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MICRO PHOTO INC
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PATENTS

NOTICES

Adjudicated Patents

(C. A. Ky.) Keeney and Ferm Patent No. 1,918,968 (80—32), for a rolling mill. Claims 2, 5, 10, 16 to 20, 22, and 23 *Held* invalid. *The Cold Metal Products Company* v. *Newport Steel Corporation*, 226 F.2d 19; 107 USPQ 59.

(C. A. Ky.) Steckel Patent No. 1,977,214 (80—2), for method and apparatus for hot rolling strip metal. Claims 4, 5, 12, 18, and 22 *Held* invalid. *Id.*

(C. A. Ky.) Montgomery Patent No. 2,087,065 (80—60), for method and apparatus for rolling. *Held* invalid. *Id.*

(C. A. Wis.) Anderson Patent No. 2,479,993 (223—83), for a garment shape maintaining device, *Held* invalid. *Anderson et al.* v. *Phoenix Products Company*, 226 F.2d 191; 107 USPQ 66.

(C. A. Calif.) Pierce Patent No. 2,501,962 (252—378), for a process for expanding earth materials, *Held* invalid. *Pierce* v. *Muehleisen et al.*, 226 F.2d 200; 107 USPQ 74; followed in *Pierce* v. *Perlite Aggregates, Inc., et al.*, 226 F.2d 204; 107 USPQ 78.

(C. A. Ohio) Kornman and Harrison Patent No. D. 154,550 (D21—6), for a canopy, *Held* invalid. *Thabet Manufacturing Company, doing business as American Beauty Ventilated Aluminum Awning Company* v. *Koolvent Metal Awning Corporation of America*, 226 F.2d 207; 107 USPQ 61.

Patents Available for Licensing or Sale

2,724,156. Pole Boot (Plastic Boot To Protect Wood Poles From Decay, Termites, Etc.). Francis B. Shaw, 3216 Morrison St., N. W., Washington, D. C.

Des. 175,502. Game Board (For "Win-Place-Show"). Joseph Follettie, 3132 3rd Ave., Apt. 7, Sacramento 17, Calif.

General Electric Company is prepared to grant non-exclusive licenses to domestic manufacturers under the following 15 patents.

Applications for license under the following two patents may be addressed to: General Electric Company, Research Services, Post Office Box 1088, Schenectady, N. Y.

2,586,516. Inert Gas Arc Welding Electrode.

2,594,905. Arc Welding Electrode.

Applications for license under the following 10 patents may be addressed to: Patent Counsel, Switchgear & Control Division, General Electric Company, 6901 Elmwood Ave., Philadelphia 42, Pa.

2,208,447. Apparatus for Straightening Woven Material.

2,511,680. Electronic Relay Arrangement for Protecting Power Systems.

2,528,237. Electric Protective System.

2,581,196. Electronic Relay Arrangement for Protecting Power Systems.

2,588,129. Indicator Light for Control Switches.

2,598,446. Fluid Actuated Electric Circuit Breaker.

2,650,334. Electric Capacitor.

2,717,293. Electric Circuit Interrupter.

2,717,298. Sealed Enclosing Structure for Electric Circuit Breakers.

2,717,326. Electric Arc Furnace Control Systems.

Applications for license under the following two patents may be addressed to: General Electric Company, Locomotive and Car Equipment Department, 2901 East Lake Road, Erie, Pa.

2,448,813. Power System.

2,562,727. Pantograph Assembly.

Applications for license under the following patent may be addressed to: General Electric Company, Patent Counsel, Measurements and Industrial Products Division, 920 Western Ave., West Lynn 3, Mass.

2,717,307. Tubular Luminaire.

New Applications Received During November 1955

Patents	6,116
Designs	442
Plants	15
Reissues	13
Total	6,586

Issue

Patents	905	No. 2,728,913 to No. 2,729,817, incl.
Designs	91	No. 176,490 to No. 176,580, incl.
Plants	6	No. 1,442 to No. 1,447, incl.
Reissues	1	No. 24,105
Total	1003	

CONDITION OF PATENT APPLICATIONS AS OF NOVEMBER 30, 1955

Total number of pending applications (excluding Designs)	220,996
Total number of pending Design applications	7,046
Total number of applications awaiting action (excluding Designs)	135,527
Total number of Design applications awaiting action	3,108
Date of oldest new application	July 20, 1954
Date of oldest amended application	Sept. 28, 1953

ROSA, M. C., Executive Examiner

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 48, 43, 50, 56, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 48, 51, 54, 69, 70.
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 18, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	12-14-54	1-28-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	5-2-55	11-15-54
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	3-2-55	12-14-53
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	3-3-55	2-11-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	2-2-55	5-20-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic, Amides, Amines, General Organic Processes	1-12-55	4-2-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	3-7-55	12-14-53
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	11-26-54	4-14-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	2-24-55	3-22-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	3-17-55	6-4-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	2-14-55	11-6-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	2-14-55	2-10-54
14. (III) MANIAN, J. C., (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire, Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	1-27-55	3-8-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	3-1-55	3-30-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	12-23-54	1-5-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	3-4-55	6-4-54
18. (VI) KURZ, J. A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	12-7-54	1-7-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	3-8-55	4-16-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	3-21-55	4-22-54
21. (III) MADER, R. C., Textiles	3-8-55	3-22-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	3-2-55	3-11-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	8-17-54	9-30-53
24. (III) DRACOPOULOS, P. T., (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	2-2-55	10-4-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	3-3-55	3-1-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	4-12-55	10-11-54
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	2-24-55	7-21-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	2-15-55	5-14-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	2-4-55	7-15-54
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	4-28-55	7-2-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	1-12-55	6-1-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	3-18-55	9-13-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	3-1-55	1-29-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	2-21-55	2-18-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	3-1-55	5-20-54
36. (V) McFADYEN, A. D., Measuring and Testing	1-24-55	11-10-54
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	1-25-55	5-24-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g. Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	2-17-55	6-6-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	3-9-55	4-2-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	2-23-55	5-3-54
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	9-13-54	11-20-53
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	12-1-54	5-19-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	3-8-55	1-25-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	2-10-55	11-3-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	3-14-55	8-17-54
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	11-19-54	1-7-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	1-25-55	8-2-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	3-17-55	4-7-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	2-21-55	2-17-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	2-25-55	4-21-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	3-11-55	3-5-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	1-6-55	2-8-54
55. (VII) KLINE, J. R., Surgery; Dentistry: Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	11-1-54	2-10-54
56. (I) KEELY, J. E., (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	2-14-55	5-5-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	4-29-55	6-18-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	3-9-55	2-4-54
59. (I) HENKIN, B., (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	3-2-55	3-5-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	2-15-55	8-9-54
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	2-14-55	7-30-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	1-31-55	1-15-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	3-14-55	2-23-54
66. (V) LISANN, L., Geometric Instruments; Automatic Weighing Scales; Acoustics	2-11-55	3-15-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	1-26-55	10-4-54
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	2-2-55	11-19-53
70. (II) BREWRINK, J. L., Explosive Weapons, Ammunition, Charges and Composition; Explosive Charge Manufacturing; Jet Motor Processes; Torpedoes; Radar; Sonar; Automatic Pilots; Antennas; Actinide Series (e. g. Fissionable) Compounds; Irradiation Chemistry; Mass Spectrometers	7-20-54	9-28-53
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making	3-7-55	11-1-54
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers	3-3-55	2-10-54
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	5-5-55	8-2-54
CLASS. DIVS. IV (VI) SMITH, (Mrs.) M. P., Harrows; Plows; Earth Rollers	3-25-55	7-26-54
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	3-1-55	12-6-54
DESIGNS (III) A—BREHM, G. I., Industrial Arts	5-6-55	5-23-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts	4-14-55	4-15-55

The following divisions have been abolished: 10, 44, 46, 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during January 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1953*.

Patents	Numbers 2,142,080 to 2,145,843, inclusive
Plant Patents	Numbers 307 to 312, inclusive

DECISIONS IN PATENT CASES

U. S. Court of Customs and Patent Appeals

DONNA L. JONES (KRATZ), EXECUTRIX OF THE ESTATE OF JAMES J. JONES, DECEASED *v.* KUPRION

No. 6077. Decided June 28, 1955. Petition for rehearing denied September 21, 1955

[225 F.2d 485; 107 USPQ 9]

1. INTERFERENCE—CONSTRUCTION OF COUNTS.

Held, that in applying the rule that the count should be given the broadest interpretation which it reasonably will support, the word "reasonably" should not be deleted, and the crucial language in a count should not be given an unwarranted over-broad interpretation.

2. SAME—SAME.

"Words in a count are generally to be given their ordinary meaning in the particular art involved."

3. SAME—PRIORITY—RIGHT TO MAKE COUNTS.

Held, that the senior party is not entitled to make the count and that priority should have been awarded the junior party.

APPEAL from the Patent Office. Interference No. 84,832.

REVERSED.

J. Matthews Neale (*Strauch, Nolan & Diggins* of counsel) for Donna L. Jones (Kratz), Executrix of the estate of James J. Jones, deceased.

Callard Livingston (*Ivan P. Tashof* of counsel) for Kuprion.

Before GARRETT, *Chief Judge*, and O'CONNELL, JOHNSON, WORLEY, and COLE, *Associate Judges*

JOHNSON, *J.*, delivered the opinion of the court.

This is an appeal from the decision of the Board of Interference Examiners of the United States Patent Office awarding priority of invention as to the single count in issue to appellee Arthur E. Kuprion.

The interference is between appellee's application, Serial No. 602,201, filed June 29, 1945, and Patent No. 2,482,621 issued to James J. Jones, now deceased, September 20, 1949, on his application, Serial No. 791,847, filed December 15, 1947. Thus, appellee is the senior party. Both the Primary Examiner and the Board of Interference Examiners held that Kuprion was entitled to an award of priority.

The single count in issue originated in a claim of Jones' patent which was copied by Kuprion for the purpose of this interference proceeding.

The count reads as follows:

A camera for photographically recording the order in which a plurality of contestants cross the finish line of a race course comprising selectively operable means for continuously moving a film through a camera: an exposure slot adapted to cover a narrow field of view containing the finish line of the race course; lens means associated with said slot for forming an image of said field of view on the central area of the film; *and means carried in fixed predetermined relation to said camera and arranged in predetermined relation to said lens means for simultaneously imposing respectively aligned and identified reference markings at spaced intervals along the opposite longitudinal marginal edges* of the film in parallel relation to the image of the finish line formed by said lens means to provide aligned axially spaced pairs of respectively *identified reference markings* adapted for use in constructing a determinative finish line parallel to said image of said finish line and tangent to the leading portion of the images of the contestants photographed on the central area of the film. (Italics added.)

Jones moved to dissolve the interference on the ground that Kuprion "has no right to make the count of the interference because the application Serial No. 602,201 of Kuprion involved in this interference:

(*a*) Discloses an inoperative structure.

(*b*) Fails to disclose a structure upon which the count of the interference can be read.

(*c*) As originally filed, did not disclose the invention set forth in the count in the 'full, clear, concise and exact terms' required by R. S. 4888 (U. S. C. Title 35, Sec. 33) and was amended on October 19, 1948 (Amendment C, paper # 9), after knowledge of the Jones invention was obtained by Kuprion, who thereafter entered into an operational and license agreement under the Jones application and patent as shown by the attached copy of the agreement marked Exhibit 1 for identification.

The Examiner dismissed the motion to dissolve and stated:

The party Jones' contention that the invention set forth in the count is not sufficiently disclosed in the Kuprion application as originally filed, is closely related to the question of the operativeness of the Kuprion apparatus. As has been indicated above, no conclusive showing has been made demonstrating that the Kuprion apparatus is incapable of producing a record such as shown in Figure 8 of Kuprion. The Kuprion apparatus, as originally disclosed, fully supports the count of the interference, it being obvious that the record produced by said apparatus is "adapted" for use in the same manner and for the same purpose as the record obtained by the Jones apparatus. Since testimony on the matter may be useful in resolving any doubts which may exist as to whether or not the Kuprion application discloses the subject matter in issue or is operative, it is deemed advisable to continue the Interference at this time, to permit the taking and proper consideration of such testimony.

Both parties took testimony, filed briefs and were represented at final hearing. However, Jones died on April 10, 1951, which was several months before the taking of testimony in his behalf.

It is stated by Jones that cameras of the type here involved have previously been proposed for producing a photofinish of a race but that the finish line, which is superimposed on the resulting photograph, cannot be accurately positioned under the prior art methods and with prior art apparatus, and, that as a consequence, much litigation has arisen in which the promoters of the contests have been successfully sued because of improperly positioned finish lines which show the wrong contestant as the winner.

The involved invention as set forth in the count may be briefly described as relating to continuous flow, strip film cameras and means for photographically recording on a film images of the contestants in a race as they cross the finish line, and simultaneously imposing on the film, aligned and identified markings related to the finish line in such a way as to permit accurate determination of the order in which the contestants pass the finish line.

Jones has contended most vigorously before the court, and before the Board, that Kuprion's disclosure does not read on the count here in issue, and does not establish either conception or reduction to practice of the issue count.

In the brief for Jones it is stated that the single question raised by this appeal is "Does Kuprion in his application show conception and reduction to practice of the invention of the interference count entitling him to an award of priority or the right to contest inventorship with Jones?"

We think appellant has correctly stated the issue before us. If Kuprion's disclosure reads on the count he is entitled to an award of priority of the invention, otherwise Jones should prevail. Therefore we deem it unnecessary to discuss the many other issues presented to the Board.

The count in issue provides for "* * * means carried in fixed predetermined relation to said camera and arranged in predetermined relation to said lens means for simultaneously imposing respectively *aligned* and *identified reference markings at spaced intervals along the opposite longitudinal edges* of the film in *parallel relation* to the image of the finish line formed by said lens means to provide *aligned spaced* pairs of respectively *identified reference markings* adapted for use in constructing a determinative finish line parallel to said image of said finish line * * *."

It seems to us that both Kuprion and Jones have means for spacing aligned marks at intervals along the opposite longitudinal edges of the film in parallel relation to the image of the finish line. The camera shown by Kuprion's application photographs the moving contestants on the main central portion of a continuously moving film in a manner similar to that shown by Jones. To provide corresponding markings on the edges of the film Kuprion proposes to photograph the end portions of the actual finish line so that the photographically recorded images of the end portions of the finish line are alternately long and short. The reference markings on the edges of Jones' film are lines of equal length which are identified by numbers from 1 to 9. The numbers appear alternately on every other line so that each line is identified. Those numbered are identified by the numbers and those not numbered are identified as the line between numbers 1 and 2, or between numbers 2 and 3, and so on.

The Jones specification requires that the reference markings be respectively identified and suggests the use of numerals "or the like" for that purpose. It was the opinion of the Board that the count "* * * does not appear to require that they be identified in any specific manner, provided they assure accurate construction of a determinative finish line in parallelism to the image of the actual finish line."

We think that any specific manner of identification would satisfy the count.

[1] The Board correctly held that the count should be given the broadest interpretation which it reasonably will support, citing *Scott* v. *Longtin et al.*, 52 App. D. C. 102, 28 Fed. 606, 1922 C. D. 145. However, in applying this rule the word "reasonably" should not be deleted, *Harris* v. *Henry*, 20 CCPA (Patents) 883, 63 F.2d 120, 16 USPQ 442, and the crucial language in a count should not be given an unwarranted over-broad interpretation. [2] Words in a count are generally to be given their ordinary meaning in the partfcular art involved. *Clark* v. *Camras*, 40 CCPA (Patents) 963, 204 F.2d 273, 97 USPQ 434.

The Board held that Kuprion identifies his reference marks by their distinctive length rather than by numerals; that the difference between the reference marks of Kuprion and Jones is one of degree only and that therefore Kuprion's disclosure was deemed sufficient to read on the count. With this we cannot agree.

We are of the opinion that the reference marks on the edges of Kuprion's film are not identified within the meaning of the count. There is nothing to identify any of the long reference marks appearing on one edge of the film with respect to each other or with respect to any mark on the other edge of the film. This also applies to the short marks. They are simply a series of alternating long and short marks which are wholly unidentified, and therefore we do not think the count reads on Kuprion's disclosure. [3] The decision appealed from should be and hereby is reversed.

REVERSED.

WORLEY, *J.*, dissents.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

2,097,214. (See Re. 20,866.)

2,180,795. N. A. Christensen, Packing, **filed** Nov. 19, 1955, Ct. Cls., Doc. 432/55, *Jo. C. Calhoun, Jr., and Esther C. Young, executors of the estate of Niels A. Christensen (deceased)* v. *The United States.*

2,213,138. J. T. Hayward, Method and apparatus for detecting oil in well drilling; **2,214,674**, same, Method of logging wells; **2,342,273**, same, Method for detecting oil in well drilling; **2,404,132**, same, Apparatus for use in logging wells; **2,489,180**, same, Method of detecting gas in well-drilling fluids, **filed** Mar. 3, 1955, D. C., S. D. Tex. (Houston), Doc. 8787, *Hagecard-Wallf Research Corp. et al.* v. *Hycalog, Inc.* Action dismissed without prejudice (notice Nov. 16, 1955).

2,214,674. (See 2,213,138.)

2,230,340. E. O. Shreffler, Adjusting means for knee action mechanism; **2,673,084**, A. W. Blythe, Coil spring booster, **filed** Nov. 17, 1955, D. C., W. D. N. Y. (Buffalo), Doc. 6798, *Turner Mfg. Co. et al.* v. *Buffalo Metal Container Corp. et al.*

2,284,921. R. B. Purkiss, Casket sealing and locking means, **filed** Nov. 15, 1955, D. C., E. D. Pa. (Philadelphia), Doc. 19836, *The Batesville Casket Co.* v. *Lee E. Jones Corp. et al.*

2,287,502. Togesen and Fisher, Electrical distribution system, **filed** Nov. 17, 1955, D. C., E. D. Mich. (Detroit), Doc. 14946, *Bulldog Electric Products Co.* v. *Federal Pacific Electric Co. et al.*

2,289,577. F. D. Jonas, Suspension filing folder and index tab, **filed** Nov. 10, 1954, D. C., S. D. N. Y., Doc. 96/367, *Oxford Filing Supply Co., Inc.*, v. *Remington Rand, Inc.* Stipulation and order of discontinuance Nov. 18, 1955.

2,342,273. (See 2,213,138.)

2,404,132. (See 2,213,138.)

2,412,758. (See 2,632,417.)

2,416,412. (See 2,632,417.)

2,461,464. R. Aronstein, Filter for fluorescent screens, **filed** July 28, 1954, D. C., S. D. N. Y., Doc. 94/354, *Transmirra Products Corp. et al.* v. *Grass Distributors, Inc.* Stipulation and order of discontinuance (notice Nov. 17, 1955). **Same**, Doc. 94/357, *Transmirra Products Corp. et al.* v. *I. T. & T. Distributing Corp.* Decree as above Nov. 17, 1955.

2,475,809. H. H. Sullivan et al., Gas developing machine for photosensitive sheets having automatic gas delivery, **filed** Mar. 25, 1954, D. C., N. D. Ill. (Chicago), Doc. 54c457 (originally filed Nov. 18, 1953, D. C. Del., Doc. 1571), *Paragon-Revolute Corp.* v. *The C. F. Pease Co.* Summary judgment dismissing complaint; claims 1, 3, 4, and 6 of patent held invalid Oct. 31, 1955.

2,489,180. (See 2,213,138.)

2,493,727. (See Des. 153,013.)

2,503,682. (See Des. 153,013.)

2,548,846. (See Des. 153,013.)

2,554,067. (See 2,632,417.)

2,556,116. (See 2,632,417.)

2,561,932. (See 2,632,417.)

2,565,826. (See 2,632,417.)

2,578,156. (See 2,632,417.)

2,585,306. J. Galkin, Belt loop sewing machine; **2,585,307**, same, Attachment for blindstitch sewing machines; **2,646,759**, same, Folder for blindstitch sewing machines, **filed** Oct. 29, 1953, D. C., S. D. N. Y., Doc. 89/41, *Joseph Galkin Corp. et al. v. American Blind Stitch Machine Co. et al.* Stipulation and order of dismissal Nov. 18, 1955.

2,585,307. (See 2,585,306.)

2,600,932. (See 2,632,417.)

2,606,549. (See 2,632,417.)

2,632,417. O. R. Smith, Pipe reforming clamp; **2,641,008**, same, Pipe reconditioning machine; **2,412,758**, same, Apparatus for cleaning pipe; **2,554,067**, same, Pipe coating machine; **2,556,116**, same, Pipe cleaning equipment; **2,561,932**, same, Motor vehicle drive; **2,578,156**, same, Vehicle with drive shaft coupled to forward extremity of engines; **2,606,549**, same, Heating apparatus for the coating containing tanks of pipe conditioning machines; **2,565,826**, **2,600,932**, same, Mixing device; **2,416,412**, F. A. Smith, Pipe cleaning oven, **filed** Mar. 24, 1955, D. C., S. D. Tex. (Houston), Doc. 8827 (originally filed Oct. 21, 1954, D. C., N. D. Tex., Doc. 2908), *O. R. Smith v. The Texas Pipe Line Co.* Stipulation dismissing complaint and counterclaim with prejudice (notice Nov. 14, 1955).

2,641,008. (See 2,632,417.)

2,646,759. (See 2,585,306.)

2,673,084. (See 2,230,340.)

2,699,056. S. Margulies, Woman's stocking and method of forming same, **filed** Nov. 15, 1955, D. C., E. D. Pa. (Philadelphia), Doc. 19831, *Mar-Rene Hosiery Mills v. Viki Hosiery Corp.*

2,710,046. Markus and Siegel, Ornamental sheet material and method of making same, **filed** June 9, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 15628, *Aristocrat Leather Products, Inc. v. Textural Products Inc. et al.* Consent decree Nov. 17, 1955.

2,714,812. Leath and Bobo, Method of controlling wildness of twisted yarn during delivery to a knitting operation, **filed** Nov. 17, 1955, D. C., W. D. N. C. (Charlotte), Doc. 1135, *Patentex, Inc. v. Nebel Knitting Co.* **Same**, Doc. 1136, *Patentex, Inc. v. Huntley Hosiery Co., Inc.* **Same**, Doc. 1137, *Patentex, Inc. v. Hudson Hosiery Co.*

Re. 20,866 (of **2,097,214**), B. A. Peterson, Combustion chamber, **filed** Nov. 12, 1954, D. C., E. D. Mich. (Detroit), Doc. 13913, *Rex Clay Products Co. v. Holland Furnace Co.* Stipulation and order of dismissal Nov. 16, 1955.

Des. 144,255. P. D. Ney, Slipper or similar article, **filed** Nov. 18, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 19058-BH, *Paddies, Inc., et al. v. Broadway Department Store, Inc., et al.*

Des. 153,013, **2,503,682**, H. F. Parker, Hoist; **2,493,727**, Parker and Robins, Hand hoist; **2,548,846**, same, Chain hoist, **filed** Nov. 17, 1955, D. C., N. D. Ohio (Cleveland), Doc. 32256, *Columbus-McKinnon Chain Corp. v. Ohio Hoist & Mfg. Co. Inc.*

REISSUES

JANUARY 3, 1956

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,105

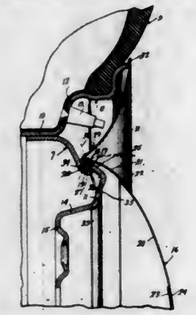
WHEEL COVER

George Albert Lyon, Detroit, Mich.

Original No. 2,445,330, dated July 20, 1948, Serial No. 618,825, September 27, 1945. Application for reissue April 11, 1955, Serial No. 500,715

5 Claims. (Cl. 301—37)

1. In a wheel structure of the type including a wheel comprising a tire rim and a central body part having circumferentially spaced cover retaining integral bumps and a detachable circular cover with a springy continuous turned edge having portions springy radially outwardly over the bumps and intermediate portions springy inwardly against the wheel body, characterized by the bumps each having an axially inward undercut outer shoulder and the body having a generally axial annular shoulder radially inward of the bases of said bump shoulders at the junction of said bump shoulders with the body part and of a diameter substantially less than that of the circle common to the bases of the shoulders of the bumps to provide clearance for the intermediate portions of said cover edge to spring radially inward of the bump shoulders and tightly against the wheel body.



PLANT PATENTS

GRANTED JANUARY 3, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,442

STRAWBERRY PLANT

Edith Parish, Smelser Township, Grant County, Wis.

Application April 20, 1954, Serial No. 424,538

1 Claim. (Cl. 47—62)

A new and distinct variety of strawberry plant substantially as herein shown and described, characterized by a large, coreless, non-fibrous berry, rich in flavor and aroma, and with indented seeds; by its sturdy, erect leaf and flower stems; and by its non-overlapping leaflets.

1,443

LILAC PLANT

Edward J. Gardner, deceased, late of Horicon, Wis., by Robert L. Gardner, executor, Horicon, Wis., assignor to Robert L. Gardner

Application May 25, 1953, Serial No. 357,395

1 Claim. (Cl. 47—60)

A new and distinct variety of lilac plant as described and illustrated and characterized by loose panicles of large single florets generally lilac in color, each floret comprising four petals, the respective petals having well defined stripes darker and more blue than the remainder of the petal and radiating from the center of the floret and outlined in white to present a distinct cross on each floret.

1,444

LILAC PLANT

Edward J. Gardner, deceased, late of Horicon, Wis., by Robert L. Gardner, executor, Horicon, Wis., assignor to Robert L. Gardner

Application May 25, 1953, Serial No. 357,396

1 Claim. (Cl. 47—60)

A new and distinct variety of lilac plant as described and illustrated and characterized by dense panicles of florets, each having four or five twisted petals which are pale lilac in their background color and have a deeper shade in the center area in each petal.

1,445

MOCK ORANGE PLANT

Edward J. Gardner, deceased, late of Horicon, Wis., by Robert L. Gardner, executor, Horicon, Wis., assignor to Robert L. Gardner

Application May 25, 1953, Serial No. 357,397

1 Claim. (Cl. 47—60)

A new and distinct variety of Philadelphus plant as described and illustrated and characterized by very double flowers including one or more rows of heavy broad outer petals surrounding a mass of narrow and generally twisted inner petals through which stamen project.

1,446

CHRYSANTHEMUM PLANT

Eugene S. Boerner, Newark, N. Y., assignor to Jackson & Perkins Company, Newark, N. Y., a corporation of New York

Application February 15, 1955, Serial No. 488,446

1 Claim. (Cl. 47—60)

A new and distinct variety of chrysanthemum plant of the decorative type, substantially as herein shown and described, characterized particularly as to novelty by being substantially identical with the chrysanthemum variety "Swallow" (Plant Patent No. 1,106), except for the new and distinctive Strontian Yellow, lightly overcast with Empire Yellow, general color tonality of its blooms.

1,447
ROSE PLANT

Eugene S. Boerner, Newark, N. Y., assignor to Jackson & Perkins Company, Newark, N. Y., a corporation of New York

Application February 7, 1955, Serial No. 486,748
1 Claim. (Cl. 47—61)

A new and distinct variety of rose plant of the climber class, substantially as herein shown and described, characterized particularly as to novelty by an everblooming habit and floriferousness comparable to the variety "New Dawn" (Plant Patent No. 1), the large size and superior shape of its flowers, the good lasting quality of its flowers when cut and used for cut flowers, and the improved and distinctive La France Pink, lightly overcast with Cartridge Buff, general color tonality of its flowers.

PATENTS

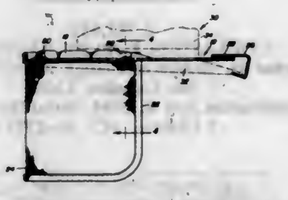
GRANTED JANUARY 3, 1956

GENERAL AND MECHANICAL

2,728,913
SHIELD FOR SAFETY HATS

Milton S. Connor, Lansing, Mich.

Application May 8, 1953, Serial No. 353,875
7 Claims. (Cl. 2—10)



1. An attachment for safety hats comprising an annular supporting plate adapted to rest on a brim portion of the hat, a supporting frame detachably secured to the forward edge of said supporting plate, said supporting frame depending from said supporting plate and having a shield mounted therein, said supporting plate being provided with hooks for removably securing said supporting plate to the brim of a safety hat, said hooks including downwardly directed portions adapted to engage the undersurface of the brim portion of the hat.

2,728,914
HAND PROTECTORS FOR INFANTS

Dave Mercur, Pittsburgh, Pa.

Application August 19, 1953, Serial No. 375,103
2 Claims. (Cl. 2—16)



1. A hand protector for infants comprising a hand portion consisting of a spherical hollow body of smooth, soft, pliable material and a wrist portion attached to and extending from said body as a tubular extension consisting of a plurality of elastic wrist bands of progressively decreasing diametrical size from the connected end of the wrist portion to the free end thereof to stiffen the hand portion of the protector and provide a grip at the wrist portion thereof.

2,728,915
CHILD'S COMBINATION UNDERGARMENT

Sarita Warshawsky, Chicago, Ill.

Application October 13, 1953, Serial No. 385,730
2 Claims. (Cl. 2—75)

1. In a child's undergarment of the character described, the combination of a tubularly-knit fabric elastic upper-torso undershirt and an outwardly flaring non-elastic stiffened petticoat skirt, the upper marginal edge of said skirt folded over and stitched to afford a hollow waistband, a band of elastic tape positioned within said waistband, said waistband stitched along the outside to the lower marginal edge of said undershirt, and a plurality of depending tabs stitched to the lower marginal edge of the undershirt and positioned to afford means for attaching undergarments and accessories thereto beneath said underskirt.



2,728,916
PROTECTIVE CLOTHING

James Henry Clarke and John Godfrey, Llwynypia, Wales, assignors to Elliot Equipment Limited, Llwynypia, South Wales, a British company

Application July 3, 1953, Serial No. 365,872
Claims priority, application Great Britain June 5, 1953
3 Claims. (Cl. 2—82)



2. A protective garment comprising a bag-like container, a mouth at one end of the latter to permit entry of a wearer feet first, a face engaging margin around a face opening formed in the container at a location spaced below said mouth, and a resilient cap connected at least to the upper part of said margin and lying exterior to said container and below said mouth, whereby a wearer can enter the garment, feet first, through said mouth and after bringing the face engaging margin into position can turn the cap inside out to engage his head with the mouth beneath the cap, thereby effectively closing said mouth.

2,728,917
PANELED NECKTIE AND METHOD OF MANUFACTURE

Aubrey L. Gouner, New Orleans, La., assignor to Wembley, Inc., New Orleans, La., a corporation of Louisiana

Application December 7, 1953, Serial No. 396,424
1 Claim. (Cl. 2—146)

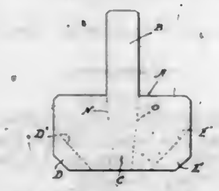
A necktie comprising a flat elongated outer material tube having a front face and a rear face and having the longitudinal edges coincident with each other and co-ex-

tensive with the longitudinal center line of the front face said edges being folded to project inwardly along said line, an elongated flat panel tube having a front face and a rear face and having the longitudinal edges coincident with each other and co-extensive with the longitudinal center line of the rear face, said edges being folded to project outwardly of said tube, said last named edges being sand-



wiched between the inwardly projecting edges of the first named tube so that said panel tube lies superposed on the front face of said outer tube symmetrically disposed on either side of the longitudinal center line of said outer tube, and a single line of stitching uniting the edges of said tubes and extending substantially from end to end of the two tubes and lying wholly within the outer tube.

2,728,918
NECKTIE CONSTRUCTION
Merrill Loyd Ball, Santa Monica, Calif.
Application March 3, 1953, Serial No. 340,116
1 Claim. (Cl. 2—150)



A necktie construction comprising a knot member and a streamer member, said streamer member being formed of front and rear fabric sections, each section having upwardly convergent side edges, stitching securing the upper ends of said sections together, said knot member comprising an initially rectangular sheet, an elongated tongue integral with said sheet extending from the upper longitudinal edge of said sheet and disposed substantially midway of the length of said upper edge, a pair of pockets formed at the rear of said sheet by diagonally extending bends at the two lower corners thereof, the fold line of said pockets intersecting the side edges of the rectangular sheet substantially midway of the side edges of the sheet, said pockets converging downwardly with the lower ends disposed apart, said sheet being bent on an arc, said streamer member extending downwardly between the lower ends of said pockets, a fabric covering fixed on the front and rear sides of said sheet, the convex side of said sheet being outermost, the secured together fabric sections being disposed on the concave rear side of said sheet, a transversely curved wedge member confronting the rear one of said fabric sections and seating in said pockets, the small end of said wedge member being lowermost and spanning the distance between said pockets, a fabric covering about said wedge member, said wedge member binding said streamer member against the rear concave side of said sheet, a covering about said tongue, said tongue being bent downwardly and forwardly at the rear of said sheet whereby to engage over the neckband and to project therebelow.

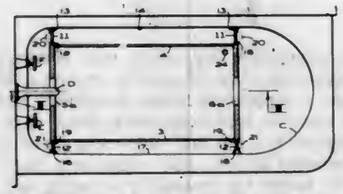
2,728,919
TRIMMING TAPE
Herbert G. Booth, Harrison, N. Y., assignor to David Traum Company, Inc., a corporation of New York
Application July 21, 1952, Serial No. 300,043
2 Claims. (Cl. 2—278)

1. As an article of manufacture, rick rack trimming tape, the lateral edges of which have sinusoidal conformations, said tape being of textile fabric having continuous longitudinal strands extending the entire length thereof and short lengths of strands constituting the sinusoidal conformations, said length of tape having a



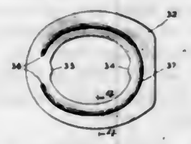
thermoplastic heat-fusible adhesive of type resistant to dry cleaning and laundering operations, which adhesive coats one face of the tape and bonds the short lengths of strands against fraying.

2,728,920
COLLAPSIBLE BABY BATHTUB
Katherine M. Hylton and Hugh R. McMenamin IV, San Leandro, Calif.
Application July 6, 1954, Serial No. 441,462
2 Claims. (Cl. 4—177)



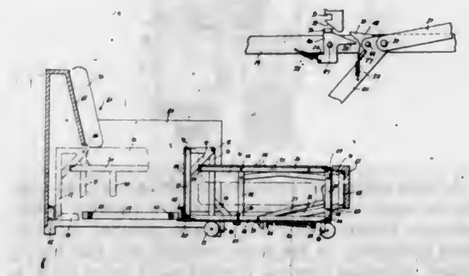
1. A collapsible baby bathtub comprising two end frames substantially rectangular in form and each having a tubular top member with open ends; a water-receiving receptacle having a flexible bottom, side and end walls; the end walls being secured to the two end frames; vacuum cups carried by the end frames and positioned to rest on the bottom of a large bath tub when the baby bathtub is placed therein; rods slidably mounted in the open ends of the tubular top members; vacuum cups carried by the outer ends of the rods and adapted to contact with the sides of the large tub for securing the end frames thereto when the rods are moved outwardly; and means mounted on each rod for securing it in adjusted position in the tubular top member.

2,728,921
VENTILATING TOILET
Emil J. Dorko, Bradenville, Pa.
Application May 19, 1953, Serial No. 355,913
1 Claim. (Cl. 4—216)



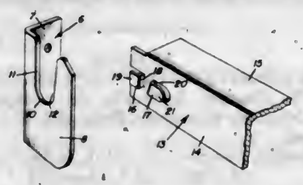
A ventilating toilet comprising a toilet hopper, a ring toilet seat having a forwardly projecting lip at the rear of the opening and a rearwardly projecting lip at the front of the opening hinged to the toilet hopper at the rear of the top rim thereof, said lips being in the same plane with said ring toilet seat, a yieldable sponge rubber sealing member secured on the underside of said seat and extending about said rear hinged portion forward to the front thereof but having its front ends spaced apart to provide a small air entrance when the seat is down on the rim of the toilet hopper, said lips being adapted to seal the upper surface of said seat against the body of the user thereof to thereby limit the admission of air to said small air entrance, a seat closure cover hinged at the rear of said toilet hopper to overlie said toilet seat ring, a second yieldable annular sponge rubber sealing member secured on the underside of said closure cover and extending fully thereabout, and means for venting air entering from said air entrance and toilet gases from the rear of said toilet hopper.

2,728,922
FOLDABLE BED CONSTRUCTION
Edward Feinstein, New York, N. Y.
Refiled for abandoned application Serial No. 9,481, February 19, 1948. This application August 10, 1953, Serial No. 373,256
3 Claims. (Cl. 5—13)



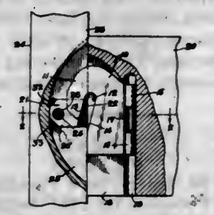
1. A foldable bed unit comprising a base, a pair of spaced posts extending from said base, an inner section pivoted at one end to said posts adjacent the upper end thereof, a middle section pivoted to the other end of said inner section, an outer foldable section and an intermediate section pivoted to said outer section and to said middle section, said outer section and said middle section forming the top and bottom respectively and said inner section and said intermediate section forming the rear and front ends respectively when said bed unit is in folded condition, a bell crank pivoted to said outer section, one leg of said bell crank serving as a supporting member for said outer section when in unfolded condition, the other leg of said bell crank engaging said middle section to support said outer section thereon in folded condition, a lever pivoted at one end to said base and at the other end to said middle section at a point forward of the base pivot point when the bed unit is in extended position, the leg of said bell crank which engages said middle section having a slot therein, said middle section having a pivotal latch member including a latch plate and spring means urging said latch member to a position in which the latch plate is receivable within said slot, said lever carrying pivoted detent means positioned to engage said latch means and move it out of engagement with said slot as the bed unit is unfolded.

2,728,923
CORNER LOCK FOR BEDSTEADS
Thomas E. Allen, Kankakee, Ill.
Application April 17, 1953, Serial No. 349,354
1 Claim. (Cl. 5—294)



A corner lock for bedsteads comprising in combination a corner bracket including a vertical attaching flange and a rail supporting flange at right angles to the attaching flange, said rail supporting flange having a substantially V-shaped notch in its upper edge and said notch being formed with an inwardly disposed edge parallel to the attaching flange and an outwardly inclined outwardly disposed edge, and a bed rail having a pair of locking tongues projecting therefrom, said tongues including shank portions adapted to enter said notch and oppositely extending flange portions at right angles to the respective shank portions and spaced outwardly from the rail and locked at the outer surface of the rail supporting flange, one of said shank portions of the locking tongues being inclined parallel to and positioned to ride against the inclined edge of the notch to force the rail longitudinally toward the attaching flange to bind both tongues in the notch by a downward inserting engagement of the tongues therewith.

2,728,924
BED RAIL FASTENER
Henry Mutchnik, Baltimore, Md.
Application July 8, 1953, Serial No. 366,685
5 Claims. (Cl. 5—296)



1. A bed rail fastener comprising a plate having a hook-like tongue extended from one edge and having hub sections on the opposite edge said plate being adapted to be positioned in a slot extended inwardly from the end of a bed rail and positioned midway between side surfaces of the rail and said slot communicating with a cylindrical opening in the bed rail whereby with the plate in the slot the hub sections are adapted to be positioned and frictionally retained in the cylindrical opening and the tongue adapted to extend from the end of the rail, a U-shaped socket having an inclined end wall adapted to be mounted in a slot in the side of a post with the inclined end wall positioned to receive the tongue of the plate, means for preventing the sides of the socket being pressed together to prevent the tongue entering the socket, and means for retaining the socket in the post.

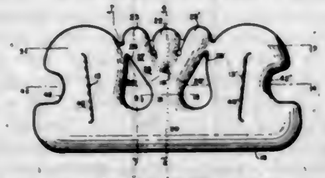
2,728,925
BED RAIL ATTACHMENT
Robert L. Ray, Lenoir, N. C.
Application October 26, 1954, Serial No. 464,864
5 Claims. (Cl. 5—318)



1. An accessory for attachment to an L-shaped rail of a bed, said rail including a vertically disposed and a horizontally disposed portion, a plate arranged contiguous to

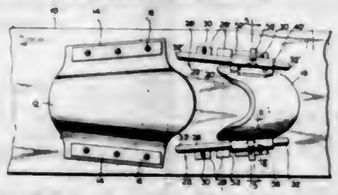
the upper surface of the horizontal portion of said rail, a bracket including a first portion arranged below said plate on the opposite side of the horizontal portion of said bed rail from said plate, a second portion arranged angularly with respect to said first portion, a vertically disposed third portion extending downwardly from said second portion, a first arcuate rib on the lower end of said third portion, a vertically disposed fourth portion extending upwardly from said web and arranged in spaced parallel relation with respect to said third portion, a second arcuate web extending from the upper end of said fourth portion, a vertically disposed fifth portion depending from said last named web, a curved lip on the lower end of said fifth portion, a lug arranged contiguous to one side of the vertical portion of said rail, a base arranged in spaced parallel relation with respect to said fourth portion, a body member including an intermediate offset section arranged contiguous to said base, a swivel pin extending through said offset section, base, fourth portion and lug, outwardly projecting inclined sections extending outwardly from said offset section, flat sections extending from said inclined sections and arranged in spaced parallel relation with respect to said base, securing elements extending outwardly from said flat sections and having rings thereon, inclined straight sections extending from said flat sections and terminating in apertured ears, and securing elements connecting said ears to said base.

2,728,926
PILLOWS
William M. Emery, New Providence, N. J.
Application February 10, 1953, Serial No. 336,121
15 Claims. (Cl. 5—338)



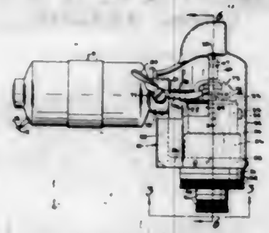
1. A pillow, including top and bottom sheets joined together to form an enclosure to confine a suitable gaseous medium to resiliently space said sheets apart, the joining of said sheets together being such as to provide a pillow substantially E-shaped in plan when said sheets are resiliently spaced apart and thereby providing two longer outer arms, a shorter intermediate arm and a generally cylindrical appearing portion interconnecting said arms to form one edge of the pillow, the free ends of said arms of said E being webbed together and said longer outer arms being separated from the intermediate arm by joining said top and bottom sheets adjacent to the cylindrical appearing portion and between the shorter arm and each of the longer arms respectively.

2,728,927
WATER SKI FOOT BINDING DEVICE
Hayden M. Hargett, Florence, Ala.
Application April 13, 1953, Serial No. 348,382
2 Claims. (Cl. 9—21)



1. A foot binder for skis and the like comprising a toe engaging member, and a heel engaging member, said heel engaging member comprising a heel support, paired track members, a plurality of dentils securable to the upper face of a ski rearwardly of the toe engaging member and supporting said track members, track engaging slide blocks secured to each side of said heel support, a locking pawl carried by each of said slide blocks and adapted to engage the spaces between the track supporting dentils.

2,728,928
SHOE POLISHING MACHINE
Franciscus H. J. Beeren, Clover, S. C.
Application December 6, 1954, Serial No. 473,416
7 Claims. (Cl. 15—29)



1. A hand controlled portable polishing machine comprising an outer rotary member having a resilient polishing element thereon, an inner rotary member mounted for axial movement in the outer member and also having a resilient polishing elemegt thereon, said inner member having a chamber therein for containing polishing liquid, said inner member also having a passageway therein for directing liquid from the chamber to the resilient element thereon, a valve controlling said passageway, means for imparting rotary motion to the outer and inner rotary members, manually operable means for shifting said inner rotary member between extended and retracted positions relative to the outer rotary member, and means automatically closing said valve when the inner rotary member is retracted and automatically opening said valve when the inner rotary member is extended.

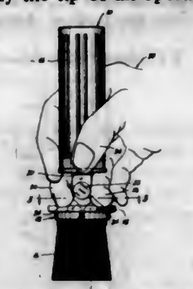
2,728,929
CLEANING AND ABRADING TOOL
Floyd Leslie Bell, North Hollywood, Calif.
Application May 15, 1953, Serial No. 355,375
6 Claims. (Cl. 15—104.01)



1. A cleaning tool comprising, a twisted stem, a thimble-shaped sleeve on said stem, wires seated in the twists of the stem to form a brush within the sleeve, the end of the brush projecting a short distance below the open end of the sleeve, and wires seated in the twists of the stem below the sleeve and projecting from the stem to form a helical brush smaller in diameter.

2,728,930
FINGER GROOVED FOUNTAIN BRUSH CASTING
Herbert W. Hempel, Belleville, Ill., assignor to Marsh Stencil Machine Company, Belleville, Ill., a corporation of Illinois
Application February 19, 1951, Serial No. 211,743
1 Claim. (Cl. 15—138)

A fountain brush comprising a neck bounded at its top by the lower end of a brush barrel reservoir for marking fluid having a bottom extending laterally beyond said neck, said neck being bounded at its bottom by a flange of a brush body extending laterally beyond the neck, said neck having two straight parallel side walls with grooves therein parallel to the junction of the side walls with said flange, said neck having conduit means between the reservoir and the brush body, said flange being provided with grooves parallel to said side walls, and each of said neck grooves merging with one of the grooves in said flange to form a coextensive smooth rounded surface for receiving comfortably the tip of an operator's finger, said



coextensive smooth rounded surface being arcuate in cross section and of substantially the same radius of curvature, and a valve operating member in said neck between the grooves at one end between the side walls thereof for controlling flow through said conduit means, whereby the barrel of said brush may be grasped by an operator's hand between the thumb and the index finger with the operator's fingers being conveniently received in said grooves on opposite sides of the neck in a position such that the operator's thumb may easily operate said valve without changing the position of said fingers.

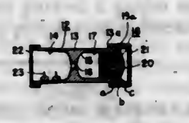
2,728,931
BROOM BRIDLE
Allen F. Edmonds, Abilene, Tex.
Application February 11, 1952, Serial No. 270,914
1 Claim. (Cl. 15—170)



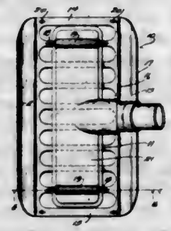
In a broom having a head comprised of a plurality of straws secured to a handle, a pair of complementary U-shaped clamping bands adapted to encompass said head transversely of said straws to bind said straws together, outwardly directed teeth formed on the outer face portions of the opposite ends of one of said bands, inwardly directed teeth formed on the inner face portions of the opposite ends of the other of said bands, said outwardly directed teeth being complementary to and interlocking with said inwardly directed teeth, a plurality of inwardly extending substantially triangular tangs struck from each band, said tangs extending transversely of and at substantially right angles to said bands, and a plurality of outwardly directed prongs struck from each of the opposite side edges of each of said tangs and extending transversely of said tangs, with the prongs struck from one side edge bent oppositely to the prongs struck from the other side edge of said tang.

2,728,932
MARKING DEVICE
Julian A. Ramsey, Sr., Washington County, Pa.
Application June 30, 1951, Serial No. 234,537
5 Claims. (Cl. 15—227)

1. An improved marking device of the character shown and described which comprises, a holding body part of substantially cylindrical shape and limited longitudinal extent such that it may be readily carried in the pocket of a purse or of clothing being worn, a central abutment wall extending across said body part internally thereof; a pair of bore walls extending longitudinally along said body part in opposite directions from said abutment wall and being open to opposite ends of said body part, one of said bore walls defining a thimble-like finger-tip-receiving compartment portion with said abutment wall, the other of said bore walls defining a marking-unit-carrying and supporting compartment portion with said abutment wall and having an outer rim end portion; a self-contained marking unit having a retaining cup portion and an endwise-projecting marking portion mounted within said cup portion to project outwardly therefrom; a flexible peripheral ring flange about said cup portion at its open end said ring flange being U-shaped in transverse cross-section and having a pair of transversely-extending inner and outer leg portions and a connecting base portion; said cup portion being slidable in abutment with and internally along said other bore wall until the inner leg portion of said flexible ring flange abuts the outer rim end portion of said other bore wall to flexibly-removably mount said marking unit within the supporting compartment portion of said holding body; a closure cap of cup-shape having an inner bore portion of smaller diameter and an outer open-end bore portion of larger diameter defining an intermediate internal abutment shoulder therein, said outer bore portion being slidable in abutment with and over and along the outer rim end portion of said other bore wall until said internal abutment shoulder abuts said flexible ring flange of said marking unit; the base portion of said flexible ring flange having only a slightly larger diameter than said inner bore portion of said closure cap to be flexed radially-inwardly by and slide along said abutment shoulder into sliding engagement with said inner bore portion of said closure cap when its said abutment shoulder is forced thereover.

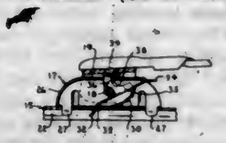


2,728,933
VACUUM CLEANER NOZZLE ATTACHMENTS
Ruth A. Pieper and George A. Pieper, Milwaukee, Wis.
Application April 14, 1953, Serial No. 348,776
3 Claims. (Cl. 15—246)



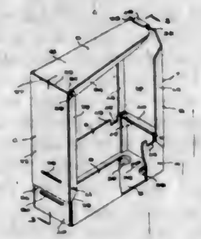
1. In a vacuum cleaner attachment, a plurality of parallel runners, integral members joining the ends of said runners, and continuous downwardly disposed ribs extending along said integral members transversely to the direction of the runners for erasing marks of said runners in a rug while it is being cleaned.

2,728,934
CONNECTOR FOR WINDSHIELD WIPER BLADE ASSEMBLY
Fred A. Krohm, Hobart, Ind., assignor to Productive Inventions, Inc., a corporation of Indiana
Original application April 17, 1952, Serial No. 282,846. Divided and this application January 30, 1953, Serial No. 334,148
11 Claims. (Cl. 15—250)



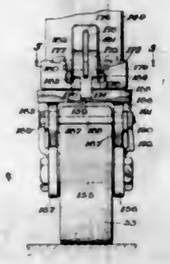
4. A support, a connector carried by said support, said connector including a housing having side walls provided with inner longitudinal marginal edges, an opening provided in the housing, and elongated resilient means having an inner end firmly secured between the marginal edges of the housing and support and an outer free end for engaging and urging a locking element in a direction for detachably securing an entering part in said opening.

2,728,935
COLLAPSIBLE SHOE SHINE BOX
Ives B. Maher, Brooklyn, N. Y.
Application July 10, 1953, Serial No. 367,223
2 Claims. (Cl. 15—265)



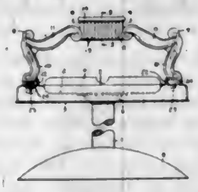
1. In a box, a bottom section having side walls and end walls, a cover section having a web and side flanges, one end of said side flanges being engaged with the outer sides of said side walls, first hinge means hinging said one end of said side flanges to upper portions of the bottom section side walls at one end of the bottom section, a standard section having a web and side flanges engaged with the outer sides of the bottom section side walls at the opposite end of the bottom section from said cover section, second hinge means hinging the standard section side flanges on the bottom section side walls at said opposite end of the bottom section and at one end of said standard section, said standard section having another free end, a foot rest section having a web and side flanges positioned at the inner sides of the standard section side flanges, a third hinge means hinging the foot rest section side flanges at one end to the standard section side flanges at the free end of the standard section, said foot rest section having another free end, a detent tongue on the last-mentioned free end, said tongue being narrower than the last-mentioned free end so as to define an abutment at a side of the tongue engaging the inner side of the web of said cover section, the web of the cover section being provided with a keeper slot through which said tongue removably extends, said cover and standard sections being perpendicular to the bottom section and braced apart at their free ends by said foot rest section, said cover and standard sections having portions at their other ends supportably engaging the outer sides of the bottom section end walls, the web of said standard section having a keeper slot and the free end of said cover section having a lateral tab engageable through the last-mentioned keeper slot when the cover section is superimposed upon the standard section in the collapsed position of the box.

2,728,936
CASTER WITH SWIVEL LOCK
William C. Hodges and Alexander L. Robb, Redwood City, Calif., assignors to Hodges Research and Development Company, Redwood City, Calif., a corporation of California
Original application October 31, 1949, Serial No. 124,592. Divided and this application August 29, 1951, Serial No. 244,189
2 Claims. (Cl. 16—35)



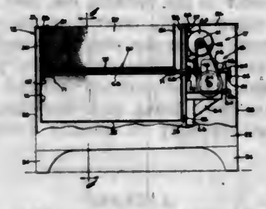
1. In a caster mechanism a bearing member, a base rotatable on said bearing member, a caster wheel mounted on said base, spaced ears carried by the bearing member, a latch pivotally mounted between said ears, latch engaging means in said base, resilient means urging said latch into engagement with said latch engaging means, resilient means carried by said latch and engaging said ears when said latch is in disengaged position and manually operable means pivoted in said latch for disengaging said second named resilient means from said ears.

2,728,937
HANDLE STRUCTURE FOR ASH RECEPTACLE
William Shapiro, Toronto, Ontario, Canada, assignor to Electrolite Products Limited
Application January 31, 1952, Serial No. 269,159
2 Claims. (Cl. 16—110.5)



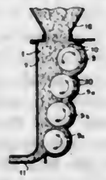
1. A handle structure for an ash receptacle comprising a pair of rigid arm portions connected by a rigid elongated intermediate portion and extending outwardly from opposite ends of said elongated intermediate portion, said intermediate portion having continuous side and end walls and opening to the top to form a receptacle adapted to receive and be substantially completely filled by a cigarette lighter, said arm portions being formed so that their inner ends are integral with and extend part way up the ends walls of said intermediate receptacle portion, said arm portions depending downwardly from said inner ends to a substantial distance below said intermediate receptacle portion and terminating in reinforced mounting feet, and means carried by said feet for removably securing said handle structure to a receptacle, said intermediate receptacle portion forming a hand grip portion adapted to fit substantailly entirely within and disposed to be encircled and gripped by a hand with a cigarette lighter contained in said receptacle.

2,728,938
POULTRY SCALDING MACHINE
Robert W. McKinley, James C. Howard, and J. Howard Ernstes, Greensburg, Ind., assignors to The Ashley Machine Company, Greensburg, Ind., a corporation of Indiana
Application January 2, 1953, Serial No. 329,272
11 Claims. (Cl. 17—11.2)



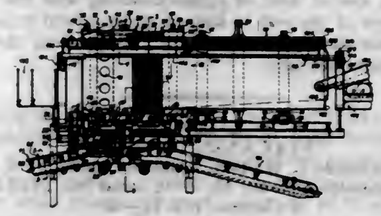
1. A poultry scalding machine comprising a scalding tank, said scalding tank being provided with a partially cylindrical member forming a bottom and having side walls rising upwardly from said bottom, a substantially flat poultry propelling member mounted for rotation about a substantially horizontal axis with respect to the partially cylindrical bottom, said poultry propelling member being substantially radial to said horizontal axis, means connected to the propelling member for rotating the same, said tank being adapted to contain a liquid scald bath, said flat propelling member having a deflector extending along its side edge, said deflector being extended angularly from the plane of the propelling member and forwardly in the direction of rotation, the longitudinal axis of rotation of the propelling member being common to the axis of the cylindrical bottom of the tank, said deflector having an outer edge contiguous to the partially cylindrical bottom and sweeping across said cylindrical bottom during rotation of the propelling member, the deflector by its angularity being adapted to displace the scalding liquid upwardly on the advancing side of the propelling member during rotation through said bath to form a flowing stream acting upon the poultry within the bath and adapted to float the poultry upwardly above the cylindrical bottom, the deflector and propelling member being adapted successively to propel the poultry through the scald bath, scoop the poultry from the bath, and dump the poultry back into the bath during sustained rotation thereof.

2,728,939
APPARATUS FOR PRODUCING COMPOSITE WOODEN BOARDS AND THE LIKE
Erwin Behr, Wendlingen (Neckar), Wurttemberg, Germany, assignor to Allwood Incorporated, Glarus, Switzerland, a corporation of Switzerland
Application January 3, 1951, Serial No. 204,209
3 Claims. (Cl. 18—1)



1. Apparatus for producing wood composition products from long-fibered wood particles, comprising a hopper for supplying a mass of particles, a housing disposed below said hopper and communicating therewith, said housing having a bottom opening and being gradually tapering from said hopper to said opening, an outlet conduit of horizontally flat shape adjoining said bottom opening for extruding a pre-compressed sheet of particles, and a number of studded revolvable rollers disposed within said housing above one another for sequentially forcing the particles from said hopper to said conduit, the uppermost one of said rollers having a direction of revolution opposite to that of the other rollers.

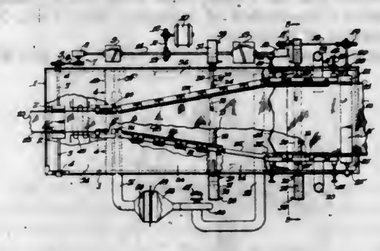
2,728,940
BALLING APPARATUS AND PROCESS
Lloyd A. Yesberger and Ira H. Wynne, Duluth, Minn., assignors to Oglebay, Norton and Company, Cleveland, Ohio, a corporation of Delaware
Application January 23, 1952, Serial No. 267,842
20 Claims. (Cl. 18—1)



1. An apparatus of the character described for producing ball-like bodies from finely divided material comprising a rotatable drum, means to introduce finely divided material into said drum, means to rotate said drum to thereby produce balls of the finely divided material introduced therein, means to scrape material from the wall of said drum with the said scraped material dropping into the drum and being rolled therein, screening means adjacent the point of discharge of said balls from said drum to remove particles of the material smaller than a predetermined size, a rotatable smooth surfaced rerolling means independent of said drum receiving the balls passing over said screening means, means to remove material adhering to the surface of said rerolling means, means to convey the said removed material from said rerolling means to said drum, and means to rotate the said rerolling means to thereby effect compacting and discharge of said balls.

20. The method of making essentially spherical balls or pellets from moistened fine metalliferous material which consists in delivering said material at one end of a rotating cylindrical drum, then separating the balls or pellets which have been formed in the said drum, from any admixed fine material, rerolling the balls or pellets upon a clear and bare inner surface of a cylindrical rotating drum and discharging the balls or pellets from the second drum.

2,728,941
APPARATUS FOR STRETCHING WEBS
Francis Peter Alles, Westfield, and Kenneth Albert Hellman, Florham Park, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
Application August 12, 1952, Serial No. 303,908
11 Claims. (Cl. 18—1)



1. A web stretching apparatus comprising a frame, web feed rolls near one end and outlet pull rolls near the other end, means for rotating said feed and outlet rolls at differential rates of speed so that the web having thickened edges to be stretched is under tension be-

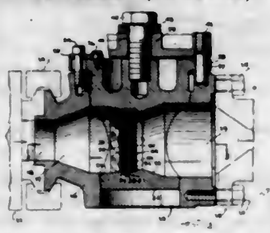
tween the feed and outlet rolls, two spaced rows of a plurality of coacting pairs of idler guide rollers, one row being placed on one side and the other on the opposite side of the axis of the path of the web between the feed and outlet rolls, the axis of the rollers in each pair being at opposite angles from each other and at an angle from the plane of the web, one roller of each pair being placed above and the other below the plane of the web near its thickened edge so that each thickened edge of the web will contact the peripheral edges of at least one of the same rollers of each pair in a respective row, said pairs of rollers in each row being mounted on a respective rail, said spaced rows of rollers coacting with the thickened edges of the web to keep it under lateral tension in a predetermined path during its passage from the feed rolls to the outlet rolls.

2,728,942
VULCANIZING MOLD
Archibald L. Wallace, Mountain Lakes, N. J.
Application October 20, 1950, Serial No. 191,246
3 Claims. (Cl. 18—6)



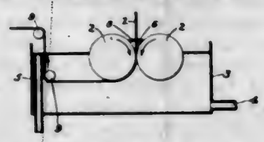
1. A vulcanizing apparatus, including, in combination, two mating molds for receiving an object to be vulcanized, at least one of said molds being deformable, the deformable mold being initially formed with an inner surface profile departing from the exterior profile desired in the finished vulcanized object, a roller brought to bear at times against the exterior surface of a deformable mold and formed with a profile such that it forces the deformable mold at at least one end in close contact with the end of the mating mold, said end being beyond the points of contact of the roller, said roller also so formed that it forces an intermediate portion of the deformable mold tightly against the object to be vulcanized positioned between the molds, and a clamp bearing solely at the end of the mating molds whereby the molds are kept together after being pressed together by the roller and after the roller is no longer pressing against the mold, said deformable mold being formed of elastic material and the intermediate portion of the mold between the ends being free to deform and naturally defining in conjunction with the mating mold a volume of the object to be vulcanized whereby the deformable mold maintains a follow-up pressure on the object to be vulcanized after the pressure of the roller is removed but the ends of the molds are held together by the clamps.

2,728,943
EXTRUSION APPARATUS
David B. Hertz and Ho Chow, New York, N. Y., assignors to Celanese Corporation of America, New York, N. Y., a corporation of Delaware
Application September 29, 1953, Serial No. 383,088
10 Claims. (Cl. 18—12)



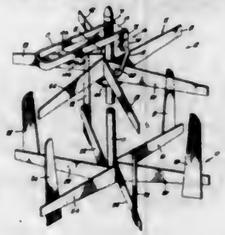
1. In an extrusion apparatus, the combination with an extruder and a forming die of a body portion having a passageway into the inlet end of which the extruded material enters from the extruder and from the outlet end of which the extruded material enters into the forming die, said body portion having a bore, a plug positioned in said bore and having a passageway extending therethrough that is aligned with the passageway in the body portion to form a path for the extruded material from the extruder to the forming die, said plug and said bore having interengaging tapered surfaces that form a seal therebetween when the plug is seated in the bore, and a filter assembly positioned in the passageway in the plug for filtering the extruded material, the construction and arrangement being such that the plug carrying the filter assembly may be readily removed and replaced.

2,728,944
PRODUCTION OF ARTIFICIAL FILMS
Charles Hampden Crooks, Welwyn, England, assignor to Imperial Chemical Industries Limited, London, England, a corporation of Great Britain
Application January 19, 1953, Serial No. 331,905
Claims priority, application Great Britain August 1, 1952
5 Claims. (Cl. 18—15)



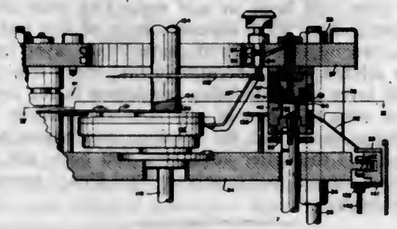
1. Apparatus for the production of melt-extruded film which comprises a pair of contra-rotatable nip rolls, means for extruding a molten film downwards into the nip of the rolls, means for supplying liquid to the nip and for maintaining a pool of liquid therein, and means for removing liquid from the pool at each side of the path of the film said means being in the regions directly between the path of the film and the nip rolls.

2,728,945
TIRE CURING ARRANGEMENT
Maurice Clapp, Redlands, Calif.
Application December 2, 1952, Serial No. 323,605
9 Claims. (Cl. 18—18)



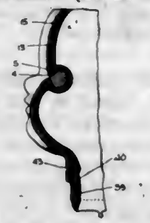
1. A tire engaging structure comprising a base member having: a centrally disposed post, a plurality of circumferentially spaced tire bead engaging fingers mounted on said post and extending radially outwardly therefrom, a plurality of tire bead bridging members, one of which is mounted on a corresponding finger and extends generally parallel with the axis of said post; a tire clamping member normally slidably mounted with respect to said base member, said clamping member being slidably mounted on said post; a handle; a friction plate pivoted on said handle about a first pivoting axis, said friction plate having a friction aperture engaging said post; and a toggle having its upper end pivoted on said handle about a second pivoting axis and the lower one of its ends pivoted on said clamping member and having one end thereof movable past a line joining said first and second pivoting axes.

2,728,946
HYDRAULIC APPARATUS FOR MOLDING LINERS IN JAR CLOSURES
Edwin C. Pinsenschaum, Columbus, Ohio, assignor to The Denison Engineering Company, Columbus, Ohio, a corporation of Ohio
Application December 11, 1951, Serial No. 261,041
11 Claims. (Cl. 18—20)



5. Apparatus for securing lining material to jar lids comprising a frame; a plurality of pressing die sections stationarily arranged in a circle on said frame; complemental die sections movably disposed in said frame for cooperation with said first-mentioned die sections; power cylinders for independently operating each of said complemental die sections; a control valve for each power cylinder; feeding mechanism in said frame, said feeding mechanism having a transfer member supported for rotation about an axis disposed eccentrically to the center of the circle on which said stationary die sections are arranged; motion-transmitting means for moving the axis of rotation of said transfer member about the center of said circle; and a driving means for said control valves and said motion-transmitting means.

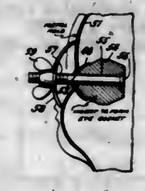
2,728,947
MOLDS FOR MAKING DOLLS COMPOSED OF PLASTIC MATERIAL
Joseph L. Kallus, New York, N. Y.
Application May 22, 1951, Serial No. 227,610
3 Claims. (Cl. 18—34)



1. A mold for a doll's head having two small chambered spherical eye-forming metal wall portions each having a restricted small opening, and a large chambered head-forming metal wall portion having a restricted main opening at the neck portion of the doll's head and extending into and completely covering the inner faces of the eye-forming wall portions, said large metal wall portion metallically secured to the entire inner faces of said small chambered wall portions with its inner face forming the outer conformation of the doll's head including the face of the doll's head and with the small chambered wall portions extending inwardly from the large chambered metal wall portion and their outer faces forming deep bulging eye sockets in the doll's head.

2,728,948
MOLDS FOR MAKING DOLLS COMPOSED OF PLASTIC MATERIAL
Joseph L. Kallus, Brooklyn, N. Y.
Application November 24, 1953, Serial No. 394,007
4 Claims. (Cl. 18—34)

1. A mold having a metal wall forming a chambered doll head and a restricted neck portion with a main opening at the entrance to the neck portion and two small openings defining locations for eye conformations in said wall adjacent said openings having inwardly facing concave faces to form seats, position-defining preformed bulbous eye socket forming metal protuberances positioned on said seats to form eye sockets, anchoring devices

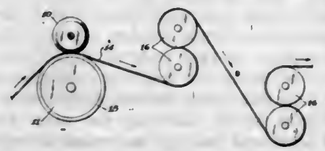


engaging the outer face of said wall, and bolts extending through the openings in said metal wall, through said metal parts and said anchoring devices to secure said metal parts in place, each metal protuberance having a greater main diameter than the diameter of its associated opening.

2,728,949
PROCESS FOR MAKING MINERAL WOOL
Everett Weldon Sweet, Morristown, N. J., assignor to Aquex Development and Sales Corporation, Whippany, N. J., a corporation of New Jersey
No Drawing. Application October 21, 1949, Serial No. 122,863
1 Claim. (Cl. 18—47.3)

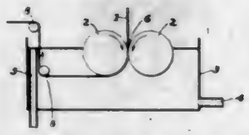
A process for rendering mineral wool water-resistant comprising disrupting a molten stream of siliceous material by subjecting it to a blast of steam, the fibres so formed being deposited in the form of a mat, applying to the fibres at a point between the point of their formation and their point of deposit and while at an elevated temperature, a first composition comprising a thermosetting resin, a curing catalyst therefor, a mineral oil and a water-insoluble soap and thereafter applying to the fibres an aqueous colloidal dispersion comprising particles of polyvinyl acetate, and a wax, while said fibres are sufficiently heated to evaporate water from said fibres and advance the cure of the resin to deposit both compositions on said fibres in the form of a discontinuous deposit.

2,728,950
PROCESS FOR PRODUCING FIBERS FROM FILMS OF POLYMERIC MATERIALS
Richard J. Annesser, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
Application May 6, 1954, Serial No. 428,011
3 Claims. (Cl. 18—47.5)



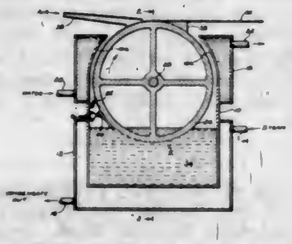
1. The method which comprises supplying a coherent and unoriented plastic film to the nip between a cold roll having a yieldable surface and a heated roll having closely spaced parallel narrow circular ridges on its periphery, while applying sufficient pressure to the latter roll to score the film to at least half its thickness, stretching the so-scored film to effect longitudinal orientation, and mechanically separating the stretched product into fibers along the scored lines.

2,728,951
PROCESS FOR QUENCHING MELT EXTRUDED FILM
Aldan Francis O'Hanlon, High Salvington, near Worthing, and Jack Witherington Cornforth, Harpenden, England, assignors to Imperial Chemical Industries Limited, London, England, a corporation of Great Britain
Application January 19, 1953, Serial No. 332,023
Claims priority, application Great Britain January 23, 1952
18 Claims. (Cl. 18—48)



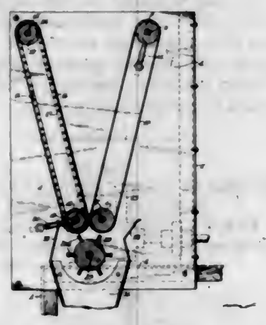
1. A process for quenching a melt extruded film of a highly polymeric synthetic linear compound which comprises passing the film downwards in its molten state into a pool of liquid maintained in the nip formed between two contra-rotating rolls, said liquid being maintained at a temperature considerably below its own boiling point, being of sufficient quantity and depth and being sufficiently below the melting point of the polymeric compound to bring about rapid chilling of the film to the solid state, the two rolls being rotated at equal peripheral speed and each roll, at the nip, rotating in the direction of travel of the quenched film which passes through the nip.

2,728,952
METHOD OF MAKING FILMS
Michael J. Borushko, Detroit, Mich., assignor to Harding Manufacturing Company, Inc., Detroit, Mich., a corporation of Michigan
Original application April 22, 1950, Serial No. 157,615, now Patent No. 2,675,779, dated April 20, 1954. Divided and this application September 8, 1953, Serial No. 378,887
15 Claims. (Cl. 18—57)



1. The method of making a continuous film which comprises providing a body of a liquid composition including a solvent and a film-forming material dispersed therein; maintaining said liquid at an elevated temperature approaching the boiling point of said solvent; condensing solvent vapor rising from said liquid at said elevated temperature before said vapor reaches a predetermined level above the surface of said body of liquid and returning to said body of liquid the resulting condensate, a vapor-containing zone thus being defined immediately above the surface of said liquid; enclosing the space immediately above said level and cooling said space to maintain said space at a solvent vapor condensing temperature for defining immediately above said vapor-containing zone another zone which is substantially free from solvent vapor; providing an endless body capable of absorbing, retaining and releasing heat; advancing said body over an endless path which extends into said body of liquid, out of said body of liquid, through said vapor-containing zone, through said vapor-free zone and back into said body of liquid, said body absorbing heat while passing through said body of liquid, retaining said absorbed heat while passing through said vapor-containing zone and releasing said absorbed heat in said vapor-free zone; said endless body carrying a layer of said liquid composition as said body emerges from said body of liquid and passes through said two zones, the rate of advancement of said body through said vapor-free zone being such that said layer will be retained in said vapor-free zone while said heat released from said body in said vapor-free zone causes rapid volatilization of the solvent content of said layer of liquid carried by said body to convert said layer into a film; the solvent vapor liberated in said vapor-free zone from said layer of liquid being condensed in the cooled vapor-free zone to maintain said zone substantially free from solvent vapor and the resulting condensate being recovered; and thereafter advancing said body and said film along divergent paths, whereby said film is separated from said body.

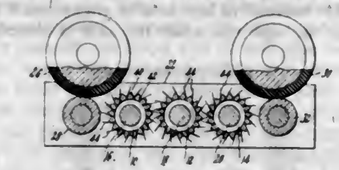
2,728,953
MACHINE FOR MAKING RESILIENT FILTER ELEMENTS AND BATTS
Joseph B. Sebok and Frank Sebok, Detroit, Mich., assignors to Houdaille-Hershey Corporation, Detroit, Mich., a corporation of Michigan
Original application May 7, 1948, Serial No. 25,726. Divided and this application December 20, 1950, Serial No. 201,728
3 Claims. (Cl. 19—67)



1. In a machine for making a resilient batt of fibrous material, a housing, a spout in said housing, said spout projecting partially therefrom and having an inlet in the housing and an outlet outside thereof, a high speed rotary comb mounted within said spout adjacent the inlet thereof, means above said spout inlet extending partially therein for delivering fibrous material to said comb which whips the material to separate the fibers thereof and force the material through said spout outlet, said housing having an opening in the wall above said spout inlet, said comb by its whipping action also separating dust and scale from the material, and said material delivering means coacting with an adjacent wall of the spout inlet to define an outlet for the separated dust and scale, whereby the action of said comb in effects blows same through said defined outlet and to said housing opening.

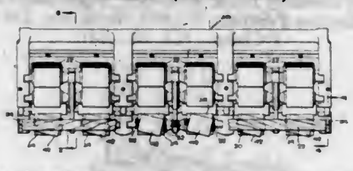
2,728,954
DRAFTING APPARATUS WITH MULTIPLE PORCUPINES
Willie Holdsworth, Seekonk, Mass., assignor to Holdsworth Manufacturing Company, Inc., Pawtucket, R. I., a corporation of Rhode Island
Application February 3, 1953, Serial No. 334,779
4 Claims. (Cl. 19—130)

2. In a drawing frame having front rolls and having back rolls spaced from said front rolls, a plurality of porcupines mounted on said frame between the front rolls and back rolls to rotate about parallel axes, said porcupines having fluted surfaces with longitudinal ridges and valleys and a longitudinally extending row of pins adjacent to each said ridge, one of said valleys being between each two successive rows of pins, means connecting adjacent porcupines for rotation at equal peripheral speeds in



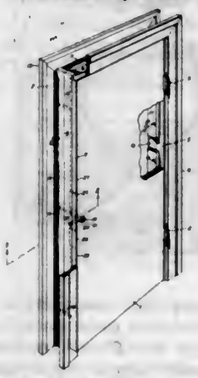
opposite directions, the axes of said porcupines being so spaced that the rows of pins on each porcupine enter the spaces and project into the valleys between rows of pins of the next adjacent porcupine when they pass the line of centers of said porcupines.

2,728,955
CLEARER FOR THE TOP DRAWING ROLLERS OF A SPINNING MACHINE
Eddie F. Rose, Maiden, N. C.
Application February 26, 1954, Serial No. 412,836
2 Claims. (Cl. 19—140)



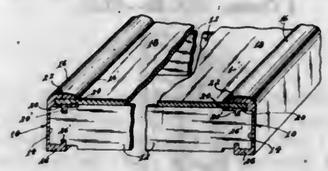
1. In a drawing frame for a spinning machine longitudinally spaced drawing rollers carried by said frame for rotation about a common horizontal axis, and guides carried by and extending upwardly from the frame adjacent opposite ends thereof, means for preventing the accumulation of lint and waste on the drawing rollers comprising a support carried by the guides and extending longitudinally of the spinning frame above the drawing rollers, longitudinally spaced clearer rollers carried by the support with one clearer roller above each drawing roller and having rolling contact therewith, said clearer rollers rotating about parallel axes which lie above the common axis and oblique thereto.

2,728,956
METHOD AND PREASSEMBLED CASING FOR FINISHING A ROUGH DOOR OPENING
Edwin T. Jackson, Tallahassee, Fla., assignor to Jackstite, Inc., Tallahassee, Fla., a corporation of Florida
Application September 19, 1952, Serial No. 310,445
12 Claims. (Cl. 20—11)



12. In a pre-assembled door casing and comprising a swingable door member pre-drilled in a swinging edge to form a lock bolt opening and a jamb member confronting said drilled edge of said door member and having a preformed door-bolt-receiving aperture aligned with said opening, the combination of an elongated reinforcing device having a portion disposed in said opening and anchored against longitudinal motion to said door member and protruding beyond said edge, the protruding portion of said device being engaged in said aperture in said jamb member, and means on said jamb member to draw said protruding portion of said device into said aperture and to retain said protruding portion in inwardly drawn position in said aperture.

2,728,957
MOULDINGS FOR PANEL MEMBERS AND THE LIKE
Robert R. Keller, Manchester, N. H.
Application June 3, 1953, Serial No. 359,380
7 Claims. (Cl. 20—15)



1. A panel-moulding structure comprising oppositely disposed channel-strips spaced substantially apart and having their channels open toward each other, similar walls of said channel-strips being relatively deeply grooved in general parallelism, with the entrances to the grooves open toward each other, a panel member extending between said channel-strips and having opposite end margins seated in said grooves, and a plurality of generally flat relatively rigid panel-supporting elements each having its opposite end portions slidably engaged in the channels of said channel-strips with a longitudinal edge thereof engaging said panel member throughout a substantial portion of the extent of each said element between said channel-strips, said generally flat panel-supporting elements being slidable along the channels of the channel-strips for supporting said panel member at selected locations between opposite edges thereof, and inter-locking means on said channel-strips and on said end portions of said elements coacting to secure said channel-strips in a predetermined spaced relationship.

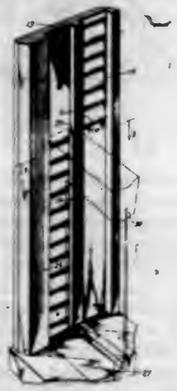
2,728,958
INSULATING STRUCTURE
Robert A. King, Erie, Pa., assignor to General Electric Company, a corporation of New York
Application October 23, 1952, Serial No. 316,436
3 Claims. (Cl. 20—35)



1. A door structure comprising a pan-shaped outer wall including an inwardly extending peripheral portion, a vacuum insulating structure including two spaced walls, one of said last named walls being composed of a thin sheet, a compressible filler material between said walls for supporting said walls against external atmospheric pressure when the space between said walls is evacuated, said insulating structure being disposed within said pan-shaped outer wall with said thin sheet facing away from said pan-shaped wall and forming at least a portion of the inner wall surface of said door structure, a breaker frame enclosing the space between said peripheral portion of

said outer wall and said thin sheet, one edge of said breaker frame engaging said thin sheet along a boundary spaced inwardly from the marginal edge thereof whereby the area between said one edge of said breaker frame and said marginal edge of said thin sheet is concealed, and a reinforcing sheet between said thin sheet and said filler material, said reinforcing sheet extending only to said edge of said breaker frame whereby said reinforcing sheet is spaced from the other of said walls of said vacuum insulating structure and supports only the exposed area of said thin sheet, said reinforcing sheet being substantially thicker than said thin sheet, said thin sheet being pressed smoothly against said reinforcing sheet by external atmospheric pressure.

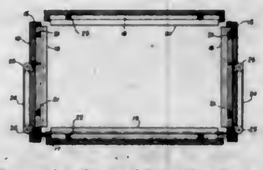
2,728,959
ONE PIECE JAMB LINER WEATHER STRIP
Christopher C. Amy, Reno, Nev.
Application December 5, 1952, Serial No. 324,354
1 Claim. (Cl. 20—52.4)



In a window frame, a base providing a sill with side rails extended upwardly from said sill, said side rails having a parting strip positioned substantially midway of the width thereof, a bead on the outer edge, and a trimming strip on the inner edge, thereby providing sash traveling channels on opposite sides of said parting strip, and a one piece metal liner having a channel shaped section midway of the width thereof extended around said parting strip and having flanges extended from the edges of said channel shaped section across said sash traveling channels, the flanges on each side of said liner lying in the same plane said channel shaped section having side webs with arcuate spring sections therein and the flange at one side of the liner being corrugated horizontally from a point substantially midway of the height thereof to the window sill and with the flange on the opposite side having horizontally disposed corrugations extended from a point substantially midway of the height of the frame to the upper end of the frame whereby the corrugations on one side are positioned to coact with the lower sash and corrugations on the opposite side are positioned to coact with the upper sash, said side webs being arranged in spaced parallel relation with respect to each other, said spring sections extending the same distances as the adjacent corrugations.

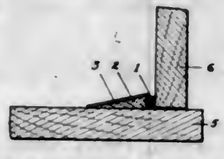
2,728,960
COMBINATION WINDOW STRUCTURE
Andrew Mihok, Windsor, Ontario, Canada
Application March 12, 1953, Serial No. 341,871
3 Claims. (Cl. 20—53)

2. A window construction comprising a frame, a sash rotatably mounted in said frame, longitudinal grooves formed in the sides and sill of said frame, sealing bars slidably mounted in the grooves in the sides of said frame for movement into sealing engagement with the outer side of the sash rails when said sash is closed, a locking and sealing bar slidably mounted in the groove of the sill of said frame for movement into sealing engagement with the inner side of the sash rail when the sash is closed, spring



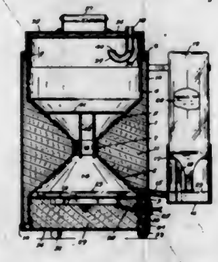
means normally projecting said sealing bars and said locking and sealing bar outwardly from said grooves, and flexible means connecting said locking and sealing bar with said sealing bars for retracting said sealing bars when said locking and sealing bar is depressed to release said sash for rotation.

2,728,961
DOOR SILL INSULATOR
Charles Geoffrey Lyon, Winnipeg, Manitoba, Canada
Application February 5, 1952, Serial No. 270,075
1 Claim. (Cl. 20—64)



In combination with a door sill and a swingable door; an attachable insulating threshold construction, comprising: a backing strip of triangular-shaped cross section positioned on the sill, across the door opening; resilient material secured to the vertical edge of said backing strip for door contact therewith, when closed; a rectangular-shaped flat plate, of greater width and overlying said backing strip; one edge of said plate contacting and partly overlying said resilient material and the other edge thereof resting on and supported by the sill, in advance of said backing strip; holes in said plate; and fastening means passing through the holes and through the underlying backing strip to secure the above assembly to the sill.

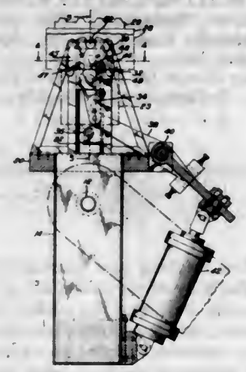
2,728,962
FOMENT STERILIZER
Norman MacLeod, Winnipeg, Manitoba, Canada
Application December 2, 1952, Serial No. 323,597
1 Claim. (Cl. 21—95)



A foment sterilizing unit comprising in combination a vertical casing, a removable cover on said casing, a water trap in said cover, an hourglass-shaped liner within said casing, said liner comprising an upper part and a lower part with a restricted junction therebetween, a chamber in said lower part, a reservoir adjacent said casing and

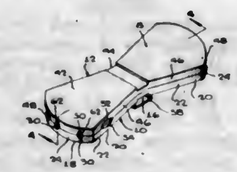
fluidally connected with said chamber, means for maintaining a predetermined level of water in said reservoir and in said chamber, means for heating the water in said chamber and a partition for supporting foment cloths in said upper part, said water trap taking the form of a vertical pipe extending through said cover, and extending internally thereof, the lower end of said pipe being curved upwardly, condensate formed within said curved portion acting to build up steam pressure within said device and to permit escape of steam therethrough, thereby maintaining said pressure and permitting movement of steam through said partition, said partition comprising a perforated disc adapted to engage the wall of said upper part immediately superjacent said junction, and a plurality of legs extending downwardly from said disc and engageable with the walls of said junction to maintain said disc substantially horizontal.

2,728,963
SHELL MOLDING MACHINE
John P. Rynerson, Jr., Warren W. Ballantine, Ward R. Kidder, and Percy O. Gibson, Kokomo, Ind., assignors to Union Carbide and Carbon Corporation, a corporation of New York
Application September 25, 1953, Serial No. 382,378
9 Claims. (Cl. 22—9)



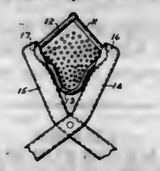
1. In a shell molding machine, an open topped dump box, a heater mounted above said box, a pattern head carrying a pattern to register with the open top of said box and receive a shell invested thereon, means for mounting said pattern head and heater for relative movement, and means for simultaneously raising and rotating said pattern head to present said shell to said heater.

2,728,964
CORSAGE HOLDER
David E. Baird, Lock Haven, Pa.
Application March 4, 1952, Serial No. 274,788
8 Claims. (Cl. 24—5)



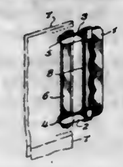
5. As a new article of manufacture, a corsage form and flower preserver comprising a container having a constriction intermediate its ends, an absorbent pad within the container adjacent the constriction and defining plant stem receiving chambers within the container adjacent opposite ends thereof, and said container having flower stem accommodating openings extending through opposite ends thereof and communicating with the chambers for holding in selected relation to one another flowers carried by stems contacting the absorbent pad, and partition walls carried by the container and extending longitudinally through the chambers for engaging the stems extending through the openings and limiting lateral movement of the flowers.

2,728,965
CLIP FOR THE ASSEMBLY OF EVERGREEN AND/OR FLORAL MATERIAL TO FORM DISPLAYS
Arthur C. Hillman, East Paterson, N. J.
Application December 10, 1952, Serial No. 325,117
1 Claim. (Cl. 24—27)



A device for use in assembling a plurality of flora into a display comprising: a wire-like clip member substantially U-shaped, the base of the U having a downwardly bent center portion and a pair of upwardly bent portions on either side of the center portion; means defining a notch substantially at the center of the downwardly bent base portion, and the legs of the U being substantially straight and extending radially from the base portion in a pair of planes each of which includes one leg and the base, said planes intersecting each other at an acute angle.

2,728,966
TROUSER WAIST BUCKLE
George R. Cantil, Great Neck, N. Y.
Application September 9, 1952, Serial No. 308,596
4 Claims. (Cl. 24—196)

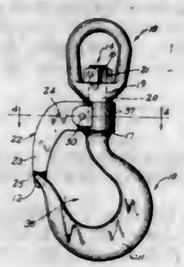


1. A buckle for a creased garment comprising a U-shaped member the free ends of which are adapted to extend through a crease in said garment, said ends being folded back to form loops, a holding bar adapted to fit through said loops to hold said buckle in position in said crease of said garment without any sewing, and a rider member adapted to slide on the arms of said U-shaped member.

2,728,967
SAFETY HOOK
Claude William Burnham, Sacramento, Calif., assignor to E. D. Bullard Company, a corporation of California
Application February 11, 1953, Serial No. 336,347
7 Claims. (Cl. 24—241)

1. In combination; a hook provided with a throat and including a curved portion terminating in a terminal end; a shank extending from said hook and including a cylindrical portion having a longitudinal axis and a groove in the surface of said cylindrical portion extending as a chord to said surface; a safety arm including a hub mounted for rotation on said cylindrical portion and having an arm extending from the hub, said hub being rotatable on said cylindrical portion to bring said arm into and out of bridging relation to said throat and engagement with

said hook terminal end, said hub having a recess therein extending as a chord to said cylindrical portion and opening into engagement with said cylindrical portion and said



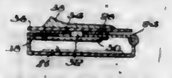
groove; a pin movable in said recess into and out of locking engagement with said groove; and a spring biasing said pin into groove engaging position.

2,728,968
ADJUSTMENT MEANS FOR SPRING TENSION CLIPS OF JEWELRY
Herbert E. Scharff and Marc C. Walschaert, Davenport, Iowa
Application October 27, 1952, Serial No. 317,113
6 Claims. (Cl. 24—252)



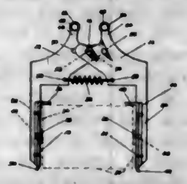
4. In a spring clip for an article of jewelry, as an earring, a first post having a body with two wings projecting at a substantial angle therefrom, the two wings projecting parallel to each other, a second post upstanding from the body between the wings, a lever divided at one end into three parallel arms, the remainder of the lever being unitary, the wings having holes therein, the arms of the lever having laterally extending projections which fit into the holes in the wings, the two outer arms of the lever being in the same plane, the central arm being bent slightly upwardly above the plane of the other two arms, this central arm of the lever resting upon the end of the second post and thereby exerting pressure to hold the clip against the main body of the article of jewelry, and a slider on the lever to increase or decrease the tension on the spring of the lever.

2,728,969
CLASP
Edward G. Baumann, St. Petersburg, Fla.
Application July 19, 1952, Serial No. 299,871
2 Claims. (Cl. 24—260)



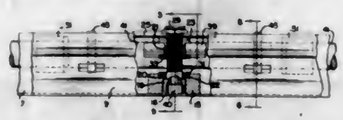
1. A belt or ribbon clasp comprising a channel-shaped member with upwardly-extending flanges at each side of the channel, an inwardly-turned ledge at the top of one flange, a clamping member hinged to the top of the other flange, said clamping member extending from the hinge to the ledge, a slot in said clamping member extending normally to the flanges, a latch slidably mounted on the bottom of the clamping member and movable into a position across the ribbon and below the ledge, a face plate mounted above the member and connected to the latch by a boss which extends through the slot in the member whereby a reciprocating motion of the face plate will move the latch into and out of engagement with the under side of the ledge.

2,728,970
CELL HOLDER AND CONCRETE FORM
Fred J. Zoerb, Ainsworth, Nebr.
Application August 6, 1954, Serial No. 448,266
5 Claims. (Cl. 25—1)



1. A tool for use in building construction comprising spaced pivotally connected elements having upwardly extending sections on ends thereof on one side of the pivotal connections and arms extended from the ends on the opposite side, rods extending through the sections connecting the elements, elongated parallel plates connected by said arms and spaced gripping pads on inner surfaces of said plates for holding cell forming shells positioned between the plates.

2,728,971
CASKET SEALING AND LOCKING DEVICE
Edgar Fay Harter, Springfield, Ohio, assignor to The Springfield Metallic Casket Co., Inc., Springfield, Ohio, a corporation of Ohio
Application March 18, 1955, Serial No. 495,168
9 Claims. (Cl. 27—17)

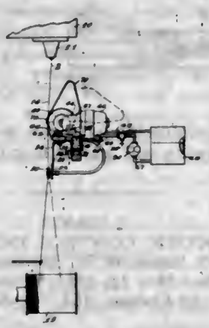


1. In a casket, latching and closing mechanism supported within the body of the casket along a forward wall thereof for closing the lid of the casket into sealed contact with the body, said mechanism comprising a plurality of first latching members adapted to cooperate with pull-down latching members on the casket lid, a rock-shaft carrying the first latching members and rockable to actuate said members simultaneously, said rock-shaft extending along the forward wall within the casket body, a rotatably mounted threaded element supported within the body, fixed against rectilineal movement, and extending transversely to the said forward wall and to the rock-shaft, a nut threadedly engaging the element and movable rectilineally therealong upon rotation of the threaded element, and means secured to the rock-shaft operably connecting the rock-shaft to the nut for rockable movement of the rock-shaft upon rectilineal movement of the nut.

2,728,972
METHOD AND APPARATUS FOR COATING FIBERS
Warren Wendell Drummond and George E. Smock, Newark, Ohio, assignors to Owens-Corning Fiberglas Corporation, Toledo, Ohio, a corporation of Ohio
Application April 10, 1951, Serial No. 220,284
11 Claims. (Cl. 28—1)

1. Apparatus for coating moving fibers with a liquid including in combination, an element having a cylindrical surface of synthetic rubber; means for continuously rotating the element in the same general direction as the moving fibers and at a speed less than that of the fibers; a receptacle adapted to contain the liquid coating material; said element being disposed whereby the synthetic rubber surface during rotation of the element acquires a film of the liquid by engagement with the liquid in the receptacle; means for guiding the fibers in individually

spaced relation and directing each of the fibers into engagement with the synthetic rubber surface whereby the fibers follow the curvature of the surface for a sub-



stantial distance to effect a transfer of a coating of liquid from the film on the synthetic rubber surface to the fibers, and means for maintaining a predetermined level of the liquid coating material in the receptacle.

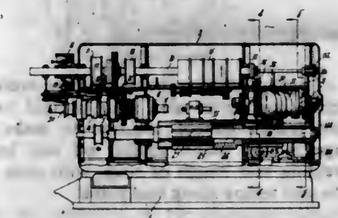
2,728,973
DEVICE FOR STRETCHING SYNTHETIC SILK
Paul Kümmel, Ems, Switzerland, assignor to Inventa A. G. fur Forschung und Patentverwertung, Lucerne, Switzerland
Application August 11, 1950, Serial No. 178,789
1 Claim. (Cl. 28—71.3)



A device for stretching polylinear yarns of the type of superpolyamides and superpolyurthanes comprising a spool for the yarn to be stretched; a thread brake, a weighting roller and a feed roller pressing together, between which the yarn delivered from said spool is led and moved; stretching means for the yarn delivered from said rollers; and a spooling device for the stretched yarn, said thread brake being arranged between the spool carrying the yarn to be stretched and said weighting and feed rollers in order to impart pre-tension to the material before the stretching process proper is performed.

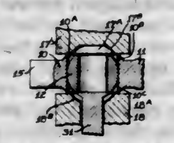
2,728,974
AUTOMATIC LATHE
Carroll E. Miller, Windsor, Vt., assignor to Cone Automatic Machine Company Inc., Windsor, Vt., a corporation of Vermont
Application August 24, 1950, Serial No. 181,287
7 Claims. (Cl. 29—43)

1. In combination, a rotary work spindle, an indexing tool-carrying turret mounted for rotation about an axis parallel and eccentric to said work spindle, a plurality of tool supports carried by said turret and arranged in circular array about said axis, means for indexing said turret to bring said tool supports successively into cooperative relation to said spindle, means for locking said turret in indexed position, a cam having a pair of spaced cam paths, a follower carried by each tool support for selective cooperation with either of said cam paths when said tool support reaches cooperative angular position by indexing of said turret, means located at one index station of said turret for moving said follower from one to another selected position in alinement with one or the other of said cam paths when said follower reaches cooperative relation thereto at a different index station of said turret, means holding said follower in said selected position until it reaches said different indexed station,



means for rotating said cam to cause the tool support then in said different index station to move axially of said turret, and a second cam mounted for motion with said first mentioned cam, effective on said tool carrier only when said follower is being moved by one of said cam paths to move said locking means to rock said turret and cause a tool on said support to cut work carried by said spindle laterally of the spindle axis and while the tool is spaced from the outer end of the work.

2,728,975
METHOD FOR MAKING TWO PIECE ROD END BEARINGS
Lee Russell Potter, Pasadena, Calif.
Application December 27, 1949, Serial No. 135,174
2 Claims. (Cl. 29—149.5)

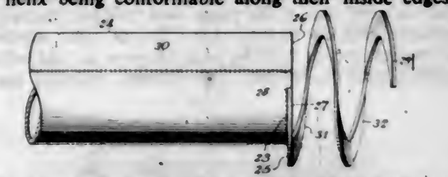


1. In the art of manufacturing two piece rod end bearings of the universal type in which a ball shaped member is maintained by at least one lip integrally formed with a race member in which the ball shaped member is free to move, the steps comprising forming said race member originally with a cylindrical aperture therethrough, the opposite mouths of which are each defined by an annular lip of generally right angled triangularly shaped cross sectional area which extends axially and outwardly beyond the body of the race member, heating said ball shaped member to a temperature above room temperature, inserting said ball in said aperture, then pressing the outer edges of said lip to thereby press each of said lips inwardly into said aperture against said ball and locking said ball in place while said ball is at an elevated temperature to thereby form ball retaining lips for preventing movement of said ball shaped member from said aperture but allowing rotative movement of said ball in said aperture after said ball cools, and restraining outward movement of all portions of said race member while said lips are being pressed inwardly and being deformed to their final position to assure a true coining action between the lips and the ball shaped member.

2,728,976
METHOD OF MAKING FLANGED TUBE
James J. Kraus, Neenah, Wis.
Application July 21, 1950, Serial No. 175,199
3 Claims. (Cl. 29—157)

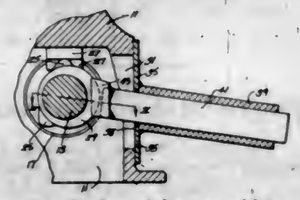
1. The method of flanging thin-walled tubing formed from corrosion-resistant sheet metal and having a longi-

tudinally extending welded seam, which comprises coiling a thin, flat strip of such metal edgewise to form a flexible helix the turns of which are resiliently separable, portions of said helically coiled strip approximating one turn of the helix being conformable along their inside edges to



said tubing in a plane cutting the axis of the tubing, conforming such a portion of said strip to said tubing to determine the length thereof required to make a continuous flange in said plane, cutting off said length of strip, and welding said length of strip, with ends abutted and joined, to said tubing along said plane.

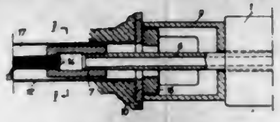
2,728,977
MEANS FOR REPLACING TIMING GEARS ON INTERNAL COMBUSTION ENGINES
Reginald R. Beezley, Memphis, Tenn.
Application February 7, 1951, Serial No. 209,879
3 Claims. (Cl. 29—283)



1. An abutment tool adapted for use with an engine of the type having a cam shaft, a fuel pump opening in adjacency to said cam shaft, and a fuel pump removably mounted over said opening, upon removal of said fuel pump, said tool including a plate of a size to overlie and cover the fuel pump opening, a hollow sleeve secured at one end to said plate, the longitudinal axis of said sleeve being deflected out of perpendicular relative to the plane of said plate, a plunger coaxially slidably mounted in said sleeve, said plunger being of a length to extend beyond the opposite ends of said sleeve, one end of said plunger extending beyond the plate end of said sleeve through and beyond said plate, and a flat blade-like abutment member rigidly fixed substantially in tangency to one side of said plunger end, the face of said plunger end being flat and substantially perpendicular to said abutment member, said tool being mountable on said engine and when so mounted being disposed so that said axis is perpendicular to the axis of the engine cam shaft, said plunger end face substantially abuts the periphery of a shaft-carried cam, and said abutment extends into engagement with a cam carried by the cam shaft, whereby to limit endwise cam shaft movement during replacement of gearing on the cam shaft.

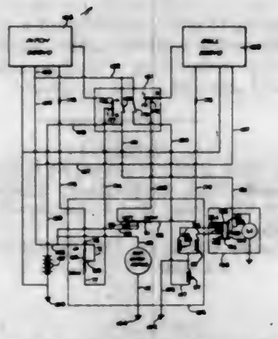
2,728,978
METHOD FOR PRETENSIONING AND ANCHORING REINFORCEMENTS OF CONCRETE
Max Birkenmaier, Antonio Brandestini, and Mirko Robin Roš, Zurich, and Kurt Vogt, Beinwil am See, Switzerland
Application March 8, 1951, Serial No. 214,611
Claims priority, application Switzerland March 10, 1950
2 Claims. (Cl. 29—452)

1. A method of producing an anchorage for prestressed reinforcing wires for a concrete structure comprising inserting a plurality of reinforcing wires in openings provided in an anchor member, upsetting the ends of said wires so that the upset ends bear against said member, then applying a prestressing force to said anchor member



whereby said reinforcing wires are uniformly prestressed and then anchoring said anchor member to said concrete structure.

2,728,979
GYROSCOPIC CONTROL INSTRUMENT
Thomas O. Summers, Jr., Sherman Oaks, Calif.
Application May 12, 1951, Serial No. 225,996
30 Claims. (Cl. 74—5.34)



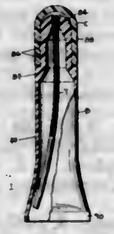
10. In a gyroscopic control instrument for a movable craft, a reference gyroscope having inner and outer gimbals, a gyro rotor supported by one of said gimbals, a pendulous bail mounted about the pitch axis of said craft, first and second erecting devices mounted on said bail and positioned on opposite sides of a plane passing through the inner gimbal axis and perpendicular to the outer gimbal axis, a rate gyro positioned with its precessional axis transverse of said craft so as to be sensitive to either right or left turns of said craft, first means operated by said rate gyro during a right turn to energize said first erecting device and second means operated by said rate gyro during a left turn to energize said second erecting device, said rotor being moved about thhe roll axis by said first and second erecting means until it assumes a position about which the craft will fly straight.

2,728,980
METHOD FOR PRODUCING MOLDS FOR MAKING DOLLS COMPOSED OF PLASTIC MATERIAL
Joseph L. Kallus, Brooklyn, N. Y.
Application September 10, 1953, Serial No. 379,454
4 Claims. (Cl. 29—458)



1. The method of manufacturing a chambered mold having an inner mold face for a chambered plastic doll head consisting in forming a wax model, inserting independent metal parts having concave inner seat forming faces into such wax model with outer exposed portions of the independent metal parts supplementing the outer face of the wax model, coating the outer face of the wax model and the outer exposed portions of the independent metal parts with a conductive metal, thereupon electrodepositing a metal on said outer face of the wax model and said outer exposed portions of the independent metal parts to anchor the independent metal parts to the electrodeposited metal wall, thereupon removing the wax from the interior of the mold wall, positioning bulbous metal protuberances on the concave inner faces of the independent metal parts extending from the inner face of the electrodeposited metal wall, and extending connecting means through the electrodeposited metal wall and independent metal parts, and connecting the bulbous metal protuberances in place on said independent metal parts to constitute socket forming protuberances in the mold to enable the faces of said protuberances to supplement the metal wall to complete the inner mold face.

2,728,981
METHOD OF MAKING ATOMIZERS
Robert Hooper, Towaco, N. J., assignor, by mesne assignments, to Boonton Molding Company, Boonton, N. J., a limited partnership
Application June 7, 1950, Serial No. 166,613
1 Claim. (Cl. 29—525)



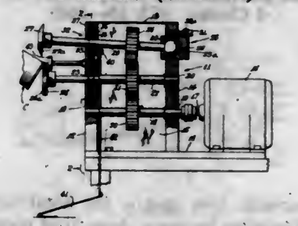
In the manufacture of an atomizer having a uniform diameter hole receiving an atomizer tube, the method of facilitating passage of the tube through the hole and of securing the upper end of an inexpensive tube tightly in the hole which includes using a desired length of slender extruded uniform-section polyethylene tube having a diameter appreciably smaller than the hole, preliminarily enlarging the upper end of the tube substantially concentrically of the tube, passing the tube freely through the hole until the enlarged end reaches the hole, and then forcing the enlarged end frictionally into the hole for a short distance.

2,728,982
METHOD OF MAKING BENDABLE WEATHER OR TRIM STRIP
Oliver B. Merrill, Amesbury, Mass.
Original application December 22, 1949, Serial No. 134,464, now Patent No. 2,619,375, dated November 25, 1952. Divided and this application February 13, 1952, Serial No. 271,401
1 Claim. (Cl. 29—533)



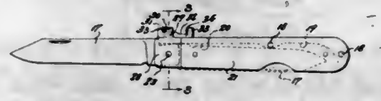
The herein described method of forming a bendable sheet metal base for a weather or trim strip which comprises forming slits in a sheet metal strip extending inwardly from a longitudinal edge thereof to provide a series of elongated tongues disposed side by side along the length of the strip, bending an edge of each tongue laterally, and rolling the slitted edge of the strip to flatten the bent edges of the tongues to widen the tongues and dispose the edges of the widened tongues in lapping relation.

2,728,983
APPARATUS FOR REMOVING THE ENDS OF CONTAINERS
Vincent A. Mugavero, Ridgefield, Conn.
Application February 9, 1955, Serial No. 487,103
5 Claims. (Cl. 30—9)



1. In an apparatus of the character described for removing the ends from the tubular wall portions of a container, a cutting device comprising a frame, a pair of shafts supported on said frame in substantially spaced relationship, a cutting tool mounted on the end of one of the shafts and a feeding tool mounted on the other shaft, one of said shafts having one end positioned in an adjustable bearing whereby said shaft is mounted for transverse movement and pivotally mounted for movement from a retracted to an operative position so that the tool mounted on the end thereof is predeterminately positioned relative to the other tool in order to accommodate particular container sizes, a gear mounted intermediate the ends of each shaft to form an intermeshing gear train for rotating said shafts, said gears being adapted to mesh in both retracted or operative position, means for relatively moving said tools from retracted into cooperating cutting relationship whereby the end portion of a can is wedged and secured therebetween with the feeding tool engaging the circumferential portion of the container and the cutting tool engaging the cylindrical wall portion of a container adjacent the end, and means for actuating said gear train to operate said feed tool and cutting tool so that the end of the container is sheared off adjacent the end of the tubular wall portion.

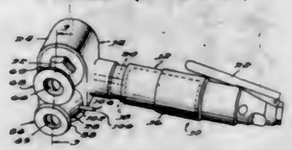
2,728,984
TOOL ELEMENT LOCKING MEANS FOR FOLDABLE TOOLS
Joseph Hopta, Plainfield, N. J.
Application September 13, 1952, Serial No. 309,404
3 Claims. (Cl. 30—161)



1. A foldable tool comprising a handle, a tool element having a tang pivoted in an end of the handle for swinging movement into and out of the handle, spring means mounted in the handle along and normally flush with the back thereof and adapted to flex outwardly from the back thereof, the flexible end portion of said spring means being disposed to yieldably bear upon the tang of said tool element in all position of said tang, a bridge bar supported from external sides of the handle for transverse extension across the back of said handle adjacent to an end of the handle to which said tool element is pivoted and in outwardly spaced offset relation to the exposed back surface of said flexible end portion of the spring means, and a slide bolt releasably movable betwen said bridge bar and said flexible end portion of the spring means, whereby to obstruct outward flexing movement of the latter under

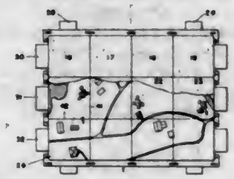
turning thrust of the tang of the tool element and thereby to lock said tool element against accidental displacement from either out-swung position for use or in-swung closed position relative to the handle.

2,728,985
ADJUSTABLE ROTARY SHEARS
Robert C. Quackenbush, San Fernando, Calif.
Application December 27, 1954, Serial No. 477,783
4 Claims. (Cl. 30—265)



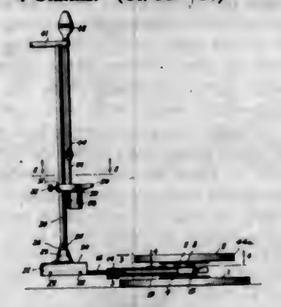
1. In a portable trim shears, the combination of: a housing, said housing having a shear head upon the outer end thereof and said head having first and second bosses extending outwardly therefrom on parallel axes normal to the axis of said housing, said bosses having bores in the interior thereof; a motor in said housing; a motor driven shaft in the bore of said first boss; a first cutter mounted in said head for rotation on said motor-driven shaft; a second shaft driven by said motor driven shaft and located in the bore of said second boss; a second cutter mounted for rotation on said second shaft, said first and second cutters having their peripheral edges disposed in overlapping relationship during a cutting operation; and a carrier mounted in said second boss and supporting said second shaft to move said second cutter away from said first cutter, said carrier being constituted by an elongated bushing mounted in said bore of second boss and having an eccentrically located bore for the reception of said second shaft.

2,728,986
MOSAIC FRAME AND METHOD OF MAKING MOSAIC MAPS
William Shirley Karr and Alva F. Warren, Lansing, Mich., assignors to Abrams Aerial Survey Corporation, Lansing, Mich., a corporation of Michigan
Application January 23, 1952, Serial No. 267,892
3 Claims. (Cl. 33—1)



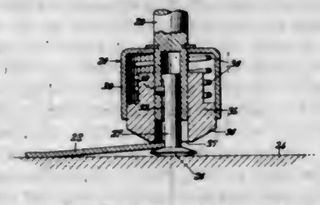
1. The method of making mosaic maps which comprises the steps of providing a mosaic assembly support comprising a frame and a plurality of mosaic boards detachably connected thereto in a common plane, said mosaic boards being arranged in abutting relationship in a plurality of abutting rows, said boards being accurately cut to scale and representing quadrangles of the area to be mapped, plotting on said boards ground control points, assembling by the aid of said control points on the first row and at least a portion of the second row a photographic mosaic of the terrain to be mapped, cutting the mosaic boards in the first row from those in the second row and from each other at the edges of the abutting boards and removing those boards from the frame, and moving the remaining mosaic boards on the frame to permit the addition of another row of boards adjoining the farthest removed from the first row, so that additional control may be plotted on the added row.

2,728,987
DRESS MARKER
Stanley Weintraub, Brooklyn, N. Y.
Application November 8, 1952, Serial No. 319,528
4 Claims. (Cl. 33—10)



1. A skirt marker having a disk-shaped base, a platform located above the base, a post extending between the base and platform, a ball-bearing encircling the post, a pair of parallel tracks secured to the outer race of the bearing, rails telescopically mounted in the tracks, a vertical post carried at the outer ends of the rails, a marker head vertically adjustable on said vertical post, and means by which said marker head is caused to eject marking material while the vertical post is moved in a circular path around the platform.

2,728,988
CONTOUR FOLLOWING APPARATUS
Lloyd W. Young, Elizabeth, N. J., assignor to Union Carbide and Carbon Corporation, a corporation of New York
Application November 8, 1952, Serial No. 319,527
4 Claims. (Cl. 33—23)

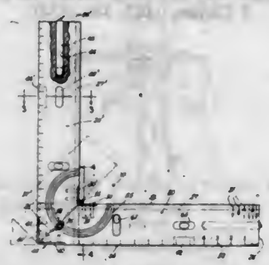


1. In a contour following apparatus having a tracing stylus adapted to engage a pattern on a table, a traction wheel for driving said stylus around said pattern, means for supporting said stylus on said driving wheel, said stylus having a foot adapted to ride over said table and to extend under the margin of said pattern and a stem having a flat portion above said foot to engage the side edge of said pattern margin on said foot, the improvement which comprises a floating mounting for said stem on said supporting means to permit said flat portion and foot and pattern margin resting thereon to move vertically with respect to said traction wheel to float over undulations in the surface of said table not engaged by said traction wheel, in combination with a hold down sleeve on said stylus slidable longitudinally of said stem down over said flat portion and having a downwardly facing bottom portion adapted to engage the top of the margin of the pattern resting on the top of said foot and hold it thereagainst.

2,728,989
COMBINATION TOOL
Carl J. Laggren, Elizabeth, N. J.
Application February 25, 1954, Serial No. 412,453
4 Claims. (Cl. 33—88)

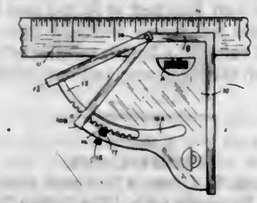
1. A combination tool comprising, in combination, a pair of arms each having parallel rectilinear side edges

and an end bevelled at an angle of 45 degrees to such edges, the bevelled ends of said arms being juxtaposable to position said arms perpendicular to each other to form a construction square having inner and outer corners; hinge leaves on each side edge of each arm adjacent its



bevelled end, the hinge leaves on each arm mating with the correspondingly located hinge leaves on the other arm; and a removable hinge pin selectively operable to hingedly interconnect either pair of mating hinge leaves; whereby the arms are angularly adjustable about either the inner or outer corner of the square.

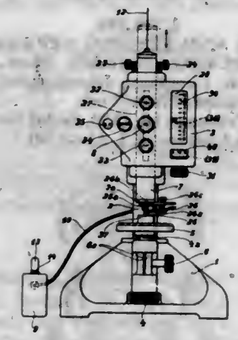
2,728,990
DEGREE MARKING ADDITION TO A CARPENTER'S COMBINATION SQUARE
Loren E. Murch, Auburn, Calif.
Application March 6, 1953, Serial No. 340,715
1 Claim. (Cl. 33—93)



In a combination with a carpenter's tool having a blade with a straight edge, a body attached to said blade and having a straight edge at 45° to the edge of the blade, said body having an arcuate slot, a leg of channel-like form pivotally connected at one end to said body, an arcuate arm movably positioned in said slot, said leg having a longitudinal slot arranged to receive said blade, said arm having a bifurcated end connected to the leg on each side of the longitudinal slot and arranged to receive said blade, and means on the body to engage and hold the arcuate arm in adjusted positions.

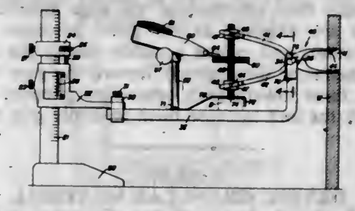
2,728,991
PRECISION MEASURING INSTRUMENT
Wilhelm Rinker, Wetzlar, Germany, assignor to Ernst Leitz, G. m. b. H., Wetzlar, Germany
Application June 4, 1953, Serial No. 359,525
Claims priority, application Germany June 30, 1952
13 Claims. (Cl. 33—147)

1. A device for determination of tolerance conformity and absolute linear dimension of a workpiece, comprising a support for said workpiece, a housing, a tubular element provided with a cut-out and movably disposed within said housing, pin means for contacting said workpiece projecting from said element toward said support, actuatable regulating means on said element cooperating with said pin means for maintaining said pin means in predetermined position relative to said element and for moving said pin means into said element, scale means within said element and operatively connected to said pin means for movement therewith, signal means including a plurality of contact means selectively actuated by movement of said scale means, screen means on said housing, and means within said housing aligned with said cut-out of said element for projecting an image of said scale means onto said screen means, whereby said



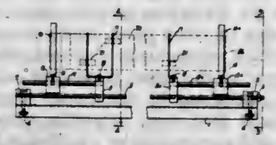
scale means determines the absolute linear dimension of said workpiece while said signal means determines conformity of the workpiece with a preselected tolerance range.

2,728,992
HEIGHT GAUGE AND METHOD OF USING SAME
Dewey E. Frey, Rochester, N. Y.
Application January 21, 1955, Serial No. 483,266
7 Claims. (Cl. 33—172)



1. A height gauge comprising a support, a bracket adjustable rectilinearly on said support, a caliper mounted on said bracket, said caliper having two scissor arms pivotally mounted on said bracket on a common pivot, each arm having a contact point at one end, adjustable connecting means carried by said bracket and connecting said arms at their opposite ends to adjust them about their pivot, a member secured to said connecting means, and gauging means carried by said bracket for gauging the position of said member.

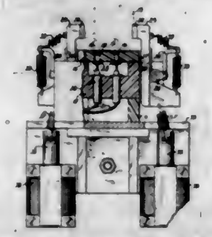
2,728,993
VENETIAN BLIND TAPE MEASURING DEVICE
Robert W. Meyer, Elyria, Ohio, assignor to The Guarantee Specialty Manufacturing Co., Cleveland, Ohio, a corporation
Application May 10, 1951, Serial No. 225,502
9 Claims. (Cl. 33—174)



1. A tape measuring device of the class described comprising in combination, a base, spaced movable tape tensioning means supported on said base, locking means for said movable means, a tape end gauge block carried by each of said tensioning means and movable relative thereto, means for locking said blocks, and tape end supporting members on said blocks, said tensioning means

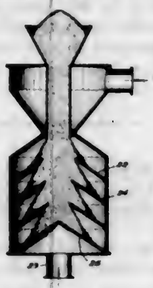
being supported on said base intermediate said gauge blocks, and a measuring scale on the base co-operative with said blocks and at least one of the tape end supporting members.

2,728,994
GAGING AND TESTING APPARATUS
Lawrence A. McCarthy, Haverhill, Mass., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application February 16, 1953, Serial No. 337,032
6 Claims. (Cl. 33—174)



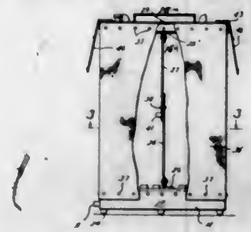
1. An apparatus for testing electrical units having terminals to be disposed at given spaced positions relative to each other, the apparatus comprising a gage member having apertures disposed therein to receive the terminals of the units when in their given positions, gripping elements mounted for movement relative to the gage member to grip the units singly, means to apply a given force to the elements to move the unit to move the terminals thereof into their apertures of the gage member if the terminals are disposed at the given positions relative to each other, and means actuable during the start of the movement of the elements toward the gage member to move them toward each other into gripping engagement with the unit to cause them to firmly grip the unit.

2,728,995
DRYING GRANULAR MATERIAL
Franz Schaub, Oberhausen-Holten, Germany, assignor to Ruhrchemie Aktiengesellschaft, Oberhausen-Holten, Germany, a corporation of Germany
Application July 29, 1952, Serial No. 301,452
Claims priority, application Germany August 4, 1951
9 Claims. (Cl. 34—57)



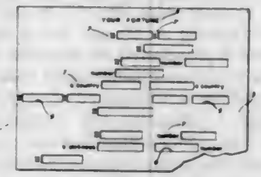
1. A device for the drying of pulverulent and granular materials capable of being piled, which comprises means defining a vertical, substantially enclosed vessel, gas inlet means positioned at the lower portion of said vessel, gas outlet means positioned at the upper portion of said vessel, a material feed pipe, extending through the top of said vessel and terminating at a sufficient height above the bottom of the vessel to allow a vertical, conical pile of granular material to be maintained therebetween, and a multiple number of superimposed annular plates, each plate defining a gas passage opening therethrough, the gas passage opening on each plate being defined in a position staggered with respect to the position of the gas passage opening defined on the next successive plate.

2,728,996
FOLDABLE ELECTRIC CLOTHES DRIERS
Harry Mason, Denver, Colo., assignor, by mesne assignments, to Consolidated General Products, Inc., Houston, Tex., a corporation of Texas
Application May 21, 1953, Serial No. 356,571
4 Claims. (Cl. 34—234)



1. An electric clothes drier comprising in combination, a base of box form having horizontal top and bottom walls and four side walls, said bottom wall being foraminated and said top wall having a central, imperforate, heat-deflecting portion and a plurality of louvers adjacent the outer edges thereof, said louvers being positioned to direct the flow of air inwardly above said base, an electric heating element mounted below said imperforate central portion, a rectangular top frame of substantially the same size and shape as said base, a pair of opposite disposed toggle members, each of said toggle members being pivotally mounted at its lower and upper ends to the base and frame, respectively, for releasably supporting the frame a fixed distance above the base, and a drying chamber comprising a fabric wall attached at its top and bottom to the periphery of said top frame and said base, respectively, said fabric wall being of a length substantially equal to the distance between the top frame and base when said toggles are extended.

2,728,997
STORY GAME
Leah K. Gross, Cleveland, Ohio
Application November 16, 1954, Serial No. 469,163
1 Claim. (Cl. 35—35)



A game of the character described, comprising a sheet having a composition characterized by blank spaces denoting omitted words, a second sheet having openings therein adapted for registration with the blank spaces of said first sheet, a plurality of selected lists of words comprising different parts of speech, said lists identified by indicia, said second sheet having indicia thereon adjacent said openings, said last-named indicia indicating the list from which words are to be selected according to the indicia of said lists, whereby words may be selected from said lists and inserted in the blank spaces of the first sheet when the second sheet is superimposed on the first sheet, thereby completing the composition on the first sheet.

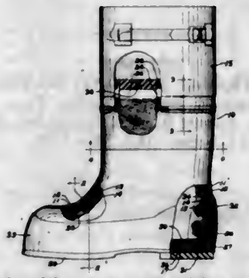
2,728,998
HALF SLACKS
Gladys Queen, Brooklyn, N. Y.
Application July 23, 1954, Serial No. 445,216
1 Claim. (Cl. 36—2)

A leg covering to be worn beneath a dress or the like outer garment, comprising a tubular member with the upper and lower ends inturned to provide an upper and a lower cuff, flexible elements extending the major part



of the interior length of the leg covering, and means on said flexible elements to adjust the vertical length of said inner cuffs.

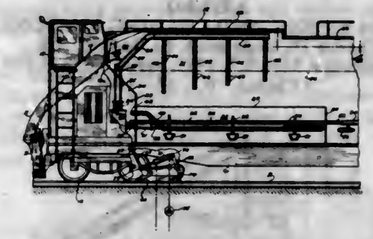
2,728,999
FOOTWEAR AND THE LIKE
Leslie H. L'Hollier, Newton, Mass., assignor to The B. F. Goodrich Company, New York, N. Y., a corporation of New York
Application August 16, 1950, Serial No. 179,834
9 Claims. (Cl. 36—4)



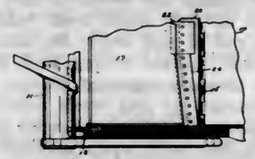
1. An article of footwear comprising pliable and flexible inner and outer spaced-apart generally-parallel wall members of a size and shape to constitute the sole portion and the foot and upper portion of said article and to provide an opening for the entrance and exit of the foot of a wearer, each of the wall members being moisture-impervious throughout its entire extent, the wall members being hermetically sealed one to the other in a joinder extending completely around the upper portion of said article to provide an air-tight chamber between the spaced-apart wall members below said joinder, and flexible sheet heat-insulating filler means comprising solid material substantially filling said airtight chamber for substantially eliminating transfer of heat through said airtight chamber and for keeping the walls of said airtight chamber spaced apart except at the said joinder, the spaced-apart walls of said airtight chamber being capable of independent flexing movements with respect to each other in intermediate regions of said foot and upper portion under stresses developed during walking and running.

2,729,000
SNOW MELTING APPARATUS
Chester W. Bros, Archie O. Williamson, and Ulyss O. Guignard, Minneapolis, Minn., assignors to Wm. Bros Boiler and Manufacturing Company, Minneapolis, Minn., a corporation of Minnesota
Application May 24, 1951, Serial No. 228,032
10 Claims. (Cl. 37—14)

10. A snow melter for use with snow delivery means which delivers the snow in a high velocity stream of compacted particles, comprising an enclosed and elongated tank having a spray chamber at its forward end and means for introducing the snow lengthwise of the upper part of said chamber, a partition arranged crosswise of the tank and defining with adjacent portions of the tank itself an open-topped storage for a comparatively shallow starting volume of water at the bottom of the melting chamber, means for heating this starting water, means for spraying the hot water upon the snow as it enters and travels through the melting chamber, the part of the tank rearward of said partition communicating with the melting chamber at a level above that of said starting water in order to receive and accumulate melted snow, means for adding heat at the rear of the tank to maintain the melted snow in a fluent condition, and means for discharging the accumulated melted snow from the tank.



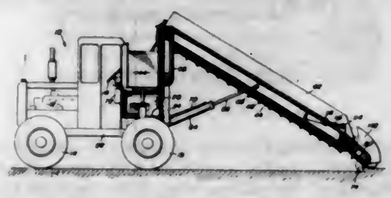
2,729,001
TAPERED CUTTING EDGE FOR DIGGING AND CARRYING SCRAPER AND ASSOCIATED APRON
William J. Adams, Santa Cruz, Calif., assignor, by mesne assignments, to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 14, 1951, Serial No. 241,745
1 Claim. (Cl. 37—141)



In a digging and carrying scraper, a scraper bowl open at its forward end and having a cutter blade mounting base behind said open end, a rectangular center blade section and two rhomboid end blade sections, one on each side of said center blade section, all of said blade sections lying in a common plane, each of said blade sections having leading and trailing cutting edges, a line of spaced bolt holes in each section extending parallel to one of its associated cutting edges for detachably mounting said section on said base, the leading cutting edge of said center blade section extending perpendicular to the direction of movement and each of said end sections extending laterally outwardly and upwardly and rearwardly with respect to digging motion of said scraper, and the forward internal angle of each said rhomboid end section at the end abutting said center section being complementary to the angle between the leading edge of said end section and a line parallel to the leading edge of said center section, said angles being measured in said common plane, whereby said blade sections may be reoriented on said base so that the trailing cutting edges may be used, the center portion of said blade adapted to make a deeper cut than the end portions thereof, an apron pivotally mounted on said bowl about an axis generally parallel to the leading cutting edge of said center blade section for opening or closing said open end, said apron having a lip having portions thereof oriented similarly to the leading cutting edges of said sections and adapted to engage said sections in closed position, the lip portion engageable with said center section being located farther from said pivotal axis than the lip portions engageable with said end blade sections, said lip and cutting edge construction

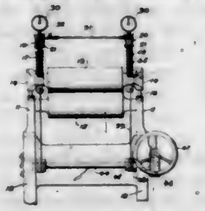
preventing escape of the bowl contents in the closed position, providing a larger throat opening over the center blade section than over the end sections, and providing easy apron closing when the bowl is loaded.

2,729,002
EXCAVATING AND LOADING MACHINE
Charles W. Hedgecock, El Dorado, Ark.
Application March 2, 1953, Serial No. 339,690
2 Claims. (Cl. 37—190)



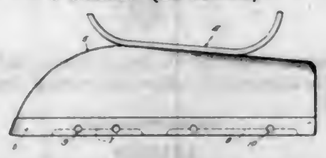
1. An excavating and loading machine comprising a vehicle, a conveyor frame mounted for pivotal movement at its upper end on said vehicle, an endless belt conveyor about said frame, hydraulic means for pivoting said conveyor to raise and lower the free end of said conveyor secured to said frame and said vehicle, a cutter drum carrier, a cutter drum journalled on said carrier, drive means for actuating said conveyor and rotating said cutter drum, said drive means being entrained about a shaft journalled in said conveyor frame, hydraulically actuated means for pivoting said carrier relative to said frame, said carrier including a pair of crank arms each having a pair of sockets, one socket of each pair of said sockets of each of said crank arms being rotatably mounted on an end of said shaft, the other socket of each pair of said sockets having said hydraulically actuated means pivotally mounted therein, and cutter drum supports carried by said crank arms, said cutter drum being rotatably carried by said cutter supports, and means for urging the cutter drum supports away from the crank arms including clips secured to said crank arms, adjusting blocks secured to said crank arms, and threaded adjusting bolts threadedly secured in said adjusting blocks engaging said cutter drum supports.

2,729,003
ROLLING PRESSURE CONTROL APPARATUS
Samuel Cohn and Eugene Cohn, New York, and Jules G. Walter, Manhasset, N. Y., assignors to Samcoe Holding Corporation, Woodside, N. Y., a corporation of New York
Application July 1, 1953, Serial No. 365,408
13 Claims. (Cl. 38—52)



1. In apparatus including a pair of parallel pressure rolls one of which is mounted for engagement with and movement relative to the other to increase the pressure therebetween, means supporting said one roll at opposite ends thereof, a pair of springs one engaging said roll supporting means at one end of said one roll and the other engaging said roll supporting means at the other end of said one roll, and means to apply compressive force to each spring, the improvement which comprises a fluid pressure means interposed between each spring and the means to apply compressive force thereto whereby compressive force is applied to each spring through a fluid pressure means, and means interconnecting said fluid pressure means to equalize the pressure in each.

2,729,004
LAUNDRY IRON
Carl Arthur Swanson, Winnetka, Ill.
Application April 22, 1953, Serial No. 350,304
3 Claims. (Cl. 38—93)



1. A laundry iron having a base plate with a planar bottom surface having an indentation therein, and venting passage means inside and entirely above the bottom surface of the base plate, said venting passage means connecting said indentation to the atmosphere at a side of said base plate.

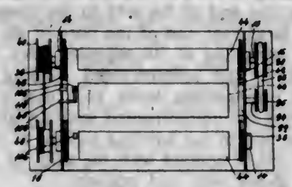
2,729,005
SECTIONAL IRONING BOARD
Edwin E. Foster, Austin, Tex.
Application August 9, 1952, Serial No. 303,473
4 Claims. (Cl. 38—139)



1. An ironing board comprising an elongated flat board generally rectangular in outline, one corner portion of the board being separated from the remainder along a straight line at an acute angle to the length of the board intersecting one side of the board intermediate its ends and adjacent to one end and intersecting said one end intermediate the sides of the board, a hinge connecting the corner portion to the remainder of the board along the line of separation for movement from an extended position in the plane of the remainder of the board to a folded position beneath and substantially parallel to the remainder of the board, said hinge lying on the underside of the board and corner portion so that when the corner portion is folded under the board will have a tapered end, latch means to hold the corner portion in its extended and folded positions and means supporting said board from a point adjacent its other end with said one end thereof free.

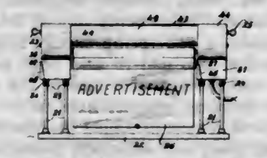
2,729,006
INDICATOR AND THE LIKE APPARATUS WITH A MOVABLE FOIL WEB
Stig Allan Ragnar Olsson, Norrkoping, Sweden
Application September 5, 1951, Serial No. 245,213
5 Claims. (Cl. 40—31)

1. In an indicating apparatus for a vehicle, a rotatably mounted first shaft, a first roller rotatably mounted on said first shaft, a first helical spring surrounding said first shaft and connected at one end to said first shaft and at the opposite end to said first roller to provide a yieldable coupling, a reversible motor, drive means connecting said motor and said first shaft, a second shaft rotatably mounted parallel to said first shaft, a second roller rotatably mounted on said second shaft, a second helical spring surrounding said second shaft and connected at one end to said second shaft and at the opposite end to said second roller to provide a yieldable coupling, the points of connection between said second spring and said second shaft and said second roller being at opposite ends of said second shaft and said second roller from the points of connection between said first spring and said first shaft and said first roller, a web wound on said first roller in one direction and on said second roller in the opposite direction, a first winding drum on said first shaft, a second winding drum on said second shaft, a flexible member wound on said first drum in one direction and on said second drum in the opposite direction whereby upon rotation of said first shaft by said motor in one direction said web will unwind from said first roller and wind up on said second roller and said second roller will be driven at a progresively increasing speed by said flexible member as the diameter of said member on said first drum increases and the diameter of said



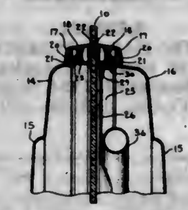
member on said second drum decreases, the change in relative speed between said first and second shafts resulting in progressively increasing the tension in said second spring, this operation being reversed upon reversal of said motor, means for intermittently operating said motor in response to travel of said vehicle a predetermined distance comprising a lead screw driven from the running gear of said vehicle, traverse means driven by said lead screw and including normally open contacts, means for closing said contacts at predetermined points in the travel of said traverse means, spaced conducting means in said web, switch means disposed in the path of movement of said conducting means and being closed when in contact therewith and relays connected in a circuit including said contacts, said switch means and said motor whereby said motor will be operated upon closing said contacts and stop upon closing of said switch means to intermittently transfer said web from said first to said second roller and vice versa in acocrdance with the direction of rotation of said motor.

2,729,007
DISPLAY DEVICE
Joseph W. Littman, New York, N. Y.
Application September 8, 1950, Serial No. 183,778
16 Claims. (Cl. 40—36)



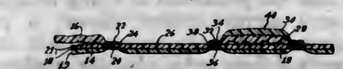
1. In a display device, a pair of tracks supported in elevated position and spaced from each other in opposed relation, each track comprising a circular plate arranged with a continuous groove in one face having an arcuate portion and a declining straight portion communicating with the arcuate portion, a plurality of display members, each member comprising a flexible portion containing advertising matter thereon and having a stiff strip at the upper section arranged with projections at the opposite sides for engagement in the track grooves and normally supported in the straight track groove portions with the flexible portions suspended therefrom, and a rotating member associated with each track plate and arranged with diametrically opposed recesses traveling in a circle of the arc of the arcuate track groove portion to successively engage and move the projections in the lower ends of the straight track groove portions from said ends along the arcuate track groove portions and deliver said projections to the upper ends of the straight track groove portions, and the recesses in each rotating member are spaced from each other so that one recess engages the projection in the lower end of the associated straight track groove portion while the other recess is moving the projection of a preceding display member along the arcuate track groove portion.

2,729,008
LUMINOUS SIGN
Richard H. Van Den Berg, Milwaukee, Wis., assignor to Display Corporation, Milwaukee, Wis., a corporation of Wisconsin
Application April 16, 1953, Serial No. 349,205
10 Claims. (Cl. 40—130)



1. The combination in a luminous sign, of a window pane, display panels secured in registry with each other to opposite sides of said pane to form two chambers, and illuminating means in one of said chambers.

2,729,009
ORNAMENTED SHEET MATERIAL AND METHOD OF MAKING SAME
George Markus, West Orange, N. J., and Martin Siegel, Roslyn, N. Y., assignors to Aristocrat Leather Products, Inc., New York, N. Y., a corporation of New Jersey
Application May 20, 1955, Serial No. 509,836
4 Claims. (Cl. 41—24)



2. Ornamented material, comprising a plurality of layers including inner and outer layers which comprise thermoplastic material and are disposed in superposed relation, one of said layers at one side thereof being fused to another of said layers by said thermoplastic material along a line defining a tear edge on said other layer and outlining an opening closed by said one layer, said one layer having a surface area exposed through said opening and comprising intersticed material impregnated with thermoplastic material in the interstices of said one layer at the portion thereof which is fused to said other layer, and a securing layer comprising thermoplastic material fused to said one layer at the opposite side thereof at said portion of the said one layer.

2,729,010
ORNAMENTAL SHEET MATERIAL AND METHOD OF MAKING THE SAME
George Markus, West Orange, N. J., and Martin Siegel, Roslyn, N. Y., assignors to Aristocrat Leather Products, Inc., New York, N. Y., a corporation of New Jersey
Application February 28, 1955, Serial No. 490,869
7 Claims. (Cl. 41—34)

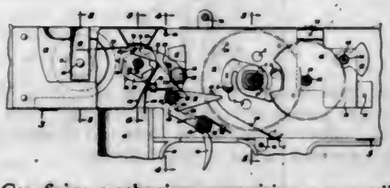
1. Ornamented material, comprising a plurality of layers including inner and outer layers which comprise

thermoplastic material and are disposed in superposed relation, one of said layers at one side thereof being fused to another of said layers by said thermoplastic material along a line defining a tear edge on said other layer, said one layer comprising intersticed material im-



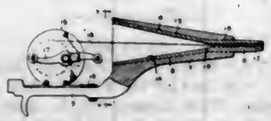
pregnated with thermoplastic material in the interstices of said one layer at the portion thereof which is fused to said other layer, and a securing layer comprising thermoplastic material fused to said one layer at the opposite side thereof at said portion of the said one layer.

2,729,011
AUTOMATIC CAP GUN MECHANISM
Kenneth W. Frye, Los Angeles, Calif.
Application September 27, 1954, Serial No. 458,524
4 Claims. (Cl. 42—57)



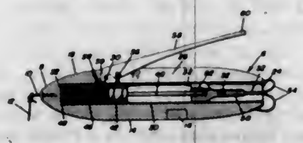
3. Cap firing mechanism comprising a generally cylindrical anvil rotatable about its axis, projections fixed in spaced relationship to the circumferential surface of the anvil adapted for engaging a strip of perforated caps, presser means conforming to the periphery of the anvil arranged to engage a strip of caps radially outwardly of said anvil and press the same radially against the anvil laterally of said projections for guiding the perforations of the caps onto the projections as a strip of caps is fed onto the anvil during rotation thereof, a pivotally mounted hammer operatively associated with the anvil for continuously striking and discharging powder charges on the caps on the anvil between the anvil projections, stripper means associated with the anvil for continuously stripping remnants of discharged caps from the anvil, ratchet and pawl means associated with the hammer and anvil for synchronizing the movement thereof, and power means for intermittently striking the hammer against the caps on the anvil.

2,729,012
HAND FISHING DEVICE
Robert E. Lee, Sumter, S. C.
Application January 19, 1953, Serial No. 331,915
1 Claim. (Cl. 43—18)



A hand fishing device comprising a generally U-shaped body portion including forward and rear end portions and bottom, the forward end portion extending above the rear end portion, a handle secured to the rear end portion, a sleeve secured to the forward end portion and positioned higher than said handle and extending longitudinally of the body portion and forwardly beyond the forward end portion terminating substantially at the rear face of said forward end portion, said sleeve having a bore extending longitudinally therethrough which tapers toward the forward end of the sleeve, said bore being arranged with its axis above said handle, an elongated tubular rod having a flared rear end portion which tapers forwardly, said flared rear end portion having a fitting engagement within the tapered sleeve when the flared rear end portion is inserted into the rear end of said sleeve and moved forwardly in said sleeve, the bores of said sleeve and said flared rear end portions at their rear ends having greater horizontal dimensions than vertical dimensions, a reel extending transversely of the bottom of said U-shaped body portion and detachably mounted upon said bottom so that the reel may be removed for the insertion of the flared rear end portion in the said sleeve since the flared rear end portion will then pass over said handle, said reel having an uninterrupted winding surface extending from one end of the reel to the opopsite end of the reel, the large rear end of the bore of the flared rear end portion extending at its opposite sides beyond the opposite ends of the uninterrupted winding surface of the reel, the arrangement being such that a single line when traversing the uninterrupted winding surface of the reel from one end of the winding surface to the opposite end remains out of contact with the sides of the tapered bore of the flared rear end portion.

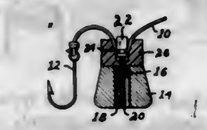
2,729,013
ARTIFICIAL FISHING BAIT
Albert E. Chandler, San Antonio, Tex.
Application January 14, 1954, Serial No. 403,958
2 Claims. (Cl. 43—35)



1. An artificial fishing bait comprising an elongate buoyant plug having an axial socket closed at the leading end and open at the opposite end and opening through the trailing end of the plug, and having an elongated slot communicating with the socket and opening through one lengthwise side of the plug and also through the trailing end of the plug, the leading end of said slot being closed and spaced rearwardly from the leading end of said socket, a keeper pin fixed in said plug and spanning the slot adjacent the closed end of the slot, a readily insertable and removable assembly comprising a linearly straight rigid rod having an enlarged head fixed to one end of the rod, said rod and head being normally confined but slidable in said socket and said head being spaced from the closed end of the socket, a coil spring axially aligned with the rod and affixed at one end to said head and having its opposite end resting removably against the closed end of said socket, a coupling member fixed to the other end of said rod, fishhook means arranged exteriorly of the trailing end of said plug and integrally connected with said coupling member, a trip-latch pivotally mounted on said head and having a portion opposed to said rod and a leading end portion provided with a keeper hook releasably engaged with the aforementioned keeper pin, and a readily insertable and removable assembling and retaining screw for said assembly fixed to the plug and having a portion located in and spanning the socket between the ends of the socket and also occupying a position between the coupling member and said head to, in this manner, removably retain the assembly in said socket, said fishhook means having hook portions engaging and being

normally guarded by said plug, and that portion of said rod which is slidable in said socket being urged outwardly thereof by and when the trip latch keeper hook is released, whereby the hook portions of said fishhook means are disengaged from said plug and exposed to make a catch.

2,729,014
FISHING EQUIPMENT
Howard A. Johnson, Vandalia, Ohio, assignor of one-half to George E. Good, Germantown, Ohio
Application March 3, 1953, Serial No. 339,974
5 Claims. (Cl. 43—42.49)



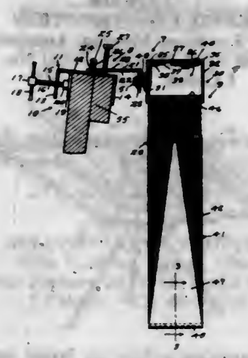
1. A quick detachable line clamping mechanism for removably attaching a fish line to a fishing implement including an irregular headed bolt having a line engaging annular recess provided in the peripheral surface of its head and a threaded shank, a fishing implement, a threaded member in said implement for receiving the threaded shank, and a line clamping element comprising a sleeve slidable longitudinally on and supported on said shank and having a bolt receiving recess formed therein, the walls of said last mentioned recess being non-circular in cross section and complementary to the shape of the bolt head for preventing relative rotation and arranged at an angle relative to the sides of the bolt so as to accommodate various sizes of lines and being arranged to wedge the fish line against the sides of said bolt head upon the bolt being tightened.

2,729,015
FISHING BOBBER
Edward J. Finnegan, Methuen, Mass.
Application September 30, 1954, Serial No. 459,458
2 Claims. (Cl. 43—44.9)



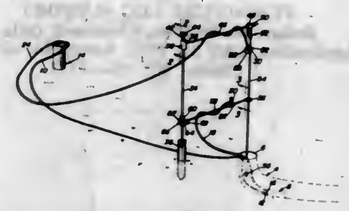
1. A fishing float comprising, a body portion of buoyant material having a central longitudinal extending bore and a slot extending radially to intersect the surface of said body portion along the entire length thereof; a tubular bushing permanently secured in the bore of said body portion and having a longitudinally extending slot in alignment with the slot of the body portion; an inner unit fitting within said bushing comprising a tubular portion terminating at one end in an outwardly flanged finger grip, said inner unit being provided along its entire length with a slot of a width substantially less than the internal diameter of said tubular portion and insufficient to permit a knot on a fishing line to pass therethrough; and reaching in depth to the axis of said unit; the tubular portion of said inner unit having an internal diameter large enough to accommodate a knot on a fishing line and terminating above the end of said slotted finger grip to thus prevent a knot on a fishing line from passing through said finger grip; said inner unit being rotatably mounted with its tubular portion within said tubular bushing and being secured against longitudinal movement relative thereto.

2,729,016
SWINGING FISH CONTAINER
Morris L. B. McDaniel, Haynesville, La.
Application July 16, 1954, Serial No. 443,844
5 Claims. (Cl. 43—55)



1. A container structure of the character described comprising an elongated container having an open end, mounting means adapted to be secured to the side of a boat, means swingably connecting said container adjacent the upper end thereof to said mounting means for swinging movement in substantially a vertical plane about substantially a horizontal axis and by which said container is normally supported in substantially a vertical plane, said container including an elongated lower section at least a part of which including a lower end thereof is adapted to be disposed in a submerged position when the container is vertically disposed and including a front wall, at least a part of said front wall being solid and extending upwardly from the lower end thereof to form a ski and shield, said lower section having another portion disposed adjacent the lower end thereof and formed of a foraminous material, said solid front wall portion functioning as a ski to cause the container to swing upwardly and rearwardly when the boat on which the mounting means is supported is underway and moving forwardly for supporting the lower end of said lower container section above the water surface or in only a slightly submerged position.

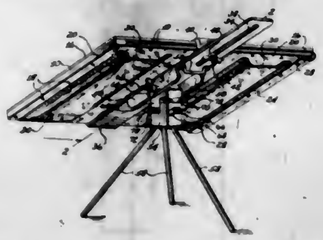
2,729,017
ANIMAL EXTERMINATING DEVICE
David W. Mealey, Foster, Oreg.
Application September 22, 1953, Serial No. 381,670
3 Claims. (Cl. 43—84)



1. In a device of the class described, in combination, a vertically elongated stake having an anchor at its lower end to be forced into the ground, a horizontally disposed upper arm joined at one end to said stake and extending laterally therefrom, an insulator adjustably mounted on the other end of said upper arm, a lower arm horizontally disposed in a plane below said upper arm and having one end adjustably mounted on said stake, the other end of said arm having a contact eye, a binding post adjustable on said lower arm, a pendulum having its upper end pivotally suspended from said insulator and its inter-

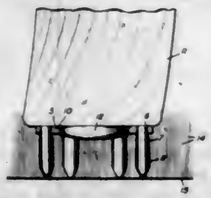
mediate portion passing downwardly through and below said eye, and a second binding post, the latter carried by said pendulum.

2,729,018
EASEL CONSTRUCTION
Franklin Townsend Morgan, Annapolis, Md.
Application April 21, 1952, Serial No. 283,431
1 Claim. (Cl. 45—129)



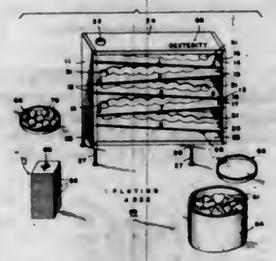
An easel comprising a drawing board support formed with an elongated slot adjacent the upper end thereof and having an outwardly projecting portion adjacent the lower end of said support, a clamp member secured to said support adjacent said slot and adjustable along the length of said slot to retain a drawing board between said outwardly projecting portion and said clamp, a pair of spaced parallel flanges projecting rearwardly from said support, a connecting member pivotally secured to said flanges to permit forward and rearward tilting of said drawing board support, said connecting member being formed with a pair of upwardly converging surfaces meeting in a line extending transversely of said support and engageable with said support whereby said surfaces provide abutments to limit the forward and rearward tilting movement of said support, means for securing said support to said connecting member in a desired position, a base member pivotally secured to said connecting member to permit sideward tilting of said drawing board support, said connecting member having a pair of downwardly converging surfaces meeting in a line extending axially of said support and engageable with said base member whereby said surfaces provide abutments to limit the sideward travel of said support, means for securing said connecting member to said base member in a desired position, said base member being provided with a plurality of downwardly opening inclined recesses, and a plurality of removable legs engageable with said recesses to maintain the easel in an upright position.

2,729,019
FURNITURE LEG SUPPORT
Robert H. Breeden, Cleveland, Okla.
Application April 26, 1954, Serial No. 425,576
1 Claim. (Cl. 45—137)



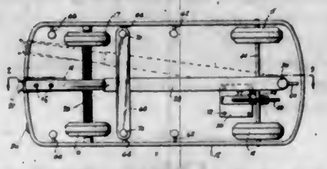
In combination, a furniture leg having a supporting button at its lower end, a ring closely fitted on the button, and a plurality of pegs extending downwardly from the ring to support the leg in an elevated position, said pegs having flexible covers and adapted to pass between the upstanding strands of the nap of a rug to rest on the backing thereof.

2,729,020
MARBLE RUNWAY DEVICE
William L. Framptos, Lincoln, Nebr.
Application April 12, 1951, Serial No. 220,607
6 Claims. (Cl. 46—43)



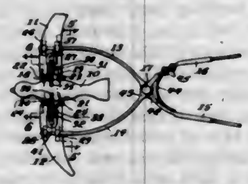
1. A marble guiding device of the type having a plurality of runways sloping in successively opposite directions and having a marble directing path; in which the sides of the path are formed of semi-circles meeting in cusps.

2,729,021
TOY VEHICLE WITH AUTOMATIC BRAKE
Raymond J. Lohr, Erie, Pa., assignor to Louis Marx & Company, Inc., New York, N. Y., a corporation of New York
Application July 17, 1951, Serial No. 237,217
12 Claims. (Cl. 46—112)



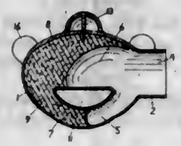
12. A toy vehicle comprising a body and wheels, a brake for automatically stopping said vehicle after a selected predeterminable distance of travel, a sound-producing device actuated by a wheel for producing a sound simulating a brake screech, means responsive to predetermined integrations of rotations of the wheels to initiate operation of the sound-producing device and to apply the brake respectively, means accessible on the outside of the vehicle body to readily vary the predetermined integrations, said means including a scale and an indicator cooperating with said scale, said scale being in units of length corresponding to the travel of the vehicle permitted before the sound-producing device is actuated and the brake applied.

2,729,022
MOVABLE TOY BIRD
William Eugene Polk, New York, N. Y.
Application March 13, 1953, Serial No. 342,226
4 Claims. (Cl. 46—124)



1. An activated toy bird comprising a body, wings hinged to the sides of the body, springs positioned between the hinges also connecting the wings to the sides of the body, and pivotally connected arms positioned with ends thereof extended from one side of the pivotal connection hinged to the wings and with the ends on the opposite side of the pivotal connection extended to provide handles.

2,729,023
TOY NOVELTY GLOVES
George Lerner, Freeport, and Louis Ralph Josephson, New York, N. Y.
Application December 9, 1953, Serial No. 397,175
4 Claims. (Cl. 46—153)



1. A toy glove comprising a hollow flexible body having an opening for insertion of a hand and forming two chambers, one of said chambers forming a channel for insertion of the thumb, the other chamber forming a compartment for the remaining parts of the hand, said channel being connected with said compartment at both channel ends and being spaced, between said ends, from said compartment by a mouth-simulating gap facing a viewer looking toward a side of said body in a direction crossing the longitudinal direction of the hand fingers; and pieces simulating other face parts and being affixed to said body side in positions corresponding and substantially symmetric to said mouth-simulating gap.

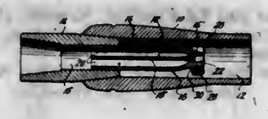
2,729,024
ANIMATED TOY FIGURE
Frederick Guttmann, Forest Hills, N. Y.
Application August 10, 1953, Serial No. 373,224
7 Claims. (Cl. 46—154)



1. The combination, in a hollow toy figure having recesses for the insertion of the thumb, middle finger and index finger of a hand of an operator, of movable supporting ends forming parts of said toy figure and into which ends said fingers extend, with reservoir means for retaining marking substance located within said supporting ends and displaceable by said fingers, and capillary means establishing communication between said reservoir means and the outer surface of said ends, respectively, whereby upon displacement of said reservoir means by said fingers marking substance may be pressed through said capillary means from within said reservoir means therewithout.

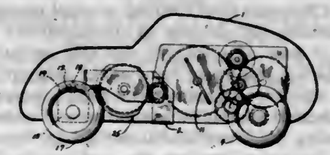
2,729,025
GAME CALL DEVICE
William H. Jones, Hickman Mills, Mo.
Application April 29, 1954, Serial No. 426,498
3 Claims. (Cl. 46—180)

1. A game call device, comprising a body portion having a central bore or passage and formed with a mouthpiece at one end of said passage, and a reed unit or assembly mounted within the opposite end of said passage and comprising a pair of tone fingers and a pair of superposed reed elements embraced between said fingers in



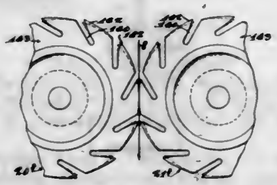
alinement with said central bore or passage of said body portion of the device.

2,729,026
SELF-STEERING VEHICLE
Ollie F. Slaby, Parma, Ohio
Application January 20, 1950, Serial No. 139,587
5 Claims. (Cl. 46—213)



1. In a self-propelled vehicle, in combination, a frame, running gear mounted at the rear end of the frame, steerable running gear steerably mounted at the front end of the frame, a motor mounted on the frame and operatively connected with the rear running gear for propelling the vehicle, a pair of transversely spaced extensions rigidly carried by the front running gear, a rotatable steering control element rotatably mounted on the frame, means operatively connecting said motor and said element for rotating the latter, said element being constructed and arranged to engage periodically with one or the other of said extensions during rotation of said element to steerably move the front running gear.

2,729,027
APPARATUS FOR ATTENUATING GLASS AND SIMILAR FIBERS
Games Slayter and Ed Fletcher, Newark, Ohio, assignors to Owens-Corning Fiberglas Corporation, Toledo, Ohio, a corporation of Delaware
Application November 22, 1950, Serial No. 197,141
8 Claims. (Cl. 49—17)



8. In a material attenuating apparatus, opposed rotatable elements spaced under static conditions at adjacent regions and defining a material receiving gap therebetween, each element formed of relatively readily expansible substance having a plurality of peripheral floating segments each elongated circumferentially of the element and anchored at at least one end and having a thin section formed and arranged to bulge outwardly farther than any other section of the segment during rotation of the element to close the gap and engage the material entered therebetween.

2,729,028

METHOD AND APPARATUS FOR SIMULTANEOUSLY ATTENUATING AND SEVERING GLASS FIBERS

Games Slayter and Ed Fletcher, Newark, Ohio, assignors to Owens-Corning Fiberglas Corporation, Toledo, Ohio, a corporation of Delaware

Application November 22, 1950, Serial No. 197,142
16 Claims. (Cl. 49—17)



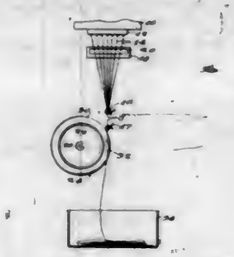
9. Apparatus for attenuating and processing continuous fibers including, in combination, means for feeding streams of flowable fiber-forming mineral material; means for attenuating the streams to comparatively fine fibers including a pair of relatively movable surfaces at least one of which is resiliently deformable; said surfaces being engaged whereby adjacent contacting portions thereof are deformed to present substantial area of contact; means for gathering the fibers into linear group formation and directing the group between the surfaces in the area of contact, means for moving the surfaces to attenuate the streams into fibers; means associated with said surfaces engageable with the group of fibers while in said area of contact for reducing the linear group to predetermined lengths, said fiber reducing operation being effective in a zone of said area of contact so that the continuous linear group is constantly in frictional engagement with said surfaces whereby continuous fiber attenuation is obtained unaffected by the fiber reducing operation.

2,729,029

METHOD AND APPARATUS FOR ATTENUATING GLASS AND OTHER FIBERS

Games Slayter, Newark, Ohio, assignor to Owens-Corning Fiberglas Corporation, a corporation of Delaware

Continuation of abandoned application Serial No. 215,584, March 14, 1951. This application June 8, 1954, Serial No. 435,285
21 Claims. (Cl. 49—17)



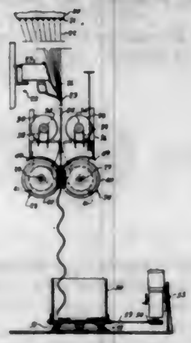
7. Apparatus for producing fibers from heat softenable material including, in combination, means for flowing a plurality of streams of the material from a supply, attenuating means including elements disposed for rotation about angularly arranged axes and having surface portions in interengaging relation, guiding means for directing the fibers formed from the streams between the engaging surface portions of the elements whereby the fibers are gripped by said surface portions, and means for causing relative rotation of the elements for attenuating fibers from said streams at comparatively high linear speeds.

2,729,030

METHOD OF AND APPARATUS FOR LINEARLY FEEDING AN UNTWISTED, MULTIFILAMENT STRAND

Games Slayter, Newark, Ohio, assignor to Owens-Corning Fiberglas Corporation, a corporation of Delaware

Application July 2, 1954, Serial No. 440,908
15 Claims. (Cl. 49—17)



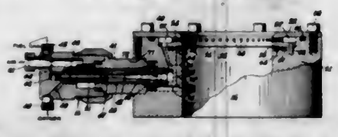
5. Apparatus for forming a continuous, untwisted strand of fibers, in combination, means for supplying continuous streams of fiber forming material; means for attenuating the streams to fine fibers including a pair of pull rolls engageable with the fibers; means for rotating the rolls; means for gathering the fibers into a strand prior to their engagement with the rolls; and means associated with said pair of rolls directing forces against the strand of fibers for disassociating said strand of fibers away from the surfaces of said rolls.

2,729,031

APPARATUS FOR BURNING-OFF HOLLOW GLASSWARE

Raymond A. Wolf, Maplewood, N. J., assignor to Union Carbide and Carbon Corporation, a corporation of New York

Original application July 9, 1949, Serial No. 103,825, now Patent No. 2,570,899, dated October 9, 1951. Divided and this application January 5, 1951, Serial No. 204,599
2 Claims. (Cl. 49—50)



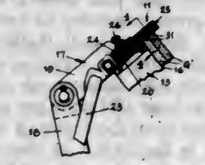
1. In apparatus for burning off hollow glassware having work supporting means including means for rotating a glass workpiece about a substantially vertical axis, and a cut-off head is provided for applying a flame at a horizontally localized region extending circumferentially around the workpiece for severing waste material or moil from such hollow glassware, the improvement in said cut-off head which comprises an annular body member, an annular flame port ring member secured coaxially to said body member and having radially arranged coplanar combustible mixture ports for producing a heating flame to impinge on the glass workpiece, a substantially radially directed annularly extending surface of one of said members having an annular recess cooperating with a substantially radially directed annularly extending surface of the other of said members to provide a substantially radially inwardly directed annularly extending quenching fluid discharge slot in said head and disposed in a plane parallel to but spaced below the plane of said mixture ports, said head being mounted with respect to said work supporting means to receive the workpiece projected thereinto from above and to permit the dropping of severed waste material downwardly therefrom, and to position said slot on the moil side of the flame to discharge a cooling fluid against a heated zone of said glass workpiece at a distance below said flame of not less than one-sixteenth inch and not more than one inch; and fluid supply means including passages in said body member for supplying a combustible mixture to said ports and for supplying a quenching fluid to said slot.

2,729,032

GLASS BENDING APPARATUS

Gerald White, Rossford, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio

Application December 9, 1952, Serial No. 324,875
7 Claims. (Cl. 49—67)



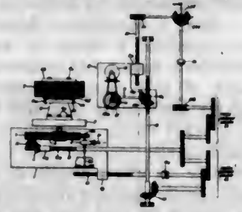
1. In combination with a bending mold having a shaping surface into conformity with which a glass sheet is adapted to be bent, a locator block associated with said mold for locating and guiding an edge of said sheet during the bending thereof, said block comprising a hard, heat resistant core, a resilient layer about said core and a sheet edge contacting layer of heat-conducting material.

2,729,033

HOBBING TYPE APPARATUS AND METHOD FOR GRINDING GEARS

Andrew H. Prucknicki, Dorchester, Frank P. Hennessy, Wakefield, and William J. Berrigan, Lynn, Mass., assignors to General Electric Company, a corporation of New York

Application December 15, 1952, Serial No. 326,088
6 Claims. (Cl. 51—52)



3. A gear finishing machine comprising a power-driven hob type cutting wheel and a rotatable work supporting table with means for positively driving the work-table in exact synchronism with rotation of the cutting wheel, means for supporting a work-piece on the table and including means for effecting a preselected limited degree of oscillation of the work-piece about the axis of and relative to the table, and means for locking the work-piece support means for driving the work-piece in exact synchronism with the cutting wheel during a portion of the finishing process.

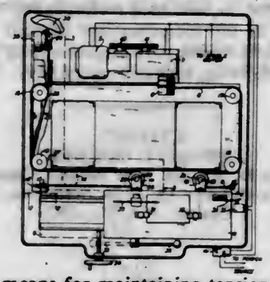
2,729,034

WORK TABLE FEEDING MECHANISM

Gerard A. Frank and Jack J. Monahan, Allentown, Pa., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York

Application January 29, 1954, Serial No. 406,943
3 Claims. (Cl. 51—92)

1. In a machine having a driven tool and a table for supporting work to be moved with respect to the tool, a winch and a cable extending around the winch for moving the table, a capstan free to rotate only in one direction, a second cable for the table extending around the



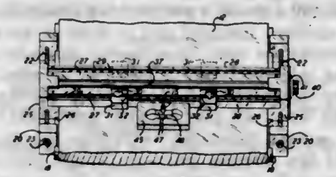
capstan and means for maintaining tension in the second cable opposing motion of the table in the direction corresponding to the free rotation of the capstan.

2,729,035

MICROMETER SLIDE ATTACHMENT FOR GRINDING MACHINES

George W. Soderman, West Englewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York

Application November 28, 1952, Serial No. 323,003
2 Claims. (Cl. 51—102)



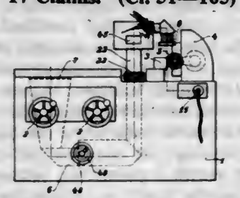
1. In combination with a profile grinder having a work supporting table and a grinding wheel rotatable about a given axis and reciprocable axially into and out of an article to be ground, a gaging element mounted for movement into selective positions relative to the table and axis to be initially positioned by an article with an inner surface to be ground engaging the grinding wheel while an opposing outer surface of the article engages the element, a measuring wheel having radial graduations representing fractions of an inch positioned circumferentially from a zero position disposed adjacent a fixed pointer when the gaging element is disposed in the initial position, and means responsive to the measuring wheel to move the gaging element a measured distance away from said initial position whereby the article may be moved to cause grinding of the inner surface until said opposing outer surface engages the element.

2,729,036

MACHINE TOOLS

Georg Franke and Otto Malfeld, Wetzlar, Germany, assignors to Hommel-Werke G. m. b. H., and Ernst Leitz G. m. b. H., Mannheim-Kaefertal and Wetzlar, Germany

Application April 8, 1952, Serial No. 281,238
Claims priority, application Germany April 12, 1951
17 Claims. (Cl. 51—165)



1. A machine tool, comprising, in combination, a frame; a tool; means for reciprocating said tool with re-

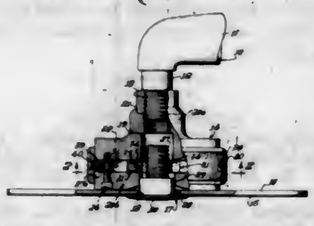
spect to said frame; a screen; an optical system for reproducing an image of said tool on said screen; a first objective forming part of said optical system and being rigidly connected to said tool reciprocating means so as to participate in the reciprocations of said tool; and a second objective forming part of said optical system, said second objective being focussed to infinity.

2,729,037
ABRASIVE HOLDER
Dom D. Soccoli, New Britain, Conn.
Application October 19, 1953, Serial No. 386,748
1 Claim. (Cl. 51—197)



An abrading tool adapted for rotation at high speed by an electric drill or the like having a chuck comprising in combination, a substantially flat and rigid sheet metal holder having longitudinal relatively narrow lip portions at opposite edges thereof depending downwardly therefrom in relatively converging relation, an elongated spindle extending upwardly from said holder adapted for engagement by a chuck, a pad member formed from yieldable and resilient material and a sheet of abrasive material overlying the outer face thereof, opposite side edge portions of said sheet and of said pad member disposed in abutting relation with adjacent inner portions of said holder and lips, said pad member and sheet having a relatively greater transverse width than the distance between said lips whereby portions of said pad and sheet extend outwardly from between said lips in curving convex relation, opposite end portions of said pad member between opposite sides thereof increasing in thickness inwardly from end extremities thereof to a relatively thicker central portion intermediate said opposite end portions whereby said pad member is relatively more yieldable at opposite end portions thereof than at said central intermediate portion.

2,729,038
ROTARY ABRADING MACHINE HEADS
Alma A. Hutchins, Pasadena, Calif.
Application October 30, 1953, Serial No. 389,307
14 Claims. (Cl. 51—197)



1. Apparatus for attaching an abrasive disc to a rotary power driven abrading tool comprising a head adapted for attachment to a rotary drive member of said tool, a clamping member removably connectable to said head and adapted to extend through a central opening in said disc and clamp it to the head, retaining means carried by the head and operable to releasably retain said clamping member thereto and movable relative to the head between an active position holding said member and disc to the head and an inactive position permitting removal of the disc and member from the head, and means for actuating said retaining means between said positions, said clamping member and retaining means having threads which are interengageable in said active position of the retaining means to hold said member and disc to the head, and said retaining means being movable essentially transversely of the axis of said threads into said active position.

2,729,039
RESINOID BONDED CUTTING-OFF GRINDING WHEELS AND METHOD OF CUTTING METALS
Hyman Nathan Stone, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts
No Drawing. Application July 9, 1952,
Serial No. 297,981
6 Claims. (Cl. 51—206)

1. A cutting-off grinding wheel comprising abrasive granules bonded together with phenolic resin bond and having a grinding periphery and flat parallel sides and a coating of metal on each side thereof said metal being selected from the group consisting of antimony, bismuth, cadmium, gallium, indium, lead, thallium and tin and alloys thereof, said coating of metal on each side of the wheel being granular and having such an average thickness that it weighs at least .004 gram per square centimeter at any given distance from the center of the wheel greater than $.7r$ where r is the radius of the wheel, and said coating of metal on each side of the wheel being nowhere greater than .010 inch thick.

2,729,040
VACUUM CHUCK JIGS
James Wallace, Wichita, Kans., and Norlin O. Lewis, Marietta, Ga., assignors to Boeing Airplane Company, Wichita, Kans., a corporation of Delaware
Application February 10, 1954, Serial No. 409,479
5 Claims. (Cl. 51—235)

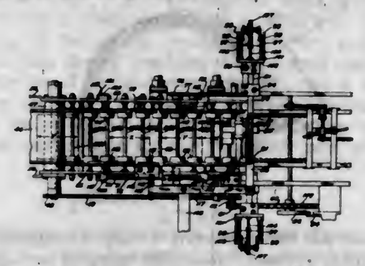


1. In a multiple vacuum chuck holder or the like, the combination of a base, a superjacent flexible work load sustaining carrier member, a series of work retaining vacuum chuck members detachably mounted on said carrier member, each of said chuck members having depending side flanges embracing opposite edges of said carrier member, bracket means pivotally supporting opposite ends of said carrier member and carried by said base, means operable to effect longitudinal adjustment of one end of said carrier member relatively of said base, upstanding jacks carried by said base and extending in a series lengthwise of said base and carrier member, carrier member engaging and sustaining heads fixedly secured to the upper ends of the respective jacks for varying the attitude of the carrier member, and a vacuum line having connection with said chuck members for effecting the grip of the latter to the work.

2,729,041
APPARATUS FOR ASSEMBLY OF INTERLOCKING CONTAINERS
Edward N. Burnett, San Lorenzo, Calif., assignor to Gerber Products Company, Fremont, Mich., a corporation of Michigan
Original application October 3, 1950, Serial No. 188,254, now Patent No. 2,651,153, dated September 8, 1953. Divided and this application March 16, 1953, Serial No. 342,630
7 Claims. (Cl. 53—44)

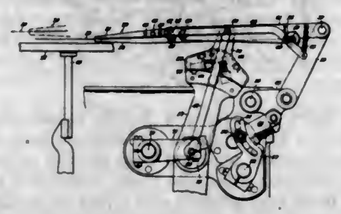
1. Means for assembling groups of interlocking container units having projecting tongues overlapping adjacent units of the character described comprising a plurality

of frusto-conical rollers positioned and arranged to engage the side bottom edges of said units to support the bottom outer flaps angularly disposed with respect to the bottom inner flaps to permit the tongue on one of said bottom outer flaps to overlie the adjacent unit, stop means for arresting forward movement of said units,



means for retracting said stop means, means for rotating a first group of rollers located at intervals rearwardly of said stop means over a total distance substantially equal to the length of a group of said units thereby urging said units forwardly, and a second group of idler rollers located rearwardly of the first group of rollers.

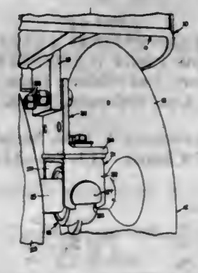
2,729,042
PAPER FEEDING DEVICE FOR WRAPPING MACHINES
Leonard Brook, Beeston, Leeds, England, assignor to The Forgrove Machinery Company Limited, Leeds, England, a company of Great Britain
Application February 3, 1953, Serial No. 334,799
Claims priority, application Great Britain
February 18, 1952
5 Claims. (Cl. 53—155)



1. In a wrapping machine comprising a wrapping mechanism and an elevator for lifting articles in succession into said wrapping mechanism, the combination with said elevator of a picker, mechanism for reciprocating the picker in a substantially horizontal path so that said picker performs alternate forward strokes, to collect a wrapper, and rearward strokes, to feed the wrapper into position above the elevator, said picker comprising a fixed bottom jaw and a movable top jaw movable between open and closed positions, a link pivoted at its opposite ends to said jaws, an arm extending rearwardly from the top jaw, a member rotatably mounted in the bottom jaw, a crank pin in said rotatable member engaging a hole in said arm, and means for rotating said rotatable member and thereby, through said crank pin, arm and link, imparting forward and downward movement to said top jaw to close it and upward and rearward movement to said top jaw to open it.

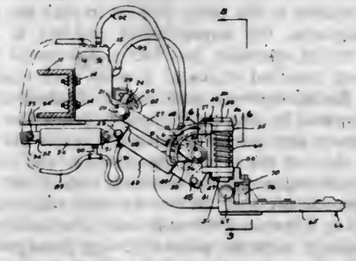
2,729,043
ADJUSTABLE BEARING CONNECTION
William R. Frank, Bell, Calif., assignor to John Deere Killefer Company, Los Angeles, Calif., a corporation of California
Application September 2, 1952, Serial No. 307,491
10 Claims. (Cl. 55—30)

1. In a disk harrow that includes a gang frame, a gang of disks carried thereby, and bearing means rotatably supporting said gang in said frame, the improvement residing in connecting means between the individual bearing means and the frame, said connecting means comprising a bearing bracket attachable to said gang frame and having a pivot-receiving opening, a bearing yoke adapted to receive said bearing means, a pivot bolt carried by said yoke and extending through said bracket



opening, the latter being sufficiently larger than said pivot bolt to permit said yoke and pivot to shift relative to said bracket, clamping plate means having an opening rotatably but non-shiftably receiving said pivot bolt, whereby the bearing yoke may pivot relative to said clamping plate means but is restrained against shifting laterally relative to the pivot bolt, and means shiftably connecting said clamping plate means with said bracket.

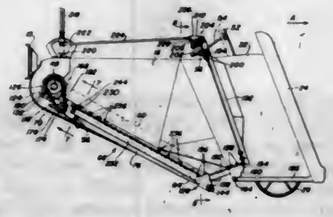
2,729,044
POWER MOWER ATTACHMENT
Thomas J. Dunn and Herbert W. Davis, Hackettstown, N. J.
Application April 27, 1954, Serial No. 425,848
10 Claims. (Cl. 56—25)



1. A power mower attachment comprising an upstanding housing adapted to be secured in side by side relation with respect to a side of a tractor frame, an arm arranged on the side of said housing remote from the side adapted to be secured to the tractor frame side adjacent the lower end of said housing and sloping downwardly and outwardly from said housing lower end and having the upper end connected to the lower end portion of said housing for swinging movement about a horizontal axis in upwardly and downwardly directions, an upstanding frame positioned adjacent the lower end of said arm and connected intermediate its ends to the lower end of said arm for swinging movement about a second horizontal axis parallel to and spaced from said first named axis in upwardly and downwardly directions, an upstanding bracket arranged at a right angle with respect to said upstanding frame and connected to said frame for rotational movement about a vertical axis in clockwise and counterclockwise directions, an upstanding transmission casing arranged on the forward side of said arm and extending transversely of said bracket and connected to the lower end of said bracket for movement with the latter, a horizontally disposed reciprocating knife mower assembly projecting perpendicularly from and carried by said

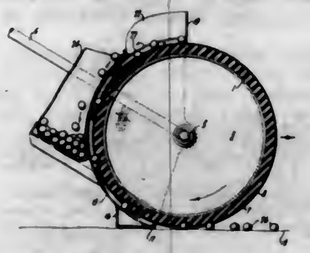
casing, a first means operatively connected to said arm adjacent its upper end for effecting the swinging movements of said arm, and a second means operatively connected to said upstanding frame adjacent the lower end thereof for effecting the swinging movements of said upstanding frame.

2,729,045
AUXILIARY HARVESTING ATTACHMENT FOR ROW-CROP HARVESTER
Norman F. Andrews, Des Moines, Iowa, assignor to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa
Application November 4, 1954, Serial No. 466,736
7 Claims. (Cl. 56—33)



1. In a harvester adapted to advance over a field of row-planted stalk-borne crops and including inner and outer upwardly and rearwardly inclined supports respectively having front and rear ends and spaced apart transversely to the line of advance to define between them a fore-and-aft plant-receiving passageway in which crop-engaging means is operative to detach crops from the stalks of passageway-received plants as the harvester advances, and wherein the inner support is transversely adjustable relative to the outer support to vary the width of the passageway, the improvement residing in a stalk-clearing device operative to effect a downward force on passageway received stalks to prevent such stalks from clogging the passageway, said device comprising: a rear bracket carried by the outer support below the crop-engaging means and extending inwardly across the passageway and clear of the inner support; inner and outer side-by-side stalk engaging rolls rotatable respectively on generally fore-and-aft axes below the crop-engaging means and defining a fore-and-aft stalk bite substantially in vertical alinement with the plant-receiving passageway, said rolls respectively having rear ends journaled in the rear bracket and front ends respectively proximate to the front ends of the supports, the journaling of the rear end of the inner roll including means affording a generally upright axis about which said inner roll may swing laterally relative to the outer roll and thus to vary the width of the stalk bite; a front outer bearing carried by the front end of the outer support and journaling the front end of the outer roll; a front bracket carried by the front end of the inner support; a front inner bearing journaling the front end of the inner roll and mounted on the front bracket for transverse adjustment relative to said bracket to effect width variations in the stalk bite; an elongated rigid bar having a front end connected to the front bracket, an intermediate portion connected to the inner support and a rear end proximate to the rear bracket; means including transversely adjustable cooperative elements connecting the rear end of the bar to the rear bracket for adjusting said bar and the inner support in unison and relative to the rear bracket and outer support to vary the width of the plant-receiving passageway; and drive means for rotating the rolls in unison but in opposite directions so that the proximate surface portions thereof move downwardly in the stalk bite to grip and exert a downward force on stalks received in said bite.

2,729,046
NUT AND FRUIT HARVESTER
James D. Patterson, Woodland, Calif.
Application August 20, 1954, Serial No. 451,245
7 Claims. (Cl. 56—328)



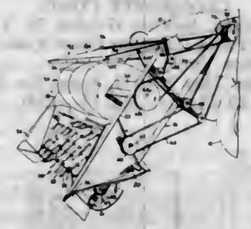
1. A conveyor for conveying articles comprising: an endless blanket of foam rubber-like material arranged to travel in a closed path about and in parallelism with a horizontal reference line; and a ramp paralleling a portion of said blanket in spaced relation thereto, the clearance between said blanket and said ramp being less than the smallest cross-sectional width of said articles.

2,729,047
PICKUP AND FEEDER MOUNTING FOR HARVESTER
Leo G. Cheatum, Ottumwa, Iowa, assignor to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa
Application November 1, 1954, Serial No. 466,109
7 Claims. (Cl. 56—344)



1. In a harvester having a mobile frame adapted to advance over a field of crops, the improvement comprising: a crop-receiving platform rigid on and projecting in a forward direction from the main frame and having a transverse front edge portion and a pair of upright sides, said sides respectively having upper front portions spaced transversely apart and spaced above the front edge portion; a transverse conveyor shaft carried by the platform parallel and adjacent to the platform front edge portion and having opposite ends projecting transversely respectively beyond the platform sides; an endless conveyor movable rearwardly over the platform and between the platform sides and including a forward shaft embracing portion at the platform front edge portion; pickup means transverse to the line of advance and spaced ahead of the platform, said means including a top portion at a normal level below that of the platform and movable pickup elements operative to pick up crops from the ground and to transfer such crops to said top portion, said means further including coaxial shaft portions projecting transversely respectively at opposite ends thereof; supporting linkage mounting the pickup means on the platform for vertical movement, said linkage including a pair of transversely spaced apart fore-and-aft lower links having rear ends pivotally connected to the platform on a transverse axis respectively via the aforesaid conveyor shaft ends and pivotally connected at their front ends to the pickup means on a transverse axis respectively via the pickup means shaft portions, a pair of transversely spaced apart fore-and-aft upper links pivotally connected respectively at their rear ends directly to the upper front portions of the platform sides for vertical movement about a transverse axis and extending forwardly to front ends spaced above the pickup means, a transverse feeder shaft having opposite ends carried respectively by the front ends of the upper links, and a pair of transversely spaced apart upright links pivotally connected at their lower ends respectively to the pickup means shaft portions and pivotally connected at their upper ends respectively to the ends of the feeder shaft; a fore-and-aft deck sheet cross-connecting the lower links and having a front part rearwardly adjacent to the pickup means top portion and having a rear portion closely overlying the aforesaid shaft-embracing portion of the platform conveyor; and a feeder carried by the feeder shaft and including crop-engaging elements movable rearwardly over the pickup means top portion and rearwardly over the front part of the deck sheet.

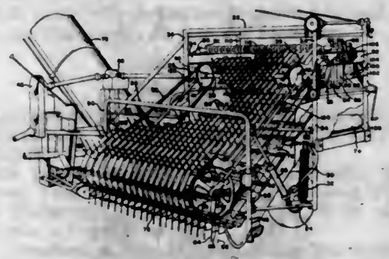
2,729,048
WINDROW PICKUP AND DISTRIBUTING DEVICE
Russell L. Dort, Davenport, Iowa, assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application September 18, 1952, Serial No. 310,205
10 Claims. (Cl. 56—351)



1. In a crop-handling machine adapted to advance over a field of windrowed crops and having pick-up means, conveying means behind and for receiving crops from the pick-up means and crop-treating means behind and for receiving crops from the conveying means, wherein at least the conveying means and the treating means are of greater width than a windrow, the improvement residing in mechanism for spreading the picked-up crop cross-wise of the conveying means before entry of the crop to the treating means, comprising: an elongated rotatable spreading device of a length substantially equal to the width of the conveyor means and including means for the mounting thereof over the conveyor means with its length crosswise of the conveyor means and for rotation so that it sweeps downwardly behind the pickup means and then from front to rear over the conveyor means, said device including portions movable upon rotation of the device to impart transverse motion to the crops on the conveyor means; and a hood having means for the affixation thereof to the machine to overlie the device in vertically spaced relation thereto to prevent crops moved by the device from traveling forwardly over the device.

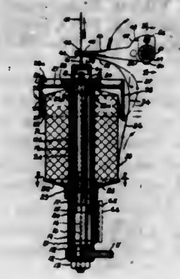
2,729,049
PICKUP WITH BELT STRIPPING MEANS
Wellington W. Porter, Waterloo, N. Y.
Application May 9, 1952, Serial No. 286,985
12 Claims. (Cl. 56—364)

1. A harvester comprising, an inclined ramp, a pair of parallel laterally spaced chains mounted upon forward and rear sprockets above said ramp, the lower reaches of said chains extending substantially parallel to but spaced above said ramp, transverse bars carried by said chains in spaced substantially parallel relation, feeding tines secured to said bars of a length substantially that of the spacing between said reaches and ramp and extending substantially perpendicularly thereto, means for moving said lower reaches in an upward direction, stripper belts arranged around said bars and between said tines, and idler pulley means for said belts disposed below and to the rear of said rear sprockets, whereby a reach of said



belts extends diagonally away from the lower reaches of said chains.

2,729,050
APPARATUS FOR AND METHOD OF PREPARING TEXTILE STRANDS BY TWISTING, TWINING, WRAPPING, AND COVERING
Frank Honig, Edgewood, R. I.
Application October 9, 1951, Serial No. 250,532.
9 Claims. (Cl. 57—18)

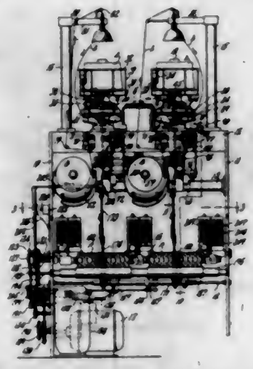


1. That method of preparing twisted strand by unwinding yarn or tow overend from a rapidly rotating supply package, which comprises as steps creating a rotating body of air coaxial with the package, a portion of said rotating body of air, relatively narrow as compared with the length of the package and located near the discharge end of the package, flowing radially outward in response to centrifugal action, and another portion of said rotating body of air flowing helically toward the discharge end of the package from the opposite end of the latter and acting to compress the starting end of the balloon formed by the unwinding yarn, and so compressing the terminal portion of the balloon as to maintain the maximum diameter of the balloon within said radially flowing portion of the revolving body of air.

2,729,051
METHOD OF AND APPARATUS FOR FORMING PRECISION WOUND YARN PACKAGES
Robert J. Clarkson, Winnsboro, S. C., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application June 20, 1952, Serial No. 294,675
23 Claims. (Cl. 57—58.3)

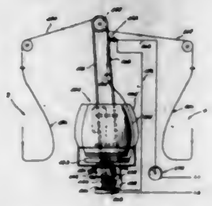
11. Apparatus for forming precision wound yarn packages, comprising means for supporting a plurality of yarn receiving cores in axial alignment and for driving one core from another, traverse mechanism for winding yarn on the respective cores, means for operating said mechanism at an exact predetermined ratio to the core speed to thereby lay yarn on each core with a precision wind, means for controlling the winding speed of the packages including a speed governing drum that engages the sur-

face of a package, and means for driving said drum at a speed slightly slower than the surface speed of the pack-



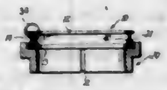
age so that it will hold back the package speed to that of the drum speed.

2,729,052
TWISTING SPINDLE BALLOON CONTROL
Alfred W. Vibber, Ridgewood, N. J.
Application February 16, 1953, Serial No. 337,192
17 Claims. (Cl. 57—58.55)



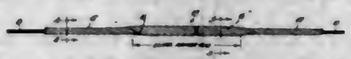
2. Apparatus for controlling the balloon of an elongated flexible material balloon creating twisting spindle, comprising means at one end of the balloon for feeding material into the balloon, means at the other end of the balloon for feeding material out of the balloon, one of such above recited means feeding the material at an essentially constant rate, the other of such means feeding the material at a selectively variable rate, means for detecting the tension in that zone of the flexible material extending between the balloon and the essentially constant speed feeding means, and means responsive to the last named means operative upon the variable speed material feeding means to vary its speed of feeding of the material.

2,729,053
REVERSIBLE DOUBLE-FLANGE TRAVELER RING
Valentin Lindner, New York, N. Y., assignor to Lenkotex Company, New York, N. Y., a partnership
Application December 20, 1952, Serial No. 327,091
7 Claims. (Cl. 57—119)



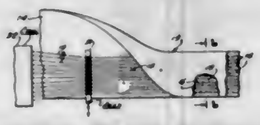
6. In combination, a metallic traveler ring having an upper and a lower flange symmetrically disposed, a plastic coating forming a removable film on the lower portion of said ring including said lower flange, a holder releasably engaging said coated lower flange, and a traveler slidably engaging said upper flange.

2,729,054
HELICALLY-PREFORMED ARMOR FOR LINEAR BODIES
Thomas F. Peterson, Shaker Heights, Ohio
Application November 19, 1952, Serial No. 321,425
7 Claims. (Cl. 57—145)



1. An armoring and reinforcing envelope for wires, cables, and the like, composed of helically-preformed elements of uniform internal helical diameter and uniform pitch as preformed, and of not less than a predetermined length, having at least one substantially shorter helically-preformed element laid-up therewith intermediately of the length of the assembly in crowding relation to the longer elements, said envelope being characterized by a greater helical internal diameter in said intermediate portion than at the terminal portions of the assembly which extend beyond the ends of said shorter element.

2,729,055
COMPOSITE CORD
Lawrence S. Tobias, Jackson Heights, N. Y., assignor to International Paper Company, New York, N. Y., a corporation of New York
Application May 7, 1952, Serial No. 286,476
10 Claims. (Cl. 57—154)



1. A composite tape comprising a stretchable web, a layer of non-rigid adhesive on said web, and a plurality of stretchable strands embedded in said adhesive, said web and said strands having different inherent stretchabilities and the one with the least inherent stretch having mechanically imparted thereto sufficient additional stretch to substantially equal that of the other.

2,729,056
SNAP-ATTACHED CASE AND BACK OF A CLOCK
Charles Henry Arnold, Colebrook River, Conn., assignor to The William L. Gilbert Clock Corporation, Winsted, Conn., a corporation of Connecticut
Application September 25, 1952, Serial No. 311,443
2 Claims. (Cl. 58—53)



2. A clock comprising a case of slightly resilient material having an open back, a front with a dial aperture, and an endless peripheral wall between front and back, said wall having angularly spaced notched inward projections formed in part as wedges, respectively, extending axially of the case and ascending substantially from said wall near said open back toward said front to the respective notches, and the latter having bottoms spaced inwardly from the adjacent inner surface of said wall; a movement receivable in said case with clearance therefrom; and a movement-carrying rear plate shaped similarly as, but slightly smaller than, the opening in said case

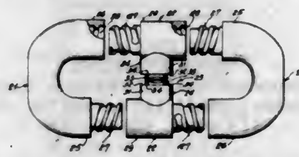
back, so that the periphery of said plate may be sprung over said wedges into the respective notches for the secure attachment of said plate to the case with the movement in the latter and the periphery of said plate slightly spaced from said inner wall surface, said rear plate having an inner web portion on which said movement is mounted and an uninterrupted peripheral marginal portion laterally offset from the plane of said web portion, thereby lending spring characteristics to said plate.

2,729,057
INDEX REGULATOR SET
Hans Kocher, Cortebert, Bern, Switzerland, assignor to Cortebert Watch Co., Cortebert, Switzerland, a corporation of Switzerland
Application January 2, 1953, Serial No. 329,372
9 Claims. (Cl. 58—113)



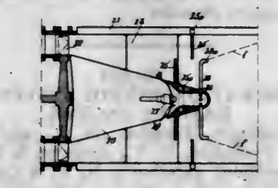
1. A regulator for adjusting the hair spring of the balance of timepieces, comprising a ring member, a regulator lever member rotatable on said ring member, said lever member having a portion which is elastically deformable in a direction transverse to the axis of rotation of said lever member, clamp means for gripping the hair spring, said clamp means including a first jaw member operatively connected with said elastically deformable portion and a second jaw member supported by said ring member, said lever member and said ring member having each a surface portion, said surface portions slidably engaging each other and causing deformation of said elastically deformable portion and separation of said jaw members for releasing the hair spring upon rotation of said lever member on said ring member, and stationary means frictionally engaging said ring member and preventing rotation of said ring member while said deformable portion is deformed and affording rotation of said ring member upon continued rotation of said lever member for displacing the jaw member supported by said ring member along said hair spring, the original undeformed configuration of the resilient portion of said lever member being restored upon discontinuance of the rotation of said lever member on said ring member for regripping the hair spring.

2,729,058
CHAIN SHACKLES HAVING A RESILIENT CLIP
Mortimer Russell Dock, Washington, D. C.
Application May 25, 1953, Serial No. 357,071
17 Claims. (Cl. 59—86)



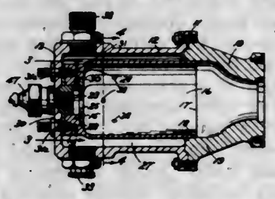
1. A chain link shackle comprising, in combination; a plurality of connectable link sections including a pair of opposed rotatable side sections; a pair of stud lugs with one fixedly mounted on each side section, said stud lugs being adapted to be rotated to opposed, spaced-apart and substantially aligned relation with assembly of said sections; and stud lugs alignment-maintaining means comprising a plurality of interengaging means having opposed portions each carrying a pair of laterally-spaced resilient elements provided with inturned tip sections snap mounted about said stud lugs when the latter are brought to substantial alignment temporarily to prevent said stud lugs from being rotated out of alignment, said means being unsnappable to permit said stud lugs to be rotated relative to each other with demountable rotation of said side sections for disassembly of said link sections.

2,729,059
CONTINUOUS FLOW INTERNAL COMBUSTION ENGINES, IN PARTICULAR AIRCRAFT ENGINES
Claude Fouré, Becon-Courbevoie, and Lucien Reingold, Paris, France, assignors to Office National d'Etudes et de Recherches Aeronautiques (O. N. E. R. A.), Paris, France, a French society
Application May 29, 1950, Serial No. 164,934
Claims priority, application France May 28, 1949
8 Claims. (Cl. 60—35.6)



1. A continuous flow internal combustion engine which comprises, in combination, at least one duct for the flow of a gaseous stream, said duct including at least one comburent gas intake, at least one tubular element having its mean line transverse to said duct downstream of said intake to inject fuel through the mass of said comburent gas, said tubular element being provided with a multiplicity of fuel outlets distributed along its length and opening at a substantial distance from the walls of said duct and transversely both to the flow direction in said duct and to said mean line, means for supplying fuel to said tubular element, and flame holder means located in said duct downstream of said fuel injection tubular element.

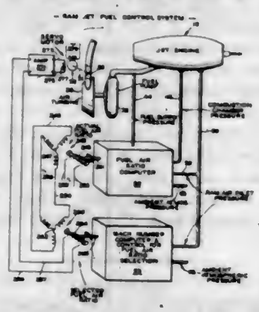
2,729,060
MEANS FOR PROVIDING WORKING FLUID FOR A FLUID-OPERABLE STARTER MOTOR FOR A PRIME MOVER
Sidney Allen and Morris A. Stokes, Coventry, England, assignors to Armstrong Siddeley Motors Limited, Coventry, England
Application June 14, 1952, Serial No. 293,635
Claims priority, application Great Britain July 7, 1951
4 Claims. (Cl. 60—39.14)



1. Means for providing working fluid for use in a fluid-operable starter motor, including a source of compressed air, a source of liquid fuel, a main valve controlling the delivery from the source of compressed air, the latter being connected to the source of liquid fuel so that the delivery of fuel is effected by the compressed air when the main valve is opened, the fuel is delivered under the pressure of the air and the source of compressed air can supply a combustion chamber in which the fuel is burnt in the compressed air and which delivers the products of combustion to the starter motor as the working fluid, said combustion chamber including an outer casing having one end closed, a flame tube having annular clearance from said casing and having a closed

end rigidly attached thereto at said one end, the opposite end of said casing having a reduced bore in which the adjacent end of said flame tube is mounted, the compressed air being supplied to the annular chamber between said casing and said flame tube and being supplied to said flame tube through at least one ring of holes provided therein, said flame tube having at its closed end a cylindrical chamber communicating with said annular chamber by at least one relatively-small-diameter passage disposed tangentially to the bore of said cylindrical chamber whereby air will pass at high velocity through said passage and enter said cylindrical chamber with a whirling motion, and the closed ends of said casing and flame tube carrying a fuel metering device disposed in a transverse passage leading to said tangential passage whereby the high velocity air passing through the latter will eject and atomise fuel from said device for burning in said combustion chamber.

2,729,061
FUEL-AIR RATIO CONTROL SYSTEM FOR A RAM-JET ENGINE
Louis N. Grafinger, Paramus, N. J., and Bernard J. O'Connor, Tuckahoe, N. Y., assignors to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application June 4, 1952, Serial No. 291,738
24 Claims. (Cl. 60—39.28)

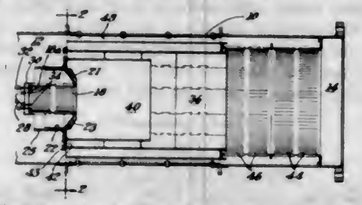


1. A control system for an aircraft engine having means for supplying air and fuel under pressure to the engine, comprising a fuel-air ratio computer sensitive to the fuel and air supply pressures, a Mach-number computer, fuel supply control means, means operatively connecting the fuel-air ratio computer to said control means to maintain the fuel-air ratio at a selected value, datum changing means for varying the selected fuel-air ratio value, and means operatively connecting the Mach-number computer to said datum changing means so as to vary the selected fuel-air ratio in a sense to maintain the aircraft in flight at a pretermined Mach-number.

15. A fuel-air ratio computer comprising a fuel flow sensing device, a ram-air inlet pressure sensing device, a reversible motor, an electrical computer network for controlling said motor, means connecting said devices in said network including variable coupling transformer means, and means drivingly connecting said motor to said variable coupling transformer means for electrically balancing said network.

2,729,062
POWER PLANT COMBUSTION CHAMBER
Fritz O. Hennig, Olean, N. Y., assignor, by mesne assignments, to Dresser Operations, Inc., Whittier, Calif., a corporation of California
Application July 6, 1951, Serial No. 235,432
4 Claims. (Cl. 60—39.65)

1. A power plant combustion chamber comprised of a plurality of plates, each plate extending along the central axis of the chamber and having a marginal portion attached to a support, a central portion normally out of the combustion zone and adapted to be air cooled, and a second marginal portion spaced from the first marginal portion by the central portion, said last mentioned mar-



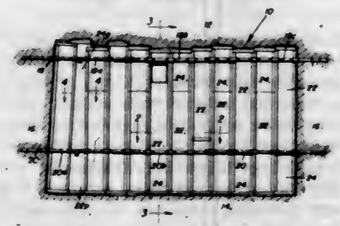
ginal portion forming a part of the inner wall of the combustion chamber and means to secure the marginal edge of one plate to a central portion of another plate whereby expansion is provided.

2,729,063
HYDRAULIC TOOL
Cyrus Earl Hoadley, Bradley, Ill., assignor to Manco Mfg. Co., Bradley, Ill., a corporation of Illinois
Application May 14, 1954, Serial No. 429,837
4 Claims. (Cl. 60—52)



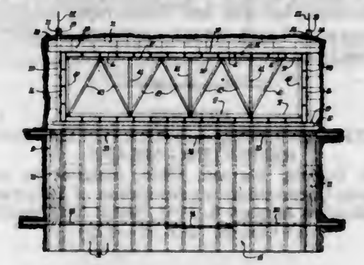
1. In a hydraulic tool, a body comprising a cylinder and a block at one end thereof, a ram operable in said cylinder, a hydraulic fluid reservoir, a first handle secured to said body, a second handle pivoted on said body for movement toward and away from said first handle, means comprising a pump plunger operated by said second handle for delivering hydraulic fluid under pressure from said reservoir to said cylinder, said block having a release passage opening from said cylinder into said reservoir, a normally closed release valve controlling said passage and closing toward said reservoir, a valve opening pin slidable in said block for movement in valve opening and valve closing directions, a release plunger slidable in said second handle and aligned with said pin when said second handle is in its extreme position toward said first handle, said release plunger normally being in retracted ineffective position, and means carried by said second handle for optionally projecting said release plunger and holding it projected, whereby said release plunger will move said pin toward said valve and open the latter when said second handle is moved to its limit toward said first handle.

2,729,064
MINE STOPPING
Jack R. Kennedy and Samuel F. Kennedy, Taylorville, Ill.
Application April 23, 1953, Serial No. 350,557
11 Claims. (Cl. 61—45)



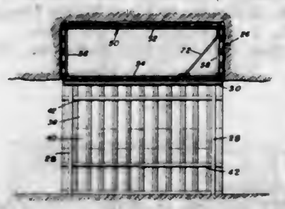
1. A stopping for mines comprising at least one substantially horizontally extending support bar adapted to be embedded in the rib of a mine, a plurality of pairs of vertically extending telescoping panels, and means resiliently clampingly securing said pairs of panels to said support bar in abutting relationship with the next adjacent pair of panels whereby upon distortion of said mine bottom from a squeeze said pairs of panels will telescope, one panel within another.

2,729,065
ADJUSTABLE PREFABRICATED METAL OVERCAST
Joseph Craggs and Keith Reed McCann, Taylorville, Ill., assignors, by mesne assignments, to Jack R. Kennedy and Samuel F. Kennedy, both of Taylorville, Ill.
Application June 26, 1953, Serial No. 364,372
2 Claims. (Cl. 61—45)



1. In a mine ventilation overcast structure adapted to establish a circulation of air over one entry at the intersection between two entries in a mine, an extensible rectangular metal duct extending across one entry in an elevated position and connected at its ends with an intersecting entry and comprising a plurality of channel-like panels connected together in side-by-side relation with respect to each other, means supporting said duct in an elevated position across said one entry comprising cross beams in the intersecting entry and an intermediate beam hung from the mine roof and supporting said duct intermediate the ends thereof, and filler block retaining means comprising an outwardly opening channel extending across the top of the overcast adjacent each end thereof and cooperating outwardly opening channels extending along the side of the overcast.

2,729,066
VENTILATION SYSTEM FOR MINES
Jack R. Kennedy and Samuel F. Kennedy, Taylorville, Ill.
Application August 21, 1953, Serial No. 375,615
10 Claims. (Cl. 61—45)



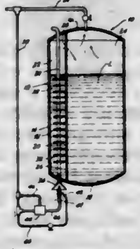
1. A ventilation system for mines having a mine shaft including an overhead, said mine shaft being intersected by a cross shaft, said cross shaft having an overhead forming a recess in the overhead of said mine shaft, a substantially rectangular conduit received in said recess, and vertically extending stoppings in said cross shaft extending from the bottom of said cross shaft to said conduit and closing said cross shaft relative to said mine shaft at each side of said mine shaft.

2,729,067
METHOD FOR FORMING PILES
Raymond Patterson, Evergreen Park, Ill., assignor, by mesne assignments, to Intrusion-Prepakt, Incorporated, Cleveland, Ohio, a corporation of Delaware
Application September 18, 1951, Serial No. 247,151
12 Claims. (Cl. 61—57)



1. A method of forming piles in the earth comprising sinking an auger-type drill into the earth to define the location and depth of a pile cavity without removing the earth therefrom, and forcing a fluid hydraulic cement grout into the earth below said drill with sufficient pressure and in sufficient quantity to raise said drill from said cavity and form the pile therein.

2,729,068
COMBINATION LIQUID FUEL VAPORIZER AND STORAGE TANK
Orville Mitchell, Dallas, Tex., assignor to John E. Mitchell Company, Dallas, Tex., a corporation of Missouri
Application January 30, 1952, Serial No. 269,018
7 Claims. (Cl. 62—1)

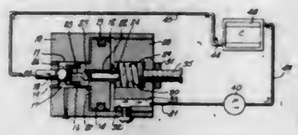


1. A device of the type described, comprising a container for fluids; an upwardly extending partition in the container passing from the bottom to the top of said container and dividing it into at least two compartments of unequal size; passage means in said partition between the two compartments adjacent the bottom of the container to permit limited fluid flow between them; passage means in said partition between the two compartments adjacent the top of the container; a heat source associated with the compartment of lesser size for applying heat to a fluid contained therein, said heat source being adapted to utilize a portion of the fluid being stored; and means controlling the heat source responsive to the pressure at the top of the container.

2,729,069
THROTTLING VALVE
Norman H. Collins, Flushing, N. Y.
Application April 13, 1953, Serial No. 348,451
3 Claims. (Cl. 62—8)

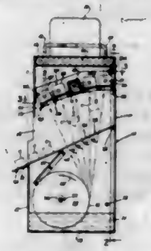
1. A refrigerant throttling valve including, a valve housing having two bores of different size, a movable piston member composed of two portions that approximate

the cross sectional areas of the two bores and into which it is mounted, a valve seat in the housing facing the smaller of the two bores, and providing an inlet port, a ball valve mounted between the valve seat and the face of the smaller portion of the piston to open or close said port, a pair of seals one about the periphery of each of



the two portions of the piston, a restrictor connected at one end to the smaller face of the piston and connected at the other end to the larger face of the piston, a closure element mounted in the larger bore of the housing to restrict the movement of the piston and to form an expansion chamber for the restrictor, and a port to connect said expansion chamber to the suction side of a compressor.

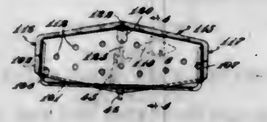
2,729,070
ICE CUBE MACHINE
Ward A. Ames, Faribault, Minn.
Application June 28, 1952, Serial No. 296,189
10 Claims. (Cl. 62—107)



1. An ice cube machine comprising in combination a tank having a front wall provided with an aperture therein and a rear wall for retaining a supply of liquid at the bottom thereof, a plurality of discs having portions rotatable progressively into and out of contact with said liquid, a plurality of inverted cups centered above each of said discs and positioned thereover for receiving liquid tangentially thrown from said disc, said cups each comprising an inner and outer shell and being connected together for the flow of refrigerant between said inner and outer shell, refrigeration means for causing a flow of refrigerant to flow through said inner and outer shells, means between said discs and said cups for receiving ice cubes which are ejected from said cups, said means being inclined from said rear wall to said front wall to guide ice cubes thereout, and said front wall above said aperture being parallel to but spaced towards said rear wall from said front wall below said aperture.

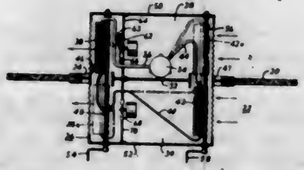
2,729,071
TWO FLUID REFRIGERATION SYSTEM
Lyman F. Whitney, Boston, Mass., assignor, by mesne assignments, to Stator Company, a corporation of Massachusetts
Original application October 4, 1949, Serial No. 119,489, now Patent No. 2,678,548, dated May 18, 1954. Divided and this application March 19, 1953, Serial No. 343,345
4 Claims. (Cl. 62—126)

1. Refrigerating apparatus comprising a compartment having a housing formed with spaced inner and outer top and side walls providing an enclosure, a primary liquid refrigerant disposed within said enclosure so as to provide a liquid-vapor interface in heat transfer relation to the interior of said compartment between its upper and lower parts, a second enclosure formed with spaced inner and outer side walls, the side walls of one enclosure being disposed in close thermal contact with the side walls of the other enclosure so that the upper part of the second enclosure is in heat transfer relation to at least a part of



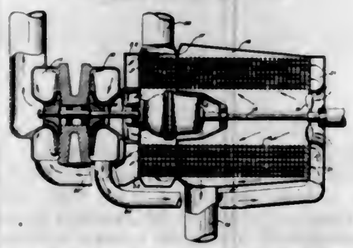
said liquid-vapor interface, and a secondary refrigerant within said second enclosure said secondary refrigerant having a vapor pressure greater than that of the primary refrigerant and adapted to reflux in response to a temperature differential between said liquid-vapor interface and the lower part of said second enclosure, thereby transferring heat from the latter to said interface.

2,729,072
REFRIGERATING APPARATUS HAVING REHEATING MEANS
Edwin S. Dybvig, Dayton, Ohio, assignor to General Motors Corporation, a corporation of Delaware
Application January 8, 1951, Serial No. 204,956
17 Claims. (Cl. 62—129)



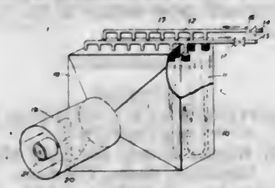
1. Air conditioning apparatus for an enclosure including a condenser element, an evaporator element, one of said elements being movably mounted upon said apparatus for movement into and out of heat exchange relation with said enclosure, a refrigerant compressor fixed within the apparatus, and operative refrigerant flow connections between said elements and said compressor, the refrigerant flow connection between said movably mounted element and the compressor and the refrigerant flow connection between said movably mounted element and the other element being flexible refrigerant flow connections.

2,729,073
AIR EXPANSION REFRIGERATION SYSTEM
Edwin A. Nielsen, Dearborn, and Charles C. Hill, Oak Park, Mich., assignors to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application July 27, 1953, Serial No. 370,508
3 Claims. (Cl. 62—136)



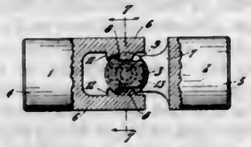
1. A vehicular air conditioning apparatus comprising an inlet conduit leading from the space to be conditioned, an outlet conduit leading to the space to be conditioned, a cooling fan, a speed changer, a radial flow centrifugal compressor, a radial flow centrifugal expander and an annular heat exchanger, said cooling fan, compressor, expander and heat exchanger being arranged concentrically, a bulkhead dividing said heat exchanger into a first and second section, said first section being cooled by ambient air circulated by the cooling fan and said second section being connected to said inlet conduit and cooled by air recirculated through this conduit from the space to be cooled, and said centrifugal expander discharging expanded and cooled air into the outlet conduit and hence to the space to be cooled.

2,729,074
VAPORISATION OF LIQUEFIED GASES
Adam Gregory Monroe, London, and Anton Walter Freud, Hounslow, England, assignors to The British Oxygen Company Limited, London, England, a British company
Application April 11, 1951, Serial No. 220,534
Claims priority, application Great Britain April 24, 1950
3 Claims. (Cl. 62—170)



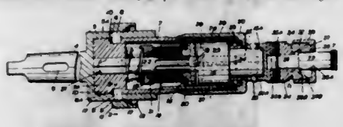
1. Process for the vaporisation of liquefied oxygen or nitrogen with subsequent heating of the vapor formed to a temperature not above the ambient temperature, which comprises passing a stream of the liquefied gas through an evaporator, passing a stream of atmospheric air externally of the evaporator in indirect heat exchange with the liquefied gas passing internally therethrough at a velocity such that the fall in temperature of the air in its passage past the evaporator is maintained at a value sufficiently small to prevent the outer surface of the evaporator from falling below the freezing point of water at atmospheric pressure, and periodically reversing the direction of flow of the liquefied gas through the evaporator while maintaining constant the direction of flow of the stream of atmospheric air externally of the evaporator.

2,729,075
UNIVERSAL JOINTS
Thomas B. Cavanaugh, West Springfield, Mass.
Application June 21, 1954, Serial No. 438,062
4 Claims. (Cl. 64—17)



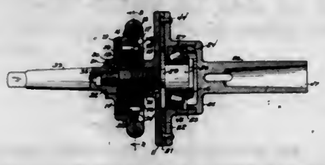
1. In a universal joint having three parts only comprising a pair of identical fork members and a center block member, one of said members being formed with a pair of integral trunnions having a common axis, the other of said members being formed with recesses in which said trunnions are rotatably engaged, said recesses extending in one direction to the outer surface of said other member to permit insertion of said trunnions into said recesses, and interlocking means comprising oppositely disposed arcuate ridges on one of said members, said ridges being concentric with and spaced from said trunnions and engaging the other of said members only when said members are assembled in operating relationship to prevent disengagement of said trunnions from said recesses.

2,729,076
MACHINE ATTACHMENTS FOR TOOLS
Allan Stevenson Thomson, Greenock, Scotland
Application September 20, 1951, Serial No. 247,397
Claims priority, application Great Britain September 28, 1950
4 Claims. (Cl. 64—29)



1. A machine attachment for tools, said attachment being of the slipping-clutch type and comprising a casing, a supporting shaft axially located in said casing and in driving engagement therewith, slipping-clutch components which are a sliding fit in said casing and are movable relatively thereto and to one another, axially spaced oil seals between said casing and the respective components, and an oil reservoir located within the interior of said components, said reservoir comprising a chamber walled by said components, a blind oil-containing hole in one of said components, said shaft fitting into said hole, and an oil passage extending along said shaft to connect said hole with said chamber, said reservoir serving to supply oil between said components and also between them and said casing.

2,729,077
CONSTANT TORQUE COUPLING
Robert L. Holloway, Snyder, N. Y.
Application February 11, 1953, Serial No. 336,297
2 Claims. (Cl. 64—30)

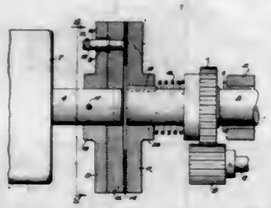


1. In a torque coupling, a hub provided with a circular flange on one end thereof, a sleeve arranged on the other end of said hub and provided with spring engaging lugs thereon, a casing positioned around said lugs, a housing surrounding said casing, a worm gear carried by said casing, a worm journaled in said housing and meshing with said worm gear, springs positioned in said casing and having an end thereof engaging the lugs of said sleeve, lugs on the inner surface of said casing engaging the other ends of said springs, said housing being provided with a hub having a square opening therein, a driving element including a square section positioned in said square opening, said square section being provided with a threaded bore, a shaft including an intermediate section provided with a high lead thread for threadedly engaging said first named hub, said shaft having a stud arranged in engagement with said bore, a driven element including an extended section, a flange including a cylindrical hub secured to said extended section, and a friction disc secured to said last named flange and arranged contiguous to the flange on said first named hub.

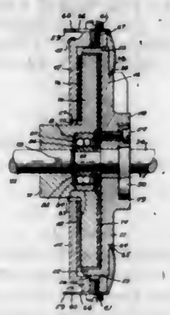
2,729,078
COUPLING FOR TRANSMITTING VIBRATION-FREE ROTATIONAL MOTION
Frank Schmidt, Chicago, Ill., assignor to Streeter-Amet Company, Chicago, Ill., a corporation of Illinois
Application March 23, 1953, Serial No. 343,827
5 Claims. (Cl. 64—30)

1. In a device for transmitting vibration-free rotational motion, a first shaft, a second shaft aligned with said

first shaft, a first disc mounted on said first shaft so as to rotate therewith and move axially thereof, a second disc fixed to said second shaft having a slot therethrough, an intermediate disc adjacent said first and second discs rotatably mounted on one of said shafts, frictional material between said first disc and said intermediate disc, yieldable pressure means urging said first disc into frictional engagement with said intermediate disc to transmit rotational motion therebetween, said intermediate disc having a pin projecting from the face adjacent said second disc and adapted to move within said slot, and resilient means for yieldingly securing said pin to said second disc, whereby rotational motion is transmitted from said intermediate disc to said second disc.

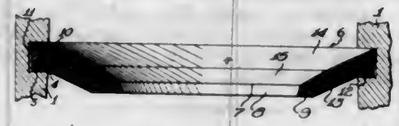


2,729,079
WEIGHT SENSITIVE PULL AND BRAKE CLUTCH
John Julius Kuehn, Chicago, Ill.
Application February 3, 1955, Serial No. 485,976
1 Claim. (Cl. 64—30)



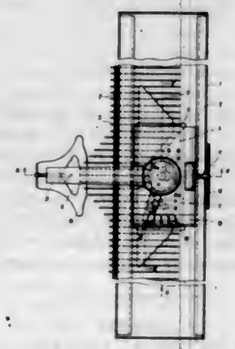
A weight sensitive pull and brake clutch of the character described, comprising a drive shaft, a cup-shaped driving member mounted on said shaft for rotation therewith, a second cup-shaped driving member having an axial opening therethrough and being assembled with said first-mentioned cup-shaped member, the flange portions of each of said members having complementary threads for assembly of said members into a housing of adjustable width, a driven disc within said housing, said driven disc being rotatable about the axis of said drive shaft and said driving members, a circular frictional disc of sintered material positioned adjacent each of the opposite sides of said driven disc frictionally coupling said driven disc to said driving members, said frictional discs, said driven disc and said driving members all operating in a dry condition and free of a lubricant, a pivot-type bearing assembled in conjunction with said driven disc and the end portion of said drive shaft within said housing for supporting and pivoting the driving members and driven disc about a fixed center, and a driven shaft having one end secured to said driven disc for rotation therewith about said axis of rotation of said drive shaft, said driven shaft extending through said axial opening of said housing and being spaced from the walls of said housing to permit angular movement of the free end of said driven shaft to vary said frictional coupling as a function of the weight placed upon or removed from said driven shaft.

2,729,080
PAPER CUP HOLDER
Herbert L. Bennett, Easton, Pa., assignor to Dixie Cup Company, Easton, Pa., a corporation of Delaware
Application February 7, 1952, Serial No. 270,480
5 Claims. (Cl. 65—61)



2. As an article of manufacture, a cup gripping element for insertion in a paper cup holder, comprising a resilient disc upwardly bowed and having a central opening therein, said disc prior to insertion in a holder having an outwardly and downwardly sloping upper surface and an upwardly and outwardly beveled margin on the lower surface meeting said upper surface at the circumferential edge of the disc.

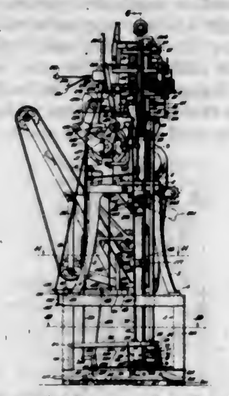
2,729,081
NEEDLE-MOVING MECHANISM FOR KNITTING MACHINES
Willy Werner Lenkeit and Josef Biggel, Markdorf, Baden, Germany
Application June 30, 1953, Serial No. 365,068
5 Claims. (Cl. 66—77)



1. In a knitting machine, a needle-moving mechanism comprising a sled, a body releasably affixed to said sled, two guide plates affixed to said body and extending alongside of each other, each of said plates having a curved contour facing the curved contour of the other plate whereby said plates include a curved channel, and a lever pivoted to said sled and to said body at axes eccentric to each other whereby said lever, when turned while said body is released, shifts said plates simultaneously and equally relatively to said sled.

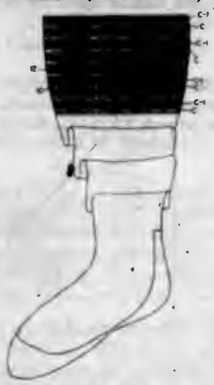
2,729,082
AUTOMATIC TAKE-UP MEANS FOR KNITTING MACHINES
Joseph F. Tew, Newland, N. C., assignor, by mesne assignments, to Scott & Williams, Incorporated, Laconia, N. H., a corporation of Massachusetts
Application April 13, 1951, Serial No. 220,822
21 Claims. (Cl. 66—149)

16. In a circular knitting machine having a needle cylinder and adapted to knit separate articles each of which is pressed off when completed, pneumatically operated means for automatically seizing the free end portion of each article while it is being knit and for imparting tension thereto during subsequent knitting, and



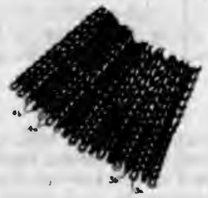
means for automatically releasing the completed article from seizing means.

2,729,083
STOCKING WELT
Isidor Rabinovitz, Philadelphia, Pa.
Application November 18, 1953, Serial No. 392,916
1 Claim. (Cl. 66—172)



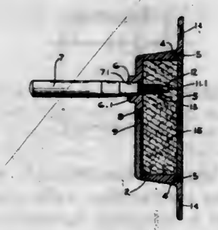
A stocking welt formed of a plurality of alternating annular bands, each pair of adjacent bands being knit under uniform tension of yarns of different denier which are twisted in opposite directions and a course knit of pre-dyed yarn separating said adjacent bands.

2,729,084
GARMENT
Lambertus te Strake, Deurne, Netherlands
Application March 4, 1953, Serial No. 340,325
Claims priority, application Netherlands March 5, 1952
3 Claims. (Cl. 66—176)



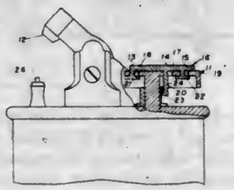
1. A knitted garment having a front body portion and a back body portion, said front portion comprised of one and one ribbed knitting and said back portion comprised of two and two ribbed knitting.

2,729,085
LIGHTERS
Kenneth M. Van Norman, East Moline, Ill.
Application November 19, 1952, Serial No. 321,343
2 Claims. (Cl. 67—4.1)



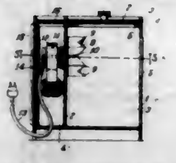
1. As an article of manufacture, a lighter including a unitary rectangular chamber of transparent plastic with a flat projecting flange around the lower edge thereof, a fibrous absorbent pad mounted in the chamber, a flat plate having a projecting rim formed upon one face thereof secured in a corresponding groove formed in the flange and forming one wall of the chamber, an opening in the opposite wall of the chamber holding in air-tight contact therewith a handle, said handle having mounted thereon an ignition pin with a sharp-edged head formed upon the outer end of said pin, a sleeve of asbestos fiber mounted upon said ignition pin extending to its sharp-edged head, and a closely coiled spring surrounding and shielding the sleeve, said sleeve having a small portion thereof extending beyond the outer end of the spring and said spring being adapted to shield the body of the sleeve from direct contact with the fire when the lighter is ignited, the sleeve and spring being readily removable and replaceable.

2,729,086
LIGHTER
Samuel Mickelberg, Philadelphia, Pa.
Application September 16, 1953, Serial No. 380,517
3 Claims. (Cl. 67—7.1)



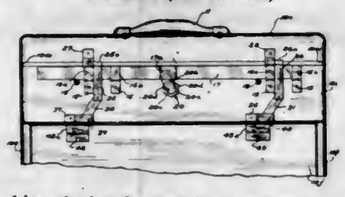
1. In a spark actuated lighter of the type wherein a unitary pressure producing movement removes a snuffer cap from an upright wick on the lighter frame and produces the spark and release of the pressure replaces the snuffer cap extinguishing the flame, a pressure bar for transmitting said movement to the snuffer cap and spark producing mechanism, a substantially elongated lock bar above and in sliding contact with said lever, means for holding and guiding said bar in longitudinal sliding displacement along said pressure bar, a catch bar attached to and extending from said lock bar terminating in an upward pointing hook and a downward pointing hook attached to the lighter frame adjacent said upward pointing hook whereby when said pressure bar is pressed and the lock bar pushed to bring said hooks in meshed relation the pressure bar is prevented from returning to its inoperative position preventing replacement of the snuffer cap when the external pressure is removed.

2,729,087
TOY CLOTHES WASHING MACHINES
Charles D. Harrell, Knoxville, Tenn., assignor to Walter Lutz, Rockford, Tenn.
Application March 16, 1951, Serial No. 216,007
1 Claim. (Cl. 68—131)



A toy washing machine comprising a casing having a bottom, upstanding surrounding walls about three sides of the casing, and a transverse upstanding partition between opposite side walls and cooperating therewith to enclose a water compartment at one side of the partition and a motor compartment at the opposite side thereof within the casing, the side of said motor compartment opposite said partition having an opening therein, the opposite side walls of the casing having inturned flanges defining opposite sides of said opening, a removable plate for said opening, means forming sliding connections between the opposite edges of said plate and the inturned flanges, a cover plate rigid with the removable plate and of greater length transversely of the removable plate than the width of said plate substantially closing the space between the opposite side walls and between the removable plate and the partition, a motor mounted in the motor compartment and having a shaft extending through the partition, and an agitator on the shaft in the water compartment.

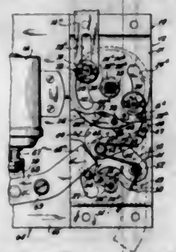
2,729,088
DOUBLE LOCK FOR CABINET
Henry E. Huot and Joseph A. Ducharme, St. Paul, Minn., assignors to Huot Manufacturing Company, St. Paul, Minn., a corporation of Minnesota
Application June 29, 1953, Serial No. 364,828
4 Claims. (Cl. 70—63)



1. A locking device for use in connection with a casing having a pair of covers and spaced sides having in combination, a bar adapted to be movably secured to a side of said casing for movement longitudinally thereof, means for moving said bar longitudinally, a pair of spaced latch members secured to said bar, spaced keepers adapted to be secured to one of said covers to be respectively engaged by said latch members, a second pair of latch members respectively secured to said first pair of latch members and pivotally connected thereto, guide members adaped to be secured to said side for guiding said last mentioned latch members, spaced keepers adapted to be secured to said other cover to be respectively engaged by said last mentioned latch members.

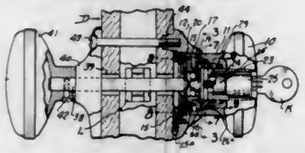
2,729,089
SOLENOID-CONTROLLED DOOR LOCK
Albert L. Pelcin, Maple Heights, Ohio, assignor to The Eastern Malleable Iron Company, Cleveland, Ohio, a corporation of Connecticut
Application February 8, 1952, Serial No. 270,629
8 Claims. (Cl. 70—151)

6. In a door lock of the character described, a housing, bolt means movable relative to said housing for projection into and retraction from a door locking position, spring means effective to releasably hold said bolt means in its projected position, manually operable handle means, mechanism in said housing responsive to movement of said handle means for retracting said bolt means, latch means movable in said housing between a holding position in holding engagement with the handle actuatable mechanism for preventing movement of the latter in the direction to retract said bolt means and a retracted posi-



tion releasing said handle actuatable mechanism for a single actuation of the latter in the direction to retract said bolt means, a second spring means urging said latch means toward said holding position, retaining means adapted to retain said latch means in said retracted position including a pawl engageable by said mechanism for causing said retaining means to release said latch means in response to said single actuation of said mechanism, and key actuatable means operable to move said latch means to its retracted position.

2,729,090
KEY-OPERATED DOOR KNOB ASSEMBLY
Burton S. Floraday, Toledo, Ohio
Application March 18, 1952, Serial No. 277,167
7 Claims. (Cl. 70—223)

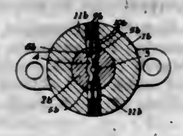


1. Door latch operating mechanism comprising a latch operating spindle, an outside operated knob, a mounting for said knob affording turning movements thereof, a driven clutch member, an operative connection between said driven clutch member and said spindle for turning the latter in response to turning movements of the former, a driving clutch member shiftable to and from operative engagement with said driven clutch member, an operative connection between said knob and driving clutch member, a key operated lock cylinder, stationary tubular means independent of said knob for mounting said lock cylinder thereby to enable the lock cylinder to receive its key in a predetermined position irrespective of the position of the knob, means responsive to movement of said key lock cylinder for moving said driving clutch member away from said driven clutch member and controlling the movement of said driving clutch member to said driven clutch member, and a spring for urging said driving clutch member into operative engagement with said driven clutch member.

2,729,091
KEY OPERATED LOCK MECHANISM
Jack William Taylor, New Denham, England, assignor to Ingersoll Limited, London, England
Application February 18, 1952, Serial No. 271,992
Claims priority, application Great Britain
February 19, 1951
4 Claims. (Cl. 70—358)

1. Key operated lock mechanism comprising a cylinder having a bore, a plug revolvably mounted in the bore

of said cylinder, pin tumblers movably mounted in said plug, said plug having two laterally spaced key slots extending longitudinally thereof, said pin tumblers comprising two similar sets respectively disposed on opposite sides of the axis of the lock mechanism and jointly spanning both of said key slots for cooperation with a double edge key and having key engaging surfaces cooperating with a key in either of said slots, said key slots having



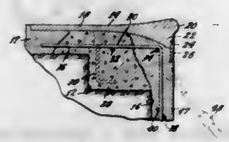
key receiving openings respectively at opposite ends of said plug, and means under the control of said pin tumblers for preventing rotation of said plug within said cylinder until all of said pin tumblers have been moved the correct amount, whereby the proper key may be inserted in either of said slots for moving said pin tumblers to release said means and permit rotation of said plug within said cylinder.

2,729,092
PLUG AND CYLINDER TYPE LOCK MECHANISM
Jack William Taylor, New Denham, England, assignor to Ingersoll Limited, London, England
Application February 18, 1952, Serial No. 271,991
Claims priority, application Great Britain
February 19, 1951
6 Claims. (Cl. 70—364)



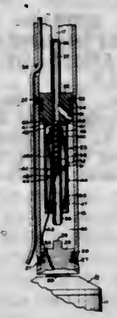
1. Plug and cylinder type lock mechanism comprising a fixed cylinder, a key receiving plug mounted for rotational movement within said cylinder under the turning action of an inserted key, said plug having a plurality of arcuate shaped compartments, a series of arcuate shaped tumblers mounted in said arcuate shaped compartments for individual sliding movement through an arcuate path in said plug as a result of their engagement by an inserted key, and means controlled by said tumblers for preventing rotational movement of said plug within said cylinder until all the tumblers have been lifted the correct amount as a result of the insertion of the correct key into the plug.

2,729,093
SWIMMING POOL AND METHOD OF CONSTRUCTION
Ian M. Ridley, Burbank, Calif.
Application January 23, 1953, Serial No. 332,887
12 Claims. (Cl. 72—13)



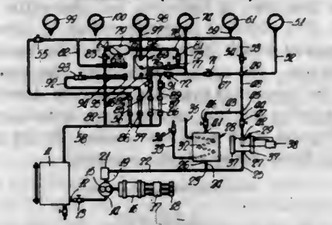
12. In swimming pool construction, the combination comprising: a concrete bond beam located about the periphery of an excavation; a network of reinforcing rods disposed within the excavation with their ends anchored in said bond beam; a longitudinal series of deck slabs having a row of water line tiles secured thereto and aligned horizontally about said periphery fixedly secured to said bond beam with the forward edges of said slabs overlying and projecting beyond said bond beam, and reinforcing rods; and substantially water impervious tightly packed concrete filling the space beneath the overhanging portion of the deck slabs and extending continuously downward forming the side walls of the pool with said reinforcing rods embedded therein.

2,729,094
APPARATUS FOR TESTING SEISMOMETERS
Raymond G. Piety, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application September 15, 1950, Serial No. 185,054
9 Claims. (Cl. 73—1)



1. In an apparatus for testing a seismometer the combination of a planting device secured to said seismometer, said planting device incorporating a tube for holding a plurality of impact-producing balls, an electrically actuated release mechanism to permit said balls to leave said tube successively to strike and produce impacts upon said seismometer, means for collecting the balls leaving said tube, and means responsive to tilting of said device to return the balls to said tube.

2,729,095
TEST EQUIPMENT FOR OIL TEMPERATURE REGULATING VALVES
Edward M. Greer, Great Neck, N. Y., assignor to Greer Hydraulics, Inc., a corporation of New York
Application March 20, 1952, Serial No. 277,589
4 Claims. (Cl. 73—1)



1. Equipment for testing valve units of the type having an inlet port, an outlet port and a plurality of pressure controlled valve means, said equipment comprising a reservoir, an oil cooling unit, an oil heating unit, means to force oil from said reservoir through said units, a feed line having its outlet end connected to said reservoir, a sight glass in said feed line, valve means controlling the flow of oil from each of said units to the input of said feed line so that the oil therein may be set at a predetermined value, an oil temperature gauge connected to said feed line, a pressure gauge connected to said feed line, a test pad having three ports for mounting of such valve unit to be tested thereon, an oil inlet line connected at one end to said feed line and having a coupling at its other end for connection to the oil inlet port of the valve under test which is associated

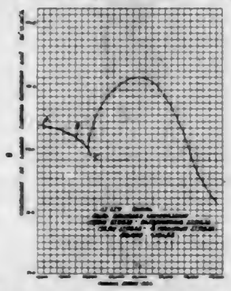
with one of the ports of the mounting pad, a shut off valve in said feed line between said oil inlet line and said sight glass, valve means to control the flow of oil from the port of said test pad associated with the oil inlet line, a by-pass line having a sight glass therein connected at one end to the second of the ports in said test pad and at its other end leading to said reservoir, valve means to control said by-pass line, whereby upon flow of oil through said feed line into the inlet port of the valve unit under test, the flow of oil through said last named sight glass will indicate opening of pressure controlled valve means in the unit under test at the oil temperature and pressure indicated on said temperature and pressure gauges.

2,729,096

METHOD FOR DETERMINING THE FATIGUE ENDURANCE LIMIT OF SOLIDS, ESPECIALLY METALS

Joseph L. Rosenholtz, Troy, and Dudley T. Smith, Watervliet, N. Y., assignors to Rensselaer Polytechnic Institute, Troy, N. Y., a corporation of New York

Application October 16, 1951, Serial No. 251,542
13 Claims. (Cl. 73—15.6)



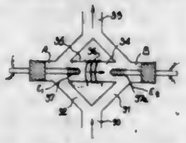
1. The method of determining the endurance limit of a solid material when subjected to a definite type fatigue stress or combinations of definite types of fatigue stresses, which comprises, preparing a plurality of substantially identical test specimens of the material, subjecting said specimens without rupturing the same to substantially the same number of reversed cycles of fatigue stress of the type determined, each of the specimens being subjected to a different value of stress of said type, the stresses applied being arranged in an increasing incremental manner from one specimen to the next, and thereafter measuring the value of a physical property which is common to all specimens and which is responsive to the varying fatigue stress changes, the stress applied to the specimen, the value of the measured property of which decreases to the minimum point of the incremental series and then increases beyond such minimum value, being the desired endurance limit value of the material.

2,729,097

APPARATUS FOR ANALYZING GASES

Claude M. Cherrier, Saint-Mande, France, assignor to Societe Anonyme des Manufactures des Glaces et Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France

Application January 3, 1952, Serial No. 264,799
6 Claims. (Cl. 73—27)



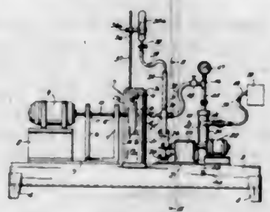
1. Gas analyzing apparatus comprising parallel gas conduits interconnected by a cross conduit, means to flow a gas through said parallel conduits, means generating a magnetic field in the cross conduit, audio frequency current supplied heating resistances disposed within the conduits near the ends of the cross conduit comprising arms of an electrical measuring bridge, and low frequency means to heat the gas flowing through the cross conduit.

2,729,098

CLEANING COMPOUND TESTING APPARATUS

William E. MacKenzie, Collingdale, and Stephen A. Matuska, Philadelphia, Pa.

Application March 11, 1953, Serial No. 341,848
3 Claims. (Cl. 73—53)
(Granted under Title 35, U. S. Code (1952), sec. 266)



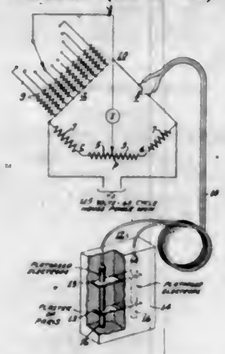
1. Apparatus for determining the effectiveness of a cleaning solution comprising an elongated trough; an element having a flat circular surface positioned above one extremity of the trough; a standard soil which is substantially uniformly deposited on the said surface; means for rotating the element at a predetermined rate on an axis which is substantially at right angles with the center of the said surface; a hood-like device which extends upwardly from the trough and which encloses all but the said surface of the element; a spray-forming device positioned in front of the said surface of the element; means for supplying the spray-forming device with controlled amounts of a pressurized fluid and the said cleaning solution; and means for automatically reciprocating the spray-forming device to and fro across the said surface.

2,729,099

APPARATUS FOR MEASURING MOISTURE OF SOIL

Robert Rosenthal, Tenafly, N. J., assignor to Industrial Instruments, Inc., a corporation of New Jersey

Application June 18, 1952, Serial No. 294,153
5 Claims. (Cl. 73—73)



4. The combination with a moisture-sensitive element comprising a block of porous absorbent material having completely embedded therein a pair of spaced electrodes coated with black platinum, whereby the effective surface area of the electrodes is increased many times as compared to the surface area obtained from a mere increase in the peripheral dimensions of the electrodes, of a measuring instrument comprising a Wheatstone bridge completely devoid of concentrated capacitance, there being an indicator across one diagonal of said bridge and a connection across the other diagonal of said bridge for supplying house power supply thereto, said bridge having four arms in one of which is a series of selectable resistors, in two other arms a fixed resistor, there being a potentiometer between said last two arms, and in the fourth arm said block of porous absorbent material connected thereto by rubber-covered leads.

2,729,100

WELL DRILLING RECORDER

Marcus G. McCool and Charles O. Moorhead, Oklahoma City, Okla.

Application August 10, 1953, Serial No. 373,282
8 Claims. (Cl. 73—151.5)



3. In recording apparatus for rotary well drilling rigs, said rigs including a string of drill stem, the combination of: a recording line connected to move longitudinally with said string during drilling operation, means capable of recording said longitudinal movement of the line, said means including a clock driven sheet, a rockably mounted arm, and means operated by the arm for making a mark on said sheet each time the arm is rocked; and means carried by the line for actuating said recording means, said means carried by the line including spaced deformations on the line, each adapted to engage and rock said arm as it passes the same; and means for biasing the arm to a normal unrocked position, whereby the arm will return to normal position after being rocked by a deformity.

2,729,101

FLOWMETER

Bruce F. Wiley, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application July 9, 1951, Serial No. 235,770
4 Claims. (Cl. 73—155)



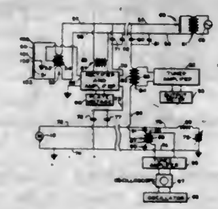
1. Apparatus for measuring fluid flow between isolated regions of a bore hole comprising, in combination, a casing adapted to be disposed in a bore hole, a packer attached to said casing and extending outwardly therefrom to engage the walls of the bore hole in fluid-tight engagement, first conduit means extending through said casing to communicate with regions of the bore hole above and below said packer, second conduit means extending through said casing to communicate with regions of the bore hole above and below said packer, a direct current Wheatstone bridge circuit having a first pair of thermal sensitive opposing resistance arms disposed within said first conduit means in thermal contact with the flow therethrough, a heating element to heat said first pair of resistance arms, an impeller disposed within said second conduit means, and a direct current motor to drive said impeller; a direct current voltage source to energize said motor, an alternating current voltage source to energize said heating element, current indicating means to measure electrical unbalance of said bridge circuit, and means to measure the speed of rotation of said impeller, said voltage sources and indicating means being adapted to be positioned at the surface of a bore hole; and a first pair of leads connecting said bridge circuit with said current indicating means, a second pair of leads connecting said motor with said direct current voltage source, one of said first pair of leads and one of said second pair of leads connecting said heating element with said alternating current voltage source, and a pair of capacitors connected in the circuit of said heating element and said alternating current voltage source to prevent interaction between the alternating current flow in the bridge and motor circuits extending between a region within a bore hole and the surface of the bore hole.

2,729,102

FLOWMETER

William G. Worth, Grand Prairie, Tex., assignor to Phillips Petroleum Company, a corporation of Delaware

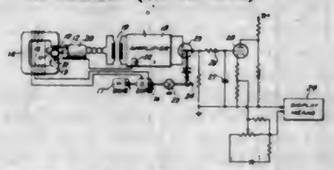
Application October 1, 1951, Serial No. 249,205
12 Claims. (Cl. 73—155)



1. Apparatus for measuring the rate of fluid flow through a passage comprising a structure adapted to be positioned within the passage, packing means extending outwardly from said structure to engage the walls of the passage to divide the passage into first and second regions, first conduit means carried by said structure to communicate between said first and second regions, second conduit means carried by said structure to communicate between said first and second regions, a first thermal sensitive impedance element, a second impedance element, said first element being positioned in said first conduit means, said second element being positioned externally of said first conduit means, means forming an electrical bridge circuit having said first and second elements in adjacent arms thereof, said bridge circuit having first and second pairs of opposite terminals, a source of voltage applied across the first opposite terminals of said bridge circuit, means for measuring the signal between the second opposite terminals of said bridge circuit, said signal being indicative of fluid flow through said first conduit means, an impeller positioned in said second conduit means, a motor to rotate said impeller to direct fluid through said second conduit means at a rate so that the flow through said first conduit means is zero, and means to measure the speed of rotation of said impeller, the speed of rotation of said

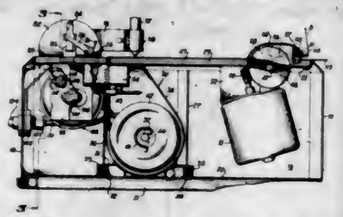
impeller being a measure of the rate of fluid flow through said second conduit means when the indicated flow through said first conduit means is zero.

2,729,103
MEANS FOR REJECTING NO-FLOW SIGNALS IN A FLOWMETER
Charles K. Raynsford and Rudolph W. Buntenbach, Summit, N. J., assignors to Vitro Corporation of America, New York, N. Y., a corporation of Delaware
Application May 16, 1952, Serial No. 288,127
13 Claims. (Cl. 73—194)



1. In a flowmeter, a flow tube including spaced electrodes at a probing section, magnetic excitation means having a gap at said probing section, and signal-processing means coupled to said electrodes and including synchronous-rectifier means synchronized with said magnetic excitation means.

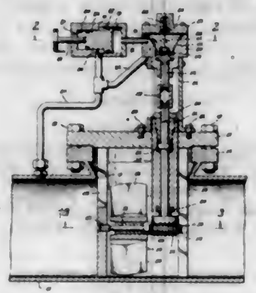
2,729,104
PRESSURE INDICATING AND RECORDING MACHINES FOR INTERNAL COMBUSTION ENGINES
Wayne L. Shuck and William J. Huber, Los Angeles, Calif., assignors to Charles D. Hirst, doing business as Challenger Mfg. Co.
Application December 20, 1948, Serial No. 66,154
5 Claims. (Cl. 73—391)



1. A graphometer comprising a casing, a removable planar top on said casing, means in the casing wall providing a removable connection to a source of pressure differential, a removable retainer in said casing adapted to hold a roll of recording paper, a paper-engaging roller in the top adjacent one edge, a motor attached to the top and suspended within said casing and drive means between the motor and the roller, a slot in said top at a location remote from the roller defining one end of a recording track for paper between the slot and the roller, a diaphragm shell in said casing suspended from said top and connected to said removable connection and having a diaphragm thereon, a substantially vertical stylus shaft rotatably mounted in said top, strap means connected between the diaphragm and the shaft at a point eccentric to and transverse to said shaft adapted to translate diaphragm movement to rotational movement in said shaft, and a stylus arm above the top connected to said shaft having a tracer adapted to lie within said recording track.

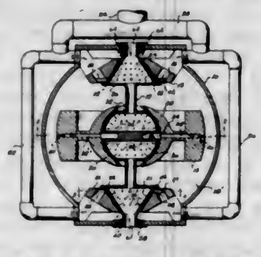
2,729,105
SAMPLE TAKING APPARATUS
Arthur E. McFarland and Artie F. McFarland, Houston, Tex.
Application August 7, 1953, Serial No. 372,846
7 Claims. (Cl. 73—422)

1. Sample taking apparatus comprising a valve casing having an inlet and an outlet and a port spaced from said inlet and outlet, a valve in the casing having a flowway and rotatable to one position to bring the flowway into communication with the inlet and said port and to another position to bring the flowway in communication with the outlet and said port, means having a connection



with a conduit containing a flowing liquid and with said inlet to conduct liquid from the conduit to said inlet, and rotatable means mounted in the conduit in position to be rotated by said flowing liquid and having a driving connection with said valve to rotate the valve.

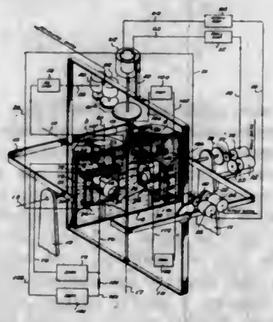
2,729,106
AIR-SUPPORTED GYROSCOPE
James C. Mathiesen, Pleasantville, N. Y., assignor, by mesne assignments, to Norden-Ketay Corporation, a corporation of Illinois
Application November 1, 1952, Serial No. 318,186
7 Claims. (Cl. 74—5.7)



1. In a gyroscope, a housing, a hollow shaft extending through the housing and carried thereby, a bearing formed with a spherical surface supported by the shaft, a rotor having a journal formed with a spherical surface positioned concentrically with the spherical surface of the bearing, means communicating with the interior of the hollow shaft for introducing air under pressure between said spherical surfaces to form an air bearing film therebetween and means for rotating the rotor, the spherical surface of the journal subtending a greater angle at the concentric center of the spherical surfaces than that subtended by the spherical surface of the bearing.

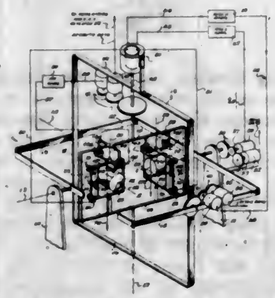
2,729,107
GYROSCOPIC INSTRUMENT
Frederick D. Braddon, Babylon, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application December 13, 1951, Serial No. 261,508
26 Claims. (Cl. 74—5.34)

1. A three axis gyroscopic reference instrument comprising a platform supported with freedom about pitch and roll axes, a member supported on said platform with freedom about a vertical axis, a first gyroscopic rotor with a normally horizontal spin axis having a frame mounted on said member in neutral equilibrium with freedom about a vertical axis and a horizontal axis, means for directing said first gyroscopic rotor frame about its vertical axis including a gravity responsive electrolytic level providing a limited substantially linear signal output with tilt of the frame about its horizontal axis within a range of plus or minus one-half a degree from a level condition, means responsive to the signal of said electrolytic level for also levelling the frame of the first gyroscopic rotor about its horizontal axis, a second gyroscopic rotor with a normally horizontal spin axis having a frame mounted on said member in neutral equilibrium with freedom about a vertical axis and a horizontal axis, means for slaving said second rotor to said first rotor so that the spin axis thereof is perpendicular to the spin axis of the first rotor, means for levelling the



frame of the second rotor about its horizontal axis including a gravity responsive second electrolytic level providing a limited substantially linear signal output with tilt of the frame about its horizontal axis within a range of plus or minus one-half a degree from a level condition, means operable to stabilize said platform about its pitch and roll axes from the reference levels determined by the first and second rotor frames about the respective horizontal axes thereof, and means operable to stabilize said member about its vertical axis from the directed position provided by one of said rotor frames about its vertical axis.

2,729,108
CONTROL SYSTEMS FOR GYROSCOPIC INSTRUMENTS
Victor Vacquier, Garden City, Andrew P. Cope, East Hempstead, and Richard Proskauer, Westbury, N. Y., assignors to Sperry Rand Corporation, a corporation of Delaware
Application December 13, 1951, Serial No. 261,524
30 Claims. (Cl. 74—5.34)

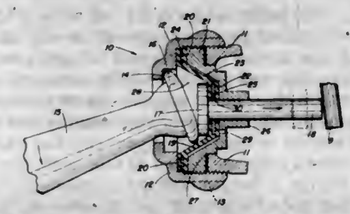


1. A three axis gyroscopic reference instrument for dirigible craft comprising a platform supported with freedom about pitch and roll axes, a member supported on said platform with freedom about a vertical axis, a first gyroscopic rotor with a normally horizontal spin axis having a frame mounted on said member with freedom about a vertical axis and a horizontal axis, a gravity responsive device providing a limited measure of the tilt of the frame from a level condition about its horizontal axis, means for measuring the acceleration of the craft in a north-south direction, means for precessing said frame about its vertical axis in accordance with the difference between the measurements of said tilt measuring device and said north-south acceleration measuring means; a second gyroscopic rotor with a normally horizontal spin axis having a frame mounted on said member with freedom about a vertical axis and a horizontal axis, means for slaving said second rotor to said first rotor so that the spin axis thereof is perpendicular to the spin axis of the first rotor, a second gravity responsive device providing a limited measure of the tilt of the second rotor frame about its horizontal axis, means for measuring the acceleration of the craft in an east-west direction, and means for exerting a torque about the vertical axis of said second rotor frame in accordance with the difference between the measurements of said second tilt measuring device and said east-west acceleration measuring means.

ERRATUM

For Class 74—5.34 see:
Patent No. 2,728,979

2,729,109
FLUSH VALVE OPERATING HANDLE UNITS
Jacques J. Filliung, Chicago, Ill., assignor to Sloan Valve Company, Chicago, Ill., a corporation of Illinois
Application December 6, 1951, Serial No. 260,207
2 Claims. (Cl. 74—18.2)



1. In a handle unit for a flush valve, a socket member attached to a wall surrounding an opening in said flush valve, a cup-shaped bushing and a flexible diaphragm clamped together at their peripheries by said socket member against said flush valve opening, the bottom cup-portion of said bushing being spaced apart from the axis of said diaphragm to permit flexing of said diaphragm into said cup-shaped bushing space, an operating plunger having a head portion and a stem slidably extending through an opening in the axis of said diaphragm and the bottom of said bushing, said bushing acting to guide said plunger stem in its movements, a handle in said socket member movable against said plunger head portion for actuating said plunger, said diaphragm being generally disc-shaped and having a thickened outer edge portion clamped to said socket member and a thickened inner axial portion through which said plunger extends, both of said thickened portions being reinforced to provide stiffness and a seal against leakage, the portion of said diaphragm extending between said thickened outer and inner portions being thinner to provide flexibility therein, said diaphragm being normally flexed inwardly towards said cup-shaped bushing to hold said handle in extended position and being additionally flexed by the operation of said handle, said handle and plunger being restored by the tension stored in said diaphragm when the handle is released, the extent of movement of said handle and said plunger being limited by the diaphragm expanding across the cup-shaped space in said bushing and said axial portion engaging the bottom of said bushing, said diaphragm also serving to prevent leakage of water outward from said handle unit, said plunger head portion compressing the axial portion of said diaphragm against the bottom of

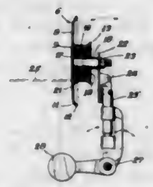
said bushing to prevent leakage through said diaphragm opening, there being an opening in the bottom of said bushing for expelling water in said bushing space whenever the diaphragm is flexed, and a nut formed on said socket member for attaching said socket member to the wall surrounding the opening in said flush valve.

2,729,110
SHEET METAL PULLEY CONSTRUCTION FOR TOOTH GRIP BELTS
Robert J. Killian, Canton, and Paul Williams, North Canton, Ohio, and Arthur M. Wickwire, Morristown, N. J., assignors to Automatic Steel Products, Inc., Wilmington, Del., a corporation of Delaware
Application May 7, 1953, Serial No. 353,588
6 Claims. (Cl. 74—230.8)



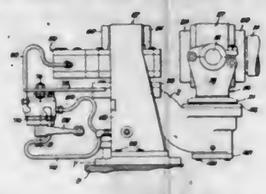
1. In a belt pulley adapted for use with a tooth grip belt, a sheet metal gear cup member having an annular wall, said cup having teeth formed in said annular wall and having a disc wall portion radially connected with said annular wall, a sheet metal support cup member telescopically assembled with said gear cup member and having a disc wall portion secured to said gear cup disc wall portion radially inward from the region of said teeth, said support member having a flanged portion extending radially outward of one end of said teeth and therebeyond to provide side guide means for a tooth grip belt engaged with said teeth, and annular means on the support member externally engaging and holding outer diameter surface portions of said teeth at one end of said gear cup.

2,729,111
WIRE GUIDE DEVICE
Clarence O. Baetz, Appleton, Wis., assignor to Gilbert & Nash Company, Menasha, Wis., a corporation of Wisconsin
Application February 4, 1954, Serial No. 408,115
7 Claims. (Cl. 74—240)



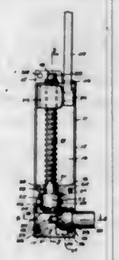
2. In a wire guide device for paper making machines, a palm disk having a wire engaging face comprising circular concentric concave and convex areas merging to define a circular ridge therebetween, said disk being normally disposed in a plane approximately normal to the wire engaged thereby, and means coaxial with said areas to support said disk for rotational movement in said plane, said means comprising a stud shaft having said disk journaled on one end thereof.

2,729,112
WIRE OR FELT GUIDE MECHANISM
Herbert L. Wendshuh and David E. Lamon, Appleton, Wis., assignors to Gilbert & Nash Company, Menasha, Wis., a corporation of Wisconsin
Application February 4, 1954, Serial No. 408,116
12 Claims. (Cl. 74—241)



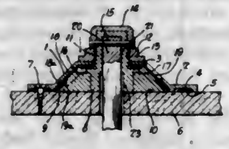
4. In a wire guide mechanism for a paper making machine, means including a support arm mounted for pivotal movement and having a bearing structure journaled thereon to rotatably support one end of a wire guide roll, means including a hydraulic fan motor and a fluid control valve operative responsive to sidewise travel of a wire to pivot said arm whereby sidewise travel of the wire is regulated, said motor comprising a housing, a rotor keyed to said support arm and enclosed within said housing, a base to support said arm for pivotal movement, bracket means securing the housing and base against relative pivotal movement, said bracket means having a bearing, and a rotor shaft journaled in said bearing.

2,729,113
SECTIONAL HOUSING FOR JACKSCREW OPERATORS
Donn C. Blanchard, Miami, Fla., assignor to Stanley Building Specialties Company, North Miami, Fla., a corporation of Florida
Application October 28, 1954, Serial No. 465,318
4 Claims. (Cl. 74—417)



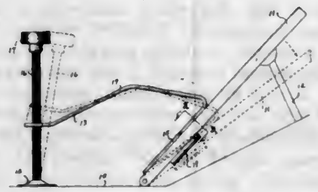
1. A bearing forming device, comprising companion casing sections to be arranged opposite to each other, said casing sections including blocks disposed at corresponding ends of the casing sections, said blocks having bearing recesses, said casing sections including blocks arranged near their opposite corresponding ends, the second-named blocks being provided near their inner ends with bearing recesses, the second-named blocks being provided outwardly of their bearing recesses with bearing flanges, said casing sections having gear receiving recesses outwardly of the second-named blocks, a jackscrew extending longitudinally within the casing sections and having an outer end journaled within the bearing recesses of the first-named blocks, a sleeve carried by the jackscrew near its opposite end, a head secured to the sleeve, a bevel gear carried by the head, the sleeve being journaled in the bearing recesses of the second-named blocks and the head being journaled in the bearing flanges of the second-named blocks and the bevel gear operating within the gear receiving recess, a second sleeve, a second head carried by the second sleeve, and a second bevel gear carried by the second head and engaging the first-named bevel gear, the second head being arranged at substantially a right angle to the first head, and bearing means arranged within said casing sections and receiving the second sleeve and second head.

2,729,114
DAMPER REGULATOR
Emil O. Young, Cleveland Heights, Ohio
Application July 27, 1954, Serial No. 446,090
2 Claims. (Cl. 74—504)



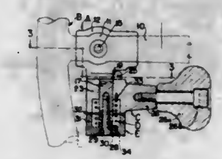
1. In damper control means of the class described, in combination, an escutcheon, a skirt on the extremity thereof having a face for mounting the escutcheon on a conduit, a plug in the escutcheon adapted to contact a portion of a conduit, a bearing section in the escutcheon, a shaft extending from the plug through the escutcheon, locking means on the shaft and resilient means intermediate the plug and escutcheon to effect initial frictional engagement of the plug and adjacent conduit face to thereby maintain the plug in adjusted position during manipulation of the locking means to locking position, the interior of the escutcheon being generally of conical shape, the plug of similar shape and conforming closely to the interior of the said escutcheon, locking elements being provided on the plug and in the escutcheon, said elements providing positive positioning of the plug after the plug has moved out of the frictional engagement specified.

2,729,115
ADJUSTABLE ACCELERATOR PEDAL DEPRESSING DEVICE
Merle Dale Reynolds and Park M. Griffith, Mitchellville, Iowa
Application November 26, 1954, Serial No. 471,298
6 Claims. (Cl. 74—513)



3. In combination, a floor board and spring loaded accelerator pedal of an internal combustion engine automotive vehicle; said pedal having its rear lower end hinged to the floor board and its length extending forwardly and upwardly, a bracket brace member extending first forwardly and then rearwardly and downwardly to detachably extend downwardly over the said pedal, a hook portion on that part of said bracket brace member that extends rearwardly and downwardly extending detachably under the under side of said pedal; a threaded vertical rod threaded through the rear portion of said brace bracket member for regulating its height above said floor board, a means on the top of said threaded rod to facilitate its manual rotation, and a foot swiveled on the bottom of said threaded rod.

2,729,116
SAFETY SPINNING KNOB FOR STEERING WHEEL
Charles A. Arnold, San Jose, Calif., assignor of one-half to Herbert W. Weaver, Campbell, Calif.
Application January 7, 1952, Serial No. 265,222
4 Claims. (Cl. 74—557)



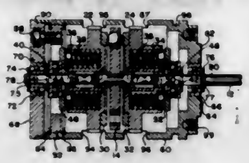
1. A spinning knob for a steering wheel comprising a body portion formed to have interfitting relation with a steering wheel element, a clamp member mounted to secure said body portion to the steering wheel, a support post mounted to project from said body portion transversely of a radius of the steering wheel and in the plane thereof, a knob support pivoted on said post, a knob mounted on said knob support for swinging movement from a retracted position within the plane of the steering wheel to upright extended position, a rotatively adjustable cap mounted to abut said post and spaced from said knob support to free said knob support for rotative movement relative to said post and said cap, a peripheral portion of the cap being exposed for grasping in adjusting the cap, a torsion coil spring mounted coaxially of said post within a cavity provided therefor between the cap and the knob support, the ends of said spring being connected respectively to said cap and to said knob support to urge the knob support pivotally about the support post to swing the knob toward its retracted position, and a screw penetrating said cap and screwed into a threaded hole provided therefor in said body to clamp said cap in rotatively adjusted position relative to said body.

2,729,117
MULTICRANK DRIVING MECHANISM FOR INTERNAL-COMBUSTION ENGINES
Karl Maybach, Friedrichshafen (Bodensee), and Richard Seifert, Friedrichshafen (Seemoos), Germany, assignors, by direct and mesne assignments, to Maybach-Motorenbau G. m. b. H., Friedrichshafen, Germany, a firm of Germany
Application August 7, 1951, Serial No. 240,654
Claims priority, application Germany October 3, 1950
2 Claims. (Cl. 74—596)



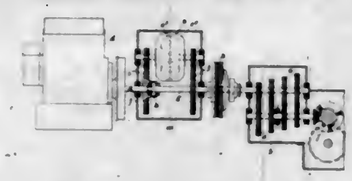
1. A crank shaft comprising at least three coaxial bearing discs of uniform outside diameter, cranks interposed between said bearing discs, the outer diameters of said discs being smaller than the diameter of an imaginary cylinder coaxial of the crank shaft and tangentially enveloping said cranks, each of said bearing discs having a substantially cylindrical circumferential outer surface coaxial of the crank shaft, an annular groove of rectangular cross section in said outer surface, a plurality of rollers received in said groove, the rotation axis of said rollers being parallel to the rotation axis of the crank shaft and the diameter of said rollers being greater than the depth of said groove, and bearing rings individually surrounding said bearing discs and having an internal diameter greater than the diameter of the imaginary cylinder enveloping said cranks, each of said rings having a cylindrical inner surface enveloping the rollers of the respective bearing discs and affording axial withdrawal of the crank shaft through said rings.

2,729,118
GEARLESS DIFFERENTIAL
Lyell M. Emslie, Jamaica, N. Y.
Application April 25, 1955, Serial No. 514,670
7 Claims. (Cl. 74—650)



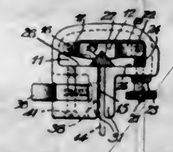
1. A gearless differential comprising in combination: a cylindrical housing provided with slotted openings at right angles to the axis of said housing, a servo mount means forming part of said housing, first and second end portions provided with centrally positioned bearing receiving openings, bearing members located in each of said openings, a shaft supported by said bearing members, means for preventing axial movement of said shaft in said bearings, a spider fixed to said shaft, balls carried by said spider, a first gear having teeth exposed to one of said slotted openings and rotatably and slidably mounted on said shaft, a first flat surface member driven by said first gear, spring means to maintain said first flat surface member in engagement with said balls, a second gear having teeth exposed to one of said slotted openings and rotatably and slidably mounted on said shaft, a second flat surface member driven by said second gear, and spring means to maintain said second flat surface member in engagement with said balls.

2,729,119
VARIABLE SPEED POWER TRANSMISSION MECHANISMS
John Frederick Alcock, Leeds, England
Application August 15, 1952, Serial No. 304,527
Claims priority, application Great Britain September 3, 1951
2 Claims. (Cl. 74—655)



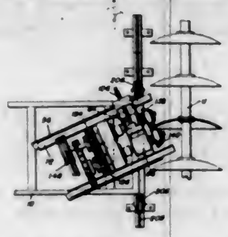
1. A variable speed drive for the traction wheels of a locomotive comprising a first gear box, a main power input shaft extending therein, an output shaft extending therein in alignment with said input shaft, a clutch means within the gear box for coupling the said shafts together, a gear wheel on each of said shafts, a hydraulic transmission means within the gear box having its axis parallel to said shafts and including an input shaft and a coaxially arranged output shaft, a gear wheel on each said last mentioned shafts in meshing engagement with the gear wheels on the power input shaft and the first mentioned output shaft, a second gear box, a variable speed gearing therein including an output shaft for driving the traction wheels and an input shaft, said last mentioned input shaft being coaxial with the output shaft of the first gear box, and a second clutch means for coupling the input shaft of the variable speed gearing with the output shaft of the first gear box whereby with the second clutch means engaged the selective engagement or disengagement of the first clutch means provides either a direct drive for all speed changes of the variable speed gearing or a drive therefor which includes the hydraulic transmission.

2,729,120
SAW JOINTER
James McEwan, San Jose, Calif.
Application October 6, 1953, Serial No. 384,463
4 Claims. (Cl. 76—47)



4. A saw jointer comprising a substantially T-shaped body having a substantially T-shaped recess therein including a bar portion and a narrow leg of the recess extending from the bar portion of the recess to one side of the jointer and forming a saw receiving slot, the bar portion of said T-shaped recess having a flat file engaging surface at the inner end of said slot, a file clamping member movably mounted in said body and extending across said slot, said clamping member having a V-shaped recess therein and aligned with said slot and a flat file engaging surface at either side of the recess, one wall of said slot having an elongated opening formed therein, and an elongated positioning member pivotally mounted at one end of said opening for engagement with a saw in said slot under manual pressure of a person grasping said jointer in his hand.

2,729,121
COMBINATION PORTABLE AND STATIONARY DISK ROLLER
Dick P. Robinson and Dick P. Robinson, Jr., Garden City, Kans.
Application April 24, 1953, Serial No. 350,968
14 Claims. (Cl. 76—89.2)



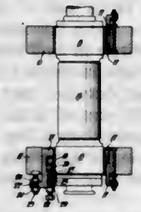
9. In a disk sharpening apparatus, a main frame, a subframe horizontally pivotally attached to the main frame, a support vertically rockably attached to the subframe, a pair of coacting power driven disk sharpening rollers carried by the support, means connected to the main frame and the subframe for adjusting the subframe horizontally angularly relative to the main frame, and means carried by said support and said subframe for selectively raising and lowering the support.

2,729,122
BUTTON-BUCKLE DIES
George Goldberg, Fall River, Mass., assignor to Metacomet Manufacturing Company, Inc., a corporation of Massachusetts
Application June 11, 1953, Serial No. 360,868
9 Claims. (Cl. 79—5)



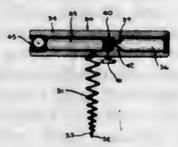
1. An improvement for a button-buckle type die comprising an upper die, a spring biased lower die, and a thimble on said lower die, said upper die having a finger, said finger having a bottom portion sloping upwardly from the center axis of the die, said lower die having a cylinder, extended means attached to said cylinder, a base, a member hingedly connected to said base, and means on said member for blocking said extended means whereby said lower die may be prevented from being forced down against said spring bias.

2,729,123
DEVICE FOR MOUNTING ROLL CHOCKS
Will A. Breedon and Louis L. Miller, Cleveland, Ohio, assignors to United States Steel Corporation, a corporation of New Jersey
Application February 13, 1952, Serial No. 271,395
5 Claims. (Cl. 80—55)



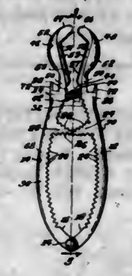
1. In a rolling mill which includes a housing, a chock mounted in said housing and a roll rotatably mounted in said chock, the combination with said housing and chock of a mounting device which comprises a tab fixed to a side face of said chock adjacent the horizontal transverse center line of the chock, an inner jaw mounted in said housing for sliding movement in a direction parallel to the roll axis, an outer jaw slidably mounted on said inner jaw, said jaws having faces which engage opposed faces of said tab for gripping the latter within the confines of said housing, means for adjusting said outer jaw with respect to said inner jaw and thereby adjusting the gripping pressure on said tab, and means for adjusting said inner jaw relative to said housing and thereby axially adjusting said chock and said roll, one of the engaging faces of said tab and said jaws located at the inner side of said tab and one located at the outer side thereof being convex and allowing said chock to pivot on an axis perpendicular to the roll axis.

2,729,124
CORK EXTRACTOR WITH GAS PRESSURE GENERATING MEANS
Denis Farandatos, New York, N. Y.
Application December 21, 1950, Serial No. 201,967
7 Claims. (Cl. 81—3.2)



1. In a cork extractor a tubular cork penetrating means, a hollow hand grip rigidly attached thereto, the total size of said grip being approximately the size of a gripping hand, said grip and said means being at right angles to each other, and cylindrical gas pressure generating means housed in the grip and opening into said penetrating means.

2,729,125
PIVOTED LEVER TYPE CONTAINER CAP REMOVER WITH CUTTER
Frank A. Krzanowski, Pittsburgh, Pa., assignor of one-half to Adam J. Ciesielski, Pittsburgh, Pa.
Application May 7, 1954, Serial No. 428,160
1 Claim. (Cl. 81—3.46)



A container cap remover comprising a pair of concavo-convexly formed levers connected together at one end for movement in arcuate paths lying in the same plane and having their concave faces in opposing relation, an inwardly extending projection carried by each of said levers intermediate its ends for movement therewith in intersecting paths to define an abutment stop to limit movement of said levers in their arcuate paths toward each other, and arcuately formed set of jaws carried by said other ends of said levers to define therebetween a clamp the closing action of which is limited by said abutment stop, each of said jaws carrying a cutter in its inner face, said cutter on each jaw being in opposed relation, and guide fingers carried by the end of each cutter remote from said levers to guide said cutters about the neck of a container and to provide gripping means whereby the container may be lifted by the cap remover.

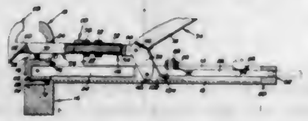
2,729,126
KNOB SHOES
Arthur H. Stanton, Jr., Chagrin Falls, and Le Isle D. Noble, Hudson, Ohio, assignors to The Standard Parts Company, Bedford, Ohio, a corporation of Ohio
Application February 2, 2953, Serial No. 334,506
3 Claims. (Cl. 81—40)



1. A knob shoe having an integral stem which is threaded for feed through a support and is provided with a hand knob secured to and adjacent one end, the stem having an opposite end spherical surface portion and a portion of reduced cross-section adjacent said opposite end, the stem thence being further reduced in cross-section to provide a groove merging into said spherical end portion, the groove providing a stem shoulder adjacent the first-mentioned reduced portion and confronting said spherical end portion, a housing having an outer end wall, and having a peripheral side wall providing an inner end opening surrounding the first-mentioned reduced stem portion, an interior surface of said housing end wall being rockable upon said spherical end portion, the spherical end portion being passable through said opening and into the housing for loose accommodation of the spherical end portion therein, an interior peripheral surface of said housing side wall being provided with a groove which confronts the groove in the stem, and a split spring retaining ring seated in the housing groove and having inwardly-bent end portions normally intersecting the stem groove

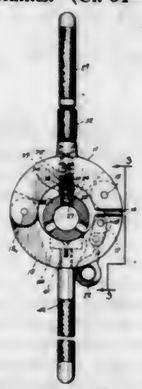
adjacent the stem shoulder, whereby the forcing of the spherical end portion of the stem against the ring expands the ring bent ends into the housing groove and permits passage of the spherical end portion into the housing, the expanded ends of the ring snapping back into normal inwardly-bent position in the stem groove after the passage thereby of the spherical end portion, whereby the latter is retained in the housing and the housing and stem have relative universal action.

2,729,127
SLIDABLE JAW WRENCH WITH HAND GRIP AND ADJUSTING LINK
Yasuo Watanabe, Kalaheo, Kauai, Territory of Hawaii
Application May 4, 1953, Serial No. 352,766
3 Claims. (Cl. 81—88)



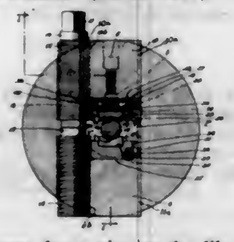
1. A combination tool comprising an elongated handle having a stationary jaw at one end, a movable jaw carried by said handle movable toward and away from the stationary jaw, means for moving said movable jaw, said handle having an apertured lug adjacent said stationary jaw, said movable jaw having an elongated shank received through the aperture in said lug, said means including an actuating lever pivotally secured at one end to said handle, said shank having a threaded free end portion, a bifurcated adjustment link pivotally secured at one end to an intermediate portion of said lever, the threaded end portion fitting telescopically and slidably between the furcations on said link, an adjusting nut carried by said furcations and operably connected with said threaded end portion of said shank for varying the bite between said jaws, and a lock nut also threaded on the threaded portion of said shank for selectively engaging said lug and limiting the spacing between said jaws.

2,729,128
CHUCK-STOCK FOR DRILL PRESSES AND THE LIKE
Clyde L. Gilbert, Elkhart, Ind
Application November 5, 1952, Serial No. 318,838
14 Claims. (Cl. 81—90)



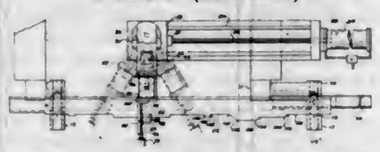
7. An accessory tool for drill presses, lathes, milling machines and the like adapted to embrace and operatively engage a chuck, comprising a collar, a handle adjustably mounted in said collar, a stud mounted in said handle for engaging the key pilot hole of said chuck, and a spring biased collar slidably mounted on said stud for engaging said chuck and forcing it into positive engagement with said collar.

2,729,129
GRIPPING MEANS FOR A TORSION TESTING MACHINE OR THE LIKE
William J. Reese, Philadelphia, Pa., assignor to Tinius Olsen Testing Machine Company, Willow Grove, Pa., a corporation of Pennsylvania
Application December 15, 1953, Serial No. 398,250
5 Claims. (Cl. 81—179)



1. Gripping means for a vise or the like comprising: a support having a slot and a jaw member yieldably slidable in opposite directions in said slots; spring means to normally center said jaw member in said slot and a V section on said jaw member, the apex of the V extending in a direction generally normal to the direction of movement of said jaw member, each leg of the V having a plurality of teeth arranged generally transversely at an angle substantially less than 90° but not parallel to the apex of the V.

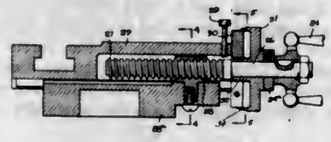
2,729,130
UNIVERSAL STEP TURNING DUPLICATOR FOR LATHES
Curtis Walker, Standish, Mich.
Application August 9, 1952, Serial No. 303,586
2 Claims. (Cl. 82—14)



1. In a universal step turning duplicator having a bed, a head stock and tail stock for supporting a workpiece, and ways parallel to the workpiece axis; a carriage mounted on said ways movable longitudinally thereof, power means joined to said carriage for effecting continuous feed movements thereof, a cross slide on said carriage and adjustable transversely of the direction of said carriage movements, a compound support swivelly mounted on said cross slide and selectively positionable relative to the direction of movement of said carriage, means for securing said support to said cross slide in selected adjusted position, a cutter carrying top slide slidably mounted upon said support, a hydraulic motor joined to said top slide, a template support upon said bed and mounting a template with the plane of its profile parallel to the workpiece axis, a tracer housing adjustably secured to said motor with its axis at right angles to the workpiece axis, a valve in said housing for controlling the flow of pressure fluid from a pressure source to said motor, a spindle engaging said valve, universally mounted within said housing and depending axially therefrom with its depending end engageable with the template profile at a predetermined lateral pressure and responsive to lateral thrust and relief therefrom during feed movements of said carriage, whereby deflections of said spindle operate said valve to control said motor tending to maintain said predetermined pressure whereby said cutter reproduces in said workpiece the profile of said template, a horizontal support plate mounted upon the outer end of said motor and extending rearwardly thereof and having a horizontally extending dovetail recess therein, a mounting block on said tracer having a dovetail longitudinally slidable

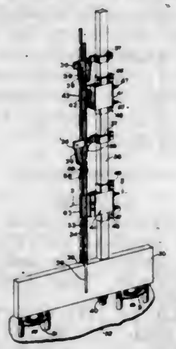
within said recess, and a hand screw mounted and journalled on said support plate and threadedly engaging said dovetail for effecting in and out adjustments of said spindle relative to said workpiece axis, the longitudinal axis of said spindle being in a vertical plane passing through the longitudinal axis of said motor.

2,729,131
PRECISION TOOL ADJUSTMENT DEVICE
Leon G. Arpin, Montclair, N. J.
Application November 25, 1952, Serial No. 322,523
1 Claim. (Cl. 82—24)



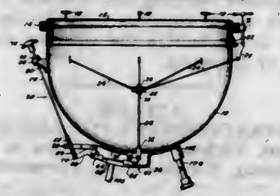
In a lathe compound feed having a rotatable feed screw and shaft, and a compound which is adjusted by the rotation of said feed screw, means independent of the rotation of said feed screw for producing precision adjustment of said compound, said means comprising an indicia wheel freely rotatable on said feed screw shaft, an externally threaded hub on said wheel, the threads of said hub being of a higher pitch than the threads of the feed screw, a collar having a central bore and disposed around the feed screw shaft while being free thereof, said bore being threaded and mating with the wheel hub threads for retracting or attracting the collar, said collar being connected to the compound whereby said retraction or attraction of the collar produces a corresponding movement of the tool holder, and a hand operated screw on said compound, said screw being adapted to be tightened against said feed screw shaft for preventing rotation thereof during rotation of said wheel, a flange bearing indicia markings for indicating the extent of rotational action of said wheel, and additional indicia markings on said collar, said collar markings being perpendicularly arranged relative to the wheel flange markings for indicating the extent of attraction or retraction of said collar within said flange.

2,729,132
ELECTRICAL PICK-UP FOR VIBRATING BODIES
Jacob T. Kunz, North Hills, Pa., assignor to Schulmerich Electronics, Incorporated, Sellersville, Pa., a corporation of Pennsylvania
Original application November 17, 1948, Serial No. 60,470, now Patent No. 2,606,474, dated August 12, 1952. Divided and this application October 19, 1951, Serial No. 252,080
4 Claims. (Cl. 84—1.14)



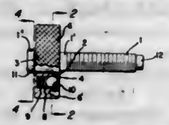
1. In an electric musical instrument tone generator having a pair of vibrating rods, a collector plate device having an electrode with a flat surface adjacent one of the rods, and a shield between said rods, said shield having a supporting portion angularly disposed relative to an edge of said electrode so as to have a minimum of capacity relative thereto.

2,729,133
DRUM TUNING MECHANISM
William F. Ludwig, Chicago, Ill.
Application September 9, 1954, Serial No. 454,989
3 Claims. (Cl. 84—419)



1. In a drum including a casing supported in spaced relationship above a floor by a plurality of legs and having a central axis, and a drum head disposed perpendicularly to said axis, the combination with drum-head tensioning mechanism, including bell crank levers and adjusting devices engaged with the latter and the drum-head hoop, of radial tension rods connecting the bell crank levers with an axial tension rod disposed centrally of the drum casing and extending transversely of the drum head, said axial tension rod passing through an opening at the bottom of the drum, a housing including a mounting plate secured to the bottom of the casing for supporting said housing in spaced relationship above the floor, a leverage system mounted in the housing and comprising a pair of aligned bell cranks spaced from each other and connected by a link, one of the bell cranks of said leverage system being connected to said axial tension rod, and an operating mechanism having a single hand screw mounted on the casing adjacent the drum head, said screw being operatively connected to the other bell crank of said leverage system to move said axial tension rod toward and away from said drum head and cause said radial tension rods to expand and contract to actuate said first-named bell crank levers to apply equal tension on the drum head, the bell cranks of the leverage system being arranged to provide an increased mechanical advantage as the tension increases.

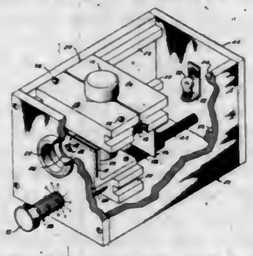
2,729,134
PREDETERMINED TORQUE RELEASE THUMB SCREW
Arthur H. Stanton, Jr., Chagrin Falls, and Le Isle D. Noble, Hudson, Ohio, assignors to The Standard Parts Company, Bedford, Ohio, a corporation of Ohio
Application February 2, 1953, Serial No. 334,508
1 Claim. (Cl. 85—61)



A torque thumb screw comprising a stem having a threaded inner end portion and an intermediate plane portion, the outer end of said stem being an enlarged plane portion, a plate disc secured to and surrounding the intermediate plane portion of the stem adjacent the inner end of the enlarged portion thereof, a knob rotatable relatively to the disc and for which the latter forms an inner end plate, the enlarged end portion of the stem being extended outwardly of the knob and being formed with a peripheral groove adjacently exterior of the outer face of the knob, a split spring ring seated in the groove

and having one face thereof abutting the outer knob face thus removably retaining the knob and stem in assembled position, a recess in the knob having an axis parallel to the stem axis, a compression spring seated at one end on the bottom of the recess, a ball seat in the outer face of the disc, an arcuate groove in the outer face of the disc, said groove being coaxial with the stem axis and being of narrowing and depth-decreasing formation from end to end and merging at its narrowest and shallowest end into the outer face of the disc, the widest and deepest end of the groove merging into the disc ball seat, the latter forming a ball chamber with the top end of the knob recess, and a ball in the chamber seated on the opposite end of the spring.

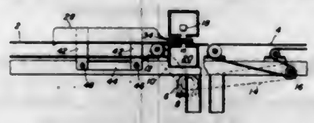
2,729,135
REFRACTOMETER FOR LIQUIDS
Bob B. Briant, Wichita, Kans., assignor to Boeing Airplane Company, Wichita, Kans., a corporation of Delaware
Application December 18, 1952, Serial No. 326,748
2 Claims. (Cl. 88—14)



1. A device for determining the index of refraction of a substance comprising, in combination: a thin walled cylindrical transparent container for holding the substance, the substance and the container wall together constituting a condensing lens; a source of light on one side of said lens; an apertured otherwise light impervious image creating shield interposed transversely between the lens and the light source; a translucent image receiving focal length detecting screen on the opposite side of the lens, the light source, the shield, the lens and the screen all being in optical alignment, said shield having two apertures spaced equidistant from the line of optical alignment on opposite sides thereof; means supporting said containes in fixed position with relation to said shield and the source of light; a movable member supporting said screen in a plane substantially perpendicular to the line of optical alignment; a compound micrometer type screw supporting said movable member for movement along the line of optical alignment; means journaling the screw; and cooperating means on the screw and on the screw journaling means to measure a distance between the lens and screen proportional to the index of refraction of the lens substance when the two light images created by the shield coincide on the screen.

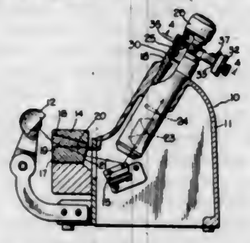
2,729,136
APPARATUS FOR DETECTING PIN HOLES IN SHEETS
Daniel E. Feick, Duquesne, and Roy E. Howell, Pittsburgh, Pa., assignors to United States Steel Corporation, a corporation of New Jersey
Application May 27, 1954, Serial No. 432,768
4 Claims. (Cl. 88—14)

1. Apparatus for detecting pin holes in sheets having substantially parallel side edges comprising means for conveying said sheets in a substantially horizontal path, a light source at one side of the path of travel of said sheets, photosensitive means on the opposite side of the path of travel of said sheets aligned with the light source, said light source and photosensitive device having a length substantially as great as the width of the sheet being inspected, spaced guides located at each edge of the sheet being inspected, each of said guides having a substantially horizontal portion extending from the sheet entry end thereof to a position beyond the said light source and an upwardly extending outer portion, said outer portions being spaced apart a distance only slightly greater than



the width of the strip, and a cover member on each guide at its exit end spaced above the horizontal portion a distance greater than the thickness of the sheets being inspected, said horizontal portion and cover member having slots therein at said light source extending outwardly to a point slightly inwardly of the upwardly extending portion.

2,729,137
REFRACTOMETER WITH LINEAR SCALE
John W. Forrest, Brighton, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a corporation of New York
Application December 27, 1954, Serial No. 477,761
5 Claims. (Cl. 88—14)

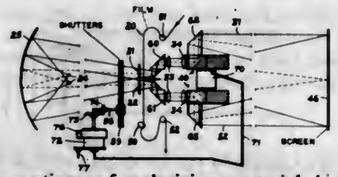


1. In a refractometer the combination of a housing, a refracting prism mounted in an opening in said housing and having an exposed horizontally positioned refracting surface thereon for receiving a sample to be tested, said prism having an emerging surface disposed at an angle with respect to said refracting surface from which the refracted rays from the refracting surface emerge, said angle having a magnitude within the range of 60 to 70 degrees, said prism being made of glass having a refractive index between 1.75 and 2.0, the relation between the index of refraction of the glass and said angle being such that the upper and lower extreme rays refracted by the prism will fall symmetrically about the median ray refracted by the prism, a viewing means having an eyepiece projecting from said housing in optical alignment with the rays refracted from said prism, and a scale mounted in the eyepiece of the telescope in optical alignment with the rays refracted by the prism, said scale being divided into substantially equally spaced divisions that are calibrated in an appropriate refractometric scale, whereby the borderline of total reflection produced by the sample on the refracting surface of the prism may be read directly from the scale.

2,729,138
SYSTEM AND APPARATUS FOR PROJECTING THREE DIMENSIONAL MOTION PICTURES
Robert V. Bernier, Dayton, Ohio, assignor, by mesne assignments, to Synthetic Vision Corporation, Dayton, Ohio, a corporation of Ohio
Application July 17, 1951, Serial No. 237,275
5 Claims. (Cl. 88—16.6)
(Granted under Title 35, U. S. Code (1952), sec. 266)

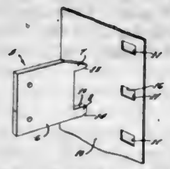
1. Apparatus for projecting three-dimensional motion pictures upon a common projection surface from film

having unpolarized right and left eye stereoscopic images in alternate full frames thereof, comprising means defining a pair of film gate apertures past which said film is adapted to travel successively, said apertures being spaced in the direction of film travel to register simultaneously successive frames in said film, means for simultaneously projecting a beam of unpolarized light through each said aperture to project right and left eye images simultaneously from successive said frames, means for advancing said film frame by frame past said apertures, a cylindrical transparent polarizing filter mounted in the path of each of said beams from said apertures to said projection surface for rotation about an axis perpendicular to the direction of travel of the portion of said beam passing therethrough, each said filter including two semi-



cylindrical portions of polarizing material having the polarizing axes thereof perpendicular to each other and at substantially 45° to said rotational axis of said filter, means for directing each said beam radially through the near side of the associated said filter to polarize said beam, means for directing said polarized beams generally axially of said filters to positions outside said filters and from said positions to said projection surface in superimposed relation, and means for continuously rotating said filters in coordinated relation with each other and with said drive means to reverse the respective directions of polarization of said beams each time said film is advanced to cause all said right eye images and all said left eye images to be polarized in respectively opposite directions.

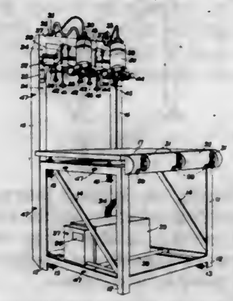
2,729,139
FILM PULL-DOWN CLAW
Warren R. Isom, West Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application May 28, 1952, Serial No. 290,442
5 Claims. (Cl. 88—18.4)



1. A film pull-down claw for both advancing and registering film in an aperture comprising a body portion and a plurality of teeth extending from said body portion and adapted to enter the sprocket holes of said film, be moved to advance said film, and be withdrawn from the sprocket holes of said film, at least one of said claws having a tapered tip and a height the height of the sprocket hole of unshrunk film minus the film shrinkage and the sprocket hole shrinkage, the lower sides of the tip portions of said teeth being beveled to provide said teeth with narrower tips than bases.

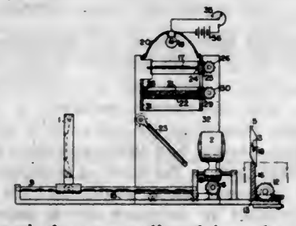
2,729,140
STEREO-PHOTOGRAMMETRIC PROJECTION PLOTTING APPARATUS
John Elsden Odle, Pinner, Middlesex, England
Application July 9, 1952, Serial No. 297,871
9 Claims. (Cl. 88—24)

1. A projection unit for use in stereo-photogrammetric plotting by projection, comprising a projector-supporting bar of a length to accommodate a plurality of projectors spaced thereon to project a corresponding number of stereoscopically related transparencies, a supporting framework fixed to said bar to form a rigid unitary structure therewith, a flat-topped table supported in said framework



in a position generally to receive images projected by projectors supported by said bar, and means for adjusting said table in relation to said framework, whereby the table top can be brought into precise parallelism with the datum plane of such images notwithstanding the rigid relationship to said framework and bar.

2,729,141
IMAGE SUPERIMPOSITION PROJECTION DEVICES
Joseph B. Walker, Los Angeles, Calif.
Application May 11, 1953, Serial No. 353,968
9 Claims. (Cl. 88—24)

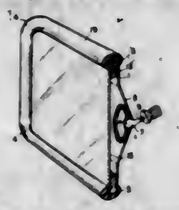


1. In an optical system, aligned in order, a divergent primary lens, an angularly disposed transmissive-reflective element, a convergent secondary lens, and an image plane; said lenses positioned to form an image of an object within the field of said lenses upon said image plane and so constituted and spaced that the magnification of said image is approximately proportional to the inverse of the distance between said primary and said secondary lenses over a working range; another object outside the field of said lenses, an additional weakly convergent lens positioned to collect light from said other object and direct it unto said transmissive-reflective element such that said light is reflected by said element with approximately the same divergence into said secondary lens as the light from said divergent primary lens, said elements spaced to form a focused image of said other object upon said image plane; and means to alter the positions of at least one of the pair of elements, said other object and said additional lens, as a function of the inverse of the distance between said primary and said secondary lenses so that the magnification of the image of said other object is proportional to the magnification of the image of said first-mentioned object.

2,729,142
SHOCK RESISTANT REARVIEW MIRROR
Theodore L. Beach, Jr., Donnelsville, Ohio
Application February 23, 1952, Serial No. 272,931
7 Claims. (Cl. 88—96)

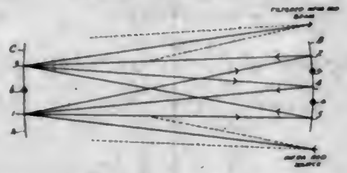
1. In a shock resistant mirror the combination of an assembly comprising a backing member having an up-

standing flange, a mirror positioned in the backing member and having the mirror edge portion defining a spacing with the flange, said flange being wholly out of contact with the said mirror edge portion, and a channeled



resilient collar having an integral internal rib thereof extending into said spacing engaging the mirror edge portion, said collar enveloping the flange and a marginal portion of the mirror surface and compressively engaging said backing member and mirror.

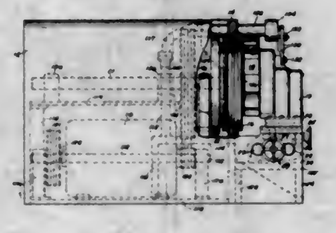
2,729,143
INFRARED OPTICAL SYSTEM
John U. White, Darien, Conn.
Application June 13, 1950, Serial No. 167,792
2 Claims. (Cl. 88—105)



1. An infra-red filter system for separating radiation in a selected wave length interval from radiation of wave lengths lying to either side of said interval in such manner that said last-named radiation is reduced to negligible value relative to the radiation in said interval, comprising first, second and third selective reflection interference filters each in the form of a spherical surface and each of the same focal length, each of said filters being characterized in structure by a dielectric layer sandwiched between a substrate reflector and a surface reflector in the form of a thin metallic film, the first filter layer having a thickness which optically is half the wavelength of radiation in the selected interval, the second and third filter layers having respective thicknesses which are twice and four times that of the first filter layer, said first, second and third filters thereby respectively having first order, second order and fourth order reflection peaks at the wavelength of radiation in the selected interval, said first and second filters thereby providing absorption peaks which cancel with the first order reflection peak of said second filter and with the first and second order reflection peaks of said third filter, the filters being arranged facing each other so that one reflection filter is opposite the other two and the center of curvature of the first-mentioned reflection filter is between the two opposing reflection filters and the centers of curvature of the two opposing reflection filters are located at the surface of the first and separated by a distance less than half of the length of the first reflection filter whereby the optical path through the system includes a plurality of reflections from each filter surface.

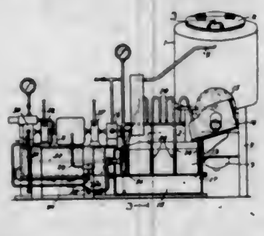
2,729,144
MACHINE TOOL CONSTRUCTION
Erick W. Bergmann, Monroe, Mich.
Application May 3, 1950, Serial No. 159,833
1 Claim. (Cl. 90—20)

A planing mill of the type having a base structure and work positioning means which comprises a rotatably mounted chuck adapted to carry a plurality of workpieces for movement in a circular path, characterized by said base structure including a fixed housing member positioned in spaced relation to said circular path, said housing member being provided with a relatively large cylindrical aperture forming a journal, the axis of which is perpendicular to the plane of said circular path, a generally cylindrical tool holder assembly rotatably carried by said housing member within said aperture, said tool holder assembly having a working face projecting from said aperture and the surface of said housing member adjacent thereto, means for mounting a series of tool elements on said working face in an annular ring within the diameter of said aperture, the said annular



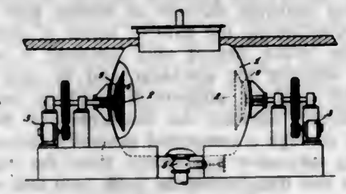
ring of tool elements overlapping the said circular path of travel of said workpieces, and means for rotating said chuck in response to rotation of said tool holder assembly comprising a shaft projecting from the working face of said tool holder assembly, a cross shaft, driving elements between said shaft and cross shaft and between said cross shaft and said chuck whereby the rotational inertia of said tool holder assembly is available to overcome reaction forces affecting the rotation of said chuck, said driving elements including means for permitting relative lateral and longitudinal movement between said shaft and said chuck, said work positioning means being mounted on the base structure for movement in directions parallel to and transversely of the rotational axis of said tool holder assembly.

2,729,145
DISINTEGRATING APPARATUS
Kurt Wandel, Downingtown, Pa.
Application August 12, 1952, Serial No. 303,856
10 Claims. (Cl. 92—20)



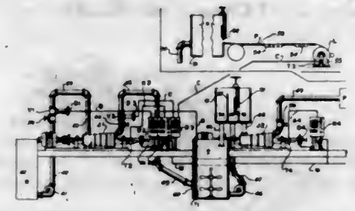
3. A self-contained apparatus for destroying waste paper and restoring it to self-sustaining, solid form consisting of a unit for disintegrating waste paper in the presence of water to form an aqueous suspension of cellulose fibers, a press box, means for delivering the suspension to said box, a movable member for pressing the suspension in said box, means for extracting water from said suspension comprising a plurality of movable hollow partition members having foraminous faces in contact with said pulp during the pressing operation, and means for applying suction to the interior of said hollow members.

2,729,146
IMPELLERS FOR PULP DISINTEGRATING MACHINES
Kurt Wandel, Downingtown, Pa.
Application February 27, 1952, Serial No. 273,590
4 Claims. (Cl. 92—26)



3. In a machine of the class described an impeller comprising a concave disk of steel having a layer of copper on its concave surface and a series of hard mineral crystals arranged in radial rows embedded in the copper layer.

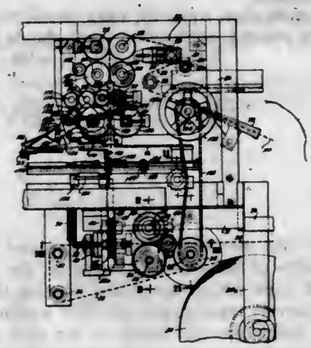
2,729,147
MULTIPLE SYNCHRONIZED PNEUMATIC PAPER STOCK CONTROL DEVICE
Bruno E. Prevost, West Boxford, Mass., assignor to John W. Bolton & Sons Inc., Lawrence, Mass., a corporation of Massachusetts
Application January 26, 1953, Serial No. 333,049
6 Claims. (Cl. 92—46)



1. Paper stock control aparatus for regulating paper stock in a system which includes a beater chest and pump, a Jordan inlet valve, a Jordan, a Jordan outlet valve, a machine chest and pump, a machine head box, a Fourdrinier machine and a couch roll suction leg, said control apparatus comprising first pneumatic means automatically advancing and retracting the Jordan plug in accordance with variations in stock pressure within the Jordan for continuously maintaining uniform preselected pressure between the plug and shell knives thereof; second pneumatic means automatically opening and closing the Jordan outlet valve in accordance with variations in the quantity and equality of the stock at the couch roll for increasing and decreasing the time stock remains in said Jordan and third pneumatic means automatically opening and closing the Jordan inlet valve in accordance with variations in the stock level of the machine chest for increasing and decreasing the amount of stock delivered to said Jordan, said first means automatically compensating for changes in stock pressure in the Jordan caused by the actuation of said second and third means.

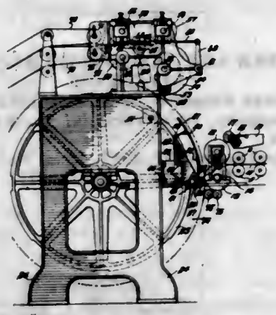
2,729,148
MECHANISM FOR INSERTING A SLEEVE IN A BAG VALVE
Harry Peters, Middletown, and William J. Tilton, Franklin, Ohio, assignors to The Raymond Bag Company, Middletown, Ohio, a corporation of Ohio
Application August 14, 1950, Serial No. 179,142
9 Claims. (Cl. 93—8)

1. In a mechanism for inserting a sleeve in a previously formed valve of a valved bag, means for supporting a bag with its valve in a position to receive a sleeve, a sleeve inserting element movable into and out of said valve, means for moving a section of sleeve material toward the path of said inserting element, means for folding one lateral edge portion of said section of material onto the body thereof, means for applying paste to the outer surface of said folded edge portion, means for scoring said section of material on a transverse line between the ends thereof, said moving means including means to advance said scored section to a position in which said score line is substantially in the path of said



inserting element and to then release the same, and means for actuating said inserting element in timed relation to said advancing means to cause said inserting element to engage said section and fold the same on said score line with said folded edge portion thereof on the outer side of the folded section, and to move the folded section into said valve with said folded edge portion thereof in engagement with said valve and with the outer end portion thereof projecting outwardly beyond the outer end of said valve.

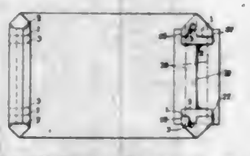
2,729,149
MACHINE FOR MAKING HEAT SEALED CLOSURE
William H. Bokenkroger, Hudson Falls, N. Y., assignor to Union Bag & Paper Corporation, New York, N. Y., a corporation of New Jersey
Application October 8, 1952, Serial No. 313,659
4 Claims. (Cl. 93—27)



1. In a machine of the class described, means for conveying to bottoming rolls a tube having at least its interior surface heat sealable, cooperating bottoming rolls with a tucker blade in one which forces the tube along a predetermined transverse line into a pair of gripper jaws in the other, the pressure of the jaws causing the end portion of the tube to fold upwardly into a position substantially perpendicular to the body of the tube, a rotatable cylinder having a heat sealing unit mounted thereon, said unit having bars adapted to receive the end portion from the jaws while in folded up position and apply heat and pressure to said portion in said position during the rotation of the cylinder, means for removing the tube

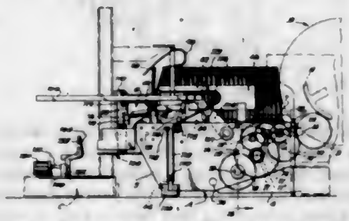
from the heat sealing unit after the end portion has been heat sealed, and means for completing the fold and securing the heat sealed portion against the body of the tube.

2,729,150
MULTI-PLY BAGS AND METHODS FOR MAKING SAME
Alexander Gelbcke, Rode-St.-Genese, Belgium, assignor to St. Regis Bates S. A., Tubize, Belgium, a corporation of Belgium
Application April 15, 1952, Serial No. 282,350
Claims priority, application Netherlands April 28, 1951
5 Claims. (Cl. 93—35)



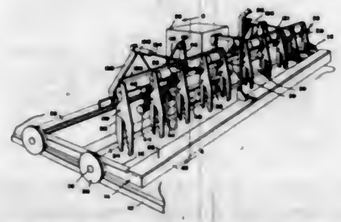
5. In the manufacture of pasted end multiwall bags from webs of flexible sheet material, the combination of method steps which comprises; scoring the webs at regular intervals transversely of their length at lines which are to define the end edges of the four corner flaps of the finished bags; then assembling the webs by superposing same in such relation longitudinally that each score line on the web which is to form the outer ply of the bags is located at a position intermediate a score line on one under ply and a score line on another under ply, the score lines being positioned to provide four substantially identical corner flaps except that the score lines on the innermost of said plies for two of the corners are spaced in advance of said intermediate position while those at the other two corners are spaced rearwardly of said position, and the score lines on an intermediate ply for said first two of the corners are spaced rearwardly of said position while those at said other two corners are spaced in advance of said position; forming the assembled webs into a tube; separating such tube into bag lengths along lines which include said score lines; and folding inwardly areas at said score lines to form the four corner flaps, the outer ply of each of which is of normal length, with an under ply thereof of abbreviated length and another of more extended length.

2,729,151
TRANSFER MECHANISM FOR BAGMAKING MACHINES
Arthur J. Evers, Brooklyn, N. Y., assignor to International Paper Company, New York, N. Y., a corporation of New York
Application July 31, 1952, Serial No. 301,888
5 Claims. (Cl. 93—93)



3. Bag transfer apparatus including a main frame, a conveyor mounted on said frame and comprising a pair of endless chains each provided with a plurality of outwardly extending lugs normally disposed in spaced parallel relation, a bag-receiving table portion interposed between the intake portion of said conveyor and the discharge station of an associated bagmaking machine for initially receiving individual vertically positioned bags therefrom, means operatively positioned beneath said receiving table portion for assembling said bags into successive groups each containing a predetermined number of bags and for moving each such group into engagement between pairs of lugs on said conveyor, said bag group assembling means including a pair of picker fingers alternately movable through an orbital path having a portion overlapping the path of travel of said lugs adjacent the intake end of said conveyor, a work table located adjacent the discharge end of said conveyor, alternately operable grippers disposed on each side of said conveyor adjacent the discharge end thereof and movable through a compound generally helical path for removing successive bag groups from the lugs of said conveyor and transferring the same onto said work table from alternate directions whereby the bottoms of the bags in one group will be adjacent the open ends of the bags in the next adjacent group, and means operatively associated with said work table for assembling a predetermined number of said bag groups into successive bundles each containing a predetermined number of such groups.

2,729,152
APPARATUS FOR PLACING CORRUGATED JOINTS IN CONCRETE
Fred D. Carnes, Fort Worth, Tex., assignor to Flexible Road Joint Machine Company, Warren, Ohio, a corporation of Ohio
Application October 10, 1951, Serial No. 250,760
7 Claims. (Cl. 94—51)

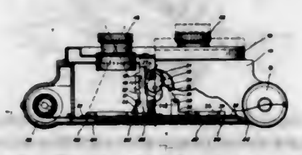


4. In an apparatus for installing a corrugated joint in plastic concrete in a vertical position, cooperating members adapted to grip the joint therebetween while the joint and members are being lowered into the plastic concrete, one of said members having a flat face adapted to contact the crests of the corrugations on one face of the joint, the other of said members being movably mounted relative to said flat faced member and having a gripping face conforming to the corrugations on the opposite face of said joint to hold said joint against said flat faced member, means for withdrawing said members from the plastic concrete after the movable member has been disengaged from the joint, and means for guiding said flat-faced member in a substantially vertical path during the withdrawing operation, whereby the flat-faced member maintains the joint in its installed vertical position.

2,729,153
STEREOSCOPIC CAMERA
Reinhold Heidecke, Braunschweig, Germany, assignor to Franke & Heidecke, Fabrik Photographischer Präzisions-Apparate, Braunschweig, Germany, a firm of Germany
Application May 18, 1953, Serial No. 355,485
Claims priority, application Germany May 19, 1952
7 Claims. (Cl. 95—18)

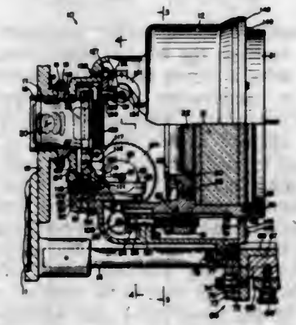
1. A stereoscopic camera including a front wall, a pair of lenses mounted on said front wall in side by side relation to each other and at an invariable distance from each other, a film support for holding film behind the lenses in the focal planes thereof, said support and said front wall

being mounted for relative movement toward and away from each other for varying the distance between said support and said lenses to focus the camera upon objects at variable distances from the camera, a pair of masks behind said lenses and substantially against the front face of the film held in said support, to define the picture area of the film exposed to light entering the camera through said lenses, said masks being slidably mounted for lateral movement toward and away from each other in directions parallel to the front face of the film, a member projecting rearwardly from said front wall in fixed relation thereto, said member having a pair of inclined cam slots



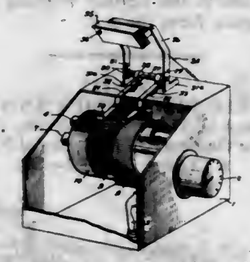
therein diverging from each other in a rearward direction and converging toward each other in a forward direction, and a portion on each of said masks engaging in one of said cam slots and moving along its associated cam slot in accordance with relative movement of said front wall and said film support toward or away from each other, to slide said masks laterally toward each other when said front wall and said film support are brought closer to each other for focusing upon a more distant object and to slide said masks laterally away from each other when said front wall and said film support are separated farther from each other for focusing upon a closer object.

2,729,154
FOCUSING LENS MOUNTING
Charles J. De Grave, Jr., Chili, and Olin W. Boughton, Canandaigua, N. Y., assignors to Bausch & Lomb Optical Company, Rochester, N. Y., a corporation of New York
Application December 10, 1954, Serial No. 474,404
6 Claims. (Cl. 95—45)



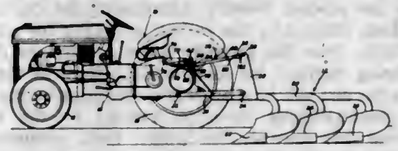
1. A focusing lens mount for holding a plurality of anamorphosing cylindrical lens elements in alignment with a camera objective comprising a casing, a longitudinally movable slide held in said casing whereon a first portion of said elements is fixedly mounted, means including a first pair of parallel guideways fixed longitudinally within said casing and slidably fitted to opposite sides of said slide for supporting it, a second longitudinally movable slide located above and rearwardly of the first slide whereon the remaining portion of said lens elements is fixedly mounted in optical alignment with the first portion of elements, and a second pair of parallel guideways fixed longitudinally in said casing parallel to the first pair of guideways and slidably fitted to the opposite sides of the second slide to support it, means for holding the first and second slides parallel to each other, means for moving each slide, and adjustment means including a vertically and horizontally adjustable connection between said camera objective and the front of said casing for effecting parallelism between said guideways and the optical axis of said camera objective whereby the axes of said elements are held in precise optical alignment with each other and in substantial coincidence with an axial vertical plane which includes the optical axis of said objective for all focusing positions of said elements.

2,729,155
PHOTOGRAPHIC PRINTER
Willi Fix, Speyer, Germany
Application January 8, 1952, Serial No. 265,430
Claims priority, application Germany January 13, 1951
8 Claims. (Cl. 95—75)



1. An exposure apparatus comprising a housing, a light transmitting window positioned on a wall of said housing, a light source disposed in said housing and spaced from said window, a plurality of rotatably supported tubular members, axially aligned and encompassing said light source, said tubular members being formed of a light transmitting material, the light transmitting properties of said material varying along the periphery of said tubular members and means to individually angularly rotate said tubular members so as to control the intensity of light from said light source incident upon predetermined areas of said window.

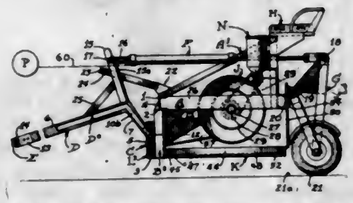
2,729,156
TRACTOR LINKAGE
Harold L. Willey, Dearborn, Mich., assignor to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application December 8, 1951, Serial No. 260,612
1 Claim. (Cl. 97—46.07)



In combination, a tractor having upper and lower attachment means, a plow having upper and lower attachment means and having a plurality of longitudinally spaced plow shares, a pair of laterally spaced nonextensible lower links interconnecting the lower attachment means on said tractor and plow and pivotally attached thereto, power lift means on the tractor connected to one of said lower links to lift the latter and the plow, a first upper link pivotally connected at its forward end to the upper attachment means on said tractor, a second upper link pivotally connected at its rearward end to the upper attachment means on said plow and supported for free unrestrained sliding movement relative to said first upper link, stop means limiting the forward movement of said second upper link relative to said first upper link to space said upper attachment means on said tractor and said plow a predetermined minimum distance apart when said plow is in soil working position and said upper links are in

compression to position said plow shares substantially in horizontal alignment when operating at a normal working depth, and other stop means associated with said first and second upper links to limit the rearward movement of said second upper link relative to said first upper link to space said upper attachment means a predetermined maximum distance apart when the plow is lifted out of engagement with the soil into transport position, the sliding movement of said second upper link rearwardly relative to said first upper link being unrestrained between the minimum and maximum positions defined by said stop means, the range of sliding movement between the first and second upper links being sufficient to enable the upper attachment means on the tractor and plow to be increased when the plow is initially lifted by said power lift means an amount sufficient to tilt said plow shares upwardly in a forward direction at the normal working depth to assist in raising the plow from the soil.

2,729,157
ROLLER SEED BED FORMER AND PLANTER
Samuel G. Webb, Jr., Holtville, Calif.
Application October 15, 1951, Serial No. 251,348
6 Claims. (Cl. 97—56)



6. In a device of the type described; a main frame rectangular in shape, and having front and rear members; a carriage for raising and lowering this frame; seed-bed-forming rollers carried by the frame between the front and rear members thereof, and being rotatable about an axis paralleling the front member; the ends of the rollers flaring outwardly in a conical shape, and the ends of adjacent rollers being spaced from each other; legs extending downwardly from the front member, and being arranged at the ends thereof and at a point that is in line with the space between adjacent rollers; elongate ground-engaging depth-control shoes adjustably connected to the legs in rear of the latter and to the rear of the frame for supporting the frame and rollers the desired distance above the ground, thereby determining the depth of the seed beds formed by the rollers; a tongue for advancing the frame over the ground; wings secured to the legs, and being inclined for directing dirt towards the rollers where the dirt will be shaped into seed beds by the rollers; and ground-digging members carried by the legs for directing dirt towards the wings; these ground-digging members being disposed in front of and in alignment with the depth-control shoes, whereby said members will provide furrows in the ground in which the shoes may be advanced.

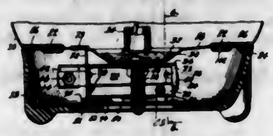
2,729,158
HEATING INSTALLATION FOR MOTOR VEHICLES
Karl Wilfert, Sindelfingen, Kreis Boblingen, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application May 6, 1950, Serial No. 160,421
Claims priority, application Germany May 7, 1949
4 Claims. (Cl. 98—2)

1. Heating installation for motor vehicles comprising a warm-air conduit with a heat exchanger therein and a cold air conduit, said warm-air conduit and said cold-air conduit extending toward the front of the vehicle and being open at the forward ends thereof, combining conduit means connected to the rear ends of said warm-air conduit and said cold-air conduit including combining valve means for adjustably mixing warm and cold air from said warm-air conduit and said cold-air conduit respectively, a first utilization conduit and a second utilization conduit, said utilization conduits extending toward the passenger compartment at different points thereof, distributor means connected between said combining conduit means and said first and second utilization conduits including distributor valve means for variably distributing the mixed air to said first and said second



utilization conduit respectively, and a common actuating means for said combining valve means and said distributor valve means, said common actuating means including a shifting lever supported for movement in two planes at right angle with each other, and means for connecting said shifting lever with said combining valve means and said distributor valve means for operating said combining valve means during movement of said lever in one of said planes and for operating said distributor valve means during movement of said lever in the other of said planes.

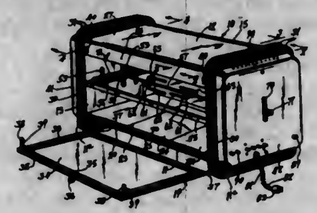
2,729,159
COFFEE MAKER
Alfred J. Huck and Israel Pass, St. Louis, Mo., assignors to Knapp-Monarch Company, St. Louis, Mo., a corporation of Delaware
Application July 1, 1950, Serial No. 171,711
4 Claims. (Cl. 99—281)



1. An automatic coffee maker comprising a bottom bowl, a top bowl on the bottom bowl having a depending transfer tube, a circuit controlling switch, the switch comprising in combination, a flexible support arm secured to the lower bowl, adjustable means secured to the lower bowl adapted to flex the support, a snap acting switch carried by said support having a pair of relatively movable contact making members and an over-center spring mechanism operable to seal the members selectively in contact-making or contact-breaking relation, a uniformly acting switch carried by said support and having a pair of relatively movable contact-making members, a bimetallic arm means in thermal contact with the bottom of the lower bowl and operative to engage the switches sequentially to open the uniform acting switch and the snap acting switch in succession, adjustable means interposed between the bimetallic arm means and the uniform acting switch, manual reset means operable to force the snap acting switch to the contact-making condition to initiate coffee-making operations and means operable to heat the bottom bowl and energized through said switches in parallel.

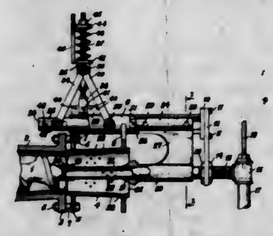
2,729,160
COMBINED ROTISSERIE AND BROILER
Joseph J. Pirz, Flushing, N. Y.
Application February 12, 1954, Serial No. 409,989
7 Claims. (Cl. 99—421)

1. A combined rotisserie and broiler comprising a hollow casing having, top, bottom, rear and end walls constituting an oven, said end walls having spaced elongated slots, a plate slidable on the outer surface of each end wall, bolts carried by each plate and extending inwardly through the slots in the adjacent end wall, a channel-shaped track secured to the inner ends of the bolts of each plate and slidable along the inner surface of the



adjacent end wall, said tracks being arranged in opposed relation, in the oven, a spit supporting frame slidably and removably supported by and rigidly connecting the tracks, a spit assembly supported in said frame, a screw-threaded shaft protruding outside the casing and being connected to one of the plates, and a nut on the protruding outer end of the shaft for actuating the same.

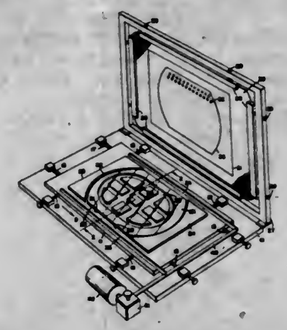
2,729,161
CONTINUOUS FLOW PRESS FOR REMOVING MOISTURE FROM MATERIALS SUCH AS BARK AND THE LIKE
K. A. Uno Lowgren, Yonkers, and Hjalmar S. Messing, New York, N. Y., assignors to American Defibrator Inc., New York, N. Y., a corporation of New York
Application April 13, 1953, Serial No. 348,394
9 Claims. (Cl. 100—147)



1. In an apparatus of the character described, a housing, a spiral feeder operating therein, said housing having an outlet, a perforated sleeve at the outlet of the housing, an apertured liquid-outlet tube extending axially through the sleeve, a carriage slidable on said tube, said carriage including a plug member located in the outlet end of the sleeve and movable with the carriage toward or away from said end, a piston forming a part of the carriage, a cylinder mounted on the sleeve and in which the piston reciprocates, a toggle having links connected to the cylinder and links connected to the piston, and spring means for applying pressure to the toggle to thereby resist sliding movements of the carriage.

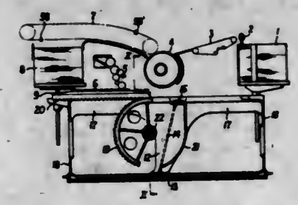
2,729,162
SCREENING APPARATUS
Norman L. Edelberg and Joseph P. Fiore, Chicago, Ill., assignors to The Rauland Corporation, a corporation of Illinois
Application June 10, 1953, Serial No. 360,792
5 Claims. (Cl. 101—126)

5. In the manufacture of a color-image reproducer, a screening apparatus for applying a phosphor composition to a multiplicity of discrete target areas arranged in a predetermined pattern on a selected surface of a target member, said apparatus comprising: a screen base; means for retaining said target member on said screening base in a predetermined location in which said surface lies in a predetermined position; a target stencil, having a multiplicity of apertures corresponding in configuration to said target areas and in space distribution to said predetermined pattern, adapted to be supported in a second position parallel to and spaced a preselected distance from said selected surface; means, including a squeegee adapted to traverse said stencil in a given direction while progressively maintaining individual transverse portions of said stencil in substantially linear contact with said target member, for exuding said phosphor composition through said



stencil apertures onto said surface of said target member; means including a pair of support members, each comprising an elongated tube formed from a resilient deformable material, mounted on said screening base at opposite sides of said predetermined location, for yieldably supporting said stencil in said second position and tending to restore each transverse portion of said stencil to said second position immediately following traversal by said squeegee; and means for varying the internal air pressure within said tubes to adjust the resistance offered by said support members to said squeegee.

2,729,163
TWO-REVOLUTION PRINTING PRESS
Paul Dietrich and Emil Kolland, Augsburg, Germany, assignors to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a corporation of Germany
Application May 12, 1951, Serial No. 225,962
Claims priority, application Germany May 17, 1950
5 Claims. (Cl. 101—250)



1. A printing press of the character described comprising a press bed, a type bed mounted on said press bed for reciprocating movement from one end to the other, tracks on said press bed for guiding and supporting said type bed during said reciprocating movement, an impression cylinder mounted transversely over said press bed intermediate the ends thereof, said impression cylinder defining an impression line of maximum pressure transversely of said press bed, a toothed rack on the bottom of said type bed substantially in the middle thereof, gear means under said press bed cooperating with said toothed rack for driving said type bed in said reciprocating motion, said gear means protruding upwardly through said press bed substantially beneath said impression cylinder, a lower transverse chord adjacent the bottom of said press substantially aligned with said impression line, an upper transverse chord supporting said

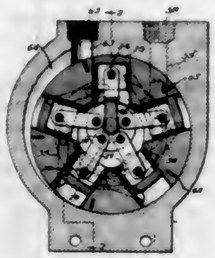
press bed disposed to one side of said impression line, a slanting web rigidly interconnecting said lower and said upper chords and meeting said lower chord vertically below said impression line, a bulge in said web defining an operating housing for said gear means, and substantially T-shaped vertical stays disposed longitudinally of said press bed supporting said tracks on the upper portions of said stays, substantially the entire force of said stays resting on said lower chord.

2,729,164
TRANSFER PRINTING MECHANISM
Laszlo M. Stempel, New York, N. Y., assignor to Laszlo M. Stempel, New York, and Albert Charles Nolte, Plandome, N. Y., as joint trustees
Application June 17, 1948, Serial No. 33,636
1 Claim. (Cl. 101—415.1)



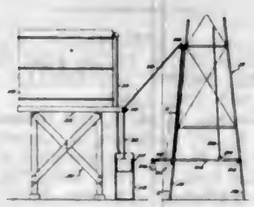
In a transfer press, in combination, a transfer cylinder having a longitudinal recess formed therein, the recess including a relatively narrow entrance portion through the periphery of the cylinder, a portion which can be entered directly through the entrance portion, and an offset undercut portion, the two latter portions being merged and having substantially radial, parallel walls, a flexible blanket wrapped around the periphery of the cylinder, blanket clamps secured to the opposite ends of the blanket and each including a main bar and an auxiliary bar, the main bar of the first clamp being lodged in the undercut portion of the recess, and the main bar of the second clamp being formed with a shouldered rabbet in which the auxiliary bar of the first clamp is received, the clamps being of a combined thickness substantially to fill the width of the recess, the second clamp as it is forced inward into the recess serving to force the first clamp inward also, the main bar of the second clamp being formed with protruding ends, and retaining members cooperative with said ends to cause both clamps to be held in blanket tensioning positions.

2,729,165
ROTARY PUMP
Martin W. Kremer, Bridgeview, Ill.
Application November 5, 1954, Serial No. 467,174
7 Claims. (Cl. 103—5)



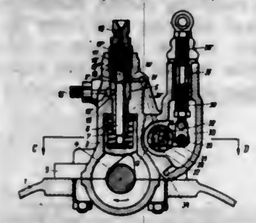
1. A rotary pump comprising a casing, an annular cylinder block carried in said casing for rotation therein, said cylinder block being provided with a plurality of radially disposed cylinders, a piston in each cylinder, a crankshaft member positioned within said annular cylinder block for rotation about an axis eccentric to that of the cylinder block, means rigidly connected to said crankshaft member for connecting one piston to said crankshaft member to cause mutual rotation of said crankshaft member and said cylinder block about their respective axes, means for pivotally connecting the remaining pistons to said crankshaft member, said cylinder block being provided with a plurality of bores having inner ends and outer ends with reference to the radial, both ends of said bores being on the same side of the center of rotation of said cylinder block, said bores being connected at their radial outer ends to the respective radially outer portions of said cylinders, said casing being provided with an intake which communicates with the inner ends of said bores to conduct fluid to the radial outer portions of the cylinders during the suction stroke of the pistons carried therein.

2,729,166
AUTOMATIC WIND MILL STOP
Henry W. Menn, Bishop, Tex.
Application January 17, 1951, Serial No. 206,491
1 Claim. (Cl. 103—31)



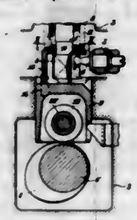
An automatic stop means for a windmill comprising a frame, a horizontally disposed platform secured to the top of said frame, a reservoir tank mounted on said platform for receiving water from a wind mill pump, a windmill tower including substantially vertically disposed legs, an overflow pipe connected to said tank, a cylindrical guide member arranged adjacent to the lower end of said overflow pipe, a bucket movably mounted in said guide member for receiving water from said overflow pipe, a first guide pulley connected to said platform, a second guide pulley connected to said windmill tower, a lever having one end pivotally connected to a leg of the tower by means of a pivot pin, a bracket secured to another of said legs for receiving said lever when the lever is in lowered position for limiting downward movement of the other end of said lever, said one end of the lever being bevelled adjacent said pivot pin to provide a shoulder, a cable trained over said pulleys and having one end connected to said lever and its other end connected to said bucket, an arm having one end pivotally connected to another of said legs and said arm selectively supported by the shoulder of said lever, said lever and arm extending substantially horizontally and said arm extending at an angle with respect to said lever, a weight connected to the free end of said arm, said shoulder selectively moving out from under said arm to permit the weight to move the arm downwardly, said shoulder supporting said arm when the arm is on said shoulder, said shoulder being arranged on one end of said lever and the opposite end of said lever engaging said bracket, and a line having one end connected to said arm and its other end adapted to be connected to a brake mechanism on the windmill for stopping the latter when the level of water in the tank exceeds a predetermined level, the water in said tank overflowing through said pipe into said bucket to apply tension on said cable to thereby pivot said lever and permit said weight to pivot the arm downwardly.

2,729,167
FUEL INJECTION PUMP
Heinrich K. Links, Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application March 3, 1950, Serial No. 147,350
Claims priority, application Germany March 4, 1949
7 Claims. (Cl. 103—41)



1. In a fuel injection pump having a plurality of pump cylinders: a pump piston in each of said pump cylinders, drive mechanism for each of said pump pistons, inlet, outlet and bypass ports in each of said pump cylinders; said bypass ports of said pump cylinders being connected to common conduit; a rotary valve for said cylinders, said common conduit being connected to said rotary valve; said rotary valve controlling the quantity of injected fuel by bypassing fuel at the end of the injection stroke of each pump piston to a chamber of low fuel pressure; said rotary valve being actuated in timed relation with the movement of said pistons.

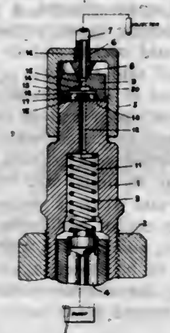
2,729,168
FUEL INJECTION PUMP
Kurt Ziesche, Koln-Holweide, and Johann Keylwerth, Koln-Kalk, Germany, assignors to Klöckner-Humboldt-Deutz A. G., Koln (Rhine), Germany, a firm
Application July 22, 1950, Serial No. 175,318
In Germany July 4, 1949
Public Law 619, August 23, 1954
Patent expires July 4, 1969
5 Claims. (Cl. 103—41)



1. In a fuel injection pump, the combination of a cylinder, a piston axially reciprocable in said cylinder and angularly displaceable for regulating the amount of fuel per stroke, a piston head integral with said piston outside said cylinder, said head having an axially extending groove of a length at least equal to that of the piston stroke, and a member linearly displaceable in a direction tangential to said piston and having a pin directed toward said piston head, said pin having a ball-shaped end in sliding engagement with said groove to impart angular displacement to said piston head.

2,729,169
FUEL PUMPING SYSTEM
William M. Nichols, Schenectady, N. Y., assignor to Alco Products, Incorporated, New York, N. Y., a corporation of New York
Application June 19, 1951, Serial No. 232,283
2 Claims. (Cl. 103—41)

1. In a fuel pumping system for an internal combustion engine of the class in which fuel is supplied in metered amounts by a pump through a housing having a spring biased delivery valve into delivery means whence it passes into the injector, the pump completing its supply stroke upon a predetermined fuel spill, in combination, a valve in the delivery valve housing having duct means therethrough, and said housing having a closed chamber between and in communication with said valve in the delivery means and the delivery valve, said valve in the delivery means unseating in response to the flow of fuel upon the



supply stroke of the pump and seating in response to the return flow of fuel upon the completion of the supply stroke of the pump, such seating of the valve serving to limit the return flow of fuel into the chamber thereby to damp surging in the fuel in the delivery means, said chamber trapping therein that portion of the return flow of fuel which passes through the duct means thereby to maintain accurate metering of fuel delivered by the pump.

2,729,170
DOUBLE-ACTION PUMPS
Welsey L. Tucker, Shandon, Calif., assignor to T and N Valve Company, Shandon, Calif.
Application October 6, 1950, Serial No. 188,723
2 Claims. (Cl. 103—190)



1. A double action pump comprising upper and lower casing sections having externally threaded adjacent ends, an internally threaded coupling collar joining the adjacent ends of said sections and having a plurality of circumferentially spaced radial extending apertures therein, said lower section being larger in cross section than said upper section, a tubular open ended conduit extending axially within the sections and having a lower end disposed in the lower section and an upper end disposed in the upper section, the lower end of said conduit being externally threaded, upper and lower clamping nuts receivably engaged on the lower end of said conduit, pistons held on the lower end of said conduit and clamped between said nuts, the upper end portion of said conduit also being externally threaded, upper pistons on the upper end portion of said conduit,

upper and lower clamping nuts receivably engaged on the upper end portion of said conduit and clampingly engaging the upper pistons therebetween, a guide sleeve disposed above the upper end of said conduit, a tubular support, a plurality of rigid arms fixed to and extending downwardly from the sleeve, said arms having lower threaded ends receivably engaging the upper end of said tubular support, said support being secured to said conduit above said upper pistons, a sucker rod extending downwardly into the upper section, means coupling the lower end of said sucker rod to a ring secured on an upper portion of said support, a beveled valve seat within the upper end of said tubular support, a beveled valve confined at the upper end of said tubular support by said arms and said ring, said valve adapted to engage said seat as the tubular conduit and pistons are moved upwardly within the sections, said valve having a stem slidably engaging said ring, a second coupling collar secured to the lower end of said lower section and having a valve seat therein, and a valve within the second coupling and adapted to be seated against the seat of said second coupling as the tubular conduit and pistons attached thereto are moved downwardly in the sections.

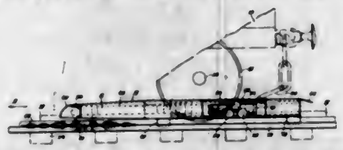
2,729,171
SAND PUMP FOR OIL AND WATER WELLS
Mozel A. Adams, Rayne, La., assignor of one-half to Joseph F. Burdett, Houston, Tex.
Application January 21, 1955, Serial No. 483,294
3 Claims. (Cl. 103—204)



1. A pump comprising a casing, a hollow upper plunger in said casing having a first ball valve therein, a depending conduit connected to said upper plunger, a piston secured to said conduit, a hollow lower plunger in said casing having a second ball valve therein, and a cylinder connected to said lower plunger and slidably housing said piston, and means connected to said conduit and cylinder arranged to circulate fluid from the casing against said ball valves responsive to the reciprocation of said plungers in the casing.

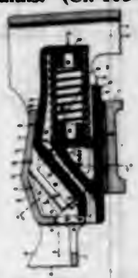
2,729,172
DEVICES FOR MOVING RAIL WAGONS AND THE LIKE
George Wilfred Grossmith, Bristol, England, assignor to Strachan & Henshaw, Limited, Whitehall, Bristol, England, a company of Great Britain
Application September 16, 1952, Serial No. 309,846
Claims priority, application Great Britain September 18, 1951
10 Claims. (Cl. 104—172)

1. A device for moving rail wagons and the like, comprising a vehicle adapted to move in a path between and in substantial parallelism with the usual track rails for a rail wagon or the like, supporting means, between said track rails, supporting said vehicle for such movement, a draw member carried by said vehicle, propelling means connected to said draw member and adapted to move the latter substantially along said path, a lost-motion connection interconnecting said vehicle and said draw member, a roller constrained to move bodily with said vehicle during the mentioned movement of the latter, shiftable mounting means, supporting said roller on said vehicle and adapting said roller for movement laterally of said vehicle between a projected, wagon-moving position in line with and adjacent to a wheel of such a wagon and a retracted position clear of wagon-



moving relationship to said wheel, and releasable locking means coacting with said draw member and said vehicle to constrain the latter to move along its said path with the draw member when said wheel is in its retracted position; the said mounting means coacting with said draw member, during lost-motion movement of the latter relatively to the vehicle, to impart said lateral movement to said roller, and continued movement of said draw member by said propelling means, following such lost-motion, roller-projecting movement, being operative to cause said roller to push the adjacent wagon wheel and move the wagon.

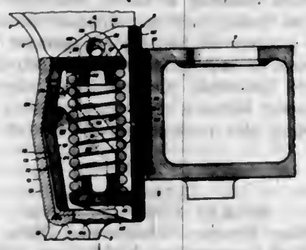
2,729,173
FRICTION CONTROLLED RAILWAY TRUCK
Glenn F. Couch, Buffalo, N. Y., assignor to The Symington-Gould Corporation, Depew, N. Y., a corporation of Marvland
Application June 22, 1950, Serial No. 169,629
21 Claims. (Cl. 105—193)



1. In a snubbed railway truck of the type having a side frame and a member movable vertically and transversely relative to said side frame, the combination of, a column in said side frame and having a horizontal surface and an inclined surface forming an acute angle therewith, a wedge removably restrained against vertical movement relative to said column by said surfaces, movable means carried by said wedge, a shoe, and spring means acting between said shoe and wedge, said shoe being urged by said spring means into bearing engagement with said movable means and frictional engagement with said member.

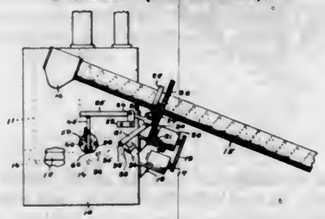
2,729,174
SNUBBED RAILWAY TRUCK
Glenn F. Couch, Buffalo, N. Y., assignor to The Symington-Gould Corporation, Depew, N. Y., a corporation of Maryland
Application June 7, 1950, Serial No. 166,691
25 Claims. (Cl. 105—197)

1. In a railway truck of a type having a side frame member and a vertically movable member, the combination of, one of said members having a pocket with a horizontal shelf and a wall forming an acute angle with said shelf, a wedge resting on said shelf and having a surface in bearing relation with said wall, an inclined



face on said wedge, a shoe in frictional engagement with said other member and movably contacting said inclined face, and spring means for urging said shoe along said inclined face into frictional engagement with said other member.

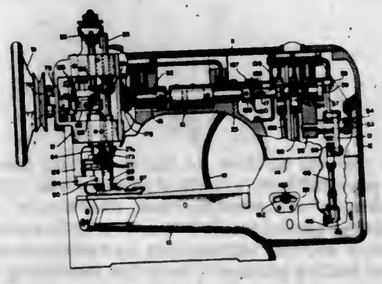
2,729,175
RAKER CONTROL
Harry R. Knittle, Catawissa, Pa.
Application November 1, 1950, Serial No. 193,350
1 Claim. (Cl. 110—32)



In combination with a furnace, a reciprocable grate, a bracket mounted on a wall of the furnace, said bracket having arms extending from both sides thereof and positioned with one arm extending into the furnace upon which the bracket is mounted, and the other extending outwardly from the furnace, a thermostat carried by the arm extending into the furnace and positioned to be located below the grate, a vertically disposed lever pivotally mounted on the arm extending outwardly from the furnace, power drive mechanism, linkage between said mechanism and grate to reciprocate the latter, a movable controller bar movable in one position to disengage the drive mechanism from the linkage, the vertically disposed lever having an adjustable connecting between its lower end and the thermostat in the furnace, the upper end of the lever having a knee action joint therein with resilient means for resiliently retaining the parts in alignment, the upper end of the lever being in alignment with the controller bar when the thermostat is in hot position to disengage the drive mechanism, and out of alignment therewith on the cool position of the thermostat to permit engagement of the drive and reciprocation of the grate.

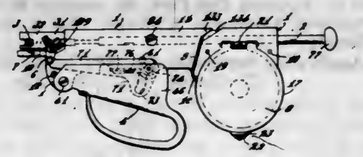
2,729,176
FEED-OFF-THE-ARM KNIT GOODS MACHINE
Clarence C. Smith, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application January 29, 1951, Serial No. 208,400
8 Claims. (Cl. 112—63)

1. In a sewing machine having a main frame with a single drive shaft extending longitudinally thereof, a downwardly extending hollow member at one end of said frame and a tubular work supporting arm projecting laterally from the lower end of said member, the combination which comprises a needle bar carrying a plurality of needles mounted for reciprocation in said frame above said work arm, a single four motion looper in said arm arranged to cooperate with the threads carried by said plurality of needles to form a plurality of lines of stitching, connections from said drive shaft adjacent one end thereof for reciprocating said needle bar, connections from said shaft adjacent the other end thereof including a rock member mounted upon a fixed pivot in said hollow member for oscillating said looper to impart loop seizing and shedding movements thereto, said rock member having



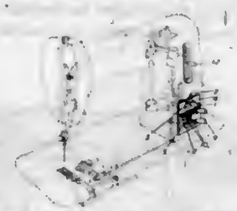
a pair of arms extending at an obtuse angle in relation to each other from the pivot of said member, one of said arms extending upwardly and laterally from said pivot and the other extending downwardly from said pivot, said last mentioned connections including also motion imparting means on said shaft, means connecting said motion imparting means with the upwardly extending arm of said rock member, and means connecting the downwardly extending arm of said rock member with said looper for oscillating the latter, and connections from said shaft adjacent said other end thereof for shifting said looper bodily for needle avoid purposes.

2,729,177
TAG ATTACHING DEVICE
Carl A. Flood, Framingham, Mass., assignor to Dennison Manufacturing Company, Framingham, Mass., a corporation of Massachusetts
Original application October 31, 1951, Serial No. 254,147, now Patent No. 2,701,486, dated February 8, 1955. Divided and this application January 14, 1953, Serial No. 331,206
6 Claims. (Cl. 112—104)



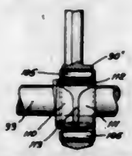
1. In a device for looping a strand through sheet material, a needle for passing the strand through the material, said needle having an internal wall forming a longitudinal passage extending through the tip of the needle, surfaces extending transversely of the needle and forming a slot intersecting said passage, and an elongate threading element in said passage, said threading element being adapted to slide between a rear position in which its end is to the rear of the aforesaid slot and a forward position in which its end is near the tip of the needle said end being yieldingly biased toward said internal wall, whereby the strand may be threaded in said passage by disposing the strand in said slot and sliding the element through the slot toward the tip of the needle so that said end clamps the strand against said wall thereby drawing the strand toward said tip and confining a portion of the strand in said passage between said end and wall.

2,729,178
STITCH REGULATING CONTROL LEVER ARRANGEMENT
Giuseppe Amman, also known as Gino Amman, Milan, Italy, assignor to Societa per Azioni Fratelli Borletti, Milan, Italy
Application September 13, 1950, Serial No. 184,640
Claims priority, application Italy April 7, 1950
1 Claim. (Cl. 112—158)



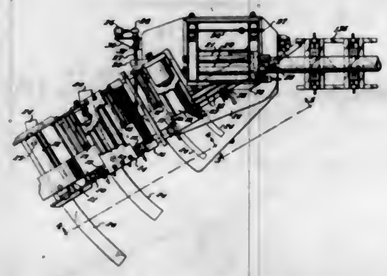
In a sewing machine for zigzag stitching having a free arm provided with a vertical member and a horizontal member, a reciprocating and transversely oscillating needle bar carried by the free arm, a shiftable feed mechanism, a lever for shifting said feed mechanism into and out of feeding position, a lever for controlling the transverse position of the needle bar and a lever for regulating the width of stitch in relation to said transverse position, the vertical member of said free arm having an opening in the lower front portion thereof, a control plate mounted on the lower front portion of the vertical member of the free arm and closing said opening, said control plate having three slots therein in close proximity, actuating means carried by the first mentioned lever and extending through one of said slots, actuating means carried by the second mentioned lever and extending through another of said slots, and actuating means carried by the third mentioned lever and extending through the remaining slot, said plate closing said opening having an outwardly extending peripheral flange in the plane of the front face thereof to engage the front surface of the vertical member and limit inward movement of the plate in said opening, and detachable means on the rear face of said plate for engaging the inner surface of said vertical member about said opening to retain the plate in position in said opening.

2,729,179
SEWING MACHINE BEARING AND PITMAN CONSTRUCTION
John G. Attwood, Oak Park, Ill., assignor to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application September 18, 1952, Serial No. 310,295
21 Claims. (Cl. 112—220)



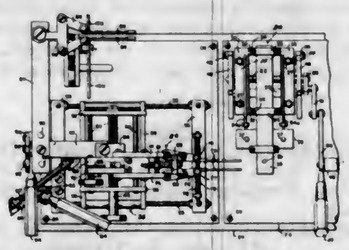
1. In a sewing machine having a driven oscillatory member, a turnable shaft and means for turning the same, the combination of connections from said shaft to said member for oscillating the latter which comprises an eccentrically disposed driving element carried by said shaft, a pitman having a strap surrounding said driving element and having its opposite end connected with said oscillatory member, said opposite end of the pitman being moved through an arcuate path having a component parallel with the axis of said shaft, whereby said pitman is rocked in said direction about said driving element about an axis transverse to the axis of said element, said driving element and said strap carrying coacting bearing surfaces, certain portions of said coacting surfaces being of true cylindrical contour and having bearing engagement along a line extending axially of said driving element for substantially the full axial length of said coacting surfaces, and other portions of said surfaces being relieved adjacent the ends thereof to provide a narrower bearing engagement between the other portions of said surfaces than is provided between said certain portions thereof, the narrower bearing engagement between said other portions of said surfaces enabling said rocking movements of the pitman.

2,729,180
SPIRAL PIPE MACHINE
Jonathan Roy Freeze, Middletown, Ohio, assignor to Armco Steel Corporation, Middletown, Ohio, a corporation of Ohio
Original application February 17, 1948, Serial No. 8,758, now Reissue Patent No. 23,316, dated January 2, 1951, of Patent No. 2,501,845, March 28, 1950. Divided and this application June 28, 1949, Serial No. 101,883
9 Claims. (Cl. 113—35)



1. In a machine for making spiral welded pipe from metal stock, having rolls for feeding said stock forwardly and bending means to form said stock into a helix, both said means having their axes in horizontal planes, said bending means being stationary and disposed at an oblique angle to said feeding means, said feeding means being movable to change said angle, a feeding table over which said stock is fed, said feeding table comprising two plane portions disposed at an angle to each other, in overlapping relation, one stationary with said bending means and one movable with said feeding means, the line of intersection of said planes being parallel to the axis of said bending means.

2,729,181
JIG FOR ASSEMBLING INSTRUMENT ROTORS AND HAIRSPRINGS
Russell M. Kenney, Paris, Ky.
Application May 9, 1952, Serial No. 287,024
25 Claims. (Cl. 113—99)
(Granted under Title 35, U. S. Code (1952), sec. 266)



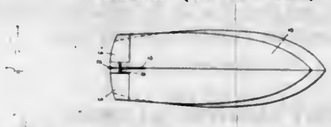
1. A work holder and assembling machine for assembling hairsprings on instrument rotor body units, and the like, comprising an assembly station including means to releasably hold a body unit fixedly at a given position, a travelling hairspring carrier, a stationary guide therefor extending generally toward said station, said carrier movable at will on the guide from a position remote from the station to a position adjacent the station, a hairspring support on the carrier constructed to support independently a hairspring in operative assembly relation with said body at said station when the carrier is in said adjacent position, means operable at will to move the carrier on said guide to and from said positions, a clamping device constructed to coengage a hairspring on said support to retain the same oriented on said support in said assembly relation with said body, a clamp mount for the clamping device mounted movably on the carrier for relative movement thereon to translate the clamping device horizontally in a clamp path fixed in plan relative to the carrier the terminal portion of which path overlies the path of said support when the latter is moved with the carrier, said movement of translation being between a position remote from the said support to a proximal one over said support and spaced over a hairspring on the support, and means remote from the clamping device and from the support operable at will to move the clamp mount vertically on the carrier to and from an operative position on a hairspring on said support.

2,729,182
SHIP'S HULL HAVING FORKED CANAL IN BOTTOM
Giovanni B. Tommasi, Rome, Italy
Application May 28, 1951, Serial No. 228,642
Claims priority, application Italy June 3, 1950
14 Claims. (Cl. 114—57)



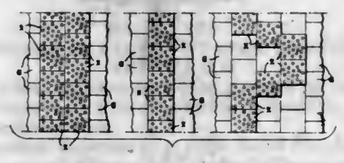
1. In a ship's hull, a main central canal formed lengthwise in the bottom thereof beginning from midship, the said canal having a part-circular section which increases continuously in depth toward the stern until it forks to provide two canals, each of which has an end portion with a helicoidal shape, the bottom of the hull at each of the said end portions assuming the form of a torpedo-shaped body which sharpens towards the stern, and a mantle in continuance of each of the said helicoidal canals beyond the said torpedo shaped bodies toward the stern.

2,729,183
INBOARD MOTORBOAT HULL OF THE PLANING TYPE HAVING A CAVITATION PLATE
Samuel P. Owen, Columbus, Ohio
Application March 18, 1953, Serial No. 343,183
7 Claims. (Cl. 114—66.5)



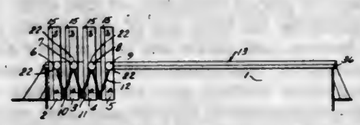
1. A motorboat of the inboard motor and planing type comprising a hull having a pair of identical cut-outs in the bottom at its stern with a cavitation plate therebetween extending amidship from a line coinciding with the forward walls of said cut-outs towards the stern of the boat, said cavitation plate having a lower surface which is a continuation of the surface of the bottom of the hull, said cut-outs being open at their outer and rear sides and the forward wall of each cut-out being at an abrupt angle relative to the bottom surface of the hull, the stern of the cavitation plate also terminating at an abrupt angle relative to the lower surface thereof, and a propeller driven from the motor of the boat and located beneath said cavitation plate.

2,729,184
A MONOLITHIC METAL SHELL STRUCTURE
Aaron B. Bagsar, Drexel Hill, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Application March 15, 1951, Serial No. 215,803
10 Claims. (Cl. 114—79)



1. A metal shell structure which it is desired to protect from the extension in one general direction of any crack that may develop in the shell, said shell comprising impervious conventional sections and special sections, adjacent conventional sections being at their edges united one to another by welds and each of said special sections being at their edges united to adjacent conventional sections by welds to thereby form a continuous integral structure extending throughout a predetermined area to be protected from such crack extension, the special sections having a multiplicity of holes therein which open only in exposed faces of such special sections, thereby providing with the conventional sections an impervious monolithic shell, said holes in said special sections being distributed in closely spaced relationship to each other both along and transversely of said general direction so that any line extending approximately along said general direction intersects the edges of a plurality of said holes.

2,729,185
WATERTIGHT CLOSING DEVICE FOR DOORS, HATCHES, OR SIMILAR ELEMENTS
Henri Kummerman, Neuilly-sur-Seine, France
Application October 23, 1951, Serial No. 252,640
Claims priority, application France November 7, 1950
6 Claims. (Cl. 114—201)

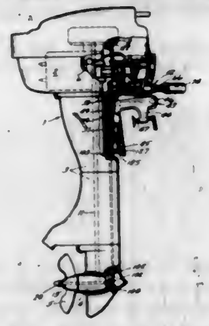


1. A device for closing a hatch opening on a ship comprising at least one panel having opposite lateral sides located in a hatch opening for closing said hatch opening, a pivot shaft extending outwardly on each of said opposite lateral sides of the panel which are parallel to the sides of the hatch opening pivotally mounting said panel in said hatch opening, for swinging to a substantially horizontal position substantially vertically projecting means on said lateral edges of said opening, and means extending laterally and projecting generally vertically from the sides of the panel carrying said pivot shafts, both said projecting means being spaced and extending substantially parallel when the panel is in substantially horizontal position, at least one cover element hingedly mounted on the side of said hatch opening and on an axis generally parallel to the lateral side of said hatch opening, and a resilient packing contained in said cover element, said cover element being adapted to be tilted in a substantially horizontal position over said projecting means or away therefrom to close or open a tight joint therebetween.

2,729,186
CONTROL MECHANISM FOR OUTBOARD MARINE MOTORS

Dale D. Kloss, Minneapolis, Minn., assignor to Champion Motors Co., Minneapolis, Minn., a corporation of Minnesota

Application July 3, 1953, Serial No. 365,914
8 Claims. (Cl. 115—18)



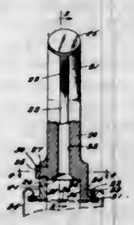
1. An outboard marine motor comprising a power head, a propeller, drive means between the power head and propeller, said drive means comprising a transmission mechanism of the type which is selectively variable as to drive condition, said transmission mechanism comprising a shiftable selector element mounted for movements between neutral and drive positions, bracket means for securing the motor to the transom of a boat, means vertically pivotally mounting said outboard motor on said bracket means for pivotal steering movements, a tiller secured to said motor for imparting pivotal steering movements thereto, said tiller comprising a pair of cooperating tiller sections one of which is anchored to the motor and the other of which is pivotally secured to said one thereof for limited swinging movements about a substantially horizontal axis extending generally in the direction of steering movements, a manually operative transmission control element for said shiftable selector element, said control element providing a handle for said tiller and being telescopically received in said pivotally mounted tiller section for limited rotary movements between neutral and driving positions and about an axis extending longitudinally of said tiller and transversely of the axis of pivotal movement of said other tiller section, a pinion on the inner end of said handle, operating linkage between said pinion and said selector element of the transmission mechanism, said linkage including a cross sectionally circular gear rack extending coaxially of the pivotal connection between said tiller sections and having meshing engagement with said pinion, and stop means limiting rotary movement of said control element in one direction with respect to said pivotally mounted tiller section, said control element being axially movable with respect to said tiller, whereby to cause disengagement of the control element with said stop means and to permit further rotary movement of said control element in the same direction.

2,729,187
FIRE ALARM

Eli H. Bloom, Philadelphia, Pa.

Application June 9, 1953, Serial No. 360,577
5 Claims. (Cl. 116—106)

1. In a fire alarm, a compressed gas cylinder having an orifice and a fusible plug in the orifice and exposed to the air at the outside, in combination with a whistle mounted on the cylinder, comprising a lower tubular leg in prolongation of the orifice, the lower tubular leg starting at a distance of from 0.235 to 0.485 inch from the orifice, there being an air entrainment inlet at the side between the fusible plug and the lower leg, the lower tubular leg having an internal diameter in inches of 0.122 orifice size in inches times gas pressure in p. s. i. ±0.030 inch, the lower tubular leg ending at a distance of 0.75 to 2.25 inches from the orifice, feet connecting the lower tubular leg with the cylinder on either side of the air entrainment inlet, an upper tubular leg positioned at the end of the lower tubular leg remote from the orifice, there being an open side between the upper and lower tubular



legs having a length between 0.125 and 0.5 inch, the upper tubular leg extending at an angle of 105 to 140 degrees with respect to the lower tubular leg, the upper tubular leg having a length between 0.25 and 2 inches, and the upper tubular leg having an internal diameter of 1.5 to 3 times that of the lower tubular leg, and a closure at the end of the upper tubular leg remote from the orifice.

2,729,188
PNEUMATIC HORN AND SUPPORT MEANS THEREFOR

Carl F. Erikson, White Plains, N. Y., assignor to Nathan Manufacturing Corporation, New York, N. Y., a corporation of New York

Application April 28, 1953, Serial No. 351,550
4 Claims. (Cl. 116—142)



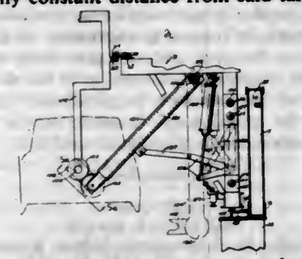
1. A support for a pneumatic horn wherein said horn has a head member near a throat section of the horn and has means for attaching the horn including a flat mounting surface having a passage therein to carry actuating fluid, said mounting surface lying parallel to the longitudinal axis of the horn, said head member extending laterally beyond the outside dimensions of said throat and overlapping said mounting surface, said support comprising at least one support member provided with at least one attaching surface, said support member having within its body a channel for carrying the actuating fluid, said channel terminating at said attaching surface and matching with said horn passage when a horn is attached, said support member being dimensioned to allow lateral extension of the head member of a horn beyond at least a portion of the attaching surface of its support member for providing compactness in mounting said horn.

2,729,189
BODY PAINTING MACHINE

Howard V. Schweitzer, Shaker Heights, and William C. Albertson, Jr., Lakewood, Ohio; said Albertson, Jr., assignor to said Schweitzer

Application October 28, 1950, Serial No. 192,644
10 Claims. (Cl. 118—6)

10. In a body painter, means to rotate an irregularly shaped target body about an axis, means to transpose said body longitudinally along said axis past a station, paint spraying means at said station aimed toward the path described by said body, linkage means moving said paint spraying means to cause sprayed paint to coat said body to a substantially even thickness, said linkage means comprising means to maintain said paint spraying means at a substantially constant distance from said target body and

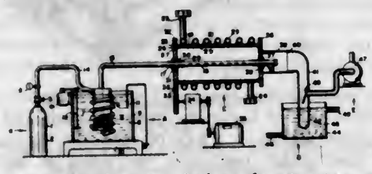


restraining said paint spraying means against motion in a direction parallel to said axis.

2,729,190
APPARATUS FOR PLATING THE INTERIOR OF HOLLOW OBJECTS

Peter Pawlyk, Dayton, Ohio, assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Army

Application October 8, 1951, Serial No. 250,306
6 Claims. (Cl. 118—48)

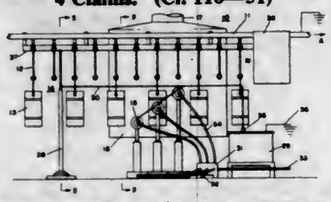


1. In apparatus for gas plating, the structure comprising opposed end flanges adapted to support a tubular object therebetween, said flanges being provided with bores, means to heat said object, a long multi-apertured tubular member having opposed ends extending through said bores, said flanges being rotatably supported on said tubular member, and a support extending from one said flange toward the other, said support surrounding a portion of said tubular member and slidingly engaging the same along a portion of the length thereof, and means to rotate said hollow cylinder and flanges about said tubular member.

2,729,191
ELECTROSTATIC COATING APPARATUS

Edwin M. Ransburg, Indianapolis, Ind., assignor to Ransburg Electro-Coating Corp., Indianapolis, Ind., a corporation of Indiana

Application July 15, 1950, Serial No. 174,055
4 Claims. (Cl. 118—51)

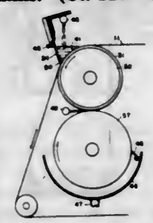


1. In an electrostatic coating apparatus, a support for an article to be coated, conveyor means for moving said support and an article supported thereby along a predetermined path through a coating zone, means for creating in the coating zone a spray of coating-material particles bearing electrical charges of the same polarity, said support having an article engaging portion and being electroconductive to maintain a supported article at a particle-attracting potential, said support being provided with a permanent sheath of insulating material encasing all portions of the support exposed to the coating zone except that support-portion engaged by the article, and means including a discharge electrode disposed at one side of said path and at a point therealong anterior to the coating zone for impressing on each of said sheaths prior to its entry into the coating zone an electrical surface charge of the same polarity as that borne by the coating-material particles, said sheath being sufficiently non-conductive to maintain such impressed surface charge for the duration of its passage to and through the coating zone, whereby the charged particles of coating material will be electrostatically repelled from the sheath.

2,729,192
DOCTOR BLADE FOR PAPER COATING APPARATUS

Edgar Warner, Middletown, Ohio, assignor to The Champion Paper and Fibre Company, Hamilton, Ohio, a corporation of Ohio

Application December 31, 1952, Serial No. 328,840
8 Claims. (Cl. 118—117)

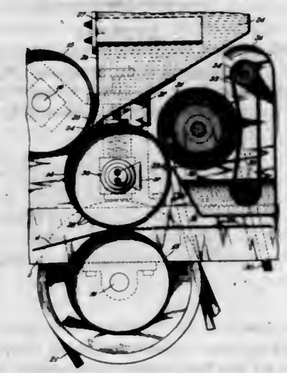


1. A device for making coated printing paper wherein doctoring means is provided for smoothing and limiting the thickness of the coating, which doctoring means comprises: a flexible cylindrical doctor rod; a flexible socket in which said rod is rotatably mounted, which socket embraces said rod around more than half of its circumference and is continuous throughout the working length of the rod; a spring mounting of uniform stiffness throughout the entire working length of said doctor rod, said mounting comprising a flexible plate-like structure of resilient material, to one edge of which plate-like structure said flexible socket is fixedly attached throughout its length; and a rigid support on which the other edge of said plate-like structure is fixedly mounted throughout its length, whereby the position of the doctor rod and the corresponding degree of flexure of said plate-like structure, at any time, depend upon the degree of pressure against said doctor rod at that time.

2,729,193
APPARATUS FOR MAKING ADHESIVE TAPE

William M. Scholl, Chicago, Ill.

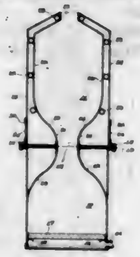
Application September 9, 1950, Serial No. 184,076
8 Claims. (Cl. 118—202)



1. In adhesive tape making apparatus, means defining a path of travel for a tape, a backing roll on one side of

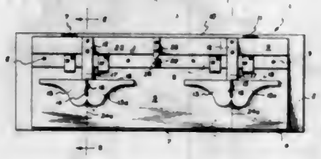
the tape path, an adhesive applying roll on the other side of the tape path, said applying roll having indentations in its circumferential surface, means to deliver adhesive to said indentations for application to the tape in spaced dabs, a brush wiping against the surface of said applying roll between the tape and the second said means, and means to moisten said brush with a cleansing liquid.

2,729,194
APPARATUS FOR DUSTING PLASTIC FILM AND LIKE SHEET MATERIAL
William C. Jones, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
Application November 19, 1954, Serial No. 469,925
2 Claims. (Cl. 118—308)



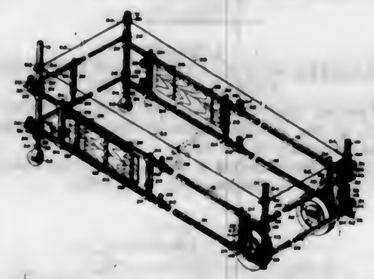
1. Apparatus for emitting a cloud of dust particles at a controllable rate comprising two interconnected superposed chambers, the upper side walls of the lower chamber and the lower side walls of the upper chamber converging smoothly and symmetrically to an interconnecting venturi throat between said chambers; a porous plate disposed transversely across the lower chamber near the bottom thereof dividing said chamber into two compartments; an inlet port in the lowermost compartment for admitting inert gas under pressure beneath said porous plate; a jacket about the upper chamber, means in said jacket for heating said upper chamber; a plurality of spaced perforations along a horizontal line on each side of the apparatus through the jacket at a level just above that of the venturi throat; a plurality of spaced perforations along a horizontal line through the walls of the upper chamber above the venturi throat; damper means associated with the perforations in the outer jacket to regulate the draft therethrough; a narrow elongated outlet port at the top of the upper chamber; means for supplying gas under pressure to the compartment beneath the porous plate; and a supply of finely divided dusting material in the compartment of the lower chamber above said porous plate.

2,729,195
APPARATUS FOR PASTING SHOE PARTS
Raymond Belz, Hanover, Pa.
Application June 11, 1954, Serial No. 436,100
7 Claims. (Cl. 118—505)



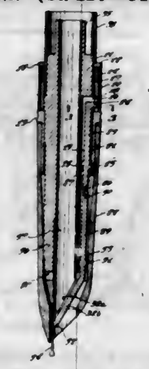
1. In a machine for pasting shoe parts, a base plate for supporting work pieces, an arm hingedly connected at one end to the base plate, a template member carried by said arm, said template member being provided with a slot and the arm being provided with a pair of longitudinally spaced and upwardly projecting pins adapted to be received in said slot when the template is mounted on the arm, said pins and slot being dimensioned transversely to preclude transverse movement of the template with respect to the arm, and said pins being spaced with respect to the longitudinal dimension of the slot to permit adjustment of the template longitudinally of the arm, and means for securing the template on the arm in an adjusted position longitudinally of said arm.

2,729,196
PORTABLE RACK
Maloy D. Breitenbach, Belpre, Kans.
Application September 23, 1952, Serial No. 311,097
8 Claims. (Cl. 119—20)



1. A portable four-sided rack which comprises, in combination: a pair of vertically disposed, elongated, tubular, front corner members; a pair of vertically disposed, elongated, rear corner members; two pairs of horizontally disposed, vertically spaced, elongated side members, each pair connected to one of said front and rear corner members to form opposite sides of said rack, both ends of each of said lower side members being rigidly attached to said corner members in the lower portion thereof, both ends of each of said upper side members being slidably and removably attached to said corner members; a plurality of telescoping, vertically disposed members connecting said upper and lower member of each pair of said side members, the upper end of the outer portion of each telescoping connecting member being attached to a collar slidably mounted on said upper side members, the other end of said connecting members being attached to a collar slidably mounted on said lower side members; two pairs of horizontally disposed, vertically spaced, elongated, telescoping end members, one pair connected to said front corner members and the other pair connected to said rear corner members to form opposite ends of said rack, one end of each member of each of said pair being slidably and removably mounted on one of said corner members one on either side of said upper side member attached thereto, the other end of each member of each of said pair being slidably and removably mounted on vertically disposed projecting members rigidly attached to connecting means slidably and removably mounted on the opposite corner member one on either side of said upper side member attached thereto; a telescoping, vertically disposed member connecting said upper and lower member of each pair of said end members, the upper end of the outer portion of each telescoping connecting member being rigidly attached to the outer portion of said upper one of said telescoping end members in its outer portion thereof, the other end of said connecting member being rigidly attached to the outer portion of said lower one of said telescoping end members in its outer portion thereof; two supporting wheels, each mounted on a separate vertically disposed, elongated member, each of said members telescopically, rotatably and adjustably mounted in separate connecting members, said connecting members on the inside of said rack and one of each connected to each of said collars nearest said rear corner members which are slidably mounted on said lower side members; two supporting wheels, each mounted on a separate vertically disposed, elongated member, said members telescopically, rotatably and adjustably mounted one in each of said front corner members; a pair of eyes rigidly attached on the inside one above the other to the outer portion of each of said telescoping members nearest said front corner members which are slidably attached by said collars to said upper side members; projecting members slidably and rotatably mounted, one on each of said upper and lower side members in the middle portion thereof, and each adapted to rotatably and removably mount one end of each of said end members; a connecting member slidably and removably mounted on each of said corner members in the upper portion thereof, a pair of eyes attached to each of said connecting members, a separate containing member comprising a length of wire having a spring therein vertically spaced above each of said side and end members, each end of each of said containing members attached to one of said eyes; two elongated wing members, each one of which is attached in one end portion to a single transverse member, each of said transverse members being adapted to be telescopically and rotatably mounted one in each of said front corner members in the upper portions thereof; and a rectangularly shaped runway member having a plurality of ridges on one of its sides transverse its width, said member being adapted to be hung on and carried by said upper side and end members.

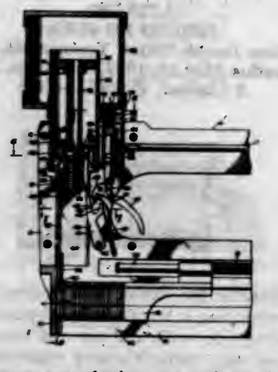
2,729,197
VARIABLE LINE WIDTH WRITING PEN
Stanley Ankud, Brooklyn, N. Y.
Application April 12, 1954, Serial No. 422,500
2 Claims. (Cl. 120—51)



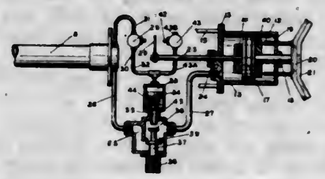
1. A writing pen comprising expandable writing nibs secured to a cylindrical holder therefor, in combination with a sleeve rotatably mounted concentrically on the holder and including surfaces of variable distance from the holder axis in further combination with a lever linkage movable to positions bearing against the nibs with a variable pressure, said lever linkage having one end positioned for contact with the said surfaces and an opposite end in contact with the nibs, said opposite end including means for variably expanding the said nibs when the lever linkage is moved to the said positions, whereby rotary motion of the sleeve actuates the said one end, causing the linkage to progressively expand the nibs.

2,729,198
PNEUMATIC NAILER
Harlan N. Faccou, Santa Ana, Calif.
Application November 27, 1951, Serial No. 258,435
5 Claims. (Cl. 121—3)

1. In a pneumatic nailer, a driver for driving nails to be driven, a piston connected thereto, a cylinder in which the piston is reciprocable, a reservoir surrounding one end of the cylinder and with which the cylinder communicates, said reservoir being of volumetric capacity materially greater than the displacement of the piston in the cylinder, a sear engageable with the piston for holding it in retracted position, a trigger engageable with the sear for causing the sear to release the piston, a supply source of compressed air, means including a valve operable by the trigger for connecting the supply source of compressed air to the reservoir while the sear is holding the piston in retracted position and for shutting off the supply of compressed air to the reservoir and opening the reservoir to atmosphere when the trigger is actuated to cause the sear to release the piston.



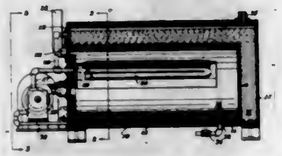
2,729,199
TREE SHAKERS
John P. Jones, Portland, Oreg.
Application September 17, 1951, Serial No. 246,943
2 Claims. (Cl. 121—157)



1. A hydraulic motor for a tree shaker comprising a cylinder, a piston reciprocable in said cylinder, a piston rod connected to one side of said piston and extending outwardly of one end of said cylinder, engaging means carried by the outer end of said piston rod outwardly of said cylinder for engagement with and reaction to a resilient member, and means for alternately driving said piston in one direction and permitting movement of said piston in the opposite direction by the reaction of the engaged resilient member, said means comprising a valve operating rod connected to the opposite side of said piston in diametric relation to said piston rod, and extending outwardly of said cylinder, a fluid supply reservoir, a main valve, means connecting said reservoir to said main valve and means connecting said main valve to said cylinder for supplying fluid under pressure into said cylinder to operate said piston, said main valve including a valve member that is spring biased to closed position, a second piston in said main valve mounted for movement relative to said valve member and engageable therewith to move said valve member against the biasing spring to unseat said valve member, a pair of spaced control elements, means for connecting said control elements to said main valve in operational relation to said second piston for moving said second piston in opposite directions to open and close said valve member, means for connecting one of said control elements to said reservoir, an arm mounted on said valve

operating rod intermediate of said control elements so that upon movement of said valve operating rod by said piston said arm will alternately engage said control elements to operate said main valve to effect reversal of the stroke of said piston.

2,729,200
LIQUID HEATER
William Joseph Miller, Youngstown, Ohio
Application May 19, 1952, Serial No. 288,608
2 Claims. (Cl. 122—140)



1. An apparatus for storing and heating a heat transfer liquid comprising a horizontally disposed liquid holding tank having side walls and top and bottom walls and front and rear end walls, a casing extending horizontally into said tank through an opening in the front wall thereof and disposed in spaced relation to the top and the bottom and the side walls and having a rear end wall spaced from the rear wall of the tank and thereby providing a liquid chamber in the tank about the casing, there being a vent opening through the top of the tank, a closure for the front end of said casing, said casing defining a combustion chamber, a baffle extending longitudinally in said combustion chamber in spaced relation to the top and bottom and at its inner rear end being spaced from said casing rear end wall, said baffle being arched transversely and having depending side flanges secured tightly against inner surfaces of side walls of the casing and dividing the combustion chamber into a main portion under the baffle and an outlet portion above the baffle communicating with the main portion through space between the rear end of the baffle and the rear end wall of the casing, said baffle being hollow and having upper and lower walls consisting of metal plates secured in face to face engagement with each other along side edge portions to form the depending side flanges of double thickness, the upper and lower plates being also welded to each other along line spaced from each other transversely of the baffle and between the lines of welding being crimped and thereby defining a tortuous path extending back and forth through the baffle longitudinally thereof and having an inlet at one end and an outlet at its other end, a platform in front of said tank, a pump on said platform having an inlet pipe communicating with the front end of the liquid chamber under said casing and an outlet pipe communicating with the inlet end of said tortuous path, a pipe extending between the outlet end of the tortuous path and the front end of the liquid chamber above said casing, a blower-type burner on said platform having a discharge nozzle passing through the closure for the front end of said combustion chamber under said baffle, a motor on said platform driving the pump and the burner, and an outlet stack communicating with the front end of the combustion chamber above the baffle.

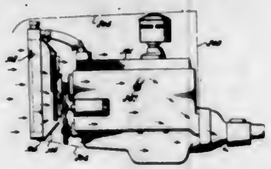
2,729,201
CYLINDER BAFFLE FOR AIR-COOLED ENGINE
Fredric G. Rohm, Montoursville, Pa., assignor to Avco Manufacturing Corporation, Cincinnati, Ohio, a corporation of Delaware
Application October 28, 1954, Serial No. 465,249
9 Claims. (Cl. 123—41.6)

1. A baffle for an air-cooled engine having juxtaposed cylinders each of which includes a lower finned barrel portion and an upper finned head portion over which cooling air flows in passing from one side of the cylinders, termed the "inlet side," to the other side of the cylinders, termed the "outlet side," comprising an upwardly tapered transfer channel closely adjacent the outlet side of the juxtaposed barrel portions, control portions laterally disposed on said transfer channel located closely adjacent the fins of the barrel portions, a head plate immediately above said transfer channel and adjacent the cylinder heads, lateral control portions integral with said head plate closely adjacent the fins of the cylinder heads, a top member at the top of said head plate disposed in



the space between the adjacent cylinder heads, and a base plate below said transfer channel for blocking airflow past the bottom portions of the cylinder barrels, whereby air flowing from the inlet to the outlet sides between the cylinder barrels passes in part between the fins of the barrels and past the first-mentioned control portions, a part of the air being deflected and conducted by said transfer channel to the space defined by said head plate and said top member, where the air is joined by supplementary air flowing directly between the cylinder heads, all of the air adjacent the head plate flowing past the head fins and said second-mentioned control portions.

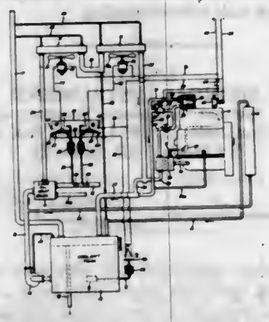
2,729,202
FLUID CIRCULATION SYSTEMS
Elmore J. Sanders, San Gabriel, Calif.
Application March 23, 1951, Serial No. 217,253
25 Claims. (Cl. 123—41.04)



1. A fluid circulation system comprising a rotatable fan normally taking suction and discharging axially and having angular fluid displacement blades, shutter means at the suction side of said fan operable between open and closed conditions while the fan is in operation, said shutter means in closed condition being disposed across said suction side of the fan in close proximity to said blades and acting to convert the fan to a centrifugal impeller discharging fluid radially outwardly, and baffle means positioned in the path of said radially outward flow of fluid and deflecting a portion thereof in a direction axially of the fan.

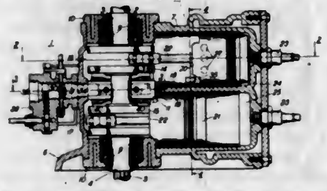
2,729,203
COOLANT SYSTEM
James J. Prendergast, Erie, Pa., assignor to General Electric Company, a corporation of New York
Application December 27, 1952, Serial No. 328,197
10 Claims. (Cl. 123—41.12)

1. A coolant system for an oil cooler and an engine comprising, a tank for containing a supply of coolant, a pump for withdrawing coolant from the said tank and circulating it through the oil cooler and the engine, conduit means connecting said tank, said pump, the cooler and the engine so that coolant discharged by the pump flows through the oil cooler and that at least a portion of said coolant from the cooler flows through the engine with substantially all of the coolant discharged by said pump being returned to said tank for recirculation through the system, a radiator connected in circuit with said con-



duit means between said pump and the engine whereby at least a portion of the coolant discharged by said pump flows through said radiator, a fan for circulating air through the said radiator to cool the coolant passing therethrough, means responsive to the temperature of oil leaving the cooler for starting the operation of said fan, and means responsive to the temperature of the coolant in said tank for starting the operation of the said fan.

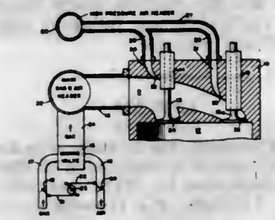
2,729,204
CRANKCASE INDUCTION SYSTEM FOR ALTERNATE-FIRING TWO-CYCLE ENGINES
James A. Meyer, Oshkosh, Wis., assignor to Kiekhaefer Corporation, Cedarburg, Wis., a corporation of Wisconsin
Application March 4, 1955, Serial No. 492,135
5 Claims. (Cl. 123—59)



1. In an alternate-firing reciprocating piston two-cycle engine having adjacent cylinders with intake and exhaust ports controlled by the respective pistons and employing crankcase induction and precompression of the fuel mixture, a crankcase and cylinder block having formed therein an induction passage receiving the fuel and air mixture at one end and extending directly between the crankchambers and cylinders of the engine, said induction passage having reed-controlled ports opening oppositely into the crank chambers and piston-controlled third ports opening oppositely into the cylinders, said third ports being located at the other end of said passage, and said reed-controlled ports opening in advance of said third ports and being located in advance thereof respecting the flow of fuel and air whereby the velocity of the fuel and air mixture is maintained relatively constant.

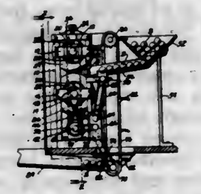
2,729,205
FUEL CONTROL SYSTEM
William M. Nichols, Schenectady, N. Y., assignor to Alco Products, Inc., New York, N. Y., a corporation of New York
Application April 14, 1953, Serial No. 348,793
5 Claims. (Cl. 123—120)

1. A fuel control system for a gas fueled internal combustion engine having a cylinder head and an inlet valve therein, a passage in the cylinder head leading to said valve, means to supply to the passage at a predetermined pressure a combustible admixture having a predetermined air-fuel ratio, and independent means to provide a continuous supply of air to the passage at a pressure higher



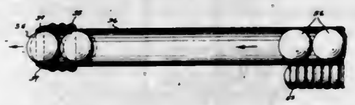
than the predetermined pressure at which such combustible admixture is supplied, whereby said air forces the combustible admixture away from the valve, when the latter is closed, and advances through the inlet valve, when the latter is open, to scavenge the combustion chamber.

2,729,206
BALL THROWING DEVICE
Eliot B. Wilson, Detroit, Mich.
Application June 20, 1952, Serial No. 294,662
4 Claims. (Cl. 124—1)



1. A ball throwing machine comprising a frame, a pair of pneumatic tires rotatably driven in said frame, valve means for varying the air pressure in said pneumatic tires, said tires being arranged with their treads adjacent and the sides of the tires in a plane parallel to the diameter of the tires, means for driving said tires in opposite directions of rotation, and means for feeding balls between the approaching tread surfaces of said tires during rotation of said tires.

2,729,207
REPEATER AIR GUN
Edwin E. Foster, Austin, Tex., assignor of one-half to Don O. Scott, Detroit, Mich.
Application April 17, 1950, Serial No. 156,371
3 Claims. (Cl. 124—13)



1. An air gun comprising a tubular barrel adapted to hold a series of projectiles and having an open muzzle end and a closed breach end, an annular resilient sleeve at the muzzle end of the barrel having a portion normally of smaller diameter than the projectiles to maintain the projectiles in the barrel and to seal against the projectiles and which is yielding to permit the projectiles to be projected in series from the muzzle end of the barrel, a fluid connection to the barrel adjacent to its breach end, a check valve in the connection opening toward the barrel, and a pump communicating with the connection to supply intermittent charges of air pressure therethrough to the breach end of the barrel, the barrel being unob-

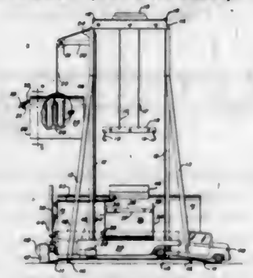
structed from the sleeve to the breach thereof and the projectiles being moved through the barrel from the breach toward the muzzle end solely by air pressure but fitting loosely enough in the barrel that the air may pass them to force the first projectile of the series past the resilient sleeve and the resilient sleeve flexing back to catch and seal against the next following projectile after the discharge of each projectile.

2,729,208
POPGUN
Lee B. Gaeke, Plymouth, Mich., assignor to Daisy Manufacturing Company, a corporation of Michigan
Application September 11, 1953, Serial No. 379,490
3 Claims. (Cl. 124—14)



1. In a toy popgun, a barrel, a hollow housing member rigidly connected to said barrel and having an apertured end wall and a cylindrical confining side wall, a one-piece sheet metal valve member slidably disposed in said housing member and having the central portion of one face thereof normally engaging said end wall and closing said aperture, the outer peripheral portion of said face extending out of the plane of the central portion thereof so as to be spaced away from said end wall when the central portion is in engagement therewith the periphery of said valve member having a plurality of circumferentially spaced notches providing spaces between said housing side wall and the periphery of said valve member through which fluid can flow when said valve member is moved away from said end wall, an apertured packing member in said barrel and abutting said housing member end wall, spring means resiliently retaining said valve member in engagement with said end wall, plunger means in said barrel movable to compress air between it and said valve member, means for propelling said plunger toward said housing member, and a projection on said plunger adapted to extend through said end wall aperture and strike said valve member to move the same way from said housing member end wall against said spring means when said plunger reaches a predetermined point in its travel toward said housing member.

2,729,209
APPARATUS FOR HANDLING ASPHALT
William Joseph Miller, Youngstown, Ohio
Application November 20, 1953, Serial No. 393,409
9 Claims. (Cl. 126—343.5)



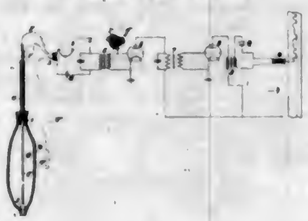
1. In apparatus for handling asphalt including a source of a fluid heating medium a horizontally disposed cylindrical container having an access opening in the upper part thereof and a valved opening in the lower part thereof and structure by which said container may be handled, an internally heated saddle for the reception of said container and a movable heat retaining cap for enveloping said container on said saddle, heating coils extending downwardly within said heat retaining cap and terminating short of the bottom thereof and acting to enter the access opening of said container when said heat retaining cap is positioned thereover, said heated saddle, heating coils and heat retaining cap acting to liquefy the contents of the said container so that the same may be removed through said valved opening.

2,729,210
MEDICAL INSTRUMENT
Frank C. Spencer, Honolulu, Territory of Hawaii
Application June 22, 1954, Serial No. 438,450
7 Claims. (Cl. 128—2)



1. A curetting instrument for obtaining a continuous circumferential specimen tissue strip from a body cavity comprising: a stem; a frusto-conical hollow blade support secured to said stem, a portion of the peripheral wall of said blade support being cut away to define a planar blade supporting surface parallel with a locus line of said frusto-conical blade support, an adjacent portion of the wall being cut away to define a longitudinal opening communicating with the lumen of the blade support; and means to clamp a replaceable longitudinally extending blade on said planar surface.

2,729,211
DEVICE FOR EXAMINING THE CONDITION OF THE STOMACH
Josef Peter, Deggendorf (Danube), Germany
Application July 7, 1950, Serial No. 172,404
4 Claims. (Cl. 128—2.1)



1. A device for examining the condition of the stomach, comprising in combination two electrodes for palpating the walls of the stomach, electric converting means for transforming direct currents into varying currents, electrical connecting means between said electrodes and said transforming means, an electrical indicator, electrical transferring means for influencing said indicator by the varying currents, and a source of a potential inserted between said two electrodes so as to counteract the continuous potential produced by the muscular movement and thus to displace the zero line of the varying currents.

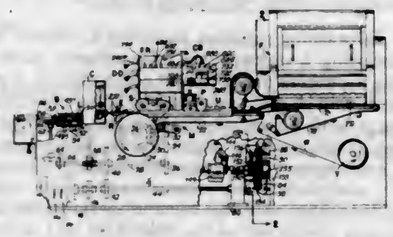
2,729,212
DRIP METER
William F. Butler, Oakland, Calif., assignor to Cutter Laboratories, Berkeley, Calif., a corporation of California
Application October 6, 1951, Serial No. 250,087
4 Claims. (Cl. 128—214)

1. A drip meter for intravenous solution sets comprising: a transparent tubular drip meter shell provided at its lower end with an outlet passageway and at its upper end with an inlet nipple arranged to be connected with a suitable source of transfusion fluid; an upstanding nipple mounted within said shell with its lower end in communication with said outlet passageway; a bonnet mounted over said upstanding nipple, one pair of opposed side



walls of said bonnet being in engagement with the sides of said upstanding nipple.

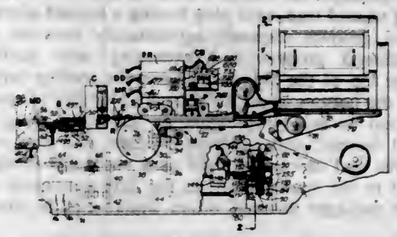
2,729,213
FEED CONTROL
William C. Broekhuysen, Brooklyn, N. Y., and Samuel Gilman, Maplewood, N. J., assignors to American Machine & Foundry Company, a corporation of New Jersey
Application March 9, 1950, Serial No. 148,661
18 Claims. (Cl. 131—21)



1. The method of regulating the rate of feed of a machine feeding material continuously from a feeder which method comprises, detecting the density of the material as it is fed from said feeder, converting said detection to an electrical voltage whose polarity is determined by whether the material is lighter or heavier than a predetermined density and whose magnitude depends on the deviation of the density of the material from the required density, operating a device for increasing or decreasing in accordance with said polarity and magnitude the speed of said feed each time the electrical voltage falls outside predetermined limits, delaying the operation of said device each time the electrical voltage falls outside said predetermined limits for a predetermined fixed period of time which is not less than the time it takes the material to travel from said feed to said detecting station before allowing a correction to be made, and incapacitating the operation of said device each time the deviation of the characteristics of the material returns within the predetermined limits within the time the operation of said device is being delayed.

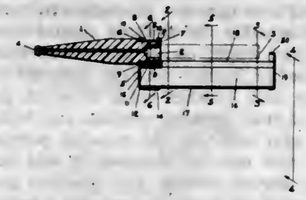
2,729,214
DETECTING AND CONTROL APPARATUS
William C. Broekhuysen, Brooklyn, and Vincent J. Petrucelly, New York, N. Y., assignors to American Machine & Foundry Company, a corporation of New Jersey
Application March 9, 1950, Serial No. 148,662
22 Claims. (Cl. 131—21)

1. The method of detecting the condition of a cigarette rod as it is being manufactured in a cigarette making machine, said method comprising, passing a cigarette rod having a pasted seam extending along its length between spaced electrodes, locating these electrodes so that one of them is directly over and is adapted to straddle the seam of the cigarette rod to minimize the effect of the pasted seam on the dielectric field, impressing across the electrodes an alternating voltage of not less than 50 megacycles so that the impedance of a condenser formed by the electrodes and the portion of said cigarette rod passing between said electrodes is substantially independent of the geometric distribution of the tobacco in said cigarette



rod, connecting said electrodes to an electrical impedance measuring bridge so that said condenser formed by the electrodes and the portion of said cigarette rod passing between said electrodes comprises at least one arm of said bridge amplifying said measurements to obtain a signal, and then mechanically using said signal to operate a control after it reaches a predetermined intensity.

2,729,215
CIGARETTE HOLDER AND ASH RECEPTACLE
Hal W. Dahly, Chicago, Ill.
Application May 6, 1950, Serial No. 160,567
2 Claims. (Cl. 131—175)



1. A cigarette holder and ash receptacle combined comprising a bit, and an elongated ash receptacle extending forwardly beyond said bit, said receptacle having an end and weight element combined and a pivotal construction serving to pivot said element to said bit in receptacle operating relation therewith, said construction consisting of a sleeve means fixed around the forward end of said bit co-axially therewith, said sleeve means having flanges spaced apart, and a receptacle supporting ring means encircling said sleeve means between said flanges and being free to rotate thereon, said ring means being fixed to said element, and the overall axial length of said ring means, considered along the axis of said sleeve means, being sufficient to alone hold said receptacle substantially parallel to said axis.

2,729,216
SMOKER'S PIPE
Abram G. Coble, Webster City, Iowa; L. G. Hix, guardian of said Abram G. Coble, incompetent
Application March 23, 1954, Serial No. 418,002
1 Claim. (Cl. 131—194)



A smoker's pipe comprising a stem carrying a dished bowl support at one end, an upstanding condensing plug carried by said bowl support, a bowl carried by said sup-

port and having a bottom wall spaced from the interior of said support to define therebetween a moisture trap, said bottom wall having an opening therein to receive the top of said plug, said plug having a plurality of grooves in spaced apart relation about its periphery and extending longitudinally thereof along the sides and top to define passages for the flow of moisture condensed on said plug to said trap, said plug having a second plurality of spaced grooves disposed equidistantly between said first-mentioned grooves and extending only partially across the top of the plug to increase the cooling surface adjacent the bottom of the bowl, and a plurality of spaced ribs carried by said plug extending vertically along the side wall thereof, and ribs smaller than said first mentioned ribs and carried by said plug vertically along its side wall in the spaces between the first-mentioned ribs to define passages through which smoke can be drawn.

2,729,217
FLAT-CURL HAIR CURLER
Santo Grasso and Wally F. Kern, Philadelphia, Pa.
Application October 12, 1953, Serial No. 385,508
3 Claims. (Cl. 132—43)



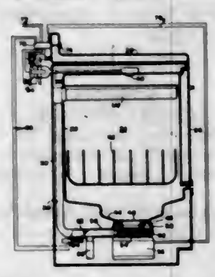
2. A hair curler for forming a strand of hair into a flat helical curl, comprising a sheet material body portion including two opposed enlarged curl retaining portions joined together by a short central mandrel portion of reduced width, and a fabric hair buncher comprising a sheet of flexible material disposed transversely of said body, said buncher being of width greater than the length of said mandrel portion and being fixed at one end to said body at said mandrel portion whereby a strand of hair may be wrapped in said buncher and subsequently wound around said mandrel portion, said body being made of bendable material whereby the curl retaining portions may be bent about said central portion to lie substantially in the plane of the curl and retain the latter substantially flat.

2,729,218
HAIR BLOCKING GUIDE
Dewey E. Harmon, Dallas Center, Iowa
Application September 25, 1951, Serial No. 248,251
1 Claim. (Cl. 132—45)



A hair waving blocking guide adapted to fit on the head comprising a peripheral wire member substantially defining the hairline, and curved to fit above the wearer's ears; a second wire member connected at both ends to the peripheral member and extending arcuately transversely across the crown of the head; a third wire member connected at both ends to said peripheral member and shaped in an inverted U to form the back of the guide; spaced longitudinal members substantially at right angles to said second member and connected between the peripheral member and the third member; and substantially horizontal spaced members connected between the side segments of the third member; all of said wire members being shaped to the contour of the head and being in spaced relation to subdivide the hair into locks of a desirable size for treating and curling.

2,729,219
DISHWASHING MACHINE
William Smith, Jr., Dayton, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application February 19, 1952, Serial No. 272,391
5 Claims. (Cl. 134—95)



1. A dishwashing machine including a cabinet having walls enclosing a dishwashing compartment, means for supplying a washing liquid to said compartment, a motor, the bottom wall of said compartment being provided with a discharge outlet, a refuse shredder and a pump in said discharge outlet directly connected to said motor, the inlet of said pump being connected to the outlet of said shredder, said pump being provided with a two way outlet provided with a two way valve, a spray means in said compartment connected to one branch of said outlet and a drain connection connected to the second branch of said outlet.

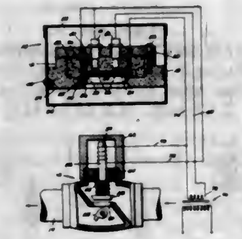
2,729,220
REVOLVING FAN PARASOL
William Smyrnow, Brooklyn, N. Y.
Application November 2, 1953, Serial No. 389,722
9 Claims. (Cl. 135—16)



1. In a parasol, a rotatable stick, spaced ribs supported at the top of said stick and adapted to rotate therewith, a cover supported by said ribs, an elongated tubular handle at the lower end of said stick and forming an extension thereof, webs attached to said ribs and depending therefrom, apparatus carried by the handle for turning said stick including a crank device operatively connected to the stick, and means for reciprocating said crank device, whereby said stick and said webs are rotated.

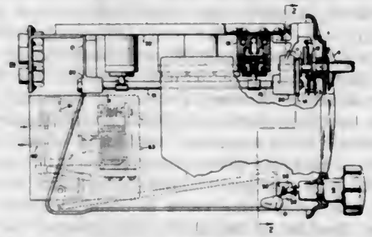
2,729,221
SAFETY DEVICE FOR GAS BURNING APPLIANCES
George Gorham and Ignace Grageroff, New York, N. Y.
Application September 12, 1950, Serial No. 184,414
9 Claims. (Cl. 137—76)

1. A safety device of the character described, operable in response to the generation of heat resulting from the oxidation of heating or illuminating gas in the presence of a catalyst, comprising a container for said catalyst having provision for exposing the catalyst to escaping gas, fusible means positioned in heat exchange relation with said catalyst, and an electric flow control circuit including said fusible means so as to be normally completed, under the control of said fusible means, and so as to be



interrupted under the control of said fusible means pursuant to the evolution of heat in said catalyst, and an electric heater for heating the catalyst independently of the action of said gas to a temperature which is high enough to prevent the condensation of moisture on said catalyst but which is below the ignition temperature of the gas.

2,729,222
MANUAL-AUTOMATIC APPARATUS FOR FLUID PRESSURE CONTROL
Paul S. Dickey, East Cleveland, Harry E. Weaver, South Euclid, Harvard H. Gorrie, Cleveland Heights, and Jack F. Shannon, Euclid, Ohio, assignors to Bailey Meter Company, a corporation of Delaware
Application October 15, 1951, Serial No. 251,406
5 Claims. (Cl. 137—82)



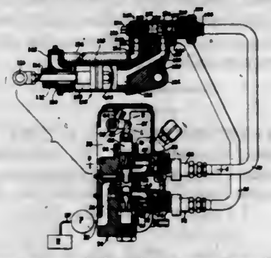
1. A selector station for a fluid pressure control system wherein a fluid pressure is produced by a variable representative of a condition and said condition is controlled either manually or automatically through said selector station, comprising in combination, a plurality of two-position valves, means for simultaneous mechanical actuation of the valves, hand operated switching means for giving the mechanical actuating means two positions of rest, a hand actuated means for establishing a fluid pressure, input piping upon which is imposed a fluid pressure responsive to a variable, output piping connected to some of the plurality of valves whose actuation selectively controls the condition in accordance with the manually controlled fluid pressure and the variable fluid pressure, and two groups of substantially linear parallel pressure gage scales including cooperating pointers indicating the input and output fluid pressures, the first group having one pointer indicating the input, the second group having two pointers indicating the output continuously with one pointer and the other pointer actuated selectively by said valves to indicate input when said means is in a manual position and to indicate output of the hand actuated means for establishing fluid pressure when said mechanical actuating means is in automatic position.

2,729,223
FLUID PRESSURE RELAYS
Albert J. Rosenberger, Chicago, Ill., assignor to Republic Flow Meters Company, Chicago, Ill., a corporation of Illinois
Application September 12, 1951, Serial No. 246,200
15 Claims. (Cl. 137—85)



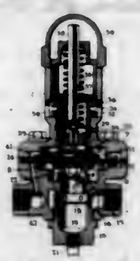
1. A fluid pressure relay comprising a body formed with a chamber having a fluid outlet connection, a fluid supply nozzle extending into the chamber, a hollow arm pivoted in the chamber and having a nozzle near its free end communicating with its interior, means connecting the interior of the hollow arm to atmosphere, a flapper carried by the arm overlying the nozzle thereon and resiliently biased toward the nozzle thereon to close it and projecting beyond the arm into registry with the supply nozzle to move toward and away from the fluid supply nozzle as the arm pivots, and means to move the arm about its pivot.

2,729,224
FLUID-PRESSURE CONTROL SYSTEM
Harold M. Stueland, East Moline, Ill., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application June 6, 1952, Serial No. 292,172
8 Claims. (Cl. 137—102)



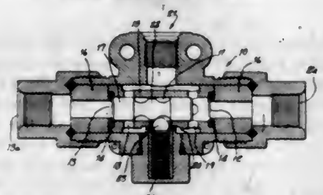
1. A by-pass valve of the character described, comprising: a valve body having a valve-receiving bore therein and a fluid inlet leading to one end of the valve bore; a first motor passage in the body fluid-connected to the valve bore; a second motor passage in the valve body separate from the first motor passage and independent of the valve bore; a by-pass in the body and fluid-connecting the second motor passage and the bore; a valve member shiftable in the bore between first and second positions and biased to its first position to cut off the by-pass from the bore, said valve member having a passage therein opening at one end to the fluid inlet and opening at its other end to the first motor passage, and a check valve in the valve member passage effective to open to return fluid in the first motor passage and effective to close said valve member passage to inlet fluid, said closed check valve providing a fluid-receivable area against which inlet fluid operates to move the valve member to its second position, said valve member having a fluid-conducting portion effective in said second position to retain the fluid connection between the bore and the first motor passage and to open the by-pass to the bore so that the first and second motor passages are fluid-connected via the by-pass and the bore.

2,729,225
COMPRESSOR GOVERNOR
Lewis A. Safford, Watertown, N. Y., assignor to The New York Air Brake Company, a corporation of New Jersey
Application December 29, 1952, Serial No. 328,491
6 Claims. (Cl. 137—107)



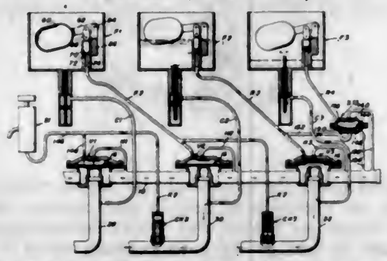
6. A pressure responsive controller for pressure operated motors, comprising in combination a divided housing; a diaphragm marginally clamped between the parts of the housing on the plane of division, said housing and diaphragm defining on opposite sides of the diaphragm two working spaces which are in continuous restricted communication with each other, the inner margin of the diaphragm-clamping area being of larger diameter in the first than in the second working spaces, whereby the diaphragm has a larger effective area when pressure in the second working space predominates than it has when pressure in the first predominates; means affording connection between a space whose pressure is to exercise control to the first of said working spaces, and including a relatively smaller valve seat presented toward the diaphragm; a valve carried by the diaphragm and capable of closing against said seat; a connection with atmosphere to the second of said working spaces and including a relatively larger valve seat presented toward the diaphragm; a second valve carried by the diaphragm and capable of closing against the second named seat; yielding means biasing the diaphragm toward the first named seat; and means affording a connection between the second working space and a motor to be controlled.

2,729,226
AUTOMATIC SOURCE SELECTOR VALVE
David W. Jones, Commack, N. Y., assignor to Kenyon Instrument Company, Inc., Huntington, N. Y.
Application June 24, 1952, Serial No. 295,161
7 Claims. (Cl. 137—112)



1. An automatic source selector valve comprising a valve housing forming a piston chamber, the chamber having opposed inlet ports at its ends adapted for connection to separate fluid pressure sources, piston seats defining said ports, a double-ended piston reciprocatably movable in the chamber and operable to engage said seats and seal said ports alternately in the reciprocation of the piston, the housing having a pair of outlet passages leading laterally from the piston chamber between said seats and spaced longitudinally of the piston, whereby engagement of the piston with either seat allows communication between the other seat and the housing passage nearer thereto via the chamber, each housing passage being spaced from the more remote seat a distance greater than that between the seat engaging parts of the piston, resulting in a simultaneous overlapping of both housing passages by the piston during a portion of its movement between the seats and thus precluding internal leakage between the opposed ports during the piston operation, and interengaging cam and biasing elements located one on the piston and the other in the housing and operable to shift the piston from an intermediate position to either seat depending upon which of the pressures in said ports predominates.

2,729,227
WATER DISTRIBUTING SYSTEM
Walter P. Hearn, Tucson, Ariz.
Application April 1, 1954, Serial No. 420,327
2 Claims. (Cl. 137—122)

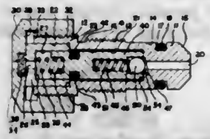


1. In an automatically operating fluid distributing system, a fluid pressure supply line, a plurality of sequentially operated valve assemblies connected in series in communication with said line, each of said valve assemblies having an outlet conduit connected thereto, a pressure responsive movable wall member disposed in each of said valve assemblies dividing the interior thereof into separate first and second fluid chambers, said supply line and fluid outlet communicating with the first of said chambers, said fluid outlet terminating in a valve seat in said first chamber and engageable with said pressure responsive movable wall, a fluid control line and said fluid line being in communication with the second of said chambers, a valve seat contained in said second fluid supply line, said valve seat being engageable by said pressure responsive movable wall including an effective area normally urging it toward a position for closing off communication between the supply line and outlet conduit in said first chamber, a fluid flow responsive flow timing control valve associated with each of said valve assemblies, a fluid line communicating each of said outlet conduits with a respective flow timing valve for actuating the latter, a starting valve in communication with the second chamber of the first in said series of valve assemblies for reducing pressure in said second chamber permitting said pressure responsive movable wall to close off communication of said supply line with said second chamber, each of the remaining valve assemblies in series having a control line in communication with their second chamber and in communication with the flow timing valve associated with the previously operated valve assembly, check valve control means in communication with the outlet conduits of the remaining valve assembly and in communication with the second chamber of a preceding valve assembly, and a fluid pressure responsive valve at the end of said fluid supply line for returning the pressure responsive movable wall of the last valve assembly in series into contact with the valve seat of the fluid outlet.

2,729,228
AUTOMATIC AIR BLEEDER VALVE FOR HYDRAULIC SYSTEMS
Robert Stevenson, Barrington, R. I., assignor to Anco, Inc., a corporation of Rhode Island
Application April 1, 1952, Serial No. 279,860
4 Claims. (Cl. 137—199)

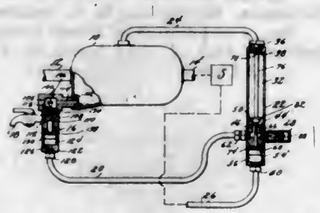
1. In an automatic air bleeder valve for hydraulic systems, a valve body having an external stepped formation,

consisting of a threaded area on the largest and intermediate diameters with a separating ring on the intermediate diameter adjacent the largest diameter and a machined end on the smallest diameter, a groove in said smallest diameter, a fluid tight packing in said groove, internally, said valve body is provided with a bore throughout its length in stepped formation consisting of an entering port adjacent a piston cylinder which terminates in a bushing retaining chamber, a shoulder formed between said piston cylinder and said bushing retaining chamber, a wall formed between said entering port and said piston cylinder, a valve seat formed at the juncture of said entering port and said wall, a bushing provided with an inside diameter and, having an air escape port, secured in said bushing retaining chamber with its base abutting said shoulder, a retaining nut, provided with screw threads adapted to mesh with said threaded area on the largest diameter of said valve body, a relief ring adjacent said threads, a counterbored area in the base of said nut, a filter, housed in said counterbored area, an auxiliary air escape port in said base adjacent said counterbored area



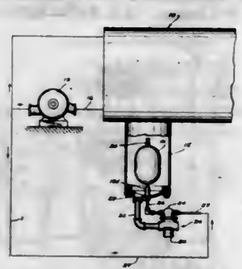
and aligned with said air escape port in said bushing, the base of said nut abutting said bushing, a piston provided with an annular groove in its outside diameter slidably mounted in said piston cylinder and the inside diameter of said bushing, a fluid tight packing housed in said annular groove adapted to cooperate with the inside diameter of said bushing to form a fluid tight seal and with the piston cylinder to form a non-fluid tight seal, a spring retaining cavity in one end of said piston, a ball retaining annular recess terminating in a spring retaining bore in the opposite end of said piston, a ball in said ball retaining annular recess, clinch pins in said ball retaining annular recess abutting said ball, a spring in said spring retaining bore abutting the base of said spring retaining bore on one end and said ball with its opposite end, and a spring in said spring retaining cavity abutting the base of said cavity with one end and abutting said bushing with its other end said ball cooperating with said valve seat to form a fluid tight seal when said piston is influenced by the spring in said spring retaining cavity during a drop in hydraulic pressure in said hydraulic system.

2,729,229
AUTOMATIC BLOW-OFF FOR PRESSURE TANKS
Walter Frank Cousino, Toledo, Ohio, assignor of one-third to Jackson H. Rollins, and one-third to Harry M. Turner, both of Toledo, Ohio
Application September 12, 1950, Serial No. 184,371
9 Claims. (Cl. 137—204)



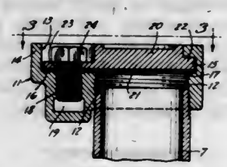
1. In combination with a fluid pressure supply system including a tank, a blow-off for said tank including a first valve adapted to be opened against the pressure in said tank, a manually controllable discharge valve for the flow from the opened first valve, and a first piston and cylinder operator for opening said first valve including a pressure duct to said cylinder; a relay for a predetermined control of pressure into said duct, said relay including a second piston and cylinder operator having duct connections from said tank and from a service control device operated by the pressure from said tank, and valve means in said relay operable by said second piston and cylinder operator in response to said service control device to control pressure flow from said tank to said first piston and cylinder operator in response to its operation as effected by operating pressure from the service control device.

2,729,230
CONTROL FOR SEPARATOR DRAIN VALVE
Robert W. Kenney, South Pasadena, Calif., assignor to Stanley G. Harwood, South Pasadena, Calif.
Application June 23, 1952, Serial No. 294,960
8 Claims. (Cl. 137—204)



1. In connection with a tank in the bottom of which water collects, a drain valve structure having in combination, a container communicating with said tank and adapted to receive said water therefrom by gravity, an inlet passage into said container, a pump for pumping a hydrocarbon liquid through said passage into said container, an ejector disposed in said passage, a member controlling said ejector by controlling the discharge of said liquid from said passage into said container, a drain conduit permitting the discharge of water from said container, a valve controlled by said ejector for controlling the discharge of water through said drain conduit when a certain amount of water has collected in said container.

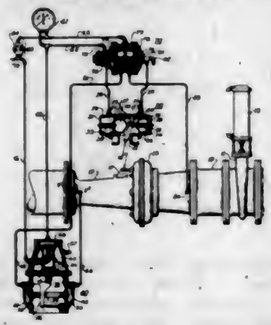
2,729,231
OUTLET BOX CLOSURE
John F. Quest, Minneapolis, Minn., assignor to J. F. Quest Foundry Co., Minneapolis, Minn., a corporation of Minnesota
Application February 25, 1955, Serial No. 490,604
1 Claim. (Cl. 137—371)



Closure means for the upper end of a stop valve box, said means comprising a generally cylindrical head having a screw threaded opening in its bottom for reception of the upper end portion of said box, said opening being axially offset with respect to the axis of said head, said head at its upper end being provided with an axially opening recess in communication with said opening, a side wall portion of said recess being undercut to provide a retaining notch at one side of said box opening, said head diametrically opposite said notch defining a screw threaded hole extending downwardly from said recess in radially outwardly spaced relation to said box opening

and terminating at its lower end in a diametrically enlarged chamber, a closure plate in said recess, said closure plate having a radially outwardly projecting tooth receivable in said notch and an axially extended opening in diametrically opposed relationship to said tooth, and in alignment with the threaded hole in said head, a lock screw extending through said opening in the cover plate and having screw threaded engagement with said threaded hole whereby to close said chamber, said screw terminating at its lower end above the bottom of said chamber, and a gasket interposed between said cover plate and the bottom of said recess whereby to seal the interior of the box opening and said chamber.

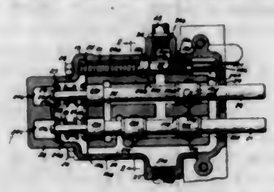
2,729,232
CONTROLLER
Walter J. Hughes, Tucson, Ariz., assignor to Infilco Incorporated, Tucson, Ariz., a corporation of Delaware
Application November 3, 1951, Serial No. 254,697
9 Claims. (Cl. 137—487)



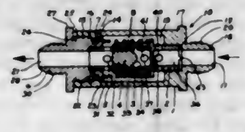
1. An automatic switch for the application of fluid pressure to a pneumatically operated motor positioning a valve controlling flow through a conduit, to open and close the valve in response to opening and closing, respectively, of a shutoff valve in the conduit, said switch comprising a pressure sensitive means, means for continuously applying to said pressure sensitive means a pressure varying with the loss in pressure across one of said valves and urging said pressure sensitive means into one direction, mechanical means for applying a mechanical force to said pressure sensitive means urging it in the opposite direction, a pair of fluid pressure lines adapted to transmit fluid pressures to said motor, means for applying a rating pressure to said lines, means for connecting one of said fluid pressure lines to a source of measuring pressure varying as a function of the flow to be controlled, and valve means positioned in unison by movement of said pressure sensitive means to admit measuring pressure to said one fluid pressure line, and rating pressure to the other, and positioned by a reverse movement of said pressure sensitive means to cut off rating pressure from said other fluid pressure line and switch it to said one line and simultaneously cut off measuring pressure from said one line.

2,729,233
HYDRAULIC RELIEF VALVE
Curt H. Garmager, Royal Oak, Mich., assignor, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application August 3, 1950, Serial No. 177,498
3 Claims. (Cl. 137—494)

1. A relief valve for connection between a fluid pressure source and a sump comprising a casing defining a bore, a valve body slidably mounted in said bore and having axially spaced piston portions cooperating with said bore in fluid sealing relationship and a reduced diameter portion intermediate the said piston portions cooperating with said bore to define a chamber, means for connecting said chamber to the fluid pressure source, port means in one end of said bore normally obturated by one of said piston portions for connection to the sump, a spring urging said valve body axially toward said other end of said bore to normally abut one end face of said valve body therewith, said valve body having an axial recess in said one end face thereof, a piston slidably inserted in said axial recess in sealing relation therewith, and conduit means in said valve body connecting the inner end of said axial recess with said chamber, whereby the force of said spring is opposed only by fluid pressure acting on an effective area on said valve body equal to the cross sectional area of said axial recess.

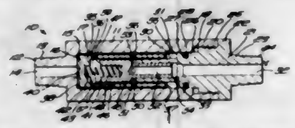


2,729,234
SURGE VALVE
Robert Stevenson, Barrington, R. I., assignor to Anco, Inc., a corporation of Rhode Island
Application November 1, 1951, Serial No. 254,317
5 Claims. (Cl. 137—498)



5. A surge valve comprising a body having means to secure said body to a conduit, said body comprising an inlet contiguous to a cavity adjacent a chamber, a gland secured in said body having means to be secured to a conduit, said gland having an outlet adjacent a counterbore, a tube provided with apertures secured in said counterbore, a piston, consisting of a left hand tube and a right hand tube oppositely disposed and separated by a wall with apertures in the right hand tube, is slidably mounted by means of the right hand tube in said cavity, the left hand tube slidably engages said tube secured in said counterbore, resilient means interposed between said wall and said gland, said piston acting against said resilient means to block out said apertures in said tube secured in the counterbore in response to excess pressure passing from one conduit to the other conduit.

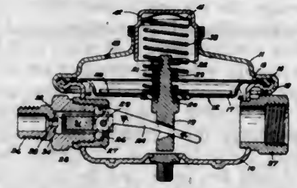
2,729,235
GAGE DAMPENING VALVE
Robert Stevenson, Barrington, R. I., assignor to Anco, Inc., a corporation of Rhode Island
Application May 14, 1952, Serial No. 287,680
3 Claims. (Cl. 137—498)



1. In a surge dampening valve the combination of a housing provided with means to be secured to a hydraulic pressure system, an inlet port and a chamber, a face in said chamber, a gland secured in said chamber with a fluid tight connection, a quill, a bore and an outlet port

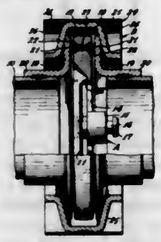
formed in said gland which is provided with means to be attached to a gage, a primary piston freely movable in said chamber, provided with an end wall and a sleeve adapted to freely engage said quill in said gland externally thereof and having prongs in said end wall abutting the face of said chamber, a secondary piston provided with a cylinder and a hollow core, said cylinder freely engageable with the sleeve in said primary piston, said hollow core slidably engageable with the bore in said gland, ports in said hollow core communicating with said bore and outlet port in said gland and resilient means interposed between said primary and secondary pistons, the sliding movement of said primary piston influencing the sliding movement of said secondary piston through said resilient means to cause the end of said quill to determine the effective flow area of said ports.

2,729,236
REGULATOR AND DIAPHRAGM
Louis J. Valince, Euclid, Ohio, assignor to The Weatherhead Company, Cleveland, Ohio, a corporation of Ohio
Application August 31, 1951, Serial No. 244,631
4 Claims. (Cl. 137—505.46)



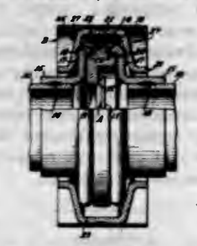
1. A fluid pressure regulator comprising a casing, a resilient diaphragm movable between a first position and a second position in said casing forming a fluid pressure chamber, inlet and outlet means in said casing for said chamber, a valve in said inlet means, valve operating means connected between said diaphragm and valve, a spring urging said diaphragm toward said first position, said diaphragm formed to assume said first position when unstressed and arranged to deflect between said first position and second position without stretching, said operating means positioning said valve in a substantially full open position when said diaphragm is in said first position, the resilience of said diaphragm operating to resist deflection from said first position due to fluid pressure in said chamber and creating an internal force tending to return said diaphragm to said first position.

2,729,237
VALVE ASSEMBLY
Lester E. Hite, Los Angeles, Calif., assignor to Marman Products Company, Inc., Los Angeles, Calif., a corporation of California
Application March 20, 1953, Serial No. 343,682
5 Claims. (Cl. 137—515.7)



1. In a valve assembly for a fluid line comprising tube sections arranged in end-to-end relation: a pair of axially opposed flange units each of L-section including a cylindrical collar surrounding and secured to an end portion of a respective tube section, and a radial flange projecting substantially directly outwardly from said collar; a valve unit comprising an annular body disposed substantially entirely between said radial flanges in close adjacency thereto and having at its inner margin an annular valve seat portion defining a valve seat and a valve opening of a diameter substantially equal to that of the tube sections, and a movable valve element carried by said annular body for valve opening and closing movements and engageable with said seat at substantially the diameter of the tube sections; means providing a seal between the annular body and said flanges restricted to an annular area outwardly of the tube section diameter; and coupling means for encasing and protecting the flanges and for drawing them together to establish a seal with the annular body, said coupling means comprising a contractile collar of V-channel section with frusto-conical, radially inwardly diverging side walls in wedging engagement with the respective flanges, and means for effecting radial contraction of said collar.

2,729,238
VALVE MOUNTING
Lester E. Hite, Los Angeles, Calif., assignor to Marman Products Company, Inc., Los Angeles, Calif., a corporation of California
Application March 20, 1953, Serial No. 343,683
11 Claims. (Cl. 137—515.7)

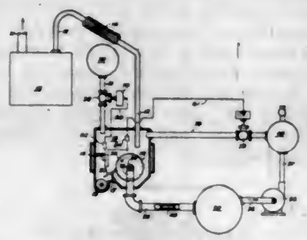


1. In a valve assembly for a fluid line comprising tube sections to be coupled end to end in axial alignment: a combined seal and valve unit comprising an annular seal and a valve seat defining a valve opening of a diameter substantially equal to that of the tube sections, and a movable valve element carried by said annular seal; thin, flat flanges extending radially outwardly from the opposed ends of said tube sections, said flanges including peripheral portions projecting axially toward each other and having inner margins defining shoulders which are offset radially outwardly from said tube sections to define, with the opposed inner radial faces of said flanges, an annular recess in which said seal and valve seat are received substantially entirely between said flanges; said seal and flange having cooperable means for establishing a fluid sealing joint between said flanges; and coupling means encircling said flanges and having axially opposed means engageable with the respective flanges for applying thereto axial pressure for urging said flanges and seal into sealing interengagement.

2,729,239
PROTECTIVE ARRANGEMENT
Ralph W. Baker, George W. Mattson, and Frank L. Padgitt, Baton Rouge, La., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware
Application November 6, 1952, Serial No. 319,132
3 Claims. (Cl. 137—563)

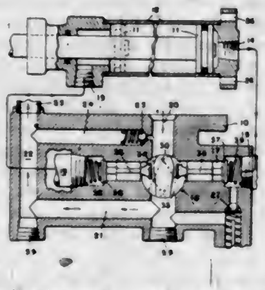
1. A protective fluid pressure system for treating easily oxidizable materials comprising a chamber to be maintained under a predetermined gas pressure and having a restricted opening to atmosphere, the degree of restriction being subject to wide and sudden variations; a pressure responsive control means positioned within said

chamber; a time delay means; a source of gas pressure; a gas supply conduit connecting the said source to said chamber; a feed valve controlling the flow of gas from said source to said chamber and normally permitting the continuous flow of a limited quantity of gas thereto; a feed valve operating mechanism controlling the operation of said feed valve, said mechanism being connected to said pressure responsive means through said time delay means to open said valve and supply additional gas to said chamber in the event of a prolonged low pressure in said chamber; a recirculating circuit for supplying gas



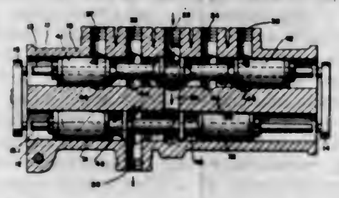
to said chamber upon a sudden decrease in pressure therein, said circuit being connected to said chamber at different places to form a closed gas circuit therewith, said recirculating circuit including a conduit, a gas circulating pump, a gas surge reservoir on the discharge side of said pump and a control valve between said reservoir and said chamber, and a control valve operating mechanism controlling the operation of said control valve, said latter mechanism being connected to said pressure responsive control means and responsive thereto to supply gas to said chamber from said gas surge reservoir upon sudden decreases in pressure in said chamber.

2,729,240
PLURAL-WAY DISTRIBUTING VALVE
Richard H. Sheppard, Hanover, Pa.
Application June 12, 1950, Serial No. 167,622
10 Claims. (Cl. 137—621)



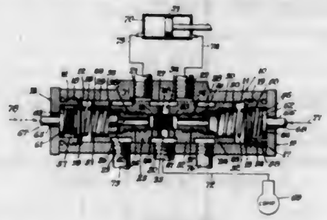
1. In a distributing valve, a body having therein a main valve chamber and a bore intersecting the chamber to form two branches of the chamber, a pair of opposed valves in the chamber on opposite sides of said bore and spring pressed to their seats and toward the bore, a third bore passing thru the intersection, a cylindrical shaft in said third bore having a reduced portion forming a central blade with flat sides each facing a branch of the chamber, said shaft being oscillatable in its third bore to close communication between the bore and either branch at will, a cam projection on each side of said member, and a head on each of the opposed valves extending into the path of the proximate projection to be engaged thereby to unseat its valve as the member is rocked about its axis to direct flow through the opposite branch.

2,729,241
HYDRAULIC POWER DISTRIBUTION VALVE
Charles J. Clark, Oak Park, Ill.
Application November 21, 1952, Serial No. 321,831
2 Claims. (Cl. 137—621)



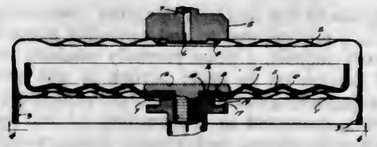
1. A valve comprising a casing having two parallel bores, plungers in said bores connected together in fixed relation to each other for simultaneous longitudinal movement in either direction from a middle position in said bores, stop means to limit the stroke of said plungers, one of said bores having five ports spaced apart longitudinally thereof, a passage connecting said bores for direct communication with the middle one of said five ports, the other said bore having an outlet port spaced laterally from said passage, the plunger in said other bore comprising a pair of pistons fixed thereon and spaced apart axially for establishing communication between said last named port and said passage when said plungers are at mid-stroke and to cut off such communication when said plungers are at either end of their stroke, and the plunger in said one bore comprising three pistons spaced apart axially for establishing communication selectively between the middle one of said five ports and the next adjacent port only at either side of said middle one while establishing communication between the two ports on the other side of said middle one and simultaneously cutting off communication between the ports on the opposite side of said middle one, the central one of said three pistons having a peripheral groove normally establishing communication between the middle port and said passage when the respective plunger is in mid-stroke position.

2,729,242
CONTROL VALVE
Raymond G. Olson, Niles, Ill., assignor of one-half to Kenneth T. Snow, Oak Park, Ill.
Application April 14, 1953, Serial No. 348,775
6 Claims. (Cl. 137—622)



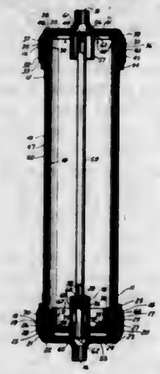
1. A control valve for fluids comprising a housing having a cylindrical bore therethrough, a cylindrically shaped valve slidably engaging said housing bore, said cylindrically shaped valve having an annular groove therearound spaced substantially centrally between the ends thereof, and a spaced apart annular groove on each side of said centrally located annular groove, said cylindrically shaped valve having a longitudinally disposed substantially centrally located bore extending the length thereof, said valve having passage means joining said centrally located annular groove and said longitudinally extending bore, a valve disposed within said longitudinally extending bore, spaced apart valve seats within said longitudinally extending bore and disposed on each side of a central section thereof including said passage means, said valve slidable in the central section of said bore between said valve seats, said valve having bleed means therein, whereby when said valve is positioned on one valve seat that seat is closed except for leakage past the seat to the contral section of said bore through said bleed means and simultaneously the other of said valve seats is completely open, individual bleed valves on each end of said housing and constituting a closure for the ends of said cylindrical bore, said housing having an inlet passage adjacent a central portion thereof and adapted to communicate with the centrally located annular groove, and outlet passages spaced from the inlet passage.

2,729,243
CATENATED MULTIPLE ANEROID CAPSULE
Jurg A. Senn, Shorewood, Wis.
Application June 16, 1952, Serial No. 293,867
4 Claims. (Cl. 137—787)



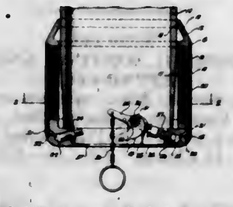
1. In a resilient capsule pressure motor the combination comprising spaced external free and reference diaphragms joined and sealed to one another at their outer rims to surround an internal void, an attachment member engaging said external reference diaphragm, a central opening in said external free diaphragm, first and second closely adjacent internal outwardly expandable diaphragms disposed within the space surrounded by said external diaphragms joined and sealed to one another at their outer rims, said first internal diaphragm having a central opening adjacent the central opening in said external free diaphragm, means forming a sealed connection between said first internal diaphragm and said external free diaphragm adjacent the central openings thereof, and a second attachment member responsively connected with the second internal diaphragm extending outwardly therefrom through the openings in said internal and external diaphragms.

2,729,244
HYDRAULIC ACCUMULATORS
Walter A. Alaska, Cleveland, and Robert H. Davies, Aurora, Ohio, assignors to The Parker Appliance Company, Cleveland, Ohio, a corporation of Ohio
Application September 25, 1952, Serial No. 311,511
7 Claims. (Cl. 138—31)



2. In a piston type accumulator, a cylindrical casing including a closure at each end thereof, a cylindrical inner shell within said casing and spaced therefrom to provide an annular chamber therebetween, a movable piston within the inner shell having a fluidtight sliding contact with said inner shell and dividing it into an air side and a hydraulic liquid side, a passage connecting the air side to the annular chamber, a port leading to the hydraulic liquid side of said inner shell, a guide rod passing through the central portion of the piston and supported at each end adjacent the closures said piston having a fluidtight sliding contact with said rod.

2,729,245
PNEUMATICALLY ACTUATED THREAD PROTECTOR
Joseph F. Northrop, Whittier, Calif., assignor, by mesne assignments, to Stansbury Inc., Bakersfield, Calif., a corporation of California
Application April 5, 1954, Serial No. 421,105
3 Claims. (Cl. 138—96)



1. A pneumatically actuated pipe thread protector comprising an upper ring, a lower ring spaced therefrom and a wall connecting said rings, said rings and wall defining a housing, an annulus mounted in said housing between said upper and lower rings and with the inner face of the annulus exposed to the threads of the pipe, said housing having an air space therein defined by the outer surface of the annulus, said wall and the upper and lower rings, an air intake fitting extending into said air space, and a release valve extending into the air space.

2,729,246
METHOD OF WEAVING PILE FABRICS
Francis P. Groat, Bloomsburg, Pa., assignor to The Magee Carpet Company, Bloomsburg, Pa., a corporation of Pennsylvania
Application March 29, 1951, Serial No. 218,222
4 Claims. (Cl. 139—39)

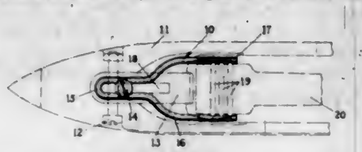


4. The method of weaving on a wire loom a cut pile fabric floor covering having a backing with pile warps held therein by elements of the backing, raising the pile warps selectively from the backing and restoring said pile warps to the backing to form transverse rows of portions of the pile warps projecting above the backing to form pile loops, the loops in each row being arranged in staggered relation to the loops in the next adjacent rows, successively raising and cutting each row of loops to form tufts whereby the pile warps are pulled to reduce the height of a leg of the tufts in the preceding row formed from the same pile warps.

2,729,247
SHUTTLE SPRING
Francis E. O'Neil, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a corporation of Maine
Application March 7, 1955, Serial No. 492,654
2 Claims. (Cl. 139—207)

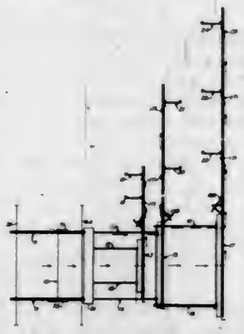
1. A shuttle having in combination a shuttle body and a bobbin supporting spring, said spring having bobbin

gripping jaws, spaced grooves formed interiorly of said jaws adjacent their ends and a U-shaped shank portion by which said supporting spring is held in said shuttle body, said spring having extending about its entire outer periphery and substantially on a plane with the centers of



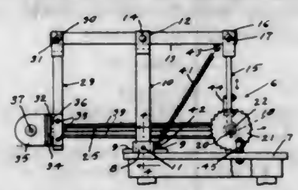
said grooves, an outwardly directed, arcuate corrugation, and means in said shuttle defining a cavity for receiving said U-shaped shank of the spring, said cavity being formed with an indentation complementary to the said corrugation for tightly embracing it when the spring is inserted therein.

2,729,248
BOARD TRIMMING, SORTING, AND STACKING APPARATUS
John B. King, Forest, Miss., assignor to King Lumber Engineering Company, Jackson, Miss., a partnership
Application February 24, 1953, Serial No. 338,418
10 Claims. (Cl. 143—37)



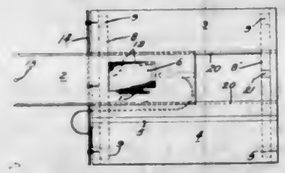
2. A board trimming, sorting and stacking apparatus comprising in combination a frame, a pair of spaced substantially parallel board supporting ways carried by said frame for adjustment toward and from each other, a conveyor chain having an upper run supported by each way, spaced board engaging lugs carried by each chain and projecting outwardly therefrom, spaced parallel shafts rotatably mounted on said frame adjacent the ends of said ways, sprockets slidably and non-rotatably mounted on said shafts and engaging said chains whereby upon rotation of said shafts said chains will be driven to feed boards in engagement with said lugs along said ways, a trimming saw rotatably mounted on each way, an arbor slidably and non-rotatably engaging each saw, power means for driving said arbor and saws to trim boards fed thereto by said chains, means for simultaneously moving said ways, chains and saws toward and from each other comprising spaced racks mounted on said frame transversely of and adjacent the ends of said ways, a pinion shaft rotatably mounted on one of said ways and having spaced pinions engaging said racks, crossed cables trained over pulleys and attached to said ways adjacent the ends thereof whereby upon rotation of said pinion shaft to move the associated way in one direction, said cables will move the other way in the opposite direction to facilitate supporting, feeding and trimming boards to any desired length, means for receiving boards of different lengths from said chains and for depositing such boards in separate laterally extending conveyor troughs according to length, means associated with each trough for ejecting boards therefrom to form stacks in separate bins in accordance with the widths of such boards and means for counting and indicating the number of boards in each bin.

2,729,249
SWINGING PARALLELOGRAM LINKAGE POWER MITER SAW
Anton Keipp, Mansfield, Ohio
Application November 1, 1954, Serial No. 465,930
8 Claims. (Cl. 143—46)



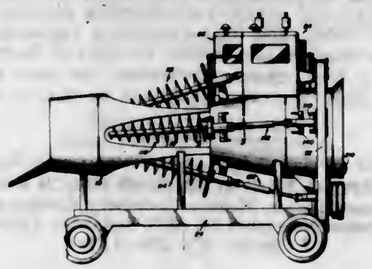
1. A saw of the character described comprising a work support, a post secured to and extending upwardly from said work support, a beam pivotally mounted intermediate of its ends on an upper portion of said post for up and down rocking movement relative to the post, hangers swingably connected to end portions of said beam and depending therefrom, said hangers being swingable in a plane parallel to said beam, means connecting said hangers for swinging movement as a unit, a shaft journalled in the lower end of one of said hangers, a circular type saw blade fixed to said shaft and disposed in a plane substantially parallel to said beam, said blade being supported by the hanger, individual thereto, above said work support, and means for driving said saw blade connected to said shaft and including a motor supported by the other hanger.

2,729,250
PORTABLE SAW TABLE CONTAINING SLIDING PORTION
Escho V. Gilkey, Marysville, Calif., assignor to Jack R. Halvorsen, Lake Forest, Ill.
Application October 13, 1952, Serial No. 314,466
2 Claims. (Cl. 143—132)



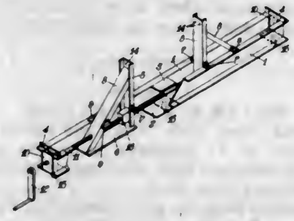
1. A portable saw table for a portable electric saw consisting of a supporting frame and a portable table top, said portable top comprising three adjacently positioned substantially coplanar panels of substantially equal length arranged to provide a substantially uninterrupted surface, said adjacently positioned panels arranged so that the opposed parallel side edges of the center one of said panels are in substantial abutting relation to one edge of each of the other said panels which extend laterally outwardly from said parallel edges, said latter two panels being attached to the supporting frame of said table, the center of said panels provided with an aperture offset longitudinally relative to the center of said panel to receive a saw blade, said panel being movable relative to said supporting frame and the two attached panels thereon and adapted to support the portable saw by suitable means from its surface, and cooperating means located below the plane of the table top provided at the adjacently positioned side edges of said panels consisting of complementary tongue and groove elements to interlock said panels against movement normal to the plane of the table top, but permitting sliding longitudinal movement of said movable panel to move the portable saw relative to said attached table top panels and the supporting frame.

2,729,251
HOLLOW-HEAD TYPE LOG PEELER HAVING CONCENTRICALLY ARRANGED AND INDIVIDUALLY ROTATABLE HELICAL BLADES
Kenneth W. Brown, Indianapolis, Ind.
Application September 20, 1954, Serial No. 457,043
10 Claims. (Cl. 144—208)



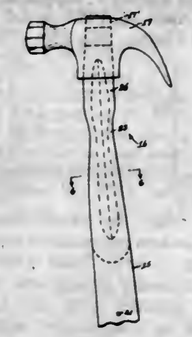
9. A log-peeling machine comprising a casing having a plurality of circumferentially spaced openings therein, a plurality of peeling members mounted on the exterior of said casing and including portions projecting thereinto through said openings, means for rotating said members, means resiliently urging said members inwardly of the casing, and means for independently controlling the inward movement of one of said members.

2,729,252
STRAIGHT BEAM ADJUSTABLE JAW CLAMP
John Elliott, London, England, assignor to Acrow (Engineers) Limited, London, England
Application March 7, 1952, Serial No. 275,410
3 Claims. (Cl. 144—291)



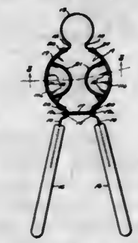
1. A clamp for holding together the formwork of casing used for casting concrete beams in situ, comprising a beam structure having a longitudinally-extending channel formed therein which is closed at each end by closure plates fitted to the ends of said beam structure, said closure plates each having an aperture through which passes a rotatable screw-threaded member extending the length of said channel and arranged to pass through correspondingly-threaded apertures in a pair of opposed, braced, L-shaped clamping members having flat underneath surfaces which slide along the bottom of said channel, said screw-threaded member having a right hand thread over one part of its length and a left hand thread over another part of its length whereby rotation of said member is effective to move said clamping members in opposite directions through equal distances, said beam structure being provided on the underside thereof with means for locating adjustable steel props, and angle brackets on the sides of said L-shaped members slidable on the upper outer surfaces of the beam structure.

2,729,253
HAMMER WITH TUBULAR HANDLE HAVING REINFORCING MEANS
Luther Marsh, Philadelphia, Pa., assignor, by mesne assignments, to Hardware Products Co., New York, N. Y., a firm
Application December 7, 1954, Serial No. 473,535
5 Claims. (Cl. 145—29)



1. In a tool of the character described, an outer elongated tubular structure including two comparatively long channel members positioned with their corresponding longitudinal edges in abutment respectively, means to hold said channel members so assembled to form a handle, an inner elongated tubular structure including two comparatively short channel members positioned with their corresponding longitudinal edges in abutment respectively; all said channel members being of sheet metal; the inner tubular structure being positioned within an end section of the outer tubular structure and a head of a hammer-like tool having an eye to receive a handle therein; both tubular structures being positioned in part within said eye and the outer tubular member being secured to said head; the inner tubular structure extending out of said eye towards the other end of the handle and fitting snugly the greater part of its length within the outer tubular structure; said outer tubular structure having means holding the inner tubular structure from lengthwise movement therein.

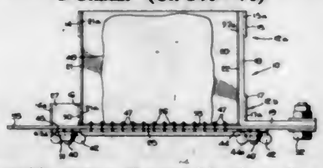
2,729,254
EGG OPENER
Samuel Parks McLaughlin, Coshocton, Ohio
Application December 10, 1954, Serial No. 474,356
3 Claims. (Cl. 146—2)



1. An egg opener comprising two rigid jaws, each jaw being slightly less than a half of a circle and having their concavities mutually facing, a portion of spring characteristics interconnecting said jaws and tending to separate them, a plurality of short needles spaced along and rigidly secured to said jaws and extending generally radially inwardly therefrom, said needles lying approximately in a common plane, two receiving cage portions secured one to each of said jaws and extending toward each other and away from the plane of said needles, whereby an egg placed in contact with said cage portions will position said

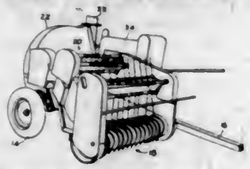
needles properly to sever the top of the shell thereof and to hold the same when severed, and handles secured to the ends of the jaws remote from said interconnecting portion.

2,729,255
VEGETABLE CUTTER AND SHREDDER
William Small and Bartell T. Jeppesen, Lynwood, Calif.
Application April 26, 1954, Serial No. 425,347
1 Claim. (Cl. 146—78)



In a vegetable cutter, the combination of: a vegetable supporting table; an arm mounted on said table; a straight, flat bar providing a knife, said knife being pivotally mounted on the extremity of said arm on an axis close to and substantially parallel with said table so that said knife sweeps close to and parallel with an edge of said table when rotated about said axis, said knife having a cutting edge facing downward and co-extensive with said table, the portion of said knife disposed outwardly from said edge forming a handle; a pair of threaded studs provided on said knife to extend therefrom in parallel horizontal relation adjacent opposite ends of said cutting edge; a vegetable guide plate disposed parallel to said knife and having backing bars at its opposite side edges which extend upward to form apertured attaching lugs which fit over said studs, thereby permitting said guide plate to be removably mounted on said studs by a pair of wing nuts; slitting blades outstruck inwardly from said vegetable guide plate, said blades being arranged in spaced rows with the blades of each row in staggered relation to adjacent blades of the other row, and a guide stop on said table overlying and guiding said plate and providing a down limit stop for said handle.

2,729,256
FORAGE HARVESTER
Marcus E. McClellan, Ottumwa, Iowa, assignor to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa
Application March 13, 1953, Serial No. 342,153
3 Claims. (Cl. 146—121)



1. A mobile harvester having a main frame supported on a pair of ground-engaging wheels spaced relatively widely apart transverse to the line of advance and carrying adjacent to the wheels a crop-reduction means of the type including a frame-supported rotor having radial knives cooperative with a generally radial frame-supported shear bar, a frame-mounted crop-collecting means ahead of and delivering rearwardly to the reduction means, and hitch means on the frame adapted for connection to and support on a power vehicle in longitudinally remote relation to the reduction means for vehicle-powered advance of the harvester over a field of crops to perform a combined crop-collecting and crop-reduction operation, said harvester characterized in that the frame is inherently relatively flexible for flexing and return to normal as the ground wheels encounter varying ground contour during advance over the field, and said harvester being further characterized by a combined rotor and shear bar mount of rigid, self-contained construction having a frame-engaging area only a fraction of the size of the harvester frame and including means for affixing the mount to the frame solely in said area so as to isolate the mount from flexing of the frame; said mount including at one end thereof a rigidly included journal portion serving as the sole means for journaling the rotor and a supporting portion rigid therewith and extending radially from the journal portion alongside the rotational plane of the rotor knives and serving as the sole means for carrying the shear bar in cooperative relation to the rotor knives; said journal and supporting portions being free from shock- and force-transmitting connections to the frame except as said portions are parts of the mount, whereby a fixed relationship between the rotor knives and the shear bar exists unaffected by flexing of the frame.

2,729,257
SHOPPING, TRAVELLING, OR BEACH BAG
Werner Kepper, Mehlem-Godesberg, Germany
Application November 20, 1953, Serial No. 393,449
2 Claims. (Cl. 150—1.7)



1. A hand bag comprising a top portion and a foldable and extensible bottom portion, a first horizontal row of zipper scoops on the side of the bag adjacent the base of said top portion, a second horizontal row of zipper scoops adjacent the base of said bottom portion, and removable zipper fastener means for uniting said first and second rows of scoops upon folding of said bottom portion to bring the rows of scoops into fastening relationship.

2. A hand bag as in claim 1, further comprising false bottom flap means attached to an inner side of said top portion and stretchable over the folded bottom portion.

2,729,258
SILVER FLAT-WARE CASE
Mary Pentland, New York, N. Y., and Edwin B. Banner, Haddonfield, N. J., assignors, by mesne assignments, to Reeve & Mitchell Mfg. Co., Inc., New York, N. Y., a corporation of New York
Application May 23, 1951, Serial No. 227,856
9 Claims. (Cl. 150—52)



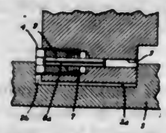
1. A silver flatware case comprising relatively form-retaining front and rear walls and relatively form-retaining separators intermediate said front and rear walls, said separators being formed of relatively form-retaining core members and a soft flexible core-facing fabric enveloping at least the upper portion and one side of said core member, and a soft flexible pocket-forming fabric affixed to the aforesaid core-facing fabric by vertical lines of attachment to form vertical pockets between such core-facing fabric and said pocket-forming fabric, with the upper edge of such pocket-forming fabric being below the top of the core member, and a case-closing member extending from the upper marginal portion of the rear wall, over the tops of said separators and extending to the front wall, and a closure-fastener intermediate said front wall and said case-closing member.

2,729,259
PNEUMATIC JACKET
Irving Abrams, Woodside, N. Y.
Application December 19, 1952, Serial No. 326,993
6 Claims. (Cl. 150—52)



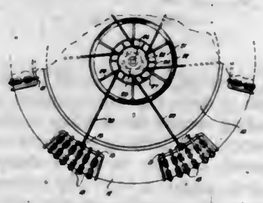
1. A removable and inflatable tubular jacket for baby bottles to maintain the temperature of the contents thereof and to prevent accidental breakage comprising a hollow body having concentrically disposed inner and outer spaced and elastic walls and top and bottom walls, the said inner and outer walls having connecting welds at predetermined areas and having a reduced top neck portion whereby said hollow body is applicable to a baby bottle over the top thereof and to substantially conform in shape therewith, a valve body communicating with the outer wall for inflating said hollow body whereby the inner wall becomes compressed against the surface of the bottle for frictional engagement therewith and the nipple of the bottle is exposed.

2,729,260
SCREW LOCKED BY DEFORMING PIN
William N. Matson, Fitchburg, Mass., assignor to General Electric Company, a corporation of New York
Application November 6, 1952, Serial No. 319,151
1 Claim. (Cl. 151—67)



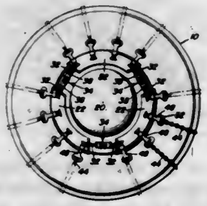
In combination with a first machine member defining a threaded hole, a threaded cylindrical member disposed in said threaded hole, the cylindrical member having an external thread extending the length thereof and a central axial cylindrical hole extending entirely therethrough, a cylindrical hole defined by the first member in alignment with said axial hole, and means for locking said cylindrical member relative to said first machine member, said means comprising a generally cylindrical locking pin member constructed of a harder material than said first machine member and cylindrical member, the pin member defining axially extending ribs having an outer diameter slightly greater than the diameters of the aligned cylindrical hole and axial hole defined by the first member and threaded cylindrical member respectively, the pin being driven into place with said ribs deformably engaging the walls of both said aligned holes, whereby the cylindrical member may be adjusted by appropriate rotation relative to the first machine member and then locked in said position by driving the ribbed pin through the hole in the cylindrical member and into the aligned hole in the first member.

2,729,261
RADIAL TENSIONING DEVICE
Ralph V. Rucker, Charleston, W. Va., assignor of one-fourth to Arch E. Strickland, one-fourth to Geo. D. Rucker, both of Clendenin, and one-fourth to Mark C. Strickland, Elkview, W. Va.
Application September 30, 1952, Serial No. 312,213
1 Claim. (Cl. 152—218)



A tension device for tire non-skid elements comprising a hub cap plate engaging means constituting a dished cup adapted to detachably engage the hub cap plate of a vehicle wheel, a resilient rim carried by said cup defining a cushion suction grip therefor and shielding said hub cap plate against injury from said cup, a drum journaled upon said cup and extending in line with the axis thereof and beyond said dished cup, flexible means connected to said drum and adapted to engage non-skid elements carried by a tire, said flexible means being adapted to be wound upon said drum, said flexible means being inclined outwardly from the non-skid elements and toward said drum to force said cup tightly against the hub cap as the flexible means is wound upon said drum, an end plate upon which the outer end of said drum is journaled, a plurality of bracing rods connected to said plate and to said cup for bracing said plate, and an actuating crank carried by said drum.

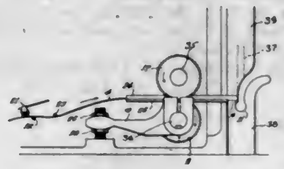
2,729,262
TIRE CHAIN
Edward W. Lohmiller, Elmhurst, Ill.
Application February 13, 1953, Serial No. 336,801
2 Claims. (Cl. 152—233)



1. In a wheel having a rim adapted to receive a tire and having tire retaining flanges at either side thereof, a segmental attaching ring on each side of the wheel having portions for engaging over its corresponding flange, one of said rings having peripherally spaced slots of greater dimension toward the center of the wheel than toward the periphery, the other of said rings having peripherally spaced slots of greater dimension toward the periphery of the wheel than toward the center, tire chains extending over the tire and having their opposite

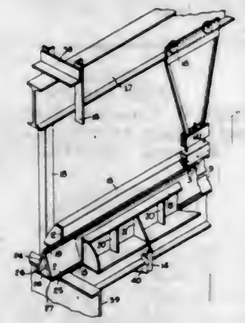
ends secured to corresponding rings through said slots, the ends of each of said chains terminating in a T-shaped member for interlocking with one of the slots and having a laterally offset end, and resilient L-shaped latches secured to said members for latching said members in said one ring.

2,729,263
MACHINE FOR FASTENING SAUSAGE CASINGS
Maynard J. G. Tipper, Oakland, Calif.
Application November 16, 1954, Serial No. 469,145
1 Claim. (Cl. 153—1)



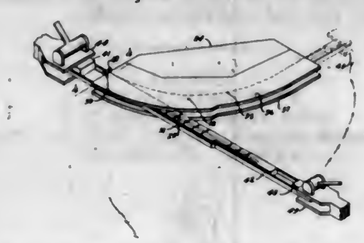
In a casing fastening machine used for sealing the ends of casings with a strip, the improvement comprising intermittent feeding means for feeding a continuous strip into a die cavity, a die defining a die cavity in which the casing is inserted, said die having a sharp cutting edge adjacent the strip feeder, a vertically reciprocating punch having a sharp cutting edge in register with the sharp die edge, a projecting tip on said punch serving as crimping means, said feeding means being adapted to feed a predetermined length of strip prior to an idle period, said cutting edges being adapted to cut the strip at the end of the feeding period, and said punch being adapted to deflect and guide said strip during the feeding stroke and around said casing in said cavity and then to squeeze and crimp said encircled casing.

2,729,264
APPARATUS FOR THE MANUFACTURE OF SUPPORT MEMBERS FROM SHEET METAL
William Herbert Smith, East Molesey, England
Application November 27, 1951, Serial No. 258,466
7 Claims. (Cl. 153—3)



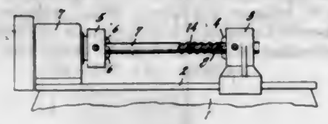
1. Apparatus for the manufacture from sheet metal of extensible centering, scaffolding and similar support members of substantially triangular section, comprising a support, a mandrel mounted on said support for fitting within a sheet metal blank of channel section, said mandrel having a main body portion of substantially triangular section, an expandable base comprising parts movable outwardly relatively to each other and a top member which can be raised and lowered relatively to said base, means pivotally mounted on said support on opposite sides of said mandrel for bending the sides of said blank into contact with the sides of the body of said mandrel, swaging rollers, and means on said support and movably supporting said swaging rollers above said mandrel for running said rollers along the edges of the blank to bend the edge portions of the blank over said top member in its raised position.

2,729,265
ARTICULATED METAL FORMING TOOL
Everett E. Jones, Wichita, Kans., assignor to Boeing Airplane Company, Wichita, Kans., a corporation of Delaware
Application December 20, 1951, Serial No. 262,511
6 Claims. (Cl. 153—32)



1. As a new article of manufacture, an articulated composite tool for aid in bending and shaping linear metal strips of channel and angle section in the planes of their webs, comprising: a plurality of cooperating pre-contoured solid block-like sections arranged end to end in closely spaced relation; a groove in each block-like section, all said grooves being disposed end to end; a non-elongatable elongate flexible metal member seated in and extending lengthwise through the grooves in all said sections; and solidified poured metal filling the groove of each section and embedding and holding a portion of said flexible member rigidly in each of said sections, those portions of the flexible member between the adjacent ends of each adjacent pair of said block-like sections serving to connect all sections together while permitting limited relative movement with respect to adjacent sections.

2,729,266
APPARATUS AND METHOD FOR MAKING SPIRALLY CORRUGATED METAL TUBES
Robert P. Humphrey, Kalamazoo, Mich., assignor to General Gas Light Company, Kalamazoo, Mich.
Application November 24, 1952, Serial No. 322,252
8 Claims. (Cl. 153—71)



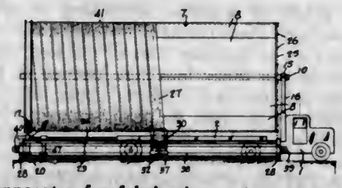
1. The method of making spirally corrugated tubes comprising the steps of providing a metal tube of substantially uniform diameter and wall thickness from end to end thereof, forming a plurality of angularly and uniformly spaced dimple-like indentations in the wall of the tube adjacent one end thereof and in approximately the same transverse plane, supporting a mandrel having an elongated cylindrical portion of uniform and of substantially less diameter than the interior diameter of the tube centrally within the tube, nonrotatably externally and internally supporting the tube adjacent but at the outer side of the indentations therein while permitting longitudinal movement of the end of the tube so supported, and interiorly and externally supporting the wall of the tube at its other end and rotating the tube in one direction.

2,729,267
MACHINE AND METHOD FOR MAKING EDGE EMBOSSED PAPER ARTICLE AND PRODUCT THEREOF
William M. Walton, Oshkosh, Wis., assignor to Hoffmaster Company, Inc., Oshkosh, Wis., a corporation of Wisconsin
Application July 16, 1952, Serial No. 299,151
6 Claims. (Cl. 154—1)



1. In apparatus for fabricating from a plurality of plies of relatively thin filmsy cellulosic tissue materials articles secured together by means of embossed marginal areas of substantial width which surround and completely enclose an unembossed central area, a pair of embossing rolls, said embossing rolls having edge embossing areas thereon extending along the end edges and said embossing rolls having circumferentially spaced transversely extending edge embossing areas whereby to provide in the articles said embossed marginal areas and unembossed areas surrounded by said embossed areas, said embossing rolls being cut away in the areas surrounded by said edge embossing areas and said cut away areas being filled in with strips of resilient material which lightly grip the tissue therebetween as it passes between said embossing rolls and means cooperating with said rolls to advance the webs under controlled tension whereby a central area is provided in the articles which is substantially smooth and free of wrinkles.

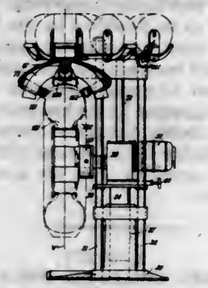
2,729,268
METHOD AND APPARATUS FOR ERECTING A FIBER REINFORCED PLASTIC STORAGE STRUCTURE
Dean C. Broughton and Erwin G. Dueringer, Milwaukee, Wis., assignors to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application December 20, 1954, Serial No. 476,307
6 Claims. (Cl. 154—1.8)



1. An apparatus for fabricating and erecting a storage vessel which comprises a movable platform, a sectionalized generally cylindrical mandrel mounted for rotation about the longitudinal axis thereof on said platform with the outer end of said mandrel extending outwardly beyond said platform, means for rotating said mandrel about said axis, means for winding a fibrous reinforcing strand on the rotating mandrel in a generally helical pattern and for coating the strand with a resinous material to form a cylindrical shell, a telescopic member connected to the platform and adapted to be extended outwardly from the platform beneath the outer end of the mandrel, supporting means associated with said telescopic member for rotatably supporting the outer end of the mandrel during rotation thereof, means connected to the platform for engaging the shell and tiliting the same upwardly about the outer end thereof to a substantially vertical position with said telescopic member adapted to be drawn inwardly toward the platform as the shell is tilted, and clamping means connected to the telescopic member for engaging the outer end of the shell and for moving the shell longitudinally as the shell is tilted upwardly, the outer end of the shell being moved inwardly to a position adjacent the platform to permit the shell to be subsequently positioned on a foundation.

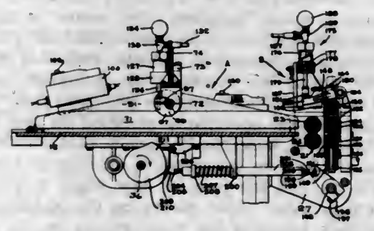
6. A method of fabricating and erecting a storage vessel comprising, assembling a plurality of generally arcuate panels into the form of a cylindrical mandrel, rotatably supporting the mandrel on a platform on a movable vehicle, rotating the mandrel about the longitudinal axis thereof, winding a fibrous strand on the rotating mandrel in a generally helical pattern, impregnating the strand with a resinous material to form a resin-bonded fiber reinforced cylindrical shell, tilting the shell upwardly about an end thereof while moving the shell longitudinally to position said end outwardly adjacent the platform, moving the vehicle to position said end of the shell over a foundation, and lowering the shell onto the foundation with the shell disposed in a vertical position.

2,729,269
MACHINE FOR RETREADING PNEUMATIC TIRES
Roger Antraigue, Paris, France
Application January 22, 1953, Serial No. 332,607
Claims priority, application France January 30, 1952
7 Claims. (Cl. 154—9)



1. In an apparatus for securing treaded raw rubber material to the casing of a tire, in combination, rotary core means insertable in the tire casing in engagement with the inner periphery thereof, a displaceable support supporting said core means, guide means guiding said support in the direction of the rotational axis of said core means, hydraulic ram means for displacing said support along said guide means, a frame supporting said guide means, and roller means carried on said frame adjacent said core means and rotatable on axes parallel to the axis of rotation of the core means.

2,729,270
PRESSURE SEALING APPARATUS
Donald E. Prenveille, Oakland, and Alvin H. Storch, Jr., Hayward, Calif., assignors to Food Machinery and Chemical Corporation, San Jose, Calif., a corporation of Delaware
Application March 24, 1954, Serial No. 418,438
22 Claims. (Cl. 154—42)



1. A pressure sealing apparatus comprising two opposed sealing members, means yieldably pressing one of

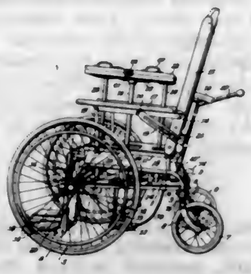
said sealing members toward the other with substantially unvarying force, and means operable to force said sealing members apart.

2,729,271
EXERCISER
Barbara Griffin Hayes, Santa Barbara, Calif.
Application December 11, 1952, Serial No. 325,358
3 Claims. (Cl. 155—17)



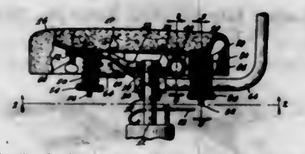
3. For exercising the arms and shoulders, the combination of a double cross arm frame and a tension spring; said double cross arm frame comprising: a vertical frame member adapted to be straddled by the legs of a user; a lower horizontal cross arm member extending from both sides of the vertical member and over which the user may place his legs; and an upper horizontal cross arm member adapted to be grasped by the hands of the user, whereby the user and double cross arm frame may be placed in vertical oscillation by a vertical pumping action of the user pulling upwardly with his arms on the upper cross arm member.

2,729,272
WHEEL CHAIR OR THE LIKE
Ralph T. Lidge and James W. Flexman, Chicago, Ill.
Application June 18, 1953, Serial No. 362,449
7 Claims. (Cl. 155—30)



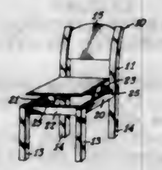
1. In a wheeled vehicle for invalids of the kind described, a frame provided with a wheel at each side and with a pair of wheels at one end swiveled on the frame, a vertically movable platform operatively mounted on the frame, hydraulic means including valve means for raising or lowering the platform, including means for guiding the same during its movement and also including operator-operated means for actuating the hydraulic means and valve means for controlling the position of the platform, a transfer seat operatively mounted on said platform member and movable thereover, complementally formed track means on the platform member and transfer seat for guiding the transfer seat when moved on the platform member, roller means on the transfer seat and operatively engaging the track means on the platform member for centering the same on the platform and preventing its displacement on the platform.

2,729,273
SWIVEL TILTING CHAIR
Earl F. Hamilton and William S. Hamilton, Columbus, Ind.
Application September 16, 1953, Serial No. 380,459
13 Claims. (Cl. 155—77)



8. A swivel chair, comprising in combination with a seat and a base having a vertical rod supporting said seat, a seat-supporting bracket rotatably carried by said rod and in fixed axial position thereon, said bracket including two rigidly interconnected sheet-metal members having horizontal, vertically spaced portions provided with aligned openings rotatably receiving said rod, a seat-supporting bar secured to the seat and extending transversely therebeneath, said bracket members having integral extensions of complementary shape clamped together in seat-supporting relationship with said bar.

2,729,274
ADJUSTABLE CHAIR
Anthony J. Boechetti and Paul A. Terry, Huntington Park, Calif., assignors, by direct and mesne assignments, of one-half to Herbert A. Huebner and Albert M. Herzig, jointly
Continuation of application Serial No. 623,646, October 22, 1945. This application August 30, 1951, Serial No. 244,297
11 Claims. (Cl. 155—91)



1. An article of furniture comprising an open frame having side bars, a seat normally resting on the frame, two toggle links set at opposite sides of the seat, each toggle link comprising a lower long link pivoted to the inside of a frame side bar and a shorter upper link pivoted to the underside of the seat, the seat adapted to be held in an elevated position by the longer links extending upwardly and outwardly and bearing against the frame bars and the shorter links extending horizontally inwardly from and holding the lower links in said elevated position.

2,729,275
FOLDING CHAIR WITH INDEPENDENT SEAT-FOLD
Erving B. Morgan, Benjamin J. Oom, and Gerald V. Spencer, Grand Rapids, Mich., assignors to American Seating Company, Grand Rapids, Mich., a corporation of New Jersey
Application February 18, 1955, Serial No. 489,048
1 Claim. (Cl. 155—142)

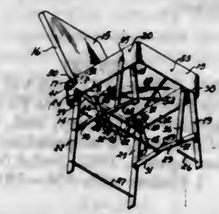
In a folding chair: spaced pairs of pivotally connected front and rear legs interrelatively movable to folded positions with the rear legs lying alongside the front legs and to unfolded inverted V-form positions; side arms pivotally connected to the front legs and extending both forwardly and rearwardly therefrom in the unfolded condition of the chair; links connecting the rear legs and the rearward parts of the side arms for effecting folding movement of the rear legs when the forward parts of the side arms are lifted, a seat support connecting the forward parts

of the side arms; a seat pivotally mounted at its opposite sides on the side arms intermediate the forward and rearward parts of said side arms whereby in the unfolded condition of the chair the seat is independently swingable



to a lowered position of use resting on the seat support and to a raised position of non-use, in either of which independently swung positions of the seat the chair is foldable by the application of a lifting force to the seat support.

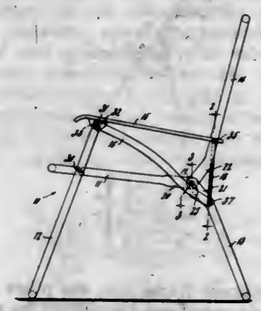
2,729,276
FOLDING CHAIR
Svata Volney, Long Island City, N. Y.
Application April 12, 1949, Serial No. 86,878
3 Claims. (Cl. 155—148)



2. A folding chair comprising in combination a seat including a seat plate and a supporting frame therefor; said supporting frame including a front and a rear flange and two side flanges forming an open casing with said seat plate; a backrest; a joint connecting said backrest to said seat; said backrest swingable around the rear flange to cover the casing; releasable locking means holding the backrest in operative position relative to the seat; a pair of rear legs pivotally attached to the seat within the casing near the rear flange; a pair of front legs pivotally attached to the seat within the casing near the front flange; said legs adapted to fit into the casing when folded substantially parallel to the side flanges; and releasable bracing means connecting each front leg with the opposite rear leg; said bracing means adapted to hold the legs in operative position and when released to permit their folding into the casing.

2,729,277
FOLDING CHAIR
Morton D. Rechler, New York, N. Y., assignor to Rexart Metal Industries Inc., Whitestone, N. Y., a corporation of New York
Application December 14, 1951, Serial No. 261,624
4 Claims. (Cl. 155—148)

2. A folding chair comprising a seat frame, rear leg frame, back frame, means for cooperatively pivoting the three frames at the rear of the chair enabling them to be folded compactly or opened for use, the back frame extending rearwardly and upwardly and the rear leg frame extending rearwardly and downwardly from the pivot means when the chair is open for use, a tension spring bridged between points respectively on the back frame and the rear leg frame spaced with respect to the pivot means, said spring being located in a position to the rear of the pivot means where it is adapted to hold back frame and the rear leg frame open when the chair is open for use, a front leg frame pivoted to the seat frame with its upper portions extending above the seat frame, arm rests pivoted to the back frame, the forward ends of the arm rest being pivoted to the front leg frame



above the position of the seat frame, actuating link respectively connecting the upper portions of the front leg frame to the respective sides of the rear leg frame, and a stop on each side of the chair resting upon said respective links when the chair is open for use under tension of the spring.

2,729,278
SLIP COVER
Theodore M. Warnach, Baltimore, Md.
Application November 25, 1952, Serial No. 322,378
2 Claims. (Cl. 155—182)

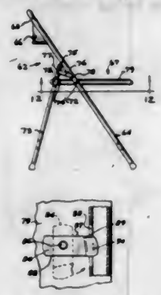


1. In a slip cover for furniture, a seat panel, side panels joined to said seat panel, back panels interconnected to said seat panel by said side panels and defining open portions along the front and rear of the furniture back, closure means extending over the back of said furniture and closing said open portions, said closure means comprising a front and rear closing flap, resilient means interconnecting the back panels at the front of said furniture back, and additional resilient means secured to said back panels at the rear of the furniture back, said additional resilient means also being secured to said rear closing flap, said resilient means providing for adjustment of said back panels when said slip cover is applied to the furniture to be covered.

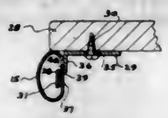
2,729,279
FOLDING CHAIR SEAT FASTENER
Willard G. Axtell, Denver, Colo., and Darold T. Beggs and Diamond A. Amorose, Lincoln Park, Mich., assignors to Shwayder Brothers, Denver, Colo., a corporation of Colorado
Application March 2, 1953, Serial No. 339,758
2 Claims. (Cl. 155—196)

1. In a folding chair having a pair of front legs, a pair of rear legs and a seat between said pairs of legs and pivotally mounted thereon, said seat comprising a hollow tubular frame lying in a single plane, said frame having a plurality of spaced horizontally extending coplanar slots

formed in its inner wall, a platform positioned upon said frame, and a plurality of locking clips pivotally secured upon the under surface of said platform adjacent said frame, each clip being vertically offset below said platform extending horizontally through and retainingly positioned in an adjacent frame slot, the offset end of each clip lying in a plane inclined laterally to the plane of said clip for wedging engagement with a portion of said frame forming the top boundary of the slot for drawing up said platform into tight engagement with said frame.



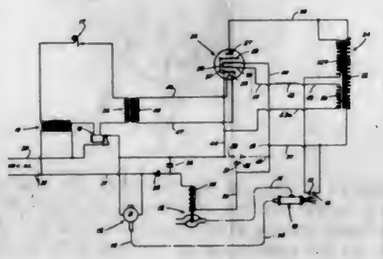
2,729,280
CHAIR SEAT FASTENER
John B. Adler, Grosse Ile, Mich., assignor to Shwayder Brothers, Inc., Denver, Colo., a corporation of Colorado
Application March 19, 1954, Serial No. 417,280
1 Claim. (Cl. 155—196)



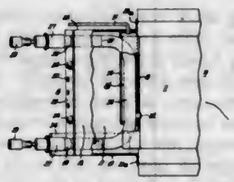
In a folding chair having a pair of front legs, a pair of rear legs and a seat between said pairs of legs and pivotally mounted thereon, said seat comprising a hollow tubular frame lying in a single plane, said frame having a plurality of spaced horizontally extending coplanar slots formed in its inner wall, a platform positioned upon said frame, and a plurality of locking clips secured upon the undersurface of said platform adjacent said frame, each clip being vertically offset below said platform extending horizontally through and retainingly positioned in an adjacent frame slot in operative engagement with a portion of said frame forming the top boundary of the slot, and extending downwardly upon the interior of said frame adjacent its inner wall.

2,729,281
BURNER IGNITION AND FUEL CONTROL SYSTEM
Allan W. Lindberg, Webster Groves, and James C. Rombach, Rock Hill, Mo., assignors to Missouri Automatic Control Corporation, St. Louis, Mo., a corporation of Missouri
Application October 8, 1951, Serial No. 250,375
1 Claim. (Cl. 158—28)

In a burner control system for pressure type oil burners, a source of electrical power, electrically operated fuel supply means, an electrically operated blower for supplying air for atomization of the fuel, and a high frequency ignition spark generating system including an electron discharge tube which when conducting provides ignition spark and effects energization of said fuel supply means, said tube including an indirectly heated cathode, a cathode heater, a control grid and a plate, said spark generating system further including a plate to cathode circuit for connecting said tube across said source of power, which circuit includes in the plate side thereof an ignition transformer primary winding and said fuel supply means, means forming an inductive feed-back from said transformer winding to said tube control grid to effect oscillation, a pair of spaced spark electrodes, an ignition transformer secondary winding and means connecting said electrodes across said secondary winding, and means including a temperature responsive switch for simultaneously connecting and disconnecting said blower, said plate to cathode circuit, and said cathode heater with said source of power, whereby operation of the blower and cathode heater is instantaneous upon closure of said temperature responsive switch but operation of the fuel supply means is delayed until said tube cathode is heated to the point of emission.

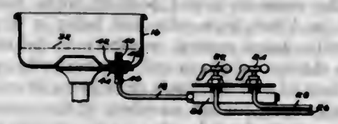


2,729,282
ELECTRICALLY OPERATED DEVICE FOR STARTING COMBUSTION IN LIQUID FUEL BURNERS
Thomas H. Lennox, New Albany, Ind., assignor to General Electric Company, a corporation of New York
Application April 9, 1952, Serial No. 281,317
1 Claim. (Cl. 158—28)



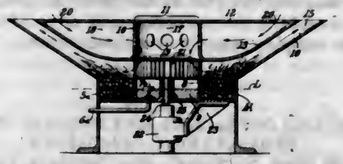
A liquid fuel burner comprising means forming a main combustion chamber, means forming an ignition chamber located beside said main combustion chamber and communicating therewith by means of a narrow horizontally disposed slit in the side of said main combustion chamber, a sheathed resistance type electrical igniter positioned in said ignition chamber with at least a portion thereof generally parallel to and disposed adjacent and slightly higher than said slit, connections to a source of electric current for energizing said igniter to cause it to become heated, an elongated tray member supported in said means forming the ignition chamber in poor heat conducting relationship thereto and located below said igniter to be heated thereby, said tray member being located at approximately the same level as said slit and generally parallel and closely adjacent thereto, means for draining liquid by gravity flow from said tray member into the said main combustion chamber, means for discharging a stream of liquid fuel on to said tray member after the tray member has become heated thereby to vaporize said fuel and ignite the resulting vapor, and means for providing during operation of said liquid fuel burner a continuous stream of air flow through said ignition chamber past said igniter and over said tray member for blowing the ignited vapor through the said slit into the said main combustion chamber.

2,729,283
EXPLOSION PROOF OIL BURNER
Alcide Edward Mathey, Allston, Mass., assignor to Scully Signal Company, Cambridge, Mass., a corporation of Massachusetts
Application January 19, 1952, Serial No. 267,219
7 Claims. (Cl. 158—40)



7. In combination with an oil burner, a reservoir for supplying oil to said burner, and a supply line connecting said burner and said reservoir and having its entrance end substantially vertical and terminating a short distance above the bottom of said reservoir, means for preventing an explosion in said burner comprising, an elongated element provided with an axial passageway fitting within said entrance end and forming with said entrance end an annular passageway communicating with the interior of said supply line, one of said passageways terminating within said reservoir at a level higher than the level at which the other of said passageways terminates, the passageway terminating at the higher level being of larger capacity than the passageway terminating at the lower level, the passageway terminating at the lower level being of such lesser capacity that when the oil level in the reservoir drops below the level at which said passageway of greater capacity terminates, the oil supply to said burner will be reduced to a degree that will permit the temperature of said burner to fall while said burner is still in operation to a temperature below that capable of causing appreciable combustible vaporization of said oil.

2,729,284
OIL BURNING APPARATUS
George G. Spratt, Clinton, Conn.
Application June 29, 1950, Serial No. 171,128
6 Claims. (Cl. 158—91)

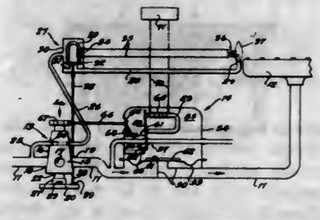


1. In an oil burner, an annular trough filled with refractory material, the outer wall of the trough being extended upwardly well above the inner wall; means for feeding oil into the trough to keep the refractory material saturated; a coaxial hollow pre-heater element disposed above the trough and having a surface which is substantially co-extensive with and complemental to the upwardly extended wall of the trough, and which, in conjunction with said wall, provides an annular flue for traverse by and escape of combustion gases from the burner; and a coaxial rotating fan horizontally arranged immediately over the inner wall of the trough for drawing air from the exterior through the hollow of the pre-heater element and directing it over the oil saturated material into the flue.

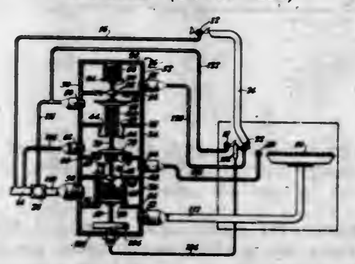
2,729,285
SHUT-OFF VALVE SYSTEM
William A. Ray, North Hollywood, Calif., assignor to General Controls Co., Glendale, Calif., a corporation of California
Application May 22, 1951, Serial No. 227,688
12 Claims. (Cl. 158—129)

1. In a valve system which comprises a pair of valves fluidly interconnected in series so that closing of either valve effects obstruction of flow through the system, one of the valves being automatically operable for normal control of said flow and including means biasing it to closed position, the other of the valves being normally open and manually operable to closed position to effect shut-off of said flow: the combination therewith of means, arranged to act independently of said biasing means and including means mechanically operable by operation of said manually operable valve, for effecting closing of said automatically operable valve when the manually operable valve is operated to closed position.

6. In a gas-burner control system: a burner; a conduit for supplying gas to said burner; a pair of valves in said conduit for controlling flow therethrough, said valves being fluidly interconnected in series so that closing of either valve effects obstruction of supply of gas to said burner; one of said valves being of the power-operated type and including means biasing it to closed position; means responsive to a condition resulting from the operation of said burner for controlling the operation of said power-operated valve; the other of said pair of valves being of the manually-operable type; and means, arranged to act independently of said biasing means and including a mechanical connection between the valves, so constructed and arranged that operation of said manually-operable valve to closed position also effects closure of said power-operated valve regardless of the requirement of said condition responsive means.



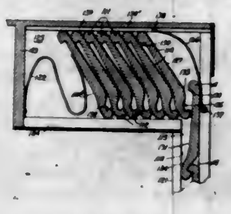
2,729,286
SAFETY CONTROL AND IGNITION APPARATUS FOR FUEL BURNERS
Charles K. Strobel, Pittsburgh, Pa., assignor to Robertshaw-Fulton Controls Company, Greensburg, Pa., a corporation of Delaware
Application October 11, 1950, Serial No. 189,584
5 Claims. (Cl. 158—133)



1. In a main fuel burner control and ignition system having a standby pilot burner and a flash pilot burner, a control device comprising a casing having fuel outlets for a main burner, standby pilot burner and flash pilot burner respectively and a plurality of fuel inlets, a plurality of apertured valve seats in said casing interposed one between each of said inlets and outlets respectively, a valve assembly in said casing including a plurality of aligned valve elements connected together for movement relative to said valve seats substantially as a unit for controlling fuel flow to said outlets respectively, and thermally responsive means for moving said assembly between controlling

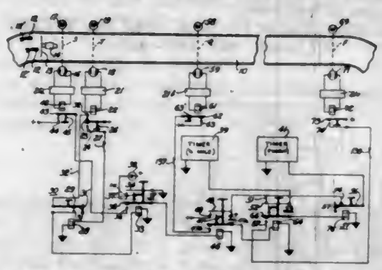
positions, said valve elements being positioned relative to each other and to said seats to prevent fuel flow to said main and standby burner outlets while permitting fuel flow to said flash burner outlet in one position of said assembly and to permit fuel flow to said main and standby burner outlets while preventing fuel flow to said flash burner outlet in another position of said assembly.

2,729,287
SHUTTER, WINDOW, OR THE LIKE
Richard Goldner, Sydney, Australia
Application May 12, 1951, Serial No. 225,960
Claims priority, application Australia May 15, 1950
14 Claims. (Cl. 160—33)



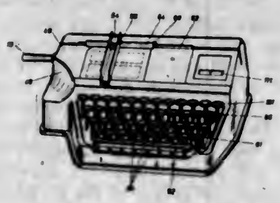
1. A shutter comprising spaced, parallel shutter guides, several separate shutter slats slidable within the space bounded by these guides, a magazine for disconnected slats adjoining one end of the shutter guides at an angle thereto, a driving arrangement whereby slats inside the magazine are urged towards said guides, the slats being provided at their opposite edges with engaging elements which project to different sides thereof in directions transverse to the general plane of the slats and which edgewise connect adjoining slats whilst in said space, the shutter further comprising deflecting means disposed near the station of slat transition between magazine and guides, said deflecting means causing angular deflection towards the magazine of the disconnected edge of a slat in transition.

2,729,288
STARTING MECHANISM FOR TIMER
Ira M. Malott, Louisville, Ky.
Application October 3, 1952, Serial No. 313,005
4 Claims. (Cl. 161—18)



1. Apparatus for starting and stopping a timer for timing a horse race in which the contestants are preceded across the starting line of the track by a starting gate propelled by a vehicle, said apparatus comprising a first light source and photo cell so located that the light source projects a beam across the track at the starting line onto said cell, an amplifier controlled by said photo cell and a relay controlled thereby having normally closed contact members which are held in open position when the light beam impinges on the photo cell; a second light source and photo cell so located that the light source projects a beam of light across the track on a line slightly in advance of the starting line onto said second photo cell, said second light beam being at an elevation to be interrupted by the starting gate, an amplifier controlled by said second photo cell and a relay controlled by said second amplifier and having normally open and normally closed contact members, the normally open contact members being closed when the light beam energizes said second photo cell; a first latch relay provided with a coil and normally open contact members and a latch for latching the same in closed position when said coil is energized, said first latch relay coil being in circuit with the normally closed contact members of the relay controlled by the second photo cell, the normally open contact members of said first latch relay being in circuit with the normally open contact members of the second photo cell relay; a second latch relay having a coil in circuit with the contact members of the first latch relay and the normally open contact members of the second photo cell relay, normally open contact members of the second latch relay in circuit with the normally closed contact members of the first photo cell relay, and a latch for holding said normally open contact members closed when its coil has been energized; a third latch relay having normally open contact members, a coil in circuit with the contact members of the first photo cell and the second latch relays respectively whereby the coil of the third latch relay is energized when the light beam impinging on the first photo cell is interrupted by the leading contestant, thereby closing the contact members of the third latch relay, a latch for holding said contact members closed; a timer in circuit with the normally open contact members of said third latch relay for timing the race from the starting line to the finish line, said timer starting when the first light beam is interrupted by the leading contestant; a timer stopping relay having normally closed contact members in series with the starting circuit of the timer; a finish line light source and photo cell so located that the beam crosses the track at the finish line and impinges on said photo cell, an amplifier controlled by said finish line photo cell, a relay controlled by said finish line photo cell and having normally closed contact members in circuit with the timer stopping relay coil, the contact members of the finish line relay closing when the light beam at the finish line is broken by the leading contestant, whereby the coil of the timer stopping relay is energized and the timer stopped, and means for latching the timer stopping relay in energized position.

2,729,289
KEYBOARD OPERATED MULTI-DECK RECORD PERFORATING MACHINES
Michael Maul, Schwabach, near Nurnberg, Germany
Application November 12, 1952, Serial No. 319,987
Claims priority, application Germany November 17, 1951
3 Claims. (Cl. 164—112)



1. In a punching machine for multi-deck hole combinational record cards in which each deck comprises a row of adjacent record columns, a punching mechanism and means for feeding the card column by column past said punching mechanism with the die of said punching mechanism disposed above the visible side of the card and the punches below the card, said punching mechanism including for each record deck a separate set of punches for the perforation of a single record column, the various sets of punches being arranged in a row transversely of the feeding direction of the card, a set of controlling bars under the punches for a single set of punches, a carrier for said controlling bars and a bearing guide for said carrier, said carrier being movable as a unit together with the controlling bars on said bearing guide in the direction of said row of punches, manually operable deck selection means for positioning said carrier and therewith the controlling bars in operative position with respect to any one of said sets of punches, a set of key levers common to all said sets of punches and co-operating with said single set of controlling bars in each deck selection position of the carrier, said controlling bars serving at the same time as punch selector bars as well as translator bars for translating the actuation of the key lever into a combinational control of said punches, and power driven punch actuating means effective upon actuation of any of said key levers for actuating said punches by means of said controlling bars.

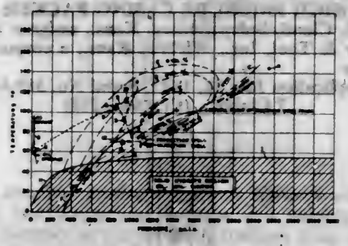
2,729,290
MULTI-DECK RECORD PERFORATING MACHINES
Michael Maul, Schwabach, near Nurnberg, Germany
Application November 12, 1952, Serial No. 319,988
Claims priority, application Germany November 17, 1951
5 Claims. (Cl. 164—112)



1. In a punching machine for multi-deck hole combinational record cards having a plurality of adjacent record columns in each deck, a card bed, punching means in said card bed and means for feeding the card on said card bed column by column past said punching means, a single set of key levers common to all decks and power driven punch actuating means rendered effective upon actuation of any of said key levers, the punching means comprising for each deck a row of punches for a single record column and the associated matrix, the rows of punches being arranged in alignment beneath the card in said card bed whereas the matrix is arranged above the card so as to leave the card visible with the exception of the portion covered by the matrix, a separate set of controlling bars for each row of punches including a controlling bar for each punch, said controlling bars being displaceable in longitudinal direction transversely of said row of punches below the same and adapted to establish upon displacement an operative connection between said punch actuating means and the associated punch so as to serve as punch selector bars, and said controlling bars being also provided as translator bars for translating a key actuation into a combinational control of said controlling bars, all sets of controlling bars being under the control of said single set of key levers common to all sets of controlling bars, and deck selection means for selecting any one of said sets of controlling bars for the operative connection between the associated set of punches and the punch actuating means.

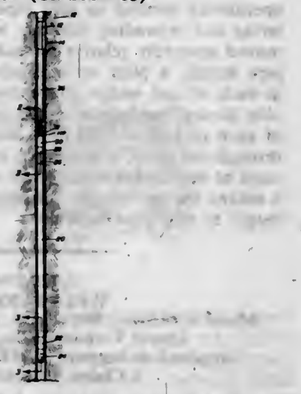
2,729,291
SEPARATING CO_2-PETROLEUM MIXTURES
Fern B. Haverfield, Houston, Tex., assignor to Continental Oil Company, Ponca City, Okla., a corporation of Delaware
Application March 22, 1952, Serial No. 278,001
6 Claims. (Cl. 166—7)

6. A process for the recovery of normally liquid hydrocarbons from a high pressure well effluent comprising a major proportion of CO_2 and a minor proportion of petroleum hydrocarbons, a dominant portion of which well effluent is in a liquid phase, said process comprising the steps of shifting the phase equilibrium of said liquid phase to vaporize therefrom sufficient of its CO_2 content to leave a liquid phase of predominantly petroleum hydrocarbons containing less than 40 liquid volume per cent dissolved CO_2 by raising the temperature of the well effluent to between about 95 to about 110° F. while reducing the pressure to between about 750 to about 1000 p. s. i. a.



removing said liquid phase, reducing the pressure on the predominantly petroleum hydrocarbon liquid phase to about atmospheric to vaporize therefrom essentially adiabatically substantially all of the CO_2 dissolved therein to thus recover the normally liquid hydrocarbons, compressing the separated gaseous CO_2, cooling the compressed gaseous CO_2 in heat exchange relation with the well effluent to supply thereto the aforesaid initial heat and to liquify the CO_2, and returning the liquified CO_2 to an input cycling well.

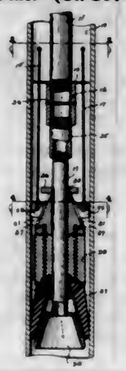
2,729,292
BAILER
Thomas E. Hinson, Corpus Christi, Tex.
Application February 17, 1953, Serial No. 337,317
6 Claims. (Cl. 166—63)



1. A bailer comprising an elongated substantially tubular body, a head mounted on one end of said tubular body, a frangible seal sealing the bore of said tubular body in proximity to said head, said head having inlet passages therein, a ball valve in said head, a firing chamber mounted in said body at the opposite end from said head, a breech block mounted on said firing chamber, a cylinder mounted on said breech block, said breech block having a bore communicating said cylinder with said firing chamber, a flexible diaphragm interposed between said breech block and said firing chamber, a firing pin slidably mounted in the bore in said breech block, said firing pin engaging said diaphragm and extending into said cylinder, a cartridge for rupturing said frangible seal mounted in said firing chamber and aligned with said frangible seal, means connected with said diaphragm and arranged to contact said cartridge when said diaphragm is flexed in order to fire the cartridge, a plunger

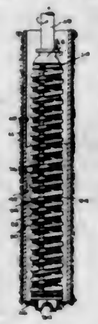
slidably mounted in said cylinder, a frangible member retaining said plunger out of engagement with said firing pin, said plunger and said firing pin being in alignment, and means operable to rupture said frangible member and project said plunger against said firing pin to thereby move said pin against said diaphragm to flex the latter as aforesaid.

2,729,293
HIGH PRESSURE CASING PACKER
Robert E. Cloud, Independence, Kans., assignor to Cloud Packer & Tool, Inc., Wichita, Kans., a corporation of Kansas
Application July 22, 1953, Serial No. 369,645
7 Claims. (Cl. 166—118)



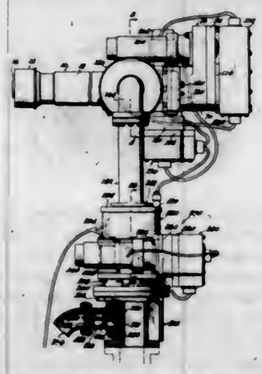
1. In a device of the class described, a pipe section, a wedge slip expander slidably mounted on said pipe section, a plurality of wedge slips slidably mounted on said wedge slip expander, an inverted resilient cup operatively secured to said wedge slip expander, a bell member operatively secured to said pipe section capable of entering and expanding said cup when said pipe section is moved upwardly relative to said wedge slip expander, a pipe length, a plate on said pipe length, a rod secured to each of said wedge slips extending upwardly and slidably through said plate, a stop member on the upper end of each of said rods to limit any movement of the rods through the plate, a means for limiting the sliding movement of said wedge slips on said wedge slip expander, and a means for operatively detachably connecting said pipe length to said pipe section.

2,729,294
WELL SCREEN
Mozel A. Adams, Rayne, La., assignor of one-half to Carrol Vernon Radke, Jennings, La.
Application August 7, 1953, Serial No. 372,999
1 Claim. (Cl. 166—231)



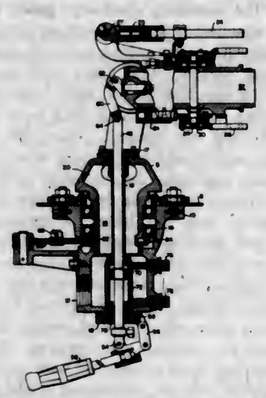
A well screen comprising an elongated metal strip having oppositely directed lateral flanges along its side edges and closed slots of predetermined width spaced apart longitudinally thereof, said strip being spirally wound to tubular form with the oppositely directed flanges on the contiguous edges of adjacent coils disposed in opposed relationship, and at least one strip of solder material bonded to and extending longitudinally of said body to releasably hold the coils of said spirally wound strip in adjusted position relative to each other, a bottom plate marginally secured to an end of said screen body and having apertures therein, a foot plate secured to said bottom plate in spaced and substantially parallel relationship thereto and having lugs projecting from the side thereof remote from said bottom plate, a flapper plate disposed between said bottom plate and said foot plate, and spring means connected to said flapper plate and resiliently urging the latter to closing relationship to the apertures in said bottom plate.

2,729,295
REMOTE CONTROL FIRE-FIGHTING TURRET AND NOZZLE
Theodoric B. Edwards, Alexandria, Va.
Application February 20, 1953, Serial No. 338,173
20 Claims. (Cl. 169—25)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A fire-fighting apparatus comprising, in combination, a nozzle for receiving fire-extinguishing liquid from a supply thereof and directing the liquid onto a fire, mounting means for the nozzle operable for effecting a selected directional adjustment for the nozzle in both vertical and horizontal directions, a conduit for liquid mounted in the nozzle and spaced from the interior of the nozzle for defining a passage for liquid intermediate the conduit and nozzle, both the conduit and the passage communicating with the supply of liquid for conveying liquid through the nozzle, adjustable slide valve means in the nozzle mounted on the conduit and in the said passage for selectively controlling flow of liquid through the conduit and passage, mechanism for adjusting the said slide valve means relative to the nozzle and conduit, a first motor connected to the said adjusting mechanism for driving the latter, a second motor for turning the mounting means for the nozzle for directionally adjusting the nozzle horizontally, transmission mechanism connecting the second motor and mounting means for rotating the latter, a third motor for vertically adjusting the nozzle, transmission mechanism connecting the third motor to the nozzle, each of the said motors having a split field for enabling a selected reversal of direction of operation of each motor for reversing direction of movement of the slide valve, the mounting means for the nozzle, and the elevation of the nozzle, each of the adjusting mechanisms for the slide valve and the transmission mechanisms connecting the second motor to the nozzle-mounting means, and the transmission mechanism connecting the third motor to the nozzle for elevating the nozzle, including control instrumentalities for controllably limiting the movements of the slide valve, the mounting means for the nozzle and vertical movements of the nozzle in reverse directions, a common source of electrical current for all of the aforesaid motors, means connecting the source of current to the split fields of each motor in independent circuits, a common operating station for the motors at a remote location relative to the mounting means for the nozzle, and means at the operating station and common to all of the motor circuits for selectively energizing the circuits from the common source of current for operating selected motors in a selected direction for producing selected adjustments of the nozzle and of the character of liquid discharge from the nozzle.

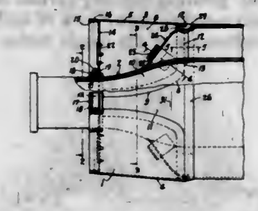
2,729,296
HYDRAULIC TURRET CONTROL
Gordon T. Gurney, Worcester, Mass., assignor to Rockwood Sprinkler Company, Worcester, Mass., a corporation of Massachusetts
Application September 24, 1954, Serial No. 458,146
5 Claims. (Cl. 169—25)



1. A fire fighting turret comprising a frame, a body member, means for mounting the body member for rotation in azimuth, a nozzle member journalled about an axis in the body for rotation in elevation, communicating liquid passages in the body member and nozzle member, a control rod extending along the azimuth axis, a link connecting the control rod to the nozzle at a point displaced from the elevation axis of the nozzle, a handle connected with the control rod and the frame for independently turning the body in azimuth and the nozzle member in elevation by means of the control rod, hydraulic means to effect control of the elevation of the nozzle by vertical displacement of the control rod, and hydraulic means for rotating the body in azimuth.

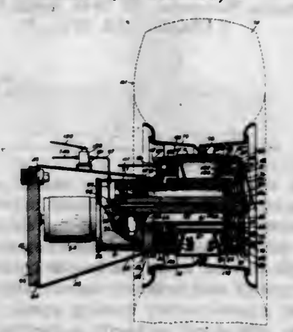
2,729,297
PROPELLER CUFF
Adolph E. Felt, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application August 1, 1951, Serial No. 239,699
3 Claims. (Cl. 170—159)

1. In combination with a propeller blade of airfoil section, a cuff carried by said blade and comprising a pair of hollow cuff members mounted on the shank of the blade to complement the airfoil contour of said blade, each of said members being formed of a face surface and a camber surface joined together at their outward edges with the inner edges of the face and camber surfaces of each member disposed astride the shank and disposed generally tangentially to the face and camber surfaces of the shank, and with the inner edges of the face and camber surfaces of each member spaced in a chordwise direction from the longitudinal center line of the corresponding face and camber surfaces of the shank, each member having an open end portion facing inboardly of said blade, a closure for the open end portion



of each member, reinforcing means disposed within each member and connecting the face and camber surfaces of said member to prevent said surfaces from spreading apart during rotational service of the blade, and bonding means for flexibly securing said members to the shank of said blade with said members being out of contact with said shank.

2,729,298
WHEEL MOUNTED MOTOR AND AIR-OPERATED CLUTCH WITH ELECTRICAL CONTROL THEREFOR
Robert G. Le Tourneau, Longview, Tex., assignor to R. G. Le Tourneau, Inc., Peoria, Ill., a corporation of California
Original application September 11, 1950, Serial No. 184,226. Divided and this application November 24, 1951, Serial No. 258,063
7 Claims. (Cl. 180—60)

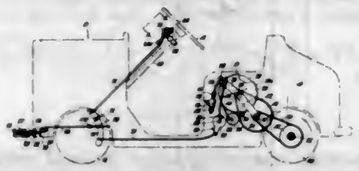


1. A wheel drive unit for vehicles, comprising: a gear box supported from the vehicle by a frame, an electric motor attached to and driving said gear box, a stationary hollow axle projecting laterally from said frame, a wheel journaled about said axle, a spindle extending through said axle and one end of said spindle engaging said gear box in driven relation, a clutch support attached to the other end of said spindle and driven therewith, an air clutch between said wheel and clutch support to impart rotation to the wheel when said air clutch is engaged, a solenoid air valve near said frame and dual function electric control means to permit simultaneous excitation of said valve and motor.

2,729,299
VEHICLE POWER TRANSMISSION AND CONTROL THEREFOR
Oscar C. Rink, Liberty, Mo., assignor to Small Cars, Inc., Kansas City, Mo., a corporation of Missouri
Application March 10, 1952, Serial No. 275,738
4 Claims. (Cl. 180—83)

3. In a wheeled vehicle, a power transmission mechanism including a movable control member having "for-

ward" and "reverse" positions and a "neutral" position intermediate said first two positions, spring means connected to said member and always urging same toward "neutral" position, a toggle having one end hinged to said member and the other end hinged to turn about a fixed center, said toggle being partially folded when said member is in "neutral" position whereby further folding of the toggle moves said member toward one of said first two positions and straightening of the toggle moves the member



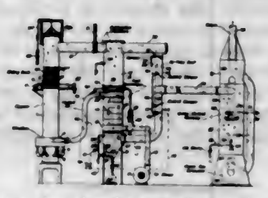
toward the other of said first two positions, an over-center stop for releasably locking the toggle in substantially straightened condition, a manually operable lever connected to said toggle for folding and unfolding same, a bumper yieldably mounted on the vehicle, and a thrust element operatively connected to said bumper and said toggle for applying a thrust on the toggle in a direction tending to fold same responsive to yielding of the bumper as a result of impact thereof with an obstacle in the path of the vehicle.

2,729,300
WATER BORNE MEANS FOR MAKING SEISMIC SURVEYS
Le Roy C. Paslay, George M. Pavey, Jr., and Frank P. Wipff, Dallas, Tex., assignors to Marine Instrument Company, Dallas, Tex.
Application November 29, 1949, Serial No. 129,896
9 Claims. (Cl. 181—.5)



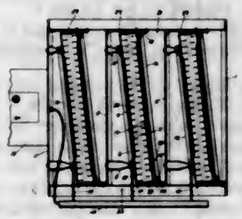
1. In a waterborne system for seismic prospecting for geological structures disposed beneath a body of water, in combination, a positively buoyant elongated flexible streamer having a plurality of detecting devices disposed at intervals therein, a flexible lead-in cable connected to the head end of said streamer for effecting a towing connection to a continuously moving vessel, means on the vessel for paying out suddenly a predetermined length of said cable while the vessel is moving along a course, a depressor connected to said cable at the head end of the streamer for maintaining the head end of the streamer near the bottom while the streamer is being towed, said depressor having sufficient mass to anchor the head end of the streamer as the length of cable is payed out, a plurality of cylindrical elongated negatively buoyant hydrofoil devices movably suspended by one end thereof at intervals from the streamer for maintaining the streamer in tension while the head end thereof is anchored, each of said hydrofoil devices tilting to a planning position such that the streamer is straight throughout the length thereof while being towed and the hydrofoil devices pivot to a more nearly vertical position while the streamer is anchored whereby the detecting devices disposed within the portions of the streamer adjacent the hydrofoil devices slowly descend while the detecting devices disposed within the intermediate portions of the streamer slowly rise within the water, and a flexible weighted drogue in continuous contact with the bed of the body of water and connected to the tail end of said streamer for stabilizing the streamer and for applying a continuous tension to the trailing end thereof.

2,729,301
CUPOLA WASTE GAS HEAT EXCHANGE AND PURIFYING SYSTEM
Regner A. Ekstrom, Jr., Markham, Ill., assignor to Griddle Corporation, Markham, Ill., a corporation of Illinois
Application March 19, 1953, Serial No. 343,301
3 Claims. (Cl. 183—6)



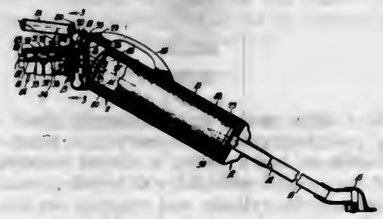
2. Apparatus for simultaneously cooling and purifying the discharge gases from a cupola and for preheating air being charged thereto, which comprises in combination, a separate confined combustion chamber connected with the upper portion of said cupola and having fuel inlet means connected thereto, a heat exchange section connecting with and positioned below said combustion chamber suitable for receiving the resulting discharge gases and entrained material in a downward flow, a by-pass conduit from said combustion chamber and connected with centrifugal particle separating means, fluid inlet and spraying means connecting with the interior of said by-pass conduit, an air inlet conduit connected with said heat exchange section and a heated air conduit connected between said heat exchange section and said cupola whereby air passing in indirect heat exchange relationship with the hot discharge gases from the cupola may be pre-heated prior to being introduced into the latter, a spraying zone connected with and positioned below the outlet end of said heat exchange section whereby discharge gases leaving the latter pass in a downward direction into the spraying zone, fluid inlet and spraying means connected with the interior of said spraying zone, slurry outlet means from the latter, conduit means for cooled and sprayed discharge gases from said spraying zone connected with said by-pass conduit, flow control means positioned within said by-pass conduit and within the cooled gas discharge conduit, temperature sensitive means in said heated air conduit to said cupola, automatic regulating means connecting said temperature sensitive means to said flow control means in said conduits, whereby to control flow of discharge gases through said heat exchange section, and conduit means connecting said particle separating means with an outlet stack.

2,729,302
ELECTROSTATIC FILTER
Ronald G. True, Louisville, Ky., assignor to American Air Filter Company, Inc., Louisville, Ky., a corporation of Delaware
Application February 11, 1949, Serial No. 75,885
20 Claims. (Cl. 183—7)



1. An electrostatic filter comprising: an air flow housing having an air cleaning chamber adapted to receive a dielectric filter cell in position to clean the air passing through the chamber; a pair of electrostatic cell-charging grids of opposite electrical sign arranged within said chamber, one on each side of the space provided for said cell; means mounting said grids on said housing for movement relatively toward and away from each other to grip and release a cell arranged between them, said mounting means including means for electrically insulating one grid from the other; and means for connecting the grids to an electrical supply line to impose a difference of electrical potential between them.

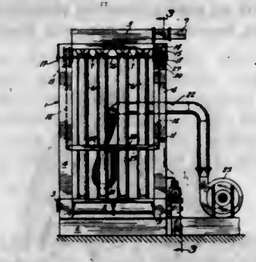
2,729,303
VACUUM CLEANER
Kenton D. McMahan, Scotia, N. Y.
Application February 3, 1951, Serial No. 209,277
5 Claims. (Cl. 183—37)



1. A vacuum cleaner comprising a rigid casing for a dirt separator adapted to extend at an angle to the floor when said cleaner is employed for cleaning near the floor level, means for securing a tubular connection for a cleaning tool to the forward inlet end of said casing, a coaxial fan and motor unit mounted at the rear outlet end of said casing with its axis extending at an acute angle to the casing axis, at least a portion of the axis of the fan and motor unit along said unit being located below said casing axis, and said angle being such as to cause the axis of said unit to extend substantially horizontal in floor cleaning position of said cleaner, the heaviest part of the cleaner exclusive of tubular connections and of cleaning tools at the forward end of said casing being the fan and motor unit, and the center of gravity of the cleaner exclusive of tubular connections and of cleaning tools at the forward end of said casing being in the region of the casing near its rear outlet end, said cleaner being light enough to permit its operation conveniently as a portable hand device above the floor level, and handle means for said cleaner comprising a primary part located above the fan and motor unit and extending in a direction substantially parallel to the axis of the motor and fan unit and at an acute angle to the casing axis to permit convenient manipulation of the cleaner as a floor cleaner and a secondary part on the top of said casing approximately over said center of gravity to permit convenient manipulation of the cleaner as a portable hand device.

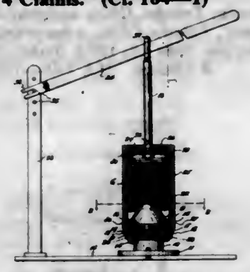
2,729,304
CLEANING DEVICE FOR AIR FILTERS
Arden E. Swanson, Minneapolis, Minn., assignor to The Day Company, Minneapolis, Minn., a corporation of Minnesota
Application December 28, 1953, Serial No. 400,455
8 Claims. (Cl. 183—61)

1. A cleaning device for tubular air filters of the type comprising a tube of flexible porous material, an inlet at one end of said tube for dust laden air, an outlet at the other end of said tube for discharge of material filtered out of the air escaping outwardly through the interstices of the wall of said tube, and means for delivering dust laden air under relatively low pressure to the inlet; said cleaning device including a cleaning head having a discharge opening adapted to engage said tube, means mounting said cleaning head for reciprocatory movements axially of the tube, power operated mechanism for imparting said reciprocatory movement to the cleaning head, said power operated mechanism including a motor, and control means operative to cause said motor to move the cleaning head at relatively high speed in the direction of its reciprocatory movement toward said inlet and at relatively low speed in the opposite direction, said control



means including motor reversing control elements adjacent opposite ends of said tube and alternately engaging said cleaning device at its limit of movement in one direction to cause movement of the cleaning device in the opposite direction, and speed control elements governing the speed of said motor in opposite directions.

2,729,305
GREASE PACKER FOR ANTIFRICTION BEARINGS
Frederic L. Hamel, Montclair, N. J.
Application March 25, 1954, Serial No. 418,651
4 Claims. (Cl. 184—1)

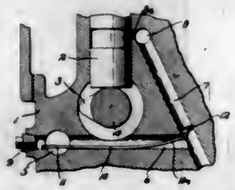


1. Apparatus for packing an antifriction bearing with lubricating grease, said bearing having a race ring and a surrounding cage in concentric outwardly spaced relation thereto to hold antifriction elements assembled therewith, said apparatus comprising a fixed supporting column having an annular seat upon which the bearing to be packed is supported, a downwardly open cylinder member to contain packing grease, means to seat the lower open end of said cylinder member upon the upwardly presented end margin of the cage of the supported bearing and outwardly of the space intermediate the latter and the race ring, a plunger reciprocable in said cylinder member operative to discharge grease from the latter, means to actuate said plunger, and a conical deflector means detachably connected with said supporting column to overlie the race ring of the supported bearing, said deflector means being of diameter less than the internal diameter of the cylinder member and not in excess of the diameter of the race ring, whereby to deflect and guide grease discharged from the cylinder member into the internal space between the race ring and cage of the bearing.

2,729,306
OIL FLOW RESTRICTING CONTROL DEVICE
Lewis M. Davis, Muskegon, Mich., assignor to Sealed Power Corporation, Muskegon, Mich., a corporation of Michigan
Application November 1, 1954, Serial No. 465,933
2 Claims. (Cl. 184—6)

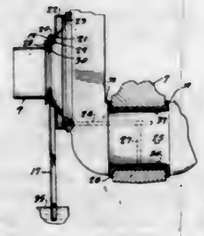
1. In an internal combustion engine having a block, a reciprocable tappet therein, an oil conducting conduit

leading to said tappet, and an oil supplying conduit connected with the first mentioned conduit at a distance from said tappet, and said conduits being at an angle to each other, the supplying conduit having an opening at an outer side of the block, the improvement comprising, an elongated shank of spring material lengthwise of said supplying conduit having an inner end portion of curved



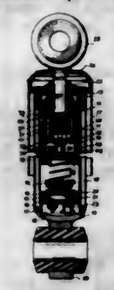
form and an oil blocking head at the inner end thereof, said head being located in the first mentioned conduit adjacent the inner end of the supply conduit and maintained in such position by the curved inner end portion of said shank, the area of said head being less than the cross sectional area of the first conduit for passage of a restricted quantity of oil.

2,729,307
LUBRICATING SYSTEM
James E. Perrin, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a corporation of Ohio
Application May 10, 1954, Serial No. 428,508
8 Claims. (Cl. 184—11)



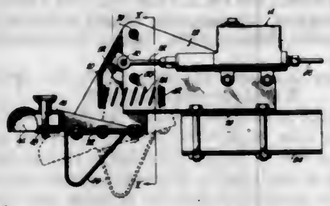
1. In a lubricating system for a compressor or the like, a piston within a cylinder, a connecting rod for driving the piston, a crankcase providing an oil sump, a crankshaft extending horizontally above the oil sump, a connecting rod bearing on the crankshaft, a truncated conical surface on the crankshaft and coaxial therewith, said conical surface having a large diameter end and a small diameter end, an oil receiving cup adjacent and overhanging the large diameter end of the conical surface for receiving oil therefrom, an oil delivering passage interiorly of the crankshaft from the oil cup to the connecting rod bearing, a rotatable oil raising ring encircling and depending from the crankshaft, the lower portion of the ring passing through the oil in the sump, an edge of the ring resting on the conical surface, an annular section of ring adjacent the edge, said section having an inner periphery of cylindrical form extending from the edge above and in spaced relation to the conical surface toward the small diameter end of the conical surface, and annular means on the crankshaft beyond the small diameter end of the conical surface supporting the ring against the conical surface, whereby, when the ring is rotated through turning of the crankshaft, oil is carried upwardly from the sump upon the inner periphery of cylindrical form and is drained therefrom by centrifugal and capillary action across the edge of the ring to the conical surface.

2,729,308
MULTIPLE STAGE SHOCK ABSORBER
Jerry V. Koski, Cleveland, and Robert E. Schwary, Euclid, Ohio, assignors to The Gabriel Company, Cleveland, Ohio, a corporation of Ohio
Application January 5, 1952, Serial No. 265,112
6 Claims. (Cl. 188—88)



1. In a direct double acting hydraulic shock absorber having a working cylinder, a reservoir, a piston member reciprocable in said cylinder, a closure member at one end of the cylinder provided with a communicating passage between the cylinder and reservoir for the flow of hydraulic medium from the cylinder to the reservoir during the impact of the piston member toward said closure member, and flow passage means on said piston member for the flow of hydraulic medium during the impact stroke of the piston member from the side thereof adjacent to said closure member to the other side of the piston member; the improvement which comprises a pair of successively acting auxiliary pressure build-up means in and spaced longitudinally of said cylinder and located intermediate said members with one of said means adjacent to said piston member and the other of said means adjacent to said closure member, said pressure build-up means each being spaced from its adjacent member in the normal load position of the shock absorber, and a coil spring anchored at its opposite ends to said pressure build-up means and forming a direct mechanical interconnection therebetween for effecting movement of said pressure build-up means in unison and also providing for relative movement therebetween, one of said pressure build-up means acting during the impact stroke of the piston member to engage the adjacent side of the piston member to close said piston flow passage means and the other acting during the impact stroke to engage said closure member and close the communicating passage therein.

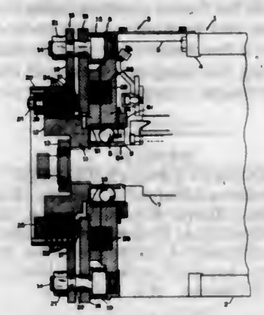
2,729,309
COMBINED TRAILER HITCH AND HYDRAULIC BRAKE OPERATING MECHANISM
Robert K. Mullin, Muncie, Kans.
Application July 13, 1953, Serial No. 367,535
3 Claims. (Cl. 188—112)



1. Hydraulic trailer brake actuating mechanism comprising a U-shaped support having a bight adapted for rigid mounting upon the tongue of a trailer in overhanging relationship to the tongue and provided with a pair of spaced, upstanding legs; a U-shaped bracket having a bight beneath the bight of the support and a pair of upstanding arms partially embracing the legs at the normally

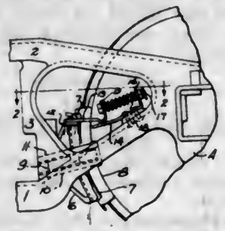
forwardmost end of the support; a horizontal pivot pin interconnecting the legs and the arms at the uppermost ends thereof for swingably mounting the bracket on the support; a coupling member normally aligned with the tongue, said coupling member being rigidly mounted upon the bight of the bracket and extending forwardly therefrom for connecting the bracket to a towing vehicle; a hydraulic cylinder secured to the innermost face of one leg and having a horizontal piston rod extending forwardly therefrom between said pin and said bight of the support and connected with said arms for reciprocable movement thereby as the bracket swings on said pivot pin relative to the support; and a guide member interconnecting the legs beneath the rod, said arms having arcuate guide slots concentric with said pin and slidable on the guide member for limiting the extent of swinging movement of the bracket in both directions.

2,729,310
ELECTROMAGNETIC BRAKE
Robert G. Le Tourneau, Longview, Tex.
Application October 17, 1952, Serial No. 315,329
4 Claims. (Cl. 188—171)



2. In a brake structure, a stator of magnetic material, a rotor of magnetic material journalled in said stator, an electromagnetic coil on said stator, a longitudinally splined portion of said rotor slidably supporting a plurality of magnetic friction plates, support means slidably mounting a plurality of stator friction plates of magnetic material alternately interposed between the friction plates on said rotor, nonmagnetic studs holding said support means in fixed axial relation to said coil, a magnetic pressure plate axially slidable on said studs between said coil and said friction plates, and spring means urging said pressure plate toward said friction plates.

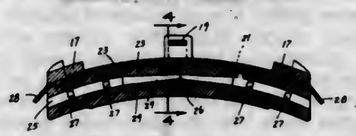
2,729,311
BRAKE BEAM SAFETY GUARD AND GUIDE STRUCTURE
Donald E. Barton and Irvin J. Spaeth, Chicago, Ill., assignors to Chicago Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application June 11, 1951, Serial No. 230,942
13 Claims. (Cl. 188—210)



7. A railway brake beam head having a body with forwardly facing shoe-mounting elements and a member pivoted to the side of the body and extending forwardly therefrom and including a shiftable clamp for varying its angular relation to the body.

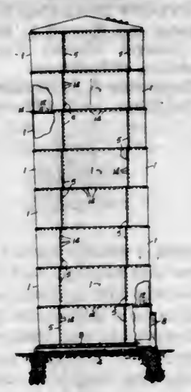
10. A railway brake beam head comprising a body having forwardly directed elements for carrying a brake shoe and having structure for slidably mounting the head on a railway truck part for its normal support, and a member above said structure extending laterally from said body and then forwardly and substantially beyond said shoe mounting elements and having a forwardly and downwardly facing terminal disposed to engage another truck part to form an auxiliary support for the head and a beam with which it is assembled.

2,729,312
AIR COOLED BRAKE SHOE
Robert W. Foster, Sullivan, Ind.
Application October 19, 1950, Serial No. 190,970
6 Claims. (Cl. 188—264)



1. A brake shoe for railroad cars, and the like, including an elongated generally arcuate brake shoe body adapted to conform generally to the contour of the wheel with an engaging surface adapted to oppose the wheel, at least one longitudinal air passage formed therein, extending from end to end and terminating in openings on the ends of the shoe, and air scoops connected to and extending beyond both ends of the shoe to direct air into the end of each passage.

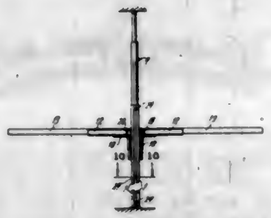
2,729,313
BOLTED METAL SILO CONSTRUCTION
Adolph W. Ernestus, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application August 10, 1949, Serial No. 109,507
3 Claims. (Cl. 189—3)



1. In a storage structure, a first panel, a second panel having the lower edge thereof in generally horizontal alignment with the lower edge of said first panel and having a side edge portion overlapping the adjacent side edge portion of said first panel to form a first vertical area of overlap, a third panel having the upper edge portion thereof overlapping the lower edge portion of said first panel to form a first horizontal area of overlap, a fourth panel having the upper edge thereof in generally horizontal alignment with the upper edge of said third panel and having the upper edge portion thereof overlapping the

lower portion of said first vertical area of overlap to provide a first area of three overlapping layers, said fourth panel having a side edge portion overlapping the adjacent side edge portion of said third panel to form a second vertical area of overlap with the upper portion of said side edge portion of said fourth panel disposed in overlapping relation with said first horizontal area of overlap to provide a second area of three overlapping layers disposed immediately adjacent said first area of three overlapping layers, a bolt disposed through aligned openings in each area of three overlapping layers, and a series of bolts disposed in spaced relation in aligned openings in each of said vertical and horizontal areas of overlap.

2,729,314
SHELF BRACKET
John G. Doran, Brentwood, Mo.
Application June 15, 1950, Serial No. 168,267
9 Claims. (Cl. 189—34)



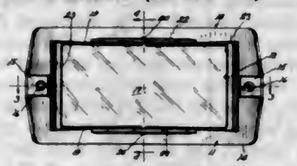
4. A fixture support of the character described comprising, an upright comprising a pair of channels secured back-to-back with spacers therebetween, said channels each having opposite, inturned lateral flanges on the outer face thereof an angle bracket having a shoe extending downward therefrom, a fixture supporting arm supported in horizontal position by said bracket and having flanges engaging said inturned flanges of said upright, and means for clamping said arm flanges and said shoe against said upright flanges.

2,729,315
WINDOW SEALING STRIP
Robert O. Morgann and Russell J. Bush, Dayton, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 5, 1950, Serial No. 199,318
6 Claims. (Cl. 189—65)



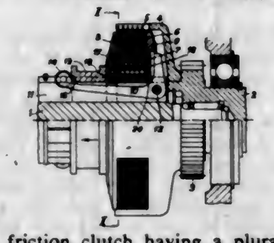
1. In combination, a window having a stationary frame, a swinging window sash having a sash frame swingable into abutting relationship with said stationary frame to close the window opening, said sash frame having an outwardly-opening relatively wide and shallow channel extending around the periphery thereof, a predetermined length less than the peripheral length of said channel of flat-section elastomeric strip retained flatwise in said relatively shallow channel and extending substantially around the periphery of said sash frame, said strip having an integral flexible sealing flange extending longitudinally along one edge of said strip and projecting laterally beyond the closing face of said sash frame and pressed edgewise into sealing engagement with said stationary frame when said sash is in closed position, and a pair of hooks engaging the strip and positioned at opposite terminal ends only of said strip and adapted to engage portions of said sash frame, whereby the strip is held in position under tension in said channel for retaining the strip in position therein.

2,729,316
FRAME CONSTRUCTION
Marshall N. Anderson, Grayslake, Ill., assignor to Sellstrom Manufacturing Co., Chicago, Ill., a corporation of Illinois
Application January 19, 1953, Serial No. 332,004
4 Claims. (Cl. 189—78)



2. An element for use in resiliently urging the marginal portion of a panel against a ledge formed in a frame member and delimiting an aperture provided in the latter, said element comprising a resilient wirelike nonplanar body delimiting an aperture of substantially the same configuration as the aperture formed in such a frame member, said body being provided with a pair of oppositely disposed outwardly extending protuberances releasably affixable to the frame member, said body, when in affixed relation with the frame member, being flexed toward a planar position and portions of said body disposed on opposite sides of a line connecting said protuberances resiliently contacting the marginal portion of the panel and maintaining the frame member and panel in assembled relation.

2,729,317
FRICTION DISC CLUTCHES
Otto Schwab, Friedrichshafen, Bodensee, Germany, assignor to Zahnradfabrik Friedrichshafen, Aktiengesellschaft, Friedrichshafen, Bodensee, Germany
Application March 14, 1951, Serial No. 215,509
Claims priority, application Germany June 29, 1950
3 Claims. (Cl. 192—69)



1. In a friction clutch having a plurality of friction discs in which in the range of the pressure action of the clutch parts pre-tensioned soft acting springs are inserted, the combination of: an annular part slidably mounted upon and mating with a splined part of one of the coupling shafts and disposed internally of said plurality of discs and concentric therewith, said annular part abuting said springs at one end; two collars fixed to said coupling shaft for limiting the longitudinal movement of the aforementioned annular part and holding said springs in their pretensioned condition independently of said friction discs; said annular part also including a shoulder for abutting the end disc of the clutch, said shoulder being adapted to cause movement of said annular part to act on said springs.

2,729,318
MAGNETIC CLUTCH WITH STATIONARY WINDING
Paul A. Harter, Beloit, Wis., assignor to Warner Electric Brake & Clutch Company, South Beloit, Ill., a corporation of Illinois
Application December 26, 1951, Serial No. 263,398
3 Claims. (Cl. 192—84)

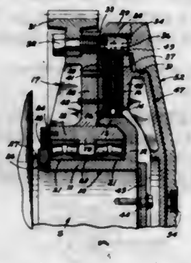
1. In a magnetic clutch, the combination of, an annular non-rotatable magnet ring of U-shaped radial cross

section having concentric inner and outer pole pieces, an annular winding within said ring, said outer pole piece projecting axially beyond said inner piece and having an internal cylindrical surface and the inner piece having an axially opening annular groove in its end defined by a cylindrical wall, a rotary sleeve projecting axially through said inner pole piece beyond the grooved end thereof, an inner magnetic pole ring fast on the projecting end



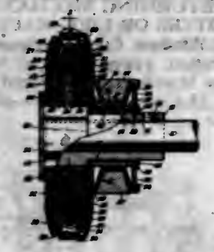
of said sleeve and having thereon a flange projecting axially into said groove to telescope closely with said cylindrical wall thereof, an outer magnetic pole ring closely telescoping with said internal surface of said outer pole piece, non-magnetic means rigidly connecting said pole rings for rotation with said sleeve, said pole rings having axially facing and radially spaced pole faces, and an armature ring opposing said pole faces and mounted for frictional gripping engagement therewith.

2,729,319
FLUID OPERATED MULTIPLE DISC CLUTCH
Robert G. Friedman, Tiffin, Ohio, assignor to National Machinery Co., Tiffin, Ohio, a corporation of Ohio
Application October 3, 1951, Serial No. 249,515
2 Claims. (Cl. 192—85)



1. A clutch comprising a hub member having a mounting sleeve terminating at one end in a generally radial flange from which extends an annular flange overlying said shaft mounting sleeve, a driving member having a sleeve surrounding said mounting sleeve, anti-friction bearings between said sleeves, means for retaining said bearings and members together, a central web extending from said outer sleeve, an annular peripheral flange on said web, a series of circumferentially spaced radially inwardly facing semi-circular notches in said web flange, cylindrical keys freely positioned in said notches, abutment means adjacent the ends of said notches confining the entire axial extent of said keys in said notches, an outer friction disc, semi-cylindrical notches in said disc receiving said keys, an inner friction disc keyed to said annular flange, the engagement of said outer friction disc and said cylindrical keys being radially aligned with the engaging surface of said outer disc, a cover secured to said driving member outwardly of said friction discs, and a piston within said cover for pressing said friction discs together.

2,729,320
CENTRIFUGAL CLUTCH
Henry G. Henrickson, Des Plaines, Ill., assignor to Gateway Engineering Company, Chicago, Ill., a corporation of Illinois
Application June 4, 1954, Serial No. 434,536
9 Claims. (Cl. 192—105)



1. A centrifugal clutch mechanism comprising, in combination, a central rotary driving member, a clutch housing rotatably journalled on said driving member for free relative rotation with respect thereto, and having inner side faces constituting rigid, non-yielding, annular clutch faces, a pair of annular clutch plates disposed within said housing and slidably keyed to said driving member for rotation in unison therewith, said plates each having a friction surface thereon in opposition to one of said clutch faces, a friction disk disposed between each friction surface and its adjacent clutch face on the housing, said clutch plates being movable axially in opposite directions from retracted positions wherein the friction disks are out of effective driving contact with said clutch faces, to advanced positions wherein said friction disks are compressed between the clutch plates and clutch faces to establish a friction drive from the plates to the housing through said friction disks, radially shiftable means responsive to the action of centrifugal forces disposed within said housing between said clutch plates and movable from an inner retracted position to an outer advanced position when a predetermined speed of rotation has been attained by said driving member and clutch plates, and cam means positioned in the path of movement of said radially shiftable means for forcing said clutch plates to their advanced positions upon outward movement of said radially shiftable means.

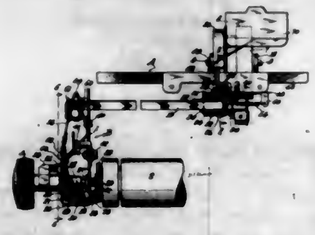
2,729,321
ROLLER CONVEYOR CONSTRUCTION
Emmett G. Morrison, Elgin, Ill.
Application June 4, 1952, Serial No. 291,624
12 Claims. (Cl. 193—35)



1. Roller conveyor construction including a pair of side rails, a plurality of lineal supports between said side rails and rows of rollers mounted on each of said lineal

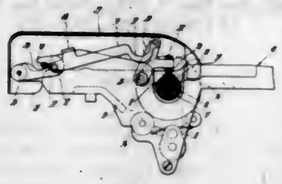
supports, the rollers in each row being alternately turned on an angle so that articles supported thereon ride upon an edge of the same.

2,729,322
CARRIAGE RETURNING MECHANISM FOR TYPEWRITERS OR LIKE MACHINES
John F. Kloski, Windsor, Conn., assignor to Royal McBee Corporation, a corporation of New York
Application March 11, 1953, Serial No. 341,703
12 Claims. (Cl. 197—66)



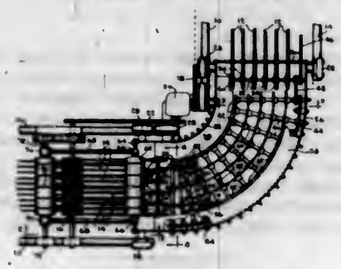
1. Carriage returning mechanism for a typewriter or like machine having a stationary frame element, and a carriage element mounted on said frame element for character spacing and return movements, said mechanism comprising an electric motor mounted on one of said elements; means connected to the other of said elements and to said motor for transmitting returning driving effort from said motor to said carriage element; a normally closed electric switch in circuit with said motor; and a spring loaded cam device for opening said switch in response to the transmission of sufficient effort from said motor to said carriage element to overcome the starting inertia thereof and start said carriage element on its return movement from a state of rest, said cam device being operable by its spring loading for effecting re-closing of said switch in response to diminishing of the effort transmitted from said motor to said carriage element after the starting inertia thereof has been overcome.

2,729,323
PLATEN REMOVING FACILITY
Willard C. Jones, West Hartford, Conn., assignor to Underwood Corporation, New York, N. Y., a corporation of Delaware
Application December 26, 1952, Serial No. 327,973
5 Claims. (Cl. 197—145)



4. The combination with a platen frame end piece having a saddle for seating a removable platen, of a clamp pivotally mounted on said end piece closely behind said saddle, to swing from behind said saddle forwardly and downwardly to a platen hold-down position over the saddle, and to swing oppositely to a released position behind said saddle to free said platen for upward removal from said saddle, a toggle linked to said clamp and by operation to a straightened condition swinging said clamp to said hold-down position and by operation to an upwardly broken condition swinging said clamp to said released position, a cover normally overlying and concealing said end piece, the said saddle and the said toggle, means pivotally mounting said cover on said end piece near its rear extremity to swing upwardly and rearwardly from its overlying position to a raised position clear to the rear of said saddle, and means associating said cover operatively with said toggle so that movement of the cover downwardly from said raised to said overlying position will straighten the toggle and apply the clamp, and so that movement of the cover from said overlying to said raised position will break the toggle upwardly and will release the clamp, thereby rendering the platen freely removable.

2,729,324
HORIZONTAL TURNS FOR CONVEYERS
Frederic E. Howdle, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application October 30, 1952, Serial No. 317,667
12 Claims. (Cl. 198—167)



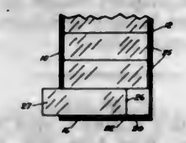
1. In a horizontal turn for a conveyor for material such as newspapers or other items sometimes travelling in overlapped relation, an output belt at the output end of said turn, a roller above said output belt adapted to engage such material on said belt, and means for adjusting said roller so that one end thereof may be nearer and the other end thereof may be farther from said belt to assert a momentary retarding action on the leading corner of an item of such material upon reaching said roller.

2,729,325
COIN HOLDER FOR KEY CHAINS AND THE LIKE
Walter G. Nauman, Milwaukee, Wis.
Application May 14, 1952, Serial No. 287,794
1 Claim. (Cl. 206—.81)



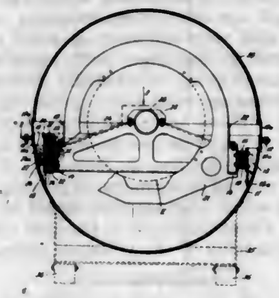
In combination with a key chain having a series of spaced balls joined by thin elongated links, a coin holder comprising, a relatively thin elongated body having integral top, bottom and side walls defining a receptacle therein opened at one end, said side walls terminating short of the top and bottom walls forming resilient end portions at the open end of said body, said top and bottom walls each having an aligned centrally disposed longitudinal slot therein opening out on the open end of said body, the opposed edges of each slot being beveled, said bevels being deeper at the open ends of said slots, the inner end of each slot terminating in a semi-spherical recess of a size and configuration to receive a respective portion of a ball of said key chain, said semi-spherical recesses each extending into the respective top and bottom wall for approximately one-half the thickness of said wall, said slots each being of a size and configuration to receive said links of said ball chain but of a lesser width than the diameter of said balls, whereby the opposed surfaces of any two balls will ride on the beveled surfaces of said slots with the adjacent links of said ball chain received in said slot to cam the resilient ends of said top and bottom walls toward one another and be received in the semi-spherical recess to firmly secure the coin holder to said chain.

2,729,326
CIGARETTE CARTON
Michael Stadnyk, Webster, N. Y.
Application August 29, 1951, Serial No. 244,153
1 Claim. (Cl. 206—44.12)



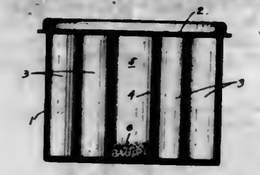
A carton of cigarette packages or like articles, said carton having front, rear, and opposite side walls and top and bottom closing flaps, and in which the packages are stacked on top of one another, the height of said carton being equal to that of the column of packages stacked in the carton and the width and length of the carton being equal to the width and length of one of said packages, said carton having a plurality of elongate, spaced window apertures in one wall, said window apertures extending each in the direction of the width of said packages and being equal in number to the number of packages containable in said carton, said window apertures being disposed one above the other in the same order as the packages, and one of said window apertures being opposite each package whereby stamps may be applied to the packages and the packages inspected through said window apertures, and the wall of said carton, which is opposite said apertured wall, having a removable piece adjacent its bottom end which has an area at least as great as the registering side of the lowermost package in the carton, whereby the successively lowermost packages may be dispensed through the opening formed by removal of said piece.

2,729,327
SHIPPING CONTAINER WITH INTERNAL RESILIENT MOUNTING MEANS
Nereus H. Roy, Glenbrook, Conn., assignor to Waugh Equipment Company, New York, N. Y., a corporation of Maine
Application May 14, 1953, Serial No. 355,050
2 Claims. (Cl. 206—46)



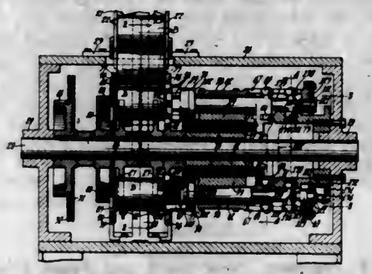
1. In a shipping container for an object, the combination of a casing, a pair of mounting members within the casing along opposite sides of the casing, means for securing the members to the object, a rubber shear block interposed between each member and the casing, the block having one vertical face secured to the member and the opposite vertical face secured to the casing, and means for limiting vertical movement of each member relative to the casing in one direction including a spring unit secured to the casing adjacent each shear block, and a stop mounted on the member and overlying and normally spaced from the spring unit, the spring unit having a natural frequency different from that of the shear block and being engageable by the stop and operable after such engagement to resist movement of the stop and object toward the unit.

2,729,328
PACKAGE OF REVERSIBLE HYDROCOLLOID IMPRESSION MATERIAL AND WATER-SOLUBLE INORGANIC SALT
Walter J. van Roosem, Los Angeles, Calif.
Application February 10, 1953, Serial No. 336,085
2 Claims. (Cl. 206—63.5)



1. A package of material for use in the preparation of impressions, which comprises: a container; a plurality of bodies of reversible hydrocolloid impression material within said container; and a quantity of water-soluble inorganic salt within said container; the space occupied by said bodies of material and said salt being less than the internal capacity of said container so as to provide space within the container for addition of water in sufficient quantity to dissolve said salt.

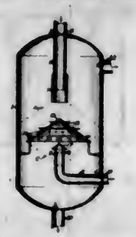
2,729,329
COLLAR BAND DETECTING MACHINE WITH DETECTOR LOCKING FEATURE
William Pechy, Belmar, N. J., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application November 20, 1951, Serial No. 257,303
8 Claims. (Cl. 209—89)



1. In a machine for detecting collar bands in tearing strip cans and for separating normal cans having a properly located collar band from abnormal cans lacking a collar band or having an improperly located collar band, the combination of a feeding turret having peripheral pockets for receiving and propelling cans to be tested along a predetermined curved path of travel to and through an abnormal release station, a detector head disposed in axial alignment with each of said turret pockets and projectable into the cans in said pockets for detecting the presence and location of collar bands in said cans, means for projecting said detector heads partially into said cans for supporting them during said detecting operation, means for retracting said heads from said cans to release them at said abnormal can station, a transfer turret disposed adjacent said can feeding turret at said abnormal can station and having peripheral pockets for receiving abnormal cans released from said feeding turret, means for rotating said turrets in unison, magnet means in said transfer turret for attracting and holding said re-

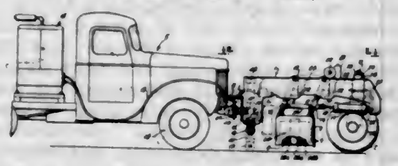
ceived abnormal cans in said turret pockets, and locking means carried by said heads for holding the heads in their projected can supporting position within normal cans to prevent the release of said normal cans from said feeding turret pockets at said abnormal can station, thereby separating the normal cans from the abnormal cans.

2,729,330
ELUTRIATION SYSTEM
Raymond Newirth, Gibbstown, N. J., assignor to Houdry Process Corporation, Wilmington, Del., a corporation of Delaware
Application April 18, 1951, Serial No. 221,688
5 Claims. (Cl. 209—138)



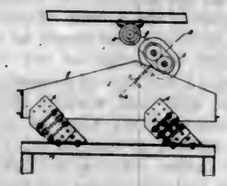
1. In a process wherein a body of granular material having an average particle size in the range of about 4 to 10 mesh is continuously circulated under conditions conducive to attrition of the solid particles resulting in the production of fines, the method of removing said fines from said body which comprises the steps of: introducing a compact moving stream of said granular material at an intermediate level within a confined elutriating zone; withdrawing granular material from the bottom of said zone at a rate adapted to maintain said granular material within said zone as a compact, non-turbulent gravitating bed receiving said stream of granular material directly upon a portion of its surface; flowing the top portion of said bed laterally downward from the zone of solids introduction as a supported shallow layer of uniform depth; passing gas upwardly throughout said moving layer at a velocity sufficient to suspend and carry upwardly through the compact remaining portion of said layer only said fines; and discharging the suspension of gas and fines from the region of said elutriating zone above said moving layer, the rate of flow of said supported layer being controlled by the rate of said withdrawal of granular material from the bottom of said elutriating zone.

2,729,331
MOBILE MAGNET
Robert T. Norment, New York, and Frank Dertinger, Flushing, N. Y., and Golon Barney Harris, Washington, D. C., assignors, by mesne assignments, to International Fermont Machinery Co., Inc., Ramapo, N. Y., a corporation of New York
Application June 24, 1952, Serial No. 295,368
11 Claims. (Cl. 209—215)



11. A pusher type magnetic sweeper for attachment to and partial support by the front of a wheeled vehicle comprising the combination of a frame, a shaft rotatably mounted in a generally vertical position on said frame adjacent its front end having wheel means on its lower portion for providing rolling contact with the ground, said shaft having its axis of rotation spaced forwardly of the normal ground contacting location of the wheel means, coupling means on said frame adjacent the rear end thereof having a width sufficient to connect the sweeper to laterally spaced points on the front of the wheeled vehicle whereby the wheeled vehicle supports the rear end of the frame and guides the sweeper and constitutes the sole means in addition to said wheel means for supporting the frame, magnet support means on said frame intermediate said shaft and said coupling means for supporting and positioning a magnet beneath the frame, and a magnet mounted on said support means.

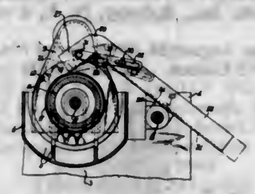
2,729,332
VIBRATORY SCREEN MOUNTING
Frederick R. Gruner, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a corporation of Delaware
Application April 5, 1951, Serial No. 219,399
2 Claims. (Cl. 209—329)



2. A vibrating screen of the type in which a resiliently mounted screen body member is caused during normal operation to have a vibratory motion along a straight line in a plane inclined to the horizontal and in which large undesired forces produced at resonant speeds during the starting and stopping operations tend to vibrate the screen body member in a generally vertical direction, comprising, a screen body member, power driven means for imparting period inertia forces to said screen body member along a straight line inclined to the horizontal, a stationary base member, a plurality of rigid plates attached to one of said members and arranged in parallel relation to said plane and said straight line, mounting means attached to the other of said members having upwardly facing mounting surfaces respectively arranged beneath said plates in parallel relation thereto and downwardly facing mounting surfaces respectively arranged above said plates in parallel relation thereto, a first group of elastically deformable interplane shear mountings respectively connecting said upwardly facing mounting surfaces and said plates which yield resiliently in shear to resist the motion imparted to said screen body along said straight line, and a second group of elastically deformable interplane shear mountings respectively connecting said downwardly facing surfaces and said plates which yield resiliently in shear to resist the motion imparted to said screen body along said straight line, the mountings of one of said groups being stressed in compression to resist the vertical motion of the screen body member caused by large undesired vertical forces produced at resonant speeds during starting and stopping of the vibrating screen.

2,729,333
DISCHARGE CHUTE ASSEMBLY FOR MAGNETIC CLARIFIER
Alfred W. Gardes and Nicholas Dudchik, Lebanon, Ind., assignors to Housaille-Hershey of Indiana, Inc., a corporation of Indiana
Application February 21, 1952, Serial No. 272,827
7 Claims. (Cl. 210—1.5)

1. A discharge assembly for a magnetic clarifier, including a downwardly inclined chute for the discharge of swarf, a scraper element pivoted to the upper end of the chute and having a free edge portion for disposition in proximity to the pickup drum of a clarifier, each of said chute and scraper element having upstanding side flanges, a link pivoted to a side flange of the scraper element, said

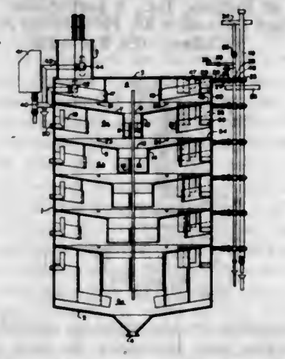


link having an elongated slot therein at the other end, and means on the side flange of the chute extending through said slot to anchor the link in a position of adjustment.

2,729,334
PURIFICATION OF PAPER MILL WHITE WATER BY FROTH FLOTATION
Rudolf Schwarz, Oberlahnstein, and Theodor Hennig, Braubach, Germany, assignors to Zschimmer & Schwarz, Brilon, Westphalia, Germany
No Drawing. Application October 27, 1951, Serial No. 253,572
4 Claims. (Cl. 210—53)

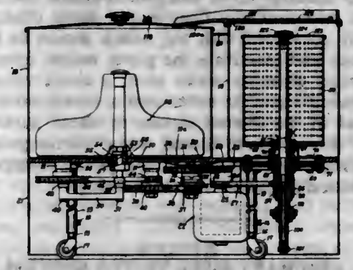
1. The process for the purification of white water waste containing suspended solids and fibers from cellulose, paper, and cardboard manufacture which comprises subjecting said white water waste in an acid condition to a froth flotation in the presence of a flotation agent consisting of a mixture of sulfonated fatty materials selected from the group consisting of sulfonates of castor oil, tea seed oil, cotton seed oil, and the sulfonates of the fatty acids derived therefrom, with protein solutions selected from group consisting of glue, dehydrated glue, gelatine, keratine, albumin, the amount of the protein relative to the oil sulfonate by weight in the said mixture varying from about 20% to about 400% and said flotation agent being added to said white water waste in an amount from about .5 to 10 milligrams per liter of said waste whereby the suspended solids and fibers are floated in said white water waste and separating the floated materials from the white water, said floated material being rendered free from stickiness and stain.

2,729,335
CLARIFIERS
Rafael Estrada, Havana, Cuba
Application October 17, 1951, Serial No. 251,800
31 Claims. (Cl. 210—55)



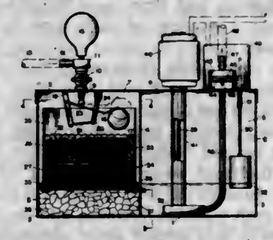
1. Means to clarify a liquid containing matter in suspension comprising, in combination, a tank having a top and a bottom, a plurality of trays supported in said tank and spaced from each other to provide a plurality of clarifying compartments therein, means for flocculating said liquid and forming a plurality of discrete flocculating chambers at least one for each of said compartments, each of said flocculating chambers communicating with one of said compartments, means for injecting liquid containing matter in suspension to be flocculated into each of said flocculating chambers, said chambers being designed and proportioned to reduce the velocity of the liquid passing therethrough, thereby minimizing the disturbance of the liquid then being clarified in the compartments.

2,729,336
WASHING MACHINE AND CENTRIFUGAL DRIER
Richey L. Swartz, Canton, Ohio, assignor of one-half to Kenneth B. Cope, Canton, Ohio
Application July 28, 1947, Serial No. 764,208
2 Claims. (Cl. 210—72)



1. In a centrifugal drier, a tub having a relatively large central opening in its bottom wall, a flat horizontal flexible diaphragm closing said opening, means connecting the peripheral portion only of the diaphragm to the bottom wall of the tub surrounding said opening, an anti-friction bearing connected to the central portion of the diaphragm, there being a relatively small central opening in the diaphragm, a shaft journalled through said bearing, a perforate basket fixed upon the shaft within the tub, a pulley rotatably mounted upon the shaft directly below the diaphragm, means for driving said pulley, a clutch member fixed upon said pulley, a second clutch member slidably keyed upon the shaft, spring means normally urging the second clutch member into operative engagement with the first clutch member, and a clutch lever for moving the second clutch member out of engagement with the first clutch member, said anti-friction bearing and flexible diaphragm forming the only support for the shaft and basket, whereby the basket is completely flexibly mounted so as to float within the tub.

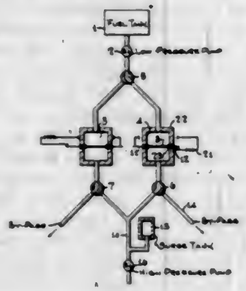
2,729,337
FISH AQUARIUM AND FILTER APPARATUS THEREFOR
Albert G. Alferman, Miami, Fla.
Application June 8, 1953, Serial No. 360,022
5 Claims. (Cl. 210—150)



1. In a filter unit for a household aquarium, the combination of a casing defining in lateral relation a filter chamber and a pump chamber communicating therewith adjacent the bottom of said casing, individual covers for said chambers, a filter structure in the filter chamber

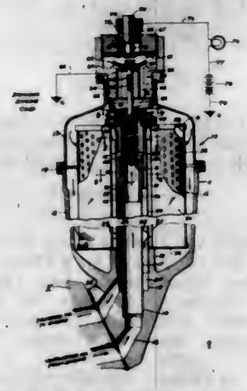
and an intake fitting carried by the cover thereof for communication therewith and with the aquarium to direct an unfiltered water stream to the filter structure for gravity flow therethrough, float-operated valve means suspended from the filter chamber cover and operable to seal the intake fitting to interrupt the unfiltered stream upon a rise in filter structure water level, said intake fitting and valve means being structurally attached to the filter chamber cover for separation therewith from said casing, a filtered water discharge assembly carried by the pump chamber cover comprising pump means in the pump chamber and an upwardly extending outlet tube connected thereto directing a filtered water stream to the aquarium, a motor mounted on the pump chamber cover and driveably connected with said pump means, an electrical circuit for said motor, a switch housing on the pump chamber cover and switch means therein interposed in said circuit, a float in the pump chamber mechanically connected with the switch means to interrupt said circuit and inactivate the pump means upon a drop in the pump chamber water level, a check valve casing on the pump chamber cover and a check valve therein interposed in the filtered stream to check a reversal in the flow thereof, said filtered water discharge assembly being structurally attached to the pump chamber cover for separation therewith from said casing.

2,729,338
AIRCRAFT FUEL FILTER SYSTEM
John J. Heigl, Short Hills, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application October 4, 1951, Serial No. 249,677
2 Claims. (Cl. 210—150.5)



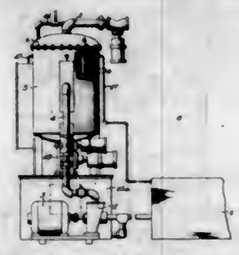
1. In a method for supplying fuel to an aircraft engine through a confined flow path including a pair of separate filtration zones and an accumulation zone for a minor portion of filtered fuel, wherein said fuel contains ice particles, which comprises passing said fuel through said flow path and a first one of said filtration zones, removing and retaining ice particles from said fuel in said first zone; interrupting flow to and from said filtration zone while heating at least a portion of said zone to convert ice particles retained therein to water; restoring flow through said filtration zone while discharging fuel and retained water from said zone and said flow path; passing fuel through the second one of said filtration zones and said flow path during said heating step; interrupting flow through said flow path beyond both of said filtration zones during discharge of fuel and water from either of said zones; restoring flow through the first one of said filtration zones and said flow path while performing said heating and fuel discharge steps in said second zone; accumulating filtered fuel from said flow path in said accumulation zone during passage of fuel through either of said filtration zones and said flow path, and discharging filtered fuel from said accumulation zone into said flow path during discharge of fuel and water from either filtration zone.

2,729,339
AUTOMATIC DISCRIMINATORY CLOGGING DETECTOR FOR OIL FILTERS
Marion M. McCoy, New Market, N. J., assignor to Purolator Products, Inc., Rahway, N. J., a corporation of Delaware
Application August 28, 1953, Serial No. 377,142
5 Claims. (Cl. 210—183)



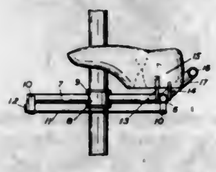
1. In a filter for engine liquids including a housing, a center tube, a replaceable filter element in said housing and by-pass valve means carried by said center tube and operable in the axial direction of said tube to relieve liquid pressure in said housing whenever flow of liquid through the filter is hampered by reason of low temperature of the liquid being filtered or actual clogging of the filter element, clogged filter detector means operable in response to operation of said by-pass valve means, said detector means including an electric circuit, and a thermostatic circuit closing member in said circuit disposed transversely of the axis of said center tube and which is movable axially with and by operation of said by-pass means to close said electric circuit only when the liquid flowing through said filter has been warmed to usual engine operating temperatures, said thermostatic member being so constructed as to preclude circuit closing action notwithstanding operation of the by-pass valve means when the liquid being filtered is below usual warm engine operating temperatures.

2,729,340
DRAIN AND EMULSION PRESERVING ARRANGEMENT FOR CLARIFIERS
John F. Harms, Dearborn, Mich., assignor to Houdaille-Hershey of Indiana, Inc., a corporation of Indiana
Application December 28, 1950, Serial No. 203,147
5 Claims. (Cl. 210—184)



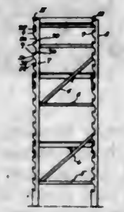
1. In apparatus for clarifying an emulsion, a tank, a filter supporting plate separating the tank interiorly into separate filtering and filtrate compartments, filtering means connected to said plate and arranged to discharge filtrate through said plate into the filtrate compartment, said tank having an intake opening for filtrable emulsion, and an open-ended drain pipe extending through the tank and terminating immediately adjacent the filter compartment side of said plate to drain off a separated portion of an emulsion ingredient from the filtering side of said plate and return the same to the unfiltered emulsion.

2,729,341
RACKS FOR SUPPORTING LASTS DURING THE MANUFACTURE OF BOOTS AND SHOES
Alfred Freeman, Wellingborough, England
Application November 9, 1950, Serial No. 194,742
Claims priority, application Great Britain November 9, 1949
4 Claims. (Cl. 211—37)



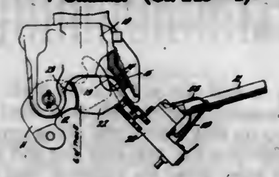
1. A last rack comprising at least one rail, a series of upstanding last-supporting pins on said rail for engagement in last sockets, a pair of divergent last-steadying arms on said rail and associated with each said pin adapted to make point contact with the opposite sides of the heel portion of the last, and a second rail supported by the first rail and extending to a position above and to the rear of the upper ends of said last-supporting pins and arms and adapted to constitute a guard for arresting downward movement of a last removed from its support over second rail.

2,729,342
PALLET RACKS
Samuel Seal, Jr., Pittsburgh, Pa.
Application November 1, 1951, Serial No. 254,425
3 Claims. (Cl. 211—147)



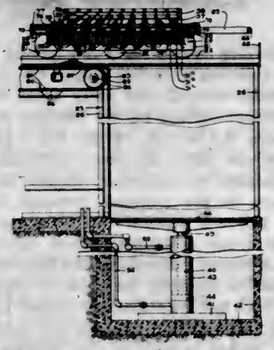
3. An adjustable rack and shelf assembly adapted for insertion of the loaded shelves by means of a lift truck restricted to imparting vertical and horizontal movements to the shelves, comprising a frame having at least four parallel spaced uprights arranged in pairs, one pair being forwardly of the other and the forward pair being spaced apart a greater distance than the other pair, a vertically adjustable shelf supported on said uprights and having front and rear structural sections the ends of which project beyond the sides of the shelf and are of an overall length greater than the spacing between the respective pairs of uprights upon which they are supported, the rear structural shelf section having an overall length less than the spacing between the front pair of rack uprights permitting the shelf to be inserted between said latter uprights in a horizontal plane, means on said front and rear structural shelf sections which overlap the uprights and on the overlapped portions of each upright for adjustably supporting the shelf in a plurality of vertically spaced portions, said means at each end of each shelf structural section comprising horizontally engaging opposing hooks and elongated openings interlocking upon vertical lowering of the shelf to resist horizontal separation of the shelf and uprights while providing vertical support for each end of the shelf upon its adjacent upright, at least one hook of each said pair having a portion of the front face thereof sloping inwardly and transversely of the adjacent hook bearing portion, the opposing surfaces of the sloping hook portion and elongated opening upon engagement restricting vertical displacement of the shelf.

2,729,343
MEANS FOR FACILITATING THE CLASSIFICATION OF RAILROAD CARS
Dennis William Brosnan, Washington, D. C.
Application August 7, 1952, Serial No. 303,039
7 Claims. (Cl. 213—1)



1. In a coupler, in combination, a draw head, a knuckle mounted on the draw head for movement from an open to a closed position and vice versa, said knuckle being in open position with relatively movable portions of the knuckle and draw head in spaced relation, and an element interposed between and engaging said portions and preventing accidental relative movement thereof, said element being frangible and adapted to break or crumble to permit closing of the knuckle under the influence of forces applied thereto during a normal coupling operation.

2,729,344
MACHINE FOR DISMOUNTING STACKS OF CANS
Thomas D. Birchall, Turlock, Calif., assignor to G. W. Hume Company, Turlock, Calif., a corporation of California
Application December 27, 1949, Serial No. 135,256
7 Claims. (Cl. 214—8.5)

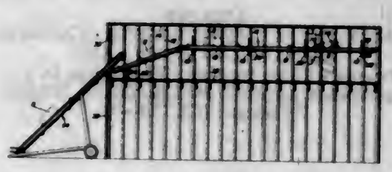


1. In a machine for unpiling a stack of cans, a cart for transporting layers of cans and like articles comprising a plurality of adjacently positioned horizontal bars of magnetizable material and of a cross sectional contour in the form of a downwardly directed E each having a pair of lateral flanges and a center flange, magnetizing windings arranged longitudinally around said center flange, and means for presenting the uppermost layer of a stack of cans to the ends of said flanges.

2,729,345
BALED HAY AND STRAW DISTRIBUTOR
Henry C. Gisleson, Luana, Iowa
Application February 27, 1953, Serial No. 339,273
2 Claims. (Cl. 214—16)

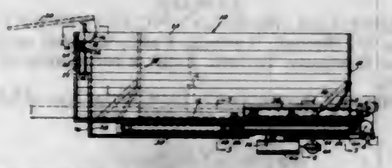
1. A distributor for baled hay, straw and the like, said distributor comprising a plurality of hanger members

adapted to be secured within the top of a barn, a platform supported by said hanger members and adapted to support bales in longitudinally extending position thereon, a longitudinal shield channel secured to the undersurface of said platform, said platform having a central longitudinal slot in registry with said channel, a power driven endless conveyor supported by the platform and having an upper



flight movable in said slot and a lower flight movable in said channel, longitudinally spaced cleats fixed to the conveyor, the cleats on said upper flight riding upon the upper face of said platform and engaging one end of the bales to advance the bales along the platform, and a longitudinally adjustable bale tripping member slidably adjustably supported on the platform at each side thereof and inclining upwardly in the direction of advance of the bales to tip the bales sidewise off the opposite side of the platform.

2,729,346
UNLOADING ATTACHMENT FOR A BIN
Gordon G. German, Eugene, Oreg.
Application October 8, 1954, Serial No. 461,241
2 Claims. (Cl. 214—17)



1. An unloading device for a bin having an open end comprising a follower mounted in said bin to move longitudinally therein toward and away from the open end thereof, a cylinder carried by the follower for movement therewith above the bottom of the bin, a piston carried by the bin remote from the open end thereof and telescopically entering the cylinder, means to admit fluid under pressure to the cylinder through the piston to advance the follower toward the open end of the bin and discharge from the bin material deposited therein between the open end thereof and the follower, a cylinder carried by the bin beneath the bottom thereof, a piston mounted in said last mentioned cylinder for movement longitudinally through one end thereof beneath the bottom, a guide pulley carried by the bottom adjacent the end thereof remote from the open end, a pulley carried by the last mentioned piston for movement therewith, and a flexible member trained over said pulleys and connected to the cylinders for retracting the cylinder carried by the follower as the pulley advances with its piston.

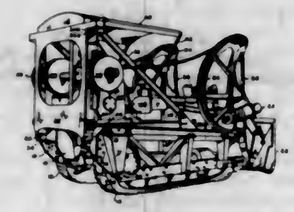
2,729,347
COMBINATION LIFT AND DOLLY
David F. Jorgensen, Altadena, Calif.
Application October 20, 1952, Serial No. 315,799
13 Claims. (Cl. 214—77)

1. A dolly, comprising: a frame structure supported on a wheel member for movements over a supporting surface; a platform carried by said structure adapted to support an object placed thereon and having a dividing channel between its ends; an arm member; a cam connection between said arm member and said structure enabling selective movements of said arm member to positions of use and non-use, said arm member in its position of use having a surface portion engageable with said supporting surface; and means carried by said arm



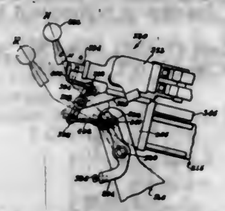
member defining a plurality of spaced rollers over which a lift bar extending through said channel may be successively fulcrumed to lift an object and apply pressure through said cam connection to move said structure in a direction to move the platform under the lifted object.

2,729,348
MATERIAL HANDLING MACHINE
Theodore N. Hackett and Daniel M. Schwartz, Salt Lake City, Utah, assignors to The Elmco Corporation, Salt Lake City, Utah, a corporation of Utah
Application June 7, 1951, Serial No. 230,365
6 Claims. (Cl. 214—131)



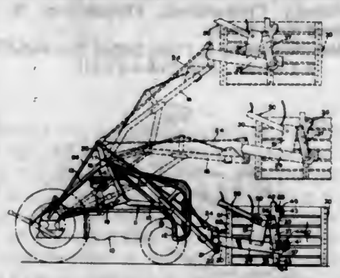
1. In a mobile material handling vehicle including a main frame, a prime mover carried by the frame, and an overhead material handling structure mounted for rolling engagement on said frame from a depressed material gathering position at one end of the vehicle to an elevated material dumping position at the other end of the vehicle, drive means operatively connecting the prime mover to the overhead material handling structure, said drive means comprising a clutch unit including a driver member and a driven member, brake means for the driven clutch member, interdependent control means for said clutch and brake selectively operable to engage the clutch members and disengage the brake and to disengage the clutch members and engage the brake, said control means comprising a single manually operable control member pivotally movable back and forth between a clutch-engaged position and a brake-engaged position through an intermediate neutral clutch and brake-disengaged position, a first set of members connecting the brake means with said control member, a second set of members connecting the clutch unit with said control member, said second set of members including a pair of substantially rectilinear members having a pivotal joint therebetween and members actuated by the material handling structure in the elevated material dumping position to move said pair of members out of the rectilinear relation to disengage the clutch driver member from the driven clutch member when the control member is in the clutch-engaged position.

2,729,349
CONTROL MECHANISM FOR MOUNTING ON A MOVABLE SUPPORT
Harold M. Stueland, East Moline, Ill., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Original application March 29, 1951, Serial No. 218,105, now Patent No. 2,679,943, dated June 1, 1954. Divided and this application June 29, 1953, Serial No. 364,558
8 Claims. (Cl. 214—140)



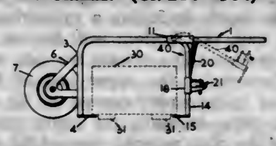
1. In a loader of the character described, the combination of: a support; a load-bearing element movably carried by the support for movement between raised and lowered positions; fluid power means connected between the support and element for effecting raising and lowering of the element, and including a fluid motor swingable on the support on a first transverse pivot; a control valve housing fixed to the motor above said first pivot, and having a valve part including a rear end portion projecting rearwardly of the first pivot and shiftable selectively forwardly and rearwardly relative to the housing for controlling the motor; a control lever pivoted to the support for adjustment selectively back and forth about a second transverse pivot below the first pivot and extending upwardly to a point coincident at times with the first pivot; a bracket fixed to the motor and having a third transverse pivot intermediate the first pivot and the rear end portion of the valve member; and means for shifting the control part by adjustment of the control member between its neutral and active positions and arranged so that raising of the aforesaid element is without substantial effect on the adjusted position of the control member, said means comprising a lever rockable on the third pivot and having upper and lower ends respectively above and below said third pivot, link means connecting the upper end of the lever to the rear end portion of the valve member, and link means connecting the lower end of the lever to the aforesaid point on the control member.

2,729,350
RECEPTACLE HANDLING DEVICE
Raymond W. Wilson, Ferndale, Mich., assignor, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application February 2, 1953, Serial No. 334,428
5 Claims. (Cl. 214—313)



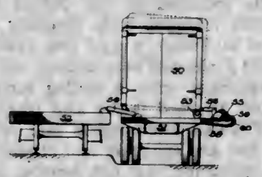
1. In a material handling apparatus, a material receptable having vertically spaced trunnions projecting laterally beyond opposing sides thereof, lift arms capable of being extended along opposing sides of said receptacle and respectively insertable beneath said trunnions, a normally vertically extending dump arm on each of said lift arms and simultaneously engageable with said trunnions upon elevation of said lift arms, boom means for elevating and lowering said lift arms, power-operated means carried by said lift arms and connected to said dump arms, said dump arms being arcuately movable relative to said lift arms to tilt said receptacle through the trunnions engaged by said dump arms, movement of said dump arms taking place about a pivot axis located on said lift arms, and fixed projections on said lift arms in longitudinal alignment with one of said trunnions and against which said one trunnion abuts during tilting movement to prevent displacement of said receptacle during tilting movement thereof.

2,729,351
MOLD BARROW
Leo O. Greeley, Cadillac, Mich., assignor to F. J. McCarthy, Inc., Cadillac, Mich., a corporation of Michigan
Application January 25, 1952, Serial No. 268,292
7 Claims. (Cl. 214—384)



1. In a conveyance of the wheel barrow type, the combination comprising: an L-shaped main frame including a forward, vertical portion and a rearward, horizontal portion, said rearward portion being joined to said forward portion at the upper end of said forward portion; means mounting a wheel to said forward portion; a rearwardly extending finger mounted to the lower end of said vertical portion of said main frame; a leg member having the same length as said forward portion of said main frame pivotally mounted to and between said rearward portion of said main frame for forward and rearward motion; said leg member extending downwardly from said main frame and means for locking said leg member in said downwardly extending position perpendicular to said main frame; a forwardly extending finger mounted on the lower end of said leg member whereby an article may be cradled between said rearwardly extending finger and said forwardly extending finger with said fingers beneath said article.

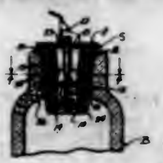
2,729,352
TRACK ENGAGING APPARATUS FOR MOVING TRANSFERABLE CONTAINERS
William C. Hodges and Alexander L. Robb, Redwood City, Calif., assignors to Hodges Research and Development Company, Redwood City, Calif., a corporation of California
Original application October 31, 1949, Serial No. 124,592. Divided and this application August 29, 1951, Serial No. 244,187
8 Claims. (Cl. 214—516)



1. In a mechanism for transferring containers mounted on casters upon a substantially level vehicular supporting surface, a rack-type track recessed in and substantially flush with the supporting surface, a power unit in-

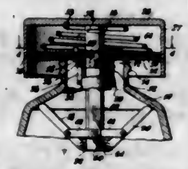
cluding a motor and a driving pinion engaging and mounted for movement on said track, a connecting arm pivoted at one end of said unit, and means mounted on the end of said connecting arm for connection to the container whereby the container may be transferred to or from the supporting surface.

2,729,353
STOPPER FOR VACUUM BOTTLES
Axel Moeller, Racine, Wis., assignor to Moeller Mfg. Co., Racine, Wis., a corporation of Wisconsin
Application September 19, 1952, Serial No. 310,496
1 Claim. (Cl. 215—53)



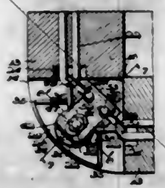
In a stopper for bottles, an elongated hollow compressible body member of a longer longitudinal length than the neck of the bottle including a cylindrical side wall and a bottom wall, said bottom wall having an interior cone shaped boss extending toward the side wall, an annular flange formed on the upper end of the stopper member adapted to intimately engage the lip of a bottle, a bottom cone plate engaging the lower wall with the cone portion of the plate movable toward the axial center of the body, said bottom cone plate having an annular seat extending beyond the conical portion of said plate and the inner periphery of the side wall of the body member, an axially disposed threaded stem on the center of the cone plate extending into the hollow body, a top compression plate engaging the upper surface of the body member, a sleeve nut threaded on the stem and movable through the upper plate, and a cam lever pivoted to the upper end of the sleeve nut for engaging the upper plate, the conical boss being movable bodily into the body member upon longitudinal compression thereof for bulging out the lower end of the body member.

2,729,354
UNIVERSAL BOTTLE CLOSURE
Nathan Zepelovitch, New York, N. Y., assignor to Nahum A. Bernstein, New York, N. Y.
Application April 28, 1950, Serial No. 158,642
14 Claims. (Cl. 215—85)



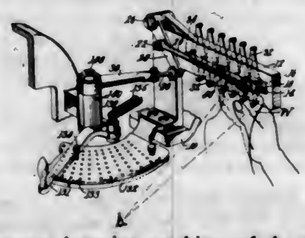
4. A container stopper comprising, a shaft substantially non-rotatable along the major portion of its length, a cover member mounted on one end of said shaft, a pair of extendible retaining arms pivotally mounted on the other end of said shaft, a rigid disc slidably mounted on said shaft and positioned intermediate said cover member and said retaining arms, a sealing surface mounted on said disc and disposed facing said retaining arms, a link member disposed intermediate said retaining arms and said rigid disc and engaging said retaining arms, lost motion means connecting said link member and said rigid disc in such a manner as to permit a predetermined limited axial telescopic movement of said link member with respect to said rigid disc for extending and retracting said retaining arms in accordance with the spacing between said disc and said retaining arms, and a spring operatively connected intermediate said cover member and said rigid disc for normally biasing said disc adjacent said retaining arms.

2,729,355
TENSIONABLE CONNECTION FOR KNOCKDOWN ARTICLES
Donald H. Gaston, Los Angeles, Calif., assignor to the United States of America as represented by the Secretary of the Army
Application June 17, 1953, Serial No. 362,335
13 Claims. (Cl. 217—65)



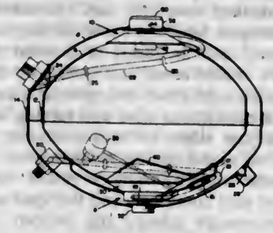
4. A knockdown container or the like, comprising a plurality of walls connected together to form a hollow container, said walls each having a plurality of edge surfaces, a plurality of pilasters each having a pair of angularly disposed side surfaces engaging correspondingly disposed edge surfaces of a pair of walls, said engaging side and edge surfaces of said pilasters and walls respectively being formed with interfitted complementary interfitting means whereby each pilaster releasably secures a pair of angularly disposed walls together, said container being formed with recesses at each corner thereof, said recesses each being at least partially defined by the adjacent ends of a trio of pilasters, an anchor fixed to each end of each pilaster, a base seated in each recess on one end of a pilaster, a rocker arm rockably mounted on said base, a drawbolt slidable through said rocker arm, said bolt having a head at one end in drawing engagement with the anchor of said pilaster which seats said base, a flexible draw member connecting said rocker arm with said anchors of the remaining pilasters of the trio, a nut on said drawbolt, said nut bearing on said rocker arm so as to rock the same in one direction upon tightening of said nut, tightening of said nut being operative to tension said flexible member and simultaneously impart axial tension to said drawbolt whereby each pilaster of the trio is tensioned substantially equally, and said connectors and pilasters thereby securing said walls together in rigid container-forming relation.

2,729,356
VISUAL GAGES FOR EYELETING MACHINE SPACING ADJUSTMENT
Sylvester L. Gookin, Cohasset, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application November 1, 1954, Serial No. 465,970
6 Claims. (Cl. 218—17.2)



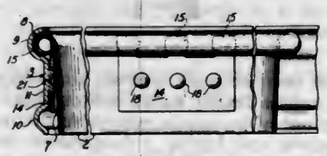
1. In a fastener inserting machine, of the type with which a succession of spaced apart fasteners may be inserted one at a time in a work piece and wherein the spacing apart of said fasteners may be varied by the setting of a manually movable space adjustment lever, a movable visual gaging device operatively connected with said lever by driving means and having spaced apart gaging indicators carried by the device and movable synchronously with the movement of the lever.

2,729,357
VACUUM JACKETED CONTAINER
Walter C. Nason, Jr., Quincy, and Howard O. McMahon, Lexington, Mass., and William R. Morgan, Camillus, N. Y., assignors, by direct and mesne assignments, to Cambridge Corporation, Somerville, Mass., a corporation of Delaware
Application May 6, 1953, Serial No. 353,268
9 Claims. (Cl. 220—15)



1. In a vacuum jacketed container having an inner vessel and an outer vessel, a support assembly comprising a compression spring, thrust members for the spring, one of said thrust members being connected with one of the vessels, the other thrust member having a conical wall, a cap member having a conical wall opposed to the conical wall of the thrust member, a ball retainer between the walls, and a plurality of tempered glass spheres in the ball retainer and having small-area contact with said conical walls.

2,729,358
BAKE PANS PROVIDED WITH IMPROVED MEANS FOR ATTACHING THE SAME TO THE STRAPPING
Charles E. Phillips, Cincinnati, Ohio, assignor to The Lockwood Manufacturing Co., Cincinnati, Ohio, a corporation of Ohio
Application May 15, 1952, Serial No. 287,999
5 Claims. (Cl. 220—23.2)



1. A cake pan assembly comprising a group of circular pans, each pan having a hollow beaded lip, a band embracing the group of pans, a separate plate between the band and each pan at a location where the band and pans are approximately tangent to each other, each plate having at the upper edge thereof at least one finger provided with an eye at the end thereof disposed within the bead of its associated pan, said plate being joined to the band at at least one point by fused metal, the portion of each plate below said bead being spaced from the adjacent pan wall.

2,729,359
WATER PRESSURE SEALING CLOSURE FOR WATER SOFTENER TANKS
Frederick D. Gugeler, Lombard, Ill.
Application November 7, 1951, Serial No. 255,202
11 Claims. (Cl. 220—25)



1. In combination in a water softener tank construction, a tank having an upwardly extending neck flange defining an access opening into the tank, a closure disk member of smaller diameter than said opening, a shoulder member carried in attached relation by the upper portion of said neck and having a joint therewith liable to leakage, said shoulder member providing a charging opening of smaller diameter than said access opening, said charging opening being of smaller diameter than said disk, and means for supporting said disk in closing relation at the inner face of said shoulder member to be forced by pressure within the tank into seating relation to said shoulder member, said shoulder member having a sealing gasket on its inner face against which said disk engages sealingly, said gasket also engaging said neck and thereby effecting a seal at the joint between said neck and said shoulder member.

2,729,360
PUNCTURING AND DISPENSING DEVICE HAVING SIDE PIERCING ELEMENT
Fred J. Taber, Richmond, Mo.
Application August 23, 1951, Serial No. 243,194
1 Claim. (Cl. 222—86)



For use with a container for liquid having a side wall and a pair of opposed ends each provided with a rim, a combination end-puncturing and side-piercing device comprising an elongated support member of U-shaped cross-section having a bight wall and a pair of leg walls, said member having a lowermost straight portion and a laterally extending handle portion, said bight wall being on the uppermost side of said handle portion, there being an elongated opening in said bight wall in the zone of juncture of said portions; an elongated lever element of U-shaped cross-section having a bight section and a pair of leg sections, said bight section being on the lowermost side of the element, said element being passed through said opening of the member and including a first length disposed below said handle portion of the member and a second length extending from the opposite side of the member; a pivot pin passing through said leg walls of the member in the zone of juncture of said portions and through said leg sections of the element between said lengths to swingably mount the element on the member; spring means yieldably biasing said element in a direction to urge said first length downwardly and away from said

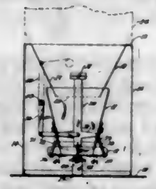
handle portion; stop means for limiting swinging movement of the lever in said direction; a downwardly directed funnel mounted on the bight wall of said straight portion adjacent the lower extremity of the latter; an upwardly facing knife mounted on the bight wall of said straight portion within the funnel and adapted for engagement with the lower end of said container within the rim thereof; an imperforate, conical piercing pin mounted on the bight wall of said straight portion adjacent the upper extremity of the latter and adapted for engagement with the side wall of said container adjacent the upper end of the latter; and a hook on the end of said second length of the lever adapted for engagement with the rim of the upper end of the container for forcing the container downwardly and toward said knife and said piercing pin to cause said container to be punctured thereby when the lever is swung against the bias of said spring means in a direction moving said first length upwardly and toward said handle portion.

2,729,361
COLLAPSIBLE DISPENSING TUBE
Walter Ephron, New York, N. Y.
Application June 21, 1950, Serial No. 169,465
2 Claims. (Cl. 222—92)



1. In a dispensing tube, in combination, a deformable body and a nipple rigidly secured to said body, said nipple having a channel forming a substantially helical convolution throughout its length, said channel communicating with the interior of said body and emerging laterally from said nipple.

2,729,362
CHEMICAL FEEDER
Walter J. Hughes, Tucson, Ariz., assignor to Infilco Incorporated, Tucson, Ariz., a corporation of Delaware
Application July 17, 1953, Serial No. 368,622
7 Claims. (Cl. 222—161)



1. A feeder for pulverant material comprising a bin having a discharge opening in its lower end, a reciprocably mounted delivery member below said discharge opening, said delivery member having an open top and an open bottom, means for reciprocating said delivery member at constant rate and with uniform amplitude, a tray mounted below said delivery member and linked thereto for movement therewith, means positionable to limit the amplitude of reciprocation of said tray relative to the amplitude of reciprocation of said delivery member, and means mounted on said delivery member transversely of its direction of reciprocation and extending to adjacent said tray and operative to sweep material from said tray when the amplitude of reciprocation of said tray is smaller than that of said delivery member.

2,729,363
NONCLOGGABLE DISPENSER
Alois Bauer, Brooklyn, and Louis Bulla, Bronx, N. Y.
Application February 24, 1953, Serial No. 338,288
1 Claim. (Cl. 222—189)



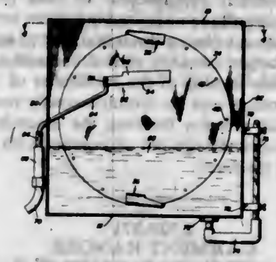
A non-cloggable dispenser for powdered material open at the top, a conical cover for said container removably secured to said open top, said cover having an opening at the apex thereof, and an insert of circular shape fitting within the sides of said cover and resting on the top edges of said container, said insert comprising a conical spring formed from a continuous wire and having an outer ring resting on the top edges of said container within said cover, said cover at the conical sides thereof abutting the top of said outer ring whereby to retain said spring on the top edges of said container, and the apex of said spring extending downwardly toward the bottom of said container.

2,729,364
OIL CONTAINER AND DISPENSER
Stephen Malko, Chicago, Ill.
Application August 12, 1952, Serial No. 303,961
6 Claims. (Cl. 222—211)



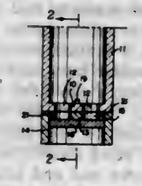
1. An oil container and dispenser comprising in combination a hollow flexibly walled body member, a closure member at one of its ends, a removable closure member at its opposite end having a longitudinal bore therethrough and having a recessed portion in communication with said longitudinal bore, resilient sealing members having registering bores therein in the said recessed portion of the closure member, a slidably movable hollow stem mounted in the longitudinal bore in the said closure member and extending through the central bores in the said sealing members, the said hollow stem having transverse ports adjacent one end, a closure member on one end of the said hollow stem and a fixed collar on the said hollow stem adjacent the end of the said stem opposite to the said closure member, the said sealing members being tightly fitted into the said recess and having a close sliding fitting engagement with the hollow movable stem.

2,729,365
AUTOMATIC LIQUID FEEDER
Louis Fettkether and Donald L. Fettkether, Farley, Iowa
Application July 30, 1954, Serial No. 446,848
2 Claims. (Cl. 222—305)



1. An automatic liquid feeder comprising a liquid supply tank, a vertical wheel rotatably mounted within said liquid supply tank, drive means for rotating said wheel, at least one bucket carried by said wheel for picking up liquid from within said liquid supply tank, a tray for receiving liquid from said bucket, said bucket being tubular with a rear closed end and having a longitudinally extending front end opening, an upturned lip at the front end of said bucket to ensure proper picking up of liquid from a low liquid supply.

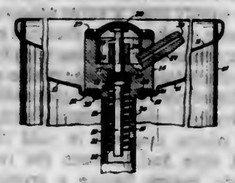
2,729,366
PILL DISPENSER
Orlando A. Chadwick, Denver, Colo.
Application October 25, 1952, Serial No. 316,919
6 Claims. (Cl. 222—362)



1. A dispenser for dry granular and pellet form materials comprising the combination with a container for the material of a container end closure fully and transversely obstructing the container, apertures accommodative of a measured quantity of the material to be dispensed eccentrically intersecting said end closure, a disk fixedly carried by the container in registration with and to spacedly parallel said end closure exteriorly of the container, apertures intersecting said disk out of registration with the end closure apertures, a transfer plate revolubly engaged between said disk and end closure, and apertures through said plate alternatively registrable with the apertures of said disk and end closure as an incident of plate angular adjustment.

2,729,367
PRESSURE DISPENSING VALVE ASSEMBLY
Abe O. Samuels, Bridgeport, Conn., assignor, by mesne assignments, to Maryland Devices, Inc., Baltimore, Md., a corporation of Maryland
Application May 13, 1950, Serial No. 161,835
1 Claim. (Cl. 222—394)

The combination of a pressure-tight container having an opening in one end thereof, a discharge valve mounted in the opening and having a shoulder overlying the outer face of the end wall around the opening and an annular flange integral with and depending from the shoulder, said flange extending through the opening and being bent back to engage annularly the inner face of the wall around the opening to secure the discharge valve to the container, the shoulder of the discharge valve having an annular channel overlying that portion of the wall of the container around the opening above the bent back flange, and a gasket composed of resilient material in the annular channel compressed between the upper and outer and inner walls of



the channel and said portion of the end wall of the container by the bent back flange to prevent leakage between the container wall and discharge valve, said gasket being slightly thicker than the depth of the annular channel and substantially as wide as is said channel.

2,729,368
TILT-RESTRICTOR AND MECHANISM COVER FOR TILTABLE SPOUTS
Aaron S. Lapin, Richmond Heights, and Jack W. Soffer, St. Louis, Mo., assignors to Development Research, Inc., St. Louis, Mo., a corporation of Missouri
Application September 23, 1950, Serial No. 186,351
5 Claims. (Cl. 222—394)



1. For use with a dispenser having a tiltable discharge spout including a dispensing tip at its outer end and a tilt-permitting mechanism inward of such tip, a tilt restrictor and mechanism cover comprising a washer-like disk secured to such spout between its dispensing tip and its tilt-permitting mechanism and having an unsecured outer edge, said disk having a width, measured radially from the wall of such spout, greater than the arc of greatest intended tilt of such spout, together with a domed annulus, bounded by a circumferential edge adapted for mounting to such dispenser and an inner edge presented spacedly around such spout and adjacent the surface of said disk, the width of space between said inner edge and such spout in untilted position being less than the radial width of said disk.

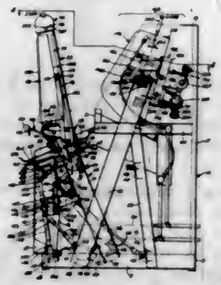
2,729,369
GREASE-GUNS
Henri A. Chinchole, Paris, France
Application January 28, 1952, Serial No. 268,549
Claims priority, application France October 4, 1951
13 Claims. (Cl. 222—394)



1. A grease gun comprising a body traversed by a duct communicating at one end with a pipe for supplying

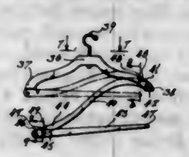
grease under pressure and at the other end with a pipe for discharging grease, a manually operated tumbler controlling the flow of grease through said duct, a plunger actuated by said tumbler, a spring-controlled valve adapted to be lifted off its seat by the pressure of the grease in the supply pipe, a valve adapted to rest on its seat by the pressure of the grease that has passed the first valve and to be removed from its seat by the plunger actuated by the tumbler, discharge valve means including a slide and two valves rigid therewith disposed in said duct in a chamber communicating with the discharge pipe, a tubular piston disposed in said chamber about a shank of said slide and between the two valves carried by said slide, means having a grease passage and disposed in said duct between said discharge pipe and said chamber and being formed with a discharge valve seat, both of said slide valves acting in the same direction and one capable of coming into contact with the discharge valve seat and the other adapted to close the orifice of the piston in response to the manual operation of said tumbler, and a spring coupled to said slide and adapted to push the slide so as to disengage the slide from its discharge valve seat.

2,729,370
PRESSING MACHINE
Ira C. Maxwell, Ole H. Langen, and Peter W. Toogen, Minneapolis, Minn., assignors to The Unipress Company, Incorporated, Minneapolis, Minn., a corporation of Minnesota
Application September 2, 1952, Serial No. 307,456
29 Claims. (Cl. 223—73)



1. A pressing surface composed of two cooperating pressing elements each including a groove lengthwise therein, said groove having a cooperating meeting edge at one side and a cooperating pressing flange at the other side, means mounting said pressing elements with the groove, meeting edge and flange of the one cooperating pressing element facing the corresponding portions of the other and for limited rocking movement about an axis generally normal to the grooves thereof, means connecting said pressing elements and for guiding said meeting edges into engagement with each other, the grooves of the pressing elements forming together an internal generally tubular longitudinal space into which access is available through the space then existing between the pressing flanges, the portion of said grooves of the pressing elements adjacent the meeting edges forming together a combined smooth pressing surface generally opposite said space through which access may be gained, an elongated form having a thickness such that it can be entered by edgewise movement through said space and having an edge shaped for pressing engagement with said combined smooth pressing surface for pressing a longitudinal strip of a garment sleeved thereon, the remainder of the grooved pressing surfaces and flanges of the pressing elements being shaped so as to be out of contact with said form when said meeting edges of the pressing elements are in contact, means connected to the form for moving said form thus edgewise into pressing engagement with said smooth pressing surface for ironing said longitudinal area of a tubular garment component sleeved on said form and means for then moving the presser heads pivotally about axes generally longitudinal of said pressing elements and for simultaneously moving them towards each other in a direction to bring the remainder of said grooved surfaces and flanges towards each other and against said form to complete ironing of the remainder of the tubular garment component and for simultaneously rocking those portions of said grooves forming the smooth combined pressing area substantially out of contact with said longitudinal area of the form.

2,729,371
GARMENT HANGER
Rose Waldman, Jersey City, N. J.
Application July 18, 1952, Serial No. 299,544
1 Claim. (Cl. 223—89)



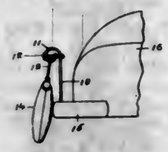
A garment hanger comprising an arcuate shoulder bar, a wire hook centrally attached to the shoulder bar, an S-shaped member having one end pivotally secured to the shoulder bar at one end of said bar with a diagonal downward inclination toward the other end of the bar, a straight bar pivotally secured to the lower end of the inclined S-shaped member, means to hold the S-shaped member in its inclined position and means to hold the straight bar extending substantially horizontally from the lower end of the S-shaped member toward the secured end of the shoulder bar, said means to hold the S-shaped member being a pin fixed to said member to abut the upper edge of the shoulder bar when said member is in its inclined position and said means to hold the straight bar horizontal being an abutment stud fixed to the straight bar at its secured end and adapted to abut a slot formed in the upper edge of the inclined member when the straight bar is horizontally disposed.

2,729,372
NEEDLES
Percy Winter, Fort Lee, N. J.
Application June 15, 1953, Serial No. 361,675
1 Claim. (Cl. 223—102)



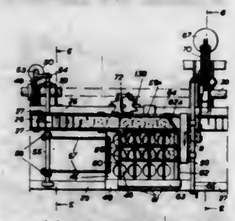
A sewing needle having a cylindrical shank and a point at the front end thereof, the rear end being flattened to produce a flattened portion the transverse dimension of which is not substantially greater than the diameter of said cylindrical shank, said flattened portion having an eye through which the thread may be freely pulled endwise, a gap formed in a side edge of said flattened portion and in the rear of said eye, said flattened portion having an outer edge extending toward the rear of the needle leading into said gap and being inclined downwardly towards said gap to facilitate entry of the thread into said gap, a projection of the said outer edge intersecting the top wall of said gap so that said top wall acts as a stop to guide the thread into said gap and a passage formed in the flattened portion connecting said gap to the portion of the eye farthest from the point, the intermediate portion of said passage being narrower than the end portions thereof, whereby a loop of thread may be pulled into or out of said eye by exerting a greater pull on the said loop lengthwise of the needle than is normally employed in sewing.

2,729,373
WATER BAG CARRIER
James Elliott Stamp, Grand Junction, Colo.
Application July 8, 1953, Serial No. 366,645
1 Claim. (Cl. 224—42.03)



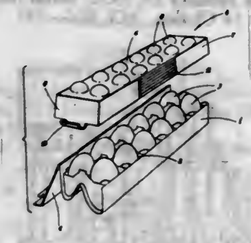
In a water bag supporting bracket for use on a bumper of a motor vehicle, the combination which comprises a vertically disposed bar having an attaching means on the lower end and having a coil providing a hook for retaining a handle of a water bag on the upper end, said hook including a U-shaped section having vertically disposed arms connected at their lower ends with an arcuate section and positioned with one of said arms connected to the upper end of said vertically disposed bar with an arcuate section which extends over the other arm, said arms and bar having aligned openings extended therethrough and a fastener extended through the aligned openings for retaining the handle of a waer bag in said U-shaped section, and said attaching means being adapted to attach the bar to a guard of a motor vehicle bumper.

2,729,374
MACHINES FOR PACKING ARTICLES INTO CONTAINERS
George Wallace Haycock, Glasgow, Scotland, assignor to Haybar Limited, Glasgow, Scotland
Application December 28, 1951, Serial No. 263,774
Claims priority, application Great Britain January 1, 1951
13 Claims. (Cl. 226—14)



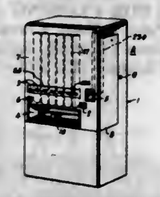
1. A packing machine having a packing zone and comprising a supply conveyor for conveying articles in succession, an article-locator for marshalling the conveyed articles in successive groups at the packing zone and consisting of a transversely displaceable carrier with longitudinally projecting members to define spaced-apart receivers for rows of said articles, means for displacing the carrier step-by-step in one direction to receive the articles row-after-row and form a group and for reversing the carrier thereafter to return in the opposite direction, means associated with said article-locator to maintain a space between every two adjacent articles in each row, a conveyor for conveying empty criss-cross partitioned containers to, and removing said containers when filled from the packing zone, article-packing mechanism operating in the packing zone for packing the container there with a marshalled group of the articles, said article-packing mechanism comprising article-grippers movable direct from an upper position, in which they seize the articles of a group individually, to a lower position in which the grippers put the spaced-apart rows of spaced-apart articles into inter-partition compartments of a container below, said upper position being directly above said lower position, mechanism for lowering and raising the grippers between said positions and devices acting on the grippers to close and open them so that they seize and release the articles.

2,729,375
EGG TRANSFERRING AND SUPPORTING DEVICE
Marvin W. Pace, Yucca Valley, Calif.
Application August 10, 1953, Serial No. 373,086
5 Claims. (Cl. 226—14)



1. An egg transferring and supporting device for cooperation with an egg carton having symmetrically arranged compartments each holding an egg in upwardly exposed relation, said device comprising a tray-like container having a bottom, sides, and ends, the container normally opening upwardly with said sides and ends upstanding from the bottom, and said container having normally upwardly opening individual egg-seating recesses in the bottom in substantially the same positional relation as the compartments and the eggs in said carton; the container being shaped and dimensioned for cooperative and symmetrical engagement, when inverted, with the egg carton from above, whereby when the assembly of said engaged egg carton and container is inverted to place the latter lowermost and in its normally upwardly opening position, the eggs transfer from said compartments into corresponding recesses of said container.

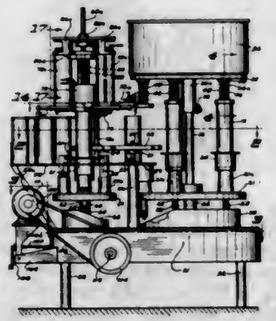
2,729,376
BEVERAGE VENDING MACHINE
Marcus A. Gould, San Diego, Calif., and Kenneth I. Arntson, Fort Worth, Tex.
Application January 14, 1950, Serial No. 138,634
11 Claims. (Cl. 226—46.3)



1. A mechanical machine for vending a beverage in an open-ended receptacle through a delivery opening comprising storage means adapted to support a stack of said receptacles, release means associated with said storage means adapted to successively eject receptacles therefrom, a liquid supply tank having discharge means, flow control means in said discharge means, a manually operable actuating lever operatively connected to said release means and to said flow control means adapted on actuation to successively eject a receptacle and then open said flow control means, a movable receptacle support means having a first position for supporting an ejected receptacle in communication with said discharge means and a second position wherein said receptacle is aligned with said delivery opening by gravity action of a predetermined amount of liquid in said ejected

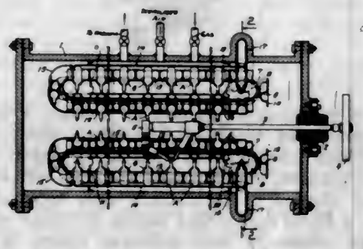
receptacle, and an interconnecting linkage between said support means and said flow control means adapted to close said flow control means on movement of said support means to said second position.

2,729,377
MACHINE FOR FILLING AND SEALING A CONTAINER
John G. O'Neil, Minneapolis, Minn., assignor to Weinon Corporation, St. Paul, Minn., a corporation of Minnesota
Application January 19, 1952, Serial No. 267,283
14 Claims. (Cl. 226—75)



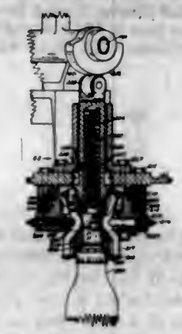
1. The method of sealing a container having an open upper end which consists in forming a closure member having a flat central portion and an upwardly and reversely bent peripheral flange, said flange thus having inner and outer portions, said flat central portion being disposed below the top of said flange, coating said container and flange with a substance adapted to form an adhesive when heated, holding said closure member above said container and substantially axially aligned therewith, moving said container upwardly into said closure member between said inner and outer portions of said flange, heating said closure member and upper portion of said container to soften said substance and pressing both portions of said flange against the inner and outer sides of said container to seal said container and flange together.

2,729,378
MACHINE FOR CLOSING AMPOULES
Juan L. Pujol y Font, Cleveland, Ohio
Application June 11, 1952, Serial No. 292,850
11 Claims. (Cl. 226—82.2)



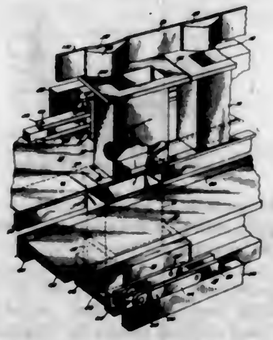
1. In a machine for sealing ampoules the combination of a gas-tight chamber, a magazine for holding a supply of ampoules, means for successively feeding the ampoules from said magazine to said chamber, means for distributing said ampoules within said chamber, a heat-sealing unit in said chamber, and means controlled from without said chamber for bringing said ampoules and said heat-sealing unit in relative positions to effect the sealing of said ampoules.

2,729,379
BOTTLE CAPPING MACHINE
Isaac L. Wilcox, Fulton, and Nathaniel S. Cole, Baldwinsville, N. Y., assignors to Oswego Falls Corporation, Fulton, N. Y., a corporation of New York
Application September 29, 1950, Serial No. 187,472
6 Claims. (Cl. 226—83)



1. A capping head for applying hood caps to bottles comprising a body member, an annular series of cap engaging and contracting fingers arranged in the body and depending therefrom, an annular series of pivot members mounted in the body for movement radial of said annular series of fingers, each of said fingers being pivotally mounted intermediate its ends to a corresponding one of said pivot members, cam means cooperable with the upper ends of said fingers to effect outward radial movement thereof and inward radial movement of the lower portions of said fingers, and means yieldingly urging said pivot members toward the axis of said annular series of fingers.

2,729,380
PACKAGE FILLING MACHINE
Clarence J. Malhiot, Oak Park, Ill., assignor to F. B. Redington Co., Chicago, Ill., a corporation of Delaware
Application May 20, 1950, Serial No. 163,249
3 Claims. (Cl. 226—102)



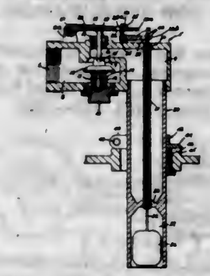
1. In a package filling machine, an endless movable conveyor, a series of measuring pockets on said conveyor, said pockets having open upper and lower ends and movable by the conveyor in succession in a horizontal closed path through a pocket filling zone in one direction to receive charges of material to be packaged therein through the open upper ends thereof and through a package filling zone to discharge said charges through the lower ends thereof into respective packages conducted through said latter zone, means at said pocket filling zone for delivering material in and about the open upper ends of the pockets passing therethrough, the open upper end of each pocket being provided with a surrounding rim portion presenting a substantially flat upper surface area designed for reception thereon of excess material not delivered into said pocket at the pocket filling zone, an endless conveyor, a series of rake members on said endless conveyor movable through said pocket filling zone across the upper surface of said rim portions for impelling said excess material into the open ends of said pockets, and means for moving the rake members mounted on said conveyor.

2,729,381
PROCESS AND DEVICES FOR THE SUBMITTING SUCCESSIVELY OF BOTTLES AND OTHER RECEPTACLES TO EXHAUSTION AND PRESSURE
Jacques Nicolas Wiser, Antwerp, Belgium
Application March 12, 1952, Serial No. 276,214
6 Claims. (Cl. 226—116)



1. A process for the submitting successively to exhaustion and pressure of receptacles closed by a closure of the type that comprises a cap the bottom of which has at least one orifice and against this bottom an elastic diaphragm having at least one orifice not juxtaposed to the orifice of the said cap, said process comprising the steps of: applying a force by which the elastic diaphragm is mechanically urged so that the orifice of the cap is temporarily freed and the orifice of the diaphragm is temporarily opened, connecting the interior of the receptacle with a source of vacuum while said mechanical urging of the diaphragm is maintained, then connecting the interior of said receptacle to a source of a fluid under pressure.

2,729,382
BARREL FILLERS
John G. Weber, Philadelphia, Pa., assignor to Pennsylvania Flexible Metallic Tubing Co., Philadelphia, Pa., a corporation of Pennsylvania
Application December 1, 1952, Serial No. 323,481
2 Claims. (Cl. 226—127)



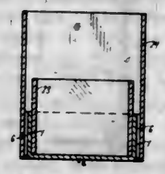
1. A barrel filler assembly comprising an elongated valve housing having an inlet at one end and a discharge at the other end, an internal partition, means in said housing forming an inlet compartment and a discharge compartment, said compartments being in substantially longitudinal alignment, said partition means having a valve seat opening therein spaced from the sides of said housing and lying in a plane substantially parallel to the longitudinal plane of said housing, a valve positioned within said inlet compartment and below said partition, said valve including spring loading means seated between the bottom surface of the valve and the bottom surface of said valve housing urging said valve upwardly into said valve seat opening, a valve rod extending upwardly from said valve and through said housing, a lever pivotally mounted to said housing forward of said valve rod for engaging and vertically actuating said valve rod to displace said valve, said lever provided with a slotted opening rearward of said valve rod, a bellcrank pivotally mounted to the top of said housing at a point in substantial alignment with the slot in said lever to latch the lever in a position contiguous to the valve housing when the lever is depressed, a spout threadably engaged to the discharge compartment of said housing and extending downwardly therefrom at substantially right angles thereto, a tubular guide supported coaxially in the spout, a float rod in said guide, means for adjustably connecting the upper end of the float rod to the other free arm of the bellcrank, and a float attached to the lower end of the float rod.

2,729,383
SHIPPING CARTON
Byron W. King, Lakewood, Ohio, assignor to Liftainer System Company, Huntington Woods, Mich., a corporation of Michigan
Application January 14, 1953, Serial No. 331,139
2 Claims. (Cl. 229—6)



1. A carton having four side walls and a bottom portion of paper board, a floor spaced above the lower edge of said bottom portion, a reinforcing frame of wood material below said floor, said reinforcing frame comprising spaced longitudinally extending wood frame members and transverse wood frame members, and tunnel portions folded from extensions at the lower edges of opposite side walls below said frame and in the space between an adjacent pair of said longitudinally extending members.

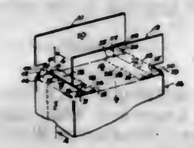
2,729,384
CONTAINERS
Walter C. George, St. Louis, and William T. Nye, Richmond Heights, Mo., and John A. Bousquet, Houston, Tex., assignors to Gaylord Container Corporation, St. Louis, Mo., a corporation of Maryland
Application January 30, 1953, Serial No. 334,288
3 Claims. (Cl. 229—23)



1. A tall heavy duty rigid container for shipping and/or storing material therein comprising a relatively shallow collapsible tray having a flat bottom with an upstanding wall thereabout and a plurality of open-ended collapsible sleeves, the sleeves each being interiorly unobstructed throughout their lengths, snugly telescoped and of greater successive lengths relative to each other and the said upstanding wall, the lower portions of all the sleeves being in parallel relationship with each other and with the lower portion of at least one sleeve disposed within and in snug contacting relation with the inner surfaces of the upstanding wall, and with the lower end edge thereof in contacting relationship with the adjacent inner surface of the flat bottom and at least one other sleeve having its lower portion snugly engaging the outer surfaces of the upstanding wall and with its lower edge being substantially co-planar with the exterior surface of the flat bottom, the upper edge of the shortest sleeve terminating upwardly and beyond the upstanding wall, and the upper edge of the

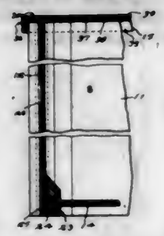
next successive sleeve terminating spacedly upwardly beyond the upper edge of said shortest sleeve to provide a stepped wall throughout the length of the container.

2,729,385
CLOSURE FOR CONTAINERS
George Arlington Moore, New York, N. Y.
Application June 7, 1952, Serial No. 292,226
7 Claims. (Cl. 229—37)



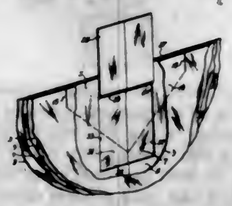
6. A corner closing construction for cartons which comprises an inwardly and downwardly folded flap, said flap having a flat up-right triangular pleat folded of a portion of an adjacent up-right foldable end closing panel, said flap being provided with an inner-most marginal portion thereof being folded upwardly, outwardly and downwardly in self-superimposing relationship upon an inner portion of its folded wall, the opposed side end edges of said superimposed folds being disposed in abutment with interior surface margins of a pair of adjacent opposing side walls of the container, the outer disposed transverse end edge of the superimposed fold being disposed in line with the up-right free end edge of said folded pleat, said panel having the folded pleat being folded inwardly and downwardly upon said self-superimposed folded margin, said pleat being disposed flatly upon an outer margin of said in-folded flap, the free edge of said pleat being disposed in abutment with a portion of the free end edge of said self-superimposed folded margin.

2,729,386
COLLAPSIBLE BOXES OR CRATES
Simon Haddad, Charleston, W. Va.
Application August 4, 1952, Serial No. 302,511
1 Claim. (Cl. 229—41)



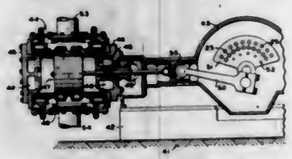
A collapsible crate comprising a pair of opposed side walls, a pair of opposed end walls, a bottom wall, and a cover having a depending peripheral flange, said walls and flanged cover each being formed of a central sheet of cardboard having a plastic coating on opposite sides thereof, each of said side walls adjacent each of its respective ends being provided with an enlarged vertical column formed of said plastic and being integral with said plastic coating on each side of said sheet, each of said columns having a vertically extending keyway formed therein with each keyway of one of said side walls confronting a keyway on the other of said side walls, each of said end walls having a substantially horizontal column formed of plastic material which is integrally connected with said plastic coating on opposite sides of each end wall and positioned adjacent the lower end thereof, each of said horizontal columns having a keyway formed therein with the keyway of one of said horizontal columns confronting the keyway of the other of said columns, said bottom wall having an enlarged key at opposite ends thereof engaged slidably within the keyways formed in said horizontal columns, said end walls each having an enlarged key at each of its respective ends slidably engaged in said confronting keyways formed in said vertical columns, and said cover positioned over the open end of said crate with its said flange telescoping around said side and end walls.

2,729,387
BAG
Charles V. Brady, St. Louis, and Russell J. Williams, Richmond Heights, Mo., assignors to Bemis Bro. Bag Company, St. Louis, Mo., a corporation of Missouri
Application April 30, 1953, Serial No. 352,118
9 Claims. (Cl. 229—62.5)



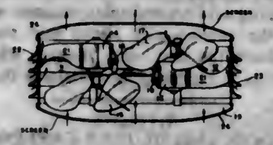
1. A multi-ply bag having a folded-in valve at one corner thereof and a valve extension formed from one of the plies of the bag extending from the valve, said extension being constituted by a tongue-like portion of said one ply integrally joined to said one ply on a line extending adjacent and generally parallel to the edge of the valve, said tongue-like portion being severed from the said one ply on that side of said line away from the edge of the valve, being longer than the distance from the edge of the valve to said line, and being folded back substantially on said line thereby to project beyond the edge of the valve.

2,729,388
ADJUSTMENT OF COMPRESSOR CYLINDER CLEARANCE FOR WIDE RANGE OF CONDITIONS
Clarence R. Ringham, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application December 8, 1950, Serial No. 199,879
19 Claims. (Cl. 230—188)



10. A gas compressor comprising, in combination, a cylinder having a removable closed end, valve openings in said cylinder near said closed end, valves removably mounted in said valve openings, an axially movable variable clearance piston fitting said cylinder, means to move said piston, said variable clearance piston comprising a piston head plate movable to a point adjacent said closed end of said cylinder to compress gas between said piston head plate and said closed end, a cylindrical piston body assembly separable from said head plate, said cylindrical body assembly including a plurality of circular plate of diameter equal to that of said head plate, a successive pair of said circular plates separated by a circular plate of diameter smaller than the diameter of a plate of said pair of plates, a piston ring surrounding circumferentially said plate of said smaller diameter, and a centered opening in said plates and in said head plate for insertion of said piston rod.

2,729,389
AIR TRANSLATING APPARATUS
Gustav H. Koch, Springfield, Mass., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application September 10, 1954, Serial No. 455,256
4 Claims. (Cl. 230—259)



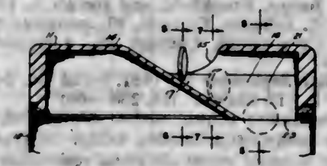
1. A fan device comprising a plurality of fan units, each unit comprising an electric motor and a propeller fan mounted on the motor shaft, a fan supporting structure, said units being mounted on said supporting structure and disposed side by side with their axes parallel, the paths of the fan tips, when projected on a plane normal to the axes, overlapping each other, each fan being disposed at the end of its associated motor shaft which is opposite of the end of the other motor shaft on which the other fan is disposed, and each fan overlapping the motor of the other unit in axial extent, said fans being operable in directions to move air in the same direction.

2,729,390
TOY BANK
Harry E. Gosselin, Bridgeport, Conn.
Application August 13, 1952, Serial No. 304,110
4 Claims. (Cl. 232—4)



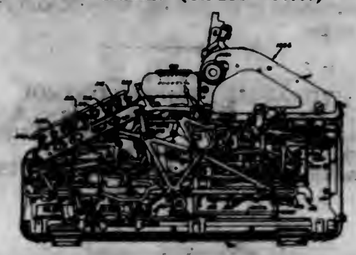
1. In a bank of the type described, a hollow base member; a simulated building mounted on the top of the base to partially overlie said top, the top of the base adjacent the building having thereon simulated landscaping, said base having an opening in the side thereof through which money deposited in the base may be removed; and a closure slidably mounted on the base to close said opening and having a notch in one edge to form with the edge of the opening a coin-receiving slot through which money may be deposited in the base.

2,729,391
DROP INLET CONSTRUCTION FOR FARE BOXES
Walter E. Straubel, Johnston, and Max L. Grant, Providence, R. I.; said Straubel assignor to said Grant
Application June 22, 1951, Serial No. 233,018
1 Claim. (Cl. 232—7)



A drop inlet for a fare box having an upper wall, an inlet opening in said upper wall of large size adapted to simultaneously receive a number of fare elements dropped thereinto, a receiving chamber below the inlet opening comprising a guide trough having an elongated end wall of transverse concave curvature and inclining downwardly in a straight path from one end of the opening towards the other end of the opening, said transverse curvature having a progressively decreasing radius throughout its downward incline, and flat side walls extending from the elongated edges of the end wall in downwardly converging relation, the lower ends of the end wall and the side walls terminating in the same horizontal plane and forming an elongated exit slot substantially narrower than the diameter of a small coin, said exit slot being horizontally displaced in relation to the opening and positioned below and underlying the upper wall.

2,729,392
CONTROL MEANS FOR CALCULATING MACHINE
Thomas M. Butler, Detroit, Mich., assignor to Burroughs Corporation, Detroit, Mich., a corporation of Michigan
Original application April 7, 1949, Serial No. 85,971. Divided and this application March 24, 1952, Serial No. 278,260
8 Claims. (Cl. 235—60.47)

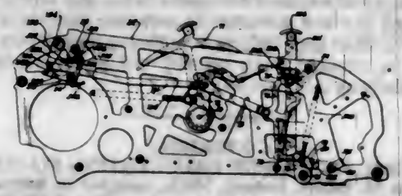


1. A calculating machine having columnar recording means including a portion movable to a plurality of columnar recording positions, a first totalizer, function control means for the first totalizer conditionable to cause said totalizer to perform any of a plurality of computing functions, including addition, subtraction and total-taking, a second totalizer, function control means for the second totalizer, a first means automatically controlled by said movable portion of said columnar recording means and variably presettable to condition the function control means for the second totalizer for any of a plurality of computing functions in machine operations performed with said movable portion in its several columnar positions, a second means automatically controlled by said movable portion and variably presettable independently of said first means to vary the conditioning of the function control means for the second totalizer in any of a plurality of preselectable ways in preselectable ones of the columnar positions of said movable portion, and means controlled automatically by the first totalizer in accordance with the algebraic sign of the amounts accumulated therein to render said second means effective to vary the condition of the function control means for the second totalizer in the preselected way in operations of the machine performed with said movable portion in a preselected columnar position when the first totalizer contains an amount of one algebraic sign but ineffective when said amount is of the other algebraic sign.

2,729,393
ZEROIZING CONTROL MECHANISM
Eugene V. Heitlinger, Franklin Park, Ill., assignor to Felt and Tarrant Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application May 16, 1952, Serial No. 288,133
23 Claims. (Cl. 235—130)

1. A calculating machine, comprising an accumulator, keys for controlling actuation of said accumulator, error control mechanism operable in response to mismanipulation of any of said keys to prevent erroneous actuation of said accumulator, means for zeroizing said accumulator

including a zeroizing control member, normally inoperative means in certain denominational orders of the machine for preventing zeroizing of certain denominational orders of said accumulator upon operation of said zeroizing control member, selectively operable control means for rendering said normally inoperative means



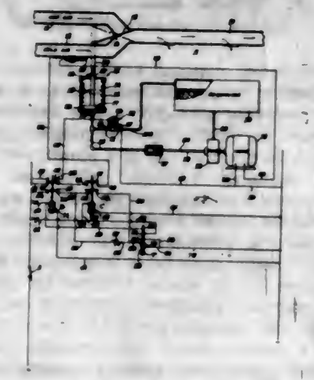
operable, and normally inoperative mechanism in said certain denominational orders of the machine conditioned in response to operation of said control means for actuation in response to subsequent operation of said error control mechanism to prevent operation of said zeroizing control member.

2,729,394

HYDRAULIC DAMPER CONTROL

William R. Peterson, Oaklawn, and Charles E. Krupp, Evanston, Ill., assignors to Vapor Heating Corporation, Chicago, Ill., a corporation of Delaware

Application December 12, 1952, Serial No. 325,732
5 Claims. (Cl. 236—13)



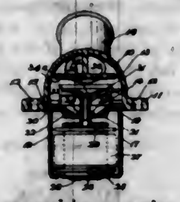
1. In combination with means including an adjustable damper for proportionately blending heated and unheated air for delivery into an enclosure to vary the temperature thereof, of means for adjusting the damper in opposite directions comprising an hydraulic reciprocating motor operatively connected to said damper and means for operating the same including a spring for operating said motor and damper in one direction, fluid pressure means for moving said motor and damper in the opposite direction including a fluid pressure source separate from said motor, an electric motor operated pump for withdrawing fluid from said source and forcing it into said hydraulic motor, a by-pass conduit connecting said fluid source with said hydraulic motor, a normally closed but energized open solenoid valve disposed in said by-pass conduit and operable when energized to pass hydraulic fluid from said hydraulic motor to said source, an electric circuit for said solenoid valve, an electric circuit for said pump motor, means for controlling the energization of said solenoid valve and said pump motor comprising two pairs of normally opened fixed contacts arranged in series in said motor circuit, a pair of normally closed fixed contacts in the solenoid circuit, a first relay magnet operable upon energization thereof to close one pair of said normally open contacts and to open said normally closed contacts, a second relay magnet operable upon energization thereof to close the other pair of normally open contacts, and circuit means including a thermostat responsive to the temperature of the enclosure, and circuit means operable under the control of said thermostat for maintaining both of said relay magnets energized when the temperature within the enclosure is below a predetermined maximum, for de-energizing said second relay magnet when the temperature of the enclosure is above said maximum, and for de-energizing the first relay magnet when said temperature attains a higher predetermined maximum.

2,729,395

THERMOSTATS AND OUTLET CASTINGS USED IN MOUNTING THERMOSTATS IN AUTOMOTIVE COOLING SYSTEMS

William M. Watkins, Jr., Knoxville, Tenn., assignor to Robertshaw-Fulton Controls Company, Greensburg, Pa., a corporation of Delaware

Application August 30, 1950, Serial No. 182,361
8 Claims. (Cl. 236—34)



2. A thermostat comprising a casing defining a walled fluid duct having a generally cylindrical side wall, spaced end walls and an inlet opening in one of said end walls and an outlet passage in the other said end wall, an annular valve seat in said duct, a circular poppet valve element positioned downstream of said seat in axial alignment therewith and movable relative to said seat for controlling fluid flow through said duct, said valve member having a downstream side defining a plane, thermally responsive means for actuating said valve element including an expansible element arranged to be contacted by fluid flowing into said casing, said valve element being operable to open and closed position solely by means of said expansible element, a flange carried by one of said walls and providing a surface in said passage substantially parallel to said downstream side of said valve element in all positions thereof and in close proximity thereto when said valve element is in open position, said flange being positioned between said valve element and said other wall, said surface being substantially coextensive with said downstream side of said valve element for shielding said downstream side of said valve element from the effects of turbulent flow downstream thereof and thereby maintaining substantially constant loading on said expansible element.

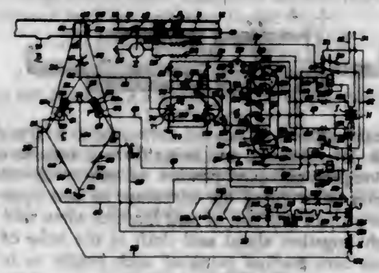
2,729,396

ELECTRONICALLY REBALANCED TEMPERATURE SENSING BRIDGE

Charles E. Impey, Brookfield, and Joseph A. Christ and Edward W. Johnson, Chicago, Ill., assignors to Vapor Heating Corporation, Chicago, Ill., a corporation of Delaware

Application September 12, 1951, Serial No. 246,188
14 Claims. (Cl. 236—68)

1. A temperature control system comprising, in combination, a temperature sensing bridge composed of a plurality of arms of equal electrical resistance, an electrical power source connected to opposite sides of the bridge, a temperature sensitive resistor interposed in one of said arms and responsive to deflections in the temperature being controlled to vary the resistance of said arm relative to the other arms of the bridge and thereby unbalance the bridge, a temperature altering means including an actuator therefor for progressively adjusting the same to counteract the temperature deflections in the temperature being controlled, a temperature sensitive resistor interposed in another arm of the bridge, an electrical heater for applying heat to the last mentioned resistor to produce resistance variation therein to offset the effect of the resistance variation in the first mentioned resistor and thereby momentarily rebalance the bridge, electrically energized circuit closing means for energizing said heater and said actuator, and means including an



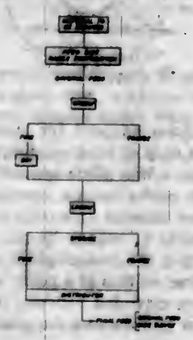
electronic switch connected in circuit with an output point of the bridge and effective during an unbalanced condition in the bridge for controlling the energization of said circuit closing means, whereby the recurrent balanced and unbalanced condition of the bridge and the consequent momentary energization and de-energization of said actuator progressively varies the effectiveness of the temperature altering means to remove the said deflection in the temperature being controlled.

2,729,397

METHOD OF AND APPARATUS FOR FEEDING MATERIALS TO DRUM TYPE CRUSHING AND GRINDING MILL

David Weston, Toronto, Ontario, Canada

Application January 2, 1951, Serial No. 203,861
10 Claims. (Cl. 241—24)



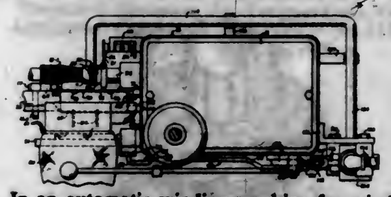
1. A method of feeding material to a combined dry crushing and grinding mill of the type comprising a drum having a diameter length ratio of at least 2:1, highly upstanding transverse crusher bars spaced uniformly about the interior of the cylindrical periphery thereof and opposed annular liner deflector members secured to the interior of the end walls, said method comprising preparing from the material an original feed having at least a predetermined minimum percentage of relatively coarse material of a selected plus size; separating said original feed into a relatively fine part and a relatively coarse part containing substantially all the material of said selected plus size; handling each of said parts separately until substantially immediately prior to their delivery to the mill; and delivering said parts to the mill substantially in the same ratio as they are present in said original feed.

2,729,398

YARN TAIL DISPOSAL DEVICE FOR AUTOMATIC BOBBIN WINDING MACHINES

John W. May, Wynnewood, Pa., assignor, by mesne assignments, to Deering Milliken Research Corporation, Pendleton, S. C., a corporation of Delaware

Application September 12, 1951, Serial No. 246,299
9 Claims. (Cl. 242—19)



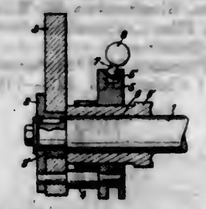
1. In an automatic winding machine for winding yarn onto bobbins having winding means, means for expelling bobbins upon completion of the winding process and means for severing yarn tails from said bobbins, the combination with a pneumatic nozzle for directing a blast of compressed air across the path of travel of said expelled bobbins and a hopper positioned on said machine on the other side of the path of travel of the expelled bobbins and in alignment with said pneumatic nozzle, of means for introducing air under pressure to said nozzle and means operatively connecting said last-named means to said machine to cause a blast of air to be emitted from said pneumatic nozzle upon a bobbin being expelled to direct said yarn tails into said hopper.

2,729,399

TRAVERSE CAM MECHANISM FOR WINDING MACHINES

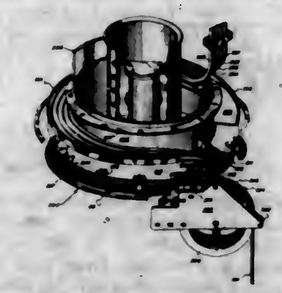
Eugen Stammwitz, Kaiserslautern, Rheinpfalz, Germany

Application June 18, 1951, Serial No. 232,136
2 Claims. (Cl. 242—43.7)



1. Means for controlling the formation of a reserve winding on the pirns of spinning, twisting and like frames, comprising a reciprocable ring rail and cam operating means reciprocating the ring rail, such cam operating means including a cam shaft arranged below the ring rail, a bearing for the cam shaft, an apertured cam body, a laterally extending hub on said body fixed to an end of the cam shaft adjacent the bearing with the end of the hub being in facial contact with an end of the bearing, a second apertured cam body journalled on the said hub with one face of said second cam body being adjacent the first cam body and the other face being adjacent the end of the bearing, a control ring journalled on the said bearing and slidable longitudinally along the bearing toward and away from the said cam bodies, drive pins on the said control ring and disposed in the apertures of the second cam body with the control ring in its farthermost position away from the said cam bodies yet movable into the apertures of the first cam body when said ring is moved toward the cam bodies to couple said bodies together to effect one cycle of movement of the cam operating means, and means selectively moving the control ring toward and away from the cam bodies so that when the drive pins are removed from the apertures of the first cam body, the first cam body reciprocates the ring rail until the required length of reserve winding is formed.

2,729,400
CABLE REEL MECHANISM
William Danziger, Franklin Square, N. Y.
Original application September 1, 1950, Serial No. 182,696. Divided and this application February 16, 1954, Serial No. 410,468
5 Claims. (Cl. 242—47.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A cable reel device for interconnecting a rotatable launcher mount with its supporting structure comprising; a supporting member, a cable encircling drum-shaped member secured to the supporting member, a cable shelf secured to said drum for supporting a portion of the cables for movement with the supporting member, a second cable shelf secured to said drum for receiving and paying out another portion of said cables, means for guiding said cables from said first cable shelf onto and off of the second cable shelf, a cable well into which the cables are fed when paying off of the second cable shelf, and cable tension means in the well to provide a constant tension on the portion of cable in the well.

2,729,401
ROLLFILM CARTRIDGE
Victor G. Italiano, Binghamton, N. Y., assignor to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware
Application February 11, 1952, Serial No. 270,998
1 Claim. (Cl. 242—71)



A rollfilm cartridge comprising a cylindrical shell and end caps, a spool rotatably received within said shell, said spool having end flanges, a circular groove formed in each of said flanges, and a depending intruding flange formed on each of said end caps receivable in said grooves and complementary inclined wall portions on said caps and on the flanges of said spool, said intruding flange in said groove and said wall portions obstructing from all directions the passage of light into the cartridge.

2,729,402
CHUCK FOR COUPLING ROLL CORES TO A DRIVEN WINDING SHAFT
Theodore C. Kramer, Richmond, Va.
Application October 20, 1953, Serial No. 387,159
3 Claims. (Cl. 242—72)

1. In apparatus for winding sheet material in a roll about a hollow core, of the type which includes a driven winding shaft having longitudinally spaced recesses with flat faces, between which the core is mounted on said shaft, a chuck for coupling the core and shaft responsive to relative rotation between said chuck and shaft in either direction, said chuck comprising an annular body member insertable within an end of said core, completely divided in an axial plane into independently movable jaws, one having a semi-bore therethrough of uninterrupted cylindrical curvature to fit the shaft, the other having a semi-



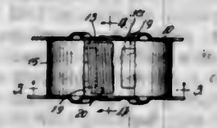
bore therethrough of cylindrical curvature to fit the shaft, adjacent its lateral faces, and being formed with an intermediate longitudinal cam portion of uniformly convex cross-section interrupting the curvature of said semi-bore adapted to project into one of said recesses when said jaws are brought together about said shaft in the zone of said recess, said cam portion being of such height as to roll upon the corresponding flat face responsive to relative rotation between said shaft and chuck in either direction, for spreading said jaws.

2,729,403
WINDING DRUM FOR STRIP MATERIAL
James Leonard Golding, Harvey, John J. Bosshard, Chicago, and William H. Comerford, Bellewood, Ill., assignors to Plasti-Glo Mfg. Corp., Chicago, Ill.
Application March 12, 1954, Serial No. 415,815
4 Claims. (Cl. 242—72)



1. A winding drum adapted for mounting on the expansible arms of a strip or wire winding machine comprising a frontal plate, a rear plate spacedly attached to the frontal one, both plates having openings in substantial registration, a band situated forwardly of the frontal plate and being expansible to engage its rear portion with the rim of the opening in the frontal plate, an element attaching the band for free motion at a point between the plates, and other elements extended between the plates distantly from said point for maintaining the alinement of the band with the plates.

2,729,404
FILM CARRYING REEL
Karl Knickerbocker, Mount Prospect, Ill.
Application June 14, 1952, Serial No. 293,504
2 Claims. (Cl. 242—74)



1. In a film reel, a pair of side disks, a hub to which said disks are secured centrally in spaced parallel relation, said hub having circumferentially spaced apart peripheral portions defining spaced spring supporting

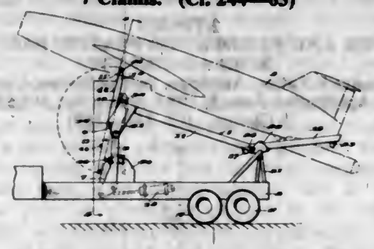
means having a gap therebetween, and means for securing a film end to said first mentioned means, said means including a coiled spring supported by said hub across said gap between said portions with the turns of the spring arranged about an axis extending in a plane substantially along the periphery of the hub, and the turns of the spring presenting opposed parallel surfaces axially of the hub joined by curved ends and said parallel surfaces being spaced apart a distance substantially less than the distance between said curved ends.

2,729,405
MEANS FOR TRANSPORTING AND LAUNCHING LANDING CRAFTS
Donald B. Doolittle, Wilmington, Del., assignor, by mesne assignments, to All American Engineering Company, Wilmington, Del., a corporation of Delaware
Application October 14, 1952, Serial No. 314,678
4 Claims. (Cl. 244—2)



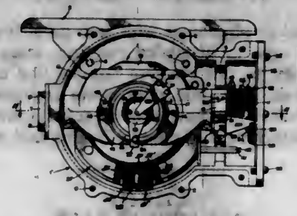
4. In combination, an aircraft, a landing craft and means for launching said landing craft from said aircraft; said aircraft including a fuselage having an interior flat bottom surface and an open rear end and water-ski type landing gear; said landing craft comprising a hull having bow and stern and adapted to be carried in said aircraft on said bottom surface for movement rearwardly through said open rear end; said launching means comprising a cable attached at one end to the stern of the landing craft, a sea anchor attached to the other end of said cable whereby forward movement of the aircraft along the surface of a body of water on said ski-type landing gear and resistance due to engagement of the sea anchor with the water pulls the landing craft rearwardly out of the aircraft.

2,729,406
ZERO-LENGTH LAUNCHER FOR AIRCRAFT
Orville J. Bush, Joppa, Md., assignor to The Glenn L. Martin Company, Middle River, Md., a corporation of Maryland
Application February 1, 1952, Serial No. 269,485
7 Claims. (Cl. 244—63)



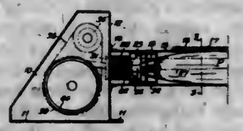
7. A zero-length launcher for launching aircraft comprising, a frame, a bed carried by said frame and adapted for movement from a retracted position relative to said frame to a launching position displaced from said retracted position, actuating means connecting with said frame and bed for causing said movement from a retracted to a launching position, an arm swingably carried by the forward portion of said bed and having its free end adapted to engage and support the forward portion of said aircraft, said arm when thus engaged with said aircraft extending generally upwardly from said bed whereby during launching of said aircraft said arm will swing forwardly and downwardly out of engagement with the aircraft, and shock absorbing means carried by said frame for limiting the swinging movement of said arm and preventing rebound thereof into the path of said aircraft.

2,729,407
FLIGHT CONTROL SYSTEM
Thomas O. Summers, Jr., Sherman Oaks, Calif.
Application October 15, 1951, Serial No. 251,422
19 Claims. (Cl. 244—79)



16. In a flight control system for a movable craft equipped with a roll reference, a rate gyro positioned to precess in opposite directions upon turning movement of the mounting craft in opposite directions, reversible drive means driven in one direction in response to precession of said rate gyro during a turn in one direction and driven in the opposite direction in response to precession of said rate gyro during a turn in the opposite direction and means positioned by said drive means for biasing said roll reference to provide a straight course reference, said drive means being dissociated from said rate gyro while said craft is on a straight course.

2,729,408
PARACHUTE APPARATUS FOR RETARDING AIRCRAFT
John Raymond Cuthbert Quilter, Woking, England
Application April 20, 1953, Serial No. 349,717
Claims priority, application Great Britain April 23, 1952
10 Claims. (Cl. 244—113)

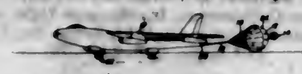


1. Parachute apparatus for retarding aircraft in flight, comprising a parachute with rigging lines connected to the aircraft, a housing upon the aircraft, said housing including telescopic parts slidable in relation to one another, said parachute and rigging lines being normally enclosed within said housing while said telescopic parts are extended in relation to one another, means for exposing said parachute to the air-stream by relative movement of said telescopic parts, said parachute operating when deployed in the air-stream to draw said rigging lines out of said housing, and means for retracting said rigging lines and parachute into said housing after deployment, said retracting means operating to extend said telescopic parts for normal enclosure of said rigging lines and parachute.

2,729,409
AERODYNAMIC AIRCRAFT BRAKE
George J. Hand, Sr., Baltimore, Md., assignor, by mesne assignments, to Decelo-Chute Corp.
Application October 1, 1953, Serial No. 383,431
4 Claims. (Cl. 244—113)

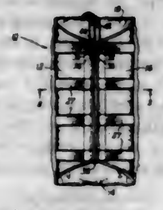
1. A deceleration brake for an aircraft comprising a canopy, shroud lines on said canopy, an automatic pilot chute attached to said canopy, a control line attached to

said shroud lines, a storage tube for said canopy, mounting brackets adapted to mount said tube in an air craft, said tube having limited sliding movement in said brackets whereby the outer end of said tube is movable to a position within or a position outside the body of an air craft, said control line extending through said tube, a



reel mounted in alignment with said tube, biasing means urging said tube to distended position, means for operating said reel to retrieve said control line to store said canopy in said tube, said pilot chute engaging said tube whereby said tube is moved to retracted position controllable jaws attaching said control line to said reel.

2,729,410
PARACHUTE PACK
Harold J. Moran, Trenton, N. J., assignor to Switlik Parachute Company, Inc., Trenton, N. J.
Application February 19, 1952, Serial No. 272,453
12 Claims. (Cl. 244—148)



1. In a parachute pack including a fabric cover having a back and side closing flaps adapted to fold over the back of the pack with their longitudinal edges adjacent each other, the improvement which includes a zipper detachably securing said edges together substantially from end to end, the elements of the zipper being disengageable from each other throughout the length of the zipper, means at the ends of the zipper to temporarily prevent such disengagement, a plurality of spring members extending transversely across said back portion secured thereto and having curved ends, leaf springs rigid with the ends of said first mentioned springs and having a pre-tensioned, curved set of coiled form away from said upturned ends, said leaf springs being attached to said flaps and adapted to be bent over the back portion of the cover with the flaps against their pre-tension whereby when the retaining means for the zipper at one end is released, said leaf springs will disengage the members of said zipper, move the flaps transversely from over the back portion of the sides thereof and retain said flaps in said position.

2,729,411
ADJUSTABLE LINE HANGER
John Lewis Cahill, Dayton, Ohio
Application March 26, 1953, Serial No. 344,829
2 Claims. (Cl. 248—59)



1. A hanger for supporting a line, rope, wire or the like consisting of a bracket and a vertical straight channel re-

movably carried by the bracket in depending position; a loop member forming a part of the bracket and extending out therefrom in a substantially horizontal plane, said loop member being rigid and having an opening in which the vertical channel fits when in said depending position; an upwardly extending hook rigidly fixed to the bracket above said loop; said vertical channel being rigid and having complemental hook-receiving openings arranged in an equally spaced series extending longitudinally of the web of the channel; the lower end of the channel having a pair of horizontally aligned openings in the two flanges of the vertical channel; means for supporting a line or the like consisting of a line-supporting rod passed through and rigidly held in said aligned openings and extending horizontally for a short distance beyond both said flanges; the opening in the loop member being sufficiently larger than the cross section of the channel to permit lateral as well as vertical movement of the channel when it is being adjusted vertically by engagement of different openings which said hook to raise or lower said line-supporting means.

2,729,412
FASTENING DEVICE
Robert R. Arnesbury, Wellesley, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Boston, Mass., a corporation of Delaware
Application November 5, 1952, Serial No. 318,893
4 Claims. (Cl. 248—68)



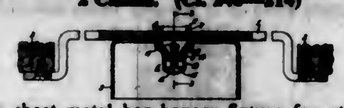
1. A clip for attaching tubing or the like to a support, comprising a pair of spaced upwardly rounded portions which are connected at adjacent ends, hook means extending laterally from the unconnected end of one upwardly rounded portion for engagement with the support, and other means extending downwardly from the unconnected end of the other upwardly rounded portion for snapping engagement with the support, said other means being longitudinally bifurcated so as to be transversely resilient, and having snap shoulder means on the edges for snapping engagement with the support.

2,729,413
DRYER AND HOLDER FOR PLASTIC BAGS AND SIMILAR OBJECTS
Gladys I. Fetter, Antelope, Saskatchewan, Canada
Application June 9, 1953, Serial No. 360,558
2 Claims. (Cl. 248—159)



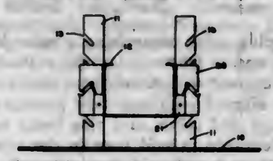
1. A rack comprising a base having a notch; and a standard thereon including a first portion having at one end a bifurcation straddling the base and engaged in the notch, the first portion having at its other end a head formed with a bifurcation including fork arms and a cross piece connecting the same, and a second portion having at one end a bifurcation straddling the cross piece, the last-named bifurcation being a duplicate of the first bifurcation for selective engagement of either of said portions in the notch of the base in a base-straddling position.

2,729,414
BAR HANGER FIXTURE FOR OUTLET BOXES
Edward B. Clark, Milford, Conn., assignor to General Electric Company, a corporation of New York
Application October 21, 1952, Serial No. 317,333
2 Claims. (Cl. 248—214)



1. A sheet metal bar hanger fixture for attaching an outlet box to a bar hanger including a hollow clamp and a hollow stud, the said hollow clamp comprising a cylindrical sleeve adapted to be positioned in an outlet box knock-out opening, the said sleeve having opposed openings to receive a bar hanger, said clamp also having a cylindrical neck of less diameter than the sleeve with a tapered wall portion joining the said sleeve and neck, said neck having a bottom wall provided with a tapped opening, the said hollow stud comprising an externally-threaded cylindrical sleeve in telescopic engagement with the cylindrical neck of the clamp and an outwardly flared flange the edge of which is adapted to engage the inner wall of an outlet box, one of said clamp and stud members having one or more lugs which engage within indents formed in the other member to hold the stud from turning relatively to the clamp, the bottom wall of said threaded sleeve having an opening in line with said tapped opening in the neck of the clamp, and a screw which extends through the opening in the bottom wall of the threaded sleeve and threads into the opening in the bottom wall of the neck of the clamp in order to provide the desired clamping action.

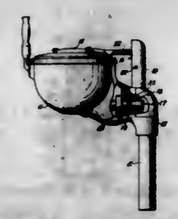
2,729,415
ADJUSTABLE BRACKET
Marvin L. Smallegan, Zeeland, Mich., assignor to Automatic Poultry Feeder Company, Zeeland, Mich., a corporation of Michigan
Application November 14, 1951, Serial No. 256,353
2 Claims. (Cl. 248—244)



1. In an adjustable stand having a vertical standard and a bracket slidably mounted thereon, said bracket adapted to be attached to a conveyor bed, the combination comprising: a plurality of vertically spaced slots in said standard open at one end, all of said slots opening through one edge of said standard and inclined downward from said open end; a U-shaped hanger having a web and a pair of ends, said ends being pivotally mounted to said bracket and said web selectively engaging in one of said slots; a lip on said bracket; said lip being above the point of pivotal attachment of the ends of said hanger to said bracket and spaced outwardly from said edge of said standard, said lip being in the path of travel of the web of said hanger; said hanger being free for upward pivotal movement with respect to said bracket as its web enters said slots.

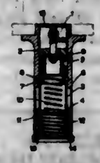
2,729,416
SPRING CONTROLLED LID FOR POPCORN KETTLES
Samuel M. Wass, Kansas City, Mo., assignor to Manley, Inc., Kansas City, Mo., a corporation of Missouri
Application January 14, 1952, Serial No. 266,397
2 Claims. (Cl. 248—292)

1. In a popcorn machine having a support, an open top kettle mounted on the support for swinging movement on a horizontal axis to and from a dumping position, and a lid normally disposed in a closed position over the open top of said kettle by gravitational force, structure for mounting the lid for swinging movement to and from an open position spaced from the kettle, permitting swinging of the latter to said dumping position, said structure comprising an elongated arm; means securing the arm to said lid; a first pin on the support mounting the arm for swinging movement on a horizontal axis; an elongated coil spring having its longitudinal axis substantially perpendicular to the longitudinal axis of the arm and substantially vertical when the lid is closed; fastening means securing one end of the spring to the support; a stem on the opposite end of the spring, said first pin being disposed be-



tween the stem and the lid; a second pin mounted on the arm in spaced parallelism to the first pin for swinging movement with the arm on an arc concentric to the axis of said first pin; and means pivotally connecting the stem to the second pin for swinging movement of the stem toward and away from the first pin as the lid swings toward and away from the closed position respectively, said first pin being disposed between said fastening means and the second pin substantially within a vertical line passing through said axis of the spring and joining the fastening means and the second pin when the lid is closed, said spring being longitudinally stretched when the lid is closed, whereby on slight movement of the lid away the kettle, the spring will swing the lid to a fully open position.

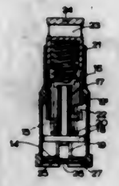
2,729,417
RETRACTABLE LASHING OR LIKE ATTACHMENT DEVICE
Harry Maynard, Hull, England, assignor to Blackburn and General Aircraft Limited, Brough, East Yorkshire, England, a British company
Application July 3, 1953, Serial No. 366,019
Claims priority, application Great Britain March 18, 1953
2 Claims. (Cl. 248—361)



1. An anchorage to which a lashing and like securing means may be connected, comprising a retractable member provided with a pair of lugs interconnected at their bases and extended as a tubular sleeve, a plurality of balls freely movable in radial bores provided in said sleeve, an external flange on the end of said sleeve, a holding member having a two diameter bore and provided with a peripheral groove formed in the wall of said bore, an externally operable member disposed between the lugs and having a part extending through the interconnecting portion thereof, a cam member, means for connecting said part to said cam member, a spring effective on said cam member, and a further spring effective on said retractable member to urge it towards extended opera-

tive position in which it is held by said external flange abutting the end of said smaller diameter bore of the holding member and on its retraction said cam member urges said balls into latching engagement with said groove in the holding member.

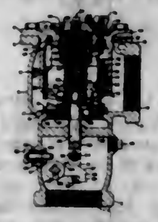
2,729,418
RETRACTABLE LASHING OR LIKE ATTACHMENT DEVICE
Harry Maynard, Hull, England, assignor to Blackburn and General Aircraft Limited, Brough, East Yorkshire, England, a British company
Application July 3, 1953, Serial No. 366,025
4 Claims. (Cl. 248—361)



4. A retractable attachment device which comprises, in combination: a holding member formed with a cylindrical bore therein; an attachment member partly of tubular form, said attachment member being both axially slidable and rotatable in said bore in said holding member, and being provided with bayonet joint slots in the tubular end portion thereof; a guide member formed with an axially-extending cylindrical bore and an external flange, said guide member being supported at the lower end of said holding member; a displaceable member mounted in said bore in said guide member for axial movement therein; a spring surrounding part of said displaceable member urging said displaceable member outwardly in said bore, away from said external flange of said guide member; a transversely extending rod carried by said displaceable member, said rod being adapted to be engaged in said bayonet slots in said attachment member; a spring axially positioned in said tubular portion of said attachment member, between the end thereof and said guide member, said spring tending to urge said attachment member outwardly, away from said guide member, into its extended operative position; means on said holding member cooperating with means on said tubular portion of said attachment member for limiting outward movement of said attachment member into its extended operative position; and means, including a bar supporting the lower end of said guide member, and slots to receive the ends of said bar formed in said holding member, whereby said guide member is supported at the lower end of said holding member.

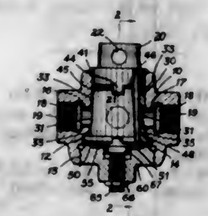
2,729,419
SHOCK PROOF LOADING VALVE
Arthur F. Briede, Cincinnati, Ohio, assignor to OPW Corporation, Cincinnati, Ohio, a corporation of Ohio
Application September 23, 1950, Serial No. 186,339
2 Claims. (Cl. 251—35)

1. A loading valve comprising a casing having a valve seat between inlet and outlet openings, a main valve for said valve seat having a piston connected to its non-seating side and having a substantial area of said side directly exposed to the pressure line, a cylinder for the piston detachably connected to the casing and having a bleed opening therein exposed to the inlet pressure, a supplemental valve and seat mounted on the main valve, a check valve for controlling flow between the inlet and the piston cylinder, means urging the check valve normally closed, a stem projecting from the check valve, a poppet stem for the main and supplemental valves having means for first opening the secondary valve and then the main valve, an arm operatively connected to said poppet stem, a stop pin for said arm having end portions of unequal length to be selected for adjustment by turning said stop pin end



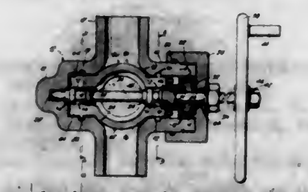
for end, common spring means for normally closing the main and supplemental valves, and means disposed in the path of the stem of the check valve for opening the check valve when the main valve is open to its extreme position for admitting inlet pressure to the pressure side of the piston.

2,729,420
VALVE FOR CORROSIVE FLUIDS
Robert C. Schenck, Dayton, Ohio, assignor to The Duriron Company, Inc., Dayton, Ohio, a corporation of New York
Application July 29, 1950, Serial No. 176,600
5 Claims. (Cl. 251—171)



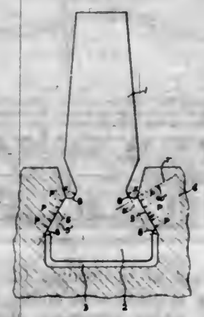
1. A lined plug valve comprising a valve body having flow passages and a frustoconical bore therethrough, a tapered plug received within said bore and having a port adapted to be aligned with said flow passages to control the flow through said valve, said plug being proportioned for annular clearance in said bore in the axially aligned position of said port with said flow passages, an annular liner received in said clearance and having flow passages therethrough corresponding with those in said body, said liner being formed of plastic material subject to deformation under pressure and having circumferentially continuous areas of substantial axial extent on both sides of said flow passages for establishing a sealing relation with corresponding circumferentially continuous areas on said plug and in said bore respectively, said liner being press-fitted into said bore under pressure causing cold flow thereof into sealing relation with the wall of said bore, means on said body extending into said clearance in interlocking relation with said smaller end of said liner beyond the adjacent said sealing area thereof to secure said end of said liner against angular movement in said bore, means for exerting pressure on the larger end of said plug to maintain said liner in deformed sealing relation with said plug and said bore, and said liner and said body being proportioned initially with respect to the axial length of said bore and the location therein of said interlocking means to provide annular space for accommodating the entire smaller annular terminal edge of said liner and including the portion of said edge directly opposed to said interlocking means upon deformation of said liner under the operation of said pressure exerting means and in response to applied sealing pressure in use.

2,729,421
CAM-LOCKED VALVE
Walter S. Baer, Sr., Yeadon, Pa.
Application December 16, 1952, Serial No. 326,370
1 Claim. (Cl. 251—188)
(Granted under Title 35, U. S. Code (1952), sec. 266)



A valve mechanism comprising a valve housing having inlet and outlet passages and a valve chamber communicating with the said passages; valve seats surrounding the said passages; a plurality of valve elements; means for removably securing the valve elements one to another so that they move in the chamber as a unit to and from an open, a preliminarily closed, and a closed position with respect to the passages; a valve stem; means mounting the valve stem in the chamber for rotary and axis movement; spline means on the valve stem for rotating the unit between its open and its preliminarily closed positions when the valve stem occupies a first preselected axial position; and cam means on the valve stem for operating the unit between its preliminarily closed and its closed positions when the valve stem occupies a second preselected axial position; and means including an internally splined member which is positioned on the housing and which is adapted to engage the spline means on the valve stem for resisting rotary movement of the unit when the valve stem occupies its second axial position.

2,729,422
SHAPED ARTICLE OF CERAMIC MATERIAL
Herbert Scharf, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a corporation of Germany
Application March 26, 1952, Serial No. 278,559
Claims priority, application Germany April 6, 1951
4 Claims. (Cl. 253—77)



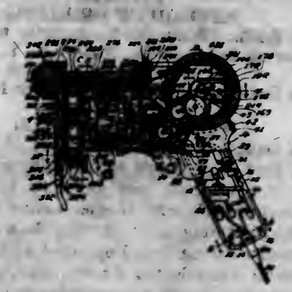
1. A ceramic turbine blade having a working portion and a root portion extending therefrom for affixing said blade in position in use in a groove in the rim of a turbine, said root portion having a generally wedge shape dovetail configuration outwardly flared from said working portion and including load carrying surfaces outwardly projecting from said dovetail configuration and positioned to receive perpendicularly thereto substantially the entire forces acting on said root portion in use, said outwardly projecting surfaces being machine finished and bounded on opposite sides by concave arcuate walls which are not machine finished and the radii of curvature of which do not substantially exceed the extent of projection of said surfaces, and a tangent to said concave walls at the points of intersection with said load carrying surfaces forming substantially a right angle with said surfaces.

2,729,423
CASKET LIFT
Earnest R. Green, Hampton, Iowa
Application August 27, 1953, Serial No. 376,813
1 Claim. (Cl. 254—113)



A casket lift comprising a base member having a pair of parallel longitudinal members, an upstanding member centrally positioned on each longitudinal member, a cross-piece interconnecting the lower ends of said upstanding members, said upstanding members forming a vertically disposed guide, an inverted U-shaped lift member having depending leg portions slidable in said guide, the bight portion of said lift member forming a lifting surface for engaging the undersurface of a casket, a U-shaped lift handle having leg portions pivotally attached to the upstanding members in spaced relation to the free ends thereof, a pair of lift arms pivotally interconnecting the ends of the leg portions of the lift handle to the sides of the U-shaped lift member, the pivotal connection between the lift arms and the lift member being vertically adjustable, and the pivotal connection between the lift arms and the lift handle being swingable over the pivotal connection between the handle and the upstanding members for raising and locking the lift members in vertically extending position, said handle having a bight portion for engaging the cross piece adjacent the base for limiting the movement of the handle and the swingable pivotal connection.

2,729,424
PORTABLE HAND TOOL
John W. Eppensteiner, Woodbridge, N. J.
Application April 2, 1954, Serial No. 420,580
2 Claims. (Cl. 254—134.3)



1. A portable hand tool for laying an electrical cable in a conduit, comprising a frame, a hand grip projecting from one end of said frame, a reel drum supported on said frame for unwinding movement in one direction, said reel drum having a guide cable wound thereon with a free end portion, a guide tube carried by said frame and having an inlet end positioned adjacent said reel drum and an outlet

end positioned adjacent the other end of said frame for receiving and guiding said guide cable end portion therethrough, air propulsion means carried by said frame and connected in communication with said guide tube adjacent the outlet end thereof for forcibly propelling said guided cable end portion out of the outlet end of said tube, and positively driven means operatively connected to said reel drum for effecting winding movement of the latter in the other direction.

2,729,425
SAFETY DEVICE
Robert C. Gschwind, Chicago, Ill.
Application March 30, 1954, Serial No. 419,881
7 Claims. (Cl. 254—157)

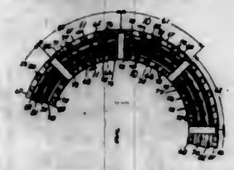


1. A safety device of the class described comprising a housing, a safety cable pulley member rotatably carried within said housing, a safety cable having one end connected to said pulley member, said housing having an aperture formed in one wall thereof and through which the opposite free end of said cable projects for connection to a point distant from said housing, braking means carried by said pulley member and movable into engagement with said member for preventing rotation of said member in one direction, means for normally holding said braking means from braking position with respect to said pulley member, and means carried by said pulley member for releasing said holding means to permit said braking means to move in the direction of rotation of said pulley member to prevent rotation of said pulley in said one direction when the rotation of said pulley member reaches a predetermined speed.

2,729,426
METHOD OF DRILLING
Julian C. Smith, Ithaca, N. Y., assignor to Hough Soils Engineering Laboratories, Ithaca, N. Y., a proprietorship
No Drawing. Application October 18, 1954, Serial No. 463,045
9 Claims. (Cl. 255—1.8)

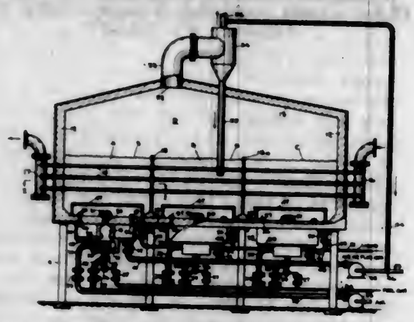
1. In a process of pneumatic drilling of wells in which a drilling fluid is circulated downwardly to the bit of the drill in one passageway and upwardly from the bit to surface discharge through another passageway, the steps which comprise producing a drilling fluid of compressed gaseous media having a hydrophobed surfaced finely divided powder disseminated therethrough, conducting the said drilling fluid under pressure down one passageway to the bit, passing the drilling fluid through and around the bit in a manner to cause the said gaseous media to expand so as to cool the bit and the said hydrophobed surfaced powder to coat the surfaces of the cuttings as they are made to render the cuttings water repellent, and then conducting the said drilling fluid with the entrained powder-coated cuttings to the surface for discharge.

2,729,427
BIT
Frank F. Davis and Stewart G. Richmond, Minneapolis, Minn., assignors to E. J. Longyear Company, Minneapolis, Minn., a corporation of Delaware
Application January 18, 1952, Serial No. 267,084
2 Claims. (Cl. 255—72)



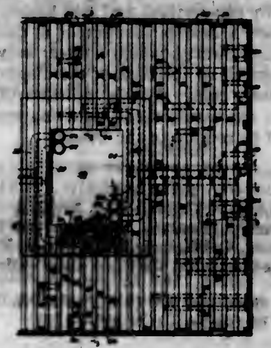
1. A bit for drilling in rock and the like formations, said bit being in the form of a cylinder having a coupling at one end and a passage lengthwise therethrough, the opposite end of the cylinder forming a drilling face, said drilling face being composed of sectors, said bit being characterized by having a plurality of arcuate ridges in said drilling face, each ridge being concentric with the axis of the cylinder, each sector including a ridge of maximum radius and ridges of lesser radii, each of said ridges of lesser radii being arcuate, concentric with the cylinder axis and having a radial dimension different from the radii of adjacent ridges in adjacent sectors of said circular drill face, and at least several hard cutting granules set in substantially tracking relation along the crests of each of said ridges, the granules of each ridge being of a size such that their cutting paths do not overlap the cutting paths of the granules in ridges of different radii.

2,729,428
FLUIDIZED BED TEMPERATURE CONDITIONER AND METHOD OF CONTROLLING TEMPERATURES OF FLUID STREAMS
Oswald H. Milmore, Berkeley, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application April 20, 1953, Serial No. 349,700
11 Claims. (Cl. 257—6)



1. The method of controlling the temperature of a process stream at successive points along the path of travel thereof which comprises flowing said stream through a tube that traverses a plurality of compartments of a fluidized bed temperature conditioner that are essentially horizontally isolated at least at the lower parts thereof and has a heat-conductive wall within each of said compartments, maintaining within each of said compartments a dense fluidized bed of finely divided heat-retentive solids in isolation from the fluidized beds in other compartments and in external contact with the portion of said tube that is situated within the respective compartment to effect direct heat transfer between the solids and the said heat-conductive tube wall by admitting a separate portion of fluidizing gas to the lower part of each compartment, withdrawing said portions of fluidizing gas from the upper parts of said compartments above the said tube, and controlling the temperatures of the heat-retentive solids within each of the several compartments independently of one another, whereby the temperature of the process stream is correspondingly controlled by passage through different portions of the tube situated within the respective compartments.

2,729,429
AIR CONDITIONING AND DISTRIBUTING SYSTEM AND APPARATUS
Richard P. Goesmann, Port Washington, N. Y., assignor to H. H. Robertson Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application February 24, 1954, Serial No. 412,217
25 Claims. (Cl. 257—6)



1. In a multi-story building and air conditioning structure, means forming a vertical service core in said building; spaced horizontal floor supporting beams disposed about said core forming the stories of said building; metallic cellular load supporting floors erected directly upon said beams and including cells defining passages for air flow therethrough and extending transversely of said beams; two vertical air supply ducts in said service core through which air streams of different condition flow; means forming a passageway in said building between adjacent stories along a portion of said core; means extending along said passageway and connected to said air supply ducts and constituting separate headers for the distribution of the two air streams of different condition from said air supply ducts; means connecting said headers to selected floor cells for introducing said differently conditioned air streams into different floor cells; outlet means from said different floor cells communicating with portions of the building outwardly of said passageway; and means for mixing said differently conditioned air streams prior to discharge from said outlet means to the portions of the building to be conditioned.

2,729,430
HEAT EXCHANGER
Everett N. Sieder, Fredonia, and Robert M. Church, Westfield, N. Y., assignors to Alco Products, Inc., New York, N. Y., a corporation of New York
Application May 10, 1954, Serial No. 428,734
7 Claims. (Cl. 257—32)

1. In a heat exchanger of the horizontal shell and tube type in which fluid passing through the tubes is heated by steam supplied to the shell and condensed therein, a structure enveloping a portion of the tubes to form a subcooler, inlet means for the flow of condensate from the shell into the subcooler in response to the pressure of steam in the shell, means for the outlet of such condensate from the subcooler, aperture means in said structure through which the tubes extend to permit differential expansion between the tubes and the subcooler structure, means on the subcooler structure forming a chamber to enclose said aperture means, inlet means for the flow of condensate into said chamber in response to the pressure of steam in the



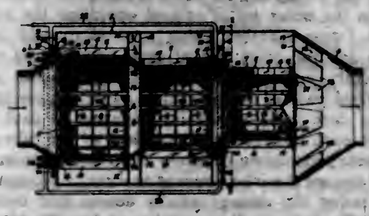
shell, and condensate conducting means leading from said chamber to a zone of pressure lower than the pressure of the condensate in the chamber whereby a continuous flow of condensate through the chamber is produced thus to form a fluid seal.

2,729,431
AIR CONDITIONING AND SOUND DEADENING CEILING INSTALLATION
George P. Little, Shaker Heights, Ohio, assignor to The George P. Little Company, Inc., Cleveland, Ohio, a corporation of Ohio
Application November 17, 1951, Serial No. 256,925
1 Claim. (Cl. 257—124)



A series of parallel horizontal metal pipes at the ceiling of a room through which heating or cooling fluid may be circulated, a metallic rail depending from each of said pipes, each of said rails having a vertical web and base flanges extending laterally on each side of the web, each rail comprising an integral open arcuate hook portion above its web hung over and contacting the corresponding pipe, and a plurality of metal pans supported upon the facing side flanges of adjacent rails, each of said hook portions conforming in cross section to an arc of a circle of greater diameter than the diameter of the pipe on which it hangs, and the center of gravity of the supported rail lying substantially in said web, whereby fluid at a temperature other than room temperature when circulated through said pipes transfers heat to or from said pans because of the contact between the pipes and the rails and between the base flanges of the rails and the pans, and whereby a rail may be tilted upon its pipe to permit a pan to be removed and a new one to be installed.

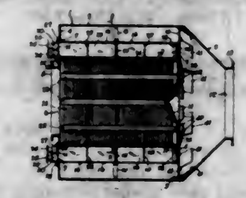
2,729,432
LARGE CAPACITY HEAT EXCHANGER
William F. Berg, Elmhurst, N. Y., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application September 17, 1952, Serial No. 310,075
14 Claims. (Cl. 257—137)



1. A heat transfer apparatus for controlling the temperature of substantially large volumes of fluid passing therethrough, which comprises a longitudinally extending duct having an inlet and outlet end, a series of annular heat transfer banks disposed axially of each other within

said duct and having a longitudinal central passage therethrough, said banks being spaced radially inwardly of the duct to provide an outer passage between the banks and the duct, each said bank comprising a plurality of independently removable longitudinally disposed core sections arranged in a substantially circular shape to form each annular bank with said core sections defining separate flow paths for a fluid and a heat transfer medium, means to introduce fluid into the central passage of said duct and to flow a portion of the fluid axially through the central passage of the banks and to flow another portion of said fluid radially through the core sections of each of said banks to said outer passage and thence longitudinally of the duct to said outlet, and means to supply a heat transfer medium to each core section and to withdraw the same from said core section.

2,729,433
HEAT EXCHANGER WITH REMOVABLE TUBE BANKS
William F. Berg, Elmhurst, N. Y., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application January 7, 1952, Serial No. 265,253
3 Claims. (Cl. 257—241)



1. A heat transfer apparatus comprising a generally cylindrical casing having a centrally disposed fluid inlet opening at one end and a centrally disposed fluid outlet opening at the other end, an annular member secured at its periphery to said casing and located adjacent said outlet opening, an inner set of circumferentially spaced openings disposed in said annular member to provide for passage of untreated fluid through said member, an outer set of circumferentially spaced openings disposed outwardly from the first set to provide for passage of treated fluid through said annular member, closure means pivoted to said annular member adjacent both said first and said second spaced openings to permit opening and closing of said openings and thereby control the flow of treated and untreated fluid through the outlet and the temperature of the fluid discharged from the apparatus, a pair of longitudinally spaced spider plates assembled with said casing, longitudinally extending frame members of generally rectangular shape assembled annularly and secured at their respective ends to said spider plates to provide a plurality of independent frame members spaced annularly about the inside of said casing and removed inwardly from the casing wall to provide a longitudinal passage between the casing and frames extending the length of the casing to the outer set of spaced openings, the exit end of each frame member being secured to said annular member and the entry end of each frame being secured to the entry end of the casing, means to seal off the longitudinal passage at the entry end of the casing, heat exchange core units removably disposed in each frame and with each unit being independent of the other units, baffle means extending centrally from said annular member and toward the inlet opening to direct a portion of the fluid entering the casing radially across said units, and a longitudinally extending strip secured to the inner portion of adjacent frame members and extending between said adjacent frame members to seal off the passage of fluid between the core units and effectively direct the fluid across the core units.

2,729,434
SELF-CLEANING BEATER
Harold G. Walden, Greenville, Maine
Application August 20, 1953, Serial No. 375,398
4 Claims. (Cl. 259—1)



1. A cleaning device for the beater of a rotary mixer employing a member of downwardly tapered parallel mixer fingers, said device comprising a flat body member having a plurality of apertures and said fingers depending therethrough, and a flexible diaphragm in each aperture having an opening through which a finger may be forced to be snugly engaged by the edge of the diaphragm opening, said member being slidable downwardly on said fingers to clean the same of any adhering material previously agitated by motion of the beater.

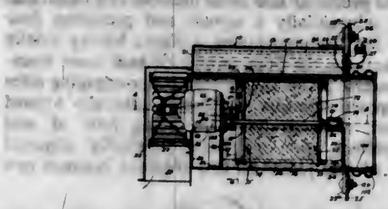
2,729,435
TRANSIT CONCRETE MIXER
Henry C. Harbers, Pasadena, and Edward D. Sharpe, South Pasadena, Calif., assignors to Cook Bros. Equipment Co., Los Angeles, Calif., a corporation of California
Application December 20, 1952, Serial No. 327,092
14 Claims. (Cl. 259—172)



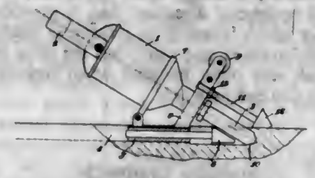
1. In a transit concrete mixer: a truck; an engine for propelling the truck; a transmission mechanism; a drum rotatably mounted on the truck; mechanical means connected to the transmission mechanism; hydraulic means connected to the forward end of the engine shaft; a first control means for the mechanical means selectively operable to connect the latter to the drum to drive the same in either direction; a second control means for the hydraulic means selectively operable to connect the latter to the drum to drive the same in either direction; and a means movable to one position in which it interlocks the two control means to each other for simultaneous operation, and another position in which the first control means is locked against operation and the second control means released for operation.

2,729,436
COOLER
William Arthur Norris, Alhambra, Calif.
Application January 15, 1954, Serial No. 404,177
5 Claims. (Cl. 261—24)

2. In a vehicle cooler, a body including a receptacle member having a partition, a plate mounted on said partition, a motor mounted on said plate, a shaft on the motor, a fan on the motor shaft, a housing for the fan, means to secure the housing to the body, said housing having a discharge outlet, a collar on the shaft, an eccentric pin on said collar, a foraminous cylindrical cage rotatably mounted in said body, water absorbing material in said cage, said cage including a cylindrical rim, a bracket on said partition, a link pivoted on said bracket, a dog, a pivot pin on said link supporting said dog on said link, said dog having a sharpened end disposed to engage the inner wall of said rim, a second link pivoted to said bracket pivot pin at one end and pivotally connected to said eccentric pin at its other end, a tension spring on said second link and connected to said dog at a point on the dog remote from said sharpened end whereby when the motor rotates the rim will be moved step-by-step, said partition and the receptacle member bottom, ends and one side forming a container in which the cage is disposed, and means to supply liquid to said container.

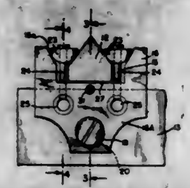


2,729,437
APPARATUS FOR MAKING CAVITIES FOR PIPES, ELECTRIC WIRING AND SWITCHES IN THE MASONRY OF HOUSES AND THE LIKE
Franz Brenner, Ansbach, Germany, assignor to Ansbacher Maschinen- und Werkzeughau Gesellschaft mit beschrankter Haftung, Ansbach, Germany
Application July 23, 1951, Serial No. 238,091
Claims priority, application Germany July 28, 1950
1 Claim. (Cl. 262—8)



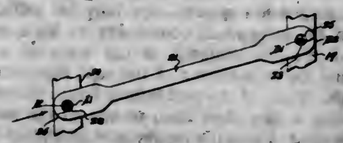
An apparatus for making cavities for pipes and electric wiring in masonry, comprising, in combination, a hand drilling machine having a handle adapted to be grasped by a workman and a rotary cutter adapted to form a groove in a wall when the drilling machine is guided manually over the wall with the cutter applied to the wall at an angle thereto, a guiding member connected to the drilling machine at an angle to the axis of rotation of the cutter for sliding movement in the groove formed by the cutter, so as to guide the cutter in the right path and at the right depth and inclination during the formation of the groove, after an initial portion of the groove has been cut to receive said guiding member, a clamping member on said guiding member secured to the drilling machine in proximity to the cutter and extending on both sides of the cutter, a handle on the clamping member on the side of the cutter opposite to the guiding member, for enabling the apparatus to be guided over the wall during the operation of the cutter, a centering support adapted to be attached to the clamping member on the same side as the handle thereon so as to extend parallel to the axis of rotation of the cutter, said centering support including a shank having a screw thread for engagement with the clamping member, and a cone end for insertion in a bored hole in the wall to enable circular switch cavities to be formed by causing the drilling machine to be displaced around said bored hole with the axis of rotation of the cutter perpendicular to the wall face, said cone end having its axis eccentric with respect to the axis of the shank to enable larger or smaller wall cavities to be bored by varying the distance of the axis of the cone end from the axis of rotation of the cutter.

2,729,438
MOUNTINGS FOR WEIGHT SUPPORTING MEMBERS OF ANALYTICAL BALANCE
Bernard Wasko, New Rochelle, N. Y., assignor to Voland and Sons, Inc., New Rochelle, N. Y., a corporation of New York
Application March 1, 1954, Serial No. 413,347
6 Claims. (Cl. 265—49)



1. In a weighing balance having a pivoted beam, the combination of a weight supporting member supported on the beam, the sides of said weight supporting member having inclined surfaces, an adjustable wedge member engaging one of said inclined surfaces, an adjustable wedge member engaging the other of said inclined surfaces, each adjustable wedge member having a curved surface in contact with the respective inclined surface of the weight supporting member which it engages, and means for adjusting the height and the angular position of each adjustable wedge member, the relative heights and angular positions of the two adjustable wedge members determining the position of the weight supporting member on the beam.

2,729,439
CHECK ROD MOUNTING FOR A WEIGHING SCALE
Robert E. Ohaus, Westfield, N. J., assignor to Ohaus Scale Corporation, Union, N. J., a corporation of New Jersey
Application February 24, 1955, Serial No. 490,191
6 Claims. (Cl. 265—54)

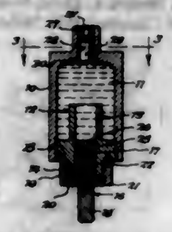


1. In a weighing scale parallelogram check linkage, a check rod, means to pivotally connect an end of the check rod to a given member of the check linkage, said means comprising a U-shaped element, the legs of which are disposed in vertical plane and fixed across said member, one leg of said element being adapted to serve as a pivot pin portion and being of polygonal cross-section with its major diagonal disposed perpendicular to the axis of said member thereby to provide an inner knife edge pivot and an outer knife edge pivot, said end of the check rod having a circular opening through which said pivot pin portion extends, and said opening being of a diameter slightly in excess of the length of the knife edge pivot forming diagonal of said pivot pin portion.

2,729,440
FORCE ADJUSTMENT FOR FLUID SPRING
George F. Wales, Kenmore, N. Y.
Application May 25, 1951, Serial No. 228,245
6 Claims. (Cl. 267—1)

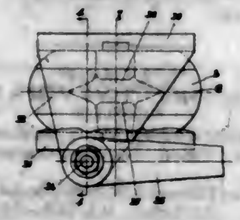
1. A device of the character described comprising a housing formed to provide a chamber filled with a body of compressible liquid and one end of which is formed with a threaded opening, a cylinder screwed into said opening and open at one end into said chamber, said cylinder hav-

ing an external threaded extension, a piston movable in said cylinder in response to compression forces to compress said body of liquid, said piston being returned to its original position as said body of liquid is permitted to expand upon relief of said compression forces, a cap-



piece screwed on said threaded extension and operatively connected to said piston to adjust the original position of said piston, said cap-piece and piston being adjustable relative to said threaded extension to pre-load said body of liquid, and a displacement element movable into said chamber for further pre-loading said body of liquid.

2,729,441
SUSPENSION SYSTEM, ESPECIALLY FOR VEHICLES
Paul Henze, Einbeck, Hannover, Germany
Application February 16, 1953, Serial No. 336,155
3 Claims. (Cl. 267—21)



1. A suspension system, especially for vehicles having parts to be suspended, comprising at least one hollow body of resilient material in the form of a ring, the inner and outer diameter of the said ring increasing towards the center of the said hollow body, fastening means comprising a first plate fixed to one of the said parts to be suspended, a first pin on the said first plate fitting into one end of the said ring-shaped hollow body of resilient material, side-flanges extending from the said plate and enclosing the said ring-shaped hollow body therebetween, a second plate disposed on the opposite side of the said ring-shaped hollow body, a second pin on the said second plate fitting into the said opposite end of the said hollow body, a shaft disposed outside of the center-line of the said ring-shaped hollow body and passing through the said side-flanges, said second plate being rigidly mounted on said shaft, the said pins locking the said hollow body of resilient material to the said two plates, and an arm secured to the said shaft, the end of the said arm being supported by another of the said parts to be suspended.

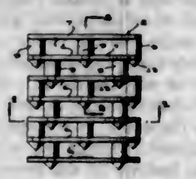
2,729,442
RESILIENT DEVICES HAVING DEFORMABLE CUSHIONS
Hermann J. Neidhart, Geneva, Switzerland
Application July 8, 1955, Serial No. 520,889
13 Claims. (Cl. 267—21)

1. In an elastic device of the type having an outer tubular member, an inner member substantially coaxially disposed within the outer member with sufficient clearance for relative rotation of one member with respect to the other about their common axis, and a plurality of elastic cushioning rollers disposed between the interior of the outer member and the exterior of the inner member in substantially uniformly spaced relationship about the inner member, said cushioning rollers being free of connection with said members for rolling engagement therewith, the inner profile of said outer member in a transverse plane being substantially a square and providing four substantially flat, roller-engaging surfaces having axially extending junctions, the outer profile of said inner member in a transverse plane having four roller-engaging sides normally disposed opposite and facing generally toward said junctions, respectively, there being four of said cushioning rollers and one being normally disposed against each of said junctions and confined between two



of said roller-engaging surfaces of said outer member and one of said roller-engaging sides of said inner member, the improvement in which said roller-engaging sides of the inner member, in transverse section, substantially define a regular, closed, four-sided figure having protuberances at its four corners, said protuberances respectively providing roller-engaging extensions of the sides of the inner member beyond the sides of said four-sided figure in the same peripheral direction with respect to said common axis, whereby a longer roller-engaging path is provided in said peripheral direction than is provided by an inner member which is square in transverse section, without such protuberances, and which has the same minimum clearance with said outer member when rotated relative thereto about said common axis.

2,729,443
RUBBER SPRINGS
Clarence C. Olinger, East Franklin Township, Armstrong County, Pa.
Application September 10, 1954, Serial No. 455,201
5 Claims. (Cl. 267—63)

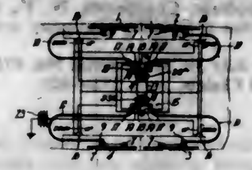


1. In a compression spring, a plurality of superimposed sections each comprising a resilient and flexible band having holes spaced therealong, resilient and flexible pegs secured to a side of said band and having free ends, reduced necks on said free ends terminating in enlarged heads, the necks defining shoulders at the free ends of the pegs, the necks of the pegs of one section being engaged through the holes of the next section with the heads engaging one side of the band of the next section and the shoulders engaging the other side thereof.

2,729,444
WINDOW RAISER
Erwin C. Horton, Hamburg, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y.
Application December 9, 1950, Serial No. 200,064
2 Claims. (Cl. 268—26)

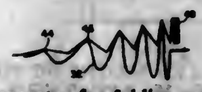
1. In a motor vehicle, a plurality of windows, window supporting cables mounting the windows individually

for opening and closing movement, a common source of rotary mechanical power on the body of the vehicle having oppositely extending power output shaft parts, a separate flexible transmission shaft extending from each window to the common power source, a separate self-locking worm gear device at each window drivingly connecting the corresponding flexible shaft to the sup-



porting cable and serving to lock the window against being pried open, and means operable to connect the flexible transmission shafts selectively to the common source of power comprising a pair of normally disengaged clutches at each of said output shaft parts, each clutch being operable to connect a corresponding one of said flexible shafts to the power source.

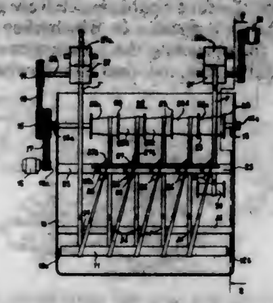
2,729,445
SPIRAL PAPER FOLDING DEVICE
William M. Webster, Miamisburg, Ohio
Application November 5, 1952, Serial No. 318,777
4 Claims. (Cl. 270—39)



1. In an apparatus for folding continuous strip means of paper having equally spaced successive transverse lines of weaknesses along its length into a folded pack, means for feeding the paper in the direction of its length at a predetermined speed, means consisting of a spiral-shaped folding element adapted to receive said strip from said feeding means and support the same at spaced intervals therealong, said spiral-shaped element having working surfaces consisting of slender peaks which are adapted to contact the strip means at alternate fold lines along the length of said strip and leaving the intermediate portion of the strip unsupported, said spiral-shaped folding element decreasing in pitch from the feed-in point of said spiral-shaped element toward the discharge end thereof, means for rotating said element in timed relationship to the feed of said strip, and said spiral element being adapted to engage said strip means substantially as a point contact at said alternate fold lines whereby said strip means is caused to double upon itself at such fold lines and form a folded pack at the discharge end of said folding element.

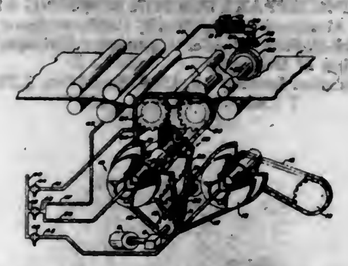
2,729,446
TENSION CONTROL MEANS IN FABRIC TREATING APPARATUS
Frank B. Morrill, North Adams, and Edgar C. Rust, Jr., Williamstown, Mass., assignors to James Hunter Machine Company, North Adams, Mass., a corporation of Massachusetts
Application August 29, 1952, Serial No. 307,076
7 Claims. (Cl. 271—2.3)

1. Apparatus for transporting a length of material under substantially constant tension through a treating fluid, which comprises a rotatable shaft, a member spaced from the shaft and held against bodily movement toward and away from the shaft, a conical conveyor drum on the shaft adapted to support the material in a loop extending partly around the drum and said member, means for feeding material into said loop, means for driving the drum shaft to advance the material in the loop and withdraw material from the loop, a movable element positioned to engage the material in said loop and movable generally parallel to the rotation axis of the conical



drum, and a biasing device operatively connected to said element and urging it toward the enlarged end of said drum, whereby the material is biased toward said enlarged end.

2,729,447
TWO SPEED FEEDER
Alvin F. Groll, Napoleon, Ohio
Application December 4, 1952, Serial No. 324,092
9 Claims. (Cl. 271—2.4)

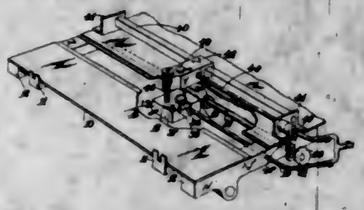


1. In a feeder for strip stock, in combination, a power source, a stock drive roll, a first power transmission system leading from the source of power to the stock drive roll and adapted to drive the stock drive roll at a first speed, a second power transmission system leading from the source of power to the stock drive roll and adapted to drive the roll at a second speed slower than the first, means operatively connected to the systems for selectively engaging and disengaging each of said transmission systems, and means including portions located at predetermined positions to be engaged by the strip stock and operatively connected to said engaging and disengaging means for successively engaging and disengaging said transmission systems as the leading end of the stock is moved to the predetermined positions whereby the stock is started, rapidly moved to a first position, and slowly moved to a final position and stopped under control of the stock drive roll.

2,729,448
SHEET FEEDING MECHANISMS
Headley Townsend Beckhouse, Nassau, Bahamas
Application August 13, 1952, Serial No. 304,102
Claims priority, application Great Britain August 31, 1951
8 Claims. (Cl. 271—56)

4. A sheet feeding mechanism of the kind embodying a feed-board onto which a succession of single sheets are to be fed characterized by a detector for detecting the inadvertent feeding on to the board of two superposed sheets comprising two opposed suction nozzles separated by slightly more than twice the thickness of one of the sheets and located to receive between them and be sealed one by a single sheet or both by two superposed sheets lying

on the board, connections to the two nozzles from a common source of suction, two suction control valves for the connections to the two nozzles respectively, positioned above and below the feed-board respectively and directly connected to the two nozzles to which they are appropriated, means for operating the valves extending to the valves above and below the feed-board, whereby when



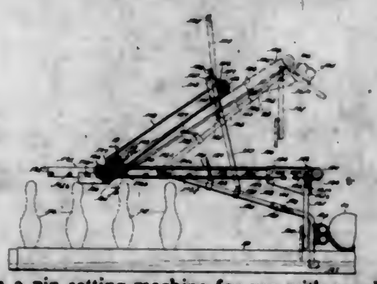
both valves are open the degree of suction which can build up in the connection is greater when both nozzles are sealed respectively by two sheets between the nozzles than it is when only one of the nozzles is sealed by a single sheet between them and the other is open for ingress of air and means responsive to the greater build-up of suction to stop the mechanism.

2,729,449

PIN SETTING APPARATUS FOR BOWLING ALLEYS

George A. Montooth, Long Beach, Calif., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a corporation of Delaware

Application January 14, 1948, Serial No. 2,205
7 Claims. (Cl. 273—43)



1. In a pin setting machine for use with an alley bed, apparatus comprising, a guard member normally positioned above said alley bed and vertically movable to a position adjacent the surface of the alley bed and transverse thereto in the path of a rolled ball for preventing balls from striking machine mechanisms during an operating cycle of the machine, a sweep member mounted independently of said guard member extending transversely of said alley bed and normally positioned above said alley bed, said sweep member being vertically movable to a position adjacent said alley bed and horizontally movable along said alley bed to the rear thereof, a member carried by said guard and operable to engage said sweep to cause said sweep to be carried upwardly by said guard in said vertical path, a single power source for moving said guard member in said vertical path and for moving said sweep member in said horizontal path, means connecting said power source alternately to said guard member and to said sweep member to obtain said vertical and horizontal movement in sequential manner, said last mentioned means comprising a planetary gear assembly having one element thereof drivingly connected to said sweep member to drive said sweep member in a horizontal direction and another element drivingly connected to said guard member to drive said guard member in a vertical direction when said sweep member is locked against movement, and means for locking the sweep against movement relative to the guard when the guard and sweep are normally positioned above the alley bed and when the sweep moves into position behind the guard after moving from the rear of the alley bed.

2,729,450

CONTROLLED MOISTURE CONTENT BOWLING PINS

Wentworth B. Clapham, Chappaqua, N. Y., assignor to American Machine & Foundry Company, a corporation of New Jersey

Application July 30, 1953, Serial No. 371,337
30 Claims. (Cl. 273—82)



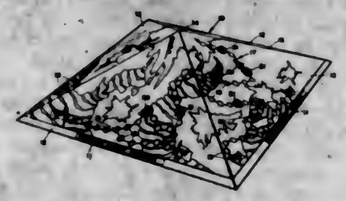
1. A bowling pin provided with an interior chamber, and a moisture controlling medium enclosed in said chamber, said moisture controlling medium being operative to prevent substantial moisture changes in the wood of said pin, and thereby maintain the moisture content of said pin substantially constant.

2,729,451

CHANCE CONTROLLED MAGNETIC PIECES AND BOARD GAME APPARATUS

J Russell Larson, Spokane, Wash., assignor to Saml Gabriel Sons & Company, New York, N. Y.

Application March 29, 1954, Serial No. 419,237
4 Claims. (Cl. 273—134)



1. A game comprising the combination of a game board formed of at least three planar solid sections of polygonal form tapering in width from their bottom to their top and connected along their side edges to form an enclosure, the sections carrying indicia providing tracks leading from the bottom of the sections upward to at least one goal with the tracks having a plurality of stations and merging on their way to the goal, playing pieces movable along the tracks from station to station, and chance means for determining the successive advances of the individual playing pieces.

2,729,452

CARD HOLDER

Albert F. Baumann, Wausau, Wis.

Application December 7, 1953, Serial No. 396,415
2 Claims. (Cl. 273—150)

1. A card holder comprising a base portion adapted to rest on a horizontal support, a front wall and rear wall both of arcuate contour extending upwardly from said base portion, an arcuate support member positioned intermediate said walls, a movable arcuate segment supported on said arcuate support for axial relative movement thereon, the inner periphery of said arcuate segment being complemental to the contour of said arcuate support member, the upper periphery of said rear wall extending beyond the upper periphery of said movable segment, and a compressible member positioned between said front



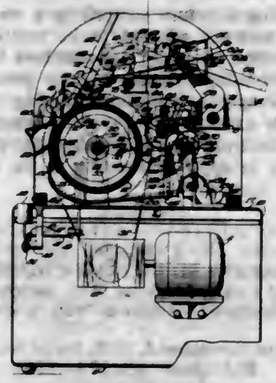
wall and said arcuate segment for yieldingly urging said segment against said rear wall for frictionally retaining cards between said arcuate segment and rear wall.

2,729,453

MAGNETIC RECORDING AND REPRODUCING APPARATUS

Marvin Camras, Chicago, Ill., assignor to Armour Research Foundation of Illinois Institute of Technology, Chicago, Ill., a corporation of Illinois

Application January 13, 1950, Serial No. 138,476
19 Claims. (Cl. 274—4)



1. In a magnetic recorder utilizing magnetizable sheet records for recording and reproducing purposes, a record carrying drum and means for wrapping the sheet around said drum in centered relation with respect thereto and for holding the sheet in engagement therewith including a cylindrical casing encircling said drum and having its inner periphery uniformly spaced therefrom, a record receiving slot extending along said casing, and sheet wrapping and spreading means spaced radially from said drum and having a soft sheet-engaging surface offering frictional resistance against the sheet record and slidably engageable with the sheet record within said casing and extending therearound and diverging from said slot from a central point with respect to said drum toward the outer sides of the drum.

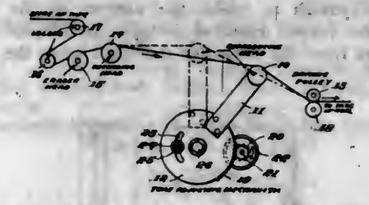
2,729,454

SIMULTANEOUS SOUND AND MOTION PICTURE SYSTEM

Max Mejia Vides, El Salvador, San Salvador

Application December 7, 1953, Serial No. 396,627
1 Claim. (Cl. 274—4)

In a device of the character described, a disc, an arm extended from said disc and secured thereto, a magnetic sound reproducing head carried by said arm, a driving pulley and a magnetic sound recording head arranged on opposite sides of said sound reproducing head, a magnetic sound tape having an eraser head and idlers arranged in engagement therewith, said disc being provided with a gear segment, a shaft having a pinion meshing with said gear segment, a hand wheel connected to said shaft, there being an elongated slot in said disc, a clamping screw extended through said slot, a pin having said disc journalled thereon whereby the position of the reproducing head may be adjusted to perform a delayed reproduction of the magnetic recorded sound equal to the time required



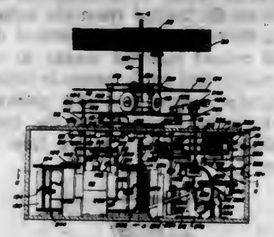
for a film to travel from the lens gate of a single system motion picture camera or sound projector to its sound recording device whereby each picture image or frame may be made to register with its corresponding portion of the sound track to thereby leave sufficient room or margin for splicing without affecting critical or valuable sound or notes.

2,729,455

AUTOMATIC INTERLOCKING DUAL PHONOGRAPH RECORD PLAYER

Herman H. Mueller, Ephrata, Pa.

Application June 9, 1949, Serial No. 98,048
12 Claims. (Cl. 274—10)



1. An automatic record changing and playing mechanism comprising a frame, a turntable rotatably mounted on the frame, a reproducer including a pickup arm for reproducing sounds from records rotated by the turntable, means for swinging the pickup arm about a vertical and horizontal axis, a stationary spindle supported by the frame concentrically with the turntable for supporting a plurality of records at their centers, means disposed parallel with the spindle for supporting the records stacked above the turntable and releasing the records one by one, drive and spacing means disposed adjacent the turntable for horizontal swinging movement relative to the spindle, said last means operatively being connective with the turntable for supporting and rotating the lowermost record from the stack, the record being supported in a parallel plane above the turntable, means disposed adjacent the turntable for retaining the record under pressure in driven engagement of the drive means, and means carried by the spindle for raising the record from the drive means to allow the drive means to swing outwardly beyond the periphery of the turntable and for then lowering said record into interlocking placement on the turntable.

2,729,456

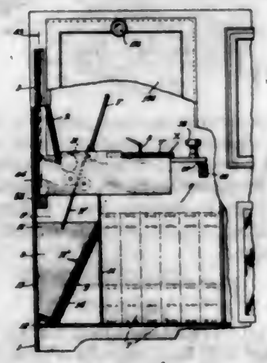
PHONOGRAPH RECORD PLAYER

Reuben C. Carlson, Chicago, Ill., assignor to Admiral Corporation, Chicago, Ill., a corporation of Delaware

Application November 15, 1949, Serial No. 127,465
14 Claims. (Cl. 274—10)

1. A phonograph record player having a frame providing stationary magazine members on which a plu-

rality of records are adapted to be supported in near-vertical position a cyclically movable record transfer element disposed adjacent the magazine, the records being adapted to be moved by gravity toward said cyclically movable record transfer element, the element being adapted to normally retain the records in the magazine, said element also having record-receiving means in connection therewith to which the support of the record nearest the record removal element is adapted to be transferred from the magazine members when the record



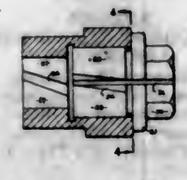
transfer element is moved through a cycle of motion, ejector means in association with said record transfer element to remove the record from the support of said record-receiving means, cyclically operated drive means coupled to said record removal means to actuate said record ejector means, and guide means in connection with said record transfer means and said ejector means to provide a predetermined course for the ejector means to operate in when removing a record from said record receiving means.

2,729,457
NIPPLE CHUCK
Walter A. Wagner, San Jose, Calif.
Application October 18, 1954, Serial No. 463,009
6 Claims. (Cl. 279—2)



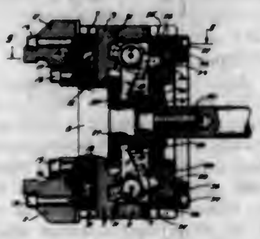
1. A nipple chuck comprising a main body having one end square in cross section, an opposite nipple supporting cylindrical end, and a mid portion of a diameter to provide a nipple abutting shoulder adjacent said cylindrical end, said main body having an axial bore, an actuating rod guided for sliding movement in the axial bore of said main body and having both its ends extending therefrom for impact, said nipple supporting cylindrical end having a plurality of longitudinal slots formed therethrough, a nipple engaging chuck jaw in each of the longitudinal slots in said cylindrical end, said actuating rod having a slight tapered portion disposed in the region of said cylindrical end, and conforming tapered inner faces on said jaws engageable by the tapered portion of said actuating rod for effecting outward radial movement of said jaws relative to said cylindrical end upon sliding movement of said actuating rod in one direction.

2,729,458
COUPLING STRUCTURE
Elmer P. Secrey, deceased, late of Syracuse, N. Y., by Caleb Candee Brown, Jr., executor, assignor to Ruth Gale Secrey
Application December 22, 1952, Serial No. 327,398
7 Claims. (Cl. 279—41)



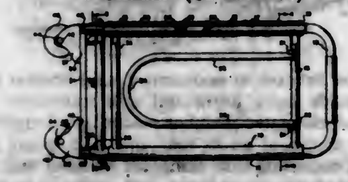
1. A coupling structure comprising a socket member and a male member adapted to be positioned in the bore of the socket member, said members being formed on their confronting surfaces with a plurality of circumferentially spaced helically extending grooves and having spirally extending cam surfaces intermediate said grooves, the cam surfaces in one member extending circumferentially in opposite direction to the cam surfaces on said other member.

2,729,459
BALANCED ROTARY CHUCK
Lorenz Albert Leifer, Madison, Wis., assignor to Gisholt Machine Company, Madison, Wis., a corporation of Wisconsin
Application November 3, 1950, Serial No. 193,766
12 Claims. (Cl. 279—119)



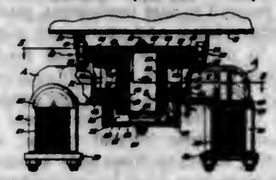
1. A rotary chuck comprising gripping means disposed for radial operating movement to grip an object by radial inward movement thereof whereby high rotational speeds tend to release the object by reason of centrifugal forces acting upon the gripping means, bell crank lever means having a short arm engaging said gripping means to actuate the same, axially movable draw means connected to actuate said bell crank lever means, balancing means supported for free radial movement adjacent said bell crank lever means opposite said gripping means, and a lever carried by said bell crank lever opposite to said short arm thereof and engaging said balancing means to be actuated thereby, said balancing means being adapted to press radially outwardly on said last-named lever to oppose outward centrifugal displacement of said gripping means during rotation of the chuck and leave said draw means effective for gripping action.

2,729,460
COLLAPSIBLE LUGGAGE DOLLY
Julio R. Formon, Litchfield, Conn.
Application May 11, 1953, Serial No. 354,029
Claims priority, application Germany May 13, 1953
9 Claims. (Cl. 280—40)



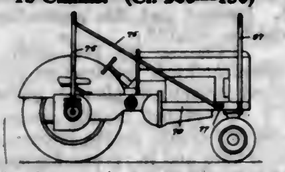
1. In a collapsible luggage dolly having a substantially plane frame including a pair of parallel tubular longitudinals, the combination of a pair of rearward extension members in telescopic relationship to said longitudinals, a transverse member connecting said extension members so as to ensure their common movement in the axial direction of said longitudinals, two back struts attached to said extension members, respectively, in the same plane at right angles and eccentrically in relation to the axes of said extension members, each of said struts being turnable about the axis of the associated extension member, said struts having a first end position in which they are parallel to said transverse member and in which the one strut bears lengthwise on the other with its free end adjacent the extension member associated to said other strut, said struts having a second end position in which said struts are directed at right angles to and upwards of the plane of said frame, and a wheel-carrying bracket secured to the ultimate end of each extension member.

2,729,461
FIFTH WHEEL CONSTRUCTION
Lloyd D. Kay, San Marino, Calif., assignor to Kay-Brunner Steel Products, Inc., a corporation of Delaware
Application July 27, 1953, Serial No. 370,470
9 Claims. (Cl. 280—125)



1. A fifth wheel construction, including: a hub of spool form adapted to be fixed to a vehicle frame so that its major axis is disposed vertically; a bolster having a socket rotatably receiving and supporting the hub; a spindle fixed to the bolster and extending upwardly through the hub, the spindle being tubular and closed at its lower end to provide therein a reservoir for oil; and ports in the spindle permitting oil from the reservoir to flow between the spindle and the hub and into the socket.

2,729,462
SAFETY GUARD FOR A TRACTOR OPERATOR
Osborne Maybrier, Cynthiana, Ky.
Application July 28, 1952, Serial No. 301,317
15 Claims. (Cl. 280—150)



1. In combination, a tractor having a driver's seat, a pair of upwardly extending guard members disposed one on each side of the seat and terminating at their upper ends above the head of the driver, and outwardly of and over the rear wheels of said tractor and means securing said guard members on the tractor.

2,729,463
AUTOMOBILE FENDER WITH WHEEL WELL VENTILATING MEANS
Donald C. Ludwig, Detroit, Mich., assignor to Houdaille-Hershey Corporation, Detroit, Mich., a corporation of Michigan
Application October 18, 1950, Serial No. 190,812
14 Claims. (Cl. 280—152)



1. A stone guard adapted for use on vehicle fenders comprising, a body member, and a series of longitudinally disposed channel-shaped sections on said body, said sections having openings at the forward ends thereof to provide ventilation therethrough.

2,729,464
TRAVELLING HOBBY HORSE
Edward P. O'Donnell, Tulsa, Okla., assignor to Lyonal A. Babb and Thomas W. Babb, Liberal, Kans.
Application February 7, 1952, Serial No. 270,317
3 Claims. (Cl. 280—218)

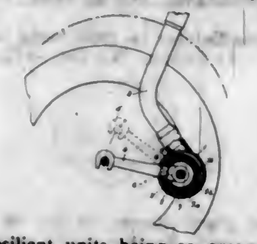


1. A wheeled toy adapted to be intermittently advanced over a surface, said toy comprising front and rear axles, wheels carried by said axles, means cooperating with said wheels for preventing rearward rotation thereof, an upwardly extending resilient arcuate member above said axles, the ends of said arcuate member being rigidly anchored to the axles, a double link connection between the ends of the arcuate member and connected to said arcuate member ends in a plane above and adjacent the axles, foot engaging members carried by the double link connection and forming means whereby said link connection can be broken downwardly for advancing the rear axle under the weight of the occupant, said arcuate member forming means for advancing the front axle when the weight of the occupant is shifted from the foot engaging members to the arcuate member, said arcuate member being formed in two sections hingedly connected to each other at a point directly above the foot engaging members.

2,729,465
SPRINGING SYSTEM FOR A MOTORCYCLE WHEEL
Pier Luigi Torre, Milan, Italy
Application November 13, 1952, Serial No. 320,172
Claims priority, application Italy November 17, 1951
4 Claims. (Cl. 280—277)

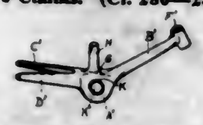
1. A system of springing for a vehicle wheel and particularly a motorcycle wheel comprising a resilient unit for each side of the vehicle wheel, said resilient unit having a plurality of split ring springs, a casing for each of the said resilient units secured to the vehicle

frame and an arm on each side of said wheel for retaining said wheel, said springs being mounted in said casing coaxially with respect to the axis of rotation of said arm, said casing having internal projections against which rest the side portions of the terminal sections of said springs while the central portion of said terminal sections rest against said arm, said springs being constrained to spread out by the action of the said arm which when moving under the effect of road asperities will press against one end of said springs, the said springs of each



of the said resilient units being so arranged so as to operate progressively beginning the spreading out action from the outermost one with the others in succession, each inner spring having a notch on a terminal side; said notch being located to obtain a delayed spring action, said notch being located at the center of the sections of said springs and having a width corresponding to the width of the said arms and having a gradual progressing depth in the various springs so as to bring about the progressive springing action desired.

2,729,466
BICYCLE FRAME ELEMENT
Raffaele Giordani, Bologna, Italy
Application June 12, 1951, Serial No. 231,078
Claims priority, application Italy July 10, 1950
6 Claims. (Cl. 280—281)



1. A bicycle frame element made from a single elongated sheet metal blank having two symmetrical halves with respect to a longitudinally extending central line of symmetry, the frame element being bent about said central line and having symmetrical halves located opposite each other and having the free edges thereof bent toward each other, each of said two symmetrical halves including a dished portion having one hole, and being joined to the other dished portion along a joining portion having an aperture, each of said halves also including an integral semi-tubular portion projecting from said dished portion in one direction, the two dished portions forming a hollow casing having said holes oppositely arranged, aligned, and adapted to support the drive shaft of a bicycle, and also adapted to support on said flanged tubular edge portion of said aperture a saddle supporting means, and the two semi-tubular portions forming a tubular portion adapted to support a stem carrying a steering handle bar.

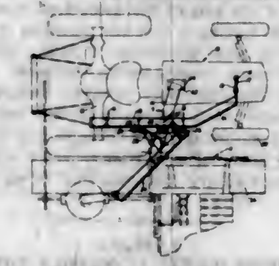
2,729,467
ADJUSTABLE LOAD TRAILER HITCH
Terrell J. Reese, Elkhart, Ind.
Application September 10, 1952, Serial No. 308,744
2 Claims. (Cl. 280—406)

2. A hitch for detachably connecting tractive and trailing vehicles, comprising a detachable two-part swivel coupling, coupling carriers adapted to be fixedly secured to said tractive and trailing vehicles, a guide carried by the trailer-mounted carrier, an elongated member slidable endwise in said guide, a spring urging said member rearwardly, and a pivot connection between said tractor-mounted carrier and said member, said pivot being spaced below said coupling, a bracket depending from said trailer-mounted carrier, and inclined braces connecting the lower



parts of said bracket to said carrier, said bracket journaling said guide on a horizontal axis transverse of said vehicle, said elongated member mounting a longitudinally adjustable abutment on its rear end, said spring being a coil spring encircling said elongated member and bearing against said abutment and said guide at its opposite ends.

2,729,468
SIDE DRAFT IMPLEMENT HITCH FRAME WITH LONGITUDINAL PIVOTAL AXIS
Vernon O. Hauswirth, Royal Oak, and Charles E. McKeon, Birmingham, Mich., assignors, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application September 18, 1952, Serial No. 310,282
4 Claims. (Cl. 280—456)

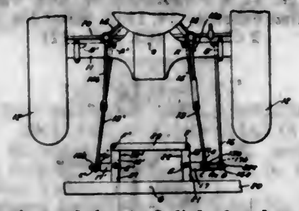


4. In combination, a tractor, an implement, a main frame beam rigidly secured to said tractor to extend longitudinally thereof, a pair of spaced pivot sleeves on said main beam having longitudinal bores, a secondary frame beam rigidly secured to said implement, pivot pins carried by said secondary beam and positioned within said pivot sleeve bores to define a longitudinal pivot axis about which said frame beams are normally relatively pivotable, said secondary frame beam projecting generally laterally of said main frame beam to support said implement in laterally spaced relation to said tractor, rigid bridging means projecting laterally from said secondary beam to underlie said tractor in load-bearing relationship therewith, and supporting means suspending a medial portion of said bridging means from said main frame and defining a fulcrum about which said bridging means is pivotable to resist normal relative movement of said main and secondary beams by virtue of the implement weight and the tractor weight imposed on opposite ends, respectively of said bridging means.

2,729,469
IMPLEMENT HITCH FOR TRACTORS
Raymond W. Wilson, Ferndale, Mich., assignor, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Original application November 13, 1950, Serial No. 195,158, now Patent No. 2,653,823, dated September 29, 1953. Divided and this application January 26, 1953, Serial No. 333,148
8 Claims. (Cl. 280—456)

1. An implement hitch for tractors having a pair of laterally spaced, universally pivoted, trailing draft links, comprising a pair of bell cranks, means for pivotally mounting said bell cranks on the implement on laterally spaced vertical axes and in reversed relationship relative to each other, a rigid link interconnecting corresponding arms of said bell cranks, means on the other arms of said

bell cranks respectively adapted for connection to the tractor draft links, and a supplementary draft link, means on one end of said supplementary draft link adapted for pivotal connection to the tractor in alignment with the



pivotal mountings of the draft links but laterally spaced from one of the draft links, and means for pivotally connecting the other end of said supplementary draft link to said other arm of the adjacent bell crank.

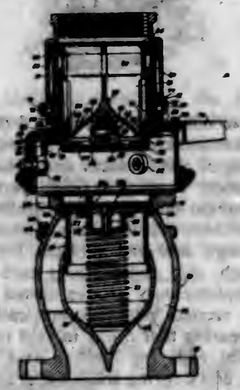
2,729,470
RESILIENT DRAFT DEVICE WITH ADJUSTABLE ATTACHING MEANS
Fred H. Seitz, Aurora, Colo.
Application March 8, 1952, Serial No. 275,494
5 Claims. (Cl. 280—483)



1. A hitch structure for connecting a trailer vehicle having a forwardly extending frame structure to a towing vehicle comprising, a reach bar for connecting to the towing vehicle, detachable means for pivotally connecting the rear end of the reach bar to the under side of the trailer frame structure rearwardly of its forward end, means for yieldably connecting the reach bar to the forward end of the frame structure, and means embodied in the yieldable connecting means and including a structure establishing a longitudinal slot above the reach bar and a member connected to the trailer frame and slidable in the slot for permitting the reach bar to be freely slidable longitudinally relative to the forward end of the frame and thereby allowing the detachable connection between the trailer frame structure and rear end of the reach bar to be easily made at points having different distances from the forward end of the trailer frame structure.

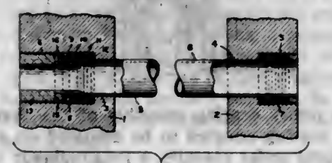
2,729,471
VALVED COUPLING DEVICES FOR PIPES OR CONDUITS
John Fraser, Tolworth, Surbiton, England, assignor to Avery-Hardoll Limited, Tolworth, Surbiton, England
Application August 28, 1952, Serial No. 306,859
Claims priority, application Great Britain September 24, 1951
1 Claim. (Cl. 284—18)

In a coupling device for conduits comprising first and second tubular coupling members having mutually engaged mating ends, a valve seat in the mating end of the first coupling member, a first main valve engaging said valve seat to close the passage through said first coupling member, a valve seat in the mating end of the second coupling member, a second main valve engaging said last mentioned valve seat to close the passage through said second coupling member, valve operating means in said second coupling member to move said second main valve outwardly to its open position, and said first main valve being opened by the opening movement of the second main valve, the provision of means in said first coupling member defining with said first main valve a chamber in which said first main valve is slidable, means defining a restricted passage connecting said chamber with the passage through the first coupling member, aligned ports in said first and second main valves to connect said chamber with the passage through the second coupling member, an outwardly opening pilot valve closing the port in the second main valve, an inwardly opening pilot valve closing the port in the first main valve and aligned with the outwardly opening pilot valve, an axially movable member forming part of the valve operating means and having lost motion relative



to said second main valve, and means fixing said outwardly opening pilot valve to said axially movable member, said axially movable member moving said outwardly opening pilot valve outwardly while taking up the lost motion between itself and the second main valve preparatory to opening said second main valve and said outwardly opening pilot valve engaging and opening said inwardly facing pilot valve whereby the said chamber is connected to the passage through the second coupling member before the main valves are opened.

2,729,472
PACKING FOR CONDENSER TUBES
Samuel Pennella, Pompton Lakes, N. J.
Application March 3, 1953, Serial No. 340,125
3 Claims. (Cl. 285—5)



1. In a surface condenser the combination of tube sheets having tube end receiving openings therein of substantially the diameter of the outside diameter of the tubes and tubes extending from one tube sheet to the other, said tube sheet openings counterbored at their inlet ends to a diameter greater than the outside diameter of the tubes, said tubes at their inlet ends extending into and only partially through the counterbores and having their inlet ends flared outwardly into the counterbores, packing rings of highly compressed material which will swell when wetted in said counterbores inwardly of the flared ends of said tubes, said packing rings provided with internal recesses, compressible packing in said recesses and engaging the tubes and said packing rings to form seals therebetween, second packing rings of highly compressed fiber which will swell when wetted in said counterbore and against the flared ends of said tubes, and insert packing rings of hard tough plastic inserted in said counterbores outwardly of said second packing rings said second packing rings and said insert packing rings forming fluid tight seals with said condenser tube sheet upon their swelling when wetted.

2,729,473
ELECTRICAL FIXTURE SWIVEL JOINT CONSTRUCTIONS
Irving Warshawsky, Brooklyn, N. Y.
Application June 28, 1951, Serial No. 234,013
2 Claims. (Cl. 285—96.6)



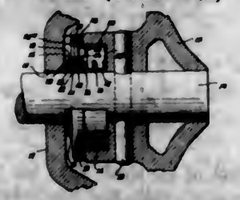
1. An electric conduit swivel joint fitting construction comprising interconnected tubular mating members having circular shaped end surfaces assembled in close axial alignment relation forming a joint permitting relative swiveling movement between said members, the tubularity of said members providing a continuous passageway extending through said end surfaces for installing wiring therethrough, said end surfaces each having therein a circular complementary groove closed at its ends extending in an arcuate path concentrically and forming a raceway, a bearing ball riding in said raceway coacting with said closed ends for limiting said relative swiveling movement, and a spring frictional drag cage washer of concavo-convex shape interposed under compression between said end surfaces, said washer having an opening therein of a diameter substantially equal to that of said bearing ball through which the latter extends.

2,729,474
SAND SEAL FOR ROTATING BEARING
Hector F. Unger, deceased, late of Portland, Oreg., by Delores J. Unger, executrix, Portland, Oreg.
Application December 2, 1952, Serial No. 323,550
2 Claims. (Cl. 285—97.9)



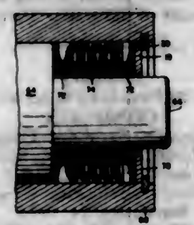
1. In a rotary bearing assembly of the character described a housing adapted to be mounted on a pipe delivering liquid under pressure, a longitudinally split bearing sleeve in said housing, a shank rotatably journaled in said bearing sleeve, a channel extending axially through said shank, cooperating engaging annular shoulders on the outer surface of said shank and on the inner surface of said bearing sleeve, the bottom end of said shank extending below the bottom end of said bearing sleeve, a resilient annular sealing member mounted on the lower end of said shank, an annular lip on said sealing member spaced from the bottom end of said sealing member and positioned adjacent the bottom end of said bearing sleeve, the periphery of said lip corresponding at least to the inner periphery of said housing, whereby pressure of the liquid at the intake end of said shank channel will cause said lip to be pressed against the bottom end of said bearing sleeve and to block the passage of liquid and any foreign particles therein in between said bearing sleeve and said shank, an annular inturned rib on said bottom end of said bearing sleeve, and an annular groove on said sealing member receiving said rib, said rib and said groove providing an additional seal against the passage of liquid and foreign particles in between said bearing sleeve and said shank.

2,729,475
DIAPHRAGM TYPE MECHANICAL SEAL
Albert M. Chambers, Jr., and Roger Schwing, Palmyra, N. Y., assignors to The Garlock Packing Company, Palmyra, N. Y., a corporation of New York
Application February 16, 1953, Serial No. 337,066
2 Claims. (Cl. 286—11)



1. A diaphragm type mechanical seal comprising an annular cup-shaped shell adapted for fixed, fluid-tight association with one of two approximately coaxial, relatively rotatable machine elements, an annular diaphragm of soft, flexible material having a wear ring at one periphery adapted to effect a sliding seal with an annular surface on the other of said machine elements and a thickened annular portion at its other periphery, and a relatively rigid supporting ring in intimate side-by-side association with said thickened peripheral portion; the shell having an annular, radially facing, marginal channel within which said thickened peripheral portion and said supporting ring are fluid-tightly gripped, and the said supporting ring being of complemental shape relative to said thickened peripheral portion and having a concave inner side face, one circumferential part of which is in axial alignment with said thickened peripheral portion and another circumferential part of which is in radial alignment with said thickened peripheral portion, thereby being adapted to oppose radial and axial deformation of said thickened peripheral portion and to oppose dislodgment of the latter from said channel.

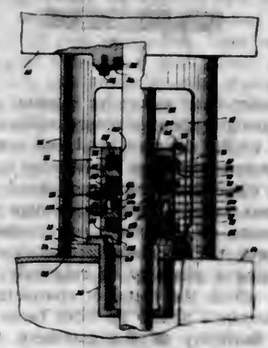
2,729,476
SHAFT OR JOURNAL SEAL
James E. Duggan, Jamestown, R. I., assignor to Watts Electric & Mfg. Co., Birmingham, Mich., a corporation of Michigan
Application March 24, 1952, Serial No. 278,272
5 Claims. (Cl. 286—11.11)



4. A shaft seal for fixed mounting on a shaft for contact with the inner surface of a journal comprising an assembly of intermediate rings formed of flexible plastic material each of which has an annular thickened assembly rib spaced substantially from both its radially outer edge and its radially inner edge but more closely adjacent to its radially inner edge, the portions of said rings intermediate said ribs and the radially inner edge portions thereof being relatively thick but spaced apart axially, the portions of said rings intermediate said ribs and the radially outer edge portions thereof being relatively thin and inclined at an acute angle from radial planes, the radially outer edge portions of said rings terminating in edge surfaces inclined to the axis thereof and intersecting the adjacent side surfaces thereof at an acute angle, said rings having interfitting annular tongue and groove

formations located in the circumferential zone of said ribs effective to prevent relative radial displacement of said ribs in both radially inward and outward directions, and means pressing said rings together axially in the zone of said ribs.

2,729,477
FLOATING PACKING RING ASSEMBLIES FOR SEALING ROTARY SHAFTS
Russell I. Hamilton, Palmyra, N. Y., assignor to The Garlock Packing Company, Palmyra, N. Y., a corporation of New York
Application January 7, 1953, Serial No. 330,025
2 Claims. (Cl. 286—11.16)



1. A sealing device for effecting a seal between a rotary shaft and a machine-casing opening into which such shaft extends, comprising a packing casing adapted for fixed sealing association with said opening and having a shaft passage therein substantially coaxial with said opening and an internal annular groove therein, a pair of substantially similar, flat-sided, segmental sealing rings, having segments which are slidable laterally in said groove, spring means extending circumferentially about said pair of segmental sealing rings to provide contraction of the rings to adapt the latter for sliding, sealing engagement, at their inner peripheries, with the shaft, and which rings are in intimate, substantially sealed, side-face to side-face association with each other and with the side walls of said groove, and means coacting with said packing casing and with both said segmental rings to hold said rings in relative angular positions in which the segment junctures are in axial non-alignment and to prevent rotation of said rings relative to the packing casing; said sealing rings having, in one segment of each thereof, a similar peripheral notch extending throughout the thickness of each one of said rings, which notches have approximately radially extending, opposite, flat, side walls parallel to each other, the segments of the two sealing rings being in axial non-alignment when said notches are in axial alignment, and said means comprising a key fixed to the bottom of said groove and having parallel, flat, side walls extending radially inwardly in said groove and within said notches of the two rings in accurate, face-to-face, sliding association with said flat, side walls of said notches, whereby to prevent rotation of said rings and to hold said rings in segmental non-alignment.

2,729,478
PACKING CONSTRUCTION
Albert M. Chambers, Jr., and John J. Patrick, Palmyra, N. Y., assignors to The Garlock Packing Company, Palmyra, N. Y., a corporation of New York
Application May 21, 1953, Serial No. 356,532
6 Claims. (Cl. 286—26)

1. A packing assembly comprising portions of two intertelescoping parts to be sealed, which portions have opposed cylindrical surfaces, non-variably spaced relatively to each other, defining an annular packing space therebetween; and, tightly disposed in said space, a packing ring of circular shape in radial axial section, of substantially noncompressible material, and having a continuous, concentric slot which, in its depth dimension, extends from a side surface of the ring to a location therewithin to at least a plane coincident with the lines of contact of said



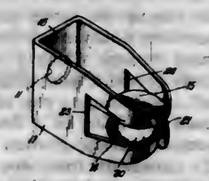
ring with said cylindrical surfaces, the diameter of the ring's section at said plane being greater, when the ring is unstressed, than the spacing between said cylindrical surfaces, and portions of said ring at opposite sides of said slot being yieldably pressed toward each other by such contact of the ring with said cylindrical surfaces, thereby reducing the ring's mentioned diameter and enabling its disposition in said packing space.

2,729,479
LOCKING MEANS
Fayette Leister, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a corporation of Connecticut
Application June 21, 1950, Serial No. 169,447
6 Claims. (Cl. 287—52.09)



1. In a ring locking means, an inner bearing ring or the like to be secured to a shaft and having a bore therein in which to accommodate a shaft, said ring having an eccentric counterbore at one end of said bore, and locking means including a resilient wire ring on the outer surface of said first ring, said wire ring having a generally axially directed portion fitting in and against said counterbore, whereby upon relative rotation of said rings said axially directed portion will be jammed between the shaft and the counterbore in order to lock said inner bearing ring or the like upon a shaft.

2,729,480
ROPE THIMBLE
Arthur A. Berndt, Chicago, Ill., assignor to Electroline Company, Chicago, Ill., a corporation of Illinois
Application May 12, 1953, Serial No. 354,520
6 Claims. (Cl. 287—81)



1. In a guy thimble, a device formed of sheet metal and including a clevis having a pair of spaced, forwardly extending side walls, an ear portion cut from each side wall and extending rearwardly of each side wall, each ear portion being arcuately bent inwardly of the clevis into contact with its opposite ear portion, the end portions of the side walls each being arcuately bent inwardly

so as to contact each other, whereby the forward end of the clevis is semi-circular and which forms a ring with the semi-circular ear portions, and said ring in transverse section being bent into a semi-circular shape to complete the thimble of the device.

2,729,481
SPLIT OIL SEAL
Albert M. Chambers, Jr., George F. Closs, Edward W. Fisher, and George R. Milligan, Palmyra, N. Y., assignors to The Garlock Packing Company, Palmyra, N. Y., a corporation of New York
Application May 22, 1952, Serial No. 289,274
5 Claims. (Cl. 288—13)



1. A split oil seal comprising plural, abutting, packing segments collectively constituting an annular fluid-sealing assembly, each of said segments comprising an outer, arcuate body portion having relatively rigid, radially inwardly extending end flanges at opposite ends thereof, an inner, flexible, arcuate sealing flange integral with said body portion but having a sealing lip portion separated from a radially opposed part of said body portion by an axially facing, arcuate recess, radial end webs of resilient material at opposite ends of the segment interconnecting the said body portion and sealing flange, and a longitudinally tensioned coil spring in said recess with its ends connected to said end flanges intermediate portions of the spring being in radially inwardly pressing engagement with said sealing flange, due to the tendency of the tension of the spring to be effective in a straight line.

2,729,482
FLUID SEAL
Thomas O. Kosatka, Chicago, Ill., assignor to Victor Manufacturing & Gasket Co., Chicago, Ill., a corporation of Illinois
Application December 11, 1952, Serial No. 325,335
4 Claims. (Cl. 288—13)



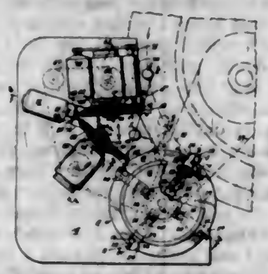
2. A seal for closing the space between complementary housing members which are drawn together to form a circular opening through which a rotatable shaft projects concentrically to seal a fluid within said housing and around said shaft, comprising: a pair of semi-circular sealing members each consisting of a first metallic member containing a semi-cylindrical portion and a flange that projects radially outwardly from one end of said semi-cylindrical portion; a second metallic member containing a semi-cylindrical portion telescoped within the semi-cylindrical portion of the first metallic member and a flange that projects radially from one end thereof past the end of the semi-cylindrical portion of said first metallic member and therebeyond; and an elastomer encompassing said metallic members, bonded thereto and forming therewith an outwardly opening channel adapted to engage the housing members to secure the seal thereto and to form a seal therewith, and forming also a sealing lip projecting radially inwardly from said semi-cylindrical portions and adapted to engage the shaft and to form a seal therewith.

2,729,483
GASKET
Joseph B. Victor, Chicago, Ill., assignor to Victor Manufacturing & Gasket Co., Chicago, Ill., a corporation of Illinois
Application October 31, 1951, Serial No. 254,152
2 Claims. (Cl. 288—26)



1. A cylinder head gasket for internal combustion engines comprising: a sheet of compressible asbestos shaped to conform to the cylinder head and containing a plurality of groups of openings conforming to corresponding openings in the cylinder block and head; a pair of thin flexible planar metallic facing members registered with and conforming to said sheet and containing openings registering with the openings in said sheet and in addition containing a plurality of relatively small perforations, from which the metal is completely removed to leave the members planar on both faces thereby to increase the flexibility of the members, through which perforations the asbestos may flow into direct contact with the cylinder block and head as the gasket is compressed therebetween; and means securing together said sheet and facings so that the gasket may be handled as a unit prior to assembly in the engine.

2,729,484
APPARATUS FOR SEVERING STRING ENDS
Bruce C. McCreary, Bound Brook, and Oliver W. Wood, Rahway, N. J., assignors to Johnson & Johnson, a corporation of New Jersey
Application September 29, 1952, Serial No. 312,132
16 Claims. (Cl. 289—1)



1. An apparatus for cutting off excess string ends extending from the knot of a string tied on a package, the combination which includes movable carrier means equipped with clamping devices operable to grasp and hold the individual string ends extending from a knot on a package, means presenting a slot simultaneously to accommodate both string ends and for guiding the package in a given path of movement as tension is applied to the string ends after they have entered the slot, and a string severing device adjacent said means for cutting both string ends off close to the knot as the package is guided along said path, said carrier means being operable upon movement thereof to bring the string ends grasped in the clamping devices thereon into the guide slot and apply tension thereto.

2,729,485
DOOR LOCK SPRING UNIT
Ernest L. Schlage, Burlingame, Calif., assignor to Schlage Lock Company, a corporation
Application August 20, 1951, Serial No. 242,622
5 Claims. (Cl. 292—1)



1. A spring unit for use with a door lock having a frame and a spindle comprising a mounting plate having a central opening, means for securing said mounting plate on said frame with said spindle extending through said opening, a pair of lugs upstanding from said mounting plate and directed away from said frame, a cup having a central aperture and a pair of slots disposed with said lugs extending through said slots, a disc coupled to said spindle for rotation therewith, a pair of tabs upstanding from said disc and in one position of said spindle overlying said lugs, a pair of helical compression springs disposed within said cup and abutting said lugs and said tabs, said lugs and said tabs being disposed relative to the ends of said springs to extend substantially diametrally of the latter whereby axially directed forces are applied to said springs upon rotation of said spindle.

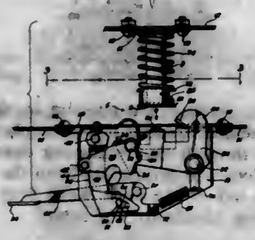
2,729,486
MECHANISM FOR OPERATING A REFRIGERATOR DOOR FASTENER
Winfield C. Evans, Mount Airy, Md., assignor to Jamison Cold Storage Door Company, Hagerstown, Md., a corporation of Maryland
Application April 13, 1954, Serial No. 422,875
1 Claim. (Cl. 292—92)



In a door fastener having a latch bar on the outer face of the door with which a spring projected keeper cooperates and a cam for extending and retracting said latch bar, mechanism for operating said cam comprising a sleeve rigidly connected to said cam, said sleeve having a spiral slot therein, a push rod disposed in said sleeve, means for preventing rotation of the push rod, a pin fixed to said rod and engaging said spiral slot in said sleeve for rotating the sleeve when the push rod is moved endwise therein for retracting said latch bar, a spring in said sleeve for moving the rod to an initial extended position and for projecting the latch bar into engaging position with the keeper when the push rod is released by the operator.

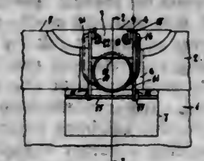
2,729,487
HOOD LATCH
Herbert Krause and Carl A. Sigel, Chicago, Ill., assignors to Chicago Forging & Manufacturing Company, Chicago, Ill., a corporation of Delaware
Application February 14, 1952, Serial No. 271,554
4 Claims. (Cl. 292—99)

1. In a hood latch assembly for motor vehicles or the like, a base member having a keeper-receiving aperture therein, a latch lever movably mounted on said base and adapted upon movement thereof to extend into alignment with said keeper-receiving aperture, a pawl and ratchet holding means between said latch member and said base and formed and adapted to hold said latch lever in said aligned position said pawl being pivotally mounted on said latch lever, said ratchet being pivotally mounted on said base member, an actuating member



pivoted to said base member for releasing said pawl and ratchet assembly to allow said latch lever to move to disengaged position, and resilient means interconnected with and extending between said actuating member and latch lever for biasing said actuating member toward inoperative position and said latch lever toward a position out of alignment with said keeper-receiving aperture.

2,729,488
CRATE FASTENER
Joseph Cibula, Pine Creek Station, Manitoba, Canada
Application December 16, 1954, Serial No. 475,609
2 Claims. (Cl. 292—107)



1. A fastener for egg crates and the like, comprising in combination with a crate and hinged lid therefor, a top plate secured to said lid, a fastening wire secured to said crate below said top plate, and a locking component cooperating between said fastening wire and said top plate adapted to maintain said lid in the closed position, said top plate being provided with an upper and a lower extending projection, one above the other, and a major portion therebetween, said fastening wire consisting of a pair of substantially vertical side portions secured by the lower ends thereof to said crate, and an over-spanning loop extending between the upper ends of said side portions, said loop adapted to engage over said upper projection, means adjacent the upper ends of said side portions adapted to pivotally support the ends of said locking component, said locking component consisting of a resilient wire looped medially the ends thereof, said loop adapted to engage under said lower projection whereby the resiliency of said locking component reacts between said means, thereby holding said over-spanning loop in engagement with said upper projection.

2,729,489
DOOR LATCH
Claude O. Westover, Orlando, Fla.
Application February 4, 1953, Serial No. 335,026
3 Claims. (Cl. 292—143)

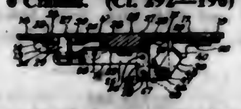
1. A door latch comprising inner and outer plates formed with openings for registering with an opening formed through a door, fasteners for the inner plate spaced from each other transversely of the said inner plate and having eyes bearing against the said inner plate, a bolt

freely slidable longitudinally through the eyes for movement to extended and retracted positions, a portion of the bolt between the eyes being formed with a transverse opening, and a stem formed of stiff metal having one end portion formed with a lateral extension terminating



in a bill passing through the opening in the bolt with its free end presented towards the inner plate, said stem being projected through the registering openings of the plates and the door and protruding from the outer plate, said protruding end of the stem being bent laterally to form an operating handle for the stem.

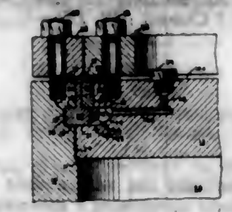
2,729,490
FLUSH TYPE TOGGLE LATCH
Arnold F. Gander, Berkeley, Calif.
Application November 20, 1953, Serial No. 393,358
6 Claims. (Cl. 292—196)



1. A flush type toggle latch mechanism comprising, in combination, a unitary base structure, a latch actuator hingedly mounted at the mid-portion of the base structure for swinging movement relative to a fixed axis and having actuating knobs thereon for manual operation of the latch mechanism, a latch bolt mounted at one end of the base structure for swinging movement relative to a fixed axis and between latching and retracted positions, said latch bolt being generally U-shaped with side arms each having portions in obtuse angular relationship to one another and a connecting portion adjoining adjacent ends of the side arms and providing a keeper engaging surface, the axis of swinging movement of the latch bolt relative to the base structure being substantially coincident with the junctures of said angularly disposed portions of the side arms so that said portions of each of the side arms extend therefrom in angular relationship, a link having its opposite end portions rotatably connected to adjacent ends of the actuator and the latch bolt side arm portions remote from the said connecting portion thereof by means providing axes which move relative to the axis of swinging movement of the latch bolt when the actuator is moved, a torsion spring having a coil portion encompassing the axis of swinging movement of the latch bolt and end portions extending from the coil portion, which end portions are connected to the base structure and the latch bolt, said torsion spring being normally stressed to exert a force continually biasing the latch bolt toward its latching position, means providing stops for limiting movements of the actuator at opposite extreme positions of movement relative to the base structure, and the axes of movements of said link being so located relative to the fixed axis of movement of the actuator and the fixed axis of movement of the latch bolt that when the latch bolt is in either the latching or retracted position, the actuator is held against one of said stop means.

2,729,491
HIGH PRESSURE CLOSURE FASTENER
Everett N. Sieder, Fredonia, N. Y., assignor to Alco Products, Incorporated, New York, N. Y., a corporation of New York
Application March 22, 1952, Serial No. 278,981
3 Claims. (Cl. 292—256.6)

1. Apparatus of the character described comprising a pressure-sustaining barrel having an opening at one end and an inwardly facing continuous recess having a shear bearing wall adjacent the opening, a segmented shear member disposed in said recess and extending into the barrel, a cover in the opening radially overlapping the



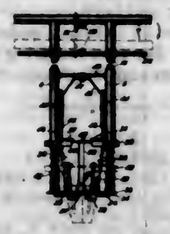
shear member on each side thereof to form an inner contact area and an outer contact area between the shear member and the cover, the median line of said outer contact area being radially inward of the median line of said inner contact area.

2,729,492
KEEPER MECHANISM
Rollo Marple, Jackson, Mich., assignor to Hancock Manufacturing Company, Jackson, Mich., a corporation of Michigan
Application April 21, 1951, Serial No. 222,181
3 Claims. (Cl. 292—341.12)



1. In a keeper adapted for use with a multi-toothed rotary bolt and a dogging member adapted to be moved into dogging position behind a tooth of said bolt, a forwardly facing primary striker surface for imparting initial rotation to said bolt toward its dogging position, means on said keeper for completing the dogging movement of said bolt, said means comprising an auxiliary member pivotally mounted on said keeper behind said primary striker surface, said auxiliary member extending through a slot in said keeper and having a secondary striker surface outwardly of said slot, and resilient means normally urging said auxiliary member against the bolt in opposition to the direction of the said bolt.

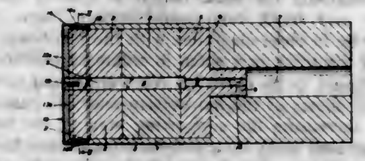
2,729,493
IMPLEMENT FOR LIFTING AND TRANSPLANTING PLANTS
Anton Engel, Floessenburg, near Weiden, Oberpfalz, Germany
Application August 26, 1952, Serial No. 306,356
13 Claims. (Cl. 294—50.8)



1. An implement for lifting and transplanting plants of the type including a two-part frame having an upper part and a lower part, operating means for said implement on said upper frame part, and means for mounting cutting members on said frame, said mounting means in-

cluding an annular plate with circularly arranged elements for supporting said cutting members, said cutting members consisting of a plurality of blades shaped to form together upon downward movement a shell of frusto-conical form, two annular disks on said lower frame part, arranged one above the other in spaced relationship, conforming with their open inner edges to a frusto-conical shell, a plurality of guide members mounted on said disks so as to extend therebetween and capable of guiding said cutting blades for downward movement, thereby moving them from open-shell to closed-shell position.

2,729,494
MAGNETIC RETRIEVING TOOL
George William Job Trowbridge, Surbiton, England, assignor to The Kingston Instrument Company Ltd., Surbiton, England, a British company
Application September 14, 1951, Serial No. 246,693
Claims priority, application Great Britain September 28, 1950
9 Claims. (Cl. 294—65.5)



1. A magnetic retrieving tool for well bores comprising at least one permanent magnet, a cap member of magnetic material, a body, means detachably securing said magnet and body together, and means detachably securing said cap member to the end of said body and in contact with at least one pole of said magnet thereby to facilitate replacement of said cap member.

2,729,495
DEVICES FOR CONNECTING A LOAD TO A PARACHUTE
Lucien G. Dejean, Paris, France, assignor to Societe Nationale de Constructions Aeronautiques du Sud-Ouest (Societe Anonyme), Paris, France, a company of France
Application October 16, 1951, Serial No. 251,527
Claims priority, application France October 23, 1950
9 Claims. (Cl. 294—83)



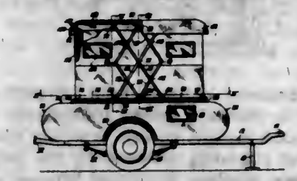
1. The combination with a connector device of the type comprising a tubular casing, a slidable member extending into said casing, means associated with the casing and the member to lock same in certain relative positions thereof and to release the member from the casing when the member is moved inwardly of the casing to a predetermined position, and means within the casing engaging said member and tending to move it inwardly of said casing to said predetermined position, of a retarding device for limiting inward displacement of said member, comprising a cylinder forming an extension of said casing and having a closed end, a piston movable inside said cylinder and cooperating with said member to prevent displacement thereof to said predetermined position when said piston is remote from said end and to permit displacement of said member to said predetermined position when said piston is proximate to said end, means for urging said piston toward said end, and a fluid inside said cylinder between said end and said piston to damp the motion of said piston.

2,729,496
AUTOMATIC HOOKS
Harry W. Jones, Knoxville, Tenn., assignor to Dempster Brothers, Inc., Knoxville, Tenn., a corporation of Tennessee
Application September 15, 1952, Serial No. 309,625
12 Claims. (Cl. 294—83)



12. An automatic hook comprising an upright elongated body having a hook portion thereon and projecting laterally from the body, a shuttle mounted on the body for movement toward and from the hook portion, said shuttle having an abutment portion projecting laterally from the body overlapping the hook portion and outwardly beyond the end of the hook portion in position for engagement by a member moving upward over the hook to lift the shuttle thereby and enter the hook, a safety hook separate from the shuttle and movably mounted on the body beside the shuttle, said safety hook having a hook portion overlapping the hook portion on the body for retaining said member in the first-mentioned hook portion, means for limiting the outermost position of the second-mentioned hook portion to a point between the body portion and an upright plane at the outer edge of the first-mentioned hook portion, and means yieldably urging the safety hook toward the last-mentioned position for retaining the member in the first-mentioned hook portion with the shuttle thereover.

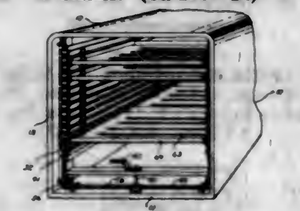
2,729,497
COLLAPSIBLE CAMPING TRAILER BODY
Arleigh A. Runyan, Gashland, Mo.
Application February 9, 1953, Serial No. 335,788
1 Claim. (Cl. 296—23)



In a trailer, an open top, hollow body; a hollow, open-bottomed roof for the open top of said body; a pair of spaced extending means underlying the roof, each including a collapsible mechanism of the lazy tong lever type having a pair of crossed, scissors links pivoted together intermediate their ends, spaced trunnion blocks in substantial axial alignment, said links having lowermost ends pivotally connected to said blocks in spaced relation, and an operating screw shaft rotatably carried by said body and threaded in said spaced blocks for raising and lowering said roof relative to the body and for maintaining stability of the roof in any position throughout its path of travel; an elongated, downwardly opening channel

member on the roof for each of said extending means respectively and aligned therewith when the roof is at the lowermost end of its path of travel covering the open top of the body and said mechanisms are collapsed, each channel member being substantially U-shaped in transverse cross-section, presenting a horizontal bight and a pair of spaced, vertical legs, the upper ends of said links being within corresponding channel members and having anti-friction elements in bearing engagement with the bight thereof, there being a lap joint between one leg of each member and the body when the roof is at said lowermost end of its path of travel; an articulated wall hingedly secured at its upper extremity to the other leg of each channel member respectively, said walls depending from their channel members and extending to said body when the roof is at the uppermost end of its path of travel, each wall including a pair of hingedly interconnected sections rendering the same foldable to a position underlying the roof when the latter is lowered in covering relationship to the open top of the body, there being a lap joint between each wall and the body when the walls are depending from the channel members the sections of each wall being overlapped along their line of hinged interconnection when the roof is at the uppermost end of its path of travel, each of said walls having its lowermost section hingedly secured to the body; and a second pair of articulated wall assemblies each having an upper section hingedly secured at its uppermost extremity to the roof for outward swinging movement away from the center of the roof and a lower section hingedly interconnected with the corresponding upper section for free inward swinging movement toward the center of the roof, the lowermost extremities of the last-mentioned lower sections being adapted to engage the body when the roof is at the uppermost end of its path of travel, said last-mentioned upper sections being disposed within the roof and having their lowermost extremities above the lowermost extremity of the roof.

2,729,498
DELIVERY BODIES
Thomas A. Law, Jamestown, N. Y.
Application March 9, 1953, Serial No. 341,019
7 Claims. (Cl. 296—24)



1. In an enclosed delivery body, structure for supporting trays in verticaly spaced arrangement comprising a pair of spaced vertical panels, vertically spaced ledges formed in and extending substantially the length of said panels, resilient members interposed between said ledges, further means operable to depress the members located between any pair of ledges into proximity with the ledge next beneath, linkage connecting said further means, and a lever operable to actuate said linkage.

2,729,499
AUXILIARY FRAME FOR TRUCK BOXES
Murnat O. Eggum, St. Paul, Minn.
Application May 4, 1953, Serial No. 352,781
3 Claims. (Cl. 296—26)

1. An auxiliary frame for a truck box on a pick-up type of truck having a flat bottom and short upstanding side panels secured rigidly to the side edges of said flat bottom, said auxiliary frame comprising a pair of spaced parallel sheath members, one each rigidly disposed closely adjacent the juncture of a side panel with the flat bottom of the truck box for substantially the length thereof, a support frame having a pair of elongated members telescopically received respectively within said sheath members and having a crossbar rigidly interconnecting the outer ends thereof and providing a clear and unobstructed space in the medial area of the frame, an upstanding corner post rigidly secured at each side of the frame at the juncture between the crossbar and each elongated



telescopically received member, said upstanding post being substantially the same height as that of the side panels on said truck box, said support frame being adapted to lie in close clearance with the rectilinear edge portions of the truck box when in collapsed position and further adapted to be extended rearwardly and substantially in the planes of the flat bottom and side panels for effectively increasing the supporting area of the bottom and sides of said truck box, and securing means between said support frame and the sheath members for rigidly holding the frame in preselected extended position.

2,729,500
LOCKING MEANS FOR LICENSE PLATE ACCESSORY FOR GUARDING FUEL TANK FILLER TUBES
Richard H. Dickenshied, Birmingham, and Carl F. Dickason, Ann Arbor, Mich., assignors to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application January 23, 1952, Serial No. 267,882
1 Claim. (Cl. 296—28)



In a motor vehicle body having a luggage compartment located adjacent the rearward end thereof, a forwardly extending floor panel for said compartment, a fixed transversely extending back panel extending upwardly from said floor panel adjacent the rearward edge thereof and formed with a rearwardly facing transversely extending depressed groove at its upper edge and an upper rearwardly extending marginal flange, a lid for said luggage compartment hinged at its forward edge to said vehicle body and having a rearward marginal flange overlapping the depressed groove formed at the top of said back panel, a resilient weatherstrip carried by the rearward marginal flange of said lid engaging the upper marginal flange of said back panel when the lid is closed to form a seal therebetween, said back panel having a depressed cavity located centrally of the width of the vehicle, a fuel tank filler tube extending through said back panel into said cavity, a cap for the end of said filler tube, a cover unit pivotally mounted at its lower edge on said back panel and in overlapping relationship to said cavity for swinging movement about a horizontal axis, said cover unit extending upwardly along said back panel and covering said cavity

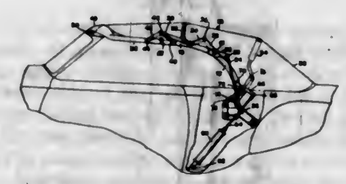
and filler tube cap and terminating in an upper marginal flange offset forwardly from the main portion of said cover unit and located in said transversely extending depressed groove in the back panel, said cover unit marginal flange being overlapped by the rearward marginal flange of the luggage compartment lid when the latter is closed to prevent swinging said cover unit rearwardly to afford access to said filler tube and cap.

2,729,501
VEHICLE CONVERTIBLE FOR CARRYING MEN OR GOODS
Hubertus Josephus van Doorne, Deurne, and Johannes Jacobus Pop, The Hague, Netherlands
Application April 14, 1952, Serial No. 282,106
Claims priority, application Netherlands April 21, 1951
4 Claims. (Cl. 296—66)



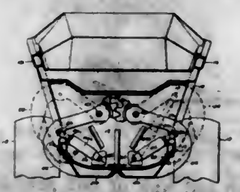
1. In a troop or personnel carrying vehicle: a body having a floor, two longitudinal side-walls, a foot space above said floor and between said side-walls, two longitudinal platforms seating planks adapted to cover said platforms, a rectangular step having a vertical and a horizontal portion between each of said platforms and the adjacent side-wall of said foot space, the length of said seating planks being substantially equal to the distance between the vertical portions of said steps and the thickness of said seating planks being substantially equal to the height of said steps.

2,729,502
CONVERTIBLE TOP LINKAGE AND ACTUATING MECHANISM
Clifford E. Hale, Ypsilanti, Mich., assignor to Detroit Harvester Company, Detroit, Mich., a corporation of Michigan
Application October 6, 1952, Serial No. 313,261
6 Claims. (Cl. 296—117)



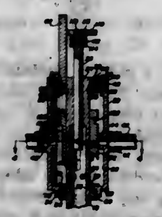
5. In a folding top, a pillar pivoted at one end to a fixed pivot, a power unit having a member movable between fixed limiting positions, a first link pivotally connected at opposite ends to said pillar and member respectively, a second link pivoted at one end to a fixed pivot and pivoted at its other end to said first link intermediate the ends of said first link, adjustable means for varying the length of one of said links to correlate the limiting position of said member with the fully raised position of said pillar, and adjustable means independent of said first adjustable means for varying the length of the other of said links to correlate the limiting position of said member with the fully lowered position of said pillar.

2,729,503
CLAM SHELL DOOR CONSTRUCTION
Stewart F. Armington, Willoughby, Ohio, assignor, by mesne assignments, to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 11, 1951, Serial No. 241,431
12 Claims. (Cl. 298—35)



1. A dumping wagon, comprising a transportable bottom dump hopper, said hopper having side walls, a longitudinally extending frame member at the bottom of each side wall, each side wall having a slot therein above the frame member, two bottom dump doors with one door corresponding to each side wall, each door swingable outwardly and inwardly under its corresponding frame member and side walls, two brackets, each supporting a door and being pivotally mounted within the hopper intermediate the side walls and ends of said hopper, each bracket extending from its pivot point through one of said slots around the outside of one of said frame members to support its door outside and below the hopper, and the inner edges of said doors meeting in their closed position below the hopper between the vertical projection of said frame members.

2,729,504
SPRINKLER AND SEALING CONSTRUCTION
Michael F. Zukas, Southold, N. Y.
Application July 2, 1951, Serial No. 234,836
12 Claims. (Cl. 299—18)



1. An adjustable sprinkler comprising a hollow body having sprinkler arms, a water supply pipe communicating with the interior of the body, means mounting said body for rotation upon said supply pipe, ports on the interior of said body communicating with said sprinkler arms, a sleeve valve member in said body adjacent said ports and axially slidable upon said supply pipe, adjusting means mounted in said pipe for axial movement and connected with said valve member, control means for said adjusting means exteriorly of said body, said pipe having a longitudinal slot therein, a pin on said adjusting means extending through said slot and secured to said valve member to slidably and non-rotatably secure the valve member and the adjusting means to the pipe.

2,729,505
LATHER FOAM DISPENSER
Salmon C. Harvey, Brooklyn, N. Y.
Application April 5, 1951, Serial No. 219,400
1 Claim. (Cl. 299—90)

A lather foam dispenser for use with a brush including the combination of a flexible reservoir having a threaded neck at one end thereof with an outlet port therethrough providing an outlet for said reservoir, an elongated flexible tube extending inwards through said port in said

neck into the reservoir, a cap with an internal thread fitting upon the threaded neck, said cap having an opening registering with the outlet port of said neck for receiving the outer end of said flexible tube therethrough so that said outer end opens to the surface of said cap, and a



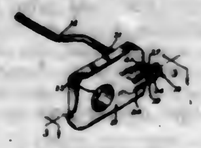
check valve in an end wall of said flexible reservoir, a short wire loop having the engaging ends twisted relative to each other, said engaging ends being disposed in the outer end of said tube and the loop portion extending a short distance from the end beyond the outer end of the said cap.

2,729,506
HAND-ACTUATED SPRAYER
Frank A. Zilberi, Euclid, and Arthur S. Kish, Mayfield Heights, Ohio, assignors to Z & W Machine Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application February 25, 1954, Serial No. 412,607
6 Claims. (Cl. 299—97)



1. In combination, a can for containing a fluid, a spray pump unit, and means removably securing said unit to said can, said means comprising a can top frictionally locked to said can, said top having an elongated opening therein, and said spray unit comprising a body having tenons projecting therefrom and adapted to be passed through said opening and to be rotated about the axis of said top, whereby to removably lock said body to said top.

2,729,507
WINDSHIELD WASHER CONSTRUCTION
Ralph H. Wise, Wayne, Mich., assignor to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application August 21, 1952, Serial No. 305,571
2 Claims. (Cl. 299—151)



1. A discharge nozzle unit comprising a bezel member having an elongated threaded hole therein, means for supplying fluid under pressure to said threaded hole, said member also having an opening through the wall thereof intersecting said threaded opening, and a plug having a threaded shank adapted to be received in the threaded opening in said member, said plug having a passageway therein communicating with the interior of the threaded hole in said member and opening into the peripheral surface of said plug so that in one position of said plug in the threaded hole the open end of said passageway is in alignment with the opening through the wall of said member and in another position of said plug said passageway is blocked by the internal wall of said threaded hole.

2,729,508
WHEEL COVER
George Albert Lyon, Detroit, Mich.
Application August 19, 1952, Serial No. 305,165
19 Claims. (Cl. 301—37)



1. In a wheel structure including a load sustaining wheel body and a multi-flange tire rim including a generally axially extending flange, a cover for the outer side of the wheel including a circular cover member having a marginal flange, said flange having respective slots therein, and resilient retaining clip members retainingly engaging in said slots and having retaining finger portions extending therefrom and including generally radially and axially outwardly inclined short and stiff terminal flanges having tip edges resiliently tensioned into retaining gripping relation to the tire rim.

2,729,509
WHEEL COVER
George Albert Lyon, Detroit, Mich.
Application August 27, 1952, Serial No. 306,662
18 Claims. (Cl. 301—37)



1. In a wheel structure including a wheel body and a multi-flange tire rim having a generally arcuately outwardly extending terminal flange, a wheel cover including a circular body member having a marginal portion arranged to overlie the inner portion of the terminal flange and including an underturned flange portion having thereon a series of retaining clips of substantial resiliency each of which includes a retaining finger interengageable with the outwardly projecting portion of the tire rim terminal flange and an intermediate hump flexibly engageable by the underturned flange in pressing the cover into position in order to force the clips past the edge of the terminal flange into retaining position.

2,729,510
WHEEL COVER
George Albert Lyon, Detroit, Mich.
Application September 5, 1952, Serial No. 308,013
17 Claims. (Cl. 301—37)



1. In a cover for disposition at the outer side of a vehicle wheel having a tire rim, a sheet metal cover body having an annular portion divided into a plurality of radially extending flexible strips providing spokes integrally joined by a continuous outer annular marginal portion, said spokes having adjacent to said marginal portion radially outwardly facing and axially inwardly directed shoulders engageable under resilient tension against a flange of a tire rim.

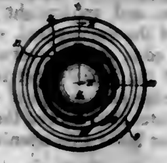
2,729,511
WHEEL COVER
George Albert Lyon, Detroit, Mich.
Application December 24, 1952, Serial No. 327,782
7 Claims. (Cl. 301—37)



1. In a wheel structure including a tire rim having a plurality of angularly related flanges including a side flange and a terminal flange, a cover for disposition at the outer side of the wheel comprising a circular cover member having behind the margin thereof a flange structure directed generally radially and axially inwardly, said flange structure having thereon a series of retaining spring finger members secured to the radially inner side of the flange structure and having retaining spring legs of substantial width disposed with their major dimension circumferentially of the cover and projecting through circumferentially elongated apertures in the flange structure, said spring legs being resiliently flexible in axial direction and directed generally radially outwardly and engageable retainingly with the tire rim terminal flange.

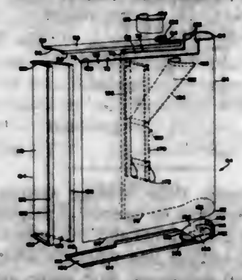
2,729,512
WHEEL COVER
George Albert Lyon, Detroit, Mich.
Application September 23, 1953, Serial No. 381,793
13 Claims. (Cl. 301—37)

1. In a wheel structure including a wheel having multi-flanged tire rim and body parts with spaced wheel openings adjacent their junction, a circular wheel cover for disposition on said wheel over the junction of said parts and means for centering and retaining said cover on the wheel comprising a plurality of elements fastened at spaced



points to the back side of the cover, each element including a finger for retainingly gripping a flange of the rim part and each element having another finger positioned to extend into a wheel opening to engage a wheel part therein for centering the cover on the wheel.

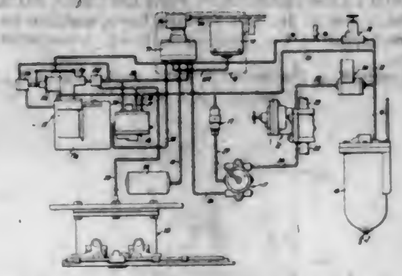
2,729,513
DOOR CONSTRUCTION FOR COTTON PICKER
Harold N. Swim, Jr., Des Moines, Iowa, assignor to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa
Application December 9, 1954, Serial No. 474,152
8 Claims. (Cl. 302—58)



1. A door structure of the character described, comprising: a rigid sheet having the shape of a U and of such configuration and arrangement that the bight of the U provides an upright front wall of semi-circular section about an upright axis and the legs of the U respectively provide inner and outer upright panels integral with and extending rearwardly from the front wall to respective upright rear terminal edges, said panels being substantially parallel and spaced apart transversely on the order of the diameter of the front wall and having horizontally coplanar top edges and horizontally coplanar bottom edges, the outer panel being longer than the inner panel in fore-and-aft dimension to dispose its rear edge rearwardly beyond the rear edge of the inner panel, and said front wall having an arcuate bottom edge in the plane of the bottom edges of the panels and said front wall further having an upright, integral, coaxial semicircular extension rising above the plane of the top edges of the panel; a top plate substantially equal in length to the outer panel and having inner and outer fore-and-aft edge portions secured respectively to the panel top edges and further having a rear edge transverse to the outer panel at the junction of the top and rear edges of said outer panel, said top plate having a semicircular front edge complementing the front wall extension and forming therewith a circular top opening in the plane of the top edges of the panels; an upright half-ring coincident with the semicircular front edge of the top plate and secured thereto, said half-ring being further secured to and combining with the front wall extension to provide an upright circular conduit coaxially in communication with the aforesaid top opening; a bottom plate having a semicircular front edge coincident with and secured to the front wall adjacent to the bottom edge thereof and further having inner and outer fore-and-aft edge portions secured respectively to the bottom edges

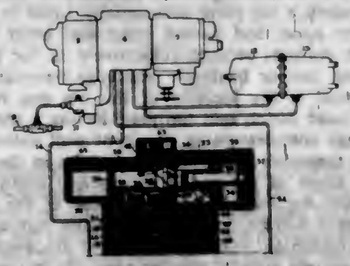
of the panels, said bottom plate having a transverse rear edge in vertical alinement with the rear edge of the top plate; and an upright rear wall having top and bottom edges secured respectively to the rear edges of the top and bottom plates and an upright outer edge secured to the rear edge of the outer panel, said rear wall having an upright inner edge spaced rearwardly from the upright rear edge of the inner panel to provide, with said inner panel rear edge and the inner edge portions of the top and bottom plates that exceed the length of the inner panel, a rectangular inner side opening in the door structure.

2,729,514
TRAIN CONTROL SYSTEM
Herbert P. Folker, Oakland, Calif., assignor to National Safety Appliance Co., Ltd., San Francisco, Calif., a corporation of California
Application December 17, 1951, Serial No. 262,107
16 Claims. (Cl. 303—18)



1. In a pneumatic train braking system including a control valve adapted to be opened in response to a track impulse to vent a control line and an automatic stop valve connected to the control line whereby when the control line is vented said automatic stop valve vents the main brake pipe of the train braking system; a forestalling unit associated with the control line and including a shut-off valve adapted at the beginning of the forestalling cycle to close that portion of the control line leading to said control valve, a branch line, means for placing the branch line in communication with said first named portion of the control line during a forestalling cycle, and additional valve means serving to vent said branch line in response to an excessive train speed.

2,729,515
AIR BRAKE
Ralph C. Ross and Lewis A. Safford, Watertown, N. Y., assignors to The New York Air Brake Company, a corporation of New Jersey
Application July 21, 1954, Serial No. 444,896
6 Claims. (Cl. 303—22)



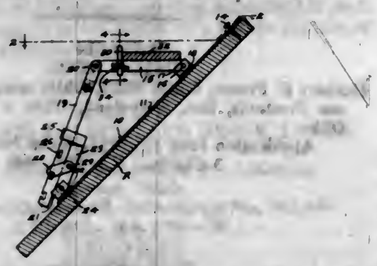
1. Control means having at least three settings for proportioning brake-applying forces in relation to loads and adapted for interposition between a brake-controlling valve device of the automatic type and a brake cylinder, said control means comprising means defining at least three flow paths between the brake cylinder connection of the brake controlling valve device and the brake cylinder, said paths being hereinafter called the first path, the second path and the third path; a selector valve device having positions in which it opens a selected one of said flow paths and closes the others against flow to the brake cylinder, the first of said paths, when open, affording substantially free flow; a first proportioning valve interposed in the second path and including flow intercepting means responsive to pressure drop of air flowing through itself to limit pressures developed in the brake cylinder to a fraction of pressures at said brake cylinder connection; a second proportioning valve interposed in the third path and including flow intercepting means responsive to pressure drop of air flowing through itself to limit pressures developed in the brake cylinder to smaller fractions of the pressures at said brake cylinder connection, as compared with the fractions characteristic of the first proportioning valve; means enclosing a volume connected with said second and third flow paths for augmenting the quantity of air drawn from said brake cylinder connection under low load and intermediate load conditions; and at least one check valve interposed between the volume and a proportioning valve to prevent cross flow through said volume.

2,729,516
ADJUSTABLE SCAFFOLD
Harry Colvin, Mayville, N. Y.
Application February 13, 1952, Serial No. 271,349
1 Claim. (Cl. 304—6)



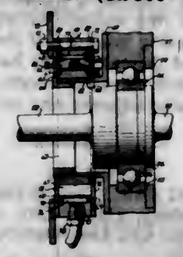
A foldable scaffold, comprising a platform structure having a pair of longitudinal side rails and cross bars rigidly connecting said side rails, a leg structure at each end of said platform structure and comprising a pair of leg bars with their opposing faces severally opposing the outer side faces of said side rails, a horizontal pivot securing the upper end of each leg bar to the corresponding end of a companion side rail, and a cross member connecting each companion pair of leg bars and foldable with said leg structure into engagement with the lower edges of said side rails, a diagonal brace for each leg bar with its upper end arranged against the inner vertical face of the companion side rail, a pivot connecting said upper end of each brace with the companion side rail at a point to permit engagement between each brace with the cross member of the companion leg structure to retain said brace in generally parallel relation to said side rail when the scaffold is folded, a bolt extending horizontally of each leg bar with its head disposed against and projecting from the outer face thereof and removably extending through a bolt hole at the lower end of the companion brace, an independently extensible extension bar arranged against and parallel with each leg bar and alongside the outer face thereof and extending over and adapted to embed said bolt head, a U-shaped metal strap having its legs secured to the lower end of one of said bars and slidingly embracing the other of said bars, a longitudinal slot provided in each of one of said bars out of line with said bolt head and generally perpendicular to the mating faces of said bars, a stud bolt secured to the other of said bars and having a threaded end extending through and projecting from said slot, and a handled nut on the threaded end of said stud bolt and arranged to clamp each pair of leg and extension bars together and to embed said bolt heads in said extension bars.

2,729,517
SAFETY ROOF BRACKET
Liday Elury Hamilton, Sr., Maitland, Fla., and George D. MacKenzie, Oshawa, Ontario, Canada
Application November 16, 1951, Serial No. 256,747
1 Claim. (Cl. 304—20)



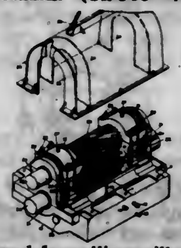
A roof bracket comprising an elongated flat bar adapted to rest on a slanting roof, said bar having a pair of key-hole openings adjacent the upper end thereof for receiving fastening members, a cross head at the lower end of said bar, an upstanding bracket on said cross head, a second bracket on said bar at an intermediate point thereof, a platform-supporting link pivotally secured at one end to said second bracket, a bracing link pivotally secured at one end to the outer end of said platform-supporting link, a short link pivotally secured at one end to said first-mentioned bracket, a guide loop carried by said short link engaging about said bracing link, said bracing link having spaced inverted T-shaped keeper slots in the outer edge thereof, a locking link pivotally mounted on said short link, said link having a cross pin engageable in a selected keeper slot, a platform abutment comprising a second loop surrounding said platform-supporting link for sliding movement thereon. an upstanding lug carried by said loop engageable against the edge of said platform and screw means extending through a side of said second loop securing said abutment in adjusted position on said platform-supporting link.

2,729,518
SHAFT VIBRATION STABILIZER
Bernard E. O'Connor, Buffalo, N. Y., assignor to Houdaille-Hershey Corporation, Detroit, Mich., a corporation of Michigan
Application September 26, 1951, Serial No. 248,405
11 Claims. (Cl. 308—9)



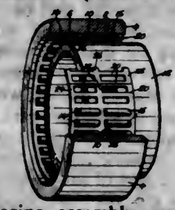
1. A shaft vibration stabilizer comprising a stationary ring, a second ring spaced inwardly therefrom in alignment therewith, means closing the annular space between said rings, a plurality of slidable radial vanes cooperating with said closure means and rings and forming a plurality of communicating fluid chamber means between said rings and restrictive orifice means between said chamber means restricting the flow of fluid to react against said inner ring to restrain high velocity movement thereof in radial and angular directions.

2,729,519
PINION STAND FOR ROLLING MILLS
Hermann A. Bottenborn, Little Neck, N. Y., assignor to Erwin Loewy, New York, N. Y.
Application March 18, 1953, Serial No. 343,213
5 Claims. (Cl. 308—78)



1. In a pinion stand for rolling mills, including a base, upper and lower pinions, and trunnions for said pinions carried on said base; an oil reservoir in said base, bearing supports for the trunnions of the lower pinion carried by said base, separate spacers mounted on said base at each end thereof, bearing supports for the trunnions of the upper and lower pinions carried by said spacers, separate caps for the bearings of the trunnions of the upper pinion mounted on said spacers, bearings in said bearing supports, means to secure said spacers and said caps to said base, and to support said spacers and said caps solely from said base, lubricating pipes extending from said oil reservoir to said bearings and pinions for conducting oil under pressure to said bearings and pinions, and a removable cover enclosing said pinions, bearings, spacers and lubricating pipes.

2,729,520
ROLLER BEARING ASSEMBLY
Frank W. Ritchie, Runson, and Leonhard A. Maas, Trenton, N. J., assignors to The Smith Bearing Company, Inc., Trenton, N. J., a corporation of New Jersey
Application January 9, 1953, Serial No. 330,442
3 Claims. (Cl. 308—213)



3. A roller bearing assembly comprising inner and outer race members with two parallel sets of rollers therebetween, one of said members having two parallel roller receiving raceways separated by a centrally located divider, a cage extending across said divider and over said raceways between the race members, said cage having roller receiving recesses therein and being in the form of a ring which is split transversely, and tongues and recesses formed on the adjacent ends of the cage and having interfitting relation preventing relative lateral displacement of said ends while permitting circumferential displacement thereof.

2,729,521
CRANK PIN BEARING FOR CONNECTING RODS OF INTERNAL-COMBUSTION ENGINES
Karl Maybach, Friedrichshafen am Bodensee, Gustav Mohr, Immenstaad am Bodensee, and Richard Seifert, Friedrichshafen-Seemoos, Germany, assignors, by direct and mesne assignments, to Maybach-Motorenbau G. m. b. H., Friedrichshafen, Germany, a firm of Germany
Application November 4, 1950, Serial No. 194,044
Claims priority, application Germany March 21, 1950
2 Claims. (Cl. 308—237)

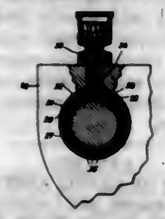
1. A bushing for a crank pin bearing for internal combustion engines, said bushing being split into two

halves, each half having a substantially radial surface facing and being spaced from a corresponding surface of the other half, and corrugations provided on each of said surfaces and extending in substantially axial direction, the crests of the corrugations on the surface of one



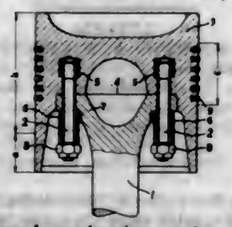
half fitting tightly into the grooves of the corrugations of the other half, and the crests of said corrugations projecting farther from said surfaces than the bottoms of the grooves of said corrugations are recessed from said surfaces.

2,729,522
BEARINGS
Andre Bechler, Moutier, Switzerland
Application December 27, 1951, Serial No. 263,597
Claims priority, application Switzerland December 29, 1950
3 Claims. (Cl. 308—240)



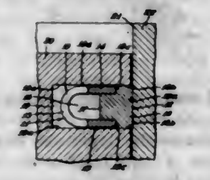
1. A bearing for the support of a cam shaft of a machine tool comprising a bearing box having a bore forming a bearing surface, a substantially axial lubricating oil supply recess in a first part of said bearing surface, lubricating oil supply means connected with said recess for supplying lubricating oil into said recess, a plurality of substantially axial lubricating oil removal grooves in a second part of said bearing surface which second part is diametrically opposed to said first part, said grooves having side walls extending substantially at a right angle and radially from said bearing surface for scraping the oil into said grooves, the part of said bearing surface between said recess and said grooves being continuous, and an oil receiving means at each end of said grooves for receiving the oil scraped into said grooves.

2,729,523
PISTON FOR INTERNAL COMBUSTION ENGINES
Dietrich von Lassberg and Franz Gebhart, Augsburg, Germany, assignors to Maschinenfabrik Augsburg-Nürnberg A. G., Augsburg, Germany, a corporation of Germany
Application March 8, 1952, Serial No. 275,572
Claims priority, application Germany March 15, 1951
3 Claims. (Cl. 309—17)



1. In an internal combustion engine having a crosshead, the combination which comprises a piston made substantially of light metal, said piston having a main body portion and a skirt portion of greater diameter than said main body portion, a connecting rod for said piston having a different coefficient of thermal expansion than said piston, and means providing an expansion compensating connection between said piston and said piston rod, said connection being positioned within said lesser diameter main body portion of said piston preventing distortion of said greater diameter skirt portion by thermal expansion of said piston rod.

2,729,524
PISTON RING
Herbert F. Prasse, Gates Mills, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application June 15, 1951, Serial No. 231,701
3 Claims. (Cl. 309—44)



1. A compression piston ring assembly comprising a flexible circumferentially expansible sheet metal ring defining a channel with an open outer face, a solid metal ring of shallow T-shaped cross section having the leg thereof seated in and partially filling the channel and the head thereof overlying the sheet metal ring to provide a circumferential, imperforate, cylinder wall engaging face and top and bottom ring groove engaging faces, and said solid metal ring having shoulders on opposite sides of the leg thereof engaged by the outer circumferential edges of the sheet metal ring to expand the solid metal ring.

2,729,525
PISTON RING
Herbert E. Sietman, Bay Village, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application February 9, 1952, Serial No. 270,793
6 Claims. (Cl. 309—44)



1. A piston ring comprising a plurality of separate flat split superimposed ring sections having facing interlocking members extending inwardly of the inner peripheries thereof and spaced therealong and having interengaging connection with each other for interlocking the ring sections with the gaps of adjacent ring sections in non-registering relation.

2,729,526
GATE LEG TABLE WITH DROP LEAF
Robert W. Humphrey, Culver City, Calif., assignor to Virtue Bros. Mfg. Co., Los Angeles, Calif., a corporation of California
Application July 22, 1950, Serial No. 175,398
2 Claims. (Cl. 311—63)

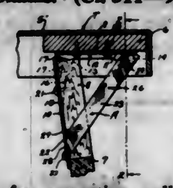
1. A support frame for interconnecting the fixed part of the drop leaf top and the swingable legs of a gate leg table, said frame comprising a single length of tubing formed to have a lower transverse portion, a vertically upright portion at each end of said transverse portion, the swingable legs being adapted to be connected to said upright portion, said transverse and upright portions being

coplanar, and a horizontal and angularly directed end portion at the upper end of each upright portion, said an-



gularly directed end portions extending oppositely to each other and adapted to be connected to a middle portion of said fixed part of the top of the table.

2,729,527
COMBINATION FOLDING LEG HINGE, LATCH, AND BRACE
Arvid J. Anderson and Enfred W. Anderson, Norway, Mich.
Application October 20, 1954, Serial No. 463,488
2 Claims. (Cl. 311—98)



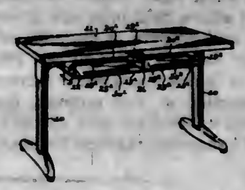
1. An assembly for mounting collapsible legs of a table to a top comprising an upper leaf and a lower leaf, each of said leaves including a flat body plate and right angularly extending flanges on the side edges thereof, the inner ends of said flanges being extended to form pivot ears, hinge bolts connecting the ears together, means for securing the lower leaf to a table leg, and said leaf having a struck out keeper tongue, the flanges of said upper leaf at their outer ends being extended to form pivot ears, a combination latch and brace bar received between said last mentioned ears, means pivotally connecting the bar to said last mentioned ears, spring means normally holding the bar in a raised position toward the upper leaf and against said lower leaf, the lower end of the bar having formed on its inner edge a keeper notch for receiving the keeper tongue when the lower leaf is swung downwardly at an angle away from the upper leaf.

2,729,528
MUZZLE LOADING CUP DISPENSER
Herbert L. Bennett, Easton, Pa., assignor to Dixie Cup Company, Easton, Pa., a corporation of Delaware
Application January 2, 1953, Serial No. 329,257
6 Claims. (Cl. 312—43)



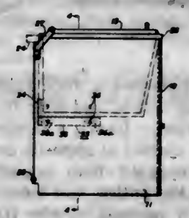
1. In a paper cup dispenser, a casing, means therein to support an inverted stack of nested paper cups, said casing having an open top through which terminal cups may project, spring urged holding means adjacent the mouth of said casing and having projecting means to enter between the mouths of adjacent cups of the stack and restrain inward movement of the cups thereabove when pressure is applied to the terminal cup, and cam surfacing on said holding means in position to be contacted by entering cups to move the holding means away from engagement with the cup stack, whereby the dispenser may be loaded through the open end of said casing.

2,729,529
BOOKRACK OR THE LIKE
Alfred C. Hoven and Walter E. Nordmark, Grand Rapids, Mich., assignors to American Seating Company, Grand Rapids, Mich., a corporation of New Jersey
Application August 31, 1953, Serial No. 377,276
3 Claims. (Cl. 312—108)



2. A sectional bookrack or the like adapted for attachment to the underside of a table top or the like, comprising: a vertically disposed end panel having attachment means at its upper edge for attachment to the table top and having a longitudinally extending retaining flange on its lower edge; and a plurality of body members each having a horizontally disposed bottom provided at one end edge with a longitudinal flange, the longitudinal flange of a selected body member being engageable with the retaining flange on the end panel's lower edge and provided at its opposite end edge with an end wall extending vertically upwardly therefrom and having attachment means at its upper edge for attachment to the table top, and each body member also having at its end opposite said end wall means adapting it for attachment to another body member adjacent the latter's edge having the end wall.

2,729,530
HOUSING FOR LAUNDRY TUB UNITS
Bernard E. Mustee, Cleveland, Ohio
Application March 25, 1950, Serial No. 151,882
6 Claims. (Cl. 312—228)

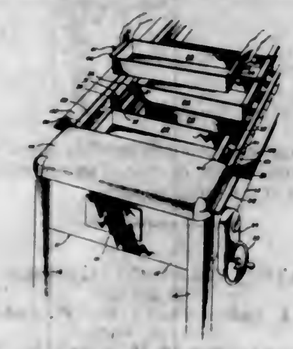


5. A housing attachment for a cast composition type laundry tub unit comprising, a front panel section and two side wall panel sections, and adjustable position anchor means carried by said side wall panels to lock the housing with a laundry tub unit, including anchor members carried by said side wall panels for holding the housing fixed with respect to said tub unit, said anchor members having spaced longitudinal slots therethrough, said slots extending in a first direction, longitudinal slots in said side panels spaced to register with said slots in the anchor members and extending in a direction transverse

to the slots in said anchor members, and bolt means passing through each of the registering slots in the panel and anchor members.

2,729,531
CONVEYOR TYPE FILE
Niels Y. Andersen, Sayder, N. Y., assignor, by mesne assignments, to Sperry Rand Corporation, New York, N. Y., a corporation of Delaware
Application August 9, 1952, Serial No. 303,582
8 Claims. (Cl. 312—268)

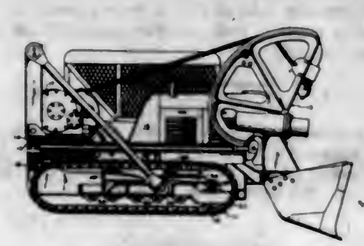
1. A file cabinet comprising a frame having spaced parallel side frame members at the top of said cabinet formed with inwardly projecting portions along the lower portions thereof and a longitudinally extending groove above said inwardly projecting portions opening at the top through an opening in the top of said cabinet, said opening extending between the upper edges of said side frame members, track means mounted on said side frame members above said inwardly projecting portions and located in said grooves, a plurality of pairs of tray carriers slidably mounted in opposed relation on said track means for lineal movement thereon at opposite sides of said opening in said grooves, lineally movable flexible members connecting said carriers and retaining them in spaced connected relation for movement on said track means in unison, a plurality of trays each detachably engageable through said opening in the top of said cabinet with a pair of said tray carriers, and means for moving said flexible members and tray carriers on said



track means for selectively locating desired trays in front of an operator at the central portion of said opening for filing and reference purposes to the contents of said desired trays.

CHEMICAL

2,729,532
CRAWLER TREAD TAKE-UP DEVICE
Daniel M. Schwartz and Theodore N. Hackett, Salt Lake City, Utah, assignors to The Eimco Corporation, Salt Lake City, Utah, a corporation of Utah
Original application October 24, 1950, Serial No. 191,808, now Patent No. 2,689,660, dated September 21, 1954. Divided and this application December 14, 1951, Serial No. 261,834
4 Claims. (Cl. 305—9)

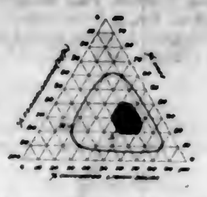


1. In a vehicle including a main frame, paired lateral crawler units on each side of said main frame, each crawler unit including a crawler frame, a motor driven sprocket and an idler pulley carried at opposite ends of the crawler frame, an endless crawler chain extending between said sprocket and said idler pulley, and means slidably mounting said idler pulley on said crawler frame whereby the crawler chain is maintained under tension between the sprocket and the idler pulley, said means comprising a U-shaped member slidably mounted on the crawler frame, bearing means secured at the bifurcated end of the U-shaped member rotatably carrying said idler pulley, a spring mounted entirely within the U-shaped member and between the bifurcations thereof rearwardly of said bearing means, said spring bearing at one end against the crawler frame, and means carried by said U-shaped member engaging the other end of said spring whereby the idler pulley carried by the slidably mounted U-shaped member is urged into engagement with the crawler chain.

2,729,533
PROCESS OF DYEING ACRYLONITRILE TEXTILE BY CUPROUS ION TECHNIQUE
Francis W. Glaze, Jr., Kennett Square, Pa., and Stanley B. Speck, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application October 20, 1952, Serial No. 315,834
9 Claims. (Cl. 8—55)

1. A process which comprises the application of an acid dye to a textile produced from a polymer of acrylonitrile in the presence of cuprous ions and a compound of the class consisting of the non-complex vanadate, molybdate and tungstate salt of ammonium and an alkali metal.

2,729,534
LIGNIN-TANNED LEATHER AND PROCESS FOR MAKING SAME
Hans Ehrensperger, Mackayville, Quebec, Canada
Application September 7, 1955, Serial No. 532,947
17 Claims. (Cl. 8—94.31)

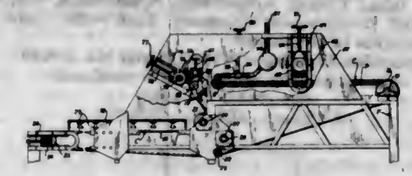


1. A process of producing leather comprising soaking leather stock in an aqueous solution of lignin-containing material selected from the group consisting of sulphonic acid-lignin and alkali lignin, said aqueous solution having a pH above about 3.5 in the case of sulphonic acid-lignin, said aqueous solution having a pH above about 6.5 in the case of alkali lignin when said alkali lignin is kraft lignin, and said aqueous solution having a pH above about 8.5 in the case of alkali lignin when said alkali lignin is not kraft lignin, and a water-soluble condensation product of a water-soluble aldehyde with a member of the group consisting of monomeric double acid amides and amino triazines, then acidifying the solution without heating to precipitate the active substance in situ as a water-insoluble precipitate, said acidification being to a pH below about 2.5 when said lignin material is a sulphonic acid lignin and to a pH below about 5 when said lignin material is an alkali lignin.

2,729,535
PROCESS OF MAKING ALKALI-INSOLUBLE CELLULOSE GLYCOLIC ACID ETHER FABRIC
Ladislaus Balassa, West Barrington, and Henry A. Christoph, Norwood, R. I., assignors, by mesne assignments, to Leslie Ladislaus Balassa, Madison, N. J.
No Drawing. Application June 22, 1949, Serial No. 100,761
6 Claims. (Cl. 8—120)

1. A process of preparing alkali-insoluble glycolic acid ethers of fibrous cellulose comprising impregnating the cellulose fabric with an aqueous solution of ammonium monochloroacetate, retaining in the fabric an amount of the solution about equal to the weight of the dry fabric corresponding with 5% to 10% of chloroacetic acid calculated on the weight of the dry fabric, drying the fabric, impregnating the dried fabric with a 40 to 55% aqueous solution of sodium hydroxide at temperatures about 55 to 85° C., retaining about 90 to 110% sodium hydroxide solution calculated on the weight of the dry fabric, permitting the sodium hydroxide solution to remain in contact with the fabric for a period of from 45 seconds to 3 minutes, removing the sodium hydroxide with excess water, and then drying the fabric.

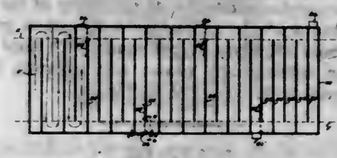
2,729,536
MACHINE FOR AND METHOD OF CLEANING RUGS
Burnard T. Pull, Glenn A. Fahlberg, and Lloyd E. Hayne, Denver, Colo.
Application December 12, 1949, Serial No. 132,436
9 Claims. (Cl. 8—149.3)



8. The method of cleaning a rug having a base and pile, comprising continuously moving the rug along a curved path with the pile fibers outward and exposed, and spraying said pile fibers during their movement along the curved path with a stream of cleaning fluid directed to pass through the pile fibers from their base outwardly and only in a direction substantially transversely to the axes of the fibers, said spray having its origin close to the pile fibers and being of a force great enough to cause it to move through all the pile fibers standing in its path, simultaneously brushing the fibers as they are sprayed with the direction of brushing being toward the oncoming fluid, and spraying the rug by a second stream of fluid which stream passes through the rug in a direction from the base side to the pile side during the movement of the rug along the curved path.

2,729,537
OPEN WIDTH WET PROCESSING APPARATUS AND PROCESS
James B. Lasley, Lancaster, S. C., assignor to The Springs Cotton Mills, Inc., a corporation of South Carolina
Application April 3, 1951, Serial No. 218,976
11 Claims. (Cl. 8—151)

1. An open width wet processing apparatus for treating fabrics in web form comprising an immersion tank, means for training an open width fabric web for immersion and withdrawal successively a plurality of times from said tank, and baffle means in said tank for separating each immersion of a fabric web by said training means, said baffle means being arranged in said tank as partitions extending alternately from opposite sides of said tank in a length reaching at least in projected alignment with the respective opposite side edges of said web and terminating short of the other side of said tank, whereby said baffle means are adapted for directing a treating liquor flow in said tank transversely of the open width of a fabric web at each immersion therein by said training means.

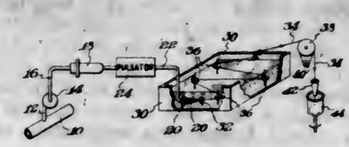


11. The method of wet processing a fabric web in open width form which comprises immersing and withdrawing said fabric web a plurality of times in and from a treating liquor bath, counterflowing the treating liquor bath in relation to the direction of travel of said fabric web through said bath, and channeling the flow of treating liquor in said bath transversely widthwise of the open width of said fabric web at each immersion.

2,729,538
PREVENTION OF NYLON GEL FORMATION
Donald R. Hull, Seaford, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application November 30, 1951, Serial No. 259,283
9 Claims. (Cl. 18—54)

1. A process for forming a polyamide fiber which comprises coating with a silicone those internal surfaces of a melt spinning device which are ahead of the metering pump and which during conventional operation of the said spinning device contact molten polyamide, thereafter introducing molten polyamide, extruding the melt through an orifice and solidifying the extruded mass into a fiber.

2,729,539
PROCESS FOR SPINNING CONTINUOUS FILAMENT NUB YARN
Arthur Lulay, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application December 17, 1952, Serial No. 326,412
5 Claims. (Cl. 18—54)



1. In the process of spinning continuous filament yarn with frequent and sharp variations in denier by extruding viscose with a pulsating motion through a spinneret into a coagulating and regenerating bath to form filaments and converging the filaments to form a yarn bundle, the improvement which comprises spinning the yarn at a speed greater than 50 yards per minute and converging the filaments into a yarn bundle at a distance within 12 inches of the spinneret which does not produce stuck filaments.

2,729,540

PROCESS OF PREPARING ALKALI METAL AND ALKALINE EARTH METAL BOROHYDRIDES

Norman Gall Fisher, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application September 24, 1945, Serial No. 618,411
6 Claims. (Cl. 23—14)

3. Process which comprises heating a mixture of approximately equimolar amounts of an alkali metal hydride and a trialkyl borine wherein the alkyl groups are each of from one to six carbon atoms in the presence of an inert diluent at a temperature of at least about 200° C. but below the decomposition temperature of the reactants and the borohydride and under a hydrogen pressure of at least about 1500 pounds per square inch until hydrogen absorption substantially ceases and isolating the alkali metal borohydride.

2,729,541

PREPARATION OF METAL CYANATES

David O. De Pree and Edgar Bradley Oldenburg, Royal Oak, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application March 24, 1953, Serial No. 344,453
13 Claims. (Cl. 23—75)

7. A process for the manufacture of metal cyanates comprising reacting a dispersion of a metallic element in an inert organic liquid having a boiling point between about 110 and 160° C. with a urea at a temperature between about 60 and 110° C., subsequently raising the temperature to between about 140 to 200° C. to drive off said inert organic liquid and maintaining the reaction mixture at that temperature for a sufficient time to allow the reaction to proceed substantially to completion.

2,729,542

SYNTHESIS OF SILICON CARBIDE

Edward Van der Pyl, Holden, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts

Application October 9, 1953, Serial No. 385,079
4 Claims. (Cl. 23—208)



1. Process for the synthesis of silicon carbide comprising charging a mixture of carbon and silica into a plurality of open ended containers which are of a size and shape to be detachably joined at the open ends, mating a plurality of said containers and introducing them into a tube furnace having the shape of a long tube thereby forming a tube within the tube furnace which tube thereby formed constitutes a single compartment, advancing the containers through the tube furnace and removing the containers which have been advanced all the way through the tube furnace, said tube furnace being at a median location thereof heated to a temperature of at least 1800° C.

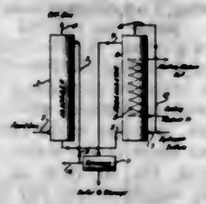
2,729,543

REMOVAL OF SULFUR DIOXIDE FROM GASES CONTAINING THE SAME

James L. Keller, Brea, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California

Application December 12, 1950, Serial No. 200,370
11 Claims. (Cl. 23—225)

1. In a cyclic process wherein (1) a sulfur dioxide-containing gas is continuously contacted with an aqueous absorbent which is buffered to a pH value between about 4 and about 6, (2) the sulfur dioxide-containing rich absorbent so obtained is continuously treated with gaseous hydrogen sulfide whereby there is obtained regenerated lean absorbent having free sulfur suspended therein, (3) said free sulfur is separated from said regenerated lean absorbent, and (4) said regenerated lean absorbent is continuously returned to the initial contacting step, said process being characterized by the formation of thiosulfate ion in said step (2) by reaction between hydrogen sulfide, sulfur dioxide and water until the concentration of thiosulfate ion in the regenerated lean absorbent



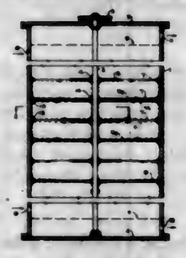
reaches a substantially fixed steady state value; the improvement which consists in increasing the concentration of thiosulfate ion to a value greater than said steady state value by adding to the absorbent a compound selected from the class consisting of water-soluble thiosulfates and water-soluble alkalies, carrying out step (2) at an elevated temperature between about 40° C. and the boiling point of said absorbent, and removing the said regenerated lean absorbent having free sulfur suspended therein out of contact with free hydrogen sulfide substantially as soon as the stoichiometric amount of hydrogen sulfide has dissolved in the absorbent.

2,729,544

CONTACT APPARATUS WITH ROTATING DISCS

Willem Johan Pieters, Amsterdam, Netherlands, assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

Application September 7, 1951, Serial No. 245,507
Claims priority, application Netherlands September 13, 1950
6 Claims. (Cl. 23—270.5)



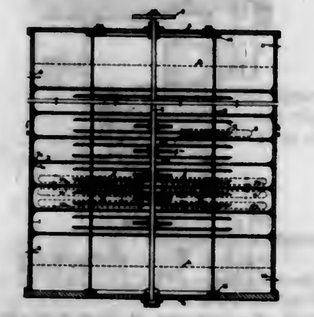
1. In a contactor of the character described, having a plurality of compartments separated by centrally apertured walls and bounded by outer, substantially circular walls and containing within each compartment a rotor disc lying wholly within the compartment and spaced from the said apertured walls thereof, several rotor discs in different compartments being mounted on a shaft that extends through and is smaller than the apertures in said apertured walls, wherein, within each of said compartments, fluent material is made to flow as flat toroidal vortices that include flow of the material outwardly from the rotor disc, followed by division of the material and change in the flow direction thereof near the outer wall and flow first as separate, oppositely directed currents toward said apertured walls and thereafter inwardly along said walls, the improvement of an annular streamlining body at said outer wall situated intermediate said centrally apertured walls and substantially opposite the rotor disc, said body having a pair of concave surfaces directed toward the said apertured walls and toward the rotor shaft.

2,729,545

CONTACT APPARATUS WITH ROTATING DISCS

Gerrit Hendrik Reman and Willem Johan Pieters, Amsterdam, Netherlands, assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

Application September 13, 1951, Serial No. 246,488
Claims priority, application Netherlands September 20, 1950
8 Claims. (Cl. 23—270.5)



1. A rotating disc contactor comprising a tubular shell; a plurality of annular, stationary baffles fixed within said shell extending from the shell wall to central openings and dividing said shell into a series of communicating compartments; a rotor shaft extending axially with respect to said shell through said openings; a plurality of rotor discs fixed to said shaft, each disc being wholly within one of said compartments and displaced axially a substantial distance from the stationary baffles thereof and extending radially outwards toward but terminating short of the wall of said shell; at least one flat guide ring in a compartment, said ring having an outer periphery materially smaller than the internal size of the shell and an inner opening materially greater than the size of the shaft and being spaced axially from and situated between the rotor disc and a stationary baffle of the compartment; means for introducing and discharging fluent materials at axially displaced points in said shell; and means for rotating said rotor shaft and rotor discs.

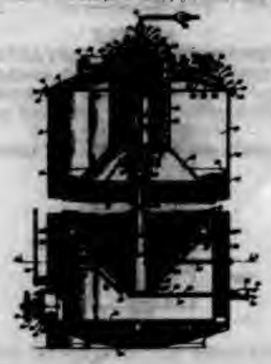
2,729,546

APPARATUS FOR PRODUCING INERT GASES

Hilding V. Williamson, Chicago, Ill., assignor to Cardox Corporation, Chicago, Ill., a corporation of Illinois

Original application November 18, 1948, Serial No. 60,755, now Patent No. 2,624,711, dated January 6, 1953. Divided and this application June 9, 1952, Serial No. 292,429
10 Claims. (Cl. 23—281)

1. A device for producing inert gas, comprising a housing having a gas collecting chamber therein, a partition mounted in said housing for supporting a fuel bed below said gas collecting chamber and in spaced relationship with the bottom of the housing, means providing a confined passageway between the gas collecting chamber and the space below said fuel supporting partition, said passageway having openings into said gas collecting chamber at different distances from said fuel bed, means for introducing a pressure air stream into said passageway in a direction to entrain a portion of the gaseous products of combustion from said collecting chamber through said openings and to cause said air and said entrained gases to traverse said passageway for delivery to the fuel bed through said partition, means for conversely varying the size of said openings to control the portion of the collecting chamber from which the gaseous products of combustion are entrained into said



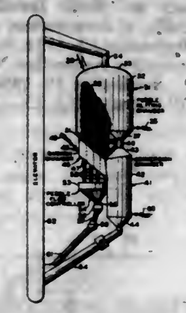
passageway and to thereby regulate the temperature of the gases entrained in said air stream, and means for releasing a portion of the gases in said collecting chamber from said housing.

2,729,547

SOLIDS FLOW CONTROL APPARATUS

Carl E. Alleman, Etter, Tex., assignor to Phillips Petroleum Company, a corporation of Delaware

Application April 24, 1950, Serial No. 157,665
10 Claims. (Cl. 23—284)



1. Apparatus for regulating flow of pebbles from separate points in a pebble system, comprising a rotatable vertically disposed cylindrical pebble reservoir having an open top and a closed bottom, a first conduit in said closed bottom offset from the rotational axis of said reservoir, a plurality of second conduits in communication with pebbles at said separate points in said pebble system and extending downwardly into said reservoir through its open top and terminating at equal vertical distances from the upper end of said first conduit along a locus of points describing an arc not exceeding 180° and having an axis common with the rotational axis of said reservoir and spaced at said vertical distance of at least ⅝ of the arc radius, and means for adjustably rotating said reservoir.

2,729,548

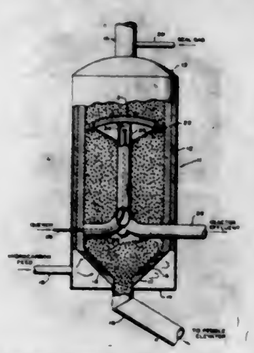
PEBBLE HEAT EXCHANGE CHAMBER

Curt E. Forkel, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application September 8, 1952, Serial No. 308,379
9 Claims. (Cl. 23—284)

1. An improved pebble heat exchange chamber comprising in combination a closed, upright, elongated shell; pebble inlet means in the upper end of said shell; pebble outlet means in the lower end of said shell; gaseous ma-

terial inlet means in the lower end of said shell; and a hollow core centrally positioned within said shell, extending downwardly through said chamber from a point in the upper end portion of said chamber, and above the nor-



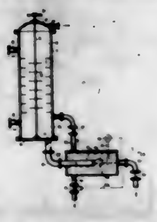
mal level of pebbles within said chamber to the exterior of the lower end portion of said chamber, said hollow core being open in its upper end section into said chamber above said normal level of pebbles to provide a flow path for gaseous effluent into said core.

2,729,549

METHOD AND APPARATUS FOR CONTACTING AND SEPARATING LIQUID PHASES BY SETTLING

Gerrit H. Reman and Benny Zietse, Amsterdam, Netherlands, assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

Application September 22, 1951, Serial No. 247,884
Claims priority, application Netherlands September 29, 1950
19 Claims. (Cl. 23—310)



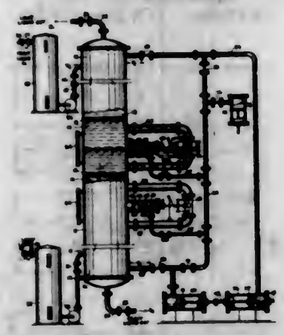
1. Process of separating the phases of a dispersion consisting essentially of first liquid phase dispersed in a continuous second liquid phase, said phases having different densities and said dispersion containing a minor amount of a substance that separates as a third phase that accumulates at the interface between continuous layers of said first and second phases upon settling, comprising the steps of: flowing said dispersion through a quiet flow zone in a direction toward which the first liquid phase tends to settle and at a velocity so low that droplets of first phase move substantially faster than the second liquid phase but sufficiently high to maintain the predominant part of said droplets in a dispersed state, thereby producing a modified dispersion wherein the first phase is concentrated in relation to the second phase; discharging second liquid phase from said quiet flow zone; maintaining continuous layers of said first and second liquid phases separated by an interface in a settling zone; withdrawing said modified dispersion from said quiet flow zone and admitting it with only a minor amount of the second liquid phase and with a substantial horizontal velocity component to said interface in the settling zone, whereby the droplets of the first liquid phase flow to the continuous layer of like liquid phase in the settling zone without vertical flow through said interface and without passage through any layer of said third phase that may collect at said interface; and discharging liquid phase from said layer thereof in the settling zone.

2,729,550

METHOD AND APPARATUS FOR CONTACTING LIQUIDS BY RECIPROCAL DISPERSION

Russel L. Maycock, Oakland, and George M. Hartwig, San Francisco, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

Application November 9, 1951, Serial No. 255,692
20 Claims. (Cl. 23—310)



1. Method of contacting at least partially immiscible liquids having relatively different densities the first of which liquids increases in volume relatively to the second liquid upon being contacted therewith, which comprises the steps of establishing a continuous body of substantial depth of each of said liquids in contact with each other within a confined contacting zone bounded in part by a first dispersing member having restricted flow openings in contact with the body of lighter liquid and in part by a second dispersing member having restricted flow openings in contact with the body of heavier liquid; establishing a continuous body of heavier liquid outside of said contacting zone in contact with the first dispersing member; establishing a continuous body of lighter liquid outside of said contacting zone in contact with the second dispersing member; alternately (*a*) dispersing lighter liquid from each of said bodies of lighter liquid through the openings of the respective dispersing members in contact therewith into the continuous bodies of heavier liquid that are in contact with the respective dispersing members and (*b*) dispersing heavier liquid from each of said bodies of heavier liquid through the openings of the respective dispersing members in contact therewith into the bodies of lighter liquid that are in contact with the respective dispersing members; and maintaining each of said bodies within said contacting zone at a substantial depth during an extended sequence of alternate dispersions by decreasing the effective volume of said contacting zone during the dispersion of the said first liquid and increasing the effective volume of said contacting zone during the dispersion of the said second liquid.

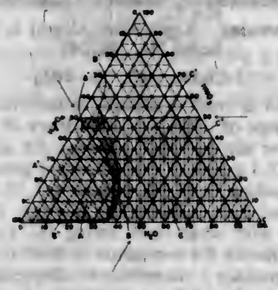
2,729,551

SURFACE TREATMENT OF ALUMINUM AND ITS ALLOYS

Charles C. Cohn, Atlantic City, N. J., assignor to Samuel L. Cohn and Charles C. Cohn, copartners trading and doing business as Colonial Alloys Company, Philadelphia, Pa.

Continuation of abandoned application Serial No. 13,291, March 5, 1948. This application January 18, 1954, Serial No. 404,436
12 Claims. (Cl. 41—42)

1. The method of treating a surface of aluminum or an aluminum alloy comprising subjecting said surface to the action of an acidic mixture having a solvent action on said surface to produce a macroscopically uniform smooth finish, said mixture including as its essential constituents approximately 45% to 98% of free phosphoric acid, ap-



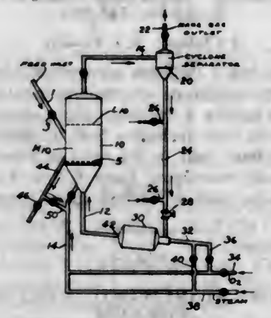
proximately 2% to 35% of water, and approximately ½% to 50% of free nitric acid, said action taking place at a temperature in the range from 150° F. to the boiling point of said mixture.

2,729,552

PROCESS OF CONTACTING GASIFORM CARBONACEOUS SOLIDS

Karl J. Nelson and Edward J. Gornowski, Cranford, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application December 24, 1949, Serial No. 134,976
9 Claims. (Cl. 48—197)



1. In the process of gasifying subdivided carbonaceous solids in the form of a dense turbulent mass of solids containing a substantial proportion of particles substantially larger than 40 microns in diameter fluidized by upwardly flowing gases in a gasification zone, the improvement which comprises reducing the entrainment of solids from said mass in said gases by maintaining the concentration of particles of —40 microns size within said mass at a level adequate for smooth fluidization but substantially above that at which said entrainment is at a maximum.

2,729,553

ABRASIVE ARTICLE

James E. Price, Abington, Pa., assignor to Simonds Abrasive Company, Philadelphia, Pa., a corporation of Pennsylvania

No Drawing. Application March 6, 1952, Serial No. 275,222
6 Claims. (Cl. 51—298)

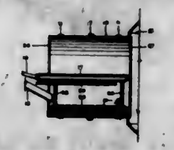
1. An abrasive body comprising abrasive grains bound in a binding phase comprising between about 33% to about 80% of a thermosetting resin in the infusible, insoluble state, and between about 20% and about 67% of a finely-divided filler of which at least about 10% is an alkaline earth metal fluoride selected from the group consisting of the calcium, magnesium and barium fluorides and of which at least about 7% is an alkaline earth metal compound selected from the group consisting of magnesia and lime.

2,729,554

AMMONIATION OF SUPERPHOSPHATE

Francis T. Nielsson, Sheffield, Ala., assignor to Tennessee Valley Authority, a corporation of the United States

Application December 26, 1952, Serial No. 328,156
3 Claims. (Cl. 71—43)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A process for ammoniating superphosphate which comprises continuously introducing superphosphate into an upper end of an inclined drum; therein maintaining a bed of rolling discrete particles of superphosphate having a depth of about one fourth to two fifths of the diameter of the drum; maintaining the surface of the bed of rolling particles at an inclination of about 30° to 45° to the horizontal diameter of the drum; passing each of the particles through the bed from end to end of the drum in a continuous curved path approximating a flattened helix of many turns, having upward-inclined turns adjacent to the inner surface of the drum and downward-inclined turns adjacent to the upper surface of the bed; passing the particles at lower speed through upward turns of the helical path than through descending turns; continuously introducing ammoniating fluid beneath the surface of the bed in a broad stream countercurrent to the upward movement of said particles in such path, the breadth of said stream extending substantially the entire length of the bed; maintaining substantially greater rate of flow in a central part of the stream of ammoniating fluid than in the edges of said stream; continuously passing a current of air over the surface of said bed; and withdrawing ammoniated product from the lower end of the drum.

2,729,555

METHOD OF OPERATING BLAST FURNACES

Earl H. Shipley, Pittsburgh, Pa.

No Drawing. Application June 5, 1952, Serial No. 291,980
1 Claim. (Cl. 75—5)

The steps in the method of operating blast furnaces which comprise preparing the blast of the furnace by the addition of a quantity of pure oxygen up to 5 per cent by volume and the injection of steam in the blast up to ten grains of water vapor per cubic foot of blast proportionate to the quantity of oxygen introduced into the blast to provide reducing gases for reaction with the ore at levels higher in the furnace, and injecting hot reducing gases at temperatures above 2300° F. comprising a mixture of carbon monoxide and hydrogen of the composition of 55% to 65% hydrogen; 23% to 35% carbon monoxide; 5% to 15% water vapor; 1% to 5% carbon dioxide, and 1% to 4% residual methane, at a point above the melting zone of the furnace.

2,729,556

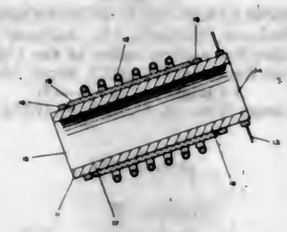
METHOD FOR MAKING PIG IRON OR STEEL

Mars G. Fontana, Columbus, Ohio

Application December 2, 1952, Serial No. 323,659
7 Claims. (Cl. 75—11)

1. A process of reducing iron ore comprising an iron oxide which comprises introducing the ore together with carbon into the top of a rotating inclined tube formed of

a substance which is a conductor of electricity but which has a melting point appreciably higher than that of iron; inducing an electrical current in said tube to heat the tube, and by it, the ore, to a temperature above the melting point of iron; and rotating the tube while passing the mixture of ore and carbon through the tube so that the ore is reduced by the action of the carbon thereon at the elevated temperatures employed.



2,729,557

METHOD OF PREVENTING DEPOSITION OF ALKALINE EARTH METAL SALTS IN CYANIDATION OF PRECIOUS METAL ORES

Robert B. Booth and Norman Hedley, Stamford, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application February 2, 1955, Serial No. 485,822
13 Claims. (Cl. 75—105)

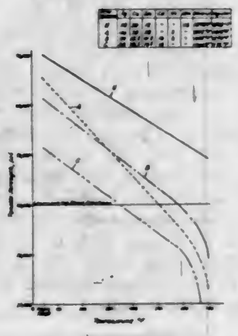
1. The method of preventing the deposition of alkaline earth metal salts from cyanide solutions which comprises incorporating in the solution a small amount of a synthetic polymeric water-soluble polyelectrolyte having an average molecular weight of at least 10,000, and having a structure derived by the substantially linear polymerization of at least one monoolefinic compound through the aliphatic unsaturated group.

2,729,558

SILVER BRAZING ALLOYS

Ross Bayes, Basking Ridge, and Henry B. Aull, Livingston, N. J., assignors to The American Platinum Works, Newark, N. J., a corporation of New Jersey

Application May 3, 1952, Serial No. 285,932
16 Claims. (Cl. 75—134)



1. An alloy especially suited for uniting base metals for producing a joint capable of withstanding high stresses and temperatures comprising 25% to 35% copper, a minimum of 10% zinc and 10% to 17% manganese, with the sum of the manganese and zinc content being approximately 25–30%, and 40% to 50% of silver, said copper, zinc, manganese and silver essentially constituting all of the alloy.

2,729,559

METHOD OF MANUFACTURING ELECTRIC CONTACT MATERIAL

Tatsuo Matsukawa, Asahi-ku, Osaka-shi, Japan

No Drawing. Application August 1, 1952, Serial No. 302,248
1 Claim. (Cl. 75—201)

The method of making electric contact material, comprising the steps of adding to 3000 liters of aqueous solution of silver nitrate which contains .03 gram of silver in each cc., 36.5 grams of copper coated graphite powder whose composition is 86.3% copper and 13.7% graphite by weight, and then agitating the mixture, then washing the material with water and drying the material, next heating the powder for two hours at 500° C. in a hydrogen flow to produce a silver-copper-alloy coated graphite powder composed of 5% graphite, 5% copper, and 90% silver by weight, then pressing the powder in a mold with a pressure of 3 tons per square centimeter, and sintering at 700° C. for two hours in the hydrogenous atmosphere.

2,729,560

WET STRENGTH PAPER CONTAINING AMINOALIPHATIC CHAIN POLYMER RESINS

Ronald R. House, Darien, and Sewell T. Moore and Arthur M. Schiller, Stamford, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application June 22, 1953, Serial No. 363,394
9 Claims. (Cl. 92—3)

6. Paper having a uniform content of about 0.1% to 5% of its dry weight of an aminoaliphatic vinyl type polymer resin having a polymer chain composed of recurring ethylenic units including both amidoethylene units and aminoethylene units in the ratio of from 1 to 4 to 4 to 1, said chain containing from 0.2 to 4 such aminoethylene units for each 10 carbon atoms thereof.

2,729,561

BLOWING DRY STARCH INTO A PAPERMAKING FURNISH

John C. Marrone, Woodbury, Conn.

Application August 26, 1952, Serial No. 306,396
2 Claims. (Cl. 92—21)



1. A method of depositing starch particles or the like into an aqueous paper pulp mixture comprising the steps of moving a paper pulp mixture through a controlled closed circuit path, continuously agitating such paper pulp mixture as it is moved, providing an air stream, moving starch particles into the air stream by gravity and suction action, creating a turbulence in the starch carrying air stream, and discharging the starch carrying air stream onto the moving surface of the paper pulp mixture at a localized area thereof for ready inclusion into such aqueous paper pulp mixture.

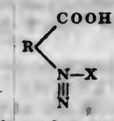
2,729,562

PROCESS FOR PRODUCING IMAGES

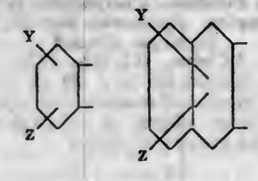
Rene Robert Zenge, Scotch Plains, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 8, 1954, Serial No. 467,630
19 Claims. (Cl. 95—7)

1. A photographic element comprising a sheet support bearing a hardened water-permeable protein colloid layer containing a light-sensitive diazonium salt of the general formula:



wherein X is the anion of an acid and R is a radical taken from the group consisting of



and



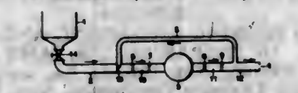
where Y and Z are members taken from the group consisting of H,COOH, Cl, Br, —NO_2, —NH_2, alkyl of 1 to 5 carbon atoms and aryl of not more than 10 carbon atoms and the remaining nuclear carbon atoms have hydrogen attached thereto.

2,729,563

PROCESS FOR THE PREPARATION OF BUTTER FROM HIGH CONCENTRATED CREAM

Barend de Goede, The Hague, Netherlands, assignor to De Nederlandse Centrale Organisatie Voor Toegepast-Natuurwetenschappelijk Onderzoek, The Hague, Netherlands, a corporation of Netherlands

Application August 1, 1951, Serial No. 239,700
Claims priority, application Netherlands August 5, 1950
6 Claims. (Cl. 99—119)



1. A process of preparing butter from cream, comprising the steps of adding butter to cream having a high fat content; and intimately mixing said cream and butter at a temperature of 17–33° C. until a substantially uniform mixture of said cream and butter is formed, resulting in conversion of said cream having a high fat content into butter without churning thereof.

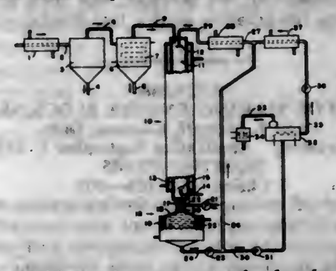
2,729,564

METHOD OF RECOVERING VOLATILE FLAVORING OILS

George J. Keller, Arcadia, Calif., assignor to the United States of America as represented by the Secretary of Agriculture

Application March 2, 1951, Serial No. 213,639
8 Claims. (Cl. 99—140)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A method for recovering a volatile flavoring oil from a gaseous material containing said oil and water vapor which comprises contacting said gaseous material with a refrigerated hygroscopic aqueous solution of an inorganic electrolyte immiscible with the flavoring oil whereby to absorb the water vapor and to condense said oil, allowing the resulting mixture to stand whereby to form a flavoring oil phase and an aqueous phase containing the absorbed water vapor, and separating the flavoring oil phase.



2,729,565

MEAT CASING AND PROCESS FOR USING THE SAME

Robert E. O'Brian, Des Moines, Iowa, and Edward D. O'Brian, Whittier, Calif.

No Drawing. Application January 22, 1954, Serial No. 405,662
2 Claims. (Cl. 99—176)

1. An artificial meat casing which will decompose in the presence of moisture comprising of from about 70 to about 95% by weight of amylose and from about 5 to about 30% by weight of amylopectin in which the molecules have been oriented by stretching.

2,729,566

PROCESS FOR PREPARING DEHYDRATED POTATOES

Winfred O. Harrington, Rolland M. McCready, and Robert L. Olson, Berkeley, Calif., assignors to the United States of America as represented by the Secretary of Agriculture

Application February 7, 1951, Serial No. 209,896
6 Claims. (Cl. 99—207)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A process for preparing dehydrated potatoes of superior rehydration properties which comprises cutting raw potatoes into discrete pieces, cooking the cut potatoes to produce discrete pieces of cooked potato in which the cells are virtually intact and in their original positions, rapidly freezing the cooked, cut potatoes, then thawing the frozen potatoes at such a rate that the potato tissue is maintained in the temperature range from about 28° F. to about 32° F. for at least 15 minutes thereby to cause the cells to shrink and dehydrating the thawed potatoes.

2,729,567

DEHYDRATION OF POTATOES

Edward G. Heisler, Plymouth Meeting, Pa., assignor to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application July 8, 1952, Serial No. 297,802
8 Claims. (Cl. 99—207)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. The process of preparing full-flavored dehydrated potatoes in the form of a free-flowing powder comprising mixing cooked, mashed, white potatoes with ethanol to form a slurry, separating the liquid phase containing re-

moved water from the potatoes, recovering the dissolved solids from the separated liquid phase, incorporating said recovered solids into the potatoes, and then air drying while stirring the potatoes until a free flowing powder is formed.

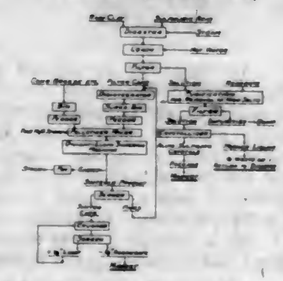
2,729,568
METHOD OF MAKING ENGINE BLOCK SEALER
Vergil J. Metcalf, Glencoe, Okla.
No Drawing. Application September 1, 1954, Serial No. 453,685
1 Claim. (Cl. 106—33)

A method of making a free flowing sealing composition for use in stopping leaks in hot water circulating systems, comprising the steps of adding one part by weight of powdered aluminum to two parts by weight of white sugar and then adding a quantity of water, and then boiling the mixture until ebulition takes place whereby the sugar coats the aluminum and increases the stickiness and weight thereof, and then permitting the mixture to cool and adding 17 parts by weight of sodium silicate, plus one part by weight of quantity of powdered cast iron and 1 part by weight of powdered aluminum to the mixture.

2,729,569
DENTAL CEMENTS
Henry Lipkind and Sidney Rogoff, Nutley, N. J.
No Drawing. Application December 12, 1952, Serial No. 325,688
4 Claims. (Cl. 106—35)

1. The improvement in the class of dental compositions suitable as fillings and applicable in dental restoration work, which comprises integrally incorporating into said compositions from 0.05% to 5.0% by weight of a water soluble alkali metal salt of an alkyl siliconic acid in which the alkyl group is characterized by having from 1 to 6 carbon atoms and in which the ratio of alkali metal to silicon is from 2:1 to 1:1.

2,729,570
LIGHTWEIGHT AGGREGATES AND METHOD OF MAKING SAME FROM CLAY RESIDUES
Charles W. Nichols, West Orange, N. J., assignor, by mesne assignments, to McDowell Company, Inc., Cleveland, Ohio, a corporation of Ohio
Application April 25, 1952, Serial No. 284,381
2 Claims. (Cl. 106—40)



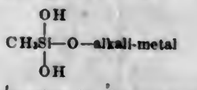
1. Method for forming a lightweight aggregate for use in concrete products, from clay rich in silicon dioxide, aluminum oxide and containing substantial amounts of oxidized iron and which has been digested with sulfuric acid and leached to remove aluminum sulfate and a substantial portion of the iron content as salts thereof, such method comprising: mixing the thus-treated clay in disintegrated form with fine fuel and forming the mixture into pellets; igniting the fuel in a layer of the pellets and passing air therethrough, sufficient fuel being used for the mixture to cause only momentary sintering of the pellets to form a rigid cellular sinter cake; and then cooling and crushing such cake to provide the lightweight aggregate of desired size.

2,729,571
NITROCELLULOSE COATING COMPOSITIONS
John D. Brandner and Robert H. Hunter, Wilmington, Del., assignors to Atlas Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application September 18, 1950, Serial No. 185,510
1 Claim. (Cl. 106—173)

A nitrocellulose lacquer, the solids of which consist essentially of one part by weight soluble nitrocellulose containing from about 10.7% to about 12.2% nitrogen; from about 0.25 to about 1.0 part of phenoxyethyl tall oil ester as plasticizer; and from 0 to about 5 parts of a modifying resin.

2,729,572
STABLE SOLUTION OF AN ALUMINUM SALT OF A METHYL SILANE TRIOL
Arnold Torkelson, Hoosick Falls, N. Y., assignor to General Electric Company, a corporation of New York
No Drawing. Application May 27, 1952, Serial No. 290,318
4 Claims. (Cl. 106—287)

1. A stable solution having a pH of from 6.8 to 10 comprising the product of reaction in an aqueous medium of (1) an aqueous solution of an alkali-metal salt of methyl silanetriol having the formula



wherein the concentration in the aqueous solution of the latter alkali-metal salt when calculated as $CH_3SiO_{1.5}$ is less than 6%, by weight, and (2) a simple water-soluble aluminum salt selected from the class consisting of aluminum sulfate and aluminum nitrate which is effective in reducing the pH of the alkali-metal salt solution without impairing the stability of the latter, there being present from 0.001 to 0.4 mol of the aluminum salt for each mol of the alkali-metal salt of the methyl silanetriol.

2,729,573
PLASTIC WELDING COMPOSITION
Bernard B. Goldner, Philadelphia, and John C. MacIntyre, Lansdale, Pa.
No Drawing. Application May 18, 1953, Serial No. 355,872
2 Claims. (Cl. 106—287)

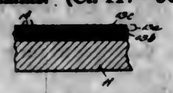
1. A composition of matter used as a plastic weld consisting of a mixture of ethylene dichloride and tetrahydrofurfuryl alcohol.

2,729,574
COATED ROOFING AND SIDING AND PROCESS OF PREPARING THE SAME
Walter J. Schwarz, New Orleans, La., assignor to The Patent and Licensing Corporation, New York, N. Y., a corporation of Massachusetts
Application May 7, 1952, Serial No. 286,643
6 Claims. (Cl. 117—25)



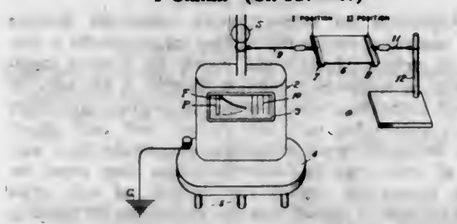
4. A process for preparing an improved composition roofing and siding which comprises coating a base with a bituminous material, applying light colored granules, pressing the granules into the bituminous material, applying dry cement, spraying on alkali silicate solution and heat treating.

2,729,575
PRESSURE SENSITIVE TRANSFER SHEET AND METHOD OF MAKING SAME
Douglas A. Newman, Sea Cliff, N. Y., assignor to Columbia Ribbon and Carbon Manufacturing Company, Inc., Glen Cove, N. Y., a corporation of New York
Application November 9, 1948, Serial No. 59,120
4 Claims. (Cl. 117—36)



1. The method of making a pressure sensitive transfer element which includes the steps of applying to a base having a pressure sensitive wax-carbon transfer coating thereon including a soluble dye, a first coating on said transfer coating comprising a major portion of a resinous film-forming substance and a solvent therefor which is a non-solvent for said dye; drying said coating by evaporating said solvent; applying a second coating on said first coating comprising a major portion of wax in molten form; and hardening said second coating by cooling the same.

2,729,576
METHOD OF DRY CLEANING FABRIC AND SIMULTANEOUSLY RENDERING THE SAME ANTISTATIC
Ralf B. Trusler, Dayton, Ohio, assignor to The Davies-Young Soap Company, Dayton, Ohio
Application September 29, 1953, Serial No. 383,003
1 Claim. (Cl. 117—47)

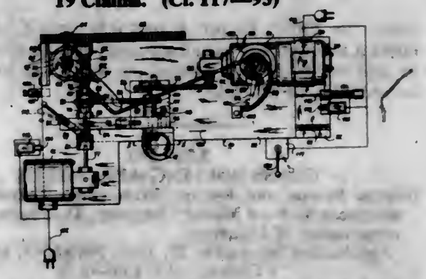


The method of dry cleaning fabrics and clothing and simultaneously rendering the same anti-static, which comprises washing the fabric and clothing with dry cleaning solvent having from 0.2% to 10% by weight of a detergent dissolved therein, and then rinsing the fabric and clothing with a dry cleaning solvent having from 0.02% to 5.0% by weight of an anti-static agent dissolved therein, the anti-static agent being applied to the fabric and clothing in the presence of detergent carried thereby from the washing.

2,729,577
METHOD OF IMPARTING ANTISTATIC PROPERTIES TO TEXTILE MATERIALS
Osborne C. Bacon, Penns Grove, N. J., and Lehman E. Hughes, New Castle, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application February 27, 1953, Serial No. 339,482
5 Claims. (Cl. 117—76)

5. The method of treating textile material which comprises imparting anti-static properties thereto by treating the textile material first with an aqueous pad bath containing 15% by weight, based on the bath, of dimethylolurea containing about 20 parts monomer and 4 parts low polymer and about 0.5% by weight of ammonium phosphate catalyst, drying the textile material thoroughly, and then immersing it in an aqueous solution containing (1) from 0.01% to 0.1% by weight of a polyacrylyloxyalkyltrialkyl ammonium alkyl sulfate salt in which the alkyl radicals contain from 1 to 4 carbon atoms; and (2) about a molar equivalent thereof of a water-soluble salt from the group consisting of alkyl carboxylates and alkyl sulfates, the alkyl group of which contains from 8 to 20 carbon atoms, and thereafter drying the said textile material.

2,729,578
WELDING APPARATUS AND METHOD
Oscar Hedlund and Joseph Arthur Edwards, Jr., Battle Creek, Mich., assignors to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application July 16, 1952, Serial No. 299,206
19 Claims. (Cl. 117—93)



1. The method of applying weld material to a desired area of an engine valve or like article which comprises, supporting the article adjacent a stationary welding head for simultaneous rotary and traversing movements with the traversing movement being substantially in a direction transverse to said welding head, operating said welding head to produce a weld formation on the article at an initial weld point of said desired area, simultaneously imparting rotary and traversing movements to said article such that the point of weld formation moves spirally over said desired area along convolutions lying at different radial distances from said initial weld point, and progressively varying the rates of speed of said rotary and traversing movements such that the adjacent convolutions of the weld formation are disposed in juxtaposed relation on the workpiece and aggregate the entire desired area.

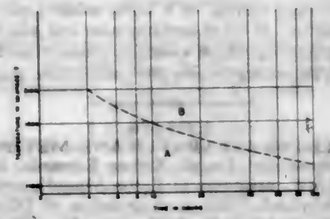
2,729,579
METHOD OF TREATING A FIBROUS COOKING UTENSIL
George E. Rhone, Long Beach, Calif.
No Drawing. Application July 16, 1953, Serial No. 368,529
3 Claims. (Cl. 117—143)

1. The method of treating a cooking utensil formed of a cellulose fiber which consists in first immersing the cellulose fiber utensil in a solution, consisting of ammonium sulphate 3 parts by volume, borax 1 part by volume, calcium carbonate 2 parts by volume, ferric oxide 1 part by volume, aluminum silicate 1 part by volume, sodium silicate 10 parts by volume and water 5 parts by volume, then drying the utensil at 125° Fahrenheit, then immersing the utensil in a solution of calcium chloride, and then drying the utensil at a temperature of 125° Fahrenheit.

2,729,580
METHOD OF IMPROVING THE UNIFORMITY OF CORRODIBILITY OF WELDED NICKEL ANODES
Walter L. Pinner, Detroit, and Orville D. Hoxie, Farmington, Mich., assignors to Houdaille-Hershey Corporation, Detroit, Mich., a corporation of Michigan
Application November 16, 1950, Serial No. 196,032
1 Claim. (Cl. 148—13)

The method of making a composite welded anode which comprises welding together metal sheets to form

an anode wherein both the weld metal and the metal sheets are electrolytic nickel, and then subjecting the welded anode to heat treatment within the range of



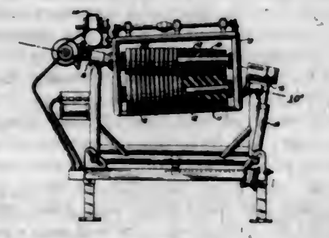
1400° to 2100° F. for a sufficient period of time to effect a substantially equalized grain growth of the nickel in said anode in and around the weld and to decrease corrodibility of the weld.

2,729,581

GLASS ROLLING APPARATUS

George Pascoe and George Matvechuk, Detroit, Mich., assignors to Ford Motor Company, Dearborn, Mich., a corporation of Delaware

Application November 19, 1954, Serial No. 469,927
4 Claims. (Cl. 154—2.7)



1. A glass rolling device comprising a frame, a pair of elastomer rolls rotatably supported in said frame and means for rotatably driving one of said rolls, the first of said rolls being smaller in diameter than the second of said rolls and each of said rolls decreasing in diameter from one end to the other with the larger ends of the two rolls superimposed, said frame being rotatable upon an axis which makes an acute angle with the line of contact between the rolls.

2,729,582

METHOD FOR MAKING UNWOVEN FABRICS

Piero Modigliani, Piandome, N. Y., assignor to Johns-Manville Corporation, New York, N. Y., a corporation of New York

No Drawing. Application April 8, 1954,
Serial No. 421,960
7 Claims. (Cl. 154—90)

1. A method of forming an unwoven fabric comprising drawing glass filaments from orifices of a furnace with a drum, forming a condensed mat by winding a plurality of layers of said filaments on said drum with the filaments of adjacent layers crossing at acute angles, applying to the filaments during winding a complex compound having a functional group which bonds to the surfaces of the filaments and a functional group which bonds to a binder subsequently to be applied, removing said mat from the drum, applying said binder in unset form to the filaments at any time after removal of the mat from the drum, and setting the binder.

2,729,583

METHOD OF FABRICATING ELECTRICAL APPARATUS

Meier Sadowsky, Elkins Park, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania

Application September 14, 1951, Serial No. 246,689
5 Claims. (Cl. 154—95)

1. The method of forming a screen structure for cathode ray tubes, said method comprising the steps of: forming a first sandwich-like assembly of a solid transparent substrate and a layer of fluorescent materials, forming a film of organic material having approximately the same surface area as said layer of fluorescent materials, depositing on said organic film a metal film of electron permeable thickness to form a second sandwich-like assembly of organic material and metal, depositing said second assembly on said layer of fluorescent materials, and baking the structure so formed until said organic film has been substantially completely vaporized.

2,729,584

METHOD AND APPARATUS FOR THE MANUFACTURE OF A COMPOSITE WOOD PRODUCT

Warren Curtis Foster, Wentworth, N. H., assignor, by mesne assignments, to The Crandall Corporation, Wentworth, N. H., a corporation of Delaware

Application July 20, 1949, Serial No. 105,765
18 Claims. (Cl. 154—116)



3. Apparatus for manufacturing composite flooring which comprises means for feeding longitudinally a plurality of strips of hard wood, means for feeding longitudinally in superposed relation thereto a plurality of strips of supporting wood, means for guiding said strips along a converging path into contact with each other, means for applying thermo-setting glue to the inner surfaces of said strips immediately before they come together, means for heating the surfaces of said strips before the glue is applied thereto, and means for pressing the glued strips together under heat and pressure.

5. A method of producing a composite wood product having at least two wood layers bonded together along juxtaposed surfaces thereof which comprises heating said wood layers, applying thermosetting glue to at least one of said heated layers along a surface thereof to be juxtapositioned with a surface of the other layer, and then juxtapositioning said layers with the thermosetting glue between said surfaces thereof and applying pressure to bond said layers together.

2,729,585

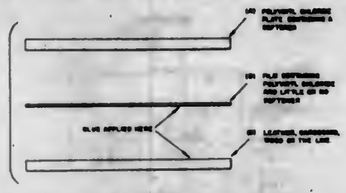
PROCESS FOR ADHERING POLYVINYL CHLORIDE CONTAINING A SOFTENER TO A NON-METALLIC LAYER

Wolfgang Gruber, Joseph Heckmaier, and Martin Doriat, Burghausen, Upper Bavaria, Germany, assignors to Wacker-Chemie G. m. b. H., a corporation

Application September 16, 1952, Serial No. 309,948
Claims priority, application Germany October 12, 1951
9 Claims. (Cl. 154—139)

1. Process for adhesively joining two layers of non-metallic materials at least one of which comprises polyvinyl chloride containing a softener which normally impairs its adhesiveness, comprising affixing to said softener-containing layer a facing selected from the group consisting of pure polyvinyl chloride and a copolymer

of vinyl chloride and vinyl acetate, and then adhesively uniting said facing with the other layer of material.



5. A permanent durable laminated structure comprising a plurality of layers of non-metallic materials at least one of which is polyvinyl chloride containing a softener which normally impairs its adhesiveness, a facing selected from the group consisting of pure polyvinyl chloride and a copolymer of vinyl chloride and vinyl acetate affixed to said softener-containing layer, and an adhesive uniting said facing with another of said layers.

2,729,586

THERAPEUTIC COMPOSITIONS COMPRISING WATER-SOLUBLE CHLOROPHYLL AND SALTS OF FATTY ACIDS

Samuel M. Peck, New York, N. Y., assignor, by mesne assignments, to Rystan Company, Mount Vernon, N. Y., a limited partnership

No Drawing. Application February 1, 1952,
Serial No. 269,580
13 Claims. (Cl. 167—65)

1. A therapeutic composition comprising water-soluble chlorophyll and an agent selected from the group consisting of sodium, potassium and ammonium salts of fatty acids having from three to eleven carbon atoms, and mixtures of said above-defined salts.

2,729,587

PRODUCTION OF FRUCTOSE

Harold J. Koepsell, Richard W. Jackson, and Clarence A. Hoffman, Peoria, Ill., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application March 11, 1952,
Serial No. 276,034
4 Claims. (Cl. 195—31)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. The method comprising subjecting an aqueous solution of sucrose to the action of a dextran-producing enzyme in the substantial absence of living microbial cells, separating dextran from the solution and subsequently recovering fructose from the resulting solution.

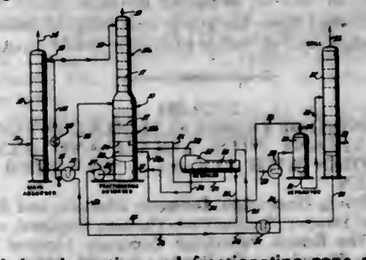
2,729,588

OPERATING A REBOILER SYSTEM FOR FRACTIONATING ABSORBER-STILLS WHICH COMPRISES SEPARATELY INTRODUCING VAPORS AND LIQUID FROM THE REBOILER INTO THE STILL AND MIXING ABSORBED VAPORS VAPORIZED FROM THE STILL BOTTOMS WITH THE LIQUID BEFORE ITS INTRODUCTION INTO THE STILL

Joe C. Hannah, Anaheim, Calif., assignor to The Fluor Corporation, Ltd., Los Angeles, Calif., a corporation of California

Application February 23, 1952, Serial No. 273,019
7 Claims. (Cl. 196—8)

1. The process of fractionally absorbing hydrocarbons from a mixture of higher and lower boiling hydrocarbons, that includes introducing said mixture to a vertically extended absorption and fractionating zone containing a vertical series of trays above and below the mixture inlet, maintaining the mixture in said absorption and fractionating zone at a temperature above the vaporizing temperature of the lower boiling hydrocarbons under the existing pressure, introducing lean absorption oil to an upper location in said zone for downward flow countercurrently in contact with rising vapors liberated from said mixture and concurrently with unvaporized components of said mixture flowing downwardly below the inlet, removing unabsorbed vapors from the top of said zone, passing said unvaporized components and absorption oil from a lower portion of said zone through a reboiling zone, separately returning vapors of a portion of said components and an unvaporized liquid stream from the reboiler zone to the lower portion of the absorption and fractionating zone, removing the returned liquid from the bottom of the absorption and fractionating zone and heating and vaporizing said components remaining in the absorption oil, separating the vapors as a first lower boiling vapor stream and a second higher boiling vapor stream from a hot residual absorption oil containing stream, introducing said first vapor stream into said liquid stream flowing from the reboiler zone into the absorption and fractionating zone so that the liquid and vapors are intimately admixed before entering the absorption and fractionating zone, and passing said residual absorption oil stream in heated condition in indirect heat exchange relation with the liquid in the reboiler and thence to said upper location in the absorption and fractionating zone.

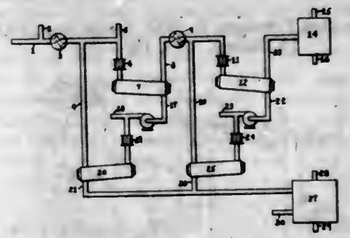


2,729,589

DEASPHALTING WITH PROPANE AND BUTANE

Robert H. Waghorne and Charles F. Learner, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application June 12, 1952, Serial No. 293,114
3 Claims. (Cl. 196—14.46)



1. A deasphalting process in which a residual oil having a viscosity above about 2500 S. S. U. at 210° F. is admixed with a deasphalting agent consisting essentially of propane and butane in which the said butane comprises about 14% by volume of the deasphalting agent.

2,729,590

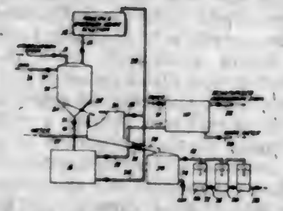
DESULFURIZATION OF HYDROCARBON OILS

Richard B. Bishop, Haddonfield, William I. Denton, Woodbury, and William E. Garwood, Haddonfield, N. J., assignors to Socony Mobil Oil Company, Inc., a corporation of New York

Application January 2, 1953, Serial No. 329,292
14 Claims. (Cl. 196—27)

1. A process for removing sulfur and oxygen from a hydrocarbon oil containing the same, which comprises

contacting said oil at a temperature of at least about 550° F. but below a temperature at which substantial



conversion of said oil to lighter products occurs with a reagent selected from the group consisting of iodine, hydrogen iodide, and an iodine-hydrogen iodide mixture.

2,729,591

SWEETENING OF PETROLEUM OILS CONTAINING MERCAPTANS WITH ALKALI AND OXYGEN AND THEN WITH ALKALI, A SOLUTIZER AND OXYGEN

Dorothy Sylvia Haresnape, formerly Macken, and Ronald Leonard Denyer, Sunbury-on-Thames, England, assignors to The British Petroleum Company Limited

No Drawing. Application June 20, 1952, Serial No. 294,722
Claims priority, application Great Britain July 4, 1951
6 Claims. (Cl. 196—29)

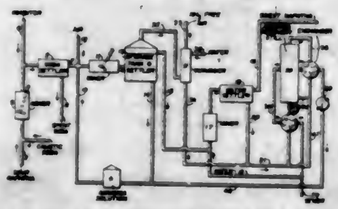
1. A process of sweetening a petroleum oil containing mercaptans, which comprises mixing the oil with an aqueous caustic alkali solution in the presence of free oxygen so as to convert part of said mercaptans into disulphides, separating the oil from the caustic alkali solution, mixing the separated oil in the presence of free oxygen but in the absence of a catalyst for the oxidation of mercaptans to disulphides with an aqueous caustic alkali solution containing a substance which is capable of increasing the solubility of the mercaptans in the alkali solution, so as to effect a further conversion of mercaptans into disulphides, and separating a sweetened oil from the caustic alkali solution.

2,729,592

AIR SWEETENING PROCESS

Edward J. Niehaus, Jr., Baltimore, Md., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application February 3, 1953, Serial No. 334,865
10 Claims. (Cl. 196—29)



1. A process for sweetening gasoline containing substantial portions of cracked stocks in which the gasoline is contacted with air in the presence of a phenylenediamine inhibitor and ammonia.

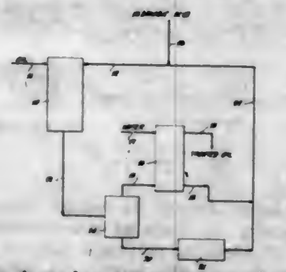
2,729,593

DEMETALATION OF HYDROCARBON OILS

William E. Garwood, Haddonfield, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York

Application January 6, 1953, Serial No. 329,872
12 Claims. (Cl. 196—35)

2. A process for removing metal contaminant selected from the group consisting of nickel, vanadium, iron, and copper from a hydrocarbon oil containing the same, which comprises contacting said oil with a reagent selected from the group consisting of iodine, hydriodic acid



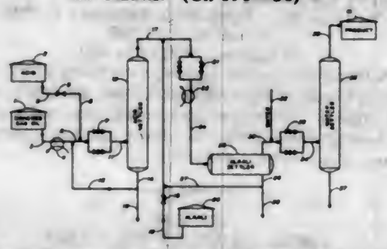
and mixtures thereof at a temperature of at least about 500° F., but below a temperature at which substantial conversion of said oil to lighter products occurs.

2,729,594

STABILIZATION OF CRACKED DISTILLATE FUEL OILS

William H. Alderson, El Cerrito, and John H. Easthagen, Berkeley, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware

Application December 13, 1952, Serial No. 325,838
10 Claims. (Cl. 196—38)



1. The process of stabilizing a hydrocarbon cracked petroleum fuel oil distillate boiling within about the range of 300° F. to 750° F., which comprises intimately admixing in a single acid treating stage said cracked petroleum fuel oil distillate at a temperature within about the range of 50° F. to 220° F. with sulfuric acid of a concentration of at least 60% and varying inversely with the temperature within the specified temperature range, isolating an acid phase and an acid-treated hydrocarbon phase, contacting in a single caustic treating stage said acid-treated hydrocarbon phase at a temperature within about the range of 150° F. to 250° F. with an aqueous alkali metal hydroxide solution of 5° Bé. to 20° Bé. to react with free acidic and potentially acidic materials to yield an alkaline phase and a hydrocarbon phase, isolating said hydrocarbon phase, water washing and drying said hydrocarbon phase to produce the finished product.

2. Process as described in claim 1, wherein the cracked fuel oil distillate is intimately admixed with sulfuric acid at a temperature between about 80° F. and 110° F. and the concentration of the sulfuric acid is between about 83% and 88%.

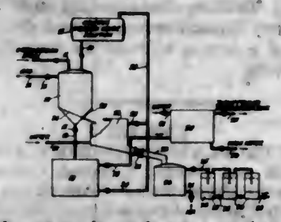
2,729,595

PROCESS FOR REMOVING NITROGEN COMPOUNDS FROM HYDROCARBON OIL WITH IODINE OR HYDROGEN IODIDE

William I. Denton, Woodbury, and William E. Garwood, Haddonfield, N. J., assignors to Socony Mobil Oil Company, Inc., a corporation of New York

Application January 2, 1953, Serial No. 329,291
10 Claims. (Cl. 196—39)

1. A process for denitrifying a nitrogen-containing hydrocarbon oil, which comprises contacting said oil at a temperature between about 650° F. and about 750° F. with a reagent selected from the group consisting of iodine, hydrogen iodide, and an iodine-hydrogen iodide



mixture, and present in such amount that the ratio of gram atoms of iodine in said reagent to the gram atoms of nitrogen contained in said oil is at least about 0.005.

2,729,596

PRODUCTION OF DIESEL AND JET FUELS

George Alexander Mills, Swarthmore, Pa., assignor to Houdry Process Corporation, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 21, 1951, Serial No. 227,527
7 Claims. (Cl. 196—53)

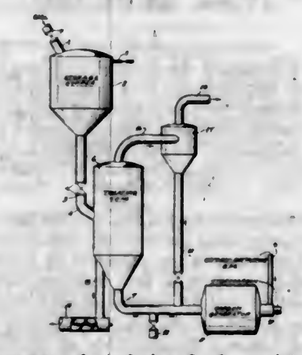
1. The method of preparing liquid hydrocarbon fuels of high paraffinicity and having a cetane number of about 80 and which comprises the steps of subjecting a crude oil fraction boiling above the range of gasoline to hydrogenative cracking in contact with a catalyst composite comprising a predominating proportion of a cracking component and a minor proportion of a catalytic nickel material having hydrogenating activity, effecting conversion of said fraction in contact with said catalyst at a temperature above 700° F. and under a total pressure of at least 1000 pounds per square inch, at least three mols of hydrogen being added to the conversion reaction per mol of oil charged; separating the reaction products to provide a fuel cut boiling above 300° F. of high normal paraffin content, subjecting the fuel cut to selective treatment to separate out a portion thereof having an increased concentration of normal paraffins.

2,729,597

PROCESS FOR RENDERING SOLID CARBONACEOUS MATERIALS NON-AGGLOMERATIVE

Paul W. Garbo, Freeport, N. Y., assignor to Hydrocarbon Research, Inc., New York, N. Y., a corporation of New Jersey

Application April 30, 1949, Serial No. 90,636
2 Claims. (Cl. 202—16)



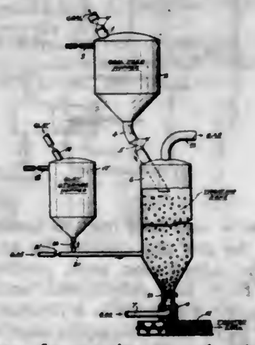
1. The process of rendering fresh particles of caking coal non-caking without substantial carbonization, said particles being of a size adapted for gasification in a settled moving bed, which comprises introducing said fresh particles into a dense phase fluidized mass maintained at an elevated temperature of at least 600° F. adapted to cause tackiness of the surfaces of said fresh particles while passing a substantially non-oxidizing gas containing finely powdered soot suspended therein upwardly through said mass to effect the fluidization thereof and to coat the tacky surfaces of said fresh particles with said soot, said fluidized mass at all times consisting essentially of coal particles which have been thus rendered substantially non-caking, and withdrawing coal particles from said mass prior to substantial carbonization as substantially non-caking coal particles coated with soot.

2,729,598

FLUIDIZED BED COATING OF COAL WITH NON-AGGLOMERATIVE MATERIAL

Paul W. Garbo, Freeport, N. Y., assignor to Hydrocarbon Research, Inc., New York, N. Y., a corporation of New Jersey

Application May 13, 1949, Serial No. 93,158
4 Claims. (Cl. 202—25)



1. In a process for treating a coal, which becomes tacky and cakes on heating, to substantially eliminate its caking tendencies without effecting substantial gasification of said coal, the improvement which comprises introducing relatively coarse pieces of said coal into the upper portion of a dense phase fluidized bed of solid particles of a non-agglomerating material having an average particle size considerably less than the average particle size of the pieces of coal, passing a fluidizing gas upwardly through said bed at a rate sufficient to maintain said particles of non-agglomerating material in a highly agitated condition but insufficient to cause substantial fluidization of said pieces of coal or entrainment of said particles of non-agglomerating material from said bed while permitting said pieces of coal to settle to the bottom of said bed, maintaining said pieces of coal in contact with said fluidized particles in said bed at a temperature above about 600° F. and below about 1,000° F. to ensure tackiness of the surface of said pieces, and to render said pieces substantially non-agglomerating by the adhesion of a thin coating of said particles of non-agglomerating material to the surface of said pieces, and withdrawing the thus coated pieces of coal from the lower portion of said fluidized bed substantially free of the tendency to cake on heating.

2,729,599

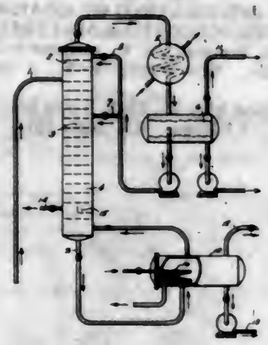
DEHYDRATION OF MALEIC ACID TO ANHYDRIDE

Ernest O. Ohsol, Cranford, William C. Sussky, Linden, and Leland K. Beach, Mountainside, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application August 2, 1948, Serial No. 41,975
1 Claim. (Cl. 202—42)

In a continuous process for the preparation of maleic anhydride which comprises continuously introducing

an aqueous solution of maleic acid at a feed inlet into an upper portion of a fractionating column, said column having a dehydration zone below said feed inlet, continuously refluxing within the upper part of said column an inert organic liquid capable of azeotroping with water and lower boiling than said anhydride, removing from the top of said column an azeotropic vapor composition of water and of said inert organic liquid, continuously passing the maleic acid as it is freed of aqueous solvent downwardly through said dehydrating zone, the improvement which comprises introducing a sufficient additional amount of said inert organic liquid into the



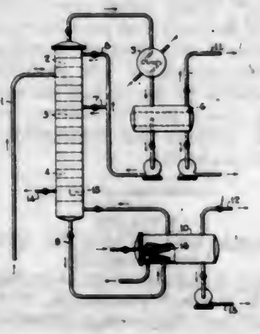
column at below said feed inlet to insure complete dehydration of the acid and dissolve the anhydride as it is formed in the dehydration zone, continuously passing downwardly from said dehydration zone the resulting solution of maleic anhydride in a residual portion of the inert organic liquid into a stripping zone where the inert organic liquid is vaporized to form vapors passed up through the dehydrating zone, removing anhydrous maleic anhydride as a bottoms liquid from the column below said stripping zone removing the anhydrous maleic anhydride as vapor from said bottoms liquid, and maintaining in said bottoms liquid a non-volatile high-boiling stable organic liquid compound as a fluxing material.

2,729,600

AZEOTROPIC DEHYDRATION OF MALEIC ACID TO ANHYDRIDE

Leland K. Beach, Mountainside, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application August 29, 1951, Serial No. 244,181
1 Claim. (Cl. 202—42)



In a process of obtaining purified maleic anhydride by distillation of water azeotropically from a crude aqueous solution of maleic acid with an organic entraining agent forming an azeotrope with the water, the improvement which comprises using chlorobenzene as said entraining agent, effecting dehydration of residual maleic acid which remains at a point where free water is substantially absent, and thereafter distilling the resulting maleic anhydride away from tarry impurities in a second distillation zone by addition of n-decane to form an azeotrope with the maleic anhydride.

2,729,601

ELECTROPLATING ON BERYLLIUM

John G. Beach and Charles L. Faust, Columbus, Ohio, assignors to the United States of America as represented by the United States Atomic Energy Commission

Application April 24, 1953, Serial No. 351,036
7 Claims. (Cl. 204—32)

1. In a method of electroplating a beryllium body including the steps of passing an electric current through the beryllium body as an anode in an aqueous solution of phosphoric acid and hydrochloric acid, rinsing the beryllium body with water, and electroplating a metal on a surface of the body, the improvement comprising immersing the beryllium body in 70% nitric acid for two minutes at a temperature from 70° to 90° F. after said anodic treatment and before the water rinse.

2,729,602

ELECTRODEPOSITION OF BRIGHT ZINC PLATE

George Robert Van Houten, Greenfield, Ind.

No Drawing. Application July 29, 1952, Serial No. 301,601
10 Claims. (Cl. 204—55)

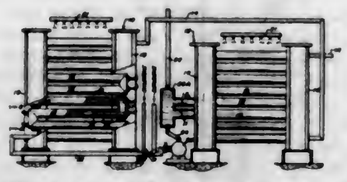
9. The process of producing bright zinc plate which comprises providing an anode and a cathode in an acid zinc solution containing an additive selected from the group consisting of selenium, tellurium, the oxides, acids and acid salts of selenium and tellurium, and the sulfur homologs of the oxides, acids and acid salts of selenium and tellurium such as to maintain the effective concentration of the metal of the selected additive between 0.01 mg. and 20 mg. per liter of solution, and passing an electric current between said anode and cathode thereby causing the deposition of bright zinc plate on said cathode.

2,729,603

MANUFACTURE OF BENZENE HEXACHLORIDE

John T. Clarke and Stephen N. Hall, Baton Rouge, La., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware

Application January 23, 1952, Serial No. 267,836
4 Claims. (Cl. 204—163)



1. A continuous process for the manufacture of benzene hexachloride comprising the steps of continuously reacting benzene and chlorine in the presence of actinic light in an excess of benzene in a first reaction zone to react between about 70 and 95 percent of said chlorine, recycling a major portion of the reaction solution containing chlorine and benzene hexachloride in benzene solvent through said first reaction zone in a weight ratio above about 4:1 relative to the weight of fresh feed reactants, and introducing the remaining portion of the reaction solution into a second zone to substantially complete the reaction of chlorine with benzene.

2,729,604

LANTHANUM OXYCHLORIDE PHOSPHORS AND THEIR PREPARATION

Frank Evans Swindells, Maplewood, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application March 23, 1953, Serial No. 344,121
13 Claims. (Cl. 252—301.4)

1. A lanthanum oxychloride phosphor activated by a metal taken from the group consisting of antimony and bismuth.

2,729,605

SAMARIUM ACTIVATED LANTHANUM OXYCHLORIDE PHOSPHOR

Frank Evans Swindells, Maplewood, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application March 23, 1953, Serial No. 344,122
5 Claims. (Cl. 252—301.4)

1. A samarium-activated lanthanum oxychloride phosphor.

2,729,606

PREPARATION OF FLUORESCENT TUNGSTATE

Siegfried Rothschild, Wallington, England, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application August 26, 1952, Serial No. 306,463
Claims priority, application Great Britain August 28, 1951
3 Claims. (Cl. 252—301.5)

1. A method for making fluorescent tungstates, which comprises the steps of firing a material selected from the group consisting of calcium tungstate, magnesium tungstate and zinc tungstate with a water-soluble halide salt-flux material to produce a fluorescent tungstate, thereafter washing the fired tungstate with water to remove residual flux therefrom, mixing said fired tungstate with ammonium sulphate, and firing said mixture to reduce afterglow of the fluorescent tungstate.

2,729,607

CATION EXCHANGE RESIN

Karl Haagen, Leverkusen-Bayerwerk, Germany, assignor to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application March 5, 1952, Serial No. 275,011
Claims priority, application Germany March 7, 1951
14 Claims. (Cl. 260—2.2)

11. A water insoluble cation exchanging solid resin consisting of an aromatic formaldehyde condensation product containing carboxylic and sulfonic acid groups and phenolic hydroxy groups which are etherified with a member of the class consisting of aromatic and aliphatic compounds, said resins being substantially free of unetherified phenolic hydroxyl groups.

2,729,608

COMPOSITE ELASTOMERS CONTAINING CHLOROSULFONATED POLYMERS OF ETHYLENE

Daniel E. Strain, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 10, 1951, Serial No. 225,678
10 Claims. (Cl. 260—4)

1. A composition of matter, highly resistant to deterioration by the action of oxygen, ozone and oxidizing agents, comprising a homogeneous mixture of a chlorosulfonated normally solid polymer of ethylene and an unsaturated elastomer of the group consisting of natural rubber, isomerized rubber, polychloroprene, polymers of butadiene alone, copolymers of butadiene with acrylonitrile, copolymers of buetadiene with styrene and copolymers of butadiene with iso-olefins, the chlorosulfonated normally solid polymer of ethylene constituting from about 20% to about 50% by volume of the elastomer in the composition.

2,729,609

POLY TERT-ALKYL SUBSTITUTED CARBOCYCLIC MONOCARBOXYLIC ACIDS IN ALKYD RESINS

Roy W. H. Teas and Thomas F. Mika, Orinda, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application October 16, 1952, Serial No. 315,186
14 Claims. (Cl. 260—16)

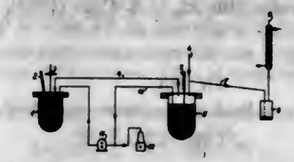
1. A resinous reaction product of a mixture comprising an acid component of the group consisting of polycarboxylic acids, polycarboxylic acid anhydrides and polycarboxylic acid halides, a polyhydric alcohol and a modifying agent comprising at least one poly-tert-alkyl-substituted carbocyclic monocarboxylic acid.

2,729,610

PROCESS FOR POLYMERISING MONOMERIC AROMATIC VINYL COMPOUNDS

Heinz Ehring, Krefeld, and Karl Raichle, Krefeld-Uerdingen, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

Application August 1, 1951, Serial No. 239,716
Claims priority, application Germany August 4, 1950
15 Claims. (Cl. 260—22)



1. Process for polymerizing a monomeric aromatic vinyl compound selected from the group consisting of vinyl naphthalene, styrene, alpha alkyl styrenes, and styrenes substituted in the nucleus by a group of the class consisting of an alkyl group, a hydroxy group, an alkoxy group and a halogen group, in the presence of an ester of a polyvalent alcohol containing a radical of a higher unsaturated fatty acid, which comprises rapidly circulating and recirculating the liquid reaction mixture through a predetermined path in a closed system comprising an elongated narrow zone, said reaction mixture passing through a narrow zone at a rate of many times per hour, gradually introducing the monomeric aromatic vinyl compound into the liquid phase of the ester substantially before the end of said narrow zone, heating the reaction mixture to a temperature between the boiling point of the aromatic vinyl compound and the decomposition temperature of the reaction mixture, and controlling the rate of introduction of the monomeric aromatic vinyl compound to permit some polymerization of the aromatic vinyl compound prior to the recirculation thereof through the narrow zone, whereby the reaction mixture in the recirculation path just prior to the narrow zone has only a very slight vapor pressure of the monomeric aromatic vinyl compound.

2. The method of claim 1 in which the ester is an alkyd resin.

2,729,611

UREA FORMALDEHYDE CONDENSATION PRODUCT

Louis C. Chesley, Jr., Syracuse, and Raymond G. Hart, Bainbridge, N. Y., assignors to The Borden Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application November 6, 1952, Serial No. 319,186
2 Claims. (Cl. 260—29.4)

1. In making a resin that gives a stable colloidal solution in water, the process which comprises warming a mixture of about 1.4–1.9 moles of formaldehyde with 1 mole of urea in aqueous solution and at a pH at least as

high as approximately 7, continuing the warming only until condensation reaches the stage at which dimethylol urea is formed and a specimen of the solution, on cooling, shows a positive cloud test, then adding additional formaldehyde in amount to make the total formaldehyde introduced about 2.1–3 moles, adding an acid catalyst of urea formaldehyde condensation in any amount required to establish the pH approximately within the range 2.5–6, continuing the warming until the product, when an alkali is added to a sample thereof in amount to establish the pH at 7.3 and the sample diluted with water to concentration 2%–15% solids, gives a colloidal solution with a strong Tyndall effect, then discontinuing the warming and adding an alkali in amount to neutralize any acidity of the product.

2,729,612

ESTERS OF 9,10-DIHYDROXYSTEARIC ACID WITH ETHER ALCOHOLS

Hogan B. Knight and Daniel Swern, Philadelphia, Pa., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application January 13, 1950, Serial No. 138,529
9 Claims. (Cl. 260—31.4)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A plasticizer compound of the general formula:

$$CH_3(CH_2)_7-\underset{OH}{CH}-\underset{OH}{CH}-(CH_2)_7-CO-O-R$$

wherein R is a radical of the group consisting of

$$-CH_2-CH_2-OR'$$

and

$$-CH_2-CH_2-O-CH_2-CH_2-OR''$$

wherein R' is a member of the group consisting of alkyl, phenyl and benzyl hydrocarbon radicals and R'' is an alkyl hydrocarbon group.

2,729,613

SOLID POLYMERS OF PERHALOGENATED POLYOLEFINS

William T. Miller, Ithaca, N. Y.

No Drawing. Application February 19, 1951, Serial No. 211,790
24 Claims. (Cl. 260—33.8)

3. Solid polymers of a polyunsaturated fluoroolefin which has at least three and not more than 12 base carbon atoms, at least two double bonds between base carbon atoms, and at least one fluorine atom attached to a base carbon atom, the remaining substituents being selected from at least one of the group consisting of the halogens and perhalogenated organic radicals not more than one of which contains more than three carbon atoms.

2,729,614

STABILIZATION OF OXYGEN-SENSITIVE MATERIALS WITH SUBSTITUTED GUANYLGUANIDINES

David O. De Pree, Royal Oak, and Eugene F. Hill, Birmingham, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application April 1, 1953, Serial No. 346,282
8 Claims. (Cl. 260—45.9)

1. A new composition stable to oxidation comprising a rubbery high molecular weight organic material normally tending to deteriorate in the presence of oxygen and in quantity sufficient to inhibit such deterioration an antioxidant comprising the product obtained by condensing dicyandiamide with a compound possessing at least one aromatic ring which is substituted with one amino radical and a radical selected from the group consisting of amino, substituted amino, hydroxy and alkoxy groups.

2,729,615

MANUFACTURE OF POLYMERISATION PRODUCTS OBTAINED FROM ACRYLIC ACID DERIVATIVES

George Isaac Maurice Bloom, Knebworth, Jack Ernest Duddington, St. Albans, Mervyn Frederick Vincent, Harpenden, and Anthony Horace Willbourn, Welwyn Garden City, England, assignors to Imperial Chemical Industries Limited, London, England, a corporation of Great Britain

No Drawing. Application January 21, 1953, Serial No. 332,512
Claims priority, application Great Britain February 1, 1952
6 Claims. (Cl. 260—63)

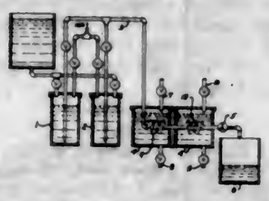
1. A process which comprises polymerizing an ester of alpha-chloroacrylic acid in the presence of a compound containing an epoxy group selected from the group consisting of ethylene oxide, propylene oxide, epichlorohydrin, phenyl glycidyl ether, diallyl ether monoxide and poly-diallyl ether monoxide.

2,729,616

CONDENSATION OF UREA AND FORMALDEHYDE

Maurice H. Bigelow and Harold N. Spurlock, Toledo, Ohio, assignors, by mesne assignments, to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

Application February 28, 1952, Serial No. 273,908
5 Claims. (Cl. 260—69)



1. A method of producing a urea-formaldehyde condensation product that comprises the steps of bringing urea, formaldehyde and water together to form an aqueous solution containing not less than 1.5 and not more than 2.5 mols of formaldehyde per mol of urea, adjusting the pH of the solution to a value between 6 and 8, subjecting the solution to superatmospheric pressure, heating the solution to a temperature above its boiling point at atmospheric pressure to thereby cause the pH to drop to a value at which condensation proceeds, and arresting the condensation at the desired point by cooling the solution.

2,729,617

PRODUCTION OF THERMOSETTING SYNTHETIC RESINS CAPABLE OF IMPARTING IMPROVED WET STRENGTH TO PAPER

John B. Davidson and Edward J. Romatowski, Toledo, Ohio, assignors to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

No Drawing. Application April 14, 1952, Serial No. 282,264
10 Claims. (Cl. 260—70)

1. A method of producing a thermosetting synthetic resin capable of imparting improved wet strength to paper, that comprises reacting 1 mol of ammonia with 1 to 4 mols of formaldehyde and 1 to 6 mols of formic acid in aqueous solution to produce methylamines, and reacting from 3⅓ to 100 mols of urea per mol of ammonia and 1.8 to 2.4 mols of formaldehyde per mol of urea in aqueous solution with the methyl amines so produced at a pH between about 3.0 and about 6.5.

2,729,618

ISOCYANATE-MODIFIED POLYESTERS REACTED WITH GLYCOLS

Karl Erwin Müller, Leverkusen-Bayerwerk, Friedrich Wilhelm Schmidt, Leverkusen-Wiesdorf, Erwin Weinbrenner, Leverkusen-Bayerwerk, Germany, and Hans-Frank Piepenbrink, deceased, late of Leverkusen-Wiesdorf, Germany, by Ursula B. Piepenbrink, administratrix, Leverkusen-Wiesdorf, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application November 18, 1952, Serial No. 321,272
18 Claims. (Cl. 260—75)

1. The process which comprises reacting an anhydrous organic, linear polyester having from 0.6 to 2.4 per cent by weight of hydroxyl groups and an acid value substantially not exceeding 1, said polyester being made from an aliphatic polymethylene dicarboxylic acid and a polymethylene glycol, with an organic diisocyanate whose sole reactive groups are isocyanate groups, in an excess of from 20 to 250 per cent over the amount which is necessary to combine with said hydroxyl groups and then reacting the isocyanate modified polyester thus formed with a compound of the general formula $R(OH)_2$ having a molecular weight not exceeding 800, wherein R is a radical selected from the group consisting of a divalent hydrocarbon radical and a divalent radical in which the carbon chain is interrupted by a member of the group consisting of —O—, —N—, —S—, $—SO_2$ in such a proportion, that the excess of isocyanate groups therein is reduced to at most zero.

2,729,619

TITANIUM TETRAFLUORIDE AS CATALYST IN PRODUCTION OF POLYESTERS

John K. Sullivan, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application March 18, 1954, Serial No. 417,218
16 Claims. (Cl. 260—75)

1. In a process for preparing a polyester by the self-condensation, with the removal of glycol, of a bis glycol ester of at least one acid selected from the group consisting of terephthalic acid and isophthalic acid, the improvement which comprises carrying out said condensation in the presence of a catalytic amount of titanium tetrafluoride.

2,729,620

NEODYMIUM CHLORIDE AS CATALYST IN PRODUCTION OF POLYESTERS

John K. Sullivan, Akron, Ohio, assignor to The Goodyear Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application March 26, 1954, Serial No. 419,104
16 Claims. (Cl. 260—75)

1. In a process for preparing a polyester by the self-condensation, with the removal of glycol, of a bis glycol ester of at least one acid selected from the group consisting of terephthalic acid and isophthalic acid, the improvement which comprises carrying out said condensation in the presence of a catalytic amount of neodymium chloride.

2,729,621

POLYMERIZATION OF DL-ALANINE CARBOANHYDRIDE AND ORIENTATION OF POLYMER

Ralph E. Miegel, Elsmere, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 24, 1950, Serial No. 197,513
2 Claims. (Cl. 260—77.5)

1. Process of preparing an oriented, high molecular weight, linear polyamide, the recurring units of which are DL-alanine units which comprises heating DL-alanine-N-carboanhydride, at 55–115° C. for at least 20 hours in solution in an inert solvent, liquid at the reaction temperature, for the said DL-alanine-N-carboanhydride but which is a non-solvent for poly-DL-alanine, said solution containing not more than fourteen per cent, by weight, of DL-alanine N-carboanhydride, said N-carboanhydride being analytically free from chlorine, containing 12.2%±0.2% nitrogen as determined by the Dumas method, and having a specific ultraviolet extinction of maximum value about 2550 A. falling off rapidly to a value below 0.0015 in the vicinity of 2700 A., with no increase above 0.0015 and a general gradual decrease in specific extinction in the range to and including 3200 A., continuing the polymerization until the resulting polyamide has an inherent viscosity of at least 0.3 and orienting the polyamide by stretching the polyamide, swollen with a swelling agent therefor, until the stretched length of the polyamide is at least 200% of its unstretched length.

2,729,622

POLYCARBOXYL- AND POLYCARBALKOXYL-CONTAINING POLYMERIZABLE QUATERNARY AMMONIUM MONOMERS AND THEIR POLYMERS

Charles J. Albisetti and Arthur L. Barney, Wilmington, Theodore L. Cairns, Newark, and Hilmer E. Winberg, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application April 11, 1952, Serial No. 281,896
14 Claims. (Cl. 260—78.3)

5. A compound, having but one non-aromatic carbon to carbon unsaturation, from the class consisting of salts and esters, with alkanols of up to four carbons, of an acid of the formula

$$CH_2=C-(CO)_m-O-(CH_2)_n-\underset{\displaystyle (CH_2)_n \\ \displaystyle H}{\overset{\displaystyle X}{\overset{|}{N}}}-[R(COOH)_s],$$
$$(R')_{s-r}$$

wherein X is the anion of an acid of molecular weight up to 250, r and s are positive integers up to 3 with at least one plural, m is a cardinal number from zero to one, n is a positive integer from 2 to 3, R is a saturated aliphatic hydrocarbon radical of up to eight carbons and of valence $r+1$ and R' is an alkyl radical of up to four carbons.

2,729,623

AIR-DRYING RESIN MADE FROM ALLYLIC ALCOHOL, AN OXIRANE AND AN UNSATURATED DIBASIC ACID

Robert A. Gregg, Passaic, N. J., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application March 10, 1951, Serial No. 215,021
5 Claims. (Cl. 260—78.5)

1. The method of making a soluble, unsaturated, air-drying, polymeric resin which comprises polymerizing, at a temperature of from 25° to 150° C. in the presence of allyl alcohol as a gelation suppressor and a free radical polymerization catalyst, a mixture of esters obtained by esterifying an aliphatic alpha-ethylenic alpha, beta-dicarboxylic acid in amount such that the ratio of moles of alcohols furnished by the mixture of alcohols hereinafter mentioned to acid equivalents supplied by said acid is from 1.3:1 to 2.0:1 at a temperature of from 50° to 120° C. with a mixture of alcohols formed by reacting allyl alcohol and ethylene oxide in a molar ratio of alcohol to oxide of from 1:1 to 5:1 at a temperature of from 40° to 100° C. in the presence of an ionic catalyst, and continuing said polymerizing

step until a major proportion of said mixture of esters has been converted to a soluble, unsaturated, air-drying, polymeric resin.

2,729,624

POLYMERIZATION OF VINYL MONOMERS BY OXYHALOGEN ACID ANION/HYDRAZINE-DISULFONATE ION COMPOSITIONS

Edward G. Howard, Jr., Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application April 2, 1953, Serial No. 346,519

9 Claims. (Cl. 260—80)

1. Process for the polymerization of a monomer subject to addition polymerization and containing a carbon carbon double bond which comprises bringing said monomer in contact, in an aqueous system, with a water soluble hydrazinedisulfonate and an oxidizing agent of the class consisting of water soluble bromates, iodates, and periodates.

2,729,625

CROSS-LINKED COPOLYMERS OF THE ESTERS OF ACRYLIC AND METHACRYLIC ACID

Melvin D. Hurwitz, Huntingdon Valley, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application May 6, 1952, Serial No. 286,441

6 Claims. (Cl. 260—80.5)

1. A thermoplastic copolymer which is capable of converting to a thermoset product when it is heated above about 135° C. and which is the copolymerized product of a mixture of the three essential components: (*a*) from 5 to 15 molar percent of an ester from the class consisting of tert.-butyl acrylate, tert.-butyl methacrylate, tert.-amyl acrylate, and tert.-amyl methacrylate, (*b*) from 5 to 15 molar percent of an ester from the class consisting of glycidyl acrylate and glycidyl methacrylate, and (*c*) from 70 to 90 molar percent of at least one ester having the general formula $CH_2=CRCOOR'$ in which R represents a member of the class consisting of a hydrogen atom and the methyl radical and R' is a non-tertiary alkyl radical containing one to eighteen carbon atoms.

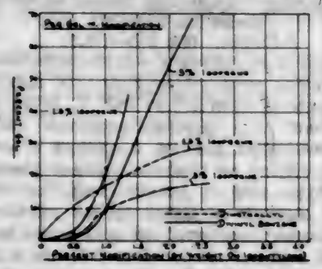
2,729,626

ISOOLEFIN-MULTIOLEFIN COPOLYMERS

Lester M. Welch, Madison, Howard L. Wilson, Raritan Township, Middlesex County, and Luther B. Turner, Cranford, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application May 1, 1952, Serial No. 285,392

13 Claims. (Cl. 260—80.7)



1. In the process of making vulcanizable rubbery polymers of increased toughness and improved physical properties, composed of a major proportion of an isoolefin having from 4 to 5 carbon atoms, a minor proportion of a conjugated aliphatic diolefin of 4 to 8 carbon atoms, using proportions to make a copolymer having an iodine number of about 1 to 50 and a minor proportion of a divinyl aromatic compound, by polymerization at a temperature below −40° C. with a Friedel-Crafts catalyst dissolved in a non-complex-forming solvent which is liquid at the polymerization temperature, the steps in combination which comprise using an amount of said divinyl aromatic compound of about 1% up to a maximum of about 4% by weight based on isobutylene, while also using a reaction diluent containing more than 50% by volume of an alkyl halide of 1 to 2 carbon atoms, and using in excess of one volume of said reaction diluent per volume of mixed olefin reactants, whereby an insoluble polymer is obtained.

2,729,627

POLYVINYL CHLORIDE FOR USE IN PLASTISOLS

Clide I. Carr, Jr., Fair Lawn, N. J., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application November 26, 1952, Serial No. 322,795

9 Claims. (Cl. 260—92.8)

1. The method of making polyvinyl chloride for use in preparing plastisols which comprises polymerizing an aqueous emulsion of vinyl chloride to a desired final conversion of monomeric vinyl chloride to polymer of 50% to 95% at a temperature from 40° C. to 60° C. to form a latex having an average particle diameter from 0.35 to 0.9 micron, and at a time between 50% and 95% of the desired final conversion of vinyl chloride monomer to polymer, adding to the reaction mixture a molecular weight regulator for polyvinyl chloride selected from the group consisting of polyhaloalkanes, polyhaloalkenes, alkyl aldehydes, ethyl dibromoacetate, ethyl dibromomalonate, benzene sulfonyl chloride and its monomethyl and monohalo derivatives, 1,1,1-tribromo-2-methyl proponal-2, allyl bromide, N-chlorophthalimide, alkyl iodides, and phenacyl bromide, in effective amount to give a final polymer having an intrinsic viscosity of from 0.75 to 1.3 measured in cyclohexanone at 30° C., and after the desired final conversion of vinyl chloride to polymer, removing any unreacted residual vinyl chloride monomer, and recovering the polyvinyl chloride from the latex.

2,729,628

ACYLATED PROTEINS

Godfrey E. Mann, New Orleans, La., assignor to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application October 31, 1952, Serial No. 318,141

3 Claims. (Cl. 260—123.5)

(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A process of at least doubling the intrinsic viscosity of a natural protein selected from the group consisting of peanut protein, soybean protein, casein, egg albumin, and blood albumin, comprising peptizing the natural protein in a basic aqueous medium to form an aqueous solution containing from about 0.1 to 0.2 part by weight of protein, reacting the peptized protein with from about 0.04 to 0.12 part by weight based on the weight of protein of terephthalyl dichloride by mixing the peptized protein with a solution of the terephthalyl dichloride in enough diethyl ether so that the ether solution constitutes from about 29 to 39% of the resulting mixture, while maintaining the reaction temperature between about 0 to 5° C. and maintaining the pH of the reaction mixture to at least above 7, and continuing the reaction until the intrinsic viscosity of the resulting modified protein is at least twice that of the natural protein.

2,729,629

GREEN SUBSTANTIVE DYESTUFF MIXTURES AND PROCESS OF MAKING SAME

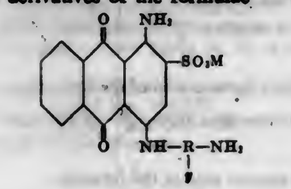
Wolfgang Frey, Neue Welt, near Basel, and Albin Peter, Binningen, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm

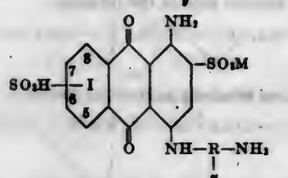
No Drawing. Application April 21, 1952, Serial No. 283,495

Claims priority, application Switzerland April 25, 1951

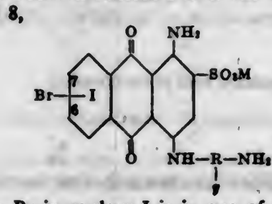
12 Claims. (Cl. 260—144)

1. A green substantive dyestuff mixture obtained by condensing one molecular proportion of an anthraquinone derivative selected from the group consisting of the anthraquinone derivatives of the formulae

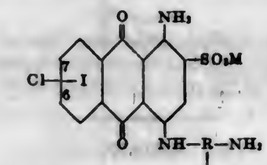




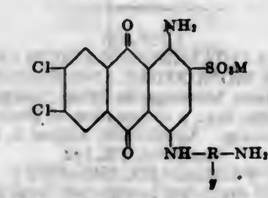
wherein the SO_3H in nucleus I is in one of the positions 5, 6, 7 and 8,



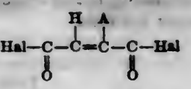
wherein the Br in nucleus I is in one of the positions 6 and 7,



wherein the Cl in nucleus I is in one of the positions 6 and 7, and



and R stands for a member selected from the group consisting of mono- and binuclear radicals of the benzene series, *y* is a member selected from the group consisting of hydrogen, lower alkyl, lower alkoxy and SO_3H, and M stands for an atom selected from the group consisting of hydrogen, lithium, sodium and potassium, with one molecular proportion of a yellow aminoazo compound containing from one to two azo groups and from zero to one atom of copper, by the action of one molecular proportion of a dicarboxylic acid halide corresponding to the formula



wherein Hal stands for an atom selected from the group consisting of chlorine and bromine, and A stands for a member selected from the group consisting of hydrogen, chlorine, bromine and methyl.

2,729,630

ACID DISAZO DYESTUFFS

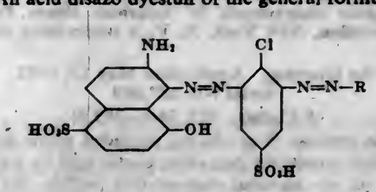
Hans Krzikalla, Heidelberg, Tim Toepel, Ludwigshafen (Rhine-Oggersheim), and Bernd Eistert, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen am Rhine, Germany

No Drawing. Application October 10, 1951, Serial No. 250,796

Claims priority, application Germany November 2, 1950

6 Claims. (Cl. 260—155)

1. An acid disazo dyestuff of the general formula



wherein R stands for the radical of a coupling component selected from the group consisting of 2-hydroxynaphthalene and its 6-sulfonic acid, 2.4-dihydroxyquinoline, 1.3-diketocyclohexane and 1-phenyl-3-methylpyrazolone-(5) and its 3'-sulfonic acid.

2,729,631

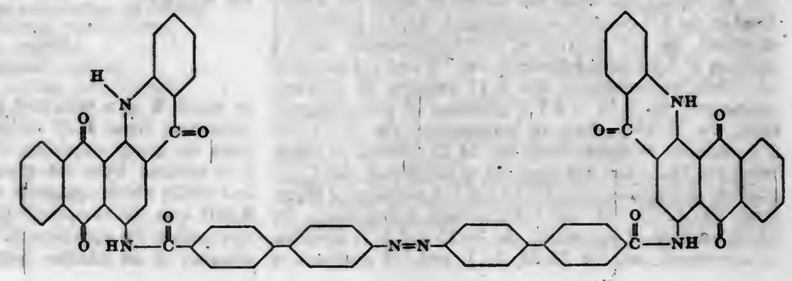
VAT DYESTUFF OF THE ANTHRAQUINONE-ACRIDONE SERIES

Paul Nawiasky, Summit, N. J., and L. D. Barrick, Pittsburgh, Pa., assignors to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application May 21, 1952, Serial No. 289,207

1 Claim. (Cl. 260—155)

The vat dyestuff of the formula:



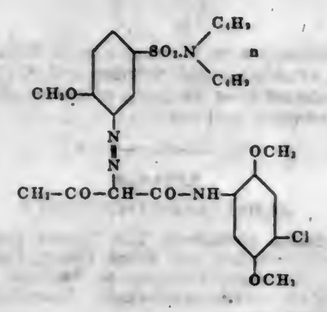
2,729,632

MONO-AZO-DYESTUFFS INSOLUBLE IN WATER

Ernst Fischer and Franz Muris, Offenbach (Main), Germany, assignors to Farbwerke Hoechst A. G. vormals Meister Lucius und Brüning, Frankfurt am Main Hochst, Germany, a German company

No Drawing. Application February 12, 1953, Serial No. 336,638
Claims priority, application Germany February 15, 1952
7 Claims. (Cl. 260—193)

4. The water-insoluble mono-azo-dyestuff corresponding to the following formula



2,729,633

SULFATED PECTIC ACID BLOOD ANTICOAGULANT

Harvey E. Albern, Springfield Township, Montgomery County, and Joseph Seifter, Philadelphia, Pa., assignors, by mesne assignments, to American Home Products Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application May 13, 1952, Serial No. 287,608
6 Claims. (Cl. 260—209.5)

1. The method of producing degraded pectic acid sulfates which comprises degrading pectic acid by treatment thereof at an elevated temperature within the range 80–120° C. for a period ranging from about 10 minutes to about eight hours, and then sulfating said degraded pectic acid by treatment thereof with a halosulfonic acid in the presence of pyridine as an acid acceptor.

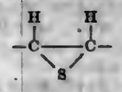
2,729,634

SYNTHETIC STEROL ESTERS CONTAINING SULFUR

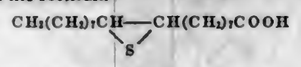
Frederick E. Dearborn, Washington, D. C.

No Drawing. Application June 26, 1951, Serial No. 233,676
3 Claims. (Cl. 260—239.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)

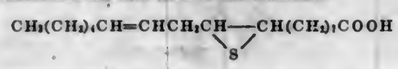
1. A process comprising esterifying a compound selected from the group consisting of the sterols cholesterol, sistosterol, dihydrolanosterol, 7-dehydrocholesterol, dihydroagnosterol, stigmasterol, lanosterol, ergosterol, and agnosterol, and these said sterols in which the double bond at the 5:6 position of cholesterol, the 5:6 position of sitosterol, the 8:9 position of dihydrolanosterol, the 7:8 position of 7-dehydrocholesterol, the 7:8 and 5:6 positions of 7-dehydrocholesterol, the 9:11 position of dihydroagnosterol, the 9:11 and 7:8 positions of dihydroagnosterol, the 22:23 position of stigmasterol, the 22:23 and 5:6 positions of stigmasterol, the 24:25 position of lanosterol, the 24:25 and 8:9 positions of lanosterol, the 22:23 position of ergosterol, the 22:23 and 7:8 positions of ergosterol, the 22:23, 7:8, and 5:6 positions of ergosterol, the 24:25 position of agnosterol, the 24:25 and 9:11 positions of agnosterol, and the 24:25, 9:11, and 7:8 positions of agnosterol, have each been saturated with sulfur forming a thiirane group of the formula



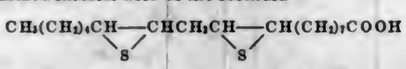
in which formula each carbon atom remains connected to the same adjacent carbon atom to which it was connected prior to the saturation with sulfur, with an acid selected from the group consisting of lauric acid, palmitic acid, stearic acid, benzoic acid, salicylic acid, oleic acid, ricinoleic acid, linoleic acid, linolenic acid, monosulfurized oleic acid of the formula



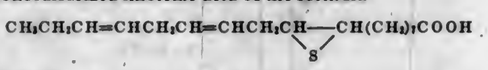
monosulfurized linoleic acid of the formula



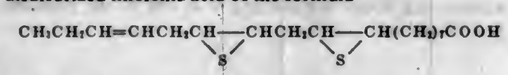
disulfurized linoleic acid of the formula



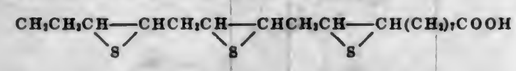
monosulfurized linolenic acid of the formula



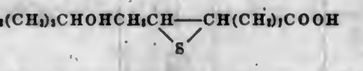
disulfurized linolenic acid of the formula



trisulfurized linolenic acid of the formula



and monosulfurized ricinoleic acid of the formula



to produce the corresponding ester, the use of the first mentioned, non-sulfurized sterols requiring the corresponding use of one of the recited sulfurized acids.

2,729,635

WITHDRAWN

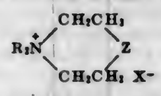
2,729,636

N,N-DIALKYLTHIAMORPHOLINIUM CHLORIDES, THEIR MONOXIDES AND DIOXIDES

John G. Erickson, Minneapolis, Minn., assignor to General Mills, Inc., a corporation of Delaware

No Drawing. Application August 3, 1953, Serial No. 372,142
4 Claims. (Cl. 260—243)

1. Process of preparing compounds having the following formula:



in which R is a saturated aliphatic hydrocarbon group containing from 8–22 carbon atoms and X is selected from the group consisting of chlorine and bromine and Z is selected from the group consisting of =S, =SO, and =SO_2 which comprises reacting the secondary amine R_2NH with the compound $(ClCH_2CH_2)_2Z$ at a temperature within the approximate range of 65–150° C. in the presence of an alkaline material.

2,729,637

METHOD OF PRODUCING CYANURIC ACID

Howard S. Gable, Kansas City, Mo., and Glenn W. Kerr, Mission, Kans.; said Kerr assignor to said Gable

No Drawing. Application June 29, 1953, Serial No. 364,908
6 Claims. (Cl. 260—248)

1. A process for the preparation of cyanuric acid consisting of, reacting urea and thionyl chloride together under reflux at a temperature of a water bath until after an exothermic reaction has taken place.

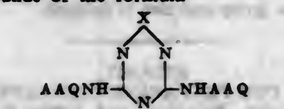
2,729,638

VAT DYESTUFFS OF THE PHTHALOYLCARBAZOLO TRIAZINE SERIES

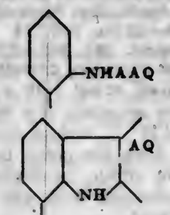
Asa Willard Joyce, Plainfield, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application December 17, 1953, Serial No. 398,876
18 Claims. (Cl. 260—249)

1. Compounds of the formula



in which AAQ is an alpha-anthraquinonyl radical and X is a member of the group consisting of



where AAQ has the same meaning as above and [AQ is an anthraquinone radical linked to the NH in an alpha position.

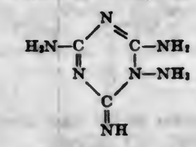
2,729,639

AMINO-ISO-MELAMINE

John J. Roemer, Tamaqua, Pa., and Donald W. Kaiser, Hamden, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application May 9, 1955, Serial No. 507,136
6 Claims. (Cl. 260—249.6)

1. Amino-iso-melamine, having the formula



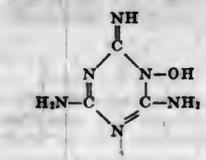
2,729,640

HYDROXY-ISO-MELAMINE

Donald W. Kaiser, Hamden, Conn., and John J. Roemer, Tamaqua, Pa., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application May 9, 1955, Serial No. 507,140
5 Claims. (Cl. 260—249.6)

1. Hydroxy-iso-melamine having the formula:



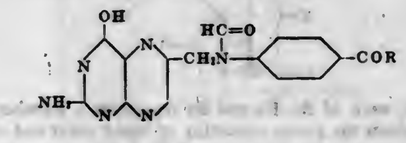
2,729,641

TETRAHYDROFORMYLPTERINS AND PREPARATION OF THE SAME

John A. Brockman, Jr., Pearl River, N. Y., and Barbara Roth, Middlesex Borough, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

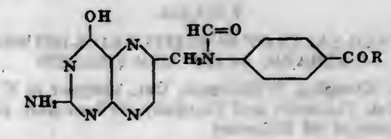
No Drawing. Application April 29, 1950, Serial No. 159,151
8 Claims. (Cl. 260—251.5)

1. Compounds of the group consisting of the tetrahydro form of compounds having the structure:



in which —COR is a member of the group consisting of carboxylic acid, carbonylaspartic acid, carbonylglutamic acid, carbonylglutamylglutamic acid, carbonylglutamylglutamylglutamic acid radicals and the cationic salts thereof.

3. A process of preparing the tetrahydro form of compounds having the structure:



in which COR is a member of the group consisting of carboxylic acid, carbonylaspartic acid, carbonylglutamic acid, carbonylglutamylglutamic acid, carbonylglutamylglutamylglutamic acid radicals which comprises subjecting said compounds to the action of hydrogen until two moles of hydrogen have been absorbed.

2,729,642

WATER SOLUBLE SALTS OF 8-(PARA-AMINOBENZYL) CAFFEINE AND METHOD FOR THEIR PREPARATION

Raymond Merritt Burgison, Baltimore, Md., assignor, by mesne assignments, to The Chattanooga Medicine Company, Chattanooga, Tenn., a corporation of Tennessee

No Drawing. Application August 13, 1954, Serial No. 449,793
5 Claims. (Cl. 260—256)

1. A water soluble, non-toxic acid salt of 8-(para-aminobenzyl) caffeine.

5. The method of making a water soluble salt of 8-(para-aminobenzyl) caffeine, which comprises reacting 8-(para-aminobenzyl) theophylline with acetic anhydride, salting out the resulting 8-(para-acetylaminobenzyl) theophylline, recovering the latter compound and suspending the same in water, reacting said suspended latter compound with di-methyl sulfate in the presence of an alkali to effect the formation and precipitation of 8-(para-acetylaminobenzyl) caffeine, deacetylating said last mentioned compound to form the corresponding 8-(para-aminobenzyl) caffeine and reacting the same with an acid to form a soluble salt thereof.

2,729,643

1,3-DISUBSTITUTED AND 1,3,8-TRISUBSTITUTED-7-CARBOXAMIDO XANTHINES

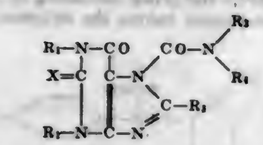
Willy Stoll and Erich Schmid, Basel, Switzerland, assignors to the Swiss firm J. R. Geigy A.-G., Basel, Switzerland

No Drawing. Application January 10, 1955, Serial No. 480,991

Claims priority, application Switzerland January 27, 1954

6 Claims. (Cl. 260—256)

1. Xanthine derivatives corresponding to the formula:



wherein each of R_1, R_2 and R_3 represents a member selected from the group consisting of lower alkyl and allyl, R_4 represents a member selected from the group consisting of hydrogen and lower alkyl, R_3 and R_4 together with the nitrogen atom represent a member selected from the group consisting of an alkylene imino radical with 5 to 6 ring members and the morpholino radical, R_5 represents a member selected from the group consisting of hydrogen and lower alkyl, and X represents a member selected from the group consisting of oxygen and sulphur.

2,729,644

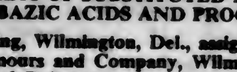
INNER SALTS OF SUBSTITUTED 2-DITHIO-CARBAZIC ACIDS AND PROCESS

Hein L. Klopping, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application September 8, 1952, Serial No. 308,528

5 Claims. (Cl. 260—294.8)

1. A compound of the group consisting of inner salts of the formula



and hydrates of said salts, where Q is a member of the class consisting of tri(lower alkyl)ammonium and pyridinium groups, and R and R_1 are selected from the class consisting of hydrogen and alkyl.

2,729,645

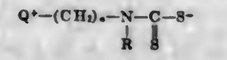
1-[2-(DITHIOCARBOXYAMINO)POLYMETHYLENE] QUATERNARY AMMONIUM INNER SALTS

Hein L. Klopping, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application September 8, 1952, Serial No. 308,529

6 Claims. (Cl. 260—294.8)

1. A compound of the group consisting of inner salts of the formula



and hydrates of said salts, where Q is a member of the class consisting of tri(lower alkyl)ammonium and pyridinium groups, R is a member of the group consisting of hydrogen and lower alkyl, and *n* is an integer of from 1 to 3.

2,729,646

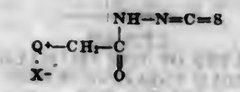
2-THIONOCARBONYLHYDRAZIDES OF (CARBOXYMETHYL)QUATERNARY AMMONIUM SALTS AND METHOD

Hein L. Klopping, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application September 8, 1952, Serial No. 308,530

6 Claims. (Cl. 260—294.8)

1. A compound having the formula



where Q^+ is a quaternary ammonium radical of the class consisting of tri (lower alkyl) ammonium and pyridinium groups, and X is a halogen of the group consisting of chlorine and bromine, the nitrogen atom of the quaternary ammonium radical being linked directly to the carbon of the methylene group and also to halogen.

2,729,647

PROCESS FOR PREPARING CITRAZINIC ACID

Abraham Bavley, Brooklyn, and Edgar K. Hamilton, Merrick, N. Y., assignors to Chas. Pfizer & Co., Inc., Brooklyn, N. Y., a corporation of Delaware

No Drawing. Application September 20, 1952, Serial No. 310,734

5 Claims. (Cl. 260—295)

1. In a process for preparing citrazinic acid, the steps of reacting in a closed vessel with a molar excess of concentrated aqueous ammonia at a temperature within the range 125° to 175° C. and at autogenous pressure a material selected from the group consisting of citric acid and ammonium citrate, acidifying resulting solution to precipitate citrazinic acid, and recovering citrazinic acid so precipitated.

2,729,648

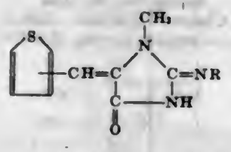
5-THENYLIDENE DERIVATIVES OF CREATININE

Kurt J. Rorig, Evanston, Ill., assignor to G. D. Searle & Co., Chicago, Ill., a corporation of Illinois

No Drawing. Application June 17, 1954, Serial No. 437,561

5 Claims. (Cl. 260—309.7)

1. A compound of the structural formula



wherein R is a member of the class consisting of hydrogen and (lower alkyl)-CO radicals.

2,729,649

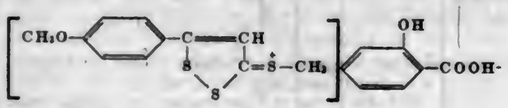
METHOD OF PREPARING SULFONIUM COMPOUNDS

Bruno Böttcher and Fritz L. Bauer, Kronach, Franconia, Germany

No Drawing. Application April 13, 1951, Serial No. 220,978

1 Claim. (Cl. 260—327)

A new complex sulfonium compound of the formula



2,729,650

PRODUCTION OF DIALDEHYDES AND DERIVATIVES THEREOF

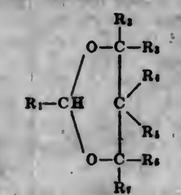
John Habeshaw, Clackmannanshire, Scotland, and Charles John Gooch, Shepperton, Middlesex, England, assignors to The British Petroleum Company Limited

No Drawing. Application March 10, 1951, Serial No. 215,023

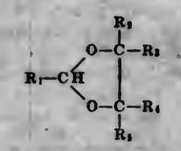
Claims priority, application Great Britain March 31, 1950

10 Claims. (Cl. 260—340.7)

1. A process for the production of derivatives of dialdehydic organic compounds comprising reacting a cyclic acetal selected from the group consisting of a compound having the formulas



and



wherein R_1 is a radical selected from the group consisting of aliphatic and cycloaliphatic radicals, said R_1 containing at least one carbon to carbon double bond; and wherein R_2, R_3, R_4, R_5, R_6 and R_7 are elements selected, from the group consisting of hydrogen, aliphatic radicals, cycloaliphatic radicals and aryl radicals, with carbon monoxide and hydrogen at a temperature in the range of about 120–200° C., and at a pressure of about 50 to about 300 atmospheres to produce a mono-acetal of a dialdehyde.

2,729,651

PROCESS FOR THE PRODUCTION OF ALIPHATIC OXYGEN COMPOUNDS BY CARBONYLATION OF ALCOHOLS, ETHERS, AND ESTERS

Walter Reppe, Ludwigshafen (Rhine), Herbert Friederich, Worms, Nikolaus von Kutepow, Karlsruhe-Rueppurr, and Walter Mersch, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application June 9, 1953, Serial No. 360,616

Claims priority, application Germany June 11, 1952

24 Claims. (Cl. 260—343.5)

1. In the production of aliphatic oxygen compounds by the action of carbon monoxide on oxygen compounds selected from the group consisting of saturated lower molecular aliphatic alcohols, their ethers and their aliphatic monocarboxylic acid esters at elevated temperatures and under superatmospheric pressure in the presence of nickel compounds, the step which comprises using as the catalyst a complex compound of a nickel halide with an organic halide selected from the group consisting of tertiary and quaternary ammonium and phosphonium halides.

2,729,652

PRODUCTION OF DEHYDRACETIC ACID

Herbert Nordt, Leverkusen-Bayerwerk, Germany, assignor to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application April 22, 1954, Serial No. 425,037

Claims priority, application Germany April 24, 1953

4 Claims. (Cl. 260—343.5)

1. In the process for the production of dehydracetic acid wherein diketene is polymerized in the presence of a basic polymerization catalyst, the improvement which comprises carrying out the polymerization in acetic anhydride at temperatures within the range of about 0° C. to about 30° C.

2,729,653

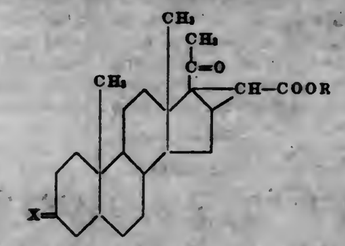
16,17-CARBOXYMETHYLENE PREGNENES AND ESTERS THEREOF

George P. Mueller, Park Ridge, Ill., assignor to G. D. Searle & Co., Chicago, Ill., a corporation of Illinois

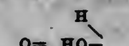
No Drawing. Application September 24, 1954, Serial No. 458,270

9 Claims. (Cl. 260—397.1)

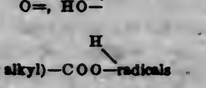
1. A pregnene of the structural formula



wherein the carbon atom in position 5 is joined to one of the carbon atoms in position 4 and 6 by a double bond and to the other by a single bond, wherein X= is a member of the class consisting of



and



and wherein R is a member of the class consisting of hydrogen, lower alkyl radicals and radicals of the structural formula (lower alkylene)-N-(lower alkyl)$_2$.

2,729,654

10-HYDROXY-3-KETOSTEROIDS

Frank B. Colton, Chicago, Ill., assignor to G. D. Searle & Co., Chicago, Ill., a corporation of Illinois

No Drawing. Application May 19, 1954, Serial No. 430,977

4 Claims. (Cl. 260—397.4)

1. 10-hydroxy-4-estren-3-one substituted in the 17-position by a member of the class consisting of oxo, hydroxy and acetyl radicals.

2,729,655

PRODUCTION OF STEROLS

Sidney E. Miller, St. Paul, and Charles Manly Berry, Minneapolis, Minn., assignors to General Mills, Inc., a corporation of Delaware

No Drawing. Application April 28, 1952, Serial No. 284,821

10 Claims. (Cl. 260—397.25)

1. A process of recovering sterols which comprises saponifying a fatty material containing unsaponifiables including sterols, said material being selected from the group consisting of fatty acid distillation residues and deodorizer sludges, acidifying the saponification reaction mixture, esterifying the resultant fatty acids with a lower aliphatic alcohol and recovering the sterols from the esterification reaction mixture, directly without saponification of the lower aliphatic alcohol esters.

2,729,656

ISOLATION OF STEROLS

Charles Manly Berry, Minneapolis, and Sidney E. Miller, St. Paul, Minn., assignors to General Mills, Inc., a corporation of Delaware

No Drawing. Application April 28, 1952, Serial No. 284,822

9 Claims. (Cl. 260—397.25)

1. Process of recovering sterols which comprises saponifying a fatty material containing unsaponifiables including sterols with a substantially anhydrous alcoholic alkali, crystallizing alkali metal soaps and sterols from the substantially anhydrous saponification reaction mixture, separating the crystallized soap and sterols and extracting the crystallized soap and sterols with a solvent selected from the group consisting of acetone and ethylene dichloride, and separating the extract from the residual soap, the crystallized soap being maintained substantially anhydrous throughout the separation and extraction.

2,729,657

PREPARATION OF FATTY ACYL DERIVATIVES OF AMINO ACIDS

Irving Joseph Krems, Fort Lee, N. J., assignor to Colgate-Palmolive Company, Jersey City, N. J., a corporation of Delaware

No Drawing. Application July 19, 1951, Serial No. 237,691

10 Claims. (Cl. 260—404)

1. A process for the preparation of a higher fatty acid amide of a lower aliphatic amino monocarboxylic acid which comprises condensing higher fatty acid halide with a salt of a lower aliphatic amino monocarboxylic acid having a reactive hydrogen atom attached to the free amino group to form a salt of the higher fatty acid amide of said amino acid as a condensation product in an aqueous medium while maintaining the pH of the reaction mixture between 9 to 12.5 until the substantial completion of the reaction and in the presence of a hydrogen halide acceptor for the hydrogen halide liberated in the condensation reaction, acidifying the resulting reaction mixture to a pH from about 2 to 4.5 to convert said condensation product to the higher fatty acid amide of said amino acid, and recovering the latter compound.

2,729,658

POLYMERIZATION PROCESS USING BORON FLUORIDE

Clarence B. Croston, Howard M. Teeter, and John C. Cowan, Peoria, Ill., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application December 17, 1951, Serial No. 262,164

1 Claim. (Cl. 260—407)

(Granted under Title 35, U. S. Code (1952), sec. 266)

A process comprising subjecting a fatty acid material selected from the group consisting of long-chain, unsaturated, aliphatic carboxylic acids, and mixtures of such acids, to the action of boron trifluoride at a temperature of about from 140° C. to 250° C. until polymerization is effected, said boron trifluoride being present in an amount of from 0.1 percent to 6 percent based on the weight of the fatty acid material, separating boron trifluoride from the reaction mixture, and subsequently separating unpolymerized material from the reaction product by distillation.

2,729,659

LARD OIL AND OLEO OIL

Waldo C. Ault and Steward G. Morris, Philadelphia, Pa., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application June 17, 1952, Serial No. 294,111

2 Claims. (Cl. 260—409)

(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A process for the preparation of relatively low titer glyceride fractions from a material selected from the class consisting of animal fats and oils, comprising selectively hydrogenating said material at a temperature of about from 300° to 350° F. to reduce substantially all of the polyunsaturated component fatty acids contained therein to either saturated or monoethenoic components without significantly affecting the monoethenoic component fatty acids originally present therein and then separating the low titer glyceride fractions from the less soluble, higher titer glyceride fractions of the glyceride mixture so obtained by causing the crystallization of the latter fractions as a solid phase and recovering the low titer components as a liquid, said low titer components having increased resistance to rancidity with resulting improved resistance to the development of undesirable odors and gummy, sticky polymerization products, and having also, improved resistance to oil and flavor deterioration.

2,729,660

PHOSPHITE ESTERS AS ESTERIFICATION CATALYSTS

Stuart A. Harrison, Minneapolis, Minn., assignor to General Mills, Inc., a corporation of Delaware

No Drawing. Application January 21, 1953, Serial No. 332,555

4 Claims. (Cl. 260—410.6)

1. Process of esterifying an acid selected from the group consisting of higher fatty acids and rosin acids with an aliphatic alcohol which comprises heating the alcohol and the acid in the presence of a phosphite ester, said ester being selected from the group consisting of aliphatic and aromatic esters.

2,729,661

MEAL RECYCLING SOLVENT EXTRACTION PROCESS

Joseph Pominski and Henry L. E. Vix, New Orleans, La., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application August 23, 1954, Serial No. 451,722

4 Claims. (Cl. 260—412.4)

(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A process of solvent extracting a vegetable oil bearing material comprising: forming a mixture of oil-containing particles of the vegetable oil bearing material with from about 15% to 45% by weight of desolventized and dried, solvent extracted particles of a substantially oil-free meal produced by heating solvent wet solvent extracted particles of the same oil bearing material while they are wet with solvent and have a moisture content of from about 8 to 20% on a fat free basis to a temperature of from about 145 to 230° F., in a dehydrative atmosphere, until the particles are substantially free of solvent and have a moisture content of from about 5.0 to 12.0%; and solvent extracting the mixture to produce a vegetable oil and a meal.

2,729,662

METHOD FOR CONTINUOUS REFINING OF FATTY OILS

Ivar Axel Afzelius, Bromma, Sweden, assignor to Aktiebolaget Separator, Stockholm, Sweden, a corporation of Sweden

Application June 10, 1952, Serial No. 292,650
Claims priority, application Sweden June 20, 1951
3 Claims. (Cl. 260—425)

1. In the continuous refining of fatty oils by treating the oil with an alkali refining agent in two stages of alkali treatment and in each stage separating the oil from the resulting soap, the improvement which comprises blowing steam through the oil from the first stage separation during the second alkali-treatment stage.

2,729,663

FLUORINE AND SULFUR COMPOUNDS

Earl L. Muetterties, Hockessin, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application August 20, 1954, Serial No. 451,301
5 Claims. (Cl. 260—431)

1. Process of obtaining a trifluoromethyl compound comprising reacting carbon disulfide and mercuric fluoride at temperature within the range from 100° C. to about 500° C.

2. The process of claim 1 in which the reaction temperature is from about 300° C. to about 500° C. and the major product is bistrifluoromethyl disulfide.

3. The process of claim 1 in which the reaction temperature is from about 100° C. to about 300° C. and the major product is bis(trifluoromethylthio)mercury.

2,729,664

HYDROCARBON SYNTHESIS CATALYST

Isidor Kirshenbaum, Union, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Continuation of application Serial No. 792,851, December 19, 1947. This application August 2, 1951, Serial No. 240,031
1 Claim. (Cl. 260—449.6)

A method of synthesizing normally liquid hydrocarbons and oxygenated hydrocarbons by a reaction between carbon monoxide and hydrogen which comprises contacting the said carbon monoxide and hydrogen at synthesis conditions of temperature, pressure and contact time with a bed of fluidized catalyst consisting essentially of a reduced alpha ferric oxide catalyst associated with approximately 1 weight per cent of caesium fluoride, based on the total weight of the catalyst, and recovering from the reaction a product containing normally liquid hydrocarbons and oxygenated hydrocarbons.

2,729,665

DICARBOXYLIC ACIDS AND THEIR DERIVATIVES AND PRODUCTION OF THE SAME FROM PARAFFIN WAX

John P. Buckmann, Yorba Linda, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California

No Drawing. Application March 17, 1952, Serial No. 277,082
18 Claims. (Cl. 260—451)

1. A method for the treatment of paraffin wax to produce a mixture of dicarboxylic acids which comprises oxidizing a refined paraffin wax, having between about 15 and about 50 carbon atoms per molecule and a melting point between about 90° F. and about 200° F. by blowing said wax with a gas containing free oxygen at a pressure between normal atmospheric pressure and 500 pounds per square inch gage and a temperature between about 210° F. and about 260° F. until the oxidized product has an acid number between about 490 and about 575 mg. KOH/g., the rate of said blowing being initially between 0.75 and 1.25 standard cubic feet per minute per 100 pounds of wax and being increased to between 1.5 and 2.0 standard cubic feet at the end of the period of oxidation.

17. A method according to claim 1 in which said produced mixture of dicarboxylic acids is esterified with a saturated aliphatic alcohol to produce the corresponding ester.

2,729,666

ALKYL-ARYL DIISOCYANATES WITH REDUCED ACTIVITY

Otto Stallmann, Bridgeton, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application July 21, 1952, Serial No. 300,128
2 Claims. (Cl. 260—453)

1. An organic diisocyanate having one of its —NCO groups attached to an aromatic radical and its other —NCO group attached to a carbon bearing two lower aliphatic hydrocarbon groups which may be joined together to form a cycloaliphatic ring with the attached carbon, the said carbon being attached to the said aromatic radical.

2,729,667

PREPARATION OF UNSYMMETRICAL DIALKYL BIS(DIALKYLAMIDO)PYROPHOSPHATES

George A. Saul, Nitro, W. Va., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application November 14, 1951, Serial No. 256,365
5 Claims. (Cl. 260—461)

1. The process of making an unsymmetrical dialkyl bis(dialkylamido)pyrophosphate which comprises reacting a dialkyl halophosphate and an alkyl bis(dialkylamido)phosphate.

2,729,668

PROCESS FOR MAKING DIETHOXYPHOSPHORYL TETRAMETHYLDIAMIDOTHIOPHOSPHATE

George A. Saul, Nitro, W. Va., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application May 3, 1954, Serial No. 427,351
1 Claim. (Cl. 260—461)

The method of making diethoxyphosphoryl tetramethyldiamidothiophosphate which comprises heating together substantially equimolecular proportions of diethoxyphosphoryl chloride and a short chain alkyl ester of bis(dimethylamido)thiophosphate.

2,729,669

CYANOACYLALKENYLUREAS

Viktor Papesch, Morton Grove, and Elmer F. Schroeder, Chicago, Ill., assignors to G. D. Searle & Co., Chicago, Ill., a corporation of Illinois

No Drawing. Application October 31, 1951, Serial No. 254,196
7 Claims. (Cl. 260—465.4)

1. A nitrile of the structural formula

R—NH—CO—NR′—CO—A—CN

wherein A is a lower alkylene radical, and one of the radicals R and R′ is a lower alkyl radical containing less than 4 carbon atoms and the other a lower alkenyl radical containing more than 2 and less than 5 carbon atoms.

2,729,670

MANUFACTURE OF ACRYLONITRILE

Paulus H. De Bruin, Geleen, Netherlands, assignor to Stamicarbon N. V., Heerlen, Netherlands

No Drawing. Application March 16, 1953, Serial No. 342,725
Claims priority, application Netherlands April 10, 1952
8 Claims. (Cl. 260—465.9)

1. In the production of acrylonitrile by a process involving the dehydration of ethylene cyanohydrin at a temperature below 250° C. in the presence of an alkali metal formate catalyst, the improvement which comprises effecting the dehydration using, as the catalyst, a mixture of alkali metal formates which is liquid at the reaction temperature.

2,729,671

METHOD OF INHIBITING POLYMERIZATION AND PRODUCT

William G. Bickford and Charles H. Mack, New Orleans, La., and Richard N. Moore, Lake City, Fla., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application April 22, 1952, Serial No. 283,746
2 Claims. (Cl. 260—486)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A vinyl-type monomer normally subject to polymerization via the ethylenic linkages containing as a polymerization retarder a minor amount of a compound selected from the group consisting of norconidendrin, alpha-conidendrol and beta-conidendrol.

2,729,672

NON-HYGROSCOPIC CHOLINE SALTS

Francis Marc Callahan, South Nyack, N. Y., and John Joseph Swanenburg, West Chester, Pa., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application July 28, 1953, Serial No. 370,875
1 Claim. (Cl. 260—501)

Monocholine 1,2,3,4-butanetetracarboxylate.

2,729,673

CARBOXYLATION OF AROMATIC COMPOUNDS

William W. Prichard, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 30, 1951, Serial No. 259,309
7 Claims. (Cl. 260—515)

1. Process for carboxylation of aromatic carbocyclic compounds which comprises reacting in the presence of catalytic amounts of nickel carbonyl under substantially anhydrous conditions at a temperature up to about 450° and above 325° C. in an atmosphere of carbon monoxide, an alkanoic acid of 2 to 3 carbons, inclusive, and an aromatic carbocyclic compound selected from the group consisting of unsubstituted aromatic hydrocarbons and alkyl-, alkoxy-, carboxy-, carbalkoxy-, and carbonamido-substituted aromatic hydrocarbons having at most one substituent other than alkyl, said substituent being attached directly to annular carbon of an aromatic ring.

2,729,674

DECARBOXYLATION OF TRIMELLITIC ACID

Art C. McKinnis, Long Beach, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California

No Drawing. Application February 8, 1954, Serial No. 408,997
11 Claims. (Cl. 260—522)

1. A method for decarboxylating trimellitic acid to form isophthalic acid which comprises heating trimellitic acid at a temperature between about 150° and 400° C. in the presence of water and a significant proportion of alkali which is less than stoichiometric but sufficient to increase materially the ratio of isophthalic acid/terephthalic acid formed over that formed in the absence of alkali, and recovering the resulting isophthalic acid.

2,729,675

METHOD OF PREPARING MERCAPTOSUCCINIC ACID

Frank M. Cowen, Norwalk, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application December 11, 1952, Serial No. 325,440
4 Claims. (Cl. 260—537)

1. A method for the preparation of mercaptosuccinic acid which includes the step of heating an O,O-dialkyl dithiophosphatosuccinic anhydride in the presence of water at a temperature sufficient to cause evolution of hydrogen sulfide.

2,729,676

PREPARATION OF β,β'-DISELENODIPROPIONIC ACID

Donald L. MacPeek, Charleston, W. Va., and William H. Rauscher, Brunswick, N. Y., assignors to the United States of America as represented by the Secretary of the Army

No Drawing. Application April 29, 1953, Serial No. 352,053
1 Claim. (Cl. 260—537)

A method of preparing β,β'-diselenodipropionic acid comprising slowly reacting sodium selenide with beta propionolactone in aqueous solution at a temperature between 5° C. and —5° C. in an oxygen free atmosphere, and acidifying said reaction solution to form said diselenodipropionic acid.

2,729,677

PROCESS FOR THE MANUFACTURE OF SUBSTITUTED UREAS

Everett E. Gilbert and George J. Sorma, Flushing, N. Y., assignors to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

Application March 16, 1954, Serial No. 416,538
8 Claims. (Cl. 260—553)

1. A process for the production of unsymmetrically substituted ureas which comprises maintaining a mixture of urea and a primary cyclic hydrocarbon amine wherein the cyclic hydrocarbon radical of said amine is selected from the group consisting of phenyl, alkyl-phenyl, aralkyl-phenyl, di-phenyl, cyclohexyl, alkyl-cyclohexyl, and their halogen substitution products for a sufficient length of time to produce symmetrically substituted cyclic hydrocarbon urea at a temperature between above about 100° C. and below the temperature at which substantial decomposition of the symmetrically substituted hydrocarbon urea occurs; admixing an alkyl amine having hydrogen and at least 1 and not more than 2 alkyl radicals attached to the nitrogen of said amine and each said alkyl radical having no more than 6 carbon atoms with the symmetrically substituted cyclic hydrocarbon urea; maintaining the mixture for a sufficient length of time to effect conversion of the symmetrically substituted cyclic hydrocarbon urea to an unsymmetrically substituted urea having a cyclic hydrocarbon radical attached to one nitrogen and at least one alkyl radical attached to the other nitrogen of the urea at a temperature between above about 150° C. and below temperature at which substantial decomposition of the unsymmetrically substituted urea occurs and recovering said unsymmetrically substituted urea.

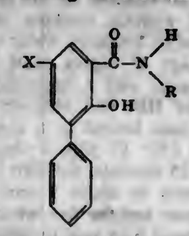
2,729,678

PHENYL HALO-SUBSTITUTED SALICYLAMIDE

Melville Sahyun, John A. Faust, and Leonard H. Jules, Santa Barbara, Calif., assignors to Sahyun Laboratories, Santa Barbara, Calif., a corporation of California

No Drawing. Application February 12, 1953, Serial No. 336,645
5 Claims. (Cl. 260—559)

1. A compound having the formula:



wherein X is selected from the group consisting of chlorine, bromine and iodine, and wherein R is selected from the group consisting of hydrogen and hydroxyl-lower-alkyl containing up to eight carbon atoms.

2,729,679

PREPARATION OF METHYLENIMINES

John Lynde Anderson, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 19, 1951, Serial No. 257,180
5 Claims. (Cl. 260—566)

1. Process of preparing a methylenimine of the formula $R_1R_2CHN{=}CH_2$ in which R_1 and R_2 are from the group consisting of hydrogen and hydrocarbon radicals of 1 to 7 carbons, inclusive, the sum of the carbons in R_1 and R_2 not exceeding 7, said process comprising pyrolyzing a hexahydro-trihydrocarbon substituted-s-triazine wherein each ring nitrogen is attached to an exocyclic substituent of the formula R_1R_2HC— in which R_1 and R_2 are from the group consisting of hydrogen and hydrocarbon radicals of 1 to 7 carbons, inclusive, the sum of the carbons in R_1 and R_2 not exceeding 7, at a temperature of at least 300° C. and isolating the resulting methylenimine substantially as formed.

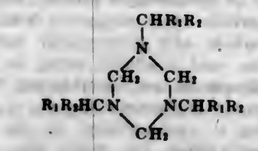
2,729,680

PREPARATION OF METHYLENIMINES

John Lynde Anderson, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 14, 1952, Serial No. 320,623
6 Claims. (Cl. 260—566)

1. Process of preparing a methylenimine of the formula $R_1R_2CHN{=}CH_2$ from a triazine of the formula



wherein R_1 and R_2 are from the group consisting of hydrogen and hydrocarbon radicals and oxygen interrupted hydrocarbon radicals, the sum of the carbons in R_1 plus R_2 not exceeding 7, which comprises contacting the triazine at a temperature of 0° C. to 300° C. under anhydrous conditions with a strong acid catalyst substantially non-volatile at the temperature employed, and isolating the resulting monomolecular methylenimine substantially as formed.

2,729,681

PREPARATION OF α-DICHLOROMETHYL-BENZHYDROLS

Harold F. Wilson, Moorestown, N. J., and W E Craig, Philadelphia, Pa., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application March 8, 1954, Serial No. 414,865
4 Claims. (Cl. 260—618)

4. A process for preparing α-dichloromethyldichlorobenzhydrol which comprises reacting 1,1-bis(chlorophenyl)-2,2-dichloroethane and chromium trioxide in acetic acid in the presence of a strong inorganic acid.

2,729,682

PREPARATION OF ISOPROPANOL OF IMPROVED ODOR QUALITY

Henry O. Mottern, Bloomfield, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application May 20, 1950, Serial No. 163,319
4 Claims. (Cl. 260—641)

1. In a process of producing isopropanol by hydration of a propylene hydrocarbon feed which contains impurities normally giving rise to mercaptan odor and also contains less than 0.2 percent of C_4 to C_6 mono-olefinic hydrocarbons, the improvement of minimizing mercaptan odor which comprises adding to said propylene feed enough of a C_4 to C_6 mono-olefinic hydrocarbon to produce a modified propylene feed containing 0.5 to 5 weight percent of said C_4 to C_6 mono-olefinic hydrocarbon, absorbing said modified propylene feed in sulfuric acid of 60 to 95 weight percent strength to produce an acid extract, hydrolyzing the extract to produce crude isopropanol containing low boiling impurities and simultaneously reacting the C_4–C_6 olefin with the odor-causing impurities to convert them to high boiling impurities boiling as high as 250–300° C., introducing the crude isopropanol into a point near the mid-section of a distillation zone, introducing water to an upper portion of the distillation zone in amounts sufficient to maintain a water concentration of 70 to 99 mol percent in the liquid phase in the distillation zone, applying heat to the distillation zone to distill therefrom vapors which rise countercurrently to the downflowing aqueous reflux, removing overhead from the distillation zone low-boiling and high-boiling impurities including impurities normally giving rise to mercaptan odor and removing from the bottom of said distillation zone a dilute aqueous isopropanol substantially free of mercaptan odor.

2,729,683

DEHYDROCHLORINATION OF BENZENE HEXACHLORIDE

Alfred J. Kolka, Birmingham, and Harold D. Orloff, Detroit, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application December 5, 1951, Serial No. 260,105
7 Claims. (Cl. 260—648)

1. A process for the manufacture of pentachlorocyclohexene and hexachlorocyclohexene comprising subjecting a mixture consisting essentially of gamma benzene hexachloride, delta benzene hexachloride and heptachlorocyclohexane to a temperature of between about 150 and

500° C. for not more than about 30 minutes and recovering the pentachlorocyclohexene and hexachlorocyclohexene.

2,729,684

TREATMENT OF BENZENE HEXACHLORIDE

William T. Donaldson, Aiken, S. C., and James C. Hetrick, Detroit, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application November 17, 1952, Serial No. 321,054

2 Claims. (Cl. 260—648)

1. A process for the manufacture of benzene hexachloride, comprising chlorinating benzene in the presence of actinic light, the benzene being employed in excess of stoichiometric quantities whereby the benzene hexachloride is obtained in benzene solution, removing a quantity of the benzene sufficient to give a benzene hexachloride to benzene weight ratio between about 3:1 and 6:1 to effect crystallization of a portion of the benzene hexachloride, separating the liquid and solid phases, removing further quantities of the benzene from said liquid phase sufficient to give a benzene hexachloride to benzene weight ratio of between about 6:1 to 10:1, and adding to the solution between about 10 and about 30 percent by weight of a solvent depressant selected from the group consisting of light hydrocarbon fractions and phenols to effect further crystallization of the benzene hexachloride, and recovering the latter crystallized fraction, the latter fraction containing an increased concentration of the gamma isomer.

2,729,685

PRODUCTION OF HIGH PURITY 1,2,4,5-TETRACHLOROBENZENE

Paul E. Weimer, Baton Rouge, La., and Aubrey L. Hanna, Pensacola, Fla., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application September 17, 1952, Serial No. 310,111

3 Claims. (Cl. 260—650)

1. In a process for the production of 1,2,4,5-tetrachlorobenzene of extremely high purity in which lower chlorinated benzenes are chlorinated and thereafter an impure 1,2,4,5-tetrachlorobenzene is crystallized, the novel steps comprising washing the 1,2,4,5-tetrachlorobenzene of less than 95 percent purity at a temperature between about 0° and 50° C. with a lower aliphatic monohydric alcohol and separating wash liquid from residual solids.

2,729,686

AROMATIZATION OF ORGANIC CHLORINE COMPOUNDS

David D. Humphreys, Baton Rouge, La., assignor to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application November 12, 1952, Serial No. 320,139

3 Claims. (Cl. 260—650)

1. A process for aromatizing benzene hexachloride to produce trichlorobenzene having an enhanced proportion of 1,2,4-trichlorobenzene comprising heating said benzene hexachloride to a temperature of at least 180° C. in the presence of silicified skeletons of diatoms as a catalyst, said catalyst being present in a concentration of at least 0.01 percent by weight, based upon the weight of said benzene hexachloride.

2,729,687

PROCESS FOR BROMINATING HALOGENATED METHANES

John D. Sterling, Glassboro, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 6, 1951, Serial No. 260,319

10 Claims. (Cl. 260—653)

1. The process of brominating a halogenated methane of the formula CClXYZ wherein X represents an element of the group consisting of H, Cl and Br and each of Y and Z represents an element of the group consisting of H, Cl, Br and F wherein chlorine in the halogenated methane is replaced by bromine, which consists essentially of passing a mixture of vapors of at least one of such halogenated methanes and a brominating agent of the group consisting of HBr and mixtures of HBr and Br_2 through an inert tube heated to a temperature of from 500° C. to about 650° C. with a contact time of from about 2 to about 25 seconds, the HBr being in a ratio of from about 0.5 mol to about 3 mol for each mol of halogenated methane and the Br_2, when present, being in a ratio of from about 0.25 mol to about 3 mol for each mol of halogenated methane, and then collecting and separating the reaction products.

2,729,688

PRODUCTION OF NAPHTHALENE

James A. Anderson, Jr., and Edward J. Hoffmann, Baytown, Tex., assignors, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware

Application October 26, 1953, Serial No. 388,140

5 Claims. (Cl. 260—668)

1. A method for producing naphthalene which comprises subjecting a tetralin-containing hydrocarbon fraction boiling in the range from about 350° to about 650° F. in a reaction zone free of active catalytic material to a temperature in the range between about 1200° and about 1400° F. at a pressure in the range between about 400 and about 1000 pounds per square inch gauge for a time in the range between about 2 and about 120 seconds in the presence of hydrogen in an amount in the range between 4000 and 10,000 standard cubic feet per barrel of said hydrocarbon fraction to produce a product containing naphthalene, and recovering said product.

2,729,689

PRODUCTION OF CARBIDE PRODUCT AND METHYLACETYLENE

Edward R. Blanchard, Summit, N. J., and Francis E. McKenna, New York, N. Y., assignors to Air Reduction Company, Incorporated, New York, N. Y., a corporation of New York

No Drawing. Application May 27, 1952, Serial No. 290,319

8 Claims. (Cl. 260—678)

1. A process of producing a product containing magnesium sesquicarbide which comprises heating and reacting calcium carbide and substantially anhydrous magnesium chloride, said reactants being in finely-divided state and in intimate contact, carrying out the reaction in an inert atmosphere, and maintaining the reaction mixture at a temperature at least sufficient for the formation of magnesium sesquicarbide but below that which causes any substantial melting of the magnesium chloride and any substantial decomposition of the magnesium sesquicarbide whereby said calcium carbide and said magnesium chloride are reacted in a solid state.

7. A process in accordance with claim 1 wherein the magnesium sesquicarbide product formed is treated with an agent capable of generating methylacetylene therefrom.

2,729,690

SYNERGISTIC STABILIZING COMPOSITIONS

Edgar Bradley Oldenburg, Royal Oak, Mich., assignor to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application October 26, 1951, Serial No. 253,457

7 Claims. (Cl. 260—799)

7. A composition comprising rubber stabilized by the presence of between about 0.1 and 2.0 parts per 100 parts of rubber of a synergistic antioxidant composition consisting essentially of an arylamine antioxidant, and a hydrazine, said hydrazine being present in amount between about 30 and 100 parts per 100 parts of said arylamine.

2,729,691

SYNERGISTIC STABILIZING COMPOSITIONS FOR ORGANIC MATERIALS COMPRISING A MIXTURE OF AN ARYLAMINE AND AN ALKYLENEDIAMINE

David O. De Pree, Birmingham, Mich., assignor to Ethyl Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application October 27, 1951, Serial No. 253,561

7 Claims. (Cl. 260—809)

1. A composition comprising a sulfur-vulcanizable rubber normally tending to deteriorate in the presence of oxygen, and in amount between about 0.1 and 2.0 parts per 100 parts of said rubber, a synergistic antioxidant composition consisting essentially of a naphthylamine rubber antioxidant and an alkylenediamine, said alkylenediamine being present in amount between about 30 and 100 parts per 100 parts of said naphthylamine rubber antioxidant.

ELECTRICAL

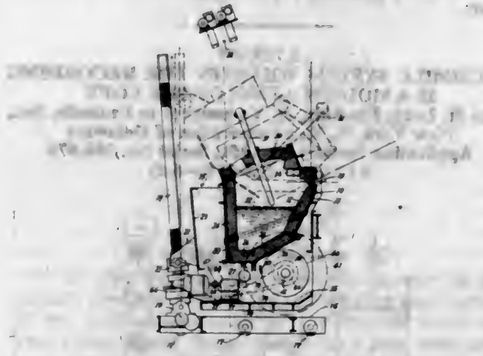
2,729,692

ROTARY FIELD STIRRING DEVICE WITH INDEPENDENTLY DRIVEN FAN

Temple W. Ratcliffe, Beaver, Pa., assignor to The Babcock & Wilcox Company, New York, N. Y., a corporation of New Jersey

Application August 14, 1952, Serial No. 304,254

5 Claims. (Cl. 13—26)



1. An inductive stirrer comprising a rotatable field-member, said field-member having a mounting shaft and a succession of peripherally disposed magnetic poles of opposite polarities; a cylindrical shroud, of non-magnetic material, surrounding said field-member; variable speed drive means for rotating said field-member at a relatively low speed; a fan rotatably mounted on said shaft adjacent an end of said field-member; and means operable to drive said fan at a relatively high speed substantially in excess of the speed of said field-member to force cooling air axially through the latter.

2,729,693

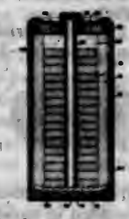
DRY CELL

James W. Waber, Chicago, Ill.

Application February 16, 1954, Serial No. 410,650

18 Claims. (Cl. 136—133)

1. A dry cell comprising a metallic cup member containing a mass of mix, an electrolyte and a carbon electrode, a closure member carried by said cup member, one of said members containing an opening, and a substantially liquid-tight hydrogen-permeable envelope completely surrounding said members.



2,729,694

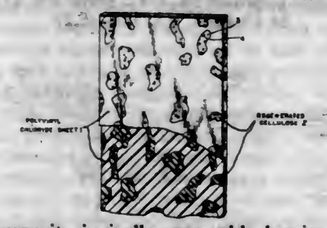
BATTERY SEPARATOR

Grenville B. Ellis, Red Bank, N. J., assignor to the United States of America as represented by the Secretary of the Army

Application September 1, 1953, Serial No. 377,991

3 Claims. (Cl. 136—145)

(Granted under Title 35, U. S. Code (1952), sec. 266)



3. A composite ionically permeable barrier to be inserted between the electrodes of primary cells comprising a porous polyvinyl chloride acting as a mechanical support, the pores of said supporting material containing a mixture of ultra micro-porous cellophane and polyvinyl alcohol of high ionic conductivity and low electric resistance.

2,729,695

ELECTRICAL CONNECTORS

Frank L. Pierce, Camp Hill, Pa., assignor to Aircraft-Marine Products, Inc., Harrisburg, Pa.

Application April 27, 1951, Serial No. 223,195

5 Claims. (Cl. 174—84)

5. A moisturetight electrical connector of a type which is to be crimped onto a plurality of insulated conductors

having uninsulated extremities including: a malleable metal cylindrical sleeve adapted to receive the insulation free portion of a conductor in each end, a plastic sleeve surrounding the metal sleeve and being of such length as to enclose the metal sleeve and a portion of the insulation of each of the conductors therein, a second malleable metal cylindrical sleeve surrounding the plastic sleeve and being



shorter than said sleeve so that a section of the plastic sleeve protrudes from each end of the second metal sleeve, whereby crimping the connector onto the conductors causes the protruding sections of the plastic sleeve to be slightly extruded with the consequent formation of a moistureproof seal between the insulation and the plastic due to the tendency of the plastic to attempt to regain its original shape.

2,729,696

THREE CONDUCTOR RIP CORD

George C. Mapelsden, Easton, and Clifford O. Hull, Stratford, Conn., assignors to General Electric Company, a corporation of New York

Application June 29, 1955, Serial No. 518,714

9 Claims. (Cl. 174—117)



7. An insulated electrical cord comprising at least two parallel conductors embedded in sheathing material, with a reduced section of sheathing material above and below one of the conductors so that said one of the conductors lies in a weakened stripping plane and is readily exposed when the reduced sections are torn open.

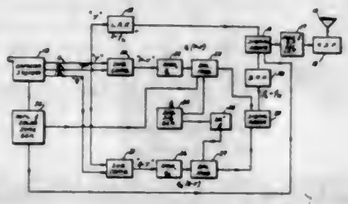
2,729,697

COLOR TELEVISION SYSTEM

John B. Chatten, Philadelphia, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania

Application February 28, 1952, Serial No. 273,929

26 Claims. (Cl. 178—5.2)



1. In a system for the transmission of intelligence representative of the chromaticity of image elements: first means for producing a first signal containing amplitude variations representative of variations in the P values of light from said image elements, said P values being substantially equal to 1.3 times the standard X values of said light minus 0.3 times the standard Z values of said light; second means for generating a second signal containing amplitude variations representative of variations in the Q values of light from said image elements, said Q values being substantially equal to the sum of 0.189 times said standard X values of said light and 0.811 times said standard Z values thereof; and means for transmitting said first and said second signals in an amplitude-ratio of substantially two-to-one.

2,729,698

ELECTRICAL FILTERS

Gordon L. Fredendall, Huntingdon Valley, Pa., assignor to Radio Corporation of America, a corporation of Delaware

Application September 22, 1954, Serial No. 457,687

9 Claims. (Cl. 178—5.4)



1. An electrical filter comprising the combination of delay line means having an input end, an output end and a central tapping point, means for applying signals to said delay line means input end, means for combining signals from said delay line means input end, output end and central tapping point to obtain an output signal which obeys a multiple bandpass characteristic, means for reversing in phase signals derived from said delay line means central tapping point, means for combining said phased reversed signals with signals from said delay line means input end and output end to obtain a second output signal obeying a second multiple bandpass characteristic substantially complementary to said first-named multiple bandpass characteristics, a bandpass filter, means for applying said second output signal to said bandpass filter, and means for combining said first-named output signal with the output of said bandpass filter.

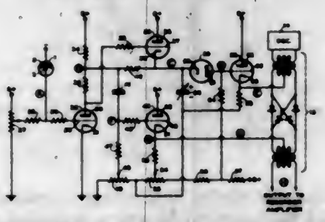
2,729,699

FACSIMILE SYSTEM WHEREIN THE RECORDING IS A MODIFICATION OF THE COPY

John H. Long, Flushing, N. Y., assignor to Faximile, Inc., New York, N. Y., a corporation of Delaware

Application January 18, 1951, Serial No. 206,676

4 Claims. (Cl. 178—6.6)



1. In a facsimile system, a source of rectangular electrical signal pulses derived from the point by point and line by line scanning of graphic copy, a differentiator and limiter circuit means receptive to pulses from said source and operative to convert said pulses to pulses of fixed duration, a signal transmission circuit means also receptive to the pulses from said source and operative to produce pulses of shortened duration and a balanced modulator connected to both of said circuit means for receiving and combining the pulses of fixed and of shortened duration to produce pulses having at least the said fixed duration.

2,729,700

FACSIMILE SYSTEM WITH AUTOMATIC DENSITY CONTROL

Frank A. Hester, New York, N. Y., assignor to Faximile, Inc., New York, N. Y., a corporation of Delaware

Application March 16, 1951, Serial No. 215,959

5 Claims. (Cl. 178—6.6)

1. A facsimile apparatus for recording graphic copy having tonal density values varying between black and white, comprising a variable gain amplifier having input terminals for receiving signals representative of said copy, a constant current amplifier electrically connected to said voltage amplifier, a pair of circuits connected in parallel to the constant current amplifier, one of said circuits including a pair of contacting conductive recording electrodes, said electrodes being periodically out of



contact with each other to interrupt said one circuit at predetermined intervals, and the other of said circuits including in series connection a non-linear resistor and a linear resistor; and a control circuit including a rectifier and a filter connected to said resistors, said control circuit being connected to an input terminal of the amplifier to apply a gain control voltage thereto when said one circuit is interrupted.

2,729,701

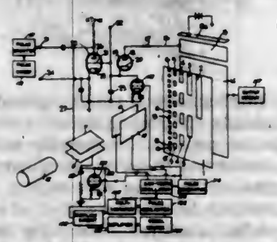
PULSE CODE MODULATION SYSTEMS

Maurice Moise Levy, London, England, assignor to The General Electric Company Limited, London, England

Application August 11, 1950, Serial No. 178,768

Claims priority, application Great Britain August 15, 1949

5 Claims. (Cl. 178—43.5)



3. An electric pulse code modulation system for periodically generating a group of coded pulses representative of the instantaneous value of a magnitude which may vary within a given range, comprising a pulse-time modulator circuit for generating a train of recurrent pulses occurring one within each of a train of regularly recurrent equal fixed intervals at a time depending on the instantaneous value of said magnitude, coding means for generating a first train of coded pulses representative of the nearest one, in a predetermined relation to the time of occurrence of each of said train of recurrent pulses, of a set of M, where M is any integer greater than two, instants which set is distributed at intervals over the fixed interval in which said pulse occurs, means for automatically delaying any one of said train of recurrent pulses which coincides with one of the said set of M instants by a time sufficient to prevent said coincidence, means for deriving a signal dependent on the time interval between the time of occurrence of each of said train of recurrent pulses and the said nearest one of the corresponding set of M instants, a second coding means, means for applying said signal to the second coding means for generating a second train of coded pulses representative of the nearest one, in the said predetermined relation to the time of occurrence of each of said train of recurrent pulses, of a set of m, where m is any integer greater than two, instants distributed at intervals over the interval defined by the two consecutive ones of the set of M instants between which each said recurrent pulse occurs, and means for combining the first and second trains of coded pulses to form the required group of coded pulses.

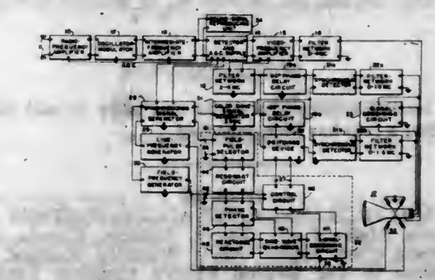
2,729,702

TELEVISION FIELD-IDENTIFICATION SYSTEM

Donald Richman, Flushing, N. Y., assignor to Hazeltine Research, Inc., Chicago, Ill., a corporation of Illinois

Application June 20, 1952, Serial No. 294,680

16 Claims. (Cl. 178—69.5)



1. In an odd-line interlaced television system a field-identification system comprising: means for supplying a composite television signal including line-frequency pulses and groups of field-frequency pulses, said groups of field-frequency pulses having one time relation with respect to said line-frequency pulses during one group of fields and another time relation during interlaced fields; means including a generator for generating a signal having a frequency of substantially 7860 cycles and desirably substantially in coincidence with each of said groups of field-frequency pulses and desirably having a peak amplitude at a time in the vicinity of a line-frequency pulse of one of said fields, said generated signal tending to vary from these desirable relationships; means including a resonant circuit coupled to said supply means and tuned to a high harmonic of field frequency and excited by said field-frequency pulses for developing a signal in coincidence with each of said groups of field-frequency pulses and having a peak amplitude at a time in the vicinity of said line-frequency pulse of said one of said fields; means including a phase detector responsive jointly to said generated and said developed signals for developing a resultant signal; means including a reactance circuit responsive to said resultant signal and coupled to said generator for applying said resultant signal to said generator to maintain said desirable relationships; means for supplying pulse signals substantially synchronously with said line-frequency pulses; and means including a control system jointly reponsive to said last-mentioned pulse signals and said generated signal for developing a control effect representative of the time relation of said line-frequency pulses and said groups of field-frequency pulses, thereby to identify each field.

2,729,703

TELEPHONE PAYSTATION

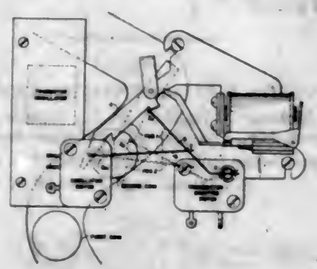
Alfred H. Faulkner, Chicago, Ill., and Robert L. Huffman, Palatine, Ill., assignors to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware

Application May 6, 1954, Serial No. 428,003

6 Claims. (Cl. 179—6.5)

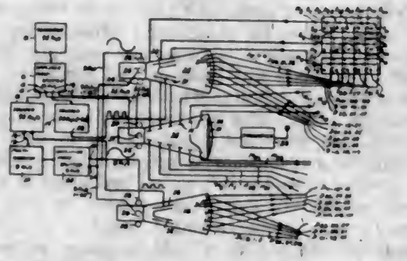
1. For use in a telephone system having a calling line and a called line and means for establishing a connection therebetween and a coin receiving means at said calling line, an electronic oscillator circuit associated with said calling line completed automatically at answer by the party on said called line for signalling said called party

to retain said connection, and means operable on the deposit of a coin in said receiving means for disconnecting



said oscillator circuit to signal said party at said called line that a coin has been deposited.

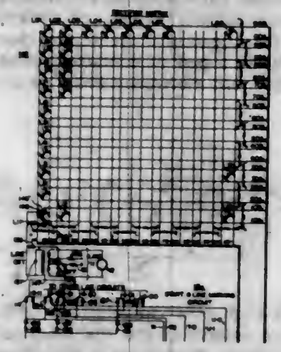
2,729,704
MULTI-CHANNEL SIGNALLING SYSTEMS
Maurice Moise Levy, Ottawa, Ontario, Canada, and Dennis Clark Espley, North Wembley, England, assignors to The General Electric Company Limited, London, England
Original application October 21, 1948, Serial No. 55,732. Divided and this application November 29, 1951, Serial No. 258,922
4 Claims. (Cl. 179—15)



1. A receiver for multi-channel pulse signals in up to N channels each of which is constituted by a train of modulated pulses, the pulses of the trains being interlaced in time and having the same pulse recurrence frequency, and said channels constituting N/a groups each of a equally-spaced channels, where a is an integer greater than unity, said receiver comprising distributor means having an input terminal and N/a output terminals; N/a demodulating devices for performing a step in the demodulation of said signals, each said demodulating device having an input terminal connected to a different one of the output terminals of said distributor means and an output terminal, and N/a further distributor means, each having an input terminal coupled to the output terminal of a different one of said demodulating devices and a output terminals connected respectively to the channels of a group.

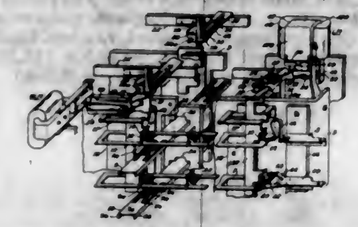
2,729,705
TELEPHONE SYSTEM
Alfred H. Faulkner, Chicago, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application April 27, 1951, Serial No. 223,247
37 Claims. (Cl. 179—18)

1. In a combination adapted for use in a telephone system, a calling line circuit, a first means for extending connections from said calling line circuit, a called line circuit, a rectifier matrix connected to said calling and called line circuits, and circuit means in said first means controlled over said calling line circuit for rendering conductive selected rectifiers of said matrix to complete a connection



from said calling line circuit to said called line circuit through said selected rectifiers.

2,729,706
CROSS-BAR SWITCH
Andrew W. Vincent, Rochester, N. Y.
Application October 6, 1952, Serial No. 313,250
7 Claims. (Cl. 179—27.54)

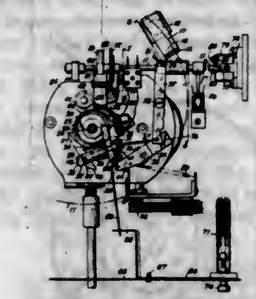


2. In an interconnecting switch, spaced parallel rigid bars of electrically conducting material extending in one direction, spaced parallel, transversely resilient strips of electrically conducting material coordinately arranged in operative cross-over relation with respect to said bars to extend in a second direction, a pusher at each cross-over movable to deflect a portion of the strip thereat into electrical engagement with the related bar, a plurality of movable shafts each individual to a group of pushers related to a strip, elements on each shaft, each element of a shaft being individual to one of the pushers of a strip, each element at the limit of its forward movement being spaced from its related pusher, and allotting means for preselecting for use a pusher in each group, said means comprising a lengthwise movable tape common to a pusher in each group, said tape having an actuator unit resiliently mounted thereon for each pusher in the group and movable in the same direction with the tape into the space between its related pusher and its related element whereby movement of an element in cooperation with one of said actuator units will operate the related pusher, and means for operating said tapes selectively.

2,729,707
TELEPHONIC APPARATUS
Samuel Dunseith McKellen, Kensington, London, England
Application June 4, 1951, Serial No. 229,675
Claims priority, application Great Britain June 7, 1950
12 Claims. (Cl. 179—90)

1. In telephonic alarm apparatus of the class described, including a call transmitter and a motor-driven record of a message to be communicated to a pre-selected line after calling, a call transmitter comprising a dialling drum, contacts co-operating with said drum, a gear-wheel fast with said drum, a movable support for said drum,

contacts and gear-wheel, a pinion rotatable by rotation of said motor-driven record, means for retaining said support in a starting position wherein said gear-wheel is clear of said pinion, means for moving said support to a



dialling position wherein said gear-wheel engages with said pinion, means for retaining said support in said dialling position during transmission of the dialling impulses, and means for displacing said support from said dialling position after transmission of said impulses.

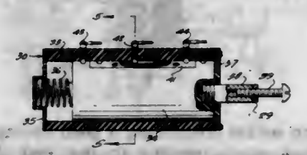
2,729,708
BAND-PASS AMPLIFIER SYSTEMS
Hunter C. Goodrich, Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application February 2, 1951, Serial No. 209,163
3 Claims. (Cl. 179—171)



1. An amplifier system comprising a first amplifier and a second amplifier, said first amplifier including a first semi-conducting body, a first base electrode, a first emitter electrode and a first collector electrode in contact with said first body; said second amplifier including a second semi-conducting body, a second base electrode, a second emitter electrode and a second collector electrode in contact with said second body; means for applying operating potentials to said electrodes, a carrier wave source coupled between said first emitter and said first base electrodes for impressing said carrier wave thereon, an output circuit coupled between said second collector and said second base electrodes; and a coupling circuit having a predetermined pass band for coupling said amplifiers, and including a capacitive reactance element and an inductive reactance element connected in series effectively between said second emitter and said second base electrodes, and a connection between said first collector electrode and an intermediate point of one of said reactance elements, whereby said reactance elements effectively provide a parallel resonant circuit and whereby the width of said pass band is determined by the Q of said resonant circuit.

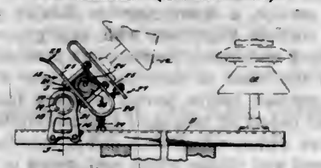
2,729,709
ELECTRIC SWITCH
Jules J. Bertrand, Watervliet, N. Y.
Application March 21, 1952, Serial No. 277,861
2 Claims. (Cl. 200—16)

1. In combination with an automotive vehicle having a carburetor having a throttle lever, a two-position switch comprising a tubular housing having a side wall, a closed end wall and another end wall, a middle contact traversing said side wall at a point intermediate and spaced from said end walls, said middle contact projecting into the interior of said housing, a second contact traversing said side wall and projecting into the interior of said housing at a point between and spaced from said middle contact and said closed end wall, a third contact traversing said side wall and projecting into the interior of said housing at a point between and spaced from said middle contact and said other end wall, said contacts being insulated from each other, a plunger slidably fitting in said housing and shorter than said housing, said plunger being of insulated material and said contacts being substantially in alignment with each other lengthwise of the plunger, a contactor plate on said plunger, said contactor plate extending lengthwise of the plunger and terminating at its ends in spaced relation to the ends of the plunger, said con-



tactor plate being of a length to bridge said middle contact and only one of said side contacts at a time, said contactor plate having a depression spaced from its opposite ends in which said middle contact is constantly engaged, said depression having ends serving as limit stops engageable by said middle contact in extreme positions of said plunger in which said contact plate is engaged with only one of said side contacts, spring means acting between said closed end wall of the housing and said plunger and urging said plunger toward said other end wall of the housing, and an extension on an end of said plunger traversing said other end wall and operatively engaged with said throttle lever.

2,729,710
HIGH TENSION ELECTRICAL SWITCHES
Tomlinson F. Johnson, Atlanta, Ga.
Application October 7, 1954, Serial No. 460,853
7 Claims. (Cl. 200—48)



1. In a group of high tension electric switches mounted in spaced parallel relation on a common support with each switch including a stationary insulator carrying switch jaws and a rocking insulator carrying a switch blade mounted on a base member, the combination with the rocking insulators of means for operating them as a unit, whereby all of said switches will simultaneously be opened or closed, said means comprising a bearing assembly for each rocking insulator including a pair of upright support members mounted on opposite sides of the switch base member and having ring shaped bearings formed in their upper ends, a shaft extending through and journaled in said bearings, an insulator support plate having an S-shaped configuration to provide three arms positioned one above the other in spaced and generally parallel relation, the uppermost of said arms providing a mounting surface for the rocking insulator, the lowermost of said arms being rigidly attached to said shaft intermediate said bearings, and adjusting means mounted on said support plate for varying the plane of said uppermost arm to thereby adjust the rocking insulator angle in two directions; and an elongated shaft rigidly connecting all of the bearing assemblies together, said elongated shaft being received in the space between the lowermost and intermediate arms of each of the insula-

tor support plates and detachably clamped therein, whereby all of the rocking insulators will be operated simultaneously as a unit.

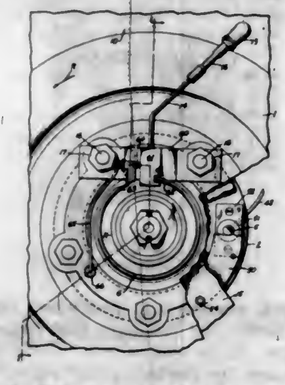
2,729,711
ELECTRIC SWITCH LAMP SOCKET
Anthony Tiscione, Brooklyn, N. Y.
Application November 7, 1952, Serial No. 319,230
4 Claims. (Cl. 200—51.14)



1. A lamp socket comprising a shell having an insulating, sectional recess opening to one end thereof, said recess being internally threaded adjacent its open end to receive in threaded engagement the threaded base of an electric lamp having shell and end contacts, said shell having spaced passageways extended in from its end opposite its open end and opening into said recess, rigid conductor members mounted in said passageways and extended into said recess to make electrical contact with the shell and end contacts of a lamp, one of said conductor members being formed of separate parts having spaced end aligned adjacent ends, an insulating switch member movably mounted between the adjacent ends of the parts of the said one conductor member, said switch member having a contact piece alignable with and disalignable from said adjacent ends, and means within said shell and engaging said switch member holding it in a position in which said contact piece is either in alignment with or disalignment with the adjacent ends of the parts of the said one conductor member, said holding means comprising a groove formed in said switch member and having spaced recesses at its ends separated by an intervening cam portion, a detent member slidably positioned within said shell in alignment with said groove, and a spring retaining said detent member in a position engaged with one or the other of said recesses, said shell being formed of opposed halves having adjacent faces joined together, said halves of said shell having cutouts in their adjacent faces within which said detent member is slidably positioned and within which said spring is mounted, said switch member being a disc of dielectric material turnably supported within a complementary circular cavity formed in the adjacent faces of the halves of said shell, and means for turning said disc of dielectric material in one direction or the other, said rigid conductor members having socketed ends for connection to flexible conductors.

2,729,712
TIRE LOW PRESSURE ALARMS
Wendell P. Sprague, Jr., Portland, Oreg.
Application June 30, 1951, Serial No. 234,543
2 Claims. (Cl. 200—61.25)

1. A switch closable by low pressure in the pneumatic tire of a wheeled vehicle, said switch including: a mounting member adapted for attachment to the wheel in the vicinity of its axis of rotation, for rotation therewith, and constituting a first terminal of the switch; a Bourdon tube the fixed end whereof is carried by said mounting member; conduit means carried by said mounting member and communicating with said Bourdon tube, and adapted for communication with the interior of the tire; said Bourdon tube being arranged to be oriented by said mounting member, when the latter is attached to the wheel, concentrically of the wheel's axis of rotation and with its free end adjacent the mounting member and ahead thereof in the normal sense of the wheel's rotation; and a second terminal of the switch carried by the free end of the Bourdon tube which, when the tube is so oriented, is located in position ahead of and adjacent



the first terminal, but spaced therefrom by the distention of the tube at normal pressure within the tube and for contact therewith by contraction of the tube at a selected subnormal pressure.

2,729,713
SWITCH
Philip J. Berner and James D. Connell, Dayton, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 31, 1954, Serial No. 453,347
4 Claims. (Cl. 200—61.54)



1. A horn blowing mechanism for assembly in a vehicular steering wheel that includes a central cavity having a shoulder therearound comprising in combination; a unitary assembly having upper and lower cup members, each including a bead portion thereon in non-contacting relation with respect to one another, a Bellville spring of greater diameter than either cup member and adapted to rest on said shoulder in the steering wheel cavity when the mechanism is assembled therewith, said spring being interposed between said two beads on said cup members and normally in contact with only one of said beads when the periphery of the spring rests on said shoulder, and a plurality of rivets loosely passed through said cups and spring for assembling the several parts into a unit and for limiting the maximum movement therebetween, said rivets being of a non-conducting nature with respect to one of said cups and the spring, said spring being operable to snap into engagement with the other of said beads when pressure is applied to one of said cup members.

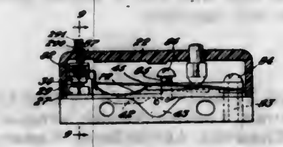
2,729,714
DOUBLE SNAP ACTION SWITCH
Frederick J. Broch, Cambridge, Mass.
Application October 21, 1950, Serial No. 191,447
13 Claims. (Cl. 200—67)

1. A snap action switch comprising an elongate base, means adjacent to one end of the base for supporting at least one fixed electrical contact, a substantially rigid contact carrying arm extending longitudinally of the base, fixed means adjacent to the opposite end of the base defining a horizontal pivotal axis for the contact carrying arm, said arm having a contact adjacent to its free end which is arranged selectively to make with the fixed contact, two elongate elements extending longitudinally of the base, those ends of said elements which are nearer to the fixed contact being joined together, one of said elongate elements being normally in tension and the other in compression, means anchoring that end of the tensioned element, which is nearer to the pivot means for the contact carrying arm, to the base, the corresponding end of the compression element engaging the contact carrying arm at a point intermediate the ends of said arm and normally exerting force against the contact carrying arm in



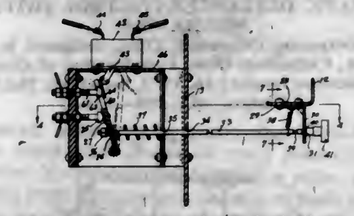
a direction to keep the movable contact in engagement with the fixed contact, means for limiting motion of the joined ends of the tension and compression elements, and actuating means for applying force to the tension element, at a point nearer to the anchored end of said element than to its other end, so as to decrease the effective length of the tension element and thereby shift the effective line of action of the tension element until said line of action first coincides with and then passes the normal line of action of the compression element, thereby causing an abrupt snap motion of the joined ends of said elements and a shift in the line of action of the compression element such that the latter now exerts force on the contact carrying arm in a direction opposite to the force applied by the actuating means thereby carrying the movable contact away from the fixed contact.

2,729,715
SNAP ACTION ELECTRICAL SWITCH
Frederick John Broch, Cambridge, Mass.
Application August 23, 1952, Serial No. 306,049
13 Claims. (Cl. 200—67)



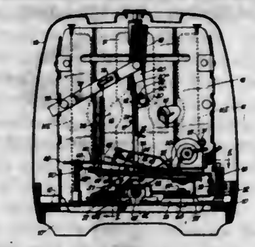
1. A snap action switch having in combination a rigid elongate base provided at one end with a supporting surface and near its opposite end with vertically spaced normally fixed contacts, an elongate thin and flexible tension element, a portion of one end of the tension element resting upon said supporting surface and being clamped thereto, a compression spring, a normally immovable abutment for one end of the compression spring, and means for adjusting the height of the abutment, the opposite end of the compression spring being hingedly connected to the tension element, an actuator for applying downward force to the tension element for flexing the latter transversely, rigid fulcrum means defining a transverse pivotal axis, above the level of the supporting surface about which the tension element may bend, said fulcrum means being carried by the base and having said pivotal axis spaced longitudinally of the base from the clamped portion of the tension element, and a movable contact engageable alternatively with one or the other of the fixed contacts and which moves down in response to the snap action of the compression spring, the compression spring normally holding the movable contact in engagement with the upper fixed contact.

2,729,716
AUTOMOBILE AUTOMATIC AND MANUAL CIRCUIT BREAKER
Kenneth L. Lee, Stevenson, Ala.
Application May 22, 1953, Serial No. 356,800
4 Claims. (Cl. 200—114)



1. In a motor vehicle, a circuit including a source of current, a support, a thermal overload circuit breaking device mounted on the support and connected in said circuit, said thermal overload device having a pivoted reset arm normally in a circuit-closing position and being rotated to a circuit-opening position responsive to excessive current through the thermal overload device, a pair of stationary contacts mounted on said support means connecting said contacts into said circuit, a conductive plate pivoted to said support, means biasing said plate into bridging relation to said contacts, the free end of said plate being disposed adjacent the said circuit-opening position of said reset arm, and an operating member connected to said plate for manually rotating said plate away from said contacts, said reset arm being disposed on the side of said plate opposite said contacts, and means whereby said arm is engaged by and rotated to said circuit-closing position when the plate is rotated away from said contacts.

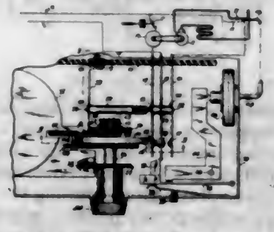
2,729,717
SWITCH CONSTRUCTION
Charles D. Visos, St. Louis, Mo., assignor to Knapp-Monarch Company, St. Louis, Mo., a corporation of Delaware
Application July 18, 1952, Serial No. 299,609
3 Claims. (Cl. 200—122)



1. In a toaster control switch, a thermal element having an electric heater therefor, a pair of switch blades, support means for supporting said thermal element and switch blades in spaced relation, stop means for predetermining the initial position of said switch blades, a release mechanism including a bimetal element to actuate the same, electrical circuit means having a current supply, said bimetal element being shunted by said switch blades, said thermal element when heated by said heater moving to engage said switch blades and move them in one direction, a magnet supported on said support means, one of said switch blades being movable toward said magnet when the blades are moved in said one direction, an armature carried by one of said switch blades and having a face

adapted to be attracted by said magnet, a contact carried by said armature and having only the thickness of its head projecting from said face, a second contact between the poles of said magnet and adapted to be engaged by said first contact when said armature face is thus attracted, said second contact being substantially flush with the pole faces of said magnet.

2,729,718
AUTOMATIC DEFROSTER CONTROL SWITCHING MECHANISM
John Liebermann, Columbus, Ohio, assignors to Ranco, Inc., Columbus, Ohio, a corporation of Ohio
Application January 16, 1952, Serial No. 266,725
9 Claims. (Cl. 200—136.3)



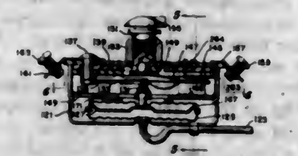
1. In an electric switching mechanism, a pair of resilient members biased in one direction and one member adapted to be biased into engagement with the other, means to releasably hold the other of said members in one position, means including a pair of cams to hold said one member from said other member, one cam having a step operative to release said one member to engage said other member held in said one position and the other cam having a step operative to cause snap movement of said one member out of contact with said other member held in said one position, thermal responsive means to actuate said first mentioned means to release said one member, and means to drive each of said cams at a predetermined rate.

2,729,719
CONTROL DEVICE
Carl G. Kronmiller, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application July 24, 1953, Serial No. 370,029
24 Claims. (Cl. 200—138)



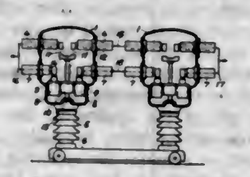
24. A control device comprising, a base, a support member mounted on and movable with respect to said base member, a first bimetal element mounted on said support member and movable therewith, control means controlled in accordance with the position of said first bimetal element with respect to said base member, a manually positionable member pivotally mounted on said base, drive means to transmit rotation of said manually positionable element to said support member, said first bimetal element and said control means constituting temperature responsive control means the control point of which is adjusted by rotation of said manually positionable member, a post extending axially through said manually positionable member and secured at its inner end to said base, indicia means including a scale means comprising indicia of temperature arcurately disposed about the pivotal axis of said manually positionable member, and an index cooperating with the indicia on said scale means, one of the above named scale and index portions of said indicia means being carried on said manually positionable member and the other being carried by said post, and a second bimetal element disposed substantially concentric of said post and cooperating with said scale means to indicate ambient temperature.

2,729,720
REFRIGERATING APPARATUS
James W. Jacobs, Dayton, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application March 22, 1952, Serial No. 278,077
6 Claims. (Cl. 200—140)



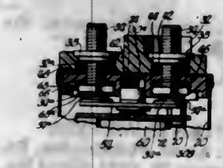
1. A control including a supporting structure, a control device supported by said supporting structure, a diaphragm having its central portion connected to and supported by said supporting structure, a movable substantially rigid wall connected to the peripheral portion of said diaphragm, transmitting means connecting that portion of said wall coaxially located relative to the central portion of said diaphragm with said control device, and a sealed diaphragm means having one portion operably connected to said wall and a second portion operably connected to said structure.

2,729,721
HIGH TENSION CIRCUIT BREAKERS
Haakon Forwald, Ludvika, Sweden, assignor to Allmanna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a Swedish corporation
Application March 17, 1953, Serial No. 342,890
Claims priority, application Sweden March 19, 1952
5 Claims. (Cl. 200—145)



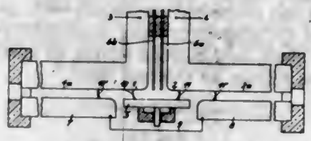
1. An air blast circuit breaker comprising a compressed air container, a plurality of breaking gaps connected in series and enclosed within said container, insulating means serving to support said container, a series of voltage-dependent resistances connected in parallel with only the extreme ends of the series-connected breaking gaps, and auxiliary breaking gaps connected in series with the said resistances and located within the said container.

2,729,722
HERMETICALLY SEALED BLOW-OUT CIRCUIT BREAKER
Marvin G. Nelsen, Skokie, Ill., assignor to Guardian Electric Manufacturing Co., Chicago, Ill., a corporation of Illinois
Application December 6, 1952, Serial No. 324,513
1 Claim. (Cl. 200—147)



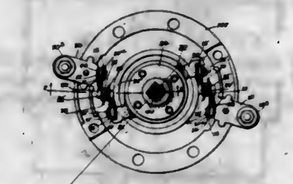
In a circuit breaker, an insulating plate having a pair of spaced bolt-receiving holes terminating on their inner margins in bolt-head receiving sockets, electrically conducting bolts in the holes having heads received in the sockets with substantially diametrically opposed clearance spaces substantially in the line between the bolt-heads, magnets having washer portions received under the heads of the bolts and pole portions extending axially of the bolts in the clearance spaces between the sockets and the bolt-heads and terminating at points adjacent the planes of the exposed faces of the bolt-heads, and an armature operable to bridge the exposed faces of the bolt-heads to make and break the circuit, and washers received under the bolt-heads having arc extinguishing wing portions extending through the clearance spaces to protrude beyond the planes of the exposed faces of the bolt-heads and outboard of the space between the bolt-heads.

2,729,723
ALTERNATING-CURRENT CIRCUIT INTERRUPTERS
Gustav Wilhelm Pristsak, Berlin-Spandau, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a German corporation
Application February 16, 1953, Serial No. 337,151
Claims priority, application Germany February 14, 1952
7 Claims. (Cl. 200—147)



1. A device for interrupting alternating current, comprising two stationary contacts and a movable contact bridgingly engageable with said two stationary contacts and movable away therefrom to form two primary arc gaps with said respective stationary contacts, two pairs of electrodes forming two respective interstitial runner gaps of substantially uniform gap spacing and disposed adjacent to said respective primary arc gaps on opposite sides thereof to receive in said runner gaps the arcs originating in said respective primary arc gaps, a first conductor connecting one electrode of each pair with one of said respective stationary contacts at an electrode end away from said primary gaps, and a second conductor interconnecting said other two electrodes at respective electrode points away from the electrode ends adjacent to said primary gaps, whereby an arc entering into one of the runner gaps forms together with said two conductors a loop circuit tending to reverse the running direction of the arc.

2,729,724
CONTACT STRUCTURE FOR ROTARY SWITCHES
Harold E. Schleicher, West Hartford, Conn., assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a corporation of Connecticut
Application December 17, 1951, Serial No. 261,961
11 Claims. (Cl. 200—166)



1. Contact structure for rotary shock-proof electric switches, comprising a balanced rotary conductive bridging member having oppositely extending arms, a resilient leaf-spring contact-support on the end of each arm lying in planes parallel to the axis of rotation of said bridging member, a contact element on one end of each support facing in a direction for engagement with a fixed contact, a damping spring lying against that face of said leaf-spring support which is opposite the contact element, in combination with fixed terminal members, a leaf-spring contact-support mounted on each terminal member, a contact element mounted on one end of said terminal-mounted contact-support slidably engageable with one of said bridging contact elements, a damping spring lying against that face of said terminal-mounted support which is opposite its contact element.

2,729,725
BREAKER POINT ASSEMBLY FOR INTERNAL COMBUSTION ENGINES
Andrew C. Russell, Shawnee, Okla.
Application September 13, 1954, Serial No. 455,483
3 Claims. (Cl. 200—166)

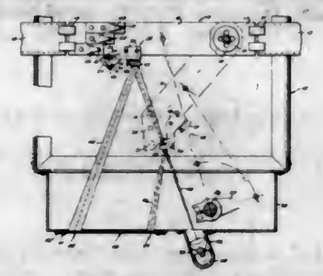


1. As an article of manufacture, a blank for use in a breaker point assembly, said blank comprising a unitary body of insulating material having a main, block-like portion provided with a bore therethrough, and a cam follower extension portion integrally attached to said main portion and provided with a zone of reduced dimension adjacent the extremity thereof attached to said main portion, said extension portion being bendable at said zone thereof and of dimensions for disposition of a part thereof remote from its said extremity in spaced alignment with one extremity of said bore, whereby said extension portion is adapted to extend between an external cam and one extremity of a contact-carrying element forming a part of said assembly and shiftably mountable in said bore, to be oppositely engaged by said cam and said element, and to swing about said zone thereof toward and away from said extremity of the bore for shifting the element responsive to the cam.

2,729,726
POSITION INDICATOR FOR ENCLOSED DISCONNECT SWITCH
Harold H. Rudd, Greensburg, Pa., assignor to I-T-E Circuit Breaker Company, Philadelphia, Pa.
Application August 31, 1953, Serial No. 377,531
5 Claims. (Cl. 200—167)

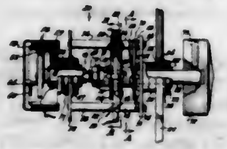
1. A disconnect switch having a blade with closed and open position; indicating means comprising a light source,

a screen and a first and second mirror; said first and second mirror individually adjustably mounted on said switch blade; said first mirror positioned to reflect light from said



light source to a first position on said screen when said switch blade is in said closed position; said second mirror positioned to reflect light to a second spot on said screen when said blade is in said open position.

2,729,727
VARIABLE IMPEDANCE DEVICE
Everett W. Molloy, South San Gabriel, and Harold R. Schultz, Anaheim, Calif., assignors to Beckman Instruments, Inc., Fullerton, Calif., a corporation of California
Application February 28, 1955, Serial No. 490,971
19 Claims. (Cl. 201—48)



1. In a variable impedance device, the combination of: a first impedance element; stop means defining a range on said first impedance element; a first traversing element adjacent to said first impedance element and relatively movable with respect thereto within said range between said stop means to effectively vary the impedance thereof; actuating means coupled to one of said first elements for moving said one element relative to the other of said first elements to cause said first traversing element to traverse said first impedance element through said range; a second impedance element; a second traversing element adjacent to said second impedance element and relatively movable with respect thereto; and means for relatively moving said second impedance element and said second traversing element through a desired travel distance when said actuating means is urged beyond the points at which said first traversing element reaches the ends of said range.

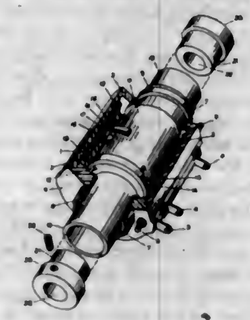
2,729,728
ELECTRIC RESISTOR
Herbert G. Koenig, Merriam, Kans., assignor to Trio Manufacturing Company, Griggsville, Ill., a partnership
Application September 21, 1953, Serial No. 381,386
9 Claims. (Cl. 201—55)

1. In an electrical instrument, a hollow body; a conductive brush in the body; means interconnecting the brush and the body for relative rotation; a spiral conductive band in the body, the brush being in wiping engagement with the band; and conductor lines coupled with the band and the brush, said band having a pair of relatively overlapping ends, spaced to receive a portion of the brush therebetween, whereby to render the band and the brush relatively rotatable for more than 360 degrees while the brush remains in engagement with the band, said body being provided with a spiral, radially inward



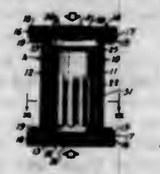
facing wall, the band being secured to the radially inward face of said wall.

2,729,729
POTENTIOMETERS
John W. Knoll, Philadelphia, Pa.
Application February 29, 1952, Serial No. 274,179
3 Claims. (Cl. 201—56)



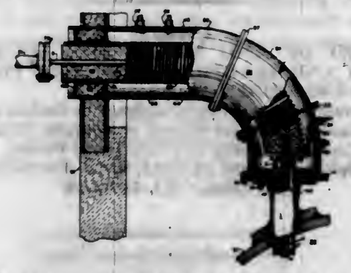
1. A variable resistance device comprising a cylindrical housing, a helical coil of resistance wire mounted internally of said housing, at least one external terminal of said housing, at least one external terminal on said housing connected electrically to one end of said helical coil, a tubular shaft rotatably mounted concentrically in said housing and having at least one end extending from said housing, a contact member mounted on said tubular shaft and adapted to move longitudinally of said tubular shaft, said contact member making electrical contact with said helical coil and adapted to make electrical contact with successive portions of said helical coil upon rotation of said tubular shaft, a terminal extending exteriorly of said housing and connected electrically with said movable contact, and an adapter bushing in at least one end of said tubular shaft, said bushing having an aperture therein adapted to receive an external shaft.

2,729,730
PRESSURE GAUGE
Merle C. Brady, San Diego, Calif., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application November 2, 1950, Serial No. 193,680
11 Claims. (Cl. 201—63)



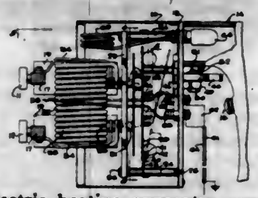
1. A pressure gauge comprising a compliant chamber responsive to differential internal and external fluid pressures, having a greater perimeter in cross-section than a line circumscribing said chamber in the plane of said cross-section, and a strain-responsive element supported on and circumscribing at least a portion of said chamber.

2,729,731
FEED APPARATUS
Edward W. Kleinpeter, Baton Rouge, La., assignor to Ethyl Corporation, New York, N. Y., a corporation of Delaware
Application July 10, 1953, Serial No. 367,171
4 Claims. (Cl. 219—10.51)



3. A feed system for transfer and feed of a high melting liquid to an isolated reaction space, comprising a feed supply line, a feed line and nozzle section, and a reaction zone, the feed supply line terminating at a point relatively remote from the reaction zone, one extremity of the said feed line section connecting to said supply line, the other extremity of the feed line section connecting to the nozzle section, the feed line section and nozzle section being double walled chambers having an inner wall common to each of the said sections, said inner wall being of material susceptible of induction heating, and forming a conduit for the high melting material, an outer segmented wall of said double wall chamber being a plurality of joined segments the outer wall of said nozzle section being only one segment, the said inner and outer walls being joined at the opposite extremities, thereby forming a chamber for receiving induction heating elements for heating of the inner wall, said elements including an individual insulated electric induction heating coil in the feed line and nozzle sections respectively, said coils encircling the said conduit, means for introducing and maintaining an inert gas atmosphere in the said chamber, said feed line and nozzle section being adapted to be sealed with the reaction zone to prevent contact of the reactants with said coils or escape of reactants from the reaction zone.

2,729,732
DIELECTRIC HEATING GUN
George S. Mogilner, Los Angeles, Calif.
Application March 16, 1953, Serial No. 342,354
4 Claims. (Cl. 219—10.75)



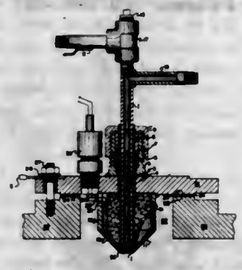
4. In dielectric heating apparatus containing a tuned circuit: a wall member; a tuning condenser on one side of said wall member comprising a fixed plate and a movable plate; means supporting the fixed plate in insulated relation to said wall member; a flexible resilient member electrically connecting the movable plate with said wall member and supporting the plate for swinging movement about an edge thereof in a direction normal to its surface; a pistol grip handle secured to said wall and extending from the side thereof opposite said condenser; an elongate member pivoted at one end on said wall member for swinging movement, the other end of said elongate member being positioned to abut said movable plate; and a cam adjacent the pivoted end of said elongate member operable to swingably adjust the angular position of said elongate member and vary the position of said movable plate in its swinging movement, said cam having a portion positioned for operating engagement by a digit of an operator's hand while gripping the pistol grip handle.

2,729,733
HEATING DEVICE
Andrew George Heron, Newcastle upon Tyne, England, assignor to Heron Heating Devices Limited
Application June 24, 1952, Serial No. 295,267
6 Claims. (Cl. 219—19)



1. A muffler for melting or loosening thermoplastic materials such as solidified liquids or semi-liquids from their containers and for drying containers, adapted to pass over the container to be treated, and comprising a hollow bell-like coil supporting former, an electric heating cable wound on said former in the form of a helix, said heating cable comprising a rectilinear conductor, a continuous refractory insulation medium encasing said conductor throughout its length, and a continuous metallic sheath encasing said insulation medium throughout its length, an inner metal barrel covering said former, an outer metal barrel enclosing the inner barrel and rigidly spaced therefrom, thermal insulation material in the space between said barrels, and a terminal box on the outer barrel to which the ends of the heating cable are connected, and which is adapted to be connected to an electric supply source.

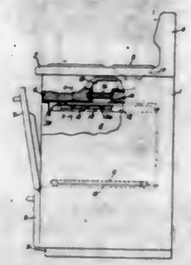
2,729,734
FEED DEVICE FOR REACTION VESSELS
Lewis M. Decker, Baton Rouge, La., assignor to Ethyl Corporation, New York, N. Y., a corporation of Delaware
Application August 3, 1953, Serial No. 372,139
6 Claims. (Cl. 219—19)



5. In a feed device for introducing a high melting material into a pressurized reaction space having an atmosphere capable of reacting with the said material, the apparatus comprising a conduit terminating within said reaction space, an annular member surrounding the portion of said conduit within the reaction space and affixed thereto at the end of said conduit, said annular member having a wall cross sectional area immediately adjacent the end of the conduit less than the conduit wall, and a flange member surrounding the conduit and attached to the end of the member surrounding the conduit and pressure and electri-

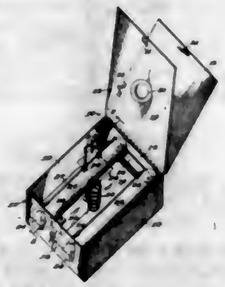
cal sealing means electrically insulating said conduit from the flange member, said conduit, conduit surrounding member, and flange member forming an electrical circuit having an area of reduced cross section immediately adjacent the discharge end of the conduit, whereby passage of electrical current through the said circuit generates heat at a uniform rate in the conduit and at an intense rate immediately adjacent the end of said conduit.

2,729,735
ELECTRIC RANGE
John H. Fries, Jr., Louisville, Ky., assignor to General Electric Company, a corporation of New York
Application September 18, 1952, Serial No. 310,278
4 Claims. (Cl. 219—20)



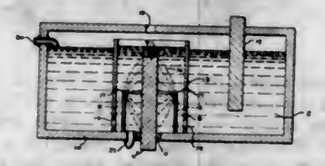
1. In an electric range, an oven comprising walls defining a heating compartment having a front opening, a door for said opening, a baking unit for supplying heat to said oven, a broiling unit adjacent the top wall of said oven, a vent opening in one of the walls of said oven communicating with an opening in an exterior surface of said range to form an oven vent, an auxiliary heating unit located in said oven vent, and an electrical heating circuit including a selector switch for selectively connecting said baking and broiling units to a source of power and a thermostatic switch for controlling the temperature in said oven, said selector switch having a pair of contacts for simultaneously connecting said auxiliary heating unit to said source of power for continuous energization upon actuation of said selector switch to energize said baking unit.

2,729,736
PORTABLE ELECTRIC CIGARETTE LIGHTER
Jose Brito Perez, Havana, Cuba
Application August 4, 1954, Serial No. 447,715
4 Claims. (Cl. 219—32)



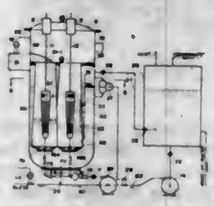
1. A cigarette lighter comprising a rectangular casing including a body having side, end and bottom walls, an inner cover hingedly connected to one end wall, and an outer cover hingedly connected to the same end wall and adapted to overlie the inner cover, a vertically disposed electrical resistance coil supported in said body, batteries removably supported in said body, a normally closed switch in said body and electrical connections between said batteries, switch and coil, said inner cover having a cigarette end admission opening axially aligned with said coil in the closed position of the inner cover, said outer cover having switch opening means rendered operative upon closing said outer cover which also conceals said opening in the inner cover.

2,729,737
METHOD OF AND MEANS FOR LOCALIZING HEAT AND REACTIONS IN LIMITED PORTIONS OF FLUID BODIES
Jean Choussy, Lyon, France, assignor to Societe Anonyme des Manufactures des Glaces et Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France
Application April 14, 1953, Serial No. 348,651
3 Claims. (Cl. 219—40)



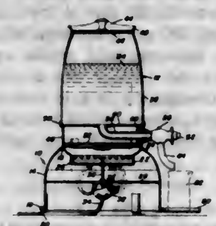
1. Apparatus for carrying out processes by Joule effect comprising a container for liquid, a plurality of electrodes spaced from each other and located in the part of the container that receives the liquid, barrier means interposed between said electrodes, said barrier being composed of electrically non-conductive material and including a plurality of vertically arranged, overlapping walls one of which extends from above the liquid level downward toward the bottom of the tank and the other of which extends upward from the bottom of the tank toward the liquid level, one of said walls having means to permit the passage of liquid near the bottom and the other having means to permit the passage of liquid near the liquid level, thus compelling the electric current passing between the electrodes to pass through the liquid canal existing between the walls, said walls providing a constricted channel, for the liquid, through which the current between said electrodes passes and in which it is concentrated, and means above the said channel to remove products released therein by said concentrated current.

2,729,738
ELECTRIC STEAM GENERATOR
Milton Eaton, Shawinigan Falls, Quebec, Canada, assignor to The Shawinigan Water and Power Company, Montreal, Quebec, Canada, a corporation of Quebec
Application December 27, 1954, Serial No. 477,828
8 Claims. (Cl. 219—40)



1. An electrode boiler of the type having at least one electrode normally partially submerged in the boiler water, said boiler containing (1) means for dividing the boiler into (*a*) a steam outlet compartment at the top of the boiler above the highest operating water level (*b*) a steam generating compartment surrounding the electrodes, and (*c*) a control compartment surrounding the sides of the steam generating compartment (2) steam communication between said steam generating and steam outlet compartments, (3) water communication between said steam generating and control compartments, (4) means for regulating the power input by transfer of water between said steam generating and control compartments in response to control means including an outlet for bleeding steam from the top of said control compartment at a constant rate, and (5) means for supplying feed water directly to said steam generating compartment at a rate responsive to the water level in said control compartment.

2,729,739
SYRUP SERVER
Burdett C. Howard, Jackson, Calif.
Application April 13, 1954, Serial No. 422,820
3 Claims. (Cl. 219—43)



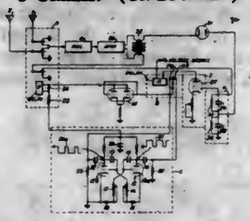
1. A syrup server comprising a supporting base having an open upper end, a cup-shaped support fitting in said upper end and having an annular rim flange overlying and seating on said upper end and suspending said support in said base, a cruciform frame having crossed webs seating on said annular flange and terminating in upstanding flanges, depending hooked legs on said upstanding flanges engaging under and interlocking with said rim flange, a syrup dispenser fitting between said upstanding flanges and seating on said crossed webs, and a heating element in said cup-shaped support.

2,729,740
HERMETICALLY SEALED FLASHLIGHT
Jerome I. Davis, Croton-on-Hudson, N. Y., assignor to P. R. Mallory & Co., Inc., Indianapolis, Ind., a corporation of Delaware
Application January 9, 1952, Serial No. 265,596
11 Claims. (Cl. 240—10.66)



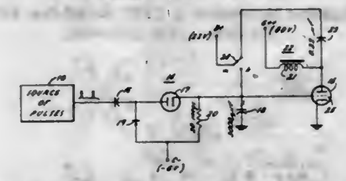
1. In a flashlight device comprising an external, separate waterproof jacket, a flashlight insertable therewithin comprising a battery, a stationary, insulative bulb retainer having a skirt and shoulder for seating the same on said battery, a flashlight bulb for said flashlight having a pair of electric terminals, metal bulb-holding contact means having a detent ear struck out therefrom adapted to be retained by said bulb retaining means, said bulb of said flashlight adapted to be held therewithin, single switch means for said flashlight, a portion of said switch means making electrical contact with the shell of said battery with another portion thereof being adapted to make contact as desired with said detent ear of said bulb contact means, a coil spring conductor held within said bulb retainer connecting one of said terminals of said flashlight bulb with the second connection of said battery, and cap means adapted to be fitted over said bulb retaining means and said flashlight bulb to protect the same, said flashlight jacket being hermetically sealed to said cap means of said flashlight.

2,729,741
DIVERSITY RECEPTION SYSTEM
Richard F. Chapman, Glendale, N. Y., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application October 10, 1951, Serial No. 250,583
5 Claims. (Cl. 250—20)



1. A diversity reception system comprising two receiving antennas, a receiver, means to generate a timing cycle signal wave having two unequal portions, means for coupling said receiving antennas to said receiver alternately in response to said unequal portions of said timing cycle signal wave, means for comparing with each other the outputs of said receiver due to each of said antennas during the unequal portions of said timing cycle signal wave, and switching means responsive to the output of said comparison means to couple the receiving antenna responsible for the greater output coupled to the receiver during the longer of the unequal portions of the timing cycle signal wave.

2,729,742
PULSE-OPERATED TIMING CIRCUIT
Frederick N. Brauer, Jenkintown, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application October 19, 1950, Serial No. 190,984
4 Claims. (Cl. 250—27)

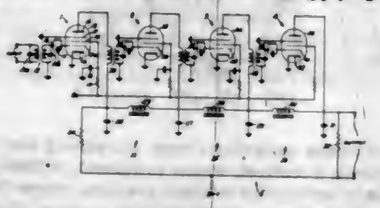


1. In an electrical system; an amplifier tube having at least triode electrodes; biasing means for rendering said tube normally non-conductive; means responsive to applied pulse signals for rendering said tube conductive, said responsive means comprising a first capacitor and a shunt discharge resistor connected in the input circuit of said tube; and means for maintaining said tube conductive for a relatively long period of time following application of the last of said pulse signals, said last-named means comprising a second capacitor and switching means responsive to current flow in the output circuit of said amplifier tube for connecting said second capacitor between the grid and an output electrode of said tube, whereby the discharge time constant of the input circuit of said tube is substantially increased, being approximately equal to the value of said discharge resistor multiplied by the value of said second capacitor multiplied by the gain of said tube.

2,729,743
LOGARITHMIC AMPLIFIER DETECTOR
Jesse S. Le Grand, Wood-Ridge, N. J., assignor to International Telephone and Telegraph Corporation, Nutley, N. J., a corporation of Maryland
Application September 2, 1954, Serial No. 453,773
11 Claims. (Cl. 250—27)

1. A logarithmic amplifier detector comprising a plurality of voltage amplifiers each adapted to receive a

single input signal and to provide an output having an amplitude that is a linear function of the amplitude of the input signal to that amplifier for all values of input signals below a predetermined amplitude and having a substantially constant amplitude for all values of signals above said predetermined amplitude, means connecting said amplifiers in series combination whereby an alternating signal responsive to the output of each amplifier is applied as the input signal to the next succeeding amplifier in said series, means for applying the signal to be amplified as the input signal to first amplifier in said series, means to rectify the signal in each of said amplifiers, time delay means for the rectified signal output of each of said amplifiers, said time delay being equal to the time for said alternating signal to proceed through all of the succeeding amplifiers and means to combine the time delayed rectified output of all of said amplifiers whereby the output of said combining means is proportional in amplitude to the logarithm of said input signal to be amplified.

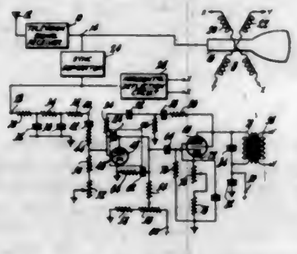


2,729,744

DEFLECTION WAVEFORM GENERATOR

Benjamin S. Vilkomerson, Camden, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application November 2, 1950, Serial No. 193,621
1 Claim. (Cl. 250—36)



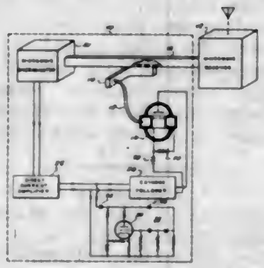
In a cathode ray beam sawtooth deflection signal generating circuit the combination of: a circuit potential datum means for the circuit elements as hereinafter defined; a source of periodically recurrent synchronizing signals subject to fortuitous interference by stray random signals; an electron discharge tube having an anode, cathode and control electrode; an anode power supply source for said tube delivering a positive potential referenced to said datum means; a first resistor galvanically connected from said anode to said positive potential source to form an output circuit; a first capacitor; a peaking resistor connected in series with said capacitor to form a sawtooth defining network; means connecting said sawtooth defining network between said anode and said datum means in charging relation to said power source through said first resistor and in discharging relation to said tube when conducting, the value of said first resistor, said peaking resistor and condenser being chosen to provide a substantially linear sawtooth waveform at said anode upon the causing of periodic conduction and non-conduction in said tube at a frequency corresponding to that of said synchronizing pulses; galvanically conductive input impedance means having substantial resistance; means connecting said input impedance means in galvanically conducting relation between said control electrode and said datum means to form an input circuit through which control electrode current may flow; a second capacitor connected between said control electrode and said datum means in charging relation to input circuit potentials resulting from control electrode current flow to form in combination with said impedance a time constant biasing means having a time constant less than the period of said synchronizing signals; regeneratively feed back means coupled with said tube regeneratively feeding back output circuit signals to said input circuit with such magnitude as to cause periodic grid current flow in said tube followed by plate current cutoff therein, the voltage on said first capacitor increasing in a charging manner during intervals of said plate current cutoff; and a third capacitor having a value in excess of 100 micromicrofarads connected substantially directly between said anode and said control electrode to reduce the voltage rise at said anode immediately following conduction in said tube to minimize the likelihood of stray random signals immediately following said synchronizing signals producing random conduction in said tube.

2,729,745

SWEEP ARRANGEMENTS FOR SERVO SYSTEMS

Charles R. Kenny, Massapequa, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware

Application June 5, 1951, Serial No. 230,060
1 Claim. (Cl. 250—36)



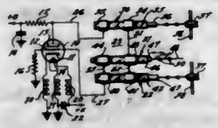
In an ultra-high frequency receiver, an automatic frequency control system for stabilizing the alternating output voltage from an ultra-high-frequency local oscillator at a fixed frequency independent of the frequency of a received signal, comprising in combination, an ultra-high-frequency discriminator coupled to the output of said local oscillator, said discriminator having a narrow band frequency response range which is within but less than the frequency range over which said local oscillator may be swept, said discriminator providing an output frequency control voltage when the frequency of said local oscillator is swept within the frequency response range of said discriminator, said frequency control voltage varying in magnitude and polarity according to departures of the frequency of said local oscillator from the lock-in frequency of said discriminator, a control amplifier coupled to the output of said discriminator for amplifying said frequency control voltage, means coupling the amplified frequency control voltage from the output circuit of said control amplifier to said local oscillator, an automatic sweep control means for sweeping the frequency of said local oscillator over a frequency band including the frequency response range of said discriminator, said sweep control means including an electron discharge tube and a feed-back circuit, said electron discharge tube having an input circuit and an output circuit, the output circuit of said electron discharge tube being coupled across the output circuit of said control amplifier, said feed-back circuit being coupled between the output circuit and the input circuit of said electron discharge tube, said electron discharge tube providing a voltage amplification according to the value of impedance in the intercoupled output circuits, the value of the impedance in the intercoupled output circuits being sufficiently high when the frequency of said local oscillator is outside the frequency response range of said discriminator for providing a voltage amplification in said electron discharge tube sufficient to produce a low frequency oscillatory sweep voltage in the output circuit of said electron discharge tube, the value of the impedance in the intercoupled output circuits being appreciably lower when the frequency of said local oscillator is within the frequency response range of said discriminator, the resulting voltage amplification in said electron discharge tube being insufficient to sustain said low frequency sweep voltage, said low frequency sweep voltage across the intercoupled output circuits sweeping the frequency of said local oscillator over a frequency band including the frequency response range of said discriminator, said sweep control means automatically ceasing to produce a sweep voltage when the frequency of said local oscillator is within the frequency response range of said discriminator and the voltage amplification of said electron discharge tube falls below the value necessary to sustain said low frequency sweep voltage, the frequency of the alternating output voltage from said local oscillator being controlled solely by the amplified frequency control voltage from said control amplifier and being stabilized at a fixed frequency equal to the lock-in frequency of said discriminator.

2,729,746

MULTI-CHANNEL UHF OSCILLATORS

Wen Yuan Pan, Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application August 23, 1951, Serial No. 243,220
The terminal fifteen years of the term of the patent to be granted has been disclaimed
15 Claims. (Cl. 250—36)



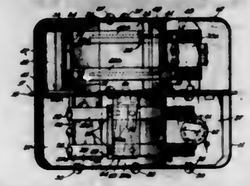
1. In a U. H. F. oscillator adapted to be tuned to two predetermined fixed frequencies, a frequency-determining series-resonant circuit structure comprising a first, a second and a third capacitance means, said first capacitance means including a first and a second capacitance member spaced from each other and a first conductive core disposed adjacent to said first and second members and adjustable with respect to said first member, said second capacitance means including a third and a fourth capacitance member spaced from each other and a second conductive core movable to a first position adjacent to both said third and fourth members and to a second position adjacent to said fourth member only, said third capacitance means including a fifth and a sixth capacitance member spaced from each other and a third conductive core disposed adjacent to said fifth and sixth members and adjustable with respect to said fifth member, a first conductor connecting said second member to said fourth member and providing inductance, further conductors providing negligible inductance and connecting said fourth to said sixth member and said third to said fifth member, and two output conductors connected individually to said first and to said fifth member.

2,729,747

ULTRA HIGH FREQUENCY TUNING APPARATUS

Harold F. Rieth, Kokomo, Ind., assignor to Kingston Products Corporation, Kokomo, Ind., a corporation of Indiana

Application February 19, 1951, Serial No. 211,633
7 Claims. (Cl. 250—40)



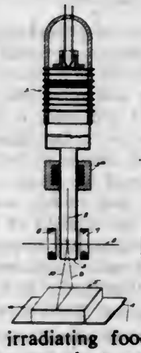
1. In a frequency selective tuning apparatus, a flat support member, circuit means including at least one parallel line resonating circuit loop on each side of said support member, an annulus circling the support member and rotatably mounted for angular adjustment relative thereto, and oppositely extending ganged slider bars engageable with each of said lines to control said resonating circuit loops in response to rotation of said support member for effecting selective frequency selection.

2,729,748

APPARATUS FOR STERILIZING FOODS, DRUGS AND OTHER SUBSTANCES BY SCANNING ACTION OF HIGH-ENERGY ELECTRONS

Denis M. Robinson, Arlington, Mass., assignor to High Voltage Engineering Corporation, Cambridge, Mass., a corporation of Massachusetts

Original application August 17, 1950, Serial No. 179,910, now Patent No. 2,602,751, dated July 8, 1952. Divided and this application July 13, 1951, Serial No. 236,652
15 Claims. (Cl. 250—49.5)



1. Apparatus for irradiating foods, drugs and other materials with high-energy electrons comprising in combination means for creating and directing an electron beam of small, cross-sectional area and high charge density, means for preserving the necessary vacuum in which the electrons are accelerated, means for supporting in the path of such electron beam, and outside the evacuated region in which the electrons are accelerated, the material to be irradiated by the action of said electron beam, and means for causing said electron beam to sweep rapidly with relation to said supported material, thereby delivering onto said supported material, by said electron beam, the required total dosage with maximum instantaneous ionization density.

2,729,749

LUMINOUS ATTACHMENT FOR LOCK BARRELS

Bernard Heinz, Scranton, Pa.

Application December 29, 1952, Serial No. 328,387
2 Claims. (Cl. 250—76)

1. A luminous attachment for locks comprising a transparent ring, a luminous coating on the inner end of

said ring, means fixedly securing said ring relative to the lock structure with said ring concentric to the lock barrel, a key guide plate interposed between said ring and the outer end of the lock barrel, said plate having a keyhole, a lock plate interposed between said guide

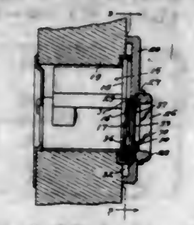
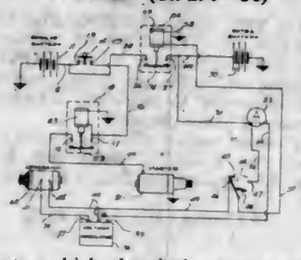


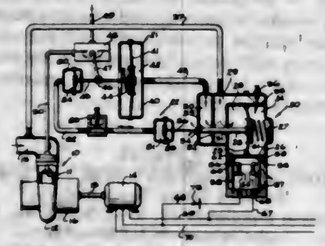
plate and the outer end of the lock barrel, and oppositely extending locking fingers carried by said lock plate engageable respectively in the keyhole of said guide plate and the keyhole of the lock barrel for locking said guide plate relative to said lock barrel.

2,729,750
MOTOR VEHICLE ELECTRICAL SYSTEM
Carson Owen Draper and Dale A. Draper, Provo, Utah
Application June 29, 1954, Serial No. 440,042
4 Claims. (Cl. 290—36)



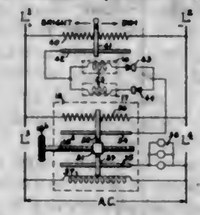
1. In a motor vehicle electrical system, a starting motor, a generator, a first battery, a second battery, a relay having its winding normally connected to said generator, a circuit controlled by said relay and arranged to connect said batteries to said generator in parallel for charging the batteries in response to energization of said relay by said generator. circuit means including a normally open control switch arranged to connect said first battery to said starting motor, and switch means arranged for at times disconnecting the winding of said relay from said generator and connecting said relay winding to said second battery, whereby said second battery is connected by said relay in parallel with the first battery and may be utilized for operating said starting motor.

2,729,751
REGULATING APPARATUS FOR PRIME MOVER DYNAMO PLANTS
Sydney E. Westman, Inglewood, Calif., assignor to The Garrett Corporation, Los Angeles, Calif., a corporation of California
Application June 16, 1951, Serial No. 232,015
7 Claims. (Cl. 290—40)



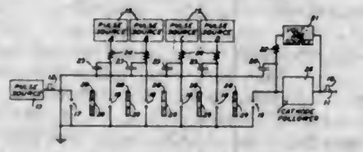
1. A regulating apparatus for a prime mover including: an alternator driven by said prime mover, a control operable to vary the output of said prime mover, regulating means operably connected to said control, and tuned vibrating means responsive to the output frequency of said alternator for controlling the operation of said regulating means.

2,729,752
ILLUMINATION CONTROL
Edwin W. Seeger, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application August 1, 1952, Serial No. 302,027
8 Claims. (Cl. 307—31)



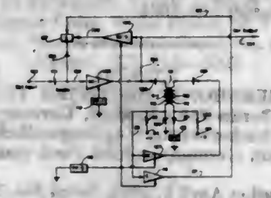
8. The combination with a dimmer having a reversibly rotatable control member, of a motor, a pair of shafts connected for simultaneous rotation thereof in opposite directions respectively by said motor, a pair of magnetic particle clutches individualized to each of said shafts for simultaneous drive of their driving elements thereby in opposite directions respectively, said clutches each having an electromagnetic energizing winding serving in accordance with its degree of energization to vary the adhesive coupling between its driving and driven elements, driving connections between the dimmer control member and the selectively driven elements of said clutches, and means for selectively controlling the energization of the clutch windings comprising a potentiometer rheostat having a selectively positionable contact element, a second potentiometer rheostat having its contact element positioned by said dimmer control member and a pair of half-wave rectifiers, each of which is connected in series with an associated one of said clutch windings between the contact elements of the rheostats in opposed current conducting relation to the other.

2,729,753
ELECTRICAL CIRCUITS EMPLOYING SPARK GAPS
Raymond W. Ketchledge, Whippany, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application September 16, 1954, Serial No. 456,594
10 Claims. (Cl. 307—88)



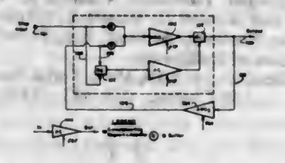
9. A logic circuit comprising a plurality of spark gaps arranged in succession, means applying a pulse to a first of said gaps to initiate a discharge thereat, means for preventing the shock wave from a discharge at one gap appearing at any but an adjacent gap with sufficient energy to trigger the gap, said gaps being arranged so that spark breakdown occurs at a gap on appearance thereat of a shock wave from an immediately prior spark gap, means for applying voltages to said spark gaps of sufficient magnitude to prevent breakdown of said gaps on appearance thereat of said shock wave, and output means connected to a last of said gaps for receiving an output pulse on the successive breakdown of each of said gaps between said first and last gaps.

2,729,754
MONOSTABLE DEVICE
William F. Steagall, Merchantville, N. J., assignor to Sperry-Rand Corporation, Philadelphia, Pa., a corporation of Delaware
Application October 27, 1954, Serial No. 464,979
14 Claims. (Cl. 307—88)



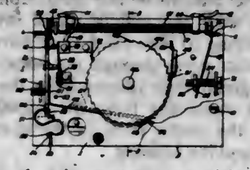
1. In combination in a monostable device, a first non-complementing magnetic amplifier supplied with a train of first phase power pulses, a second non-complementing magnetic amplifier supplied with a train of second phase power pulse input, a first circuit means connecting the output of said first amplifier to the input of said second amplifier, a second circuit means connecting the output of said second amplifier to the input of said first amplifier, one of said circuit means comprising an input means and a gating means, the other of said circuit means comprising an output means, a reactor comprising a saturable magnetic core with a substantially rectangular characteristic hysteresis loop, a primary winding and a secondary winding, a third non-complementing magnetic amplifier supplied with a train of second phase power pulses, a complementing magnetic amplifier supplied with a train of second phase power pulses, said primary winding having one terminal connected to said output means and the other terminal connected to the inputs of said third non-complementing magnetic amplifier and said complementing magnetic amplifier, a source of blocking pulses, said secondary winding being connected to the output of said third non-complementing amplifier and to said source of blocking pulses, the output of said complementing amplifier being connected to said gating means, said reactor core being of such size and material that a plurality of pulses are required to saturate it whereby a plurality of output pulses are produced at said output means in response to each input signal.

2,729,755
BISTABLE DEVICE
William F. Steagall, Merchantville, N. J., assignor to Sperry-Rand Corp., a corporation of Delaware
Application November 19, 1954, Serial No. 470,096
8 Claims. (Cl. 307—88)



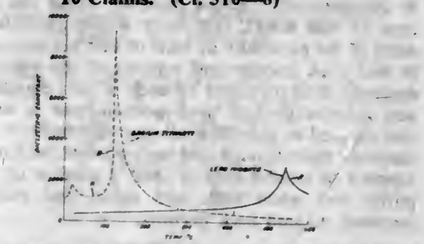
1. A bistable device comprising a first non-complementing magnetic amplifier having an input and an output, a gate means, a complementing magnetic amplifier having an input and an output, both said amplifiers having their outputs connected to said gate means, an output for said gate means, a second non-complementing magnetic amplifier having an input connected to the output of said gate and an output connected to the input of said first amplifier, at least one input for the device, a second gate means connected to a device input and the output of said second amplifier, the output of said second gate means being connected as input to said complementing amplifier.

2,729,756
ELECTRICAL THERMAL MOTOR
George M. Euler and John L. Sloanneger, Morrison, Ill., assignors to General Electric Company, a corporation of New York
Application August 26, 1954, Serial No. 452,396
16 Claims. (Cl. 310—4)



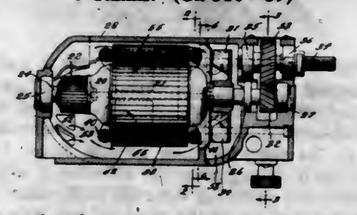
1. A thermo-electric motor comprising support and pivot means, a lever pivotably mounted on said means, spring means mounted on said means and spaced from said lever, a column of material expansible in response to heat positioned between said spring means and said lever, means for intermittently heating said column, toggle means engaging said lever and arranged to bias said lever against said column, said spring means being arranged to overcome said toggle means at a predetermined point in the expansion of said column thereby to snap said lever to a predetermined position, said toggle means being arranged to overcome said spring means at a predetermined point in the contraction of said column thereby to snap said lever to a second predetermined position.

2,729,757
FERROELECTRIC CERAMIC COMPOSITION AND METHOD OF MAKING SAME
Gilbert Goodman, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application June 9, 1951, Serial No. 230,788
10 Claims. (Cl. 310—8)



9. A transducer comprising a coherent fired body of piezoelectric ceramic consisting essentially of a combination of PbO and Nb_2O_5 in which the molar ratio of lead to niobium is between 0.25 and 0.75 to 1, said body having electrodes on opposing surfaces thereof.

2,729,758
ELECTRIC MOTOR
Walter Knapp, Manheim Township, Lancaster County, Pa., assignor to Reamstown Products Company, Reamstown, Lancaster County, Pa., a corporation of Pennsylvania
Application September 10, 1952, Serial No. 308,736
6 Claims. (Cl. 310—59)



1. In an electric motor, a rotor, a stator coil around the rotor, a magnetic core surrounding the rotor and at least partially surrounding the stator coil, a housing sur-

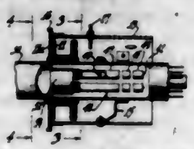
rounding the magnetic core, a shaft mounting the rotor and rotatably mounted in the housing, a fan on the shaft at one end of the rotor, there being inlet openings into the housing at the end remote from the fan, there being longitudinal passages between the inlet port and the fan through the space between the housing and the magnetic core around the outside of the stator coil, said passages terminating at their fan end in radial inwardly directed branches delivering to the radial inner portion of the fan, there being outlet ports through the housing adjacent the end of the magnetic core remote from the fan, and there being passages extending from the radial outer portion of the fan to the outlet ports in the space between the magnetic core and the housing.

2,729,759

BEAM CONTROLLING APPARATUS

Jerrold K. Kratz, Haddonfield, and William H. Barkow, Pennsauken, N. J., assignors to Radio Corporation of America, a corporation of Delaware

Application October 13, 1953, Serial No. 385,748
10 Claims. (Cl. 313—70)



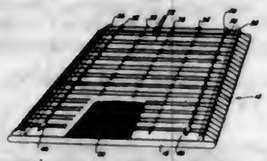
1. In color image reproducing apparatus utilizing a color kinescope including a neck portion, apparatus comprising the combination of a shield of magnetic material adapted to fit over said neck portion of said kinescope, means for fixedly mounting said shield on said neck portion, a plurality of permanent magnets, means for adjustably mounting said permanent magnets in said shield in symmetrically located positions about the circumference of said shield, said latter means permitting adjustment of the proximity of each of said permanent magnets to said neck portion and reversal of the polarity of the magnetic field produced by each of said permanent magnets relative to said neck portion, and a color purity coil adapted to provide a substantially uniform transverse magnetic field through said neck portion, said shield being adapted to extend over at least a portion of said color purity coil when both said shield and said coil are mounted on said neck portion.

2,729,760

ELECTRODE STRUCTURE FOR CATHODE-RAY TUBES FOR IMAGE PRODUCTION IN NATURAL COLOR

Ernest O. Lawrence, Berkeley, Calif., assignor to Chromatic Television Laboratories, Inc., New York, N. Y., a corporation of California

Application March 17, 1953, Serial No. 342,941
7 Claims. (Cl. 313—78)



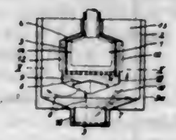
1. A vibration-inhibiting assembly for a cathode-ray tube designed for the reconstitution of polychrome images, said tube having a planar-surface target electrode and a color-control grid structure of parallel wires lying adjacent to the planar surface of said target electrode, said vibration-inhibiting assembly including a pair of rod-like members of insulating material each extending substantially transversely of the wires of said grid structure and interwoven therebetween so as to displace each of the said grid wires in a direction approximately normal to the planar surface of said target electrode, with each of the said grid wires being so displaced in the same direction by each rod and with adjacent wires being displaced in opposite directions relative to the said target electrode, thereby to form between said rods two sets of parallel grid wires respectively lying in distinct planes each of which is substantially parallel to the planar surface of said target electrode.

2,729,761

THERMIONIC RECTIFIER TUBE

Max Bosch, Berlin-Reinickendorf, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a joint stock company of Germany

Application April 1, 1952, Serial No. 279,799
Claims priority, application Germany April 3, 1951
4 Claims. (Cl. 313—167)



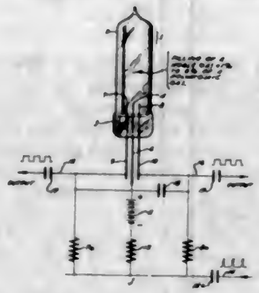
1. An arc-discharge rectifier, comprising a rectifier vessel containing a vaporous atmosphere, an anode and a thermionic cathode disposed in said vessel in spaced relation to each other, and a jacket having a peripheral wall portion surrounding said anode in spaced relation thereto and being open toward said cathode to permit arc discharges to pass from said cathode to said anode, said jacket having in said peripheral wall portion a plurality of elongated openings, said openings being narrow enough to deionize said vapor during flow therethrough, said openings being of such aggregate area as to offer no more resistance to the inflow of said vapor to the interior of said jacket than the resistance offered by said opening in said jacket toward said cathode, said vessel forming together with said jacket a buffer space around said jacket on the axial jacket end remote from said cathode, said buffer space being of such volume as to limit the concentration of ionization of the vapor surrounding said jacket wall portion to such a degree that substantially deionized vapor will be drawn through said openings to within said jacket to equalize pressure therein during half-cycles of non-conduction, whereby the occurrence of arc-back is minimized.

2,729,762

COLD CATHODE SWITCH TUBE

Glenn E. Hagen, Lawndale, Charles R. Williams, Hawthorne, and Robert D. Hancock, Compton, Calif., assignors to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California

Application April 18, 1950, Serial No. 156,659
12 Claims. (Cl. 313—185)



1. A three electrode cold cathode glow tube switch

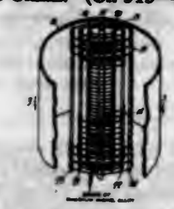
comprising an envelope containing an anode, and a cathode on each side of said anode, and a filling of a noble gas mixed with from 1% to 5% of water vapor.

2,729,763

ELECTRON TUBE GRIDS

Eugene Cohn, White Plains, N. Y.

Application March 19, 1952, Serial No. 277,403
1 Claim. (Cl. 313—311)



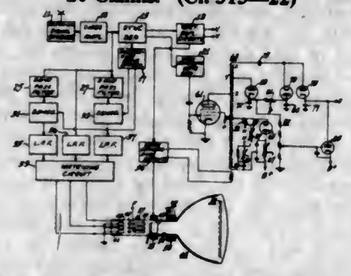
A grid electrode suitable for use in an electron tube consisting of an alloy wire having a diameter from .0015 to .0004 inch, the alloy consisting of from 30% to 50% rhodium, from 44% to 70% nickel and from 0% to 6% of a metal from the group consisting of tungsten and molybdenum.

2,729,764

HIGH VOLTAGE SUPPLY

Leonard Dietch, Pennsauken, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application February 3, 1954, Serial No. 407,921
20 Claims. (Cl. 315—22)



1. In a cathode ray tube system including a transformer periodically energized by pulses, a high voltage power supply comprising in combination first rectifying means coupled to an intermediate point on said transformer for developing a first unidirectional potential from said pulses, second rectifying means, a capacitor, said capacitor coupling said second rectifying means to a point on said transformer of higher pulse potential than said intermediate point, a D.-C. coupling means connected between said first and second rectifying means in such manner that a potential substantially equivalent to said first unidirectional potential is impressed on said capacitor whereby said second rectifying means develops a second unidirectional potential substantially equivalent to the sum of said higher pulse potential and said first unidirectional potential.

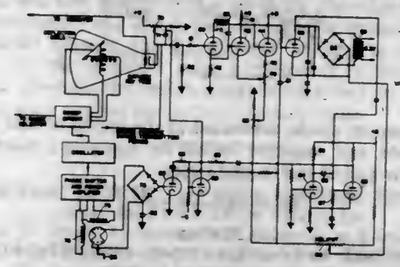
2,729,765

RANGE INDICATOR FOR SCANNING ECHO RANGING SYSTEMS

Norman B. Saunders, Cambridge, Mass., assignor to the United States of America as represented by the Secretary of the Navy

Application January 8, 1946, Serial No. 639,898
13 Claims. (Cl. 315—22)

1. Apparatus for supplying an electrical impulse to a cathode ray tube having imposed thereon a spiral sweep which includes, range gate means including an electronic valve controlled by a linearly varying voltage at each initiation of said spiral sweep, said gate means initiating said impulse, a pulsing circuit operated by said range gate and having incorporated therein a capacitor for determining the duration of said impulse, means to impress the output of said pulsing circuit on said cathode ray tube, and means operative in a predetermined sector of the spiral of said spiral sweep, said means providing a transient signal to override the output of said pulsing circuit whereby the impulse supplied to the cathode ray tube is interrupted, said overriding means including a triode, and a full wave rectifier connected to said triode, means to supply a voltage of an adjustable phase to said rectifier, and a capacitor connected to unbalance said rectifier whereby the output thereof which is impressed on said triode consists of a voltage wave having peaks at the impressed frequency.

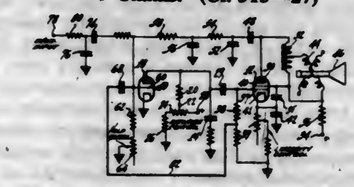


2,729,766

ELECTRONIC OSCILLATOR CIRCUITS

Benjamin S. Vilkomerson, Camden, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application February 7, 1951, Serial No. 209,737
9 Claims. (Cl. 315—27)



1. In an electron oscillator circuit, an electron discharge tube having at least an anode, cathode and control electrode, a resistive portion of a time constant circuit connected from said control electrode to said cathode, an output circuit connected from said anode to said cathode and including a source of biasing potential, coupling means having a substantially linear amplitude response connected between said output circuit and said time constant circuit for regeneratively feeding back electrical variations appearing in said output circuit to said time constant circuit, means included in said time constant circuit for changing the time constant value thereof, and a separate circuit consisting of an impedance connected from said output circuit directly to the resistive portion of said time constant circuit.

2,729,767

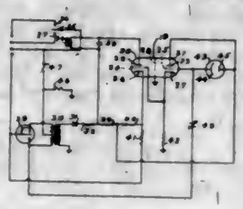
AUTOMATIC HEADLIGHT CONTROL

Dennis J. Psoras and Walter C. Brown, Baltimore, Md.

Application January 7, 1953, Serial No. 330,060
5 Claims. (Cl. 315—83)

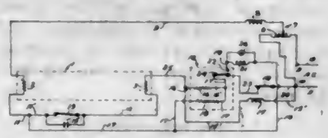
4. Apparatus for varying a lamp between bright and dim conditions, comprising a first triode, a second triode, the grid of said first triode being connected to the cathode of said second triode, plate potential supply circuits connected to the plates of the respective triodes, a lamp operable in bright and dim conditions, means responsive to

changes in plate current of said first triode for switching said lamp between bright and dim conditions, a phototube having its cathode connected to the grid of said second



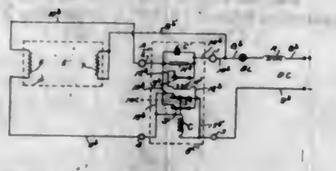
triode, and its anode connected to the anode of said second triode, and capacitor means for applying a blocking bias to the grid of said second triode.

2,729,768
STARTING AND OPERATING CIRCUITS FOR FLUORESCENT LAMPS
William S. H. Hamilton, Larchmont, N. Y.
Application August 22, 1952, Serial No. 305,790
8 Claims. (Cl. 315—100)



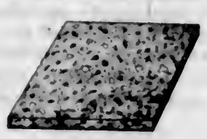
8. A system for supplying preheating and operating current to a discharge device comprising the combination of a supply line, a gaseous electric discharge device having two electrodes constructed to receive preheating current, a relay switch having two sets of normally closed contacts, means including an inductive reactance device and the operating coil of said relay switch for connecting said electrodes with said supply line, a time delay device having a normally closed contact, a normally open contact and a thermally responsive member constructed to move slowly from engagement with said normally closed contact to engage said normally open contact, electrical resistance means for heating said thermally responsive member, an electrode preheating circuit capable of producing firing temperature electrode heating, said circuit being a series circuit extending from one side of a voltage source to the opposite side of said source and including said inductive reactance device, one of said electrodes, the first set of relay switch contacts, said heating means, and a shunt circuit around said relay switch operating coil, said shunt circuit including in series connection said thermally responsive member and said normally closed contact and the second set of relay switch contacts so that after the line circuit is closed said heating means will be energized and will cause said thermally responsive member to move away from said normally closed contact and thus cause the energization of said relay switch operating coil and the consequent opening of said sets of relay switch contacts, the opening of the first set of contacts causing an inductive voltage kick across the electrodes to cause the discharge device to fire, the first set of said switch contacts being connected across the electrodes, the opening of the second set of relay contacts maintaining said operating coil energized after the re-engagement of the thermally responsive member with said normally closed contact, and, should the discharge device not fire, said member intermittently engaging and disengaging said contact until the heat from said heating means causes the thermally responsive member to move against said normally open contact, thus energizing the relay switch operating coil to thereby maintain the discharge device locked out of operation.

2,729,769
STARTING AND OPERATING CIRCUITS FOR FLUORESCENT LAMPS
William S. H. Hamilton, Larchmont, N. Y.
Original application June 6, 1951, Serial No. 230,185. Divided and this application February 18, 1953, Serial No. 337,487
4 Claims. (Cl. 315—100)



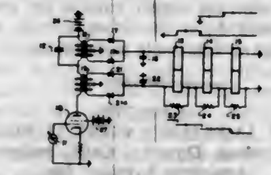
1. In a system for starting and operating electric discharge devices comprising a gaseous electric discharge device of the low pressure type having two electrodes at least one of which is constructed to receive preheating current, a supply circuit, a normally closed thermally responsive shunting switch having an operating heater, a normally closed electromagnetic starting switch having an operating winding, means including an inductive reactance device and the winding of said starting switch for connecting said electrodes to said supply circuit, a preheating circuit capable of producing firing temperature electrode heating, said circuit extending from one side of a voltage source to the opposite side of said source and including in series connection said inductive reactance device and the heater for said shunting switch and at least one of said electrodes and said starting and shunting switches, said shunting switch being connected in shunt with the winding of said starting switch so that the opening of said shunting switch causes the energization of said winding and the consequent opening of said starting switch thereby causing the discharge device to fire by an inductive voltage kick, said starting switch being connected in shunt with said electrodes, and mechanical means operatively interconnecting said starting and shunting switches to hold the shunting switch open after the heater therefor cools, the operating current of said discharge device continuing to energize said winding and hold both of said switches open during the operation of the discharge device, the combination with said system of a normally closed thermally responsive cut-out switch included in the said preheating circuit, and a heater therefor connected at all times across the electrodes of the discharge device.

2,729,770
ELECTRICALLY CONDUCTIVE PLASTIC PANELS
Edward Stanley Robbins, Killen, Ala.
Application April 13, 1954, Serial No. 422,797
11 Claims. (Cl. 317—2)



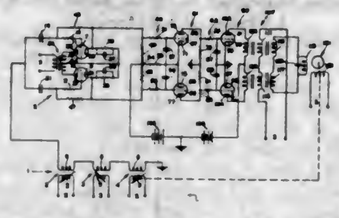
7. A singular, integral, semi-conductive floor covering characterized by a controlled, limited electrical conductivity between the upper wearing surface and the supporting undersurface thereof; said floor covering being semi-conductive and operative for dissipating static electricity, said covering comprising two distinctive floor covering materials which are intermixed and of different electrical characteristics of conductivity, the first material being electrically resistive, the second material being electrically conductive; the electrically resistive material forming the major proportion of the upper portion of the floor covering, including its upper wearing surface, and being irregularly disposed through the floor covering in amounts lessening toward the lower surface, the electrically conductive material forming the major proportion of the lower portion of the floor covering, including its supporting undersurface, and being irregularly disposed throughout said floor covering in lessening amounts toward the upper surface, said conductive material forming irregular channels extending from the lower portion of the floor covering to the upper wearing surface thereof, whereby a plurality of electrically conductive paths are provided between the upper wearing surface and the electrically conductive supporting undersurface of said floor covering; said materials being fused into an integral, monolithic, unitary floor covering.

2,729,771
ELECTRIC RELAY SYSTEMS
Bertram M. Hadfield, Manchester, Mass., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application January 28, 1949, Serial No. 73,365
14 Claims. (Cl. 317—138)



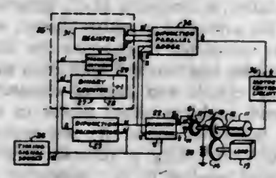
1. A signalling system having means for generating a number of currents of different frequencies, another means arranged to be controlled by each current generated by the first means and applied thereto for simultaneously providing a constant voltage regardless of the frequency of each applied current and a voltage proportional to the frequency of each applied current, means for applying the currents generated by the first means to said other means to control said other means to provide a constant voltage and a voltage proportional to the frequency of each generated current, a plurality of switch control elements of which a different number are arranged to be controlled by said constant voltage and each different proportional voltage when applied simultaneously to all of said switch control elements, and means for simultaneously applying to all of said switch control elements said constant voltage and the proportional voltage provided by said other means when controlled by a certain frequency of current to control only the number of said switch elements arranged to be controlled by said constant voltage and said proportional voltage.

2,729,772
SERVO SYSTEM CONTROLLED BY ELECTRICAL SIGNALS
Cories M. Perkins, Minneapolis, Minn., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application February 20, 1951, Serial No. 211,960
4 Claims. (Cl. 318—28)



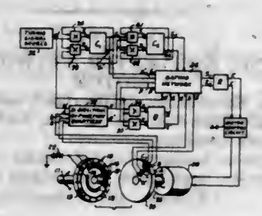
1. A device for amplifying the usable signals and rejecting the spurious signals of a signal source which develops signal voltages in response to a change in a condition to be measured, comprising a discriminator stage and an amplifier stage, said discriminator stage having a pair of electron tubes each having a grid adapted to receive directly said signal voltages including usable signals and spurious voltages substantially ninety degrees out of phase with the signals, said signal voltages being of a magnitude to operate the discriminator below saturating plate currents, and said amplifier stage receiving the output of said discriminator, said discriminator including means to substantially balance out the spurious voltages so that the input to the amplifier stage corresponds to the usable signal whereby the usable signal is amplified in the amplifier stage and not the spurious signal voltage.

2,729,773
ELECTRIC MOTOR CONTROL SYSTEM EMPLOYING DI-FUNCTION SIGNALS
Floyd G. Steele, La Jolla, Calif., assignor to Digital Control Systems, Inc., a corporation of California
Application April 9, 1953, Serial No. 347,803
10 Claims. (Cl. 318—28)



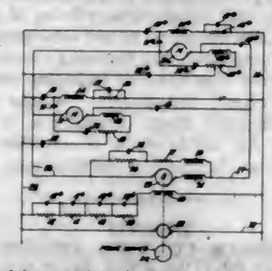
2. A device for controlling the shaft displacement made by an electric motor, said device comprising: a digital integrator responsive to the displacement of the motor shaft for producing an output di-function signal whose value in inversely proportional to the displacement; and means for applying energy to the motor in an amount proportional to the value of said output di-function signal.

2,729,774
DI-FUNCTION NON-LINEAR SERVO SYSTEM
Floyd G. Steele, La Jolla, Calif., assignor to Digital Control Systems, Inc., a corporation of California
Application February 13, 1953, Serial No. 336,817
12 Claims. (Cl. 318—31)



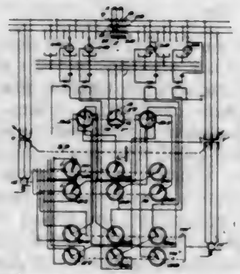
1. A di-function servo system for controlling the energization of a motor whereby the shaft of the motor rotates in accordance with the rotation of a freely rotatable shaft, said system comprising: means for electrically sensing the direction of relative displacement between the shaft of the motor and the freely rotatable shaft; means for producing a di-function signal whose value indicates whether said relative displacement is increasing, decreasing, or remaining constant; and means responsive to the value of said di-function signal and the direction of said relative displacement as sensed by the first named-means for controlling the application of energy to the motor to reduce said relative displacement.

2,729,775
CIRCUITS FOR WINCH MOTORS
Frank N. Ware, Rogers City, Mich., assignor to United States Steel Corporation, a corporation of New Jersey
Application May 21, 1952, Serial No. 289,175
3 Claims. (Cl. 318—87)



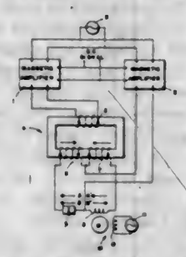
2. In a drive which includes opposed winches and cables adapted to pull in opposite directions, a pair of D.-C. motors each of which has an armature and a separately excited field winding, the armature of each motor being mechanically connected to a different winch for driving the latter, a common D.-C. generator connected to energize the armature of either motor, and a common D.-C. exciter connected to energize the field winding of either motor, the combination with each motor, of a dynamic baking circuit and control connections for said braking circuit enabling either motor to act as a holdback while the other drives its respective winch, each braking circuit including a resistance, a field winding differential with respect to the respective separately excited field winding and contacts connected in series across the respective motor armature, each control connection including contacts connected between the armature and the separately excited field of the respective motor, contacts connected between said exciter and at least a portion of the respective resistance, and contacts connected between said exciter and the respective separately excited field, said first, second and third named contacts associated with either motor being adapted to open and said fourth named contacts associated therewith to close to enable that motor to drive its winch, the contacts associated with the other motor being adapted to assume opposite positions to enable this other motor to exert a holdback torque with current generated thereby both setting up a series field differential to the separately excited field and opposing the current from said exciter.

2,729,776
ELECTRONIC CONVERTER NETWORK FOR A. C. MOTOR
Erwin Kern, Ennetbaden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie, Baden, Switzerland, a joint stock company
Application January 5, 1953, Serial No. 329,680
Claims priority, application Switzerland January 8, 1952
3 Claims. (Cl. 318—138)



1. An electronic converter system comprising multiphase alternating current input circuit, a commutatorless rectified current motor having a field winding and a star-connected multiphase driving winding having a section with an outer terminal for each phase of the input circuit, two sets of converter paths in parallel between each motor winding terminal and the respective phases of the alternating current input circuit, oppositely arranged electronic converters in the converter paths of each set, the respective converter including a control grid between a cathode and anode for controlling conduction through the converter, and a control network for commutating one converter of each set as a rectifier with respect to input circuit voltage and as an inverter with respect to motor voltage and commutating the other converter as an inverter with regard to input circuit voltage and as a rectifier with regard to motor voltage, the commutation as viewed from the motor leading the voltage zero for the converters passing current in one direction and lagging the voltage zero for the converters passing current in the opposite direction; said control network including separate groups of ganged switches for supplying grid-ignition voltages in sequence to the several converters in the respective parallel converter paths, separate synchronous motors for driving each of said groups of ganged switches, and separate supply circuits for energizing the respective motors from the input circuit, each supply circuit including an adjustable transformer.

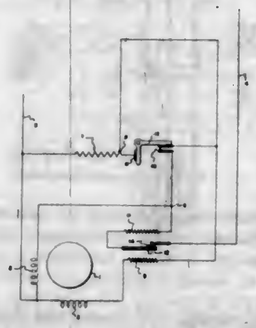
2,729,777
MAGNETIC AMPLIFIER CIRCUIT FOR MOTOR
Edward L. Gardner, Downey, Calif., assignor to North American Aviation, Inc.
Application November 12, 1954, Serial No. 468,213
9 Claims. (Cl. 318—207)



1. In combination, two magnetic amplifiers, a transformer comprising a first, second and third winding, a first load and a second load, said second winding and said first load connected in parallel with said third winding and said second load, the output of said first magnetic amplifier connected to the common connection of said second winding and said third winding and the common connection of said first load and said second load, and the output of said second magnetic amplifier connected to said first winding.

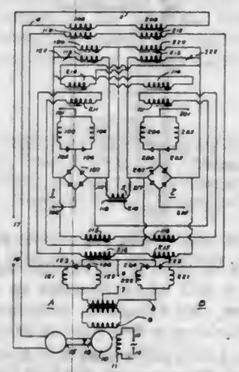
2,729,778
MOTOR PROTECTION DEVICE
Charles S. Grimshaw, Fulton, Ill., assignor to General Electric Company, a corporation of New York
Application September 16, 1954, Serial No. 456,593
1 Claim. (Cl. 318—221)

In combination, a single phase motor adapted to be connected to a power supply line and including a rotor, a starting winding and a running winding; starting and running circuits for said motor; said running circuit including, in series connection, said running winding, a thermally operated overload switch and a running circuit overload heater; said starting winding including, in series connection, said starting winding, a starting circuit overload heater, said overload switch, said running circuit overload heater, and starting circuit control contacts; a resistance heater actuating said starting circuit control contacts and connected in parallel with said starting winding and in series with said starting circuit control contacts, said running circuit overload heater and said overload switch; said resistance heater being connected across said power line when said starting circuit control contacts are closed and opening said starting circuit contacts after connection of said motor to said



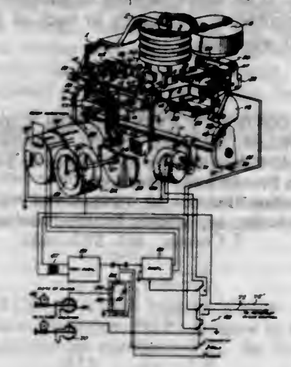
supply line for a predetermined period of time; said resistance heater and said starting circuit overload heater also forming part of and being energized by a closed circuit including said starting winding when said starting circuit contacts are open whereby said resistance heater holds said starting circuit contacts open when said rotor is running and closes said contacts to energize said starting winding circuit when said rotor stalls.

2,729,779
MOTOR CONTROL SYSTEM UTILIZING MAGNETIC AMPLIFIERS
Frederick Roger Milsom, Cheltenham, Glos, England, assignor to S. Smith & Sons (England) Limited, London, and Furzehill Laboratories, Herts, England
Application December 12, 1950, Serial No. 200,350
4 Claims. (Cl. 318—327)



1. An amplifier system comprising two similar magnetic amplifiers each having an input and an output, a source of current coupled to each of said inputs, said amplifiers each including rectifying means so arranged that each amplifier produces direct currents which vary respectively in opposite directions from a common datum in response to variations in said source of current, positive voltage feedback means coupled to each of said outputs, positive current feedback means coupled to each of said outputs, negative voltage feed back means coupled to each of said outputs, and negative current feedback means coupled to each of said outputs, means selectively coupling said voltage feedbacks from each of said outputs to both of said inputs, further means selectively coupling said current feedbacks from each of said outputs to both of said inputs, and a further amplifier system having a further input, the outputs of said two similar magnetic amplifiers being coupled to the input of said further amplifier system.

2,729,780
ALTITUDE CONTROL FOR AUTOMATIC PILOTS
Harry Miller, Brooklyn, and Robert D. Love, Malverne, N. Y., assignors to Sperry Rand Corporation, a corporation of Delaware
Application February 9, 1951, Serial No. 210,152
18 Claims. (Cl. 318—489)



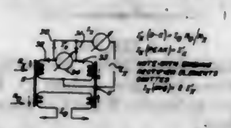
1. A pressure responsive device comprising a pivoted control bar, leaf springs providing a pivotal orthogonal axis mounting therefor, said bar being statically balanced about its pivotal axis, means for preventing vibratory oscillations from affecting said bar including a second weighted bar, means for pivotally mounting the same about an axis parallel to the axis of said first bar, and means for oppositely coupling said two bars so that ratio of the moment of inertia of the two bars to their respective lever arms are equal and opposite.

2. In a pressure responsive device of the type wherein a pivoted control member is subjected to two opposing couples derived respectively from a barometric element and an energized resilient member, the combination comprising motive means connected to said resilient member for energizing the same, a pick-off for providing a control signal in accordance with pivotal movements of said control member about a null position occurring when said opposing couples are equal, reference means driven by said motive means to a setting corresponding to a reference altitude, selector means manually positioned to a setting corresponding to a desired altitude, means connecting said reference means and selector means for providing a signal output dependent on the difference between said settings, and means for applying said difference signal output in controlling relation to said motive means whereby said control member is offset from its null position to produce an altitude control signal so long as disagreement exists between the reference altitude and the desired altitude.

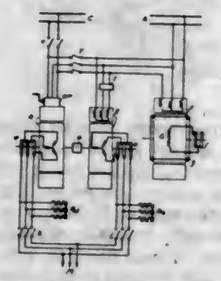
2,729,781
ELECTROMAGNETIC TRANSFORMER
Roswell W. Gilbert, Montclair, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a corporation of New Jersey
Application October 31, 1952, Serial No. 317,898
1 Claim. (Cl. 321—25)

Apparatus for the ratio transformation of direct current and comprising input and output circuits, a pair of saturable magnetic cores, a primary winding linking each of said cores and connected to the input circuit, single identical secondary windings linked to each core and connected in series to the output circuit, diode rectifier

elements connected in series with each of the secondary windings, and a source of alternating current excitation connected to the secondary windings in parallel relationship, the magnitude of the alternating current being sufficient to maintain a magnetic flux linkage in at least one of the cores at all times, thereby to maintain substantially equal magnetization alternately in each of the secondary and primary windings.



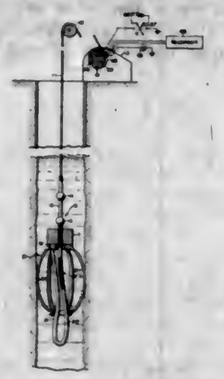
2,729,782
FREQUENCY CONVERTOR GROUPS
Pierre Letrilliart, Jeumont, France, assignor to Forges et Ateliers de Constructions Electriques de Jeumont, Paris, France, a French body corporate
Application October 30, 1951, Serial No. 253,787
Claims priority, application France November 7, 1950
7 Claims. (Cl. 321—63)



1. A frequency convertor group for producing successively a plurality of polyphase output frequencies within a wide range, comprising two similar polyphase induction machines of the conventional type with slip-ring rotors, said rotors being mechanically coupled together, two rheostats connected separately to said rotors, a pole-changing device for the stator windings of the first of said induction machines, a reverser for the stator windings of the second machine, an interconnecting switch between the stator windings of the respective induction machines, selective switching means for connecting said slip-ring rotors to a polyphase load, means for energizing the stator windings of at least one of said induction machines by direct current and means for energizing the stator windings of both said induction machines by polyphase current of constant frequency.

2,729,783
METHOD OF AND APPARATUS FOR ELECTRICAL WELL LOGGING
Raymond G. Piety, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application February 6, 1950, Serial No. 142,577
6 Claims. (Cl. 324—1)

1. Apparatus for electrical well logging which comprises, in combination, a cage forming a first electrode adapted to contact well fluid when the cage is lowered into a well bore, said cage including a plurality of strips of resilient material so arranged as to engage the walls of a well bore to resist movement of the cage in a longitudinal direction therethrough, a cable attached at its lower end to said cage for suspending said cage in a well bore, a weight carried by said cable at a position above its point of attachment to said cage, the portion of said cable between said cage and said weight being sufficiently flexible to allow said weight to engage said cage whereby the weight forces the cage downward through the well bore, second and third electrodes carried by said cable above said weight in spaced relation with one another



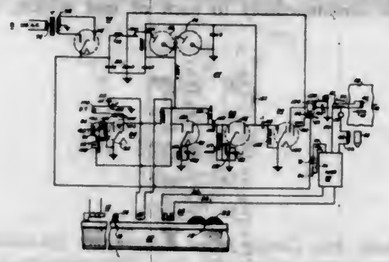
and with said weight, said second and third electrodes being electrically insulated from one another and from said cage through said cable, said second and third electrodes each being adapted to contact well fluid in the bore hole.

2,729,784
METHOD AND APPARATUS FOR ELECTRIC WELL LOGGING
Robert E. Fearon, Tulsa, Okla., assignor, by mesne assignments, to Lane-Wells Company, Los Angeles, Calif., a corporation of Delaware
Application November 30, 1950, Serial No. 198,295
15 Claims. (Cl. 324—1)



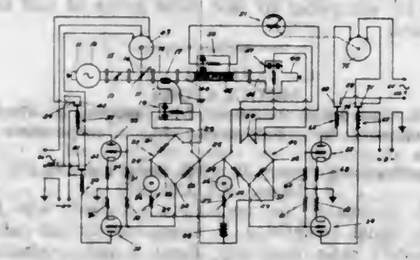
1. A method of making an electric log of the formations adjacent a well which contains an electrically conductive medium, that comprises introducing a first electrical current between a first pair of axially spaced positions bounding a first portion of said electrically conductive medium in a manner such that said first electrical current will have a substantial axial component, separately introducing a second electrical current between a second pair of axially spaced positions bounding a second portion axially spaced from said first portion of said electrically conductive medium in a manner such that said second electrical current will have a substantial axial component opposite to said axial component of said first electrical current, whereby the flow of the axial components in opposite directions will create on a pair of axially spaced locations in the region between said portions substantially equal potentials different from the potential of any given reference point located in remote portions of said electrically conductive medium, and measuring a function of the current conducted between said region and the formation adjacent thereto.

2,729,785
MULTI-CYCLE DETECTOR
Henry W. Keevil, Evanston, Ill.
Application January 17, 1952, Serial No. 266,971
3 Claims. (Cl. 324—37)



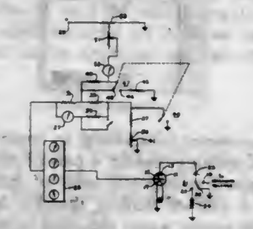
1. In an apparatus for locating relatively-deep internal flaws in rails, rail magnetizing means movable along the rail for inducing a magnetic flux into the rail to set up characteristic residual magnetic conditions in the vicinity of such flaws as well as in the vicinity of surface defects, detector means likewise movable along the rail and adapted to produce an electrical impulse whenever said detector means traverses such fields, recording means potentially responsive to the production of an impulse by said detector means to produce a recording, a vacuum tube regenerative oscillator having a tuned input circuit, means to produce an electro-magnetic field, said means including a coil operatively connected to said oscillator and likewise movable along the rail with its longitudinal axis substantially at right angles to the length of the rail whereby successive portions of the rail are subjected to the external field of said coil to produce eddy currents in the object whereby surface cracks therein block the normal path of said eddy currents and change the reluctance of said field and, consequently, the reactance of said coil to an extent sufficient to render said oscillator circuit incapable of sustaining oscillations, means operable upon termination of oscillations in said oscillator circuit for producing an electrical impulse, and relay means operable upon production of an electrical impulse by said latter impulse producing means for rendering said first-mentioned impulse-producing means ineffective.

2,729,786
MEANS FOR TREATING SUBSTANCES
Norman R. Wild, East Natick, and Huston W. Cockrill, Auburndale, Mass., assignors to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application December 17, 1945, Serial No. 635,560
9 Claims. (Cl. 324—58.5)



9. Apparatus for treating a substance comprising: means for generating electromagnetic energy of a critical wavelength, characteristic of the nature of said substance in its molecular form, at which a strongly selective absorption of said energy occurs, said critical wavelength being longer than about .1 millimeter; a wave guide, receptive of said energy and receptive of said substance, for propagating said energy through said substance; a variable attenuating device associated with said wave guide and disposed intermediate said first-named means and said substance; and thermally-responsive means, receptive of and operable by a portion of said energy, for controlling the operation of said attenuating device, whereby said energy is maintained at a substantially constant power level; means for indicating the amount of said energy absorbed by said substance in terms of the quantity of said substance initially present; thermally-responsive means, receptive of said energy after the same has passed through said substance and adapted to absorb the remaining energy, for controlling the operation of said indicating means; and thermally-responsive means, cooperable with said last-named thermally-responsive means and disposed closely adjacent thereto, for eliminating the effect on said last-named thermally-responsive means of changes in ambient temperature, whereby inaccuracy in the determination of the amount of energy absorbed by said substance is eliminated and the magnitude of the absorbed energy may be utilized to indicate the quantity of said substance being treated.

2,729,787
VACUUM TUBE VOLTMETER
Luke C. L. Yuan, Princeton, N. J., assignor to the United States of America as represented by the Secretary of the Navy
Application July 26, 1949, Serial No. 106,835
1 Claim. (Cl. 324—123)

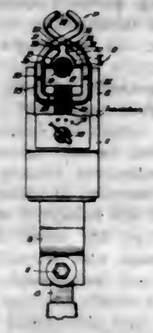


Potential measuring apparatus comprising a circuit having two parallel arms, one of said arms comprising a source of reference voltage and a resistive network, the other of said arms comprising a bridge circuit including first and second equal resistances forming two arms thereof, a variable resistance forming a third arm thereof in series with said first resistance, a precision resistance, electron discharge tube and a voltage to be measured, in series with said second resistance, forming the fourth arm thereof, and null indicating means coupling the junction of said first and said variable resistance with the junction of said second resistance with said fourth arm, wherein the precision resistance is coupled to the grid of said tube and the negative terminal of the voltage to be measured is coupled to the plate of said tube.

2,729,788
ELECTRIC MEASURING INSTRUMENT
Edmund O. Schweitzer, Jr., Northbrook, Ill., assignor to E. O. Schweitzer Manufacturing Co., Inc., Northbrook, Ill., a corporation of Illinois
Application December 29, 1951, Serial No. 264,121
2 Claims. (Cl. 324—127)

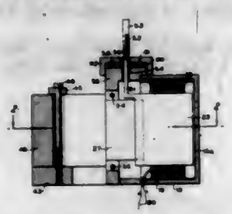
1. Means for measuring alternating current flow in a conductor comprising, in combination, a magnetic core structure defining a generally rectangular window open on one end with the sides beyond said open end having spaced cork screw like arms intertwined with each other and defining a permanently open entrance slot therebe-

tween through which said conductor is adapted to enter said window, and a measuring winding linking said core



structure for measuring the current flow in said conductor.

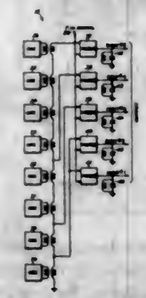
2,729,789
GALVANOMETER
Robert M. Ransier and Garold B. Way, Bartlesville, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware
Application September 18, 1950, Serial No. 185,356
5 Claims. (Cl. 324—147)



1. A galvanometer comprising, in combination, a housing having an opening therein, a pair of plates of magnetic material disposed at opposite sides of said housing, each plate having a pair of flanges, thereby defining two sets of spaced pole pieces, a coil mounted between the flanged portions of said plates to vary a magnetic field therebetween in accordance with an electrical signal input, an armature comprising a flat plate of magnetic material having a slot formed in one edge thereof, a resilient metal hinge plate having one edge thereof secured to said housing and an opposite edge fitted within said slot and secured to the portions of said flat plate defining said slot, an arm protruding from said edge of the flat plate and having a bent portion extending through said opening, said bent portion having a mirror-supporting cradle formed exteriorly of said housing in substantial alignment with the axis of rotation of said hinge plate, a gasket sealing the region between said arm and said housing in the neighborhood of said opening, a magnet for establishing a magnetic field between said sets of pole pieces, and means for detachably securing said magnet to said housing whereby the magnet is movable upon disengagement of said securing means to permit variation of the magnetic field between said sets of pole pieces, thereby to permit centering of said armature.

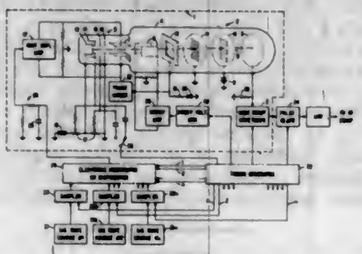
2,729,790
PULSE CODE MODULATOR
Herbert S. Haynes, Montclair, N. J., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application January 2, 1952, Serial No. 264,618
9 Claims. (Cl. 332—1)

1. A pulse code modulation coder comprising a frequency modulation signal source and a cyclic progression coding circuit, said coding circuit including a mixer for each digit incorporated in a cyclic progression code, a plurality of independent frequency sources, means to apply predetermined ones of said frequency sources to said mixers, means to apply signals from said signal source simultaneously to each of said mixers, a delay



line having a plurality of input connections therealong and means connecting the outputs of said mixers to respective ones of said input connections to thereby interleave in time the outputs of said mixers, and means to convert the signal output of said mixers to pulse code signals.

2,729,791
MULTICHANNEL COMMUNICATION
Charles L. Estes, Scottsdale, Ariz., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application December 27, 1952, Serial No. 328,220
16 Claims. (Cl. 332—11)

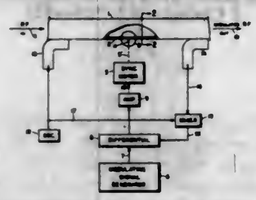


14. A binary pulse coder of the type described comprising a coding device of the electron beam deflecting type operated at twice the sampling repetition rate to form a code pulse group in one-half the time allotment per channel in a multichannel signal wave and a code group stretcher coupled to the output of said coding device to expand the digit spacing of the condensed code pulse group for occupancy by said pulse group of said time allotment.

2,729,792
MODULATORS
Peter A. Castruccio, Baltimore, Md., assignor to Aircraft Armaments, Inc., Baltimore, Md., a corporation of Ohio
Application February 12, 1953, Serial No. 336,483
4 Claims. (Cl. 332—37)

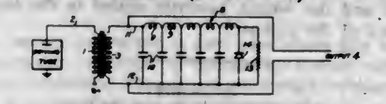
1. A modulator for modulating a pulsed radio frequency signal comprising, a waveguide through which said pulsed radio frequency signal is fed, modulating means including a movable attenuator, said waveguide having a slot formed therein receiving said movable attenuator for amplitude modulating electrical energy within said waveguide, oscillating means generating a continuous wave signal at a frequency different from the frequency of said pulsed radio frequency signal, means feeding said continuous wave signal into said waveguide

ahead of said slot and extracting said continuous wave signal after said slot as a modulated continuous wave signal, mixer means connecting with said last mentioned means and responsive to said modulated continuous wave signal to produce a signal representing the envelope of



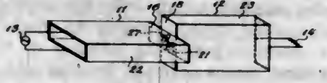
the modulated continuous wave signal, and feedback means connecting with said modulating means and responsive to the output from said mixer means for stabilizing said modulating means and reducing overall phase shift of the modulated radio frequency pulses.

2,729,793
INDUCTIVE COUPLING CIRCUITS FOR PULSES
Warren A. Anderson, Nutley, N. J., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application October 20, 1951, Serial No. 252,281
8 Claims. (Cl. 333—20)



1. A device for coupling across an inductive circuit to reduce the duration of the inductive reaction of said circuit upon transmission of an electric pulse therethrough, comprising a transmission line having common input and output terminals at one end thereof for coupling across said inductive circuit, means terminating the other end of said line in its characteristic impedance including a second means to present at said other end an effective short circuit to pulses of a given polarity to thereby invert and reflect them back to said common terminals, and to present an effective open circuit to pulses of polarity opposite to said given polarity whereby pulses of said opposite polarity are suppressed.

2,729,794
HIGH FREQUENCY APPARATUS
Seymour B. Cohn, Flushing, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application October 20, 1950, Serial No. 191,118
8 Claims. (Cl. 333—21)



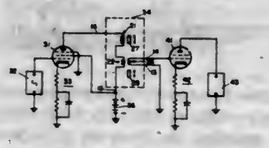
1. High frequency apparatus comprising two rectangular waveguides dimensioned to propagate electromagnetic energy in the dominant mode and substantially aligned along an axis, said waveguides having end walls, a portion of each of said end walls being in common with a portion of the other end wall, the narrow sides of one of said waveguides being parallel to the broad sides of the other of said waveguides, said common end wall portion being substantially square in outline, and means for coupling between energy propagated in the dominant TE_{10} mode in each of the wave guides, said last-named means including at least one aperture in the square common end wall portion between the wave guides, said aperture being resonant at a frequency within the operating frequency range of the wave guides, the energy coupling means being asymmetrical about the two bisectors of the square end wall portion that extend parallel to the wave guide walls defining said square end wall portion, and the energy coupling means being symmetrical about at least one diagonal of the square common end wall portion.

2,729,795
DELAY LINE
Conrad H. Hoeppner, Washington, D. C.
Application September 19, 1945, Serial No. 617,420
2 Claims. (Cl. 333—29)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. An artificial transmission line comprising a rod-like conducting member, a plurality of insulating sleeve members each of which contains an inductance coil wound thereon, said sleeve members being disposed on said rod-like member and supported in colinear relation thereby, the separate inductance coils being connected in series, a plurality of disc shaped capacitors each of which includes a centrally disposed conducting sleeve extending therethrough and defining one electrode terminal of the capacitor, the other electrode terminal of the capacitor being formed on the periphery of the capacitor, each of said capacitors being disposed on said rod in alternation with said insulating sleeves with the central electrode of each of said capacitors contacting said rod, the other terminal of each of said capacitors being connected to the electrical junction of adjacent inductance coils.

2,729,796
BAND PASS COUPLING CIRCUIT
George D. Hulst, Upper Montclair, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application December 27, 1951, Serial No. 263,565
3 Claims. (Cl. 333—78)



1. A device for coupling a voltage source having a pair of output terminals and capacitance thereacross to a utilization circuit having a pair of input terminals and input capacitance and conductance thereacross, said device comprising a tunable transformer having a primary circuit comprising first and second helical primary windings connected in series across said output terminals of said source; a helical secondary winding bifilarly interwound with said second primary winding and connected across said input terminals of said utilization circuit, said secondary winding being inductively coupled substantially exclusively to said second primary winding to reflect said input capacitance and conductance back to said second primary winding to load and to tune said primary circuit; a first slug located within said first primary winding and movable axially thereof to change the inductance of said first primary winding thereby changing the bandwidth of said device; and a second slug located within said second primary and said secondary and movable axially thereof to adjust the center frequency to which said device is tuned, the relative inductances of said first and second primary windings being so related that the change in the

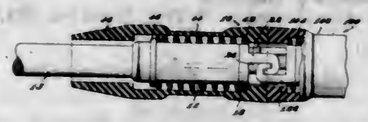
amount of said input capacitance reflected back to said primary circuit upon movement of said first slug maintains substantially constant the frequency to which said primary circuit is tuned upon variation of the inductance of said first primary winding upon said movement of said first slug.

2,729,797
PLUG FOR ELECTRICAL APPARATUS
Victor Kobler and Werner Kobler, Zurich, Switzerland
Application September 20, 1954, Serial No. 456,899
Claims priority, application Switzerland September 29, 1953
3 Claims. (Cl. 339—36)



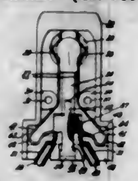
1. A plug for electrical apparatus comprising an insulating body, plug contacts at one end of said insulating body, a protection cap for sensitive apparatus parts and a cap support slidably arranged on said insulating body, said protection cap and said insulating body being formed as separate parts, said cap support having a recess, said protection cap and its support being movable from one position in which the insulating plug body is nested within said recess in said cap support and said cap is arranged adjacent the contact carrying portion of said body to a second position away from said contact carrying portion of said insulating body.

2,729,798
ELECTRICAL CONNECTOR
Harold J. Graham, Highland Park, Mich., assignor to Mec-Elec Engineering Co., Boston, Mass., a corporation of Massachusetts
Application July 6, 1950, Serial No. 172,314
5 Claims. (Cl. 339—47)



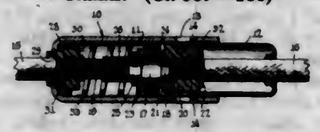
1. An electrical connector comprising two identical coupling members each including a body having means at one end for securing the body to a respective electrical conductor and a plurality of equally spaced fingers at the opposite end for engaging the similar fingers of the opposite member, the inner and outer surfaces of the fingers lying, respectively, in two coaxially disposed cylinders, each of the fingers including a main portion projecting outwardly from said body and having a laterally extending shoulder with a lip arranged substantially parallel to the main portion of the finger to form a reentrant recess having generally parallel side walls, the distance between the side walls being slightly greater than the width of the lip, the distance between the side of the lip of one finger and the adjacent side of the main portion of the next finger being greater than the distance between the same side of the lip and the corresponding side of the main portion of the same finger so that the members can be assembled by inserting the fingers of one member into the slots between the fingers of the other member and relatively rotating said members, and yieldable means for axially moving the lips into the recesses in the corresponding fingers thereby to lock the members in assembled position and insure good electrical contact therebetween.

2,729,799
FLUORESCENT LAMPHOLDER WITH QUICK-CONNECT TERMINALS
John M. Pistey, Fairfield, Conn., assignor to General Electric Company, a corporation of New York
Application October 29, 1954, Serial No. 465,499
5 Claims. (Cl. 339—52)



1. A lampholder comprising a hollow housing having at least one contact member of resilient material, a terminal portion of said contact being bent at a reentrant angle and serving as a movable locking tongue, a manually operated plunger extending through one outer wall of the housing and guided for reciprocating movement adjacent the free end of the locking tongue, the plunger having an indentation in one side face for receiving the free end of the tongue, and a lead-wire-receiving opening in said outer wall adjacent the plunger, so that when the plunger is in its outer position, a lead wire may be inserted between the plunger and the locking tongue of the contact, while the wire may be gripped in the housing when the plunger is forced inwardly thereof and the tongue becomes seated in the indented side face of the plunger.

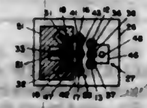
2,729,800
ELECTRIC WIRE COUPLING
Knud J. Knudsen, Naugatuck, Conn., assignor to The Lewis Engineering Company, Naugatuck, Conn., a corporation of Connecticut
Application April 23, 1953, Serial No. 350,646
8 Claims. (Cl. 339—188)



1. An electric connector for detachably connecting together two electric lines, comprising a tubular casing having an inwardly-extended shoulder adjacent one end; a pair of contacts in the casing, having abutting engagement with each other; means mounting one contact on the casing for movement toward and away from the other contact including a pair of telescoping metal members in the casing, slidable one on the other, said one contact being rigidly secured and electrically connected to one of the telescoping members and the other telescoping member being loosely carried in and engaging the shoulder of the casing, said shoulder preventing pull-out of said other member; resilient means normally holding said one contact in abutting engagement with the other contact, said means normally retaining said other telescoping member and shoulder in engagement and means electrically connecting the ends of the lines respectively to said other contact and to said other telescoping member.

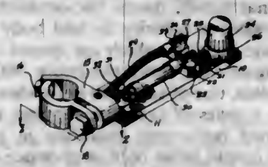
2,729,801
THERMIONIC TUBE AND SOCKETS THEREFOR
Henry R. Hesse, East Paterson, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application August 31, 1951, Serial No. 244,602
4 Claims. (Cl. 339—193)

1. An electrical connector for a circular thermionic tube and the like having at least two connector pins extending therefrom in a common plane across the diameter of said tube, comprising a socket for receiving said pins, said socket comprising an electrically conductive pin receptacle positioned substantially in said plane and extend-



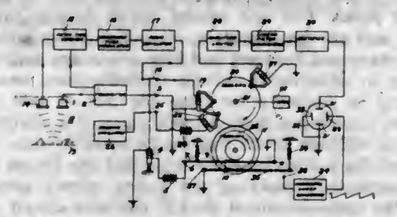
ing laterally between said pins and having sufficient depth to substantially fill the area defined thereby, and pin-gripping portions at the lateral extremities of said receptacle, extending along and in electrical contact with substantially the entire lengths, respectively, of said pins.

2,729,802
BATTERY CONNECTOR
John C. Jordan and Lloyd M. Le Jeune, Monroe, La.
Application May 21, 1954, Serial No. 431,563
1 Claim. (Cl. 339—256)



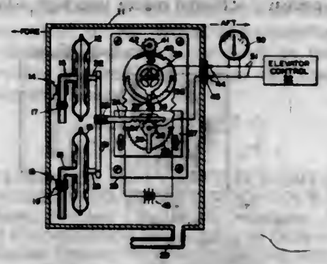
In a battery connector, a first conductive clip having blade contacts arranged in upstanding spaced relation, a second conductive clip also having blade contacts arranged in upstanding spaced relation positioned in longitudinal spaced relation with respect to said first clip with the space between its blade contacts in alignment with the space between the blade contacts of said first clip, there being registering cross slots in each of said blade contacts extending inwardly from the upper ends thereof, each of said blade contacts being adapted to receive in the space therebetween a blade type terminal projecting from an end of a fuse and to frictionally engage such terminal when received in said space with the registering cross slots receiving the cross piece carried by said blade type terminal.

2,729,803
RECORDING DEPTH SOUNDER
Bertram M. Harrison, Wellesley Hills, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application December 22, 1949, Serial No. 134,558
8 Claims. (Cl. 340—3)



8. A distance measuring and recording device comprising means for measuring said distance, means for generating signals having a frequency which varies as a function of said distance, means for storing said signals comprising a magnetizable medium, means for cyclically moving said medium relative to a recorder to record information in said medium, said recorder being energized to record information during a predetermined portion of the cycle, and means for progressively varying the position of said portion in said cycle.

2,729,804
AIRCRAFT ALTITUDE SIGNAL GENERATOR
Frederick W. Schule, Shorewood, Wis., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application November 19, 1953, Serial No. 393,075
6 Claims. (Cl. 340—27)



1. An aircraft altitude control signal generator comprising means for producing a first electrical signal having a polarity corresponding to the direction of pitch deviation from level flight pitch and an amplitude corresponding to the extent of such deviation, means for producing a second electrical signal having a polarity corresponding to the direction of a change in altitude and an amplitude corresponding to the rate and amount of such change, the polarity of such signals being opposite for changes in the same direction, and means for combining said signals to produce a resultant control signal.

2,729,805
RAILWAY CROSSING APPROACH SIGNAL
Douglas R. Struke, Brampton, Ontario, Canada
Application January 12, 1955, Serial No. 481,448
9 Claims. (Cl. 340—31)

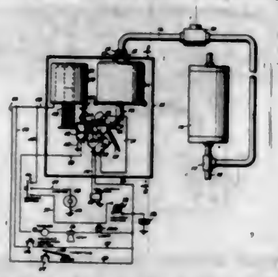


1. A device for warning the driver of a vehicle passing thereover on a road surface and comprising: a downwardly deflectable tread plate; means supporting one edge of said tread plate substantially in alignment with said road surface and transversely of normal vehicle motion thereover; a spring pivotally urging said tread plate substantially on said edge to a raised position; retractable locking means normally retaining the upper surface of said tread plate in alignment with said road surface against the pressure of said spring; means retracting said locking means responsive to an exterior signal; and means operatively connected to said tread plate creating a warning noise and vibration upon downward deflection of said tread plate from the raised position by a vehicle passing thereover, said noise and vibration being in part communicated directly to said vehicle and the driver thereof by said tread plate.

2,729,806
IDLING PERIOD SIGNALLING AND STOPPING DEVICE FOR MOTOR VEHICLE ENGINES
Joseph F. Dewhirst, Bridgeport, Conn.
Application September 27, 1954, Serial No. 458,331
3 Claims. (Cl. 340—52)

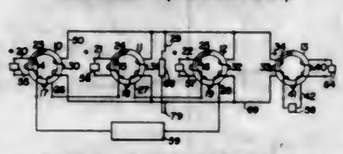
1. A control device for rendering a signal in a motor vehicle after a predetermined stationary period and for stopping the engine after a predetermined stationary period, said engine having an electrical starter circuit therein and an oil pressure lubricating system comprising oil pres-

sure actuated means adapted to be connected to the oil pressure lubricating system and movable between relatively low and high oil pressure positions, timer means having a predetermined operating period, said oil pressure actuated means actuating said timer means substantially at the commencement of the stationary period, reset means arranged to be actuated to reset position by movement of said oil pressure actuated means into high oil pressure posi-



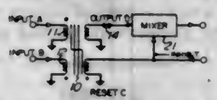
tion, and means adapted to be operatively connected to said electrical circuit to render a signal at the end of a predetermined operating period of said timer means, means adapted to be operatively connected to said electrical circuit to stop the engine subsequent to the rendering of said signal, and means arranged to actuate said reset means independently of said oil pressure actuated means.

2,729,807
GATE AND MEMORY CIRCUITS UTILIZING MAGNETIC CORES
John O. Paivinen, Aldan, Pa., assignor to Burroughs Corporation, Detroit, Mich., a corporation of Michigan
Application November 20, 1952, Serial No. 321,707
13 Claims. (Cl. 340—174)



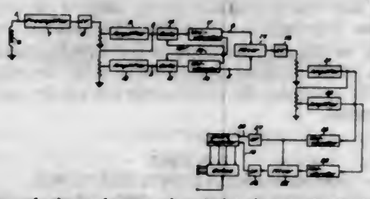
13. A memory circuit comprising a plurality of first bistable elements having substantially rectangular hysteresis characteristics, a plurality of first input circuits each individual to one of said plurality of bistable elements, and adapted for energization to selectively cause said bistable elements to have a remanence condition of a first polarity, a first plurality of input pulse sources adapted to individually and selectively energize said plurality of first input circuits, a plurality of clearing circuits each individual to one of said plurality of first bistable elements and adapted when energized to selectively cause said bistable elements to have a remanence condition of a second polarity, a plurality of energizing means adapted to individually energize said plurality of clearing circuits, a plurality of sensing circuits each individual to one of said plurality of first bistable elements, a current source, said plurality of sensing circuits being connected in parallel with respect to said current source, a second bistable element, a first circuit for said second bistable element and connected to said current source in parallel with said plurality of sensing circuits, a second clearing circuit coupled to said bistable element, an output circuit coupled to said second bistable element and responsive to a change in polarity of the storage state in said second bistable element, the impedances presented to a current from said current source by said sensing circuits being either large or small in accordance with the remanence polarity of the associated binary elements of said plurality of first bistable elements, and the current flow through said first input circuit being either large enough to cause reversal of remanence polarity in said second bistable element or small enough to leave unchanged the remanence polarity of said second bistable element in accordance with the parallel combination impedance of said parallel combination of said sensing circuits.

2,729,808
PULSE GATING CIRCUITS AND METHODS
Isaac Levin Auerbach, Philadelphia, and John Oliver Paivinen, Aldan, Pa., assignors to Burroughs Corporation, Detroit, Mich., a corporation of Michigan
Application December 4, 1952, Serial No. 324,115
12 Claims. (Cl. 340—174)



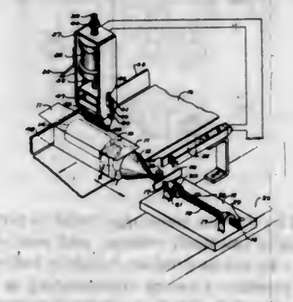
1. A primed gate circuit comprising, a body of material having a substantially rectangular hysteresis characteristic and remanence qualities, means for establishing a remanence of one polarity in said body in response to a series of priming signal pulses, means for establishing a remanence of the opposite polarity in said body in response to a series of signal pulses which are spaced in time from the priming signal and occur randomly with respect to the priming pulses, one of said series of pulses being cyclic in nature, and a series of cyclic reset pulses for establishing an unprimed remanence condition in said body to assure a gated output pulse only in presence of a priming pulse.

2,729,809
POLARITY SELECTOR
Robert G. Hester, Redondo Beach, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application January 22, 1953, Serial No. 332,648
4 Claims. (Cl. 340—174)



1. A polarity selector circuit having a single input and first and second outputs comprising means for receiving a sequence of electrical pulses representative of binary characters at said input; first means for deriving first and second pulses of opposite polarity from each of said received pulses; first and second circuit devices having a stable and an unstable state; respective pulse gating circuits interposed between said first means and said circuit devices to selectively pass said derived pulses; means for deriving an output pulse from the one of said circuit devices receiving a derived input pulse of a selected polarity as said one device assumes its unstable state; means for deriving a blocking pulse from said one circuit device for temporarily blocking the gating circuit associated with the opposite circuit device; common circuit means coupled to both of said circuit devices for receiving said output pulses therefrom; means for deriving third and fourth pulses of opposite polarity from said common circuit; third and fourth circuit devices having a stable and an unstable state coupled to said last named means for receiving respectively said third and fourth pulses; means for deriving an output pulse from the one of said third and fourth circuit devices receiving an input pulse of a selected polarity; circuit means coupling said pulse derived from said third device to said first output; circuit means coupled to said third and fourth circuit devices for mixing said output pulses derived from said third and fourth circuit devices; and means for impressing said mixed output pulses on said second output.

2,729,810
LITERATURE DETECTION DEVICE FOR CARTONING MACHINE
Henry F. Coffey, Indianapolis, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a corporation of Indiana
Application October 26, 1953, Serial No. 388,162
5 Claims. (Cl. 340—259)



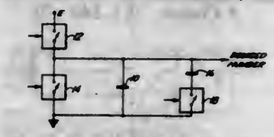
1. In a cartoning machine of the class described, including a conveyor for continuously advancing along a predetermined path a series of cartons in each of which has been deposited a product receptacle normally having a literature insert folded thereover; a device for sensing the absence of said insert in any one of said cartons, said device comprising a funnel-shaped feeler; means associated with said feeler for imparting reciprocatory movement thereto for a predetermined distance along said path in timed relation with the advance of said cartons along said path, said means being simultaneously operable to reciprocate said feeler to and fro, into and out of the open ends of said carton into sensing contact with said insert or that end of the receptacle which should be enfolded thereby; the funnel shape of said feeler in combination with variation in surface area between an insert-enfolded receptacle and an unenfolded receptacle causing said feeler to have corresponding variations in the magnitude of its sensing stroke reciprocation; and signal means associated with and operable by said feeler to signal the absence of an insert in any one of said cartons.

2,729,811
NUMERATION CONVERTERS
Paul François Marie Gloess, Paris, France, assignor to Societe d'Electronique et d'Automatisme, Paris, France, a corporation of France
Application January 22, 1951, Serial No. 207,137
Claims priority, application France January 28, 1950
11 Claims. (Cl. 340—347)



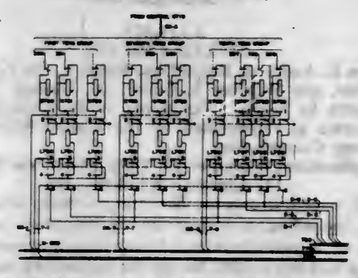
1. A method of electrically converting a number in a first numeration system into a number of another numeration system of an order inferior to said first numeration system, comprising the steps of registering each digit of the number expressed in said first numeration system in the form of a code expressed in the said other numeration system, producing a coded electric impulse train for each digit in said number, each train representing in the other numeration system the corresponding digit in the first numeration system, adding said coded trains together and, before said adding operation, converting said coded trains into coded trains representing in the said other numeration system the product of their digits multiplied by the value of the radix of said first numeration system raised to the power corresponding to the respective digits, thus producing a resultant train coded to represent the number expressed in the base of said other numeration system.

2,729,812
APPARATUS FOR CONVERTING DIGITAL INFORMATION TO AN ANALOG VOLTAGE
Dale M. Jahn, Garden City, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application October 4, 1954, Serial No. 459,973
9 Claims. (Cl. 340—347)



7. The method of converting to an analog voltage a serial binary number in the form of pulses for the one digits and no-pulses for the zero digits with the least significant digit occurring first, said method comprising the steps of charging a first condenser to a fixed potential in response to the one digit pulses except for the last digit, discharging the condenser in response to the zero digit no-pulses except for the last digit, charging the first condenser to a fixed potential in response to a zero digit no-pulse for the last digit of the serial binary number, discharging the condenser in response to a one digit pulse for the last digit of the serial binary number, and connecting the first condenser in parallel with a second condenser momentarily following the charging or discharging of the first condenser by reception of a binary digit.

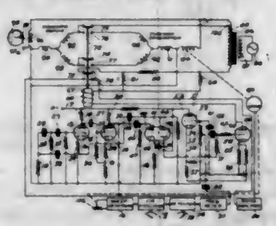
2,729,813
TRANSMITTER FOR A REMOTE SUPERVISORY AND CONTROL SYSTEM
John I. Bellamy, Wheaton, and Paul W. Hemminger, Franklin Park, Ill., assignors, by mesne assignments, to International Telephone and Telegraph Corporation, a corporation of Maryland
Original application June 14, 1951, Serial No. 231,584. Divided and this application January 14, 1953, Serial No. 331,234
6 Claims. (Cl. 340—359)



2. In a sender for use in a remote supervisory and control system, separately energizable incoming control lines, an outgoing transmission line, line relays connected respectively to the control lines and operable respectively thereover responsive to energization thereof, means responsive to the said operation of any line relay for closing a low-resistance local circuit for energizing the asso-

ciated line more strongly, means also responsive to the said operation of any line relay for causing the sender to transmit digit pulses over the transmission line characteristic of the operated line relay and its energized line, cutoff relays associated with the line relays respectively, means responsive to the completion of the said sender operation for operating the cutoff relay associated with the operated line relay, means included in the cutoff relay for disconnecting the energized line from the associated line relay and for transferring it to the associated cutoff relay to hold the latter relay locked operated so long as the transferred line remains energized, the disconnected line relay thereupon restoring.

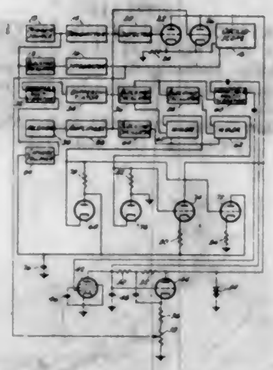
2,729,814
RELIABILITY INDICATORS
Floyd T. Wimberly, Watertown, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application August 15, 1952, Serial No. 304,580
9 Claims. (Cl. 343—7)



4. In a distance measuring system, means for transmitting a radio frequency signal, means for modulating said radio frequency signal with a modulation signal, means for receiving and demodulating said radio frequency signal to produce a signal derived from said modulation signal proportional to the distance travelled by said signal, an indicator, means to drive said indicator comprising a first multi-phase motor, two alternative driving voltage sources for said motor, a first source being a multi-phase generator, means to connect said generator to said first motor comprising normally open contacts, a second multi-phase motor, means causing said second motor to drive said generator to a position determined by the distance measured, the second source being a fixed voltage, a set of normally closed contacts connecting said voltage source to the first motor, operating means for said normally open and normally closed contacts controlled by the output of said receiving and demodulating means to operate said contact operating means when the received and demodulated signal has certain characteristics.

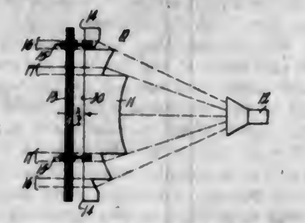
2,729,815
SWEEP CIRCUIT
Gilman B. Andrews, Royal Oak, Ralph L. De Voll, Grosse Pointe, and William X. Lamb, Jr., Detroit, Mich., assignors, by mesne assignments, to the United States of America as represented by the United States Atomic Energy Commission
Application September 19, 1951, Serial No. 247,285
11 Claims. (Cl. 343—13)

1. A sweep circuit for deflecting a beam in an oscilloscope, including, a trigger source operative to produce pulses at a predetermined frequency, a transmitter for sending out the pulses, means for converting each trigger pulse into a first substantially sawtooth voltage operative to produce a partial horizontal sweep of the beam in the oscilloscope during the transmission of the pulse, means for receiving pulses related to the transmitted pulse, gating means operative to determine the time for pulse reception, the gating means including means for producing a signal slightly before the pulse reception, means operative by the gating signal to produce a pulse having a duration substantially equal to the horizontal portion remaining unswept after the partial sweep produced by the trigger pulse and having an amplitude corresponding to the maximum value of the first sawtooth voltage, a capacitance adapted



to be charged by the last mentioned pulse to produce a second substantially sawtooth voltage, and means for superimposing the two pulses produced slightly before the pulse reception to produce a sweep commencing at the end of the sweep produced by the first sawtooth voltage.

2,729,816
LENS ANTENNA
Carl F. Crawford, Camden, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application August 30, 1954, Serial No. 452,804
8 Claims. (Cl. 343—753)



1. In an arrangement including a lens for focusing radio waves into a beam pattern having at least one null portion adjacent said lens and a shield substantially transparent to radio waves adapted to be mounted to said lens in the path of said beam pattern: mounting means located in said null portion of said beam pattern for securing said shield to said lens, whereby said mounting means has minimized effect on said beam pattern.

2,729,817
DIRECTIVE RADIO AERIAL SYSTEMS
Sidney Cornbleet, Edgware, England, assignor to The General Electric Company Limited, London, England, a British company
Application September 29, 1952, Serial No. 312,077
Claims priority, application Great Britain September 28, 1951
6 Claims. (Cl. 343—779)



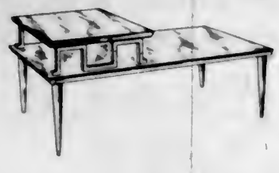
1. A reverse feed directive radio aerial system comprising a reflector, a first length of feeder, for passing

electromagnetic waves to and from the reflector, projecting through the reflector from behind, a ring of similar feeder, the length of the electrical path round the ring being substantially $3\lambda_g/2$ (where λ_g is the wavelength in the feeder of the waves propagated therein operation) and the ring being coupled at one point to the end of the first length of feeder, two further short lengths of similar feeder one end of each of which is coupled to the ring at points spaced round the ring in opposite directions by an electrical distance $\lambda_g/4$ from the point at which it is coupled to the first length of feeder, the other ends of the two short lengths of feeder having terminations directed towards the reflector for passing electromagnetic waves to and from the reflector.

DESIGNS

JANUARY 3, 1956

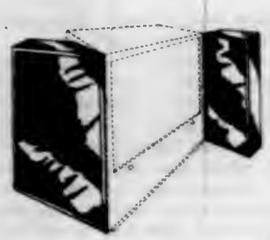
176,490
TABLE
Samuel E. Adler, Chicago, Ill., assignor to Admiral Corporation, Chicago, Ill., a corporation of Delaware
Application December 6, 1954, Serial No. 33,414
Term of patent 14 years
(Cl. D33—14)



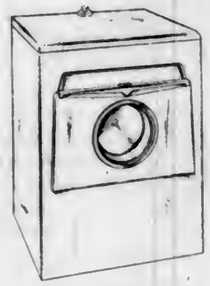
176,491
TABLE
Samuel E. Adler, Chicago, Ill., assignor to Admiral Corporation, Chicago, Ill., a corporation of Delaware
Application December 6, 1954, Serial No. 33,415
Term of patent 14 years
(Cl. D33—14)



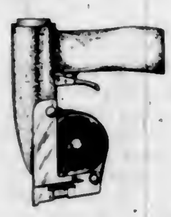
176,492
TELEVISION CABINET OR SIMILAR ARTICLE
Jack Barofsky, Los Angeles, Calif.
Application November 18, 1953, Serial No. 27,650
Term of patent 14 years
(Cl. D56—4)



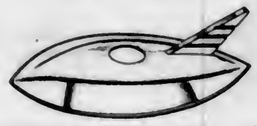
176,493
LAUNDRY MACHINE
Frederick W. Becker and Frederick W. Perl, Mansfield, Ohio, assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application June 21, 1955, Serial No. 36,609
Term of patent 14 years
(Cl. D49—1)



176,494
TACKER OR SIMILAR ARTICLE
John D. Beinert, Babylon, N. Y., assignor to Speed Products Company, Inc., New York, N. Y., a corporation of New York
Application May 6, 1955, Serial No. 35,855
Term of patent 14 years
(Cl. D54—14)



176,495
BASE COVER FOR AUTOMOBILE RADIO ANTENNAE
Fred P. Berdass, Minneapolis, Minn., assignor to Bermo Industries, Inc., Minneapolis, Minn., a corporation of Minnesota
Application August 11, 1954, Serial No. 31,815
Term of patent 3½ years
(Cl. D14—6)



176,496
DRESS
Arthur M. Berger, Scarsdale, N. Y.
Application April 7, 1955, Serial No. 35,404
Term of patent 3½ years
(Cl. D3—26)



176,497
PENDANT CHARM
Sylvia Biers, New York, N. Y.
Application May 16, 1955, Serial No. 35,984
Term of patent 14 years
(Cl. D45—17)



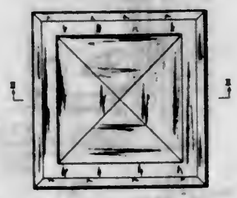
176,498
PENDANT CHARM
Sylvia Biers, New York, N. Y.
Application May 16, 1955, Serial No. 35,985
Term of patent 14 years
(Cl. D45—17)



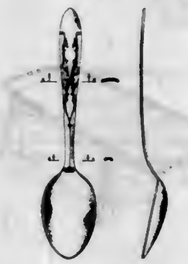
176,499
PENDANT CHARM
Sylvia Biers, New York, N. Y.
Application May 16, 1955, Serial No. 35,986
Term of patent 14 years
(Cl. D45—17)



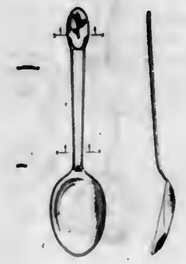
176,500
WALL TILE
Melvin H. Boldt, Chicago, Ill., assignor to Franklin Plastics, Inc., Franklin, Pa., a corporation of Pennsylvania
Application July 7, 1954, Serial No. 31,304
Term of patent 14 years
(Cl. D18—2)



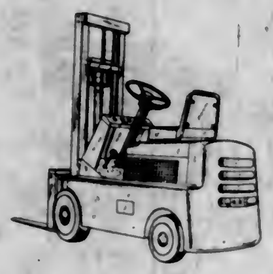
176,501
SPOON OR SIMILAR ARTICLE
John Brokate, Wallingford, Conn., assignor to The Hobson & Botts, Co., Danbury, Conn., a corporation of Connecticut
Application January 24, 1955, Serial No. 34,155
Term of patent 14 years
(Cl. D54—12)



176,502
SPOON OR SIMILAR ARTICLE
John Brokate, Wallingford, Conn., assignor to The Hobson & Botts Co., Danbury, Conn., a corporation of Connecticut
Application January 24, 1955, Serial No. 34,154
Term of patent 14 years
(Cl. D54—12)



176,503
LIFT TRUCK
Robert C. Brown, Portland, Oreg., assignor to Hyster Company, Portland, Oreg., a corporation of Oregon
Application July 27, 1953, Serial No. 26,136
Term of patent 14 years
(Cl. D14—3)



176,504
PORTABLE OUTDOOR SHELTER
John J. Daus, Jr., Evansville, Ind., assignor to Anchor Supply Company, Inc., Evansville, Ind., a corporation
Application March 23, 1955, Serial No. 35,163
Term of patent 7 years
(Cl. D88—3)



176,505
COMBINED SUCTION CLEANER AND FLOOR POLISHER
Thomas Dick and Leonard Wingfield, Motherwell, Scotland, assignors to Vactric Limited, Motherwell, Scotland, a British company
Application December 8, 1952, Serial No. 22,601
Claims priority, application Great Britain July 15, 1952
Term of patent 14 years
(Cl. D9—2)



176,506
COMBINED DECANTER AND CLOSURE CAP THEREFOR
Ernest L. Du Pree, Weston, Conn., assignor to Schenley Industries, Inc., New York, N. Y., a corporation of Delaware
Application May 3, 1955, Serial No. 35,791
Term of patent 14 years
(Cl. D58—6)



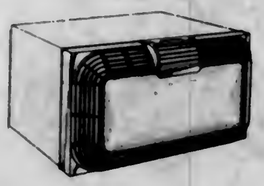
176,507
TWINE HOOK OR SIMILAR ARTICLE
Mary E. Durfee, Katonah, N. Y.
Application November 27, 1953, Serial No. 27,814
Term of patent 14 years
(Cl. D17—12)



176,508
CONTROL KNOB FOR A PATTERN CAM
John P. Enos, Union, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application October 8, 1954, Serial No. 32,593
Term of patent 14 years
(Cl. D70—2)



176,509
ROOM COOLER
Joseph Federico, Buffalo, N. Y., assignor to Carrier Corporation, Syracuse, N. Y., a corporation of Delaware
Application January 27, 1954, Serial No. 28,698
Term of patent 7 years
(Cl. D62—4)



176,510
WATCH BOX
Jack Fairchild Fleming, Summit, N. J., assignor to Arrow Manufacturing Company, Incorporated, West New York, N. J., a corporation of New Jersey
Application January 17, 1955, Serial No. 34,026
Term of patent 3½ years
(Cl. D80—5)



176,511
MOBILE DOUBLE SHELVED CARRIER WITH OPEN SUPPORTING FRAME
William H. Frick, Cleveland, Ohio
Application May 7, 1953, Serial No. 24,905
Term of patent 14 years
(Cl. D14—3)



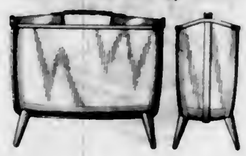
176,512
COMBINED EARRING AND HEARING AID HOUSING
Anthony W. Hagedorn, Silver Spring, and Abraham A. Saffitz, Hyattsville, Md.
Application September 14, 1954, Serial No. 32,281
Term of patent 14 years
(Cl. D45—9)



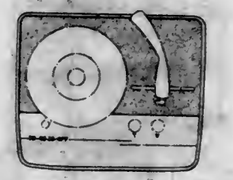
176,513
CABIN BOAT OR SIMILAR ARTICLE
William T. Hamilton, Jr., Dallas, Tex.
Application May 17, 1954, Serial No. 30,530
Term of patent 14 years
(Cl. D71—1)



176,514
MAGAZINE STAND OR SIMILAR ARTICLE
Jon W. Hauser, St. Charles, Ill., assignor to Hawley Products Company, St. Charles, Ill., a corporation of Delaware
Application March 7, 1955, Serial No. 34,877
Term of patent 14 years
(Cl. D33—2)



176,515
RECORD PLAYER OR SIMILAR ARTICLE
Jon W. Hauser, St. Charles, Ill., assignor to Hawley Products Company, St. Charles, Ill., a corporation of Delaware
Application March 7, 1955, Serial No. 34,880
Term of patent 14 years
(Cl. D56—4)



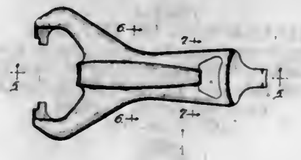
176,516
PISTOL
Robert L. Hillberg, West Cheshire, Conn.
Application April 30, 1954, Serial No. 30,261
Term of patent 14 years
(Cl. D30—1)



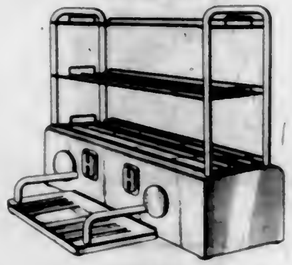
176,517
COMBINED PAINT CAN OPENER AND PAIL HOOK
Leonard Howard, West Orange, N. J.
Application July 13, 1955, Serial No. 36,960
Term of patent 14 years
(Cl. D17—12)



176,518
COMBINED BOTTLE AND JAR OPENER
James L. Hvale, Chicago, Ill., assignor to Ekco Products Company, Chicago, Ill., a corporation of Illinois
Application September 9, 1954, Serial No. 32,211
Term of patent 14 years
(Cl. D44—29)



176,519
COMBINATION FOOD WARMER AND DISPENSER
Elliott A. Johnson, Chicago, Ill., assignor to Helmco, Inc., Chicago, Ill., a corporation of Illinois
Application May 23, 1955, Serial No. 36,182
Term of patent 7 years
(Cl. D81—10)



176,520
COMBINED HOBBY HORSE AND SUPPORT OR SIMILAR ARTICLE
Leonard F. Johnson, Bristol, Va.
Application October 18, 1954, Serial No. 32,700
Term of patent 3½ years
(Cl. D34—15)



176,521
LOUNGE CHAIR
James E. Jones, Toledo, Ohio, assignor to The Hettrick Manufacturing Company, Toledo, Ohio, a corporation of Ohio
Application December 13, 1954, Serial No. 33,490
Term of patent 14 years
(Cl. D15—1)



176,522
FINGER RING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application February 25, 1955, Serial No. 34,708
Term of patent 7 years
(Cl. D45—10)



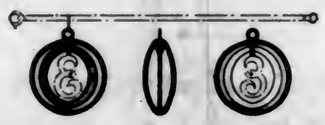
176,523
FINGER RING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application February 25, 1955, Serial No. 34,709
Term of patent 7 years
(Cl. D45—10)



176,524
FINGER RING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application March 8, 1955, Serial No. 34,930
Term of patent 7 years
(Cl. D45—10)



176,525
CHARM BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application April 20, 1955, Serial No. 35,611
Term of patent 7 years
(Cl. D45—17)



176,526
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application April 27, 1955, Serial No. 35,700
Term of patent 7 years
(Cl. D45—16)



176,527
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application April 27, 1955, Serial No. 35,702
Term of patent 7 years
(Cl. D45—16)



176,528
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application April 27, 1955, Serial No. 35,703
Term of patent 7 years
(Cl. D45—16)



176,529
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application April 27, 1955, Serial No. 35,704
Term of patent 7 years
(Cl. D45—16)



176,530
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 7, 1955, Serial No. 36,848
Term of patent 7 years
(Cl. D45—16)



176,531
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 13, 1955, Serial No. 36,931
Term of patent 7 years
(Cl. D45—16)



176,532
AUTOMOBILE
Jack E. Kenitz, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application May 11, 1955, Serial No. 35,936
Term of patent 7 years
(Cl. D14—3)



176,533
STEERING WHEEL
Elmer C. Kiekhaefer, Cedarburg, Wis.
Application October 22, 1954, Serial No. 32,783
Term of patent 14 years
(Cl. D14—30)



176,534
FLOWER PLANTER
Arthur F. Klingberg, Chicago, Ill., assignor to Bernard Edward Co., Chicago, Ill., a corporation of Illinois
Application January 24, 1955, Serial No. 34,133
Term of patent 3½ years
(Cl. D35—3)



176,535
FLOWER PLANTER
Arthur F. Klingberg, Chicago, Ill., assignor to Bernard Edward Co., Chicago, Ill., a corporation of Illinois
Application January 24, 1955, Serial No. 34,134
Term of patent 3½ years
(Cl. D35—3)



176,536
FLOWER PLANTER
Arthur F. Klingberg, Chicago, Ill., assignor to Bernard Edward Co., Chicago, Ill., a corporation of Illinois
Application January 24, 1955, Serial No. 34,135
Term of patent 3½ years
(Cl. D35—3)



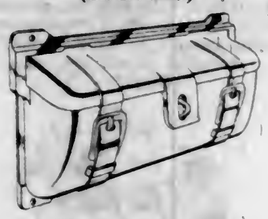
176,537
GASKET CUTTER
Carl B. Kromsten, Brooklyn, N. Y.
Application July 14, 1955, Serial No. 36,977
Term of patent 14 years
(Cl. D54—13)



176,538
COMBINED PIN CONTAINER AND POURER
George Abe Laughton, Lowsoanford, England
Application June 8, 1954, Serial No. 30,871
Term of patent 14 years
(Cl. D58—17)



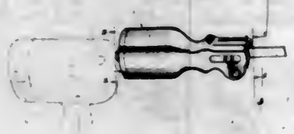
176,539
MAILBOX
Irving Levine, Woodmere, N. Y.
Application June 20, 1955, Serial No. 36,596
Term of patent 14 years
(Cl. D74—9)



176,540
KNIFE OR SIMILAR ARTICLE OF FLATWARE
Alexander Edward Lewis, Brooklyn, N. Y.
Application October 28, 1954, Serial No 32,864
Term of patent 3½ years
(Cl. D54—12)



176,541
SAW ATTACHMENT FOR A ROTARY DRILL
Jonas Theodore Lindquist, Skokie, Ill., assignor, by mesne assignments, to Thor Power Tool Company, Aurora, Ill., a corporation of Delaware
Application April 27, 1955, Serial No. 35,708
Term of patent 3½ years
(Cl. D90—3)



176,542
JAR
Arnold I. Lorenzen, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a corporation of Ohio
Application November 19, 1953, Serial No. 27,672
Term of patent 14 years
(Cl. D58—25)



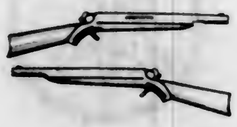
176,543
WHEEL COVER MEMBER OR SIMILAR ARTICLE
George Albert Lyon, Detroit, Mich.
Application April 14, 1955, Serial No. 35,504
Term of patent 14 years
(Cl. D14—30)



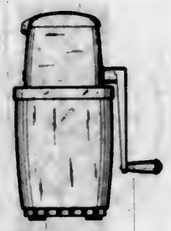
176,544
WHEEL COVER MEMBER OR SIMILAR ARTICLE
George Albert Lyon, Detroit, Mich.
Application April 15, 1955, Serial No. 35,538
Term of patent 14 years
(Cl. D14—30)



176,545
WRITING INSTRUMENT
Joseph P. Mayer, Round Lake, Ill.
Application June 24, 1955, Serial No. 36,673
Term of patent 14 years
(Cl. D74—17)



176,546
PORTABLE ICE CRUSHER CASING
Walter E. Moore, Bel Nor, Mo., assignor to Swing-A-Way Manufacturing Company, St. Louis, Mo., a corporation of Missouri
Application August 1, 1955, Serial No. 37,247
Term of patent 14 years
(Cl. D89—1)



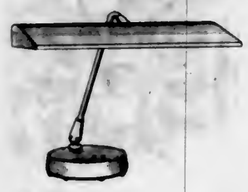
176,547
STITCH REGULATOR PLATE
Phillip S. Morse, Bronx, N. Y.
Application July 18, 1955, Serial No. 37,005
Term of patent 14 years
(Cl. D70—2)



176,548
STITCH REGULATOR PLATE
Phillip S. Morse, Bronx, N. Y.
Application July 18, 1955, Serial No. 37,006
Term of patent 14 years
(Cl. D70—2)



176,549
DESK LAMP
Fred Mugnai, Chicago, Ill., assignor to Art Specialty Co., Chicago, Ill., a corporation of Illinois
Application November 19, 1954, Serial No. 33,166
Term of patent 14 years
(Cl. D48—20)



176,550
DESK LAMP
Fred Mugnai, Chicago, Ill., assignor to Art Specialty Co., Chicago, Ill., a corporation of Illinois
Application April 26, 1955, Serial No. 35,679
Term of patent 14 years
(Cl. D48—20)



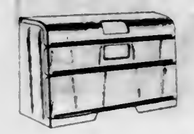
176,551
PLAYHOUSE
Stanley G. Patterson, Kansas City, Mo.
Application March 14, 1955, Serial No. 35,030
Term of patent 7 years
(Cl. D34—15)



176,552
STEAK KNIFE
Emil S. Polk, Scarsdale, N. Y.
Application February 26, 1954, Serial No. 29,229
Term of patent 14 years
(Cl. D22—3)



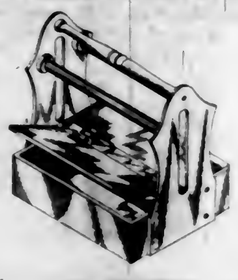
176,553
CABINET FOR DISPENSING PAPER TOWELS, WAXED PAPER, AND ALUMINUM FOIL
Harry Preble, Jr., Cross River, N. Y., assignor to National Can Corporation, Chicago, Ill., a corporation of Delaware
Application March 3, 1955, Serial No. 34,845
Term of patent 14 years
(Cl. D4—3)



176,554
BRUSH
Albert R. Racicot, Aurora, Ill., assignor to National Brush Company, Aurora, Ill., a corporation of Illinois
Application July 7, 1954, Serial No. 31,303
Term of patent 14 years
(Cl. D9—2)



176,555
KNITTING WORK BOX
Mary C. Rosamond, Oakdale, Calif.
Application July 1, 1955, Serial No. 36,796
Term of patent 14 years
(Cl. D3—19)



176,556
LAWN SPRINKLER
Corey L. Russell, Milwaukee, Wis.
Application August 3, 1955, Serial No. 37,306
Term of patent 14 years
(Cl. D91—1)



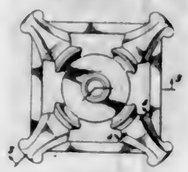
176,557
SERVING CART FRAME
Lewis L. Salton, New York, N. Y.
Application April 8, 1954, Serial No. 29,927
Term of patent 14 years
(Cl. D14—3)



176,558
RIBBON OR SIMILAR ARTICLE
Bernard U. Samuel, Menlo Park, Calif., assignor to Arrow Brands, Inc., Los Angeles, Calif., a corporation of California
Application November 8, 1954, Serial No. 32,998
Term of patent 3½ years
(Cl. D92—1)



176,559
DOOR ESCUTCHEON PLATE
Bruno H. Schindler, Inglewood, Calif., assignor to The Peabody Company, Inc., Los Angeles, Calif., a corporation of California
Application July 5, 1955, Serial No. 36,805
Term of patent 14 years
(Cl. D50—6)



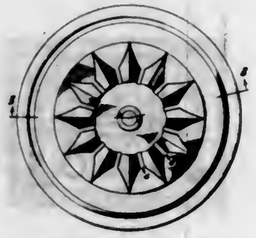
176,560
DOOR ESCUTCHEON PLATE
Bruno H. Schindler, Inglewood, Calif., assignor to The Peabody Company, Inc., Los Angeles, Calif., a corporation of California
Application July 5, 1955, Serial No. 36,806
Term of patent 14 years
(Cl. D50—6)



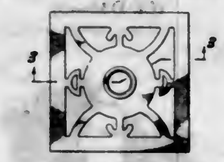
176,561
DOOR ESCUTCHEON PLATE
Bruno H. Schindler, Inglewood, Calif., assignor to The Peabody Company, Inc., Los Angeles, Calif., a corporation of California
Application July 5, 1955, Serial No. 36,807
Term of patent 14 years
(Cl. D50—6)



176,562
DOOR ESCUTCHEON PLATE
Bruno H. Schindler, Inglewood, Calif., assignor to The Peabody Company, Inc., Los Angeles, Calif., a corporation of California
Application July 5, 1955, Serial No. 36,808
Term of patent 14 years
(Cl. D50—6)



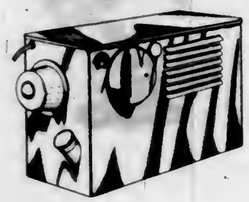
176,563
DOOR ESCUTCHEON PLATE
Bruno H. Schindler, Inglewood, Calif., assignor to The Peabody Company, Inc., Los Angeles, Calif., a corporation of California
Application July 5, 1955, Serial No. 36,809
Term of patent 14 years
(Cl. D50—6)



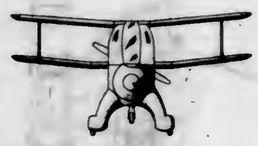
176,564
ELECTRIC IMMERSION HEATER UNIT
Peter Schlumbohm, New York, N. Y.
Application July 2, 1954, Serial No. 31,271
Term of patent 14 years
(Cl. D81—10)



176,565
PORTABLE COOLER
Clinton C. Schoonover, Samuel Fox and Ernest M. Williams, Wichita, Kans.; said Williams assignor to Clinton C. Schoonover and Samuel Fox, doing business as Kool-Rite Sales Company, Wichita, Kans., a partnership
Application June 21, 1954, Serial No. 31,079
Term of patent 3½ years
(Cl. D67—4)



176,566
AIRCRAFT OR SIMILAR ARTICLE
Gerard J. Soucy, Dallas, Tex.
Application May 5, 1955, Serial No. 35,849
Term of patent 3½ years
(Cl. D71—1)



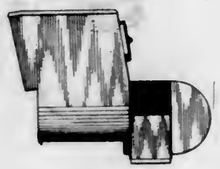
176,567
SUPPORT FOR TOILET ACCESSORIES
Max H. Sparber, Munster, Ind.
Application January 3, 1955, Serial No. 33,796
Term of patent 7 years
(Cl. D4—3)



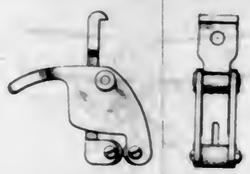
176,568
SEWING MACHINE CABINET
Howard D. Stump, South Bend, Ind.
Application October 6, 1954, Serial No. 32,562
Term of patent 14 years
(Cl. D33—12)



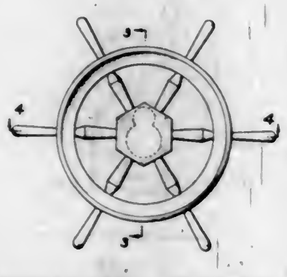
176,569
CAR FOR AN AMUSEMENT DEVICE
Lee A. Sullivan, Jr., Jacksonville, Ill., assignor to Eli Bridge Company, Jacksonville, Ill., a corporation of Illinois
Application May 2, 1955, Serial No. 35,774
Term of patent 14 years
(Cl. D34—5)



176,570
TAPE LINE WIPER
Carl C. Taylor, Garland, Tex.
Application August 30, 1954, Serial No. 32,088
Term of patent 7 years
(Cl. D9—6)



176,571
ORNAMENT FOR A VEHICLE BODY
Richard A. Teague, Rochester, Mich., assignor to Studebaker-Packard Corporation, a corporation of Michigan
Application August 4, 1954, Serial No. 31,735
Term of patent 14 years
(Cl. D14—6)



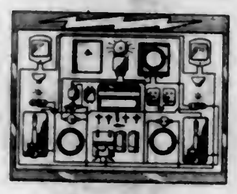
176,572
COMBINED PARKING LAMP LENS AND FRAME THEREFOR
Richard A. Teague, Rochester, Mich., assignor to Studebaker-Packard Corporation, a corporation of Michigan
Application November 1, 1954, Serial No. 32,906
Term of patent 14 years
(Cl. D48—32)



176,573
CREAM JUG
James I. Thompson, Vancouver, British Columbia, Canada
Application March 15, 1954, Serial No. 29,542
Term of patent 3½ years
(Cl. D44—21)



176,574
ELECTRICAL TOY DISPLAY UNIT OR SIMILAR ARTICLE
Max Tucker, Flushing, N. Y., assignor of one-half to Richard B. Sloane, Forest Hills, N. Y.
Application October 14, 1954, Serial No. 32,668
Term of patent 7 years
(Cl. D25—1)



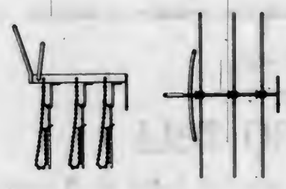
176,575
FLOWER PLANTER
Arthur F. Klingberg, Chicago, Ill., assignor to Bernard Edward Co., Chicago, Ill., a corporation of Illinois
Application January 24, 1955, Serial No. 34,136
Term of patent 3½ years
(Cl. D35—3)



176,576
COMBINED FLOWER PLANTER AND BRACKET THEREFOR
Arthur F. Klingberg, Chicago, Ill., assignor to Bernard Edward Co., Chicago, Ill., a corporation of Illinois
Application January 24, 1955, Serial No. 34,150
Term of patent 3½ years
(Cl. D35—3)



176,577
COMBINED COAT HANGER AND HAT RACK
Charles H. Kraft, Mission Woods, Kans.
Application December 6, 1954, Serial No. 33,417
Term of patent 7 years
(Cl. D33—8)



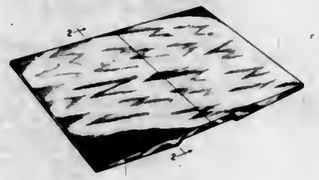
176,578
HANDLE BAR GRIP
Samuel J. Kraver, Great Neck, N. Y.
Application December 31, 1954, Serial No. 33,765
Term of patent 14 years
(Cl. D90—11)



176,579
HANDLE BAR GRIP GUARD
Samuel J. Kraver, Great Neck, N. Y.
Application December 31, 1954, Serial No. 33,766
Term of patent 14 years
(Cl. D90—11)



176,580
TABLE TOP OR SIMILAR ARTICLE
Arthur Umanoff, New York, N. Y., assignor to Century Laminated Products Corp., Astoria, N. Y., a corporation of New York
Application April 1, 1955, Serial No. 35,326
Term of patent 14 years
(Cl. D33—14)



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Gardner, Edward J., deceased, by R. L. Gardner, executor, to R. L. Gardner. 1,444, Cl. 47—60.
Gardner, Edward J., deceased, by R. L. Gardner, executor, to R. L. Gardner. 1,445, Cl. 47—60.
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Boerner, Eugene S. 1,447.
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Adler, Samuel E. 176,491.
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Samuel, Bernard U. 176,558.
Arrow Mfg. Co., Inc.: *See*—
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Mugnai, Fred. 176,549.
Mugnai, Fred. 176,550.
Barofsky, Jack. 176,492, Cl. D56—4.
Becker, Frederick W., and F. W. Perl, to Westinghouse Electric Corp. 176,493, Cl. D49—1.
Beinert, John D., to Speed Products Co., Inc. 176,494, Cl. D54—14.
Berdass, Fred P., to Bermo Industries, Inc. 176,495, Cl. D14—6.
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Klingberg, Arthur F. 176,535.
Klingberg, Arthur F. 176,536.
Klingberg, Arthur F. 176,575.
Klingberg, Arthur F. 176,576.
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Biers, Sylvia. 176,498, Cl. D45—17.
Biers, Sylvia. 176,499, Cl. D45—17.
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Hvale, James L. 176,518.
Eli Bridge Co.: *See*—
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Katz, Adolph, to Coro, Inc. 176,526, Cl. D45—16.
Katz, Adolph, to Coro, Inc. 176,527, Cl. D45—16.
Katz, Adolph, to Coro, Inc. 176,528, Cl. D45—16.
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Klingberg, Arthur F., to Bernard Edward Co. 176,535, Cl. D35—3.
Klingberg, Arthur F., to Bernard Edward Co. 176,536, Cl. D35—3.
Klingberg, Arthur F., to Bernard Edward Co. 176,575, Cl. D35—3.
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Morse, Phillip S. 176,548, Cl. D70—2.
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Mugnai, Fred, to Art Specialty Co. 176,550, Cl. D48—20.
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Schindler, Bruno H., to The Peabody Co., Inc. 176,560, Cl. D50—6.
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Schindler, Bruno H., to The Peabody Co., Inc. 176,562, Cl. D50—6.
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Dick, Thomas, and Wingfield. 176,505.

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Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 34,806 (Thomas A. Edison), Thomas A. Edison, Inc., Phonographs, phonographic supplies, etc.; **TM 60,343**, same, Primary batteries, parts thereof, and fan-motors; **TM 82,971**, same, Storage batteries, parts thereof, and sets of such batteries; **TM 259,035** (Edison), same, Primary batteries; **TM 301,881** (Edison), **TM 567,703** ("Thomas A. Edison" and picture of Thomas A. Edison), same, Storage batteries; **TM 303,203** (Edison), same, Sound recording and reproducing apparatus and equipment consisting of dictating and transcribing machines, etc.; **TM 303,326**, same, Machine for shaving sound record tablets and parts thereof; **TM 305,381**, same, Electric motors; **TM 372,127**, same, Electrical switches and electrical relays; **TM 377,016**, same, Regulators for heating apparatus, etc.; **TM 409,187**, same, Indicating instruments, etc.; **TM 367,425** (Thomas A. Edison), **TM 368,005** (Edison), same, Electronic and audio apparatus and devices, etc.; **TM 368,309** (Thomas A. Edison), **TM 368,310** (Edison), same, Miners' electric lighting outfits, etc., **filed** May 1, 1953, D. C., N. D. Ill. (Chicago), Doc. 53c1113, *Thomas A. Edison, Inc.* v. *Altheimer & Baer, Inc.* Defendant enjoined from use of words "Edison," "Edison 62," and "Thomas A. Edison"; counterclaim dismissed Nov. 16, 1955.

TM 60,343. (See TM 34,806.)

TM 82,971. (See TM 34,806.)

TM 121,840 (Thorogood), Albert H. Weinbrenner Co., Shoes made of leather, canvas, rubber, and a combination of said materials, **filed** Sept. 16, 1952, D. C., S. D. N. Y., Doc. 78/337, *Albert H. Weinbrenner Co.* v. *Miller Shoe & Rubber Co., Inc.* (Order of discontinuance of Nov. 10, 1955 vacated.) Consent judgment, defendant enjoined Nov. 14, 1955.

TM 259,035. (See TM 34,806.)

TM 301,881. (See TM 34,806.)

TM 303,203. (See TM 34,806.)

TM 303,326. (See TM 34,806.)

TM 304,055 (Mars), Mars, Incorporated, Candy, **filed** July 15, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18436–Y, *Mars, Inc.* v. *Mar Candy et al.* Consent judgment; trademark "Mars" held valid; defendants enjoined from use of words "Mar," "El Mar," and "Elmar" (notice Nov. 18, 1955).

TM 305,381. (See TM 34,806.)

TM 316,913. (See TM 530,481.)

TM 367,425. (See TM 34,806.)

TM 368,005. (See TM 34,806.)

TM 368,309. (See TM 34,806.)

TM 368,310. (See TM 34,806.)

TM 372,127. (See TM 34,806.)

TM 377,016. (See TM 34,806.)

TM 409,187. (See TM 34,806.)

TM 530,481, TM 316,913 (Yale), Becton, Dickinson and Company, Clinical thermometers, hypodermic syringes, and needles, **filed** Nov. 17, 1955, D. C., S. D. N. Y., Doc. 105/65, *Becton, Dickinson and Co.* v. *Schultz Surgical Instrument Co.*

TM 567,703. (See TM 34,806.)

TM 593,985 ("Crest Hy Lo Base Protein Calorie" and design), Crest Foods Co., Preparation including non-fat milk solids with additional stabilizing contents, etc., **filed** May 31, 1955, D. C., N. D. Calif. (Sacramento), Doc. 7248, *Crest Foods Co.* v. *Milk Foods, Inc.* Case dismissed Nov. 10, 1955.

TM 597,450 (Lucky), Sylvan Sweets Co., Candy cigarettes, **filed** Oct. 4, 1955, D. C. N. J. (Trenton), Doc. 967/55, *Sylvan Sweets Co.* v. *Ce De Inc.* Judgment for injunction Nov. 16, 1955.

CONDITION OF TRADEMARK APPLICATIONS AS OF DECEMBER 9, 1955

Total number of applications awaiting action (excluding renewals and republications)..... 8,883
Date of oldest new application..... Apr. 18, 1955
Date of oldest amended application..... Sept. 19, 1955

MERCHANT, JOHN, Executive Examiner

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application	
	New	Amended
I. STERBA, J. R., Classes 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 33, 35, 44, 52	5-4-55	9-22-55
II. SHRYOCK, R. F. (Acting), Classes 2, 6, 18, 22, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107	4-18-55	9-20-55
III. WENDT, C. M. (Acting), Classes 1, 3, 7, 8, 9, 10, 11, 15, 17, 20, 29, 31, 32, 34, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50.	5-24-55	9-19-55
Renewals (All Classes)	10-21-55	11-28-55
Sec. 12 (c) Publications (All Classes)	10-27-55	11-25-55

Applications Filed During Week Ending December 9, 1955—414

Registrations Issued..... 427—No. 618,396 to No. 618,822
Renewals Issued..... 35

Availability of Forms

On and after January 1, 1956, printed forms of trademark applications for individuals, partnerships and firms, and corporations will be available to all practitioners and to the public without cost. In the interest of saving clerical time and the time of Examiners in making the examination, practitioners before the Patent Office are urged to make use of these forms in filing applications to register, or at least to follow the format in preparing applications for registration. The forms may be readily adapted for service marks, collective marks and certification marks.

Requests for printed application forms should be addressed to the United States Patent Office.

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5. As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 662,433. Flex-O-Glass, Inc., d. b. a. Warp Brothers, Chicago, Ill. Filed Mar. 11, 1954.

FLEX-O-FILM

For Transparent and Translucent Plastic Sheets of a Thickness Ranging From a Few Thousandths to Thirty Thousandths of an Inch.
Use since December 1953.

SN 672,297. Kurashiki Rayon Company Limited, Kurashiki City, Okayama Prefecture, Japan. Filed Aug. 26, 1954.

KURALON

For Polyvinyl Alcohol Filaments and Other Synthetic Fibers.
Use since about 1950.

SN 672,964. Laminated Plas-Tex Corporation, Springfield, Ohio. Filed Sept. 9, 1954.

Lam - Tex Creations

For Laminated Vinyl Sheeting for Use in the Manufacture of Lamp Shades, Wall Coverings, and the Like.
Use since May 26, 1954.

SN 681,901. Baartman & Koning N. V., Sassenheim, Netherlands. Filed Feb. 18, 1955.

Colorama

Priority is claimed under Sec. 44(d). Dutch application filed Dec. 3, 1954, Reg. No. 120,351, dated Dec. 6, 1954.
For Bulbs, Corms, Flower Seeds, and Flowers.

SN 684,610. Union Wadding Company, Pawtucket, R. I. Filed Mar. 30, 1955.

PADOX

For Wadding for Use in Boxes.
Use since December 1932.

SN 685,570. B. D. Eisendrath Tanning Company, Chicago, Ill. Filed Apr. 15, 1955.

COBBLECALF

For Leather.
Use since Feb. 15, 1955.

SN 686,051. The M. A. Hanna Company, Cleveland, Ohio. Filed Apr. 22, 1955.

MAYSVILLE
A BALL OF FIRE

For Coal.
Use since Mar. 18, 1955.

SN 686,740. Hebb Leather Company, Inc., Boston, Mass. Filed May 3, 1955.

VELGLUV

Applicant claims ownership of Reg. No. 578,171.
For Leather.
Use since Feb. 11, 1955.

SN 687,107. Radel Leather Manufacturing Co., Newark, N. J. Filed May 9, 1955.

RADEL

For Leather.
Use since Feb. 21, 1955.

SN 688,894. Barzen Company, Minneapolis, Minn. Filed June 6, 1955.

RAKE N' HOE

For Lawn Seed.
Use since May 12, 1952.

CLASS 2

SN 691,959. Pro-Phy-Lac-Tic Brush Company, Northampton, Mass. Filed July 26, 1955.

CADENCE

For Plastic Dinner Hollow Ware.
Use since June 27, 1955.

SN 692,199. Burroughs Manufacturing Corp., Los Angeles, Calif. Filed Aug. 1, 1955.

TEETER-TRAY

For Serving Trays.
Use since May 26, 1955.

CLASS 3

SN 676,344. Alfred Sternjakob K.-G., Frankenthal, Germany. Filed Nov. 9, 1954.

zizi

Applicant claims ownership of German Reg. No. 643,215, dated Aug. 27, 1953.
For Leather Bags Including Extendable Multi-Purpose Bags and Valises.

SN 684,866. Lloyd H. Nee, Scottsdale, Ariz. Filed Apr. 4, 1955.

Lloyd Kiva

For Women's Hand Bags.
Use since July 1946.

CLASS 4

SN 669,599. The Bullen Chemical Co., Inc., Folcroft, Pa. Filed July 8, 1954. Sec. 2(f) as to "Bullen's."

B.M.C.
BULLEN'S MAINTENANCE CONTROL

No exclusive claim is made to the words "Maintenance Control" apart from the mark as shown. Applicant claims ownership of Reg. No. 296,324.
For Preparation for Cleaning, Polishing, and Maintaining Floors.
Use since Aug. 1, 1953; and since 1905 as to "Bullen's."

SN 674,053. Copper Brite, Inc., Los Angeles, Calif. Filed Sept. 30, 1954. Sec. 2(f).

Copper Brite

For Cleaner and Polisher for Copper Bottom Utensils.
Use since Nov. 9, 1950.

SN 677,969. Metal Textile Corporation, Roselle, N. J. Filed Dec. 8, 1954.

The Golden Fleece

"WORTH ITS WEIGHT IN GOLD"

The words "Worth Its Weight in Gold" are disclaimed apart from the mark as shown. Applicant claims ownership of Reg. No. 399,714.
For Pot Cleaners and Scouring Cloths.
Use since on or about Nov. 2, 1954.

SN 690,258. Glass-Wick, Brooklyn, N. Y. Filed June 27, 1955.

GLASS-WICK

For Cleaning and Polishing Preparation Containing Silicone for Cleaning and Polishing Eyeglasses.
Use since August 1950.

CLASS 5

SN 666,446. The Dayton Rubber Company, Dayton, Ohio. Filed May 17, 1954. Sec. 2(f).

Dayton

Applicant claims ownership of Reg. Nos. 147,726, 577,860, and others.
For Rubber Cement.
Use since on or about May 11, 1947.

SN 690,565. Joseph E. McKenna, d. b. a. Hydramatic Packing Co., Philadelphia, Pa. Filed June 30, 1955.

PERMA-GRIP
When you get to the bare facts it won't come off

For Adhesive for Adhering Fiber Glass to Metal, Concrete, and Wood.
Use since Aug. 6, 1954.

CLASS 6

SN 671,687. Surface Coatings, Inc., Atlanta, Ga. Filed Aug. 13, 1954.

SURCO

The drawing is lined for the color red.
For Surfacing and Waterproofing Materials Including Concentrates for Use in Preparing Concrete, Cement Mortars, Lime and Gypsum, All Used Primarily for Surface Coatings.
Use since Aug. 20, 1953.

SN 683,119. International Salt Company, Scranton, Pa. Filed Mar. 9, 1955.

STERLING
STORITE

Applicant claims ownership of Reg. No. 359,638.
For Rock Salt.
Use since Jan. 19, 1955.

CLASS 7

SN 671,429. Joseph M. Gordon, d. b. a. J. M. Gordon Laboratories, Croton-on-Hudson, N. Y. Filed Aug. 10, 1954.

Snap-On Ribbon

The word "Ribbon" is disclaimed apart from the mark as shown.
For Stretchable Plastic Securing Tape Which Is Not Adhesively Coated and Which Is Used for Wrapping Purposes.
Use since Jan. 5, 1954.

SN 673,549. Shuford Mills, Inc., Hickory, N. C. Filed Sept. 21, 1954.

STAY CLEAN

For Twine.
Use since Mar. 25, 1954.

SN 674,090. Pennsylvania Sling Company, Pittsburgh, Pa. Filed Sept. 30, 1954.

Penco Slings

No claim is made to the exclusive use of the word "Slings" apart from the mark shown.
For Wire Rope Slings, Braided, Bridle, Manila Rope Slings, and Chain Slings.
Use since August 1951.

SN 678,737. N. V. Vereenigde Touwfabrieken, Rotterdam, Netherlands. Filed Dec. 21, 1954. Sec. 2(f).

HOLLAND

For Binder Twine.
Use since Mar. 1, 1927.

SN 683,743. American Manufacturing Company, Brooklyn, N. Y. Filed Mar. 18, 1955.

SARACORE

For Rope Manufactured From Vegetable Fiber With a Core of Saran.
Use since Mar. 4, 1955.

SN 685,112. Elwood Long, d. b. a. Midwest Cordage Company, Fayette, Mo. Filed Apr. 7, 1955.

GOLD BOND

For Baler Twine and Binder Twine.
Use since Mar. 24, 1955.

SN 688,429. A. Kimball Company, New York, N. Y. Filed May 27, 1955. Sec. 2(f).

Ti-PAKS

Applicant claims ownership of Reg. No. 573,883.
For Bendable Wire Reinforced Paper Strips Used for Banding Packages.
Use since Dec. 30, 1949.

CLASS 10

SN 673,177. Grace Chemical Company, New York, N. Y., to W. R. Grace & Co., New York, N. Y. Filed Sept. 14, 1954.

A WORLD OF EXPERIENCE

Applicant claims ownership of Reg. No. 597,826.
For Nitrogeneous Fertilizers, Especially Urea and Anhydrous Ammonia.
Use since Aug. 31, 1954.

SN 674,150. Farbwerke Hoechst Aktiengesellschaft, vormals Meister Lucius und Bruning, Frankfurt am Main Hoechst, Germany. Filed Oct. 1, 1954.

HOECHST

The mark consists of a bridge and tower design and the word "Hoechst" within a circle and the representation of a zebra.
For Fertilizers.
Use since July 1, 1954.

SN 684,270. Borax Consolidated, Limited, d. b. a. Pacific Coast Borax Co., division of Borax Consolidated, Limited, Los Angeles, Calif. Filed Mar. 28, 1955.

POLYBOR-2

Applicant claims ownership of Reg. No. 526,658.
For Fertilizer.
Use since September 1950.

SN 690,051. The Virilium Corporation, Medway, Mass. Filed June 22, 1955.

VIRILIUM

For Liquid Fertilizer Concentrate.
Use since Mar. 3, 1955.

CLASS 11

SN 690,240. Dashew Business Machines, Inc., Culver City, Calif. Filed June 27, 1955.

DASHafluid

For Inks Used in Addressing Machines.
Use since February 1953.

CLASS 12

SN 651,500. Cement Enamel of Michigan, Incorporated, Detroit, Mich. Filed Aug. 7, 1953. Sec. 2(f).

CEMENT ENAMEL

For Vitreous Wall Surfacing.
Use since Jan. 1, 1930.

SN 651,927. Midwestern Engine & Equipment Co., Inc., Tulsa, Okla. Filed Aug. 17, 1953.

CORROGLAS

For Coverings and Wrapping for Pipe, Said Goods Being Spun Fiber Glass Coverings and Wrappings for Pipe.
Use since Dec. 1, 1952.

SN 651,928. Midwestern Engine & Equipment Co., Inc., Tulsa, Okla. Filed Aug. 17, 1953.

GLAStape

For Covering and Wrapping for Pipe, Said Goods Being of Spun Fiberglass Impregnated With Re-Enforcing Strands of Silk or the Like for the Purpose of Insulating Pipe Against Corrosive Action, the Goods Are Usually in the Form of Rolls of Variable Widths and Thicknesses Depending Upon the Size of the Pipe.
Use since Dec. 1, 1952.

SN 663,110. Joseph E. Martin, d. b. a. Yard-Stor Shelter Company, Detroit, Mich. Filed Mar. 23, 1954.

Yard-Stor

For Prefabricated Metal Warehouses and Storage Shelters and Storage Shelter Units Thereof.
Use since Mar. 31, 1953.

SN 677,751. Universal Stone Corporation, Freeport, N. Y. Filed Dec. 3, 1954.

Glenstone

For Precast Stone Used Primarily on the Exterior Surfaces of Buildings.
Use since Mar. 1, 1954.

SN 678,924. Charles J. Rend, d. b. a. Commodore Industries, Redwood City, Calif. Filed Dec. 24, 1954.

REND-O-LITE

For Decorative Plastic Panels and Sheets Composed of Synthetic Resinous Polymers for Use as Building Materials.
Use since July 1954.

SN 678,961. Champion Paper Products Company, Union, N. J. Filed Dec. 27, 1954.

Malkraft

For Creped Sheathing Paper.
Use since Jan. 31, 1950.

SN 679,072. G. Antolini & Sons, Santa Barbara, Calif. Filed Dec. 29, 1954.

SMS SANTA MARIA STONE

No claim is made to the representation of the goods or to the words "Santa Maria Stone" apart from the mark as shown. The stippling appearing on the drawing is employed to indicate the use of red color.
For Building Stone.
Use since July 13, 1954.

SN 679,365. Altex Engineering Company, Summerville, S. C. Filed Jan. 4, 1955.

Flexalite

For Prefabricated Sash and Window Units.
Use since on or about Oct. 11, 1954.

SN 680,166. Tecfab, Incorporated, Baltimore, Md. Filed Jan. 19, 1955.

TECFAB

For Pre-Fabricated Masonry Panel To Be Used in the Construction of a Building or Other Structure.
Use since Jan. 12, 1955.

SN 690,523. Bauwerk A. G., St. Margrethen, S. G., Switzerland. Filed June 30, 1955.

BAU BW WERK

Literally translated the words "Bau Werk" mean "building plant." The words "Bau Werk" are disclaimed apart from the mark as shown.
For Parquet Tiles, Wooden Flooring.
Use since Apr. 1, 1955.

SN 692,195. Basic Refractories, Incorporated, Cleveland, Ohio. Filed Aug. 1, 1955.

CRAM

For Refractory Materials Suitable for Protective Coating in Furnace Lining and Repairing.
Use since July 13, 1955.

SN 692,746. Jack B. Tizer, d. b. a. Royal Carpet and Linoleum Company, Philadelphia, Pa. Filed Aug. 9, 1955.

flextone

For Thermoplastic Asphalt Tile, Linoleum Tile, and Plastic Wall Tile.
Use since during December 1953.

SN 694,584. Metallic Building Company, Houston, Tex. Filed Sept. 13, 1955. Sec. 2(f).

METALLIC

The trademark is silver or white lettering on red background surrounded by the outline of a building, the trademark being applied to buildings at the peak of gables thereof so as to be exposed on the outside of the buildings when erected.
For Prefabricated Buildings.
Use since prior to Jan. 1, 1949.

SN 694,872. Globe Roofing Products Co., Inc., Whiting, Ind. Filed Sept. 19, 1955.

THERMO-KOLORGRĀN

Applicant claims ownership of Reg. Nos. 336,079, 588,924, and others.
For Roofing, Insulating Board, and Insulating Siding.
Use since July 19, 1953, on insulating siding.

SN 694,916. Robinson Plywood and Timber Company, Everett, Wash. Filed Sept. 19, 1955.

PLYWALL

Applicant claims ownership of Reg. No. 296,705.
For Plywood.
Use since July 23, 1931.

CLASS 13

SN 676,474. Chicago Metallic Manufacturing Company, Chicago, Ill. Filed Nov. 12, 1954.

SANI-SPACERS

For Baking Pan Spacing Rods in Multiple Baking Pan Assemblies.
Use since July 25, 1952.

SN 676,475. Chicago Metallic Manufacturing Company, Chicago, Ill. Filed Nov. 12, 1954.

SANI-STRAPPING

For Baking Pan Strappings.
Use since June 9, 1951.

SN 681,746. Chemex Corporation, New York, N. Y. Filed Feb. 16, 1955.

CHEMEX Coffeemaker

The word "Coffeemaker" is disclaimed apart from the mark shown.
For Coffeemakers.
Use since July 10, 1943.

SN 682,265. Irrigation Equipment Co., Inc., Eugene, Oreg. Filed Feb. 24, 1955.

MORE SURE MOISTURE SPRINK and SPRINKLE the Twins

Applicant claims ownership of Reg. No. 572,613.
For Movable Field Irrigation Systems Comprising Pipes, Metal Couplers, Valves, Pipe Fittings, and Nozzles, Said Systems Being Sold as Units and Comprising Two Types, One Which May Be Laid Directly on the Ground and One Including as a Portion of the Unit Wheels for Supporting the Pipes and Imparting Mobility to the System, and Metal Pipe Couplers, Valves, and Fittings Forming Parts of Such Systems.
Use since Jan. 7, 1955.

SN 682,699. Beverage Control Sales Co. of Philadelphia, Inc., Philadelphia, Pa. Filed Mar. 3, 1955.

Bev-Flo

For Dispensing Closure for a Beverage Bottle.
Use since Jan. 4, 1955.

SN 683,875. The Gould-Mersereau Co., Inc., New York, N. Y. Filed Mar. 21, 1955.

"HANG-RITE"

For Drapery or Curtain Carriers.
Use since Oct. 20, 1954.

SN 686,322. Mitchell Manufacturing Company, Chicago, Ill. Filed Apr. 26, 1955.

EXPANDO-MOUNT

For Mounting Unit for Mounting Air Conditioners in Windows.
Use since Dec. 10, 1954.

SN 691,640. Shawnee Pottery Company, Zanesville, Ohio. Filed July 20, 1955.

SUPPER SUSAN

For Combined Lazy Susan With Chafing Dish and Serving Dishes.
Use since July 5, 1955.

SN 691,656. Henry Aschenbrenner, Ypsilanti, Mich. Filed July 21, 1955.

HENRY ASCHENBRENNER'S NAVIGATOR

For Tapered Plastic Hose With Grommet Outlets for Irrigation Use.
Use since Sept. 10, 1954.

SN 692,338. Clayton Mark & Company, Evanston, Ill. Filed Aug. 2, 1955. Sec. 2(f).

HANDLE-BAR

Applicant claims ownership of Reg. No. 329,887.
For Unions and Union Check Valves.
Use since Aug. 21, 1934.

SN 694,357. James A. Young, d. b. a. Engineered Products, Hollywood, Fla. Filed Sept. 8, 1955.

HURRI-CLIP

For Spring Retracted Clip Device for Attaching Storm Shutters in Overlying Relation to a Window Opening.
Use since June 14, 1954.

SN 694,679. Tru-Fit Screw Products Corporation, Lakewood, Ohio. Filed Sept. 14, 1955. Sec. 2(f).

Tru-Fit

Applicant claims ownership of Reg. No. 424,422.
For Bolts, Nuts, and Screws.
Use since October 1941.

CLASS 14

SN 676,455. Ateenate, Inc., Boston, Mass. Filed Nov. 12, 1954.

18-8 ATEENATE PROCESS

For Stainless Steel Plates Permanently Marked With Legends, and/or Graphic Illustrations or Ornamentations.
Use since on or about Dec. 26, 1950.

SN 686,266. Atlantic Zinc Works, Inc., Brooklyn, N. Y. Filed Apr. 26, 1955.

MICRO-METAL

For Blank Type Engravers' Plates.
Use since Apr. 21, 1955.

SN 695,750. Newport Steel Corporation, Newport, Ky. Filed Oct. 3, 1955.

NEF

For Cold Rolled Steel.
Use since Sept. 16, 1955.

CLASS 15

SN 689,213. Diamond Candle Co., Inc., Newburgh, N. Y. Filed June 9, 1955.

Golden Glo

For Candles.
Use since 1935.

SN 690,962. R. J. Oil & Refining Company, Inc., Terre Haute, Ind. Filed July 8, 1955.

500 PLATOLUBE

Applicant claims ownership of Reg. No. 587,072.
For Motor Oil.
Use since Mar. 1, 1955.

CLASS 16

SN 646,317. St. Louis Paint Manufacturing Company, St. Louis, Mo. Filed May 1, 1953.

PANDA

For Paints and Other Coatings—Namely, Industrial Paints; Paint Enamels; Varnishes; Oil Stains; Stucco Coatings; Floor Ply—Namely, for Concrete Floors and Other Masonry Surfaces, Containing Pliolite Which Is Unaffected by Water and Most Chemicals; Wall Sealers; Flat Wall Paints, and Aluminum Paints.
Use since March 1944.

SN 674,484. Vinyl Plastic Supply Co., Long Island City, N. Y., to Liquid Plastics Corporation, New York, N. Y. Filed Oct. 7, 1954.

PLASTI SPRAY "PLASTIC SKIN"

Applicant claims ownership of Reg. No. 580,853.
For Sprayable Synthetic Resins Which Form a Coating.
Use since Oct. 23, 1951.

SN 681,426. John C. Dolph Company, Monmouth Junction, N. J. Filed Feb. 10, 1955.

HI-THERM

For Varnishes, Resins, Insulating Coating Compositions.
Use since Dec. 13, 1954.

CLASS 17

SN 680,124. Bonded Oil Company, Springfield, Ohio. Filed Jan. 19, 1955.

Bonded

For Cigarettes.
Use since Nov. 3, 1954.

SN 681,285. Philip Morris & Co. Ltd., Incorporated, New York, N. Y., now by change of name to Philip Morris Incorporated. Filed Feb. 8, 1955.

BARKING DOG NEVER BITES

Applicant claims ownership of Reg. Nos. 71,941 and 350,237.
For Smoking Tobacco.
Use since July 9, 1912.

SN 681,531. Philip Morris & Co. Ltd., Incorporated, New York, N. Y., now by change of name to Philip Morris Incorporated. Filed Feb. 11, 1955.

BARKING DOG

NEVER BITES

Applicant claims ownership of Reg. Nos. 71,941 and 350,237.
For Smoking Tobacco.
Use since April 1947; and since July 9, 1908, in a different form.

SN 687,419. Singleton & Cole Limited, Birmingham, England. Filed May 12, 1955. Sec. 2(f).

SINGLETON'S SNUFF SUPER-MENTHOL

Applicant claims ownership of U. S. Reg. No. 543,846.
For Snuff.
Use since on or about Dec. 31, 1932.

CLASS 18

SN 658,214. Gordon K. Woodard, d. b. a. The Vi-San Company, Glendale, Calif. Filed Dec. 18, 1953.

THE REALM OF THE HANDY DIETARIES ON NUTRITION VI-SAN

For Dietary Food Supplement.
Use since Oct. 1, 1952.

SN 674,348. Post Institute, Inc., Tarpon Springs, Fla. Filed Oct. 5, 1954.

HYPERSONIC

For Human Hair Colloids in Liquid and Solid Form—Namely, as an Ingredient in an Antiseptic Shampoo, for the Treatment and Improvement of Human Hair.
Use since Aug. 17, 1949.

SN 674,749. John J. Lindenberg, d. b. a. Chipper Co., Hutchinson, Minn., to Jamison White Incorporated, Minneapolis, Minn. Filed Oct. 13, 1954.

CHIPPERS

For Dietary Supplement in the Form of a Pill Consisting Primarily in Vitamin B1.
Use since Aug. 10, 1954.

SN 677,502. The Harrower Laboratory, Inc., Jersey City, N. J. Filed Nov. 30, 1954.

Hematrinsic

Applicant claims ownership of Reg. No. 356,408.
For Preparation in Tablet Form Containing Hemopoietic Constituents and Used in the Treatment of Nutritional Hypochromic Anemias, Macrocytic Anemias, Pernicious Anemias and Normochromic Anemias.
Use since Oct. 26, 1954.

SN 680,221. Rhein-Chemie G. m. b. H., Mannheim, Germany. Filed Jan. 20, 1955.

Asgoviscum

Priority is claimed under Sec. 44(d). German application filed Oct. 27, 1954, Reg. No. 666,974, dated Nov. 23, 1954.
For Medicines for the Treatment of Arteriosclerosis, Hypertension, Fermentation and Putrefaction Processes in the Stomach and Intestine, Especially Mistletoe Preparations.

SN 680,533. Warren E. Hauck, d. b. a. Hiss Pharmacal Company, Utica, N. Y., to Warner-Hudnut, Inc., New York, N. Y., now by change of name to Warner-Lambert Pharmaceutical Company. Filed Jan. 26, 1955.

GELUTABS

For Antacid Tablets for the Temporary Relief of Gastric Hyperacidity.
Use since September 1951.

SN 681,274. Thomas Kerfoot & Co., Ltd., Bardsley, Ashton-Under-Lyne, England. Filed Feb. 8, 1955.

VAPEX

Applicant claims ownership of Reg. Nos. 181,259 and 536,166.
For Medicated Inhalers.
Use since 1938.

SN 683,295. Irwin, Neisler and Company, Decatur, Ill. Filed Mar. 11, 1955.

NORMATENSEN

For Synthetic Chemical Agent for the Treatment of Hypertension.
Use since Feb. 23, 1955.

SN 684,681. Riker Laboratories, Inc., Los Angeles, Calif. Filed Mar. 31, 1955.

Canephine

For Pharmaceutical Preparation Effective as a Depressant.
Use since Jan. 12, 1955.

SN 684,894. The Stuart Company, Pasadena, Calif. Filed Apr. 4, 1955.

Azodyne

For Composition Composed of Phenylazo-Diaminopyridine HCl Which Is Used as an Ingredient in Compositions Used for the Treatment of Urinary Tract Infections.
Use since Mar. 1, 1955.

SN 685,458. Organon Inc., Orange, N. J. Filed Apr. 13, 1955. Applicant claims ownership of Reg. No. 566,740.

NUFACTON

For Medicinal Preparation To Be Used in the Treatment and Prevention of Vitamin B and Vitamin C Deficiencies.
Use since Mar. 30, 1955.

SN 685,554. Beebe Laboratories, Incorporated, St. Paul, Minn. Filed Apr. 15, 1955.

Idōl

For Newcastle Disease Vaccine for Fowl.
Use since Dec. 4, 1953.

SN 686,239. The Upjohn Company, Kalamazoo, Mich. Filed Apr. 25, 1955.

Zymagen

For Hormonal Preparation.
Use since Feb. 8, 1955.

SN 686,579. Smith Kline & French Laboratories, Philadelphia, Pa. Filed Apr. 29, 1955.

HYPTROL

For Hypnotic Preparation.
Use since Apr. 22, 1955.

SN 686,688. Physicians and Hospitals Supply Company, Inc., d. b. a. Ulmer Pharmacal Company, Minneapolis, Minn. Filed May 2, 1955.

KLORDON

For Medical Preparation—Namely, a Capsule of Chloral Hydrate and Belladonna Alkaloids for Use as a Hypnotic and Antispasmodic.
Use since Apr. 27, 1955.

SN 687,101. S. B. Penick & Company, New York, N. Y. Filed May 9, 1955.

RAUNORMINE

For Drugs Isolated From Rauwolfia Plants and Used in the Treatment of Hypertension.
Use since on or about Oct. 14, 1954.

SN 687,189. The Evron Company, Inc., Chicago, Ill. Filed May 10, 1955.

EVRALOID

For Medicinal Preparation for Use in the Treatment of Hypertension.
Use since Feb. 14, 1955.

SN 687,190. The Evron Company, Inc., Chicago, Ill. Filed May 10, 1955.

PENTRITOL

For Medicinal Preparation for the Treatment of Angina Pectoris.
Use since Dec. 3, 1954.

SN 687,398. Nature Food Centres, Inc., Cambridge, Mass. Filed May 12, 1955.

"Super-Stron"

For Geriatric Diet Supplement Comprising Vitamins, Minerals, and Other Factors.
Use since June 5, 1954.

SN 687,450. Chicago Pharmacal Company, Chicago, Ill. Filed May 13, 1955.

BARBEPHINE

For Medicinal Preparation Adapted for Use in Relieving Paroxysms of Bronchial Asthma and Hay Fever.
Use since June 1, 1942.

SN 687,624. Professional Drug Service, Inc., d. b. a. A A Storck Pharmaceuticals, St. Louis, Mo. Filed May 16, 1955.

ATROSULE

For Antispasmodic.
Use since Dec. 6, 1954.

SN 689,153. Olin Mathieson Chemical Corporation, New York, N. Y. Filed June 8, 1955.

DELADUMONE

Applicant claims ownership of Reg. No. 558,803.
For Preparation Containing Male and Female Sex Hormones, for Use in the Treatment of Symptoms of the Menopausal Syndrome.
Use since Feb. 25, 1955.

SN 690,864. The Chattanooga Medicine Co., Chattanooga, Tenn. Filed July 7, 1955.

NORMS

For Preparation for Pre-Menstrual Tension.
Use since June 16, 1955.

SN 691,408. Abbott Laboratories, North Chicago, Ill. Filed July 18, 1955.

NUALETS

For Vitamin-Mineral Preparation in Tablet Form.
Use since July 6, 1955.

SN 691,409. Abbott Laboratories, North Chicago, Ill. Filed July 18, 1955.

PRE-DAYLIN

Applicant claims ownership of Reg. No. 550,477.
For Multiple Vitamin Preparation in the Form of an Emulsion of Both Water-Soluble and Oil-Soluble Vitamins Intended for Oral Administration in the Treatment or Prevention of Certain Nutritional Disorders.
Use since July 6, 1955.

SN 691,429. Brachvogel-Hovey, Los Angeles, Calif. Filed July 18, 1955.

FRIGIDERM

For Skin Anesthetic.
Use since Feb. 2, 1955.

SN 691,484. Kremers-Urban Company, Milwaukee, Wis. Filed July 18, 1955.

LEVSIN

For Anticholinergic Agent for Reducing Gastro-Intestinal Motility, Decreasing Gastric Secretory Activity, and Exerting Parasympatholytic Action in Visceral Smooth Muscle and Glands Used in the Treatment of Gastro-Intestinal Spasticities, Pylorospasm, Peptic Ulcer, Biliary Colic and Biliary Dysfunction, Dysmenorrhea, Genitourinary Spasm, or in Other Conditions in Which Hypertonicity of Smooth Muscle Occurs.
Use since June 9, 1955.

SN 691,492. Olin Mathieson Chemical Corporation, New York, N. Y. Filed July 18, 1955.

Lazagel

For Zinc Oxide Ointment.
Use since July 7, 1955.

SN 691,586. Success Chemical Company, Inc., Brooklyn, N. Y. Filed July 19, 1955.

MENSTRAIN

For Tablets Intended for the Relief of Pre-Menstrual Discomfort.
Use since July 6, 1955.

CLASS 19

SN 666,342. Fargo Rubber Corporation, Los Angeles, Calif. Filed May 14, 1954.

SAMSON

For Wheels and Casters for Industrial Vehicles.
Use since February 1946.

SN 682,426. Heckethorn Manufacturing & Supply Co., Littleton, Colo. Filed Feb. 28, 1955.

Velvet-ride

For Shock Absorbers for the Absorption of Shocks Between the Wheels and the Bodies of Automotive Vehicles.
Use since on or about Dec. 7, 1954.

SN 685,734. Mon-O-Coach, Inc., Ironwood, Mich. Filed Apr. 18, 1955.

Mon-O-Liner

Applicant claims ownership of Reg. No. 598,415.
For Mobile Homes or House Trailers.
Use since Dec. 6, 1954.

SN 686,066. Lewis Rose Co., Philadelphia, Pa. Filed Apr. 22, 1955.

TRUCADO

For Hand Trucks.
Use since January 1948.

SN 686,067. Lewis Rose Co., Philadelphia, Pa. Filed Apr. 22, 1955.

ROLONARE

For Hand Trucks.
Use since January 1948.

CLASS 21

SN 663,142. Turntable Products, Inc., Township of Lyndhurst, Bergen County, N. J. Filed Mar. 23, 1954.

"FOAM DAMP"

For Disc Coverings for Phonograph Turntables and for Supporting Disc Records.
Use since Oct. 14, 1953.

SN 664,401. Cannon Electric Company, Los Angeles, Calif. Filed Apr. 13, 1954.

CANNON ELECTRIC

The words "Do It Electrically" and "Electric" are disclaimed apart from the mark as shown. The drawing is lined for red but no claim is made to color. Applicant claims ownership of Reg. Nos. 418,856, 425,506, and others.

For Electric Equipment and Parts Therefor—Namely, Electrical Cable Connectors; Wall and Box Mounting Receptacles and Accessory Equipment for This Type of Production—Namely, Dust-Caps, Junction Boxes, Plugs, and Special Flanges; Special Function Solenoids; Electrical Relays; Electrical Switches and Push-Buttons; Institutional Signal Equipment—Namely, Call Stations, Annunciators, Corridor Pilot Lights, Paging Systems, and Explosion and Vapor-Proof Switches; Multi-Contact Electric Cable Connectors; Bushings; Conduit Fittings and Adaptors; Light Fixtures; and Cable Terminals.

Use since 1942.

SN 664,929. The Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa., now by change of name The Silex Company. Filed Apr. 21, 1954.

The letter "E" is lined for the color red.

For Electrical Machines—Namely, Meat and Food Choppers, Juice Extractors, Coffee Grinders.

Use since the year 1901.

SN 665,517. Proctor Electric Company, Philadelphia, Pa. Filed Apr. 30, 1954.

COLORMINDER

For Bread-Sensitive Thermostat Comprising a Part of Electric Toasters.

Use since Oct. 30, 1952.

SN 668,418. V-M Corporation, Benton Harbor, Mich. Filed June 17, 1954.

Tone-O-Matic

For Loud Speaker Units for Electric Phonographs.

Use since May 17, 1954.

SN 669,102. Electroacustic G. m. b. H., Kiel, Germany. Filed June 29, 1954.

MAGIC WAND

Priority is claimed under Sec. 44(d). German application filed Mar. 12, 1954, Reg. No. 667,915, dated Dec. 9, 1954.

For Phonograph Record Changers and Record-Centering Spindles for Such Record Changers.

SN 672,790. Blessing-Hoffmann Corp., Chicago, Ill. Filed Sept. 7, 1954.

CARTER SERVE IT HOT SERVE IT COLD THE SERVER

The words "Serve It Hot" and "Serve It Cold" are disclaimed apart from the mark as shown.

For Food Serving Equipment, Including Specifically Electrically Heated Banquet and Hospital Service Cabinets and Plate Carriers for Use Therewith.

Use since Feb. 26, 1954.

SN 673,676. New York Shipbuilding Corporation, d. b. a. Nesco, division of New York Shipbuilding Corporation, Milwaukee, Wis. Filed Sept. 23, 1954.

TEARYTE

For Automatic Electric Tea Maker and Related Accessories.

Use since July 12, 1954.

SN 674,787. Alarm Service, Inc., Chicago, Ill. Filed Oct. 14, 1954.

FIRE-MASTER

For Electrically Monitored Automatic Fire Alarm and General Annunciator Apparatus.

Use since Sept. 15, 1953.

SN 675,747. Adoa Corporation, Asheville, N. C. Filed Nov. 1, 1954.

APPROVED ADOA PRODUCTS

The words "Approved Products" are disclaimed apart from the mark as shown. The drawing is lined to indicate the use of red color.

For Electrical Heaters and Electrical Fans.

Use since Apr. 1, 1954.

SN 677,670. Eric T. New, d. b. a. Enlite Products Co., New York, N. Y. Filed Dec. 2, 1954.

ENLITE

For Generator Powered Bicycle Lamps, Battery Powered Bicycle Lights.

Use since Mar. 2, 1950, as to generator powered bicycle lights.

SN 681,362. Music-Master Company, Indianapolis, Ind. Filed Feb. 9, 1955.

Music-master

For Radio Receivers and Loud Speakers.

Use since Feb. 7, 1955.

SN 682,537. David Bogen Co., Inc., New York, N. Y. Filed Mar. 1, 1955.

AUTO db LOCK

Applicant claims ownership of Reg. No. 429,247.

For Radio Apparatus.

Use since Nov. 1, 1954.

SN 683,522. Lear, Incorporated, Grand Rapids, Mich. Filed Mar. 15, 1955.

For Apparatus for Amplifying a Torque of Low Magnitude Into a Torque of Larger Magnitude in the Nature of a Servo-Mechanism and Adapted, for Example, to the Steering of Vehicles.

Use since Jan. 27, 1955.

SN 683,610. Harry F. Meyers, d. b. a. Lighting Research Laboratories, Youngstown, Ohio. Filed Mar. 16, 1955.

"Lirelab"

For Industrial Lighting Fixtures.

Use since Jan. 15, 1934.

SN 685,024. Interlectric Corporation, Warren, Pa. Filed Apr. 6, 1955.

GREAT WESTERN

For Electric Fuses, Incandescent Electric Lamps, Fluorescent Electric Lamps, and Electric Photoflash Lamps.

Use since January 1912 on electric fuses.

SN 685,293. Nutone, Inc., Cincinnati, Ohio. Filed Apr. 11, 1955.

NuTone

Applicant claims ownership of Reg. Nos. 355,825, 505,582, and 591,087.

For Electrically Operated Combination Unit for Mixing and Blending Food, Fruit Juicing, and Knife Sharpening.

Use since Apr. 7, 1955.

SN 686,775. Radio Corporation of America, New York, N. Y. Filed May 3, 1955.

RCA

Applicant claims ownership of Reg. Nos. 302,712, 310,781, and 436,793.

For Tape Recorders, Component and Replacement Parts of Such Goods, and Accessories for Such Goods.

Use since June 17, 1953.

SN 687,256. Clarostat Mfg. Co., Inc., Dover, N. H. Filed May 11, 1955.

R T V

For Electrical Resistors and Controls.

Use since December 1951.

SN 688,678. Southern California Water Heaters Manufacturers Association, La Habra, Calif. Filed June 1, 1955. COLLECTIVE MARK.

Verified Long Life

No claim is made to the words "Verified Long Life" apart from the mark as shown. The drawing is lined for the color blue.

For Electric Water Heaters.

Use since May 3, 1955.

SN 689,024. Columbia Broadcasting System, Inc., also d. b. a. CBS-Hytron, division of Columbia Broadcasting System, Inc., New York, N. Y. Filed June 7, 1955.

CBS

Applicant claims ownership of Reg. Nos. 381,572, 587,387, and others.

For Electronic Tubes and Semiconductors.

Use since Mar. 20, 1955.

SN 689,711. Eagle Signal Corporation, Moline, Ill. Filed June 17, 1955.

MONOTROL

For Traffic Signal Systems.

Use since Apr. 4, 1955.

SN 690,574. Penn Tool & Machine Company, Danville, Ill. Filed June 30, 1955. Sec. 2(f).

Berkeley

For Electric Welding Apparatus and Electric Welding Fixtures.

Use since July 1941.

SN 691,022. Emerson Radio & Phonograph Corporation, Jersey City, N. J. Filed July 11, 1955.

EMERSON Phonoradio

The lining is for blue and gold. Applicant claims ownership of Reg. Nos. 225,976 and 598,699.

For Phonographs; Record Players; Radio Receivers; Television Receivers; Combination Phonograph and Radio Receivers; Combination Record Players and Radio Receivers; Combination Phonographs and Television Receivers; Combi-

nation Record Players and Television Receivers; Combination Phonograph, Radio and Television Receivers; Combination Record Players, Radio Receivers and Television Receivers; and Parts Thereof, viz., Tubes, Eliminators and Loudspeakers.
Use since June 1941.

SN 691,742. Aut-O-Hop Systems, Inc., Cleveland, Ohio. Filed July 22, 1955.

AUT-O-HOP

For Switchboards, Two-Way Communication Speakers and Parts Thereof.
Use since Aug. 30, 1954.

SN 691,885. Pilot Radio Corporation, Long Island City, N. Y. Filed July 25, 1955.

Encore

For High Fidelity Phonographs and Radio-Phonograph Combinations.
Use since May 1954.

SN 691,947. Meyer M. Katz, Philadelphia, Pa. Filed July 26, 1955.

Magnetrack

For Magnetic Recording Media for Motion Picture Film.
Use since Mar. 27, 1955.

SN 692,109. Bell & Gossett Company, Morton Grove, Ill. Filed July 29, 1955.

Hydro-Flo

Applicant claims ownership of Reg. Nos. 542,172, 554,429, and 555,376.
For Solenoid Controlled, Diaphragm Operated Valves, and Electric Motors.
Use since Oct. 26, 1948, on electric motors.

SN 692,203. Chicago Condenser Corp., Chicago, Ill. Filed Aug. 1, 1955.

PY-CAPS

For Electric Capacitors.
Use since Jan. 21, 1955.

SN 692,266. Pyramid Electric Company, North Bergen, N. J. Filed Aug. 1, 1955.

Kool-sel

For Selenium Rectifiers.
Use since Jan. 15, 1955.

SN 692,576. Continental Manufacturing Corp., Culver City, Calif. Filed Aug. 8, 1955.

LIFE-TIME

For Storage Batteries.
Use since Feb. 28, 1953.

CLASS 22

SN 640,021. Marianne Tuteur, New York, N. Y. Filed Dec. 24, 1952.

BUNNYCHICK

For Nursery Toy Characters in the Nature of Stuffed, Solid, and Hollow Animals and Dolls and Caricatures.
Use since Dec. 1, 1952.

SN 655,380. White's Auto Stores, Inc., Wichita Falls, Tex. Filed Oct. 26, 1953.

WHITE

For Tricycles, Velocipedes, Coaster Wagons, Scooters, and Sidewalk Bicycles.
Use since September 1952 on sidewalk bicycles.

SN 672,516. Jordan Klein, Miami, Fla. Filed Aug. 31, 1954.

MAKO

For Spearfishing Gun, Harpoon, and Stainless Steel Detachable Spear Heads.
Use since early in December 1953.

SN 674,996. The Nye Rubber Company, Barberton, Ohio. Filed Oct. 18, 1954. Sec. 2(f).

NYE

For Toy Vehicle Wheels and Tires.
Use since Sept. 8, 1954.

SN 676,847. Tim-Mee Toys, Inc., Aurora, Ill. Filed Nov. 17, 1954.

Tim-Mee TOYS

No claim is made herein to the word "Toys" apart from the mark as shown. The drawing is lined for blue.
For Plastic Figure Toys in the Form of Cowboys, Indians, Soldiers, Military Equipment, and the Like.
Use since Jan. 21, 1954.

SN 678,126. Elmer R. Lewis, Amarillo, Tex. Filed Dec. 10, 1954.

Liflina

For Strap Which Is Fastened at One End to a Life Preserver and at the Other End to the Wearer's Belt for the Safety of Those Occupying Watercraft.
Use since Nov. 4, 1954.

SN 678,883. Ottoman Company, Inc., New York, N. Y. Filed Dec. 23, 1954.

whistlin' OTTO the BABY REINDEER

For Animal Toys.
Use since June 18, 1954.

SN 680,760. Ideal Toy Corporation, Hollis, N. Y. Filed Jan. 31, 1955.

IDEAL'S

"MINUTE MAN"

For Children's Plastic Wading Pool.
Use since Dec. 10, 1954.

CLASS 23

SN 632,609. Fortuna-Werke Spezialmaschinenfabrik Aktiengesellschaft, Stuttgart-Bad Cannstatt, Germany. Filed July 16, 1952.

Finitor

Applicant claims ownership of German Reg. No. 611,554, dated Sept. 13, 1951.
For Machine Tools for Working Metal, Wood, Stones, Glass, Fabrics and Similar Materials—Namely, Drilling Machines, Drilling Templates, Lathes, Milling Machines, Planing Machines, Grinding Machines, Grinding Spindles, Chucks, Steady Rests, Back Rests, Centers for Machine Tools, Grinding Wheel Guards, Splash Guards, Grinding Spindle Carriers, Grinding Spindle Brackets, Grinding Wheel Dressing and Truing Tools, Drives for Grinding Machines—Namely, Gear Transmission, Fluid Drives, Wheelheads and Workheads for Grinding Machines, Cooling System for Grinding Machines, Lubricators for Grinding Machines, Pressure Oil System for Grinding Machines, Hydraulic Drives for Grinding Machines, Wrenches and Spanners for Assembling and Dismantling Machine Tools, and Parts Therefor, Collets, Wheel Flanges for Grinding Wheels, Grinding Wheel Arbors, Grinding Wheel Quills, Grinding Wheel Extensions, Tool Post Grinders, Grinding Benches, Tool Grinding Machines, Closers, Turret Bushings, Chuck Table.

SN 638,455. Vacuum Cleaner Corporation of America, Philadelphia, Pa. Filed Nov. 21, 1952.

Reelomatic

Applicant claims ownership of Reg. Nos. 318,396 and 410,926.
For Spring-Wound and Spring-Operated Cord Take-Up Reels for Paying Out and Retrieving Electric Appliance Cord, Clothes Line Rope, and Similar Cord or Rope.
Use since October 1947.

SN 641,136. General Riveters, Inc., Buffalo, N. Y. Filed Jan. 22, 1953.

TOOLSET

For Perforating and Notching Dies for Use in Punch Presses.
Use since Oct. 15, 1952.

SN 644,654. Wyoming Tie & Timber Company, Metropolis, Ill. Filed Apr. 2, 1953.

WYOLIFT

For Tie Forks for Mounting on Tractors and Load Frames.
Use since Jan. 2, 1953.

SN 651,062. Kirk Manufacturing Co., d. b. a. Bill Kirk Manufacturing Co., Amarillo, Tex. Filed July 29, 1953.

BILL KIRK'S STOCKAID

For Automatic, Stationary, Mechanical Live-Stock Oiler and Insecticide Applicator, Operated by Stock Upon Bodily Rubbing or Scratching Against Operative Parts of the Same.
Use since on or about Feb. 1, 1953.

SN 653,078. Rud. Osberghaus, Solingen, Germany. Filed Sept. 11, 1953.

DURASHARP

For Razors, Safety Razors, and Razor Blades.
Use since September 1950.

SN 657,644. Reo Motors, Inc., Lansing, Mich., to Motor Wheel Corporation, Lansing Mich. Filed Dec. 8, 1953.

REO TRIMALAWN

The term "De Luxe" is disclaimed apart from the mark as shown. The drawing is lined for red, white, and black, but color is not considered an essential feature.
For Gasoline Powered Reel Type Power Lawn Mowers.
Use since Jan. 25, 1946.

SN 657,645. Reo Motors, Inc., Lansing, Mich., to Motor Wheel Corporation, Lansing Mich. Filed Dec. 8, 1953.

REO ELECTRA-LAWN

The term "Lawn" is disclaimed apart from the mark as shown. The drawing is lined for red and yellow, the words being superimposed, in part, upon a black panel. However, color is not considered an essential feature.
For Electric Powered Rotary Type Power Lawn Mowers.
Use since Nov. 28, 1952.

SN 657,647. Reo Motors, Inc., Lansing, Mich., to Motor Wheel Corporation, Lansing Mich. Filed Dec. 8, 1953.



The drawing is lined for red, yellow, and black, but color is not considered an essential feature.
For Gasoline Powered Rotary Type Power Lawn Mower.
Use since Aug. 25, 1952.

SN 657,648. Reo Motors, Inc., Lansing, Mich., to Motor Wheel Corporation, Lansing Mich. Filed Dec. 8, 1953.



The drawing is lined for red, white, and black, but color is not considered an essential feature.
For Gasoline Powered Reel Type Power Lawn Mowers.
Use since Aug. 31, 1950.

SN 657,649. Reo Motors, Inc., Lansing, Mich., to Motor Wheel Corporation, Lansing Mich. Filed Dec. 8, 1953.



The drawing is lined for red, yellow, and black, but color is not considered an essential feature.
For Gasoline Powered Rotary Type Power Lawn Mower.
Use since Aug. 27, 1952.

SN 670,297. Modern Sewing Machine Co., Brooklyn, N. Y. Filed July 20, 1954.

Stradivaro

For Sewing Machines.
Use since Oct. 9, 1952.

SN 670,958. National Food Slicing Machine Co., Inc., White Plains, N. Y. Filed Aug. 2, 1954.

"THE NATIONAL HOME FOOD SLICER"

The words "The" and "Home Food Slicer" are disclaimed apart from the trademark as shown.
For Food Slicers.
Use since Mar. 19, 1953.

SN 670,959. National Food Slicing Machine Co., Inc., White Plains, N. Y. Filed Aug. 2, 1954.

"SLICE - CRAFTER"

For Food Slicers.
Use since June 29, 1954.

SN 672,309. National Lift Company, Ypsilanti, Mich. Filed Aug. 26, 1954.

HYDRACLUTCH

For Liquid Pumps.
Use since Mar. 16, 1950.

SN 672,806. Maurice J. Couturier, d. b. a. J. C. Welding Company, Detroit, Mich., to Korsoft Engineering, Inc., Detroit, Mich. Filed Sept. 7, 1954.

KORSOFT
BROACHES

For Broaches and Cutting Tools.
Use since May 15, 1954.

SN 673,204. Societe Anonyme Societe des Engrenages de Precision, Courbevoie (Seine), France. Filed Sept. 14, 1954.

Hydromagnetic

Applicant claims ownership of French Reg. No. 435,950, Seine Tribunal of Commerce, dated Dec. 2, 1953 (National Institute No. 24,057).
For Transmission Gears and More Particularly Change-Speed Box Connected With a Gearing.

SN 673,205. Societe Anonyme Societe des Engrenages de Precision, Courbevoie (Seine), France. Filed Sept. 14, 1954.

Magnetofluid

Applicant claims ownership of French Reg. No. 435,953, Seine Tribunal of Commerce, dated Dec. 2, 1953 (National Institute No. 24,060).
For Transmission Gears and More Particularly Change-Speed Box Connected With a Gearing.

SN 673,785. Söderhamns Verkstäder Aktiebolag, Soderhamn Sweden. Filed Sept. 24, 1954. Sec. 2(f).

SÖDERHAMN

For Sawmill Machinery—Namely, Gang Saws, Edgers, Slab and Board Separators, Resaws, Cross Cut Saws, Chippers, Hogs, Rechippers, Chip Screens, Wet Board Machines, and Debarkers.
Use since Dec. 22, 1951.

SN 673,786. Söderhamns Verkstäder Aktiebolag, Soderhamn, Sweden. Filed Sept. 24, 1954. Sec. 2(f).

SÖDERHAMNS

For Sawmill Machinery—Namely, Gang Saws, Edgers, Slab and Board Separators, Resaws, Cross Cut Saws, Chippers, Hogs, Rechippers, Chip Screens, Wet Board Machines, and Debarkers.
Use since Oct. 16, 1941.

SN 673,834. Joyce-Cridland Company, Dayton, Ohio. Filed Sept. 27, 1954. Sec. 2(f) as to "Joyce."

JOYCE
H-MASTER

Applicant claims ownership of Reg. Nos. 351,262 and 510,586.
For Motor Vehicle Hydraulic Lifts.
Use since Feb. 24, 1954.

SN 674,778. Veb Optima Büromaschinenwerk Erfurt, Erfurt, Germany. Filed Oct. 13, 1954.

Optima

For Typewriters and Parts Thereof.
Use since May 29, 1952.

SN 674,904. Oxy-Catalyst, Inc., Wayne, Pa. Filed Oct. 15, 1954.

DIESELER

For Exhaust Attachment for Internal Combustion Engines Embodying a Housing Containing Catalytic Material for Rendering Exhaust Gases Thereof Odorless and Non-Poisonous, and Parts Therefor.
Use since May 7, 1954.

SN 675,537. Felix Bottcher, Koln-Braunsfeld, Germany. Filed Oct. 27, 1954.

ARTEX

Priority is claimed under Sec. 44(d). German application filed Apr. 27, 1954, Reg. No. 671,397, dated Feb. 15, 1955.
For Printing Rollers for Book Printing, Offset Printing, Intaglio Printing, and Analine Printing; Lacquering Rollers and Impression Rollers for Rotogravure.

SN 675,725. Rowe Manufacturing Co., Inc., Whippany, N. J. Filed Oct. 29, 1954.

ROWEBOTERIA

Applicant claims ownership of Reg. No. 533,276.
For Battery of Automatic Merchandising Machines.
Use since July 9, 1954.

SN 677,959. Hyde Manufacturing Company, Southbridge, Mass. Filed Dec. 8, 1954. Sec. 2(f).

HYDE BLUE DIAMOND

Applicant claims ownership of Reg. Nos. 32,034, 270,520, and others.
For Putty Knives and Scrapers.
Use since Nov. 26, 1952; since 1916 on the word "Diamond"; and since May 1, 1898, on the geometrical representation of a diamond and the word "Hyde."

SN 680,743. Fairbanks, Morse & Co., Chicago, Ill. Filed Jan. 31, 1955.



Applicant claims ownership of Reg. Nos. 300,399, 416,615, and others.
For Diesel Locomotives.
Use since Aug. 21, 1944.

SN 682,171. The National Acme Company, Cleveland, Ohio. Filed Feb. 23, 1955.



Applicant claims ownership of Reg. Nos. 108,806 and 190,244.
For Dies, Including Spring and Opening Dies, Metalworking Tools Consisting of Drills and Drilling Tools, Box Tools, Shaving Tools, Knurling Tools, Threading Tools, Forming Tools, Cutting Tools, Cutting-Off Tools, and Shaping Tools, Metalworking and Automatic Multiple Spindle and Automatic Single Spindle Screw Machines, Lathes, Nut and Bolt Machines.
Use since on or about Mar. 1, 1908.

SN 682,972. Petch Manufacturing Co., Alpena, Mich. Filed Mar. 7, 1955.

No claim is made to the words "Air & Hydraulic Cylinders" apart from the mark as shown.
For Air and Hydraulic Cylinders, Concrete Block Cutting Machines Incorporating Air and Hydraulic Cylinders.
Use since Jan. 15, 1954.

SN 683,905. Olaf E. Opichka, d. b. a. 20th Century Handy Tool Company, Green Bay, Wis. Filed Mar. 21, 1955.

ATOMIC

For Mixing Device Adapted for Mixing and Blending Animal Feeds and Having a Tank, Movably Mounted Paddles and Hydraulic Control for Selectively Tipping Said Feed Tank; and for Machines for Cutting Meats and Feeds and Having a Drivable and Movable Shear Adapted To Slice Feed Materials.

Use since Dec. 27, 1951.

SN 685,132. W. Schlafhorst & Co., Munchen Gladbach, North Rhine-Westphalia, Germany. Filed Apr. 7, 1955.

AUTOCOPSER

Applicant claims ownership of German Reg. No. 516,324, dated Sept. 28, 1939.

For Textile Machines—Namely, Machines for Winding Thread and Yarn.

SN 685,996. Rampp Company, Marietta, Ohio. Filed Apr. 21, 1955.



For Well Drilling Tools—Namely, Cable Tools, Fishing Tools, Derrick Floor Accessories, Spudder Parts, Drilling Machine Parts, and Engine and Compressor Parts.

Use since Mar. 21, 1955.

SN 686,056. Winthrop A. Johns, d. b. a. Johns Manufacturing Company, Middlesex, N. J. Filed Apr. 22, 1955.

MAGNA-PLUG

For Sacrificial Anode Combined With a Drain Plug of an Internal Combustion Engine for Neutralizing Acids in the Lubricating Oil of Internal Combustion Engines.

Use since Jan. 15, 1951.

SN 686,057. Winthrop A. Johns, d. b. a. Johns Manufacturing Company, Middlesex, N. J. Filed Apr. 22, 1955.

MAGNA-POWER

For Sacrificial Anode Combined With a Drain Plug of an Internal Combustion Engine for Neutralizing Acids in the Lubricating Oil of Internal Combustion Engines.

Use since Jan. 15, 1951.

SN 686,315. Kent-Moore Organization, Inc., Detroit, Mich. Filed Apr. 26, 1955.

Aero Power

For Fluid Pressure Operated Mechanism for Removing Carbon From the Interior of the Head and Adjacent Wall Surface of an Internal Combustion Engine Cylinder.

Use since Feb. 1, 1954.

SN 687,702. Jim-Jak Industries, Incorporated, Minneapolis, Minn. Filed May 17, 1955.

Jim-Jak

For Coin-Operated Vending Machines for Dispensing Liquid Beverages.

Use since Dec. 15, 1954.

SN 689,072. Nichols Engineering & Research Corporation, New York, N. Y. Filed June 7, 1955.

VORJECT

Applicant claims ownership of Reg. No. 355,857.

For Vortex Forming Apparatus for Separating Undesired Particles From Liquid Mixtures, and Parts Thereof.

Use since on or about Feb. 28, 1955.

SN 689,934. Ekco Products Company, Chicago, Ill. Filed June 21, 1955.

Ancienne Maison

For Cutlery—Namely, Paring Knives, Vegetable Knives, Utility Knives, Boning Knives, Fowl and Steak Knives, Roast Slicers, Steak Knives, Butcher Knives, Ham Slicers, Roast Beef Slicers, and Forks.

Use since on or about Jan. 1, 1953.

SN 690,779. Utica Cutlery Company, Utica, N. Y. Filed July 5, 1955.

Romany

For Table Knives, Forks and Spoons, and Pie Knives, All of Base Metal.

Use since Mar. 23, 1955.

SN 691,221. Magic Hostess Corporation, Kansas City, Mo. Filed July 13, 1955.

MAGIC HOSTESS

Applicant claims ownership of Reg. No. 587,315.

For Kitchen Utensils—Namely, Can Openers, Fruit Juicers, Ice Crushers, Food Shredders, Slicers, and Graters, Food Grinders and Choppers, and Egg Beaters.

Use since Mar. 17, 1954.

SN 693,518. Besly-Welles Corporation, Chicago, Ill. Filed Apr. 19, 1955. Sec. 2(f).

BESLY BOWEN

Applicant claims ownership of Reg. No. 519,925.

For Grinding Machines.

Use since March 1950.

CLASS 24

SN 673,512. Forse Equipment Corporation, Anderson, Ind. Filed Sept. 21, 1954. Sec. 2(f).

FORSE

For Washing and Pressing Machines for Laundries, Dry Cleaners, and the Like.

Use since 1928.

CLASS 25

SN 679,240. Sargent & Greenleaf, Inc., Rochester, N. Y. Filed Dec. 31, 1954.

"Feather Touch"

For Panic Exit Devices.

Use since Sept. 27, 1954.

CLASS 26

SN 657,275. Graflex, Inc., Rochester, N. Y. Filed Dec. 2, 1953. Sec. 2(f).



The terms "American-Made," "Since 1890," and "Cameras" are disclaimed apart from the mark. Applicant claims ownership of Reg. Nos. 368,960 and 417,586.

For Photographic Cameras and Parts Thereof.

Use since April 1940.

SN 663,951. Royal Design & Manufacturing, Inc., Detroit, Mich. Filed Apr. 5, 1954.



The words "Tool Control Unit" are disclaimed apart from the mark.

For Tool Boards, Tool Use Boards, and Tool Schedule Boards Which Give Warning of the Approach of the End of Usefulness of Such Tools.

Use since Feb. 15, 1954.

SN 691,865. Mack's Industries, Incorporated, Waterloo, Iowa. Filed July 25, 1955. Sec. 2(f).

Rol-fold

Applicant claims ownership of Reg. No. 579,493.

For Machines for Applying and Binding Tape to the Edges of Photographic Transparency Slides.

Use since on or about June 8, 1950.

CLASS 29

SN 676,330. Platt & Smillie Chemicals, Inc., St. Louis, Mo. Filed Nov. 9, 1954.

ECONOPLIER

For Combination Floor-Wax Applicator and Container for Use in Conjunction With a Floor Polishing Machine.

Use since Sept. 2, 1954.

CLASS 32

SN 642,576. Walter N. Stuckslager, Inc., Chicago, Ill. Filed Feb. 20, 1953.

The ANSWER group

For Household Furnishings of Homogeneous Character—Namely, Beds, Dressers, Book-Cases, Cabinets, Chests, Tables, and Chairs.

Use since Feb. 5, 1952.

SN 658,664. Howard D. Stump, d. b. a. Stump Sales & Engineering Co., South Bend, Ind. Filed Dec. 28, 1953. Sec. 2(f).

Stump

For Sewing Machine Cabinets, Sewing Tables, Tables, Chairs, Stools or Benches, Consoles and Desks.

Use since July 1, 1947.

SN 666,781. Pennant Corporation, Grand Rapids, Mich. Filed May 20, 1954.



For Storage Chest Hassocks, Chests for the Storage of Toys, Juvenile Wardrobes, and Storage Benches.

Use since May 27, 1953, on storage chest hassocks.

SN 669,929. The Singer Manufacturing Company, Elizabeth, N. J. Filed July 13, 1954.

S

Applicant claims ownership of Reg. Nos. 69,900, 584,089, and others.

For Cabinets, Stools, Chairs, Tables, and Card Tables.

Use since in the year 1870 on cabinets and tables.

SN 676,485. The Englander Company, Inc., Chicago, Ill. Filed Nov. 12, 1954.

Bed n Sofa
by
Englander

Applicant disclaims the representation of the goods and the words "Bed" and "Sofa" apart from the mark as shown. Applicant claims ownership of Reg. No. 519,220.
For Convertible Sleeping Unit, Convertible Sleeping Bed, and Convertible Sleeping Sofa.
Use since Sept. 15, 1954.

SN 681,476. American Map Company, Inc., New York, N. Y. Filed Feb. 11, 1955.

VISILINE

For Display and Reference Equipment for Map Mounting—Namely, Spring Roller Casings for Maps, and Wall Racks for Maps and Light Educational Displays.
Use since Jan. 5, 1955.

SN 681,947. Shagg Studios, Ltd., Chicago, Ill. Filed Feb. 18, 1955.

BELLETTE

For Lazy Susans, Lazy Susan Type Turntable Supports, Lap Tables, Stack Tables and Trays, Magazine Racks, Telephone Stands, Valet Stands, and Fabricated Metal Wall Ornaments of the Sunburst Type With Mirrors in the Center.
Use since June 1937 on lazy susans.

SN 686,905. Hedstrom Union Company, Fitchburg, Mass. Filed May 5, 1955.

Ped-E-Pen

For Play Pens.
Use since Jan. 3, 1955.

SN 686,906. Hedstrom Union Company, Fitchburg, Mass. Filed May 5, 1955.

ROMP-A-ROUND

For Children's Feeding and Play Tables.
Use since Jan. 3, 1955.

SN 689,384. Donald J. Herzog, d. b. a. The Royal Company, Minneapolis, Minn. Filed June 13, 1955.

Handi-Napper

For Collapsible Combination Infant Bed and Bathtub.
Use since January 1955.

SN 689,517. Pucel Enterprises, Inc., Cleveland, Ohio. Filed June 14, 1955.

Grizzly

For Shop Equipment—Namely, Tables, Benches, Cabinets, Racks, Shelves, Stands, Desks, and Parts Thereof.
Use since Aug. 2, 1951.

SN 689,634. Metaltex, Inc., Brooklyn, N. Y. Filed June 16, 1955.

Tru-Vue

For Mirrors—Namely, Beauty Mirrors, Hand Mirrors, Make-Up Mirrors, Shaving Mirrors, Collapsible Mirrors, and Pocket Mirrors.
Use since Feb. 15, 1948.
Subj. to Intf. with SN 685,410.

SN 690,376. Flex-O-Air Sleep Products, Inc., Flushing, N. Y. Filed June 28, 1955.

FLEX-O-PEDIC

For Bed Mattresses and Bed Springs.
Use since during the year 1951.

CLASS 34

SN 672,250. Ruud Manufacturing Company, Pittsburgh, Pa. Filed Aug. 25, 1954.

SANI-TEMP

For Apparatus for Supplying Hot Water as for Commercial Dish-Rinsing and Embodying a Heater, Water Tank, and Controls in Assembly.
Use since Sept. 19, 1951.

SN 675,170. James R. Shaver, d. b. a. Iron Lung Ventilator Company, Cleveland, Ohio. Filed Oct. 20, 1954.

turbulo

For Air Tunnels Through Which Strip Metal Is Conveyed for Cooling.
Use since June 8, 1954.

SN 676,849. Vapor Heating Corporation, Chicago, Ill. Filed Nov. 17, 1954.

WATCHMAN

For Automatic Gas and Oil-Fired Hot Water Heaters Used To Circulate Hot Water Through a Diesel Locomotive Engine While the Latter Is Out of Service During Cold Weather.
Use since Aug. 31, 1954.

SN 677,503. Heating Equipment Manufacturing Co., San Francisco, Calif. Filed Nov. 30, 1954. Sec. 2(f).

Custom-Aire

Applicant claims ownership of Reg. No. 396,347.
For Gas Fired Forced Air Heating Units, Gas Fired Gravity Heating Units, Recessed Wall Heaters, Floor Furnaces, Circulating Heaters, Oil Fired Gravity Circulating Heaters, and Water Cooled Air Conditioning Units.
Use since Jan. 16, 1940.

SN 680,253. Ferruccio Casinghini, d. b. a. F. Casinghini Economizzatori Green, Milan, Italy. Filed Jan. 21, 1955.

LOCOMEC

Applicant claims ownership of Italian Reg. No. 107,975, dated June 16, 1952.
For Fuel Economizers and Heat Exchangers.

SN 681,135. The G. C. Breidert Co., Pacoima, Calif. Filed Feb. 7, 1955.

POWAIR-X-HAUSTER

For Ventilating Devices for Withdrawing Air and Gases From Buildings and Ships.
Use since January 1955.

SN 681,845. General Blower Company, Morton Grove, Ill. Filed Feb. 17, 1955. Sec. 2(f).

GB

For All Types of Centrifugal and Propeller Fans and Equipment for Industrial and Commercial Purposes Requiring the Movement of Air, Gases, or Material.
Use since 1936.

SN 682,702. C & H Air Conditioning Fan Company, Inc., Atlanta, Ga. Filed Mar. 3, 1955.

Silver-Aire!

For Ventilating and Air Moving Fans.
Use since Jan. 26, 1955.

SN 682,724. Gary Steel Products Corp., Gary, Ind. Filed Mar. 3, 1955.



For Sheet Metal Products—Namely, Ducts, Connectors, Chimneys, and Wall Radiators.
Use since Sept. 2, 1954.

SN 685,044. Progress Manufacturing Company, Inc., Philadelphia, Pa. Filed Apr. 6, 1955.

PRODUCTS OF PROGRESS

For Electric Motor Operated Ventilating Fans.
Use since May 1946.

SN 685,897. Fasco Industries Inc., Rochester, N. Y. Filed Apr. 20, 1955.

SPARTAN

For Ventilating Fans, Circulating Fans, Portable Window Fans, Portable Casement Fans, Oscillating Fans, Pedestal Fans, and Hassock Floor Fans.
Use since Mar. 31, 1933.

SN 685,941. The Williamson Heater Company, Cincinnati, Ohio. Filed Apr. 20, 1955.

Yearound

For Residential Cooling Units.
Use since Mar. 21, 1955.
Subj. to Intf. with SN 686,091.

SN 686,063. Lava Crucible-Refractories Company, Pittsburgh, Pa. Filed Apr. 22, 1955.

ESS-I-SEE

Applicant claims ownership of Reg. No. 351,584.
For Crucibles Used in Melting Metals.
Use since Dec. 1, 1954.

SN 686,091. Rheem Manufacturing Company, Richmond, Calif. Filed Apr. 22, 1955.

YEAR
'ROUNDER

For Combination Air Conditioners and Furnace Units.
Use since on or about July 20, 1954.
Subj. to Intf. with SN 685,941.

SN 686,154. Compressor Engineering Co., Chicago, Ill. Filed Apr. 25, 1955. Sec. 2(f).

CLEAN-AIR

For After Coolers.
Use since Nov. 1, 1940.

SN 686,450. Holophane Company, Inc., New York, N. Y. Filed Apr. 28, 1955.

PARADOME

For Illumination Equipment—Namely, Lighting Fixtures, Plastic and Glass Lamp Panels, Screens, Globes, Reflectors, and Refractors.
Use since Feb. 28, 1955.

SN 686,571. Riley Stoker Corporation, Worcester, Mass. Filed Apr. 29, 1955.



For Steam Generators.
Use since July 1, 1913.

SN 686,829. James Incorporated, Omaha, Nebr. Filed May 4, 1955.



For Sun Shield Assembly for Window Type Air Conditioning Units.
Use since Mar. 15, 1955.

SN 687,544. Dalzen Manufacturing Company, St. St. Clair, Mich. Filed May 16, 1955.

Tropic Breeze

For Gas Heating Furnace.
Use since Jan. 1, 1938.

SN 687,913. H. R. Basford Co., San Francisco, Calif. Filed May 20, 1955.

SANI-GLAS

For Gas Water Heaters.
Use since July 8, 1954.

SN 688,202. American Coal Burner and Wood Stoker Corporation, Chicago, Ill. Filed May 25, 1955.

COMBUSTIKATOR

For Fuel Burning Furnaces and Parts Therefor—Namely, Grates, Grate Bars, Doors, Conveyor Grates and Drive Mechanism.
Use since June 18, 1925.

SN 688,352. Premier Stove Company, Belleville, Ill. Filed May 26, 1955.

Premier

For Domestic Gas Ranges and Heaters.
Use since January 1928.

SN 688,384. Borg-Warner Corporation, Chicago, Ill. Filed May 27, 1955.

LIFE-LINED

For Water Heaters and Parts Thereof for Replacement and Repair.
Use since on or about Jan. 7, 1955.

CLASS 36

SN 658,794. Lucky Records Company, Shamshuipo, Kowloon, Hong Kong. Filed Dec. 30, 1953.



The English equivalent of the Chinese symbols appearing in the mark is "Lucky Records."
For Grooved Phonograph Records.
Use since Jan. 1, 1953.

SN 669,606. Deutsche Grammophon Gesellschaft m. b. H., Hannover, Germany. Filed July 8, 1954.



Applicant claims ownership of German Reg. No. 645,607, dated Oct. 7, 1953.
For Grooved Phonograph Records, Envelopes and Storage Containers Therefor, and Phonograph Needles.

SN 673,217. Accordion Manufacturers and Wholesalers Outlet, Chicago, Ill. Filed Sept. 15, 1954.

POLYTONETTE

For Accordions.
Use since Aug. 6, 1952.

SN 690,908. H. & A. Selmer, Inc., Elkhart, Ind. Filed July 7, 1955.

MARK VI

For Saxophones.
Use since Sept. 1, 1954.

CLASS 37

SN 678,135. Nekoosa-Edwards Paper Company, Port Edwards, Wis. Filed Dec. 10, 1954. Sec. 2(f) as to "Nekoosa."

NEKOOSA MASTER-LUCENT

Applicant claims ownership of Reg. No. 515,060.
For Copy Reproduction Paper—Namely, Duplicating and Mimeo Paper.
Use since Oct. 26, 1954; and since 1946 on "Nekoosa."

SN 687,051. The Champion Paper and Fibre Company, Hamilton, Ohio. Filed May 9, 1955.

Chalice

For Printing Paper.
Use since on or about Mar. 24, 1955.

SN 687,088. Montblanc-Simplo G. m. b. H., Hamburg, Germany. Filed May 9, 1955.

Pix

For Fountain Pens, Ball Point Pens, Stands for Fountain Pens, Cases for Fountain Pens, Mechanical Pencils.
Use since July 19, 1929.

SN 687,627. Roswell H. Rausch, d. b. a. Dec Paper Company, Oak Tree, N. J. Filed May 16, 1955.

GAY-BLADE

For Wrapping Paper.
Use since Apr. 22, 1955.

CLASS 38

SN 684,313. The Jones Publishing Company, Chicago, Ill. Filed Mar. 28, 1955.



No claim is made to the word "Publications" apart from the mark as a whole.
For Periodicals Issued From Time to Time.
Use since March 1955.

SN 684,317. Lane Publishing Co., Menlo Park, Calif. Filed Mar. 28, 1955.

A Sunset Booklet

Applicant makes no claim to the term "Booklet" apart from the mark as a whole. Applicant claims ownership of Reg. Nos. 209,499, 511,453, and others.
For Pamphlets.
Use since Feb. 15, 1955.

SN 684,983. Terrytoons, Inc., New Rochelle, N. Y. Filed Apr. 5, 1955.

BARKER BILL

Applicant claims ownership of Reg. No. 598,224.
For Daily and Sunday Newspaper Comic Strips and Pages.
Use since Sept. 27, 1954.

CLASS 39

SN 672,255. Spatz Bros. Inc., New York, N. Y. Filed Aug. 25, 1954.

CAR-COAT

For Jackets and Raincoats.
Use since Aug. 11, 1954.

SN 682,547. Eugene Hosiery Mills, Sinking Spring, Pa. Filed Mar. 1, 1955.

Denise

For Ladies' Hosiery.
Use since Jan. 17, 1955.

SN 682,981. Michael N. Rachid, Bayamon, Puerto Rico. Filed Mar. 7, 1955.

MICHELI

For Men's Hats.
Use since March 1952.

SN 683,194. Gallenkamp Stores Co., Los Angeles, Calif. Filed Mar. 10, 1955.

Gallenkampers

Applicant claims ownership of Reg. Nos. 290,495, 505,515, and 553,266.
For Shoes for Children.
Use since Feb. 15, 1955.

SN 683,195. Gallenkamp Stores Co., Los Angeles, Calif. Filed Mar. 10, 1955.

Ballenskampers

Applicant claims ownership of Reg. Nos. 290,495, 505,515, and 553,266.
For Shoes for Children.
Use since Feb. 15, 1955.

SN 683,394. Huth-James Shoe, Inc., Milwaukee, Wis. Filed Mar. 14, 1955.

"KOZY-KOMFORT"

For Men's and Boys' Shoes.
Use since July 26, 1954.

SN 683,442. J. Schoeneman, Inc., Baltimore, Md. Filed Mar. 14, 1955.

Ceramic

For Coats, Vests, Trousers, Knickerbockers, Top Coats, and Overcoats for Men, Youths, and Boys.
Use since Feb. 24, 1955.

SN 683,449. H. C. Stillman Shoe Company, Inc., Lawrence, Mass. Filed Mar. 14, 1955.

DRESSMAKER'S FIT-O-MATIC

Applicant claims ownership of Reg. No. 531,113.
For Women's Shoes.
Use since Nov. 26, 1954.

SN 683,510. Hudson Hosiery Company, Charlotte, N. C. Filed Mar. 15, 1955.

OAKHURST
COMFY STRETCH

Applicant claims ownership of Reg. Nos. 502,810 and 402,660.
For Ladies' Hosiery.
Use since Mar. 7, 1955; and since Jan. 1, 1941, as to "Oakhurst."

SN 683,824. Wallach's, Inc., New York, N. Y. Filed Mar. 18, 1955.

Racquet Club

Applicant claims ownership of Reg. Nos. 562,564, 582,268, and 583,393.
For Men's Clothing—Namely, Sweaters, Sport Shirts, Dress Shirts, Pajamas, Neckties, Jackets, Hose, Undershorts, Undershirts.
Use since Feb. 15, 1955.

SN 683,908. Ray J. Pastene, d. b. a. Pastene & Co., San Francisco, Calif. Filed Mar. 21, 1955.

Roman Walk

For Men's, Women's, and Children's Sandals.
Use since Mar. 2, 1955.

SN 683,909. Ray J. Pastene, d. b. a. Pastene & Co., San Francisco, Calif. Filed Mar. 21, 1955.

Sea Walk

For Men's, Women's, and Children's Sandals.
Use since Mar. 2, 1955.

SN 684,136. Julius Kayser & Co., New York, N. Y. Filed Mar. 24, 1955.

SHEERLAST

For Hosiery.
Use since Dec. 16, 1954.

SN 684,355. John B. Stetson Company, Philadelphia, Pa. Filed Mar. 28, 1955. Sec. 2(f).

Kensington

For Men's Hats.
Use since in the year 1909.

SN 684,401. Cordette of California, Los Angeles, Calif. Filed Mar. 29, 1955.

Cordette

For Juniors', Misses', and Half-Size Dresses.
Use since Mar. 9, 1953.

SN 684,498. Terry Sales Corp., New York, N. Y. Filed Mar. 29, 1955.

Melofine

For Wool-Felt Form To Be Made Into a Felt Hat.
Use since Oct. 13, 1954.

SN 684,760. Riverside Manufacturing Company, Moultrie, Ga. Filed Apr. 1, 1955.

RIVERSIDE MASTERBILT

For Industrial Uniforms and Caps.
Use since on or about Dec. 1, 1951.

SN 684,832. Glaser Bros. Inc., St. Louis, Mo. Filed Apr. 4, 1955.

Lowaytex

For Young Men's Slacks.
Use since Mar. 9, 1955.

SN 684,849. Lindner Bros., d. b. a. Linstor of San Francisco, San Francisco, Calif. Filed Apr. 4, 1955.

"ROOTER"

For Sweaters.
Use since Mar. 22, 1955.

SN 688,814. The Franzen Shoe & Slipper Co., Worcester, Mass. Filed June 3, 1955.

eldorados

For Shoes and Slippers.
Use since Mar. 31, 1955.

SN 689,044. Krieger & Rosen Shoe Co., Inc., Brooklyn, N. Y. Filed June 7, 1955.

Happy - Mates

For Children's Shoes.
Use since Apr. 1, 1955.

SN 689,045. Krieger & Rosen Shoe Co., Inc., Brooklyn, N. Y. Filed June 7, 1955.

TUFF SHIELD

For Children's Shoes.
Use since Apr. 1, 1955.

SN 690,023. Morpul, Incorporated, Greensboro, N. C. Filed June 22, 1955. Sec. 2(f).

morpul

Applicant claims ownership of Reg. No. 428,356.
For Hosiery.
Use since Nov. 15, 1954.

SN 691,028. Gaylord Products, Incorporated, Chicago, Ill. Filed July 11, 1955.

Modern Miss

For Hair Nets.
Use since July 10, 1951.

SN 691,383. Peter Pan Foundations, Inc., New York, N. Y. Filed July 15, 1955.

YOUNG AT HEART

For Brassieres, Girdles, and Bathing Suits.
Use since June 13, 1955.

SN 691,389. Saks & Company, New York, N. Y. Filed July 15, 1955.

EMBLAZER

For Women's, Misses', and Children's Jackets, Cardigan Jackets, Blazers, Coats, Suits, Blouses, Outer Shirts, Pull-Over Sweaters, and Cardigan Sweaters.
Use since June 29, 1955.

CLASS 40

SN 682,534. Batterson-Wessels Company, Muscatine, Iowa. Filed Mar. 1, 1955.

BW fashion-rite

For Buttons.
Use since July 1, 1951.

SN 689,032. The Gillette Company, d. b. a. The Toni Company, Boston, Mass. Filed June 7, 1955.

sofstyle

For Non-Electric Hair Curlers Not Made of Precious Metal.
Use since Apr. 12, 1955.

CLASS 42

SN 681,459. Star Ribbons, Inc., Dallas, Tex. Filed Feb. 10, 1955.

STAR RIBBONS, Inc.

For Textile Ribbons.
Use since Oct. 1, 1954.

SN 687,525. Bates Manufacturing Company, Lewiston, Maine. Filed May 16, 1955.

JUST HANG IT UP!

For Fabric Piece Goods of Cotton, Synthetic Fibres, and All Mixtures of Synthetic Fibres.
Use since Mar. 21, 1952.

SN 687,716. Norma Sales Corporation, New York, N. Y. Filed May 17, 1955.

'STARFIRE'

For Bedspreads.
Use since Apr. 22, 1955.

SN 687,810. Powerknit Mills, Inc., Long Island City, N. Y. Filed May 18, 1955.

POWERKNIT

For Elastic Fabrics.
Use since on or about September 1942.

SN 688,815. D. B. Fuller & Co., Inc., New York, N. Y. Filed June 3, 1955.

CHESTERTON

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since Feb. 15, 1954.

SN 688,890. Bachmann Uxbridge Worsted Corporation, New York, N. Y. Filed June 6, 1955.

DELSPUN

For Worsted Fabrics in the Piece.
Use since Mar. 8, 1955.

SN 688,896. Bemis Bro. Bag Company, St. Louis, Mo. Filed June 6, 1955.

BEMIBRITE

For Burlap Piece Goods.
Use since May 10, 1955.

SN 688,970. Shirley Fabrics Corporation, New York, N. Y. Filed June 6, 1955.

JACADOT

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since Apr. 5, 1954.

SN 688,971. Shirley Fabrics Corporation, New York, N. Y. Filed June 6, 1955.

SIREPPE

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since Feb. 15, 1954.

SN 688,972. Shirley Fabrics Corporation, New York, N. Y. Filed June 6, 1955.

SHANTOMAN

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since Apr. 26, 1954.

SN 689,170. Shirley Fabrics Corporation, New York, N. Y. Filed June 8, 1955.

COQUARDI

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since Mar. 23, 1954.

SN 689,171. Shirley Fabrics Corporation, New York, N. Y. Filed June 8, 1955.

KAABA

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since Apr. 28, 1954.

SN 689,230. The Millville Manufacturing Company, Philadelphia, Pa. Filed June 9, 1955.

"ANIMAL PARTY"

For Crib Sheets.
Use since Mar. 25, 1955.

CLASS 43

SN 689,608. Celanese Corporation of America, New York, N. Y. Filed June 16, 1955.

AIRLOFT

For Yarns.
Use since May 27, 1955.
Subj. to Intf. with SN 689,368.

CLASS 44

SN 674,327. The Davidson Rubber Company, Boston, Mass. Filed Oct. 5, 1954.

Trip-Mate

For Rectal and Vaginal Syringe.
Use since Aug. 17, 1954.

SN 677,802. Hans Nemec, Vorarlberg, Austria. Filed Dec. 6, 1954.



Priority is claimed under Sec. 44(d). Austrian application filed Sept. 3, 1954, Reg. No. 31,008, dated Nov. 12, 1954.
For Apparatus for Electro-Therapy by Nerve Stimulating Electric Currents.

SN 681,412. Consolidated Metal Products Corp., Albany, N. Y. Filed Feb. 10, 1955.

Tilon

For Synthetic Mixture or Material Into Which Artificial Teeth Are Set To Make Dental Plates.
Use since Jan. 4, 1955.

SN 682,241. Dallons Laboratories, Inc., Los Angeles, Calif. Filed Feb. 24, 1955.

Meditherm

For Diathermy Equipment.
Use since Aug. 1, 1945.

SN 685,158. Joseph Lagman, d. b. a. Audio Company of America, Phoenix, Ariz. Filed Apr. 8, 1955.

HEARING GLASSES

For Hearing Aids Mounted in Frames for Eye-Glasses.
Use since Feb. 14, 1955.

SN 689,938. The Gillette Company, d. b. a. The Toni Company, Boston, Mass. Filed June 21, 1955.

ringlet

Applicant claims ownership of Reg. No. 561,985.
For Home Permanent Waving Kit Containing Hair Waving Lotion and End Tissues.
Use since Mar. 24, 1955.

SN 691,907. Universal Dental Company, Philadelphia, Pa. Filed July 25, 1955.

DUAL-DIAL

For Devices for Displaying, Selecting, and Comparing Color of Artificial Teeth.
Use since July 1, 1955.

CLASS 46

SN 635,583. Brock and Company, Inc., Philadelphia, Pa. Filed Sept. 22, 1952. Sec. 2(f).

Brock's

For Box Lunches Normally Containing Two Bread Sandwiches, One Roll Sandwich, One Portion of Pie, One Piece of Fruit and One Portion of Vegetable Salad; Sandwiches, Hot Coffee, Iced Tea, Tomato Juice, and Frozen French Fried Potatoes.
Use since in early 1928 on box lunches.

SN 644,556. King Steak Co., Philadelphia, Pa. Filed Apr. 1, 1953.



No claim is made to the descriptive wording "Fit for a King" and "Buttered Beef Steaks" except in the association shown. The drawing is lined for red but no claim is made to color.
For Frozen Steaks.
Use since May 15, 1947.

SN 644,795. Schutter Candy Company, Chicago, Ill. Filed Apr. 6, 1953.

COCONUT-RED

For Candy Bars.
Use since Mar. 26, 1953.

SN 656,294. Bien Trading Co., Inc., New York, N. Y. Filed Nov. 13, 1953.



The crab is disclaimed apart from the mark as shown.
For Canned and Frozen Crabmeat.
Use since Jan. 15, 1953.

SN 661,834. Roberts & Oake, Inc., Chicago, Ill. Filed Mar. 1, 1954. Sec. 2(f).

Sweetmeat

Applicant claims ownership of Reg. Nos. 224,389 (expired) and 251,693 (expired).
For Fresh and Cured Pork and Pork Products—Namely, Hams, Picnics, Bacons, and Sausages.
Use since on or about Jan. 1, 1936.

SN 661,835. Roberts & Oake, Inc., Chicago, Ill. Filed Mar. 1, 1954. Sec. 2(f) as to "Sweetmeat."



The drawing is lined for red. Applicant claims ownership of Reg. Nos. 224,389 (expired) and 251,693 (expired).
For Fresh and Cured Pork and Pork Products—Namely, Hams, Picnics, Bacons, and Sausages.
Use since on or about Dec. 1, 1953; and since Jan. 1, 1936 on "Sweetmeat."

SN 663,410. Fred Wolferman, Inc., Kansas City, Mo. Filed Mar. 26, 1954.

Applicant claims ownership of Reg. No. 548,258.
For Fluid Milk, Butter, and Fresh Eggs; Cheese; Jams; Jellies; Marmalade; Fruit Butters; Canned, Dried, and Frozen Vegetables; Canned Vegetable Juices; Canned Tomato Puree; Canned Mushrooms; Canned Mushroom Broth; Canned Soups; Canned, Pickled, Spiced, Brandied, Frozen, Dried, and Evaporated Fruits; Canned Fruit Juices; Prepared Fruit Salads; Vinegar; Olive Oil for Cooking Purposes; Salad Oils; Salad Dressing; Mayonnaise; Catsup; Chili Sauce; Tartar Sauce; Cocktail Sauce; Hollandaise Sauce; Peanut Butter; Chili Con Carne; Mince Meat; Canned Corned Beef Hash, Beef Stew, and Frankfurters; Smoked Ham and Bacon; Canned Smoked Turkey; Canned Fish, Shell Fish, Shad Roe, Sardines, Caviar, Shrimp Cocktail; Hors D'oeuvres Composed Principally of Spiced Fish and Shrimp; Canned Cocktail Onions, Pickles, and Olives; Sugar; Syrups for Food Purposes; Cake Flour; Bread, Rolls, Cookies, Cakes, Pastries, and Fruit Cake; Canned and Packaged Plum and Fruit Puddings; Rice; Macaroni; Spaghetti; Noodles; Coffee; Tea; Salted Nuts; Potato Chips; Cheese Chips; Spices; Food Flavoring Extracts; Candies; Ice Cream and Sherbets; and Sauces of Fruit and Syrup for Ice Cream.
Use since January 1900.

SN 664,528. Grace Chemical Company, New York, N. Y., to W. R. Grace & Co., New York, N. Y., a corporation of Connecticut.

NUREA

Filed Apr. 14, 1954.
For Urea Feed Compound Used as a Substitute for Protein in Ruminant Animal Feeds.
Use since Apr. 2, 1954.

SN 666,918. Colter Corporation, New York, N. Y. Filed May 24, 1954. Sec. 2(f).

Jekyll Island

Applicant claims ownership of Reg. No. 527,565.
For Seafood—Namely, Prepared Frozen Shrimp.
Use since July 15, 1948.

SN 669,161. Whole Grain Products, Inc., Cleveland, Ohio. Filed June 29, 1954.

ROTA

For Flour and Baked Goods—Namely, Breads, Rolls, Cakes, Doughnuts, Cookies, and Pies.
Use since May 14, 1954.

SN 670,418. Droste's Cacao- en Chocoladefabrieken N. V., Haarlem, Netherlands. Filed July 22, 1954. Sec. 2(f).

Droste

Applicant claims ownership of Reg. Nos. 295,552, 585,395, and others.
For Cocoa, Candies, and Cooking Chocolate.
Use since Jan. 30, 1906.

SN 672,792. The Borden Company, New York, N. Y. Filed Sept. 7, 1954.

merry-molds

For Ice Cream.
Use since Mar. 15, 1954.

SN 673,107. Kingsway Chocolate Company Limited, Toronto, Ontario, Canada. Filed Sept. 13, 1954.



The wording "Tasty Chocolate Flavor" and "Instant Mix With Milk" is disclaimed apart from the mark as a whole.
For Soluble Chocolate Cocoa Powders.
Use since Nov. 20, 1953.

SN 673,278. Gross Egg Co., d. b. a. M. M. Gross, Chicago, Ill. Filed Sept. 16, 1954.

SILVERPAK

For Frozen Egg Whites.
Use since Feb. 21, 1950.

SN 673,299. Pomona Products Co., Griffin, Ga. Filed Sept. 16, 1954.

Pomona Sunshine

Applicant claims ownership of Reg. Nos. 121,700 and 131,919.
For Canned Vegetables and Canned Peaches.
Use since July 10, 1952.

SN 674,208. Valley View Packing Co., Inc., San Jose, Calif. Filed Oct. 1, 1954. Sec. 2(f).



Applicant claims ownership of Reg. Nos. 433,150, 422,179, and 425,546.
For Dried Fruits.
Use since Nov. 16, 1945.

SN 679,049. Kagran Corporation, New York, N. Y. Filed Dec. 28, 1954.

HOWDY DOODY

Applicant claims ownership of Reg. No. 520,775.
For Fruits and Vegetables.
Use since Sept. 1, 1954.

SN 679,688. Swift & Company, Chicago, Ill. Filed Jan. 10, 1955. Sec. 2(f).

Norwood

For Bacon, Bologna, Frankfurters, Salami, Carcasses and Portions of Carcasses of Beef, Lamb, and Veal; Sausages.
Use since in about 1931.

SN 679,830. Stella D'oro Biscuit Co., Inc., New York, N. Y. Filed Jan. 13, 1955.



"Stella D'oro" is translated as "Star of Gold."
For Cookies and Biscuits.
Use since Sept. 20, 1954.

SN 680,103. Sisco-Hamilton Co., Chicago, Ill. Filed Jan. 18, 1955. Sec. 2(f).

Lady Blair

For Chocolate Covered Cherries.
Use since Dec. 6, 1945.

SN 680,146. W. P. Ihrie and Sons, Baltimore, Md. Filed Jan. 19, 1955. Sec. 2(f).

"A Pip of a Chip"

Applicant claims ownership of Reg. No. 515,462.
For Potato Chips.
Use since Jan. 1, 1937.

SN 681,431. Etablissements Lefevre-Utile, Nantes, France. Filed Feb. 10, 1955.

LEFÈVRE UTILE

For Cookies, Biscuits, Wafers, and Crackers.
Use since 1885.

SN 681,432. Etablissements Lefevre-Utile, Nantes, France. Filed Feb. 10, 1955.

LU

For Cookies, Biscuits, Wafers, and Crackers.
Use since 1885.

SN 681,514. William Weeks Grove, d. b. a. Stuarts Draft Mills, Stuarts Draft, Va. Filed Feb. 11, 1955.

GOOD AS GOLD

For Wheat Flour.
Use since July 1905.

SN 681,768. Health Food Products Company, Inc., Louisville, Ky. Filed Feb. 16, 1955.

HOWDI POP

For Raw Popcorn Packed in Cooking Oil.
Use since Feb. 2, 1955.

SN 681,884. Senator Frozen Products, Inc., New York, N. Y. Filed Feb. 17, 1955.

Ciro's

For Ice Cream, Sherbets, Frozen Coated and Uncoated Ice Cream on a Stick, Water Ice and Combinations of Water Ice and Ice Cream.
Use since Mar. 25, 1954.

SN 682,602. Sub-Tropic Fruit Co., Inc., Goulds, Fla. Filed Mar. 1, 1955.

TROPIC-FRESH

For Fresh and Frozen Avocados.
Use since Nov. 29, 1954.

SN 682,628. Eastern States Farmers' Exchange, Incorporated, West Springfield, Mass. Filed Mar. 2, 1955.

APPIWHEY

For Poultry Feed Comprising Condensed Whey.
Use since Jan. 20, 1955.

SN 682,997. Swift & Company, Chicago, Ill. Filed Mar. 7, 1955.

hyola

For Shortening.
Use since in about 1930.

SN 683,168. Barricini, Inc., Long Island City, N. Y. Filed Mar. 10, 1955.

BRAZIL-JACS

Applicant claims ownership of Reg. No. 551,684.
For Candy-Coated Brazil Nuts.
Use since Jan. 1, 1955.

SN 683,942. Ventura Coastal Lemon Company, Ventura, Calif. Filed Mar. 21, 1955.

COASTAL

Applicant claims ownership of Reg. No. 389,727.
For Citrus Oils—Namely, Lemon Oil, Orange Oil, Grapefruit Oil, and Tangerine Oil.
Use since Dec. 1, 1954, on lemon oil.

SN 684,178. Yick Lung Company, Honolulu, Hawaii. Filed Mar. 24, 1955.

YICK'S YICK LUNG

The term "Yick Lung" in the Chinese language means "Profitable Enterprise."
For Candy and Preserved Fruits.
Use since January 1952.

SN 684,956. The Mohican Stores, Inc., New York, N. Y. Filed Apr. 5, 1955.

MOHICAN



Applicant claims ownership of Reg. No. 347,907.
For Fruit and Berry Preserves, Orange Marmalade, Jellies, Chili Sauce, Catsup, Apple Butter, Potato Salad, Macaroni Salad, Peanut Butter, Salad Dressing, and Mayonnaise.
Use since October 1954 on salad dressing, mayonnaise, and macaroni salad.

SN 685,308. Santa Barbara Coastal Lemon Co., Santa Barbara, Calif. Filed Apr. 11, 1955.

SIGNALMAN

For Fresh Lemons and Avocados.
Use since Mar. 10, 1955.

SN 685,309. Schell Ranch and Packing Co., Fullerton, Calif. Filed Apr. 11, 1955.

AMAZING

COACHELLA

For Fresh Citrus Fruits.
Use since Jan. 12, 1952.

SN 685,644. John E. Bennett, d. b. a. The Bennett Company, San Francisco, Calif. Filed Apr. 18, 1955.

BOLA-BOLA

For Chewing Gum.
Use since Mar. 31, 1955.

SN 685,735. Nash-De Camp Company, Visalia, Calif. Filed Apr. 18, 1955.

JOSHUA TREE

Applicant claims ownership of Reg. No. 519,255.
For Fresh Vegetables, Fresh Citrus Fruits, and Fresh Deciduous Fruits.
Use since Apr. 3, 1948.

SN 685,826. Martin A. Evers, d. b. a. Red Door Farms, Dayton, Ohio. Filed Apr. 19, 1955.

RED DOOR FARMS

For Fresh Herbs, Dried Herbs, Blended Seasonings, Pickles, Vinegar, Jellies and Fruit Preserves.
Use since Aug. 12, 1954, on fresh herbs.

SN 685,832. Alice J. Grossniklaus, d. b. a. Alpine Cheese Factory, Wilmot, Ohio. Filed Apr. 19, 1955.

Alpine Mountain

Applicant claims ownership of Reg. No. 594,921.
For Cheese.
Use since Feb. 15, 1953.

SN 685,854. Safeway Stores, Incorporated, Oakland, Calif. Filed Apr. 19, 1955.

Lunch Box

For Sandwich Spread.
Use since Mar. 15, 1937.

SN 686,061. Lanco Products Corporation, New York, N. Y. Filed Apr. 22, 1955.

SHEREX

Applicant claims ownership of Reg. No. 414,130.
For Stabilizer for Sherbets and Ices.
Use since Mar. 1, 1955.

SN 686,084. The Procter & Gamble Company, Cincinnati, Ohio. Filed Apr. 22, 1955.

GLORO

For Edible Vegetable Oils.
Use since Mar. 18, 1955.

SN 686,085. The Procter & Gamble Company, Cincinnati, Ohio. Filed Apr. 22, 1955.

CLIDO

For Edible Vegetable Oils.
Use since Mar. 17, 1955.

SN 686,086. The Procter & Gamble Company, Cincinnati, Ohio. Filed Apr. 22, 1955.

OLD GLORY

Applicant claims ownership of Reg. No. 104,965.
For Edible Vegetable Oils.
Use since Mar. 18, 1955.

SN 686,087. The Procter & Gamble Company, Cincinnati, Ohio. Filed Apr. 22, 1955.

VELDO

Applicant claims ownership of Reg. No. 324,562.
For Edible Vegetable Oils.
Use since Mar. 17, 1955.

SN 686,204. Minot Food Packers, Inc., Bridgeton, N. J. Filed Apr. 25, 1955.

MIN-OT

Applicant claims ownership of Reg. No. 259,080.
For Canned Foods—Namely, Potato Salad, Whole White Potatoes, Sweet Potatoes, Tomato Juice, Blueberries, and Cranberry Sauce.
Use since Jan. 2, 1929.

SN 686,257. Yakima Fruit & Cold Storage Co., Yakima, Wash. Filed Apr. 25, 1955.

Smart Apple

For Fresh Apples.
Use since Apr. 15, 1955.

SN 686,438. Robert J. Ghiglia, d. b. a. Merced Produce & Packing Co., Chowchilla, Calif. Filed Apr. 28, 1955.

TOMATO KING

For Fresh Vegetables.
Use since Apr. 13, 1955.

SN 687,348. California Prune and Apricot Growers Association, San Jose, Calif. Filed May 12, 1955.

SUNSWEET

Applicant claims ownership of Reg. Nos. 121,593, 344,450, and others.
For Dried Fruits.
Use since November 1954.

SN 687,530. Briggs Lemon Association, Santa Paula, Calif. Filed May 16, 1955.

KEEPER

Applicant claims ownership of Reg. No. 354,408.
For Fresh Citrus Fruits.
Use since Nov. 17, 1936.

CLASS 47

SN 684,359. Supreme Wine Co., Inc., Boston, Mass. Filed Mar. 28, 1955.

SUPREME

The drawing is lined for gold and red. Applicant claims ownership of Reg. No. 352,820.
For Wines.
Use since January 1935.

CLASS 49

SN 683,006. Western United Company, San Francisco, Calif. Filed Mar. 7, 1955.

DARDANELLA

Applicant claims ownership of Reg. No. 360,051.
For Brandy.
Use since Jan. 12, 1955.

SN 684,374. Maclachlans Limited, Glasgow, Scotland. Filed Mar. 18, 1955.

"FIVE CASTLE"

For Whisky.
Use since July 21, 1916.

SN 689,998. Federal Liquors Ltd., Boston, Mass. Filed June 22, 1955.

Canadian Crest

For Whiskey.
Use since May 2, 1955.

CLASS 50

SN 648,052. Alfred Schiftan, Inc., New York, N. Y. Filed June 1, 1953.

ASNY

For Holy Water Fonts Not Connected to a Permanent Water Supply, Paper Mache Nativity Sets, Non-Precious Metal Statues, Wooden and Plaster Wall Plaques, Wooden and Non-Precious Metal Wall and Standing Crucifixes, Triptics, China Figures, Busts and Plaster Figures.
Use since May 11, 1953.

SN 669,127. Loxit Systems, Inc., Chicago, Ill. Filed June 29, 1954.

Porcelox

For Chalkboards.
Use since Feb. 19, 1954.

SN 669,452. Richard G. Krueger, Inc., New York, N. Y., to Krueger Products Company, Inc., Dover, Del. Filed July 6, 1954.

LITTLE
GOODY

Applicant claims ownership of Reg. No. 546,330.
For High-Chair Tray Cover Having Toys Affixed Thereto.
Use since June 1, 1954.

SN 672,788. Bee Line Co., Mount Angel, Oreg. Filed Sept. 7, 1954.

BEE LINE

For Garden Row Markers Comprising a Pair of Stocks and an Interconnecting Line.
Use since Jan. 29, 1954.

SN 673,288. Mission Industries, National City, Calif. Filed Sept. 16, 1954.

T & Master

For Hangers for Neckwear.
Use since Feb. 23, 1954.
Subj. to intf. with SN 694,835.

SN 676,010. Charles P. Schiller, d. b. a. Citra Products, Winter Haven, Fla. Filed Nov. 3, 1954.



For Device for Sipping Juices From Various Fruits in the Nature of a Straw.
Use since October 1952.

SN 676,011. Charles P. Schiller, d. b. a. Citra Products, Winter Haven, Fla. Filed Nov. 3, 1954.

CitraSipper

For Device for Sipping Juices From Various Fruits in the Nature of a Straw.
Use since March 1949.

SN 681,363. The O-P Craft Co., Inc., Sandusky, Ohio. Filed Feb. 9, 1955.



For Kits Containing a Variety of Undecorated Artistic Household Articles To Be Hand Decorated, Together With Decorative Designs for Application Thereto and Instructions for Their Use; Wooden Plaques and Mats; Wooden Bottle Stoppers; and Gummed Hangers.
Use since June 29, 1939.

SN 681,485. Edward Block, d. b. a. Hallmark House, Springfield, Mass. Filed Feb. 11, 1955.

TRIP AHOY

For Traveling Kits Containing Male or Female Cosmetic Items Including the Articles Toothpaste, Toothbrush, Razor, Razor Blade, Shaving Soap, Face Soap, Face Towel, Face Lotion, Face Powder.
Use since Nov. 1, 1954.

SN 683,664. Chamseal Company, Huntington Beach, Calif. Filed Mar. 17, 1955.

CHAMSEAL

For Stopper for Bottles Containing Pressurized or Unpressurized Beverages, Such as Champagne, Wine, and Whiskies.
Use since Aug. 13, 1954.

SN 684,559. Carmen W. Hamilton, Hopkins, Minn. Filed Mar. 30, 1955.

MELODY
HILL

For Bird Houses and Feeders.
Use since Jan. 1, 1941.

SN 686,325. P. O. Moore, Inc., New York, N. Y. Filed Apr. 26, 1955.



For Permanent and Temporary Key Identification Tags.
Use since Apr. 8, 1955.

SN 688,656. National Screen Service Corporation, New York, N. Y. Filed June 1, 1955.

TRAVEL-AD

For Frames Used for the Display of Advertising Matter.
Use since Mar. 30, 1955.

CLASS 51

SN 659,509. Wickhen Products, Inc., Milwaukee, Wis. Filed Jan. 14, 1954.

VITA-COS

For Vitamin Preparation for Use in Cosmetics.
Use since Nov. 27, 1953.

SN 660,181. Pierre Balmain, Paris, France. Filed Jan. 27, 1954.

ELYSEES 64-83

Applicant claims ownership of French Reg. No. 368,196, Paris Tribunal of Commerce, dated June 20, 1946 (National Institute No. 390,748).
For Perfume, Eau de Cologne, Toilet Water, Beauty Products—Namely, Beauty Cream, Face Rouge, Lip Rouge, Soap, Talcum Powder, Face Powder, Toilet Oil, Bath Oil, Deodorant.

SN 676,245. Suzanne Thierry, Paris, France. Filed Nov. 8, 1954.

ONDINE

For Perfume.
Use since August 1954.

SN 682,778. Paul Baudecroux, Etang-la-Ville, Seine et Oise, France. Filed Mar. 4, 1955.



Priority is claimed under Sec. 44(d). French application filed Sept. 13, 1954, Versailles Tribunal of Commerce Reg. No. 6,128, dated Sept. 13, 1954 (National Institute No. 44,049). The lining is for red.
For Lipstick.
Use since July 1949.

SN 683,056. The George W. Luft Company, Inc., Long Island City, N. Y. Filed Mar. 8, 1955.

Busy Number

For Lipsticks.
Use since Feb. 25, 1955.

SN 683,473. Amole, Incorporated, Dayton, Ohio. Filed Mar. 15, 1955.

Aquafoam

For Bubbling Bath Preparation in Liquid Form.
Use since Feb. 16, 1955.

SN 683,553. The Realistic Company, Cincinnati, Ohio. Filed Mar. 15, 1955.

"Snap-and-Body"

For Hair Curling Lotion or a Hair Waving Lotion.
Use since on or about Jan. 12, 1955.

SN 683,917. Revlon Products Corporation, New York, N. Y. Filed Mar. 21, 1955.

'SEA ISLE COOLER'

For Eau de Cologne.
Use since Feb. 28, 1955.

SN 684,415. E. Frederics, Inc., Brooklyn, N. Y. Filed Mar. 29, 1955.

frederics
WONDER
WAVE

Applicant claims ownership of Reg. No. 581,849.
For Hair Waving Solution.
Use since in the year 1934.

SN 684,627. Bellvera Cosmetic, Inc., Phoenix, Ariz., to Ratner Promotions, Chicago, Ill. Filed Mar. 31, 1955.

Bellvera

For Cosmetic Facial Creams for Removing, Temporarily, Wrinkles.
Use since July 1950.

CLASS 52

SN 685,139. Harry P. Steininger, Detroit, Mich. Filed Apr. 7, 1955.

QIK

For Drain Solvent.
Use since Dec. 20, 1941.

SN 687,261. Helene Curtis Industries, Inc., Chicago, Ill. Filed May 11, 1955.

BEAUTY BREAK

For Shampoo.
Use since Apr. 14, 1955.

SN 687,588. Gulf Oil Corporation, Pittsburgh, Pa. Filed May 16, 1955.

Gas-O-Clenz

Applicant claims ownership of Reg. No. 222,704.
For Solvent for Cleaning Fine Mechanisms, Jewelry, Optical Goods, and for Dry Cleaning.
Use since on or about Oct. 3, 1924.

SERVICE MARKS

CLASS 100

SN 644,430. John R. Marquis, d. b. a. Forty-Eight Staters, Amarillo, Tex. Filed Mar. 30, 1953.



For Promoting Fellowship and Good Will Between Persons in Different States and Sections of the United States Through the Encouragement of Travel by Its Members and Candidates for Membership.
Use since Mar. 18, 1953.

SN 654,990. National Fire Protection Association, Inc., Boston, Mass. Filed Oct. 19, 1953.



For Conducting Public Campaigns on Fire Protection and Fire Prevention in the Home and Assisting Public and Private Agencies Engaged in Similar Campaigns by Distributing and Sponsoring Circulars, Pamphlets, Posters, Newspaper Publicity, and Television Announcements.
Use since Aug. 15, 1953.

SN 670,884. Strauss Decorating and Exposition Company, Inc., New York, N. Y. Filed July 2, 1954.

INTEGRATED

Applicant claims ownership of Reg. No. 593,125.
For Arranging and Planning Commercial Displays, Decorations, and Exhibits.
Use since June 30, 1949.

SN 680,471. The International Association of Lions Clubs, Chicago, Ill. Filed Jan. 25, 1955.



Applicant claims ownership of Reg. Nos. 384,746, 403,918, 419,076, and 559,838.
For Promoting Good Fellowship Among the Peoples of the World Through a Study of the Problems of International Relationships; Promoting the Theory and Principles of Good Government and Good Citizenship; Encouraging Its Members To Take an Active Interest in the Civic, Commercial, Social, and Moral Welfare of the Community, and Encouraging Efficiency and Promoting High Ethical Standards in Business and in the Professions.
Use since during July 1920.

SN 682,181. Peeco Engineering Company Inc., Elizabeth, N. J. Filed Feb. 23, 1955.



For Designing and Developing All Types of Electrical and Mechanical Machines and Processes, and Rendering Consultation Services in That Field.
Use since May 8, 1934.

CLASS 101

SN 656,316. Kenneth Kaplan, d. b. a. Ken Kaplan and Associates and also as Ken-Plans, Buffalo, N. Y. Filed Nov. 13, 1953.



The wording in the mark constitutes the title of a radio and television program.
For Advertising the Goods and Services of Others Through the Medium of a Radio and Television Broadcast Program Consisting of a Shower Party for an Actual Bride- and Groom-To-Be.
Use since Oct. 5, 1953.

SN 657,939. Local Trademarks, Inc., New York, N. Y. Filed Dec. 14, 1953.



For Advertising Services—Namely, the Formulation and Preparation of Advertising Copy and Literature.
Use since Dec. 4, 1953.

SN 664,459. National Credit Rating Bureau, Jackson, Miss. Filed Apr. 13, 1954.



For Furnishing Credit Ratings and Rendering Advisory Services to Business Organizations To Aid Them in the Collection of Debts.
Use since Mar. 1, 1954.

SN 671,978. Belnap & Thompson, Inc., Chicago, Ill. Filed Aug. 20, 1954.

WINerama

For Services Consisting of the Preparation and Furnishing of Visual and Sound Sales Campaign Material to Clients for Presentation to Their Salesmen for Use in Stimulating Sales Campaigns for Providing an Incentive Program for the Salesmen.
Use since May 1954.

SN 676,305. Castle Offset-Printing Corp., d. b. a. The Castle Company, New York, N. Y. Filed Nov. 9, 1954. Sec. 2(f).



THE CASTLE COMPANY

For Lithographing and for Preparing Prints of Advertising Layouts, Designs and Lettering, Conforming to Required Specifications, From Which Reproductions May Be Made by the Offset Processes and Lithography.
Use since Dec. 15, 1929.

CLASS 102

SN 643,639. Charg-All, Inc., New Rochelle, N. Y. Filed Mar. 16, 1953.

Charg-All

For Extension of Credit to Customers Certified by Applicant and Who Purchase at Subscribing Retail Outlets, and for Making of Collections From Such Customers Through a Central Billing System.
Use since on or about Mar. 31, 1950.

SN 643,640. Charg-All, Inc., New Rochelle, N. Y. Filed Mar. 16, 1953.



For Extension of Credit to Customers Certified by Applicant and Who Purchase at Subscribing Retail Outlets, and for Making of Collections From Such Customers Through a Central Billing System.
Use since on or about Mar. 31, 1950.

SN 661,113. West Point Products Co., Fullerton, Calif. Filed Feb. 15, 1954.

CREDIT BUILDER

For Credit Recording Service Whereby Applicant Establishes, in Individual Communities, a Licensee Bank Under Its Credit Preservation System So That an Individual Who Has Established Credit With a Particular Licensee Bank May Transfer His Credit Rating to a Member Licensee Bank in Another Community.
Use since Feb. 5, 1954.

SN 680,127. California-Western States Life Insurance Company, Sacramento, Calif. Filed Jan. 19, 1955.

California Western States Life Insurance Company

For Writing Individual Life, Individual Accident and Health, Group Life, Group Accident and Health, Group Weekly Indemnity, and Wholesale Life Insurance, and Annuities, Both Group and Individual.
Use since at least as early as Jan. 31, 1937.

CLASS 103

SN 675,412. Midland Constructors, Inc., Chicago, Ill. Filed Oct. 25, 1954.



Applicant disclaims any exclusive right to the use of the words "Heavy Construction, Engineers, Transmission Lines, Contractors" apart from the mark as shown.

For General Construction and Engineering Services—Namely, the Design, Construction, and Maintenance of Electrical Transmission Lines, Flood Control Installations, Sewage Disposal Plants, Power Plants and Substations, Pumping Plants, Compressor Stations, Dams, Bridges, Viaducts, Water Supply Systems, Sewer and Gas Systems, Pipe Lines, and Radio, Television and Telephone Transmission Systems.

Use since Oct. 1, 1953.

SN 676,241. St. Louis Tire Dealers' Association, St. Louis, Mo. Filed Nov. 8, 1954. COLLECTIVE MARK.



The drawing is lined for red and yellow. Applicant disclaims exclusive right to the term "Re-Cappers" apart from the mark as shown.

For Retreading Automobile and Truck Tires.

Use since Nov. 2, 1954.

CLASS 105

SN 654,191. Arrow Transfer and Storage Company, Chattanooga, Tenn. Filed Oct. 5, 1953.

ARROW

For In-Transit Furniture and Merchandise Storage, Local and Long Distance Household Goods Moving, Pool Car and Pool Truck Distribution, Heavy Hauling, Refrigerated Delivery, Explosives Delivery, and Dump Truck Service.

Use since 1934.

SN 659,523. The Baltimore & Ohio Railroad Company, Baltimore, Md. Filed Jan. 15, 1954.

T-S

For Railroad Transportation.

Use since on or about May 13, 1950.

SN 659,524. The Baltimore & Ohio Railroad Company, Baltimore, Md. Filed Jan. 15, 1954. Sec. 2(f).

TIME-SAVER

For Transportation of Freight by Railroad and Truck Pickup and Delivery of the Goods To and From the Railway Terminals.

Use since on or about May 13, 1950.

SN 675,951. Allied Van Lines, Inc., Broadview, Ill. Filed Nov. 3, 1954.

SEA VAN

For Storage and Packing of Household Goods and for the Transportation of Household Goods by Motor Vehicle, Ship, and Rail.

Use since Feb. 12, 1954.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

618,396. AMAZON. Herman L. Jesson, d. b. a. H. L. Jesson Co. SN 639,571. Pub. 9–27–55. Filed 12–16–52.

618,397. WARM-CELL. Barclay Home Products, Inc. SN 646,647. Pub. 10–4–55. Filed 5–8–53.

618,398. PARAGON COAL. Jno. McCall Coal Company, Inc. SN 665,772. Pub. 9–27–55. Filed 5–5–54.

618,399. PARAGON COAL AND DESIGN. Jno. McCall Coal Company, Inc. SN 665,773. Pub. 9–27–55. Filed 5–5–54.

618,400. INJECTA STONE. Pre-Vest, Inc. SN 671,858. Pub. 10–4–55. Filed 8–17–54.

618,401. CORK CALF. Hermann Loewenstein, Inc. SN 672,422. Pub. 10–4–55. Filed 8–30–54.

618,402. FOSTALENE. Foster Grant Co., Inc. SN 673,349. Pub. 10–4–55. Filed 9–17–54.

618,403. GALALITH. Internationale Galalithgesellschaft Aktiengesellschaft. SN 676,289. Pub. 10–4–55. Filed 11–5–54.

618,404. ESKIMO BAY BEAVER, BUTTERFLY AND DESIGN. Francesco Rivella, d. b. a. Bartolomeo Rivella. SN 676,336. Pub. 10–4–55. Filed 11–9–54.

618,405. GAZELDA. Gazelda Limited. SN 677,209. Pub. 9–27–55. Filed 11–24–54.

618,406. HICKORY HILL, HA ETC. AND DESIGN. Irving T. Beard, d. b. a. Hickory Hill Hatchery. SN 679,076. Pub. 10–4–55. Filed 12–29–54.

618,407. GRIP-CHIPS. James S. Vandermade, Inc. SN 679,356. Pub. 10–4–55. Filed 1–3–55.

CLASS 2

618,408. GENERAL AND DESIGN. General Hardware Mfg. Co., Inc. SN 655,052. Pub. 10–4–55. Filed 10–20–53.

618,409. GEORG JENSEN INC. AND DESIGN. Georg Jensen Inc. SN 680,610. Pub. 9–27–55. Filed 1–27–55.

618,410. KITCHENRYTE. New York Shipbuilding Corporation, d. b. a. Nesco, division of New York Shipbuilding Corporation. SN 683,221. Pub. 10–4–55. Filed 3–10–55.

CLASS 3

618,411. TOTE-RACK. Atlantic Products Corporation. SN 676,858. Pub. 9–27–55. Filed 11–18–54.

618,412. CUB SKATE CASE AND DESIGN. Balaban Luggage Company. SN 677,543. Pub. 10–4–55. Filed 12–1–54.

618,413. GOLD DOT AND DESIGN. Gold Dot Marketing Corporation. SN 680,881. Pub. 10–4–55. Filed 2–1–55.

618,446. QUICKIT. Mackie Jewel Skaggs Barnes. SN 681,660. Pub. 10–4–55. Filed 2–14–55.

CLASS 4

618,414. FINISHINE. Finishine Laboratories, Inc. SN 667,512. Pub. 9–27–55. Filed 6–2–54.

618,415. LO-THERM. A. P. de Sanno & Son, Inc. SN 668,733. Pub. 10–4–55. Filed 6–23–54.

618,416. RE-LOD-ABLE. Sheldon M. Booth, d. b. a. Diamond Tool Company. SN 673,966. Pub. 9–27–55. Filed 9–29–54.

618,417. SIOUX AND DESIGN. Albertson & Company, Inc. SN 679,704. Pub. 10–4–55. Filed 1–11–55.

618,418. SIOUX AND DESIGN. Albertson & Company, Inc. SN 679,705. Pub. 10–4–55. Filed 1–11–55.

618,419. SUPER 8. John A. Kenderessy. SN 686,457. Pub. 10–4–55. Filed 4–28–55.

CLASS 5

618,420. NICEWARNER N LEATHER CO. AND DESIGN. Nicewarner Leather Company. SN 634,856. Pub. 9–27–55. Filed 9–4–52.

618,421. STIKETTE. Connie L. Schliff, d. b. a. Stikette. SN 665,864. Pub. 10–4–55. Filed 5–6–54.

CLASS 6

618,422. IMPREX. Ideal Industries, Inc. SN 659,148. Pub. 9–27–55. Filed 1–7–54.

618,423. TINCHER IMPREX PROCESS AND DESIGN. Ideal Industries, Inc. SN 660,575. Pub. 9–27–55. Filed 2–3–54.

618,424. BRAZIL KILL. Walter P. Brazil, d. b. a. B & B Exterminating Co. SN 664,396. Pub. 10–4–55. Filed 4–13–54.

618,425. CAB-O-SIL. Godfrey L. Cabot, Inc. SN 667,214. Pub. 10–4–55. Filed 5–27–54.

618,426. CHINCH-CHEK. Re-Mark Chemical Co., Inc. SN 667,901. Pub. 10–4–55. Filed 6–8–54.

618,427. CELA. Cela Landwirtschaftliche Chemikalien G. m. b. H. SN 668,079. Pub. 10–4–55. Filed 6–11–54.

618,428. HYDRALIN. Dehydag Deutsche Hydrierwerke GmbH. SN 668,532. Pub. 9–27–55. Filed 6–21–54.

618,429. EDENOL. Dehydag Deutsche Hydrierwerke GmbH. SN 668,533. Pub. 9–27–55. Filed 6–21–54.

618,430. FOVAN. Foley & Company, d. b. a. Fovan Chemical Div. SN 668,985. Pub. 10–4–55. Filed 6–28–54.

618,431. FERMI-TABS. Omaha Chemical Company. SN 669,207. Pub. 10–4–55. Filed 6–30–54.

618,432. RANGER. Ranger Chemical Company. SN 669,474. Pub. 9–27–55. Filed 7–6–54.

618,433. SAFE T DISC. Oscar Nonnenmann. SN 670,299. Pub. 9–27–55. Filed 7–20–54.

618,434. SAFE T WATER. Oscar Nonnenmann. SN 670,300. Pub. 9–27–55. Filed 7–20–54.

618,435. DAROTIN. Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. SN 671,727. Pub. 10–4–55. Filed 8–16–54.

618,436. CHAPERONE. Herbert J. Atkinson, d. b. a. Sudbury Laboratory. SN 671,926. Pub. 10–4–55. Filed 8–19–54.

618,437. ORAFIX. Ciba Limited. SN 672,799. Pub. 10–4–55. Filed 9–7–54.

618,438. LEVANOL. Farbenfabriken Bayer Aktiengesellschaft. SN 672,939. Pub. 10–4–55. Filed 9–9–54.

618,439. VERV. C. J. Patterson Company. SN 673,122. Pub. 9–27–55. Filed 9–13–54.

618,440. LUSANE. E. I. du Pont de Nemours and Company. SN 673,228. Pub. 10–4–55. Filed 9–15–54.

618,441. EUTANOL. Dehydag Deutsche Hydrierwerke G. m. b. H. SN 673,579. Pub. 10–4–55. Filed 9–22–54.

618,442. MIGASOL AND DESIGN. Ciba Limited. SN 674,223. Pub. 9–27–55. Filed 10–4–54.

618,443. SILCAR. Elektroschmelzwerk Kempten A. G., now by change of name Elektroschmelzwerk Kempten G. m. b. H. SN 674,235. Pub. 9–27–55. Filed 10–4–54.

618,444. CHLORPAX AND DESIGN. Biocerta Corporation. SN 674,870. Pub. 9–27–55. Filed 10–15–54.

618,445. MACDERMID METEX STRIP AID. MacDermid Incorporated. SN 676,123. Pub. 10–4–55. Filed 11–5–54.

618,446. (See Class 3 for this trademark.)

618,447. MONNET'S MOULIN ROUGE BRAND. Produits Chimiques Ch. Monnet (Societe Anonyme). SN 676,226. Pub. 10–4–55. Filed 11–8–54.

618,448. AVON AMULSION. Tide Water Associated Oil Company. SN 676,249. Pub. 9–27–55. Filed 11–8–54.

618,449. AVON ARLAND. Tide Water Associated Oil Company. SN 676,250. Pub. 9–27–55. Filed 11–8–54.

618,450. AVON ALLSPRAY. Tide Water Associated Oil Company. SN 676,251. Pub. 9–27–55. Filed 11–8–54.

618,451. AVON AMULSIFINE. Tide Water Associated Oil Company. SN 676,252. Pub. 9–27–55. Filed 11–8–54.

618,452. REPRESENTATION OF A HUMAN FEMALE. Julius Samann. SN 677,450. Pub. 9–27–55. Filed 11–29–54.

618,453. JAMES "PERMA-KILL" AND DESIGN. Joseph H. James, d. b. a. James Products Company. SN 678,401. Pub. 9–27–55. Filed 12–15–54.

618,454. CAMCO. Cambridge Chemical Products Company. SN 679,080. Pub. 10–4–55. Filed 12–29–54.

618,455. SCRAM. Frank J. Curran Co. SN 679,759. Pub. 10–4–55. Filed 1–12–55.

618,456. TOUCH MAKES WEEDS GO. O. M. Scott and Sons Company. SN 680,100. Pub. 9–27–55. Filed 1–18–55.

618,457. LARVABOR. Borax Consolidated, Limited, d. b. a. Pacific Coast Borax Co., division of Borax Consolidated, Limited. SN 680,355. Pub. 9–27–55. Filed 1–24–55.

618,458. SELECTOX. Veith Chemical Co., Inc. SN 680,437. Pub. 10–4–55. Filed 1–24–55.

618,459. IRGALON. Geigy Chemical Corporation. SN 681,083. Pub. 10–4–55. Filed 2–4–55.

618,460. KODAK TESTED CHEMICALS AND DESIGN. Eastman Kodak Company. SN 681,757. Pub. 9–27–55. Filed 2–16–55.

618,461. DEMA. Midland Chemical Corporation. SN 682,575. Pub. 10–4–55. Filed 3–1–55.

618,462. BUCO. Blackman-Uhler Co., Inc. SN 682,617. Pub. 10–4–55. Filed 3–2–55.

CLASS 7

618,463. WU AND DESIGN. Westfalische Union Aktiengesellschaft fur Eisen- und Drahtindustrie. SN 653,186. Pub. 9–27–55. Filed 9–14–53.

CLASS 8

618,464. GUARDS. Warren W. Gibbons. SN 659,255. Pub. 10–4–55. Filed 1–11–54.

CLASS 9

618,465. HIGHWAY PATROLMAN. Smith and Wesson, Inc. SN 665,314. Pub. 9–27–55. Filed 4–27–54.

CLASS 10

618,466. KEY TO CHELATION AND DESIGN. Versenes Incorporated, to The Dow Chemical Company. SN 670,015. Pub. 10–4–55. Filed 7–14–54.

CLASS 11

618,467. NU-KOTE. Mittag & Volger, Incorporated. SN 666,501. Pub. 9–27–55. Filed 5–17–54.

CLASS 12

618,468. DJ—DENISON JALOUSIES AND DESIGN. Denison Corporation. SN 648,535. Pub. 10–4–55. Filed 6–10–53.

618,469. NARCO. North American Refractories Co. SN 667,822. Pub. 10–4–55. Filed 6–7–54.

618,470. SEAL-COTE Z–22. Fred A. Wilson Company. SN 672,199. Pub. 9–27–55. Filed 8–24–54.

618,471. TYPOLE TRIPLE BRACE. National Farm Buildings and Supply Co. SN 673,538. Pub. 10–4–55. Filed 9–21–54.

618,472. SV SLIDE-VIEW AND DESIGN. Slide-View Steel Door & Window Co. SN 678,558. Pub. 10–4–55. Filed 12–17–54.

618,473. PLYFA AND DESIGN. Kristian Staerk A/S. SN 680,310. Pub. 9–27–55. Filed 1–21–55.

618,474. PERMA-LITE. Perma-Lite Products Corporation. SN 681,290. Pub. 9–27–55. Filed 2–8–55.

618,475. HOLMPRESS. Holmpress Piles Limited. SN 683,117. Pub. 9–27–55. Filed 3–9–55.

618,476. PANADOR. Panaview Door & Window Co. SN 685,513. Pub. 9–27–55. Filed 4–14–55.

618,477. WACO AND DESIGN. Washington Aluminum Company, Inc. SN 685,875. Pub. 9–27–55. Filed 4–19–55.

618,478. FARM-FAB. Beaver Products, Inc. SN 686,022. Pub. 9–27–55. Filed 4–22–55.

618,479. STUD-PAK. United States Mineral Wool Company. SN 686,703. Pub. 9–27–55. Filed 5–2–55.

618,480. EPI-SEAL. Bonded Products, Inc. SN 686,801. Pub. 9–27–55. Filed 5–4–55.

618,481. REDIBRIK. W. E. Dunn Mfg. Co. SN 686,894. Pub. 9–27–55. Filed 5–5–55.

618,482. EV-RI-WAY AND DESIGN. Roach & Musser Co. SN 687,004. Pub. 9–27–55. Filed 5–6–55.

618,483. TREMTOP. The Tremco Manufacturing Company. SN 687,019. Pub. 9–27–55. Filed 5–6–55.

618,484. ATCO AND DESIGN. Anderson-Tully Company. SN 687,024. Pub. 10–4–55. Filed 5–26–55.

618,485. EVERLITE. Robert H. Anderson, d. b. a. Northwest Plastic Industry. SN 687,039. Pub. 9–27–55. Filed 5–9–55.

618,486. LUXOR. Luxor Mfg. Company. SN 687,079. Pub. 9–27–55. Filed 5–9–55.

618,487. KALWOOD. Keller Products Inc. SN 687,293. Pub. 9–27–55. Filed 5–11–55.

618,488. KALWALL. Keller Products Inc. SN 687,294. Pub. 9–27–55. Filed 5–11–55.

618,489. PYROFORM. United States Gypsum Company. SN 687,330. Pub. 9–27–55. Filed 5–11–55.

618,490. ARMACLAD AND DESIGN. Hess Manufacturing Company. SN 687,470. Pub. 9–27–55. Filed 5–13–55.

618,491. UNI-CORP. The Union Sand and Supply Corporation. SN 687,510. Pub. 9–27–55. Filed 5–13–55.

618,492. PARFEN. Parfen Company. SN 688,959. Pub. 9–27–55. Filed 6–6–55.

618,493. FIRE CHIEF. Sears, Roebuck and Co. SN 689,521. Pub. 10–4–55. Filed 6–14–55.

CLASS 13

618,494. EZ PAINTR. E Z Paintr Corporation. SN 643,666. Pub. 9–27–55. Filed 3–16–53.

618,495. LOKFIL. Scully Signal Company. SN 657,301. Pub. 10–4–55. Filed 12–2–53.

618,496. CATCHAL-ATOR AND DESIGN. The Sunray Stove Company. SN 662,685. Pub. 10–4–55. Filed 3–15–54.

618,497. LIFETIME. Hanover Wire Cloth Division, Continental Copper & Steel Industries, Inc. SN 671,431. Pub. 10–4–55. Filed 8–10–54.

618,498. STACKMASTER. William Hodges & Co., Inc. SN 680,194. Pub. 9–27–55. Filed 1–20–55.

618,499. SAMS AND DESIGN. Howard W. Sams & Co., Inc. SN 680,418. Pub. 10–4–55. Filed 1–24–55.

618,500. JAMESTOWN AND DESIGN. Jamestown Metal Products, Inc. SN 681,693. Pub. 9–27–55. Filed 2–15–55.

618,501. MID-STATES. Mid-States Steel & Wire Co. SN 682,035. Pub. 9–27–55. Filed 2–21–55.

618,502. TELESEAT. Sperzel Company. SN 682,681. Pub. 9–27–55. Filed 3–2–55.

618,503. SELF EASE. Self Ease Units Inc. SN 682,758. Pub. 9–27–55. Filed 3–3–55.

618,504. NATIONAL. United States Steel Corporation. SN 683,637. Pub. 9–27–55. Filed 3–16–55.

618,505. BALL-LOK. D. W. Price Corporation. SN 683,810. Pub. 10–4–55. Filed 3–18–55.

618,506. ACF. ACF Industries, Incorporated. SN 683,832. Pub. 9–27–55. Filed 3–21–55.

618,507. BOWKEEP. Joslas Manufacturing Company. SN 683,889. Pub. 10–4–55. Filed 3–21–55.

618,508. KURLICUE. The Independent Nail and Packing Company, Inc. SN 684,132. Pub. 10–4–55. Filed 3–24–55.

618,509. EZE-MOUNT. Scovill Manufacturing Company. SN 684,159. Pub. 10–4–55. Filed 3–24–55.

618,510. FULL CIRCLE. Smith-Blair, Inc. SN 684,249. Pub. 9–27–55. Filed 3–25–55.

618,511. SLIM JIM. The Independent Nail and Packing Company, Inc. SN 684,310. Pub. 10–4–55. Filed 3–28–55.

618,512. SUMMERSET. Morgan Brothers Co. SN 684,860. Pub. 9–27–55. Filed 4–4–55.

618,513. WATERMELON. Byron F. Lohmar. SN 684,951. Pub. 9–27–55. Filed 4–5–55.

618,514. AIR-LOC. A. M. S. Corporation. SN 685,078. Pub. 10–4–55. Filed 4–7–55.

618,515. NYLSLIDES. Hardware Designers Inc. SN 685,274. Pub. 9–27–55. Filed 4–11–55.

618,516. AUTO-THER-MATIC. Watts Regulator Company. SN 685,792. Pub. 9–27–55. Filed 4–18–55.

618,517. SCOTTIE AND DESIGN. William H. Walker, d. b. a. Walker Manufacturing Company. SN 686,408. Pub. 9–27–55. Filed 4–27–55.

618,518. CRYSTAL-FLO. Sears, Roebuck and Co. SN 686,484. Pub. 9–27–55. Filed 4–28–55.

618,519. DURATONE. Talon, Inc. SN 686,497. Pub. 9–27–55. Filed 4–28–55.

618,520. NY. The New York Air Brake Company. SN 686,080. Pub. 9–27–55. Filed 5–2–55.

618,521. KEYSTONE K AND DESIGN. Keystone Tool Corp. SN 686,982. Pub. 9–27–55. Filed 5–6–55.

618,522. WATERITE. Scovill Manufacturing Company. SN 687,131. Pub. 9–27–55. Filed 5–9–55.

CLASS 14

618,523. COLORKOTE. Enamel Products and Plating Company. SN 685,178. Pub. 9–27–55. Filed 4–8–55.

CLASS 15

618,524. NARESCOIL. National Research Corporation. SN 655,144. Pub. 9–27–55. Filed 10–21–53.

618,525. OILIDYN. United States Movidyn Corporation. SN 665,971. Pub. 9–27–55. Filed 5–7–54.

618,526. INDESTRUCTIBLE PH-ILM. The Brooks Oil Company. SN 666,258. Pub. 9–27–55. Filed 5–13–54.

CLASS 16

618,527. AQUAKOTE. The Modene Paint Company, Inc. SN 682,579. Pub. 9–27–55. Filed 3–1–55.

618,528. EM-COTE. Edward J. Mock, d. b. a. Em-Cote, Resinous Products Division, Southern Distributing & Manufacturing Company. SN 682,718. Pub. 9–27–55. Filed 3–3–55.

618,529. FINISH MASTER. Tung Oil Products, Inc. SN 685,536. Pub. 9–27–55. Filed 4–14–55.

618,530. STAN-LUX. Standard-Toch Chemicals, Inc. SN 685,863. Pub. 9–27–55. Filed 4–19–55.

618,531. BROLITE. Andrew Brown Company. SN 686,882. Pub. 9–27–55. Filed 5–5–55.

618,532. EDIXO. Phelan-Faust Paint Mfg. Co. SN 686,999. Pub. 9–27–55. Filed 5–6–55.

618,533. F & H AND DESIGN. Finnaren & Haley, Inc. SN 687,366. Pub. 9–27–55. Filed 5–12–55.

618,534. COLORAGE. Sun Chemical Corporation. SN 688,475. Pub. 9–27–55. Filed 5–27–55.

CLASS 18

618,535. BETA FOPLEX-MRT. Marvin R. Thompson, Inc. SN 626,917. Pub. 9–27–55. Filed 3–22–52.

618,536. PREGESTAL-MRT. Marvin R. Thompson, Inc. SN 626,918. Pub. 9–27–55. Filed 3–22–52.

618,537. VERANOVINE-MRT. Marvin R. Thompson, Inc., to Marvin R. Thompson. SN 626,919. Pub. 9–27–55. Filed 3–22–52.

618,538. ZY-WOKOSTO-WA. Miroslaw Szczepkowski, d. b. a. Mirros Medicine Company. SN 661,846. Pub. 9–27–55. Filed 3–1–54.

618,539. 2–8–9 OINTMENT. Robert Hawthorne Seaborn. SN 664,476. Pub. 9–27–55. Filed 4–13–54.

618,540. PHARMAMEDIA. Traders Oil Mill Company, to The Buckeye Cotton Oil Company, now by merger to The Buckeye Cellulose Corporation. SN 668,705. Pub. 9–27–55. Filed 6–22–54.

618,541. NUTRIFERM. Schenley Distillers, Inc. SN 670,510. Pub. 9–27–55. Filed 7–23–54.

618,542. BIVAL AND DESIGN. Kenneth L. Lee, d. b. a. Bival Laboratory. SN 673,599. Pub. 9–27–55. Filed 9–22–54.

618,543. FOLIDOL AND DESIGN. Noramex Company, Inc. SN 674,416. Pub. 9–27–55. Filed 10–6–54.

618,544. JUBILEE. Burton-Edward Co., Inc. SN 676,097. Pub. 9–27–55. Filed 11–5–54.

618,545. RUMARUB. S. Pfeiffer Manufacturing Company, now by change of name The Pfeiffer Co. SN 676,997. Pub. 9–27–55. Filed 11–19–54.

618,546. PODENE AND DESIGN (REPRESENTATION OF A GROTESQUE FACE ON A FOOT PRINT). Corbate Co., Incorporated. SN 677,037. Pub. 9–27–55. Filed 11–22–54.

618,547. 3 DIAMONDS DESIGN. Nysco Laboratories, Inc. SN 680,014. Pub. 9–27–55. Filed 1–17–55.

618,548. WALLOP. Schenley Distillers, Inc. SN 680,039. Pub. 9–27–55. Filed 1–17–55.

618,549. POLLEN PAK. Barry Laboratories, Inc. SN 682,862. Pub. 9–27–55. Filed 3–7–55.

618,550. P 400. Milex Products. SN 682,959. Pub. 9–27–55. Filed 3–7–55.

618,551. ZIPCOL. K & W Promotion Company. SN 683,051. Pub. 9–27–55. Filed 3–8–55.

618,552. ACTALOY. Abbott Laboratories. SN 683,162. Pub. 9–27–55. Filed 3–10–55.

618,553. CHEROSAN. Chase Chemical Company. SN 683,175. Pub. 9–27–55. Filed 3–10–55.

618,554. KLOROCOL. Chase Chemical Company. SN 683,176. Pub. 9–27–55. Filed 3–10–55.

618,555. CHANUL. Chase Chemical Company. SN 683,178. Pub. 9–27–55. Filed 3–10–55.

618,556. PERICLOR. American Home Products Corporation, d. b. a. Ives-Cameron Company Division of American Home Products Corporation. SN 683,333. Pub. 9–27–55. Filed 3–14–55.

618,557. POLYCITRA. Harry Eisenberg, d. b. a. Willen Drug Company. SN 683,765. Pub. 9–27–55. Filed 3–18–55.

CLASS 19

618,558. ECA AND DESIGN. Societe Civile Eca. SN 623,016. Pub. 9–27–55. Filed 12–29–51.

618,559. TOIDEYCO. The Toidey Company, Gertrude A. Muller, Inc. SN 623,933. Pub. 9–27–55. Filed 1–16–52.

618,560. SPHERILASTIK. Metalastik Limited. SN 669,787. Pub. 9–27–55. Filed 7–12–54.

618,561. GILPATRICK CROSSDUMP TRAILER. Gilpatrick Construction Company. SN 670,280. Pub. 9–27–55. Filed 7–20–54.

618,562. FIBER CRAFT AND DESIGN. Fibercraft, Inc. SN 682,549. Pub. 9–27–55. Filed 3–1–55.

CLASS 21

618,563. ROLL-A-GRILL. J. J. Connolly, Inc. SN 655,112. Pub. 9–27–55. Filed 10–21–53.

618,564. AIRSTREAM AND DESIGN. Jersey State Equipment Co. CONSOLIDATED CERTIFICATE. SN 665,418, pub. 6–14–55, filed 4–29–54, Cl. 21; SN 681,694, pub. 9–27–55, filed 2–15–55, Cl. 23.

618,565. CSF. Compagnie Generale de Telegraphie Sans Fil. SN 666,827. Pub. 9–6–55. Filed 5–21–54.

618,566. STABILIDYNE. Compagnie Generale de Telegraphie Sans Fil. SN 666,828. Pub. 7–19–55. Filed 5–21–54.

618,567. TEN-TENNA. Waldom Electronics, Inc. SN 671,225. Pub. 9–27–55. Filed 8–5–54.

618,568. XY AND DESIGN. Stromberg-Carlson Company, to General Dynamics Corporation. SN 673,878. Pub. 9–27–55. Filed 9–27–54.

618,569. CDF. Continental-Diamond Fibre Company, now by change of name to Haveg Industries, Inc., to Continental-Diamond Fibre Division of The Budd Company, Inc. SN 673,901. Pub. 9–27–55. Filed 9–28–54.

618,570. CDF AND DESIGN. Continental-Diamond Fibre Company, now by change of name to Haveg Industries, Inc., to Continental-Diamond Fibre Division of the Budd Company, Inc. SN 673,903. Pub. 9–27–55. Filed 9–28–54.

618,571. WALK TIME. Walk Time Inc. SN 675,184. Pub. 9–27–55. Filed 10–20–54.

618,572. RED THROAT. Briegel Method Tool Co. SN 683,272. Pub. 9–27–55. Filed 3–11–55.

618,573. BAGPIPER. The Hamilton Metal Products Company. SN 684,731. Pub. 9–27–55. Filed 4–1–55.

618,574. GOLIATH. The Peerless Corporation. SN 684,751. Pub. 9–27–55. Filed 4–1–55.

618,575. MAMMOTH. The Peerless Corporation. SN 684,752. Pub. 9–27–55. Filed 4–1–55.

618,576. MOGUL. The Peerless Corporation. SN 684,753. Pub. 9–27–55. Filed 4–1–55.

618,577. EIMAC. Eitel-McCullough, Inc. SN 684,821. Pub. 9–27–55. Filed 4–4–55.

618,578. SOUTHLAND. Vitalic Battery Company, Inc. SN 684,899. Pub. 9–27–55. Filed 4–4–55.

618,579. CAPTIVATED. The Staver Company Incorporated. SN 684,982. Pub. 9–27–55. Filed 4–5–55.

618,580. ROTO-GLO. Pass & Seymour, Inc. SN 685,119. Pub. 9–27–55. Filed 4–7–55.

618,581. COSMOS AND DESIGN. Cosmos Electronic Machine Corp. SN 685,355. Pub. 9–27–55. Filed 4–12–55.

618,582. MUSICLOCK. Stromberg-Carlson Company, to General Dynamics Corporation. SN 685,413. Pub. 9–27–55. Filed 4–12–55.

618,583. MAGIC-FRY. Empire Products. SN 685,439. Pub. 9–27–55. Filed 4–13–55.

618,584. BARNACLE MAGNET. Erlez Manufacturing Co. SN 685,681. Pub. 9–27–55. Filed 4–18–55.

618,585. VOLSEAL. Johns-Manville Corporation. SN 685,835. Pub. 9–27–55. Filed 4–19–55.

618,586. CO-THERM. Midwest Electronics Manufacturing Corporation. SN 685,917. Pub. 9–27–55. Filed 4–20–55.

618,587. SOLARMATIC. Electriglas Corporation. SN 686,036. Pub. 9–27–55. Filed 4–22–55.

618,588. MULTI DUTI. The Emerson Electric Mfg. Co. SN 686,172. Pub. 9–27–55. Filed 4–25–55.

618,589. ANGEL DESIGN. The Gramophone Company Limited. SN 686,300. Pub. 9–27–55. Filed 4–26–55.

618,590. BITE-LITE. Jim Bishop, Inc. SN 686,418. Pub. 9–27–55. Filed 4–28–55.

618,591. ALCUNECTOR. Kaiser Aluminum & Chemical Corporation. SN 686,456. Pub. 9–27–55. Filed 4–28–55.

618,592. BECKMAN. Beckman Instruments, Inc. SN 686,602. Pub. 9–27–55. Filed 5–2–55.

618,593. PRESIDENT. Jefferson Electric Company. SN 686,830. Pub. 9–27–55. Filed 5–4–55.

618,594. REDCO AND DESIGN. Republic Electric & Development Co. SN 687,110. Pub. 9–27–55. Filed 5–9–55.

CLASS 22

618,595. RHYTHMBAR. Ena Marjorie Bartley. SN 659,976. Pub. 9–27–55. Filed 1–25–54.

CLASS 23

618,564. CONSOLIDATED CERTIFICATE. See Class 21.

618,596. POWERFLO. Gray Company, Inc. SN 634,687. Pub. 9–27–55. Filed 8–30–52.

618,597. REFINITE AND DESIGN. The Refinite Corporation. SN 639,392. Pub. 9–27–55. Filed 12–12–52.

618,598. ROL-A-DAM. Gunning Manufacturing Company. SN 652,720. Pub. 9–27–55. Filed 9–3–53.

618,599. EBERLE. J. N. Eberle & Cie. A. G. SN 653,750. Pub. 9–27–55. Filed 9–25–53.

618,600. COSMA AND DESIGN. Pan American Trade Development Corp., of which Cosma Shoe Machinery is a division. SN 654,203. Pub. 9–27–55. Filed 10–5–53.

618,601. SPREADMASTER. Schultz Farm Machinery Manufacturing Company. SN 669,363. Pub. 9–27–55. Filed 7–2–54.

618,602. CLARK ROSS AND DESIGN. Clark Equipment Company. SN 669,401. Pub. 9–27–55. Filed 7–6–54.

618,603. M-E. Food Machinery and Chemical Corporation. SN 669,610. Pub. 9–27–55. Filed 7–8–54.

618,604. HENSLEY AND DESIGN. Clyde C. Hensley, d. b. a. Hensley Equipment Company. SN 669,765. Pub. 9–27–55. Filed 7–12–54.

618,605. KITCHENAID. The Hobart Manufacturing Company. SN 674,593. Pub. 9–27–55. Filed 10–11–54.

618,606. "ROYAL." The Wire and Steel Products Co., Inc. SN 676,432. Pub. 9–27–55. Filed 11–10–54.

618,607. BIPEL. B. I. P. Engineering Limited. SN 677,381. Pub. 9–27–55. Filed 11–29–54.

618,608. REPRESENTATION OF A SHIELD. Astor Equipment Corporation. SN 678,180. Pub. 9–27–55. Filed 12–13–54.

618,609. CHEC-EZE. Almor Company. SN 679,965. Pub. 9–27–55. Filed 1–17–55.

618,610. ROLLWAY. Rollway Bearing Company, Inc. SN 680,904. Pub. 9–27–55. Filed 2–1–55.

618,611. SPICA AND DESIGN. Spica S. P. A. SN 681,045. Pub. 9–27–55. Filed 2–3–55.

618,612. SUPERBORE. Twentieth Century Mfg. Co. SN 681,112. Pub. 9–27–55. Filed 2–4–55.

618,613. SKANDA. R. Wallace & Sons Manufacturing Company. SN 681,316. Pub. 9–27–55. Filed 2–8–55.

618,614. WONDER BENDER AND DESIGN. Elgen Manufacturing Corporation. SN 681,346. Pub. 10–4–55. Filed 2–9–55.

618,615. SANTA-FE. Imperial Knife Company, Inc. SN 681,358. Pub. 10–4–55. Filed 2–9–55.

618,616. CLUSTER-PAK. Atlanta Paper Company. SN 681,481. Pub. 10–4–55. Filed 2–11–55.

618,617. KENTACH. Kennametal Inc. SN 681,520. Pub. 10–4–55. Filed 2–11–55.

618,618. R. C. ALLEN. R. C. Allen Business Machines, Inc. CONSOLIDATED CERTIFICATE. SN 681,733, pub. 9–13–55, filed 2–16–55, Cl. 23; SN 682,611, pub. 9–20–55, filed 3–2–55, Cl. 26.

618,619. PORTER-CABLE. Porter-Cable Machine Company. SN 681,795. Pub. 9–27–55. Filed 2–16–55.

618,620. SPEEDSTAND. Speedway Manufacturing Company. SN 682,076. Pub. 10–4–55. Filed 2–21–55.

618,621. VELLUBOLT AND DESIGN. The Vellumoid Company. SN 682,089. Pub. 10–4–55. Filed 2–21–55.

618,622. ALLITE. Allied Products Corp. SN 682,103. Pub. 10–4–55. Filed 2–23–55.

618,623. NATIONAL ACME AND DESIGN. The National Acme Company. SN 682,168. Pub. 9–27–55. Filed 2–23–55.

618,624. "HI-POP" AND DESIGN. Surplus Automotive Co. SN 682,304. Pub. 10–4–55. Filed 2–24–55.

618,625. SKID-LOADER. Drott Manufacturing Corporation. SN 682,334. Pub. 10–4–55. Filed 2–25–55.

618,626. JETCOOL. Paasche Airbrush Company. SN 682,463. Pub. 10–4–55. Filed 2–28–55.

618,627. ACME. The National Acme Company. SN 682,658. Pub. 10–4–55. Filed 3–2–55.

618,628. RED HEAD. Case-Maul Manufacturing Company. SN 682,704. Pub. 10–4–55. Filed 3–3–55.

618,629. MAGNAPUL. Klekhaefer Corporation. SN 682,935. Pub. 10–4–55. Filed 3–7–55.

CLASS 24

618,630. PHILCO. Philco Corporation. SN 678,665. Pub. 10–4–55. Filed 12–20–54.

618,631. WORLDSBEST. Worldsbest Industries, Inc. SN 685,328. Pub. 10–4–55. Filed 4–11–55.

618,632. LUSTERPLATE. Davis Specialties, Inc., to Bishop David Freeman Co. SN 685,965. Pub. 9–27–55. Filed 4–21–55.

618,633. BROTHER. Nihon Mishin Seizo Kabushiki Kaisha. SN 686,073. Pub. 9–27–55. Filed 4–22–55.

CLASS 25

618,634. RIVAL AND DESIGN. The New England Lock and Hardware Company. SN 685,385. Pub. 9–27–55. Filed 4–12–55.

618,635. ACE. Chicago Lock Company. SN 686,807. Pub. 9–27–55. Filed 5–4–55.

618,636. THE GUARDIAN. The American Hardware Corporation. SN 688,790. Pub. 9–27–55. Filed 6–3–55.

CLASS 26

618,618. CONSOLIDATED CERTIFICATE. See Class 23.

618,637. RADIANT AND DESIGN. Radiant Manufacturing Corporation. SN 656,590. Pub. 9–27–55. Filed 11–18–53.

618,638. ANKER AND DESIGN. Anker-Werke A. G. SN 656,998. Pub. 9–27–55. Filed 11–27–53.

618,639. UNITEST. Diesel Control Corporation. SN 665,689. Pub. 10–4–55. Filed 5–4–54.

618,640. MULTIPLE-INPUT. The Denominator Company, Inc. SN 670,036. Pub. 10–4–55. Filed 7–15–54.

618,641. AEROSERVER. John J. Kropp, d. b. a. Allied Oil Equipment Co. SN 670,201. Pub. 10–4–55. Filed 7–19–54.

618,642. TAYTAL. Taylor, Taylor & Hobson Limited. SN 671,688. Pub. 10–4–55. Filed 8–13–54.

618,643. KWIK √ CHEK. New Standard Corporation. SN 672,908. Pub. 10–4–55. Filed 9–8–54.

618,644. CLACK. Agfa Camera-Werk Aktiengesellschaft. SN 677,125. Pub. 8–23–55. Filed 11–23–54.

618,645. VARIOMAT. Agfa Camera-Werk Aktiengesellschaft. SN 677,126. Pub. 8–9–55. Filed 11–23–54.

618,646. FLEXTAR. Peerless Camera Stores, Inc. SN 680,406. Pub. 10–4–55. Filed 1–24–55.

618,647. LOUVRE. Societe Industrielle de Lunetterie. SN 681,948. Pub. 8–30–55. Filed 2–18–55.

618,648. OPTA-COR AND DESIGN. Optics Manufacturing Corporation. SN 682,461. Pub. 10–4–55. Filed 2–28–55.

618,649. CORNING. Corning Glass Works. CONSOLIDATED CERTIFICATE. SN 683,489, pub. 9–20–55, filed 3–15–55, Cl. 26; SN 683,488, pub. 9–6–55, filed 3–15–55, Cl. 33.

618,650. RANGELITE. Graflex, Inc. SN 684,656. Pub. 10–4–55. Filed 3–31–55.

618,651. CHEMOMETER. Arnold O. Beckman, Inc. SN 685,470. Pub. 10–4–55. Filed 4–14–55.

618,652. CAST-T. Minneapolis-Honeywell Regulator Company. SN 685,509. Pub. 10–4–55. Filed 4–14–55.

618,653. NATIONAL. The National Cash Register Company. SN 686,472. Pub. 10–4–55. Filed 4–28–55.

618,654. CROWN. Propper Manufacturing Company, Inc. SN 686,567. Pub. 10–4–55. Filed 4–29–55.

618,655. SYNCHRO-SCAN. B-I-F Industries, Inc., from Builders-Providence, Incorporated. SN 686,883. Pub. 10–4–55. Filed 5–5–55.

618,656. SECOR. Sierra Electronic Corporation. SN 687,132. Pub. 10–4–55. Filed 5–9–55.

618,657. CROWN. Keuffel & Esser Company. SN 687,948. Pub. 10–4–55. Filed 5–20–55.

618,658. GOLFGUIDE. Taylor Instrument Companies. SN 688,095. Pub. 10–4–55. Filed 5–23–55.

618,659. TELEV-EYES. Mark Tenser, d. b. a. Marimark Co. SN 688,096. Pub. 10–4–55. Filed 5–23–55.

CLASS 27

618,660. BAG-BELL. Baumgartner Frères S. A. SN 681,982. Pub. 10–4–55. Filed 2–21–55.

618,661. WOODSMAN. Wyler Watch Agency, Inc. SN 683,950. Pub. 10–4–55. Filed 3–21–55.

618,662. CARTIER LAFONTE. Benjamin Cohen, d. b. a. Cohen Bros. Jewelers. SN 684,195. Pub. 10–4–55. Filed 3–25–55.

CLASS 29

618,663. WHIRL A WAY. Osrow Products Co., Inc. SN 657,552. Pub. 10–4–55. Filed 12–7–53.

618,664. WAXEEZ. The New York Association for the Blind, Inc. SN 671,193. Pub. 10–4–55. Filed 8–5–54.

CLASS 31

618,665. GRAVEX AND DESIGN. Graver Tank & Mfg. Co., Inc. SN 657,617. Pub. 9–13–55. Filed 12–8–53.

618,666. STERASYL. The Paterson Engineering Company Limited. SN 662,560. Pub. 10–4–55. Filed 3–12–54.

618,667. MILLSHAKE. Mills Industries, Incorporated. SN 671,357. Pub. 10–4–55. Filed 8–9–54.

CLASS 32

618,668. MAGIC MIST SUNTANNER. Richard H. Whiteside, d. b. a. The Aqua-Sun Mfg. Co. SN 671,399. Pub. 10–4–55. Filed 8–9–54.

618,669. RE-LAX. Maurice J. Reed, d. b. a. Claremont Products. SN 675,231. Pub. 10–4–55. Filed 10–21–54.

618,670. RIDE-EZE. Industrial Specialties Co. SN 678,539. Pub. 10–4–55. Filed 12–17–54.

CLASS 33

618,649. CONSOLIDATED CERTIFICATE. See Class 26.

CLASS 34

618,671. AEROIL AUTO-STEAM AND DESIGN. Aeroil Products Company, Inc. SN 644,371. Pub. 10–4–55. Filed 3–30–53.

618,672. LEITNER. Leitner Equipment Company. SN 664,333. Pub. 10–4–55. Filed 4–12–54.

618,673. IPSEN. Ipsen Industries, Inc. SN 670,358. Pub. 10–4–55. Filed 7–21–54.

618,674. EMPIRE. Empire Stove Company. SN 674,380. Pub. 10–4–55. Filed 10–6–54.

618,675. UNI-BILT. San-Equip, Inc., now by change of name Vega Industries, Inc. SN 676,081. Pub. 10–4–55. Filed 11–4–54.

618,676. DUAL-VECTOR. Union Asbestos & Rubber Company. SN 676,280. Pub. 10–4–55. Filed 11–8–54.

CLASS 35

618,677. VY/FLEX. The Anchor Packing Company. SN 670,323. Pub. 10–4–55. Filed 7–21–54.

618,678. TRACTION KING. Vanderbilt Tire & Rubber Corp. SN 690,417. Pub. 10–4–55. Filed 6–28–55.

CLASS 36

618,679. D THOMASTIK. Dr. Thomastik und Mitarbeiter Offene Handelsgesellschaft. SN 671,919. Pub. 10–4–55. Filed 8–18–54.

618,680. WILMAC. Wilmac Recorders. SN 677,191. Pub. 10–4–55. Filed 11–23–54.

CLASS 37

618,681. CHARMIN AND DESIGN. Charmin Paper Mills, Inc. SN 673,506. Pub. 10–4–55. Filed 9–21–54.

618,682. COVER-ALL. United Paper Company. SN 675,673. Pub. 10–4–55. Filed 10–28–54.

618,683. MAIL-VERTISER. Direct Mail Envelope Co., Inc. SN 676,184. Pub. 10–4–55. Filed 11–8–54.

CLASS 38

618,684. JUNIORAMA AND DESIGN. Hearst Publishing Company, Inc. SN 681,269. Pub. 10–4–55. Filed 2–8–55.

CLASS 39

618,685. END 'O' RUN. Leo Teplitz. SN 631,696. Pub. 10–4–55. Filed 6–24–52.

618,686. BERNARDO JR. Bernardo Sandals, Inc. SN 643,458. Pub. 10–4–55. Filed 3–11–53.

618,687. "BACK MAGIC" BY LADY LYNNE. Lady Lynne Lingerie Inc. SN 646,778. Pub. 10–4–55. Filed 5–11–53.

618,688. ENTWINE. Wispese Co. SN 653,092. Pub. 10–4–55. Filed 9–11–53.

618,689. COOL PUFF. Max Gussow, Inc. SN 657,212. Pub. 10–4–55. Filed 12–1–53.

618,690. BANTAM-BEN SPORTSWEAR AND DESIGN. Marcus Breier Sons, Inc. SN 660,468. Pub. 10–4–55. Filed 2–2–54.

618,691. WONDER WELTS. Five Star Footwear Co. SN 661,183. Pub. 10–4–55. Filed 2–17–54.

618,692. WESTEX. Westex Boot & Shoe Company, to Westex Boot Company. SN 661,856. Pub. 10–4–55. Filed 3–1–54.

618,693. JUNIOR ARCH PRESERVER AND DESIGN. The Selby Shoe Company. SN 663,150. Pub. 10–4–55. Filed 3–23–54.

618,694. DITTO. Textile Distributors, Inc., now by change of name Textile Industries, Incorporated. SN 664,055. Pub. 10–4–55. Filed 4–5–54.

618,695. AIR-RATED. Melville Shoe Corporation. SN 670,748. Pub. 10–4–55. Filed 7–28–54.

618,696. ARNÉ. Lew L. Gluck Co. SN 672,227. Pub. 10–4–55. Filed 8–25–54.

618,697. CONFORM-O. Triangle Hosiery Company. SN 672,258. Pub. 10–4–55. Filed 8–25–54.

618,698. ELWOOD. Elwood Hosiery Mills, Inc. SN 672,333. Pub. 10–4–55. Filed 8–27–54.

618,699. DEBRA DEAN SHORT-ESE. Halms & Ettinger, Inc. SN 672,418. Pub. 10–4–55. Filed 8–30–54.

618,700. NITEREST. Reliance Manufacturing Company. SN 673,198. Pub. 10–4–55. Filed 9–14–54.

618,701. W. Blue Bell, Inc. SN 673,564. Pub. 10–4–55. Filed 9–22–54.

618,702. FINGER FREE. The Daniel Hays Company, Inc. SN 674,673. Pub. 10–4–55. Filed 10–12–54.

618,703. RAINBOW. Hat Corporation of America. SN 674,815. Pub. 10–4–55. Filed 10–14–54.

618,704. SAINT & SINNER. U. B. Buchanan. SN 675,128. Pub. 10–4–55. Filed 10–20–54.

618,705. THE COMBO. Auerbach & Co. SN 675,463. Pub. 10–4–55. Filed 10–26–54.

618,706. SUMMER HOUSE AND DESIGN (REPRESENTATION OF A HOUSE). Top-O-Mart Clothes, Inc. SN 676,560. Pub. 10–4–55. Filed 11–12–54.

618,707. SOUND ASORB AND DESIGN. Bill Jack Scientific Instrument Co. SN 676,977. Pub. 10–4–55. Filed 11–19–54.

618,708. WALKAWAYS. R. H. Macy & Co., Inc. SN 676,985. Pub. 10–4–55. Filed 11–19–54.

618,709. CAPTAIN JET. Gallenkamp Stores Co. SN 677,054. Pub. 10–4–55. Filed 11–22–54.

618,710. JACK O' TERRY. H & K Garment Co. SN 677,508. Pub. 10–4–55. Filed 11–30–54.

618,711. GUNSTON. Gunston, Inc. SN 677,563. Pub. 10–4–55. Filed 12–1–54.

618,712. QUALITY MANCHESTER AND DESIGN. Adolph Arons & Sons, Inc. SN 678,302. Pub. 10–4–55. Filed 12–14–54.

618,713. A GAINSBOROUGH FUR. Ginsberg & Feldsott. SN 678,391. Pub. 10–4–55. Filed 12–15–54.

618,714. PUPETTAS. Malfi Originals, Inc. SN 679,131. Pub. 10–4–55. Filed 12–30–54.

618,715. KAJHMAHAL. A. Sagner's Son. SN 681,210. Pub. 10–4–55. Filed 2–7–55.

618,716. WHITE BEAR. Biltmore Sportswear, Inc. SN 681,407. Pub. 10–4–55. Filed 2–10–55.

CLASS 42

618,717. CLOSURE CLOTH. Marcus Breier Sons, Inc. SN 648,706. Pub. 10–4–55. Filed 2–4–53.

618,718. D AND DESIGN. Dorset Woolen Company. SN 648,743. Pub. 10–4–55. Filed 6–15–53.

618,719. FLAGSTONE TWEED. Patricia Scott Inc., d. b. a. Scott Enterprises. SN 659,319. Pub. 10–4–55. Filed 1–11–54.

618,720. HEIRLOOM. Bates Manufacturing Company. SN 669,234. Pub. 9–20–55. Filed 7–1–54.

618,721. 2ND TO NONE. Woodward, Baldwin & Co. Inc. SN 675,192. Pub. 10–4–55. Filed 10–20–54.

618,722. RAVENTONES. American Woolen Company, now by merger and change of name Textron American, Inc. SN 677,920. Pub. 10–4–55. Filed 12–8–54.

CLASS 43

618,723. ACETA AND DESIGN (REPRESENTATION OF A TRIANGLE). Farbenfabriken Bayer Aktiengesellschaft. SN 672,574. Pub. 8–9–55. Filed 9–1–54.

CLASS 44

618,724. REPAIR-A-DENT AND DESIGN. William C. Thompson, d. b. a. Repair-A-Dent Co. SN 662,828. Pub. 10–4–55. Filed 3–17–54.

618,725. REVIV-A-LIFE. Evelyn A. Baer, d. b. a. The E. A. Baer Industries. SN 668,623. Pub. 10–4–55. Filed 6–22–54.

618,726. CYCLOTHERAPY. Cyclotherapy, Inc. SN 672,643. Pub. 10–4–55. Filed 9–2–54.

618,727. ELASTIC FOAM. Connecticut Bandage Mills, Inc. SN 675,262. Pub. 10–4–55. Filed 10–22–54.

618,728. "WASH-AWAY" AND DESIGN (REPRESENTATION OF A HUMAN EYE). Industrial Products Company. SN 676,630. Pub. 10–4–55. Filed 11–15–54.

618,729. ELAST AIDS. United States Plastic Bandage Company. SN 676,772. Pub. 10–4–55. Filed 11–16–54.

618,730. HAGGARD'S SAVE-A-LIFE. The Mt. Pitt Company, d. b. a. Medford Manufacturing Company. SN 679,228. Pub. 10–4–55. Filed 12–31–54.

618,731. LIFE. Phillips Associates, Inc. SN 679,324. Pub. 10–4–55. Filed 1–3–55.

618,732. MULTI-PLANE. Continental X-Ray Corporation. SN 681,749. Pub. 10–4–55. Filed 2–16–55.

CLASS 45

618,733. OLD INDIA QUININE WATER AND DESIGN. Cantrell & Cochrane Corporation. SN 669,738. Pub. 10–4–55. Filed 7–12–54.

CLASS 46

618,734. PECORA'S BABY TOP. Pecora Baby Top Products Company. SN 635,611. Pub. 10–4–55. Filed 9–22–52.

618,735. BAC-T AND DESIGN. Brook Hill Farms, Inc., to Medical Dairy Specialties, Inc. SN 654,097. Pub. 10–4–55. Filed 10–2–53.

618,736. HEATH ENGLISH TOFFEE. L. S. Heath & Sons, Inc. SN 659,350. Pub. 10–4–55. Filed 1–12–54.

618,737. R. B. RICE'S AND DESIGN. R. B. Rice Sausage Co., Inc. SN 660,507. Pub. 10–4–55. Filed 2–2–54.

618,738. JUSPOR AND DESIGN. Juspor Foods. SN 661,021. Pub. 10–4–55. Filed 2–12–54.

618,739. CORONET. Lauhoff Grain Company. SN 664,013. Pub. 9–20–55. Filed 4–6–54.

618,740. WALDORF. The William Focke's Sons Company. SN 665,411. Pub. 10–4–55. Filed 4–29–54.

618,741. HOT RIZE. Martha White Mills, Inc. SN 674,357. Pub. 10–4–55. Filed 10–5–54.

618,742. GOLD LABEL FEEDS AND DESIGN (REPRESENTATION OF A RIBBON SEAL). Jacob H. Goldberg, d. b. a. Goldberg Feed and Grain Company. SN 676,801. Pub. 10–4–55. Filed 11–17–54.

618,743. KINGNUT AND DESIGN. The Capital City Products Company. SN 677,200. Pub. 10–4–55. Filed 11–24–54.

618,744. RED CHAIN DIXIE WHITE AND DESIGN (REPRESENTATION OF A WOMAN AND CHAIN). Universal Mills. SN 677,369. Pub. 10–4–55. Filed 11–26–54.

618,745. JAN-U-WINE AND SEAL DESIGN. Oriental Foods, Incorporated. SN 677,439. Pub. 10–4–55. Filed 11–29–54.

618,746. SUNDAE SNACK. Sea Snack Company. SN 679,799. Pub. 10–4–55. Filed 1–12–55.

618,747. HEIDI. Overseas Barters, Inc. SN 679,927. Pub. 10–4–55. Filed 1–14–55.

618,748. FLAVOR PICT. Rauth Farms. SN 680,694. Pub. 10–4–55. Filed 1–28–55.

618,749. KODAK. Eastman Kodak Company. SN 681,076. Pub. 10–4–55. Filed 2–4–55.

CLASS 47

618,750. SULFOVIN. Farbenfabriken Bayer Aktiengesellschaft. SN 668,885. Pub. 8–16–55. Filed 5–27–54.

618,751. OPTIMUS. Cella Brothers, Inc. SN 680,066. Pub. 10–4–55. Filed 1–18–55.

CLASS 48

618,752. CHAMPAGNE VELVET GOLD LABEL BEER, ETC. AND DESIGN (REPRESENTATION OF THE LABEL). Terre Haute Brewing Company, Inc. SN 670,862. Pub. 10–4–55. Filed 7–30–54.

618,753. OB ORANJEBOOM SINCE 1671 AND DESIGN. N. V. Brouwerij d'Oranjeboom. SN 673,427. Pub. 10–4–55. Filed 9–20–54.

CLASS 50

618,754. NYGEN TOLEX. The General Tire & Rubber Company. SN 675,076. Pub. 10–4–55. Filed 10–19–54.

618,755. REX AND DESIGN (REPRESENTATION OF A CROWN). Trans-Sphere Trading Corporation. SN 675,850. Pub. 10–4–55. Filed 11–1–54.

618,756. NAUGALITE. United States Rubber Company. SN 676,773. Pub. 10–4–55. Filed 11–16–54.

618,757. J C HIGGINS. Sears, Roebuck and Co. SN 678,155. Pub. 10–4–55. Filed 12–10–54.

CLASS 51

618,758. SOLANGE. Valoré Inc., from Irving A. Grannick. SN 655,312. Pub. 10–4–55. Filed 10–26–53.

618,759. BLUE VISION. Valoré Inc., from Irving A. Grannick. SN 657,428. Pub. 10–4–55. Filed 12–4–53.

618,760. SAYONARA. Valoré Inc., from Irving A. Grannick. SN 657,430. Pub. 10–4–55. Filed 12–4–53.

618,761. Desert Tan. Desert Tan Co., to Desert Tan, Inc. SN 662,295. Pub. 10–4–55. Filed 3–9–54.

618,762. FONTAINEBLEAU. Rodina Inc., d. b. a. Maison Mendessolle. SN 669,803. Pub. 10–4–55. Filed 7–12–54.

618,763. SOFT TOUCH. The Gillette Company, d. b. a. The Toni Company. SN 677,781. Pub. 10–4–55. Filed 12–6–54.

618,764. I'M LOVED. H. B. Shapiro. SN 677,996. Pub. 10–4–55. Filed 12–8–54.

618,765. COPURE. Porfirio P. Sorse, d. b. a. Copure Company. SN 680,309. Pub. 10–4–55. Filed 1–21–55.

CLASS 52

618,766. SOFT. Glissen Chemical Co., Inc. SN 678,526. Pub. 10–4–55. Filed 12–17–54.

618,767. PURPLE X. E. R. Goodrich, d. b. a. Goodrich Maintenance Supply Company. SN 680,168. Pub. 10–4–55. Filed 1–25–55.

618,768. CORLEX. Armstrong Cork Company. SN 680,577. Pub. 10–4–55. Filed 1–27–55.

Service Marks

CLASS 100

618,769. UNION CIRCULATION COMPANY, INC. AND DESIGN. Union Circulation Co., Inc., to Union Circulation Company. SN 670,261. Pub. 10–4–55. Filed 7–19–54.

CLASS 101

618,770. TAXIPOSTER ADVERTISING. William E. Whaley, d. b. a. William E. Whaley Company. SN 670,767. Pub. 10–4–55. Filed 7–28–54.

618,771. WHALEY TAXIPOSTER ADVERTISING. William E. Whaley, d. b. a. William E. Whaley Company. SN 670,768. Pub. 10–4–55. Filed 7–28–54.

618,772. CERTIFIED AND DESIGN (REPRESENTATION OF A GROCER). Certified Grocers of Illinois, Inc. SN 672,565. Pub. 10–4–55. Filed 9–1–54.

618,773. REPRESENTATION OF CHICKEN AND MAP OF TEXAS. Kuno, Inc. SN 676,979. Pub. 10–4–55. Filed 11–19–54.

618,774. RADIODIZING. Robert A. Borles, d. b. a. Robert A. Borles Company. SN 684,188. Pub. 10–4–55. Filed 3–25–55.

CLASS 102

618,775. CARICATURE OF MAN. The Indiana National Bank. SN 666,956. Pub. 10–4–55. Filed 5–24–54.

618,776. PICTURAMA OF HOME BUYS AND DESIGN. Thomas J. Massey & Company, Inc. SN 680,088. Pub. 10–4–55. Filed 1–18–55.

CLASS 103

618,777. CKC PROCESS. Car Kleen Company. SN 677,550. Pub. 10–4–55. Filed 12–1–54.

CLASS 105

618,778. THE WHITE GLOVE MOVERS AND GLOVE DESIGN. O K Van and Storage. SN 674,344. Pub. 10–4–55. Filed 10–5–54.

CLASS 107

618,779. SKI ANTICS. Ski Antics, Inc. SN 665,448. Pub. 10–4–55. Filed 4–29–54.

Certification Mark

CLASS A

618,780. MARVIBOND. United States Rubber Company. SN 680,314. Pub. 9–27–55. Filed 1–21–55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 1

618,781. George O. Jenkins Company, Bridgewater, Mass. SN 672,896. Filed P. R. 9–8–54. Am. S. R. 9–30–55.

OAK-TAN

For Leather Fibre Sheets.
Use since 1931.

CLASS 6

618,782. Pittsburgh Coke & Chemical Company, Pittsburgh, Pa. SN 668,693. Filed P. R. 6–22–54. Am. S. R. 8–16–55.

PITTSBURGH-DIRECT

For Dyestuffs.
Use since Mar. 28, 1954.

CLASS 12

618,783. J. G. Enterprises, Inc., Rochester, N. Y. SN 676,056. Filed P. R. 11–4–54. Am. S. R. 10–20–55.

NO-KORD SASH RUNNER

For Window Sash Runners.
Use since Sept. 8, 1953.

618,784. Aetna Steel Products Corporation, d. b. a. Arnot-Jamestown Division, New York, N. Y. SN 679,263. Filed P. R. 1–3–55. Am. S. R. 6–2–55.

PARTITION-ettes

For Portable Partition Structures and Component Parts Thereof.
Use since Aug. 1, 1952.

618,785. James Seeman Designs, Inc., Richmond Hills, Queens, N. Y. SN 680,552. Filed P. R. 1–26–55. Am. S. R. 10–20–55.

ceramica Venezia

For Ceramic Tiles, To Be Used on Floors and Table Tops, and Wall Coverings.
Use since August 1954.

CLASS 13

618,786. Albert T. Scheiwer, Erie, Pa. SN 643,726. Filed P. R. 3–16–53. Am. S. R. 7–14–55.

*Snap-Faucet

For Faucets for Liquid Lines, Coffee Urns, and Tanks.
Use since Nov. 1, 1952.

618,787. J. A. Zurn Mfg. Co., Erie, Pa. SN 648,070. Filed P. R. 6–1–53. Am. S. R. 8–3–55.

LOW PRESSURE DROP

For Strainers for Use in Liquid Lines.
Use since Nov. 1, 1952.

CLASS 21

618,788. Paul Kobler, Lynbrook, N. Y. SN 658,291. Filed P. R. 12–21–53. Am. S. R. 11–4–54.

Kobler

For Electric Shavers.
Use since April 1950.

618,789. Standard Novelty and Lamp Company, Chicago, Ill. SN 672,916. Filed P. R. 9–8–54. Am. S. R. 10–3–55.

For Portable Lamps and Shades as Floor Lamps, Table Lamps, Television Lamps, Torchieres and Similar Lighting Devices Used for Home Furnishings and Outdoor Garden Illumination.
Use since June 16, 1924.

618,790. C. Conradty, Nurnberg, Germany. SN 679,212. Filed 12–31–54.

CONRADTY

For Carbon Rods for Arc Lamps and Batteries; Artificial Graphite; Plates, Electrodes, Rods, and Other Molded Articles Made of Artificial Graphite; Molded Silicon Carbide Rods; Carbon and Graphite Sealing Gaskets; Carbon Plates; Carbon Rods; Carbon Electrodes for Primary Cells, for Storage Batteries, for Liquid and Solid Electrolysis; Carbon, Graphite and Metal Brushes for Electric Generators and Motors, Automobile Starters and Ignition Apparatus; Sliding and Pressure Contacts; Heating Rods for Thermal Apparatus; Carbon and Graphite Welding Rods for Electric Arc Welding; Telephone Carbons; Carbon Resistances for Lightning Rods and High Tension Safety Devices; and Film Resistances for Radio Apparatus and Measuring Instruments; Graphite Anodes for Electronic Tubes.

CLASS 23

618,791. National Ring Traveler Company, Pawtucket, R. I. SN 634,700. Filed P. R. 8–30–52. Am. S. R. 2–21–55.

BAL-ELLIPSOID

For Ring Travelers.
Use since May 13, 1952.

618,792. Diamond Saw Works, Inc., Buffalo, N. Y. SN 646,116. Filed P. R. 4–29–53. Am. S. R. 10–5–55.

They don't scratch - they cut!

For Metal Cutting Saw Blades.
Use since 1939.

618,793. The Craftint Mfg. Company, Cleveland, Ohio, from Bates & Edgerton. SN 669,075. Filed P. R. 6–29–54. Am. S. R. 6–16–55.

Bates

For Adjustable Enameling Stands for Holding Work Pieces While Firing in a Kiln.
Use since Feb. 11, 1953.

618,794. Max E. Wetzler, Long Island City, N. Y. SN 674,308. Filed P. R. 10–4–54. Am. S. R. 10–4–55.

CLAMPETTE

For Clamping Devices for Wood, Metal, and Other Materials.
Use since Sept. 7, 1954.

618,795. Babson Bros. Co., Chicago, Ill. SN 679,708. Filed P. R. 1–11–55. Am. S. R. 9–19–55.

High Velocity

For Automatic Washing Solution Circulating Systems for Carry-Away Milk Pipe Lines.
Use since May 10, 1954.

618,796. W. Schlafhorst & Co., Munchen Gladbach, North Rhine-Westphalia, Germany. SN 685,131. Filed 4–7–55.

Schlafhorst

For Textile Machines—Namely, Machines for Winding, for Doubling, and for Twisting Thread and Yarn, Machines for Winding Warp Beams, Machines for Unwinding Thread or Yarn (i. e., Creels), Hopper Feed Equipment, Equipment for Collecting and Stacking Pirns, Bobbin Conveyors, Yarn Tension Devices, Yarn Clearer, Yarn Waxing Devices, Warper Beams, Dust Cleaning Devices, Warping Creels, Electric Yarn Break Detectors for Warping Creels, Sectional Warpers, Leasing Reeds, Solid Cop Winders, and Parts Thereof.

CLASS 26

618,797. Meredith Publishing Company, Des Moines, Iowa. SN 662,659. Filed P. R. 3–15–54. Am. S. R. 10–10–55.

Handy plan

For Pattern Plans.
Use since during January 1954.

618,798. Electro-Tester Company, Malden, Mass. SN 680,667. Filed P. R. 1–28–55. Am. S. R. 9–12–55.

Electro-Tester

For Electrical Continuity Testers.
Use since Dec. 27, 1952.

618,799. Sartorius-Werke Aktiengesellschaft, Gottingen, Germany. SN 685,759. Filed P. R. 4–18–55. Am. S. R. 10–6–55.

SARTORIUS-WERKE GOTTINGEN

For Micrometric Scales, Square Meter Scales, Beam Balances, Filament Sorting Scales, Yarn Number Rulers, Microtomes, and Microscopes.

CLASS 27

618,800. Berman Watch Company, Inc., New York, N. Y. SN 685,341. Filed P. R. 4–12–55. Am. S. R. 9–28–55.

LORD WINDSOR

For Watches.
Use since Mar. 1, 1953.

CLASS 30

618,801. New York Merchandise Co., Inc., New York, N. Y. SN 655,687. Filed P. R. 11–2–53. Am. S. R. 7–23–54.

Wales

For Wall Plates, Tea Pots, Kitchen Ware, Vases, Centerpieces, and Planters All Made of Earthenware and Porcelain.
Use since Aug. 24, 1950.

CLASS 32

618,802. Bebry Bedding Corporation, Bayonne, N. J. SN 676,459. Filed P. R. 11–12–54. Am. S. R. 10–19–55.

OFF-THE-FLOOR CONVERTIBLE

For Sofa Beds.
Use since Oct. 4, 1954.

CLASS 39

618,803. Colin Hall Clothes, Ltd., New York, N. Y. SN 645,802. Filed P. R. 4–23–53. Am. S. R. 11–7–55.

Petrocelli

For Men's Suits.
Use since August 1950.

CLASS 44

618,804. The Scholl Mfg. Co., Inc., Chicago, Ill. SN 659,432. Filed P. R. 1–13–54. Am. S. R. 9–20–55.

BALL-O-FOOT

For Metatarsal Cushions.
Use since Sept. 11, 1953.

618,805. Samuel Bonat & Bro., Inc., Paterson, N. J. SN 676,172. Filed P. R. 11–8–54. Am. S. R. 10–11–55.

ULTRA THIN

For End Wraps Used for Permanent Waving.
Use since Sept. 23, 1954.

CLASS 45

618,806. Dell Products Corp., East Orange, N. J. SN 684,404. Filed P. R. 3–29–55. Am. S. R. 9–14–55.

CRANE'S

For Non-Alcoholic Flavored Syrups Used in Mixing Alcoholic and Non-Alcoholic Drinks.
Use since May 10, 1954.

CLASS 46

618,807. Clemente Jacques y Cia, S. A., Mexico City, Mexico. SN 638,191. Filed P. R. 11–17–52. Am. S. R. 10–24–55.



The rings and square in the drawing represent medals awarded to applicant at the following fairs—Rio de Janeiro 1923, Paris 1900, Chicago 1893, and St. Louis, Missouri 1900.

For Canned Serranos Chiles in Chapingo Sauce, in Tomato Sauce and in Pickled Sauce.

Use since Sept. 20, 1913.

618,808. Arthur R. Vinton, Rock Tavern, N. Y. SN 648,974. Filed P. R. 6–17–53. Am. S. R. 9–28–55.



For Food Sauces Containing Principally Tamarinds, Spices, Etc.

Use since Sept. 15, 1941.

618,809. Jacob B. Oumedian, d. b. a. Nu-Maid Confections, Grand Rapids, Mich. SN 655,692. Filed P. R. 11–2–53. Am. S. R. 3–7–55.



For Candied Popcorn.

Use since Apr. 20, 1953.

618,810. Macon Grocery Company, Macon, Ga. SN 659,633. Filed P. R. 1–18–54. Am. S. R. 9–22–55.

BEST LINE

For Canned Fruits and Canned Vegetables.

Use since Dec. 1, 1953, on canned fruits.

618,811. A. Hempel Trading, Inc., New York, N. Y. SN 661,163. Filed 1–25–54.



For Canned Ham.

Use since Nov. 9, 1951.

618,812. Arthur Gerber & Company, Chicago, Ill. SN 662,534. Filed P. R. 3–12–54. Am. S. R. 8–29–55.



The drawing is lined for the color green.

For Fresh Lettuce.

Use since Jan. 8, 1954.

618,813. American Bakers' Service Co., Kansas City, Mo. SN 664,386. Filed P. R. 4–13–54. Am. S. R. 10–5–55.



For Bread.

Use since Apr. 2, 1954.

618,814. The Colorado Milling & Elevator Company, Denver, Colo. SN 671,723. Filed P. R. 8–16–54. Am. S. R. 6–30–55.

SUPER SPRING

For Wheat Flour.

Use since June 11, 1954.

618,815. R & R Farms, Carthage, Mo. SN 676,333. Filed P. R. 11–9–54. Am. S. R. 9–14–55.

HAM 'N YAM

For Frozen Dinner, Consisting of Barbecued Hickory-Smoked Ham, Candied Yams, Baby Lima Beans, Roll and Sauce.

Use since June 2, 1954.

618,816. Aktiengesellschaft Chocolat Tobler, d. b. a. Chocolat Tobler, Limited and Societe Anonyme Chocolat Tobler, Berne, Switzerland. SN 677,474. Filed P. R. 11–30–54. Am. S. R. 10–11–55.



For Chocolate Bars.

Use since June 24, 1954, and since Feb. 11, 1909, on "Toblerone."

CLASS 51

618,817. Elizabeth Arden Sales Corporation, New York, N. Y. SN 672,040. Filed 8–23–54.

ARDENA

PURE RED

For Rouge, Lipstick, and Nail Lacquer.

Use since June 1, 1953.

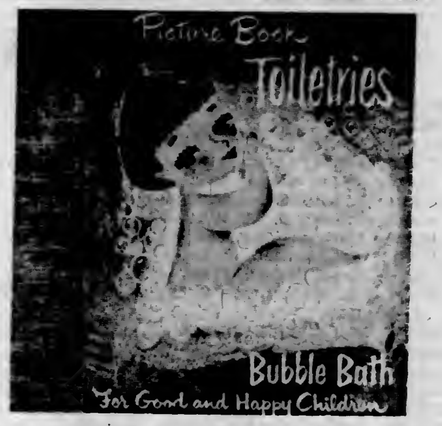
618,818. Fay Wood Corporation, New Rochelle, N. Y. SN 683,073. Filed P. R. 3–8–55. Am. S. R. 10–7–55.



For Bubbling Bath Preparation in Liquid Form and Toilet Water.

Use since May 5, 1954, on bubbling bath preparation in liquid form.

618,819. Fay Wood Corporation, New Rochelle, N. Y. SN 683,074. Filed P. R. 3–8–55. Am. S. R. 10–7–55.



For Bubbling Bath Preparation in Powder Form.

Use since May 5, 1954.

Service Marks

CLASS 100

618,820. National Automobile Safety Service Association, Inc., Thomson, Ga. SN 629,035. Filed P. R. 5–1–52. Am. S. R. 3–9–54.



For Fostering and Promoting Safety on the Streets and on the Highways Through the Encouragement of Certain Periodic Maintenance and Safety Services to Automobiles and Other Motor Vehicles; Providing Safety Service Information to Motor Vehicle Dealers, Owners and Drivers; and Testing and Reporting Upon Vehicular Safety Equipment, Materials, Programs and Plans.

Use since Sept. 7, 1951.

CLASS 106

618,821. Joseph B. Cox, d. b. a. Precision Castparts Co., Portland, Oreg., from Precision Castparts Corp. SN 654,586. Filed P. R. 10–12–53. Am. S. R. 2–28–55.

PRECISION CASTPARTS CO.

For Investment and Shell Mold Casting of Metals for Others on a Custom Basis.

Use since April 1953.

CLASS 107

618,822. Mennonite Crusaders, Inc., Harrisonburg, Va. SN 656,814. Filed P. R. 11–23–53. Am. S. R. 10–12–55.

the mennonite hour

For Promoting Interest in Religion and the Bible, Through the Medium of Radio Broadcast Programs.

Use since Jan. 1, 1952.

TRADEMARK REGISTRATIONS RENEWED

106,549. GIRALDA. Cl. 42. 10–26–15.
106,748. GENERAL. Cl. 16. 10–26–15.
107,140. AMCO. Cl. 12. 11–16–15.
107,141. AMCO. Cl. 32. 11–16–15.
107,702. AMCO. Cl. 25. 12–21–15.
107,900. NEDICK'S. Cl. 46. 1–4–16.
108,387. NEDICK'S. Cl. 46. 2–8–16.
108,438. YORKSHIRE FARM. Cl. 46. 2–8–16.
109,301. ORGANIDIN. Cl. 18. 3–28–16.
327,674. CANNON DURALITE. Cl. 42. 9–3–35.
328,088. MACHARNUDO CASTLE FINO LA INA ETC. Cl. 47. 9–17–35.
328,551. YELVI AND DESIGN. Cl. 18. 10–1–35.
328,573. MAYWOODE. Cl. 49. 10–1–35.
328,807. VALWAY. Cl. 42. 10–8–35.
329,187. SCIENCE CRAFT. Cl. 26. 10–22–35.
329,188. SCIENCE CRAFT. Cl. 26. 10–22–35.
329,536. MARCO COVER. Cl. 37. 11–5–35.
329,753. WM. ROGERS MFG. CO. Cl. 28. 11–12–35.
329,754. WM. ROGERS & SON. Cl. 28. 11–12–35.
329,758. 1847 ROGERS BROS. Cl. 28. 11–12–35.
329,835. BAKON YEAST. Cl. 46. 11–12–35.
330,120. OPPORTUNITY. Cl. 38. 11–19–35.
330,447. RESISTOL AND DESIGN. Cl. 39. 12–3–35.
330,689. KENTUCKY DERBY ETC. AND DESIGN. Cl. 49. 12–10–35.
330,880. PHE-MER-NITE. Cl. 51. 12–17–35.
332,031. TABLE GARDEN. Cl. 46. 1–28–36.
332,602. SNOOZERS. Cl. 39. 2–18–36.
332,739. G & W THREE STAR AND DESIGN. Cl. 49. 2–25–36.
332,783. PAR-TOX. Cl. 6. 2–25–36.
332,927. VAL-U. Cl. 39. 3–3–36.
333,117. WOODEN SHOE. Cl. 46. 3–10–36.
333,155. CASCOTIN. Cl. 5. 3–10–36.
333,244. ANGEL FOOD. Cl. 46. 3–10–36.
333,526. TREE SWEET AND DESIGN. Cl. 46. 3–24–36.
333,576. MARQUISE ETC. AND DESIGN. Cl. 39. 3–24–36.

TRADEMARK REGISTRATIONS CANCELED

Section 7

62,458. SILVER MEDAL LEAF LARD AND DESIGN. Cl. 46. 5–7–07.
245,826. HONEY BRAND AND REPRESENTATION OF A BEE HIVE. Cl. 46. 8–21–28.
386,955. HONEY BRAND PARTY LOAF. Cl. 46. 4–29–41.
520,105. THREE GOOD TIMES TO ENJOY LIFE MORE AND DESIGN. Cl. 45. 1–17–50.
528,037. HONEY BRAND. Cl. 46. 7–25–50.
536,395. HONEY BRAND PARTY LOAF. Cl. 46. 1–16–51.
557,359. OLD FASHIONED. Cl. 46. 4–8–52.
586,753. HAPPY TIME. Cl. 46. 3–9–54.
593,431. AUTOMATIC HOOK N EYE. Cl. 39. 8–3–54.

Section 8

55,065. STANDARD. Cl. 38. 8–7–06.
68,404. GOLDEN CROWN AND REPRESENTATION OF CROWN. Cl. 46. 4–7–08.
72,490. BLUEBELL. Cl. 42. 1–26–09.
72,781. THE AMERICAN ANNUAL OF PHOTOGRAPHY. Cl. 38. 2–23–09.
84,553. MONITOR. Cl. 46. 12–19–11.
115,486. HOLD-TITE. Cl. 2. 2–20–17.
142,578. SMILAX. Cl. 46. 5–17–21.
166,631. SPARTAN AND REPRESENTATION OF SPARTAN. Cl. 39. 4–10–23.
169,488. CONQUEROR. Cl. 46. 6–19–23.
186,270. E WITHIN CIRCLE DESIGN. Cl. 4. 7–8–24.
180,440. SEALSKIN AND REPRESENTATION OF SEAL. Cl. 37. 9–16–24.
204,803. ATHENA. Cl. 46. 10–27–25.
213,922. FAHRALLOY. Cl. 14. 6–8–26.
217,782. CLOVER DALE. Cl. 39. 9–7–26.
234,869. HALF DOME. Cl. 46. 11–8–27.
243,898. PI-NELLA. Cl. 45. 7–3–28.
245,295. CRAFTONE. Cl. 42. 8–7–28.
246,639. PICA-HEEL. Cl. 39. 9–11–28.
253,196. GLYCOPHANE. Cl. 37. 2–19–29.
255,716. AMENTA'S AND DESIGN. Cl. 6. 4–30–29.
256,572. BAUGHGRO. Cl. 10. 5–21–29.
258,491. GYMKAMP TOGS. Cl. 39. 7–9–29.
258,911. "ESCORT" Cl. 39. 7–16–29.
259,124. CRÊME LAVANT DJER KISS WITHIN CIRCLE DESIGN. Cl. 6. 7–23–29.
266,542. THE BOOK DIAL. Cl. 38. 1–28–30.
341,963. FRIENDLY SEAL OF QUALITY SERVICE AND SEAL DESIGN. Cl. 37. 12–29–36.
347,525. "BORSARI EBON-TANK". Cl. 2. 6–29–37.
356,144. MOTHER'S MANUAL. Cl. 38. 4–12–38.
360,791. JUMBO AND REPRESENTATION OF ELEPHANT. Cl. 2. 9–27–38.
378,115. SEAL OF QUALITY AND SEAL DESIGN. Cl. 50. 5–28–40.
378,337. GEOMETRIC DESIGN. Cl. 46. 6–4–40.
390,708. CALLING ALL GIRLS. Cl. 38. 9–30–41.
399,259. D-A. Cl. 46. 12–22–42.
406,527. BARE FOOT. Cl. 42. 4–11–44.
407,253. PRO CAN AND REPRESENTATION OF STARS. Cl. 46. 5–23–44.
410,132. CALLING ALL KIDS. Cl. 38. 11–7–44.
413,146. A SLICK CHICK AND GROTESQUE REPRESENTATION OF CHICK. Cl. 39. 4–10–45.
427,158. AINSBROOKE. Cl. 39. 1–28–47.
427,570. TELEFUNNIES. Cl. 26. 2–11–47.
429,851. MALLET AND REPRESENTATION OF MALLET. Cl. 39. 5–20–47.
440,496. PTR AND REPRESENTATION OF GLOBE. Cl. 38. 9–7–48.
440,948. LITTLE FRIEND. Cl. 39. 10–12–48.
441,787. THERMODRAFT. Cl. 34. 1–4–49.
512,666. MOLLYE. Cl. 22. 7–26–49.
512,668. CINDERELLA. Cl. 22. 7–26–49.
512,673. R. MERAT. Cl. 49. 7–26–49.
512,674. R. MERAT. Cl. 47. 7–26–49.
512,678. MASTERBILT. Cl. 22. 7–26–49.
512,682. ALL YEAR. Cl. 21. 7–26–49.
512,684. AIR FRANCE GABARDINE. Cl. 42. 7–26–49.
512,686. MOZART AND REPRESENTATION OF MOZART. Cl. 17. 7–26–49.
512,687. REINHARD. Cl. 34. 7–26–49.
512,690. PERKINOD. Cl. 47. 7–26–49.
512,691. OPEX SYN-SPOT. Cl. 16. 7–26–49.
512,695. YUMA STAR. Cl. 46. 7–26–49.
512,696. THE MAGNETIC VILLAGE. Cl. 22. 7–26–49.
512,697. EVCO AND REPRESENTATION OF LATHE CENTER. Cl. 23. 7–26–49.
512,701. AKKA. Cl. 24. 7–26–49.
512,702. JOE GLOW AND REPRESENTATION OF CHILD. Cl. 21. 7–26–49.
512,703. ROBERTS' "RITE-PITCH". Cl. 22. 7–26–49.
512,704. "RITE-PITCH". Cl. 22. 7–26–49.
512,705. REDIPALS. Cl. 37. 7–26–49.
512,711. JOHN CHATILLON & SONS. C ETC. Cl. 26. 7–26–49.
512,714. EXCEL. Cl. 26. 7–26–49.
512,718. B & G WITHIN OVAL DESIGN. Cl. 26. 7–26–49.
512,719. AMERIGOMA BUBBLERO. Cl. 46. 7–26–49.
512,725. REPRESENTATION OF BOW AND SHUTTLE. Cl. 42. 7–26–49.
512,728. IDEAL. Cl. 22. 7–26–49.
512,730. PICKWICK. Cl. 23. 7–26–49.
512,736. BRUNO AND REPRESENTATION OF HEAD OF DOG. Cl. 23. 7–26–49.

512,746. ZAMBOOLA. Cl. 22. 7–26–49.
512,749. "GRASS-BLITZER". Cl. 23. 7–26–49.
512,752. GLADDING. Cl. 6. 7–26–49.
512,762. THEPTINE. Cl. 6. 7–26–49.
512,766. CCC D. B. CROCKETT ETC. WITHIN DIAMOND DESIGN. Cl. 16. 7–26–49.
512,773. GLEN EDEN. Cl. 46. 7–26–49.
512,778. SHELBY. Cl. 23. 7–26–49.
512,786. SUNSEAL. Cl. 16. 7–26–49.
512,787. PERSONAL WEIGHT. Cl. 26. 7–26–49.
512,788. VOLLRATH. Cl. 23. 7–26–49.
512,789. SCHOOL GIRL. Cl. 46. 7–26–49.
512,790. TOWN AND COUNTRY. Cl. 45. 7–26–49.
512,791. AMAESSA AND REPRESENTATION OF ANGEL. Cl. 46. 7–26–49.
512,792. 2-WAY. Cl. 26. 7–26–49.
512,793. 3-WAY. Cl. 26. 7–26–49.
512,795. ALMAR. Cl. 39. 7–26–49.
512,798. CG AND REPRESENTATION OF MICROSCOPE. Cl. 42. 7–26–49.
512,799. HOUSE BEAUTIFUL. Cl. 42. 7–26–49.
512,812. EDINBORO. Cl. 46. 7–26–49.
512,816. INSTANT. Cl. 23. 7–26–49.
512,823. RUB-TONE. Cl. 16. 7–26–49.
512,824. PARADYNE. Cl. 6. 7–26–49.
512,825. GEMCO. Cl. 34. 7–26–49.
512,826. WALL-TITE. Cl. 16. 7–26–49.
512,827. FEATHERIZED. Cl. 42. 7–26–49.
512,829. YEN-SENG. Cl. 45. 7–26–49.
512,830. PRINCE. Cl. 23. 7–26–49.
512,832. RENWAL. Cl. 23. 7–26–49.
512,834. DYNALITE. Cl. 23. 7–26–49.
512,835. EM BEE. Cl. 16. 7–26–49.
512,838. TAKITOF. Cl. 16. 7–26–49.
512,843. STYLON. Cl. 23. 7–26–49.
512,846. DDZ. Cl. 24. 7–26–49.
512,852. IOVAN. Cl. 6. 7–26–49.
512,855. CORROSITE. Cl. 16. 7–26–49.
512,856. JUICY SNOW. Cl. 45. 7–26–49.
512,859. LIP LINE. Cl. 29. 7–26–49.
512,860. CONTOUR WHIRL. Cl. 39. 7–26–49.
512,864. ETCO. Cl. 42. 7–26–49.
512,865. COVERTOGS. Cl. 39. 7–26–49.
512,869. SUNGREEN. Cl. 6. 7–26–49.
512,875. CENTRAFIRE. Cl. 34. 7–26–49.
512,882. SHOVELAIRE. Cl. 34. 7–26–49.
512,889. AGELESS. Cl. 12. 7–26–49.
512,891. KBS. Cl. 12. 7–26–49.
512,894. PLASTIGLOS. Cl. 16. 7–26–49.
512,895. CAV-BRO AND PORTRAIT OF MAN. Cl. 6. 7–26–49.
512,896. DELRICH. Cl. 46. 7–26–49.
512,899. GROTESQUE DESIGN OF BILLIARD PLAYER. Cl. 42. 7–26–49.
512,900. GLENRIDGE. Cl. 42. 7–26–49.
512,905. LADCO. Cl. 42. 7–26–49.
512,908. VIGLAS. Cl. 42. 7–26–49.
512,912. PYRAMID. Cl. 23. 7–26–49.
512,913. FEATHERTRED. Cl. 42. 7–26–49.
512,914. NODORMIX. Cl. 16. 7–26–49.
512,928. TUBE-TITE. Cl. 13. 7–26–49.
512,930. BATHE-A-BABE. Cl. 13. 7–26–49.
512,931. CUCAMONGA BEST AND DESIGN. Cl. 46. 7–26–49.
512,933. TENDERFUL. Cl. 46. 7–26–49.
512,934. HASTINGS. Cl. 23. 7–26–49.
512,935. OLD SIDMORE. Cl. 49. 7–26–49.
512,936. OLD TOM GLEN. Cl. 49. 7–26–49.
512,937. VOLGA VODKA. Cl. 49. 7–26–49.
512,939. PEN RITE. Cl. 37. 7–26–49.
512,940. SEARS DEHYDRATED SASSAFRAS AND DIAMOND DESIGN. Cl. 45. 7–26–49.
512,941. FONDA. Cl. 26. 7–26–49.
512,942. "CLAIM PROOF". Cl. 37. 7–26–49.
512,943. MORTAR-NU. Cl. 12. 7–26–49.
512,944. CARAMELIZED BY CASE SWAYNE AND DESIGN. Cl. 46. 7–26–49.
512,945. ARM & HAMMER BAKING SODA ETC. AND DESIGN. Cl. 6. 7–26–49.
512,946. ARM & HAMMER BAKING SODA ETC. AND DESIGN. Cl. 6. 7–26–49.
512,947. DYERSBURG. Cl. 32. 7–26–49.
512,948. PETAL-EDGE. Cl. 42. 7–26–49.
512,952. PRATTS SEAL OF QUALITY AND DESIGN. Cl. 46. 7–26–49.
512,953. PREBILT. Cl. 12. 7–26–49.
512,954. CALIFORNIA DEW. Cl. 47. 7–26–49.
512,955. NEW HAMPSHIRE BUCKSKIN AND DESIGN. Cl. 39. 7–26–49.
512,957. BARRETT'S MOUSESAULT. Cl. 6. 7–26–49.
512,960. GIRARD'S A TASTE OF SAN FRANCISCO AND DESIGN. Cl. 46. 7–26–49.
512,961. RATS' END AND DESIGN. Cl. 6. 7–26–49.
512,963. STAMFORD QUALITY AND DESIGN. Cl. 23. 7–26–49.
512,964. MRS. STEVEN'S. Cl. 46. 7–26–49.
512,965. THE SCOPIE GANG MAKES THE WEATHER. Cl. 38. 7–26–49.
512,966. APPLIED HYDRAULICS. Cl. 38. 7–26–49.
512,968. MACROBIOTICS. Cl. 38. 7–26–49.
512,969. IBERIA AND DESIGN. Cl. 36. 7–26–49.
512,971. COLUMBIA. Cl. 42. 7–26–49.
512,975. THE INTERNATIONAL JOURNAL OF GYNAECOLOGY AND OBSTETRICS. Cl. 38. 7–26–49.
512,977. MACO-TEX. Cl. 42. 7–26–49.
512,981. BOREL'S. Cl. 6. 7–26–49.
512,982. THIBETEAN AND DESIGN. Cl. 42. 7–26–49.
512,983. HERB-TOX. Cl. 6. 7–26–49.

Section 18

339,118. BERKE'S CAKES AND DESIGN. Cl. 46. 9–22–36. Canc. 5973.
358,905. MEDICINE TODAY. Cl. 38. 7–26–38. Canc. 6478.
410,562. SHAMPOOCH. Cl. 6. 12–5–44. Canc. 6470.
429,425. ARLÉ JEWEL AND DESIGN. Cl. 28. 4–29–47. Canc. 6532.
517,459. HEMOGLOVITOL. Cl. 6. 11–8–49. Intf. 5256.
568,186. THE 7 SEAS AND DESIGN. Cl. 46. 12–23–52. Canc. 6453.
585,847. CARRY-CRIB. Cl. 32. 2–16–54. Canc. 6326.
598,299. COIL FOAM. Cl. 32. 11–16–54. Canc. 6538.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

148,138. "LIBERTY" AND DESIGN. Cl. 15. 11–8–21. Liberty Oil Company, Limited. Esso Standard Oil Company, New York, N. Y. Amended to appear:

LIBERTY

230,343. KAUFMANN'S PRIDE OF PITTSBURGH AND DESIGN. Cl. 42. 7–19–27. Kaufmann Department Stores, Inc. The May Department Stores Company, St. Louis, Mo. Amended to appear:

KAUFMANN'S

PRIDE OF PITTSBURGH

266,835. ROYAL GUM TRIM ETC. AND DESIGN. Cl. 12. 2–4–30. Crossett Lumber Company, assignor to Fordyce Lumber Company, Fordyce, Ark. Amended: In the statement, column 2, line 3, "Crossett," is deleted, and the drawing is amended to appear:



266,836. ROYAL OAK TRIM ETC. AND DESIGN. Cl. 12. 2–4–30. Crossett Lumber Company, assignor to Fordyce Lumber Company, Fordyce, Ark. Amended: In the statement, column 2, line 3, "Crossett," is deleted, and the drawing is amended to appear:



285,491. TABASCO ETC. AND DESIGN. Cl. 46. 7–28–31. McIlhenny Company, New Iberia, La. Amended to appear:



329,520. NATION WIDE PAPERS AND DESIGN. Cl. 37. 11–5–35. Nation Wide Papers, Inc. Carpenter Paper Company, Omaha, Nebr. Amended: The second paragraph of column 2 of the statement is deleted, and the drawing is amended to appear:

NATION WIDE

345,476. TECHNICOLOR AND DESIGN. Cl. 26. 4–27–37. Technicolor Motion Picture Corporation, Hollywood, Calif. Amended to appear:



401,511. MARSDEN HUGLOCK NUTS. Cl. 13. 5–25–43. National Machine Products Company, Detroit, Mich. Amended: The second paragraph of column 2 of the statement is deleted, and the drawing is amended to appear:

HUGLOCK

422,349. DERMOLATE AND DESIGN. Cl. 52. 7–16–46. National Oil Products Company. White Laboratories, Inc., Kenilworth, N. J. Amended to appear:

DERMOLATE

510,698. ARMSTRONG'S. Cl. 4. 6–7–49. Armstrong Cork Company, Lancaster, Pa. Amended to appear:

Armstrong

517,624. FIGURE OF A BURGERMEISTER. Cl. 48. 11–15–49. San Francisco Brewing Corporation, San Francisco, Calif. Amended:



521,104. KHAKI WATERSHED AND DESIGN. Cl. 50. 2–21–50. The Hettrick Manufacturing Company, Toledo, Ohio. Amended to appear:

KHAKI-WATERSHED

528,159. ALL AND DESIGN. Cl. 52. 7–25–50. Detergents, Inc. Monsanto Chemical Company, St. Louis, Mo. Amended to appear:



529,371. JACQUES FATH AND DESIGN. Cl. 39. 8–22–50. Jacques F. Fath & Cie, Paris, France. Corrected: In the certificate, lines 2 and 13; in the heading to the registration; in line 1 of the statement; and in the printed signature to the declaration, "Societe Jacques F. Fath" should be *Jacques F. Fath & Cie.*

546,186. SNOOZER. Cl. 39. 8–7–51. Virginia Underwear Corporation, now by change of name Walker Knitting Company, Inc., Martinsville, Va. Amended: In the certificate, lines 2 and 13; in the heading and signature to the statement; and in line 1 of the statement, after "Corporation," *now by change of name Walker Knitting Company, Inc.*, is inserted.

601,259. PLIMASINE. Cl. 18. 1–25–55. Ciba Limited. Ciba Pharmaceutical Products, Inc., Summit, N. J. Amended to appear:

PLIMASIN

TRADEMARK REGISTRATIONS—NEW CERTIFICATES

New Certificates issued under sections 7(c), 7(f), 7(g) of the Trademark Act of 1946 for the unexpired term of the original registrations.

225,640. SWEET MARIE. Cl. 46. Willard's Chocolates Limited. 3–22–27. New Cert. Sec. 7(c), to Willard's Chocolate Company Limited, Toronto, Canada, 1–3–56.

584,155. ACCOLINE. Cl. 46. Darmenindustrie H. Vaessen. 12–29–53. New Cert. Sec. 7(c), to Chemische Industrie Paul Schoemaker N. V., Deventer, Netherlands, 1–3–56.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 13

331,384. Jan. 7, 1936. The Chicago Screw Company, Bellwood, Ill. Pub. by registrant.

Safety Plus

The word "Safety" is disclaimed apart from the mark, as shown, no common law rights, however, being waived.

For Socket Set Screws, Socket Head Cap Screws, Socket Head Shoulder Screws, and Square Head Dog Point Screws.

CLASS 18

327,024. Aug. 13, 1935. Arthur B. Chalmers, Kansas City, Mo. Pub. by registrant.

EL-CRE-SOL

The term "Cre-Sol" is disclaimed apart from the mark as shown on the drawing.

For Preparation for Treatment of Diseases of the Mouth.

CLASS 26

443,594. Dec. 6, 1949. Domar Products, Inc., St. Paul, Minn. Pub. by registrant.

Sun Clip

No claim is made to the word "Sun" except in the association shown.

For Optical Goods Comprising Auxiliary Lenses and Sun Glasses.

CLASS 34

331,365. Jan. 7, 1936. Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Pub. by Henney Motor Company, Inc., New York, N. Y.

AIR-O-MATIC

For Air Conditioning Systems and Heating, Cooling, Dehumidifying, and Humidifying Units for Air Conditioning Systems and Parts Thereof.

CLASS 39

325,154. June 11, 1935. Chatham Manufacturing Company, Elkin, N. C. Pub. by registrant.

CHATHAM

For Clothing—Namely, Suits, Coats, Skirts, and Dresses for Women.

330,082. Nov. 19, 1935. Young's Merchandising Corporation, New York, N. Y. Pub. by registrant.

MELOFELT

Young's

For Men's Hats and Caps of Straw, Felt, and Silk, and Sport Hats for Women of Felt and Straw, and Combinations Thereof.

330,450. Dec. 3, 1935. Indianapolis Glove Company, Indianapolis, Ind. Pub. by Indianapolis Glove Company, Inc., Indianapolis, Ind.

SEAL FLEECE

No claim is made to the exclusive use of the term "Fleece" apart from the mark.

For Work Gloves and Work Mittens of Fabric, Leather, and Combinations Thereof.

CLASS 43

327,045. Aug. 13, 1935. The Clark Thread Company, Newark, N. J. Pub. by Coats & Clark Inc., New York, N. Y.

PASTIME

For Thread and Yarn.

327,864. Sept. 10, 1935. The Clark Thread Company, Newark, N. J. Pub. by Coats & Clark Inc., New York, N. Y.

CRONITA

For Thread and Yarn.

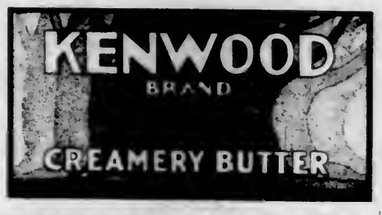
CLASS 46

107,111. Nov. 9, 1915. Tioga Mill & Elevator Company, Waverly, N. Y. Pub. by Tioga Mills Inc., Waverly, N. Y.



For Poultry-Grain, Dry Mash, Chick Feed, Prepared Mixed Feed for Stock and Middlings.

287,975. Oct. 20, 1931. Land O'Lakes Creameries, Inc., Minneapolis, Minn. Pub. by registrant.



Applicant disclaims the geographical word "Kenwood" and the descriptive words "Brand" and "Creamery Butter" apart from the mark as shown on the drawing.

For Creamery Butter.

439,912. July 27, 1948. Carr-Consolidated Biscuit Company, Wilkes-Barre, Pa. Pub. by registrant.



The name "Cookie Carr" is disclaimed apart from the mark as shown.

For Malted Cream Cookies.

LIST OF REGISTRANTS OF TRADEMARKS

ACF Industries, Inc., New York, N. Y. 618,506, pub. 9–27–55. Cl. 13.
A. M. S. Corp., South Norwalk, Conn. 618,514, pub. 10–4–55. Cl. 13.
Abbott, A. C., Products Co.: *See*— Abbott, Ambrose C.
Abbott, Ambrose C., d. b. a. A. C. Abbott Products Co., Los Angeles, Calif., 360,791, canc. Cl. 2.
Abbott Laboratories, North Chicago, Ill. 512,852, canc. Cl. 6.
Abbott Laboratories, North Chicago, Ill. 618,552, pub. 9–27–55. Cl. 18.
Acme Backing Corp., Brooklyn, N. Y. 512,908, canc. Cl. 42.
Action Canvas Products Mfg. Co.: *See*— Hollander, Maurice.
Aeroil Products Co., Inc., South Hackensack, N. J. 618,671, pub. 10–4–55. Cl. 34.
Aetna Steel Products Corp., d. b. a. Arnot-Jamestown Division, New York, N. Y. 618,784. Cl. 12.
Agfa Camera-Werk Aktiengesellschaft, Munich, Germany. 618,644, pub. 8–23–55. Cl. 26.
Agfa Camera-Werk Aktiengesellschaft, Munich, Germany. 618,645, pub. 8–9–55. Cl. 26.
Aktiengesellschaft Chocolat Tobler, d. b. a. Chocolat Tobler, Ltd., and Societe Anonyme Chocolat Tobler, Berne, Switzerland. 618,816. Cl. 46.
Albertson & Co., Inc., Sioux City, Iowa. 618,417–18, pub. 10–4–55. Cl. 4.
Allen, R. C., Business Machines, Inc., Grand Rapids, Mich. 618,618. Pub. 9–13–55, Cl. 23; pub. 9–20–55, Cl. 26. (Consolidated certificate, Classes 23 and 26.)
Allied Oil Equipment Co.: *See*— Kropp, John J.
Allied Packers Inc., Chicago, Ill. 245,826, canc. Cl. 46.
Allied Products Corp., Detroit, Mich. 618,622, pub. 10–4–55. Cl. 23.
Almor Co., Van Dyke, Mich. 618,609, pub. 9–27–55. Cl. 23.
Amalfi Originals, Inc., New York, N. Y. 618,714, pub. 10–4–55. Cl. 39.
Amenta, A., & Co.: *See*— Amenta, Angelo.
Amenta, Angelo, d. b. a. Amenta & Co., Johnstown, Pa. 255,716, canc. Cl. 6.
American Annual of Photography, New York, N. Y. 72,781, canc. Cl. 38.
American Bakers' Service Co., Kansas City, Mo. 618,813. Cl. 46.
American Beverage Corp., Brooklyn, N. Y. 512,790, canc. Cl. 45.
American Chewing Products Corp., Newark, N. J. 512,719, canc. Cl. 46.
American Hardware Corp., The, New Britain, Conn. 618,636, pub. 9–27–55. Cl. 25.
American Home Products Corp., d. b. a. Ives-Cameron Co. Division of American Home Products Corp., Philadelphia, Pa. 618,556, pub. 9–27–55. Cl. 18.
American Manganese Steel Co., Chicago and Chicago Heights, Ill., New York, N. Y., New Castle, Del., St. Louis, Mo., Los Angeles and Oakland, Calif., and elsewhere. 213,922, canc. Cl. 14.
American Woolen Co., New York, N. Y., now by merger and change of name Textron American, Inc. 618,722, pub. 10–4–55. Cl. 42.
Anchor Packing Co., The, Philadelphia, Pa. 618,677, pub. 10–4–55. Cl. 35.
Anderson, Robert H., d. b. a. Northwest Plastic Industry, Seattle, Wash. 618,485, pub. 9–27–55. Cl. 12.
Anderson-Tully Co., Memphis, Tenn. 618,484, pub. 10–4–55. Cl. 12.
Angel Food Ice Cream Co.: *See*— Meador, Oscar M.
Angel Food Ice Cream Corp.: *See*— Meador, Oscar M.
Anker-Werke A. G., Bielefeld, Germany. 618,638, pub. 9–27–55. Cl. 26.
Appliance Corp. of America, Milwaukee, Wis. 512,701, canc. Cl. 24.
Aqua-Sun Mfg. Co., The: *See*— Whiteside, Richard H.
Arden, Elizabeth, Sales Corp., New York, N. Y. 618,817. Cl. 51.
Arie Jewel, Inc., Atlanta, Ga. 529,425, canc. Cl. 28.
Armstrong Cork Co., Lancaster, Pa. 510,698. Am. 7(d). Cl. 4.
Armstrong Cork Co., Lancaster, Pa. 618,768, pub. 10–4–55. Cl. 52.
Armstrong Paint & Varnish Works, Chicago, Ill. 512,894, canc. Cl. 16.
Arnot-Jamestown Division: *See*— Aetna Steel Products Corp.
Arons, Adolph, & Sons, Inc., Jersey City, N. J. 618,712, pub. 10–4–55. Cl. 39.
Art Metal Construction Co., Jamestown, N. Y. 107,140, ren. 11–16–55. Cl. 12.
Art Metal Construction Co., Jamestown, N. Y. 107,141, ren. 11–16–55. Cl. 32.
Art Metal Construction Co., Jamestown, N. Y. 107,702, ren. 12–21–55. Cl. 25.
Astor Equipment Corp., New York, N. Y. 618,608, pub. 9–27–55. Cl. 23.
Athens Hosiery Mills, Athens, Tenn. 166,631, canc. Cl. 39.
Atkinson, Herbert J., d. b. a. Sudbury Laboratory, South Sudbury, Mass. 618,436, pub. 10–4–55. Cl. 6.
Atlanta Paper Co., Atlanta, Ga. 618,616, pub. 10–4–55. Cl. 23.
Atlantic Products Corp., Trenton, N. J. 618,411, pub. 9–27–55. Cl. 3.
Auerbach & Co., Los Angeles, Calif. 618,705, pub. 10–4–55. Cl. 39.
Aughinbaugh Canning Co., Baltimore, Md. 68,404, canc. Cl. 46.
B & B Exterminating Co.: *See*— Brazil, Walter P.
B-I-F Industries, Inc., Providence, R. I., from Builders-Providence, Inc. 618,655, pub. 10–4–55. Cl. 26.
B. I. P. Engineering Ltd., London, England. 618,607, pub. 9–27–55. Cl. 23.
Babson Bros. Co., Chicago, Ill. 618,795. Cl. 23.
Baer, E. A., Industries, The: *See*— Baer, Evelyn A.
Baer, Evelyn A., d. b. a. The E. A. Baer Industries, Chicago, Ill. 618,725, pub. 10–4–55. Cl. 44.
Bakon-Yeast, Inc., New York, N. Y. 329,835, ren. 11–12–55. Cl. 46.
Balaban Luggage Co., Council Bluffs, Iowa. 618,412, pub. 10–4–55. Cl. 3.
Barclay Home Products, Inc., New York, N. Y. 618,397, pub. 10–4–55. Cl. 1.
Barnes, MacKie Jewel Skaggs, Pampa, Tex. 618,446, pub. 10–4–55. Cl. 3.
Barrett Products Co., Philadelphia, Pa. 512,957, canc. Cl. 6.
Barry Laboratories, Inc., Detroit, Mich. 618,549, pub. 9–27–55. Cl. 18.
Bartley, Ena M., Moseley, Birmingham, England. 618,595, pub. 9–27–55. Cl. 22.
Bartmann & Bixer, Inc., New York, N. Y. 512,948, canc. Cl. 42.
Bates & Edgerton: *See*— Craftint Mfg. Co., The.
Bates Mfg. Co., Lewiston, Maine. 618,720, pub. 9–20–55. Cl. 42.
Battery Mfg. Co., Inc., Louisville, Ky. 512,682, canc. Cl. 21.
Baugh and Sons Co., Baltimore, Md. 256,572, canc. Cl. 10.
Baumgartner Frères S. A., Grenchen, Switzerland. 618,660, pub. 10–4–55. Cl. 27.
Beard, Irving T., d. b. a. Hickory Hill Hatchery, Chandlerville, Ill. 618,406, pub. 10–4–55. Cl. 1.
Beaver Products, Inc., Beaver Dam, Wis. 618,478, pub. 9–27–55. Cl. 12.
Bebry Bedding Corp., Bayonne, N. J. 618,802. Cl. 32.
Beckman, Arnold O., Inc., S. Pasadena, Calif. 618,651, pub. 10–4–55. Cl. 26.
Beckman Instruments, Inc., Fullerton, Calif. 618,592, pub. 9–27–55. Cl. 21.
Bell & Gossett Co., Morton Grove, Ill. 512,718, canc. Cl. 26.
Berke Cake Co.: *See*— Berkowitz, Nathan.
Berkowitz, Nathan, d. b. a. Berke Cake Co., Brooklyn, N. Y. 339,118, canc. Cl. 46.
Berman Watch Co., Inc., New York, N. Y. 618,800. Cl. 27.
Bernardo Sandals, Inc., New York, N. Y. 618,686, pub. 10–4–55. Cl. 39.
Bianchini, Ferier, Lyon, France, to Bianchini, Ferier, Inc., New York, N. Y. 106,549, ren. 10–26–55. Cl. 42.
Bianchini, Ferier, Inc.: *See*— Bianchini, Ferier.
Biltmore Sportswear, Inc., Boston, Mass. 618,716, pub. 10–4–55. Cl. 39.
Biocerta Corp., New York, N. Y. 618,444, pub. 9–27–55. Cl. 6.
Bishop, Jim, Inc., Kansas City, Mo. 618,590, pub. 9–27–55. Cl. 21.
Bissell Varnish Co., The, Bridgeport, Conn. 512,766, canc. Cl. 16.
Bival Laboratory: *See*— Lee, Kenneth L.
Blackman-Uhler Co., Inc., Spartansburg, S. C. 618,462, pub. 10–4–55. Cl. 6.
Blue Bell, Inc., Greensboro, N. C. 618,701, pub. 10–4–55. Cl. 39.
Bonat, Samuel, & Bro., Inc., Paterson, N. J. 618,805. Cl. 44.
Boned Products, Inc, Chicago, Ill. 618,480, pub. 9–27–55. Cl. 12.
Booth, Sheldon M., d. b. a. Diamond Tool Co., South Haven, Mich. 618,416, pub. 9–27–55. Cl. 4.
Borax Consolidated, Ltd., d. b. a. Pacific Coast Borax Co., Division of Borax Consolidated, Ltd., Los Angeles, Calif. 618,457, pub. 9–27–55. Cl. 6.
Borden Co., The: *See*— Casein Mfg. Co. of America, Inc., The.
Borel, Eunice B., d. b. a. Mrs. John Borel, St. Martinsville, La. 512,981, canc. Cl. 6.
Borel, Mrs. John: *See*— Borel, Eunice B.
Borg, Gustave A., Naugatuck, Conn. 512,928, canc. Cl. 13.
Bories, Robert A., d. b. a. Robert A. Bories Co., New York, N. Y. 618,774, pub. 10–4–55. Cl. 101.
Bories, Robert A., Co.: *See*— Bories, Robert A.
Borsari & Cie, Zollikon, Switzerland. 347,525, canc. Cl. 2.
Brazil, Walter P., d. b. a. B & B Exterminating Co., Jacksonville, Fla. 618,424, pub. 10–4–55. Cl. 6.

Breier, Marcus, Sons, Inc., Amsterdam, N. Y. 618,690, pub. 10–4–55. Cl. 39.
Breier, Marcus, Sons, Inc., Amsterdam, N. Y. 618,717, pub. 10–4–55. Cl. 42.
Briegel Method Tool Co., Galva, Ill. 618,572, pub. 9–27–55. Cl. 21.
Brook Hill Farms, Inc., to Medical Dairy Specialties, Inc., Chicago, Ill. 618,735, pub. 10–4–55. Cl. 46.
Brooks Oil Co., The, Cleveland, Ohio. 618,526, pub. 9–27–55. Cl. 15.
Brown, Andrew, Co., Los Angeles, Calif. 618,531, pub. 9–27–55. Cl. 16.
Brown & Bigelow, St. Paul, Minn. 312,705, canc. Cl. 37.
Bruno Tools: *See*—
Clark, Robert H.
Brunswick-Balke-Collender Co., The, Chicago, Ill. 512,899, canc. Cl. 42.
Buchanan, U. B., New York, N. Y. 618,704, pub. 10–4–56. Cl. 39.
Buckeye Cellulose Corp., The: *See*—
Traders Oil Mill Co.
Buckeye Cotton Oil Co., The: *See*—
Traders Oil Mill Co.
Builders-Providence, Inc.: *See*—
B-I-F Industries, Inc.
Bunny Bear, Inc., Everett, Mass. 585,847, canc. Cl. 32.
Burnee Corp., to C & C Super Corp., New York, N. Y. 107,900, ren. 1–4–56. Cl. 46.
Burnee Corp., to C & C Super Corp., New York, N. Y. 108,387, ren. 2–8–56. Cl. 46.
Burton-Edward Co., Inc., Oklahoma City, Okla. 618,544, pub. 9–27–55. Cl. 18.
Byer-Rolnick Co., to Resistol Hats, Inc., Dallas, Tex. 330,447, ren. 12–3–55. Cl. 39.
C & C Super Corp.: *See*—
Burnee Corp.
C & H Air Conditioning Fan Co. Inc., Atlanta, Ga. 512,882, canc. Cl. 34.
Cabot, Godfrey L., Inc., Boston, Mass. 618,425, pub. 10–4–55. Cl. 6.
Callaway Mills, to Callaway Mills Co., La Grange, Ga. 328,807, ren. 10–8–55. Cl. 42.
Callaway Mills Co.: *See*—
Callaway Mills.
Cambridge Chemical Products Co., Dearborn, Mich. 618,454, pub. 10–4–55. Cl. 6.
Cannon Mills Co., Kannapolis, N. C. 327,674, ren. 9–3–55. Cl. 42.
Cantrell & Cochrane Corp., New York, N. Y. 618,733, pub. 10–4–55. Cl. 45.
Capital City Products Co., The, Columbus, Ohio. 618,743, pub. 10–4–55. Cl. 46.
Capital Paper Co., Indianapolis, Ind. 115,486, canc. Cl. 2.
Capital Paper Co., Indianapolis, Ind. 189,440, canc. Cl. 37.
Capital Paper Co., Indianapolis, Ind. 341,963, canc. Cl. 37.
Capper & Capper, Ltd., Chicago, Ill., to Knothe Brothers Co. Inc., New York, N. Y. 322,602, ren. 2–18–56. Cl. 39.
Car Kleen Co., Springfield, N. J. 618,777, pub. 10–4–55. Cl. 103.
Carpenter Paper Co.: *See*—
Nation Wide Papers, Inc.
Carr-Consolidated Biscuit Co., Wilkes-Barre, Pa. 439,912, 12(c) pub. 1–3–56. Cl. 46.
Carr-Consolidated Biscuit Co., Wilkes-Barre, Pa. 586,753, canc. Cl. 46.
Case-Maul Mfg. Co., Mansfield, Ohio. 618,628, pub. 10–4–55. Cl. 23.
Case-Swayne Co., Inc., Santa Ana, Calif. 512,944, canc. Cl. 46.
Casein Mfg. Co. of America, Inc., The, to The Borden Co., New York, N. Y. 333,155, ren. 3–10–56. Cl. 5.
Cavalier Bros., Edgewater, N. J. 512,895, canc. Cl. 6.
Cela Landwirtschaftliche Chemikalien G. m. b. H., Ingelheim am Rhine, Germany. 618,427, pub. 10–4–55. Cl. 6.
Celia Brothers, Inc., New York, N. Y. 618,751, pub. 10–4–55. Cl. 47.
Cerruti Inc., Union City, N. J., and elsewhere in the United States. 512,725, canc. Cl. 42.
Certified Grocers of Illinois, Inc., Chicago, Ill. 618,772, pub. 10–4–55. Cl. 101.
Chalmers, Arthur B., Kansas City, Mo. 327,024, 12(c) pub. 1–3–56. Cl. 18.
Chamberlin Co. of America, Detroit, Mich. 512,943, canc. Cl. 12.
Charmin Paper Mills, Inc., Green Bay, Wis. 618,681, pub. 10–4–55. Cl. 37.
Chase Chemical Co., Newark, N. J. 618,553–5, pub. 9–27–55. Cl. 18.
Chase, J. L., Co., Chicago, Ill. 598,299, canc. Cl. 32.
Chatham Mfg. Co., Elkin, N. C. 325,154, 12(c) pub. 1–3–56. Cl. 39.
Chatillon, John, & Sons, New York, N. Y. 512,711, canc. Cl. 26.
Chavin, Elias, d. b. a. Claremont Vintners & Distillers, Claremont, Calif. 512,954, canc. Cl. 47.
Chemische Industrie Paul Schoemaker N. V.: *See*—
Darmenindustrie H. Vaessen.
Chicago Lock Co., Chicago, Ill. 618,635, pub. 9–27–55. Cl. 25.
Chicago Screw Co., The, Bellwood, Ill. 331,384, 12(c) pub. 1–3–56. Cl. 13.
Chinski Trading Corp.: *See*—
Texas Star Flour Mills.
Chocolat Tobler, Ltd.: *See*—
Aktiengesellschaft Chocolat Tobler.
Church & Dwight Co., Inc., New York, N. Y. 512,945–6, canc. Cl. 6.
Ciba Ltd. Ciba Pharmaceutical Products, Inc., Summit, N. J. 601,259. Am. 7(d). Cl. 18.
Ciba Ltd., Basel, Switzerland. 618,437, pub. 10–4–55. Cl. 6.
Ciba Ltd., Basel, Switzerland. 618,442, pub. 9–27–55. Cl. 6.
Ciba Pharmaceutical Products, Inc.: *See*—
Ciba Ltd.
Cicchetti, P., d. b. a. Melba Packing Co., Fresno, Calif. 512,931, canc. Cl. 46.
Claremont Products: *See*—
Reed, Maurice J.
Claremont Vintners & Distillers: *See*—
Chavin, Elias.
Clark Equipment Co., Buchanan, Mich. 618,602, pub. 9–27–55. Cl. 23.
Clark, Robert H., d. b. a. Bruno Tools, Beverly Hills, Calif. 512,736, canc. Cl. 23.
Clark Thread Co., The, Newark, N. J., by Coats & Clark Inc., New York, N. Y. 327,045, 12(c) pub. 1–3–56. Cl. 43.
Clark Thread Co., The, Newark, N. J., by Coats & Clark Inc., New York, N. Y. 327,864, 12(c) pub. 1–3–56. Cl. 43.
Coats & Clark Inc.: *See*—
Clark Thread Co., The.
Cohen, Benjamin, d. b. a. Cohen Bros. Jewelers, Alexandria, Va. 618,662, pub. 10–4–55. Cl. 27.
Cohen Bros. Jewelers: *See*—
Cohen, Benjamin.
Colin Hall Clothes, Ltd., New York, N. Y. 618,803. Cl. 39.
Colorado Milling & Elevator Co., The, Denver, Colo. 618,814. Cl. 46.
Columbia Mills, Inc., The, New York, N. Y. 512,971, canc. Cl. 42.
Compagnie Generale de Telegraphie Sans Fil, Paris, France. 618,565, pub. 9–6–55. Cl. 21.
Compagnie Generale de Telegraphie Sans Fil, Paris, France. 618,566, pub. 7–19–55. Cl. 21.
Concordia-Gallia Corp., New York, N. Y. 512,798, canc. Cl. 42.
Cone Export and Commission Co., Inc., New York, N. Y. 512,900, canc. Cl. 42.
Connecticut Bandage Mills, Inc., Bridgeport, Conn. 618,727, pub. 10–4–55. Cl. 44.
Connolly, J. J., Inc., New York, N. Y. 618,563, pub. 9–27–55. Cl. 21.
Conradty, C., Nurnberg, Germany. 618,790. Cl. 21.
Consolidated Cigar Corp., New York, N. Y. 512,686, canc. Cl. 17.
Continental-Diamond Fibre Co., now by change of name to Haveg Industries, Inc., to Continental-Diamond Fibre Division of The Budd Co., Inc., Newark, Del. 618,569–70, pub. 9–27–55. Cl. 21.
Continental-Diamond Fibre Division of The Budd Co., Inc.: *See*—
Continental-Diamond Fibre Co.
Continental X-Ray Corp., Chicago, Ill. 618,732, pub. 10–4–55. Cl. 44.
Cook Products Corp., San Francisco, Calif. 512,960, canc. Cl. 46.
Copure Co.: *See*—
Sorse, Porfirio P.
Corbate Co., Inc., Washington, D. C. 618,546, pub. 9–27–55. Cl. 18.
Corning Glass Works, Corning, N. Y. 618,649. Pub. 9–6–55, Cl. 33; pub. 9–20–55, Cl. 26. (Consolidated certificate, Classes 26 and 33.)
Corrosite Corp., New York, N. Y. 512,855, canc. Cl. 16.
Cosmos Electronic Machine Corp., New York, N. Y. 618,581, pub. 9–27–55. Cl. 21.
Cox, Joseph B., d. b. a. Precision Castparts Co., Portland, Oreg., from Precision Castparts Corp. 618,821. Cl. 106.
Craftall, Inc., Chicago, Ill., from G. H. Miller, Jr. 512,696, canc. Cl. 22.
Craftint Mfg. Co., The, Cleveland, Ohio, from Bates & Edgerton. 618,793. Cl. 23.
Crossett Lumber Co., to Fordyce Lumber Co., Fordyce, Ark. 266,835–6. Am. 7(d). Cl. 12.
Cudahy Packing Co., The, Chicago, Ill. 512,896, canc. Cl. 46.
Curran, Frank J., Co., Downers Grove, Ill. 618,455, pub. 10–4–55. Cl. 6.
Cyclotherapy, Inc., Buffalo, N. Y. 618,726, pub. 10–4–55. Cl. 44.
Damerel-Allison Assn.: *See*—
Damerel-Allison Co.
Damerel-Allison Co., Covina, Calif. 234,869, canc. Cl. 46.
Damerel-Allison Co., d. b. a. Damerel-Allison Assn., Covina, Calif. 399,259, canc. Cl. 46.
Darmenindustrie H. Vaessen, to Chemische Industrie Paul Schoemaker N. V., Deventer, Netherlands. 584,155, new certificate. Cl. 46.
D'Arrigo Bros., Co., San Jose, Calif. 378,337, canc. Cl. 46.
Davies & Meacham to The Patterson-Sargent Co., to The Patterson-Sargent Co., Cleveland, Ohio. 106,748, ren. 10–26–55. Cl. 16.
Davis Specialties, Inc., Evanston, Ill., to Bishop David Freeman Co. 618,632, pub. 9–27–55. Cl. 24.
Dehydag Deutsche Hydrierwerke G. m. b. H., Dusseldorf, Germany. 618,428–9, pub. 9–27–55. Cl. 6.
Dehydag Deutsche Hydrierwerke G. m. b. H., Dusseldorf, Germany. 618,441, pub. 10–4–55. Cl. 6.
Dell Products Corp., East Orange, N. J. 618,806. Cl. 45.
Denison Corp., North Miami, Fla. 618,468, pub. 10–4–55. Cl. 12.
Denominator Co., Inc., The, New York, N. Y. 618,640, pub. 10–4–55. Cl. 26.
De Sanno, A. P., & Son, Inc., Phoenixville, Pa. 618,415, pub. 10–4–55. Cl. 4.
Desert Tan Co., to Desert Tan, Inc., Hempstead, N. Y. 618,761, pub. 10–4–55. Cl. 51.
Desert Tan, Inc.: *See*—
Desert Tan Co.
Detergents, Inc. Monsanto Chemical Co., St. Louis, Mo. 528,159. Am. 7(d). Cl. 52.

Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfurt (Main), Germany. 618,435, pub. 10–4–55. Cl. 6.
Diamond Saw Works, Inc., Buffalo, N. Y. 618,792. Cl. 23.
Diamond Tool Co.: *See*—
Booth, Sheldon M.
Diesel Control Corp., Denver, Colo. 618,639, pub. 10–4–55. Cl. 26.
Direct Mail Envelope Co., Inc., New York, N. Y. 618,683, pub. 10–4–55. Cl. 37.
Discos Iberia, S. de R. L., Mexico City, Mexico. 512,969, canc. Cl. 36.
Dixie Underwear Co. Inc., Montgomery, Ala. 217,782, canc. Cl. 39.
Dr. Pepper Co., Dallas, Tex. 520,105, canc. Cl. 45.
Domar Products, Inc., St. Paul, Minn. 443,594, 12(c) pub. 1–3–56. Cl. 26.
Domecq, Pedro, S. A.: *See*—
Domecq, Pedro, y Cia.
Domecq, Pedro, y Cia. to Pedro Domecq, S. A., Jeres de la Frontera, Spain. 328,088, ren. 9–17–55. Cl. 47.
Dorset Woolen Co., Slocum, R. I. 618,718, pub. 10–4–55. Cl. 42.
Doubleday, Doran Book Shops, Inc., Garden City, N. Y. 266,542, canc. Cl. 38.
Dow Chemical Co., The: *See*—
Versenes Inc.
Drott Mfg. Corp., Wausau, Wis. 618,625, pub. 10–4–55. Cl. 23.
Dunn, W. E., Mfg. Co., Holland, Mich. 618,481, pub. 9–27–55. Cl. 12.
Du Pont, E. I., de Nemours and Co., Wilmington, Del. 618,440, pub. 10–4–55. Cl. 6.
Dynacycle Mfg. Co., St. Louis, Mo. 512,834, canc. Cl. 23.
E Z Paintr Corp., Butler, Wis. 618,494, pub. 9–27–55. Cl. 13.
Eastman Kodak Co., Rochester, N. Y. 618,460, pub. 9–27–55. Cl. 6.
Eastman Kodak Co., Rochester, N. Y. 618,749, pub. 10–4–55. Cl. 46.
Eavey Co., The, Xenia, Ohio. 186,270, canc. Cl. 4.
Eberle, J. N., & Cie. A. G., Augsburg, Germany. 618,599, pub. 9–27–55. Cl. 23.
Eisenberg, Harry, d. b. a. Willen Drug Co., Baltimore, Md. 618,557, pub. 9–27–55. Cl. 18.
Eitel-McCullough, Inc., San Bruno, Calif. 618,577, pub. 9–27–55. Cl. 21.
Electriglas Corp., Bergenfield, N. J. 618,587, pub. 9–27–55. Cl. 21.
Electro-Tester Co., Malden, Mass. 618,798. Cl. 26.
Elektroschmelzwerk Kempten A. G., Munich, Bavaria, Germany, now by change of name, Elektroschmelzwerk Kempten G. m. b. H. 618,443, pub. 9–27–55. Cl. 6.
Elektroschmelzwerk Kempten G. m. b. H.: *See*—
Elektroschmelzwerk Kempten A. G.
Elgen Mfg. Corp., Long Island City, N. Y. 618,614, pub. 10–4–55. Cl. 23.
Elwood Hosiery Mills, Inc., Elwood, N. J. 618,698, pub. 10–4–55. Cl. 39.
Em-Cote, Resinous Products Division, Southern Distributing & Mfg. Co.: *See*—
Mock, Edward J.
Emerson Electric Mfg. Co., The, St. Louis, Mo. 618,588, pub. 9–27–55. Cl. 21.
Empire Products, Chicago, Ill. 618,583, pub. 9–27–55. Cl. 21.
Empire Stove Co., Belleville, Ill. 618,674, pub. 10–4–55. Cl. 34.
Enamel Products and Plating Co., McKeesport, Pa. 618,523, pub. 9–27–55. Cl. 14.
Endo Products Inc., Richmond Hill, N. Y. 517,459, canc. Cl. 6.
Enjay Co., Inc., Wilmington, Del., and New York, N. Y. 512,824, canc. Cl. 6.
Erie2 Mfg. Co., Erie, Pa. 618,584, pub. 9–27–55. Cl. 21.
Ernstthal Textile Co., New York, N. Y. 512,864, canc. Cl. 42.
Esso Standard Oil Co.: *See*—
Liberty Oil Co., Ltd.
Etablissements Pernod, Maisons Pernod Fils, Hemard et Pernod Pere et Fils Reunies, (Societe Anonyme), Paris, France. 512,690, canc. Cl. 47.
Excel Movie Products, Inc., Chicago, Ill. 512,714, canc. Cl. 26.
Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. 618,438, pub. 10–4–55. Cl. 6.
Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. 618,723, pub. 8–9–55. Cl. 43.
Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. 618,750, pub. 8–16–55. Cl. 47.
Fath, Jacques F., & Cie, Paris, France. 529,371, cor. Cl. 39.
Federal Razor Blade Co., Inc., New York, N. Y. 512,778, canc. Cl. 23.
Fibercraft, Inc., North Miami, Fla. 618,562, pub. 9–27–55. Cl. 19.
Finishine Laboratories, Inc., Syracuse, N. Y. 618,414, pub. 9–27–55. Cl. 4.
Finnaren & Haley, Inc., Philadelphia, Pa. 618,533, pub. 9–27–55. Cl. 16.
Five Star Footwear Co., Long Island City, N. Y. 618,691, pub. 10–4–55. Cl. 39.
Flamberg, Morton, New York, N. Y. 427,158, canc. Cl. 39.
Fletcher, G. G., & O. H. Fletcher, Yuma, Ariz., from G. G. Fletcher & Sons. 512,695, canc. Cl. 46.
Fletcher, G. G., & Sons: *See*—
Fletcher, G. G., & O. H. Fletcher.
Fletcher, O. H.: *See*—
Fletcher, G. G., & O. H. Fletcher.
Focke's, William, Sons Co., The, Dayton, Ohio. 618,740, pub. 10–4–55. Cl. 46.
Foley & Co., d. b. a. Fovan Chemical Division, Tampa, Fla. 618,430, pub. 10–4–55. Cl. 6.
Food Machinery and Chemical Corp., San Jose, Calif. 618,603, pub. 9–27–55. Cl. 23.
Fordyce Lumber Co.: *See*—
Crossett Lumber Co.
Foster Grant Co., Inc., Leominster, Mass. 618,402, pub. 10–4–55. Cl. 1.
Fovan Chemical Division: *See*—
Foley & Co.
Freeman, Bishop David, Co.: *See*—
Davis Specialties, Inc.
Frym, Sam J., d. b. a. L. A. Drapery Mfg. Co., Los Angeles, Calif. 512,905, canc. Cl. 42.
Funk & Wagnalls Co., New York, N. Y. 55,065, canc. Cl. 38.
Gallenkamp Stores Co., Los Angeles, Calif. 618,709, pub. 10–4–55. Cl. 39.
Gazelda Ltd., Watford, England. 618,405, pub. 9–27–55. Cl. 1.
Geigy Chemical Corp., New York, N. Y. 618,459, pub. 10–45–55. Cl. 6.
General Dynamics Corp.: *See*—
Stromberg-Carlson Co.
General Engineering and Mfg. Co., St. Louis, Mo. 512,825, canc. Cl. 34.
General Hardware Mfg. Co., Inc., New York, N. Y. 618,408, pub. 10–4–55. Cl. 2.
General Tire & Rubber Co., The, Akron, Ohio. 618,754, pub. 10–4–55. Cl. 50.
Gerber, Arthur, & Co., Chicago, Ill. 618,812. Cl. 46.
Gibbons, Warren W., Hollywood, Calif. 618,464, pub. 10–4–55. Cl. 8.
Gillette Co., The, d. b. a. The Toni Co., Boston, Mass. 618,763, pub. 10–4–55. Cl. 51.
Gilpatrick Construction Co., Riverton, Wyo. 618,561, pub. 9–27–55. Cl. 19.
Ginsberg & Feldsott, New York, N. Y. 618,713, pub. 10–4–55. Cl. 39.
Ginseng Products Co.: *See*—
Neu, Hugo G.
Gladding, B. F., & Co. Inc., South Otselic, N. Y. 512,728, canc. Cl. 22.
Gladding, B. F., & Co. Inc., South Otselic, N. Y. 512,752, canc. Cl. 6.
Glenmore Distilleries Co., Owensboro, to Glenmore Distilleries Co., Louisville, Ky. 330,689, ren. 12–10–55. Cl. 49.
Glick, B. E., & Sons, Corning, Calif. 512,933, canc. Cl. 46.
Glissen Chemical Co., Inc., Brooklyn, N. Y. 618,766, pub. 10–4–55. Cl. 52.
Glomax Inc., Fort Wayne, Ind. 512,702, canc. Cl. 21.
Gluck, Lew L., Co., New York, N. Y. 618,696, pub. 10–4–55. Cl. 39.
Goldberg Feed and Grain Co.: *See*—
Goldberg, Jacob H.
Goldberg, Jacob H., d. b. a. Goldberg Feed and Grain Co., West Fargo, N. Dak. 618,742, pub. 10–4–55. Cl. 46.
Gold Dot Marketing Corp., New York, N. Y. 618,413, pub. 10–4–55. Cl. 3.
Goldfarb, Joseph: *See*—
Goldfarb, Minnie.
Goldfarb, Minnie, administratrix of the business of Joseph Goldfarb, New York, N. Y., to Onyx Blouse Co., Inc. 440,948, canc. Cl. 39.
Goldman, Meyer, trading under the name Winchester Toy Co., Yeadon and Philadelphia, Pa. 512,666, canc. Cl. 22.
Gooderham & Worts, Ltd., Detroit, Mich. 332,739, ren. 2–25–56. Cl. 49.
Goodrich, E. R., d. b. a. Goodrich Maintenance Supply Co., Oklahoma City, Okla. 618,767, pub. 10–4–55. Cl. 52.
Goodrich Maintenance Supply Co.: *See*—
Goodrich, E. R.
Goodyear Paint and Varnish, Inc., Charlotte, N. C. 512,786, canc. Cl. 16.
Goulds Pumps, Inc., Seneca Falls, N. Y. 512,912, canc. Cl. 23.
Graflex, Inc., Rochester, N. Y. 618,650, pub. 10–4–55. Cl. 26.
Gramophone Co. Ltd., The, Hayes, Middlesex, England. 618,589, pub. 9–27–55. Cl. 21.
Grannick, Irving A.: *See*—
Valoré, Inc.
Graver Tank & Mfg. Co., Inc., East Chicago, Ind. 618,665, pub. 9–13–55. Cl. 31.
Gray Co., Inc., Minneapolis, Minn. 618,596, pub. 9–27–55. Cl. 23.
Greenfield, Samuel F., d. b. a. Val-U Dress Shops, to Val-U Dress Shops, Inc., New York, N. Y. 332,927, ren. 3–3–56. Cl. 39.
Gruber's, Charles J., Sons, Philadelphia, Pa. 243,898, canc. Cl. 45.
Gunning Mfg. Co., Lansford, N. Dak. 618,598, pub. 9–27–55. Cl. 23.
Gunston, Inc., Ashland, Va. 618,711, pub. 10–4–55. Cl. 39.
Gussow, Max, Inc., New York, N. Y. 618,689, pub. 10–4–55. Cl. 39.
H & K Garment Co., Pontiac, Ill. 618,710, pub. 10–4–55. Cl. 39.
Halma & Ettinger, Inc., New York, N. Y. 618,699, pub. 10–4–55. Cl. 39.
Hamilton Metal Products Co., The, Hamilton, Ohio. 618,573, pub. 9–27–55. Cl. 21.
Hanover Wire Cloth Division, Continental Copper & Steel Industries, Inc., New York, N. Y. 618,497, pub. 10–4–55. Cl. 13.
Hardware Designers, Inc., Irvington, N. J. 618,515, pub. 9–27–55. Cl. 13.
Hastings Signal & Equipment Co., Boston, Mass. 512,934, canc. Cl. 23.
Hat Corp. of America, Norwalk, Conn. 618,703, pub. 10–4–55. Cl. 39.
Haveg Industries, Inc.: *See*—
Continental-Diamond Fibre Co.

Hays, Daniel, Co., Inc., The, Gloversville, N. Y. 618,702, pub. 10–4–55. Cl. 39.
Hearst Publishing Co., Inc., San Francisco, Calif. 618,684, pub. 10–4–55. Cl. 38.
Heath, L. S., & Sons, Inc., Robinson, Ill. 618,736, pub. 10–4–55. Cl. 46.
Hempel, A., Trading, Inc., New York, N. Y. 618,811. Cl. 46.
Henney Motor Co., Inc.: *See*—
Williams Oil-O-Matic Heating Corp.
Hensley, Clyde C., d. b. a. Hensley Equipment Co., Oakland, Calif. 618,604, pub. 9–27–55. Cl. 23.
Hensley Equipment Co.: *See*—
Hensley, Clyde C.
Herb-Tox Lab., River Edge, N. J. 512,983, canc. Cl. 6.
Hess Mfg. Co., Quincy, Pa. 618,490, pub. 9–27–55. Cl. 12.
Hettrick Mfg. Co., The, Toledo, Ohio. 521,104. Am. 7(d). Cl. 50.
Hewitt, Chas., & Sons Co.: *See*—
Winston and Newell Co.
Hickory Hill Hatchery: *See*—
Beard, Irving T.
Hobart Mfg. Co., The, Troy, Ohio. 618,605, pub. 9–27–55. Cl. 23.
Hodges, William, & Co., Inc., Philadelphia, Pa. 618,498, pub. 9–27–55. Cl. 13.
Hoffmann, George W., Corp., New York, N. Y. 512,830, canc. Cl. 23.
Holland District Asparagus Growers Assn., Clarksburg, to Lambert Marketing Co., Sacramento, Calif. 333,117, ren. 3–10–56. Cl. 46.
Hollander, Maurice, d. b. a. Action Canvas Products Mfg. Co., New York, N. Y. 512,930, canc. Cl. 13.
Holmpress Piles Ltd., Hull, England. 618,475, pub. 9–27–55. Cl. 12.
Hotstream Heater Co., The, Cleveland, Ohio. 441,787, canc. Cl. 34.
House Beautiful Curtains Inc., New York, N. Y. 512,799, canc. Cl. 42.
Hughes & Adams, Inc., Seattle, Wash. 142,578, canc. Cl. 46.
Hydraulics Publishing Co., The: *See*—
Technical Publishing Co., The.
Hygrade Food Products Corp., Detroit, Mich. 557,359, canc. Cl. 46.
Hygrade Food Products Corp., New York, N. Y. 386,955, canc. Cl. 46.
Hygrade Food Products Corp., New York, N. Y. 528,037, canc. Cl. 46.
Hygrade Food Products Corp., New York, N. Y. 536,395, canc. Cl. 46.
Ideal Industries, Inc., Sycamore, Ill. 618,422–3, pub. 9–27–55. Cl. 6.
Imperial Knife Co., Inc., Providence, R. I. 618,615, pub. 10–4–55. Cl. 23.
Independent Nail and Packing Co., Inc., The, Bridgewater, Mass. 618,508, pub. 10–4–55. Cl. 13.
Independent Nail and Packing Co., Inc., The, Bridgewater, Mass. 618,511, pub. 10–4–55. Cl. 13.
Indiana National Bank, The, Indianapolis, Ind. 618,775, pub. 10–4–55. Cl. 102.
Indianapolis Glove Co., by Indianapolis Glove Co., Inc., Indianapolis, Ind. 330,450. 12(c) pub. 1–3–56. Cl. 39.
Indianapolis Glove Co., Inc.: *See*—
Indianapolis Glove Co.
Industrial Products Co., Philadelphia, Pa. 618,728, pub. 10–4–55. Cl. 44.
Industrial Specialties Co., Kansas City, Mo. 618,670, pub. 10–4–55. Cl. 32.
International Galalithgesellschaft Aktiengesellschaft, Hamburg-Harburg, Germany. 618,403, pub. 10–4–55. Cl. 1.
International Silver Co., to The International Silver Co., Meriden, Conn. 329,753–4, ren. 11–12–55. Cl. 28.
International Silver Co., to The International Silver Co., Meriden, Conn. 329,758, ren. 11–12–55. Cl. 28.
International Silver Co., The: *See*—
International Silver Co.
Ipsen Industries, Inc., Rockford, Ill. 618,673, pub. 10–4–55. Cl. 34.
Ives-Cameron Co. Division of American Home Products Corp.: *See*—
American Home Products Corp.
J. G. Enterprises, Inc., Rochester, N. Y. 618,783. Cl. 12.
Jack, Bill, Scientific Instrument Co., Solana Beach, Calif. 618,707, pub. 10–4–55. Cl. 39.
Jacobson, Mark & Harry, Detroit, Mich. 512,889, canc. Cl. 12.
Jacques, Clemente y Cia, S. A., Mexico City, Mex. 618,807. Cl. 46.
James, Joseph H., d. b. a. James Products Co., Ponca City, Okla. 618,453, pub. 9–27–55. Cl. 6.
James Products Co.: *See*—
James, Joseph H.
Jamestown Metal Products, Inc., Jamestown, N. Y. 618,500, pub. 9–27–55. Cl. 13.
Jefferson Electric Co., Bellwood, Ill. 618,593, pub. 9–27–55. Cl. 21.
Jenkins, George O., Co., Bridgewater, Mass. 618,781. Cl. 1.
Jensen, Georg, Inc., New York, N. Y. 618,409, pub. 9–27–55. Cl. 2.
Jersey State Equipment Co., Newark, N. J. 618,564. Pub. 6–14–55, Cl. 21; pub. 9–27–55, Cl. 23. (Consolidated certificate, Classes 21 and 23.)
Jesson, H. L., Co.: *See*—
Jesson, Herman L.
Jesson, Herman L., d. b. a. H. L. Jesson Co., Los Angeles, Calif. 618,396, pub. 9–27–55. Cl. 1.
Johns-Manville Corp., New York, N. Y. 618,585, pub. 9–27–55. Cl. 21.
Jordan Marsh Co., Boston, Mass. 258,911, canc. Cl. 39.
Josias Mfg. Co., Philadelphia, Pa. 618,507, pub. 10–4–55. Cl. 13.
Juicy Snow, Inc., Los Angeles, Calif. 512,856, canc. Cl. 45.
Juspor Foods, Battle Creek, Mich. 618,738, pub. 10–4–55. Cl. 46.
KBS Mineral Wool Co., Omaha, Nebr. 512,891, canc. Cl. 12.
K & W Promotion Co., Ahoskie, N. C. 618,551, pub. 9–27–55. Cl. 18.
Kaiser Aluminum & Chemical Corp., Oakland, Calif. 618,591, pub. 9–27–55. Cl. 21.
Karpen, S., & Bros., Dyersburg, Tenn. 512,947, canc. Cl. 32.
Kaufmann Department Stores, Inc., The May Department Stores Co., St. Louis, Mo. 230,343. Am. 7(d). Cl. 42.
Kaynee Co., The, Cleveland, Ohio. 512,865, canc. Cl. 39.
Keller Products Inc., Manchester, N. H. 618,487–8, pub. 9–27–55. Cl. 12.
Ken Corp., Newark, N. J., and New York, N. Y. 512,846, canc. Cl. 24.
Kenderessy, John A., Gary, Ind. 618,419, pub. 10–4–55. Cl. 4.
Kennametal Inc., Latrobe, Pa. 618,617, pub. 10–4–55. Cl. 23.
Kent Laboratories: *See*—
Seaney, H. Kent.
Keuffel & Esser Co., Hoboken, N. J. 618,657, pub. 10–4–55. Cl. 26.
Keystone Tool Corp., Houston, Tex. 618,521, pub. 9–27–55. Cl. 13.
Kiekhaefer Corp., Cedarburg, Wis. 618,629, pub. 10–4–55. Cl. 23.
Knothe Brothers Co. Inc.: *See*—
Capper & Capper, Ltd.
Kobler, Paul, Lynbrook, N. Y. 618,788. Cl. 21.
Kropp, John J., d. b. a. Allied Oil Equipment Co., Dallas, Tex. 618,641, pub. 10–4–55. Cl. 26.
Kuno, Inc., Corpus Christi, Tex. 618,773, pub. 10–4–55. Cl. 101.
L. A. Drapery Mfg. Co.: *See*—
Frym, Sam J.
Lady Lynne Lingerie Inc., New York, N. Y. 618,687, pub. 10–4–55. Cl. 39.
Lambert Marketing Co.: *See*—
Holland District Asparagus Growers Association.
Land O'Lakes Creameries, Inc., Minneapolis, Minn. 287,975, 12(c) pub. 1–3–56. Cl. 46.
Lauhoff Grain Co., Danville, Ill. 618,739, pub. 9–20–55. Cl. 46.
Lawrence Products Co., Inc., Attalla, Ala. 512,913, canc. Cl. 42.
Lee, Kenneth L., d. b. a. Bival Laboratory, Olameda, Calif. 618,542, pub. 9–27–55. Cl. 18.
Leitner Equipment Co., Chicago, Ill. 618,672, pub. 10–4–55. Cl. 34.
Levi, Bert, New York, N. Y. 512,977, canc. Cl. 42.
Lewis, Henry, & Co. Inc., New York, N. Y. 512,684, canc. Cl. 42.
Liberty Oil Co., Ltd. Esso Standard Oil Co., New York, N. Y. 148,138. Am. 7(d). Cl. 15.
Lipline, Inc., New York, N. Y. 512,859, canc. Cl. 29.
Loewenstein, Hermann, Inc., New York, N. Y. 618,401, pub. 10–4–55. Cl. 1.
Lohmar, Byron F., Wausau, Wis. 618,513, pub. 9–27–55. Cl. 13.
Lowe Brothers Co., The, Dayton, Ohio. 512,823, canc. Cl. 16.
Luxor Mfg. Co., Detroit, Mich. 618,486, pub. 9–27–55. Cl. 12.
MacDermid Inc., Waterbury, Conn. 618,445, pub. 10–4–55. Cl. 6.
Macon Grocery Co., Macon, Ga. 618,810. Cl. 46.
Macrobiotics, Inc., Brooklyn, N. Y. 512,968, canc. Cl. 38.
Macy, R. H., & Co., Inc., New York, N. Y. 618,708, pub. 10–4–55. Cl. 39.
Maison Mendessolle: *See*—
Rodina Inc.
Many, Blanc & Co., Inc., New York, N. Y. 512,937, canc. Cl. 40.
Marlmark Co.: *See*—
Tenser, Mark.
Marvellum Co., The, Holyoke, Mass. 329,536, ren. 11–5–55. Cl. 37.
Massachusetts Cotton Mills, Lowell, Mass. 72,490, canc. Cl. 42.
Massengill, S. E., Co., The: *See*—
Massengill, Samuel E.
Massengill, Samuel E., d. b. a. The S. E. Massengill Co., to The S. E. Massengill Co., Bristol, Tenn. 330,880, ren. 12–17–55. Cl. 51.
Massey, Thomas J., & Co., Inc., Richmond, Va. 618,776, pub. 10–4–55. Cl. 102.
May Department Stores Co., The: *See*—
Kaufmann Department Stores, Inc.
McCall, Jno., Coal Co., Inc., Baltimore, Md. 618,398–9, pub. 9–27–55. Cl. 1.
McIlhenny Co., New Iberia, La. 285,491. Am. 7(d). Cl. 46.
Meador, Oscar M., d. b. a. Angel Food Ice Cream Co., to Angel Food Ice Cream Corp., Memphis, Tenn. 333,244, ren. 3–10–56. Cl. 46.
Medford Mfg. Co.: *See*—
Mt. Pitt Co., The.
Medical Dairy Specialties, Inc.: *See*—
Brook Hill Farms, Inc.
Medicine Today, Inc., Brooklyn, N. Y. 358,905, canc. Cl. 38.
Melba Packing Co.: *See*—
Cicchetti, P.
Melrose Distillers, Inc.: *See*—
Oldetyme Distillers, Inc.
Melville Shoe Corp., New York, N. Y. 618,695, pub. 10–4–55. Cl. 39.
Mennonite Crusaders, Inc., Harrisonburg, Va. 618,822. Cl. 107.

Mérat, Roger, Maizieres-La-Grande-Paroisse, France. 512,673, canc. Cl. 49.
Mérat, Roger, Maizieres-La-Grande-Paroisse, France. 512,674, canc. Cl. 47.
Meredith Publishing Co., Des Moines, Iowa. 618,797. Cl. 26.
Metalastik Ltd., Leicester, England. 618,560, pub. 9–27–55. Cl. 19.
Meyer Brothers, Paterson, N. J. 512,835, canc. Cl. 16.
Midland Chemical Corp., Dayton, Ohio. 618,461, pub. 10–4–55. Cl. 6.
Mid-States Steel & Wire Co., Crawfordsville, Ind. 618,501, pub. 9–27–55. Cl. 13.
Midwest Electronics Mfg. Corp., San Fernando, Calif. 618,586, pub. 9–27–55. Cl. 21.
Milex Products, Chicago, Ill. 618,550, pub. 9–27–55. Cl. 18.
Miller, George H., Jr.: *See*—
Craftail, Inc.
Mills Industries, Inc., Chicago, Ill. 618,667, pub. 10–4–55. Cl. 31.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn. 618,652, pub. 10–4–55. Cl. 26.
Mirros Medicine Co.: *See*—
Szczepkowski, Miroslaw.
Mittag & Volger, Inc., Park Ridge, N. J. 618,467, pub. 9–27–55. Cl. 11.
Mock, Edward J., d. b. a. Em-Cote, Resinous Products Division, Southern Distributing & Mfg. Co., Miami, Fla. 618,528, pub. 9–27–55. Cl. 16.
Modene Paint Co., Inc., The, Chelsea, Mass. 618,527, pub. 9–27–55. Cl. 16.
Modern-Aire of Hollywood, Inc., Los Angeles, Calif. 512,860, canc. Cl. 39.
Monad Paint & Varnish Co., Philadelphia, Pa. 512,838, canc. Cl. 16.
Monsanto Chemical Co.: *See*—
Detergents, Inc.
Morgan Brothers Co., Pittsburgh, Pa. 618,512, pub. 9–27–55. Cl. 13.
Morrell, John, & Co., Ottumwa, Iowa, Sioux Falls, S. Dak., Mobile, Ala., and Memphis, Tenn., to John Morrell & Co., Ottumwa, Iowa. 108,438, ren. 2–8–56. Cl. 46.
Mt. Pitt Co., The, d. b. a. Medford Mfg. Co., Medford, Oreg. 618,730, pub. 10–4–55. Cl. 44.
N. V. Brouwerij d'Oranjeboom, Rotterdam, Netherlands. 618,753, pub. 10–4–55. Cl. 48.
Nancy Ann Dressed Dolls: *See*—
Nancy Ann Storybook Dolls, Inc.
Nancy Ann Storybook Dolls, Inc., San Francisco, Calif., from Nancy Ann Dressed Dolls. 512,668, canc. Cl. 22.
Nanette Sportswear, Inc., New York, N. Y. 413,146, canc. Cl. 39.
Nation Wide Papers, Inc. Carpenter Paper Co., Omaha, Nebr. 329,520. Am. 7(d). Cl. 37.
National Acme Co., The, Cleveland, Ohio. 618,623, pub. 9–27–55. Cl. 23.
National Acme Co., The, Cleveland, Ohio. 618,627, pub. 10–4–55. Cl. 23.
National Automobile Safety Service Assn., Inc., Thomson, Ga. 618,820. Cl. 100.
National Cash Register Co., The, Dayton, Ohio. 618,653, pub. 10–4–55. Cl. 26.
National Farm Buildings and Supply Co., Lafayette, Ind. 618,471, pub. 10–4–55. Cl. 12.
National Machine Products Co., Detroit, Mich. 401,511. Am. 7(d). Cl. 13.
National Oil Products Co. White Laboratories, Inc., Kenilworth, N. J. 422,349. Am. 7(d). Cl. 52.
National Research Corp., Cambridge, Mass. 618,524, pub. 9–27–55. Cl. 15.
National Ring Traveler Co., Pawtucket, R. I. 618,791. Cl. 23.
Nesco, Division of New York Shipbuilding Corp.: *See*—
New York Shipbuilding Corp.
Neu, Hugo G., d. b. a. Ginseng Products Co., Los Angeles, Calif. 512,829, canc. Cl. 45.
New England Lock and Hardware Co., The, South Norwalk, Conn. 618,634, pub. 9–27–55. Cl. 25.
New Hampshire Gloves, Inc., Littleton, N. H. 512,955, canc. Cl. 39.
New Standard Corp., Mount Joy, Pa. 618,643, pub. 10–4–55. Cl. 26.
New York Air Brake Co., The, New York, N. Y. 618,520, pub. 9–27–55. Cl. 13.
New York Assn. for the Blind, Inc., The, New York, N. Y. 618,664, pub. 10–4–55. Cl. 29.
New York Merchandise Co., Inc., New York, N. Y. 618,801. Cl. 30.
New York Shipbuilding Corp., d. b. a. Nesco, Division of New York Shipbuilding Corp., Milwaukee, Wis. 618,410, pub. 10–4–55. Cl. 2.
Nicewarner Leather Co., Columbus, Ohio. 618,420, pub. 9–27–55. Cl. 5.
Nihon Mishin Seizo Kabushiki Kaisha, Mizuho-ku, Nagoya, Japan. 618,633, pub. 9–27–55. Cl. 24.
Nonnenmann, Oscar, Newcastle, Calif. 618,433–4, pub. 9–27–55. Cl. 6.
Noramex Co., Inc., New York, N. Y. 618,543, pub. 9–27–55. Cl. 18.
Norstar Corp., New York, N. Y. 512,746, canc. Cl. 22.
North American Refractories Co., Cleveland, Ohio. 618,469, pub. 10–4–55. Cl. 12.
Northwest Plastic Industry: *See*—
Anderson, Robert H.
Nu-Maid Confections: *See*—
Ounedian, Jacob B.
Nysco Laboratories, Inc., Long Island City, N. Y. 618,547, pub. 9–27–55. Cl. 18.
O K Van and Storage, El Paso, Tex. 618,778, pub. 10–4–55. Cl. 105.
Okie, F. G., Inc., Philadelphia, Pa. 512,914, canc. Cl. 16.
Oldetyme Distillers, Inc., New York, N. Y., to Melrose Distillers, Inc., Baltimore, Md. 328,573, ren. 10–1–55. Cl. 49.
Omaha Chemical Co., Omaha, Nebr. 618,431, pub. 10–4–55. Cl. 6.
One-Spot Co.: *See*—
Simpson, Willis E.
Onyx Blouse Co., Inc.: *See*—
Goldfarb, Minnie.
Onyx Blouse Co., Inc., New York, N. Y. 429,851, canc. Cl. 39.
Opportunity Publishing Co., Chicago, Ill. 330,120, ren. 11–19–55. Cl. 38.
Optics Mfg. Corp., Chicago, Ill. 618,648, pub. 10–4–55. Cl. 26.
Oriental Foods, Inc., Bell Gardens, Calif. 618,745, pub. 10–4–55. Cl. 46.
Osrow Products Co., Inc., Queens Village, N. Y. 618,663, pub. 10–4–55. Cl. 29.
Osmedian, Jacob B., d. b. a. Nu-Maid Confections, Grand Rapids, Mich. 618,809. Cl. 46.
Overseas Barters, Inc., New York, N. Y. 618,747, pub. 10–4–55. Cl. 46.
Paasche Airbrush Co., Chicago, Ill. 618,626, pub. 10–4–55. Cl. 23.
Pacific Coast Borax Co., Division of Borax Consolidated, Ltd.: *See*—
Borax Consolidated, Ltd.
Pan American Trade Development Corp., of which Cosma Shoe Machinery is a division, New York, N. Y. 618,600, pub. 9–27–55. Cl. 23.
Panaview Door & Window Co., N. Hollywood, Calif. 618,476, pub. 9–27–55. Cl. 12.
Parents' Institute, Inc., The, New York, N. Y. 356,144, canc. Cl. 38.
Parents' Institute, Inc., The, New York, N. Y. 390,708, canc. Cl. 38.
Parents' Institute, Inc., The, New York, N. Y. 410,132, canc. Cl. 38.
Parfen Co., Maryland Heights, Mo. 618,492, pub. 9–27–55. Cl. 12.
Parker, Ira, & Sons Co., Oshkosh, Wis. 332,783, ren. 2–25–56. Cl. 6.
Parker, Webb & Co., Detroit, Mich. 62,458, canc. Cl. 46.
Pass & Seymour, Inc., Syracuse, N. Y. 618,580, pub. 9–27–55. Cl. 21.
Paterson Engineering Co. Ltd., The, London, England. 618,666, pub. 10–4–55. Cl. 31.
Patterson, C. J., Co., Kansas City, Mo. 618,439, pub. 9–27–55. Cl. 6.
Patterson-Sargent Co., The: *See*—
Davies & Meacham.
Pecora Baby Top Products Co., West Hazleton, Pa. 618,734, pub. 10–4–55. Cl. 46.
Peerless Camera Stores, Inc., New York, N. Y. 618,646, pub. 10–4–55. Cl. 26.
Peerless Corp., The, New York, N. Y. 618,574–6, pub. 9–27–55. Cl. 21.
Pen-Rite Corp., The, New York, N. Y. 512,939, canc. Cl. 37.
Perma-Lite Products Corp., Chicago, Ill. 618,474, pub. 9–27–55. Cl. 12.
Pfeiffer Co., The: *See*—
Pfeiffer, S. Mfg. Co.
Pfeiffer, S., Mfg. Co., St. Louis, Mo., now by change of name The Pfeiffer Co. 618,545, pub. 9–27–55. Cl. 18.
Phelan-Faust Paint Mfg. Co., St. Louis, Mo. 618,532, pub. 9–27–55. Cl. 16.
Philco Corp., Philadelphia, Pa. 618,630, pub. 10–4–55. Cl. 24.
Phillips Associates, Inc., St. Paul, Minn. 618,731, pub. 10–4–55. Cl. 44.
Pickwick Co., Cedar Rapids, Iowa. 512,730, canc. Cl. 23.
Pittsburgh Coke & Chemical Co., Pittsburgh, Pa. 618,782. Cl. 6.
Porter-Cable Machine Co., Syracuse, N. Y. 618,619, pub. 9–27–55. Cl. 23.
Porter Chemical Co., The, Hagerstown, Md. 329,187–8, ren. 10–22–55. Cl. 26.
Pratt Food Co., Philadelphia, Pa. 512,952, canc. Cl. 46.
Prebilt Co., The, Chelsea, Mass. 512,953, canc. Cl. 12.
Precision Castparts Co.: *See*—
Cox, Joseph B.
Pre-Vest, Inc., Cleveland, Ohio. 618,400, pub. 10–4–55. Cl. 1.
Price, D. W., Corp., Los Angeles, Calif. 618,505, pub. 10–4–55. Cl. 13.
Princeton Worsted Mills, Inc., Trenton, N. J. 512,982. Cl. 42.
Producer-Cannera' Cooperative, Inc., North Collins, N. Y. 407,253, canc. Cl. 46.
Produits Chimiques Ch. Monnet (Societe Anonyme), Paris, France. 618,447, pub. 10–4–55. Cl. 6.
Propper Mfg. Co., Inc., Long Island City, N. Y. 618,654, pub. 10–4–55. Cl. 26.
Quaker Hosiery Co., Inc., Philadelphia, Pa. 246,639, canc. Cl. 39.
Quaker Lace Co., Philadelphia, Pa. 245,295, canc. Cl. 42.
R & R Farms, Carthage, Mo. 618,815. Cl. 46.
Radiant Mfg. Corp., Chicago, Ill. 618,637, pub. 9–27–55. Cl. 26.
Ranger Chemical Co., Houston, Tex. 618,432, pub. 9–27–55. Cl. 6.
Rauth Farms, Delray Beach, Fla. 618,748, pub. 10–4–55. Cl. 46.
Reed, Maurice J., d. b. a. Claremont Products, Cranford, N. J. 618,669, pub. 10–4–55. Cl. 32.
Refinite Corp., The, Omaha, Nebr. 618,597, pub. 9–27–55. Cl. 23.
Reinhard Brothers Co., Minneapolis, Minn. 512,687, canc. Cl. 34.

Reliance Mfg. Co., New York, N. Y. 618,700, pub. 10–4–55. Cl. 39.
Re-Mark Chemical Co., Inc., Miami, Fla. 618,426, pub. 10–4–55. Cl. 6.
Renwal Mfg. Co., Inc., New York, N. Y. 512,832, canc. Cl. 23.
Repair-A-Dent Co.: *See*—
Thompson, William C.
Republic Electric & Development Co., Seattle, Wash. 618,594, pub. 9–27–55. Cl. 21.
Resistol Hats, Inc.: *See*—
Byer-Rolnick Co.
Ricci, James V., and Charles H. Thom, Jr., New York, N. Y. 512,975, canc. Cl. 38.
Rice, R. B., Sausage Co., Inc., Lee's Summit, Mo. 618,737, pub. 10–4–55. Cl. 46.
Riley, J. M., Fruit Co., Covina, Calif. 204,803, canc. Cl. 46.
Rivella, Bartolomeo: *See*—
Rivella, Francesco.
Rivella, Francesco, d. b. a. Bartolomeo Rivella, Turin, Italy. 618,404, pub. 10–4–55. Cl. 1.
Roach & Musser Co., Muscatine, Iowa. 618,482, pub. 9–27–55. Cl. 12.
Roberts, Bob: *See*—
Roberts, Robert J.
Roberts, Robert J., d. b. a. Bob Roberts, Gary, Ind. 512,703–4, canc. Cl. 22.
Rock-Ola Mfg. Corp., Chicago, Ill. 512,787, canc. Cl. 26.
Rodina Inc., d. b. a. Maison Mendessolle, San Francisco, Calif. 618,762, pub. 10–4–55. Cl. 51.
Rollway Bearing Co., Inc., Syracuse, N. Y. 618,610, pub. 9–27–55. Cl. 23.
Rosenberg, Louis, d. b. a. Weatherscope Syndicated Features, Yonkers, N. Y. 512,965, canc. Cl. 38.
Safeguard Corp., Lansdale, Pa. 512,816, canc. Cl. 23.
Sagner's, A., Son, Baltimore, Md. 618,715, pub. 10–4–55. Cl. 39.
Samann, Julius, Zurich, Switzerland. 618,452, pub. 9–27–55. Cl. 6.
Sams, Howard W., & Co., Inc., Indianapolis, Inc. 618,499, pub. 10–4–55. Cl. 13.
San-Equip, Inc., now by change of name Vega Industries, Inc., Syracuse, N. Y. 618,675, pub. 10–4–55. Cl. 34.
San Francisco Brewing Corp., San Francisco, Calif. 517,624. Am. 7(d). Cl. 48.
Sartorius-Werke Aktiengesellschaft, Gottingen, Germany. 618,799. Cl. 26.
Scheiwer, Albert T., Erie, Pa. 618,786. Cl. 13.
Schenley Distillers, Inc., New York, N. Y. 618,541, pub. 9–27–55. Cl. 18.
Schenley Distillers, Inc., New York, N. Y. 618,548, pub. 9–27–55. Cl. 18.
Schlafhorst, W., & Co., North Rhine, Westphalia, Germany. 618,796. Cl. 23.
Schliff, Connie L., d. b. a. Stikette, Los Angeles, Calif. 618,421, pub. 10–4–55. Cl. 5.
Scholl Mfg. Co., Inc., The, Chicago, Ill. 618,804. Cl. 44.
Schultz Farm Machinery Mfg. Co., Waterloo, Iowa. 618,601, pub. 9–27–55. Cl. 23.
Scofield Marketing Service, The: *See*—
Scofield, Noel P.
Scofield, Noel P., d. b. a. The Scofield Marketing Service, New York, N. Y. 512,942, canc. Cl. 37.
Scott Enterprises: *See*—
Scott, Patricia, Inc.
Scott, O. M., and Sons Co., Marysville, Ohio. 618,456, pub. 9–27–55. Cl. 6.
Scott, Patricia, Inc., d. b. a. Scott Enterprises, New York, N. Y. 618,719, pub. 10–4–55. Cl. 42.
Scovill Mfg. Co., Waterbury, Conn. 618,509, pub. 10–4–55. Cl. 13.
Scovill Mfg. Co., Waterbury, Conn. 618,522, pub. 9–27–55. Cl. 13.
Scully Signal Co., Cambridge, Mass. 618,495, pub. 10–4–55. Cl. 13.
Sea Snack Co., Philadelphia, Pa. 618,746, pub. 10–4–55. Cl. 46.
Seaborn, Robert H., Greenville, N. C. 618,539, pub. 9–27–55. Cl. 18.
Seaney, H. Kent, d. b. a. Kent Laboratories, Highland Park, Ill. 410,562, canc. Cl. 6.
Sears, Ralph J., Anderson, Ind. 512,940, canc. Cl. 45.
Sears, Roebuck and Co., Chicago, Ill. 618,493, pub. 10–4–55. Cl. 12.
Sears, Roebuck and Co., Chicago, Ill. 618,518, pub. 9–27–55. Cl. 13.
Sears, Roebuck and Co., Chicago, Ill. 618,757, pub. 10–4–55. Cl. 50.
Seeman, James, Designs, Inc., Richmond Hills, Queens, N. Y. 618,785. Cl. 12.
Selby Shoe Co., The, Portsmouth, Ohio. 618,693, pub. 10–4–55. Cl. 39.
Self Ease Units Inc., New York, N. Y. 618,503, pub. 9–27–55. Cl. 13.
7 Seas, The, Houston, Tex. 368,186, canc. Cl. 46.
Shapiro, H. B., Miami, Fla. 618,764, pub. 10–4–55. Cl. 51.
Shedd-Bartush Foods, Inc.: *See*—
Wheatley Mayonnaise Co.
Sherwin-Williams Co., The, Cleveland, Ohio. 512,691, canc. Cl. 16.
Sherwin-Williams Co., The, Cleveland, Ohio. 512,826, canc. Cl. 16.
Sierra Electronic Corp., San Carlos, Calif. 618,656, pub. 10–4–55. Cl. 26.
Simpson, Willis E., d. b. a. One-Spot Co., Jessup, Md. 512,961, canc. Cl. 6.
Ski Antics, Inc., Minneapolis, Minn. 618,779, pub. 10–4–55. Cl. 107.
Slide-View Steel Door & Window Co., Los Angeles, Calif. 618,472, pub. 10–4–55. Cl. 12.
Smith, Alfred H., Co., New York, N. Y. 259,124, canc. Cl. 6.
Smith-Blair, Inc., South San Francisco, Calif. 618,510, pub. 9–27–55. Cl. 13.
Smith, Kline & French Laboratories, Philadelphia, Pa. 512,762, canc. Cl. 6.
Smith and Wesson, Inc., Springfield, Mass. 618,465, pub. 9–27–55. Cl. 9.
Societe Anonyme Chocolat Tobler: *See*—
Aktiengesellschaft Chocolat Tobler.
Societe Civile Eca, Meudon-Bellevue, Seine, France. 618,558, pub. 9–27–55. Cl. 19.
Societe Industrielle de Lunetterie, Paris, France. 618,647, pub. 8–30–55. Cl. 26.
Solar Aircraft Co., San Diego, Calif. 512,941, canc. Cl. 26.
Sorse, Porfirio P., d. b. a. Copure Co., Riverside, R. I. 618,765, pub. 10–4–55. Cl. 51.
Speedway Mfg. Co., Cicero, Ill. 618,620, pub. 10–4–55. Cl. 23.
Sperzel Co., Minneapolis, Minn. 618,502, pub. 9–27–55. Cl. 13.
Spica S. P. A., Leghorn, Italy. 618,611, pub. 9–27–55. Cl. 23.
Staerk, Kristian A/S, Copenhagen, Denmark. 618,473, pub. 9–27–55. Cl. 12.
Stamford General Tool Co., Inc., New York, N. Y. 512,963, canc. Cl. 23.
Standard Novelty and Lamp Co., Chicago, Ill. 618,789. Cl. 21.
Standard-Toch Chemicals, Inc., Staten Island, N. Y. 618,530, pub. 9–27–55. Cl. 16.
Staver Co. Inc., The, Bay Shore, N. Y. 618,579, pub. 9–27–55. Cl. 21.
Steinbergs Clothing, Inc., Norwood and Cincinnati, Ohio. 512,795, canc. Cl. 39.
Steinmetz, L. Corp., New York, N. Y. 593,431, canc. Cl. 39.
Steven Candy Kitchens, Inc., Chicago, Ill. 512,964, canc. Cl. 46.
Stikette: *See*—
Schliff, Connie L.
Stonhill & Gillis Ltd., London, England. 440,496, canc. Cl. 38.
Stromberg-Carlson Co., to General Dynamics Corp., Rochester, N. Y. 618,568, pub. 9–27–55. Cl. 21.
Stromberg-Carlson Co., to General Dynamics Corp., Rochester, N. Y. 618,582, pub. 9–27–55. Cl. 21.
Stylon Corp., Long Beach, Calif. 512,843, canc. Cl. 23.
Sudbury Laboratory: *See*—
Atkinson, Herbert J.
Summers, Charles G., & Co. Inc., to The Torsch-Summers Co., Baltimore, Md. 169,488, canc. Cl. 46.
Sun Chemical Corp., Long Island City, N. Y. 618,534, pub. 9–27–55. Cl. 16.
Sun-Green Co., Elmira, N. Y. 512,869, canc. Cl. 6.
Sunray Stove Co., The, Delaware, Ohio. 618,496, pub. 10–4–55. Cl. 13.
Sunset Inc., Chicago, Ill. 512,935–6, canc. Cl. 49.
Surplus Automotive Co., Chicago, Ill. 618,624, pub. 10–4–55. Cl. 23.
Szczepkowski, Miroslaw, d. b. a. Mirros Medicine Co., Chicago, Ill. 618,538, pub. 9–27–55. Cl. 18.
Talon, Inc., Meadville, Pa. 618,519, pub. 9–27–55. Cl. 13.
Taylor Instrument Companies, Rochester, N. Y. 618,658, pub. 10–4–55. Cl. 26.
Taylor, Taylor & Hobson Ltd., Leicester, England. 618,642, pub. 10–4–55. Cl. 26.
Technical Publishing Co., The, to The Hydraulics Pulishing Co., Cleveland, Ohio. 512,966, canc. Cl. 38.
Technicolor Motion Picture Corp., Hollywood, Calif. 345,476. Am. 7(d). Cl. 26.
Telecomics, Inc., New York, N. Y. 427,570, canc. Cl. 26.
Temkin, A., Co.: *See*—
Temkin, Abraham.
Temkin, Abraham, d. b. a. A. Temkin Co., New York, N. Y. 512,827, canc. Cl. 42.
Tenser, Mark, d. b. a. Marimark Co., Los Angeles, Calif. 618,659, pub. 10–4–55. Cl. 26.
Tepiltz, Leo, Zurich, Switzerland. 618,685, pub. 10–4–55. Cl. 39.
Terre Haute Brewing Co., Inc., Terre Haute, Ind. 618,752, pub. 10–4–55. Cl. 48.
Texas Star Flour Mills, Galveston, Tex., to Chinski Trading Corp., New York, N. Y. 512,791, canc. Cl. 46.
Textile Distributors, Inc., Thomasville, N. C., now by change of name Textile Industries, Inc. 618,694, pub. 10–4–55. Cl. 39.
Textile Industries, Inc.: *See*—
Textile Distributors, Inc.
Textron American, Inc.: *See*—
American Woolen Co.
Thom, Charles H., Jr.: *See*—
Ricci, James V., and Thom.
Thomastik, Dr., un Mitarbeiter Offene Handelsgesellschaft, Vienna, Austria. 618,679, pub. 10–4–55. Cl. 36.
Thompson, Marvin R.: *See*—
Thompson, Marvin R., Inc.
Thompson, Marvin R., Inc., Stamford, Conn. 618,535–6, pub. 9–27–55. Cl. 18.
Thompson, Marvin R., Inc., Stamford, to M. R. Thompson, Fairfield, County, Conn. 618,537, pub. 9–27–55. Cl. 18.
Thompson, William C., d. b. a. Repair-A-Dent Co., Los Angeles, Calif. 618,724, pub. 10–4–55. Cl. 44.
Tide Water Associated Oil Co., New York, N. Y. 618,448–51, pub. 9–27–55. Cl. 6.
Tioga Mill & Elevator Co., by Tioga Mills Inc., Waverly, N. Y. 107,111, 12(c) pub. 1–3–56. Cl. 46.
Tioga Mills Inc.: *See*—
Tioga Mill & Elevator Co.
Toidey Co., Gertrude A. Muller, Inc., The, Fort Wayne, Ind. 618,559, pub. 9–27–55. Cl. 19.
Toni Co., The: *See*—
Gillette Co., The.

Top-O-Mart Clothes, Inc., Vineland, N. J. 618,706, pub. 10–4–55. Cl. 39.
Torsch Packing Co., Baltimore, Md. 84,553, canc. Cl. 46.
Torsch-Summers Co.: *See*—
Summer, Charles G., & Co. Inc.
Traders Oil Mill Co., Fort Worth, Tex., to The Buckeye Cotton Oil Co., Cincinnati, Ohio, now by merger The Buckeye Cellulose Corp. 618,540, pub. 9–27–55. Cl. 18.
Trans-Sphere Trading Corp., Mobile, Ala. 618,755, pub. 10,4–55. Cl. 50.
Treesweet Products Co., Santa Ana, Calif. 333,526, ren. 3–24–56. Cl. 46.
Tremco Mfg. Co., The, Cleveland, Ohio. 618,483, pub. 9–27–55. Cl. 12.
Triangle Hosiery Co., High Point, N. C. 618,697, pub. 10–4–55. Cl. 39.
Tryon, Edw. K., Co., Philadelphia, Pa. 512,678, canc. Cl. 22.
Tucker's, Mrs., Foods, Inc., Sherman, Tex. 512,773, canc. Cl. 46.
Tung Oil Products, Inc., Gainesville, Fla. 618,529, pub. 9–27–55. Cl. 16.
Twentieth Century Mfg. Co., Libertyville, Ill. 618,612, pub. 9–27–55. Cl. 23.
Union Asbestos & Rubber Co., Chicago, Ill. 618,676, pub. 10–4–55. Cl. 34.
Union Circulation Co.: *See*—
Union Circulation Co., Inc.
Union Circulation Co., Inc., to Union Circulation Co., New York, N. Y. 618,769, pub. 10–4–55. Cl. 100.
Union Sand and Supply Corp., The, Painesville, Ohio. 618,491, pub. 9–27–55. Cl. 12.
United Paper Co., Tampa, Fla. 618,682, pub. 10–4–55. Cl. 37.
United States Gypsum Co., Chicago, Ill. 618,489, pub. 9–27–55. Cl. 12.
United States Mineral Wool Co., Chicago, Ill. 618,479, pub. 9–27–55. Cl. 12.
United States Movidyn Corp., Chicago, Ill. 618,525, pub. 9–27–55. Cl. 15.
United States Plastic Bandage Co., Buffalo, N. Y. 618,729, pub. 10–4–55. Cl. 44.
United States Rubber Co., New York, N. Y. 618,756, pub. 10–4–55. Cl. 50.
United States Rubber Co., New York, N. Y. 618,780, pub. 9–27–55. Cl. A.
United States Steel Corp., Pittsburgh, Pa. 618,504, pub. 9–27–55. Cl. 13.
Universal Mills, Fort Worth, Tex. 618,744, pub. 10–4–55. Cl. 46.
Univis Lens Co., The, Dayton, Ohio. 512,792–3, canc. Cl. 26.
Valoré Inc., Greenwich, Conn., from I. A. Grannick. 618,758–60, pub. 10–4–55. Cl. 51.
Val-U Dress Shops: *See*—
Greenfield, Samuel F.
Val-U Dress Shops, Inc.: *See*—
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Vamor, Alfred, New York, N. Y. 406,527, canc. Cl. 42.
Vanderbilt Tire & Rubber Corp., New York, N. Y. 618,678, pub. 10–4–55. Cl. 35.
Vandermade, James S., Inc., Paterson, N. J. 618,407, pub. 10–4–55. Cl. 1.
Vanderwall, Ernest H., d. b. a. Ernest H. Vanderwall Co., San Francisco, Calif. 512,697, canc. Cl. 23.
Vanderwall, Ernest H., Co.: *See*—
Vanderwall, Ernest H.
Vega Industries, Inc.: *See*—
San-Equip, Inc.
Veith Chemical Co., Inc., Fresno, Calif. 618,458, pub. 10–4–55. Cl. 6.
Vellumoid Co., The, Worcester, Mass. 618,621, pub. 10–4–55. Cl. 23.
Versenes Inc., Framingham, Mass., to The Dow Chemical Co., Midland, Mich. 618,466, pub. 10–4–55. Cl. 10.
Vinton, Arthur R., Rock Tavern, N. Y. 618,808. Cl. 46.
Virginia Underwear Corp., now by change of name Walker Knitting Co., Inc., Martinsville, Va. 546,186. Am. 7(d). Cl. 39.
Vitalic Battery Co., Inc., Dallas, Tex. 618,578, pub. 9–27–55. Cl. 21.
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Waldon Electronics, Inc., Chicago, Ill. 618,567, pub. 9–27–55. Cl. 21.
Walk Time Inc., Huron, S. Dak. 618,571, pub. 9–27–55. Cl. 21.
Walker Knitting Co., Inc.: *See*—
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Walker, William H.
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Wallace, R., & Sons Mfg. Co., Wallingford, Conn. 618,613, pub. 9–27–55. Cl. 23.
Wampole, Henry K., and Co., Inc., Philadelphia, Pa. 109,301, ren. 3–28–56. Cl. 18.
Wanamaker, John, Philadelphia, Philadelphia, Pa. 258,491, canc. Cl. 39.
Warren Mfg. Co., The, Riegelsville, N. J., and New York, N. Y. 253,196, canc. Cl. 37.
Washington Aluminum Co., Inc., Baltimore, Md. 618,477, pub. 9–27–55. Cl. 12.
Watts Regulator Co., Lawrence, Mass. 618,516, pub. 9–27–55. Cl. 13.
Weatherscope Syndicated Features: *See*—
Rosenberg, Louis.
Westex Boot Co.: *See*—
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Westex Boot & Shoe Co., Wichita Falls, to Westex Boot Co., Vernon, Tex. 618,692, pub. 10–4–55. Cl. 39.
Westfalische Union Aktiengesellschaft fur Eisen- und Drahtindustrie, Hamm, Westphalia, Germany. 618,463, pub. 9–27–55. Cl. 7.
Westinghouse Electric Corp., East Pittsburgh, Pa. 512,875, canc. Cl. 34.
Weston Biscuit Co. Inc., Passaic, N. J. 512,812, canc. Cl. 46.
Wetzler, Max E., Long Island City, N. Y. 618,794. Cl. 23.
Whaley, William E., d. b. a. William E. Whaley Co., Louisville, Ky. 618,770–1, pub. 10–4–55. Cl. 101.
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Wheatley Mayonnaise Co., Louisville, Ky., to Shedd-Bartush Foods, Inc., Detroit, Mich. 332,031, ren. 1–28–56. Cl. 46.
White Laboratories, Inc.: *See*—
National Oil Products Co.
White, Martha, Mills, Inc., Nashville, Tenn. 618,741, pub. 10–4–55. Cl. 46.
White River Paper Mills, Inc., Indianapolis, Ind. 378,115, canc. Cl. 50.
Whiteside, Richard H., d. b. a. The Aqua-Sun Mfg. Co., Corcoran, Calif. 618,668, pub. 10–4–55. Cl. 32.
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Willard's Chocolates Ltd.
Willard's Chocolates Ltd. to Willards Chocolate Co. Ltd., Toronto, Canada. 225,640, new cert. Cl. 46.
Willen Drug Co.: *See*—
Eisenberg, Harry.
Williams Oil-O-Matic Heating Corp., Bloomington, Ill., by Henney Motor Co., Inc., New York, N. Y. 331,365, 12(c) pub. 1–3–56. Cl. 34.
Wilmac Recorders, Pasadena, Calif. 618,680, pub. 10–4–55. Cl. 36.
Wilson, Fred A., Co., Birmingham, Mich. 618,470, pub. 9–27–55. Cl. 12.
Winchester Toy Co.: *See*—
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Winston and Newell Co., d. b. a. Chas. Hewitt & Sons Co., Wilmington, Del., and Minneapolis, Minn. 512,789, canc. Cl. 46.
Wire and Steel Products Co., Inc., The, Brooklyn, N. Y. 618,606, pub. 9–27–55. Cl. 23.
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Wohl Shoe Co., St. Louis, Mo. 333,576, ren. 3–24–56. Cl. 39.
Wood, Fay, Corp., New Rochelle, N. Y. 618,818–19. Cl. 51.
Woodward, Baldwin & Co. Inc., New York, N. Y. 618,721, pub. 10–4–55. Cl. 42.
Worldsbest Industries, Inc., Cudahy, Wis. 618,631, pub. 10–4–55. Cl. 24.
Worthington Mower Co., Stroudsburg, Pa. 512,749, canc. Cl. 23.
Wyler Watch Agency, Inc., New York, N. Y. 618,661, pub. 10–4–55. Cl. 27.
Yelvington, C. D., Holly Hill, Fla. 328,551, ren. 10–1–55. Cl. 18.
Young's Merchandising Corp., New York, N. Y. 330,082, 12(c) pub. 1–3–56. Cl. 39.
Zurn, J. A., Mfg. Co., Erie, Pa. 618,787. Cl. 13.

U. S. GOVERNMENT PRINTING OFFICE: 0—1955

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January 10, 1956 Volume 702 Number 2

PATENTS

NOTICES

Disclaimer

2,648,353.—*Lionel Hascorth*, Littleover, England. DUCT STRUCTURE FOR GAS-TURBINE ENGINES. Patent dated Aug. 11, 1953. Disclaimer filed Dec. 12, 1955, by the assignee, *Rolls-Royce Limited*.

Hereby enters this disclaimer to claims 1, 2, 3, 5, 6, 7, 8, 10, 11, 12, 15, and 17 of said patent.

New Applications Received During November 1955

Patents	6,116
Designs	442
Plants	15
Reissues	13
Total	6,586

Issue

Patents	900	No. 2,729,818 to No. 2,730,717, incl.
Designs	71	No. 176,581 to No. 176,651, incl.
Reissues	4	No. 24,106 to No. 24,109, incl.
Total	975	

CONDITION OF PATENT APPLICATIONS AS OF NOVEMBER 30, 1955

Total number of pending applications (excluding Designs)	220,996
Total number of pending Design applications	7,046
Total number of applications awaiting action (excluding Designs)	135,527
Total number of Design applications awaiting action	3,108
Date of oldest new application	July 20, 1954
Date of oldest amended application	Sept. 28, 1953

ROSA, M. C., Executive Examiner

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 48, 51, 54, 69, 70.
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 18, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	12-14-54	1-28-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	5-2-55	11-15-54
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	3-2-55	12-14-53
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	3-3-55	2-11-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	2-2-55	5-20-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic, Amides, Amines, General Organic Processes	1-12-55	4-2-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	3-7-55	12-14-53
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	11-26-54	4-14-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	2-24-55	3-22-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	3-17-55	6-4-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	2-14-55	11-6-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	2-14-55	2-10-54
14. (III) MANIAN, J. C., (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire, Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	1-27-55	3-8-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	3-1-55	3-30-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	12-23-54	1-5-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	3-4-55	6-4-54
18. (VI) KURZ, J. A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	12-7-54	1-7-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	3-8-55	4-16-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	3-21-55	4-22-54
21. (III) MADER, R. C., Textiles	3-8-55	3-22-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	3-2-55	3-11-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	8-17-54	9-30-53
24. (III) DRACOPOULOS, P. T., (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	2-2-55	10-4-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	3-3-55	3-1-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	4-12-55	10-11-54
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	2-24-55	7-21-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	2-15-55	5-14-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	2-4-55	7-15-54
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	4-28-55	7-2-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	1-12-55	6-1-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	3-18-55	9-13-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	3-1-55	1-29-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	2-21-55	2-18-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	3-1-55	5-20-54
36. (V) McFADYEN, A. D., Measuring and Testing	1-24-55	11-10-54
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	1-25-55	5-24-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g. Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	2-17-55	6-6-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	3-9-55	4-2-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	2-23-55	5-3-54
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	9-13-54	11-20-53
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	12-1-54	5-19-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilising and Disinfecting (except Wood Treatment Apparatus)	3-8-55	1-25-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	2-10-55	11-3-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	3-14-55	8-17-54
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	11-19-54	1-7-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	1-25-55	8-2-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	3-17-55	4-7-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	2-21-55	2-17-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	2-25-55	4-21-54
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54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	1-6-55	2-8-54
55. (VII) KLINE, J. R., Surgery; Dentistry: Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	11-1-54	2-10-54
56. (I) KEELY, J. E., (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	2-14-55	5-5-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	4-29-55	6-18-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	3-9-55	2-4-54
59. (I) HENKIN, B., (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	3-2-55	3-5-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	2-15-55	8-9-54
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	2-14-55	7-30-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	1-31-55	1-15-54
64. (I) GORECKI, C. A., Fuels; Miscellaneous Compositions	3-14-55	2-23-54
66. (V) LISANN, I., Geometric Instruments; Automatic Weighing Scales; Acoustics	2-11-55	3-15-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	1-26-55	10-4-54
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	2-2-55	11-19-53
70. (II) BREWRINK, J. L., Explosive Weapons, Ammunition, Charges and Composition; Explosive Charge Manufacturing; Jet Motor Processes; Torpedoes; Radar; Sonar; Automatic Pilots; Antennas; Actinide Series (e. g. Fissionable) Compounds; Irradiation Chemistry; Mass Spectrometers	7-20-54	9-28-53
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The following divisions have been abolished: 10, 44, 46, 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during January 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1953*.

Patents	Numbers 2,142,080 to 2,145,843, inclusive
Plant Patents	Numbers 307 to 312, inclusive

DECISIONS IN PATENT CASES

United States Court of Appeals
Seventh Circuit

THE WEATHERHEAD COMPANY ET AL. v. DRILLMASTER SUPPLY COMPANY ET AL.

No. 11408. Decided October 28, 1955

[— F.2d —; 107 USPQ 184]

1. DOUBLE PATENTING—TESTS OF VALIDITY.
"It is clear • • • that copending applications on which patents are granted to the same inventor must pass two tests of validity. They must constitute invention over the prior art, and they must be 'different' from each other in order to avoid double patenting. If double patenting is found, the later of the two patents is invalid."

2. SAME—APPLICABILITY OF TERM.
"It is to be understood that the term 'double patenting' should apply only to copending applications upon which patents have been granted to the same inventor."

3. SAME—TEST FOR.
"Copending applications are not prior art as to each other, but this means only that, when the applications were made by the same inventor and the doctrine of double patenting applies, the later patent need not show an inventive advance over what was disclosed but not claimed in the earlier patent. When determining whether or not double patenting exists only the claims are compared, and the claim of the later patent must show an invention beyond the claim of the first."

4. SAME—REASON FOR PROHIBITING.
"The principal reason for prohibiting double patenting, is to prevent inventors from getting more than the seventeen year monopoly on one invention. An extension of monopoly is only justified by the presence of invention which grants the second application as much dignity as the first."

5. PARTICULAR PATENTS—KREIDEL PATENT NO. 2,171,217—VALIDITY.
Judgment of the District Court holding invalid Patent No. 2,171,217 to Kreidel for a metal packing ring, affirmed.

APPEAL from District Court for Southern District of Indiana, STECKLER, *Chief Judge*.

AFFIRMED.

F. O. Richey and *George N. Hibben* for The Weatherhead Company et al.

No appearance for Drillmaster Supply Company et al.

Before FINNEGAN, SWAIM and SCHNACKENBERG, *Circuit Judges*

SWAIM, *Circuit Judge*:

The plaintiffs-appellants are the assignees of two patents: one, No. 2,139,413, issued December 6, 1938, on a joint for pipe connections, and the other, No. 2,171,217, issued August 29, 1939, on a metal packing ring for use with, as a part of, such a joint for pipe connections as was described in the first patent. Plaintiffs brought this action for infringement of both patents. The trial court held that Patent No. 2,139,413 (hereafter referred to as 413) was valid and infringed, and that Patent No. 2,171,217 (hereafter referred to as 217) was invalid for lack of invention, in that it did not show invention beyond patent 413 which was first issued: that the particular ring disclosed and claimed in patent 217 was within the skill and would have been obvious to a person having ordinary skill in the art.

Both patents were applied for by and issued to the same man, Hans Kreidel, and the applications therefor were copending for several months in the Patent Office.

Before Kreidel's basic invention, covered by patent 413, the problem of how to join pipes that were to withstand high pressures had not been satisfactorily solved. The most common methods involved cutting threads in the pipe which, of course, reduced the thickness of the pipe where they were cut and thereby lessened the ability of the pipe to carry loads under high pressures. If threads are cut in a pipe that is to carry high pressures, the extra thickness of the rest of the pipe is wasted. Kreidel was the first to develop a joining device that would not weaken the pipe and yet would hold the joint together under high pressures.

Kreidel's invention, as disclosed in his first patent, 413, holds the pipe in place by means of a metal packing ring which fits around the pipe, and has a forward cutting edge which is forced down until it cuts into the pipe raising a small burr and holding the pipe securely so that it cannot slip backwards. The cutting does not weaken the pipe because the cutting edge remains pressed firmly in the grooves cut in the pipe, taking the place of the metal of the pipe which has been displaced.

The joint has three parts: (1) the tubular connecting piece with a funnel-shaped mouth flaring outwardly into which the pipe is placed, (2) the packing ring which holds the pipe against the tubular connecting piece by cutting into it, and (3) a nut which screws onto the connecting piece and presses the packing ring so that its forward edge passes inside the flared end of the connecting piece and is then squeezed down into the pipe as the nut pushes it farther forward. As the nut is tightened, the packing ring is pushed farther into the flared end of the connecting piece where it becomes smaller and smaller until it cuts into the pipe and thereby holds it firmly against the shoulder of the connecting piece.

The metal of which the packing ring should be made is not specified in patent 413, which says only that the ring should be "• • • of material sufficiently hard to shear [cut] said tube [pipe] and being sufficiently ductile to be radially contracted to an internal diameter substantially less than the external diameter of said tube • • •"

Appellants' patent 217 describes an "improved" metal packing ring for used with the type of pipe joint disclosed in patent 413. Patent 217 describes a packing ring identical in structure and operation to that disclosed in patent 413. The only claims in 217 not in 413 are that the ring should be made of low carbon steel which has been surface hardened by means of a potassium cyanide bath. This will provide a hardened surface portion to provide cutting edges for cutting into the pipe and a relatively soft core that can be deformed enough to bring the hard cutting edge in contact with the pipe. Patent 217 also claims the idea of coating certain surfaces of the ring with cadmium so that it will slide more easily when the ring is being forced into the funnel end of the connecting piece.

The appellants argue that the packing ring claimed in 217 is different in form from that claimed in 413. They insist that 413 claims only a ring with a plurality of cutting edges and that 217 claims only a single cutting edge. An examination of the patents shows that they both claim a ring with either a single or a plurality of cutting edges. Claim 8 of patent 413 claims, "• • • a sleeve having an annular part with *an* edge sufficiently hard to cut into the tube • • •." (Our emphasis.) This language by itself clearly claims a single edged ring, and when illustrated by Figures 1, 2 and 3 of the drawings filed with the application, there can be no doubt. The first claim in patent 217 claims a "• • • packing ring for use with tube couplings of a type described • • •." In the description in patent 217 this paragraph appears:

"In the drawing, two embodiments of the invention are shown and in each a packing ring is provided with only one cutting edge for purposes of illustration."

Nothing more need be said on this subject. The only difference in claim in the second application is that a specific metal is named which has the general qualities that the first application specified (i. e., "• • • of material sufficiently hard to shear said tube and being sufficiently ductile to be radially contracted • • •."— taken from claim 11 of patent 413).

The trial court held that 217 does not disclose invention over 413, and that the specific ring disclosed in claim 12 of patent 413 was within the skill of and would have been obvious at the time of the invention claimed in patent 217 to any mechanic skilled in this art. However, the appellants argue that, because the two patents were copending, 413 is not part of the prior art as far as 217 is concerned, and that, therefore, 217 need not disclose or claim an invention over 413. They cite several old cases (*Pyle National Co.* v. *Lewin*, 7 Cir., 92 F.2d 628, 35 USPQ 40; *Traitel Marble Co.* v. *U. T. Hungerford Brass & Copper Co.*, 2 Cir., 22 F.2d 259) that appear to support their position and ignore a large number of more recent cases that seem to be against them. This may be partially explained by the fact that the decisions concerning copending applications and double patenting seem to contain some conflicting statements as to the rules and their proper application. [1] It is clear, however, that copending applications on which patents are granted to the same inventor must pass two tests of validity. They must constitute invention over the prior art, and they must be "different" from each other in order to avoid double patenting. If double patenting is found, the later of the two patents is invalid.

It was early held that one copending patent was not prior art as to the other, and that the later of the two did not have to show invention over the earlier. *Traitel Marble Co.* v. *U. T. Hungerford Brass & Copper Co.*, 2 Cir., 22 F.2d 259. In that case the patents were granted to the same inventor. The court, in an opinion by Judge Learned Hand, held that the inventor did not have to show a difference between the two amounting to invention in order to avoid double patenting. In *Western States Machine Co.* v. *S. S. Hepworth Co.*, 2 Cir., 147 F.2d 345, 64 USPQ 141, with Judge Hand again speaking for the court, it was held that an earlier copending patent *was* part of the prior art and that the later patent must demonstrate invention beyond the first. Logically, this holding would obviate the defense of double patenting since an improvement sufficient to embody invention would necessarily be different enough to rule out double patenting.

In *Old Town Ribbon & Carbon Co.* v. *Columbia R. & C. Mfg. Co.*, 2 Cir., 159 F.2d 379, 72 USPQ 57, the same court, in an opinion by the same judge, held that the first of copending patents was *not* prior art as to the others, and that it could be shown to prove a prior inventor but not to show the state of the art for the purpose of determining whether the second patent disclosed invention. This is the position taken in most modern cases in the Courts of Appeals. *B. F. Sturtevant Co.* v. *Massachusetts Hair & Felt Co.*, 1 Cir., 122 F.2d 900, 913, 51 USPQ 198, 211; *Sherwin-Williams Co.* v. *Marzall*, D. C. Cir., 190 F.2d 606, 89 USPQ 208.

Strangely enough, however, a different rule of law developed in the Court of Customs and Patent Appeals. In *In re Sherman*, CCPA, 121 F.2d 527, 50 USPQ 142, a case decided a few months before the Sturtevant case, supra, the court in dealing with two patents held by the same inventor said: "• • • even though the two applications were copending, when appellant takes out a patent on one of the applications it is well settled that the patent may be cited as showing what appellant has already received in the way of patent claims. This, of course, means that the second independent application must disclose invention over and above the claims of the first." 121 F.2d at page 529, 50 USPQ at 144. We do not see how this case can be read as holding anything other than that the "difference" necessary to avoid double patenting must be great enough, and of the type necessary, to embody the familiar concept of invention. [2] It is to be understood that the term "double patenting" should apply only to copending applications upon which patents have been granted to the same inventor. Hoar, Patent Tactics and Law, 130 (revised ed. 1940). This is not an isolated case; the Court of Customs and Patent Appeals has been holding this for some time. *In re Christmann*, CCPA, 128 F.2d 596, 53 USPQ 634; *In re Copeman*, CCPA, 135 F.2d 349 57 USPQ 312; *Application of Loiseleur*, CCPA, 158 F.2d 309, 72 USPQ 110; *Application of Bigelow*, CCPA, 194 F.2d 550, 93 USPQ 17. Contrast the United States Court of Customs and Patent Appeals' treatment of double patenting in the above cases with a typical Court of Appeals' treatment in *Jordan* v. *Hemphill Co.*, 4 Cir., 180 F.2d 457, 84 USPQ 398. [3] The Court of Customs and Patent Appeals, however, has continued to hold that copending applications are not prior art as to each other, but this means only that, when the applications were made by the same inventor and the doctrine of double patenting applies, the later patent need not show an inventive advance over what was disclosed but not claimed in the earlier patent. When determining whether or not double patenting exists only the claims are compared, and the claim of the later patent must show an invention beyond the claim of the first.

The test for double patenting adopted by the Court of Customs and Patent Appeals seems to us to be the correct one. [4] The principal reason for prohibiting double patenting, is to prevent inventors from getting more than the seventeen year monopoly on one invention. An extension of monopoly is only justified by the presence of invention which grants the second application as much dignity as the first. In the instant case, for example, the appellants have absolutely nothing to

gain by patent 217 except an extension of their monopoly by almost one year. No one could manufacture the device claimed in 217 without infringing 413. *Application of Coleman*, CCPA, 189 F.2d 976, 979, 90 USPQ 100, 103. The later patent is not at all necessary to protect the packing ring described therein whether made out of surface hardened, low carbon steel or anything else.

We agree with the finding of the master adopted by the District Court, that Patent No. 2,171,217 does not embody invention over Patent No. 2,139,413. Therefore, under the test we have adopted, the appellants are guilty of double patenting and their second patent (No. 2,171,217) is invalid.

[5] The judgment of the District Court is affirmed. AFFIRMED.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

2,116,964, B. Ridgeway, Transmission, **filed** Apr. 29, 1953, D. C., E. D. Mo. (St. Louis), Doc. 9179(1), *Ridgeway Automatic Transmission Co. v. General Motors Corp.* Judgment favor defendant Oct. 21, 1955.

2,120,007, B. Gruskin, Therapeutic agent for use in the treatment of infection, suit for Declaratory Judgment filed Apr. 1, 1952, D. C., S. D. N. Y., Doc. 74/247, *Wenet Dental Mfg. Co., Inc. et al. v. Rystan Co., Inc.* (Block Drug. Co., Inc. included as plaintiff Aug. 7, 1952). Stipulation and order of dismissal Nov. 1, 1955.

2,123,803. (See 2,169,769.)

2,134,656, M. Breth, Cloth unwinder; **2,220,230**, H. W. Gilbert, Unwinding machine; **2,276,479**, same, Cloth feeding device for unwinding and laying up machines, **filed** Dec. 6, 1949, D. C., S. D. N. Y., Doc. 54/145, *Cutting Room Appliances Corp. v. Klapper Sewing Machine Co. et al.* Stipulation and order of dismissal Oct. 21, 1955.

2,169,769, **2,123,803**, W. F. Regenhardt, Cabinet construction; **2,304,020**, same, Interlock for steel files; **2,386,343**, same, Interlock; **2,344,168**, same, Filing cabinet; **2,256,352**, H. W. Regenhardt, Drawer follower, **filed** May 30, 1950, D. C., N. D. Ohio (Cleveland), Doc. 27396, *Diebold, Inc. et al. v. Record Files, Inc.* (Patent No. **2,344,168** included by amendment Oct. 27, 1954). Claim 2 of Patent 2,123,803, claim 1 of Patent 2,386,343, claims 8 and 16 of Patent 2,256,352, claim 16 of Patent 2,304,020, and claim 1 of Patent 2,344,168 held invalid; "first cause of action" of complaint and defendant's counterclaim dismissed; injunction to issue; Patent 2,169,769 withdrawn by plaintiff during trial Oct. 21, 1955.

2,177,627, R. G. Drew, Adhesive sheeting, **filed** Oct. 18, 1955, D. C., S. D. N. Y., Doc. 104/143, *Minnesota Mining and Mfg. Co. v. Vernon Chemical & Mfg. Corp. et al.*

2,201,068, G. Wintritz, Manufacture of slide fasteners; **2,318,445**, same, Method and apparatus for making die rolls; **2,338,884**, F. Ulrich, Apparatus for making slide fasteners; **2,352,141**, same, Die roll and method of making the same; **2,370,380**, same, Machine and method for making slide fasteners, **filed** Oct. 31, 1951, D. C., S. D. N. Y., Doc. 70/340, *Conmar Products Corp. v. Seal Fastener Corp.* Order of discontinuance Oct. 28, 1955.

2,220,230. (See 2,134,656.)

2,237,567, E. H. Land, Light polarizer and process of manufacturing the same; **2,454,515**, same, Light-polarizing sheet of molecularly oriented transparent linear high polymer dyed with dichroic substance, etc.; **2,238,219**, E. V. Fineran, Temperature controlling device, **filed** Aug. 7, 1953, D. C. Mass. (Boston), Doc. 53/797–S, *Polaroid Corp. v. Loew's Inc.* Consent order of dismissal without prejudice Dec. 4, 1953.

2,238,219. (See 2,237,567.)

2,256,352. (See 2,169,769.)

2,259,400, R. C. Switzer, Flaw detection; **2,405,078**, R. A. Ward, Method and compositions for locating surface discontinuities, **filed** Mar. 24, 1954, D. C., S. D. Calif. (Los Angeles), Doc. 16554–HW, *Switzer Brothers, Inc. et al. v. Lubrication Company of America et al.* Consent judgment: Patents 2,259,400 and 2,405,078 held valid; defendants have infringed claims 16–24 of Patent 2,405,078 and contributed to infringement of both patents; injunction restraining defendants (notice Oct. 18, 1955).

2,268,537. (See 2,574,971.)

2,276,479. (See 2,134,656.)

2,278,383, P. Rosenblatt, Display device, **filed** Apr. 29, 1955, D. C., S. D. N. Y., Doc. 100/203, *Alb, Inc. v. Noma Electric Corp. and Noma Lite's Inc.* (Noma Electric Corp. withdrawn pursuant to amended complaint May 5, 1955). Judgment dismissing amended complaint on merits Oct. 19, 1955.

2,282,292, Amy and Aceves, All wave radio receiving system; **2,422,458**, same, Filter device for antenna systems; **2,611,066**, same, Antenna system; **2,465,331**, J. Y. Resnick, Television receiving antenna, **filed** Sept. 15, 1952, D..C., S. D. N. Y., Doc. 78/332, *Channel Master Corp. v. Amy, Aceves & King, Inc. et al.* Stipulation and order of dismissal (notice Oct. 19, 1955).

2,302,690. (See Re. 22,260.)

2,304,020. (See 2,169,769.)

2,318,445. (See 2,201,068.)

2,323,852, Seidel and Lownes, Device for opening and emptying cartons, **filed** Oct. 14, 1955, D. C., N. D. Ohio (Cleveland), Doc. 32186, *A-B-C Packaging Machine Corp. et al. v. Carling Brewing Co., Inc.*

2,331,317. (See Re. 22,260.)

2,338,884. (See 2,201,068.)

2,342,257. (See Re. 22,260.)

2,344,168. (See 2,169,769.)

2,352,141. (See 2,201,068.)

2,354,857, J. A. Gits et al., Molded indicia-bearing product and method of making the same, **filed** June 10, 1952, D. C., S. D. N. Y., Doc. 76/184, *Joseph A. Gits et al. v. Jamison Plastic Corp. et al.* Order of discontinuance (notice Oct. 28, 1955).

2,370,380. (See 2,201,068.)

2,386,343. (See 2,169,769.)

2,465,597, C. A. Hillgren, Door lock; **2,489,160**, Schoepe and Lord, Door knob and method of making the same, **appeal** filed C. C. A., 9th Cir., Doc. 13060, *Kwikset Locks, Inc. et al. v. Carl A. Hillgren* and *Carl A. Hillgren v. Kwikset Locks, Inc. et al.* Reversed as to each judgment Feb. 3, 1954. Same, **filed** Feb. 6, 1950, D. C., S. D. Calif. (Los Angeles), Doc. 11056–HW, *Carl A. Hillgren v. Kwikset Locks, Inc. et al.* Judgment pursuant to Mandate of C. C. A.; Patent 2,403,597 held invalid as to claims 1 and 2; Patent 2,489,160 held valid but not infringed by plaintiff; complaint and counterclaim dismissed (notice Oct. 18, 1955).

2,465,078. (See 2,259,400.)

2,422,458. (See 2,282,292.)

2,426,602. (See Re. 22,260.)

2,454,515. (See 2,237,567.)

2,461,464, R. Aronstein, Filter for fluorescent screens, **filed** Feb. 7, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 15222, *Transmirra Products Corp. et al. v. Olympic Radio & Television Inc.* Order of dismissal Oct. 26, 1955.

2,462,019, W. W. Bowman, Beverage dispenser, **filed** Oct. 20, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c1869, *Rowe Spacarb, Inc. v. Cole Products Corp.*

2,465,331. (See 2,282,292.)

2,478,901. (See Re. 22,260.)

2,489,160. (See 2,403,597.)

2,488,969, W. Wentworth, Spectacle sweat bar, **filed** Dec. 14, 1951, D. C., S. D. N. Y., Doc. 72/3, *Welsh Mfg. Co. v. Sunwave Products, Inc.* Single claim of patent held invalid; action dismissed Oct. 18, 1955.

2,515,817, K. C. Augenstein, Expansion bracelet; **Des. 165,356**, same, Expansible chain for a bracelet or similar article, **filed** Oct. 6, 1954, D. C. N. J. (Newark), Doc. 793/54, *Speidel Corp. v. Chambers Mfg. Co. et al.* Consent judgment for injunction Nov. 1, 1955.

2,557,627, S. J. Baril, Plural garment hanger, **filed** June 2, 1953, D. C., S. D. N. Y., Doc. 85/251, *Hobar, Inc. v. Berkeley Industries.* Stipulation and order of dismissal Oct. 21, 1955.

2,561,270, **2,564,755**, P. W. Felt, Liquefied petroleum gas lighter; **2,571,435**, A. L. Flamm, Gas fueled cigar lighter, **filed** Dec. 31, 1951, D. C., S. D. N. Y., Doc. 72/133, *Ronson Art Metal Works, Inc. v. Brown & Bigelow Inc.* (Patent **2,564,755** included by supplemental complaint June 11, 1952). Order of discontinuance Oct. 28, 1955.

2,571,435. (See 2,561,270.)

2,574,971 (a), H. Heltzer, Highway marking paint containing glass beads; **2,268,537**, L. Shuger, Road marker, **filed** May 27, 1953, D. C. Md. (Baltimore), Doc. 6633, *Minnesota Mining & Mfg. Co. v. Baltimore Paint & Color Works.* (Patent No. **2,268,537** included by counterclaim June 16, 1953.) Claims 1 and 2 of the Heltzer patent held valid and infringer; claim 1 of the Shuger patent held valid and claims 2 and 3 held invalid; the Heltzer patent does not infringe the Shuger patent (notice Oct. 20, 1955).

2,574,971 (b), H. Heltzer, Highway marking paint containing glass beads, **appeal** filed Aug. 15, 1955, C. C. A., 4th Cir., Doc. 7074, *Albert A. Shuger et al. v. Minnesota Mining & Mfg. Co.*

2,581,169, K. C. Bugg, Tobacco pipe; **Des. 142,280**, same, Smoker's pipe, **filed** Feb. 9, 1955, D. C., S. D. N. Y., Doc. 98/338, *Falcon Industries, Inc. et al. v. Marxman Pipes, Inc. et al.* Stipulation and judgment for injunction (notice Oct. 25, 1955).

2,586,436, P. Planer, Wide angle oblique projection system, **filed** Nov. 2, 1955, D. C., S. D. N. Y., Doc. 104/308, *Katherine Planer, as administratrix for Paul Planer v. Century Lighting, Inc.*

2,564,755. (See 2,561,270.)

2,599,999, W. L. George, Check stand for grocery stores, **filed** Oct. 20, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18910–C, *Wm. T. Alvarado Sales Co. et al. v. Check-A-Matic Co. et al.*

2,611,066. (See 2,282,292.)

2,632,165, B. Murdock, Girdle construction, **filed** Oct. 20, 1955, D. C. N. J. (Newark), Doc. 950/55, *Fortuna Foundations, Inc. et al. v. Fleznit Co., Inc.*

2,634,777, B. S. Berger, Pass case, **filed** Mar. 29, 1954, D. C., S. D. N. Y., Doc. 92/115, *Philip Florin, Inc. v. Winston Leather Products Inc.* Stipulation and order of discontinuance Oct. 25, 1955.

2,657,564, G. C. Graham, Washing machine having flexible extractor and automatic control, **filed** Oct. 24, 1955, D. C., S. D. N. Y., Doc. 104/203, *Graham & Barker v. Avco Mfg. Corp. et al.*

2,664,045, G. N. Rullo, Inking mechanism for printer slotter-multicolor rolls, **filed** Nov. 2, 1955, D. C., S. D. N. Y., Doc. 104/311, *S & S Corrugated Paper Machinery Co. Inc. v. Universal Corrugated Box Machinery Corp.*

2,667,653, A. L. Le Febvre, Combined mop and wringer, **filed** Oct. 17, 1955, D. C. Mass. (Boston), Doc. 55/931–F, *The Fuller Brush Co. et al. v. Frederick V. Fowler et al.*

2,674,963, A. Guide, Spiral seam producing mechanism for sewing machines, **filed** Oct. 31, 1955, D. C., S. D. N. Y., Doc. 104/279, *Anthony Guide v. Exquisite Form Brassiere, Inc.*

2,678,265, A. Schwerdle, Weed control, **filed** Nov. 2, 1955, D. C. N. J. (Camden), Doc. 1036/55, *W. A. Cleary Corp. et al. v. Vineland Chemical Co.*

2,686,322, Blanke and Sands, Five-way type of bed assembly, **filed** Oct. 24, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 15994, *The Harvard Mfg. Co. v. Adler's Bed Spring Corp.* Same, D. C., N. D. Ohio (Cleveland), Doc. 32200, *The Harvard Mfg. Co. v. National Mfg. Co.* Same, **filed** Oct. 25, 1955, D. C., N. D. Ohio (Cleveland), Doc. 32201, *The Harvard Mfg. Co. v. Mantua Mfg. Co.*

2,694,656, M. Camras, Magnetic impulse record member, magnetic material and method of making magnetic material, **filed** May 12, 1955, D. C., S. D. N. Y., Doc. 100/324, *Technical Tape Corp. v. Minnesota Mining & Mfg. Co.* Order and judgment dismissing complaint (notice Oct. 31, 1955).

2,699,054, L. H. Conover, Tetracycline, **filed** Oct. 28, 1955, D. C., S. D. N. Y., Doc. 104/268 (originally filed Jan. 11, 1955, D. C., N. D. Ga. (Atlanta), Doc. 5084), *Chas. Pfizer & Co., Inc. v. Bristol Laboratories, Inc.* Same, Doc. 104/267 (originally filed Jan. 11, 1955, D. C., N. D. Ga. (Atlanta), Doc. 5082), *Chas. Pfizer & Co. v. Olin Mathieson Chemical Corp.* Same, Doc. 104/266 (originally filed Jan. 11, 1955, D. C., N. D. Ga. (Atlanta), Doc. 5083), *Chas. Pfizer & Co., Inc. v. The Upjohn Co.*

2,699,817, J. Adler et al., Folding high chair, **filed** Oct. 28, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18935–PH, *Trenton Industries, Inc. v. A. E. Peterson Mfg. Co.*

2,711,714, L. G. Timeus, Aquarium feeding device, **filed** Aug. 19, 1955, D. C., S. D. N. Y., Doc. 103/33, *Saxon Plastics Corp. v. Lawrence G. Timeus.* Patent held invalid; motion for summary judgment granted Nov. 3, 1955.

2,717,282, F. J. Reed, Equipment for use with magnetic tape records; **2,719,884**, Reed and Bobb, same, **filed** Oct. 17, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c1791, *International Electrics Co. et al. v. Webster-Chicago Corp.*

2,718,208, G. E. Tanner, Fluid controlled vacuum cut-off for milking machine teat cups, **filed** Oct. 27, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18934–T, *Babson Bros. Co. v. V. S. Goleman Co. et al.*

2,718,234, B. J. Blumberg, Hygroscopic air escape valve, **filed** Oct. 21, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 15988, *Benjamin J. Blumberg et al. v. Mortimer Reiss et al.*

2,718,677, G. W. Cornell, Threshold and door sealing construction, **filed** Oct. 26, 1955, D. C., S. D. Fla. (Miami), Doc. 6521–M, *The Duraflex Co. et al. v. Adams Engineering Co., Inc.*

2,719,884. (See 2,717,282.)

Re. 22,260, H. E. Edgerton, Switching system for light-flash-producers, such as stroboscopes; **2,426,602**, same, Electric system for producing intermittent or flashing light; **2,342,257**, **2,478,901**, same, Electric system; **2,302,690**, K. J. Germeshausen, Electric oscillator; **2,331,317**, same, Stroboscope, **filed** Oct. 21, 1955, D. C. N. J. (Newark), Doc. 992/55, *Harold E. Edgerton et al. v. Electronic Brazing Co.*

Re. 22,267, M. Bechik, Flexible mattress handle, **filed** Oct. 27, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c1921, *Bechik Products, Inc. v. New & Frank Co., Inc.*

Des. 142,280. (See 2,581,169.)

Des. 162,805, F. Ferber, Ball point pen, **filed** Mar. 24, 1952, D. C., S. D. N. Y., Doc. 74/152, *Ferber Corp. v. Robert J. Burnham, Inc.* Stipulation and order vacating discontinuance of Oct. 28, 1955; consent judgment for injunction Nov. 21, 1955.

Des. 165,356. (See 2,515,817.)

Des. 166,174, W. H. Crawford, Check stand or similar article; **Des. 166,193**, **Des. 171,596**, F. W. Hartup, same; **TM 580,515** (Zephyr), Modern Village Stores, Inc., Automatic check stands for grocery stores, suit for Declaratory Judgment filed Nov. 2, 1953, D. C., S. D. Calif. (Los Angeles), Doc. 16000–T, *Benj. F. Wininger & Son, Inc. v. Modern Village Stores, Inc.* (**Des. Patent 171,596** included by counterclaim Mar. 23, 1954). Consent judgment; design patents held valid and infringed by plaintiff and counterdefendants; injunction restraining plaintiff and counterdefendants; except as stated all claims and counterclaims dismissed with prejudice (notice Oct. 17, 1955).

Des. 166,193. (See Des. 166,174.)

Des. 166,605, R. B. Karoff, Foldable food tray, **filed** May 14, 1952, D. C., S. D. N. Y., Doc. 75/322, *Karoff Originals, Ltd. v. The DuKent Co.* Stipulation and order of discontinuance (notice Oct. 19, 1955). Same, **filed** May 26, 1952, D. C., S. D. N. Y., Doc. 76/42, *Karoff Originals, Ltd. v. Cambridgeware Inc. et al.* Decree as above (notice Oct. 25, 1955).

Des. 169,338, J. H. Risley, Chair, **filed** Mar. 8, 1955, D. C., S. D. N. Y., Doc. 99/144, *John H. Risley v. George R. Sotelo.* Stipulation and order of discontinuance (notice Oct. 18, 1955).

Des. 170,295, Ziskin and Billig, Canister or similar article, filed Oct. 24, 1955, D. C., S. D. N. Y., Doc. 104/200, *The Kromex Corp.* v. *Astra Trading Corp.* Same, Doc. 104/201, *The Kromex Corp.* v. *Benjamin and Medwin, Inc.* Same, Doc. 104/202, *The Kromex Corp.* v. *Carlo's Fifth Avenue.*

Des. 171,463, E. Rodriguez, Expansible link chain for a bracelet, filed Oct. 20, 1955, D. C., S. D. N. Y., Doc. 104/170, *Jacoby Bender, Inc.* v. *Micro Flex Bracelet Corp. et al.*

Des. 171,506. (See Des. 166,174.)

Des. 173,661, O. Cassini, Dress or similar article, filed Dec. 3, 1954, D. C., S. D. N. Y., Doc. 97/156, *Oleg Cassini, Inc.* v. *Alexanders Department Stores, Inc.* (Third party action filed July 8, 1955, *Alexander's Department Stores, Inc.* v. *Thayer Originals, Inc.*) Stipulation and order of discontinuance (notice Oct. 31, 1955).

Des. 175,531, C. H. Brinton, Combined paper weight and clamp, filed Oct. 20, 1955, D. C., S. D. N. Y., Doc. 104/172, *Gift Guild, Inc. et al.* v. *Kirel Creations et al.*

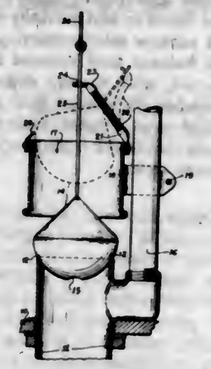
REISSUES

JANUARY 10, 1956

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,106
FLUSH BALL GUIDE

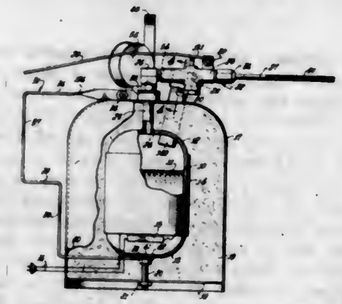
Louis W. Schnepp, San Bernardino, Calif.
Original No. 2,666,929, dated January 26, 1954, Serial No. 227,389, May 21, 1951. Application for reissue August 29, 1955, Serial No. 531,367
5 Claims. (Cl. 4—57)



1. The combination with a flush tank, its outlet pipe, its overflow pipe, a ball valve which closes said outlet pipe and a pull rod attached to the upper end of said ball, of an open ended cylinder mounted for vertical adjustment on said overflow pipe above said outlet pipe and said ball valve, a flexible guide mounted on the upper portion of said cylinder and extending upwardly and inwardly from the wall of said cylinder and a bearing on the upper end of said flexible guide for said pull rod.

24,107
PORTABLE STEAM CLEANERS

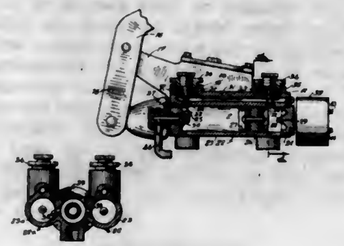
Paul T. Krampe, Glendale, and Jay J. Hanzlik, North Hollywood, Calif.; said Hanzlik assignor to said Krampe
Original No. 2,639,365, dated May 19, 1953, Serial No. 230,458, June 8, 1951. Application for reissue January 18, 1955, Serial No. 482,690
10 Claims. (Cl. 219—38)



10. In a steam cleaner construction, a bodily movable hollow metal boiler of cylindrical cross section normally disposed with its axis in upright position, an external shell spaced radially from and housing said boiler, a cylindrical electrical heating element of blanket-like character coaxially surrounding said boiler with its inner surface in heat transmissive contact with the boiler and with an outer cylindrical heat radiating surface facing said shell, insulating material in the annular space between said heating element and shell acting to prevent transmission of boiler heat to said shell, liquid supply means for said boiler, steam discharge means extending from the interior of said boiler to the exterior of said shell, mounting means secured to said shell and enabling tilting of the boiler transversely of its axis, and a manually actuable valve for said discharge means having a control member positioned adjacent said mounting means, said construction adapted for tilting manipulation to discharge variable mixtures of steam and liquid therefrom.

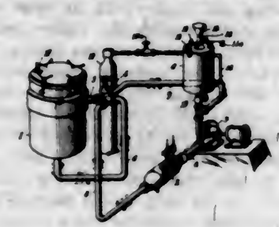
24,108
HYDRAULIC BRAKE SAFETY DEVICE

Arthur J. Felt, Englewood, Colo., assignor to Philip H. Collins, Arapahoe County, Charles W. McDonnell and Stanley W. Prisner, Denver, Colo.
Original No. 2,583,825, dated January 29, 1952, Serial No. 145,769, February 23, 1950. Application for reissue October 19, 1953, Serial No. 387,084
4 Claims. (Cl. 60—54.5)



4. A hydraulic brake actuating device comprising: a master cylinder adapted for horizontal operation; a reservoir disposed above said cylinder and formed therewith as an integral casting having a common wall through which intercommunication can be established; a piston in the master cylinder designed to be actuated by a brake pedal or the like; said wall having a port between said reservoir and the discharge end of said cylinder to establish said intercommunication; a pair of safety cylinders, one disposed on each side of the master cylinder and parallel thereto, all of said cylinders formed as an integral casting with said reservoir, with portions of the master cylinder walls forming common portions of the safety cylinder walls; a piston floated in each safety cylinder to constitute the only element mechanically movable therein; said common wall portions having ports for communicating one end of said master cylinder with corresponding adjacent ends of the safety cylinders so that the safety pistons are movable in the opposite direction to that of the master piston when the latter is actuated; and the walls of the safety cylinders each having an internal longitudinal passage for establishing communication from one side of its safety piston to the other when said pistons are disposed to permit such intercommunication, and each having an outlet port for the discharge of pressure fluid.

24,109
APPARATUS FOR THE TREATMENT OF TEXTILE MATERIALS AT ELEVATED TEMPERATURES
Baldewijn Steverlynck, Courtrai, Belgium, assignor to Groeninghe Ververij P. V. B. A., Courtrai, Belgium
Original No. 2,633,009, dated March 31, 1953, Serial No. 118,842, September 30, 1949. Application for reissue December 8, 1954, Serial No. 474,646. In the Netherlands February 10, 1949
10 Claims. (Cl. 68—184)



4. In a liquid treatment apparatus of the class described, in combination with a closed pressure tight vat adapted to hold therein material to be treated and to constrain a treatment liquor entering said vat to flow through said material, a closed circulatory duct system connected to different portions of said vat which communicate with oppositely disposed portions of said material for conveying said liquor therethrough, and pump means serially included in said duct system for forcing said liquor to flow through said duct system and said vat to constitute a closed main circulation circuit for said liquor extending through said vat, said duct system and said pump, the provision of: a closed pressure tight balance tank situated outside of said circuit; controllable means connected to said balance tank for maintaining said tank partially filled with a liquid and maintaining a resilient cushion of gas under a pressure appreciably higher than atmospheric pressure above the liquid in said partially filled tank; means defining a branch passage interconnecting said circuit and a portion of said balance tank situated beneath the level of the liquid therein, said passage defining means both preventing appreciable circulatory flow of said liquor in said circuit through said balance tank and transmitting to the liquor in said circuit the hydrostatic pressure of said liquid in said balance tank.

PATENTS

GRANTED JANUARY 10, 1956

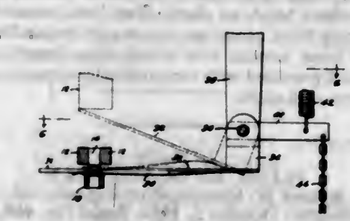
GENERAL AND MECHANICAL

2,729,818
FACSIMILE APPARATUS
John Bell, Beckenham, England, Frank H. Cannon, Chatswood, New South Wales, Australia, and Grahame Arthur Mundy, Beckenham, England, assignors to Muirhead & Co. Limited, Beckenham, England
Application July 31, 1953, Serial No. 371,488
Claims priority, application Great Britain August 1, 1952
5 Claims. (Cl. 346—101)



1. A helical recording electrode assembly for facsimile recorders comprising a plurality of identical sections, each representing a fraction of a single revolution of the helix and each comprising a rigid helical surface, helically disposed radial parts rigidly supporting the helical surface parts and a central shaft part carrying the radial means for securing the sections in abutting relaitonship with the helical surfaces in accurate alignment and a continuous helical electrode mounted on the aligned helical surfaces.

2,729,819
ATTACHMENT FOR STAPLING MACHINE AND STAPLE
Angelo C. Falone, Northfield, and Richard Alschuler, Glencoe, Ill.
Application August 22, 1951, Serial No. 243,066
5 Claims. (Cl. 1—2)



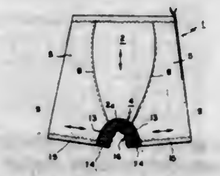
1. An attachment for a stapling machine of the type having staple forming means, a staple driving member and an anvil positioned therebelow, the stapling machine being provided with a reel of flat wire which is fed below the staple driving member and cut off across the width of the same to form a staple, said attachment including a bracket pivoted on said machine, a spacer bar extending forward therefrom, the forward end of said bar positioned below said staple driving member, the bar being generally the width of the bridge of the staple to be formed and adapted when the staple driving member descends toward the anvil to press the staple through material positioned on the anvil to create a space above the material, the thickness of the space being determined by the thickness of said bar, said bar having an arm with a right angle gauge thereon for locating material on the anvil.

2,729,820
SAFETY HEADGEAR
Marshall N. Anderson, Grayslake, Ill., assignor to Sellstrom Manufacturing Co., Chicago, Ill., a corporation of Illinois
Application January 19, 1953, Serial No. 332,001
3 Claims. (Cl. 2—8)



1. A protective device comprising a head-encompassing band provided with a protuberance secured to said band and extending angularly forwardly therefrom, the distal end of said protuberance being spaced laterally from said band and disposed outside the area delimited thereby and rearwardly of the front of said band; face and neck protecting means; supporting means on which said protecting means is mounted, said supporting means comprising an arcuate strip; an inflexible link disposed intermediate the distal end of said protuberance and the end of said arcuate strip; and a pair of frictional pivotal means connecting the respective ends of said link to said supporting means and the distal end of said protuberance and retaining said protecting means in selected spaced positions with respect to the face of the wearer and said band; the frictional resistance to pivotal movement of the pivotal means between the distal end of said protuberance and said link being greater than that of the other pivotal means.

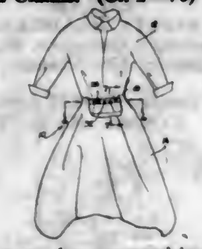
2,729,821
PANTY GIRDLE
Herman Freudenberg, New York, N. Y.
Application September 2, 1953, Serial No. 378,021
2 Claims. (Cl. 2—43)



1. A garment of the panty-girdle type comprising a body having front and rear panels and front and rear side sections, said side sections being sewed to each other and to side edges of the front and rear panels, the side sections being extended downwardly and providing leg extensions, and crotch portions disposed between the leg extensions and consisting of front and rear sections having outer side edges sewed to lower edges of said front and rear panels respectively and to inner side edges of the leg extensions, and inner side edges of the front and rear sections of the crotch portion being sewed transversely to each other by a seam having a reenforcing strand en-

closed therein, the front crotch portion being of a fabric stretchable in an opposite direction from the rear crotch portion.

2,729,822
GARMENT
Rose G. Arkin, New York, N. Y.
Application February 16, 1953, Serial No. 337,061
2 Claims. (Cl. 2—76)



1. A ready-to-wear dress comprising a skirt and a blouse, the lower edge of the blouse extending a substantial distance below the upper edge of the skirt and being disposed within the skirt, the skirt and blouse being secured together by stitching adjacent the waistline and terminating at opposite sides of the dress, said skirt and blouse being detachably secured across the dress between the side stitching by means constituting a pair of long strips, means securing one strip along its entire length to the inside of the skirt at the waistline adjacent the upper edge of the skirt, stitching securing the other strip along its entire length to the outside of the blouse at the waistline a substantial distance above the lower edge of the blouse whereby the position of the other strip can be adjusted up or down to fit the dress to a wearer's figure, and a set of identically spaced couplable halves of detachable attaching means secured to said strips whereby the strips are detachably connected to one another.

2,729,823
PROTECTIVE ARTICLE FOR USE BY HAIRDRESSERS
Florence B. Foster, Los Angeles, Calif.
Application September 1, 1953, Serial No. 377,786
4 Claims. (Cl. 2—174)



1. A protective article for use in dressing the hair comprising two cup members each to engage over an ear of the wearer, each cup member including a partial perimeter rim terminating in a flange to hold the bottom of the cup member away from the ear, a relatively wide elongated shield, means detachably coupling the ends of said shield to each cup member, an elastic cord substantially co-extensive with said shield and attached thereto, means detachably coupling the ends of said cord to said cup members, a second elastic cord and means for detachably coupling the ends of said second cord whereby with said cup members disposed over the ears of the wearer, said shield and first mentioned cord will extend across the forehead and said second cord across the back of the neck to hold said article in operative position on the wearer.

2,729,824
STOCKING
Ludwig Doll, Jr., Heidelsheim-Bruchsal, Germany
Application June 10, 1954, Serial No. 435,861
Claims priority, application Germany June 17, 1953
5 Claims. (Cl. 2—239)



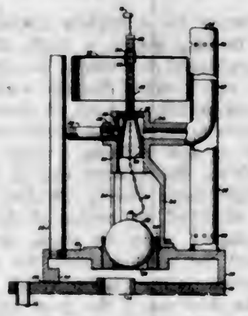
1. A stocking, particularly a lady's nylon stocking, having a thread guide running from the tip of the toe of said stocking to the upper hem thereof along the back of the stocking, a thread fastening device at said upper hem and a thread within said guide, one end of said thread being attached to the toe of said stocking and the other end of said thread being held by the fastening device under a tension which is greater than the tension of the stocking when pulled over the leg of the wearer and fastened to supporting garters.

2,729,825
STOCKING CLAMPING GARTER
Ernest E. Rosecrans, Sr., Los Angeles, Calif.
Application November 30, 1954, Serial No. 471,968
3 Claims. (Cl. 2—312)



1. In a stocking clamping garter, the combination of a foam rubber band, an elastic fiber band secured to said foam rubber band, studs secured to said elastic fiber band, a garter band around said elastic fiber band, and said garter band provided with longitudinally-extending eyelets fitting over said studs.

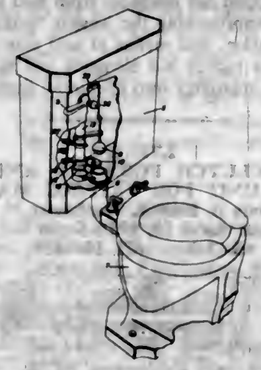
2,729,826
FLUSH TANK ASSEMBLY
Roland W. Downin, Port Deposit, Md.
Application October 5, 1954, Serial No. 460,413
16 Claims. (Cl. 4—41)



1. In an assembly for emptying and refilling a liquid-containing tank including a valve body including a cylinder in which a piston may move freely up and down,

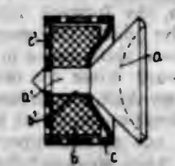
a piston for said cylinder including upper and lower cylinder engaging skirts and an intermediate, constricted conical portion, said cone sloping outwardly toward the bottom, an inlet and an outlet in the valve body at points intermediate the extremes of piston travel, a ball confined within the annular space defined by the two piston skirts and the valve cylinder, a liquid tight seat for the ball in the inlet, the relative sizes of the cylinder, piston and ball being such that, at the upward limit of piston travel the ball is held in liquid sealing engagement on the seat, at the lower limit of piston travel, the ball prevents the piston from falling out of the cylinder and at all times except when the piston is at its upper limit, the displacement of the ball from the seat permits a flow of liquid from the inlet to the outlet, and means for holding the piston at its upper limit of travel when the tank is full.

2,729,827
EMERGENCY CUT-OFF FOR FLUSH TANKS
Deen I. Morita, Honolulu, Territory of Hawaii
Application May 5, 1953, Serial No. 353,132
5 Claims. (Cl. 4—52)



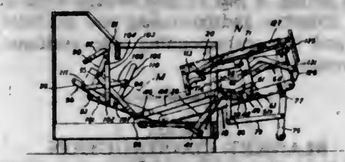
4. In combination, a flush tank having a flush mechanism therein and including a semi-automatic valve for a drain pipe leading from the tank to a toilet bowl, a vertical supporting member in the tank, and an emergency semi-automatic valve slidably and swingably mounted on said vertical supporting member for closing the upper end of the drain pipe.

2,729,828
DEVICE HAVING A CLEANSING AND/OR DISINFECTING ACTION
Dora Bürgin, Basel, Switzerland
Application July 28, 1952, Serial No. 301,406
3 Claims. (Cl. 4—231)



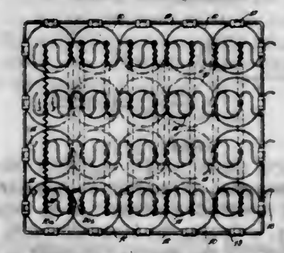
1. A device for household cleaning or disinfecting comprising a substantially cylindrical housing having perforations in the cylindrical wall thereof and being closed at one end and open at the other end, said closed end having an aperture therein, a removable closure member adapted to fit over the open end of said housing and having an aperture therein aligned with aperture in said closed end, a pressed block of a soluble substance having desired cleaning or disinfecting properties fitted within said housing and having a bore therethrough, and means adapted to hold said removable closure member over the open end of said housing and to support said block in said housing comprising a plug-like member extending through said aligned apertures and said bore having an enlarged extension on one end thereof exteriorly of one of said apertures and having a peripheral groove on the opposite end thereof adapted to make snap engagement with the edges of the other of said apertures.

2,729,829
LOVE SEAT BED WITH AUTOMATIC LATCHING AND UNLATCHING MEANS
Peter P. Bebry, Bayonne, N. J., assignor to Bebry Bedding Corporation, Bayonne, N. J., a corporation of New York
Application June 18, 1954, Serial No. 437,666
6 Claims. (Cl. 5—13)



5. In an article of furniture of the class described, a furniture frame, a foldable frame composed of a plurality of sections, said foldable frame being swingably connected with the furniture frame and said sections being pivotally connected together in end to end relation for movement thereof from aligned bed forming relation to a folded relation within the furniture frame and with two sections disposed in spaced substantially parallel relation, two links pivotally connected together and pivotally connected with adjacent sections, a latch member, means pivotally connecting said latch member with one of said two sections and movable with the folding of said two sections to latch said two sections against unfolding, a latch release member, means swingably connecting said latch release member with one of said two sections, and a link pivotally connected to the furniture frame and with said last named means for swinging said latch release member with the movement of the foldable frame from folded relation to engage and move said latch member out of latched engagement to permit of the unfolding of said two sections.

2,729,830
SPRING ASSEMBLY UNIT HAVING BASE SUPPORT
William W. Gleason, Chicago, Ill., assignor to Nachman Corporation, Chicago, Ill., a corporation of Illinois
Application April 2, 1952, Serial No. 280,039
3 Claims. (Cl. 5—266)



1. A spring assembly unit comprising a group of coil springs arranged in a plurality of rows running in one direction and a plurality of crossrows running in a transverse direction, a border frame attached to the outer edges of the top convolutions of the marginal springs of the group, sinuous support members extending lengthwise of some of said rows, each of said support members bearing against the bottom convolution of each of the coil springs in the corresponding row, each of said support

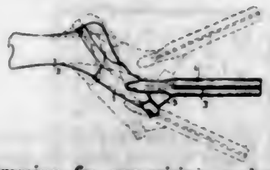
members having opposite ends terminating beyond the bottom convolutions of the coils in the corresponding row, each of said support members being formed of continuous U-shaped portions serially oppositely disposed, said U-shaped portions having legs extending crosswise of said rows, alternate legs being spaced apart a distance less than the diameter of the bottom convolutions of the coil springs, each of said coil springs in said some of said rows having its bottom convolution engaging a pair of said alternate legs in overlapping relation to a pair of said U-shaped portions with said legs of said pair engaging opposite side portions of said bottom convolution, each leg of said pair engaging the correponding side portion at two spaced points, and helical wires resiliently interconnecting said rows and extending crosswise thereof with said helical wires connecting said support members to said coil spring, a pair of said helical wires extending along each crossrow and encircling said alternate legs of each pair and the corresponding side portions of said bottom convolutions.

2,729,831
BLANKET CONSTRUCTION
Fred Fuld, New York, and Thomas A. Craig, Yonkers, N. Y.
Application January 19, 1953, Serial No. 331,846
1 Claim. (Cl. 5—336)



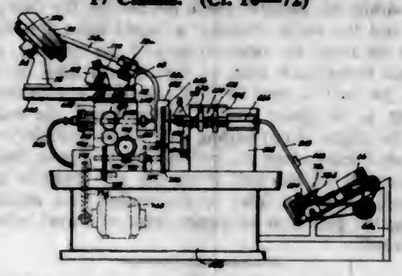
The combination with a blanket covering for a bed having a mattress of a separable, substantially rectangular pocket adapted to enclose the foot end of the bed mattress on the top, bottom, sides and end thereof, and fastening means releasably connecting the top and sides of said pocket with the undersurface of said blanket at the foot end thereof, and flexible strips fixedly carried along the longitudinal sides of the blanket near the head end thereof adapted to be looped around the sides of the bed at the head end thereof whereby to secure the upper end of the blanket to the bed.

2,729,832
SWIMMING FIN
Walter Schmitz, Rheydt (Rheinland), Germany
Application February 25, 1953, Serial No. 338,824
Claims priority, application Germany February 28, 1952
7 Claims. (Cl. 9—21)



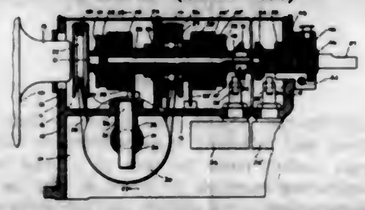
1. A swimming fin comprising a shoe-like member having an open toe portion adapted to be attached to a foot of the user, a flexible fin blade extending outwardly from the bottom of the shoe-like member in proximity to the open toe portion and lying wholly within the forward half portion of the shoe-like member, the angularity of the fin blade relative to the plane of the bottom of the shoe-like member being in the range of 25 to 50° with the point of intersection of the planes of the fin blade and bottom of the shoe-like member lying above the bottom of the shoe-like member and said fin blade normally occupying a position in a plane substantially parallel with the longitudinal axis of the leg of the user.

2,729,833
ASSEMBLY MACHINE AND METHOD
Moritz H. Nielsen, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a corporation of Illinois
Application November 4, 1950, Serial No. 194,148
17 Claims. (Cl. 10—72)



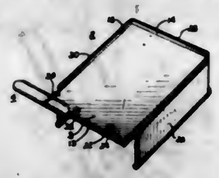
3. Apparatus for producing permanently assembled washers and nut elements comprising means for feeding washers successively along a predetermined path, means for selecting nut elements from a random mass, means for tapping the selected nut elements successively, means for feeding the tapped nut elements from said tapping means along a path approaching the washer feeding path at an assembling station, and means at said assembling station for feeding the tapped nut elements and said washers in timed relation relatively into telescopic engagement.

2,729,834
MULTIPLE CLUTCH FORWARD AND REVERSE DRIVE UNIT FOR TAPPING MACHINE
Melvin H. Emrick, Manhasset, N. Y.
Application March 10, 1953, Serial No. 341,394
5 Claims. (Cl. 10—136)



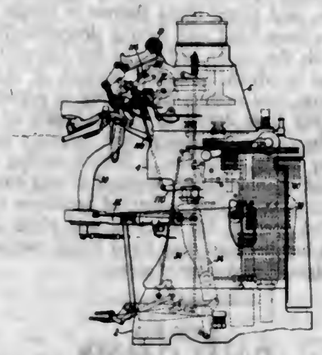
1. A tapping unit of the class described, comprising a casing having joined end walls, with a large opening extending between said end walls, detachable means for closing the casing opening, means, in the casing between said end walls, forming a bearing support for a driven shaft extending longitudinally of the casing between said end walls, a lead screw in threaded engagement with one end wall, a drive shaft extending into the casing through the other end wall, said shafts and lead screw being in axial alinement, a drive unit comprising forward and reverse drivers, the forward driver being directly driven by said drive shaft, the reverse driver being mounted on said driven shaft, means in operative engagement with the forward driver for driving said reverse driver from said drive shaft, two independent electrically actuated two-part clutches, one clutch being arranged between the forward and reverse drivers, with one part thereof fixed to the driven shaft and the other part thereof fixed to the drive shaft to control forward drive of said driven shaft, the other clutch being arranged on the driven shaft between said reverse driver and said lead screw, said last named clutch having one part fixed to the reverse driver and the other part thereof fixed to the driven shaft, said lead screw having a sliding key coupling with the driven shaft, and means comprising a pair of switches spaced in said casing and in circuit with said clutches and a collar on said lead screw operatively engaging said switches for controlling forward and reverse drives of the driven shaft and said lead screw.

2,729,835
MACHINE FOR APPLYING BINDING CLIPS
Isidore Spinner, Chicago, Ill.
Application July 24, 1952, Serial No. 300,607
7 Claims. (Cl. 11—1)



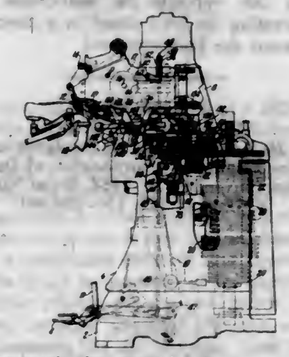
1. A device for placing a resilient tube having separable edges, extending the length of said tube which resiliently resist separation, in binding engagement with sheets of material comprising a platform for supporting the sheets of material to be bound, said platform including means for aligning the said sheets of material in place with one edge thereof extending along one edge of said platform, a camming lip on a corner of said platform including said latter platform edge adapted to extend into the end of said tube to part said separable edges of said tube to facilitate bringing the said sheets of material between said separable edges whereby said binder is in position for clamping engagement with said sheets of material, said camming lip being spaced outwardly of said aligning means in a direction lengthwise of said one platform edge so that the edges of the tube are separated before the tube reaches the sheets of material supported on said platform.

2,729,836
MACHINES FOR LASTING AND SEWING SHOES
Otto R. Haas, Wenham, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey.
Original application June 12, 1951, Serial No. 231,082, now Patent No. 2,723,633, dated November 15, 1955. Divided and this application December 11, 1952, Serial No. 325,357
3 Claims. (Cl. 12—9.1)



3. A shoe lasting and sewing machine having inseam sewing and lasting devices including, a curved hook needle and a lasting gripper comprising jaws arranged to engage the upper of a shoe close to the sewing point, a main sewing shaft, cams on the sewing shaft, a carrier upon which one of the gripper jaws is rigidly supported, a pivotal connection for the other gripper jaw on the carrier, a shoe supporting jack and a pattern cam shaft for imparting feeding and turning movements to the jack to transfer the point of operation about the shoe, in combination with three separate levers actuated by the cams on the sewing shaft, independent sets of connections between the cam levers and the gripper jaw carrier, one of which sets actuates the jaws to grasp and release the upper, another of which causes the jaws to tension the upper and the third of which moves the jaws toward the center of a shoe bottom with an overdraw motion, a throw-out lever controlled by the pattern cam shaft acting on the gripper jaw carrier along certain portions of a shoe to retain the gripper jaws inoperative, and a throw-out member acting on the cam lever which tensions the upper to render the gripper jaws inoperative throughout the operation of the sewing devices about the entire length of an inseam.

2,729,837
AUTOMATIC SHOE MACHINES
Otto R. Haas, Wenham, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application May 28, 1953, Serial No. 358,047
9 Claims. (Cl. 12—17.2)

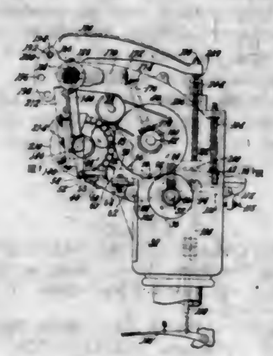


7. An automatic shoe machine having means for operating upon a shoe a main frame and an actuating shaft in the main frame for actuating the operating means, a shoe supporting jack relatively movable to transfer the point of operation along the sole margin of a shoe supported on the jack, an actuating mechanism for the jack, a pattern cam shaft for the actuating mechanism connected for rotation with the actuating shaft and a clutch for disconnecting the pattern cam shaft from the actuating shaft, driving and stopping mechanism for bringing the machine to rest at the end of an operation on a shoe, auxiliary mechanism thrown into operation when the stopping mechanism is actuated for completing rotation of the pattern cam shaft, a treadle for controlling the driving and stopping mechanism, mechanism for reversing rotation of the pattern cam shaft, and a brake for stopping rotation of the pattern cam shaft, in combination with three sets of connections for disengaging the brake from the pattern cam shaft, including a set actuated by the auxiliary mechanism, a set actuated by the treadle, and a set actuated by the pattern cam shaft reversing mechanism.

2,729,838
SHOE INSEAM TRIMMING MACHINES
Corwin W. Baker, Melrose, Pa., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application January 20, 1955, Serial No. 483,089
18 Claims. (Cl. 12—82)

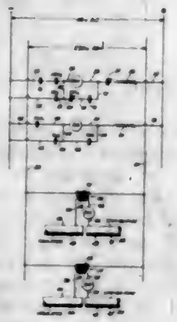
1. A machine for trimming the inseam of a welted shoe comprising a rotatable tubular knife having a peripheral cutting edge in a plane normal to the axis of rotation of the knife, a rotatable rib guide mounted adjacent to said cutting edge and engageable with the inner surface of the inseam, a rotatable welt-crease guide shaped to enter the crease between the upper and the welt, a cylindrical feed wheel rotatable on an axis in a plane

parallel to the axis of rotation of the knife, the feed wheel being engageable with the outlying margin of the



welt on the side opposite the welt-crease guide, and means for rotating the feed wheel in a direction to feed the shoe toward the knife.

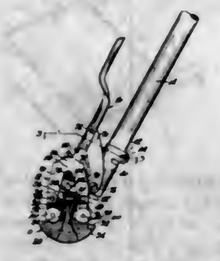
2,729,839
SCRAPER DETECTOR
William W. Holt, Jr., Atlanta, Ga., assignor to Plantation Pipe Line Company, a corporation of Delaware
Application November 23, 1954, Serial No. 470,582
6 Claims. (Cl. 15—104.06)



6. In combination a pump station including a pumping unit and a bypass line having a valve interposed therein, a first pipeline defining an insulated section connected to the upstream side of said pump station, a second pipeline defining an insulated section connected to the downstream side of the pump station, a scraper capable of conducting electricity positioned in said pipeline and movable therethrough, electrical means responsive to arrival of said scraper in bridging relation with said first insulated section and said first pipeline to stop said pump unit and open said valve, and electrical means responsive to arrival of said scraper in bridging relation with said second insulated section and said second pipeline to start said pump and close said valve.

2,729,840
SPONGE MOP WITH VARIABLY SPACED WRINGER ROLLERS
Levant C. Rogers, Delton, Mich.
Application December 28, 1951, Serial No. 263,755
2 Claims. (Cl. 15—119)

1. A cleaning device comprising a handle, a cleaning unit including a carrier and an expansible cleaning element mounted by and projecting from said carrier, a wringing unit, one unit being mounted on said handle, actuating means carried by said handle and connected to the other unit to shift the other unit relative to said first unit and thereby wring said cleaning element, said wringing unit including a rigid member having two spaced fork portions each arching said carrier and having two leg portions, a lever pivoted to each fork leg, wringer rolls extending along opposite sides of said element and journaled by adjacent levers, and toggle means extend-



ing transversely of and above said carrier and connecting adjacent levers, said toggle means having its central portion located below the level of the connection of its end portions with said levers, whereby its central portion engages said carrier to pivot said toggle when said actuating means is operated.

2,729,841
MOP HAVING CLAMPING PLATE TYPE HOLDER
Louis A. Littleton, Point Pleasant, N. J.
Application June 27, 1952, Serial No. 296,045
1 Claim. (Cl. 15—229)

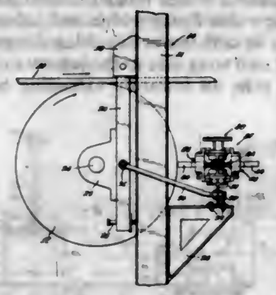


A mop comprising, in combination, a mop head, a pair of superposed top and bottom plates having centrally disposed, registered apertures for clamping said mop head therebetween, said plates being shorter in length than the width of the mop head and having downwardly sloping sides in which the upper surface of the top plate is protuberant and in which the lower surface of the bottom plate is hollow, said sloping sides being of predetermined widths whereby lines drawn across each pair of adjacent side edges thereof will converge and intersect to form a ninety degree angle, a handle, a ferrule having an internally threaded opening rigidly secured to said handle, and a bolt passing through said registered apertures and internally threaded opening for securing said plates and mop head to said handle, said mop head being bulbous along peripheral edges of said secured plates.

2,729,842
PULLEY CLEANER
Chris Stamos, Chicago, Ill, assignor to The United Electric Coal Companies, Chicago, Ill., a corporation of Delaware
Application June 21, 1952, Serial No. 294,943
9 Claims. (Cl. 15—256.5)

1. A pulley cleaner for cleaning the surface of a cylindrical pulley or the like, comprising a cleaning tool to be positioned with the outer end thereof immediately adjacent and practically in engagement with the cylindrical surface of the pulley, drive means connected to said tool to draw said tool longitudinally across the cylindrical surface of the pulley in a path substantially parallel to the axis of rotation of the pulley, and guide means rigidly supporting said tool for movement solely in said path, said tool comprising the sole type of cleaning instrumentality

for cleaning the pulley surface, said tool being moved by said drive means and supported by said guide means to



scrape mud, clay and the like packed on the pulley surface directly off of the cylindrical surface of the pulley.

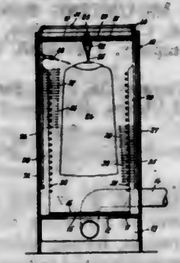
2,729,843
WHEEL CARRIER FOR TANK TYPE VACUUM CLEANERS
Joseph P. Seek, Culver City, Calif.
Application January 8, 1953, Serial No. 330,219
4 Claims. (Cl. 15—257)



1. In a cart of the class described, a chassis comprising a pair of elongate rearwardly divergent members integrally connected at the forward ends thereof, inwardly inclined arms formed by bent portions of the rear ends of said members to engage a load placed upon the chassis, a cross member carried by said members in forwardly spaced relation with respect to said arms, other inwardly inclined arms formed by bent end portions of said cross member, a second cross member also carried by said members in rearwardly spaced relation with respect to the forward connected ends thereof, still other inwardly inclined arms formed by bent end portions of said second cross member, the arms of the first and second cross members being adapted to engage with the opposite sides of the load, said second cross member coacting with the connected ends of said divergent members to provide a loop, a steering post having a shank extending upwardly through said loop, a head on said shank above the loop, a spring arm carried by the chassis and having an eye member through which said shank also extends, said spring arm urging said eye member into engagement with said head to normally maintain the shank at the limit of upward movement, an annular element carried by said shank in contacting relation with the under side of said loop to limit the upward movement of said post, a traction member carried by said post, and other traction elements supporting the rear end portion of the chassis.

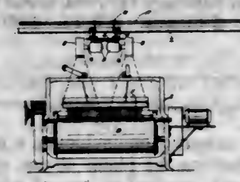
2,729,844
MACHINE FOR DUST CLEANING GARMENTS
George Weiss, New Hyde Park, N. Y., assignor to B. Altman & Co., New York, N. Y., a corporation of New York
Application December 11, 1951, Serial No. 261,057
9 Claims. (Cl. 15—308)

1. A dust cleaning apparatus for garments comprising a cabinet, means in said cabinet for suspending a garment to be cleaned and being freely rotatable to enable the suspended garment to be rotated about its vertical axis, means for supplying air under relatively high pressure, a plurality of pipes connected to said supply means and arranged vertically in spaced relation in said cabinet, each pipe having a series of closely spaced openings to direct a plurality of air jets toward the garment to be cleaned, and extending through a different vertical range than the series of openings in the other pipes, the total range of the series of openings of all of the pipes being substantially continuous in a vertical direction so that all portions of the garment located in such total range are subjected to a continuous series of air jets, the series of



openings in each pipe being directed at a different angle than that of the series of openings in the other pipes and the angles of the openings of all of the pipes being arranged to induce a rotary flow of air about the vertical axis of a freely suspended garment within the cabinet, whereby the garment is caused to rotate with whipping action by such air jets, means in said cabinet around the area occupied by a suspended garment and constructed and arranged to be struck by portions of the garment rotated under the action of said air jets and thereby exercise a beating action on such garment portions, and suction means for exhausting the air and dust from the cabinet.

2,729,845
APPARATUS FOR AUTOMATICALLY REMOVING LINT FROM ABOVE AND BELOW THE WARP OF TEXTILE LOOMS
Carroll deV. Miller, Rocky River, and Francis N. Becker, Cleveland, Ohio, assignors to The American Monorail Company, Cleveland, Ohio, a corporation of Ohio
Application December 27, 1950, Serial No. 202,856
8 Claims. (Cl. 15—312)



1. Apparatus for cleaning textile looms comprising a frame to travel repeatedly over a row of looms, a motor carried by said frame and having a substantially horizontal rotor shaft, a centrifugal fan fixed to said shaft, a substantially vertical casing around said fan and having a substantially vertical nozzle opening downwardly from the casing on one side of the harnesses of the looms, said fan when rotating and traveling over the looms serving to discharge air through the nozzle and down onto the warp of the looms in a stream substantially less in width at the warp level than the length of the warp from the warp roll to the harness and capable of passing between the warp strands and removing lint from parts of the looms below the warp level in the path of the stream but incapable of actuating the stop motions of the looms, and means operatively associated which said nozzle for automatically and at regular intervals reciprocating said stream about a horizontal axis substantially parallel to the line of travel of the frame to move the stream

substantially normal to the line of travel of the frame in a manner that during repeated movements of the blower over the looms the air stream is directed in varying directions against each loom and in a manner to pass said stream between substantially all the warp strands on the looms and between substantially all the different portions of those strands from the warp roll to the harness of each loom during repeated movements of the frame over the looms.

2,729,846
MOUNTING RING
Thomas W. Reed, Cleveland, Ohio, assignor to The F. Hohlfelder Company, Cleveland, Ohio, a corporation of Ohio
Application January 26, 1954, Serial No. 406,291
1 Claim. (Cl. 16—109)



A split ring adapted to enclose a resilient annulus and mount the same in a holding device, said ring having a depressed means, having sidewalls and a bottom wall, defining a circumferential groove thereabout adapted to engage the holding device, the ends of the split ring being normally spaced apart and adapted to be closed under compression when so mounting the annulus, said groove defining means at one extremity of the ring having a slot approximating the groove in width and located in its entirety in the groove defining means below the outer surface of said ring, and at the other extremity having an integral tongue approximating the bottom of the groove in width and projecting therefrom and located in its entirety between the outer and inner surfaces of the ring, but below the outer surface of said ring, the shape of said tongue being complementary to but smaller than the slot so that the tongue is normally free of contact with the slot and is nearer in distance in at least at one point than the smallest dimension of the ring whereby the entire surface area of the ring is exposed for processing and a plurality of said rings may be intermixed and processed in bulk without intertangling.

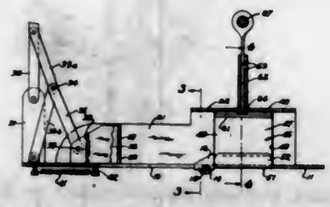
2,729,847
HINGE CONSTRUCTION FOR BABY CRIBS
Wayne M. Foster, Long Beach, Calif.
Application February 15, 1954, Serial No. 410,075
2 Claims. (Cl. 16—145)



1. A hinge construction including a pair of plates, a hinge pin connecting the plates at one end thereof, said plates being each attached to one of adjacent members, one of said plates having a hole therein, a leaf spring secured at one end thereof to one of the adjacent members and adjacent the end of one of the plates, said leaf spring extending the length of both of the plates and spanning the hinge pin, a pin on the end of the leaf spring opposite the secured end thereof, one of said adjacent members having a hole extending therethrough through which said pin extends to enter the hole in the leaf spring, a bolt, means mounting the bolt on the plate adjacent said hole, said bolt engaging the pin to hold said pin in the hole in one position of said bolt.

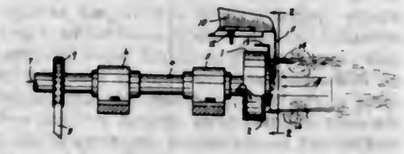
2,729,848
POULTRY GIZZARD OPENER
Anthony P. Celillo, San Francisco, Calif.
Application October 6, 1953, Serial No. 384,409
6 Claims. (Cl. 17—11)

1. A poultry trimming device for objects slit along one edge having internal inedible organs comprising a frame having at least one open end, an opening in the bottom, a substantially closed top, and sides formed with openings therein; a pair of wings hinged to said frame, each said wing having a side fitting within and substantially closing the opening in said frame side, hinged means hinging the top edge of said wing side to the juncture of the frame top and frame side, an inwardly extending bottom member



at least partially enclosing the opening in said frame bottom extending inwardly along the bottom edge of said wing side, and an upwardly extending spreader along the inner edge of said bottom arranged to fit within the slit in said object and means for moving said wings outwardly above said hinged means to expose the interior of said object.

2,729,849
APPARATUS AND PROCESS FOR FORMING MINERAL FIBER
Richard Merritt Downey, North Judson, Ind., assignor, by direct and mesne assignments, of one-fourth to Midwest Insulations, Inc., Wabash, Ind., a corporation of Indiana, one-fourth to Industrial Products Company, Inc., Mount Pleasant, Tenn., a corporation of Tennessee, one-fourth to The Carney Company, Inc., Mankato, Minn., a corporation of Minnesota, and one-fourth to Airseal Insulations, Inc., Buffalo, N. Y., a corporation of New York
Application November 17, 1951, Serial No. 256,907
7 Claims. (Cl. 18—2.5)

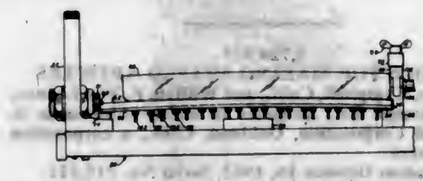


7. Apparatus for producing mineral wool and the like which comprises a disc rotatable about a substantially horizontal axis, an annular blow nozzle of a diameter slightly larger than that of the disc and positioned so as to blow an annular blast past the periphery of said disc at a velocity to create a low pressure area adjacent to the face thereof, and means for flowing molten material by gravity in front of said disc sufficiently close to the front surface thereof to cause said material to be drawn by suction induced by said low pressure area against the front face of said disc.

2,729,850
METHODS OF AND APPARATUS FOR MAKING CAST ARTICLES
Leonard S. Dewees, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application September 1, 1951, Serial No. 244,810
9 Claims. (Cl. 18—5)

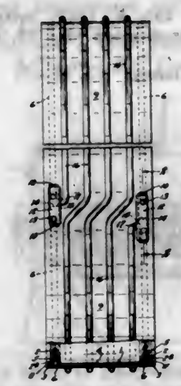
1. Apparatus for making a cast article including an elongated, plastic shell having a plurality of cylindrical elements projecting from one side thereof, which comprises a base, a bar of insulating material mounted on the base, an elongated metal plate having apertures therein through which the elements of such a shell may project, an elongated insulating plate secured to the metal plate

and provided with matching apertures of smaller dimensions than the apertures in the metal plates for receiving the elements and holding them out of contact with the metal plate, and means for engaging the metal plate and bending it about the bar so as to cause such a shell positioned thereon to be bowed.



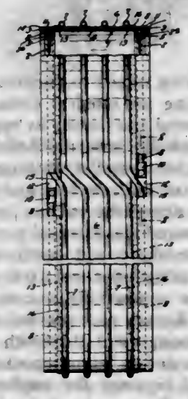
8. The method of making a cast cable terminal including an elongated, polystyrene shell tending to become bowed when a polymerizable resin is cured therein, which comprises securing a plurality of terminal elements in such a shell, attaching individual conductors of a multiconductor cable to the terminals, bowing the shell in a direction opposite to that caused by such curing, introducing sufficient flowable, polymerizable resin into the shell to cover the terminals and conductors, said resin comprising a polyester of a linear polyhydric alcohol and an unsaturated polybasic acid, a vinyl compound and filler material, heating the resulting assembly to accelerate the curing of the resin, cooling the assembly, and holding the shell against lateral bending and maintaining the shell bowed during the heating and cooling steps whereby the resulting finished article will be substantially straight.

2,729,851
MOLD FOR RETREADING PNEUMATIC TIRE CASINGS
Earle W. Hawkinson, Minneapolis, Minn., assignor to Paul E. Hawkinson Company, Minneapolis, Minn., a corporation of Minnesota
Application October 9, 1952, Serial No. 313,869
1 Claim. (Cl. 18—18)



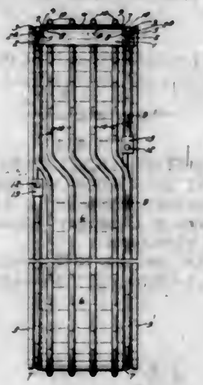
A device for applying treads to pneumatic tire casings, said device comprising an integral cylinder-like matrix formed from sheet metal and having its opposite side edge portions extending radially inwardly defining continuous, unbroken, unobstructed parallel V-shaped tread material confining flanges of uniform size and shape throughout the full peripheral extent thereof, a convolution of tubular heating conduit totally received within each of said confining flanges with its opposite ends projecting radially outwardly therefrom in closely spaced relationship, a band-like reinforcing jacket about the external peripheral surface of said matrix covering over and concealing said V-shaped confining flanges and the heating conduit therein, said jacket having openings therein through which the radially outwardly projecting opposite ends of the heating conduit within said confining flanges project, inlet and outlet fittings on the radially outwardly projecting ends of said confining flange-contained heating conduits, and a spirally wound heating conduit secured to the peripheral outer surface of said band-like reinforcing jacket intermediate said confining flanges, opposite ends of said spirally wound conduit being connected to one of the radially outwardly projecting ends of the conduits in said spaced confining flanges through said fittings.

2,729,852
MOLD FOR RETREADING PNEUMATIC TIRE CASINGS AND METHOD OF FORMING SAME
Earle W. Hawkinson, Minneapolis, Minn., assignor to Paul E. Hawkinson Company, Minneapolis, Minn., a corporation of Minnesota
Application October 10, 1952, Serial No. 314,125
1 Claim. (Cl. 18—18)



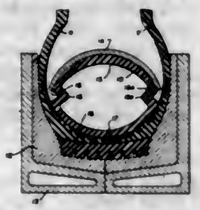
A device for applying treads to pneumatic tire casings, said device comprising an integral cylinder-like matrix formed from sheet metal and having its opposite side edge portions extending radially inwardly defining unbroken, unobstructed parallel continuous V-shaped tread material confining flanges of uniform size and shape throughout the full peripheral extent thereof, a reinforcing band circumferentially about the external peripheral surface of said matrix between said confining flanges, an endless generally spirally-wound tubular heating conduit about said matrix, substantially one convolution at opposite ends of said conduit being nestingly received totally within each of said V-shaped confining flanges, the convolutions of said coil intermediate said flanges being secured to the radial outer surface of said reinforcing band, the opposite ends of said tubular heating conduit projecting radially outwardly of said matrix and terminating radially outwardly of said flanges in enlarged heads providing respectively inlet and outlet fittings, and a pair of opposed annular reinforcing band sections encompassing the marginal edges of the matrix and overlying said confining flanges and the tubular conduit therein, the opposed axial inner edges of said sections being in overlapping relationship with the outer axial edges of said reinforcing band and rigidly secured thereto, and the outer axial edge portions of said sections being rigidly secured to the outer axial marginal edge portion of said matrix to thereby positively hold the matrix against lateral expansion, each of said sections being provided with an inwardly opening notch at its inner edge through which one of said fittings and said conduit extend.

2,729,853
MOLD FOR RETREADING PNEUMATIC TIRE CASINGS
Raymond P. Hawkinson, Minneapolis, Minn., assignor to Paul E. Hawkinson Company, Minneapolis, Minn., a corporation of Minnesota
Application October 20, 1952, Serial No. 315,618
1 Claim. (Cl. 18—18)



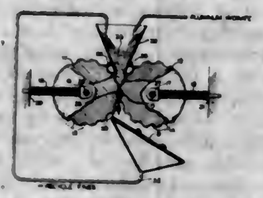
A device for applying treads to pneumatic tire casings, said device comprising an integral cylinder-like matrix formed from sheet metal and having its opposite side edge portions extending radially inwardly defining continuous, unbroken, unobstructed, parallel V-shaped tread material confining flanges of uniform size and shape throughout the full annular extent thereof, an endless band-like reinforcing jacket around the external peripheral surface of said matrix intermediate said confining flanges, said reinforcing jacket having opposite axial side edge portions overlapping the opposed axial inner walls of said V-shaped confining flanges and pressed angularly radially inwardly into engagement therewith preventing the flexing of said matrix due to lateral spreading action of a tire casing contained between the confining flanges, an endless generally spirally-wound tubular heating conduit about said matrix having substantially one convolution at opposite ends of said conduit nestingly received totally within each of said V-shaped confining flanges, the convolutions of said coil intermediate said flanges being secured to the radial outer surface of said reinforcing jacket, and the opposite ends of said tubular heating conduit projecting radially outwardly of said matrix and terminating radially outwardly of said flanges in portions providing inlet and outlet fittings.

2,729,854
AIRBAG
Lee W. Mitchell, Denver, Colo., assignor to The Gates Rubber Company, Denver, Colo., a corporation of Colorado
Application February 8, 1952, Serial No. 270,661
1 Claim. (Cl. 18—45)



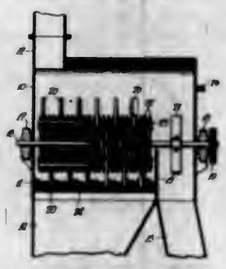
An annular, tubular bag of expansible material adapted to be confined in an annular chamber formed by part of the inner surface of a pneumatic tire and a conventional curing ring positioned therein during the curing operation, the bag being held in place by said curing ring, being preformed with inwardly extending endless folds placed on diametric opposite sides of the bag adjacent opposite edges of the curing ring, which folds unfold when the bag is subjected to internal fluid pressure, tending thereby to lengthen the periphery of the bag and produce a thickening of the wall surface due to said unfolding.

2,729,855
METHODS FOR MAKING SHAPED ARTICLES
Leslie Titus, Campbell, Calif., and William F. Van Loenen, Baton Rouge, La., assignors to Kaiser Aluminum & Chemical Corporation, Oakland, Calif., a corporation of Delaware
Application October 16, 1952, Serial No. 315,122
8 Claims. (Cl. 18—55)



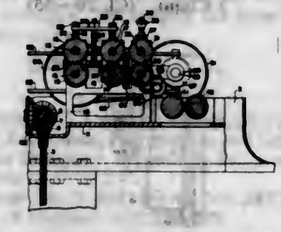
6. A method of producing alumina hydrate pellets which comprises maintaining a film of water on the pressing surfaces of a pellet-forming compression zone, and feeding alumina hydrate to said zone in amount sufficient to form a pellet, and compressing the alumina to produce pellet-forming pressure in said zone and to produce a temperature in said zone in excess of the atmospheric boiling point of the water.

2,729,856
PROCESS FOR SEPARATING FIBROUS VEGETABLE MATERIALS INTO PITH AND FIBER PORTIONS
Paul M. Horton and Arthur G. Keller, Baton Rouge, La., assignors to Board of Supervisors of Louisiana State University and Agricultural and Mechanical College, Baton Rouge, La.
Original application July 6, 1949, Serial No. 103,268. Divided and this application May 28, 1954, Serial No. 433,195
5 Claims. (Cl. 19—7)



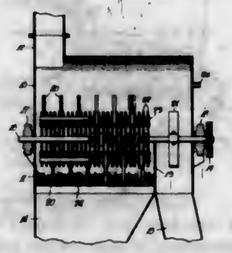
1. A method of separating crushed stalks containing pith and fibrous material into pith and fibrous constituents, which method comprises feeding as a continuous stream a mass of said crushed stalks in a longitudinally extending path, subjecting said mass of crushed stalks during its movement in said path and while the said crushed stalks are in a gaseous medium to mechanical beating to loosen the mass of crushed stalks and place the pith in a readily separable form, continuously screening the loosened material to screen out the pith therefrom while the loosened material is moving through said longitudinally extending path, continuously removing from the terminus of said path the residual fibrous material from which the pith has been screened out and continuously separately removing the pith.

2,729,857
SLIVER DRAFTER EVENER
Daniel E. Cushing and Homer Cushing, Reisterstown, Md.
Application April 18, 1950, Serial No. 156,662
10 Claims. (Cl. 19—70)



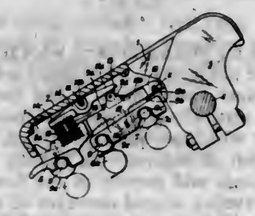
1. A sliver drafter-evener comprising a set of opposed feed rolls for the passage of a sliver therebetween, a set of opposed drafting-evener rolls spaced from and immediately adjacent the feed rolls for the passage of the sliver therebetween as it is received from the feed rolls, means to hold the drafter-evener rolls resiliently together, the drafter-evener rolls being variably and relatively spaced upon passage therebetween of a sliver varying from a predetermined thickness, means connected with said drafting-evener rolls sensitive to their variable relative spacing, means to drive the rolls of each set at the same speeds, means to coordinate the driving means between the two sets of rolls to substantially always drive the set of drafting-evener rolls faster than the set of feed rolls to draft the sliver, and means to connect the sensitive means to the drive coordinating means to vary the speed of the drafting-evener rolls, to increase the speed when a sliver thicker than the predetermined thickness passes between the drafting-evener rolls and to decrease it when a thinner sliver passes therebetween.

2,729,858
APPARATUS FOR PROCESSING FIBROUS VEGETABLE MATERIALS
Paul M. Horton and Arthur G. Keller, Baton Rouge, La., assignors to Board of Supervisors of Louisiana State University and Agricultural and Mechanical College, Baton Rouge, La.
Application July 6, 1949, Serial No. 103,268
9 Claims. (Cl. 19—90)



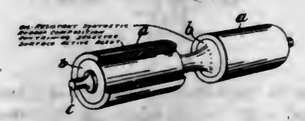
7. An apparatus for breaking up crushed stalks containing pith and fibers to effect substantially continuous separation of the pith and fibers, comprising, in combination, a casing having an inlet at its top for the crushed stalks and having spaced in a longitudinal direction from said inlet a fiber discharge outlet at its base, a substantially semi-cylindrical screen extending in a general longitudinal direction having one end contiguous to said inlet below said inlet and having its opposite end contiguous to said fiber discharge outlet, a rotatable shaft extending lengthwise of said casing substantially concentric with said screen, hammers carried by and projecting outwardly from said shaft for breaking up said crushed stalks and liberating the pith therein, the top of the circle defined by the rotation of said hammers being positioned a substantial distance below the top of said casing to provide a relatively large free space directly above said hammers and extending in the same longitudinal direction as the direction of feed of the crushed stalks through said casing in which large free space a mass of the crushed stalks fed to the machine is subjected to repeated beating by said hammers, and a pith discharge passageway beneath said screen through which pith passing through said screen is withdrawn from said casing.

2,729,859
DRAFTING MECHANISMS FOR TEXTILE FIBRES
Joseph Noguera, Salford, Manchester, England, assignor to Casablancas High Draft Company Limited, Salford, Manchester, England, a British company
Application December 26, 1952, Serial No. 328,040
Claims priority, application Great Britain January 30, 1952
8 Claims. (Cl. 19—135)



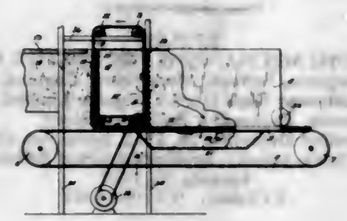
2. In a textile fibre drafting mechanism having adjoining drafting systems composed of consecutive roller pairs and a top arm which is pivoted at the rear of said mechanism and overlies intermediate necks between the top rollers of said systems, the combination of a first saddle pivoted at the rear on said arm and engaging the front roller neck, a second saddle engaging each rearward roller neck, spring means acting on said first saddle to apply weighting pressure thereto, and a weight transmitting lever mounted to turn about a pivot on said top arm, under the reaction of the same said spring means, and thereby to apply weighting pressure to said second saddle.

2,729,860
FIBRE-CONTACTING ELEMENTS USED IN PROCESSING TEXTILE FIBRES, PARTICULARLY IN SPINNING
Mark Balkin and Denys Grahame Turner, Newcastle-upon-Tyne, England, assignors to George Angus and Company Limited, Newcastle-upon-Tyne, England
Application May 7, 1952, Serial No. 286,492
4 Claims. (Cl. 19—143)



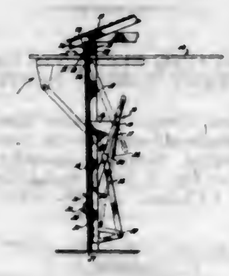
1. A fibre-contacting element for use in processing textile fibres and composed of an oil-resistant synthetic rubber composition containing as a permanent ingredient, in the proportion of at least two parts by weight to one hundred parts by weight of synthetic rubber, a surface active agent having the property of imparting in said proportion an anti-licking character to the element and selected from the group of surface active agents exhibiting said property and consisting of: salts of carboxylic acids, sulphuric esters and sulphonic acids; amine salts and quaternary ammonium compounds; and reaction products of phenols, alcohols and higher fatty acids respectively with ethylene and propylene oxides; all the foregoing containing long-chain hydrophobic molecular groups.

2,729,861
APPARATUS AND METHOD FOR MAKING FIBROUS FELTS
Richard M. Downey, North Judson, Ind., assignor to United States Gypsum Company, Chicago, Ill., a corporation of Illinois
Application November 1, 1951, Serial No. 254,374
9 Claims. (Cl. 19—156)



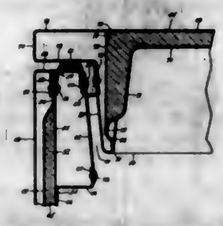
1. Apparatus for making mineral wool felt which comprises means for producing a horizontally traveling stream of gas-borne mineral wool fibers, a first foraminous conveyor having a vertically positioned downwardly traveling portion against which portion said stream impinges and upon which a felt of mineral wool initially collects while gas passes through said portion of the first conveyor, a horizontaily traveling second conveyor to which the felt thus produced is transferred from said first conveyor, means for passing gas which has passed through said vertical portion of said first conveyor through the transferred felt and thence through the second conveyor so as to filter out fibers carried by said gas, and means for exhausting the thus filtered gas to the atmosphere.

2,729,862
NO-SAG OVERHEAD RETRACTING DOORS
Alvin L. Marjama, Monterey Park, Calif.
Application May 28, 1951, Serial No. 228,570
6 Claims. (Cl. 20—16)



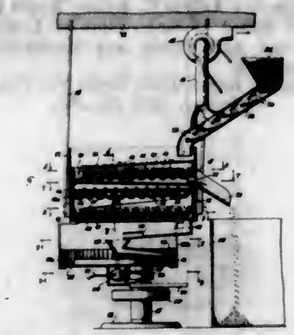
1. For use in combination with an overhead swinging door mounted at its lateral edges for movement between a vertically extending closed condition and an overhead horizontally extending open condition, and a frame member above the door, said door extending and bodily moving generally horizontally during the final stages of its opening movement and during the inital stages of its closing movement; a first element attachable to said frame member, and a second element attachable to said door at a location intermediate said lateral door edges and movable into and out of interfitting relation with said first element during and by virtue of said horizontal movement of the door, said first element having a portion engaging and received beneath a portion of said first element in said open condition of the door to support the door from said member, one of said elements having a wedge face acting to engage the other and progressively draw the door upwardly as it approaches said opened condition.

2,729,863
INSULATED CABINET
Lowell M. Kurtz, Erie, Pa., assignor to General Electric Company, a corporation of New York
Application December 11, 1952, Serial No. 325,298
1 Claim. (Cl. 20—35)



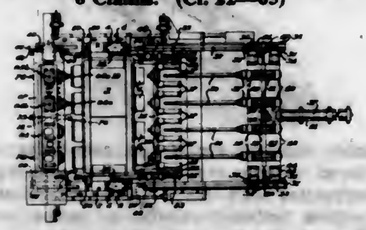
An insulating structure including a sealed evacuated envelope comprising a first wall, a second wall, said second wall including a flange portion extending generally normal to the body of said second wall in a direction away from said first wall, a breaker strip of a material of low thermal conductivity disposed in a direction generally normal to said wails and sealingly engaging said walls to complete said sealed envelope, said first wall including a section extending beyond said breaker strip, a trim strip having one edge secured to said extending section of said first wall and disposed generally parallel to said breaker strip, the other edge of said trim strip being formed in U-shaped cross section, the end of said flange portion of said second wall being received within said U-shaped cross section of said breaker strip, and a fastener penetrating said extending section of said first wall for mounting said trim strip.

2,729,864
GRAIN STERILIZING APPARATUS
Herbert R. Klink, Roanoke, Va.
Application April 25, 1951, Serial No. 222,884
4 Claims. (Cl. 21—91)



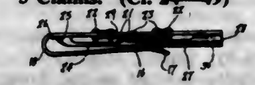
3. An insect remover and destroyer for grain, comprising means including screen means adapted to receive successive portions of grain, for sifting insects from the grain, said screen means being adapted to retain grain and pass the insects, associated means for discharging grain from the screen means, means collecting the insects sifted from the grain, a conduit structure adapted to receive insects from said collecting means and having inner and outer ends, said conduit structure being arranged to define a path for the insects and mounted for rotation about an axis adjacent the said inner end and at an angle to said path for flinging the received insects through the conduit structure and outwardly through said outer end thereof by centrifugal force, means for rotating said conduit structure and wall means surrounding said rotating conduit structure outside the path of revolution of said outer end, to be impinged by the insects flung outwardly from said conduit structure, for destroying the insects, said conduit structure comprising a tubular passage extending substantially radially of said axis of rotation in a direction substantially perpendicular to said axis, and shaped to direct the insects outwardly under full centrifugal force through the outer end of the conduit structure, for flinging the insects destructively against the wall means.

2,729,865
CENTRIFUGAL CASTING APPARATUS
Paul J. Kaveny, Zelienople, Pa., assignor to Herman Pneumatic Machine Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application July 8, 1952, Serial No. 297,711
8 Claims. (Cl. 22—65)



1. Centrifugal casting apparatus comprising a support, an open-ended flask rotatably carried by the support, means mounted for movement generally axially of the flask into and out of the flask cooperating with the flask in forming therein a mold of finely divided mold forming material, pivot means whose axis extends generally transversely of the axis of the flask, a carrier carried by the pivot means in fixed transverse location and having outwardly extending arms and a member adapted to be moved into juxtaposition with an open end of the flask carried by the arms adapted to be positioned substantially coaxially with the flask in the path of the mold forming means when the carrier is in one angular position about the axis of the pivot means, means for moving the carrier about the pivot means to position said member laterally of the path of the mold forming means with the arms disposed alongside the path of the mold forming means and means for moving said member generally axially of the flask into and out of juxtaposition with said open end of the flask when the carrier is in said first mentioned angular position about the axis of the pivot means.

2,729,866
EXPANDABLE TIE HOLDER
Abraham Welnrib, Brooklyn, and Saul Kaplowitz, Elmont, N. Y.
Application April 2, 1954, Serial No. 420,720
3 Claims. (Cl. 24—49)



1. A sectional tie clasp comprising a clip having a rear spring arm and a front arm, an extension member for said front arm, a plurality of lazy tong links connecting said front arm and extension member for adjustment, a telescopic arm guide secured to said front arm and a sheath secured to said extension member and axially aligned with said arm guide.

2,729,867
BUCKLE FRAME AND COVERING THEREFOR
Mary Heloise Ballard, Chicago, Ill., assignor to Ballard Belt and Buckle Company, Chicago, Ill.
Application July 5, 1951, Serial No. 235,228
1 Claim. (Cl. 24—176)

In a covered S-shaped buckle frame comprising a fabric tube covering said frame having helical warp and weft and having a maximum lateral dimension corresponding to the dimension of the wide portion of the frame, said tube having a longitudinally extending loose and stretchable seam in taut relation on said frame with the free-end portions secured for maintaining said taut relation,



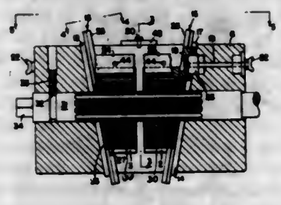
said loose seam allowing said tube to contract when under tension for snugly and smoothly conforming to the narrower portions of the frame, the improvement of the buckle frame comprising a frame having free-end portions of a width substantially equal to the widest portion of said frame.

2,729,868
PAPER MONEY HOLDER
Reginald W. Manning, Phoenix, Ariz.
Application November 3, 1952, Serial No. 318,397
2 Claims. (Cl. 24—255)



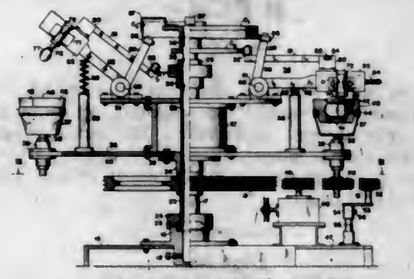
1. A paper money holder in essentially one-piece clip form comprising a resilient sheet-like material doubled upon itself along a first edge to form sides having free edges resiliently spreadable to receive the money between them, a first of said sides containing an opening substantially midway between its free edge and said first edge, and a roller mounted at the outside of the holder for pivotal movement within said opening and engageable with and rotatable by money being inserted into or withdrawn from the holder, the second side of the holder having a portion curved inwardly toward the roller and extending across the holder, said second side being deflected outwardly from said first side at its free edge and said second side containing in said curved portion an opening opposite the first mentioned opening and receiving said roller.

2,729,869
GRIPS FOR USE IN TENSION TESTING MACHINES
Francis C. Huyser, Moline, Ill., assignor to American Machine and Metals, Inc., New York, N. Y., a corporation of Delaware
Application September 14, 1951, Serial No. 246,683
7 Claims. (Cl. 24—263)



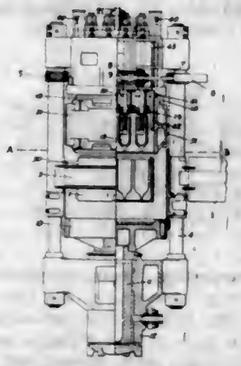
1. Specimen supporting means comprising, a testing machine head having an opening with two inclined opposed surfaces, a plate lying against each surface, a tongue along one edge of each of said plates, a pair of wedge grips bearing against said plates respectively and adapted to engage a specimen between them, rack plates in said opening each having a groove in which the tongue of one of said plates slides, means connecting each of said rack plates to one of said wedge grips, and a single pinion carried by the head for moving both rack plates simultaneously.

2,729,870
ROLLER TOOL JIGGERING MACHINE
George B. Guthrie, Chester, W. Va., assignor to The Hall China Company, East Liverpool, Ohio, a corporation of Ohio
Application August 7, 1952, Serial No. 303,105
12 Claims. (Cl. 25—24)



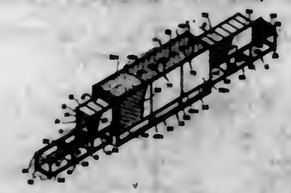
11. Apparatus for continuously forming a plurality of containers including a plurality of molds, means to rotate each mold, a bell crank lever for each mold having a first arm positioned near the mold, a sleeve on the first arm adapted for axial movement along the arm, resilient means on the first arm to oppose the outward movement of the sleeve, a roller tool supported by the sleeve and insertable in the mold, a first cam engageable with the second arm of the bell crank lever to lower the first arm and thereby insert the tool in the mold, resilient means to oppose the downward movement of the first arm whereby initial engagement of the second arm of the lever with said first cam is facilitated, a second cam synchronized with the first to control the travel of the sleeve along the first arm whereby the roller also moves along the first arm relatively to the mold while inserted therein to form the container and is finally left in a position free of contact with the mold, a third cam synchronized with the previous two to retract the tool from the mold when in said final position whereby the container can be removed from the mold and replaced with additional container-forming material before the first cam reinserts the tool in the mold.

2,729,871
HYDRAULIC PRESS
Antonio Vittorio Locatelli, Rome, Italy
Application January 29, 1952, Serial No. 268,752
Claims priority, application Italy February 28, 1951
3 Claims. (Cl. 25—54)



1. In an apparatus for hydraulically dry molding perforated tiles, an open-top open bottom mold receiving case, means mounting said case for vertical movement, and a sensing device comprising an element within and independent of said case for engaging and being shifted by a mold entering the case, and an element carried by said case and normally spaced from said first-named elements and engageable with said first-named element upon movement of said case prior to movement of said first-named element.

2,729,872
PORTABLE TUNNEL KILN
Forrest W. Peterson, Burbank, Calif., assignor, by mesne assignments, to Ferro Corporation, Cleveland, Ohio, a corporation of Ohio
Application December 29, 1950, Serial No. 203,483
6 Claims. (Cl. 25—144)



1. A pusher slab type tunnel kiln, comprising: a plurality of tunnel sections removably connected together; skids for supporting each section; means for adjusting at least one section vertically relative to another section; and a muffle extending longitudinally in at least one section, said muffle being formed of refractory material and having dry, slip joints so that said muffle is relatively flexible.

6. In a kiln: a plurality of tunnel units, each unit having a structure of refractory material forming a tunnel; metal frame-work for each unit for supporting the refractory structure, one of said units having a recess in one end for reception of the adjacent end of the other unit so that the tunnels thereof are in register for forming a tunnel through the kiln; and means for at least one of the units for leveling same so as to bring the tunnel of said other section into register with the tunnel of said one section whereby the sections may be joined.

2,729,873
METHOD OF MANUFACTURING A CONCRETE PIPE JOINT
Herbert P. Ludwig, Colton, Calif., assignor to Concrete Conduit Company, Colton, Calif., a corporation of California
Application January 9, 1951, Serial No. 205,059
1 Claim. (Cl. 25—154)

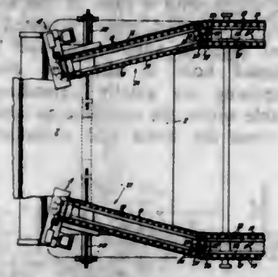


A method of casting a plurality of concrete pipe collars, characterized by: placing a series of casting rings, each having a radially directed central flange and axially directed lips, within a tubular casting shell; separating said casting rings by annular foraminous reinforcing units; rotating said casting shell; and introducing cementitious material therein, whereby said cementitious material is urged by centrifugal force radially outwardly between the confronting ends of said lips, through and around said reinforcing units, and crowded axially between said lips and said casting shell.

2,729,874
TENTER
John McCreary, Cohoes, N. Y.
Application July 10, 1953, Serial No. 367,304
5 Claims. (Cl. 26—61)

1. A tenter comprising two, horizontally-spaced, chain-supporting beds each comprising two, horizontally-spaced

channels adapted laterally to confine the runs of the chain supported on said bed; each of said beds, adjacent the feeding end of said tenter, comprising a separate section longitudinally-spaced from the balance of said bed; a chain comprising a multiplicity of links provided with tenter pins and rollers thereon supported on each of said beds within said channels; said rollers having vertical axes adapting them to roll on the sides of said



channels when in contact therewith; links pivotally connecting each of said separate sections at a plurality of points to the adjacent portion of the bed of which it is a part to swing laterally towards and away from the other bed; said links having channels thereon forming longitudinally-spaced extensions of the channels on said bed; and flexible means in said channels forming extensions of the side walls of said channels and bridging the spaces therebetween.

2,729,875
ADJUSTABLE BED CONSTRUCTION FOR CASKETS
John L. White, Cambridge City, Ind.
Application June 9, 1954, Serial No. 435,417
12 Claims. (Cl. 27—12)



4. In a casket having a casket bed, means for adjustably supporting said casket bed, said means comprising a vertical post configurated to form a plurality of spaced apertures, a positioning plate pivotally secured to one end of said casket bed, said positioning plate being disposed in slidable engagement with said vertical post, said positioning plate being configurated to form a plurality of vertically spaced notches, an adjustment plunger, means for reciprocally mounting said adjustment plunger at an end of said bed, said plunger being shiftable to an advanced position in which it engages one of the openings in the vertical post, said plunger carrying a finger adapted for engagement with one of the notches provided in said positioning plate when said plunger is in an advanced position, said plunger being shiftable to a retracted position in which it is disengaged from said aperture in the vertical post and the finger is disengaged from the notches in the positioning plate, whereby the end of the bed can be raised or lowered and the sideways angulation of the bed can be adjusted.

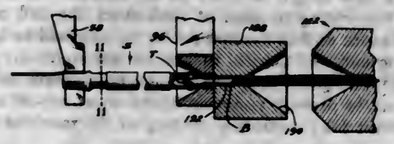
2,729,876
BLOOD VESSEL DRAINAGE TUBE
Melloy S. Hagemann, Kansas City, Kans.
Application January 19, 1953, Serial No. 331,937
4 Claims. (Cl. 27—24)

1. In combination with a rigid tube, a clamping means comprising a shaft fixed to said tube and having a portion disposed in parallel, spaced apart relation to said tube, a pair of clamping members pivoted on said shaft and each having a jaw portion extending laterally from said shaft, said jaw portions being disposed respectively at opposite



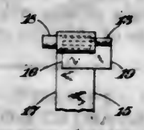
sides of said tube and being shaped to conform generally with the cross-sectional contour of said tube, and resilient means urging said jaws toward said tube.

2,729,877
HEATER INSERTER
Henry W. Roeber and Stanley J. Gartner, Emporium, Pa., assignors to Sylvania Electric Products Inc., a corporation of Massachusetts
Application February 20, 1948, Serial No. 9,844
12 Claims. (Cl. 29—25.19)



1. The method of assembling indirectly heated cathodes having a bundle of heater wire within a hollow sleeve and comprising the steps of simultaneously compacting said bundle of heater wire, oscillating the bundle relative to said sleeve and about its longitudinal axis, and advancing it endwise toward and into the open end of the cathode sleeve.

2,729,878
ELECTRICAL CAPACITORS
Richard Alfred Grouse, Wandsworth, London, England, assignor to A. H. Hunt Capacitors Limited, London, England, a British company
Application September 7, 1950, Serial No. 183,489
Claims priority, application Great Britain September 8, 1949
7 Claims. (Cl. 29—25.42)

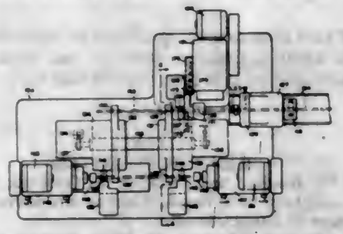


1. A process of producing an electrical capacitor, consisting of winding from a single strip of dielectric a roll, and feeding at intervals into the roll as it is wound rectangular cut strips of metal foil so that the foil strips are spaced apart in the roll longitudinally of the dielectric strip, the foil strips all having the same width and being fed into the roll in staggered relationship so as to form two series, with each foil strip extending up to one end of the roll but not the other end and the foil strips of the two series extending up to opposite ends of the roll and overlapping one another in the roll to form capacitor electrodes of opposite polarity, and thereafter connecting a terminal at each end of the roll to the foil strips of the series extending up to that end.

2,729,879
CUT-OFF MACHINE
Merritt B. Sampson, Chagrin Falls, Ohio, assignor to The Motch & Merryweather Machinery Company, Cleveland, Ohio, a corporation of Ohio
Application August 17, 1949, Serial No. 110,838
5 Claims. (Cl. 29—69)

1. In an automatic cold metal sawing machine including a rotary saw, means operative to reciprocate said saw

to cut off sections from a length of stock advanced therepast, and stock feeding means operative intermittently to advance such length of stock into position to be cut off by said saw; stock clamping means closely adjacent the side of said saw remote from such feeding means normally operative firmly to clamp such stock during performance of a sawing operation, control means for holding said stock clamping means closed during initial feeding of a new length of stock to the machine to serve as a stop preventing passage of such stock the full normal feed distance so that the first cut by the saw will be a short cropping cut, and control means for automatically opening said clamping means prior to completion of such initial cut to prevent jamming of the short cut-off section and permit fully automatic cycling of the machine thereafter.



2,729,880

ALUMINUM OXIDE SEMI-CONDUCTORS

William A. Miller, Port Jefferson, N. Y., assignor to Radio Corporation of America, a corporation of Delaware

No Drawing. Application September 23, 1948, Serial No. 50,883
7 Claims. (Cl. 29—182.1)

1. A semi-conductor having a negative temperature coefficient of resistance, consisting essentially of a compact porous body of sintered aluminum oxide and aluminum, said body being made by diffusing aluminum metal homogeneously throughout the pores of a compact body of aluminum oxide at sintering temperatures of said oxide above about 1,450° C. but below the melting temperature of said oxide and in a non-oxidizing atmosphere, and the ratio by weight of said oxide to said aluminum being within the range of about 40 to 1 and about 3 to 1.

2,729,881

COMPOSITE METAL ARTICLE OF CHROME STEEL AND PLATINUM COMPONENTS

Max Joseph Stumbock, South Orange, N. J., assignor to Baker & Co., Inc., Newark, N. J., a corporation of New Jersey

No Drawing. Application June 20, 1951, Serial No. 232,667
1 Claim. (Cl. 29—196.3)

A composite metal article made up of two or more independently formed metal parts having two abutting metal surfaces, one of said parts having an abutting surface being a chrome steel alloy and the other of said abutting parts being of a platinum alloy, the combination therewith of a binary brazing alloy between said surfaces and bonded thereto consisting of 60% Pd and 40% Cu and having a melting point of about 1200° C.

2,729,882

COMMUTATOR ASSEMBLING MACHINE

Richard M. Goodwin, Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application January 18, 1952, Serial No. 267,098
4 Claims. (Cl. 29—205)

1. A commutator assembling machine comprising in combination, a stationary block having an annular chamber into which a row of alternate metal bars and insulating segments are directed to form them into an annulus; two rotatable discs, superposed and arranged so that a segmental area of one overlaps a segmental area of the second disc, each disc having equally spaced transverse holes arranged in a circular row concentric of the disc, one hole of said one disc aligning with the annular chamber in the block at the same time another hole of the said one disc aligns with a hole in the second disc; a pair of oppositely disposed, power actuated plungers coaxially aligned with the annular chamber in the block and the aligned hole in the one disc, the one plunger comprising an axially extending cylindrical plug positionable within the said hole on which to receive the annulus from the block and a radially extending



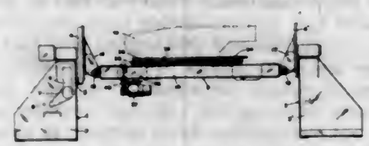
shoulder engageable by the annulus to axially align the segment thereof within the said one hole, the other plunger comprising a sleeve operative to engage and transfer the annulus from the block to the aligned hole in the one disc with at least partial telescoping thereof on the said plug; and a second pair of oppositely disposed power actuated plungers in coaxial alignment with the two aligned holes in the two discs, one plunger when actuated providing an abutment cover for the hole in the second disc, the other plunger comprising an axially extending cylindrical plug and a radial shoulder extending therefrom engageable with the annulus in the one disc to maintain established alignment of the annulus segments during transfer of the annulus from the one disc into the hole in the second disc.

2,729,883

POSITIONER FOR WELDING OR OTHER MANUFACTURING OPERATION

Louis G. Hilkemeier, Plainfield, N. J., assignor to Worthington Corporation, Harrison, N. J., a corporation of Delaware

Application February 25, 1953, Serial No. 338,662
2 Claims. (Cl. 29—288)



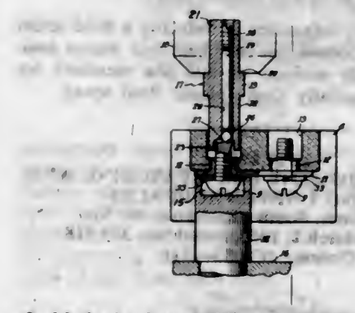
1. The combination with a headstock having a rotatable driven table thereon and a tailstock having a freely rotatable table of at least one cradle support bracket mounted on and movable with each of said tables, spaced channels connected between said cradle support brackets and movable therewith in a circular path about the axial line between said tables, said channels being wider at their central position than at their connecting end, a work table having an opening therethrough, means for movably mounting said work table on said widest portion of the spaced channels for rotatable movement about an axis transverse of the axial line of said tables including, a supporting ring fixedly connected to said channel members on the upper side thereof, a ball bearing member including an inner race fixedly connected to said supporting ring, a gear ring connected to said work table about said opening and forming an outer race to allow substantially frictionless rotation of said work table, and driving means engaging said gear ring for independent rotation of said work table, and a platform member attached to the underside of said channel members to facilitate operation through said opening.

2,729,884

METAL ARTICLE DEFORMING METHOD AND APPARATUS THEREFOR

Francesco F. Mautone, Chicago, Ill., assignor to Admiral Corporation, Chicago, Ill., a corporation of Delaware

Application August 30, 1952, Serial No. 307,329
3 Claims. (Cl. 29—522)



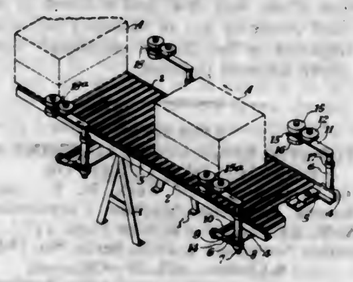
3. Method of assembling and adjustably securing a screw within an aperture with a restricted portion comprising assembling only the threaded portion of said screw within said aperture with the end of said threaded portion within the unrestricted portion of the aperture, resting the head of the screw on an anvil adjacent said restricted portion while the threaded portion is within said unrestricted portion of the aperture, subjecting the extremity of said threaded portion of the screw to gradual application of force by a sphere rotating and eccentrically moving while surrounded by a circular recess for the reception of said extremity to gradually form an arcuate groove in said extremity and simultaneously flaring the perimeter of said extremity until it is deformed to a diameter substantially greater than the restricted portion and smaller than said unrestricted portion of the aperture.

2,729,885

APPARATUS FOR SLITTING CARTONS

Albert J. Wahl, Portland, and Charles A. Lanz, Brocton, N. Y., assignors to A. J. Wahl, Inc., Brocton, N. Y., a corporation of New York

Application February 8, 1954, Serial No. 408,776
10 Claims. (Cl. 30—2)



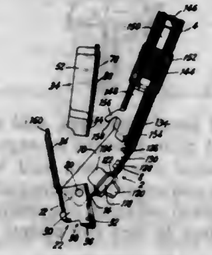
1. In apparatus of the class described, a box support on which the box is movably mounted, a pair of slitters arranged on opposite sides of the box for cutting the box in two lengthwise, a pair of slitters arranged on opposite sides of the box for cutting the box in two crosswise, and means for exerting a yielding pressure on said slitters when in engagement with the box to hold the slitters in cutting engagement with the box as the box is moved between them.

2,729,886

MAGAZINE TYPE RAZOR

Charles Delafontaine, North Hollywood, Calif., and William C. Baumgardner, Bayside, N. Y., assignors to Warner-Lambert Pharmaceutical Company, a corporation of Delaware

Application January 16, 1953, Serial No. 331,620
25 Claims. (Cl. 30—40)



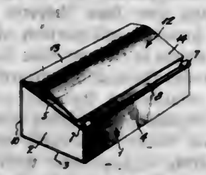
7. A safety razor having a head, said head having an integral blade locating and holding element, said element having a forwardly extending transverse lip, a comb spaced from such lip, means defining a pocket communicating with the space between the lip and comb, and a disposable magazine member adapted to be removably mounted in said element, said member having a cavity for a ribbon blade coil and provided with a transversely extending and continuous blade-contacting flange, and clamping means including a movable element adapted to secure the magazine member in operative position in the pocket in the element with said flange in engagement beneath the lip.

2,729,887

DISPOSABLE RAZOR

Leo M. Appeldorn, Huntington, W. Va.

Application June 4, 1953, Serial No. 359,561
2 Claims. (Cl. 30—41)



1. A disposable razor comprising a body having a bottom, front, back and side panels and a blade rest substantially closing the top thereof, a resilient flap projecting from said back panel and extending over the major portion of said blade rest and adapted to have its free edge bear upon a razor blade on said blade rest and hold the blade in place upon said blade rest, said blade rest having a longitudinal slot adjacent the juncture of said blade rest and said front panel, and at least one of said other panels having a slot diagonally disposed from said first mentioned slot with respect to said body, whereby waste may enter the body through the slot in said blade rest and flow out through the other said slot.

2,729,888

SAFETY RAZORS

John B. O'Shea, Northampton, Mass.

Application June 30, 1953, Serial No. 365,176
5 Claims. (Cl. 30—60.5)

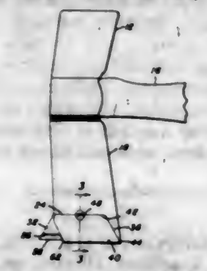
1. In a safety razor having a head body fixed to a handle and having a pair of cover members swingable between open positions in which they are spread apart for reception of a razor blade between them and closed positions in which they close upon the blade and clamp the blade against said head body, a plate element disposed edgewise between said cover members and having a bar

element rigid on each of its ends, means pivotally supporting said cover members on and between said bar elements, a shoulder at each end of said plate element in substantially spaced relation to said bar elements, means for moving said plate element toward and from said head body thereby to correspondingly move said shoulders and



the pivots of said cover members, said shoulders being positioned on said plate element to engage and support a blade when moved away from said head body, and coacting means on said cover members and said head body for effecting rotational swinging movements of said cover members in response to said movements of their pivots.

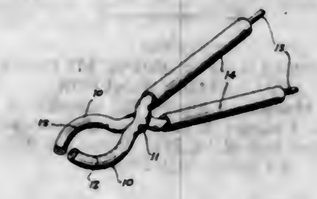
2,729,889
DETACHABLE CUTTER BLADE
Edmund F. Trinski, East Chicago, Ind.
Application April 2, 1952, Serial No. 279,971
1 Claim. (Cl. 30—286)



A cutting tool of the type comprising a handle and a head on one end portion thereof and at right angles thereto, said head having one face thereon tapering to a marginal edge, the forward end portion of said head being cut away and a recess in the opposite face of said head extending longitudinally from said forward end portion to a point in spaced relation to the rear end thereof and defining relatively angularly extending shoulders, a substantially trapezoidal blade removably mounted in the recess in edge-abutting engagement with the shoulders and including a tapered cutting edge extending beyond said marginal edge and projecting forwardly of said head, a polygonal guard plate removably mounted in the recess on the head and abutting the shoulders, said plate having a cut-away forward end portion flush with said cut-away portion of the head for exposing the forwardly projecting portion of the blade, said plate comprising an inwardly bent marginal flange paralleling the tapered cutting edge and closely adjacent thereto, said head having a threaded opening extending transversely therethrough in communication with the recess and intersecting one of the shoulders, said blade having a threaded marginal notch therein aligned with the opening, said plate having a tapered marginal notch therein aligned with the opening, and a screw threadedly mounted in the opening and the first-named notch and including a conical head engaged in the second-named notch for clamping the blade and the plate in the recess.

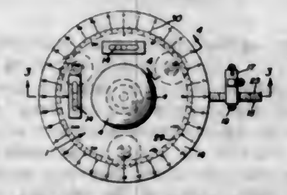
2,729,890
CHEESE SCISSORS FOR ITALIAN CHEESES
Raymond T. Stahl, Homewood, Ill., assignor to Swift & Company, Chicago, Ill., a corporation of Illinois
Application November 20, 1952, Serial No. 321,615
3 Claims. (Cl. 31—5)

1. Apparatus for subdividing semi-plastic loaves into units of lesser length comprising: opposingly-positioned, blunt-edged, hollow jaw members mounted for pivotal motion, said jaws when in an open position describing an annular orifice and when closed substantially occluding



said annular orifice, means for introducing a fluid under pressure into said hollow jaw members and means positioned on the inside surfaces of said jaw members for producing a substantially single planar fluid spray.

2,729,891
COMPASS INSTRUMENT FOR MEASURING AND MARKING UNEVEN SURFACES
Cecil C. Winter, South Charleston, W. Va.
Application March 2, 1953, Serial No. 339,518
2 Claims. (Cl. 33—21)

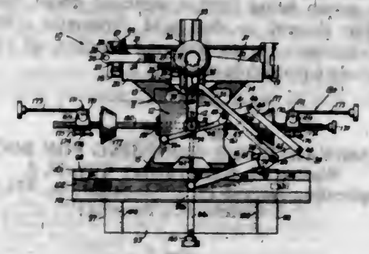


1. An instrument for projecting a circle on an uneven surface and taking depth measurements of the surface at different points comprising a disk having a graduated edge, legs spaced around said disk and supporting said disk on said surface and telescopically adjustable to adjust the disk into horizontal position, right angularly related spirit levels on said disk for indicating when said disk is horizontal, a graduated ring surrounding the edge of the disk and supported by said legs for rotation around the axis of the disk to register the graduations on the ring with the graduations on the disk, a radial graduated compass beam on the ring, a graduated stylus, and a mounting for the stylus slidable on the beam to register with the graduations on the beam and having the stylus vertically adjustable therein at one side of the beam, a centering pin extending through said disk for centering the disk and legs on said surface and having a hand grip knob thereon above said disk, and a clamp in said disk in which said centering pin is vertically adjustable and which is rotatable in the disk to clampingly retain said centering pin in adjusted position.

2,729,892
MULTI-RATIO ENGRAVING MACHINE AND WORKHOLDER THEREFOR
Gerhard G. Gruettner, New York, N. Y., assignor to New Hermes Engraving Machine Corporation, New York, N. Y., a corporation of New York
Application November 4, 1950, Serial No. 194,163
6 Claims. (Cl. 33—25)

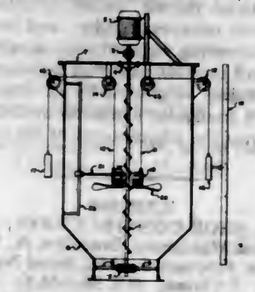
1. In an engraving machine or the like having a base, a workholder and a copyholder, the combination having a multi-ratio pantographic tracer arm and engraving tool assembly, said assembly comprising a parallelogram linkage of a pair of inner and outer end linkage arms, and a pair of inner and outer side linkage arms, each of which arms is of fixed length, with the alternate arms of each pair being joined pivotally to each other by pivot means and bearing means respectively, to join the parallelogram linkage in a parallelogram of fixed length members, ex-

tensions on each of the end linkage arms, one of which has slidable positioning means thereon to one side of the parallelogram linkage carrying an engraving tool, the other extension having pivot supporting means to one side of the parallelogram linkage, said last pivot supporting means including a fixed length tracer arm, a



pantograph supporting extension arm slidably connected to one of said side linkage arms at one end of said extension arm, and pivot means for the assembly at the other end of said extension arm, a slide mount for said pivot means, guide means for said slide mount and means for supporting the assembly and work for relative movement to and from each other.

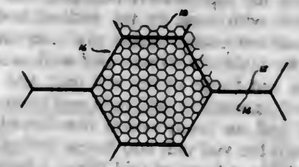
2,729,893
CONTINUOUS LEVEL-SENSING DEVICE
John Francis Schnacky, Buffalo, N. Y.
Application April 20, 1953, Serial No. 349,615
1 Claim. (Cl. 33—126)



The combination with a vessel for liquid or fluent solid material, of a device for sensing and indicating the level of the material comprising a shaft having a screw thread thereon, said shaft extending vertically through the material in said vessel and being supported rotatably thereby, means for rotating the shaft in a sense to advance the screw thread upwardly, a rotor on said shaft threadedly engaged thereby, said rotor having portions adapted when engaged by said material to frictionally retard its rotation with the shaft so as to cause it to progress upwardly with the advance of said screw thread, and said rotor being freely rotatable downwardly along said screw thread when out of engagement with said material.

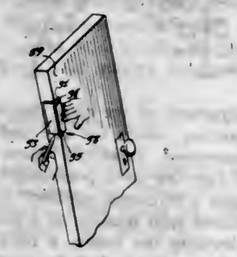
2,729,894
PLASTIC DIE MODEL AND METHOD OF MAKING SAME
Herbert V. Andrews, Wayne, Mich.
Application August 6, 1952, Serial No. 302,966
6 Claims. (Cl. 33—174)

1. A close dimension plastic die model comprising a unitary outer honeycomb structure formed of a plurality of substantially vertical primary cells of plastic impregnated fibrous material, a plurality of groups of smaller substantially vertical plastic filler cells, one group disposed within each of said primary cells, said groups of filler cells being formed separate from said primary cell structure and each group of filler cells being engaged at its outer boundaries with the adjacent primary cell so that said primary cell is a wall surrounding said group of filler cells, said filler cells being formed of a stable material of high compressive strength and extending substantially to the top level of the primary cell, a core of light weight, stable plastic having high compressive strength disposed within said primary and filler cells



and extending short of the top of said filler cells, and a layer of low shrinkage surface plastic which will remain stable over a relatively large range of temperatures extending over and above the face of said honeycomb structure and into the primary cells and filler cells to the core in said filler cells, said primary and filler cell structure relieving internal stresses and strains and adding to the strength of said die model.

2,729,895
BUTT GAUGE FOR CORRECT FITTING OF HINGES ON DOORS AND JAMBS
Carl Ivar Backstrom, Englewood, N. J.
Application August 6, 1952, Serial No. 302,965
1 Claim. (Cl. 33—197)



A butt gauge for scribing doors and jambs comprising a smooth, flat body of rectangular cross section, an integrally formed rectangular ridge located along one longitudinal edge of said body at one side thereof and extending perpendicularly thereto, and a second integrally formed rectangular ridge located along the same longitudinal edge of said body at the other side thereof and extending perpendicularly thereto, said second ridge being of a lesser thickness than said first ridge, said ridges being squared with the smooth surface of said body whereby to provide sharp, right angular corners therewith.

2,729,896
WHEEL ALIGNMENT GAUGE
Lester A. Rosenblum, Franklin, N. H.
Application November 18, 1952, Serial No. 321,165
3 Claims. (Cl. 33—203.18)



1. An alignment gauge comprising a work-engaging head, a hollow compartmental body extending from the head and formed by companion housing sections including a lower supporting section secured to the head and a removable upper section accurately seated on the lower

section, means on the upper section for mounting an elongate leveling vial for viewing at the upper face of said section, said means comprising an elongate opening and transverse walls at the inner face of said housing at each end of said opening, a leveling unit including a vial, said unit having mounting flanges projecting at the respective ends, means on the transverse housing wall at one end of said opening for supportively engaging one end flange of the vial unit with capacity for vertical bodily adjustment about said last-named means as a fulcrum, a threaded bore in the other transverse end wall, a slot in the corresponding end flange of the vial unit, and a threaded setting element received in said bore and having a manipulating head and an intermediate non-threaded portion passing through the vial unit end flange slot and engaging the upper and lower faces of said flange adjacent the slot for positive vertical adjustment of the vial unit pivotally about the fulcruming remote end thereof and in either direction by appropriate increments to zero the vial relative to the housing for factory setting thereof, and means to secure and block said setting against tampering.

2,729,897
INSTRUMENT FOR TRANSFERRING SURVEY REFERENCE POINTS
William Donald Smith, Newport Beach, Calif.
Application October 6, 1952, Serial No. 313,209
9 Claims. (Cl. 33—217)



1. An instrument of the class described, comprising a boom, supporting means for one end of the boom extending transversely from the boom in rigid relation thereto and carrying at a predetermined distance from the boom axis a reference member adapted to be accurately positioned with relation to a fixed reference mark, means for leveling the boom, a measuring element dependent from the other end of the boom under directional control of gravity and carrying a position indicator at its free end, and control means adjacent the said one end of the boom for controllably varying the length of the pendent portion of the measuring element, said means for leveling the boom including a secondary support of adjustably variable effective length and means indicating angular departure of the boom from horizontal position, the secondary support comprising a leg having a foot at one end and pivotally connected at the other end to the boom, and means for adjustably shifting the point of said connection longitudinally of the boom.

2,729,898
COLOR LOCATOR
Frederic H. Rahr, New York, N. Y., assignor to The Sherwin-Williams Company, Cleveland, Ohio, a corporation of Ohio
Application May 27, 1947, Serial No. 750,864
7 Claims. (Cl. 35—28.3)



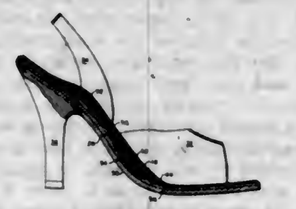
7. A color directory comprising a set of plates of transparent material which exhibits substantially no absorption of wave bands of incident visible light and chromatic and achromatic color chips carried by said plates and arranged in groups of chromatic color chips spaced about an achromatic color chip, the color chips of one group differing from the color chips of any other group by a difference in white content, the chromatic color chips in any one group being further arranged about the achromatic chip thereof so that said chromatic color chips exhibit variations, as to hue and shading, of colors of substantially equal white content.

2,729,899
REMOVABLE FUR TRIMMING FOR BOOTS
Warren M. Haase, Jersey City, N. J.
Application August 17, 1953, Serial No. 374,596
1 Claim. (Cl. 36—7.1)



A combined boot and cuff comprising a boot, a cuff having a flexible body extended along the inner top edge portion of the boot, a trim member longitudinally extending along the length of the flexible body and embracing said top edge, said body comprising a fabric covering folded in the form of a pocket and including a stiffener material therein, means securing said fabric covering and trim member together, and fastening means on said fabric covering engaged with means on the boot to secure the cuff thereon, said trim member being folded in a line extending longitudinally of the flexible body and including a triangular extension at each end thereof fitting snugly over the adjacent end of the top edge of the boot.

2,729,900
SHOE CONSTRUCTION
Fred Maccarone, Brooklyn, N. Y.
Application February 3, 1955, Serial No. 485,877
7 Claims. (Cl. 36—58.5)

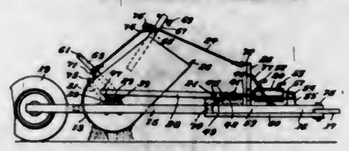


1. In combination, a sock lining having an elongated aperture longitudinally cut in the shank portion, a cushion member stitched to the underside of the lining and filling the aperture, a second cushion member secured to the underside of the sock lining and the first-named cushion member and defining a pocket between the cushion members, and an elongated leaf spring longitudinally disposed in the pocket.

2,729,901
HYDRAULICALLY ACTUATED TRACTOR SCRAPER
Henry Schmale, Thornton, Iowa
Application November 20, 1951, Serial No. 257,305
1 Claim. (Cl. 37—133)

A hydraulically actuated tractor scraper, comprising a scoop including a base plate, side walls secured to said base plate, a gate hingedly connected to said side walls, a

horizontally disposed frame including side beams, a tongue extending forwardly from said frame, wheels connected to the rear ends of said beams, a horizontally disposed cylinder for actuating said scoop, the front end of said scoop being open and provided with a scraper blade, the rear ends of said side walls being substantially semi-circular in shape, arms extending forwardly from said gate, stub shafts connected to said arms and journaled on said beams, a piston rod projecting rearwardly from said cylinder, a crossbar connected to said rod and having its ends secured to the side walls of said scoop, a



projection extending upwardly from said tongue, a pin pivotally connecting the front end of said cylinder to said projection, diagonally positioned sections connecting the front ends of said side beams to said tongue, stop members for limiting turning movement of said scoop, an eye on said gate, a vertically disposed post projecting upwardly from said frame, a cable having one end connected to said post and its other end connected to the eye on said gate, sloping side members extending between said post and diagonally positioned sections, and a crossbar connected to said gate for engagement with the side beams of said frame.

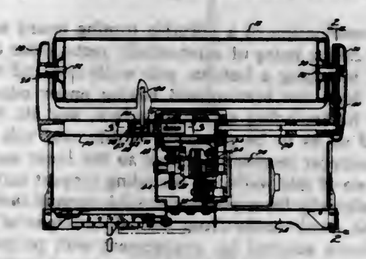
2,729,902
DETACHABLE BLADE FASTENING MEANS FOR DIGGER TOOTH
Ernie L. Launder, Montebello, Calif., assignor to H. & L. Tooth Company, Montebello, Calif., a corporation of California
Application November 4, 1949, Serial No. 125,522
7 Claims. (Cl. 37—142)



1. In combination, a tooth tip having a flat top, an elongate blade seated on the top of the tip and having ribs at the sides thereof, the blade projecting forward from the tip, and means coupling the blade and tip including, plates separate from the tip and blade and located at the sides of the assembled tip and blade, an inwardly projecting flange on each plate engaging a rib of the blade above the tip, and a bottom connecting the plates and engaged under the tip, the flanges being pitched relative to the top of the tip and cooperating therewith to form rearwardly converging channels into which the ribs of the blade are wedged.

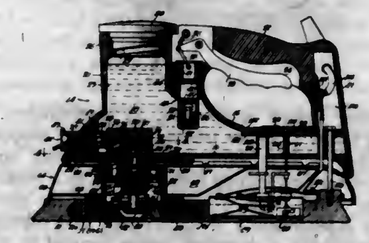
2,729,903
RELEASE MECHANISM
Herman A. Sperlich, Highland Park, Mich., assignor to Ironrite, Inc., Mount Clemens, Mich., a corporation of Michigan
Application September 30, 1953, Serial No. 383,271
8 Claims. (Cl. 38—59)

1. In an ironing machine, the combination of, a stationary ironing shoe, an ironing element movable toward and away from said shoe, said ironing element being rotatably mounted on a pair of spaced arms, a longitudinal hollow member connecting said arms, a sleeve releasably locked in said longitudinal member, a lever fixed in said sleeve for oscillating said longitudinal member, whereby said ironing element is moved toward and away from said shoe, said longitudinal member and sleeve being provided with adjacently disposed longitudinal apertures, a lock pin carried in the aperture in said sleeve, a spool in said sleeve, a release trigger carried by said spool, a spring means carried by and anchored to said sleeve and adapted to resiliently bias said trigger so as to move said lock pin outwardly and into engagement with the aperture in said longitudinal member to releasably lock said sleeve



and longitudinal member against relative movement, abutment means on said longitudinal member, a release handle operatively attached to said spool and adapted to actuate said release trigger against the biasing action of said spring means so as to disengage said lock pin from the aperture in said longitudinal member, and said release handle being adapted to engage said abutment means after said lock pin is disengaged from said longitudinal member, whereby said longitudinal member may be moved relative to said sleeve and said ironing element accordingly moved away from said ironing shoe without actuating said lever.

2,729,904
HAND PRESSING STEAM AND SPRINKLING IRON
Henry Maykemper, Eau Claire, Wis.
Application August 6, 1954, Serial No. 448,306
14 Claims. (Cl. 38—77)



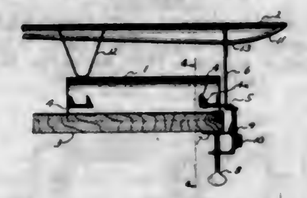
1. A multiple-purpose electric iron comprising a sole plate, steam generating means associated with said sole plate, a heating element associated with said sole plate, a water reservoir disposed above said sole plate and steam generating means, conduit means establishing communication between said reservoir and said steam generating means, a spray nozzle projecting from the forward end of said reservoir and communicating with said conduit means, said water reservoir being pressure-tight, a pump associated with said reservoir operable to build up a pressure head in said reservoir, a valve movable in said conduit means and including ports therein selectively establishing communication between said reservoir and said spray nozzle, between said reservoir and said steam generating means and selectively blocking off communication between said spray nozzle, said steam generating means and said reservoir, and control means associated with said valve and extending to the exterior of the iron to accommodate setting of said valve.

2,729,905
PORTABLE IRONING BOARD
Leroy Crozier, Cincinnati, Ohio, assignor to Crozier-Johns Company, Cincinnati, Ohio, a partnership
Application March 24, 1953, Serial No. 344,379
6 Claims. (Cl. 38—112)



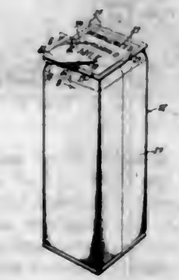
1. The combination of a portable ironing board and a casing, said casing being of substantially rectangular cross section and including a bottom, side walls and end walls upstanding from the bottom and having upper edges, a rectangular lid including an undersurface, said lid being configurated so as to be recessible within said side and end walls, support members secured to the inner surface of at least two of said walls and including support surfaces extending inwardly from said walls, said support surfaces being spaced downwardly from the upper edges of said walls and being adapted for engagement with peripheral portions of said lid, a foldable ironing board including a main section secured to the undersurface of said lid and an extension section hinged to said main section, said lid being adapted to be supported in an inverted position by said support members, and when said lid is inverted said extension section being adapted to be pivoted outwardly into coplanar relationship with the main section, means associated with said casing for releasably securing said lid in its recessed position.

2,729,906
IRONING DEVICE
George Kleinsorge, Chicago, Ill.
Application November 7, 1952, Serial No. 319,284
3 Claims. (Cl. 38—135)



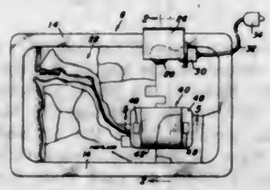
1. An ironing device comprising, in combination, a collar ironing board, a sleeve ironing board and supporting means adapted to movably mount the device on a supporting structure presenting a flat surface in a manner permitting use of the collar ironing board and the sleeve ironing board independently of each other, said supporting means comprising a clamping device secured to said collar ironing board including a frame of substantially U-shaped conformation presentnig a mid-portion and two sides disposed at right angles to said mid-portion, and having a pair of apertures disposed at right angles to each other, one in one said side and the other in the adjacent area of said mid-portion and a pressure member movably supported relatively to said frame in the other said side and adapted to apply pressure against one side of the supporting structure, and a hinged support member for said sleeve ironing board permitting movement thereof to horizontal and vertical position having an upper portion, a lower portion and a hinge connecting adjacent ends of said upper and lower portion and having an axis extending transversely of said upper portion and said lower portion, said upper portion being secured at its end opposite said hinge to said sleeve ironing board and said lower portion having an end conformation extending at right angles at its end opposite that connected to said hinge for engagement with said apertures and a shoulder disposed adjacent said conformation adapted to rest on said one side of said frame during engagement of said conformation with said aperture.

2,729,907
CONTAINER TOP LABEL
Donald G. Magill, Great Neck, N. Y., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application February 11, 1953, Serial No. 336,239
5 Claims. (Cl. 40—4)



1. The combination of a container having a flat recessed top provided with a dispensing opening therein closed with a friction plug having side flanges overlapping the recessed top of the container adjacent said opening, and a flat label conforming to the shape of and snugly fitting within the recess in the container top, said label having a pair of spaced slits extending inwardly from its margin to define therebetween a cover tongue overlapping and protecting said friction plug, said slits also defining a pair of spaced retainer tongues in said label engageable beneath said friction plug side flanges with the plug disposed between said retainer tongues for holding said label in place within the recessed top of said container.

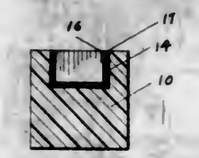
2,729,908
COMBINED MAP ANTIGLARE SHIELD AND MAGNIFYING GLASS
Herbert L. Miller, Portland, Oreg.
Application May 28, 1951, Serial No. 228,611
2 Claims. (Cl. 40—10)



1. A holder for a backing plate having a folded map wrapped therearound comprising, in combination, a flat transparent panel having an endless frame projecting beyond one side thereof, said frame circumscribing the entire marginal edge portions of the panel and having flanges parallel to and spaced from said one side of the panel and combining therewith in defining a receiver, said receiver being open at but one end, a rigid metal plate properly sized and fitted through said open end into the receiver and removably confined in the receiver, the dimensions of the receiver being such as to accommodate not only the plate alone but the latter after a map is completely and compactly wrapped around the plate, the complemental inner marginal edges of the respective flanges defining a sight opening exposing the principal portion of one side of the plate, the other side of the plate being visible by way of said transparent panel, a hood-

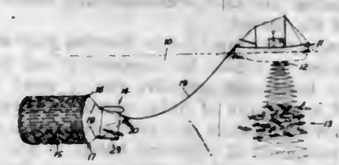
like shade for a lamp bulb slidably mounted on one longitudinal edge portion of the frame so that the holder projects laterally beyond the plane of said frame, said holder shade and plate, as a unit, being suitable for placement on the user's lap when in use.

2,729,909
DECORATIVE INLAID ARTICLE AND METHOD
Robert R. Buck, Boston, Mass.
Application February 24, 1955, Serial No. 490,363
6 Claims. (Cl. 41—35)



1. A decorative inlaid article comprising a substantially transparent polymerized acrylic resin plastic body having a plurality of surfaces, at least one of said surfaces having a uniform cylindrical bottomed bore therein, a pigmented adhesive decorating coating, comprising polymerized acrylic resin and a pigment, integral with said body at all portions thereof defined by the walls of said bore, and an aluminum member firmly positioned in said bore engaging said coating at all points thereof, whereby spawling of said coating is prevented thereby presenting a uniformly appearing decorative inlay when viewed through said plastic body at said surfaces.

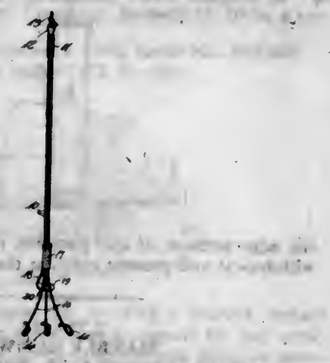
2,729,910
CONTROLLABLE DEPTH MAINTAINING DEVICES
Robert A. Frykland, Dedham, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application April 26, 1950, Serial No. 158,307
10 Claims. (Cl. 43—9)



1. In a surface vessel provided with depth sounding means adapted to locate and record the depth of a school of fish, the improvement comprising an otter board towed by said vessel and adapted to be connected to said net, a controllable diving plane attached to said otter board and an electric motor controlling said plane in response to the depth of said otter board.

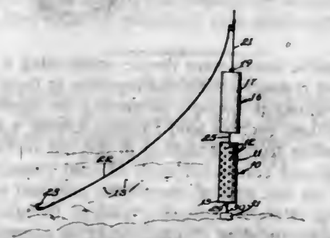
2,729,911
FISH HOOK SPREADER
Charles A. Leverth, Jr., Bedford, Ohio
Application July 15, 1953, Serial No. 368,138
1 Claim. (Cl. 43—42.74)

A device of the character described comprising a multiplicity of leaders connected together at one of their ends, means for attaching a fishhook to the other end of each of said leaders, and means for selectively spacing the said other ends one from another, said last-mentioned means comprising a cylindrical sleeve closely surrounding all of said leaders and slidable thereon, said sleeve having a portion of the side wall extended, and a guide plate carried by the free end of the extended portion of said sleeve and having openings each for the passage therethrough of one of said leaders, said plate being disposed in a plane normal to the longitudinal axis



of the sleeve, said leaders being formed of spring wire and outwardly biased from one another.

2,729,912
CHUM BASKET
Thomas F. Moffett, Trenton, N. J.
Application April 15, 1954, Serial No. 423,323
2 Claims. (Cl. 43—44.99)



1. In a chum holding and distributing assembly, a basket including a cylindrical side wall provided with a plurality of spaced apertures, a bottom wall on the lower end of said basket, a ring member secured to the lower surface of said bottom wall, a line connected to said ring member, a weight connected to said line, there being an opening in the top of said basket, a lid detachably closing said opening and provided with a central aperture, a tubular shield slidably receiving said basket and including an annular side member and a top member, the outer peripheral edge of said bottom wall providing an annular lip for selective engagement by the side member of said shield, a line extending through the aperture in said lid and having one end connected to the top of said shield and its other end connected to the bottom wall of said basket, a fishing line connected to the outer surface of the top of said shield, a line extending from said fishing line, and a fishhook connected to said last named line.

2,729,913
CONTAINER FOR FISHING FLIES
John J. Holwerda, Palo Alto, Calif.
Application September 16, 1953, Serial No. 380,443
1 Claim. (Cl. 43—57.5)

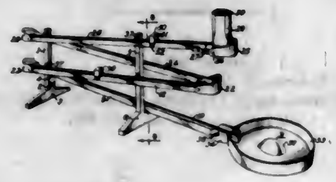
A container for fishing flies and the like comprising an elongated, tubular casing of transparent material closed at one end and open at the other, a cap for the open end of said casing, a removable partition within said casing extending longitudinally substantially from end to end thereof, said partition being formed of relatively soft material suitable for reception of pointed objects and disposed to bisect longitudinally said container, and a pocket clip on the exterior of said casing

having a pair of spaced prongs extending through the wall of said casing, said prongs engaging portions of oppo-



site edge surfaces of said partition to guide insertion and withdrawal and prevent rotation thereof.

2,729,914
MARBLE RUNWAY
Frances Elizabeth Cook, Washington, D. C.
Application August 18, 1952, Serial No. 304,872
1 Claim. (Cl. 46—43)



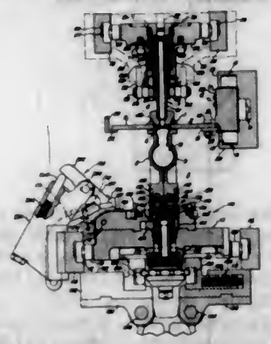
A collapsible amusement device comprising a plurality of elongated runners connected together at their adjacent ends with adjacent runners extending in oppositely inclined direction, each of said runners having a longitudinally extending trough provided in the top surface thereof, the adjacent connected ends of said runners having a shoulder on one end of one of the adjacent ends, said ends having laterally extending curved troughs therein, said laterally extending troughs being in communication with each other, a plurality of pins each extending through the adjacent end portions of said runners for pivotally connecting said runner end portions together, the runners being spaced apart by means of said shoulders, a pair of standards extending between said spaced apart runners, a plurality of spring plates positioned along said standards and having outwardly extending bulged portions whereby said runners can move over said plates and, when desired, be supported in playing position by said bulged portions extending above and below said runners, said standards being pivotally connected to the lowermost of said runners for folding to extend longitudinally with said runners in their collapsed position, a plate pivotally mounted on the free end of the lowermost end runner, a bell mounted on said plate and rounded objects for rolling down said troughs and onto said plate against said bell.

2,729,915
SOIL WARMING DEVICE
Andrew Hallum, Springfield, Mo.
Application October 28, 1953, Serial No. 388,857
4 Claims. (Cl. 47—19)



1. A seed warming device comprising a fuel tank adapted to be positioned above ground level, a wick tube extending from said tank and including a horizontally disposed straight portion and a vertically disposed upright portion positioned in the ground, a shield positioned around a portion of said wick tube, a partition arranged in said shield, and a cap mounted on an end of said shield and including a flange provided with a plurality of openings for the passage therethrough of gases of combustion.

2,729,916
GLASS BLOWING MACHINE
Adrien F. Casler and Jesper H. Carlstrom, East Cleveland, Ohio, assignors to General Electric Company, a corporation of New York
Application March 17, 1951, Serial No. 216,204
4 Claims. (Cl. 49—19)

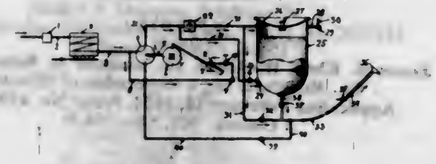


1. In a glass working machine for forming glass articles, the combination of a blow-head carrier comprised of a plurality of articulated links, means mounting said carrier for movement along a horizontal operative run, a pair of blow-heads mounted on each link and comprising separate body portions carrying hollow spindles movable therein to and from operative positions outwardly of said carrier, the body portions of individual blow-heads on each link being separately secured directly to said link in accurately spaced relationship, means interconnecting the spindles of the pair of blow-heads on each link for effecting simultaneous movement of said spindles with respect to the carrier, and means along the horizontal run of said carrier for actuating the said interconnecting means upon movement of the carrier.

2. In a glass working machine for forming glass articles, the combination of means for supporting and blowing glass along a horizontal operative run, a mold carrier comprised of a plurality of links, means mounting said carrier for movement along said horizontal run, a pair of molds each composed of separable halves, a pair of rotatable spindle assemblies mounted on each link, each spindle assembly comprising a rotatable hollow spindle, a pair of mold carriers provided with rack members and mounting a pair of said mold halves on each of said hollow spindles for movement to open or closed position and for rotation with said hollow spindle, and a rotatable shaft located within each said hollow spindle and carrying pinion means engageable with the said rack members for actuation of said mold carriers upon rotation of the shaft, means common to the spindle assemblies on each link for selectively preventing rotation of the said hollow spindles, common sprocket drive means mounted on each link and connected to rotate the shafts thereon, means located along the said horizontal run for actuating said sprocket drive means, and means also along the said horizontal run for rendering ineffective said spindle rotation-preventing means upon closure of the mold halves.

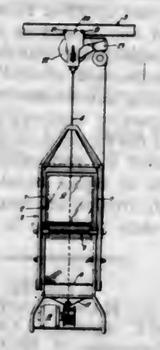
2,729,917
CLEANING APPARATUS
William C. Gregory, Compton, Calif.
Application June 30, 1953, Serial No. 365,219
8 Claims. (Cl. 51—8)

1. In an apparatus of the class described, comprising a three way pipe valve attached to a source of dehydrated compressed air, compressed air driven means adapted to rotate said three way pipe valve one-quarter turn during each operation, a hollow non-conducting rod having a nozzle attached to one end and a shutoff valve attached to the other, pipe connecting means connecting the three way pipe valve to the shutoff valve, a pressure vessel having a top portion and a bottom portion and installed



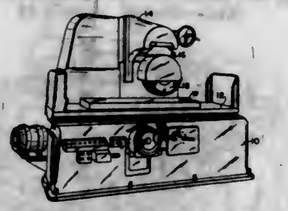
in said bottom portion a compressed air operated vibrator and an outlet opening for moving an orifice, an air pressure regulator connected to the top portion and the bottom portion of the pressure vessel, pipe connecting means between the bottom portion of the pressure vessel and the shutoff valve and pipes connecting the three way valve to the air pressure regulator and to the vibrator.

2,729,918
BLAST CLEANING APPARATUS
William N. Van Deusburgh, Kent, Wash.
Application April 6, 1954, Serial No. 421,455
6 Claims. (Cl. 51—8)
(Granted under Title 35, U. S. Code (1952), sec. 266)



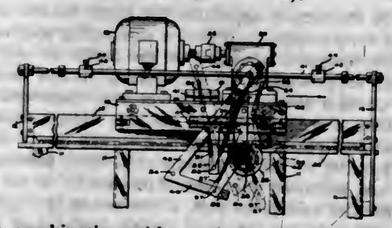
1. Blast apparatus for use on vertically inclined surfaces, the apparatus including a cabinet provided with an open end and with a discharge opening, means for suspending said cabinet in a freely-swinging position with its open end adjacent the surface to be worked, a blast nozzle projecting into said cabinet toward said open end, pressure-reducing means operative during blasting for creating a differential pressure within the cabinet capable of moving blast products outwardly through said discharge opening, and compressibly-resilient means extending outwardly from said open end for engaging the surface to be worked, said suspension means including a trolley assembly adapted to be detachably supported above said surface, a cable suspending said cabinet from said trolley assembly, means for driving said trolley horizontally of said surface, and means for adjusting said cable length whereby said cabinet is movable horizontally and vertically with respect to said surface for positioning the cabinet over all surface areas, resilient means whereby said blast products are contained and said differential pressure discharge is accomplished.

2,729,919
METHOD AND APPARATUS FOR GRINDING
Frederick G. Krafft, Springfield, Ohio, assignor to The Thompson Grinder Company, Springfield, Ohio, a corporation of Ohio
Application September 6, 1952, Serial No. 308,265
25 Claims. (Cl. 51—92)



1. In an arrangement for working a smooth surface to form a spot pattern thereon; a support for the workpiece having the said surface, a rotatable abrasive member for working the surface, said member comprising a holder forming the hub of the wheel, abrasive segments mounted in said holder, one series of said segments forming a right hand spiral rib on the holder interrupted between the ends of adjacent segments, and another series of said segments forming a left hand spiral rib on the holder interrupted between the ends of adjacent segments, the interruptions in the respective ribs being opposite each other, means for rotating the abrasive member at a predetermined speed, and means for reciprocating said support and member relatively at a predetermined speed.

2,729,920
GRINDING MACHINE FEEDING DEVICE
Harry T. Rutherford, Bare Hills, Md.
Application December 8, 1952, Serial No. 324,622
5 Claims. (Cl. 51—92)

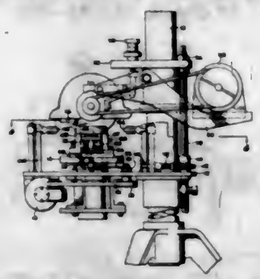


1. In combination with a grinding machine having a horizontal grinding element extending upwardly across a horizontal bed; comprising a work feeding mechanism having a supporting frame therefor fixedly secured to one side of the machine and a track carried by the frame, a carriage adapted to be moved back and forth along the track, means carried by the said carriage and extending over a base having a horizontal surface for engaging the work, independent driving means carried by the carriage for moving the carriage along the tracks, a fixed toothed gear rack carried by the frame, a reversible driving means carried by the carriage comprising a pair of oppositely rotating pinions carried upon a centrally pivoted support operated adjacent the said rack by the driving means, means associated with the pinion support for alternately shifting the two pinions in and out of engagement with the said rack for reversing the direction of the carriage.

2,729,921
AUTOMATIC FILE-SHARPENING MACHINE
Robert L. Day, Sun Valley, Calif., assignor of one-half to Harry L. Williams, Los Angeles, Calif.
Application May 17, 1954, Serial No. 430,305
9 Claims. (Cl. 51—96)

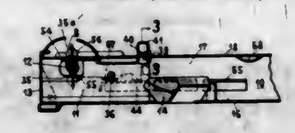
9. An automatic file-sharpening machine for files with curved teeth including a file-supporting platform, means

to hold a file on said platform, means to position a grinding wheel with its grinding edge in contact with the teeth of a file clamped on said platform said means including means to automatically lower said grinding wheel to compensate for reduction in diameter occasioned by wear,



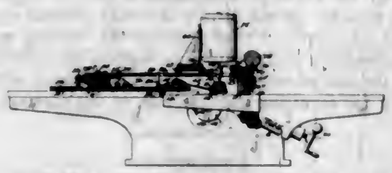
means to move said platform and said wheel in a relative oscillatory motion to pass substantially an entire file tooth under said grinding wheel, and means to move said file to bring a succeeding file tooth under said wheel for sharpening after said wheel has passed over a file tooth.

2,729,922
SHARPENING APPARATUS FOR RAZOR BLADES
Ignace Ciniglio, Luzern, Switzerland
Application May 13, 1953, Serial No. 354,723
Claims priority, application Switzerland August 26, 1952
4 Claims. (Cl. 51—153)



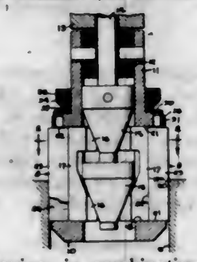
1. A sharpening apparatus for razor blades, comprising in combination: a frame, a sharpening tool mounted thereupon, guides arranged on the inside of said frame, a slide reciprocating on said guides, forked levers pivoted on said slide about a pivot axis transverse to the direction of reciprocating of the said slide, a blade holder mounted rotatably in the said forked levers about an axis parallel to the said pivot axis, discs provided with flats and mounted upon the blade holder at the respective ends of said pivot axis, a two-armed spring, bearing with its ends on the said forked levers and pressing said discs on the said guides, a disk mounted adjustably about its own axis on the said slide, and a crank pin eccentrically arranged on the said disk, the middle portion of the said spring being wound around said crank pin.

2,729,923
JOINTER SHARPENER
Walter H. Durst, Seattle, Wash.
Application May 1, 1953, Serial No. 352,353
2 Claims. (Cl. 51—173)



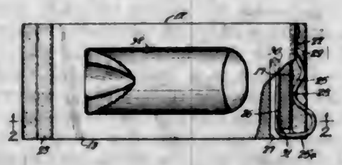
1. In a cutter knife sharpening attachment for use on a jointer having a bed, a base plate, a clamp for securing the base plate to the bed of the jointer, a carrier plate hinged to and positioned above the base plate in parallel longitudinal alignment with said baseplate, a feed mechanism block carried by an extended end of the carrier plate, adjusting means in said feed mechanism block for adjusting the elevation of the carrier plate in relation to the bed of the machine, parallel rails mounted on said carrier plate and extended transversely across the base plate, a motor mounted to slide in said rails and a grinding wheel carried by the motor and positioned to engage the cutter knives of said jointer.

2,729,924
HONE
James B. Klein, Rockford, Ill., assignor to Barnes Drill Co., Rockford, Ill., a corporation of Illinois
Application February 15, 1954, Serial No. 410,257
3 Claims. (Cl. 51—184.3)



3. A hone having, in combination, a hollow rotary body, means on said body defining elongated parallel slots angularly spaced therearound and having parallel end walls, rigid expansion plates one extending substantially the full length of each slot and fitting snugly between said end walls thereof, a cam reciprocable along the body to engage said plates for shifting the same outwardly in said slots and to permit inward retraction of the plates, elongated abrasive elements each having flat parallel ends and one guided in each of said slots for bodily edgewise adjustment with the bottom of the element backed by the one of said plates in the slot, a plurality of gripping devices mounted on said body and engaging the respective elements at points spaced from the active faces of the elements, and resilient means urging said devices against the respective elements and having sufficient strength to create between each element and the body enough friction to retain the radial position of the element when said cam is retracted.

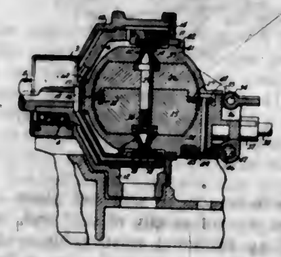
2,729,925
HAND TOOLS
Earl C. Applegate, Chicago, Ill.
Application December 28, 1953, Serial No. 400,398
12 Claims. (Cl. 51—187)



1. A hand tool comprising an elongated block having a flat bottom face of generally rectangular plan and parallel side walls rising upward therefrom at opposite longitudinal edges thereof, and a top face having its opposite ends cut back from the corresponding front and rear ends of the bottom face, means for firmly securing a coated abrasive strip along said bottom face and in overlapping relation to the front and rear ends of the block including a clamp having a jaw mounted for sliding movement in a bore extending inwardly from one of said side walls and a jaw connected thereto adapted to engage a portion of the coated abrasive strip in underlying relation to said second jaw, and an offset

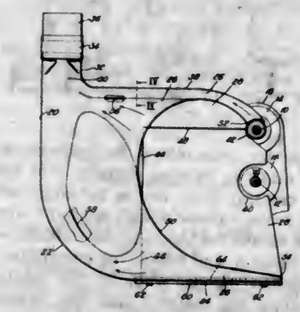
formed in the surface of the block facing the connected ends of said jaws whereby said connected ends of said jaws are adapted to be positioned within the confines of a plane projected upwardly of said latter side wall.

2,729,926
COOLANT-CIRCULATING ADJUSTABLE GRINDING TOOL
Arthur J. Holman, Brighton, N. Y.
Application November 13, 1951, Serial No. 255,914
9 Claims. (Cl. 51—207)



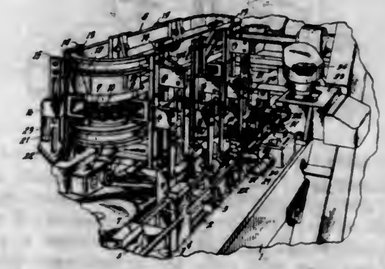
9. A coolant circulating grinding tool for combined rough and fine grinding, comprising multiple grinding rings of differing grit grain size mounted on a common axis with their annular faces in contact, the annular face of each coarser grinding ring which is in contact with an annular face of a finer grinding ring being provided with both lateral and radial channels through which coolant may flow to scavenge ground material and loosened grit from the abrading surfaces of said grinding rings.

2,729,927
DUST COLLECTING HOODS
Alfred C. D'Arcey, Danvers, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application April 19, 1952, Serial No. 283,206
6 Claims. (Cl. 51—273)



1. An edge trimmer dust hood having a rear portion shaped to define an exhaust passage for connection to a suction system, which rear portion has extending forwardly therefrom, to constitute a forward portion of the hood, two lateral walls, a top wall, and a bottom wall, which four walls define a space communicating with the exhaust passage, one of said lateral walls having an opening in its forward portion and having a lip extending laterally out from the edge of said opening, said hood having also a smoothly curved constricting baffle enclosing a dead air space and extending across the space between the lateral walls and shaped to divide that space into narrow upper and lower streamlined passageways leading from the forward portion of the hood into the exhaust passage.

2,729,928
MACHINE FOR FOLDING AND CLOSING LINER BAGS IN CARTONS
Franklin M. Willbrandt, Battle Creek, Mich., assignor to Battle Creek Packaging Machines, Inc., a corporation of Michigan
Application January 15, 1953, Serial No. 331,345
13 Claims. (Cl. 53—144)

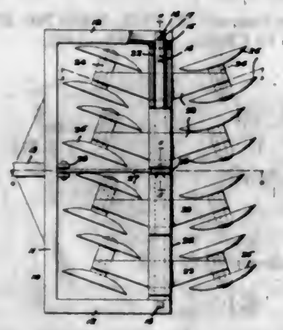


1. A machine for forming top folds in liner bags in open cartons comprising, a first conveyor adapted to advance cartons with open liner bags projecting therefrom, a second conveyor positioned to move in parallel equal timed relation to a reach of said first conveyor, means forming slideways carried by said second conveyor and registering with cartons on said first conveyor, a first slide reciprocably carried by each of said slideways and having a triangular nose reciprocable into the end of a bag on said first conveyor to spread the bag transversely of said first conveyor, a second slide reciprocably carried by each of said slideways for movement parallel to said first slides, fingers mounted on said second slides on longitudinally opposite ends of the first slides and having inclined lower ends cammingly engageable with the outer surface of the end of a bag spread by said noses, means forming cam tracks extending along said second conveyor and engageable with said slides to advance said first slides and thereafter advance said second slides and retract said first slides prior to retraction of the second slides associated therewith, opposed pressure bars reciprocable transversely of said first conveyor into compressing relation on opposite sides of a bag deflected by said fingers, means connected to reciprocate said bars in timed relation to said fingers to engage opposite sides of a bag immediately after retraction of the fingers from the bag engaged by the bars, means for heating one of said bars to seal the tops of said bags, a plate on each of said bars with an inner edge inclined downwardly and outwardly of said first conveyor to engage and depress end flaps on the containers in which the bags are held, side plates extending over said first conveyor behind said bars and forming a guide slot to receive the flattened ends of bags advanced from said bars, said side plates extending over the depressed position of the leading flaps on said containers as determined by the leading plate on said bars to hold the leading end flaps depressed, plow means positioned over said guide slot and adapted to fold the sealed ends of said bags upon themselves, coacting crimping wheels positioned on opposite sides of said bags behind said plow means to engage said bags and crimp and seal the folded ends thereof in vertically extending corrugations, and means for heating one of said wheels.

2,729,929
DISK PLOW
Robert F. Mason, Magee, Miss.
Application November 7, 1952, Serial No. 319,360
2 Claims. (Cl. 55—81)

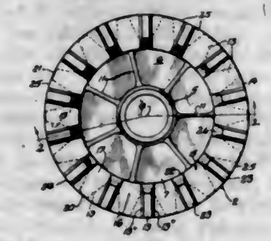
1. In a disk plow, a draft beam, arms projecting rearwardly and in parallelism from the ends of said beam, shaft sections loosely mounted at their outer ends in the extremities of said arms, a hinge member connecting the

inner ends of said shaft sections, a link pivoted at one end to said beam and extending rearwardly therefrom in parallelism with said arms, an annulus on the rear end of said link loosely enclosing the joined ends of said shaft



sections, sleeves rotatably mounted on said shaft sections, disk arms projecting laterally from said sleeves in opposite directions, and disks rotatably mounted at the ends of said disk arms.

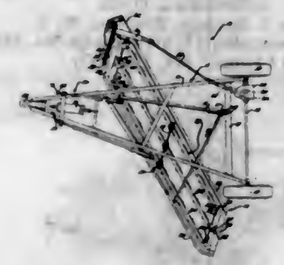
2,729,930
COTTON DOFFER
Delos A. Walker, Memphis, Tenn., assignor to International Harvester Company, a corporation of New Jersey
Application January 17, 1955, Serial No. 482,130
10 Claims. (Cl. 56—41)



1. A doffer assembly comprising a plate-like unit for rotation about a principal axis thereof, and having a plurality of circumferentially spaced radially outwardly extending fingers disposed in a plane substantially perpendicular to said axis; an integral unit of elastomer material comprising an annular wafer-like web having an obverse face and a reverse face and connected at said reverse face to said fingers; said fingers defining slots therebetween; and a plurality of lugs integral with said web and projecting axially from said obverse face thereof and disposed in substantially centered relation to each slot and having side edges spaced circumferentially from respective fingers.

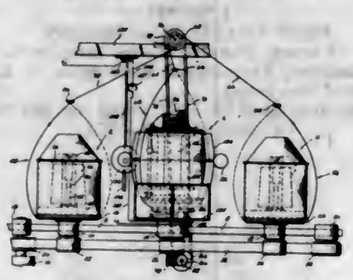
2,729,931
SIDE DELIVERY RAKE
Matthew E. Hamilton, Stockton, Calif., assignor to J. I. Case Company, Racine, Wis., a corporation of Wisconsin
Application March 16, 1953, Serial No. 342,613
16 Claims. (Cl. 56—377)

1. In a reel for a side-delivery rake having circumferentially spaced tooth bars, parallel end plates for rotatably supporting the tooth bars at the opposite ends thereof, spaced tines carried by the respective tooth bars, and means for effecting relative rotation of said tooth bars with respect to said end plates for maintaining each of said tines in a depending position with respect to said tooth bars, the improvement comprising a center bearing ring construction for the reel for preventing outward deflection of the tooth bars with respect to the axis of said reel in response to force imposed thereupon during rotation of the reel, said center bearing ring construction comprising a ring telescopically received by said reel substantially halfway between the ends thereof, a member fixed on each of the tooth bars shaped to interlock with said ring for positioning the ring in



parallelism with respect to said end plates and preventing movement thereof axially of said reel, said members being in rolling frictional relationship with respect to the inner circumference of said ring, a force imposed upon one of the tooth bars tending to deflect said one tooth bar outwardly being transferred by said ring to other of said tooth bars for causing deflection thereof in the same direction.

2,729,932
TWISTING SPINDLE BALLOON CONTROL
Alfred W. Vibber, Ridgewood, N. J.
Application July 24, 1951, Serial No. 238,215
20 Claims. (Cl. 57—58.83)



1. Apparatus for controlling the balloon of an elongated flexible material twisting spindle, said spindle having a balloon creating flyer, means for continuously feeding material into the balloon at an essentially constant rate, variable speed means for continuously withdrawing material from the balloon, and means for controlling the speed of the last named means, whereby the relation of the speeds of feeding the material into the balloon and of withdrawing it from the balloon may be varied to control the size of the balloon during operation of the spindle.

2,729,933
TWINE
William W. Crawford, Whitemarsh, Pa., assignor to The Schlichter Jute Cordage Company, New York, N. Y., a corporation of Pennsylvania
Application July 12, 1952, Serial No. 298,596
1 Claim. (Cl. 57—140)

A twine comprising a resin-coated glass fiber yarn and jute fibers held in association therewith by said resin coating and imparting to the twine a friction surface.

2,729,934
TIMEPIECE
Georges Bridevaux, Tavannes, Switzerland, assignor to Tavannes Watch Co. S. A., Tavannes, Switzerland, a firm
Application October 7, 1952, Serial No. 313,411
Claims priority, application Switzerland November 22, 1951
2 Claims. (Cl. 58—104)



1. In a time piece, the combination of a first plate, at least one pillar rigid with said plate and provided with a tapping at its free end and with an outer depression in the immediate vicinity of said tapping, a second plate system including a three-quarter plate and a cock in contacting relationship with the latter, said plate and cock being provided with apertures engaging the tapped end of the pillar, a headed screw engaging the tapping in the pillar and the head of which engages the outer surface of the second plate system and means engaging the depression in the pillar and urging the second plate system against the head on the screw.

2,729,935
METHOD OF INCREASING THE STRENGTH OF A SPROCKET CHAIN
Joseph J. Beck, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a corporation of Wisconsin
Application November 24, 1950, Serial No. 197,297
6 Claims. (Cl. 59—8)

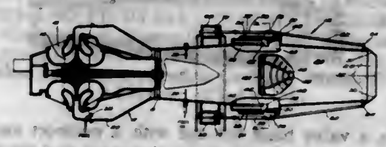


1. The method of increasing the yield strength of a sprocket chain link having a curled joint portion at one end of the link which comprises curling said portion so that the pitch of the link is less than the ultimate desired and then uncurling said portion to increase the pitch to the desired length, said last mentioned step imparting residual compressive stresses on the inside surface of the curled portion in the area where the curled portion joins the rest of the link which are retained in the link when it is placed in service.

2,729,936
FUEL FOR AND METHOD OF OPERATING A JET ENGINE
Sylvester C. Britton, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
No Drawing. Application April 24, 1950, Serial No. 157,853
9 Claims. (Cl. 60—35.4)

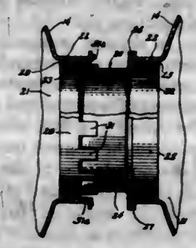
1. An improved method for operating a jet engine which comprises injecting into a combustion chamber of a fixed size a fuel consisting essentially of between 5% and 95% by volume 1-olefins boiling between 90° F. and 500° F.; injecting air into the forward portion of said combustion chamber at a mach number between 0.01 and 1.00, at a pressure of between 0.2 and 40 atmospheres, at a temperature between —30° F. and 1040° F., and at a fuel-air ratio between 0.005 and 0.10; burning said fuel in said combustion chamber at a combustion efficiency within the range of from 40% to 100% so as to heat said air and resulting combustion gases; and exhausting said gases through a rearwardly extending exhaust duct at an exit velocity higher than the flying speed of said engine.

2,729,937
RETRACTABLE FLAMEHOLDERS FOR AFTERBURNERS
George F. Hausmann, Windsor, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application March 20, 1951, Serial No. 216,559
1 Claim. (Cl. 60—35.6)



In an afterburner for a turbojet power plant comprising an elongated duct having exhaust gases passing therethrough, means for injecting fuel into the duct, a flameholder for improving flame propagation in the duct comprising a segmental grid, each of the segments being pivotally supported in the outer duct wall and forming a quarter of a substantially flat circular grid, said segments being movable into a plane transversely of and into said gas stream whereby they are in an operative position, said segments also being movable to planes parallel to and out of the gas stream, a plurality of recesses in the outer wall of the duct for receiving the segments when in planes parallel to said gas stream, mechanism operatively connected to said segments for simultaneously pivoting them into either of said transverse and parallel planes comprising toothed elements engaging said segments adjacent their pivots, a motor for moving said toothed elements, movable elements for varying the exhaust end area of said duct, and means operatively connecting said movable elements with said motor for simultaneously varying said area and pivoting said segments.

2,729,938
COMBUSTION CHAMBER CROSSOVER TUBE
Charles J. McDowall, New Augusta, and John B. Wheatley and Floyd G. Dougherty, Indianapolis, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 26, 1951, Serial No. 207,934
8 Claims. (Cl. 60—39.37)



4. An apparatus comprising, in combination, first and second tubes and a crossover sleeve interconnecting the tubes, the tubes being provided with opposed spaced openings and the sleeve being mounted so as to extend into the openings and extend therebetween to provide communication between the tubes, the sleeve including means providing a fixed shoulder thereon to limit the depth of insertion thereof into the first tube and means providing at least one tab deformable outwardly from the sleeve to limit the depth of insertion thereof into the second tube, the shoulder and tab thus serving to locate and fix the sleeve in a position interconnecting the tubes.

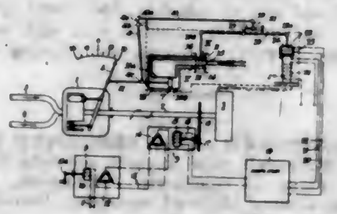
8. A crossover sleeve including means providing a fixed shoulder thereon and means on the sleeve providing a plurality of tabs deformable radially from the sleeve, the tabs being spaced radially from the sleeve in their original position to facilitate deformation thereof.

2,729,939
RIBLESS PULSE JET VALVE GRID
Lawrence F. Campbell, Silver Spring, Md.
Application June 9, 1952, Serial No. 292,597
10 Claims. (Cl. 60—39.77)
(Granted under Title 35, U. S. Code (1952), sec. 266)



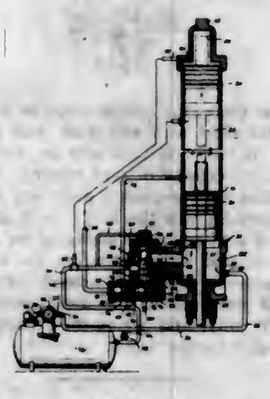
6. In a valve bank for use with a pulse-jet engine, a valve assembly comprising, an elongated rod for mounting said assembly in said bank, a first pair of metallic rectangular spring members mounted on each side of said elongated rod, a second pair of metallic rectangular spring members mounted on said elongated rod each contiguous with one of said first members, and a pair of resilient members each sandwiched between a first member and its respective second member.

2,729,940
FOLLOW-UP CONTROL SYSTEMS
John Russell Duguid Walker, Westminster, London, England
Application February 10, 1953, Serial No. 336,867
Claims priority, application Great Britain February 11, 1952
14 Claims. (Cl. 60—51)



1. A follow-up control system comprising an electric transmitter, an electric receiver formed as a resetter, a load shaft in driving connection with the resetter, a hydraulic swash plate motor in driving connection with the load shaft, a control member on the motor for controlling the angulation of the swash plate, an assembly having a first principal part consisting of a piston and a second principal part consisting of a cylinder, a first connection from one of said principal parts to the control member for effecting the adjustment of the angulation of the motor, an amplifier, first electrical connections as between the resetter, the transmitter and the amplifier for applying to the amplifier a signal which is a function of the positioned displacement as between the transmitter and the receiver, valve means to control the admission of hydraulic fluid to the said cylinder whereby the piston is displaced relative to the cylinder, second electrical connections as between the amplifier and the valve means for applying the amplified signals to the valve means to operate the latter, a second connection between said one part and the valve means so that displacement of the piston with respect to the cylinder under the action of the hydraulic fluid causes the valve means to be operated to tend to prevent further admission of hydraulic fluid to the cylinder, and a braking valve interposed in the hydraulic circuit between the valve means and said assembly, the braking valve serving, when operated, to effect such flow of hydraulic fluid to the cylinder, whereby the angulation of the motor becomes such that the motor is caused to brake the load.

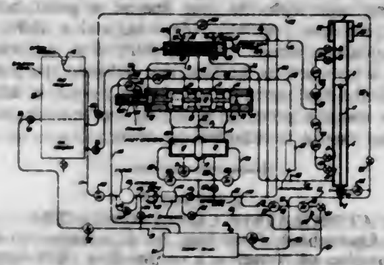
2,729,941
FLUID ACTUATED PUMPING JACK
Howard E. Rose, Farmingdale, N. Y., and Peter S. Bloudoff, South Gate, Calif., assignors to Axelson Manufacturing Company, Division of Pressed Steel Car Company, Inc., Los Angeles, Calif.
Application April 30, 1954, Serial No. 426,766
29 Claims. (Cl. 60—52)



1. Fluid actuated pumping jack apparatus for use with a source of pressurized power fluid, comprising: a vertical cylinder; a piston slidably disposed therein for axial reciprocal movement relative thereto; supply passage means for conducting fluid from said source to the lower portion of said cylinder; return passage means for conducting said fluid from the lower portion of said cylinder to said source; control valve means that includes a chamber disposed in said return passage means, and a control valve element slidably disposed in said chamber for at least partially blocking said return passage means when disposed in a first position, said element unblocking said return passage means when disposed in a second position; biasing means normally urging said valve element toward said second position whereby said supply and return passage means will be placed in communication through means which include said chamber; pilot valve means that include a chamber, a piston-type pilot valve element slidably disposed therein, and passage means cooperating with said pilot valve element for alternately connecting one end of said chamber with the high-pressure side of said source of fluid pressure whereby said control valve element will be urged toward said first position, and for venting said one end of said chamber whereby said biasing means may urge said control valve element to said second position; and, fluid conduit means connecting spaced points in said pilot valve chamber with vertically spaced points in said cylinder whereby movement of said pilot valve element shall be responsive to the position of said piston in said cylinder.

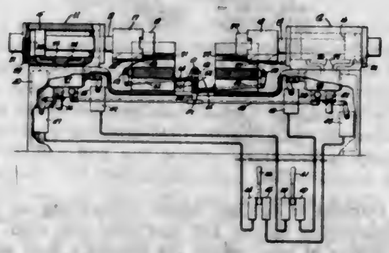
2,729,942
MANUALLY CONTROLLABLE PUMPING JACK
David P. Billings, Manhattan Beach, and Thomas E. Garrison, Torrance, Calif., assignors to The Pelton Water Wheel Company, a corporation
Application December 17, 1954, Serial No. 475,974
4 Claims. (Cl. 60—52)

1. A manually controllable pumping jack comprising a jack cylinder, a jack piston reciprocable in said cylinder, a balance tank for oil under air pressure, an oil transfer pump, a reversing valve for controlling the transfer of oil between said balance tank and said cylinder through said pump, means depending upon the position of said piston in said cylinder for controlling the operation of said reversing valve, a conduit extending from the oil region of said balance tank to the head end of said



cylinder, and a manually controlled shut-off valve in said conduit.

2,729,943
FLUID-PRESSURE-ACTUATED APPARATUS
Eugene C. Clarke and Henry A. Weyer, Chambersburg, Pa., assignors to Chambersburg Engineering Company, Chambersburg, Pa., a corporation of Pennsylvania
Application May 26, 1953, Serial No. 357,466
13 Claims. (Cl. 60—97)



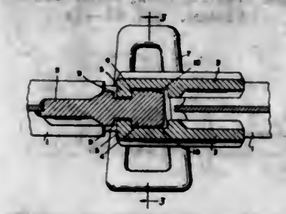
1. In an apparatus of the class described, a pair of aligned and spaced fluid cylinders, a pair of movable members extending respectively from the inner ends of said cylinders and having pistons within the cylinders for operation of said members toward and away from each other by pressurized fluid supplied to the cylinders, means for effecting flow of operating fluid to and from said cylinders to actuate said members, a pair of valves arranged respectively in association with each of said cylinders to vary the flow of operating fluid, means for detecting lack of synchronism of the movements of said members, and means interconnecting said detecting means and said valves normally ineffective to operate said valves but operable by said detecting means upon detection of non-synchronous movements of said members for effecting differential operation of said valves to synchronize the movements of said members.

2,729,944
AUTOMATIC DAM
Henry D. Bentrup, Deerfield, Kans.
Application July 9, 1953, Serial No. 366,953
13 Claims. (Cl. 61—29)



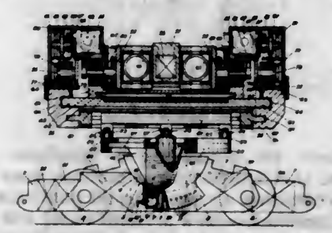
1. In an automatic dam for use with an irrigation ditch, a flexible dam curtain, a support for said dam curtain capable of straddling the irrigation ditch, one end of the curtain being attached to said support and the other end thereof being free, weight means carried by the free end of said curtain, means for removably staking said free and weighted end of the curtain to the earth at opposite sides of the ditch, and means disposed at one side of the ditch and connected to said support for moving the support to unroll the curtain into the ditch to dam up the water therein.

2,729,945
MINE FILLING FRAME STRUCTURE COMPRISING PROPS AND PIVOTALLY CONNECTED GIRDERS
Karl Gerlach, Moers (Lower Rhine), Germany
Application February 28, 1950, Serial No. 146,908
Claims priority, application Germany March 9, 1949
3 Claims. (Cl. 61—45)



1. Mine filling frame structure including props and girders, wherein the ends of the girders are provided with interengaging conformations defining pivot joints between adjoining girders, said conformations being constituted by laterally extending bosses defining a pivot head at an end of one girder and by curved recesses formed in spaced cheeks defined by the bifurcated end of another girder defining claws in said cheeks, the said claws having engagement with said laterally extending bosses and having the general shape of curved claws encompassing said bosses downwardly and beyond the horizontal center line through said bosses longitudinally of the girders, thereby constituting said pivot joints and affording freedom of movement for one of the girders downwardly, and tensioning means for said pivot joints comprising a jaw at the end of each adjoining girder end below the pivot forming conformations, and a wedge for engagement with said jaws for securely supporting one girder at the end of the other girder.

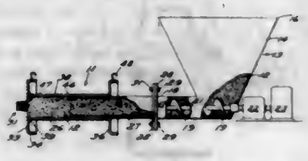
2,729,946
MACHINE FOR INSTALLING METAL MINE PROPS
Jean Maurice Quoniam, Neunkirchen-Heinitz, Saar Territory, assignor to Saarbergwerke, Saarbrucken, Saar Territory, a corporation of the Saar
Application August 10, 1954, Serial No. 448,974
Claims priority, application France September 12, 1953
10 Claims. (Cl. 61—63)



1. A machine for installing metal mine props, comprising an underframe, means for supporting and moving said underframe on the ground, an elongated supporting frame carried by said underframe and adapted to occupy at least a horizontal position, an elongated operating frame superimposed upon said supporting frame and adapted to slide on said supporting frame lengthwise thereof, a cradle supported by said operating frame and adapted to slide lengthwise of said operating frame, said cradle being adapted to accommodate a metal prop and

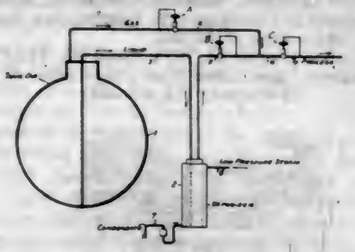
to be tilted together with said prop when said cradle reaches one end of said operating frame, means carried by said operating frame for moving said cradle along said operating frame, means for tilting said cradle when said cradle reaches said end of said operating frame, means carried by said cradle for expanding said prop.

2,729,947
APPARATUS FOR PRODUCING LOAVES OF MEAT OR THE LIKE
Vao L. Cheney, San Leandro, Calif., assignor to Chip Steak Company, Oakland, Calif., a corporation of California
Application May 23, 1952, Serial No. 289,477
3 Claims. (Cl. 62—1)



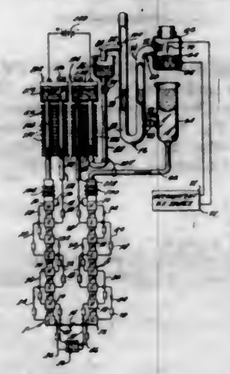
1. Mold apparatus comprising an axially extending rigid casing having an axially extending bore, a closure plate overlying and secured to one end of said casing and extending laterally beyond said casing to provide a generally continuous flange, said closure plate being provided with an aperture in axial alignment with and substantially smaller than said casing bore, an air valve mounted on said plate and having a chamber in communication with said aperture whereby compressed air may be introduced into said casing bore through said chamber and aperture, and a front plate substantially coterminous with said closure plate secured to the other end of said casing, said front plate having a bore therein axially aligned with and of substantially the same size as said casing bore.

2,729,948
PROCESS OF TRANSFER OF LIQUEFIED GAS
Walter W. Northgraves, Kenmore, N. Y., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application February 18, 1953, Serial No. 337,469
2 Claims. (Cl. 62—1)



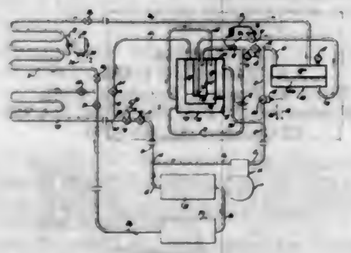
2. A system for discharging a liquefiable gas in gaseous state at a desired process pressure from a pressure vessel containing the gas in liquid state which comprises, in cooperation with a pressure vessel and a process requiring the liquefiable gas in gaseous state at a desired process pressure, a first line connecting the upper portion of the pressure vessel with the process, a pressure regulating device in the first line adjusted to close at a pressure in the pressure vessel corresponding to a permissible temperature for the liquefied gas in the pressure vessel, a second pressure regulating device in the first line adjusted to open at a pressure less than the desired process pressure, a vaporizing unit, means for supplying heat to the vaporizing unit, a second line connecting the lower portion of the pressure vessel with the lower portion of the vaporizing unit, a third line connecting the upper portion of the vaporizing unit with the first line at a point between the two pressure regulating devices, and a third pressure regulating device in the third line adjusted to open at a pressure in the first line between the pressure at which the first pressure regulating device is adjusted to close and the pressure at which the second pressure regulating device is adjusted to open.

2,729,949
CUMULATIVE COOLING SYSTEM
Nils E. Lindenblad, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 19, 1954, Serial No. 469,995
9 Claims. (Cl. 62—1)



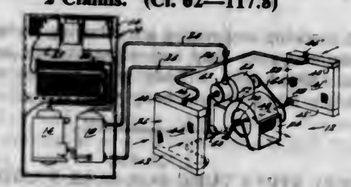
1. A cumulative cooling system comprising an array of thermocouples having hot junctions and cold junctions, a source of heat, means for passing a fluid successively in heat exchange relationship with said cold junctions of said array to cool said fluid, means for passing said cooled fluid in heat exchange relationship with said source to absorb heat therefrom, and means for passing said fluid passed in heat exchange relationship with said source successively in heat exchange relationship with said hot junctions of said array to carry away heat from said hot junctions at varying temperatures to cause said cold junctions to absorb heat at varying temperatures.

2,729,950
HOT GAS DEFROSTING SYSTEM
Earl Toothman, San Francisco, Calif., assignor of one-half to Edward A. Danforth, Palo Alto, Calif.
Application March 18, 1953, Serial No. 343,108
13 Claims. (Cl. 62—3)



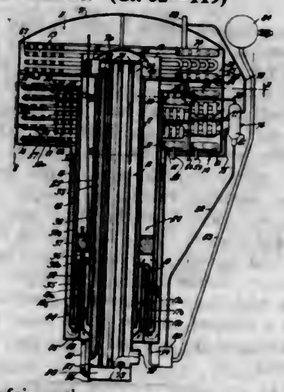
8. A hot gas defrosting system comprising a vaporizing chamber for expansion and vaporization of liquid refrigerant expelled from the evaporator of a refrigeration system, a reheating chamber for reheating cold refrigerant vapor expelled from such evaporator and for vaporizing any residue of liquid refrigerant contained in such vapor, heating means supplied with hot gas from the compressor of such refrigeration system for heating said vaporizing chamber, means communicating said heating means with said reheating chamber to conduct partly spent hot gas from said heating means to said reheating chamber to thereby heat said chamber, means for conducting vaporized refrigerant and reheated refrigerant vapor to said compressor, means for conducting cold refrigerant vapor expelled from said evaporator into said reheating chamber and means for expanding liquid refrigerant expelled from said evaporator into said liquid refrigerant chamber.

2,729,951
CONDENSER WATER COOLING DEVICE
Paul W. Wyckoff, Dayton, and Richard L. Brugler, Trotwood, Ohio, assignors to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application September 20, 1952, Serial No. 310,606
2 Claims. (Cl. 62—117.8)



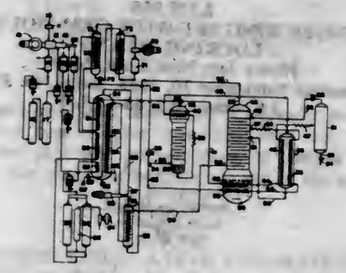
1. A heat exchange device for use with a packaged air conditioning unit having a casing with an evaporator, a compressor and a condenser which is adapted to provide a heat transfer relationship between a refrigerant and a cooling liquid mounted therein; said heat exchange device comprising a self-contained unitary assembly including a casing having first and second air handling openings, a substantially flat radiator mounted in said casing in registry with one of said openings, a motor driven blower mounted in said casing and adapted to induce a circulation of air in said first opening, over said radiator and out said second opening and pump means mounted in said casing and operable to induce a circulation of cooling liquid from the condenser through said radiator.

2,729,952
ABSORPTION REFRIGERATION APPARATUS
Eugene P. Whitlow, Evansville, Ind., assignor to Servel, Inc., New York, N. Y., a corporation of Delaware
Application July 11, 1952, Serial No. 298,275
28 Claims. (Cl. 62—119)



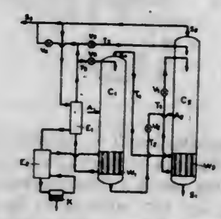
1. A unitary refrigeration apparatus containing a working fluid and comprising a plurality of shells nested one within another from the outer shell inwardly, transverse walls between certain of the nested shells to seal the apparatus and provide separate concentric chambers therein, heat receiving and heat rejecting elements in the chambers, and the space between adjacent shells providing passages for the flow of working fluid between chambers in said apparatus.

2,729,953
AIR FRACTIONATING CYCLE AND APPARATUS
Clarence J. Schilling, Allentown, Pa., assignor to Air Products Incorporated, a corporation of Michigan
Original application October 9, 1946, Serial No. 702,112, now Patent No. 2,620,637, dated December 9, 1952. Divided and this application April 16, 1952, Serial No. 282,644
11 Claims. (Cl. 62—122)



1. In an air fractionating apparatus having fractionating columns arranged to operate respectively at relatively high and relatively low pressure: means for liquefying at the higher pressure a stream of gaseous nitrogen drawn from the high pressure column; means for expanding to the lower pressure a stream of crude oxygen drawn from the high pressure column; means for subcooling said liquid nitrogen stream by heat interchange with said expanded crude oxygen stream; means for expanding said subcooled nitrogen to the lower pressure; transfer means including a path through a liquid receiving reservoir communicating with the last-named expansion means and the low pressure column for delivering expanded subcooled nitrogen to the low pressure column, and valve controlled means for withdrawing desired quantities of liquid nitrogen from said reservoir.

2,729,954
SEPARATION OF GASEOUS MIXTURES
Alfred Etienne, Paris, France, assignor to L'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude, Paris, France
Application July 8, 1952, Serial No. 297,683
Claims priority, application France August 1, 1951
1 Claim. (Cl. 62—175.5)



A process for separating at a sub-atmospheric temperature a substantially binary mixture, made up with two components with close boiling points into said components, which process involves higher and lower pressure rectification stages, with heat exchanges between these stages, and comprises withdrawing as final product a portion of the lowest boiling component issuing in a gaseous state from the lower pressure stage, compressing the remaining portion of said component, liquefying it by indirect contact with the highest boiling fraction resulting from the higher pressure rectification, expanding the so obtained liquid and using it by direct

contact as cooling liquid in both rectification stages, furnishing the whole of the heat necessary for operating the lower pressure rectification stage by liquefying the lowest boiling fraction resulting in a gaseous condition from the higher pressure rectification, expanding the resulting liquid and introducing it into the lower pressure rectification stage.

2,729,955
FINGER RING SET WITH GEM MOUNT LOCKING MEANS
Henry Jay, New York, N. Y.
Application November 30, 1953, Serial No. 394,941
2 Claims. (Cl. 63—15.3)



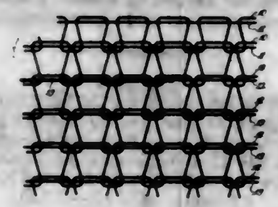
1. A finger ring set adapted to be worn on one finger of a hand, comprising, a first ring including a shank having a crown portion and an elongated setting for a jewel said elongated setting extending at right angles to the plane of the ring, said jewel setting having tapering end portions extending laterally to each side of said shank from a point centrally of the thickness of said crown portion thereof, and a companion ring including a shank having a crown portion of approximately equal radial thickness as the crown portion of said first ring, said companion ring having a transversely extending groove formed in the upper surface of the crown portion thereof, said groove being of tapered outline and conforming in shape to and adapted to seat and retain the lower portion of one of said tapering end portions of said jewel setting of said first ring.

2,729,956
BEVERAGE CAN AND ACCESSORY
Philip E. Gilbert, Chicago, Ill.
Application September 13, 1954, Serial No. 455,416
7 Claims. (Cl. 65—13)



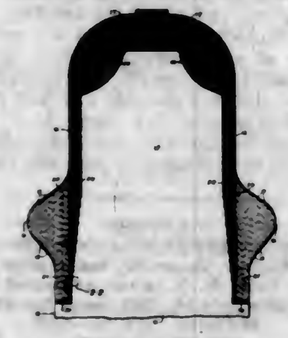
1. The pre-assembled unit for drinking beverages comprising a cylindrical can containing a beverage and having laterally projecting beads at the top and bottom thereof and a generally flat top adapted to be apertured by a pointed instrument and an auxiliary drinking device permanently telescopically associated with said can, said auxiliary drinking device comprising a generally frusto-conical member of sheet material having open top and bottom ends, the bottom end having an internal diameter less than that of said beads to retain said device permanently telescopically mounted on said can, and the internal diameter of said bottom end being sufficiently great to allow telescopic sliding movement of said device along said can, said device being movable from a position with both of its ends substantially intermediate the can beads to a position with its upper edge projecting beyond the top bead, the lower edge then being somewhat below said top bead, and said device wedging against said top bead.

2,729,957
METHOD OF KNITTING AND THE PRODUCT THEREOF
Henry Pope, Jr., Glencoe, Ill., assignor, by mesne assignments, to The Davis Company, Chattanooga, Tenn., a corporation of Maryland
Application December 24, 1952, Serial No. 327,860
6 Claims. (Cl. 66—172)



1. A stocking comprising a top having a course knitted with alginate yarn only and adjacent said course other courses knitted with a body yarn and an elastic yarn laid in the loops of said body yarn.

2,729,958
HEEL STRUCTURE FOR FULL FASHIONED STOCKINGS AND METHOD
Charlie A. Miles, Burlington, N. C., assignor to Standard Hosiery Mills, Inc., Burlington, N. C., a corporation of North Carolina
Application May 28, 1951, Serial No. 228,665
6 Claims. (Cl. 66—179)



1. In a stocking blank having a foot including a sole and an instep, laterally projecting heel tabs and a high extended heel portion above each heel tab, a reenforced marginal area spaced inwardly from the outer selvages of each heel tab and high heel portion and being disposed between each heel tab and high heel portion and the instep of the blank wherein the adjacent edges of the reenforced marginal areas and of the heel tabs and the high heel portions extend in straight lines defined by two adjacent wales from the upper end of each high extended heel portion to the juncture of the corresponding heel tab and the sole, and each of said marginal areas being relatively narrow adjacent the upper end of the corresponding high heel portion and gradually increasing in width in a stepped manner at the inner edge thereof to a course adjacent the juncture of the heel tabs and the sole of the blank.

2,729,959
TURRET TYPE CIGARETTE LIGHTER
Franklin N. Ladner, Woodville, Miss.
Application June 12, 1953, Serial No. 361,124
2 Claims. (Cl. 67—7.1)

1. A flint loading assembly for cigarette lighters comprising a tube, a plunger reciprocably received in said tube and normally urged to an upper position therein, a loader wheel rotatably carried by said tube, the axis of rotation of the wheel being parallel therewith, said tube having an opening adjacent its upper end through which said wheel is projectible, said wheel having circumferentially spaced flint-receiving notches selectively registrable with the bore of said tube, a lateral stem on said plunger for manually reciprocating said plunger, and actuating means for rotating said wheel in step-by-step



fashion, said actuating means being operable by the stem upon movement of the plunger from its upper position, said stem projecting outwardly of the casing, said actuating means including a lever pivoted intermediate its ends to said casing and having a cam portion disposed in the path of movement of said stem and wipingly engaged by said stem.

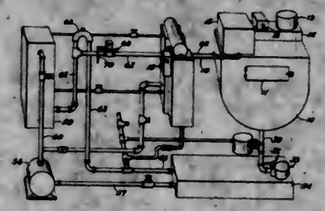
2,729,960
FLASH LAMP
Robert M. Anderson, Euclid, Ohio, assignor to General Electric Company, a corporation of New York
Application January 2, 1952, Serial No. 264,553
5 Claims. (Cl. 67—31)



3. A flash lamp comprising a sealed radiation-transmitting envelope having a neck portion, a combustion-supporting gaseous filling in said envelope, a charge of readily combustible material loosely arranged within the bulbous portion of said envelope, and ignition means in said envelope comprising a pair of lead-in wires sealed through the wall of the envelope and extending thereinto from the neck portion thereof and having laterally bent inner ends extending adjacent and in a plane transverse to the axis of the envelope neck portion and located within the said charge of combustible material, a filament connected across the said bent ends of the lead-in wires and located adjacent the axis of the envelope, and coatings of fulminating material on the said bent ends of the lead-in wires located adjacent the axis of the envelope neck portion and embedding the ends of the said filament.

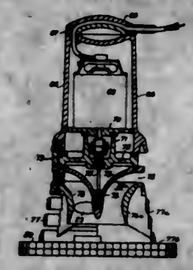
2,729,961
DRY CLEANING APPARATUS
Carl Sarkis Shields, Wickliffe, Ohio
Application September 20, 1950, Serial No. 185,711
13 Claims. (Cl. 68—18)

1. Dry cleaning apparatus comprising a washing compartment, a reservoir for dry cleaning solvent, a filter for said solvent, and a pump connected to the reservoir and to the filter for drawing solvent from the reservoir and forcing it through the filter to the washing compartment, a conduit connecting the filter and washing compartment for solvent flow to said compartment, means including a pipe communicating with said conduit and with the reservoir and having a portion between the point of connection to said conduit and reservoir disposed upwardly to a level substantially above the normal solvent liquid level in the



said compartment and above the uppermost portion of said conduit, and a valve in said conduit and disposed between the pipe and compartment to control flow of solvent to the washing compartment and to the reservoir.

2,729,962
LIQUID CIRCULATING APPARATUS
William Osborn Hicklin, Manchester, England, assignor to William E. Cary Limited, Manchester, England, a British company
Application July 12, 1951, Serial No. 236,294
Claims priority, application Great Britain April 12, 1950
4 Claims. (Cl. 68—184)



1. A washing machine for use in a container, comprising, in combination, a base member including an annular outer supporting portion formed with circumferentially arranged inlet means and having a bottom end adapted to be supported in said container, and a tubular inner guide portion having an upwardly and outwardly flaring convex inner face having an upper horizontal top face portion merging into the top end of said supporting portion and an annular substantially vertical outer face located opposite a part of said inlet means; a substantially conical guide member having an outwardly and upwardly flaring concave bottom face and arranged with said bottom face spaced from and above said inner face of said base member so as to form with the same an annular upwardly and outwardly flaring passage curving into the horizontal without sudden change of direction and opening in an annular outlet means located adjacent said circumferentially arranged inlet means, said guide member having an opening in its center; a motor casing arranged on top of said conical guide member and having a bottom wall with an opening therein; a motor arranged within said closed motor casing; a shaft having an upper end connected to said motor and projecting downwardly through said opening in said bottom wall of said motor casing and through said opening in the center of said guide member and having a lower end portion located in said anular passage below said substantially conical guide member; impeller means secured to said lower end portion of said shaft and located in said annular passage and adapted to suck liquid from the container through said inlet means at least partly downwardly along said annular outer face, and to move the liquid through said passage back into the container in a substantially horizontal flow so as to

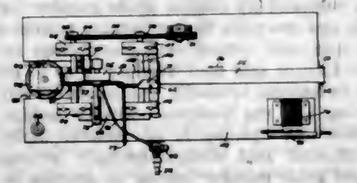
circulate a liquid and clothes in the container; and securing means firmly securing said base member, said substantially conical guide member and said motor casing to each other.

2,729,963
CLOTHES WRINGER RELEASE MECHANISM
Samuel I. Gabrielson, East Lynn, and Raymond W. Coates, Bridgeport, Conn., assignors to General Electric Company, a corporation of New York
Application August 13, 1952, Serial No. 304,164
9 Claims. (Cl. 68—249)



1. In a clothes wringer, a wringer head, a frame, means pivotally and yieldingly connecting the frame to the head, wringer rolls journaled in the frame, gearing including a gear shaft in the head by which said rolls are driven, an operating member for controlling said gearing and movable from a neutral non-driving position to a driving position for selecting direction of roll rotation, an input drive shaft, a drive clutch for connecting said input drive shaft to the gear shaft, means biasing said drive clutch into engagement, a shift member connected to the drive clutch for moving it, means carried by the frame which when the frame is turned relatively to the head effects movement of the shift member to open said drive clutch, latch means operated upon movement of said shift member to open the drive clutch for locking said drive clutch in open position, and means responsive to movement of said operating member to neutral position for moving said latch means to release said drive clutch.

2,729,964
MACHINE FOR FOLDING SHEARLING STRIPS
Leslie S. Brown, Newton, Mass.
Application May 28, 1954, Serial No. 433,036
6 Claims. (Cl. 69—7.5)



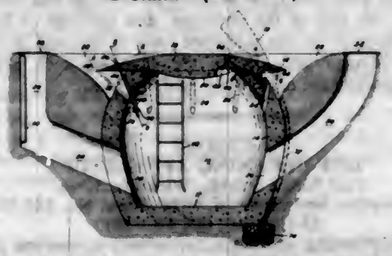
1. A machine for creasing shearling strips or the like, which have a pile mounted on a backer, comprising: a supporting frame; a first pair of pulleys mounted on said frame; a first belt running on said pulleys; a second pair of pulleys mounted on said frame; a second belt running on said second pair of pulleys, said belts running parallel, and adjacent to, each other along part of their travel and being disposed there to grip between them the strip to be creased; means for driving said belts so as to advance the strip thus gripped along a predetermined path; a creasing tool mounted adjacent said path between said first pair of pulleys and disposed to bear on the backer of said strip; an idler roll mounted between said second pair of pulleys, and disposed to support the pile side of the strip adjacent said tool; and means for heating and maintaining said tool at a temperature suitable for shrinking the portion of the backer which comes in contact with the tool.

2,729,965
KEY CONTAINER
Joseph Kurlian, Philadelphia, Pa.
Application May 28, 1952, Serial No. 290,539
2 Claims. (Cl. 70—456)



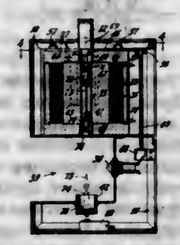
2. A key container comprising an integral elongated block having an exterior outline which is rectangular in front, end and rear views and trapeziform in side view, with one end of said block substantially larger than the other end, said block having a plurality of parallel slots extending entirely through the large end portion and partly through the small end portion defining a plurality of slightly flexible parallel walls and providing a plurality of parallel key receiving pockets, each of said parallel walls having a slot extending laterally from the rear of the block adjacent the larger end and terminating in a slightly enlarged aperture spaced from the front of the block, said slots and apertures being in alignment, and a pivot pin adapted to extend through key head apertures having its shank diameter of a size to travel snugly through said lateral aligned slots to said slightly enlarged apertures for pivotally mounting keys within said key receiving pockets, said pin having headed ends of a diameter larger than said slightly enlarged apertures, at least one of said headed ends being of a diameter to pass through apertures in key heads, said block also having a finger receiving notch opening to the front adjacent the smaller end, whereby keys, one for each pocket, may be mounted on said pivot pin and said pin passed through said laterally extending aligned slots to said aligned slightly enlarged apertures and the keys pivoted into said key receiving pockets in snug engagement with said parallel walls and individually pivoted from said key pockets for individual use by a finger extending into said finger receiving notch.

2,729,966
BOMB SHELTER
Dorothy C. Lutteke, Van Dyke, Mich.
Application May 24, 1951, Serial No. 228,049
1 Claim. (Cl. 72—1)



A bomb shelter comprising a hollow round body embedded in the ground and composed of cementitious material, said body including a circular floor and a generally circular side wall extending upward from the floor and having its upper end section inclined inwardly on all sides to form a hatch opening coaxially related to the floor and of less diameter than the floor, said body further including a circular closure member for the hatch opening, said closure member having a diameter greater than the upper end of the wall and being centrally related thereto so that in closed position its outer marginal portions project outwardly beyond all sides of the upper end of the wall, the ground immediately adjacent to the body being removed to provide a shallow trench extending around the body and exposing the upper section of the side wall under the projecting marginal portions of the closure member to the atmosphere, means pivotally connecting the closure member to one side of the upper section of the side wall for swinging movement about a horizontal axis from a closed position overlying the hatch opening to an upright position exposing the hatch opening, the upper inwardly inclined section of the wall being provided with a plurality of air vent passages circularly spaced therearound and opening at one end into the interior of the body and at the other end into the trench under the projecting portion of the closure member, and a counterweight secured to the projecting portion of the closure member adjacent to the pivotal axis thereof and arranged upon opening movement of the closure member to enter one of said air vent passages, and means for releasably locking the counterweight in the air vent passage which it enters to hold the closure member in open position.

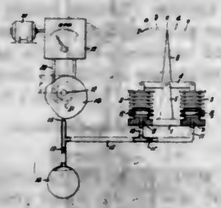
2,729,967
METHOD AND APPARATUS FOR DETERMINING THE CHARACTERISTICS OF A THERMOPLASTIC MATERIAL
Herman S. Kaufman, New York, N. Y., and Carmen R. Giannotta, North Caldwell, N. J., assignors to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware
Application May 27, 1954, Serial No. 432,681
18 Claims. (Cl. 73—15.6)



1. A method for determining the characteristics of a thermoplastic material, which comprises: suspending, at one end, an elongated specimen of a thermoplastic material, notched between the ends thereof, in a heating zone; pulling the other end of said thermoplastic specimen at a constant tension; maintaining a substantially constant temperature in said heating zone which is between the softening temperature of said thermoplastic material and below the temperature of substantial degradation; and measuring the period of time required for said thermoplastic specimen to pull apart at the notched portion thereof at said temperature.

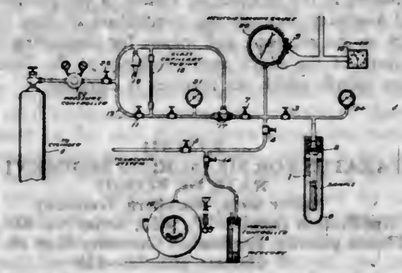
13. Apparatus for determining the characteristics of a thermoplastic material, which comprises in combination: an elongated heating vessel having a passageway extending vertically therethrough adapted to have said thermoplastic material suspended therein; means for heating said vessel; thermostat means responsive to the temperature in the interior of said vessel for controlling said heating means and maintaining a substantially constant temperature in said vessel; means for insulating said vessel; a base member; means for fixing said heating vessel in a vertical position above said base member; time registering means; means responsive to the introduction of said thermoplastic material into said passageway for starting said time registering means; and means for stopping said time registering means actuated by the falling of said thermoplastic material through said passageway.

2,729,968
PNEUMATIC GAGING DEVICE
Carl-Gustaf Hard af Segerstad and Ake H. Malmquist, Sandviken, Sweden, assignors to Sandvikens Jernverks Aktiebolag, Sandviken, Sweden
Application April 28, 1953, Serial No. 351,558
1 Claim. (Cl. 73—37.6)



In measuring apparatus for checking the departure of a dimension of a work piece from a preselected nominal value comprising a sensing mechansim for developing a quantity which varies in magnitude with the departure of the dimension of the work piece from the preselected nominal value, means for supporting a work piece and cyclically displacing the same with respect to said sensing mechanism, said sensing mechanism comprising a nozzle, a source of compressed air connected to said nozzle through a conduit including a throttling section, a first expansible chamber pressure-responsive means responsive to substantially the instantaneous value of said developed quantity, a second expansible chamber pressure-responsive means responsive to substantially the mean value of said developed quantity, the connection of the first pressure responsive means to said conduit being unobstructed and the connection to the second pressure responsive means including a throttling element, and indicating means actuated jointly by said first and second pressure responsive means to indicate the maximum and minimum departures of the work piece dimension from the preselected nominal value.

2,729,969
METHOD FOR AUTOMATIC MEASUREMENT OF SURFACE AREA AND PORE VOLUME
William B. Innes, Stamford, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
Application April 26, 1951, Serial No. 223,048
7 Claims. (Cl. 73—38)

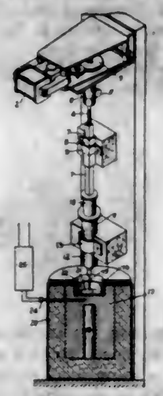


1. A method for the measurement of surface areas greater than 0.5 square meter per gram, which comprises introducing a gas at a constant rate of flow into an evacuated chamber containing a weighted amount of the material to be measured cooled to 50°–225° Absolute, measuring the time required to reach a pressure relative to saturation between 0.1 and 0.3, and calculating from the time required the surface area of the said material.

2,729,970
CARBONIZATION TESTING APPARATUS

Robert B. Faris, Jr., Solon, and John D. Bartleson, Beechwood, Ohio, assignors to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio

Application October 28, 1952, Serial No. 317,252
1 Claim. (Cl. 73—64)



In oil-carbonization testing apparatus, a body of heat insulating material, a metal block of considerable mass received within an opening provided therefor in such insulating material, a portion of the upper surface of the block as thus received being exposed and so formed as to provide a cylindrical recess in the block at such region, a metal receiver of dished cylindrical form removably positioned in the block recess with its bottom resting on the bottom of the recess, the outside diameter and height of said receiver being slightly less than the respectively corresponding dimensions of the recess, a cylinder made of transparent material having capacity indicia thereon and a projecting fine nozzle at one end, a support mounting said cylinder vertically above the receiver with its nozzle directed downwardly toward the latter, whereby oil to be tested may be discharged from the cylinder to the receiver, a piston in said cylinder, a stem attached to and projecting upwardly from the piston beyond the upper end of the cylinder, guide structure so constructed and engaged with said stem as to prevent rotation of the same, a shaft threadably engaged with the stem for controlled axial advance and retraction thereof and hence of the piston, a reversible electric motor connected to and operative to drive said shaft, electric heating means in the body of the metal block spaced therewithin from the walls of such recess, said heating means being operative to effect carbonization of a measured quantity of the oil placed in the receiver by means of the piston-cylinder feed assembly through the conduction of heat from the block to the receiver, and means for measuring the temperature of the block approximately at the base of the recess within which the receiver is disposed.

2,729,971
APPARATUS FOR MEASURING SEDIMENTATION RATE OF BLOOD

Walter Stein, Nurnberg, Germany

Application October 27, 1952, Serial No. 316,995
Claims priority, application Germany May 10, 1952
7 Claims. (Cl. 73—61)

1. A blood testing device comprising a capillary tube for observation of the settlement of the red blood corpuscles, a frame to support said tube in a normally vertical position, a valve at the lower end of said tube, said valve comprising a cup-shaped body provided with an axially downwardly extending guide, there being a bore through said body from the center of the body at an angle through the side of the guide, an apertured sealing element seated in said body, a flexible hose extending from said body through said bore, a hose clamping ring to receive said guide, resilient means to urge the capillary tube, cup-shaped body and clamping ring axially toward each other to securely hold the sealing element against the

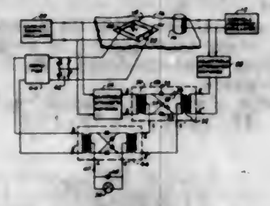


capillary tube and to clamp the flexible hose between the valve body element and clamping ring, and a lever actuated cam element between the clamping ring and body element whereby the clamping pressure on the flexible hose may be relieved.

2,729,972
MECHANICAL RESONANCE DETECTION SYSTEMS

Walter H. Schwidetzky, San Diego, Calif., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware

Application January 22, 1953, Serial No. 332,677
9 Claims. (Cl. 73—67)



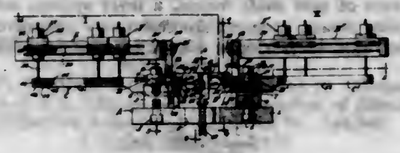
7. Apparatus for determining the characteristics of a structural body by its response to mechanical vibrations applied thereto comprising electrical generating means for producing a first signal, vibrator means connected with said electrical means for producing vibrations applied to said structural body, a carrier signal, means responsive to said carrier signal and vibrations of said body for producing a second signal modulated in accordance with said vibrations, modulator circuit means connected with said electrical means and said carrier signal for modulating said carrier by said first electrical signal thereby, developing a reference signal, and circuit comparing means responsive to said second signal and said reference signal for generating an output signal indicating the phase relationship between vibrations applied to said structural body and response of said body to said vibrations, means responsive to said circuit comparing means for indicating the phase relationship between applied vibrations and the response of said body to said applied vibrations.

2,729,973
MULTIRANGE LOAD CELL

Robert S. Strimel, King Manor, Bridgeport, Pa., assignor to Tinius Olsen Testing Machine Company, Willow Grove, Pa., a corporation of Pennsylvania

Application May 19, 1953, Serial No. 356,043
10 Claims. (Cl. 73—141)

1. A load cell comprising: a support for the cell; a load responsive member generally elongated, each end of which is fixedly secured to said support; a load applying arm radially extending from said load responsive member, the arm being positioned between said fixed ends; a bracket secured to each said fixed end but spaced apart from said support whereby the only connection between the bracket and the support is through said fixed ends; a second arm extending from said bracket and adapted to mount control elements; and a control actu-

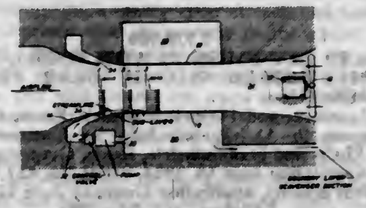


ating member radially extending from said load responsive member, the actuating member being positioned between said fixed ends and having means connectible with control elements mounted on said second arm.

2,729,974
TRANSONIC FLOW CONTROL WITH REDUCED POWER

John G. Lee, Farmington, and Henry H. Hoadley, Manchester, Conn., assignors to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware

Application February 15, 1952, Serial No. 271,772
3 Claims. (Cl. 73—147)

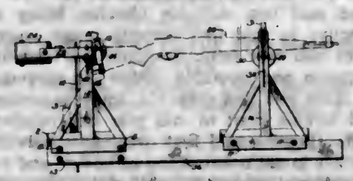


1. In a fluid flow control device, the combination of a fluid confining passage having a converging portion and a portion of substantially constant cross section, said portion of constant cross section having perforations therein which extend around the periphery thereof, means for moving a mass of fluid through said passage so that its velocity is increased to at least sonic speed at the point of maximum convergence of said converging portion, means operatively connected to the outside of said portion of constant cross section for withdrawing fluid from the passage through said perforations to remove low energy fluid immediately adjacent thereto, and pump means for moving a portion of the withdrawn fluid back into the main stream including an annular opening adjacent the juncture of said portions, said annular opening being coaxially disposed relative to said passage and the moving mass of fluid.

2,729,975
VARIABLE RECOIL MOUNT

Herman F. Hawthorne, Wilbraham, and Filser D. Hoppert, East Longmeadow, Mass.

Application June 9, 1952, Serial No. 292,598
9 Claims. (Cl. 73—167)
(Granted under Title 35, U. S. Code (1952), sec. 266)

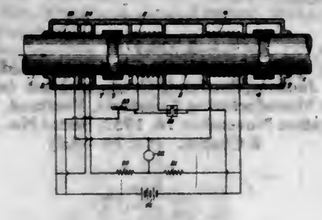


1. A test fixture for a firearm wherein the recoil and counterrecoil is controlled to obtain predetermined time-displacement relationships, comprising a front support fixedly secured to a channel-like base and arranged to slidably receive the front end of a firearm, a rear support fixedly secured to said base, a flexible cantilever beam vertically mounted to said base, means attached to the upper front end of said cantilever beam for pivotally supporting the rear end of the firearm, means controlling the flexing of said beam during the recoil movement of the firearm, and means for damping the flexing of said beam during the counterrecoil movement of the firearm, said damping means comprising a cylinder pivotally secured to the upper end of said rear support and a longitudinally movable piston pivotally secured to the upper end of said cantilever beam, said damping means being arranged to cooperate with said cantilever beam for simulating the actual recoil conditions encountered when fired from the shoulder of a shooter.

2,729,976
THERMAL FLOWMETER

John Harry Laub, Short Hills, N. J.

Original application May 21, 1946, Serial No. 671,179. Divided and this application January 6, 1953, Serial No. 329,899
9 Claims. (Cl. 73—204)



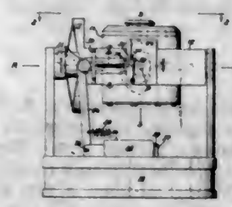
1. A flow meter for measuring the flow of a confined flowing medium comprising conduit means, heating means externally contacting a portion of said conduit means to enable transmission of heat energy through said conduit means to said flowing medium, a first temperature responsive means externally contacting said conduit means and so located as to be responsive to the temperature of the flowing medium prior to the transmission of heat thereto, a second temperature responsive means externally contacting said conduit means and so located as to be responsive to the temperature of the flowing medium after the transmission of heat thereto, a bridge having a pair of fixed resistance ratio arms, the other arms consisting of said first and second temperature responsive means and constituting the thermometer arms of the bridge, an electrical circuit comprising a first and a second portion, said first portion consisting of said thermometer arms, said second portion including said ratio arms and the heating means, means arranged in the diagonal of said bridge for sensing any unbalance therein as produced by the said temperature responsive means, and a compensating element externally wound in intimate thermal contact with said conduit means on a portion thereof containing flowing medium unheated by said heating means so as to be responsive to temperature fluctuations of the flowing medium prior to the transmission of heat thereto, the compensating element and temperature responsive means being in the same thermal transfer relationship with the flowing medium, said element being electrically connected into the second portion of said circuit whereby any sensing errors due to fluctuations in the temperature of the flowing medium are compensated for by a shifting of the bridge balance and a signal is produced only as the result of a change in the rate of flow.

2,729,977
CAPILLARY TUBE FOR MEASURING INSTRUMENTS
Hans Juffa, Kassel, Germany
Application January 31, 1952, Serial No. 269,184
3 Claims. (Cl. 73—371)



1. A capillary device comprising a capillary tube having a bore of substantially circular cross section, said tube having at least one interruption in said circular cross section extending longitudinally along the wall of the bore integrally therewith at the periphery thereof, said interruption having a pair of substantially parallel walls extending approximately perpendicularly to said bore and a transverse wall extending between said pair of parallel walls, and a column of a liquid movable through said capillary tube.

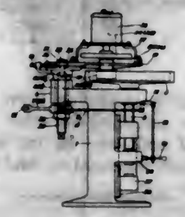
2,729,978
GYROSCOPE CAGING SYSTEM
Albert L. Judson, Portland, Oreg., assignor to Iron Fireman Manufacturing Company, Portland, Oreg.
Application November 18, 1952, Serial No. 321,141
6 Claims. (Cl. 74—5.1)



1. In combination with a gyroscope having a rotor adapted for spinning in a support about one axis and means including a gimbal ring mounting said support for freedom about two mutually perpendicular axes other than said spin axis, a centering and caging means including a first cam member rotatable with said gimbal ring, a second cam member rotatable with said support, a pivoted first cam follower member mounted independently of said support and said gimbal ring and including an element carried thereon for engaging said first cam member, a second cam follower member slidably mounted on said gimbal ring and including an element carried thereon for resiliently engaging said second cam member, said first cam follower member being adapted to engage said first cam member until said gimbal ring is centered about one of said mutually perpendicular axes and thereafter to lock said gimbal ring and actuate said second cam follower member to engage said second cam member until said support is centered about the other of said mutually perpendicular axes.

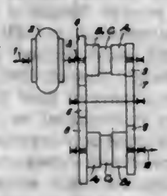
2,729,979
FRICTION WHEEL SPINDLE PRESSES
Richard Theodor Elsen, Essen, Germany
Application September 9, 1954, Serial No. 455,037
Claims priority, application Germany October 13, 1953
3 Claims. (Cl. 74—213)

1. In combination in a friction wheel spindle press having a flyweel disc designed as a cup wheel and operatively connected to a movable pressing member, and having driving wheels drivingly connected with each other and adapted drivingly to engage said cup wheel: a pair of shaft means, a pair of supporting arms respectively supporting said driving wheels and being swingable about the axes of said shaft means, a lever system, releasable coupling means arranged for selectively operatively connecting said lever system with said supporting arms for



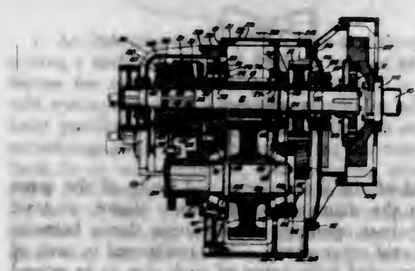
respectively swinging the same about said axes, means respectively associated with said shaft means and movable in axial direction of said shaft means for disengaging the coupling connection between said lever system and the respective supporting arms and lifting the respective driving wheel out of said cup wheel to thereby allow swinging the respective driving wheel beyond the periphery of said cup wheel.

2,729,980
FLUID TRANSMISSION WITH SUBSEQUENT MULTI-SPEED CHANGE GEAR TRANSMISSION
Ernst Lammerz and Hugo Rambausek, Essen, Germany, assignors to Aktiengesellschaft fur Unternehmungen der Eisen- und Stahlindustrie, Essen, Germany
Application June 18, 1954, Serial No. 437,774
Claims priority, application Germany June 22, 1953
7 Claims. (Cl. 74—359)



1. In combination with a fluid transmission having a pump shaft and a turbine shaft: a gear transmission having three velocity ranges and comprising a plurality of gear sets arranged in at least two planes and on three shafts; one of said three shafts being drivingly connected to said turbine shaft, and another one of said three shafts being the gear transmission output shaft; the gears arranged in one and the same plane continuously meshing with each other; a first and a second shiftable clutch respectively mounted on two of said shafts; a first overrunning clutch mounted on the same shaft as said first shiftable clutch; a second overrunning clutch mounted on the same shaft as said second shiftable clutch; said first and said second overrunning clutches being arranged to act as power-conveying means in the first velocity range and said two shiftable clutches being arranged to be inactive in said first velocity range; means associated with said first shiftable clutch and said first overrunning clutch and operable within the second velocity range to cause said first shiftable clutch to convey power from said turbine shaft to said gear transmission output shaft while allowing said first overrunning clutch to become inactive in the transmission of power; and means associated with said second shiftable clutch and said second overrunning clutch and operable within the third velocity range to cause said second shiftable clutch to convey power from said fluid transmission through said first shiftable clutch to said transmission output shaft while allowing said second overrunning clutch to become inactive in the transmission of power.

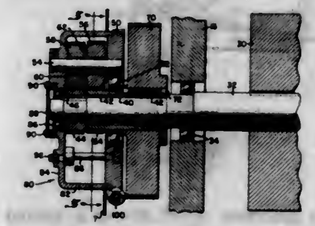
2,729,981
REVERSIBLE POWER TRANSMISSION MECHANISM
Hugo F. Budzien, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a corporation of Illinois
Application August 2, 1951, Serial No. 240,001
1 Claim. (Cl. 74—361)



A reversible power transmission assembly for operatively connecting a prime mover and means to be driven thereby, comprising a casing open at each end and providing an internal wall transversely in the casing intermediate the casing ends, said wall dividing the casing interior into first and second casing chambers, a first removable end wall closing the open end of the casing adjacent said first casing chamber, a second removable end wall closing the open end of the casing adjacent said second casing chamber, a pair of power input shafts extending longitudinally of the casing through said internal wall and said first and second end walls, bearings carried by said internal wall and said first end wall rotatably supporting said shafts over corresponding end portions thereof, a housing removably carried by the casing and projecting outwardly from said second end wall, bearings carried by said housing and rotatably supporting the opposite corresponding ends of said power input shafts, enmeshing gear elements in said first casing chamber with one such gear element secured upon each power input shaft, provided for interconnecting the shafts for conjoint rotation thereof in opposite directions, a pair of pinion members in said second casing chamber, one thereof for each power input shaft and each being in radially spaced concentric relation to its associated shaft, bearings in said internal wall and said second end wall rotatably supporting said pinion members independently of said shafts, clutch means on each shaft end in said housing, for selective connection and disconnection of the shaft relative to its associated pinion member, a power output shaft extending across said second casing chamber and projecting from the casing, bearings in said internal wall and said second end wall rotatably supporting said output shaft, and a gear member secured upon the output shaft in said second casing chamber, said pinion members being in constant mesh with said gear member.

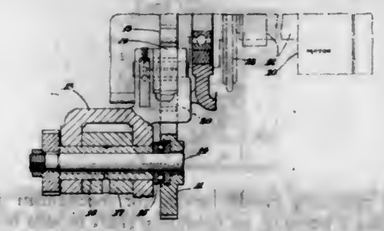
2,729,982
GOVERNOR-DRUM DRIVE FOR PRINTING PRESSES
Harold W. Huffman, Hamilton, Ohio, assignor to The Hamilton Tool Company, Hamilton, Ohio, a corporation of Ohio
Application April 16, 1954, Serial No. 423,731
8 Claims. (Cl. 74—395)

1. A governor-drum drive comprising a rotatable governor-drum shaft, a sleeve journaled on said shaft, drive means for rotating the sleeve, a cage journaled on the sleeve, a pair of interlocked planetary gears journaled on a common shaft carried by said cage, a gear in driven relationship with the sleeve and in driving relationship with one of the said planetary gears, a gear in driving



relationship with said drum shaft and in driven relationship with the other planetary gear, and means to rotate the cage for altering the normal rotational speed imparted to the drum shaft by the said drive means.

2,729,983
DRIVING GEAR FOR AUTOMATIC LATHES
Alfred James Benning, Hove, England, assignor to C. V. A. Jigs, Moulds & Tools Limited, Hove, England, a British company
Application July 18, 1951, Serial No. 237,464
Claims priority, application Great Britain July 27, 1950
6 Claims. (Cl. 74—472)

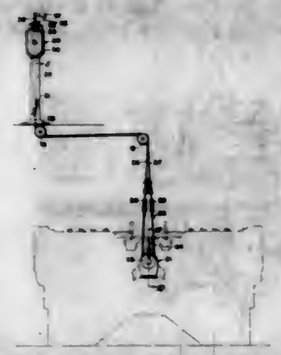


1. A driving gear which is operatively connected to a reversible motor for driving a unidirectional control shaft comprising a transmission between the motor and the unidirectional control shaft, which transmission comprises a driving pinion driven by said electric motor, a driven gear wheel fixed to said control shaft, an oscillatable carrier pivoted about the control shaft and two intermeshing pinions rotatably mounted on said carrier, one of said intermeshing pinions being permanently meshed with the aforesaid driven gear wheel and said intermeshing pinions being meshed one at a time with said driving pinion, a control member for oscillating the oscillatable carrier, thereby changing the intermeshing pinion which is meshed with the driving pinion, a controller for reversing said electric motor, and an operative interconnection between said control member and said controller, whereby oscillation of said oscillatable carrier is accompanied by reversal of the electric motor.

2,729,984
MARINE ENGINE CONTROL SYSTEM
John F. Morse, Hudson, Ohio
Application June 3, 1952, Serial No. 291,451
27 Claims. (Cl. 74—472)

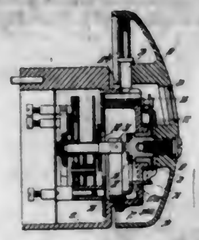
1. A pilot house control apparatus for a marine engine having a throttle and a reversible transmission, an engine room control shaft operatively connected to said throttle and transmission, said unit comprising a single manually oscillatable lever in the pilot house, means oper-

atively connecting said lever to said control shaft, and a hydraulic delay mechanism for retarding movement of



said lever from neutral position in either direction to retard engaging the transmission and opening the throttle.

2,729,985
ELECTRIC SWITCH OPERATOR
Albert Morrell Midgley, Northwood, England, assignor of one-half to Albert Henry Midgley, Northwood, England
Application April 17, 1951, Serial No. 221,356
Claims priority, application Great Britain April 24, 1950
2 Claims. (Cl. 74—504)



1. An operating handle device for mechanism of the type having a housing, an operating shaft in said housing and a radial operating arm secured to the shaft, said device comprising a knob, a spindle secured to said knob and journalled in a wall of said housing coaxially with said shaft, a fixed post carried by said housing, a spiral spring loosely surrounding said spindle and having its terminals extending radially of the spindle to engage closely on either side of said post, a spider member secured to said spindle having a first tongue lying between the terminals of said spring to define a centered position for the knob, a pair of angularly spaced radial fingers on said spider member, a disc loose on said spindle having a second tongue disposed between said fingers for lost-motion movement thereby and a bifurcated member on said disc engaging the said radial operating arm to rotate the same upon movement of said knob to either side of its centered position.

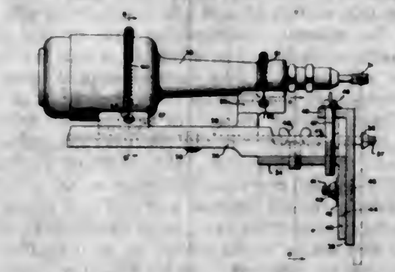
2,729,986
ADJUSTABLE STOP MECHANISM
Arthur Fröbel, Oberndorf (Neckar), Germany, assignor to Olympia Werke Aktiengesellschaft, Wilhelmshaven, Germany, a corporation of Germany
Application October 17, 1952, Serial No. 315,400
Claims priority, application Germany October 17, 1951
1 Claim. (Cl. 74—526)

An adjustable stop mechanism comprising an inner substantially cylindrical sleeve adapted to slide along a relatively stationary cylindrical rod, a shell secured to one end of said sleeve and having a frusto-conical wall spaced apart from and overlying one end of said sleeve with its smaller end adjacent the middle of said sleeve, an outer frusto-conical sleeve concentric with and spaced apart from said inner sleeve with its larger end extending between said inner sleeve and said shell, the larger end of said outer sleeve having at least three projections extending inwardly to sliding contact with said inner sleeve, a shell secured to the smaller end of said outer sleeve and having a frusto-conical wall spaced apart from and overlying the smaller end of said outer sleeve with its smaller end adjacent the middle of said inner sleeve, the smaller end of said outer sleeve projecting beyond the



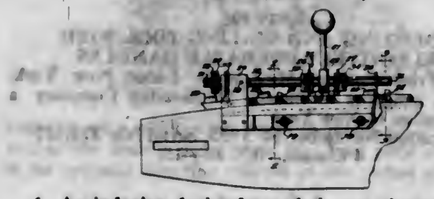
adjacent end of the inner sleeve and being of the same diameter as the diameter of the inner sleeve, at least two spaced apart openings in said inner sleeve between the ends of said outer sleeve, a ball positioned in each of said openings, said balls being of such size as to extend only partly through said openings and to engage said outer sleeve, and a coiled spring positioned in the space between said sleeves and compressed between said projections and said balls thereby tending to move said outer and inner sleeves endwise with respect to each other and thus to press said balls through said openings into engagement with said rod.

2,729,987
CHAIN SAW SHARPENER
Gary G. Bluemink, Racine, Wis., assignor to The Dumore Company, Racine, Wis., a corporation of Wisconsin
Application July 7, 1952, Serial No. 297,510
7 Claims. (Cl. 76—37)



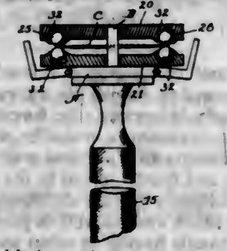
5. A chain saw sharpener including a bracket, means engaging one end of said bracket for adjustably mounting said bracket in a cantilevered manner on the blade of a chain saw, said means permitting pivotal movement of said bracket with respect to said saw blade about a vertical axis, said bracket having longitudinally disposed guide means, a slide mounted on said bracket and having portions engaging said guide means to permit free longitudinally sliding motion thereof, said slide having a substantially centered V-shaped supporting portion, a grinder having a substantially cylindrical housing portion engaged and supported by said V-shaped supporting portion, and means connected to said supporting portion and embracing said cylindrical housing portion to maintain said grinder in contact with said V-shaped supporting portion, whereby said grinder will be maintained in fixed relationship with respect to said slide and with its axis in substantial parallelism with the direction of said longitudinally sliding motion.

2,729,988
INDEXING DEVICE FOR CHAIN SAW SHARPENER
Royal A. Beach, Racine, Wis., assignor to The Dumore Company, Racine, Wis., a corporation of Wisconsin
Application May 5, 1954, Serial No. 427,704
9 Claims. (Cl. 76—77)



1. An indexing device for a chain saw sharpener comprising a shaft, an indexing member carried by said shaft, means for mounting said shaft parallel to a saw blade, said means including a bearing, means for adjusting the axial position of said shaft with respect to said bearing, means engaging said shaft for feeding the same back and forth in an axial direction, said adjusting means providing a limiting position in one direction to limit the feeding of said shaft in that direction and comprising a stop member adjustably mounted on said shaft for engagement with one portion of said bearing, and said feeding means comprising a feed nut threaded onto said shaft and engaging another portion of said bearing, and means keying said shaft against rotation with respect to said bearing whereby rotation of said feed nut will shift the axial position of said shaft.

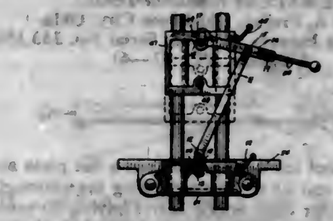
2,729,989
SAFETY RAZOR BLADE SHARPENER
James H. McCue, Pasadena, Calif.
Application June 1, 1954, Serial No. 433,369
1 Claim. (Cl. 76—89.2)



A safety razor blade cutting edge sharpener which when in use employs for a support a conventional safety razor having the usual tubular handle, pairs of hinged shutters and a vertically reciprocating dividing wall between the shutters, said sharpener comprising upper and lower rectangular plates, each of said plates having longitudinally and centrally disposed slots therein which are enlarged between their ends for mounting upon the dividing wall of the razor with a razor blade therebetween, said plates each having a plurality of metal rubbing balls embedded therein in a line near the longitudinal edges of each plate, the balls of each plate facing corresponding balls of the other plate, so that, with plates and intermediate blade mounted on the razor and over the dividing wall thereof, the blade edges are sharpened by hand longitudinal reciprocation of the plates with the dividing wall serving as a guide for the plates during reciprocation.

2,729,990
JACK FOR MACHINE TOOLS
Charles W. Ballman, Indianapolis, Ind.
Application January 29, 1953, Serial No. 334,062
1 Claim. (Cl. 77—5)

An attachable and detachable accessory lifting or lowering jack for machine tools having parts vertically adjustable to fixed positions relative to one another and including a transverse mounting bar, comprising a U-shaped clamp for attachment to one part of said machine tool, a standard pivotally mounted on said clamp, and a lever pivotally connected at the other end of said stand-



ard and having a double hook including spaced bights at one end for detachably and transversely engaging the mounting bar of the other part of said machine tool whereby either of said bights may selectively engage said bar for lifting or lowering either of said parts with respect to the other part.

2,729,991
PRE-SET BORING TOOL
Max Peterman, West Orange, N. J.
Application March 24, 1955, Serial No. 496,416
1 Claim. (Cl. 77—58)



An adjustable boring tool adapted for interchangeable insertion in the socket of a rotary holder, said tool comprising an elongated sleeve adapted for ready insertion and retention in the socket of said holder, said sleeve having a longitudinal bore extending therethrough at an axial angle relative to the axis of the sleeve, an elongated boring bar formed with a shank fitted for insertion into said bore, said bar being provided with a cutter on the outer extremity thereof, an adjusting screw threaded into the end of the sleeve remote from the boring bar, and adapted to form an adjustable stop for the inner extremity of the bar, an indicating dial disposed on the extremity of the sleeve within the confines of the periphery thereof, a longitudinal mark on said adjusting screw to register with the indications of said dial for determining the longitudinal adjustment of the boring bar, and means for fixedly retaining said boring bar in adjusted position to said sleeve.

2,729,992
ROLLING OF METALS
Charles Wankat, Brookfield, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware
No Drawing. Application July 19, 1952, Serial No. 299,927
13 Claims. (Cl. 80—16)

1. In a process of rolling metal in contact with a lubricating oil, wherein the metal normally becomes discolored during the rolling thereof, the improvement which comprises adding to the lubricating oil, in a small but sufficient amount to reduce discoloration of the metal,

a compound selected from the group consisting of a disalicylal diamino alkane and an ortho-hydroxybenzal aminophenol.

2,729,993
JEWELERS BORING TOOL
Hugh A. Preller, Oklahoma City, Okla.
Application January 26, 1953, Serial No. 333,156
4 Claims. (Cl. 81—6)



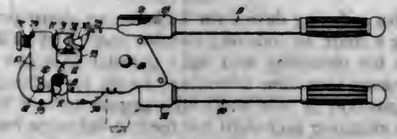
1. A hand tool for boring a hole in a flat plate around the projecting end of a shaft extending therethrough, including: a tubular open ended barrel having bit receiving means adjacent said open end; a tubular bit removably mounted at one end by said bit receiving means permitting unitary rotation of said bit and said barrel, said bit having a free toothed end projecting from said barrel; a segmental shaft gripping chuck within said barrel adapted for projecting beyond the toothed end of said bit; slidable means within said barrel for compressing said chuck into shaft gripping position; and a thrust-rod projecting beyond the other end of said barrel having its inner end removably engaged with said slidable means.

2,729,994
HOSE CLAMP APPLYING MACHINE
Ellis E. Hewitt, Pittsburgh, Rankin J. Bush, Greensburg, and William B. Jeffrey, Irwin, Pa., assignors to Westinghouse Air Brake Company, a corporation of Pennsylvania
Application May 29, 1951, Serial No. 228,894
3 Claims. (Cl. 81—9.3)



1. Apparatus for removing the extension from a tightened hose clamp of the type described, said apparatus comprising in combination, a casing body adapted for fixed mounting, an immovable extension back-up element fixed to said casing body and tapered for projection between the outer surface of a hose clamp coil and its extension in the direction of its keeper strap, keeper strap stop means attached to said casing body and disposed adjacent to said extension back-up element to define a slot-and-guideway into which the free end of the hose clamp coil extension may be inserted for projection therethrough, movable pulling means carried by said casing body and normally disposed adjacent to the outlet side of said slot-and-guideway for gripping the projecting end of the coil extension and exerting a pulling force thereon, thereby bringing the extension dispensing end of the hose clamp keeper strap into engagement with said keeper strap stop means as the extension is tensioned, and blow dealing means disposed at the inlet side of said slot-and-guideway directed for movement transversely of the direction of projection of said slot-and-guideway past said back-up element with clearance to deliver a hammer blow to the outer face of the coil keeper strap immediately adjacent to its extension dispensing end while held in engagement with said keeper strap stop means under influence of tension applied to the extension, thereby causing a tension failure of said extension transversely along a line of contact with the lower end of the outer layer of the keeper strap due to the sudden build-up in tension stress in said extension resultant from said hammer blow.

2,729,995
INDENTING AND SEALING TOOL WITH SELECTIVELY OPERABLE HANDLES
Gerson Friedman and Michael D. Lazar, New York, N. Y., assignors to Burndy Engineering Company a corporation of New York
Application November 14, 1952, Serial No. 320,452
4 Claims. (Cl. 81—15)



1. A tool comprising a body, a plurality of jaw members, a plurality of handles pivotally mounted to said body, each of said handles being connected to a jaw member and control means mounted on said body and linearly slidable from one handle to the other for simultaneously controlling the movement thereof.

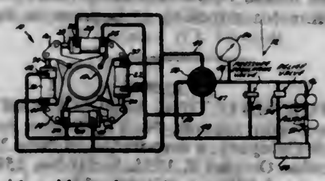
2,729,996
ELECTRICIAN'S HAND TOOL
Waldo W. Schoenwald, Minot, N. Dak.
Application July 3, 1953, Serial No. 365,880
2 Claims. (Cl. 81—51)



1. A hand tool comprising a primary handle of appreciable cross-section having its outward end centrally and longitudinally bifurcated, the furcations and the intervening space providing a fork-like sheath, a first implement embodying a first jaw and a shank, the latter in alignment with and fixedly joined to the outer end of one furcation, an auxiliary handle superimposed against and pivoted to said shank and foldable in part into said sheath, said auxiliary handle having an offset second jaw opposed to, coplanar with and movable toward and from said first jaw, said primary handle having a first recess in one side aligned with and constituting a pocket-like tension of said sheath, said second jaw being wholly foldable into an out-of-the-way position in said extension, and said primary handle having a second recess in a side opposite to said first named side and providing a second extension of said sheath and said auxiliary handle being foldable in part into said second extension.

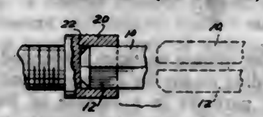
2,729,997
HYDRAULICALLY CONTROLLED REVERSIBLE RATCHET WRENCH
William R. Davis, Simsbury, Conn., assignor to The Kell-Strom Tool Co., Incorporated, Wethersfield, Conn., a corporation of Connecticut
Application July 6, 1954, Serial No. 441,365
8 Claims. (Cl. 81—60)

2. In a wrench, the combination comprising a ratchet wheel adapted for driving connection with a rotatable device, a drive plate engaging and rotatable around said ratchet wheel, an anchor plate engaging and rotatable around said ratchet wheel, a first pawl carried by said drive plate and engageable with said ratchet wheel to rotate the same with the drive plate when the drive plate is rotated in one direction relative to said anchor plate, and a second pawl carried by said anchor plate and en-



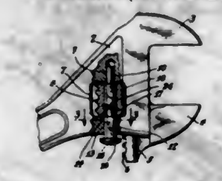
gageable with said ratchet wheel to retain the same relative to the anchor plate when the drive plate is rotated in the opposite direction relative to the anchor plate.

2,729,998
SELF-GRIPPING TOOL FOR TURNING SOCKET HEAD FASTENERS
John J. Deliso, Worcester, Mass.
Application April 30, 1954, Serial No. 426,849
2 Claims. (Cl. 81—72)



1. A tool for holding and turning a hexagonal socket head fastener, said tool comprising a plurality of elongated conjoined but separate wires each having a cross section in the form of half a regular hexagon, means holding the wires in parallel relationship, said wires having corresponding free ends slightly spaced apart, said wires of half-hexagon section being springy and each having a substantially flat side, the flat sides facing each other and together forming a full regular hexagon section when pressed together, to substantially fit and fill the hexagonal socket of the fastener.

2,729,999
ADJUSTING AND LOCKING MEANS FOR SLIDABLE JAW WRENCH
William A. Barnes, Utica, N. Y., assignor to Utica Drop Forge & Tool Corporation, Utica, N. Y., a corporation of New York
Application November 15, 1954, Serial No. 468,652
4 Claims. (Cl. 81—165)



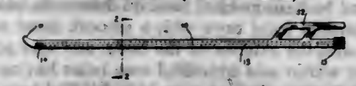
1. A wrench having a fixed jaw provided with a handle, a movable jaw supported by the fixed jaw, and formed with a rack, a worm shaft mounted in said fixed jaw for rotation and longitudinal movement, a worm carried by said shaft in engagement with said rack to effect shifting of said movable jaw towards or away from said fixed jaw upon rotation of said worm, said worm being mounted on said shaft for relative movement longitudinally of the shaft and being held against rotation with respect to the shaft in all of its positions with respect to the shaft, means for locking said shaft against rotation in one of its longitudinal positions and in a plurality of angular positions thereof, said shaft having an end portion projecting from the stationary jaw and provided with means for rotating the shaft and worm when the shaft is in an unlocked position, and means arranged between said worm and said shaft for releasably holding said shaft in either locking or unlocking position.

2,730,000
SLIDABLE JAW FACE MEANS FOR AN OPEN END WRENCH
Harry E. Crittenden, Jr., Portsmouth, Va.
Application July 13, 1953, Serial No. 367,667
7 Claims. (Cl. 81—179)



1. In a wrench, comprising a body having a handle terminating in a bifurcated flat head, said flat head comprising jaws having substantially parallel flat face portions opposed to each other, in combination with a pair of spring controlled contact balls, a pair of springs and means to maintain said springs and balls in operative position, each jaw having an elongated recessed portion therein to receive one of said balls and a spring plus means to retain each ball and spring in operative position within the major portion of said recessed portion, said recessed portions being reduced to provide opposed open sides whereby a minor portion of each ball may extend through the parallel jaw portions to engage a nut or bolt head of appropriate size, whereby each ball is adapted to engage directly the flat faces of the nut in a position adjacent the nearest corner of the nut relatively to said ball substantially as described.

2,730,001
VIOLIN BOW
Robert T. Martin, Douglas, Ariz.
Application October 20, 1952, Serial No. 315,609
1 Claim. (Cl. 84—282)



A device of the character described comprising an elongated body having an upwardly curved outer end, a handle formed integrally with the upper side of the inner end portion of said body, said body having a plurality of minute transverse grooves formed in the lower face thereof, a rod extending longitudinally through said body and threadably connected thereto adjacent the forward end thereof, and a nut threaded to the rearward end of said rod without said body.

2,730,002
TOY MUSICAL INSTRUMENTS
J. Edward Legler, Fresno, Calif.
Application September 12, 1952, Serial No. 309,187
7 Claims. (Cl. 84—375)



1. A toy musical instrument comprising a tubular member, a partition mounted in the tubular member in closing relation thereto having a plurality of openings therethrough, valve means rotatably mounted in the tubular member in overlaying relation to the openings in the partition having a port therein registrable with the openings in response to adjustable positioning of the valve means in the tubular member, air operative sound means positioned for individual actuation by air directed through

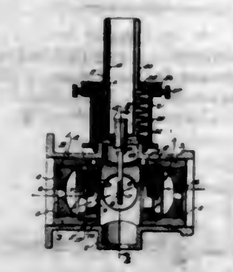
the openings in the partition, means mounted in the tubular member shielding each of the sound means from air directed through all but their respective openings in the partition, a control member mounted on the tubular member movable axially of the rotatable valve means, and control means interconnecting the control member and the valve means rotatably positioning the valve means in response to movement of the control member in spaced relation thereto, said control means including a driving nut mounted on one of the elements interconnected thereby and an elongated helicoid bar mounted on the opposite element interconnected thereby and slidably extended through the driving nut.

2,730,003
CAST LINER FOR WOODWIND INSTRUMENTS
Hugh W. Loney, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a corporation of Indiana
Application August 9, 1951, Serial No. 241,104
5 Claims. (Cl. 84—380)



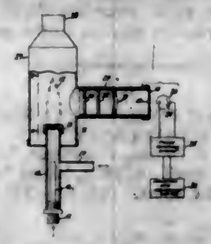
1. A woodwind musical instrument comprising an elongated wood body formed with an axial bore therethrough, said body having a plurality of oversized tone holes through the sides thereof and a one piece cast liner of plastic material molded within said bore and tone holes of said wood body in integral relation therewith, said liner having a finished axial bore with a smooth inner surface concentric with the exterior of the body, and said portions of said liner within said oversized tone holes having openings therein communicating with said finished axial bore.

2,730,004
MICROILLUMINATOR FOR SPECTROMETERS
Richard M. Badger, Altadena, and Roger Newman, Pasadena, Calif., assignors to California Institute Research Foundation, Pasadena, Calif., a corporation of California
Application September 17, 1951, Serial No. 247,004
6 Claims. (Cl. 88—14)



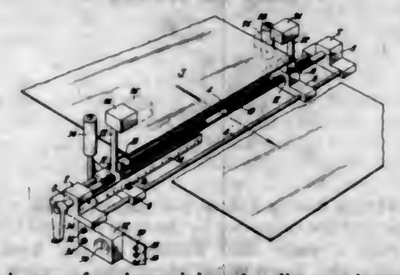
1. A microilluminator, comprising: a rigid housing having co-axial rigidly related mounting tubes, and a sealable laterally directed access aperture between said mounting tubes; an optical condenser system mounted in one of said coaxial tubes and an optical objective system mounted in the other of said coaxial tubes, said optical condenser system and optical objective system being similar similar and each including an apertured concave mirror and confronting convex mirror so disposed that said optical condenser system and optical objective system have a common focusing point coaxial with said mirrors; and means operable through and sealing said access aperture for disposing a specimen at said focusing point.

2,730,005
MEANS FOR DETECTING AEROSOL PARTICLES
Bernard Vonnegut, Alplaus, N. Y., assignor to General Electric Company, a corporation of New York
Application October 9, 1951, Serial No. 250,515
8 Claims. (Cl. 88—14)



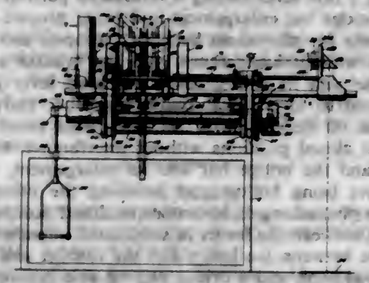
1. A detector for minute particles suspended in a gaseous medium including means for energizing and imparting movement to the particles in a sample of the medium being tested to cause the same to emanate momentary flashes of light and to move in a predetermined direction, optical means disposed adjacent the path of movement of said particles for effectively inspecting the momentary flashes of light thus occurring within a preselected cross section of the path as the energized particles pass through the same, a light sensitive device disposed adjacent said optical means and cooperating therewith to derive an electrical signal indicative of the characteristics of the particles in the medium, and a pulsed electric signal responsive indicating circuit coupled to said light-sensitive device for deriving a count of only the increased intensity momentary light flashes occurring within the preselected area.

2,730,006
STRIP WIDTH GAGE
Paul P. Gottschall, Concord, Calif., assignor to United States Steel Corporation, a corporation of New Jersey
Application March 19, 1952, Serial No. 277,365
6 Claims. (Cl. 88—14)



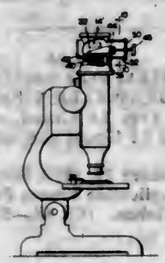
1. A gage for determining the distance between the opposite edges of a moving elongated article comprising a pair of carriages one adjacent each edge of said article, means mounting said carriages for movement transversely of said article, a light source mounted on each of said carriages on one side of said article, a photo-sensitive device mounted on each carriage on the side of said article opposite said light source, a source of power, said light sources being connected in parallel to said source of power, an adjusting rheostat in series with said light sources, a balancing rheostat connected across said light sources, and an ammeter calibrated to indicate variations in the width of the article, said photo-sensitive devices being connected in parallel to said ammeter.

2,730,007
APPARATUS FOR PRODUCING STRESS IMAGES
Everett Chapman, West Chester, Pa.
Application April 12, 1952, Serial No. 282,014
15 Claims. (Cl. 88—14)



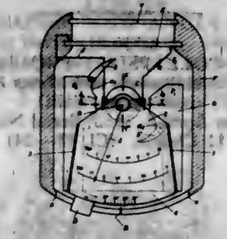
1. Apparatus for producing a stress image from a test specimen of the type which is birefringent under stress comprising: a central control station; a viewing station located adjacent said central control station; mechanism including at least one source of light to form a beam of light for projection along an optical axis to said viewing station; mechanism controllable at said central control station for positioning the test specimen with respect to the optical axis; mechanism controllable at said central control station for stressing the test specimen while positioned with respect to the optical axis; mechanism controllable at said central control station for polarizing said light beam and optically cooperating with the test specimen to form a stress image and having means to form a second image for indicating the plane of polarization; including means to change the plane of polarization; and mechanism controllable at said central control station for projecting said images to said viewing station, the viewing station being oriented with respect to the optical axis whereby the images are observed in the direction of the propagation of light.

2,730,008
OPTICAL MICROMETER
John H. McGinn, Philadelphia, Pa., assignor, by mesne assignments, to Research Corporation, New York, N. Y., a nonprofit corporation of New York
Application June 30, 1954, Serial No. 440,394
5 Claims. (Cl. 88—14)



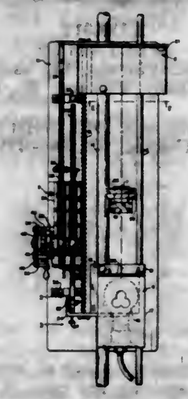
1. Apparatus for measuring the diameter of microscopic particles comprising a magnifying lens system for obtaining a magnified image of microscopic particles, birefringent crystal means, means for positioning said birefringent crystal means in the image beam for splitting the image beam into two simultaneous overlapping beams, said positioning means including means operatively connected therewith for varying the effective thickness of the birefringent crystal means in the image beam whereby the effective thickness of the birefringent crystal means in the image beam when the overlapping images are brought into tangency is an indication of the size of the particle.

2,730,009
PHOTO-ELECTRIC EXPOSURE METERS
Paul Poiretta, Neuilly, France, assignor to Societe Marocaine d'Achats et de Constructions Somarac, Casablanca, French Morocco
Application August 22, 1951, Serial No. 243,068
Claims priority, application France March 28, 1951
4 Claims. (Cl. 88—23)



1. In an exposure meter controlled by a photo-cell and including a privoting indicator hand, in combination: at least one removable dial carrying on at least one face a plurality of concentric scales of diaphragm values each of said scales corresponding to a shutter speed, said values over each scale being equidistant from each other, and carrying on the same face a scale of a substantial range of emulsion sensitivity values; the angular deflections of said hand corresponding to a change in a given ratio of the luminous intensity influencing said photo-cell being equal to each other; and means for shifting said dial concentrically to the pivot of said hand and by predetermined amounts of said range of emulsion sensitivity values with reference to said hand; said plurality of scales of diaphragm values, said corresponding shutter speeds, and said scale of emulsion sensitivity being simultaneously visible and readable on a single face of said dial; whereby diaphragm values are readable directly for various values of emulsion sensitivity over said range.

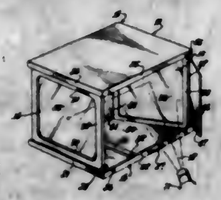
2,730,010
AUTOMATIC FOCUSING DEVICE
Gerhard Schwesinger, Little Silver, N. J., assignor to the United States of America as represented by the Secretary of the Army
Application November 2, 1951, Serial No. 254,620
7 Claims. (Cl. 88—24)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In an optical apparatus having a subject stage, a lens and an image stage, a mechanism for automatically focusing said apparatus comprising two positive action motion converting systems each system including two interengaging rotating members, having a fixed pattern of relatively changing ratios, one member of each system being normally coupled together and serving as input members, the other members of each system being inde-

pendently freely rotatable and serving as output members, means operable to transmit motion of said output members to two of the elements of said optical apparatus and means to adjust the relative rotative position of said two input members thereby to change the output ratio pattern of the mechanism to conform to the focusing requirements of lenses of different focal length.

2,730,011
PORTABLE, COLLAPSIBLE PROJECTION BOX
Alvin E. Kleinhample and Elmer J. Peery, Bakersfield, Calif.
Application April 6, 1953, Serial No. 346,930
11 Claims. (Cl. 88—24)



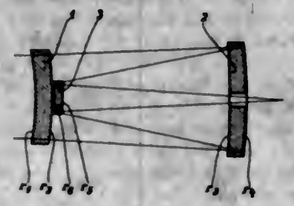
1. In a portable collapsible projection box the combination of: top and bottom rectangular hollow box portions adapted to be assembled to form a hollow carrying case; a transverse retainer bar on said bottom box portion; a translucent screen means pivotally carried within bottom box portion and adapted to be vertically positioned to form the front of said projection box; a foldable mirror assembly means adapted to be carried in folded collapsed relation within the assembled box portions and including a center mirror panel, a side panel hinged to one side of the mirror panel, and an adjustable light deflector panel hinged to the opposite side of the mirror panel; the panels of said mirror means being unfoldable and supported by the bottom box portion in vertical position; a groove on said screen means and a slot on said bar for receiving marginal edges of said side panel, said side panel forming a side wall of said box; said mirror panel extending in angular relation to the side panel and rearwardly of the screen means; said top box portion being mounted on said screen means and said mirror means and forming a top wall of said box; and the assembled erected box having a side opposite to the side panel open to receive rays from a projector.

2,730,012
SPECTACLES
Robert Malcom, Jr., Chicago, Ill., assignor to Chicago Eye Shield Company, Chicago, Ill., a corporation of Illinois
Application August 8, 1952, Serial No. 303,235
4 Claims. (Cl. 88—47)



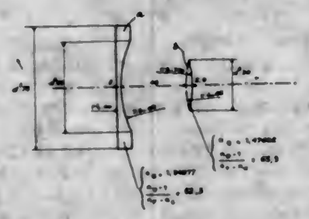
1. Spectacles comprising a pair of lenses, a pair of eye wires marginally receiving the pair of lenses, a bridge bar connecting together the pair of eye wires and having an enlargement adjacent each wire, said eye wires being split adjacent the enlargements of the bridge bar, a bracket on each eye wire adjacent to the split therein and on the opposite side of the split from the bridge bar enlargement, pivoted toggle levers for each eye wire and spanning the split therein and pivoted to the bridge bar enlargement and the bracket for spreading the eye wires to remove the lenses therefrom when the pivoted toggle levers are opened and for drawing together the eye wires to clamp and secure the lenses therein when the pivoted toggle levers are closed, each of said pivoted toggle levers including a first lever having a bifurcated portion receiving the bridge bar enlargement and being pivoted at one end thereto for movement between the open and closed positions without interference with the bracket and the bridge bar and its enlargement, a second lever pivoted at one end to the bracket and at its other end to the other end of the first lever for movement between the open and closed positions without interference with the bracket and the bridge bar and its enlargement, one of said levers being hollow and receiving the other lever when the pivoted toggle levers are in closed position with the pivot between the levers in substantial alignment with the pivots between the levers and the bracket and bridge bar enlargement, and a bridge pad on said hollow levers for supporting the spectacles and for manipulating the pivoted toggle levers between their open and closed positions.

2,730,013
REFLECTING LENS OBJECTIVE
Walter Mandler, Atzbach, near Wetzlar, Germany, assignor to Ernst Leitz, G. m. b. H., a corporation of Germany
Application August 30, 1951, Serial No. 244,377
Claims priority, application Germany September 2, 1950
3 Claims. (Cl. 88—57)



1. A reflecting lens objective of the Cassegrain type comprising in operative alignment a front negative lens, a second dispersing Cassegrain type negative lens cemented to said front lens with a reflecting surface between the said two lenses and a rear main maniscus lens having a central aperture and a reflecting surface on its rear side and axially air spaced from the said front negative lens, all of the said lenses being made of the same kind of glass.

2,730,014
OPTICAL SYSTEM FOR DISTORTIONLESS UNDERWATER VISION
Alexandre Ivanoff, Yves Le Grand, and Pierre Cuvier, Paris, France; said Le Grand and said Cuvier assignors to said Ivanoff
Application February 19, 1952, Serial No. 272,416
Claims priority, application France February 22, 1951
8 Claims. (Cl. 88—57)



1. An optical system for distortionless underwater viewing and photographing an object in the water through a boundary between the water and a medium containing viewing means, consisting of a plane-concave divergent lens means with its plano-surface forming the boundary with the water and having a dioptric power

$$D_1=\frac{1-n}{e}$$

and a double convex convergent lens means arranged between said divergent lens means and said viewing means, n being the refractive index of water and e being the distance from the principal image point of the divergent lens means to the principal object point of the convergent lens means.

2,730,015
FOUR COMPONENT WIDE ANGLE PHOTOGRAPHIC OBJECTIVE CONSISTING OF SIX LENS ELEMENTS
Albrecht Wilhelm Tronnier, Gottingen, Germany, assignor to Voigtländer, A. G., Braunschweig, Germany, a corporation of Germany
Application May 28, 1953, Serial No. 357,997
Claims priority, application Germany June 11, 1952
7 Claims. (Cl. 88—57)



1. Wide angle field objective consisting of six individual lenses, three of which form a front part and three form a rear part, said front part and rear part being arranged on two opposite sides of a centrally located diaphragm in the following manner: said diaphragm is enclosed by two converging cemented lens members spaced from the diaphragm; each of said cemented lens members being followed by a diverging outer lens located in terminal positions in the objective; on both sides of the diaphragm, the cemented lens member adjacent the diaphragm, as well as the outer lens turned away from the diaphragm are designed as menisci and their glass-air surfaces are concave toward the enclosed diaphragm, so that all outer lens surfaces of the total objective, bordering on air, are concave toward the diaphragm; each, the front part and the rear part of the objective comprising a converging, meniscus-shaped cemented lens member, which is concave toward the diaphragm and consists of a diverging lens of unequal curvature united with a converging lens of likewise unequal curvature by a converging cemented surface; each of said cemented lens members being separated from the outer diverging meniscus-shaped terminal lens, which is turned away from the diaphragm, by an air space having the shape of a meniscus-shaped converging lens, which is likewise concave toward the diaphragm, and the curvature of which meets the following conditions:

$$(a)\quad \frac{R_3-R_2}{R_3}>0.150$$

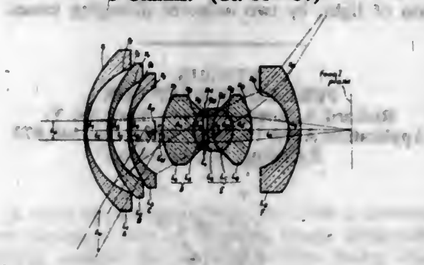
$$(b)\quad \frac{R_3-R_9}{R_9}>0.150$$

$$(c)\quad \frac{R_3-R_2}{R_3}<0.850$$

$$(d)\quad \frac{R_3-R_9}{R_9}<0.850$$

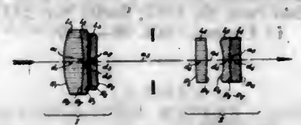
wherein R_3 is the radius of curvature of the surface limiting the air space located in the front part of the objective, between the cemented lens and the individual terminal lens, on the side of the cemented lens and R_2 is the radius of curvature of the surface limiting this air space on the side of the terminal lens; R_8 is the radius of curvature of the surface limiting the air space located in the rear part of the objective, between the cemented lens and the individual terminal lens, on the side of the cemented lens and R_9 is the radius of curvature of the surface limiting this air space on the side of the terminal lens.

2,730,016
PHOTOGRAPHIC WIDE-ANGLE OBJECTIVE
Ludwig Bertele, Heerbrugg, Switzerland
Application September 3, 1953, Serial No. 378,306
Claims priority, application Switzerland September 8, 1952
3 Claims. (Cl. 88—57)



1. A photographic wide angle objective having an aperture ratio of at least 1:6.3 and, for purposes of distortion-free correction for spherical aberration with image angles of at least 120° being composed of two distinctly unsymmetrical lens groups including between them a diaphragm the front group facing the object consisting of an inner converging lens component adjacent the said diaphragm and, separated therefrom and from one another, of at least three meniscus shaped diverging lens members, the rear group facing the image consisting of another inner converging lens component adjacent the said diaphragm, and, separated from said component, of one diverging meniscus shaped lens member, all air spaces between the lens components and members in each group being meniscus shaped air lenses, and the distance between the two outer convex surfaces directed towards the object and image side respectively of said components being greater than $0.20\cdot f$ and smaller than $1.5\cdot f$, f being the focal length of the objective.

2,730,017
PHOTOGRAPHIC TELE-OBJECTIVE HAVING THREE LENS COMPOSITE FRONT AND REAR MEMBERS
Albrecht Wilhelm Tronnier, Gottingen, Germany, assignor to Voigtländer, A. G., Braunschweig, Germany, a corporation of Germany
Application October 6, 1954, Serial No. 460,687
Claims priority, application Germany November 23, 1953
12 Claims. (Cl. 88—57)



1. Tele-objective of high light-transmitting capacity comprising a composite front member and a composite rear member which are separated by a large air space; the composite front member, which is turned toward the side of the major conjugate having a converging effect, while the composite rear member, which is located on the side of the minor conjugate, consists of a tele-negative system comprising three lenses, i. e. a biconvex converging lens and a negative lens member air-spaced therefrom and having outer surfaces of unequal curvature, of which the most strongly diverging surface is concave relative to the front system, the diaphragm and said preceding

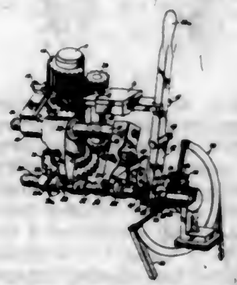
biconvex converging lens, said air-spaced negative lens member consisting of 2 lenses made of glasses of differing dispersions, for obtaining a high chromatic correction; the width of said air space, measured along the optical axis, amounting to at least 20%, but not more than 60% of the focal length of the total objective; the converging composite front member being composed of three lenses in such manner that the first lens of the front member, in the direction of the light, is a biconvex lens, the proper focal length of which amounts to at least 22.5%, but not more than 47.5% of the equivalent focal length of the total objective, and said first lens is followed, in the direction of light, by two adjacent diverging lenses.

2,730,018
PERISCOPIC PEEP BOX
Richard A. Loederer, New York, N. Y.
Application April 15, 1953, Serial No. 348,873
1 Claim. (Cl. 88—68)



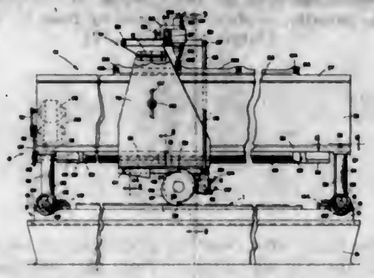
A device of the class described comprising a box-like housing having a peep hole in one end thereof, a vertical mirror mounted in the box at an angle of substantially forty-five degrees to the axis of said hole, one vertical edge of said mirror being positioned against the adjacent vertical edge of the other end of the housing, the side of the housing between said front and rear and adjacent said edge of said other end of the housing being open and unobstructed, the other vertical edge of the mirror being positioned against the other side of the housing, said other side of the housing having a wall closing the same, said housing having a handle, and means for retaining said mirror in position as aforesaid, said housing including top and bottom walls, said means comprising an upwardly extending boss on said bottom wall and a downwardly extending boss on said top wall, said bosses being vertically aligned and being positioned adjacent the face of said mirror thereby clamping said mirror between said bosses and said other side of the housing and said other end of the housing.

2,730,019
MACHINE FOR CHAMFERING GEARS AND CLUTCH MEANS THEREOF
John M. Christman, Grosse Pointe Woods, Mich.
Application June 20, 1951, Serial No. 232,630
11 Claims. (Cl. 90—1.4)



1. In a machine for chamfering gears, a cutter movable through a predetermined cycle of motions, rotating driving means for said cutter adapted to cause completion of the cutter motion cycle in one revolution, positive clutch means adapted to connect said driving means to said cutter for driving the same and to disconnect said driving means therefrom, stop means engageable by said clutch means when said clutch means are moved into the position for disconnecting the driving means from the cutter, said stop means being engageable by said clutch means only within a predetermined portion of the rotating cycle thereof corresponding to predetermined positions of said cutter in the motion cycle thereof, said clutch means being movable at any of their rotative positions from their full engagement with said driving means.

2,730,020
MACHINE TOOL
Latham Pollock, Los Angeles, and Joe S. Appleton, Gardena, Calif., assignors to North American Aviation, Inc.
Application February 9, 1953, Serial No. 335,942
6 Claims. (Cl. 90—13)

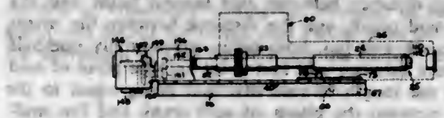


1. A machine tool comprising a bed having a work-supporting surface; a frame, said frame including guide means defining a straight path parallel to said work-supporting surface of said bed; a carriage assembly on said frame; means engaging said carriage assembly for effecting movement thereof relative to said frame along said straight path of said guide means; cutter means carried by said carriage assembly for engaging a workpiece on said work-supporting surface during such movement of said carriage assembly and effecting a cut in the direction of said straight path of said guide means; means for effecting movement of said cutter means in a direction perpendicular to said work-supporting surface during said movement of said carriage assembly for varying the depth of cut by said cutter means; means for causing said cutter means to effect successive parallel cuts in a workpiece, said means including means for laterally moving said cutter means with respect to said carriage assembly thereby to vary the lateral position of said cutter means relative to said straight path of said guide means for directing said cutter means through parallel paths; and means for causing said cutter means to effect successive non parallel cuts, said means including adjustable means for pivoting said frame with respect to said bed thereby to angularly adjust said straight path of said guide means for directing said cutter means through angularly displaced paths.

2,730,021
MACHINE TOOL
Keith F. Gallimore and Garner H. Schurger, Fond du Lac, Wis., assignors to Giddings & Lewis Machine Tool Company, Fond du Lac, Wis., a corporation of Wisconsin
Application November 17, 1948, Serial No. 60,438
11 Claims. (Cl. 90—16)

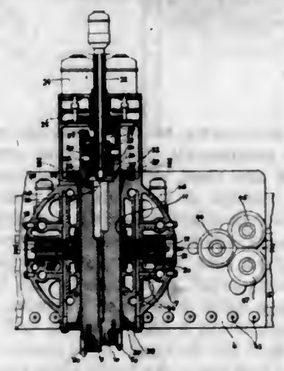
1. In a spindle headstock, in combination, a housing, a spindle mounted in said housing for rotation and for projected axial translation, an elongated supporting member of generally rectangular cross-section slidably mounted on said housing below and spaced from the spindle

for longitudinal translation parallel to said spindle, said member having means on its top face for supporting a tool element adjacent the projecting end of the spindle and in driving relation thereto, a feed shaft journaled in



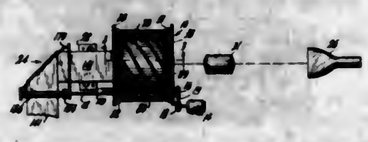
said housing, and separately engageable and disengageable drive connections from said shaft for translating said spindle and said suporting member either independently or in synchronism.

2,730,022
PLANING MACHINES
Oskar Waldrich, Werthenbach, Germany
Application May 15, 1951, Serial No. 226,382
Claims priority, application Germany May 17, 1950
10 Claims. (Cl. 90—53)



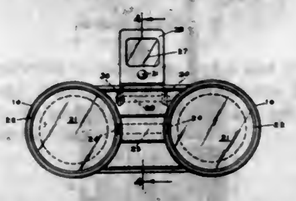
1. In a planing machine including a movable table and a tool head means moving the table in both directions in relation to the tool head, and switch means controlling each stroke of the table, the combination of two rams each carrying at least one tool and movable longitudinally, means acting between the strokes of the table advancing one ram towards the table and retracting the other ram away from the table and at the same time rotating the two rams about a longitudinal axis through an angle of the order of 180° whereby apart from cross feed, the tools on the two rams are interchanged in a working position the same for both but with the tools facing oppositely respectively and means for automatically firmly clamping the rams in the tool head during the working strokes.

2,730,023
ELECTROPHOTOGRAPHIC RECORDER
Harold G. Greig, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 26, 1951, Serial No. 258,145
8 Claims. (Cl. 95—1.7)



1. An electrophotographic recorder comprising an imperforate hollow cylinder, means to impart rotation to said cylinder, a second imperforate hollow cylinder nested within said first named cylinder, said second cylinder having a photoconductive inner surface, means for spacing said second named cylinder substantially coaxially with said first named cylinder, said last named means providing one or more helical passageways between said first named and said second named cylinders extending substantially from end to end axially of said cylinders.

2,730,024
PORTRAIT ATTACHMENT FOR STEREOSCOPIC CAMERAS
Maurice J. Merrick, Portland, Oreg., assignor to Sawyer's Inc., Portland, Oreg., a corporation of Oregon
Application November 7, 1952, Serial No. 319,371
2 Claims. (Cl. 95—18)

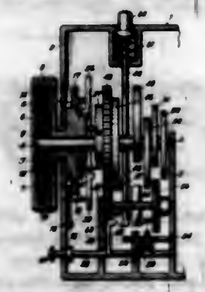


1. A close-up attachment for use with a stereoscopic camera having a pair of objective lenses surrounded by projecting annular flanges and a view finder disposed centrally between and above said objective lenses, comprising a frame, a pair of prism lenses, said prism lenses being of longer focal length than the objective lenses of the camera, lens mounting means on said frame to mount said prism lenses in said frame at the same spacing as the spacing of the objective lenses of the camera, a pair of annular friction flanges on said frame adapted to embrace the projecting flanges of the camera whereby to maintain said prism lenses in front of the objective lenses of the camera in order to effect shortening of the effective focal length of the camera, cooperative means on said prism lenses and said frame to maintain the thicker portions of said prism lenses toward each other with each prism lens symmetrically disposed with respect to a line through the centers thereof, a supplementary view finder lens holder pivotally mounted on said frame for movement about a pivotal axis parallel to said line between an operative position and a retracted position wherein said lens holder is nested between said friction flanges, a supplementary view finder lens mounted in said supplementary view finder lens holder in position to register with the view finder of the camera when said holder is in said operative position, said supplementary view finder lens comprising a prism having its thickest portion lowermost, said prism lenses bearing such optical relation to the lenses of the camera that beams of light originating from a point relatively close to the camera along the optical axis of the camera are directed in parallel relation after passing through the prism lenses and the camera lenses so as to permit close-up stereoscopic photography, and said supplementary view finder lens bearing such relation to said prism lenses that the line of sight therethrough is directed at said point.

2,730,025
PHOTOGRAPHIC REFLEX CAMERAS
Fritz Faulhaber, Schonaich, Bezirk Boblingen, Germany, assignor to Voigtländer A. G., Braunschweig, Germany, a corporation of Germany
Application December 10, 1952, Serial No. 325,055
Claims priority, application Germany December 10, 1951
9 Claims. (Cl. 95—42)

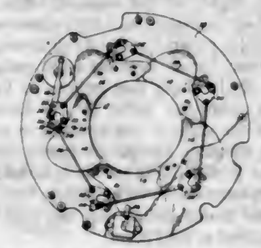
1. A one-eye mirror reflex camera comprising in combination coupled film transport and shutter setting means; a first gear system and a manually operable member for causing said first gear system to actuate the film transport means and shutter setting means and to charge a spring mechanism; a second gear system which is actuated only by said spring mechanism, is adapted to be started by a

separate release member and running independently from the first gear system for (*a*) moving the members to be shifted from rest and viewing position to the ready for picture taking position, (*b*) subsequently releasing the shutter and (*c*) returning the shifted members to their rest and viewing position; the functions of the second gear system including, in step (*a*), closing of the shutter sectors, drawing shut a diaphragm ring to the selected value, upward swinging of the reflex mirror and displacement of a cover flap and in step (*c*) shifting back of said cover flap, swinging of the reflex mirror to viewing position, complete opening of said diaphragm ring and opening of the shutter



sectors; said second gear system including means for carrying out said functions; said means comprising a plurality of eccentric discs fastened to a common shaft rotated by said spring mechanism; a separate eccentric disc being provided for actuation of the shutter sectors, for actuation of the diaphragm ring, for actuation of the reflex mirror, for operation of the cover flap and for the release of the shutter, respectively; each of said eccentric discs cooperating with lever means which is held against the respective disc and is adapted to engage with one of its ends portions of the camera member to be actuated, in order to carry out the said functions.

2,730,026
SHUTTER BLADE DRIVE LINKAGE
Ludolph F. Welanetz, Hempstead, N. Y., assignor to Fairchild Camera and Instrument Corporation, a corporation of Delaware
Application April 22, 1952, Serial No. 283,695
3 Claims. (Cl. 95—63)



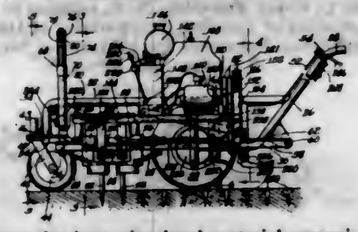
1. In a photographic shutter, a support defining an exposure aperture, a plurality of blades pivotally mounted on said support at points adjacent and surrounding the edge of said aperture for movement between two extreme angular positions with respect to said aperture, each blade being clear of said aperture in one of said extreme positions, and the blades together completely occluding said aperture in the other of their extreme positions; for each blade a fan pivoted on said support outwardly of the blade pivots, a crank pivoted on said support adjacent said fan, a first link pivotally connecting a first point on said fan with a second point on said crank, means for driving said fan to move said first point between angular positions substantially 90° apart and lying on opposite sides of the line joining the pivotal supports of said fan and said blade, a second link pivotally connected to said crank and pivoted to said blade at a point spaced from the blade pivot and lying on the opposite side, from said blade pivot, of a line connecting the center of the exposure aperture and the fan pivot, the distance between said second point and the pivot of said crank, and the distance between the pivots of said crank and fan, both being substantially one-half the distance between said first point and the pivot of said fan, and the length of said first link being equal to the distance between the pivots of said crank and fan multiplied by the square root of two; and means interconnecting all the fans for simultaneous rotation.

2,730,027
APPARATUS FOR DEVELOPING PHOTOGRAPHIC FILM AND THE LIKE
Francis William King, New Malden, England
Application October 20, 1949, Serial No. 122,369
8 Claims. (Cl. 95—90.5)



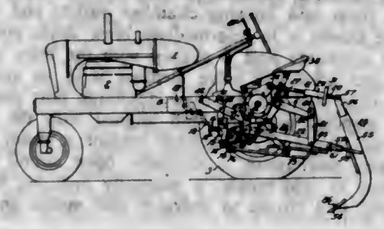
1. A flexible and portable daylight-loading apparatus for processing or measuring and temporarily storing photographic film comprising a thin-walled tube of opaque flexible rubber or like material adapted to contain a film, a clamp for closing the tube situated near each end thereof, and means for transporting the film into the tube from a holder arranged at one end thereof, characterised in that at the other end the clamp has a curved jaw attached to the tube and deforming it so that the passage inside the tube has a zig-zag course where it passes through said clamp.

2,730,028
TURF PERFORATOR
Harry L. Oswalt, Garden City, Kans.
Application February 20, 1951, Serial No. 211,933
17 Claims. (Cl. 97—34)



1. Apparatus for loosening hard material comprising a frame, means including wheels for moving said frame along the surface of said material, a floating platform, impositive means only for supporting said floating platform from said frame free for restrained movement in any direction relative thereto, a plurality of sharpened, elongated spikes carried by said platform for perforating the surface of said hard material, means for lowering said spikes into the material, means for vigorously vibrating said floating platform while said spikes are in the material thereby to vigorously vibrate the material to loosen the same, and means for lifting said spikes from the material for movement of said frame along the surface thereof.

2,730,029
TOOL MOUNTING AND ADJUSTING MECHANISM FOR TRACTORS
John F. Brundage, Camarillo, Calif., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application July 16, 1952, Serial No. 299,090
7 Claims. (Cl. 97—46.07)



4. An agricultural machine comprising, in combination, a tractor body, a draft transmitting element movably mounted on said tractor body and having a hitch portion in fore and aft movable relation to the latter; a pair of hitch links swingably connected with each other at a common pivot center; detachable connecting means between said hitch portion of said draft transmitting element and one of said hitch links; pivot means connecting the other of said hitch links and said tractor body on a first center spaced a predetermined distance from said common pivot center of said hitch links; a rigid implement mounting structure; upper and lower coupling link structures pivotally connected at upper and lower pivot centers, respectively, with said implement mounting structure; pivot means operatively connecting said upper coupling link structure with said tractor body; other pivot means operatively connecting said lower coupling link structure with said other hitch link on another center spaced from said first center a second predetermined distance shorter than said first predetermined distance; a ground engaging tool connected with said implement mounting structure so as to afford a ground reaction center in downwardly spaced relation to said upper and lower coupling link structures; and a resilient element operatively interposed between said draft transmitting element and said tractor body, so as to yieldingly resist movement of the latter upon transmission of draft induced force thereto through said lower coupling link structure and said pivotally connected hitch links.

2,730,030
STEERABLE AGRICULTURAL IMPLEMENT
John M. Chambers, Blackdown Hill, Leamington Spa, England, assignor to Massey-Harris-Ferguson (Sales) Limited, a British company
Application July 7, 1953, Serial No. 366,594
Claims priority, application Great Britain July 8, 1952
10 Claims. (Cl. 97—47.55)

1. For use with a tractor having a pair of laterally spaced draft links and a control link spaced upwardly therefrom all pivotally attached to the tractor for universal swinging movement, an implement comprising, in combination, a frame, connecting means on said frame cooperating with the trailing ends of the links to connect the implement thereto for movement with the tractor and for lateral swinging movement relative thereto, means for adjusting at least one of the connecting means cooperating with the draft links in a fore and aft direction to vary the angular disposition of said frame with respect to the center line of the tractor, and ground engaging means on



said frame operative to swing the frame and draft links to one side or the other of the tractor center line a sufficient distance to position the frame at right angles to the tractor center line.

2,730,031
WRENCH TYPE CLAMP
August G. Buhr, La Crosse, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application October 17, 1951, Serial No. 251,789
2 Claims. (Cl. 97—198.1)

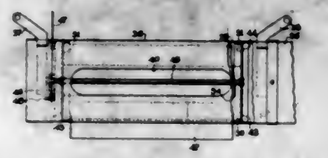


1. In an agricultural implement, the combination of a mobile support, an earth working tool, and connecting means between said support and said tool operative to advance the latter in ground engaging condition upon propulsion of said support, said connecting means comprising a draft bar of rectangular cross section extending transversely of said support and secured thereto against torsional displacement about its axis, a mounting standard for said earth working tool extending transversely of said draft bar and having a pair of relatively diverging surfaces at right angles to each other and in face to face engagement, respectively, with contiguous longitudinally extending side surfaces of said draft bar so that upon said advancement of said tool said mounting standard will tend to swing rearwardly about a line of contact between one of said relatively diverging surfaces and an adjacent first corner portion of said draft bar, a tab member secured to said standard and projecting from the other of said relatively diverging surfaces in proximity to a corner of said draft bar diagonally opposite to said first corner and bearing against said draft bar so as to positively restrain said rearward swinging movement of said standard, and releasable clamping means independent of said tab member adjustably connected with said standard and cooperating with said draft bar for securing said standard against separation from said draft bar transversely of the latter.

2,730,032
VENTILATION SYSTEM FOR AUTOMOBILES AND THE LIKE
Leo S. Greenmun, Cleveland, Ohio
Original application February 25, 1948, Serial No. 10,645, now Patent No. 2,634,669, dated April 14, 1953. Divided and this application March 10, 1953, Serial No. 341,581
5 Claims. (Cl. 98—2)

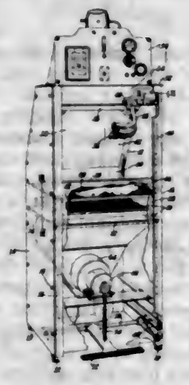
1. In a ventilation system for automobiles and the like, an elongated cylinder extending transversely of the auto-

mobile, stationarily supported on the automobile and having an elongated air inlet opening in its front wall, a conduit for admitting air into said opening, said cylinder having a similar elongated air outlet opening in the bottom wall thereof, plates mounted in the ends of said cylinder, said plates having circumferentially-spaced air outlet openings therein, a second cylinder disposed within



said first cylinder and rotatable in said first cylinder, said second cylinder having elongated air inlet and air outlet openings in diametrically-opposite walls thereof, said second cylinder having ends disposed in contiguous relation to the plates of said first cylinder and having circumferentially-spaced air inlet openings in said ends equivalent in number and substantially coextensive in size with the air outlet openings in said plates.

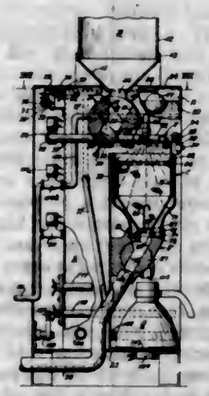
2,730,033
SPRAY BOOTHS
Alfred S. Mellor, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application February 2, 1953, Serial No. 334,557
2 Claims. (Cl. 98—115)



1. In a spray booth having a work receiving opening and an exhaust passage, means beneath said opening for supporting a mineral wool filter transversely of said passage, guide members superposed on said means to allow said filter to drop into place and to position said filter laterally, a cheesecloth-carrying hollow frame, said guide members having inclined top portions extending to the adjacent side walls to facilitate the positioning of the filters and having means supporting the hollow frame at a postion above said filter, and means for holding a piece of cheesecloth on said frame with its margins resting on the inclined top portions of the guide members.

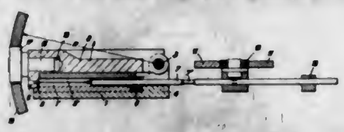
2,730,034
COFFEE BREWING APPARATUS
Lars Svendsgaard, Berkeley, Calif.
Application January 30, 1950, Serial No. 141,260
11 Claims. (Cl. 99—283)

1. In a completely automatic coffee brewing machine the combination of: a container for dry ground coffee: means for measuring out a predetermined quantity of said coffee; a source of heated brew water; means for flowing out a predetermined quantity of said hot brew water; a second source of water under pressure for rinsing; a spray member connected to said source of rinse water; an open topped brewing chamber positioned directly below said spray member and having a brew discharge port and a used grounds disposal port at its bottom; a fabric filter member having an open top and an open bottom, with its open top secured near the top edge of said brewing chamber and with its open bottom edge secured to said grounds disposal port; a valve housing secured to said brew discharge port and to said used grounds disposal port, said valve housing having a brew outlet conduit and a rinse outlet conduit; valve means in said housing having a passageway therein which when the valve means is in closed position seals off said outlet conduits from said brewing chamber outlets and when the valve means is in intermediate brew drain position the brew discharge port is aligned with the brew outlet conduit and when the valve member is in its grounds disposal rinse position the brew discharge port and the grounds disposal port are both aligned with the rinse outlet conduit; a source of electric current; a motor actuated timing mechanism; a normally open circuit from said source to said motor; a manually operable means for closing said circuit to energize said motor and for



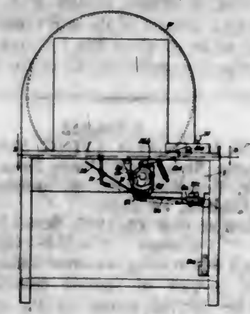
moving said valve member into closed position and for moving said coffee measuring means into position to drop a charge of dry ground coffee into said brewing chamber; means urging return of said valve member to its intermediate brew-drain position and to its grounds disposal rinse position; latch means for holding said valve in its closed and then in its intermediate positions; a holding circuit for maintaining said motor circuit closed during a full cycle of said timing mechanism; means actuated by said timing mechanism for introducing a measured quantity of hot brew water into said brewing chamber upon initiation of the brewing cycle, means actuated by said timing mechanism after said hot brew water has been in said brewing chamber for a predetermined time, for moving said valve latch means whereby said urging means will move said valve member to its intermediate brew-drain position at which time the brewed coffee will drain out of said brewing chamber through said brew discharge port and said brew outlet conduit; means actuated by said timing mechanism after said brew has drained for releasing said valve latch means whereby said urging means will move said valve to its grounds disposal rinse position; and means actuated by said timing mechanism for introducing rinse water to said spray member after said valve is in its grounds disposal rinse position; and for opening said normally open electric circuit upon completion of the rinse time.

2,730,035
BAKING DEVICE
Ferdinand Kovac, Hannover, Germany, assignor to Werner Bahlsen, Hannover, Germany
Application March 18, 1952, Serial No. 277,269
Claims priority, application Germany March 24, 1951
10 Claims. (Cl. 99—373)



1. A baking device, comprising, in combination, a bottom form having a front end and a rear end and including a horizontal bottom wall, two lateral first ridges and an upwardly extending rear wall, said rear wall being formed with at least one horizontal bore located between said lateral first ridges; a top form including a horizontal top wall, two lateral second ridges opposite said first ridges, and a downwardly extending front wall located opposite said rear wall, said front wall being formed with at least one horizontal bore arranged coaxial with said bore in said rear wall between said second ridges, said top form being pivotally mounted at said rear end of said bottom form and movable relatively to said bottom form between an angularly spaced position and a closing position in which the bottom edge of said front wall of said top form engages said bottom form, and the top edge of said rear wall of said bottom member engages said top form; at least one core member slidably mounted in said bores in said front and rear walls; first cam means located at the front end of said top form and having a first cam track; a first cam follower secured to said top member and engaging said first cam track on said first cam means, said first cam track being shaped so that said top form is pivoted to said angularly spaced position when said top and bottom forms, and said first cam means move relatively to each other in the direction of the pivoting axis of said top form; second cam means having a second cam track; and a second cam follower secured to said core member and engaging said second cam track on said second cam means, said second cam track being shaped so that during relative movement in said direction between said top and bottom forms, and said second cam means, said core member is moved between said advanced and said retracted positions thereof.

2,730,036
PACKAGE AND LIKE BINDING MECHANISM
John James Cheesman, Gerrards Cross, England, assignor, by mesne assignments, to General Strapping Corporation, New York, N. Y., a corporation of New York
Application May 29, 1951, Serial No. 228,830
Claims priority, application Great Britain July 5, 1950
25 Claims. (Cl. 100—27)



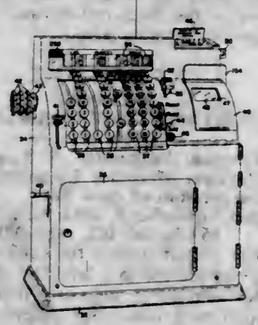
1. Mechanism for binding packages or the like of the type having means for feeding a strip of flexible material in a binding plane to form a loop around the article to be bound, a holding gripper movable for gripping the strip adjacent the free end thereof, means for reversing the operation of the feeding means to close the loop onto the package and to tension the strip, means for connecting the parts of the strip defining the ends of the loop, and means for severing the looped part of the material from the strip, in combination therewith, single handle means directly controlled by the operator movable to one position for at least moving said gripping means and operating said reversing means and movable to another position for initiating automatic operation of at least the connecting means and the severing means.

2,730,037
SELECTOR MECHANISM
Frederick K. Stark, Yonkers, N. Y.
Application October 12, 1951, Serial No. 251,100
2 Claims. (Cl. 101—58)



1. A selector mechanism for addressing machines, said selector mechanism being adapted for use with punched cards having holes disposed in two groups and with detecting means capable of entering through said holes and of closing an electrical circuit for actuating a printing mechanism, said selector mechanism comprising a plate with two separate metal halves, each half having a group of holes corresponding to the holes in said punched cards, a strip of insulating material for insulatingly connecting said two halves, said halves being connected in series in said electrical circuit, two metal pins likewise in series connection in said electrical circuit, each of said pins being arranged for simultaneous coaction with one hole in each group of holes, and said electrical circuit being closed and printing effected only when one of said pins is in registering position with, and actually entering through a hole in one group, and the other pin is in registering position with and actually entering through a hole in said other group.

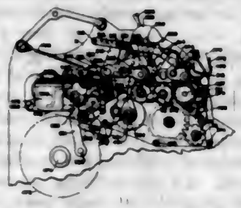
2,730,038
LABEL PRINTING AND ISSUING MECHANISM FOR CASH REGISTERS
Mayo A. Goodbar, Oakwood, and Russell G. Pratt, Dayton, Ohio, assignors to The National Cash Register Company, Dayton, Ohio, a corporation of Maryland
Application March 22, 1952, Serial No. 278,063
7 Claims. (Cl. 101—69)



1. In a machine of the character described, constructed and arranged to perform operations in which labels are printed and issued, the combination of a removable print-

ing element to print certain data on the labels; a receptacle for the element; a shoulder on the element; means including a finger coacting with the shoulder to secure the element in the receptacle when said element is properly inserted therein; means connected to the finger and operable to move said finger to ineffective position; yieldable means connected to the moving means and effective to urge the finger to effective position; a latch to hold the moving means and the finger in ineffective position; means on the moving means to prevent machine operation when said moving means and the finger are in ineffective position; and manually operable means effective upon operation to release the latch so that the yieldable means may return the moving means and the finger to effective position to permit operation of the machine and to enforce operation of said manually operable means.

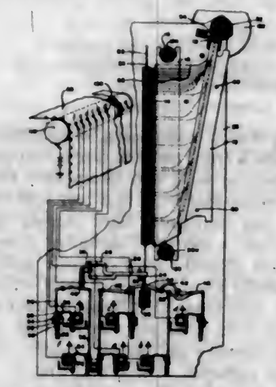
2,730,039
PRINTER MECHANISM FOR CASH REGISTERS AND ACCOUNTING MACHINES
Frank R. Werner, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a corporation of Maryland
Original application August 25, 1948, Serial No. 46,165, now Patent No. 2,661,661, dated December 1, 1953. Divided and this application March 21, 1951, Serial No. 216,826
3 Claims. (Cl. 101—93)



1. In a machine of the class described, the combination of type carriers; a printing hammer to take impressions from the type carriers onto a web of record material; operating means to actuate the printing hammer; a device to couple the printing hammer with and to uncouple the printing hammer from the operating means; a web feeding means including feed rollers and tension rollers; means settable into two positions; a link connecting the settable means with the device and the tension rollers, said settable means when in one position acting to move said device to couple the printing hammer to the operating means and to move the tension rollers into position to coact with the web and the feed rollers to render the feed rollers effective to feed the web, said settable means when in another position acting to move said device to uncouple the printing hammer from the operating means and to move the tension rollers into position out of coaction with the feed rollers; and a manipulative cam to position the settable means.

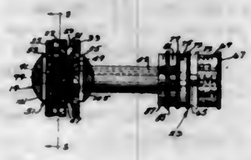
2,730,040
HIGH SPEED MULTIPLE CHARACTER WIRE PRINTER
Reynold B. Johnson, Binghamton, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application November 8, 1951, Serial No. 255,391
16 Claims. (Cl. 101—93)

1. In a wire printer, means for confining a cluster of wires at one end thereof to a letter printing area, a wire guide member adapted to support printing wires therein for free longitudinal movement relative to each other, printing wires in said guide member, said wires terminating at one end in a plane at said confining means to constitute a printing face and being arranged remote therefrom in a plane constituting a wire setting zone, a wire setting device in said wire setting zone, means for moving said setting device and the wires at said wire setting zone into contact with each other for differentially adjusting the longitudinal position of setting device selected wires to form a printing character at said printing face, means for separating said setting device and said wires



at said wire setting zone after selected wires have been set to form a letter but before a printing operation thereby freeing said wires for longitudinal movement under impact at the printing face thereof, and means thereafter operative to print by impact from a printing face so set up.

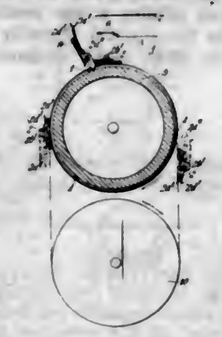
2,730,041
DATE WHEEL SETTING DEVICE
Alva G. Russell, Stamford, Conn., assignor to Pitney-Bowes, Inc., Stamford, Conn., a corporation of Delaware
Application June 13, 1951, Serial No. 231,395
8 Claims. (Cl. 101—110)



4. In a postage meter a rotatable printing drum; a plurality of coaxial settable date printing wheels mounted on said drum; a plurality of coaxial finger wheels mounted on said drum at one end thereof, coaxial with said printing wheels; and means connecting each of said finger wheels to one of said printing wheels for setting the same, at least two of said date printing wheels having each a series of printing images on its periphery with intervening gaps, and being meshable axially with the other wheel with the printing images of its series disposed in the gaps of the other so as to align the printing images of both wheels in a direction peripherally of the wheels.

2,730,042
STENCIL DUPLICATING MACHINES
Leonard Walter Styles and Henry John Picking, Tottenham Hale, London, England, assignors to Gestetner Limited, London, England
Application June 12, 1951, Serial No. 231,072
3 Claims. (Cl. 101—122)

1. A stencil duplicating machine comprising a plurality of cylinders, a pair of spaced flexible endless bands adapted to be carried round by the cylinders, a rigid transverse member engaged at its ends with the respective bands and adapted for the securing thereto of one end of a flexible silk gauze support for a stencil and of one end of a stencil, a hinged spring cover for the ends of a silk grauze and stencil so secured, a projecting member on the hinged spring cover and a stud on at least one of the cylinders for engaging the projecting member



to hold the cover open at the appropriate position for fitting and removing the cover and for releasing the cover so that it may close automatically when the transverse member is carried round by the bands away from said appropriate position.

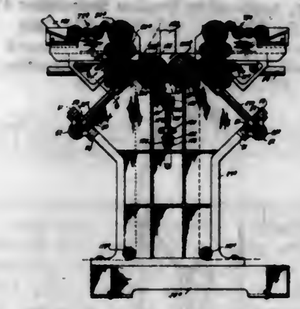
2,730,043
SQUEEGEES
Nathan Louft, Silver Spring, Md.
Application August 27, 1951, Serial No. 243,895
2 Claims. (Cl. 101—123)



2. A squeegee device for screen process printing machines having conveyor means for reciprocating a squeegee to convey the squeegee in a downwardly extending position over a screen to spread ink over the screen during the operative stroke and tilt the squeegee to extend upwardly during the return stroke, said device comprising a support adapted for mounting on the conveyor of a screen process printing machine, a squeegee mounted on said support to be reciprocated by the conveyor, and a combination distributing and collecting member pivotally mounted on said support in front of said squeegee and swingable by gravity between a substantially horizontal position in engagement with the front of said squeegee to receive and collect ink that flows down the squeegee when the latter is tilted upwardly during the return stroke and a pendent position substantially in contact with the screen to drop the ink in front of the squeegee immediately at the beginning of the operative stroke and distribute the paint over the process screen during the operative stroke to leave a thin substantially uniform layer of ink immediately in front of said squeegee, and means on said squeegee support between said squeegee and said member engaging said member as said member is swung to its horizontal position and maintaining said member in such horizontal position during the return stroke of said squeegee.

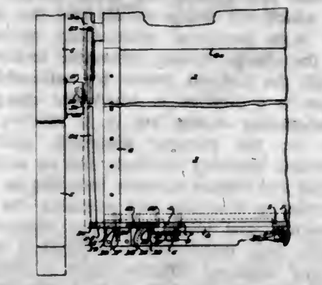
2,730,044
SLOTTED FRAME CONSTRUCTION FOR ROTARY PRINTING PRESS
Dewey L. Harrison, Grand Prairie, Tex.
Application October 19, 1951, Serial No. 252,083
12 Claims. (Cl. 101—181)

1. A rotary printing press comprising: a pair of spaced parallel vertical side frames, a horizontal flange at the top of each of said frames, said horizontal flanges each having a depending V-shaped portion at each end thereof, an angular flange formed on each side of each of said side frames below and in parallelism with the inner surfaces of said V-shaped portion to define an open ended L-shaped slot inclining downwardly from the open end and then inclining upwardly to the closed end, the slots in said frames being aligned; an impression cylinder ro-



tatably mounted on and between said side frames; bearing blocks slidably and adjustably mounted on said side frames in said slots, each of said bearing blocks being removable through the open end of its slot, and a plate cylinder rotatably mounted on said bearing blocks and movable into contact with said impression cylinder when said bearing blocks are moved upwardly in said slots.

2,730,045
FORM CLAMP MECHANISM FOR PRESSES
George M. Pfaller, Pittsburgh, and August A. Saal, Ross Township, Allegheny County, Pa.
Application September 6, 1952, Serial No. 308,276
5 Claims. (Cl. 101—250)

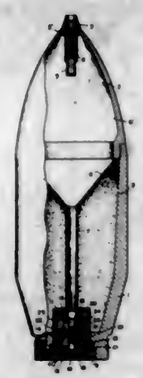


1. In a press having a movable bed adapted to carry a form and having a plurality of form clamps connected with the bed and each mounted for swinging movement between a position in alignment with the form and a position out of alignment with the form and electrically operated means for moving the bed, a switch disposed alongside the path of movement of the bed rendering the electrically operated means for moving the bed operative in a first position of the switch and inoperative in a second position of the switch, actuating means for actuating the switch carried by the bed movable between a first position in which the switch is in its first position and a second position actuating the switch to its second position and means connected with the form clamps insuring synchronous operation thereof so that when one of the form clamps is swung to one of said positions the remainder thereof will be similarly swung, the last mentioned means being shiftable transversely of the direction of movement of the bed upon swinging of the form clamps between said positions and operatively connected with the actuating means moving the same to the second position thereof when the form clamps are swung to inoperative position.

2,730,046
SAFETY DEVICE FOR THE EXPLOSIVE HEAD OF A MISSILE

Lars Oscar Bergström and Karl Erik Waldemar Hjelm, Bofors, Sweden, assignors to Aktiebolaget Bofors, Bofors, Sweden, a corporation of Sweden

Application September 12, 1951, Serial No. 246,222
Claims priority, application Sweden September 19, 1950
14 Claims. (Cl. 102—81)



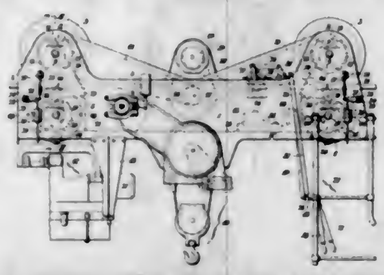
1. A fuse magazine for detonating the charge of the explosive head of a missile of the rocket type, comprising charge means for setting off the charge of the explosive head, detonating means for igniting said charge means, support means supporting one of said means disposed axially movable in said explosive head, the other of said means being stationarily disposed within said explosive head, spring means coacting with said support means and biasing the same toward an axial position in which the charge means and the detonating means are in a positional relationship operative for detonating the charge means, releasable locking means coacting with the support means for releasably retaining the same in a position in which the charge means and the detonating means are in a relative position inoperative for the purpose aforesaid, said locking means including retaining elements and an axially movable retaining and release member retaining in one position the retaining elements and releasing the same in another position, and yieldable means disposed within said explosive head responsive to a physical magnitude developed and rendered effective upon a discharge of the missile, the said yieldable means supporting said retaining and release member and being biased into a position in which the said member occupies its retaining position, the said physical magnitude moving the yieldable means into a position in which said retaining and release member occupies its release position thereby freeing the support means for the aforesaid action by said spring means, the said support means being disposed in a position in the explosive head in which the force of the initial linear acceleration experienced by the missile when in flight acts upon the support means in an axial direction opposite to the spring means for retarding displacement of the support means until the said force has decreased below the force of the spring action.

2,730,047
CABLE-TRAVERSING TROLLEY CARRIAGES

Ernest J. Rollings, Merion, Pa., assignor to Northern Engineering & Machine Corporation, Philadelphia, Pa., a corporation of Pennsylvania

Application September 7, 1951, Serial No. 245,548
10 Claims. (Cl. 105—153)

1. In a cable traversing trolley carriage having a frame, a pair of grooved power-driven wheels for respectively engaging the cable from above and from below, a fixed axis on the frame about which the upper wheel is rotative, an eccentric sleeve about which the lower wheel is rotative, said sleeve being free on another fixed axis on the frame; and yielding means tending to turn the sleeve to keep the lower wheel normally in tractive engagement with the cable, brake mechanism including a

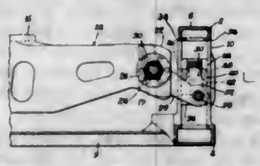


brake drum secured to the lower wheel; a disk mounted on the hub of the lower wheel and carrying a normally-retracted brake shoe for cooperation with the drum; means for restraining the disk while allowing it to rise and fall with the lower wheel; a pressure fluid cylinder also mounted on the disk for actuating the brake shoe; and manual means for controlling admission of pressure fluid to the brake-actuating cylinder.

2,730,048
CAR TRUCK

Mehmet Kemal Coskun, Granite City, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey

Application June 12, 1952, Serial No. 293,049
6 Claims. (Cl. 105—190)



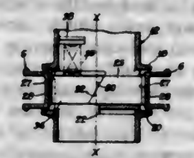
6. In a railway car truck, a side frame member, a bolster member, means to support the bolster member from the frame member, said means comprising a torsion spring bar carried by one of said members, a crank arm having ends, one of said ends being connected to the bar at a point intermediate its ends, swing hangers, a bearing means movably positioned in the other of said members to be self-alignable with respect to the transverse center line of said member, said bearing means journaling the swing hangers to said other member, and a pivotal connection between the swing hangers and the other end of the crank arm, said pivotal connection being movable in directions extending lengthwise and transversely of the truck to reduce twisting stress on said crank arm and said swing hangers.

2,730,049
SNUBBED TRUCK

Walter L. Schlegel, Jr., Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of Illinois

Application September 20, 1951, Serial No. 247,458
12 Claims. (Cl. 105—197)

10. A railway car truck having spaced columns, a bolster therebetween, and friction means for controlling bolster oscillations comprising friction shoes in direct wedge engagement with each other and in frictional engagement with respective columns, a spring compressed between the bolster and one of the shoes on a sloping compressional axis to prevent vertical chatter of said one

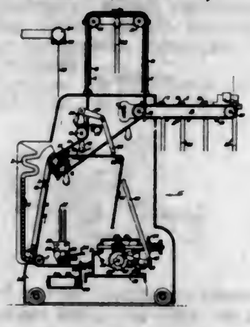


shoe relative to the bolster, and means on the bolster for preventing vertical chatter of the other shoe relative to the bolster.

2,730,050
CUTTING AND REMOVING DEVICE FOR BUNCHES OF DOUGH STRINGS

Mario Braibanti and Giuseppe Braibanti, Milan, Italy

Application November 4, 1952, Serial No. 318,682
Claims priority, application Italy October 7, 1948
2 Claims. (Cl. 107—7)



1. In a cutting and removing machine for bunches of dough strings issuing in long curtain form from rows of nozzles of a dough-goods press; the combination of two shears in horizontal cutting planes and at different levels, the lower of said shears being arranged vertically beneath the row of nozzles and the upper shear being laterally displaced in relation to and parallel to the lower shear, said lower shear operating in rapid cutting sequence and said upper shear operating with longer time intervals between successive cutting actions, a first endless conveying device including an endless chain, trained over pinions, at the opposite sides of the machine, said chains being provided, at certain distances apart, with catches for grasping and driving dough carrying rods for the dough strings and driven from one of the said pinions, a magazine for dough carrying rods, the carrying rods being taken singly from said magazine and conveyed by said first conveying device into a plane transverse to the discharge plane of the dough strings, a second endless conveying device including an endless chain, trained over pinions, at the opposite sides of the machine, on which chains there are provided, at certain distances apart, swinging carriers which grasp said carrying rods at the opposite ends and lift them from the first conveying device shortly after they have passed the discharge plane of the dough strings said second conveying device conveying the carrying rods vertically upwards through said upper shear while the latter is open, said chains of the second conveying device being trained over driving pinions which are driven by the chains of said first conveying device, a third conveying device including endless chains each of which is trained over a pinion and which run respectively along arms projecting from the machine at the opposite sides of the latter last mentioned chains being provided with catches removing the carrying rods singly from said second conveying device and conveying them outside the machine, a driving motor and a speed regulator as well as controlling gearing driven from said motor for operating the moved parts of the machine, and a controlling mechanism driven from said motor for intermittently operating the said top shears.

2,730,051
BREAD DOUGH LOAF CURLING

Francis Frederick Hansen, Pittsburgh, Pa.

Application May 23, 1952, Serial No. 289,583
2 Claims. (Cl. 107—54)

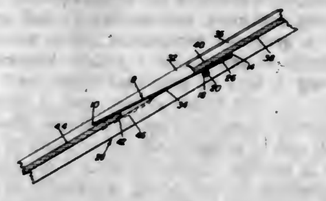


1. A continuous method of moulding loaves of bread dough comprising continuously advancing a piece of bread dough in a unidirectional path while subjecting it to a plurality of sheeting operations to produce a flat elongated piece, bodily carrying the piece from one sheeting operation to the next while supported in a flat position and turning the piece in transit through an angle of approximately 90° to the line of advance, curling the sheeted piece after the second sheeting operation, bodily carrying the piece from the second sheeting operation to the curling operation, turning the piece through an angle of approximately 90° to the line of advance while being carried in transit from the second sheeting operation to the curling operation, and pressure rolling the curled pieces while it advances in the unidirectional line of movement.

2,730,052
ROOF REPAIR SHEET FOR GREENHOUSES

John Milton Ebersole, Lititz, Pa.

Application June 2, 1953, Serial No. 359,135
6 Claims. (Cl. 108—1)



1. In combination, a greenhouse roof structure embodying spaced parallel coplanar inclined frame members, a first pane of glass supported by and between said members, a second pane of plass also supported by and between said members and having one marginal edge spaced from an adjacent marginal edge of said first pane of glass, and a temporary sheet material repair plate spanning said space and protectively covering the same, the upper edge portion of said plate underlying a cooperating lower edge portion of the first pane of glass, the lower edge portion of said plate overlapping the adjacent upper edge portion of said second pane of glass, the other marginal edge portions of the plate cooperating with complemental bordering portions of said frame members and being separably fastened to the latter.

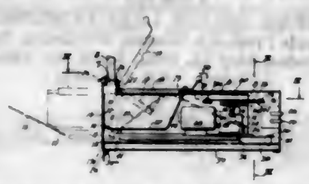
2,730,053
MOTORIZED DRIVE-IN TELLER'S WINDOW

Clarence D. Ellithorpe, Milford, Conn., assignor to Duplex Electric Company, Inc., New York, N. Y., a corporation of Delaware

Application June 11, 1952, Serial No. 292,926
16 Claims. (Cl. 109—19)

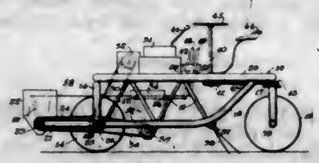
1. In a drive-in banking window or the like, a frame defining an opening for a deposit unit and adapted to form part of an upright wall of a teller's window, a deposit unit forming an article receptacle, means slidably

supporting said unit for movement in said opening between inner and outer positions at which the receptacle is accessible from inner and outer sides, respectively, of such wall, a movable front end door for said unit, said door being hinged to the unit to swing outwardly and downwardly as the unit moves to the outer position to



provide access to the interior of the receptacle from said outer side, abutment means on said unit for arresting opening movement of the door, and means extending from said door in position to butt said frame and swing the door to closed position as the unit is moved to said inner position.

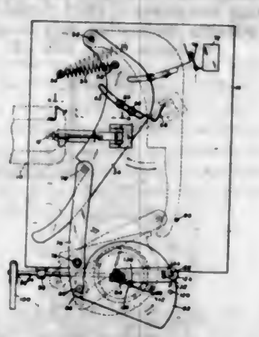
2,730,054
EARTH CONDITIONING AND SEEDING MACHINE
Joseph F. McDonald, Saginaw, Mich.
Application May 28, 1952, Serial No. 290,509
1 Claim. (Cl. 111—10)



A self propelled machine for simultaneously conditioning, texturing uniformly, and seeding a rough soil surface including: a generally rectangular frame provided with wheel journals at either end; a pattern impressing front roller having a face of expanded metal and journaled transversely of said frame at one end; a fertilizer distributing hopper supported on said frame ahead of said front roller and of substantially equal width to said front roller and in parallel relation thereto; a seed distributing hopper supported on said frame rearwardly of said front roller and transversely of said frame for sowing seed in a path substantially equal in width to the width of said front roller; a rake bar supported on said frame behind said seed hopper provided with a plurality of adjustable ground engaging tines for striating the ground with a pattern of shallow grooves paralleling the line of travel of said machine and superimposed over the roller impressed pattern; a turnable rear roller having a face of expanded metal and being journaled on the rear end of said frame for imparting an overlying ground impressing pattern to the soil and mounted transversely of said frame and of a size substantially equal to the said front roller; a motor on said frame driving said front roller; controls on said frame selectively operating said seed and fertilizer hoppers; and steering means on said frame drivably connected to the said rear roller for steering the same.

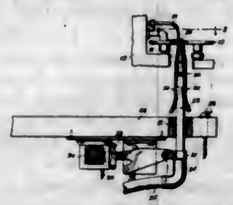
2,730,055
SPIRAL STITCH ATTACHMENT FOR SEWING MACHINES
Sam Desperak and Joseph Roechko, Brooklyn, and Gerard Desmond, Franklin Square, N. Y., assignors to Advance Spiral Machine Company, Inc., New York, N. Y.
Application June 5, 1953, Serial No. 359,873
3 Claims. (Cl. 112—2)

1. A spiral stitching attachment for sewing machines, comprising a work support which is mounted for movement toward and away from the sewing machine needle, a rotatably mounted cam connected to said work support to move it relative to said needle, a rotary drive mechanism, and a disengageable clutch between said rotary drive mechanism and said cam, whereby the drive mechanism actuates the cam and causes the work support to move relative to the sewing machine needle when the clutch is engaged and whereby the cam is released from the drive mechanism to stop movement of the work support relative to the sewing machine needle when the clutch is disengaged, said work support including an arm which is pivotally mounted for movement toward and away from the sewing machine needle, a spring connected to said arm and urging it to move in one direction relative to said needle, a second arm which is also pivotally mounted for movement relative to said needle, a roller at one end of said second arm engaging the first arm, and a second roller at the opposite end of the second arm engaging



the cam, whereby actuation of the cam by the drive mechanism when the clutch is engaged causes the second arm to pivot in engagement with the first arm, thereby causing the first arm to pivot relative to the sewing machine needle in the opposite direction from the direction in which it is urged to move by said spring, said clutch comprising a rotably mounted disc which is directly connected to the rotary drive mechanism, and a locking arm which is pivotally connected to the cam, said disc having a pronounced rim and said locking arm having a slot which accommodates said rim, the side walls of said slot being engageable with said rim to lock the locking arm and the disc against relative movement when the locking arm is in one position relative to the rim, said side walls of the slot being disengageable from said rim to free the locking arm and the disc for relative movement when the locking arm is moved to another position relative to said rim.

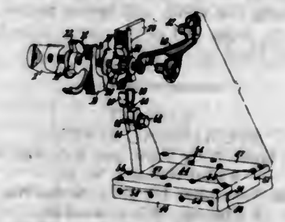
2,730,056
ATTACHMENT FOR FUR SEWING MACHINES
Leo Wiesenfeld, Miami, Fla.
Application August 13, 1951, Serial No. 241,598
4 Claims. (Cl. 112—20)



1. A fur sewing machine for seaming pieces of fur having driven feed discs, a reciprocating needle and an attachment for aligning fur hairs just prior to sewing of the fur pieces and for removing loose lint, dust and dirt particles from the fur pieces, said attachment comprising

a conduit member movable toward and away from said feed discs and said reciprocating needle, an extension member partially received within said conduit member, said extension member being slidably adjustable with respect to said conduit member, that part of said extension member not received within said conduit member defining an elongated opening at its end, said opening being elongated generally in the direction of the line of feed in advance of the sewing point, a wedge member located at the edge of said elongated opening farthest from said feed discs and extending upwardly therefrom, said wedge member having a generally semi-tubular shape and the vertical edges of said wedge member disposed towards said feed discs, said wedge member constituting a partial upward extension of said extension member, said extension member being positioned in the line of feed in advance of the sewing point and slightly below said discs, and said conduit member being adapted for connection to a vacuum source.

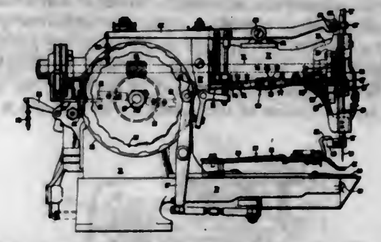
2,730,057
SEWING MACHINE FEED MECHANISMS
Carlton R. Hosley, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application November 15, 1954, Serial No. 468,718
6 Claims. (Cl. 112—48)



1. A shoe outsole sewing machine having a main frame, stitch forming and work feeding devices including a curved work penetrating instrument, a segment having a peripherally grooved hub for supporting said instrument, a stud fixed in the frame of the machine and passing loosely through the hub of the segment, a guideway of right angular cross section in the frame of the machine with wearing surfaces extending in parallel relation to the fixed stud, a feed slide fitting the guideway for imparting movement to the instrument supporting segment lengthwise of said stud, and means for taking up the looseness from wear by crowding the slide in either of two directions at right angles to the wearing surfaces of the slide and guideway, in combination with a connecting yoke between the slide and the segment, provided with a rectangular arm entering the groove in the segment hub and extending parallel to one of the wearing surfaces on the slide.

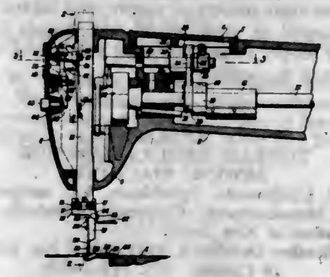
2,730,058
THROW-OUTS FOR AUTOMATIC CLAMP-LIFTERS
Michael McCann, Union, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application April 16, 1953, Serial No. 349,281
3 Claims. (Cl. 112—110)

1. In a cyclically operated sewing machine having an actuating mechanism, a work-clamp, and automatic work-clamp opening mechanism of the type including a member shiftable into and out of driven relation with said actuating mechanism, cam means driven from said actuating mechanism, and a push rod extending between said shiftable member and said cam means, said push rod comprising two axially opposed end portions adjustable axially one with respect to the other, an angularly adjustable sleeve member fixed axially with respect to a first of said axially opposed push rod portions and telescopically arranged with respect to the second of said push rod portions, a radially extending pin carried by said second push rod portion, said sleeve member formed with a slot



of which each extremity extends at an angle of not more than 90° with respect to the first push rod portion, said slot extremities defining two pin-accommodating abutment surfaces spaced apart both angularly and axially of said second push rod end portion.

2,730,059
TRIMMING MECHANISMS FOR SEWING MACHINES
Herman Ritter, Cranford, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application January 16, 1953, Serial No. 331,643
3 Claims. (Cl. 112—123)

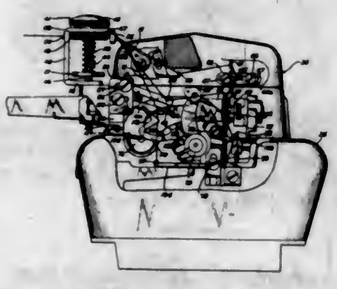


1. In a sewing machine having a bracket-arm terminating in a head and a face-plate closing an open end of said head to define a closed compartment, a reciprocable trimmer-bar and an actuating element therefor mounted within said closed compartment, a releasable connection between said trimmer-bar and said actuating element comprising a slidable pin carried by said actuating element for sliding movement relative thereto and a cooperating notch formed in said trimmer-bar, a lever pivotally mounted internally of said closed compartment upon said face-plate and operatively connected to said pin for retracting the same upon pivotal movement of said lever, and a plunger carried by said face-plate for axial sliding movement therethrough and arranged substantially parallel to said pin, the end of said plunger within said closed compartment operatively engaging said lever to pivot the same upon sliding movement of said plunger and the end of said plunger externally of said closed compartment being adapted for manual actuation to impart sliding movements to said plunger.

2,730,060
THREAD CONTROL MECHANISM FOR SEWING MACHINES
Edgar Scholj, Chicago, and Salvatore Lippere, Berwyn, Ill., assignors to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application November 28, 1952, Serial No. 323,098
15 Claims. (Cl. 112—162)

1. In an overedge sewing machine having a main drive shaft stitch forming means including a needle, an over-

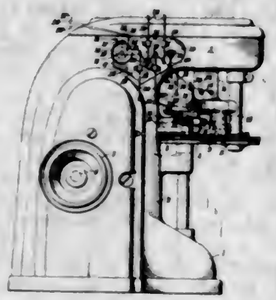
edge looper and an under looper, and connections from said shaft for operating said stitch forming means in coordination to form overedge stitches, the combination of thread controlling devices for controlling the delivery of threads from sources of supply to said stitch forming means, said devices including a plurality of thread guiding means for each of the threads delivered to the needle, the overedge looper and the under looper, a plurality of thread takeup members arranged to act upon the several threads in the course of their delivery to said stitch forming means, and connections from said shaft for operating said takeup members in such timed relation as to completely draw the thread delivered to said under looper from its source of supply before the threads delivered to said needle and said overedge looper are completely drawn from their sources of supply, said takeup members being arranged to draw all of said threads from their sources of supply during the latter part of the downward movement of the neddle.



2,730,061
THREAD REGULATORS FOR SEWING MACHINES

Edward J. Czajkowski, Lynchburg, Va., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey

Application October 4, 1951, Serial No. 249,737
10 Claims. (Cl. 112—254)

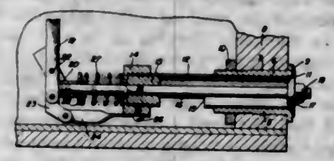


1. Thread regulating means for a multi-thread sewing machine comprising a plate adapted to be secured to the frame of the machine, a plurality of bars extending from the plate, a plurality of rods carried by the bars, each of which rods is provided with a thread guide, one of said rods being provided on each of said bars for each of the threads in the stitch structure and the corresponding rods on each of he bars constituting a series, said rods being adjustable with respect to the bars to stagger the thread guides of the rods in each series and to vary the staggered relation thereof, whereby the threads traversing each series of thread guides will follow tortuous paths, which paths can be individually varied to increase or decrease the tension imposed upon them.

2,730,062
AUTOMATIC BALER

William B. Mitchell, Texas City, Tex.

Application November 15, 1954, Serial No. 468,830
1 Claim. (Cl. 114—185)

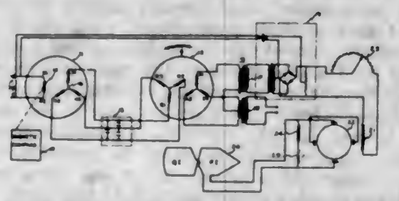


An automatic baler for boats comprising a drain at the stern and projecting forwardly into the boat adjacent the bottom thereof, a valve closing the outer end of the drain, a valve stem extending forwardly from the valve and slidable in the drain, a lever attached to the front end of the valve stem for opening the valve, and spring means closing the valve, said drain includes a sleeve sealed in the stern of the boat and having a valve seat at its rear end for the valve, a nipple threaded internally of the sleeve and projecting forwardly into the boat, a guide for the valve stem in the front portion of the nipple, said nipple having an opening in its lower portion behind said guide to admit water from the boat thereto, a bracket attached to a stationary member, a lever pivoted to the bracket, means connecting the front end of the valve stem to the lever for opening the valve, and spring means tensionally mounted on the front end of the valve stem between the nipple and the lever to close the valve.

2,730,063
DEGAUSSING SYSTEM

Richard W. Gebs, New York, and Baldwin W. Ridley, Valley Stream, N. Y.

Application November 10, 1952, Serial No. 319,802
8 Claims. (Cl. 114—240)
(Granted under Title 35, U. S. Code (1952), sec. 266)



5. Apparatus for adjusting the magnetic output of a ship's degaussing system having an A coil and an FI—QI coil in accordance with the ship's heading, comprising a pair of generators for supplying the respective coils, each generator being so adjusted that its output varies linearly with the excitation of its field, a Scott-T transformer, the secondaries of which are arranged to supply the respective fields, a synchro transmitter having Y-connected output windings connected to the primaries of said Scott-T transformer whereby the generators are adapted to vary the A coil excitation as a function of the sine and the FI—QI coil as a function of the cosine of angular deviation of the transmitter rotor, the said rotor of the synchro transmitter being arranged to change its angular orientation by the same degree that the ship's heading changes.

2,730,064
DEFLECTOR FOR ENDLESS CHAIN PROPELLER

Edward J. Eyring, Arlington, Va.

Application November 10, 1949, Serial No. 126,654
6 Claims. (Cl. 115—1)
(Granted under Title 35, U. S. Code (1952), sec. 266)

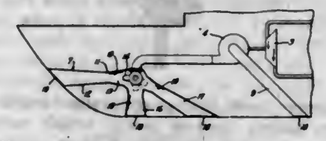
1. In combination in an amphibian craft; an endless traction belt having thereon a series of fluid impeller blades; said impeller blades projecting inwardly with respect to the belt; and a series of fluid deflector vanes fixed to said craft adjacent to and depending downward toward said blades; the planes of said deflector vanes extending laterally beyond the outer edge of said blades, and to a progressively greater extent in a fore to aft sequence.



2,730,065
HYDRAULIC SHIP PROPULSION APPARATUS

Carl F. Piper, Oakland, Calif.

Application August 30, 1954, Serial No. 453,173
1 Claim. (Cl. 115—14)
(Granted under Title 35, U. S. Code (1952), sec. 266)

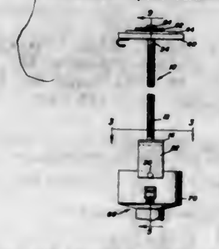


Hydraulic propulsion apparatus for marine ships, said apparatus including a discharge conduit provided with an aft discharge port, at least two water intake conduits both opening externally of the ship, and a pump connected on its suction side to only one of said intake conduits and on its pressure side to said discharge conduit, said discharge conduit discharging aft and being formed with a reduced neck portion and an outwardly diverging portion extending from said neck to said aft discharge port for forming a venturi, said pump being adapted to direct its intake through said reduced neck portion toward said discharge port whereupon an intake suction pressure is created near said venturi neck, and said remaining intake conduit being in communication with said venturi neck concurrently with said pump suction-connected intake for permitting said venturi suction to draw in such an additional volume of water as is needed for ship propulsion, said additional volume being drawn in wholly in response to the reduced pressure created at said venturi neck by said pump.

2,730,066
TIMING AND TAPPET SETTING INDICATOR HAVING A REMOTE DIAL

Ray G. Gist, Texas City, Tex.

Application April 8, 1954, Serial No. 421,860
8 Claims. (Cl. 116—124)

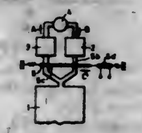


1. A timing and tappet setting indicator comprising a mounting head securable to a distributor head, an indicator dial, an elongated housing secured to and connecting said mounting head and said indicator dial, a driven shaft extending through said housing, a pointer on one end of said driven shaft cooperating with said indicator dial, a coupling member on the other end of said driven shaft selectively securable to a distributor shaft.

2,730,067
APPARATUS FOR GENERATING SONIC OR SUPERSONIC MECHANICAL OSCILLATIONS

Erwin Alfred Schaufler, Erlangen, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a German corporation

Application March 19, 1953, Serial No. 343,326
Claims priority, application Germany March 22, 1952
6 Claims. (Cl. 116—137)

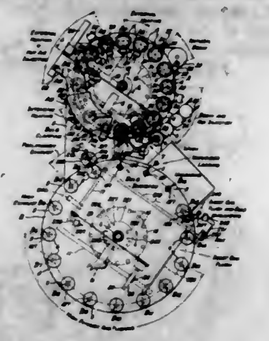


1. Apparatus for generating sonic oscillations in a space containing a fluid medium, comprising a first chamber and a second chamber both containing the same fluid medium as said space, said first chamber continually having a higher pressure and said second chamber continually having a lower pressure than said space, passages connecting said respective two chambers with said space, and periodically operating flow transfer control means disposed in said passages to form part thereof and alternately closing said respective passages, whereby said media in said chambers are rhythmically and alternately merged with the medium in said space.

2,730,068
BULB WASHING AND REFLECTOR COATING APPARATUS

Kenneth W. Reynolds, Mayfield Heights, and John A. Billson, Warrensville Heights, Ohio, assignors to General Electric Company, a corporation of New York

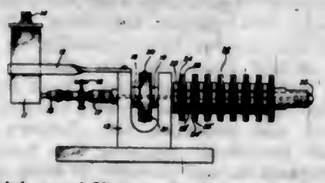
Application March 14, 1952, Serial No. 276,494
7 Claims. (Cl. 118—49)



1. In combination with coating apparatus comprising a carrier provided with a plurality of heads for supporting and evacuating a glass lamp bulb and depositing a reflective coating onto the interior wall thereof by thermal vaporization, a bulb washing carrier adjacent the bulb coating carrier and having a plurality of heads each provided with a bulb holder for supporting the bulb in an upright position with its open neck end down, means for advancing said carriers in synchronized relation to each other to advance the heads on the bulb washing carrier through a plurality of work stations, means for advancing said carrier to move the heads through a series of work stations, means comprising a nozzle located at one of said stations and directed upwardly in alignment with the open neck end of a bulb at said station for injecting a stream of cleaning liquid into said bulb, means along the path of travel of said heads from the wash station to expel the remaining cleaning liquid from and thoroughly dry the interior surface of said bulb, heating means along the path of travel of said heads from said

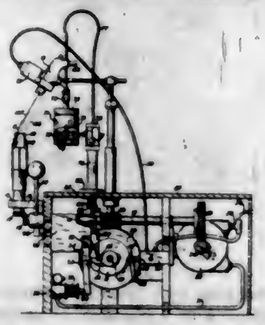
drying means for externally heating the bulb to a temperature of the order of several hundred degrees centigrade but below the softening point of the bulb glass, and bulb-transfer means located adjacent the path of travel of the said heads from said heating means for automatically transferring the heated bulbs in said heads into the heads on said bulb coating carrier.

2,730,069
WIRE COATING APPARATUS
Harold A. Sauer, Warminster, Pa., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 27, 1952, Serial No. 306,579
7 Claims. (Cl. 118—234)



1. In a high speed filament coating apparatus, a coating roller having a groove in which the filament rides, an annular coating material reservoir within the roller having a continuous peripheral outlet to said groove, said reservoir being of substantially greater width than said outlet, and an internal passage opening into said reservoir for supplying material to said reservoir.

2,730,070
SPRAYING MACHINE FOR INTERNAL SURFACES OF HOLLOW ARTICLES
Edward T. Stocker, Groveland, Mass., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application July 21, 1954, Serial No. 444,875
3 Claims. (Cl. 118—318)



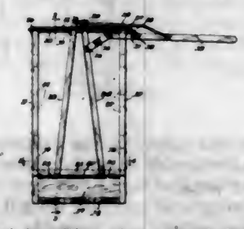
1. An apparatus for spraying the internal surfaces of hollow articles comprising a drive shaft, power means operable to drive the shaft, an arm supported by the shaft for free rocking movement about the axis thereof, a support for a hollow article rotatably carried by the arm and operatively connected to the shaft to be rotatably driven thereby, means actuable to rock the arm to rock the support therewith between a loading position, where hollow articles may be loaded successively on the support, and a spraying position, a spray unit disposed relative to the support when in the spraying position to direct a spray of material into the article, means driven by the drive shaft in timed relation with the rotation of the support to move the spray unit between a starting position and a finishing position, and means driven by the drive shaft to render the power means unoperated to stop rotation of the drive shaft after a predetermined number of cycles of rotation of the support.

2,730,071
MILKING APPARATUS
Thomas W. Merritt, St. Charles, and Chester A. Thomas, Lake Forest, Ill., assignors to Babcon Bros. Co., a corporation of Illinois
Application June 2, 1951, Serial No. 229,592
12 Claims. (Cl. 119—14.46)



1. Temporary milk storage apparatus for use in a milking system having vacuum means which communicates with milk withdrawing means through said apparatus, comprising a chamber having a volumetric capacity no less than the amount of milk delivered by a cow at a milking, said chamber comprising a body portion having a straight, cylindrical sidewall of transparent material, top and bottom sections in readily separable fluid tight engagement with the ends of the body portion; means defining a milk receiving passageway opening into said chamber and connecting it to said milk withdrawing means; means defining a suction passageway opening through the bottom section of the chamber and extending up to and terminating near the top thereof and above the level of the normal amount of milk to be received in said chamber in milking a cow; means defining a mlik discharge passageway opening into the bottom section of said chamber at the bottom thereof; and valve means which is selectively movable between two positions for controlling the flow of milk into and out of said chamber, said valve means being adapted to provide direct communication between the discharge passageway and the source of vacuum and between the suction passageway and atmosphere in one of said positions and to provide communication between the suction passageway and the source of vacuum and to close off the discharge passageway in the other of said positions.

2,730,072
ANIMAL HANDLING CHUTE
Carlyle Firkins, Belvidere, Ill.
Application May 19, 1953, Serial No. 356,080
4 Claims. (Cl. 119—99)



1. An animal handling chute consisting of a rectangular member having open ends and a closed bottom and sides, a pair of holding bars at one end of the said chute, a transverse member upon which the lower ends

of the said holding bars are mounted, a transversely extending guide rod having a downwardly turned portion at one of its ends forming an outside guide member for the vertical holding members, brackets on the said chute within which the said guide rod is mounted, a lever pivotally mounted intermediate its ends on the said transversely extending guide rod, a connecting rod secured to one of said holding members at one of its ends and to the said lever at its opposite end, one of said brackets within which the guide member is mounted forming a stop against the downward movement of the said connecting lever and a link secured to the said lever at its lower end and to the other of said holding bars at a point spaced from its upper end, the said link and the connecting rod forming toggle connections with the holding members and the said lever, the force of the said link being normally exerted in a direction opposite to that of the connecting rod, but when turned beyond aligned position of the pivotal point of the lever and attachment point of the connecting rod and the lever to exert its force in the opposite direction whereby the lever is held in locked position against the said stop, the said bars being straight and disposed at an angle to each other when in closed position in substantial meeting engagement with the upper ends thereof and spaced a substantial distance at their lower ends when in closed position whereby pressure is exerted only upon the upper portions of the neck of the animal while in the chute.

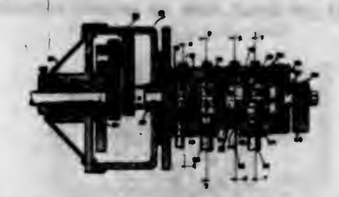
2,730,073
PERCUSSION TOOLS
Charles Leavell, Lombard, Ill., assignor to Mechanical Research Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application June 23, 1953, Serial No. 363,588
17 Claims. (Cl. 121—32)



1. In combination with a pressure fluid actuated percussion tool having a casing and a work point movably mounted therein, a friction brake carried by said casing and adapted when actuated to frictionally grip said work point to restrain relative movement between the casing and work piece, and means for actuating said friction brake sequentially and in timed relation with the operation of said tool to restrain relative movement between said casing and work point during the periods of actuation.

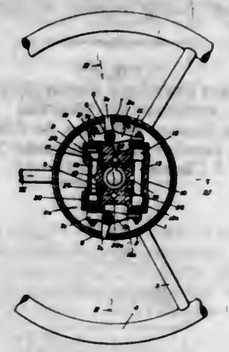
2,730,074
SERVO-MOTOR VALVE
Walter Ernst, Dayton, Ohio, assignor to The Thompson Grinder Company, Springfield, Ohio, a corporation of Ohio
Application April 3, 1951, Serial No. 219,039
8 Claims. (Cl. 121—41)

1. In a servo-valve; a valve casing, a valve sleeve rotatably mounted in said casing adjacent to one end thereof, a rotatable valve member in said casing adjacent the other end thereof, said valve sleeve and valve member telescoping over a portion only of their lengths, pressure and exhaust ports in the said other end of said casing and pressure and exhaust channels in said valve member in



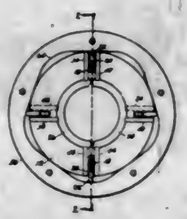
continuous communication with said ports, a pair of axially spaced service ports in the said one end of said casing and a pair of service ports in said valve sleeve in continuous communication therewith, and said pressure and exhaust channels terminating in ports in the respective planes of the service ports in the said valve sleeve.

2,730,075
CONTROL MEANS FOR POWER-ASSISTED STEERING MECHANISM
Stanley Howard Edge, Danesgate, Lincoln, and Frederick Henry Heacock and Douglas Leonard Geoffrey Young, Lincoln, England, assignors to Clayton Dewandre Company Limited, Lincoln, England, a British company
Application July 18, 1952, Serial No. 299,711
4 Claims. (Cl. 121—41)



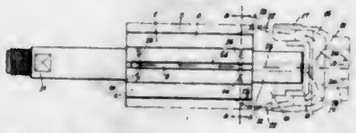
1. Control means for power-assisted steering mechanism for motor vehicles, comprising a steering column shaft, an inner hub member having means for securing it to said shaft, a steering wheel connected to but having limited angular movement relative to said shaft, an outer hub member fixed to said steering wheel, the inner hub member providing bearing and supporting means for the outer hub member, a directional control valve supported on said inner hub member and operative to control the direction of operation of a fluid pressure power steering motor, a pair of fluid pressure control valves supported on said inner hub member and operative to supply pressure fluid to the power steering motor, said pressure control valves each having an area exposed to the motor pressure fluid, and multi-armed valve actuating levers each of which operatively engages a fluid pressure control valve and the directional control valve, said actuating levers being supported on the inner hub member and having rigid connection with the outer hub member and being operative in response to limited angular movement of the steering wheel in one or the other direction relatively to the steering column shaft for actuating said directional and pressure control valves in accordance with the degree and direction of angular movement of the steering wheel and for transmitting to the steering wheel reaction of the fluid on said areas of the pressure control valves.

2,730,076
HYDRAULIC MOTORS
Ephraim W. Hogue, Bethesda, Md.
Application May 31, 1952, Serial No. 290,870
8 Claims. (Cl. 121—56)



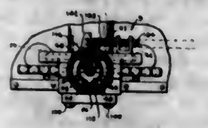
1. A hydraulic power converter comprising a stator including a cylindrical body having equi-spaced radially disposed slots, blades reciprocal in the slots, a rotor cooperating with said stator and including a ring having a channel contoured to provide sine or cosine cam surfaces constituting chambers for the reception of the blades, there being N+1 chambers for every N blades, means urging the blades radially outward, means for delivery of all of the fluid supplied to any chamber back of the respective blades and means for discharge of all of the fluid in each chamber immediately forward of the respective blades, the variation in spacing of said rotor and stator surfaces being such that the sum of the exposed areas of all the slidable blades in said chambers remains substantially constant during rotation of said rotor.

2,730,077
IMPROVED ROTARY COMPRESSED-AIR OPERATED MOTOR
George Henry Thomas Williams, St. Albans, England
Application October 22, 1951, Serial No. 252,522
2 Claims. (Cl. 121—92)



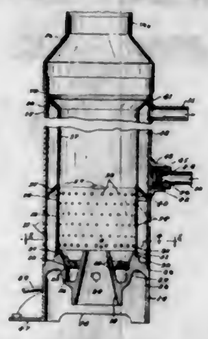
1. A rotary compressed air operated motor of the type set forth comprising a rotor having a length considerably greater than its diameter, an outer shell also having a length considerably greater than its diameter and positioned to enclose the rotor, power chambers formed between the rotor and the interior wall of the shell, inlet and outlet ports in said shell communicating with said chambers, the internal surface of the shell having a double cam formation with sharp increases in internal radii near the inlet ports so as to give each chamber a sudden increase of area adjacent the inlet port of the chamber and a gradual decrease in area towards the exhaust port of the chamber, longitudinally extending radial slots in the rotor, a rotor blade disposed within each slot and slidable in a radial direction, a longitudinal axial hole in the rotor, means to introduce compressed air into the axial hole and a plurality of radial passages along the length of the rotor to connect the longitudinal hole with each slot so that the compressed air introduced into the longitudinal hole is applied directly behind and along the length of each blade to press the blades outwardly towards the inner wall of the shell whereby the blades are maintained in contact with the inner wall of the shell throughout each rotary cycle despite the sharp changes in internal diameter of the shell.

2,730,078
FLUID MOTOR FOR WINDSHIELD WIPER
Fred A. Krohns, Hobart, Ind., assignor to Productive Inventions, Inc., a corporation of Indiana
Continuation of application Serial No. 92,634, May 11, 1949. This application January 7, 1955, Serial No. 480,510
17 Claims. (Cl. 121—97)



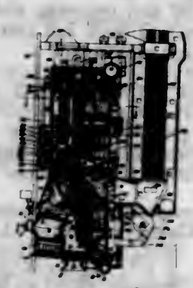
1. A windshield wiper motor comprising a housing having a chamber, a vane movable in the chamber, a valve body carried by the housing and having a pair of passageways communicating with the chamber, a first port connected to one passageway and a second port connected to the other passageway, a pair of ports either of which is connectible with a source of vacuum, a valve carried by the body and manually movable in one direction for controlling the vacuum from a selected one of said pair of ports through said one passageway and movable in another direction for controlling the vacuum from the other selected port of said pair of ports through said other passageway.

2,730,079
OIL BURNING WATER HEATER
Jack A. Merritt, Spokane, Wash., assignor to Universal Engine Heater Company, Spokane, Wash., a corporation of Washington
Application October 1, 1951, Serial No. 249,177
3 Claims. (Cl. 122—156)



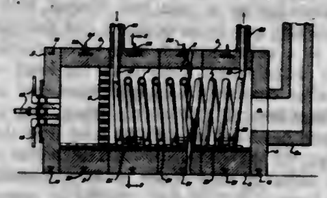
3. A water heater adapted for burning Diesel engine fuel and the like comprising in combination an annular hollow base, an inner central air inlet sleeve spaced from said hollow base, a top wall connecting the top of the base with the sleeve, said wall joining the sleeve intermediate the ends of the sleeve and extending outwardly and upwardly from the sleeve and cooperating with the upper portion of the sleeve to form an annular oil well, the top wall having an annular upstanding top rib projecting above the portions of the top wall that lie outwardly of the rib and spaced inwardly from the base and outwardly from the top of the sleeve and providing an outer rim for the oil well, said sleeve extending inwardly and upwardly from its junction with the top wall and providing an inner rim for the oil well, an inner apertured shell seated on the top wall at said top rib, an outer annular jacket spaced outwardly from the inner shell and seated on the top wall, an imperforate shell joined to said inner shell and extending upwardly therefrom, partition walls extending outwardly from the upper and lower ends of the imperforate shell to the jacket to form therewith a water chamber, the inner wall of which is in direct heat conducting relation to the apertured shell, the jacket having air apertures at spaced points around it and the inner shell having annular rows of small apertures above the rim of the oil well, the lowermost row being below the lowermost apertures in the jacket, an oil inlet in the top wall adjacent to the bottom of the oil well, and a wick in said well above the inlet.

2,730,080
VAPOR GENERATING INSTALLATION, INCLUDING A CYCLONE FURNACE
Hubert G. Stalkamp, Bala-Cynwyd, Pa., assignor to The Babcock & Wilcox Company, Rockleigh, N. J., a corporation of New Jersey
Application December 6, 1950, Serial No. 199,442
3 Claims. (Cl. 122—235)



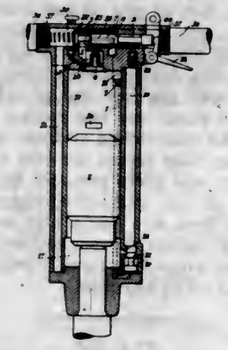
1. In a vapor generating installation, upright vapor generating tubes defining the walls of a secondary furnace chamber and its refractory lined hopper-like bottom, a cyclone furnace including a cyclone combustion chamber and a primary furnace chamber from which high temperature furnace gases are discharged upwardly into the hopper-like bottom of the secondary furnace chamber, vapor generating tubes defining the walls of the cyclone and the primary furnace chamber, and a fluid circulation system including upper and lower drums as well as downcomer connections and the vapor generating tubes above specified, some of the first mentioned vapor generating tubes having inclined sections covered by refractory to form an inclined wall of said hopper-like bottom, others of the first mentioned vapor generating tubes extending transversely of the above mentioned hopper bottom inclined sections in platen formation and then continuing along a wall separating the lower part of the secondary furnace chamber from the primary furnace chamber, said tubes in platen formation forming a plurality of widely spaced platens distributed across the flow of combustion products upwardly from the lower part of the primary furnace chamber and into said hopper-like construction, others of the vapor generating tubes extending directly from the lower drum in platen rows between adjacent tubes of said inclined wall of said hopper-like construction and first forming inclined platens distributed across the gas flow upwardly through said hopper-like construction and from the gas outlet of the primary furnace chamber and then continuing as upright platens distributed across the gas flow in the lower part of the secondary furnace chamber, some of the tubes of the last mentioned upright platens having their upper ends connected by bifurcations to larger-diameter upright wall tubes along a wall of the secondary furnace chamber, others of the upright tubes of the last mentioned platens extending between adjacent furnace chamber wall tubes and being united in pairs by Y-connectors with individual larger diameter tubes of a wall of the secondary furnace chamber at a higher level position.

2,730,081
DISTILLATION FURNACE
Howard Church, Baton Rouge, La., assignor to Kaiser Aluminum & Chemical Corporation, a corporation of Delaware
Application October 14, 1949, Serial No. 121,385
2 Claims. (Cl. 122—248)



1. In a furnace construction comprising an elongated cylindrical muffle chamber, and walls, a fluid-carrying helical coil disposed axially within said chamber and supported in concentric relationship with and spaced from the interior walls of said chamber and having its inlet at one end of said chamber and its outlet at the other end of said chamber, and means for heating said chamber, the improvement comprising a plurality of substantially identical precast bottom refractory segments having substantially semi-cylindrical interior surfaces and assembled end to end to form the bottom and a portion of the side walls of said chamber, a plurality of substantially identical precast top refractory segments having semi-cylindrical interior and exterior surfaces and assembled end to end superimposed upon and secured to said assembled bottom segments and forming the top and portions of the side walls of said chamber, arcuate metallic reinforcing members embedded within each of said top refractory segments, each of said arcuate reinforcing members being provided with expansion notches, and metallic reinforcing members embedded within each of said bottom refractory segments.

2,730,082
EXPLOSION-OPERATED TOOLS
Aloyse Nicolas Wampach, Luxembourg, Luxembourg
Application August 16, 1950, Serial No. 179,680
Claims priority, application Luxembourg August 24, 1949
2 Claims. (Cl. 123—7)



1. An internal combustion tool, comprising in combination, a cylinder having a head end in which combustion takes place; a piston mounted in said cylinder for reciprocating movement therein; a first duct located on the outside of said cylinder, extending along the length thereof, and communicating with the bottom end of said cylinder so that when compressed air is supplied to said duct, compressed air will flow to said bottom end of said cylinder to start the tool, said first duct being formed with a bore adjacent said bottom end of said cylinder and communicating with the atmosphere; a valve

member located adjacent said bore of said first duct and being mounted in the latter for slidable movement between a lower position where said bore is kept out of communication with said cylinder by said valve member and an upper position where said bore communicates with the bottom end of said cylinder; a second duct communicating at one end thereof with the head of said cylinder and at an opposite end thereof with said first duct at a point beneath said valve member so that when said piston moves away from the head end of said cylinder after combustion in said head end and uncovers said one end of said second duct, the compressed gases in said head end of said cylinder flow through said second duct to the underside of said valve member to move the same to said upper position thereof so as to place the bottom end of said cylinder in communication with the atmosphere through said bore of said first duct and thereby eliminate resistance to movement of said piston by an explosion in the head end of said cylinder.

2,730,083

HEAT EXCHANGER FOR VARYING THE LUBRICATING OIL TEMPERATURE IN INTERNAL-COMBUSTION ENGINES

Johann Kremser, Hannover, Germany

Application July 31, 1953, Serial No. 371,497
4 Claims. (Cl. 123—41.33)



1. In a heat exchanger unit for a cooling medium in internal combustion engines having an engine block, a housing, a pump mounted in said housing, a suction pipe disposed adjacent to and connected with said pump at the suction side of the latter, a jacket enclosing said suction pipe, an oil pipe disposed inside of the jacket, said oil pipe having a spiral rib disposed at the outer surface thereof, and said spiral rib engaging the inner face of the jacket, said spiral rib combined with the jacket defining a helical channel adapted to feed oil therethrough to be cooled, the inner face of said oil pipe being spaced apart from said suction pipe and the space between said suction pipe and said oil pipe defining a first passage for said cooling medium in a direction away from said pump and communicating with the free end of said suction pipe remote from said pump, and said suction pipe forming a second passage for said cooling medium in a direction towards said pump, inlet means for said cooling medium disposed adjacent said pump into said first passage, inlet means for said oil into said helical channel disposed at the end remote from said pump and outlet means for said oil from said helical channel adjacent said pump, in order to provide a counterstream between said cooling medium and said oil to be cooled.

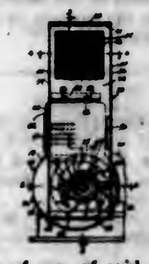
2,730,084

AIR INTAKE STACK FOR GASOLINE MOTORS

Henry J. Stegeman, Fairfield, Conn., assignor to The Locke Steel Chain Company, Bridgeport, Conn., a corporation of Connecticut

Application September 15, 1953, Serial No. 380,175
6 Claims. (Cl. 123—41.65)

1. The combination with a gasoline motor provided with a blower fan and a blower fan casing enclosing said blower fan and having a vertical wall provided with an air intake opening of an elongated air intake stack having a screened air entrance toward its upper end and including a vertical rear wall, said rear wall being engageable with said vertical wall of said casing in substantially parallel relation and having an opening toward its lower end in substantial register with said casing opening, interlocking means projecting outwardly from



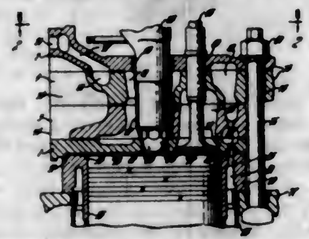
the peripheral edge of one of said openings engageable within the other of said openings, and fastener means connected between said stack and said motor to secure said stack in vertical position.

2,730,085

CYLINDER HEAD

William E. Brill, Cleveland, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application December 19, 1950, Serial No. 201,663
10 Claims. (Cl. 123—41.76)



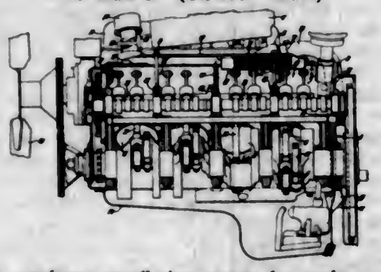
1. An engine cylinder head comprising a plurality of formed steel plates having adjacent seating surface portions located centrally and along the edges of the plates and registering recesses between said portions forming an annular gas passage, one of said plates having a bottom surface on the opposite side thereof from its said seating surface forming the outer end surface of the engine combustion chamber, said seating surface portions being joined by fused metal and having other registering recesses therein extending around the gas passage and forming a coolant jacket space therefor.

2,730,086

CRANKCASE VENTILATION SYSTEM

Herman A. Brohn, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application November 19, 1952, Serial No. 321,453
10 Claims. (Cl. 123—41.86)



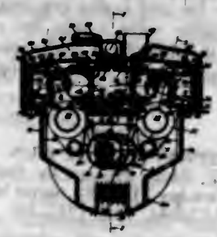
1. A crankcase ventilation system for engines comprising a camshaft gallery and a crankcase formed in an engine block having obliquely disposed rows of cylinders, said block being formed between the adjacent sides of said rows of cylinders to provide an elongated passage extending from the front wall to the rear wall of said block, a transversely disposed wall extending across said block and intermediate said end walls and dividing said camshaft gallery and said crankcase into vertically extending front and rear compartments, said camshaft gallery and said crankcase in each of said compartments being adapted to communicate with one another through one end of said elongated passage, said wall being formed to terminate above the lower extremity of said crankcase to provide beneath said wall a communicating passage between said front and rear compartments, an inlet passage formed in the upper wall enclosing said camshaft gallery and communicating with the upper part of said front compartment, and an outlet passage formed in said upper wall enclosing said camshaft gallery and communicating with the upper part of said rear compartment.

2,730,087

INTERNAL-COMBUSTION ENGINES

Digby B. Morton, Digby B. Morton, Jr., and Graeme E. Morton, Kilbirnie, Wellington, New Zealand

Application April 20, 1953, Serial No. 349,834
Claims priority, application New Zealand May 2, 1952
7 Claims. (Cl. 123—51)



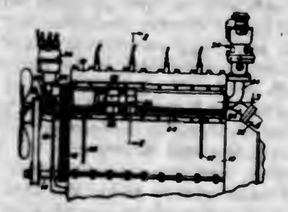
1. In an internal combustion engine of the type having a cylinder, a pair of double acting opposed pistons in said cylinder, a gudgeon pin in each said piston, a connecting rod lever for each said piston slidably insertable into said gudgeon pin, a frame member to support said connecting rod levers and said cylinder, a cover removably attached to said frame member, said cover having a flat lower surface for engagement with the said frame member to hold the said cylinder against motion, a plurality of sealing rings disposed between respective points of engagement, and a plurality of toggle catches to removably secure the said cover to the said frame whereby upon release of said toggle catches the said cylinder may be dismounted, said piston thereby removing from slidable engagement with said connecting rod.

2,730,088

ROTARY VALVE-TYPE ENGINE

Cyrus L. Hyde, Camarillo, Calif., assignor of one-half to Hamilton D. Hazlehurst, Camarillo, Calif.

Application August 12, 1954, Serial No. 449,367
3 Claims. (Cl. 123—59)



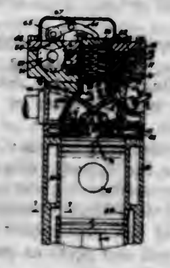
1. In an internal combustion engine, a cylinder block having a plurality of cylinders, a semi-cylindrical recess in one side of said block extending longitudially thereof, passages in said block connecting said recess with each of said cylinders, a stationary sleeve seated in said recess and having apertures, each of said passages having a bored boss extending into one of said apertures, a rotary sleeve journaled in said stationary sleeve, said rotary sleeve having ports each registering with one of said bored bosses upon rotation of said rotary sleeve, means sealing the interior of the rotary sleeve from the interior of the stationary sleeve, a fluid conduit communicating with said rotary sleeve.

2,730,089

ROTARY VALVE INTERNAL COMBUSTION ENGINE

Louis O. French, Milwaukee, Wis.

Application June 4, 1952, Serial No. 291,729
6 Claims. (Cl. 123—90)



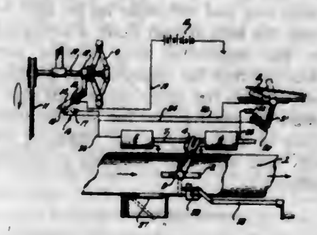
1. In an internal combustion engine, the combination of a cylinder, a piston reciprocally mounted in the cylinder, a tapered plug type rotary valve member operatively mounted on the head end of the cylinder and having a head provided with a port, a port in the head end of said cylinder cooperating with said port in the valve member, means for rotating said valve member, spring means for acting on said member in the direction of its longitudinal axis to exert a pressure thereon opposing pressures in the cylinder acting on said member, and reciprocatory cyclicly timed means operated by the engine for loading said spring means in predetermined amounts during the compression stroke of the engine and the high pressure period in the engine's cycle following compression to reduce the frictional forces opposing the movement of said valve.

2,730,090

EXHAUST BACK PRESSURE BRAKING SYSTEM

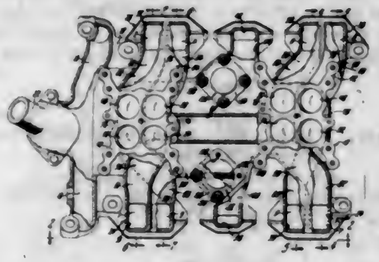
James W. F. Holl, Temple City, Calif.

Application July 17, 1953, Serial No. 368,618
6 Claims. (Cl. 123—97)



1. An exhaust back pressure brake for vehicles having an engine, and an exhaust pipe extending from the engine, of a valve mounted in said exhaust pipe, an arm projecting from said valve, a pair of solenoids, an actuating rod extending through both of the solenoids, means attaching the arm to the actuating rod, an engine throttle, and electrical switch means operable by the throttle to control said solenoids.

2,730,091
INTAKE MANIFOLD
Gilbert Burrell, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 20, 1954, Serial No. 405,105
20 Claims. (Cl. 123—122)



1. An intake manifold for an internal combustion engine comprising a member having pairs of distribution passages extending transversely therethrough to form outlet ports in the opposite sides of said member for communication with the cylinders of the said engine, each of said distribution passages having center portions and end portions on the opposite sides thereof, and primary and secondary mixture supply passages communicating with each of said center portions, said end portions on one side of said center portion being substantially parallel and said end portions on the opposite side thereof being crossed.

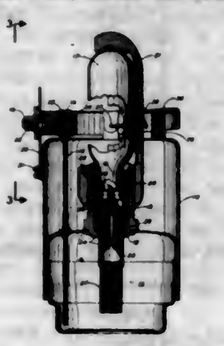
2,730,092
ENGINE STARTER
David L. Reif, Cincinnati, Ohio, assignor to Clinton Machine Company, Clinton, Mich., a corporation of Michigan
Application July 6, 1951, Serial No. 235,554
10 Claims. (Cl. 123—185)



1. An engine starting mechanism of the class described adapted for imparting initial rotation to an engine shaft comprising: a rotatable engine shaft; a cup, fixedly mounted on said engine shaft in coaxial relation therewith; a rotatable friction member positioned within said cup and normally spaced, at its periphery, from the inner surface of said cup and rotatable on an axis normally in alignment with the axis of said shaft; a swingable supporting member for supporting said friction member and swingable into position for engaging the periphery of said friction member with the inner surface of said cup and a manually operable mechanism for simultaneously effecting a swinging of said support for engaging said friction member with said cup and effecting a rotation of said friction member.

2,730,093
HAND-HELD DISCHARGER
George L. Neely, Berkeley, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware
Application November 7, 1952, Serial No. 319,219
5 Claims. (Cl. 123—187.5)

1. In a hand-held discharger for introducing starting fluid into the intake system of an internal combustion engine from a sealed bulb containing a starting fluid under pressure, means forming a unitary sealed expansion chamber, a single filling and charging conduit means forming the only entry path for fluid into said sealed expansion chamber for admitting the pressurized fluid contents from said bulb into said sealed expansion chamber, perforating means disposed in said conduit means for releasing the contents of said bulb, means for sealing together said



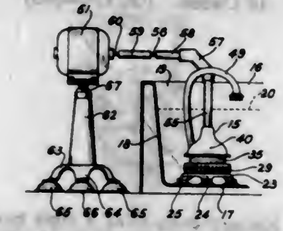
bulb and said expansion chamber when the interior of said bulb is in communication with said expansion chamber, pressure responsive valve means in said conduit means to retain fluid when said bulb is withdrawn, and discharging means for said sealed expansion chamber including hand-operable valve means for releasing a desired quantity of the fluid from said expansion chamber into the intake system of an internal combustion engine.

2,730,094
REPEATING TOY GUN
Roy E. Hicks, Ponca City, Okla.
Application October 11, 1952, Serial No. 314,249
3 Claims. (Cl. 124—19)



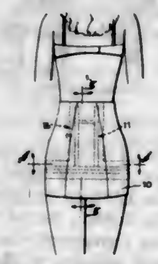
1. A repeating toy gun adapted to discharge resilient band projectiles, comprising a body including a portion simulative of a gun barrel and adapted to have such projectiles stretched thereon, a pair of hammer members pivotally attached to said body in laterally spaced-apart relation adjacent the rear end of such barrel portion, said hammer members being rockable independently of one another with each adapted to have such a projectile engaged thereabout above its pivotal connection, a pair of trigger members respectively associated with said hammer members and being likewise mounted for independent rocking movement on said body, each such trigger member in a cocked position thereof engaging the respectively associated hammer member below the pivotal connection of the latter to restrain the same against rocking forwardly and releasing the hammer member for such movement upon actuation to a firing position, and a cocking member in the form of a resilient band engaged intermediate its ends with the body generally between the two hammer and trigger member assemblies and with the several hammer and trigger members at spaced points along its end portions to either side of the thus engaged body portion, such points of engagement being so arranged spatially that each end portion of the cocking band extends from the body forwardly to the hammer member engaged thereby, rearwardly and downwardly to the associated trigger member, and then upwardly back to the body, the cocking band thereby being operative resiliently to maintain both hammer and trigger member assemblies in cocked condition and to return the same to such condition after firing.

2,730,095
HYDROTHERAPY PUMP
William H. Scott, Rochester, N. Y.
Application September 23, 1952, Serial No. 311,049
3 Claims. (Cl. 128—66)



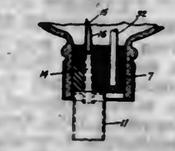
1. A hydrotherapy device comprising in combination a housing the lower portion of which is adapted to be submerged below the surface of a treating liquid in a tank, a liquid pump propeller casing carried by said portion and having a liquid inlet and a liquid outlet, a propeller rotatably mounted in said casing, an air pump casing carried by said portion adjacent said first casing, an air propeller mounted for rotation in said second and eccentric to the latter casing, an air inlet connection attached to said second casing and having a tube adapted to extend above said surface and having a vacuum massaging device connected to the upper end of said air inlet, an air discharge outlet connection on said second casing connected to the liquid inlet of said first casing to cause air to be mixed with the liquid discharged from said first casing, a shaft supported in said housing and carrying both propellers, and means operatively connected to the shaft for rotating said shaft to operate both pumps.

2,730,096
BACK BRACE
Isaac M. Pease, Cincinnati, Ohio, assignor to Surgical Appliance Industries, Inc., Cincinnati, Ohio, a corporation of Ohio
Application November 29, 1952, Serial No. 323,289
2 Claims. (Cl. 128—78)



1. As an article of manufacture, an anatomical support unit adapted to be secured to a support garment to give localized support to the sacro-lumbar region of the back, said unit comprising a brace member which is generally in the shape of an inverted T, said brace member having a pair of stiff uprights disposed in spaced parallel relation and configurated to conform generally to the contours of a person's back in the sacro-lumbar region, a flexible trochanter band secured horizontally to the lower ends of said uprights, a cloth envelope which is generally in the shape of an inverted T, said brace member disposed within said envelope, and said envelope being substantially wider in both the upright portion thereof and the horizontal portion thereof than the corresponding portions of the brace member, whereby marginal areas of the envelope are available at the edges of the brace member to receive lines of stitching for securing the unit to a support garment and for restraining movement of the brace member within the envelope.

2,730,097
INJECTION MECHANISM
Robert Kennedy Cutter, Berkeley, Calif., assignor to Cutter Laboratories, Inc., a corporation of California
Application June 19, 1951, Serial No. 232,285
6 Claims. (Cl. 128—214)



5. In an apparatus of the character described, a rubber stopper piercing element consisting of a tublar conical spike of a material selected from the group consisting of cellulose acetate, cellulose acetate butyrate, a methacrylate polymer, ethyl cellulose and polystyrene cut off at one end along a plane at about 45° to the axis of the spike to provide a piercing end on the spike, said spike having its piercing end slotted from the end thereof axially to an intermediate point along the spike.

2,730,098
DRIP METER
William F. Butler, Oakland, Calif., assignor to Cutter Laboratories, Inc., a corporation of California
Application October 19, 1953, Serial No. 387,007
1 Claim. (Cl. 128—214)



A leak-proof, unitary drip meter consisting of an elongated, transparent, hollow body; said body consisting of a cone and a cover therefor; said cone having a base, an apex and a sidewall disposed symmetrically about the longitudinal axis of the cone; the sidewall of the cone having an included angle between about 5° and about 25°; said cone terminating in an extended tubular portion symmetrically disposed about the longitudinal axis of the cone and providing an outlet from the cone at the apex end of the cone; said outlet being of relatively small cross-section as compared to the cross-section of the cone to provide a liquid trap at the apex end of the cone and maintain a body of liquid above said outlet to cushion the fall of fluid in the cone; said liquid body being of diminishing cross-sectional area as measured in successive planes normal to said axis and at successively lower elevations toward said outlet; said cone tapering gradually from said base to said outlet to provide the cone with exterior and interior surfaces tapering everywhere inwardly toward (*a*) the longitudinal axis of the cone and (*b*) said outlet on said cone; said cover being secured over the base of the cone and having an integral tubular member symmetrically disposed about the longitudinal axis of the cover and extending beyond the cover on each side thereof to provide a liquid inlet to the cone on the outside of the cover and a liquid discharge orifice off which liquid drips and falls unimpeded through the cone into the body of liquid trapped temporarily at the apex end of the cone; said cover tapering gradually inwardly toward the tubular member to provide the cover with exterior and interior surfaces tapering inwardly toward the longitudinal axis of the cover and the liquid inlet in the tubular member;

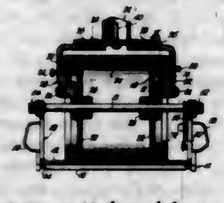
said cover being secured integrally and permanently on the base so that the cover and base are integral, one with the other, and the hollow body so provided is unitary and leak-proof.

2,730,099
HYPODERMIC NEEDLE INJECTOR
Ernest Ruben Sullivan, Bronte, near Sydney, New South Wales, Australia, assignor to Washington H. Soul Pattinson and Company Limited, Sydney, New South Wales, Australia, a corporation of New South Wales
Application August 13, 1954, Serial No. 449,546
Claims priority, application Australia August 28, 1953
4 Claims. (Cl. 128—218)



1. A hypodermic needle injector consisting of a syringe holder from which a nedle projects at one end and the syringe plunger projects from the other end, a carrier on which said syringe holder is slidably mounted, an adjustable stop to regulate the travel of the syringe holder on the carrier, a bell crank pivoted on one end of the carrier, one limb of said bell crank being adapted to bear upon the body where the injection is to be made, the other limb of said bell crank having an offset stop adapted to abut the syringe holder, a spring in the carrier adapted to force the syringe holder to the end of its travel as regulated by said stop when the bell crank stop is moved out of the track of the syring holder by pressure applied to the bell crank foot.

2,730,100
DERMATOME HAVING IMPROVED CONTROL
George J. Hood, Lawrence, Kans.
Application February 23, 1954, Serial No. 411,733
9 Claims. (Cl. 128—305)



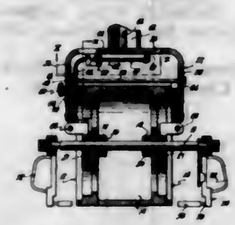
1. In a dermatome, a U-shaped frame provided with a cutter blade bed and a pair of arms; an elongated shaft spanning the distance between the arms; a skin holder; a yoke embracing the holder; a handle secured to the yoke; means rotatably mounting the yoke for swinging movement about the longitudinal axis of the shaft, and relative to the shaft, the frame and the holder; means mounting the holder on the shaft for free rotation relative thereto; and means rigidly securing the shaft to the arms whereby the frame and the shaft reciprocate freely as a unit on said longitudinal axis of the shaft relative to the holder and said yoke and swing freely as a unit about said axis of the shaft, said holder having an arcuate surface substantially concentric with the shaft, said yoke having a pair of legs, there being an elongated pin rigid to each leg of the yoke respectively, and extending in one direction therefrom, each pin extending beyond said surface of the holder for cooperating with the handle in presenting a three-point rest to support the holder for free rotation on said shaft.

2,730,101
TEAT BISTOURY WITH EXPANSIBLE CUTTER KNIVES
Roy D. Hoffman, Bedford, Pa.
Application February 23, 1954, Serial No. 411,935
10 Claims. (Cl. 128—305)



1. A teat bistoury comprising a rigid barrel having a stationary finger grip fixed to one end of the barrel, a rod rotatable in the bore of said barrel and having a head on the leading end providing a shoulder, a cutter having longitudinally spaced ferrules rotatable with said rod and located between said head and the leading end of said barrel, expansible and contractible blades connected at their respective ends to their respective ferrules, a second but movable finger grip, the adjacent end portion of said rod extending through and beyond said movable finger grip, and shoulder means on the last named end portion of the rod, said movable finger grip being interposed between the stationary finger grip and said shoulder means and having end thrust and rod adjusting engagement with said shoulder means.

2,730,102
DERMATOME HAVING FINGER-TIP CONTROL
George J. Hood, Lawrence, Kans.
Application May 28, 1954, Serial No. 433,070
13 Claims. (Cl. 128—305)



1. In a dermatome, a U-shaped frame provided with a cutter blade bed and a pair of arms; an elongated shaft spanning the distance between the arms; a skin holder; a yoke embracing the holder; means rotatably mounting the yoke for swinging movement about the longitudinal axis of the shaft, and relative to the shaft, the frame and the holder; means mounting the holder on the shaft for free rotation relative thereto; and means rigidly securing the shaft to the arms whereby the frame and the shaft reciprocate freely as a unit on said longitudinal axis of the shaft relative to the holder and said yoke and swing freely as a unit about said axis of the shaft, said holder having an arcuate, outermost surface, there being structure on the yoke engageable with the holder for rolling the latter on an area of contact with said outermost surface upon swinging of the yoke when the dermatome is placed in use.

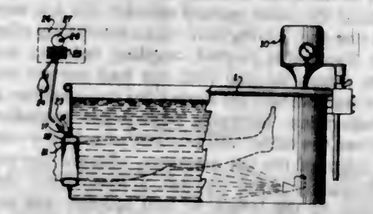
2,730,103
MAGNETOSTRICTIVE CUTTING TOOL
Leo Mackta, Brooklyn, N. Y.
Application November 22, 1954, Serial No. 470,347
10 Claims. (Cl. 128—305)

1. A cutting tool comprising a support, a tool bit having a cutting tip, means connecting said tool bit to said support, and electromagnetic means arranged to vibrate said tool bit in a manner causing said cutting tip to move



in a substantially circular path and causing said bit to describe a substantially conical surface.

2,730,104
HYDROTHERAPY TANK WITH INFLATABLE LIMB-RECEIVING CUFF
Louis B. Newman, Chicago, Ill.
Application February 14, 1952, Serial No. 271,580
7 Claims. (Cl. 128—370)



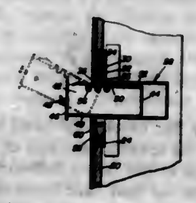
2. A container having an opening for receiving a limb to be extended through the opening into the container, yielding means for sealing the space between the limb and the periphery of the opening against leakage, said yielding means comprising an inflatable ring member secured to said container walls around the opening and adapted to encircle the limb, and means connected to the ring for inflating the ring member into pressure engagement with the limb, said last-mentioned means including means for cyclically varying the pressure in the ring member.

2,730,105
RING FASTENER ASSEMBLIES
Andrew E. Pisciotto, Jr., and Salvatore L. Pisciotto, Lakeview, N. Y.
Application July 24, 1953, Serial No. 370,164
2 Claims. (Cl. 129—8)



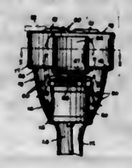
2. A fastener comprising a sleeve having an internal shoulder at its lower extremity, a complementary sleeve attached to the lower extremity of said first sleeve and having an internal shoulder, a lock washer having a lug extending at right angles to its lower surface, said washer being slidably disposed in said complementary sleeve above the internal shoulder thereof, a spring located between and bearing against the shoulder of the first sleeve and the upper surface of the washer so as normally to urge the lug of the washer downwardly against the internal shoulder of the complementary sleeve whereby the washer is tilted, and a wire operating member freely extending through the sleeve and complementary sleeve and attached at one end to the lock washer at a point approximately diametrically opposite its lug and at its other end to a pull ring whereby the lock washer can be lifted against the action of the spring.

2,730,106
ASH RECEIVER
William C. York, Falls Church, Va.
Application March 13, 1953, Serial No. 342,229
1 Claim. (Cl. 131—235)



An ash receiver of the character described comprising: an elongated horizontal housing open at one end, means on the open end of the housing for mounting the same on a supporting wall, a depending lip in the top of the open end portion of the housing, an elongated receptacle slidable into and out of the housing and including a top having an opening therein, a resilient longitudinal bar having one end portion secured to the top of the receptacle and including an undulated free end portion extending therefrom into the opening therein and constituting a cigarette holder, said bar having a cigarette extinguisher on its free end, and a stop on said one end portion of the bar engageable with the lip for positively limiting outward sliding movement of the receptacle, the undulated portion of the bar being engageable with the lip for frictionally securing the receptacle in adjusted position in the housing and for vibrating the bar for clearing the extinguisher when said receptacle is slid into or out of the housing.

2,730,107
ASH RECEIVER
Leo J. De Shetler, Toledo, Ohio
Application November 20, 1953, Serial No. 393,313
8 Claims. (Cl. 131—238)



1. An ash receiver for cigarettes and the like, comprising a body portion having an open top and side walls provided with spaced openings therein, means for supporting a cigarette with its lighted end in close relation to the open top of said body portion, and means carried along the bottom of said body portion for creating a downward flow of air through the open top of the body portion and outwardly through the spaced openings in the side walls thereof.

2,730,108
MULTIPURPOSE KEY FOR OPENING TOBACCO CANS
Foncie A. Hubbard, Danville, Va.
Application May 22, 1952, Serial No. 289,317
1 Claim. (Cl. 131—247)

For use in conjunction with a flat bottomed smoking tobacco can wherein said bottom is elevated and forms

a pocket; a device for tamping tobacco in the bowl of a smoking pipe comprising a linearly straight shank having a severable attaching tab at one end adapted to be welded to the bottom of the stated tobacco can, that portion of the shank adjacent said tab being flat and apertured, the other end of said shank being cylindrical and gradually tapered in cross-section and then formed into a spiral having tightly wound contacting coils in concentric relationship and with all of said coils in a common plane and providing a



substantially circular flat head, said head being normally in the same plane as the longitudinal axis of said shank and the junctional portion of the shank between the head and shank being bendable so that said head may be readily bent from said common plane position to assume a position at right angles to the shank with the shank joining the outermost coil of the head, whereupon the head then serves as a tamp which is adapted to be fitted into a tobacco bowl in a smoking pipe.

2,730,109
HAIR CURLING APPLIANCES
Annie Anthony Coakley and June Esther Louise Coakley, London, England
Application December 1, 1954, Serial No. 472,397
3 Claims. (Cl. 132—41)



1. A hair-curler comprising a body including a finger portion to receive hair wound round it during the formation of a curl and a slide member slidably secured thereon and movable longitudinally of the finger portion between a withdrawn position remote from the finger portion and a position of use adjacent the finger portion for the formation of a curl of increased size about both the finger portion and slide member, a curl-securing member, for removal with the formed curl, releasably mounted on the body adjacent the finger portion and a spring blade secured to the body and lying normally along and against the finger portion, said blade being bendable manually away from the finger portion for the insertion of the end of a hank of hair to be gripped between the blade and finger portion.

2,730,110
APPARATUS FOR PERMANENTLY WAVING HAIR ON THE HUMAN HEAD
Frank J. Hale, New York, N. Y.
Application January 6, 1951, Serial No. 204,733
4 Claims. (Cl. 132—42)



1. A short, stiff, thick, unidirectionally tapered spindle, the wide end of said spindle having a diameter from three-eighths to three-quarters of an inch and the narrow end of spindle having a diameter from three-sixteenths to nine-sixteenths of an inch, the taper being in the order of three-thirty-seconds of an inch per linear inch of spindle, said spindle having a length no greater than two inches, whereby a tress wound Croquignole style on the spindle can after being permanently waved thereon and while still wet be compressed axially into the form of a ringlet and slipped off the spindle, the external surface of the spindle being longitudinally scalloped to provide a series of shallow annular depressions connected by shallow annular ridges, the diameters of said ridges being progressively slightly smaller from the wide to the narrow end of the spindle.

2,730,111
CURL HOLDING CLIP
Nathan L. Solomon, Englewood, N. J.
Application September 29, 1950, Serial No. 187,395
1 Claim. (Cl. 132—46)



A curl holding clip, comprising a pair of elongated jaw members in the form of a flat one thickness thin strips of substantially the same general contour, the jaw members, adjacent one end, having half-round interfitting offset wall portions forming a pivotal coupling between said jaw members, means integral with one wall portion engaging the other wall portion for keying the jaw members against lateral separation, diverging fingerpieces extending outwardly from the offset wall portions of said jaw members, the side edges of the jaw members, adjacent the wall portions, having elongated recesses, a wide elastic ring of a width equal to the length of said recesses and arranged therein flush with the side edges of said jaw members, said ring yieldably supporting the jaw members in abutting engagement, outer side edges of the ring being flush with the corresponding edges of the jaw members, interfitting means spaced longitudinally of the jaw members intermediate the ends thereof for engaging a curl supported therebetween in retaining the clip against displacement from the curl, and the free end of one jaw member having an offset portion overlying the corresponding end of the other jaw member.

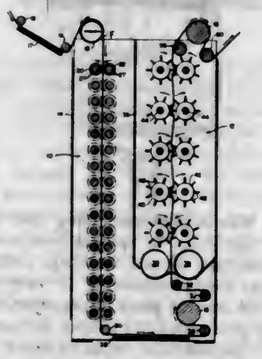
2,730,112
LIPSTICK AND TISSUE HOLDERS
Martha K. Cramer, New York, N. Y.
Application June 22, 1953, Serial No. 363,047
2 Claims. (Cl. 132—79)



1. A lipstick and tissue holder comprising an actuator barrel provided with an annular thrust surface, a stick carrier slidable within said actuator barrel, an outer tubular case in which said actuator barrel is rotatable, a housing having an inner tubular wall portion connected to and encompassing said outer tubular case and an outer tubular wall portion provided with a longitudinal slot as well as a bottom portion connecting the inner wall portion to said outer wall portion and being adjacent the annular thrust surface of said actuator barrel and being rotatable thereon, a longitudinal tissue sheet intermediate the outer and inner wall portions of said housing extending through

the slot in said outer wall portion, and a removable cap member constructed and arranged for encompassing said housing fitting over the outer wall portion thereof and having a longitudinal slot in registering alignment with the slot in the outer wall portion of said housing.

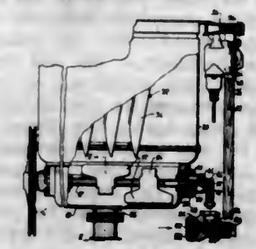
2,730,113
FABRIC CARBON DUSTER AND METHOD
Wilfred N. Hadley, Springfield, Vt., assignor to Parks & Woolson Machine Company, Springfield, Vt., a corporation of Vermont
Application February 1, 1954, Serial No. 407,315
16 Claims. (Cl. 134—9)



1. A continuous method of treating strip fabric to remove charred vegetable matter therefrom, which consists in feeding the fabric in open width through a char breaking field, and continuously penetrating the fabric in closely disposed points thereover and therealong in said field to engage and break up the char in the fabric as the fabric passes through the field.

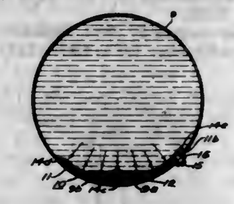
8. In a machine for removing vegetable char from a fabric strip, the combination of a plurality of pairs of parallel cylindrical rolls having fabric penetrating needles projecting outwardly from their peripheries, the rolls of each pair being spaced apart a distance to receive a fabric strip therebetween and penetrate both faces of the fabric and the pairs being aligned to receive the fabric consecutively therethrough, means mounting the rolls for free rotation, and means for drawing fabric through the rolls in a manner rotating the rolls and penetrating the fabric.

2,730,114
AUTOMATIC DISH-WASHING MACHINE AND CONTROL MECHANISM
Sven Börje Fredrik Carlstedt, Stockholm, Sweden
Application March 21, 1951, Serial No. 216,683
Claims priority, application Sweden March 23, 1950
15 Claims. (Cl. 134—57)



8. In an automatic dishwashing machine, a container for receiving articles to be washed, a relatively large opening in the bottom of said container, a troughlike casing disposed below said container and communicating therewith through said opening, a shaft rotatably mounted in said casing and extending longitudinally thereof, impellers fixed to said shaft, a drain port in the bottom of said casing, a fluid supply conduit connected to said casing, a shut-off valve in said conduit, means for opening said valve upon rotation of said shaft and for shutting said valve when said shaft is at rest, electric drive means for said shaft whereby upon rotation thereof said valve will open to supply liquid to said casing, said impellers operating to circulate said liquid into contact with said articles to wash the same, the movement of said liquid by said drain port preventing discharge therethrough and upon stopping of said shaft said valve will close and said liquid will discharge through said drain port, control means for said machine including a switch, timing means for actuating said switch, means for setting said timing means to close said switch and energize said drive means, said timing means operating to open said switch and deenergize said drive means thereby completing the washing cycle and permitting liquid to drain from said container, said timing means again closing said switch to energize said drive means and start a rinsing cycle, said rinsing cycle continuing until said timing means again opens said switch to again deenergize said drive means thus completing the washing operation.

2,730,115
RELIEF VALVE
Gustav A. Hempel, Pittsburgh, Pa., assignor to McDowell Manufacturing Company, a corporation of Pennsylvania
Application April 16, 1953, Serial No. 349,219
9 Claims. (Cl. 137—107)

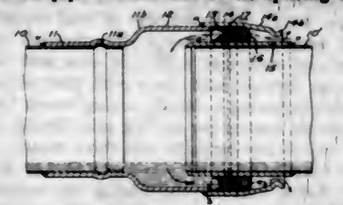


1. An improved relief valve to be operatively mounted across the curvature of and over a vent hole in a wall portion of a fluid-carrying wall member of curvilinear section which comprises, a valve body of gasket material having a seating shoulder to engage the wall member about the vent hole therein, a flexible part carried by said body and extending therealong, a reinforcing portion backing said flexible part behind said seating shoulder and spaced inwardly from opposite longitudinal ends of said flexible part to define transverse lines of flexure across said flexible part outwardly from opposite longitudinal ends of said reinforcing portion, means securing a longitudinal end portion of said body to the wall member and positioning said body to extend across the curvature of the wall member and over the vent hole therein, and said flexible part normally maintaining said seating shoulder out of closing-off engagement with the wall member and being flexed along the lines of flexure by the application of fluid pressure to move said seating shoulder into closing-off engagement with the wall member.

2,730,116
GASKET VALVE
Clyde E. Rickard, Pittsburgh, Pa., assignor to McDowell Manufacturing Company, Millvale, Pa., a corporation of Pennsylvania
Application April 15, 1954, Serial No. 423,295
9 Claims. (Cl. 137—107)

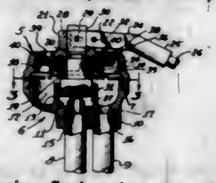
1. In a valve coupling for a joint between a housing body member and an adjacent end portion of a separable pipe section that when coupled together define a supply line to which liquid is to be supplied under positive line

pressure, wherein the housing body member receives the adjacent end portion of the pipe section therein and defines an annular joint spacing therewith, and wherein latching means is carried by said coupling body to detachably engage and hold the adjacent end portion of the pipe section in position with respect to said body: a continuous sealing gasket to be operatively positioned between the housing body member and the adjacent end portion of the pipe section and in the spacing to seal off



an inner portion of the joint from an outer portion of the joint when liquid is supplied to the supply line under line pressure, said gasket having a heel portion therealong defining a fluid passageway normally open to the inner and outer portions of the joint when line pressure is relieved, a backing portion for said heel portion, and said heel portion being pressed against said backing portion when line pressure is applied to positively close-off said passageway.

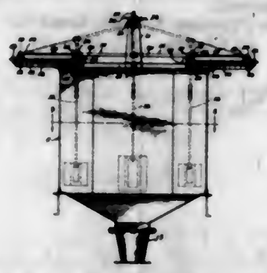
2,730,117
ANTISIPHONING STRUCTURE FOR BALL COCKS
Bennett Svirsky, Los Angeles, Calif., assignor, by direct and mesne assignments, to Free-Gold Enterprises, Inc., Los Angeles, Calif.
Application August 5, 1952, Serial No. 302,761
2 Claims. (Cl. 137—217)



1. An antisiphoning flush valve comprising upper and lower cupped mating members forming a chamber, a water supply opening and a hush pipe opening in the lower member, a first sleeve extending inwardly of the chamber from the lower member and circumscribing the water supply opening, a valve seat in the water supply opening housed within the first sleeve, a second sleeve of smaller diameter than the first sleeve extending from the upper member into the chamber concentrically with the first sleeve and defining a first opening in the upper member, a valve stem having a head member reciprocable within the first sleeve, and of larger diameter than the second sleeve whereby the second sleeve forms a limit stop on the displacement of the head member, and a shank member extending from the head member through the second sleeve and said first opening for engagement externally of the chamber with valve actuating means, a plurality of auxiliary holes in the upper member and annular washer means mounted around the upper sleeve to slide thereon and close the auxiliary holes under the influence of an incoming water stream when the valve stem is in open position.

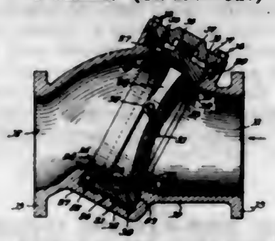
2,730,118
STOCK METERING AND PROPORTIONING APPARATUS
Ben Cowan, Montreal, Quebec, Canada
Application April 6, 1953, Serial No. 346,890
11 Claims. (Cl. 137—266)

1. Stock metering and proportioning apparatus comprising a mixing compartment, a plurality of stock storage compartments to which different types of stock are supplied and from which said stocks are delivered to said mixing compartment in predetermined amounts and proportions, each of said stock storage compartments being provided with overflow means and with stock inlet and outlet orifices located below the level of overflow, stock metering and proportioning gates controlling said outlet orifices, and operable to vary both the total quantity of stock discharged through each outlet orifice and the proportions in which the different types of stocks are delivered through said orifices to said mixing compartment,



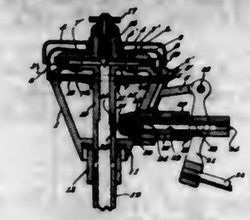
gate operating means interconnecting said gates and operable to shift the latter to various positions to vary the total effective opening of said discharge orifices, said gate operating means being adjustable to vary the ratios of movement of the several gates in response to a given operation of said gate operating means to thereby vary the ratios at which the different types of stock are delivered from the storage compartments to the mixing compartment, and means for supplying stock to said stock storage compartment to maintain a continuous overflow therefrom.

2,730,119
VALVE WITH RENEWABLE CAGE
Kurt B. Brodtschneider, Chicago, Ill., assignor to Crane Co., Chicago, Ill., a corporation of Illinois
Application September 6, 1950, Serial No. 183,416
5 Claims. (Cl. 137—327)



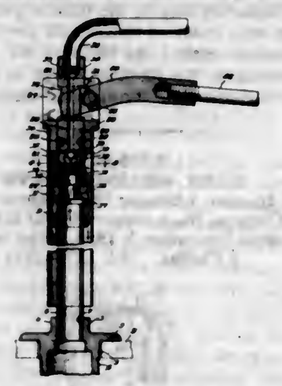
3. In a valve construction the combination of a casing, a closure member within the casing, a cage member comprising telescoped members adjustably disposed within said casing and substantially containing said closure member at least in the closed position of the valve, the said cage being endwise expandible within the said casing to sealingly engage opposed sides of the casing and defining a fluid passage therethrough, the said closure member cooperating with a valve seat formed on one of the telescopd members to control the flow of fluid through the valve, the said casing having side disposed port means for removing the said cage member and said closure member upon adjustment of the telescoped members to break engagement with said casing, at least one of said telescoped members having means for removal of said telescoped members transversely through said side disposed port means, the said port means in the casing being in communication with the interior of the said casing within which the said cage member is disposed, the said removal means being transversely disposed on the outer one of the telescoped members.

2,730,120
FLUSH TANK INLET CONTROL VALVE
Louis Sirotek, Chicago, Ill.
Application July 7, 1954, Serial No. 441,788
8 Claims. (Cl. 137—411)



1. A water inlet control valve, comprising a chambered housing, a head on the housing above the chamber having ducts therein opening onto one side thereof and vertical ways formed in and through the same separate from the ducts, an inlet nipple extended from the head downwardly through and beyond the chamber and the housing and communicating with the ducts, a diaphragm valve between the housing chamber and the open ends of the ducts seatable, at times, thereover and at other times, removable therefrom, a valve sleeve on the housing opening into said chamber, a hollow valve stem slidable in said sleeve, a valve carried by the stem seatable in the sleeve, said nipple having an escape port therein communicating with the housing chamber, means on the stem operable with the sliding thereof in one direction to close said escape port and in another direction to open the escape port, and means connected to the stem for imparting sliding motion thereto in either of two directions.

2,730,121
BALLCOCKS
George E. Hansen, Elmwood Park, Ill., assignor to Crane Co., Chicago, Ill., a corporation of Illinois
Application August 7, 1951, Serial No. 240,706
2 Claims. (Cl. 137—437)



1. In a ballcock, a water inlet pipe, a transversely ported casing mounted thereon, a vertically extending tube depending from said casing and surrounding said inlet pipe and being spaced therefrom to provide a water outlet chamber, a plunger type of closure member reciprocally movable in said casing and snugly received therein except for an annular clearance adjacent the transverse ports of said casing, the said plunger closure member also being transversely ported adjacent the annular clearance between the plunger closure member and casing, a central port in the plunger closure member communicating with the transversely ported portion of said closure member, a refill tube connected to said central port, pivotally mounted means on the casing engaging the said plunger closure member to move the latter member reciprocally, and means provided by a lower peripheral portion of said casing immediately below its transversely ported portion between said tube and the inlet pipe to restrict flow into the tank and increase pressure of flow through the central port of the plunger closure member.

2,730,122
WATER CONTROL FOR CLOSET TANKS
Bennett Svirsky, Los Angeles, Calif., assignor, by direct and mesne assignments, to Free-Gold Enterprises, Inc., Los Angeles, Calif.
Application December 24, 1951, Serial No. 263,043
4 Claims. (Cl. 137—437)

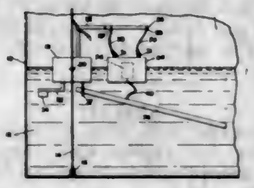


1. In a ball cock valve structure, a thick-walled inlet pipe upstanding from the floor of a toilet tank, the internal diameter of said pipe being abruptly enlarged in a downwardly spaced relation to the upper end of the pipe thus providing an upwardly facing annular ledge at the lower end of said diametrical enlargement, there being outlets through the pipe superjacent to said ledge, and an exterior slightly undercut zone surrounding the part of the pipe which is provided with said outlet means, the part of the pipe superjacent to said zone being exteriorly screwthreaded, a cap having an internally screwthreaded portion screwed onto said exteriorly screwthreaded pipe portion, said cap having a skirt portion with a somewhat greater internal diameter than the part of said pipe subjacent to said undercut zone, said skirt portion surrounding said zone and pipe portion subjacent thereto thus providing an annular, downwardly opening outlet passage the mouth of which is located below said zone, and a valve having a cylindrical body portion terminating in a conical portion having a rounded nose carried by said cap, said conical portion adapted to be inserted into the opening through said annular ledge to close said opening, said cap consisting of a double inverted ring having an inverted annular well with an internal wall which forms a guide for said cylindrical body portion of the valve, said screwthreaded portion of said cap terminating short of the closed end of said inverted well and the upper end portion of said pipe being unthreaded and occupying said unthreaded portion of said well when said cap is fully screwed on, thus to lock said cap and pipe together to maintain the concentricity of said skirt portion of the cap in relation to said pipe.

2,730,123
TANK FLOAT
Harold A. Quist, Swarthmore, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Application March 17, 1953, Serial No. 342,864
2 Claims. (Cl. 137—452)

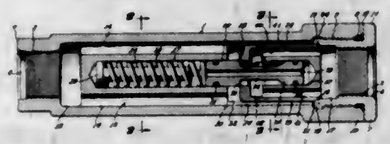
1. A float system for use in sensing liquid levels in storage tanks comprising, in combination with a liquid level measuring element, a pair of spaced apart floats, namely, a guided float and an indicating float, means connecting the latter float with the measuring element, substantially vertically extending guides engaging the guided

float and allowing it to move up and down with changes in vertical liquid level while limiting its horizontal movement, and means connecting the two floats including a



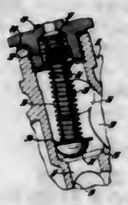
flexible connection permitting movement of the indicating float, both vertically and horizontally, independent of the guided float.

2,730,124
VALVE
J. D. Buchanan, Burbank, Calif.
Application January 25, 1952, Serial No. 268,174
11 Claims. (Cl. 137—493.1)



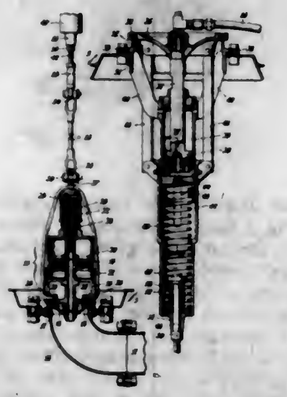
1. A valve comprising a casing having a through passage, said casing having a valve seat of a certain diameter for said passage, a hollow valve member having a through passage, said valve member having one end having a valve head for said seat, said valve member having an opposite end having thereon a valve seat of smaller diameter for said passage through said valve member, said casing having a cylinder larger in diameter than said seat on said valve member, and a piston fitting said cylinder, said piston having a valve head for said seat on said valve member, said casing passage having an end portion communicating with said valve head of said hollow valve member, said casing passage having an intermediate portion communicating with said piston and its valve head, said piston having a spring urging both of said valve heads to their respective seats.

2,730,125
FILTER VALVE WITH DEFLECTOR
Russell S. Thatcher and Roy L. Bowers, Flint, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 16, 1952, Serial No. 282,662
8 Claims. (Cl. 137—543.21)



2. In a relief valve, a valve body having a passage, a substantially symmetrical valve seat in said passage, a valve head positioned within said passage and cooperating with said valve seat, said valve head being mounted for axial and transverse movement, a spring resiliently urging said valve head against said valve seat to close said passage, and said valve head having an eccentric portion arranged at the fluid discharge side of said seat to reduce the flow on one side of said passage to exert a transverse force on the valve to damp vibration.

2,730,126
FILLING CONTROL MECHANISM FOR TANK VEHICLES
James Andrew Jensen, Haverford, Pa., assignor to Philadelphia Valve Company, Philadelphia, Pa., a firm
Application June 30, 1954, Serial No. 440,522
6 Claims. (Cl. 137—587)



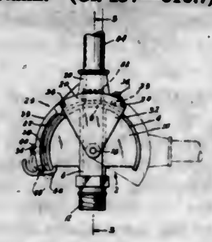
1. In filling control mechanism for a delivery vehicle tank, a valve having a spring-loaded lift closure element to cooperate with an inlet-drain port at the bottom of the tank; a lift cover for a coaxial vent opening at the top of the tank; actuating means including a vertically-arranged cylinder fixedly supported within the tank in coaxial alignment with the inlet port and the vent opening, and a piston on a pendent tubular rod extension of the vent cover disposed within the cylinder; a suspended cup-section sleeve connected to the vent cover and engaged upwardly about the cylinder; a helical spring within the sleeve in compression between the bottom of the sleeve and the bottom of the cylinder for normally maintaining the vent cover closed; a linkage operatively connecting the sleeve with the closure element of the inlet-drain valve; and manually operable means for admitting pressure fluid into the cylinder by way of the tubular piston rod extension of the vent cover to cause said cover to be raised to open position against the force of the spring and the closure element of the fill-drain valve to be lifted from its seat at the same time through the linkage.

2,730,127
TANK FILLING VALVE
George E. Hansen, Chicago, Ill., assignor to Crane Co., Chicago, Ill., a corporation of Illinois
Application November 3, 1950, Serial No. 193,955
2 Claims. (Cl. 137—591)



1. A tank filling valve comprising a casing of substantially inverted U-construction, one leg of the U-casing comprising the inlet and the other leg comprising the outlet of the valve, a sleeve-like closure member reciprocally movable relative to the outlet leg and positioned at a lower end limit thereof, actuating means for the said closure member, a hollow seat for the said closure member cooperating with an end portion of the outlet leg of the said casing, the said actuating means including a hollow sleeve member surrounding the casing portion which connects the legs of the U-construction and being rotatable about said portion to actuate the said closure member, the said closure member including a hollow cylindrical portion surrounding an outer surface of the leg of the outlet of the casing adjacent said hollow seat and being telescopically movable over the said hollow seat to interrupt fluid flow therepast upon predetermined reciprocal movement of said closure member, the said hollow cylindrical portion having pivotal means hingedly cooperating with the hollow sleeve member of said actuating means to reciprocate said cylindrical portion of the closure member upon rotation of said hollow sleeve member of the actuating means.

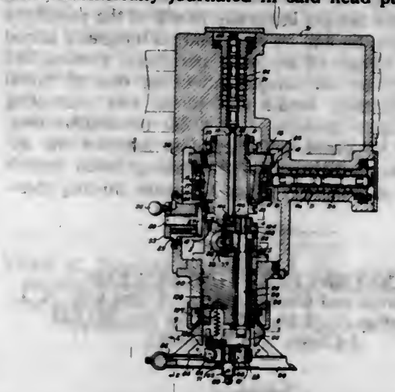
2,730,128
PIVOTED VALVE UNIT FOR OVERHEAD SPRINKLERS
Frank C. Borst, Oroville, Wash.
Application April 6, 1951, Serial No. 219,731
1 Claim. (Cl. 137—616.7)



A pivoted valve unit for overhead sprinklers consisting of a sector-shaped member having a rim formed on the arcuate side thereof and provided with a perforation intermediate its ends and having a tubular portion extending through said member and terminating at said perforation, a flanged pipe having a tubular portion and a flange portion which is curved at a slightly larger radius than the rim of said sector-shaped member and is slidable thereupon, a sleeve member slidably mounted on the tubular portion of said flanged pipe and having a flange portion extending over the outer side of the flange of said flanged pipe in an arc of slightly greater radius than that of the flange, opposed lateral sector portions secured to said sleeve member and pivotally mounted on a pair of pins laterally extending from opposite sides of said sector-shaped member, a packing ring interposed between the tubular portion of said flanged pipe and that section of said sleeve member into which said last-mentioned tubular portion is extended, locking means provided at one end of the flange portion of said sleeve member being constructed and arranged for releasably engaging one end of the rim of said sector-shaped member, a set screw screwed through the flange portion of said sleeve member, and resilient means interposed between said set screw and said flanged pipe for forcing the flanged pipe against the circumference of the rim of said sector-shaped member, whereby upon release of the locking means said sleeve member may be pivoted to either an open position in which a fluid flow passage is established through the tubular portions and sleeve member or a closed position in which the pipe flange covers said perforation and arrests flow therethrough.

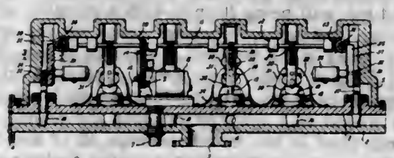
2,730,129
TRACER CONTROL MECHANISM
Albert H. Dall, Cincinnati, and Hans Fritschi, Amberley Village, Ohio, assignors to The Cincinnati Milling Machine Co., Cincinnati, Ohio, a corporation of Ohio
Application May 20, 1952, Serial No. 288,806
7 Claims. (Cl. 137—622)

1. A tracer mechanism comprising a housing, a rotatable tracer head journaled in said housing, fluid operable means connected for rotation of said head, a tracer valve mounted in said head having a source of pressure connected thereto, said valve having a plunger movable from a neutral position to connect said source of pressure to said fluid operable means, and pattern operable means to control the shifting of said plunger including a rock shaft eccentrically journaled in said head parallel to the



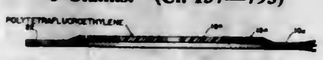
axis of said head, a crank arm operatively connecting said rock shaft to said plunger, a second crank arm attached to said rock shaft, a tracer finger attached to said second crank arm in offset relation to the axis of the rock shaft whereby lateral movement of the tracer finger will rock said shaft to open said valve and cause rotation of the head.

2,730,130
MULTIPLE VALVE
Don Paul Guldry, Houston, Tex.
Application January 14, 1955, Serial No. 481,902
9 Claims. (Cl. 137—635)



1. In a multiple valve, a manifold housing, an inlet opening into said housing and a plurality of outlet openings in said housing, a valve actuating mechanism housing on said manifold, valves controlling the outlet openings in said manifold, valve stems extending from said valves through said manifold housing into said actuating mechanism housing, a motor, means in connection with said motor for selectively raising and lowering said valve stems, and means for releasably maintaining said valve stems in open or closed position.

2,730,131
FLEXIBLE DIAPHRAGM FOR FUEL PUMPS AND THE LIKE AND METHOD OF FORMING THE SAME
Howard L. Asp, Evanston, and Paul T. Haake, Park Ridge, Ill., assignors to Crane Packing Company, Chicago, Ill., a corporation of Illinois
Application January 2, 1953, Serial No. 329,382
5 Claims. (Cl. 137—793)



1. A flexible pump diaphragm of the character described comprising a unitary disc-like member of appropriate configuration and of a homogeneous flexible material including a solid unbroken central hub portion

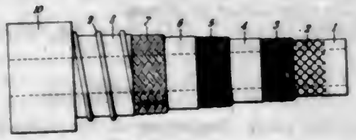
of predetermined uniform thickness, a solid unbroken continuous outer peripheral portion of the same predetermined uniform thickness, and an intermediate portion connecting said hub and peripheral portions, said intermediate portion comprising a plurality of layers of the homogeneous flexible material, each layer being in the form of an unbroken continuous flexible ring having its inner margin integrally joined to the periphery of said hub portion and its outer margin integrally joined to the inner margin of the outer peripheral portion, the opposite faces of said diaphragm being free of radial and circumferential seams and joints and presenting smooth unbroken surfaces, and a flat continuous ring-like member of metal foil interposed between the adjacent superimposed layers of the homogeneous flexible material and substantially filling the space existing therebetween.

2,730,132
SILENCERS FOR FLUID SYSTEMS
Nathan Marcus and George Marcus, Union City, N. J.
Application April 24, 1952, Serial No. 284,028
1 Claim. (Cl. 138—26)



A fluid silencer comprising a chamber having a top flat annular wall and an inwardly tapering conical wall extending downwardly from said top wall, and a neck extending downwardly from the lower end of the conical wall, said top wall being formed with a plurality of sets of openings, said sets of openings being equally spaced from the center of the top wall, a plurality of sets of coil tubes of resilient metal, there being a plurality of said coil tubes in each set, the coil tubes in each set being helically wound in a common cylinder and having their lower ends fitted in one set of openings, all of said tubes having their upper ends sealed, a casing enclosing said tubes comprising a cylindrical member having its lower end fixed to the periphery of the top wall of the chamber, and a top cover fixed to the upper end of the cylindrical wall and spaced above the upper end of said tubes, the various sets of tubes forming cylinders of different diameters telescoping one within the other.

2,730,133
REINFORCED FIREPROOF HOSE
Wilfrid Holland-Bowyer, Sale, and James Henry Woodward, Manchester, England, assignors to Dunlop Rubber Company Limited, London, England, a British company
Application February 2, 1952, Serial No. 269,656
Claims priority, application Great Britain February 2, 1951
4 Claims. (Cl. 138—56)



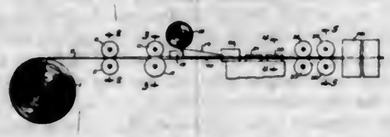
1. A fire-resistant hose which comprises a lining tube of rubber, a rubber impregnated covering of textile fabric embedded in the outer surface of said lining tube, two coaxial spaced reinforcements of braided metal wire on said textile fabric, a tubular layer of rubber separating said reinforcements, a covering of rubber on said braided metal wire, a covering of braided asbestos on said covering of rubber, a metal helix enclosing said braided asbestos covering, a layer of fire-resistant rubber between said helix and said braided asbestos covering and an outer covering of synthetic rubber enclosing said wire helix.

2,730,134
CASING FOR PUSH-PULL CABLE ASSEMBLY
John F. Morse, Hudson, Ohio
Application October 6, 1950, Serial No. 188,809
2 Claims. (Cl. 138—57)



1. A flexible casing for the core of a push-pull cable assembly having an inner reinforcing member to withstand high compression loads without deformation and an outer reinforcing member to withstand high tensile loads without elongating, said inner reinforcing member consisting of a flat wire ribbon tightly wrapped in a helix with the edges of the turns of the ribbon in contact, the said edges being rounded with the common tangent at each contact perpendicular to the axis of the casing to permit the casing to bend without relative transverse displacement of the turns and the inner surface of the helix forming a constant diameter sliding bearing for the core, a sheath of rubber surrounding the inner reinforcing member, said outer reinforcing member consisting of a plurality of wires spirally wrapped about the casing in relatively long spirals and having a permanent set in spiral form, said outer wires being partially embedded in the rubber sheath, the wires forming the outer member being spaced apart to permit them to be further embedded in the rubber sheath.

2,730,135
TUBING OR METHOD OF MAKING TUBING
Arthur M. Wallace, Detroit, Mich., assignor to Bundy Tubing Company, Detroit, Mich., a corporation of Michigan
Application September 10, 1951, Serial No. 245,896
5 Claims. (Cl. 138—74)

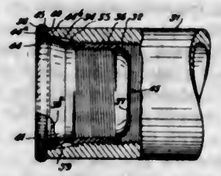


1. The method of making tubing which comprises, placing a double scarfed formation on opposite edges of a strip of metal stock, with each scarfed edge having angularly disposed surfaces and an intermediate surface substantially in the plane of the strip stock, fashioning the strip substantially into hollow cross sectional form to thus provide the major portion of the tubing, placing a carrier strip of metal stock, having a coating of bonding metal on opposite faces thereof, between the opposite scarfed edges of the first named strip, and with the coated faces in interfacial relationship with the scarfed faces of the opposite edges of the first named strip, the bonding metal being different from the metal of the strips, subjecting the said edges and the carrier strip to pressure to constrict the central part of the carrier strip

and tightly engage the interfaces, subjecting the tubing to heat to melt the bonding metal and then cooling the tubing to solidify the bonding metal and unite the interfaces.

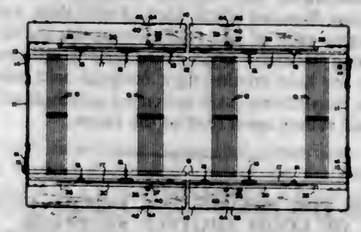
4. A tubing comprising, a strip of metal stock fashioned substantially into hollow cross sectional form with its edges spaced apart from each other, said strip constituting substantially the entire hollow cross sectional form, a second strip of metal stock, the width of which is narrow relative to the first strip, the second strip being disposed between the edges of the first strip with the width dimension of the second strip extending circumferentially of the hollow cross sectional form and the thickness dimension of the second strip extending radially of the hollow cross sectional form, one edge of the first strip overlapping the second strip on the outside and in interfacial relationship, the other edge of first strip overlapping the second strip on the inside and in interfacial relationship, outer and inner side surfaces of the second strip being exposed thereby forming outside and inside surface portions of the tubular form, the second strip and the overlapping edges of the first strip having a combined thickness substantially equal to the thickness of the first strip, whereby the tubing has substantially smooth inside and outside surfaces, and connections between the interfaces of the two strips comprised of brazing or soldering metal different from the metal of the said two strips of stock.

2,730,136
THREAD PROTECTORS
Stanley L. Phillips, Parkview Village, Ohio, assignor to Wedge Protectors, Inc., Cleveland, Ohio, a corporation of Ohio
Original application May 6, 1950, Serial No. 160,495, now Patent No. 2,627,877, dated February 10, 1955. Divided and this application November 1, 1952, Serial No. 318,262
1 Claim. (Cl. 138—96)



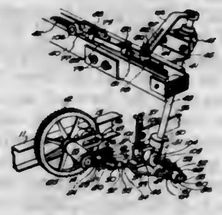
A thread protector for application to a hollow member having a helical thread on the inside thereof and also having an internal annular chamfer at its outer end comprising, a one-piece sheet metal sleeve having a group of thread elements thereon and engageable with said helical thread for retaining the protector in connected relation with said member, the sheet metal of the extreme outer end of said sleeve being deflected so as to define a radially offset hollow annular rim formed by continuously connected annular wall portions consisting of axially spaced first and second substantially radially extending flange portions and an axially extending portion connecting said second flange portion with said first flange portion, said hollow annular rim forming a stiffening means and an external annular end seat on the outer end of said sleeve and being of a radial width such that the outer periphery of said rim projects beyond the outer periphery of said member, said first flange portion forming an end wall on said protector at the outer end thereof and said second flange portion forming said external annular end seat on said protector for seating engagement with the end face of said member, said second flange portion being an inturned annular flange portion terminating in a free annular edge presented toward and lying adjacent to the main wall of said sleeve at a point between said first flange portion and said thread elements such that said free annular edge is relatively shielded from injurious personal contact therewith, the sheet metal of said sleeve also defining an axially inwardly converging external annular taper on said protector adjacent said annular rim and adapted for seating engagement against the internal annular chamfer of said member, said free annular edge being spaced from said main wall of said sleeve by an intervening annular slot, and a packing retained in said hollow annular rim and having an annular portion projecting from said hollow rim through said annular slot for continuous annular sealing engagement with the end of said member adjacent the outer end of said chamfer.

2,730,137
HEDDLE FRAME
Victor C. Hassold, Philadelphia, Pa., assignor to Steel Heddle Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania
Application May 4, 1953, Serial No. 352,664
8 Claims. (Cl. 139—92)



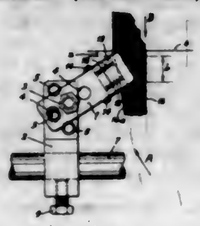
1. A heddle frame comprising top and bottom rails, end struts connecting the ends of said rails, heddle bars extending from end to end in the frame, heddles mounted on said heddle bars, slide hooks for supporting said heddle bars intermediate their ends, auxiliary rods upon which said hooks are slidably mounted, brackets slidably engaging said auxiliary rods for supporting the same intermediate the ends thereof, tracks on which said brackets are slidably mounted, said tracks being mounted on the inner edges of the respective rails.

2,730,138
SHUTTLE MOTION
Antonio Schiappa, Pawtucket, R. I.
Application June 22, 1955, Serial No. 517,111
6 Claims. (Cl. 139—138)



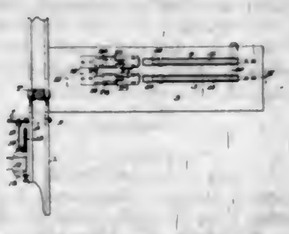
1. In a narrow fabric loom having a crown gear, and a rocking lay, a rack rod reciprocatingly mounted in said lay, a crank drive driven by said crown gear, a bracket secured to said rocking lay, a swivel bearing mounted in said bracket, a substantially vertical shaft mounted in said swivel bracket, means connecting said vertical shaft with said rack rod and a second means connecting said vertical shaft with said crank drive whereby said crank drive reciprocates said rack rod through said vertical shaft and said rocking lay through said bracket and swivel bearing rocks said vertical shaft.

2,730,139
TEMPLE FOR LOOMS
Theodor Ryffel, Meilen, Switzerland
Application February 1, 1954, Serial No. 407,528
Claims priority, application Switzerland January 31, 1953
6 Claims. (Cl. 139—294)



1. A temple for a loom having a beam; said temple comprising a pair of spaced sets for engaging the selvedges of a fabric, respectively, each of said sets including a holder operatively connected with said beam and forming an acute angle with the fabric in moving direction of the latter, each of said holders being provided with a slot having converging slot surfaces defining a slot opening, roller means disposed within each of said slots, and spring means urging each of said roller means toward its respective opening, whereby when said fabric is stationary said selvedges are held friction-tight between said rollers and said slots, respectively, said selvedges automatically disengaging said rollers upon feed of the fabric.

2,730,140
MEANS FOR PREVENTING INJURY IN CASE OF LOOM SHUTTLE STOPPAGE
Frank A. Lovshin, Shelton, Andrew J. Dufourd, Stratford, and Russell T. Korolyshun, Derby, Conn., assignors to Sidney Blumenthal & Co., Inc., New York, N. Y., a corporation of New York
Application October 10, 1950, Serial No. 189,348
4 Claims. (Cl. 139—341)



1. In a double shuttle loom having upper and lower shuttle boxes at each side thereof for cooperation with upper and lower shuttles, means for stopping the forward motion of the lay when either shuttle fails properly to enter either of its boxes, said means comprising, complementary members on the lay and the loom frame normally in position to contact on the forward motion of the lay, and electric means for preventing such contact including an electrically energizable element operatively connected to at least one of said members, a switch on each of said shuttle boxes arranged to be operated when its shuttle properly enters each of its boxes, and an electric connection between said element and all of said switches.

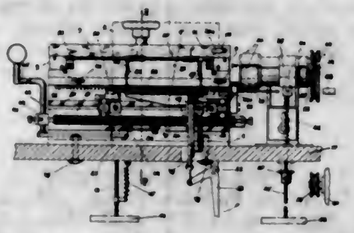
2,730,141
METHOD OF MAKING STRUCTURAL FORM TIES
Robert Clyde Gates, Denver, Colo., assignor to Gates & Sons, Inc., Denver, Colo., a corporation of Colorado
Application March 28, 1952, Serial No. 279,073
2 Claims. (Cl. 140—73)

1. The method of making a structural form tie from a straight wire of a length approximately three times the length of the finished tie which comprises the following steps performed in the order given; bending the ends of the wire into the forms of hooks whose ends extend across the line of the wire; folding the wire simultaneously about two points which divide the original length of the wire into three equal parts thus forming a bight at each end,



the reversely bent portions that terminate in the hooks crossing each other, thereby positioning the hooks in the bights, the planes of the hooks being parallel and substantially perpendicular to the planes of the bights; and twisting all of that part between the hooks into a three strand cable.

2,730,142
APPARATUS FOR BINDING PILES OF SHEETS
Willi Berberich, Heilbronn (Neckar), Wurttemberg, Germany
Application August 15, 1951, Serial No. 241,995
Claims priority, application Germany May 25, 1951
8 Claims. (Cl. 140—92.3)



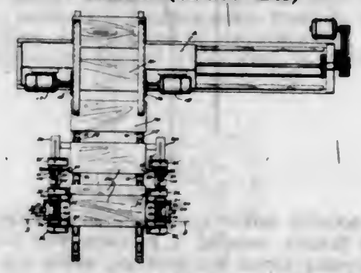
1. A coil guiding and feeding means for apparatus for binding piles of perforated sheets by winding-in a wire spiral hinge comprising, a frame, two holding plates provided on said frame and adapted to clamp the pile of sheets, a comb secured to each of said plates and adapted to engage the wire spiral to be wound into a pile of sheets, a form member reciprocally supported on said frame and adjacent the holding plates, means to press said form member against the back of the pile of sheets and to displace the individual sheets so that the holes therein form a curved channel in dependence with the diameter of the wire spiral, said means also moving the form member away from contact with the pile of sheets before the wire spiral is wound into the pile of sheets, and an abutment on one of the holding plates arranged angularly to the winding direction and adapted to curve the said hole channels in a pitch direction in agreement with the wire spiral.

2,730,143
POWER SAW CHAIN
John L. Ryde, Los Angeles, Calif., assignor to McCulloch Motors Corporation, Los Angeles, Calif., a corporation of Wisconsin
Application February 11, 1953, Serial No. 336,310
6 Claims. (Cl. 143—135)



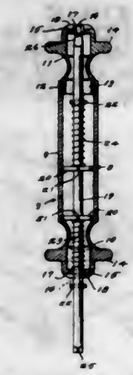
1. In a saw chain: a succession of pivotally joined links, certain of said links having cutter teeth formed thereon to define cutter links, certain of said links having depth gauge means extending outwardly therefrom to limit the depth of cut of said cutter teeth; said cutter links being disposed along said chain in alternate left and right configuration; each of said cutter teeth having a tapered blade portion extending transversely of the plane of the cutter link, said tapered blade portion including an internal surface portion and a substantially flat external surface portion converging continuously toward said internal surface portion; said external surface portion being inclined outwardly at an angle from a normal to the plane of the cutter link and being provided with a forward cutting edge inclined rearwardly with respect to a perpendicular to the plane of said cutter link, whereby said alternate left and right cutter teeth define a groove in an object being cut during a cutting operation.

2,730,144
AUTOMATIC HOPPER FEED FOR A WOOD WORKING MACHINE
Curt G. Joa, Sheboygan Falls, Wis.
Application November 4, 1953, Serial No. 390,111
8 Claims. (Cl. 144—245)



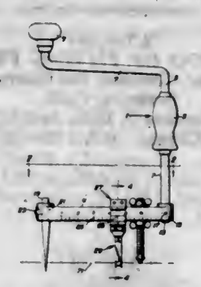
4. The combination with a feed conveyor having spaced lugs and a gap representing the start of a cycle and of greater width than the lug spacing aforesaid, of a hopper provided with escapement means for delivering successive work pieces onto the conveyor to be propelled by the lugs thereof, and an escapement control comprising a conveyor actuated cam, an escapement drive including a clutch having relatively movable parts, a cam follower having connections for the disengagement of the clutch and means controlled by the movement of one of said clutch parts for effecting re-engagement of the clutch.

2,730,145
TOOL WITH RETRACTABLE BIT
Vincent C. Brown, Big Stone City, S. Dak.
Application January 7, 1953, Serial No. 330,110
2 Claims. (Cl. 145—64)



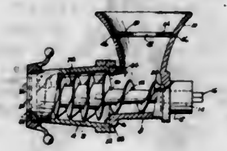
1. A tool of the character described comprising an elongated hollow handle having end walls provided with central openings, transverse slots and external transverse grooves, said openings and slots being disposed in alignment, said grooves being disposed at angles to the slots, an elongated tool bit forming rod extending longitudinally through the hollow handle and having end portions slidably fitting the end wall openings, pins extending diametrically through said rod near to but spaced from the rod ends and projecting radially from the rod, spaced abutment members secured to the rod between said pins, and expansion coil springs disposed on the rod between the abutment members and pins, said springs being selectively compressed between an end wall of the handle and the abutment member adjacent thereto for retaining the adjacent pin in engagement with the groove of said end wall for keying the rod to the handle with one of the rod ends in an extended position beyond said last mentioned end wall.

2,730,146
HAND ROUTER AND CUTTER TOOL
Francesco Privitera, Manville, R. I.
Application March 27, 1953, Serial No. 344,970
3 Claims. (Cl. 145—121)



1. A hand router and cutter tool comprising a brace having a vertical shank and a crank on the upper end of the shank with a breast knob thereon, a beam extending laterally from the lower end of the shank and having a terminal center pin fixed to and depending therefrom for engagement with a piece of work and revolving of the beam about the pin by operation of the brace, a bar cutter, and means mounting said cutter in depending position on the beam for revolving therewith over the work comprising a pair of bar grips at opposite sides of the cutter, a pair of blocks at opposite sides of the pair of grips and said beam and engaging over upper side edges of the beam, an apertured block on said pair of grips engaging the bottom of the beam, a nut threaded on the pair of grips for turning against the apertured block to screw feed said pair of grips downwardly of said blocks, and coacting camming devices on said pair of blocks and grips camming said grips into gripping relation to said cutter upon downward movement of said grips.

2,730,147
MEAT GRINDER AND SAFETY ATTACHMENT THEREFOR
Earl W. Rees, Norwalk, Calif.
Application August 16, 1952, Serial No. 304,705
4 Claims. (Cl. 146—182)

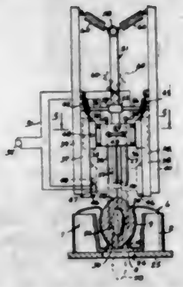


1. In a meat grinder of the class described, comprising a bowl member and a bowl body, a conical worm revolubly mounted in said bowl body having the smaller extremity thereof projecting from said bowl body, a complementary cone housing mounted over the extended end of said conical worm, and means in said cone housing for mounting said housing in an adjustable position and to said bowl body.

2,730,148
METHOD OF TREATING VEGETABLE MATERIAL
Carlo Maturrese, Flushing, N. Y.
No Drawing. Application October 18, 1954, Serial No. 463,053
5 Claims. (Cl. 146—222)

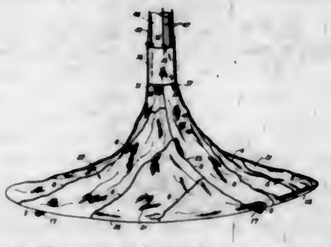
1. The process of reducing vegetable material in large pieces to a finely divided state which comprises confining one or more of said large pieces only in a defined area, repeatedly chipping particles of various sizes from the outer surface portions of said large pieces at a peripheral portion of said area, retaining the larger of those pieces thus chipped in said area and removing the smaller particles only of those thus chipped from said area, the said smaller particles being removed from said area at a peripheral portion of said area spaced from that at which said chipping action takes place.

2,730,149
METHOD OF PITTING FRUIT
John G. Aguilar, Concord, and George W. Brown, Berkeley, Calif.
Application October 7, 1952, Serial No. 313,556
10 Claims. (Cl. 146—227)



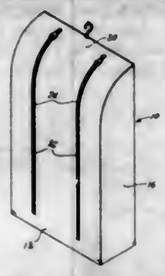
1. The method of pitting a fruit having a pit comprising the steps of: heating that portion only of the fruit adjacent said pit to reduce the adhesion between the meat of said fruit and said pit without substantially heating the remainder of the meat of said fruit and thereafter removing said pit.

2,730,150
STORAGE BINS
Leon E. Wunderwald, Great Falls, Mont., and Richard L. Rosebrough, Webster Groves, Mo.; said Rosebrough assignor to Bemis Bro. Bag Company, St. Louis, Mo., a corporation of Missouri
Application October 26, 1953, Serial No. 388,100
6 Claims. (Cl. 150—.5)



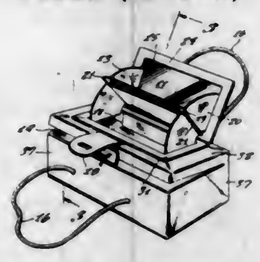
1. An erectile and collapsible protective storage bin for flowable dry materials comprising a water-resistant flexible bottom sheet, water-resistant flexible side wall sheet portions attached to and extending convergently upward from the margins of the bottom to form an inlet, a water-resistant flexible loading neck sheet attached to and extending from said inlet, hold-down means attached near the margins of the bottom and side wall portions adapted to receive hold-down ground pegs, an assembly of means on the loading neck for attaching a suspender adapted to hold said neck in connection with a filling spout, and attachment means on a wall portion, which attachment means and said assembly of means on the loading neck are adapted to receive a tie for gathering the neck and holding the neck in downwardly directed weather-deflecting position on a side portion when the bin is loaded.

2,730,151
PORTABLE CARRIER
Gladys F. Smith, Dallas, Tex.
Application August 13, 1954, Serial No. 449,638
2 Claims. (Cl. 150—1)



1. A portable carrier comprising an envelope of impervious flexible material, a partition wall carried by and extending across the envelope within the interior thereof to define an upper compartment adjacent the upper end thereof, a second partition wall carried by the envelope within the interior thereof and extending longitudinally downwardly between the first partition wall and the bottom of the envelope to define two adjacent compartments beneath the upper compartment, a supporting frame within the envelope adjacent the upper end thereof for holding the envelope suspended in expanded condition, suspension means carried by the frame and extending upwardly therefrom through the envelope, said envelope having spaced parallel elongated longitudinal slits extending through one wall thereof and opening into the upper compartment and the respective adjacent compartments to define access openings for the compartments, and slide fasteners carried by the envelope for closing the slits.

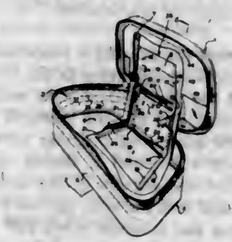
2,730,152
DUAL COMPARTMENT HANDBAG
Charles Stakofsky, Brooklyn, N. Y.
Application December 14, 1953, Serial No. 397,830
2 Claims. (Cl. 150—28)



1. A ladies' handbag comprising one main lower compartment having a cover and a plurality of upper compartments, said cover having an opening in the center thereof, a first frame forming a part of the lowermost of said upper compartments, said first frame being rigidly secured in said opening of said cover, the said upper compartments being contained in the said main lower compartment in the closed position of said upper compartments, at least one partition containing a zippered pocket

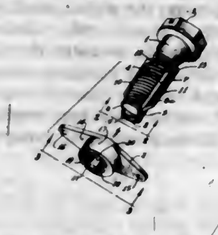
being disposed between two adjacent upper compartments, the lowermost of said upper compartments having a bottom wall and the uppermost of said upper compartments having a top wall, and each of said upper compartments having side walls of flexible material, a second frame formed in said top wall of the uppermost of the said upper compartments, the latter being expansible by means of the said second frame, the said second frame being pivoted to the upper face of the said first frame, whereby an opening movement of the said second frame causes said flexible side walls to elongate, thereby expanding the size of said upper compartments.

2,730,153
TOILET CASES
George Miller, Wellesley, and Emil K. Renz, Dedham, Mass., assignors to Knight Leather Products, Inc., Boston, Mass., a corporation of Massachusetts
Application April 29, 1953, Serial No. 351,826
4 Claims. (Cl. 150—34)



1. A travelling case having a rear wall, bottom and a cover, means flexibly securing said cover to said rear wall, a hingeable reinforcing member comprising an upper section secured in the cover, a central section secured in the rear wall and a lower section secured in the bottom, and a plurality of torsional springs secured to said reinforcing member, each having an upper, lower and central non-torque section positioned respectively in the cover, bottom and rear wall of the case with each of said central non-torque sections joined to the upper and lower sections of its respective spring by transverse torque spring sections positioned respectively between the cover and rear wall and between the rear wall and bottom.

2,730,154
SELF-LOCKING FASTENER HAVING LONGITUDINAL SPRING KEY DETENT MEANS
Cecil W. Aspey, Los Angeles, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application July 23, 1951, Serial No. 238,179
3 Claims. (Cl. 151—8)



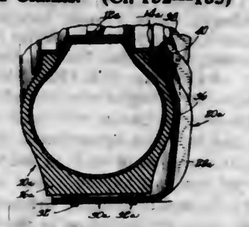
1. A fastener comprising: a headed bolt and a nut having diametrically opposite longitudinal portions of their threads cut away, each of said cut away portions having a longitudinal groove centered therein, said bolt grooves being connected at one end thereof by a transverse slot in the threaded end of said bolt and being terminated at the other end thereof at radial bores in said bolt, said nut grooves having one rounded longitudinal edge and one normal longitudinal edge with the latter edge disposed inwardly of the former along the thread length; and a generally U-shaped wire spring having a generally semicircular transverse end section disposed within said transverse bolt slot and generally parallel side sections extending from said end section partially within and compressible into said longitudinal bolt grooves, said side sections terminating in in-bent ends entering and movable within said radial bores in said bolt, said spring side sections being adapted to be partially received in said nut grooves and said normal longitudinal edges of the latter being adapted to prevent said bolt from being turned relative to said nut beyond the point of complete engagement of their respective thread portions, and said rounded edges of said nut grooves being adapted to cam said spring side sections into said bolt grooves when said bolt is turned relative to said nut in a direction to disengage said threaded portions in order to permit said disengaging turning.

2,730,155
POLYGONAL LOCK WASHER HAVING UNDULATING CONFIGURATION
Friedrich Karl Knohl, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a corporation of Illinois
Application December 27, 1951, Serial No. 263,659
3 Claims. (Cl. 151—35)



1. A sheet metal lock washer comprising a polygonal washer body of general annular form, and a plurality of internally extending locking teeth projecting axially beyond the opposite surfaces of the washer body adjacent thereto, said washer body being bowed in opposite axial directions and at 90 degrees relative displacement to provide a first pair of diametrically opposed substantially flat peripheral edge sections disposed in one plane and a second pair of diametrically opposed substantially flat peripheral edge sections in a plane spaced axially from the plane of said first pair of edge sections and at 90 degrees relative displacement thereto, adjacent edges of the said peripheral edge sections being joined by intermediate sections completing the polygonal washer body, and said substantially flat peripheral edge sections having plural locking teeth projecting therefrom and presenting spaced contact surfaces therealong to provide stable support of the washer and to facilitate application of either side of the washer to a work surface or to a cooperating fastener element.

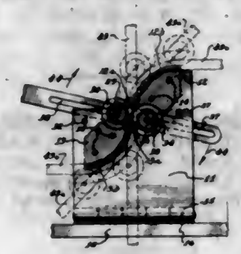
2,730,156
ANTISKID DEVICE
Harry R. Ansel, Chicago, Ill.
Application July 5, 1952, Serial No. 297,269
11 Claims. (Cl. 152—185)



1. An antiskid device for use on a vehicle wheel provided with a resilient tire comprising a rubber portion generally circular in cross section and adapted to encircle

the vehicle wheel coaxially in juxtaposition to the generally cylindrical, supporting surface engaging section of the resilient tire, a plurality of relatively hard elements extending outwardly from the periphery of said rubber portion and adapted to bite into ice and snow on an underlying supporting surface, and a single radially inwardly extending flange having a plurality of arcuately spaced bolt holes for attaching said antiskid device to the rim of said wheel.

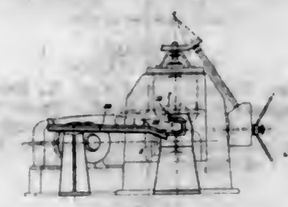
2,730,157
CONDUIT AND TUBING OFFSET BENDING APPARATUS
Fred W. Ponting, Phoenix, Ariz.
Application December 26, 1952, Serial No. 327,952
7 Claims. (Cl. 153—46)



1. In a conduit and tubing bending machine, a frame, a first work engaging quarter segment fixed on said frame having an arcuate work engaging surface tangent at one end to one side of a work piece in starting position in said machine with said arcuate surface facing in one direction longitudinally of said work piece, a second work engaging quarter segment fixed on said frame having an arcuate work engaging surface tangent at one end and to the other side of said work piece in starting position with said arcuate surface of said second segment facing in the opposite direction longitudinally of said work piece, a first link pivotally mounted on said frame at the center defined by the radius of curvature of the arcuate work engaging surface of said first segment, a second link pivotally mounted on said frame at the center defined by the radius of curvature of the arcuate work engaging surface of said second segment, work engaging rollers journalled on the outer end of each of said links arranged to roll over the arcuate work engaging surfaces of said segments, an operating lever pivotally mounted on said frame for rocking on an axis located between the points of tangential contact of said arcuate work engaging surfaces of said segments with the work piece when in starting position, and means interacting between said operating lever and said links to effect simultaneous swinging of said links upon rocking of said operating lever.

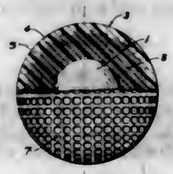
2,730,158
STRAIGHTENING MACHINES WITH HYPERBOLIC ROLLS
Rene Heintz, Louvroil, France, assignor to Louvroil Montbard Aulnoye, Paris, France, société anonyme
Application August 16, 1950, Serial No. 179,667
Claims priority, application France August 25, 1949
4 Claims. (Cl. 153—91)

1. A machine for straightening cylindrical work pieces by passing the same between rolls with concave peripheries, which said machine comprises a frame having the form and an arch with skew ends in the vicinity of which extend arch end portions having a pier on one side only, a plurality of rolls mounted under the arch constituted by the frame, said plurality including in the inlet end portion of the arch a pair of work piece take-in rolls composed of a lower work roll and of an upper and vertically shiftable back-up roll and in the outlet end portion of the arch a pair of work piece take-out rolls composed and mounted similarly to the pair of take-in rolls, means for actuating the work rolls, quick-action means for shifting upwards each vertically shiftable back-up roll, for shifting the same downwards in the direction of the companion work roll and for resiliently urging it in said direction, a work piece inlet-guide arranged ahead of the take-in rolls, a sloped table for the rough work pieces, partially engaged in the inlet end-portion of the arch opposite to the single pier of said end-portion, said table having its lower edge along the inlet guide and the take-in work roll and



being thereby adapted for causing a sideward rolling motion of the rough work pieces towards the inlet guide and the engagement of the fore-end of said work pieces between the take-in work roll and the upwards shifted companion roll, a work piece outlet guide arranged in the rear of the take-out rolls, and a sloped table partially engaged in the outlet end portion of the arch opposite to the single pier of said end portion, last said table having its upper edge along the take-out work roll and the outlet guide and being thereby adapted for removing the straightened bars by sideward rolling motion thereof when the take-out back up roll has been shifted upwards.

2,730,159
METHOD OF MAKING GOLF BALLS
Stephen T. Semegen, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a corporation of New York
Application January 17, 1951, Serial No. 206,508
8 Claims. (Cl. 154—17)

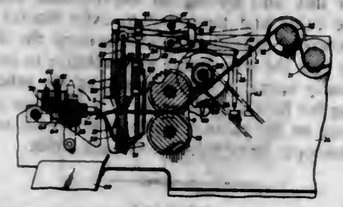


2. In the method of producing golf balls containing a core, a center and a cover, the steps comprising wrapping a golf ball core with a thread under tension of a long chain linear super-polyamide wherein the amide groups are separated by hydrocarbon groups containing at least two carbon atoms and wherein from 1 to about 15% of the amido hydrogen atoms have been replaced with alkoxy-alkyl radicals forming recurring groups of

$$-N(R-O-R')-CO-$$

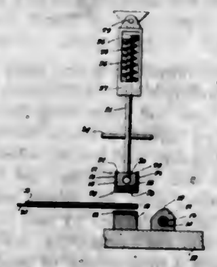
in which R is alkyl and R' is alkyl having from 1 to 8 carbon atoms in an amount sufficient to provide a center and a cover and heat molding said wrapped thread cover for a time and at a temperature sufficient to fuse into a continuous and uniform mass at least the outer surface layers of said wrapped thread of said cover without causing relaxation of the underlying tension wrapped threads of the center.

2,730,160
APPARATUS FOR FORMING JOINTS BETWEEN THERMOPLASTIC SHEETS
Joseph Pickering, Leicester, England, assignor to The British Xylonite Company Limited, London, England, a British company
Application October 16, 1951, Serial No. 251,478
Claims priority, application Great Britain October 16, 1950
8 Claims. (Cl. 154—42)



1. Apparatus for use in forming a joint between sheets of flattened thermoplastic material, comprising a pair of relatively-movable jaws for receiving and clamping therebetween the sheets, means advancing such sheets between the movable jaws, a knife blade mounted for reciprocation in a plane spaced in front of the bite between said clamping jaws and longitudinally of such jaws, means operatively connected with the knife blade to reciprocate such blade, an anvil movable into position between said clamping jaws and knife blade to provide a support for the thermoplastic material between the clamping jaws and knife blade and further means to move such anvil into said last named position.

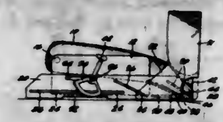
2,730,161
HEAT SEALING MACHINE OF THE THERMAL IMPULSE TYPE AND METHOD
Nicholas Langer, New York, N. Y.
Application November 10, 1951, Serial No. 255,777
11 Claims. (Cl. 154—42)



1. In a machine for heat sealing thermoplastic layers, the combination which comprises a sealing member having a smooth sealing face, a heater member having a raised heating face defining a predetermined pattern of an area smaller than that of said sealing face, and means for sequentially bringing said sealing face into pressure contact with said heating face in the absence of sliding displacement of said faces with respect to each other during such contact to form on the sealing face a heated pattern of restricted area and then into pressure contact with the layers to be sealed to form thereon a corresponding sealed pattern.

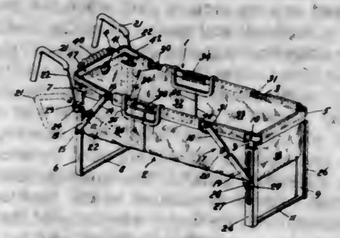
8. The method of heat sealing thermoplastic layers which comprises bringing a sealing roll into rolling contact with a heater roll having a zone of predetermined configuration thereof maintained at sealing temperature in the absence of sliding displacement of said rolls with respect to each other during such contact thereby to store sealing heat in a corresponding zone of the surface of the sealing roll while maintaining the remaining zone of said surface below sealing temperature, and then bringing the surface of said sealing roll including both preheated and unheated zones into rolling contact with the layers to be sealed thereby to deposit said stored heat on said layers and to cause heat sealing of the layers in a corresponding zone.

2,730,162
ADJUSTABLE AUTOMOBILE SEAT
Bruce R. Davis, Santa Barbara, Calif.
Application June 8, 1953, Serial No. 360,045
4 Claims. (Cl. 155—14)



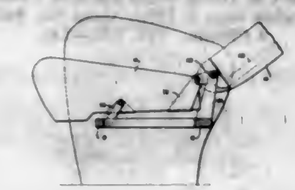
1. A conveyance seat comprising: a seat, slide means upon which said seat is pivotally mounted for horizontal movement, a back rest mounted upon said slide means for horizontal movement with said seat, means for raising and lowering said back rest during horizontal movement of said seat and back rest, and means pivoting said seat in conjunction with vertical movement of said back rest so that the lower extremity of said back rest and the rear extremity of said seat are substantially in contact at all positions of said seat.

2,730,163
CONVERTIBLE BASSINET AND CHILD'S CHAIR FOR AUTOMOBILES
Morris I. Goldberg, Waban, Mass.
Application December 11, 1953, Serial No. 397,604
2 Claims. (Cl. 155—44)



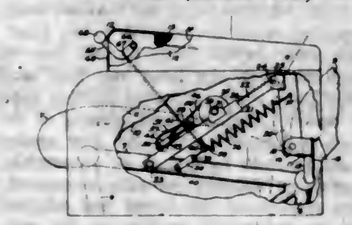
2. A convertible bassinet and child's chair comprising an elongated supporting frame divided transversely into separable head and foot sections, a bassinet body suspended from the frame and also divided transversely into separable head and foot sections, leg elements secured to the end of the head section of the frame, other leg elements connected to the foot section of the frame, means detachably connecting together the head and foot sections of both the frame and the bassinet body, hook-shaped supporting members secured to the head section of the frame and adapted to be hooked over the back of an automobile seat, the head and foot sections of the frame and body when connected together constituting a complete bassinet, and the head sections of the frame and body when separated from the foot sections constituting a child's chair for use in an automobile, and a U-shaped retaining member pivotally connected to the chair section portion of the frame and adapted to be swung from an inoperative position at the end of the frame into an operative position in which the transverse portion of said retaining member extends across the chair section in front of a child occupying said section and rests on the ends of the side members of the chair section frame.

2,730,164
PIVOTAL ARRANGEMENT FOR RECLINER CHAIRS
David E. Higley and Helmer W. Wickman, Gardner, Mass., assignors to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application June 19, 1952, Serial No. 294,302
1 Claim. (Cl. 155—116)



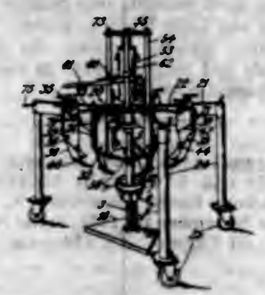
A reclining chair for vehicles comprising a base frame, a cushion back rest, means for pivotally connecting said back rest to said frame at a point substantially above the lower extremity of the back rest; back rest frame arms connected to said back rest extending downwardly from said pivot points along the sides of said back rest to the lower corner of said back rest cushioning, a full depth of cushioning between the extremities of said back rest frame arms; a cushion seat including in its construction a seat frame, resilient cushion elements mounted on said seat frame and upwardly extending seat suspension arms mounted on said seat frame along the sides thereof at the rear of the cushion seat; means pivotally connected to the base frame of said chair and movably supporting the forward portion of said cushion seat including links pivotally connected at their lower ends to said base frame and pivotally connected at their upper ends to said forward portion of said cushion seat, and adapted to carry the forward portion of said seat in a forward and upward arcuate path when the back rest of said seat is reclined; and means pivotally connecting the upwardly extending seat suspension arms of the cushion seat to the lower extremity of said back rest frame arms at a point substantially coinciding with the line of the upper rear corner of said cushion seat and the lower extremity of said cushion back rest, whereby the full depth of seat cushion will be provided between the said upwardly extending arms of the cushion seat, the said seat cushion will pivot relative to the back rest on an axis coinciding with the lower extremity of the back rest without opening a gap therebetween, and the back rest will pivot relative to the chair frame on an axis substantially above the lower extremity of said back rest.

2,730,165
SEAT LOCKING MECHANISM
Gordon Karl Jones, Burbank, Calif.
Application July 6, 1953, Serial No. 366,290
10 Claims. (Cl. 155—163)



1. In a reclining seat: a seat frame, a seat back hinged thereto for reclining movement; a pair of telescoping links interposed between and connected respectively to said seat back and frame for telescoping movement in response to hinging movement of the seat back relative to the seat frame; and means for locking said links against telescoping movement so as to fix the seat back in a selected position of adjustment, said locking means comprising rack teeth on one of said telescoping links, a pinion journalled on the other link and meshing with said rack teeth, a drum fixed to said pinion, a cable wound around the drum, the ends of said cable being anchored to said other link, a bow spring having one end anchored to said other link and having an intermediate portion engaging the cable and tensioned to exert lateral pressure thereon whereby to snub the cable around the drum and to thereby lock the telescoping links relative to each other, and manually operable means engaging the other end of said spring for flexing said spring in a direction to release the pressure on the cable sufficiently to permit movement of the telescopic links relative to each other.

2,730,166
MOBILE TROLLEY MOUNTED TIRE REMOVING MACHINE
Douglas Henry Musgrave Davidson, Effingham, and Albert Charles Baritrop, Southgate, London, England, said Baritrop assignor to Norman Garney Randall, London, England
Application August 20, 1952, Serial No. 305,384
7 Claims. (Cl. 157—1.2)

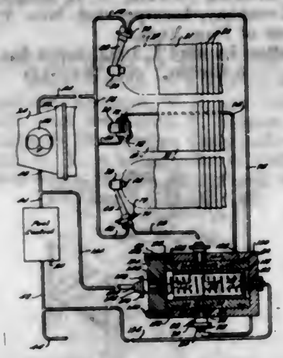


1. A machine for removing a tire from a wheel comprising a stand including a base and means extending upwardly from said base for supporting the wheel against downwardly directed thrust, a frame having a plurality of spaced supporting legs and trolley wheels attached to the lower ends of said legs so that the frame may be moved over the stand after the wheel has been placed thereon, elevating means carried by said frame, a readily detachable connection for connecting said stand to said elevating means, and a multiplicity of blades attached to said frame and spaced around a circle to engage the tire at circumferentially distributed positions, said blades having surfaces shaped to engage the tire substantially tangentially to a side wall of the tire to push the tire off the wheel during the elevation of the stand.

2,730,167
CONTROL APPARATUS
Jorma O. Sarto, Walled Lake, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application March 8, 1950, Serial No. 148,322
5 Claims. (Cl. 158—36.4)

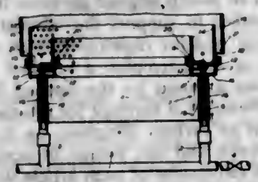
1. A fuel system comprising pump means having an intake and an outlet, a metering device connected to the intake of the pump means for providing a supply of fuel at predetermined rates of flow thereto, bypass nozzles connected to the pump outlet each having an ejection orifice and a bypass discharge mutually supplied thereby, means forming split paths for the return flow of fuel from the respective bypass discharges of the nozzles and having a common portion leading to the pump intake and pressure

responsive means in the common portion of said fuel return paths for individually increasingly restricting the



return flow of fuel in each of said split paths in response to increasing pressure in the pump intake.

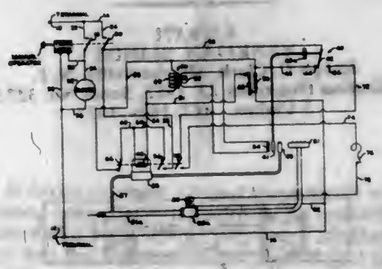
2,730,168
LIQUID FUEL BURNERS
Alfred Eric Thorpe, Sutton Coldfield, England
Application August 5, 1949, Serial No. 108,695
2 Claims. (Cl. 158—88)



1. A burner for liquid fuels, comprising: an annular fuel trough having spaced concentric inner and outer walls formed of thermally conductive material, said walls being divergently flared at their upper end portions; an outer ring member comprising an inwardly extending flange portion having a circular central opening therein concentric with said trough, said outer ring member being supported by said outer wall at the upper end thereof; an inner ring member comprising an outwardly extending flange portion having a circular periphery concentric with said trough and spaced from said central opening in said outer ring member to define an annular opening therebetween communicating with space between said flared upper end portions of said walls, said inner ring member being supported by said inner wall member at the upper end thereof with its flange portion generally in the same plane as the flange portion of said outer ring member; a cylindrical kindler disposed in said trough in heat transferring proximity to the portions of said walls below said flared portions, said kindler extending upwardly through said annular opening and in contact with the edges of said ring members adjacent to said opening; vent means in said flared portions of said walls and further vent means in said ring members, said vent means communicating with space between said flared portions of said walls and around the upper portion of said kindler.

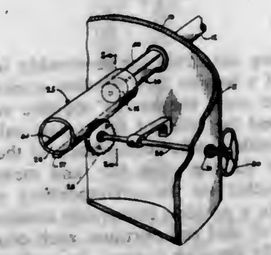
2,730,169
GAS BURNER CONTROL SYSTEM
Justin A. Deubel, Milwaukee, Wis., assignor, by mesne assignments, to General Controls Co., a corporation of California
Application November 6, 1950, Serial No. 194,293
8 Claims. (Cl. 158—125)

1. Control apparatus for a main burner, including a pilot burner, an igniter for the pilot burner, an electromagnetically operated main valve controlling the flow of fuel to said main burner, a pilot valve controlling the flow of fuel to said pilot burner, an electromagnetically operated switching mechanism, electromagnetic means for operating said switching mechanism and said pilot valve, a single pole-double throw pilot ignition responsive switching mechanism moveable from a cold to a hot position upon the establishment of flame at the pilot burner, and circuit means connecting said igniter and said electromagnetic means in a circuit network for concurrent energization thereof, a circuit for said main valve operator, control switch means connecting both said circuit network and said main valve operator circuit across a source of power, a portion of said pilot ignition responsive



switching mechanism having contacts closed when said mechanism is in cold position, said contacts being connected in series with said circuit network, and contacts open when said mechanism is in cold position connected in circuit with said main valve operator, and circuit means preventing said main valve from reopening upon momentary deenergization of said electromechanism means while said pilot ignition responsive switching mechanism remains in hot position, said last mentioned circuit means including a normally open switch of said electromagnetically operated switch mechanism controlling energization of said main valve operator and a normally open switch of said electromagnetically operated switch mechanism shunting said closed cold contacts of the pilot ignition responsive switch mechanism.

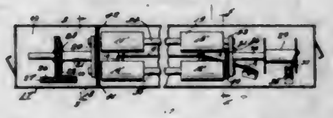
2,730,170
SHIELDED SOAP SPRAY NOZZLE
Purdy Bradford, Palos Park, and Charles S. Steiner, Homewood, Ill., assignors to Swift & Company, Chicago, Ill., a corporation of Illinois
Application September 14, 1949, Serial No. 115,638
1 Claim. (Cl. 159—2)



In a dehydrating apparatus for flash drying a material, the combination of a dehydrating chamber, a nozzle member for injecting the material into the chamber, an enclosure member for said nozzle member, said enclosure member extending downstream from the discharge end of said nozzle member, the length of said enclosure member downstream from said discharge end being substan-

tially longer than the distance between the walls of the enclosure member, said enclosure member and said nozzle member forming a completely enclosed space about the discharge end of said nozzle member except for the downstream end of the nozzle member, said downstream end of the enclosure member being in communication with the interior of the chamber with said enclosed space from said nozzle to said chamber being unobstructed, one of said members being movable with respect to the other of the members in a direction along the line of flow of said material to vary the length of said enclosed space, and means extending through a wall of said chamber and operatively connected to said one member to move one said member with respect to the other of the members.

2,730,171
VENETIAN BLINDS
Joseph C. Clark, Merchantville, N. J.
Application December 23, 1952, Serial No. 327,594
3 Claims. (Cl. 160—167)



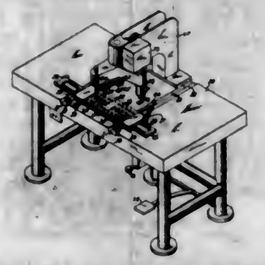
1. A venetian blind comprising slats and tapes, means including rotatable parallel shafts for anchoring the upper ends of the tapes, tiltable means mounting said shafts for relatively raising some straps and lowering others for tilting the slats independently of rotation of the rotatable shafts.

2,730,172
MOUNTING BRACKET FOR TENSION TYPE SCREEN UNITS
David Jordan Rust and Jack H. Jensen, San Leandro, Calif., assignors to Ry-Lock Company, Ltd., San Leandro, Calif., a corporation of California
Application February 6, 1953, Serial No. 335,532
3 Claims. (Cl. 160—328)



1. A mounting assembly for removably securing the top cross bar of a tension type window screen on a window frame, said cross bar having opposite end portions projecting beyond the sides of the screen; said assembly comprising a cradle bracket below each of the projecting end portions of the top cross bar, and means securing each cradle bracket on the corresponding side of the window frame in a position removably cradle supporting the related one of said end portions; each cradle bracket being of inwardly opening channel form, disposed vertically, and including a front plate, an outer side plate, and an inner side plate, the latter terminating at its upper edge below the corresponding edges of the remaining plates whereby a cradle is defined between the front plate and side of the window frame above said upper edge of the inner side plate, and the related one of said end portions of the top cross bar removably seating in said cradle.

2,730,173
PUNCHING APPARATUS
Rudolph S. Brescka, Newark, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application January 5, 1952, Serial No. 265,079
6 Claims. (Cl. 164—15)



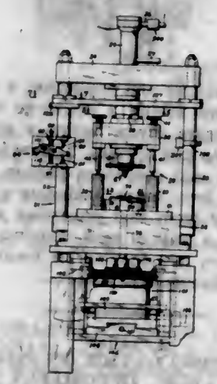
1. An apparatus for punching various portions from articles singly in combination with like templets similar in contour to the articles and having numerous accurately spaced normally closed identifying portions any selected numbers of which may be opened to identify portions to be punched from the articles singly, the apparatus comprising a support, a die carried by the support, a punch supported for reciprocation relative to the die to cooperate therewith to punch aligned portions from the articles singly, a member to support the templets singly having apertures positioned for registration with all the identifying portions of each templet, a selected number of the apertures being exposed by the opened identifying portions of each templet, a carriage for the member mounted for movement in various directions on the support relative to the punch and die, means supported by the carriage to cause movement of each article with the carriage relative to the punch and die, and a locating element positioned for registration with the exposed apertures of the member singly to cooperate therewith in positioning the carriage to accurately locate the portion to be punched from each article in alignment with the punch and die.

2,730,174
SEPARATING DEVICES FOR RECORD SHEETS AND CARBON PAPER
Bert Weinstein, New York, N. Y.
Application September 16, 1953, Serial No. 380,423
9 Claims. (Cl. 164—84.5)



1. A device for separating record sheets from transfer sheets with which said record sheets are interleaved, comprising a base board adapted to hold a set of sheets to be separated, a stationary clip assembly at one end of said board adapted to grip all the sheets of the set, a movable clip assembly on the board shiftable toward and away from the stationary assembly and adapted for gripping said record sheets to separate the same from the transfer sheets when the movable assembly is shifted away from the stationary assembly, means releasably holding the movable assembly in selected positions to which it is shifted toward the stationary assembly, and means under the control of a user acting on the holding means to disengage the same from the movable assembly, thus to permit movement of the movable assembly away from said stationary assembly, said holding means including a toothed tongue carried by the movable assembly, resilient means mounted on the base board and a rack bar supported on said resilient means, said resilient means being tensioned to urge said rack bar against said toothed tongue for retaining the movable assembly in said selected position.

2,730,175
PUNCH FOR AUTOMATICALLY LOCATING THE APERTURES IN A JET-CUP
Rene P. Piperoux, Radburn, N. J., and Arpad P. Berger, New York, and Ferdinand P. Diemer, Woodhaven, N. Y., assignors to Celanese Corporation of America, New York, N. Y., a corporation of Delaware
Application September 29, 1950, Serial No. 187,426
6 Claims. (Cl. 164—87)



1. A positioning system comprising a movable member, a motor for driving said movable member, a plurality of synchros operatively connected to and driven by said movable member, each of said synchros being connected to said movable member through a gear train having a different ratio whereby a given movement of the movable member will move each of said synchros by a different amount, a reference synchro, switch means for connecting one only of said synchros to said reference synchro at a time, and means responsive to the relative position of the reference synchro and the synchro to which the reference synchro is connected to energize the motor to move the movable member to bring the reference synchro and the synchro to which said reference synchro is connected into alignment, the extent of movement of the movable member being different for each synchro connected to the reference synchro and dependent thereon.

4. A punch for automatically locating the apertures in a jet-cup, comprising an anvil for engaging and supporting the jet-cup, a press for repeatedly bringing a punch point into contact with the jet-cup, and means for moving the anvil between successive contacts of the jet-cup with the punch point, said moving means comprising a motor for driving said anvil, a plurality of synchros operatively connected to and driven by said anvil, each of said synchros being connected to and driven by said anvil through a gear train having a different ratio whereby a given movement of the anvil will drive each of said synchros by a different amount, a reference synchro, switch means for connecting one only of said synchros to said reference synchro at a time, and means responsive to the relative position of the reference synchro and the synchro to which the reference synchro is connected to energize the motor to drive the anvil to bring the reference synchro and the synchro to which said reference synchro is connected into alignment, the extent of movement of the anvil and the spacing between the successive contacts of the punch point and the jet-cup being different for each synchro connected to the reference synchro and dependent thereon.

2,730,176
MEANS FOR LOOSENING PIPES IN UNDERGROUND BORINGS
Wolfgang Konrad Jacob Herbold, Bruehl (Bezirk) Koeln, Germany
Application March 25, 1952, Serial No. 278,525
5 Claims. (Cl. 166—177)



2. A device arranged within a magnetically attractable cylindrical body comprising a drive shaft rotatably mounted within said body, a drill rod, a disk member secured to said drill rod adjacent one end thereof, said disk member having a mass which is substantially equally distributed around the axis of said drill rod and defining a surface of revolution, means for connecting the other end of said drill rod to one end of said shaft for rotation of said drill rod and said disk member with said shaft within said body, said drill rod and said disk member forming a pendulum movable circularly relative to said body upon rotation of said shaft, means for rotating said shaft, and magnetic means operative for forcing said disk member into physical contact with the inner walls of said body before rotation of said drill rod for rolling contact with the inner surface of said body.

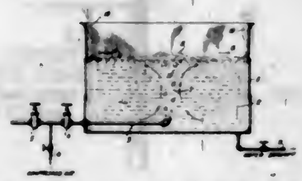
2,730,177
CEMENT RETAINING SHOE
Albert K. Kline, Tulsa, Okla.
Application December 23, 1953, Serial No. 400,037
2 Claims. (Cl. 166—184)



1. In a cement retaining shoe, an upper ring member, a hollow mandrel positioned below said ring member and provided with an upper exteriorly threaded portion, an adapter having its lower end threadedly engaging the upper end of said mandrel and provided with a plurality of ports, there being an annular groove in said adapter, a split ring rotatably seated in said groove, a floating ring positioned below said adapter and secured to said split ring, resilient means connecting said ring member to said floating ring, a resilient packer mounted on said mandrel, and a bottom shoe connected to the

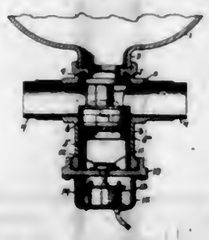
lower end of said mandrel, there being a valve seat in said bottom shoe, and a ball arranged in engagement with said valve seat, said resilient means comprising a plurality of spaced apart friction springs, there being a slot in said mandrel, and a pin extending through said floating ring and into said slot.

2,730,178
METHOD OF CONTROLLING OIL TANK FIRES
Joe L. Risinger, Maplewood, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York
Application December 11, 1951, Serial No. 261,158
2 Claims. (Cl. 169—1)



1. That method of extinguishing a combustion upon the surface of a stored body of oil, which oil has a flash point above atmospheric temperature, which comprises introducing into the oil, at a point well below the surface thereof, at least one stream of compressed air, the amount of such air being from about 6 cubic feet to about 13 cubic feet of free air per minute per one hundred square feet of oil surface, the pressure of such air being sufficiently above atmospheric pressure to insure ready entry of air into the oil, whereby submerged portions of the oil, existing at a temperature below the flash point of the oil are brought into contact with and mixed with the surface portion of the oil to cool the surface below the flash point and extinguish the combustion by depriving it of oil vapors.

2,730,179
VALVE FOR FIRE EXTINGUISHER
Vernon E. Ferguson, Swan, Mo.
Application November 18, 1952, Serial No. 321,138
3 Claims. (Cl. 169—9)



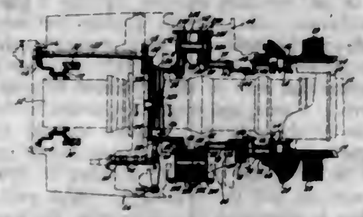
1. A fire extinguisher comprising a container of fire extinguishing fluid under pressure and having a discharge opening, a discharge nipple connected to the discharge opening, a cylinder projecting from the nipple in axial alinement with the discharge opening, a piston reciprocating in the cylinder and formed with a reduced stem extending into the nipple, a valve carried by the stem for closing the discharge opening, said piston being normally advanced by pressure in the cylinder to maintain the valve in closed relation to the discharge opening, a valve in the cylinder normally held closed by pressure in the cylinder, and means to unseat the cylinder valve against the cylinder pressure to permit container pressure to open the container valve by effecting movement of the piston within the cylinder.

2,730,180
CONTAINER AND APPLICATOR FOR LIQUID AND GASEOUS COMPOUNDS
Walter C. Beard, Jr., Naugatuck, and Arthur B. Dayton, Jr., Danbury, Conn., assignors to The Risdon Manufacturing Company, Naugatuck, Conn., a corporation of Connecticut
Application October 5, 1951, Serial No. 249,972
8 Claims. (Cl. 169—31)



1. In a fluid container and applicator, a container for fluid under pressure having a discharge opening in a wall thereof, a closure device having a projection normally extending into said opening, and means for sealing said opening with said projection therein, said closure device comprising lever means including a wall-contacting element spaced from said projection so as to form a fulcrum against a wall of said container to withdraw said projection from said opening for breaking said sealing means and releasing said fluid.

2,730,181
GEAR PRELOADING DEVICE ON PITCH CHANGE MECHANISM FOR OPPOSITELY ROTATING PROPELLERS
Philip M. Freeman, Farmington, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application January 8, 1952, Serial No. 265,403
10 Claims. (Cl. 170—135.27)

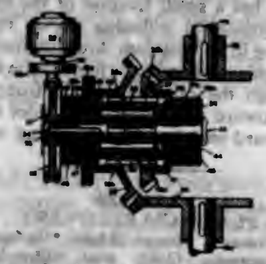


8. In a dual rotation propeller, outboard and inboard propeller components adapted to be driven in opposite directions at a fixed speed ratio, pitch changing mechanism comprising a first gear train, including a first set of planet gears and a cage, connecting the hub of one component with the blades of the other component and acting to position said cage, a second gear train, including a second set of planet gears and said cage, connecting the blades of said one component and a freely rotatable pitch control element carried by said other component, and a centrifugally actuated weight carried by said other component and operatively connected with said pitch control element to bias said element and said gear train in one direction.

2,730,182
CONTROL DIFFERENTIAL TRANSMISSION GEARING
William W. Sloane, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application November 21, 1952, Serial No. 321,928
3 Claims. (Cl. 180—6.44)

2. In a track laying vehicle having two laterally spaced endless tracks with a power-operated gearing connected to each of the tracks for driving the latter normally at the same speed in the same direction, the improvement

comprising a variable speed control for the endless tracks, said speed control having concentric gears operatively connected with said tracks and normally rotatable by by said shafts in opposite directions, a cage rotatably mounted concentric with said gears, a pair of idler gears carried by said cage on parallel axes spaced from the common axis of said cage and said first-named gears,



said idler gears having teeth meshed with said first-named gears and also teeth meshed with each other on substantially uniform pitch diameters, and independent power-operated control means for rotating said cage in either direction of rotation at varying selected rotational speeds so as to control the relative speed of the endless tracks.

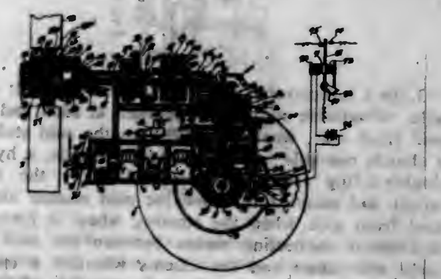
2,730,183
TRACTOR-TRAILER CONTROL CONNECTION AND ANTI-SLACK DEVICE THEREFOR
Martin C. Svoboda, Pittsburgh, Pa., assignor to Michael J. Hannon, Mount Lebanon, Pa.
Application March 24, 1952, Serial No. 278,198
3 Claims. (Cl. 180—14)



1. A fluid control connection between an automotive tractor and a trailer adapted to be coupled to the tractor comprising means forming a chamber within one of the tractor and trailer, an elongated flexible hollow fluid conduit, a fixed connection between one end of the elongated flexible hollow fluid conduit and the one of the tractor and trailer having the chamber providing for the passage of fluid through the connection at all times, the elongated flexible hollow fluid conduit having its other end projecting from the chamber for operative connection with the other of the tractor and trailer, and resilient means connected with the one of the tractor and trailer having the chamber and with the elongated flexible hollow fluid conduit drawing the portion of the elongated flexible hollow fluid conduit adjacent the second mentioned end thereof toward the one of the tractor and trailer having the chamber and into the chamber so that for any relative position of the tractor and trailer the portion of the elongated flexible hollow fluid conduit spanning the space between the tractor and trailer is maintained substantially taut.

2,730,184
VEHICLE PROPULSION AND TRANSMISSION MEANS
Adolphe C. Peterson, Edina, Minn.
Application February 14, 1952, Serial No. 271,457
16 Claims. (Cl. 180—54)

1. In a vehicle propulsion means, a road wheel means and a wheel driving element in driving connection therewith, an air propeller means for propulsion and a propeller driving element in driving connection therewith, an engine and an engine shaft element driven thereby, power transmission mechanism for driving said wheel driving element and said propeller driving element, said mechanism including a gear rotatable in driving relation with one of said elements, a gear rotatable in driving relation with a second one of said elements, a satellite carrier rotating in fixed relation with the third of said elements, satellite gears borne by said carrier and meshing with both of



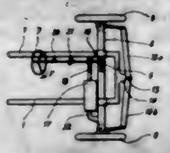
said gears whereby the torque available on the engine shaft is divided between the said gears meshing with the satellite gears; a secondary transmission to transmit drive from the meshed gear, which is in driving relation with the air propeller means, to the road wheel means, this secondary transmission including an engageable or disengageable clutch means; and an engageable or disengageable clutch means interposed in the drive to the air propeller means from the said meshed gear in driving relation therewith.

2,730,185
MOTOR VEHICLE WITH FORWARDLY MOUNTED ENGINE
Dante Giacosa, Turin, Italy, assignor to Fiat S. p. A., Turin, Italy
Application June 27, 1950, Serial No. 170,617
Claims priority, application Italy June 30, 1949
1 Claim. (Cl. 180—64)



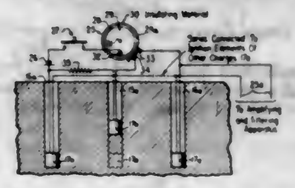
In a motor vehicle, a frame having spaced arms extending forwardly to the front of the vehicle, the distance between the outside edges of said arms being substantially less than the track width of the vehicle, a beam extending transversely of said arms and having end portions connected to opposite intermediate portions of said arms, said beam having a central portion disposed at a level below the level of said end portions and being curved in the direction of the rear of the vehicle, steerable front wheels suspended from the ends of said beam, an engine disposed in the space between said arms and extending longitudinally of the vehicle directly above said beam, a steering linkage for the front wheels disposed forwardly of said beam, and an oil sump depending from said engine and extending into the space between the steering linkage and said beam, said oil sump having a forward recessed portion for accommodating said steering linkage and a rearward recessed portion for accommodating said beam, said oil sump thereby having portions extending forward and downwardly of said steering linkage, and rearwardly of said beam.

2,730,186
STEERING ARRANGEMENT FOR MOTOR-VEHICLES
André L. A. Morgen, Reims, France
Application June 26, 1953, Serial No. 364,393
Claims priority, application France June 30, 1952
8 Claims. (Cl. 180—79.2)



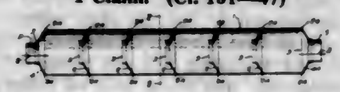
3. In a motor-vehicle having a steering wheel: a front axle, swivellable stub axles mounted at each end of the said front axle, wheels mounted on the said stub axles, a chassis movable along the said front axle, a hydraulic double-acting servo-motor controlled by the steering wheel and adapted to move the said chassis along the said front axle when the steering wheel is turned, and articulated connecting means between the said swivellable stub axles and the chassis whereby a transverse movement of the chassis towards one side of the front axle orients the said wheels in the direction which would make the vehicle move towards this side.

2,730,187
SYSTEM AND METHOD OF GENERATING SEISMIC WAVES IN THE EARTH
James E. Hawkins and William E. Pugh, Tulsa, Okla., assignors to Seismograph Service Corporation, Tulsa, Okla., a corporation of Delaware
Original application January 11, 1947, Serial No. 721,558, now Patent No. 2,630,188, dated March 3, 1953. Divided and this application June 13, 1952, Serial No. 293,379
7 Claims. (Cl. 181—.5)



1. A system for producing directional propagation of seismic waves through the earth, comprising a pair of spaced apart explosive charges disposed in the earth's crust at approximately the same depth, a third explosive charge disposed in the earth's crust at a depth not greater than the depth of said pair of charges and substantially equally spaced from said pair of charges, and means for simultaneously detonating said pair of charges and for detonating said third charge a predetermined time interval thereafter, thereby to directionalize the major portion of the explosive energy in a downward direction.

2,730,188
BAFFLE MUFFLER SILENCER
John H. Bailey, Sacramento, Calif.
Application May 21, 1951, Serial No. 227,391
1 Claim. (Cl. 181—47)



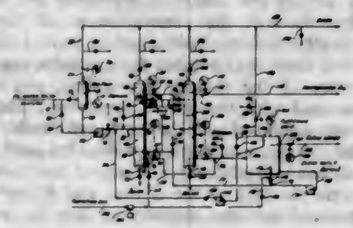
A silencing muffler having a front inlet and a back outlet and comprising a casing having imperforate cylindrical walls and provided with a front upstream baffle plate having a central opening therein and a back downstream plate with a central opening therein, a series of additional baffle plates mounted within said casing and located between said front baffle plate and said back plate, each of said baffle plates having imperforate sloping conical sides extending continuously from said imperforate casing walls to a single central opening and converging in a direction toward said front baffle plate to terminate upstream in said central opening, the height of said conical plates forming but a small fraction of the base diameter thereof, and cylindrical stiffening sleeves on said baffle plates projecting in an upstream direction from the perimeter of said openings whereby portions of the exhaust gases entering through the opening in said front baffle plate are deflected toward said imperforate sides of said baffle plates and toward said imperforate casing walls.

2,730,189
PLATINUM RECOVERY
Hermann Holzmann, Hanau (Main), Germany, assignor to The Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfurt am Main, Germany, a corporation of Germany
Application February 2, 1951, Serial No. 208,998
Claims priority, application Germany February 9, 1950
10 Claims. (Cl. 183—1)



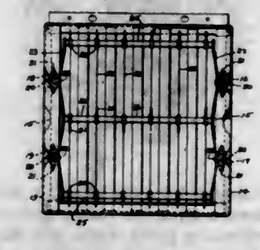
1. In an apparatus for carrying out high temperature catalytic reactions employing a platinum catalyst in which highly heated reaction gases leaving the catalyst contain platinum lost from the catalyst, means for collecting the platinum contained in the reaction gases leaving the platinum catalyst consisting of at least one fine meshed woven netting having a metallic surface comprising a noble metal selected from the group consisting of gold, silver and palladium arranged across the path of the highly heated reaction gases leaving the catalyst.

2,730,190
TREATMENT OF OIL-CONTAINING WATER
James S. Brown, San Gabriel, Paul W. Fischer, East Whittier, and Leslie C. Johnson, Redondo Beach, Calif., assignors to Union Oil Company of California, Los Angeles, Calif., a corporation of California
Application February 8, 1952, Serial No. 270,726
24 Claims. (Cl. 183—2.7)



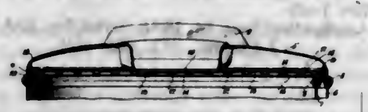
13. A method for the purification of oil-contaminated water which comprises passing an oil-contaminated raw water feed stream successively through a plurality of individual flotation zones in a multicell flotation zone so as to provide therein a water residence time of between about one and about 60 minutes, removing as a clean water recycle a portion of the clean water flowing from the last of said individual flotation zones, controlling said clean water recycle at a rate of between about 5% and about 35% of the flow rate of said raw water feed, combining said clean water recycle with a flotation gas under pressure at a rate of between about 0.05 and about 5.0 S. C. F. per barrel of said raw water feed stream whereby at least a portion of said gas is dissolved therein, injecting and depressuring a portion of the gas-ladened water into each of said individual flotation zones whereby flotation gas bubbles are formed by dissolution of the dissolved portion of gas in the depressuring step and pass with the undissolved portion of gas countercurrent to the flow of water through each individual flotation zone reducing the oil contamination thereof, removing a stream of oil accumulating in said multicell flotation zone as a product of the process, and removing the remaining portion of said clean water from the last of said individual flotation zones as a clean water product.

2,730,191
ELECTROSTATIC PRECIPITATOR
Ray W. Warburton, Medfield, Mass., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application April 1, 1954, Serial No. 420,365
2 Claims. (Cl. 183—7)



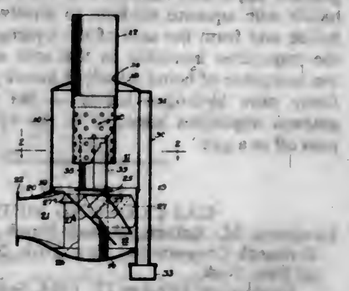
1. An electrostatic precipitator comprising a casing having a gas inlet, an ionizer frame having a pair of end ionizer wire supports and a central ionizer wire support, said frame having a pair of resilient side plates attached to the ends of said supports, said side plates between said end supports and said central support having outwardly bowed portions, a first pair of insulators having their outer ends attached to one of the sides of said casing adjacent said inlet and having their inner ends attached to the outwardly bowed portions of one of said side plates, and a second pair of insulators having their outer ends attached to the opposite side of said casing adjacent said inlet and having their inner ends attached to the outwardly bowed portions of the other of said side plates.

2,730,192
VACUUM CLEANER FILTER ASSEMBLY
Carl E. Meyerhoefer, Brooklyn, N. Y., assignor, by mesne assignments, to Lewyt Corporation, Brooklyn, N. Y., a corporation of New York
Application November 27, 1953, Serial No. 394,777
6 Claims. (Cl. 183—51)



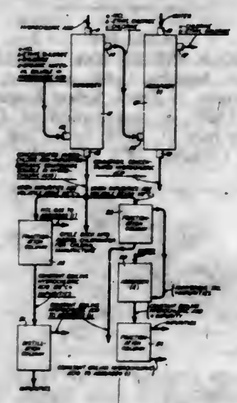
1. A vacuum cleaner filter assembly including in combination a cover, a perforated plate, a layer of flexible air-porous material having its body in contact with one face of said plate and its edge zone overlapping the edge of that plate, a gasket member formed of resilient material and provided with a groove in its inner edge, said groove accommodating the edge zones of said plate and material to maintain the latter in contact with said plate and against displacement with respect thereto, the outer edge of said gasket member providing a surface to detachably interlock with a surface of said cover by which said filter is to be mounted.

2,730,193
SPARK ARRESTER SNUBBER
Robert L. Hoyle, Libertyville, Ill., assignor to Burgess-Manning Company, Libertyville, Ill., a corporation of Illinois
Application February 23, 1954, Serial No. 411,915
3 Claims. (Cl. 183—87)



1. In a spark arrester snubber having a cylindrical shell, inlet and outlet end closures for said shell, conduit means adjacent the inlet end thereof adapted to direct an incoming gaseous stream laterally into said shell on one side of the axis thereof, an open-ended outlet tube extending from the outlet end of said shell thereinto substantially coaxially with the axis of said shell, said shell having a slot therein extending lengthwise from the outlet end thereof opposite said outlet tube, and a dust trap exteriorly enclosing said slot; the improvement therein comprising a fixed segmental spinner unit having a cylindrical support member coaxial with said shell at the inlet end thereof and a series of pitched blades circumferentially spaced around said support member and extending radially therefrom to the inner surface of said shell, said blades being spaced from said inlet end closure and each successive blade in the direction of flow of the gaseous stream extending progressively farther toward the inlet end of said shell and being so arranged that it imparts a longitudinal component of flow to a portion of said incoming gaseous stream.

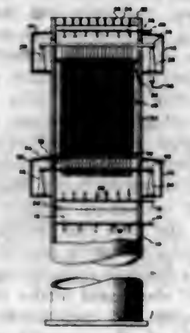
2,730,194
HYDROCHLORIC ACID FROM CHLORAL VENT GASES
Herbert C. Wohlers, St. Louis, Frank N. Grover, Alma, and Charles W. Lentz and Loren E. Pauling, St. Louis, Mich., assignors to Michigan Chemical Corporation, St. Louis, Mich., a corporation of Michigan
Application April 4, 1952, Serial No. 280,488
12 Claims. (Cl. 183—115)



9. The method of treating an off gas containing a hydrogen halide as the major constituent in admixture with gaseous impurities some of which are soluble in the acid

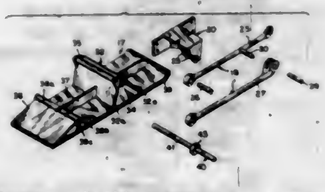
of the hydrogen halide and others of which are not, comprising the steps of contacting the off gas with a concentrated acid of the hydrogen halide in an amount ranging from 5–25 percent by weight of the product acid capable of being formed by the hydrogen halide in the off gas, contacting the gases of the hydrogen halide and gaseous impurities insoluble in the acid of the hydrogen halide with aqueous medium to dissolve out the hydrogen halide and form the acid of the hydrogen halide in which the impurities insoluble in the acid of hydrogen halide are incapable of being dissolved thereby to produce a relatively pure hydrogen halide as the product while the gaseous impurities insoluble in the hydrogen halide acid pass off as a gas.

2,730,195
GAS CLEANING METHOD
Lawrence M. Roberts, Bound Brook, N. J., assignor to Research Corporation, New York, N. Y., a corporation of New York
Application October 27, 1954, Serial No. 464,948
3 Claims. (Cl. 183—121)



1. The method of collecting fume containing substantial quantities of fluorine compounds, carbon compounds and tar products issuing from aluminum electric furnaces employing plastic pitch type electrodes comprising the steps of entraining the fume in a stream of carrier gas, removing a substantial portion of the fluorine compounds from said carrier gas stream by subjecting the gas to an aqueous spray whereby the carrier gas is humidified, and thereafter subjecting the carrier gas stream to electrical precipitation between discharge electrodes and complementary collecting electrodes continuously flushed with an aqueous medium to remove suspended particles from said gas in the form of an aqueous slurry.

2,730,196
VEHICLE EMERGENCY BRAKE
Kirk Besoyan, Los Angeles, Calif., assignor, by direct and mesne assignments, to Truck Safety Engineering Corp., Los Angeles, Calif., a corporation of California
Application July 21, 1950, Serial No. 175,066
1 Claim. (Cl. 188—4)



In an emergency braking device for a vehicle wheel, a drag shoe comprising a body having a flat bottom ground-engaging surface inclining forwardly at its front end, a pair of coaxial longitudinally spaced transversely disposed rear rollers rotatably carried by the top portion of the body adjacent its rear end, a forward roller rotatably carried by the top portion of the body in parallel relation to the rear rollers, said forward roller being spaced from the rear rollers a distance greater than the radius of said wheel and being disposed about an axis above the plane of the longitudinal axis of said rear rollers, and a vertical rib extending upwardly above the top surface of and longitudinally of the body between the rear rollers; said forward roller being higher than said rib; the rear top surface of said body inclining upwardly from its rear end to said rear rollers.

2,730,197
ARTICULATED CONNECTIONS
Thomas R. Smith, Newton, Iowa, assignor to The Maytag Company, Newton, Iowa, a corporation of Delaware
Application October 6, 1951, Serial No. 250,151
11 Claims. (Cl. 188—17)



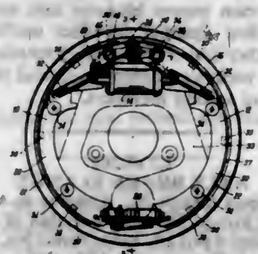
1. In an articulated connection, the combination of a first member having a cylindrical bore therein, a second member including a cylindrical sleeve mounted within said bore, said first and second members being relatively rotatable, a spiral clutch element having a plurality of convolutes wound in the same direction encompassing said sleeve and associated with said members to normally lock the same against relative rotary movement, said clutch element having an integral lug on one of its central convolutes for anchorage to one of said members and opposite end portions for simultaneously engaging the other of said members to lock the same against relative rotary movement, and means including a manually operable element to engage and simultaneously move said end portions of said clutch element out of clutching engagement with said other of said members to permit relative rotary movement between said members.

2,730,198
TRACK BRAKE ASSEMBLY
William T. Rossell, New York, N. Y., assignor to Transit Research Corporation, New York, N. Y., a corporation of New York
Application June 14, 1951, Serial No. 231,452
2 Claims. (Cl. 188—41)



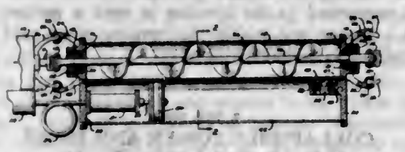
2. A track brake assembly comprising parallel track brake shoes, parallel bars extending from one of said shoes to the other thereof, the ends of each of said bars being formed as a loop, and means connecting the ends of said bars to said shoes comprising spaced brackets integral with said shoes, a pin nonrotatably mounted in each of said brackets with the pins in the brackets of each shoe being substantially coaxial with each other and substantially parallel to the length of said shoes, and a sleeve of rubber-like material enveloping said pin, each of said loops enveloping one of said sleeves, said sleeves each being surface bonded to their said pins and to said loops whereby relative rotation of said shoes about the axis of said pins is resisted by torsional stresses in said sleeves.

2,730,199
BRAKE ADJUSTOR
Clayton F. Britton, South Bend, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application September 29, 1954, Serial No. 459,097
6 Claims. (Cl. 188—78)



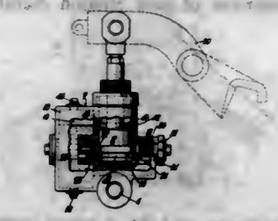
3. In a brake, a pair of articulated brake shoes, a backing plate, anchoring means vertically suspending the brake shoes, said anchoring means being pivotally secured to the backing plate, a fastening device received through apertures in the anchoring means and backing plate to permit pivotal movement of the anchoring means, said fastening device being adapted to hold the anchoring means against pivotal movement to maintain a selected vertical position for the brake shoes, and a second fastening device received through the anchoring means and backing plate for attaching the brake to the vehicle.

2,730,200
FLUID BRAKE FOR AUTOMOTIVE VEHICLE
John B. Murphy, Oceanside, Calif.
Application July 3, 1953, Serial No. 366,041
4 Claims. (Cl. 188—90)



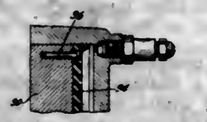
1. In combination with an automotive vehicle drive shaft connecting the vehicle transmission to the differential mechanism of the vehicle, fluid brake mechanism comprising a cylinder coaxially receiving said drive shaft and having end walls closing its front and rear ends and through which said drive shaft extends, a spiral screw surrounding said drive shaft between said end walls and having its outer edge surface substantially in contact with the inner surface of said cylinder, means providing a fluid reservoir carried by said end walls which close the opposite sides thereof and communicating with the interior of said cylinder at one end thereof, and fluid pressure operated means carried by said reservoir adjacent the other end and effective to force hydraulic fluid from said reservoir into said cylinder and to enable said spiral screw to return the hydraulic fluid from said cylinder to said reservoir.

2,730,201
SHOCK ABSORBER
Frederick A. Melzer, Gary, Ind.
Original application January 11, 1947, Serial No. 721,631, now Patent No. 2,598,582, dated May 27, 1952. Divided and this application April 4, 1952, Serial No. 280,586
2 Claims. (Cl. 188—97)



1. A fluid shock absorber comprising a housing, a vertically disposed piston and cylinder and fluid reservoir in said housing, said reservoir extending upwardly adjacent said cylinder, said cylinder having adjacent its lower end a pair of passageways to said reservoir, a suction valve in one of said passageways for admitting fluid from said reservoir to said cylinder when said piston is elevated, a pressure operated valve in the other of said passageways for permitting fluid to pass from said cylinder to said reservoir when said piston is lowered, a pair of peripheral grooves in said cylinder disposed above and below said piston when slightly above its lowermost position and a duct connecting said grooves whereby fluid may flow from below to above said piston to relieve the pressure in said cylinder as the piston approaches its lowermost position.

2,730,202
FLUID SEAL FOR BRAKE
William H. Du Bois, South Bend, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application March 17, 1950, Serial No. 150,177
8 Claims. (Cl. 188—152)

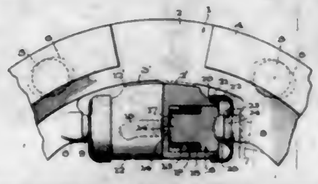


7. A disk brake actuator comprising an axially movable pressure-transmitting member, a chamber in which said pressure-transmitting member reciprocates, said pressure-transmitting member and the chamber in which it reciprocates having the form of an incomplete annulus which has a uniform radial dimension throughout its arcuate extent and which terminates in semi-circular end portions formed on radii equal to half of said radial dimension, a sealing member which prevents the escape of fluid from the chamber, said sealing member being shaped to conform to the chamber, and retaining pins having head portions molded into the extreme ends of said sealing member and a stem formed to slide into and out of an opening in the pressure-transmitting member.

2,730,203
DISC BRAKE AND THRUST MEANS FOR ACTUATING THE SAME
Millard B. Lucker, St. Joseph, and Claude R. Myers, Galien, Mich., assignors, by mesne assignments, to Lambert-Brake Corporation, St. Joseph, Mich., a corporation of Michigan
Application November 3, 1950, Serial No. 193,968
3 Claims. (Cl. 188—152)

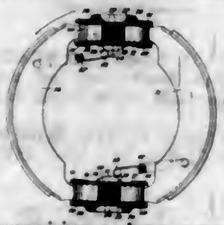
1. A friction device for brakes and the like, comprising a friction member adapted for compound rotative and

axial movement into and out of engagement with a member to be braked, actuator means for imparting such movements to the friction member aforesaid, and a thrust means interposed between a portion of said actuator means and a portion of said friction member for transmitting braking forces from the actuator means to the friction member, while allowing compound rotative and axial displacement of said friction member relative to



said actuator means, said thrust means comprising a thrust receiving wear pad carried on one of the portions aforesaid, said wear pad having a relatively flat face, and a thrust transmitting member having one of its ends rounded and swivelly seated in a seat in the other portion aforesaid, the other end of said thrust transmitting member having a relatively flat face in sliding engagement with the flat face on the wear paid upon movement of the friction member as aforesaid.

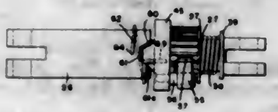
2,730,204
VEHICLE BRAKES
James Henry Pratt, Wythall, England, assignor to Girling Limited, Birmingham, England, a British company
Application November 28, 1950, Serial No. 197,903
Claims priority, application Great Britain December 1, 1949
3 Claims. (Cl. 188—152)



1. A brake comprising a drum normally rotating in one direction, a stationary back-plate, opposed arcuate shoes mounted within the drum, diametrically opposed double-ended hydraulic wheel cylinders mounted on the back-plate between the ends of the shoes which engage with the pistons of said cylinders, stop means limiting the inward movement of each piston into its cylinder, means urging the pistons in each cylinder apart to hold the shoes in light rubbing contact with the drum in the "off" position of the brake, spring means urging the toe end of each shoe inwardly to force the piston with which it engages into its cylinder to the limit of its movement to provide a stationary abutment for that end of the shoe, each shoe on application of the brake being circumferentially movable with the drum to force the piston in the other cylinder with which the heel of the shoe engages into its cylinder to the limit of its travel, and means for cushioning the inward movement of said latter piston into its cylinder to prevent noise.

2,730,205
AUTOMATIC SCREW TYPE BRAKE WEAR ADJUSTOR
Robert Henry Bauman, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 5, 1954, Serial No. 402,310
5 Claims. (Cl. 188—196)

1. A wear compensating device for a brake structure, comprising, a first member having a longitudinally extending chamber, a second member telescopically received within said first member axially movable therein, said second member having a helical type thread thereon, a nut threadedly received on said second member for rotation thereon, said nut having teeth on its periphery, a nut actuating member positioned between said nut and said first member, a pawl carried on said nut actuating



member and engaging said teeth to rotate said nut thereby upon oscillation of said actuating member relative to said nut, and cam means between said actuating member and said first member to effect oscillation of said actuating member and thereby effect rotation of said nut on said second member whereby to extend the total length of said first and second members.

2,730,206
AXLE BRAKE FLANGE
John A. Buvelot, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application April 10, 1953, Serial No. 348,043
6 Claims. (Cl. 188—206)

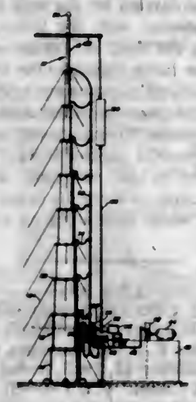


1. A fabricated brake flange for use in a trailing wheel axle assembly comprising a relatively flat base plate, an arm formed integral with the base plate and having a portion offset angularly from the plane of said plate, a bearing receiving inner housing disposed to extend through a hole centrally located in the plate and above said plate on the side thereof remote from said offset, said housing being of generally cylindrical form and having a radially extending abutment engaging and secured to the face of said plate adjacent said offset, means on the housing to position bearings relative thereto, and a cap connected to the housing in such a manner as to retain a grease seal within the housing when said flange is assembled to said axle assembly.

2,730,207
COLLAPSIBLE TOWER AND HOIST
Robert E. Hall, Larkinsville, Ala.
Application November 28, 1952, Serial No. 323,013
7 Claims. (Cl. 189—14)

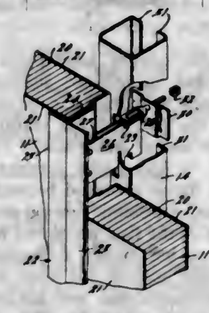
4. A collapsible tower comprising telescoping cylinders constituting double acting pistons, a reservoir, a supply conduit connected to said reservoir, a pump in said supply conduit, a return conduit connected to said reservoir, a first conduit connected to said cylinders and when connected to said supply conduit supplying fluid to raise said tower, a second conduit connected to said cylinders, and when connected to said supply conduit supplying fluid to lower said tower, a reversing valve interconnecting said conduits, a control lever for said valve, a flexible element connected between said lever and the top of said tower, said valve having a neutral position, said lever being operable to one position to connect said supply conduit to said first conduit, said flexible element being operable to move said valve to neutral position when said tower is fully raised, a wind receiving element on said flexible

element, said wind receiving element being operable in response to wind pressure to move said lever to connect



said supply conduit to said second conduit to lower said tower.

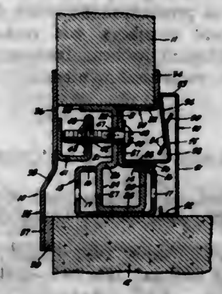
2,730,208
BUILDING STRUCTURE
Charles M. Valentine, St. Clair, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application August 1, 1952, Serial No. 302,083
2 Claims. (Cl. 189—34)



1. A space enclosing building structure including a frame work comprising open sided channel members, spaced adjacent wall forming panels, and means securing the panels to the frame work including a substantially T-shaped batten having a leg extending into the space between adjacent panels and oppositely directed flanges overlapping and engaging respective adjacent panels, a U-shaped element receiving and secured to the batten leg and having a notched periphery, a fastener detachably secured to the notched periphery of the U-shaped element and extending through the open side of a channel frame member, a plate bridging the open side of said channel frame member and having an opening receiving an end portion of said fastener, and a nut threaded onto said fastener end portion and reacting against said plate to draw the batten flanges against said panels and said panels against said frame work.

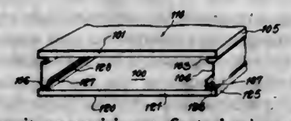
2,730,209
SILL CONSTRUCTION
Franklin F. Larsen, Reseda, Calif.
Application January 23, 1953, Serial No. 332,896
12 Claims. (Cl. 189—34)

1. A combination sill construction for supporting a wall comprising a runner fixedly secured to a supporting floor, a tie down clip interlocked with said runner and extended upwardly therefrom and provided with a supporting shelf to support said wall, a clamping element resting upon said runner and extended upwardly adjacent said clip and provided at its upper end with a supporting shelf for said wall and with a vertical clamping run adapted to abut the side of said wall, securing means to secure said clamp-



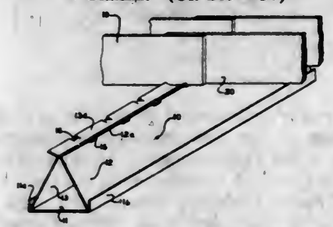
ing element to said tie down clip, and clamping means, including a run adapted to abut the side of said wall spaced from said clamping run of said clamping element, to position said wall on said supporting shelves.

2,730,210
WALL UNITS
Robert W. McLaughlin, Poundridge, and Guy F. Kotrbaty, Yonkers, N. Y.
Application May 15, 1947, Serial No. 748,188
4 Claims. (Cl. 189—34)



1. A wall unit comprising a first sheet metal channel with load-supporting flanges and a wall-forming web, the longitudinal edge portion of each of the flanges extending inwardly to form a planar portion substantially parallel to the web, the innermost part of each of the longitudinal edge portions being disposed towards the web at an obtuse angle to the plane of each of said planar portions, and an enclosing panel including a second metal channel having a web of substantially the same width as that of the wall-forming web, the longitudinal edge portion of each of the flanges of the second channel extending inwardly substantially parallel to its web and to said planar portion and in at least partial contact with said planar portion, each innermost part of the longitudinal edge portion of the second channel projecting away from the plane of its web parallel to said first mentioned innermost part and in abutment therewith each innermost part of the second channel having detent means in engagement with the corresponding innermost part of the first channel thereby to center and lock the channels with respect to each other.

2,730,211
STRUCTURAL MEMBER
Robert Lindsay Findlay, Youngstown, Ohio
Application October 9, 1953, Serial No. 385,130
2 Claims. (Cl. 189—37)



1. A structural member comprising an elongated generally triangular beam of plate construction, said beam

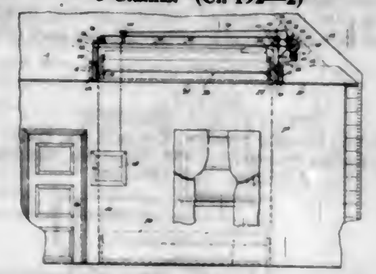
having a bottom wall and side walls and being welded together at its upper apex, means integral with said side walls and extending upwardly and outwardly from said apex, said means having a plurality of regularly spaced recesses therein of predetermined width for the reception of other structural members, said recesses having side edge portions adapted to bear transversely against the sides of said other structural members.

2,730,212
RELEASABLE TORQUE TRANSMITTING APPARATUS
Henry T. M. Rice, San Marino, and Robert T. Stevens, Altadena, Calif., assignors to Dillon Stevens, Los Angeles, Calif.
Application January 8, 1952, Serial No. 265,511
19 Claims. (Cl. 192—.096)



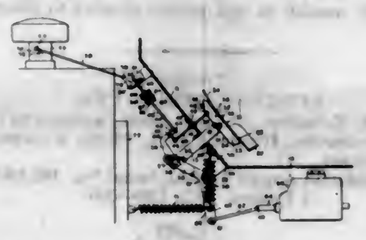
1. In torque transmitting apparatus: driving and driven members; coengaging elements on said members effecting a rotatable driving connection between said members, said elements being responsive to the torque transmitted through said members and tending to be disengaged from each other by such torque; means exerting a holding force on said elements to maintain them in engagement with each other until a predetermined torque is transmitted between said elements; a prime mover connected directly to said driving member to couple said prime mover at a one-to-one transmission ratio to said driving member, said prime mover and driving member including rotatable inertia means having greater energy stored therein than corresponds to the predetermined torque at which said elements are releasable from each other.

2,730,213
POWER AND CONTROL DEVICE FOR A BED ASSEMBLY
Samuel S. Mason and Emmaline E. M. Mason, Orangevale, Calif.
Application December 28, 1951, Serial No. 263,832
5 Claims. (Cl. 192—2)



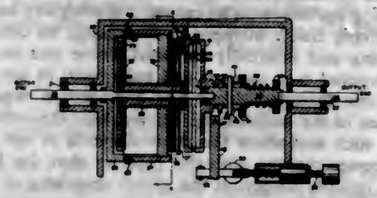
1. In a power and control device for a disappearing bed assembly of the type including a well mountable in a ceiling, a bed proportioned to be recessed within the well, a shaft rotatably mounted upon the well, and cable and pulley means extending between the shaft and bed and effective to raise and lower the bed responsive to rotation of the shaft, the combination comprising: electrically controlled means adapted for connection to the shaft for driving the same; a normally set brake including a brake drum adapted to be fixed to the shaft, a brake shoe adapted to be carried by the well and movable into and out of engagement with the drum, yielding means normally retaining the shoe in a drum-engaging position, and a brake release cable linked to the shoe and arranged to shift the shoe out of engagement with the drum when pulled; normally open switch means electrically connected to the shaft drive means to actuate the same when closed; and a manually operated control handle connected to the brake release cable to pull the same when shifted to a predetermined position, said handle being arranged to close the switch means when shifted to its cable-pulling position.

2,730,214
FOOT PEDAL CONTROL MECHANISM FOR AUTOMOTIVE VEHICLES
Pauline F. Scott, Norcross, Ga.
Application October 15, 1953, Serial No. 386,246
1 Claim. (Cl. 192—3)



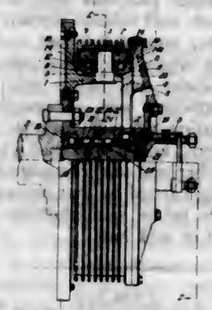
A foot operated control mechanism for automotive vehicles, comprising an inclined stationary support, an inclined bar, means to mount the inclined bar upon the support so that the inclined bar reciprocates longitudinally in a straight line at substantially right angles to the inclined support, a foot pedal arranged above the inclined support, a flange arranged beneath and secured to the foot pedal and extending throughout the major portion of the length of the foot pedal and pivotally mounted upon said bar, said bar having a shoulder to engage the flange and thereby holding the foot pedal at substantially right angles to said bar, said bar having an inclined shoulder leading to the first shoulder to permit the toe end of the pedal being inclined downwardly with respect to the bar, said bar being movable downwardly sufficiently upon break failure to cause the flange to engage the inclined support for preventing the turning movement of the pedal upon said pivot, a substantially horizontal arm rigidly secured to the bar near its lower end and extending forwardly beyond the same, a bell crank pivoted upon the horizontal arm, a link connecting the bell crank and foot pedal upon the forward side of said bar, throttle control means connected with the bell crank including a lost-motion element connected therein, a substantially vertical swinging brake-actuating bell crank arranged beneath the stationary support and pivotally mounted upon the stationary support upon the side of said bar remote from the first-named bell crank, a pin and slot connection between the brake-actuating bell crank and the lower end of said bar, fluid pressure brake control means connected with the brake-actuating bell crank, a retractable coil spring connected with the stationary support above the pivot of the brake-actuating bell crank lever and in substantial vertical alignment with such pivot and connected with the brake-actuating bell crank at a point below said point, the point of connection between the spring and brake-actuating bell crank being shiftable upon opposite sides of the pivot and the brake-actuating bell crank for moving said spring past dead center with respect to the pivot of the brake-actuating bell crank when such brake-actuating bell crank is swung in opposite directions, and a generally horizontal retractile coil spring connected with the brake-actuating bell crank beneath its pivot to swing such bell crank in a direction to raise said bar.

2,730,215
SYNCHRONOUS STARTING CLUTCH
Bert Fisk and Charles L. Spencer, Washington, D. C.
Application August 17, 1950, Serial No. 180,021
9 Claims. (Cl. 192—30)
(Granted under Title 35, U. S. Code (1952), sec. 266)



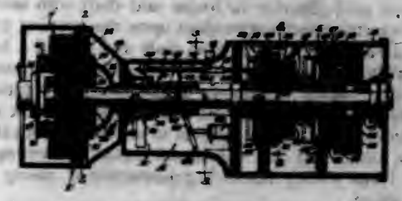
1. A synchronous starting device comprising, an input shaft, an externally threaded cylindrical member coaxial with said shaft and rotatably mounted thereon, spring means having one end attached to said shaft and the other end to said cylindrical member, reference means disposed on said member in threaded engagement therewith, keying means affixed to said shaft and slidably engaging said reference means to turn said reference means with said shaft, a first clutch plate mounted on one end of said cylindrical member, an output shaft having a common axis with said input shaft, a second clutch plate disposed on said output shaft to rotate therewith and axially moveable thereon to be engageable with said first clutch plate, a positioning stop on said first clutch plate, and means engaging said reference means with said positioning stop when said reference means is in a predetermined axial position on said cylindrical member.

2,730,216
CENTRIFUGALLY OPERATED FRICTION CLUTCHES
Albert Arthur Miller, Coventry, England, assignor to Self-Changing Gears Limited, Coventry, England
Application October 6, 1952, Serial No. 313,217
Claims priority, application Great Britain October 9, 1951
6 Claims. (Cl. 192—48)



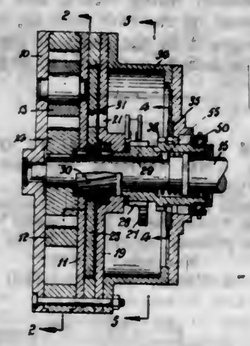
1. A centrifugal clutch comprising, in combination, arcuate centrifugal weights disposed in annular formation, spring means for opposing outward movement of the weights under centrifugal force, an arcuate friction member associated with each weight and for movement outwardly independently of the weights into engagement with a drive element, and radially disposed driving and guide means each of which is common to one of the weights and its associated friction member and carries said weight and member for simultaneously imparting rotation thereto, whereby at low speeds of rotation the friction members alone move radially into engagement with the driven element and at a predetermined speed of rotation the weights also move outwardly to increase the engagement pressure of the friction members.

2,730,217
POWER TRANSMITTING MECHANISM
Exil E. Bower, Charleston, Ill.
Application October 7, 1952, Serial No. 313,550
4 Claims. (Cl. 192—61)



1. A power transmitting mechanism, comprising: a drive shaft adapted to be coupled to a source of torque; a driven shaft adapted to supply torque for use and adapted to have a constant mesh gear transmission for transmitting the drive torque to the driven shaft and a fluid clutch mechanism between the drive shaft and gear transmission; said clutch mechanism including a flywheel on the drive shaft having therein a plurality of pinions arranged about the axis of the drive shaft, a clutch shaft carrying a central gear reposing in said flywheel and in mesh with said pinions to form a plurality of gear type oil pumps having inlets and outlets on opposite sides of the flywheel, an oil reservoir compartment separate from the oil pumps and flywheel, an oil conducting casing on the flywheel surrounding the clutch shaft and extending from the flywheel into the oil supply compartment, said casing flaring outwardly adjacent the oil inlets to said pumps whereby centrifugal force aids in conducting the oil to the pump inlets, means for conducting oil into said casing, said clutch shaft having a bore communicating with the outlets from said pumps and the oil supply compartment, and a valve for closing said bore against the passage of oil whereby said pump gears may couple the clutch shaft to the drive shaft.

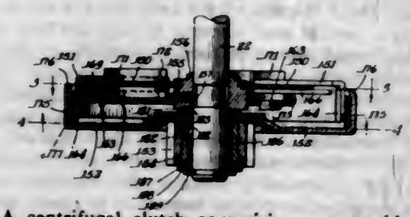
2,730,218
HYDRAULIC CLUTCH
Axel C. Wickman, Oak Park, Detroit, Mich.
Application September 28, 1954, Serial No. 458,746
14 Claims. (Cl. 192—61)



12. In a hydraulic clutch, a rotatable hollow casing, a pair of spaced partitions located within said casing to set off a hydraulic pump chamber and a centrifugal liquid reservoir chamber, first inlet and outlet ports in one of said partitions, and second inlet and outlet ports in said second partition and radially offset a predetermined

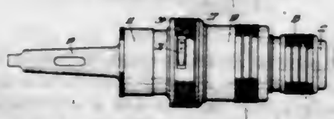
angular distance relative to said first ports, said inlet ports being located near the outer peripheries of said partitions and said outlet ports being located remotely from said outer peripheries; a rotatable disk valve positioned between said partitions and provided with an opening through which said first and second inlet ports may be communicated and an additional opening through which said first and second outlet ports may be communicated; aligned central openings through said partitions, disk plate, and casing, a power shaft inserted through said openings and extending into said pump chamber, pump means in said chamber to rotate said shaft with said casing at varying speeds dependent upon the opening of said ports; a sleeve fitted over said shaft and having a helical toothed splined portion cooperating with teeth upon said disk valve, means responsive to the speed of rotation of said casing rotating said shaft and thereby said disk valve, said sleeve being axially slidable to cause said helical portion to rotate said disk valve, and means preventing said sleeve from sliding below a predetermined casing rotational speed.

2,730,219
CENTRIFUGAL CLUTCH
William H. Kitto, Evanston, Ill., assignor to G-M Laboratories, Inc., Chicago, Ill., a corporation of Illinois
Application November 27, 1950, Serial No. 197,722
17 Claims. (Cl. 192—105)



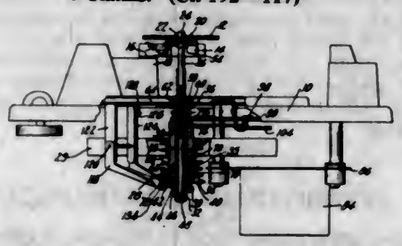
1. A centrifugal clutch comprising, a rotatable drive shaft, a drive plate secured to the drive shaft for rotation therewith, a plurality of weights having shoes on their outer edges, means including spring means movable with and radially slidably mounting the weights on the drive plate for substantially straight line radial movement relative to the drive plate to and from extended and retracted positions and resiliently connecting the weights to the drive plate for resiliently driving the weights in a rotative direction by the drive plate, additional spring means urging the weights inwardly until overcome by centrifugal force whereupon said weights slide radially outwardly against the action of said last mentioned spring means, and a cup member rotatably mounted on the drive shaft for rotation relative thereto and engaged by the shoes of the weights when the weights slide radially outwardly to be rotated thereby.

2,730,220
DEVICE FOR THE ATTACHMENT OF TOOLS TO DRILLING AND OTHER POWER OPERATED METAL WORKING MACHINES
John Dodd, Greenock, Scotland
Application November 3, 1952, Serial No. 318,392
Claims priority, application Great Britain November 9, 1951
2 Claims. (Cl. 192—114)



1. A device for the attachment of tools for drilling, reaming, boring, countersinking, tapping, studding and like operations to drilling and other power-operated metal working machines provided with a slipping clutch through which the drive is transmitted, said clutch comprising driving and driven members having co-acting faces each having interengaging teeth with sloping faces, a casing in which is located the driving and driven clutch members together with resilient means urging said members into co-operative engagement, an internally screw threaded sleeve screwed on the casing, said sleeve having at one end thereof an internal flange, anti-friction bearings provided between the said flange and the driven clutch member, the loading on the clutch members being adjusted by adjusting the sleeve on its casing, a driving key connecting the driving clutch member to the casing, an outer sleeve enclosing said internally threaded sleeve and having circumferenital cam recesses and balls fitted in apertures in the screw threaded sleeve and arranged to engage with recesses in the ends of the driving key, the construction being such that when the outer sleeve is in one position its recesses register with the balls so that the balls can move radially to permit the clutch members to slip and when in another position the balls are prevented from radial movement and engage the driving key so that the clutch members are positively held in engagement.

2,730,221
CLUTCH AND SPINDLE DISENGAGING MEANS FOR TURNTABLES
Farlow B. Burt, South Bend, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application September 29, 1949, Serial No. 118,553
6 Claims. (Cl. 192—117)



1. In a phonograph apparatus, in combination, a platform, a turntable carried above said platform, a mechanism for driving said turntable, said mechanism including a rotatable wheel provided with a hub, a tubular support for said hub, said tubular support carried by said platform, a member constructed and arranged for drivably engaging said turntable and extending through said tubular support above and below said platform, said turntable being provided with an opening for drivably receiving that portion of said member which extends above said platform, and a two part clutch interposed between said member and said rotatable wheel, one part of said clutch being carried by that portion of said member which extends below said platform and the other part being formed in said hub.

2,730,222
CONVEYER ROLLER
Samuel J. Klein, Detroit, Mich.
Application July 14, 1953, Serial No. 367,789
4 Claims. (Cl. 193—37)



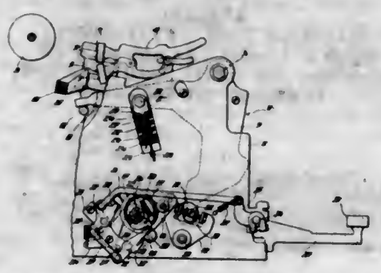
1. A conveyer roller for providing support for an object, said roller comprising a body having an annular tread, an annular hub concentric with said tread, and a supporting universally deformable web interconnecting said tread and said hub, said web interconnecting said tread and said hub along a line inclined to the vertical, said web being joined to said tread and said hub intermediate the edges thereof whereby the edges of said tread are free enabling said tread to conform to the shape of an object supported by said roller.

2,730,223
ICE BLOCK STORAGE AND DISPENSING RACK
Harold O. MacLean, Highland Park, Ill.
Application July 30, 1953, Serial No. 371,294
7 Claims. (Cl. 193—39)



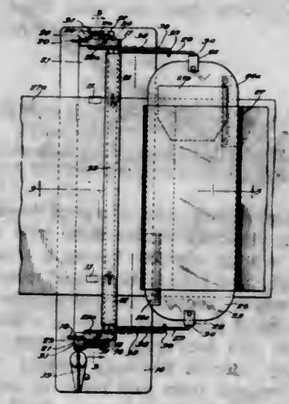
1. An ice block storage and dispensing rack comprising two spaced apart spirals of channel-like cross-section for storing and conveying ice blocks therein, a plurality of longitudinally extending ice block conveying channels extending between each successive round of each spiral, the channels of each successive round located in a vertical tier, and means located adjacent the ends of said channels for controlling the entrance and discharge of ice blocks to and from said channels.

2,730,224
POWER CASE-SHIFT MECHANISM
Harry C. Yaeger, West Hartford, Conn., assignor to Underwood Corporation, New York, N. Y., a corporation of Delaware
Application February 10, 1953, Serial No. 336,091
6 Claims. (Cl. 197—74)



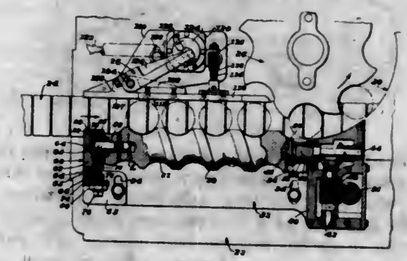
1. In a typewriting machine having a case-shift body mounted for downward and upward case-shifts between an upper and a lower position, flexibly strainable means arranged to oppose downward shift of said body, comprising relatively easily flexible spring-turns approximately counterbalancing the weight of the body to resist moderately the body in a first part downward shift, and comprising also relatively much harder strainable spring-turns to resist heavily the body substantially throughout the second half of the downward shift but exclusive of an appreciable first part of the downward shift, whereby said harder strainable spring-turns store a significant amount of energy in the downward shift of the body, and harmonic motion means controllable to shift said body from either of said positions to the other and to hold it there, said harmonic motion means, resultant to shifting the body to lower position, being effective to hold said harder strainable spring-turns against effectively acting upwardly on said body, and consequential to starting the shift of said body from said lower to said upper position enabling said harder strainable spring-turns to exert energy stored therein to assist effectively and strongly thereafter the upward shift of the body substantially not less than half-way toward the upper position.

2,730,225
HOLDER FOR CARBON ROLLS
Lester K. Fleischmann, Chicago, Ill.
Application October 13, 1954, Serial No. 462,074
7 Claims. (Cl. 197—126)



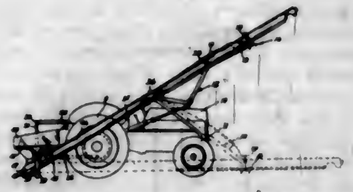
1. A carbon holder for supporting a carbon roll between strips of continuous form stationery in a writing machine, comprising: a base member adapted to be secured to the writing machine, said base member having a pair of upwardly extending spaced supports; a carbon roll supporting structure extending between and secured to said spaced supports to hold a carbon roll in a generally horizontal position; and mechanism for adjustably tilting said carbon roll supporting structure to maintain carbon unwound from the carbon roll in proper lateral alignment between the strips of continuous form stationery.

2,730,226
ARTICLE FEEDING MECHANISM
Carl L. Day and Rudolph H. Breeback, Baltimore, Md., assignors to Crown Cork & Seal Company, Inc., Baltimore, Md., a corporation of New York
Application June 6, 1951, Serial No. 230,192
13 Claims. (Cl. 198—34)



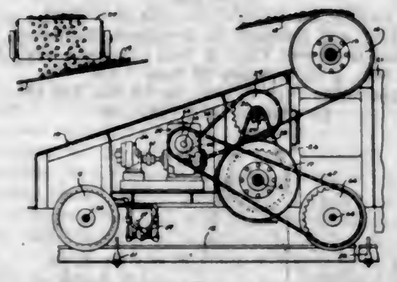
1. A mechanism to space articles moving unidirectionally along a straight path comprising a generally cylindrical element positioned with its axis substantially parallel to and at one side of said path, said element having its periphery provided with a helical groove, a pair of supporting devices, one at each end of said element, the supporting device at the outfeed end of said element including universal joint means cooperating with said element, the supporting device at the infeed end of said element including journal means horizontally movable with respect to said path and means to urge said element toward said path, and an element at the opposite side of said path including a vertical planar face substantially parallel to the path of the articles.

2,730,227
MOBILE GRAIN ELEVATOR
Veri L Chicane, Cottonwood, Idaho
Application February 16, 1953, Serial No. 337,037
2 Claims. (Cl. 198—53)



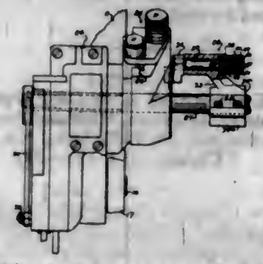
1. The combination with a tractor having a power-operated lift, vertically tiltable draw bars and a power take-off; of a grain elevator having a transversely disposed support frame releasably secured to said draw bars; a spiral conveyor pivotally carried at one end by said frame for vertical tilting movement in a plane longitudinally parallel and outwardly spaced from said tractor; said lift being adapted to freely support said conveyor at a point removed from said pivot, to impart selective vertical tilting movement thereto; a fixed receiving bin carried by said frame and communicating through a flexible conduit with said conveyor adjacent its pivoted end; and power transmission means operably uniting said power take-off and said spiral conveyor whereby said conveyor is driven.

2,730,228
AUTOMATIC TRIPPER FOR BELT CONVEYORS
Mark S. Greeley and Rushton O. Kimbro, Birmingham, Ala., assignors to Continental Gin Company, a corporation of Delaware
Application March 19, 1952, Serial No. 277,468
12 Claims. (Cl. 198—186)



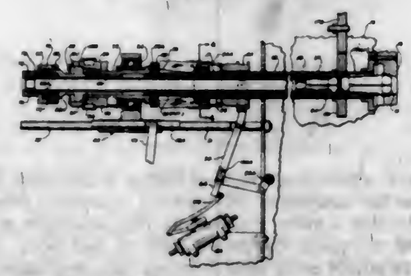
1. The combination with a conveyor belt tripper frame mounted on wheels and having pulleys journaled thereon around which a conveying belt passes and which are driven by said belt, of a fluid pressure pump mounted on said frame in driven relation with one of said pulleys, means supplying fluid to said pump, a fluid pressure motor mounted on said frame and connected in driving relation with said wheels, conduits communicating with opposite sides of said motor, a four-way valve having an exhaust port and communicating with said conduits and said pump, said valve being operable to introduce fluid selectively under pressure to the motor through one of said conduits and discharge fluid through the other of said conduits and said exhaust port, and a four-way pressure operated pilot valve communicating with said pump and with the four-way valve to be operated for actuating the same upon a predetermined distance of tripper travel, said pilot valve having an exhaust port and being constructed and arranged for the operation thereof to be completed before there is a change of flow in the valve to be controlled.

2,730,229
STOCK STOP FOR MACHINE TOOL
John J. Nichta, Parma, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a corporation of Ohio
Application July 14, 1953, Serial No. 367,829
12 Claims. (Cl. 203—35)



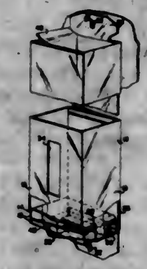
1. In a machine tool having an indexible carrier supporting a plurality of hollow spindles through which stock is axially fed, a stock stop including a portion extending transversely relative to the axes of said spindles, a member pivotally supporting said stock stop for rocking movement to and from a position in the path of stock fed through one of said spindles in an indexed position of the carrier, cooperating axially engageable interfitting surfaces on said member and stock stop normally preventing relative rotation therebetween, and spring means exerting an axially directed force to maintain said interfitting surfaces engaged, the said surfaces having cooperating portions such that rotative force applied to said stock stop rocks the latter through yielding of said spring means thereby preventing damage to the machine tool resulting from lateral engagement of objects with said stop.

2,730,230
MACHINE TOOL ATTACHMENT
Ralph R. Gordon, La Crescenta, Calif.
Application July 3, 1951, Serial No. 234,961
15 Claims. (Cl. 203—159)



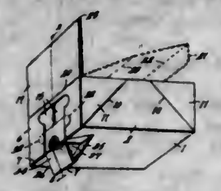
1. Automatic feeding apparatus for turning machine tools of the type including a headstock, a chuck supported at the inboard end of the headstock by a spindle passing through the headstock, a driving collet supported in the chuck by a first draw tube concentrically disposed within the spindle, and control means for rotating the spindle and first draw tube and for causing longitudinal displacement of the two to open and close the driving collet, which automatic feeding apparatus comprises a track extending from the outboard side of the headstock and parallel to the longitudinal axis of the spindle, a carriage slidably mounted on the track, outboard and inboard stops for limiting the displacement of the carriage on the track, a fixed tube rotatably fastened to the carriage and extending into the first draw tube coaxially therewith and to a point within the headstock adjacent the driving collet, a second draw tube mounted coaxially within said fixed tube and extending from the outboard end thereof, a feed collet mounted on the inner end of the second draw tube and extending beyond the inner end of the fixed tube, clutch means mounted on the carriage for causing relative longitudinal motion of the fixed tube and second draw tube, means operable responsive to carriage travel to actuate the clutch, and means operable responsive to operation of the driving collet control means to cause the carriage to travel on the track.

2,730,231
MATCH BOOK DISPENSER AND SUPPORTING BRACKET THEREFOR
Charles B. Ryan, Piqua, Ohio
Application October 27, 1952, Serial No. 317,091
2 Claims. (Cl. 206—30)



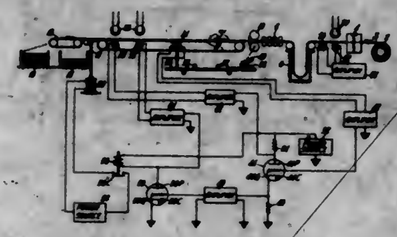
1. In combination; a carton formed of a blank of stiff paper or the like comprising fold lines extending in spaced relation thereacross parallel to one side edge of the blank whereby the blank is divided into five sections said blank being folded along said lines to form a rectangular carton with the two side sections of the blank overlapping in back, tabs extending from the tops and bottoms of the sections on each side of the center section overlapping and secured together to provide top and bottom closures therefor, said tabs having their back edges stepped back from the back wall so as to leave a slot in front of the back wall of the carton there being a notch extending across the bottom of the said center section and part-way into the said sections on opposite sides thereof to form a feed opening in the bottom of the completed carton, and a flat stiff supporting strip extending completely through the said slot in the carton in front of the back wall and comprising means at its ends for securing it to a wall surface, and shelf means extending outwardly from said supporting strip to supportingly engage said bottom closure.

2,730,232
DISPLAY CARTON
Merrill J. Coe, Kalamazoo, Mich., assignor to Sutherland Paper Company, Kalamazoo, Mich.
Application October 13, 1952, Serial No. 314,429
8 Claims. (Cl. 206—45.26)



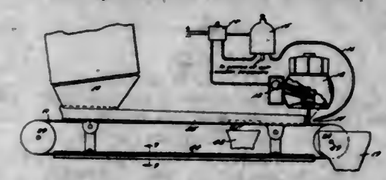
8. A display carton comprising a bottom, side, front and inner and outer rear walls, and an easel member hingedly joined at its lower end to the bottom in spaced relation to the rear end of the bottom, said easel member being defined by spaced slits extending downwardly in the outer rear wall and into the bottom and connected adjacent their upper ends by a slit in the outer rear wall, the easel member having a transverse score at the juncture of the portion thereof formed from the outer rear end wall and that formed from the bottom, the easel member having a laterally projecting tab disposed between the outer and inner rear walls when the easel member is adjusted to erected position, said easel member also having a lug supportedly engageable with the lower edge of the inner rear wall when the easel is in erected position.

2,730,233
APPARATUS FOR INSPECTING AND CLASSIFYING FLAT STEEL PRODUCTS
William E. Coleman and George H. Rendel, Pittsburgh, Pa., assignors to United States Steel Corporation, a corporation of New Jersey
Application March 18, 1952, Serial No. 277,138
10 Claims. (Cl. 209—111)



1. Apparatus for inspecting and classifying flat products which comprises a pin hole detector, means for passing the flat product in strip form through the pin hole detector, a marker actuated by said pin hole detector when a pin hole appears in the strip for applying a mark to the strip adjacent the pin hole, a shear for cutting the strip into sheets, a mark detector adjacent the path of travel of the sheets, a deflector located along the path of travel of the sheets beyond said detector, a photocell located approximately the length of one sheet from said detector on the side thereof adjacent said deflector, means for actuating said deflector, and a circuit for actuating said last named means when the leading edge of a sheet with a mark thereon cuts off light to said photocell to deflect said sheet out of the normal path of travel, said circuit including means for storing a signal from said detector in response to the said mark on the marked sheet passing the detector, and means connecting said photocell to said last named means to deactivate said means for storing a signal when the leading edge of the marked sheet reaches said photocell so that said deflector actuating means in actuated.

2,730,234
COLOR SORTING MECHANISM
Everett H. Bickley, Bala-Cynwyd, Pa.
Application August 2, 1952, Serial No. 302,343
10 Claims. (Cl. 209—111)

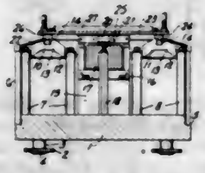


10. In a sorting apparatus, the combination of a scanning head for focussing light rays towards an inspection point, means locating a bean at said inspection point, means mounting said head for movement towards and away from said inspection point to adjust the focus of said rays upon a bean, and a vernier means for adjusting said head for critical focussing adjustment.

2,730,235
LIQUID SEPARATING MEDIUM AND USE THEREOF
Jerome Swimmer, Chicago, Ill.
No Drawing. Application October 24, 1952, Serial No. 316,770
14 Claims. (Cl. 209—166)

1. A method of separating a mixture of solids of different densities, at least one of said solids having a specific gravity below about 3.62 and at least one other of said solids having a specific gravity above about 3.33, comprising treating said mixture with a solution of iodomethyl mercury iodide in methylene iodide, said solution having a greater density than at least one but less than all of said solids and a lesser density than at least one but less than all of said solids, to produce a sink fraction and a float fraction.

2,730,236
ASSAY TEST SIEVE SHAKER
Edward J. Missien, Indiana, Pa., assignor to Syntron Company, Homer City, Pa., a corporation of Delaware
Application December 18, 1950, Serial No. 201,455
1 Claim. (Cl. 209—237)



An assay machine comprising a base member, a plurality of adjustable resilient vibration dampeners supporting said base member, a plurality of elastomers each having one side mounted in parallel spaced relation on said base member, a table member secured to the other side of said elastomers to provide the sole support of said table member for reciprocation in a vertical rectilinear path without tilting and as a free body, a set of assay sieves and a pan removably clamped to said table member, an electromagnetic motor having a field means and an armature means, a mounting to secure one of said motor means to the under side of said table member, a mounting to adjustably secure said other motor means to the said base member midway between said elastomers and in operative spaced relation with said one motor means, a rheostat, a circuit connecting said rheostat in series with said field means, spaced elastomer bumpers each adjustably mounted on one member and symmetrically located midway between said elastomers and on opposite sides of said motor to simultaneously engage the opposite member to stop the table member short of its full downward movement when the field means is energized, said rheostat controlling the effective magnitude of the reciprocation and thereby the effective stopping force simultaneously applied by said bumpers.

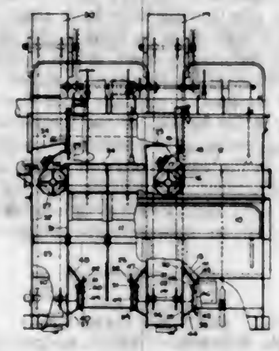
2,730,237
VIBRATING SCREENS
Gerhard Linke, Mulheim an der Ruhr, Germany, assignor to Siebtechnik, Gesellschaft mit beschrankter Haftung, Mulheim an der Ruhr, Germany, a firm
Application September 24, 1951, Serial No. 248,122
In Germany November 7, 1949
Public Law 619, August 23, 1954
Patent expires November 7, 1969
4 Claims. (Cl. 209—366.5)

1. A vibrating screen, comprising a ballast frame, a primary set of springs resiliently supporting said ballast frame, a screen frame, a secondary set of springs connecting said screen frame with said ballast frame and extending transversely to the direction of said primary set of springs, whereby said ballast frame along with said screen frame may swing while reciprocating along an elevated path of movement and whereby said screen frame may swing relatively to said ballast frame upon said secondary set of springs while reciprocating along an elevated path of movement which intersects the first-mentioned path of movement, a single unbalanced rotary shaft located at the point of intersection of a line passing through the center of gravity of the screen frame and extending in the direc-



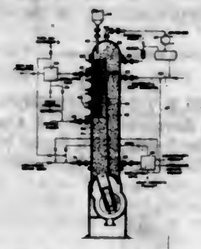
tion of its path of movement with a line passing through the center of gravity of the combined screen and ballast frames and extending in the direction of the path of movement of the ballast frame, and means connecting said shaft with said screen frame for vibrating said screen frame, and a motor connected with said shaft for driving said shaft, whereby a plane passing through the center of gravity of the screen frame extends perpendicularly to said secondary set of helical springs and leaf springs, and a plane passing through the center of gravity of the combined screen and ballast frames extends parallel to said secondary set.

2,730,238
MULTIPLE COMPARTMENT JIGGING APPARATUS
William J. Smith, Worthington, Ohio, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Application July 31, 1952, Serial No. 301,906
10 Claims. (Cl. 209—455)



1. A jig particularly adapted for use in a heavy media material separating system including a material treating compartment and a successive material treating compartment adapted to treat material being separated after it has been treated in said first named compartment, said first named compartment including a material supporting screen and a hutch compartment below said screen, an elevator compartment, material ejector means adjacent said screen controlling the ejection of material from said screen into said elevator compartment, means providing a fluid passageway between the bottom of said hutch compartment and said elevator compartment, a one-way check valve operable to restrict the flow of fluid from said elevator compartment into said hutch compartment and operable to permit free flow of fluid from said hutch compartment into said elevator compartment, said successive material treating compartment including a material supporting screen and a hutch compartment below said screen, a second elevator compartment, a second material ejector means adjacent said second named screen controlling the ejection of high gravity material from said screen into said second elevator compartment, means providing a fluid passageway between the bottom of said second named hutch compartment and each of said elevator compartments, and a one-way check valve between each of said elevator compartments and said second named hutch compartment operable to restrict the flow of fluid from said elevator compartments to said hutch compartment and operable to permit free flow of fluid from said hutch compartment into both of said elevator compartments, at least one of said last named check valves being adjustable to restrict and to stop substantially all flow of fluid from said second named hutch compartment into one of said elevator compartments.

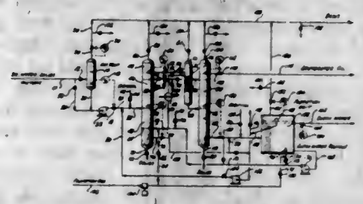
2,730,239
CONTINUOUS FLUID-SOLID CONTACTING APPARATUS
Norman E. Peery, San Francisco, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application March 22, 1952, Serial No. 278,096
6 Claims. (Cl. 210—42.5)



1. An apparatus for continuously contacting a fluid stream with a non-turbulent moving body of particulate solid material comprising in combination two substantially upright elongated substantially adjacent vessels of substantially equal lengths adapted for substantially unobstructed movement of a mass of particulate solid material therethrough downwardly through the first of said vessels and upwardly through the second of said vessels, an oscillatable cylinder-piston valve assembly secured in spaced relation to the lower end closures of said vessels and adapted to be oscillated between alternating communication with said vessels and adapted for reciprocation of the piston thereof alternatingly to withdraw particulate solid material from the lower end of the first of the two vessels and to force the thus withdrawn particulate material into the lower end of the second of the two vessels, whereby the particulate solid material is caused to move downwardly from the upper end of the first vessel and thence upwardly by force of solid-to-solid contact between the particles to the upper end of the second vessel, fluid communicating means provided in said vessels adapted to permit the flow of fluid through each of said vessels in intimate contact with particulate solid material therein and substantially unobstructed communicating means between the upper ends of the vessels for the free transport by gravity of particulate solid from the second to the first vessel.

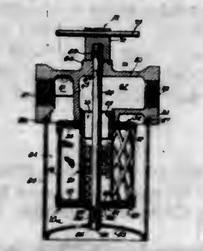
2,730,240
DEHYDRATION OF OILS
Leslie C. Johnson, Redondo Beach, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California
Application February 8, 1952, Serial No. 270,725
17 Claims. (Cl. 210—53)

1. A process for the dehydration of water-containing oils which comprises establishing a treating zone containing a flotation zone communicating with a superimposed oil washing zone, introducing oil contaminated with water into said treating zone, maintaining a body of oil in said washing zone, maintaining a body of water in said flotation zone, injecting a stream of clean water recycle containing dissolved flotation gas into said flotation zone, depressuring said recycle stream to liberate flotation gas therefrom whereby emulsified oil particles are agglomerated and carried by the flotation bubbles countercurrently to water passing through said flotation zone and then into said oil washing zone, removing water from said flotation zone, passing a heated stream of clean water recycle in countercurrent contact with said body of oil through said washing zone and on into said flotation zone forming an oil phase of reduced water content, flowing said water removed from said flotation zone into a supplemental flotation zone, injecting additional clean water recycle containing dissolved flotation gas and depressuring



said recycle into said supplemental flotation zone to remove residual oil contamination from the water therein, returning recovered oil from said supplemental flotation zone to said treating zone for dehydration, removing clean water from said supplemental flotation zone, employing part thereof as said clean water recycle streams, flowing said oil from said washing zone through a degassing zone, concurrently contacting the oil therein with a stream of hot water, removing liberated gas from said degassing zone, flowing degassed oil and said water into a secondary treating zone, countercurrently contacting said degassed oil with additional hot water to form a dehydrated oil product, and flowing water from said secondary treating zone into said supplemental flotation zone.

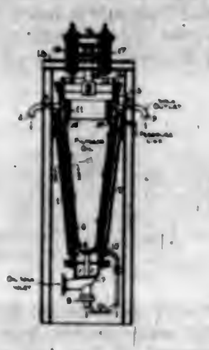
2,730,241
FILTERS
William A. Thomas, Chicago, Ill., assignor to Marvel Engineering Company, Chicago, Ill., a corporation of Illinois
Application February 9, 1953, Serial No. 335,710
2 Claims. (Cl. 210—165)



1. A filter assembly comprising a circular head casting formed with an integral transverse partially cylindrical portion having a pair of internally pipe threaded conduits aligned with each other, said casting having a central hub with a plane end, a through bore, an elongated bolt in said bore, and having a threaded end, a cylindrical threaded member having an axial threaded bore receiving said threaded end, said member having a plane lower end, and having a transverse pin, said casting having a circular bottom edge provided with a circular groove of rectangular cross-section, an O-ring in said latter groove, said bolt being welded to the inside center of the bottom of said housing, and a filter unit mounted on said bolt in said housing, and having an internal conduit communicat-

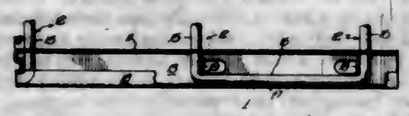
ing with one of said threaded conduits and its exterior surface in said housing communicating with the other of said threaded conduits.

2,730,242
APPARATUS FOR SEPARATING OIL FROM WAX
Frank Burnette Samuel, Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application February 27, 1951, Serial No. 212,875
4 Claims. (Cl. 210—199)



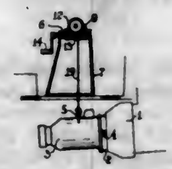
1. In an apparatus for deoiling petroleum wax, the combination which comprises a first hollow body with conical walls, a second hollow body with conical walls disposed within said first body whereby the substantially parallel conical walls of the two bodies form an annular space therebetween, fluid-tight stuffing box means at each end of said annular space adapted to provide sliding, longitudinal, relative movement between the bodies, the walls of at least one of said bodies being perforated for the flow of oil therethrough, a coarse filter medium covering each perforated wall and positioned within said annular space, a filter medium adapted to separate oil from wax covering each said coarse filter medium, one of said bodies being stationary and the other body being movably mounted, means for introducing an oil-containing wax under pressure within one end of said annular space whereby the movable body is displaced longitudinally away from the stationary body, resilient means connected to said movable body and yieldably resistant to the longitudinal movement of said movable body whereby the wax within said annular space is subjected to high resilient pressure, valve means for restricting and regulating the flow of deoiled wax from the opposite end of said annular space and means for removing oil which has permeated through each said perforated body.

2,730,243
ARTICLE DISPLAY BOARD
Robert G. Platt, Chicago, Ill., assignor to Century Display Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application September 29, 1948, Serial No. 51,695
3 Claims. (Cl. 211—87)



1. A display board having hangers projecting from the front side thereof adapted to be packaged in dismantled condition and to be assembled without the use of special tools, comprising, a panel member formed of thin metal stock having a horizontal marginal bottom section rearwardly extending at right angles from the bottom edge of said panel member, said marginal bottom section having a vertical section standing up from the rear edge thereof and said vertical section having a forwardly extending horizontal section projecting therefrom so as to provide a horizontal trough extending along the rear edge of said marginal bottom section and open on the front side thereof, said panel member being provided with a plurality of regularly spaced rod-receiving holes aligned level with the opening in said trough, and a U-shaped hanger rod for each pair of said holes with the yoke portion of each hanger rod being straight and with the side hanger arms extending at right angles from the opposite ends of the yoke, the side arms of said U-shaped hanger rods being insertable through a pair of said holes so that the yoke portions fit snugly within said trough, and the side arms project forwardly from the front side of said panel member, said marginal bottom section having pairs of struck-out tongues located within the corners of each U-shaped hanger so that the tongues of each pair extend toward each other and may be bent upwardly against the inside of each adjacent corner where one of the side arms joins the yoke portion so as to thereby lock said yoke portions in said trough, said trough having a depth equal approximately to the diameter of said yoke portions.

2,730,244
AUTOMOBILE TRANSMISSION HOIST
Eric E. Berggren, Milford, Conn.
Application March 10, 1955, Serial No. 493,434
4 Claims. (Cl. 212—28)

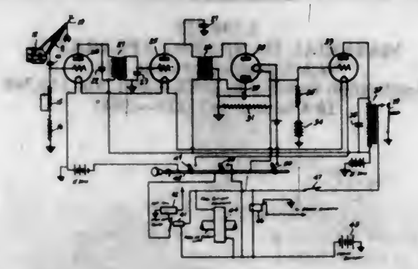


1. An automobile transmission hoist comprising; a frame disposed parallel to the motor drive shaft of said automobile; a head bearing pivotally mounted at one end of said frame; a hoist shaft rotatably mounted in said head bearing, and extending beyond the other end of said frame; a sleeve bearing rotatably mounted on said hoist shaft, being disposed and adapted to roll on said frame at its other end; a screw clamping means mounted on said frame and adapted to secure said sleeve bearing in position by preventing its rolling; manual driving means mounted on said pivoted head bearing and adapted to rotate said hoist shaft; a flexible cable having one end secured to, and wound on, said hoist shaft; an eyebolt secured to the free end of said cable, and having threaded portion for connection with the threaded hole of the transmission of said automobile.

2,730,245
AUTOMATIC CONTROL SYSTEM FOR HOISTING APPARATUS
James E. Auld, Miami, Fla.
Application April 15, 1952, Serial No. 282,491
1 Claim. (Cl. 212—39)

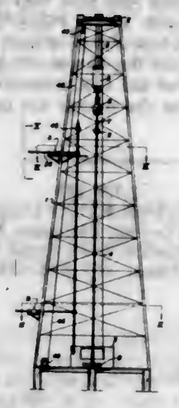
In combination, a hoisting apparatus including a motivating system for said apparatus to prevent approach to a high voltage power line within predetermined limits of proximity, comprising an antenna mounted on the hoisting apparatus, an amplifier including a filament cathode tube coupled to said antenna for deriving a useful signal when the antenna penetrates a magnetic field of predetermined intensity means for energizing said tube comprising a source of potential and a gang switch having contacts coupled to said source of potential and the

filament cathode of said tube and contacts coupled to the motivating system of the hoisting apparatus for starting said apparatus, whereby said amplifier is substantially instantaneously energized and operative when said hoisting apparatus is started, triggering means responsive to said signal when said antenna penetrates said magnetic field,



a master control relay operative in response to actuation of said triggering means to operate its contacts, and circuit means connected to the contacts of said relay and in operative relationship to said motivating system for stopping said hoisting apparatus when said master relay closes.

2,730,246
APPARATUS FOR HANDLING PIPE IN A DERRICK
Albert L. Stone, Palos Verdes Estates, Calif., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
Application November 3, 1951, Serial No. 254,781
20 Claims. (Cl. 214—2.5)



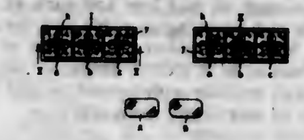
1. Apparatus for handling pipe in a derrick having at least one side, comprising: a linear trackway adapted to be mounted substantially horizontally in the derrick substantially parallel to a side of the derrick; a carriage mounted on said trackway for movement therealong; an arm having a pipe-engaging member thereon, said pipe-engaging member having means adapted to embrace a pipe and being constrained to move horizontally in unison with said arm; means mounting said arm on said carriage with its longitudinal axis substantially horizontal and in fixed substantially perpendicular relation to said trackway, said arm being movable longitudinally thereof relative to said mounting means to move said pipe-engaging member toward and away from the vertical centerline of the derrick and the side of the derrick on which said trackway is mounted; means for moving said carriage along said trackway; and means for moving said arm relative to its mounting means.

2,730,247
AUTOMATIC LUMBER STACKER
Joseph M. Lawson, Memphis, Tenn., assignor, by direct and mesne assignments, to Lawson Stacker Company, Inc., a corporation of Tennessee
Continuation of abandoned application Serial No. 145,641, February 23, 1950. This application October 13, 1954, Serial No. 462,003
19 Claims. (Cl. 214—6)



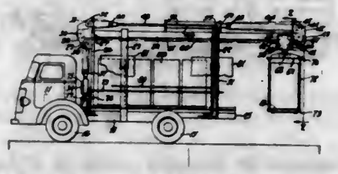
1. In a machine for tiering lumber in a stack, which machine includes horizontally shiftable forks having tier carrying forward end portions movable under shift into cantilevered relation over said stack, means for supporting said forks for shift, including means constraining the rear ends of said forks against vertical displacement during shift, and means for alternately shifting said forks toward said stack and said forward end portions into overlying relation to said stack and for retracting said forks; the improvement which comprises means for raising and lowering the support for the forward end portions of said forks, linkage operatively coupled to said forward end supporting means and including stops respectively positioned along and secured on said linkage for engagement and displacement by said forks as rearward shift is ending, to raise, and as forward shift is ending, to lower, said fork end portions.

2,730,248
KEYBOARD FOR MAIL SORTING APPARATUS
Gerardus van Waert, The Hague, Netherlands, assignor to N. V. Technische Maatschappij Marchand-Andriessen, The Hague, Netherlands, a limited liability company of the Netherlands
Application March 23, 1953, Serial No. 344,169
Claims priority, application Netherlands March 27, 1952
3 Claims. (Cl. 214—11)



1. A keyboard comprising a plurality of rectangular shaped keys arranged in a plurality of rectangular groups of four keys each, the edges of each key adjacent an edge of another key in the group having part of a finger shaped recess therein, whereby each key may be depressed individually, or the adjacent keys having said recesses may be depressed in pairs, or all the keys in a group may be depressed by pressure on the center of the group.

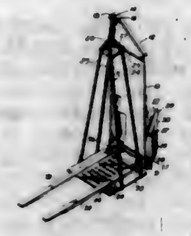
2,730,249
PACKAGE LOADER FOR TRUCKS
Ewart S. Edwards, Portland, Oreg.
Application March 8, 1952, Serial No. 275,600
4 Claims. (Cl. 214—75)



1. A package loader for trucks having in combination a vehicle, a deck having laterally movable sides, a track over the center of the truck and projecting from the rear

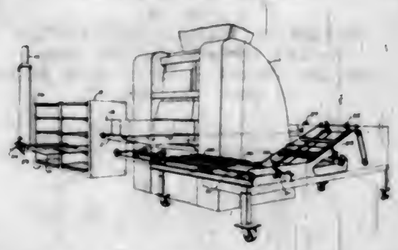
end thereof, a carriage mounted on said track, a platform supported by said carriage, means for elevating a load above the top of said deck, and an endgate having horizontal members projecting under the rearmost portion of the load which may be placed on said deck.

2,730,250
LOADER FORKS
Gaines W. Harrison, Columbia, S. C.
Application February 13, 1952, Serial No. 271,350
2 Claims. (Cl. 214—131)



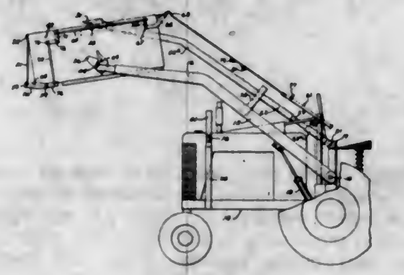
1. A lifting device comprising a frame formed by two parallel extending side bars, each of said bars having arms, each arm extending toward and joining the other arm, said arms extending laterally of said bars, pivot means mounted on said bars, the pivot means on one of said bars being aligned with the pivot means on the other of said bars, a lifting base pivotably mounted on said pivot means, said base comprising spaced parallel legs, a support plate interconnecting said legs, braces removably connected to each of said legs, each brace being connected to one of said bars, pivot means mounted on said bars for pivotally connecting said frame to a lifting device, a bifurcated projecting member connected to the juncture of said arms, a link pivotally mounted on said bifurcated member, said link having means for receiving chains for use in lifting a load with said device, means forming an opening in each of said legs and each of said bars, the opening in each leg being alignable with the opening in one of said bars upon pivoted movement of said legs toward said bars so as to receive means for retaining said legs in a locked position with respect to said bars upon disconnection of said braces from said legs.

2,730,251
HOIST OR OFF-BEARER FOR USE IN CONCRETE BLOCK MOLDING MACHINES
Walter G. Schutt, Adrian, Mich., assignor to Stearns Manufacturing Company, Adrian, Mich., a corporation of Michigan
Original application April 3, 1948, Serial No. 18,798. Divided and this application April 2, 1951, Serial No. 218,719
2 Claims. (Cl. 214—152)



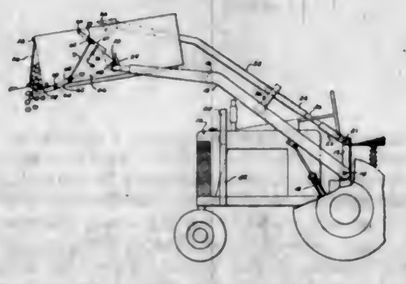
1. The method of handling pallets in a concrete or cement block forming machine which comprises the use of an electromagnetic tool to lift the loaded pallets out of the machine by putting the tool under the pallets and physically lifting the loaded pallets, conveying them and putting them into a rack and then magnetically attaching the tool to the top of an empty pallet in a rack and conveying the pallet back to the machine while magnetically gripping the top of the pallet and then releasing the pallet at the machine by de-energizing the electromagnetic tool.

2,730,252
MATERIAL HANDLING APPARATUS
Vick Oswalt, Clermont, Fla.
Application October 8, 1952, Serial No. 313,760
10 Claims. (Cl. 214—304)



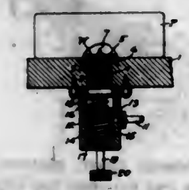
1. In combination with a tractor vehicle having forwardly extending power actuated lift arms, a dump box having lift pins on opposite sides thereof intermediate its ends and below its center of gravity, lift hooks on the lift arms adapted to engage and disengage the lift pins, a third pin on one side of the box located above its associated lift pin, an extensible leveling arm on the tractor extending forwardly above one of the lift arms, a hook carried by the leveling arm and adapted to engage and disengage the third pin, power actuated means operable from the tractor to extend and retract the leveling arm to vary the relation of the box to the horizontal, a door pivoted at one end of the box, a latch for the door and means operable from the tractor for operating the latch to open the door.

2,730,253
TRIP MEANS FOR FRUIT LOADING BOX
Vick Oswalt, Clermont, Fla.
Application April 6, 1953, Serial No. 347,110
4 Claims. (Cl. 214—304)



1. In combination with a vehicle having power operated lift arms, a receptacle having laterally extending lift pins, a pivoted door at one end of the receptacle, a latch for the door, hook members on the lift arms for detachably engaging the lift pins, means maintaining the receptacle level as it is lifted, means operable from the vehicle for tilting the receptacle, and latch release means mounted on the receptacle operatively connected to said latch and operable responsive to tilting the receptacle to release the latch and hold it in released position.

2,730,254
PACKAGE OPENER
Albert R. Saharoff, Philadelphia, Pa., Olof E. Freed, Richmond, Ky., and John D. Horner, Pittsburgh, Pa., assignors to the United States of America as represented by the Secretary of the Army
Application November 3, 1952, Serial No. 318,537
4 Claims. (Cl. 214—305)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In a device for opening wrapped packages by compressed air, a planar support for a package to be opened, said support having an opening therethrough, a plate inlaid in said support flush with the upper surface thereof covering said opening in the support and having a central opening therein, said plate being in contact with the contiguous surface of a package positioned on said support, whereby to prevent escape of compressed air therebetween, a nozzle having a sharp, upwardly projecting point and vertically adjustably fixed with said support and extending upwardly through the opening in said plate beyond the upper surface of said plate and said support to expose its outlet thereabove, a source of compressed air, and a conduit including a manually operable valve between said source and nozzle.

2,730,255
REFUSE-COLLECTING VEHICLE
George Thomson Gibson, Edinburgh, and William Heggie Wilson Ramsay, Jr., Penicuik, Scotland, assignors to John Gibson & Son Limited, Edinburgh, Scotland
Application June 16, 1953, Serial No. 362,118
Claims priority, application Great Britain March 17, 1953
9 Claims. (Cl. 214—503)



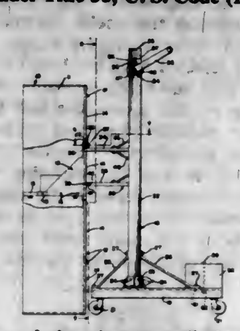
1. A tail-gate structure for suspension at the rear open end of a vehicle body comprising a pair of vertical side wall members of segmental shape spaced apart, an arcuate platform connecting the lower edges of said members, a paddle device rotatably mounted upon a transverse axle between said members, said paddle device having a pair of diametrically opposite arms, and paddles pivotally attached to the outer ends of said arms, a rear wall connecting the rear edges of said members above the paddle device, a fixed cam on each of said members, cam plates fixed to said paddles and arranged to coact with said cams, spring means for urging said paddles to turn about their pivotal attachments to said arms to hold said cam plates in contact with said cams, and means for imparting intermittent rotary motion through 180 degrees to said paddle device to impart in conjunction with the shape of said cam a feathering rotary motion to said paddles so that, when the paddle device is at rest, one of said paddles is disposed substantially vertically above the front edge of said platform and the other paddle is disposed inwards of the lower edge of said rear wall to permit the introduction of material on to said platform from the rear thereof, subsequent movement of said paddle device through 180 degrees causing the inwardly disposed paddle to sweep over said platform into a substantially vertical position at the front edge thereof and causing the other paddle to move upwards and rearwards into a position disposed inwards of the lower edge of said rear wall.

2,730,256
CONVEYOR TRUCK
Edgar W. Louden and William K. Holleron, Houston, Tex., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey
Application June 30, 1953, Serial No. 365,188
1 Claim. (Cl. 214—522)



A conveyor truck, comprising a truck body, a rearwardly downwardly inclined bin mounted thereon, said bin having sides sloping inwardly downwardly, an air-permeable but powder-impermeable bottom in said bin, an air chamber underneath said air-permeable bottom, an air blower connected to said air chamber, an adjustable discharge gate at one end of said bin and adjacent the bottom thereof, a relatively short, substantially horizontal screw disposed at a lower level than said permeable bottom, a cylindrical housing enclosing said screw and of appreciably larger inside diameter than the outside diameter of said screw, a discharge chute connecting said adjustable gate and said housing, a vertical screw conveyor section communicating with said housing, a movable screw conveyor section attached to and communicating with the discharge end of said vertical screw conveyor section, and a final discharge spout at the down-stream end of said movable screw conveyor section, said movable screw conveyor section adapted to rotate in a vertical plane coincident with the longitudinal axis of said truck.

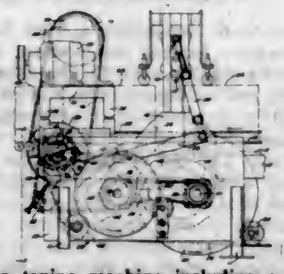
2,730,257
CHASSIS TRUCK
Richard H. F. Stresau, Jr., Washington Grove, Md., assignor to the United States of America as represented by the Secretary of the Navy
Application July 11, 1952, Serial No. 298,480
3 Claims. (Cl. 214—650)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A device of the character disclosed comprising a wheeled base a pair of supports secured to said base in spaced relation with respect to each other, a carriage mounted for vertical sliding movement between said supports, roller means on said carriage, guide means on said supports in engagement with said roller means for

guiding said carriage along said supports, a shaft rotatably mounted on said supports, means including a cable operatively connected to said shaft and carriage for causing said sliding movement of said carriage as said shaft is rotated, means secured to said shaft for rotating the shaft, a pair of mutually spaced arms on said carriage, lug means including a threaded element on each of said arms for securing and supporting an electronic chassis thereon a mass adjustably secured on said base for equalizing the load thereon when said chassis is secured to said carriage, a second pair of mutually spaced arms on said carriage, and means on each of said second arms for absorbing the force of impact as said lugs engage said chassis.

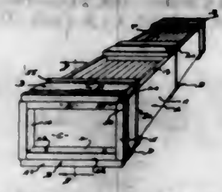
2,730,258
IMPROVEMENTS IN TAPING MACHINE CONVEYOR AND CUTTER HEAD SYNCHRONIZING MECHANISM
Adolph A. Wagner, Milwaukee, and Arnold J. Werner, Elm Grove, Wis.
Application December 12, 1951, Serial No. 261,211
1 Claim. (Cl. 216—22)



In a carton taping machine including a horizontally movable conveyor to continuously advance spaced, aligned cartons, and having means for applying tape to the tops and ends of said cartons as they are spacedly moved through the machine, a horizontally reciprocatable cutter head carrier, and a cutter head vertically, reciprocatably mounted on said carrier; a drive shaft having thereon normally fixed first and second sprockets, an endless chain engaged by the first sprocket for driving the conveyor at a constant speed, means for horizontally reciprocating the cutter head carrier, other means for vertically reciprocating the cutter head, and an endless chain engaged by the second sprocket and extending to the carrier reciprocating means and cutter head reciprocating means, said second sprocket including a hub formed with a central bore receiving said drive shaft, said hub being split axially into two complementary shells, a screw extending through one of said shells and threaded into the other shell for drawing the shells together about said shaft to cause said shells to fixedly clamp said shaft in said hub bore in a selected fixed position of rotation relative to said shaft, said hub being rotatable relative to said shaft upon release of said screw, the hub having a plurality of coplanar radially projecting teeth engaged by said endless chain, the selective rotation of said hub on its shaft providing for selective variation in the timed relationship of movements between the cutter head carrier and cutter head and the conveyer to insure reciprocating movements of the cutter head into and out of spaces between pairs of advancing cartons.

2,730,259
PACKING CASE
Chester A. Frick, Glendale, Calif., assignor to Leo M. Harvey, Los Angeles, Calif.
Application March 10, 1951, Serial No. 214,864
9 Claims. (Cl. 217—43)

7. An elongate object-carrying case including, two like spaced parallel elongate boards extending longitudinally of the case and having opposed object-confining inner sides and longitudinal edges, a plurality of like spaced blocks in spaced pairs one at each end of the case, each block including a plate with end portions bearing on the edges of the boards and spaced object-confining ribs engaging and extending between the inner sides of the boards



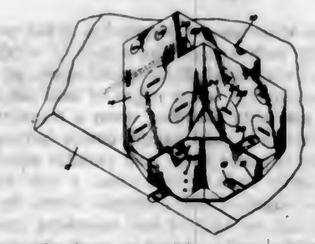
and spacing the boards apart, closures each extending between the boards and between the blocks of a pair and confined between the ribs of such pair of blocks, anchoring means stopping movement of the blocks lengthwise of the boards, and ties extending continuously around the end portions of the case holding the boards, blocks and closures assembled.

2,730,260
SEALING ALLOY FOR SOFT GLASS
Harold M. McCullough, Seaford, N. Y., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application September 26, 1952, Serial No. 311,591
3 Claims. (Cl. 220—2.3)



1. In an electron discharge device having a glass envelope and a metallic member sealed through said envelope in a vacuum tight manner, said metallic member consisting of an alloy comprising approximately 42% nickel, 4 to 8% chromium, 1 to 3% titanium and the balance substantially entirely iron.

2,730,261
CEILING OUTLET BOX WITH POSITIONING MEANS
Leo H. Tutt, Topeka, Kans.
Application December 17, 1953, Serial No. 398,671
4 Claims. (Cl. 220—3.7)



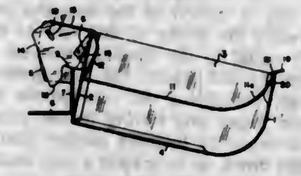
1. An outlet box comprising a receptacle having side walls, a closed end and an open end, one of said side walls having a recessed portion forming a reduced area, means for determining the position of the receptacle, and means projecting through said reduced area and engaging a support for mounting said receptacle, said receptacle being provided with a plurality of openings having removable closures therein, and said mounting means includes an elongated fastener, said side walls having struck-out bendable lugs engaging the fastener for guiding and frictionally retaining the fastener in position for engagement with the support.

2,730,262
SUPPORTING AND CLOSING MEANS FOR COLLAPSIBLE TUBES
Hunter Reams, Hagerstown, Md.
Application April 24, 1952, Serial No. 284,103
2 Claims. (Cl. 220—18)



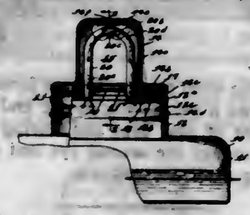
1. Supporting and closing means for the necks of collapsible tubes comprising an elongated base member attachable to a wall and having bottom longitudinally spaced threaded recesses therein, externally threaded caps for said necks rotatable in one and the same direction in said recesses for threading into the same, opposite notched cam lugs in said caps, and opposite lateral lugs on said necks rotatable over said cam lugs by rotation of said necks in said caps in said one direction and into and from interlocking engagement with the notches in said cam lugs, said cam lugs coacting with said lateral lugs during such rotation of the necks to cam the necks inwardly of the caps, the threads in said recesses and those on said caps having terminal radial stop shoulders engaging upon rotation of said caps in said one direction to establish a like position of the cam lugs in the caps to thereby establish a like position of all of the tubes when the lateral lugs on the necks engage the notches in the cam lugs, said lateral lugs during rotation thereof into disengaging position coacting with said notches to maintain said shoulders engaged.

2,730,263
ADJUSTABLE CONTAINER FOR SERVICE PARTS
Allan K. Nelson, Detroit, Mich.
Application March 13, 1953, Serial No. 342,046
5 Claims. (Cl. 220—18)



1. In combination, an open-topped container having a front and a back wall and a bottom, a support for the container in exterior proximity to the back wall, a pair of brackets rearwardly extending from the container, spaced apart transversely of the container and similarly upwardly notched to straddle the support, a plate disposable within the container in an upwardly spaced and approximately parallel relation to said bottom and proportioned to cover and prevent access to a lower portion of the container contents, an upward extension from the rear end of said plate, a rearward extension from the top portion of said upward extension, a pair of lugs on said rearward extension engaging between and coacting with the brackets to substantially center said plate laterally relative to the container, and means pivoting said lugs upon said brackets about an axis transverse to the container, whereby the plate may be upwardly swung to give access to said lower portion of the container contents.

2,730,264
VENTED TANK CAP
Raymond K. Strasel, Winthrop Harbor, Ill., assignor to Jacobsen Manufacturing Company, Racine, Wis., a corporation of Wisconsin
Application November 13, 1951, Serial No. 256,031
1 Claim. (Cl. 220—44)



A fuel tank cap adapted to engage the neck of a tank to close its inlet opening, comprising a body portion having a closed chamber of a certain size and a relatively small vent hole located at the highest point of the chamber for admitting air to said chamber, an inverted U-tube mounted in said chamber with its curved portion adjacent said highest point and both of its legs extending through the lowest wall of said chamber into said tank and providing a plurality of spaced apart passages in communication with said tank, said tube having a relatively small port located at the center of the under side of the curved portion thereof to communicate said chamber and said passages, said relatively small vent hole and said relatively small port allowing the flow of air from the atmosphere and from said tank into said chamber at only a limited rate.

2,730,265
REINFORCEMENT STRUCTURE FOR DISKS
Sven Ake Lundgren, Hultafred, Sweden, assignor, by mesne assignments, to American Heat Reclaiming Corporation, New York, N. Y., a corporation of New York
Application January 29, 1951, Serial No. 208,285
12 Claims. (Cl. 220—71)



6. In a structure for use as a cover element for a pressure vessel comprising a substantially circular flat disk element having one surface adapted to be subjected to the pressure in the vessel, a reinforcing structure for said disk element including at least two concentric groups of shell shaped ring elements arranged in coaxial relation to said disk, each group including at least two concentric substantially circular ring elements diverging in axial section along substantially straight lines toward the opposite surface of said disk element, each ring element bearing at least indirectly against said opposite side surface with one of its circumferential edges along a path concentric to the corresponding bearing path of the other ring elements, the bearing paths of said ring elements being spaced in the zone between the peripheral portion of the disk element and the central portion thereof, the ring elements within each group being interconnected along their circumferential edges remote from said disk element by means of a stiffening ring of substantially heavier dimension in radial direction than that of said ring elements, said stiffening ring being interposed between and interconnected with said circumferential edges.

2,730,266
BRUSH DRESSING ATTACHMENT FOR PAINT CANS
Dallas J. Courtney, Chicago, Ill.
Application September 18, 1953, Serial No. 381,100
1 Claim. (Cl. 220—90)

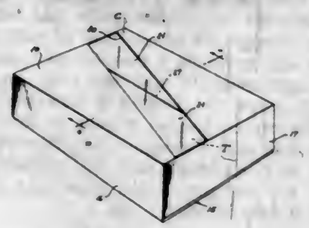
A brush dressing attachment for a paint can comprising a wire formed into a ring with the ends of the wire free,

the ring being provided on each end portion with a loop disposed at a substantial distance from the extreme end, each loop comprising a stem portion, transverse to the plane of the ring and on the same side of such plane,



and an eye on the stem portion remote from and parallel to said plane, and a bar having at one end a hinge connection with one of said eyes and having at the other end a hook to engage the second eye and cause the bar to hold the ring against expansion.

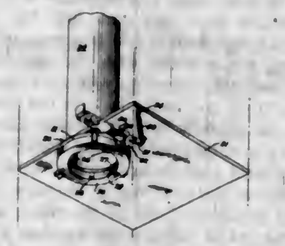
2,730,267
DISPENSING
Nicholas Marcalus, West Englewood, N. J.
Application January 26, 1953, Serial No. 333,057
2 Claims. (Cl. 221—48)



1. In a container construction of the class described, an elongated closed receptacle comprising elongated top and side walls and end walls of shorter dimension than the peripheral length of the top and side walls, a similarly shaped pack of interfolded paper sheets in said receptacle, said pack of sheets being of a type wherein each sheet is folded on a line extending longitudinally of the receptacle to provide top and bottom sections connected together along coincident longitudinal margins by a fold portion embracing the free longitudinal margin of the top section of the subjacent sheet with the top section of the topmost sheet of said pack arranged for withdrawal from said receptacle in progressive zig-zag order from the topmost sheet to the bottommost sheet of the pack, said top wall overlying said topmost sheet and being formed with a substantially straight diagonally extending elongated slot extending substantially from one end wall to the opposite end wall and in angular relation to the longitudinal fold line of said pack and through which slot said topmost sheet is adapted to be withdrawn, the edge faces of said top wall defining said slot being spaced inwardly away from said side walls in proximity therewith and cooperating with the top edges of said end walls to solely define the confines of said slot whereby to insure withdrawal and release of one end of the fold portion of the topmost sheet in advance of its other end to thus minimize any resistance to the withdrawal of said topmost sheet and the positioning of the top section of the adjacent sheet through said slot for subsequent withdrawal.

2,730,268
CUP DISPENSER
Ernest R. Moesch, San Francisco, Calif., assignor to Marbac Corporation, San Francisco, Calif., a corporation of California
Application April 22, 1952, Serial No. 283,556
4 Claims. (Cl. 221—221)

1. A dispenser for stackable paper cups having a beaded rim including in combination a support plate having a cup dispensing passage therethrough; a stationary ring secured below said plate and having an annular relieved portion therearound and a plurality of radial slots thereacross; a first set of generally radial fingers slidable radially in alternate said slots and adapted to be projected into said passage to support the rim of the lowermost of a stack of paper cups and to be withdrawn therefrom, said first fingers each having a cam-following stud on the upper surface thereof; a second set of radial fingers slidable radially in the remainder of said slots along a level above said first set of fingers, and adapted to be projected into said passage between the rims of the lowermost cup and the cup immediately thereabove, to support all but one of said stack of cups, each said second finger having a cam-following stud on its upper surface; a set of ejection fingers pivoted to said second fingers therebelow for swinging movement of their radially inner ends against or down from the radially inner ends of said second fingers, said ejection fingers having cam-following studs on their upper surfaces; springs in said slots normally urging said ejection fingers up against said second fingers; a cam ring mounted rotatably on said annular relieved portion of said stationary

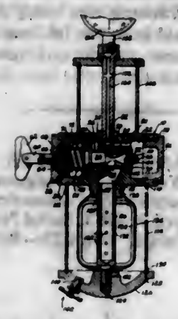


ring, and having a cammed groove for each said finger, each groove for said first set of fingers comprising an inner arc and an outer arc joined by a diagonal portion at about midway between their ends, the groove for each of said second set of fingers comprising a short diagonal portion and a long arcuate portion located at the radial inner end thereof so that said second fingers are projected out into said passage before the first set of fingers is withdrawn from said passage when said ring is turned in one direction and said second set is withdrawn only after said first set of fingers has been projected back in when said ring is turned in the opposite direction, the spacing between the levels of said sets of fingers being substantially equal to the spacing between the rims of adjacent cups in said stacks, the cam grooves for each ejection finger paralleling the cam groove for its associated second finger and having in the arcuate portion thereof a downwardly inclined portion that forces said ejection finger down, so as to eject a cup; means for rotating said cam ring in said first direction; and spring means secured to said rotating means for returning said cam ring back to its original position.

2,730,269
FLUID APPARATUS
Clarence E. Earle, Washington, D. C., and Carl A. Covington, Alexandria, Va.; Dorothy B. Earle, executrix of said Clarence E. Earle, deceased
Application April 14, 1949, Serial No. 87,476
12 Claims. (Cl. 222—193)

1. Fluid apparatus comprising a valve casing having inlet and outlet ports, means providing a valve chamber having a discharge opening in said casing, a differential valve body in said valve chamber interposed between said ports cooperable with said opening, said casing containing inlet and outlet passages between said ports respectively and said valve chamber, a housing separably secured to said casing defining a chamber intermediate and interconnecting said inlet port and said valve chamber in

series with said inlet passage, and a second housing separably secured to said casing defining a chamber com-



municable with said outlet passage intermediate said body and said outlet port.

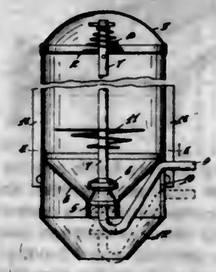
2,730,270
LIQUID MEASURING AND DISPENSING DEVICE
Harry B. Heinemann, Kansas City, Mo.
Application June 29, 1953, Serial No. 364,725
2 Claims. (Cl. 222—205)



1. A combination liquid measuring and dispensing device comprising in combination with a compressible container, a liquid flow conduit in said container and extending through the uppermost end of the latter; an elongated measuring tube having the lowermost end thereof disposed adjacent said uppermost end of the container exteriorly of the latter; and a laterally-extending pouring spout integral with the tube at the uppermost end thereof and provided with a restricted outlet orifice, said conduit extending into the tube through said lowermost end and on the longitudinal axis of the latter and being joined to said lowermost end of the tube in closing relationship thereto, a portion of the conduit within the tube extending at an angle in a direction oppositely to the pouring spout and terminating in an uppermost open end spaced from the pouring spout on one side of said longitudinal axis of the tube whereby, when the container is grasped and tilted to pour the contents of the tube through said orifice, said contents will not flow into the container through the conduit.

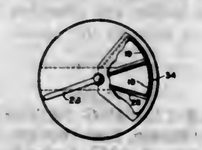
2,730,271
DISPENSER APPLIANCE FOR POWDERED OR GRANULAR MATERIAL AS SOAP AND THE LIKE
Lyman D. Dunn, Chicago, Ill.
Application April 24, 1951, Serial No. 222,680
1 Claim. (Cl. 222—322)

Apparatus for dispensing measured quantities of pulverulent material comprising a generally cylindrical container having a funnel shaped bottom terminating at its lower apex in a cylindrical spout extending downwardly therefrom, a plate extending across the top of the container, a valve actuating rod having one end positioned exteriorly of the container, said rod having a reverse bend therein to provide an intermediate portion extending upwardly through said spout and through a guide opening in the plate, a valve carried by the intermediate portion of said rod, said valve having a pair of vertically spaced valving portions of equal diameter defining therebetween a metering cavity, said valving portions each being circular in horizontal section and closely fitting the interior surface of the spout with the spacing between said



valving portions being approximately equal to the length of the spout, stop means cooperating with the rod to restrict movement thereof from a rest position in which the lower valving portion is positioned at the upper end of the spout and in which said cavity is wholly within the container and above the spout to a discharging position in which the upper valving portion is positioned at the lower end of the spout and in which said cavity is wholly below the lower end of the spout, and a spring connected to the actuating rod and constantly biasing the same toward movement to said rest position, said one end of the rod providing a handle permitting manual movement of the rod to said discharging position.

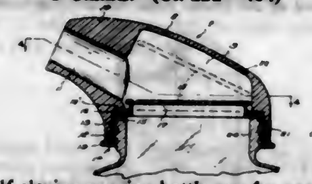
2,730,272
MEASURING AND DISPENSING TOP
Alfred Leighton Ellis, Atlanta, Ga.
Application November 30, 1950, Serial No. 198,379
4 Claims. (Cl. 222—362)



1. In a device of the class described, a top member comprising a hollow shell having an arcuate pocket portion formed in one side thereof to receive a measuring element, a handle element having a shaft rotatably mounted centrally in said top member, a measuring element positioned in said pocket portion and secured to said handle element for movement therewith, said measuring element comprising two substantially triangular-shaped measuring compartments having arcuate walls complementary to said arcuate pocket portion, a narrow bearing plate extending radially across the top member beneath said measuring element, said shaft being journaled at one end in said bearing plate, said top member being provided with a dispensing opening in said arcuate pocket portion, said measuring element being provided with dispensing openings through said arcuate walls communicating respectively with said measuring compartments, said measuring element being movable by said handle element to bring the dispensing openings communicating with said measuring compartments selectively into registry with the

dispensing opening in said top member, said bearing plate being constructed and arranged selectively to cover the measuring compartment in communication with the dispensing opening in registry with the dispensing opening in the top member and to uncover the other of said measuring compartments.

2,730,273
SELF-CLOSING BOTTLE CAP
Florence P. Smith, Chicago, Ill.
Application June 4, 1953, Serial No. 359,478
3 Claims. (Cl. 222—484)



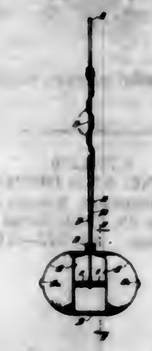
1. A self-closing pouring bottle cap for use with bottles having a threaded neck portion, that comprises a head portion that is provided with a downwardly opening chamber and with the head portion being extended radially to form a pouring spout having a fluid passage that is angled upward from the chamber, the fluid passage communicating with the chamber, the head portion having a lower internally shouldered neck portion that is circumferentially grooved upon its inner wall, a cylindrical coupling member having an inwardly extending flange at its upper end and an outwardly extending flange at its lower end, the coupling member formed open throughout and communicating with the chamber, the marginal edge of the upper flange provided with an upstanding valve seat that is concentric to the chamber opening, the valve seat extending upwardly into the chamber, a disc valve disposed in the chamber and having a diameter substantially equal to the major diameter of the chamber, the valve being floatingly positioned in the chamber to fall by gravity toward and from the valve seat, the cylindrical coupling member provided with an external annular bead that has snapping engagement into the groove of the shouldered neck portion with the bead and groove connection permitting rotation of the head portion with respect to the coupling, the inner wall of the coupling member being threaded for engagement with the threads of the bottle, the chamber being vented to allow a free flow of fluid to the spout.

2,730,274
SELF-CLOSING NOZZLE
John F. Brown, Los Angeles, Calif.
Application May 8, 1953, Serial No. 353,774
3 Claims. (Cl. 222—490)



3. A nozzle comprising a tubular body having a resilient side wall and a wall at one end formed with a transverse slit providing the outlet for the nozzle and having recesses on the opposite sides of said slit, said body having means at the other end for attachment to a container and provided exteriorly thereof on diametrically opposite sides with finger-engaging lugs; opposed stiffening ribs extending longitudinally of said wall; a coil centrally disposed in said body and engaging said ribs at opposite sides thereof, said coil having end portions extending from one side of said coil and disposed in said recesses to close the sides of said slit against each other, said coil having spaced end portions extending from the other side of said coil and lying against the inner faces of said opposed stiffening ribs, said stiffening ribs being adapted, by pressure on the lugs of said body, to fulcrum on said coil and move the end portions of said coil toward each other and thereby expand the slit.

2,730,275
BRASSIERE SHAPER
Iris M. Flores, New York, N. Y., assignor to Sarong, Inc., a corporation of Connecticut
Application April 9, 1953, Serial No. 347,751
15 Claims. (Cl. 223—66)



1. A brassiere shaper having in combination, a pair of bust cup forms, a main supporting frame therefor including means for securing the said forms on said frame at different positions relative to each other for varying the distance apart of said forms to accommodate brassieres of different size, and means for securing the ends of the brassiere beyond the respective said forms to hold an applied brassiere in stretched condition.

2,730,276
SLEEVE SHAPING DEVICES
Claes Göran Birger Bursell, Goteborg, Sweden
Application August 11, 1952, Serial No. 303,686
3 Claims. (Cl. 223—67)



1. In a sleeve shaping machine, the combination comprising an elongated gas-pervious bag adapted to be inserted into the sleeve of a garment, a nozzle for supplying a hot gaseous fluid into said bag for expanding the same against the sleeve, and a pair of flexible rods connected to said nozzle and extending longitudinally in said bag, one of said rods being movable relative to the other to keep the sleeve stretched out in a manner conforming to the shape of the sleeve and the outer sides of said rods being V edged to establish soft creases in the sleeve along the lines of contact pressure between the sleeve and rod edges.

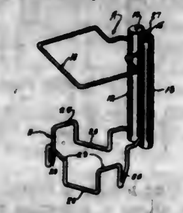
2,730,277
WATCH SUPPORTING ATTACHMENT FOR BELTS
Max Aaskoss, Ridge Edge, N. J.
Application August 31, 1953, Serial No. 377,336
1 Claim. (Cl. 224—4)

A watch-supporting attachment for belts, comprising a plurality of superposed panels connected to define an opening through which a belt may be extended, and a pair of loops carried by said panels and adapted for extension therethrough of the retaining pins of a wrist-type watch, the panels including a back panel, a middle panel, and a front panel stitched together with the belt-receiving opening being defined between the back and middle panels, the middle panel having spaced slits, said loops being adjustably connected with the connection therebetween extending through said slits, the adjustable connection be-



tween the loops being formed by an elastic strip resiliently extendible to space the loops a selected distance apart, said loops being normally connected fixedly to the front panel with the fixed connection being removable to permit extension of the strip, the removable connection of the loops to the front panel being formed by transverse rows of stitches extending through the front panel and loops.

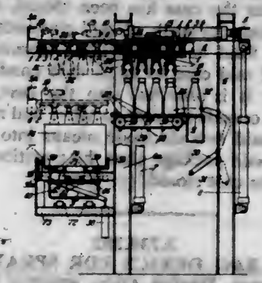
2,730,278
HOLDER FOR MILK CARTONS
Rudolph A. Sherlowsky, Hales Corners, Wis.
Application November 8, 1951, Serial No. 255,367
2 Claims. (Cl. 224—45)



1. A resilient holder for cardboard cartons and the like comprising an upper resilient frame formed from a single length of heavy gauge wire, a lower resilient frame formed from a single length of heavy gauge wire, said upper frame being square shaped in plan and said lower frame being octangular in plan, said upper and lower frames each having a pair of aligned parallel radially extending end terminals, said lower frame including diagonal stretches extending across and under the carton bottom and vertical stretches extending upwardly along the sides of the carton providing side support braces, and a pair of spaced vertically extending parallel handles, each handle having its upper end rigidly secured to one end terminal of the upper frame and having its lower end rigidly secured to one end terminal of the lower frame.

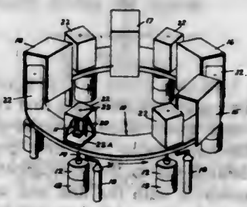
2,730,279
BOTTLE CRATING AND DECRATING MACHINES
Arthur Guy Enock, Thame, England, assignor to Graham-Enock Manufacturing Company Limited, London, England
Application November 23, 1951, Serial No. 257,783
8 Claims. (Cl. 226—14)

1. A bottle crating machine, comprising conveyor means for delivering bottles in line to said machine, means for transferring groups of bottles from said conveyor and marshalling them on a marshalling table in spaced relationship into a group pattern conforming to the positions they will occupy in a crate, a crate conveyor located laterally of the marshalling table, a frame located above and extending over the marshalling table and crate conveyor, said frame having a vertical displacement relating to the marshalling table and crate conveyor, a plate carried by said frame and movable laterally relatively thereto from a position over the marshalling table to a position over a crate on said crate conveyor, a plurality of bottle gripping devices suspended from said plate and conforming to the pattern of a marshalled group of bottles, said gripping means being operable by a downward vertical movement of said frame to grip the bottle necks, means



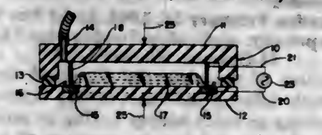
for operating the gripping devices to release bottles gripped thereby when the bottles are placed in position in a crate, pneumatic means comprising air cylinders for actuating said frame, plate and gripper bottle releasing means, and control means for said cylinders located to be actuated by the moving parts in sequence whereby the cycle of operations is automatically controlled.

2,730,280
MACHINES FOR EVACUATING ELECTRON DISCHARGE DEVICES AND THE LIKE
Percy L. Spencer, Waban, Mass., assignor to Raytheon Manufacturing Company, Waltham, Mass., a corporation of Delaware
Application November 5, 1954, Serial No. 467,183
8 Claims. (Cl. 226—20.4)



1. A machine comprising means for supporting a plurality of electron discharge devices, means for moving said supporting means through a station at which heating means is located, a plurality of containers containing carbon dioxide, one for each electron discharge device mounted on said moving means, and means for enveloping said electron discharge devices with carbon dioxide gas evolved from said containers.

2,730,281
PACKAGING APPARATUS
James J. Prohaska, La Grange, Ill., assignor to Swift & Company, Chicago, Ill., a corporation of Illinois
Application February 15, 1952, Serial No. 271,786
11 Claims. (Cl. 226—56)



1. A sealing device for preparing packages of a given size and shape having special fluid conditions therein, said device including a hollow case having a separable top and bottom, gasket means between said top and bottom, a first

electrode means mounted on said bottom, said electrode means being at least the size and shape of one face of said package, aligning means to position said package on said electrode means, a second electrode means mounted on said top in a position to be over said first electrode means when said case is closed, means including a resilient member to hold the two electrode means spaced from each other after the case has been closed, external electrical connections for each of said electrode means, said case having a fluid line connection communicating with the interior of said case to apply said conditions to said package after it is inserted into the case, and means operable from outside the case to move said resilient member to bring said two electrode means into contact with either side of said package after the insertion thereof into the case and the case closed.

2,730,282

SUCTION BAG DEVICE FOR SPRAY DRYER

Frank E. Bonner, Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio

Application November 24, 1952, Serial No. 322,314
5 Claims. (Cl. 226—58)



1. A spray drying system having a first conduit through which hot air and spray dried material pass, a second conduit communicable with the first conduit for the exhausting of heated air to the atmosphere, and a third conduit communicable with the first and second conduits and through which the spray dried material may be passed, a collection unit secured over said third conduit for receipt of spray dried material, said collection unit comprising, an inner air-permeable bag, an outer casing defining a spacing with said permeable bag, and means associated with said casing operable to reduce the pressure in said spacing below that in said bag to an extent sufficient to cause dried material to flow to said air permeable bag.

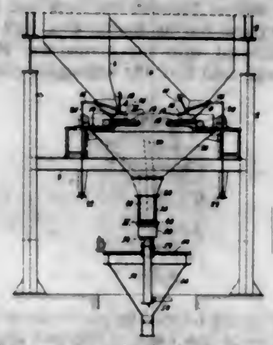
2,730,283

CHARGING REDUCTION CONTAINERS FOR THE PRODUCTION OF SPONGE METALS

Sven Emil Sieurin, Gamlegard, Forslovsholm, and Edvin Verner Olsson, Hoganas, Sweden, assignors to Hoganas-Billesholms Aktiebolag, Hoganas, Sweden, a corporation of Sweden

Application February 20, 1948, Serial No. 9,848
Claims priority, application Sweden May 11, 1946
11 Claims. (Cl. 226—72)

1. Apparatus of the character described for filling a container with different materials in free flowing particle state comprising an outer hopper having an outlet dimensioned to fit the rim defining the open top of a container and an inner hopper within said outer hopper, said inner hopper providing a plurality of laterally spaced apart feeding channels extending beyond the opening in said outer hopper and dimensioned to terminate short of the bottom of the container when the latter is positioned in contact with the rim of the outlet opening of the outer



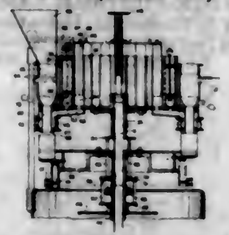
hopper, and means for selectively feeding different materials to the different hoppers.

2,730,284

PEA AND BEAN FILLING MACHINE

Oscar T. Hutchinson, Salem, N. J.

Application April 6, 1953, Serial No. 347,076
2 Claims. (Cl. 226—97)



1. A filling machine having a liquid tank revolving on a horizontal plane about a common axis, having liquid measuring pockets, telescopic adjusting plugs having air vents, means for a universal adjustment for quantity of liquid, measuring pockets within said tank radially in line with center of filling valves projecting upward and sealed off from liquid in supply tank, said pockets having a small hole at the base of each pocket to flow liquid into measuring pockets, horizontal ports below said holes extending to a space surrounding and sealed off from the center hole of valves through which the solids are discharged, a second hole in base of liquid tank radially in line with valves and over said ports, located between first mentioned holes beneath measuring pockets and the valve, perforated tubes surrounding the holes fixed to and rotating with said tank, spherical rubber balls within perforated tubes having rods extending upward with guides on rods to center the spherical balls over the holes, knobs on upper end of said rods, a stationary cam track above said rubber balls to open holes for filling measuring pockets and to close holes to seal the measure of liquid in the pockets, means to discharge contents of measuring pockets into containers after they enter the machine to lift filling valves, and means for rotating all measuring and discharge parts, and means for individually and independently measuring and discharging solids and liquid in each valve.

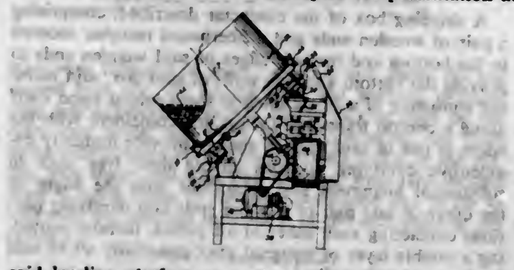
2,730,285

CAN FILLING MACHINE

Angelo Gino Lazzery, Oaklyn, N. J., assignor to National Metalcrafters, Inc.

Application December 17, 1951, Serial No. 262,086
2 Claims. (Cl. 226—99)

1. A filling machine comprising in combination, a loading platform, an endless belt conveyer for presenting a stream of empty containers at the loading platform, and for removing filled containers from the loading platform, a frame rotatably mounted and having a plurality of apertured projections radially disposed about the axis of rotation, a filling tank removably mounted upon said frame for rotation therewith with its axis at an angle of substantially forty-five degrees with the loading platform to position the tank with upper and lower diametrically opposite portions on the periphery of said tank for rotation to present different positions about the tank periphery at the upper portion above said loading platform, a plurality of smooth open-ended cylindrical measuring compartments extending at regular intervals around the bottom of the filling tank at the outer periphery mating with the projections in said frame and adapted for presentation at



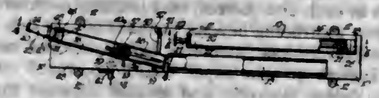
said loading platform, a spring biased closing plate pivoted to engage the open ends of each of the measuring compartments, fixed camming means adjacent the loading platform to engage the pivoted plate to release the spring and discharge the compartment contents in response to rotation of said tank, a stationary feed funnel located to feed a measured charge of materials discharged from said compartments, and Geneva movement means coupled with said tank for common drive therewith to operate in synchronism with rotation of said tank to move single empty containers from said conveyor belt in a dwelling position adjacent the feed funnel coincidentally upon presentation of a projection of said frame for conveying said charge to the container and to thereafter move the filled containers to the belt conveyer for removal from the loading platform.

2,730,286

MACHINE FOR COMPRESSING MEAT BODIES AND FOR PACKAGING SAME

John Opie, Riverside, Ill.

Application April 8, 1953, Serial No. 347,503
7 Claims. (Cl. 226—101)



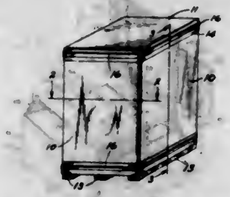
4. In a machine for pressing pieces of food into a body of desired shape, an elongated base, a metal substantially cylindrical trough pivoted at one end thereof to said base; a compression plate movable into and out of said trough; means for pivoting one end portion of said plate to said trough; manually actuable means connected to said trough and adapted to raise and lower said plate; an elongated hopper on said base having an opening in a position to register with said trough in one position of the latter; an air cylinder and piston on said base; manually operable mechanism for selectively reciprocating said piston; and a plunger exterior of said air cylinder and connected to said piston; said trough and plate being positionable into alignment with said plunger; the projecting movement of said plunger into said trough being adapted to compress the food pieces into desired shape and to expel the same through the outlet end of said trough.

2,730,287

SHIPPING CONTAINER

Fred Richard Mueller, Euclid, Ohio, assignor to Conler Container Corporation, Cleveland, Ohio, a corporation of Ohio

Application January 2, 1953, Serial No. 329,231
2 Claims. (Cl. 229—14)



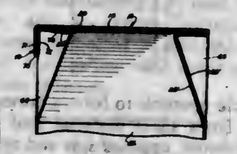
1. A corrugated paper carton for heavy articles of manufacture comprising a rectangular corrugated paper base, upwardly directed side flanges thereon, opposed side and a center wooden cleat on the upper face of said base having bolt holes therein, opposed side and a center wooden skids on the lower face of said base arranged at right angles to said cleats and affixed thereto, corrugated paper side walls upwardly directed flanges thereon disposed within said base flanges and in abutting relation with the ends of said cleats, said side wall flanges being enveloped by downwardly folded edge portions of said base flanges, metal bands compressively engaged with the folded base flanges, a corrugated paper liner in the chamber defined by said side walls disposed in spaced relation therewith, a cap on said liner, depending flanges thereon, downwardly directed flanges on the upper ends of said side walls, a top cover, and bolts in the bolt holes in said cleats arranged to hold the article of manufacture in a fixed position within the carton.

2,730,288

CONTAINER WITH RECLOSABLE POURING OPENING

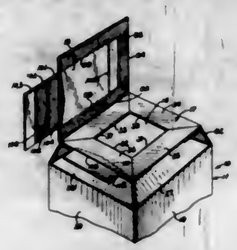
Charles H. Dixon, Detroit, Mich., assignor to Ex-Cell-O Corporation, Detroit, Mich., a corporation of Michigan

Application December 28, 1949, Serial No. 135,430
6 Claims. (Cl. 229—17)



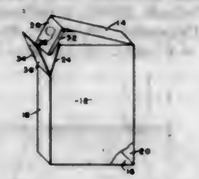
2. In a tubular container of paper or the like having an end closure with an overhanging margin between its edges and the supporting wall of the container, the combination comprising a first flap having a dispensing opening therein, a second flap adhesively secured in overlying relation with said first flap, a lift tab hinged to said second flap and being substantially coplanar therewith, a series of panel extensions on said lift tab, certain ones of said extensions having a portion of said first flap adhesively sandwiched therebetween and thereby defining a gripping tab, said gripping tab being bent into depending relation with said lift tab, the remaining one of said panel extensions being disposed in underlying latching relation with the overhanging margin of said end closure, said outermost extension being yieldably biased into such position by said gripping tab.

2,730,289
CONTAINER OF PAPERBOARD OR THE LIKE
Charles H. Dixon, Detroit, Mich., assignor to Ex-Cell-O Corporation, Detroit, Mich., a corporation of Michigan
Application June 2, 1951, Serial No. 229,551
7 Claims. (Cl. 229—17)



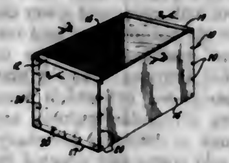
6. In a tubular container of paperboard or the like and having a relatively flat end closure, the combination of a plurality of generally trapezoidal flange panels disposed in coplanar relation with their adjacent sides abutting each other so as to define a rectangular bearing flange with a central pouring opening therein, a holding tab projecting outwardly from the longer base edge of one of said trapezoidal flange panels but being joined to the latter along a severance line non-parallel with said longer base edge of said one flange panel, a hinged lift tab initially disposable in overlying relation with the dispensing opening, and panel extensions on said lift tab, certain ones of said panel extensions being adhesively secured to said holding tab and defining therewith a gripping tab, the remaining one of said panel extensions being disposed in underlying relation with said one trapezoidal flange panel for coaction therewith as a reclosure latch for said lift tab.

2,730,290
CONTAINER AND DISPENSER
John T. Lynes, Decatur, Ga., assignor of one-half to Irving B. Levenson
Application March 2, 1953, Serial No. 339,584
5 Claims. (Cl. 229—17)



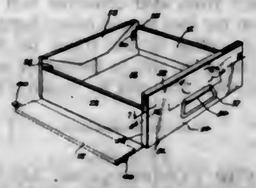
1. In an article operable to form a normally closed container formed from sheet material and comprising opposed top and bottom, opposed side and opposed end walls sealed at their intersecting edges, a base flap formed about a hinge line on said top wall as an extension thereof, a plug on said base flap defined by partial cutting thereon, said base flap being immovable on said container and said plug being readily removable under slight pressure, said side walls being angularly cut across a respective corner thereof forming an inclined surface at the edge of the container with said base flap fixed thereto and acting as a closure therefor, a tongue defined on said container and being movable about a hinge line formed on a portion thereof, and means bonding a portion of said tongue to said plug, said bonding means being discontinuous about most of said tongue thereby permitting said tongue to pivot out of its normal plane on said container, whereby initially said box is sealed by said plug and the bending of said tongue out of plane carries the plug with it temporarily forming an opening in said box which is re-sealed upon reseating said tongue and plug.

2,730,291
SHIPPING CONTAINER
Harry C. Reeser, North Hollywood, Calif., assignor to The Patent and Licensing Corporation, New York, N. Y., a corporation of Massachusetts
Application March 25, 1949, Serial No. 83,391
1 Claim. (Cl. 229—23)



A shipping box of the character described, comprising a pair of wooden ends and a fiberboard member secured to the bottom and the side edges of said wooden ends to provide the bottom and side walls of said box, said member consisting of a single integral sheet folded upon itself along a central transverse crease line coincident with the edges of one of said wooden ends to provide mutually coextensive overlying portions having their free ends in substantial alignment and coincident with the edges of the other of said pair of wooden ends said overlying portions contacting each other at all points, thereby providing a double layer of material over essentially all of said bottom and side walls.

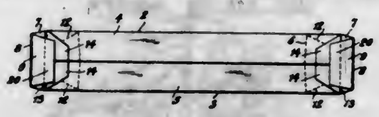
2,730,292
FILE DRAWER
Frank D. Jonas, Upper Brookville, and Edward D. Patterson, Sea Cliff, N. Y., assignors to Oxford Filing Supply Co., Inc., Garden City, N. Y., a corporation of New Jersey
Application November 19, 1953, Serial No. 393,157
12 Claims. (Cl. 229—30)



1. In a file drawer structure, in combination, a base and side, front and rear walls each formed of plural thicknesses of paper board, the side walls having latching members at each end thereof, said latching members having tongues protruding beyond the ends of said side walls, the remainder of said members being enclosed between the thicknesses of said paper board, apertured latching members facing inwardly and located adjacent the side edges of said front and rear walls, said apertured latching members being held between thicknesses of said paper board, apertured portions of said mating members lying substantially flush with the inner surface of the inner thickness of said paper board, said portions cooperating with said tongues of said first mentioned members to lock said side, front and rear walls in upstanding position and means for locking said tongues in said apertured latching members.

2,730,293
BOXES OR CARTONS
David Levkoff, Great Neck, N. Y.
Application December 6, 1954, Serial No. 473,231
2 Claims. (Cl. 229—31)

1. A carton of the character described provided with a bottom, side walls, outer end walls, webs between the ends of the side walls and the ends of the outer end walls, said webs being foldable along diagonal score lines to form inner end walls and parts overlying such walls, a locking flap at the upper end of each of the inner end walls, said locking flaps being each folded downwardly on a transverse fold line substantially in the plane of the upper edges of the side walls into the carton to thereby extend over the parts of the folded webs, said locking flaps being secured together in overlapped position, a flap extending upwardly from the top of each of the outer end walls, said flaps being each folded downwardly on a



transverse fold line in spaced relation and above the last named fold line and having their end portions overlapping and adhesively attached to the locking flaps on the inner end walls, the width of the connected end flaps being substantially coextensive with the width of the carton, said outer end wall flap coacting with said locking flaps to cause them to remain downfolded and to do so solely by the erecting movement of the end walls of the carton.

2,730,294
SET UP BOX
Joseph J. Stavis, Roxbury, and Bernard H. Stavis, Newton, Mass.
Application December 2, 1952, Serial No. 323,626
5 Claims. (Cl. 229—52)



1. A nestable set up box of bendable, resilient sheet material, said box comprising a pair of tapered side walls; a pair of tapered end walls; a flat bottom; a flat cover hingedly attached at one end to one of said walls; a pair of tapered side closure flaps hingedly attached to said cover; a tapered end closure flap hingedly attached to the free end of said cover and equal in depth to the depth of the walls of said box to receive support from the box bottom; a doubled handle having a terminal glue tab adhesively secured flatwise on the inside face of said end closure flap, and forming the terminal portion of said end closure flap, said handle having a finger opening therethrough, and a handle slot, centrally positioned in the wall of said box, opposite to the wall to which said cover is attached, said slot being arranged to receive said handle when the cover is closed.

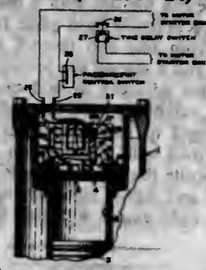
2,730,295
HEAT SEALED BAG
William H. Bokenkroger, Hudson Falls, N. Y., assignor to Union Bag & Paper Corporation, New York, N. Y., a corporation of New Jersey
Application October 2, 1952, Serial No. 312,769
4 Claims. (Cl. 229—57)

1. A bag formed from a gusseted tube with a heat sealable inner surface and comprising upper and lower walls, an end portion, a transverse heat seal in the end portion closing the tube, and cut-outs in one wall on each side of the end portion through the said wall and the halves of the gussets adjacent and connected to the said wall, said cut-outs being located in the gusset area and extending from the bottom edge of the tube to below the top edge of the heat seal with all walls along the bottom edge flush cut except at such cut-outs, the end portion



being folded over the cut-outs and adhesively secured to the wall to form an end closure.

2,730,296
UNLOADER MECHANISM FOR COMPRESSORS
George W. Hartwell, Granby, Mass., assignor to Worthington Corporation, Harrison, N. J., a corporation of Delaware
Application August 9, 1952, Serial No. 303,621
6 Claims. (Cl. 230—24)



1. In an unloader mechanism for compressors the combination with a compressor having an inlet valve, of at least one unloader finger for moving said valve into open position to unload the compressor, a mechanical advantage linkage means including paired upper linkage arms and paired lower linkage arms pivotally connected to said unloader finger and for actuating said unloader finger, a resilient member in engagement with said linkage means for normally maintaining said inlet valve in the unloaded position, and an electric solenoid including a plunger operatively connected to said linkage means and resilient member for loading said compressor at a predetermined suction pressure.

2,730,297
HIGH-VACUUM MOLECULAR PUMP
Adrianus Cornelis van Dorsten and Adrianus Verhoeff, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application March 23, 1951, Serial No. 217,206
Claims priority, application Netherlands April 12, 1950
5 Claims. (Cl. 230—118)



1. A high-vacuum molecular pump being provided with a suction side and a pressure side and comprising a rotor

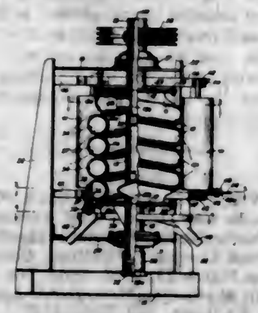
part and a stator part mounted one within the other, said inner part being provided with surfaces which make said part frusto-conical in shape and an outer part being provided with a surface juxtaposed to said inner part, a continuous pump groove in said outer part which extends from said suction side to the pressure side of said pump and opens out adjacent to said inner part, the cross-sectional area of said groove being constructed and arranged to increase progressively toward the suction side of said pump, and all points on the bottom of said groove being at the same radial distance from the axis of rotation of said pump.

2,730,298
DETACHABLE AUTOMATIC MAIL BOX SIGNAL
Oscar Paul Hasserodt, Elyria, Ohio
Application January 21, 1953, Serial No. 332,306
6 Claims. (Cl. 232—35)



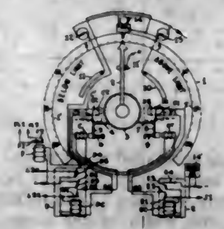
5. A signal device for use with a mail box comprising a substantially rectangular base plate formed with a first ear extending from one end thereof and back beneath said base plate, and a second ear projecting from one side of said base plate adjacent to said one end, the end of said second ear extending back toward said base plate; a signal plate hinged to said base plate at the other end thereof and formed with a projection on the end of the signal plate opposite the hinge, and spring means between said base plate and signal plate urging said signal plate to substantially right angles with said base plate.

2,730,299
COILED TUBE CONTINUOUS CENTRIFUGE
William H. Kelsey, Stockton, Utah, assignor to Combined Metals Reduction Company, Salt Lake City, Utah, a corporation of Utah
Application November 27, 1953, Serial No. 394,561
9 Claims. (Cl. 233—3)



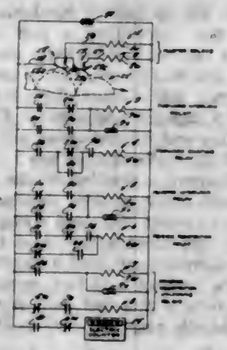
1. A continuous centrifuge machine, comprising an elongate tube coiled about a rotative axis, said tube defining a centrifuge chamber internally thereof and having at least that longitudinally extending portion thereof which faces outwardly from said rotative axis formed of flexible material; supporting means for said tube; means mounting said supporting means for rotation about an axis coincident with the said rotative axis of the tube; means for rapidly rotating said supporting means; means for feeding material to be processed into said tube; means for separately discharging from said tube segregated components of the said material fed into and processed within said tube; and means for transversely indenting the said flexible portion of said tube at multiple locations along the length of the tube as it rotates.

2,730,300
PRODUCTION DEVIATION COMPUTER
Henry C. Savino, Hackensack, N. J.
Application March 17, 1953, Serial No. 342,870
15 Claims. (Cl. 235—61)



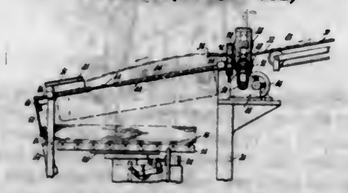
1. A computing and indicating system for showing deviations from a control limit, comprising, a first counting device emitting a first series of impulses, a second counting device emitting a second series of impulses, an impulse divider mechanism operatively connected with the first-mentioned counting device and emitting a third series of impulses conforming to a pre-set control limit, an indicator for showing the difference between two series of impulses, means operatively connecting said impulse divider mechanism with said indicator, and means operatively connecting the second-mentioned counting indicator with said device, whereby said indicator is actuated by a difference between the second and third series of impulses.

2,730,301
ELECTRIC CAN COUNTER CIRCUIT
Bernard Delacour Beamish, New Rochelle, N. Y.
Application April 9, 1954, Serial No. 422,010
11 Claims. (Cl. 235—98)



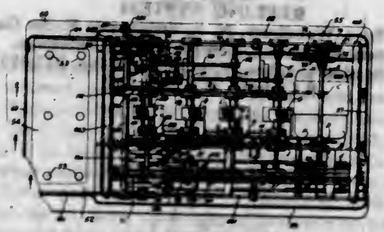
1. Counting apparatus for counting objects moving along a common path, said apparatus comprising directionally responsive object sensing means disposed in proximity to said path, a counter, count controlling means connected between said sensing means and said counter for actuating said counter in response to an object moving forwardly along said path, and count suppressing means controlled by said sensing means in response to an object moving backwardly along said path for preventing said counter from being actuated by the next forwardly moving object, said object sensing means comprises two switches disposed in proximity to said path for successive actuation and deaction by a moving object, said switches being further arranged for simultaneous actuation by each moving object, said count controlling means being responsive to deactuation of a first one of said switches with a second one of said switches actuated, and said count suppressing means being responsive to deactuation of said second switch with said first switch actuated.

2,730,302
MACHINE FOR STACKING STRIP SHINGLES
Deering S. Roberts, Marshfield, Mass.
Application September 18, 1951, Serial No. 247,168
6 Claims. (Cl. 235—132)



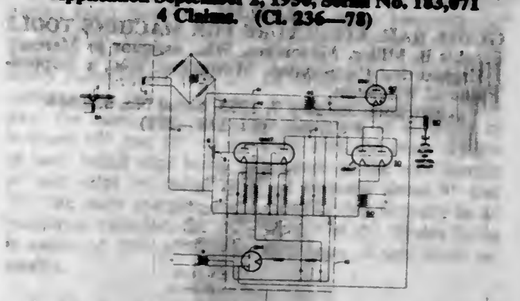
3. Mechanism for stacking and discharging strip shingles, comprising a pair of feed rolls, means for driving said rolls at a predetermined constant rate, a support for strip shingles in line with the feeding direction of said rolls and sloping downwardly away from the rolls, means operable to move said support out from under the strip shingles thereon so as to dump such strip shingles, a light source supported adjacent to said rolls to project a beam across the path of the strip shingles emerging from said rolls, and means including a photoelectric cell located in the path of said beam for causing said dumping means to operate in timed relation to the emergence from said feed rolls of the last of a predetermined number of strip shingles to be fed through the said rolls.

2,730,303
WEIGHING MACHINE PRINTER
Eugene Hajos, Rutland, Vt., assignor, by mesne assignments, to The Howe Scale Company, Inc., Rutland, Vt., a corporation of Delaware
Application August 18, 1950, Serial No. 180,180
21 Claims. (Cl. 235—136)



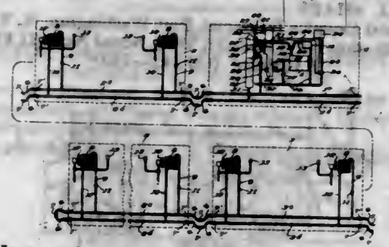
1. In a vernier and sensing cam combination to be used in an indicator and printer to be used for indicating and printing the weight registered by an associated weighing machine, the indication of weight recorded being transmitted to said printer during the weighing operation and before the weighing machine reaches a balance and the printer being adjusted immediately after balance is reached correctly to read or indicate the weight, said adjusting mechanism including a plurality of digit wheels arranged to rotate relative to one another in fixed speed relationship during translation, vernier cam adjusting means to re-adjust angular position of each of said wheels after stoppage of translation to the correct full integer value representing the count, said adjusting means including a plurality of sequentially operated units, tens, hundreds and thousands vernier cams and connecting levers and gears to move said digit wheels to corrected position actuated by said vernier cams.

2,730,304
FAIL-SAFE CONTROL SYSTEM
George Robert Markow, Cleveland Heights, and Anthony J. Hornfeck, Lyndhurst, Ohio, assignors to Bailey Meter Company, a corporation of Delaware
Application September 2, 1950, Serial No. 183,071
4 Claims. (Cl. 236—78)



1. An electrical system including in combination; an electric network for detection of a variable condition and establishing an A.-C. voltage in accordance therewith; an amplifier for the A.-C. voltage; and an electric circuit supplied by constant source of A.-C. and including; an electronic vacuum tube whose anode and cathode are elements of the electric circuit and which is responsive to the established voltage, a low resistance gas type of electronic tube having its anode and cathode as elements in the electric circuit and arranged to be responsive to the reverse phase of the established A.-C. voltage to effectively terminate the electric circuit when the established A.-C. voltage reaches a predetermined maximum value, means operative upon the vacuum tube anode-cathode circuit to effectively terminate the electric circuit upon the established A.-C. voltage reaching a predetermined minimum value, and exhibiting means sensitive to energy levels of the electric circuit between the minimum and maximum values of the established A.-C. voltage.

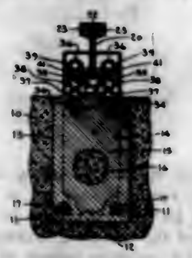
2,730,305
METHOD AND APPARATUS FOR HEATING TRAINS
John W. Chadwick, Glendale, Calif.
Application January 14, 1952, Serial No. 266,361
25 Claims. (Cl. 237—5)



1. In a method of heating the interiors of railway cars in trains pulled by locomotives powered by internal combustion prime mover means cooled by a liquid circulation system; said method comprising diverting at least a part of the engine cooling liquid as it leaves an engine from its normal circulation path and into a car heating circulation path extending from the engine along the train to the rearmost car to be heated and thence back to the engine, drawing off portions of the diverted liquid at at least some of the cars between the locomotive and the rearmost car of the train, passing the drawn off portions of liquid through heat exchanging devices disposed within the cars at which the liquid is drawn off, and returning the drawn off portions of liquid to the side of said car heating circulation path en route from the rearmost car to the engine, the improvement which comprises provid-

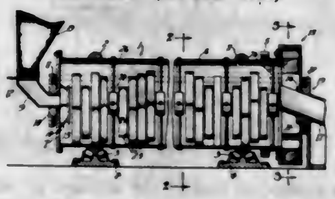
ing a make up liquid supply and introducing make up liquid into that part of the system between the return portion of the car heating circulation path and the engine.

2,730,306
GUIDE RAIL STRUCTURE FOR MACHINE TOOLS
Francis B. Miller, Milwaukee, Wis., assignor to Mercury Engineering Corporation, Milwaukee, Wis., a corporation of Wisconsin
Application January 7, 1953, Serial No. 330,884
3 Claims. (Cl. 238—281)



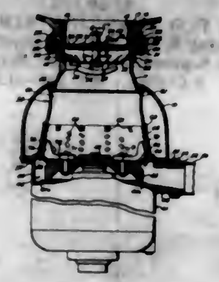
3. In a track mounting construction for traveling machine tools, the combination of a concrete bed having metal reinforcing rods mounted therein as a pair of spaced rods, metal track anchorages having spaced holes to receive said rods and anchored therewith in said bed at spaced intervals along said rods, a rail having a series of lugs depending from its base and spaced for placement over said anchorages, said anchorages having spaced upstanding lugs with alined threaded holes disposed at right angles to said rail and receiving said lugs of the rail between them, clamping screws adjustably mounted in said holes and engageable with rail lugs to clamp said rail to said anchorages in the vertical and horizontal alinement of the rail, studs mounted in said anchorages and extending through openings in the base of said rail, and nuts clamping the base of said rail to said studs in the position determined by the clamping of the rail lugs to the anchorage lugs.

2,730,307
PLURAL STAGE ROTARY DRUM PULVERIZERS, WITH GRINDING PLATES OF REGULAR POLYGONAL SHAPE
Daniel Douglas Demarest, Port Washington, N. Y.
Application November 21, 1952, Serial No. 321,833
8 Claims. (Cl. 241—153)



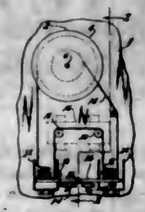
5. In a grinding mill, the combination of a substantially circular rotary drum having inlet and outlet openings at opposite ends thereof, a series of grinding plates supported edgewise in the drum, a plurality of spacer elements within the drum extending substantially at least from the periphery past the center thereof, which separate said grinding plates into loosely associated groups, said grinding plates being substantially in the form of regular polygons of not more than five sides having filleted corners at the intersection of said sides, and being of such size as to occupy a substantial portion of the cross sectional area of said rotary circular drum and extending above the central portion of said drum to thus overlap in height said spacer elements.

2,730,308
WASTE DISPOSAL DEVICE
Hans Jordan, Los Angeles, Calif., assignor, by mesne assignments, to Given Machinery Company, Los Angeles, Calif., a copartnership
Application September 24, 1951, Serial No. 248,002
7 Claims. (Cl. 241—257)



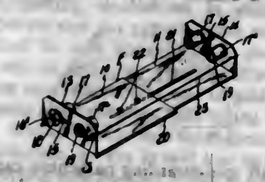
7. A waste disposal device including: a housing ring member defining a comminuting chamber disposed about a vertical axis for receiving waste material, said member having an open lower end and a plurality of stationary cutter lugs on its inner surface, said lugs being spaced and scattered about said inner surface in broken, irregular rows and providing vertical spaces between vertical rows; and a cutter head rotatable on said axis within the lower open end of said housing member and provided with cutters disposed within said comminuting chamber and co-operating with said scattered lugs to comminute waste material, the lower portion of said housing having a plurality of outlet passages to receive comminuted material from the spaces between said vertical rows of lugs and pass such comminuted material from said chamber, the lower portion of said housing ring member adjacent said passages being provided with inwardly projecting arcuate flange members spaced at said passages to define discharge orifices between such flange members, said arcuate flange members collectively providing a broken annular shelf to retain waste material descending thereon.

2,730,309
REELING SYSTEM
John S. Baer, Woodbury, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application October 29, 1952, Serial No. 317,493
9 Claims. (Cl. 242—55)



1. In a reeling system for a tape member the system including separate tape driving means, in combination, a first and second movable tape storage means, means for imparting movement to said tape storage means, a first and second tape accumulating means associated respectively with said first and second tape storage means for receiving a slack length of tape between each of said tape storage means and said tape driving means, means positioned in cooperative association with each of said tape accumulating means for determining the relative amount of tape in said two tape accumulating means, and means responsive to said determining means for controlling said means for imparting movement to said tape storage means.

2,730,310
PAPER ROLL HOLDER
Wilbert Edwin Schultz, Bay City, Mich.
Application February 4, 1952, Serial No. 269,700
2 Claims. (Cl. 242—55.5)



1. A paper roll holder comprising a longitudinal frame having substantially parallelly disposed, upright end members, at least a pair of studs mounted on the inner face of each end member, the stubs on each end member being spaced a transverse distance apart one from the other, the stubs on one of the end members being substantially in longitudinal alignment with corresponding stubs on the other end member, transversely extending, substantially parallel guide means provided in said end members, at least one of the stubs on an end member and its correspondingly aligned stub on the other end member being transversely slidable in said guide means in the respective end members to vary the transverse distance between the said transversely slidable stubs and the other stubs on the end members to permit the supporting of paper rolls of different diameter, and a taut, detachable, flexible wire spanning said end sections adjacent the edges thereof, and a spring interposed between the end of the wire and an end section to provide the wire with resiliency.

2,730,311
IMPELLER PROPELLED AERODYNAMIC BODY
Edmond R. Doak, Los Angeles, Calif.
Application July 1, 1950, Serial No. 171,705
20 Claims. (Cl. 244—12)



1. An aerodynamic unit comprising, in combination with a body having an upper, generally convex surface and a lower, generally convex surface and having air foil characteristics in longitudinal section, margins of said upper and lower surfaces being connected, in part at least, to form entering and trailing edges: a port in the upper surface and an outlet port in the lower surface, said lower port being rearwardly displaced with respect to the upper port; an inclined passageway extending through the body and connecting said ports, said passageway being provided with a smooth, virtually imperforate wall, said wall being in continuous, curved, confluent, anastomotic relation to the upper surface of the body; a power-driven impeller mounted for rotation within said passageway about an inclined axis coincidental with the axis of said passageway, said impeller including counter-rotating, torque-counteracting impeller sections, each impeller section carrying blades mounted upon a hub portion, said hub portion being correlated to the walls of the passageway to provide an annular air duct, each blade having a concave front face defined by a root line adjacent the hub, a generally radial inlet edge, a generally radial outlet edge, and an outer margin; the outer margin of each blade being at an angle of between 35° and 60° to the axis of rotation, such outer margin being in proximity to the wall of the passageway for a distance not materially shorter than the effective axial height of the air-moving impeller blades; said impeller being adapted to produce a vertical reaction in excess of 30 lbs. per square foot of area swept by the impeller.

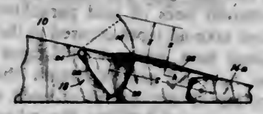
19. A device for generating high velocity fluid flow comprising: a driven shaft provided with a plurality of angularly extending blades in spaced relation, each blade having front face concave in section taken perpendicular to the shaft, each such face being defined by a root line adjacent the shaft, a generally radial inlet edge, a generally radial outlet edge and an outer edge, the inlet and outlet edges lying in planes perpendicular to the shaft axis, the outer edge of each blade being at an angle of between 35° and 60° to the shaft axis, the outer margin of each radial edge being in advance of the root margin of such edge by radial angle of between about 5° and 50°, the outer margins of the blades lying virtually in an imaginary cylinder, the axial height of the blades being in excess of 20% of the outer diameter of said blade assembly.

2,730,312
DISCOID-SHAPED AIRCRAFT
Le Roy W. Crookes, Scotia, N. Y.
Application November 23, 1953, Serial No. 393,881
3 Claims. (Cl. 244—13)



1. An aircraft having in combination, a main air foil of truncated discoid planform to provide a circular leading edge, a trailing horizontal stabilizer of complementary trailing segmental form having the tips thereof joined to the ends of the trailing edge of the main air foil and having the center thereof depressed from the trailing edge of the main air foil, and a vertical stabilizer extending substantially diametrically from the main air foil midway of the trailing edge thereof to support the depressed center of the horizontal stabilizer.

2,730,313
AIRFOIL PROTUBERANCE FOR IMPROVING SPOILER EFFECTIVENESS
Rodger F. Ringham, Dallas, Tex., assignor, by mesne assignments, to Chance Vought Aircraft, Incorporated, a corporation of Delaware
Application December 12, 1952, Serial No. 325,530
5 Claims. (Cl. 244—42)



1. A spoiler installation in combination with an airplane wing comprising; a lateral slot in said wing, a spoiler plate having an operable connection with said wing normally positioned within said wing and adapted to be projected above the surface of said wing through said slot, and a deflecting protuberance on said wing extending above the wing surface having a streamlined configuration and disposed parallel to and over said slot for deflecting the flow of boundary layer air in the vicinity of said spoiler, said deflecting surface having a lateral opening therein corresponding to and in registry with said slot through which registering opening and slot said spoiler plate is adapted to project.

2,730,314
PARACHUTE CANOPY STRUCTURES
Leonard P. Frieder, Great Neck, and Walter S. Finken, Brooklyn, N. Y.; said Finken assignor to said Frieder
Application January 23, 1952, Serial No. 267,814
1 Claim. (Cl. 244—142)



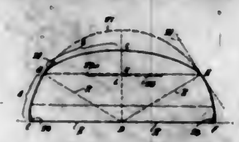
An aircraft spin-retarding parachute canopy formed of sheet material and extending from a closed crown to a mouth opening adapted to be secured by shroud lines to a load, said canopy having, when unstressed, the contour of a semi-ellipsoid having the major axis of its generating ellipse in the plane of said mouth opening and having a semiminor axis substantially equal to three-fourths of the semimajor axis, said contour having a substantial and continuous curvature at all points along its intersection with any horizontal or vertical intersecting plane, said canopy material being substantially uniform throughout any horizontal cross-section through the canopy, whereby the canopy is cordless and ventless and stress due to said load is distributed uniformly throughout the canopy when the canopy is inflated.

2,730,315
PARACHUTE CANOPY
Gordon L. Fogal and Albert M. Mitnick, Silver Spring, Md.
Application November 17, 1950, Serial No. 196,336
1 Claim. (Cl. 244—145)
(Granted under Title 35, U. S. Code (1952), sec. 266)



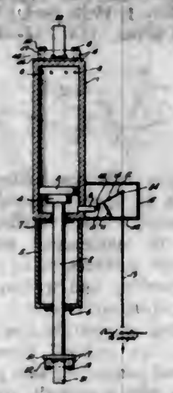
A parachute of truncated elliptical cross section having a vent opening in the crown thereof and having shroud lines which intersect at the crown vent and pass over the peripheral hem and comprising a plurality of radial gore sections of generally increasing arc length in transverse cross section joined by stitched tubular seams at the radial edges thereof, said gore sections having excess fullness of width of decreasing degree of curvature from said vent to a region at the maximum periphery and thereafter terminating in a circular hem portion, said tubular seams receiving the shroud lines of said parachute, a plurality of equally spaced take-up tapes secured at the ends thereof to said peripheral hem, each of said tapes taking up a portion of the hem of greater length than the tapes between the points of attachment of each of said tapes, said shroud lines passing between the take-up tapes and the hem whereby a substantially triangular opening is formed between each of the tapes and the hem, the shroud lines being at the inner apexes of the triangular openings, said shroud lines drawing in the gore sections at the seams thereof, the excess fullness of the sections providing a substantial cross-sectional radius to each of the sections which varies with respect to width from a lesser cross-sectional radius adjacent the crown vent to a greater cross-sectional radius at the maximum periphery and terminating into said triangular opening adjacent the peripheral hem thereby to provide greater strength to the gore sections adjacent the crown vent and a lesser strength thereto adjacent the peripheral hem.

2,730,316
LOAD-RETARDING CANOPY STRUCTURE
Leonard P. Frieder, Great Neck, and Walter S. Finken, Brooklyn, N. Y., said Finken assignor to Frieder
Application June 25, 1951, Serial No. 233,444
2 Claims. (Cl. 244—145)



1. An aircraft spin-retarding parachute canopy formed of sheet material and extending from a closed crown to a mouth opening adapted to be secured by shroud lines to a load, said canopy having, when unstressed, a contour consisting essentially of an intermediate zone of a sphere having an altitude substantially equal to one-half the radius of its base and an upper, oblate, inverted cup-shaped zone tangentially joining the upper periphery of said intermediate zone and having an altitude substantially equal to one-half the altitude of said intermediate zone, said contour having a substantial and continuous curvature of all points along its intersection with any horizontal or vertical intersecting plane, said canopy material being substantially uniform throughout any horizontal cross-section through the canopy, whereby the canopy is cordless and ventless and stress due to said load is distributed uniformly throughout the canopy when the canopy is inflated.

2,730,317
PARACHUTE DECELERATION DEVICE
Keith Ousnian, Cambridge, Mass.
Application January 20, 1955, Serial No. 483,184
6 Claims. (Cl. 244—152)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In a parachute deceleration device the combination of energy converting means with triggering means for said energy converting means and coupling means for said energy converting means, said energy converting means being adapted for converting gas pressure to lateral motion and comprising a closed piston cylinder, a piston shaft having a piston head coaxially affixed thereto and extending through the base of said cylinder, an upper bushing and a lower bushing adapted to permit axial motion of said shaft, said upper bushing being supported by said base of said cylinder and said lower bushing being supported by a lower bushing support unit extending axially from said base of said cylinder, ventilating holes in said cylinder in the area farthest from said base, a piston head spacer coaxially positioned on said shaft on the underside of said piston head, a hole through said cylinder in the area between said base and said underside of said piston

head having a diameter smaller than the axial length of said spacer and a high velocity gas capsule fitted in said hole and having its output end positioned to release gas into said cylinder, said triggering means being adapted for initiating the operation of said gas capsule to release gas under pressure into said cylinder and comprising a housing, a triggering mechanism in said gas capsule adapted to operate said gas capsule upon contact, an arm pivotally affixed to said housing by a pivot, a contact point at one end of said arm, a spring affixed at one end to said housing and at the other end to said arm between said contact point and said pivot, said spring being adapted to urge said contact point into engagement with said triggering mechanism, an eye in said arm at the end opposite that supporting said contact point, a cord secured at one end to said arm through said eye and passing through a hole through said housing and a weight secured to the other end of said cord, said weight being adapted to urge said contact point away from engagement with said triggering mechanism, said coupling means being adapted for coupling said energy converting means to outside equipment and comprising a base plate affixed to the flat surface of said closed piston cylinder farthest from said base and another base plate affixed to the outer extremity of said shaft, coupling screws extending perpendicularly from said base plates, clamp plates having holes therethrough positioned to interact with said coupling screws, said clamp plates being adapted for insertion through loops in straps from outside equipment and bolts cooperating with said coupling screws to bolt said clamp plates to said base plates.

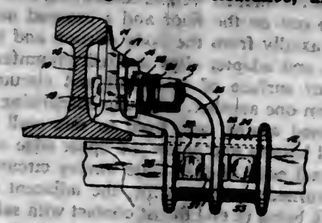
2,730,318
KITE
Charles H. Schild, Fresno, Calif.
Application July 27, 1953, Serial No. 370,345
7 Claims. (Cl. 244—153)



1. A kite comprising a frame having an elongated spinal member, a pivot pin secured adjacent to an end of the spinal member, a pivot pin secured adjacent to an end of the spinal member, and a pair of overlying bow arms journaled on said pin and extending outwardly on opposite lateral sides thereof; a covering on said frame forming pivotal wings on each side of said spinal member; means on said arms for yieldably resisting pivotal movement of said wings; and bridle means attached to said spinal member.

2,730,319
ROCKER CLIP FOR CONNECTING SWITCH RODS TO SWITCH POINTS
George Arnold, Shaker Heights, and Harry A. Schultz, Garfield Heights, Ohio, assignors to Cleveland Frog & Crossing Co., Cleveland, Ohio, a corporation of Ohio
Application September 29, 1950, Serial No. 187,536
13 Claims. (Cl. 246—452)

1. Means for connecting a switch rod to a switch point comprising a member having a portion secured to the switch rod and another portion rigidly connected to the first portion, said other portion having an arcuate surface rockably bearing upon a surface of the switch point and provided with spaced openings therethrough, means rigidly connected to said switch point and extending through said openings with a clearance, and resilient



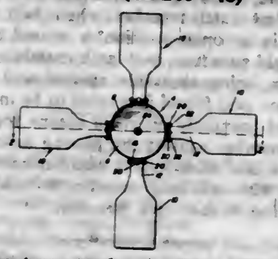
means between a portion of said connecting means and the said second portion of said member on the side thereof opposite that engaging said switch point.

2,730,320
UTILITY CARRIER
Steven L. Srader, Santa Ana, Calif.
Application September 4, 1953, Serial No. 378,589
1 Claim. (Cl. 248—16)



In a utility carrier having a base, an adjustable motor mount comprising an upstanding plate adapted to be mounted upon one end of the base of the carrier, said plate having a pair of vertically spaced transverse slots therein, a motor mounting bracket having means adapted to engage the motor of a tool and a motor clamp removably secured to said bracket for clamping a motor thereon, said motor mounting bracket having means for attaching said bracket to the plate, said means being comprised of an element overlying each of said slots, each element having apertures therethrough in diametrically opposed relationship to the apertures in the other element, the centers of said apertures being on a curve whose center is coincident with the center of the bracket, and a bolt means passed through the slot, and a selected aperture in each of said elements to hold the bracket and plate in a selected position, said slots extending a distance greater than the distance between diametrically opposed apertures whereby said bolt means may be passed through only one slot.

2,730,321
CHRISTMAS TREE STAND
Harvey J. Dutton, Medford, Oreg.
Application May 4, 1953, Serial No. 352,773
1 Claim. (Cl. 248—48)



A Christmas tree stand comprising an open-top can having a flat bottom and upstanding marginal wall and providing a receiver for the coacting end-portion of the tree-trunk, an upstanding screw-threaded fastening secured in said can and joined with the bottom and rising centrally therefrom and adapted to be anchored in the

tree-trunk, a plurality of radial coplanar attachable and detachable hold-down and stabilizing legs, each leg comprising a bottle-shaped weight embodying a body portion adapted to rest on the floor and a reduced neck portion extending axially from the body portion and terminating in a bead, and adapter clips secured circumferentially to the exterior surface of said wall and circumferentially spaced from one another, each clip comprising a flat plate superimposed against and fixed to said wall in a plane above said bottom and below the upper edge of said wall, the marginal edge of said plate having circumferentially spaced inturned resilient grips, the adjacent end of the bottle neck being in end thrust contact with said plate and said grips reisliently engaging the cooperating bead and serving to detachably maintain the same in its intended position.

2,730,322
MOUNTING RACKS FOR ELECTROACOUSTIC APPARATUS
Fritz Haberland, Emmendingen, Baden, and Walter Johner, Riegel Kaiserstuhl, Germany, assignors to Klangfilm Gesellschaft mit beschränkter Haftung, Berlin, Germany, a corporation of Germany
Application July 5, 1951, Serial No. 235,344
In Germany October 27, 1949
Public Law 619, August 23, 1954
Patent expires October 27, 1969
3 Claims. (Cl. 248—127)



1. A mounting rack for operatively-wired electric apparatus, comprising a rack structure having rectangular sides whose long edges are vertical, a rotatable mounting frame for accommodating the apparatus to be wired, said frame being hinged to said structure at one of said sides between two long edges in the manner of a door and having a vertical hinge axis parallel to the two long edges of said one side and spaced from one of said edges a distance of more than one quarter but less than one half of the horizontal width of said frame, arresting means comprising a latch member slidably mounted in said frame for movement in a radial direction with respect to said vertical hinge axis, resilient means normally biasing said latch member in a direction outward of said axis, a first catch member secured to said structure, said latch member being engageable with said first catch member when said frame is rotated to be in an open position, a second catch member secured to said structure, said latch member, when in normal position, being abuttable against said second catch member when said frame is rotated to be in nearly closed position, and manually operable means for withdrawing said latch member against the biasing action of said resilient means, said second catch member comprising means cooperative with said latch member to lock said frame in closed position in said rack structure.

2,730,323
DISPLAY STAND
Fredric C. Muntwyler, Palos Park, Ill.
Application November 2, 1954, Serial No. 466,286
5 Claims. (Cl. 248—197)

5. A display stand comprising, in combination: a generally vertically disposed display panel having downwardly exteading projections at the bottom adjacent opposite side portions, and recesses in the side portions above the bottom extending upwardly and inwardly from the outer edge of the panel; and a supporting leg structure for each side of the panel comprising a pair of legs diverging downwardly and, forwardly and rearwardly respectively and having portions at their upper ends de-



tachably fitting in said recesses, and a transverse rod extending between lower portions of said legs in a front to rear direction with respect to the panel and having a U-shaped portion intereonnecting with the adjacent downwardly extending projection to prevent vertical and lateral movement of the leg structure with respect to the panel when so connected and when the upper portions of said legs are fitted in said recesses.

2,730,324
EASEL SUPPORT FOR COUNTER DISPLAY BOX
Harwood S. Taylor, Jr., Elmira, N. Y., assignor to F. M. Howell & Co., Elmira, N. Y.
Application November 29, 1951, Serial No. 258,885
4 Claims. (Cl. 248—198)

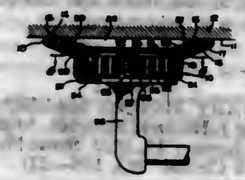


1. A blank for an easel for displaying articles comprising, a rectangular sheet having a transverse line of fold perpendicular to its edges and a line of fold spaced from the first line of fold and inclined with respect thereto to form a central panel, a line of fold oppositely inclined with respect to said first inclined line of fold, the two inclined lines of fold at equal angles with respect to one side edge of said sheet and forming between them a side panel, a line of fold perpendicular to the edges of the sheet intersecting said oppositely inclined line of fold at the side edge of the sheet and forming with said second inclined line of fold a right angle triangular converter panel, the hypotenuse of the right angle triangle and one side of the side panel being common, an inclined line of fold meeting the side edge of the sheet at a common point with said first perpendicular line of fold forming a second right angle triangular converter panel identical to the first, and a line of fold oppositely inclined to said last mentioned inclined line of fold to form a second side panel identical to the first, the remaining end portions of the sheet forming end panels for attaching the easel to the article to be displayed.

2,730,325
VACUUM FIXTURE
Charles A. Van Duzen and Lawrence W. Van Duzen, Escondido, Calif., assignors to Van Duzen Engineering Company, Escondido, Calif., a copartnership
Application July 17, 1950, Serial No. 174,292
6 Claims. (Cl. 248—206)

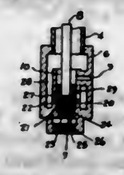
1. A suction type fastener comprising the combination of a resilient suction cup, an impervious shell having a continuous rim adapted to compress a continuous portion of the suction cup against a mounting surface, a rigid plate imbedded within the central portion of the

suction cup, a first screw element fixed to the rigid plate and protruding from the back face of the suction cup, a central plastic mounting plate overlying an inner rim on the impervious shell and being provided with a central aperture, said mounting plate having a plurality of



voids therein to facilitate the insertion of wood screws, and a second screw element extending through the central aperture and cooperating with the first screw element to move the central portion of the suction cup in a direction away from the mounting surface.

2,730,326
VALVES FOR FROST-PROOF YARD HYDRANT
Carlton L. Staben, Freeport, Ill., assignor to Modern-Woodmanse Manufacturing Company, a corporation of Illinois
Application March 28, 1950, Serial No. 152,317
1 Claim. (Cl. 251—358)



As an article of manufacture, a valve element comprising a one piece, generally cylindrical, elongated body of molded, compressible, resilient, rubber-like material, said body being elongated to the extent that its diameter is small in relation to its overall length, said body having in the center thereof, approximately midway of its length, a substantially cylindrical metallic insert of a radius approximately half the radius of said body and having a threaded axial hole provided therein into which the end of a valve control rod is adapted to be threadedly connected for manipulation of the valve, said body having the one end portion thereof formed substantially semi-spherical to serve as a compressible seating end that is compressible endwise of said body when the valve is seated, and the other end portion of said body outwardly from the insert being hollow so as to provide a tubular radially compressible and radially expansible cylindrical shank portion in radially spaced relation to the valve control rod, the wall thickness of said tubular portion being small in relation to the length of its extension from said insert.

2,730,327
VEHICLE JACK
James L. Prough, Altoona, Pa.
Application August 30, 1950, Serial No. 182,292
6 Claims. (Cl. 254—133)

1. A bumper jack comprising a base, anti-friction bearing means in the base, a jack screw removably supported by the bearing means, a vehicle bumper supporting means threadingly mounted on the jack screw to move up and down the screw as the screw is turned in one direction or the other, removable clamping means on the bumper supporting means engaging the portion of the bumper opposite the bumper supporting means and holding the supporting means against removal from



the bumper and removable means for turning the jack screw.

2,730,328
DEFLECTING TOOLS
Guy Eastman Brown, Fayetteville, Ark.
Application December 18, 1952, Serial No. 326,694
7 Claims. (Cl. 255—1.6)

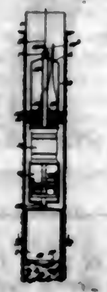


1. A deflecting tool including, a tubular mandrel, a drive housing rotatively coupled to the upper end of the mandrel and mounted for limited telescoping movement relative thereto, whereby the housing may move longitudinally of the mandrel while maintaining a rotative drive connection therewith, a supporting coupling secured to the lower end of the mandrel and spaced from the housing, a lower collar rotatably mounted on the mandrel and supported upon the coupling, an actuating collar rotatable on the mandrel below the drive housing, a coiled spring surrounding the mandrel and confined between the lower collar and the actuating collar for urging said collars into engagement with the coupling and housing respectively, and a deflecting element pivotally connected with the collars and being disposed in a retracted position when the collars are at their outer limits spaced from each other, said deflecting element being moved radially outwardly when said collars are moved toward each other.

2,730,329
DEVICE FOR BORING WELLS IN THE GROUND
André Paul Jourdain, Liege, Belgium, assignor to Compagnie Internationale des Pieux Armes Frankignoul, Societe Anonyme, Liege, Belgium
Application June 7, 1950, Serial No. 166,739
Claims priority, application France June 11, 1949
6 Claims. (Cl. 255—4.8)

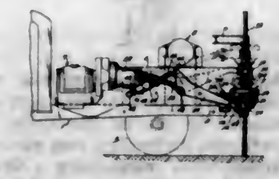
1. A device for boring vertical shafts in the ground, comprising a rotary cutting tool, a rotary driving unit directly coupled thereto to form an assembly adapted to be lowered into the ground, means for attaching the assembly to cablelike suspension means, flexible means for con-

necting the driving unit to a source of power medium arranged on the surface of the ground, a cage integral with the frame of the driving unit, longitudinal slots provided in said cage and having a length substantially corresponding to the stroke of the cutting tool, at least two electro-magnets each having a movable armature, and means connecting the electro-magnets to a source of electric cur-



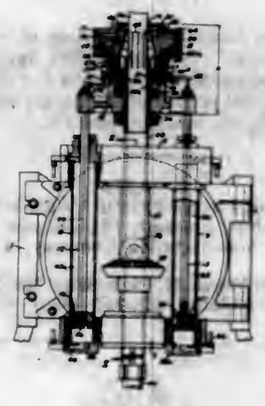
rent, each armature extending radially through one of said slots of the cage and being capable of being urged against the walls of the shaft being formed, thereby to retain the frame of the driving unit against rotary movement relative to the shaft while permitting a longitudinal movement of the assembly including the tool, driving unit and cage in the shaft through a distance at least equal to the operating stroke of the cutting tool.

2,730,330
OIL WELL DRILLING APPARATUS
Charles F. Ball, Franklin, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application August 25, 1950, Serial No. 181,408
6 Claims. (Cl. 255—19)



5. In a drilling apparatus, the combination comprising a base, means on said base providing a vertical guideway, a frame guided for movement along said guideway, drill rotation mechanism carried by said frame and movable vertically therewith along said guideway, said frame disposed in a relatively low position on said base when said rotation mechanism is in lowered position on said guideway, a prime mover on said base, an adjustable driving connection between said prime mover and said rotation mechanism for rotating the latter, said driving connection extending centrally lengthwise of said base, parallel rigid, elongated levers pivotally mounted intermediate their ends on said base, operative connections between the outer ends of said levers and said frame, said levers extending longitudinally along the opposite sides of and spaced equidistantly from said driving connection, fluid cylinders pivotally mounted on said base and spaced from the inner ends of said levers and containing reciprocable pistons operatively connected to said parallel levers at one side of the lever pivots, and means for supplying fluid under pressure to said cylinders to effect swinging of said levers in unison about their pivots to move said frame together with said rotation mechanism along said vertical guideway, the pivots of said levers being disposed in a relatively high position on said base so that said levers extend downwardly when said rotation mechanism is in lowered position along said guideway, said operative connections between said levers and said frame comprising pivoted links pivotally connected at their lower ends to said levers for flexibly connecting the outer ends of said levers with said frame, said links pivotally connected at their upper ends to said frame and extending upwardly when said frame is in lowered position.

2,730,331
ROTARY MINING MACHINE
Peter J. Harinck, Ferndale, Mich.
Application January 19, 1953, Serial No. 332,062
6 Claims. (Cl. 255—22)



5. An automatic rotary drilling machine for drilling holes into the earth comprising, a base member, a drill head member, at least two hydraulic cylinders with pistons therein mounted on one of said members, piston rods on said pistons connected to said other member, said drill head being advanced for drilling and retracted by introducing hydraulic medium respectively in one end and the other end of said cylinders, drive means rotatably mounted on said base, said drive means having a portion movable for advancing and retracting with said drill head and having a chuck fixed thereon, said drill head having a rotatable portion fixed on said movable portion of said drive means, means on said rotatable portion forming a cylinder around said chuck and piston means therein engaging said chuck, the latter said cylinder being open ended to permit drill pipe to project through said chuck, the latter said piston being hydraulically reciprocable to actuate said chuck for engagement and disengagement with drill pipe therein by introducing hydraulic medium in one end and the other end respectively of the latter said cylinder, one of said piston rods having a passageway opening into said one end of the cylinder thereon, conduit means connecting said passageway and said one end of the latter said cylinder, the other piston rod having a passageway opening into said other end of the cylinder thereon, and conduit means connecting the latter said passageway and said other end of the latter said cylinder, whereby to advance and retract said drill head respectively when said chuck engages and disengages from the drill pipe.

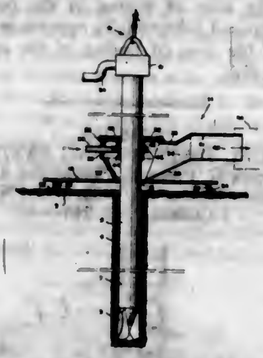
2,730,332
MOTOR OPERATED DRILL
Ralph F. Hale, Claremont, N. H., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application May 8, 1953, Serial No. 353,822
24 Claims. (Cl. 255—45)

1. In combination, a motor movable rectilinearly back and forth along a predetermined longitudinal path, means for guiding said motor for movement along said path, a flexible power conductor element leading to said motor for supplying power medium thereto and having a loop portion providing sufficient slack to permit such back and forth movement of said motor along said path, and a reversible power operated tension control mechanism on said guiding means and relative to which said motor has rectilinear movement, said control mechanism comprising a control element engaging said loop portion of



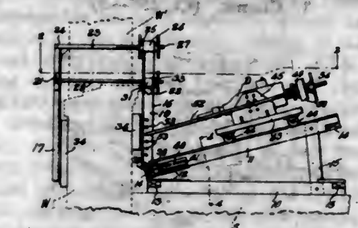
said conductor element for maintaining the latter under the desired predetermined tension irrespective of the direction of movement and the position of said motor along its path, said control element acting on said loop portion of said conductor element to draw in or pay out the same by power as said motor moves along its path, and means for guiding said control element for movement back and forth relative to said motor guiding means along a path in parallelism with the direction of rectilinear movement of said motor along its path.

2,730,333
DUST DEFLECTOR
William E. Lenhart, Jr., Beaumont, Tex., and Lonnie K. Ledbetter, Riverton, Wyo., assignors to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Application March 16, 1953, Serial No. 342,518
2 Claims. (Cl. 255—50)



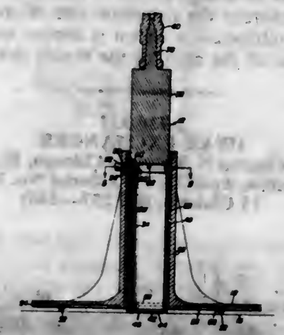
2. A dust deflector adapted to be positioned over a bore hole in the earth when air is employed for carrying dust and cuttings out of the bore hole during drilling thereof by means of a drill stem, the dust deflector comprising a base plate, an upper plate positioned above and spaced from the base plate, the base plate and the upper plate having aligning bores adapted to receive a drill stem passing downwardly therethrough into a bore hole, members extending downwardly from the base plate and surrounding the bore hole providing sealing engagement between the underside of the base plate and the earth, means extending between the upper and base plates providing a chamber between the plates surrounding the drill stem therebetween, a sleeve surrounding the drill stem and extending from the upper plate, an annular array of bores through the sleeve extending generally inwardly and downwardly toward the drill stem, means for supplying fluid to the outer ends of said bores to produce generally inwardly and downwardly directed fluid jets emanating from said bores and impinging against the drill stem providing a seal between the sleeve and the drill stem, the two sealing means preventing escape of air from said chamber to the atmosphere, and a discharge passage connected to said chamber for discharging from said chamber dust and cuttings carried out of the bore hole.

2,730,334
VENTILATING HOLE DRILLING MACHINE SUPPORTING FRAME
Archie L. Sullivan, Birmingham, Ala.
Application March 28, 1955, Serial No. 497,292
9 Claims. (Cl. 255—51)



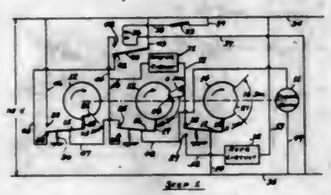
1. A device of the class described comprising a hanger frame adapted to extend through a window opening, said hanger frame having depending means for clamping against the respective inner and outer faces of a wall below the window, a trackway connected to said hanger frame, and a drill carriage carried by said trackway for feeding a drill carried by said carriage into operative engagement with a wall upon which said device is mounted.

2,730,335
AIR CORE DRILL
Joseph Lamprecht, Fayetteville, N. Y.
Application March 16, 1953, Serial No. 342,545
4 Claims. (Cl. 255—72)



1. A core drill for cutting cylindrical samples from rock, tile, cementitious and other materials, said core drill comprising a cylindrical drill having cutting teeth at the lower end thereof, a supporting base for said cylindrical drill adapted to overlie the surface of the material to be drilled, said cylindrical drill being mounted in said supporting base for rotation and for axial movement therethrough, an air line attachment carried by said supporting base, passage means in said supporting base and cylindrical drill in communication with said air line attachment for delivering air to the interior of said cylindrical drill, said cylindrical drill having a cylindrical main wall portion, said cutting teeth being circumferentially spaced and projecting inwardly and outwardly of said main wall portion of said cylindrical drill to provide clearance on each side of said main wall portion when disposed in a hole drilled by said cutting teeth, said cutting teeth having areas of reduced width providing vertically extending recesses along both the outer and inner peripheries thereof, each of said recesses terminating at the forward edge of the next tooth, the cutting teeth having cutting edges circumferentially spaced to provide axially extending recesses intersecting said vertically extending recesses whereby air applied to the interior of said cylindrical drill will be free to pass downwardly through said drill and upwardly out of a hole being drilled.

2,730,336
ELECTRICALLY CONTROLLED HEATING AND COOLING SYSTEM
George Shiers, Silver Spring, Md., assignor to American Instrument Company, Inc., Silver Spring, Md.
Application April 20, 1953, Serial No. 349,809
13 Claims. (Cl. 257—3)



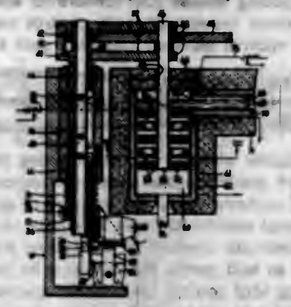
1. In a control system for a space whose temperature is to be controlled, a temperature-responsive element in said space, a timing device controlled by said temperature-responsive element, a refrigeration circuit arranged to cool said space, a heater circuit arranged to heat said space, means for energizing said refrigeration circuit responsive to a first predetermined minimum period of operation of said timing device, means for maintaining said refrigeration circuit energized through a second predetermined minimum period of operation of said timing device, and means, including said temperature-responsive element, arranged for deenergizing said refrigeration circuit and energizing said heater circuit at the end of said second predetermined minimum period of operation of said timing device, whereby the repetition rate of starting operations of the refrigeration circuit is limited to at least the repetition rate of the cycle of the timing device.

2,730,337
HEAT EXCHANGER
Charles N. Roswell, Chicago, Ill.
Application April 13, 1953, Serial No. 348,186
14 Claims. (Cl. 257—246)



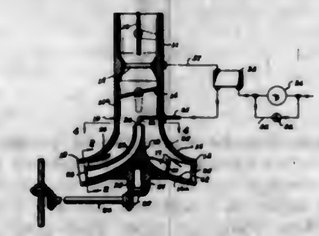
1. A heat exchanger, comprising: an outer casing having a first heat exchange medium port and a first product port adjacent to one end and a second heat exchange medium port and a second product port adjacent to the other end thereof; a heat exchange medium conduit tube removably telescopically received into said casing through said one end and having an outer wall of the tube spaced from an inner wall of the casing to provide a substantially annular product chamber, both product ports normally communicating with said chamber to direct product therethrough; releasable attaching means fastening the tube in said casing in a predetermined position; cooperating wall sections on said casing and tube directing said medium into said tube in a passage along the inner surface of said tube outer wall and between said medium ports in one general direction only from one end of the tube to the other when in contact with said outer wall inner surface; and wall sections in said casing directing said medium between said medium ports in a passage along the outer surface of said casing inner wall.

2,730,338
GLASS REFINING APPARATUS
Joseph S. Gregorius, Tarentum, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny, Pa., a corporation of Pennsylvania
Application September 14, 1951, Serial No. 246,596
6 Claims. (Cl. 259—8)



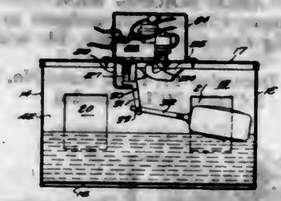
1. In a glass homogenizing apparatus, a refractory structure defining an upright container having an inlet at its upper portion for conveying a stream of molten glass thereto, means for maintaining the glass in molten form, an upright driven shaft rotatable in the container, spaced disks mounted in substantially horizontal planes upon the shaft and in the container, each disk having a series of openings bored therethrough, the axis of boring of each opening being disposed obliquely to the mean plane of the disk in which it is formed, the oblique angularity of the axes of boring of the openings in one disk being disposed substantially oppositely to the oblique angularity of the axes of boring of the openings in the next adjacent disk.

2,730,339
FUEL DISTRIBUTING SYSTEM
Frank G. Pramell, Chillicothe, Ohio
Application October 23, 1952, Serial No. 316,523
7 Claims. (Cl. 261—19)



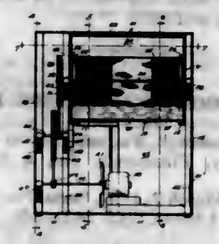
1. A fuel distributing system for feeding fuel and air into a plurality of manifold branch pipes, comprising, in combination: an air induction pipe, walls forming a distributor chamber for fuel and air in the form of a surface of revolution joined to said air induction pipe, a portion of said surface of revolution being defined by a wall portion having an annular series of fuel and air discharge ports symmetrically disposed about and equally spaced from the axis of said surface of revolution, said ports opening into the infeed ends of said manifold branches, a distributor rotor rotatably mounted in said chamber on the axis of said surface of revolution, said rotor having an uninterrupted fuel passage therethrough having an axially positioned fuel intake port at one end and an eccentrically positioned discharge spout at the other directed toward said ported wall portion of said chamber, so as to register successively with said fuel and air discharge ports of said distributor chamber, and means for feeding a continuous stream of fuel to said axially positioned intake port of said rotor, whereby a continuous stream of fuel issues from said rotor spout and passes successively through successive fuel and air discharge ports of said distributor chamber when said rotor is revolved, said rotor occupying a portion only of said distributor chamber and being positioned therein so as to afford a constant air flow space through said distributor chamber from said induction pipe around the outside of said rotor to said fuel and air discharge ports, whereby said ports successively receive both air from said induction pipe through said chamber and fuel spouting from said rotor.

2,730,340
HUMIDIFIER
Domenico Patriarca, Cranston, R. I.
Application February 12, 1953, Serial No. 336,500
1 Claim. (Cl. 261—26)



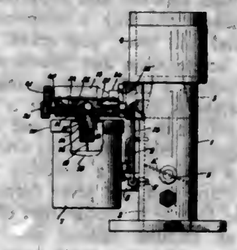
In a humidifier the combination of a housing adapted to hold a liquid and having a multiple number of louvers, a cover provided with air vents and having a bracket secured thereto, a hydrostat secured to said cover, a micro-switch secured to said cover provided with a plunger extending through said cover and a motor secured to said cover and provided with a shaft extending through said cover, a propeller secured to said shaft, a bell crank lever pivotally mounted in said bracket with one end engaging said plunger, a float pivotally mounted in the other end of said bell crank lever and operable in said case, a warning signal, an electrical circuit uniting said hydrostat, said micro-switch, said motor and said warning signal to cause said motor to be under the electrical control of said hydrostat and said warning signal to be under the electrical control of said micro-switch through the action of said float on said plunger through the medium of said bell crank lever.

2,730,341
AIR COOLING SYSTEM
Oliver W. Roe, San Diego, Calif.
Application June 16, 1953, Serial No. 361,949
2 Claims. (Cl. 261—30)



1. An air cooling system of the class described comprising a housing having a bottom wall, a pair of vertically spaced apart front and rear walls secured at their lower edges to the bottom wall and rising therefrom, a pair of upstanding spaced apart side walls secured at their lower edges to said bottom wall and at their side edges to the respective front and rear walls, said front and rear walls having exhaust openings adjacent the upper ends thereof, a removable top wall secured to the upper edges of said front, rear and side walls, a transverse horizontally extending brace bar fixed at one end on one of said side walls intermediate the length thereof, vertically extending transversely spaced apart braces fixed on said front and rear walls adjacent to and spaced from the side walls, another transverse brace fixed between said vertically extending braces in horizontal alignment with said first mentioned transverse brace bar, and impervious container adapted to contain liquid having bottom, side and end walls engageable on said transverse braces and spaced from said other side wall thereby defining in said housing upper and lower longitudinal chambers and a vertically extending chamber adjacent one side wall communicating with said upper and lower chambers, a screen cylinder in said container partly dipping into the liquid in said container, a motor in the lower of said longitudinal chambers, drive means operatively connected between the motor and said cylinder for rotating said cylinder in said container, the other one of said side walls having an opening therethrough adjacent the lower end thereof for the entrance of air into said housing, said rear wall having a segmental arcuate opening therein adjacent said top wall in horizontal alignment with the upper peripheral surface of said cylinder for the intake of air into said screen, and a fan connected to said motor in the lower chamber whereby air may be circulated from said lower chamber through said vertical chamber and through said upper chamber.

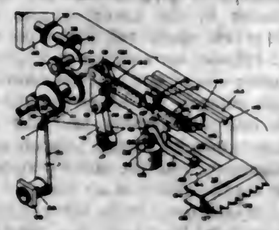
2,730,342
FUEL INJECTOR
Roy C. Lee, Irvington, N. J.
Application September 19, 1951, Serial No. 247,231
1 Claim. (Cl. 261—41)



A downdraft fuel injector for internal combustion engines comprising an elongated hollow body providing a primary mixing chamber, a throttle valve in said primary mixing chamber, an auxiliary mixing chamber communicating with said primary mixing chamber through a low and intermediate speed jet disposed below said throttle valve, an air inlet tube communicating with said auxiliary mixing chamber and with said primary mixing chamber above said throttle valve, a fuel chamber secured to said body, a fitting communicating with said auxiliary mixing chamber and said fuel chamber, a fuel inlet in said fitting for receiving fuel under pressure, a low speed valve for controlling flow of fuel under pressure from said fitting to said auxiliary mixing chamber, a float valve in said fitting, a float in said fuel chamber for actuating said float valve to control flow of fuel from said fitting to said fuel chamber, a second fitting communicating with said auxiliary mixing chamber and the lower portion of said fuel chamber, an intermediate speed valve for controlling flow of fuel from said fuel chamber to said auxiliary mixing chamber, a high speed jet communicating with said primary mixing chamber above said throttle valve, means for supplying fuel from said fuel chamber to said high speed jet and a high speed valve for controlling flow of fuel to said high speed jet whereby with said throttle valve closed or partially open air will be drawn into said auxiliary mixing chamber through said air inlet tube and mixed with fuel supplied from said first fitting at low speed and from said first fitting and said second fitting at intermediate speed to discharge a combustible mixture at low and intermediate speed

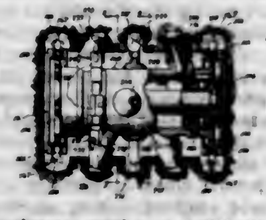
jet into said primary mixing chamber, said high speed jet serving to spread fuel to said primary mixing chamber at high speed.

2,730,343
MECHANICAL MINER WITH CUTTER HEAD PROVIDED WITH A RECIPROCATING WEIGHT
William W. Sloane, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application June 17, 1952, Serial No. 293,958
8 Claims. (Cl. 262—8)



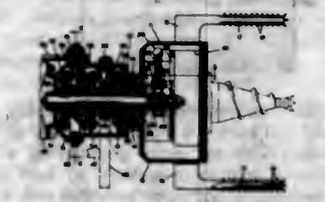
8. In a mechanical miner, a cutter head adapted to be moved in a straight line into contact with a seam of frangible material, a weight adapted to reciprocate in a straight line with respect to said cutter head, power means for imparting reciprocatory movement to said weight comprising a varying speed gear, a crank driven at the speed of said variable speed gear, a lever including means for connecting said lever to said crank, means affording a connection between said reciprocating weight and said lever, means affording a connection between said cutter head and said lever, said crank and said lever providing for acceleration and deceleration of said weight so as to produce a high force against said cutter head when the weight is decelerating at a high rate in its movement towards said cutter head and so as to produce a low force against said cutter head when the weight is accelerating at a low rate in a direction towards said cutter head, said crank and said lever forming a means for transferring the change in momentum of said weight in the form of an impulse against said cutter head, means for crowding said cutter head against said seam of frangible material, means for arresting said weight in its travel in a direction towards said cutter head when said cutter head is no longer encountering resistance from said seam, and means for returning said weight to a position for resumption of its regular reciprocating movement after having been arrested in its movement by said arresting means.

2,730,344
COAL MINING MACHINE WITH ROTARY CUTTING AND DISLODGING DRUM
Frank Cartlidge, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application September 20, 1949, Serial No. 116,684
13 Claims. (Cl. 262—9)



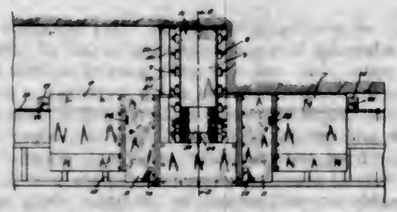
1. In a continuous cutting and dislodging element, a rotary drum mounted for rotatable movement about an axis extending parallel to a working face, a plurality of rows of cutter bits mounted around the periphery of said drum and spaced laterally along the surface thereof and projecting therefrom to cut a plurality of parallel kerfs in a mine face, and roller means mounted on said drum to extend into the kerfs cut by said bits, said roller means being rotatable about axes inclined with respect to the face of said drum and extending from the face of said drum from points outside of said rows into the path of said cutter bits and each having an inclined engaging face engageable with one wall of the kerf and presenting continuously rotating wedging faces inclined with respect to one wall of the kerf and shearing off the cores between the kerfs along the cleavage planes of the coal.

2,730,345
MINING MACHINE WITH RADIALLY ADJUSTABLE BORING ARM
William W. Sloane, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application December 17, 1952, Serial No. 326,399
1 Claim. (Cl. 262—26)



In a mining machine having a frame and a power-driven boring element rotatably mounted thereon, including a hub and at least one cutter carrying arm adjustable radially of said hub, means for adjusting the position of the arm relative to said hub, including a shaft extending concentrically through an axially of said hub and operably connected with the arm at the front end thereof to move the latter in response to rotation of the shaft relative to the hub, the improvement comprising a first gear fixed on said shaft, a planetary gear meshed with said first gear and journalled on a carrier concentrically mounted with respect to said hub and shaft, a second gear rotatably mounted concentrically with the first gear, the shaft and the hub, and also meshed with said planetary gear, a third gear journalled on the frame and meshed with the second gear, and a fourth gear fixed on the hub and meshed with the said third gear, and means for rotating said carrier reversely about the axis of said hub and shaft, including a control shaft disposed on an axis parallel with the axis of said hub and shaft.

2,730,346
REVERSIBLE LOOP CUTTER TYPE LONGWALL MINER
Joseph F. Joy, Pittsburgh, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application March 7, 1951, Serial No. 214,242
21 Claims. (Cl. 262—30)



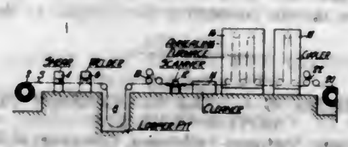
1. In a mining machine of the character disclosed, a guide bar having an open center and providing guideways at its opposite sides, endless loop cutter carrying chains guided for orbital circulation along the guideways of said guide bar and carrying cutting elements, one of said loop cutter chains disposed on said guide bar in advance of the other, and motor operated driving means for said chains for driving the advance one of said chains at a relatively high cutting speed to cut the mineral of a solid mine vein and for driving said other trailing chain at a relatively low conveying speed for conveying the loose mineral dislodged from the previously-cut mine face in a lateral direction out of the machine-path.

2,730,347
CUTTER BAR CONSTRUCTION AND ADJUSTMENT THEREFOR
Armin O. Bruestle and Claude B. Krekeler, Cincinnati, Ohio, assignors to The Cincinnati Mine Machinery Company, Cincinnati, Ohio, a corporation of Ohio
Application October 31, 1952, Serial No. 318,042
5 Claims. (Cl. 262—33)



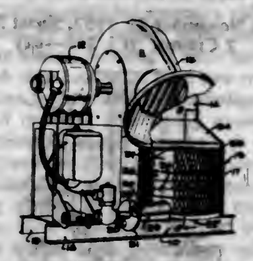
1. In a cutter bar the combination of a cutter bar body having upper and lower plates held apart by spaced rails and forming a central enclosed channel, a bar hanger slidable in said channel to support said cutter bar body in adjusted position, said bar hanger having a reduced forward extension, guide blocks fastened between said plates and spaced to accept the forward end of said extension, a thrust block fastened between said plates and having a portion lying between said guide blocks and opposed to said extension, and a wedge member insertable through an opening in one of said plates and dimensioned so as to lie between said guide blocks and between said extension and said thrust block and wholly between the outer surfaces of said upper and lower plates when seated, and means for holding said wedge member in seated position, said wedge member having at least one beveled face, a mating beveled face being located on one of said first mentioned opposed elements, said wedge member being so dimensioned as substantially to fill said opening in said plate when said wedge member is seated, and at least one shim element insertable through said opening when said wedge member is withdrawn, and dimensioned to lie wholly between said upper and lower plates against one of said first mentioned opposed elements.

2,730,348
EDGE SCANNER FOR STRIP MATERIAL
George H. Rendel, Pittsburgh, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Application May 14, 1952, Serial No. 287,791
17 Claims. (Cl. 263—3)



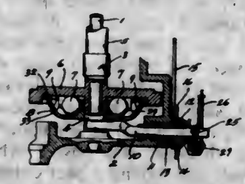
1. Apparatus for inspecting the side edges of a longitudinally moving strip comprising a light source on one side of each of said edges, a light responsive device on the opposite side of each of said edges, a pair of carriages mounted for movement transversely of the path of travel of the strip, and a shutter mounted on each of said carriages, each of said shutters having a slot therein extending transversely of the path of travel of said strip adjacent the edges thereof.

2,730,349
HEATER UNIT
Paul D. Kilbury, Hawthorne, Calif.
Application February 9, 1953, Serial No. 335,699
1 Claim. (Cl. 263—19)



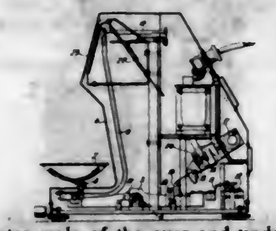
A space heater, comprising: a foraminate upright cylindrical shell; a top wall member for said shell of generally conical form, and having an apex outlet opening; a similar generally conical wall member positioned within said shell below and substantially in parallel relationship with said top wall with its base periphery engaging said shell substantially midway between the top and bottom of said shell, said second wall having an apex opening axially aligned with the opening of said top wall, but of relatively smaller area, said top wall and said second wall cooperating to define a centrally located, vertically extending, unobstructed flow channel in said shell for upward movement of air from the portion of said shell beneath the second wall, and an inwardly and upwardly inclined air passage between said walls for flow of air from the associated shell periphery into mixed relation with the air in said flow channel; a gas burner within said shell below said second wall and adjacent the bottom of said shell; and a blower having an inlet connected to the apex outlet of said top wall adapted to withdraw said mixed air and discharge it into the space to be heated, said blower acting to induce airflow through the apex openings of said walls, and said second wall acting to restrict and stabilize upward flow of air at said burner in a manner to prevent flame lift therein.

2,730,350
SPEED REGULATOR
Edwin L. Fisher, Sheboygan, and Alvin P. Fenton, Kohler, Wis., assignors to Kohler Co., Kohler, Wis., a corporation of Wisconsin
Application February 2, 1953, Serial No. 334,544
10 Claims. (Cl. 264—3)



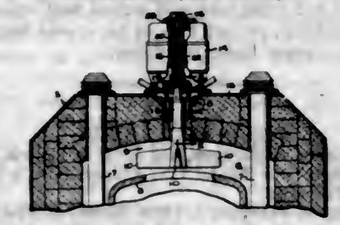
10. In a governor the combination comprising a governor shaft, governor weights, a rotatably mounted control shaft to be rotated in response to movement of said weights, an arm extending radially outward from and rotatable with said control shaft, a regulating member in the form of a disc encircling said shaft and rotatable with respect thereto, said regulating member having a spring engaging portion at a substantial radial distance from said shaft, a helical spring encircling said shaft with one end extending radially outward to a connection with said arm and the other end extending radially outward to a connection with said spring engaging portion of said disc, and means for rotating said regulating member about said shaft to impart spring bias to said control shaft.

2,730,351
COUNTER SCALES OF THE OVER AND UNDER WEIGHT TYPE
David Stanley Round, Birmingham, England, assignor to W. & T. Avery Limited, Birmingham, England, a British company
Application November 25, 1952, Serial No. 322,385
2 Claims. (Cl. 265—62)



1. A counter scale of the over and under weight type having a pivoted weigh beam, a second beam linked to the weigh beam and pivotal in response to weighing movements of the weigh beam, an over and under weight indicator carried by said second beam, a torsion ribbon fixed between its ends to said second beam to receive torsional movements in response to pivotal movements thereof and having means fixed to its ends to sustain torsional forces imposed on the ribbon by said second beam, the torsion ribbon constituting a fulcrum for said second beam and providing a torsional resistance to said second beam to control the degree of pivotal movement thereof in response to overweight and underweight movements of the weigh beam.

2,730,352
CERAMIC FAN CONSTRUCTION FOR HEAT TREATING FURNACES
Harold N. Ipsen, Rockford, Ill.
Application July 1, 1954, Serial No. 440,660
3 Claims. (Cl. 266—5)



3. In a heat treating furnace having a hole through one wall thereof, the combination of, a hollow power driven shaft disposed exteriorly of said furnace and alined with said hole, a fan of ceramic material disposed within said furnace and having a hollow shaft projecting into said hole and formed with an inwardly facing internal abutment, said shafts having opposed and mating surfaces engaging each other, an elongated fastening element projecting through said power driven shaft and into said fan shaft and having a part engaging said abutment, and means for drawing said part against said abutment thereby holding said surfaces together and connecting said power driven shaft and said fan for rotation together.

2,730,353
SECTIONALIZED REACTION VESSEL
Henry S. Dombrowski and Carl W. Sanders, Jr., Wilmington, and Eugene Wall, Seaford, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application May 5, 1955, Serial No. 506,212
4 Claims. (Cl. 266—43)

1. A metal reaction vessel comprising a plurality of adjoining metal sidewall sections formed into an enclosure, the inside surface of said enclosure being composed of a diffused layer of the metal of said sidewall and a metal selected from the group consisting of titanium, zirconium and hafnium, a metal head adjoining a rim of said enclo-



sure, thin metal strips covering both the exterior joint between said rim and said head and the exposed exterior joints of the adjoining sidewalls, and means for securing said metal strips on both sides of said joints.

2,730,354
HYDRAULIC INTERVAL TIMER
Glenn A. Burris, Bayside, Calif.
Application November 9, 1953, Serial No. 391,067
4 Claims. (Cl. 267—1)

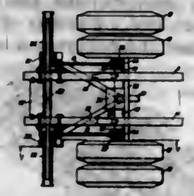


1. An interval timer comprising a valve body having threaded bosses on the opposite ends thereof, a valve in said valve body, a reservoir threaded into the boss on one end of said body and extended upwardly from said valve, a cylinder threaded into the boss on the opposite end thereof and extended from the valve body in diametrically opposed relation to said reservoir, resilient means urging the valve to the closed position, a piston in said cylinder, said valve positioned to open upon movement of the piston away from the valve, a piston rod extended from said piston, resilient means for urging said piston toward the valve, and a by-pass having a regulating valve therein connecting the cylinder to the reservoir.

2,730,355
STABILIZING WHEEL SUSPENSION FOR MOTOR VEHICLES
Hugo Katzung, Stuttgart-Vaihingen, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application October 1, 1952, Serial No. 312,587
10 Claims. (Cl. 267—11)

1. In a vehicle, the combination comprising an axle, a pair of wheels mounted thereon and carrying same, a chassis, a pair of lateral links pivoted to said chassis for rocking motion within longitudinal planes of the vehicle and connected to said axle and adapted to guide the same for relative up-and-down movement, a stabilizer spring

connecting said lateral links to restrain a relative inclination of said axle and said chassis, a link pivoted to said chassis and engaging the center of said axle, and a spring



connecting said chassis with said last mentioned link to restrain the motion of the latter and to transfer the weight of said chassis to said axle.

2,730,356
LOAD SUPPORTING AND VIBRATION DAMPING MOUNTING
Gerald G. Hunter, Pontiac, Mich., assignor to Baldwin Rubber Company, Pontiac, Mich., a corporation of Michigan
Application March 2, 1953, Serial No. 339,633
4 Claims. (Cl. 267—63)



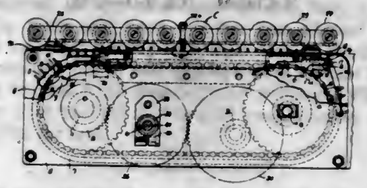
1. In combination with vertically spaced members supported for relative movement in directions toward and away from each other and laterally spaced guide pins extending between said members to prevent lateral shifting movement of the members, a mounting interposed between said members including an elongated block of resilient material having load supporting pads at opposite ends formed with vertical passages respectively receiving said pins and being of a height corresponding to the thickness of the block to support one member on the other, said block having spaced side walls having a height corresponding to the height of said pads and integrally connecting said pads and cooperating therewith to support one member on the other, said block also having a plurality of ribs between said pads extending transversely of said block and integrally connecting the opposite side walls, said ribs being independent of each other and being separated from said pads and from each other by openings extending through said block from the top to the bottom thereof, the ribs having a height approximating but slightly less than the thickness of the pads and coacting with the pads to support the load in response to a deflection of the pads a distance greater than the height differential between the ribs and pads.

2,730,357
GUIDE BAR MEANS FOR CLOTH FOLDING MACHINE
Walter Deichmann, Mineola, N. Y., assignor to Cutting Room Appliances Corp., New York, N. Y., a corporation of New York
Application June 3, 1952, Serial No. 291,438
1 Claim. (Cl. 270—86)



A cloth folding device comprising main support bar means, first and second oblique strut means carried by said main support bar means and intersecting at their upper ends to form therewith a triangle, upper guide bar means connected at one end thereof to the apex of said triangle, and support post means carried by said main support bar means and secured at its upper end to another portion of said upper guide bar means; a plurality of roller members carried by said upper guide bar means; said upper guide bar means including a main body in the form of an elongated strip having at least two recesses formed in its upper edge with projections defining the two ends of each of said recesses, and having grooves formed in the upper portions of said projections to form seats; a support rod extending through said grooves and seated therein and extending across said recesses, said roller members being carried by said support rod for rotation in said recesses; first cap means carried by one of said projections and having an at least partly cylindrical outer surface of a diameter equal to that of said rollers; second cap means carried by another of said projections at points adjacent the point of interconnection of said upper support bar means and said first and second oblique strut means, said second cap means having a first substantially cylindrical surface of a diameter equal to that of said rollers, and a second gradually tapering surface which tapers in a direction away from said rollers and toward said point of interconnection.

2,730,358
MANIFOLD FORM FEEDING AND HOLD-DOWN MECHANISM
John M. Riordan, Cleveland Heights, Ohio, assignor to Bonnar-Vawter, Incorporated, Cleveland, Ohio, a corporation
Application September 23, 1952, Serial No. 311,124
4 Claims. (Cl. 271—2.1)



1. In mechanism of the class described for feeding strip material including paper webs having feed holes in an edge thereof, in combination, a frame, a table on said frame, a feeding unit supported by said frame for feeding the strip material along the table comprising sprockets and an endless chain carried thereby for travel movement therearound in one direction beneath said table, drive means for said unit, a series of feeding devices separate from said chain, pivotally connected to said chain so as to extend outwardly with respect thereto for movement therewith, said devices having one end free of and in trailing position with respect to the direction of travel of said chain, said devices having feed hole engaging instrumentalities thereon and guide elements on said frame spaced outwardly with respect to said chain, said one end of each of the devices having a part in constant engagement with said elements to effect vertical movement of the instrumentalities during traverse of the chain around a sprocket and simultaneously project the same above the table at right angles.

2,730,359
WEB INDEXING APPARATUS FOR WRAPPING MACHINES
John W. Smith, Battle Creek, Mich., assignor to Battle Creek Packaging Machines, Inc., a corporation of Michigan
Application September 25, 1952, Serial No. 311,505
10 Claims. (Cl. 271—2.6)

1. Index control for a machine for feeding a web having index indicia thereon comprising, means for feeding

a web, drive means including a clutch connected to operate said web feeding means, a first lever connected to engage and disengage said clutch, a cyclically operating cam on said machine, a crank pivoted on said machine and having a follower engaged with said cam, a second lever pivoted on the same axis as said crank and adjacent said crank, a pawl pivotally mounted on a swinging portion of said crank and drivingly engageable in one posi-



tion with said second lever, a link connecting said levers to impart engaging motion to said clutch, a third lever connected to engage and disengage said clutch, solenoids on said machine having their armatures connected to said pawl and said third lever, electric means connected to energize said solenoids, and an electric eye sensing device positioned adjacent the path of said web to sense the position of said indicia and electrically connected to actuate said means for energizing said solenoids.

2,730,360

SUCTION GRIPPING MECHANISM FOR ENVELOPE MACHINES AND THE LIKE

Vincent E. Heywood, Worcester, Mass., assignor to United States Envelope Company, Springfield, Mass., a corporation of Maine

Application June 19, 1951, Serial No. 232,403
4 Claims. (Cl. 271—27)



1. A suction gripping device for flexible sheet material comprising in combination, a rotatable cylinder providing a slot in its peripheral surface, a passage extending through said cylinder for connecting said slot to a source of vacuum, an element movable in said slot widthwise thereof for alternately establishing and shutting off the access of suction to said slot from said vacuum-connected passage, means for maintaining said element seated against an edge of said slot at said cylinder's periphery to close off communication between said slot and said evacuated passage and means for moving said element away from said edge to establish communication between said slot and said passage.

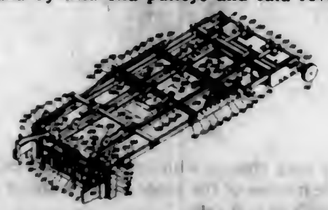
2,730,361

SHEET FEEDING DEVICES IN ADDRESSING AND LIKE MACHINES

Robert Leonard Kerr, London, England, assignor to Adrema Limited, London, England, a British Company

Application July 6, 1950, Serial No. 172,250
4 Claims. (Cl. 271—45)

1. A self-contained conveyor for paper sheets attachable to the horizontal table of an addressing and like printing machine, said conveyor comprising an elongated frame fitting the table of the machine and having at both ends extensions depending below the working level of the table outside the peripheral outline thereof when the frame is fitted to the table, a set of pulleys at each end of the frame, the pulleys of the two sets being mounted on the frame rotatable about two axes parallel to each other and extending transversely of the frame, a set of reversing pulleys mounted on each of said depending extensions rotatable about parallel axes perpendicular of said transverse axes, and a plurality of endless conveyor tapes guided by said end pulleys and said reversing pul-



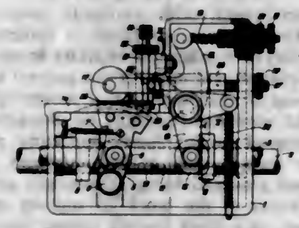
leys, each of said tapes having a feed run and a return run guided by said end pulleys in a common horizontal plane substantially coplanar with the plane of the frame from one end of the frame to the other and reversed by said reversing pulleys below said plane, the return runs of said tapes being disposed adjacent to the sides of the frame.

2,730,362

DEVICE FOR SIDE REGISTERING SHEETS IN PRINTING OR SIMILAR MACHINES

Werner Koch, Offenbach (Main), Hesse, Germany, assignor to Faber & Schleicher Aktiengesellschaft, Offenbach (Main), Germany, a firm

Application January 4, 1951, Serial No. 204,317
Claims priority, application Germany January 10, 1950
4 Claims. (Cl. 271—59)



1. In a printing machine through which sheets move to be printed, a device for the side registering of the sheets to be printed, comprising a housing, a sheet feeding surface on said housing, a one-piece side gauge and a guide plate and means for swinging said one-piece side gauge and guide plate about an axis which is parallel to the moving direction of the sheets, a cam-controlled lever, a shaft for pivotally supporting said lever having its axis substantially in the plane of movement of the sheets, another lever on said shaft straddling said first-named lever and adapted to be rocked by the said first-named lever, a block rigidly secured to the free end of the second named lever, said one-piece side gauge and guide plate being rigidly connected to said block, and a hand-operable set screw extending vertically through said block and bearing with its lower end upon a part of the housing for adjusting the said side gauge and guide plate simultaneously in substantially vertical direction when the said levers are at rest in their operative position.

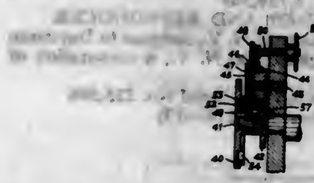
2,730,363

SHEET DELIVERY MECHANISM FOR PRINTING MACHINES

Paul Dietrich and Emil Kolland, Augsburg, Germany, assignors to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a corporation of Germany

Application May 12, 1951, Serial No. 225,964
Claims priority, application Germany May 19, 1950
4 Claims. (Cl. 271—79)

1. A variable speed drive for printing press chain delivery mechanism comprising in combination a main drive gear driven by said press, a control cam on one face of said main drive gear for controlling variations in speed of said variable speed drive, a planetary gear system including a sun gear, a plurality of planetary gears meshing therewith, and a rotatable carrier on which said planetary gears are mounted, means for rotatably mounting said carrier coaxially with said sun gear and in substantially face to face relation with said cam face



of said main drive gear, means for driving said sun gear from said main drive gear, output gear means driven by said planetary gears at variable speeds as said carrier moves on its said rotatable mounting, a cam follower on said carrier and engaging said control cam on said face of said main drive gear effecting oscillation of said carrier for varying the speed of said output gear means, and means for driving said chain delivery mechanism from said output gear means.

2,730,364

CHAIN DELIVERY UNIT FOR PRINTING PRESSES

Elmer R. Thomsen, Portland, Oreg.

Application November 4, 1953, Serial No. 390,172
2 Claims. (Cl. 271—79)



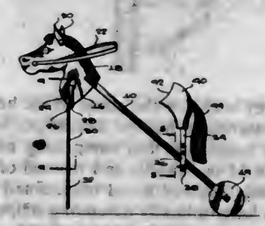
1. A paper chain delivery unit for a multilith printing press having a frame and an impression cylinder having a recessed leading edge driven by a gear comprising a unit frame, attaching means on the unit frame adapted to attach the unit frame to the press frame, an anvil adapted to be mounted in the cylinder recess having recesses therein, a first sprocket shaft rotatably carried by said unit frame and adapted to be placed near the impression cylinder, a second sprocket shaft rotatably carried by said unit frame and remote from said first shaft, a sprocket wheel fixed to each shaft adjacent each end thereof, the sprocket wheels at one end of the two sprocket shafts being in alignment and constituting a pair and the sprocket wheels at the opposite end of the two sprocket shafts being in alignment and constituting a pair, a sprocket chain entrained over each pair of sprocket wheels, a gear on said first sprocket shaft adapted to mesh with the press gear, a plurality of paper gripping devices carried by said sprocket chains and spaced from one another a distance sufficient to bring said devices successively into gripping relation to the leading edge of successive sheets of paper carried by the impression cylinder, each device comprising a gripper bar extending between said chains and having its opposite ends secured to the chains, a gripper finger shaft rotatably carried by said bar, gripper fingers on said finger shaft and angularly adjustable with respect to the axis thereof and cooperating with said bar to grip the paper, means for urging said fingers into gripping position, cam means for opening said fingers when they reach the leading edge of the paper, said opened fingers being received by the recesses in the anvil to facilitate gripping of the paper, second cam means for opening said fingers adjacent said second sprocket shaft for releasing the paper, and toothed wheels fixed to said first sprocket shaft and adapted to engage the paper as it leaves the impression cylinder to maintain the proper contour of the paper, each of said toothed wheels having two substantially diametrically opposite cut away segments for accommodating the paper gripping devices when adjacent the impression cylinder.

2,730,365

STICK HORSE

Caesar Ortega Godoy, Los Angeles, Calif.

Application February 27, 1953, Serial No. 339,371
2 Claims. (Cl. 272—1)



1. A stick horse comprising an axle supported by a pair of wheels, a main bar having one end fixedly connected to the intermediate portion of said axle, an upstanding post carried by said bar inwardly of and spaced from said axle, a seat member formed in the simulation of the hind part of a horse secured to said post, a head member formed in the simulation of the forepart of a horse secured to the other end of said bar, and legs depending from said head member and adapted to flex freely at locations intermediate their ends to simulate the movements of a horse, said legs including a fabric backing attached to said head member and stiffening pieces attached to said backing and spaced longitudinally thereof to articulate the legs.

2,730,366

OCCUPANT PROPELLED AMUSEMENT DEVICE

Robert O. Etherington, Lawrenceburg, Ky.

Application March 19, 1952, Serial No. 277,465
9 Claims. (Cl. 272—33)



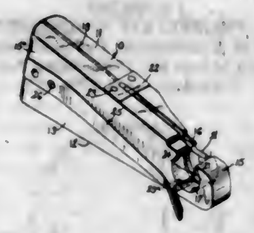
1. An amusement device comprising a circular trackway supported by a circular base, said circular trackway being elevated above said circular base, longitudinally curved standards extending between said base and said trackway and supporting said trackway, a plurality of vehicles mounted on said trackway and supported thereby, said vehicles each including a wheel engaging said trackway, a frame carried by said wheel, drive means associated with said frame for driving said wheel, said frames being connected at their lower ends by a lower annular connecting member, seats for said vehicles mounted on said lower annular connecting member and supported thereby, the curvature of said standards providing clearance for said vehicles.

2,730,367
HOCKEY STICKS
Gustav Bublik, London, England
Application September 16, 1953, Serial No. 380,513
2 Claims. (Cl. 273—67)



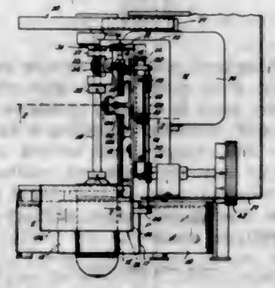
1. A hockey stick for the game of ice hockey and comprising a substantially hollow handle portion and a blade portion, said handle portion comprising an insert extending the length of the handle and formed of two longitudinally extending strips of wood maintained in spaced relationship, two longitudinally extending strips of cane affixed one to the outer lateral face of each of said wood strips and two separate outer or covering strips of wood between which said insert and its associated cane strips are sandwiched and said blade portion, which is initially separate from said handle portion and subsequently affixed thereto, comprising an inner layer composed of a plurality of strips of cane disposed in edge to edge relationship and two outer or covering strips of wood between which said inner layer is sandwiched.

2,730,368
GRAVITY FED MAGAZINE EQUIPPED COIN SPINNER
Leo Martin, Branford, and Allen K. Bird, Guilford, Conn.
Application June 3, 1954, Serial No. 434,115
1 Claim. (Cl. 273—138)



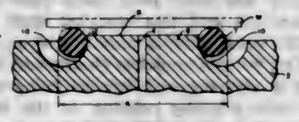
In a coin spinner, an elongated body having an upper edge and a lower edge, said upper edge being recessed adjacent one end of the body for receiving a coin therein, said body being provided with means to support the coin on edge, said upper edge of the body having a longitudinal groove formed therein communicating with said recess, the bottom of the groove being inclined downwardly toward the recess and the grooved portion of the body providing a gravity-feed magazine for coins, an upstanding pin in the the body adjacent one side thereof and extending into said recess at one side of the vertical center line of the coin in said recess, and a striker in the form of a leaf spring extending along the other side of the body, the leaf spring having one end thereof secured to the body and having the other end thereof swingable laterally toward and away from the body, and the leaf spring having a laterally offset portion extensible into said recess to strike the coin therein at the other side of the vertical center line thereof, thereby propelling the coin laterally from the body and spinning the same, said means supporting the coin in said recess comprising a pair of elongated resilient members connected to the body and extending into the mouth of said recess, one resilient element being disposed at each side of the coin disposed in said recess.

2,730,369
SOUND RECORDER AND REPRODUCER
Edgar L. Steed, Poughkeepsie, N. Y., assignor to Daystrom Electric Corp., Poughkeepsie, N. Y., a corporation of Delaware
Application July 6, 1951, Serial No. 235,506
1 Claim. (Cl. 274—13)



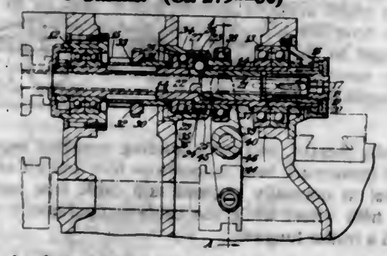
In a sound-on-film recorder including a frame and a carriage supporting a recording head for motion transversely of a film at a recording station fixed with reference to the frame, a carriage drive comprising a lead screw shaft, bearings in the frame for said shaft, two channels fixed with respect to the frame substantially parallel to each other and to the lead screw shaft, a channel affixed to the carriage, a channel movably supported on the carriage, a plurality of balls engaged between one of the frame channels and the fixed carriage channel, a plurality of balls engaged between the movable carriage channel and the other frame channel, a spring stressed between the carriage and the movable carriage channel urging the movable carriage channel toward the frame channel associated therewith, two bearing members affixed to the carriage along a line substantially parallel to the fixed carriage channel, a bracket, wings on said bracket adapted to engage said carriage bearing members, means to adjust the spacing of said wings, and a toothed wheel frictionally coupled to said bracket in position to engage the thread of the lead screw.

2,730,370
WORK HOLDING CHUCK
George F. Brewster, Kittery, Maine
Application August 13, 1954, Serial No. 449,683
9 Claims. (Cl. 279—3)



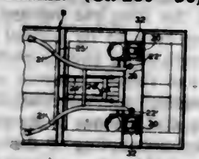
1. In a vacuum-operated chuck for holding a work piece, a work holding element, an elastic sealing ring, a ring seating surface formed on said work holding element and normally adapted to receive and support the sealing ring in a position in which it projects beyond one side of the holding element, and said ring seating surface being formed with a groove having a hyperboloidal surface for causing the ring to move into a circumferentially extending position when the said work piece is forced into contact with the work holding element.

2,730,371
OPERATING MECHANISM FOR CHUCKS, CLUTCHES AND LIKE DEVICES
William Elias Reginald Pulman, Hove, England, assignor to C. V. A. Jigs, Moulds & Tools Limited, Hove, England, a British company
Application July 17, 1951, Serial No. 237,238
Claims priority, application Great Britain July 17, 1950
5 Claims. (Cl. 279—50)



1. In a chuck structure having a hollow spindle, a collet mounted within one end of the spindle and having resilient fingers, wedge means for causing radial movement of said fingers to engage the work, an axially movable transmitting member within said spindle for operating said wedge means, operating mechanism comprising a collar encircling said spindle and axially movable relatively thereto, a second collar encircling said spindle and held against substantial axial movement relatively thereto, said collars having opposed wedge faces whereby the gap between the collars increases in width as it extends outwardly, a plurality of balls disposed between said wedge faces, a cup member encircling said balls and having an internal cross-section which decreases in area in an axial direction, means for moving said cup member axially whereby its inner surface engages said balls and forces them radially inwardly between said wedge surfaces, thereby moving said collar away from said second collar, an axially-slotted portion of the spindle and a plurality of balls extending through the slots in said portion of the spindle and disposed between and engaging said movable collar and said transmitting member, whereby axial movement of the movable collar is transmitted to the transmitting member.

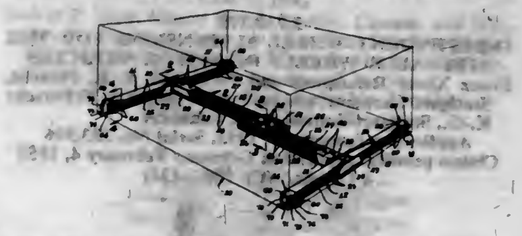
2,730,372
COMBINED FOLDING TABLE AND DOLLY
Julius A. Mahr, Minneapolis, Minn., assignor, by mesne assignments, to Harold R. Nielsen, St. Paul, Minn.
Application November 24, 1950, Serial No. 197,306
8 Claims. (Cl. 280—30)



1. In a table of the class described, a table top having folding legs, a member fixed adjacent to the table top, floor wheels attached to the member, a guard for at least one of the wheels movably attached to the member, and means carried by at least one of said legs for raising the guard when the legs are lowered and lowering the guard when the legs are raised.

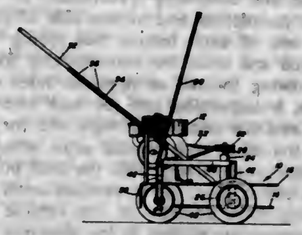
2,730,373
ADJUSTABLE DOLLY FOR KITCHEN STOVES AND THE LIKE
George A. Bievins, Burbank, and Chester B. Ensinger, Woodland Hills, Calif.
Application March 2, 1953, Serial No. 339,648
7 Claims. (Cl. 280—35)

1. A dolly for use under a household device such as a stove or refrigerator having a rectangular bottom skirt, said dolly being fabricated largely from a hollow section of noncircular cross-sectional configuration and comprising: Two lengths of said section adjustably interconnected for relative longitudinal movement to form a frame member to extend across one dimension of the rectangular space inside the skirt centrally of the space; two T-shaped connecting members having their shank portions mounted on the opposite ends respectively of said central frame member; two pairs of lengths of said section mounted on



the four ends respectively of the two arms of said T-shaped connecting members to form therewith two parallel frame members to extend to the four corners of said space, at least one member of each of said pairs being adjustable relative to the corresponding T-shaped connecting member; supporting wheels journaled in said two parallel frame members; and means at the ends of said parallel frame members to engage and support said household device near the four corners of said skirt.

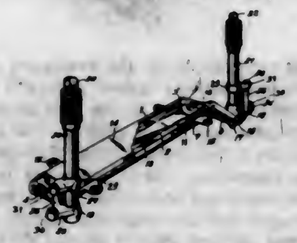
2,730,374
POWER MOWER WITH WHEEL RAISING AND LOWERING MEANS
Ervin Rogers and Al Schmitz, Nebraska City, Nebr.
Application August 31, 1953, Serial No. 377,623
1 Claim. (Cl. 280—44)



In a power mower, a base adapted to support a motor and cutter blade thereon, a pair of bushings mounted on the upper surface of said base member along each side thereof, a shaft rotatably mounted in each of said bushings, an upright axle supporting member secured to an end of each shaft, and control means connected to said axle supporting members for adjusting the position of said axles with respect to the base member, said axle supporting members comprising a first pair of arms secured at one end to the shafts on one side of the base member and extending downwardly therefrom, a second pair of arms secured adjacent their mid points to the shafts on the other side of the base member, the second pair of arms being substantially twice the length of the first pair of arms and having a downwardly extending portion equal to the downwardly extending first pair of arms and an upwardly extending portion, said downwardly extending portions being axially aligned with the second pair of arms on the other side of the base member to form aligned pairs of arms, said control means being connected to the upper portion of said second pair of arms, an axle connected between each axially aligned pair of arms adjacent the lower end thereof, and a wheel rotatably supported on each end of the axles, said control means comprising a rod pivotally connected between the upper ends of said

second pair of arms, an upright actuating lever connected to one of said second pair of arms, a handle inclining upwardly from said base member and across said lever, and a bar extending along said handle on the same side of the base member as said second pair of arms and provided with notches spaced along the same for selective engagement with said actuating lever for securing the lever in various adjusted positions.

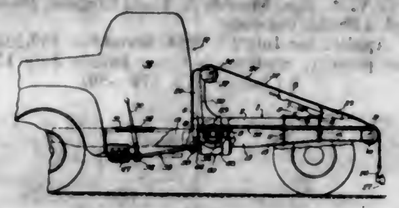
2,730,375
INDEPENDENT WHEEL SUSPENSIONS FOR THE STEERABLE WHEELS OF MOTOR VEHICLES
Franz Xaver Reimspiess and Ferdinand A. E. Porsche, Stuttgart, Germany, assignors to Dr. Ing. h. c. F. Porsche K.-G., Stuttgart-Zuffenhausen, Germany
Application January 29, 1953, Serial No. 333,906
Claims priority, application Germany February 4, 1952
4 Claims. (Cl. 280—124)



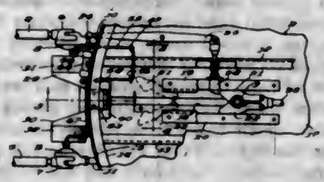
4. A wheel suspension unit for the steerable wheels of motor vehicles having a frame or body in which the axes of the steerable wheels are in the same transverse vertical plane, comprising a casing adapted to be fixed to the underside of the frame or body of the motor vehicle, a pair of torsion bar springs supported in said casing in spaced parallel relation in a substantially horizontal plane and extending transversely of the vehicle substantially parallel to and to one side of said vertical plane, one end of each torsion bar spring being non-rotatably fixed and held, the non-rotatably fixed ends of the springs being located at opposite sides of the suspension unit, a suspension arm for each steerable wheel having one end for connection with and for supporting said wheel, the other ends of said arms being non-rotatably connected respectively with the said other ends of said torsion bar springs, the suspension arms being alike and extending longitudinally of the vehicle from their respective torsion bar springs in the direction toward but to different points longitudinally of the vehicle with respect to said transverse vertical plane because of the relative positions of said pair of torsion bar springs longitudinally of the vehicle with respect to said transverse vertical plane, and a pair of wheel-axle journal carriers pivoted respectively to the said other ends of said suspension arms, the axle journal carrier pivoted to the suspension arm connected to the torsion bar spring nearer to said transverse vertical plane being located between its pivot point and said nearer torsion bar spring while the axle journal carrier pivoted to the other suspension arm is located on the side of its pivot point with the other suspension arm remote from the torsion bar spring to which said other suspension arm is connected, whereby the axle journal carriers are located so that the axes of the steerable wheels to be carried thereby are in said transverse vertical plane.

2,730,376
ATTACHABLE HITCHING UNIT FOR TRUCKS
William E. Martin, Kewanee, Ill.
Application August 14, 1951, Serial No. 241,712
16 Claims. (Cl. 280—425)

1. A unit for handling hitch pin trailer tongues comprising, in combination, a framework base, a fifth wheel supported upon said framework base to receive a hitch pin of a trailer tongue, a cable for attachment with the tongue, a cable winch carried by said framework base in a position below the level of said fifth wheel and forwardly thereof, and cable guiding members supported by said framework base in locations fore and aft of said fifth wheel to normally suspend said cable free and clear of the fifth wheel while the cable is operatively connected with a trailer tongue.



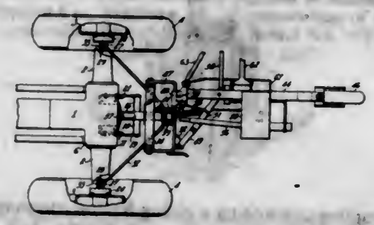
2,730,377
TRAILER UNCOUPLING PREVENTING SAFETY MEANS
Antonio T. Fucchi, Hollywood, Calif.
Application September 18, 1953, Serial No. 380,913
6 Claims. (Cl. 280—432)



1. The combination with a coupling means for a tractor and a trailer including an upwardly projecting king pin on the tractor movable along a guiding slot on the trailer into and out of locking engagement with king pin engaging jaws on the trailer, and tractor energized braking means on the trailer, of means for preventing accidental or unintended uncoupling of the tractor and trailer comprising a bar normally disposed closely above the guiding slot and hingedly supported by the trailer at a point above the path of the king pin of the tractor incident to movement thereof along the guiding slot; said hinged support being constructed and arranged to permit the bar to be swung upwardly and rearwardly incident to movement of the king pin toward coupling engagement and to drop back to its normal position, said bar being of such length as to engage portions of the trailer frame structure and thereby prevent escape of the king pin from the guiding slot therefor, manually operable means for moving said bar out of the path of the king pin to permit intended uncoupling of the tractor and trailer, other manually operable means for holding said bar out of said path, and means connected to and actuated by the braking means of the tractor and trailer effective to render said holding means inoperative while the braking means is energized.

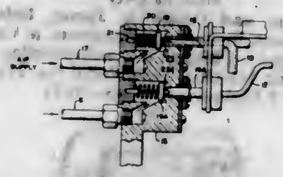
2,730,378
THREE POINT QUICK HITCH MEANS FOR SEMITRAILING IMPLEMENTS
Rector C. Ferguson, Gadsden, Ala., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application March 3, 1953, Serial No. 339,967
12 Claims. (Cl. 280—461)

1. In a tractor having a drop axle structure presenting a pair of opposed final drive housings and having in effect a single centrally disposed draft bar extending longitudinally of the tractor between said housings, the combination comprising: a pair of brackets fixed to laterally opposite portions, respectively, of said housings, said brackets each presenting a vertical surface portion and a pair of vertically spaced lugs extending inwardly from and having aligned openings therethrough in spaced relation to said vertical surface portion, a draft transmitting element of generally V-shape as viewed in plan having the free ends of its legs turned inward to form bight portions disposed, respectively, between said pairs of said lugs; a wedge pin inserted through each pair of lugs in draft load transmitting engagement with the inner surface portion of the respective bight portion disposed



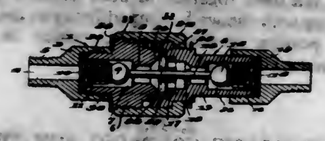
therebetween; a U-shaped part positioned with its base fixedly bridging the apex end portion of said V-shaped element in overlying relation thereto with its legs extending vertically thereabove, said base presenting a pair of tabs depending therefrom in straddling relation to said draft bar; a clamp part fixed to the apex end of said V-shaped element in rearwardly extending relation thereto and presenting a pair of bolts depending therefrom in straddling relation to said draft bar; and a strap part engaging the side of said draft bar opposite said clamp part and being provided with a pair of spaced holes therethrough receiving said bolts for fixedly securing the rear end of said draft bar to said clamp part.

2,730,379
FLUID PRESSURE COUPLE
Harvard H. Gorrie, Cleveland Heights, Ohio, assignor to Bailey Meter Company, a corporation of Delaware
Application December 20, 1951, Serial No. 262,613
1 Claim. (Cl. 284—1)



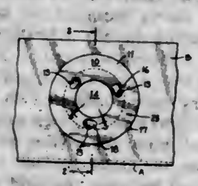
Fluid pressure coupling structure adapted to connect a control station between a source of fluid pressure and a controlled system, including; a stationary bank housing including, a plurality of chambers adapted to be connected to the fluid pressure supply and controlled system, a plurality of female receptacle passages of substantial length opening externally of the housing, a valve seat surface formed on the chamber end of each passage, with each of said valve seat surfaces being substantially equidistant from the respective external end of the receptacle passages, an O-ring positioned in an annular recess in each passage adjacent the external end of the passage, a valve in each chamber spring-urged onto the seat at the chamber end of each passage, and an annular locking ring mounted in each passage; and an assembly of male plugs held on a common mounting and including, a first tubular plug longer than the other plugs to register with the female receptacle adapted to be valved to the fluid pressure supply and seal with the O-ring prior to actuating the valve by abutting thereon, the other tubular plugs being shorter than the first plug and which register with their female receptacles adapted to be valved to the controlled system and sealing with their O-rings prior to actuating their valves by abutting thereon, and an annular locking recess formed about each plug releasably engaging the ring mounted in each passage.

2,730,380
COUPLING
Melvin P. Espy, Mount Royal, Quebec, Canada, and William W. Pitman, Colgate, and Barnham Josselyn, Kingsville, Md., assignors to The Glenn L. Martin Company, Middle River, Md., a corporation of Maryland
Application April 26, 1952, Serial No. 284,602
3 Claims. (Cl. 284—19)



2. A separable hydraulic coupling for use in conjunction with high pressure hydraulic fluid lines comprising, interfitting male and female members, fastening means for removably fastening said members in interfitting engagement, each of said members having a passage to permit the flow of fluid through said coupling when said members are fastened in interfitting engagement, valve means located in the passage of each of said members, the outer end of said female member providing a recess to receive the terminal portion of said male member in close-fitting relationship, said recess terminating in an inner transverse shoulder, said male member having an end face on said terminal portion, said shoulder and said end face lying in substantially parallel planes and defining a space therebetween when said members are fastened in interfitting engagement, and an O-ring seal member positioned in said recess against said shoulder and having an external diameter substantially equal to the internal diameter of said recess, said seal member normally being greater in thickness than the dimension of said space, and therefore being somewhat compressed between said shoulder and said end face when said male and female members are fastened in interfitting engagement, the fluid pressure in said coupling tending to expand the ring against the shoulder and end face whereby leakage between said male and female members is prevented.

2,730,381
REDUCING WASHER ASSEMBLY FOR OVERSIZED HOLES
Lawrence M. Curtiss, Mountainside, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a corporation of New Jersey
Application September 17, 1952, Serial No. 309,994
5 Claims. (Cl. 285—30)



1. A wall provided with an aperture of circular outline, conductor mounting means for forming an opening at the aperture having a diameter less than that of the aperture, said means comprising a pair of identical metallic discs at the aperture for at least partially closing the same, one disc disposed on one side and the other on the opposite side of the wall, each disc provided with the same number of slots extending therethrough ar-

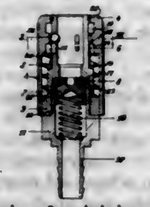
ranged radially and circumferentially spaced apart, a portion of the discs within each slot being bent out of the plane of the associated disc to form a tab, each projecting into the aperture in lapping relation to a corresponding tab of the other disc, the tabs of each disc all extending in the same circumferential direction from their root ends and integral with the balance of their associated disc, the outer edges of the tabs defining a circle having a diameter substantially equal to that of the aperture whereby the tabs of such disc in their relation to the perimeter of the aperture coact to center it in the aperture and the tabs of each disc intruding rotatively into the tab slots of the other disc directly to interlock the two discs together and operating to secure the discs together in their position centered in the aperture with the wall clamped between the peripheral marginal portion of the two discs which lie externally of the interlocking lugs.

2,730,382

AUTOMATIC COUPLING FOR PIPES

Stefano De Mastri, La Spezia, Italy, assignor to R. K. Price Associates, Inc., New York, N. Y., a company of New York

Application October 17, 1952, Serial No. 315,323
Claims priority, application Italy October 19, 1951
2 Claims. (Cl. 285—97.3)



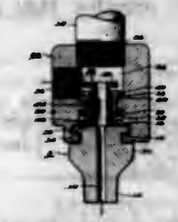
1. A coupling device for joining two portions of a hose the first portion of which is arranged to supply a fluid and the second to receive the fluid, comprising a male member adapted to be fitted to said second portion, a female coupling body adapted to be fitted to said first portion and receiving an end of said male member, said male member having a circular groove formed in the part to be introduced into said coupling body and a shoulder adjacent to said groove, said coupling body comprising a shell member having at the interior two zones of different diameter and on its outer surface three zones of different diameter forming a first and a second step, said shell member being provided at the interior with a threaded portion the shell being provided in the part of its wall receiving the male member with three elongated openings angularly spaced from each other the longitudinal axis of the opening being parallel to the axis of the shell, a ball in each of said openings arranged to move axially in the opening and radially with respect of the axis of the shell member, to lock said male member to said coupling body, a sleeve mounted on said shell member and slidably connected thereto, said sleeve being provided with a shoulder, a recess adjacent to said shoulder and a circular groove above said recess and adjacent one end of the sleeve, a first spring mounted on the shell member between said balls and said first step existing on the outer surface of the shell body for biasing said balls, a second spring mounted on the outer surface of the shell member and compressed between the said second outer step of the shell member and the said shoulder of said sleeve, a plug screwed to the threaded portion of the said shell member for connection with a portion of the hose, said recess in the inner wall of the said sleeve being opposite to and receiving said balls during the introduction of the end of said male member into said shell member, said groove made in the inner wall of said sleeve being opposite to and receiving said balls during the removal of the said male member from said shell member and said balls being held in the groove on said male member by the portion of the sleeve intermediate the recess and groove to join said member to said coupling body.

2,730,383

PIPE COUPLING SEALING MEANS

Hermann E. Ballard, Berkeley, Calif.

Application May 17, 1952, Serial No. 288,490
2 Claims. (Cl. 285—143)



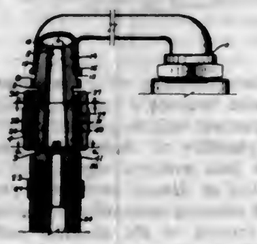
1. A coupling comprising a casing having communicating inlet and outlet passages formed therein, said inlet passage being adapted to be connected to a source of fluid under pressure, said outlet passage being adapted for registry with an external seating surface, a first rigid sleeve slidably mounted in said outlet passage, abutment means on said first sleeve and engageable with said casing for limiting axial movement of said sleeve, sealing means between said first sleeve and said casing, a second sleeve of pliant material slidably mounted in said first sleeve with one end thereof exposed to fluid pressure within the coupling and movable under the fluid pressure to force the other end thereof into sealing engagement with the external seating surface regardless of any irregularities of the surface, a third rigid sleeve slidably mounted in said second sleeve, and abutment means on said third sleeve operatively engageable with said casing for limiting axial movement of said third sleeve.

2,730,384

SLEEVE COMPRESSED RESILIENT SOCKET COUPLING

Lewis A. James and Duane A. James, Independence, Kans., assignors, by mesne assignments, to Cribben and Sexton Company, Chicago, Ill., a corporation of Illinois

Application March 1, 1952, Serial No. 274,392
3 Claims. (Cl. 285—161)



1. A detachable coupling comprising, a male member having an elongated connecting shank of circular cross section and tapered slightly inwardly from the outlet end thereof and a peripheral groove adjacent said end, a compressible gasket in said peripheral groove, a female member having a normally cylindrical bore opening from one end thereof for receiving the connecting shank of said male member, said bore substantially conforming in diameter to the outlet end of the shank of the male member, said compressible gasket engaging the female member to effect a seal between the male and female members, said female member having a plurality spaced slots extending longitudinally from the open

end thereof and terminating short of the portion engaged by the compressible gasket, a sleeve surrounding the female member, and cooperating tapering surfaces on the sleeve and female member movably engaged to compress the slotted portion of the female member and the bore of the slotted portion into substantial conformity with the inwardly tapering connecting shank of the male member for locking engagement therewith.

2,730,385

SOLDERED ELBOW

Fred Kuehne, Jr., Mattoon, Ill., assignor to Kuehne Manufacturing Co., Mattoon, Ill., a corporation of Illinois

Application March 22, 1952, Serial No. 278,020
2 Claims. (Cl. 285—211)



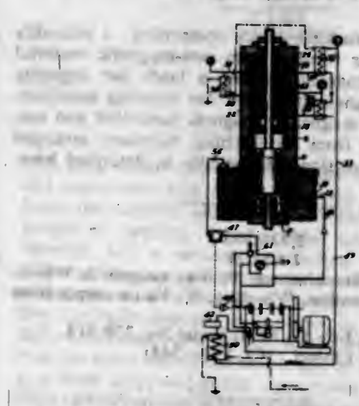
1. An angle joint for tubes comprising, a pair of tubular members of circular cross section disposed at an angle to each other and having beveled ends shaped for mutually registering circumferential abutment and being soldered together at said ends, a reinforcing insert in the form of a relatively thin flat plate having arms disposed at an angle to each other lying in the plane of the axes of said members with the longitudinal marginal edges of the plate abutting along and soldered to the inner walls of said member, and lugs on said insert plate inwardly of its perimeter extending transverse to such axial plane and bearing against said inner walls of the tubes adjacent said bevelled ends.

2,730,386

LUBRICATED STUFFING BOX

James Rodger Shields, Pittsburgh, Pa., assignor, by mesne assignments, to Blaw-Knox Company, Pittsburgh, Pa., a corporation of Delaware

Application May 18, 1950, Serial No. 162,648
3 Claims. (Cl. 286—19)



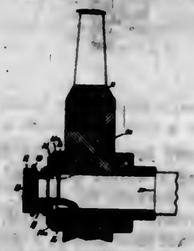
1. In a lubricated stuffing box positioned within a wall through which a rotary shaft enters a chamber containing a fluid being treated at high pressure and preventing the high pressure fluid from being forced past the stuffing box, the combination of a plurality of sets of packing disposed within the stuffing box and enclosing the shaft, a spacing member disposed between adjacent sets of packing and enclosing the shaft, each spacing member having an annular apertured cavity for reception of lubricant for the shaft, apertures in the stuffing box communicating respectively with the shaft below the lowermost set of packing and with each spacing member cavity for passage of lubricant through the stuffing box and to the shaft, a pressurized closed circuit conduit connecting said stuffing box apertures in series to successively pass lubricant from beneath the lowermost set of packing and around the sets of packing to the spacing members, the lubricant being initially introduced into the stuffing box at a pressure greater than that within the chamber, and means for reducing the pressure of the lubricant after each successive passage through the stuffing box.

2,730,387

APPARATUS FOR PREVENTING RELATIVE MOTION BETWEEN A SHAFT AND A HUB

Albert O. White, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

Application January 15, 1952, Serial No. 266,492
3 Claims. (Cl. 287—53)



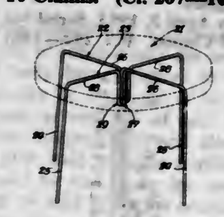
1. A turbine wheel assembly comprising a turbine wheel, a shaft on which said wheel is mounted, said shaft having a splined portion extending beyond the hub of said turbine wheel, a splined driving dog mounted on the splined portion of said shaft, said dog having a circular recess which closely mates with a corresponding cylindrical land on the hub of said turbine wheel said dog and said turbine wheel being in snug engagement one with the other whereby relative rotation of said elements is prevented and said dog aids the wheel in opposing centrifugal deformation stresses applied thereto during operation.

2,730,388

DETACHABLE JOINT CONSTRUCTION

Frederic A. Roberton, Oak Park, Ill.

Application September 23, 1950, Serial No. 186,325
10 Claims. (Cl. 287—103)



1. A detachable joint structure comprising a pair of coacting joint members each including a pair of elongated elements with at least one pair of said elements being transversely spaced and arranged for resilient coaction therebetween, said one pair of elements being longitudinally and slidably interfitted in side-by-side assembled engagement with the other pair of said elements, said pairs of elements being detachable by longitudinal sliding movement therebetween, and the transverse spacing between said one pair of elements when detached from the other pair of elements being sufficiently restricted to require said one pair of elements to be spread apart slightly during said assembled engagement with said other pair of elements whereby to provide snug longitudinal contact therebetween with the resilient coaction between said one pair of elements retaining the latter in said snug

contact and whereby said elements exert a mutual resilient camming action against each other for retaining said joint members in predetermined angular relation.

2,730,389
EMERGENCY SANDING DEVICE FOR AUTOMOTIVE VEHICLES
Maurice D. Sherman, Brooklyn, N. Y.
Application January 20, 1951, Serial No. 207,010
2 Claims. (Cl. 291—23)



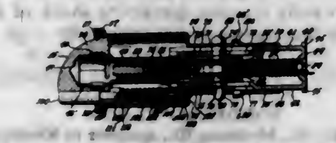
1. An electrically actuated safety device for an automobile comprising a walled container having a floor inclined downward towards its center, said container being adapted to retain gritty material, a pipe projecting downward from said floor center, a second pipe in spaced longitudinal alignment with said first-named pipe, means securing said pipes in spaced apart relation, a flat valve plate including a pivot edge extending between said pipes within said space and sealing the first named pipe from said second-named pipe, link means secured at one end to said pivot edge, lever means secured to the other end of said link means and solenoid means engaging said lever to reciprocate said valve plate transversely of the first-named pipe, said securing means including an adjustable strap and a spring hinge, one leaf of which is secured to said strap and the other end to said plate and arranged to urge said plate to sealing position.

2,730,390
LOCK FASTENER
Wallace E. Atkinson, Dinwiddie County, Va., assignor to Long Manufacturing Co., Inc., Petersburg, Va., a corporation of Virginia
Application April 8, 1953, Serial No. 347,582
10 Claims. (Cl. 292—145)



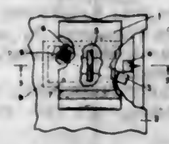
2. The combination in a lock structure comprising an escutcheon plate provided with an aperture therethrough, a plunger element, an operating button device including a surface bearing on one surface of said plate, said button device including a shank extending substantially normally to the said button surface and passing through the said plate aperture, a planar element at the free end of the said shank having a surface thereto lying parallel to, and on the second side of, the said plate, one of the said elements being provided with an aperture and the other said element being provided with a pin extending into and lying entirely within the element aperture, whereby the plunger is operatively engaged with the button device.

2,730,391
LATCH MECHANISM
Aiden Granville Rayburn, West Los Angeles, Calif., assignor to Victor M. Carter, Van Nuys, Calif.
Application April 1, 1952, Serial No. 279,735
8 Claims. (Cl. 292—169)



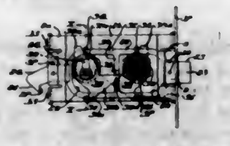
2. In a tubular lock set a latch mechanism comprising a tubular casing having an outer end portion and a flat-sided inner end portion, a latch bolt having a striking head and a flat-sided shaft affixed thereto, a hollow flat-sided actuator slidably mounted in said inner end of the casing and having a guiding relationship with the shaft, said inner end of the casing having a transverse pin mounted therein, said shaft and said actuator having longitudinal slots at opposite sides slidably surrounding the pin, an elongated guide member having one end reciprocatably mounted in the latch bolt, an opposite end reciprocatably mounted in the actuator and mid-portion having a transverse aperture therein mounted on the pin, spring means engaging the guide means and biased against the latch bolt and actuator, and a reciprocator pivotally mounted on the pin having one end thereof engaging the actuator and the other end engaging the shaft.

2,730,392
MAGNETIC LOCKING DEVICE
Nils A. Thiebaud, La Canada, Calif.
Application November 12, 1954, Serial No. 468,223
4 Claims. (Cl. 292—201)



1. A magnetic locking device comprising: a rotatably mounted latch bar formed from non-magnetic material embodying a permanent magnet, a latch bar engaging member, two magnetizable latch bar securing members, and a permanent magnet or magnets concealed and embodied separately from the latching members; arranged in a manner to function substantially as described herein.

2,730,393
LATCH
William M. Ries, Beechbottom, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a corporation of Delaware
Application July 27, 1951, Serial No. 238,913
23 Claims. (Cl. 292—244)



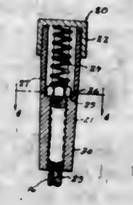
1. A latch comprising a casing comprising opposed plates each having ears projecting toward the other, means connecting together the ears of the respective plates constituting the only means holding the plates together, a bolt disposed between the plate, a portion of the bolt projecting from between the plates, and means for moving the bolt relatively to the plates.

2,730,394
QUICK-RELEASE DOOR LATCH
Kenneth A. Price and Robert E. Slater, Pacific Palisades, Calif., assignors to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application January 12, 1953, Serial No. 330,674
10 Claims. (Cl. 292—256)



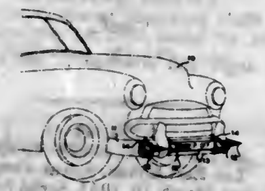
1. A closure fastener comprising: a channel type insert member having latch engaging camming notches at one end and positioning cams at the other end; a receptor member having a channel cavity and adapted to be secured to a structural member; positioning studs near one end of said receptor around which said positioning cams pivot, said cams causing lineal contraction between said insert and receptor members; a segmented hinge for securing said insert member to a complementary structural member to be latched to aforementioned structural member, said hinge being effective to enable said insert to pivot with respect to said hinge at the insert cam end; and a latch placed within said receptor member effective to engage said insert engaging camming notches.

2,730,395
AUTOMOBILE DOOR LOCKING MEANS
John Rolando, Detroit, Mich.
Application July 12, 1954, Serial No. 442,782
1 Claim. (Cl. 292—305)



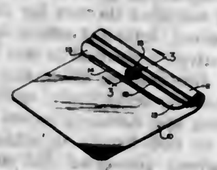
A push button and holding means for a lock operating rod for a door lock for enabling the door to be locked from the outside comprising a horizontal window rail having an opening, a soft rubber grommet lining said opening, and a vertically extending shank below said rail extending upwardly through said opening central of said grommet and having a threaded upper end, a rod like vertically disposed push button in said opening central of said grommet and having its lower end telescoped over the upper end of the shank, and its upper end exposed as a finger grip, said button comprising a hollow substantially cylindrical vertically and axially centrally bored body having an open lower end and an enlarged finger grip forming cap closing the upper end of the bore, said bore having a shoulder between its ends, a nut seated on said shoulder, and formed to thread onto the upper end of the shank, the bore having means to fix said nut against rotation as it threads onto the shank, and a lost motion providing shank moving means in the form of a coiled compression spring between the nut and the cap, said body being dimensioned to fit snugly in said grommet and having an external taper diminishing gradually in diameter towards its lower end for establishing a friction grip between the soft rubber grommet and the tapered body as the body is pushed down into the grommet for locking the door.

2,730,396
AUTOMOBILE BUMPER ATTACHMENT
Darrell M. Johnson, Thomson, Ga., assignor to The Laudar Company, Thomson, Ga., a corporation of Georgia
Application May 19, 1952, Serial No. 288,643
11 Claims. (Cl. 293—71)



4. A bumper guard comprising a projection of resilient material having a base flange and a wall tapering therefrom to a relatively sharp apex, a pair of clips mounting said guard, said clips having portions engaging the base of said projection and having yieldable hook portions spaced in a manner to engage opposite edges of a bumper, the resilient material of said projection when engaged by said clips permit said hooks to move toward and from each other whereby said hooks will resiliently secure said projection on the bumper.

2,730,397
TOAST SERVERS
Nicholas S. Hodska, Stratford, Conn., assignor to F. D. Kees Manufacturing Company, Beatrice, Nebr.
Application January 13, 1953, Serial No. 330,959
1 Claim. (Cl. 294—25)

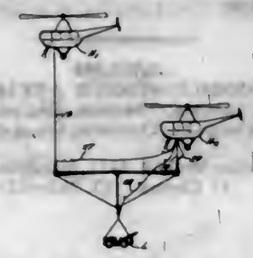


A toast server comprising a rectangular flat body of resilient material of substantially the same size as a piece of toast, said body being adapted to pass downwardly within the opening of a toaster, a U-shaped hand grip integrally formed at one end of said body, a bendable gripping portion integrally formed along the free edge of said hand grip, said gripping portion extending substantially parallel to said body for approximately one-third the length of said body, the central portion of said gripping portion along the free edge thereof being bent downwardly whereby to provide an inwardly extending gripping finger adapted to engage the adjacent face of the toast, an out-turned substantially flat toast contacting ear integrally formed with each end portion of the free edge of said gripping portion and a thumb receiving button secured to the upper surface of said gripping portion.

2,730,398
AIR LIFT DEVICES
Richard S. Huested, Englewood, N. J.
Application October 24, 1951, Serial No. 252,859
4 Claims. (Cl. 294—81)

1. A rig for handling loads by means of a pair of helicopters comprising a horizontal spar, means for attaching cables at the ends thereof for lifting the same, a fitting

for supporting a load, and lower suspending cables attached to the ends of the spar, extending downwardly there-



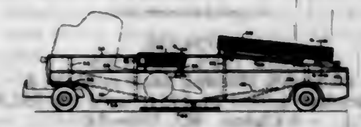
from at an angle and attached to the load supporting fitting.

2,730,399
AUTOMATIC GAFF HOOK
Leo Earl Inman, Salem, Oreg.
Application March 10, 1953, Serial No. 341,399
3 Claims. (Cl. 294—110)



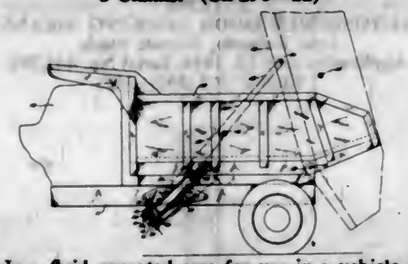
1. A gaff hook comprising an elongated hollow handle, a pair of cooperating gaff hooks at one end of the handle pivotally mounted thereon for swinging into and from gaffing position, actuating means in said handle for said hooks operatively connected to said hooks and movable in opposite directions to swing said hooks into and from gaffing positions respectively, spring means in said handle for moving said actuating means in one direction, a plunger rod in said handle to which said actuating means is operatively connected and manually movable outwardly of said handle to move the actuating means in the opposite direction in opposition to said spring means, and coacting wedge members in said handle and on said rod co-engaging in response to outward movement of said rod to lock said rod in outward position and disengaged by a jarring impact against said rod to unlock the rod for operation of said actuating means by said spring means.

2,730,400
PIVOTAL TRACK VEHICLE CARRYING TRAILER AND METHOD OF LOADING SAME
Lynn M. Francis, Detroit, Mich., assignor to Dual-Motors Truck Company, Detroit, Mich., a corporation of Michigan
Application February 4, 1952, Serial No. 269,780
3 Claims. (Cl. 296—1)



1. A truck hauling highway trailer adapted to carry three trucks in an inclined position, said trucks being substantially parallel one to the other, comprising spaced side frames and a plurality of decks therebetween, a lower deck having a forward inclined track portion, a flat central track portion, and a rear inclined track portion, a middle deck having a pair of flat tracks, one pivotally attached to each of said side frames, a removable cross bar which is disposed beneath the said tracks and extends between said side frames in the supporting position, and a pair of detachable tracks, one attached to the rear portion of each of said flat tracks in the carrying position, said cross bar and removable tracks being removed and said flat tracks being pivoted toward said side frames when loading or unloading the forward vehicle, and an upper deck including a pair of tracks each pivotal about longitudinal, transverse and vertical axes and affixed to one of said side frames at its forward end and having a pivot arm extending from the rear portion thereof with a T-joint thereon, a pair of pivot seat brackets having open top slots therein affixed one to each of said side frames and adapted to pivotally seat the T-joint of one of said tracks so that the tracks may be pivoted toward said side frames to permit loading and unloading of the first two vehicles, the rear portions of said tracks being disposed on the rear inclined portion of said lower deck in the loaded position, a cross bar pivotally attached at one end to one of said side frames, and seating means in the other of said side frames adapted to seat the other end of said cross bar in the supporting position.

2,730,401
FLUID PRESSURE OPERATED TELESCOPIC HOISTS
George A. Rea, Pewaukee, Wis., assignor to The Heil Co., Milwaukee, Wis., a corporation of Wisconsin
Application July 13, 1951, Serial No. 236,545
5 Claims. (Cl. 298—22)



1. In a fluid operated ram for use in a vehicle having a dump body mounted thereon for movement between a load carrying position and an overbalanced dumping position: a sleeve having an inner and an outer end; means for introducing fluid under pressure into the inner end of said sleeve; a piston axially slidable in said sleeve; a piston rod of smaller diameter than said sleeve projecting through the outer end of said sleeve; means forming a seal between said piston rod and the outer end of said sleeve; a restricted passage affording constant communication between the fluid spaces in said sleeve on opposite sides of said piston; a passage of relatively large cross-section connecting the fluid spaces on opposite sides of said piston; and a check valve in the latter passage permitting fluid flow through said relatively large passage only during retracting movement of said piston.

2,730,402
CONTROLLABLE DISPERSAL DEVICE
Arthur A. Whiting, Jr., Williamsville, Richard J. Trudell, Akron, and Harry L. Glass, Lancaster, N. Y., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application September 30, 1953, Serial No. 383,423
6 Claims. (Cl. 299—30)

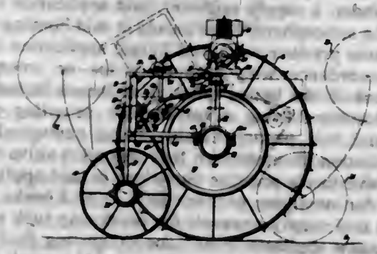
1. In spray dispersal apparatus, a tubular open-ended casing, an air intake throat at one end of said casing,

an inlet air valve at said throat, an annular valve for spray liquid adjacent the periphery of said air valve, an outlet air valve at the other end of said casing, a mixing chamber between said air valves, a connection normally



fixed but adjustable as to length between said air valves, and means for moving said connection to change the length and thereby the port openings to said chamber of both of said air valves.

2,730,403
DEVICE FOR MOVING WHEEL-MOUNTED IRRIGATION PIPELINE
Alva E. Huntley, Portland, Oreg., assignor to Farmland Irrigation Company, Inc., a corporation of California
Application March 9, 1953, Serial No. 341,288
5 Claims. (Cl. 299—47)



1. A driving system for a wheel-mounted pipeline comprising a tubular supporting axle constituting a portion of the pipeline, a gear wheel secured to said axle, a motor, a horizontally disposed platform supporting the motor, means freely sleeved on said axle supporting said platform above said pipeline for rotation about a vertical axis disposed in the plane of rotation of said gear wheel, support means operable to maintain said platform in a horizontal position and to normally prevent rotation of said platform in a horizontal plane comprising an outrigger frame having a horizontally disposed pivotal connection with said platform and terminating in a ground-engaging wheel, said frame embodying means to normally prevent pivotal movement of said frame with respect to said platform, and means carried by said frame for interconnecting said motor and said gear wheel, including a second gear wheel disposed in the plane of rotation of said first-mentioned gear wheel.

2,730,404
LAWN SPRINKLER HOSE
Richard J. Meisinger, Saddle River, and John T. Dempsey, Belleville, N. J., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application May 25, 1954, Serial No. 432,159
8 Claims. (Cl. 299—104)



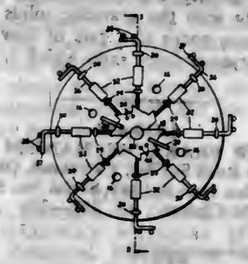
1. A sprinkler hose comprising a flexible synthetic resinous tube having an outer shell divided into a plurality of longitudinal passages and reinforced by a longitudinal partitioning structure, said shell having a flat bottom wall and an arcuate top wall spanning from one edge of said bottom wall to the other, said partitioning structure extending upwardly from said flat bottom wall to said arcuate top wall and forming therebetween a passage having imperforate walls, and said arcuate top wall having a plurality of jet orifices extending therethrough to each of the passages formed in part by said arcuate top wall.

2,730,405
SPRAYING DEVICE
Clyne E. Stoops, Hayward, Calif.
Application July 14, 1952, Serial No. 298,718
8 Claims. (Cl. 299—144)



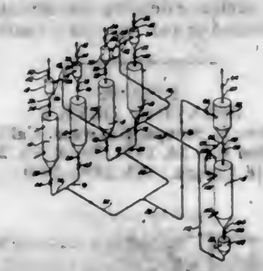
8. A spraying device including a spray head, means dividing said head into a plurality of substantially sealed chambers, means defining a spray discharge opening for each of said chambers, said openings being angularly related to each other, a conduit for each of said chambers, and valve means for controlling flow of material in each of said conduits.

2,730,406
ANTI-SKID DEVICE
Gerald C. Fitzgerald, East Hartford, Conn.
Application December 29, 1952, Serial No. 328,355
3 Claims. (Cl. 301—47)



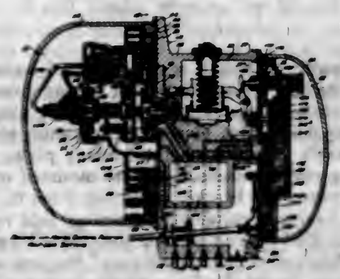
1. In combination with a vehicle wheel having a tire mounted thereon, a mounting plate having means to enable it to be attached to said wheel, a backing plate, means for securing the backing plate to the mounting plate, a lift plate rotatably mounted on the backing plate, an inner arm having one end thereof slidably mounted on the lift plate, an inner plate bracket projecting from the backing plate and having a rectangular opening, said inner arm having a twisted portion passing through the opening in the inner bracket to cause rotation of the arm when the arm is moved longitudinally, a sleeve having a chamber of rectangular cross section, said sleeve having shoulders at its upper and lower ends, a rectangular head on the inner arm positioned in the chamber and engaging the lower shoulder of the sleeve, an upper arm of circular cross section and having a rectangular head positioned in the chamber and engaging the upper shoulder, an upper bracket projecting from the backing plate and having a circular opening through which the upper arm passes, said upper arm having an angularly directed portion, a spring positioned in the chamber between the heads of said arms and normally urging the upper arm upwardly, and means to rotate the lift plate to move the inner arm up or down.

2,730,407
CONVEYANCE OF GRANULAR SOLIDS
Clyde H. O. Berg and John E. Hines, Jr., Long Beach, Calif., assignors to Union Oil Company of California, Los Angeles, Calif., a corporation of California
Application October 23, 1950, Serial No. 191,566
22 Claims. (Cl. 302—17)



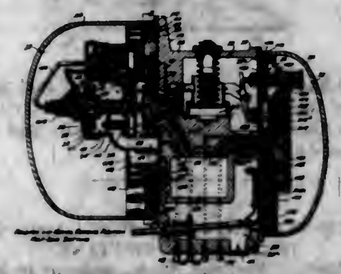
1. A process for the transfer of granular solids from at least one primary solids zone to and from a plurality of secondary solids zones which comprises passing granular solids from said primary solids zone successively through a primary main conveyance zone and through at least one of a plurality of divergent primary branch conveyance zones communicating therewith into at least one of said plurality of secondary solids zones, subsequently passing granular solids from at least one of said plurality of secondary solids zones successively through a communicating one of a plurality of converging secondary branch conveyance zones and through a secondary main conveyance zone communicating therewith, restricting the discharge of granular solids from said plurality of primary branch conveyance zones and from said secondary main conveyance zone to maintain the granular solids in all flowing conveyance zones at substantially their static bulk density, and depressuring a conveyance fluid concurrently with the granular solids through the flowing conveyance zones at a rate of flow sufficient to establish a conveyance force ratio which is greater than 1.0.

2,730,408
AIR BRAKE MECHANISM
Jacob Rush Snyder, Cleveland, Ohio
Application June 9, 1949, Serial No. 98,063
31 Claims. (Cl. 303—35)



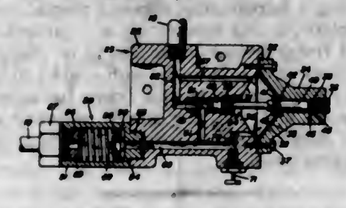
1. In an air brake control valve mechanism; a housing member adapted for mounting on a vehicle and provided with brake pipe, supply reservoir and brake cylinder connections; a hollow member mounted on one side of said housing member and defining an auxiliary reservoir; a second hollow member mounted on the other side of said housing member and defining an application chamber; valve means controlling said brake pipe and supply reservoir connections and located in the first hollow member and forming therewith an assembly which is detachable from said housing member as a unit; and relay valve means controlling said brake cylinder connection and located in said second hollow member and forming therewith an assembly which is also detachable from said housing member as a unit.

2,730,409
AIR BRAKE CONTROL VALVE MECHANISM
Jacob Rush Snyder, Cleveland, Ohio
Application March 4, 1952, Serial No. 274,777
13 Claims. (Cl. 303—68)



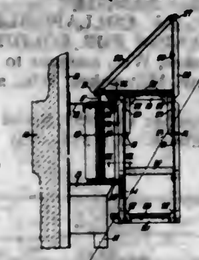
1. In an air brake control valve mechanism; a housing containing an application chamber and also having passages therein adapted for connection with a brake pipe, a brake cylinder, a supply reservoir, said application chamber and the atmosphere; valve means in said housing operable to cause pressure variations in said application chamber in accordance with desired service or emergency applications of the brake; relay valve means including a piston chamber having a relay valve actuating piston therein and said piston chamber being connected with said application chamber such that said relay valve means is responsive to the pressure variations in said application chamber for supplying pressure fluid to said brake cylinder from said supply reservoir for producing such service or emergency applications and for exhausting fluid from the brake cylinder; and manually operable valve means for venting said piston chamber to atmosphere for causing the release of brake cylinder pressure by said relay valve means.

2,730,410
CUTOFF CONTROLS FOR AUTOMOBILE HYDRAULIC BRAKES
George N. Phillips, El Dorado, Ark.
Application August 18, 1952, Serial No. 305,003
4 Claims. (Cl. 303—84)



1. In a pressure cutoff control, a body having a through passage therein with ends adapted to be connected by a hydraulic brake line to a pressure displacement and a brake cylinder of a hydraulic brake for passing pressure from said displacement to a brake cylinder, a main control valve in said body operative to open and close communication between the ends of said passage, a chamber in said body having a flexible diaphragm therein connected to said main valve and flexible under pressure in said chamber to open said main valve, valve controlled means in said body for admitting pressure from the end of said through passage connected to said displacement to said chamber to flex the diaphragm and open said control valve, a passage in said body connecting the end of said through passage connected to said brake cylinder and chamber to equalize pressure in the chamber with that in the last mentioned end of said through passage, spring means in said body for closing said main valve when the pressure in said last mentioned end of the through passage falls below a given value, and means on said body and at that end of the through passage which is adapted to be connected to a displacement cylinder for passing fluid under pressure into said through passage and operative to retain fluid under pressure in said through passage at a value sufficient to maintain the diaphragm and spring means in their control valve opening position.

2,730,411
DOUBLE-DECK PORTABLE SCAFFOLD
Frank J. Krane, Gary, Ind.
Application March 11, 1953, Serial No. 341,775
1 Claim. (Cl. 304—17)



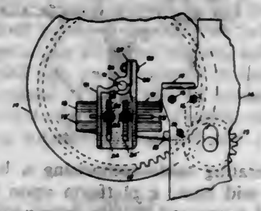
A portable scaffold adapted to be mounted on an I-beam crane girder, which carries a rail on its top flange, comprising vertical tie members and horizontal cross members and longitudinal members interconnected to form a rigid structure, upper and lower substantially coextensive platforms carried by said cross members for supporting workmen at two levels, a truss formed of uprights, a longitudinal top member and diagonal braces rigidly interconnected and extending above said upper platform and being rigidly connected to two of said tie members and two of said cross members, hooks fixedly carried by said diagnal braces at the lower ends thereof and adapted to engage the railhead, a set of rollers carried by said upper platform adjacent said hooks and being rotatable on horizontal axes to engage the upper flange of the girder, and a second set of rollers carried for vertical adjustment independently of said platforms by two of said tie members and being rotatable on vertical axes to engage the lower flange of the girder, said tie members being sectional to permit adjustment in their length.

2,730,412
REMOVABLE LADDER STEPS
John R. Yoder, Fullertown, Pa.
Application December 22, 1952, Serial No. 327,200
2 Claims. (Cl. 304—31.5)



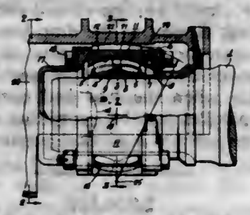
1. A removable step constructed to be supported on a rung of a ladder between the rails thereof, said step comprising a single plate having a pair of longitudinally disposed parallel slots extending inwardly from each end thereof, means for supporting and guiding a pair of separately formed strips in said slots in such manner that said strips are independently and longitudinally adjustable therein, said strips projecting beyond the ends of said plate and said slots being so spaced laterally that the projecting ends of said strips embrace and straddle the rails of the ladder, thus holding the step in position.

2,730,413
ADJUSTABLE BEAM BEARINGS
Jesse Gordon Smith, Lanett, Ala., assignor to Batson-Cook Company, West Point, Ga., a corporation of Georgia
Application October 4, 1952, Serial No. 313,123
1 Claim. (Cl. 308—24)



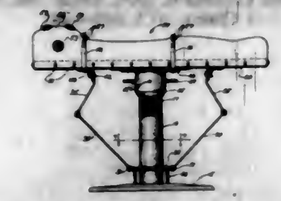
In an adjustable beam bearing for attachment to a loom frame, a stationary supporting arm provided with a lug and a positioning flange for removably positioning said arm on said frame, said flange being constructed to overlie a horizontal portion of said frame and said lug being constructed to abut a vertical portion of said frame, said arm having longitudinal serrations on one face thereof and a longitudinal slot therein, an adjustable supporting member having serrations on one face thereof adjustably engaged with said serrations on said supporting arm, said adjustable supporting member being provided with a plurality of slots at substantially right angles to said slot in said stationary supporting arm, said adjustable supporting member being adjustably fastened to said stationary supporting arm by fastening means passing through the said slots in said adjustable supporting member and the said slot in said stationary supporting arm, a bearing member carried by said adjustable supporting member, a flange on said adjustable supporting member, a complementary bearing member positioned adjacent said first mentioned bearing member, a flange on said complementary bearing member, said complementary bearing member being adjustably retained in position adjacent said first mentioned bearing member by fastening means passing through the flange on said adjustable supporting member and the flange on said complementary bearing member.

2,730,414
SPHERICAL ROLLER BEARING FOR ROCKING RAILWAY JOURNAL BOX
Per Gunnar Palmgren, Philadelphia, Pa., assignor to SKF Industries, Inc., Philadelphia, Pa., a corporation of Delaware
Application May 13, 1952, Serial No. 287,574
10 Claims. (Cl. 308—189)



1. A railway journal box and axle assembly comprising in combination a spherical roller bearing fitted to an axle journal and including two rows of rollers and an outer race ring having a spherical raceway for the rollers of both rows, elements secured at the ends of said ring and forming with the latter a casing independent of the journal box and enclosing said rollers, and means on said casing affording a seat for the journal box.

2,730,415
MANUALLY ADJUSTABLE OPERATING TABLE
Aston G. Kane, St. Andrew, Jamaica
Application August 13, 1954, Serial No. 449,733
2 Claims. (Cl. 311—6)



1. An operating table comprising a base, a standard rising from said base, a platform upon the top of said standard and connected thereto intermediate its ends for longitudinal and transverse tilting movements and for rotary movement thereabout, a frame surrounding said standard adjacent the lower end thereof and supported by said base, a pair of arms arranged in an upwardly diverging relation and each having the lower end slidably supported on said frame, a second pair of arms arranged in an upwardly converging relation and having the lower ends pivotally connected to the upper ends of said first pair of arms, means upon the connected ends of said first and second pairs of arms for releasably securing said arms selectively in any of their pivotal movement positions, said platform being connected to the upper ends of said second pair of arms for transverse tilting movement, and cooperating means upon said platform and the upper ends of said second pair of arms for releasably securing said platform selectively in any of its transverse tilting movement positions.

2,730,416
DROP LEAF DINING TABLE
Billy L. Williams, Oklahoma City, Okla.
Application January 26, 1954, Serial No. 406,232
4 Claims. (Cl. 311—60)



1. A drop leaf table comprising a plurality of supporting legs, a plate connecting said legs together, each of said legs being generally V-shaped having a free end spaced radially from and vertically spaced above said plate, a table top having a central portion rotatably positioned on said plate, and a pair of drop leaves pivotally secured to the central portion of said table top, said free ends of said legs supporting the drop leaves in a horizontal position when the central portion of the table top is disposed transversely of said legs and supporting said central portion when the legs and central portion are substantially parallel thereby permitting said drop leaves to pivot downwardly to a vertical position.

2,730,417
LEG AND BRACING MECHANISM FOR SECTIONAL FOLDING TABLES OR THE LIKE
William Mitchell, Milwaukee, Wis., assignor to Mitchell Manufacturing Company, Milwaukee, Wis., a corporation of Wisconsin
Application July 8, 1953, Serial No. 366,688
2 Claims. (Cl. 311—92)

1. In a folding table or the like, an elongated flat top formed of a pair of similar sections in end to end relationship in their outstretched condition, a bridge transversely interposed between the adjacent inner ends of said sections in the plane of the same and hingedly connected thereto whereby said sections may fold flatly upon themselves with their inner faces in adjacency, legs foldably carried by the underside of the table, and a



brace adjustably carried by the underside of one of the top sections and movable to span the underside of the bridge and the adjacent hinged end portions of the top sections parallel to the plane of the outstretched top sections.

2,730,418
IMPROVEMENTS IN COLLAPSIBLE LEG AND BRACE MECHANISM FOR FOLDING TABLES
Peter Blink, Milwaukee, Wis., assignor to Mitchell Manufacturing Company, Milwaukee, Wis., a corporation of Wisconsin
Application November 18, 1953, Serial No. 392,947
1 Claim. (Cl. 311—92)



In an article of folding furniture, a flat top formed of first and second aligned endwise adjacent sections, depending metallic rails carried by the longitudinal margins of the undersurfaces thereof, hinges joining the adjacent ends of said sections and anchored to said metallic rails, supporting legs foldably connected with said first section, an elongated rod interposed between said legs and a portion of only said second section and pivotally connected at its at its opposite ends with both of the same, supporting legs foldably connected with said second section, an elongated rod interposed between said last-mentioned legs and said first section and pivotally connected at its opposite ends to both of the same, a third set of supporting legs foldably connected with an inner undersurface portion of said first section offset from the hinges connecting said sections, and a strap pivotally attached to an under surface portion of the second section and to said third set of legs, the inner surface of one of said sections being foldable adjacent the inner surface of the other section, the movement of the sections relative to each other positively transmitting movement to all sets of supporting legs whereby all of the legs, rods and strap are foldably confined against the inner surfaces of the sections within the area bounded by said rails.

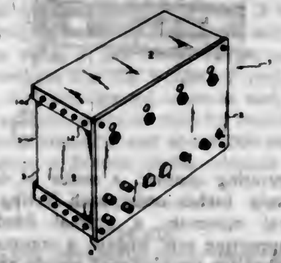
2,730,419
FURNITURE SUPPORT
Gilbert A. Watrous, San Diego, Calif., and Frederic A. Roberton, Oak Park, Ill.
Application September 18, 1951, Serial No. 247,038
12 Claims. (Cl. 311—110)



1. Furniture construction comprising a platform, an opening in said platform having access to the relative bot-

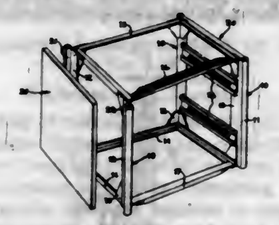
tom surface thereof, a fastening device secured in said opening, a perforate plate disposed below and adjacent said opening in axial alignment therewith, a plurality of elongated brace elements connected to and radiating from said plate outwardly and slightly upwardly abutting said platform, said brace members normally maintaining said plate spaced from said platform, said brace elements being bent adjacent their middles to a point of convergence below said plate and axially aligned therewith, a ferrule joining said converged elements together, and means cooperative with said fastening device to bias said plate toward the bottom surface of said platform.

2,730,420
CABINETS
George Bruck, Melbourne, Fla., assignor to Radiation, Inc., Melbourne, Fla., a corporation of Florida
Application July 10, 1953, Serial No. 367,329
8 Claims. (Cl. 312—213)



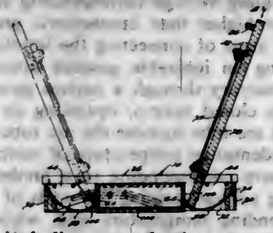
5. A ventilated cabinet comprising a U-shaped bent metal sheet constituting side and rear walls, said sheet having two right angle bends only, a top panel for said cabinet, a bottom panel for said cabinet, said top and bottom panels having each a main wall and a rear skirt and two side skirts bent at right angles to said main wall and overlapping the upper and lower edges of said side and rear walls, and means for securing said skirts to said side and rear walls, said means for securing including a plurality of speed nuts, having bolt engaging apertures, said side and rear walls and said skirts having apertures mating with each other and with said bolt engaging apertures, said speed nuts including integral spacer elements spacing said skirts laterally of said side and rear walls and spacing said main walls with respect to said upper and lower edges.

2,730,421
CABINET CONSTRUCTION
Francis J. Burst and Harry Weese, Batesville, Ind., assignors to Hill-Rom Company, Inc., Batesville, Ind, a corporation of Indiana
Application February 16, 1951, Serial No. 211,226
4 Claims. (Cl. 312—257)



1. In cabinet construction, a pair of horizontally disposed rectangular forms, said forms fabricated from metal structural members and arranged one above the other in vertically spaced relationship, four metal corner posts, each corner post having a hollow tubular portion and a flange portion, said flange portion being co-extensive and integral with said tubular portion and extending substantially tangentially therefrom, a flat face on said tubular portion, said flat face being co-extensive with said flange portion and disposed at substantially right angles thereto, said posts arranged in pairs at opposite sides of the rectangular forms with the flange portions of the posts of each pair disposed inwardly of the tubular portions thereof and extending toward one another, the respective rectangular forms rigidly secured directly to the inner faces of said flange portions by metal fasteners whereby said posts and forms comprise an all-metal skeletal cabinet framework, and a wood side panel secured to the outer sides of the flange portions of each pair of corner posts with the opposite vertical edges thereof abutting said flat faces of the respective tubular portions of said corner posts.

2,730,422
OVERBED TABLE
Henry Holmberg, Ludington, Mich., assignor to Marquette Manufacturing Co., Ludington, Mich., a corporation of Michigan
Application March 15, 1954, Serial No. 416,354
11 Claims. (Cl. 312—316)



1. A table including a top having an opening therein; a movable cover in the opening; means supporting said cover for upward pivotal opening movement from either side of said top comprising pairs of pivot mountings at opposite ends of the cover, each pair of mountings comprising a pair of aligned pivots projecting from the top into said opening at opposite sides thereof, bearing plates on said cover having downwardly opening slots receiving said pivots, and supporting plates on the table at opposite sides of said opening having inturned arcuate flanges disposed concentrically with respect to said pivots for supporting said cover during pivotal movement thereof.

2,730,423
CABINET DRAWER STOP CONSTRUCTION
Joseph P. Mock, Logan, Ohio
Application May 22, 1953, Serial No. 356,853
1 Claim. (Cl. 312—348)



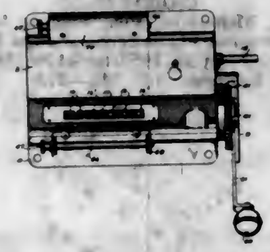
In a cabinet, means forming a drawer-receiving recess with opposed side members; a drawer with side walls, said drawer being disposed for movement into and out of said recess; spring-pressed plunger means supported by said side members for movement into and out of said recess; and means forming shoulders adjacent the front and rear ends of the side walls of said drawer for engagement with said spring-pressed plunger means, said shoulders facing the front of said drawer and cooperating with said plunger means when in engagement therewith to resist movement of the drawer outwardly of said cabinet, the shoulders adjacent the rear ends of the side walls extending a greater distance toward the side members than the shoulders adjacent the front ends of such side wall so that said plunger means will offer greater resistance to removal of the drawer from the cabinet than to movement of said drawer from closed to open position.

2,730,424
METHOD AND APPARATUS FOR MAKING HIGH PRESSURE MERCURY VAPOR LAMPS
Carl Kenty, Cleveland Heights, and Daniel A. Larson, Euclid, Ohio, assignors to General Electric Company, a corporation of New York
Application June 4, 1952, Serial No. 291,748
3 Claims. (Cl. 316—26)



3. The method of introducing mercury into an arc tube sufficient only in amount to produce a predetermined arc tube operating voltage corresponding to a mercury vapor pressure higher than atmospheric pressure which comprises the steps of connecting the interior of the arc tube containing an ionizable gaseous atmosphere to a reservoir of mercury through a narrow passage to form a hermetically closed system, operating an electric discharge in said arc tube to raise the arc tube temperature above the condensation temperature of mercury vapor at a vapor pressure corresponding to a predetermined arc tube operating voltage, heating the walls of said passage to a corresponding temperature and, while continuing the aforesaid heating of said passage walls and the operation of said arc tube, heating the mercury in said reservoir to gradually increase its temperature sufficiently to produce first a pressure differential between the interior of said arc tube and the interior of said reservoir, then a consequent flow of mecury vapor from said reservoir through said passage and into said arc tube and then an increase in the pressure of mercury vapor in said arc tube to increase the operating voltage of said arc tube, continuing the aforesaid heating of the mercury in said reservoir and the other parts of said system to gradually increase the pressure of mercury vapor in said arc tube until the aforesaid predetermined arc tube operating voltage is attained, then stopping the flow of mercury vapor into said arc tube and with the mercury vapor flow stopped rapidly cooling said arc tube by interrupting the discharge and applying a coolant to the arc tube wall to quickly reduce the pressure of the mercury vapor therein to below atmospheric pressure and then immediately sealing off said arc tube from said passage to retain in said tube an amount of mercury sufficient only to produce the aforesaid predetermined operating voltage of the arc tube.

2,730,425
PRINTING COUNTER
Clarence W. Brantz, Milwaukee, Wis., assignor to Durant Manufacturing Co., Milwaukee, Wis., a corporation of Wisconsin
Application July 28, 1950, Serial No. 176,453
2 Claims. (Cl. 346—98)



1. In a printing counter, a series of coaxial wheels of successively higher order each having a like series of peripheral numerals, a normal fixed reset shaft rotatably supporting said wheels, a constantly revolving driving member for rotating said wheels about said reset shaft, means for positioning a recording sheet adjacent to alined numerals of said wheels, a platen for delivering a recording blow against said sheet in opposition to said alined numerals, a pinion mounted upon said reset shaft, a clutch operable to drivingly connect said pinion with said shaft to reset said wheels, a platen actuating shaft having thereon a rack provided with an arcuate series of external teeth meshing with said pinion, said rack also being provided with an arcuate series of internal notches, a fixedly pivoted pawl cooperable with said notches, and a lever for oscillating said platen actuating shaft and said rack to produce printed records and to also reset said wheels through said pinion and said clutch without interrupting the rotation of said driving member, said pawl being cooperable with said notches during oscillation of said lever to positively prevent rotation of said numeral wheels independently of said driving member.

CHEMICAL

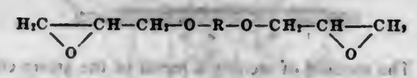
2,730,426
TREATING VEGETABLE FIBROUS MATERIAL WITH CHLORINE GAS
Frederick George Lucas Becker, deceased, late of Hatch End, England, by Edward Goulding and Dorothy John, executors, London, England, assignors to Cellulose Development Corporation Limited, Hatch End, England, a British company
Application June 20, 1951, Serial No. 232,648
2 Claims. (Cl. 8—105)

1. A method of treating vegetable fibre pulp with chlorine gas in two stages in which the fibre concentration of the pulp is reduced in the second stage, characterised in that during the first stage the reaction with the gas is carried out on the pulp in continuous, uninterrupted form having a fibre concentration from between 10% to 40% for a period of between 10 to 45 minutes, whereafter the pulp without modification passes directly to a second stage zone where it is diluted so that its fibre concentration is below 10% and where continued reaction takes place for a prolonged period up to one hour, and the method being further characterized in that the quantity of gas introduced is such that during at least the first stage the pulp has an acidity from 10 to 40 grms. of hydrochloric acid per litre.



2,730,427
SHRINKAGE CONTROL OF CELLULOSIC AND WOOL TEXTILES WITH DIGLYCIDYL ETHER COMPOUNDS
Tzeng Jiueq Suen, Stamford, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Application August 13, 1952, Serial No. 304,229
7 Claims. (Cl. 8—116)

1. A process of impregnating a textile material selected from the group consisting of cellulosic and wool materials, said process comprising impregnating said textile material with an aqueous solution of a compound having the formula



where R is an alkylene radical of from 2 to 6 carbon atoms in sufficient amount to deposit on said textile material between about 2 and about 30 per cent of said compound based on the dry weight of said textile material, drying said impregnated material and curing said compound to a water-insoluble state by heating at a temperature between about 50 and about 200 degrees centigrade to produce a flexible shrink-resistant textile material.

2,730,428
METHOD AND COMPOSITION FOR WASHING AND BLEACHING FIBROUS MATERIALS
Kurt Lindner, Berlin-Lichterfelde Ost, Germany, assignor to "Tepha" Gesellschaft für pharmazeutische und chemisch-technische Erzeugnisse m. b. H., Illertissen, Bavaria, Germany, a corporation of Germany.
No Drawing. Application October 16, 1951, Serial No. 251,623
Claims priority, application Germany October 21, 1950
10 Claims. (Cl. 8—133)

1. A method for washing and bleaching fibrous materials susceptible to attack by oxygen in alkaline washing liquids which comprises washing and bleaching such materials in an alkaline washing liquid containing an active oxygen evolving compound and a protective compound containing an SO_2 radical connected directly with a nitrogen atom of a basic nitrogen group selected from the group consisting of sulfonamides of amino carboxylic acids, peptides and albumen cleavage products.

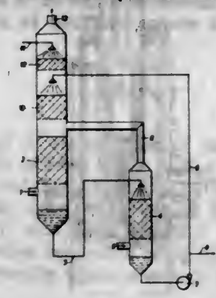
2,730,429
METHOD OF MAKING SUBSTANTIALLY PURE CUPRIC DIAMMINO CARBONATE
Helmer A. Abramson, Hancock, Mich., assignor to Calumet & Hecla, Inc., a corporation of Michigan
No Drawing. Application March 10, 1954, Serial No. 415,411
8 Claims. (Cl. 23—61)

1. The method of making substantially pure crystalline cupric diammino carbonate which comprises leaching metallic copper-containing material with an aqueous solution of ammonium carbonate containing cupric ions until a substantially saturated solution of cupric-cuprous diammino carbonate is obtained, contacting said solution with an oxidizing agent for a time sufficient to convert said solution to a supersaturated solution of cupric diammino carbonate, crystallizing said cupric diammino carbonate from said solution thereby producing substantially pure crystals of cupric diammino carbonate and separating the crystals from the liquid.

2,730,430
CYANOGEN PRODUCTION
James K. Dixon, Riverside, and James E. Longfield, Stamford, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Application January 11, 1955, Serial No. 481,283
4 Claims. (Cl. 23—151)

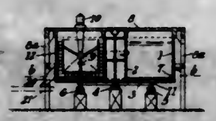
1. The process for the preparation of cyanogen which comprises: mixing one mol of hydrogen with at least two mols of cyanogen chloride in the vapor phase; subjecting said mixture to reaction conditions at a temperature of at least 400° C. and for a contact time of at least one-half a second but not more than about sixty seconds; and recovering cyanogen.

2,730,431
MANUFACTURE OF SULFURIC ACID
Alfred Haltmeier, Leverkusen-Bayerwerk, Germany, assignor to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany
Application May 24, 1950, Serial No. 163,817
Claims priority, application Germany June 8, 1949
5 Claims. (Cl. 23—167)



1. The process of manufacturing sulfuric acid which includes the steps of contacting a gas stream comprising water vapor and sulfur trioxide with a liquid stream of an aqueous sulfuric acid in an absorbing zone, the exit liquid acid from the absorbing zone being heated by said absorption to a temperature above 150° C., cooling said exit liquid acid by passing through a separate acid-cooling zone wherein the acid is cooled solely by contact with an inert gas and wherein several mols of inert gas are heated for each mol of water and acid cooled, withdrawing product acid from the acid cooled by said inert gas, recovering entrained sulfuric acid from the heated inert gas in a cleaning zone by contacting said heated inert gas with an aqueous sulfuric acid and dissipating all of the heat of the entire operation as inert gases containing water vapor without the use of a liquid functioning primarily to cool another liquid.

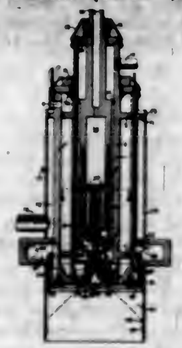
2,730,432
APPARATUS FOR THE MANUFACTURE OF SUPERPHOSPHATE AND THE LIKE
Jean Moritz, Clanton, France
Application August 3, 1951, Serial No. 240,142
Claims priority, application France August 9, 1950
7 Claims. (Cl. 23—259.2)



1. Apparatus for the continuous manufacture of superphosphate and like products, comprising: a vat consisting of a stationary peripheral wall and a revoluble bottom, an upper platform closing the vat at the top and integral

with the said stationary wall, a rotatable mandrel located at the centre of the vat and integral with the revoluble bottom, means for imparting rotation to the bottom of the vat and to the mandrel, means for introducing into said vat fluid starting materials for the production of superphosphate and like products, a flexible covering forming a substantially fluidtight sliding joint between part of the lower edge of the stationary peripheral wall of the vat and the revoluble bottom of the vat, a rotatable detaching device positioned within said vat to break up and detach the product after it has solidified; and an aperture in said stationary wall for the discharge of the broken-up product.

2,730,433
SPRAY MIXER
William J. Cartledge, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application November 2, 1954, Serial No. 466,319
6 Claims. (Cl. 23—285)



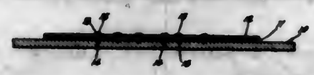
1. A spray mixer comprising a body provided with two separate inlets for materials to be mixed and an inlet for a gaseous material to be used as a propellant and atomizer for one of the liquids, concentrically arranged annular outlet orifices for said liquids, the walls of the outer annular orifice being shaped to project the liquid downwardly therefrom in the form of a thin-walled inverted cone, while the walls of the inner annular orifice are shaped to project the material downwardly in the form of a thin-walled upright cone which intersects the line of projection from the outer orifice; means within the mixer for feeding a gaseous propellant and atomizer into the path of flow of liquid to be ejected from the inner orifice whereby the liquid from the inner orifice may be propelled at a substantially higher velocity than the liquid projected from the outer orifice, and annular means extending downwardly from said body against which the materials projected from the orifices may impinge as they flow from said mixer.

2,730,434
CATALYTIC CONTACTING UNIT
Eugene J. Houdry, Ardmore, Pa., assignor to Oxy-Catalyst, Inc., a corporation of Pennsylvania
Application May 1, 1950, Serial No. 159,191
15 Claims. (Cl. 23—288)



1. A catalytic unit through which a fluid may flow comprising a pair of end members secured to one another in spaced relation by a single post extending between said members and to which said members are rigidly fastened, and a plurality of elongated elements extending between said end members and supported at both ends thereby, each of said elements providing a surface of catalytic material exposed to the flow of fluid passing through the unit, said unit being open laterally for the passage of fluid therethrough in a direction transverse to said elongated elements.

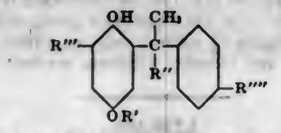
2,730,435
METHOD OF ETCHING METALS
Robert W. Michler, Perris, Calif.
Application October 4, 1954, Serial No. 459,947
3 Claims. (Cl. 41—43)



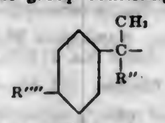
1. The method of etching a metal of the group consisting of ferrous metals, aluminum, and aluminum alloys which consists of applying a thin film of ozokerite to the article to be etched, applying thereover a thin film of gilsonite, applying a die to the two layers to extract from the ground produced thereby portions of the ground in conformity with the shape of the die, applying to the ground and that portion of the metal exposed by the removal of a portion of the ground a solution of a metallic salt capable of having an ionic exchange with the metal of the article to be etched, rendering inactive the solution of the metallic salt and removing the ground and the deposited metal from the metal thus etched.

2,730,436
STABILIZED ORGANIC COMPOSITIONS CONTAINING ARALKYLATED ALKOXY PHENOLS
David W. Young and Fred W. Bance, Westfield, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application January 8, 1952, Serial No. 265,534
9 Claims. (Cl. 44—78)

9. A composition of matter comprising an organic material normally subject to oxidative changes containing as an anti-oxidant from about 0.0003 to about 5 wt. per cent of an aralkylated alkoxy phenol corresponding to the general formula



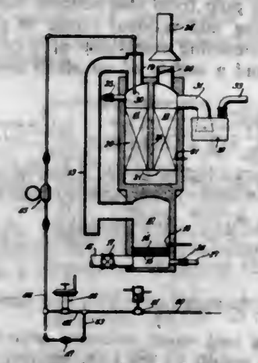
wherein R′ is an alkyl radical having from 1 to 4 carbon atoms, R″ is a radical selected from the group consisting of hydrogen and methyl radicals, R‴ is a radical selected from the group consisting of hydrogen and



radicals and R⁗ is a radical selected from the group consisting of hydrogen and methyl radicals.

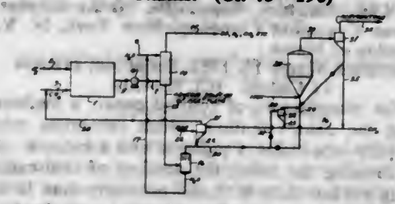
2,730,437
AUTOMATIC CONTROL FOR GAS MAKING MACHINES
Raymond B. Coombe, Oak Park, Ill.
Application April 7, 1951, Serial No. 219,864
8 Claims. (Cl. 48—74)

5. In a control system for regulating the supply of make oil to a gas making machine for producing gas from petroleum introduced to intermittently heated checkerwork chambers therein, the combination comprising, a make oil supply line for feeding make oil to spray means located within the interior of said machine, said make oil supply line being separated into a first branch and a by-pass branch which commonly feed into said spray means, a by-pass valve in said by-pass branch, a diaphragm actuated control valve in said first branch, a high pressure air line connected with a source of compressed air at one end and venting to the atmosphere at its other end, said air line connecting to said control valve and supplying pressurized air to the upper side of an actuating diaphragm thereof for opening said control valve, an electric solenoid valve in said air line between its connection with



said diaphragm control valve and its venting outlet, a thermocouple positioned within the interior of said machine, a pyrometer associated in circuit with said thermocouple for indicating internal temperatures of said machine in conjunction therewith, and electrical circuit means associating said pyrometer, thermocouple and said solenoid valve for automatic actuation of said solenoid valve whereby the latter will be opened to permit the venting of air from said air line in response to a pyrometric indication of a preselected internal temperature of said machine, said opening actuation of said solenoid valve serving to cause closure of said first branch by said diaphragm control valve thereby altering the rate of flow from said make oil supply line to said spray means.

2,730,438
PROCESS FOR TRANSPORTING ACETYLENE
Lebbeus C. Kemp, Jr., Scarsdale, N. Y., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application December 14, 1950, Serial No. 200,727
9 Claims. (Cl. 48—190)



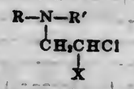
1. In the transportation of a stream of gas consisting of substantially pure acetylene under superatmospheric pressure from a first location to a second location remote from the first by fluid flow through a conduit, the improvement which comprises forming a suspension in said acetylene of particles of a heat conductive solid material substantially inert with respect to acetylene and having a particle size within the range of about 10 to 800 microns, and passing said suspension from said first location to said second location at a velocity sufficient to maintain said solid particles in suspension in said stream of acetylene.

2,730,439
ABRASIVE ARTICLES AND METHOD OF MAKING SAME
Henry R. Hoenicke, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a corporation of Delaware
Application March 19, 1953, Serial No. 343,296
7 Claims. (Cl. 51—307)

3. A bonded, fused alumina article comprising fused alumina grains and a vitrified borosilicate bond containing by oxide analysis approximately 69% silica, 13% boric oxide, 3% alumina, and under 10% alkali oxides, the alkali oxides including approximately 3% of lithium oxide.

2,730,440
HERBICIDES
John K. Fincke, San Jose, Calif., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
No Drawing. Application June 20, 1952, Serial No. 294,712
7 Claims. (Cl. 71—2.7)

1. A herbicidal composition comprising an oil-in-water emulsion of an amine compound selected from the class consisting of aliphatic amines having the general formula



in which R and R′ are members of the group consisting of alkyl radicals of from 1 to 8 carbon atoms, the radical —CH_2CH_2Cl and the radical $CH_2CHClCH_3$, and X is selected from the class consisting of hydrogen and the methyl radical, and hydrochlorides of said aliphatic amines, said amine compound being present in said composition in a quantity which is toxic to plant life.

2,730,441
PROCESS OF REDUCING IRON FORMATE
Henry L. Crowley, South Orange, N. J., assignor, by mesne assignments, to Republic Steel Corporation, Cleveland, Ohio, a corporation of New Jersey
No Drawing. Application February 2, 1953, Serial No. 334,735
3 Claims. (Cl. 75—5)

1. The process of making finely divided iron powder with a substantially reduced tendency towards pyrophorism, comprising the steps of introducing iron formate into a reaction zone, introducing in said reaction zone in contact with said iron formate a reducing gas, the essential active ingredients of which consist of hydrogen and from about 0.1% by volume of hydrogen chloride (based on the total volume of hydrogen plus hydrogen chloride) up to an amount of hydrogen chloride which will convert a substantial amount of the iron in the reaction zone to ferrous chloride, maintaining said iron formate and said reducing gas in said zone in a temperature range of about 200° C. to about 500° C., and cooling the powdered iron produced as aforesaid to room temperature under non-oxidizing conditions before exposure thereof to air.

2,730,442
METHOD OF DEPHOSPHORIZING AND REFINING THOMAS AND BESSEMER STEELS
Arthur Thill, Metz, France
No Drawing. Application April 6, 1951, Serial No. 219,769
11 Claims. (Cl. 75—55)

1. A method of dephosphorizing, desulphurizing and purifying steel, comprising adding to a molten body thereof a mixture of crystalline sodium carbonate decahydrate and anhydrous sodium carbonate, said mixture containing the sodium carbonate in substantial quantity sufficient

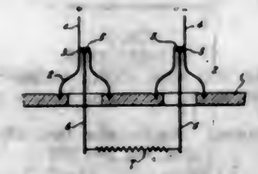
to reduce the water evolving rate of the crystalline form of the salt in the mixture, whereby to effect formation of steam, carbon dioxide and sodium monoxide with consequent reduction of the phosphorus, sulfur and impurities therein.

2,730,443

GLASS SEALING ALLOY

Carl B. Post, Wyomissing, and Warren S. Eberly, Temple, Pa., assignors to The Carpenter Steel Company, Reading, Pa., a corporation of New Jersey

Application November 10, 1951, Serial No. 255,808
1 Claim. (Cl. 75—123)



An alloy having the following composition, in per cent by weight

Carbon	nil to 0.07
Manganese	.50 to 2.00
Silicon	.25 to 1.00
Nickel	30.0 to 60.0
Titanium	0.30 to 0.70

the balance being iron and incidental impurities, said alloy being substantially gas-free at a glass-to-alloy interface during glass sealing operations at temperatures in the range of 1700° to 2200° F., and being readily wetted by low melting soldering alloys.

2,730,444

PRODUCTION OF CELLULOSE

Arthur Hodge, John Downing, and James Gordon Napier Drewitt, Spondon, near Derby, England, assignors to British Celanese Limited, a corporation of Great Britain

No Drawing. Application September 29, 1951, Serial No. 249,006
Claims priority, application Great Britain October 10, 1950
9 Claims. (Cl. 92—9)

1. Process for the production of cellulose from lignocellulosic material selected from the group consisting of woods and straws, which comprises heating the material to a temperature of 80°–190° C. with a liquid comprising 10–100% by weight of a compound selected from the group which consists of ethylenically unsaturated aliphatic dicarboxylic acids containing up to 7 carbon atoms in the molecule and cyclic anhydrides of such acids, freeing the material from the said compound, and heating the material with an aqueous caustic alkali solution of concentration 2–20% to a temperature between 70° C. and the boiling point of the solution.

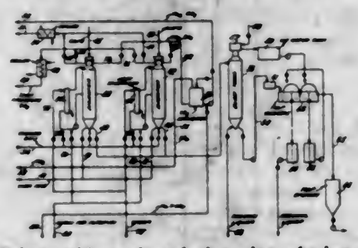
2,730,445

INTEGRATED LIGNOCELLULOSE DIGESTION AND RECOVERY PROCESS

George Sivola, Rauma, Finland

Application March 21, 1952, Serial No. 277,818
11 Claims. (Cl. 92—11)

1. The improved process of recovering chemicals and heat from residual liquor produced in a three-stage acid-neutral-alkaline process for producing pulp from fibrous material containing cellulose which comprises cooking fibrous material with a weak acid solution containing an agent of the group consisting of sulfite, bisulfite, and bisulfite with an excess of SO_2 of an alkali metal, producing partly digested pulp, converting said acid cooking by injecting an alkaline liquor in the digestor at the end of the acid cooking stage to an alkali cooking liquor having a pH range of about 7 to about 10.5 without separating said partly cooked pulp and without discontinuing the cooking, said injected alkaline liquor consisting essentially of a carbonate and mother liquor of an alkali metal produced in the conversion of the smelt solution produced hereinafter, cooking with said weak alkaline cooking liquor consisting essentially of a carbonate of an alkali metal to produce completely digested pulp and residual liquor while evolving strong CO_2 during said alkaline cooking, recovering said evolved CO_2, said recovered CO_2 constituting mainly the amount required in the subsequent treatment of a smelt solution, separating said pulp from said residual liquor, evaporating and burning said residual liquor to produce steam and a smelt consisting essentially of a carbonate of an alkali metal and a sulfide of an alkali metal, dissolving



and clarifying said smelt solution, introducing gaseous CO_2 provided mainly by the CO_2 recovered in the aforesaid conversion of acid cooking liquor to alkaline cooking liquor into said smelt solution until substantially all of said sulfide of the smelt solution is converted to a bicarbonate of an alkali metal and H_2S gas, separating a portion of said bicarbonate from the smelt solution, using said portion to make acid cooking liquor used in the first step, using the remaining bicarbonate and mother liquor in subsequent steps, burning said H_2S gas to SO_2 gas, making acid cooking liquor used in the first step with said SO_2 under pressure and a portion of said bicarbonate produced hereinabove while causing the evolving CO_2 thereby producing a weak acid salt solution containing an agent of the group consisting of sulfite, bisulfite, and bisulfite with an excess of SO_2 of an alkali metal, and recovering strong CO_2 gas evolved in the foregoing steps for use in the step of treating the smelt solution to produce a bicarbonate of an alkali metal.

2,730,446

COLOR IMPROVEMENT OF UNSIZED POROUS PAPER

Marsden Clair Hutchins, Somerville, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

Application March 15, 1952, Serial No. 276,854
12 Claims. (Cl. 92—21)

1. In the manufacture of colored paper, a method of improving the color-retention, which comprises mixing with the pulp suspension a pigment and a cationic resin, prior to forming the sheet; the amount of said cationic resin being not less than ⅛% and not more than 10% of the pulp solids.

2,730,447

METHOD OF MANUFACTURING A HIGH PROTEIN FOOD PRODUCT AND THE RESULTING PRODUCT

Robert A. Boyer, Cincinnati, Ohio, assignor to Swift & Company, Chicago, Ill., a corporation of Illinois

Application February 2, 1953, Serial No. 334,649
10 Claims. (Cl. 99—14)

1. A process for the manufacture of edible protein fibers for use in food products which comprises: forming a dispersion of a protein in a dispersing medium; adding to said dispersion a small amount of a modifying agent; and thereafter forcing the dispersion containing said modi-



fying agent through an orifice into a coagulation bath to produce a quantity of fine protein filaments each containing said modifying agent substantially uniformly distributed throughout.

2,730,448

METHOD OF PREPARING IMITATION MEAT PRODUCTS (pH CONTROL)

Robert A. Boyer, Cincinnati, Ohio, and Harold E. Saewert, Park Forest, Ill., assignors to Swift & Company, Chicago, Ill., a corporation of Illinois

No Drawing. Application February 2, 1953, Serial No. 334,757
3 Claims. (Cl. 99—14)

1. In the preparation of food products from edible protein material wherein the protein material is formed into filaments during the preparation, the improvement which comprises: subjecting the edible protein filaments to the action of a neutralizing media; and adjusting the pH thereby to within the range of pH 4.0 to 7.0 whereby to improve the texture and water-holding ability of said filaments.

2,730,449

PROCESSES FOR THE PREPARATION OF INOCULATING MATERIALS FOR CONCENTRATED MILK PRODUCTS AND FOR IMPROVING THE CRYSTALLIZATION OF LACTOSE IN CONCENTRATED MILK PRODUCTS

Theo Rudolph De Vries, Bedum, Netherlands, assignor to De Cooperatieve Fabriek Van Melkproducten Te Bedum, Bedum, Netherlands, a corporation of the Netherlands

No Drawing. Application November 22, 1950, Serial No. 197,176
Claims priority, application Netherlands November 24, 1949
21 Claims. (Cl. 99—55)

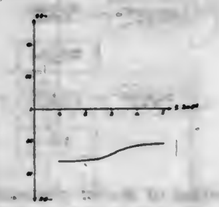
1. A process for the preparation of an inoculating material suitable for improving the crystallization of lactose in concentrated milk products, comprising the steps of introducing a powder containing a water-soluble high molecular compound in addition to lactose in the crystallized state into a small quantity of a concentrated milk product not yet containing any crystallized lactose, and then pulverizing the mixture thereby to release small individual crystals of lactose from the crystallized lactose agglomerates.

2,730,450

CERAMIC DIELECTRIC AND PROCESS OF PREPARING IT

Jean Day and Micheline Calis, Paris, France, assignors to Compagnie Generale de Telegraphie Sans Fil, a French corporation

Application June 17, 1953, Serial No. 362,326
Claims priority, application France July 1, 1952
3 Claims. (Cl. 106—39)



1. Ceramic dielectric product consisting essentially of:

	Grams
TiO_2	34 to 45
ZrO_2	40 to 27
BaO	7 to 5
ZnO	4 to 3
SnO_2	1 to 10
Aluminum silicate clay	12 to 18

2,730,451

DRYING OIL PRODUCT AND METHOD OF PRODUCING

David Aelony, Minneapolis, Minn., assignor to General Mills, Inc., a corporation of Delaware

No Drawing. Application April 7, 1952, Serial No. 281,040
9 Claims. (Cl. 106—252)

1. Process which involves heating a conjugated drying oil with a benzodioxane 1-3, substituted in the 6-position with a hydrocarbon substituent containing from 1–10 carbon atoms, at temperatures of from 200–250° C. for from 30 to 60 minutes, the substituted benzodioxane being employed in a concentration of 5% to 40% based on the combined weight of the substituted benzodioxane and the conjugated drying oil.

2,730,452

WAX COMPOSITION AND AN ARTICLE COATED THEREWITH

Robert W. B. Johnston and Stanley Marple, Jr., Houston, Tex., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

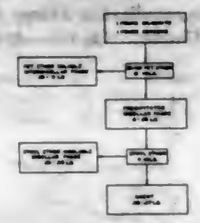
Application February 25, 1952, Serial No. 273,246
8 Claims. (Cl. 106—270)

1. A wax composition consisting essentially of (*a*) plastic microcrystalline hydrocarbon wax having a brittle point between about −5° F. and about +30° F. and a refractive index of from about 1.443 to about 1.448, and (*b*) a crystalline paraffin wax having a melting point above 165° F. and a refractive index of from about 1.439 to about 1.441, the amount of said paraffin wax being from about 0.25% to 7.5% based on the weight of the microcrystalline wax, the percentage varying within said range in accordance with the following equation:

$$\frac{\text{Penetration of the microcrystalline wax at } 110° \text{ F.} - Y_1}{10} = \text{Percent paraffin wax}$$

wherein Y_1 is a number between 85 and 105.

2,730,453
PIGMENT PEPTIZING AGENT AND PROCESS
Merrill E. Jordan and Harvey M. Cole, Walpole, Mass., assignors to Godfrey L. Cabot, Inc., Boston, Mass., a corporation of Massachusetts
Application June 29, 1951, Serial No. 234,265
5 Claims. (Cl. 106—271)



1. A composition of matter characterized by its high peptizing effect upon pigments in wax containing vehicles comprising an asphaltic fraction insoluble in solvents having an internal pressure of about 3.2 and less and soluble in solvents having an internal pressure of about 3.6, internal pressure being equal to $BV^{-1/3}$ in which B is the surface tension and V is the molecular volume of the solvent, said compositon being substantially free of other asphaltic fractions.

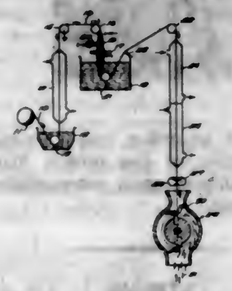
3. A process for producing an agent of high peptizing potency which comprises the steps of dissolving the soluble portion of an asphalt in a solvent having an internal pressure of about 3.2, recovering the insoluble portion therefrom, dissolving the soluble portion of said first insoluble portion in a solvent having an internal pressure above about 3.2 and no greater than about 3.6, the internal pressure being equal to $BV^{-1/3}$ in which B is the surface tension and V is the molecular volume of the solvent, separating the resulting solution from undissolved solid matter and recovering the peptizing agent from the solution.

2,730,454
ASPHALT COMPOSITIONS AND METHOD OF PREPARING SAME
Harry J. Sommer, Lafayette, and Walter H. Peterson, Point Richmond, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
No Drawing. Application May 12, 1953, Serial No. 354,654
8 Claims. (Cl. 106—273)

1. A bituminous composition comprising an asphalt having colloidally dispersed therein from about 0.2% to about 10% by weight of a clay having a base exchange capacity of at least 25, the colloidal particles of the clay having adsorbed on the surfaces thereof an amide formed between a fatty acid having at least 12 carbon atoms per molecule and a condensation product of a monohaloepoxyalkane having no more than ten carbon atoms per molecule and a nitrogen base of the group consisting of ammonia, monoalkylamines and dialkyl amines.

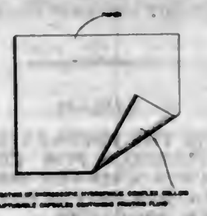
2,730,455
METHOD OF COATING FIBERS, THREADS, AND/OR FILAMENTARY MATERIAL
Carl C. Swann, Riverside, R. I.
Application October 30, 1952, Serial No. 317,638
4 Claims. (Cl. 117—4)

1. In a continuous process for the production of plastic resin coated glass fibers in chopped form for plastics-reinforcing purposes wherein a continuously moving bundle of continuous filament threads or roving initially carrying a preliminary binder coating is subjected to treatment with a solvent to remove the preliminary binder followed by exposure to a hot gaseous medium to evaporate surplus solvent and then subjected to a main coating treatment by passage through a bath containing a plastic resin coating material followed by successive exposures to a hot gaseous medium to dry the wet coatings and to set and cure the plastic resin thereof after being dried, and thereafter mechanically chopping the travelling threads or roving having the cured plastic resin coatings to produce pellets or short pieces thereof adaptable for reinforcing



purposes in plastics molding operations, the combination with the foregoing process steps of the step which comprises electrostatically ballooning the continuously moving bundle of threads or roving so as to produce wide lateral separation of the filaments thereof from each other as they move into the main coating bath and as thus-ballooned individually become completely coated with the plastic resin contained therein.

2,730,456
MANIFOLD RECORD MATERIAL
Barrett K. Green and Lowell Schleicher, Dayton, Ohio, assignors to The National Cash Register Company, Dayton, Ohio, a corporation of Maryland
Application June 30, 1953, Serial No. 365,198
6 Claims. (Cl. 117—36)



1. A record material base sheet having on a surface thereof a coating consisting of a profusion of microscopic oil-containing, pressure-rupturable capsules, each of the capsules consisting of an oily water-immiscible printing fluid as a central nucleus and a dense oil-impermeable shell-like coating therefor of gelled, film-forming complex hydrophilic colloid material evenly deposited thereabout by coacervation forces, said colloid material being the gelled product of the union, in an aqueous medium, of substantially equal parts, by weight of two different colloid materials having opposite ionic charges in said medium, said union being caused by such opposite charges, and said capsules being in substantial contiguity on the base sheet and being rupturable by printing or marking pressures.

2,730,457
PRESSURE RESPONSIVE RECORD MATERIALS
Barrett K. Green and Lowell Schleicher, Dayton, Ohio, assignors to The National Cash Register Company, Dayton, Ohio, a corporation of Maryland
No Drawing. Application June 30, 1953, Serial No. 365,292
13 Claims. (Cl. 117—36)

1. Pressure-sensitive record material consisting of a sheet of paper on a surface of which is a dry coating including, in contact with each other, microscopic oil-containing pressure-rupturable capsules of dense, oil-impermeable gelled hydrophilic-colloid material, the walls of each capsule being oil-impervious and characterized by having been deposited by coacervation forces evenly around a nucleus of oil, and microscopic particles of solid material, the oil in the capsules being water-immiscible and reactant on contact with the particles of solid material to produce a distinctive color, whereby writing and marking pressures, alone, on said record material produce distinctively colored marks at points of pressure.

2,730,458
METHOD OF INCREASING THE SCALING RESISTANCE OF METALLIC OBJECTS
Herbert Schulze, Altena, Germany, assignor to Vereinigte Deutsche Metallwerke Aktiengesellschaft, Frankfurt am Main, Germany, a corporation of Germany
No Drawing. Application October 1, 1951, Serial No. 252,586
Claims priority, application Germany October 3, 1950
4 Claims. (Cl. 117—71)

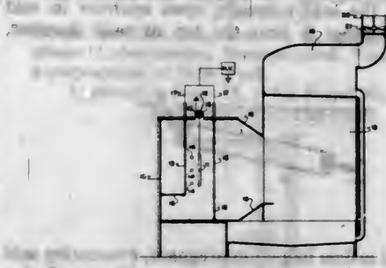
1. A method of improving the scaling resistance at temperatures above 800° C. in the presence of corrosive gases of a metal article coated with a scaling resistant chromium-and-nickel containing alloy which comprises applying to such coated metal article a coating of a bituminous paint containing a material selected from the group consisting of $CaSi_2$ and Al_2Ca.

2,730,459
PRESSURE-SENSITIVE ADHESIVE TAPE
Reynold E. Holmen, White Bear Township, Ramsey County, and William E. Lundquist, Savage, Minn., assignors to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a corporation of Delaware
No Drawing. Application June 19, 1952, Serial No. 294,475
3 Claims. (Cl. 117—76)

1. Solvent-resistant pressure-sensitive adhesive tape having a coating of pressure-sensitive adhesive firmly adherently bonded to a unified fibrous backing comprising a thin porous fibrous sheet material impregnated and unified with a solvent-resistant, rubbery, heat-reacted mixture of an amide-ester polymer and a small amount of an aldehydic curing agent, said polymer being obtained by heating together, at a high temperature, substantially equimolar proportions of components comprising essentially (*a*) dicarboxylic acids from the class consisting of terephthalic and isophthalic acid, and (*b*) combinations of a plurality of polyglycols having an average of at least two ether linkages and at least one non-cyclizable primary amino monoalkanolamine having a non-tertiary carbon atom attached to the nitrogen atom; the polyglycols and monoalkanolamines being so selected and proportioned as to provide an average of about 3–12 ether linkages, and one amido group having a single hydrogen atom attached to the nitrogen atom, for approximately each 25–90 atoms in the skeletal polymer chain.

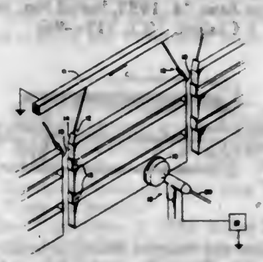
2,730,460
ELECTROSTATIC METHOD AND APPARATUS
Harold P. Ransburg, Indianapolis, Ind., assignor to Ransburg Electro-Coating Corp., Indianapolis, Ind., a corporation of Indiana
Continuation of application Serial No. 516,256, December 30, 1943. This application September 28, 1949, Serial No. 118,245
7 Claims. (Cl. 117—93)

1. A method of electrostatically depositing liquid coating material on the surface of a plurality of articles, comprising moving the articles in spaced relation to each other over a predetermined path in a coating zone, maintaining an electrostatic field over the surfaces of the articles in the coating zone, the lines of force of said field being generally perpendicular to said path, discharging a stream of atomized coating material particles into the field on one side of said article-path for electrostatic deposition on the articles, and withdrawing air from said coating zone on the opposite side of said article-path from where



the coating material is introduced in a direction generally transverse to said article-path to create in the coating zone a movement of air from the region of the field into which the coating material is introduced and toward and across the article path and thereby to aid in moving the coating particles toward and between the articles in the coating zone for electrostatic deposition thereon.

2,730,461
ELECTROSTATIC COATING METHOD
John E. Vawter, Cleveland Heights, Ohio, assignor to Ransburg Electro-Coating Corp., Indianapolis, Ind., a corporation of Indiana
Application February 19, 1953, Serial No. 337,853
1 Claim. (Cl. 117—93)



The method of electrostatically coating an article having a substantially flat surface bounded by edges meeting to form sharp corners which comprises hanging the article on a grounded support with said surface lying in a substantially vertical plane, contacting each of said corners with an electrical conductor presenting a small area in said plane relative to said surface, maintaining said conductor at ground potential in a position extending away from said corner, passing the supported article through an electrostatic field with said surface substantially normal to the lines of force thereof and introducing a spray of liquid coating material particles into said field electrostatically to deposit the particles on the article.

2,730,462
IMPREGNATION OF ABSORBENT MATERIALS
Reid Ewing, Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application April 7, 1953, Serial No. 347,275
7 Claims. (Cl. 117—95)

1. A process for impregnating an article having a permeable wall surface defining a chamber having two

openings in said wall surface, which process comprises maintaining a body of impregnant, closing said chamber at once of said openings with a first plug member having a normally closed aperture adapted to be opened to admit said impregnant to said chamber at a predetermined time and rate, closing the remaining opening with a second plug member having an aperture normally open to communicate with an evacuating means, positioning said article so that the said normally open aperture in said second plug member is near the top of said chamber,



immersing said article in said impregnant, evacuating said chamber and said wall surface through said second plug member, opening the normally closed aperture in said first plug member to admit said impregnant to said chamber while said article remains immersed in said impregnant and until said chamber is substantially filled therewith, interrupting said evacuation, removing both of said plug members while said article remains immersed in said impregnant, continuing said immersion until the wall surface has been impregnated to a predetermined degree of saturation.

2,730,463

ATOMIZING BONDERIZING OF CEMENT LINED TANK

Arthur E. Phillips, La Porte, Ind., assignor to The Coleman Company, Inc., Wichita, Kans., a corporation of Kansas

Application June 24, 1953, Serial No. 363,843
3 Claims. (Cl. 117—96)



1. In a process for cement-lining a tank, the steps of rotating the tank with aggregate, water and a hydraulic cement therein to apply the material centrifugally upon the interior surface of the tank, and introducing into the tank a fine mist consisting of silicate of soda and water while the tank is rotating.

2,730,464

ANTISTATIC TREATMENT OF TEXTILE YARNS

Philip Alan Wisnor, Willington, England, assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application May 12, 1952, Serial No. 287,429
Claims priority, application Great Britain May 17, 1951
5 Claims. (Cl. 117—139.5)

1. The method of reducing electro-static charges which develop on yarns, filaments, fibers and similar textile materials during the processing thereof which comprises applying to said textile materials a composition comprising a major proportion of mineral lubricating oil, and a minor proportion of 2-hydrocarbon substituted imidazoline having a total of from about 7 to about 30 carbon atoms per molecule, which composition is applied in an amount sufficient to deposit on said textile materials at least about 0.02 percent by weight of said substituted imidazoline.

2,730,465

ELECTRICAL ARC WELDING

Paul Christiaan van der Willigen, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

No Drawing. Application November 7, 1951, Serial No. 255,331
In Netherlands July 25, 1944
Section 1, Public Law 690, August 8, 1946
Patent expires July 25, 1964
1 Claim. (Cl. 117—206)

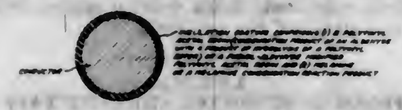
A welding electrode comprising a metal core having a diameter of 10 mms., a slag-forming conductive coating for said electrode comprising a mixture of 12% of calcium fluoride, 13% of calcium carbonate, 7% of ferrous alloys, 61% of pulverulent iron, and 7% of water glass and aluminum silicate, the thickness of the electrode being at least twice the diameter of the core whereby at no-load voltage of the welding apparatus the coating passes a current capable of initiating a welding arc on contact of the coating with a work piece.

2,730,466

INSULATED ELECTRICAL CONDUCTOR

Edward W. Daszewski, Scotia, N. Y., assignor to General Electric Company, a corporation of New York

Application August 30, 1954, Serial No. 452,807
3 Claims. (Cl. 117—232)



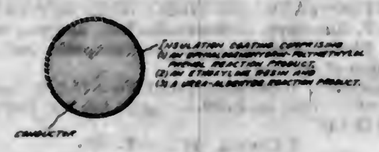
1. An insulated copper conductor in which the outer insulation therefor comprises essentially a hard, flexible, tough, abrasion-resistant and Freon-resistant coating, said coating being the heat-treated product of a mixture of ingredients consisting essentially, by weight, of (1) from 50 to 95% of a polyvinyl formal resin obtained by condensing formaldehyde with a product of hydrolysis of polyvinyl acetate, (2) from 5 to 50% of a heat-hardenable resin obtained by condensing a phenol selected from the class consisting of phenol, cresol, xylenol, and mixtures thereof, with formaldehyde in the ratio of 1 mol of the phenol to 0.7 to 2 mols of the formaldehyde in the presence of an alkaline catalyst, (3) from 0.3 to 1.2%, based on the weight of the polyvinyl formal resin, of an additive selected from the class consisting of melamine and melamine-formaldehyde condensation products and, (4) a solvent in which (1), (2) and (3) are soluble composed of a mixture of cresol and naphtha, the solids content of the treating solution for the conductor being composed, by weight, of from 5 to 25 parts of the above-described resinous ingredients to about 75 to 95 parts of the cresol-naphtha solvent.

2,730,467

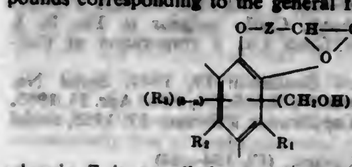
INSULATED ELECTRICAL CONDUCTORS

Edward W. Daszewski, Scotia, N. Y., assignor to General Electric Company, a corporation of New York

Application September 21, 1954, Serial No. 457,477
3 Claims. (Cl. 117—232)



1. An insulated electrical conductor in which the insulation comprises a hard, flexible, tough, abrasion-resistant and solvent-resistant coating, said coating being the heat-treated product of a mixture of (1) from about 0.1 to about 7%, by weight of the mixture, of compounds corresponding to the general formula



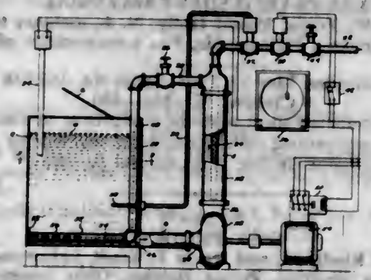
wherein Z is an alkylene radical, R_1, R_2 and R_3 are radicals selected from the class consisting of hydrogen, halogen, alkyl, aryl and aralkyl, and n is a whole number equal to from 1 to 3, (2) from about 10 to about 17%, by weight of the composition, of a complex epoxide resin containing epoxy groups and comprising a polyether derivative of a polyhydric organic compound selected from the class consisting of polyhydric alcohols and phenols containing at least two phenolic hydroxy groups, (3) from about 7 to about 15%, by weight of the mixture, of the condensation reaction product of urea and formaldehyde, and (4) from about 60 to about 80%, by weight of the mixture, of an organic solvent.

2,730,468

STARCH COOKING APPARATUS

Furman H. Martin, Fort Mill, S. C., assignor to The Springs Cotton Mills, a corporation of South Carolina

Application September 24, 1952, Serial No. 311,205
6 Claims. (Cl. 127—28)



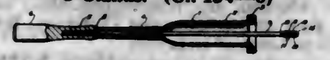
1. In apparatus for cooking starch incorporating a cylindrical slurry vat for containing a batch of starch to be cooked and a separate cooking chamber with conduit means arranged for recirculating a starch batch from said slurry vat through said cooking chamber and back to said slurry vat, the improvement which comprises a return conduit from said cooking chamber to said slurry vat having a closed-end terminal portion extending in part vertically adjacent the side wall of said slurry vat and in part horizontally adjacent the bottom thereof, with at least one discharge opening aligned at one side of the vertical part of said terminal portion so as to provide a discharge stream of liquid substantially tangential to the inner surface of said slurry vat, and with at least one discharge opening in the corresponding side of the horizontal part of said terminal portion adjacent said vertical part and at least one oppositely disposed discharge opening in said horizontal part remote from said vertical part.

2,730,469

METHOD OF CLEANING MILKING MACHINE TEAT CUPS

Walter M. Harwedel, North Ridgeville, Ohio

Application December 13, 1949, Serial No. 132,760
3 Claims. (Cl. 134—8)



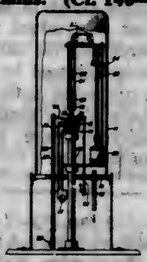
1. The method of cleaning a rubber teat cup of the type including teat-receiving and milk tube portions comprising transversely stretching the milk tube portion while removing accumulation of impurities from the interior thereof, and applying endwise pressure on the cup while the end of the milk tube portion engages an abutment and while the milk tube portion is supported from buckling to turn inside-out at least the teat-receiving portion to expose the interior thereof for cleaning and inspection.

2,730,470

METHOD OF MAKING SEMI-CONDUCTOR CRYSTALS

William Shockley, Madison, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application June 15, 1950, Serial No. 168,289
2 Claims. (Cl. 148—1.5)



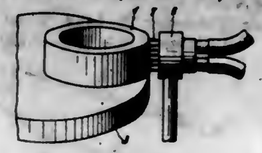
1. The method of making a semiconductive crystal which comprises melting a mass of semiconductive material selected from the group consisting of germanium and silicon and containing a conductivity type determining impurity having a boiling point below that of said material, inserting a seed of said material into said mass, withdrawing said seed at a rate to withdraw some of said mass along therewith, concomitantly with the withdrawal of said seed increasing the temperature of the remaining mass thereby to increase the rate of vaporization of said impurity therefrom and reduce the concentration of said impurity in the remaining mass, continuing withdrawal of said seed at said rate following said increasing of the temperature, and cooling the withdrawn material to solidification.

2,730,471

METHOD FOR BREAKING-UP AN ANNULAR CORE OF FERROMAGNETIC MATERIAL

Nicolaas Frederik Meier, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn, as trustee

Application September 8, 1952, Serial No. 308,488
Claims priority, application Netherlands October 1, 1951
3 Claims. (Cl. 148—9)



1. A method of breaking an annular core made of ferromagnetic polyoxide of spinel structure of iron comprising placing a heat source adjacent said core and locally heating said core to thereby split the same along at least one predetermined line.

2,730,472

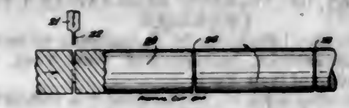
METHOD OF MANUFACTURING HOLLOW TUBULAR ARTICLES

Harry B. Osborn, Jr., Cleveland, Ohio, assignor to The Ohio Crankshaft Company, Cleveland, Ohio, a corporation of Ohio

Application May 7, 1952, Serial No. 286,654
9 Claims. (Cl. 148—10.5)

1. The method of manufacturing hollow, steel piston pins having a predetermined wall thickness and length

which comprises providing a solid, hot-rolled bar of medium-carbon steel; partially severing the bar at lengths according to the desired length of the piston pin and to depths in excess of the desired final wall thickness of the piston pin; heating the surface of said bar to temperatures above the critical and to depths generally equaling that of the desired wall thickness of the final piston pin; rapidly quenching said surface to provide a hardened outer



layer having a thickness equal to said final wall thickness; drawing said bar to produce a sorbitic structure, shallow, induction hardening the surface of said bar by rapid induction heating followed by a quench; drawing said surface to a temperature sufficient to relieve any stresses in the shallow-hardened surface without substantially changing its microstructure; and drilling out the unheat-treated core of said bar.

2,730,473

METHOD OF SPLICING INSULATED CONDUCTOR

Alfred P. Batezell, Huntingdon Valley, and Andrew J. Grandy, North Hills, Pa.

Application December 31, 1953, Serial No. 401,736
3 Claims. (Cl. 154—2.22)
(Granted under Title 35, U. S. Code (1952), sec. 266)



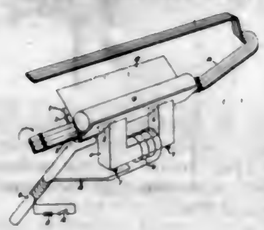
1. The method of joining the ends of two insulated electrical conductors comprising the steps of removing a sufficient quantity of insulation from the ends of said conductors to be joined, splicing the bared ends of said conductors, positioning a pair of preformed semi-cylindrical thermoplastic sheets to encompass substantially the spliced portion of said conductors and an adjacent portion of the insualtion of each of said conductors, and simultaneously bonding said pair of sheets to each other and to said insulation by application of heat to said pair of sheets thereby to form a tight seal around the splice.

2,730,474

ELECTRIC CONDUCTOR WRAPPING MACHINE

Robert W. Finholt, Lawrence Park, and Visvaldis Abolins, Erie, Pa., assignors to General Electric Company, a corporation of New York

Application September 29, 1953, Serial No. 383,102
9 Claims. (Cl. 154—2.25)



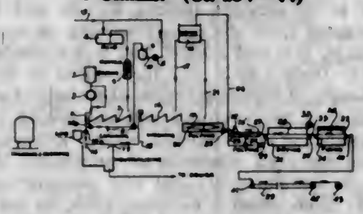
1. A device for wrapping a conductor with insulating material and comprising a jig having a non-magnetic V-shaped member having inner surfaces large enough for accommodating a length of said conductor to be insulated and outer surfaces, a magnet means having pole pieces of opposite polarity adjacent to said outer surfaces of said jig, and a member of magnetic material arranged to be placed within said jig on said conductor and said insulating material in the field of said magnetic means for urging said insulating material against said conductor.

2,730,475

METHOD OF FORMING FELTED SILICA FIBERS

Leon Parker, Burbank, Calif., assignor to The H. I. Thompson Fiber Glass Co., a corporation of California

Original application December 19, 1949, Serial No. 133,896, now Patent No. 2,635,390, dated Apr. 21, 1953. Divided and this application February 27, 1953, Serial No. 339,389
8 Claims. (Cl. 154—44)



1. A heat shrunk batt of silica fibers, each of said fibers being of length between about ¼" and 2", said fibers being substantially anhydrous and substantially free of chlorides and containing from about 90 to 99.9% of silica, and the remainder of said fibers consisting substantially of glass-forming, non-siliceous metallic oxides, said fibers and said batt being heat shrunk.

2,730,476

LAMINATED SHEET MATERIAL

Seymour W. Ferris, Mount Holly, N. J., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

Application May 19, 1953, Serial No. 356,038
6 Claims. (Cl. 154—50)

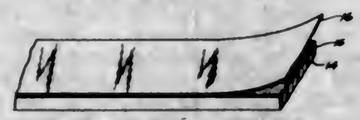
3. A laminated sheet material comprising at least two sheets of regenerated cellulose adhered together by a film of wax substantially free from normal paraffins.

2,730,477

WAX PRODUCT

Ernest T. Kindt, Sr., and David T. Kindt, Lakewood, and William Siegfried, Parma Heights, Ohio, assignors to The Kindt-Collins Company, Cleveland, Ohio, a corporation of Ohio

Application August 17, 1955, Serial No. 528,916
9 Claims. (Cl. 154—53.5)



1. A relatively soft, readily-carved, shape-maintaining, flexible and substantially non-resilient article of manufacture which comprises a non-fibrous body of wax and a pressure-sensitive adhesive for engagement with a surface to fasten the body in predetermined position against a supporting structure, said pressure-sensitive adhesive being in the form of a film disposed superficially on a portion of said wax body, and said wax body being substantially impervious to said adhesive and having other surface portions and interior portions substantially free from said adhesive.

2,730,478

FIBROUS MATERIALS AND PROCESSES FOR MAKING SAME

William A. Morgan, Jr., Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application March 5, 1954, Serial No. 414,516
7 Claims. (Cl. 154—101)

1. The process of preparing a fibrous structure which comprises forming a batt of nylon fibers, treating said batt with an aqueous bath containing a metal chloride, said metal chloride being a member of the group consisting of zinc chloride and ferric chloride, the contraction of zinc chloride in the aqueous bath being 30% to 80% and the concentration of ferric chloride being 22% to 42%, the temperature of the zinc chloride bath being 40° C. to 80° C. and the temperature of the ferric chloride bath being 60° C. to 105° C., washing the batt substantially free of unreacted metal chloride and drying.

2,730,479

FIBROUS MATERIALS AND PROCESSES OF MAKING SAME

Joseph W. Gibson, Jr., New Castle, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application March 5, 1954, Serial No. 414,517
7 Claims. (Cl. 154—101)

6. The process of forming a fibrous structure which comprises forming a batt of nylon fibres, treating said batt with an aqueous solution comprising 10–60% metal chloride and 1% to 15% nitric acid, said metal chloride being a member of the group consisting of zinc chloride and ferric chloride, said aqueous solution being at a temperature of 30° C. to 85° C., pressing said treated batt while wet with said solution against an untreated fabric comprising nylon fibers whereby the treated batt and untreated fabric are bonded together, washing said assembly free of metal chloride and nitric acid, and drying, the sum of the percentages of metal chloride and nitric acid being at least 25%.

2,730,480

METHOD OF MOUNTING A SWIVEL NOZZLE ON A PIPE

Alvin G. Brown, Euclid, Ohio, assignor to The Electric Sweeper Service Co., Cleveland, Ohio, a corporation of Ohio

Application November 23, 1951, Serial No. 257,843
2 Claims. (Cl. 154—116)



1. The method of rotatably securing a rigid cylindrical element to a cylindrical portion of a rigid nozzle member, comprising the steps of inserting said element coaxially into one end of said cylindrical portion until the end of said element abuts an annular projection in said cylindrical portion, inserting a retaining element into said cylindrical portion from the opposite end thereof until said retaining element abuts said annular projection, and adhesively bonding said retaining element to said cylindrical element to prevent withdrawal thereof from said cylindrical portion.

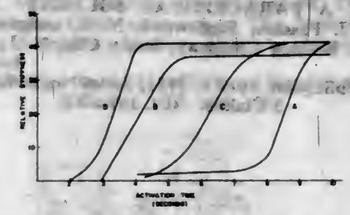
2,730,481

POLYMERIZATION BY DIELECTRIC HEATING USING INORGANIC SALTS AS HEATING ASSISTANTS

Bruce F. Day, Wilmington, Del., assignor to The Celastic Corporation, Arlington, N. J., a corporation of Delaware

Application October 29, 1952, Serial No. 317,527
6 Claims. (Cl. 154—126.5)

1. A process for stiffening a flannel material which comprises impregnating said flannel with a solution of a mixture of polyethylene glycol dimethacrylate and a copolymer of vinylchloride and vinylacetate, said solution containing a catalytic amount of benzoyl peroxide and about 10%, based on the polyethylene glycol dimethacrylate, of zinc chloride, and thereafter subjecting the



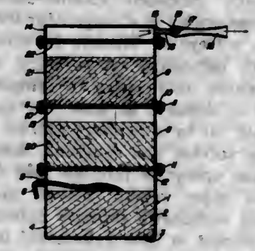
impregnated flannel to dielectric heating for a period of time sufficient to stiffen the impregnated flannel.

2,730,482

METHOD OF DISPERSING VAPORIZED DIPHENYLCHLORARSINE

Reston Stevenson, New York, N. Y., assignor to the United States of America as represented by the Secretary of War

Original application February 7, 1944, Serial No. 521,417. Divided and this application August 16, 1951, Serial No. 245,402
2 Claims. (Cl. 167—47)



1. In a method of dispersing vaporized and undecomposed diphenylchlorarsine, the steps comprising passing the hot gaseous products of combustion generated by burning an autocombustible fuel through loosely packed beds of solid particles of a gasifying agent, thereby vaporizing said agent and cooling the combined gaseous products to a temperature which will vaporize but not decompose diphenylchlorarsine, passing said gaseous products in turn through a loose bed of particles of diphenylchlorarsine and ammonium stearate to vaporize the same in an undecomposed condition and to provide an increased volume of vapors at a temperature substantially lower than that at which said products of combustion were generated, entraining air into said combined vapors and discharging the resultant mixture of air and vapors into the atmosphere.

2,730,483

THERAPEUTIC COMPOSITIONS COMPRISING NEOMYCIN, GRAMICIDIN AND QUATERNARY AMMONIUM SALT OF THONZYLAMINE

George W. Mast, South Salem, and Theodore I. Fand, White Plains, N. Y., assignors to Nepera Chemical Co., Inc., Yonkers, N. Y., a corporation of New York

No Drawing. Application August 12, 1952, Serial No. 304,013
10 Claims. (Cl. 167—65)

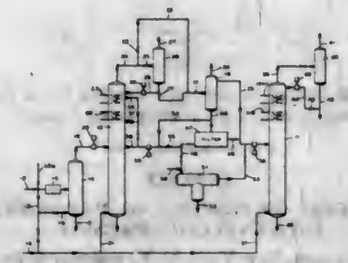
1. A therapeutic composition of matter comprising a neomycin salt, gramicidin and a quaternary ammonium salt of thonzylamine.

2,730,484

VITAMIN CONCENTRATION BY DESTEARINIZING BETWEEN SUCCESSIVE EXTRACTIONS WITH A PARACRITICAL SOLVENT

Herbert J. Pasino, Englewood, N. J., assignor to The M. W. Kellogg Company, Jersey City, N. J., a corporation

Application April 6, 1951, Serial No. 219,672
5 Claims. (Cl. 167—81)



1. A method for preparing a high potency vitamin concentrate from a low potency marine oil containing stearins, which method includes the steps of: continuously contacting said oil with a solvent having a critical temperature not substantially higher than 450° F. in a first vertically extended counter-current fractionation zone at temperatures in a range near the critical temperature of the solvent-oil mixture in which miscibility decreases with increasing temperature; maintaining temperatures within said range of temperatures but sufficiently low to dissolve at least 3% and not more than 10% of said oil in a primary extract phase containing most of the solvent and vitamins; flowing said primary extract phase upwardly through said zone, withdrawing it from the upper region thereof, and reducing pressure on said withdrawn primary extract phase to evaporate said solvent at least sufficiently to reduce the ratio of solvent to oil to less than 5 volumes of solvent to one volume of extract oil; chilling said extract phase at least in part by said evaporation to a temperature between —40° F. and 10° F. to precipitate stearins; separating said precipitated stearins from said chilled extract phase; introducing said destearinized extract phase into a second vertically extended counter-current fractionation zone and contacting it with additional quantities of said solvent sufficient to increase the ratio of solvent to oil in said zone to at least 25 volumes of solvent to one volume of oil; maintaining temperatures in the upper region of said second fractionation zone at least 2° F. higher than the temperatures in the upper region of said first fractionation zone; withdrawing a secondary extract phase from said second fractionation zone and recovering a vitamin concentrate therefrom.

2,730,485

SEPARATING OIL-WAX MIXTURES

James M. Robertson, Kingsville, and Jack L. Little, Port Arthur, Tex., assignors to The Texas Company, New York, N. Y., a corporation of Delaware

No Drawing. Application January 9, 1953, Serial No. 330,582
9 Claims. (Cl. 196—18)

1. A method of separating a mineral oil containing liquid hydrocarbon constituents and waxy constituents into said respective constituents which comprises mixing the mineral oil with a substantial amount of a solvent mixture comprising a halogenated acetal selected from the group consisting of the 1,1-dialkoxy ethanes and an amount of an aromatic, hydrocarbon oil solvent containing not more than 8 carbon atoms per molecule sufficient to effect substantially complete miscibility of the mineral oil in said solvent mixture, chilling the resulting admixture to a temperature at which waxy constituents separate from the admixture in solid form while the liquid hydrocarbon oil constituents remain substantially completely dissolved in the solvent mixture and removing the solidified waxy constituents therefrom.

2,730,486

ION EXCHANGE REMOVAL OF MERCAPTANS FROM PETROLEUM

Harry L. Coonradt, Woodbury, and Wilbur K. Leaman, Pitman, N. J., assignors to Socony Mobil Oil Company, Inc., a corporation of New York

No Drawing. Application September 19, 1951, Serial No. 247,371
15 Claims. (Cl. 196—24)

1. A method for regenerating anion exchange material exhausted with mercaptans which comprises contacting anion exchange material exhausted with mercaptans with a solution of alkali metal hydroxide whilst passing free oxygen-containing gas through said solution.

13. A method for removing mercaptans from hydrocarbons which comprises contacting hydrocarbons mixed with mercaptans with anion exchange material, separating anion exchange material from treated hydrocarbons, contacting said separated anion exchange material with a basic regenerant solution whilst passing gas substantially free from carbon dioxide and containing free oxygen through said regenerant solution to convert mercaptans to polysulfides, separating regenerated regenerant solution from regenerated anion exchange material, washing said separated anion exchange material with water, and contacting hydrocarbons admixed with mercaptans with said regenerated anion exchange material.

2,730,487

REMOVAL OF VANADIUM AND/OR SODIUM FROM PETROLEUM AND PETROLEUM PRODUCTS WITH TITANIA ON ALUMINA AND HYDROFINING

Frederick William Bertram Porter and Roy Purdy Northcott, Sunbury-on-Thames, England, assignors to The British Petroleum Company Limited

No Drawing. Application July 1, 1953, Serial No. 365,520
Claims priority, application Great Britain July 14, 1952
3 Claims. (Cl. 196—24)

1. A process for reducing the content of vanadium and sodium in a petroleum feedstock, comprising contacting the petroleum feedstock with a contact material consisting essentially of titania and alumina, in the presence of hydrogen at a temperature within the range 750°–800° F. and at a pressure within the range 500–1500 p. s. i. ga. whereby vanadium and sodium are deposited on the contact material.

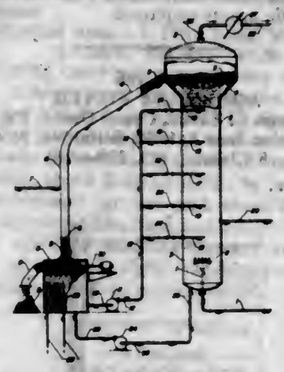
2,730,488

LIQUID BATH CONTINUOUS CONVERSION COKING PROCESS AND APPARATUS

Armand J. de Rosset, Clarendon Hills, and Charles H. Watkins, Western Springs, Ill., assignors to Universal Oil Products Company, Des Plaines, Ill., a corporation of Delaware

Application May 19, 1953, Serial No. 356,002
15 Claims. (Cl. 202—18)

1. The method of continuously converting organic material which comprises introducing said organic material into the lower portion of a vertically elongated swirling mass of liquid having a higher specific gravity than said organic material and being substantially immiscible therewith, passing the organic material upwardly through the



central portion of said swirling mass, maintaining said swirling liquid at conversion conditions and separately withdrawing the resultant products.

2,730,489

USE OF ORGANIC NITRITES TO INHIBIT POLYMERIZATION OF HYDROCARBONS DURING DISTILLATION

Ernest E. Lewis, Chadds Ford, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application September 21, 1951, Serial No. 247,767
17 Claims. (Cl. 202—57)

1. A process for minimizing polymer formation when distilling a composition comprising a major portion of hydrocarbons containing no more than six carbon atoms, said composition containing paraffins and monoolefins in major amount and at least 0.01 per cent by weight of a diolefin having from 3 to 6 carbon atoms, which process comprises carrying out the distillation of said composition while maintaining present therein throughout the distillation a polymerization inhibitor comprising from 0.001 per cent to 5 per cent, based on the weight of said composition, of a nitrite of the formula $R.NO_2$ in which R is a hydrocarbon radical having from one to eight carbon atoms and having an alkyl carbon atom to which the nitrite group is attached.

2,730,490

PROCESS OF ZINC COATING MAGNESIUM ARTICLES

Robert T. Hendrich and Dudley L. O'Brien, Jr., Cleveland, Ohio, assignors to The Wire Coating and Mfg. Co., Cleveland, Ohio, a corporation of Ohio

No Drawing. Application November 13, 1951, Serial No. 256,162
7 Claims. (Cl. 204—38)

1. The process of making a bi-metal plate consisting of a magnesium base plate having a surface coated with a smooth thin continuous adherent coating of zinc which comprises chemically depositing a superficial uniformly discontinuous layer of zinc onto the thoroughly cleaned surface of a magnesium plate by contacting said cleaned surface with an aqueous alkaline solution comprising zinc ions having ion exchange with the magnesium plate and then directly upon such chemically deposited zinc, electrodepositing from a cyanide bath a continuous layer of zinc having a thickness of not over about .0008 inch.

2,730,491

METHOD OF ELECTROPLATING COBALT-NICKEL COMPOSITION

Walter E. Moline, Dayton, and Richard M. Claesbens, Germantown, Ohio, assignors to The National Cash Register Company, Dayton, Ohio, a corporation of Maryland

Application April 22, 1952, Serial No. 283,652
6 Claims. (Cl. 204—43)



1. The process of electro-plating a base metal with a nickel-cobalt composition including the steps of preparing an electrolyte consisting of an aqueous vehicle in which has been dissolved nickel and cobalt salts so that the nickel content is from 10 to 75 grams per liter of solution and the cobalt content is from 25 to 75 grams per liter of solution and in which has been dissolved between 1 and 3 grams of a toluene sulfonamide per liter of solution, said toluene sulfonamide being taken from the group consisting of ortho-toluene sulfonamide and paratoluene sulfonamide, and boric acid in the amount of 5 to 45.0 grams per liter of solution; introducing the base metal into said electrolyte as the cathode; introducing an anode into the electrolyte; and passing, from an alternating current source, an alternating current between the electrodes, the connection from one electrode to the alternating current source being a direct connection, and the connection from the other electrode to the alternating current source being divided into two parallel branches, one branch containing a first half-wave rectifier and a first impedance and the other branch containing a second half-wave rectifier oriented electrically to pass current in a direction opposite to that of the first rectifier and also containing a second impedance of a value different from the first so that there is a plating phase and a deplating phase, said impedances being so selected that the average plating current density is less than 10 and more than one times the average deplating current density.

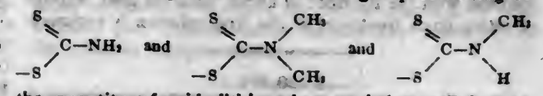
2,730,492

ELECTRODEPOSITION OF ZINC-COPPER ALLOYS

Allan E. Chester, Highland Park, Ill., assignor to Poor & Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application December 7, 1951, Serial No. 260,557
14 Claims. (Cl. 204—44)

1. A plating bath comprising an alkaline zinc copper cyanide bath containing in solution a bath soluble dithiocarbamate having a radical from the group consisting of



the quantity of said dithiocarbamate being sufficient to extend the usable range of current densities at which alloys of zinc and copper can be electrodeposited from said bath.

2,730,493

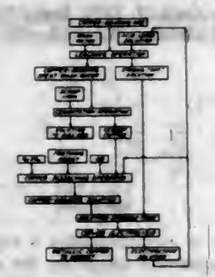
PROCESS FOR RECOVERY OF COPPER FROM CUPRIFEROUS ORE

Donald O. Carlson, Inspiration, Ariz., assignor to Inspiration Consolidated Copper Company, a corporation of Maine

Application September 29, 1951, Serial No. 248,943
8 Claims. (Cl. 204—108)

1. In a process for the recovery of copper from a cupriferous ore, in which (*a*) the ore is leached with an acidic

solution to obtain a strong copper-bearing leach solution, (*b*) the leached ore is washed with water to recover a dilute copper-bearing wash solution, (*c*) the strong leach solution is electrolyzed to recover metallic copper, and (*d*) the dilute wash solution is treated with metallic iron to produce metallic cement copper, the improvement



which comprises forming a suspension of the cement copper in an acidic solution, agitating by mechanical means and aerating such solution in the presence of a frothing agent, dissolving substantially the entire amount of the cement copper in the acid solution, uniting the resulting solution of dissolved cement copper with the strong leach solution, and electrolyzing the united solutions.

2,730,494

PROCESS OF ELECTROLYTIC DEBURRING OF METAL

Milton H. Bennert, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

No Drawing. Application September 16, 1950, Serial No. 185,317
7 Claims. (Cl. 204—145)

1. The method of removing a burr from a ferrous metal member containing carbon and forming a clean, bright surface thereon which comprises immersing at least the portion of the member having the burr thereon in a first solution consisting of approximately 2 to 60 per cent by volume of commercially concentrated hydrochloric acid (specific gravity 1.19) and the balance water, passing direct current through said first solution with the member as anode until the burr has been removed, and a dark smudge left on the member, thereafter placing at least that portion of the member having the dark smudge thereon in a second solution of the class consisting of (*a*) 20 to 95 parts by volume of commercially concentrated phosphoric acid (85% acid), 2 to 10 parts by volume of commercially concentrated hydrochloric acid (specific gravity 1.19) and 5 to 20 parts of water and (*b*) 20 to 95 parts by volume of commercially concentrated phosphoric acid (85% acid) and 5 to 20 parts by volume of water, and passing direct current through the second solution with the member as anode until the dark smudge resulting from treatment in the first solution is removed.

2,730,495

ALKYL AND CYCLOALKYL HYDROPEROXIDES

John Alan Gray, Northwich, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application April 4, 1952, Serial No. 280,665
Claims priority, application Great Britain April 13, 1951
5 Claims. (Cl. 204—162)

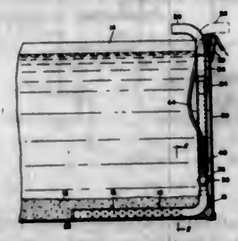
1. A proces for the manufacture of alkyl and cycloalkyl hydroperoxides which comprises providing a gaseous mixture comprising oxygen, at least one volatile paraffin, and a metallic vapor photosensitizer selected from the group consisting of mercury, zinc, and cadmium, exposing said gaseous mixture to ultraviolet light at a temperature not exceeding 80° C. so as to raise the said photosensitizer to a high energy level by absorption of ultraviolet light to thereby produce hydroperoxide, and then condensing out the hydroperoxide so obtained, said metallic vapor photosensitizer and ultraviolet light being the sole catalytic agents employed.

2,730,496

AQUARIUM FILTER

Joseph L. Zavod, Upper Darby, Pa.

Application June 4, 1953, Serial No. 359,526
8 Claims. (Cl. 210—16)



1. An aquarium filter comprising an elongated perforated tube adapted to be placed horizontally beneath the gravel bed in an aquarium, a return tube connected to one end of said perforated tube and extending vertically therefrom, said return tube being provided with circumferentially spaced apertures intermediate its ends, means providing a chamber embracing said apertured portion of said return tube, and an air inlet tube communicative with said chamber and adapted for connection to an air pump whereby passage of air through said air inlet tube and through the apertured portion of said return tube creates suction pulling water through the gravel bed into said perforated tube and into said return tube.

2,730,497

ROTARY WELL DRILLING AND COMPOSITION THEREFOR

Tzeng Jiueq Suen, New Canaan, and Arthur M. Schiller, Stamford, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application January 23, 1953, Serial No. 333,008
8 Claims. (Cl. 252—8.5)

1. A drilling fluid for drilling deep wells by the rotary drilling process comprising an inorganic solid suspending agent, an aqueous dispersing medium, and a quantity of a permanently hydrophilic sulfonated melamine-aldehyde resin sufficient to reduce water loss into the surrounding formation without increasing the viscosity of the drilling fluid to such an extent that it cannot be circulated.

2,730,498

TEXTILE LUBRICANTS

Fred Fortess, Summit, and Conrad Hohing, Jr., Morristown, N. J., assignors to Celanese Corporation of America, New York, N. Y., a corporation of Delaware

No Drawing. Application January 9, 1952, Serial No. 265,724
1 Claim. (Cl. 252—8.8)

A textile lubricant comprising an aqueous emulsion containing 400 parts by weight of water and a lubricant composition containing (A) 15 parts by weight of the partial ester of phosphoric acid with decyl alcohol, (B) 20 parts by weight of the condensation product of triethanolamine and cocoanut oil fatty acids, (C) 3.5 parts by weight of triethanolamine, (D) 2.5 parts by weight of diamyl phenol, (E) 39 parts by weight of mineral oil, and (F) 20 parts by weight of the polyethylene oxide ester of lauric acid.

2,730,499

LUBRICANTS FOR HEAVY JOURNAL BEARINGS OPERATING AT ELEVATED TEMPERATURES

Oldrich S. Pokorny, Sarnia, Ontario, Canada, assignor to Esso Research and Engineering Company, a corporation of Delaware

Application August 1, 1951, Serial No. 239,659
1 Claim. (Cl. 252—49.8)

A lubricating composition comprising a major proportion of a mineral lubricating oil having a viscosity between 50 and 200 S. S. U. at 210° F., about 0.1 to 0.5% by weight of fatty acid selected from the group consisting of stearic acid and mixtures of stearic acid and palmitic acid, about 0.02 to 0.2% by weight of a C_{18} aliphatic substituted succinic acid, about 0.3 to 1.0% by weight of tricresyl phosphate, and about 0.2 to 0.5% by weight of oxidation inhibitor selected from the group consisting of phenyl alpha naphthylamine, ditertiary butyl para cresol and mixtures thereof.

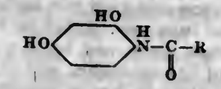
2,730,500

ANTI-OXIDANTS

David W. Young, Roselle, Arnold J. Morway, Clark, and Delmer L. Cottle, Highland Park, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application September 21, 1951, Serial No. 247,756
2 Claims. (Cl. 252—51.5)

1. A composition of matter comprising di-2-ethylhexyl sebacate containing combined therein a minor proportion effective as an anti-oxidant of an N-acyl-p-aminoresorcinol having the general formula



wherein R is an alkyl group having from 4 to 18 carbon atoms.

2,730,501

MINERAL OIL COMPOSITIONS HAVING STABILIZED LOW POUR POINTS

Ferdinand P. Otto, Woodbury, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York

No Drawing. Application December 31, 1952, Serial No. 329,089
3 Claims. (Cl. 252—57)

1. A lubricating oil composition having a stabilized low pour point comprising a major proportion of a mineral lubricating oil and a minor proportion, sufficient to lower the pour point of said oil, of a reaction product selected from the group consisting of (*a*) the product prepared by (1) reacting 1 mol of phenol with a sufficient amount of a chlorinated paraffin wax, containing about 18% by weight of chlorine, to supply approximately 4 atomic weights of chlorine to the reaction, at a temperature of from about 65° C. to about 177° C., to form a wax-alkylated phenol product, (2) forming a benzoate ester of the said wax-alkylated phenol product and (3) treating the said benzoate ester with a solid absorbent selected from the group consisting of activated carbon, silica gel and a bead cracking catalyst of the silica-alumina type, for a period of from about ½ hour to about 5 hours, at a temperature of from about 50° C. to about 200° C., and (*b*) the product prepared by (1) reacting 1 mol of phenol with a sufficient amount of chlorinated paraffin wax, containing about 18% by weight of chlorine, to supply approximately 4 atomic weights of chlorine to the reaction, at a temperature of from about 65° C. to about 177° C., to form a wax-alkylated phenol product, (2) treating the wax-alkylated phenol product with a solid absorbent selected from the group consisting of activated carbon, silica gel and bead cracking catalyst of the silica-alumina type, for a period of from about ½ hour to about 5 hours, at a temperature of from about 50° C. to about 200° C. and (3) forming the benzoate ester of the treated wax-alkylated phenol product.

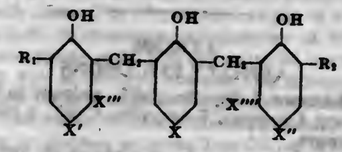
2,730,502

ANTISEPTIC DETERGENT COMPOSITION

David J. Beaver, Richmond Heights, Paul J. Stoffel, Florissant, and Roland S. Shumard, Brentwood, Mo., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application March 31, 1951, Serial No. 218,764
10 Claims. (Cl. 252—107)

2. An antiseptic detergent composition consisting essentially of a detergent soap and 0.5 to 10% by weight based upon the detergent soap of a halogenated tris-phenol of the formula



wherein R_1 and R_2 are alkyl radicals containing not more than 4 carbon atoms and where X, X', X'', X''' and X'''' are halogen atoms having an atomic weight greater than 20 but less than 80.

2,730,503

DETERGENT AND BRIGHTENING COMPOSITION

Samuel Prenner, Richmond, Va.

No Drawing. Application December 29, 1952, Serial No. 328,527
13 Claims. (Cl. 252—152)

1. A detergent and whitening composition for materials composed of nitrogenous fibers comprising an amino-coumarin compound selected from the group consisting of a di-lower-alkylamino-coumarin and a di-lower-alkylamino-coumarin having a lower-alkyl nuclear substituent, said amino group being attached to the benzene nucleus and the alkyl groups attached to the amino nitrogen being selected from the group consisting of methyl and ethyl, said coumarin compound exhibiting blue to violet fluorescence and being insoluble in water, dispersed in water containing a non-ionic, surface-active agent consisting essentially of a polyethylene glycol ether of an alkyl phenol wherein the number of oxyethylene groups are so related to the size of the alkyl radical as to confer water solubility to said compound, the amino-coumarin compound being present in an amount of at least about 2% by weight of said non-ionic, surface-active agent and sufficient to produce fluorescence on the material being treated, said non-ionic, surface-active agent being sufficient to maintain the amino-coumarin in clear solution and to distribute it substantially uniformly on the material being treated.

2,730,504

TIN ACTIVATED BARIUM PHOSPHATE PHOSPHOR

Alfred H. McKeag, North Wembley, England, assignor to General Electric Company, a corporation of New York

No Drawing. Application October 9, 1951, Serial No. 250,561
Claims priority, application Great Britain November 1, 1950
2 Claims. (Cl. 252—301.4)

1. The method of manufacturing a red-fluorescing phosphate of barium activated by tin which comprises forming a mixture of barium hydrogen phosphate and an activating tin compound in an amount such as to give

about 2% by weight of tin in the final product, and firing the mixture in successive steps in air at about 900° C. for about two hours, in hydrogen at about 800° C. for about one hour and again in air at about 900° C. for about one hour.

2,730,505

INCREASING THE VISCOSITY OF GUAR SOLS BY REACTION WITH FORMALDEHYDE

Wesley A. Jordan, Minneapolis, Minn., assignor to General Mills, Inc., a corporation of Delaware

No Drawing. Application May 28, 1954, Serial No. 433,276

5 Claims. (Cl. 252—311)

1. Guar containing formaldehyde in the ratio of from 5–15% based on the weight of the guar.

2,730,506

ASPHALT EMULSIONS

Harry J. Sommer, Lafayette, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application March 28, 1952, Serial No. 279,223

7 Claims. (Cl. 252—311.5)

1. An asphalt emulsion of the oil-in-water type, the asphalt having dispersed therein a minor amount of alkali metal soaps of naphthenic acids having an average molecular weight above about 300 and the water phase of said emulsion having a water-dispersible soap dispersed therein, the proportion of said naphthenic soap being from about 0.5 to 10% based on the weight of the asphalt and the proportion of water-dispersible soap being from about 0.5% to 10% based on the weight of the water.

2,730,507

METHOD OF MAKING DUSTLESS SOAP POWDER

Purdy Bradford, Palos Park, Ill., assignor to Swift & Company, Chicago, Ill., a corporation of Illinois

No Drawing. Application January 28, 1952, Serial No. 268,684

5 Claims. (252—369)

1. A method of treating comminuted soap to agglomerate soap dust particles therein into free flowing granules which comprises mixing said comminuted soap, at least about 5% by weight of a saponifiable higher fatty acid, and a sufficient amount of alkali to saponify said higher fatty acid; and thoroughly mixing the ingredients to form well-defined granules.

2,730,508

COOLING OF FINELY DIVIDED SOLIDS TO PREVENT AFTERBURNING IN A REGENERATION LANE

Nick P. Peet, Baytown, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware

Application November 29, 1951, Serial No. 258,902

5 Claims. (Cl. 252—417)

1. A method for regenerating finely divided catalytic solids containing carbon and carbonaceous bodies which comprises suspending said finely divided solids in a free oxygen-containing gaseous stream, burning carbon and carbonaceous bodies from said finely divided solids in a regeneration zone at a temperature in the range from 800° to 1200° F. to form a suspension of said solids in a combustible regeneration gas, reducing the solids content of said suspension in a first separation stage in said regeneration zone, flowing said suspension of reduced solids content into a second separation stage in said regeneration zone to reduce further the solids content of the suspension, introducing an inert cooling fluid into said suspension of reduced solids content flowing between said stages to lower the temperature of the suspension of reduced solids content flowing into the second stage by 50° to 150° F. to prevent afterburning in said suspension of reduced solids content downstream from said first stage while maintaining the temperature of the catalytic solids in said regeneration zone in the range between 800° and 1200° F., and then discharging a substantially solids-free gas from said second stage and said regeneration zone.

2,730,509

PRINTING INK COMPOSITIONS CONTAINING DIALDEHYDE DERIVATIVES OF SUGARS OR LOWER POLYHYDRIC ALCOHOLS

Ronald J. Baird, Philadelphia, Pa., assignor to The National Sugar Refining Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application June 29, 1950, Serial No. 171,255

2 Claims. (Cl. 260—9)

2. A printing ink comprising (I) a printing ink pigment, (II) a product of the reaction, at an elevated temperature and in the presence of an acid catalyst, between a dialdehyde and a monomeric polyhydric substance having at least four hydroxyl groups occurring in pairs wherein each of the hydroxyl groups in a pair is linked to a separate carbon and such two carbon atoms in the pair are separated from one another by from zero to one intermediate carbon atom, and being a member of the class consisting of (*a*) the sugars, and (*b*) the non-sugar, lower polyhydric alcohols free of substituents other than their hydroxyl groups, (III) a liquid solvent for said reaction product, and (IV) an acid catalyst for the reaction product on further heating to go to a more highly condensed form.

2,730,510

DRYING COMPOSITION RESISTANT TO GAS CHECKING AND FROSTING

Hans Dannenberg, Berkeley, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application December 24, 1952, Serial No. 327,920

8 Claims. (Cl. 260—18)

1. A process for preparing a composition which is resistant to gas checking and frosting when hardened as a film which comprises mixing about 0.1% to 4% by weight of an alkaline earth metal salt of an alkyl hydroxy aromatic monocarboxylic acid containing at least 6 carbon atoms in the alkyl substituent with a driving ester of polymeric polyhydric alcohols having alternating aliphatic chains and aromatic nuclei united through ether oxygen and olefinically unsaturated fatty acid of 12 to 20 carbon atoms and an iodine number of at least 90.

2,730,511

PHENOL-FORMALDEHYDE RESINS ESTERIFIED WITH HIGHER UNSATURATED FATTY ACIDS AND DIMERIZED ROSIN

Don E. Floyd, Robbinsdale, Minn., assignor to General Mills, Inc., a corporation of Delaware

No Drawing. Application June 25, 1953, Serial No. 364,201

4 Claims. (Cl. 260—19)

1. A p-t-butylphenol formaldehyde resin esterified with a mixture of an unsaturated higher fatty acid and dimerized rosin, the resin being esterified at least 50% and the dimerized rosin constituting from 10–50 equivalent percent of the acids esterified.

2,730,512

DICARBOXYLIC SULFONES AS PLASTICIZERS FOR VINYL CHLORIDE POLYMERS

William S. Emerson and Robert A. Heimsch, Dayton, Ohio, assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Original application April 20, 1950, Serial No. 157,182, now Patent No. 2,689,864, dated September 21, 1954. Divided and this application March 17, 1954, Serial No. 416,957

5 Claims. (Cl. 260—30.8)

3. A resinous composition comprising a polymer of at least 70 per cent by weight of vinyl chloride and up to 30 per cent by weight of an unsaturated monomer copolymerizable therewith, said copolymer being plasticized with a carboalkoxybenzyl carboalkoxymethyl sulfone in which each alkoxy group has from 4 to 8 carbon atoms.

2,730,513

PLASTICISED COMPOSITIONS

Eric John Gray Bailey, Welwyn Garden City, and Wilfred Walker, Cleveleys, England, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application December 13, 1951, Serial No. 261,610

Claims priority, application Great Britain December 22, 1950

1 Claim. (Cl. 260—31.8)

Compositions adapted for cable sheathing, calendering and extrusion comprising polyvinyl chloride plasticized with a plasticizer consisting essentially of the diesters of at least one polybasic acid and a mixture of (1) mixed straight chain primary alcohols and (2) mixed 2-methyl substituted primary alcohols both of said alcohols having 7, 8 and 9 carbon atoms per molecule in major proportion, said alcohols being present together in the relative proportions by volume respectively of 40 to 50% C_7 alcohols, 50 to 40% of C_8 alcohols, and 10 to 15% of C_9 alcohols.

2,730,514

SHELL MOLD AND COMPOSITION FOR MAKING SAME

Burgess P. Wallace, Brooklyn, and Van Dyke Romney, Richmond, N. Y., assignors to Whitehead Brothers Company, New York, N. Y., a corporation of New Jersey

Application February 29, 1952, Serial No. 274,232

8 Claims. (Cl. 260—38)



1. A shell mold whose walls are composed essentially of refractory inorganic grains, substantially free from any inorganic bond, which are individually coated with a layer consisting essentially of a polarized wetting agent, a second layer composed of a resinous bond superimposed on said first layer and of opposite polarity thereto which is compatible therewith, said wetting agent being adapted to intensify the bonding power of said bond.

2,730,515

BLENDED DIVINYL BENZENE POLYMERS

Edward A. McCracken and Allen L. Chaney, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application November 28, 1951, Serial No. 258,744

3 Claims. (Cl. 260—45.5)

1. A blended polymer composition consisting of 95 to 75 parts of synthetic, solid, plastic hydrocarbon interpolymer of 95 to 99.5 parts of isobutylene with 5 to 0.5 parts of isoprene and from 0.1 to 0.8% of divinyl benzene, the polymer being characterized by a low unsaturation indicated by an iodine number within the range between 1 and 50, a molecular weight above 25,000, and reactivity with sulfur to yield an elastic product; in admixture with about 5 to 25 parts by weight of a synthetic, solid, plastic hydrocarbon interpolymer of 95 to 99.5 parts of isobutylene with 5 to 0.5 parts of isoprene and from 4 to 8% of divinyl benzene, the polymer being characterized by a molecular weight above 25,000, and reactivity with sulfur to yield an elastic product, the mixture having an average of about 1 to 2% of divinyl benzene and being characterized by a lower cold flow, a higher extrusion rate, and a lower swell after extrusion, than has a single tripolymer of the same average percent divinyl benzene.

2,730,516

WATER SOLUBLE RESINOUS COMPOSITIONS AND PROCESS OF PREPARING SAME

Tzeng Jiueq Suen, New Canaan, and Arthur M. Schiller, Stamford, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application January 23, 1953, Serial No. 333,007

12 Claims. (Cl. 260—67.6)

1. A process for preparing a non-thermosetting permanently water-soluble resinous product which comprises reacting as the essential reactants (1) formaldehyde, (2) melamine and (3) an alkali metal salt of sulfurous acid until condensation occurs to form resinous products containing sulfonate groups, further polymerizing said resinous product by diluting the reaction mixture to between about 15% and about 25% solids, adjusting the pH to within the range of between about 1.5 and about 3.7 and heating at a temperature within the range of about 40° C. and about 55° C. not beyond the formation of a soft gel at said pH but at least until the neutralized solution possesses a minimum viscosity of 50 centipoises when measured as a 20% solid at 25° C., the formaldehyde being present in an amount between about 1.75 and about 6 mols per mol of melamine and the alkali metal salt being present in an amount to yield between about 0.75 and about 2.0 mols of bisulfite per mol of melamine.

2,730,517

MODIFICATION OF POLYESTER BODIES

Henry A. Vogel and Alfred R. Bader, Milwaukee, Wis., assignors to Pittsburgh Plate Glass Company

No Drawing. Application January 15, 1952, Serial No. 266,598

10 Claims. (Cl. 260—75)

1. A modified alkyd resin obtained by interesterification of an alkyd body containing free hydroxyls and an ester of a beta-keto acid and a monohydric alcohol containing 1 to 4 carbon atoms.

2,730,518

BERYLLIUM HYDROXIDE AS CATALYST IN REACTING POLYESTERS WITH DIISOCYANATES

Arthur William Birley, Stevenage, John William Croom Crawford, Welwyn Garden City, and Alan William Jukes, Luton, England, assignors to Imperial Chemical Industries Limited, London, England, a corporation of Great Britain

No Drawing. Application July 23, 1954, Serial No. 445,454

Claims priority, application Great Britain July 31, 1953

11 Claims. (Cl. 260—75)

9. In a process for the production of cured rubber-like material from a diisocyanate-modified polyester obtained by reacting under substantially anhydrous conditions (1) a polyester having terminal groups that are mainly hydroxyl groups and an average molecular weight of at least 1,000, said polyester being obtained by the reaction of at least one glycol and at least one dicarboxylic acid and (2) a diisocyanate present in excess of said polyester on a mol basis, the step comprising heating said diisocyanate-modified polyester at a curing temperature in the presence of a catalytic amount of beryllium hydroxide.

2,730,519

PRODUCTION OF CLEAR TRANSPARENT POLYMERS OF ISOBUTYLENE AND STYRENE

Robert F. Leary, Cranford, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application June 8, 1953, Serial No. 360,365

1 Claim. (Cl. 260—88.1)

In a process for copolymerizing a mixture of isobutylene and styrene at a temperature of about −80° C., to −100° C., in the presence of aluminum chloride dissolved in methyl chloride as solvent, the improvement which comprises maintaining a continuously agitated polymerizing mixture of said styrene and isobutylene in a constant concentration in 2 to 4 volumes of methyl chloride as solvent and at a constant volume, maintaining a substantially constant conversion level of said polymerizing mixture at about 40 to 80% conversion, continuously adding a mixture of 47 to 40% by weight of isobutylene and 53 to 60% by weight of styrene in a substantially fixed ratio relative to each other to said polymerizing mixture, simultaneously continuously removing isobutylene, styrene and a copolymerization product containing about 44 to 55% combined styrene and having an intrinsic viscosity of about 0.7 to 1.5 and a light transmission of at least 60% in ¼" molded layer from the polymerizing mixture, and adjusting the ratio of the total amount of isobutylene and styrene added to the mixture of isobutylene, styrene and product removed so that the concentration of isobutylene and styrene and product in the polymerizing mixture is maintained constant.

2,730,520

COPOLYMER OF FATTY ACID AND ROSIN ACID

Kirtland E. McCaleb, Minneapolis, Minn., assignor to General Mills, Inc., a corporation of Delaware

No Drawing. Application January 14, 1952, Serial No. 266,449

4 Claims. (Cl. 260—97)

1. Process of producing a rosin acid-unsaturated fatty acid copolymer, which comprises heating a mixture of rosin acids and unsaturated higher fatty acids to a temperature within the approximate range of 75–100° C. in the presence of a phosphoric acid-boron trifluoride catalyst.

2,730,521

CHROMIUM CONTAINING MONOAZO DYESTUFFS

Guido Schetty and Hans Ackermann, Basel, Switzerland, assignors to J. R. Geigy A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application August 24, 1953, Serial No. 376,238

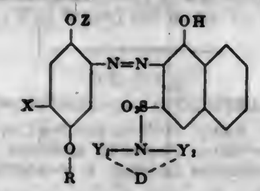
Claims priority, application Switzerland September 10, 1952

6 Claims. (Cl. 260—146)

1. A complex chromium compound of the general formula:

$$[D—M_1—D]M_2$$

wherein M_1 is a complexly bound chromium atom, M_2 is a cation selected from the group consisting of alkali metals and ammonium and D is a co-ordinated monoazo dyestuff of the formula:



wherein R represents a member selected from the group consisting of methyl, ethyl and hydroxyethyl radicals, X represents a member selected from the group consisting of H and Cl, Y_1 represents a member selected from the group of hydrogen, methyl, ethyl, cyclohexyl and phenyl radicals, Y_2 represents a member selected from the group consisting of hydrogen and lower alkyl, Z represents a member selected from the group consisting of —CH_3, —C_2H_5 and —CH_2CH_2OH, and Y_1 and Y_2 may be bound together by D, D representing the atoms necessary to form together with



a six-membered ring selected from the group consisting of the piperidino and morpholino rings.

2,730,522

COBALT-CONTAINING MONOAZO DYESTUFFS

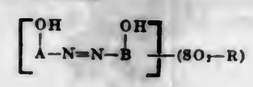
Guido Schetty, Basel, Switzerland, assignor to J. R. Geigy A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application January 2, 1953, Serial No. 329,459

Claims priority, application Switzerland January 5, 1952

7 Claims. (Cl. 260—147)

1. The complex cobalt compound of a monoazo dyestuff having the formula:



wherein A represents a benzene nucleus, containing the OH group in o-position to the azo group, B represents the radical of a member selected from the group consisting of phenolic, naphtholic, 5-pyrazolonic and acetoacetyl-anilidic coupling components, containing the OH-group in o-position to the azo group, R represents a low molecular alkyl radical, the alkyl sulphone group being bound aromatically and A and B being otherwise free from carboxylic acid and sulphonic acid groups.

2,730,523

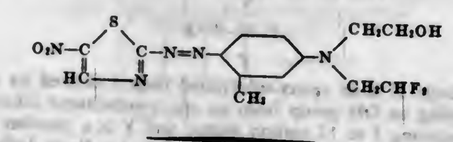
5-NITROTHIAZOLEAZO-N-FLUOROALKYL-ANILINE COMPOUNDS

Joseph B. Dickey and Edmund B. Towne, Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application August 16, 1952, Serial No. 304,837

9 Claims. (Cl. 260—158)

5. The azo compound having the formula:



2,730,524

PROCESS FOR THE OXIDATION OF CELLULOSE

Karel Johannes Nieuwenhuis, Delft, Netherlands, assignor to Nederlandse Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek ten behoeve van Nijverheid, Handel en Verkeer, The Hague, Netherlands, a corporation of Netherlands

No Drawing. Application October 25, 1951, Serial No. 253,198

Claims priority, application Netherlands October 28, 1950

14 Claims. (Cl. 260—212)

1. A process of oxidizing cellulose, comprising the steps of treating a cellulose-containing material with nitric acid in the presence of a reducing agent adapted to react with said nitric acid to produce a nitrogen oxide and being free of nitrite groups, thereby causing oxidation of the cellulose by the formed nitrogen oxide; and recovering a macromolecular oxidized cellulose having a high number of carboxyl groups per monose unit.

2,730,525

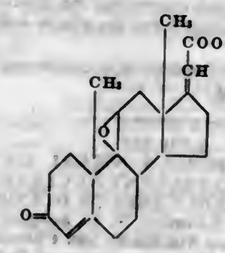
9:11-OXIDO STEROIDS

John A. Hogg, Kalamazoo Township, Kalamazoo County, Philip F. Beal, Portage Township, Kalamazoo County, and Alan H. Nathan and Frank H. Lincoln, Jr., Kalamazoo Township, Kalamazoo County, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application December 17, 1954, Serial No. 476,058

3 Claims. (Cl. 260—239.55)

1. Lower-alkyl 3-keto-9:11-β-oxido-4,17(20)-pregnadiene-21-oate having the formula:



2,730,526

PREPARATION OF 2-BENZOTHIAZOLYL SULFENE MORPHOLIDE

Robert C. Kinstler, Dunellen, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application May 21, 1951, Serial No. 227,510

3 Claims. (Cl. 260—247.1)

1. A process of preparing 2-benzothiazolyl sulfene morpholide of high purity from free 2-mercaptobenzothiazole and N-chloromorpholine wherein free 2-mercaptobenzothiazole is reacted directly with N-chloromorpholine in an anhydrous, inert, volatile organic solvent to form 2-benzothiazolyl sulfene morpholide and by-product hydrogen chloride without forming any substantial amount of 2-benzothiazolyl disulfide, which comprises the steps of: preparing an anhydrous solution of N-chloromorpholine and morpholine in an inert, volatile, organic solvent, said morpholine compounds being in substantially equimolecular amounts; mixing 2-mercaptobenzothiazole with said solution in amount sufficient to react with the N-chloromorpholine and convert the same into 2-benzothiazolyl sulfene morpholide; maintaining the mixture at reaction temperature until the reaction is substantially complete and by-product hydrogen chloride is fixed by the morpholine and converted into insoluble morpholine hydrochloride; and recovering 2-benzothiazolyl sulfene morpholide from the reaction mixture.

2,730,527

PREPARATION OF 2-BENZOTHIAZOLYL SULFENE MORPHOLIDE

Robert Chalk Kinstler, Dunellen, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application December 12, 1952, Serial No. 325,699

4 Claims. (Cl. 260—247.1)

1. A process of preparing 2-benzothiazolyl sulfene morpholide of high purity wherein 2-benzothiazolyl disulfide is reacted directly with N-chloromorpholine and morpholine to form 2-benzothiazolyl sulfene morpholide and by-product hydrogen chloride which comprises the steps of: preparing an anhydrous solution of N-chloromorpholine and morpholine in an inert, volatile, organic solvent, the mol ratio of morpholine to N-chloromorpholine being about 2:1; mixing 2-benzothiazolyl disulfide with said solution in amount substantially equimolar to said N-chloromorpholine; maintaining the mixture at reaction temperature until the reaction is substantially complete and by-product hydrogen chloride is fixed as insoluble morpholine hydrochloride; and recovering 2-benzothiazolyl sulfene morpholide from the reaction mixture.

2,730,528

PURIFICATION OF MERCAPTOBENZOTHIAZOLE

Robert G. Weyker, Bound Brook, and Robert H. Ebel, Plainfield, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application June 18, 1953, Serial No. 362,656

8 Claims. (Cl. 260—306)

1. A process of treating crude mercaptobenzothiazole prepared by reacting aniline, carbon bisulfide and sulfur to recover substantially the entire mercaptobenzothiazole content thereof as a mercaptobenzothiazole product of selected predetermined purity without formation of and retreatment of tarry settler heels and recovered liquors which comprises: digesting said crude mercaptobenzothiazole in aqueous solution with caustic soda to dissolve substantially all solids including substantially the entire mercaptobenzothiazole content, adding to resultant liquor a material selected from the group consisting of salts of peracids, peroxides, chlorites, and hypochlorites whereby oxidation and precipitation of dissolved impurities occurs to the extent necessary to obtain a mercaptobenzothiazole product of selected predetermined purity with-

out oxidation of mercaptobenzothiazole, the amount of material added being no greater than that necessary to obtain a mercaptobenzothiazole product of said selected predetermined purity, and separating resultant mercaptobenzothiazole-free tarry precipitate.

2,730,529

SPIROCYCLIC ESTERS OF SULPHUROUS ACID AND THEIR USE AS PEST COMBATTING AGENTS

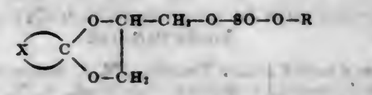
Karl Gützi and Paul Müller, Basel, Switzerland, assignors to J. R. Geigy A. G., Basel Switzerland, a Swiss firm

No Drawing. Application May 14, 1954, Serial No. 429,972

Claims priority, application Switzerland May 22, 1953

6 Claims. (Cl. 260—340.9)

1. A spirocyclic ester of sulphurous acid corresponding to the general formula:



wherein R represents a chlorosubstituted alkyl radical containing not less than 2 and not more than 3 carbon atoms, and X represents a divalent, saturated hydrocarbon radical which together with the quaternary carbon atom forms a ring with not less than five and not more than seven ring members, said hydrocarbon radical containing not less than 4 and not more than 17 carbon atoms and being substituted by a member selected from the group consisting of hydrogen, halogen and lower alkoxy groups.

2,730,530

FATTY ACID ANHYDRIDES

John L. Ohlson and Charles W. Hoerr, Chicago, Ill., assignors to Swift & Company, Chicago, Ill., a corporation of Illinois

No Drawing. Application April 22, 1952, Serial No. 283,764

10 Claims. (Cl. 260—346.8)

1. A process for the manufacture of acid anhydrides which comprises contacting a reactant having a critical temperature above 150° C. selected from the group consisting of fatty acids having at least 3 carbon atoms, dicarboxylic acids, the methyl and ethyl esters of such acids, and mixtures thereof, with an "activated" alumina catalyst at a temperature below 300° C. and between 150° C. and the critical temperature of said reactant within a zone maintained at sufficient pressure to keep the reactant in the liquid phase during its contact with said catalyst.

2,730,531

AMIDES OF EPOXYAMINES

George B. Payne, Albany, and Curtis W. Smith, Berkeley, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application March 3, 1953, Serial No. 340,162

5 Claims. (Cl. 260—348)

1. An N-epoxyalkyl amide of a polycarboxylic acid having five to thirty-six carbon atoms in the amide molecule and composed of carbon, hydrogen, carbonyl and epoxy oxygen, and amido nitrogen atoms, said epoxy oxygen being linked to adjacent carbon atoms.

2,730,532

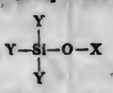
EPOXY-SUBSTITUTED ESTERS OF SILICON ACIDS AND THEIR PREPARATION

Robert W. Martin, Lafayette, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application July 20, 1953, Serial No. 369,233

15 Claims. (Cl. 260—348)

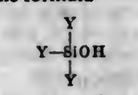
1. Epoxy-substituted compounds of the formula



wherein X is an epoxy-substituted radical derived by removing an OH group from an epoxy-substituted alkanol containing 3 to 12 carbon atoms, and Y is a member of the group consisting of epoxy-substituted radicals derived by removing the hydrogen from the —OH group of an epoxy-substituted alkanol containing 3 to 12 carbon atoms, alkyl, alkenyl, cycloalkenyl radicals containing from 1 to 8 carbon atoms, aryl, alkaryl, arylalkyl radicals which are mononuclear and containing from 6 to 12 carbon atoms, alkoxy, alkenyloxy, cycloalkenyloxy radicals containing from 1 to 8 carbon atoms, aryloxy, alkaryloxy, arylalkoxy radicals which are mononuclear and containing from 6 to 12 carbon atoms.

2. A polymer of the epoxy compounds defined in claim 1.

11. A process for preparing an ester of an epoxy-substituted alkanol containing from 3 to 12 carbon atoms and a silicon acid having the formula



wherein Y is a member of the group consisting of —OH, alkyl, alkenyl, cycloalkenyl radicals containing from 1 to 8 carbon atoms, aryl, alkaryl, arylalkyl radicals which are mononuclear and containing from 6 to 12 carbon atoms, alkoxy, alkenyloxy, cycloalkenyloxy radicals containing from 1 to 8 carbon atoms, aryloxy alkaryloxy, arylalkoxy radicals which are mononuclear and containing from 6 to 12 carbon atoms, the epoxy group in the said alcohol remaining intact in the ester molecule, which comprises reacting the epoxy-substituted alcohol with a halo-substituted silane having a formula as described above for the silicon acid wherein the OH group attached to silicon is replaced by a halogen atom in the presence of a hydrogen halide absorbing material comprising an amine at a temperature below about 30° C. and recovering the desired ester of the epoxy-substituted alcohol and the silicon acid from the reaction mixture.

12. A process as in claim 11 wherein the epoxy-substituted alcohol is glycidol.

2,730,533

TREATMENT OF POROUS NICKEL CATALYSTS WITH AMINES TO PREVENT NUCLEAR HYDROGENATION IN REDUCTION OF QUINONES

Robert R. Umhoefer, Kenmore, N. Y., assignor, by mesne assignments, to Food Machinery and Chemical Corporation, San Jose, Calif., a corporation of Delaware

No Drawing. Application March 26, 1952, Serial No. 278,739

7 Claims. (Cl. 260—369)

1. In the process of hydrogenating a quinone dissolved in a liquid organic solvent to a hydroquinone in the presence of a nickel catalyst, the method of preventing nuclear hydrogenation of the quinone but permitting reduction of the quinone to the corresponding hydroquinone which comprises adding an amine to the catalyst and then performing the hydrogenation with the catalyst and in the presence of the amine to reduce the quinone to hydroquinone without nuclear hydrogenation.

2,730,534

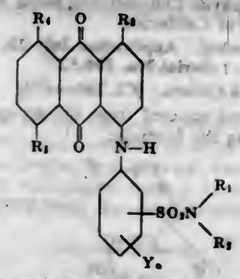
ANTHRAQUINONE DYESTUFFS

Milton L. Hoefle, David I. Randall and Edgar E. Renfrew, Easton, Pa., assignors to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

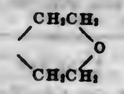
No Drawing. Application December 31, 1952, Serial No. 329,106

6 Claims. (Cl. 260—373)

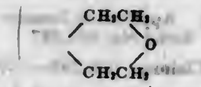
1. A compound of the formula



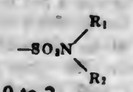
wherein R_3, R_4 and R_5 are selected from the group consisting of hydrogen, hydroxy, amino, alkylamino, arylamino and acylamino, R_1 is selected from the group consisting of alkyl, hydroxyalkyl, hydroxyalkoxyalkyl, hydroxypolyalkoxyalkyl, cyanoalkyl and, when taken together



R_2 is selected from the group consisting of hydrogen, alkyl, hydroxy alkyl, hydroxyalkoxyalkyl, hydroxypolyalkoxyalkyl, cyanoalkyl and, when taken together



Y is selected from the group consisting of H, Cl, NO_2



and n has a value of 0 to 2.

2,730,535

PRODUCTION OF SUBSTITUTED QUINONES

Alexander Gaydasch, Broadview, and William K. T. Gleim, Orland Park, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application September 25, 1952, Serial No. 311,553

14 Claims. (Cl. 260—396)

1. A process for producing a polyalkyl p-benzoquinone which comprises reacting a polyalkyl phenol having an unsubstituted carbon atom in the para position to the hydroxyl group with an oxidizing agent comprising an alkali chlorate and sulfuric acid in the presence of a vanadium pentoxide catalyst.

2,730,536

RECOVERY OF ERGOSTEROL

Robert J. Feeney, New York, N. Y., assignor to Chas. Pfizer & Co., Inc., Brooklyn, N. Y., a corporation of Delaware

No Drawing. Application May 1, 1952, Serial No. 285,556

7 Claims. (Cl. 260—397.25)

1. A process for the recovery of ergosterol, which comprises extracting a fungus fermentation mycelium with a partially water-miscible lower aliphatic alcohol at an elevated temperature, concentrating the alcoholic extract in the presence of water, adding sufficient water to form distinct organic and aqueous phases, heating the mixture with caustic alkali to saponify the conjugated sterols present, separating the organic solvent phase, concentrating it to a dry solvent concentrate, filtering out the impurities thereby precipitated, saturating the dry filtrate with water, and separating the ergosterol which thereupon precipitates from the wet solvent.

2,730,537

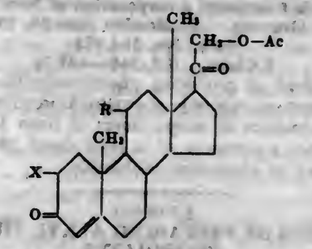
Δ^4-3-KETO-2-HALO PREGNENES AND PROCESS

Alan H. Nathan and John A. Hogg, Kalamazoo Township, Kalamazoo County, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application October 1, 1954, Serial No. 459,872

20 Claims. (Cl. 260—397.45)

1. 2-halosteroids represented by the following formula:



wherein R is selected from the group consisting of hydrogen, α-hydroxy, β-hydroxy, ketonic oxygen and Ac—O—, wherein Ac in each instance represents the acyl radical of a hydrocarbon carboxylic acid containing from one to eight carbon atoms, inclusive, and wherein X is a halogen having an atomic weight from 35 to eighty, inclusive.

2,730,538

SPERM OIL FRACTIONATION

Robert I. Brabets, Hazelcrest, and Robert J. Hlavacek, Berwyn, Ill., and Earle Fritz, East Chicago, Ind., assignors to Swift & Company, Chicago, Ill., a corporation of Illinois

Application December 15, 1952, Serial No. 326,062

4 Claims. (Cl. 260—409)

2. A method for the production of a liquid wax product which comprises: contacting an oil selected from the group consisting of crude sperm oil, tout oil and hydrogenated tout oil in a continuous, countercurrent fractionating zone with a liquefied, normally-gaseous hydrocarbon, the hydrocarbon to oil ratio ranging from 20:1 to 25:1; maintaining said zone at a temperature of from 205° F. to 215° F. and at a pressure of from 600 to 700 p. s. i.; and separating out an overhead fraction from said zone, said fraction having a high content of the wax ester component of said oil.

2,730,539

SOAP MANUFACTURE

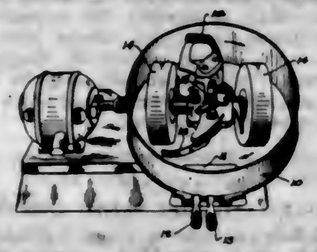
Purdy Bradford, Palos Park, Ill., assignor to Swift & Company, Chicago, Ill., a corporation of Illinois

Application May 21, 1951, Serial No. 227,328

4 Claims. (Cl. 260—417)

3. A method for the manufacture of low moisture content soap, comprising adding to a mixture of saponifiable matter, containing only a small percentage of free fatty acids and solid alkali the amount of water desired in the final product, saponifying said mixture at a temperature below the boiling point of water by the application thereto

of an intensive mechanical shearing action while applying high mechanical pressures to the mixture, and recovering



as the product of such saponification a soap of the desired moisture content.

2,730,540

PREPARATION OF PHENYL ALKYLCHLOROSILANES

Robert O. Sauer, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

No Drawing. Application June 26, 1953, Serial No. 364,471
1 Claim. (Cl. 260—448.2)

The method of producing phenylmethyldichlorosilane which comprises reacting phenyltrichlorosilane and trimethylchlorosilane at temperatures of from 300 to 500° C. and under a presssure of at least about 500 p. s. i. in the presence of aluminum trichloride.

2,730,541

PROCESS OF PREPARING ALKYL THIONOPHOSPHATES

William T. Dye, Jr., Dayton, Ohio, assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application May 10, 1952, Serial No. 287,251
12 Claims. (Cl. 260—461)

1. The process which comprises contacting phosphorus trichloride with a primary, fatty alcohol of from 1 to 5 carbon atoms in the presence of a heated solution of sulfur in an inert diluent which is a solvent for said sulfur and substantially a non-solvent for hydrogen chloride and recovering from the resulting reaction product a trialkyl thionophosphate in which each alkyl radical has from 1 to 5 carbon atoms.

2,730,542

PROCESS FOR PREPARING ETHANOL-2-AMINOPHOSPHORIC ACID

Vittorio Emiliano Ferrari and Giorgio Ferrari, Pavia, Italy

No Drawing. Application May 20, 1952, Serial No. 288,948
Claims priority, application Italy June 25, 1951
1 Claim. (Cl. 260—461)

A process for producing ethanol-2-aminophosphoric acid, comprising the steps of mixing monoethanolamine and orthophosphoric acid in aqueous solution at a temperature of not more than 10° C., then heating the mixture under vacuum at 185° C. for about 3 hours, and crystallizing the ethanol-2-aminophosphoric acid thus obtained.

2,730,543

FLUORINATED NITRILES

John L. Rendall, St. Paul, and Wilbur Pearlson, Bald Eagle, White Bear Township, Minn., assignors to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a corporation of Delaware

No Drawing. Application May 20, 1950, Serial No. 163,331
1 Claim. (Cl. 260—465.7)

As a new product, the chemical compound

$$R_fCF_2CR'_fHCN$$

where R_f and R'_f are selected from the group consisting of perfluoroalkyl radicals and fluorine.

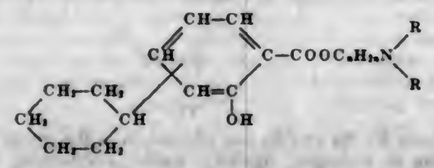
2,730,544

ALKYLAMINOALKYL ESTERS OF HYDROXYCYCLOHEXYLBENZOIC ACID

Melville Sahyun and John A. Faust, Santa Barbara, Calif., assignors to Sahyun Laboratories, Santa Barbara, Calif., a corporation of California

No Drawing. Application July 23, 1952, Serial No. 300,527
6 Claims. (Cl. 260—473)

1. A compound selected from the group consisting of (*a*) esters having the formula:



wherein R is a lower-alkyl group, *n* is an integer from the group consisting of 2, 3 and 4, and wherein the cyclohexyl group is attached to the 3, 4 or 5 position of the phenyl ring, and (*b*) acid addition salts thereof.

2,730,545

RECOVERY OF GLUTAMIC ACID

Forest A. Hoglan, Glenview, Ill., assignor to International Minerals & Chemical Corporation, a corporation of New York

No Drawing. Application January 28, 1954, Serial No. 406,887
11 Claims. (Cl. 260—527)

1. In a process for the recovery of glutamic acid from thin Steffen's filtrate having a pH between about 9.5 and about 10.5, wherein the Steffen's filtrate is partially hydrolyzed by storing at an elevated temperature for at least about 24 hours, the improvements comprising directly concentrating said partially hydrolyzed filtrate to a dry substance content of between about 55% and about 80%, and crystallizing and sepaarting glutamic acid from the resulting hydrolysate.

2,730,546

PROCESS FOR THE PRODUCTION OF ALIPHATIC ACID ANHYDRIDES BY CARBONYLATION OF ESTERS

Walter Reppe, Ludwigshafen (Rhine), and Herbert Friederich, Worms, Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Rheinland-Pfalz, Germany

No Drawing. Application May 1, 1953, Serial No. 352,594
Claims priority, application Germany May 7, 1952
19 Claims. (Cl. 260—549)

1. In the production of aliphatic oxygen compounds by the action of carbon monoxide on esters of lower saturated fatty acids with saturated lower aliphatic alcohols at superatmospheric temperatures and under superatmospheric pressure in the presence of cobalt compounds, the step which comprises using as the catalyst a complex compound of a cobalt halide wherein the halogen is selected from the group consisting of bromine and iodine with an organic halide selected from the group consisting of quaternary ammonium and phosphonium bromides, iodides and bromide-iodides.

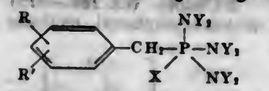
2,730,547

BENZYLTRIS (DIALKYLAMINO) PHOSPHONIUM HALIDES

William T. Dye, Jr., Decatur, Ala., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application February 1, 1955, Serial No. 485,585
4 Claims. (Cl. 260—551)

1. Phosphonium halides having the general formula



in which R and R' are selected from the class consisting of hydrogen, chlorine, bromine and alkyl radicals of from 1 to 18 carbon atoms, Y is selected from the class consisting of alkyl radicals of from 1 to 4 carbon atoms, and X is selected from the class consisting of chlorine and bromine.

2,730,548

METHOD FOR PRODUCING POLYCYCLIC HYDROCARBONS AND DERIVATIVES THEREOF

Henry Bluestone, Cleveland Heights, Ohio, Samuel B. Soloway, Denver, Colo., Julius Hyman, Coral Gables, Fla., and Rex E. Lidov, Fullerton, Calif., assignors, by mesne assignments, to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application July 20, 1951, Serial No. 237,844
14 Claims. (Cl. 260—586)

1. A process for preparing compounds containing the nor-tricyclene nucleus which in planar structural representation is



which comprises reacting bicyclo-(2.2.1)-heptadiene with a material that adds to double bonds and is selected from the group consisting of halogens, hydrogen halides, carboxylic acids, alcohols, phenols, aromatic hydrocarbons and carboxylic acid halides.

2,730,549

PREPARATION OF A POLYENE ALDEHYDE

Otto Isler, Marc Montavon, and Rudolf Rüegg, Basel, and Paul Zeller, Neuallschwil, Switzerland, assignors to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application June 10, 1954, Serial No. 435,936
Claims priority, application Switzerland June 29, 1953
13 Claims. (Cl. 260—598)

1. A process which comprises reacting 2-methyl-4-(2,6,6-trimethyl-1-cyclohexenyl)-2-buten-1-al with a tri-(lower alkyl) ester of a lower orthoalkanoic acid in the presence of an acidic condensation agent to produce 1,1-di(lower alkoxy) - 2 - methyl - 4 - (2,6,6 - trimethyl - 1-cyclohexenyl)-2-butene, reacting the latter with vinyl lower alkyl ether in the presence of an acidic condensation agent to produce 1,1,3-tri(lower alkoxy)-4-methyl-6-(2,6,6-trimethyl-1-cyclohexenyl)-4-hexene, hydrolyzing the latter in aqeuous acid medium to produce 4-methyl-6-(2,6,6-trimethyl-1-cyclohexenyl)-2,4-hexadien-1-al, reacting the latter with a tri(lower alkyl) ester of a lower orthoalkanoic acid in the presence of an acidic condensation agent to produce 1,1-di(lower alkoxy)-4-methyl-6-(2,6,6-trimethyl-1-cyclohexenyl)-2,4-hexadiene, reacting the latter with propenyl lower alkyl ether in the presence of an acidic condensation agent to produce 1,1,3-tri-(lower alkoxy) - 2,6 - dimethyl - 8 - (2,6,6 - trimethyl - 1-cyclohexenyl)-4,6-octadiene, and hydrolyzing the latter in aqueous acid medium to produce 2,6-dimethyl - 8 - (2,6,6-trimethyl-1-cyclohexenyl)-2,4,6-octatrien-1-al.

2,730,550

PRODUCTION AND STABILIZATION OF AROMATIC HYDROPEROXIDES

Jan Pieter Fortuin and Hein Israel Waterman, Delft, Netherlands, assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application March 4, 1952, Serial No. 274,842
Claims priority, application Netherlands July 5, 1951
18 Claims. (Cl. 260—610)

1. In a process for the production of an α,α-dialkyl aralkyl hydroperoxide-containing reaction mixture by the reaction of an α,α-dialkyl aralkyl hydrocarbon with an oxygen-containing gas in a reaction zone, the improvement which comprises employing as said reaction zone a zone wherein all wall-surfaces of said reaction zone coming into direct contact with said reaction mixture consist essentially of a metal selected from the group consisting of copper, silver, gold and alloys thereof, thereby reacting said α,α-dialkyl aralkyl hydrocarbon with said oxygen-containing gas in the absence of any substantial decomposition of α,α-dialkyl aralkyl hydroperoxide in said reaction zone.

12. The method of suppressing the substantial decomposition of α,α-(dialkyl)aralkyl hydroperoxide while subjected to conditions of its production, processing, transportation and storage which comprises subjecting said α,α-(dialkyl)aralkyl hydroperoxide to said conditions while enclosed in a confined space wherein all surfaces of the walls defining said confined space coming into direct contact with said α,α-(dialkyl)aralkyl hydroperoxide consist essentially of a metal of the group consisting of copper, silver, gold and alloys thereof.

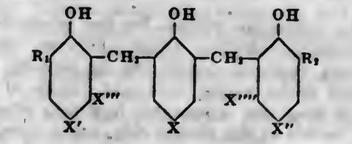
2,730,551

HALOGENATED TRIS-PHENOLS

David J. Beaver, Richmond Heights, Roland S. Shumard, Brentwood, and Paul J. Stoffel, Florissant, Mo., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application March 24, 1952, Serial No. 278,316
9 Claims. (Cl. 260—619)

2. A halogenated tris-phenol of the formula



where R_1 and R_2 are alkyl radicals containing not more than 4 carbon atoms, and where X, X', X'', X''' and X'''' are halogen atoms having an atomic weight greater than 19.00 but less than 80.

2,730,552

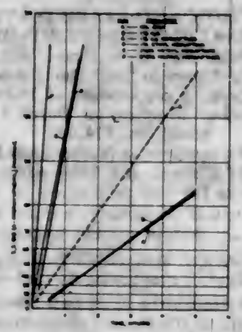
PRODUCTION OF BIS DI-(HYDROXYARYL) SUBSTITUTED COMPOUNDS

George T. Williamson, Oakland, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

Application August 25, 1952, Serial No. 306,172
9 Claims. (Cl. 260—619)

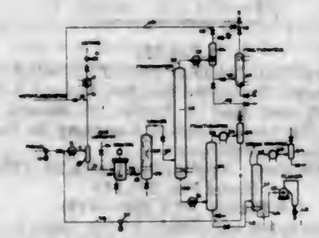
1. The continuous process for the production of 2,2-bis(4-hydroxyphenyl) propane which comprises, introducing as a continuous stream a mixture comprising phenol, dimethyl ketone, an acid catalyst consisting essentially of a strong mineral acid and a normally gaseous promoter consisting essentially of methyl mercaptan into

a reaction zone maintained at a temperature in the range of from about 60° to about 65° C., with a contact time of from about 15 minutes to about 2 hours, said mixture containing a mol ratio of said phenol to said ketone in the range of from about 5.5:1 to about 15:1, thereby



reacting phenol with said ketone with the formation of reaction products comprising 2,2-bis(4-hydroxyphenyl) propane in said reaction zone, and continuously withdrawing reaction products comprising 2,2-bis(4-hydroxyphenyl) propane from said reaction zone.

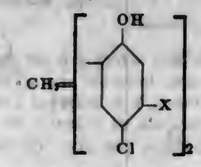
2,730,553
PRODUCTION OF BIS DI-(HYDROXYARYL) SUBSTITUTED COMPOUNDS
George T. Williamson, Oakland, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application August 25, 1952, Serial No. 306,173
5 Claims. (Cl. 260—619)



1. The continuous process for the production of bis-(hydroxyphenyl)alkanes, which comprises continuously introducing reactants comprising an aliphatic ketone, a substantial molar excess over said ketone of a phenol having at least one replaceable hydrogen attached to a nuclear carbon of the phenol ring, and a strong mineral acid catalyst, into a reaction zone maintained at a temperature of from about 20° to about 110° C., maintaining said reactants in the liquid phase in said reaction zone for a period of time sufficiently long to effect the interaction of at least a part but not all of said ketone with said phenol in said reaction zone, thereby forming an incompletely reacted reaction mixture comprising bis-(hydroxyphenyl)alkane, and unreacted ketone and phenol in said reaction zone, continuously withdrawing said incompletely reacted reaction mixture from said reaction zone, continuously passing said withdrawn mixture as the sole reactant feed into a soaking zone maintained at a temperature of from about 20° to about 110° C., maintaining said mixture substantially in the liquid phase in said soaking zone in a state of continuous agitation until substantial completion of the reaction at the prevailing conditions is attained, and continuously withdrawing reaction mixture comprising bis-(hydroxyphenyl)alkane from said soaking zone.

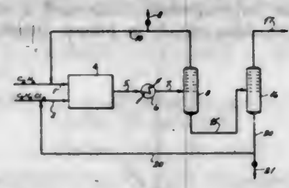
2,730,554
GERMICIDAL DIPHENYL METHANE COMPOUNDS
Guido Schetty, Walter Stammbach and Ernst Model, Basel, Switzerland, assignors to J. R. Geigy A. G., Basel, Switzerland, a Swiss firm
No Drawing. Application December 23, 1952, Serial No. 327,669
Claims priority, application Switzerland December 29, 1951
3 Claims. (Cl. 260—619)

1. A 2.2'-dihydroxydiphenyl methane compound of the formula



wherein X represents a member selected from the group consisting of chlorine and the trifluoromethyl group.

2,730,555
CATALYST AND PROCESS FOR PREPARATION OF VINYL CHLORIDE
Ludwig Rosenstein, San Francisco, Calif., assignor to Texaco Development Corporation, New York, N. Y., a corporation of Delaware
Application August 7, 1951, Serial No. 240,758
1 Claim. (Cl. 260—656)

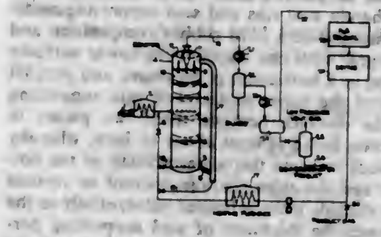


A process for preparing vinyl chloride which comprises: passing dichloroethane and acetylene, in a mol ratio of acetylene to dichloroethane between 1.0 and 1.8, into a reaction zone containing a catalyst of about 85% mercurous chloride and about 15% potassium chloride at rate sufficient to give a contact time between 20 and 50 seconds; effecting reaction between acetylene and dichoroethane in said reaction zone to produce vinyl chloride at a temperature between 200° and 450° F. and at a pressure less than 4 atmospheres; removing from said reaction zone a vinyl chloride-containing product; separating said product into a gaseous phase and a liquid phase; recycling a major portion of said gaseous phase to the reaction zone; distilling said liquid phase to obtain a liquid residual fraction containing catalyst, dichloroethane, polyacetylenes, and chlorine-containing polyacetylenes; and recycling at least a major portion of said residual fraction to the reaction zone.

2,730,556
METHOD FOR EFFECTING ENDOTHERMIC DEHYDROGENATION REACTIONS
George E. Lledholm, Berkeley, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application March 13, 1953, Serial No. 342,139
11 Claims. (Cl. 260—668)

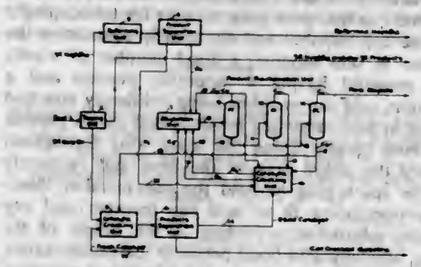
1. In a catalytic endothermic vapor phase dehydrogenation process the improved method of contacting the catalyst with the reactant to be dehydrogenated which comprises passing a powdered dehydrogenation catalyst in the form of a plurality of semi-isolated fluidized beds downward through an elongated reaction vessel, introducing preheated reactant vapors into the reaction vessel near

the mid-height thereof, withdrawing reacted vapors in admixture with recycle gas consisting mainly of hydrogen from the top of said reaction vessel, separating from said withdrawn mixture a recycle gas consisting largely of hydrogen, heating said recycle gas to a temperature higher than the average reaction temperature, introducing the larger part of the heated recycle gas into the said reaction vessel near the bottom thereof below the point of introduction of said feed whereby the catalyst in the lower



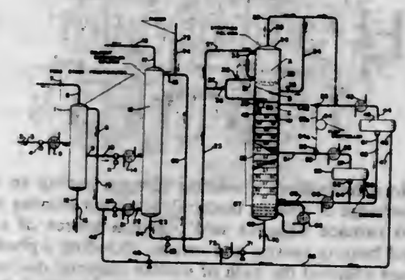
zones of said vessel is preheated and stripped of reactant vapors and the thereby cooled recycled gas passes upward and mixes with the feed in the upper zones of the said vessel, and utilizing a separate minor portion of heated recycle gas to separately transport the heated catalyst from near the bottom of said reaction vessel to near the top of said reaction vessel, whereby the temperature near the point of introduction of said feed is below the temperature in said reaction vessel near the top and the bottom thereof.

2,730,557
PRODUCTION OF ALKYL AROMATIC HYDROCARBONS
Nicolaas Max and Ype Schaafsma, Amsterdam, Netherlands, assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application March 2, 1954, Serial No. 413,516
Claims priority, application Great Britain March 6, 1953
2 Claims. (Cl. 260—671)



1. Process for the conversion of hydrocarbons in part to para-dialkyl aromatic hydrocarbons which comprises in combination the steps of catalytically cracking alkylate obtained as hereinafter defined, separating from the products of said cracking a fraction consisting largely of cumene with minor amounts of benzene, passing the said fraction to an alkylation zone wherein it is alkylated with propylene, separating from the resulting alkylate by fractional distillation a fraction consisting largely of para-diisopropyl benzene, passing to the said catalytic cracking a fraction consisting largely of ortho- and meta-diisopropyl benzene and catalytically cracking the same in the presence of at least 50% by volume diluent gas at a temperaperature between 300° C. and 425° C. under conditions whereby very little conversion to benzene, ethylene and butylenes is obtained, passing the cracked product to said alkylation zone as aforesaid, and retaining the concentration of alkyl aromatics having other than C_3 alkyl groups sufficiently low in the alkylation product to allow separation of said para-diisopropyl benzene by fractional distillation by withdrawing in addition to and separate from said para-diisopropyl benzene fraction a regulated portion of the alkylate boiling above said para-diisopropyl benzene fraction.

2,730,558
LIQUID SOLVENT EXTRACTION PROCESS
Clarence G. Gerhold, Riverside, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware
Application August 20, 1952, Serial No. 305,391
7 Claims. (Cl. 260—674)



1. A combination solvent extraction-rich solvent stripping process which comprises contacting an oxygen-containing organic solvent under solvent extraction conditions with a feed stock mixture comprising organic compounds of class A and of class B, said class A compound being relatively more soluble in said solvent than said class B compound, forming thereby a raffinate comprising said class B compound and an extract comprising said oxygen-containing organic solvent, said class A compound and a small proportion of class B raffinate compound, thereafter contacting said extract with a volatile class B compound of lower boiling point than said solvent and the class B compound in said feed stock mixture thereby effecting a displacement of the latter class B compound from said extract, subjecting the resulting extract to distillation, separately withdrawing from said distillation a light vapor fraction containing lower boiling class B compound, an intermediate fraction comprising essentially said class A compound and a heavy fraction comprising essentially said solvent, and maintaining the rate of withdrawal of said light vapor fraction substantially constant by instantaneously varying the rate of withdrawal of said intermediate fraction in direct response to change in the rate of withdrawal of said light vapor fraction.

2,730,559
PREPARATION OF DIALLYLIC COMPOUNDS
Lee M. Porter, Concord, and Frederick F. Rust, Orinda, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
No Drawing. Application April 27, 1953, Serial No. 351,484
14 Claims. (Cl. 260—680)

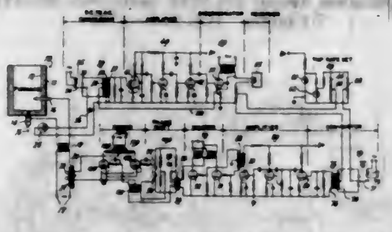
5. A process for preparing a diallylic compound which comprises heating a polychlorinated alkane which is incapable of splitting out hydrogen halide under the conditions of the process to a pyrolyzing temperature between 400° C. and 600° C. for a short period in the presence of a beta,gamma-monoethylenically unsaturated aliphatic hydrocarbon, said polychlorinated compound and unsaturated aliphatic hydrocarbon being combined in a mole ratio of 1:4 to 1:12, and then recovering the desired diallylic compound from the resulting mixture.

ELECTRICAL

2,730,560
TAPPING CONTROL SYSTEM FOR MELTING FURNACES

William T. Hage, Alliance, Ohio, assignor to The Babcock & Wilcox Company, New York, N. Y., a corporation of New Jersey

Application August 28, 1952, Serial No. 306,772
11 Claims. (Cl. 13—33)

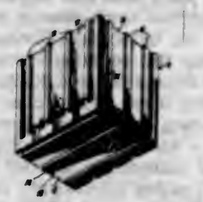


1. In combination, a melting furnace having an outlet for discharge of molten material; auxiliary heating means in said furnace adjacent said outlet; a source of energy for said heating means; and means, including a phototube disposed adjacent the path of molten material discharging from the furnace, controlling the supply of energy to said auxiliary heating means in inverse relation to the luminous intensity of such discharging molten material.

2,730,561
SUBMARINE BATTERY JAR SUPPORT CONSTRUCTION

Harold B. Cuff, Little Falls, Herman A. Swoboda, Montclair, and Albert J. Lorenz, Clifton, N. J., assignors to American Hard Rubber Company, New York, N. Y., a corporation of New York

Application May 12, 1949, Serial No. 92,792
1 Claim. (Cl. 136—181)



Supporting means for the jar of a storage battery of the type used in submarines, wherein the battery and its supporting means is adapted to rest upon a supporting surface, wherein said jar has a bottom and substantially vertical side walls, which are adapted to support an electrode structure suspended from the upper parts of said side walls, and wherein the supporting means for the battery jar is adapted for enhancing its resistance to impact shocks, said supporting means comprising supporting portions disposed beneath and in substantial vertical alignment with each of said side walls about the periphery of the bottom of the jar, a plurality of spaced supporting members for supporting a part of the bottom of said battery jar inwardly of the side walls thereof, each of said supporting portions extending a substantial distance vertically downwardly further than any of said supporting members, and each of said supporting portions and said supporting members being composed of material having at least about as high a resistance to compression as the material of which the side walls of said jar are composed, whereby to avoid failure of said battery jar due to torsional and shearing stresses effective on the battery jar adjacent to the junctures of the bottom and side walls, wherein said supporting portions are formed as the sides of a rectangular rigid frame having an outside contour substantially the same as that of the bottom of the battery jar, wherein said supporting members are a plurality of parallel ribs, wherein said ribs and said supporting members are all composed of a hard rubber composition and are formed integral with one another, the lower surfaces of said ribs lying in a horizontal plane above and parallel with the plane of the lower surfaces of said supporting portions and the distance between these two planes in a vertical direction being at least about ⅛ inch, whereby relative movement between the center portion of the bottom of the jar and the edge portions thereof in vertical alignment with the side walls is limited substantially to the difference between the thickness of said supporting portions and said ribs, and is maintained within the elastic limit of the material forming the bottom of the battery jar.

2,730,562
WATERPROOF SPARK PLUG SHIELD

Carleton S. Marden, Waltham, Mass., assignor to National Products Corporation, Boston, Mass., a corporation of Massachusetts

Application January 11, 1951, Serial No. 205,561
6 Claims. (Cl. 174—35)

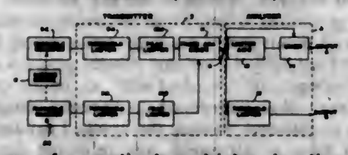


1. For shielding a spark plug mounted in a support, a device comprising a metallic cap member for electromagnetically shielding the spark plug, cup means adapted to be fixed relatively to the spark plug support for telescopingly receiving the cap member and electrically connecting the cap member to said support, a hood member of elastic insulating material having a mounting portion and a sleeve portion, said cap member being resiliently attached to the hood at said mounting portion, said sleeve portion having a bore closely fitting the spark plug throughout substantially the entire area of the bore and resiliently gripping the spark plug to hold the cap member thereabout, the telescoping fit of said cap member and cup means being adjustable according to the height of the spark plug, whereby said hood prevents the accumulation of moisture at said post and said cap member is mechanically attached to the spark plug with a vibration-damping elastic connection.

2,730,563
SYSTEM FOR MULTIPLEXING FACSIMILE

Herbert Karsh, Falls Church, Va., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy

Application December 21, 1951, Serial No. 262,813
12 Claims. (Cl. 178—5)



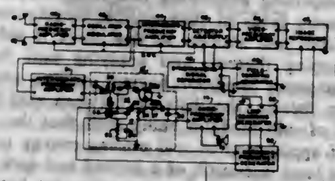
1. A system for amplitude multiplex signaling comprising means for simultaneously combining a plurality of

continuous signals into a single resultant signal of varying amplitude and threshold and amplitude limiting means for analyzing said signal into separate signals in accordance with the amplitude of each of the original separate signals.

2,730,564
FREQUENCY-MODULATION DETECTION SYSTEM

Bernard D. Loughlin, Lynbrook, N. Y., assignor to Hazeltine Research, Inc., Chicago, Ill., a corporation of Illinois

Application July 11, 1951, Serial No. 236,153
8 Claims. (Cl. 178—5.8)

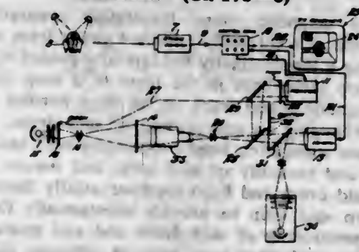


8. A system for deriving the modulation components of a frequency-modulated wave signal in a television apparatus comprising: means for supplying said frequency-modulated wave signal; means comprising an impedance network including in series an impedance circuit and a unidirectionally conductive device coupled to said supply circuit for causing the impedance of said network to vary with the frequency of said frequency-modulated signal; means including a line-frequency generator for developing scanning wave signals; means including a harmonic amplifier coupled to said generator for developing an unmodulated other wave signal having a frequency in the range of 60 to 100 kilocycles; means including a load circuit coupled to said harmonic amplifier and responsive to said other wave signal and effectively coupled in shunt with said network for utilizing said variations in the impedance of said network to effect amplitude modulation of said other wave signal in said load circuit corresponding to said frequency modulation of said supplied signal; and means including an amplitude detector coupled to said load circuit for deriving the modulation components of said amplitude-modulated other wave signal.

2,730,565
PRODUCTION OF COMPOSITE LIVE ACTION AND SCENIC EFFECTS FOR TELEVISION

Freeman H. Owens, New York, N. Y.

Application March 21, 1951, Serial No. 216,792
3 Claims. (Cl. 178—6)

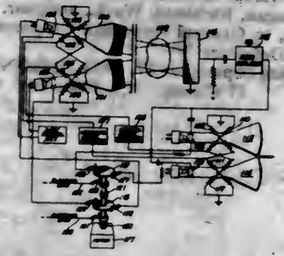


1. Apparatus for producing composite television pictures and comprising a studio camera for televising live action, a projection camera for televising scenic effects to go with the live action, means for illuminating and projecting only that portion of the picture of a scene which will go with the live action without obscuring the same, into said projection camera and means for effecting registration and combination of the action televised by the studio camera and that portion of the scenic subject matter televised by the projection camera, including a mask for the pictured subject matter corresponding generally to the included area televised by the studio camera, a monitor for the studio camera and means for projecting the scenic subject televised by the projection camera on to said monitor, and a mask having an outline of the included live action area for sighting the televised scenic subject matter over the live action monitor.

2,730,566
METHOD AND APPARATUS FOR X-RAY FLUOROSCOPY

John B. Bartow, Blue Bell, and Grey D. MacLaughlin, Jr., Perkiomenville, Pa., assignors to Bartow Beacons, Inc., Blue Bell, Pa., a corporation of Pennsylvania

Application December 27, 1949, Serial No. 135,071
15 Claims. (Cl. 178—6.5)

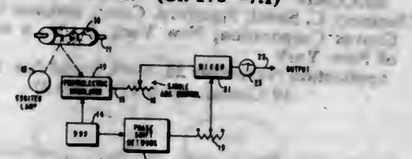


1. In a system of stereoscopic X-ray fluoroscopy; means for alternately effecting X-ray scannings, at two different angles, of a space in which an object may be placed for examination; a device arranged to receive X-rays emanating from said space and adapted to effect translation of received X-rays into an electrical signal; a pair of cathode ray receiving tubes arranged for observation of their respective screen images by the eyes of an observer; means for utilizing said signal to control the intensity of the electron beams of said tubes; and means for effecting alternate electron scannings in said tubes in synchronism with the alternate X-ray scannings of said space.

2,730,567
FACSIMILE SCANNING METHOD AND APPARATUS FOR PREDETERMINED SIGNAL OUTPUT AND CONTRAST

Kenneth R. McConnell, Red Bank, N. J., assignor to Times Facsimile Corporation, New York, N. Y., a corporation of New York

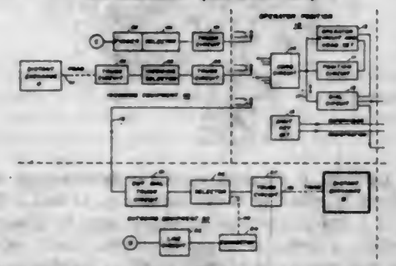
Application June 15, 1950, Serial No. 168,295
11 Claims. (Cl. 178—7.1)



1. In a facsimile scanning system for generating signals of different amplitudes representing different copy shadings with a predetermined maximum black-signal output and a predetermined amplitude ratio between black and white signals irrespective of the density of the lightest tone of the copy, incorporating a single adjustable control, in combination, means including a light source for illuminating the copy, means including a photocell used as a modulator for scanning successive elemental areas of the copy, an output circuit, a source of carrier current, means including said photocell and carrier current source to generate a first electromotive force in said output circuit varying in amplitude in accordance with the variations in light striking the photocell, means for deriving a second electromotive force from said carrier current, means

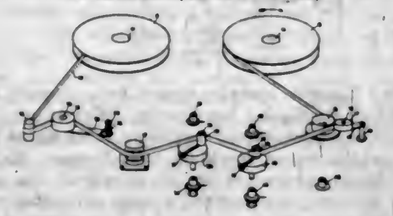
whereby said second electromotive force is of constant amplitude and differs in phase from the first electromotive force, means for combining said second electromotive force with the first electromotive force in the output circuit so that said first electromotive force subtracts from said second electromotive force, and a single adjustable control means for varying the level of said first electromotive force to produce a combined minimum output signal of constant predetermined amplitude for any given white density of the copies being transmitted, allowing copies of varying white densities to be transmitted with the same signal contrast solely in response to the adjustment of said single control means.

2,730,568
STARTING NEXT IDLE REGISTER
Leon H. Reagan, Richland, Wash., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application September 27, 1952, Serial No. 311,845
27 Claims. (Cl. 179—18)



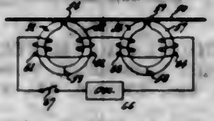
1. In a register sender, a pluarlity of register circuits each of which is operative to store a digit indication, said indication being the digits of a directory number, the number of register circuits being different from the number of digits in said directory number, a sender for transmitting a plurality of trains of digit impulses each of which corresponds to a digit stored in one of said registers, and means included in each register to assign the next idle register in a closed circle operation regardless of any particular starting point for storing the next succeeding digit indication, regardless of the position of said succeeding digit indication in said directory number.

2,730,569
RECORD SCRAMBLING AND UNSCRAMBLING MEANS FOR SYSTEMS USING MAGNETIC RECORD
Chauncey C. Street, Stamford, Conn., assignor to Conger-Groves Corporation, New York, N. Y., a corporation of New York
Application November 25, 1949, Serial No. 129,256
20 Claims. (Cl. 179—100.2)



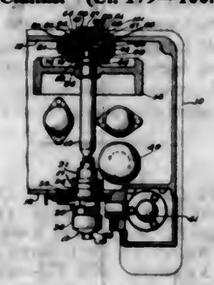
1. A magnetic recorder comprising a driving mechanism for moving a record at substantially a constant speed past a sound head, at least one reciprocating element positioned between said sound head and said constant speed drive, said element being adapted continually and periodically to increase and decrease the record transit past said sound head, said element being operatively coupled to said constant speed drive.

2,730,570
MAGNETIC SOUND RECORD ERASING METHOD AND HEADS THEREFOR
Michael Rettinger, Encino, Calif., assignor to Radio Corporation of America, a corporation of Delaware
Application August 30, 1950, Serial No. 182,316
6 Claims. (Cl. 179—100.2)



1. The method of applying erasing energy to a magnetic record comprising generating two independent and distinct magnetic fields of superaudible erasing energy at a distance from one another so that there is substantially no overlapping thereof, and applying said fields to a moving magnetic medium having varying amounts of magnetism therein, the distance between said fields and the speed of said medium being such that the difference in time of application of said erasing energy to said medium is at least one-tenth of a second and each magnetic field is substantially zero at the midpoint between said fields, the frequency of said superaudible erasing energy and the speed of said medium to which said energy is being applied being such that at least fifteen magnetic reversals are produced in every section of said medium at each point of maximum application of said fields and over 2000 reversals being produced of diminishing amplitude from maximum to substantially zero amplitude between the application of said first field and the application of said second field.

2,730,571
MAGNETIC SOUND TRANSLATING APPARATUS
Frank J. Schoessler, Chicago, Ill., assignor to Bell & Howell Company, Chicago, Ill., a corporation of Illinois
Application September 15, 1954, Serial No. 456,095
12 Claims. (Cl. 179—100.2)



1. In a magnetic sound translating apparatus, the combination of a rotatably mounted guide drum adapted for guiding a longitudinally fed laterally guided magnetic record strip thereabout in the form of a loop and having a magnetic sound track on an edge portion of said strip overhanging an end portion of said drum, a magnetic sound translating head cooperative with said sound track at and inwardly of said loop, and means for adjusting said drum and head together axially thereof and relative to said strip to provide substantially the same relative positioning of said drum end and sound translating head with the inner edge of different widths of sound tracks.

2,730,572
PHONOGRAPH TRANSDUCER
Lloyd J. Andres, Chicago, Ill., assignor to Permo, Incorporated, Chicago, Ill., a corporation
Application August 8, 1952, Serial No. 303,294
4 Claims. (Cl. 179—100.41)

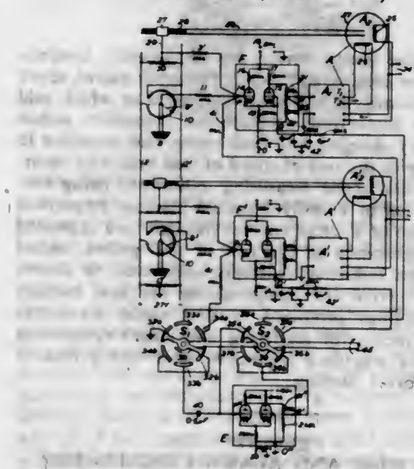
1. A magnetic phonograph transducer for energizing a sound circuit comprising a body, a pair of pole pieces in

spaced relation in said body, each of said pole pieces having an integral pair of poles in parallel spaced relation, the two said pair of pole pieces spaced from each other forming two air gaps, a permanent magnet bridging said pole pieces for normally providing two zones of magnetic flux across said air gaps, a coil of predetermined inductance symmetrically positioned within a portion of said pole pieces with its axis substantially centered in said air gaps and normal to the said zones of magnetic flux, a needle shank of magnetic wire material in the shape of a helical



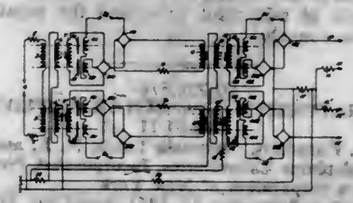
convolute with a playing point secured at one end thereof, resilient dampening material substantially filling the space within the said convolute, means in said body for securing said shank by an end portion opposite that of said playing point with said shank extending through said coil substantially midway in said air gaps and intersecting said zones of magnetic flux whereby the lateral movement of said playing point will flex said shank in the said air gaps and generate a current in said coil when said coil is connected to a sound circuit.

2,730,573
FEED-BACK AMPLIFIER SYSTEMS AND SERVO MECHANISMS THAT ARE ADAPTED TO RESPOND TO INPUT CHANGES AT VERY LOW FREQUENCIES
Hugh Brougham Sedgfield, Barnes Common, London, and Frederick Arthur Summerlin, Lee, London, England, assignors, by mesne assignments, to The Sperry Gyroscope Company, Limited, Brentford, England, a company of Great Britain
Application November 30, 1949, Serial No. 130,328
Claims priority, application Great Britain December 1, 1948
4 Claims. (Cl. 179—171)



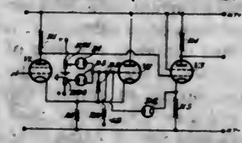
1. A signal amplification system comprising a signal generating means for providing a system input signal, a first D. C. amplifier, a load device connected to said first D. C. amplifier and responsive to the output thereof for providing a system response signal, means for differentially combining said system input signal and said system response signal so as to produce a difference signal, a capacitor, a second D. C. amplifier, switching means operable in a first sense to connect the difference signal output of said combining means in series with said capacitor to the input of said second D. C. amplifier while simultaneously connecting the output of said second D. C. amplifier to the input of said first D. C. amplifier, said switching means being operable in a second sense to disconnect the connections provided by its first sense of operation and simultaneously to connect the output of said second D. C. amplifier across said capacitor and to the input of said second D. C. amplifier, means for operating said switching means so that the latter is operated at successively recurrent time intervals respectively in its first and second senses, and means coupled to said combining means and said first D. C. amplifier for providing a path for said difference signal to said first D. C. amplifier that by-passes the circuitry of said switching means, said capacitor and said second D. C. amplifier.

2,730,574
MAGNETIC AMPLIFIER
Frederick H. Belsey, Sale, England, assignor to General Electric Company, a corporation of New York
Application August 22, 1951, Serial No. 243,062
13 Claims. (Cl. 179—171)



9. In a multi-stage magnetic amplifier having a plurality of push-pull connected stages in cascaded connection, means responsive to the output of one stage for generating a signal proportional to the sum of the push-pull components thereof, and means for degeneratively directing this signal to control the saturation of a preceding stage, thereby rendering said amplifier substantially insensitive to variation of the line voltage.

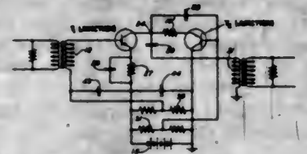
2,730,575
SYNC PULSE-EMPHASIZING AMPLIFIER
Godfrey Edmund Hayden-Pigg, Laindon, England, assignor to Marconi's Wireless Telegraph Company Limited, London, England, a company of Great Britain
Application September 11, 1951, Serial No. 246,007
Claims priority, application Great Britain September 29, 1950
5 Claims. (Cl. 179—171)



1. A distorting amplifier arrangement for use in a television system of the kind wherein video and synchronizng signals form a composite wave with the video signals occupying a range of amplitudes in one direction from a datum amplitude and the synchronizing signals occupying a range of amplitudes in the opposite direction from said datum amplitude, said amplifier comprising a first valve including at least a cathode, a control grid and an anode, said control grid being connected for application thereto of video signals including positive going synchronizing impulses, means providing inherent negative feedback for said first valve, said means including a first resistor in the cathode lead thereof and a second resistor between the anode thereof and the positive terminal of a power supply, means for applying said composite wave between the control grid and cathode of said first valve, a second valve having at least

a cathode, a control grid and an anode, a resistance connected in shunt between the control grid and cathode of said second valve, connections between the cathodes of said first and second valves and between the anode of said second valve and said positive terminal, said first resistor being connected at one end to said cathode and at the other end to the negative side of said power supply, means responsive to synchronizing signals exceeding a predetermined amplitude in said opposite direction to maintain conduction in said second valve to oppose the inherent negative feedback of said first valve, said means including a resistance between a potential source more negative than the potential of said cathodes and the control grid of said second valve, a rectifier in the control grid circuit of said second valve and connected to receive said composite wave, said rectifier being connected in the sense to conduct the synchronizing signals in said composite wave, a third valve including a cathode and at least one additional electrode, the output from the first valve being applied to the additional electrode of said third valve, the cathode of said third valve being connected back through said rectifier to the control grid of said second valve and a resistance between the cathode of said third valve and the negative side of said power supply.

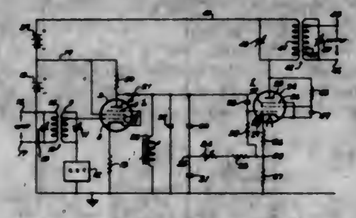
2,730,576
MINIATURIZED TRANSISTOR AMPLIFIER CIRCUIT
Robert S. Caruthers, Mountain Lakes, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application September 17, 1951, Serial No. 246,971
1 Claim. (Cl. 179—171)



An amplifier which comprises a first transistor having an emitter electrode, a collector electrode, and a base electrode, alternating-current signal input coupling means connected between the emitter and base electrodes of said first transistor, alternating-current signal output coupling means connected between the emitter and collector electrodes of said first transistor, and means to provide a flow of direct energizing current through the emitter and collector electrodes of said first transistor without introducing an alternating-current path between them having either a low impedance or a substantial reactance, said last-mentioned means including a source of direct potential, a second transistor of the same conductivity type as said first transistor having an emitter electrode, a collector electrode, and a base electrode, said first and second transistors and said source being connected to form a series direct-current path which includes the emitter and collector electrodes of said first transistor, the emitter and collector electrodes of said second transistor, and said source, and means to supply a direct operating potential to the base electrode of said second transistor, whereby said second transistor provides a resistance between its emitter and collector electrodes that is many times larger for alternating current than for direct current.

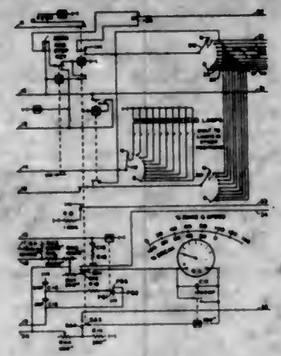
2,730,577
FREQUENCY SELECTIVE AMPLIFIER CIRCUIT
Arthur Winters, New York, N. Y.
Application March 9, 1954, Serial No. 415,059
4 Claims. (Cl. 179—171)

1. A frequency selective amplifier circuit, comprising first and second amplifier stages, each including an electric translating device, an input circuit and an output circuit, means coupling the output circuit of the first stage to the input circuit of the second stage including a resistor connected to said first stage output circuit and a



parallel resonant circuit connected in series with said resistor, and means coupling an intermediate point and both terminals of said parallel resonant circuit to electrically separated points in the second stage input circuit.

2,730,578
IMPULSE TESTING EQUIPMENT
Charles R. Fisher, Rochester, N. Y., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application June 25, 1952, Serial No. 295,517
10 Claims. (Cl. 179—175.2)



1. In a pulse testing device, the combination comprising; means for receiving cyclically recurring pulses, speed measuring means for indicating the speed at which said pulses recur comprising at least one capacitor, means for alternately charging and discharging said capacitor in accordance with the rate of speed of said cyclically recurring pulses, said speed measuring indications being subject to a period of initially distorted readings responsive to the passage of a surge current through said capacitor upon the occurrence of the first of said pulses, means comprising an inductive reactance connected to absorb said surge current for compensating for said initially distorted readings produced in said speed measuring means, and means for rendering said means comprising said inductive reactance ineffective after said period of initially distorted reading.

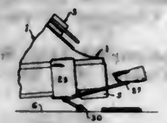
2,730,579
ORDER WIRE AND ALARM CIRCUITS FOR CARRIER SYSTEMS
Robert L. Case, Mountain Lakes, Homer G. Jordan, Fanwood, and Myron R. Kleist, Basking Ridge, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application November 25, 1950, Serial No. 197,592
10 Claims. (Cl. 179—175.3)

1. An alarm signaling system comprising a transmission line, a plurality of single frequency tone oscillators coupled thereto at spaced stations along said line, means for maintaining the level of said tones constant at a common receiving station along said line, a plurality of receivers at said station, each receiver having a narrow band filter therein and a detector selective to a tone, an



alarm indicator and a common delay circuit between said receivers and indicator for preventing false operation of said indicator by extraneous currents of short duration with respect to the delay interval.

2,730,580
ADVANCING PAPERWEIGHT LIFTER
John W. Anderson, Gary, Ind.
Application July 3, 1951, Serial No. 235,056
12 Claims. (Cl. 179—178)



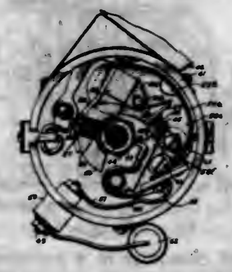
1. In combination: a mounting, a telephone base disposed on the mounting, a lever, and means pivotally connecting the lever to the underside of the base adjacent its forward end, said lever having a part engaging the mounting and also a handle for pivoting the lever to cause the said part to raise the forward end of the base.

2,730,581
DUAL STORAGE BATTERY SWITCH
Peter Bruno, Chicago, Ill.
Application June 19, 1953, Serial No. 362,849
1 Claim. (Cl. 200—16)



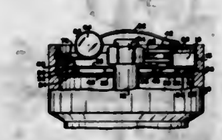
An electric storage battery switch for carrying heavy starter motor currents, comprising an insulating housing having four rectangular side walls and two rectangular end walls secured together to form a rectangular chamber in said housing, a manually movable contact in said housing in the nature of a moving contact of wide range and a plurality of additionally spring pressed contacts radially movable with respect to said manually movable contact mounted in said housing in the nature of fixed contacts with relatively small range of movement, all of said spring pressed contacts being mounted on plungers slidably mounted in cylindrical bores in said side walls, and all of said contacts comprising solid blocks of highly conductive metal, said manually movable contact comprising a rectangular block with rounded corners carried by an elongated plunger extending through one of the end walls and movable from end to end of said chamber, said elongated plunger having a plurality of ball sockets, and said latter end wall having a spring pressed ball for holding said elongated plunger in any of three positions, the plungers of said spring pressed contacts each being provided with a plurality of nuts mounted on threaded ends for connection to conductors, said nuts limiting inward motion of the spring pressed contacts, said spring pressed contacts each being urged inwardly by compression springs symmetrically arranged in each contact in registering bores extending partially into each spring pressed contact and the adjacent side wall, causing the spring pressed contacts to project into said chamber into engagement with the movable contact, said spring pressed contacts including one elongated member for engagement in two positions, and two short members, each of which engages the movable contact in one position, said chamber having an insulated end portion where the movable contact is on open circuit and not in contact with any of said spring pressed contacts.

2,730,582
IGNITION SYSTEMS
Paul S. Jernigan, Wichita Falls, Tex.
Application September 10, 1951, Serial No. 245,848
3 Claims. (Cl. 200—22)



1. In an auxiliary grounding brush for an ignition distributor having breaker points and a mounting for mounting the auxiliary grounding brush, a brush holder arm pivotally mounted on said mounting and insulated therefrom, said arm extending outward therefrom and carrying an insulation block thereon, which block has a concave cylindrical surface thereon which surface is adapted to cooperate with the cam of said distributor so at least two lobes of said cam will be in contact with said concave cylindrical surface of said insulating block at all times, a ground brush mounted on said insulation block and having a cylindrical surface thereof in common with the inner cylindrical surface of said insulating block, means connecting said brush with a source of electricity supplying electricity to said breaker points, said brush being adjustable circumferentially so as to contact with a lobe of said cam for a predetermined time before the closing of the points of said distributor, and resilient means for urging said insulation block and said auxiliary brush into contact relation with the lobes of said cam.

2,730,583
DISTRIBUTOR PLATE ASSEMBLY
Leslie L. Brunk, Detroit, Mich., assignor to Renberles Products Co., Detroit, Mich., a corporation of Michigan
Application October 16, 1952, Serial No. 315,040
13 Claims. (Cl. 200—31)



1. In a distributor plate assembly of the nature described; a metal plate adapted for being stationarily mounted in a distributor housing and having means for supporting a ball race, a ball bearing having an outer race supported by said means and also having an inner race, balls in the space between the races, a breaker plate mounted on said inner race, tabs struck out from said

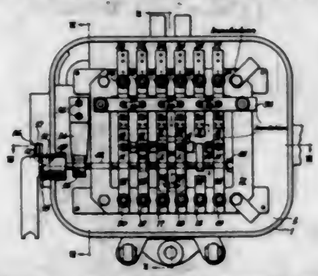
breaker plate and extending downwardly inside said inner race, the lower corner of said inner race being chamfered and the lower ends of said tabs being bent over the chamfered lower edge of said inner race for fixedly connecting the breaker plate with the said inner race, and a platform carried by said breaker plate and extending above the same, said platform being adapted to support a condenser.

2,730,584

AUXILIARY CONTACT ACTUATOR FOR TRAIN CONTROL GOVERNORS

Herbert L. Bone, Forest Hills, and Harold C. Clausen, Penn Township, Allegheny County, Pa., assignors to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania

Application April 26, 1952, Serial No. 284,666
2 Claims. (Cl. 200—42)



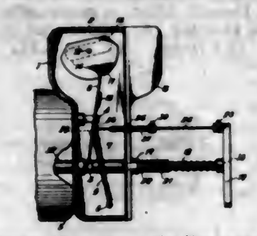
1. In a circuit controller of a governor enclosed in a housing provided with an aperture and having contacts adapted to be normally selectively actuated by the governor at predetermined speeds, auxiliary means for actuating said contacts when said governor is stationary comprising a shaft rotatably mounted in said housing and provided with a keyway which is accessible from outside of the housing through said aperture, a key to fit in said keyway for rotating said shaft to predetermined positions from outside of the housing, said key, keyway and aperture being so proportioned that said key is insertable in and withdrawable from said keyway when and only when said shaft is in a normal position in which none of said contacts is actuated, means on said shaft for selectively actuating said contacts when said shaft is rotated to said predetermined positions, and means for yieldably holding said shaft in each of said predetermined positions and in said position in which none of said contacts is actuated.

2,730,585

APPARATUS FOR THE AUTOMATIC CONTROL OF ELECTRIC MOTORS

Albert Obermoser, Miesbach, Germany

Application January 14, 1953, Serial No. 331,128
Claims priority, application Germany January 15, 1952
3 Claims. (Cl. 200—47)



1. An apparatus for automatically controlling an electric motor in dependence upon the feed of a threading tool driven by said motor, comprising a casing adapted to be engaged with the non-rotating driving means of the threading tool, a quick-break switch system accommodated in said casing and comprising two see-saw levers and associated knife-edge bearings for said levers, tension spring means whose opposite ends are suspended from the two levers whereby the levers are drawn together and held in their knife-edge bearings, a mercury switch system controlled by the first of said levers in such a way that the two extreme positions of the mercury switch system correspond to the two operative positions of the switch for reversal of the direction of rotation of the motor to be controlled by the switch, a contact member adapted for engagement with the workpiece, means for slidably guiding the contact member in relation to said casing and spacing it therefrom under spring action, and a rod for transmitting the relative movements of the contact member to the second of said levers, whereby the levers are caused to spring into their opposite end positions, through the dead centre position, as the respective end position of the contact member has been reached, for reversing the mercury switch.

2,730,586

LAMP SWITCH

Hans C. Duetzmann. New Haven, Conn., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia

Application September 1, 1953, Serial No. 377,754
5 Claims. (Cl. 200—60)



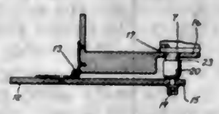
1. A switch comprising a wall member having an elongated opening therein, a movable operating member of insulating material having a head adjacent the wall member and a contact carrying part extending through said opening, means securing said operating member for sliding movement in said opening, a conductive contact secured to said contact carrying part and a conductive spring finger overlying said opening and engaging said contact carrying part for selective engagement and disengagement with said contact upon sliding movement of said member along said opening.

2,730,587

SWITCH ACTUATING MECHANISM FOR SET-UP MACHINES AND THE LIKE

Bernard Feltwell, Toronto, Ontario, Canada, assignor to Manton Brothers Limited, Toronto, Ontario, Canada

Application January 9, 1953, Serial No. 330,465
8 Claims. (Cl. 200—61.58)



1. In a box setting-up machine or the like having an upright frame, relatively movable presser members adjacent the top thereof, and power-operated means for effecting relative movement of said presser members, a movable member for effecting energization of said power means located intermediate the height of said frame, and trip means actuatable by the leg of an operator to effect movement of said movable member, said trip means comprising a resiliently flexible bar pivoted intermediate its length intermediate the height of said frame and having one end projecting beyond said frame to a point adjacent the operator's leg and the other end projecting to adjacent said movable member, means constraining said latter bar end to substantially linear straight-line movement towards and from said movable member and operatively associating said latter bar end and said movable

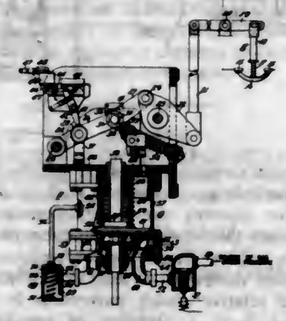
member to impart bar movement thereto and stop means limiting the extent of linear movement of said latter bar end while said resiliently flexible bar end projecting beyond said frame is adapted to flex relative to said latter bar end to move in an arcuate path under applied body pressure to absorb and dissipate applied body pressure progressively on said arcuate path.

2,730,588

FLUID MOTOR DUMPING SYSTEM, INCLUDING A CYLINDER HEAD VALVE

Arthur C. Kelle, Stoughton, Mass., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.

Application December 19, 1952, Serial No. 326,831
7 Claims. (Cl. 200—82)



1. In an operating mechanism for circuit breakers, a motor operable by gas under pressure and comprising a cylinder and a piston movably arranged therein, a source of gas under pressure, means for admitting gas under pressure from said source to one end of said cylinder to close the breaker, spring means for returning said piston to the initial position thereof upon closing of the breaker, a collapsible linkage of the trip free type for operatively relating the breaker to said motor, tripping means for causing collapse of said linkage to cause opening of the breaker, a ram on said piston separate from said linkage and cooperating therewith upon collapse thereof for reclosing the breaker, means for venting said cylinder to cause said spring means to rapidly return said piston to said initial position thereof, said venting means comprising a valve element arranged in said end of said cylinder, resilient means for biasing said element to closed position to close said end of said cylinder, pilot means for cracking said venting means, said pilot means including a piston type valve, resilient means for biasing said piston type valve to closed position, means defining a passage from the upstream side of said element to atmosphere forming an integral part of said pilot means for reducing the fluid pressure on the upstream side of said element and for holding said pilot valve in an open position by the action of gas under pressure being vented through said passage, and means for cracking said pilot valve to open said venting means to exhaust the fluid in said cylinder to atmosphere comprising means defining an orifice in said cylinder controlled by said piston and means defining a permanently open duct for connecting said orifice to said pilot valve.

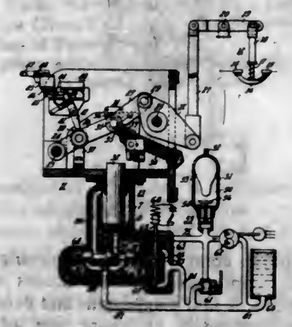
2,730,589

CIRCUIT BREAKER WITH HYDRAULIC MOTOR CONTROLLED BY MAIN AND PILOT VALVES

Elijah R. Perry, Stoughton, and Nicholas W. Morelli, Westwood, Mass., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.

Application January 13, 1953, Serial No. 331,043
10 Claims. (Cl. 200—82)

1. A circuit interrupting device comprising a pair of relatively movable contacts, a motor comprising a cylinder and a piston for causing relative movement of said contacts, a pneumo-hydraulic accumulator for supplying liquid under pressure, a control valve and a pilot valve both arranged in one end of said cylinder for causing actuation of said piston upon the flow of liquid under pressure therethrough, and means for connecting said accumulator to said valves, said control valve arranged to admit liquid under pressure from said accumulator to said cylinder on one side of said piston to actuate said piston in one direc-



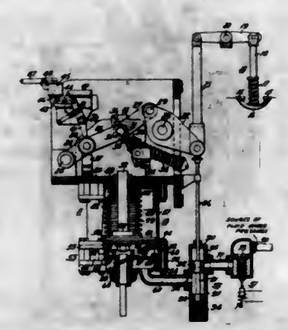
tion and substantially simultaneously drain liquid from said cylinder on the other side of said piston, said control valve further arranged to admit liquid under pressure from said accumulator to said cylinder on said other side of said piston to actuate said piston in another direction and substantially simultaneously drain liquid from said cylinder on said one side of said piston, said pilot valve controlling actuation of said control valve to cause said control valve to initiate actuation of said piston in first one direction and then another direction.

2,730,590

FLUID MOTOR DUMPING SYSTEM WITH FLUID ADMITTING AND VENTING VALVE

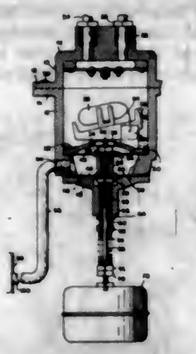
Arthur C. Kelle, Stoughton, Mass., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.

Application March 2, 1953, Serial No. 339,815
12 Claims. (Cl. 200—82)



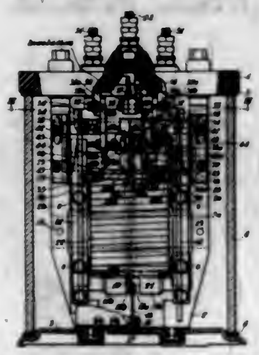
1. In combination, a circuit breaker comprising a pair of engageable arcing contacts, a motor operable by fluid under pressure and comprising a cylinder and a piston movably arranged therein for causing relative movement of said contacts, a source of fluid under pressure, means for admitting fluid under pressure from said source to one end of said cylinder to close said contacts, and means for venting said cylinder to atmosphere to cause said piston to return to its initial position, and substantially simultaneously therewith preventing said fluid admitting means from supplying fluid to said cylinder during said venting operation.

2,730,591
SUMP PUMP CONTROL
Axel L. Nielsen, Hazel Park, Mich.
Application August 3, 1953, Serial No. 372,132
9 Claims. (Cl. 200—84)



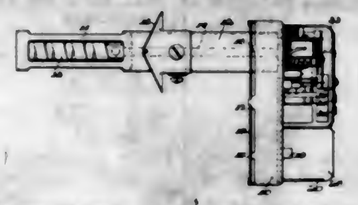
1. A sump pump control device comprising a pair of spaced flexible diaphragms, sealing means connecting peripheral portions of said diaphragms and defining therewith a pressure-responsive enclosure, one of said diaphragms having a larger area exposed to pressure within said enclosure than said other diaphragm, a float rod operatively connected to both of said diaphragms, a float on said rod, and a sump pump motor control switch operatively connected to said rod, and conduit means connecting said enclosure to the discharge line of a sump pump to exert on said float rod a force equal to the difference between the forces developed on said diaphragms by pressure within said enclosure.

2,730,592
CODE FOLLOWING RELAY WITH FREQUENCY DECODING CONTACTS
Andrew Hufnagel, Penn Township, Allegheny County, Pa., assignor to Westinghouse Air Brake Company, a corporation of Pennsylvania
Application February 10, 1951, Serial No. 210,358
18 Claims. (Cl. 200—91)



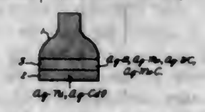
12. A relay comprising an armature, an operating winding for oscillating said armature, a contact operating structure oscillated by said armature, a second contact operating structure mechanically resonant at a predetermined frequency, a flat operating spring fixed adjacent one end to said first contact operating structure and oscillated thereby, and an operating post on said second contact operating structure abutting the face of said spring adjacent its other end whereby said second contact structure is oscillated only in response to armature oscillations of resonant frequency, said operating post sliding over the face of said operating spring upon oscillation of said second contact operating structure thereby providing frictional damping for said second contact operating structure to broaden the frequency band width to which said second contact operating structure is responsive.

2,730,593
BURNER CONTROL DEVICE
Paul G. Frerer, Peru, Ill., assignor to Bendix Aviation Corporation, Baltimore, Md., a corporation of Delaware
Original application June 15, 1948, Serial No. 33,129. Divided and this application March 11, 1952, Serial No. 275,980
7 Claims. (Cl. 200—138)



1. In a control device of the type specified, a thermal control unit including a rotatable shaft and a temperature-responsive element operatively connected to said shaft for rotating the latter as a function of changes in temperature, a pair of clutch members mounted on said shaft for rotation therewith, at least one of said members having limited relative clutch movement in a direction axially of said shaft, a plurality of annular members disposed between said clutch members for rotation through frictional engagement with the latter, a frictional spacing ring interposed between said annular members, switch-actuating arms projecting radially from said annular members, resilient means urging said clutch members into such frictional engagement, switch elements located in the angular path traversed by said arms, and stops arranged to determine the limit of rotation of said arms.

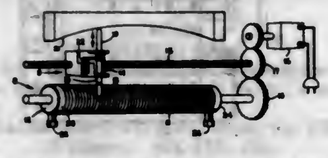
2,730,594
ELECTRIC CONTACT
Robert G. Page, New Britain, Conn., assignor to General Electric Company, a corporation of New York
Application December 26, 1952, Serial No. 327,993
4 Claims. (Cl. 200—166)



1. An integral two-layer make and break electric contact suitable for direct current duty at one voltage rating and an equivalent alternating current duty at a higher voltage rating, said contact having a facing layer of at least 1/32" in thickness and formed of a composition comprising a mixture of silver and a semi-refractory material selected from the group consisting of nickel and cadmium oxide and a backing layer of a composition comprising a mixture of silver and a refractory material selected from the group consisting of tungsten, molybdenum, and carbides of these metals.

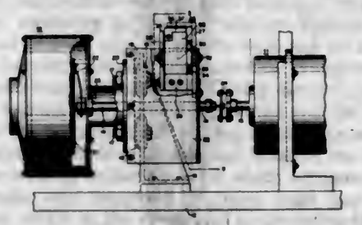
2,730,595
POTENTIOMETERS
Robert G. Lancaster, Beech Grove, Ind., assignor to the United States of America as represented by the Secretary of the Navy
Application August 4, 1953, Serial No. 372,410
7 Claims. (Cl. 201—48)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A potentiometer comprising, a resistance element, a linearly slidable contact member having a contact in slidable engagement with said resistance element, a lead screw in threaded engagement with said slidable contact member carrying said slidable contact member for positioning the contact thereof, a cam surface in parallel relation to the linear motion of said slidable contact member, and a cam follower means on said slidable contact member



in following engagement with said cam surface for producing a motion transversely to the linear motion of said slidable contact member for introducing a variation in positioning the contact of said slidable contact member with respect to said resistance element to correct for non-linearity of said potentiometer response.

2,730,596
MOTOR DRIVEN RHEOSTAT
Donald J. McLaughlin, Washington, D. C., assignor to the United States of America as represented by the Secretary of the Navy
Application March 7, 1955, Serial No. 492,815
8 Claims. (Cl. 201—48)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. An antifriction variable resistance device comprising a base frame, a variable resistance element having an arcuate resistance strip mounted on said frame with a contact arm rotatably mounted on said frame to sweep over said resistance strip, said resistance strip being resiliently mounted on the frame for vibration about substantially the center of sweep of said contact arm, a vibratory weight resiliently connected with said resistance strip, means for vibrating said weight in substantially the direction of movement of said contact arm, and means for varying the amplitude of vibration of said weight, whereby oscillatory force transmitted through said resilient connection to the resistance strip may be varied to an amount just below that required to overcome the static friction between the resistance strip and the contact arm.

2,730,597
ELECTRICAL RESISTANCE ELEMENTS
Leon Podolsky, Pittsfield, and Stanley O. Dorst, North Adams, Mass., assignors to Sprague Electric Company, North Adams, Mass., a corporation of Massachusetts
Application April 26, 1951, Serial No. 223,029
8 Claims. (Cl. 201—63)



1. An electrical resistor comprising a non-conductive elongated inorganic base material having a temperature coefficient of volume expansion of less than about 2.0×10^{-5}/° C., coated with a uniform dispersion of conducting particles in a polytetrahaloethylene resin said dispersion containing from about 5 to about 90% by weight of conducting particles, the thickness of the coating being appreciably less than that of the base material, whereby the expansion characteristics of the base determine the expansion characteristics of the coating, and terminal connections adapted to be inserted in an electric circuit, secured to said coating.

2,730,598
TRANSPARENT ELECTRO-CONDUCTING ARTICLE
William O. Lytle, New Kensington, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
Application August 17, 1951, Serial No. 242,352
11 Claims. (Cl. 201—73)



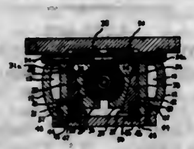
1. In a method of producing a transparent electroconductive article which comprises heating a refractory base to a temperture above about 500° F. but below the temperature at which the base melts, the improvement comprising applying a pair of spaced strips of electroconductive material to spaced portions of a surface of the heated base, then applying a bus bar to a portion of each strip, then reheating the base containing the strips and bus bars, and finally applying a transparent electroconductive film to the exposed surface of the reheated base and electroconductive strips.

2,730,599
PRESSURE WELDING BY INDUCTION HEATING
Bela Ronay, Harundale, Glen Burnie, Md.
Application July 3, 1952, Serial No. 297,197
2 Claims. (Cl. 219—4)
(Granted under Title 35, U. S. Code (1952), sec. 266)



2. An induction heating apparatus, comprising a primary coil, and a secondary coil positioned in inductive relationship to said primary coil, said secondary coil being in the form of a tube having a single axial slit in the wall thereof and a transversely projecting flange of relatively narrow axial width, which flange is adapted to overlie the workpiece to be heated and to develop in said workpiece on supply of alternating current to said primary coil a heated band of a width approximately equal to that of said flange.

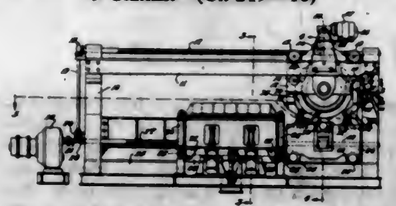
2,730,600
ROTATING ELECTRODE STRUCTURE
Simon Fisher and Thaddeus S. Kurlinski, Bay City, Mich., assignors to National Electric Welding Machines Co., Bay City, Mich., a corporation of Michigan
Application June 8, 1953, Serial No. 360,124
5 Claims. (Cl. 219—4)



1. In a rotating resistance welding electrode structure having coolant circulated through the shaft, the combi-

nation including: a housing; a shaft therethrough; frictionless bearings at either end of said housing; a smooth contact area on said shaft intermediate said bearings; contactor blocks between said bearings and bearing against said smooth contact area; guide pins positioning said contactor blocks; sliding wedges in operable contact with the backs of said contactor blocks; means urging said wedges against the backs of said contactor blocks.

2,730,601
RESISTANCE WELDING MACHINE FOR SHEET
Eo Reed, Middletown, Ohio, assignor to Armco Steel Corporation, Middletown, Ohio, a corporation of Ohio
Application November 3, 1950, Serial No. 193,941
9 Claims. (Cl. 219—10)



9. The method of welding metal sheets end to end to form a strip, which includes the steps of bringing a leading edge of a sheet into abutment with a trailing edge of a preceding sheet, while deforming said leading and trailing edges out of the plane of said sheets, clamping said sheets, establishing a resistance welding circuit through said abutting edges of said sheets and applying current thereto while forcing them back into the plane of said sheets, and moving said circuit along said abutting edges.

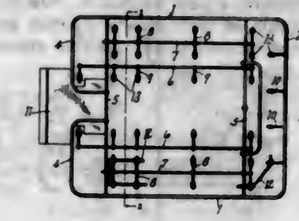
2,730,602
APPARATUS FOR ELECTRICALLY ERODING MATERIALS
Cecil P. Porterfield, Pittsburgh, Pa., assignor to The Method X Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application January 7, 1954, Serial No. 402,675
10 Claims. (Cl. 219—15)



1. An electro-erosion apparatus comprising in combination an electrical power source, a frame, an electrode tool conductive spindle movable relative to the frame, means defining a bore slidably fitted around said movable spindle and also defining a cavity opening into said bore, a quantity of mercury sufficient to fill said cavity completely confined therein, said means having an electrical conducting path from the outside thereof to the said cavity, a terminal on the outer end portion of said conducting path for connecting the latter to the said electrical power source, said conducting path and said terminal being insulated from said spindle, and means for putting said quantity of mercury under pressure to provide continuous positive contact of said mercury with said spindle and the inner end portion of said conducting path.

2,730,603
OVEN HEATING UNIT
Charles C. Averill, Albion, and Harold W. Tuttle, Jr., Adrian, Mich., assignors to Union Steel Products Company, Albion, Mich., a corporation of Michigan
Application January 19, 1953, Serial No. 332,026
6 Claims. (Cl. 219—19)

5. A heating unit resistor support comprising a support member, an insulator holder of bendable metal stock of transverse channel section fixedly secured transversely to the support member and projecting transversely therefrom, said holder being conformed longitudinal-



ly at its outer end into a loop of over 180° arc with the channel facing inwardly of the loop, and a flat annular insulator having a transversely convex periphery retainingly embraced within the channel of the loop.

2,730,604
PLUMBER'S TOOL
William J. Eberle and Emile D. Dubuisson, Elsa, Tex., said Dubuisson assignor to said Eberle
Application September 29, 1952, Serial No. 312,087
7 Claims. (Cl. 219—21)



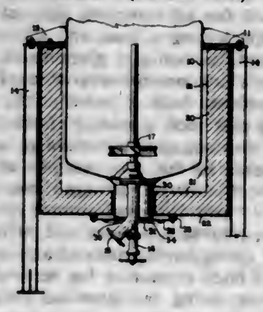
1. A joint forming tool comprising an expansible mandrel, heating elements carried by said mandrel for heating members being joined, a joint sealing element carried by said mandrel for positioning at a joint between members joined together, said heating elements being disposed on opposite sides of said joint sealing element.

2,730,605
ELECTRIC CIGAR LIGHTER
Arthur A. Johnson, Bridgeport, Conn., assignor to Automatic Devices Corporation, Bridgeport, Conn., a corporation of Connecticut
Application February 25, 1952, Serial No. 273,219
16 Claims. (Cl. 219—32)



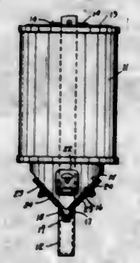
1. A wireless type cigar lighter comprising a holder; an igniting unit adapted to be stored on the holder, said unit being removable for use and having an electric heating element; a carrying knob on the igniting unit; means normally operative when the igniting unit is stored on the holder, closing a circuit through the heating element in response to a predeterminate inward movement of the knob with resptc to the holder; and automatic means rendering said immediately-preceding means inoperative to close said circuit when the igniting unit is first being replaced and the knob is moved inward said predeterminate distance on the holder, thereby to prevent inadvertent re-energization of the heating element during such replacement.

2,730,606
FLEXIBLE SEAL
Philemon E. Veras, Hobokus, N. J., assignor to Interchemical Corporation, New York, N. Y., a corporation of Ohio
Application March 27, 1952, Serial No. 278,786
2 Claims. (Cl. 219—38)



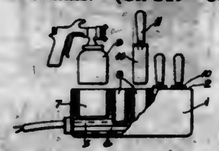
1. In conjunction with a kettle having a bottom outlet and an insulating jacket with electric heating elements mounted thereon adjacent to the wall and bottom of the kettle, the said insulating jacket serving to support the said kettle in a hanging position and being dimensioned to provide a heating zone between the kettle and the inner surface of the jacket and an opening around the said outlet, the improvement of a flexible seal between the kettle and the surrounding insulating jacket which accommodates the said outlet and comprises a sleeve from heat resisting material which at the upper end is continuously fastened to the bottom of the kettle and at the lower end expands into a ring which has at least one concentric corrugation and at the periphery is fixedly attached to the bottom part of the insulating jacket.

2,730,607
FLUID HEATING UNIT
James R. Tillison, Acton, Ind.
Application February 16, 1954, Serial No. 410,676
3 Claims. (Cl. 219—38)



1. A liquid heating unit comprising a storage tank containing a supply of liquid, a sump portion at the bottom of said tank having inwardly and downwardly merging flat side walls, an electric heating element secured to each of said side walls, a thermostat connected with said heating elements mounted on said sump communicating with the liquid contents thereof to control the heat generated by said elements, and an outlet conduit having its inner end communicating with the interior of said tank above said heating elements and thermostat to prevent withdrawal of liquid below the level of said thermostat and heating elements for maintaining effective heat control thereof.

2,730,608
CUP HEATERS
Eskil A. Axelsson, Stockholm, Sweden
Application March 26, 1954, Serial No. 418,968
Claims priority, application Sweden March 31, 1953
4 Claims. (Cl. 219—38)



4. Apparatus for heating substances in vessels comprising a closed tank containing a liquid, a heating element for heating the liquid and pockets provided in said closed tank and being formed to fit the shapes of the vessels so as to receive the vessels with a minimum of friction, said pockets having walls which are resilient.

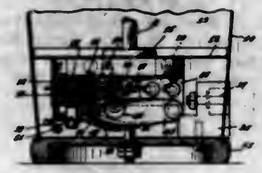
2,730,609
BLOWPIPES
George Constantinesco, Torver, Coniston, England, assignor to The Yorkshire Copper Works Limited, Leeds, England, a British company
Application September 9, 1952, Serial No. 308,652
Claims priority, application Great Britain September 18, 1951
13 Claims. (Cl. 219—39)

1. A heat transfer device of the class described, comprising: means defining a passage for a fluid medium whose temperature is to be changed, said passage comprising an inlet portion and an outlet portion, the cross-sectional area of said inlet portion being appreciably greater than the cross-sectional area of said inlet portion being appreciably greater than the cross-sectional area of said outlet portion, the cross-sectional area of said passage being continuously and progressively reduced in magnitude from said inlet portion to said outlet portion; fluid pervious thermal means disposed in said passage for changing the temperature of said fluid, said thermal means substantially entirely filling said passage, the amount of heat transferable per unit of time between said fluid and said thermal means being substantially uniform throughout the entire volume of said thermal means, the rate of said progressive decrease of cross-sectional area of said passage from said inlet portion to said outlet portion being so proportioned that the velocity of said fluid medium flowing therethrough is progressively and continuously increased in accordance with the decreasing temperature differential between said thermal means and said medium throughout said passage, whereby the rate of heat transfer between said thermal means and said fluid medium is made substantially uniform throughout the entirety of said passage and the temperature of said thermal means is maintained substantially constant throughout its entire volume.

2,730,610
PERCOLATOR

Edward A. Farr and John P. Theisen, Columbus, Ind., assignors to Arvin Industries, Inc., Columbus, Ind., a corporation of Indiana

Application June 4, 1951, Serial No. 229,698
4 Claims. (Cl. 219—44)

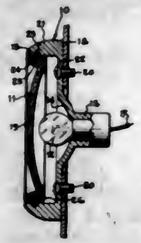


4. In combination, a vessel adapted to contain a body of liquid, an electrical resistance heating element in heat-transmitting relationship with a wall of said vessel, a switch for controlling the supply of current to said element, said switch being biased toward open position, a pivotally mounted arm swingable in one direction to close said switch, a latch member movable over a predetermined path into engagement with said arm to retain it in switch-closing position, a support on which said arm is pivotally mounted, said support being movable generally parallel to the path of latch-member movement, manually adjustable means for so moving said support, and means in heat-transmitting relationship with the wall of said vessel for moving said latch member toward released position.

2,730,611
SUSPENDED LENS CONSTRUCTION FOR VEHICULAR LIGHTS

James J. Black, Cincinnati, Ohio, assignor to Trailmobile, Inc., Chicago, Ill., a corporation of Delaware

Application September 15, 1953, Serial No. 380,217
3 Claims. (Cl. 240—7.1)



1. A vehicle light comprising a housing, a bulb disposed within the housing, said housing including a rear wall, a peripheral rim upstanding from said rear wall, the inner surface of said rim being configurated to form an annular groove lying in a plane transverse to the axis of the housing, a translucent lens which is smaller in diameter than the inside diameter of the rim and which is disposed within said rim, said lens having an annular groove in its outermost periphery adapted for alignment with the groove in said rim, the annular groove in the lens and the annular groove in the housing rim being so positioned that the rim of the lens lies substantially within and is protected by the housing when the grooves are aligned, a compressible mounting ring disposed intermediate said lens and said rim and residing in engagement with the annular grooves provided in the lens and rim, said mounting ring being of sufficient cross sectional size to support said lens in spaced relationship with said housing rim, and constituting the sole support for said lens, said annular groove in the housing rim being spaced axially outwardly along said rim a sufficient distance from said rear wall so that said lens is resiliently supported free from contact with said rear wall.

2,730,612
TROUBLE LIGHT GUARD

William J. Westendorf, Kittanning, Pa.

Application December 3, 1954, Serial No. 472,980
3 Claims. (Cl. 240—54)

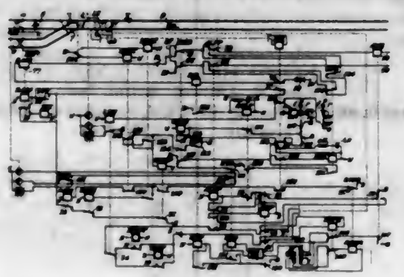


2. In a guard for an extension light of the type including a handle having a head and a neck of reduced diameter, a frame including a plurality of spaced apart cylindrical ribs, a ring member secured to adjacent ends of said ribs, an arcuate base of substantially semi-circular shape engaging said neck, a bracket of substantially semi-circular shape also engaging a portion of said neck, said ribs being secured to the outer surface of said bracket and base, a hook member arranged contiguous to the outer surface of said base and secured thereto, a body member secured to said bracket and including a body portion, a coil spring having one end arranged in engagement with said body portion, a lug secured to the other end of said coil spring and provided with an aperture for receiving said hook member, and interengaging means on said base and bracket for interconnecting the adjacent ends of said base and bracket, said interengaging means comprising cutouts in said base and bracket defining overlapping portions of reduced thickness, there being an opening in the portion of reduced thickness on the base, and a finger extending from the reduced thickness portion on the bracket for engagement with said last named opening.

2,730,613
RAILWAY TRAFFIC CONTROLLING APPARATUS

Clifford D. Ihrig, Penn Township, Allegheny County, Pa., assignor to Westinghouse Air Brake Company, a corporation of Pennsylvania

Application March 22, 1951, Serial No. 216,953
10 Claims. (Cl. 246—26)

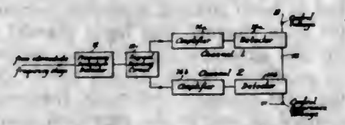


1. In railway traffic controlling apparatus for a stretch of railway track which is provided with a plurality of signals for governing traffic movements in a first direction and in the opposite or second direction over said stretch of railway track, embodying a plurality of polar traffic control relays one for each of said signals connected in series in a traffic control circuit, each of said relays having polar contacts which when the corresponding relay becomes deenergized remain closed in the normal or reverse position to which they were last operated in response to current of normal or reverse polarity respectively, the combination comprising, first manually controllable signal control means having a normal condition and manually operable to a second condition, second manually controllable signal control means having a normal condition and manually operable to a second condition, a first traffic locking relay, a second traffic locking relay, means controlled by said first manually controllable means in its normal condition and by said second manually controllable means in its second condition for supplying current of a given or normal polarity to said traffic control circuit through the winding of said first traffic locking relay, means controlled by said first manually controllable means in its second condition and by said second manually controllable means in its normal condition for supplying current of the opposite or reverse polarity to said traffic control circuit through the winding of said second traffic locking relay, a first traffic indication relay, a second traffic indication relay, a first traffic responsive relay energized by means controlled by contacts of said traffic control relays in the reverse position but becoming deenergized in response to a train entering said stretch in said first direction, a second traffic responsive relay energized by means controlled by contacts of said traffic control relays in the normal position but becoming deenergized in response to a train entering said stretch in said second direction, means controlled by either said first manually controllable means in its second condition or by said first traffic responsive relay in the energized condition for energizing said first traffic indication relay, means controlled by either said second manually controllable means in its second condition or by said second traffic responsive relay in the energized condition for energizing said second traffic indication relay, means controlled by said first traffic locking relay in the energized condition for retaining said first traffic indication relay energized, means controlled by said second traffic locking relay in the energized condition for retaining said second traffic indication relay energized, means including back contacts of said first or second traffic indication relay for energizing said traffic control circuit by current of reverse or normal polarity respectively in response to a train entering said stretch of track, means including contacts of the corresponding traffic control relays closed in the normal position for controlling said signals for governing traffic movements in the second direction, and means including contacts of the corresponding traffic control relays closed in the reverse position for controlling said signals for governing traffic movements in the first direction.

2,730,614
AUTOMATIC FREQUENCY CONTROL SYSTEM

John L. Wheeler, Rochester, N. Y., assignor to Stromberg-Carlson Company, a corporation of New York

Application January 20, 1950, Serial No. 139,773
8 Claims. (Cl. 250—20)

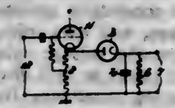


1. An automatic frequency control arrangement for maintaining the center frequency of a system including a frequency controlling element and a frequency sensitive element substantially mid-way between the two extremes of frequency deviation, comprising, a signal dividing circuit operative to separate into two distinct channels the signals appearing at the output of said frequency sensitive element into a portion more positive than the voltage corresponding to the center frequency of said frequency sensitive element and a portion more negative than said voltage, means for separately amplifying the signal portions in each of said channels, means for detecting the amplified signal portions in each of said channels, and means controlled at least in part by the resultant of the detected signal portions for varying the frequency of said frequency controlling element.

2,730,615
CIRCUIT-ARRANGEMENT FOR REDUCING PULSE INTERFERENCE IN RADIO RECEIVERS

Marius Robert Mantz, Hilversum, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application February 21, 1951, Serial No. 212,092
Claims priority, application Netherlands March 1, 1950
2 Claims. (Cl. 250—20)

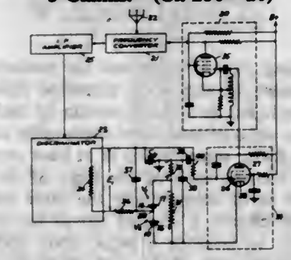


1. In a radio receiver including a detector for producing a desired signal subject to having interference pulses, which has a faster time rate of change than that of said desired signal, a circuit for reducing said interference pulses, comprising a cathode follower including an electron discharge tube having a grid connected to receive said signal and having a cathode output electrode, a load resistor connected at an end thereof to said cathode, a two-terminal unidirectionally-conductive element biased to be normally conductive for said signal and having one terminal thereof connected to said cathode, and a capacitor and an output resistor connected in parallel directly between the remaining terminal of said unidirectionally-conductive element and the remaining end of said load resistor, the sum of the effective value of said load resistor and the internal resistance of said unidirectionally-conductive element being low compared with the impedance of said capacitor for the highest desired frequency of said desired signal, whereby upon the occurrence of said interference pulses the current passing through said unidirectionally-conductive element becomes interrupted substantially immediately.

2,730,616
AUTOMATIC FREQUENCY-CONTROL CIRCUITS

Wendell R. Bastow, Natick, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware

Application March 15, 1951, Serial No. 215,775
3 Claims. (Cl. 250—20)



1. A frequency control system for a beat-frequency type radio receiver comprising a discriminator centered at a reference frequency and having an output resistor whose terminals provide a unidirectional output voltage the magnitude and sense of which depend, respectively, upon the amount and direction of deviation of an input signal from said reference frequency, a controllable local oscillator and mixer and intermediate frequency circuits in said receiver, a connection from said intermediate frequency circuit to said discriminator to provide said input signal, a reactance modulator having its control grid circuit connected directly to one of said discriminator output resistor terminals, said control grid circuit also having an input condenser forming a directly shunted part thereof, said reactance modulator being also connected to said oscillator to control the frequency thereof, a variable time constant circuit connected between the output of said discriminator and said modulator and including

said condenser, said circuit having first and second parallel branches each branch including a rectifier of the type which has a first relatively low resistance value in the conductive condition and a second relatively high resistance value in the non-conductive condition, said rectifiers being poled in opposite directions in said circuit, and means forming part of the cathode circuit of said reactance modulator for providing bias voltage for said rectifiers in the non-conductive condition in the absence of said output voltage, said bias voltage having a value which is intermediate the voltage values of said output voltage for no input signal to said discriminator and for an input signal having maximum frequency deviation from said reference frequency, whereby said variable time constant circuit has the faster time constant for received signals which shift violently in frequency and the slower time constant when received signals are absent or shift but slowly in frequency.

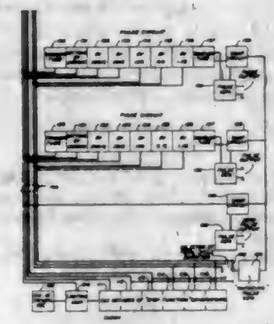
2,730,617

TIMING CIRCUIT

George H. Marmont, Hollywood, Calif., and Bernard M. Oliver, Morristown, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Original application February 28, 1946, Serial No. 650,978, now Patent No. 2,607,892, dated August 19, 1952. Divided and this application December 5, 1951, Serial No. 259,948

5 Claims. (Cl. 250—27)



1. In a timing circuit, apparatus for concurrently generating a plurality of step wave forms of different duration, means included in at least certain of said apparatus for causing the steps of said wave form to be substantially rectangular in form, other means in at least certain of said apparatus for causing each of the steps of the respective wave forms to be of substantially the same magnitude, a pulse generator circuit, a control circuit for causing said pulse generator to produce a pulse upon coincident occurrence of predetermined steps of selected ones of said step wave forms, means for applying each of said wave forms to said control circuit and bias control means for independently selecting a step of each of said wave forms for the actuation of said control circuit.

2,730,618

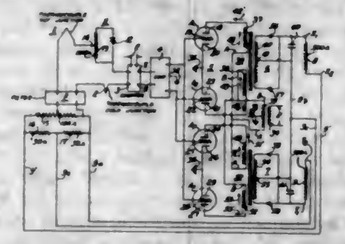
THERMO-COUPLE ELECTRONIC CIRCUITS PROVIDED WITH FEED-BACK TO THE THERMO-COUPLE

Franklin Michaels, Orrville, Ohio, assignor to Hagan Corporation, Pittsburgh, Pa., a corporation of Pennsylvania

Application October 25, 1954, Serial No. 464,253

5 Claims. (Cl. 250—27)

1. An electronic temperature responsive system comprising a thermocouple, a chopper connected to the thermocouple for interrupting the thermocouple E. M. F., an amplifier connected to the chopper for amplifying the interrupted voltage thereof, a grid controlled power output tube system connected to the amplifier, rectifiers for rectifying the output of the power output unit, calibrated resistors in circuit with the rectifiers, means for feeding back to the thermocouple the voltage difference across said



calibrated resistors to maintain a predetermined relationship between the input of the thermocouple and the output of the power units and means responsive to the voltage across said calibrated resistors for developing an output that is proportional to the difference between them.

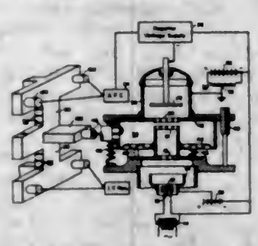
2,730,619

OSCILLATOR CONTROL

William S. Parnell, Glen Burnie, and John W. Taylor, Jr., Baltimore, Md., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Navy

Application May 18, 1950, Serial No. 162,738

1 Claim. (Cl. 250—36)



In combination, a reflex velocity modulated oscillation generator having a cathode, a cavity resonator, a repeller electrode and means for adjusting the resonant frequency of said resonator, means for applying to said resonator a high positive potential with respect to said cathode, means for varying said positive potential to vary the power generated by said generator, means for applying to said repeller electrode a negative potential with respect to said cathode, a waveguide having a main energy channel and symmetrical cross channels at each end of the main channel and an input channel positioned intermediate the ends of the main channel, said input channel communicating with said generator for receiving electromagnetic oscillations produced therein, crystal mixers disposed in each of the cross channels, automatic frequency control means arranged to receive the combined energy output from the waveguide and the crystal mixers of one cross channel such that said negative potential may be varied to maintain the frequency of said generator at a desired constant value, a receiver mixer system coupled to the other of said cross channels and to said generator input channel, constant attenuation decoupling means electrically separating one cross channel from the other cross channel, said decoupling means being disposed within the main energy channel and on each side of the input channel to suppress coupling in the waveguide, each of said attenuation means comprising a plurality of cards of a resistance material spaced a substantial distance apart for absorbing part of the energy of the oscillations passing therethrough and to provide proper impedance matching characteristics for an optimum standing wave ratio in the waveguide.

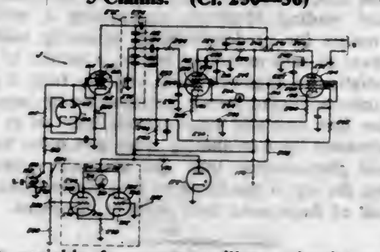
2,730,620

VARIABLE FREQUENCY SIGNAL GENERATOR

Otto H. Schmitt, Minneapolis, Minn., and Winfield E. Fromm, Roslyn, N. Y., assignors to Airborne Instruments Laboratory, Inc., Mineola, N. Y.

Original application May 25, 1948, Serial No. 29,018. Divided and this application May 15, 1951, Serial No. 226,513

5 Claims. (Cl. 250—36)



1. A variable frequency oscillator circuit comprising electronic amplification means having an input and an output circuit, a frequency-responsive network including a first series-connected varistor and condenser and a second parallel-connected varistor and condenser, circuit means connecting said first varistor and condenser between said input and output circuits and said second varistor and condenser across said input circuit, a pentode vacuum tube having a control grid and an anode-cathode circuit, circuit means connecting said varistors in series with said anode-cathode circuit, and control means for varying the potential between said cathode and said control grid.

2,730,621

RADIO TRANSMITTER OF THE KIND COMPRISING A MAGNETRON TUBE ENERGIZED BY A SYNCHRONIZED PULSE GENERATOR

Simon Jacob Hellings and Frank Krienen, Hilversum, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application December 26, 1951, Serial No. 263,374

Claims priority, application Netherlands January 4, 1951

5 Claims. (Cl. 250—36)



1. A transmitter comprising a pulse generator including an electron discharge tube having a cathode, a grid and an anode, an anode resistor, means to apply a positive operating potential to said anode through said resistor, a feedback transformer having a primary and a secondary, a storage capacitor connecting one end of said primary to said anode, the other end of said primary being connected to said cathode, a delay network for determining the duration of the generated pulses, and means coupling said secondary between said grid and cathode through said delay network; means to apply synchronizing pulses to said grid to control the recurrence rate of said generator; and a magnetron having an anode connected to said one end of said primary and a cathode connected to said other end of said primary.

2,730,622

OSCILLATOR SYNCHRONIZATION

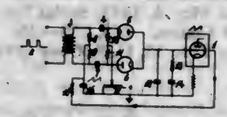
Peter Johannes Hubertus Janssen, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application August 7, 1952, Serial No. 303,041

Claims priority, application Netherlands September 10, 1951

1 Claim. (Cl. 250—36)

In a television receiver, a circuit-arrangement for synchronizing the output of a sawtooth generator with synchronizing pulses comprising a transformer having a primary winding and a secondary winding, means for applying synchronizing pulses to said primary winding, first and second resistors connected serially across said secondary winding, first and second diodes each having a cathode and an anode, the anode of said first diode being connected to the cathode of said second diode, a first capacitor connected between one end of said secondary winding and the cathode of said first diode, a second capacitor connected between the other end of said secondary winding and the anode of said second diode, third and fourth resistors connected serially between the cathode of said first diode and the anode of said second diode, a third



capacitor connected between the anode of said first diode and ground, a fifth resistor, a fourth capacitor connected in series with said fifth resistor across said third capacitor, the anode of said first diode being coupled to the input of said generator, a sixth resistor, the output of said generator being connected through said sixth resistor to the junction point between said first and second resistors, a fifth capacitor connected between said junction point and ground, and means for connecting the junction point between said third and fourth resistors to an adjustable source of potential for varying the phase between said synchronizing pulses and the output oscillations of said sawtooth generator.

2,730,623

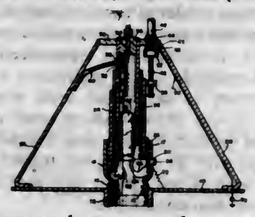
RADIOSONDE TRANSMITTER HOUSING

Albert D. Emurian, Merion, Pa., and William Todd, Interlaken, N. J., assignors to the United States of America as represented by the Secretary of the Army

Application March 11, 1953, Serial No. 341,849

3 Claims. (Cl. 250—36)

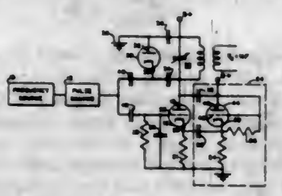
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A resonant tank structure for a radiosonde comprising a pair of spaced mutually opposing annular metallic discs, said discs being parallel and concentrically disposed relative to each other, a plurality of flat metallic strips interconnecting the outer peripheries of said annular discs, a first metallic tubular member having one end affixed to the inner periphery of one of said annular discs, a second metallic tubular member mounted along the inner periphery of the other of said annular discs whereby the free end of said second tubular member encompasses the free end of said first tubular member and is radially spaced therefrom, means for insulating said second tubular member from said other annular disc, a third tubular member encompassing said first tubular member for substantially the entire length thereof and radially spaced therefrom, an insulated sleeve affixed to the inner surface of said third tubular member, means operatively associated with said third tubular member for axially positioning said third tubular member within said second tubular member, a spring contact member having one end affixed to said second tubular member, the free end of said contact member being in sliding contact with the outer surface of said third tubular member, a bushing of insulating material mounted within

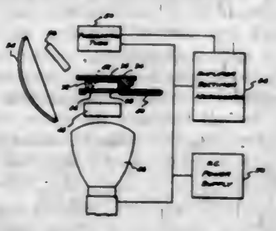
the affixed end of said first tubular member and encompassed thereby, a central bore in said bushing, an aperture in the wall of said first tubular member adjacent said affixed end, and a feed-in conductor having one end attached to one of said flat metallic strips, the other end of said feed-in conductor extending through said aperture and said bore.

2,730,624
FREQUENCY MULTIPLIER CIRCUIT
Alwin Hahnel, Little Silver, N. J., assignor to the United States of America as represented by the Secretary of the Army
Application May 4, 1953, Serial No. 353,029
9 Claims. (Cl. 250—36)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A frequency multiplier circuit comprising a source of fundamental frequency voltage, means responsive to the output of said source for generating gating pulses having a repetition frequency equal to said fundamental frequency, each cycle of said gating pulse comprising a positive portion of relatively long duration and a negative portion of relatively short duration, an electron discharge device having an input circuit and an output circuit, said output circuit including means for selecting any desired harmonic frequency of said fundamental frequency, said electron discharge device being normally non-conductive, means for coupling said gating pulses to said input circuit whereby said electron discharge device is rendered conductive and shock-excited into oscillation at said harmonic frequency for the duration of said positive portion and rendered non-conductive for the duration of said negative portion, regenerative means coupled from said output circuit and said input circuit for rapidly increasing the amplitude of the oscillatory energy at said harmonic frequency to saturation level when said electron discharge device is conducting, and unidirectional discharge means in circuit with said frequency selecting means and responsive to said gating pulses for damping said oscillatory energy only when said electron discharge device is rendered non-conductive.

2,730,625
RADIATION DETECTION DEVICES
William A. Shurcliff, Cambridge, Mass., assignor to Polaroid Corporation, Cambridge, Mass., a corporation of Delaware
Application May 13, 1952, Serial No. 287,535
12 Claims. (Cl. 250—71)



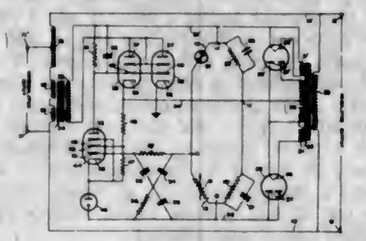
1. Detecting apparatus comprising a base, a cover capable of forming with said base a casing, said base and said cover being composed of a material which is adapted to transmit penetrative radiation without appreciable attenuation, a phosphate glass detecting element mounted on said base, said element, after having received a dose of penetrative radiation, being adapted to emit from one face thereof fluorescent light of an intensity functionally related to said dose when exciting radiation of predetermined quality and intensity is incident upon another face thereof, said other face being substantially at right angles to said one face, and reading apparatus for measuring said dose, said reading apparatus comprising a mounting means, means for predeterminedly orienting said base with respect to said mounting means, a source of ultraviolet radiation in alignment with said one face, a photoelectric tube, a curved mirror positioned with respect to said other face and said photoelectric tube so as to reflect fluorescent light emanating from said other face toward said photoelectric tube and electrical means for measuring the signal produced by said photoelectric tube as a result of fluorescent light incident thereupon.

2,730,626
AIRBORNE RADIATION DETECTOR
Frederick M. Varney, Washington, D. C.
Application July 28, 1948, Serial No. 41,161
10 Claims. (Cl. 250—83.6)
(Granted under Title 35, U. S. Code (1952), sec. 266)



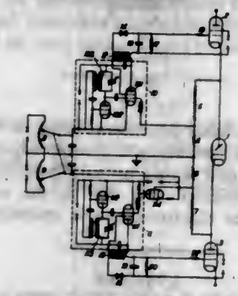
1. In a constant altitude balloon, an impervious envelope adapted to be inflated with a lighter-than-air gas, a lighter-than-air gas generator attached to and supported by said envelope for automatically inflating said envelope, and altitude responsive means to control the volume of said gas in said envelope to maintain said envelope at a predetermined altitude.

2,730,627
X-RAY STABILIZER
John E. Jacobs, Milwaukee, Wis., assignor to General Electric Company, a corporation of New York
Application January 11, 1952, Serial No. 266,052
18 Claims. (Cl. 250—97)



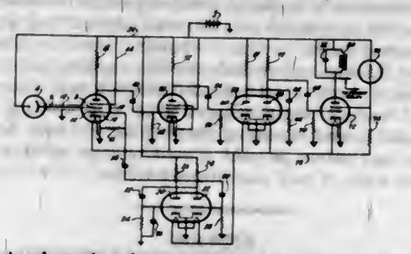
1. The method of regulating an electrical power operated ray generator, which comprises the application of cyclically pulsating electrical energy upon the generator through a supply line having a transformer and an interconnected variable impedance component, applying generated rays to ray responsive semi-conductor means, measuring variations of ray intensity in terms of ray induced changes in the apparent impedance of the semi-conductor means, and regulating generator actuating energy by adjusting the variable impedance component in accordance with the so measured variations in the apparent impedance of the semi-conductor means.

2,730,628
OPERATION OF X-RAY TUBES
Victor Quittner, London, England, assignor to General Radiological Limited, London, England, a British company
Application July 19, 1951, Serial No. 237,559
Claims priority, application Great Britain July 22, 1950
4 Claims. (Cl. 250—103)



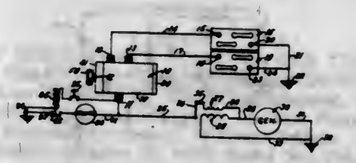
2. A circuit for operating an X-ray tube comprising a high tension source of direct current, a grid-controlled switch tube, an X-ray tube and a second grid-controlled switch tube connected in series in that order across the high tension source, the cathode of one tube being joined to the anode of its neighbour, like resistances connected between the respective electrodes of said X-ray tube and earth, tappings on said resistances near their earthed ends, high frequency generators having their output controlled by connection to said tappings, and high frequency transformers having their primary windings connected to the respective high frequency generators, and their secondary windings to the cathode-grid circuits of the respective switch tubes, said circuits including each a rectifier and smoothing elements.

2,730,629
LOW VOLTAGE PHOTOELECTRIC CONTROL CIRCUIT
Carl E. Atkins, Bloomfield, N. J., assignor to Tung-Sol Electric Inc., a corporation of Delaware
Application December 19, 1952, Serial No. 326,809
9 Claims. (Cl. 250—214)



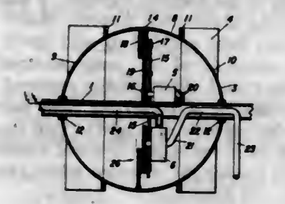
1. A photoelectric control circuit comprising a low voltage source of direct current, a two-electrode photoelectric tube, a gating tube having a cathode, at least one grid and an anode, a lead provided with a grounded shield connecting one electrode of said photoelectric tube with a grid of said gating tube, one terminal of said source being connected to the other electrode of said photoelectric tube, a circuit including a dropping resistor and said source connected across said gating tube, means normally blocking said gating tube and means for intermittently rendering said blocking means inoperative whereby photoelectric currents generated by light incident on the photo cathode of the photoelectric tube and accumulated by the distributed capacity comprising said lead and shield will be intermittently discharged through said gating tube and produce at the anode thereof pulses varying in amplitude with the intensity of the incident light.

2,730,630
DUAL STORAGE BATTERY SYSTEM
Peter Bruno, Chicago, Ill.
Original application July 19, 1953, Serial No. 362,849. Divided and this application August 27, 1954, Serial No. 452,634
1 Claim. (Cl. 290—38)



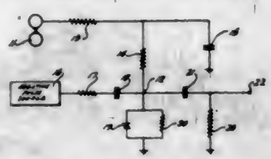
A dual storage battery system comprising a pair of storage batteries having one terminal of each battery connected to ground, an insulating support, a pair of threaded studs slidably mounted in apertures in said support, a pair of lock nuts on the stud in each aperture, said nuts having conductors secured therebetween and connected to the other terminals of said two batteries, a copper block threaded on the end of each stud and having a sliding movement with said stud on said support, spring means urging said blocks away from said nuts, a second copper block carried by a threaded stud on said support and oppositely disposed to the first two blocks, the said second block being elongated to extend over the combined width of the first-mentioned blocks, an automobile starter connected in circuit with said second block by means of a pair of nuts clamped on a conductor and spaced from the second block sufficiently to permit a limited movement of the block with said stud, spring means urging the second block toward the first two blocks, and a solid block of copper forming a connector block slidably mounted on said support and having rounded corners for riding between the first two blocks and the second block, causing all the blocks to spread away from each other and to be brought into tight engagement with each other by said spring means over substantially the full area of the engaging sides of the blocks, the said connector block permitting, by its location, the use of either one or both of said batteries to energize said starter.

2,730,631
CURRENT-DRIVEN MOTOR
Juliana S. Dandini, Reno, Nev.
Application March 30, 1953, Serial No. 345,532
7 Claims. (Cl. 290—54)



5. In a current-driven motor, a shaft having a yoke fixed to opposite ends thereof, a single cable attached to the bight of the yoke and adapted for fastening to an anchorage point adjacent a body of flowing water, a hollow ball revolvable on the shaft and adapted for freely floating on the body of water with freedom of swinging movement about said point of anchorage, fins on the ball operable by the flowing water for rotating the ball, power-operated means fixedly mounted on the shaft within the ball, and a driving connection between the ball and said means for operating the latter, the yoke being made to hold the shaft against rotation.

2,730,632
DIODE GATING CIRCUIT
Daniel L. Curtis, Venice, Calif., assignor, by mesne assignments, to Hughes Aircraft Company, a corporation of Delaware
Application February 1, 1952, Serial No. 269,565
8 Claims. (Cl. 307—88.5)



1. An electronic gating circuit for passing input pulses upon occurrence of an electrical control signal, said circuit comprising: a first resistor; a second resistor; means conductively coupling said first and second resistors in series; a diode conductively coupled across said second resistor; means for applying the control signal across the serially coupled first and second resistors to back-bias said diode; means for applying the input pulses across the second resistor; and output means conductively coupled across said second resistor, said output means being responsive to back-biasing of said diode for producing an output pulse corresponding to each input pulse.

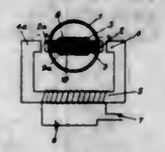
2,730,633
ELECTRO-MECHANICAL RESONATOR
Jacob Fredrik Klinkhamer, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application July 6, 1953, Serial No. 366,283
Claims priority, application Netherlands July 9, 1952
4 Claims. (Cl. 310—26)



1. An electro-mechanical vibrating device comprising a magneto-strictive annular member consisting of a highly magnetically permeable substantially electrically non-conductive material and having a given axis extending through the center thereof, a ferromagnetic core supported between but spaced from two diametrically-opposed points of the annular member, a winding on said core for carrying alternating current, means for producing a polarizing field parallel to said given axis in one direction for one-half of the magneto-strictive member located between said diametrically-opposed points, and means for producing a polarizing field parallel to said given axis in the opposite direction to said one direction in the other half of the magneto-strictive member, whereby the member is torsionally vibrated when alternating current traverses said winding.

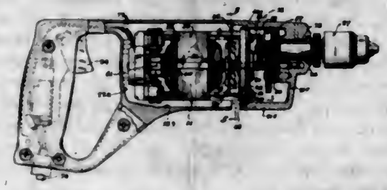
2,730,634
ELECTRICAL BALANCE WHEEL FOR TIME-KEEPERS
Paul Dargier de Saint-Vaulry, Byans-sur-le-Doubs, France, assignor to Lip S. A. D'Horlogerie, Besancon, France
Application July 3, 1953, Serial No. 366,009
Claims priority, application France July 9, 1952
1 Claim. (Cl. 310—39)

A balance wheel for an electric time-keeper subjected to the action of a magnetic field designed to maintain the oscillating movement of said balance wheel, a permanent magnet of the concentric magnetization type being supported by said balance wheel and pivoting therewith, said permanent magnet cooperating with another permanent magnet also of the concentric magnetization type, said permanent magnets being disposed in such a way that their action on each other during the



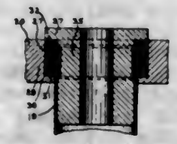
rotation of the moving permanent magnet together with said balance wheel produces a torque which neutralizes the disturbing torque acting on said balance wheel during the rotation thereof and due to the remanence or polarization of the electro-magnetic maintaining circuit.

2,730,635
PORTABLE ELECTRIC DRILLS
Joseph A. McCabe, Chicago, Ill., assignor to Portable Electric Tools, Inc., Chicago, Ill., a corporation of Illinois
Application April 4, 1952, Serial No. 280,479
5 Claims. (Cl. 310—50)



1. In a portable drill unit, a sectional housing comprising a forward gear box section including a forward wall, and a hollow rear section having side and rear walls defining a motor chamber and secured at its forward end to said gear box and having a rigid handle at its rear end, an output shaft journaled in and extending through said forward wall of said gear box-section, gearing in said gear box section, an electric driving motor disposed in said motor chamber in a spaced and independent relationship with respect to said side and rear walls thereof and including a motor frame having a mounting member disposed adjacent the rear end of said gear box section, said motor including a motor shaft extended through said mounting member and drivingly engaged with said gearing, and means fixing said mounting member to said gear box to support said motor in said spaced relation to said side and rear walls of said rear housing section.

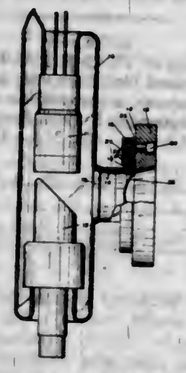
2,730,636
FLUIDTIGHT SEAL FOR ELECTRIC MOTORS AND GENERATORS
Eustace S. Dunn, Piedmont, Calif.
Application September 27, 1954, Serial No. 458,356
2 Claims. (Cl. 310—86)



1. A combined watertight seal and rotor bearing mount for submersible motors comprising in combination a tubular external housing for said motor, a stator within said housing having an axial bore therethrough, a tubular lining sleeve for said bore, annular end pieces closing the space between said housing and said lining sleeve and

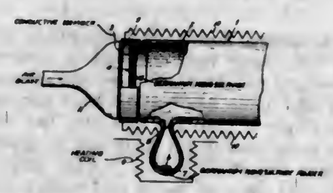
fixed to said housing to provide a watertight joint, inner peripheral recesses on said end pieces, a plurality of alternately spaced rubber rings and metal rings adapted to be received within said peripheral recesses, and bearing sleeves for rotatably mounting a rotor within said lining sleeve, said bearing sleeves having an external diameter providing a close fit within said sleeve, a slightly reduced diameter at the portion opposite said inner peripheral recesses and end shoulders adapted to bear against and overlap the ends of said lining sleeve peripheral recesses.

2,730,637
X-RAY TUBES WITH LOW-ABSORPTION WINDOWS
Zed J. Atlee, Chicago, Ill.
Application May 24, 1952, Serial No. 289,827
11 Claims. (Cl. 313—59)



1. An X-ray generator comprising a sealed envelope, anode and cathode means within said envelope, said envelope having an opening opposite said anode means, a round tubular metal member sealed to said envelope about said opening having a radially extending, peripheral flange about its outer end, said flange having a substantially planar face, a metal clamp ring having a substantially planar face, a thin disc of aluminum foil extending across the outer end of said member and having its peripheral marginal portion extending between said flange and ring, the planar face of said flange having an annular groove therein spaced slightly outwardly from the edge of said disc, a silicone grease of relatively low volatility within said groove and covering the joint between the edge of said foil and the face of said flange, and means operatively connected to said ring and said flange for tightly clamping the face of said ring to the face of said flange with said foil therebetween.

2,730,638
PHOTOCONDUCTIVE ELECTRODE
Robert J. Cashman, Glenview, Ill., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application June 6, 1952, Serial No. 292,034
9 Claims. (Cl. 313—65)



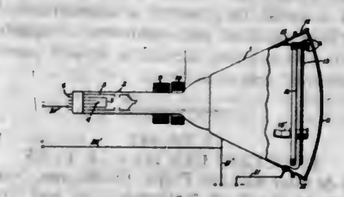
5. In a tube having a photoconductive electrode of extensive area adapted to receive a light image thereon to control the conductivity of different portions of the area thereof in accordance with the intensity of the light of corresponding portions of said image, and scanning means for passing current through different portions of said photoconductive electrode to measure the conductivity thereof; a photoconductive layer for said photoconductive electrode comprising essentially germanium monosulfide.

2,730,639
TARGET STRUCTURES SUCH AS ARE UTILISED IN TELEVISION TRANSMISSION TUBES
Charles Alan Johnson, St. Margarets, England, assignor to Electric & Musical Industries Limited, Hayes, Middlesex, England, a company of Great Britain
Application October 16, 1950, Serial No. 190,293
4 Claims. (Cl. 313—67)



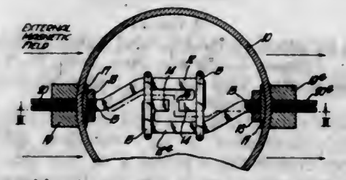
1. A target structure, such as is suitable for use in a television pick-up tube, comprising a layer of leaky dielectric material, a conductive electrode applied to one side of said layer, a multiplicity of discrete insulating elements on the other side of said layer, and photoemissive conductive elements on said insulating elements, said conductive elements being spaced from said layer by said insulating elements.

2,730,640
SECONDARY ELECTRON EMITTING SYSTEM
Lewis R. Koller, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application August 8, 1951, Serial No. 240,841
2 Claims. (Cl. 313—68)



2. A secondary electron emission system comprising the combination of a transparent supporting plate, an electrically conductive transparent coating on a surface of said plate, a transparent film of material having high secondary electron emission characteristics superimposed on said conductive coating, a perforated screen electrode supported closely adjacent said plate and a phosphor coating on said screen electrode on the side facing said film.

2,730,641
MAGNETIC COMPENSATOR
Thomas A. McLauchlan, Pittsburgh, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Application June 11, 1953, Serial No. 360,978
2 Claims. (Cl. 313—75)



1. The combination, with a device which includes a cylindrical chamber and means for passing an electron beam through said chamber along its central axis, of a compensator for changeable local magnetic fields of a

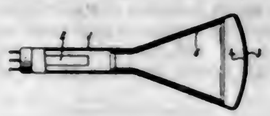
known direction comprising a pair of hook-shaped arms of soft magnetic material each having a shank and a reversely bent tip aligned with its shank, non-magnetic and conductive means clamping said arms together with their tips separated to form a gap and the shanks and tips of the two arms all in alignment, and means mounting said arms inside said chamber with said shanks and tips lying along a diameter of the chamber in the direction of the changeable local field and with the central axis of the chamber passing through said gap.

2,730,642
DEVICE COMPRISING A CATHODE-RAY TUBE
Johan Adriaan Grosjean, Hilversum, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application January 4, 1952, Serial No. 264,985
Claims priority, application Netherlands April 23, 1951
4 Claims. (Cl. 313—76)



1. A device for plan position indication comprising a cathode ray tube including an envelope having a conical portion and a neck portion, deflection coils rotatably mounted on said neck portion adjacent said conical portion, and a magnetic system surrounding said deflection coils, said magnetic system including a pair of arcuate substantially non-conductive permanent magnet segments positioned opposite one another and concentric with the coils and oriented to produce a diametrically directed magnetic field, each of said permanent magnets exhibiting a ratio of remanent induction B_r and coercive field strength $_BH_c$ of less than four.

2,730,643
ELECTRIC DISCHARGE TUBE
Johannes de Gier and Jan Peper, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application July 15, 1952, Serial No. 298,979
Claims priority, application Netherlands August 25, 1951
7 Claims. (Cl. 313—85)



1. An electric discharge tube comprising an envelope having a glass portion, and a low-reflecting metal layer deposited on the inner surface of said glass portion, said metal layer consisting of a mixture of nickel and chromium and being produced by vaporization.

2,730,644
ELECTROLUMINESCENT LIGHT MEANS
Hyman A. Michlin, New York, N. Y.
Application April 10, 1951, Serial No. 220,173
1 Claim. (Cl. 313—108)

A thin electroluminescent light means capable of being electrically controlled to vary resultant color emitted therefrom comprising a plurality of thin electroluminescent layers, each of said thin electroluminescent layers luminescing in a different part of the light spectrum, a thin transparent electrode layer on each side of each of said thin electroluminescent layers to thereby form separate electroluminescent assemblies, each of said electroluminescent assemblies arranged in superimposed rela-



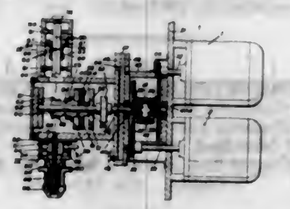
tion to each other, and a thin layer of transparent insulation separating each of said electroluminescent assemblies.

2,730,645
METALLIC FLAME RADIATION
Carl Kenty, Cleveland Heights, Ohio, assignor to General Electric Company, a corporation of New York
Application September 3, 1953, Serial No. 378,242
7 Claims. (Cl. 313—185)



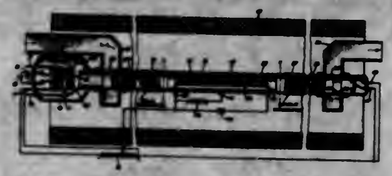
1. An electric discharge device comprising a vitreous envelope having sealed therein a pair of terminal electrodes of unactivated metal, a plurality of intermediate unactivated metal electrodes insulatively mounted within said envelope and spaced end-to-end between said terminal electrodes and with short arc gaps between adjoining electrodes, and a gaseous filling within said envelope comprising an inert gas at a pressure in excess of 3 centimeters of mercury and a small percentage of nitrogen.

2,730,646
ELECTRIC ARC WELDING APPARATUS
Peter Thomas Houldcroft and John Guy Purchas, London, England, assignors to British Welding Research Association, London, England, a corporation of Great Britain
Application August 28, 1952, Serial No. 306,814
Claims priority, application Great Britain September 3, 1951
14 Claims. (Cl. 314—62)



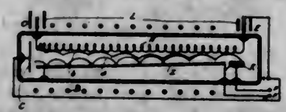
1. An automatic feed for a consumable arc welding electrode comprising feed members, a differential gear train comprising two in-put members and an out-put member, a driving connection between said out-put member and at least one of said feed members, two motors connected to drive said in-put members in opposite directions, means controlled by the voltage across said arc for varying the speed of one of said motors directly with changes in value of said voltage, and means controlled by said voltage for varying the speed of the second motor inversely with changes in the value of said voltage.

2,730,647
MICROWAVE AMPLIFIER
John R. Pierce, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application June 22, 1949, Serial No. 100,718
16 Claims. (Cl. 315—3)



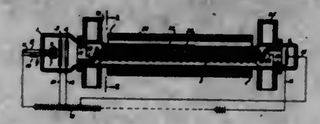
11. An amplifying space discharge device which comprises an electron gun and a first collector electrode spaced apart to define a path of travel for electrons, means coupled to said electron gun to direct a stream of electrons from said gun to said first collector, an elongated electron emissive electrode extending lengthwise along said path for a distance of at least several signal wavelengths in said stream, a second collector electrode situated substantially coaxially with said elongated electron emissive electrode and extending over substantially the same portion of said path, means coupled to said elongated electron emissive electrode to direct electrons radially of said stream in substantially all directions perpendicular to the axis thereof from said elongated electron emissive electrode to said second collector, means coupled to said stream between said gun and said elongated electron emissive electrode to supply signal wave energy thereto, and means coupled to said stream between said elongated electron emissive electrode and said first collector to withdraw amplified signal wave energy therefrom.

2,730,648
TRAVELLING-WAVE TUBE
Alfred Lerbs, Paris, France, assignor to Compagnie Generale de Telegraphie Sans Fil, a corporation of France
Application January 18, 1950, Serial No. 139,318
Claims priority, application France February 4, 1949
7 Claims. (Cl. 315—3.5)



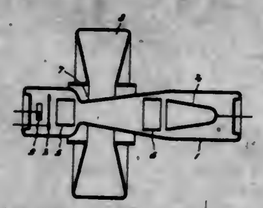
1. In a travelling wave tube arrangement, in combination, an electron source emitting an electron beam along a predetermined path; a collector of electrons arranged spaced from said electron source in the path of said electron beam; a retardation line having an input end arranged in the region of said electron source and an output end arranged in the region of said collector of electrons, said retardation line extending along said predetermined path of said electron beam; means connected to said input end of said retardation line for exciting an electromagnetic wave therein; means connected to said output end of said retardation line for collecting the energy amplified by the electron beam; a conductor extending between said source and said collector and being spaced apart from said retardation line a distance of a predetermined magnitude so as to define therewith a space for the propagation of the electron beam emitted by said source; means for applying an electrostatic field between said retardation line and said conductor; and means for establishing a magnetic field having an intensity of predetermined magnitude in the space between said retardation line and said conductor at right angles to said electrostatic field and to the electron beam, one of said magnitudes gradually increasing from said input end to said output end of said retardation line, whereby the product of the intensity of said magnetic field and of said distance between said conductor and said retardation line gradually increases from said input end to said output end of said retardation line so that the tube has a high gain in the first part of the propagation space adjacent to said input end and a high efficiency in the second part of said propagation space adjacent to said output end.

2,730,649
TRAVELING WAVE AMPLIFIER
Gordon C. Dewey, New York, N. Y., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application February 4, 1950, Serial No. 142,463
9 Claims. (Cl. 315—3.5)



1. A travelling wave amplifier comprising an electron emitter electrode and an electron collector electrode spaced apart along a given axis to define an electron path therebetween, transmission means comprising a conductor extending from a point adjacent said emitter electrode to a point adjacent said collector electrode, said conductor being of a character to provide for propagation of an electromagnetic wave with a component thereof traveling axially along said path at substantially the same velocity as the electron beam, the forward half of said conductor extending from a point adjacent said emitter electrode having a lossy characteristic for substantially the entire length thereof while the rearward half of said conductor extending to a point adjacent said collector electrode has a substantially lossless characteristic for substantially the entire length thereof.

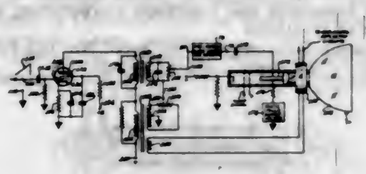
2,730,650
VERY HIGH FREQUENCY ELECTRON DISCHARGE TUBES
Hugo Georg Bruijsing, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application February 5, 1952, Serial No. 270,022
Claims priority, application Netherlands March 29, 1951
2 Claims. (Cl. 315—5)



1. An electron discharge system for very high frequencies comprising an electron discharge tube including an envelope, a cathode, a control grid, first and second high potential annular electrodes, and a collecting electrode arranged in that order in the envelope, said first annular electrode having a given internal diameter, a cavity resonator surrounding said envelope between said annular electrodes and having an annular gap facing said envelope, said envelope having a wall portion between said first annular electrode and the side of said gap remote from said first annular electrode having a reentrant por-

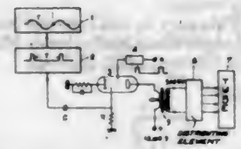
tion whose internal diameter is smaller than the internal diameter of said first annular electrode and tapers outwardly toward the second annular electrode, whereby the wall portion is struck throughout its surface by electrons emitted by said cathode.

2,730,651
DYNAMIC ELECTRON BEAM CONTROL SYSTEMS
Richard W. Sonnenfeldt, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application March 31, 1953, Serial No. 345,893
9 Claims. (Cl. 315—13)



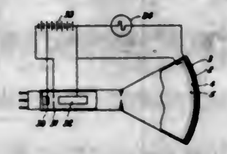
1. In a voltage generating means for developing a substantially parabolic waveform, the combination of: a source of sawtooth waveform; integrating means including low frequency attenuation means coupled with said sawtooth waveform source for developing an integrated signal waveform; means coupled with said sawtooth waveform source for developing a sawtooth waveform suitable for addition to the waveform produced by said integrating means including said low frequency attenuation means; circuit means connected with said integrating means including said low frequency attenuation means and said sawtooth waveform developing means for linearly combining the output signals from each to provide a single composite waveform of substantially parabolic shape.

2,730,652
APPARATUS WITH FOCALIZED ELECTRONIC BEAM, SUCH NAMELY AS MICROSCOPES
Henri Gutton and Frédéric Violet, Paris, France, assignors to Compagnie Generale De Telegraphie Sans Fil, a corporation of France
Application March 10, 1951, Serial No. 214,893
Claims priority, application France March 30, 1950
4 Claims. (Cl. 315—14)



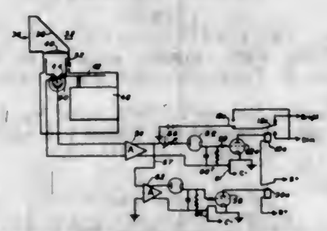
1. An intermittent voltage supply for electronic microscopes comprising in combination, an electronic microscope having a beam accelerating and focussing electrodes, the electronic microscopes being operated with a fixed and focussed beam; a master oscillator for generating a sinusoidal voltage; means for transforming said sinusoidal voltage into periodically recurrent unidirectional impulses; means for stepping up the voltage of said peridically recurrent unidirectional impulses into high voltage unidirectional impulses; and means for applying said high voltage periodically recurrent impulses directly to said beam accelerating and focussing electrodes of the electronic microscope whereby said electronic microscope is rendered conductive during that time only in which said periodically recurrent impulses are generated and applied to said beam accelerating and focussing electrodes.

2,730,653
CATHODE-RAY TUBE FOR REPRODUCING COLOURED TELEVISION IMAGES
Pieter Schagen, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application March 18, 1953, Serial No. 343,139
Claims priority, application Netherlands April 17, 1952
4 Claims. (Cl. 315—15)



1. A cathode-ray tube for reproducing color television images comprising an electron gun including a cathode, a transparent support facing said cathode, a first layer of luminescent material luminescing in a first color disposed on the side of said support facing said cathode, a second layer of luminescent material luminescing in a second color superposed on said first layer, a grid-like electrode disposed between said luminescent layers and said cathode and in close proximity to the former, a third layer of luminescent material luminescing in a third color disposed on the side of said grid electrode facing said first and second luminescent layers, and a field electrode disposed between said third layer and said transparent support.

2,730,654
AUTOMATIC HEADLIGHT DIMMER INSENSITIVE TO ORDINARY LIGHTS
Jacob Rabinow, Takoma Park, Md.
Application October 21, 1952, Serial No. 315,897
4 Claims. (Cl. 315—83)

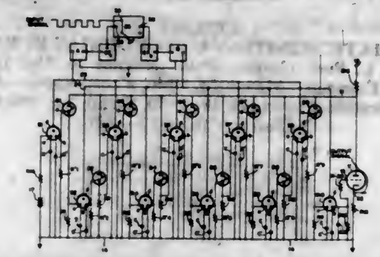


1. An automatic headlight dimming system comprising means for admitting light from a selected field of view, a photoelectrically controlled light-dimming circuit sensitive to a steady component of said admitted light for automatically dimming the headlights of a vehicle, and means responsive to a regularly fluctuating component of light from said field of view for inhibiting action of said dimming circuit.

2,730,655
GAS TUBE COUNTER
Helmut John Geisler, Hillside Lake, Wappinger Falls, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application March 12, 1953, Serial No. 341,989
10 Claims. (Cl. 315—84.5)

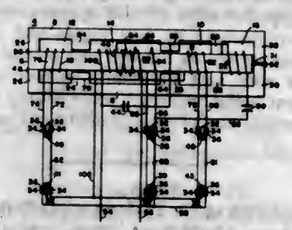
1. In a gas tube counter, a first plurality of digit position gas tubes, a second plurality of digit position gas tubes interspersed between the tubes of said first plurality, said tubes having an anode, cathode and control electrode and being adapted to be rendered conductive in succession in response to the application of a series of input pulses to be counted, circuit means connecting the anode and cathode electrodes of said tubes for energization, switch means connecting the anode-

cathode circuit of each said tube to the control electrode of the next adjacent tube so that conduction in one tube renders the next adjacent tube conductive on operation of said switch means, and stepping means operable in response to said input pulses to alternately operate the



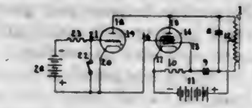
switch means connecting the control electrodes of the tubes of said first plurality and the switch means connecting the control electrodes of the tubes of said second plurality so that the last tube rendered conductive indicates the number of input pulses applied.

2,730,656
APPARATUS FOR OPERATING GASEOUS DISCHARGE DEVICES
Archie R. Cornell, Avon Lake, Ohio, assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application September 23, 1953, Serial No. 381,884
8 Claims. (Cl. 315—97)



1. Apparatus for controlling the operation of a plurality of gaseous discharge devices comprising a plurality of lampholders each having two contacts and being arranged in pairs, an autotransformer having a primary winding portion and a plurality of high reactance secondary winding portions, each connected to separate pairs of said lampholders to impress a high voltage therebetween, each of said high reactance secondary winding portions having means for impressing a voltage across the contacts of a lampholder in said separate pairs of said lampholders, and said primary winding portion having an extending portion whereby a voltage may be impressed across the other contacts of each of said separate pairs of lampholders.

2,730,657
MULTIPLE PHASE CONTROL SYSTEM
Stuart C. Rockafellow, Farmington, Mich., assignor to Robotron Corporation, Detroit, Mich., a corporation of Michigan
Application June 8, 1950, Serial No. 166,788
5 Claims. (Cl. 315—146)



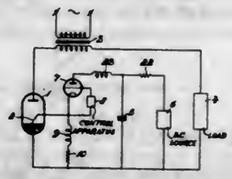
1. In a control device for controlling the flow of electrical current through a plurality of separate load circuits, each thereof having a load and an independent source of alternating load potential, the combination: a pair of gas filled electric discharge devices and means connecting same in back-to-back relation in each load circuit, each of said electric discharge devices having principal electrodes and a control electrode; a source of constant biasing potential in the control electrode circuit of each of said electric discharge devices of such polarity that said electric discharge devices are normally nonconductive; a transformer having a plurality of secondary windings, one of which is in each of said control electrode circuits and connected in series with said source of bias potential; means including a constant power source and a vacuum electric discharge device imposing an oscillating potential onto the primary winding of said transformer, a screen grid in said vacuum electric discharge device and means including a switch connecting said screen grid to the anode of said vacuum electric discharge device.

2,730,658
CIRCUIT FOR COUNTING PULSES
Willem Six, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application August 16, 1952, Serial No. 304,811
Claims priority, application Netherlands September 24, 1951
5 Claims. (Cl. 315—164)



1. Apparatus for counting pulses derived from a pulse source, comprising a series of gaseous discharge paths each provided with first and second main electrodes and an ignition electrode, and a circuit for igniting said paths in succession by said pulses, said circuit including a voltage supply having one terminal thereof connected to the first main electrode of each path, a series of resistors each connecting a respective second main electrode to the other terminal of said supply, means galvanically connecting each second main electrode to the ignition electrode of the succeeding path in the series, means capacitively connecting each second main electrode to the second main electrode of the succeeding path in the series, and means for interposing said pulse source in series with said voltage supply.

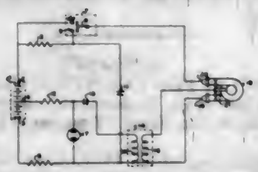
2,730,659
RECTIFYING APPARATUS
Karl Walter Hess, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application June 26, 1952, Serial No. 295,761
Claims priority, application Netherlands July 2, 1951
5 Claims. (Cl. 315—168)



1. An apparatus for rectifying an alternating voltage comprising an ignitron having a cathode, an anode and a resistance ignition electrode, means to apply said alternating voltage to said anode relative to said cathode; and an ignition circuit for said ignitron including an ignition voltage source, means to apply the voltage from said source to said ignition electrode as an ignition pulse

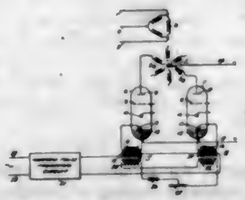
having a steep wave front and having a duration exceeding 100 microseconds, and an impedance connected between said electrode and said cathode, said impedance having a value at which upon failure of the ignitron to ignite at a predetermined instant following the application of said ignition voltage, said ignition voltage at said electrode is diminished to a level below that at which said ignitron can be subsequently ignited by said pulse.

2,730,660
PHOTOGRAPHIC FLASH CIRCUIT
Stanley D. Ellenberger, Kittredge, Colo., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application April 10, 1953, Serial No. 347,995
5 Claims. (Cl. 315—240)



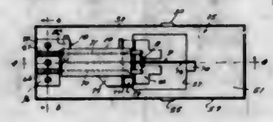
1. Apparatus for producing a flash of light for photographic purposes comprising a gas filled lamp having main electrodes and means for triggering the lamp to cause an abrupt discharge thereof between said electrodes, a dry cell battery, an electrical energy storage capacitor of the electrolytic type, means connecting said capacitor across said electrodes, a high value resistance, means continuously connecting said capacitor to said battery in series with said resistance, a switch for placing said apparatus in condition to be used, means connecting said switch across said high value resistance so that upon closure of said switch, said capacitor is connected to said battery independently of said resistance to be fully charged thereby so as to supply adequate energy for the firing of said lamp, and means for energizing said triggering means to cause discharge of the capacitor through said lamp, said high value resistance having such value in relation to the voltage of the battery and the leakage characteristics of the capacitor that upon opening of said switch a voltage will be maintained on the capacitor sufficient to prevent deforming thereof but the current continuing to flow through said resistance will be so minute that said battery will remain effective over many months despite said continual flow of current.

2,730,661
INITIATING THE ARC IN MERCURY POOL TUBES
Harry L. Kellogg, Scotia, N. Y., assignor to General Electric Company, a corporation of New York
Application January 15, 1952, Serial No. 266,526
6 Claims. (Cl. 315—252)



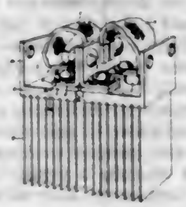
1. A circuit for energizing the starting electrode of a mercury pool type tube comprising a transformer having a primary input winding energized with alternating current, a secondary output winding interconnected with the starting electrode, and a biasing winding energized with direct current, the magnetizing effect of said biasing winding being in opposition to the magnetizing effect of alternate half-cycles of said alternating current during which said starting electrode is operably energized.

2,730,662
AUTOMATIC IGNITION UNIT FOR GAS BURNERS
Richard L. Perl, Galion, Ohio, assignor to The Tappan Stove Company, Mansfield, Ohio, a corporation of Ohio
Application November 20, 1950, Serial No. 196,683
3 Claims. (Cl. 317—83)



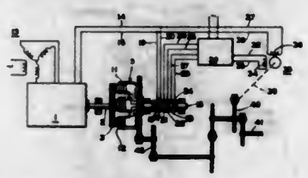
1. A thermally responsive switch comprising a frame having an opening therethrough, a normally closed switch having a stationary contact and a movable contact, and a thermostatic element carried by said frame; said thermostatic element being formed from a single piece of sheet metal and comprising a base having a relatively long strip and a relatively short strip extending upwardly therefrom in spaced relation to each other, said base and said short strip being disposed entirely on one side of said opening, said short strip having one end thereof extending outwardly from said base toward said opening and said long strip having one end thereof extending outwardly from said base across said opening, the tips of said extending ends of said strips being rigidly secured to said frame on opposite sides of said opening; said stationary contact being secured to said frame and said movable contact being carried by the free end of said long strip in engagement with said stationary contact, said thermostatic element being operative when heated to move said movable contact out of engagement with said stationary contact.

2,730,663
UNILATERALLY CONDUCTIVE DEVICE
Edgar A. Harty, Marblehead, Mass., assignor to General Electric Company, a corporation of New York
Application March 20, 1953, Serial No. 343,588
6 Claims. (Cl. 317—234)



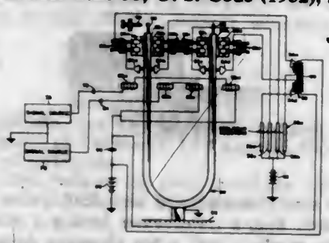
3. A unilaterally conductive device comprising an electrically conductive terminal block having a base provided with flat upper and lower surfaces and including a pair of oppositely disposed upright side walls extending from said base beyond said upper surface in parallel spaced relation, one said side wall being electrically connected to said base to constitute therewith a first terminal and the other said side wall being electrically insulated from said base to constitute a second terminal, a broad area semi-conductor cell having a P–N junction between two spaced apart contact surfaces thereof fixed to said upper surface between said side walls, one said contact surface being conductively secured in flatwise engaging relation with said upper surface of said base, an electric conductor connected between the other said contact surface and said second terminal, and heat-dissipating means disposed in heat conductive relation with said lower surface of said base.

2,730,664
INDUCTION SIGNAL MOTOR-OPERATED DIFFERENTIAL TRANSFORMER
John C. Karlson, Brooklyn, N. Y., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application March 27, 1953, Serial No. 345,073
8 Claims. (Cl. 318—31)



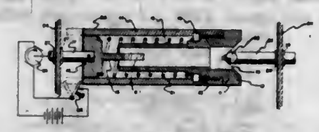
2. In a signal transmitting system, a two-element signal pick-off, one element comprising a transformer including an E-type core having a primary winding on the center leg and secondary windings on the outer legs of the core connected in series opposition, the transformer being rotatable about an axis passing longitudinally of said center winding, the other element comprising a circumferentially unsymmetrical armature rotatable in a path adjacent to the free ends of said legs about an axis extending in the same direction as the transformer axis; means for rotating one of said elements and thereby shifting the armature circumferentially from a selected position relative to said secondary windings, thereby changing the relative magnetic fields of the latter windings; and means for rotating the other element and thereby returning the armature to said selected relative position.

2,730,665
SIGNAL DETECTOR
Robert W. Hart, Lynn, Mass.
Original application September 27, 1951, Serial No. 248,625. Divided and this application May 20, 1953, Serial No. 356,322
6 Claims. (Cl. 318—128)
(Granted under Title 35, U. S. Code (1952), sec. 266)



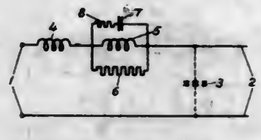
1. In apparatus for driving a tuning fork at constant amplitude comprising a current source, an electromagnetic driving means magnetically associated with an arm of said tuning fork and an inertia operated microphone mounted on an arm of said tuning fork, said current source, said driving means and said microphone being connected in series circuit, means for limiting the net driving force applied to said tuning fork during each vibration, said last-mentioned means comprising a pressure sensitive microphone, means supporting said microphone, said supporting means including a spring member normally pressing on said microphone, a rigid arm secured to one arm of said tuning fork and adapted to contact said spring member upon the attainment by said tuning fork of a predetermined amplitude of oscillation, said rigid arm acting to reduce the pressure exerted by said spring member on said microphone and thereby increase the impedance of said microphone at amplitudes of vibration greater than said predetermined amplitude, said pressure sensitive microphone being connected in said series circuit to limit the current flowing therein.

2,730,666
POWER CONTROL DEVICE FOR ELECTRIC MOTOR
Jack H. Cohen and Robert A. Goslin, Indianapolis, Ind., assignors to the United States of America as represented by the Secretary of the Navy
Application March 23, 1953, Serial No. 344,256
5 Claims. (Cl. 318—475)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A power control mechanism comprising an input shaft, an output shaft, a collar attached adjacent one end of said input shaft, said input shaft having said one end reduced to a tongue, a first tubular member slidably surrounding said collar, a second tubular member threadedly attached at one end to the end of said first tubular member and extending partially within said first tubular member, said second tubular member having slots in the end extending within said first tubular member, and having a cam surfaced recess in its other end, said slots engaging said tongue of the input shaft, said output shaft having a cross member engaged in said recess, a compression spring retained between the collar and the threaded ends of the tubular members and surrounding a portion of said second tubular member.

2,730,667
PROTECTIVE MEANS FOR HIGH VOLTAGE DIRECT CURRENT TRANSMISSIONS
Erich Uhlmann, Ludvika, Sweden, assignor to Allmanna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a Swedish corporation
Application April 23, 1952, Serial No. 283,906
Claims priority, application Sweden April 23, 1951
8 Claims. (Cl. 321—2)

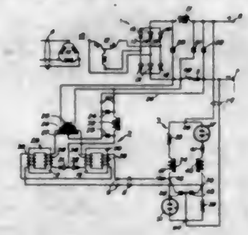


1. A power transmission system operating with high voltage direct current, comprising a rectifier installation, an inverter installation, a connecting direct current line extending between said installations, a reactor between each of said installations and said line, said reactor having an inductance sufficient to limit the rate of change of the line current at any change of the load to a reasonable value, another reactor cooperating with each of the first-named reactors and connected between said line and each of said installations and having an inductance of the same order of magnitude as the first-named reactors, and energy dissipating means connected to at least one of said reactors.

2,730,668
REGULATED POWER SUPPLY
Philip E. Edelman, North Hollywood, Calif., assignor to Bendix Aviation Corporation, North Hollywood, Calif., a corporation of Delaware
Application October 15, 1954, Serial No. 462,568
10 Claims. (Cl. 321—18)

1. A converter for rectifying alternating current, filtering the rectified current and delivering it to a pair of output terminals at a predetermined potential, comprising: a main rectifier and filter unit for receiving alternating current and converting it into a direct current output at

a potential differing from said predetermined potential by a fraction of the latter; an auxiliary variable potential rectifier and filter unit for receiving alternating current and converting it to a direct current output of potential substantially equal to said fraction, said auxiliary unit including a pair of control terminals and means responsive to a varying control current applied thereto for varying the potential of the direct current output relative to the alternating current input of said auxiliary unit; means con-



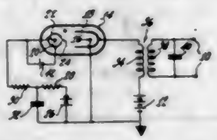
necting the direct current outputs of said main and auxiliary units in series relation between said output terminals; and a voltage-sensing means for deriving from the direct current voltage across said output terminals and applying to said control terminals of said auxiliary unit a D. C. control current variable with the potential across said output terminals, and in direction such that changes in the output voltage of the auxiliary unit oppose departures of the potential between said output terminals from said predetermined value.

2,730,669

ELECTRONIC INVERTER SYSTEM

William M. Webster, Jr., Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application September 26, 1951, Serial No. 248,387
6 Claims. (Cl. 321—35)



1. An inverter system comprising a gas filled separated function tube having work electrodes including an anode and a main cathode and ionizing electrodes including an auxiliary cathode and a constricting electrode enclosing said auxiliary cathode and having an opening opposite said main cathode, a load circuit connected to said anode, means to apply a potential less than the ionization potential of said tube gas across said main cathode and anode through said load circuit, and relaxation oscillator means having a discharge path including said ionizing electrodes to provide a pulsing ionization current in said tube.

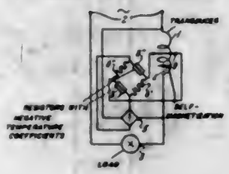
2,730,670

MEANS FOR PRODUCING LOW-FREQUENCY ELECTRICAL OSCILLATIONS

Lennart Borg, Ludvika, Sweden, assignor to Allmänna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a corporation of Sweden

Application November 7, 1950, Serial No. 194,453
Claims priority, application Sweden November 14, 1949
6 Claims. (Cl. 321—68)

1. A device producing low frequency oscillations and having a source of alternating current feeding an electric circuit, comprising a transductor in said circuit, a load in circuit with said transductor exposed to said oscillations, means for the magnetization and subsequent demagnetization of the transductor including control means of the transductor, at least one rectifier connected to a voltage which is dependent on the current through the load, two current paths at least partly separated from each



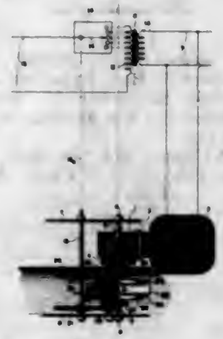
other and both connecting said rectifier with said control means, and impedance elements in said separated current paths, the characters of which paths are differently time-dependent, one current path affecting the magnetization and the other current path affecting the subsequent demagnetization of the transductor.

2,730,671

ELECTRO-MECHANICAL CONTROL MEANS

Anthony Van Ryan, South Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware

Application March 16, 1951, Serial No. 216,050
6 Claims. (Cl. 323—43.5)



3. In an alternating current electrical system comprising an electric line, a transformer having a primary and a secondary winding, and a tap changing device having a rotatably operable contact arm arranged to selectively electrically connect predetermined portions of one of said windings with said line, the combination with a unitary regulatory device comprising a field structure having opposed pole pieces and an energizing winding electrically connected with said secondary winding, a normally unidirectional rotating armature, said armature being freely movable longitudinally of its axis simultaneously with its rotation responsive to variations of electrical energy in said secondary winding, power translating means including an hydraulic rotational clutch mechanism, said clutch mechanism comprising a driving disk operatively associated with said armature, opposed driven disks each being freely movable rotationally and slidable axially relative to said driving disk, and reversible power takeoff means operatively associated with said tap changing device and arranged to be alternatively rotationally driven by said driven disks responsive to longitudinal movement of said driving disk, whereby the operation of said tap changing device will be directly responsive to electrical quantity variations in said secondary winding.

2,730,672

ELECTRICAL RESISTIVITY WELL LOGGING SYSTEMS AND METHODS

Whitman D. Mounce, Houston, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware

Application October 18, 1948, Serial No. 55,046
16 Claims. (Cl. 324—1)



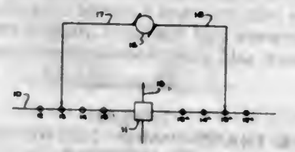
1. In a system for making a resistivity log in a borehole in the earth, the combination of an electrical cable, an electrode assembly supported in the borehole on the cable and including a current electrode device and a pick-up electrode, a source of current at the surface of the ground connected to said cable for causing current to flow from the current electrode device into fluid in the borehole and into the earth formations, measuring equipment at the surface of the ground, also connected to said cable for taking readings of the electrical potential between the pick-up electrode and a reference point, an arrangement for changing the effective distance between the current electrode device and the pick-up electrode while the readings are being taken to enable the making of a step by step log and a control circuit connected to said cable and said measuring equipment for correlating the changes in said effective distance with said readings.

2,730,673

MAGNETOMETER

John Jay Jakosky, Los Angeles, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California

Application January 20, 1947, Serial No. 723,049
15 Claims. (Cl. 324—7)



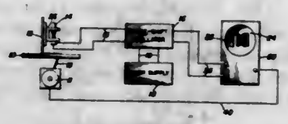
1. An apparatus for determining the location of anomalous underground structure which comprises electrodes in contact with the earth's surface at spaced points, an electric direct current generator, insulated conductors connecting said generator to said electrodes, a pick-up coil maintained substantially equidistant between and on an imaginary line running through said electrodes and a compensated galvanometer electrically connected to said pick-up coil, said galvanometer being magnetically compensated and characterized by having substantially no restoring torque associated with its indicating mechanism whereby said compensated galvanometer registers an indication constituting a unidirectional deflection of its indicating mechanism upon and in proportion to a change in the direct current magnetic field intensity intersecting said pick-up coil and induced by a change in subsurface direct current between said electrodes.

2,730,674

ELECTRONIC TEST EQUIPMENT

Willard M. Grimes, Jr., Paterson, N. J., assignor to the United States of America as represented by the Secretary of the Navy

Application September 12, 1952, Serial No. 309,321
3 Claims. (Cl. 324—20)



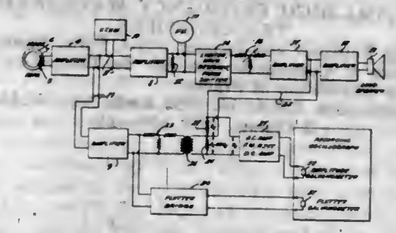
1. An electro-mechanical mechanism for testing the operation of an electron tube, comprising, an electrical circuit including a power source and a phase shift oscillator having a tube connected therein, said tube being arranged to be mechanically isolated from said oscillator and the rest of said electrical circuit, holding means for said tube likewise mechanically isolated from said electrical circuit, means for vibrating said holding means and said tube while said tube is connected in said electrical circuit, and means connected to the output of said phase shift oscillator for observing and recording the operating characteristics of said tube.

2,730,675

SMALL AMPLITUDE MEASURING SYSTEM

Kurt Singer, North Hollywood, Calif., assignor to Radio Corporation of America, a corporation of Delaware

Application May 15, 1951, Serial No. 226,515
The terminal 15 years of the term of the patent to be granted has been disclaimed
2 Claims. (Cl. 324—78)

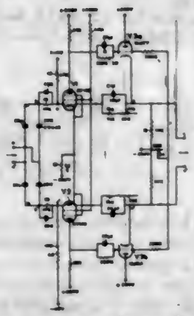


1. An electric measuring system comprising a signal wave source adapted to vary in frequency and amplitude, means connected to said signal wave source for limiting the amplitude of said signal wave to a constant amplitude, means connected to said limiting means for restoring the wave shape of said signal wave at said constant amplitude, means connected to said wave shape restoring means for shifting the phase of said wave 180 degrees, a second circuit means connected to said original signal wave source for obtaining said original signal with its original amplitude variations, combining means connected to said phase shifting means and to said last mentioned means for algebraically adding said restored wave of constant amplitude and 180 degrees phase shift to the original signal wave of varying amplitude, and means connected to said combining means for indicating the differential wave between said restored wave of constant amplitude and said original signal wave of varying amplitude, said differential indicating means being a recorder, said recorder including means to compare the amplitude of said differential wave with variations in frequency of said signal wave.

2,730,676
PULSE CODE SYSTEMS

Ronald Hugh Barker, Christchurch, England, assignor to National Research Development Corporation, London, England, a British corporation

Application January 2, 1952, Serial No. 264,573
Claims priority, application Great Britain January 8, 1951
18 Claims. (Cl. 332—11)

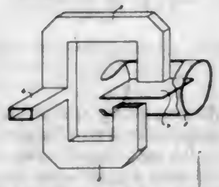


1. In a cyclic permuting pulse code system, a circuit arrangement for modifying the signal potential between the derivation of two successive code digits, and comprising a rectifier bridge having two input connections for separately applying a signal potential and a reference potential to said bridge, and having first and second output connections on which the more negative and more positive of the two applied potentials are produced respectively, a potential amplifying and modifying circuit to which the output of the bridge is applied, said circuit doubling the potential difference between the two potentials applied thereto and changing the more positive potential by a predetermined potential in a negative sense with respect to the more negative potential.

2,730,677
ULTRA-HIGH FREQUENCY WAVE-MODE TRANSFORMERS

Georges Boissinot and Jacques Gillet, Paris, France, assignors to Compagnie Generale de Telegraphie Sans Fil, a corporation of France

Application August 26, 1952, Serial No. 306,336
2 Claims. (Cl. 333—21)

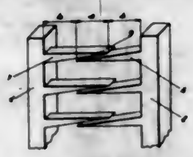


1. An ultra-high-frequency wave transformer for transforming a wave of the H_{01} type propagated in a rectangular guide into a wave of the H_0 type propagated in a circular guide, or vice versa, said transformer comprising a circular first guide inside which a conductor partition is disposed in a median plane, a rectangular second guide, and two rectangular guide portions having respective extremities penetrating into the circular guide on the two opposite sides of said partition, the axes of said rectangular guide portions being perpendicular to said partition, the other ends of said rectangular guide portions being connected together and to said second guide in a series T junction, the smaller sides of the rectangular guide portions being disposed in transverse planes of the circular guide, the two said rectangular guide portions opening into said circular guide at locations axially separated by $\lambda/4$, and the two said rectangular guide portions having lengths which differ by $\lambda/4$ where λ is the operating wavelength in said guides.

2,730,678
IMPROVEMENTS IN INTERDIGITAL DELAY LINES

Oscar Dohler and Bernard Epsztein, Paris, France, assignors to Compagnie Generale de Telegraphie Sans Fil, a corporation of France

Application December 17, 1952, Serial No. 326,552
Claims priority, application France December 29, 1951
4 Claims. (Cl. 333—31)

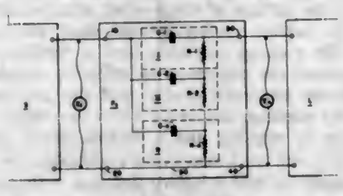


1. A delay line for a travelling wave tube, comprising two combs, each having a series of parallel fingers having a first extremity secured thereto and a second free extremity, the fingers of both combs being reciprocally interdigitated, the distance between said free extremity of each finger of one of said combs and the other comb being of the order of one-third of the total distance between said combs, said fingers having, in the plane of said combs, decreasing width from said first extremity to said second extremity.

2,730,679
DELAYED-RECOVERY ELECTRIC FILTER NETWORK

George A. Philbrick, Dover, Mass.

Application May 18, 1951, Serial No. 226,963
11 Claims. (Cl. 333—70)



1. A delayed-recovery high-pass filter network adapted to be interposed between a signal source and a load, comprising, in combination, first and second input terminals, first and second cooperating output terminals adapted to have a load connected therebetween, a common connection from said second input terminal to said second output terminal, a first capacitance connected between said first input terminal and said first output terminal, two resistances connected in series between said first and second output terminals, and a seuond capacitance connected directly between said first input trminal and the connection between said series-connected resistances.

2,730,680
WAVE TRANSMISSION NETWORK USING TRANSISTOR

John T. Bangert, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application September 3, 1952, Serial No. 307,687
8 Claims. (Cl. 333—80)



1. A negative-resistance network comprising two terminals between which the negative resistance is effective,

two transistors, two resistive impedances at least one of which has a substantial resistive component in the operating frequency range of the network, two resistors, a capacitor, and a source of direct voltage, each of said transistors having a base, a collector, and an emitter, one of said terminals being connected to the base of the first of said transistors, the other of said terminals being connected to the collector of the second of said transistors, said resistive impedances being connected in series between said emitters, said resistors being connected in series between said collectors, said source being connected between the common terminal of said resistive impedances and the common terminal of said resistors, and said capacitor being connected between the collector of said first transistor and the base of said second transistor.

2,730,681
INDUCTANCE

Jan Jacobus Went, Eindhoven, and Govert Jan Verlinde, Hilversum, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application April 18, 1951, Serial No. 221,572
Claims priority, application Netherlands April 20, 1950
4 Claims. (Cl. 336—110)



1. An inductor adapted to operate at signal frequencies exceeding 10 kc. comprising a ferromagnetic core element constituted of a ferromagnetic ferrite material having a large magnetic permeability, a coefficient of losses tan δ less than 0.06, and a Curie temperature exceeding 80° C., a winding surrounding said core element, and a permanent magnet in close proximity to said core element and coupled thereto at a position at which a constant premagnetizing field is produced within the core element by said magnet, said constant field produced by said magnet having a value at which the initial permeability of said core element is reduced to about one-half the value that would exist in the absence of the premagnetizing field whereby the inductance of the inductor is substantially independent of temperature over a range of temperatures.

2,730,682
TUNING NETWORK STRUCTURE

Frank A. Wood, Elmhurst, Ill., assignor to Zenith Radio Corporation, a corporation of Illinois

Application May 1, 1952, Serial No. 285,379
4 Claims. (Cl. 336—142)



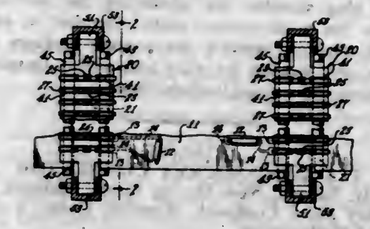
1. A tuning strip for a step-by-step turret tuner having mounting provisions for accommodating a plurality of such strips, said tuning strip comprising: a base member of insulating material to be received and supported by said mounting provisions and including on one face thereof an elongated projecting section which defines a substantially V-shaped elongated channel section; at least one self-supporting inductance coil mounted in nested parallel relation within said channel and having lead-in portions projecting transversely beyond said channel section and across the upper edge thereof; and a plurality of feed-through contact terminals electrically connected to said lead-in portions of said coil, projecting through and supported by said base member at one side of said channel section.

3. A tuning strip for a step-by-step turret tuner having mounting provisions for accommodating a plurality of such strips, said tuning strip comprising: a base member to be received and supported by said mounting provisions and including a substantially V-shaped elongated channel portion; at least one self-supporting inductance coil mounted in nested parallel relation within said channel and having lead-in portions projecting transversely beyond said channel; a plurality of contact terminals electrically connected to said lead-in portions of said coil and supported by said base member in mutually insulating relation; a guide projecting from said base member at one end of said channel portion and including a substantially V-shaped slot in axial alignment with said coil; a threaded tuning core supported in said slot in essentially coaxial alignment with a selected one of said coils and at least partially threaded into said guide portion; and a retaining member retaining said tuning core in said guide for movement into and out of said coil.

2,730,683
SLIDING CONNECTOR

Jay J. Ayres, Washington Township, Gloucester County, N. J., and LeRoy H. Shanin, Philadelphia, Pa., assignors to Radio Corporation of America, a corporation of Delaware

Application September 29, 1954, Serial No. 459,190
5 Claims. (Cl. 339—17)



1. A connector for use with a printed circuit board having spaced terminals thereon, said connector comprising an elongated block having a groove extending along either side thereof adapted to receive an edge of a printed circuit board, apertures in said elongated block, spaced vertical conductors extending through said elongated block in said apertures, spring contact members mounted on said elongated block and electrically connected each to one of said conductors, each of said contact members having at least one free end extending toward one of said grooves, said elongated block having a number of spaced notches extending downwardly from said grooves and adapted to receive said free ends of said contact members, said contact member being biased to lie in said notches beneath said grooves, and a cam member extending through said elongated block beneath each of said grooves, said cam member being adapted, in one position, to urge said free ends of said contact members upwardly into said grooves whereby said free ends may engage the terminals of a printed circuit board.

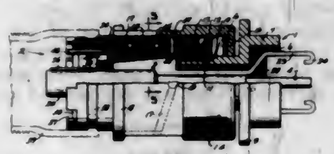
2,730,684
ELECTRICAL CONNECTORS

Alfred S. Gutman, Brookline, Mass.

Application August 30, 1954, Serial No. 453,166
16 Claims. (Cl. 339—60)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. In a multiple contact electrical connector, a plug contact member having a central axis comprising a plurality of contact segments fixed in insulated relation to each other around the central axis, each segment having an inclined contact surface inclined forwardly of the plug contact member toward the central axis, and facing radially outward to form an annular outwardly tapered multi-contact plug having the tapered contact surfaces spaced around its periphery, a complemental multi-contact sock-

et member for the plug member having an inner inwardly tapered multi-contact surface substantially complemental to the outwardly tapered multi-contact surface of the plug forming a socket, comprising an annular body having a central axis, a plurality of relatively insulated contact segments, yieldably mounted within the body for radial yielding movement toward the central axis of the body and spaced around the ecntral axis of the body, having contact surfaces facing toward the central axis of the body and inclined inwardly from the mouth of the socket toward the central axis of the body for yieldable



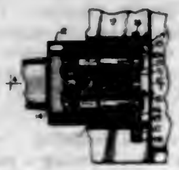
wiping contact with the contact segments of the plug when the plug is inserted into the socket, resilient means between the body and the yieldable contact segments therein yieldably urging the latter contact segments radially inward toward the central axis of the body, and cooperating bayonet slot and lug means between the body and the plug member for advancing the multi-contact plug into the multi-contact socket member to establish electrical contact between the contact surfaces of the segments and locking the plug and socket members together when said contact is established.

2,730,685

PLUG-AND-SOCKET CONNECTOR

Robert H. Sperzel, New Haven, Conn., assignor to The Whitney Blake Company, Hamden, Conn., a corporation of Connecticut

Application September 22, 1953, Serial No. 381,577
2 Claims. (Cl. 339—62)



1. In an electrical plug-and-socket connector, a hollow body member having a socket therein, a groove extending about the inner periphery of the socket, a first panel held rigidly within the said groove, a second panel slidably movable in said groove, means for biasing said second panel towards said first panel, and an electrical contact element carried by each panel, said contact elements extending axially of the socket, and being parallel to each other.

2,730,686

HERMETICALLY SEALED ELECTRICAL APPARATUS

Charles E. Smiley, Livingston, N. J.

Application April 18, 1952, Serial No. 283,148
3 Claims. (Cl. 339—89)

3. A receptacle comprising a substantially flat base plate having a plurality of openings therethrough, a plurality of terminal pins positioned substantially perpendicular to said base plate and respectively extending through said openings, a plurality of elongated pin receptacles each comprising an elongated member having a plurality of jaws at an end thereof, said jaws having a beveled surface at said end of said elongated member, said pin receptacles being substantially perpendicular to said base plate and respectively attached to said terminal pins on one side of said base plate with said beveled surfaces being relatively farthest away from said base plate, an outside-threaded annular ring attached at an end thereof to said one side of said base plate and encircling said terminal pins, a circular compression plate positioned over the beveled surfaces of said jaws substantially parallel to said base

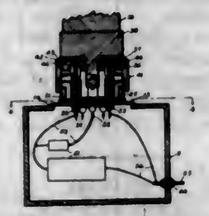


plate and containing a plurality of beveled openings therethrough respectively positioned in engagement with the beveled surfaces of said jaws, and an inside-threaded annular tightening ring positioned in threaded engagement with said outside-threaded annular ring and encircling said compression plate and having an inwardly extending annular shoulder in engagement with a surface of said compression plate.

2,730,687

SELF LOCKING CONNECTING DEVICE FOR DETACHABLY CONNECTING TWO ELEMENTS

Henry J. Modrey, Fleetwood, N. Y., assignor to Interlock Corporation, New York, N. Y., a corporation of New Jersey

Application May 10, 1950, Serial No. 161,138
10 Claims. (Cl. 339—91)



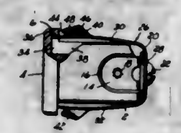
1. An engaging coupling member for a connecting device of the type comprising a receiver coupling member including a wall member having an opening therethrough adapted to receive the engaging coupling member in detachably locking engagement, said engaging coupling member comprising a clamping rod including an opening and having a clamping head on one end eccentrically overhanging the rod, a locking slide disposed axially slidably in said opening, at least part of the rod wall defining said opening guiding said slide and holding the same in captive position alongside and parallel to the rod, the combined peripheral outline of the clamping rod just below the clamping head and of the slide approximately fitting the cross-section of said receiving opening and the combined peripheral outline of the clamping head and the slide exceeding the cross-section of the receiving opening, yieldable means urging the slide toward the clamping head, retaining means on the clamping rod and the locking slide coacting with each other for limiting the movement of the slide toward the clamping head by the action of said yieldable means, and actuating means for withdrawing the slide relative to the clamping head against the action of said yieldable means.

2,730,688

FASTENER FOR RETAINING A CASING IN A PANEL

Edward E. Miller, New Britain, Conn., assignor to The Hart Manufacturing Company, Hartford, Conn., a corporation of Connecticut

Application February 5, 1954, Serial No. 408,433
3 Claims. (Cl. 339—128)



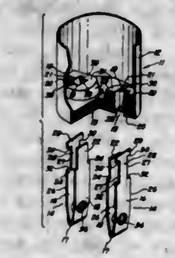
1. Fastening means for a casing of the type adapted to be installed in an aperture in a thin panel and having a flange on the front of the casing adapted to seat against the periphery of an aperture in the panel, comprising a clamp for removably retaining said casing in firmly seated position in said panel comprising a U-shaped member secured to the back of said casing and having resilient arms extending forwardly along opposite sides thereof, outwardly inclined ears on said arms having a lateral spacing when said arms are relaxed greater than the width of said aperture and adapted to engage the edges of said aperture to flex said arms together when said casing is inserted through said aperture, and a rearwardly and outwardly inclined diagonal front edge on each of said ears, said inclined front edges being engageable with the peripheral edge of said aperture in the seated position of said flange to cam said casing rearwardly into firmly seated position.

2,730,689

ELECTRIC TERMINAL CONNECTOR

Fredrick S. Lamb, Cleveland Heights, and Herman E. Hermanson, East Cleveland, Ohio, assignors to General Electric Company, a corporation of New York; patent dedicated to the public insofar as it relates to lamps and lamp parts to the extent stated in document recorded in the U. S. Patent Office, January 4, 1954, Liber U-238, page 394

Application December 26, 1951, Serial No. 263,454
7 Claims. (Cl. 339—145)



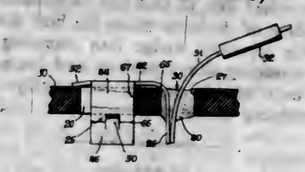
1. An electrical connector comprising a body member provided with an insulative wall portion having an aperture therethrough, and a contact prong slidably insertable into said aperture from the exterior of said wall to secure the prong in place therein, said contact prong comprising a strip of metal having an inner end portion providing a stop shoulder extending laterally inward from a side edge of the prong and facing outwardly toward the outer end of the prong, said inner end portion being twisted at a slight angle to the plane of the prong to thereby displace the said outwardly facing shoulder to one side of the prong, said prong also having an inwardly facing laterally extending stop shoulder opposed to and spaced from said outwardly facing shoulder a distance approximately corresponding to the thickness of said wall around the said aperture, said inwardly facing stop shoulder being engageable with the outer side of said wall to limit insertion movement of the prong into the said aperture in said wall, and said aperture having inwardly converging side wall portions defining a slot having a width at its inner end corresponding approximately to the thickness of the prong so as to snugly receive the prong, said converging side walls engaging and flexing the said twisted inner end of the prong into parallelism with the rest of the prong during its passage through the said aperture whereby to allow the said flexed inner end to spring back to its normal unflexed position, upon passage thereof completely beyond the inner side of said wall, so as to overlie and engage with the said inner side of the wall to thereby lock the prong in place in said aperture against outward withdrawal therefrom.

2,730,690

PRINTED CIRCUIT CHASSIS AND TUBE CLIP

Richard J. Harasek, Chicago, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois

Application March 29, 1952, Serial No. 279,420
5 Claims. (Cl. 339—193)



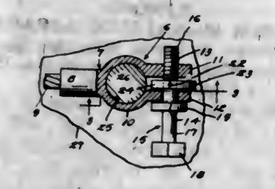
1. In a chassis for receiving a removable electrical component of the plug-in type having extending prongs and including a chassis sheet of insulating material having a plurality of prong receiving apertures therethrough together with a plurality of correlated apertures each related in a predetermined position to a respective one of said prong receiving apertures, an electrically conductive prong gripping spring contact inserted in each of said prong receiving apertures comprising, a body portion overlaying the upper face of said chassis sheet and having a prong receiving aperture therethrough in registry with the prong receiving aperture of said sheet, a pair of oppositely positioned spring jaw members depending from said body portion and extending through the prong receiving aperture of said sheet, a tail portion depending from said body portion and extending through the respective correlated aperture of said sheet, each of said jaw members having a projection extending in a direction away from the oppositely positioned jaw member and adapted to contact the lower face surface of said sheet to retain the contact in the respective prong receiving aperture of the sheet, and said body portion having an end portion extending at an angle towards the upper face of said sheet to constrain the projection of each jaw member towards the under surface of said sheet.

2,730,691

BATTERY TERMINAL CLAMP

Willard E. Nelson, Watervliet, Mich.

Application March 15, 1954, Serial No. 416,253
1 Claim. (Cl. 339—239)



In combination with a split clamping sleeve having a bore for engaging a battery post or terminal and having substantially parallel arms projecting from the sleeve on opposite sides of the sleeve gap, said arms having aligned

openings, one of said openings being threaded, the other opening being unthreaded and larger than the threaded opening, an actuator comprising a bolt shank having a threaded portion threadedly engaging the threaded opening and an unthreaded portion extending loosely through the unthreaded opening, an eccentric wedge comprising a disk eccentrically fixed on said bolt shank and loosely disposed between said arms and including a peripheral portion disposed a greater distance from the axis of the bolt than the distance between the bolt axis and an adjacent portion of the sleeve bore, said peripheral portion being movable by rotation of the bolt into the sleeve bore for clamping a battery post or terminal between said eccentric wedge and a portion of the clamping sleeve, and an enlargement fixed to the unthreaded bolt shank portion and disposed on the outer side of said arm having the unthreaded opening and positioned to cooperate with the bolt shank and said arms to adjust the size of the sleeve bore to accommodate battery posts and terminals of different cross sectional sizes, and said enlargement being advanced against the outer side of said last mentioned arm to prevent spreading of the arms when the bolt shank is turned to move the eccentric wedge into clamping relationship with said clamping sleeve portion and for advancing the threaded bolt shank portion outwardly through the threaded opening of the other arm.

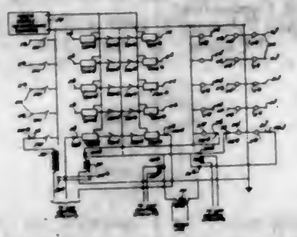
2,730,692
CONTACT MEMBER FOR DISC-SHAPED ELECTRODE CONNECTIONS
Jan Jongsma, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application March 18, 1953, Serial No. 343,201
Claims priority, application Netherlands April 10, 1952
2 Claims. (Cl. 339—256)



1. A device for securing a flat disc-shaped electrode connection of an electric discharge tube to a substantially flat metal wall having a circular aperture, said device comprising a flat metal contact member having a central aperture and a plurality of radial slots extending outwardly from said aperture defining a plurality of resilient elements, said member being mounted on said wall in the aperture therein, and a solid flexible diaphragm constituted of a metal of good electrical conductivity and having a central aperture therein, said diaphragm being mounted in said aperture in said wall and underlying said contact member and closely adjacent thereto so as to completely cover the slots therein, said apertures in said contacts member and diaphragm being aligned with each other.

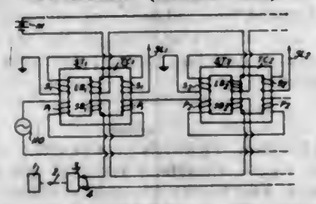
2,730,693
ELEVATOR SIGNALLING APPARATUS
Charles W. Lerch, Wilmette, Ill.
Application May 29, 1953, Serial No. 358,428
4 Claims. (Cl. 340—19)

1. In an automatic elevator installation comprising a car, a plurality of floor stations, "up" and "down" hall lanterns for each of such floors, automatic power mechanism for moving the car between floor stations, and manually operable switch means within said car for controlling said automatic power mechanism to stop the car at any selected one of said floor stations, the improvement which comprises a passenger exit warning signal located at each of said floor stations, and mechanism operative responsively to an actuation of said switch means within said car to energize such passenger-exit warning signal at the floor station selected by said switch-means actuation during the interval in which said car is approaching



and stopping at said floor station, such mechanism comprising also means for de-energizing such passenger-exit warning signal when the car resumes its movement following such stop.

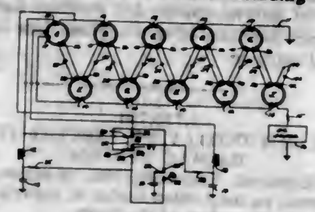
2,730,694
AMPLITUDE RECORDING SYSTEM UTILIZING SATURABLE CORE REACTORS
David T. N. Williamson, Edinburgh, Scotland, assignor to Ferranti Ltd., Hollinwood, England
Application January 29, 1952, Serial No. 268,785
Claims priority, application Great Britain February 2, 1951
11 Claims. (Cl. 340—172)



1. A system for the visible recording of intelligence capable of being translated into electrical signals of varying amplitude, comprising a sheet of electro-responsive material, an array of stylus members each arranged in proximity to a different unit area of the sheet and each identified with a different level of amplitude of said signals, and an amplitude discrimination system for selectively energising said stylus members comprising a plurality of saturable transductors, one for each of said stylus members, means for locally biasing each of said transductors beyond the magnetic saturation point to different degrees proportional to the different amplitude levels of the signals to be recorded comprising a local bias winding on each transductor, all of said local bias windings being energised by a substantially constant source of direct current, a primary winding for each transductor energised by a substantially constant source of alternating current, a secondary winding for each transductor connected in energy transfer relation to an individual one of said stylus members, the alternating fluxes due to said primary winding and said secondary winding being individually balanced with respect to the bias windings so as to have no coupling effect on the said bias windings, and means for applying electrical signals of varying amplitude representative of the intelligence to be recorded to all of said signal bias windings in common.

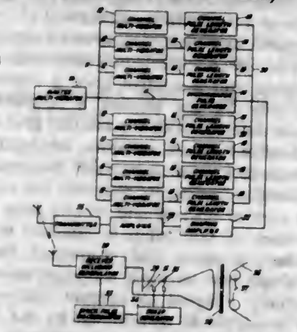
2,730,695
MAGNETIC SHIFT REGISTERS
Garret F. Ziffer, Cambridge, Mass., assignor to American Machine & Foundry Company, a corporation of New Jersey
Application January 26, 1953, Serial No. 333,159
10 Claims. (Cl. 340—174)

1. A magnetic shift register comprising a line of storage cores, a line of temporary storage cores, shift windings on said cores, an input winding on the first core in order in said line of storage cores connected in series with the shift windings on said temporary storage cores, a two position switch, and means including said switch



for supplying a shift current pulse to the shift windings on said storage cores when said switch is in one position, and for supplying a shift current pulse to said input winding and said shift windings on said temporary storage cores when the switch is in the other position.

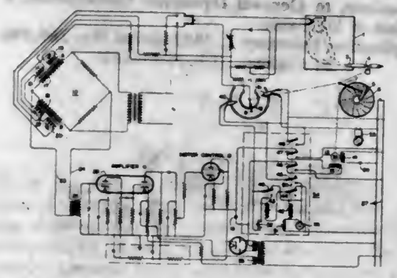
2,730,696
PULSE TIME MODULATED SYSTEM
James N. Davis, Falls Church, Va., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application May 10, 1951, Serial No. 225,534
11 Claims. (Cl. 340—182)



1. A pulse time modulator circuit having in combination, means for periodically initiating a synchronizing and time reference pulse, the interval between any two adjacent time reference and synchronizing pulses being defined as a transmission interval, said interval being composed of first and second successive sub-intervals, said second interval being characterized as a common interval means for initiating a plurality of data conveying pulses effective during a common interval, individual means associated with each of said last mentioned means for indicating intelligence to be conveyed by said data pulses, means operatively associating said first mentioned means and said second mentioned means to establish a common time base correlation therebetween, and means cooperatively connecting said first mentioned means and said intelligence indicating means with said second mentioned means for time interval spacing of pulses from said data initiating means in respect to pulses from said first mentioned means, said time spacing being controlled solely by said intelligence indicating means.

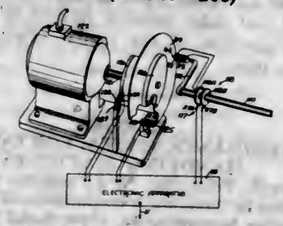
2,730,697
CONTROL SYSTEMS
Louis M. Wermelskirchen, Cleveland, Ohio, assignor to Bailey Meter Company, a corporation of Delaware
Application March 25, 1953, Serial No. 344,638
12 Claims. (Cl. 340—187)

1. A combination of electrical measuring and controlling apparatus including, an electronic amplifier and motor control circuit having an input circuit and an output circuit, first terminal means adapted to connect the input circuit to a measuring circuit sensitive to a condition, second terminal means adapted to connect the output circuit to a motor driving an indicator and controller of the condition between two extremes of their position and range of control, a contactor member driven in consonance with the indicator and controller between the two extremes of position, balancing structure in the measuring circuit connected to the contactor member, a switch actuated by the contactor member when the indicator and



contactor members are driven toward the extremes of their positions indicative of the minimum value of the condition which is when the controller is driven toward the maximum of its range of control, and a relay controlled by the actuated switch which actuates contacts disconnecting the second terminal means from the motor and connecting the motor in circuit with a power supply in an arrangement which causes the motor to drive the indicator to its maximum extreme of position and the controller to the minimum extreme of its range.

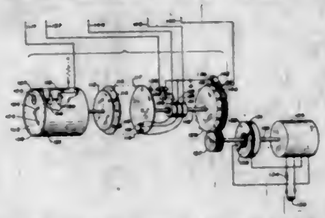
2,730,698
POSITION INDICATING APPARATUS
Howard L. Daniels, St. Paul, and John W. Hogan, Minneapolis, Minn., assignors, by mesne assignments, to Sperry Rand Corporation, New York, N. Y., a corporation of Delaware
Application March 26, 1951, Serial No. 217,454
1 Claim. (Cl. 340—206)



In apparatus having a first magnetic transducer movable with an input member for writing a magnetic spot on a cyclically revolving member and having a second magnetic transducer fixedly positioned for reading the recorded spot for determining a period for counting a number of pulses generated synchronously with the motion of said member, a combined writing and erasing circuit for operating the first transducer comprising a condenser connected across a source of potential, means for connecting the condenser in series with the winding of the first transducer and the anode-cathode path of a controllable electron-discharge tube whereby pulses of a current in a given direction will flow through the winding of the first transducer upon discharge of the condenser through the discharge tube, and means responsive to the generation of a signal in the second transducer for disconnecting the winding of the first transducer from the said series circuit and for connecting said winding of the first transducer into a circuit connected to carry current in a direction opposite to the direction of said pulses of current, the means for connecting the

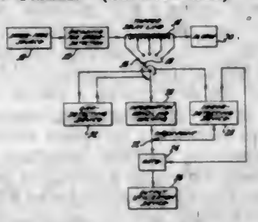
winding of the first transducer into the last-mentioned circuit including means for maintaining the current in said opposite direction for at least one complete cyclic revolution of the travelling member.

2,730,699
TELEMETERING SYSTEM
Joseph W. Gratian, Rochester, N. Y., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application February 1, 1952, Serial No. 269,496
24 Claims. (Cl. 340—212)



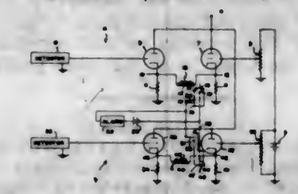
1. In a telemetering system, the combination of an index member having an axis and adapted for rotation about said axis; a first magnet mounted for rotation with said index member about said axis; a continuously-rotating scanning member; a first magnetic pickup coil mounted on said scanning member, said first pickup coil being located on said scanning member to pass said first magnet at least once in each scanning period, whereby index member pulses are induced in said first pickup coil; a second magnet mounted on said scanning member, a second magnetic pickup coil stationarily located for encounter with said second magnet at least once in each scanning period, whereby reference pulses are induced in said second coil; a cathode-ray tube having a circular sweep circuit and a radial-deflection circuit; means for synchronizing said circular sweep circuit with said reference pulses; and means for applying said index member pulses to said radial-deflection circuit thus producing on the screen of said cathode-ray tube a circular trace having a pip indicating the location of said index member relative to said scanning sequence regardless of the spatial orientation of said cathode-ray tube.

2,730,700
ERROR AVOIDANCE SYSTEM FOR INFORMATION HANDLING MACHINES
Robert Serrell, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 24, 1950, Serial No. 197,285
6 Claims. (Cl. 340—213)



1. In combination with an information-handling machine, an error avoidance system comprising an error-free information source, means to apply an item of information from said source to said machine input including time delay means to store said item of information and to receive continuously at regular intervals subsequent items from said source, means to detect an error in said item of information at the output of said machine, means to prevent external delivery of information from said machine responsive to a detection of an error by said error detecting means, means to reapply said item of information from said storage means responsive to said detection of an error by said error detecting means, and means to condition said storage means to apply a subsequent item of information to said machine input responsive to proper handling of said applied item of information by said machine.

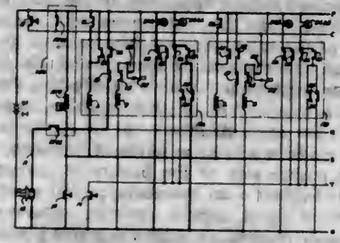
2,730,701
ALARM INITIATING CIRCUIT FOR RADIAC SYSTEM
Carl W. Magnuson, Baltimore, Md., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application May 14, 1952, Serial No. 287,786
1 Claim. (Cl. 340—213)



An alarm initiating circuit responsive to signals indicative of conditions a predetermined amount above or below ambient generated by a detecting device comprising, a detector, first and second electron tubes each having an anode, a cathode and a control grid, a common source of voltage supply for the anodes, a conductor directly connecting said detector with the control grid of said first tube, individualized equal resistors connecting the respective cathode to ground, a variable bias source including a potentiometer having its movable tap connected directly to the control grid of said second tube for causing one or the other of said tubes to conduct more heavily than the other, a relay coil connected between said cathodes, a single two terminal armature associated with said coil initially adapted to contact one or the other of said two terminals as determined by the bias voltage applied to said second grid and operable in response to signals of a predetermined amount to reverse its contacts, a single pole double throw switch, conductors connecting said two terminals with the two contact positions of said switch respectively, an alarm circuit including a power supply therefor serially connected with said armature and said switch pole, said alarm circuit being energized in response to detected signals indicative of conditions a predetermined amount above ambient when said switch pole is in one position and to conditions a predetermined amount below ambient conditions when said pole is in the other position depending on the initial position of said armature.

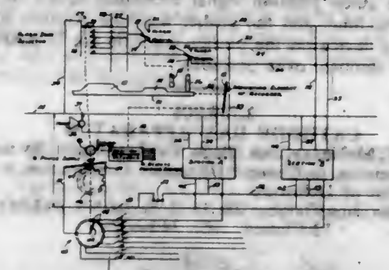
2,730,702
ALARM SYSTEM
Robert J. Marmorstone, Chicago, Ill., assignor, by mesne assignments, to Panellit, Inc., Skokie, Ill., a corporation of Illinois
Application January 27, 1953, Serial No. 333,427
9 Claims. (Cl. 340—213)

1. A manual reset alarm system for the protection of a series of devices comprising a source of direct current, positive and negative terminals connected with said source, positive and negative control busses, connected with the respective terminals through a normally open and a normally closed push-button switch respectively; a series of alarm relay units corresponding with said series of devices and interposed between said positive terminal and control bus on the one hand and said negative terminal and control bus on the other hand; relay coil and switch means in each unit comprising an alarm-modifying coil, a make-before-break switch controlled by said coil and connected in series with the positive side of said coil, and conductors to connect a normally open section of said switch to a positive terminal, the normally closed section of said switch to the positive control bus, and the other side of said coil to the negative terminal; a switch



shunted around said normally open push-button switch, and means for holding the next to the last mentioned switch open at all times except upon depression of said normally closed push-button switch and for holding said next to the last mentioned switch closed for a moment following the release of said normally closed push-button switch.

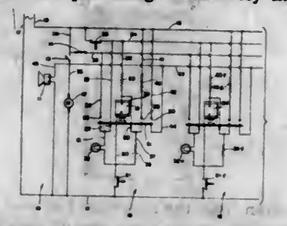
2,730,703
MULTI-STATION CONDITION-RESPONSIVE ALARM SYSTEM
Hugh N. Ross, Montgomery County, Md., assignor to American Instrument Company, Inc., Silver Spring, Md.
Application March 5, 1954, Serial No. 414,429
8 Claims. (Cl. 340—213)



1. In combination, a condition-responsive device having an alarm position and a normal position, a common audible alarm device, a plurality of stations, a respective visual alarm device connected to each station, first relay means at each station, means for energizing said common audible alarm device and the visual alarm device of a station when said first relay means thereof becomes energized, means energizing said first relay means when said condition-responsive device assumes said alarm position, second relay means at each station, means energizing said second relay means when the condition-responsive device moves from alarm to normal position, means deenergizing said first relay means in response to the energization of said second relay means, and means deenergizing said second relay means responsive to the deenergization of said first relay means.

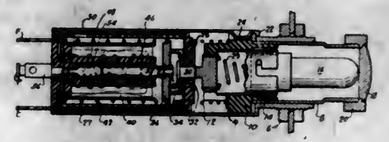
2,730,704
ANNUNCIATOR SYSTEM
Howard C. Warren, Chicago, Ill.
Application February 14, 1955, Serial No. 488,065
10 Claims. (Cl. 340—213)

1. In an annunciator circuit having alarm devices controlled by a relay adapted to be energized in response to an abnormal condition in a system being policed thereby, a relay having an energizing circuit and normally open and closed contacts, at least two alarm devices, one of which is in circuit with both a normally open and normally closed contact, a power source for energizing said relay whenever an abnormal condition is present in said system, a circuit element in shunt with the energizing circuit of said relay through parallel paths including respectively a normally open and normally closed contact and providing a relatively high resistance



initially to the flow of current therethrough but a low resistance following a period of current flow therethrough, and means for interrupting momentarily the energizing circuit of said relay to de-energize the same, said circuit element being operative subsequent to said interruption to effectively short out said relay whereby it remains de-energized even though an abnormal condition persists in said system.

2,730,705
AUTOMATIC RECYCLING WARNING LIGHT
Theodore W. Hallerberg, Los Angeles, Roy L. Roberts, Jr., Fullerton, and Herman H. Flum, Southgate, Calif.; said Roberts and said Flum assignors to said Hallerberg
Application December 8, 1954, Serial No. 473,835
3 Claims. (Cl. 340—214)

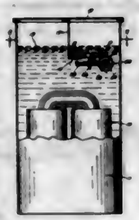


1. An automatic recycling electrical warning device comprising, a power source, a warning lamp, a main power switch in series with said power source, a function switch responsive to a condition to be monitored in series with said main power switch, two parallel circuits of higher and lower resistance connecting said function switch and said lamp, manual means to open said lower resistance circuit to dim said lamp, a solenoid in parallel with said lamp across said function switch, an armature for said solenoid constituting a portion of said low resistance circuit and movable by said manual means and normally biased to circuit closing position, said solenoid being so magnetically related to said armature as to be capable of overcoming the biasing force thereon only when said armature is manually moved to circuit opening position and releasing said armature to said biasing force when either said main power switch or said function switch is opened.

2,730,706
APPARATUS FOR INDICATING AGE OF INSULATION
George H. Manke, South Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application October 5, 1954, Serial No. 460,453
9 Claims. (Cl. 340—253)

1. In encased electrical apparatus insulated with solid insulation and immersed within a dielectric liquid within the casing of said apparatus, the rate of deterioration of said solid insulation increasing with temperature rise, in combination, a thermally responsive actuator immersed

at least in part in said dielectric liquid and including an expansible bellows partially filled with an expansible liquid movable in response to heating caused by load current in said apparatus, a rotatable indicia carrying dial, a rack and pinion connected to said bellows for deriving



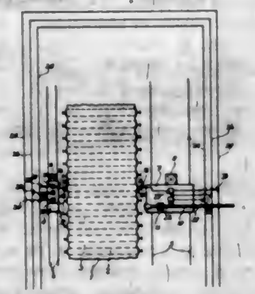
rotational motion from the movement of said bellows, unidirectional motion transmitting means providing a driving connection in one direction only between said pinion and said dial, and means for preventing rotation of said dial in a direction opposite to that in which it is driven by said motion transmitting means.

2,730,707

SIGNALLING DEVICES FOR COKE-OVEN BATTERIES

Albert Häbeerle, Essen-Werden, North Rhine-Westphalia, and Franz Gödde, Essen, North Rhine-Westphalia, Germany, assignors, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware

Application April 18, 1951, Serial No. 221,574
7 Claims. (Cl. 340—282)



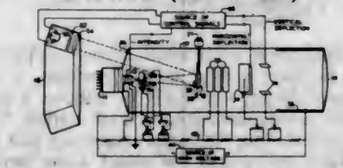
2. A signalling device for synchronously controlling the coke guide and pusher machines on opposite sides of a coke oven battery, comprising a series of elements arranged along the coke side of the battery in correspondence with the individual oven chambers; a coke guide position electrical signal impulse emitting apparatus carried by said coke guide machine and a coke guide position signal recording device carried by said pusher machine and adapted to be operated by impulses of the coke guide position signal impulse emitting apparatus on the coke guide machine into positions that correspond with the respective positions of the coke guide machine relative to the individual oven chambers of the battery; said signal impulse emitting apparatus being adapted, as the coke guide machine passes each coking chamber, to be operated by the respective said elements of the oven chambers to transmit a signal in the form of an electric impulse to said coke guide position signal recording device on the pusher machine to cause said recording device to indicate on the pusher machine the individual position of the coke guide machine with respect to the ovens of said battery; a cross-check recording device carried by the coke guide machine and adapted to be operated by electric impulses into positions to repeat the indications of said coke guide position signal recording device on the pusher machine; and electric impulse emitting apparatus on the pusher machine operable on operation of the coke guide position recording device to transmit an equivalent electric impulse to the cross-check recording device on the coke guide machine; a coke guide position signal recording device carried by the coke guide machine and adapted to be operated by the impulses of the coke guide position signal impulse emitting apparatus on the coke guide machine into positions that correspond with the respective positions of the coke guide machine relative to the individual oven chambers of the battery; and which includes a circuit on the pusher machine for effecting the forward travel of a pusher ram on that machine to push coke charges in the oven chambers out of the same through the coke guide machine; a series of elements arranged along the pusher side of the battery in correspondence with the individual oven chambers; pusher machine position electrical signal impulse emitting apparatus carried by the pusher machine; a pusher machine position signal recording device carried by the pusher machine and adapted to be operated by the impulses of the pusher machine position signal impulse emitting apparatus on the pusher machine into positions that correspond with the respective positions of the pusher machine relative to the individual oven chambers of the battery; said pusher machine position signal emitting apparatus being adapted, as the pusher machine passes each oven chamber, to be operated by the respective elements of the oven chambers to transmit a signal in the form of an electric impulse to the pusher machine position signal recording device to cause the latter to indicate the individual position of the pusher machine with respect to the ovens of said battery; and means on the pusher machine operable to close the circuit for forward travel of the pusher ram only when the coke guide position signal recording device on the pusher machine, and the pusher machine position signal recording device on the pusher machine are in positions showing identical oven positions.

2,730,708

CATHODE RAY APPARATUS

Joseph T. McNaney, San Diego, Calif., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware

Application October 28, 1952, Serial No. 317,289
12 Claims. (Cl. 340—324)



1. Cathode-ray apparatus comprising an evacuated container, an electron gun located at one end of the container for projecting an electron beam longitudinally along the container, a screen located at the other end of the container, thermionic electron emissive means located along the path of said electron beam for projecting electrons toward the screen, and means for controlling the intensity and cross-sectional shape of the electron stream produced by the electron emissive means, said controlling means including means located between the electron emissive means and the electron gun.

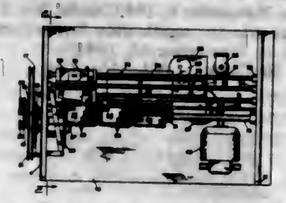
2,730,709

MEASURING APPARATUS

Arthur L. Range, John C. Stevens, and Marcus Leupold, Portland, Oreg., assignors to Leupold & Stevens Instruments, Inc., Portland, Oreg., a corporation of Oregon

Application November 12, 1952, Serial No. 319,854
2 Claims. (Cl. 340—345)

1. A machine of the character described comprising an elongated shaft, a plurality of drums rotatably mounted in end-to-end relation on said shaft, each of said drums having a plurality of longitudinally spaced, code protrusions thereon, means to rotate a first one of said drums in either direction in proportion to a fluctuating measurable condition, reversible totalizer means between each adjacent pair of drums whereby said first drum partially rotates the next adjacent drum a definite fraction of a revolution in either direction for each complete revolution of the first drum and so on progressively for each succeeding drum whereby said drums assume relative positions corresponding to the measurable condition at all times, means to signal a measurement comprising a carriage, carriage guiding means extending parallel to said shaft, a sensing element mounted on said carriage and



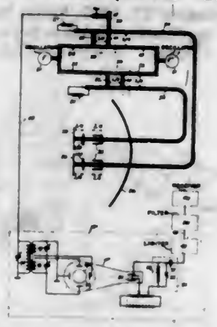
engageable with the surfaces of said drums, means to move said carriage longitudinally of said guiding means to cause said sensing element progressively to traverse the surfaces of all of said drums in a longitudinal direction, and means operatively associated with said carriage to lock said drums against movement during the time that said sensing element traverses said drums comprising a lever engaged by said carriage and moved thereby to a position of inoperativeness between movements of said carriage, spring means moving said lever to an operative position when said carriage starts to move, and an abutment on said first drum engaged by said lever to arrest said drums which said sensing element traverses the surfaces of the drums.

2,730,710

LOBE SWITCHING RADAR SYSTEMS

Julien M. Loeb, Paris, France

Application May 13, 1952, Serial No. 287,551
Claims priority, application France May 16, 1951
8 Claims. (Cl. 343—10)



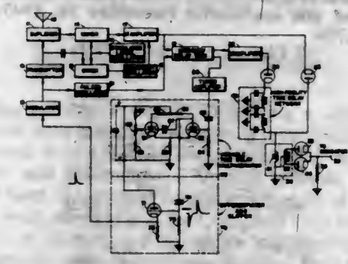
1. A radar system comprising a radio frequency oscillator, a plurality of radiators, a radio frequency switch connected to feed the output of the oscillator successively to said radiators in cyclical fashion at a cyclical rate of the same order of magnitude as the echo time for typical targets to be observed with the system, means to vary the cyclical rate of operation of the switch over a plurality of octaves, a radio receiver, tunable means linked to said rate varying means to extract from the signal received in said receiver the component varying at said cyclical rate, and means to compare the phase of said component with a signal of the same frequency as and of fixed phase with reference to the operation of said switch.

2,730,711

SYNCHRONIZING SYSTEM

Arthur A. Varela, Washington, D. C.

Application December 11, 1945, Serial No. 634,343
6 Claims. (Cl. 343—13)
(Granted under Title 35, U. S. Code (1952), sec. 266)



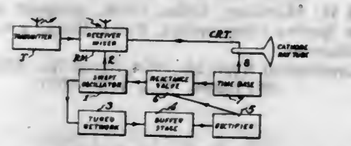
1. In a radio echo-ranging system, a transmitter operative when triggered to transmit a pulse of radio energy, receiver means operative to receive echoes of the transmitted pulse reflected by remote objects, means producing a control signal simultaneously with the initiation of the transmitted pulse, first delay means operative to delay the control signal and the received echo signals, second delay means fed by the delayed echo signals from the first delay means, and trigger means responsive to the delay control signal from the first delay means operative to trigger the transmitter after an interval following the transmitted pulse equal to the total delay given the echo signals by the first and second delay means.

2,730,712

FREQUENCY MODULATED RADAR SYSTEM

Leslie Howard Dawson, Chelmsford, England, assignor to Marconi's Wireless Telegraph Company, Limited, London, England, a company of Great Britain

Application October 9, 1950, Serial No. 189,268
Claims priority, application Great Britain October 20, 1949
5 Claims. (Cl. 343—14)



1. A frequency modulated radar system of the panoramic receiver type comprising a transmitter transmitting frequency modulated waves, a receiver receiving the transmitted waves after reflection from a target and mixing said received waves with frequency modulated waves then being transmitted to produce a beat frequency which will be a function of the range of the target and contain frequency components dependent upon the radial movement of said target with respect to said transmitter and receiver and a swept oscillator whose oscillations are mixed with said beat frequency to sweep the same over a predetermined range, said radar system including also means providing limitation of the frequency swing of said swept oscillator at least at one end of said frequency swing, said means providing limitation including a resonant circuit tuned to a frequency closely adjacent to a predetermined desired limiting frequency, means for feeding output from said swept oscillator to said resonant circuit, a control circuit fed from said resonant circuit, and means responsive to said control circuit for controlling the frequency of said swept oscillator when and only when said swept oscillator approaches said limiting frequency whereby it is prevented from passing said limiting frequency.

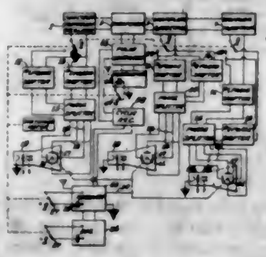
2,730,713

POSITION FINDER SYSTEM OF RADIO PULSE TYPE WITH VERNIER INDICATOR TUBE

Irving Wolff, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Original application March 20, 1941, Serial No. 384,323, now Patent No. 2,493,097, dated January 3, 1950. Divided and this application December 30, 1947, Serial No. 794,706

7 Claims. (Cl. 343—17.1)



1. In a distance measuring system, means for transmitting an electrical pulse at a certain repetition rate whereby the transmitted pulses have a certain repetition period, means for receiving said pulses after reflection, a cathode ray tube indicator having a screen and having means for producing a cathode ray, means for deflecting said cathode ray along a predetermined path on said screen with said deflection along said path being repeated at a periodic rate that is a multiple of said pulse repetition rate, means for deflecting the cathode ray of said tube to produce an indication on said screen at the time of reception of said received pulses, means in addition for increasing the intensity of said cathode ray at said certain repetition rate and for a duration short compared to said certain repetition period and phase so that said increase in intensity occurs during the time said received pulse is applied from said receiving means to said indicator.

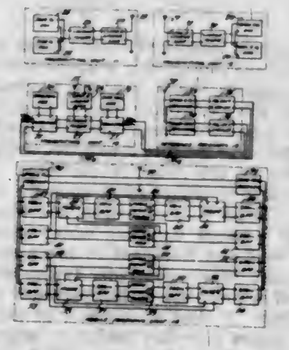
2,730,714

RADIO LOCATION SYSTEM

Edward H. Mahoney, Tulsa, Okla., assignor to Seismograph Service Corporation, Tulsa, Okla., a corporation of Delaware

Application April 23, 1954, Serial No. 425,199

20 Claims. (Cl. 343—105)



1. In a position determining system, at least three spaced transmitting units each continuously radiating at least two carrier waves to a receiving point, a reference receiver including a pair of heterodyning means each responsive to only one of the waves radiated by each of said three units and each heterodyning in pairs the three waves to which it is responsive in order to produce a plurality of beat frequency signals, and means for radiating to said receiving point at least four reference signals having different frequencies respectively related to the frequency of the produced beat frequency signals.

2,730,715

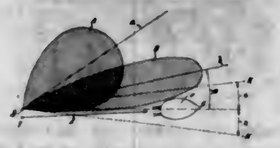
METHOD OF AND APPARATUS FOR GUIDING FLIGHT BODIES ALONG PRESELECTED FLIGHT PATHS

Gustav Guanella, Zurich, Paul Güttinger, Wettingen, Max Lattmann, Zurich, and Georg Weber, Kusnacht, near Zurich, Switzerland, assignors to "Patelhold" Patentverwertungs- & Elektro-Holding A.-G., Glarus, Switzerland, and "Contraves" A.-G., Zurich, Switzerland, jointly

Application November 6, 1952, Serial No. 319,058

Claims priority, application Switzerland November 15, 1951

20 Claims. (Cl. 343—106)



1. In the steering of flight bodies along a desired flight path in accordance with the degree of modulation of signal energy received on the flight body, the steps which comprise radiating two beams of ultra-short wave radio energy of individually distinctive character and of different angular spread, rotating the beam of greater angular spread about the desired flight path and with its axis of maximum intensity at a preselected relatively large angle to the flight path, and rotating the beam of lesser angular spread about the desired flight path and with its axis of maximum intensity at a different and relatively small angle to the flight path.

2,730,716

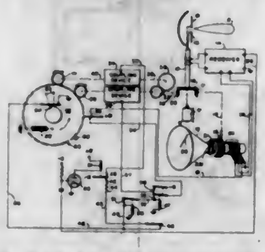
CONTROL APPARATUS FOR DIRECTION FINDER

Carl-Erik Granqvist, Lidingo, Sweden, assignor to Hazeltine Research, Inc., Chicago, Ill., a corporation of Illinois

Application August 27, 1952, Serial No. 306,597

Claims priority, application Sweden September 1, 1951

12 Claims. (Cl. 343—118)



1. A control apparatus for deriving an effect representative of the middle of the duration of a pulse which may be unsymmetrical comprising: a first control system responsive to the pulse for deriving at a predetermined rate a first control effect representative of the duration of the pulse; a second control system coupled to said first system and effectively responsive to a portion of the pulse for deriving at a rate substantially greater than said predetermined rate a second control effect; a signal-developing means coupled to said second system and effectively responsive to said control effects for terminating said second control effect and developing at said termination a third control effect representative of a time interval of fixed duration between another portion of the pulse and a time thereafter; and a circuit for applying said third control effect to an indicating device to produce an indication of said middle of the pulse.

3. A control apparatus for a direction finder including a rotatable directive antenna, an indicating device operative in synchronism with the antenna rotation, and a receiver for deriving an output pulse at each antenna rotation in response to an unmodulated wave signal radiated from a point comprising: a first control system responsive to the output pulse for deriving at a predetermined rate a first control effect representative of the duration of the output pulse; a second control system coupled to said first system and effectively responsive to the trailing edge of the output pulse for deriving at a rate substantially twice said predetermined rate a second control effect; signal-developing means coupled to said second system and effectively responsive to said control effects for terminating said second control effect and developing at said termination a third control effect representative of a time interval of fixed duration between the center of the output pulse and a time thereafter; and a circuit for applying said third control effect to the indicating device to produce an indication of the direction of the point.

2,730,717

DIRECTIONAL WAVE ANTENNA FOR MARINE RADAR USE

Max Katchky and Hugh Gordon Byers, Toronto, Ontario, Canada

Application January 16, 1952, Serial No. 266,656

Claims priority, application Canada April 18, 1951

5 Claims. (Cl. 343—756)



1. An antenna assembly comprising a sectoral horn, a slotted waveguide of rectangular cross-section and so positioned at the throat of said horn that the radiating face of said waveguide is directed towards the mouth of said horn in the plane bisecting the angle of divergence of the walls of said horn, said radiating face being one of the narrow sides of said waveguide, said narrow side having regularly spaced, alternately inclined slots cut therein, means for end-feeding said waveguide with power at a frequency to which the spacing of said slots is non-resonant, and means for filtering the energy radiated from said waveguide and reflecting back into said waveguide unwanted vertically-polarized energy radiated therefrom.

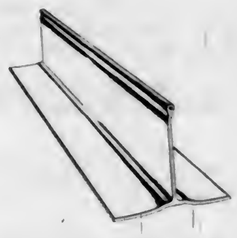
DESIGNS

JANUARY 10, 1956

176,581
DATE STAMP OR SIMILAR ARTICLE
Milton L. Albert, Brooklyn, N. Y., assignor to Jos. Freeman & Co. Inc., Brooklyn, N. Y., a corporation of New York
Application July 12, 1954, Serial No. 31,397
Term of patent 14 years
(Cl. D64—10)



176,582
SEPARATOR FOR MEAT AND PRODUCE
Alan J. Bacon, Alhambra, Calif.
Application May 10, 1954, Serial No. 30,408
Term of patent 14 years
(Cl. D11—1)



176,583
COMBINATION SPOUT CAP AND FLINT HOLDER
Russel E. Bandfield and Clifford J. Kraemer, Toledo, Ohio
Application October 16, 1953, Serial No. 27,191
Term of patent 14 years
(Cl. D58—26)



176,584
TWO-SEATED TRICYCLE
Ruth A. Barone, and Joseph Swbado, Toledo, Ohio
Application September 30, 1955, Serial No. 38,173
Term of patent 14 years
(Cl. D34—15)



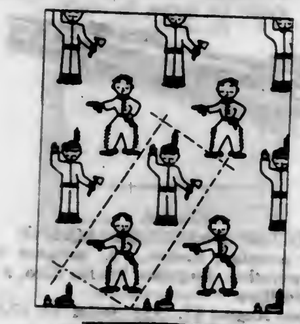
176,585
GEAR HOUSING FOR JALOUSIE TYPE WINDOWS
Donn C. Blanchard, Miami, Fla., assignor to Stanley Building Specialties Company, North Miami, Fla., a corporation of Florida
Application November 12, 1954, Serial No. 33,074
Term of patent 14 years
(Cl. D10—10)



176,586
EDUCATIONAL GAME BOARD
Esther E. Bogenberger, Milwaukee, Wis.
Application March 18, 1955, Serial No. 35,098
Term of patent 14 years
(Cl. D25—1)



176,587
TEXTILE FABRIC OR SIMILAR ARTICLE
Marie Therese Brady, Chevy Chase, Md.
Application March 10, 1955, Serial No. 34,971
Term of patent 14 years
(Cl. D92—1)



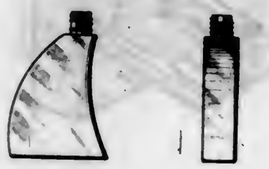
176,588
TEXTILE FABRIC OR SIMILAR ARTICLE
Marie Therese Brady, Chevy Chase, Md.
Application March 10, 1955, Serial No. 34,972
Term of patent 14 years
(Cl. D92—1)



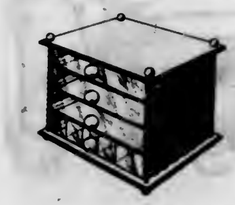
176,589
ELECTRIC FRYER
Morris D. Brandler, Forest Hills, N. Y.
Application April 13, 1955, Serial No. 35,490
Term of patent 14 years
(Cl. D81—10)



176,590
TOILET WATER BOTTLE OR SIMILAR ARTICLE
Frederick M. Breen, Westchester, N. Y., assignor to Coty, Inc., New York, N. Y., a corporation of Delaware
Application September 27, 1954, Serial No. 32,453
Term of patent 14 years
(Cl. D58—6)



176,591
CABINET
Alan W. Brown, Higganum, Conn., assignor to The Campro Sales Company, Canton, Ohio, a corporation of Ohio
Application May 16, 1955, Serial No. 35,991
Term of patent 14 years
(Cl. D33—19)



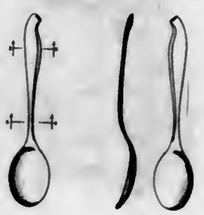
176,592
FISHING SINKER
Samuel Candella, Buffalo, N. Y.
Application July 7, 1955, Serial No. 36,861
Term of patent 7 years
(Cl. D31—4)



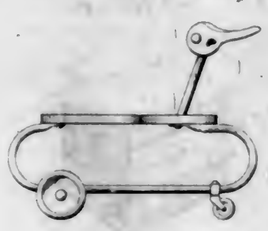
176,593
MEDALLION
Robert J. Carlyle, Brooklyn, N. Y.
Application May 12, 1955, Serial No. 35,946
Term of patent 3½ years
(Cl. D29—2)



176,594
SPOON OR SIMILAR ARTICLE
Theodore E. Cayer, Taunton, Mass., assignor to Reed and Barton Corporation, Taunton, Mass., a corporation of Massachusetts
Application April 19, 1955, Serial No. 35,568
Term of patent 14 years
(Cl. D54—12)



176,595
CHILD'S TOY WALKER
Joseph D. Clark, Burbank, Calif.
Application June 3, 1955, Serial No. 36,345
Term of patent 14 years
(Cl. D34—15)



176,596
SOFA BED COMBINATION
John P. Cleese, Jr., San Francisco, Calif.
Application January 11, 1954, Serial No. 28,476
Term of patent 7 years
(Cl. D15—11)



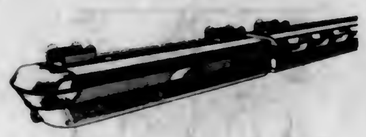
176,597
ATOMIZER
Harold E. Curry, Santurce, Puerto Rico
Application August 29, 1955, Serial No. 37,684
Term of patent 14 years
(Cl. D83—1)



176,598
CUSHION
James H. Dardenelle and Bernita A. Dardenelle, Lindsay, Calif.
Application March 28, 1955, Serial No. 35,224
Term of patent 3½ years
(Cl. D3—9)



176,599
SUSPENSION RAILWAY TRAIN
Arthur J. Di Stasi, Trenton, N. J.
Application July 22, 1955, Serial No. 37,106
Term of patent 14 years
(Cl. D66—1)



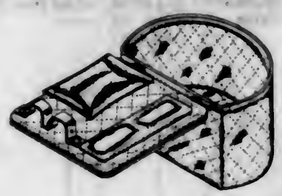
176,600
ELECTRIC SANDING MACHINE
Sarkis Doctor Acopian, Easton, Pa., assignor to Weller Electric Corporation, Luquillo, Puerto Rico, a corporation of Puerto Rico
Application August 17, 1955, Serial No. 37,537
Term of patent 14 years
(Cl. D37—1)



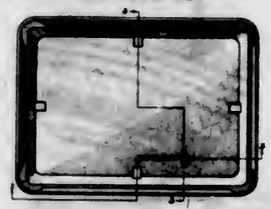
176,601
SPOON OR OTHER SIMILAR ARTICLE OF FLATWARE
Robert L. Doerfler, Meriden, Conn., assignor to The International Silver Company, Meriden, Conn., a corporation of Connecticut
Application November 23, 1954, Serial No. 33,195
Term of patent 14 years
(Cl. D54—12)



176,602
SEWING BAG
Lois I. Durham, Junction City, Oreg.
Application May 19, 1955, Serial No. 36,109
Term of patent 14 years
(Cl. D3—19)



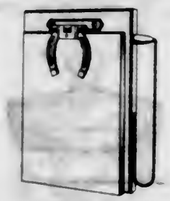
176,603
PLANT CONTAINER
Richard L. Emery, Fairfield, Maine, assignor to Keyes Fibre Company, Portland, Maine, a corporation of Maine
Application November 18, 1954, Serial No. 33,150
Term of patent 14 years
(Cl. D35—3)



176,604
AIRPLANE
Wendell B. Fehring, Wichita, Kans., assignor to Boeing Airplane Company, Wichita, Kans., a corporation of Delaware
Application May 26, 1955, Serial No. 36,221
Term of patent 14 years
(Cl. D71—1)



176,605
MEMORANDUM NOTE PAD UNIT
Addis T. Fitzgerald, Inglewood, Calif.
Application April 19, 1955, Serial No. 35,571
Term of patent 3½ years
(Cl. D74—1)



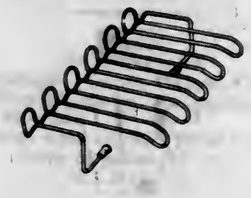
176,606
COMBINED BUFFET AND EXTENSION TABLE
Abe J. Gaines, Glencoe, Ill., assignor to Saginaw Furniture Shops, Inc., Chicago, Ill., a corporation of Michigan
Application March 29, 1954, Serial No. 29,751
Term of patent 14 years
(Cl. D33—19)



176,607
COMBINED CREDENZA AND EXTENSION TABLE
Abe J. Gaines, Glencoe, Ill., assignor to Saginaw Furniture Shops, Inc., Chicago, Ill., a corporation of Michigan
Application March 29, 1954, Serial No. 29,753
Term of patent 14 years
(Cl. D33—13)



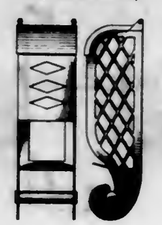
176,608
IRON HOLDER
Roselle Harper, Hollywood, Calif.
Application January 3, 1955, Serial No. 33,779
Term of patent 14 years
(Cl. D49—6)



176,609
CRADLE FOR USE WITH A TRANSDUCER FOR DICTATING AND LIKE EQUIPMENT
Lawrence M. Heineman, Chicago, Ill., assignor to Permoflux Corporation, Chicago, Ill., a corporation of Illinois
Application February 21, 1955, Serial No. 34,605
Term of patent 7 years
(Cl. D26—14)



176,610
COMBINED TOILET ROLL TISSUE DISPENSER AND HOLDER
William Hubiak, Albion, Pa.
Application May 27, 1955, Serial No. 36,259
Term of patent 14 years
(Cl. D4—3)



176,611
DRESS OR SIMILAR ARTICLE
Bernard Hurwitz, New York, N. Y.
Application May 17, 1955, Serial No. 36,039
Term of patent 3½ years
(Cl. D3—26)



176,612
WOMAN'S SWEATER
Erwin B. Jackman, Brooklyn, N. Y.
Application January 31, 1955, Serial No. 34,297
Term of patent 14 years
(Cl. D3—4)



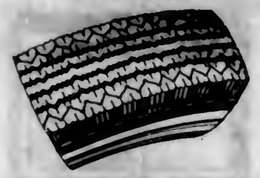
176,613
WOMAN'S SWEATER
Erwin B. Jackman, Brooklyn, N. Y.
Application January 31, 1955, Serial No. 34,298
Term of patent 7 years
(Cl. D3—4)



176,614
WOMAN'S BLOUSE
Erwin B. Jackman, Brooklyn, N. Y.
Application February 2, 1955, Serial No. 34,333
Term of patent 7 years
(Cl. D3—4)



176,615
TIRE
Frank Bernard Jones, Castle Bromwich, Birmingham, England, assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a corporation of New York
Application September 17, 1954, Serial No. 32,341
Claims priority, application Great Britain July 22, 1954
Term of patent 14 years
(Cl. D90—20)



176,616
COMBINED LAMP AND PLANTER
Samuel Kaufman and Adolph Kaufman, New York, N. Y.
Application November 29, 1954, Serial No. 33,309
Term of patent 14 years
(Cl. D48—20)



176,617
CASTER GLIDE
Michael Kramcsak, Jr., Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a corporation of Connecticut
Application May 20, 1954, Serial No. 30,583
Term of patent 7 years
(Cl. D10—6)



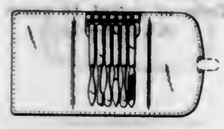
176,618
CHAIR
William J. Kranz, Cuba, N. Y., assignor to Viko Furniture Corporation, Eldred, Pa., a corporation of Pennsylvania
Application December 9, 1953, Serial No. 27,992
Term of patent 7 years
(Cl. D15—1)



176,619
PAPER WEIGHT OR SIMILAR ARTICLE
William G. Kurtz, Jr., East Rockaway, N. Y.
Application November 18, 1954, Serial No. 33,153
Term of patent 14 years
(Cl. D74—12)



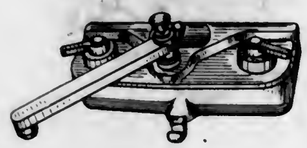
176,620
COMBINED MANICURE SET AND CASE
Alfred Edouard Lamarthe, Paris, France
Application June 14, 1954, Serial No. 30,973
Claims priority, application France February 3, 1954
Term of patent 14 years
(Cl. D86—10)



176,621
TAG PRINTING MACHINE
Jacob K. Maki, Westminster, Mass., assignor to Simplex Time Recorder Co., Gardner, Mass., a corporation of Massachusetts
Application January 5, 1955, Serial No. 33,846
Term of patent 14 years
(Cl. D64—11)



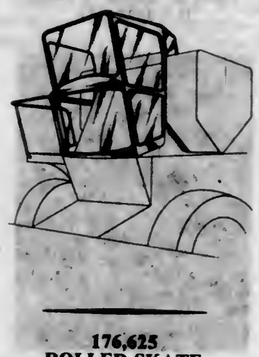
176,622
DISHWASHING UNIT
Charles J. Manville, Pontiac, Mich.
Application May 18, 1955, Serial No. 36,093
Term of patent 14 years
(Cl. D91—3)



176,623
TEXTILE FABRIC
Douglas D. McCord, New York, N. Y., assignor to Chicopee Mills, Inc., a corporation of New York
Application February 23, 1955, Serial No. 34,641
Term of patent 14 years
(Cl. D92—1)



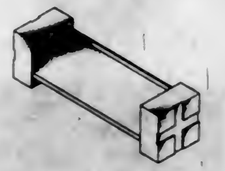
176,624
COMBINE CAB
Lawrie G. McIntosh, Toronto, Ontario, Canada, assignor to Massey-Harris-Ferguson, Inc., Racine, Wis., a corporation of Maryland
Application April 18, 1955, Serial No. 35,554
Term of patent 14 years
(Cl. D14—3)



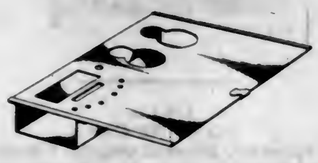
176,625
ROLLER SKATE
Charles O. Menzel, Milwaukee, Wis., assignor to Globe-Union Inc., Milwaukee, Wis., a corporation of Delaware
Application May 5, 1955, Serial No. 35,843
Term of patent 14 years
(Cl. D34—14)



176,626
FILM THICKNESS GAUGE
Ervin J. Michalak, San Francisco, Calif.
Application November 30, 1953, Serial No. 27,838
Term of patent 14 years
(Cl. D52—6)



176,627
TRAY ATTACHMENT FOR A GOLF CART OR SIMILAR ARTICLE
Harold W. Nash, Los Angeles, Calif.
Application January 11, 1955, Serial No. 33,922
Term of patent 14 years
(Cl. D34—5)



176,628
TEXTILE FABRIC
Thomas Nelson, Boston, Mass., assignor to American Twine & Fabric Corporation, Boston, Mass., a corporation of New Hampshire
Application May 25, 1954, Serial No. 30,651
Term of patent 7 years
(Cl. D92—1)



176,629
DISPLAY STAND
Floyd R. Palm, Jr., Rockford, Ill., assignor to National Lock Company, Rockford, Ill., a corporation of Delaware
Application July 13, 1953, Serial No. 25,904
Term of patent 14 years
(Cl. D80—9)



176,630
TALCUM POWDER BOX OR SIMILAR ARTICLE
Pasquo P. Pecora, West Hazleton, Pa., assignor to Pecora's Farm Dairy, West Hazleton, Pa., a partnership
Application September 19, 1952, Serial No. 21,525
Term of patent 14 years
(Cl. D58—11)



176,631
CANDELABRA
Andrew Reiz, Kansas City, Mo.
Application June 21, 1955, Serial No. 36,621
Term of patent 14 years
(Cl. D48—2)



176,632
GAME DIE OR SIMILAR ARTICLE
Monroe H. Rosenow, Brookfield, Wis.
Application March 11, 1955, Serial No. 34,993
Term of patent 14 years
(Cl. D34—5)



176,633
COMBINED PHONOGRAPH TABLE AND RACK FOR RECORD ALBUMS OR THE LIKE
Michael Ross, New York, N. Y., assignor to Decca Records Inc., New York, N. Y., a corporation of New York
Application July 16, 1954, Serial No. 31,464
Term of patent 3½ years
(Cl. D33—14)



176,634
ICED FOOD SERVER
Peter Schlumbohm, New York, N. Y.
Application January 11, 1954, Serial No. 28,477
Term of patent 14 years
(Cl. D44—15)



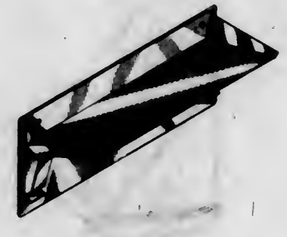
176,635
VACUUM CLEANER OR SIMILAR ARTICLE
John C. Shalvoy, Fairfield, Conn., assignor to General Electric Company, a corporation of New York
Application September 20, 1955, Serial No. 38,004
Term of patent 14 years
(Cl. D9—2)



176,636
LIGHT GRILLE
Lewis B. Simon, Dearborn Township, Wayne County, Mich.
Application January 4, 1955, Serial No. 33,828
Term of patent 7 years
(Cl. D48—32)



176,637
COMBINED TROUSER HANGER AND TRAY
Clifford P. Sivertson, Wheaton, Md.
Application May 6, 1955, Serial No. 35,868
Term of patent 14 years
(Cl. D33—3)



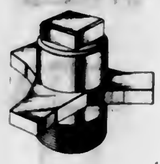
176,638
COMBINED FLOOR FURNACE GUARD AND TABLE
William C. Sleeman, Birmingham, Ala.
Application December 31, 1954, Serial No. 33,777
Term of patent 7 years
(Cl. D81—1)



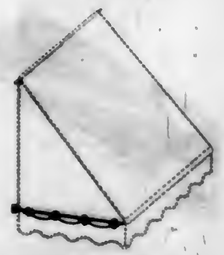
176,639
HOUSING FOR DISPENSING APPARATUS
Raymond A. Smith, Pittsburgh, Pa., assignor to Bowser, Inc., Fort Wayne, Ind., a corporation of Indiana
Application January 25, 1955, Serial No. 34,199
Term of patent 14 years
(Cl. D52—2)



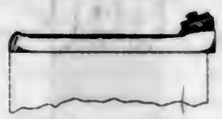
176,640
COMBINED PIPE CLOSING PLUG AND WRENCH GRIPS
Virgil T. Smith, Hutchinson, Kans.
Application November 9, 1954, Serial No. 33,046
Term of patent 14 years
(Cl. D91—1)



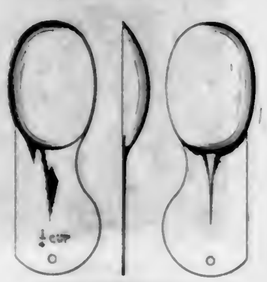
176,641
AWNING
William I. Smith, Perrysburg, Ohio
Application November 4, 1954, Serial No. 32,960
Term of patent 14 years
(Cl. D21—6)



176,642
LAUNDRY MACHINE CABINET OR SIMILAR ARTICLE
Carl W. Sundberg, Birmingham, Mich., assignor, by mesne assignments, to Whirlpool-Seeger Corporation, St. Joseph, Mich., a corporation of Delaware
Application August 5, 1954, Serial No. 31,741
Term of patent 14 years
(Cl. D49—1)



176,643
MEASURING SCOOP
Carl C. Taylor, Garland, and Lois T. Lamb, Brownwood, Tex.
Application July 1, 1955, Serial No. 36,797
Term of patent 7 years
(Cl. D44—29)



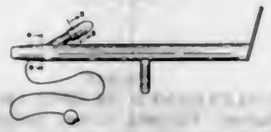
176,644
CHAMPAGNE BOTTLE STOPPER
Floyd A. Terwilliger, Rochester, N. Y.
Application March 22, 1955, Serial No. 35,162
Term of patent 14 years
(Cl. D58—26)



176,645
FLOUR SIFTER CASING
Herbert Velke, Uzwil, Switzerland, assignor to Gebrueder Buehler, a Swiss firm
Application November 30, 1954, Serial No. 33,328
Term of patent 7 years
(Cl. D55—1)



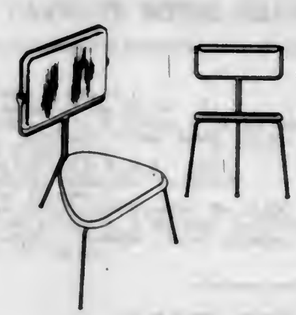
176,646
BLOW-GUN TOY
Fred Waynal, Syracuse, N. Y.
Application January 6, 1955, Serial No. 33,856
Term of patent 14 years
(Cl. D34—15)



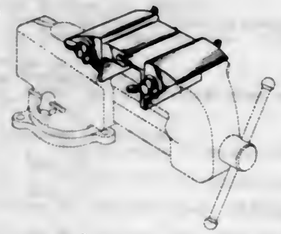
176,647
UPHOLSTERY FABRIC
Alfred T. Wilde, North Bergen, N. J.
Application April 12, 1955, Serial No. 35,489
Term of patent 3½ years
(Cl. D92—1)



176,648
COMBINED CHAIR AND TABLE
Robert S. Wilson, Tucson, Ariz.
Application March 28, 1955, Serial No. 35,247
Term of patent 7 years
(Cl. D15—1)



176,649
BRAKE BENDING VISE
Robert L. Yates, Sun Valley, Calif., assignor to Lockheed Aircraft Service, Inc., Burbank, Calif.
Application August 19, 1953, Serial No. 26,507
Term of patent 14 years
(Cl. D41—1)



176,650
CHILD'S PLAYSUIT
Arthur Yunker, New York, N. Y.
Application April 7, 1954, Serial No. 29,903
Term of patent 14 years
(Cl. D3—17)



176,651
POCKET LIGHTER
Hermann Zahn, Sulzbach (Main), Germany, assignor to Ibelo Metallwaren Gesellschaft mit beschraenkter Haftung Hermann Zahn, Frankfurt am Main, Germany, a German firm
Application November 16, 1954, Serial No. 33,119
Term of patent 14 years
(Cl. D48—27)



LIST OF REISSUE PATENTEES

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Collins, Philip H.: *See*—
Felt, Arthur J. Re. 24,108.

Felt, Arthur J., to P. H. Collins, C. W. McDonnell, and S. W. Prisner. Hydraulic brake safety device. Re. 24,108, 1–10–56, Cl. 60—54.5.

Groeninghe Ververij P. V. B. A.: *See*—
Steverlynck, Baldewijn. Re. 24,109.

Hanzlik, Jay J.: *See*—
Krampe, Paul T., and Hanzlik. Re. 24,107.

Krampe, Paul T., and J. J. Hanzlik; said Hanzlik assor. to said Krampe. Portable steam cleaners. Re. 24,107, 1–10–56, Cl. 219—38.

McDonnell, Charles W.: *See*—
Felt, Arthur J. Re. 24,108.

Prisner, Stanley W.: *See*—
Felt, Arthur J. Re. 24,108.

Schnepp, Louis W. Flush ball guide. Re. 24,106, 1–10–56, Cl. 4—57.

Steverlynck, Baldewijn, to Groeninghe Ververij P. V. B. A. Apparatus for the treatment of textile materials at elevated temperatures. Re. 24,109, 1–10–56, Cl. 68—184.

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Albert, Milton L., to Jos. Freeman & Co. Inc. Date stamp or similar article. 176,581, 1–10–56, Cl. D64—10.

American Twine & Fabric Corp.: *See*—
Nelson, Thomas. 176,628.

Bacon, Alan J. Separator for meat and produce. 176,582, 1–10–56, Cl. D11—1.

Bandfield, Russel E., and C. J. Kraemer. Combination spout cap and flint holder. 176,583, 1–10–56, Cl. D58—26.

Barone, Ruth A., and J. Swbado. Two-seated tricycle. 176,584, 1–10–56, Cl. D34—15.

Bassick Co., The: *See*—
Kramcsak, Michael, Jr. 176,617.

Blanchard, Donn C., to Stanley Building Specialties Co. Gear housing for jalousie type windows. 176,585, 1–10–56, Cl. D10—10.

Boeing Airplane Co.: *See*—
Fehring, Wendell B. 176,604.

Bogenberger, Esther E. Educational game board. 176,586, 1–10–56, Cl. D25—1.

Bowser, Inc.: *See*—
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Brady, Marie T. Textile fabric or similar article. 176,587, 1–10–56, Cl. D92—1.

Brady, Marie T. Textile fabric or similar article. 176,588, 1–10–56, Cl. D92—1.

Brandler, Morris D. Electric fryer. 176,589, 1–10–56, Cl. D81—10.

Breen, Frederick M., to Coty, Inc. Toilet water bottle or similar article. 176,590, 1–10–56, Cl. D58—6.

Brown, Alan W., to The Campro Sales Co. Cabinet. 176,591, 1–10–56, Cl. D33—19.

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Candella, Samuel. Fishing sinker. 176,592, 1–10–56, Cl. D31—4.

Carlyle, Robert J. Medallion. 176,593, 1–10–56, Cl. D29—2.

Cayer, Theodore E., to Reed and Barton Corp. Spoon or similar article. 176,594, 1–10–56, Cl. D54—12.

Chicopee Mills, Inc.: *See*—
McCord, Douglas D. 176,623.

Clark, Joseph D. Child's toy walker. 176,595, 1–10–56, Cl. D34—15.

Cleese, John P., Jr. Sofa bed combination. 176,596, 1–10–56, Cl. D15—11.

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Dardenelle, James H. and B. A. 176,598.

Dardenelle, James H. and B. A. Cushion. 176,598, 1–10–56, Cl. D3—9.

Decca Records Inc.: *See*—
Ross, Michael. 176,633.

Di Stasi, Arthur J. Suspension railway train. 176,599, 1–10–56, Cl. D66—1.

Doctor Acoplan, Sarkis, to Weller Electric Corp. Electric sanding machine. 176,600, 1–10–56, Cl. D37—1.

Doerfler, Robert L., to The International Silver Co. Spoon or other similar article of flatware. 176,601, 1–10–56, Cl. D54—12.

Dunlop Tire and Rubber Corp.: *See*—
Jones, Frank B. 176,615.

Durham, Lois I. Sewing bag. 176,602, 1–10–56, Cl. D3—19.

Emery, Richard L., to Keyes Fibre Co. Plant container. 176,603, 1–10–56, Cl. D35—3.

Fehring, Wendell B., to Boeing Airplane Co. Airplane. 176,604, 1–10–56, Cl. D71—1.

Fitzgerald, Addis T. Memorandum note pad unit. 176,605, 1–10–56, Cl. D74—1.

Freeman, Jos., & Co. Inc.: *See*—
Albert, Milton L. 176,581.

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Gaines, Abe J., to Saginaw Furniture Shops, Inc. Combined credenza and extension table. 176,607, 1–10–56, Cl. D33—13.

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Harper, Roselle. Iron holder. 176,608, 1–10–56, Cl. D49—6.

Heineman, Lawrence M., to Permoflux Corp. Cradle for use with a transducer for dictating and like equipment. 176,609, 1–10–56, Cl. D26—14.

Hublak, William. Combined toilet roll tissue dispenser and holder. 176,610, 1–10–56, Cl. D4—3.

Hurwitz, Bernard. Dress or similar article. 176,611, 1–10–56, Cl. D3—26.

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Jackman, Erwin B. Woman's sweater. 176,612, 1–10–56, Cl. D3—4.

Jackman, Erwin B. Woman's sweater. 176,613, 1–10–56, Cl. D3—4.

Jackman, Erwin B. Woman's blouse. 176,614, 1–10–56, Cl. D3—4.

Jones, Frank B., to Dunlop Tire and Rubber Corp. Tire. 176,615, 1–10–56, Cl. D90—20.

Kaufman, Adolph: *See*—
Kaufman, Samuel and A. 176,616.

Kaufman, Samuel and A. Combined lamp and planter. 176,616, 1–10–56, Cl. D48—20.

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Kramcsak, Michael, Jr., to The Bassick Co. Caster glide. 176,617, 1–10–56, Cl. D10—6.

Kranz, William J., to Viko Furniture Corp. Chair. 176,618, 1–10–56, Cl. D15—1.

Kurtz, William G., Jr. Paper weight or similar article. 176,619, 1–10–56, Cl. D74—12.

Lamarthe, Alfred E. Combined manicure set and case. 176,620, 1–10–56, Cl. D86—10.

Lamb, Lois T.: *See*—
Taylor, Carl C., and Lamb. 176,643.

Lockheed Aircraft Service, Inc.: *See*—
Yates, Robert L. 176,649.

Maki, Jacob K., to Simplex Time Recorder Co. Tag printing machine. 176,621, 1–10–56, Cl. D64—11.

Manville, Charles J. Dishwashing unit. 176,622, 1–10–56, Cl. D91—3.

Massey-Harris-Ferguson, Inc.: *See*—
McIntosh, Lawrie G. 176,624.

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Menzel, Charles O., to Globe-Union Inc. Roller skate. 176,625, 1–10–56, Cl. D34—14.

Michalak, Erwin J. Film thickness gauge. 176,626, 1–10–56, Cl. D52—6.

Nash, Harold W. Tray attachment for a golf cart or similar article. 176,627, 1–10–56, Cl. D34—5.

National Lock Co.: *See*—
Palm, Floyd R., Jr. 176,629.

Nelson, Thomas, to American Twine & Fabric Corp. Textile fabric. 176,628, 1–10–56, Cl. D92—1.

Palm, Floyd R., Jr., to National Lock Co. Display stand. 176,629, 1–10–56, Cl. D80—9.

Pecora, Pasquo P., to Pecora's Farm Dairy. Talcum powder box or similar article. 176,630, 1–10–56, Cl. D58—11.

Pecora's Farm Dairy: *See*—
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Permoflux Corp.: *See*—
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Reed and Barton Corp.: *See*—
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Reiz, Andrew. Candelabra. 176,631, 1–10–56, Cl. D48—2.
Rosenow, Monroe H. Game die or similar article. 176,632, 1–10–56, Cl. D34—5.
Ross, Michael, to Decca Records Inc. Combined phonograph table and rack for record albums or the like. 176,633, 1–10–56, Cl. D33—14.
Saginaw Furniture Shops, Inc.: *See*—
Gaines, Abe J. 176,606.
Gaines, Abe J. 176,607.
Schlumbohm, Peter. Iced food server. 176,634, 1–10–56, Cl. D44—15.
Shalvoy, John C., to General Electric Co. Vacuum cleaner or similar article. 176,635, 1–10–56, Cl. D9—2.
Simon, Lewis B. Light grille. 176,636, 1–10–56, Cl. D48—32.
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Sivertson, Clifford P. Combined trouser hanger and tray. 176,637, 1–10–56, Cl. D33—3.
Sleeman, William C. Combined floor furnace guard and table. 176,638, 1–10–56, Cl. D81—1.
Smith, Raymond A., to Bowser, Inc. Housing for dispensing apparatus. 176,639, 1–10–56, Cl. D52—2.
Smith, Virgil T. Combined pipe closing plug and wrench grips. 176,640, 1–10–56, Cl. D91—1.
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Stanley Building Specialties Co.: *See*—
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Terwilliger, Floyd A. Champagne bottle stopper. 176,644, 1–10–56, Cl. D58—26.
Velke, Herbert, to G. Buehler. Flour sifter casing. 176,645. 1–10–56, Cl. D35—1.
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Waynal, Fred. Blow-gun toy. 176,646, 1–10–56, Cl. D34—15.
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Yates, Robert L., to Lockheed Aircraft Service, Inc. Brake bending vise. 176,649, 1–10–56, Cl. D41—1.
Yunker, Arthur. Child's playsuit. 176,650, 1–10–56, Cl. D3—17.
Zahn, Hermann, to Ibelo Metallwaren Gesellschaft mit beschraenkter Haftung Hermann Zahn. Pocket lighter. 176,651, 1–10–56, Cl. D48—27.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 10TH DAY OF JANUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Abolins, Visvaldis: *See*—
Finholt, Robert W., and Abolins. 2,730,474.
Abramson, Helmer A., to Calumet & Hecla, Inc. Method of making substantially pure cupric diammino carbonate. 2,730,429, 1–10–56, Cl. 23—61.
Ackermann, Hans: *See*—
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Aelony, David, to General Mills, Inc. Drying oil product and method of producing. 2,730,451, 1–10–56, Cl. 106—252.
Aguilar, John G., and G. W. Brown. Method of pitting fruit. 2,730,149, 1–10–56, Cl. 146—227.
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Anderson, Marshall N., to Sellstrom Mfg. Co. Safety headgear. 2,729,820, 1–10–56, Cl. 2—8.
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Andres, Lloyd J., to Permo, Inc. Phonograph transducer. 2,730,572, 1–10–56, Cl. 179—100.41.
Andrews, Herbert V. Plastic die model and method of making same. 2,729,894, 1–10–56, Cl. 33—174.
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Aspey, Cecil W., to Northrop Aircraft, Inc. Self-locking fastener having longitudinal spring key detent means. 2,730,154, 1–10–56, Cl. 151—8.
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Backstrom, Carl I. Butt gauge for correct fitting of hinges on doors and jambs. 2,729,895, 1–10–56, Cl. 33—197.
Bader, Alfred R.: *See*—
Vogel, Henry A., and Bader. 2,730,517.
Bader, Richard M., and R. Newman, to California Institute Research Foundation. Microilluminator for spectrometers. 2,730,004, 1–10–56, Cl. 88—14.
Badische Anilin- & Soda-Fabrik Aktiengesellschaft: *See*—
Reppe, Walter, and Friederich. 2,730,546.
Baer, John S., to Radio Corp. of America. Reeling system. 2,730,309, 1–10–56, Cl. 242—55.
Bahlsen, Werner: *See*—
Kovac, Ferdinand. 2,730,035.
Bailey, John H. Baffle Muffler silencer. 2,730,188, 1–10–56, Cl. 181—47.
Bailey Meter Co.: *See*—
Gorrie, Harvard H. 2,730,379.
Markow, George R., and Hornfeck. 2,730,304.
Wermelskirchen, Louis M. 2,730,697.
Baird, Ronald J., to The National Sugar Refining Co. Printink ink compositions containing dialdehyde derivatives of sugars or lower polyhydric alcohols. 2,730,509, 1–10–56, Cl. 260—9.
Baker & Co., Inc. *See*—
Stumbock, Max J. 2,729,881.
Baker, Corwin W., to United Shoe Machinery Corp. Shoe inseam trimming machines. 2,729,838, 1–10–56, Cl. 12—82.
Baldwin Rubber Co.: *See*—
Hunter, Gerald G. 2,730,356.
Balkin, Mark, and D. G. Turner, to George Angus and Co., Ltd. Fibre-contacting elements used in processing textile fibres, particularly in spinning. 2,729,860, 1–10–56, Cl. 19—143.
Ball, Charles F., to Joy Mfg. Co. Oil well drilling apparatus. 2,730,330, 1–10–56, Cl. 255—19.
Ballard Belt and Buckle Co.: *See*—
Ballard, Mary H. 2,729,867.
Ballard, Herman E. Pipe coupling sealing means. 2,730,838, 1–10–56, Cl. 285—143.
Ballard, Mary H., to Ballard Belt and Buckle Co. Buckle frame and covering therefor. 2,729,867, 1–10–56, Cl. 24—176.
Balley, Eric J. G., and W. Walker, to Imperial Chemical Industries Ltd. Plasticised compositions. 2,730,513, 1–10–56, Cl. 260—31.8.
Ballman, Charles W. Jack for machine tools. 2,729,990. 1–10–56, Cl. 77—5.

Banes, Fred W.: *See*—
Young, David W., and Banes. 2,730,436.

Bangert, John T., to Bell Telephone Laboratories, Inc. Wave transmission network using transistor. 2,730,680, 1–10–56, Cl. 333—80.

Banning, Alfred J., to C. V. A. Jigs Moulds & Tools Ltd. Driving gear for automatic lathes. 2,729,983, 1–10–56, Cl. 74—472.

Barker, Ronald H., to National Research Development Corp. Pulse code systems. 2,730,676, 1–10–56, Cl. 332—11.

Baritrop, Albert C.: *See*—
Davidson, Douglas H., Musgrave, and Baritrop. 2,730,166.

Barnes Drill Co.: *See*—
Klein, James B. 2,729,924.

Barnes, William A., to Utica Drop Forge & Tool Corp. Adjusting and locking means for slidable jaw wrench. 2,729,999, 1–10–56, Cl. 81—165.

Bartleson, John D.: *See*—
Faris, Robert B., Jr., and Bartleson. 2,729,970.

Bartow Beacons, Inc.: *See*—
Bartow, John B., and MacLaughlin. 2,730,566.

Bartow, John B., and G. D. MacLaughlin, Jr., to Bartow Beacons, Inc. Method and apparatus for X-ray fluoroscopy. 2,730,566, 1–10–56, Cl. 178—6.5.

Bastow, Wendell R., to Raytheon Mfg. Co. Automatic frequency-control circuits. 2,730,616, 1–10–56, Cl. 250—20.

Batesell, Alfred P., and A. J. Grandy. Method of splicing insulated conductor. 2,730,473, 1–10–56, Cl. 154—2.22.

Batson-Cook Co.: *See*—
Smith, Jesse G. 2,730,413.

Battle Creek Packaging Machines, Inc.: *See*—
Smith, John W. 2,730,359.
Willbrandt, Franklin M. 2,729,928.

Bauman, Robert H., to General Motors Corp. Automatic screw type brake wear adjustor. 2,730,205, 1–10–56, Cl. 188—196.

Baumgardner, William C.: *See*—
Delafontaine, Charles, and Baumgardner. 2,729,886.

Beach, Royal A., to The Dumore Co. Indexing device for chain saw sharpener. 2,729,988, 1–10–56, Cl. 76—77.

Beal, Philip F.: *See*—
Hogg, John A., Beal, Nathan, and Lincoln. 2,730,525.

Beamish, Bernard D. Electric can counter circuit. 2,730,301, 1–10–56, Cl. 235—98.

Beard, Walter C., Jr., and A. B. Dayton, Jr., to The Risdon Mfg. Co. Container and applicator for liquid and gaseous compounds. 2,730,180, 1–10–56, Cl. 169—31.

Beaver, David J., P. J. Stoffel, and R. S. Shumard, to Monsanto Chemical Co. Antiseptic detergent composition. 2,730,502, 1–10–56, Cl. 252—107.

Beaver, David J., R. S. Shumard, and P. J. Stoffel, to Monsanto Chemical Co. Halogenated tris-phenols. 2,730,551, 1–10–56, Cl. 260—619.

Bebry Bedding Corp.: *See*—
Bebry, Peter P. 2,729,829.

Bebry, Peter P., to Bebry Bedding Corp. Love seat bed with automatic latching and unlatching means. 2,729,829, 1–10–56, Cl. 5—13.

Beck, Joseph J., to Chain Belt Co. Method of increasing the strength of a sprocket chain. 2,729,935, 1–10–56, Cl. 59—8.

Becker, Francis X.: *See*—
Miller, Carroll de V., and Becker. 2,729,845.

Becker, Frederick G. L., deceased, by E. Goulding and D. John, executors, to Cellulose Development Corp. Ltd. Treating vegetable fibrous material with chlorine gas. 2,730,426, 1–10–56, Cl. 8—105.

Bell & Howell Co.: *See*—
Schuessler, Frank J. 2,730,571.

Bell, John, F. H. Cannon, and G. A. Mundy, to Muirhead & Co. Ltd. Facsimile apparatus. 2,729,818, 1–10–56, Cl. 346—101.

Bell Telephone Laboratories, Inc.: *See*—
Bangert, John T. 2,730,680.
Caruthers, Robert S. 2,730,576.
Case, Robert L., Jordan, and Kleist. 2,730,579.
Marmont, George H., and Oliver. 2,730,617.
Pierce, John R. 2,730,647.
Sauer, Harold A. 2,730,069.
Shockley, William. 2,730,470.

Belsey, Frederick H., to General Electric Co. Magnetic amplifier. 2,730,574, 1–10–56, Cl. 179—171.

Bemis Bro. Bag Co.: *See*—
Wunderwald, Leon E., and Rosebrough. 2,730,150.

Bendix Aviation Corp.: *See*—
Britton, Clayton F. 2,730,199.
Burt, Farlow B. 2,730,221.
Du Bois, William H. 2,730,202.
Edelman, Philip E. 2,730,668.
Frerer, Paul G. 2,730,593.
Karlson, John C. 2,730,864.

Bennert, Milton H., to General Motors Corp. Process of electrolytic deburring of metal. 2,730,494, 1–10–56, Cl. 204—145.

Bentrup, Henry D. Automatic dam. 2,729,944, 1–10–56, Cl. 61—29.

Berberich, Willi. Apparatus for binding piles of sheets. 2,730,142, 1–10–56, Cl. 140—92.3.

Berg, Clyde H. O., and J. E. Hines, Jr., to Union Oil Co. of California. Conveyance of granular solids. 2,730,407, 1–10–56, Cl. 302—17.

Berger, Arpad P.: *See*—
Piperoux, Rene P., Berger, and Diemer. 2,730,175.

Berggren, Eric E. Automobile transmission hoist. 2,730,244, 1–10–56, Cl. 212—28.

Bergstrom, Lars O., and K. E. W. Hjelm, to Aktiebolaget Bofors. Safety device for the explosive head of missile. 2,730,046, 1–10–56, Cl. 102—81.

Bertele, Ludwig. Photographic wide-angle objective. 2,730,016, 1–10–56, Cl. 88—57.

Besoyan, Kirk, to Truck Safety Engineering Corp. Vehicle emergency brake. 2,730,196, 1–10–56, Cl. 188—4.

Bickley, Everett H. Color sorting mechanism. 2,730,234, 1–10–56, Cl. 209—111.

Billings, David P., and T. E. Garrison, to The Pelton Water Wheel Co. Manually controllable pumping jack. 2,729,942, 1–10–56, Cl. 60—52.

Billson, John A.: *See*—
Reynolds, Kenneth W., and Billson. 2,730,068.

Bird, Allen K.: *See*—
Martin, Leo, and Bird. 2,730,368.

Birley, Arthur W., J. W. C. Crawford, and A. W. Jukes, to Imperial Chemical Industries Ltd. Beryllium hydroxide as catalyst in reacting polyesters with diisocyanates. 2,730,518, 1–10–56, Cl. 260—75.

Black, James J., to Trailmobile, Inc. Suspended lens construction for vehicular lights. 2,730,611, 1–10–56, Cl. 240—7.1.

Blaw-Knox Co.: *See*—
Shields, James R. 2,730,386.

Blevins, George A., and C. B. Ensinger. Adjustable dolly for kitchen stoves and the like. 2,730,373, 1–10–56, Cl. 280—35.

Blink, Peter, to Mitchell Mfg. Co. Improvements in collapsible leg and brace mechanism for folding tables. 2,730,418, 1–10–56, Cl. 311—92.

Bloudoff, Peter S.: *See*—
Rose, Howard E., and Bloudoff. 2,729,941.

Bluemink, Gary G., to The Dumore Co. Chain saw sharpener. 2,729,987, 1–10–56, Cl. 76—37.

Bluestone, Henry, S. B. Soloway, J. Hyman, and R. E. Lidov, to Shell Development Co. Method for producing polycyclic hydrocarbons and derivatives thereof. 2,730,548, 1–10–56, Cl. 260—586.

Blumenthal, Sidney, & Co., Inc.: *See*—
Lovshin, Frank A., Dufourd, and Koroiyshun. 2,730,140.

Boissinot, Georges, and J. Gillet, to Compagnie Generale de Telegraphie Sans Fil. Ultra-high frequency wave mode transformers. 2,730,677, 1–10–56, Cl. 333—21.

Bokenkroger, William H., to Union Bag & Paper Corp. Heat sealed bag. 2,730,295, 1–10–56, Cl. 229—57.

Bone, Herbert L., and H. C. Clausen, to Westinghouse Air Brake Co. Auxiliary contact actuator for train control governors. 2,730,584, 1–10–56, Cl. 200—42.

Bonnar-Vawter, Inc.: *See*—
Riordan, John M. 2,730,358.

Bonner, Frank E., to The Commonwealth Engineering Co. of Ohio. Suction bag device for spray dryer. 2,730,282, 1–10–56, Cl. 226—58.

Borg, Lennart, to Allmänna Svenska Elektriska Aktiebolaget. Means for producing low-frequency electrical oscillations. 2,730,670, 1–10–56, Cl. 321—68.

Borst, Frank C. Pivoted valve unit for overhead sprinklers. 2,730,128, 1–10–56, Cl. 137—616.7.

Bower, Exil E. Power transmitting mechanism. 2,730,217, 1–10–56, Cl. 192—61.

Bowers, Roy L.: *See*—
Thatcher, Russell S., and Bowers. 2,730,125.

Boyer, Robert A., to Swift & Co. Method of manufacturing a high protein food product and the resulting product. 2,730,447, 1–10–56, Cl. 99—14.

Boyer, Robert A., and H. E. Saewert, to Swift & Co. Method of preparing imitation meat products (pH control). 2,730,448, 1–10–56, Cl. 99—14.

Braatz, Clarence W., to Durant Mfg. Co. Printing counter. 2,730,425, 1–10–56, Cl. 346—98.

Brabets, Robert L., R. J. Hlavacek, and E. Fritz, to Swift & Co. Sperm oil fractionation. 2,730,538, 1–10–56, Cl. 260—409.

Bradford, Purdy, and C. S. Steiner, to Swift & Co. Shielded soap spray nozzle. 2,730,170, 1–10–56, Cl. 159—2.

Bradford, Purdy, to Swift & Co. Method of making dustless soap powder. 2,730,507, 1–10–56, Cl. 252—369.

Bradford, Purdy, to Swift & Co. Soap manufacture. 2,730,539, 1–10–56, Cl. 260—417.

Braibanti, Giuseppe: *See*—
Braibanti, Mario and G. 2,730,050.

Braibanti, Mario and G. Cutting and removing device for bunches of dough strings. 2,730,050, 1–10–56, Cl. 107—7.

Bredtschneider, Kurt B., to Crane Co. Valve with renewable cage. 2,730,119, 1–10–56, Cl. 137—327.

Breeback, Rudolph H.: *See*—
Day, Carl L., and Breeback. 2,730,226.

Bresacka, Rudolph S., to Western Electric Co., Inc. Punching apparatus. 2,730,173, 1–10–56, Cl. 164—15.

Brewster, George F. Work holding chuck. 2,730,370, 1–10–56, Cl. 279—3.

Brideyaux, Georges, to Tavannes Watch Co. S. A. Timepiece. 2,729,934, 1–10–56, Cl. 58—104.

Brill, William E., to General Motors Corp. Cylinder head. 2,730,085, 1–10–56, Cl. 123—41.76.

British Celanese Ltd.: *See*—
Hodge, Arthur, Downing, and Drewitt. 2,730,444.

British Petroleum Co., Ltd., The: *See*—
Porter, Frederick W. B., and Northcott. 2,730,487.

British Welding Research Assn.: *See*—
Houldcroft, Peter T., and Purchas. 2,730,646.

British Xylonite Co. Ltd., The: *See*—
Pickering, Joseph. 2,730,160.

Britton, Clayton F., to Bendix Aviation Corp. Brake adjustor. 2,730,199, 1–10–56, Cl. 188—78.

Britton, Sylvester C., to Phillips Petroleum Co. Fuel for and method of operating a jet engine. 2,729,936, 1–10–56, Cl. 60—35.4.

Brohn, Herman A., to General Motors Corp. Crankcase ventilation system. 2,730,086, 1–10–56, Cl. 123—41.86.

Brown, Alvin G., to The Electric Sweeper Service Co. Method of mounting a swivel nozzle on a pipe. 2,730,480, 1–10–56, Cl. 154—116.

Brown, George W.: *See*—
Aguilar, John G., and Brown. 2,730,149.

Brown, Guy E. Deflecting tools. 2,730,328, 1–10–56, Cl. 255—1.6.

Brown, James S., P. W. Fischer, and L. C. Johnson, to Union Oil Co. of California. Treatment of oil-containing water. 2,730,190, 1–10–56, Cl. 183—2.7.

Brown, John F. Self-closing nozzle. 2,730,274, 1–10–56, Cl. 222—490.

Brown, Leslie S. Machine for folding shearling strips. 2,729,964, 1–10–56, Cl. 69—7.5.

Brown, Vincent C. Tool with retractable bit. 2,730,145, 1–10–56, Cl. 143—64.

Bruck, George, to Radiation, Inc. Cabinets. 2,730,420, 1–10–56, Cl. 312—213.

Bruestle, Armin O., and C. B. Krekeler, to The Cincinnati Mine Machinery Co. Cutter bar construction and adjustment therefor. 2,730,347, 1–10–56, Cl. 262—33.

Brugler, Richard L.: *See*—
Wyckoff, Paul W., and Brugler. 2,729,951.

Bruijning, Hugo G., to Hartford National Bank and Trust Co. Very high frequency electron discharge tubes. 2,730,650, 1–10–56, Cl. 315—5.

Brundage, John F., to Allis-Chalmers Mfg. Co. Tool mounting and adjusting mechanism for tractors. 2,730,029, 1–10–56, Cl. 97—46.07.

Brunk, Leslie L., to Renberles Products Co. Distributor plate assembly. 2,730,583, 1–10–56, Cl. 200—31.

Bruno, Peter. Dual storage battery switch. 2,730,581, 1–10–56, Cl. 200—16.

Bruno, Peter. Dual storage battery system. 2,730,630, 1–10–56, Cl. 290—38.

Bublik, Gustav. Hockey sticks. 2,730,367. 1–10–56, Cl. 273—67.

Buchanan, J. D. Valve. 2,730,124, 1–10–56, Cl. 137—493.1.

Buck, Robert R. Decorative inlaid article and method. 2,729,909, 1–10–56, Cl. 41—35.

Budzien, Hugo F., to Fairbanks, Morse & Co. Reversible power transmission mechanism. 2,729,981, 1–10–56, Cl. 74—361.

Buhr, August G., to Allis-Chalmers Mfg. Co. Wrench type clamp. 2,730,031, 1–10–56, Cl. 97—198.1.

Bundy Tubing Co.: *See*—
Wallace, Arthur M. 2,730,135.

Burgess-Manning Co.: *See*—
Hoyle, Robert L. 2,730,193.

Bürgin, Dora. Device having a cleansing and/disinfecting action. 2,729,828. 1–10–56, Cl. 4—231.

Burndy Engineering Co.: *See*—
Friedman, Gerson, and Lazar. 2,729,995.

Burrell, Gilbert, to General Motors Corp. Intake manifold. 2,730,091, 1–10–56, Cl. 123—122.

Burris, Glenn A. Hydraulic interval timer. 2,730,354, 1–10–56, Cl. 267—1.

Bursell, Claes G. B. Sleeve shaping devices. 2,730,276, 1–10–56, Cl. 223—67.

Burst, Francis J., and H. Weese, to Hill-Rom Co., Inc. Cabinet construction. 2,730,421, 1–10–56, Cl. 312—257.

Burt, Farlow B., to Bendix Aviation Corp. Clutch and spindle disengaging means for turntables. 2,730,221, 1–10–56, Cl. 192—117.

Bush, Rankin J.: *See*—
Hewitt, Ellis E., Bush, and Jeffrey. 2,729,994.

Butler, William F., to Cutler Laboratories, Inc. Drip meter. 2,730,098, 1–10–56, Cl. 128—214.

Buvelot, John A., to American Steel Foundries. Axle brake flange. 2,730,206, 1–10–56, Cl. 188—206.

Byers, Hugh G.: *See*—
Katchky, Max, and Byers. 2,730,717.

C. V. A. Jigs Moulds & Tools Ltd.: *See*—
Banning, Alfred J. 2,729,983.
Pulman, William E. R. 2,730,371.

Cabot, Godfrey L., Inc.: *See*—
Jordan, Merrill E., and Cole. 2,730,453.

California Institute Research Foundation: *See*—
Badger, Richard M., and Newman. 2,730,004.

California Research Corp.: *See*—
Neely, George L. 2,730,093.

Calis, Michieline: *See*—
Day, Jean, and Calis. 2,730,450.

Calument & Hecla, Inc.: *See*—
Abramson, Helmer A. 2,730,429.

Campbell, Lawrence F. Ribless pulse jet valve grid. 2,729,939, 1–10–56. Cl. 60—39.77.

Cannon, Frank H.: *See*—
Bell, John, Cannon, and Mundy. 2,729,818.

Carborundum Co., The: *See*—
Houchins, Henry R. 2,730,439.

Carlson, Donald O., to Inspiration Consolidated Copper Co. Process for recovery of copper from cupriferous ore. 2,730,493, 1–10–56, Cl. 204—108.

Carlstedt, Sven B. F. Automatic dish-washing machine and control mechanism. 2,730,114, 1–10–56, Cl. 134—57.

Carlstrom, Jesper H.: *See*—
Casler, Adrien F., and Carlstrom. 2,729,916.

Carney Co., Inc., The: *See*—
Downey, Richard M. 2,729,849.

Carpenter Steel Co., The: *See*—
Post, Carl B., and Eberly. 2,730,443.

Carter, Victor M.: *See*—
Rayburn, Alden G. 2,730,391.

Cartledge, William J., to E. I. du Pont de Nemours and Co. Spray mixer. 2,730,433, 1–10–56, Cl. 23—285.

Cartlidge, Frank, to Goodman Mfg. Co. Coal mining machine with rotary cutting and dislodging drum. 2,730,344, 1–10–56, Cl. 262—9.

Caruthers, Robert S., to Bell Telephone Laboratories, Inc. Miniaturized transistor amplifier circuit. 2,730,576, 1–10–56, Cl. 179—171.

Cary, William E., Ltd.: *See*—
Hicklin, William O. 2,729,962.

Casablancas High Draft Co. Ltd.: *See*—
Noguera, Joseph. 2,729,859.

Case, J. I., Co.: *See*—
Hamilton, Matthew E. 2,729,931.

Case, Robert L., H. G. Jordan, and M. R. Kleist, to Bell Telephone Laboratories, Inc. Order wire and alarm circuits for carrier systems. 2,730,579, 1–10–56, Cl. 179—175.3.

Cashman, Robert J., to International Telephone and Telegraph Corp. Photoconductive electrode. 2,730,638, 1–10–56, Cl. 313—65.

Casler, Adrien F., and J. H. Carlstrom, to General Electric Co. Glass blowing machine. 2,729,916, 1–10–56, Cl. 49—19.

Celanese Corp. of America: *See*—
Fortess, Fred, and Hobing. 2,730,498.
Piperoux, Rene P., Berger, and Diemer. 2,730,175.

Celastic Corp., The: *See*—
Day, Bruce F. 2,730,481.

Cellilo, Anthony P. Poultry gizzard opener. 2,729,848, 1–10–56, Cl. 17—11.

Cellulose Development Corp. Ltd.: *See*—
Becker, Frederick G. L. 2,730,426.

Century Display Mfg. Co.: *See*—
Platt, Robert G. 2,730,243.

Chadwick, John W. Method and apparatus for heating trains. 2,730,305, 1–10–56, Cl. 237—5.

Chain Belt Co.: *See*—
Beck, Joseph J. 2,729,935.

Chambers, John M., to Massey-Harris-Ferguson (Sales) Ltd. Steerable agricultural implement. 2,730,030, 1–10–56, Cl. 97—47.55.

Chambersburg Engineering Co.: *See*—
Clarke, Eugene C., and Weyer. 2,729,943.

Chance Vought Aircraft, Inc.: *See*—
Ringham, Rodger F. 2,730,313.

Chaney, Allen L.: *See*—
McCracken, Edward A., and Chaney. 2,730,515.

Chapman, Everett. Apparatus for producing stress images. 2,730,007, 1–10–56, Cl. 88—14.

Cheesman, John J., to General Strapping Corp. Package and like binding mechanism. 2,730,036, 1–10–56, Cl. 100—27.

Cheney, Vao L., to Chip Steak Co. Apparatus for producing loaves of meat or the like. 2,729,947, 1–10–56, Cl. 62—1.

Chester, Allan E., to Poor & Co. Electrodeposition of zinc-copper alloys. 2,730,492, 1–10–56, Cl. 204—44.

Chicago Eye Shield Co.: *See*—
Malcom, Robert, Jr. 2,730,012.

Chicane, Verl I. Mobile grain elevator. 2,730,227, 1–10–56, Cl. 198—53.

Chip Steak Co.: *See*—
Cheney, Vao L. 2,729,947.

Christman, John M. Machine for chamfering gears and clutch means thereof. 2,730,019, 1–10–56, Cl. 90—1.4.

Chrysler Corp.: *See*—
Sarto, Jorma O. 2,730,167.
Valentine, Charles M. 2,730,208.
Wyckoff, Paul W., and Brugler. 2,729,951.

Church, Howard, to Kaiser Aluminum & Chemical Corp. Distillation furnace. 2,730,081, 1–10–56, Cl. 122—248.

Cincinnati Milling Machine Co., The: *See*—
Dall, Albert H., and Fritschi. 2,730,129.

Cincinnati Mine Machinery Co., The: *See*—
Bruestle, Armin O., and Krekeler. 2,730,347.

Criniglio, Ignace. Sharpening apparatus for razor blades. 2,729,922, 1–10–56, Cl. 51—153.

Clark, Joseph C. Venetian blinds. 2,730,171, 1–10–56, Cl. 160—167.

Clarke, Eugene C., and H. A. Weyer, to Chambersburg Engineering Co. Fluid-pressure-actuated apparatus. 2,729,943, 1–10–56, Cl. 60—97.

Clausen, Harold C.: *See*—
Bone, Herbert L., and Clausen. 2,730,584.

Clayton Dewandre Co. Ltd.: *See*—
Edge, Stanley H., Heacock, and Young. 2,730,075.

Cleveland Frog & Crossing Co.: *See*—
Arnold, George, and Schultz. 2,730,319.

Clinehens, Richard M.: *See*—
Moline, Walter E., and Clinehens. 2,730,491.

Clinton Machine Co.: *See*—
Relf, David L. 2,730,092.

Coakley, Annie A. and J. E. L. Hair curling appliances. 2,730,109, 1–10–56, Cl. 132—41.

Coakley, June E. L.: *See*—
Coakley, Annie A. and J. E. L. 2,730,109.

Coates, Raymond W.: *See*—
Gabrielson, Samuel I., and Coates. 2,729,963.

Coe, Merrill J., to Sutherland Paper Co. Display carton. 2,730,232, 1–10–56, Cl. 206—45.26.

Cohen, Jack H., and R. A. Goslin, to the United States of America as represented by the Secretary of the Navy. Power control device for electric motor. 2,730,666, 1–10–56, Cl. 318—475.

Cole, Harvey M.: *See*—
Jordan, Merrill E., and Cole. 2,730,453.

Coleman Co., Inc., The: *See*—
Phillips, Arthur E. 2,730,463.

Coleman, William E., and G. H. Rendel, to United States Steel Corp. Apparatus for inspecting and classifying flat steel products. 2,730,233, 1–10–56, Cl. 209—111.

Combined Metals Reduction Co.: *See*—
Kelsey, William H. 2,730,299.

Commonwealth Engineering Co. of Ohio, The: *See*—
Bonner, Frank E. 2,730,282.

Compagnie Generale de Telegraphie Sans Fil: *See*—
Boissinot, Georges, and Gillet. 2,730,677.
Day, Jean, and Calls. 2,730,450.
Dohler, Oscar, and Epsztein. 2,730,678.
Gutton, Henri, and Violet. 2,730,652.
Lerbs, Alfred. 2,730,648.

Compagnie Internationale des Pieux Armes Frankignoul, Societe Anonyme: *See*—
Jourdain, André P. 2,730,329.

Concrete Conduit Co.: *See*—
Ludwig, Herbert P. 2,729,873.

Conger-Groves Corp.: *See*—
Street, Chauncey C. 2,730,569.

Conn, C. G., Ltd.: *See*—
Loney, Hugh W. 2,730,003.

Constantinesco, George, to The Yorkshire Copper Works Ltd. Blowpipes. 2,730,609, 1–10–56, Cl. 219—39.

Continental Gin Co.: *See*—
Greeley, Mark S., and Kimbro. 2,730,228.

"Contraves" A.-G.: *See*—
Guanella, Gustav, Güttinger, Lattmann, and Weber. 2,730,715.

Cook, Frances E. Marble runway. 2,729,914, 1–10–56, Cl. 46—43.

Coombe, Raymond B. Automatic control for gas making machines. 2,730,437, 1–10–56, Cl. 48—74.

Coonradt, Harry L., and W. K. Leaman, to Socony Mobil Oil Co., Inc. Ion exchange removal of mercaptans from petroleum. 2,730,486, 1–10–56, Cl. 196—24.

Cornell, Archie R., to Westinghouse Electric Corp. Apparatus for operating gaseous discharge devices. 2,730,656, 1–10–56, Cl. 315—97.

Coskun, Mehmet K., to American Steel Foundries. Car truck. 2,730,048, 1–10–56, Cl. 105—190.

Cottle, Delmer L.: *See*—
Young, David W., Morway, and Cottle. 2,730,500.

Coursey, Dallas J. Brush dressing attachment for paint cans. 2,730,266, 1–10–56, Cl. 220—90.

Covington, Carl A.: *See*—
Earle, Clarence E., and Covington. 2,730,269.

Cowan, Ben. Stock metering and proportioning apparatus. 2,730,118, 1–10–56, Cl. 137—266.

Cozier Container Corp.: *See*—
Mueller, Fred R. 2,730,287.

Craig, Thomas A.: *See*—
Fuld, Fred, and Craig. 2,729,831.

Cramer, Martha K. Lipstick and tissue holders. 2,730,112, 1–10–56, Cl. 132—79.

Crane Co.: *See*—
Bredtschneider, Kurt B. 2,730,119.
Hansen, George E. 2,730,121.
Hansen, George E. 2,730,127.

Crane Packing Co.: *See*—
Asp, Howard L., and Haake. 2,730,131.

Crawford, John W. C.: *See*—
Birley, Arthur W., Crawford, and Jukes. 2,730,518.

Crawford, William W., to The Schlichter Jute Cordage Co. Twine. 2,729,933, 1–10–56, Cl. 57—140.

Cribben and Sexton Co.: *See*—
James, Lewis A. and D. A. 2,730,384.

Crittenden, Harry E., Jr. Slidable jaw face means for an open end wrench. 2,730,000, 1–10–56, Cl. 81—179.

Crookes, Le Roy W. Discoid-shaped aircraft. 2,730,312, 1–10–56, Cl. 244—13.

Crowley, Henry L., to Republic Steel Corp. Process of reducing iron formate. 2,730,441, 1–10–56, Cl. 75—.5.

Crown Cork & Seal Co., Inc.: *See*—
Day, Carl L., and Breeback. 2,730,226.

Crozier-Johns Co.: *See*—
Crozier, Leroy. 2,729,905.

Crozier, Leroy, to Crozier-Johns Co. Portable ironing board. 2,729,905, 1–10–56, Cl. 38—112.

Cuff, Harold B., H. A. Swoboda, and A. J. Lorenz, to American Hard Rubber Co. Submarine battery jar support construction. 2,730,561, 1–10–56, Cl. 136—181.

Curtis, Daniel L., to Hughes Aircraft Co. Diode gating circuit. 2,730,632, 1–10–56, Cl. 307—88.5.

Curtiss, Lawrence M., to The Thomas & Betts Co. Reducing washer assembly for oversized holes. 2,730,381, 1–10–56, Cl. 285—30.

Cushing, Daniel E. and H. Sliver drafter evener. 2,729,857, 1–10–56, Cl. 19—70.

Cushing, Homer: *See*—
Cushing, Daniel E. and H. 2,729,857.

Cutter Laboratories, Inc.: *See*—
Butler, William F. 2,730,098.
Cutter, Robert K. 2,730,097.

Cutter, Robert K., to Cutter Laboratories, Inc. Injection mechanism. 2,730,097, 1–10–56, Cl. 128—214.

Cutting Room Appliances Corp.: *See*—
Deichmann, Walter. 2,730,357.

Cuvier, Pierre: *See*—
Ivanoff, Alexandre, Le Grand, and Cuvier. 2,730,014.

Czajkowski, Edward J., to The Singer Mfg. Co. Thread regulators for sewing machines. 2,730,061, 1–10–56, Cl. 112—254.

Daimler-Benz Aktiengesellschaft: *See*—
Katzung, Hugo. 2,730,355.

Dall, Albert H., and H. Fritschi, to The Cincinnati Milling Machine Co. Tracer control mechanism. 2,730,129, 1–10–56, Cl. 137—622.

Dandini, Juliana S. Current-driven motor. 2,730,631, 1–10–56, Cl. 290—54.

Danforth, Edward A.: *See*—
Toothman, Earl. 2,729,950.

Daniels, Howard L., and J. W. Hogan, to Sperry Rand Corp. Position indicating apparatus. 2,730,698, 1–10–56, Cl. 340—206.

Dannenberg, Hans, to Shell Development Co. Drying composition resistant to gas checking and frosting. 2,730,510, 1–10–56, Cl. 260—18.

D'Arcey, Alfred C., to United Shoe Machinery Corp. Dust collecting hoods. 2,729,927, 1–10–56, Cl. 51—273.

Dargier de Saint-Vaulry, Paul, to Lip S. A. D'Horlogerie. Electrical balance wheel for time-keepers. 2,730,634, 1–10–56, Cl. 310—39.

Daszewski, Edward W., to General Electric Co. Insulated electrical conductor. 2,730,466, 1–10–56, Cl. 117—232.

Daszewski, Edward W., to General Electric Co. Insulated electrical conductors. 2,730,467, 1–10–56, Cl. 117—232.

Davidson, Douglas H. M., and A. C. Barltrop; said Barltrop assor. to N. G. Randall. Mobile trolley mounted tire removing machine. 2,730,166, 1–10–56, Cl. 157—1.2.

Davis, Bruce R. Adjustable automobile seat. 2,730,162, 1–10–56, Cl. 155—14.

Davis Co., The: *See*—
Pope, Henry, Jr. 2,729,957.

Davis, James N., to Sylvania Electric Products Inc. Pulse time modulated system. 2,730,696, 1–10–56, Cl. 340—182.

Davis, William R., to The Kell-Strom Tool Co., Inc. Hydraulically controlled reversible ratchet wrench. 2,729,997, 1–10–56, Cl. 81—60.

Dawson, Leslie H., to Marconi's Wireless Telegraph Co., Ltd. Frequency modulated radar system. 2,730,712, 1–10–56, Cl. 343—14.

Day, Bruce F., to The Celastic Corp. Polymerization by dielectric heating using inorganic salts as heating assistants. 2,730,481, 1–10–56, Cl. 154—126.5.

Day, Carl L., and R. H. Breeback, to Crown Cork & Seal Co., Inc. Article feeding mechanism. 2,730,226, 1–10–56, Cl. 198—34.

Day, Jean, and M. Calls, to Compagnie Generale de Telegraphie Sans Fil. Ceramic dielectric and process of preparing it. 2,730,450, 1–10–56, Cl. 106—39.

Day, Robert L., ½ to H. L. Williams. Automatic file-sharpening machine. 2,729,921, 1–10–56, Cl. 51—96.

Daystrom Electric Corp.: *See*—
Steed, Edgar L. 2,730,369.

Dayton, Arthur B., Jr.: *See*—
Beard, Walter C., Jr., and Dayton. 2,730,180.

De Cooperatieve Fabriek Van Melkproducten Te Bedum: *See*—
De Vries, Theo Rudolph. 2,730,449.

De Gier, Johannes, and J. Peper, to Hartford National Bank and Trust Co. Electric discharge tube. 2,730,643, 1–10–56, Cl. 313—85.

Deichmann, Walter, to Cutting Room Appliances Corp. Guide bar means for cloth folding machine. 2,730,357, 1–10–56, Cl. 270—86.

Delafontaine, Charles, and W. C. Baumgardner, to Warner-Lambert Pharmaceutical Co. Magazine type razor. 2,729,886, 1–10–56, Cl. 30—40.

Delise, John J. Self-gripping tool for turning socket head. 2,729,998, 1–10–56, Cl. 81—72.

Demarest, Daniel D. Plural stage rotary drum pulverizers, with grinding plates of regular polygonal shape. 2,730,307, 1–10–56, Cl. 241—153.

De Mastri, Stefano, to R. K. Price Associates, Inc. Automatic coupling for pipes. 2,730,382, 1–10–56, Cl. 285—97.3.

Dempsey, John T.: *See*—
Meisinger, Richard J., and Dempsey. 2,730,404.

De Rosset, Armand J., and C. H. Watkins, to Universal Oil Products Co. Liquid bath continuous conversion coking process and apparatus. 2,730,488, 1–10–56, Cl. 202—18.

De Shelter, Leo J. Ash receiver. 2,730,107, 1–10–56, Cl. 131—238.

Desmond, Gerard: *See*—
Desperak, Sam, Roschko, and Desmond. 2,730,055.

Desperak, Sam, J. Roschko, and G. Desmond, to Advance Spiral Machine Co., Inc. Spiral stitch attachment for sewing machines. 2,730,055, 1–10–56, Cl. 112—2.

Deubel, Justin A., to General Controls Co. Gas burner control system. 2,730,169, 1–10–56, Cl. 158—125.

Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, The: *See*—
Holzmann, Hermann. 2,730,189.

De Vries, Theo R., to De Cooperatieve Fabriek Van Melkproducten Te Bedum. Processes for the preparation of inoculating materials for concentrated milk products and for improving the crystallization of lactose in concentrated milk products. 2,730,449, 1–10–56, Cl. 99—55.

Dewees, Leonard S., to Western Electric Co., Inc. Methods of and apparatus for making cast articles. 2,729,850, 1–10–56, Cl. 18—5.

Dewey, Gordon C., to International Telephone and Telegraph Corp. Travelling wave amplifier. 2,730,649, 1–10–56, Cl. 315—3.5.

Dickey, Joseph B., and E. B. Towne, to Eastman Kodak Co. 5-Nitrothinzoleazo-N-fluoroalkylaniline compounds. 2,730,523, 1–10–56, Cl. 260—158.

Diemer, Ferdinand P.: *See*—
Piperoux, Rene P., Berger, and Diemer. 2,730,175.

Dietrich, Paul, and E. Kolland, to Maschinenfabrik Augsberg-Nurnberg A. G. Sheet delivery mechanism for printing machines. 2,730,363, 1–10–56, Cl. 271—79.

Dixon, Charles H., to Ex-Cell-O Corp. Container with reclosable pouring opening. 2,730,288, 1–10–56, Cl. 229—17.

Dixon, Charles H., to Ex-Cell-O Corp. Container of paperboard or the like. 2,730,289, 1–10–56, Cl. 229—17.

Dixon, James K., and J. E. Longfield, to American Cyanamid Co. Cyanogen production. 2,730,430, 1–10–56, Cl. 23—151.

Doak, Edmond R. Impeller propelled aerodynamic body. 2,730,311, 1–10–56, Cl. 244—12.

Dr. ing. h. c. F. Porsche K.-G.: *See*—
Reimspiess, Frans X., and Porsche. 2,730,375.

Dodd, John. Device for the attachment of tools to drilling and other power operated metal working machines. 2,730,220, 1–10–56, Cl. 192—114.

Dohler, Oscar, and B. Epsztein, to Compagnie Generale de Telegraphie Sans Fil. 2,730,678, 1–10–56, Cl. 333—31.

Doll, Ludwig, Jr. Stocking. 2,729,824, 1–10–56, Cl. 2—239.

Dombrowski, Henry S., C. W. Sanders, Jr., and E. Wall, to E. I. du Pont de Nemours and Co. Sectionalized reaction vessel. 2,730,353, 1–10–56, Cl. 266—43.

Dorst, Stanley O.: *See*—
Podolsky, Leon, and Dorst. 2,730,597.

Dougherty, Floyd G.: *See*—
McDowall, Charles J., Wheatley, and Dougherty. 2,729,938.

Downey, Richard M., to United States Gypsum Co. Apparatus and method for making fibrous felts. 2,729,861, 1–10–56, Cl. 19—156.

Downey, Richard M., ¼ to Midwest Insulations, Inc., ¼ to Industrial Products Co., Inc., ¼ to The Carney Co., Inc., and ¼ to Airseal Insulations, Inc. Apparatus and process for forming mineral fiber. 2,729,849, 1–10–56, Cl. 18—2.5.

Dowin, Roland W. Flush tank assembly. 2,729,826, 1–10–56, Cl. 4—41.

Downing, John: *See*—
Hodge, Arthur, Downing, and Drewitt. 2,730,444.

Drewitt, James G. N.: *See*—
Hodge, Arthur, Downing, and Drewitt. 2,730,444.

Dual-Motors Truck Co.: *See*—
Francis, Lynn M. 2,730,400.

Du Bois, William H., to Bendix Aviation Corp. Fluid seal for brake. 2,730,202, 1–10–56, Cl. 188—152.

Dubuisson, Emile D.: *See*—
Eberle, William J., and Dubuisson. 2,730,604.

Duetsmann, Hans C., to Olin Mathieson Chemical Corp. Lamp switch. 2,730,586, 1–10–56, Cl. 200—60.

Dufourd, Andrew J.: *See*—
Lovshin, Frank A., Dufourd, and Korolyshun. 2,730,140.

Dumore Co., The: *See*—
Beach, Royal A. 2,729,988.
Bluemink, Gary G. 2,729,987.

Dunlop Rubber Co. Ltd.: *See*—
Holland-Bowyer, Wilfrid, and Woodward. 2,730,133.

Dunn, Eustace S. Fluid tight seal for electric motors and generators. 2,730,636, 1–10–56, Cl. 310—86.

Dunn, Lyman D. Dispenser appliance for powdered or granular material as soap and the like. 2,730,271, 1–10–56, Cl. 222—322.

Duplex Electric Co., Inc.: *See*—
Ellithorpe, Clarence D. 2,730,053.

Du Pont, E. I., de Nemours and Co.: *See*—
Cartledge, William J. 2,730,433.
Dombrowski, Henry S., Sanders, and Wall. 2,730,353.
Gibson, Joseph W., Jr. 2,730,479.
Lewis, Ernest E. 2,730,489.
Morgan, William A., Jr. 2,730,478.

Durant Mfg. Co.: *See*—
Brantz, Clarence W. 2,730,425.

Durst, Walter H. Jointer sharpener. 2,729,923, 1–10–56, Cl. 51—173.

Dutton, Harvey J. Christmas tree stand. 2,730,321, 1–10–56, Cl. 248—48.

Dye, William T., Jr., to Monsanto Chemical Co. Process of preparing alkyl thionophosphates. 2,730,541, 1–10–56, Cl. 260—461.

Dye, William T., Jr., to Monsanto Chemical Co. Benzyltris-(dialkylamino) phosphonium halides. 2,730,547, 1–10–56, Cl. 260—551.

Earle, Clarence E., deceased, and C. A. Covington; D. B. Earle, executrix of said C. E. Earle. Fluid apparatus. 2,730,269, 1–10–56, Cl. 222—193.

Earle, Dorothy B.: *See*—
Earle, Clarence E., and Covington. 2,730,269.

Eastman Kodak Co.: *See*—
Dickey, Joseph B., and Towne. 2,730,523.

Ebel, Robert H.: *See*—
Weyker, Robert G., and Ebel. 2,730,528.

Eberle, William J., and E. D. Dubuisson; said Dubuisson assor. to said Eberle. Plumber's tool. 2,730,604, 1–10–56, Cl. 219—21.

Eberly, Warren S.: *See*—
Post, Carl B., and Eberly. 2,730,443.

Ebersole, John M. Roof repair sheet for greenhouses. 2,730,052, 1–10–56, Cl. 108—1.

Edelman, Philip E., to Bendix Aviation Corp. Regulated power supply. 2,730,668, 1–10–56, Cl. 321—18.

Edge, Stanley H., F. H. Heacock, and D. L. G. Young, to Clayton Dewandre Co. Ltd. Control means for power-assisted steering mechanism. 2,730,075, 1–10–56, Cl. 121—41.

Edwards, Ewart S. Package loader for trucks. 2,730,249, 1–10–56. Cl. 214—75.

Ellenberger, Stanley D., to Minneapolis-Honeywell Regulator Co. Photographic flash circuit. 2,730,660, 1–10–56, Cl. 315—240.

Electric & Musical Industries Ltd.: *See*—
Johnson, Charles A. 2,730,639.

Electric Sweeper Service Co., The: *See*—
Brown, Alvin G. 2,730,480.

Ellis, Alfred L. Measuring and dispensing top. 2,730,272, 1–10–56, Cl. 222—362.

Ellithorpe, Clarence D., to Duplex Electric Co., Inc. Motor-ized drive-in teller's window. 2,730,053, 1–10–56, Cl. 109—19.

Elsen, Richard T. Friction on wheel spindle presses. 2,729,979, 1–10–56, Cl. 74—213.

Emerson, William S., and R. A. Heimsch, to Monsanto Chemical Co. Dicarboxylic sulfones as plasticizers for vinyl chloride polymers. 2,730,512, 1–10–56, Cl. 260—30.8.

Emrick, Melvin H. Multiple clutch forward and reverse drive unit for tapping machine. 2,729,834, 1–10–56, Cl. 10—136.

Emurian, Albert D., and W. Todd, to the United States of America as represented by the Secretary of the Army. Radiosonde transmitter housing. 2,730,623, 1–10–56, Cl. 250—36.

Enock, Arthur G., to Graham-Enock Mfg. Co. Ltd. Bottle crating and decrating machines. 2,730,279, 1–10–56, Cl. 226—14.

Ensinger, Chester B.: *See*—
Blevins, George A., and Ensinger. 2,730,373.

Epsztein, Bernard: *See*—
Dohler, Oscar, and Epsztein. 2,730,678.

Ernst, Walter, to The Thompson Grinder Co. Servo-motor valve. 2,730,074, 1–10–56, Cl. 121—41.

Espy, Melvin P., W. W. Pittman, and B. Josselyn, to The Glenn L. Martin Co. Coupling. 2,730,380, 1–10–56, Cl. 284—19.

Esso Research and Engineering Co.: *See*—
Leary, Robert F. 2,730,519.
McCracken, Edward A., and Chaney. 2,730,515.
Mounce, Whitman D. 2,730,672.
Peet, Nick P. 2,730,508.
Pokorny, Oldrich S. 2,730,499.
Samuel, Frank B. 2,730,242.
Stone, Albert L. 2,730,246.
Young, David W., and Banes. 2,730,436.
Young, David W., Morway, and Cottle. 2,730,500.

Etherington, Robert O. Occupant propelled amusement device. 2,730,366, 1–10–56, Cl. 272—33.

Etienne, Alfred, to L'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude. Separation of gaseous mixtures. 2,729,954, 1–10–56, Cl. 62—175.5.

Ewing, Reid, to McGraw Electric Co. Impregnation of absorbent materials. 2,730,462, 1–10–56, Cl. 117—95.

Ex-Cello-O Corp.: *See*—
Dixon, Charles H. 2,730,288.
Dixon, Charles H. 2,730,289.

Eyring, Edward J. Deflector for endless chain propeller. 2,730,064, 1–10–56, Cl. 115—1.

Faber & Schleicher Aktiengesellschaft: *See*—
Koch, Werner. 2,730,362.

Fairbanks, Morse & Co.: *See*—
Budzien, Hugo F. 2,729,981.

Fairchild Camera and Instrument Corp.: *See*—
Welanets, Ludolph F. 2,730,026.

Falone, Angelo C., and R. Alachuier. Attachment for stapling machine and staple. 2,729,819, 1–10–56, Cl. 1—2.

Fand, Theodore I.: *See*—
Mast, George W., and Fand. 2,730,483.

Farbenfabriken Bayer Aktiengesellschaft: *See*—
Haltmeier, Alfred. 2,730,431.

Faris, Robert B., Jr., and J. D. Bartleson, to The Standard Oil Co. Carbonization testing apparatus. 2,729,970, 1–10–56, Cl. 73—64.

Farmland Irrigation Co., Inc.: *See*—
Huntley, Alva E. 2,730,403.

Farr, Edward A., and J. P. Theisen, to Arvin Industries, Inc. Percolator. 2,730,610, 1–10–56, Cl. 219—44.

Faulhaber, Fritz, to Voigtländer A. G. Photographic reflex cameras. 2,730,025, 1–10–56, Cl. 95—42.

Faust, John A.: *See*—
Sahyun, Melville, and Faust. 2,730,544.

Feeney, Robert J., to Chas. Pfizer & Co., Inc. Recovery of ergosterol. 2,730,536, 1–10–56, Cl. 260—397.25.

Feltwell, Bernard, to Manton Brothers Ltd. Switch actuating mechanism for set-up machines and the like. 2,730,587, 1–10–56, Cl. 200—61.58.

Fenton, Alvin P.: *See*—
Fisher, Edwin L., and Fenton. 2,730,350.

Fergason, Rector C., to Allis-Chalmers Mfg. Co. Three point quick hitch means for semitrailing implements. 2,730,378, 1–10–56, Cl. 280—461.

Ferguson, Vernon E. Valve for fire extinguisher. 2,730,179, 1–10–56, Cl. 169—9.

Ferranti Ltd.: *See*—
Williamson, David T. N. 2,730,694.

Ferrari, Giorgio: *See*—
Ferrari, Vittorio E. and G. 2,730,542.

Ferrari, Vittorio E. and G., Process for preparing ethanol-2-aminophosphoric acid. 2,730,542, 1–10–56, Cl. 260—461.

Ferris, Seymour W., to Sun Oil Co. Laminated sheet material. 2,730,476, 1–10–56, Cl. 154—50.

Ferro Corp.: *See*—
Peterson, Forrest W. 2,729,872.

Fiat S. p. A.: *See*—
Giacosa, Dante. 2,730,185.

Fincke, John K., to Monsanto Chemical Co. Herbicides. 2,730,440, 1–10–56, Cl. 71—2.7.

Findlay, Robert L. Structural member. 2,730,211, 1–10–56, Cl. 189—37.

Finholt, Robert W., and V. Abolins, to General Electric Co. Electric conductor wrapping machine. 2,730,474, 1–10–56, Cl. 154—2.25.

Finken, Walter S.: *See*—
Frieder, Leonard P., and Finken. 2,730,314.
Frieder, Leonard P., and Finken. 2,730,316.

Firkins, Carlyle. Animal handling chute. 2,730,072, 1–10–56, Cl. 119—99.

Fischer, Paul W.: *See*—
Brown, James S., Fischer, and Johnson. 2,730,190.

Fisher, Charles R., to General Dynamics Corp. Impulse testing equipment. 2,730,578, 1–10–56, Cl. 179—175.2.

Fisher, Edwin L., and A. P. Fenton, to Kohler Co. Speed regulator. 2,730,350, 1–10–56, Cl. 264—3.

Fisher, Simon, and T. S. Kurlinski, to National Electric Welding Machines Co. Rotating electrode structure. 2,730,600, 1–10–56, Cl. 219—4.

Fisk, Bert, and C. L. Spencer. Synchronous starting clutch. 2,730,215, 1–10–56, Cl. 192—30.
Fitzgerald, Gerald C. Anti-skid device. 2,730,406, 1–10–56, Cl. 301—47.
Fleischmann, Lester K. Holder for carbon rolls. 2,730,225, 1–10–56, Cl. 197—126.
Flores, Iris M., to Sarong, Inc. Brassiere shaper. 2,730,275, 1–10–56, Cl. 223—66.
Floyd, Don E., to General Mills, Inc. Phenol-formaldehyde resins esterified with higher unsaturated fatty acids and dimerized rosin. 2,730,511, 1–10–56, Cl. 260—19.
Flum, Herman H.: *See*—
Hallerberg, Theodore W., Roberts, and Flum. 2,730,705.
Fogal, Gordon L., and A. M. Mitnick. Parachute canopy. 2,730,315, 1–10–56, Cl. 244—145.
Food Machinery and Chemical Corp.: *See*—
Umhoefer, Robert R. 2,730,533.
Fortess, Fred, and C. Hohing, Jr., to Celanese Corp. of America. Textile lubricants. 2,730,498, 1–10–56, Cl. 252—8.8.
Fortuin, Jan P., and H. I. Waterman, to Shell Development Co. Production and stabilization of aromatic hydroperoxides. 2,730,550, 1–10–56, Cl. 260—610.
Foster, Florence B. Protective article for use by hairdressers. 2,729,823, 1–10–56, Cl. 2—174.
Foster, Wayne M. Hinge construction for baby cribs. 2,729,847, 1–10–56, Cl. 16—145.
Francis, Lynn M., to Dual-Motors Truck Co. Pivotal track vehicle carrying trailer and method of loading same. 2,730,400, 1–10–56, Cl. 296—1.
Free-Gold Enterprises, Inc.: *See*—
Svirsky, Bennett. 2,730,117.
Svirsky, Bennett. 2,730,122.
Freed, Olof E.: *See*—
Sabaroff, Albert R., Freed, and Horner. 2,730,254.
Freeman, Philip M., to United Aircraft Corp. Gear preloading device on pitch change mechanism for oppositely rotating propellers. 2,730,181, 1–10–56, Cl. 170—135.27.
French, Louis O. Rotary valve internal combustion engine. 2,730,089, 1–10–56, Cl. 123—80.
Frerer, Paul G., to Bendix Aviation Corp. Burner control device. 2,730,593, 1–10–56, Cl. 200—138.
Freudenberg, Herman. Panty girdle. 2,729,821, 1–10–56, Cl. 2—43.
Frick, Chester A., to L. M. Harvey. Packing case. 2,730,259, 1–10–56, Cl. 217—43.
Frieder, Leonard P., and W. S. Finken; said Finken assor. to said Frieder. Parachute canopy structures. 2,730,314, 1–10–56, Cl. 244—142.
Frieder, Leonard P., and W. S. Finken; said Finken assor. to said Frieder. Load-retarding canopy structure. 2,730,316, 1–10–56, Cl. 244—145.
Friederich, Herbert: *See*—
Reppe, Walter, and Friederich. 2,730,546.
Friedman, Gerson, and M. D. Lazar, to Burndy Engineering Co. Indenting and sealing tool with selectively operable handles. 2,729,995, 1–10–56, Cl. 81—15.
Fritschi, Hans: *See*—
Dall, Albert H., and Fritschi. 2,730,129.
Fritz, Earle: *See*—
Brabets, Robert I., Hlavacek, and Frits. 2,730,538.
Fröbel, Arthur, to Olympia Werke Aktiengesellschaft. Adjustable stop mechanism. 2,729,986, 1–10–56, Cl. 74—526.
Fromm, Winfield E.: *See*—
Schmitt, Otto H., and Fromm. 2,730,620.
Fryklund, Robert A., to Raytheon Mfg. Co. Controllable depth maintaining devices. 2,729,910, 1–10–56, Cl. 43—9.
Fuld, Fred, and T. A. Craig. Blanket construction. 2,729,831, 1–10–56, Cl. 5—336.
Fuschi, Antonio T. Trailer uncoupling preventing safety means. 2,730,377, 1–10–56, Cl. 280—432.
G-M Laboratories, Inc.: *See*—
Kitto, William H. 2,730,219.
Gabrielson, Samuel I., and R. W. Coates, to General Electric Co. Clothes wringer release mechanism. 2,729,963, 1–10–56, Cl. 68—249.
Gallimore, Keith F., and G. H. Schurger, to Giddings & Lewis Machine Tool Co. Machine tool. 2,730,021, 1–10–56, Cl. 90—16.
Garrison, Thomas E.: *See*—
Billings, David P., and Garrison. 2,729,942.
Gartner, Stanley J.: *See*—
Roeber, Henry W., and Gartner. 2,729,877.
Gates, Robert C., to Gates & Sons, Inc. Method of making structural form ties. 2,730,141, 1–10–56, Cl. 140—73.
Gates Rubber Co., The: *See*—
Mitchell, Lee W. 2,729,854.
Gates & Sons, Inc.: *See*—
Gates, Robert C. 2,730,141.
Gätzi, Karl, and P. Muller, to J. R. Geigy A. G. Spirocyclic esters of sulphurous acid and their use as pest combatting agents. 2,730,529, 1–10–56, Cl. 260—340.9.
Gaydasch, Alexander, and W. K. T. Gleim, to Universal Oil Products Co. Production of substituted quinones. 2,730,535, 1–10–56, Cl. 260—396.
Gebe, Richard W., and B. W. Ridley. Degaussing system. 2,730,063, 1–10–56, Cl. 114—240.
Geigy, J. R., A. G.: *See*—
Gätzi, Karl, and Müller. 2,730,529.
Schetty, Guido. 2,730,522.
Schetty, Guido, and Ackermann. 2,730,521.
Schetty, Guido, Stammbach, and Model. 2,730,534.
Geisler, Helmut J., to International Business Machines Corp. Gas tube counter. 2,730,655, 1–10–56, Cl. 315—84.5.
General Aniline & Film Corp.: *See*—
Hoefle, Milton L., Randall, and Renfrew. 2,730,534.
General Controls Co.: *See*—
Deubel, Justin A. 2,730,169.
General Dynamics Corp.: *See*—
Fisher, Charles R. 2,730,578.
Gratian, Joseph W. 2,730,699.
McNaney, Joseph T. 2,730,708.
Reagan, Leon H. 2,730,568.
Schwidetzky, Walter H. 2,729,972.
General Electric Co.: *See*—
Anderson, Robert M. 2,729,960.
Belsey, Frederick H. 2,730,574.
Casler, Adrien F., and Carlstrom. 2,729,916.
Daszewski, Edward W. 2,730,466.
Daszewski, Edward W. 2,730,467.
Finholt, Robert W., and Abolins. 2,730,474.
Gabrielson, Samuel I., and Coates. 2,729,963.
Harty, Edgar A. 2,730,663.
Jacobs, John E. 2,730,627.
Kellogg, Harry L. 2,730,661.
Kenty, Carl. 2,730,645.
Kenty, Carl, and Larson. 2,730,424.
Koller, Lewis R. 2,730,640.
Kurtz, Lowell M. 2,729,863.
Lamb, Fredrick S., and Hermanson. 2,730,689.
McKeag, Alfred H. 2,730,504.
Page, Robert G. 2,730,594.
Reynolds, Kenneth W., and Billson. 2,730,068.
Sauer, Robert O. 2,730,540.
Vonnegut, Bernard. 2,730,005.
White, Albert O. 2,730,387.
General Mills, Inc.: *See*—
Aelony, David. 2,730,451.
Floyd, Don E. 2,730,511.
Jordan, Wesley A. 2,730,505.
McCaleb, Kirtland E. 2,730,520.
General Motors Corp.: *See*—
Bauman, Robert H. 2,730,205.
Bennert, Milton H. 2,730,494.
Brill, William E. 2,730,085.
Brohn, Herman A. 2,730,086.
Burrell, Gilbert. 2,730,091.
Goodwin, Richard M. 2,729,882.
McDowall, Charles J., Wheatley, and Dougherty. 2,729,938.
Thatcher, Russell S., and Bowers. 2,730,125.
General Radiological Ltd.: *See*—
Quittner, Victor. 2,730,628.
General Strapping Corp.: *See*—
Cheesman, John J. 2,730,036.
Gerhold, Clarence G., to Universal Oil Products Co. Liquid solvent extraction process. 2,730,558, 1–10–56, Cl. 260—674.
Gerlach, Karl. Mine filling frame structure comprising props and pivotally connected girders. 2,729,945, 1–10–56, Cl. 61—45.
Gestetner Ltd.: *See*—
Styles, Leonard W., and Picking. 2,730,042.
Giacosa, Dante, to Fiat S. p. A. Motor vehicle with forwardly mounted engine. 2,730,185, 1–10–56, Cl. 180—64.
Giannotta, Carmen R. *See*—
Kaufman, Herman S., and Giannotta. 2,729,967.
Gibson, George T., and W. H. W. Ramsay, Jr., to John Gibson & Son Ltd. Refuse-collecting vehicle. 2,730,255, 1–10–56, Cl. 214—503.
Gibson, John, & Son Ltd.: *See*—
Gibson, George T., and Ramsay. 2,730,255.
Gibson, Joseph W., Jr., to E. I. du Pont de Nemours and Co. Fibrous materials and processes of making same. 2,730,479, 1–10–56, Cl. 154—101.
Giddings & Lewis Machine Tool Co.: *See*—
Gallimore, Keith F., and Schurger. 2,730,021.
Gilbert, Phillip E. Beverage can and accessory. 2,729,956. 1–10–56, Cl. 65—13.
Gillett, Jacques: *See*
Boissinot, Georges, and Gillett. 2,730,677.
Girling, Ltd. *See*—
Pratt, James H. 2,730,204.
Gist, Ray G. Timing and tappet setting indicator having a remote dial. 2,730,066, 1–10–56, Cl. 116—124.
Given Machinery Co.: *See*—
Jordan, Hans. 2,730,308.
Glass, Harry L.: *See*—
Whiting, Arthur A., Jr., Trudell, and Glass. 2,730,402.
Gleason, William W., to Nachman Corp. Spring assembly unit having base support. 2,729,830, 1–10–56, Cl. 5—266.
Gleim, William K. T.: *See*—
Gaydasch, Alexander, and Gleim. 2,730,535.
Gödde, Franz: *See*—
Hilbeerle, Albert, and Gödde. 2,730,707.
Godoy, Caesar O. Stick horse. 2,730,365, 1–10–56, Cl. 272—1
Goldberg, Morris I. Convertible bassinet and child's chair for automobiles. 2,730,163, 1–10–56, Cl. 155—44.
Goodbar, Mayo A., and R. G. Pratt, to The National Cash Register Co. Label printing and issuing mechanism for cash registers. 2,730,038, 1–10–56, Cl. 101—69.
Goodman Mfg. Co.: *See*—
Cartlidge, Frank. 2,730,344.
Sloane, William W. 2,730,182.
Sloane, William W. 2,730,343.
Sloane, William W. 2,730,345.
Goodrich B. F., Co., The: *See*—
Semegen, Stephen T. 2,730,159.
Goodwin, Richard M., to General Motors Corp. Commutator assembling machine. 2,729,882, 1–10–56, Cl. 29—205.
Gordon, Ralph R. Machine tool attachment. 2,730,230, 1–10–56, Cl. 203—159.
Gorrie, Harvard H., to Bailey Meter Co. Fluid pressure couple. 2,730,379 1–10–56, Cl. 284—1.
Goslin, Robert A.: *See*
Cohen, Jack H., and Goslin. 2,730,666.

Gottschall, Paul P., to United States Steel Corp. Strip width gage. 2,730,006, 1–10–56, Cl. 88—14.
Goulding, Edward: *See*—
Becker, Frederick G. L. 2,730,426.
Graham-Enock Mfg. Co. Ltd.: *See*—
Enock, Arthur G. 2,730,279.
Grandy, Andrew J.: *See*—
Batezell, Alfred P., and Grandy. 2,730,473.
Granqvist, Carl-Erik, to Hazeltine Research, Inc. Control apparatus for direction finder. 2,730,716, 1–10–56, Cl. 343—118.
Gratian, Joseph W., to General Dynamics Corp. Telemetering system. 2,730,699, 1–10–56, Cl. 340—212.
Gray, John A., to Imperial Chemical Industries Ltd. Alkyl and cycloalkyl hydroperoxides. 2,730,495, 1–10–56, Cl. 204—162.
Greeley, Mark S., and R. O. Kimbro, to Continental Gin Co. Automatic tripper for belt conveyors. 2,730,228, 1–10–56, Cl. 198—186.
Green, Barrett K., and L. Schleicher, to The National Cash Register Co. Manifold record material. 2,730,456. 1–10–56, Cl. 117—36.
Green, Barrett K., and L. Schleicher, to The National Cash Register Co. Pressure responsive record materials. 2,730,457, 1–10–56, Cl. 117—36.
Greenman, Leo S. Ventilation system for automobiles and the like. 2,730,032, 1–10–56, Cl. 98—2.
Gregorius, Joseph S., to Pittsburgh Plate Glass Co. Glass refining apparatus. 2,730,338, 1–10–56, Cl. 259—8.
Gregory, William C. Cleaning apparatus. 2,729,917, 1–10–56, Cl. 51—8.
Greig, Harold G., to Radio Corp. of America. Electrophotographic recorder. 2,730,023, 1–10–56, Cl. 95—1.7.
Grimes, Willard M., Jr., to the United States of America as represented by the Secretary of the Navy. Electronic test equipment. 2,730,674, 1–10–56, Cl. 324—20.
Grosjean, Johan A., to Hartford National Bank and Trust Co. Device comprising a cathode-ray tube. 2,730,642, 1–10–56, Cl. 313—76.
Grouse, Richard A., to A. H. Hunt Capacitors Ltd. Electrical capacitors. 2,729,878, 1–10–56, Cl. 29—25.42.
Grover, Frank N.: *See*—
Wohlers, Herbert C., Grover, Lentz, and Pauling. 2,730,194.
Gruettner, Gerhard G., to New Hermes Engraving Machine Corp. Multi-ratio engraving machine and workholder therefor. 2,729,892, 1–10–56, Cl. 33—25.
Guanella, Gustav, P. Güttinger, M. Lattmann, and G. Weber, to "Patelhold" Patentverwertungs- & Elektro-Holding A.-G. and "Contraves" A.-G. Method of and apparatus for guiding flight bodies along preselected flight paths. 2,730,715, 1–10–56, Cl. 343—106.
Guidry, Don P. Multiple valve. 2,730,130, 1–10–56, Cl. 137—635.
Guthrie, George B., to The Hall China Co. Roller tool jiggering machine. 2,729,870, 1–10–56, Cl. 25—24.
Gutman, Alfred S. Electrical connectors. 2,730,684, 1–10–56, Cl. 339—60.
Güttinger, Paul: *See*—
Guanella, Gustav, Güttinger, Lattman and Weber. 2,730,715.
Gutton, Henri and E. Violet, to Compagnie Generale de Telegraphie Sans Fil. Apparatus with focalized electronic beam, such namely as microscopes. 2,730,652, 1–10–56, Cl. 315—14.
H. & L. Tooth Co.: *See*—
Launder, Ernie L. 2,729,902.
Haak, Paul T.: *See*—
Asp, Howard L., and Haake. 2,730,131.
Haas, Otto R., to United Shoe Machinery Corp. Machines for lasting and sewing shoes. 2,729,836, 1–10–56, Cl. 12—9.1.
Haas, Otto R., to United Shoe Machinery Corp. Automatic shoe machines. 2,729,837, 1–10–56, Cl. 12—17.2.
Haase, Warren M. Removable fur trimming for boots. 2,729,899, 1–10–56, Cl. 36—7.1.
Hilbeerle, Albert, and F. Gödde, to Koppers Co., Inc. Signalling devices for coke-oven batteries. 2,730,707, 1–10–56, Cl. 340—282.
Haberland, Fritz, and W. Johner, to Klangfilm Gesellschaft mit beschränkter, Haftung. Mounting racks for electro-acoustic apparatus. 2,730,322, 1–10–56, Cl. 248—127.
Hadley, Wilfred N., to Park & Woolson Machine Co. Fabric carbon duster and method. 2,730,113, 1–10–56, Cl. 134—9.
Hagan Corp: *See*—
Michaels, Franklin. 2,730,618.
Hage, William T., to The Babcock & Wilcox Co. Tapping control system for melting furnaces. 2,730,560, 1–10–56, Cl. 13—33.
Hagemann, Melloy S. Blood vessel drainage tube. 2,729,876, 1–10–56, Cl. 27—24.
Hahnel, Alwin, to the United States of America as represented by the Secretary of the Army. Frequency Multiplier circuit. 2,730,624, Cl. 250—36.
Hajos, Eugene, to The Howe Scale Co., Inc. Weighing machine printer. 2,730,303, 1–10–56, Cl. 235—136.
Hale, Frank J. Apparatus for permanently waving hair on the human head. 2,730,110, 1–10–56, Cl. 132—42.
Hale, Ralph F., to Joy Mfg. Co. Motor operated drill. 2,730,332, 1–10–56, Cl. 255—45.
Hall China Co., The.: *See*—
Guthrie, George B. 2,729,870.
Hall, Robert E. Collapsible tower and hoist. 2,730,207, 1–10–56, Cl. 189—14.
Hallerberg, Theodore W., R. L. Roberts, Jr., and H. H. Flum; said Roberts and said Flum assors. to said Hallerberg. Automatic recycling warning light. 2,730,705, 1–10–56, Cl. 340—214.
Hallum, Andrew. Soil warning device. 2,729,915, 1–10–56, Cl. 47—19.
Haltmeier, Alfred, to Fabrenfabriken Bayer Aktiengesellschaft. Manufacture of sulfuric acid. 2,730,431, 1–10–56, Cl. 23—167.
Hamilton, Matthew E., to J. I. Case Co. Side delivery rake. 2,729,931, 1–10–56, Cl. 56—377.
Hamilton Tool Co., The: *See*—
Hauffman, Harold W. 2,729,982.
Hannon, Michael J.: *See*—
Svoboda, Martin C. 2,730,183.
Hansen, Francis F. Bread dough loaf curling. 2,730,051, 1–10–56, Cl. 107—54.
Hansen, George E., to Crane Co. Ballcocks. 2,730,121, Cl. 137—437.
Hansen, George E., to Crane Co. Tank filling valve 2,730,127, 1–10–56, Cl. 137—591.
Harasek, Richard J., to Motorola, Inc. Printed circuit chassis and tube clip. 2,730,690, 1–10–56, Cl. 339—193.
Hard af Segerstad, Carl-Gustaf, and A. H. Malmquist, to Scandvikens Jernverks Aktieboiag. Pneumatic gaging device, 2,729,908, 1–10–56, Cl. 73—37.6.
Harinck, Peter J. Rotary mining machine. 2,730,331, 1–10–56, Cl. 255—22.
Harrison, Dewey L. Slotted frame construction for rotary printing press. 2,730,044, 1–10–56, Cl. 101—181.
Harrison, Gaines W. Loader forks. 2,730,250, 1–10–56, Cl. 214—131.
Hart Mfg. Co., The: *See*—
Miller, Edward E. 2,730,688.
Hart, Robert W. Signal detector. 2,730,665, 1–10–56, Cl. 318—128.
Hartford National Bank and Trust Co.: *See*—
Bruijning, Hugo G. 2,730,650.
de Grier, Johannes, and Peper. 2,730,643.
Grosjean, Johan A. 2,730,642.
Hellings, Simon J., and Krienen. 2,730,621.
Hess, Karl W. 2,730,659.
Janssen, Peter J. H. 2,730,622.
Jongsma, Jan. 2,730,692.
Klinkhamer, Jacob F. 2,730,633.
Mantz, Marius R. 2,730,615.
Meier, Nicholaas F. 2,730,471.
Schagen, Pieter. 2,730,653.
Six, Willem. 2,730,658.
van der Willigen, Paul C. 2,730,465.
van Dorsten, Adrianus C. and Verhoeff. 2,730,297.
Went, Jan J., and Verlinde. 2,730,681.
Hartwell, George W., to Worthington Corp. Unloader mechanism for compressors. 2,730,296. 1–10–56, Cl. 230—24.
Harty, Edgar A., to General Electric Co. Unilaterally conductive device. 2,730,663, 1–10–56, Cl. 317—234.
Harvey, Leo M.: *See*—
Frick, Chester A. 2,730,259.
Harwedel, Walter M. Method of cleaning milking machine teat cups. 2,730,469, 1–10–56, Cl. 134—8.
Haserodt, Oscar P. Detachable automatic mail box signal. 2,730,298, 1–10–56, Cl. 232—35.
Hassold, Victor C., to Steel Heddle Mfg. Co. Heddle frame. 2,730,137, 1–10–56, Cl. 139—92.
Hausmann, George F., to United Aircraft Corp. Retractable flameholders for afterburners. 2,729,937, 1–10–56, Cl. 60—35.6.
Hawkins, James E., and W. E. Pugh, to Seismograph Service Corp. System and method of generating seismic waves in the earth. 2,730,187, 1–10–56, Cl. 181—.5.
Hawkinson, Earle W., to Paul E. Hawkinson Co. Mold for retreading pneumatic tire casings. 2,729,851, 1–10–56, Cl. 18—18.
Hawkinson, Earle W., to Paul E. Hawkinson Co. Mold for retreading pneumatic tire casings and method of forming same. 2,729,852, 1–10–56, Cl. 18—18.
Hawkinson, Paul E., Co.: *See*—
Hawkinson, Earle W. 2,729,851.
Hawkinson, Earle W. 2,729,852.
Hawkinson, Raymond P. 2,729,853.
Hawkinson, Raymond P., to Paul E. Hawkinson Co. Mold for retreading pneumatic tire casings. 2,729,853, 1–10–56, Cl. 18—18.
Hawthorne, Herman F., and F. D. Hoppert. Variable recoil mount. 2,729,975, 1–10–56, Cl. 73—167.
Hayden-Pigg, Godfrey E., to Marconi's Wireless Telegraph Co. Ltd. Sync pulse-emphasizing amplifier. 2,730,575, 1–10–56, Cl. 179—171.
Hazeltine Research, Inc.: *See*—
Granqvist, Carl-Erik. 2,730,716.
Loughlin, Bernard D. 2,730,564.
Hazlehurst, Hamilton D.: *See*—
Hyde Cyrus L. 2,730,088.
Heacock, Frederick H.: *See*—
Edge, Stanley H., Heacock, and Young. 2,730,075.
Hell Co., The: *See*—
Rea, George A. 2,730,401.
Helmsch, Robert A.: *See*—
Emerson, William S., and Helmsch. 2,730,512.
Helnemann, Harry B. Liquid measuring and dispensing device. 2,730,270. 1–10–56, Cl. 222—205.
Heintz, Rene, to Louvroil Montbard Aulnoye. Straightening machines with hyperbolic rolls. 2,730,158, 1–10–56, Cl. 153—91.
Hellings, Simon J., and F. Krienen, to Hartford National Bank and Trust Co. Radio transmitter of the kind comprising a magnetron tube energized by a synchronized pulse generator. 2,730,621, 1–10–56, Cl. 250—36.
Hempel, Gustav A., to McDowell Mfg. Co. Relief valve. 2,730,115, 1–10–56, Cl. 137—107.
Hendrich, Robert T., and D. L. O'Brien, Jr., to The Wire Coating and Mfg. Co. Process of zinc coating magnesium articles. 2,730,490, 1–10–56, Cl. 204—38.
Herbold, Wolfgang K. J. Means for loosening pipes in underground borings. 2,730,176, 1–10–56, Cl. 166—177.

Herman Pneumatic Machine Co.: *See*—
Kaveny, Paul J. 2,729,865.

Hermanson, Herman E.: *See*—
Lamb, Frederick S., and Hermanson. 2,730,689.

Hess, Karl W., to Hartford National Bank and Trust Co. Rectifying apparatus. 2,730,659, 1–10–56, Cl. 315—168.

Hewitt, Ellis E., R. J. Bush, and W. B. Jeffrey, to Westinghouse Air Brake Co. Hose clamp applying machine. 2,729,994, 1–10–56, Cl. 81—9.3.

Heywood, Vincent E., to United States Envelope Co. Suction gripping mechanism for envelope machines and the like. 2,730,360, 1–10–56, Cl. 271—27.

Heywood-Wakefield Co.: *See*—
Higley, David E., and Wickman.

2,730,164.

Hicklin, William O., to William E. Cary Ltd. Liquid circulating apparatus. 2,729,962, 1–10–56, Cl. 68—184.

Hicks, Roy E. Repeating toy gun. 2,730,094, 1–10–56, Cl. 124—19.

Higley, David E., and H. W. Wickman, to Heywood-Wakefield Co. Pivotal arrangement for recliner chairs. 2,730,164, 1–10–56, Cl. 155—116.

Hilkemeier, Louis G., to Worthington Corp. Positioner for welding or other manufacturing operation. 2,729,883, 1–10–56, Cl. 29—288.

Hill-Rom Co., Inc.: *See*—
Burst, Francis J., and Weese. 2,730,421.

Hines, John E., Jr.: *See*—
Berg, Clyde H. O., and Hines. 2,730,407.

Hjelm, Karl E. W.: *See*—
Bergström, Lars O., and Hjelm. 2,730,046.

Hlavacek, Robert J.: *See*—
Brabets, Robert I., Hlavacek, and Fritz. 2,730,538.

Hoadley, Henry H.: *See*—
Lee, John G., and Hoadley. 2,729,974.

Hodge, Arthur, J. Downing, and J. G. N. Drewitt, to British Celanese Ltd. Production of cellulose. 2,730,444, 1–10–56, Cl. 92—9.

Hodska, Nicholas S., to F. D. Kees Mfg. Co. Toast servers. 2,730,397, 1–10–56, Cl. 294—25.

Hoefle, Milton L., D. I. Randall, and E. E. Renfrew, to General Aniline & Film Corp. Anthraquinone dyestuffs. 2,730,534, 1–10–56, Cl. 260—373.

Hoerr, Charles W.: *See*—
Ohlson, John L., and Hoerr. 2,730,530.

Hoffman, Roy D. Teat bistoury with expansible cutter knives. 2,730,101, 1–10–56, Cl. 128—305.

Hoffmann-La Roche Inc.: *See*—
Isler, Otto, Montavon, Rüegg, and Zeller. 2,730,549.

Hogan, John W.: *See*—
Daniels, Howard L., and Hogan. 2,730,698.

Hoganas-Billiesholms Aktiebolag: *See*—
Sieurin, Sven E., and Olsson. 2,730,283.

Hogg, John A.: *See*—
Nathan, Alan H., and Hogg. 2,730,537.

Hogg, John A., P. F. Beal, A. H. Nathan, and F. H. Lincoln, Jr., to The Upjohn Co. 9:11-oxido steroids. 2,730,525, 1–10–56, Cl. 260—239.55.

Hoglan, Forest A., to International Minerals & Chemical Corp. Recovery of glutamic acid. 2,730,545, 1–10–56, Cl. 260—527.

Hogue, Ephraim W. Hydraulic motors. 2,730,076, 1–10–56, Cl. 121—56.

Hohing, Conrad, Jr.: *See*—
Fortess, Fred, and Hohing. 2,730,498.

Hohlfelder, F., Co., The: *See*—
Reed, Thomas W. 2,729,846.

Holl, James W. F. Exhaust back pressure braking system. 2,730,090, 1–10–56, Cl. 123—97.

Holland-Bowyer, Wilfrid, and J. H. Woodward, to Dunlop Rubber Co. Ltd. Reinforced fireproof hose. 2,730,133, 1–10–56, Cl. 138—56.

Holleron, William K.: *See*—
Louden, Edgar W., and Holleron. 2,730,256.

Holman, Arthur J. Coolant-circulating adjustable grinding tool. 2,729,926, 1–10–56, Cl. 51—207.

Holmberg, Henry, to Marquette Mfg. Co. Overbed table. 2,730,422, 1–10–56, Cl. 312—316.

Holmen, Reynold E., and W. E. Lundquist, to Minnesota Mining & Mfg. Co. Pressure-sensitive adhesive tape. 2,730,459, 1–10–56, Cl. 117—76.

Holt, William W., Jr. to Plantation Pipe Line Co. Scraper detector. 2,729,839, 1–10–56, Cl. 15—104.06.

Holwerda, John J. Container for fishing flies. 2,729,913, 1–10–56, Cl. 43—57.5.

Holzmann, Hermann, to The Deutsche Gold- und Silber-Scheideanstalt vormals Roessler. Platinum recovery. 2,730,189, 1–10–56, Cl. 183—1.

Hood, George J. Dermatome having improved control. 2,730,100, 1–10–56, Cl. 128—305.

Hood, George J. Dermatome having finger-tip control. 2,730,102, 1–10–56, Cl. 128—305.

Hoppert, Filaer D.: *See*—
Hawthorne, Herman F., and Hoppert. 2,729,975.

Horner, John D.: *See*—
Sabaroff, Albert R., Freed, and Horner. 2,730,254.

Hornfeck, Anthony J.: *See*—
Markow, George R., and Hornfeck. 2,730,304.

Horton, Paul M., and A. G. Keller, to Board of Supervisors of Louisiana State University and Agricultural and Mechanical College. Process for separating fibrous vegetable materials into pith and fiber portions. 2,729,856, 1–10–56, Cl. 19—7.

Horton, Paul M., and A. G. Keller, to Board of Supervisors of Louisiana State University and Agricultural and Mechanical College. Apparatus for processing fibrous vegetable materials. 2,729,858, 1–10–56, Cl. 19—90.

Hosley, Carlton R., to United Shoe Machinery Corp. Sewing machine feed mechanisms. 2,730,057, 1–10–56, Cl. 112—48.

Houchins, Henry R., to The Carborundum Co. Abrasive articles and method of making same. 2,730,439, 1–10–56, Cl. 51—307.

Houdry, Eugene J., to Oxy-Catalyst, Inc. Catalytic contacting unit. 2,730,434, 1–10–56, Cl. 23—288.

Houldcroft, Peter T., and J. G. Purchas, to British Welding Research Assn. Electric arc welding apparatus. 2,730,646, 1–10–56, Cl. 314—62.

Howe Scale Co., Inc., The: *See*—
Hajos, Eugene. 2,730,303.

Howell, F. M., & Co.: *See*—
Taylor, Harwood S., Jr. 2,730,324.

Hoyle, Robert L., to Burgess-Manning Co. Spark arrester snubber. 2,730,193, 1–10–56, Cl. 183—87.

Hubbard, Foncle A. Multipurpose key for opening tobacco cans. 2,730,108, 1–10–56, Cl. 131—247.

Huested, Richard S. Air lift devices. 2,730,398, 1–10–56, Cl. 294—81.

Huffman, Harold W., to The Hamilton Tool Co. Governor-drum drive for printing presses. 2,729,982, 1–10–56, Cl. 74—395.

Hufnagel, Andrew, to Westinghouse Air Brake Co. Code following relay with frequency decoding contacts. 2,730,592, 1–10–56, Cl. 200—91.

Hughes Aircraft Co.: *See*—
Curtis, Daniel L. 2,730,632.

Hunt, A. H., Capacitors Ltd.: *See*—
Grouse, Richard A. 2,729,878.

Hunter, Gerald G., to Baiwin Rubber Co. Load supporting and vibration damping mounting. 2,730,356, 1–10–56, Cl. 267—63.

Huntley, Alva E., to Farmland Irrigation Co., Inc. Device for moving wheel-mounted irrigation pipeline. 2,730,403, 1–10–56, Cl. 299—47.

Hutchins, Maraden C., to American Cyanamid Co. Color improvement of unsized porous paper. 2,730,446, 1–10–56, Cl. 92—21.

Hutchinson, Oscar T. Pea and bean filling machine. 2,730,284, 1–10–56, Cl. 226—97.

Huyser, Francis C., to American Machine and Metals, Inc. Grips for use in tension testing machines. 2,729,869, 1–10–56, Cl. 24—263.

Hyde, Cyrus L., ½ to H. D. Hazlehurst. Rotary valve-type engine. 2,730,088, 1–10–56, Cl. 123—59.

Hyman, Julius: *See*—
Bluestone, Henry, Soloway, Hyman, and Lidov. 2,730,548.

Ihrig, Clifford D., to Westinghouse Air Brake Co. Railway traffic controlling apparatus. 2,730,613, 1–10–56, Cl. 246—26.

Illinois Tool Works: *See*—
Knohl, Friedrich K. 2,730,155.
Nielsen, Moritz H. 2,729,833.

Imperial Chemical Industries Ltd.: *See*—
Bailey, Eric J. G., and Walker. 2,730,513.
Birley, Arthur W., Crawford, and Jukes. 2,730,518.
Gray, John A. 2,730,495.

Industrial Products Co., Inc.: *See*—
Downey, Richard M. 2,729,849.

Inman, Leo E. Automatic gaff hook. 2,730,390, 1–10–56, Cl. 294—110.

Innes, William B., to American Cyanamid Co. Method for automatic measurement of surface area and pore volume. 2,729,969, 1–10–56, Cl. 73—38.

Inspiration Consolidated Copper Co.: *See*—
Carlson, Donald O. 2,730,493.

Interchemical Corp.: *See*—
Verna, Philemon E. 2,730,606.

Interlock Corp.: *See*—
Modrey, Henry J. 2,730,687.

International Business Machines Corp.: *See*—
Geisler, Helmut J. 2,730,655.
Johnson, Reynold B. 2,730,040.

International Harvester Co.: *See*—
Walker, Delos A. 2,729,930.

International Minerals & Chemical Corp.: *See*—
Hoglan, Forest A. 2,730,545.

International Telephone and Telegraph Corp.: *See*—
Cashman, Robert J. 2,730,638.
Dewey, Gordon C. 2,730,649.

Ipsen, Harold N. Ceramic fan construction for heat treating furnaces. 2,730,352, 1–10–56, Cl. 266—5.

Iron Fireman Mfg. Co.: *See*—
Judson, Albert L. 2,729,978.

Ironrite, Inc.: *See*—
Sperlich, Herman A. 2,729,903.

Isler, Otto, M. Montavon, R. Rüegg, and P. Zeller, to Hoffmann-La Roche Inc. Preparation of a polyene aldehyde. 2,730,549, 1–10–56, Cl. 260—598.

Ivanoff, Alexandre, Y. Le Grand, and P. Cuvier; said Le Grand and said Cuvier assors. to said Ivanoff. Optical system for distortionless underwater vision. 2,730,014, 1–10–56, Cl. 88—57.

Jacobs, John E., to General Electric Co. X-ray stabilizer. 2,730,627, 1–10–56, Cl. 250—97.

Jacobson Mfg. Co.: *See*—
Strasel, Raymond K. 2,730,264.

Jakosky, John J., to Union Oil Co. of California. Magnetometer. 2,730,673, 1–10–56, Cl. 324—7.

James, Duane A.: *See*—
James, Lewis A. and D. A. 2,730,384.

James, Lewis A. and D. A., to Cribben and Sexton Co. Sleeve compressed resilient socket coupling. 2,730,384, 1–10–56, Cl. 285—161.

Janssen, Peter J. H., to Hartford National Bank and Trust Co. Oscillator synchronization. 2,730,622, 1–10–56, Cl. 250—36.

Jay, Henry. Finger ring set with gem mount locking means. 2,729,955, 1–10–56, Cl. 63—15.3.

Jeffrey Mfg. Co., The: *See*—
Smith, William J. 2,730,238.

Jeffrey, William B.: *See*—
Hewitt, Ellis E., Bush, and Jeffrey. 2,729,994.

Jensen, Jack H.: *See*—
Rust, David J., and Jensen. 2,730,172.

Jensen, James A., to Philadelphia Valve Co. Filling control mechanism for tank vehicles. 2,730,126, 1–10–56, Cl. 137—587.

Jernigan, Paul S. Ignition systems. 2,730,582, 1–10–56, Cl. 200—22.

Joa, Curt G. Automatic hopper feed for a wood working machine. 2,730,144, 1–10–56, Cl. 144—245.

John, Dorothy: *See*—
Becker, Frederick G. L. 2,730,426.

Johner, Walter: *See*—
Haberland, Fritz, and Johner. 2,730,322.

Johnson, Arthur A., to Automatic Devices Corp. Electric cigar lighter. 2,730,605, 1–10–56, Cl. 219—32.

Johnson, Charles A., to Electric & Musical Industries Ltd. Target structures such as are utilised in television transmission tubes. 2,730,639, 1–10–56, Cl. 313—67.

Johnson, Darrell M., to The Laudar Co. Automobile bumper attachment. 2,730,396, 1–10–56, Cl. 293—71.

Johnson, Leslie C.: *See*—
Brown, James S., Fischer, and Johnson. 2,730,190.

Johnson, Leslie C., to Union Oil Co. of California. Dehydration of oils. 2,730,240, 1–10–56, Cl. 210—53.

Johnson, Reynold B., to International Business Machines Corp. High speed multiple character wire printer. 2,730,040, 1–10–56, Cl. 101—93.

Johnston, Robert W. B., and S. Marple, Jr., to Shell Development Co. A wax composition and an article coated therewith. 2,730,452, 1–10–56, Cl. 106—270.

Jonas, Frank D., and E. D. Patterson, to Oxford Filing Supply Co., Inc. File drawer. 2,730,292, 1–10–56, Cl. 229—30.

Jones, Gordon K. Seat locking mechanism. 2,730,165, 1–10–56, Cl. 155—163.

Jongsma, Jan, to Hartford National Bank and Trust Co. Contact member for disc-shaped electrode connections. 2,730,692, 1–10–56, Cl. 339—256.

Jordan, Hans, to Given Machinery Co. Waste disposal device. 2,730,308, 1–10–56, Cl. 241—257.

Jordan, Homer G.: *See*—
Case, Robert L., Jordan, and Kleist. 2,730,579.

Jordan, Merrill E., and H. M. Cole, to Godfrey L. Cabot, Inc. Pigment peptizing agent and process. 2,730,453, 1–10–56, Cl. 106—271.

Jordan, Wesley A., to General Mills, Inc. Increasing the viscosity of guar sols by reaction with formaldehyde. 2,730,505, 1–10–56, Cl. 252—311.

Josselyn, Burnham: *See*—
Espy, Melvin P., Pitman, and Josselyn. 2,730,380.

Jourdain, André P., to Compagnie Internationale des Pieux Armes Frankignoul, Societe Anonyme. Device for boring wells in the ground. 2,730,329, 1–10–56, Cl. 255—4.8.

Joy, Joseph F., to Joy Mfg. Co. Reversible loop cutter type longwall miner. 2,730,346, 1–10–56, Cl. 262—30.

Joy Mfg. Co.: *See*—
Ball, Charles F. 2,730,330.
Hale, Ralph F. 2,730,332.
Joy, Joseph F. 2,730,346.

Judson, Albert L., to Iron Fireman Mfg. Co. Gyroscope caging system. 2,729,978, 1–10–56, Cl. 74—5.1.

Juffa, Hans. Capillary tube for measuring instruments. 2,729,977, 1–10–56, Cl. 73—371.

Jukes, Alan W.: *See*—
Birley, Arthur W., Crawford, and Jukes. 2,730,518.

Kaiser Aluminum & Chemical Corp.: *See*—
Church, Howard. 2,730,081.
Titus, Leslie, and Van Loenen. 2,729,855.

Kane, Aston G. Manually adjustable operating table. 2,730,415, 1–10–56, Cl. 311—6.

Kaplowitz, Saul: *See*—
Weinrib, Abraham, and Kaplowitz. 2,729,866.

Karlson, John C., to Bendix Aviation Corp. Induction signal motor-operated differential transformer. 2,730,664, 1–10–56, Cl. 318—31.

Karsh, Herbert, to the United States of America as represented by the Secretary of the Navy. System for multiplexing facsimile. 2,730,563, 1–10–56, Cl. 178—5.

Katchky, Max, and H. G. Byers. Directional wave antenna for marine radar use. 2,730,717, 1–10–56, Cl. 343—756.

Katzung, Hugo, to Daimler-Benz Aktiengesellschaft. Stabilizing wheel suspension for motor vehicles. 2,730,355, 1–10–56, Cl. 267—11.

Kaufman, Herman S., and C. R. Giannotta, to The M. W. Kellogg Co. Method and apparatus for determining the characteristics of a thermoplastic material. 2,729,967, 1–10–56, Cl. 73—15.6.

Kaveny, Paul J., to Herman Pneumatic Machine Co. Centrifugal casting apparatus. 2,729,865, 1–10–56, Cl. 22—65.

Kees, F. D., Mfg. Co.: *See*—
Hodska, Nicholas S. 2,730,397.

Kell-Strom Tool Co., Inc., The: *See*—
Davis, William R. 2,729,997.

Kelle, Arthur C., to Allis-Chalmers Mfg. Co. Fluid motor dumping system, including a cylinder head valve. 2,730,588, 1–10–56, Cl. 200—82.

Kelle, Arthur C., to Allis-Chalmers Mfg. Co. Fluid motor dumping system with fluid admitting and venting valve. 2,730,590, 1–10–56, Cl. 200—82.

Keller, Arthur G.: *See*—
Horton, Paul M., and Keller. 2,729,856.
Horton, Paul M., and Keller. 2,729,858.

Kellogg, Harry L., to General Electric Co. Initiating the arc in mercury pool tubes. 2,730,661, 1–10–56, Cl. 315—252.

Kellogg, M. W., Co., The: *See*—
Kaufman, Herman S., and Giannotta. 2,729,967.
Passino, Herbert J. 2,730,484.

Kelsey, William H., to Combined Metals Reduction Co. Coiled tube continuous centrifuge. 2,730,299, 1–10–56, Cl. 233—3.

Kemp, Lebbeus C., Jr., to The Texas Co. Process for transporting acetylene. 2,730,438, 1–10–56, Cl. 48—190.

Kenty, Carl, and D. A. Larson, to General Electric Co. Method and apparatus for making high pressure mercury vapor lamps. 2,730,424, 1–10–56, Cl. 316—26.

Kenty, Carl, to General Electric Co. Metallic flame radiation. 2,730,645, 1–10–56, Cl. 313—185.

Kerr, Robert L., to Adrema Ltd. Sheet feeding devices in addressing and like machines. 2,730,361, 1–10–56, Cl. 271—45.

Kilbury, Paul D. Heater unit. 2,730,349, 1–10–56, Cl. 263—19.

Kimbro, Rushton O.: *See*—
Greeley, Mark S., and Kimbro. 2,730,228.

Kindt-Collins Co., The: *See*—
Kindt, Ernest T., Sr., D. T. Kindt, and Siegfried. 2,730,477.

Kindt, David T.: *See*—
Kindt, Ernest T., Sr., D. T. Kindt, and Siegfried. 2,730,477.

Kindt, Ernest T., Sr., D. T. Kindt, and W. Siegfried, to The Kindt-Collins Co. Wax product. 2,730,477, 1–10–56, Cl. 154—53.5.

King, Francis W. Apparatus for developing photographic film and the like. 2,730,027, 1–10–56, Cl. 95—90.5.

Kinstler, Robert C., to American Cyanamid Co. Preparation of 2-benzothiazolyl sulfene morpholide. 2,730,526, 1–10–56, Cl. 260—247.1.

Kinstler, Robert C., to American Cyanamid Co. Preparation of 2-benzothiazolyl sulfene morpholide. 2,730,527, 1–10–56, Cl. 260—247.1.

Kitto, William H., to G–M Laboratories, Inc. Centrifugal clutch. 2,730,219, 1–10–56, Cl. 192—105.

Klangfilm Gesellschaft mit beschränkter: *See*—
Haberland, Fritz, and Johner. 2,730,322.

Klein, James B., to Barnes Drill Co. Hone. 2,729,924, 1–10–56, Cl. 51—184.3.

Klein, Samuel J. Conveyer roller. 2,730,222, 1–10–56, Cl. 193—37.

Kleinhample, Alvin E., and E. J. Peery. Portable, collapsible projection box. 2,730,011, 1–10–56, Cl. 88—24.

Kleinsorge, George. Ironing device. 2,729,906, 1–10–56, Cl. 38—135.

Kleist, Myron R.: *See*—
Case, Robert L., Jordan, and Kleist. 2,730,579.

Kline, Albert K. Cement retaining shoe. 2,730,177, 1–10–56, Cl. 166—184.

Klink, Herbert R. Grain sterilizing apparatus. 2,729,864, 1–10–56, Cl. 21—91.

Klinkhamer, Jacob F., to Hartford National Bank and Trust Co. Electro-mechanical resonator. 2,730,633, 1–10–56, Cl. 310—26.

Knight Leather Products, Inc.: *See*—
Miller, George, and Renz. 2,730,153.

Knohl, Friedrich K., to Illinois Tool Works. Polygonal lock washer having undulating configuration. 2,730,155, 1–10–56, Cl. 151—35.

Koch, Werner, to Faber & Schleicher Aktiengesellschaft. Device for side registering sheets in printing or similar machines. 2,730,362, 1–10–56, Cl. 271—59.

Kohler Co.: *See*—
Fisher, Edwin L., and Fenton. 2,730,350.

Kolland, Emil: *See*—
Dietrich, Paul, and Kolland. 2,730,363.

Koller, Lewis R., to General Electric Co. Secondary electron emitting system. 2,730,640, 1–10–56, Cl. 313—68.

Koppers Co., Inc.: *See*—
Häbeerle, Albert, and Gödde. 2,730,707.

Korolyshun, Russell T.: *See*—
Lovshin, Frank A., Dufourd, and Korolyshun. 2,730,140.

Kotrbaty, Guy F.: *See*—
McLaughlin, Robert W., and Kotrbaty. 2,730,210.

Kovac, Ferdinand, to Werner Bahlsen. Baking device. 2,730,035, 1–10–56, Cl. 99—373.

Krafft, Frederick G., to The Thompson Grinder Co. Method and apparatus for grinding. 2,729,919, 1–10–56, Cl. 51—92.

Krane, Frank J. Double-deck portable scaffold. 2,730,411, 1–10–56, Cl. 304—17.

Krekeler, Claude B.: *See*—
Bruestle, Armin O., and Krekeler. 2,730,347.

Kremser, Johann. Heat exchanger for varying the lubricating oil temperature in internal-combustion engines. 2,730,083, 1–10–56, Cl. 123—41.33.

Krienen, Frank: *See*—
Hellings, Simon J., and Krienen. 2,730,621.

Krohm, Fred A., to Productive Inventions, Inc. Fluid motor for windshield wiper. 2,730,078, 1–10–56, Cl. 121—97.

Kuehne, Fred, Jr., to Kuehne Mfg. Co. Soldered elbow. 2,730,385, 1–10–56, Cl. 285—211.

Kuehne Mfg. Co.: *See*—
Kuehne, Fred, Jr. 2,730,385.

Kurlian, Joseph. Key container. 2,729,965, 1–10–56, Cl. 70—456.

Kurlinski, Thaddeus S.: *See*—
Fisher, Simon, and Kurlinski. 2,730,600.

Kurtz, Lowell M., to General Electric Co. Insulated cabinet. 2,729,863, 1–10–56, Cl. 20—35.

Ladner, Franklin N. Turret type cigarette lighter. 2,729,959, 1–10–56, Cl. 67—7.1.

L'Air Liquide Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude: *See*—
Etienne, Alfred. 2,729,954.

Lamb, Fredrick S., and H. E. Hermanson, to General Electric Co. Electric terminal connector. 2,730,689, 1–10–56, Cl. 339—145.

Lambert-Brake Corp.: *See*—
Lucker, Millard B., and Myers. 2,730,203.

Lammarz, Ernst, and H. Rambausek, to Aktiengesellschaft fur Unternehmungen der Eisen- und Stahlindustrie. Fluid transmission with subsequent multi-speed change gear transmission. 2,729,980, 1–10–56, Cl. 74—359.

Lamprecht, Joseph. Air core drill. 2,730,335, 1–10–56, Cl. 255—72.

Lancaster, Robert G., to the United States of America as represented by the Secretary of the Navy. Potentiometers. 2,730,595, 1–10–56, Cl. 201—48.

Langer, Nicholas. Heat sealing machine of the thermal impulse type and method. 2,730,161, 1–10–56, Cl. 154—42.

Lanz, Charles A.: *See*—
Wahl, Albert J., and Lanz. 2,729,885.

Larsen, Franklin F. Sill construction. 2,730,209, 1–10–56, Cl. 189—34.

Larson, Daniel A.: *See*—
Kenty, Carl, and Larson. 2,730,424.

Lattmann, Max: *See*—
Guanella, Gustav, Güttinger, Lattmann, and Weber. 2,730,715.

Laub, John H. Thermal flowmeter. 2,729,976, 1–10–56, Cl. 73—204.

Laudar Co., The: *See*—
Johnson, Darrell M. 2,730,396.

Launder, Ernie L., to H. & L. Tooth Co. Detachable blade fastening means for digger tooth. 2,729,902, 1–10–56, Cl. 37—142.

Lawson, Joseph M., to Lawson Stacker Co., Inc. Automatic lumber stacker. 2,730,247, 1–10–56, Cl. 214—6.

Lawson Stacker Co., Inc.: *See*—
Lawson, Joseph M. 2,730,247.

Lazar, Michael D.: *See*—
Friedman, Gerson, and Lazar. 2,729,995.

Lazzery, Angelo G., to National Metalcrafters, Inc. Can filling machine. 2,730,285, 1–10–56, Cl. 226—99.

Leaman, Wilbur K.: *See*—
Coonradt, Harry L., and Leaman. 2,730,486.

Leary, Robert F., to Esso Research and Engineering Co. Production of clear transparent polymers of isobutylene and styrene. 2,730,519, 1–10–56, Cl. 260—88.1.

Leavell, Charles, to Mechanical Research Corp. Percussion tools. 2,730,073, 1–10–56, Cl. 121—32.

Ledbetter, Lonnie K.: *See*—
Lenhart, William E., Jr., and Ledbetter. 2,730,333.

Lee, John G., and H. H. Hoadley, to United Aircraft Corp. Transonic flow control with reduced power. 2,729,974, 1–10–56, Cl. 73—147.

Lee, Roy C. Fuel injector. 2,730,342, 1–10–56, Cl. 261—41.

Legler, J. Edward. Toy musical instruments. 2,730,002, 1–10–56, Cl. 84—375.

Le Grand, Yves: *See*—
Ivanoff, Alexandre, Le Grand, and Cuvier. 2,730,014.

Leitz, Ernst, G. m. b. H.: *See*—
Mandler, Walter. 2,730,013.

Lenhart, William E., Jr., and L. K. Ledbetter, to Sun Oil Co. Dust deflector. 2,730,333, 1–10–56, Cl. 255—30.

Lentz, Charles W.: *See*—
Wohlers, Herbert C., Grover, Lentz, and Pauling. 2,730,194.

Lerbs, Alfred, to Compagnie Generale de Telegraphie Sans Fil. Travelling-wave tube. 2,730,648, 1–10–56, Cl. 315—3.5.

Lerch, Charles W. Elevator signalling apparatus. 2,730,693, 1–10–56, Cl. 340—19.

Leupold, Marcus: *See*—
Range, Arthur L., Stevens, and Leupold. 2,730,709.

Leupold & Stevens Instruments, Inc.: *See*—
Range, Arthur L., Stevens, and Leupold. 2,730,709.

Levenson, Irving B.: *See*—
Lynes, John T. 2,730,290.

Leverth, Charles A., Jr. Fish hook spreader. 2,729,911, 1–10–56, Cl. 43—42.74.

Levkoff, David. Boxes or cartons. 2,730,293, 1–10–56, Cl. 229—31.

Lewis, Ernest E., to E. I. du Pont de Nemours and Co. Use of organic nitrites to inhibit polymerization of hydrocarbons during distillation. 2,730,489, 1–10–56, Cl. 202—57.

Lewyt Corp.: *See*—
Meyerhoefer, Carl E. 2,730,192.

Lidov, Rex E.: *See*—
Bluestone, Henry, Soloway, Hyman, and Lidov. 2,730,548.

Liedholm, George E., to Shell Development Co. Method for effecting endothermic dehydrogenation reactions. 2,730,556, 1–10–56, Cl. 260—668.

Lincoln, Frank H., Jr.: *See*—
Hogg, John A., Beal, Nathan, and Lincoln. 2,730,525.

Lindenblad, Nils E., to Radio Corp. of America. Cumulative cooling system. 2,729,949, 1–10–56, Cl. 62—1.

Lindner, Kurt, to "Tepha" Gesellschaft für pharmazeutische und chemisch-technische Erzeugnisse m. b. H. Method and composition for washing and bleaching fibrous materials. 2,730,428, 1–10–56, Cl. 8—133.

Linke, Gerhard, to Siebtechnik Gesellschaft mit beschrankter Haftung. Vibrating screens. 2,730,237, 1–10–56, Cl. 209—366.5.

Lip S. A. D'Horlogerie: *See*—
Dargier de Saint-Vaulry, Paul. 2,730,634.

Lippere, Salvatore: *See*—
Scholj, Edgar, and Lippere. 2,730,060.

Little, Jack L.: *See*—
Robertson, James M., and Little. 2,730,485.

Littleton, Louis A. Mop having clamping plate type holder. 2,729,841, 1–10–56, Cl. 15—229.

Locatelli, Antonio V. Hydraulic press. 2,729,871, 1–10–56, Cl. 25—54.

Locke Steel Chain Co., The: *See*—
Stegeman, Henry J. 2,730,084.

Loeb, Julien M. Lobe switching radar systems. 2,730,710, 1–10–56, Cl. 343—10.

Loederer, Richard A. Periscopic peep box. 2,730,018, 1–10–56, Cl. 88—68.

Loney, Hugh W., to C. G. Conn, Ltd. Cast liner for woodwind instruments. 2,730,003, 1–10–56, Cl. 84—380.

Long Mfg. Co., Inc.: *See*—
Atkinson, Wallace E. 2,730,390.

Longfield, James E.: *See*—
Dixon, James K., and Longfield. 2,730,430.

Lorenz, Albert J.: *See*—
Cuff, Harold B., Swoboda, and Lorenz. 2,730,561.

Louden, Edgar W., and W. K. Holleron, to National Lead Co. Conveyor truck. 2,730,256, 1–10–56, Cl. 214—522.

Louft, Nathan. Squeegees. 2,730,043, 1–10–56, Cl. 101—123.

Loughlin, Bernard D., to Hazeltine Research, Inc. Frequency-modulation detection system. 2,730,564, 1–10–56, Cl. 178—5.8.

Louisiana State University and Agricultural and Mechanical College, Board of Supervisors of: *See*—
Horton, Paul M., and Keller. 2,729,856.
Horton, Paul M., and Keller. 2,729,858.

Louvroil Montbard Aulnoye: *See*—
Heintz, Rene. 2,730,158.

Lovshin, Frank A., A. J. Dufourd, and R. T. Korolyshun, to Sidney Blumenthal & Co., Inc. Means for preventing injury in case of loom shuttle stoppage. 2,730,140, 1–10–56, Cl. 139—341.

Lucker, Millard B., and C. R. Myers, to Lambert-Brake Corp. Disc brake and thrust means for actuating. 2,730,203, 1–10–56, Cl. 188—152.

Ludwig, Herbert P., to Concrete Conduit Co. Method of manufacturing a concrete pipe joint. 2,729,873, 1–10–56, Cl. 25—154.

Lundgren, Sven A., to American Heat Reclaiming Corp. Reinforcement structure for disks. 2,730,265, 1–10–56, Cl. 220—71.

Lundquist, William E.: *See*—
Holmen, Reynold E., and Lundquist. 2,730,459.

Lutteke, Dorothy C. Bomb shelter. 2,729,966, 1–10–56, Cl. 72—1.

Lynes, John T., ½ to I. B. Levenson. Container and dispenser. 2,730,290, 1–10–56, Cl. 229—17.

Lytle, William O., to Pittsburgh Plate Glass Co. Transparent electro-conducting article. 2,730,598, 1–10–56, Cl. 201—73.

Maccarone, Fred. Shoe construction. 2,729,900, 1–10–56, Cl. 36—58.5.

Mackta, Leo. Magnetostrictive cutting tool. 2,730,103, 1–10–56, Cl. 128—305.

MacLaughlin, Grey D., Jr.: *See*—
Bartow, John B., and MacLaughlin. 2,730,566.

MacLean, Harold O. Ice block storage and dispensing rack. 2,730,223, 1–10–56, Cl. 193—39.

Magill, Donald G., to American Can Co. Container top label. 2,729,907, 1–10–56, Cl. 40—4.

Magnuson, Carl W., to the United States of America as represented by the Secretary of the Navy. Alarm initiating circuit for radiac system. 2,730,701, 1–10–56, Cl. 340—213.

Mahoney, Edward H., to Seismograph Service Corp. Radio location system. 2,730,714, 1–10–56, Cl. 343—105.

Mahr, Julius A., to H. R. Nielsen. Combined folding table and dolly. 2,730,372, 1–10–56, Cl. 280—30.

Malcom, Robert, Jr., to Chicago Eye Shield Co. Spectacles. 2,730,012, 1–10–56, Cl. 88—47.

Malmquist, Ake H.: *See*—
Hard af Segerstad, Carl-Gustaf, and Malmquist. 2,729,968.

Mandler, Walter, to Ernst Leitz, G. m. b. H. Reflecting lens objective. 2,730,013, 1–10–56, Cl. 88—57.

Manke, George H., to McGraw Electric Co. Apparatus for indicating age of insulation. 2,730,706, 1–10–56, Cl. 340—253.

Manning, Reginald W. Paper money holder. 2,729,868, 1–10–56, Cl. 24—255.

Manton Brothers Ltd.: *See*—
Feltwell, Bernard. 2,730,587.

Mantz, Marius R., to Hartford National Bank and Trust Co., trustee. Circuit-arrangement for reducing pulse interference in radio receivers. 2,730,615, 1–10–56, Cl. 250—20.

Marbac Corp.: *See*—
Moesch, Ernest R. 2,730,268.

Marcalus, Nicholas. Dispensing. 2,730,267, 1–10–56, Cl. 221—48.

Marconi's Wireless Telegraph Co., Ltd.: *See*—
Dawson, Leslie H. 2,730,712.
Hayden-Pigg, Godfrey E. 2,730,575.

Marcus, George: *See*—
Marcus, Nathan and G. 2,730,132.

Marcus, Nathan and G. Silencers for fluid systems. 2,730,132, 1–10–56, Cl. 138—26.

Marden, Carleton S., to National Products Corp. Waterproof spark plug shield. 2,730,562, 1–10–56, Cl. 174—35.

Marjama, Alvin L. No-sag overhead retracting doors. 2,729,862, 1–10–56, Cl. 20—16.

Markow, George R., and A. J. Hornfeck, to Bailey Meter Co. Fail-safe control system. 2,730,304, 1–10–56, Cl. 236—78.

Marmont, George H., and B. M. Oliver, to Bell Telephone Laboratories, Inc. Timing circuit. 2,730,617, 1–10–56, Cl. 250—27.

Marmorstone, Robert J., to Panellit, Inc. Alarm system. 2,730,702, 1–10–56, Cl. 340—213.

Marple, Stanley, Jr.: *See*—
Johnston, Robert W. B., and Marple. 2,730,452.

Marquette Mfg. Co.: *See*—
Holmberg, Henry. 2,730,422.

Martin, Furman H., to The Springs Cotton Mills. Starch cooking apparatus. 2,730,468, 1–10–56, Cl. 127—28.

Martin, Glenn L., Co., The: *See*—
Espy, Melvin P., Pitman, and Josselyn. 2,730,380.

Martin, Leo, and A. K. Bird. Gravity fed magazine equipped coin spinner. 2,730,368, 1–10–56, Cl. 273—138.

Martin, Robert T. Violin bow. 2,730,001, 1–10–56, Cl. 84—282.

Martin, Robert W., to Shell Development Co. Epoxy-substituted esters of silicon acids and their preparation. 2,730,532, 1–10–56, Cl. 260—348.

Martin, William E. Attachable hitching unit for trucks. 2,730,376, 1–10–56, Cl. 280—425.

Maschinenfabrik Augsberg-Nurnberg A. G.: *See*—
Dietrich, Paul, and Kolland. 2,730,303.

Marvel Engineering Co.: *See*—
Thomas, William A. 2,730,241.

Mason, Emmaline E. M.: *See*—
Mason, Samuel S. and E. E. M. 2,730,213.

Mason, Robert F. Disk plow. 2,729,929, 1–10–56, Cl. 55—81.

Mason, Samuel S., and E. E. M. Power and control device for a bed assembly. 2,730,213, 1–10–56, Cl. 192—2.

Massey-Harris-Ferguson (Sales) Ltd.: *See*—
Chambers, John M. 2,730,030.

Mast, George W., and T. I. Fand, to Nepera Chemical Co., Inc. Therapeutic compositions comprising neomycin, gramicidin and quaternary ammonium salt of thonzylamine. 2,730,483, 1–10–56, Cl. 167—65.

Matarrese, Carlo. Method of treating vegetable material. 2,730,148, 1–10–56, Cl. 146—222.

Mautone, Francesco F., to Admiral Corp. Metal article deforming method and apparatus therefor. 2,729,884, 1–10–56, Cl. 29—522.

Max, Nicolaas, and Y. Schaafsma, to Shell Development Co. Production of alkyl aromatic hydrocarbons. 2,730,557, 1–10–56, Cl. 260—671.

Maykemper, Henry. Hand pressing steam and sprinkling iron. 2,729,904, 1–10–56, Cl. 38—77.

Maytag Co., The: *See*—
Smith, Thomas R. 2,730,197.

McCabe, Joseph A., to Portable Electric Tools, Inc. Portable electric drills. 2,730,635, 1–10–56, Cl. 310—50.

McCaleb, Kirtland E., to General Mills, Inc. Copolymer of fatty acid and rosin acid. 2,730,520, 1–10–56, Cl. 260—97.

McCann, Michael, to The Singer Mfg. Co. Throw-outs for automatic clamp-lifters. 2,730,058, 1–10–56, Cl. 112—110.

McConnell, Kenneth R., to Times Facsimile Corp. Facsimile scanning method and apparatus for predetermined signal output and contrast. 2,730,567, 1–10–56, Cl. 178—7.1.

McCracken, Edward A., and A. L. Chaney, to Esso Research and Engineering Co. Blended divinyl benzene polymers. 2,730,515, 1–10–56, Cl. 260—45.5.

McCreary, John. Tenter. 2,729,874, 1–10–56, Cl. 26—61.

McCue, James H. Safety razor blade sharpener. 2,729,989, 1–10–56, Cl. 76—89.2.

McCulloch Motors Corp.: *See*—
Ryde, John L. 2,730,143.

McCullough, Harold M., to Sylvania Electric Products Inc. Sealing alloy for soft glass. 2,730,260, 1–10–56, Cl. 220—2.3

McDonald, Joseph F. Earth conditioning and seeding machine. 2,730,054, 1–10–56, Cl. 111—10.

McDowall, Charles J., J. B. Wheatley, and F. G. Dougherty, to General Motors Corp. Combustion chamber crossover tube. 2,729,938, 1–10–56, Cl. 60—39.37.

McDowell Mfg. Co.: *See*—
Hempel, Gustav A. 2,730,115.
Richard, Clyde E. 2,730,116.

McGinn, John H., to Research Corp. Optical micrometer. 2,730,008, 1–10–56, Cl. 88—14.

McGraw Electric Co.: *See*—
Ewing, Reid. 2,730,462.
Manke, George H. 2,730,706.
Van Ryan, Anthony. 2,730,671.

McKeag, Alfred H., to General Electric Co. Tin activated barium phosphate phosphor. 2,730,504, 1–10–56, Cl. 252—301.4.

McLauchlan, Thomas A., to United States Steel Corp. Magnetic compensator. 2,730,641, 1–10–56, Cl. 313—75.

McLaughlin, Donald J., to the United States of America as represented by the Secretary of the Navy. Motor driven rheostat. 2,730,596, 1–10–56, Cl. 201—48.

McLaughlin, Robert W., and G. F. Kotrbaty. Wall unit. 2,730,210, 1–10–56, Cl. 189—34.

McNaney, Joseph T., to General Dynamics Corp. Cathode ray apparatus. 2,730,708, 1–10–56, Cl. 340—324.

Mechanical Research Corp.: *See*—
Leavell, Charles. 2,730,073.

Meier, Nicolaas F. to Hartford National Bank and Trust Co., trustee. Method for breaking-up an annular core of ferromagnetic material. 2,730,471, 1–10–56, Cl. 148—9.

Meisinger, Richard J., and J. T. Dempsey, to United States Rubber Co. Lawn sprinkler hose. 2,730,404, 1–10–56, Cl. 299—104.

Mellor, Alfred S., to United Shoe Machinery Corp. Spray booths. 2,730,033, 1–10–56, Cl. 98—115.

Melzer, Frederick A. Shock absorber. 2,730,201, 1–10–56, Cl. 188—97.

Mercury Engineering Corp.: *See*—
Miller, Francis B. 2,730,306.

Merrick, Maurice J., to Sawyer's Inc. Portrait attachment for stereoscopic cameras. 2,730,024, 1–10–56, Cl. 95—18.

Merritt, Jack A., to Universal Engine Heater Co. Oil burning water heater. 2,730,079, 1–10–56, Cl. 122—156.

Merritt, Thomas W., and C. A. Thomas, to Babson Bros. Co. Milking apparatus. 2,730,071, 1–10–56, Cl. 119—14.46.

Method X Co., The: *See*—
Porterfield, Cecil P. 2,730,602.

Meyerhoefer, Carl E., to Lewyt Corp. Vacuum cleaner filter assembly. 2,730,192, 1–10–56, Cl. 183—51.

Michaels, Franklin, to Hagan Corp. Thermo-couple electronic circuits provided with feed-back to the thermo-couple. 2,730,618, 1–10–56, Cl. 250—27.

Michigan Chemical Corp.: *See*—
Wohlers, Herbert C., Grover, Lentz, and Pauling. 2,730,194.

Michler, Robert W. Method of etching metals. 2,730,435, 1–10–56, Cl. 41—43.

Michlin, Hyman A. Electroluminescent light means. 2,730,644, 1–10–56, Cl. 313—108.

Midgley, Albert H.: *See*—
Midgley, Albert M. 2,729,985.

Midgley, Albert M., ½ to A. H. Midgley. Electric switch operator. 2,729,985, 1–10–56, Cl. 74—504.

Midwest Insulations, Inc.: *See*—
Downey, Richard M. 2,729,849.

Miles, Charlie A., to Standard Hosiery Mills, Inc. Heel structure for full fashioned stockings and method. 2,729,958, 1–10–56, Cl. 66—179.

Miller, Albert A., to Self-Changing Gears Ltd. Centrifugally operated friction clutches. 2,730,216, 1–10–56, Cl. 192—48.

Miller, Carroll de V., and F. N. Becker, to The American Monorail Co. Apparatus for automatically removing lint from above and below the warp of textile looms. 2,729,845, 1–10–56, Cl. 15—312.

Miller, Edward E., to The Hart Mfg. Co. Fastener for retaining a casing in a panel. 2,730,688, 1–10–56, Cl. 339—128.

Miller, Francis B., to Mercury Engineering Corp. Guide rail structure for machine tools. 2,730,306, 1–10–56, Cl. 238—281.

Miller, George, and E. K. Reng, to Knight Leather Products, Inc. Toilet cases. 2,730,153, 1–10–56, Cl. 150—34.

Miller, Herbert L. Combined map antiglare shield and magnifying glass. 2,729,908, 1–10–56, Cl. 40—10.

Miller, William A., to Radio Corp. of America. Aluminum oxide semi-conductors. 2,729,880, 1–10–56, Cl. 29—182.1.

Minneapolis-Honeywell Regulator Co.: *See*—
Ellenberger, Stanley D. 2,730,660.

Minnesota Mining & Mfg. Co.: *See*—
Holmen, Reynold E., and Lundquist. 2,730,459.
Rendall, John L., and Pearlson. 2,730,543.

Missien, Edward J., to Syntron Co. Assay test sieve shaker. 2,730,236, 1–10–56, Cl. 209—237.

Mitchell, Lee W., to The Gates Rubber Co. Airbag. 2,729,854, 1–10–56, Cl. 18—45.

Mitchell Mfg. Co.: *See*—
Blink, Peter. 2,730,418.
Mitchell, William. 2,730,417.

Mitchell, William, to Mitchell Mfg. Co. Leg and bracing mechanism for sectional folding tables or the like. 2,730,417, 1–10–56, Cl. 311—92.

Mitchell, William B. Automatic baler. 2,730,062, 1–10–56, Cl. 114–185.

Mitnick, Albert M.: *See*—
Fogal, Gordon L., and Mitnick. 2,730,315.

Mock, Joseph P. Cabinet drawer stop construction. 2,730,423, 1–10–56, Cl. 312—348.

Model, Ernst: *See*—
Schetty, Guido, Stammbach, and Model. 2,730,554.

Modern-Woodmanse Mfg. Co.: *See*—
Staben, Carlton L. 2,730,326.

Modrey, Henry J., to Interlock Corp. Self locking connecting device for detachably connecting two elements. 2,730,687, 1–10–56, Cl. 339—91.

Moesch, Ernest R., to Marbac Corp. Cup dispenser. 2,730,268, 1–10–56, Cl. 221—221.

Moffett, Thomas F. Chum basket. 2,729,912, 1–10–56, Cl. 43—44.99.

Moline, Walter E., and R. M. Clinehens, to The National Cash Register Co. Method of electroplating cobalt-nickel composition. 2,730,491, 1–10–56, Cl. 204—43.

Monsanto Chemical Co.: *See*—
Beaver, David J., Shumard, and Stoffel. 2,730,551.
Beaver, David J., Stoffel, and Shumard. 2,730,502.
Dye, William T., Jr. 2,730,541.
Dye, William T., Jr. 2,730,547.
Emerson, William S., and Heimach. 2,730,512.
Fincke, John K. 2,730,440.

Montavon, Marc: *See*—
Isler, Otto, Montavon, Rüegg, and Zeller. 2,730,549.

Morelli, Nicholas W.: *See*—
Perry, Elijah R., and Morelli. 2,730,589.

Morgan, William A., Jr., to E. I. du Pont de Nemours and Co. Fibrous materials and processes for making same. 2,730,478, 1–10–56, Cl. 154—101.

Morgen, André L. A. Steering arrangement for motor-vehicles. 2,730,186, 1–10–56, Cl. 180—79.2.

Morita, Deen I. Emergency cut-off for flush tanks. 2,729,827, 1–10–56, Cl. 4—52.

Moritz, Jean. Apparatus for the manufacture of superphosphate and the like. 2,730,432, 1–10–56, Cl. 23—259.2.

Morse, John F. Marine engine control system. 2,729,984, 1–10–56, Cl. 74—472.

Morse, John F. Casing for push-pull cable assembly. 2,730,134, 1–10–56, Cl. 138—57.

Morton, Digby B., D. B., Jr., and G. E. Internal-combustion engines. 2,730,087, 1–10–56, Cl. 123—51.

Morton, Digby B., Jr.: *See*—
Morton, Digby B., D. B., Jr., and G. E. 2,730,087.

Morton, Graeme E.: *See*—
Morton, Digby B., D. B., Jr., and G. E. 2,730,087.

Morway, Arnold J.: *See*—
Young, David W., Morway, and Cottle. 2,730,500.

Motch & Merryweather Machinery Co., The: *See*—
Sampson, Merritt B. 2,729,879.

Motorola, Inc.: *See*—
Harasek, Richard J. 2,730,690.

Mounce, Whitman D., to Esso Research and Engineernig Co. Electrical resistivity well logging systems and methods. 2,730,672, 1–10–56, Cl. 324—1.

Mueller, Fred R., to Cozier Container Corp. Shipping container. 2,730,287, 1–10–56, Cl. 229—14.

Muirhead & Co. Ltd.: *See*—
Bell, John, Cannon, and Mundy. 2,729,818.
Müller, Paul: *See*—
Gatzi, Karl, and Müller. 2,730,529.
Mundy, Grahame A.: *See*—
Bell, John, Cannon, and Mundy. 2,729,818.
Muntwyler, Fredric C. Display stand. 2,730,323, 1–10–56, Cl. 248—197.
Murphy, John B. Fluid brake for automotive vehicle. 2,730,200, 1–10–56, Cl. 188—90.
Myers, Claude R.: *See*—
Lucker, Millard B., and Myers. 2,730,203.
N. V. Technische Maatschappij Marchand-Andriessen: *See*—
Van Waert, Gerardus. 2,730,248.
Nachman Corp.: *See*—
Gleason, William W. 2,729,830.
Nathan, Alan H.: *See*—
Hogg, John A., Beal, Nathan, and Lincoln. 2,730,525.
Nathan, Alan H., and J. A. Hogg, to The Upjohn Co. 4¹-3-keto-2-halo pregnenes and process. 2,730,537, 1–10–56, Cl. 260—397.45.
National Cash Register Co., The: *See*—
Goodbar, Mayo A., and Pratt. 2,730,038.
Green, Barrett K., and Schleicher. 2,730,456.
Green, Barrett K., and Schleicher. 2,730,457.
Moline, Walter E., and Clinehens. 2,730,491.
Werner, Frank R. 2,730,039.
National Electric Welding Machines Co.: *See*—
Flaher, Simon, and Kurlinski. 2,730,600.
National Lead Co.: *See*—
Louden, Edgar W., and Holleron. 2,730,256.
National Metalcrafters, Inc.: *See*—
Lazzery, Angelo G. 2,730,285.
National Products Corp.: *See*—
Marden, Carleton S. 2,730,562.
National Research Development Corp.: *See*—
Barker, Ronald H. 2,730,676.
National Sugar Refining Co., The: *See*—
Baird, Ronald J. 2,730,509.
Navy, United States of America as represented by the Secretary of the: *See*—
Cohen, Jack H., and Goslin. 2,730,666.
Grimes, Willard M. 2,730,674.
Karsh, Herbert. 2,730,563.
Lancaster, Robert G. 2,730,595.
Magnuson, Carl W. 2,730,701.
McLaughlin, Donald J. 2,730,596.
Parnell, William S., and Taylor. 2,730,619.
Streeau, Richard H. F., Jr. 2,730,257.
Whiting, Arthur A., Jr., Trudell, and Glass. 2,730,402.
Nederlandse Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek ten behoeve van Nijverheid Handel en Verkeer: *See*—
Nieuwenhuis, Karel J. 2,730,524.
Neely, George L., to California Research Corp. Hand-held discharger. 2,730,093, 1–10–56, Cl. 123—187.5.
Neilson, Allan K. Adjustable container for service parts. 2,730,263, 1–10–56, Cl. 220—18.
Nelson, Willard E. Battery terminal clamp. 2,730,691, 1–10–56, Cl. 339—239.
Nepera Chemical Co., Inc.: *See*—
Mast, George W., and Fand. 2,730,483.
New Hermes Engraving Machine Corp.: *See*—
Gruettner, Gerhard G. 2,729,892.
Newman, Louis B. Hydrotherapy tank with inflatable limb-receiving cuff. 2,730,104, 1–10–56, Cl. 128—370.
Newman, Roger: *See*—
Badger, Richard M., and Newman. 2,730,004.
Nichta, John J., to The Warner & Swasey Co. Stock stop for machine tool. 2,730,229, 1–10–56, Cl. 203—35.
Nielsen, Axel L. Sump pump control. 2,730,591, 1–10–56, Cl. 200—84.
Nielsen, Harold R.: *See*—
Mahr, Julius A. 2,730,372.
Nielsen, Moritz H., to Illinois Tool Works. Assembly machine and method. 2,729,833, 1–10–56, Cl. 10—72.
Nieuwenhuis, Karel J., to Nederlandse Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek ten behoeve van Nijverheid Handel en Verkeer. Process for the oxidation of cellulose. 2,730,524, 1–10–56, Cl. 260—212.
Noguera, Joseph, to Casablancas High Draft Co. Ltd. Drafting mechanisms for textile fibers. 2,729,850, 1–10–56, Cl. 19—135.
North American Aviation, Inc.: *See*—
Pollock, Latham, and Appleton. 2,730,020.
Northcott, Roy P.: *See*—
Porter, Frederick W. B., and Northcott. 2,730,487.
Northern Engineering & Machine Corp.: *See*—
Rollings, Ernest J. 2,730,047.
Northgraves, Walter W., to Olin Mathieson Chemical Corp. Process of transfer of liquefied gas. 2,729,948, 1–10–56, Cl. 62—1.
Northrop Aircraft, Inc.: *See*—
Aspey, Cecil W. 2,730,154.
Price, Kenneth A., and Slater. 2,730,394.
Obermoser, Albert. Apparatus for the automatic control of electric motors. 2,730,585, 1–10–56, Cl. 200—47.
O'Brien, Dudley L., Jr.: *See*—
Hendrich, Robert T., and O'Brien. 2,730,490.
Ohio Crankshaft Co., The: *See*—
Osborn, Harry B., Jr. 2,730,472.
Ohlson, John L., and C. W. Hoerr, to Swift & Co. Fatty acid anhydrides. 2,730,530, 1–10–56, Cl. 260—346.8.
Olin Mathieson Chemical Corp.: *See*—
Duetzmann, Hans C. 2,730,586.
Northgraves, Walter W. 2,729,948.
Oliver, Bernard M.: *See*—
Marmont, George H., and Oliver. 2,730,617.
Olsson, Edvin V.: *See*—
Sieurin, Sven E., and Olsson. 2,730,283.
Olympia Werke Aktiengesellschaft: *See*—
Fröbel, Arthur. 2,729,986.
Onanian, Keith. Parachute deceleration device. 2,730,317, 1–10–56, Cl. 244—152.
Opie, John. Machine for compressing meat bodies and for packaging same. 2,730,286, 1–10–56, Cl. 226—101.
Osborn, Harry B., Jr., to The Ohio Crankshaft Co. Method of manufacturing hollow tubular articles. 2,730,472, 1–10–56, Cl. 148—10.5.
O'Shea, John B. Safety razors. 2,729,888, 1–10–56, Cl. 30—60.5.
Oswalt, Harry L. Turf perforator. 2,730,028, 1–10–56, Cl. 97—34.
Oswalt, Vick. Material handling apparatus. 2,730,252, 1–10–56, Cl. 214—304.
Oswalt, Vick. Trip means for fruit loading box. 2,730,253, 1–10–56, Cl. 214—304.
Otto, Ferdinand P., to Socony Mobil Oil Co., Inc. Mineral oil compositions having stabilized low pour points. 2,730,501, 1–10–56, Cl. 252—57.
Owens, Freeman H. Production of composite live action and scenic effects for television. 2,730,565, 1–10–56, Cl. 178—6.
Oxford Filing Supply Co., Inc.: *See*—
Jonas, Frank D., and Patterson. 2,730,292.
Oxy-Catalyst, Inc.: *See*—
Houdry, Eugene J. 2,730,434.
Page, Robert G., to General Electric Co. Electric contact. 2,730,594, 1–10–56, Cl. 200—166.
Palmgren, Per G., to SKF Industries, Inc. Spherical roller bearing for rocking railway journal box. 2,730,414, 1–10–56, Cl. 308—180.
Panellit, Inc.: *See*—
Marmorstone, Robert J. 2,730,702.
Parker, Leon, to The H. I. Thompson Fiberglass Co. Method of forming felted silica fibers. 2,730,475, 1–10–56, Cl. 154—44.
Parks & Woolson Machine Co.: *See*—
Hadley, Wilfred N. 2,730,113.
Parnell, William S., and J. W. Taylor, Jr., to the United States of America as represented by the Secretary of the Navy. Oscillator control. 2,730,619, 1–10–56, Cl. 250—36.
Passino, Herbert J., to The M. W. Kellogg Co. Vitamin concentration by deatearinizing between successive extractions with a paracritical solvent. 2,730,484, 1–10–56, Cl. 167—81.
"Patelhold" Patentverwertungs- & Elektro-Holding A.-G.: *See*—
Guanella, Gustav, Güttinger, Lattmann, and Weber. 2,730,715.
Patent and Licensing Corp., The: *See*—
Reeser, Harry C. 2,730,291.
Patriarca, Domenico. Humidifier. 2,730,340, 1–10–56, Cl. 261—26.
Patterson, Edward D.: *See*—
Jonas, Frank D., and Patterson. 2,730,292.
Pauling, Loren E.: *See*—
Wohlers, Herbert C., Grover, Lentz, and Pauling. 2,730,194.
Payne, George B., and C. W. Smith, to Shell Development Co. Amides of epoxyamines. 2,730,531, 1–10–56, Cl. 260—348.
Pearlson, Wilbur: *See*—
Rendall, John L., and Pearlson. 2,730,543.
Pease, Isaac M., to Surgical Appliance Industries, Inc. Back brace. 2,730,096, 1–10–56, Cl. 128—78.
Peery, Elmer J.: *See*—
Kleinhample, Alvin E., and Peery. 2,730,011.
Peery, Norman E., to Shell Development Co. Continuous fluid-solid contacting apparatus. 2,730,239, 1–10–56, Cl. 210—42.5.
Peet, Nick P., to Esso Research and Engineering Co. Cooling of finely divided solids to prevent afterburning in a regeneration lane. 2,730,508, 1–10–56, Cl. 252—417.
Pelton Water Wheel Co., The: *See*—
Billings, David P., and Garrison. 2,729,942.
Peper, Jan: *See*—
De Gier, Johannes, and Peper. 2,730,643.
Perl, Richard L., to The Tappan Stove Co. Automatic ignition unit for gas burners. 2,730,662, 1–10–56, Cl. 317—83.
Permo, Inc.: *See*—
Andres, Lloyd J. 2,730,572.
Perry, Elijah R., and N. W. Morelli, to Allis-Chalmers Mfg. Co. Circuit breaker with hydraulic motor controlled by main and pilot valves. 2,730,589, 1–10–56, Cl. 200—82.
Peterman, Max. Pre-set boring tool. 2,729,991, 1–10–56, Cl. 77—58.
Peterson, Adolphe C. Vehicle propulsion and transmission means. 2,730,184, 1–10–56, Cl. 180—54.
Peterson, Forrest W., to Ferro Corp. Portable tunnel kiln. 2,729,872, 1–10–56, Cl. 25—144.
Peterson, Walter H.: *See*—
Sommer, Harry J., and Peterson. 2,730,454.
Pfaller, George M., and A. A. Saul. Form clamp mechanism for presses. 2,730,045, 1–10–56, Cl. 101—250.
Pfizer, Chas., & Co., Inc.: *See*—
Feeney, Robert J. 2,730,536.
Philadelphia Valve Co.: *See*—
Jensen, James A. 2,730,126.
Philbrick, George A. Delayed-recovery electric filter network. 2,730,679, 1–10–56, Cl. 333—70.
Phillips, Arthur E., to The Coleman Co., Inc. Atomizing bonderizing of cement lined tank. 2,730,463, 1–10–56, Cl. 117—96.
Phillips, George N. Cutoff controls for automobile hydraulic brakes. 2,730,410, 1–10–56, Cl. 303—84.
Phillips Petroleum Co.: *See*—
Britton, Sylvester C. 2,729,936.
Phillips, Stanley L., to Wedge Protectors, Inc. Thread protectors. 2,730,136, 1–10–56, Cl. 138—96.
Pickering, Joseph, to The British Xylonite Co. Ltd. Apparatus for forming joints between thermoplastic sheets. 2,730,160, 1–10–56, Cl. 154—42.

Picking, Henry J.: *See*—
Styles, Leonard W., and Picking. 2,730,042.
Pierce, John R., to Bell Telephone Laboratories, Inc. Microwave amplifier. 2,730,647, 1–10–56, Cl. 315—3.
Piper, Carl F. Hydraulic ship propulsion apparatus. 2,730,065, 1–10–56, Cl. 115—14.
Piperoux, Rene P., A. P. Berger, and F. P. Diemer, to Celanese Corp. of America. Punch for automatically locating the apertures in a jet-cup. 2,730,175, 1–10–56, Cl. 164—87.
Pisciotto, Andrew E., Jr. and S. L. Ring fastener assemblies. 2,730,105, 1–10–56, Cl. 129—8.
Pisciotto, Salvatore L.: *See*—
Pisciotto, Andrew E., Jr., and S. L. 2,730,105.
Pitman, William W.: *See*—
Espy, Melvin P., Pitman, and Josselyn. 2,730,380.
Pitney-Bowes, Inc.: *See*—
Russell, Alva G. 2,730,041.
Pittsburgh Plate Glass Co.: *See*—
Gregorius, Joseph S. 2,730,338.
Lytle, William O. 2,730,598.
Vogel, Henry A., and Bader. 2,730,517.
Plantation Pipe Line Co.: *See*—
Holt, William W., Jr. 2,729,839.
Platt, Robert G., to Century Display Mfg. Co. Article display board. 2,730,243, 1–10–56, Cl. 211—87.
Podolsky, Leon, and S. O. Dorst, to Sprague Electric Co. Electrical resistance elements. 2,730,597, 1–10–56, Cl. 201—63.
Poirette, Paul, to Societe Marocaine d'Achats et de Constructions Somarac. Photo-electric exposure meters. 2,730,009, 1–10–56, Cl. 88—23.
Pokorny, Oldrich S., to Esso Research and Engineering Co. Lubricants for heavy journal bearings operating at elevated temperatures. 2,730,499, 1–10–56, Cl. 252—49.8.
Polaroid Corp.: *See*—
Shurcliff, William A. 2,730,625.
Pollock, Latham, and J. S. Appleton, to North American Aviation, Inc. Machine tool. 2,730,020, 1–10–56, Cl. 90—13.
Ponting, Fred W. Conduit and tubing offset bending apparatus. 2,730,157, 1–10–56, Cl. 153—46.
Poor & Co.: *See*—
Chester, Allan E. 2,730,492.
Pope, Henry, Jr., to The Davis Co. Method of knitting and the product thereof. 2,729,957, 1–10–56, Cl. 66—172.
Porsche, Ferdinand A. E.: *See*—
Reimspiess, Franz X., and Porsche. 2,730,375.
Portable Electric Tools, Inc.: *See*—
McCabe, Joseph A. 2,730,635.
Porter, Frederick W. B., and R. P. Northcott, to The British Petroleum Co. Ltd. Removal of vanadium and/or sodium from petroleum and petroleum products with titania on alumina and hydrofining. 2,730,487, 1–10–56, Cl. 196—24.
Porter, Lee M., and F. F. Rust, to Shell Development Co. Preparation of diallylic compounds. 2,730,559, 1–10–56, Cl. 260—680.
Porterfield, Cecil P., to The Method X Co. Apparatus for electrically eroding materials. 2,730,602, 1–10–56, Cl. 219—15.
Post, Carl B., and W. S. Eberly, to The Carpenter Steel Co. Glass sealing alloy. 2,730,443, 1–10–56, Cl. 75—123.
Pratt, James H., to Girling Ltd. Vehicle brakes. 2,730,204, 1–10–56, Cl. 188—152.
Pratt, Russell G.: *See*—
Goodbar, Mayo A., and Pratt. 2,730,038.
Preller, Hugh A. Jewelers boring tool. 2,729,993, 1–10–56, Cl. 81—6.
Presnell, Frank G. Fuel distributing system. 2,730,339, 1–10–56, Cl. 261—19.
Pressner, Samuel. Detergent and brightening composition. 2,730,503, 1–10–56, Cl. 252—152.
Price, Kenneth A., and R. E. Slater, to Northrop Aircraft, Inc. Quick-release door latch. 2,730,394, 1–10–56, Cl. 292—256.
Price, R. K., Associates, Inc.: *See*—
De Mastri, Stefano. 2,730,382.
Privitera, Francesco. Hand router and cutter tool. 2,730,146, 1–10–56, Cl. 145—121.
Productive Inventions, Inc.: *See*—
Krohm, Fred A. 2,730,078.
Prohaska, James J., to Swift & Co. Packaging apparatus. 2,730,281, 1–10–56, Cl. 226—56.
Prough, James L. Vehicle jack. 2,730,327, 1–10–56, Cl. 254—133.
Pugh, William E.: *See*—
Hawking, James E., and Pugh. 2,730,187.
Pulman, William E. R. to C. V. A. Jigs, Moulds & Tools Ltd. Operating mechanism for chucks, clutches and like devices. 2,730,371, 1–10–56, Cl. 279—50.
Purchas, John G.: *See*—
Houldcroft, Peter T., and Purchas. 2,730,646.
Quist, Harold A., to Sun Oil Co. Tank float. 2,730,123, 1–10–56, Cl. 137—452.
Quittner, Victor, to General Radiological Ltd. Operation of X-ray tubes. 2,730,628, 1–10–56, Cl. 250—103.
Quoniam, Jean M., to Saarbergwerke. Machine for installing metal mine props. 2,729,946, 1–10–56, Cl. 61—93.
Rabinow, Jacob. Automatic headlight dimmer insensitive to ordinary lights. 2,730,654, 1–10–56, Cl. 315—83.
Radiation, Inc.: *See*—
Bruck, George. 2,730,420.
Radio Corp. of America: *See*—
Ayres, Jay J., and Shanin. 2,730,683.
Baer, John S. 2,730,309.
Greig, Harold G. 2,730,023.
Lindenblad, Nils E. 2,729,949.
Miller, William A. 2,729,880.
Rettinger, Michael. 2,730,570.
Serrell, Robert. 2,730,700.
Singer, Kurt. 2,730,675.
Sonnenfeldt, Richard W. 2,730,651.
Webster, William M., Jr. 2,730,669.
Wolff, Irving. 2,730,713.
Rahr, Frederic H., to The Sherwin-Williams Co. Color locator. 2,729,898, 1–10–56, Cl. 35—28.3.
Rambausek, Hugo: *See*—
Lammerz, Ernst, and Rambausek. 2,729,980
Ramsay, William H. W., Jr.: *See*—
Gibson, George T., and Ramsay. 2,730,255.
Randall, David I.: *See*—
Hoefle, Milton L., Randall, and Renfrew. 2,730,534.
Randall, Norman G.: *See*—
Davidson, Douglas H. M., and Baritrop. 2,730,166.
Range, Arthur L., J. C. Stevens, and M. Leupold, to Leupold & Stevens Instruments, Inc. Measuring apparatus. 2,730,709, 1–10–56, Cl. 340—345.
Ransburg Electro-Coating Corp.: *See*—
Ransburg, Harold P. 2,730,460.
Vawter, John E. 2,730,461.
Ransburg, Harold P., to Ransburg Electro-Coating Corp. Electrostatic method and apparatus. 2,730,460, 1–10–56, Cl. 117—93.
Rayburn, Alden G., to V. M. Carter. Latch mechanism. 2,730,391, 1–10–56, Cl. 292—169.
Raytheon Mfg. Co.: *See*—
Bastow, Wendell R. 2,730,616.
Fryklund, Robert A. 2,729,910.
Spencer, Percy L. 2,730,280.
Rea, George A., to The Heil Co. Fluid pressure operated telescopic hoists. 2,730,401, 1–10–56, Cl. 298—22.
Reagan, Leon H., to General Dynamics Corp. Starting next idle register. 2,730,568, 1–10–56, Cl. 179—18.
Reams, Hunter. Supporting and closing means for collapsible tubes. 2,730,262, 1–10–56, Cl. 220—18.
Reed, Eo, to Armco Steel Corp. Resistance welding machine for sheet. 2,730,601, 1–10–56, Cl. 219—10.
Reed, Thomas W., to The F. Hohlfelder Co. Mounting ring. 2,729,846, 1–10–56, Cl. 16—109.
Rees, Earl W. Meat grinder and safety attachment therefor. 2,730,147, 1–10–56, Cl. 146—182.
Reeser, Harry C., to The Patent and Licensing Corp. Shipping container. 2,730,291, 1–10–56, Cl. 229—23.
Reif, David L., to Clinton Machine Co. Engine starter. 2,730,092, 1–10–56, Cl. 123—185.
Reimspiess, Franz X., and F. A. E. Porsche, to Dr. Ing. h. c. F. Porsche K.-G. Independent wheel suspensions for the steerable wheels of motor vehicles. 2,730,375, 1–10–56, Cl. 280—124.
Renberles Products Co.: *See*—
Brunk, Leslie L. 2,730,583.
Rendall, John L., and W. Pearlson, to Minnesota Mining & Mfg. Co. Fluorinated nitriles. 2,730,543, 1–10–56, Cl. 260—465.7.
Rendel, George H.: *See*—
Coleman, William E., and Rendel. 2,730,233.
Rendel, George H., to United States Steel Corp. Edge scanner for strip material. 2,730,348, 1–10–56, Cl. 263—3.
Renfrew, Edgar E.: *See*—
Hoefle, Milton L., Randall, and Renfrew. 2,730,534.
Renz, Emil K.: *See*—
Miller, George, and Renz. 2,730,153.
Reppe, Walter, and H. Friederich, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Process for the production of aliphatic acid anhydrides by carbonylation of esters. 2,730,546, 1–10–56, Cl. 260—549.
Republic Steel Corp.: *See*—
Crowley, Henry L. 2,730,441.
Research Corp.: *See*—
McGlun, John H. 2,730,008.
Roberts, Lawrence M. 2,730,195.
Rettinger, Michael, to Radio Corp. of America. Magnetic sound record erasing method and heads therefor. 2,730,570, 1–10–56, Cl. 179—100.2.
Reynolds, Kenneth W. and J. A. Billson, to General Electric Co. Bulb washing and reflector coating apparatus. 2,730,068, 1–10–56, Cl. 118—49.
Rice, Henry T. M., and R. T. Stevens, to D. Stevens. Releasable torque transmitting apparatus. 2,730,212, 1–10–56, Cl. 192—096.
Rickard, Clyde E., to McDowell Mfg. Co. Gasket valve. 2,730,116, 1–10–56, Cl. 137—107.
Ridley, Baldwin W.: *See*—
Gebs, Richard W. and Ridley. 2,730,063.
Ries, William M., to Wheeling Steel Corp. Latch. 2,730,393, 1–10–56, Cl. 292—244.
Ringham, Rodger F., to Chance Vought Aircraft, Inc. Airfoil protuberance for improving spoiler effectiveness. 2,730,313, 1–10–56, Cl. 244—42.
Riordan, John M., to Bonnar-Vawter, Inc. Manifold form feeding and hold-down mechanism. 2,730,358, 1–10–56, Cl. 271—2.1.
Risdon Mfg. Co., The: *See*—
Beard, Walter C., Jr., and Dayton. 2,730,180.
Risinger, Joe L., to Socony Mobil Oil Co., Inc. Method of controlling oil tank fires. 2,730,178, 1–10–56, Cl. 169—1.
Ritter, Herman, to The Singer Mfg. Co. Trimming mechanisms for sewing machines. 2,730,059, 1–10–56, Cl. 112—123.
Roberton, Frederic A.: *See*—
Watrous, Gilbert A., and Roberton. 2,730,410.
Roberton, Frederic A. Detachable joint construction. 2,730,388, 1–10–56, Cl. 287—103.
Roberts, Deering S. Machine for stacking strip shingles. 2,730,302, 1–10–56, Cl. 235—132.
Roberts, Lawrence M., to Research Corp. Gas cleaning method. 2,730,195, 1–10–56, Cl. 183—121.
Roberts, Roy L., Jr.: *See*—
Hallerberg, Theodore W., Roberts, and Flum. 2,730,705.
Robertson, James M., and J. L. Little, to The Texas Co. Separating oil-wax mixtures. 2,730,485, 1–10–56, Cl. 196—18.
Robotron Corp. *See*—
Rockafellow, Stuart C. 2,730,657.

Rockafellow, Stuart C., to Robotron Corp. Multiple phase control system. 2,730,637, 1–10–56, Cl. 315—146.

Roe, Oliver W. Air cooling system. 2,730,341, 1–10–56, Cl. 261—30.

Roeber, Henry W., and S. J. Gartner, to Sylvania Electric Products Inc. Heater inserter 2,729,877, 1–10–56, Cl. 29—25.19.

Rogers, Ervin, and Al Schmitz. Power mower with wheel raising and lowering means. 2,730,374, 1–10–56, Cl. 280—44.

Rogers, Levant C. Sponge mop with variably spaced wringer rollers. 2,729,840, 1–10–56, Cl. 15—119.

Rolando, John. Automobile door locking means. 2,730,395, 1–10–56, Cl. 292—305.

Rollings, Ernest J., to Northern Engineering & Machine Corp. Cable-traversing trolley carriages. 2,730,047, 1–10–56, Cl. 105—153.

Romney, Van Dyke: *See*—
Wallace, Burgess P., and Romney. 2,730,514.

Ronay, Bela. Pressure welding by induction heating. 2,730,599, 1–10–56, Cl. 219—4.

Roschko, Joseph: *See*—
Desperak, Sam, Roschko, and Desmond. 2,730,055.

Rose, Howard E., and P. S. Bloudoff, to Axelson Mfg. Co., Division of Pressed Steel Car Co., Inc. Fluid actuated pumping jack. 2,729,941, 1–10–56, Cl. 60—52.

Rosebrough, Richard L.: *See*—
Wunderwald, Leon E., and Rosebrough. 2,730,150.

Rosecrans, Ernest E., Sr. Stocking clamping garter. 2,729,825, 1–10–56, Cl. 2—312.

Rosenblum, Lester A. Wheel alignment gauge. 2,729,896, 1–10–56, Cl. 33—203.18.

Rosenstein, Ludwig, to Texaco Development Corp. Catalyst and process for preparation of vinyl chloride. 2,730,555, 1–10–56, Cl. 260—656.

Ross, Hugh N., to American Instrument Co., Inc. Multistation condition-responsive alarm system. 2,730,703, 1–10–56, Cl. 340—213.

Rossell, William T., to Transit Research Corp. Track brake assembly. 2,730,198, 1–10–56, Cl. 188—41.

Roswell, Charles N. Heat exchanger. 2,730,337, 1–10–56, Cl. 257—246.

Round, David S., to W. & T. Avery Ltd. Counter scales of the over and under weight. 2,730,351, 1–10–56, Cl. 265—62.

Rüegg, Rudolf: *See*—
Isler, Otto, Montavon, Rüegg, and Zeller. 2,730,549.

Russell, Alva G., to Pitney-Bowes, Inc. Date wheel setting device. 2,730,041, 1–10–56, Cl. 101—110.

Rust, David J., and J. H. Jensen, to Ry-Lock Co., Ltd. Mounting bracket for tension type screen units. 2,730,172, 1–10–56, Cl. 160—328.

Rust, Frederick F.: *See*—
Porter, Lee M., and Rust. 2,730,539.

Rutherford, Harry T. Grinding machine feeding device. 2,729,920, 1–10–56, Cl. 51—92.

Ryan, Charles B. Match book dispenser and supporting bracket therefor. 2,730,231, 1–10–56, Cl. 206—30.

Ryde, John L., to McCulloch Motors Corp. Power saw chain. 2,730,143, 1–10–56, Cl. 143—135.

Ryffel, Theodor. Temple for looms. 2,730,139, 1–10–56, Cl. 139—294.

Ry-Lock Co., Ltd.: *See*—
Rust, David J., and Jensen. 2,730,172.

SKF Industries, Inc.: *See*—
Palmgren, Per G. 2,730,414.

Saarbergwerke: *See*—
Quoniam, Jean M. 2,279,946.

Sabaroff, Albert R., O. E. Freed, and J. D. Horner, to the United States of America as represented by the Secretary of the Army. Package opener. 2,730,254, 1–10–56, Cl. 214—305.

Saewert, Harold E.: *See*—
Boyer, Robert A., and Saewert. 2,730,448.

Sahyun Laboratories: *See*—
Sahyun, Melville, and Faust. 2,730,544.

Sahyun, Melville, and J. A. Faust, to Sahyun Laboratories. Alkylaminoalkyl esters of hydroxycyclohexylbenzoic acid. 2,730,544, 1–10–56, Cl. 260—473.

Sampson, Merritt B., to The Motch & Merryweather Machinery Co. Cut-off machine. 2,729,879, 1–10–56, Cl. 29—69.

Samuel, Frank B., to Esso Research and Engineering Co. Apparatus for separating oil from wax. 2,730,242. 1–10–56, Cl. 210—199.

Sanders, Carl W., Jr.: *See*—
Dombrowski, Henry S., Sanders, and Wall. 2,730,353.

Sandvikens Jernverks Aktiebolag: *See*—
Hard af Segerstad, Carl-Gustaf, and Malmquist. 2,729,968.

Sarong, Inc. *See*—
Flores, Iris M. 2,730,275.

Sarto, Jerma O., to Chrysler Corp. Control apparatus. 2,730,167, 1–10–56, Cl. 158—36.4.

Sauer, Harold A., to Bell Telephone Laboratories, Inc. Wire coating apparatus. 2,730,069, 1–10–56, Cl. 118—234.

Sauer, Robert O., to General Electric Co. Preparation of phenyl alkylchlorosilanes. 2,730,540, 1–10–56, Cl. 260—448.2.

Saul, August A.: *See*—
Pfaller, George M., and Saul. 2,730,045.

Savino, Henry C. Production deviation computer. 2,730,300, 1–10–56, Cl. 235—61.

Sawyer's Inc.: *See*—
Merrick, Maurice J. 2,730,024.

Schaafsma, Ype: *See*—
Max, Nicolaas, and Schaafsma. 2,730,557.

Schagen, Pieter, to Hartford National Bank and Trust Co. Cathode-ray tube for reproducing coloured television images. 2,730,653, 1–10–56, Cl. 315—15.

Schaufler, Erwin A., to Siemens-Schuckertwerke Aktiengesellschaft. Apparatus for generating sonic or supersonic mechanical oscillations. 2,730,067, 1–10–56, Cl. 116—137.

Schetty, Guido, and H. Ackermann, to J. R. Geigy A. G. Chromium containing monoazo dyestuffs. 2,730,521, 1–10–56, Cl. 260—146.

Schetty, Guido, to J. R. Geigy A. G. Cobalt-containing monoazo dyestuffs. 2,730,522, 1–10–56, Cl. 260—147.

Schetty, Guido, W. Staminbach, and E. Model, to J. R. Geigy A. G. Germicidal diphenyl methane compounds. 2,730,554, 1–10–56, Cl. 260—619.

Schiappa, Antonio. Shuttle motion. 2,730,138. 1–10–56, Cl. 139—138.

Schild, Charles H. Kite. 2,370,318, 1–10–56, Cl. 244—153.

Schiller, Arthur M.: *See*—
Suen, Tzeng J., and Schiller. 2,370,497.
Suen, Tzeng J., and Schiller. 2,370,516.

Schilling, Clarence J., to Air Products Inc. Air fractionating cycle and apparatus. 2,729,953, 1–10–56, Cl. 62—122.

Schlegel, Walter L., Jr., to American Steel Foondries. Snubbed truck. 2,730,049, 1–10–56, Cl. 105—197.

Schleicher, Lowell: *See*—
Green, Barrett K., and Schleicher. 2,730,456.
Green, Barrett K., and Schleicher. 2,730,457.

Schlichter Jute Cordage Co., The: *See*—
Crawford, William W. 2,729,933.

Schmale, Henry. Hydraulically actuated tractor scraper. 2,729,901, 1–10–56, Cl. 37—133.

Schmitt, Otto H., and W. E. Fromm, to Airborne Instruments Laboratory, Inc. Variable frequency signal generator. 2,730,620, 1–10–56, Cl. 250—36.

Schmitz, Al: *See*—
Rogers, Ervin, and Schmitz. 2,730,374.

Schmitz, Walter. Swimming fin. 2,729,832, 1–10–56, Cl. 9—21.

Schnacky, John F. Continuous level-sensing device. 2,729,803, 1–10–56, Cl. 33—126.

Schoenwald, Waldo W. Electrician's hand tool. 2,729,996, 1–10–56, Cl. 81—51.

Scholj, Edgar, and S. Lippere, to Union Special Machine Co. Thread control mechanism for sewing machines. 2,730,060, 1–10–56, Cl. 112—162.

Schuessler, Frank J., to Bell & Howell Co. Magnetic sound translating apparatus. 2,730,571, 1–10–56, Cl. 179—100.2.

Schultz, Harry A.: *See*—
Arnold, George, and Schultz. 2,730,319.

Schultz, Wilbert E. Paper roll holder. 2,730,310, 1–10–56, Cl. 242—55.5.

Schulze, Herbert, to Vereinigte Deutsche Metallwerke Aktiengesellschaft. Method of increasing the scaling resistance of metallic objects. 2,730,458, 1–10–56, Cl. 117—71.

Schurger, Garner H.: *See*—
Gallimore, Keith F., and Schurger. 2,730,021.

Schutt, Walter G., to Stearns Mfg. Co. Hoist or off-bearer for use in concrete block molding machines. 2,730,251, 1–10–56, Cl. 214—152.

Schwesinger, Gerhard, to the United States of America as represented by the Secretary of the Army. Automatic focusing device. 2,730,010, 1–10–56, Cl. 88—24.

Schwidetzky, Walter H., to General Dynamics Corp. Mechanical resonance detection systems. 2,729,972, 1–10–56, Cl. 73—67.

Scott, Pauline F. Foot pedal control mechanism for automotive vehicles. 2,730,214, 1–10–56, Cl. 192—3.

Scott, William H. Hydrotherapy pump. 2,730,095, 1–10–56, Cl. 128—66.

Sedgfield, Hugh B., and F. A. Summerlin, to The Sperry Gyroscope Co., Ltd. Feed-back amplifier systems and servomechanisms that are adapted to respond to input changes at very low frequencies. 2,730,573, 1–10–56, Cl. 179—171.

Seek, Joseph P. Wheel carrier for tank type vacuum cleaners. 2,729,843, 1–10–56, Cl. 15—257.

Self-Changing Gears Ltd.: *See*—
Miller, Albert A. 2,730,216.

Sellstrom Mfg. Co.: *See*—
Anderson, Marshall N. 2,729,820.

Semegen, Stephen T., to The B. F. Goodrich Co. Method of making golf balls. 2,730,159, 1–10–56, Cl. 154—17.

Serrel, Robert, to Radio Corp. of America. Error avoidance system for information handling machines. 2,730,700, 1–10–56, Cl. 340—213.

Servel, Inc.: *See*—
Whitlow, Eugene P. 2,729,952.

Seismograph Service Corp.: *See*—
Hawkins, James E., and Pugh. 2,730,187.
Mahoney, Edward H. 2,730,714.

Shanin, LeRoy H.: *See*—
Ayres, Jay J., and Shanin. 2,730,683.

Shell Development Co.: *See*—
Bluestone, Henry, Soloway, Hyman, and Lidov. 2,730,548.
Dannenberg, Hans. 2,730,510.
Fortuin, Jan P., and Waterman. 2,730,550.
Johnston, Robert W. B., and Marple. 2,730,452.
Liedholm, George E. 2,730,556.
Martin, Robert W. 2,730,532.
Max, Nicolaas, and Schaafsma. 2,730,557.
Payne, George B., and Smith. 2,730,531.
Peery, Norman E. 2,730,239.
Porter, Lee M., and Rust. 2,730,559.
Sommer, Harry J. 2,730,506.
Sommer, Harry J., and Peterson. 2,730,454.
Williamson, George T. 2,730,552.
Williamson, George T. 2,730,553.
Winsor, Philip A. 2,730,464.

Sherlowsky, Rudolph A. Holder for milk cartons. 2,730,278, 1–10–56, Cl. 224—45.

Sherman, Maurice D. Emergency sanding device for automotive vehicles. 2,730,389, 1–10–56, Cl. 291—23.

Sherwin-Williams Co., The: *See*—
Rahr, Frederic H. 2,729,898.

Shields, Carl S. Dry cleaning apparatus. 2,729,961, 1–10–56, Cl. 68—18.

Shields, James R., to Blaw-Knox Co. Lubricated stuffing box. 2,730,386, 1–10–56, Cl. 286—19.

Shiers, George, to American Instrument Co., Inc. Electrically controlled heating and cooling system. 2,730,336, 1–10–56, Cl. 257—3.

Shockley, William, to Bell Telephone Laboratories, Inc. Method of making semi-conductor crystals. 2,730,470, 1–10–56, Cl. 148—1.5.

Shumard, Roland S.: *See*—
Beaver, David J., Shumard, and Stoffel. 2,730,551.
Beaver, David J., Stoffel, and Shumard. 2,730,502.

Shurcliff, William A., to Polaroid Corp. Radiation detection devices. 2,730,625, 1–10–56, Cl. 250—71.

Siebtechnik Gesellschaft mit beschrankter Haftung: *See*—
Linke, Gerhard. 2,730,237.

Siegfried, William: *See*—
Kindt, Ernest T., Sr., and D. T., and Siegfried. 2,730,477.

Siemens-Schuckertwerke Aktiengesellschaft: *See*—
Schaufler, Erwin A. 2,730,067.

Sieurin, Sven E., and E. V. Olsson, to Hoganas-Billesholms Aktiebolag. Charging reduction containers for the production of sponge metals. 2,730,283, 1–10–56, Cl. 226—72.

Singer, Kurt, to Radio Corp. of America. Small amplitude measuring system. 2,730,675, 1–10–56, Cl. 324—78.

Singer Mfg. Co., The: *See*—
Czajkowski, Edward J. 2,730,061.
McCann, Michael. 2,730,058.
Ritter, Herman. 2,730,059.

Sirotek, Louis. Flush tank inlet control valve. 2,730,120, 1–10–56, Cl. 137—411.

Sivola, George. Integrated lignocellulose digestion and recovery process. 2,730,445, 1–10–56, Cl. 92—11.

Six, Willem, to Hartford National Bank and Trust Co. Circuit for counting pulses. 2,730,658, 1–10–56, Cl. 315—164.

Slater, Robert E.: *See*—
Price, Kenneth A., and Slater. 2,730,394.

Sloane, William W., to Goodman Mfg. Co. Control differential transmission gearing. 2,730,182, 1–10–56, Cl. 180—6.44.

Sloane, William W., to Goodman Mfg. Co. Mechanical miner with cutter head provided with a reciprocating weight. 2,730,343, 1–10–56, Cl. 262—8.

Sloane, William W., to Goodman Mfg. Co. Mining machine with radially adjustable boring arm. 2,730,345, 1–10–56, Cl. 262—26.

Smiley, Charles E. Hermetically sealed electrical apparatus. 2,730,686, 1–10–56, Cl. 339—89.

Smith, Curtis W.: *See*—
Payne, George B., and Smith. 2,730,531.

Smith, Florence P. Self-closing bottle cap. 2,730,273, 1–10–56, Cl. 222—484.

Smith, Gladys F. Portable carrier. 2,730,151, 1–10–56, Cl. 150—1.

Smith, Jesse G., to Batson-Cook Co. Adjustable beam bearings. 2,730,413, 1–10–56, Cl. 308—24.

Smith, John W., to Battle Creek Packaging Machines, Inc. Web indexing apparatus for wrapping machines. 2,730,359, 1–10–56, Cl. 271—2.6.

Smith, Thomas R., to The Maytag Co. Articulated connections. 2,730,197, 1–10–56, Cl. 188—17.

Smith, William D. Instrument for transferring survey reference points. 2,729,897, 1–10–56, Cl. 33—217.

Smith, William J., to The Jeffrey Mfg. Co. Multiple compartment jigging apparatus. 2,730,238, 1–10–56, Cl. 209—455.

Snyder, Jacob R. Air brake mechanism. 2,730,408, 1–10–56, Cl. 303—35.

Snyder, Jacob R. Air brake control valve mechanism. 2,730,409, 1–10–56, Cl. 303—68.

Societe Marocaine d'Achats et de Constructions Somarac: *See*—
Poirette, Paul. 2,730,009.

Socony Mobil Oil Co., Inc.: *See*—
Coonradt, Harry L., and Leaman. 2,730,486.
Otto, Ferdinand P. 2,730,501.
Risinger, Joe L. 2,730,178.

Solomon, Nathan L. Curl holding clip. 2,730,111, 1–10–56, Cl. 132—46.

Soloway, Samuel B.: *See*—
Bluestone, Henry, Soloway, Hyman, and Lidov. 2,730,548.

Sommer, Harry J., Lafayette, and W. H. Peterson, to Shell Development Co. Asphalt compositions and method of preparing same. 2,730,454, 1–10–56, Cl. 106—273.

Sommer, Harry J., to Shell Development Co. Asphalt emulsions. 2,730,506, 1–10–56, Cl. 252—311.5.

Sonnenfeldt, Richard W., to Radio Corp of America. Dynamic electron beam control systems. 2,730,651, 1–10–56, Cl. 315—13.

Spencer, Charles L.: *See*—
Fisk, Bert, and Spencer. 2,730,215.

Spencer, Percy L., to Raytheon Mfg. Co. Machines for evacuating electron discharge devices and the like. 2,730,280 1–10–56, Cl. 226—20.4.

Sperlich, Herman A., to Ironrite, Inc. Release mechanism. 2,729,903, 1–10–56, Cl. 38—59.

Sperry Gyroscope Co., Ltd., The: *See*—
Sedgfield, Hugh B., and Summerlin. 2,730,573.

Sperry Rand Corp.: *See*—
Daniels, Howard L., and Hogan. 2,730,698.

Sperzel, Robert H., to The Whitney Blake Co. Plug and socket connector. 2,730,685, 1–10–56, Cl. 339—62.

Spinner, Isidore. Machine for applying binding clips. 2,729,835, 1–10–56, Cl. 11—1.

Sprague Electric Co.: *See*—
Podolsky, Leon, and Dorst. 2,730,597.
Springs Cotton Mills, The: *See*—
Martin, Furman H. 2,730,468.

Srader, Steven L. Utility carrier. 2,730,320, 1–10–56, Cl. 248—16.

Staben, Carlton L., to Modern-Woodmanse Mfg. Co. Valves for frostproof yard hydrant. 2,730,326, 1–10–56, Cl. 251—358.

Stahl, Raymond T., to Swift & Co. Cheese scissors for Italian cheeses. 2,729,890, 1–10–56, Cl. 31—5.

Stakofsky, Charles. Dual compartment handbag. 2,730,152, 1–10–56, Cl. 150—28.

Stallkamp, Hubert G., to The Babcock & Wilcox Co. Vapor generating installation, including a cyclone furnace. 2,730,080, 1–10–56, Cl. 122—235.

Staminbach, Walter: *See*—
Schetty, Guido, Staminbach, and Model. 2,730,554.

Stamos, Chris, to The United Electric Coal Companies. Pulley cleaner. 2,729,842, 1–10–56, Cl. 15—256.5.

Standard Hosiery Mills, Inc.: *See*—
Miles, Charlie A. 2,729,958.

Standard Oil Co., The: *See*—
Faris, Robert B., Jr., and Bartieson. 2,729,970.

Stark, Frederick K. Selector mechanism. 2,730,037, 1–10–56, Cl. 101—58.

Stavis, Bernard H.: *See*—
Stavis, Joseph J., and B. H. 2,730,294.

Stavis, Joseph J., and B. H. Set up box. 2,730,294, Cl. 229—52.

Stearns Mfg. Co.: *See*—
Schutt, Walter G. 2,730,251.

Steed, Edgar L., to Daystrom Electric Corp. Sound recorder and reproducer. 2,730,369, 1–10–56, Cl. 274—13.

Steel Heddle Mfg. Co.: *See*—
Hassold, Victor C. 2,730,137.

Stegeman, Henry J., to The Locke Steel Chain Co. Air intake stack for gasoline motors. 2,730,084. 1–10–56, Cl. 123—41.65.

Stein, Walter. Apparatus for measuring sedimentation rate of blood. 2,729,971, 1–10–56, Cl. 73—61.

Steiner, Charles S.: *See*—
Bradford, Purdy and Steiner. 2,730,170.

Stevens, Dillon: *See*—
Rice, Henry T. M., and Stevens. 2,730,212.

Stevens, John C.: *See*—
Range, Arthur L., Stevens, and Leupold. 2,730,709.

Stevens, Robert T.: *See*—
Rice, Henry T. M., and Stevens. 2,730,212.

Stevenson, Reston, to the United States of America as represented by the Secretary of War. Method of dispersing vaporized diphenylchlorarsine. 2,730,482, 1–10–56, Cl. 167—47.

Stocker, Edward T., to Western Electric Co., Inc. Spraying machine for internal surfaces of hollow articles. 2,730,070, 1–10–56, Cl. 118—318.

Stoffel, Paul J.: *See*—
Beaver, David J., Shumard, and Stoffel. 2,730,551.
Beaver, David J., Stoffel, and Shumard. 2,730,502.

Stone, Albert L., to Esso Research and Engineering Co. Apparatus for handling pipe in a derrick. 2,730,246, 1–10–56, Cl. 214—2.5.

Stoops, Clyne E. Spraying device. 2,730,405, 1–10–56, Cl. 299—144.

Strasel, Raymond K., to Jacobsen Mfg. Co. Vented tank cap. 2,730,264, 1–10–56, Cl. 220—44.

Street, Chauncey C., to Conger-Groves Corp. Record scrambling and unscrambling means for systems using magnetic record. 2,730,569, 1–10–56, Cl. 179—100.2.

Streau, Richard H. F., Jr., to the United States of America as represented by the Secretary of the Navy. Chassis truck. 2,730,257, 1–10–56, Cl. 214—650.

Strimel, Robert S., to Tinius Olsen Testing Machine Co. Multirange load cell. 2,729,973, 1–10–56, Cl. 73—141.

Stromberg-Carlson Co.: *See*—
Wheeler, John L. 2,730,614.

Stumbock, Max J., to Baker & Co., Inc. Composite metal article of chrome steel and platinum components. 2,729,881. 1–10–56, Cl. 29—196.3.

Styles, Leonard W., and H. J. Picking, to Gestetner Ltd. Stencil duplicating machines. 2,730,042, 1–10–56, Cl. 101—122.

Suen, Tzeng J., to American Cyanamid Co. Shrinkage control of cellulosic and wool textiles with diglycidyl ether compounds. 2,730,427, 1–10–56, Cl. 8—116.

Suen, Tzeng J., and A. M. Schiller, to American Cyanamid Co. Rotary well drilling and composition therefor. 2,730,497, 1–10–56, Cl. 252—8.5.

Suen, Tzeng J., and A. M. Schiller, to American Cyanamid Co. Water soluble resinous compositions and process of preparing same. 2,730,516, 1–10–56, Cl. 260—67.6.

Sullivan, Archie L. Ventilating hole drilling machine supporting frame. 2,730,334, 1–10–56, Cl. 255—51.

Sullivan, Ernest R., to Washington H. Soul Pattinson and Co. Ltd. Hypodermic needle injector. 2,730,099, 1–10–56, Cl. 128—218.

Summerlin, Frederick A.: *See*—
Sedgfield, Hugh B., and Summerlin. 2,730,573.

Sun Oil Co.: *See*—
Ferris, Seymour W. 2,730,476.
Lenhart, William E., Jr., and Ledbetter. 2,730,333.
Quist, Harold A. 2,730,123.

Surgical Appliance Industries, Inc.: *See*—
Pease, Isaac M. 2,730,096.

Svendsgaard, Lars. Coffee brewing apparatus. 2,730,034, 1–10–56, Cl. 99—283.

Sutherland Paper Co.: *See*—
Coe, Merrill J. 2,730,232.

Svirsky, Bennett, to Free-Gold Enterprises, Inc. Antisiphoning structure for ball cocks. 2,730,117, 1–10–56, Cl. 137—217.

Svirsky, Bennett, to Free-Gold Enterprises, Inc. Water control for closet tanks. 2,730,122, 1–10–56, Cl. 137—437.

Svoboda, Martin C., to M. J. Hannon. Tractor-trailer control connection and anti-slack device therefor. 2,730,183, 1–10–56, Cl. 180—14.

Swann, Carl C. Method of coating fibers, threads, and/or filamentary material. 2,730,455, 1–10–56, Cl. 117—4.

Swift & Co.: *See*—
Boyer, Robert A. 2,730,447.
Boyer, Robert A., and Saewert. 2,730,448.
Brabets, Robert L., Hlavacek, and Fritz. 2,730,538.
Bradford, Purdy. 2,730,507.
Bradford, Purdy. 2,730,539.
Bradford, Purdy, and Steiner. 2,730,170.
Ohlson, John L., and Hoerr. 2,730,530.
Prohaska, James J. 2,730,281.
Stahl, Raymond T. 2,729,890.

Swimmer, Jerome. Liquid separating medium and use thereof. 2,730,235, 1–10–56, Cl. 209—166.

Swoboda, Herman A.: *See*—
Cuff, Harold B., Swoboda, and Lorenz. 2,730,561.

Sylvania Electric Products Inc.: *See*—
Davis, James N. 2,730,696.
McCullough, Harold M. 2,730,260.
Roeber, Henry W., and Gartner. 2,729,877.

Syntron Co.: *See*—
Missien, Edward J. 2,730,236.

Tappan Stove Co., The: *See*—
Perl, Richard L. 2,730,662.

Tavannes Watch Co. S. A.: *See*—
Bridevaux, Georges. 2,729,934.

Taylor, Harwood S., Jr., to F. M. Howell & Co. Easel support for counter display box. 2,730,324, 1–10–56, Cl. 248—198.

Taylor, John W., Jr.: *See*—
Parnell, William S., and Taylor. 2,730,619.

"Tepha" Gesellschaft für pharmazeutische und chemischtechnische Erzeugnisse m. b. H.: *See*—
Lindner, Kurt. 2,730,428.

Texaco Development Corp.: *See*—
Rosenstein, Ludwig. 2,730,555.

Texas Co., The: *See*—
Kemp, Lebbeus C., Jr. 2,730,438.
Robertson, James M., and Little. 2,730,485.

Thatcher, Russell S., and R. L. Bowers, to General Motors Corp. Filter valve with deflector. 2,730,125, 1–10–56, Cl. 137—543.21.

Theisen, John P.: *See*—
Farr, Edward A., and Theisen. 2,730,610.

Thiebaud, Nils A. Magnetic locking device. 2,730,392, 1–10–56, Cl. 292—201.

Thill, Arthur. Method of dephosphorizing and refining Thomas and Bessemer steels. 2,730,442, 1–10–56, Cl. 75—55.

Thomas & Betts Co., The: *See*—
Curtiss, Lawrence M. 2,730,381.

Thomas, Chester A.: *See*—
Merritt, Thomas W., and Thomas. 2,730,071.

Thomas, William A., to Marvel Engineering Co. Filters. 2,730,241, 1–10–56, Cl. 210—165.

Thompson Grinder Co., The: *See*—
Ernst, Walter. 2,730,074.
Krafft, Frederick G. 2,729,919.

Thompson, H. I., Fiberglass Co., The: *See*—
Parker, Leon. 2,730,475.

Thomsen, Elmer R. Chain delivery unit for printing presses. 2,730,364, 1–10–56, Cl. 271—79.

Thorpe, Alfred E. Liquid fuel burners. 2,730,168, 1–10–56, Cl. 158—88.

Tillison, James R. Fluid heating unit. 2,730,607, 1–10–56, Cl. 219—38.

Times Facsimile Corp.: *See*—
McConnell, Kenneth R. 2,730,567.

Tinius Olsen Testing Machine Co.: *See*—
Strimel, Robert S. 2,729,973.

Titus, Leslie, and W. F. Van Loenen, to Kaiser Aluminum & Chemical Corp. Methods for making shaped articles. 2,729,855, 1–10–56, Cl. 18—55.

Todd, William: *See*—
Emurian, Albert D., and Todd. 2,730,623.

Toothman, Earl, ½ to E. A. Danforth. Hot gas defrosting system. 2,729,950, 1–10–56, Cl. 62—3.

Towne, Edmund B.: *See*—
Dickey, Joseph B., and Towne. 2,730,523.

Trailmobile, Inc.: *See*—
Black, James J. 2,730,611.

Transit Research Corp.: *See*—
Rossell, William T. 2,730,198.

Trinski, Edmund F. Detachable cutter blade. 2,729,889, 1–10–56, Cl. 30—286.

Tronnier, Albrecht W., to Voigtländer, A. G. Four component wide angle photographic objective consisting of six lens elements. 2,730,015, 1–10–56, Cl. 88—57.

Tronnier, Albrecht W., to Voigtländer A. G. Photographic tele-objective having three lens composite front and rear members. 2,730,017, 1–10–56, Cl. 88—57.

Truck Safety Engineering Corp.: *See*—
Besoyan, Kirk. 2,730,196.

Trudell, Richard J.: *See*—
Whiting, Arthur A., Jr., Trudell, and Glass. 2,730,402.

Tung-Sol Electric Inc.: *See*—
Atkins, Carl E. 2,730,629.

Turner, Denys G.: *See*—
Balkin, Mark, and Turner. 2,729,860.

Tutt, Leo H. Ceiling outlet box with positioning means. 2,730,261, 1–10–56, Cl. 220—3.7.

Tuttle, Harold W., Jr.: *See*—
Averill, Charles C., and Tuttle. 2,730,603.

Uhlmann, Erich, to Allmanna Svenska Elektriska Aktiebolaget. Protective means for high voltage direct current transmissions. 2,730,667, 1–10–56, Cl. 321—2.

Umhoefer, Robert R., to Food Machinery and Chemical Corp. Treatment of porous nickel catalysts with amines to prevent nuclear hydrogenation in reduction of quinones. 2,730,533, 1–10–56, Cl. 260—369.

Underwood Corp.: *See*—
Yaeger, Harry C. 2,730,224.

Union Bag & Paper Corp.: *See*—
Bokenkroger, William H. 2,730,295.

Union Oil Co. of California: *See*—
Berg, Clyde H. O., and Hines. 2,730,407.
Brown, James S., Fischer, and Johnson. 2,730,190.
Jakosky, John J. 2,730,673.
Johnson, Leslie C. 2,730,240.

Union Special Machine Co.: *See*—
Scholj, Edgar, and Lippere. 2,730,060.

Union Steel Products Co.: *See*—
Averill, Charles C., and Tuttle. 2,730,603.

United Aircraft Corp.: *See*—
Freeman, Philip M. 2,730,181.
Hausmann, George F. 2,729,937.
Lee, John G., and Hoadley. 2,729,974.

United Electric Coal Companies, The: *See*—
Stamos, Chris. 2,729,842.

United Shoe Machinery Corp.: *See*—
Baker, Corwin W. 2,729,838.
D'Arcey, Alfred C. 2,729,927.
Haas, Otto R. 2,729,836.
Haas, Otto R., 2,729,837.
Hosley, Carlton R. 2,730,057.
Melior, Alfred S. 2,730,033.

United States Envelope Co.: *See*—
Heywood, Vincent E. 2,730,360.

United States Gypsum Co.: *See*—
Downey, Richard M. 2,729,861.

United States Rubber Co.: *See*—
Meisinger, Richard J., and Dempsey. 2,730,404.

United States Steel Corp.: *See*—
Coleman, William E., and Rendel. 2,730,233.
Gottschall, Paul P. 2,730,006.
McLauchlan, Thomas A. 2,730,641.
Rendel, George H. 2,730,348.

Universal Engine Heater Co.: *See*—
Merritt, Jack A. 2,730,079.

Universal Oil Products Co.: *See*—
De Rosset, Armand J., and Watkins. 2,730,488.
Gaydasch, Alexander, and Gleim. 2,730,535.
Gerhold, Clarence G. 2,730,558.
Wankat, Charles. 2,729,992.

Upjohn Co., The: *See*—
Hogg, John A., Beal, Nathan, and Lincoln. 2,730,525.
Nathan, Alan H., and Hogg. 2,730,537.

Utica Drop Forge & Tool Corp. *See*—
Barnes, William A. 2,279,999.

Valentine, Charles M., to Chrysler Corp. Building structure. 2,730,208, 1–10–56, Cl. 189—34.

Van Denburgh, William N. Blast cleaning apparatus. 2,729,918, 1–10–56, Cl. 51—8.

Van der Willigen, Paul C., to Hartford National Bank and Trust Co. Electrical arc welding. 2,730,465, 1–10–56, Cl. 117—206.

Van Dorsten, Adrianus C., and A. Verhoeff, to Hartford National Bank and Trust Co. High-vacuum molecular pump. 2,730,297, 1–10–56, Cl. 230—118.

Van Dusen, Charles A. and L. W., to Van Dusen Engineering Co. Vacuum fixture. 2,730,325, 1–10–56, Cl. 248—206.

Van Dusen Engineering Co.: *See*—
Van Dusen, Charles A. and L. W. 2,730,325.

Van Dusen, Laurence W.: *See*—
Van Dusen, Charles A. and L. W. 2,730,325.

Van Loenen, William F.: *See*—
Titus, Leslie, and Van Loenen. 2,729,855.

Van Ryan, Anthony, to McGraw Electric Co. Electro-mechanical control means. 2,730,671, 1–10–56, Cl. 323—43.5.

Van Waert, Gerardus, to N. V. Technische Maatschappij Marchand-Andriessen. Keyboard for mail sorting apparatus. 2,730,248, 1–10–56, Cl. 214—11.

Varela, Arthur A. Synchronizing system. 2,730,711, 1–10–56, Cl. 343—13.

Varney, Frederick M. Airborne radiation detector. 2,730,626, 1–10–56, Cl. 250—83.6.

Vawter, John E., to Ransburg Electro-Coating Corp. Electrostatic coating method. 2,730,461, 1–10–56, Cl. 117—93.

Veraa, Philemon E., to Interchemical Corp. Flexible seal. 2,730,606, 1–10–56, Cl. 219—38.

Vereinigte Deutsche Metallwerke Aktiengesellschaft: *See*—
Schulze, Herbert. 2,730,458.

Verhoeff, Adrianus: *See*—
Van Dorsten, Adrianus C., and Verhoeff. 2,730,297.

Verlinde, Govert J.: *See*—
Went, Jan J., and Verlinde. 2,730,681.

Vibber, Alfred W. Twisting spindle balloon control. 2,729,932, 1–10–56, Cl. 57—58.83.

Violet, Frédéric: *See*—
Gutton, Henri, and Violet. 2,730,652.

Vogel, Henry A., and A. R. Bader, to Pittsburgh Plate Glass Co. Modification of polyester bodies. 2,730,517, 1–10–56, Cl. 260—75.

Voigtländer A. G.: *See*—
Faulhaber, Fritz. 2,730,025.
Tronnier, Albrecht W. 2,730,015.
Tronnier, Albrecht W. 2,730,017.

Vonnegut, Bernard, to General Electric Co. Means for detecting aerosol particles. 2,730,005, 1–10–56, Cl. 88—14.

Wagner, Adolph A., and A. J. Werner. Improvements in taping machine conveyor and cutter head synchronizing mechanism. 2,730,258, 1–10–56, Cl. 216—22.

Wahl, A. J., Inc.: *See*—
Wahl, Albert J., and Lanz. 2,729,885.

Wahl, Albert J., and C. A. Lanz, to A. J. Wahl, Inc. Apparatus for slitting cartons. 2,729,885, 1–10–56, Cl. 30—2.

Waldrich, Oskar. Planing machines. 2,730,022, 1–10–56, Cl. 90—53.

Walker, Delos A., to International Harvester Co. Cotton doffer. 2,729,930, 1–10–56, Cl. 46—41.

Walker, John R. D. Follow-up control systems. 2,729,940, 1–10–56, Cl. 60—51.

Walker, Wilfred: *See*—
Bailey, Eric J. G., and Walker. 2,730,513.

Wall, Eugene: *See*—
Dombrowski, Henry S., Sanders, and Wall. 2,730,353.

Wallace, Arthur M., to Bundy Tubing Co. Tubing or method of making tubing. 2,730,135, 1–10–56, Cl. 138—74.

Wallace, Burgess P., and V. Romney, to Whitehead Brothers Co. Shell mold and composition for making same. 2,730,514, 1–10–56, Cl. 260—38.

Wampach, Aloyse N. Explosion-operated tools. 2,730,082, 1–10–56, Cl. 123—7.

Wankat, Charles, to Universal Oil Products Co. Rolling of metals. 2,729,992, 1–10–56, Cl. 80—16.

War, United States of America, as represented by the Secretary of: *See*—
Stevenson, Reston. 2,730,482.

Warburton, Ray W., to Westinghouse Electric Corp. Electrostatic precipitator. 2,730,191, 1–10–56, Cl. 183—7.

Warner-Lambert Pharmaceutical Co.: *See*—
Delafontaine, Charles, and Baumgardner. 2,729,886.

Warner & Swasey Co., The: *See*—
Nichta, John J. 2,730,229.

Warren, Howard C. Annunciator system. 2,730,704, 1–10–56, Cl. 340—213.

Washington H. Soul Pattinson and Co. Ltd.: *See*—
Sullivan, Ernest R. 2,730,099.

Waterman, Hein I.: *See*—
Fortuin, Jan P., and Waterman. 2,730,550.

Watkins, Charles H.: *See*—
De Rosset, Armand J., and Watkins. 2,730,488.

Watrous, Gilbert A., and F. A. Roberton. Furniture support. 2,730,419, 1–10–56, Cl. 311—110.

Weber, George: *See*—
Guanella, Gustav, Güttinger, Lattman, and Weber. 2,730,715.

Webster, William M., Jr., to Radio Corp. of America. Electronic inverter system. 2,730,669, 1–10–56, Cl. 321—35.

Wedge Protectors, Inc.: *See*—
Phillips, Stanley L. 2,730,136.

Weese, Harry: *See*—
Burst, Francis J., and Weese. 2,730,421.

Weinrib, Abraham, and S. Kaplowitz. Expandable tie holder. 2,729,866, 1–10–56, Cl. 24—49.

Weinstein, Bert. Separating devices for record sheets and carbon paper. 2,730,174, 1–10–56, Cl. 164—84.5.

Weiss, George, to B. Altman & Co. Machine for dust cleaning garments. 2,729,844, 1–10–56, Cl. 15—308.

Welanets, Ludolph F., to Fairchild Camera and Instrument Corp. Shutter blade drive linkage. 2,730,026, 1–10–56, Cl. 95—63.

Went, Jan J., and G. J. Verlinde, to Hartford National Bank and Trust Co. Inductance. 2,730,681, 1–10–56, Cl. 336—110.

Wermeiskirchen, Louis M., to Bailey Meter Co. Control systems. 2,730,697, 1–10–56, Cl. 340—187.

Werner, Arnold J.: *See*—
Wagner, Adolph A., and Werner. 2,730,258.

Werner, Frank R., to The National Cash Register Co. Printer Mechanism for cash registers and accounting machines. 2,730,039, 1–10–56, Cl. 101—93.

Westendorf, William J. Trouble light guard. 2,730,612, 1–10–56, Cl. 240—54.

Western Electric Co., Inc.: *See*—
Bresska, Rudolph S. 2,730,173.
Dewees, Leonard S. 2,729,850.
Stocker, Edward T. 2,730,070.

Westinghouse Air Brake Co.: *See*—
Bone, Herbert L., and Clausen. 2,730,584.
Hewitt, Ellis E., Bush, and Jeffrey. 2,729,994.
Hufnagel, Andrew. 2,730,592.
Ihrig, Clifford D. 2,730,613.

Westinghouse Electric Corp.: *See*—
Cornell, Archie R. 2,730,656.
Warburton, Ray W. 2,730,191.

Weyer, Henry A.: *See*—
Clarke, Eugene C., and Weyer. 2,729,943.

Weyker, Robert G., and R. H. Ebel, to American Cyanamid Co. Purification of mercaptobenzothiazole. 2,730,528, 1–10–56, Cl. 260—306.

Wheatley, John B.: *See*—
McDowall, Charles J., Wheatley, and Dougherty. 2,729,938.

Wheeler, John L., to Stromberg-Carlson Co. Automatic frequency control system. 2,730,614, 1–10–56, Cl. 250—20.

Wheeling Steel Corp.: *See*—
Ries, William M. 2,730,393.

White, Albert O., to General Electric Co. Apparatus for preventing relative motion between a shaft and a hub. 2,730,387, 1–10–56, Cl. 287—53.

White, John L. Adjustable bed construction for caskets. 2,729,875, 1–10–56, Cl. 27—12.

Whitehead Brothers Co.: *See*—
Wallace, Burgess P., and Romney. 2,730,515.

Whiting, Arthur A., Jr., R. J. Trudell, and H. L. Glass, to the United States of America as represented by the Secretary of the Navy. Controllable dispersal device. 2,730,402, 1–10–56, Cl. 299—30.

Whitlow, Eugene P., to Servel, Inc. Absorption refrigeration apparatus. 2,729,952, 1–10–56, Cl. 62—119.

Whitney Blake Co., The: *See*—
Sperzel, Robert H. 2,730,685.

Wickman, Axel C. Hydraulic clutch. 2,730,218, 1–10–56, Cl. 192—61.

Wickman, Helmer W.: *See*—
Higley, David E., and Wickman. 2,730,164.

Wiesenfeld, Leo. Attachment for fur sewing machines. 2,730,056, 1–10–56, Cl. 112—20.

Willbrandt, Franklin M., to Battle Creek Packaging Machines, Inc. Machine for folding and closing liner bags in cartons. 2,729,928, 1–10–56, Cl. 53—144.

Williams, Billy L. Drop leaf dining table. 2,730,416, 1–10–56, Cl. 311—60.

Williams, George H. T. Improved rotary compressed-air operated motor. 2,730,077, 1–10–56, Cl. 121—92.

Williams, Harry L.: *See*—
Day, Robert L. 2,729,921.

Williamson, David T. N., to Ferranti Ltd. Amplitude recording system utilizing saturable core reactors. 2,730,694, 1–10–56, Cl. 340—172.

Williamson, George T., to Shell Development Co. Production of bis di-(hydroxyaryl) substituted compounds. 2,730,552, 1–10–56, Cl. 260—619.

Williamson, George T., to Shell Development Co. Production of bis di-(hydroxyaryl) substituted compounds. 2,730,553, 1–10–56, Cl. 260—619.

Winsor, Philip A., to Shell Development Co. Antistatic treatment of textile yarns. 2,730,464, 1–10–56, Cl. 117—139.5.

Winter, Cecil C. Compass instrument for measuring and making uneven surfaces. 2,729,891, 1–10–56, Cl. 33—21.

Winters, Arthur. Frequency selective amplifier circuit. 2,730,377 1–10–56, Cl. 179—171.

Wire Coating and Mfg. Co., The: *See*—
Hendrich, Robert T., and O'Brien. 2,730,490.

Wohlers, Herbert C., F. N. Grover, C. W. Lentz, and L. E. Pauling, to Michigan Chemical Corp. Hydrochloric acid from chloral vent gases. 2,730,194, 1–10–56, Cl. 183—115.

Wolff, Irving, to Radio Corp. of America. Position finder system of radio pulse type with vernier indicator tube. 2,730,713, 1–10–56, Cl. 343—17.1.

Wood, Frank A., to Zenith Radio Corp. Tuning network structure. 2,730,682, 1–10–56, Cl. 336—142.

Woodward, James H.: *See*—
Holland-Bowyer, Wilfrid, and Woodward. 2,730,133.

Worthington Corp.: *See*—
Hartwell, George W. 2,730,296.
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Wunderwald, Leon E., and R. L. Rosebrough, said Rosebrough assignor to Bemis Bro. Bag Co. Storage bins. 2,730,150, 1–10–56, Cl. 150—.5.

Wyckoff, Paul W., and R. L. Brugler, to Chrysler Corp. Condenser water cooling device. 2,729,951, 1–10–56, Cl. 62—117.8.

Yaeger, Harry C., to Underwood Corp. Power case-shift mechanism. 2,730,224, 1–10–56, Cl. 197—74.

Yoder, John R. Removable ladder steps. 2,730,412, 1–10–56, Cl. 304—31.5.

York, William C. Ash receiver. 2,730,106, 1–10–56, Cl. 131—235.

Yorkshire Copper Works Ltd., The: *See*—
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Young, David W., and F. W. Banes, to Esso Research and Engineering Co. Stabilized organic compositions containing aralkylated alkoxy phenols. 2,730,436, 1–10–56, Cl. 44—78.

Young, David W., A. J. Morway, and D. L. Cottle, to Esso Research and Engineering Co. Anti-oxidants. 2,730,500, 1–10–56, Cl. 252—51.5.

Young, Douglas L. G.: *See*—
Edge, Stanley H., Heacock, and Young. 2,730,075.

Zavod, Joseph L. Aquarium filter. 2,730,496, 1–10–56, Cl. 210—16.

Zeller, Paul: *See*—
Isler, Otto, Montavon, Rüegg, and Zeller. 2,730,549.

Zenith Radio Corp.: *See*—
Wood, Frank A. 2,730,682.

Ziffer, Garret F., to American Machine & Foundry Co. Magnetic shift registers. 2,730,695, 1–10–56, Cl. 340—174.

CLASSIFICATION OF PATENTS

ISSUED JANUARY 10, 1956

NOTE.—First number—class, second number—subclass, third number—patent number

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287— 53: 2,730,387
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291— 23: 2,730,389
292— 145: 2,730,390
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313— 59: 2,730,637
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78: 2,730,675
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333— 21: 2,730,677
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80: 2,730,680
336— 110: 2,730,681
142: 2,730,682
339— 17: 2,730,683
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62: 2,730,685
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340— 19: 2,730,693
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187: 2,730,697
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345: 2,730,709
343— 10: 2,730,710
13: 2,730,711
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105: 2,730,714
106: 2,730,715
118: 2,730,716
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Classification of Designs

D 3— 4: Des. 176,612
Des. 176,613
Des. 176,614
9: Des. 176,568
17: Des. 176,650
19: Des. 176,602
26: Des. 176,611
D 4— 3: Des. 176,610
D 9— 2: Des. 176,635
D10— 6: Des. 176,617
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D11— 1: Des. 176,582
D14— 3: Des. 176,624
D15— 1: Des. 176,618
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D21— 6: Des. 176,641
D25— 1: Des. 176,586
D26—14: Des. 176,609
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15: Des. 176,584
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D35— 3: Des. 176,603
D37— 1: Des. 176,600
D41— 1: Des. 176,649
D44—15: Des. 176,634
D44—29: Des. 176,643
D48— 2: Des. 176,631
20: Des. 176,616
27: Des. 176,651
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D49— 1: Des. 176,642
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D52— 1: Des. 176,626
2: Des. 176,639
D54—12: Des. 176,594
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D55— 1: Des. 176,645
D58— 6: Des. 176,590
11: Des. 176,630
26: Des. 176,583
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D64—10: Des. 176,581
11: Des. 176,621
D66— 1: Des. 176,599
D71— 1: Des. 176,604
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D80— 9: Des. 176,629
D81— 1: Des. 176,638
D81—10: Des. 176,589
D83— 1: Des. 176,597
D85—10: Des. 176,620
D90—20: Des. 176,615
D91— 1: Des. 176,640
3: Des. 176,622
D92— 1: Des. 176,587
1: Des. 176,588
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1: Des. 176,647

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
January 10, 1956 Volume 702 Number 2

TRADEMARKS

NOTICES

Availability of Forms

On and after January 1, 1956, printed forms of trademark applications for individuals, partnerships and firms, and corporations will be available to all practitioners and to the public without cost. In the interest of saving clerical time and the time of Examiners in making the examination, practitioners before the Patent Office are urged to make use of these forms in filing applications to register, or at least to follow the format in preparing applications for registration. The forms may be readily adapted for service marks, collective marks and certification marks.

Requests for printed application forms should be addressed to the United States Patent Office.

Service by Publication

A petition to cancel each of the registrations identified below having been filed, and the notice of such proceedings sent by registered mail to each registrant at the last known address having been returned by the post office as undeliverable, notice is hereby given that unless the registrants listed herein, their assigns or legal representatives, shall enter an appearance within thirty days from the date of this publication, the cancellation will be proceeded with as in the case of default.

Harold & Harold, New York, N. Y., Reg. No. 416,674, Canc. 6582.

The Democratic Voter Management, Chicago, Ill., Reg. No. 356,390, Canc. 6585.

Delma Mfg. Co., Inc., New York, N. Y., Reg. No. 564,027, Canc. 6614.

Cosmex Corp., New York, N. Y., Reg. No. 430,546, Canc. 6618.

Kolbert-Lieberman, Inc., New York, N. Y., Reg. No. 360,625, Canc. 6621.

Cohen Bros. Corp., New York, N. Y., Reg. No. 341,410, Canc. 6622.

DAPHNE LEEDS,
Assistant Commissioner of Patents.

A petition, No. 6615, has been filed in this Office by PM Industries, Incorporated to effect the cancellation of trademark registration of Industrial Manufacturers, Inc., 470 Rahway Avenue, Elizabeth, New Jersey, No. 387,825, dated June 3, 1941.

Since this Office has been informed that ownership of this trademark has been transferred, notice is hereby given that unless the assigns or legal representatives shall enter an appearance herein within thirty days from the date of this publication, the cancellation will be proceeded with as in the case of default.

DAPHNE LEEDS,
Assistant Commissioner of Patents.

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 28,866 ("A" and design), Anheuser-Busch, Inc., Bottled lager-beer; **TM 525,364**, same, Refrigerators and refrigeration equipment; **TM 184,892** ("Anheuser-Busch" and design), same, Gluten feed; **TM 189,921**, same, Corn sirup; **TM 190,695**, same, Corn sugar; **TM 188362** ("A-B" and design), same, Ginger ale; **TM 220,901**, **TM 221,428** ("Busch," etc. and design), same; **TM 234,665** (Design of red ribbons and green borders, etc.), same, Yeast; **TM 262,607** ("Busch Healthrise Yeast" and design), same; **TM 336,622** ("Anheuser-Busch A-B" and design), same, Dough conditioner in powdered form; **TM 466,999** ("A-1 Pilsner Beer" and design), Arizona Brewing Co., Beer, filed July 20, 1955, D. C. Ariz. (Phoenix), Doc. 2266, *Anheuser-Busch, Inc.* v. *Arizona Brewing Co., Inc.*

TM 46,216. (See TM 589,608.)

TM 48,005 (Chiclets), F. H. Fleer and Company (Republished by American Chicle Company), Chewing gum; **TM 259,697** ("Chicks," etc. and design), American Chewing Products Corp., Candy-coated chewing gum, filed Mar. 21, 1952, D. C. N. J. (Newark), Doc. 241/52, *American Chewing Products Corp.* v. *American Chicle Co.* (Originally Doc. 10799,

CONDITION OF TRADEMARK APPLICATIONS AS OF DECEMBER 16, 1955

Total number of applications awaiting action (excluding renewals and republications)---------- 8,666
Date of oldest new application---------- Apr. 22, 1955
Date of oldest amended application---------- Sept. 23, 1955

MERCHANT, JOHN, Executive Examiner

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application	
	New	Amended
I. STERBA, J. R., Classes 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 33, 35, 44, 52	5-9-55	9-23-55
II. SHRYOCK, R. F. (Acting), Classes 2, 6, 18, 22, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107	4-22-55	10-3-55
III. WENDT, C. M. (Acting), Classes 1, 3, 7, 8, 9, 10, 11, 15, 17, 20, 29, 31, 32, 34, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50.	5-26-55	10-12-55
Renewals (All Classes)	10-28-55	12-5-55
Sec. 12 (c) Publications (All Classes)	11-3-55	12-2-55

Applications Filed During Week Ending December 16, 1955—391

Registrations Issued---------- 403—No. 618,823 to No. 619,225
Renewals Issued---------- 59

American Chicle Co. v. American Chewing Products Corp., filed Oct. 31, 1947). Consent order of dismissal Oct. 26, 1955.

TM 83,944 (Regina), The Regina Company, Vacuum cleaners; **TM 135,051**, same, The Regina Company (republished by The Regina Corp.), Electric vacuum-cleaners and parts thereof; **TM 602,300**, same, The Regina Corp., Electric vacuum cleaning machines; **TM 501,170** ("Established 1892 Regina" and design), same, Electrically operated domestic vacuum cleaners and floor polishing machines, filed Mar. 1, 1955, D. C., S. D. N. Y., Doc. 99/102, *The Regina Corp. v. Regina Sewing Machine Corp.* Consent judgment for injunction (notice Oct. 31, 1955).

TM 135,051. (See TM 83,944.)

TM 184,802. (See TM 28,866.)

TM 188,362. (See TM 28,866.)

TM 189,921. (See TM 28,866.)

TM 190,695. (See TM 28,866.)

TM 220,901. (See TM 28,866.)

TM 221,428. (See TM 28,866.)

TM 234,605. (See TM 28,866.)

TM 236,472 (Gold Bond), National Gypsum Company, Plaster, gypsum, lime, etc.; **TM 390,360**, same, Metal lath, corner bead, expanded metal corner bead, etc.; **TM 397,347**, same, Building construction materials comprising rock wool; **TM 397,348**, same, Acoustical construction material; **TM 412,668**, same, Gypsum, gypsum plaster, cement plaster, etc., filed Apr. 6, 1955, D. C. N. J. (Newark), Doc. 328/55, *National Gypsum Co. v. Gold Bond, Inc. et al.* Consent decree; trademarks held valid Oct. 28, 1955.

TM 259,097. (See TM 48,005.)

TM 262,097. (See TM 28,866.)

TM 281,621 (Perma-Stone), E. J. Miller, doing business as Perma-Stone Company, Molds for use in building constructions; **TM 439,000**, same, Cementitious surfacing distinguishable in appearance from nailed-on products such as shingles, etc.; **TM 587,412**, same, Perma-Stone Company, Casting of stone-like facings of a cementitious material such as concrete or plaster, etc., filed Oct. 18, 1955, D. C., N. D. Ga. (Atlanta), Doc. 5375, *Perma-Stone Co. v. Abbott Construction Co. et al.*

TM 288,958. (See TM 577,226.)

TM 296,939 (Townley), Goldring-Neiman Corp., Ladies' coats, suits, dresses, etc., filed Nov. 9, 1951, D. C., S. D. N. Y., Doc. 71/40, *Goldring, Inc. v. Townley Clothes, Inc.* Order of discontinuance (notice Oct. 28, 1955).

TM 305,331 ("News-Week" and design), **TM 385,859** (Newsweek The Magazine Of News Significance), **TM 603,656** (Newsweek), Weekly Publications, Inc., Weekly magazine, filed July 5, 1955, D. C., S. D. N. Y., Doc. 102/6, *Weekly Publications Inc. v. The Hagedorn Publishing Co. Inc.* Stipulation and order of discontinuance (notice Oct. 25, 1955).

TM 336,622. (See TM 28,866.)

TM 385,859. (See TM 305,331.)

TM 390,369. (See TM 236,472.)

TM 397,347. (See TM 236,472.)

TM 397,348. (See TM 236,472.)

TM 402,138 (White Shoulders), E. Westall, doing business as Evelyn Westall Co. (republished by Parfums Evyan, Inc.), Perfume, toilet water, and cologne; **TM 443,704** (Most Precious), E. Westall (republished by Parfums Evyan, Inc.), same, filed Oct. 19, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c1841, *Parfums Evyan, Inc. v. Yvonne, Inc. et al.*

TM 406,900. (See TM 28,866.)

TM 412,668. (See TM 236,472.)

TM 420,523 (Youthform), The Youthform Company, Brassieres, panties, girdles, etc., filed Oct. 26, 1955, D. C., N. D. Ga. (Atlanta), Doc. 5386, *The Youthform Co. v. R. H. Macy & Co., Inc. et al.*

TM 434,317 (Davy Crockett Frontiersman), The Schwartz Mfg. Company (published by Davy Crockett Enterprises, Inc.), Outer wearing apparel for men, women, and children—namely, slacks, jackets, etc., filed July 7, 1955, D. C., N. D. Ill. (Chicago); Doc. 55c1008, *Davy Crockett Enterprises, Inc. v. Wells Lamont Corp.* Consent judgment; trademark for gloves held valid; trademark held infringed; injunction granted; suit discontinued Oct. 21, 1955.

TM 439,000. (See TM 281,621.)

TM 443,704. (See TM 402,138.)

TM 501,170. (See TM 83,944.)

TM 506,398 (all), Detergents, Inc., Detergents for use as a laundry powder; **TM 528,150** ("all" and design), same, Laundry powder, filed May 13, 1955, D. C. N. J. (Newark), Doc. 444/55, *Monsanto Chemical Co. v. Stanson Chemicals et al.* Decree for injunction Oct. 26, 1955.

TM 524,743 ("The Railroad Sock" and design), **TM 584,507** (Design of a railroad train), Dwight S. Williams Company, Inc., Socks for men, filed Mar. 22, 1954, D. C., W. D. N. C. (Charlotte), Doc. 1026, *Dwight S. Williams Co., Inc. v. Lykens Hosiery Mills, Inc.* Trademarks held not infringed; action dismissed Oct. 31, 1955.

TM 525,304. (See TM 28,866.)

TM 528,150. (See TM 506,398.)

TM 550,616 (Fancee Free), Herma C. Wiedle, doing business as Fancee Free Mfg. Co., Garter belts, convertible garter belts and accessories therefor, etc., filed Oct. 26, 1955, D. C., S. D. N. Y., Doc. 104/225, *Fancee Free Mfg. Co. v. Fancy Free Fashions, Inc.*

TM 554,840 (Datarule), S. Heller, Electrical apparatus computer—namely, an instrument to determine the diameter, etc., filed Feb. 28, 1955, D. C., S. D. N. Y., Doc. 99/78, *Datarule Publ. Co. v. Stewart-Warner Corp.* Order of discontinuance (notice Oct. 21, 1955).

TM 562,873. (See TM 577,226.)

TM 567,437. (See TM 577,226.)

TM 577,226 (Swift's), Swift & Company, Glycerine used as an ingredient in the manufacture of cosmetics and dentifrices; **TM 288,958**, same, Soap; **TM 562,873**, same, Cleanser used as a polishing material; **TM 567,437**, same, Cleanser used as a detergent, filed Oct. 20, 1955, D. C. N. J. (Newark), Doc. 947/55, *Swift & Co. v. Old Empire Mfg. Chemists, Inc. et al.*

TM 580,515 (Zephyr), Modern Village Stores, Inc., Automatic check stands for grocery stores; **Des. 166,174**, W. H. Crawford, Check stand or similar article; **Des. 166,193**, **Des. 171,506**, F. W. Hartup, same, suit for Declaratory Judgment filed Nov. 2, 1953, D. C., S. D. Calif. (Los Angeles), Doc. 16000–T, *Benj. F. Winninger & Son, Inc. v. Modern Village Stores, Inc.* (**Des. Patent 171,506** included by counterclaim Mar. 23, 1954). Consent judgment; design patents held valid and infringed by plaintiff and counterdefendants; injunction restraining plaintiff and counterdefendants; except as stated all claims and counterclaims dismissed with prejudice (notice Oct. 17, 1955).

TM 584,507. (See TM 524,743.)

TM 587,412. (See TM 281,621.)

TM 589,608 (Hoyt's Cologne), **TM 600,126** (Hoyt's Dime Cologne), Hoyt Co., Inc., Cologne; **TM 46,216** ("F. Hoyt & Co." and design), F. Hoyt & Company, Limited (republished by Hoyt Co., Inc.), Perfumery, filed May 21, 1955, D. C., W. D. S. C. (Greenville), Doc. 1764, *Hoyt Co., Inc. v. Hoyt Sullivan.* Decree enjoining and restraining defendant from infringing plaintiff's trademarks, "Hoyt's," "Hoyt," "Hoyt's Dime Cologne" or "Hoyt's Cologne" Oct. 10, 1955.

TM 600,126. (See TM 589,608.)

TM 602,300. (See TM 83,944.)

TM 603,656. (See TM 305,331.)

TM 605,606 (Selfpark), Catz and Weir, doing business as Selfpark System, Providing of parking facilities for automobiles, filed Oct. 27, 1955, D. C., N. D. Calif. (San Francisco), Doc. 35015, *Selfpark System v. Downtown Center Corp.*

TM 606,167 ("Sur Luster" and design), Joe W. Robinson, Combined cleaning and polishing preparation for automobiles and the like, in cans and in bottles, filed Oct. 17, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 16898–PM, *Joe W. Robinson et al. v. Harold L. Groves et al.*

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.
As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 666,041. N. V. The General Trading & Commission House Louis Keunen, The Hague, Netherlands. Filed May 10, 1954.



Applicant claims ownership of Dutch Reg. No. 114,728, dated Mar. 3, 1953.
For Sponges.

SN 683,484. California Sportwear Company, Los Angeles, Calif. Filed Mar. 15, 1955.

VAQUERO

For Suede Leather for Use in Making Men's, Women's, and Children's Leather Sport Jackets.
Use since Feb. 25, 1955.

SN 685,108. The Homalite Corporation, Wilmington, Del. Filed Apr. 7, 1955.

HOMALITE

For Clear, Cast Plastic Sheet Material for Further Manufacture in the Industrial Arts.
Use since Dec. 1, 1954.

SN 686,976. High Vacuum Metals, Inc., New York, N. Y. Filed May 6, 1955.

chromeflex

For Metal Coated Laminated Plastics in Roll or Sheet Form To Be Used as Decorative Trimming in Automotive and Transportative Vehicles, Wearing Apparel Such as Shoes, Belts, Hats, Fabric Weaving, Molding, Bookbinding, Wall Covering, Etc.
Use since June 25, 1953.

SN 687,406. Pfister & Vogel Tanning Co., Milwaukee, Wis. Filed May 12, 1955. Sec. 2(f).

PLAYSHU

Applicant claims ownership of Reg. No. 417,785.
For Leather.
Use since October 1944.

SN 691,897. Sheller Manufacturing Corporation (Dryden Rubber Division), Chicago, Ill. Filed July 25, 1955.

SHELLERTEX

For Polyurethane Foam Material.
Use since on or about Mar. 9, 1955.

CLASS 2

SN 667,681. Duncan Parking Meter Corporation, Chicago, Ill. Filed June 4, 1954.

FINE-O-METER

For Deposit Box for Parking Fines for Overtime Parking in a Parking Metered Zone.
Use since May 13, 1954.

SN 667,682. Duncan Parking Meter Corporation, Chicago, Ill. Filed June 4, 1954.

FINE-O-METER

For Envelopes for the Reception of Fines for Overparking in a Parking Metered Zone.
Use since May 21, 1954.

SN 674,626. Republic Molding Corporation, Chicago, Ill. Filed Oct. 11, 1954.

Polly-Maid

For Plastic Housewares—Namely, Bowls, Dishes and Food Containers.
Use since Sept. 27, 1954.

SN 683,309. The Powell Pressed Steel Company, Hubbard, Ohio. Filed Mar. 11, 1955.

FLOW-MATIC

For Material Handling Boxes.
Use since Nov. 1, 1954.

SN 686,538. Fizzmaster Corporation, New York, N. Y. Filed Apr. 29, 1955.

FIZZ MASTER

For Covers for Holding Beverage Bottles With Cartridges for Charging the Beverage.
Use since November 1954.

SN 687,218. Phoenix Closet Accessories, Inc., New York, N. Y. Filed May 10, 1955.

STOR-A-SLACK

For Garment Bags.
Use since Apr. 1, 1955.

SN 687,767. Crown Cork & Seal Company, Inc., Baltimore, Md. Filed May 18, 1955.

SEALSTIK

For Cosmetic Holders of the Swivel Type Sold Empty.
Use since Oct. 2, 1954.

SN 689,200. Abbott Industries, Inc., Chicago, Ill. Filed June 9, 1955.

SKIN-PACK

For Package Comprising a Substantially Rigid Base Member and an Overlying Plastic Film.
Use since on or about May 4, 1955.

SN 689,259. American Optical Company, Southbridge, Mass. Filed June 10, 1955.

TERRAPIN

For Cases for Spectacles and the Like.
Use since March 1953.

SN 689,293. Virgil L. McCormack, d. b. a. V. L. McCormack Company, St. Louis, Mo. Filed June 10, 1955.

V-MAC

For Silos and Corn Cribs.
Use since Mar. 1, 1953.

SN 690,064. Coates Board & Carton Co. Inc., Garfield, N. J. Filed June 23, 1955.

CBC

For Collapsible Glued Boxes, Cartons and Trays Made of Boxboard, Paperboard or Cardboard.
Use since May 28, 1955.

SN 697,892. The American Automobile Association (Incorporated), Washington, D. C. Filed Nov. 23, 1955.

AAA

Applicant claims ownership of Reg. No. 341,044.
For Shipping Boxes, Cartons and Containers, and Gift Boxes.
Use since 1910.

CLASS 3

SN 681,844. Enger-Kress Company, West Bend, Wis. Filed Feb. 17, 1955.

Grab Bag

For Ladies' Handbags Formed of Cloth, Leather or Like Material.
Use since June 7, 1954.

SN 687,474. Leeds Travelwear Corporation, New York, N. Y. Filed May 13, 1955.

"ROUND-THE-WORLD" LUGGAGE

Exclusive rights to the word "Luggage," apart from the mark as shown is disclaimed.
For Articles of Luggage.
Use since Mar. 4, 1955.

SN 690,947. Fabil Mfg. Corp., New York, N. Y. Filed July 8, 1955.

Styled by Fabil

No claim is made to the words "Styled By" apart from the mark as shown.
For Wallets.
Use since in the year 1945.

CLASS 4

SN 659,498. The Scott & Fetzer Company, Cleveland, Ohio. Filed Jan. 14, 1954.

Kirby

Applicant claims ownership of Reg. Nos. 324,636 and 399,065.
For Furniture Polish, Glass Polish, Floor Wax.
Use since Apr. 15, 1952.

CLASS 5

SN 690,555. Houghton Laboratories, Inc., Olean, N. Y. Filed June 30, 1955.

HYSOL
Product of HOUGHTON LABORATORIES, Inc.

For the purposes of this application for registration, the expression "Product of Houghton Laboratories, Inc." is disclaimed.
For Resin Base Adhesive Compositions.
Use since June 28, 1950.

CLASS 6

SN 670,875. Wilco Company, Los Angeles, Calif. Filed July 30, 1954.

INSUL-X

For Water-dispersible and Soluble Oils Employed in Anti-corrosion or Anti-rust or Rust-preventing Compositions Which Protect Metals Against Rust or Other Corrosive or Chemical Attacks in Metal Liquid-carrying and Circulating Systems.
Use since on or about Apr. 29, 1954.

SN 671,479. Allied Chemical & Dye Corporation, New York, N. Y. Filed Aug. 11, 1954.

ORTHOSOLV

For Liquid Disinfectant and Deodorant for Garbage Dump and Sewage Plant Use.
Use since June 22, 1954.

SN 672,597. The Reardon Company, St. Louis County, Mo. Filed Sept. 1, 1954.

Reardon's

Applicant claims ownership of Reg. Nos. 260,703, 266,794, and 604,698.
For Rust Preventer and Liquid Masking Tape.
Use since July 7, 1954.

SN 674,338. Joseph S. Levy, d. b. a. Randall Products Mfg. Company, New York, N. Y. Filed Oct. 5, 1954.

FLEETLINE

For Anti-freeze for Use in Automobile Cooling Systems and Radiators.
Use since Sept. 14, 1953.

SN 674,381. Farbwerke Hoechst Aktiengesellschaft, vormals Meister Lucius und Brüning, Frankfurt am Main Hoechst, Germany. Filed Oct. 6, 1954.

BULBOSAN

Applicant claims ownership of German Reg. No. 504,076, dated July 25, 1938.
For Spraying Agents for Plants.

SN 674,382. Farbwerke Hoechst Aktiengesellschaft, vormals Meister Lucius und Brüning, Frankfurt am Main Hoechst, Germany. Filed Oct. 6, 1954.

VITIGRAN

Applicant claims ownership of German Reg. No. 533,727, dated June 10, 1941.
For Agents for the Extermination of Animals and Plants.

SN 674,603. Meehanite Metal Corporation, Chattanooga, Tenn. Filed Oct. 11, 1954.

AA PROCALOY

For Mixture of Chemical Preparations Used in the Processing of Molten Metals.
Use since July 8, 1954.

SN 674,857. Verona Chemical Company, Newark, N. J. Filed Oct. 14, 1954.

VERITAN

For Chemical Composition Having the Property of Absorbing Ultraviolet Light.
Use since Oct. 1, 1954.

SN 675,004. Purex Corporation, Ltd., South Gate, Calif. Filed Oct. 18, 1954.

Beads o' Bleach

For Products, in Dry Form, Having Bleaching, Deodorizing, Disinfectant, Germicidal With Incidental Cleaning, and Sanitizing Qualities.
Use since May 27, 1954.

SN 675,811. Meehanite Metal Corporation, New Rochelle, N. Y. Filed Nov. 1, 1954.

AA CALOY

The mark comprises the word "Caloy" superimposed on a large letter "M."
For Mixture of Chemical Preparations Used in the Processing of Molten Metals.
Use since Sept. 9, 1954.

SN 677,002. Russell Scientific Supply Co., Chicago, Ill. Filed Nov. 19, 1954.

SULFI-DOWN

For Analytical Sulphide Precipitation.
Use since Jan. 1, 1954.

SN 678,620. Foote Mineral Company, Berwyn, Pa. Filed Dec. 20, 1954

K-FLUX

The drawing is lined for the color (yellow or gold) but no claim is made to color.

For Chemical Composition Comprising an Inorganic Material Useful as a Fluxing Agent in Metallurgy.

Use since January 1954.

SN 678,839. The Bardahl Oil Company, Inc., St. Louis, Mo Filed Dec. 23, 1954.

AUTHORITY

For Hydraulic Brake Fluid.
Use since Nov. 24, 1954.

SN 679,669. The Macco Products Company, Chicago, Ill. Filed Jan. 10, 1955.

MACCO

For Metal Treating Compounds—Namely, Rust Preventatives, Etching Compounds, and Phosphating Compounds, for Metals.

Use since Apr. 1, 1931.

SN 681,370. Stauffer Chemical Company, San Francisco, Calif. Filed Feb. 9, 1955.

VAPAM

For Soil Fumigant.
Use since Jan. 26, 1955.

SN 681,603. Jefferson Chemical Company, Inc., New York, N. Y. Filed Feb. 14, 1955.

SURFONIC

For Surface Active Agents—Namely, Wetting, Dispersing, Penetrating, and Emulsifying Agents.

Use since Dec. 15, 1954.

SN 682,164. Mobay Chemical Company, St. Louis, Mo. Filed Feb. 23, 1955.

MOBAY

The drawing is half-toned to indicate black or a color.

For Organic Chemicals Including Isocyanates, Carbamyl Halides, Intermediates and Derivatives Therefor; Chemical Intermediates for Use in the Manufacture of Resinous Compositions; and Synthetic Resins in Solid, Liquid, Solution, Semi-solid, Semi-fluid, Emulsified, Dispersed or Suspended Form.

Use since Dec. 30, 1954.

SN 683,280. Covington Fertilizer Company, Inc., Andalusia, Ala. Filed Mar. 11, 1955.

SURE

For Insecticides.
Use since June 19, 1954.

SN 683,342. Bengal Company, New York, N. Y. Filed Mar. 14, 1955.

INSTANT Nu-Air

For Air Deodorizers.
Use since Jan. 3, 1955.

SN 683,748. Bohme Fettchemie G. m. b. H., Dusseldorf, Germany. Filed Mar. 18, 1955.

Avirol

Applicant claims ownership of German Reg. No. 100,621, dated Sept. 5, 1907.

For Chemical Specialties Used as Wetting, Dispersing, Penetrating, Dye-leveling, Finishing and/or Lubricating Agents for the Treatment of Textiles, Fibres, Yarns, and Leather.

SN 684,181. American Cyanamid Company, New York, N. Y. Filed Mar. 25, 1955.

ACCOBOND

For Resin for Treating Cellulosic Film.
Use since Mar. 16, 1955.

SN 684,268. Borax Consolidated, Limited, d. b. a. Pacific Coast Borax Co., Division of Borax Consolidated, Limited, Los Angeles, Calif. Filed Mar. 28, 1955.

DB

For Chemical Weed Killer.
Use since Feb. 26, 1955.

SN 684,289. The Dow Chemical Company, Midland, Mich. Filed Mar. 28, 1955. Sec. 2(f).

2-4 DOW

For Weed Killing Composition.
Use since July 18, 1947.

SN 685,287. Mobay Chemical Company, St. Louis, Mo. Filed Apr. 11, 1955.

MULTRON

For Synthetic Resins in Solid, Liquid, Solution, Semi-Solid, Semi-Fluid, Emulsified, Dispersed or Suspended Form.

Use since Dec. 30, 1954.

SN 685,387. Nu-Life, Incorporated, Pittsburgh, Pa. Filed Apr. 12, 1955.

NU-LIFE

For Finishing Fluid Used in Dry-Cleaning Processes to Impregnate the Material Being Cleaned in Order to Give It Body and Increase Its Wearing Qualities.

Use since Oct. 15, 1953.

SN 685,646. Blitz Products, Inc., Chicago, Ill. Filed Apr. 18, 1955.

Badger

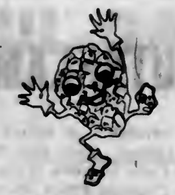
For Insecticides.
Use since Jan. 10, 1955.

SN 685,946. American Chemical Paint Company, Ambler, Pa. Filed Apr. 21, 1955.

WEEDAZOL

For Chemical Preparations for Exterminating Weeds.
Use since Apr. 6, 1955.

SN 686,096. Julius Samann, Zug, Switzerland. Filed Apr. 22, 1955.



Applicant claims ownership of U. S. Reg. No. 604,347.

For Absorbent Body Impregnated With an Air Perfuming and Deodorizing Substance.

Use since Nov. 8, 1954.

SN 686,140. Borax Consolidated, Limited, d. b. a. Pacific Coast Borax Co., Division of Borax Consolidated, Limited, Los Angeles, Calif. Filed Apr. 25, 1955.

20 MULE TEAM

Applicant claims ownership of Reg. Nos. 50,383, 327,847, and 574,007.

For Weed Control Preparation.
Use since January 1955.

SN 686,142. Borax Consolidated, Limited, d. b. a. Pacific Coast Borax Co., Division of Borax Consolidated, Limited, Los Angeles, Calif. Filed Apr. 25, 1955.

[redacted]

Applicant claims ownership of Reg. Nos. 28,491, 588,361, and others.

For Weed Control Preparation.
Use since January 1950.

SN 688,731. Hardman & Holden Limited, Manchester, England. Filed June 2, 1955.

MANOX

Applicant claims ownership of British Reg. No. 525,610, dated Sept. 10, 1931.

For Prussian Blue, Sodium Hydrosulphite, Sodium Ferrocyanide (Yellow Prussiate of Soda), Potassium Ferrocyanide (Yellow Prussiate of Potash), Potassium Ferricyanide (Red Prussiate of Potash), Oxide of Iron, Sulphocyanides, Ethyl Palmitate, Thio Urea, Carbon Bisulphide, Naphthenates (Various Metallic), Sulphuric Acid, Thio Urea Dioxide, Sodium Dioctyl Sulphosuccinate, Insoluble Sulphur.

SN 690,973. Sanders Chemical Company, Philadelphia, Pa. Filed July 8, 1955.

PASAC

For Potassium Acid Saccharate.
Use since Nov. 1, 1954.

SN 691,038. Hickson & Welch Limited, Castleford, England. Filed July 11, 1955.

Photine

Applicant claims ownership of British Reg. No. 708,405, dated June 26, 1952.

For Dyestuffs and Optical Whitening Agents.

CLASS 8

SN 675,429. Marcel Quercia, Paris, Seine, France. Filed Oct. 25, 1954.

BUTAFLAM

Applicant claims ownership of French Reg. No. 441,437, dated Apr. 24, 1954 (Seine); Natl. Inst. No. 33,983.
For Cigarette and Cigar Lighters of All Types, Borer-Type Pipe Cleaners, Pipe Cleaning Fluid, Humidors, Services for Table Use—Namely, Pipe Racks, Lighters, Ashtrays, Pipes, Cigarette Cases, Dispensers and Container Sets, Cigarette-Holders.

SN 675,430. Marcel Quercia, Paris, Seine, France. Filed Oct. 25, 1954.

FLAMIBAZ

Applicant claims ownership of French Reg. No. 441,436, dated Apr. 24, 1954 (Seine); Natl. Inst. No. 33,982.
For Cigarette and Cigar Lighters of All Types, Borer-Type Pipe Cleaners, Pipe Cleaning Fluid, Humidors, Services for Table Use—Namely, Pipe Racks, Lighters, Ashtrays, Pipes, Cigarette Cases, Dispensers and Container Sets, Cigarette-Holders.

CLASS 9

SN 687,610. Olin Mathieson Chemical Corporation, East Alton, Ill. Filed May 16, 1955.

HYDROLIN

For Blasting Cartridges.
Use since on or about June 23, 1954.

CLASS 10

SN 664,740. Eerste Nederlandsche Cooperatieve Kunstmestfabriek, Vlaardingen, Netherlands. Filed Apr. 19, 1954.

Granumix

Applicant claims ownership of Dutch Reg. No. 68,490, dated July 29, 1935.
For Fertilizers.

SN 686,139. Borax Consolidated, Limited, d. b. a. Pacific Coast Borax Co., Division of Borax Consolidated, Limited, Los Angeles, Calif. Filed Apr. 25, 1955.

20 MULE TEAM

Applicant claims ownership of Reg. Nos. 50,383, 327,847, and 374,007.
For Fertilizers Containing Boron.
Use since Dec. 27, 1954.

SN 686,141. Borax Consolidated, Limited, d. b. a. Pacific Coast Borax Co., Division of Borax Consolidated, Limited, Los Angeles, Calif. Filed Apr. 25, 1955.

[illegible]

Applicant claims ownership of Reg. Nos. 28,491, 588,361, and others.
For Fertilizers Containing Boron.
Use since Dec. 27, 1954.

CLASS 11

SN 691,515. Scripto, Inc., Atlanta, Ga. Filed July 18, 1955.

PRESTIGE

Applicant claims ownership of Reg. No. 290,856.
For Ink.
Use since Oct. 15, 1954.

CLASS 12

SN 637,975. N. V. Betonfabriek de Meteoor, De Steeg, Rheden, Netherlands. Filed Nov. 10, 1952.

ARTISTONE

Applicant claims ownership of Dutch Reg. No. 73,991, dated Mar. 21, 1939.
For Tiles for Floors, Panel-Like Rectangular Building Slabs, Stair Treads, Thresholds and Window-Sills, Lintels, Post for Doors and Windows, Ornamental Building Elements, All Made of Concrete.

SN 682,680. Southern Cypress Manufacturers Association, Jacksonville, Fla. Filed Mar. 2, 1955.

S C M A
"The Wood Eternal"

Applicant claims ownership of Reg. No. 356,447.
For Shingles, Laths, Turned Posts, Sawed Posts, Sawed Lumber, Planed Lumber, Sawed Timbers, and Planed Timbers.
Use since on or about Jan. 1, 1916.

SN 683,738. Arthur W. Wohler, d. b. a. Arthur W. Wohler Co., Pasadena, Calif. Filed Mar. 17, 1955.

"RAY-BAR"

For X-Ray Protection Materials—Namely, Lead Shielded and Cored Partitions, Panels, Doors, Window Frames, Ceiling, and Floor Parts for Constructing X-Ray Rooms, Lead Headed Nails, Screws and Wire Ties and Lead Covered Hardware, for Use in Completing Said Enclosures.
Use since Sept. 20, 1954.

SN 685,813. Daniel M. Byrne, d. b. a. Plastic Engineering Company of Tulsa, Tulsa, Okla. Filed Apr. 19, 1955.

THERM-O-DOME

For Plastic Dome for Plastic Skylight Used in Building Structure.
Use since Aug. 27, 1954.

SN 689,717. General Woodcraft Co., Inc., North Bergen, N. J., now by change of name to Woodco Corporation. Filed June 17, 1955.

ECONOVENT MULTI-PURPOSE WINDOW

No rights to registration of the words "Multi-Purpose Window" are claimed apart from the mark as shown.
For Windows With Horizontally Hinged Sashes.
Use since Feb. 15, 1955.

SN 692,678. Devices, Inc., Newark, N. J. Filed July 26, 1955.

MIRACLE

For Surface Anchors—Namely, Anchor Nails, Spindle Anchors, Anchor Bolts, Pronged Anchors and Hanger Supports.
Use since Dec. 5, 1947.

SN 693,692. The Monarch Cement Company, Humboldt, Kans. Filed Aug. 25, 1955.



For Cement.
Use since in the year 1909.

SN 693,693. The Monarch Cement Company, Humboldt, Kans. Filed Aug. 25, 1955.

MONARCH

For Cement.
Use since in the year 1909.

SN 696,258. Porete Mfg. Co., North Arlington, N. J. Filed Oct. 11, 1955.

PORETE

Applicant claims ownership of Reg. No. 159,741.
For Siding, Roofing, Insulating, Partition, Floor and Similar Building Slabs Made of Light-Weight Portland Cement Concrete and Other Binders.
Use since January 1920.

SN 696,320. Rohm & Haas Company, Philadelphia, Pa. Filed Oct. 12, 1955.

PLEXIGLAS

Applicant claims ownership of Reg. Nos. 338,539, 367,998, and 406,199.
For Plastic Sheets, Both Colored and Uncolored, for Interior and Exterior Constructional Purposes
Use since June 5, 1935, on uncolored plastic sheets.

SN 696,381. Season-All Sales Corporation, Pittsburgh, Pa. Filed Oct. 13, 1955.

CHIL-GARD

For Storm Windows and Doors.
Use since Sept. 24, 1955.

CLASS 13

SN 693,257. The Marley Company, Kansas City, Mo. Filed Aug. 17, 1955.

MARRING

For Timber Connectors, Heavy Bolts, Lag Screws, Brackets or Other Stems Used in Securing Together Building Parts.
Use since July 20, 1955.

SN 696,620. Robert E. Miller & Co., Inc., New York, N. Y. Filed Sept. 15, 1955.

DOMES OF SILENCE

For Furniture Castors, Furniture Rests, Furniture Slides, Furniture Levelers, Expansion Glides, Drawer Glides, and Nails.
Use since Apr. 2, 1909.

SN 696,621. Robert E. Miller & Co., Inc., New York, N. Y. Filed Sept. 15, 1955.

REMCO

For Furniture Castors, Furniture Rests, and Furniture Slides and Drawer Glides, Thumb Tacks, and Nails.
Use since January 1925.

CLASS 14

SN 676,975. Integral Clad Metals Company, New York, N. Y. Filed Nov. 19, 1954.

EVER-KLAD

For Bimetallic Mill Products of Copper and Iron, Stainless Steel Alloy and Iron, Nickel and Steel, Brass and Steel, Titanium and Steel, and Copper and Aluminum.
Use since Oct. 23, 1953.

SN 677,288. American Steel Foundries, Chicago, Ill. Filed Nov. 26, 1954.

TRU SHELL

For Steel Castings, Particularly Rings, Wedges, and Head Frames.
Use since on or about July 16, 1954.

CLASS 15

SN 660,367. Harry Waller, Baltimore, Md. Filed Jan. 29, 1954.

$AVON
GA$

The word "Gas" is disclaimed apart from the mark.
For Petroleum and Gasolines.
Use since Jan. 7, 1952.

SN 672,983. The Standard Oil Company, Cleveland, Ohio. Filed Sept. 9, 1954.

BORON

For Gasoline.
Use since Aug. 27, 1954.

SN 674,203. The Standard Oil Company, Cleveland, Ohio. Filed Oct. 4, 1954.

BORON

For Gasoline.
Use since Sept. 20, 1954.

SN 676,015. The Standard Oil Company, Cleveland, Ohio. Filed Nov. 3, 1954.



The word "Gasoline" is disclaimed apart from the mark as shown. The lining in the drawing indicates purple.
For Gasoline.
Use since Oct. 26, 1954.

SN 687,318. Pate Oil Company, Milwaukee, Wis. Filed May 11, 1955.

AUTO GLIDE

For Lubrication Oils and Transmission Fluids.
Use since Mar. 16, 1955.

SN 687,560. Gulf Oil Corporation, Pittsburgh, Pa. Filed May 16, 1955.



The drawing is lined for orange and blue. Applicant claims ownership of Reg. Nos. 342,770 and 379,158.
For Industrial and Technical Oils and Greases—Namely, Flushing and Slushing Oil, Quenching Oil, Transformer Oil, Cutting Oil, Thread Grinding Oil, Shock Absorber Oil, Oil and Grease for Protecting Metal and/or Concrete Surfaces, and Metal Roll and Press Oil.
Use since October 1920.

SN 688,680. Swan-Finch Oil Corporation, New York, N. Y. Filed June 1, 1955.

SAFCUT

Applicant claims ownership of Reg. No. 597,790.
For Cutting and Grinding Oils.
Use since Apr. 4, 1953, on cutting oil.

SN 690,608. Dodge & Olcott, Inc., New York, N. Y. Filed July 1, 1955.

SHAVERS' AID

For Aerosol Lubricant and Disinfectant for Electric Razors.
Use since May 20, 1955.

SN 690,763. The Standard Oil Company, Cleveland, Ohio. Filed July 5, 1955.



The drawing is lined for red and gold.
For Lubricating Oil.
Use since about June 16, 1955.

SN 691,841. The Du-Lite Chemical Corporation, Middletown, Conn. Filed July 25, 1955.

"DU-LITE"
PROCTOIL

Applicant claims ownership of Reg. No. 392,383.
For Water Displacing Protective Oil Used in the Metal Industry.
Use since on or about Jan. 5, 1943.

SN 691,842. The Du-Lite Chemical Corporation, Middletown, Conn. Filed July 25, 1955.

"DU-LITE"
KWIK-SEAL

Applicant claims ownership of Reg. No. 392,383.
For Rust Repellent Oil Used in the Metal Industry.
Use since on or about Feb. 10, 1946.

SN 691,878. National Distributing Co., Pine Bluff, Ark. Filed July 25, 1955.

MEL-O-TONE

For Lubricant for Loud Speaker Cones.
Use since Jan. 1, 1955.

CLASS 16

SN 683,795. Midwestern Color Works, Minneapolis, Minn. Filed Mar. 18, 1955.

OX-Z-NOX

For Protective Alkyds.
Use since Dec. 30, 1954.

SN 685,736. Nycote Laboratories, Van Nuys, Calif. Filed Apr. 18, 1955.

NYCOTE

For Acid Resisting Protective Coating Comprising Nylon in Solution.
Use since Dec. 16, 1954.

CLASS 17

SN 636,599. Makedon Gesellschaft für Tabak- und Zigarettenherstellung m. b. H., Mainz (Rhine), Germany. Filed Oct. 14, 1952.



The word in script, appearing below "Cigarettes," is the name "Kaloudis." Applicant disclaims the words "Perfect" and "Cigarettes" except in the precise relation and association shown in the drawing. Applicant claims ownership of German Reg. No. 621,939, dated June 11, 1952.
For Cigarettes.

SN 671,544. M. Trelles & Co., New Orleans, La. Filed July 30, 1954.



For Cigars, Cheroots, Cigarettes, and Little Cigars.
Use since 1908.

SN 691,243. Stephano Brothers, Philadelphia, Pa. Filed July 13, 1955.

vogue

For Cigarettes.
Use since May 5, 1955.

SN 691,804. Henry Von Kohorn, New York, N. Y. Filed July 22, 1955.

COP

For Cigarettes.
Use since July 12, 1955.

CLASS 18

SN 674,873. The Corona Manufacturing Co., Kenton, Ohio. Filed Oct. 15, 1954.



Applicant claims ownership of Reg. Nos. 99,143 and 506,642.
For Ointment for Wounds and Skin Irritations.
Use since Jan. 1, 1935.

SN 687,910. Armour and Company, Chicago, Ill. Filed May 20, 1955.

Diotic

For Antibiotic Preparation for the Treatment of Otitis in Animals.
Use since June 1, 1954.

SN 687,911. Armour and Company, Chicago, Ill. Filed May 20, 1955.

acb 12

For Veterinary Product Comprising an Adrenocorticotrophin Substance and Vitamin B_{12}.
Use since June 8, 1954.

SN 688,054. Mead Johnson & Company, Evansville, Ind. Filed May 23, 1955.

Pana-Vi-Sol

Applicant claims ownership of Reg. Nos. 531,808, 595,248, and others.
For Liquid Vitamin Preparation.
Use since May 12, 1955.

SN 688,077. Research Laboratories, Inc., St. Joseph, Mo. Filed May 23, 1955.

ERYSIN

For Veterinary Medicine for the Treatment of Erysipelas.
Use since Mar. 29, 1954.

SN 688,167. Manhattan Drug Company, Brooklyn, N. Y. Filed May 24, 1955.

DEN-KIT

For Medicinal Ointment for the Treatment of Toothache.
Use since Feb. 10, 1953.

SN 688,168. Manhattan Drug Company, Brooklyn, N. Y. Filed May 24, 1955.

ASMATAB

For Tablets of a Medicinal Preparation for Temporary Relief from Paroxysms of Bronchial Asthma and Hay Fever.
Use since Jan. 3, 1955.

SN 688,204. American Scientific Laboratories, Inc., Madison, Wis. Filed May 25, 1955.

BRONVAX

For Infectious Bronchitis Vaccine for Poultry.
Use since May 9, 1955.

SN 688,380. Allied Chemical & Dye Corporation, New York, N. Y. Filed May 27, 1955.

PROCADIAN

For Animal Feed Supplement.
Use since Feb. 25, 1955.

SN 688,665. The Purdue Frederick Company, New York, N. Y. Filed June 1, 1955.

TRICHOMYCIN

For Trichomonacidal Vaginal Preparation.
Use since May 17, 1955.

CLASS 19

SN 693,737. Crawford Manufacturing Co, Inc., Richmond, Va. Filed Aug. 26, 1955.

Turks

For Automobile Seat Covers.
Use since January 1955.

CLASS 20

SN 691,741. Armstrong Cork Company, Lancaster, Pa. Filed July 22, 1955.

Newray

For Resilient Floor Covering of the Linoleum Type.
Use since July 6, 1955.

CLASS 21

SN 662,919. Blaupunkt-Werke Gesellschaft mit Beschränkter Haftung, Hildesheim, Germany. Filed Mar. 19, 1954.

Blaupunkt

For Radio Receiving and Transmitting Apparatus, Television Receiving Sets, Sound Amplifying Apparatus and Electrical Talking Machines.
Use since May 1951.

SN 670,861. Canadian Marconi Company, Montreal, Quebec Canada. Filed July 30, 1954.

CMC CANADIAN MARCONI COMPANY

Priority is claimed under Sec. 44(d). Canadian application filed May 14, 1954, Reg. No. NS 190/48384, dated May 14, 1954.
For Radio Communication Apparatus; Radio Broadcasting; Transmitting, and Receiving Apparatus; Television Transmitting and Receiving Apparatus; Facsimile Transmission and Reception Apparatus; Sound Reproducing and Recording Apparatus, and Piezoelectric Devices and Semi-conductor Devices.

SN 674,785. Aerotron Radio Co., Tulsa, Okla. Filed Oct. 14, 1954.

AEROTRON

For Aircraft Radio, Radio Power Supplies, Radio Junction Boxes, Amplifiers, and Aircraft Transceivers of All Types.
Use since Mar. 31, 1951.
Subj. to Intf. with SN 676,928 and SN 678,900.

SN 686,937. Lottie Frances Withers, d. b. a. Mend-It-Sleeve Manufacturing Company, Piedmont, Calif. Filed May 5, 1955. Sec. 2(f).



For Broken Electric Wire Repair Sleeves.
Use since Nov. 23, 1933.

SN 687,625. Radio Corporation of America, New York, N. Y. Filed May 16, 1955.

RCA Victor

Applicant claims ownership of Reg. Nos. 437,873 and 361,053.
For Sound Recording and Reproducing Apparatus Utilizing Such Means as Tape, Component Parts of, as Well as Accessories for Such Goods.
Use since Feb. 3, 1955.

SN 687,632. Roller-Smith Corporation, Bethlehem, Pa. Filed May 16, 1955.

UNI-BUS

For Bus-bar Distribution System, Feeder and Plug-in Type.
Use since Mar. 17, 1955.

SN 687,687. Electro-Flex Heat, Incorporated, Hartford, Conn. Filed May 17, 1955.

Electro-Flex Heat

No claim is made for the word "Heat" apart from the mark as shown.
For Electric Heating Devices Comprising Resistance Wire Embedded in Plastic or Other Form of Flexible Material.
Use since Nov. 9, 1954.

SN 688,620. Calvin E. Bell, d. b. a. Pokrass Associates, New York, N. Y. Filed June 1, 1955.

TE KA DE

For Telephone, Cable, Wire, Electronic Tubes, Radios, Television Sets, Measuring Instruments, Diodes, Transistors, Semiconductive Components and Like Electrical and Electronic Communication Transmitting and Receiving Apparatus, Mechanisms, Instruments, and Equipment, and Parts and Components and Accessories Therefor.
Use since on or about Mar. 1, 1955.

SN 689,812. Deltronic Corporation, Los Angeles, Calif. Filed June 20, 1955.

LOG-K

The drawing is lined for red.
For Electric Relays.
Use since June 9, 1955.

SN 689,813. Deltronic Corporation, Los Angeles, Calif. Filed June 20, 1955.

MAGNA LOK

The drawing is lined for red.
For Electric Relays.
Use since June 10, 1955.

SN 690,142. Electro-Voice, Incorporated, Buchanan, Mich. Filed June 24, 1955.

The Patrician

For Loudspeaker Enclosures and Loudspeaker Systems.
Use since December 1950.

SN 690,363. Berns Manufacturing Corporation, Chicago, Ill. Filed June 28, 1955. Sec. 2(f).

Berns

Applicant claims ownership of Reg. No. 501,819.
For Electric Fans, Electric Heaters, Electric Floor Polishers, and Electric Shoe Polishers.
Use since Jan. 15, 1940.

SN 690,468. Home Music Systems, Inc., Memphis, Tenn. Filed June 29, 1955.

Musi-Kom

For Combination Radio and Intercommunication System Consisting of a Radio Receiver, Speaker, and Controls and Multiple, Individually Controlled, Speaker-Receivers.
Use since Dec. 8, 1954.

SN 690,563. Lee Rubber & Tire Corporation, Conshohocken, Pa. Filed June 30, 1955.

"dry magic"

For Automobile Storage Batteries.
Use since May 10, 1955.

SN 691,053. Lymard of California, Inc., Culver City, Calif. Filed July 11, 1955.

SEPTOR

For Electric Lighting Fixtures, Lamps, and Shades.
Use since Jan. 12, 1955.

SN 691,353. Cable Electric Products, Inc., Providence, R. I. Filed July 15, 1955. Sec. 2(f).

KWIK-CAP

For Electric Connecting Plug.
Use since January 1949.

SN 691,858. Bendix Aviation Corporation, New York, N. Y. Filed July 21, 1955.

SCINFLEX

For Electrical Connectors.
Use since July 7, 1955.

SN 691,778. Potter Instrument Company, Inc., Great Neck, N. Y. Filed July 22, 1955.

MAGNISTOR

For Saturable Core Reactors.
Use since Mar. 15, 1955.

SN 692,258. Onondaga Pottery Company, Syracuse, N. Y. Filed Aug. 1, 1955.

OPCO

For Printed Circuit Type Components for Electronic Apparatus.
Use since Sept. 18, 1953.

SN 692,344. Oxy-Dry Sprayer Corporation, New York, N. Y. Filed Aug. 2, 1955.

Oxy-Dry

Applicant claims ownership of Reg. No. 524,366.
For Static Neutralizer for Printing Presses and Other Sheet and Web Fed Machines, and Electronic Tubes for Use in Such Neutralizers.
Use since Feb. 24, 1942.

SN 692,362. Telex, Inc., St. Paul, Minn. Filed Aug. 2, 1955.

TELEWIRE

Applicant claims ownership of Reg. No. 508,167.
For Electrical Wire Sound Recording and Reproducing Apparatus.
Use since Aug. 10, 1947.

SN 696,511. Deutsche Grammophon Gesellschaft m. b. H., Hannover, Germany. Filed Oct. 17, 1955.

Polydor

Applicant claims ownership of German Reg. No. 316,613, dated July 2, 1924.
For Instruments and Apparatus for Recording, Reproducing and Amplifying Sound, Parts of Such Instruments and Apparatus, and Sound Records; Phonograph Record Players of the Portable and Console Types, Combination Sets Composed of Phonograph Record Player and Radio Receiver; Phonograph Records of the Tape and Wire Types; Apparatus for Transmitting Sound From a Record Player to Remote Loudspeakers, and Loudspeakers for Such Apparatus; Devices for Controlling Sound-Reproducing Apparatus by Deposition of Coins; Devices for Storing and Electrically Selecting for Operation a Number of Phonograph Records; Driving Mechanisms and Speed Regulators for Phonographic Apparatus.

CLASS 22

SN 669,615. Kaye-Jacobel Associates, Yonkers, N. Y. Filed July 8, 1954.

TRIC TAC TOE

For Peg Game Board and Pegs Therefor for Use in Connection With Playing a Three Dimensional Game.
Use since June 15, 1954.

SN 670,845. National Broadcasting Company Inc., New York, N. Y. Filed July 30, 1954.



For Toy Train Sets; Velocipedes, and Toy Four-Wheeled Vehicles; Toy Dishes and Kitchen Utensils; Dolls; Clothing, Strollers, Bathinettes, Furniture and Houses for Dolls as Well as Kits for Constructing Such Toys; Construction Kits Including Spools, Corks or Pipe Cleaners, or Any of Them, for Use as Toys; Toy Telephones; Toy Doctors' and Nurses' Kits; Toy Chimes, Drums, Tuned Sets of Bells, Rhythm Sets Such as Maracas, Musical Triangles and Rhythm Blocks and Xylophones; Toy Greenhouses; Bean Bags and Inflatable Bop Bags; Toy Bulletin Boards; Balloons; Sets of Toy Boats; Stuffed Animals; Cut Out Kits for the Assembly of Pictures; Kits for the Assembly of Toy Animals; Building Blocks; Toy Tiles; Pin Up Animals; Toy Scrap, Coloring, Drawing and Tracing Books; Jig-Saw and Other Puzzle Toys; Items of Toy Luggage; Toy Schoolhouses and Kits for the Assembly Thereof; Toy Hassocks; Sets of Toy Molding Clay Sticks.
Use since May 18, 1953.
Subj. to Intf. with SN 665,221.

SN 672,882. Ed-U-Cards Mfg. Corp., New York, N. Y. Filed Sept. 8, 1954.

ED-U-Toys

Applicant claims ownership of Reg. Nos. 443,664, 576,034, and 576,035.
For Toys—Namely, Building Blocks Made of Wood, Cardboard or the Like; College Sets Comprising Pieces of Paper of One or More Color, Strings, Fabrics, Wood, Cork, Plastic, Etc. and Supports for Mounting These Units in Combination; Art Sets Consisting of Three Dimensional Units, Round, Square or Other Shapes and Means for Interconnecting the Same so as to Produce an Infinite Number of Mobiles, Figures, Etc.
Use since Aug. 2, 1954.

SN 675,542. Cosmos Toy Mfg. Inc., Lynn, Mass. Filed Oct. 27, 1954.

Wiz-Mo

For Toy Gyrotype Tops.
Use since June 28, 1954.

SN 678,347. John E. Starkey, d. b. a. Starkey Toy Co., Anniston, Ala. Filed Dec. 14, 1954.



For Helicopter-Type Flying Toys.
Use since Oct. 1, 1954.

SN 684,792. American Manufacturing Concern, Falconer, N. Y. Filed Apr. 4, 1955.

falcon
toys that last

The words "Toys That Last" are disclaimed apart from the mark as shown. Applicant claims ownership of Reg. No. 560,453.
For Easel-Type Blackboards, Wallboards, Doll Cradles, Doll Cribs, Rocking Horses, Children's Rockers, Shoofly, and Table and Chair Sets.
Use since January 1921.

SN 684,823. The Enterprise Manufacturing Company, Akron, Ohio. Filed Apr. 4, 1955. Sec. 2(f).

CHUM

Applicant claims ownership of Reg. No. 324,383.
For Artificial Fishing Lures.
Use since on or about July 5, 1933.

SN 684,998. Blazon, Inc., Akron, Ohio. Filed Apr. 6, 1955.

Blazon

For Play Gymnasium Apparatus and Plastic Play Pools.
Use since Nov. 1, 1954.

SN 685,144. United States Rubber Company, New York, N. Y. Filed Apr. 7, 1955.

ENSOLITE

Applicant claims ownership of Reg. No. 569,399.
For Practice Golf Balls.
Use since July 23, 1952.

SN 686,016. Wonder Products Company, Collierville, Tenn., to Wonder Products Company. Filed Apr. 21, 1955.

THE WONDER MARE

Applicant claims ownership of Reg. Nos. 547,266 and 606,674.
For Toy Spring Horses.
Use since Mar. 22, 1955.

SN 686,549. Leida Korolenko, d. b. a. American Doll Club, Brooklyn, N. Y. Filed Apr. 29, 1955.

AMERICAN DOLL CLUB

For Dolls and Doll Clothing.
Use since Mar. 22, 1955.

SN 686,979. Ideal Toy Corporation, Hollis, N. Y. Filed May 6, 1955.

FURLENE

For Stuffed Toys.
Use since Mar. 30, 1955.

SN 687,221. Safe-Play Manufacturing Company, Philadelphia, Pa. Filed May 10, 1955.

JET MOBILE

For Children's Manually Propelled Scooters.
Use since on or about Jan. 2, 1955.

SN 687,440. Allis-Chalmers Manufacturing Company, West Allis, Wis. Filed May 13, 1955. Sec. 2(f).

ALLIS-CHALMERS

For Toy Tractors, Toy Wagons, and Toy Tractor Implements Mounted on or Propelled by Toy Tractors.
Use since on or about Sept. 1, 1949, on toy tractors.

SN 687,472. Horsman Dolls, Inc., Trenton, N. J. Filed May 13, 1955.

SUPER-FLEX

For Dolls.
Use since Feb. 17, 1955.

SN 687,701. Ideal Toy Corporation, Hollis, N. Y. Filed May 17, 1955.

JACKIE DOLL

No claim is made to the word "Doll" apart from the mark as shown.
For Dolls.
Use since Mar. 10, 1955.

CLASS 23

SN 667,788. Delphi Products Company, Inc., Delphi, Ind. Filed June 7, 1954.

Ranger

For Portable Cattle Chutes for Use in Treatment of Cattle and Other Farm Animals, Hauling the Same, and Loading Such Animals.
Use since on or about Feb. 14, 1953.

SN 674,252. Ingersoll-Rand Company, New York, N. Y. Filed Oct. 4, 1954.

DRILLMASTER

For Self Propelled Tractor or Truck Mounted Rock Drilling Rig Units.
Use since Jan. 26, 1953.

SN 674,453. Deering Milliken Research Trust, near Pendleton, S. C., to Deering Milliken Research Corporation, near Pendleton, S. C. Filed Oct. 7, 1954.

Whirlwind

For Cord Twister-Winder Machines.
Use since Apr. 26, 1954.

SN 674,890. Home Decorators, Inc., Newark, N. Y. Filed Oct. 15, 1954.

DECORATORS STAINLESS

For Stainless Steel Tableware.
Use since July 1, 1954.

SN 674,940. Carrier Corporation, Syracuse, N. Y. Filed Oct. 18, 1954.

CENTRIMETIC

For Fluid Compressors for Compressing Gases and Liquids.
Use since Apr. 6, 1954.

SN 678,197. Chain Belt Company, Milwaukee, Wis. Filed Dec. 13, 1954.

TOW-BRO

For Sludge Removers.
Use since May 1936.

SN 679,056. Nihon Mishin Seiso Kabushiki Kaisha, Misuho-ku, Nagoya, Japan. Filed Dec. 28, 1954.

SELECT-O-MATIC

Priority under Sec. 44(d). Japanese application filed Aug. 4, 1954, Reg. No. 464,725, dated Apr. 21, 1955.
For Electric Sewing Machines and Parts Thereof and Accessories—Namely, Motors Mounted on or Separate From Sewing Machines.

SN 679,142. Dana Corporation, Toledo, Ohio. Filed Dec. 30, 1954.

Synchro-Verter

For Power Transmission Mechanisms—Namely, Hydraulic Torque Converters and Synchronized Gear Boxes.
Use since on or about Nov. 4, 1954.

SN 680,744. Fairbanks, Morse & Co., Chicago, Ill. Filed Jan. 31, 1955. Sec. 2(f).

FAIRBANKS-MORSE

Applicant claims ownership of Reg. Nos. 131,456, 425,696, and others.
For Diesel Locomotives.
Use since Aug. 21, 1944.

SN 682,311. The Wilmark Company, Davis, Calif. Filed Feb. 24, 1955.

WILMARK

For Plunger Operated Device for Inserting Numbered Slugs Below the Surface of the Skin of Animals for Identification Purposes and Numbered Slugs Therefor.
Use since about Apr. 1, 1954.

SN 682,641. Grand Valley Machine and Tool Co., Grand Rapids, Mich. Filed Mar. 2, 1955.



For Hydraulically Operated Dies and Conversion Units To Provide Hydraulic Operation for Non-Hydraulic Forming Presses.
Use since on or about Sept. 27, 1954.

SN 682,791. Fairchild Engine and Airplane Corporation, Bay Shore, N. Y. Filed Mar. 4, 1955.

STRATOS

For Turbines, Aircraft Engines, Fuel Pumping and Measuring Apparatus, Engine Superchargers, Engine Control Devices, Engine and Supercharger Coupling Devices, and Parts Thereof.
Use since on or about July 30, 1945.

SN 685,388. Nylacore Corporation, Great Neck, N. Y. Filed Apr. 12, 1955.

NYLACORE

For Bearings Characterized by Their Having a Metal Shell With Moulded Synthetic Resin Lining or Sleeve.
Use since on or about Sept. 1, 1954.

SN 687,305. Mine Safety Appliances Company, Pittsburgh, Pa. Filed May 11, 1955.

MSA
SAFETY EQUIPMENT HEADQUARTERS

The words "Safety Equipment Headquarters" are disclaimed apart from the mark shown. Applicant claims ownership of Reg. No. 401,854.
For Mine Rock Dust Distributors; Steam Cleaners; Mine Fire Trucks; Mine Dust Collectors; Oxygen and Carbon Dioxide Pumps; Steel Grabs; Explosively Actuated Tools—Namely, Stud Drivers, Punches, Cable Cutters, Cable Splicers, Cable Bonding Presses; Cable Splicing Sleeves and Parts Therefor.
Use since at least as early as January 1953.

SN 687,444. Barnstead Still and Sterilizer Co., Boston, Mass. Filed May 13, 1955.

PUROMATIC CONTROLLER

For Liquid Stills and Sterilizers.
Use since Feb. 24, 1955.

SN 688,074. Poolmaster, Inc., Burlingame, Calif. Filed May 23, 1955.

POOLMASTER

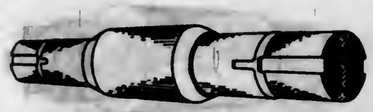
For Vacuum Cleaners for Swimming Pools.
Use since Aug. 17, 1954.

SN 688,075. Poolmaster, Inc., Burlingame, Calif. Filed May 23, 1955.



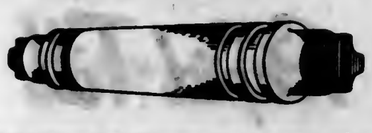
For Vacuum Cleaners for Swimming Pools.
Use since Dec. 28, 1954.

SN 689,056. Mackintosh-Hemphill Company, Pittsburgh, Pa. Filed June 7, 1955.



The mark consists of the color red applied to the total end surface of the roll wabbler, except for a rectangular field extended wholly across the end surface of the wabbler, which field is orange in color. The drawing is lined to indicate the colors red and orange. The representation of the goods is herewith disclaimed. Applicant claims ownership of Reg. Nos. 515,012, 521,750, and others.
For Finished Cast Nickel Alloy Close-Grain Chill-Type Rolls for Rolling Mills.
Use since on or about Sept. 19, 1947.

SN 689,057. Mackintosh-Hemphill Company, Pittsburgh, Pa. Filed June 7, 1955.



The mark consists of the color red applied to the total surface of the roll wabbler, except for a rectangular field extended wholly across the end surface of the wabbler, which field is gold in color. The drawing is lined to indicate the colors red and gold. The representation of the goods is herewith disclaimed. Applicant claims ownership of Reg. Nos. 515,012, 521,750, and others.
For Finished High Carbon Alloy Fine Grain Structure Rolls for Rolling Mills.
Use since on or about Sept. 23, 1947.

SN 689,058. Mackintosh-Hemphill Company, Pittsburgh, Pa. Filed June 7, 1955.



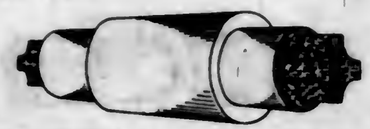
The mark consists of the color red applied to the body of the roll wabbler and a field, bronze in color, extended wholly across the end surface of the wabbler. The drawing is lined to indicate the colors red and bronze. The representation of the goods is herewith disclaimed. Applicant claims ownership of Reg. Nos. 515,012, 521,750, and others.
For Finished Heavy Duty Special Alloy Heat-Treated Rolls for Rolling Mills.
Use since on or about Nov. 11, 1947.

SN 689,059. Mackintosh-Hemphill Company, Pittsburgh, Pa. Filed June 7, 1955.



The mark consists of the color red applied to the total surface of the roll wabbler, except for a rectangular field extended wholly across the end surface of the wabbler, which field is purple. The drawing is lined for red and purple. The representation of the goods is disclaimed. Applicant claims ownership of Reg. Nos. 515,012, 521,750, and others.
For Finished High Chromium Alloy Steel Back-Up Rolls for Hot and Cold Strip-Rolling Mills.
Use since on or about Dec. 1, 1952.

SN 689,060. Mackintosh-Hemphill Company, Pittsburgh, Pa. Filed June 7, 1955.



The mark consists of the color gold applied to the total surface of the roll wabbler, except for a rectangular field extended wholly across the end surface of the wabbler, which field is red in color. The drawing is lined to indicate the colors red and gold. The representation of the goods is herewith disclaimed. Applicant claims ownership of Reg. Nos. 515,012, 521,750, and others.

For Finished High Nickel High Chromium Grain or Indefinite Chill-Type Rolls for Rolling Mills Cast at High Hardness Level and Heat Treated To Lower Hardness Level.

Use since on or about Aug. 16, 1953.

SN 689,064. Mann Edge Tool Company, Lewistown, Pa. Filed June 7, 1955. Sec. 2(f) as to "Mann's."

MANN'S Rapid-Till

Applicant claims ownership of Reg. No. 612,490.

For Garden Tools.

Use since Apr. 28, 1955.

SN 689,255. Royal McBee Corporation, New York, N. Y. Filed June 29, 1955.

ROYALITE

Applicant claims ownership of Reg. Nos. 61,674, 381,484, and others.

For Typewriting Machines and Parts Thereof

Use since on or about June 13, 1955.

SN 690,021. Minnesota Engineering Co., Minneapolis, Minn. Filed June 22, 1955.

MINN-A-MATIC

For Machines for Applying Electrical Components in Electric Circuits.

Use since on or about June 14, 1955.

SN 690,105. Toro Manufacturing Corporation of Minnesota, Minneapolis, Minn. Filed June 23, 1955.

Guard-N-Guide

For Handle for Power Lawn Mowers.

Use since July 27, 1954.

SN 690,119. Ashworth Bros. Inc., Fall River, Mass. Filed June 24, 1955.



For Metal Conveyor Belts.

Use since June 9, 1955.

SN 690,150. J. L. Ferguson Company, Joliet, Ill. Filed June 24, 1955.

PRONEPAK

For Case and Package Handling Machinery.

Use since on or about May 11, 1955.

SN 690,219. Bogelund-Jensen Kokkenudstyr A/S, Copenhagen, Denmark. Filed June 27, 1955.

Centa

For Cutlery and Sets of Knife, Spoon, and Fork (Flatware).

Use since October 1933.

SN 690,259. The Gleason Works, Rochester, N. Y. Filed June 27, 1955.

CURVIC

Applicant claims ownership of Reg. No. 402,346.

For Machines Employed in the Production of Toothed Clutches and Couplings, Including Cutting, Grinding, Hardening, and Testing Machines, and Parts for Such Machines Including Cutters and Cutter Blades for Said Cutting Machines.

Use since May 31, 1955, on cutters.

SN 690,272. Henderson Manufacturing Co., Fisher, Ill. Filed June 27, 1955.

HENDERSON Contour

For Power Lawn Mowers.

Use since Aug. 3, 1954.

SN 690,373. Dreis and Krump Manufacturing Company, Chicago, Ill. Filed June 28, 1955. Sec. 2(f).

CHICAGO

For Machines for Forming and Bending Various Sheet Materials—Namely, Presses, Bending Brakes, Box and Pan Brakes, Press Brakes, Folder Brakes, and Apron Brakes.

Use since Oct. 1, 1918, on bending brakes.

SN 690,473. The Lodge & Shipley Company—the Hamilton Division, Hamilton, Ohio. Filed June 29, 1955.

Hydro Hold

For Hydraulic Work Clamp Units for Power Squaring Shears.

Use since June 10, 1955.

SN 690,785. Westinghouse Air Brake Company, Wilmerding, Pa. Filed July 5, 1955.

VAC-NU-MATIC

For Pneumatic Rock Drills and Parts Thereof.

Use since on or about Feb. 15, 1955.

SN 690,799. The Campbell-Hausfeld Co., Harrison, Ohio. Filed July 6, 1955.

TANKMOBILE

For Air Compressors and Parts Thereof.

Use since Dec. 5, 1940.

SN 690,855. The American Type Founders, Inc., Elizabeth, N. J. Filed July 7, 1955.

Mastercraft

For Machine for Preparing, Treating, and Finishing Printing Plates.

Use since Mar. 21, 1955.

SN 691,932. Contractors Machinery Company, Kansas City, Mo. Filed July 26, 1955.

CONMACO

For Pile Driving Equipment—Namely, Steam Pile Hammers, Steam Pile Extractors, Drop Hammers, Driving Caps for Steam and Drop Hammers, Pile Driver Guides; and Hoisting Equipment Including Construction Hoists; Gin Poles, Guy Derricks and Stiffleg Derricks.

Use since May 18, 1955.

SN 692,247. Marion Power Shovel Company, Marion, Ohio. Filed Aug. 1, 1955. Sec. 2(f).

MARION

For Power Operated Excavating and Hoisting Machines—Namely, Power Shovels, Dipper Dredges, Hydraulic Dredges, Elevator Dredges, Tractor Dredges, Railroad Ditchers, Dragline Excavators, Orange Peel Excavators, Clam Shell Excavators, Trench Digging Machines, Ballast Unloaders, Log Loaders and Cranes.

Use since 1902.

SN 692,675. Nsu-Werke Aktiengesellschaft, Neckarsulm, Wurttemberg, Germany. Filed July 20, 1955.

NSU

Applicant claims ownership of German Reg. No. 228,036, dated Sept. 26, 1918.

For Internal Combustion Engines, Clutches, Gears, Oil Pumps, and Air Pumps.

SN 693,953. The Woodward Co., Albany, N. Y. Filed Aug. 30, 1955.



The drawing is lined for red.

For Metal Work Tools.

Use since prior to Jan. 1, 1925.

CLASS 26

SN 641,913. The Duriron Company, Inc., Dayton, Ohio. Filed Feb. 9, 1953.

DURIRON

Applicant claims ownership of Reg. No. 96,259.

For Laboratory Equipment, Particularly for Handling Corrosive Materials—Namely, Acid Reconditioning Apparatus, Agitators, Bleaching Apparatus, Concentrating Apparatus, Condensers, Dehydrating Apparatus, Denitrating Apparatus, Distilling Apparatus, Evaporators, Filters, Kestner Stills, Kettles, Kjeldahl Digestion Apparatus, and Wet Ashing Apparatus, and Parts Thereof.

Use since in the year 1917 on concentrating equipment.

SN 666,196. Laboratory for Electronics, Inc., Boston, Mass. Filed May 12, 1954.



Applicant claims ownership of Reg. No. 577,652.

For Radar Equipment, Including Ground Controlled Approach Aircraft Landing Systems, Radar Transmitters and Receivers, and Radar Antennas.

Use since on or about Feb. 15, 1954.

Subj. to Intf. with SN 675,322.

SN 689,232. Neptune Meter Company, New York, N. Y. Filed June 9, 1955.



Applicant claims ownership of Reg. Nos. 31,156, 281,675, and others.

For Meters for Measuring Liquids.

Use since on or about June 1914.

SN 691,873. Modern Engineering Company, Inc., St. Louis, Mo. Filed July 25, 1955.

DUBBL-STAGE

For Pressure Gages.
Use since Jan. 5, 1955.

SN 692,056. G. M. Giannini & Co. Inc., Pasadena, Calif. Filed July 28, 1955.

AEROHEAD

For Instruments Responsive to Direction and/or Pressure of an Airstream.
Use since on or about Apr. 1, 1952.

SN 692,157. Pallet Sales Corporation, New York, N. Y. Filed July 29, 1955.

LEVEL-O-METER

For Instruments Indicating the Incline of Forks on Fork Trucks.
Use since June 29, 1955.

SN 693,097. Special Lens Service, Incorporated, Butler, Mo. Filed Aug. 15, 1955.

Freeview

For Ophthalmic Lenses and Lens Blanks.
Use since December 1945.

SN 693,266. Pennsylvania Optical Company, Reading, Pa. Filed Aug. 17, 1955.

PENN-STYLE

For Eye Glass Frames.
Use since on or about June 29, 1955.

SN 693,267. Pennsylvania Optical Company, Reading, Pa. Filed Aug. 17, 1955.

PENN-POLKA

For Eye Glass Frames.
Use since on or about June 29, 1955.

CLASS 27

SN 684,715. Amida S. A. (Amida Limited), Grenchen, Switzerland. Filed Apr. 1, 1955.



Applicant claims ownership of Swiss Reg. No. 93,201, dated May 25, 1938.
For Watches, Parts of Watches, Watch Cases.

SN 685,708. Hawthorne Watch Company, San Francisco, Calif. Filed Apr. 18, 1955.

SKIN DIVER

For Watches.
Use since January 1955.
Subj. to Intf. with SN 693,887.

SN 692,861. Palmer Sales Corp., New York, N. Y. Filed Aug. 11, 1955.



For Ladies' and Men's Watches.
Use since May 18, 1955.

SN 693,203. Sani Distributors, New York, N. Y. Filed Aug. 16, 1955.

MONA

For Watches.
Use since Sept. 28, 1950.

SN 693,887. The American Rolex Watch Corporation, New York, N. Y. Filed Aug. 30, 1955.

SKINDIVER

For Wristwatches.
Use since in or about December 1954.
Subj. to Intf. with SN 685,708.

CLASS 29

SN 691,975. Whiting-Adams Company, Inc., Boston, Mass. Filed July 26, 1955.

SENSATION

For Brushes and Applicators—Namely, Paint, Enamel, Varnish, White Face Wash and Wall Brushes, and Rollers.
Use since May 27, 1955.

CLASS 32

SN 681,523. The Latem Company, Cleveland, Ohio. Filed Feb. 11, 1955.

GADGET PANELS

For Storage and Display Racks Consisting of Panels, Movable Hooks, and Movable Shelves.
Use since on or about Jan. 10, 1955.

SN 683,521. La-Z-Boy Chair Company, Monroe, Mich. Filed Mar. 15, 1955.

La-Z-Rocker

Applicant claims ownership of Reg. Nos. 368,382 and 599,684.
For Rocking Chairs.
Use since July 30, 1954.

SN 690,249. Duo-Bed Corp., Los Angeles, Calif. Filed June 27, 1955. Sec. 2(f).

DUO·BED

For Beds, Sofa Beds, Headboards for Beds, Mattresses, Box Springs, End Tables, Cocktail Tables, Combination Sofa Beds and End Tables, and Combination Sofa Beds and Desks.
Use since Jan. 1, 1949.

SN 690,533. Chesler Glass Co., Brooklyn, N. Y. Filed June 30, 1955.

LIFETIME

Applicant claims ownership of Reg. No. 415,368.
For Mirrors—Namely, Furniture Mirrors, Wall Mirrors, Pocket Mirrors, Make-Up Mirrors, and Shaving Mirrors.
Use since Jan. 2, 1945.

SN 690,910. Slumber Products Corporation, Memphis, Tenn. Filed July 7, 1955. Sec. 2(f).

BABY HEALTH

Applicant claims ownership of Reg. No. 524,023.
For Mattresses, Bed Springs, Box Springs, Sofa Beds, Chairs in the Nature of Furniture, Headboards, Cribs, Pads in the Nature of Mattresses, and Chair and Sofa Cushions.
Use since Dec. 10, 1947.

SN 690,911. Slumber Products Corporation, Memphis, Tenn. Filed July 7, 1955.

Sectionalized Comfort

For Mattresses.
Use since Jan. 20, 1955.

SN 691,128. The General Fireproofing Company, Youngstown, Ohio. Filed July 12, 1955.

Tru-val

Applicant claims ownership of Reg. No. 216,941 (renewed).
For Filing Cabinets.
Use since Apr. 1, 1955.

CLASS 34

SN 678,196. Chain Belt Company, Milwaukee, Wis., to Food Machinery & Chemical Corporation, San Jose, Calif. Filed Dec. 13, 1954.

AGI-TORT

For Pressure Cookers.
Use since Oct. 8, 1952.

SN 680,512. Bryant Air Conditioning Corp., Philadelphia, Pa. Filed Jan. 26, 1955.

B·AIR·CO

For Air-Conditioners.
Use since Dec. 15, 1954.

CLASS 36

SN 686,529. Cope Research and Development, Inc., Hollywood, Calif. Filed Apr. 29, 1955.

Silhouette

For Sound Recordings Made on Grooved Phonograph Records.
Use since on or about Apr. 6, 1955.

CLASS 37

SN 644,993. Jacksonville Paper Company, Jacksonville, Fla. Filed Apr. 9, 1953.



For Writing Paper in Bundles, in Tablet Form, and in Boxes, and Correspondence Envelopes.
Use since during the month of September 1951.

SN 678,203. Continental Can Company, Inc., New York, N. Y. Filed Dec. 13, 1954.

HANDI-TOTER

For Bags for Packaging and Carrying Merchandise.
Use since Mar. 11, 1954.

SN 685,582. Gulf States Paper Corporation, Tuscaloosa, Ala. Filed Apr. 15, 1955.

EVERGREEN

Applicant claims ownership of Reg. No. 552,835.
For Wrapping Paper.
Use since on or about June 1, 1950.

SN 687,354. Columbia Box Board Mills, Inc., Chatham, N. Y. Filed May 12, 1955.

COLUMBIA BOX BOARD MILLS INC. CHATHAM N.Y. QUALITY PAPER BOARDS FOR BETTER PAPER BOXES

The wording "Box Board Mills Inc. Chatham N. Y. Quality Paper Boards for Better Paper Boxes" is disclaimed apart from the mark as shown.
For Boxboard.
Use since 1920.

SN 687,604. Little Rapids Pulp Company, Green Bay, Wis. Filed May 16, 1955.

kid naps

For Paper Napkins.
Use since Apr. 28, 1955.

CLASS 38

SN 623,029. Leonard Arnow, Philadelphia, Pa. Filed Dec. 31, 1951.

Arnotes

For Periodical Publication.
Use since Mar. 10, 1951.

SN 637,739. Althea Rickert Wheeler, Woodstock, Ill. Filed Nov. 6, 1952.

SHOPPORTUNITIES

For Advertisement Section of a Periodical.
Use since Oct. 2, 1952.

SN 669,328. Grant Publishing Corporation, Chicago, Ill. Filed July 2, 1954.

MODERN MOTIFS

Exclusive right to the use of the word "Modern" and the word "Motifs" apart from the mark as shown is disclaimed.
For Greeting and Christmas Cards.
Use since on May 17, 1954.

SN 670,493. Miller Publications, Inc., St. Louis, Mo. Filed July 23, 1954.

PROM

For Magazine Published Monthly.
Use since 1946.

SN 677,221. Lloyd Hollister Inc., Wilmette, Ill. Filed Nov. 24, 1954. Sec. 2(f) as to "Glenview."

GLENVIEW Announcements

Applicant claims ownership of Reg. No. 533,205.
For Periodical Issued Weekly.
Use since July 29, 1954.

SN 677,222. Lloyd Hollister Inc., Northbrook, Ill. Filed Nov. 24, 1954. Sec. 2(f) as to "Northbrook."

NORTHBROOK Star

For Periodical Issued Weekly.
Use since July 29, 1954.

SN 681,266. Guenther Publishing Corporation, New York, N. Y. Filed Feb. 8, 1955.

STOCK FACTOGRAPH

For Magazine or Manual Published Annually.
Use since July 1, 1934.

SN 686,724. Broome Bros., Pueblo, Colo. Filed May 3, 1955.

Sparkletone ALBUM PRINTS

"Album Prints" is disclaimed apart from the mark as shown.
For Photographic Prints.
Use since on or about Apr. 13, 1953.

SN 686,993. National Enterprises, Inc., Dayton, Ohio, now by change of name to Top Value Enterprises, Inc. Filed May 6, 1955.

TV

For Trading Stamps.
Use since May 5, 1955.

SN 688,644. International Harvester Company, Chicago, Ill. Filed June 1, 1955.

INTERNATIONAL TRAIL

Applicant claims ownership of Reg. No. 127,957.
For Bi-Monthly Periodicals
Use since Oct. 25, 1918.

SN 688,819. Howard J. Helenbrook, d. b. a. Howard Engraving and Printing Co., Buffalo, N. Y. Filed June 3, 1955.

Howard's

For Christmas Cards and Wedding Invitations.
Use since July 1, 1945.

SN 688,942. Kohler Workers Local 833, UAW CIO, affiliated with the International Union, United Automobile Aircraft and Agricultural Implement Workers of America, Sheboygan, Wis. Filed June 6, 1955.

THE KOHLERIAN

For Newspaper.
Use since Nov. 3, 1938.

SN 689,414. Ros-Mac Publishing Company, Inc., New York, N. Y. Filed June 13, 1955.

MQ

For Monthly Industrial Publication.
Use since Dec. 6, 1954.

SN 690,377. General Features Corporation, New York, N. Y. Filed June 28, 1955.

THE FIXIT FAMILY

For Newspaper Comic Strip.
Use since May 15, 1955.

SN 690,566. Rand McNally & Company, Skokie, Ill. Filed June 30, 1955.

JUNIOR ELF

Applicant claims ownership of Reg. No. 511,139.
For Books, Particularly Children's Books.
Use since June 2, 1955.

SN 690,567. Rand McNally & Company, Skokie, Ill. Filed June 30, 1955.

ELF

Applicant claims ownership of Reg. No. 511,139.
For Books, Particularly Children's Books.
Use since Apr. 25, 1955.

CLASS 39

SN 638,081. C. Hart Manufacturing Company, Columbus, Ohio. Filed Nov. 14, 1952.

HART

For Police, Firemen's, and Plant Guards' Uniforms.
Use since 1932.

SN 661,309. Archer Mills, Inc., Columbus, Ga. Filed Feb. 19, 1954.



For Ladies' Hosiery.
Use since June 3, 1951.

SN 661,311. Archer Mills, Inc., Columbus, Ga. Filed Feb. 19, 1954.



For Ladies' Hosiery.
Use since June 3, 1951.

SN 669,309. Atlas Overall Company, Ephrata, Pa. Filed July 2, 1954.



Applicant claims ownership of Reg. No. 515,313.
For Girls' Dungarees.
Use since Jan. 2, 1954.

SN 673,435. Esquire Sportswear Co., New York, N. Y. Filed Sept. 20, 1954.

RUMPUSLACKS

For Slacks for Men and Young Men.
Use since Apr. 20, 1954.

SN 675,203. Boepple Sportswear Mills, Inc., New York, N. Y. Filed Oct. 21, 1954.

CONTESSA

For Ladies' and Misses' Sweaters.
Use since Aug. 10, 1954.
Subj. to Intf. with SN 676,142 and SN 686,299.

SN 675,266. Deala Brassieres, Inc., Miami, Fla. Filed Oct. 22, 1954.

"TRAFFIC STOPPER"

For Women's Casual Sportswear, Including Jackets, Shorts, Pedalpushers, Shortie Shorts, Long Halters, and Short Halters.
Use since Feb. 1, 1953.

SN 675,982. The B. F. Goodrich Company, Akron, Ohio. Filed Nov. 3, 1954.

CELL-TITE

Applicant claims ownership of Reg. Nos. 356,438 and 357,290.
For Shoe Soles Made of Crepe Rubber.
Use since Apr. 27, 1954.

SN 677,443. Ricci Ginilli, Inc., Los Angeles, Calif. Filed Nov. 29, 1954.

Ricci Ginilli

For Women's Shoes.
Use since Oct. 8, 1954.

SN 678,601. Cumberland Manufacturing Company, Inc., Winston-Salem, N. C. Filed Dec. 20, 1954.

CUMBERLAND

For Dungarees and Jeans for Men, Boys, Ladies, and Girls.
Use since Dec. 1, 1954.

SN 678,882. Ottoman Company, Inc., New York, N. Y. Filed Dec. 23, 1954.

whistlin' OTTO the BABY REINDEER

For Masquerade Costumes and Halloween Costumes.
Use since June 18, 1954.

SN 681,340. Brown Shoe Company, Inc., Clayton, Mo. Filed Feb. 9, 1955.

Powder-Puff

For Women's Shoes.
Use since Oct. 1, 1953.

SN 683,717. Armand Schwab & Co., Inc., New York, N. Y. Filed Mar. 17, 1955.

"TRUGRADE"

For Unfinished Hat Bodies and/or Hoods.
Use since Jan. 15, 1955.

SN 684,524. Belvedere Hosiery Company, Charlotte, N. C. Filed Mar. 30, 1955.

Festival

For Hosiery.
Use since Jan. 16, 1946.

SN 684,690. Shelley Knitting Mills, Inc., Philadelphia, Pa. Filed Mar. 31, 1955.

SOFSET

For Men's, Women's, and Children's Sweaters, Dresses, Skirts, Jackets, and Vests.
Use since Jan. 26, 1955.

SN 684,695. Standard Knitting Mills, Inc., Knoxville, Tenn. Filed Mar. 31, 1955. Sec. 2(f).

FREEDOM SLEEVE

Applicant claims ownership of Reg. Nos. 353,963, 404,621, and others.
For Men's, Boys', and Girls' Knitted Pajamas, Children's Knitted Sleepers, and Men's and Boys' Sweat Shirts.
Use since March 1933.

SN 684,697. Standard Knitting Mills, Inc., Knoxville, Tenn. Filed Mar. 31, 1955. Sec. 2(f).

FULL FREEDOM SLEEVE

Applicant claims ownership of Reg. Nos. 353,963, 404,621, and others.
For Men's, Boys', and Girls' Knitted Pajamas, Children's Knitted Sleepers, and Men's and Boys' Sweat Shirts.
Use since July 29, 1940.

SN 685,020. Handcraft Company, Inc., Princeton, Wis. Filed Apr. 6, 1955.

Shelets

For Ladies' Stretchable Slippers.
Use since Feb. 17, 1955.

SN 685,907. Hayes Garment Company, Louisville, Ky. Filed Apr. 20, 1955.

Six Shooters



For Men's and Boys' Pants, Sport Shirts, Jackets, and Dungarees.
Use since October 1953.

SN 686,113. Techno Efficiency Council, Inc., d. b. a. Thermo wear, Inc., Brooklyn, N. Y. Filed Apr. 22, 1955.

"Li'l Blue Nose"



For Men's, Women's, and Children's Underwear, Outershirts and Blouses, Suits, Coats, Vests, Pants, Jackets, Snowsuits, Dresses, Hats, Caps, Hoods, Neckerchiefs, Gloves, Mittens, and Hosiery.
Use since Mar. 3, 1955.

SN 686,188. Ino Merchandise Co., San Francisco, Calif. Filed Apr. 25, 1955.

FUKUSUKE

The Japanese word "Fukusuke" translated means "Lucky Doll."
For Foot Sox Known as "Tabis."
Use since June 1, 1949.

SN 686,274. Brooks Manufacturing Corporation, Burkeville, Va. Filed Apr. 26, 1955.

Pitty-Pat

For Baby Pants and Baby Bibs.
Use since January 1955.

SN 686,299. Girard Knitting Mills, Philadelphia, Pa. Filed Apr. 26, 1955.

Contessa

For Sweaters.
Use since July 16, 1954.
Subj. to Intf. with SN 675,203 and SN 676,142.

SN 686,492. Steinberg Bros., New York, N. Y. Filed Apr. 28, 1955.

Rock n Roll

For Slippers and Moccasins.
Use since on or about Mar. 15, 1955.

SN 686,739. Haspel Brothers, Inc., New Orleans, La. Filed May 3, 1955.

SYLKTALIA

For Men's and Boys' Suits, Coats, Pants, Trousers, and Vests.
Use since Apr. 14, 1955.

SN 686,787. Tropical Garment Manufacturing Company, Tampa, Fla. Filed May 3, 1955.

ROYAL PALM

For Work Shirts, Dress Shirts, Sport Shirts, Slacks, and Underwear Made of Textile or Knit Material, for Men, Women, and Children.
Use since Oct. 24, 1927.

SN 686,827. Hardwick Woolen Mills, Inc., Cleveland, Tenn. Filed May 4, 1955.

RICHARD CATE

For Men's, Students', Cadets', and Boys' Suits, Slacks, Topcoats, and Sport Coats.
Use since Jan. 10, 1955.

SN 686,943. S. D. Arrowood & Company, Inc., New York, N. Y. Filed May 6, 1955.

FITABLES

For Hosiery.
Use since Apr. 29, 1955.

SN 687,002. Reliance Manufacturing Company, New York, N. Y. Filed May 6, 1955.

UNIVERSAL

Applicant claims ownership of Reg. Nos. 336,224, 351,001, and 365,551.
For Jackets, Pants, Dress and Sport Shirts, and Men's and Ladies' Pajamas.
Use since 1897.

SN 687,251. Broman & Kasten, Incorporated, New York, N. Y. Filed May 11, 1955.



For Children's Blouses.
Use since Feb. 1, 1955.

SN 687,252. John Dale Brooks, Hickory, N. C. Filed May 11, 1955.

TERRYLON'S

For Anklets.
Use since Mar. 8, 1955.

SN 687,550. H. H. Fessler Knitting Company, Orwigsburg, Pa. Filed May 16, 1955.

Fesco Kid

For Boys' Shirts and Briefs.
Use since Oct. 1, 1954.

SN 687,552. H. Freeman & Son, Inc., Philadelphia, Pa. Filed May 16, 1955.

British Colonial

For Suits for Men and Young Men.
Use since May 8, 1930.

SN 687,553. H. Freeman & Son, Inc., Philadelphia, Pa. Filed May 16, 1955.

Natural-Flaire

Applicant claims ownership of Reg. No. 564,172.
For Men's Suits and Sport Coats.
Use since Feb. 24, 1953.

SN 687,778. Ida Gerber, d. b. a. Charles Gerber, New York, N. Y. Filed May 18, 1955.

"Trimheels"

For Shoe Heels.
Use since on or about Apr. 6, 1955.

SN 688,519. H. H. Fessler Knitting Company, Orwigsburg, Pa. Filed May 31, 1955.

Fesco

For Ladies' and Misses' Cotton Knit Vests and Panties, and Men's and Boys' Cotton Knit Shirts, Briefs, Midways (Mid-Length Shorts), and Drawers.
Use since Jan. 16, 1951.

SN 689,015. Barringer Knitting Mills, Inc., Philadelphia, Pa. Filed June 7, 1955.

Swellen Earle

For Sweaters.
Use since on or about May 24, 1955.

SN 689,603. Alrose Shoe Co., Inc., Exeter, N. H. Filed June 16, 1955.

Show-Offs by Sherri

For Shoes.
Use since Jan. 28, 1955.

SN 689,698. Chadbourn Hosiery Mills, Incorporated, Charlotte, N. C. Filed June 17, 1955.

Angel-Lace

For Ladies' Hosiery.
Use since Apr. 28, 1953.

SN 689,953. Jack Meltzer, Hollywood, Calif. Filed June 21, 1955.

COUNTER-MATICS

For Shoes.
Use since Apr. 28, 1953.

SN 690,266. Irwill Knitwear Corp., New York, N. Y. Filed June 27, 1955.

Jane J.

Applicant claims ownership of Reg. Nos. 384,596, 384,845, and 387,158.
For Women's and Misses' Sweaters, Suits, Dresses, Skirts, Bathing Suits, and Wraps Made Principally of Knitted Material.
Use since Apr. 11, 1955.

SN 690,286. Maiden Form Brassiere Company, Inc., New York, N. Y. Filed June 27, 1955.

MUCH ADO

For Brassieres.
Use since June 13, 1955.

SN 690,492. I. Schneierson & Sons, Inc., New York, N. Y. Filed June 29, 1955.

SHADO-Stride

Applicant claims ownership of Reg. No. 315,958.
For Ladies' and Children's Slips, Nightgowns, and Petticoats of a Textile Fabric.
Use since Mar. 10, 1933.

SN 690,494. I. Schneierson & Sons, Inc., New York, N. Y. Filed June 29, 1955.

TREASURE MAID

Applicant claims ownership of Reg. No. 293,036.
For Ladies' and Children's Slips, Nightgowns, and Petticoats of a Textile Fabric.
Use since July 10, 1929.

SN 690,495. I. Schneierson & Sons, Inc., New York, N. Y. Filed June 29, 1955.

Loomwear

Applicant claims ownership of Reg. No. 290,053.
For Ladies' and Children's Slips, Nightgowns, and Petticoats of a Textile Fabric.
Use since July 10, 1929.

SN 690,599. Bobbie Brooks Incorporated, Cleveland, Ohio. Filed July 1, 1955.

"Calgary"

For Women's Jackets and Skirts.
Use since Apr. 14, 1955.

SN 690,625. I. C. Isaacs & Company, Inc., Baltimore, Md. Filed July 1, 1955.

SLICFIT

For Ladies' and Girls' Slacks.
Use since June 7, 1955, on ladies' slacks.

SN 690,667. Wonder-Bra Co., Inc., New York, N. Y. Filed July 1, 1955.

Anchors T'Stay

For Brassieres and Bandeaux.
Use since June 1, 1955.

SN 690,668. Wonder-Bra Co., Inc., New York, N. Y. Filed July 1, 1955.

The Secret Key

For Brassieres and Bandeaux.
Use since Sept. 1, 1954.

SN 690,669. Wonder-Bra Co. Inc., New York, N. Y. Filed July 1, 1955.

BUOYS FOR GIRLS

For Brassieres and Bandeaux.
Use since June 3, 1955.

SN 690,717. L'Aiglon Apparel, Inc., Philadelphia, Pa. Filed July 5, 1955.

L'AIGLON

Applicant claims ownership of Reg. Nos. 129,329 and 161,063.
For Women's and Misses' Dresses.
Use since on or about Sept. 25, 1953; and in a different form on women's and misses' washable dresses, on or about Jan. 17, 1919.

SN 690,833. Plymouth Undergarment Co., New York, N. Y. Filed July 6, 1955.

PLYMS

Applicant claims ownership of Reg. No. 578,903.
For Ladies' Panties.
Use since May 25, 1955; and on "Plym" used as a part of the mark "Plym-Skin" on Oct. 28, 1952.

SN 690,905. Rutland Dress Co., Inc., New York, N. Y. Filed July 7, 1955.

Trulie Young

For Dresses.
Use since June 22, 1955.

SN 690,924. Wispese Corp., New York, N. Y. Filed July 7, 1955.

PHIGURE
PIRFECT

For Girdles and Panty Girdles.
Use since June 1, 1955.

SN 691,083. Reich Dress Co., Chicago, Ill. Filed July 11, 1955.

M&R original

Applicant disclaims the word "Original" apart from the mark as shown.
For Women's Dresses.
Use since Dec. 1, 1954.

SN 691,096. Stardust, Incorporated, Poughkeepsie, N. Y. Filed July 11, 1955.

Encompasse

For Brassieres.
Use since June 6, 1955.

SN 691,097. Stardust, Incorporated, Poughkeepsie, N. Y. Filed July 11, 1955.

QUATRELLE

For Brassieres.
Use since June 7, 1955.

SN 691,475. Harry A. Horn, Beverly Hills, Calif. Filed July 18, 1955.

Vera Horn

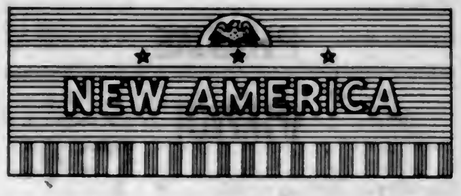
"Vera Horn" is the name of the wife of the applicant and a consent to the use and registration of this name is of record.
For Women's Wearing Apparel—Namely, Cloth Stoles, Boleros, Jackets, Shrugs, Sweaters, Scarves.
Use since Apr. 5, 1955.

SN 691,837. Dennisons, Glens Falls, N. Y. Filed July 25, 1955.

STARLETTA

For Children's Undergarments.
Use since July 18, 1955.

SN 691,946. Jacobs Hosiery Co., Inc., New York, N. Y. Filed July 26, 1955.



The drawing is lined for red and blue.
For Hosiery.
Use since September 1954.

SN 691,973. Van Raalte Company, Inc., New York, N. Y. Filed July 26, 1955.

V. R. DOUBLES

For Women's Hosiery.
Use since June 22, 1955.

CLASS 40

SN 690,796. B. Blumenthal & Co., Inc., New York, N. Y. Filed July 6, 1955.

Beautihorn

For Buttons.
Use since June 16, 1955.

CLASS 42

SN 657,[illegible]3. Thomas Textile Co., Inc., New York, N. Y. Filed Dec. 8, 1953.

Thomas

For Infants' and Children's Towels, Wash Cloths, Towel and Wash Cloth Sets, Receiving Blankets, Bath Sheets, Pillow Cases, Fitted and Plain Sheets.
Use since April 1950.

SN 660,784. Cisco, Inc., New York, N. Y. Filed Feb. 9, 1954.

PORPOISE CLOTH

No exclusive claim is made to the word "Cloth" apart from the mark as shown.
For Shirting Fabrics.
Use since Dec. 20, 1953.

SN 663,257. Dan River Mills, Incorporated, Danville, Va. Filed Mar. 25, 1954.

DAN RIVER

The fashion's woven in . . . can't launder out!

The slogan "The Fashion's Woven in . . . Can't Launder Out!" is disclaimed. Applicant claims ownership of Reg. Nos. 407,813 and 571,996.
For Sheets and Pillow Cases.
Use since Mar. 15, 1953.

SN 676,559. H. I. Thompson Fiber Glass Co., Los Angeles, Calif. Filed Nov. 12, 1954.

DEGLASIL

For Fiber Glass Fabrics.
Use since Sept. 26, 1946.

SN 678,093. Cone Mills Inc., New York, N. Y. Filed Dec. 10, 1954.

Conette

Applicant claims ownership of Reg. Nos. 291,017, 579,451, and others.
For Fabric in the Piece of Cotton and Synthetic Fibers.
Use since Oct. 22, 1954.

SN 678,189. Baracuta (Clothiers) Limited, Manchester, England. Filed Dec. 13, 1954.



Applicant claims ownership of Reg. No. 444,069.
For Waterproof Fabrics—Namely, Coated Textile Raincoat Fabrics.
Use since Dec. 1, 1933.

SN 680,351. Artvale, Inc., New York, N. Y. Filed Jan. 24, 1955.



For Nets, Laces, Ribbons, and Similar Novelty Fabrics.
Use since Jan. 2, 1954.

SN 691,952. Massachusetts Textile Company (Bernhard Altmann) Inc., New York, N. Y. Filed July 26, 1955.

furriale

For Fabrics in the Piece Containing Rabbit Hair and Wool Fabrics.
Use since June 1955.

CLASS 43

SN 690,425. American Viscose Corporation, Philadelphia, Pa. Filed June 29, 1955.

RAYSORB

For Yarns, Threads, and Yarn and Thread Filaments.
Use since June 15, 1955.

SN 693,240. Eastern Thread Mills, Inc., New York, N. Y. Filed Aug. 17, 1955.



For Thread and Yarn.
Use since Dec. 14, 1950.

SN 693,595. Deering Milliken Research Corporation, near Pendleton, S. C. Filed Aug. 24, 1955.

WEDLOCK

For Yarns.
Use since June 23, 1955.

SN 693,660. Caron Spinning Company, Rochelle, Ill. Filed Aug. 25, 1955.

Doreen

For Yarn.
Use since Aug. 5, 1955.

CLASS 44

SN 677,980. Parfour, Inc., New York, N. Y. Filed Dec. 8, 1954.



For Nursing Bottle Holders.
Use since Nov. 22, 1954.

SN 683,436. Sales Affiliates, Inc., New York, N. Y. Filed Mar. 14, 1955.

Sheer-Test

For Paper Wraps Used When Winding Hair in the Process of Cold Permanent Hair Waving.
Use since Jan. 18, 1955.

SN 689,216. Electro-Physical Laboratories, Inc., Boston, Mass. Filed June 9, 1955.

ultronic

For Medical Therapy Equipment—Namely, Equipment for Ultra-Sonic Wave Therapy Including Devices for Application to the Body, and Component Parts Thereof.
Use since Apr. 23, 1955.

SN 689,249. E. W. Teltscher, Inc., New York, N. Y. Filed June 9, 1955.

TEL-FLEX

For Foot Corrective Devices—Namely, Arch Supports, Bunion Bandages, and Hammer Toe Correctors.
Use since May 25, 1955.

CLASS 45

SN 655,949. Ethan Allen, Denver, Colo. Filed Nov. 6, 1953.

NIKI

For Powder for Mixture With Fruit Juice To Form a Beverage.
Use since Oct. 13, 1953.

SN 675,772. Ben Dumont, Indianapolis, Ind., to Jump Corporation, Indianapolis, Ind. Filed Nov. 1, 1954.

Jump-Up

Applicant claims ownership of Reg. No. 342,773.
For Carbonated Soft Drinks.
Use since Sept. 29, 1954.

SN 681,056. B. J. Barry & Company, Inc., New York, N. Y. Filed Feb. 4, 1955.

Potomac

For Cotton Duck.
Use since Feb. 26, 1954.

SN 684,444. M. J. Mfg. Company, Bridgeport, Conn. Filed Mar. 29, 1955.

Tot-wash

For Bath Mitts.
Use since Dec. 9, 1954.

SN 685,238. Avila Fabrics, Inc., New York, N. Y. Filed Apr. 11, 1955.

TINTONE

For Woven Textile Fabrics of Yarn-Dyed Nylon Especially for Making Outerwear and Bathing Suits.
Use since Jan. 24, 1955.

SN 685,966. Eagle Clothes, Inc., Brooklyn, N. Y. Filed Apr. 21, 1955.

EAGLE CHARVE

Applicant claims ownership of Reg. Nos. 154,504, 413,454, and others.
For Piece Goods of Wool and Synthetic Fibers.
Use since Mar. 28, 1955.

SN 685,972. Eagle Clothes, Inc., Brooklyn, N. Y. Filed Apr. 21, 1955.

EAGLE NATURAMA

Applicant claims ownership of Reg. Nos. 154,504, 413,454, and others.
For Piece Goods of Wool and Synthetic Fibers.
Use since Mar. 28, 1955.

SN 686,719. Arnel-Plastron, Inc., New York, N. Y. Filed May 3, 1955.

Arnel

For Fabrics and Plastic Film for Making Window Shades.
Use since 1933.

SN 687,317. The Pantasote Company, Passaic, N. J. Filed May 11, 1955.

WYNDASOTE

Applicant claims ownership of Reg. No. 299,972.
For Coated Textile Fabrics in the Piece Useful for Window Shades and All Other Purposes for Which Fabrics Having Waterproof, Water Resisting or Water Shedding Qualities May Be Used.
Use since December 1925.

SN 689,494. Joseph A. Kaplan & Sons, Inc., New York, N. Y. Filed June 14, 1955.



Applicant claims ownership of Reg. No. 606,488.
For Plastic and Fabric Shower Curtains and Matching Bathroom Window Curtains.
Use since June 1954.

SN 689,563. D. B. Fuller & Co., Inc., New York, N. Y. Filed June 15, 1955.

RUSTICO

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since Feb. 10, 1954.

SN 690,333. Selinger Textile Corporation, New York, N. Y. Filed June 27, 1955.

WISP-A-CORD

For Piece Goods of Cotton.
Use since June 17, 1955.

SN 691,205. D. B. Fuller & Co., Inc., New York, N. Y. Filed July 13, 1955.

LORIENT

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since Mar. 23, 1954.

SN 691,536. Douglas Mills Sales Corp., New York, N. Y. Filed July 19, 1955.

NUB-SAC

For Textile Fabrics in the Piece of Wool, Worsted, Synthetic Fibres and Mixtures Thereof.
Use since May 2, 1955.

SN 691,631. McCampbell & Company, Inc., New York, N. Y. Filed July 20, 1955.

TASK FORCE TWILL

The word "Twill" is disclaimed apart from the mark shown.
For All Cotton Twill, a Fabric.
Use since May 19, 1955.

SN 691,850. D. B. Fuller & Co., Inc., New York, N. Y. Filed July 25, 1955.

BASKATONE

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since Feb. 16, 1953.

SN 684,889. Sociedad Anonima Vichy Catalan, Barcelona, Province of Barcelona, Spain. Filed Apr. 4, 1955.



No claim is made to the exclusive use of the phrase "El Vichy Catalan" apart from and except in association with the rest of the mark as shown. Applicant claims ownership of Spanish Reg. No. 72,463, dated Jan. 26, 1931.
For Mineral Water.

SN 691,836. Cramore Fruit Products, Inc., Point Pleasant, N. J. Filed July 25, 1955.



For Fruit Flavoring Preparation in Dehydrated Form for Beverage Purposes.
Use since in the year 1942.

CLASS 46

SN 574,571. Chin & Lee Co., Inc., New York, N. Y. Filed Feb. 26, 1949.



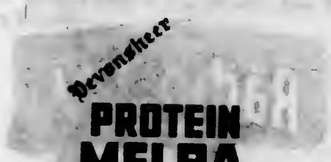
For Canned Chop Suey and Noodles.
Use since April 1939.

SN 645,826. Mogen David Food Products Co., Chicago, Ill. Filed Apr. 23, 1953.

Mogen David

For Kosher Gelatin Dessert; Kosher Salami; Tomato Juice; Kosher Chicken Soup; Canned Peas; Kosher Mandlen; Brown Buckwheat Groats; Ginger; Cocoa; Kosher Matzos; Tomato Catsup; Kosher Borsht; Kosher Creamed Schav; Kosher Dill Pickles; and Kosher Gefilte Fish.
Use since on or about Apr. 1, 1953.

SN 658,704. Devonsheer Melba Corporation, West New York, N. J. Filed Dec. 29, 1953.



Exclusive use of the word "Protein" and the word "Melba" is not claimed except in conjunction with other features of the mark. Applicant claims ownership of Reg. Nos. 299,766, 421,016, and 532,982.
For Toast.
Use since Nov. 2, 1953.

SN 666,202. Merck & Co., Inc., Rahway, N. J. Filed May 12, 1954.

CORBICURE

For Preparation for Curing of Meats.
Use since Dec. 22, 1953.

SN 669,514. The Westerners, Encino, Calif. Filed July 6, 1954.

TIFFIN-TIME
TEA

No claim is made herein to the word "Tea."
For Tea.
Use since Oct. 16, 1952.

SN 670,248. Stavanger Canning Co. A/S, Stavanger, Norway. Filed July 19, 1954.



Applicant disclaims the following features shown in the drawing except as shown: the word "Brand" and the representation of a fish as well as the shape of the label.
For Canned Sardines.
Use since 1909.
Subj. to Intf. with Reg. No. 589,573.

SN 673,178. Greekburger Corporation, Newburgh, Ind. Filed Sept. 14, 1954.



For Sandwiches.
Use since June 6, 1949.
Subj. to Intf. with SN 683,900.

SN 674,833. National Confections Co., Florence, S. C. Filed Oct. 14, 1954.

Radio-TV

The drawing is lined for blue.
For Raw Popcorn and Coconut Oil for Use in Popping Corn.
Use since Oct. 1, 1954.

SN 679,048. Hygrade Food Products Corporation, Detroit, Mich. Filed Dec. 28, 1954. Sec. 2(f).

Carstens

For Bacon, Corned Beef, Frankfurters, Ham, Lard, Luncheon Meat, Meat Loaf (Combination Loaf and Pepper Loaf), Picnic, Sausage, Shortening Made From Vegetable and Animal Fats, and Dog Food.
Use since July 1, 1904, on bacon, ham, and lard.

SN 681,988. Butler Food Products Co., Oakland, Calif. Filed Feb. 21, 1955.

ALICE BUTLER'S

For Salad Dressing.
Use since on or about Nov. 27, 1954.

SN 682,024. The Kroger Co., Cincinnati, Ohio. Filed Feb. 21, 1955.

Springcrest

Applicant claims ownership of Reg. Nos. 325,422 and 350,355.
For Fresh Eggs.
Use since 1934.

SN 683,586. Dressel's Bakeries, Chicago, Ill. Filed Mar. 16, 1955.

FRIGI-FREEZ

For Frozen Cakes.
Use since Feb. 3, 1955.

SN 683,854. Corn Products Refining Company, New York, N. Y. Filed Mar. 21, 1955.

DEXTROPEP

For Livestock Feeds and Poultry Feeds.
Use since Feb. 8, 1955.

SN 686,656. Kellogg Company, Battle Creek, Mich. Filed May 2, 1955.

Snacketts

For Sugar Coated Corn.
Use since Nov. 9, 1954.

SN 686,712. Wise Potato Chip Co., Berwick, Pa. Filed May 2, 1955.

Ridgies

For Potato Chips.
Use since Feb. 21, 1955.

SN 686,885. Chase & Company, Sanford, Fla. Filed May 5, 1955.

SPADE

Applicant claims ownership of Reg. No. 266,396.
For Fresh Citrus Fruits and Fresh Vegetables.
Use since December 1911.

SN 687,390. Magic Maid Foods, Inc., New York, N. Y. Filed May 12, 1955.

Magic Maid

For Frozen Baked Apples.
Use since Apr. 20, 1955.

SN 688,187. The Procter & Gamble Company, Cincinnati, Ohio. Filed May 24, 1955.

ATLAS

Applicant claims ownership of Reg. Nos. 104,587 and 549,375.
For Edible Vegetable Oils.
Use since Mar. 18, 1955.

CLASS 47

SN 689,016. Beaulieu Vineyard, San Francisco, Calif. Filed June 7, 1955.

Beaulieu
BV

The drawing is lined for green. Applicant claims ownership of Reg. Nos. 375,752 and 352,844.
For Champagnes.
Use since Apr. 1, 1955; "Beaulieu Vineyard" since 1900; "BV" since Aug. 1, 1937; the signature "G. Latour" since 1941.

CLASS 48

SN 689,569. Gunther Brewing Company, Baltimore, Md. Filed June 15, 1955.

The drawing is lined for the colors red and gold.
For Beer.
Use since Feb. 28, 1955.

CLASS 49

SN 674,915. H. Underberg-Albrecht, Rheinberg, Germany. Filed Oct. 15, 1954. Sec. 2(f).

UNDERBERG

For Alcoholic Bitters.
Use since on or about 1846.

SN 686,441. Glenmore Distilleries Company, Louisville, Ky. Filed Apr. 28, 1955.

OLD KENTUCKY TAVERN

Applicant claims ownership of Reg. No. 114,576.
For Bourbon Whiskey.
Use since Feb. 8, 1955.

SN 688,939. L. E. Jung & Wulff Co., Inc., New York, N. Y. Filed June 6, 1955. Sec. 2(f).

L. E. JUNG
& WULFF CO.

Applicant claims ownership of Reg. No. 326,252.
For Whiskey.
Use since Jan. 1, 1928.

CLASS 50

SN 614,393. Richard Blow, d. b. a. Montici, New York, N. Y. Filed May 25, 1951.

The mark is inlaid on the goods so that the acute angles of the two adjacent triangles are pointed upwards and the base line of the mark lies along the base line of the goods marked or parallel thereto.
For Monumental Marble Inlay Slabs, Obelisks, and Marble Decorative Plaques.
Use since May 5, 1951.

SN 659,802. The Miles Griffin Company Limited, London, England. Filed Jan. 20, 1954.

RŌTAIR

Applicant claims priority under Sec. 44(d). British application filed Aug. 31, 1953, Reg. No. 721,371, dated Aug. 31, 1953.
For Mobiles Made of Paper or Cardboard for Advertising, Decorating, and Entertainment Purposes.

SN 662,388. Prismo Safety Corporation, Huntingdon, Pa. Filed Mar. 10, 1954.

PLASTIX

For Reflective Permanent Type Pavement Markings.
Use since Aug. 1, 1953.

SN 672,113. W. L. Stensgaard and Associates, Inc., Chicago, Ill. Filed Aug. 23, 1954.

Feltuk

For Paper and Fabric Composition Material.
Use since July 7, 1954.

SN 672,243. Polymers, Inc., Middlebury, Vt. Filed Aug. 25, 1954.

PLASTI-TWIST

For Ornaments of Interwoven Plastic Fibers for Christmas Tree Decoration and Similar Purposes.
Use since June 9, 1954.

SN 678,403. Klear-Vu Corporation, New York, N. Y. Filed Dec. 15, 1954.

Polyspun

For Appliance Covers—Namely, Electric Mixer Covers and Toaster Covers of the Throw-Over Type.
Use since Oct. 13, 1952.

SN 682,742. Nora Keezer, Boston, Mass. Filed Mar. 3, 1955.

Planoramics

For Planning Kit Including Vinyl Cut-Outs Representing Desks, Machinery, Furniture and the Like, Pencils and Sheet Material To Plan the Layouts of the Contents of Rooms and Buildings.
Use since Dec. 1, 1954.

SN 685,487. The Felters Company, Boston, Mass. Filed Apr. 14, 1955.

FILON d'OR

The English translation of "Filon d'Or" is "Thread of Gold."
For Felt in the Piece.
Use since Apr. 6, 1955.

SN 685,805. American Ladder Institute, Chicago, Ill. Filed Apr. 19, 1955. COLLECTIVE MARK.

AMERICAN LADDER INSTITUTE

For Ladders.
Use since 1932.

SN 686,215. Office O' the Month, Inc., Tulsa, Okla. Filed Apr. 25, 1955.

OFFICE O' THE MONTH

For Unit Packaged Office Equipment—Namely, a Packaged Unit, Sold as Such and Which May Consist of Desks, Credenzas, Chairs, Tables, Sofas, Bars, Refrigerated Units, Chair Mats, Smoking Sets, Pen Sets, Memorandum Sets, Pictures, Draperies, Floor Coverings, Wall Coverings, Planter Boxes, Etc.
Use since Feb. 18, 1955.

SN 686,422. Bumpers, Inc., East Cleveland, Ohio, to 2534 Detroit Avenue, Inc., Cleveland, Ohio. Filed Apr. 28, 1955.

FLEX-O

For Bumpers, Characterized by Elements of Yieldable Material Clamped Between Metallic Mounting Brackets.
Use since on or about Jan. 14, 1955.

SN 686,423. Donald L. Burrus, d. b. a. Alaska Native Arts and Crafts, Juneau, Alaska. Filed Apr. 28, 1955.

The drawing is lined for black but no claim is made to color.
For Trinkets, Souvenirs, and Novelties, Such as Ivory Replicas of Native Animals and Birds, Totem Poles, Baskets, Paperweights, Etc.
Use since Apr. 28, 1950.

SN 689,185. Union Wadding Company, Pawtucket, R. I. Filed June 8, 1955.

GRASS-TEX

For Wadding With Decorative Surfaces for Covering Portions Desired To Be Decorated.
Use since May 27, 1955.

SN 689,206. Bourges Color Corporation, New York, N. Y. Filed June 9, 1955. Sec. 2(f).

BOURGES (Standardized) SOLOTONE

The word "Standardized" is disclaimed apart from the mark as shown.
For Plastic Sheets Used in Connection With a Process of Color Reproduction.
Use since at least as early as 1939; and at least as early as 1925 as to "Bourges."

SN 689,638. Multi-Krome Color Process, Inc., Baltimore, Md. Filed June 16, 1955.

MULTI - KROME

For Color Separation Negatives and Plates for Multicolor Printing in the Lithographic Art.
Use since Feb. 24, 1954, on color separation negatives.

SN 690,236. Dashew Business Machines, Inc., Culver City, Calif. Filed June 27, 1955.

DASHaplates

For Addressing and Identification Plates.
Use since June 1951.

SN 690,238. Dashew Business Machines, Inc., Culver City, Calif. Filed June 27, 1955.

DASHamats

For Addressing Machine Plates for Addressing Purposes.
Use since July 1951.

CLASS 51

SN 659,294. M'Lady, Inc., Tuscaloosa, Ala. Filed Jan. 11, 1954.

M'Lady

For Preparation for Conditioning of the Hair and Scalp, Hand Lotion, Hand Cream, Face Cream, Baby Cream, and Cream Deodorant.
Use since Jan. 6, 1954.

SN 685,610. H. Perrigo Company, Allegan, Mich., to Lee Limited, Beverly Hills, Calif. Filed Apr. 15, 1955.

Dri-Mist

For Sprayable Body Deodorant With Antiperspirant Properties.
Use since Feb. 15, 1952.

CLASS 52

SN 673,337. Clairol Incorporated, Stamford, Conn. Filed Sept. 17, 1954.

CLAIROL

Applicant claims ownership of Reg. Nos. 302,399, 582,677, and others.
For Shampoos and Shampoo Tinting Preparations for the Hair.
Use since on or about Jan. 16, 1931.

SN 673,339. Clairol Incorporated, Stamford, Conn. Filed Sept. 17, 1954.

CLAIROL

Applicant claims ownership of Reg. Nos. 302,399, 582,677, and others.
For Shampoos and Shampoo Tinting Preparations for the Hair.
Use since on or about Oct. 9, 1931.

SN 674,876. E. F. Drew & Co. Inc., New York, N. Y. Filed Oct. 15, 1954.

DREW
HY-TESS CK

For Dishwashing Composition.
Use since Aug. 2, 1954.

SN 679,977. Center Chemical Company, Atlanta, Ga. Filed Jan. 17, 1955.

The lining is for blue and yellow.
For Cleaning and Sanitary Chemical Compounds and Mixtures Used in Cleaning Buildings of All Types and Fixtures and Attachments Therein; To Clean All Types of Equipment—Namely, Industrial Equipment, Transportation Equipment and Food Processing Equipment; To Clean Meat in the Process of Being Slaughtered for Human Consumption; To Clean All Types of Sewer Lines; for Use in Laundries in the Course of Cleaning Clothing.
Use since January 1946.

SN 681,229. Henkel & Cie GMBH, Dusseldorf-Holthausen, Germany. Filed Feb. 7, 1955.

PFD

Applicant claims ownership of Reg. No. 323,660.
For Special Agents for Cleaning Oil Tanks and Ship Tanks.
Use since in the year 1947.

SN 683,095. Lewis C. Brooks, Milwaukee, Wis. Filed Mar. 9, 1955.

FO

For All-Purpose Cleanser in Powdered Form for Household Use.
Use since Jan. 10, 1955.

SN 684,262. Atlantic Chemical & Equipment Co., Atlanta, Ga. Filed Mar. 28, 1955.

Ace

For Condenser Treatment Blocks, Condenser Cleaner, and Ice Machine Cleaner.
Use since June 9, 1952.

SN 684,649. J. C. & J. Field Limited, Amersham, England. Filed Mar. 31, 1955.

BUCKINGHAM LAVENDER

Applicant claims ownership of British Reg. No. 724,834, dated Dec. 15, 1953.
For Shampoos and Soaps.

SN 684,963. E. J. C. Perry, d. b. a. Griswold and Perry Co., San Francisco, Calif. Filed Apr. 5, 1955.

BOOM

For Detergents Used for Washing and Cleansing Purposes.
Use since November 1954.

SN 685,263. Nicholas J. Feola, d. b. a. Luston Products Co., Charlestown, Mass. Filed Apr. 11, 1955.

DOUBLE-GLO

For Cleanser and Deodorizer for Household Use.
Use since Mar. 16, 1955.

SN 685,479. Tom Daly Electric Inc., Barberton, Ohio. Filed Apr. 14, 1955.

if

For General Purpose Detergents Particularly Adapted for Cleaning Action and for Use With Automatic and Conventional Washing Machines.
Use since on or about Apr. 1, 1955.

SN 686,730. Essential Chemicals Co., Milwaukee, Wis. Filed May 3, 1955.

APRIL

For Soap and Detergent for Household and Laundry Use.
Use since Apr. 1, 1945.

SN 686,977. Houbigant, Inc., New York, N. Y. Filed May 6, 1955.

THUNDERBIRD

For Soap.
Use since Apr. 27, 1953.

SN 687,049. Caled Products Company, Inc., Cottage City, Brentwood, Md. Filed May 9, 1955.

SUPER "C"

For Dry Cleaning Soap for Fabrics.
Use since Feb. 9, 1955.

SN 687,329. Trico Products Corporation, Buffalo, N. Y. Filed May 11, 1955.

TRICO

The representations of the windshield wiper and the automobile are disclaimed apart from the mark shown. Applicant claims ownership of Reg. No. 370,432.
For Glass Cleaner.
Use since on or about June 1, 1947.

SN 688,086. Shulton, Inc., Clifton, N. J. Filed May 23, 1955.

FRIENDSHIP'S GARDEN

Applicant claims ownership of Reg. Nos. 376,953 and 390,392.
For Toilet Soap.
Use since July 31, 1903.

SN 688,531. Edwin W. Hirsch, d. b. a. Research Laboratories, Chicago, Ill. Filed May 31, 1955.

SIR-V-COL

For Antiseptic Soap.
Use since Jan. 15, 1955.

SN 689,856. New Process Chemical Co., Inc., San Francisco, Calif. Filed June 20, 1955.

PROCOSUDS

For Detergent Powder for Industrial and Marine Use.
Use since 1940.

SN 690,065. Colgate-Palmolive Company, Jersey City, N. J. Filed June 23, 1955.

TWO DO

For Shampoo.
Use since Oct. 29, 1954.

SN 695,636. Lever Brothers Company, New York, N. Y. Filed Sept. 30, 1955.

Wisk

Applicant claims ownership of Reg. No. 441,100.
For Detergent for Laundry Use.
Use since Sept. 23, 1955.

SN 695,736. Louis L. Love, d. b. a. Pitman Laboratories, East Pitman, N. J. Filed Oct. 3, 1955.

ZIP-O

For Concentrated Cleaning Compound for Cleaning Rugs, Upholstery, Glass, and Hard Surfaces.
Use since September 1943.
Subj. to Intf. with SN 695,936.

SN 695,936. Pitman Laboratory Sales, Inc., Philadelphia, Pa. Filed Oct. 5, 1955.

ZIP-O

For Cleaner for Upholstery, Rugs, and Other Textile Materials, as Well as for Other Surfaces.
Use since in or about the year 1948.
Subj. to Intf. with SN 695,736.

SERVICE MARKS

CLASS 100

SN 679,006. National Industrial Laundries, Elizabeth, N. J. Filed Dec. 27, 1954.



Applicant claims ownership of Reg. Nos. 534,626, 550,386, and others.
For Rental of Work Clothes on a Replacement Basis, the Clothes When Soiled Being Replaced by Freshly Laundered Ones.
Use since on or about Nov. 1, 1954.

CLASS 101

SN 664,730. Ben Baker Blase, d. b. a. National Theatre Broadcasting, San Jose, Calif. Filed Apr. 19, 1954.

"Visible and Counted Audiences"

For Advertising the Goods and Services of Others Through the Medium of Transcriptions and Recordings Prepared by Applicant for Use in Theaters.
Use since Apr. 1, 1950.

CLASS 104

SN 662,130. National Broadcasting Company, Inc., New York, N. Y. Filed Mar. 5, 1954.

NBC

Applicant claims ownership of Reg. Nos. 370,295 and 328,991.
For Radio and Television Broadcasting.
Use since Jan. 1, 1954.

CLASS 105

SN 665,767. Grace Line Inc., New York, N. Y. Filed May 5, 1954. Sec. 2(f) as to "Grace."

GRACE LINE

The word "Line" is disclaimed apart from the mark.
For Water Transportation of Passengers and Cargo.
Use since Apr. 14, 1921.

SN 678,846. T. Dennis Duffy, d. b. a. Caravan Tours, Chicago, Ill. Filed Dec. 23, 1954.

CARAVAN TOURS

For Personally Escorted Travel Tours.
Use since February 1953.

CLASS 106

SN 650,212. Rainbowlab, Inc., New York, N. Y. Filed July 13, 1953.

PROCESSED BY Rainbowcolor

For Developing, Printing, Coloring, and Reproducing Motion Picture Color Film.
Use since Apr. 26, 1951.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

618,823. "QUALITY COUNTS" OUR WATCHWORD AND DESIGN. W. H. Robinson, Inc. SN 664,471. Pub. 10–11–55. Filed 4–13–54.

618,824. DANTE AND DESIGN. Clinchfield Coal Corporation. SN 679,516. Pub. 10–11–55. Filed 1–6–55.

618,825. CAMBI-LUX. Gellich Leather Company. SN 683,107. Pub. 10–11–55. Filed 3–9–55.

618,826. CAMBI-SMOOTH. Gellich Leather Company. SN 683,109. Pub. 10–11–55. Filed 3–9–55.

618,827. CAMBI-CORK. Gellich Leather Company. SN 683,110. Pub. 10–11–55. Filed 3–9–55.

618,828. GREAT W. Tubbs Cordage Company. SN 683,244. Pub. 10–11–55. Filed 3–10–55.

618,829. PENNWHITE. Albert Trostel & Sons Company. SN 683,327. Pub. 10–11–55. Filed 3–11–55.

618,830. QUSO. Philadelphia Quartz Company. SN 683,427. Pub. 10–11–55. Filed 3–14–55.

618,831. DETORF. Deutsche Torfhandelsgesellschaft mit Beschrankter Haftung. SN 688,001. Pub. 10–11–55. Filed 6–7–55.

CLASS 2

618,832. CRYSTALON. International Molded Plastics, Inc. SN 647,356. Pub. 1–25–55. Filed 5–20–53.

CLASS 3

618,833. AIR-MAN. Abercrombie & Fitch Company. SN 683,253. Pub. 10–11–55. Filed 3–11–55.

CLASS 4

618,834. REPRESENTATION OF A GEAR. The National Cash Register Company. SN 665,719. Pub. 10–11–55. Filed 5–4–54.

618,835. TRULAP AND DESIGN. Wheel Trueing Tool Company. SN 669,954. Pub. 10–11–55. Filed 7–13–54.

618,836. PERIMBA. Edward H. Terry. SN 681,220. Pub. 10–11–55. Filed 2–7–55.

CLASS 6

618,837. ENDEW. John Clarke & Co., Inc. SN 649,213. Pub. 1–19–54. Filed 6–23–53.

618,838. SANI SHU. Dr. Preste Shoe Sterilizer, Inc., d. b. a. Dr. Preste's Laboratory. SN 651,941. Pub. 10–11–55. Filed 8–17–53.

618,839. PROPON 4. Pittsburgh Coke & Chemical Company. SN 668,696. Pub. 10–11–55. Filed 6–22–54.

618,840. DESIGN OF THREE ARROWS. Pest Control Limited, now by change of name to Fisous Pest Control Limited. SN 668,921. Pub. 10–11–55. Filed 6–25–54.

618,841. PERGLOW. The Harshaw Chemical Company. SN 669,330. Pub. 10–11–55. Filed 7–2–54.

618,842. METALECTRO. Metalectro Corporation. SN 669,788. Pub. 10–11–55. Filed 7–12–54.

618,843. ASBESTEX. Wilco Company. SN 670,874. Pub. 10–11–55. Filed 7–30–54.

618,844. PB-1. The Pennsylvania Salt Manufacturing Company. SN 671,668. Pub. 10–11–55. Filed 8–13–54.

618,845. PHIX. Chemley Products Company. SN 672,795. Pub. 10–11–55. Filed 9–7–54.

618,846. INCOLASTIC. Inter-Coastal Paint Corporation. SN 681,519. Pub. 10–11–55. Filed 2–11–55.

CLASS 9

618,847. ALTITE. Federal Cartridge Corporation. SN 683,285. Pub. 10–11–55. Filed 3–11–55.

CLASS 10

618,848. FIESTAR. Fiestar, Inc. SN 679,661. Pub. 10–11–55. Filed 1–10–55.

CLASS 11

618,849. EMPRESS AND DESIGN. Peerless Imperial Co., Inc. SN 683,538. Pub. 10–11–55. Filed 3–15–55.

618,850. XLNT AND DESIGN. Peerless Imperial Co., Inc. SN 683,550. Pub. 10–11–55. Filed 3–15–55.

CLASS 12

618,851. VENTAIR AND DESIGN. Hayman Window Company, to Ventaire Company. SN 636,636. Pub. 12–1–53. Filed 10–15–52.

618,852. GUN GUM. Douglas Holt (Established 1919) Limited. SN 651,054. Pub. 10–11–55. Filed 7–29–53.

618,853. PERFO BOARD. W. L. Dixon Co. SN 660,476. Pub. 11–9–54. Filed 2–2–54.

618,854. KOPESEAL AND DESIGN. The Presstite Engineering Company. SN 661,499. Pub. 1–4–55. Filed 2–23–54.

618,855. NITROPHYL AND DESIGN. Cellular Rubber Products, Inc. SN 667,866. Pub. 10–11–55. Filed 6–8–54.

618,856. KOLOR KUT STONE. Brixite Manufacturing Company, Inc. SN 670,897. Pub. 10–11–55. Filed 8–2–54.

618,857. BLOCKTITE. Fred A. Wilson Company. SN 672,200. Pub. 10–11–55. Filed 8–24–54.

618,858. BLOCKTITE QUICKSET. Fred A. Wilson Company. SN 672,201. Pub. 10–11–55. Filed 8–24–54.

618,859. AMFAB. American Fabricators, a Division of Bellingham Shipyards Co. SN 678,952. Pub. 6–28–55. Filed 12–27–54.

618,860. STEELBILT. Steelbilt, Inc. SN 679,350. Pub. 10–11–55. Filed 1–3–55.

CLASS 13

618,861. HORTOCLOCHE. Jonco Products. SN 647,694. Pub. 10–11–55. Filed 5–26–53.

618,862. SEA-VIEW. The Kraissl Company, Inc. SN 658,465. Pub. 10–11–55. Filed 12–23–53.

618,863. MELNOR. Melnor Metal Products Co., Inc. SN 668,267. Pub. 10–11–55. Filed 6–15–54.

618,864. HANOVER STAR BRAND AND DESIGN OF STAR. Hanover Wire Cloth Division, Continental Copper & Steel Industries, Inc. SN 671,430. Pub. 10–11–55. Filed 8–10–54.

618,865. SHOWERINGS. Joseph A. Kaplan & Sons, Inc. SN 680,889. Pub. 10–11–55. Filed 2–1–55.

618,866. TRI-CLAMP. Ladish Co. SN 684,669. Pub. 10–4–55. Filed 3–31–55.

618,867. TRIANGLE T AND DESIGN. Triangle Conduit & Cable Co., Inc. SN 684,897. Pub. 10–4–55. Filed 4–4–55.

618,868. "HI TI." Standard Pressed Steel Company. SN 684,981. Pub. 10–11–55. Filed 4–5–55.

618,869. KLEARCOR. Western Plastics Corporation. SN 685,541. Pub. 10–4–55. Filed 4–14–55.

618,870. DESIGN OF KEY BOW. Schlage Lock Company. SN 685,762. Pub. 10–11–55. Filed 4–18–55.

618,871. POPPET. Universal Baby Bath Company Limited. SN 685,787. Pub. 10–4–55. Filed 4–18–55.

CLASS 14

618,872. OKUN'S ORIGINAL AND DESIGN. Abe L. Okun. SN 661,489. Pub. 10–11–55. Filed 2–23–54.

618,873. NIONEL. The International Nickel Company, Inc. SN 685,909. Pub. 10–11–55. Filed 4–20–55.

618,874. JALTEN. Jones & Laughlin Steel Corporation. SN 688,935. Pub. 10–11–55. Filed 6–6–55.

618,875. PERMA-TIN. Permalatan Welding Alloys, Inc. SN 689,167. Pub. 10–4–55. Filed 6–8–55.

618,876. UNIFORM AND DESIGN. The American Metal Company, Limited. SN 689,202. Pub. 10–11–55. Filed 6–9–55.

618,877. VAPOSEAL. Standard Packaging Corporation. SN 689,671. Pub. 10–4–55. Filed 6–16–55.

CLASS 15

618,878. SULFLO. Sulflo Inc. SN 672,117. Pub. 10–4–55. Filed 8–23–54.

618,879. TRIANGLE. Triangle Refineries, Inc. SN 677,109. Pub. 10–4–55. Filed 11–22–54.

618,880. GITS-ZIT. Gits-Zit Oil Products Company. SN 677,149. Pub. 10–11–55. Filed 11–23–54.

618,881. QUAKER CITY AND DESIGN. Pennsylvania Petroleum Products Co. SN 679,322. Pub. 10–4–55. Filed 1–3–55.

618,882. WAXGARD. National Wax Company. SN 682,819. Pub. 10–11–55. Filed 3–4–55.

618,883. INFILREX. Socony-Vacuum Oil Company, Incorporated, now by change of name Socony Mobil Oil Company, Inc. SN 682,831. Pub. 10–11–55. Filed 3–4–55.

CLASS 16

618,884. CHIEF, ETC., AND DESIGN. Chicago Paints, Inc. SN 650,354. Pub. 10–4–55. Filed 7–16–53.

618,885. CHICAGO PAINTS, INC. AND DESIGN OF INDIAN HEAD. Chicago Paints, Inc. SN 650,356. Pub. 10–4–55. Filed 7–16–53.

618,886. SANILAC. Socony Paint Products Company. SN 668,475. Pub. 10–4–55. Filed 6–18–54.

618,887. GEN-FLO. The General Tire & Rubber Company. SN 681,156. Pub. 10–4–55. Filed 2–7–55.

618,888. MALFA. F. Weber Co. SN 683,459. Pub. 10–4–55. Filed 3–14–55.

618,889. MIGHTYPLATE. Panther Oil & Grease Mfg. Co. SN 686,329. Pub. 10–4–55. Filed 4–26–55.

618,890. VENOSTONE. The Reardon Company. SN 687,412. Pub. 10–4–55. Filed 5–12–55.

618,891. REPRESENTATION OF A MILITARY MAN. General Paint Corporation. SN 688,524. Pub. 10–4–55. Filed 5–31–55.

618,892. DEBANODE. The Debevoise Company. SN 688,806. Pub. 10–4–55. Filed 6–3–55.

618,893. SILVER LABEL. The Sargent-Gerke Co. SN 689,083. Pub. 10–11–55. Filed 6–7–55.

CLASS 18

618,894. CANDULES. Chase Chemical Company. SN 652,097. Pub. 10–4–55. Filed 8–21–53.

618,895. CODASPRO. Van Felt and Brown, Inc. SN 669,831. Pub. 9–13–55. Filed 7–12–54.

618,896. REPTILASE. Pentapharm A. G. SN 672,093. Pub. 10–4–55. Filed 8–23–54.

618,897. REAL-LIEF. Edward M. Jaffe, d. b. a. Wilmington Drug Company and Real-Lief Products Company. SN 674,892. Pub. 10–4–55. Filed 10–15–54.

618,898. FASTONE. Fastone, Inc. SN 677,208. Pub. 10–11–55. Filed 11–24–54.

618,899. RENOGRAFIN. Olin Mathieson Chemical Corporation. SN 677,587. Pub. 10–11–55. Filed 12–1–54.

618,900. CRADOL. Benson-Nuen Laboratories, Inc. SN 677,929. Pub. 10–11–55. Filed 12–8–54.

618,901. RESTRYL. Flents Products Co. Inc. SN 678,385. Pub. 10–11–55. Filed 12–15–54.

618,902. TUCO. The Upjohn Company. SN 680,328. Pub. 10–11–55. Filed 1–21–55.

618,903. UPCO. The Upjohn Company. SN 680,335. Pub. 10–11–55. Filed 1–21–55.

618,904. PLUS-FORM. Wate-On Company. SN 680,829. Pub. 10–11–55. Filed 1–31–55.

618,905. RECANESCINE. Riker Laboratories, Inc. SN 681,205. Pub. 10–11–55. Filed 2–7–55.

618,906. PARADORMIN AND DESIGN. Dormin, Inc. SN 681,997. Pub. 10–4–55. Filed 2–21–55.

618,907. VERAPENE. Henry K. Wampole & Company, Incorporated. SN 682,366. Pub. 10–4–55. Filed 2–25–55.

618,908. HITACIN. Kilea & Hanburys, Limited. SN 682,612. Pub. 10–11–55. Filed 3–2–55.

618,909. RAUDRINAL. Olin Mathieson Chemical Corporation. SN 682,652. Pub. 10–4–55. Filed 3–2–55.

618,910. FOSFREE. Mission Pharmacal Company. SN 683,126. Pub. 10–4–55. Filed 3–9–55.

618,911. IROMIN-G. Mission Pharmacal Company. SN 683,128. Pub. 10–4–55. Filed 3–9–55.

618,912. PRULET. Mission Pharmacal Company. SN 683,129. Pub. 10–4–55. Filed 3–9–55.

618,913. PREVEDERM. Lewis A. Gross, d. b. a. Lag Products Co. and Lag Chemical Co. SN 683,197. Pub. 10–4–55. Filed 3–10–55.

618,914. CORTOMYCIN. Schering Corporation. SN 683,317. Pub. 10–11–55. Filed 3–11–55.

618,915. BLOCKAIN. George A. Breon & Company. SN 683,575. Pub. 10–11–55. Filed 3–16–55.

618,916. STROCILLIN. Abbott Laboratories. SN 683,647. Pub. 10–4–55. Filed 3–17–55.

618,917. MYSTECLIN. Olin Mathieson Chemical Corporation. SN 683,694. Pub. 10–11–55. Filed 3–17–55.

618,918. GALPHA. Galex Chemical Company. SN 683,770. Pub. 10–11–55. Filed 3–18–55.

618,919. ATARAX. Chas. Pfizer & Co., Inc. SN 683,803. Pub. 10–11–55. Filed 3–18–55.

618,920. DRACINOL. Schering Corporation. SN 684,157. Pub. 10–11–55. Filed 3–24–55.

618,921. CORTANDIN. Schering Corporation. SN 684,158. Pub. 10–11–55. Filed 3–24–55.

618,922. TRIPLE HIST AND DESIGN. Johnston Pharmaceutical Distributors, Inc. SN 684,225. Pub. 10–11–55. Filed 3–25–55.

618,923. TYTRIL. Chas. Pfizer & Co., Inc. SN 684,339. Pub. 10–11–55. Filed 3–28–55.

618,924. HY-REX AND DESIGN. Lewal Pharmacal Company. SN 684,442. Pub. 10–11–55. Filed 3–29–55.

618,925. THYPITCO. The Drug Products Co., Inc. SN 684,643. Pub. 10–11–55. Filed 3–31–55.

618,926. CHLORADONNA. Physicians and Hospitals Supply Company, Inc., d. b. a. Ulmer Pharmacal Company. SN 684,676. Pub. 10–11–55. Filed 3–31–55.

618,927. BUR-TAR-GEN. Texas Pharmacal Company. SN 684,702. Pub. 10–11–55. Filed 3–31–55.

618,928. DOLITRONE. The Wm. S. Merrell Company. SN 684,741. Pub. 10–11–55. Filed 4–1–55.

618,929. REDEX-CAPS. Wheeler and Stuckey. SN 684,779. Pub. 10–11–55. Filed 4–1–55.

618,930. HAILEY'S HITCHY-KOOOOO. Norman L. Follis. SN 684,828. Pub. 10–11–55. Filed 4–4–55.

618,931. WARSENE. The Warson Products Corporation. SN 685,061. Pub. 10–11–55. Filed 4–6–55.

CLASS 19

618,932. PORSCHE STUTTGART AND DESIGN. Dr. Ing. h. c. F. Porsche K. G. SN 668,977. Pub. 8–16–55. Filed 6–28–54.

618,933. PORSCHE. Dr. Ing. h. c. F. Porsche K. G. SN 668,978. Pub. 8–16–55. Filed 6–28–54.

618,934. SKYRAMA. Grand Central Aircraft Co. SN 669,685. Pub. 10–4–55. Filed 7–9–54.

618,935. DEPLIREX. Marcelle Houdart, born Gillet. SN 677,780. Pub. 10–11–55. Filed 12–6–54.

618,936. TRUCKSTELL. Truckstell Manufacturing Co. SN 686,007. Pub. 10–4–55. Filed 4–21–55.

618,937. PREMIER. Dewey S. Weiss, d. b. a. Premier Manufacturing Co. SN 688,981. Pub. 10–4–55. Filed 6–6–55.

618,938. HITCHMASTER. Dewey S. Weiss, d. b. a. Premier Manufacturing Co. SN 688,982. Pub. 10–4–55. Filed 6–6–55.

618,939. CARHIDE. Ward Huntzinger, d. b. a. Huntzinger-Minneapolis. SN 689,575. Pub. 10–4–55. Filed 6–15–55.

618,940. 66. Phillips Petroleum Company. SN 669,741. Pub. 10-4-55. Filed 6-17-55.

618,941. DESIGN OF SHIELD. Phillips Petroleum Company. SN 669,783. Pub. 10-4-55. Filed 6-17-55.

618,942. THUNDERBIRD. Ford Motor Company. SN 660,079. Pub. 10-4-55. Filed 6-22-55.

618,943. HILLTOP. B & C Manufacturing Company. SN 660,217. Pub. 10-4-55. Filed 6-27-55.

CLASS 21

618,944. CALCULITE. Lightolier, Incorporated. SN 644,425. Pub. 10-11-55. Filed 3-30-53.

618,945. WONDERFRY. Merit Enterprises. SN 663,036. Pub. 10-4-55. Filed 3-22-54.

618,946. ORLITE. Maschinenfabrik Oerlikon. SN 664,685. Pub. 10-11-55. Filed 4-16-54.

618,947. MIRACORD. Electroacustic G. m. b. H. SN 669,103. Pub. 10-11-55. Filed 6-29-54.

618,948. THERMAL-KING. The Electric Storage Battery Company. SN 669,979. Pub. 10-11-55. Filed 7-14-54.

618,949. THERMO-SAFE. The Electric Storage Battery Company. SN 669,980. Pub. 10-11-55. Filed 7-14-54.

618,950. LITTLE BUNNY. Nicholas A. Buccasio, d. b. a. Broome Vacuum Sales & Service. SN 670,091. Pub. 10-11-55. Filed 7-16-54.

618,951. DIP-IT. The Eagle-Picher Company. SN 671,146. Pub. 10-11-55. Filed 8-5-54.

618,952. METALOHM. Litton Industries of California. SN 672,742. Pub. 10-4-55. Filed 9-3-54.

618,953. M A D CO IN A CIRCLE DESIGN. Russell L. Maurer, d. b. a. Monticello Amusement Devices. SN 676,383. Pub. 10-11-55. Filed 11-10-54.

618,954. KLAC IN A DIAMOND DESIGN. Electroacustic G. m. b. H. SN 677,306. Pub. 10-11-55. Filed 11-26-54.

618,955. KLIPTISQUARE. The Art Metal Company. SN 680,858. Pub. 10-11-55. Filed 2-1-55.

618,956. WHEEL-A-BREEZE AND DESIGN. W. W. Welch Company. SN 681,116. Pub. 10-4-55. Filed 2-4-55.

618,957. AMIC ELECTRONIC NOTEBOOK. American Measuring Instruments Corp. SN 681,563. Pub. 10-11-55. Filed 2-14-55.

618,958. AMIC. American Measuring Instruments Corp. SN 681,564. Pub. 10-4-55. Filed 2-14-55.

618,959. SUPER-'CEPTOR. Winegard Company. SN 683,250. Pub. 10-11-55. Filed 3-10-55.

618,960. LO-HITE. The Brown-Brockmeyer Company. SN 683,350. Pub. 10-4-55. Filed 3-14-55.

618,961. GUARDETTE. General Electric Company. SN 683,391. Pub. 10-4-55. Filed 3-14-55.

618,962. EREC-TRONIC. Science Electronics, Inc. SN 683,444. Pub. 10-4-55. Filed 3-14-55.

618,963. ROTO TORK. Consolidated Electronics Industries Corp. SN 683,580. Pub. 10-4-55. Filed 3-16-55.

618,964. MINI-GATOR. Mueller Electric Company. SN 683,701. Pub. 10-4-55. Filed 3-17-55.

618,965. MONARCH BSR AND DESIGN. Birmingham Sound Reproducers Limited. SN 683,961. Pub. 10-11-55. Filed 3-22-55.

618,966. A LA CARTE. West Bend Aluminum Co. SN 683,625. Pub. 10-4-55. Filed 4-15-55.

618,967. MARVEL. Berns Manufacturing Corporation, d. b. a. Electric Blower Company. SN 685,645. Pub. 10-4-55. Filed 4-18-55.

618,968. BROTHER. Nihon Mishin Seiso Kabushiki Kaisha. SN 686,074. Pub. 10-4-55. Filed 4-22-55.

618,969. DOMINO. Sprague Electric Company. SN 686,564. Pub. 9-27-55. Filed 4-29-55.

618,970. DESIGN OF GROTESQUE HUMAN. Ideal Industries, Inc. SN 686,653. Pub. 10-11-55. Filed 5-2-55.

618,971. SHOP-LIFTER. The Ohio Electric Mfg. Co. SN 686,842. Pub. 10-4-55. Filed 5-4-55.

CLASS 22

618,972. RAINBOWLETTE AND DESIGN. Evelyn W. Rutherford. SN 613,241. Pub. 10-11-55. Filed 4-27-51.

618,973. FIB'R-LUBE. B. F. Glading & Company, Inc. SN 628,102. Pub. 10-4-55. Filed 4-15-52.

618,974. GLASSCASTER. Kleinaway, Inc., d. b. a. Waltco Products. SN 637,101. Pub. 10-11-55. Filed 10-23-53.

618,975. NINTENDO AND JAPANESE CHARACTERS. Nintendo Playing Card Co., Ltd. SN 660,503. Pub. 10-4-55. Filed 2-2-54.

618,976. TOM-WALKER. James A. McLeod. SN 661,473. Pub. 10-11-55. Filed 2-23-54.

618,977. LINGO! National Novelty Corporation. SN 661,721. Pub. 10-4-55. Filed 2-26-54.

618,978. TRAINERIFLE. Parris Manufacturing Company. SN 662,666. Pub. 10-11-55. Filed 3-15-54.

618,979. SPELLWELL. Spellwell Playing Card Co. SN 662,950. Pub. 10-11-55. Filed 3-19-54.

618,980. ZITS AND ZATS THE ACROBATS. Albert J. Roger, d. b. a. Roger Mfg. Co. SN 666,531. Pub. 10-4-55. Filed 5-17-54.

618,981. DUN CAN. Donald F. Duncan, Incorporated. SN 666,744. Pub. 10-11-55. Filed 5-20-54.

618,982. MINIC. Lines Bros. Limited. SN 669,124. Pub. 10-4-55. Filed 6-29-54.

618,983. TRI-ANG. Lines Bros. Limited. SN 669,125. Pub. 10-4-55. Filed 6-29-54.

618,984. AIR FLITE. Nashua Paper Box Co. SN 670,214. Pub. 10-11-55. Filed 7-19-54.

618,985. WHIRL A-ROUND. Francis W. Armitage, d. b. a. House of Armitage. SN 670,269. Pub. 10-11-55. Filed 7-20-54.

618,986. CL & L CO. AND DESIGN (REPRESENTATION OF A SHIELD AND TREES). The Connor Lumber and Land Company. SN 670,907. Pub. 10-4-55. Filed 8-2-54.

618,987. DRIVEMOBILE. International Mutoscope Corporation. SN 671,035. Pub. 10-11-55. Filed 8-3-54.

618,988. ST. CROIX. St. Croix Corporation. SN 673,877. Pub. 10-4-55. Filed 9-27-54.

618,989. PARTY-FOR-ONE. American Merrillel Corporation. SN 678,361. Pub. 10-11-55. Filed 12-15-54.

618,990. BRONSON JET. Higbie Manufacturing Company. SN 678,484. Pub. 9-27-55. Filed 12-16-54.

618,991. SAY HEY AND DESIGN. The Barr Rubber Products Company. SN 678,954. Pub. 10-4-55. Filed 12-27-54.

618,992. SNO COASTER. Aluminum Goods Manufacturing Company, d. b. a. Mirro. SN 679,030. Pub. 10-4-55. Filed 12-28-54.

618,993. (See Class 23 for this trademark.)

618,994. GEORG JENSEN INC. AND DESIGN. Georg Jensen Inc. SN 680,607. Pub. 10-4-55. Filed 1-27-55.

618,995. GAUCHO TWURL AND DESIGN. Bryant Playthings, Inc. SN 680,720. Pub. 10-4-55. Filed 1-31-55.

618,996. SKI-PONS. Richard O. Marsh, Jr. SN 680,771. Pub. 10-11-55. Filed 1-31-55.

618,997. BIG BUSINESS. Transogram Company, Inc. SN 681,726. Pub. 10-4-55. Filed 2-15-55.

618,998. STAN THE MAN. Stan The Man, Inc. SN 683,302. Pub. 10-4-55. Filed 2-24-55.

618,999. CHAR-LEM. Charles L. Schrall, d. b. a. Char-Lem Products. SN 683,624. Pub. 10-11-55. Filed 3-16-55.

619,000. HI-POINT. The General Tire & Rubber Company. SN 683,673. Pub. 10-11-55. Filed 3-17-55.

CLASS 23

619,001. SACO. Surplus Automotive Co. SN 679,121. Pub. 10-4-55. Filed 12-29-54.

619,001. WEDDING DAY. Saladmaster Sales, Inc. SN 665,523. Pub. 10-4-55. Filed 4-30-54.

619,002. DUO-MATIC. Bowser, Inc. SN 666,257. Pub. 10-11-55. Filed 5-13-54.

619,003. PK AND DESIGN. The Patterson-Kelley Co. Inc. SN 668,780. Pub. 10-4-55. Filed 6-23-54.

619,004. DANECASTLE (DESIGN OF CASTLE). Danecastle Ltd. SN 669,749. Pub. 10-4-55. Filed 7-12-54.

619,005. MOL-O-MATIC AND DESIGN. Molten Chemical Company. SN 670,690. Pub. 10-11-55. Filed 7-27-54.

619,006. MOREHOUSE INDUSTRIES AND DESIGN. Morehouse Industries. SN 670,844. Pub. 10-4-55. Filed 7-30-54.

619,007. VERSA-POWER. National Alarms Corporation. SN 673,757. Pub. 10-4-55. Filed 9-24-54.

619,008. SALADIZER SUPREME. Lester G. Gildersleeve. SN 674,964. Pub. 10-4-55. Filed 10-18-54.

619,009. "FURNACE FROST" AMC. The Associated Merchandising Corporation. SN 675,750. Pub. 10-4-55. Filed 11-1-54.

619,010. INFILCO AND DESIGN. Infilco Incorporated. SN 677,411. Pub. 10-4-55. Filed 11-29-54.

619,011. FORMPACK. Hydro-Chemie, Aktiengesellschaft Für Chemie und Wasserveredlung. SN 678,941. Pub. 10-4-55. Filed 12-1-54.

619,012. KLEIN. Mathias Klein & Sons. SN 680,000. Pub. 10-11-55. Filed 1-17-55.

619,013. SE BASE. Jerome J. Sloyan, d. b. a. Automatic Motor Base Co. SN 680,422. Pub. 10-4-55. Filed 1-24-55.

619,014. BOSTON BP PNEUMATIC AND DESIGN. B. P. Elkin Company. SN 681,077. Pub. 10-4-55. Filed 2-4-55.

619,015. M-W. Alaska Juneau Gold Mining Company, d. b. a. Alaska Juneau Enterprises. SN 681,128. Pub. 10-4-55. Filed 2-7-55.

619,016. TRANSIT CRANE AND DESIGN. Bucyrus-Erie Company. SN 681,137. Pub. 10-4-55. Filed 2-7-55.

619,017. FAMILIA AUTO-KNIT. Norca Machinery Corporation. SN 681,192. Pub. 10-4-55. Filed 2-7-55.

619,018. ROBERTON. Roberton Manufacturing Co. SN 681,208. Pub. 10-4-55. Filed 2-7-55.

619,019. FJORD. R. Wallace & Sons Manufacturing Company. SN 681,315. Pub. 10-4-55. Filed 2-8-55.

619,020. SATURDAY TOOLS. Jari Products, Inc. SN 681,601. Pub. 10-11-55. Filed 2-14-55.

619,021. POWER IMPLEMETTES. Jari Products, Inc. SN 681,602. Pub. 10-11-55. Filed 2-14-55.

619,022. GUIDEMASTER. Clifford B. Hannay & Son, Inc. SN 682,346. Pub. 10-25-55. Filed 2-25-55.

CLASS 24

619,023. FILTER-FLO. General Electric Company. SN 667,372. Pub. 10-11-55. Filed 5-12-55.

CLASS 26

619,024. WESTRONICS. Westronics, Inc. SN 667,851. Pub. 10-11-55. Filed 6-7-54.

619,025. LEVEL-MASTER. Sporlan Valve Company. SN 667,995. Pub. 10-11-55. Filed 6-9-54.

619,026. STEVENS. The Columbian Vise & Mfg. Company. SN 668,641. Pub. 10-11-55. Filed 6-22-54.

619,027. ELECTRONOSCOPE. High Definition Electronic Picture Recording System, Inc. SN 680,386. Pub. 10-11-55. Filed 1-24-55.

619,028. COMPTOGRAPH. Felt and Tarrant Manufacturing Company. SN 682,548. Pub. 10-11-55. Filed 2-1-55.

619,029. ENDITROL. The Permutit Company. SN 683,308. Pub. 10-11-55. Filed 3-11-55.

619,030. VEECO AND DESIGN. Vacuum Electronic Mfg. Corp. SN 683,623. Pub. 10-11-55. Filed 3-16-55.

619,031. ECHO-VOX. Kay Electric Company. SN 685,500. Pub. 10-11-55. Filed 4-14-55.

619,032. SERO-FUGE. Clay-Adams, Inc. SN 685,560. Pub. 10-11-55. Filed 4-15-55.

619,033. SANWA. Radio Wire Television Inc. of New York. SN 685,755. Pub. 10-11-55. Filed 4-18-55.

619,034. PIC AND DESIGN. Production Instrument Company. SN 686,388. Pub. 10-11-55. Filed 4-27-55.

619,035. PIC AND DESIGN. Production Instrument Company. SN 686,389. Pub. 10-11-55. Filed 4-27-55.

619,036. DIALAIRE. The Sheffield Corporation. SN 687,009. Pub. 10-11-55. Filed 5-6-55.

619,037. DIAL-O-MAP. Zenith Radio Corporation. SN 686,613. Pub. 10-11-55. Filed 5-31-55.

CLASS 27

619,038. JARO. Precision Time Corporation. SN 672,179. Pub. 10-11-55. Filed 8-24-54.

619,039. MOTOROLA. Motorola, Inc. SN 676,519. Pub. 10-11-55. Filed 11-12-54.

619,040. ALBACORE. The Gruen Watch Company. SN 685,269. Pub. 10-11-55. Filed 4-11-55.

619,041. CONSEIL. The Gruen Watch Company. SN 685,367. Pub. 10-11-55. Filed 4-12-55.

619,042. ARONNEX. The Gruen Watch Company. SN 685,369. Pub. 10-11-55. Filed 4-12-55.

619,043. NARWHAL. The Gruen Watch Company. SN 685,370. Pub. 10-11-55. Filed 4-12-55.

619,044. TWIN-HEART. Granat Bros. SN 685,702. Pub. 10-11-55. Filed 4-18-55.

CLASS 28

619,045. EARJOYS. Anna G. Lens, d. b. a. The Perfection Manufacturing Company. SN 669,340. Pub. 10-11-55. Filed 7-2-54.

619,046. ROSE PETALS. National Silver Company. SN 684,563. Pub. 10-11-55. Filed 4-4-55.

619,047. SHIELDS FIFTH AVENUE. Shields Inc. of Attleboro, Mass. SN 685,526. Pub. 10-11-55. Filed 4-14-55.

619,048. TWIN-HEART. Granat Bros. SN 685,703. Pub. 10-11-55. Filed 4-18-55.

619,049. TARA. Reed and Barton Corporation. SN 685,852. Pub. 10-11-55. Filed 4-19-55.

619,050. CELESTE. Gorham Manufacturing Company. SN 685,905. Pub. 10-11-55. Filed 4-20-55.

619,051. VARSITY HOUSE. Jerome I. Schackne, d. b. a. Varsity House. SN 686,101. Pub. 10-11-55. Filed 4-22-55.

CLASS 30

619,052. LADY ROSE. Stetson China Co., Inc. SN 685,528. Pub. 10-11-55. Filed 4-14-55.

619,053. TRAY-LITE. Harold C. Carlstead, d. b. a. Candle-Lite Lamp Company. SN 685,554. Pub. 10-11-55. Filed 4-18-55.

CLASS 31

619,054. LINDSAY AND DESIGN. The Lindsay Company. SN 659,795. Pub. 10-11-55. Filed 1-20-54.

619,055. FRIDGE-MATIC. Brayton & Co., Inc. SN 664,285. Pub. 10-11-55. Filed 4-12-54.

619,056. (See Class 51 for this trademark.)

CLASS 32

619,057. COLONIAL HOUSE AND DESIGN. Regal Furn. Mfg. Co. SN 663,123. Pub. 10-11-55. Filed 3-23-54.

619,058. POSTUREPEDIC. Sealy, Incorporated. SN 663,524. Pub. 9-14-54. Filed 3-29-54.

619,059. TRADEMARK (BARE BACK GIRL). Sealy, Incorporated. SN 663,525. Pub. 3-22-55. Filed 3-29-54.

619,060. DEFINITIV AND DESIGN. Definitiv Kontroll-Buchhaltung A. G. SN 682,713. Pub. 10-11-55. Filed 3-3-55.

CLASS 33

619,061. RONDO. The Cambridge Glass Company. SN 679,452. Pub. 10-11-55. Filed 1-5-55.

CLASS 34

619,062. BRULÉ AND DESIGN. Goder Incinerator Corporation. SN 648,993. Pub. 10-11-55. Filed 6-18-53.

619,063. STERLING. Sterling Air Conditioning Corporation of North Carolina, Inc. SN 657,573. Pub. 10-11-55. Filed 12-7-53.

619,064. "SILENT DUCT". Eigen Manufacturing Corporation. SN 657,903. Pub. 10-11-55. Filed 12-14-53.

619,065. SUNTEMP. Thomas O. Marini, d. b. a. Romac Industries, to Romac Industries, Inc. SN 666,497. Pub. 9-6-55. Filed 5-17-54.

CLASS 35

619,066. CERAMETALLIC. Bendix Aviation Corporation. SN 676,170. Pub. 10–11–55. Filed 11–8–54.

619,067. CERAMETALIX. Bendix Aviation Corporation. SN 676,171. Pub. 10–11–55. Filed 11–8–54.

619,068. O.K AUTO FLOAT SILENTRAK AND DESIGN. O. K. Ko-Op Rubber Welding System. SN 680,017. Pub. 10–11–55. Filed 1–17–55.

619,069. DUBO BORGRINGEN AND DESIGN. Vennootschap Onder de Firma "V. & M." SN 681,651. Pub. 10–11–55. Filed 2–14–55.

619,070. EL CAMINO. Pacific Tire & Rubber Co. SN 682,054. Pub. 7–5–55. Filed 2–21–55.

619,071. FLEXILE, ETC. AND DESIGN. Lee Rubber & Tire Corporation, d. b. a. Republic Rubber Division. SN 686,985. Pub. 10–11–55. Filed 5–6–55.

619,072. SUXKET. Suxket Company. SN 690,416. Pub. 10–11–55. Filed 6–28–55.

619,073. GULF WITHIN A CIRCLE. Gulf Oil Corporation. SN 690,457. Pub. 10–11–55. Filed 6–29–55.

619,074. GULF WITHIN A CIRCLE. Gulf Oil Corporation. SN 690,458. Pub. 10–11–55. Filed 6–29–55.

619,075. GULF AND DESIGN. Gulf Oil Corporation. SN 690,459. Pub. 10–11–55. Filed 6–29–55.

619,076. GULF AND DESIGN. Gulf Oil Corporation. SN 690,460. Pub. 10–11–55. Filed 6–29–55.

619,077. GULF AND DESIGN. Gulf Oil Corporation. SN 690,461. Pub. 10–11–55. Filed 6–29–55.

619,078. GULF. Gulf Oil Corporation. SN 690,462. Pub. 10–11–55. Filed 6–29–55.

619,079. DOUBLE LIFE. Lee Rubber & Tire Corporation. SN 690,562. Pub. 10–11–55. Filed 6–30–55.

619,080. ULTRAFLEX. The Hoover Company. SN 690,820. Pub. 10–11–55. Filed 7–6–55.

CLASS 36

619,081. BOB-O-LINK RECORDS AND DESIGN. Robert O. Levell. SN 659,725. Pub. 10–11–55. Filed 1–19–54.

619,082. SONGTIME AND DESIGN. Singcord Corporation. SN 682,199. Pub. 10–11–55. Filed 2–23–55.

619,083. CETRA AND DESIGN. Capitol Records, Inc. SN 683,485. Pub. 10–11–55. Filed 3–15–55.

CLASS 37

619,084. LUXOR. The American Envelope Company. SN 651,147. Pub. 10–11–55. Filed 7–31–53.

619,085. TUFFTEAR. The American Envelope Company. SN 651,148. Pub. 10–11–55. Filed 7–31–53.

619,086. SPEED-LETTER AND DESIGN. The McBee Company, to Royal McBee Corporation. SN 652,963. Pub. 10–11–55. Filed 9–9–53.

619,087. PROTEX SUPER SOFT TISSUE "SOFT AS A KITTEN" AND DESIGN. Rushmore Paper Mills, Inc. SN 653,079. Pub. 10–11–55. Filed 9–11–53.

619,088. ALCOVE. Straubel Paper Company. SN 655,094. Pub. 10–11–55. Filed 10–20–53.

619,089. SHIKI. Orientex, Ltd. SN 656,833. Pub. 10–11–55. Filed 11–23–53.

619,090. DINNER HOUR. Sterling Pulp & Paper Company. SN 658,662. Pub. 10–11–55. Filed 12–28–53.

619,091. DRI-HINGE. Belford Company, Inc. SN 659,031. Pub. 10–11–55. Filed 1–6–54.

619,092. CHART-CRAFT SEE NOW AND DESIGN. Bertha L. Groth, d. b. a. Business Charting Institute, to Catherine Marie Andreasen. SN 661,134. Pub. 10–11–55. Filed 2–16–54.

619,093. SIMPLO-STATEMENT. Wallace Colquitt Reeves, d. b. a. Doctors Specialty Ptg. Co. SN 661,958. Pub. 10–11–55. Filed 3–3–54.

619,094. PACK-VELOPE. Berlin & Jones Company, Inc. SN 662,598. Pub. 10–11–55. Filed 3–15–54.

619,095. TRANS FACE AND DESIGN. Transface Process Company. SN 679,587. Pub. 10–11–55. Filed 1–6–55.

619,096. IMPRESS. Strathmore Paper Company. SN 679,870. Pub. 10–11–55. Filed 1–13–55.

CLASS 38

619,097. MAGNUSLAURENT IUS-MEDICES ÅND PORTRAIT OF MAN. The Medici Society, Ltd. SN 670,881. Pub. 10–11–55. Filed 4–22–54.

CLASS 39

619,098. ARISTOCOOL. A. Sagner's Son. SN 625,037. Pub. 10–11–55. Filed 2–13–52.

619,099. TRIOMPH' ANTIFROISS. Manufactures de Senones (Vosges) Société à Responsabilité Limitée. SN 637,833. Pub. 10–11–55. Filed 11–8–52.

619,100. STONY BROOK. Eagle Clothes, Inc. SN 651,227. Pub. 10–11–55. Filed 8–3–53.

619,101. SEAWANEE. Spartans Manufacturing Co., Inc. SN 653,281. Pub. 10–11–55. Filed 9–16–53.

619,102. TREBOR ON PANTS IS LIKE STERLING ON SILVER AND DESIGN. Trebor Knitting Mills Co., to Trebor Knitting Mills, Inc. SN 653,410. Pub. 10–11–55. Filed 9–18–53.

619,103. PERMA-SEAL. Lawrence Process Company, Inc. SN 655,330. Pub. 10–19–54. Filed 10–20–53.

619,104. TEENS 'N TOTS. Erwin Massey Williams, d. b. a. John-Massey Hosiery Company. SN 655,624. Pub. 10–11–55. Filed 10–30–53.

619,105. TYROLAIR. Baker Clothes, Inc. SN 655,747. Pub. 10–11–55. Filed 11–3–53.

619,106. LASSIE. Barkin, Levin & Co. Inc. SN 661,684. Pub. 10–11–55. Filed 2–26–54.

619,107. THOSE WONDERFUL LITTLE FUN-SHOES OF FASHION! TURIANS AND DESIGN. Turian Inc. SN 663,141. Pub. 10–11–55. Filed 3–23–54.

619,108. PLUVIA PIQUE AND DESIGN. Etta-Leen Hats. SN 663,649. Pub. 10–11–55. Filed 3–31–54.

619,109. WEAR-ABOUTS. Rockland Sportswear, Inc. SN 664,622. Pub. 10–11–55. Filed 4–15–54.

619,110. D'FONTI AND DESIGN. Wickbury, Ltd. SN 665,975. Pub. 10–11–55. Filed 5–7–54.

619,111. CRADLE SEAT. Carmi-Ainsbrooke Corporation. SN 665,999. Pub. 10–11–55. Filed 5–10–54.

619,112. UNDER-ALLS. Brooks Uniform Co. Inc. SN 666,259. Pub. 10–11–55. Filed 5–13–54.

619,113. DRYPER. International Latex Corporation. SN 666,360. Pub. 10–11–55. Filed 5–14–54.

619,114. PLAYTEX. International Latex Corporation. SN 666,361. Pub. 10–11–55. Filed 5–14–54.

619,115. GAME BIRD SLACKS (DESIGN OF BIRD). Trouser Corp. of America. SN 674,202. Pub. 5–10–55. Filed 10–1–54.

619,116. CHILD-STRIDE. M. Stoll & Co., Inc. SN 679,501. Pub. 10–11–55. Filed 1–5–55.

619,117. DONATELLO AND DESIGN. John J. Eagen. SN 682,410. Pub. 10–11–55. Filed 2–28–55.

619,118. CONTENDER. White Stag Mfg. Co. SN 682,524. Pub. 10–11–55. Filed 2–28–55.

619,119. HOBNOBBERS. The Stetson Shoe Company, Incorporated. SN 682,683. Pub. 10–11–55. Filed 3–2–55.

619,120. "POCKET-MATE." Welwood Trading Corporation. SN 682,688. Pub. 10–11–55. Filed 3–2–55.

619,121. ROMANEASE. Chipman Knitting Mills. SN 682,706. Pub. 10–11–55. Filed 3–3–55.

619,122. ROMAN STRETCH. Chipman Knitting Mills. SN 682,707. Pub. 10–11–55. Filed 3–3–55.

619,123. FLEX-MOLD. Kendex Corporation. SN 682,807. Pub. 10–11–55. Filed 3–4–55.

619,124. KATHY PAYNE LOVELY'S. Lancaster Shoe Company. SN 682,808. Pub. 10–11–55. Filed 3–4–55.

619,125. FRANK PAYNE QUALITY SHOES. Lancaster Shoe Company. SN 682,809. Pub. 10–11–55. Filed 3–4–55.

619,126. AN IDEAL LADY. Ideal Ladies Undergarment Co. Inc. SN 682,928. Pub. 10–11–55. Filed 3–7–55.

619,127. LEISURE BELLE. R. Rosen & Son, Inc. SN 682,984. Pub. 10–11–55. Filed 3–7–55.

619,128. MAGI-STRETCH. Wayne Knitting Mills. SN 683,003. Pub. 10–11–55. Filed 3–7–55.

619,129. RADIANT SECURITY AND DESIGN. Charmfit of Hollywood, Inc. SN 683,171. Pub. 10–11–55. Filed 3–10–55.

619,130. RADIANT. Charmfit of Hollywood, Inc. SN 683,172. Pub. 10–11–55. Filed 3–10–55.

619,131. DAVENELLA. Davidow, Inc., Sportswear. SN 683,283. Pub. 10–11–55. Filed 3–11–55.

619,132. ACKORA. Fleetwood Sportwear, Inc. SN 683,286. Pub. 10–11–55. Filed 3–11–55.

CLASS 42

619,133. WUNDA NYLON. Belrug Mills of South Carolina. SN 679,548. Pub. 10–11–55. Filed 1–7–55.

619,134. BRUSHTWEED. Berkshire Woolen Company. SN 682,231. Pub. 10–11–55. Filed 2–24–55.

619,135. BEAUTISTE. Wauregan Mills, Incorporated. SN 682,687. Pub. 10–11–55. Filed 3–2–55.

619,136. DOUBLE DATE. D. B. Fuller & Co., Inc. SN 682,720. Pub. 10–11–55. Filed 3–3–55.

619,137. FULLSHAN. D. B. Fuller & Co., Inc. SN 682,721. Pub. 10–11–55. Filed 3–3–55.

619,138. FULLERSHAN. D. B. Fuller & Co., Inc. SN 682,722. Pub. 10–11–55. Filed 3–3–55.

619,139. FULLWEAVE. D. B. Fuller & Co., Inc. SN 682,723. Pub. 10–11–55. Filed 3–3–55.

619,140. BAYOU. Fabrex Corporation. SN 682,885. Pub. 10–11–55. Filed 3–7–55.

619,141. ESTABLISHED 1845 AND DESIGN. Wellington Sears Company. SN 683,158. Pub. 10–11–55. Filed 3–9–55.

CLASS 43

619,142. ELASTICOT. Sellers Manufacturing Company, Inc. SN 682,986. Pub. 10–11–55. Filed 3–7–55.

CLASS 44

619,143. HYPERCHROME. Becton, Dickinson and Company. SN 666,253. Pub. 10–11–55. Filed 5–13–54.

619,144. TENSO-PLI. Air Reduction Company, Incorporated. SN 668,617. Pub. 10–11–55. Filed 6–22–54.

CLASS 45

619,145. PITT'S AND DESIGN. The C. M. Pitt & Sons Co. SN 682,825. Pub. 10–11–55. Filed 3–4–55.

619,146. LEGRA. Mason & Mason, Inc. SN 683,525. Pub. 10–11–55. Filed 3–15–55.

CLASS 46

619,147. SNO-SI'UDS. Premium Potato Products, Inc. SN 604,546. Pub. 7–1–52. Filed 10–6–50.

619,148. SEA DIAMOND SEA WITHIN DESIGN. Consolidated Factors. SN 621,620. Pub. 1–27–53. Filed 11–24–51.

619,149. EVER SWEET. D'Arrigo Bros. Co. of California. SN 652,606. Pub. 10–11–55. Filed 9–1–53.

619,150. RAY'S. Ray's Brand Products. SN 659,207. Pub. 10–11–55. Filed 1–8–54.

619,151. PIGALLEY. Charles Lebedin. SN 659,933. Pub. 10–11–55. Filed 1–22–54.

619,152. CORAL QUEEN. Hashiye Yoshida. SN 660,464. Pub. 10–11–55. Filed 2–1–54.

619,153. BEAUTY AND DESIGN. Poul Holst-Knudsen. SN 662,115. Pub. 10–11–55. Filed 3–5–54.

619,154. PALATEAZ. Bowman Feed Products, Inc. SN 663,558. Pub. 10–11–55. Filed 3–30–54.

619,155. WORTH-MOR AND REPRESENTATION OF GIRL. Potato Specialties, Inc. SN 665,949. Pub. 10–11–55. Filed 5–7–54.

619,156. BUD BOWMAN SUPERIOR FLAVOR AND DESIGN. Bowman Dairy Company. SN 666,332. Pub. 10–4–55. Filed 5–14–54.

619,157. BURSTING STARS. Hawley & Hoops, Inc. SN 666,950. Pub. 10–4–55. Filed 5–24–54.

619,158. ARCTIC. Tri-Counties Packing Corporation. SN 667,472. Pub. 10–4–55. Filed 6–1–54.

619,159. ALMODINE. H. Kohnstamm & Co., Inc. SN 667,539. Pub. 10–11–55. Filed 6–2–54.

619,160. STRAWBERINE. H. Kohnstamm & Co., Inc. SN 667,543. Pub. 10–11–55. Filed 6–2–54.

619,161. PRIMINOLE. H. Kohnstamm & Co., Inc. SN 667,544. Pub. 10–11–55. Filed 6–2–54.

619,162. ROYAL STRIPING. H. Kohnstamm & Co., Inc. SN 667,545. Pub. 10–11–55. Filed 6–2–54.

619,163. ACME. H. Kohnstamm & Co., Inc. SN 667,547. Pub. 10–11–55. Filed 6–2–54.

619,164. CHESNULINE. H. Kohnstamm & Co., Inc. SN 667,548. Pub. 10–11–55. Filed 6–2–54.

619,165. CHOCOLINE. H. Kohnstamm & Co., Inc. SN 667,549. Pub. 10–11–55. Filed 6–2–54.

619,166. ELEVEN. H. Kohnstamm & Co., Inc. SN 667,550. Pub. 10–11–55. Filed 6–2–54.

619,167. MINOLINE. H. Kohnstamm & Co., Inc. SN 667,553. Pub. 10–11–55. Filed 6–2–54.

619,168. C. D. M. H. Kohnstamm & Co., Inc. SN 667,555. Pub. 10–11–55. Filed 6–2–54.

619,169. SUBERNOLE. H. Kohnstamm & Co., Inc. SN 667,556. Pub. 10–11–55. Filed 6–2–54.

619,170. TOPALINE. H. Kohnstamm & Co., Inc. SN 667,557. Pub. 10–11–55. Filed 6–2–54.

619,171. BANANINE. H. Kohnstamm & Co., Inc. SN 667,563. Pub. 10–11–55. Filed 6–2–54.

619,172. SEALTEST AND DESIGN. National Dairy Products Corporation. SN 668,409. Pub. 10–4–55. Filed 6–17–54.

619,173. ENRICHO. Pillsbury Mills, Inc. SN 669,356. Pub. 10–11–55. Filed 7–2–54.

619,174. MILAN. Foodtown Purchasing Company, d. b. a. The Wm. Edwards Co. SN 670,278. Pub. 10–4–55. Filed 7–20–54.

619,175. DESIGN OF MAN AND HORSES—BEN HUR DESIGN. McCormick & Company, Incorporated. SN 671,576. Pub. 10–4–55. Filed 8–12–54.

619,176. H & P AND DESIGN. Manatee Fruit Company. SN 671,950. Pub. 10–11–55. Filed 8–19–54.

619,177. CLOVER VALLEY. The Kroger Co. SN 672,517. Pub. 10–4–55. Filed 8–31–54.

619,178. CHURNY'S AND DESIGN. Paul S. Peters, d. b. a. Paul Peters Company, to Paul Peters Company, Inc. SN 675,654. Pub. 10–11–55. Filed 10–28–54.

619,179. WESTWARD HO. Gold Badge Farms. SN 680,270. Pub. 10–11–55. Filed 1–21–55.

619,180. NATCO. National Tea Co. SN 680,781. Pub. 10–11–55. Filed 1–31–55.

619,181. ROSE FARM. F. O. Mitchell & Bro., Inc. SN 681,869. Pub. 10–11–55. Filed 2–17–55.

619,182. ROYAL BANTAM AND DESIGN. Royal Bantam Foods, Inc. SN 682,070. Pub. 10–11–55. Filed 2–21–55.

619,183. SHAWNEE CHIEF AND REPRESENTATION OF INDIAN. Shawnee Milling Company. SN 682,198. Pub. 10–11–55. Filed 2–23–55.

619,184. WINTERHILL. Winterhill Foods, Inc. SN 682,689. Pub. 10–11–55. Filed 3–2–55.

619,185. PIMA PRIDE. Hayden Flour Mills. SN 682,732. Pub. 10–11–55. Filed 3–3–55.

619,186. ARIZONA TULIP AND DESIGN. Hayden Flour Mills. SN 682,734. Pub. 10–11–55. Filed 3–3–55.

619,187. "SYNCHRO-BALANCED." Southern States Cooperative, Incorporated. SN 682,832. Pub. 10–11–55. Filed 3–4–55.

CLASS 47

619,188. GAUTHIER. Societe Anonyme Marne & Champagne. SN 636,313. Pub. 10–11–55. Filed 10–7–52.

619,189. GAUTHIER ETC. AND DESIGN. Societe Anonyme Marne & Champagne. SN 636,314. Pub. 10–11–55. Filed 10–7–52.

619,190. SANSON. Hijos de Antonio Barcelo, S. A. SN 681,472. Pub. 10–11–55. Filed 1–20–55.

CLASS 48

619,191. A COORS. Adolph Coors Company. SN 683,364. Pub. 10–11–55. Filed 3–14–55.

CLASS 49

619,192. SCHENLEY'S POINTER. Schenley Industries, Inc. SN 679,684. Pub. 10–11–55. Filed 1–10–55.

CLASS 50

619,193. SMILE-PAK. Smile-Pak Inc. SN 654,758. Pub. 10–11–55. Filed 10–14–53.

619,194. TELETRAY. Teletray Service, Inc. SN 666,993. Pub. 10–11–55. Filed 5–24–54.

619,195. MOD-ELF. Alice M. Sswarce, d. b. a. Figurine Display Co. SN 668,000. Pub. 10–11–55. Filed 6–9–54.

619,196. KOKETTE. Alice M. Sswarce, d. b. a. Figurine Display Co. SN 668,870. Pub. 10–11–55. Filed 6–24–54.

619,197. LITE-PAK. The Hettrick Manufacturing Company. SN 674,584. Pub. 10–11–55. Filed 10–11–54.

619,198. AJUSTLOK. Rose Weiner, d. b. a. Pittsburgh Coat Hanger Company. SN 678,563. Pub. 10–11–55. Filed 12–17–54.

619,199. "HOLDALL" AND DESIGN. Colotyle Tyle-Bord, Inc. SN 680,258. Pub. 10–11–55. Filed 1–21–55.

CLASS 51

619,056. BRUSH-O. Brush-O-Products. SN 681,987. Pub. 10–11–55. Filed 2–21–55.

619,200. POEME. Societe Anonyme Parfums Forvil & Dentifrices du Docteur Pierre Reunis, d. b. a. Forvil. SN 673,784. Pub. 10–11–55. Filed 9–24–54.

619,201. SUNSPORTS. The Rilling-Dermetics Company. SN 675,164. Pub. 10–11–55. Filed 10–20–54.

619,202. KISLAV 6½ IN A CIRCLE DESIGN. Societe Anonyme des Gants Buscarlet, to Buscarlet Glove Company, Inc. SN 677,365. Pub. 10–11–55. Filed 11–26–54.

619,203. VAM. Wildroot Company, Inc. SN 681,635. Pub. 10–11–55. Filed 2–14–55.

CLASS 52

619,204. SYMBOL FOR POLKA DOT. Swift & Company. SN 398,440. Pub. 10–11–55. Filed 6–1–50.

619,205. STAIN-A-WAY. Economics Laboratory, Inc. SN 640,263. Pub. 10–11–55. Filed 1–2–53.

619,206. CARICATURES OF THREE MEN, ETC. AND DESIGN. The Pep Boys—Manny, Moe & Jack. SN 651,728. Pub. 10–11–55. Filed 8–12–53.

619,207. ZIP-STRIP ETC. AND DESIGN. The Star Bronze Company. SN 652,981. Pub. 3–1–55. Filed 9–9–53.

619,208. GUARANTEED. Swift & Company. SN 666,226. Pub. 10–11–55. Filed 5–12–54.

619,209. PURG-A-TERGE. E. F. Drew & Co., Inc. SN 667,101. Pub. 10–11–55. Filed 5–26–54.

619,210. MORE 'N MORE "SUDS" AND DESIGN (REPRESENTATION OF RECTANGLE AND BUBBLES). Manu-Mine Research & Development Co. SN 667,967. Pub. 10–11–55. Filed 6–9–54.

619,211. SELINITE. Russell Chemical Company. SN 670,312. Pub. 10–11–55. Filed 7–20–54.

619,212. BIO-MACHINE. Finger Lakes Chemical Company, Inc. SN 672,392. Pub. 10–11–55. Filed 8–30–54.

619,213. SANI-COLL. Finger Lakes Chemical Company, Inc. SN 672,397. Pub. 10–11–55. Filed 8–30–54.

Service Marks

CLASS 105

619,214. GLIDDEN TOUR. Veteran Motor Car Club of America. SN 673,147. Pub. 10–11–55. Filed 9–13–54.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 1

619,215. C. B. Cabaniss & Sons, Shelby, N. C. SN 681,833. Filed P. R. 2–17–55. Am. S. R. 8–26–55.



The drawing is lined for blue.
For Cotton Seed (for planting purposes).
Use since on a day uncertain in the month of Sept. 1947.

CLASS 6

619,216. Bridgeport Brass Company, Bridgeport, Conn. SN 504,429. Filed Act of 1905, 6–22–46. Am. S. R. 7–20–51.

BRASS Bridgeport CO.

For Insecticides and Deodorizing Agents.
Use since March 4, 1946 on insecticides.

CLASS 13

619,217. Bell & Gossett Company Morton Grove, Ill. SN 676,356. Filed P. R. 11–10–54. Am. S. R. 10–21–55.

DRAIN-O-TANK

For Tank Draining Valves Having Separate Air and Water Passages.
Use since Sept. 22, 1954.

CLASS 21

619,218. Electrolux Corporation, New York, N. Y. SN 655,240. Filed P. R. 10–23–53. Am. S. R. 9–22–55.



For Vacuum Cleaners, Accessories Therefor and Parts Thereof.
Use since June 1, 1953.

CLASS 23

619,219. Keller Manufacturing Co., Inc., St. Louis, Mo. SN 663,286. Filed P. R. 3–25–54. Am. S. R. 7–14–55.



The drawing is lined for red.
For Lawn Broom Rakes.
Use since February 18, 1954.

619,220. A. E. Lewis & Co., Inc., New York, N. Y. SN 664,235. Filed P. R. 4–9–54. Am. S. R. 3–14–55.

TEA ROSE

For Flat Tableware, Made of Base Metals.
Use since Mar. 2, 1954.

CLASS 23

619,221. Fjellmans Mekaniska Verkstads Aktiebolag, Mariestad, Sweden. SN 671,498. Filed P. R. 8–11–54. Am. S. R. 10–31–55.

FJELLMAN

For Hydraulic Presses and Control Mechanisms Therefor.
Use since December 1951.

CLASS 25

619,222. Kwikset Locks, Inc., Anaheim, Calif. SN 672,671. Filed P. R. 9–2–54. Am. S. R. 8–25–55.



The trademark consists of a key head or bow which is substantially pentagonal in configuration and which includes straight sides and a flat bottom of substantially the same length, the sides blending smoothly at their upper ends into a triangular top portion and at their lower ends into said bottom. A peripheral border is provided around the edge of the key head which defines a centrally located area for the reception of manufacturing data and other material.
For Keys.
Use since Jan. 27, 1947.

Service Marks

CLASS 101

619,223. Harold C. Southard, St. Clair Shores, Mich. SN 674,101. Filed P. R. 9–30–54. Am. S. R. 6–3–55.

How-Too-Doo-It

For Advertising the Goods and Services of Others Through the Medium of Television and Radio Programs Consisting of Demonstrations and Discussions in Connection with Products, Home Repairs, Home Building, and Wood Working, and Advice, Pertaining to the Operation of a Home Workshop, Including Demonstrations of Practical Around-the-House Projects, the Said Trademark also Constituting the Title of a Television Program and a Radio Program.
Use since June 16, 1953.

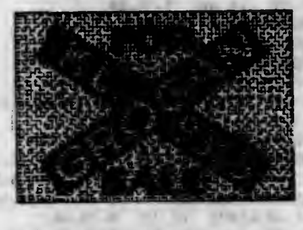
CLASS 102

619,224. The Lewis State Bank, Tallahassee, Fla. SN 658,123. Filed P. R. 12–17–53. Am. S. R. 11–7–55.

"Bill the Bank"

For Extension of Credit to Customers Who Purchase at a Subscribing Retail Outlet, and Making Collection from Such Customers Through Central Charge Service.
Use since August 25, 1953.

619,225. John B. Grogan, Toledo, Ohio. SN 677,876. Filed P. R. 12–7–54. Am. S. R. 10–20–55.



The colors claimed are as shown—black and yellow.
For Real Estate Brokerage Services.
Use since Sept. 27, 1954.

TRADEMARK REGISTRATIONS RENEWED

105,416. ANALKA. Cl. 18. 7–20–15.
106,081. SQUIRREL BRAND AND DESIGN. Cl. 46. 10–5–15.
106,094. INVARO AND DESIGN. Cl. 14. 10–12–15.
106,380. ALADDIN. Cl. 37. 10–19–15.
106,419. PFLUEGER AND DESIGN. Cl. 22. 10–19–15.
106,420. PELICAN AND DESIGN. Cl. 22. 10–19–15.
107,680. ENAMILO. Cl. 52. 12–21–15.
107,970. HD. Cl. 19. 1–4–16.
108,565. MERCK. Cl. 18. 2–15–16.
108,566. MERCK. Cl. 18. 2–15–16.
109,293. STRATHMORE AND DESIGN. Cl. 46. 3–28–16.
109,374. SHAW. Cl. 49. 4–4–16.
325,918. TRIO-CARB. Cl. 18. 7–9–35.
327,644. TRAVEL TREE. Cl. 50. 9–3–35.
328,920. EMULSOL. Cl. 52. 10–8–35.
329,022. DESIGN OF ANCHOR. Cl. 33. 10–15–35.
329,173. FRANKLY SPEAKING. Cl. 38. 10–22–35.

329,209. DURASPEED. Cl. 13. 10–22–35.
329,246. SUPRE-MACY. Cl. 49. 10–22–35.
329,387. DESIGN OF INDIAN. Cl. 15. 10–29–35.
329,811. SALE-MAKER. Cl. 31. 11–12–35.
330,057. O. G. BRITISH FLATS. Cl. 39. 11–19–35.
330,191. MACY'S FEATHERWEIGHT. Cl. 51. 11–26–35.
330,333. VAGEEN. Cl. 18. 11–26–35.
330,772. POLA-SCREEN. Cl. 26. 12–17–35.
330,829. THE GRIFFITH LABORATORIES AND DESIGN. Cl. 46. 12–17–35.
330,837. CROSS COUNTRY CORDUROY. Cl. 42. 12–17–35.
331,025. POPRITE. Cl. 22. 12–24–35.
331,061. FRANZISKANER. Cl. 48. 12–24–35.
331,263. STAF. Cl. 46. 12–31–35.
331,569. SANTAY. Cl. 46. 1–14–36.
331,591. SALE-MAKER. Cl. 32. 1–14–36.
331,732. VALDURA. Cl. 16. 1–21–36.
331,797. ALTITUDE. Cl. 51. 1–21–36.
331,818. BAKER'S AND DESIGN. Cl. 46. 1–21–36.
331,831. MEDAKA. Cl. 51. 1–21–36.
332,003. OVER THE TOP ETC. AND DESIGN. Cl. 39. 1–28–36.
332,039. FARM SQUARES. Cl. 46. 1–28–36.
332,291. O-G VANDER-BUILT SHOES. Cl. 39. 2–11–36.
332,294. O-G FAUNTLEROY. Cl. 39. 2–11–36.
332,296. O-G GARNET. Cl. 39. 2–11–36.
332,351. CADET. Cl. 23. 2–11–36.
332,502. SOUTHLAND. Cl. 37. 2–18–36.
332,510. MEDALLA DE ORO ETC. AND DESIGN. Cl. 18. 2–18–36.
332,626. BURNI-SHAVE. Cl. 23. 2–18–36.
332,628. BLUE BONNET AND DESIGN. Cl. 46. 2–18–36.
332,662. DESIGN OF WOMAN'S HEAD. Cl. 51. 2–18–36.
332,728. CO-OP. Cl. 23. 2–25–36.
332,821. SOUTHLAND AND DESIGN. Cl. 37. 2–25–36.
332,822. DESIGN OF SHEEP. Cl. 37. 2–25–36.
332,849. BAKER'S AND DESIGN. Cl. 45. 2–25–36.
332,949. REELSLICK. Cl. 15. 3–3–36.
333,132. GOLDIELOCKS. Cl. 46. 3–10–36.
333,290. PECK & PECK AND DESIGN. Cl. 3. 3–17–36.
333,295. DESIGN OF GEOMETRICAL FIGURE. Cl. 46. 3–17–36.
333,428. O. G. BROADSTEP. Cl. 39. 3–24–36.
333,440. KING PIN. Cl. 46. 3–24–36.
333,551. BEACON. Cl. 12. 3–24–36.
333,604. SAFWAY. Cl. 50. 3–31–36.

TRADEMARK REGISTRATIONS CANCELED

Section 8

72,615. CHARLES DENBY ETC. AND PORTRAIT. Cl. 17. 2–9–09.
110,128. PEERAGE. Cl. 46. 5–2–18.
111,745. LONGVIEW AND LANDSCAPE DESIGN. Cl. 46. 8–1–16.
130,682. REPRESENTATION OF CHICKEN. Cl. 46. 5–4–20.
130,683. CONKEY'S. Cl. 46. 5–4–20.
145,063. COMPANION AND PORTRAIT OF CHILD AND DOG. Cl. 46. 7–26–21.
175,803. REPRESENTATION OF CUPID AND DESIGN. Cl. 1. 11–13–23.
179,287. IVINS ETC. AND PORTRAIT. Cl. 46. 2–5–24.
186,929. LITTLE JIMMY. Cl. 38. 7–22–24.
210,159. ROYAL EMCO ETC. AND DESIGN. Cl. 21. 3–9–26.
254,560. MASTERCRAFT AND DESIGN. Cl. 42. 3–26–29.
254,561. RIP VAN WINKLE AND REPRESENTATION OF RIP VAN WINKLE ON LANDSCAPE DESIGN. Cl. 42. 3–26–29.
255,844. DUTCH KRAFT AND WINDMILL DESIGN. Cl. 16. 4–30–29.
258,544. LUCKY STRIKE. Cl. 16. 7–9–29.
259,115. NUT-LET. Cl. 46. 7–23–29.
266,132. HOME TRADER. Cl. 39. 1–14–30.
266,955. MIKE'S BEST. Cl. 39. 2–11–30.
316,062. VISCIDLUB. Cl. 15. 8–14–34.
340,004. LE VAPIN JECTOR. Cl. 23. 10–27–36.
341,562. 800 800% MORE CALCIUM. Cl. 46. 12–15–36.
345,024. VITA-MATIC. Cl. 39. 4–13–37.
349,986. CASTLE SQUARE. Cl. 39. 8–14–37.
353,035. MODERN PHOTOGRAPHY. Cl. 38. 12–21–37.
357,331. BEST LOAF AND DESIGN. Cl. 46. 5–31–38.
357,332. "BAKERY TAILORED." Cl. 46. 5–31–38.
359,473. TRAIL BLAZER. Cl. 16. 8–23–38.
359,474. TRAIL BLAZER. Cl. 24. 8–23–38.
359,932. TRAIL BLAZER. Cl. 12. 9–6–38.
362,306. ENDURO. Cl. 6. 11–15–38.
364,911. TRAIL BLAZER. Cl. 34. 2–21–39.
371,573. REMCO. Cl. 46. 9–26–39.
371,963. REMCO ETC. AND WINGS DESIGN. Cl. 46. 10–17–39.
372,354. BOSTON STANDARD SHOES AND REPRESENTATION OF BANNERS. Cl. 39. 10–31–39.
374,212. LUCKY STAR. Cl. 46. 1–2–40.
384,738. SNO PAK. Cl. 46. 2–4–41.
392,207. LITTERAE LUX. FAX DEUS AND WREATH DESIGN. Cl. 38. 12–16–41.
396,639. MCKEM DELTA COTTON. Cl. 39. 7–28–42.
400,652. COMER AM AVONDALE EST. 1897 AND SHIELD DESIGN. Cl. 42. 3–23–43.
414,461. A CLOTHESLINE COTTON. Cl. 39. 6–12–45.
431,015. GLASDOWN. Cl. 39. 7–1–47.
435,228. TURMAC. Cl. 17. 12–16–47.
437,000. MAGICLAY AND REPRESENTATION OF LAMP. Cl. 1. 3–2–48.
437,012. ESGYNO. Cl. 6. 3–2–48.
437,487. MAGICLAZE AND REPRESENTATION OF LAMP. Cl. 16. 3–23–48.
441,981. DEENA. Cl. 39. 2–1–49.
512,986. BOY-KIN. Cl. 6. 8–2–49.
512,989. GREEN WOODS. Cl. 3. 8–2–49.
512,990. NAIL NUDE. Cl. 6. 8–2–49.
512,996. STEELHEAD. Cl. 22. 8–2–49.
513,004. CHYMOGEN. Cl. 6. 8–2–49.
513,005. SKYHOOK. Cl. 26. 8–2–49.
513,007. AMERICAN. Cl. 22. 8–2–49.
513,008. PANORAD. Cl. 26. 8–2–49.
513,009. BOLIDEN AND DESIGN. Cl. 6. 8–2–49.
513,013. TODDLETOES. Cl. 39. 8–2–49.
513,014. SEEING EYE AND REPRESENTATION OF EYE. Cl. 22. 8–2–49.
513,015. SHREDSOPE. Cl. 4. 8–2–49.
513,016. SCREEN-O-SASH. Cl. 12. 8–2–49.
513,023. ÉTÉ FLEURI. Cl. 6. 8–2–49.
513,024. GEOMETRIC DESIGN. Cl. 6. 8–2–49.
513,031. GEOMETRIC DESIGN. Cl. 49. 8–2–49.
513,032. DAN-KUR. Cl. 6. 8–2–49.
513,033. ATLAS. Cl. 23. 8–2–49.
513,034. ATLAS AND REPRESENTATION OF FIGURE BEARING ROLLER BEARING. Cl. 23. 8–2–49.
513,038. DEXTER. Cl. 25. 8–2–49.
513,039. METEOR. Cl. 22. 8–2–49.
513,040. SILVER PRINCESS. Cl. 22. 8–2–49.
513,042. VETERAN. Cl. 22. 8–2–49.
513,044. "KEEP WARM." Cl. 39. 8–2–49.
513,047. PLUMBERS' ROUGE. Cl. 12. 8–2–49.
513,056. BULL DOG. Cl. 39. 8–2–49.
513,057. REO-FORM AND DESIGN. Cl. 39. 8–2–49.
513,058. KENROLL. Cl 39. 8–2–49.
513,059. ABSOPURE. Cl. 45. 8–2–49.
513,060. THERMOCRETE. Cl. 12. 8–2–49.
513,064. PORTRAIT OF ERNST KAATZ, SR. Cl. 6. 8–2–49.
513,070. D'RELL. Cl. 39. 8–2–49.
513,077. UNION-MAID AND REPRESENTATION OF WOMAN. Cl. 6. 8–2–49.
513,083. DRAINRITE. Cl. 12. 8–2–49.
513,084. BONNIE DEW. Cl. 42. 8–2–49.
513,085. CALIMALA. Cl. 42. 8–2–49.
513,087. EVERFRESH. Cl. 6. 8–2–49.
513,088. JACK DANIEL'S. Cl. 49. 8–2–49.
513,090. BAO. Cl. 6. 8–2–49.
513,091. MARIAGE D'AMOUR. Cl. 6. 8–2–49.
513,092. DEVIL-DOG. Cl. 39. 8–2–49.

513,093. TEGELENE. Cl. 6. 8–2–49.
513,099. CALFSKIN. Cl. 2. 8–2–49.
513,100. HYDRO. Cl. 12. 8–2–49.
513,101. TELEGRAPH. Cl. 4. 8–2–49.
513,102. COORS GOLDEN EXPORT LAGER BEER AND DESIGN. Cl. 48. 8–2–49.
513,107. HAGANAH. Cl. 17. 8–2–49.
513,113. EAU DE COLOGNE DU CHEVALIER D'ORSAY. Cl. 6. 8–2–49.
513,114. SEKRET SAFE AND REPRESENTATION OF SAFE DIAL. Cl. 22. 8–2–49.
513,115. VIVIBX. Cl. 6. 8–2–49.
513,117. NATOMA'S LENGTHEN AID AND SHIELD DESIGN. Cl. 6. 8–2–49.
513,119. KATHODE. Cl. 14. 8–2–49.
513,122. PRACO EL PRACO ETC. AND DESIGN. Cl. 17. 8–2–49.
513,123. EL PRACO. Cl. 17. 8–2–49.
513,129. YIPEE-I-AAAY. Cl. 22. 8–2–49.
513,131. IC-AND DESIGN. Cl. 20. 8–2–49.
513,133. GRAPE-JU. Cl. 45. 8–2–49.
513,141. VEROS. Cl. 6. 8–2–49.
513,147. QUINO-JEL. Cl. 6. 8–2–49.
513,149. PROPYLEPHRINE. Cl. 6. 8–2–49.
513,150. RREFLECTO. Cl. 26. 8–2–49.
513,153. MANGASUL. Cl. 6. 8–2–49.
513,154. KRA-Z-KLEEN. Cl. 4. 8–2–49.
513,156. ENOZ. Cl. 4. 8–2–49.
513,157. SQUALOSE. Cl. 6. 8–2–49.
513,159. PHLORIN. Cl. 6. 8–2–49.
513,162. ANNCAR. Cl. 6. 8–2–49.
513,169. PORTRAIT OF MAN AND HALF GRAPEFRUIT. Cl. 45. 8–2–49.
513,170. D-SEC. Cl. 6. 8–2–49.
513,175. SNOW TOP AND LANDSCAPE DESIGN. Cl. 6. 8–2–49.
513,181. LOVLI-DO AND SILHOUETTE OF WOMAN. Cl. 6. 8–2–49.
513,183. LOMAR. Cl. 6. 8–2–49.
513,184. PADASOL. Cl. 6. 8–2–49.
513,185. HI-SPEED. Cl. 4. 8–2–49.
513,186. INTERSIZE. Cl. 6. 8–2–49.
513,190. SECRET D'AMOUR. Cl. 6. 8–2–49.
513,193. TAL. Cl. 6. 8–2–49.
513,194. SCIENSOL. Cl. 6. 8–2–49.
513,197. U-MUST-HAV-A. Cl. 6. 8–2–49.
513,203. MERRIT. Cl. 4. 8–2–49.
513,205. THORANOL-WS. Cl. 4. 8–2–49.
513,207. GOLDEN EAGLE. Cl. 42. 8–2–49.
513,210. KITTENSTEP. Cl. 42. 8–2–49.
513,212. NOGERO AND REPRESENTATION OF AIRPLANE. Cl. 4. 8–2–49.
513,214. EVER-LEVEL. Cl. 13. 8–2–49.
513,216. FOREVER KOOL. Cl. 39. 8–2–49.
513,217. SIZE RITE. Cl. 39. 8–2–49.
513,219. REDKOTE. Cl. 39. 8–2–49.
513,221. EZON-EZOFF. Cl. 39. 8–2–49.
513,222. "GLITTER STEM." Cl. 50. 8–2–49.
513,226. SEAGUIDE. Cl. 22. 8–2–49.
513,227. BREATHINDRA. Cl. 39. 8–2–49.
513,228. MERITOOL. Cl. 39. 8–2–49.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 16

329,599. Nov. 5, 1935. The Werts Company, Cleveland, Ohio. Pub. by The Penetryn System, Inc., Cleveland, Ohio.

PENETRYN

For Water Proofing Compound in the Nature of Paint.

CLASS 21

363,361. Dec. 20, 1938. The Electric Storage Battery Company, Philadelphia, Pa. Pub. by registrant.

Exide-Tytex

For Storage Batteries.

CLASS 22

327,170. Aug. 20, 1935. S. L. Allen & Co., Inc., Philadelphia, Pa. Pub. by registrant.

SUPER STEERING

No claim is made to the word "Steering" apart from its association with the word "Super."
For Sleds.

331,047. Dec. 24, 1935. S. L. Allen & Co., Inc., Philadelphia, Pa. Pub. by registrant.

AIRLINE PILOT

For Coasting Sleds.

CLASS 27

107,459. Nov. 30, 1915. Western Clock Co., Peru, Ill. Pub. by General Time Corporation, La Salle, Ill.

THE SLEEP CHECKER

For Clocks and Watches.

CLASS 36

409,302. Oct. 3, 1944. Grossman Music Co., Cleveland, Ohio. Pub. by Grossman Music Corporation, Cleveland, Ohio.

CHAMPION

For Brass Horns—Namely, Trumpets, Cornets, Trombones, Baritones, French Horns, Altos, Mellophones, and Sousaphones; Band Instrument Supplies—Namely, Mouthpieces, Mutes, Stands, and Derbies; Reed Instruments—Namely, Clarinets, Saxophones, Oboes, Bassoons, and English Horns; Reed Instrument Supplies—Namely, Mouthpieces, Reeds, Straps, Stands, and Key Pads; Wind Instruments—Namely, Flutes and Piccolos; Fretted Instruments—Namely, Guitars, Mandolins, Mandolas, Ukuleles, Tenor Banjos, Five-String Banjos, Banjo Mandolins, Banjo Ukuleles, Tenor Guitars, and Tiples; Fretted Instrument Supplies—Namely, Banjo Heads, Banjo Head Guards, Banjo Resonators, Banjo Bridges, Banjo Tail-Pieces, and Strings; Bow Played Instruments—Namely, Violins, Violas, Violoncellos, and Bass Violas; Bow Plated Instrument Supplies—Namely, Bows, Bow Hair, Strings, and Bridges; Marimbas, Batons, Accordions, Concertinas, Fifes, Harmonicas, Ocarinas, and Band Lyras.

CLASS 38

352,654. Dec. 7, 1937. National Trailways System, Chicago, Ill. Pub. by National Trailways Bus System, Washington, D. C.

TRAILWAYS

For Bi-Monthly Periodical.

CLASS 39

106,399. Oct. 19, 1915. Bloomingdale Bros., New York, N. Y. Pub. by Federated Department Stores, Inc., d. b. a. Bloomingdale Bros., New York, N. Y.

Courtly

For Hosiery.

249,719. Nov. 20, 1928. Ogus, Rabinovich & Ogus, Inc., New York, N. Y. Pub. by registrant.

Janyth Roy

The name "Janyth Roy" is disclaimed apart from the mark as shown on the drawing.
For Women's, Children's, and Misses' Hats.

327,758. Sept. 3, 1935. Bloomingdale Bros., Inc., New York, N. Y. Pub. by Federated Department Stores, Inc., d. b. a. Bloomingdale Bros., New York, N. Y.

Chantelle

For Gloves Made of Leather and Fabric.

401,548. May 25, 1943. Penaljo, Inc., St. Louis, Mo. Pub. by Hamilton Shoe Company, St. Louis, Mo.

Penaljo

For Men's, Women's, and Children's Shoes of Leather, Fabric, and Combinations Thereof.

CLASS 42

323,126. Apr. 2, 1935. Carson Pirie Scott & Company, Chicago, Ill. Pub. by Martin Weiner Corp., Clifton, N. J.

Jex-Style

No claim is made to the exclusive right to the word "Style" apart from the mark shown in the drawing.
For Piece Goods Composed of Cotton, Rayon, Rayon and Cotton, and Wool.

CLASS 44

332,153. Feb. 4, 1936. Bard-Parker Company Inc., Danbury, Conn. Pub. by registrant.



For the purpose of this registration only the words "It's Sharp" and the word "Rib-Back" are disclaimed apart from the mark as shown in the drawing and the representation of the wrapper or envelope is disclaimed as part of the mark. The background of the wrapper illustrated in the drawing is lined for the color green.
For Surgical Knives and Detachable Blades for Surgical Knives.

CLASS 46

58,590. Dec. 18, 1906. Jones Dairy Farm, Fort Atkinson, Wis. Pub. by registrant.

JONES DAIRY FARM.
FT. ATKINSON, WISCONSIN.

For Sausages.

60,458. Feb. 12, 1907. Jones Dairy Farm, Fort Atkinson, Wis. Pub. by registrant.

DAIRY FARM

For Sausages, Hams, Bacon, Salt Pork, and Lard.

60,482. Feb. 12, 1907. Jones Dairy Farm, Fort Atkinson, Wis. Pub. by registrant.

FORT ATKINSON

For Sausages, Hams, Bacon, Salt Pork, and Lard.

61,297. Mar. 12, 1907. Jones Dairy Farm, Fort Atkinson, Wis. Pub. by registrant.

JONES DAIRY FARM

For Sausages, Hams, Bacon, Salt Pork, and Lard.

62,268. Apr. 30, 1907. Jones Dairy Farm, Fort Atkinson, Wis. Pub. by registrant.

JONES

For Sausages, Hams, Bacon, Salt Pork, and Lard.

CLASS 49

327,076. Aug. 13, 1935. George Grant, d. b. a. J. & G. Grant, Speyside, Scotland. Pub. by J. & G. Grant Limited, Blacksboat, Scotland.

GLENFARCLAS
PURE MALT WHISKY



J. & G. GRANT, DISTILLERS,
GLENFARCLAS-GLENLIVET DISTILLERY
SPEYSIDE, BANFFSHIRE, SCOTLAND.
PRODUCT OF SCOTLAND.

The words "Pure Malt Whisky," "Distillers," "Speyside," "Banffshire," "Scotland," and "Product of Scotland" are disclaimed apart from the mark shown.
For Whisky.

CLASS 51

107,465. Dec. 7, 1915. Bloomingdale Bros., New York, N. Y. Pub. by Federated Department Stores, Inc., d. b. a. Bloomingdale Bros., New York, N. Y.

SEPTOL

For Pharmaceuticals—viz., Mouth-Washes.

CLASS 52

108,151. Jan. 18, 1916. Bloomingdale Bros., New York, N. Y. Pub. by Federated Department Stores, Inc., d. b. a. Bloomingdale Bros., New York, N. Y.

NOK-SPOT

For Non-Saponaceous, Non-Inflammable Cleaning Fluid.

LIST OF REGISTRANTS OF TRADEMARKS

Abbott Laboratories, North Chicago, Ill. 618,916, pub. 10–4–55. Cl. 18.

Abercrombie & Fitch Co., New York, N. Y. 618,883, pub. 10–11–55. Cl. 3.

Abingdon-Cokesbury Press: *See*—
Book Agents of the Methodist Episcopal Church, South.

Abenpure Water Co., Inc., Detroit, Mich. 513,050, canc. Cl. 45.

Ace Fastener Corp., Chicago, Ill. 332,351, ren. 2–11–56. Cl. 23.

Air Reduction Co., Inc., New York, N. Y. 619,144, pub. 10–11–55. Cl. 44.

Alaska Juneau Enterprises: *See*—
Alaska Juneau Gold Mining Co.

Alaska Juneau Gold Mining Co., d. b. a. Alaska Juneau Enterprises, San Francisco, Calif. 619,015, pub. 10–4–55. Cl. 23.

Albert, Inc., Chicago, Ill. 441,981, canc. Cl. 39.

Allen & Hanburys, Ltd., Bethnal Green, London, England. 618,908, pub. 10–11–55. Cl. 18.

Allen, S. L., & Co., Inc., Philadelphia, Pa. 327,170, 12(c) ppb. 1–10–56. Cl. 22.

Allen, S. L., & Co., Inc., Philadelphia, Pa. 331,047, 12(c) pub. 1–10–56. Cl. 22.

Aluminum Goods Mfg. Co., d. b. a. Miro, Manitowoc, Wis. 618,992, pub. 10–4–55. Cl. 22.

American Asphalt Paint Co. to American-Marietta Co., Chicago, Ill. 331,732, ren. 1–21–56. Cl. 16.

American Distilling Co., The, Pekin, Ill., and New York, N. Y. 513,031, canc. Cl. 49.

American Envelope Co., The, West Carrollton, Ohio. 619,084–5, pub. 10–11–55. Cl. 37.

American Fabricators, a Division of Bellingham Shipyards Co., Bellingham, Wash. 618,859, pub. 6–28–55. Cl. 12.

American-Marietta Co.: *See*—
American Asphalt Paint Co.

American Measuring Instruments Corp., Long Island City, N. Y. 618,957–8, pub. 10–11–55. Cl. 21.

American Merrillel Corp., Brooklyn, N. Y. 618,989, pub. 10–11–55. Cl. 22.

American Metal Co., Ltd., The, New York, N. Y. 618,876, pub. 10–11–55. Cl. 14.

American Oil and Disinfectant Corp., New York, N. Y. 513,154, canc. Cl. 4.

Anchor Hocking Glass Corp.: *See*—
Salem Glass Works.

Andreasen, Catherine M.: *See*—
Groth, Bertha L.

Armitage, Francis W., d. b. a. House of Armitage, Allentown, Pa. 618,985, pub. 10–11–55. Cl. 22.

Armour and Co., d. b. a. The Armour Laboratories, Chicago, Ill. 513,004, canc. Cl. 6.

Armour Laboratories, The: *See*—
Armour and Co.

Art Metal Co., The, Cleveland, Ohio. 618,955, pub. 10–11–55. Cl. 21.

Associated Merchandising Corp., The, New York, N. Y. 619,009, pub. 10–4–55. Cl. 23.

Automatic Motor Base Co.: *See*—
Sloyan, Jerome J.

Auslere and Co.: *See*—
Frank, R. René.

Avondale Mills, Sylacauga, Ala. 400,652, canc. Cl. 42.

B & C Mfg. Co., Wauseon, Ohio. 618,943, pub. 10–4–55. Cl. 19.

B. R. Co.: *See*—
Bronson Reel Co.

Baker Clothes, Inc., Philadelphia, Pa. 619,103, pub. 10–11–55. Cl. 39.

Baker Extract Co., Springfield, Mass. 331,818, ren. 1–21–56. Cl. 46.

Baker Extract Co., Springfield, Mass. 332,849, ren. 2–25–56. Cl. 45.

Bard-Parker Co., Inc., Danbury, Conn. 332,153, 12(c) pub. 1–10–56. Cl. 44.

Barkin, Levin & Co. Inc., New York, N. Y. 619,106, pub. 10–11–55. Cl. 39.

Barr Rubber Products Co., The, Sandusky, Ohio. 618,991, pub. 10–4–55. Cl. 22.

Becton, Dickinson and Co., Rutherford, N. J. 619,143, pub. 10–11–55. Cl. 44.

Belford Co., Inc., New York, N. Y. 619,091, pub. 10–11–55. Cl. 37.

Bell & Gossett Co., Morton Grove, Ill. 619,217. Cl. 13.

Belrug Mills of South Carolina, Greenville, S. C. 619,133, pub. 10–11–55. Cl. 42.

Bendix Aviation Corp., Detroit, Mich. 619,066–7, pub. 10–11–55. Cl. 35.

Benson-Niles Laboratories, Inc., New York, N. Y. 618,900, pub. 10–11–55. Cl. 18.

Bercut-Richards Packing Co., Sacramento, Calif. 333,132, ren. 3–10–56. Cl. 46.

Berkshire Woolen Co., Pittsfield, Mass. 619,134, pub. 10–11–55. Cl. 42.

Berlin & Jones Co., Inc., New York, N. Y. 619,094, pub. 10–11–55. Cl. 37.

Berns Mfg. Corp., d. b. a. Electric Blower Co., Boston, Mass. 618,967, pub. 10–4–55. Cl. 21.

Big Boy, Inc., Winston-Salem, N. C. 513,133, canc. Cl. 45.

Birmingham Sound Reproducers Ltd., Staffordshire, England. 618,965, pub. 10–11–55. Cl. 21.

Bloomingdale Bros.: *See*—
Bloomingdale Bros., Inc.

Bloomingdale Bros., by Federated Department Stores, Inc., d. b. a. Bloomingdale Bros., New York, N. Y. 106,399, 12(c) pub. 1–10–56. Cl. 39.

Bloomingdale Bros., by Federated Department Stores, Inc., d. b. a. Bloomingdale Bros., New York, N. Y. 107,465, 12(c) pub. 1–10–56. Cl. 51.

Bloomingdale Bros., by Federated Department Stores, Inc., d. b. a. Bloomingdale Bros., New York, N. Y. 106,151, 12(c) pub. 1–10–56. Cl. 52.

Bloomingdale Bros., Inc., by Federated Department Stores, Inc., d. b. a. Bloomingdale Bros., New York, N. Y. 827,758, 12(c) pub. 1–10–56. Cl. 39.

Boldens Gruvaktiebolag, Skelleftehamn, Sweden. 513,009, canc. Cl. 6.

Bonewita Chemical, Inc., Burlington, Iowa. 513,024, canc. Cl. 6.

Book Agents of the Methodist Episcopal Church, South, d. b. a. Abington-Cokesbury Press, Nashville, Tenn. 392,207, canc. Cl. 38.

Boston Shoe Co.: *See*—
Smith, Jack.

Bowman Dairy Co., Chicago, Ill. 619,156, pub. 10–4–55. Cl. 46.

Bowman Feed Products, Inc., Holland, Mich. 619,154, pub. 10–11–55. Cl. 46.

Bowser, Inc., Fort Wayne, Ind. 619,002, pub. 10–11–55. Cl. 23.

Boy-Kin Products: *See*—
Hawkins, Beatrice.

Brayton & Co., Inc., Utica, N. Y. 619,055, pub. 10–11–55. Cl. 31.

Breon, George A., & Co., New York, N. Y. 618,915, pub. 10–11–55. Cl. 18.

Bridgeport Brass Co., Bridgeport, Conn. 619,210. Cl. 6.

Bristol-Myers Co. to Bristol-Myers Co., New York, N. Y. 105,416, ren. 7–20–55. Cl. 18.

Brixite Mfg. Co., Inc., South Kearny, N. J. 618,856, pub. 10–11–55. Cl. 12.

Bronson Reel Co., Bronson, now by change of name B. R. Co., to McAleer Mfg. Co., Rochester, Mich. 513,039–40, canc. Cl. 22.

Bronson Reel Co., Bronson, now by change of name B. R. Co., to McAleer Mfg. Co., Rochester, Mich. 513,042, canc. Cl. 22.

Brooks Uniform Co. Inc., New York, N. Y. 619,112, pub. 10–11–55. Cl. 39.

Broome Vacuum Sales & Service: *See*—
Buccasio, Nicholas A.

Brown-Brockmeyer Co., The, Dayton, Ohio. 618,960, pub. 10–4–55. Cl. 21.

Brush-O-Products, San Francisco, Calif. 619,056, pub. 10–11–55. Cl. 51.

Bryant Playthings, Inc., Bronx, N. Y. 618,993, pub. 10–4–55. Cl. 22.

Buccasio, Nicholas A., d. b. a. Broome Vacuum Sales & Service, Binghamton, N. Y. 618,950, pub. 10–11–55. Cl. 21.

Bucyrus-Erie Co., South Milwaukee, Wis. 619,015, pub. 10–4–55. Cl. 23.

Buscarlet Glove Co., Inc.: *See*—
Societe Anonyme des Gants Buscarlet.

Business Charting Institute; *See*—
Groth, Bertha L.

Butler, Clifford R., d. b. a. Dan-Kur Co., Dunn, N. C. 513,032, canc. Cl. 6.

Cabaniss, C. B., & Sons, Shelby, N. C. 619,215. Cl. 1.

Callot Soeurs of Paris, Inc., New York, N. Y. 513,090–1, canc. Cl. 6.

Cambridge Glass Co., The, Cambridge, Ohio. 619,061. pub. 10–11–55. Cl. 33.

Candle-Lite Lamp Co.: *See*—
Carlstead, Harold C.

Capitol Records, Inc., Los Angeles, Calif. 619,083, pub. 10–11–55. Cl. 36.

Carbone, John J., d. b. a. Joncar Co., New York, N. Y. 513,162, canc. Cl. 6.

Carlstead, Harold C., d. b. a. Candle-Lite Lamp Co., Harvey, Ill. 619,053, pub. 10–11–55. Cl. 30.

Carmi-Ainsbrooke Corp., New York, N. Y. 619,111, pub. 10–11–55. Cl. 39.

Carson Pirie Scott & Co., Chicago, Ill., by Martin Weiner Corp., Clifton, N. J. 323,126, 12(c) pub. 1–10–56. Cl. 42.

Cato Oil and Grease Co., Oklahoma City, Okla. 316,062, canc. Cl. 15.

Cellular Rubber Products, Inc., Willimantic, Conn. 618,855, pub. 10–11–55. Cl. 12.

Central Grape Products Co.: *See*—
Garcia Wine Corp.

Char-Lem Products: *See*—
Schrall, Charles L.

Charmfit of Hollywood, Inc., Los Angeles, Calif. 619,129–30, pub. 10–11–55. Cl. 39.

Chase Chemical Co., Newark, N. J. 618,894, pub. 10–4–55. Cl. 18.

Chemley Products Co., Chicago, Ill. 618,845, pub. 10–11–55. Cl. 6.

Chicago Paints, Inc., Chicago, Ill. 618,884–5, pub. 10–4–55. Cl. 16.

Chipman Knitting Mills, Easton, Pa. 619,121–2, pub. 10–11–55. Cl. 39.

Clarke, John, & Co., Inc., New York, N. Y. 618,837, pub. 1–19–54. Cl. 6.

Clay-Adams, Inc., New York, N. Y. 619,032, pub. 10–11–55. Cl. 26.

Clinchfield Coal Corp., Dante, Va. 618,824, pub. 10–11–55. Cl. 1.
Clover Mfg. Co., The, Norwalk, Conn. 513,185, canc. Cl. 4.
Colorado Milling & Elevator Co., The, Denver, Colo., and Burley, Idaho. 145,063, canc. Cl. 46.
Colotyle Tyle-Bord, Inc., Seattle, Wash. 619,190, pub. 10–11–55. Cl. 50.
Columbian Vise & Mfg. Co., The, Cleveland, Ohio. 619,026, pub. 10–11–55. Cl. 26.
Comatic Laboratories: *See*—
De Lorenzo, Joseph P.
Conkey, G. E., Co., The, Cleveland, Ohio. 130,682–3, canc. Cl. 46.
Conner Lumber and Land Co., The, Laona, Wis. 618,986, pub. 10–4–55. Cl. 22.
Consolidated Electronics Industries Corp., Waterbury, Conn. 618,963, pub. 10–4–55. Cl. 21.
Consolidated Factors, Monterey, Calif. 619,148, pub. 1–27–53. Cl. 46.
Continental Steel Corp., Kokomo, Ind. 513,083, canc. Cl. 12.
Coors, Adolph, Co., Golden, Colo. 513,102, canc. Cl. 46.
Coors, Adolph, Co., Golden, Colo. 619,191, pub. 10–11–55. Cl. 46.
Corona Soapcrafters: *See*—
Rothschild, Lee.
Cove Creek Industries, Inc., Covesville, Va. 437,000, canc. Cl. 1.
Cove Creek Industries, Inc., Covesville, Va. 437,487, canc. Cl. 16.
Cowden Mfg. Co., Kansas City, Mo., Galesburg, Ill., and Omaha, Nebr. 266,132, canc. Cl. 39.
Cowden Mfg. Co., Kansas City, Mo., Galesburg, Ill., and Omaha, Nebr. 266,955, canc. Cl. 39.
Crane, Esther N., Chicago, Ill. 513,117, canc. Cl. 6.
Crompton Co., to Crompton Co., West Warwick, R. I. 330,837, ren. 12–17–55. Cl. 42.
Dale, Vern, d. b. a. Outers Laboratories, Onalaska, Wis. 332,949, ren. 3–3–56. Cl. 15.
Danco, Gerard J., Inc., New York, N. Y. 513,157, canc. Cl. 6.
Danecastle Ltd., New York, N. Y. 619,004, pub. 10–4–55. Cl. 23.
Daniel, Henry S., Beverly Hills, Calif. 513,058, canc. Cl. 39.
Daniel, Jack, Distillery, Lem Motlow, Prop., Inc., Lynchburg, Tenn. 513,088, canc. Cl. 49.
Dan-Kur Co.: *See*—
Butler, Clifford R.
D'Arrigo Bros. Co. of California, San Jose, Calif. 619,149, pub. 10–11–55. Cl. 46.
Davidow, Inc., Sportswear, New York, N. Y. 619,131, pub. 10–11–55. Cl. 39.
Debevoise Co., The, Brooklyn, N. Y. 618,892, pub. 10–4–55. Cl. 16.
Definitiv Kontroll-Buchhaltung A. G., Zurich, Switzerland. 619,060, pub. 10–11–55. Cl. 32.
De Lorenzo, Joseph P., d. b. a. Comatic Laboratories, Rosedale, N. Y. 513,047, canc. Cl. 12.
Deutsche Torfhandelsgesellschaft mit Beschrankter Haftung, Bremen, Germany. 618,831, pub. 10–11–55. Cl. 1.
Diversey Corp., The, Chicago, Ill. 513,156, canc. Cl. 4.
Dixon, W. L., Co., Los Angeles, Calif. 618,853, pub. 11–9–54. Cl. 12.
Dr. Ing. h. c. F. Porsche K. G., Stuttgart-Zuffenhausen, Germany. 618,932–3, pub. 8–16–55. Cl. 19.
Doctors Specialty Ptg. Co.: *See*—
Reeves, Wallace C.
Dormin, Inc., New York, N. Y. 618,906, pub. 10–4–55. Cl. 18.
D'Orsay Perfumeries Corp., New York, N. Y. 513,113, canc. Cl. 6.
D'Rell Inc., Philadelphia, Pa. 513,070, canc. Cl. 39.
Drew, E. F., & Co., Inc., New York, N. Y. 619,209, pub. 10–11–55. Cl. 52.
Drug Products Co., Inc., The, Brooklyn, N. Y. 618,925, pub. 10–11–55. Cl. 18.
Drumsmith, Maude M., Milwaukie, Oreg. 331,831, ren. 1–21–56. Cl. 51.
Duncan, Donald F., Inc., Chicago, Ill. 618,981, pub. 10–11–55. Cl. 22.
Duplex Printing Press Co., Battle Creek, Mich., to National Cooperatives, Inc., Albert Lea, Minn. 332,728, ren. 2–28–56. Cl. 23.
Durolith Paint & Varnish Co., Inc., Bristol, Pa. 258,544, canc. Cl. 16.
Eagen, John J., Altadena, Calif. 619,117, pub. 10–11–55. Cl. 39.
Eagle Clothes, Inc., Brooklyn, N. Y. 619,100, pub. 10–11–55. Cl. 39.
Eagle Dry Goods Co., New York, N. Y. 513,207, canc. Cl. 42.
Eagle-Picher Co., The, Cincinnati, Ohio. 618,951, pub. 10–11–55. Cl. 21.
Eastman Kodak Co., Rochester, N. Y., to Eastman Kodak Co., Flemington, N. J. 330,772, ren. 12–17–55. Cl. 26.
Economics Laboratory, Inc., St. Paul, Minn. 619,205, pub. 10–11–55. Cl. 52.
Edwards, Wm., Co., The: *See*—
Foodtown Purchasing Co.
Electric Blower Co.: *See*—
Berns Mfg. Corp.
Electric Storage Battery Co., The, Philadelphia, Pa. 363,361, 12(c) pub. 1–10–56. Cl. 21.
Electric Storage Battery Co., The, Philadelphia, Pa. 618,948–9, pub. 10–11–55. Cl. 21.
Electroacustic G. m. b. H., Kiel, Germany. 618,947, pub. 10–11–55. Cl. 21.
Electroacustic G. m. b. H., Kiel, Germany. 618,954, pub. 10–11–55. Cl. 21.
Electrolux Corp., New York, N. Y. 619,218. Cl. 21.
Elgan Mfg. Corp., Long Island City, N. Y. 619,064, pub. 10–11–55. Cl. 34.
Elkin, B. P., Co., Corona, N. Y. 619,014, pub. 10–4–55. Cl. 22.
Emulsol Chemical Corp.: *See*—
Emulsol Corp., The.
Emulsol Corp., The, to Emulsol Chemical Corp., Chicago, Ill. 328,920, ren. 10–9–55. Cl. 52.
Enterprise Mfg. Co., The, Akron, Ohio. 106,419–20, ren. 10–19–55. Cl. 22.
Enterprise Mfg. Co., The, Akron, Ohio. 331,025, ren. 12–24–55. Cl. 22.
Etta-Leen Hats, New York, N. Y. 619,108, pub. 10–11–55. Cl. 39.
Fabrez Corp., New York, N. Y. 619,140, pub. 10–11–55. Cl. 42.
Fastone, Inc., New York, N. Y. 618,898, pub. 10–11–55. Cl. 18.
Federal Cartridge Corp., Minneapolis, Minn. 618,847, pub. 10–11–55. Cl. 9.
Federated Department Stores, Inc.: *See*—
Bloomingdale Bros.
Bloomingdale Bros., Inc.
Felt and Tarrant Mfg. Co., Chicago, Ill. 619,028, pub. 10–11–55. Cl. 26.
Fendrich, H., Evansville, Ind. 72,615, canc. Cl. 17.
Fiestar, Inc., Roslyn Heights, N. Y. 618,848, pub. 10–11–55. Cl. 10.
Figurine Display Co.: *See*—
Sawaree, Alice M.
Finger Lakes Chemical Co., Inc., Etna, N. Y. 619,212–13, pub. 10–11–55. Cl. 52.
Firth Sterling, Inc.: *See*—
Firth-Sterling Steel Co.
Firth-Sterling Steel Co., McKeesport, to Firth Sterling, Inc., Pittsburgh, Pa. 106,094, ren. 10–12–55. Cl. 14.
Fisons Peat Control Ltd.: *See*—
Peat Control Ltd.
Fitzpatrick Brothers, Chicago, Ill. 107,680, ren. 12–21–55. Cl. 52.
Fjellmans Mekaniska Verkstads Aktiebolag, Mariestad, Sweden. 619,221. Cl. 23.
Fleetwood Sportwear, Inc., New York, N. Y. 619,132, pub. 10–11–55. Cl. 39.
Flents Products Co. Inc., New York, N. Y. 618,901, pub. 10–11–55. Cl. 18.
Follis, Norman L., Fort Lauderdale, Fla. 618,930, pub. 10–11–55. Cl. 18.
Foodtown Purchasing Co., d. b. a. The Wm. Edwards Co., Cleveland, Ohio. 619,174, pub. 10–4–55. Cl. 46.
Forall Drug Co., Inc.: *See*—
Gold Medal Haarlem Oil Corp.
Ford Motor Co., Dearborn, Mich. 618,942, pub. 10–4–55. Cl. 19.
Forvil: *See*—
Societe Anonyme Parfums Forvil & Dentifrices du Docteur Pierre Reunis.
Frank, E. René, d. b. a. Ausiere and Co., Nashville, Tenn. 513,190, canc. Cl. 6.
French, Samuel H., Paint Co., Philadelphia, Pa. 513,100, canc. Cl. 12.
Fuller, D. B., & Co., Inc., New York, N. Y. 619,136–9, pub. 10–11–55. Cl. 42.
Galox Chemical Co., Santa Fe, N. Mex. 618,918, pub. 10–11–55. Cl. 18.
Garcia Wine Corp., Long Island City, to Central Grape Products Co., New York, N. Y. 513,107, canc. Cl. 47.
Gaynes, Inc., New York, N. Y. 513,216, canc. Cl. 39.
Gellich Leather Co., Taunton, Mass. 618,825–7, pub. 10–11–55. Cl. 1.
General Electric Co., Plainville, Conn. 618,961, pub. 10–4–55. Cl. 21.
General Electric Co., Schenectady, N. Y. 619,023, pub. 10–11–55. Cl. 24.
General Fire Extinguisher Co., to Grinnell Corp., Providence, R. I. 329,200, ren. 10–23–55. Cl. 13.
General Paint Corp., San Francisco, Calif. 618,891, pub. 10–4–55. Cl. 16.
General Sportwear Co., Inc., Ellenville, N. Y. 513,092, canc. Cl. 39.
General Time Corp.: *See*—
Western Clock Co.
General Tire & Rubber Co., The, Akron, Ohio. 618,887, pub. 10–4–55. Cl. 16.
General Tire & Rubber Co., The, Akron, Ohio. 619,000, pub. 10–11–55. Cl. 22.
Gildersleeve, Lester G., Pasadena, Calif. 619,008, pub. 10–4–55. Cl. 23.
Gillet, Marcelle: *See*—
Houdart, Marcelle.
Gits-Zit Oil Products Co., Wellsville, N. Y. 618,880, pub. 10–11–55. Cl. 15.
Gladding, B. F., & Co., Inc., South Otselic, N. Y. 512,996, canc. Cl. 22.
Gladding, B. F., & Co., The, South Otselic, N. Y. 618,973, pub. 10–4–55. Cl. 22.
Glasdown Corp., Wilkes-Barre, Pa. 431,015, canc. Cl. 32.
Globe Roofing Products Co. Inc., Whiting, Ind. 333,551, ren. 3–24–56. Cl. 12.
Goder Incinerator Corp., Chicago, Ill. 619,062, pub. 10–11–55. Cl. 34.
Goenner, Eugene, d. b. a. Thermocrete Panel Construction Co., Inc., New York, N. Y. 513,060, canc. Cl. 12.
Gold Badge Farms, Phoenix, Ariz. 619,179, pub. 10–11–55. Cl. 46.
Gold Medal Haarlem Oil Corp., Brooklyn, N. Y., to Forall Drug Co., Inc., Jersey City, N. J. 332,510, ren. 2–18–56. Cl. 18.

Gorham Mfg. Co., Providence, R. I. 619,050, pub. 10–11–55. Cl. 28.
Granat Bros., San Francisco, Calif. 619,044, pub. 10–11–55. Cl. 27.
Granat Bros., San Francisco, Calif. 619,048, pub. 10–11–55. Cl. 28.
Grand Central Aircraft Co., Glendale, Calif. 618,934, pub. 10–4–55. Cl. 19.
Grand Rapids Paint and Enamel Co., Grand Rapids, Mich. 255,844, canc. Cl. 16.
Grant, George, d. b. a. J. & G. Grant, Speyside, by J. & G. Grant Ltd., Blacksboat, Scotland. 327,076, 12(c) pub. 1–10–56. Cl. 49.
Grant, J. & G.: *See*—
Grant, George.
Grant, J. & G., Ltd.: *See*—
Grant, George.
Griffith Laboratories, Inc., The, d. b. a. The Griffith Laboratories, Chicago, Ill. 330,829, ren. 12–17–55. Cl. 46.
Griffith Laboratories, The: *See*—
Griffith Laboratories, Inc., The.
Grogan, John B., Toledo, Ohio. 619,225. Cl. 102.
Grinnell Corp.: *See*—
General Fire Extinguisher Co.
Gross, Lewis A., d. b. a. Lag Products Co., and Lag Chemical Co., Philadelphia, Pa. 618,913, pub. 10–4–55. Cl. 16.
Grossman Music Co., by Grossman Music Corp., Cleveland, Ohio. 409,302, 12(c) pub. 1–10–56. Cl. 36.
Grossman Music Corp.: *See*—
Grossman Music Co.
Groth, Bertha L., d. b. a. Business Charting Institute, Oak Park, to C. M. Andreasen, Westchester, Ill. 619,092, pub. 10–11–55. Cl. 37.
Gruen Watch Co., The, Cincinnati, Ohio. 619,040–3, pub. 10–11–55. Cl. 27.
Gulf Oil Corp., Pittsburgh, Pa. 619,078–8, pub. 10–11–55. Cl. 35.
Gulf States Paper Corp., Tuscaloosa, Ala. 513,099, canc. Cl. 2.
Gutmann, Carl, & Co., Inc., New York, N. Y. 513,228, canc. Cl. 39.
Hamilton Shoe Co.: *See*—
Penaljo, Inc.
Hannay, Clifford B., & Son, Inc., Westerlo, N. Y. 619,022, pub. 10–25–55. Cl. 23.
Hanover Wire Cloth Division, Continental Copper & Steel Industries, Inc., New York, N. Y. 618,864, pub. 10–11–55. Cl. 13.
Harley-Davidson Motor Co., Milwaukee, Wis. 107,970, ren. 1–4–56. Cl. 19.
Harshaw Chemical Co., The, Cleveland, Ohio. 618,841, pub. 10–11–55. Cl. 6.
Hawkins, Beatrice, d. b. a. Boy-Kin Products, Pittsburgh, Pa. 512,986, canc. Cl. 6.
Hawley & Hoops, Inc., Newark, N. J. 619,157, pub. 10–4–55. Cl. 46.
Hayden Flour Mills, Tempe, Ariz. 619,185–6, pub. 10–11–55. Cl. 46.
Hayman Window Co., Denver, Colo., to Ventaire Co., Tulsa, Okla. 618,851, pub. 12–1–53. Cl. 12.
Herbst, Rosalie, d. b. a. Reliable Mfg. Co., Elkins Park, Pa. 513,197, canc. Cl. 6.
Herrschner, Frederick, Chicago, Ill. 513,115, canc. Cl. 6.
Hettrick Mfg. Co., The, Toledo, Ohio. 619,197, pub. 10–11–55. Cl. 50.
Hewes & Potter, Inc., Boston, Mass. 513,056, canc. Cl. 39.
Higbie Mfg. Co., Rochester, Mich. 618,990, pub. 9–27–55. Cl. 22.
High Definition Electronic Picture Recording System, Inc., Los Angeles, Calif. 619,027, pub. 10–11–55. Cl. 26.
Hijos de Antonio Barcelo, S. A., Malaga, Spain. 619,190, pub. 10–11–55. Cl. 47.
Hillenbrand Bottling Co., d. b. a. Texan Carbonated Beverage Co., Evansville, Ind. 513,169, canc. Cl. 45.
Holst-Knudsen, Poul, Copenhagen, Denmark. 619,153, pub. 10–11–55. Cl. 46.
Holt, Douglas (Established 1919) Ltd., London, England. 618,852, pub. 10–11–55. Cl. 12.
Hoover Co., The, North Canton, Ohio. 619,080, pub. 10–11–55. Cl. 35.
Houdart, Marcelle, Born Gillet, Dijon, Côte d'Or, France. 618,935, pub. 10–11–55. Cl. 19.
House of Armitage: *See*—
Armitage, Francis W.
Howell Co.: *See*—
Phillips, Mary H.
Hoyle Associates, Inc., New York, N. Y. 513,150, canc. Cl. 26.
Huntsinger-Minneapolis: *See*—
Huntsinger, Ward.
Huntsinger, Ward, d. b. a. Huntsinger-Minneapolis, Minneapolis, Minn. 618,939, pub. 10–4–55. Cl. 19.
Husler Milling & Elevator Co., The, Salt Lake City, Utah. 110,128, canc. Cl. 46.
Hydro-Chemie, Aktiengesellschaft für Chemie und Wasserveredlung, Zurich, Switzerland. 619,011, pub. 10–4–55. Cl. 23.
Ideal Industries, Inc., Sycamore, Ill. 618,970, pub. 10–11–55. Cl. 21.
Ideal Ladies Undergarment Co., Inc., New York, N. Y. 619,126, pub. 10–11–55. Cl. 39.
Indico Inc., Tucson, Ariz. 619,010, pub. 10–4–55. Cl. 23.
Interchemical Corp., New York, N. Y. 513,131, canc. Cl. 20.
Inter-Coastal Paint Corp., East St. Louis, Ill. 618,846, pub. 10–11–55. Cl. 6.
International Feature Service, Inc., New York, N. Y. 186,929, canc. Cl. 38.
International Latex Corp., Playtex Park, Dover, Del. 619,113–14, pub. 10–11–55. Cl. 39.
International Molded Plastics, Inc., Cleveland, Ohio. 618,832, pub. 1–25–55. Cl. 2.
International Mutoscope Corp., Long Island City, N. Y. 618,987, pub. 10–11–55. Cl. 22.
International Nickel Co., Inc., The, New York, N. Y. 618,873, pub. 10–11–55. Cl. 14.
International Paper Co.: *See*—
Southern Kraft Corp.
Intersize of America, Inc., New York, N. Y. 513,186, canc. Cl. 6.
Isaacs, I. C., & Co., Inc., Baltimore, Md. 332,003, ren. 1–28–56. Cl. 39.
Ivins, J. S., Son, Inc., Philadelphia, Pa. 179,287, canc. Cl. 46.
Jaffe, Edward M., d. b. a. Wilmington Drug Co., and Real-Lief Products Co., Wilmington, Del. 618,867, pub. 10–4–55. Cl. 18.
Jameco, Inc., New York, N. Y. 513,114, canc. Cl. 22.
Jari Products, Inc., Minneapolis, Minn. 619,020–1, pub. 10–11–55. Cl. 23.
Jensen, Georg, Inc., New York, N. Y. 618,994, pub. 10–4–55. Cl. 22.
John-Massey Hosiery Co.: *See*—
Williams, Erwin M.
Johnston Pharmaceutical Distributors, Inc., Los Angeles, Calif. 618,922, pub. 10–11–55. Cl. 18.
Joncar Co.: *See*—
Carbone, John J.
Jonco Products, Baiby, Doncaster, England. 618,861, pub. 10–11–55. Cl. 13.
Jones Dairy Farm, Fort Atkinson, Wis. 58,590, 12(c) pub. 1–10–56. Cl. 46.
Jones Dairy Farm, Fort Atkinson, Wis. 60,458, 12(c) pub. 1–10–56. Cl. 46.
Jones Dairy Farm, Fort Atkinson, Wis. 60,482, 12(c) pub. 1–10–56. Cl. 46.
Jones Dairy Farm, Fort Atkinson, Wis. 61,297, 12(c) pub. 1–10–56. Cl. 46.
Jones Dairy Farm, Fort Atkinson, Wis. 62,268, 12(c) pub. 1–10–56. Cl. 46.
Jones & Laughlin Steel Corp., Pittsburgh, Pa. 618,874, pub. 10–11–55. Cl. 14.
Kaatz, Ernst, Sr., Long Hill, Conn. 513,064, canc. Cl. 6.
Kadane-Brown, Inc., Dallas, Tex., to Standard Brands Inc., New York, N. Y. 332,628, ren. 2–18–56. Cl. 46.
Kaplan, Joseph A., & Sons, Inc., New York, N. Y. 618,865, pub. 10–11–55. Cl. 13.
Kay Electric Co., Pine Brook, N. J. 619,031, pub. 10–11–55. Cl. 26.
Kaytee Ribbon Co.: *See*—
Tannhauser, Kurt.
Keller Mfg. Co., Inc., St. Louis, Mo. 619,219. Cl. 23.
Kendex Corp., Lindenhurst, N. Y. 619,123, pub. 10–11–55. Cl. 39.
Klein, Mathias, & Sons, Chicago, Ill. 619,012, pub. 10–11–55. Cl. 23.
Kleinsway, Inc., d. b. a. Waltco Products, Chicago, Ill. 618,974, pub. 10–11–55. Cl. 22.
Kohnstamm, H., & Co., Inc., New York, N. Y. 619,159–71, pub. 10–11–55. Cl. 46.
Kraissl Co., Inc., The, Hackensack, N. J. 618,862, pub. 10–11–55. Cl. 13.
Kroger Co., The, Cincinnati, Ohio. 619,177, pub. 10–4–55. Cl. 46.
Kwikset Locks, Inc., Anaheim, Calif. 619,222. Cl. 25.
Ladish Co., Cudahy, Wis. 618,866, pub. 10–4–55. Cl. 18.
Lag Chemical Co.: *See*—
Gross, Lewis A.
Lag Products Co.: *See*—
Gross, Lewis A.
Lancaster Shoe Co., Elizabethtown, Pa. 619,124–5, pub. 10–11–55. Cl. 39.
Landis Machine Co., St. Louis, Mo. 513,007, canc. Cl. 23.
Lawrence Process Co., Inc., Lawrence, Mass. 619,103, pub. 10–19–54. Cl. 39.
Lawrence Products Co., Inc., Attalla, Ala. 513,210, canc. Cl. 42.
Lebedin, Charles, Atlanta, Ga. 619,151, pub. 10–11–55. Cl. 46.
Lee Injector Co.: *See*—
Lee, Roy C.
Lee, Roy C., d. b. a. Lee Injector Co., Irvington, N. J. 340,004, canc. Cl. 23.
Lee Rubber & Tire Corp., d. b. a. Republic Rubber Division, Youngstown, Ohio. 619,071, pub. 10–11–55. Cl. 35.
Lee Rubber & Tire Corp., Conshohocken, Pa. 619,079, pub. 10–11–55. Cl. 35.
Lens, Anna G., d. b. a. The Perfection Mfg. Co., Jamaica, N. Y. 619,045, pub. 10–11–55. Cl. 28.
Levell, Robert O., New Castle, Ind. 619,081, pub. 10–11–55. Cl. 36.
Lewal Pharmacal Co., Chicago, Ill. 618,924, pub. 10–11–55. Cl. 18.
Lewis, A. E., & Co., Inc., New York, N. Y. 619,220. Cl. 23.
Lewis State Bank, The, Tallahassee, Fla. 619,224. Cl. 102.
Lightoller, Inc., New York, N. Y. 618,944, pub. 10–11–55. Cl. 21.
Lincoln Electric Co., The, Cleveland, Ohio. 513,119, canc. Cl. 14.
Lindsay Co., The, St. Paul, Minn. 619,054, pub. 10–11–55. Cl. 31.
Lines Bros. Ltd., Merton, London, England. 618,982–3, pub. 10–4–55. Cl. 22.
Litton Industries of California, Beverly Hills, Calif. 618,952, pub. 10–4–55. Cl. 21.
Loveland Milling & Elevator Co., The, Loveland, Colo. 111,745, canc. Cl. 46.
Lovelines Beauty Aids, Inc., New York, N. Y. 513,161, canc. Cl. 6.

Lowenfels, Frederick F. & Son, New York, N. Y. 332,039, ren. 1–28–56. Cl. 46.
M. V. C. Laboratories, Inc., Toledo, Ohio. 362,306, canc. Cl. 6.
Macy, R. H., & Co., Inc., New York, N. Y. 329,246, ren. 10–22–55. Cl. 49.
Macy, R. H., & Co., Inc., New York, N. Y. 330,191, ren. 11–26–55. Cl. 51.
Manatee Fruit Co., Tampa, Fla. 619,176, pub. 10–11–55. Cl. 46.
Manufactures de Senones (Vosges) Societe a Responsabilite Limitee, Paris, France. 619,099, pub. 10–11–55. Cl. 39.
Mann-Mine Research & Development Co., Mohnton, Pa. 619,210, pub. 10–11–55. Cl. 52.
Marini, Thomas O., d. b. a., Romac Industries, to Romac Industries, Inc., Camden, N. J. 619,065, pub. 9–6–55. Cl. 34.
Marsh, Richard O., Jr., Baltimore, Md. 618,996, pub. 10–11–55. Cl. 22.
Maschinenfabrik Oerlikon, Zurich, Switzerland. 618,946, pub. 10–11–55. Cl. 21.
Mason & Mason, Inc., Chicago, Ill. 619,146, pub. 10–11–55. Cl. 45.
Maurer, Russell L., d. b. a. Monticello Amusement Devices, Monticello, Ind. 618,953, pub. 10–11–55. Cl. 21.
McAleer Mfg. Co.: *See*—
Bronson Reel Co.
McBee Co., The, Athens, Ohio, to Royal McBee Corp. 619,086, pub. 10–11–55. Cl. 37.
McCambridge & McCambridge Co., The, Baltimore, Md. 513,087, canc. Cl. 6.
McCormick & Co., Inc., Baltimore, Md. 619,175, pub. 10–4–55. Cl. 46.
McLeod, James A., La Grange, Ga. 618,976, pub. 10–11–55. Cl. 22.
Medici Society, Ltd., The, London, England. 619,097, pub. 10–11–55. Cl. 38.
Meinor Metal Products Co., Inc., Long Island City, N. Y. 618,863, pub. 10–11–55. Cl. 13.
Merck & Co., New York, N. Y., to Merck & Co., Inc., Rahway, N. J. 106,565–6, ren. 2–15–56. Cl. 18.
Merck & Co., Inc.: *See*—
Merck & Co.
Merit Enterprises, Queens Village, N. Y. 618,945, pub. 10–4–55. Cl. 21.
Merrell, Wm. S., Co., The, Cincinnati, Ohio. 618,928, pub. 10–11–55. Cl. 18.
Merrit Products Co.: *See*—
National Toilet Co.
Metalectro Corp., Laurel, Md. 618,842, pub. 10–11–55. Cl. 6.
Millot, Inc.: *See*—
Societe Anonyme Parfumerie F. Millot.
Mills Industries, Inc., Chicago, Ill. 513,008, canc. Cl. 26.
Mirro: *See*—
Aluminum Goods Mfg. Co.
Mission Pharmacal Co., San Antonio, Tex. 618,910–12, pub. 10–4–55. Cl. 18.
Mitchell, F. O., & Bro. Inc., Perryman, Md. 619,181, pub. 10–11–55. Cl. 46.
Modern Health Products, to Modern Products, Inc. of America, Milwaukee, Wis. 331,569, ren. 1–14–56. Cl. 46.
Modern Health Products, Inc., to Modern Products, Inc. of America, Milwaukee, Wis. 331,263, ren. 12–31–55. Cl. 46.
Modern Mechanix Publishing Co., Greenwich, Conn., and New York, N. Y. 353,035, canc. Cl. 38.
Modern Products, Inc. of America: *See*—
Modern Health Products.
Modern Health Products, Inc.
Mollen Chemical Co., Philadelphia, Pa. 619,005, pub. 10–11–55. Cl. 23.
Monroe Chemical Co., Quincy, Ill. 332,662, ren. 2–18–56. Cl. 51.
Monticello Amusement Devices: *See*—
Maurer, Russell L.
Morehouse Industries, Los Angeles, Calif. 619,006, pub. 10–4–55. Cl. 23.
Motorola, Inc., Chicago, Ill. 619,039, pub. 10–11–55. Cl. 27.
Mueller Electric Co., Cleveland, Ohio. 618,964, pub. 10–4–55. Cl. 21.
Mury-Exportation, Societe a Responsabilite Limitee, Paris, France. 513,023, canc. Cl. 6.
Myers, Ralph E., d. b. a. Ralph E. Myers Co., Salinas, Calif. 371,573, canc. Cl. 46.
Myers, Ralph E., d. b. a. Ralph E. Myers Co., Salinas, Calif. 371,983, canc. Cl. 46.
Myers, Ralph E., d. b. a. Ralph E. Myers Co., Salinas, Calif. 374,212, canc. Cl. 46.
Myers, Ralph E., d. b. a. Ralph E. Myers Co., Salinas, Calif. 384,738, canc. Cl. 46.
Myers, Ralph E., Co.: *See*—
Myers, Ralph E.
Nashua Paper Box Co., Nashua, N. H. 618,984, pub. 10–11–55. Cl. 22.
National Air Conditioning Inc., Johnstown, Pa. 513,093, canc. Cl. 6.
National Alarms Corp., Lafayette, La. 619,007, pub. 10–4–55. Cl. 23.
National Baking Co., d. b. a. Omar Baking Co., Omaha, Nebr. 341,562, canc. Cl. 46.
National Brass Co., Grand Rapids, Mich. 513,038, canc. Cl. 25.
National Cash Register Co., The, Dayton, Ohio. 618,834, pub. 10–11–55. Cl. 4.
National Cooperatives, Inc.: *See*—
Duplex Printing Press Co.
National Dairy Products Corp., New York, N. Y. 619,172, pub. 10–4–55. Cl. 46.
National Novelty Corp., Lynn, Mass. 618,977, pub. 10–4–55. Cl. 22.
National Silver Co., New York, N. Y. 619,046, pub. 10–11–55. Cl. 28.
National Tea Co., Chicago, Ill. 619,180, pub. 10–11–55. Cl. 46.
National Toilet Co., d. b. a. Merrit Products Co., Paris, Tenn. 513,203, canc. Cl. 4.
National Tool Co.: *See*—
National Tool Co., The.
National Tool Co., The, to National Tool Co., Cleveland, Ohio. 332,626, ren. 2–18–56. Cl. 23.
National Trailways Bus System: *See*—
National Trailways System.
National Trailways System, Chicago, Ill., by National Trailways Bus System, Washington, D. C. 352,654, 12(c) pub. 1–10–56. Cl. 38.
National Wax Co., Chicago, Ill. 618,882, pub. 10–11–55. Cl. 15.
New Jersey Charcoal Co. Inc., Irvington, N. J. 175,803, canc. Cl. 1.
New Process Co., Warren, Pa. 513,044, canc. Cl. 39.
Nihon Mishin Seiso Kabushiki Kaisha, Mizuho-ku, Nagoya, Japan. 618,968, pub. 10–4–55. Cl. 21.
Nintendo Playing Card Co., Ltd., Shimokyo-ku, Kyoto City, Japan. 618,975, pub. 10–4–55. Cl. 22.
Nogero Mfg. Co., Portland, Oreg. 513,212, canc. Cl. 4.
Norca Machinery Corp., New York, N. Y. 619,017, pub. 10–4–55. Cl. 23.
O. K. Ko-Op Rubber Welding System, Littleton, Colo. 619,068, pub. 10–11–55. Cl. 39.
O'Connor & Goldberg, Chicago, Ill. 330,057, ren. 11–19–55. Cl. 39.
O'Connor & Goldberg, Chicago, Ill. 332,291, ren. 2–11–56. Cl. 39.
O'Connor & Goldberg, Chicago, Ill. 332,294, ren. 2–11–56. Cl. 39.
O'Connor & Goldberg, Chicago, Ill. 332,296, ren. 2–11–56. Cl. 39.
O'Connor & Goldberg, Chicago, Ill. 333,428, ren. 3–24–56. Cl. 39.
Ogus, Rabinovich & Ogus, Inc., New York, N. Y. 249,719, 12(c) pub. 1–10–56. Cl. 39.
Ohio Electric Mfg. Co., The, Maple Heights, Ohio. 618,971, pub. 10–4–55. Cl. 21.
Okun, Abe L., Flushing, N. Y. 618,872, pub. 10–11–55. Cl. 14.
Olin Mathieson Chemical Corp., New York, N. Y. 618,899, pub. 10–11–55. Cl. 18.
Olin Mathieson Chemical Corp., New York, N. Y. 618,909, pub. 10–4–55. Cl. 18.
Olin Mathieson Chemical Corp., New York, N. Y. 618,911, pub. 10–11–55. Cl. 18.
Omar Baking Co.: *See*—
National Baking Co.
Omar Mills, Inc., Omaha, Nebr. 357,331–2, canc. Cl. 46.
Orientex, Ltd., New York, N. Y. 619,089, pub. 10–11–55. Cl. 37.
Outers Laboratories: *See*—
Dale, Vern.
Pacific Tire & Rubber Co., Oakland, Calif. 619,070, pub. 7–5–55. Cl. 35.
Panther Oil & Grease Mfg. Co., Fort Worth, Tex. 618,889, pub. 10–4–55. Cl. 16.
Parris Mfg. Co., Savannah, Tenn. 618,978, pub. 10–11–55. Cl. 22.
Patterson-Kelley Co. Inc., The, East Stroudsburg, Pa. 619,003, pub. 10–4–55. Cl. 23.
Pease Woodwork Co., Inc., Cincinnati, Ohio. 513,016, canc. Cl. 12.
Peck & Peck, New York, N. Y. 333,290, ren. 3–17–56. Cl. 3.
Peerless Imperial Co., Inc., Newark, N. J. 618,949–50, pub. 10–11–55. Cl. 11.
Peerless Robes & Sportwear, New York, N. Y. 513,219, canc. Cl. 39.
Penaljo, Inc., by Hamilton Shoe Co., St. Louis, Mo. 601,548, 12(c) pub. 1–10–56. Cl. 39.
Penetryn System, Inc., The: *See*—
Werts Co., The.
Pennsylvania Petroleum Products Co., Philadelphia, Pa. 618,881, pub. 10–4–55. Cl. 15.
Pennsylvania Salt Mfg. Co., The, Philadelphia, Pa. 618,844, pub. 10–11–55. Cl. 6.
Pentapharm A. G., Basel, Switzerland. 618,896, pub. 10–4–55. Cl. 18.
Pep Boys—Manny, Moe & Jack, The, Philadelphia, Pa. 619,206, pub. 10–11–55. Cl. 52.
Perfection Mfg. Co., The: *See*—
Lens, Anna G.
Permalatem Welding Alloys, Inc., Red Bank, N. J. 618,875, pub. 10–4–55. Cl. 14.
Permutit Co., The, New York, N. Y. 619,029, pub. 10–11–55. Cl. 26.
Pest Control Ltd., Bourn, England, now by change of name to Fisons Pest Control Ltd. 618,840, pub. 10–11–55. Cl. 6.
Peters, Paul, Co.: *See*—
Peters, Paul S.
Peters, Paul, Co., Inc.: *See*—
Peters, Paul S.
Peters, Paul S., d. b. a. Paul Peters Co., to Paul Peters Co., Inc., Boston, Mass. 619,178, pub. 10–11–55. Cl. 46.
Pfeiffer Co., The: *See*—
Pfeiffer Electric, S., Mfg. Co.
Pfeiffer, S., Mfg. Co., to The Pfeiffer Co., St. Louis, Mo. 323,918, ren. 7–9–55. Cl. 18.
Pfeiffer, S., Mfg. Co., to The Pfeiffer Co., St. Louis, Mo. 330,333, ren. 11–26–55. Cl. 18.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 618,919, pub. 10–11–55. Cl. 18.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 618,923, pub. 10–11–55. Cl. 18.

Pharma-Craft Corp., The, New York, N. Y. 513,193, canc. Cl. 6.
Philadelphia Quartz Co., Philadelphia, Pa. 618,830, pub. 10–11–55. Cl. 1.
Philco Corp., Philadelphia, Pa. 513,226, canc. Cl. 26.
Phillips, Mary H., d. b. a. Howell Co., Glasgow, Va. 518,159, canc. Cl. 6.
Phillips Petroleum Co., Bartlesville, Okla. 618,940–1, pub. 10–4–55. Cl. 19.
Photo Science, Inc., New York, N. Y. 513,005, canc. Cl. 26.
Physicians and Hospitals Supply Co., Inc., d. b. a. Ulmer Pharmacal Co., Minneapolis, Minn. 618,926, pub. 10–11–55. Cl. 18.
Piggly Wiggly Corp., Jacksonville, Fla. 329,811, ren. 11–12–55. Cl. 31.
Piggly Wiggly Corp., Cincinnati, Ohio. 331,591, ren. 1–14–56. Cl. 32.
Pillsbury Mills, Inc., Minneapolis, Minn. 619,173, pub. 10–11–55. Cl. 46.
Pitt, C. M., & Sons Co., The, Baltimore, Md. 619,145, pub. 10–11–55. Cl. 45.
Pittsburgh Coat Hanger Co.: *See*—
Weiner, Rose.
Pittsburgh Coke & Chemical Co., Neville Island, Pittsburgh, Pa. 618,889, pub. 10–11–55. Cl. 6.
Planters Nut & Chocolate Co., Wilkes-Barre, Pa. 259,115, canc. Cl. 46.
Pliantform Foundations, Inc., New York, N. Y. 513,227, canc. Cl. 39.
Potato Specialties, Inc., Chicago, Ill. 619,155, pub. 10–11–55. Cl. 46.
Powell & Campbell, Inc., New York, N. Y. 513,013, canc. Cl. 39.
Powells, New York, N. Y., to The Squirrel Brand Co., Cambridge, Mass. 106,081, ren. 10–5–55. Cl. 46.
Precision Time Corp., New York, N. Y. 619,038, pub. 10–11–55. Cl. 27.
Premier Mfg. Co.: *See*—
Weiss, Dewey S.
Premium Potato Products, Inc., Cleveland, Ohio. 619,147, pub. 7–1–52. Cl. 46.
Presstite Engineering Co., The, St. Louis, Mo. 618,854, pub. 1–4–55. Cl. 12.
Preste, Dr., Shoe Steriliser, Inc., d. b. a. Dr. Preste's Laboratory, Cleveland, Ohio. 618,838, pub. 10–11–55. Cl. 6.
Preste's, Dr., Laboratory: *See*—
Preste, Dr., Shoe Steriliser, Inc.
Production Instrument Co., Chicago, Ill. 619,034–5, pub. 10–11–55. Cl. 26.
Puerto Rico Agricultural Co., San Juan, Puerto Rico. 513,122–3, canc. Cl. 17.
Radio Wire Television Inc. of New York, New York, N. Y. 619,033, pub. 10–11–55. Cl. 26.
Ray's Brand Products, Springfield, Ill. 619,150, pub. 10–11–55. Cl. 46.
Real-Lief Products Co.: *See*—
Jaffe, Edward M.
Reardon Co., The, St. Louis, Mo. 618,890, pub. 10–4–55. Cl. 16.
Reed and Barton Corp., Taunton, Mass. 619,049, pub. 10–11–55. Cl. 28.
Reeves, Wallace C., d. b. a. Doctors Specialty Pts. Co., Atlanta, Ga. 619,093, pub. 10–11–55. Cl. 37.
Regal Furn. Mfg. Co., Long Beach, Calif. 619,037, pub. 10–11–55. Cl. 32.
Reliable Mfg. Co.: *See*—
Herbst, Rosalie.
Reo-Form Lingerie, Inc., New York, N. Y. 513,057, canc. Cl. 39.
Republic Rubber Division: *See*—
Lee Rubber & Tire Corp.
Riker Laboratories, Inc., Los Angeles, Calif. 618,905, pub. 10–11–55. Cl. 18.
Rilling-Dermetics Co., The, New York, N. Y. 619,201, pub. 10–11–55. Cl. 51.
Roberton Mfg. Co., Chicago, Ill. 619,018, pub. 10–4–55. Cl. 23.
Robinson, W. H., Inc., Cairo, Ga. 618,823, pub. 10–11–55. Cl. 1.
Rochester Shoe Tree Co., Inc., Rochester, N. Y. 327,644, ren. 9–3–55. Cl. 50.
Rockford Consolidated Newspapers, Inc., to Winnebago Newspapers, Inc., Rockford, Ill. 329,175, ren. 10–22–55. Cl. 38.
Rockland Sportswear, Inc., Rockland, Mass. 619,109, pub. 10–11–55. Cl. 39.
Roger, Albert J., d. b. a. Roger Mfg. Co., Oakland, Calif. 618,980, pub. 10–4–55. Cl. 22.
Roger Mfg. Co.: *See*—
Roger, Albert J.
Romac Industries: *See*—
Marini, Thomas O.
Romac Industries, Inc.: *See*—
Marini, Thomas O.
Rosen, R., & Son, Inc., Brooklyn, N. Y. 619,127, pub. 10–11–55. Cl. 39.
Rothschild, Lee., d. b. a. Corona Soapcrafters, Redlands, Calif. 513,101, canc. Cl. 4.
Royal Bantam Foods, Inc., Chicago, Ill. 619,182, pub. 10–11–55. Cl. 46.
Royal Electric Mfg. Co., Chicago, Ill. 210,159, canc. Cl. 21.
Royal McBee Corp.: *See*—
McBee Co., The.
Rushmore Paper Mills Inc., Gouverneur, N. Y. 619,087, pub. 10–11–55. Cl. 37.
Russell Chemical Co., Pittsburgh, Pa. 619,211, pub. 10–11–55. Cl. 52.
Rutherford, Evelyn W., Garden City, N. Y. 618,972, pub. 10–11–55. Cl. 22.
S. K. F. Industries, Inc., Philadelphia, Pa., and elsewhere. 513,033–4, canc. Cl. 23.
S. and S. Co., Ltd., Oklahoma City, Okla. 437,012, canc. Cl. 6.
Safeway Steel Products, Inc.: *See*—
Uecker, Rein A., Inc.
Sagner's, A., Son, Baltimore, Md. 619,098, pub. 10–11–55. Cl. 39.
St. Croix Corp., Park Falls, Wis. 618,988, pub. 10–4–55. Cl. 22.
Saladmaster Sales, Inc., Dallas, Tex. 619,001, pub. 10–4–55. Cl. 23.
Salem Glass Works, Salem, N. J., to Anchor Hocking Glass Corp., Lancaster, Pa. 329,022, ren. 10–15–55. Cl. 33.
Sargent-Gerke Co., The, Indianapolis, Ind. 618,893, pub. 10–11–55. Cl. 16.
Schackne, Jerome I., d. b. a. Varsity House, Brooklyn, N. Y. 619,051, pub. 10–11–55. Cl. 28.
Schenley Industries, Inc., New York, N. Y. 619,192, pub. 10–11–55. Cl. 49.
Schering Corp., Bloomfield, N. J. 618,914, pub. 10–11–55. Cl. 18.
Schering Corp., Bloomfield, N. J. 618,920–1, pub. 10–11–55. Cl. 18.
Schindel-McDaniels Co., New York, N. Y. 254,560–1, canc. Cl. 42.
Schlage Lock Co., San Francisco, Calif. 618,870, pub. 10–11–55. Cl. 13.
Schrall, Charles L., d. b. a. Char-Lem Products, Wayzata, Minn. 618,909, pub. 10–11–55. Cl. 22.
Science Electronics, Inc., Cambridge, Mass. 618,962, pub. 10–4–55. Cl. 21.
Scientific Solutions, Inc., West Palm Beach, Fla. 513,194, canc. Cl. 6.
Sea Island Mfg. Co., Inc., New York, N. Y., to Tempest Shirt Mfg. Co., Inc., Jesup, Ga. 513,217, canc. Cl. 39.
Sealy, Inc., Chicago, Ill. 619,058, pub. 9–14–54. Cl. 32.
Sealy, Inc., Chicago, Ill. 619,059, pub. 3–22–55. Cl. 32.
Sedlmayr, Gabriel & Jos., Spaten-Fransiskaner Leistbräu A.-G. München, Munich, Germany, to Gabriel Sedlmayr Spaten-Fransiskaner-bräu Aktiengesellschaft München, Munchen, Germany. 331,061, ren. 12–24–55. Cl. 46.
Sedlmayr, Gabriel, Spaten-Fransiskaner-bräu Aktiengesellschaft Munchen: *See*—
Sedlmayr, Gabriel & Jos., Spaten-Fransiskaner Leistbräu A.-G. München.
Sellers Mfg. Co., Inc., Saxapahaw, N. C. 619,142, pub. 10–11–55. Cl. 43.
Shaw, Alex. D., & Co., to Munson G. Shaw Co., Inc., New York, N. Y. 109,374, ren. 4–4–56. Cl. 49.
Shaw, Munson G., Co., Inc.: *See*—
Shaw, Alex. D., & Co.
Shawmut Woolen Mills, Inc., Stoughton, Mass. 396,639, canc. Cl. 39.
Shawnee Milling Co., Shawnee, Okla. 619,183, pub. 10–11–55. Cl. 46.
Sheffield Corp., The, Dayton, Ohio. 619,036, pub. 10–11–55. Cl. 26.
Shields Inc. of Attleboro, Mass., New York, N. Y. 619,047, pub. 10–11–55. Cl. 28.
Singcord Corp., Grand Rapids, Mich. 619,082, pub. 10–11–55. Cl. 36.
Sloyan, Jerome J., d. b. a. Automatic Motor Base Co., Windsor, N. J. 619,013, pub. 10–4–55. Cl. 23.
Smile-Pak Inc., Akron, Ohio. 619,193, pub. 10–11–55. Cl. 50.
Smith, Jack, d. b. a. Boston Shoe Co., Los Angeles, Calif. 345,024, canc. Cl. 39.
Smith, Jack, d. b. a. Boston Shoe Co., Los Angeles, Calif. 349,986, canc. Cl. 39.
Smith, Jack, d. b. a. Boston Shoe Co., Los Angeles, Calif. 372,354, canc. Cl. 39.
Smoler, Boris, & Sons, Inc., Chicago, Ill. 414,461, canc. Cl. 39.
Societe Anonyme des Gants Buscarlet, Paris, France to Buscarlet Glove Co., Inc., New York, N. Y. 619,202, pub. 10–11–55. Cl. 51.
Societe Anonyme Marne & Champagne, Epernay (Marne), France. 619,188–9, pub. 10–11–55. Cl. 47.
Societe Anonyme Parfumerie F. Millot, Paris, France to Millot, Inc., New York, N. Y. 331,797, ren. 1–21–56. Cl. 51.
Societe Anonyme Parfums Forvil & Dentifrices du Docteur Pierre Reunis, d. b. a. Forvil, Manterre, France. 619,200, pub. 10–11–55. Cl. 51.
Socony Mobil Oil Co., Inc.: *See*—
Socony-Vacuum Oil Co., Inc.
Socony Paint Products Co., Raritan Township, Middlesex County, N. J. 618,886, pub. 10–4–55. Cl. 16.
Socony-Vacuum Oil Co., Inc., New York, N. Y., now by change of name Socony Mobil Oil Co., Inc. 618,883, pub. 10–11–55. Cl. 15.
Southard, Harold C., St. Clair Shores, Mich. 619,223. Cl. 101.
Southern Kraft Corp., to International Paper Co., New York, N. Y. 332,502, ren. 2–18–56. Cl. 37.
Southern Kraft Corp., to International Paper Co., New York, N. Y. 332,821–2, ren. 2–25–56. Cl. 37.
Southern States Cooperative, Inc., Richmond, Va. 619,187, pub. 10–11–55. Cl. 46.
Spartans Mfg. Co., Inc., New York, N. Y. 619,101, pub. 10–11–55. Cl. 39.
Spellwell Playing Card Co., Philadelphia, Pa. 618,979, pub. 10–11–55. Cl. 22.
Spiegel, Harold H., d. b. a. Thor Chemical Co., Chicago, Ill. 513,205, canc. Cl. 4.
Sporlan Valve Co., St. Louis, Mo. 619,025, pub. 10–11–55. Cl. 26.
Sprague Electric Co., North Adams, Mass. 618,969, pub. 9–27–55. Cl. 21.

Squibb, E. R., & Sons, New York, N. Y. 513,170, canc. Cl. 6.
Squirrel Brand Co., The: *See*—
Powells.
Stan The Man, Inc., St. Louis, Mo. 618,998, pub. 10–4–55. Cl. 22.
Standard Brands Inc.: *See*—
Kadane-Brown, Inc.
Standard Brands Inc., New York, N. Y. 333,295, ren. 3–17–56. Cl. 46.
Standard Packaging Corp., Chicago, Ill. 618,877, pub. 10–4–55. Cl. 14.
Standard Pressed Steel Co., Jenkintown, Pa. 618,868, pub. 10–11–55. Cl. 13.
Star Bronze Co., The, Alliance, Ohio. 619,207, pub. 3–1–55. Cl. 52.
Steelbilt, Inc., Gardena, Calif. 618,860, pub. 10–11–55. Cl. 12.
Sterling Air Conditioning Corp. of North Carolina, Inc., Charlotte, N. C. 619,063, pub. 10–11–55. Cl. 34.
Sterling Pulp & Paper Co., Eau Claire, Wis. 619,090, pub. 10–11–55. Cl. 37.
Stetson China Co., Inc., Lincoln, Ill. 619,052, pub. 10–11–55. Cl. 30.
Stetson Shoe Co., Inc., The, South Weymouth, Mass. 619,119, pub. 10–11–55. Cl. 39.
Stevins Mfg. Co.: *See*—
Vintschger, Francis E.
Stoff, M., & Co., Inc., New York, N. Y. 619,116, pub. 10–11–55. Cl. 39.
Stolich, Peter A., Co., Inc.: *See*—
Stolich, Peter A., Inc.
Stolich, Peter A., Inc., to Peter A. Stolich Co., Inc., Salinas, Calif. 333,440, ren. 3–24–56. Cl. 46.
Strathmore Packing House Co., Strathmore, Calif. 109,293, ren. 3–28–56. Cl. 46.
Strathmore Paper Co., West Springfield, Maine, to Strathmore Paper Co., West Springfield, Mass. 106,380, ren. 10–19–55. Cl. 37.
Strathmore Paper Co., West Springfield, Mass. 619,096, pub. 10–11–55. Cl. 37.
Straubel Paper Co., Green Bay, Wis. 619,088, pub. 10–11–55. Cl. 37.
Strong Hewat & Co., Inc., New York, N. Y. 513,084–5, canc. Cl. 42.
Sulfo-Inc., Elizabeth, N. J. 618,878, pub. 10–4–55. Cl. 15.
Surplus Automotive Co., Chicago, Ill. 618,993, pub. 10–4–55. Cl. 23.
Suxket Co., Chicago, Ill. 619,072, pub. 10–11–55. Cl. 35.
Swift & Co., Chicago, Ill. 619,204, pub. 10–11–55. Cl. 52.
Swift & Co., Chicago, Ill. 619,208, pub. 10–11–55. Cl. 52.
Swarce, Alice M., d. b. a. Figurine Display Co., Stamford, Conn. 619,195–6, pub. 10–11–55. Cl. 50.
Tannhauser, Kurt, d. b. a. Kaytee Ribbon Co., New York, N. Y. 513,222, canc. Cl. 50.
Teletray Service, Inc., Cleveland, Ohio. 619,194, pub. 10–11–55. Cl. 50.
Tempest Shirt Mfg. Co., Inc.: *See*—
Sea Island Mfg. Co., Inc.
Terry, Edward H., Beverly Hills, Calif. 618,836, pub. 10–11–55. Cl. 4.
Texan Carbonated Beverage Co.: *See*—
Hillenbrand Bottling Co.
Texas Pharmacal Co., San Antonio, Tex. 618,927, pub. 10–11–55. Cl. 18.
Thermocrete Panel Construction Co., Inc.: *See*—
Goenner, Eugene.
Thor Chemical Co.: *See*—
Spiegel, Harold H.
Tiona Petroleum Co., Philadelphia, Pa. 329,387, ren. 10–29–55. Cl. 15.
Transface Process Co., New York, N. Y. 619,095, pub. 10–11–55. Cl. 37.
Transogram Co., Inc., New York, N. Y. 618,997, pub. 10–4–55. Cl. 22.
Trebor Knitting Mills Co., to Trebor Knitting Mills, Inc., Brooklyn, N. Y. 619,102, pub. 10–11–55. Cl. 39.
Trebor Knitting Mills, Inc.: *See*—
Trebor Knitting Mills Co.
Triangle Conduit & Cable Co., Inc., New Brunswick, N. J. 618,867, pub. 10–4–55. Cl. 13.
Triangle Refineries, Inc., Houston, Tex. 618,879, pub. 10–4–55. Cl. 15.
Tri-Counties Packing Corp., Castroville, Calif. 619,158, pub. 10–4–55. Cl. 46.
Trostel, Albert, & Sons Co., Milwaukee, Wis. 618,829, pub. 10–11–55. Cl. 1.
Trouser Corp. of America, Scranton, Pa. 619,115, pub. 5–10–55. Cl. 39.
Truckstell Mfg. Co., Cleveland, Ohio. 618,936, pub. 10–4–55. Cl. 19.
Truman, David L., Hollywood, Calif. 512,990, canc. Cl. 6.
Tubbs Cordage Co., San Francisco, Calif. 618,828, pub. 10–11–55. Cl. 1.
Turian, Inc., Philadelphia, Pa. 619,107, pub. 10–11–55. Cl. 39.
"Turmac" Turkish-Macedonian Tobacco Co., N. V., Amsterdam, Netherlands. 435,228, canc. Cl. 17.
Uecker, Rein A., Inc., Wauwatosa, to Safeway Steel Products, Inc., Milwaukee, Wis. 333,604, ren. 3–31–56. Cl. 50.
Ulmer Pharmacal Co.: *See*—
Physicians and Hospitals Supply Co., Inc.
Union Products Inc., Chicago, Ill. 513,077, canc. Cl. 6.
Unique Art Mfg. Co., Inc., Newark, N. J. 513,129, canc. Cl. 22.
U. S. Knitwear Co., New York, N. Y. 513,221, canc. Cl. 39.
Universal Baby Bath Co. Ltd., Tunbridge Wells, Kent, England. 618,871, pub. 10–4–55. Cl. 13.
Upjohn Co., The, Kalamazoo, Mich. 513,149, canc. Cl. 6.
Upjohn Co., The, Kalamazoo, Mich. 618,902–3, pub. 10–11–55. Cl. 18.
Vacuum Electronic Mfg. Corp., New Hyde Park, N. Y. 619,030, pub. 10–11–55. Cl. 26.
Van Pelt and Brown, Inc., Richmond, Va. 618,895, pub. 9–13–55. Cl. 18.
Varsity House: *See*—
Schackne, Jerome I.
Vennootschap Onder de Firma, "V. & M.," Nijmegen, Netherlands. 619,069, pub. 10–11–55. Cl. 35.
Ventaire Co.: *See*—
Hayman Window Co.
Vermex Co. of America, Glendale, Calif. 512,989, canc. Cl. 6.
Veros Co., Inc., Hagerstown, Md. 513,141, canc. Cl. 6.
Veteran Motor Car Club of America, Brookline, Mass. 619,214, pub. 10–11–55. Cl. 105.
Vintschger, Francis E., d. b. a. Stevins Mfg. Co., Morristown, N. J. 513,214, canc. Cl. 13.
Wagner, Cyril, Chicago, Ill. 513,014, canc. Cl. 22.
Wallace R., & Sons Mfg. Co., Wallingford, Conn. 619,019, pub. 10–4–55. Cl. 23.
Waltco Products: *See*—
Kleinsway, Inc.
Wampole, Henry K., & Co., Inc., Philadelphia, Pa. 618,907, pub. 10–4–55. Cl. 18.
Warson Products Corp., The, St. Louis, Mo. 618,931, pub. 10–11–55. Cl. 18.
Wate-On Co., Chicago, Ill. 618,904, pub. 10–11–55. Cl. 18.
Watkins, J. R., Co., The, Winona, Minn. 513,015, canc. Cl. 4.
Wauregan Mills, Inc., Wauregan, Conn. 619,135, pub. 10–11–55. Cl. 42.
Wayne Knitting Mills, Fort Wayne, Ind. 619,128, pub. 10–11–55. Cl. 39.
Weber, F., Co., Philadelphia, Pa. 618,888, pub. 10–4–55. Cl. 16.
Weiner, Rose, d. b. a. Pittsburgh Coat Hanger Co., Pittsburgh, Pa. 619,198, pub. 10–11–55. Cl. 50.
Weiner, Martin, Corp.: *See*—
Carson Pirie Scott & Co.
Weiss, Dewey S., d. b. a. Premier Mfg. Co., Portland, Oreg. 618,937–8, pub. 10–4–55. Cl. 19.
Welch, W. W., Co., Cincinnati, Ohio. 618,956, pub. 10–4–55. Cl. 21.
Wellington Sears Co., New York, N. Y. 619,141, pub. 10–11–55. Cl. 42.
Welwood Trading Corp., Passaic, N. J. 619,120, pub. 11–10–55. Cl. 39.
Werts Co., The, by The Penetryn System, Inc., Cleveland, Ohio. 329,599, 12(c) pub. 1–10–56. Cl. 16.
West Bend Aluminum Co., West Bend, Wis. 618,966, pub. 10–4–55. Cl. 21.
West Virginia Pulp and Paper Co., New York, N. Y. 513,175, canc. Cl. 6.
Western Clock Co., Peru, by General Time Corp., La Salle, Ill. 107,459, 12(c) pub. 1–10–56. Cl. 27.
Western Electrochemical Co., Los Angeles, Calif. 513,153, canc. Cl. 6.
Western Pharmacal Co., Salt Lake City, Utah. 513,147, canc. Cl. 6.
Western Plastics Corp., Hastings, Nebr. 618,869, pub. 10–4–55. Cl. 13.
Westronics, Inc., Fort Worth, Tex. 619,024, pub. 10–11–55. Cl. 26.
Wheel Trueing Tool Co., Detroit, Mich. 618,835, pub. 10–11–55. Cl. 4.
Wheeler and Stuckey, Oklahoma City, Okla. 618,929, pub. 10–11–55. Cl. 18.
White Stag Mfg. Co., Portland, Oreg. 619,118, pub. 10–11–55. Cl. 39.
Wickbury, Ltd., New York, N. Y. 619,110, pub. 10–11–55. Cl. 39.
Wilco Co., Los Angeles, Calif. 618,843, pub. 10–11–55. Cl. 6.
Wildrodt Co., Inc., Buffalo, N. Y. 619,203, pub. 10–11–55. Cl. 51.
Williams, Erwin M., d. b. a. John-Massey Hosiery Co., Valdese, N. C. 619,104, pub. 10–11–55. Cl. 39.
Wilmington Drug Co.: *See*—
Jaffe, Edward M.
Wilson, Fred A., Co., Birmingham, Mich. 618,857–8, pub. 10–11–55. Cl. 12.
Winegard Co., Burlington, Iowa. 618,959, pub. 10–11–55. Cl. 21.
Winnebago Newspapers, Inc.: *See*—
Rockford Consolidated Newspapers, Inc.
Winterhill Foods, Inc., Port Chester, N. Y. 619,184, pub. 10–11–55. Cl. 46.
Wolf, Jacques, & Co., Clifton, N. J. 513,183–4, canc. Cl. 6.
Worthington, Geo., Co., The, Cleveland, Ohio. 359,473, canc. Cl. 16.
Worthington, Geo., Co., The, Cleveland, Ohio. 359,474, canc. Cl. 24.
Worthington, Geo., Co., The, Cleveland, Ohio. 359,932, canc. Cl. 12.
Worthington, Geo., Co., The, Cleveland, Ohio. 364,911, canc. Cl. 34.
Yoshida, Hashiye, Los Angeles, Calif. 619,152, pub. 10–11–55. Cl. 46.
Zenith Radio Corp., Chicago, Ill. 619,037, pub. 10–11–55. Cl. 26.

U. S. GOVERNMENT PRINTING OFFICE: 0—1956

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
January 17, 1956 Volume 702 Number 3

PATENTS

NOTICES

Erratum

In the OFFICIAL GAZETTE, issue of December 27, 1955, patent decision *In re Thomas A. Krivanek and Roy T. Krivanek*, page 692, second column thereof, lines 20 to 22, inclusive, strike out "In affirming the Examiner's rejection in that respect, the Board of Appeals stated:" and insert in lieu thereof *In his answer before the Board of Appeals, the Examiner stated:*.

Adjudicated Patents

(D. C. Ohio) Regenhardt Patent No. 2,123,803 (312—323), for a cabinet construction. Claim 2 *Held* invalid, but, if valid, *Held* infringed. *Diebold, Incorporated, et al. v. Record Files, Inc.*, 135 F. Supp. 74; 107 USPQ 122.

(D. C. Ohio) Regenhardt Patent No. 2,256,352 (129—31), for a drawer follower. Claims 8 and 16 *Held* invalid, but, if valid, *Held* not infringed. *Id.*

(D. C. Ohio) Regenhardt Patent No. 2,304,020 (312—111), for an interlock for steel files. Claim 16 *Held* invalid, but, if valid, *Held* infringed. *Id.*

(D. C. Ohio) Regenhardt Patent No. 2,344,168 (312—323), for a drawer stop. Claim 1 *Held* invalid, but, if valid, *Held* not infringed. *Id.*

(D. C. Ohio) Regenhardt Patent No. 2,386,343 (312—111), for an interlock. Claim 1 *Held* invalid. *Id.*

Disclaimers

2,623,146.—*Ernest G. Anger*, Wauwatosa, Wis. WELDER CONTROL SYSTEM. Patent dated Dec. 23, 1952. Disclaimer filed Dec. 20, 1955, by the assignee, *Square D Company*.

Hereby enters this disclaimer to claim 2 of said patent.

2,689,918.—*Arthur H. Youmans*, Tulsa, Okla. STATIC ATMOSPHERE ION ACCELERATOR FOR WELL LOGGING. Patent dated Sept. 21, 1954. Disclaimer filed Dec. 19, 1955, by the assignee, *Well Surveys, Incorporated*.

Hereby enters this disclaimer to claims 1, 2, 8, and 9 of said patent.

Patents Available for Licensing or Sale

2,685,832. Blade for Mechanical Blocker or Thinner. Tom Rianda, Box 39, Gonzales, Monterey County, Calif.

2,718,625. Electrical Connector (Radio Tube and Transistor Socket, Adaptable to Printed Circuitry). Francis W. Harrison, South St., Birmingham, Ohio.

2,720,897. Disc-Cutting Attachment for Power Saws (for "Circle" Cutting, Adaptable to Bench Saws and Disc Sanders, Many Band Saws and Power Jig Saws). Howard G. Kairath, 101–02 160th Ave., Howard Beach 14, N. Y.

2,726,323. Safety Heat Guard Extension Light Shield. Thomas Martin Waterman, 144 Catharine St., Springfield, Mass.

General Electric Company is prepared to grant non-exclusive licenses under the following 15 patents to domestic manufacturers.

Applications for license under the following patent may be addressed to: General Electric Company, Component Products Division, 1635 Broadway, Fort Wayne, Ind.

2,223,338. Immersion Pump Arrangement.

Applications for license under the following patent may be addressed to: General Electric Company, Aircraft Products Department, 1 River Road, Schenectady 5, N. Y.

2,292,809. Induction Apparatus.

Applications for license under the following two patents may be addressed to: General Electric Company, X-Ray Department, 4855 Electric Ave., Milwaukee 1, Wis.

2,221,671. Gas Dielectric Media.

2,602,899. Introduction of Specimens Into Discharge Vessels.

Applications for license under the following 11 patents may be addressed to: General Electric Company, Transformer Division, 100 Woodlawn Ave., Pittsfield, Mass. Attention Patent Counsel.

2,648,120. Capacitor and Method of Manufacture.

2,662,137. Transformer Protective Switch.

2,667,532. High Voltage Electrical Insulating Bushing.

2,682,168. Measurement of Moisture in Electric Transformers.

2,707,767. Electrical Regulating System.

2,709,058. Insulator Supporting Rack.

2,716,681. Circuit Interrupting Device.

2,717,296. Electrical Switch Contacts.

2,719,875. Pothead for Electric Cable.

2,720,565. Electrical Protective Switch.

2,721,362. Transmission Line Support.

New Applications Received During November 1955

Patents	6,116
Designs	442
Plants	15
Reissues	13
Total	6,586

Issue

Patents	918—No.	2,730,718 to No. 2,731,635, incl.
Designs	55—No.	176,652 to No. 176,706, incl.
Plants	3—No.	1,448 to No. 1,450, incl.
Reissues	2—No.	24,110 to No. 24,111, incl.
Total	978	

CONDITION OF PATENT APPLICATIONS AS OF NOVEMBER 30, 1955

Total number of pending applications (excluding Designs)	220,996
Total number of pending Design applications	7,046
Total number of applications awaiting action (excluding Designs)	135,527
Total number of Design applications awaiting action	3,108
Date of oldest new application	July 20, 1954
Date of oldest amended application	Sept. 28, 1953

ROSA, M. C., Executive Examiner

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 48, 51, 54, 69, 70.
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 18, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	12-14-54	1-28-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	5-2-55	11-15-54
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	3-2-55	12-14-53
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	3-3-55	2-11-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	2-2-55	5-20-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic, Amides, Amines, General Organic Processes	1-12-55	4-2-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	3-7-55	12-14-53
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	11-26-54	4-14-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	2-24-55	3-22-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	3-17-55	6-4-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	2-14-55	11-6-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	2-14-55	2-10-54
14. (III) MANIAN, J. C., (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire, Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	1-27-55	3-8-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	3-1-55	3-30-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	12-23-54	1-5-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	3-4-55	6-4-54
18. (VI) KURZ, J. A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	12-7-54	1-7-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	3-8-55	4-16-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	3-21-55	4-22-54
21. (III) MADER, R. C., Textiles	3-8-55	3-22-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	3-2-55	3-11-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	8-17-54	9-30-53
24. (III) DRACOPOULOS, P. T., (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	2-2-55	10-4-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	3-3-55	3-1-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	4-12-55	10-11-54
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	2-24-55	7-21-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	2-15-55	5-14-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools: Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	2-4-55	7-15-54
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	4-28-55	7-2-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	1-12-55	6-1-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	3-18-55	9-13-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	3-1-55	1-29-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	2-21-55	2-18-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	3-1-55	5-20-54
36. (V) McFADYEN, A. D., Measuring and Testing	1-24-55	11-10-54
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	1-25-55	5-24-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g. Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	2-17-55	6-6-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	3-9-55	4-2-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	2-23-55	5-3-54
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dumpsing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	9-13-54	11-20-53
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	12-1-54	5-19-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	3-8-55	1-25-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	2-10-55	11-3-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	3-14-55	8-17-54
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	11-19-54	1-7-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	1-25-55	8-2-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	3-17-55	4-7-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	2-21-55	2-17-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	2-25-55	4-21-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	3-11-55	3-5-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	1-6-55	2-8-54
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	11-1-54	2-10-54
56. (I) KEELY, J. E., (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	2-14-55	5-5-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	4-29-55	6-18-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	3-9-55	2-4-54
59. (I) HENKIN, B., (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	3-2-55	3-5-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	2-15-55	8-9-54
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	2-14-55	7-30-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	1-31-55	1-15-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	3-14-55	2-23-54
66. (V) LISANN, I., Geometric Instruments; Automatic Weighing Scales; Acoustics	2-11-55	3-15-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	1-26-55	10-4-54
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	2-2-55	11-19-53
70. (II) BREWRINK, J. L., Explosive Weapons, Ammunition, Charges and Composition; Explosive Charge Manufacturing; Jet Motor Processes; Torpedoes; Radar; Sonar; Automatic Pilots; Antennas; Actinide Series (e. g. Fissionable) Compounds; Irradiation Chemistry; Mass Spectrometers	7-20-54	9-28-53
CLASS. DIVS: I (VII) LANHAM, B. E., Paper Making	3-7-55	11-1-54
CLASS. DIVS: II (II) LADY, J. E., Oscillators; Amplifiers	3-3-55	2-10-54
CLASS. DIVS: III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	5-5-55	8-2-54
CLASS. DIVS: IV (VI) SMITH, (Mrs.) M. P., Harrows; Plows; Earth Rollers	3-25-55	7-26-54
CLASS. DIVS: V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	3-1-55	12-6-54
DESIGNS (III): A—BREHM, G. I., Industrial Arts	5-6-55	5-23-55
DESIGNS (III): B—GRAY, M. A., Household, Personal and Fine Arts	4-14-55	4-15-55

The following divisions have been abolished: 10, 44, 46, 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during January 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1953*.

Patents	Numbers 2,142,080 to 2,145,843, inclusive
Plant Patents	Numbers 307 to 312, inclusive

DECISIONS IN PATENT CASES

United States Court of Appeals
District of Columbia Circuit

EMERY P. MILLER AND RANSBURG ELECTRO-COATING CORP. *v.* SINCLAIR WEEKS, SECRETARY OF COMMERCE, AND ROBERT C. WATSON, COMMISSIONER OF PATENTS

No. 12738. Decided December 15, 1955

[— F.2d —; 107 USPQ 343]

PATENTABILITY—PARTICULAR SUBJECT MATTER—PROCESS OF PRODUCING A THIN COATING OF A DIELECTRIC LIQUID. Certain claims to a process of producing a thin coating of a dielectric liquid *Held* properly refused to appellants as unpatentable over the cited prior art.

APPEAL from the United States District Court for the District of Columbia.

AFFIRMED.

William J. Stellman (*Francis C. Browne* and *William E. Schuyler*, of counsel) for Emery P. Miller and Ransburg Electro-Coating Corp.

Clarence W. Moore (*H. S. Miller* of counsel) for the Secretary of Commerce and the Commissioner of Patents.

Before EDGERTON, *Chief Judge*, PRETTYMAN, and BASTIAN, *Circuit Judges*

BASTIAN, *Circuit Judge:*

This is a patent case under Rev. Stat. § 4915 (1875).[1] The District Court, after hearing, ruled that certain process claims did not constitute invention over prior art, and entered judgment dismissing the complaint.

Emery P. Miller, one of the plaintiffs, filed application for Letters Patent in the United States Patent Office entitled "Apparatus and Method of Coating," said application being Serial No. 626,631 in the Patent Office. Plaintiff, Ransburg Electro-Coating Corp., is the assignee of the application.

The Examiner in charge of the application allowed all of the apparatus claims, which were directed to a volume control apparatus for correlating the volume of sprayed material, liquid or solid, dielectric or conducting, to the speed of movement of the article being coated.

The Examiner rejected the process claims. These process claims were directed to a method of producing an extremely thin coating of dielectric liquid. The rejection was based on the fact that the process had been anticipated by patents to Pugh (1,855,869), Ransburg (2,334,648), and Wintermute (2,221,338). The applicant appealed to the Board of Appeals of the Patent Office, which affirmed the Examiner. Thereupon the present civil action was instituted.

The District Court concluded that the use of dielectric material for the purpose claimed was sufficiently disclosed in the Wintermute patent; that, although Wintermute does not show the reason for using the dielectric material or the result that is attained from its use, it is well settled that the applicant need not appreciate or realize the result or the potential use or purpose for which his device or process may be applied. The court found that the use of an electrostatic field for the general purpose for which it was used, as stated in the application, is disclosed in the prior art, referring not only to Wintermute but to Pugh and Ransburg also; and held that the fact that those patents do not disclose the result attained does not detract from their weight as prior art, for the reasons above given.

The Board of Appeals of the Patent Office indicated that the third feature of the claimed invention, relating to the number of particles to be deposited on the plates, is not sufficiently definite and precise as to make it practical for persons reasonably skilled in the art without further experimentation; and the trial court found that it was doubtful whether this step was anything more than one that should be taken by any one reasonably skilled in the art, rather than being a product of the inventive faculty.

In *Abbott* v. *Coe*, 71 App. D. C. 195, 109 F.2d 449, we held that although a court, when it agrees with a Patent Office finding, often says so, agreement is not necessary to affirmance and disagreement is not sufficient for reversal. We said: "The question for us is not whether in our opinion there was invention, but whether the finding that there was none is consistent with the evidence." Further, in Abbott, we said: "The presumption that the Patent Office is right is reenforced, in the present case, by the presumption that the trial court is right."

Of course, we are not bound by the trial court's findings of fact [see for example *Broderson* v. *Marzall*, 90 U. S. App. D. C. 78, 194 F.2d 138, and *L-O-F Glass Fibers Co.* v. *Watson*, No. 11780, decided Nov. 3, 1955]. "Allowing ourselves the permissible latitude, we cannot say that in the present case the finding of the trial court against patentability is not a reasonable one on the evidence or that it is clearly erroneous." *Standard Oil Dev. Co.* v. *Marzall*, 86 U. S. App. D. C. 210, 214, 181 F.2d 280.

It therefore follows that the judgment of the District Court must be and is affirmed.

AFFIRMED.

[1] Rev. Stat. § 4915 (1875), as amended, 35 U. S. C. § 63 (1946), was repealed by the act of July 19, 1952, c. 905, § 5, 66 Stat. 815, and was replaced, to the extent here pertinent, by 66 Stat. 803, 35 U. S. C. § 145 (1952).

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

2,098,705. (See Re. 20,975.)

2,104,949(*a*), 2,199,227, A. M. Marks, Crystalline formation; **2,237,567, 2,328,219,** E. H. Land, Light polarizer and process of manufacture; **2,454,515,** same, Light-polarizing sheet of molecularly oriented transparent linear high polymer dyed with dichroic substance and process of manufacture; **Re. 23,297,** Hyman and West, Sheetlike light-polarizing complex of iodine, etc., **filed** Feb. 10, 1953, D. C. Mass. (Boston), Doc. 53/168–S, *Depix Corp. et al.* v. *Polaroid Corp.* Claims 5 and 16 of 2,104,949, claim 9 of 2,199,227 held invalid and not infringed, claim 11 of 2,199,227 held not infringed; claims 1, 2, 5, 7, 8, 9, and 18 of 2,237,567, claims 1, 2, 3, 4, 5, 6, 20, 22, and 24 of 2,328,219, claims 17 and 18 of 2,454,515 held valid; claim 12 of 2,454,515, claims 1 and 2 of Re. 23,297 held invalid; Patents 2,328,219 and 2,454,515 held not infringed by plaintiff Marks; claims 17, 18, and 19 of 2,328,219 and claim 11 of 2,454,515 held not infringed by plaintiffs; claims 1, 2, 5, 7, 8, 9, and 18 of 2,237,567, claims 1, 2, 3, 4, 5, 6, 20, 22, and 24 of 2,328,219, and claims 17 and 18 of 2,454,515 held infringed by Depix Corp.; injunction issued against plaintiffs; complaint and counterclaim dismissed; case referred to Special Master June 25, 1955.

2,104,949(*b*), 2,199,227, A. M. Marks, Crystalline formation, **appeal** filed Oct. 19, 1955, C. C. A., 1st Cir., Doc. 5055, *Depix Corp. et al.* v. *Polaroid Corp.*

2,109,501, F. J. Osius, Disintegrating mixer for producing fluent substances, **filed** Apr. 7, 1954, D. C., W. D. N. Y. (Buffalo), Doc. 6160, *Waring Products Corp.* v. *Coring Glass Works.* Order of dismissal for lack of prosecution Nov. 9, 1955.

2,118,255, Loucks and Ward, Perforated and embossed shoe part; **2,132,036,** same, Method of embossing and perforating pre-formed shoe parts; **2,193,190,** same, Apparatus for facilitating the embossing of perforated shoe parts, **filed** Dec. 30, 1953, D. C., S. D. N. Y., Doc. 90/195, *John R. H. Ward* v. *Kaplan Products and Textiles, Inc.* Stipulation and order of discontinuance Nov. 7, 1955.

2,132,036. (See 2,118,255.)

2,137,182, P. H. Robbins, Foundation garment; **Re. 21,595,** M. Imershein, Undergarment, **filed** Nov. 12, 1954, D. C., S. D. N. Y., Doc. 96/375, *Peter Pan Foundations, Inc.* v. *Poirette Corsets, Inc.* Stipulation and order of discontinuance Nov. 10, 1955.

2,144,850, H. C. Otis, Well device, **filed** Nov. 5, 1954, D. C., W. D. Okla. (Oklahoma City), Doc. 6463, *Otis Engineering Corp.* v. *Roinbo Service Co.* Order dismissing cause with prejudice Nov. 7, 1955.

2,163,638, S. P. Vaughn, Cleaning device; **2,358,673,** same, Mop, **filed** Nov. 1, 1955, D. C., S. D. Calif. (San Diego), Doc. 1794–SD, *Sponge Products Corp. et al.* v. *Alfred M. Lewis, Inc. et al.* **Same,** Doc. 1795–SD, *Sponge Products Corp. et al.* v. *Longs Drug.*

2,193,198. (See 2,118,255.)

2,199,227. (See 2,104,949(*a*) and (*b*).)

2,199,427, J. M. Dohen, Head dress, **filed** May 7, 1952, D. C., S. D. N. Y., Doc. 75/254, *Scarves By Vera, Inc.* v. *Glenader Textile Corp. et al.* Order of discontinuance (notice Nov. 14, 1955).

2,211,613, 2,211,614, R. M. Bowie, Cathode ray tube, **filed** Oct. 21, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18919–WB, *Sylvania Electric Products Inc.* v. *Calvideo Tube Corp.*

2,211,614. (See 2,211,613.)

2,233,089, G. G. Adler, Beam construction, **filed** Nov. 1, 1955, D. C., S. D. Fla. (Miami), Doc. 6541, *W. B. Probasco* v. *Concrete Products, Inc. et al.*

2,237,567. (See 2,104,949(*a*).)

2,260,587, J. J. Shields, Flexible conveyer, **filed** Nov. 3, 1955, D. C. Colo. (Denver), Doc. 5198, *James J. Shields* v. *Flexoveyor Mfg. Co. et al.*

2,273,536, J. Poliak, Electrical shears, **filed** Feb. 21, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c280, *Ungar Electric Tools, Inc.* v. *Michael Products Co. et al.* Consent judgment; patent held valid and infringed as to claims 3 and 11 against defendants Michael Products Co., Jack Rowe, and Ted Rowe; injunction issued (notice Nov. 9, 1955); order of dismissal by agreement as to amended complaint of plaintiff and counterclaim of defendant Nathan Bromberg Nov. 15, 1955.

2,294,497, M. Zawistowski, Portable cutting machine, **filed** May 10, 1954, D. C., W. D. N. Y. (Buffalo), Doc. 6190 (originally filed July 9, 1953, S. D. N. Y., Doc. 86/245), *Simplex Cloth Cutting Machine Co. Inc.* v. *Eastman Machine Co.* Order of dismissal Nov. 9, 1955.

2,328,219. (See 2,104,949(*a*).)

2,357,815, J. Fischer, Automotive fixture or accessory, **filed** Sept. 19, 1952, D. C., W. D. N. Y. (Buffalo), Doc. 5431, *Joseph Fischer* v. *Garmanow-Simon Machine Co. Inc. et al.* Order dismissing action for lack of prosecution Nov. 9, 1955.

2,358,673. (See 2,163,638.)

2,436,389, H. W. Kleist, Refrigerating plate and internal reinforcement therefor, **filed** Nov. 14, 1955, D. C. N. J. (Newark), Doc. 1066/55, *Dole Refrigerating Co.* v. *Amerio Contact Plate Freezers, Inc.*

2,454,515. (See 2,104,949(*a*).)

2,461,957, P. Berger, Transformer; **2,556,293,** A. E. Feinberg, Apparatus for starting and operating gaseous discharge devices, **filed** Feb. 12, 1954, D. C. District of Columbia, Doc. 585/54, *Advance Transformer Co.* v. *Modern Electrical Supply Co. et al.* Consent judgment; patents held valid Nov. 8, 1955.

2,469,773, H. S. Knowles, Loud-speaker diaphragm support member, **filed** Nov. 9, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c2024, *The Muter Co.* v. *Perfection Elec. Co.*

2,505,411, Kolodny and Micci, Glass syringe having lettering embedded flush therein, **filed** Nov. 15, 1955, D. C. N. J. (Camden), Doc. 1090/55, *East Rutherford Syringes, Inc.* v. *Comar Glass Corp.*

2,515,540, Willey and Wilson, Marine drilling method and means, **filed** Nov. 14, 1955, D. C., E. D. Tex. (Beaumont), Doc. 3066, *J. Ray McDermott & Co., Inc.* v. *Bethlehem Steel Co.*

2,522,294, J. D. Noble, Magnetic fishing tool, **filed** Nov. 10, 1955, D. C., W. D. Tex. (Pecos), Doc. 2357, *John D. Noble* v. *K & G Fishing Tool Service Co., Inc. et al.*

2,558,293. (See 2,461,957.)

2,587,718, B. Fox, Modulation system and method, **filed** Aug. 25, 1954, D. C. N. J. (Newark), Doc. 681/54, *Benjamin Fox* v. *Measurements Corp.* Consent order of dismissal Nov. 7, 1955.

2,591,904, J. C. Zola, Coating compositions and preparation thereof, **filed** Oct. 31, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18944–C, *Coloramic Coatings, Inc. et al.* v. *The Sherwin-Williams Co. of Calif. et al.*

2,607,051, L. K. Jackson, Bedframe and special caster receiving socket construction, **filed** Nov. 8, 1955, D. C., E. D. Wis. (Milwaukee), Doc. 55/C/300, *The Harvard Mfg. Co.* v. *The Vincent McCall Co.*

2,609,466, I. S. Blonder, Thermorelay element, **filed** Nov. 6, 1953, D. C. N. J. (Newark), Doc. 910/53, *David Bogen Co. Inc.* v. *Isaac S. Blonder.* Stipulation of discontinuance Nov. 15, 1955.

2,620,612, L. J. De Eugenio, Rider steered power lawn mower, **filed** Apr. 27, 1955, D. C., E. D. Mo. (St. Louis), Doc. 10246(2), *Musgrave Mfg. Co.* v. *Midwest Mower Corp.* On stipulation, cause dismissed as to complaint, counterclaim and motion of Ride-A-Mower Co. to intervene Oct. 28, 1955.

2,623,558, A. E. Andersson, Machine for removing bark from logs, **filed** May 15, 1953, D. C., W. D. Wash. (Seattle), Doc. 3452, *Soderhamns Verkstader Aktiebolag et al.* v. *Nicholson Mfg. Co.* Consent decree; action dismissed Nov. 7, 1955.

2,630,295, M. B. Lucker, Automobile jack, **appeal** filed Nov. 17, 1954, C. C. A., 8th Cir. (St. Louis), Doc. 15219, *Auto Specialties Mfg. Co.* v. *Handler Motor Supply Co.* Judgment of District Court affirmed Nov. 8, 1955.

2,635,717, H. P. Albrecht et al., Connecting structure, **filed** Nov. 10, 1955, D. C., E. D. Wis. (Milwaukee), Doc. 55/c/304, *Waco Mfg. Co.* v. *The Patent Scaffolding Co., Inc.*

2,648,610, J. T. Martin, Packaged popcorn kernels and popping oil, **filed** Nov. 10, 1955, D. C., M. D. Ga. (Thomasville), Doc. 446, *Rose Kist Popcorn Co., Inc.* v. *Marchant's Super Market.*

2,660,355, C. S. Allen, Method of applying sealing spouts for lighter fluid cans; **2,670,885**, same, Plastic spout for liquid containers, **filed** Nov. 4, 1955, D. C., N. D. Ohio (Cleveland), Doc. 32231, *West Penn Closure Corp.* v. *Products Packaging, Inc.*

2,664,363, M. Meth, Method of depositing copper; **2,720,487**, same, Galvanic plating of hardened copper, **filed** Nov. 9, 1955, D. C., S. D. N. Y., Doc. 104/394, *Max Meth* v. *Metropolitan Mirror & Glass Co., Inc. et al.* Same, **filed** Nov. 14, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16035, *Max Meth* v. *J. H. Werbelovsky's Sons Inc.*

2,670,285. (See 2,660,355.)

2,686,322, Blanke and Sands, Five-way type of bed assembly, **filed** Nov. 3, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c1990, *The Harvard Mfg. Co.* v. *The Seng Co.*

2,686,579, R. G. Johannsen, Frameless garage door, **filed** Sept. 23, 1954, D. C., E. D. Mich. (Detroit), Doc. 13796, *Stamping Products & Mfg. Co.* v. *Johannsen & Taylor, Inc.* Stipulation and order of dismissal without prejudice Nov. 8, 1955.

2,687,717, O. K. Murphy, Cushion type motor operated kinesitherapy device, **filed** Nov. 9, 1955, D. C., S. D. N. Y., Doc. 104/398, *Niagara Mfg. & Dist. Corp. et al.* v. *Pulsator Corp. of America.*

2,691,730, Y. T. Lo, Wide band antenna, **filed** Dec. 14, 1954, D. C., S. D. N. Y., Doc. 97/262, *JFD Mfg. Co., Inc.* v. *Channel Master Corp. et al.* Consent judgment for injunction (notice Nov. 15, 1955).

2,695,028, M. Dulberg, Cosmetic receptacle; **2,710,614**, same, Duplex rotary holder, **filed** Nov. 9, 1955, D. C., S. D. N. Y., Doc. 104/370, *Murray Dulberg* v. *Elizabeth Arden Sales Corp.*

2,708,968, J. G. Soave, Method of producing measured lengths of slide fastener chain, **filed** Nov. 14, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16036, *Waldes Kohinoor, Inc.* v. *Anchor Precision Corp. et al.*

2,709,249, A. F. Sperry, Instrument units for process alarm systems, **filed** Nov. 14, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c2062, *Panellit, Inc.* v. *Tigerman Engineering Co. et al.*

2,710,614. (See 2,695,028.)

2,713,166, Erickson and Bullwinkle, Method of varying the effective force on a driven fastener by a powder charge of constant magnitude, **included** by counterclaim filed Oct. 14, 1955, D. C., N. D. Ohio (Cleveland), Doc. 7421, *Stemco Corp. et al.* v. *Powder Power Tool Corp.*

2,713,628, A. Barkin, Thermally controlled vaporizer, **filed** Nov. 3, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c1989, *Practical Elec. Products, Inc.* v. *De Vilbiss Co., Inc. et al.*

2,714,269, G. R. S. Charles, Ornamental beaded necklace, **filed** Nov. 14, 1955, D. C., S. D. N. Y., Doc. 105/14, *El-Gem Creations, Inc.* v. *Joseph H. Meyer Bros.*

2,720,487. (See 2,664,363.)

Re. 20,975 (of **2,008,705**), G. A. Houseman, Awning; **Des. 154,550**, Korman and Harrison, Canopy, **filed** July 3, 1952, D. C., N. D. Ohio (Toledo), Doc. 6839, *Kool Vent Metal Awning Corp. of America* v. *American Beauty Ventilated Aluminum Awning Co.* Judgment for defendant in conformity with mandate of Court of Appeals Nov. 3, 1955.

Re. 21,595. (See 2,137,182.)

Re. 23,297. (See 2,104,949(*a*).)

Des. 154,550. (See Re. 20,975.)

Des. 169,422, H. S. Chase, Combined utility purse and map holder, **filed** Apr. 14, 1954, D. C., S. D. N. Y., Doc. 92/275, *Bernard Cahn Co. Inc.* v. *Novo-Plax Mfg. Co., Inc. et al.* Stipulation and order of discontinuance Nov. 10, 1955.

Des. 169,812, P. Hellman, Combined lunchbox and vacuum bottle unit, **filed** Sept. 17, 1953, D. C., S. D. N. Y., Doc. 88/50, *Hillcraft, Inc. et al.* v. *Joell Mfg. Co. et al.* Stipulation and order of discontinuance (notice Nov. 15, 1955).

Des. 170,295, Ziskin and Billig, Canister or similar article, **filed** Oct. 24, 1955, D. C., S. D. N. Y., Doc. 104/200, *The Kromex Corp.* v. *Astra Trading Corp.* Stipulation and order of discontinuance (notice Nov. 4, 1955). **Same**, Doc. 104/201, *The Kromex Corp.* v. *Benjamin and Medwin, Inc.* Decree as above (notice Nov. 7, 1955). Same, **filed** Nov. 15, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c2073, *The Kromex Corp.* v. *Goldblatt Bros., Inc.* Same, **filed** Nov. 17, 1955, D. C., E. D. Pa. (Philadelphia), Doc. 19845, *The Kromex Corp.* v. *Gimbel Brothers, Inc.* Order of dismissal Nov. 25, 1955. Same, **filed** Oct. 24, 1955, D. C., S. D. N. Y., Doc. 104/202, *The Kromex Corp.* v. *Carlo's Fifth Avenue et al.* Stipulation and judgment for injunction (notice Nov. 17, 1955).

REISSUES

JANUARY 17, 1956

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

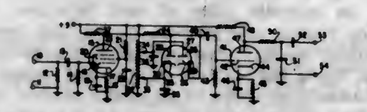
24,110

AUDIO COMPRESSION SYSTEM

Marion R. Winkler, Phoenix, Ariz., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois

Original No. 2,572,900, dated October 30, 1951, Serial No. 16,331, March 22, 1948. Application for reissue November 26, 1954, Serial No. 471,547

9 Claims. (Cl. 332—18)



3. In a modulating system in which a carrier wave is modulated by a signal including components of various frequencies and in which the deviation of the carrier wave depends upon the amplitude and frequency of the modulating signal, the method of modifying the modulating signal to prevent over-modulation of said carrier wave which comprises the steps of differentiating said modulating signal for all frequencies below a *first* predetermined value *but not substantially for frequencies above said first predetermined value*, limiting the amplitude of said differentiated wave at substantially the same value on either side of the axis thereof, and integrating said clipped wave for all frequencies above a second predetermined value *lower than said first predetermined value but not substantially for frequencies below said second predetermined value, said first and second values defining the boundaries of the frequency band of the modulating signal applied to the carrier wave.*

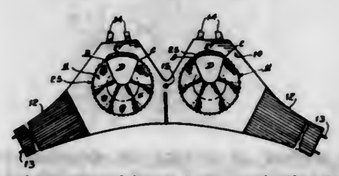
24,111

BRASSIERE

Fred V. Graf, Los Angeles, Calif.

Original No. 2,615,164, dated October 28, 1952, Serial No. 168,091, June 14, 1950. Application for reissue October 11, 1954, Serial No. 461,703

7 Claims. (Cl. 2—42)



1. A brassiere comprising a body encircling band having breast receiving apertures therein which are substantially surrounded by circular edges, each aperture being provided with a cup having a substantially U-shaped opening in its upper edge, and a curved lower edge secured to said circular edge of each aperture and substantially covering said aperture, said body encircling band having a cutout above each aperture, said cutout and said U-shaped edge forming an open top brassiere cup, and securing means attached to the free edges of said cutout adjacent said aperture.

PLANT PATENTS

GRANTED JANUARY 17, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,448

ROSE PLANT

John A. Armstrong, Ontario, Calif., assignor to Armstrong Nurseries, Inc., Ontario, Calif., a corporation of California

No Drawing. Application August 24, 1953, Serial No. 376,766

1 Claim. (Cl. 47—61)

A new and distinct variety of rose plant of the climbing hybrid tea class, substantially as described herein, characterized particularly as to novelty by being substantially identical with its parent variety "Lowell Thomas" (Plant Patent No. 595), but essentially being distinguished therefrom by its vigorous and climbing habit of growth as evidenced by its strong canes which attain a mature height of from 10 to 15 feet, at least, and by its habit of producing many more flowers in the spring than can usually be found at any one time on the parent variety.

1,449

PEACH TREE

David Bates Perrine, Centralia, Ill.

No Drawing. Application October 18, 1954, Serial No. 463,077

1 Claim. (Cl. 47—62)

A new and distinct variety of peach tree, substantially as described, bearing large, firm, and highly colored fruit; characterized as to novelty to the "Redhaven" peach in that the color and general appearance of the fruits are similar, but the present mutation ripens a full week later, grows larger and rounder and stays firmer, with a slightly "snappier" flavor.

1,450

ROSE PLANT

Herbert C. Swim, Ontario, Calif., assignor to Armstrong Nurseries, Inc., Ontario, Calif., a corporation of California

Application March 7, 1955, Serial No. 492,817

1 Claim. (Cl. 47—61)

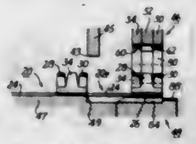
A new and distinct variety of rose plant of the hybrid polyantha class from a functional standpoint but of the hybrid tea class from a heredity standpoint, substantially as herein shown and described, characterized particularly as to novelty by its abundant, relatively flat, dark green foliage which covers the plant well, its abundant production of blooms substantially continuously during the growing season, the relatively large size, very double form and cluster habit of its blooms, and the distinctive color of the blooms, said color being nearly white around the outer portion of the flower and being shaded in varying shades of yellow, orange and sometimes light pink at the inner portion of the flower.

PATENTS

GRANTED JANUARY 17, 1956

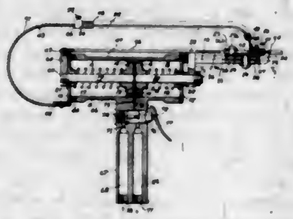
GENERAL AND MECHANICAL

2,730,718
METHOD OF APPLYING ELECTRICAL CONNECTORS
James C. Macy, Westfield, N. J., assignor to Aircraft-Marine Products, Inc., Harrisburg, Pa., a corporation of New Jersey
Application June 16, 1951, Serial No. 231,983
2 Claims. (Cl. 1—68)



1. The method of making an electrical connection which includes providing a continuous strip of electrical connectors respectively having ferrule portions with outside surfaces and inside surfaces adapted to embrace and be crimped onto conducting elements, said ferrule portions alternating with contact portions in the strip, the ferrule portion of each connector being attached directly to the contact portion of the next connector adjacent the centerline of the strip, feeding said strip toward the region between opposed dies of a crimping die set so as to bring a ferrule portion of a connector at the end of said strip between said dies while the outside surface of the ferrule portion of the next connector in the area immediately adjacent the junction with the contact portion of the end connector is supported on an anvil at one side of said dies at a level offset above that of the corresponding die face of the crimping die set, inserting a conducting element between said crimping dies in position to be embraced by said ferrule portion of the end connector, pressing both the ferrule portion and the contact portion of the end connector below said anvil in a direction away from the inside surface of the ferrule portion of the next connector thereby severing the end connector from said strip and smoothing the severed edge of the inside surface of the ferrule portion of the next connector for embracing another conducting element without cutting said other conducting element, and crimping said ferrule portion of the end connector onto said conducting element by bringing together said crimping dies.

2,730,719
STAPLE CLINCHING TOOL
Alois Steiner, Hoboken, N. J.
Application September 8, 1954, Serial No. 454,788
10 Claims. (Cl. 1—187)



1. A staple-clinching tool comprising a pair of pivotally mounted levers, oppositely disposed clinching jaws one at the end of each lever, female anvil portions in said jaws, a staple feed magazine, a staple feed guide between said magazine and said jaws, a feed bar movable along said feed guide to deliver staples from said magazine into a position of retention by said anvil portions, a hollow cylinder, a separator located within said cylinder, a pair of pistons reciprocally mounted in said cylinder on opposite sides of said separator, spring means for biasing said pistons toward said separator, said separator having a fluid passage communicating between the facing ends of said pistons, and control valve means manually shiftable to an intake position for delivering fluid pressure directly between one side of said separator and the piston adjacent thereto and then through said passage between the other side of said separator and the piston adjacent to the latter side to operate the latter piston in a time-delayed relationship to the former piston, said latter piston operatively connected to said feed bar and said former piston operatively connected to said levers, said valve means releasable to an exhaust position for exhausting the fluid pressure from said cylinder.

2,730,720
BATHING AND SHOWER CAP
Clare C. Saunders, New York, N. Y.
Application February 27, 1952, Serial No. 273,760
2 Claims. (Cl. 2—68)



1. A bathing and shower cap comprising a crown section to completely cover the arrangeable hair of the head, the lower edge defining an opening said edge having its forward portion concavely formed to provide a front forehead and temple covering section, side portions convexly curved to form an ear covering and side section and its rear portion being substantially straight to define a rear neck covering section and being formed of thin sheet plastic and adapted to conform itself to the contours of the wearer's head, the inside margin of said cap lying within and above the edge of said cap being provided with a pressure-sensitive adhesive material extending continuously around the said inside margin; and a flexible covering for said adhesive material having a free end portion adapted to be grasped whereby said covering can be stripped from said adhesive.

2,730,721
SLEEPING BAG STRUCTURE
Frederick J. P. van Veen, Ottawa, Ontario, Canada
Application December 31, 1952, Serial No. 328,843
2 Claims. (Cl. 2—69.5)

1. A sleeping bag comprising upper and lower sections, each said section having an upper and lower wall and insulating material therebetween, the lower wall of said

upper section and the upper wall of said lower section being brought together to contact each other and form a lateral seam extending substantially entirely about said sleeping bag, means defining a seam insulating compartment extending substantially entirely about said sleeping



bag including a wall outside of and spaced from said lateral seam a distance at least as great as the distance between said upper and lower walls of each said section, and solid insulating material substantially filling said seam closing compartment.

2,730,722
LADIES' HAIRPIECE AND HAT COMBINATION
Elena V. Colangelo, Brockton, Mass.
Application March 11, 1954, Serial No. 415,534
3 Claims. (Cl. 2—202)



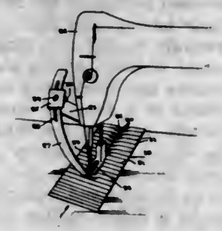
3. A covering for the head comprising a fabric defined by a straight edge and an opposite semi-circular edge, a pair of spaced apart concentric semi-circular elastic gathering tapes secured to the fabric and parallel to its semi-circular edge, the ends of the elastic gathering tapes terminating a distance from the straight edge of the fabric, the outer one of said elastic gathering tapes being adapted to gather the ends of the hair of the wearer, the other of the gathering tapes being adapted to gather the hair in the vicinity of the nape of the neck of the wearer.

2,730,723
LEG CLOSURE IN CHILD'S GARMENT
Greta M. Jonsson, Minneapolis, Minn.
Application June 24, 1954, Serial No. 438,911
1 Claim. (Cl. 2—270)



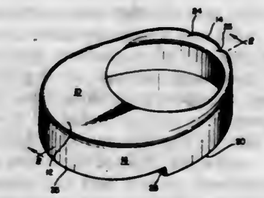
As an article of manufacture, a garment having a limb-encircling portion having a free outer end, an inner cuff secured to the outer end of the limb encircling portion, the inner cuff having a longitudinally extending slotted portion to facilitate the passage of the limb of a wearer through the inner cuff, slide fastening means for closing said slotted portion to draw the outer end of the inner cuff around the limb of the wearer, an elastic band secured to the outer end of the inner cuff for snugly holding the outer end of the cuff tightly around the limb of a wearer, an outer cuff secured to the limb-encircling portion and completely overlying the inner cuff, the outer cuff having a longitudinally extending slotted portion in substantial alignment with the slotted portion in the inner cuff to facilitate the passage of the limb through the outer cuff, the outer end of the outer cuff extending below the outer end of the inner cuff, a slide fastening means for closing the slotted portion of the outer cuff to draw the outer cuff around the limb of the wearer, a buckle and a strap means secured adjacent the outer end of the outer cuff for snugly circumposing the outer end of the outer cuff on the limb of the wearer.

2,730,724
TRIMMING AND METHOD OF MAKING SAME
Richard A. Gordon, Brooklyn, N. Y.
Application May 17, 1954, Serial No. 430,237
10 Claims. (Cl. 2—278)



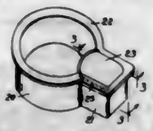
1. A trimming comprising a plurality of parallel pleats each formed with a twisted mid-portion, a securing member disposed upon a surface of said trimming on each side of the center line thereof binding the edge portions of said pleats to one another, an additional securing member disposed between said first-named securing members and beneath the twisted portions of said pleats, and means securing the twisted portions of said pleats to said trimming.

2,730,725
IMPROVED BEDPAN
Mary E. Stack, Seattle, Wash.
Application June 21, 1952, Serial No. 294,869
3 Claims. (Cl. 4—112)



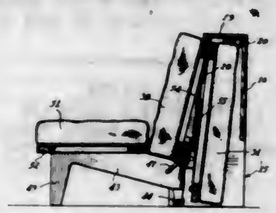
3. A bedpan, comprising: a body forming an enclosure having vertical side and end walls forming in horizontal cross-section an oval outline, the bottom of said body extending from the anterior end in a first flat horizontal bottom section which is substantially normal to said vertical walls and extends more than two-thirds of the distance to the posterior end, the bottom then rising sharply vertically in an intermediate chine bottom section, and then extending from said intermediate section to the posterior end in a second oblique flat bottom section which terminates at the posterior end at approximately the same level as said first bottom section and forms a sharp acute angle with the vertical walls at said posterior end, the corners formed by the juncture of the exterior surface of said bottom to said walls being formed with a minimum radius, the posterior top of said body forming a posterior surface with a slight concavity substantially conforming to the shape of the body portion which will rest thereon and extending more than one-third the distance to the anterior end, the anterior top of said body having a large opening extending through most of its extent.

2,730,726
SANITARY APPLIANCE FOR CHILDREN'S USE
Neville Francis Babbage, Epping, New South Wales, Australia
Application March 7, 1952, Serial No. 275,368
5 Claims. (Cl. 4—141)



1. A chamber pot of the male trainer type comprising a pot, an extension portion at the front of the pot forming a receptacle having side walls, a detachable shield to deflect forwardly or upwardly projected urine into the pot, a horizontal slideway on the side walls of said receptacle to receive said shield such that by a sliding motion of the shield in a direction from the centre of the said pot outwards, parts of the shield may be engaged therewith, the shield being thereby retained in position on the pot, said slideway being open at its rearward end and closed at its forward end whereby the shield may be removed only by a sliding motion towards the centre of the pot.

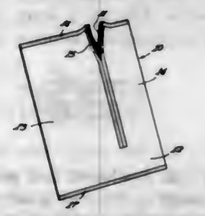
2,730,727
FOLDABLE SEAT AND BED CONSTRUCTION
Arthur J. Schneller, Brooklyn, N. Y.
Application October 9, 1952, Serial No. 313,825
1 Claim. (Cl. 5—38)



A combination seat and bed construction comprising a back shell, a cushioned section pivotally connected to the back shell for fore and aft movement, a second cushioned section, said cushioned sections having hinge members joined together, a support depending from the hinge members, a cushioned seat section including a frame movable over the floor surface and having roller devices on the rear part thereof, supporting link devices connected between the second cushioned section and the sides of the frame of the seat cushioned section, said supporting link devices adapted to move between over center positions and having spring means for holding the second cushioned section in the over center positions, flexible cable means extending between the hinge support and the forward part of the second cushioned section and tension spring means extending between the hinge support and the rear part of the first cushioned section.

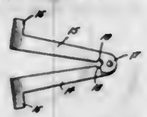
2,730,728
DIVIDED BED COVER
Virginia T. Roberts, Dearborn, Mich.
Application December 11, 1951, Serial No. 260,953
1 Claim. (Cl. 5—334)

A warmth-retaining bed-cover of an overall size to fit a standard double bed, the cover being formed with a slit extending from one end partway through its length leaving a full width portion at the other end, the slit being located approximately one-third the way in from one side of the blanket so as to form a wide unslotted covering portion adapted to extend over two-thirds of the bed to cover one of the persons occupying the bed, and to form a narrow covering portion adapted to extend over the remaining width of the bed and adapted to be folded down when the other person occupying the



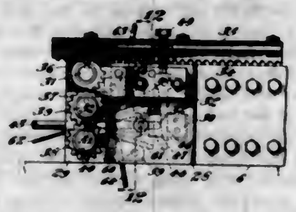
bed does not desire the warmth of the cover, and separable fastening means arranged to close the slit when the bed-cover is used to cover both occupants of the bed.

2,730,729
HOLDING DEVICES FOR RIBBON-TYPE CAN-OPENING KEYS
George Copien, Cripple Creek, Colo.
Application January 3, 1955, Serial No. 479,618
1 Claim. (Cl. 7—1)



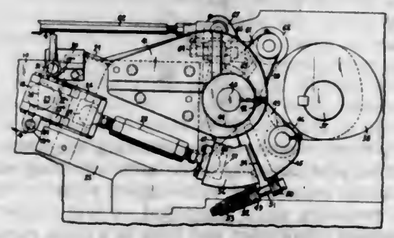
A device for supporting a winding key on a ribbon-sealed container of the type having a raised bead surrounding a circular lid, comprising: two leg members; means hinging said leg members together adjacent one extremity thereof; cooperating notches formed in said leg members adapted, when the latter are pressed together, to form a guide opening for receiving the shaft of a winding key, said leg members being arcuately formed so that when their first extremities adjacent the hinge means are rested upon the raised bead of the can, their second extremities, distant from the hinge means, will lie on the lid of the can to maintain the first extremities horizontal with the axis of the guide opening parallel to the vertical axis of the can; an outwardly projecting foot portion formed on the second extremity of each leg member and adapted to rest upon the lid of said can to resist lateral tilting of the leg members, said leg members diminishing in vertical thickness as said second extremities are approached; and a relatively sharp, horizontal terminal edge extending across the second extremities of the leg members and across said foot portions so as to lie upon said lid and adapted for use in separating the projecting extremity of a can ribbon from a can.

2,730,730
SLOTTING MACHINE FOR MINE RODS
Claude D. Reed, Harry C. Felty, and Jay W. Hackett, Lebanon, and Carl C. Hottenstein, Richland, Pa., assignors to Bethlehem Steel Company, a corporation of Pennsylvania
Application October 25, 1951, Serial No. 253,098
20 Claims. (Cl. 10—11)



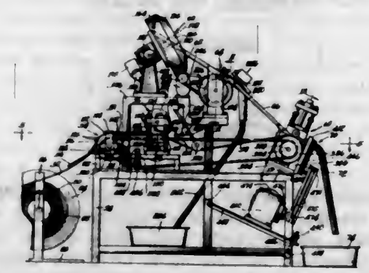
1. A machine for slotting the end portion of a blank, a cross-head, means for reciprocating the cross-head, a slotting device mounted on the reciprocating cross-head, comprising a slotting wedge, a pair of rolls carried on the cross-head in advance of the wedge for guiding the blank to the wedge, and means actuated by the movement of the cross-head for positively rotating the pair of rolls in alternately reversing directions.

2,730,731
CUT-OFF MECHANISM FOR HEADERS OR LIKE MACHINES
Joseph M. Schaeffer, Waterbury, Conn., assignor to The Waterbury Farrel Foundry & Machine Company, Waterbury, Conn., a corporation of Connecticut
Application April 30, 1953, Serial No. 352,173
9 Claims. (Cl. 10—25)



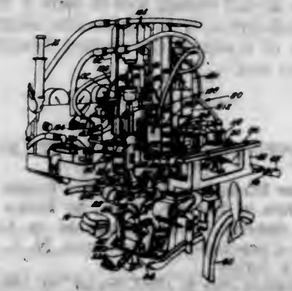
1. In a metal-blank-processing machine having a die block and a cutter bar mounted to reciprocate over a path substantially parallel to the face of the die block, cam means for imparting movement to the cutter bar and connections between said cam means and the cutter bar comprising a rock lever moved by said cam means, a member pivoted coincidentally with said lever and connected to the cutter bar against which said lever is adapted to abut, and spring means urging said lever toward said member but permitting limited separation of the lever therefrom.

2,730,732
METHOD OF AND APPARATUS FOR ASSEMBLING NUT AND WASHER ELEMENTS
Moritz H. Nielsen, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a corporation of Illinois
Application March 22, 1952, Serial No. 277,973
53 Claims. (Cl. 10—155)



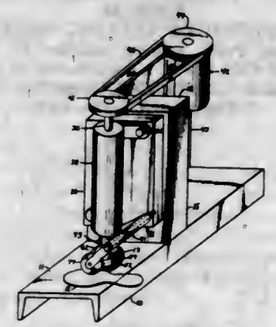
1. Apparatus for producing washer and nut element assemblies comprising means for feeding a strip of washers along a predetermined path, means for bringing a succession of nut elements into telescopic association with the washers in said strip, means for coupling each telescoped washer and fastener element to form a unit assembly, means engaging the washers of the assemblies so produced for separating the telescoped nut elements and washers from said strip, means for feeding said assemblies from the telescoping means to the separating means, and means for operating both of said feeding means, said telescoping means, and said separating means in proper time relation.

2,730,733
HEEL LASTING MACHINES
John E. Walsh, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application August 3, 1953, Serial No. 371,869
4 Claims. (Cl. 12—10.5)



3. In a machine for lasting shoes, the combination with wipers movable to wipe the lasting margin of the upper materials of a shoe inwardly over the heel end of an insole on the last, of a pair of grippers for seizing the upper materials on the opposite sides of the last adjacent to the heel breast line thereof, and for tensioning the upper materials heightwise of the last prior to the operation of said wipers, each of said grippers including a jaw for engaging an outer layer of the upper materials and a jaw for engaging an inner layer of the upper materials, fluid pressure means for operating the jaws of each gripper in a predetermined sequence, first to move the jaws in unison to tension both the inner and outer layers of the upper materials and then, while holding the jaw which engages the outer layer of the upper materials stationary to maintain said layer under tesnion, to continue the movement of the other jaw to apply an additional pull on the inner layer of said upper materials, and means for clamping the upper materials against the opposite sides of the last in the zone of action of said grippers and adjacent to the foot opening of the upper prior to the operation of the grippers.

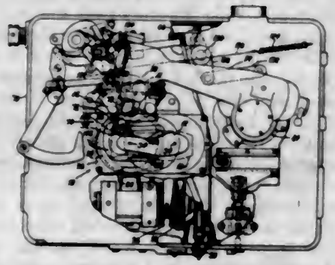
2,730,734
MACHINE FOR CUTTING A RAND ON SOLES
Donald P. Weber, Columbus, Ohio, assignor to The H. C. Godman Company, Columbus, Ohio, a corporation of Ohio
Application August 24, 1949, Serial No. 112,054
3 Claims. (Cl. 12—17)



1. A shoe machine for cutting a rand on the bottom face of the sole of a shoe comprising, in combination, a support having a flat horizontal surface and a hole therein, a shaft substantially perpendicular to said surface, means for rotating said shaft, a plate mounted for coaxial rotation with said shaft and disposed in said hole, the upper surface of said plate lying in the same plane as said surface of the support, and a cutting tool mounted

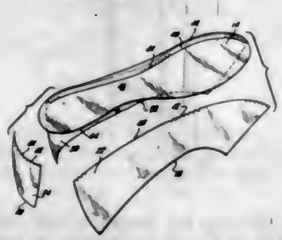
on the shaft above the plate, said tool having a lower surface contacting said upper surface of the plate and an upwardly facing cutting surface spaced from said upper surface of the plate a distance substantially equal to the depth of the cut to be made in the sole, and the peripheral edge of said plate being extended radially beyond the peripheral edge of said cutting tool to form a circumferentially extending upwardly facing surface adapted to support the face of a sole at the portion thereof being cut by said cutting tool.

2,730,735
MACHINES FOR PREPARING SOLES FOR ATTACHMENT
Daniel Walker Hannable, Beverly, and Ernest W. Stacey, deceased, late of Beverly, Mass., by Helen M. Stacey, executrix, Beverly, Mass., assignors to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application July 6, 1953, Serial No. 366,254
11 Claims. (Cl. 12—85.1)



11. In a machine for preparing soles for attachment, the combination of means to trim, reduce, and roughen the margin of a sole, a cement applying device spaced from said means and having an outlet portion pivotal about an axis extending heightwise of the sole, a pattern to support the sole in a cycle wherein successive marginal portions thereof are presented first to said trimming, reducing and roughening means and then to said device, said pattern having a groove therein of predetermined varying depth, and means cooperating with said groove to locate said outlet portion of the cement applying device in fixed angular relation to tangents at successive peripheral points of the sole.

2,730,736
METHOD OF MAKING SHOES
André Perugia, Paris, France, assignor to Anper, Inc., Long Island City, N. Y., a corporation of New York
Application April 10, 1952, Serial No. 281,561
2 Claims. (Cl. 12—142)



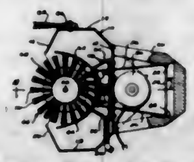
1. The method of making shoes comprising providing a closed shoe upper having an unclosed portion at its line of closure above its insole attaching edge with said upper having a lower incised edge and a forward part of the size it is to have in the finished shoe, providing an insole, working the lower incised edge of the upper over the marginal edge of said insole in successive increments and attaching it thereto, and finally securing together the unclosed portion of the upper above the insole attaching edge thereof.

2,730,737
BRUSH ROTATING AND POSITIONING DEVICE
Louis Herman, Detroit, Mich.
Application August 5, 1953, Serial No. 372,508
4 Claims. (Cl. 15—21)



1. In a brush rotating and positioning apparatus, an elongated support including a vertically extending panel, a prime mover mounted on said support, a pair of longitudinally extending shafts journalled on said support in spaced parallel relationship and lying in a plane substantially parallel to the plane of said panel, means operatively connecting one of said shafts to said prime mover for rotation thereby, bracket means straddling said pair of shafts, the other of said shafts having an operative connection with said bracket means, manually operable means actuatable to rotate said other shaft to move said bracket means in a vertical direction relative to said pair of shafts, a third shaft rotatably journalled on said bracket means between and substantially at right angles to said pair of shafts, means movable with said bracket means operatively connecting said third shaft to said one shaft for correlated rotation, and brush means mounted on said third shaft for rotation therewith.

2,730,738
POWER DRIVEN APPLICATOR FOR LIQUID MATERIALS
Donald Thomas Humes, El Centro, Calif.
Application May 29, 1953, Serial No. 358,511
2 Claims. (Cl. 15—24)



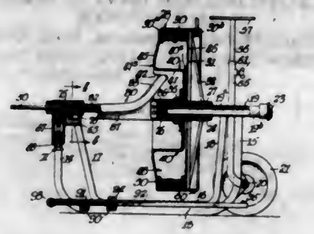
1. A power driven applicator for liquid materials comprising a housing; an applicator cylinder rotating therein and formed with radially extending, readily flexible bristles; means on the housing to drive the cylinder; a curved plate within the housing curved about a radius substantially equal to that of the cylinder and having a surface formed with corrugations extending parallel to the axis of rotation of the cylinder, the cylinder wiping over said corrugations during its rotation to momentarily flex the bristles away from immediately preceding bristles and thereby open up spaces between the bristles, the plate having rows of apertures alternating with and paralleling the corrugations, each row occurring between adjacent corrugations at the bases thereof; and means extending into the housing for forcing a liquid through the apertures into said spaces between the bristles, thus to charge the cylinder with said liquid during rotation thereof within the housing.

2,730,739
SWEEPER
Dominick Artese, New Rochelle, and Sam Ciambriello, Tuckahoe, N. Y.
Application June 21, 1954, Serial No. 438,005
1 Claim. (Cl. 15—104)



A sweeper comprising an elongated handle, a socket member affixed to said handle, a plurality of elongated strips of resilient material, one end of each of said strips being secured in said socket member, a coil spring coextensive with the portions of said strips extending outwardly of said socket member secured about said strips and terminating at the outer ends of said strips, said strips being equal in length and being rectangular in cross section, said strips being arranged in abutting relationship so that said strips may flex in a first direction with said strips being relatively rigid in a direction normal to said first direction.

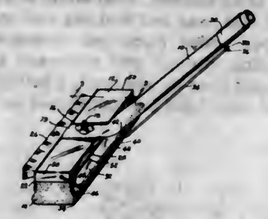
2,730,740
SEWER CLEANING MACHINES
John V. O'Brien, Park Ridge, Ill.
Application November 1, 1951, Serial No. 254,323
15 Claims. (Cl. 15—104.3)



1. A sewer cleaning machine embodying therein a frame with longitudinally spaced supports, a shaft mounted in one of said supports, means providing a bearing sleeve mounted on the other of said supports coaxially with the shaft, outer and inner drums mounted for independent rotation on said shaft and coacting to define an annular chamber for the storage of the convolutions of a coiled cable therein, said outer and inner drums including annular peripheral wall portions directly confronting each other, thereby defining outer and inner peripheral wall portions of the said annular chamber, said inner drum having a peripheral opening for the passage of cable into and out of said chamber, a cable distributor member having a straight tubular portion journalled at one end in said bearing sleeve and having its other end disposed at an angle to said straight end and disposed in operative relation to said opening in the inner drum, and means carried by said distributor member providing a bearing portion spaced longitudinally from said end of said straight portion and disposed coaxially of and rotative independently of said shaft.

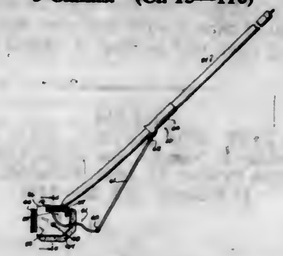
2,730,741
COMBINED CLEANING MOP AND WRINGER
Harry Gantz, Port Chester, N. Y.
Application December 1, 1950, Serial No. 198,613
5 Claims. (Cl. 15—116)

1. In a mop, a frame, a swab carried by the frame adjacent to the underside thereof, a handle attached to the frame, a squeeze plate, a means slidably mounted upon said handle and reciprocable with respect thereto between a first and second position, a lobe extending to the rear on each side of the squeeze plate and having openings therein, a member across the rear of the plate and rotatably passing through the openings and having a finger pivoted to the frame at each side thereof and a



lever connecting said means to said member whereby upon reciprocation of the means from said first position to said second position the squeeze plate is forced against the swab and upon reciprocating said means from said second position to said first position the squeeze plate is moved away from said swab.

2,730,742
COMBINED MOP AND WRINGER
Frank Zottola, Port Chester, N. Y., assignor to Empire Brushes, Inc., Port Chester, N. Y., a corporation of New York
Application June 13, 1952, Serial No. 293,321
5 Claims. (Cl. 15—116)

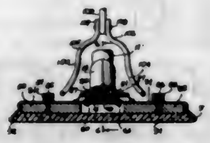


1. A mop comprising a head extending from front to rear, a pair of wing plates hinged at their inner ends to the sides of said head, a coil tension spring interconnecting said wing plates and straddling said head, blocks removably attached to the undersides of said wing plates, and leaving a space under the head between said wing plates, a single flat sponge pad attached to the undersides of said blocks and straddling the space between said blocks, a member attached to the front end of said head and formed with a bearing at right angles to the hinge connections between said wing plates and head, a second member symmetrical about its mid-portion and formed of a single piece of round wire stock, having a central portion journaled in said bearing, and outwardly and rearwardly curved portions extending from said central portion, portions inclined rearwardly, upwardly and inwardly from said curved portions, and portions inclined upwardly and disposed parallel to each other, extending from said inclined portion, said second member being of such size as to engage the pivoted wings when said second member is swung downwardly.

2,730,743
BUTTERFLY TYPE SPONGE MOPS
Frank Zottola, Port Chester, N. Y., assignor to Empire Brushes, Inc., Port Chester, N. Y., a corporation of New York
Application January 12, 1953, Serial No. 330,685
8 Claims. (Cl. 15—116)

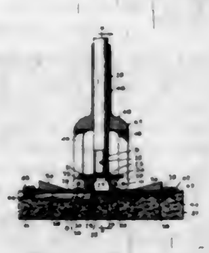
1. A mop comprising a downwardly and forwardly inclined handle having a lower front end, a head on the

lower front end of said handle and at an angle with respect thereto, said head having opposite sides and an underface and extending forwardly of the lower end of the handle, there being a pair of transversely extending spaced recesses formed in the under face of said head and opening through the opposite sides thereof, a retaining plate abutting the under face of said head and bridging said recesses to form a pair of open ended transverse passageways, fastener means extending through said plate and into said head for securing said plate to said head, a pair of wings on opposite side of said head and connected to said plate for



swinging movement toward and away from each other, said wings being adapted to carry a cleaning element, a tension spring extending through one of said passageways, means securing each end of said spring to the adjacent one of said wings for yieldably holding said wings in their position of movement away from each other, a member extending through and beyond the other one of said passageways and rotatable therein, said member having portions engageable with said wings for effecting swinging movement of latter toward each other against the force of said spring when said member is rotated in one direction.

2,730,744
WRINGER TYPE MOP DEVICE, CAM OPERATED
Sidney P. Vaughn, San Diego, Calif.
Application October 12, 1951, Serial No. 250,995
11 Claims. (Cl. 15—119)



6. A mop device comprising an attaching element having a recess which opens downwardly, a handle carrying the attaching element, pressure plates, means to pivotally mount the pressure plates upon the attaching element so that the pressure plates may be swung to opened and closed positions, arms secured to the pressure plates near the pivot means and extending above the pressure plates when the pressure plates are in the opened position, said arms having inner faces arranged to contact with the attaching element when the pressure plates are in the opened position and outer faces forming recesses, a wide sponge mop element secured to the pressure plates and when released serving to move the pressure plates toward the opened position and the inner faces of the arms into contact with the attaching element, a yoke slidably mounted upon the handle, rollers carried by the yoke to enter the recesses of the arms when the pressure plates are in the opened position, said recesses forming extensions arranged in the path of travel of the rollers, and cams secured to the pressure plates for coaction with the rollers.

2,730,745
WASH CLOTHS
Vera Norman, San Francisco, Calif.
Application December 26, 1952, Serial No. 327,950
2 Claims. (Cl. 15—122)



1. A wash cloth comprising an elongated strap formed of a plurality of superimposed layers of material; said layers being stitched together substantially in the middle of said strap to form a pocket in form of a trapezoid, the side edges of the strap serving as the parallel sides theerof; a portion of an inner layer of material forming a flap extending substantially the width of the strap and dividing said pocket into a front compartment and a soap compartment superimposed upon one another; said front compartment having a comparatively wide entrance at one side edge of the strap, and extending the width of said strap to the closed comparatively narrow bottom of the pocket; said soap compartment being closed at said one side edge and having an opening between a bottom free end of the flap and the bottom of the pocket for passing a cake of soap from the front compartment into the soap compartment; means for securely holding said layers of material together; and a handle secured to each end of the strap.

2,730,746
DISH CLOTH HOLDER HAVING SPRING WIRE AND RUNNER
Chris Madsen Rasmussen, Bend, Oreg.
Application December 15, 1952, Serial No. 325,989
1 Claim. (Cl. 15—154)



A dish cloth holder comprising elongated spaced bars defining an elongated handle, spaced arms carried by the bars adjacent one end of the handle, said arms being laterally offset from the bars and extending longitudinally from the handle in spaced relation thereto to define a jaw member, an elongated tongue pivotally carried adjacent one end by the handle adjacent the end thereof remote from the jaw member, a cooperating jaw member carried by the tongue remote from its pivoted end and adapted to move in an arcuate path into a position between the arms, opposed cloth pinching spurs carried by the arms in longitudinally spaced relation to the handle, a cloth engaging spur carried by the cooperating jaw member and projecting perpendicularly therefrom for projecting a cloth held between the jaws into the space between the cloth pinching spurs when the jaws are closed about the cloth, a yielding plate carried at its opposite ends by the handle and extending between the bars for yieldingly holding the arms separated and the cloth pinching spurs apart, a slide mounted on the handle for movement longitudinally thereon, said slide being adapted to advance the bars toward one another against the effort of the yielding plate as it moves toward the first mentioned jaw member, and said slide engaging the tongue for moving the cooperating jaw member into cloth clamping relation to the first mentioned jaw member as it advances on the handle toward the jaw members, said tongue having longitudinally spaced recesses opening through one side thereof for receiving the slide and holding it against accidental movement along the handle.

2,730,747
BRUSH HAVING RELATIVELY MOVABLE BRISTLE CARRYING SECTIONS
Louis R. Bressler, Southampton, Mass.
Application June 21, 1952, Serial No. 294,850
3 Claims. (Cl. 15—201)



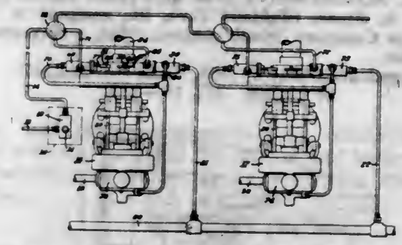
1. A brush having a sectionalized bristle carrying portion comprising in combination, separate outer bristle sections at opposite and adjacent sides and ends of said brush and separate intermediate sections between said outer sections, straight elongated plastic resilient rod members having opposite ends embedded in the outer sections at opposite sides of the brush and in intermediate sections between said outer sections, other straight elongated plastic resilient members disposed transversely to the first-named members having opposite ends embedded in the outer sections at opposite ends of the brush and intermediate sections embedded in intermediate sections between said end sections, said first and second named resilient members being in different planes and crossing one another and holding said sections with adjacent faces of adjacent sections in spaced relation for relative movements thereof as said resilient members are flexed, tufts of bristles having upper ends extending into said sections with the bristles thereof extending therefrom, and staple means securing upper ends of said bristle tufts in said sections.

2,730,748
DETACHABLE, ADJUSTABLE SHAPE MOP HEAD
Elbert D. Smyth, Newark, Ohio
Application December 17, 1952, Serial No. 326,440
1 Claim. (Cl. 15—229)



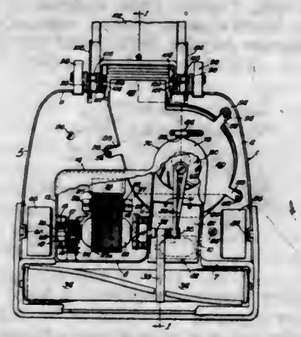
A mop head for detachable connection with the frame of a mop, comprising: a fabric sheet having a marginal edge; yarn strands attached to said sheet in spaced relation to said marginal edge; loop stitching applied around said edge and forming an internal freely flexible pocket between the sheet edge and stitching; a drawstring positioned in said pocket, said string having free manipulating ends extending laterally from said pocket and through said stitching, tightening of said strings by the drawing together of the free ends thereof in placing the string under tension serving to apply uniform tightening forces on the sheet of said fabric to draw and maintain the latter around the frame of a mop to which said head is connected; and flexible, fabric, reinforcing strain-bearing tapes secured to said sheet and overlapping said stitching adjacent the points thereon where the free end portions of said drawstring extend laterally through said stitching to absorb strains which would normally be imparted to said stitching when the ends of said drawstring are pulled relatively and laterally together.

2,730,749
SOOT BLOWER CONTROL AND OPERATING SYSTEM
Delos E. Hibner, Jr., Du Bois, Pa., assignor to Continental Foundry & Machine Company, East Chicago, Ind., a corporation of Delaware
Application February 12, 1952, Serial No. 271,270
3 Claims. (Cl. 15—318)



1. A system of successively operating soot blower units comprising a plurality of soot blower units each having a blower lance, each unit comprising a fluid-driven motor connected with the lance of that unit, a supply conduit for fluid under pressure connected to the motor, a normally closed first valve controlling said conduit, fluid-actuated means for opening the first valve, positive unyielding mechanical means for locking the first valve open and means driven by the motor for moving the locking means into and out of locking position, a second supply conduit for fluid under pressure, a normally closed second valve controlling said second conduit, and means driven by the motor for opening the second valve while the first valve is locked open, with at least one soot blower unit of said system having its said fluid-actuated means connected to receive fluid under pressure from a supply conduit controlled by the said second valve of another unit, whereby operation of the motor of the said one unit is started in the course of operation of the motor of the other unit.

2,730,750
LOW HEIGHT SUCTION CLEANER ARRANGEMENT
Nelson W. La Briere, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application May 5, 1951, Serial No. 224,768
11 Claims. (Cl. 15—324)



7. In a suction cleaner, a frame including a top wall, means on said top wall forming a nozzle chamber across the front thereof, a rotary surface agitating device mounted in said nozzle chamber, a motor mounted on said frame rearwardly of said nozzle chamber having a drive shaft extending parallel to said nozzle chamber, a suction fan supported on the underside of said top wall rearwardly of said motor and having a downwardly extending drive shaft, drive belts extending forwardly and rearwardly from

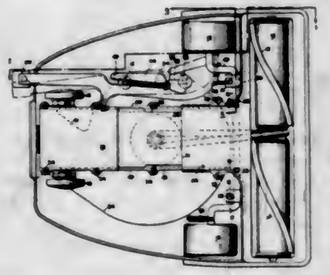
said motor shaft providing driving connections between said motor shaft and said agitating device and said fan shaft, and means forming an air duct from said nozzle chamber to said fan around said drive belts.

2,730,751

WHEEL ADJUSTMENT FOR SUCTION CLEANERS

George A. Brace, Highland Park, Ill., assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio

Application May 3, 1951, Serial No. 224,347
14 Claims. (Cl. 15—333)



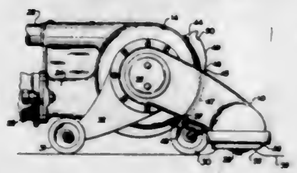
2. A suction cleaner of the floor type comprising a body provided with a motor driven suction fan, a suction nozzle of said body having a rotary agitator therein, a belt interconnecting said motor and agitator, a suction passage extending between said fan and said nozzle, a converter receiving passage communicating with said suction passage, front and rear sets of wheels supporting said cleaner body, means adjustably connecting one of said wheel sets to said body, and means on said cleaner for controlling the position of said one set of wheels, said means comprising a one piece member for manually adjusting said one set of wheels through a limited range of movement, and having a portion engageable by a converter when inserted into said receiving passage for moving said one set of wheels beyond said limited range of movement to elevate and hold said agitator in a plane entirely above the carpet so long as the converter remains in place in said receiving passage.

2,730,752

NOZZLE ADJUSTMENT FOR SUCTION CLEANER

Werner G. Seck, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio

Application July 26, 1950, Serial No. 176,014
2 Claims. (Cl. 15—361)



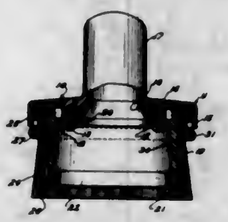
1. A suction cleaner comprising a body, a nozzle on said body for engaging the carpet to be cleaned, a crank shaft movably mounted on said body adjacent said nozzle, a pair of body supporting front wheels on said shaft, a pair of body supporting wheels at the rear of said body and about which said nozzle pivots upon adjustment of said front wheels, a handle pivotally mounted on said body for rotation through a normal operating range during reciprocation of said cleaner over the carpet, sector means movable with said handle and including means representing the major portion of said handle normal operating range operatively engaging said shaft for maintaining the latter and front wheels at one adjustment to arrange said nozzle in suction sealing position with the carpet during reciprocation of said handle through said major portion of said operating range, and means on said sector operative upon moving said handle into the upper limit of said handle normal operating range for shifting said crank shaft to lower said front wheels and pivot said body about said rear wheels to raise said nozzle from the carpet and break said suction seal.

2,730,753

SUCTION CLEANER BRUSH

Dale C. Gerber, North Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio

Application July 24, 1951, Serial No. 238,219
3 Claims. (Cl. 15—399)



1. A suction cleaning tool comprising a hollow body having an outlet adapted to be connected to a source of suction, means defining a tubular member on said body communicating with said outlet and having an inlet at one end for passage of dirt removed from the surface being cleaned, brush bristles attached to said body and disposed exteriorly around said tubular member and having the free ends extending beyond said inlet, and resilient means around said bristles above said inlet, said resilient means including a resilient ring under tension to force said bristles against said tubular member and molded to provide preset inner and outer surfaces, said ring arranged around said bristles for rotation about itself to different positions with respect to said inlet and free ends of said bristles to vary the effective length of the latter, said inner surface preset for a normal position adjacent said bristles whereby upon rotation through 180 degrees said inner and outer surfaces are respectively tensioned and compressed to assist in rotation of said ring through the remaining 180 degrees for a complete revolution to its normal position and effect said adjustment of the length of said bristles.

2,730,754

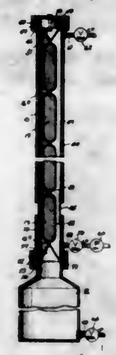
APPARATUS FOR REMOVING THE CASING OF LINK SAUSAGE AND STRUCTURALLY LIKE PRODUCTS

Robert A. Schneider, Bridgeport, Conn.

Original application December 31, 1949, Serial No. 136,264, now Patent No. 2,644,982, dated July 14, 1953. Divided and this application January 14, 1953, Serial No. 334,185
3 Claims. (Cl. 17—1)

1. Apparatus for removing the casing of link sausage and structurally like products wherein the casing is stretchable, comprising a tube for receiving a length of link sausage or the like in inwardly spaced relation to the inner wall of said tube, annular securing means at at least one end of said tube for fixedly securing the annular margin of an end of said casing in laterally stretched open position in sealed relation with respect to the inner wall of said tube to anchor said casing end against movement and to seal the space between said casing and the inner wall of said tube, and means for admitting a fluid medium

under pressure within said open end of said casing whereby said casing is adapted to be expanded away from the



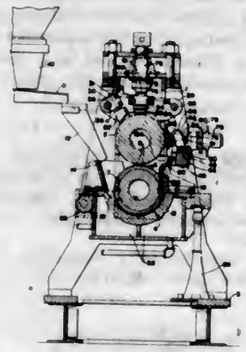
encased product toward said inner wall of said tube to release the encased product from said casing.

2,730,755

CONTINUOUS MILL

Andrew Hale, Akron, and Boyd A. McClellan, Mogadore, Ohio, assignors, by mesne assignments, to the Aetna-Standard Engineering Company, Youngstown, Ohio, a corporation of Ohio

Application January 7, 1953, Serial No. 330,019
16 Claims. (Cl. 18—2)



1. A mill for stocks of plastic material, comprising a pair of rotating mill rolls one of which is a work roll to which the stock will cling, said rolls having a narrow bight at which the stock forms in a bank, means for feeding stock at one point along said rolls, and means for advancing the stock along the rolls comprising a knife to slit the stock on the work roll, means to pick up an edge of the stock and turn it upon itself, and a rotatable coiling roller having an end face presented to the surface of the work roll, said coiling roller being located between the turning means and the bight and acting upon the stock while it is on the work roll and adapted to roll the stock upon itself into a coil before it reaches the bank.

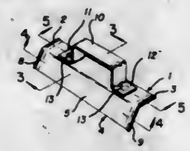
2,730,756

PUTTY APPLICATOR OR TOOL

Leo Greene, Cleveland Heights, Ohio

Application August 19, 1954, Serial No. 450,918
2 Claims. (Cl. 18—3.5)

1. A putty applicator comprising a body of substantially rectangular flat form and a blade extending angularly from one longitudinal edge of the body, said blade being of elongated rectangular form and flat for the major portion of its length, and having upwardly extending curved flanges at both ends thereof, said flanges permitting smoothing action on the putty by the blade irrespective of the longitudinal direction in which the blade is moved, and without danger of the ends of the blade digging into the putty during such smoothing



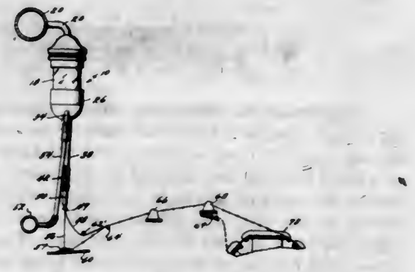
action, said blade being substantially coextensive in length with the body, and the ends of said blade being substantially perpendicular to the longitudinal edges of the blade.

2,730,757

METHOD AND APPARATUS FOR PRODUCING NOVELTY YARN

Hugo Hofmann, Elizabethton, Tenn., assignor to Beaunit Mills, Incorporated, New York, N. Y., a corporation of New York

Application December 24, 1952, Serial No. 327,875
11 Claims. (Cl. 18—8)



8. Apparatus for spinning novel filaments of artificial origin having improved strength and softness comprising means for delivering a cellulosic spinning solution at a predetermined pressure, precipitating apparatus to receive said spinning solution, a spinnerette associated with said precipitating apparatus, with the extrusion holes in said spinnerette being so arranged so as to deliver at least two distinct bundles of filaments of different denier, a plurality of funnels, each of which is disposed to receive one of said bundles of filaments, at least one of said funnels having a length greater than said other funnels, the longer of said funnels having a reduced nipple opening in its free end, means disposed beneath said longer funnels to temporarily receive the filaments issuing therefrom in piled relation, means for guiding the filament bundles from said funnels to a thread uniting means whereby the natural adhesiveness of said filaments causes the formation of a composite filament bundle, collecting means for said composite filament bundle, and means for treating said composite fialment bundle with an acid regenerating bath while being collected on said collection means.

2,730,758

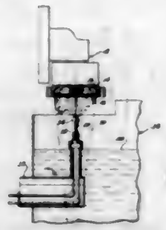
METHOD AND APPARATUS FOR THE PRODUCTION OF CRIMPED FILAMENTS

John W. Morrell, Pottstown, and Walter J. Smith, Royersford, Pa., assignors to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

Application July 21, 1954, Serial No. 444,732
6 Claims. (Cl. 18—8)

5. An apparatus for the manufacture of crimped filaments from crystalline polymeric resins comprising a melt spinning head having a die provided with a plurality of

spinning orifices arranged in a circle and directed vertically downwardly and means disposed below and coaxially



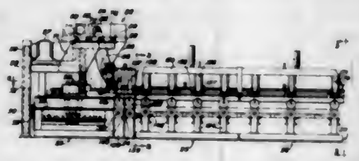
of said circle for directing a radial flow of cooling gas outwardly in all directions from said axis and past the filaments extruded from said orifices.

2,730,759
RECLAIM PROCESSING APPARATUS
George J. Glass, Poland, and George L. Bruggemeier, Akron, Ohio, assignors to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application March 3, 1953, Serial No. 346,118
7 Claims. (Cl. 18—12)



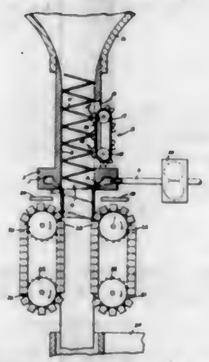
1. Apparatus for processing plastic material comprising a shaft, means to drive said shaft at one end, said shaft having a feed end and a delivery end rotatable in the bore of a fixed housing and adapted to masticate said material against the walls of said bore, said shaft comprising helical screws on the feed and delivery ends, said screws being separated by a tapered portion, the wall of said bore adjacent said first screw being helically fluted and having a pitch opposite to the pitch of the cooperating shaft screw, the walls of the bore adjacent said tapered rotor having a smooth surface tapered complementally to said tapered shaft portion, the walls of the bore adjacent said second screw having a smooth cylindrical surface.

2,730,760
EXTRUSION APPARATUS
Ralph D. Bibby, Altavista, Va., assignor to The Lane Company, Inc., Altavista, Va., a corporation of Virginia
Application October 6, 1954, Serial No. 460,570
20 Claims. (Cl. 18—12)



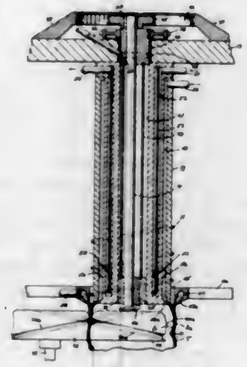
1. Extrusion apparatus comprising upper and lower platens disposed in vertical spaced relationship, said platens including corresponding entry, intermediate and trailing sections, the entry sections of said platens being substantially parallel, the intermediate sections of said platens being divergent and the trailing sections of said platens being convergent, side members disposed laterally of said platens to define a forming passage therewith, material feeding means associated with the entry ends of said platens, and a reciprocable ram disposed adjacent the entry ends of said platens and adapted to enter therebetween.

2,730,761
APPARATUS FOR PRODUCING REINFORCED TUBING
Carl A. Castellan, Delaware County, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application April 14, 1953, Serial No. 348,673
3 Claims. (Cl. 18—13)



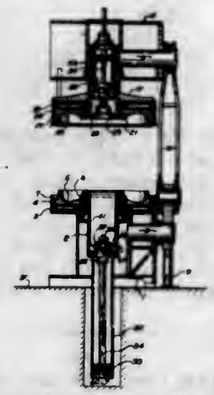
1. Apparatus for producing reinforced tubing comprising an extrusion device comprising a fixed hollow member having an internal wall defining a channel through the device for receiving and guiding a reinforcement element, a discharge orifice extending circumferentially of the wall adjacent one end thereof, an axial slot extending through the internal wall of the member and spaced from the orifice, a gripper member for gripping the element, means for moving the gripper member in a circuitous path extending through the slot in a direction to advance the element axially toward the orifice.

2,730,762
APPARATUS FOR THE CONTINUOUS FABRICATION OF REINFORCED TUBING
Hyde W. Ballard, West Chester, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application April 21, 1953, Serial No. 350,056
19 Claims. (Cl. 18—13)



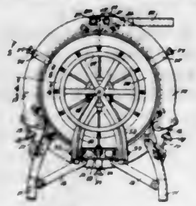
1. An apparatus for continuously fabricating reinforced flexible tubing comprising a stationary cylindrical mandrel supported at one end, means adjacent said supported end for winding a reinforcing helical strand around said mandrel, an annular extrusion nozzle in the mandrel at the opposite end thereof, a second annular extrusion nozzle surrounding said other end of the mandrel, means positioned to contact the bore of a synthetic plastic sheath extruded from said nozzles, and means cooperating with said last-named means to pressure seal said synthetic plastic sheath around the helical strand.

2,730,763
TIRE CURING PRESS
James W. Brundage, Akron, Ohio, assignor to National Rubber Machinery Company, Akron, Ohio, a corporation of Ohio
Application May 6, 1953, Serial No. 353,354
39 Claims. (Cl. 18—17)



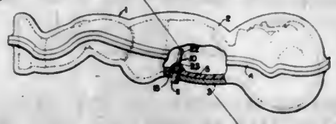
1. A tire curing press comprising a pair of complementary mold sections between which an uncured tire carcass is adapted to be positioned and means for relatively moving said mold sections to mating engagement whereat they define a cavity of tire shape therebetween, a radially expansible diaphragm having a head secured at one end thereof which has detachable engagement with one mold section, said diaphragm extending between said mold sections and disposed within such tire carcass to deform the latter to tire shape during relative movement of said mold sections to mating engagement, and means effective to move said head through the other end of said diaphragm and through the other mold section for turning said diaphragm inside-out for withdrawing the same from between said mold sections and out of the shaped carcass.

2,730,764
TIRE RECAPPING MACHINES
Harold V. James, Littleton, Colo., assignor to O. K. Rubber, Inc., Littleton, Colo., a corporation of Colorado
Application March 10, 1952, Serial No. 275,756
4 Claims. (Cl. 18—18)



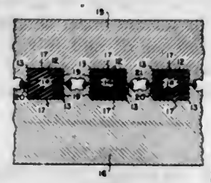
1. A tire molding device comprising: an arcuate, fixed, bottom frame member; a similar arcuate side frame member hinged to each extremity of said bottom frame member and cooperating therewith to form a complete circle; an arcuate tire tread matrix carried in each frame member; an arcuate heating element positioned between each frame member and its matrix; a withdrawable first pin in the extremity of one side frame member; a second pin in the extremity of the other frame member; a lever hingedly mounted on said second pin; a link pin in said lever; a connecting link mounted on and extending between said first pin and said link pin and acting to draw said frame members together as said lever is swung in one direction; and an eccentric portion on said first pin, said link being mounted on said eccentric portion so that rotation of said first pin will move the hinge axis of said link.

2,730,765
APPARATUS FOR MAKING HOLLOW BODIES WITH SOUND EFFECTS
Marvin J. Crafton, Doylestown, and Paul Rekettye, Akron, Ohio, assignors to The Sun Rubber Company, Barberton, Ohio, a corporation of Ohio
Application December 4, 1952, Serial No. 323,982
3 Claims. (Cl. 18—39)



1. Apparatus for the manufacture by rotational casting of hollow compressible bodies with sound effects, comprising a matrix, a post projecting inwardly of the matrix and having an enlarged portion spaced inwardly from the inner surface of the matrix to form a resonant chamber, neck portions on opposite sides of the enlarged portion to form reduced passages leading to the chamber, and a sharp edged flange on the post inwardly of the innermost neck portion.

2,730,766
PLUNGER PLUGS FOR HYPODERMIC CARTRIDGES AND METHODS OF AND APPARATUS FOR MAKING THE SAME
Ernest E. Tompkins, Narberth, Pa., assignor to Tompkins Rubber Company, Plymouth Meeting, Pa., a corporation of Pennsylvania
Application March 8, 1951, Serial No. 214,568
4 Claims. (Cl. 18—42)



1. A mold for forming plunger plugs of rubber or the like, for use in hypodermic cartridges or ampuls, comprising two mold members each having registering mold cavities, each of said mold members having an inwardly extending flange at each cavity, said flanges being located immediately adjacent the parting faces of the mold members, the arrangement being such that an annular groove will be formed in each plug intermediate the ends thereof, and any residual fins resulting from the overflow from the mold cavities will occur in each plug at the base of said annular groove.

2,730,767
CURING BAG CONSTRUCTION
Talbott E. Thomas, Cuyahoga Falls, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application April 15, 1953, Serial No. 348,891
4 Claims. (Cl. 18—45)



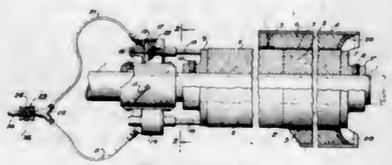
3. The method of making curing bags of the type having a body wall of rubbery material and a valve stem incorporated in said wall for the passage of fluid therethrough, which stem is surrounded in said wall by a conical coiled spring in spaced relation to the stem,

comprising the steps of placing said coiled spring about a portion of said stem that projects out of the bag body with the spring in direct contact with said wall, compressing said spring between said wall and a valve washer on said stem, laying the bag in a mold and molding and vulcanizing said body portion, whereby the rubbery material becomes soft and the compressed spring expands and automatically embeds itself within the said wall about said stem.

2,730,768
METHOD OF MANUFACTURING ELECTRICALLY CONDUCTIVE MEMBRANES AND THE LIKE
John Thacher Clarke, Newton Highlands, Mass., assignor to Ionics, Incorporated, Cambridge, Mass., a corporation of Massachusetts
No Drawing. Application December 5, 1951, Serial No. 260,080
11 Claims. (Cl. 18—58)

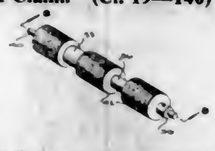
1. In the method of forming a solid electrolytically conductive, selectively permeable, unfractured ion exchange membrane having at least two dimensions in excess of 0.25 inches and comprising an insoluble infusible synthetic organic solid polymeric structure, dissociable ionic groups having a dissociation constant of at least 10^{-5} and being present in an amount of at least 0.3 milliequivalents per gram of solid material chemically bonded to said structure, and a solvent in gel relationship with said structure, the steps of (1) forming a dispersion in an organic solvent of material capable of polymerizing into said solid polymeric structure, (2) casting said dispersion on a reinforcing material to a membrane form having at least two dimensions in excess of 0.25 inches, (3) curing said dispersion to the insoluble infusible state in the presence of said organic solvent under conditions substantially preventive of the escape of said solvent thereby forming said solid polymeric structure and (4) thereafter maintaining the solvent content of said structure.

2,730,769
METHOD FOR MAKING THERMAL INSULATED PIPE
Alexander H. Isenberg, Woodside, Calif.
Application May 3, 1952, Serial No. 285,998
6 Claims. (Cl. 18—59)



1. In thermally insulated conduits, a method of covering a conveyor pipe with thermal insulation, comprising aligning a plurality of preformed sections of thermal insulation on the conveyor pipe in end-to-end relation and sufficiently loosely circumferentially of the pipe to permit relative longitudinal slippage between the pipe and insulation sections, holding one end of the aligned insulation members spaced relative to an adjacent end of the pipe and stopped against farther movement towards said adjacent end of the pipe, applying pressure longitudinally at the opposite pressure end of the insulation to compact the sections of insulation in end-to-end relation, temporarily securing said sections compacted relatively against movement longitudinally, and while said sections are so compacted, permanently securing them against longitudinal relative separation, thereafter releasing the insulation sections from the longitudinal pressure thereagainst, and imperviously enclosing said conveyor pipe and compacted and secured insulation against contact with exterior moisture.

2,730,770
CLEARING ROLLS FOR TEXTILE MACHINES
Robert J. Higginbotham and Marion E. Herndon, Jr., Charlotte, N. C.; said Herndon assignor to said Higginbotham
Application March 11, 1952, Serial No. 275,972
1 Claim. (Cl. 19—140)



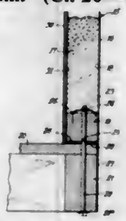
A clearing roll for a textile machine comprising an elongated shaft and roll bodies coaxially mounted on said shaft at spaced apart locations along the latter and each including a cylindrically shaped body of compressible and elastic material and a pile covering on the cylindrical surface of said body, and spacing sleeves of heavy material coaxially mounted on said shaft one between each two adjacent roll bodies to increase the weight of said clearing rolls.

2,730,771
TOP ROLLER FOR SPINNING MACHINES
Hans Julius Beck and Erwin Friedrich Schmid, Stuttgart, Germany, assignors to SKF Kugellagerfabriken Gesellschaft mit beschränkter Haftung
Application May 2, 1951, Serial No. 224,136
Claims priority, application Germany May 30, 1950
11 Claims. (Cl. 19—142)



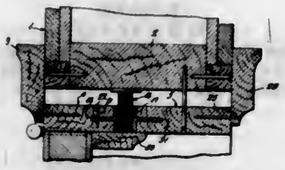
1. Top roller for spinning machines, comprising a shaft, a pair of rollers, one of said rollers being mounted at each end of said shaft for independent rotation, a single bearing for each of the rollers, each bearing including two series of balls, the shaft constituting the inner ball races, a single annular member serving as outer races, a ring between said two series of balls, fastening means connecting said ring and annular member to one another, an outer sleeve fitted upon the annular member of each of the rollers and secured in its position, and a covering placed around each outer sleeve.

2,730,772
TRAILER WALL CONSTRUCTION
Gustaf P. Jones, Pomona, Calif.
Application June 22, 1953, Serial No. 363,237
1 Claim. (Cl. 20—4)



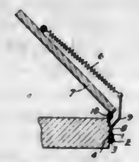
In a composite wall structure for a habitable trailer vehicle, a horizontal base runner member, a plurality of panels of pre-formed air-expanded cellular polystyrene arranged in a common plane on said runner member with vertical edges of the panels abutting, inner and outer sheathings of relatively thin material intimately attached to said panels and extending continuously over said plurality thereof, at least said outer sheathing lapping said runner member, and means carried in part by said runner member for securing the composite wall structure to a flooring or the like.

2,730,773
PACKAGED DOOR UNIT
Glenn I. Logue, Jacksonville, Fla., assignor to Con-Dor Corporation of America, Jacksonville, Fla., a corporation of Florida
Application August 19, 1952, Serial No. 305,116
9 Claims. (Cl. 20—12)



1. A prefabricated door and door frame assembly comprising, a two-part frame including front and back sections, each section having spaced jambs and a lintel and face panels on said jambs and lintels, a door hingedly mounted on one jamb of one of said sections, and jack members carried by the jambs of one of said sections and movable outwardly thereof to contact the sides of a rough door opening and initially plumb that section in a rough door opening and hold said section in place during the installation of the other section and the permanent securing of both sections in place.

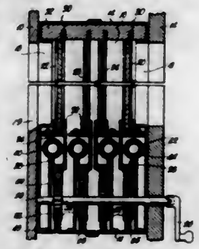
2,730,774
MULTIJOINT SPRING ANCHOR
Clarence Sagstuen, Rice Lake, Wis.
Application May 12, 1950, Serial No. 161,705
10 Claims. (Cl. 20—16)



1. A device for closing a door hinged to a jamb, said device comprising, in combination, a door spring having a terminal means of connection to a door, a stiff link with which the door spring has a series connection, and a jamb mounting having a pintle portion upon which the link is pivoted, the link having a length materially exceeding the distance from its mounting to the door and having intermediate its ends an abutment extending laterally toward the jamb whereon said mounting is carried for jamb engagement to limit the swinging movement of the link to a range less than that of the door, said link being adapted to project beyond the jamb with which said abutment is engaged and beyond the open door to give said spring moment for door closing and to hold said spring out of door contact.

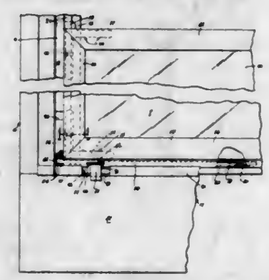
2,730,775
MULTIPLE WINDOW SASH UNIT OR ASSEMBLY
John E. Edwards, Kansas City, Kans.
Application July 24, 1952, Serial No. 300,639
1 Claim. (Cl. 20—52.1)

In apparatus of the character described, framework providing space for the shifting of a window panel unit horizontally from one position to another within said space and also providing a guideway for the upper margin of said panel unit, a panel unit adapted for shifting movement within said space, and combined supporting and horizontal shifting means for the lower margin of said panel unit comprising a horizontal sliding tube underneath said unit and having angularly extending connecting means providing supporting means for said panel unit, a fixed horizontal guide tube providing a guide passage for said sliding tube and also having vertical supporting means extending throughout the range of movement of said panel unit, a rack bar carried by said connecting



means alongside said vertical supporting means, and gear means mounted in driving relation to said rack bar for actuating said sliding tube horizontally within said guide tube.

2,730,776
WINDOW SASH MOUNTING AND LOCKING ARRANGEMENT
Howard D. Flicker, Queens Village, N. Y., assignor to Jasco Aluminum Products Corp., New Hyde Park, N. Y., a corporation of New York
Application April 14, 1953, Serial No. 348,760
23 Claims. (Cl. 20—52.2)

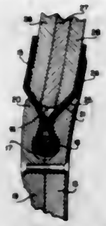


20. A window mounting arrangement comprising side rails, a window sash vertically slidably mounted between said rails, at least one of said rails having a vertical groove in the inner surface thereof, a member projecting laterally from and articulately mounted on said sash and extending into and slidable within said groove, said member having a rail-gripping surface thereon, resilient means active on said member so as to urge it to move so that said rail-gripping surface engages a surface of said groove in said rail so as to prevent movement of said sash in at least one direction, and a movable handle operatively connected to said member, accessible from the exterior of said sash, and effective when moved to cause said member to move against the action of said resilient means until said rail-gripping surface is withdrawn from said grooved surface, thereby releasing said sash for movement.

2,730,777
CANOPY MOUNTING
Vsevolod B. Korlagin, Glendale, Calif., assignor to Lockheed Aircraft Corporation, Burbank, Calif.
Application May 15, 1951, Serial No. 226,411
7 Claims. (Cl. 20—56.4)

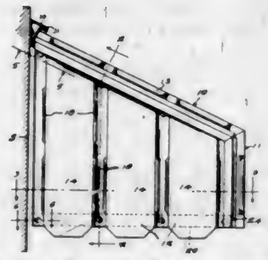
1. An aircraft enclosure and mounting therefor adapted to compensate for differential thermal expansion between the enclosure and a frame therefor, comprising a transparent body sheet formed of a synthetic resin and having a marginal edge, an attaching strip for mounting said enclosure comprising a loop of fabric forming an aligned extension of said edge, said loop having marginal edges which conform to and overlap and are cemented to the marginal edge of said body sheet where-

by to provide a flexible extension in the plane of said body sheet, a rod inserted through said loop of fabric in spaced relationship to the marginal edge of the body



sheet, and mounting means for said body sheet comprising parallel jaws aligned with the plane of the body sheet and engaging the loop of fabric between the rod and the marginal edge of the body sheet.

2,730,778
METAL AWNING
William Joseph Pax, Celina, Ohio
Application February 17, 1953, Serial No. 337,354
1 Claim. (Cl. 20—57.5)



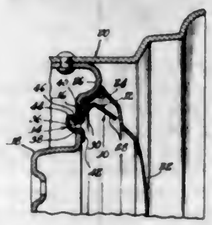
A metal awning formed of a top wall, a front wall and opposite end walls, each of said walls being formed of slats comprised of angular side walls, laterally projecting bottom flanges projecting from said side walls, a right angular outwardly projecting combined channel forming and locking flange extending from said bottom flanges, louvres formed in said side walls, the bottom flange and locking flange on one side of a slat seating in the channel formed by an adjacent side wall, its said bottom flange and its said locking flange, said locking flanges snugly engaging beneath said louvers, an upwardly and outwardly extending locking member carried by the upper inner end of said top wall, and a keeper telescoping over said locking member and adapted to be fixed to a stationary support.

2,730,779
AWNING CONSTRUCTION
Floyd V. Schleimer, San Francisco, Calif.
Application April 27, 1953, Serial No. 351,105
3 Claims. (Cl. 20—57.5)



1. In an awning construction consisting of bracket members extending in a vertical plane at right angles to the side wall of a house, a plurality of horizontal members supported by said bracket members, each of said bracket members being formed of a member which is angle shaped in cross section, one leg of said angle being provided with a plurality of punched-out offsets adapted to support said horizontal members, the foot of each of said offsets being remote from the side wall of the house.

2,730,780
HUB CAP CLIP
Ouglesa Jules Poupitch, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a corporation of Illinois
Application May 18, 1953, Serial No. 355,566
1 Claim. (Cl. 24—73)



A one piece resilient sheet material clip adapted to be detachably secured to an apertured wheel for mounting a hub cap or the like on the wheel, and comprising an elongated strip of sheet material reversely bent adjacent one end thereof to provide spaced legs forming a throat portion and a stud portion angularly offset from the throat portion and having a closed end, said stud portion adapted for insertion through a wheel aperture with one leg providing an abutment engageable with the inner wheel surface and with the opposed legs of the throat portion resiliently urged to engage the adjacent edges of the wheel aperture, the said one leg having a flange portion continuing from said throat portion and substantially normal thereto for engagement with the outer wheel surface adjacent the aperture therethrough and in opposition to said abutment, the said one leg being substantially elongated relative to the clip and providing a hub cap retaining portion extending angularly outwardly from the outer end of said flange portion and terminating in an inclined camming portion facilitating application of a hub cap thereto, and the other leg projecting from the throat portion oppositely with respect to said flange portion and providing a relatively short flange engageable with the outer wheel surface adjacent the aperture remote from said abutment and said flange portion.

2,730,781
PAPER CLIPS
John Alunas, Chicago, Ill.
Application December 31, 1953, Serial No. 401,519
1 Claim. (Cl. 24—85)



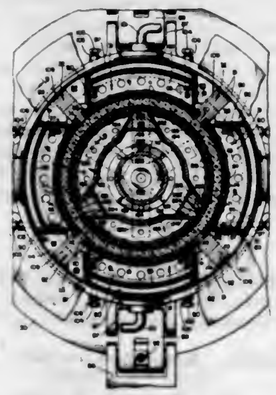
In a clip fastener, an oblong base, prongs at the corners of said base, said prongs adapted to be forced into a wooden support or the like applied by suitable means to said base, spaced twin resilient arms extending away from one of the longer edges of said base materially upwardly and reversely across same in spaced relation thereto and then downwardly toward said base a relatively short distance, a finger-piece terminating in an upwardly directed portion disposed well beyond the adjacent base edge and having an intermediate portion downwardly disposed at its juncture with said arms, and a tongue extending from said juncture between said arms parallel to said base to a point adjacent the remote longitudinal edge of said base and beyond same and pitched downwardly defining a toe for yielding engagement with the support at a point beyond said base edge to frictionally engage paper sheets inserted between said toe and support after finger pressure has been applied to said finger-piece.

2,730,782
AUTOMATIC HOSE CLAMP LOCK
Mitchell Ludwinski, Elmhurst, Ill.
Application July 15, 1952, Serial No. 298,889
1 Claim. (Cl. 24—274)



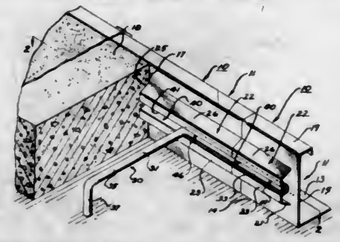
A housing for a hose clamp in which a floating worm extends through and is supported by the housing in position to pull on a strap passing through the housing underneath the worm: which housing has a top wall composed of a semicylindrical section merging into a frustoconical section, the latter section overlying and extending beyond the tip end of the worm and being of a diameter at its small end less than the diameter of the thread elements at and near the tip, and the diameter of the inner surface of the semicylindrical section being at least as great as the greatest diameter of the worm.

2,730,783
APPARATUS FOR FORMING CONCRETE PIPES AND OTHER HOLLOW BODIES
Hugh F. Kennison, Verona, N. J., assignor to Lock Joint Pipe Company, East Orange, N. J., a corporation of New Jersey
Application October 12, 1950, Serial No. 189,693
26 Claims. (Cl. 25—30)



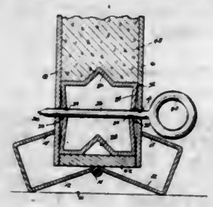
1. In a moulding apparatus; the combination comprising a deformable outer mould wall, a deformable inner mould wall, said inner and outer mould wall defining a mould cavity therebetween, each of said mould walls being formed by individual segments arranged circumferentially of the mould and having longitudinal edges of adjacent segments of the respective walls in sealed relationship with each other and providing a circumferentially continuous mould wall irrespective of the adjusted distance between said walls, means for holding said mould walls for forming a mould cavity of a predetermined volume therebetween, and means for moving all of said segments for changing the distance between said mould walls.

2,730,784
PAVING DOWEL SUPPORTING CONSTRUCTION
Thomas C. Salisbury, San Dimas, Calif., assignor, by mesne assignments, to P. B. A. Company, Alhambra, Calif., a corporation of California
Application August 31, 1953, Serial No. 377,373
1 Claim. (Cl. 25—118)



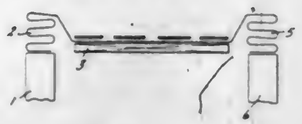
In a dowel supporting construction for supporting a plurality of paving dowels in predetermined, spaced relation and for defining the edge of a concrete structure in which portions of said dowels are embedded, the combination of: a paving header, said header including a base and a vertical form wall on said base, said form wall having a plurality of longitudinally spaced fastener receiving openings therein; an elongated keyway channel removably secured to said form wall intermediate the upper and lower edges thereof, said keyway channel having a vertical, intermediate wall disposed in spaced relation with said form wall, said intermediate wall having a continuous groove provided in the face thereof defined by a rearwardly extending, continuous protrusion in said intermediate wall for the reception of a plurality of dowels; said groove being of arcuate cross section at the bottom thereof to prevent seepage of concrete between the dowels and the bottom of the groove and the diameter of said groove being substantially the same as the diameter of said dowels; and fastener means extending through said openings in said form wall for demountably maintaining said channel thereupon.

2,730,785
CONCRETE FORM
Roger F. Williams, Des Moines, Iowa, and Glenn A. Rogge, Marinette, Wis.
Application April 17, 1952, Serial No. 282,764
6 Claims. (Cl. 25—130)



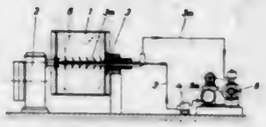
1. In a concrete form, vertical elements in laterally spaced relation to each other, a base block between said vertical elements and engaging them; said base block having concave sides; said vertical elements and said base block having holes therein, pins extending through the holes in said vertical elements and said base block, and a clamp means that has halves that are generally U-shaped in cross section and which are secured together yieldingly by a leg of each U-shaped half; said vertical elements and said base block fitting between the free ends of said U-shaped halves and said base block resting on said yielding joint; whereby the free ends of said U-shaped halves apply a compression force on said vertical elements forcing them toward said base block as a result of the weight of said vertical elements and said base blocks bearing on the yielding joint of said clamp; each of said pins being independent of every other pin.

2,730,786
METHOD OF ELIMINATING STRAIN IN FABRIC
Claes A. Kindstrand and Eric A. E. Pettersson, Stockholm, Sweden
Application September 13, 1950, Serial No. 184,606
Claims priority, application Sweden September 17, 1949
2 Claims. (Cl. 26—1)



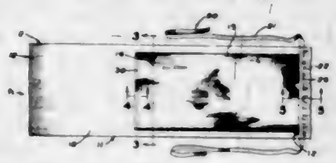
2. In the processing of fabrics in a plurality of processing stages, a process of eliminating strains from a fabric and preventing the occurrence of further strains which comprises the steps of passing the fabric being processed over a bed with said fabric extending in a plane longitudinally of said bed and at least temporarily in contact therewith, and simultaneously vibrating said bed with the fabric lying in a plane thereon, whereby said vibrations are transferred to said fabric; static pressure being applied to said fabric during the vibration thereof while over said bed.

2,730,787
METHOD AND APPARATUS FOR SECURING WORK PIECES
Karl Bechtold, Hamm, Germany
Application July 17, 1951, Serial No. 237,135
Claims priority, application Germany July 20, 1950
5 Claims. (Cl. 26—15)



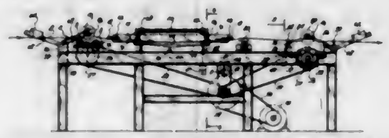
1. In a method for securing a workpiece and particularly a hide in a workable position the steps of locating said hide on a support, introducing a freezable liquid inbetween said hide and said support and securing the coherence of said hide and its support by cooling said freezable liquid to its freezing point whereby a solid layer of said liquid is formed which connects the hide and said support.

2,730,788
UNDERTAKING APPLIANCE FOR COVERING PORTIONS OF THE TORSO
Ralph E. Piatt, Washington, Pa.
Application October 2, 1952, Serial No. 312,817
2 Claims. (Cl. 27—21)



1. An undertaking appliance for permanent application to the lower portion of the torso, said appliance including an outermost covering portion comprising a thin flexible substantially fluid-impervious elongated sheet of plastic material having side and end edges and defining two elongated major parts; a pad, containing fluid-absorbent material, disposed upon the inner face of the sheet to extend over one of said major parts and having side and end edges, with one end edge portion of the sheet doubled over an adjacent end edge portion of the pad, the opposite end edge portion of the pad being disposed well inwardly of the opposite end edge of the sheet, the other major part of said sheet having an area sufficient to contact and spread over the hypogastric and umbilical regions of the torso when said other major part is spread out and applied thereto; an elongated tape with its intermediate portion extending transversely along a face of said sheet in the zone of the doubled-over end edge portion of the sheet, and means securing said intermediate portion of said tape and the doubled over end edge portion of the sheet and the adjacent end edge portion of the pad to the sheet, the free end portions of said tape being of sufficient length to be extended over the spread out major part of said sheet and secured together thereon.

2,730,789
MACHINE FOR STRETCHING NYLON THREAD
Malcolm Curry, Flanders, N. J., assignor to The American Thread Company, New York, N. Y., a corporation of New Jersey
Application October 5, 1950, Serial No. 188,543
4 Claims. (Cl. 28—62)

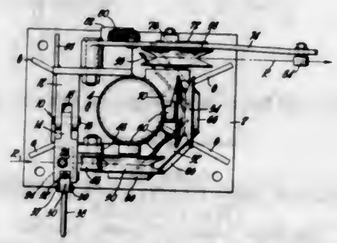


1. In a machine for treating nylon threads, means for feeding the threads longitudinally in a web with the threads arranged parallel and spaced apart in close proximity comprising two sets of feed rolls for the web, and two series of thread guides for the web respectively arranged in advance of said two sets of feed rolls through which the threads pass, a longitudinally curved heating plate positioned between the two sets of rolls in contact with which the web of threads pass so as to heat the threads slightly below the melting point of the nylon, means for driving the rolls of the two sets at different speeds so as to stretch the threads a predetermined degree, and means for relatively adjusting the heating plate and the path of travel of the web so as to vary the length of contact between the threads and the heating plate.

2,730,790
TREATMENT OF TEXTILE FIBERS
Elmer H. Rossin, Melrose, Mass., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
No Drawing. Application December 1, 1949, Serial No. 130,603
6 Claims. (Cl. 28—75)

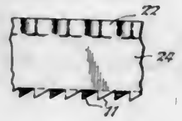
1. The method of spinning textile fibers which comprises applying to said fibers at some stage of their processing prior to spinning an aqueous dispersion of fine, discrete, unagglomerated particles of a hard, water-insoluble, non-plasticized polymerized thermoplastic resin in an amount sufficient to deposit from 0.1 to 3% by weight of said resin and up to 40% by weight of water, based on the weight of the dry fibers, said dispersion being free of cationic surface active agents, said resin being further characterized in that it is substantially resistant to plasticization by water and is nonfilm-forming at temperatures below 150° F., allowing the fibers to dry at a temperature below 150° F., and then spinning the resulting fibers to form a yarn.

2,730,791
METHOD AND APPARATUS FOR BREAKING SCALE FROM A ROD
Clarence O. Carlson, Chagrin Falls, and Walter O. Everling and Frank E. Robinson, Shaker Heights, Ohio, assignors to United States Steel Corporation, a corporation of New Jersey
Application May 4, 1953, Serial No. 352,928
12 Claims. (Cl. 29—81)



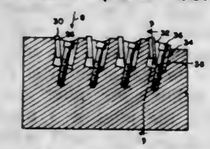
3. Apparatus for removing scale from a rod comprising a vertical post, a plurality of sheaves mounted on said post, each of said sheaves having a peripheral groove therein for receiving said rod, said sheaves being arranged around the periphery of said post with the axis of each sheave in different vertical and horizontal planes than the sheave adjacent thereto, said rod passing around at least approximately 90° of each sheave so that scale on said rod is broken therefrom, a pivotally mounted knocker arm supported by said post, a roller on the free end of said arm below which the rod passes after it leaves the last of said sheaves, a cam roller mounted on said arm intermediate its ends, a cam mounted on the last of said sheaves for rotation therewith, a spring having one end attached to said arm and the other end attached to said post to hold the cam roller in contact with the surface of said cam, the cam surface gradually rising from its low point to its high point and then abruptly falling from its high point to its low point whereby the roller on said knocker arm strikes a blow on said rod to jar the loose scale therefrom.

2,730,792
METAL CUTTING SAW
Lerned F. Ronan, East Aurora, N. Y.
Application January 15, 1952, Serial No. 266,587
1 Claim. (Cl. 29—95)



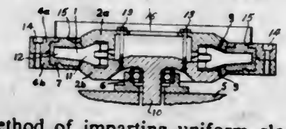
A hack saw blade for cutting metal workpieces comprising an elongate body having cutting teeth along one edge only thereof and guide means adjacent the edge opposite said one edge, said cutting teeth being set to project outwardly beyond opposite sides of said body, said guide means comprising corrugations in said body which extend lengthwise of said body and parallel to said cutting teeth to provide line contact with the walls of the cut made by the blade, said corrugations projecting alternately beyond opposite sides of said body and having bearing surfaces which are parallel to and extend in the direction of the cut, the distance laterally between the extremities of the cutting teeth being greater than the distance laterally between said bearing surfaces of said corrugations.

2,730,793
BROACHING TOOL
Russel W. Anthony and Joseph A. Psenka, Detroit, Mich., assignors to National Broach & Machine Company, Detroit, Mich., a corporation of Michigan
Application October 21, 1953, Serial No. 387,471
9 Claims. (Cl. 29—95.1)



1. A broach comprising a bar having a blade supporting rib, said bar having a series of blade pockets extending transversely through said rib, blades in said pockets, and removable blade retainers engaging said blades and holding said blades in said pockets, said blades being flat and extending slightly above and laterally beyond said rib, said rib and blades having similar cross-sectional shape so that said blades are supported by said rib close to the projecting edges of said blades.

2,730,794
METHOD AND APPARATUS FOR FINISHING TURBINE BLADES
Christian Schörner, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nürnberg A. G., Augsburg, Germany, a corporation of Germany
Application July 17, 1951, Serial No. 237,228
Claims priority, application Germany January 20, 1951
13 Claims. (Cl. 29—156.8)



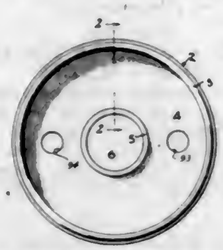
1. In a method of imparting uniform close tolerance finishing and fitting to a plurality of nonuniform turbine blades adapted to be carried around the rim of a turbine rotor, the steps which comprise fitting a portion of each said blade into a rotor dummy, spinning said rotor dummy and said blades effecting automatic alignment of said blades under the action of centrifugal forces thereon, fastening together portions of said blades outside said dummy into a rigid blade unit while maintaining said alignment of said blades in said rotor dummy, shaping said blades into said close tolerance while all said blades are fastened together in aligned position in said unit, and thereafter mounting said blades in a rotor.

10. In apparatus for imparting uniform close tolerance finishing and fitting to a plurality of nonuniform turbine blades adapted to be carried in an annular groove around the rim of a turbine rotor, the combination which comprises a rotor dummy, rim portions on said dummy defining an annular groove substantially equivalent to said annular groove in said turbine rotor, means for receiving and retaining said turbine blades in said rotor dummy annular groove, means for spinning said rotor dummy effecting automatic alignment under centrifugal force of turbine blades inserted into said groove, and means for releasing all said blades from said groove while maintaining said aligned condition of said blades.

2,730,795
WIRE LINE SHEAVE AND METHOD OF FABRICATION
Richard R. Bloss, Beaumont, Tex., assignor to Dresser Equipment Company, Beaumont, Tex., a corporation of Ohio
Application February 6, 1951, Serial No. 209,680
4 Claims. (Cl. 29—159)

1. A method of fabricating a wire line sheave of a hub, web, and rim comprising, creating a rim of a flat

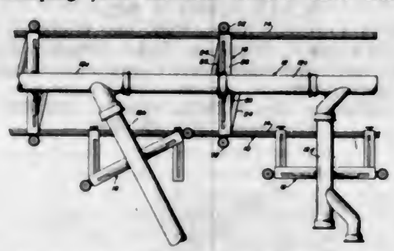
strip of sheet metal of a predetermined length and width, squaring the ends thereof with the edges, rolling such strip into a circular rim, positioning the rim on edge on flat slab surface, temporarily affixing the rim to the surface so that all points of the edge are in the same plane and with the rim as a cylinder, beveling the inside ends along the joint to form a groove penetrating substantially one half the thickness of the rim, welding such groove to create a homogeneous joint of the ends and weld metal, grooving the outer surface of the rim ends in to the inside weld metal, welding the outer groove to meet the inside weld so that the joint is a homogeneous band, having one hundred per cent weld penetration, grinding the weld to obtain a rim of uniform circumferential thickness, heating the rim by rotating the rim in a furnace having a revolving bottom to turn the rim and obtain an even heat thereon to stress relieve the metal of the rim, rolling the red hot rim between adjustable dies to roll forge the wire groove by such circumferential rolling to a predetermined setting of the roller dies to create a circumferential grain structure in the metal, a small stream of water is directed just in front of the



groove forming die to momentarily cool the metal as it passes under the grooving die, the water cools the dies and pops off scale which may have formed, removing the grooved rim from the dies and positioning on edge on a flat slab to avoid bending or distortion because the rim is still hot and practically stress relieved, cutting an annular web plate from a flat sheet metal plate, fitting the outer peripheral edge of the web into the inner peripheral base of the rim so that the central plane of the rim and the central plane of the web are coincidental by heating the rim for expansion to pass over the web periphery, thus removing grain stresses, providing a sheave hub, fitting such hub into the web center opening, welding the hub and web and the web and rim, removing any scale from the rim groove, flame hardening the sheave tread groove to a Brinell hardness approximating 500, testing the groove for "go" or "no go" gage for correct profile, mounting the sheave in a boring mill centered in a jig fixture to clamp the sheave by the formed groove or tread, machining the sheave with reference to the root diameter of the tread groove and the bore of the hub normal to the root diameter.

2,730,796
PIPE ALIGNING APPARATUS
Henry E. Menser, New Port, Ind.
Application September 28, 1951, Serial No. 248,744
3 Claims. (Cl. 29—287)

1. A pipe aligning apparatus comprising a pair of spaced parallel rails, a pair of brackets individually adjustable on the respective rails longitudinally thereof, a pair of arms pivoted at one end thereof in a horizontal plane to the respective brackets and swingable horizontally inwardly and outwardly relative to the rails, longitudinal slots in said arms, a horizontally elongated frame, means on said frame adjustably connecting said frame to said arms, said means extending through said slots and slidable therein, a vertically adjustable pipe supporting member mounted intermediate the ends of said frame, and a pair of coacting horizontally opposed pipe clamping jaws movable toward each other and



mounted on said frame at the opposite sides of said member.

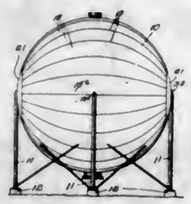
2,730,797
METHOD OF SIMULTANEOUSLY SPRINGING TWO GIRDERS
Abraham Lipski, Brussels, Belgium
Application July 21, 1952, Serial No. 300,049
Claims priority, application Belgium July 25, 1951
10 Claims. (Cl. 29—452)



1. A method for simultaneously springing two identical rigid metal girders by applying a moment thereto which will deform said girders in the direction in which they will be deformed by a service load preparatory to coating each girder with concrete to form a part of a beam of precompressed concrete and a thus sprung rigid metal girder, comprising arranging the two rigid metal girders in such a manner that their longitudinal mean planes in which they will deform under the effect of the service loads coincide and that they are symmetrical relatively to a plane perpendicular to these mean planes, arranging also said rigid metal girder in such a manner that the ends of each girder are free to move towards each other under the application of a moment which will deform said girders in a direction in which they will deform under service loads, maintaining locally the two girders at a constant distance apart by interposition at a distance from their extremities, of cross-pieces projecting laterally relatively to the girders, stiffening said girders in the proximity of said cross-pieces, bracing the stiffened portions of the girders and the projecting portions of the cross-piece situated in their proximity, applying a moment to the girders to cause the adjacent ends of the girders to approach each other, in order to spring the two girders in the direction in which they will deform under the action of the service loads, maintaining the girders in their thus sprung position, by means acting on the next portions of said adjoining ends, and supporting the projecting portions of said cross-pieces at such a level that the whole is at a distance from the ground.

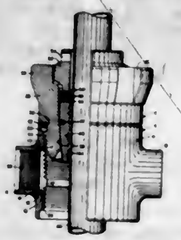
2,730,798
METHOD OF CONSTRUCTING A FIELD-ERECTED VAPOR-STORAGE VESSEL
Lyle V. Larsen, Chicago, Ill., assignor to Chicago Bridge and Iron Company, a corporation of Illinois
Application April 27, 1950, Serial No. 158,503
2 Claims. (Cl. 29—475)

1. The method of constructing a field erected vapor storage vessel having a relatively thin steel-plate shell of generally spherical shape, comprising; erecting vessel supporting columns at the construction site, a pair of said columns being positioned opposite each other on a horizontal axis of the shell, securing a head plate to each of the said two columns; forming thin, flexible, not self-supporting flat pre-cut shell plates substantially into a lune-like shape but not curved between the sides; securing the so-formed lune-like shape plates at their ends to said head plates and at the sides to other of said columns without the aid of falsework so that the plates form a generally horizontal equatorial belt portion of the vessel shell; form-



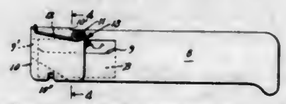
ing other similar plates into lune-like shapes; erecting and supporting said other lune-like plates on the equatorial belt plates without the aid of falsework; securing said other plates to said belt plates and head plates; and continuing in like manner to secure additional lune-like shaped plates to the previously erected plates as well as the head plates to complete the vessel shell.

2,730,799
METHOD OF FABRICATING WELL HEADS
David C. Walker, Tulsa, Okla., assignor to Walker Well Heads Inc., Tulsa, Okla., a corporation of Oklahoma
Application November 16, 1951, Serial No. 256,781
2 Claims. (Cl. 29—480)



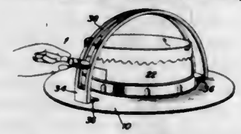
1. A method of fabricating a well head body from a large and two smaller internally threaded couplings, comprising the steps of forming two diametrically opposed radially extending apertures in the wall of the large coupling, fly cutting the apertures to provide flat machined areas on the outer surface thereof, wedging a tapered plug in the large coupling against the crests of the threads therein, welding one end of each of the smaller couplings to each of said flat machined areas of the outer surface of the large coupling immediately adjacent the apertures, and retaining the plug in the large coupling subsequent to the welding operation to preclude any substantial distortion of the threads in the large coupling.

2,730,800
SAFETY PAPER BOX CUTTER
Russell L. Bailey, Culver City, Calif.
Application June 28, 1954, Serial No. 439,584
3 Claims. (Cl. 30—2)



1. A safety cutter of the character referred to including a body having at one end two parallel sides with space therebetween designed to receive a razor blade lengthwise therein, said sides having openings therethrough near the upper edge and lengthwise thereof, to receive the heel of said blade therein, one of said openings being open at its forward end and the other of said openings having a wall at its forward end closing said opening and forming an abutment for the forward end of said heel of said blade to prevent its accidental removal, the end of the other side being flexible to permit it to be flexed laterally sufficiently for the end of said blade and heel to be moved forwardly over said end wall for removing it from said body, and a guard member pivotally connected at one corner thereof to said body to normally overlie the end of said body and the cutting edge of said blade to prevent accident, a spring yieldingly holding said guard member in its operating position, whereby as said cutter is applied to a surface to be cut said guard member is automatically moved away from said cutting edge as said cutting edge moves into and through the member being cut.

2,730,801
SLICER HAVING A TENSIONED WIRE CUTTING ELEMENT
Alfred Richard Deedman and William G. Lambrou, Canton, Ohio
Application March 23, 1954, Serial No. 418,079
3 Claims. (Cl. 30—114)



1. A slicer for pies and cakes comprising a base having a raised table support, a table having a depending skirt and a raised central portion rotatably mounted upon said table support and adapted to receive an object to be sliced, an arcuate bridge mounted on said base and overlying said table, a cutting wire, means for resiliently mounting one end of said wire upon said base, a handle attached to the other end of said wire and slidably mounted upon said bridge whereby said wire may be moved arcuately in vertical planes from horizontal to vertical positions for slicing articles carried by said table, said table skirt and table support having index means for securing said table in rotationally adjusted position upon said support.

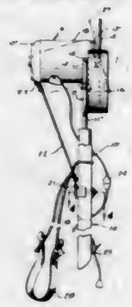
2,730,802
EJECTOR FORKS
Vito W. Ciaglia, Chicago, Ill.
Application April 3, 1953, Serial No. 346,758
2 Claims. (Cl. 30—129)



2. In an ejector fork, a recessed handle, an angular transversely slotted shank carried by said handle, a fork head at one end of said shank, a trough shaped actuating lever pivotally connected to said shank in opposed relation to said handle, a reciprocating rod actuated by said lever and extending through the slot in said shank and guided

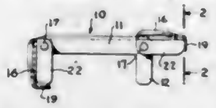
thereby and terminating immediately adjacent said fork head, linkage fulcrumed in the recessed portion of said handle and pivotally connected to said rod, said linkage slidably engaging said trough shaped lever, a stripper plate carried by said rod movable over fork head, and a return spring upon said rod engaging the slotted portion of said shank and one end of said linkage to yieldingly actuate said linkage to maintain said lever the maximum distance from said handle.

2,730,803
ADJUSTABLE HEDGE AND TREE TRIMMING POWER SAW
George F. Kimball, Oceanlake, Oreg.
Application October 1, 1954, Serial No. 459,775
3 Claims. (Cl. 30—167)



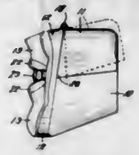
1. An adjustable hedge and tree trimming power saw comprising a handle, a U-shaped yoke including a bight and a pair of arms projecting from said bight positioned so that the bight is adjacent one end of said handle with its arms projecting longitudinally away from said handle and having the bight fixedly secured to said one end of said handle, a motor having a forward end and a rearward end positioned transversely of said yoke with the portion adjacent the forward end thereof extending between the arms of said yoke, said forward end portion of said motor being connected to the arm of said yoke for pivotal movement from its transverse position to a position at an angle with respect to said yoke, a rotatable blade spaced from the forward end of said motor and carried by the forward end of said motor, and brace means connecting the rearward end of said motor to said handle at a selected point spaced from said one end of the latter.

2,730,804
DENTAL HAND ABRASIVE SEPARATOR DEVICE
Karl W. Saupe, New York, N. Y., assignor to Mizzy, Inc., Clifton Forge, Va., a corporation of New York
Application January 8, 1954, Serial No. 402,951
17 Claims. (Cl. 32—58)



1. A dental hand abrasive separator device adapted to hold an abrasive strip having a long edge and end edges comprising a frame, a pair of spaced finger members pivotally mounted on the frame at the ends thereof and each having a groove extending inwardly, the pivot being crosswise of the frame, the finger members pivoting outwardly from a right angle operative position to release or insert an abrasive strip, and retaining means carried by each finger member and obstructing the groove therein to engage a shoulder on and retain the abrasive strip within the device when the finger member is in operative position.

2,730,805
DENTURE DEMONSTRATORS
Robert F. Smolka, Longmont, Colo.
Application May 3, 1954, Serial No. 427,209
8 Claims. (Cl. 32—71)



1. A denture displaying device comprising: a base box; a bottom plate in said box; a top plate in said box; a wall surrounding and joining the sides and rears of said top and bottom plates; an annular face ring secured to the front of said box and arching thereabove; a flexible face portion secured to and closing the front of said face ring, said face portion being provided with a mouth and simulating the mouth area of a human face; said top plate lying substantially in the occlusal plane of said mouth; a frontal set of lower teeth mounted in the forward edge of said top plate and being visible through said mouth; mounting means supported from said face ring above said top plate; and means for supporting a denture from said mounting means in articulated relation to said lower teeth and visible through said mouth.

2,730,806
LEAD SIGHT FOR GUNS
Edward E. Williams and Frank E. Fink, Mound, Minn.; said Williams assignor to said Fink
Application July 11, 1952, Serial No. 298,228
1 Claim. (Cl. 33—51)

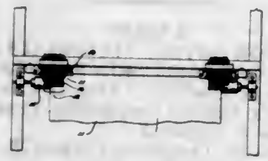


A lead sight for guns, said lead sight being made from a single relatively narrow strip of flexible resilient sheet material and comprising a pair of laterally-spaced sighting loops, a transversely extending bar element connecting said loops, said bar element being adapted to rest upon the top portion of a gun barrel adjacent the front end thereof, a pair of gripping fingers adapted to embrace opposite side portions of said gun barrel, and a pair of sighting bars each comprising a section of said strip folded double upon itself and extending radially inwardly from the laterally outer peripheral portion of a different one of said sighting loops to the central portion thereof, said connecting arm having a central gun sight receiving opening therein, said gun sight when received within said opening preventing circumferential movement of the lead sight about said barrel, the connecting bar and the sighting bars having flat surfaces disposed substantially in a common plane that intersects the axes of the sighting loops.

2,730,807
MEASURING DEVICE
Jack B. Collins, Esleworth, England, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application August 9, 1951, Serial No. 241,039
9 Claims. (Cl. 33—125)

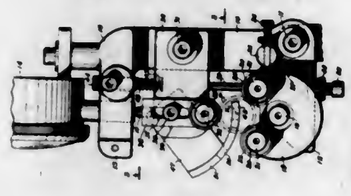
1. Apparatus for continuously measuring the width of a sheet of material comprising a conducting surface electrically connected to a measuring circuit and adapted to support said material, a bank of contacts disposed adjacent said surface and adapted to have electrical contact therewith except when said material is interposed between

said surface and said contacts, said measuring circuit having a source of substantially constant voltage and a plurality of resistances of predetermined value adapted to be connected into and out of said circuit, means connect-



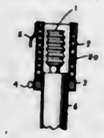
ing said resistances and said contacts respectively whereby said resistances are connected into said circuit when said contacts contact said material and are taken out of said circuit when said contacts bear against said surface.

2,730,808
TAPER GAGE HAVING MEANS FOR GAGING SMALLER DIAMETERS
Stanley G. Johnson, Bloomfield, Conn., assignor, by mesne assignments, to The Johnson Gage Development Company, a corporation of Connecticut
Application October 4, 1950, Serial No. 188,349
26 Claims. (Cl. 33—174)



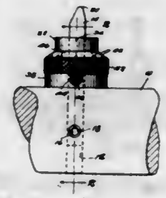
1. A gage for an externally tapered test part having a circular cross section comprising a frame, taper gaging means carried by the frame, the taper gaging means having a smaller diameter end corresponding with the smaller dimension of the test part and a larger diameter end corresponding with the larger dimension of the test part, and the taper gaging means having a laterally extending slot into the gaging means, and limit means movably mounted upon the gage for movement through the slot into the taper gaging means including at least one limit land facing towards the smaller end of the gaging means.

2,730,809
GAGE CAP
Victor Selman, Bayonne, N. J.
Application September 10, 1954, Serial No. 455,336
2 Claims. (Cl. 33—178)



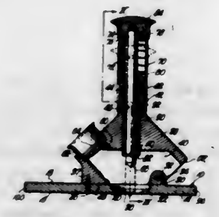
1. In combination with a gage having a holder, a collar clamped about the holder, a hook projecting from one side of the collar, a cap of flexible material such as rubber attached to the upper side of the collar and having a hollow wall, a compression spring housed in the hollow wall of the cap, and an eye attached to the upper portion of the cap and arranged to engage said hook when the cap is depressed against the action of the spring to uncover the gage.

2,730,810
TOOL BIT MICROMETER
Gustaf W. Broden, Detroit, Mich.
Application April 11, 1952, Serial No. 281,860
2 Claims. (Cl. 33—185)



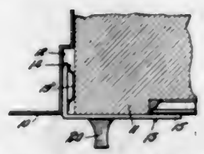
1. For use with a cylindrical boring bar having a convex outer surface and a tool receiving opening extending transversely thereof, a tool bit adjustably carried by said boring bar in the opening, a set screw carried by said boring bar and impinging said tool bit: means for accurately adjusting said tool bit when said set screw is initially loosened comprising an externally threaded collar having an axial tool bit receiving opening extending therethrough, another set screw carried by said collar transversely thereof engaging said tool bit for clamping the tool bit in the collar, and an internally screw-threaded sleeve engaged with the threads on the collar, said sleeve engaging the surface of said boring bar and moving the collar and tool bit radially with relation to the boring bar upon turning of the sleeve relative to the collar, said set screw in said boring bar being again engaged with said tool bit, and said set screw in said collar being released from said tool bit to permit removal of said tool bit adjusting means from said boring bar and the accurately set tool bit.

2,730,811
CENTER PUNCHING ASSEMBLY
Noel J. Gouldsmith, Jr., Independence, Mo.
Application April 5, 1954, Serial No. 421,136
2 Claims. (Cl. 33—189)



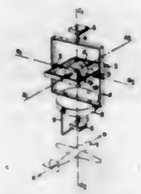
1. A center punching assembly comprising a base plate having a work-engaging face, an opposed, flat face, and a viewing and punch-clearing perforation therethrough; a structure having a pair of contiguous surfaces disposed in obtusely angled planes, a viewing opening therethrough having its axis substantially perpendicular to the plane of one of said surfaces, and a punch-receiving bore therein having its axis perpendicular to the plane of the other of said surfaces; means swingably mounting the structure on the plate for movement between an aligning position and a punching position respectively disposing said one surface and said other surface in parallelism with said flat face of the base and said opening and said bore in axial alignment with said perforation; a magnifying lens mounted in said opening; a punch element; and means reciprocably mounting the element in the bore for movement to and from an operative position extending through said perforation when the structure is in said punching position.

2,730,812
HINGE ALIGNING GAUGE
Thomas J. Dossie, New York, and Max J. Parnes, Brooklyn, N. Y.
Application April 3, 1953, Serial No. 346,760
1 Claim. (Cl. 33—197)



A gauge for alining hinges on a door to be hung in a sheet metal doorframe having pre-formed hinge gains, said gauge comprising a narrow body defined by elongated walls arranged at right angles to each other and having parallel and alined upper and lower surfaces, one wall being adapted to be positioned in the gain of the doorframe with an edge of said wall engaging an edge of said gain, said wall having a spring extending at the inner surface thereof and adapted to bear on the edge of the door facing said gain, the other wall being longer than the first wall and adapted to bear on the surface of the door, and said longer wall having an outwardly projecting fingerpiece portion.

2,730,813
GYROSCOPE
Allen T. Sinks, deceased, late of Beach Bluff, Mass., by Anna C. Sinks, administratrix, Beach Bluff, Mass., assignor to General Electric Company, a corporation of New York
Application May 19, 1945, Serial No. 594,628
18 Claims. (Cl. 33—204)



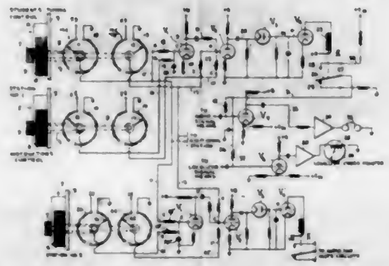
7. A directional gyro azimuth indicator for aircraft comprising a support, a gyroscope, a gimbal member, means for mounting said gyroscope on said gimbal member so that the spin axis of said gyroscope is approximately horizontal and so that the gyroscope is free to pivot about a first axis at right angles to said spin axis, means for mounting said gimbal member on said support so that it is free to rotate about a second axis at right angles to said first axis, said second axis being normally vertical, an azimuth indicator actuated by rotative movements of said gimbal member relative to said support about said second axis, and stop means for preventing said gimbal member from rotating about said first axis to a gimbal lock position in which said second axis would become aligned with said gyroscope spin axis, said stop means being constructed and arranged to permit said gimbal member to move freely relative to said gyroscope to within about two degrees of said gimbal lock position, said stop means acting when engaged to cause rotation of said gimbal and said indicator during maneuvers of said aircraft which would cause movement of said gimbal member to or through said gimbal lock position in the absence of said stop means whereby the correct indicating sense of said azimuth indicator is maintained.

16. Means for preventing gimbal lock in a universally maneuverable gyro with a gimbal ring and rotor case comprising stops on the ring and on the case respectively that cooperate to confine the relative movement between the case and ring to a range of between ±75 degrees and ±89 degrees from the normal positions thereof.

2,730,814
PROCESS FOR DRYING MATERIALS OF HIGH MOISTURE DIFFUSION RESISTANCE
Marcello Thomas Giachino, Union City, N. J., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a corporation of Maryland
No Drawing. Application March 25, 1953, Serial No. 344,680
7 Claims. (Cl. 34—9)

1. A process for drying ammonium nitrate which comprises coating ammonium nitrate with not more than about 5% of a water-insoluble, porous, inorganic material having a high surface area and drying the coated moisture-containing material at a temperature between about 100° and 180° F. in a stream of air to obtain a coated ammonium nitrate product of reduced moisure content.

2,730,815
SIMULATED RADIO RANGE TUNING CONTROL
Joseph E. Gallo, Livingston, N. J., assignor to Curtiss-Wright Corporation, a corporation of Delaware
Application July 17, 1951, Serial No. 237,212
8 Claims. (Cl. 35—10.2)



1. In a training system for radio navigation having means for simulating radio range signal transmitting and receiving apparatus, means for simulating radio station tuning by a navigator comprising a pair of variable electrical means representing the transmitter and adjustable in units and fractions thereof respectively of the transmitter frequency by an instructor for representing a given range of station frequencies, a second pair of variable electrical means representing the receiver controls and independently adjustable in units and fractions thereof of said frequency by a student for representing the same range of station frequencies whereby corresponding settings of the respective variable means represents a receiver tuned to a given station frequency, electrical resolving means connected to said radio range receiving apparatus and responsive jointly to all four of said variable electrical means for affecting the operation of said radio range receiving apparatus, according to a simulated tuned or off-tuned condition and means related to said resolving means for limiting the simulation of a tuned condition to but one combination of settings of the student's pair of variable means for a given station frequency.

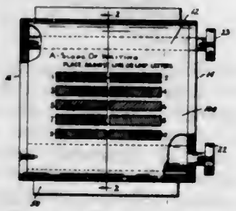
2,730,816
ROSARY DEVICE
Norman J. Garrett, Akron, Ohio
Application October 23, 1952, Serial No. 316,383
7 Claims. (Cl. 35—23)

1. A rosary device comprising a wheel having ten equally spaced peripheral recesses therein and one other peripheral recess therein spaced different circumferential distances in different directions from said ten recesses, a case in which said wheel is positioned, a bead positioned in each said recess, said case having an open portion therein, means journaling said wheel in said case with a portion of the periphery of said wheel being exposed at



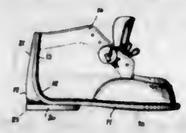
said open portion, and resilient means securing said beads on said wheel in the recesses, said case retaining said beads in said recesses except for any bead positioned at said open portion, a bead positioned at said open portion being moved at least partially out of said recess by said resilient means.

2,730,817
APPARATUS FOR COMPARING AND ANALYZING HANDWRITING
Meyer Stuart Blattner, Baltimore, Md.
Application August 9, 1954, Serial No. 448,698
3 Claims. (Cl. 35—36)



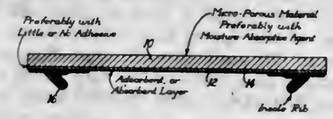
1. An apparatus of the character described comprising a transparent film having groups of specimen markings thereon for comparison purposes, a pair of spaced spools carrying the film, a frame in which the ends of the spools are rotatably mounted, and means for rotating the spools so as to move the film from one to the other to present different groups of markings to view, said frame being provided with front and rear window portions.

2,730,818
FOOTWEAR
Georges Prosper Thomas Bidegain, Pau, France
Application January 8, 1954, Serial No. 403,006
Claims priority, application France January 13, 1953
2 Claims. (Cl. 36—8.5)



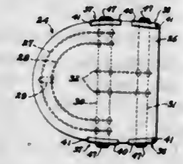
1. In a shoe having an extension of the sole turned from a lower convex curved part upwards at the back to form the rear portion of the shoe, an elbow shaped heel comprising a horizontal portion extending under the rear of the said sole and a substantially vertical portion having the same contour as the rising portion of said sole extension, said heel having an increased thickness adjacent the juncture of said horizontal and vertical portions to provide surfaces contoured to contact and register with the lower convex curved part of the sole extension and external rear surface, forming a substantially sharp right angle with the lower surface of the horizontal heel portion to resist rearward overturn of the shoe.

2,730,819
COMPOSITE INSOLES, INCLUDING MICRO-POROUS POLYMERIC MATERIAL
Orville N. Foust, Melrose, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application November 17, 1949, Serial No. 127,983
3 Claims. (Cl. 36—22)



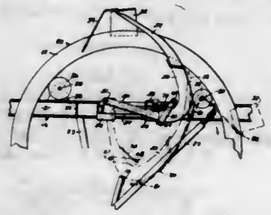
1. A shoe part shaped to conform to the edge contour of the bottom of a last, said shoe part comprising an integral foot-contacting insole layer of microporous, thermoplastic water-insoluble synthetic resinous polymeric plastic with a thickness of at least four iron, and said plastic containing a wetting agent effective substantially to increase its moisture absorptive and dissipitative capacity.

2,730,820
HEELS
Edward J. Carlin, Brooklyn, N. Y.
Application August 26, 1955, Serial No. 530,844
10 Claims. (Cl. 36—36)



1. A rubber heel for men's shoes comprising a body of rubber having a metal frame embedded therein including a pair of inner and outer spaced curved plates and a pair of straight plates disposed perpendicularly to the plane of the bodies of said curved plates, the ends of said straight plates projecting outwardly on both sides of the body, and devices on the projecting ends of the straight plates for clamping the heel onto a shoe.

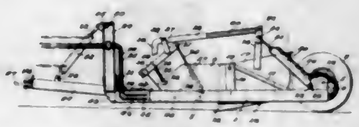
2,730,821
BUCKET CLEANER FOR EXCAVATING MACHINE
Frank J. Fetzner, Willowick, Ohio, assignor to The Cleveland Trencher Company, Cleveland, Ohio, a corporation of Ohio
Application December 1, 1951, Serial No. 259,406
2 Claims. (Cl. 37—97)



1. In an excavating machine having a support and a plurality of excavating buckets movable at a predetermined path relative to said support, a bucket cleaner mounted on said support and including a pivoted arm adapted to extend into the buckets as they move in said path, said arm being movable under the influence of gravity to an idle position out of the buckets, a latch member pivotally mounted on said arm, a stop for said member secured to said arm, resilient means interconnected between said arm and said latch member to retain

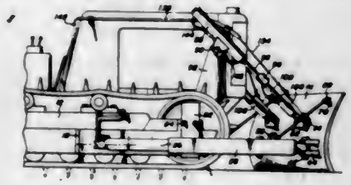
said member against said stop, a second latch member pivotally mounted on said support, a compression spring mounted on said support and connected to said second latch member to maintain said latch members in engagement with each other and through the latch members to resiliently retain the cleaner in its active position in the path of said bucket, said latches being positioned relative to each other to disengage consequent upon the rocking of the cleaner a predetermined distance against the action of said spring and thereby permit the cleaner to fall to an idle position under the influence of gravity, and coacting cam surfaces on said latch members to move said first-named latch member away from its stop and permit restoration of the latching engagement of said members by said resilient means consequent upon movement of the arm to its active position.

2,730,822
POWER DRAWN SCRAPER
Laurel B. Lindbeck, Las Cruces, N. Mex.
Application November 2, 1951, Serial No. 254,465
4 Claims. (Cl. 37—129)



1. A power drawn scraper comprising a rigid frame including spaced side members, a wheel attached to the rear end of each side member for supporting the frame, the front end of the frame being supported by the vehicle by which the scraper is drawn, a scraper bowl pivotally supported on said frame for swinging movement, a double acting fluid actuated cylinder and piston disposed at each side of the bowl and connected at one of their ends to said frame members and at their other ends to the bowl for tilting said bowl selectively for loading, for carrying and for dumping, spaced guiding members carried by each side member and disposed in front of said bowl, an apron slidable on said guiding members and movable into engagement with the loading edge portion of the bowl for retaining the earth therein during transport, brackets rigidly mounted on said frame at each side thereof, an arm pivotally attached to each bracket and pivotally connected to said apron for raising and lowering the same, a compression spring for each arm disposed between the arm and the frame for raising the apron when the bowl is tilted to loading position and to dumping position and a control rod pivotally connected to said apron carrying arms and to said bowl for simultaneously forcing the apron downwardly as the bowl is shifted from loading to carrying position for closing the bowl.

2,730,823
BULLDOZER BLADE
John F. Cassidy, Kings Park, N. Y.
Application July 30, 1951, Serial No. 239,225
2 Claims. (Cl. 37—144)



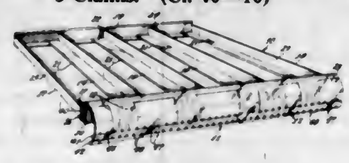
1. A bulldozer blade construction for tractors comprising a pair of support arms mounted at their rear ends on the frame of a tractor, a bulldozer blade carried on vertical pivots by the front ends of said arms, fluid pressure means contained in said arms for selectively longitudinally extending said arms to effect angling of said blade, journalling means on said frame journalling the rear ends of said arms for vertical pivoting movement, fluid pressure elevating means pivotally mounted on said tractor frame and operatively connecting with said blade intermediate of the connection thereto of said arms for vertical pivoting movement of the same, adjustable extensible means interposed between said elevating means and said blade for longitudinally varying the distance between said elevating means and said blade, said extension means comprising pairs of longitudinally extensible telescoping members, said members including aligning apertures, one of said members being pivotally attached to said blade, and latch means pivotally mounted on one of said members including a latch member engageable in said apertures for retaining said members in a fixed adjusted position and for permitting angling of said blade about said vertical pivots.

2,730,824
SERVICE STRIPE HOLDER AND CLIP
Meyer P. Cohen, Columbia, S. C.
Application July 23, 1952, Serial No. 300,434
3 Claims. (Cl. 40—1.5)



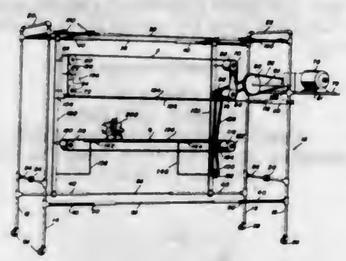
1. A military ribbon mounting comprising an elongated rigid bar undercut upon its rear face to provide a longitudinally extending channel adapted to slidably receive a military ribbon inserted endwise into the channel, said bar being formed of transparent material whereby to render said ribbon visible through the frontal face thereof, the side walls of said channel being respectively provided with opposed inwardly turned co-planar flanges which form with the base wall of the channel opposed grooves for receiving the opposite side edges of said ribbon insert, and means carried by said bar for detachably securing the same to a garment, said securing means including a pair of plate members respectively at opposite ends of said bar each having a pair of opposite end wing portions joined by an intermediate constricted portion, one of said wings being adapted to be positioned behind said ribbon insert with opposite side coplanar marginal portions thereof removably seated respectively within the grooves formed on oposite sides of the channel, said constricted portion extending from said one wing outwardly in the plane of said flanges, and the other of said wings extending forwardly from said constricted portion across the end of said bar in abutting relation thereto, and a pronged element for each plate member projecting rearwardly of said bar for engagement with a coacting removable fastener.

2,730,825
COMBINATION RACK AND PRICE TAGGING DEVICE
David L. Wilds, San Fernando, Calif.
Application February 18, 1952, Serial No. 272,117
3 Claims. (Cl. 40—10)



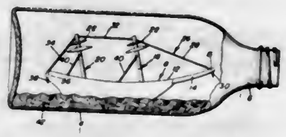
1. A resilient price tag holder comprising a transparent member having two substantially parallel edges and having an arcuate cross section, a substantially vertical supporting flange depending integrally from the upper edge thereof in the direction of a chord of said arc, an elongated ridge on said flange extending toward the concave surface of said transparent member for interlocking with a mating element on a support member, a first elongated abutment member mounted on the concave surface of said transparent member near the upper edge thereof and parallel to said upper edge, said first abutment member being spaced from the junction of said flange and said upper edge, and at least one additional elongated abutment member mounted on the concave surface of said member spaced from said first abutment member and parallel thereto for receiving a tag and holding said tag in flexed engagement between said abutment members in such a manner that said tag has an arcuate cross section.

2,730,826
ELECTRICAL MOVING CHART
Ernest Ray Hayhurst, Richwood, Va.
Application July 2, 1951, Serial No. 234,815
4 Claims. (Cl. 40—32)



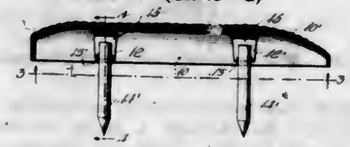
3. A moving display chart comprising a portable frame, said frame including end members, longitudinal members connecting said end members, spaced brackets mounted on said longitudinal members adjacent said end member, sets of rollers on said brackets, conveyor belts entrained over said sets of rollers between said brackets, drive means on said frame for said conveyor belts driving at least one roller from each set, said longitudinal members being horizontally adjustable for moving said brackets toward and away from each other to vary the length of the conveyor belt runs, support means for one of the runs of each conveyor belt, said support means being horizontally adjustable with said longitudinal members, said sets of rollers being arranged in vertically spaced relation to one another.

2,730,827
TOY KIT
Lois M. Patterson, Pacific Grove, Calif.
Application August 24, 1953, Serial No. 375,917
3 Claims. (Cl. 41—10)



1. In combination, a bottle having a restricted neck, an insertable and removable boat, said boat embodying a hull, rigid fore and aft masts having their lower ends detachably and hingedly joined to the deck of the hull whereby they may be folded against the deck in a compact and convenient manner, and means for swinging the masts to and retaining the same in their customary perpendicular positions relative to said deck, said means embodying an elastic band having its intermediate portion connected to the upper ends of the respective masts and its end portions connected to the respective forward and rear end portions of the hull.

2,730,828
ARTIFICIAL BAIT
Louis S. Caretti, Baltimore, Md.
Application October 17, 1952, Serial No. 315,371
2 Claims. (Cl. 43—2)



2. An artificial bait for wild fowl comprising a semicircular shell, the convexed outside surface of which is provided with a color and design to simulate an ear of corn, a supporting means for rigidly supporting the shell slightly above the ground with its convexed surface extending upwardly and in a horizontal position, the supporting means consisting of integrally formed recessed arbors extending downwardly from the central and inner surface of the shell to a point not greater than the depth of the shell each of said arbors being adapted to receive one end of a pin, of such length as to support the shell horizontally above the ground at a distance substantially that of twice the diameter of the shell.

2,730,829
TRAWLING GEAR
Charles Dennistoun Burney, London, England, assignor to Fresh Frozen Foods Ltd., London, England
Application September 8, 1948, Serial No. 48,251
Claims priority, application Great Britain September 18, 1947
10 Claims. (Cl. 43—8)

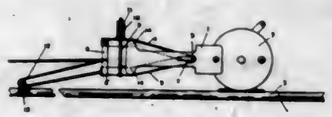


1. Trawling gear comprising a pair of side by side trawl nets connected together at their adjacent leading edges, head ropes along the upper edges of the net mouths, a single towing main cable, attached to the ends of the head ropes at the connection between the two nets, a pair of main branch towing cables each having a connection at one end thereof to the outer end of its respective head rope and a point on the main towing cable between the nets and a trawler, weighted secondary branch cables connected between the main branch towing cables and the mouths of the nets, whereby the net mouths are spread vertically at both sides of each net, and forwardly divergently running otters connected by cables to said branch towing cables, whereby both of said net mouths are spread laterally.

2,730,830
FISHING DEVICE
William L. Smith, Philadelphia, Pa.
Application March 19, 1954, Serial No. 417,316
3 Claims. (Cl. 43—25)

1. In combination with a conventional fishing rod and reel, a support member adapted for mounting on a fishing rod or reel, and having an elongated slot therethrough adjacent one end thereof, and oppositely disposed cam members at the other end, a pair of oppositely facing channel members having bifurcated ends piv-

oted together, said channel members being pivotally and slidably disposed on said support member by means of a pivot slidably retained in said slot, the channel portion of said channel members slidably engaging the cam members on the support member, a latch member pivotally disposed in one channel member, the other channel member having a slot adapted to receive the free end of the



latch, each latch member having an opening, a threaded bolt received therethrough, a spring mounted on said bolt resiliently biasing said channel members toward engagement with said cam members, and a nut on the bolt adapted to vary the degree of pressure of said spring required to hold the channel members in operative engagement with the cams on the housing.

2,730,831
FISHING DEVICE
Sam W. Williams, Normal, Ill.
Application July 2, 1953, Serial No. 365,664
1 Claim. (Cl. 43—36)



A fishing device comprising an open-ended sleeve, a projectible and retractible unit slidably mounted in said sleeve, said unit embodying expansible and contractible arms joined with each other at corresponding ends by way of a coil spring, said arms having detents adapted to telescope into one end of said sleeve, whereby said arms are contracted, pressed closely together and are thus set, fishhooks secured to the free ends of said arms, a fishing line, and an operating connection between said line, sleeve, and unit, said connection being pull-actuated when the fishhooks are taken by the fish, said sleeve provided interiorly and between its respective ends with a partition dividing said sleeve into outward and inward selectively usable chambers, said detents being confined in said outward chamber when the unit is set for releasing and being moved to and confined in said inward chamber when said unit is in its "safety" non-trippable position, said detents comprising V-shaped kinks in opposed relation, the vertices of said kinks facing in directions away from each other, said partition having a concentric guide opening of restricted size and the outward and inward surfaces of said partition having conical recesses defining cam faces which serve to press the detents and arms toward each other as the arms are forcibly slid through said guide opening to allow the detents to be retentively lodged in either chamber.

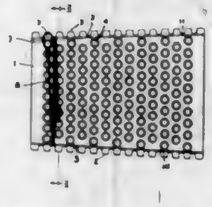
2,730,832
ADJUSTABLE OUTRIGGER FISHING SNAP
Alfred L. Mathers, Coral Gables, Fla.
Application December 4, 1953, Serial No. 396,099
3 Claims. (Cl. 43—43.11)

2. An outrigger fishing snap device of the character described comprising: a tube for interpositioning in an outrigger halyard, a hook on said tube, a wheel journaled in the tube and protruding from diametrically opposite sides thereof, a peripheral pin on said wheel, said pin and said hook being adapted to windingly receive an intermediate portion of a line for releasably securing said line to the tube, said wheel having a peripheral notch therein at a point spaced from the pin, a detent slidable in the tube and engageable in the notch, said detent and said notch comprising cooperating cam surfaces, a coil spring in the tube engaging the detent in the notch for releasably



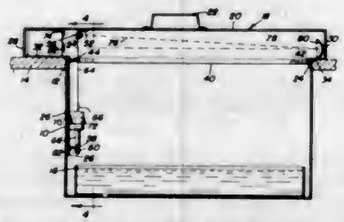
securing the wheel in operative position against rotation, and a screw threadedly mounted in one end portion of the tube and engaged with the spring for regulating the tension thereof.

2,730,833
LEADER HOLDER
Carl W. Newell, Glendale, Calif.
Application March 19, 1953, Serial No. 343,380
3 Claims. (Cl. 43—57.5)



1. A snell holder comprising a trapezoidal plate of plastic material having a plurality of projections and indentations alternating on opposing non-parallel edges thereof and a plurality of countersunk holes therethrough whereby the loop of the snell may be secured over one of said projections, the snell may be wrapped around said holder in said indentations and a hook on said snell may be engaged in one of said holes.

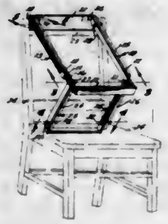
2,730,834
ANIMAL TRAP
Archie B. Norris, Cary, N. C.
Application July 10, 1953, Serial No. 367,303
2 Claims. (Cl. 43—69)



1. An electrically operated animal trap comprising a trap chamber, a demountable trap unit forming a closure for the top of said chamber, depending flanges on said unit for locating said unit with respect to said chamber, said trap unit including a cover portion extending over said chamber and defining a covered passage, a trap door

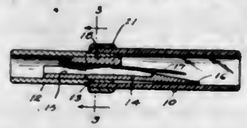
in the bottom of said passage, said trap-door providing communication between said passage and said chamber, said trap-door being hingedly mounted adjacent one edge thereof, an operating pin fixed on said door in spaced relation from said edge, a first sheave mounted in said unit above said pin, a second sheave mounted on one of said depending flanges below said pin, a flexible element secured to said pin and entrained over said sheaves, a resilient section in said flexible element, a weight attached to said flexible element for biasing said door to closed position, an electromagnetic device operable when energized to lift said weight to open said door, a light beam projector arranged to project a light beam across said passage, a reflector receiving said light beam, a light-sensitive control device, said reflector directing said light beam to said control device, and means actuated by said control device for energizing said electromagnetic device when said beam is interrupted by an animal in said passage.

2,730,835
COLLAPSIBLE DRAWING BOARD EASEL
Archie G. Weir, Fontana, Calif.
Application February 4, 1954, Serial No. 408,182
4 Claims. (Cl. 45—131)



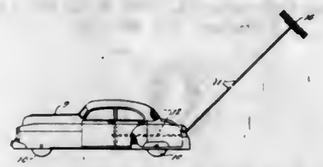
4. A collapsible drawing board easel comprising a body member and a support member, said body member including a pair of arms, a tongue arranged on the outer surface of each of said arms, a crosspiece arranged at an angle with respect to the lower ends of said arms and secured thereto, a portion of said crosspiece extending above the upper surface of said arms to provide a drawing board support, a pair of bars provided with grooves for slidably engaging said tongues, there being slots in said bars, securing elements extending from said arms through said slots, said support member including a pair of legs pivotally connected to said arms, tongues extending inwardly from said legs, a pair of strip members positioned within said legs and provided with slots for slidably receiving the tongues of said legs, there being slots in said strip members, and securing elements extending from said legs through the slots in said strip members.

2,730,836
GOOSE CALLER
Clarence E. Faulk and Paul Dudley Faulk, Lake Charles, La.
Application July 12, 1954, Serial No. 442,878
1 Claim. (Cl. 46—180)



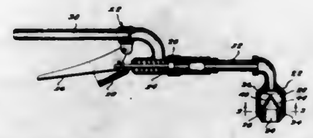
A goose caller comprising a tubular mouthpiece, a tubular fibrous sound box telescoping into the forward end of said mouthpiece, a semi-cylindrical tongue removably disposed partly in said mouthpiece and partly in said sound box, the inner side of said tongue being longitudinally channeled and tapering toward the rear end, said channel terminating forwardly of the rear end of said tongue, said tongue having the inner face on one side of said channel formed of a pair of intersecting angularly related planes with the inner face on the opposite side of said channel formed in a continuous curve, a reed overlying the channel of said tongue, and a wedge securing said reed and tongue in said sound box.

2,730,837
CONTROL MECHANISM FOR TOY
Charles H. Vaughan, Pontiac, Mich.
Application November 30, 1950, Serial No. 198,333
2 Claims. (Cl. 46—210)



1. In a toy adapted to travel along the ground, manually operated means for propelling the toy and bodily swinging one end thereof comprising a unitary shaft having a lower horizontal portion pivoted on said toy and extending longitudinally thereof, the pivot axis of said lower portion being fixed with respect to the toy and coaxial with the longitudinal axis of said lower portion, said shaft having a resilient inclined portion extending upwardly from said horizontal portion adjacent the other end of the toy, and means adjacent the upper end of the inclined portion adapted to be gripped by an operator.

2,730,838
APPLICATOR FOR APPLYING CHEMICALS TO TOBACCO PLANTS
Robert W. Wilson, Raleigh, N. C., assignor, by mesne assignments, to Patent and Development, Inc., Raleigh, N. C., a corporation of North Carolina
Application November 10, 1950, Serial No. 195,016
7 Claims. (Cl. 47—1)



6. An applicator for applying a sucker-control chemical to the stalk of a topped tobacco plant comprising a shielded applicator tip, said shield being positioned to confine the said sucker-control chemical to the said stalk and said tip formed with a recess having an inner wall and adapted to receive and position the end of said stalk therein, and having outlet ports positioned at spaced intervals around the inner wall so as to direct said sucker-control chemical onto the said stalk, conduit means connecting said ports with a supply of sucker-control chemical and means interposed in said conduit means controlling the flow of chemical therethrough to said ports.

2,730,839
METHOD OF POLLINATION
Stephen E. Chaffee, Sunnyside, Wash.
No Drawing. Application September 14, 1954, Serial No. 456,077
9 Claims. (Cl. 47—58)

1. A method of facilitating the pollination of alfalfa plants comprising the steps of periodically applying a sulfur dust to the plants in amounts ranging approxi-

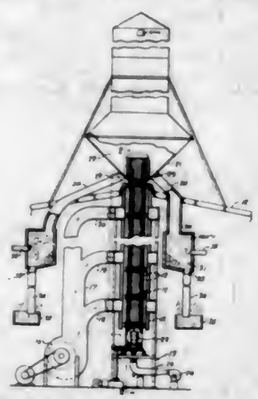
mately from thirty to fifty pounds of sulfur per acre as successive blooms of the plants ripen, and applying a quick irrigation to the plants in the period preceding each application of sulfur, the sulfur being applied to burn the stamen enclosing pod for thus causing it to open and release the pollen carrying stamen, the irrigation being applied in amounts sufficient to fill the plants with sap and vigor at the time of the sulfur dusting.

2,730,840
METHOD OF TREATING MOUNTED GLASS DISC TO RESIST BREAKAGE
Frank S. Craig, Chili, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.
Application September 28, 1949, Serial No. 118,308
3 Claims. (Cl. 49—79)



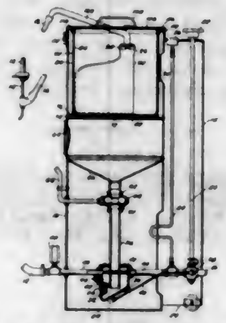
3. The method of manufacture of a mounted glass disc to render it heat resistant comprising mounting the disc in a circumferential metal channel, heating the mounted disc and its associated metal channel to approximately 1200° F. for substantially two and one-half minutes, and cooling the mounted disc in still air.

2,730,841
PRODUCTION OF SILICONE-COATED GLASS BEADS
Charles E. Seanight, Jackson, Miss.
Application August 19, 1954, Serial No. 451,012
5 Claims. (Cl. 49—79)



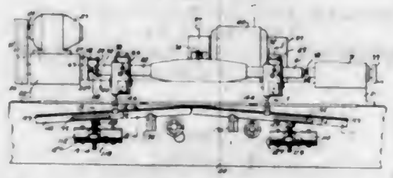
1. In a method for producing glass beads which comprises introducing irregular shapes of powdered glass into a stream of gases containing oxygen and a combustible compound, and moving at a velocity sufficient that the glass is carried by the gases into a combustion zone where the combustible compound is burned, the glass is fused and assumes a generally spherical shape, and products of combustion carry the spheroidized glass into a settling zone of greater diameter than the combustion zone, discharging products of combustion from the settling zone, and removing glass beads from the bottom of the settling zone, the improvement comprising spraying from about 0.5 to about 10 parts by weight, based upon siloxane solids, of an aqueous emulsion containing from about 0.3 to about 1 per cent by weight of siloxane solids, which dispersion is curable in no more than two hours at a temperature of about 100° F., into an enclosed zone while introducing into the enclosed zone, directly from the settling zone, 10,000 parts by weight of glass beads at a temperature from about 425° F. to about 475° F., and removing from the enclosed zone beads coated with a sensibly dry silicone.

2,730,842
CARBON BLASTER MECHANISM
Roman J. Pyciak, Detroit, Mich., assignor to Kent-Moore Organization, Inc., Detroit, Mich., a corporation of Michigan
Application May 6, 1953, Serial No. 353,372
6 Claims. (Cl. 51—8)



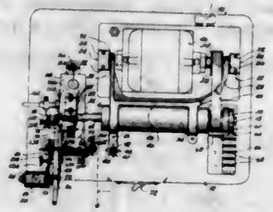
1. Apparatus for removing carbon from the combustion chamber of an internal combustion engine comprising, in combination, a casing having a receptacle adapted to hold blast granules, a blast nozzle assembly receivable through an opening in the combustion chamber of an internal combustion engine, mechanism associated with the receptacle and operative to entrain in an air stream blast granules disposed in the receptacle and deliver them to said blast nozzle, said casing provided with a filter compartment, an exhaust line communicating with the filter compartment and with said blast nozzle assembly, a filter bag within the compartment with the mouth of the bag coupled with the exhaust line to receive the discharge therefrom, a second casing adjacent to the first casing and having a discharge opening at the bottom, said second casing communicating through the first casing with the filter compartment whereby air exhausted thereinto passes into and down through the second casing and out to the atmosphere through the opening at the bottom of the second casing.

2,730,843
CAMBERING MECHANISM
Hans Ernst, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Co., Cincinnati, Ohio, a corporation of Ohio
Application June 25, 1954, Serial No. 439,300
12 Claims. (Cl. 51—94)



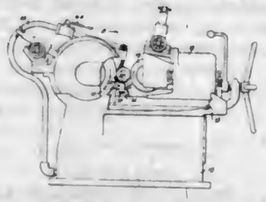
1. In a machine for grinding a cambered surface on rolls and the like having a grinding wheel and a work table relatively movable parallel to the axis of the wheel, the combination of means to support a cambered roll on the table with the tangent at the high point of camber on the roll parallel to the axis of the wheel, and with the high point of camber in the central plane through the wheel, means to effect a relative feeding movement between the roll and wheel to present other points on the cambered surface to the wheel face, said supporting means including means to impart simultaneous opposite and unequal movements to opposite ends of the roll in a radial plane of the wheel containing the wheel axis to align the tangent at each of said other points parallel to the axis of the wheel in timed relation to the feeding movement.

2,730,844
MACHINES FOR GRINDING HYPODERMIC NEEDLES
Edward S. Lea, Morrisville, Pa.
Application July 8, 1953, Serial No. 366,787
8 Claims. (Cl. 51—98)



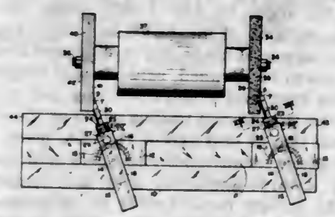
1. A machine for grinding hypodermic needles comprising, in combination, a stationary base, a grinding wheel journaled on said base, means for rotating said wheel, a vertically movable support mounted on said base in approximate tangential relation with the periphery of said wheel, spring means urging said support radially away from said wheel, a needle holder carried by said support, a stop on said base for abutting the tip of a hypodermic needle inserted in said holder, a gripping member slidably mounted in said holder, an angular shoulder in said holder, an inclined surface on said gripping member arranged to face toward said shoulder, spring means urging said inclined surface into contact with one side of a needle resting against said shoulder, and manually operable means for releasing said gripping member from contact with said needle.

2,730,845
CENTERLESS GRINDING MACHINE AND METHOD
Hans Ernst, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Co., Cincinnati, Ohio, a corporation of Ohio
Application May 25, 1953, Serial No. 357,063
7 Claims. (Cl. 51—103)



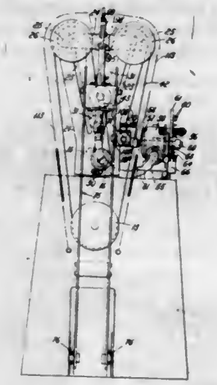
3. A centerless grinder embodying a rotatable grinding wheel and an opposed rotatable regulating wheel, said wheels forming a grinding throat therebetween, a work rest having a work supporting surface projecting into the throat between the grinding and regulating wheels and extending transversely of the wheels for peripherally rotatably supporting the surface of a work piece during grinding, said wheels being disposed and rotatable to engage and rotate the work with its supported surface moving from the grinding wheel toward and across the work rest, and coolant supply means having a nozzle discharging coolant adjacent said work supporting surface of the work rest at a point between the grinding wheel and the rest to supply a coolant spray to the work surface in the area between the grinding wheel and the rest as the work rotates toward the supporting surface of the work rest to clean and chill said area of the work surface and maintain a lubricating film on said surfaces of the work and rest during a grinding operation.

2,730,846
CUTTING TOOL GRINDING FIXTURE
Robert K. Heineman, Mount Lebanon, Pa.
Application March 20, 1952, Serial No. 277,635
3 Claims. (Cl. 51—122)



1. A device for grinding a cutting tool, comprising a grinding wheel, a cutting tool grinding fixture adapted to be mounted on a fixture support and hold a tool at a predetermined angle as it is slid across the face of the grinding wheel, said fixture comprising a base having a flat bearing surface for a tool holder and provided with a slot extending at right angles to the face of the grinding wheel across which the tool is to be slid, a slide movable in said slot, a guide bar pivoted on said slide with its pivot point fixed relative to said slide, means for holding said guide bar in different angular positions on said slide, a tool holder having a flat bottom surface bearing against the bearing surface of said base, said tool holder having a slot in its bottom surface extending longitudinally of said tool holder for receiving said guide bar, a sleeve mounted in said tool holder and extending from one end thereof and rotatable about its axis, means for securing said sleeve in said tool holder and means for securing a tool in said sleeve.

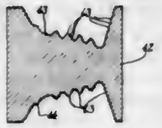
2,730,847
FORMING ROUNDED EDGES ON BLADE-LIKE ELEMENTS
Samuel James Stapenell, Bristol, England, assignor to The Bristol Aeroplane Company Limited, Bristol, England, a British company
Application May 1, 1953, Serial No. 352,507
Claims priority, application Great Britain May 5, 1952
10 Claims. (Cl. 51—144)



1. Apparatus for rounding the leading and trailing edges of an aerofoil sectioned axial flow blade of the

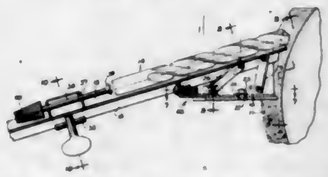
kind used in axial flow compressors and turbines, said apparatus comprising a base, a system of pulleys carried from said base, an endless abrading band of a width less than the length of a blade the leading and trailing edges of which are to be rounded, said band having an abrading surface and being supported by said pulley system with each of a pair of lengthwise portions of the band drawn taut between a pair of pulleys of said pulley system, said lengthwise portions being arranged substantially parallel with their abrading surfaces facing one another, and spaced apart by less than the minimum width of said blade a support means carried by said base, a work holder carried by said support means, means for rotating said work holder about an axis which passes between said lengthwise portions of the band, said work holder being adapted to support a blade, the leading and trailing edges of which are to be rounded, between said lengthwise portions of the band and lengthwise along said axis of rotation with the leading and trailing edges of the blade lying one on each side of said axis of rotation, means for moving said support means bodily to move said work holder repeatedly towards and away from said lengthwise portions of the endless band thereby to reciprocate a blade carried in said work holder substantially in the direction of its length, and reversing means for reversing the direction of rotation of said work holder each time its direction of bodily movement is reversed.

2,730,848
FORM DRESSING TOOL
Donald J. Wallace and Leo Catallo, Detroit, Mich., assignors to Wheel Trueing Tool Company, Detroit, Mich., a corporation of Delaware
Application June 18, 1953, Serial No. 362,603
2 Claims. (Cl. 51—204)



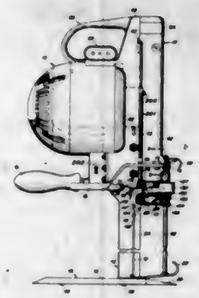
1. A form dressing tool for imparting a preselected contour simultaneously to a pair of grinding wheels, comprising a rigid tool body symmetrical about a longitudinally extending median plane and having on either side of said plane oppositely facing abrading work surfaces, each of an identical configuration that is rectilinear in longitudinally extending planes parallel to said median plane and non-rectilinear in all planes transverse to said median plane, and discrete abrasive particles forming a layer of substantially a single particle thickness embedded in said oppositely facing surfaces and exposed thereon, said particles being so distributed over said work surfaces that at least one of said particles lies in any straight line extending in the rectilinear direction of said surfaces.

2,730,849
DRILL BIT GRINDING FIXTURES
James V. Novak, Berwyn, Ill.
Application September 20, 1952, Serial No. 310,640
1 Claim. (Cl. 51—219)



A drill bit grinding fixture comprising a channel; a pair of links of different lengths having their upper ends pivoted to the channel at points spaced from one another longitudinally of the channel, and a base pivoted to the lower ends of the links at points more widely spaced from one another, longitudinally of the channel, than the first mentioned points are spaced; each link substantially consisting in a short channel member the flanges of which are pivoted to the channel and base, and the web of which channel member has a substantially V-shaped recess, the cross section of the channel being similarly substantially V-shaped.

2,730,850
SHARPENING ATTACHMENT FOR A CLOTH CUTTING MACHINE
Albert M. Rockwood and Robert M. Conklin, Columbus, Ohio, assignor, by mesne assignments, to The Wolf Machine Company, Cincinnati, Ohio, a corporation of Ohio
Application December 17, 1949, Serial No. 133,606
3 Claims. (Cl. 51—249)

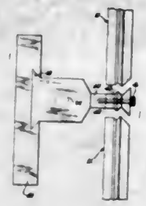


1. In a cloth cutting machine having a reciprocating knife blade and a motor for moving said blade, a sharpening device comprising a peripherally threaded hollow shaft, a circular tube positioned coaxially outside said threaded shaft, a follower secured to said tube and engaging the threads on said threaded shaft, a housing removably attached to said machine and enclosing said tube, said housing and said tube enclosing the peripheral surface of said threaded shaft, means for rotatably supporting said threaded shaft in said housing, power transmission means between said motor and said shaft, a noncircular drive shaft inside said threaded shaft, a guide member fixed to said threaded shaft having an opening complementary to said drive shaft through which said drive shaft reciprocates, a grinder-head housing secured to the lower end of said tube enclosing the bottom of said tube and said drive shaft, knife-grinding means mounted below said tube and separated from said tube and said shaft by said grinder-head housing, and power transmission means between said drive shaft and said grinding means.

2,730,851
METHOD OF FORM DRESSING OF ABRASIVE WHEELS
Donald J. Wallace and Leo Catallo, Detroit, Mich., assignors to Wheel Trueing Tool Company, Detroit, Mich., a corporation of Delaware
Application March 20, 1952, Serial No. 277,562
4 Claims. (Cl. 51—283)

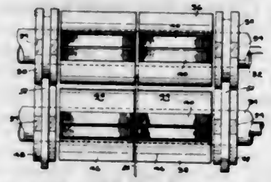
1. The method of form dressing a pair of abrasive wheels composed of abrasive grit in a matrix of a binder, which comprises moving said pair of wheels laterally toward each other, interposing between the peripheries of said wheels a pair of oppositely facing diamond particle abrasive surfaces of predetermined contour, rotating said wheels while in pressure contact with said surfaces, the pressure of said contact being insufficient to crush said

binder and moving said abrasive surfaces relative to the surfaces of said wheels tangentially thereof in abrading



contact with the peripheries of said wheels to abrade the wheels to the reverse contour of said abrasive surfaces.

2,730,852
APPARATUS FOR MAKING AND SEPARATING ENVELOPES AND OTHER CONTAINERS
Peter H. Clark, Worcester, Mass.
Application June 26, 1952, Serial No. 295,689
19 Claims. (Cl. 53—84)



1. Apparatus of the class described comprising a pair of spaced parallel hollow sleeves, means to rotate the hollow sleeves, a shaft in one hollow sleeve, means to rotate the shaft at a speed different from the sleeves, forming and crimping rollers on the sleeves cooperating to seal sheets of material passing therebetween, and a circular knife blade on the shaft and rotated thereby, said blade extending into the plane of the sheets between the rollers.

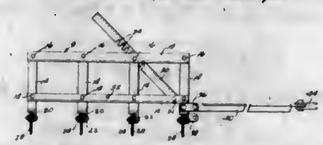
18. Apparatus of the class described comprising a pair of shafts, a crimping roller on each shaft for mutual crimping co-action, longitudinal crimping areas on the rollers, and a pair of axially spaced wheels on each shaft, the wheels on one shaft bearing on the corresponding wheels of the other shaft at the peripheries thereof, said wheels being peripherally relieved in general alignment with the crimping areas to fail to bear on each other at said areas.

2,730,853
STIRRUP LEATHER ATTACHING MEANS FOR SADDLES
Douglas H. Manning, Yoakum, Tex., assignor to Tex Tan of Yoakum, Yoakum, Tex., a corporation of Texas
Application August 31, 1953, Serial No. 377,517
3 Claims. (Cl. 54—46)



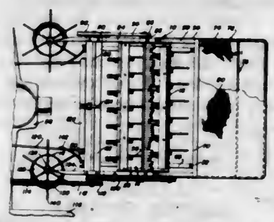
1. A saddle and a strap secured thereto and having a depending end, in combination with a stirrup leather, and means for pivotally connecting the upper end of said stirrup leather to said depending strap end, said means comprising a pair of plates fixedly connected to said strap end and extending beyond said end and overlapping the upper end of said leather, the extended ends of said plates being provided with axially aligned circular bearing apertures, a pair of circular trunnion discs fixed to the opposite faces of the upper end portion of said leather and mounted for oscillation in said apertures, and means fixed to said discs for holding said plate ends in operative relation to said trunnion discs.

2,730,854
ADJUSTABLE TOOTH HARROW
Otto Bordigon, Glenn, Calif.
Application May 9, 1952, Serial No. 287,017
2 Claims. (Cl. 55—103)



2. A harrow comprising a multiplicity of drag bars connected in spaced parallel relation, the connection of said bars to one another being adapted for joint transverse tilting of the bars, a pair of channel bars arranged in face to face spaced relation and carried by each of said drag bars, said channel bars having facing angular notches, teeth engaged in the facing notches of said channel bars of each drag bar and means on each of said drag bars adapted to engage the upper ends of the complemental teeth to limit the upward movement thereof.

2,730,855
DEVICE FOR RECOVERING COTTON
Sid B. Thomas, Lockney, Tex.
Application June 28, 1951, Serial No. 233,986
6 Claims. (Cl. 56—28)

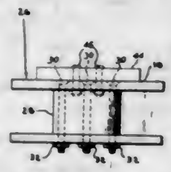


1. A cotton harvester for harvesting fallen cotton comprising a support frame adapted to be moved over the ground, a horizontally disposed drum rotatably journaled on said frame transverse the direction of movement thereof, means operatively connected to said drum and said support frame for rotating said drum, a plurality of crescent-shaped cotton impaling plates, each plate being narrower than it is deep, means for movably mounting each of said plates on said drum perpendicular to the longitudinal axis thereof, said mounting means including means swingably attaching said plates to said drum with the concave edge of said plates registering with said drum, said plates each having a serrated, ground engaging edge for impaling loose cotton on the ground.

2,730,856
AERATOR ATTACHMENT FOR LAWN MOWERS
John Mekalainas, Westbury, N. Y.
Application August 10, 1954, Serial No. 448,886
1 Claim. (Cl. 56—249)

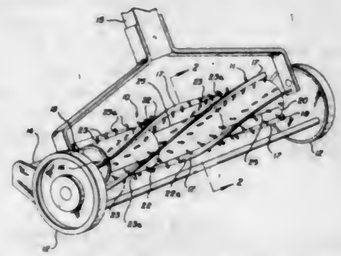
In combination with a lawn mower having at least two spaced wheels, a first disc, a plurality of acute teeth about

the periphery of said disc, a second disc, a cylindrical spacer between said discs, each of said discs being provided with a plurality of holes, a plurality of bolts through



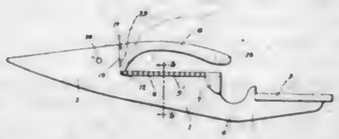
said holes securing said discs and spacer, and at least one of said discs being provided with a plurality of mounting holes therethrough, and bolts in said holes engaging a wheel for attaching said disc to a wheel of a lawn mower.

2,730,857
WEED-CUTTING ATTACHMENT FOR LAWN MOWERS
Carl E. Myers, Akron, Ohio
Application October 6, 1954, Serial No. 460,597
11 Claims. (Cl. 56—249)



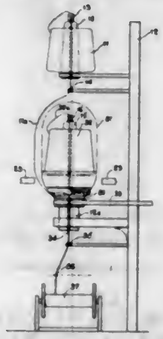
1. A weed cutting attachment operable interiorly of the cutting reel of a reel type lawn mower of the character described, comprising; a hollow cylindrical body receivable interiorly of said cutting reel for rotation therewith; and a plurality of weed-engaging members extending radially outwardly from the external surface of said cylindrical body; the wall sections of said cylindrical body having inherent recovery properties whereby said cylindrical body may be collapsed.

2,730,858
MOWER GUARD
Howard F. Steiner, Stockton, Calif.
Application November 18, 1953, Serial No. 392,826
4 Claims. (Cl. 56—307)



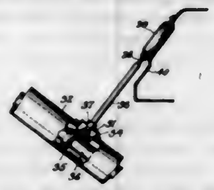
1. A mower guard comprising a body, a portion of which has an upwardly facing flat surface, a ledger plate resting on said surface, a removable cap for the guard, means between the cap and plate to retain the latter at its forward end against upward movement when the cap is mounted in place on the guard, a tongue formed in the plate from its rear end intermediate its side edges and projecting at a downward and rearward angle, and a lip on the body overhanging the tongue; the upper face of the lip being flush with the upper surface of the plate when the tongue is engaged with the lip.

2,730,859
APPARATUS FOR PLYING YARNS
Anthony David Gatling, Fisherwick, near Lichfield, England, assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a corporation of New York
Application May 22, 1953, Serial No. 356,649
9 Claims. (Cl. 57—58.3)



1. Apparatus for plying together two yarns which comprises a pair of supports for let-off yarn packages, a rotatable hollow spindle for plying the yarns together, said spindle having two radially directed passages, each having an annular seating and adapted to guide a yarn through its respective seating and to a plying point within the spindle, and a ball within each of said passages adapted to nip a yarn against a seating therein by centrifugal force on the ball generated by rotation of the spindle.

2,730,860
TIMEPIECE FOR AUTOMOTIVE VEHICLE
Rudolph S. Kelbert and Basil Vidal, New York, N. Y.
Application March 17, 1953, Serial No. 342,806
4 Claims. (Cl. 58—46)

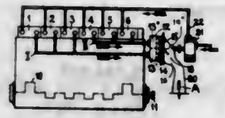


1. A device of the character described comprising, a steering post including an inner rotative shaft and including a housing surrounding the shaft, a gear fixed on the rotative shaft, the housing being apertured adjacent to said gear, an instrument panel, a timepiece secured thereon, said timepiece having a winding shaft, and a drive shaft extending between the gear on the rotative shaft and the winding shaft, said drive shaft carrying a gear at one end for mesh with the gear an the rotative shaft, the other end of the drive shaft being connected to the winding shaft.

2,730,861
MEANS FOR CHARGING AND SCAVENGING INTERNAL COMBUSTION ENGINES
Alfred Büchi, Winterthur, Switzerland
Application September 21, 1949, Serial No. 116,906
Claims priority, application Switzerland September 25, 1948
68 Claims. (Cl. 60—13)

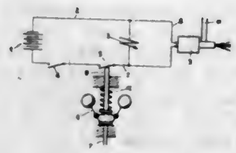
1. In combination, an internal combustion engine having a plurality of cylinders firing at different times, turbine means adapted to be driven by the exhaust gases discharged from said cylinders, at least two exhaust manifolds, each of which is adapted to deliver to the turbine

means in a stream separated from that of the other manifold the exhaust gases from at least one of the engine cylinders, so that pressure surges occur in each gas stream at different times from the surges occurring in the other gas stream, said turbine means having a separate gas inlet passage for each gas stream delivered by the manifolding, said passage being formed to conduct its respective stream separately up to and into the turbine blading, and at least one ejector means disposed adjacent the exit edges of the turbine blading to receive at least a portion of each said stream upon its discharge from said blading, said ejector means including a collecting canal spanning a segment of the rotor blading from which said gas stream portions are discharged, said collecting canal being provided with at least one partition disposed therein and forming two separate ducts to continue the separation of said gas stream portions for at least some distance downstream of the rotor blading and a mixing chamber communicating with said canal and beginning in the area of the termination of the said partition therein, in which mixing chamber said gas stream portions are brought together as a common stream, said mixing chamber having an outlet through which the mixed gases are confluently discharged.



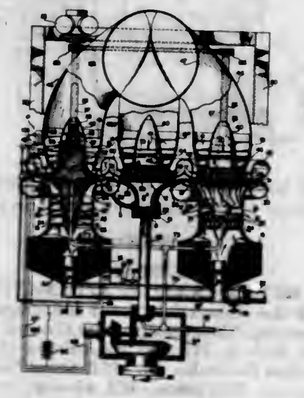
33. In a turbine having at least two inlet passages for two separate fluid streams, each said stream being continuously subject to high pressure fluctuations out of phase with the high pressure fluctuations of the other stream, and in which turbine an inlet passage is provided to conduct each said fluctuating stream separately up to and through the turbine blading, at least one ejector means disposed adjacent the exit edges of the turbine blading segments to receive at least a portion of each said stream upon its said discharge from said blading, said ejector means spanning the segments of the rotor blading from which both of said gas stream portions are discharged, and including a mixing chamber wherein said gas stream portions are brought together as a common stream, said mixing chamber having an outlet through which the mixed gases are confluently discharged.

2,730,862
ELECTRIC IGNITION CONTROL IN STARTING DEVICES FOR TURBO-ENGINES
René Léon Lamy, Paris, France, assignor to Societe du Carburateur Zenith, Lyons, France
Application October 3, 1951, Serial No. 249,590
8 Claims. (Cl. 60—39.14)



1. In a starting device for a turbo-engine, an electric ignition circuit for said turbo-engine, a switch in said circuit, and means responsive to the speed of said turbo-engine during the starting period for closing said switch as said speed reaches a predetermined value for which said turbo-engine is able to run by its own means after ignition.

2,730,863
GASEOUS FUEL TURBINE POWER PLANT HAVING PARALLEL CONNECTED COMPRESSORS
Nathan C. Price, St. Helena, Calif., assignor to Lockheed Aircraft Corporation, Burbank, Calif.
Application April 16, 1948, Serial No. 21,514
17 Claims. (Cl. 60—39.15)



1. A gas turbine power plant comprising a plurality of functionally parallel units each including a compressor and a turbine, a load driving turbine, means for introducing fuel into the compressors of said units, and a combustion chamber in receiving relation to the outlets of said compressors and delivering hot combustion gases to the first and second mentioned turbines to drive the same, said first mentioned turbines driving the compressors of their respective units.

2,730,864
METHOD AND APPARATUS FOR LAUNCHING MARINE VESSEL
Ray Granville Parker, Staten Island, N. Y., assignor to Bethlehem Steel Company, a corporation of Pennsylvania
Application November 19, 1952, Serial No. 321,388
20 Claims. (Cl. 61—67)

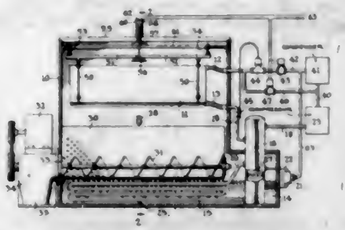


1. A method of launching a marine vessel comprising advancing said vessel longitudinally from a production line to a roller support adjacent a body of water and sliding said scow forward until its center of gravity is beyond said support causing the vessel to pivot and plunge forward until it drops into the water.

2,730,865
AUTOMATIC ICE MAKING APPARATUS
Albert L. Murdock, Durham, N. C.
Application February 26, 1952, Serial No. 273,379
7 Claims. (Cl. 62—2)

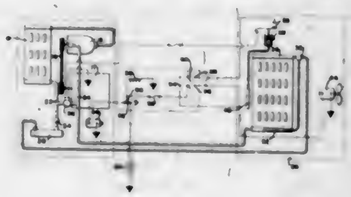
1. In automatic ice making apparatus, the combination comprising, a housing, a refrigerated hollow plate member adapted to freeze water applied to the lower outer surface of said member, a pivotally mounted linkage in the upper portion of said housing and having said hollow plate member suspended therefrom, a cold water reservoir in the bottom of said housing, pump means to apply water from said reservoir to the lower surface of said plate member, refrigerating means to cool said member, switch means engaged by said linkage for cutting off said

refrigerating means upon formation of a predetermined weight of ice upon said member, and a perforate hopper



within said housing below said member and above said water reservoir for collecting ice formed on said member.

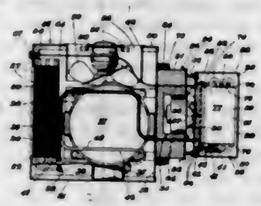
2,730,866
REFRIGERATING APPARATUS
Albert D. Baker, Kenneth L. Jones and Ernest A. Leavengood, Lansing, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 26, 1952, Serial No. 328,118
10 Claims. (Cl. 62—4)



1. In an air conditioning system for cooling and ventilating the passenger compartment of an automobile, a refrigerating system including a compressor, a condenser, a receiver, and an evaporator connected in series refrigerant flow relationship, first refrigerant flow control means comprising a pressure reducing means between said receiver and said evaporator, second refrigerant flow control means responsive to refrigeration requirements in said passenger compartment for effecting a materially reduced flow of refrigerant to said evaporator in response to a decrease in refrigeration requirements, blower means for circulating air to be conditioned in thermal exchange relationship with said evaporator and thereafter into said passenger compartment, manually controlled air outlet grill means for varying the amount of air distributed to various parts of said compartment, a power source, circuit means for connecting said power source to said blower means and said second control means, said circuit means including a multiple position switch so constructed and arranged whereby in one position of said switch said blower means and said control means are both deenergized whereas in a second position of said switch the blower means only is energized and in a third position of said switch the blower means and said second control means are both energized.

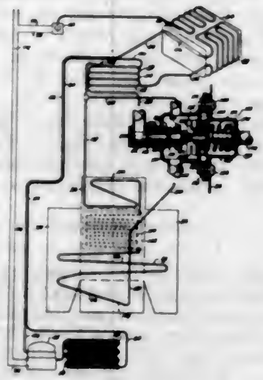
2,730,867
REFRIGERATION UNIT
Ellsworth C. Salisbury, Columbus, Ohio, assignor to Mundean Mfg. Co., Columbus, Ohio, a corporation of Ohio
Application March 19, 1954, Serial No. 417,325
10 Claims. (Cl. 62—4)

1. A refrigerator, comprising in combination, walls forming an insulated compartment, one of said walls having an opening therein; a refrigerating unit including a cooling element and an element operatively connected with the cooling element for circulating a refrigerating medium through the cooling element, said refrigerating unit including an insulating wall interposed between said elements, said insulating wall lying in substantially the plane of said one wall and closing the opening in said one wall of the first-mentioned walls and having a recess therein on the side confronting the cooling element, the refrigerating medium circulating element being disposed



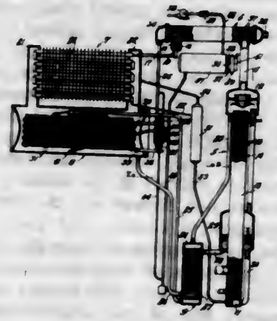
outside the compartment, said cooling element being disposed within the compartment adjacent to but spaced from said wall having the opening to provide a passage for air between the cooling element and said last-mentioned wall; a fan in said space; and a motor for driving the fan, said motor having at least a part thereof extending into said recess.

2,730,868
MULTIPLE TEMPERATURE REFRIGERATING APPARATUS
Lawrence A. Philipp, Detroit, Mich., assignor to Nash-Kelvinator Corporation, Detroit, Mich., a corporation of Maryland
Original application October 12, 1951, Serial No. 251,052. Divided and this application November 12, 1952, Serial No. 319,882
3 Claims. (Cl. 62—6)



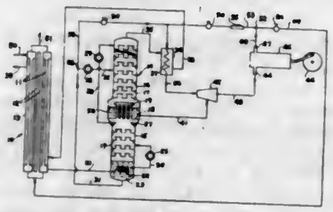
1. Refrigerating apparatus comprising, a primary cooling means, a secondary volatile refrigerant circuit having a refrigerant condensing portion in heat exchange relationship with said cooling means and having two heat absorbing portions connected in parallel, a valve responsive to pressure in said circuit interposed between the outlet of said condensing portion and the inlet of said heat absorbing portion for controlling the flow of refrigerant through said condensing portion, said circuit having a quantity of refrigerant therein of a larger liquid volume than the volumetric capacity of said condensing portion, and a conduit positioned in the secondary system between the inlet of the secondary condenser and the outlet side of said heat absorbing portion and between the inlet of said heat absorbing portion and the outlet side of said valve.

2,730,869
PURGING DEVICE FOR CLOSED REFRIGERATION SYSTEMS
Edward M. Stubblefield, Evansville, Ind., assignor to Servel, Inc., New York, N. Y., a corporation of Delaware
Application January 8, 1952, Serial No. 265,418
9 Claims. (Cl. 62—119)



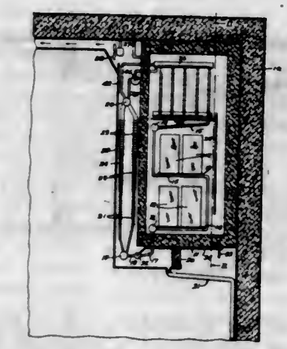
1. In a closed vacuum type heat transfer apparatus having a plurality of elements and containing a solution of water in absorbent from which water vapor is expelled by the application of heat and in which hydrogen is apt to accumulate as a foreign body which interferes with the proper operation of the apparatus, a purging device for automatically removing hydrogen from the interior of the closed apparatus comprising a wall in an element of the apparatus where hydrogen accumulates which is permeable to hydrogen and non permeable to water vapor, said hydrogen automatically diffusing through said wall from the interior to the exterior of the apparatus, and the exterior surface of said hydrogen permeable wall being so arranged as to facilitate the escape of diffused hydrogen therefrom to maintain a lower partial pressure of hydrogen in the atmosphere at the outside of the wall than the partial pressure of hydrogen in the atmosphere at the inside of said wall.

2,730,870
METHOD AND APPARATUS FOR PUMPING VOLATILE LIQUIDS
Arthur E. Steele, McKeesport, Pa., assignor to Air Products Incorporated, a corporation of Michigan
Application June 15, 1950, Serial No. 168,190
17 Claims. (Cl. 62—122)



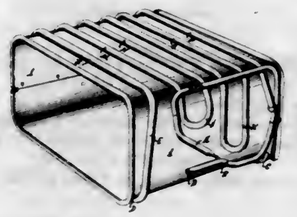
1. The method of transferring a stream of liquid material from a fractionating operation in which operation a compressed and cooled gaseous mixture is fractionated producing the liquid material as a product, comprising withdrawing a stream of the liquid material from the fractionating operation, passing the stream of liquid material to an ejector, pumping the stream of liquid material issuing from the ejector to the desired pressure, diverting a portion of the pumped stream, effecting a heat exchange between the diverted stream and a stream of colder fluid produced during the fractionating operation to form a subcooled diverted stream, and passing the subcooled diverted stream to the nozzle of the ejector as the propellent stream therefor.

2,730,871
HEAT TRANSFER SYSTEM
Norman E. MacLean, San Francisco, Calif.
Application October 25, 1954, Serial No. 464,219
3 Claims. (Cl. 62—125)



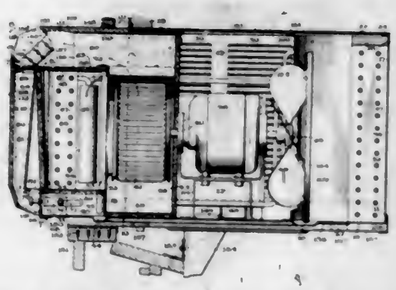
1. In a refrigeration system which comprises an enclosure for a primary refrigerant and a sealed continuous circuit for a secondary refrigerant including a condenser and a cooling unit utilizing said primary refrigerant within the enclosure and an evaporating unit outside the enclosure, the improvement which comprises two separate sets of coils forming the condenser, separate connections between the evaporating unit and each set of coils, and pump means in one of said connections to draw fluid from the evaporator and discharge toward the cooling unit.

2,730,872
EVAPORATOR INCORPORATING ACCUMULATOR WELLS AND FEED GRID
James A. Hall, Louisville, Ky., assignor to Reynolds Metals Company, Richmond, Va., a corporation of Delaware
Application May 25, 1954, Serial No. 432,230
1 Claim. (Cl. 62—126)



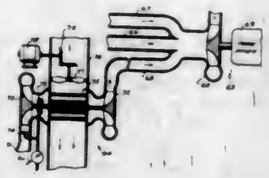
In heat exchangers, an evaporator consisting of a box-like support having an open front, a top, a bottom, and sides, of a continuous length of tubing passing back and forth across the bottom of the box in a multiplicity of turns, and also passing back and forth across the top of the box in a multiplicity of turns, the last named turns being loops at each side of the box extending downwardly in a vertical plane and contacting the sides of the box, and at least one of said loops comprising a major depending area and a plurality of the remaining loops comprising minor depending areas of lesser capacity, and an inlet and outlet for said tubing, the loop of major depending area being preceded from the inlet by a plurality of the loops of minor area and capacity, said loops constituting accumulator wells confined to vertical planes.

2,730,873
ROOM AIR CONDITIONERS
Hubert W. Hardin and Clinton C. Brinkoeter, San Antonio, Tex., assignors to Ed Friedrich, Incorporated, San Antonio, Tex., a corporation of Texas
Application May 19, 1953, Serial No. 355,928
14 Claims. (Cl. 62—129)



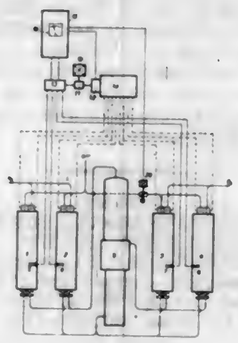
1. In a room air conditioning unit, a casing having openings at the ends thereof, a condenser mounted in said casing and disposed at one of said open ends, a removable hood consisting of a front, top and side walls mounted on said casing and extending over the other open end thereof, a housing mounted in said casing at said last mentioned open end, comprising a back wall having a shelf and a cold air deck extending laterally therefrom and arranged in spaced relation to each other, a turbine cage connected to said back wall, an air intake opening in said back wall between said deck and shelf for communication with said turbine cage, a turbine in said turbine cage, an evaporator mounted on said shelf extending across said opening and beneath said cold air deck being operatively connected to said condenser, said cold air deck having engagement with the front wall of said hood, a bulkhead provided along the rear of said cold air deck and said turbine cage, said turbine cage having an air outlet opening for delivering cold air onto said deck, said hood having an air outlet at the peripheral edge thereof through which air is discharged from said cold air deck, said casing and said front wall of said hood being spaced from each other at the bottoms thereof to provide an air intake opening.

2,730,874
AIR CONDITIONER EMPLOYING AN EXPANSION EVAPORATION AIR CYCLE
Helmut R. Schelp, Dayton, Ohio, assignor to The Garrett Corporation, a corporation of California
Application October 14, 1949, Serial No. 121,436
14 Claims. (Cl. 62—138)
(Granted under Title 35, U. S. Code (1952), sec. 266)



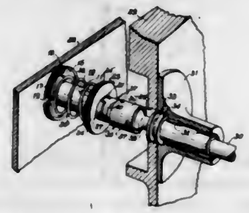
1. In an air cycle air conditioning system, an expansion turbine including an air inlet for working air at atmospheric pressure and an air outlet to discharge said working air at a reduced temperature and at a pressure below atmosphere after passing through said expansion turbine, nozzle means for introducing a fine spray of water into the working air before its entry into said expansion turbine for evaporative cooling of said working air, a heat exchanger connected to said air outlet and providing a path for said working air after leaving said expansion turbine, a first suction blower for maintaining said working air at a pressure below atmosphere between said expansion turbine and said first suction blower and including an air inlet for the working air leaving said heat exchanger and an air discharge outlet, duct means extending from said air discharge outlet to a central power plant, a second suction blower included in said central power plant and connected to said duct means to maintain said working air at a pressure below atmosphere between said first suction blower and said second suction blower but at a pressure higher than that maintained between said expansion turbine and said first suction blower, means to regulate the flow of water through said nozzle means whereby the moisture content of the working air issuing from said second suction blower into the atmosphere is capable of regulation to obtain total saturation, duct means to conduct conditioning air through said heat exchanger along a path separate from the working air path but in heat exchange relation with respect thereto, and means to maintain a flow of said conditioning air.

2,730,875
PROCESS OF OPERATING REGENERATOR PAIRS IN GAS SEPARATING INSTALLATIONS
Fritz Ranke, Pullach, near Munich, Germany, assignor to Gesellschaft fuer Linde's Eismaschinen Aktien-Gesellschaft, Hoellriegelskreuth, near Munich, Germany
Application November 7, 1951, Serial No. 255,158
Claims priority, application Germany December 21, 1950
2 Claims. (Cl. 62—175.5)



1. A method for separating a gas mixture in regenerator units consisting of individual regenerators and pairs of regenerators comprising supplying said gas mixture into one regenerator of at least one pair of filler loaded pairs of regenerators, cooling said gas mixture during its flow through said regenerator, contemporaneously flowing a mixture component in an opposite flow direction to that of said gas mixture through the second regenerator of said pair of regenerators and heating the same, alternatingly changing-over the cooling of the gas mixture and the heating of its component from one to the other regenerator after predetermined periods of time by synchronously operated change-over means, measuring the temperature variation during each of said time periods in the interior of said regenerators, automatically controlling said change-over step by shifting the instant thereof to maintain the mean temperature of the regenerators substantially constant. measuring said temperatures at predetermined instants fixed within each of said periods of time and utilizing the deviations of said combined temperatures from a desired predetermined value to vary the instant of reversal succeeding the instant of measuring said temperatures.

2,730,876
UNIVERSAL JOINT ADAPTER
Charles W. Russell, Huntington, N. Y., assignor to Republic Aviation Corporation, Farmingdale, N. Y., a corporation of Delaware
Application March 21, 1952, Serial No. 277,796
1 Claim. (Cl. 64—17)



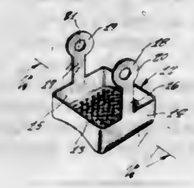
In an aircraft the combination with a stationary bulkhead and the housing of a mechanism located in close proximity to, and parallelly spaced from said bulkhead, said housing being organized and arranged for limited universal movement relative to said bulkhead and a pair of rotary shafts one projecting from the bulkhead and the other projecting from the housing, of a sleeve pivoted to the end of one of said shafts, a tongue pivoted to the sleeve at right angles to the pivot connecting the sleeve to said shaft, the outer extremity of said tongue being angularly sloped relative to its body, a shank terminating at one of its ends in an unobstructed bifurcation having an end wall disposed complementary to the sloping extremity of the tongue aforesaid and adapted to receive said tongue therein to completely and matingly fill said bifurcation and terminating in a socket at its other end fixedly attached to the end of the other of said shafts, locking means consisting of a flange fixedly projecting from the shank adjacent the socketed end thereof and provided with a peripheral lip combining with the flange to create a cup facing toward the bifurcated end of the shank, a collar mounted for reciprocation on the shank and provided with a peripheral lip combining with said collar to create a cup facing toward the fixed cup of the shank, a coiled spring encircling said shank having its opposed ends seated one in each of said cups and normally acting to move said collar to dispose it over and around the bifurcation and thereby secure said tongue therein against lateral movement only, and a lateral projection from the outer surface of each of the arms of the bifurcation adjacent the outer extremity thereof to arrest the movement of the collar by said spring.

2,730,877
FLUID COUPLING
Franz August Süberkrub, Hamburg, Germany
Application January 14, 1952, Serial No. 266,369
Claims priority, application Switzerland January 18, 1951
5 Claims. (Cl. 64—26)



1. A rotating coupling for elastic transmission of power from a driving member to a driven member using hydrostatic pressure produced by centrifugal action in a liquid contained in said coupling, said coupling comprising a hollow circular casing having a circumferential rim and side walls and a plurality of circumferentially spaced-apart radial walls fixedly arranged within said casing between its rim and its side walls, said casing being connected for rotation with one of said members, a plurality of second radial walls positioned on the other member, said second radial walls being disposed with their sides and their outer edges snugly but circumferentially movable within the open spaces between the first-named radial walls, the fixed radial walls and the movable radial walls defining in combination with the side walls and the rim of the casing confined chambers therebetween, inlet means cooperating with said chambers for supplying liquid to selected ones of said chambers and outlet means extending through the walls of said chambers and spaced radially outwardly of the radial inner ends of said chambers, said outlet means being selectively placed into and out of communication with the selected chambers containing the fluid by the relative circumferential movement of the movable radial walls between the fixed radial walls, the circumferential position of the movable walls with respect to the fixed radial walls and with respect to said outlet means for the liquid defining and limiting the liquid in the selected chambers to a quantity not exceeding the minimum volume of said selected chambers when the radial walls of said selected chambers draw closer to each other as a result of pulsations during normal torque transmission.

2,730,878
BUTTER SAVER FOR "CORN ON THE COB"
Leo Incorvaia, Bellerose, N. Y.
Application June 22, 1953, Serial No. 363,207
1 Claim. (Cl. 65—12)

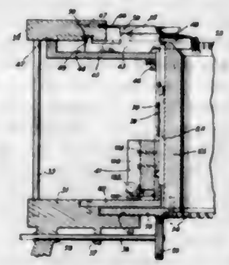


A butter saver for corn on the cob comprising a rectangular hollow body formed of thin sheet metal having a curved bottom wall equipped with perforations therein, two oppositely disposed bottom edges of the said body being upwardly curved and the two oppositely disposed other edges of the said body being straight, four oppositely disposed side walls extending upwardly integraly from the said body and adapted to surround the butter pat placed therein, the said bottom wall and hollow body together with the upwardly extending side walls being stamped out of sheet metal and then bent into the said body, the opositely disposed side walls having straight lower edges being integrally formed along the upper edges of the central portions thereof with vertical arms, circular enlargements integrally formed in the upper ends of said vertical arms adapted to permit the device to be grasped between the thumb and index finger.

2,730,879
KNITTING MACHINE
Emile Jette, Montreal, Quebec, Canada
Application January 31, 1955, Serial No. 485,105
25 Claims. (Cl. 66—13)

1. A knitting needle comprising a shank, a top hook at one end of said shank and integral therewith, a butt on said shank near the other end thereof and a second hook pivotally mounted on said shank at a substantial distance

from said top hook and intermediate the ends of said shank, said second hook having its free end portion forming a U and capable of rotating relative to said shank through an angle of more than 90°.



2,730,880
TRANSFER BIT, TRANSFER BIT BLANK AND METHOD OF PRODUCING THE BIT
Walter Larkin, Norristown, Pa., assignor to Fidelity Machine Company, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application March 18, 1955, Serial No. 495,262
13 Claims. (Cl. 66—95)



1. In a transfer bit of the type comprising a needle-receiving eye having a divided forward wall, and an adjoining yarn-retaining terminal hook, an integral flat body portion extending longitudinally from the rear end of the bit and including a bit-actuating butt, said body portion terminating rearwardly of said eye, and a forward portion of relatively thin metal integral with the said body portion and folded on itself along a line between the said body portion and the eye, said folded portions having confronting free terminal parts forming the respective opposite sides of said eye, and one at least of said terminal portions having an extremity forming the said hook.

2,730,881
KNITTING NEEDLE
Henri Adelin Marie Joseph Hilaire Sornin de Leysat, Dieppe, Seine-Inferieure, France
Application March 18, 1952, Serial No. 277,099
Claims priority, application Belgium March 20, 1951
8 Claims. (Cl. 66—117)



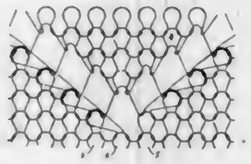
1. A hollow knitting needle comprising a tubular member open at one end and the other end of which is pointed, said tubular member being provided with a lateral outlet port near said pointed end through which port the thread passes out of the needle towards the fabric that is being knitted, a short spindle rigidly secured at both ends to the sides of the port and extending across said port inside the tubular member in a direction perpendicular to the axis of the latter and a roller revolubly carried by said spindle and over which the thread is guided as it passes out of the port.

2,730,882
CARRIER TUBE
Ernest A. Feustel, Hasbrouck Heights, N. J.
Application January 30, 1953, Serial No. 334,191
1 Claim. (Cl. 66—126)

A carrier tube for the thread carrier of a hosiery machine, the tube comprising a cylindrical non-perforated body with smooth continuous outer surfaces, said body having formed therethrough a longitudinal bore for the thread, the body having a cylindrical upper portion and a cylindrical bottom portion, the outside diameter of said bottom portion being less than the outside diameter of said upper portion and the top of the bottom portion of least diameter flaring upwardly and outwardly to the bottom of the upper portion of greatest diameter, said body having formed therein a circumferential groove at the bottom of the flaring portion and a second circumferential groove in the flaring portion adjacent the first-mentioned groove.

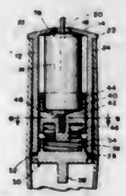


2,730,883
STOCKING AND METHOD OF PRODUCING A RAVEL TRAP
Viggo Skole, Laven, Denmark
Application February 21, 1952, Serial No. 272,842
Claims priority, application Denmark February 28, 1951
3 Claims. (Cl. 66—187)



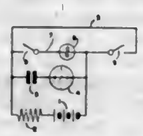
1. A knitted stocking comprising a ravel trap provided a short distance above the tip of the toe and consisting of two rows of interlock stitches diverging in a direction towards the tip of the toe from two neighbouring wales.

2,730,884
CANDLE HOLDERS
Michael Cozzoli, Hagerstown, Md.
Application March 3, 1953, Serial No. 340,127
3 Claims. (Cl. 67—27)



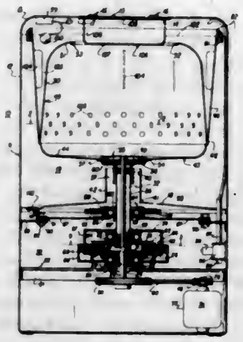
1. A candle support and feeder comprising: a casing and a cartridge supported thereby, the said cartridge consisting of a tubular shell having at its upper end an inwardly extending flange adapted to engage the upper rim of said candle and having an outwardly extending flange adapted to engage said casing, the said shell having sections thereof bent outward and in sliding resilient contact with said casing, a plug engaging the lower end of said shell, a plunger slidable in said shell and adapted to support said candle, and resilient means engaging said plug and said plunger.

2,730,885
PHOTOFLASH EQUIPMENT
Edward K. Kaprelian, Plainville, Conn., assignor to The Kalart Company Inc., Plainville, Conn.
Application November 5, 1952, Serial No. 318,823
12 Claims. (Cl. 67—31)



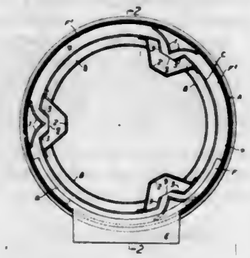
1. In a B-C photoflash unit having a charging circuit including in series connection capacitance means, a source of current for charging the capacitance means and resistance means, and further comprising at least one socket for a photoflash bulb and a flash circuit by-passing the source of current and the resistance means and including normally open switch means for short circuiting the source of current and the resistance means and connecting the photoflash bulb socket across the capacitance means upon closing of said switch means thereby discharging the capacitance means through a flash bulb inserted in said socket for firing the bulb, a testing circuit connecting in series said capacitance means, said flash bulb, signal means and normally open test switch means for discharging the capacitance means through the flash bulb and the signal means upon closing of the test switch means thereby actuating the signal means, the said signal means having an ohmic resistance value such as to prevent a firing of the flash bulb upon closing of the test switch means.

2,730,886
CLOTHES WASHING MACHINES
George P. Castner, Webster City, Iowa, assignor to Speed-Flex, Inc., a corporation of Iowa
Application December 6, 1951, Serial No. 260,170
15 Claims. (Cl. 68—23)



1. In a washing machine including an upstanding housing provided with a top wall having a top opening therein, and a top door mounted upon said top wall for movements between open and closed positions with respect to said top opening; the combination comprising an upstanding spin tub arranged in the upper portion of said housing and provided with a bottom wall and an upwardly and outwardly directed side wall and having an open top communicating with the atmosphere and mounted for rotation about a substantially vertical and central axis extending through said top opening and adapted to contain wash liquid and clothes to be washed, the normal wash liquid level in said spin tub being disposed adjacent to the open top thereof so that said spin tub is substantially filled with the wash liquid, the interior of said spin tub being readily accessible from the exterior through said top opening when said top door occupies its open position, the wash liquid contained in said spin tub being centrifugally flung from the upper portion thereof and caught in said housing in response to continuous rotation of said spin tub at a relatively high speed, a substantially disk-like dasher arranged in said spin tub adjacent to said bottom wall and having a substantially smooth face and mounted for rotation about said axis, means for continuously rotating said dasher at a sufficiently high speed to circulate the wash liquid and the clothes contained in said spin tub, the wash liquid contained in said spin tub being circulated from the face of said dasher in outwardly directed spirals across said bottom wall and thence upwardly along said side wall and then back inwardly and downwardly toward the center of the face of said dasher, the clothes contained in said spin tub being rubbed and pulsated as they are moved across the face of said dasher, and means including a non-porous member carried by said top door and projecting downwardly therefrom and partially submerged in and forming an air-tight seal with the wash liquid contained in said spin tub when said top door occupies its closed position for preventing the formation of any substantial upstanding vortex in the substantially vertically disposed column of the wash liquid extending between the face of said dasher and the lower submerged surface of said member incident to the circulation of the wash liquid, the speed and size and configuration of said dasher being such that incident to the circulation of the wash liquid in said spin tub the centrifugal forces created in the wash liquid adjacent to said member are not substantially in excess of about 14.7 p. s. i.

2,730,887
ROTARY MACHINE FOR USE IN WASHING, DRY CLEANING AND DYEING GARMENTS AND OTHER ARTICLES
Edward John Howlett, London, England, assignor to Isaac Braithwaite & Son Engineers Limited, Kendal, England, a body corporate of Great Britain
Application March 4, 1954, Serial No. 414,089
1 Claim. (Cl. 68—139)



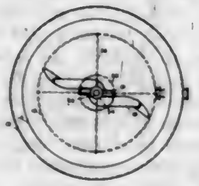
A machine for the treatment of garments and other articles with liquids of the type referred to comprising the combination with an outer stationary casing of an assembly rotatable therein and consisting of a perforated cylinder to receive the articles being treated, an outer cylinder imperforate for the greater part of its surface surrounding and connected to the perforated cylinder but spaced apart therefrom to form an annular space between the two cylinders, perforated lifters carried by the outer cylinder and projecting through slots in the perforated cylinder, the portion of the surface of the outer cylinder adjacent to the lifters being formed with spaces for the passage of liquid therethrough and scoops, also carried by the outer cylinder, co-acting with the lifters to direct the liquid in the lower portion of the outer casing to the lifters as the assembly rotates in the outer casing.

2,730,888

APPARATUS FOR TREATING PULP WITH LIQUID

George A. Seely, Hopewell, Va., and Walter E. Segl and Ernest S. Wilson, Wilmington, Del., assignors to Hercules Powder Company, Wilmington, Del., a corporation of Delaware

Application December 31, 1952, Serial No. 329,074
5 Claims. (Cl. 68—181)



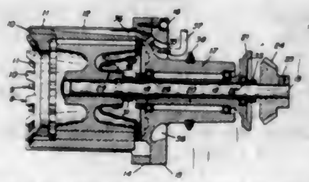
1. Apparatus for treating pulp comprising, in combination, an elongated, vertically disposed treating chamber; and, disposed below said treating chamber and in direct communication therewith, a second chamber of greater cross-sectional area than said treating chamber and housing a solid baffle of greater cross-sectional area than said treating chamber and forming an annular space with the periphery of said second chamber; and means for moving treated pulp toward the periphery of said second chamber.

2,730,889

REEL FOR THE FLUID TREATMENT OF THREAD

Thomas S. Mayner, Chagrin Falls, Ohio, assignor to Industrial Rayon Corporation, Cleveland, Ohio, a corporation of Delaware

Application October 14, 1950, Serial No. 190,187
3 Claims. (Cl. 68—205)



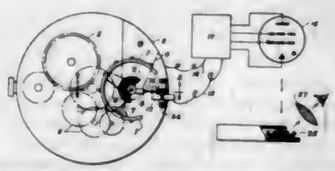
1. A thread advancing and processing reel comprising a plurality of generally circularly positioned longitudinally extending, interdigitating bar members, said bar members being adapted upon rotation to advance thread in the form of a helix; longitudinally extending surface openings in at least one-half of the said plurality of bar members; longitudinally extending recesses within said bar members; passages joining said recesses and surface openings; said surface openings being more narrow than said recesses; and means for supplying a treating liquid to said recesses.

2,730,890

STROBOSCOPIC APPARATUS FOR CALIBRATING TIME INDICATING DEVICES

Joseph M. Weinberger, Brooklyn, N. Y.

Application April 4, 1952, Serial No. 280,486
5 Claims. (Cl. 73—6)



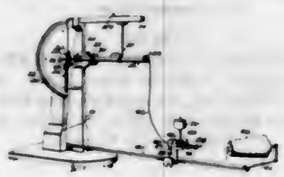
1. An apparatus for calibrating time indicating devices comprising an oscillating member, a flash lamp for intermittently illuminating an instrument to be calibrated, a circuit for momentarily energizing said flash lamp, a deflecting wedge electrically connected to and moving with said oscillating member and comprising one leg of a trigger circuit of said flash lamp energizing circuit, a resilient member adjacent said oscillating member, and a contactor member adjacent said resilient member and comprising the other leg of said trigger circuit; said resilient member and said contactor member normally forming part of an open circuit; said deflecting wedge positioned to engage said resilient member in substantially a period of maximum angular speed of said oscillating member and adapted to deflect said resilient member away from said contactor member during one half-cycle and to deflect said resilient member to momentarily touch said contactor member during a predetermined angular displacement of said oscillating member in the other half-cycle of oscillation of said oscillating member to close the said trigger circuit in response to said alternate half-cycles of oscillation and to disengage said resilient member after said predetermined angular displacement to break electrical contact between said wedge and said resilient member before electrical contact is broken between said resilient member and said contactor member.

2,730,891

THREAD STRENGTH AND FRICTION TESTER

Edward B. Frederick, Needham, Mass., and Frederick F. Balas, Pennsauken, N. J., assignors to the United States of America as represented by the Secretary of the Army

Application October 29, 1954, Serial No. 465,764
6 Claims. (Cl. 73—12)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. Apparatus of the character described comprising, in combination, a support; rigid pendulum mounted on the support to swing freely in a vertical plane; a scale plate immovably fixed to the support; an indicator arm swingable over the scale plate to give readings; frictional mounting means for one end of the indicator arm carried by the support and acting to hold the indicator arm in any angular position until the indicator arm is moved by a superior force; cooperating impact means fixed to the pendulum and to the indicator arm for transferring kinetic energy of the pendulum by direct impact to the indicator arm; thread-end-clamping means fixed adjacent the free end of the pendulum; and fixed thread-end-holding means so positioned relative to the pendulum that a thread will be fully tensioned when the pendulum attains substantially vertical position in its free fall, whereupon said tensioned thread will break under the impact of said cooperating impact means.

2,730,892

MELTING POINT BAR

William F. Bruce, Havertown, and Richard N. Blomberg, Ward, Pa., assignors, by mesne assignments, to American Home Products Corporation, New York, N. Y., a corporation of Delaware

Application May 22, 1952, Serial No. 289,396
6 Claims. (Cl. 73—17)

1. Melting point determination apparatus which comprises a longitudinally-extending heated element provided with an operating surface on which substances to be melted may be placed, said operating surface being shielded to reduce radiation losses, and having a substantially uniform temperature gradient for substantially equal length intervals along said operating surface so that the temperature varies by substantially equal increments between points at substantially equidistant intervals from each other along said operating surface, a plurality of electrical thermocouples positioned in contact with said heated element at substantially equidistant points below the operating surface thereof and adapted



to measure the temperatures along said operating surface at a plurality of points which are spaced at substantially equidistant intervals from next adjacent points, a single potentiometer for indicating the temperatures as determined by said thermocouples, electrical circuit means electrically connecting said thermocouples and said potentiometer, and means for heating said heated element adjacent one end thereof.

2,730,893

OXY-HYDROGEN FLASH DETONATOR TESTER

Frank W. Hayward, Port Washington, N. Y., Charles J. Zablocki, Silver Spring, Md., and Kenneth R. Scribner, Rochester, N. Y., assignors, by direct and mesne assignments, to the United States of America as represented by the Secretary of the Navy

Application June 27, 1952, Serial No. 296,028
11 Claims. (Cl. 73—35)



1. A flash fired detonator testing apparatus comprising, an explosion chamber having an opening therein, holding means for containing said detonator and adapted to be moved into engagement with said chamber to close the opening therein, means for admitting an explosive gas mixture having a predetermined flash temperature to the interior of said chamber, and means for providing a spark within said explosion chamber to subject the detonator under test to said predetermined flash temperature of said explosive gas mixture thereby firing a satisfactory detonator.

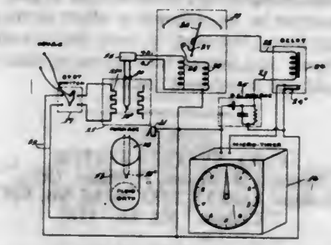
2,730,894

PORTABLE QUENCH OIL TESTER

Howard W. Husa, Chicago, Ill., assignor to Standard Oil Company, Chicago, Ill., a corporation of Indiana

Application November 30, 1953, Serial No. 395,208
8 Claims. (Cl. 73—53)

1. An apparatus for evaluating the quenching power of a fluid which comprises the combination of a pyrometer means including a thermocouple, an elevated furnace means for heating said thermocouple, a sample container below said furnace means, a vertically sliding holder for initially supporting said thermocouple means within said furnace, a timer means, a switch means for initiating said timer, said switch means being actuated by the free fall of said vertically sliding holder, and said timer being



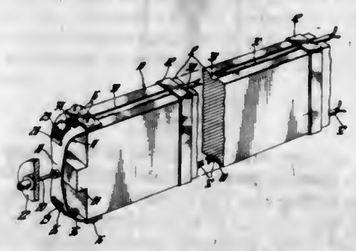
stopped in response to a predesignated temperature sensed by said pyrometer means.

2,730,895

DISPLACEMENT PICK-UP DEVICE

Charles W. Gadd, Orchard Lake, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application May 22, 1953, Serial No. 356,828
7 Claims. (Cl. 73—70)



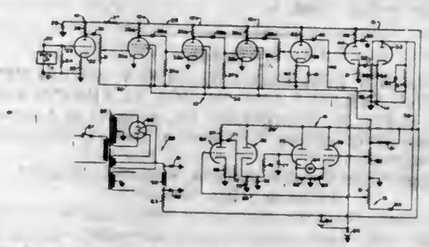
1. A displacement pick-up device comprising a support, a reed having its ends secured to said support and its intermediate portion disposed in spaced relation thereto, a probe secured to said reed and being adapted to engage a vibrating surface, strain gages secured to said reed, and indicator means connected to said gages for indicating the deflection of said reed.

2,730,896

CIRCUIT FOR MEASURING THE AVERAGE INTENSITY OF DISTURBANCES

Deslonde R. de Boisblanc, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

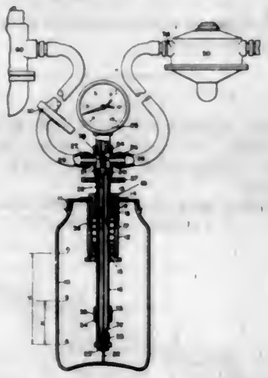
Application October 16, 1950, Serial No. 190,405
11 Claims. (Cl. 73—116)



9. A system for determining combustion instability in a jet engine having a burner wherein acoustical noise is produced by a flame, an electromagnetic detector positioned to pick up acoustical noise from the burner of said jet engine, an amplifier fed by said electromagnetic detector, an automatic volume control circuit having a relatively long time constant for controlling the gain of said amplifier so as to compensate for long-term variations in amplifier input, a rectifier fed by the output of said amplifier

to rectify the output thereof, an integrating circuit fed by said rectifier and responsive to the rectified output of said amplifier, said integrating circuit having a relatively short time constant so as to respond to short term variations in amplifier input but not to long term variations in amplifier input, and means for measuring the integrated output of said last-mentioned circuit.

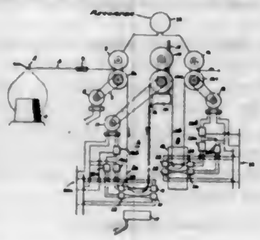
2,730,897
FUEL SYSTEM TESTER
Howard H. Morse, Portland, Oreg.
Application April 13, 1953, Serial No. 348,392
7 Claims. (Cl. 73—118)



1. In an apparatus for testing a fuel pump and fuel system, a housing having an inlet port and an outlet port, a conduit having one end connected to said inlet port and the other end adapted to be connected to the pressure side of the fuel pump, a second conduit having one end connected to said outlet port and the other end adapted to be connected to the carburetor in the fuel system, a pressure gauge connected with said housing, a test receptacle for fuel, said receptacle having a transparent wall and having markings on said wall, a tube extending into said receptacle and terminating near the bottom of said receptacle, a bottom closure for said tube, the other end of said tube connected to said housing, a valve at the upper end of said tube enabling fuel to be passed through said tube into said receptacle when said valve is opened and shutting off the passage of fuel through said tube when said valve is closed, a pair of outlet orifices of different size arranged at different levels in the lower portion of said tube, and a sleeve slidable on said tube and adapted to close either of said orifices selectively, the smaller of said orifices being sufficiently small in size to restrict the discharge of fuel into said receptacle from said tube and said housing when said valve is fully open.

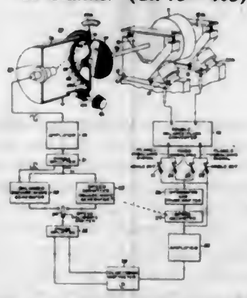
2,730,898
APPARATUS FOR CONTINUOUSLY MEASURING DRYING STRAINS AND RESIDUAL SHRINKAGE
Horace P. Fry, Jr., Swarthmore, Pa., assignor to American Viscose Corporation, Wilmington, Del., a corporation of Delaware
Application October 3, 1950, Serial No. 188,091
3 Claims. (Cl. 73—159)

1. In apparatus for measuring shrinkage in a textile material, the combination which comprises means for feeding a continuous length of textile material to a wetting zone, means for driving said feeding means at constant speed, means for removing the material from the wetting zone and positioned with respect to the feeding means to provide a depending loop of textile material therebetween, first detecting means positioned adjacent the bottom of said loop responsive to a lower predetermined limit for the bottom of the loop, second detecting means adjacent the bottom of the loop and above the first detecting means responsive to an upper predetermined limit for the bottom of the loop, means responsive to impulses from each of said detecting means to vary the speed of the material removing means to maintain the bottom of the loop between said predetermined limits, means for applying a wetting agent to the material in the wetting zone, third material handling means subsequent to the material-removing means so positioned and arranged with respect to said material-removing means to form a second depending loop in the material passing therebetween, third detecting means positioned adjacent the bottom of said second loop responsive to a lower



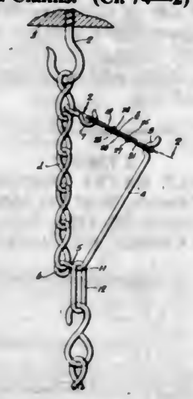
predetermined limit for the bottom of the second loop, fourth detecting means adjacent the bottom of the second loop and above the third detecting means responsive to an upper predetermined limit for the bottom of the second loop, means responsive to impulses from each of said third and fourth detecting means to vary the speed of the third material handling means to maintain the bottom of the second loop between said predetermined limits defined by the third and fourth detecting means, and means operatively connected with the material feeding means and the third material handling means for determining the relative speed of the material passing through each of said means.

2,730,899
DYNAMIC BALANCING APPARATUS
Martin W. Hellar, Jr., Schenectady, and Billy R. Shepard, Scotia, N. Y., assignors to General Electric Company, a corporation of New York
Application August 19, 1952, Serial No. 305,273
15 Claims. (Cl. 73—463)



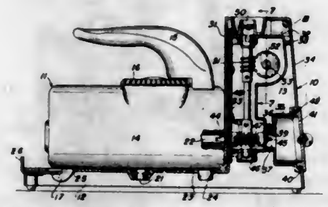
1. Apparatus for analyzing unbalances in a rotating body comprising, means coupled to said rotating body for generating alternating voltage cycles in response to the cyclical occurrence of a predetermined angular position of the rotating body, means in said alternating voltage generating means for adjusting the absolute duration of one alternation of each generated voltage cycle, means connected to the output of said last-mentioned means to receive said alternating voltage cycles for indicating an equal duration condition of both alternations of each said voltage cycle, means operatively connected to said rotating body for developing a voltage proportional to an unbalance force component of the rotating body, and means connected to said alternation duration adjusting means for simultaneously adjusting the magnitude of said unbalance force representing voltage.

2,730,900
LOAD SUPPORTING THERMOSENSITIVE LINKAGE
Arthur C. Rowley, Drexel Hill, Pa., assignor to Globe Automatic Sprinkler Company of Pennsylvania, Philadelphia, Pa., a corporation of Pennsylvania
Application February 10, 1953, Serial No. 336,055
2 Claims. (Cl. 74—2)



1. A load supporting thermally responsive linkage unit comprising in combination a flexible support member and means for suspending said member from a supporting structure, a rigid lever having an offset end portion relatively short as compared with the remaining body of the lever and pivotally connected to the lower end of said support member, said lever normally assuming a pendant position below the said member, a thermosensitive link attached detachably at one end to the said member at a point above the said pivotal connection of the lever, and means for detachably attaching the other end of said link to the free end of the lever so as to support the said free end in an elevated position wherein the angular juncture between the said offset end portions and the body of the lever forms a load-supporting socket in proximity to the pivotal connection and relatively remote to the said free end of the lever.

2,730,901
FOOD MIXERS
Melvin H. Ripple, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application March 18, 1953, Serial No. 343,121
15 Claims. (Cl. 74—16)



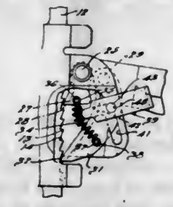
1. A portable power stand for a food mixer comprising; a flat base upon which the stand may be supported; a hollow pedestal extending upwardly from said base at one end thereof; and a gear unit detachably secured within said hollow pedestal; said gear unit including a casing, a first horizontal shaft rotatably mounted within said casing and accessible through the front and rear walls of said pedestal, a vertical shaft rotatably mounted within said casing, said vertical shaft being geared to said first horizontal shaft and its upper end being accessible through the top wall of said pedestal and a second horizontal shaft rotatably mounted in said casing, said second horizontal shaft being geared to said vertical shaft and having one of its ends accessible through one side wall of said pedestal; the ends of said shafts which are accessible through the walls of said pedestal being formed with power take-off connections for detachable driving connection with the drive shafts of power driven appliances.

2,730,902
VIBRATOR
Karl Axel Sam Karlstrom, Gavle, Sweden
Application November 22, 1952, Serial No. 322,019
8 Claims. (Cl. 74—87)



1. A vibrator comprising, in combination, a hollow impulse body having an inner surface of revolution, a pair of spaced-apart bearings in said impulse body, a shaft rotatably mounted in said bearings with said shaft lying in a position parallel with the axis of said inner surface of revolution, and a roll body secured to said shaft between the pair of bearings and having a diameter smaller than the diameter of said surface of revolution, said shaft being flexible to permit the roll body to undergo planetary movement in rolling contact with said surface of revolution.

2,730,903
LIFTING JACK
Walter C. Trautman and Lyle L. Arnes, Racine, Wis., assignors to Walker Manufacturing Company of Wisconsin, Racine, Wis., a corporation of Wisconsin
Application August 5, 1952, Serial No. 302,673
14 Claims. (Cl. 74—141.5)

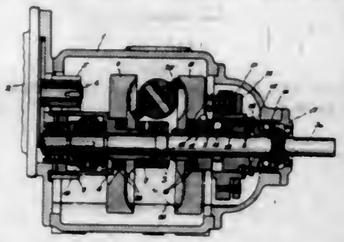


1. In a lifting jack, the combination of a body member and an actuating member pivoted to the body member, a holding pawl pivoted to one of said members, a lifting pawl pivoted to said actuating member, a single coil helical spring forming a permanent link between said pawls and energizing operating movement of the pawls toward and away from each other, a fixed pivotal connection between one end of said spring and said holding pawl, and a fixed pivotal connection between the other end of said spring and said lifting pawl.

2,730,904
CONTINUOUSLY VARIABLE SPEED GEARS
Sven Bernhard Rennerfelt, Goteborg, Sweden
Application July 14, 1952, Serial No. 298,687
4 Claims. (Cl. 74—200)

1. A variable speed gear comprising in combination, a driving and a driven shaft, two coaxial axially displaceable discs having opposed annular concave surfaces, one disc being in driving connection with the driving shaft and the other disc being in driving connection with the driven shaft, intermedate wheels disposed between the discs for cooperation with the annular concave surfaces of the discs for transmitting motion between the discs, each intermediate wheel being rotatable about an axis intersecting the axis of the discs and being adjustable for angularity relatively to the axis of the discs,

and coupling means for establishing the driving connection between one of the discs and the corresponding shaft, said coupling means comprising two sleeve members mounted on the shaft, at least one of the sleeve members being non-rotatably connected with the associated disc and movable on the shaft in both the radial and axial direction thereof, the sleeve members having opposing end cam surfaces and rolling members being interposed between the cam surfaces, the coupling being operative for increasing the pressure exerted by the discs on the intermediate wheels as the torque transmitted increases and vice versa.



2,730,905
PULLEY FRICTION DRIVE
Frederick M. Pence, Whittier, Calif., assignor, by mesne assignments, to Norris-Thermador Corporation, Los Angeles, Calif., a corporation of California
Application August 10, 1953, Serial No. 373,293
1 Claim. (Cl. 74—206)



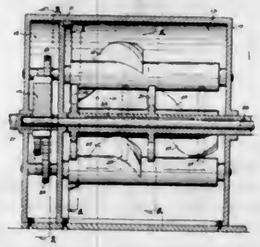
A pulley adapted to be driven by a belt and to frictionally drive a shaft disposed substantially at right angles to the axis of the pulley, comprising: a pair of circular discs secured together face to face, each of said discs being bent outward around its edge to form an oblique flange, said disc flanges forming therebetween the pulley groove for receiving a drive belt, one of said discs being larger in diameter than the other of said discs, the flange on said one disc continuing outward and lying on the surface of a cone, said cone surface being adapted to engage a friction drive wheel on said shaft disposed substantially at right angles to the axis of the pulley.

2,730,906
WHEEL STRUCTURE
Delbert J. Dickerson, Agoura, Calif., assignor to Ardell Mfg. Co., Agoura, Calif., a corporation of California
Application July 28, 1952, Serial No. 301,236
7 Claims. (Cl. 74—230.05)



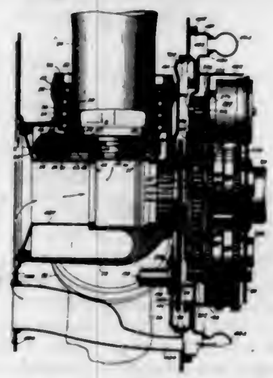
1. A wheel comprising a body adapted to be mounted for rotation about an axis and having a portion of wave-like configuration extending radially of said axis and in a direction circularly thereabout, said wave-like portion of the body being defined by a pair of generally parallel opposite side surfaces which in advancing progressively in one circular direction extend essentially in unison first toward one axial direction then toward the opposite axial direction and then back toward said first axial direction, and said body having radially inwardly of said wave-like portion an essentially annular inner portion of an axial thickness greater than the thickness of said wave-like portion, a part of said inner portion of the body located at one axial side of said wave-like portion forming in cross section essentially a polygon the adjacent sides of which essentially intersect at substantially the points at which said wave-like portion is deflected farthest toward said one axial side.

2,730,907
VARIABLE RATIO TRANSMISSION
Dale F. Marean, West Des Moines, Iowa
Application March 29, 1954, Serial No. 419,545
9 Claims. (Cl. 74—325)



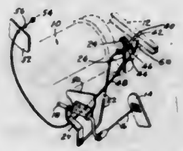
1. In a transmission, a base, a drive shaft rotatably mounted on said base, a toothed elliptical gear eccentrically mounted on said shaft, a plurality of shafts rotatably mounted on said base parallel to and arranged around said first shaft in spaced relationship, a toothed elliptical gear eccentrically mounted on each of said plurality of shafts and in mesh with said first elliptical gear, a driven shaft rotatably mounted on said base, a toothed gear on said driven shaft, and a toothed unit on each of said plurality of shafts capable of engaging said toothed gear only at certain arcs of rotation of said plurality of shafts.

2,730,908
WORM DRIVE MECHANISM
Charles W. Chillson, Caldwell, N. J., assignor to Curtiss-Wright Corporation, a corporation of Delaware
Application November 12, 1952, Serial No. 320,046
3 Claims. (Cl. 74—425)



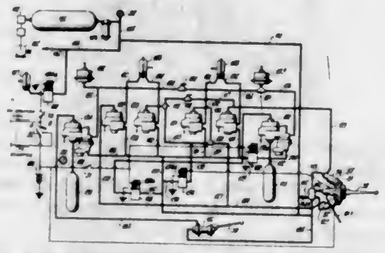
1. In a worm drive mechanism, a support, a shaft swivelly mounted on said support, a worm wheel carried by said shaft, an annular track on each side of said wheel, a worm for said wheel, a housing and journal for said worm, means on each side of said housing for engaging said tracks to maintain said worm in proper meshing relationship with said wheel, said means being coextensive in length with said housing, means carried by said support for absorbing the axial thrust of said worm, and flexible drive means for said worm including a member journalled in said support.

2,730,909
MANUAL CONTROL FOR AUTOMATIC TRANSMISSIONS
Edward F. Svoboda and Homer H. Lathrop, Burbank, Calif.
Application September 1, 1951, Serial No. 244,828
8 Claims. (Cl. 74—472)



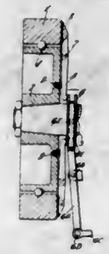
1. In an automatic transmission for automobiles wherein the governor control shaft of said transmission extends beyond the casing thereof and includes an arm and link connection to the throttle of the automobile motor, a manual control for the governor comprising an additional arm adapted to be affixed to the governor control shaft and overlying the first named arm, means for moving both arms together for controlling the governor action, said means including a flexible cable terminating in the dash of the automobile, a control knob at that end of the cable, a slidable connection with the additional arm at the other end of the cable and a lost motion connector interposed between both arms and the throttle control of the automobile motor.

2,730,910
AIR ACTUATED CONTROL SYSTEM
John H. Province, Oklahoma City, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application October 25, 1954, Serial No. 464,391
12 Claims. (Cl. 74—472)



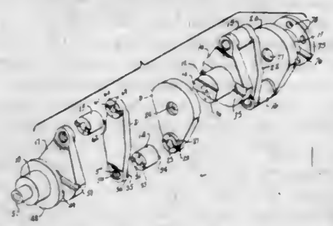
1. In a well servicing unit including a winch drum, an engine, and transmission means including a high speed clutch and a low speed clutch for driving said drum from said engine; a control system comprising, in combination, a source of pneumatic pressure, first pneumatically operated means to engage said high speed clutch, second pneumatically operated means to disengage said high speed clutch, third pneumatically operated means to engage said low speed clutch, fourth pneumatically operated means to disengage said low speed clutch, first valved means to supply pressure from said source to said first and fourth pneumatically operated means, second valved means to supply pressure from said source to said second and third pneumatically operated means, third valved means to supply pressure from said source to said second and fourth pneumatically operated means, pneumatically operated means to regulate the speed of said engine, and fourth valved means to regulate the pressure supplied to said last-mentioned pneumatically operated means thereby to regulate the speed of said engine.

2,730,911
FLYWHEELS
Victor Silberstein, Kensington, London, England
Application March 24, 1952, Serial No. 278,177
Claims priority, application Great Britain March 28, 1951
2 Claims. (Cl. 74—572)



1. In an engine of the character described having a crankshaft and a flywheel therefor, said flywheel comprising a first component flywheel fixed to the crankshaft, a second component flywheel defined by a heavy rim rotatably journalled on the outer annular surface of said first component flywheel and disengageable clutch means operatively connected with said component flywheels for constraining said component flywheels to rotate as a unit.

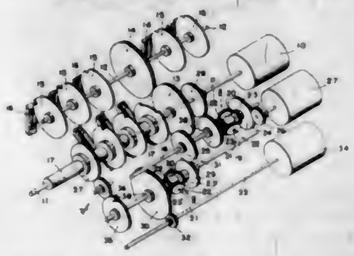
2,730,912
SECTIONAL CRANKSHAFT
Arthur N. Marinelli, Hawthorne, Nev.
Application May 23, 1952, Serial No. 289,526
2 Claims. (Cl. 74—597)



1. A crankshaft comprising main bearing pins disposed one at each end and at least one intermediate the length of the crankshaft, crank bearing pins disposed between each two adjacent main bearing pins, crank cheeks interconnecting said bearing pins and having apertures disposed one near each end of each crank cheek and cylindrical bosses respectively surrounding said apertures at the sides of said crank cheeks at which the corresponding crank bearing pins are connected, each of said bearing pins having a bore extending longitudinally therethrough, bolts extending one through each bearing pin and through the corresponding apertures in the associated crank cheeks securing said bearing pins and crank cheeks together, each of said crank cheek bosses having a groove extending diametrically thereof in the end thereof remote from the corresponding crank cheek and each bearing pin having tongues extending diametrically one across each end thereof and received in corresponding grooves in said crank cheek bosses to maintain said bearing pins against rotation relative to said crank cheeks and lubricant passages in said bearing pins and crank cheeks, said grooves and said tongues being undercut at corresponding sides to predetermine the rotational positions of said crank cheeks

relative to the corresponding bearing pins, and to align the lubricant passages in said bearing pins with corresponding lubricant passages in said crank cheeks.

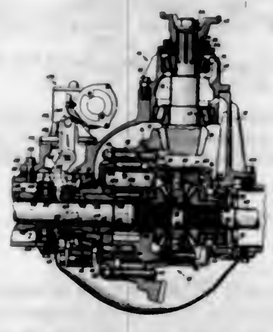
2,730,913
CLOCK MECHANISMS
Isadore Friedman, Newton Center, Mass.
Application December 30, 1949, Serial No. 136,006
3 Claims. (Cl. 74—675)



1. In a sports clock device, a clock hand-actuating shaft, and means for operating said shaft selectively at different speeds, said means comprising a motor and motor shaft, a differential shaft with a differential gear assembly mounted thereon, said assembly comprising sun-gear gear units mounted for free rotation on said differential shaft and planetary gears enmeshed with the sun gears of said units and mounted for translatory movement with said differential shaft, a gear on said motor shaft in meshing engagement with the gear of one of said sun-gear gear units, a second differential shaft with a differential gear assembly mounted thereon, said last-named differential gear assembly comprising sun-gear gear units mounted for free rotation on said second differential shaft and planetary gears enmeshed with the sun gears of said last-named units and mounted for translatory movement with said second differential shaft, a gear on said first-named differential shaft in meshing engagement with the gear of one of said last-named sun-gear gear units, means for severally locking each of the other sun-gear gear units of said differential gear assemblies, and means for transmitting rotational movement of said second differential shaft to said clock hand-actuating shaft each said locking means comprising a motor, a motor shaft and a gear on said motor shaft, said gear being in meshing engagement with the gear of sun gear-gear unit being locked, whereby said locking means motors also constitute driving means for said differential shafts so that by operating the first-named motor alone said clock hand-actuating shaft is driven at one speed, while when operating the first-named motor simultaneously with a selected one of the other motors said clock hand-actuating shaft may be driven at another speed.

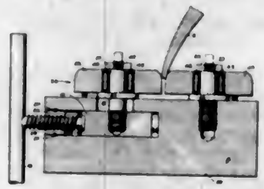
2,730,914
MULTI-SPEED PLANETARY VEHICLE DRIVE MECHANISM
Walter F. Rockwell, Detroit, Mich., assignor to The Rockwell Spring and Axle Company, Coraopolis, Pa., a corporation of Pennsylvania
Application December 17, 1953, Serial No. 398,770
7 Claims. (Cl. 74—695)

1. A multi-speed drive axle comprising, a housing, a planetary gear casing rotatably mounted in said housing; a ring gear fixedly secured to said casing and rotatable therewith; a carrier for a differential drive mechanism rotatably mounted in said casing, a plurality of planetary gears rotatably supported by said carrier in constant mesh with said ring gear; input means operatively connected to said ring gear for imparting driving torque thereto; a sun gear rotatably mounted in said casing in constant mesh with said planetary gears; axially extending inclined end surface clutch teeth integrally formed on one end of said casing; a sleeve fixedly mounted in said housing in spaced axial alignment with said sun gear; a pair of elements non-rotatably mounted for limited axial movement of at least one of said elements on said sleeve; axially facing inclined end surface brake teeth on said one element in spaced relation to said clutch teeth; a clutch and brake collar mounted for rotation with said sun gear selectively axially displaceable relative to said sun gear into alterna-



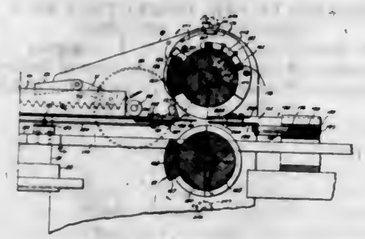
tive engagement with said clutch and brake teeth and having axially facing inclined end surface teeth on opposite sides adapted to ratchet past said clutch and brake teeth in one direction of rotation prior to meshing therewith to define different speed ratios between said input means and differential mechanism; and resilient means operatively interposed between said elements permitting limited axial movement of said brake teeth during said ratcheting until said collar and teeth are meshed.

2,730,915
DISK SHARPENER
Alan C. McElwain, Mullinville, and Donald F. Link, Wichita, Kans.
Application April 20, 1953, Serial No. 349,739
5 Claims. (Cl. 76—89.2)



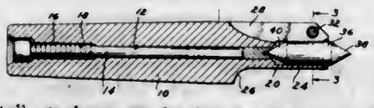
1. Apparatus for sharpening the disks of a disk tiller, which comprises, in combination, a rigid carriage bar, a first idle swaging roller which is roller-bearing and removably mounted on a first axle which is threadedly secured to said carriage bar on one end portion thereof, a second idle swaging roller which is roller-bearing and removably mounted on a second axle, a mounting member slidably mounted in the other end portion of said carriage bar, said second axle extending through an opening into said last-named end portion of said carriage bar and being threadedly secured to said mounting member, said rollers being convex on their outer edges, right angular on their inner edges and co-planarly mounted on said carriage bar, an adjusting screw threadedly mounted in said last-named end portion of said carriage bar, attached to said slidable mounting member and adapted upon turning to vary the distance between said rollers, a frame adapted to receive and hold said carriage bar, a base member, and a lever member pivotally attached to said base member and having a handle portion on its upper end portion, said lever member adapted to adjustably mount said frame with said rollers on said carriage bar in operative position.

2,730,916
DIE ROLLING MACHINE
Jacob Gavurin, Brooklyn, N. Y.
Original application May 25, 1949, Serial No. 95,309, now Patent No. 2,603,854, dated July 22, 1952. Divided and this application July 21, 1952, Serial No. 300,027
4 Claims. (Cl. 80—2)



1. A roller forging machine comprising a frame, a die assembly comprising plural roller die elements journalled in the frame, means for feeding stock to the die assembly comprising a conveyor, the roller die elements having complemental matrix grooves for forming the blanks, one of such die elements being provided with side walls which limit lateral flow of the metal, the surface of such die element having arcuate recesses inside said side walls so as to give extra thickness to the opposed longitudinal edges of the flash, the other die element having recesses to receive said side walls during rotation, a longitudinally movable assembly provided with fingers to receive the blank as it emerges from the dies and guide the same.

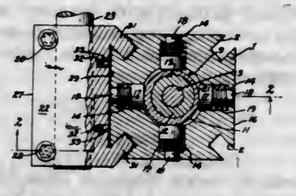
2,730,917
LATHE CENTER
Leo A. Obloy, Detroit, Mich.
Application April 28, 1954, Serial No. 426,063
2 Claims. (Cl. 82—33)



1. A tail stock center having a solid tapered body having a central bore enlarged at one end to receive an insert and tapped at the other end to receive an adjustment screw, a locator pin in said bore centrally of said body projectable into said enlarged bore at said one end of said body, said pin having a recess adjacent said last-named bore, an insert in said last-named bore of a relatively hard material, such as tungsten carbide, having one end receivable in the recess of said locator pin and the other end projectable from said body to serve as a tail stock center, said body being shaped at the forward end to have a side recess with a chordal base extending from said one end of said body to a point well back of said enlarged bore, the base of said recess being relatively close to said bore to provide an extremely thin wall between said recess and said bore, said body on the other side of said bore being axially slotted to a degree that said slot intersects said insert bore, and means for clamping together the portions of said body on opposite sides of said slot to lock an insert in said enlarged bore.

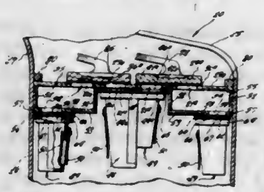
2,730,918
TOOL POST AND TOOL HOLDER
Nathan D. Daugusta, San Francisco, Calif.
Application April 4, 1951, Serial No. 219,234
5 Claims. (Cl. 82—36)

1. In a tool post and tool holder combination adapted to be mounted by a substantially stationary tool-post-mounting on a machine feed carriage, a tool post rotatably adjustable about said stationary tool-post-mounting, an aligning face on the tool post, a channel formed along each vertical edge of said aligning face, said channels converging generally toward one another cross-sectionally of said tool post, a tool holder adapted to hold a tool; a side of said tool holder facing said aligning face, cross-sectionally converging spaced retaining flanges extended from said tool holder side and slidably fitting into said channels respectively; an actuating cam rotatably mounted in said tool post; plunger means reciprocably mounted



in said tool post and extending substantially at right angles to and through said aligning face between said cam and said tool holder side so as to be movable by said cam against said tool holder side for forcing said tool holder away from said aligning face and forcing said converging flanges against the respective converging channels, said plunger means being substantially equally spaced between said channels to transmit substantially equal pressure to each of said flanges in the respective channels.

2,730,919
RESONANCE AUGMENTING MEANS FOR ACCORDIONS
Amedeo Iorio, Flushing, N. Y.
Application July 3, 1953, Serial No. 365,913
1 Claim. (Cl. 84—376)



In an accordion having a panel having a plurality of laterally spaced rows of openings adapted to be opened and closed by a keyboard and a draw reed and a blow reed disposed below each of said openings, that improvement which comprises a separate resonance chamber disposed below each of the openings in the two rows closest and farthest from the keyboard and between each such opening in the outer rows and the draw and blow reeds associated with each such opening in the outer rows, a pair of resonance chamber housings extending substantially the length of the rows of panel openings closest and farthest from the keyboard therebelow, each of said resonance chamber housings including a bottom wall having longitudinally spaced openings corresponding to and displaced vertically from the panel openings, and partitions within each of resonance chamber housings on each side of each of said bottom wall openings, said resonance chambers comprising the spaces intermediate the partitions, and track means provided on the undersurface of each of the bottom walls below said bottom wall openings, said track means having longitudinally spaced openings aligned vertically with said bottom wall openings, an elongated slide intermediate said bottom wall and said track means, said slide having openings adapted to be aligned vertically with said bottom wall openings and reed means below each of said slides and track means, comprising an elongated chamber secured to the undersurface of each of said resonance chamber bottom walls below said slide and track means, said longitudinally ex-

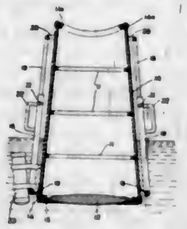
tending chamber having pairs of vertical openings longitudinally spaced from each other, each pair of said vertical openings being disposed in lateral alignment with one of said bottom wall openings, and a reed secured to the inside of said chamber over one of said pair of openings and a second reed secured to the outside of said chamber over the other of said pair of vertical openings, four rows of said panel openings being provided, track means below each of the innermost two rows of panel openings, slides within each of said track means, said track means having openings aligned vertically with the panel openings, each of said slides having openings adapted to be aligned with said panel openings, and reed means below each of said slides and track means.

2,730,920
MUSICAL WHISTLE
John H. Bacon, Wellesley Hills, Mass.
Application February 8, 1955, Serial No. 486,815
20 Claims. (Cl. 84—380)



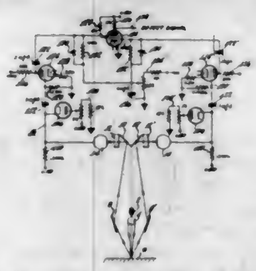
1. A bird call whistle of the type described comprising an air conduit terminating in a constricted opening, a resonant tube with one open end, said end having a knife edge aligned with said constricted opening to deflect air passing through said opening, a slidable elongated member having a hole formed therein positioned between said opening and said edge and extending longitudinally of and into said resonant tube, and means for selectively positioning the hole in and out of alignment with said edge and opening whereby the flow of air may be selectively deflected from the knife edge.

2,730,921
UNDERWATER VIEWING DEVICE
Howard W. Little, near Canton, Ohio
Application March 11, 1953, Serial No. 341,807
3 Claims. (Cl. 88—1)



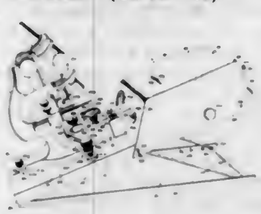
1. An underwater viewing device comprising a collapsible flexible tube, a glass in the lower end of the tube, means providing a watertight seal between the glass and the tube, transversely disposed rings secured to the inner walls of the tube at spaced intervals for extending the flexible tube circumferentially at spaced points throughout its length, transversely disposed rings on the exterior of the tube at opposite ends thereof, spaced eyes on the exterior rings at each end of the tube, and spring loaded telescoping members having angular fingers at opposite ends for detachable engagement with said eyes for extending the flexible tube longitudinally.

2,730,922
PHOTOELECTRIC INSPECTION BY A COINCIDENT METHOD
Arthur D. Beard, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application October 12, 1951, Serial No. 251,089
6 Claims. (Cl. 88—14)



3. Apparatus for inspecting a surface comprising means for directing a beam of energy to said surface whereby said beam is reflected in a specular reflection path and in diffuse reflection paths, a plurality of means located at a plurality of spaced apart points respectively for picking up part of said energy reflected from said surface, each of said pick-up means being positioned normal to different ones of said diffuse reflection paths whereby only diffuse reflection is received at all of said pick-up means simultaneously, means for limiting the energy picked up from the specular reflections, and means for discriminating the simultaneously diffusely reflected light from the light reflected in a specular path.

2,730,923
UNITARY MICROSCOPE-SUPPORT AND LAMP
George Gorham, New York, and Andres Ferrari, Jr., Uniondale, N. Y., assignors, by mesne assignments, to Scopicon, Inc., Chauncey, N. Y., a corporation of New York
Application August 9, 1949, Serial No. 109,346
2 Claims. (Cl. 88—40)



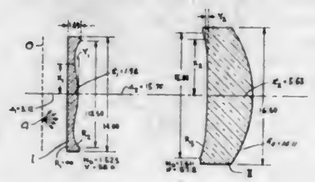
1. A unitary microscope-support and lamp, comprising a base support having a forward part on which to mount and support the microscope base and a rear part on which the lamp for the microscope is bodily mounted, means carried by said forward part of the base support for reflecting light from the lamp upwardly through the optical system of the microscope when the latter is positioned on said base, means on said forward part of the base support for releasably securing the microscope in position in relation to said light-reflecting means, and a light-diverging lens mounted for movement about an axis parallel to the optical axis of the microscope and in a plane between said reflector and the stage of the microscope from a retracted position out of the path of light from said reflector to the microscope to an operative position in the path of the light from said reflector to the microscope.

2,730,924
OPHTHALMIC MOUNTINGS
Armand De Angelis, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Application August 8, 1950, Serial No. 178,280
2 Claims. (Cl. 88—41)



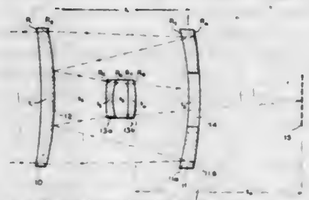
1. A lens supporting structure for use with ophthalmic lenses each having their portion of greatest width located above the geometrical center thereof and with the major part of their edge contour above said portion of greatest width arched upwardly along a relatively long and shallow curvature and blending into side edge contours of relatively short radii of curvature on opposed sides thereof to adjacent the termini of said portion of the lenses of greatest width and which in turn then blend into downwardly and inwardly converging nasal and temporal side edge contours, said supporting structure comprising a pair of rim members formed of resilient metallic material and each embodying an intermediate portion of relatively shallow curvature to follow substantially the upper edge portion of the respective lenses when assembled therewith and terminating in downwardly converging nasal and temporal depending portions blending therewith along arcs of relatively short radii of curvature to follow the adjacent side edge contours of the lenses throughout the length of said depending portions when assembled with said lenses, said rim members each having an inwardly disposed channel extending throughout the length thereof for receiving the respective edge portions of the lenses, a bridge of metallic material connecting said rim members at points above the mentioned termini on the nasal sides thereof, and outwardly extending long and slender adjustable temple supports on the temporal sides of said rim members above said termini to which temples may be pivotally connected, said depending nasal and temporal portions of the channelled rim members having their outer surfaces only covered with stiffening members formed of plastic material and to controlled contour shapes, and with said nasal and temporal depending portions of the rim members extending downwardly below said portion of the respective lenses of greatest width a distance greater than the distance between said upper contour edge portion of the rim members and a line connecting the termini of said portion of greatest width and at angles of convergence equal to at least that of said converging side contours of the lenses, said depending portions of the rim members having relatively long areas of edge contact with the lenses when supported thereby.

2,730,925
TWO COMPONENT EYE LENS SYSTEM
Arthur J. Kavanagh, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Application April 19, 1954, Serial No. 423,980
6 Claims. (Cl. 88—57)



1. An eye lens system for use in compensating the predetermined residual distortion contained in an object field to be viewed through said system and for providing a desired image magnification when the front surface of said system is disposed a preselected fixed distance from said object field, said system being well corrected for spherical aberration and coma, and consisting of a first lens component and a second lens component in axial alignment therewith, said first lens component having front and rear light refracting surfaces spaced a predetermined axial distance apart, one of said refracting surfaces being aspherically curved, said second lens component having front and rear axially aligned light refracting surfaces spaced a predetermined axial distance apart, one of said surfaces of said second component being aspherically curved, said second component being arranged a mean axial distance from said first component and being of such convergence as to approximately provide said desired image magnification for said system, the aspheric curvature of said first component being of such controlled shape in accordance with the refractive index of said first component as to introduce desired compensating amounts of image distortion into the virtual image being formed by said system, and the aspheric curvature of said second component being so controlled in accordance with the refractive index of said second component as to correct said system to an acceptable degree for spherical aberration and coma, whereby good imagery with freedom from objectionable amounts of distortion will be provided by said eye lens system.

2,730,926
CATADIOPTRIC TELEPHOTO OBJECTIVE SYSTEMS
Frank Gerard Back and Herbert Lowen, Glen Cove, N. Y.
Application August 25, 1954, Serial No. 452,136
3 Claims. (Cl. 88—57)

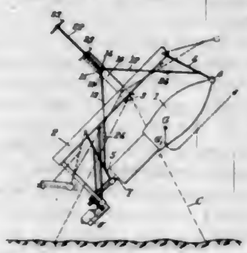


1. In a catadioptric telephoto lens system, a positive, meniscus shaped, positive corrector element concave toward the object space, the center portion of the convex rear-surface thereof adapted to form the secondary mirror of the system, a rear-surface spherical meniscus lens primary mirror positioned behind said corrector plate and said secondary mirror, the front surface of said corrector element having a negative power, said correcting element and said primary mirror forming in combination a substantially corrected positive front component, and a positive lens and a negative lens in spaced axial alignment and of combined negative power forming the negative rear-element of said catadioptric telephoto lens, whereby an image is focused by said lens system at a point behind the rear surface of said primary mirror.

2,730,927
LAUNCHING DEVICES FOR SELF-PROPELLED MISSILES
Louis Marie Eugène Bourquard, Courbevoie, France, assignor to "Societe d'Exploitation des Materials Hispano-Suiza," S. A., Bois-Colombes (Seine), France, a society of France
Application February 21, 1950, Serial No. 145,428
9 Claims. (Cl. 89—1.7)

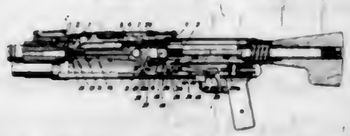
1. A device for launching a rocket missile which comprises, in combination, support means for holding said missile with its axis in the direction of firing, means for

instantaneously retracting said support means from said missile simultaneously for all points of contact between said missile and said support means, whereby said missile



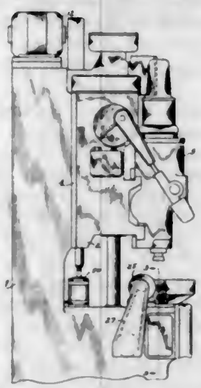
is made to drop freely with its axis parallel to said direction, and means operatively connected with said retracting means for igniting the propelling charge of said rocket missile immediately upon retraction of said support means.

2,730,928
MACHINE GUN
Erik Saetter-Lassen, Gentofte, Denmark
Application November 6, 1952, Serial No. 319,062
Claims priority, application Denmark November 17, 1951
5 Claims. (Cl. 89—190)



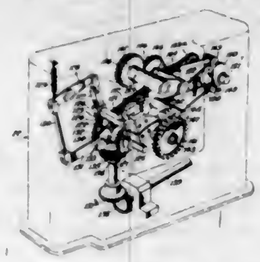
1. A recoil-operated machine gun having a trigger, a receiver having supporting surfaces, a recoiling slidable system and being adapted to be held in its rearmost retracted position and released therefrom by the action of said trigger, comprising a substantially tubular jacket and, slidably mounted in said jacket, a breech-block, a striking bolt and a striking pin longitudinally movable in relation to said breech-block, laterally swingable locking pawls mounted to the rear of the breech-block in said jacket and at their front ends supporting said breech-block and being adapted to be swung from a retracted position inside said jacket to a locking position wherein their rear ends engage the supporting surfaces of said receiver outside said jacket, thus locking said breech-block in its foremost position, said pawls in their retracted position being positioned in the path of said striking bolt, said bolt being rigidly connected to said jacket so that by moving forwards relatively to said breech-block it forces the rear ends of said pawls to their locking position through coinciding apertures having inwardly sloping surfaces at the foremost edges thereof and provided in said jacket, said locking pawls being loosely mounted in said jacket and being rounded at their fore ends so as to fit correspondingly rounded recesses provided in said breech-block and presenting lateral external surfaces cooperating with said inwardly sloping surfaces at the foremost edges of said apertures in the jacket in order to swing said pawls from their locking to their retracted position when said striking bolt with said jacket are retracted relatively to said breech-block, spring-loaded lock-member longitudinally slidably mounted within said jacket, said lock-member being situated to the rear of the locking pawls and spring means for pressing said lock-member forwards towards said pawls, said pawls being provided with parts adapted, when said pawls are in their respective retracted positions, to engage said lock-member, thereby locking the pawls in their retracted position, a trigger-operated release lever having a surface and movably mounted in the receiver and cooperating with the lock-member, said release lever being, by the normal operation of the trigger, brought into an active position, a catch member located in the path of said lock-member so as to catch said lock-member shortly before the termination of the advance of the recoiling system, and thereby preventing the lock-member from participating in the remainder of said advance, said remainder being predeterminedly made large enough to ensure unlocking of the locking-pawls from engagement with said lock-member.

2,730,929
WORK AND CUTTER SPINDLE POSITIONING MECHANISM
Edward W. Miller, Springfield, Vt., assignor to The Fellows Gear Shaper Company, Springfield, Vt., a corporation of Vermont
Application July 9, 1951, Serial No. 235,803
8 Claims. (Cl. 90—7)



1. In a gear shaper, a rotatable cutter spindle, means to reciprocate said cutter spindle, a rotatable work spindle, means to rotate said cutter spindle and work spindle in timed relation so as to suitably form a work piece held on the work spindle, means to disengage the means to rotate said work spindle, means responsive to actuation of said disengaging means to rotate the work spindle in a direction opposite to that given to said work spindle by said rotating means and means responsive to the completion of the cutting cycle to lift said cutter spindle an amount supplementary to that given to it by said reciprocating means.

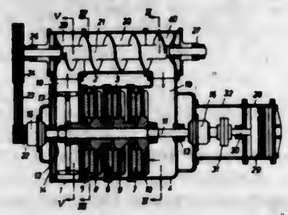
2,730,930
APPARATUS FOR THE REMOVAL OF FLASH FROM A WELDED WIRE JOINT
Eric Holroyd, Speke, Liverpool, and Norman Ashcroft Hurst, Liverpool, England, assignors to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a corporation of New York
Application September 12, 1952, Serial No. 309,213
5 Claims. (Cl. 90—15)



1. Apparatus for removing the flash from a welded wire joint which comprises a pair of gripping jaws in fixed

position, a cam, levers and linkages actuated by said cam to move said jaws together, a second cam acting on said jaws to move said jaws more slowly beyond the movement by said levers and linkages toward gripping position, a pair of trimming wheels each having peripheral cutting teeth and having a circumferential series of recesses in said teeth to receive said wire joint, means to swing said trimming wheels toward each other to engage opposite sides of the flash of the wire joint held in said gripping jaws in the series of recesses in the teeth of opposite trimming wheels and means to drive said trimming wheels to cut said flash from said joint.

2,730,931
MILL FOR FIBROUS SUBSTANCES
Werner Reisten, Aschaffenburg (Main), Germany
Application December 12, 1951, Serial No. 261,317
Claims priority, application Germany December 31, 1948
4 Claims. (Cl. 92—26)



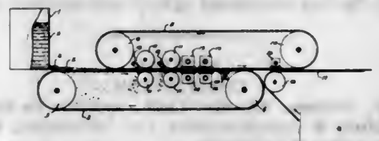
1. A mill for the continuous grinding of fibrous material such as paper pulp, cellulose or wood fibre pulp, comprising a plurality of pairs of discs provided with radial openings, each pair consisting of a stationary and a rotary disc through one after the other of which the pulp can flow in a substantially axial direction from the inlet end portion to the outlet end portion of said mill, said mill being provided with an inlet port for the admission of fresh pulp and an outlet port in said portions, respectively, a conduit directly connecting said outlet end portion to said inlet end portion, said conduit having its entrance intermediate said discs and said outlet port, and a power driven conveying means interiorly of said conduit to cause a larger fraction of the quantities of pulp having passed through said discs to flow from said outlet end portion to said inlet end portion.

2,730,932
APPARATUS FOR INTERVAL FEED AND JET SCREENING OF STOCK
John D. McCrystle, Amherst, Mass., and Edward F. Townsend, Hudson Falls, N. Y., assignors to The Sandy Hill Iron & Brass Works, Hudson Falls, N. Y., a corporation of New York
Application October 4, 1954, Serial No. 460,068
8 Claims. (Cl. 92—30)



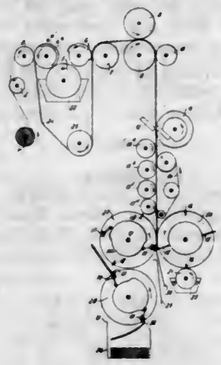
1. Apparatus for interval feed and jet screening of stock comprising in combination, an elongated conduit for locating over a screen vat having screen plates and having a forward end, said conduit being provided with separate stock and water passageways therealong having separate inlets at rear ends thereof, spouts spaced at intervals along and depending from said conduit in communication with said stock passageway and provided at lower ends with stock discharge means and separate water discharge means, connecting means carried by said spouts in communication with said water passageway and said water discharge means.

2,730,933
METHOD AND APPARATUS FOR THE MANUFACTURE OF SHEET MATERIAL FROM SOLID PARTICLES SUSPENDED IN LIQUID MEDIA
William G. Reynolds, Cottondale, Ala.
Application June 4, 1953, Serial No. 359,495
5 Claims. (Cl. 92—38)



1. In the manufacture of paper from a wood pulp-water suspension on a moving foraminous belt, the method of removing the sheet from the belt which comprises superposing a second foraminous belt over the first mentioned belt, moving in the same direction and extending beyond said first mentioned belt in the direction of movement thereof, conveying the paper being formed between said belts whereby it is pressed into the surface irregularities of the belts, subjecting the sheet being formed to an upward blast of air through the lower belt at a point inwardly of the discharge end thereof to loosen the sheet therefrom, subjecting the sheet to a downward blast of air through the upper belt beyond the lower belt and inwardly of the discharge end of said upper belt to remove the sheet therefrom, and conveying the sheet away in a direction parallel to the direction of movement of the belts.

2,730,934
MACHINE FOR MANUFACTURING BAGS
Leonard van der Meulen, Amsterdam, Netherlands
Application January 6, 1953, Serial No. 329,857
Claims priority, application Netherlands January 8, 1952
13 Claims. (Cl. 93—18)



1. In a machine for making bag bodies, the combination of a support for starting material, such as a web, strips and sheets of paper, regenerated cellulose, cellulose acetate and the like foldable material, pasters arranged to apply paste at least to one lateral edge of the material in the direction of its movement, and a transverse folder which doubles the material upon a transverse line at a distance substantially of the breadth of the bag to be made, from the foremost transverse edge of the material, said transverse folder comprising a first roll and a companion second roll, said first roll having clamping means cooperating with a folding blade of said second roll, and folding the material passed with its foremost transverse edge in advance between both rolls, over said transverse line and entraining the material for at least half a revolution of the first roll, the second roll having pasting means applying a transverse strip of paste to the material near the said foremost transverse edge of the material, said first and second roll being

positioned so that the first passing portion of the material is free from contact with said first roll, a third roll acting as companion roll of said first roll, said third roll having clamping means cooperating with a folding blade of said first roll and folding the strip with said foremost edge over and to the material doubled by the action of said first and second rolls, and means for pressing and sealing the last mentioned strip to said doubled material.

2,730,935
COMPACTOR
Earl B. Maloon, Arcadia, Calif., assignor to Southwest Welding & Manufacturing Co., Alhambra, Calif., a corporation of California
Application January 15, 1951, Serial No. 206,005
6 Claims. (Cl. 94—50)



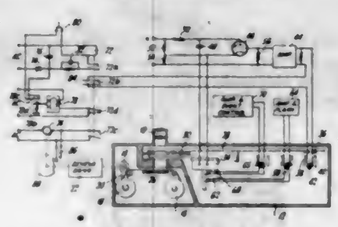
1. In a compactor for rolling and compacting a road or the like, the combination of: a plurality of separate roller units positioned in side-by-side relationship, each of the roller units having walls forming a container to receive weighting material and a single wheel assembly rotatably supporting each container; draft means for towing the roller units from a towing vehicle, said draft means including a plurality of tension straps extending from the forward ends to the rearward ends of said roller unit; a horizontal shaft traversing all of said roller units and secured to the rear ends of said tension straps, and elongated bearings at the rear ends of said roller units journaled on said shaft and restraining said roller units against tipping; a cross-beam comprising a series of flanged spools connected end-to-end, the forward ends of the straps being connected to the flanged spools, and a gooseneck secured upon one of the flanged spools.

2,730,936
IDENTITY RECORDER
Roscoe Fagan and William Meyst, Bakersfield, Calif.
Application October 13, 1952, Serial No. 314,436
1 Claim. (Cl. 95—1.1)



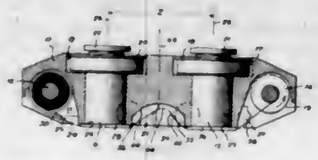
A structure of the character described including, a housing having a transparent top adapted to receive a hand and having finger-guiding elements at the upper side thereof, a vertically disposed lens in the housing spaced below the top, a shutter mechanism cooperatively related to the lens, illuminating means in the housing and adapted to illuminate the top from the lower side thereof, film-handling means in the housing below the lens and adapted to carry film for exposure to light from the lens, and control means cooperatively relating the operation of the shutter mechanism and the film-handling means whereby the film is intermittently advanced and exposed to light from the top, establishing records of the fingers and thumb of the hand on the top, the finger-guiding elements including, spaced guide elements projecting from the upper side of the top and adapted to occur between and space the fingers of a hand, and a guide element projecting up from the top and spaced from the said guide elements and adapted to locate the thumb of a hand in a predetermined position relative to the fingers when the fingers are guided by said elements.

2,730,937
CAMERAS
Paul S. Martin, Flushing, and Sidney X. Shore, Roslyn Heights, N. Y.
Application July 9, 1954, Serial No. 442,278
11 Claims. (Cl. 95—11.5)



1. A camera including a lens, a continuously driven wheel having an aperture cyclically alignable with the lens, a movable blade normally closing off the light path provided by the lens and the apertured wheel, an electromagnet having an armature joined to said blade, and a condenser-discharge circuit controlled by said wheel for energizing said electromagnet in advance of the arrival of the wheel aperture at the lens.

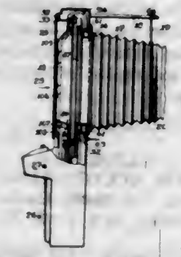
2,730,938
STEREOSCOPIC CAMERA
Albert Goldhammer, Munich, Germany
Application February 18, 1953, Serial No. 337,617
Claims priority, application Germany July 25, 1952
5 Claims. (Cl. 95—18)



1. A stereoscopic camera comprising a body having a pair of laterally spaced exposure passages therethrough, the rear margins of said passages defining picture openings, said body having a well formed between said passages, means for drawing a continuous film across said openings, guide means eccentrically positionable in said well in the direction of film travel to bend said film between said openings into said well into an asymmetric path having a substantially linear branch and an arcuate branch.

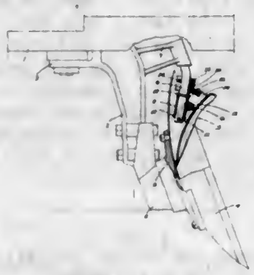
2,730,939
PROCESS CAMERA BACKS
Delbert T. Blatherwick, Chicago, Ill., assignor to Robertson Photo-Mechanix, Inc., a corporation of Illinois
Application September 30, 1954, Serial No. 459,397
7 Claims. (Cl. 95—49)

1. A process camera back having a casing provided with aligned openings in the rear of the camera, said casing extending vertically from said openings, the extended portion of said casing forming storage space for a focusing screen holder and a sensitized material holder, said holders being vertically movable within the casing and the operating positions of said holders being between and in alignment with said openings, guiding means within said casing for one of said holders for guiding it in vertical movement from the storage space in the casing to its operating position with its forward face in the focal plane of the camera, guiding means for the other of said holders for guiding it in vertical movement from the storage space in the casing in a path parallel to and spaced from the path



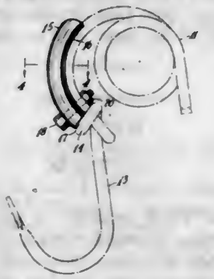
of movement of said first mentioned holder, said second guiding means being formed to carry the second mentioned holder, on approaching its limit of movement, into the vertical path of movement of the first mentioned holder, and to bring the second mentioned holder into operating position with its forward face in the focal plane of the camera.

2,730,940
SCRAPER BLADE FOR REVERSIBLE DISC PLOWS
Edward J. Rimple, Gilroy, Calif., assignor to Be-Ge Manufacturing Co., Gilroy, Calif., a corporation of California
Application July 7, 1953, Serial No. 366,582
6 Claims. (Cl. 97—31)



1. In a reversible disc plow which includes a forwardly facing, concave disc, and a movable standard rotatably supporting the disc from the rear for reversing between right and left hand positions; a scraper blade unit for the disc comprising an element fixed in connection with the standard and depending in spaced relation in front of the top of the disc, a double-ended scraper blade extending adjacent said element, and a mount securing the double-ended scraper blade intermediate its ends on said element for limited turning motion about an upstanding axis and for scraping engagement with the face of the disc; said scraper blade having lower scraping edge portions corresponding to and adapted to matchingly engage the face of the disc on opposite sides thereof, each edge portion of the blade having the same transverse curvature as that of the disc but the centers of curvature of such portions being offset so that when either scraping edge portion is caused, by the dug, up-flowing earth impinging on and turning the blade, to engage with the face of the disc on the corresponding side, the other scraping edge portion is spaced from the face of the disc on the opposite side thereof; the blade, at adjacent ends of said scraping edge portions, remaining at all times substantially in contact with the face of the disc.

2,730,941
LOCK AND WEAR PLATE ASSEMBLY FOR TILLERS
Alex Glebovich, Indiana, Pa.
Application May 7, 1953, Serial No. 353,489
4 Claims. (Cl. 97—216)



1. A lock and wear plate assembly for tine holders of rotary pulverizers having a loop through which a tine passes, comprising a curved member having the contour of the tine holder, an inwardly projecting rib on the inner surface of the curved member adapted to be seated in the loop behind the tine, a shoulder on one end of the curved member adapted to abut the tine for preventing movement of the tine in said loop and means on said curved member for detachably connecting said member to the tine holder.

2,730,942
COMBINATION LUMINOUS CEILING AND AIR CONDITIONING SYSTEM
Carl M. F. Peterson, Arlington, Mass., assignor, by mesne assignments, to The Wakefield Company, Vermilion, Ohio, a corporation of Ohio
Application June 29, 1951, Serial No. 234,250
3 Claims. (Cl. 98—40)



1. In a room space having a ceiling, the combination of a subceiling structure spaced beneath the room ceiling and comprising alternate series of relatively wide transversely corrugated panels, and relatively narrow elongated panel support members upon which opposite corrugated marginal edges of said panels laterally rest, said members being of inverted generally T-shaped cross-section providing upwardly extending webs and opposite lateral flanges respectively disposed between and underlying the marginal edges of successive panels, said webs being formed with laterally offset portions which serve to space the corrugated edges of successive panels from each other and from the webs therebetween to thus form with the corrugated marginal edges paired series of air flow passages longitudinally along said panel support members, and means for creating an air pressure differential between the spaces above and below said subceiling structure for thereby inducing flow of air through said paired series of passages.

2,730,943
FREEZE-PROOF VENT DAMPER
Robert B. Klein, Minneapolis, Minn.
Application March 16, 1953, Serial No. 342,399
6 Claims. (Cl. 98—119)

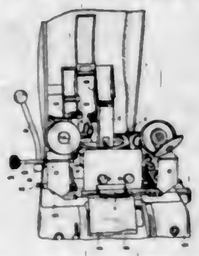
1. A freeze-proof vent for a laundry drier having a horizontal conduit member communicating with the at-

mosphere at its outer end for exhaust of moisture laden air, a flap valve member pivotally mounted adjacent the outer end of said conduit member for free swinging movement to contact the peripheral edge of said end to close said outer end, one of said members being formed to provide a passageway between itself and the other member to provide a vent from said conduit member adjacent the peripheral edge of the outer end of said conduit member



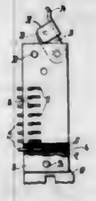
when said flap valve member is in its closed position thereby permitting constant venting of air in the conduit member through the vent, warm air from the laundry drier carrier through said conduit member melting any ice holding said flap valve member in closed position and thus allowing the flap valve member to be swingably moved away from the end of the conduit to allow a greater volume of warm air to be discharged to the atmosphere.

2,730,944
PRINTING MACHINE
Ulysse Schuster, Ixelles, Belgium
Application February 2, 1953, Serial No. 334,421
Claims priority, application Belgium February 8, 1952
7 Claims. (Cl. 101—68)



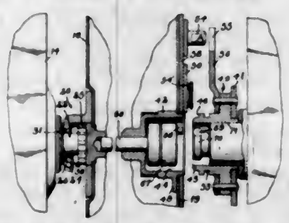
1. A machine for simultaneously printing inscriptions on individual rigid documents and abridged inscriptions thereof on a reference strip which remains in the machine, comprising a magazine for said individual rigid documents, a reciprocating pusher for pushing sequentially said documents from said magazine into printing position, means for reciprocating said pusher, a first fixed impression support for said documents at said printing position, a second fixed impression support for said reference strip at its printing position located at the side of said first support opposite said magazine, means for advancing said reference strip a predetermined distance after each impression, an impression head mounted for movement towards and away from said fixed impression supports for simultaneous application against said document and said reference strip when on their respective impression supports, means for operating said impression head, a detachable typing unit mounted upon said impression head with the part corresponding to the printing of the abridged inscriptions on the reference strip and the part corresponding to the printing of the other inscriptions on the individual documents placed one before the other, an inking ribbon interposed between each individual rigid document in printing position and said typing unit, a second inking ribbon located between said reference strip in printing position and said typing unit, means for moving said inking ribbons at right angles to the movement of said individual rigid documents from said magazine, a second strip, means for pushing said second strip from the machine in the same direction as said individual rigid documents are pushed from said magazine, idler rollers located on each side of said reference strip over which said second inking ribbon is wound to provide between said reference strip and said typing unit in printing position a plurality of strands to receive between them said second strip to permit the simultaneous printing of said abridged text on said second strip and on said reference strip, a reciprocating carriage for ejecting the printed individual documents from the machine in a direction at right angles to their movement from said magazine and means for reciprocating said carriage intermediate the movements of said typing unit and said pusher.

2,730,945
TYPE BAR FOR ACCOUNTING MACHINE
Walter A. Anderson, Trumbull, Conn., assignor to Underwood Corporation, New York, N. Y., a corporation of Delaware
Application December 8, 1953, Serial No. 396,902
3 Claims. (Cl. 101—109)



1. For use in an accounting or like machine, a type bar comprising a main body portion, means on said main body portion providing a housing, a plurality of spring urged devices mounted in said housing, elongated slots in said housing, means on said devices extending through said slots and outwardly from said housing, a magazine slidably carrying a plurality of type, an opening in said magazine aligned with each of said type and notches in each of said type aligned with said openings, manually manipulatable means connecting said magazine to said main body portion with the elongated slots in said housing aligned with the openings in said magazine and with the notches in said type, and the means on said devices extending through the openings in said magazine and engaged with the notches in said type.

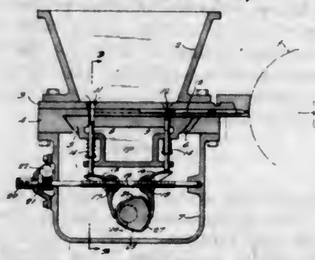
2,730,946
CYLINDER DEMOUNTING MECHANISM FOR DUPLICATORS
Edgar H. Du Bois, Chicago, George J. Zahradnik, North Riverside, and Kenneth J. Tonkin, Berwyn, Ill., assignors to A. B. Dick Company, a corporation of Illinois
Application July 8, 1954, Serial No. 442,124
8 Claims. (Cl. 101—216)



1. In a duplicating machine or the like, the combination comprising a cylinder, a drive trunnion for rotatably supporting one end of said cylinder means rotatably supporting said trunnion, said trunnion having a stem thereon terminating in a noncircular head rigid with said trunnion and of enlarged cross section relative to said stem, a hollow coupling member rigidly mounted on said cylinder, said coupling member having side wall means extending longitudinally from said cylinder and end wall

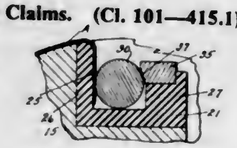
means spaced from the end of said cylinder, said end wall means having a noncircular opening therein of a shape corresponding to that of said head for closely receiving said head to establish a driving relation between said head and said coupling member, said coupling member having a generally longitudinal slot therein for receiving said trunnion, said slot having a relatively wide portion extending through said side wall means for receiving said head and a relatively narrow portion extending through said end wall means for receiving said stem while retaining said head in said opening, said cylinder being detachable from said trunnion by moving said cylinder axially toward said trunnion to position said head in said hollow coupling member and moving said cylinder laterally to withdraw said coupling member from said trunnion.

2,730,947
INKING MECHANISM FOR PRINTING MACHINES
William F. Davis, Windsor, N. J., assignor to R. Hoe & Co., Inc., New York, N. Y., a corporation of New York
Application May 31, 1952, Serial No. 290,929
8 Claims. (Cl. 101—366)



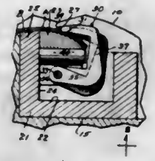
1. In an inking mechaism for printing machines, and in combination, an ink reservoir, two aligned series of ink pumps, an aligned series of conduits for supplying ink from the reservoir to an ink drum, means for moving both series of ink pumps transversely of the conduits and in the direction of alignment of the ink pumps between two predetermined positions, means establishing connection between one of said series of pumps and the ink reservoir and between the other of the said series of pumps and the conduits in one of said predetermined positions, and means similarly establishing connection between the first mentioned series of pumps and the conduits and between the second mentioned series of pumps and the ink reservoir in the other of the said predetermined positions, and a cam drive mechanism for the said pumps operable to produce a suction stroke of the said pumps when in communication with the reservoir and a discharge stroke of the said pumps when in communication with the conduits.

2,730,948
CLAMP FOR MASTER SHEETS OF PRINTING MACHINES
Lester F. Mitchell, Shaker Heights, Ohio, assignor to Addressograph-Multigraph Corporation, Cleveland, Ohio, a corporation of Delaware
Original application January 22, 1952, Serial No. 267,530. Divided and this application November 12, 1952, Serial No. 319,898
8 Claims. (Cl. 101—415.1)



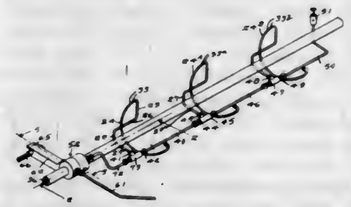
1. A clamping device for securing a thin flexible master sheet on the periphery of a printing machine drum, an axially extending recess formed in its peripheral surface, said device comprising an anvil formed of non-magnetic material mounted in the recess, a sheet clamping member comprising a permanent magnet mounted for movement to and from the anvil to permit a sheet to be inserted therebetween, and guide means formed of a magnetic material to attract and to guide said magnet into wedging engagement with a sheet positioned on the anvil consequent upon tensioning of said sheet.

2,730,949
CLAMP FOR MASTER SHEETS OF PRINTING MACHINE
Lester F. Mitchell, Shaker Heights, Ohio, assignor to Addressograph-Multigraph Corporation, Cleveland, Ohio, a corporation of Delaware
Application July 30, 1954, Serial No. 446,885
9 Claims. (Cl. 101—415.1)



1. A clamping device for securing a thin flexible printing plate on the periphery of a printing machine cylinder having an axially extending recess formed in its peripheral surface, said device comprising a support mounted in said recess and made of a non-magnetic material, said support having a surface on which one end of a printing plate may be positioned, a plate clamping member mounted in said recess for movement to and from wedging engagement with said surface whereby a printing plate positioned thereon may be wedgingly held in position on said surface by said clamping member, a second member carried by said support and coacting with said first named member to constantly tend to yieldingly move said clamping member toward a wedging position, one of said members being a permanent magnet, the other of said members being formed of a material magnetically attractable relative to the magnet and wherein said members are positioned relative to each other and to said surface to cause the force of the magnetic attraction to increase as the clamping member moves toward wedging position and to decrease as the clamping member moves from wedging position.

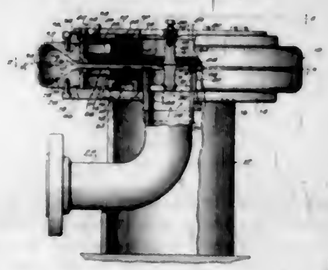
2,730,950
AIR PRESSURE SYSTEM FOR THE SKELETON WHEELS OF AN OFF-SET PRINTING PRESS
Leon J. Grassi, Bronx, N. Y.
Application July 26, 1954, Serial No. 445,772
8 Claims. (Cl. 101—420)



1. A skeleton wheel for an off-set printing press comprising a substantially flat arcuately shaped disc having a centrally positioned opening formed therein, said disc having a peripheral groove formed therein communicating at one of its ends with a groove extending along one of the sides defining the arc, an elongated substantially hol-

low cylindrical tube disposed in said peripheral groove and having a portion thereof extending into said groove formed in said side, said portion of said tube having an end section projecting laterally with respect to a side of said disc and connected with a source of air under pressure, the other end of said tubular member being closed, means for securing said tubular member in said grooves, and a plurality of spaced air outlet ports extending transversely through the wall of that part of the tubular member disposed in said peripheral groove.

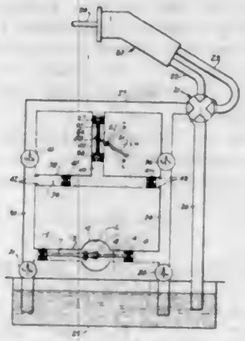
2,730,951
ELECTROMAGNETIC CENTRIFUGAL PUMP
Khatchik O. Donelian, Jackson Heights, and John R. Menke, Riverdale, N. Y., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application January 20, 1950, Serial No. 139,604
2 Claims. (Cl. 103—1)



1. An electromagnetic pump for electrically conductive fluids comprising a pair of spaced substantially parallel walls forming a flat partitionless chamber, an inlet in a wall disposed substantially centrally thereof, an enlarged annular chamber surrounding and communicating with the first chamber and having an outlet in the plane of the first chamber, and electromagnetic means for creating a magnetic field rotating about said inlet and across the first chamber in a direction parallel with the axis of the annular chamber, said means including an annular laminated core coaxial with the inlet, said core being on one side of the first chamber and abutting one of said walls, radial slots extending throughout one end of the core, windings in the slots, and an annular laminated armature abutting the other wall and disposed on the side of the chamber opposite the core.

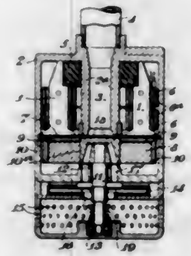
2,730,952
VARIABLE CAPACITY PUMP
Edwin J. Whiffen, Rye, N. Y.
Application September 9, 1953, Serial No. 379,219
2 Claims. (Cl. 103—37)

1. In a pumping assembly for a variable speed hydraulic transmission, a fluid conduit system including first and second conduits, a header extending between one end of said conduits, a sump into which the other ends of the conduits extend, third and fourth conduits respectively connected between the first and second conduits at locations inward from the opposite ends of the first and second conduits, and a fifth conduit connected between intermediate portions of the header and third conduit; first and second check valves in the first and second conduits respectively, between the sump and fourth conduit; third and fourth check valves in the first and second conduits respectively, between the header and the third conduit, all of said valves being arranged to permit flow from the sump to the header; reciprocating pump means working in the fourth conduit to draw fluid from the sump through the first and second conduits alternately, past the several check valves toward the header; free floating reciprocating pistons spaced apart in the third conduit at opposite sides of the fifth conduit, said pistons being reciprocable responsive to reciprocation of said pump means; a normally stationary piston in the fifth conduit; hydraulic fluid filling the space in the third



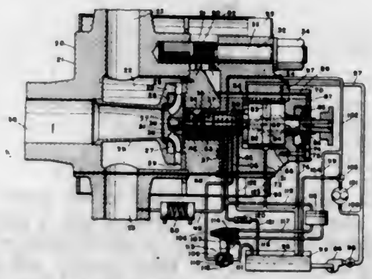
conduit between the free floating pistons and the space in the fifth conduit communicating with said third conduit space; and means for adjusting the position of the last named piston to adjust the spacing between the free floating pistons, whereby to selectively vary the discharge of said pump means.

2,730,953
ELECTRIC INDUCTION MOTOR-PUMP
Nicoló Pensabene, Orpington, England
Application January 21, 1952, Serial No. 267,330
Claims priority, application Great Britain June 6, 1951
1 Claim. (Cl. 103—87)



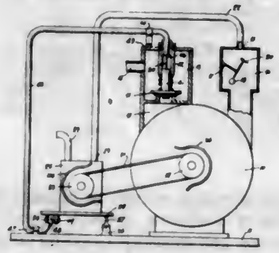
An electric induction motor and pump assembly, comprising a casing having a cylindrical outer wall and an end wall; a fluid delivery conduit extending through said end wall coaxially with said casing and projecting inwardly of said casing to thereby define an annular pocket between said conduit and outer wall, a stator having a plurality of laminated stator teeth arranged in a ring to said pocket with their axes parallel to the axis of said casing, said teeth being provided with pole faces; a rotor located adjacent said pole faces; a rotary impeller coaxial with said rotor; a wall supported within said casing between said rotor and impeller, a rotatable shaft carrying said rotor and impeller and extending through said wall; a journal bearing carried by said wall and supporting said shaft at a point between said rotor and impeller, there being pump fluid outlet passages through said wall around said bearing, and said rotor also being formed with passages allowing communication of said pump fluid outlet passages with said fluid delivery conduit through said rotor; and a water-tight annular diaphragm interposed between said stator magnets and said rotor, said diaphragm being effective for closing said annular pocket against ingress of water.

2,730,954
SEALING DEVICE FOR PUMPS
Hanns Hornschuch, Easton, Pa., assignor to Ingersoll-Rand Company, New York, N. Y., a corporation of New Jersey
Application July 7, 1954, Serial No. 441,775
5 Claims. (Cl. 103—111)



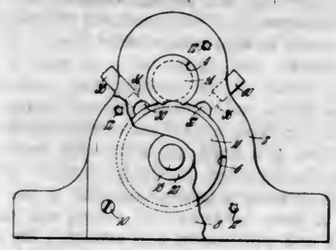
1. In a sealing device for pumps pumping liquids at high pressure, the combination of a casing having an impeller chamber and a bore opening into the chamber, an impeller rotatable in the impeller chamber, a shaft rotatable in the bore and supporting the impeller, a bearing in the bore supporting the shaft, a sealing chamber in the bore between the bearing and the impeller chamber, means in the casing connected to supply sealing liquid under pump discharge pressure to the sealing chamber, sealing means disposed in the sealing chamber and subjected to the pressure of the sealing liquid for controlling the flow of such liquid toward the bearing, a drain chamber positioned in the bore between the sealing chamber and the bearing to intercept sealing liquid leaking past the sealing means toward the bearing, means in the casing connected to supply lubricating oil under pressure to the bearing, and means positioned in the bore to control the leakage of such oil to the drain chamber.

2,730,955
PUMP DRIVE CONTROL
Barnett Share, Jamaica Estates, N. Y.
Application September 10, 1952, Serial No. 308,857
8 Claims. (Cl. 103—113)



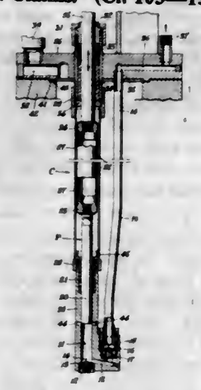
1. A pump drive control comprising, in combination, a main pump for displacing liquid, and having an outlet for liquid under pressure and a liquid inlet; a priming pump having a priming connection to said main pump; a valve normally biased to close said outlet and having a stem on its outer face slidable in a guide, said valve being operable, upon attainment of a preset outlet pressure of said main pump, to open and move said stem through said guide; a tension driving means interconnecting said pumps for driving said priming pump from said main pump; means mounting said priming pump for movement relative to said main pump; gravity influenced means biasing said priming pump away from said main pump to maintain driving tension on said driving means; and mechanism, establishing an operative connection between said valve stem and said pump mounting means, operable, upon attainment of a pre-set outlet pressure of said main pump, to move said priming pump toward said main pump to remove the driving tension from said driving means.

2,730,956
FLUID PUMP OR MOTOR
Eugene F. Prondecki, Turner Falls, Mass.
Application September 21, 1954, Serial No. 457,440
1 Claim. (Cl. 103—125)



Apparatus of the class described comprising in combination, a housing provided with elongated parallel primary and secondary bores having adjacent intersecting sides providing a connecting slot therebetween, end plates secured to the housing closing opposite ends of said bores, a primary cylinder journalled in the wall of the primary bore, a secondary cylinder in the secondary bore having shafts at its opposite ends journalled in said end plates, said housing provided with elongated channels in communication with and along the secondary bore at opposite sides of said slot and inlet and outlet passageways in communication with said channels, said secondary cylinder provided with circumferentially spaced outwardly extending ribs, adjacent ribs relatively diverging from one to the other end of the cylinder, adjacent ends of adjacent ribs at opposite ends of the cylinder being interconnected whereby said ribs form a continuous rib extending back and forth between the ends of the cylinder and therearound and the periphery of the primary cylinder provided with circumferentially spaced grooves extending from end to end thereof, adjacent grooves relatively converging from one to the other end of said primary cylinder and arranged to receive the rib of the secondary cylinder for simultaneous relative rotation of said cylinders.

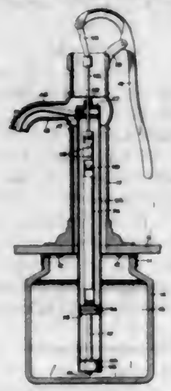
2,730,957
APPARATUS FOR PUMPING A VOLATILE LIQUID
Peter M. Riede, Kenmore, N. Y., assignor, by mesne assignments, to Union Carbide and Carbon Corporation, a corporation of New York
Application April 16, 1949, Serial No. 87,863
11 Claims. (Cl. 103—153)



4. Apparatus for pumping a liquefied gas having a boiling point below 233° K. comprising an elongated

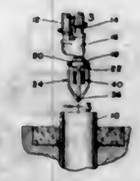
pump body having a pumping chamber therein adjacent one end and an opening at the other end; a reciprocable pumping element extending through said opening in the pump body and having an inner pumping end portion operable in said pumping chamber; a valve-controlled inlet near the end of the pumping chamber opposite said opening; a valve-controlled outlet passage from the pumping chamber for liquid discharge; warm end packing means for the portion of the pumping element passing through said opening, said packing means being spaced a substantial distance from said pumping chamber; a flow restricting sleeve in said pump body closely fitting said pumping element, said sleeve being at least as long as the working stroke of the plunger, the contacting surfaces of said sleeve and pumping element being of different material, one being a hard smooth metal surface and the other being of a solid self-lubricating material compatible with the liquefied gas being pumped; and means having walls defining a passage opening to the pumping element at a point between said sleeve and said warm end packing and constructed and arranged for returning to the inlet valve the portions of pumped liquid which flow between the pumping element and the sleeve from the pumping chamber.

2,730,958
DRIPLESS MEASURING LIQUID DISPENSER
Robert A. Nelson, North Hollywood, Calif.
Application May 24, 1954, Serial No. 431,813
11 Claims. (Cl. 103—178)



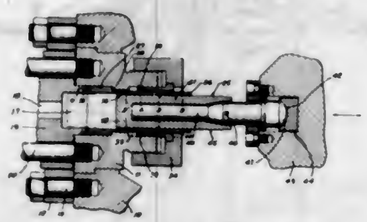
1. A liquid dispenser comprising a cylinder having its lower end in liquid to be dispensed, a pair of pistons in said cylinder, means for lowering and raising one of said pistons with respect to said other piston for permitting the flow of liquid out of said cylinder during the movement of said one piston upwardly, said means including a second hollow liquid conducting cylinder coaxially positioned within said first-mentioned cylinder, said one piston being connected to the lower end of said second-mentioned cylinder and movable therewith, openings being provided at the lower end of said second-mentioned cylinder communicating with said first-mentioned cylinder below said one piston, said liquid flowing through said openings into said second-mentioned cylinder when lowered, a check valve at the lower end of said first-mentioned cylinder to permit liquid to enter the lower portion thereof, a second check valve in said second-mentioned cylinder for permitting the flow of said liquid only from the lower portion of said first-mentioned cylinder and said second-mentioned cylinder into said first-mentioned cylinder when said second cylinder is lowered into the lower portion of said first-mentioned cylinder, means for raising said other piston during the final portion of the upward movement of said first-mentioned piston, and means for automatically lowering both of said pistons.

2,730,959
GUARD AND GUIDE FOR FOOT VALVE OR THE LIKE
Joseph A. Brenner, Hanover, Pa.
Application March 5, 1954, Serial No. 414,334
8 Claims. (Cl. 103—202)



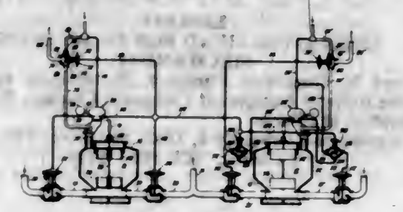
1. A well piping having attached to the lower end thereof an inlet valve member provided with a substantially cylindrical external surface, in combination with a guard and guide enclosing said valve member and operable to protect said member and guide it while being lowered into a well casing, said guard and guide comprising an attaching band shaped to surround and be firmly secured to said cylindrical surface of said valve member, a plurality of rigid guide fingers connected at the upper ends thereof to said band and extending longitudinally downward therefrom, said fingers being circumferentially spaced around said band and extending downwardly past said valve member and substantially spaced laterally from the sides of said valve member, the lower portions of said fingers being directed downwardly and inwardly toward each other and connected together to define a tapered guiding end, the spaces between adjacent fingers being substantially wider than the width of said fingers to provide ample access of the well contents to said valve member.

2,730,960
HIGH PRESSURE PUMP OR COMPRESSOR
Gerhard P. Krause, Harrison, N. Y.
Application August 3, 1953, Serial No. 372,083
8 Claims. (Cl. 103—216)



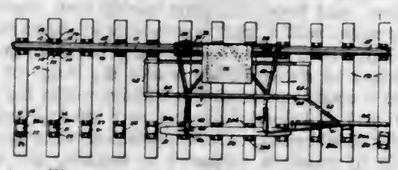
7. In a high pressure pump or compressor having a cylinder, a piston operating in said cylinder for a predetermined stroke, and means for sealing compressed fluid against leakage past the piston, said means comprising a bushing interposed between the piston and the cylinder and having a sealing portion fully engaged by said piston throughout said stroke, internal diameter of the sealing portion being only slightly larger than the outside diameter of the piston so as to provide self-sealing engagement therewith, there being provided space adjacent the outer surface of said bushing for radial heat expansion of the bushing, and a seal adjacent one end of said sealing portion within the pump in the region of the compressed fluid and engaging the bushing to prevent access of compressed fluid to the outer periphery of the sealing portion of the bushing, said sealing portion extending at its other end to a region of approximately atmospheric pressure, so that said sealing portion will be substantially free from the action of the compressed fluid along both its bore and its outer periphery in all operative positions of the piston.

2,730,961
CONTROL SYSTEM
Charles Yeomans, Hubbard Woods, Ill., assignor to Yeomans Brothers Company, Chicago, Ill., a corporation of Delaware
Application October 30, 1952, Serial No. 317,717
10 Claims. (Cl. 103—238)



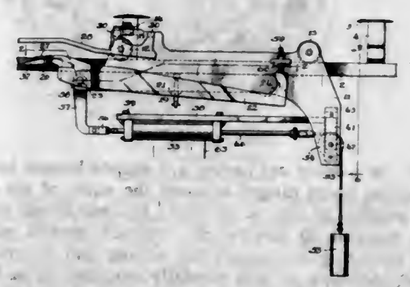
1. In apparatus of the class described, a source of pressure air, a first and a second receiver, an intake conduit delivering material to be pumped to each of said receivers, an outlet conduit extending from each of said receivers, a valve in each of said intake and outlet conduits controlling fluid communication between the conduit and the associated receiver, an air conduit connecting each of said receivers to said source of air pressure and to the atmosphere, a first valve means in said air conduit for each of said receivers controlling pressure fluid communication between said receiver and said source of pressure air and the atmosphere, a second valve means for each of said receivers responsive to the level of material within the associated receiver, means connecting each of said first valve means with its associated second valve means for fluid flow therebetween in a manner affording control of the former by the latter, said connecting means for said first receiver including a pair of interlocking valves having fluid communication with said connecting means for said second receiver, said interlocking valves controlling the fluid communication between said first and second valve means for said first receiver, and said interlocking valves being responsive to pressure air supplied through said air conduit for said second receiver upon the discharge of the latter to shut off the supply of pressure air to said first receiver and condition the apparatus for said first receiver to receive material from said intake conduit.

2,730,962
APPARATUS FOR LAYING RAILWAY RAILS
Charles R. Wright, Cleveland, and Marcellus M. Stansbury and William M. S. Dunn, Bellevue, Ohio
Application October 25, 1951, Serial No. 253,150
9 Claims. (Cl. 104—2)



1. A rolling gauge for railway tracks or the like including a frame adapted to extend between two rail positions, a pair of rollers rotatably supporting one side of said frame and adapted to engage a previously positioned and fixed rail at least two longitudinally spaced points relative to such rail, means to prevent transverse movement of said frame relative to said rail, an elongated shoe secured to the other side of said frame for engagement with the rail seats of a plurality of spaced tie plates to thereby support the other side of said frame, the forward end of said shoe having cam like surfaces to engage the side walls of the rail seats and cam them into alignment with said shoe, said shoe being removably mounted on said frame, means to adjust said shoe vertically and transversely relative to said frame, and means to secure said shoe in its adjusted position whereby compensation may be made for different rail heights and gauges.

2,730,963
BEEF DROPPER
Orlando Garapolo, Walter J. Richter, and Lyman L. Campbell, Chicago, Ill., assignors to Wilson & Co., Inc., a corporation of Delaware
Application October 6, 1951, Serial No. 250,058
10 Claims. (Cl. 104—96)



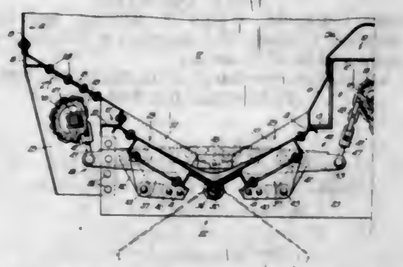
1. In combination with a rail adapted to support a roller carrying a piece of beef, a beef dropper comprising a main frame plate roller-mounted on said rail, a dropper arm pivotally supported intermediate its ends by said frame plate, a diverting rail integral with said dropper arm, said diverting rail being engageable with and overlying said first mentioned rail to guide a beef-carrying roller from said first mentioned rail to said dropper arm, said dropper arm swinging downwardly about its pivot when said beef-carrying roller passes said pivot, to lower said beef-carrying roller to a desired level, and a top guard rail supported by said main frame plate and extending forwardly of said diverting rail to engage the side of a roller being moved longitudinally along said first rail before said roller engages said diverting rail, said top guard rail conforming in contour to the contour of said diverting rail.

2,730,964
HOPPER CAR
Fred G. Garlock, Chicago, Ill., assignor to General American Transportation Corporation, Chicago, Ill., a corporation of New York
Application March 10, 1950, Serial No. 148,897
4 Claims. (Cl. 105—248)



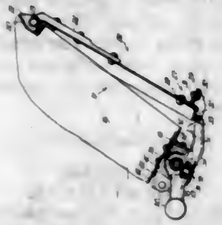
4. The combination in a hopper car comprising a frame including a center sill, of a storage bin having a bottom formed with a plurality of downwardly extending funnel-shaped hoppers arranged in longitudinal and transverse rows, a plurality of longitudinal and transverse plates carried by said frame independently of said center sill extending in vertical planes between said hoppers, and a plurality of saddle-like supporting members secured to said plates and contacting said hoppers which are on opposite sides thereof.

2,730,965
DUMP DOOR MECHANISM FOR A RAILWAY CAR
George B. Dorey, Westmount, Quebec, Canada, assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application September 24, 1952, Serial No. 311,285
14 Claims. (Cl. 105—289)



14. In a dump car having a V-shaped hopper including a pair of doors hinged adjacent the nadir of the hopper and adapted to assume upwardly inclined closed positions and movable to downwardly inclined opened positions, and operating mechanism for raising and lowering said doors including an arm pivotally mounted on said car at each end of each door adjacent the pivot axis thereof, a connection between each arm and the respective end of each door, and raising and lowering means connected to said arms.

2,730,966
HOPPER DOOR LATCHING MECHANISM
George B. Dorey, Westmount, Quebec, Canada, assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application October 23, 1952, Serial No. 316,390
2 Claims. (Cl. 105—308)



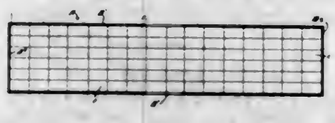
2. In a hopper structure having a discharge opening, a sloping floor for directing lading to the opening, and a door hinged adjacent the upper portion of said opening to assume a pendant open position and swingable to an inclined closed position; in combination, inner and outer brackets on the underside of said sloping floor having aligned slotted openings extending generally parallel to the movement of the swinging edge of said door, a shaft extending through said openings in said brackets, inner and outer hubs fast on the ends of said shaft and rockable and translatorily movable in said slots, aligned crank arms on said hubs, generally U-shaped links pivotally connected at one end to the crank arm on the respective hub and at the other end to the respective bracket whereby rotation of said shaft causes transverse movement thereof in said slots, said shaft in retracted position lying between the arms of said U-shaped links with the longitudinal axis of the shaft in over center position with respect to a line through the pivot axes of each link, that portion of each hub in alignment with the respective link being removed to expose a flat side of said shaft for engagement by a corresponding flat surface on each link in over center position, a latch rockably mounted on said inner hub and biased to engage said door to move it to closed position and hold it closed, abutments disposed on said latch and on said inner bracket including two abutments on the latter spaced lengthwise from each other in the direction of movement of said shaft in said slots to engage with the abutment on said latch therebetween at each end of said slots to hold said latch in a predetermined position at each end, and a handle integral with said outer hub for rocking said shaft.

2,730,967
OPERATING HEAD FOR DUMP DOOR MECHANISM
Richard N. Gunnison, Elmhurst, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application February 4, 1953, Serial No. 335,001
2 Claims. (Cl. 105—311)



1. For combination with a shaft for moving the closure of a hopper car discharge opening by rotation of the shaft, an operating head adapted to be non-rotatably mounted on one end of said shaft with its axis of rotation coincident with the axis of rotation thereof and having a W-shaped pocket construction on one side of said axis opening radially inwardly and a fulcrum post on the other side of said axis whereby an operating bar for rotating said head and thereby said shaft can be inserted to one side of said post and into either of the pockets of said W-shaped pocket construction, and a wall overlying said W-shaped pocket construction for preventing the end of said bar in either pocket from disengaging the same by sidewise movement.

2,730,968
MEANS FOR PROTECTING LADING IN CARS
Herbert W. Faus, White Plains, N. Y.
Application February 15, 1950, Serial No. 144,348
1 Claim. (Cl. 105—369)



In combination, a railroad freight car or other like vehicle of transportation, and units of lading stacked on and in sliding contact with the floor of the vehicle and each other, said floor and units having their contacting surfaces coated with a friction substance solidified thereon from a liquid state and of such composition as to produce a coefficient of static friction within the range of 1. to 2.00 and a coefficient of kinetic friction within the range of 0.75 to 1.50, thereby causing each of said units to offer substantial resistance to displacement when the vehicle while in transit is subjected to impacts, and at the same time permitting each unit to slide with consequent harmless dissipation of energy through friction when the force tending to displace the unit is great enough to produce damage if said unit were not free to move.

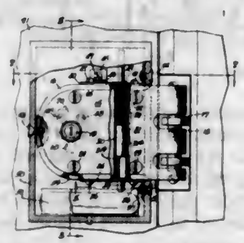
2,730,969
HIP, RIDGE AND VALLEY ROOFING SHINGLE
Manuel S. Perry, Los Altos, Calif.
Application November 2, 1954, Serial No. 466,363
1 Claim. (Cl. 108—24)

As an article of manufacture, a pre-formed roof-shingle-unit of the type described comprising a resilient metal bridging member of rectangular shape having a central longitudinally extending body portion of inverted, substantially V-shape adapted at its mouth to span the intersection between two sides of a roof and lateral wing portions extending therefrom adapted upon bending the bridging member at the central angle of the body portion and at the lateral angles of the wing portions to be formed in various angular positions to the body portion to correspond to the respective pitch of the two said sides of the roof adjacent the line of intersection therebetween, a pair of opposed shingles of rectangular shape positioned longitudinally on either side of said body portion as to overlie the outer faces of said wing portions with the adjacent longitudinal edges of said shingles spaced outwardly from the centerlines of the lateral angles between the respective wing portions and the sides of the body portion, said bridging member extending approximately half the longi-



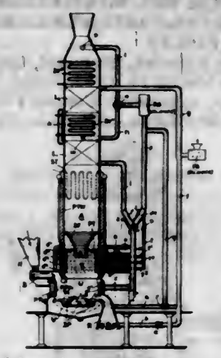
tudinal length of the opposed shingles, a sheet of flexible waterproof material of rectangular shape adjacent the undersurface of said bridging member and shingles, said material having a length substantially co-extensive with the longitudinal length of said opposed shingles and a central longitudinally extending intermediate portion shaped to extend within the inverted V-shaped body portion of the bridging member, and rivet means pivotally connecting said bridging member at a forward point on each of its said wing portions to said shingles and flexible water proof material, adapted, when successive units are applied in overlapping positions along the line of intersection between the two sides of the roof with the body portions in alignment with the said line of intersection, to permit the opposed pairs of shingles to be angularly adjusted in the respective planes of the two said roof sides, and individually aligned with respect to one another.

2,730,970
PROTECTIVE DEVICE FOR DOOR LOCKS
Frank V. Martin, Atlantic City, N. J.
Application December 1, 1952, Serial No. 323,379
10 Claims. (Cl. 109—32)



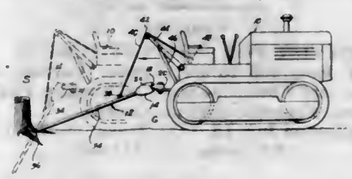
1. In a protective device operable to give a signal when a locked door or the like is forced relative to a door jamb or the like comprising a lock casing having lock mechanism and a bolt in said casing, a keeper operable to be engaged by the bolt, means mounting the lock casing on the door structure for limited resilient relative movement between said lock casing and door structure upon movement of the door toward open position with the lock mechanism latched, and alarm mechanism cooperatively associated with said casing actuatable upon said relative movement of the casing and door structure to give an alarm.

2,730,971
FURNACE AND BOILER PLANT
Max Birkner, Koln-Dellbrueck, Germany
Application August 29, 1950, Serial No. 182,075
Claims priority, application Germany September 15, 1949
10 Claims. (Cl. 110—40)



1. A method of burning solid fuel comprising delivering fuel solely by gravity onto the front portion of a fire bed traveling from front to rear of a combustion zone in the form of a free falling downwardly flowing curtain of fuel extending substantially coextensive in width with the width of the combustion zone, introducing oxidizing medium from beneath the bed, increasing the pressure of the introduced medium successively from front to rear of the bed so as to respectively fluidize the fuel on the bed and to pick up and fling incandescent particles upwardly from the rear of the bed, injecting additional hot oxidizing medium at the rear of the combustion zone, above the bed and directed toward the front of the zone to project the lifted incandescent particles from the rear to the front of the bed to intermingle the same with the downwardly flowing curtain of incoming fuel, supplying additional hot oxidizing medium in the form of jets in a plurality of vertically spaced planes above the bed and above the path of flow of the injected hot oxidizing medium and directing the jets to provide turbulence about the vertical axis of the combustion zone at an area above the path of flow of the injected additional hot oxidizing medium to separate fume borne ash from the gases and to burn gases and fuel particles in suspension, and separately regulating the temperature and supply of the introduced medium at all points of introduction.

2,730,972
TRACTOR MOUNTED BLASTING PUNCH
Olav Hamran, Larchwood, Iowa
Application August 14, 1953, Serial No. 374,282
2 Claims. (Cl. 111—89)



1. A blasting punch comprising: a clevis adapted for attachment to a tractor or like vehicle; a plate-like body having a socket, said body being pivotally connected to said clevis for vertical swinging movement; an elongated rod having one end removably engaged in said socket, said rod having its other end pointed for forcing of the pointed end of the rod into the earth, thereby to form a hole for receiving an explosive charge; means extending through the body and the first named end of the rod for detachably anchoring the first named end of the rod in said socket; and means extending between the rod and

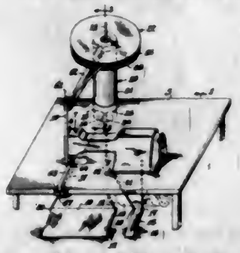
tractor for swinging the rod and body to selected positions of vertical adjustment, preliminary to forcing of the pointed end of the rod into the earth.

2,730,973

APPARATUS FOR THE FORMATION AND ASSEMBLY OF SLIDE-FASTENER-CARRYING GARMENT FLY PIECES

Michael King Rohrlick, Montreal, Quebec, Canada

Application March 10, 1952, Serial No. 275,714
Claims priority, application Canada February 5, 1952
20 Claims. (Cl. 112—2)



1. A sewing machine which includes a working bed and a sewing head over said bed, a portable reel carrying stand removably mounted on the working bed, a presser-foot carried by said head and operable for releasing pressure engagement with said bed, a treadle beneath said bed for actuating said machine and a second treadle operable to release said pressure engagement of the presser-foot, said reel carrying stand comprising a vertical housing supported by said bed, a spindle arranged in said housing for vertical sliding movement relative thereto, and having its upper end projecting beyond the upper end of said housing, multiple compartment stringer tape reel mounted for rotation about the projecting upper end of said spindle, said reel being normally in frictional engagement with the upper end of said housing, and means operably connecting said spindle with both said treadles for elevating said spindle to engage the reel to move the same out of its frictional engagement with the housing in response to selective manipulation of the machine actuating treadle and the presser-foot release actuating treadle.

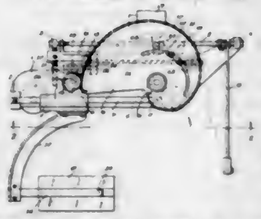
2. Apparatus as set forth in claim 1, in which said spindle elevating means comprises a reel engaging member secured to said spindle so as to be selectively shiftable below and above the frictional surface of said housing, a lever mechanism pivoted to said housing and having an arm engageable with said spindle and a second arm separately linked to said first and second mentioned treadles, said lever being swingable about its pivotal axis in response to said selective manipulation of the first and second treadles to engage said spindle in a lifting operation.

2,730,974

DEVICE FOR SPIRAL STITCHING

Harold M. Ross and Robert Cowen, Toronto, Ontario, Canada; said Cowen assignor to Century Engineering Company, Toronto, Ontario, Canada

Application July 15, 1953, Serial No. 368,122
18 Claims. (Cl. 112—2)



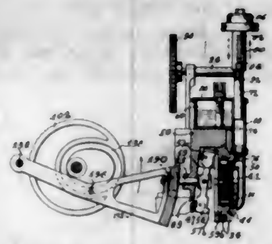
1. In a device for spiral stitching adapted for use with a sewing machine, a slide adapted to carry a fabric to be stitched, a cam acting on said slide to move same, and means carried by said slide and engaging the camming surface of said cam to displace said camming surface with constant average velocity at its point of contact with the slide.

2,730,975

THREAD-WAXING APPARATUS

Francisco Raspa, Montreal, Quebec, Canada

Application November 2, 1953, Serial No. 389,821
12 Claims. (Cl. 112—42)



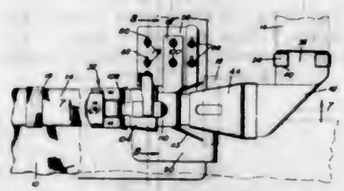
1. A lock-stitching machine for shoes having, in combination with lock-stitching mechanism including a thread receiving bobbin, two wax reservoirs, one of which is mounted adjacent the thread-receiving bobbin of said machine and the second below said first reservoir, said first reservoir being adapted to intermittently supply wax to said second reservoir and said second wax reservoir being in communication with said thread-receiving bobbin, a wax delivery member extending from said first wax reservoir to said second wax reservoir, and means to intermittently control the delivery of said wax.

2,730,976

SEWING MACHINE ATTACHMENT FOR APPLYING BAND LOOP AND BAND AND LINING TO TROUSERS

Roy M. Loden, Abilene, Tex., assignor of ten per cent to Bruce Weldon Du Bose, Abilene, Tex.

Application December 14, 1953, Serial No. 398,038
5 Claims. (Cl. 112—151)



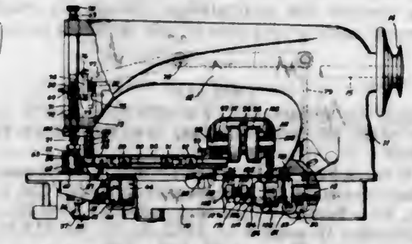
1. A sewing machine attachment comprising a mounting plate adapted for attachment upon the bed of a sewing machine adjacent the needle bar thereof, a positioning guide for placing the waist of trousers in juxtaposition to a waistband, a folder guide for folding the marginal edges of a strip of material to form a trouser waistband, loop guide means for positioning a band loop upon a waistband, a presser foot assembly adapted for mounting upon the presser bar of a sewing machine, an assembly guide for holding a folded waistband and a band loop upon the waist portion of trousers for simultaneously uniting the same, said assembly guide being operatively associated with the presser foot assembly for positioning the folded waistband, band loop and waist portion of trousers in assembled relation to the presser foot assembly, means for mounting each of said guides on said mounting plates, said mounting means for said assembly guide including an arm transversely overlying said assembly guide, a spring connected to said arm and assembly guide for yieldingly supporting the latter for limited vertical movement, said loop guide means comprising a pair of guide arms mounted upon said assembly guide and extending in embracing relation to the sides of said folder guide.

2,730,977

FEED MECHANISM FOR SEWING MACHINES

Robert A. Hayes, Franklin Park, and George M. Reimer, Elmwood Park, Ill., assignors to Union Special Machine Company, Chicago, Ill., a corporation of Illinois

Application July 31, 1953, Serial No. 371,475
20 Claims. (Cl. 112—214)



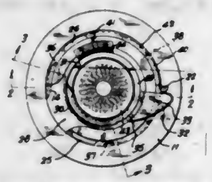
1. In a sewing machine having a frame including a work supporting base and an overhanging arm carrying a needle head over said base, and a rotary shaft extending longitudinally of said base, the combination of a four motion feed dog in said base, connections from said shaft to said feed dog for imparting work advancing and return movements and lifting and lowering movements to said feed dog, said connections including a first pair of telescopically arranged and relatively angularly adjustable eccentrics on said shaft by which the feed stroke of said feed dog may be varied, a feed roller above said base yieldingly urged toward the work supporting surface thereof, and connections from said shaft to said roller for imparting intermittent rotation thereto, said last mentioned connections including a second pair of telescopically arranged and relatively angularly adjustable eccentrics on said shaft by which the extent of intermittent movements of said roller may be varied, said eccentrics of said second pair being displaced angularly about said shaft in relation to the eccentrics of said first pair.

2,730,978

SEWING MACHINE

Waldemar A. Ayres, Lakewood, Ohio, assignor to White Sewing Machine Corporation, Lakewood, Ohio, a corporation of Delaware

Application January 25, 1954, Serial No. 405,722
3 Claims. (Cl. 112—228)



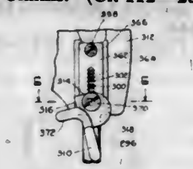
1. A rotary hook mechanism for a sewing machine comprising a rotary hook having a substantially cup-shaped body provided internally with an annular bearing shoulder the plane of which is perpendicular to the axis of the hook, said body also being provided in outwardly spaced relation to said shoulder with an annular inwardly facing groove parallel to said shoulder, the outer wall of said groove having a plurality of circularly spaced openings therein communicating with said groove, a bobbin case mounted in said body and having an annular bearing flange supported by said shoulder, a flat retainer ring mounted on said flange on the side thereof remote to said shoulder, said ring being provided on its circumferential edge with circularly spaced ribs which pass through said openings in the outer wall of said groove and into said groove whereby said ring may be angularly displaced relative to said body in one direction to cause said ribs to move angularly in said groove relative to said openings so as to underlie the outer wall of the groove and interconnect said ring and said body, and means carried by the bobbin case and adapted to engage a stationary portion of the sewing machine to hold the bobbin case against rotation.

2,730,979

SEWING MACHINE

Sidney R. Bell, Stamford, Conn., assignor to Irving J. Moritt, Brooklyn, N. Y.

Application July 17, 1952, Serial No. 299,391
3 Claims. (Cl. 112—237)



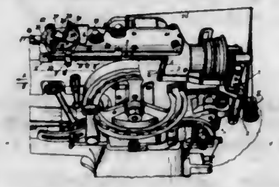
1. In a sewing machine, a sewing machine arm, a needle bar and needle, a presser foot having a part located adjacent the path of said needle, a round rod borne in said arm and carrying the presser foot, resilient means urging the presser foot downwardly, a pin projecting sidewardly from the rod, said arm having an opening to receive said pin, said foot and rod and pin all being in fixed relative orientation, a wear plate secured outside the arm and provided with a vertical slot dimensioned to slidably receive the pin to prevent rotation of the rod and presser foot, and releasable screws securing said plate to said arm, said plate having horizontal slots receiving said screws to afford sideward adjustment of the plate and consequent adjustment of the orientation of the presser foot relative to the needle, and said opening in said arm being wider than said slot in said plate in order to accommodate said sideward adjustment.

2,730,980

THREAD PULLING DEVICE

Christian Josef Marines Benink, Kaiserslautern, Germany, assignor to G. M. Pfaff A.-G., Kaiserslautern, Pfalz, Germany, a corporation of Germany

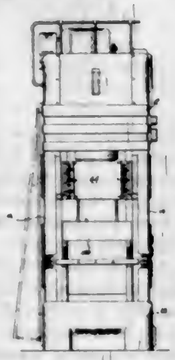
Application August 20, 1954, Serial No. 451,153
Claims priority, application Germany November 30, 1953
14 Claims. (Cl. 112—242)



1. A thread pulling device, for use in connection with a sewing machine with a controlled operating cycle and having automatic shifting means and a thread guide and a thread tensioner, said device comprising, a mechanism in driven connection with said shifting means and including a reciprocably rotatable member, and two opposite thread guiding elements connected to said member, said thread having a straight path between said thread tensioner and said thread guide in sewing operation and being suspended between said thread guiding elements, said mechanism being actuatable by said shifting means to turn said member and guiding elements upon termination of the sew-

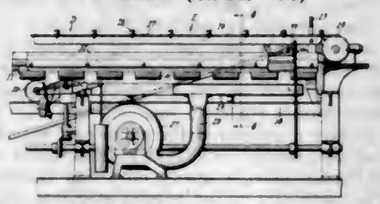
ing operation for shifting the thread from said straight path into a path intersecting, between said guiding elements, said straight path at an angle thereto, and clamping means operable for releasably clamping said thread between said guiding elements in timed relation with the actuation of said mechanism, whereby, upon actuation of said mechanism, said member will be turned and said clamping means will clamp the thread thereby increasing the amount of thread between said guide and tensioner.

2,730,981
PRESS PLATEN STOP BLOCK
Walter Ernst, Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
Original application September 15, 1949, Serial No. 115,901, now Patent No. 2,672,836, dated March 23, 1954. Divided and this application December 30, 1950, Serial No. 203,664
2 Claims. (Cl. 113—45)



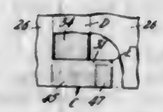
1. In a press; a bed, a head, spaced upright members extending between said head and bed, spaced guide rails carried on each upright and extending into the space between the uprights, a press platen between said uprights and having gib means engaging said guide rails, a blankholder platen supported beneath said press platen, said blankholder platen having gib means to slidably engage said guide rails, vertical reciprocable piston means in said bed, means connecting said piston means with said blankholder platen, a rod extending upwardly from said piston between said guide rails, a stop block on said bed, said rod terminating at substantially the upper edge of the stop block when said blankholder platen is in a raised position, said stop block having a passage therethrough to slidably receive said rod, and an integral projection on said press platen extending into the space between said guide rails for engagement with said stop block.

2,730,982
SOLDERING MACHINE COOLING SYSTEM
John E. Socke, Pelham Manor, N. Y., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application April 30, 1953, Serial No. 352,170
5 Claims. (Cl. 113—98)



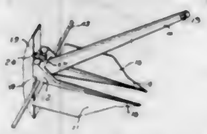
1. In a can body side seam soldering machine, the combination of a can body side seam soldering section and a can body cooling section, said soldering section including machine parts for engaging can bodies and means for applying molten solder to the side seams of the can bodies, a cooling system including means for circulating a liquid cooling medium through said soldering section to cool said machine parts and continuing through said body cooling section, and means in said cooling section for cooling said can bodies and said liquid cooling medium, whereby said liquid cooling medium absorbs heat from said machine parts in said soldering section to protect said machine parts and gives up said heat in said body cooling section to reduce the temperature of said liquid cooling medium for recirculation through the machine for a repeat cooling operation in said soldering section.

2,730,983
METHOD OF FORMING CEMENTED LOCK AND LAP SIDE SEAMS HAVING WELDED LAP PORTIONS
Denis J. Campbell, Jr., Western Springs, and Edward W. Kaiser, Maywood, Ill., assignors to American Can Company, New York, N. Y., a corporation of New Jersey
Application December 11, 1952, Serial No. 325,482
5 Claims. (Cl. 113—120)



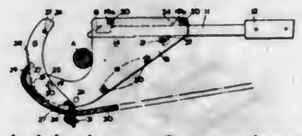
1. A method of forming a cemented side seam in a partially completed can body having lap portions and reversely bent body hooks with a flowable sealing cement on at least one of said hooks comprising interengaging said body hooks, bumping said interengaged body hooks to form a lock seam portion and to extrude a portion of said cement longitudinally from said lock seam portion, bumping selected portions of said body laps solidly together to prevent the entry of said extruded cement therebetween while bumping the remaining portions of said body laps loosely to permit the entry of said extruded cement therebetween, and welding said solidly bumped, uncemented lap portions together to hold said laps against separation during subsequent treatment.

2,730,984
PIVOTED FLUKE ANCHOR HAVING MULTIPLE CROSS ARMS
Charles H. Parks, Southport, Conn.
Application March 12, 1952, Serial No. 276,160
14 Claims. (Cl. 114—208)



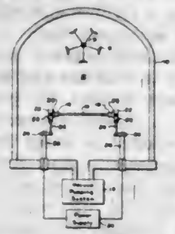
1. In an anchor having a head; a cross-arm attached to said head; a shank pivotally attached to said cross-arm; flukes attached to said head and disposed on each side of said shank; interlockable means integral with said head; an auxiliary cross-arm having interlockable means integral with it and adapted to be attached to said head with both said interlockable means in cooperating relationship with said auxiliary arm in one of two planes at substantially right angles to each other, one of said planes substantially including said flukes and shank when said anchor is in stowable condition; and releasable means for holding said auxiliary cross-arm in either of said planes with said interlockable means effective.

2,730,985
IMPLEMENT FOR ENGAGING A LINE WITH A REMOTE OBJECT
John L. Wingate, Saltterfield, near Stratford-on-Avon, England
Application August 20, 1953, Serial No. 375,426
Claims priority, application Great Britain September 30, 1952
6 Claims. (Cl. 114—230)



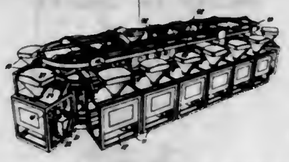
1. A hooked implement, for engaging a line with a remote object, including a support, a hook portion slidably mounted on an end portion of said support for axial movement on the latter between a position in which said end portion bridges the hook opening and a position in which said end portion leaves said hook opening unobstructed, a part to which an end of a line to be passed round the back of said hook portion is to be made fast, means providing a releasable engagement between said part and an extremity of said hook portion, a barb on said end portion, and means on said part to be engaged by said barb, such that, when the hook opening in unobstructed condition is engaged around the remote object, and an opposite end of said line is pulled, said hook portion is slid for said end portion to bridge the hook opening and to engage said barb with said means on said part, whilst when said support is pulled said hook portion will slide in the other direction for said barb to detach said part from said extremity and pull a length of the line across an opening which is thus created between said part and said extremity and through which said remote object can pass out with a bight of the line engaged with it.

2,730,986
COATING
Paul W. Patton, Bedford, Mass., assignor to National Research Corporation, Cambridge, Mass., a corporation of Massachusetts
Application March 18, 1953, Serial No. 343,175
4 Claims. (Cl. 118—49)



2. An improvement in a source of aluminum vapors for an apparatus wherein an article is coated with aluminum by evaporation of said aluminum in a vacuum and condensation of the aluminum vapors on the article, the improvement comprising an elongated carbon rod for supporting molten aluminum within an evacuated chamber, a surface stratum of a carbide of one of the metals molybdenum and tungsten on said elongated carbon rod, a hollow refractory support for receiving each end of said carbon rod, at least a portion of each said support forming a high conductivity electrical path, a metal powder filling said hollow support to serve as a low resistance path for heating current passing between each end of said carbon rod and the high conductivity portion of each support, and flexible conductors for predeterminedly positioning said supports and rod within said evacuated chamber.

2,730,987
APPARATUS FOR AUTOMATICALLY VACUUM COATING OF INTERIOR OF GLASS TUBES WITH METAL
Alden W. Nelson, Pawtucket, R. I., assignor to James L. Entwistle Company, Providence, R. I., a copartnership
Application March 25, 1954, Serial No. 418,640
6 Claims. (Cl. 118—49)



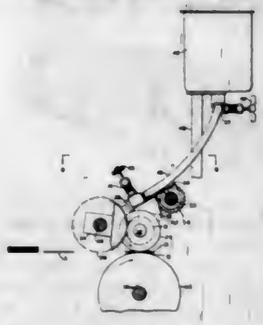
1. An automatic vacuum coating apparatus comprising in combination a stationary frame supporting an endless movable conveyor, a plurality of detachably mounted carts spaced on an driven by said conveyor and having means cooperable with said frame for holding each cart upright with its top substantially horizontal, means at the top of each cart for receiving and supporting substantially vacuum-tight the neck of a tube, said tube neck receiver means having means associated therewith comprising a supported heating filament adapted to enter the neck of the tube and adapted to hold a piece of vaporizable metal, the filament being electrically connectable by electrodes to a source of power, means connected to the tube neck receiver means for creating a vacuum, valve means between the receiver and vacuum creating means, switching means mounted on said cart for actuating the valve means, the vacuum creating means and to effect the electrical connection of the heating filament and means projecting into the path of said switches in spaced cooperable relation therewith to effect automatically the sequential operation of the various means via the switches during a vacuum coating cycle.

2,730,988
ELECTROSTATIC COATING APPARATUS
William A. Starkey, Plymouth, Ind., assignor to Ransburg Electro-Coating Corp., Indianapolis, Ind., a corporation of Indiana
Application June 10, 1950, Serial No. 167,362
5 Claims. (Cl. 118—51)



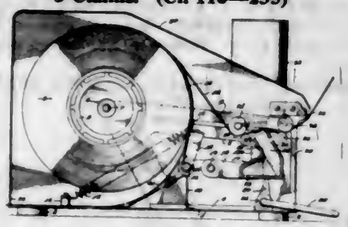
1. In an electrostatic coating apparatus having a conveyor for moving articles to be coated through a coating zone, said conveyor comprising a plurality of electroconductive hook-like article supports each having an article-engaging portion, means including an atmosphere ionizing electrode and a high-voltage source having its opposite terminals connected respectively to the ionizing electrode and conveyor, and means for creating in the coating zone a cloud of adherent coating-material particles charged oppositely to the article supports and the articles supported thereby, each of said hooks being provided with a permanent sheath of insulating material sufficiently non-conductive to support a substantial surface charge for the duration of the passage of the article support through the coating zone, said sheath encasing all portions of the articles support exposed to the coating zone except that support-portion which is engaged by the article whereby to intercept charged particles attracted toward the sheathed support and thus acquire a surface charge repellent of the coating material particles.

2,730,989
ADHESIVE APPLYING APPARATUS FOR ENVELOPE MAKING MACHINES
Lewis C. Pearce, Berea, Ohio, assignor to Pearce Development Company, Cleveland, Ohio, a corporation of Ohio
Application November 16, 1953, Serial No. 392,207
10 Claims. (Cl. 118—221)



1. In an adhesive applying device, an applicator roller, a nozzle for applying adhesive to the surface of said roller, means supporting said nozzzle for unrestricted pivotal movement about an axis parallel to but spaced from the axis of rotation of said roller, the axis of the nozzles being inclined to the radius of said roller drawn through the point of contact between said nozzle and the periphery of said roller in such manner that the trailing edge of the nozzle is closer to the surface of the roller than the leading edge, whereby said nozzle tends to float on the film of the adhesive on the surface of the roller.

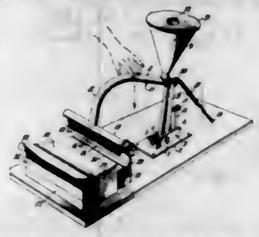
2,730,990
TAPE DISPENSER
Warren E. Gray, Van Nuys, and Fredrick Brint Edwards, Woodland Hills, Calif.
Application March 1, 1954, Serial No. 413,286
3 Claims. (Cl. 118—235)



1. In a device of the character disclosed: a roller for carrying a roll of adhesive backed tape having a protective backing strip, a spring-loaded stripper blade interposed between the tape and backing strip to separate the same during tape movement, a pair of spaced-apart rollers over which said tape is passed, and means for applying an activating medium to the adhesive of said tape and for tensioning the tape during passage thereof over the rollers.

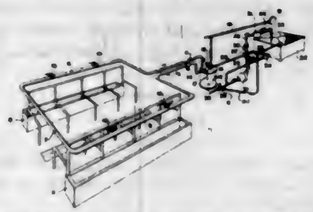
2,730,991
OSCILLATABLE PASTE DISPENSING UNIT
Graham O. Baughan, Richmond, Va.
Application August 7, 1952, Serial No. 303,118
2 Claims. (Cl. 118—415)

1. Pasting device comprising a normally horizontal base and an oscillatory pasting unit mounted thereupon comprising a supporting arm pivotally mounted at its lower end on said base to swing in a vertical plane, a stop on said base in said plane engageable with said arm to limit its swing in one direction to a small angle beyond the vertical, a spring anchored between said supporting arm and base urging said arm toward said stop, a paste container mounted on said arm adjacent the end remote from its pivotal connection, and rigid with said arm, including a hopper, an elbow shaped conduit having its axis in said vertical plane and having one end connected to said hopper and the other end downturned, a manifold perpendicular to said vertical plane connected intermediately to the lower



end of said conduit, a series of nozzles along the lower side of said manifold having their mouths in a horizontal plane when said arm is vertical, and spring closed valves controlling said nozzles, protruding therefrom to be opened through contact with an underlying sheet, said elbow shaped conduit constituting a handle depressible for oscillating said pasting device.

2,730,992
CONVERTIBLE MILKING AND WASHING PIPE LINE SYSTEM
Joseph S. Kessler, Kenosha, Wis., assignor, by mesne assignments, to Ladish Co., Cudahy, Wis., a corporation of Wisconsin
Application September 5, 1952, Serial No. 307,955
5 Claims. (Cl. 119—14.03)

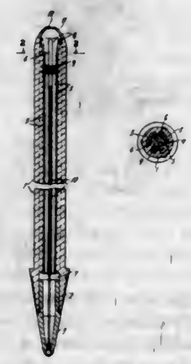


1. A dairy barn milking system, comprising: a source of cleaning solution, a main supply line for receiving milk at a milking station; a receiver normally under a vacuum in communication with said main line; a high velocity pump having an inlet and an outlet capable of developing a high fluid velocity in said line and having its inlet communicating with said receiver for pumping milk therefrom; a receptacle; a conduit connected to the outlet of said pump and positioned to direct the discharge of said pump into the receptacle; a flow restricting member in said conduit limiting the rate at which milk is pumped from the receiver by said high velocity pump; and connecting means for alternatively connecting the inlet of said pump with said source of cleaning solution and the outlet of said pump with said main supply line at a location ahead of said flow restricting member, whereby the same high velocity pump can be used for selectively pumping milk from the receiver at a predetermined limited rate or for pumping cleaning solution through said line at an unrestricted faster rate.

2,730,993
INK RESERVOIR FOR BALL POINT PEN
Farnham F. Boyle, St. Louis, Mo., assignor, by mesne assignments, to Ritepoint Pen and Pencil Company, St. Louis, Mo., a corporation of Missouri
Application January 6, 1951, Serial No. 204,754
2 Claims. (Cl. 120—42.4)

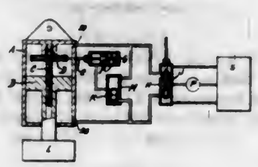
2. In a ball point pen, an elongated ink reservoir comprising a tube having a substantially uniform bore

formed with a plurality of longitudinally extending and alternately disposed substantially straight axially extending, uniformly spaced ribs and grooves extending therealong for a major portion of the length of said tube, said tube having a head thereon at one end thereof adapted to receive a ball point tip, said tube having an



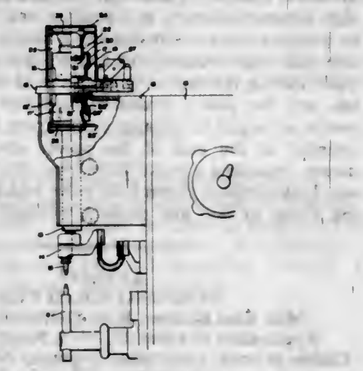
opening at the other end thereof adapted to admit air to said tube, and a resilient porous plug in said tube spaced from said opening, said plug contacting said ribs but not the bottoms of said grooves thereby forming a plurality of air passages along said grooves to admit air at all times to said tube between said plug and said ball point tip.

2,730,994
ACTUATOR CONTROL SYSTEM AND VALVE MECHANISM THEREFOR
James W. Light, Greenville, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Continuation of abandoned application Serial No. 258,938, November 29, 1951. This application February 24, 1953, Serial No. 338,348
18 Claims. (Cl. 121—40)



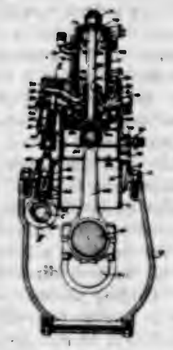
1. A control system for a fluid pressure operated actuator having a cylinder with a lineally movable member therein capable of fluid pressure actuation in either direction and releasable locking means normally operative to restrain movement of said member in the absence of fluid pressure actuation, comprising in combination, a source of incompressible fluid medium under pressure, first valve means operable to trap incompressible fluid medium in said cylinder to prevent movement of said member, second valve means operatively connected with said first valve means and operable to admit fluid under pressure from said source to release said locking means while the member is held against movement by the fluid medium trapped in said cylinder by the first valve means, and third valve means operatively connected with said first and second valve means and operable to admit fluid under pressure from said source to said cylinder to effect movement of said member while the locking means are maintained released by said second valve means and the fluid medium in the cylinder is no longer trapped by said first valve means.

2,730,995
PNEUMATIC ACTUATION OF MACHINE ELEMENTS, PARTICULARLY RESISTANCE WELDING ELECTRODES
Melvin M. Seeloff and Hans Henning Hanssen, Warren, Ohio, assignors to The Taylor-Winfield Corporation, Warren, Ohio, a corporation of Ohio
Application October 13, 1949, Serial No. 121,204
9 Claims. (Cl. 121—48)



1. In a double-acting pneumatic motor a vertically disposed outer cylinder closed at its upper end, a spider member secured to the open lower end of said outer cylinder, a cup-shaped member supported at its open end on said spider member and positioned within said outer cylinder, a movable wall comprising a pair of spaced nested concentric cup-shaped members positioned concentrically intermediate said first mentioned cup-shaped member and said outer cylinder, a first ring-like flexible diaphragm having its outer peripheral edge secured to the inner surface of said outer cylinder and its inner peripheral edge secured to the upper end of the outer surface of said movable wall, a second ring-like flexible diaphragm having its inner peripheral edge secured to the upper end of said first mentioned cup-shaped member and its outer peripheral edge secured to the inner surface of the innermost of said pair of cup-shaped members, and mechanical connecting means rigidly secured to said movable wall and depending downwardly through said spider member.

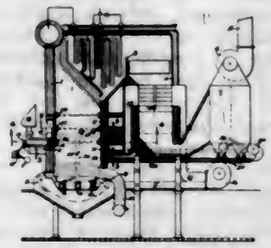
2,730,996
FLUID PRESSURE ENGINES
Abner Doble, Santa Rosa, Calif., assignor to McCulloch Motors Corporation, Los Angeles, Calif., a corporation of Wisconsin
Application April 7, 1952, Serial No. 280,978
7 Claims. (Cl. 121—102)



1. In a steam engine: a low pressure cylinder having a head at the outer end thereof and having a braking steam inlet; a low pressure piston operative in said cyl-

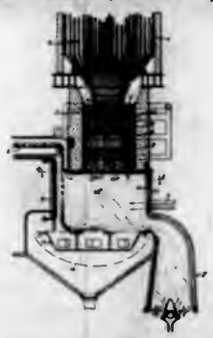
inder; a rod extending from said piston through said head; a high pressure piston connected to the outer end of said rod; a high pressure cylinder receiving the high pressure piston, said high pressure cylinder having terminal port means near the outer end thereof adapted to be uncovered by said high pressure piston; duct means for connecting said terminal port means with said low pressure cylinder; high pressure steam inlet valve means arranged to deliver steam into said high pressure cylinder when said high pressure piston is at a position near the beginning of its pressure stroke; transfer valve means adapted to connect said high pressure cylinder to said low pressure cylinder during the return stroke of said high pressure piston and the power stroke of said low pressure piston; means arranged to exhaust steam from said low pressure cylinder at the end of the power stroke thereof; and means, including a brake valve, operable independently of said high pressure steam inlet valve means to deliver braking steam to said low pressure cylinder.

2,730,997
BURNING SOLID FUEL
Max Karl Birkner, Koln-Dellbruck, Germany
Application October 25, 1949, Serial No. 123,515
Claims priority, application Germany November 1. 1948
19 Claims. (Cl. 122—4)



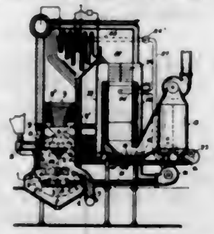
13. A method of burning solid fuel in a vertically extending combustion zone having an upper outlet and a fire bed travelling from front to rear thereof at the bottom of the zone and which fire bed embodies plural aligned portions including at least front, middle and rear portions, said method comprising continuously dropping solely by gravity all fuel to be burnt, upon the front portion of the fire bed from an inlet in the front of the zone at a height substantially midway of the height of the zone in the form of a falling curtain of fuel of narrow extent with relation to the direction of travel of the bed and of a width substantially coextensive in width with the width of the zone, introducing primary oxidizing medium under pressure from beneath the bed under all portions thereof, increasing the pressure of the medium introduced under the middle portion of the bed to a pressure sufficient to fluidize and stir the fuel thereon and to elevate fine incandescent particles therefrom, increasing the pressure of the medium introduced under the rear portion of the bed to a pressure higher than that required for fluidization and sufficient to elevate and fling fuel particles and larger incandescent particles upwardly from the bed, and supplying additional oxidizing medium above the rear portion of the bed in the form of a substantially horizontal blanketing stream of medium directed toward the front of the zone and extending throughout substantially the width of the zone at a level beneath the fuel inlet and under a pressure sufficient to entrain and project the fuel and incandescent particles elevated from the bed across the bed to the front of the zone to intermingle the same with the incoming curtain of fuel.

2,730,998
APPARATUS FOR BURNING SOLID FUEL
Max Birkner, Koln-Dellbruck, Germany
Application June 19, 1950, Serial No. 168,925
Claims priority, application Germany July 11, 1949
14 Claims. (Cl. 122—4)



1. In a boiler furnace, the combination of wall means defining a vertically disposed combustion zone and a radiation section coaxially thereabove, a traveling grate movable from front to rear in the lower portion of said zone, said wall means including a front wall having fuel inlet orifice therein above the grate, means for forwarding fuel through the inlet orifice to fall by gravity upon said grate at the front portion of said zone, said combustion zone including a first portion providing a lower fire box immediately above said grate and a second portion providing an upper fire box extending above said lower fire box, said fuel inlet orifice being disposed between the fire boxes, water tubes bounding the radiation section above the upper fire box, tuyeres extending through the walls of the upper fire box for injecting air thereinto, said tuyeres being so directed as to provide a whirling of injected air and furnace gases about the vertical axis of the fire box, a horizontal partition above the tuyeres for dividing the upper fire box from the radiation section at a level closely superjacent the tuyeres, and said partition having a central opening therein for the discharge of combustion gases into said radiation section.

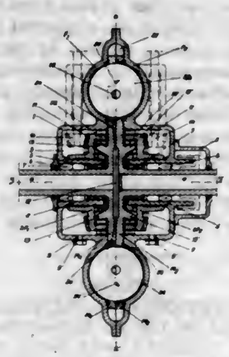
2,730,999
FURNACE AND BOILER PLANT
Max Birkner, Koln-Dellbruck, Germany
Application September 22, 1950, Serial No. 186,284
Claims priority, application Germany September 30, 1949
11 Claims. (Cl. 122—4)



1. In a furnace the combination of wall means defining a vertically extending combustion zone including upper and lower portions, means providing a superposed radiation section above and downstream of said combustion zone, water tubes bounding the radiation section, flue means extending downstream of the radiation section, a travelling grate including front, middle and rear portions at the bottom of said combustion zone and movable from front to rear thereof, feeding means substantially midway of the height of said combustion zone for feeding a curtain of solid fuel substantially coextensive in width with the width of the zone into the zone so that the fuel falls

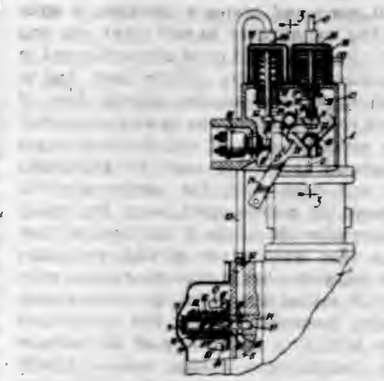
freely upon only the front portion of said grate, means for supplying a stream of primary oxidizing medium beneath and upwardly through all portions of said grate under pressure conditions such that the pressure of said medium successively increases beneath all portions of the grate from front to rear thereof with the highest pressure existing beneath and upwardly through the rear portion of the grate so as to lift upwardly incandescent particles of fuel from the grate, means for directing a stream of secondary oxidizing medium consisting at least in part of heated air from rear to front, over and above said grate in the lower portion of said combustion zone and at a level beneath said feeding means so as to project incandescent particles toward the front of the combustion zone so that they mingle with the incoming falling curtain of fuel, means for directing horizontal streams of tertiary oxidizing medium consisting at least in part of heated air tangentially into the upper portion of said combustion zone so as to provide a whirl of combustion supporting medium about the vertical axis of the upper portion of the combustion zone, and deflecting means located in the combustion zone in spaced relation with the wall means and at a level between said secondary and tertiary oxidizing medium directing means to partially physically spatially separate the lower portion of the combustion zone from the upper portion of the combustion zone so as to facilitate regulation of combustion in each portion of the combustion zone.

2,731,000
COMPOUND INTERNAL-COMBUSTION ENGINE
Raymond Pelhat, Asnieres, France
Application April 2, 1951, Serial No. 218,715
Claims priority, application France April 1, 1950
2 Claims. (Cl. 123—11)



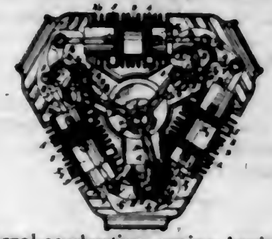
1. A variable speed rotary internal combustion engine comprising: an annular torus-shaped cylinder having a central axis of revolution and a plane of symmetry transverse to said axis; a plurality of pairs of movable pistons located in said cylinder and adapted to revolve thereing; each of said pairs comprising two pistons diametrically disposed with respect to each other; said plurality forming two sets of said pairs, each of said sets being angularly movable with respect to the other; the pistons in said two sets alternating in sequence and forming substantially gas-tight compartments in said cylinder; two rotary, piston carrying disc-members radially disposed with respect to said cylinder and having adjacent radial surfaces on said plane of symmetry; said disc-members being adapted to be angularly shifted with respect of one another and of said cylinder around said central axis; each of said disc-members being rigid with one of said sets of pairs of pistons; a first hollow shaft rigid with one of said disc-members and coaxial with said central axis; a second hollow shaft rigid with the other one of said disc-members, separate from said first shaft and coaxial with said central axis; means for feeding fuel into said compartments and means for exhausting the spent gas from said compartments in proper time sequence; at least one ignition means located directly on each of said pistons and being movable therewith; two separate sets of clutching means respectively engaging said disc-members and adapted to cause said disc-members to rotate only in one direction with respect of said cylinder; and transmission gears respectively connecting operatively each shaft with the set of clutching means which engages the disc-member rigid with the other shaft to constrain the last-named disc member to follow the motion of the other-disc-member at a reduced speed.

2,731,001
ENGINE SAFETY SHUT-DOWN DEVICE
John Dickson, Huntington Woods, and Vernon E. Schafer, Jr., Livonia, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 26, 1952, Serial No. 328,116
6 Claims. (Cl. 123—41.15)



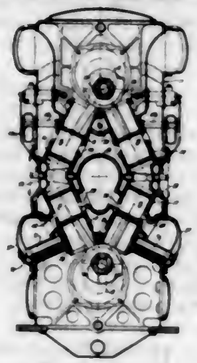
1. In an internal combustion engine having an engine combustion air supply duct, an engine exhaust gas delivery duct, an engine oil pressure lubricating system and an engine coolant distribution system, a valve in said air supply duct normally stopping the flow of air therethrough but movable to an open position permitting such flow, a member movable with said valve, a latch engageable with said member to hold said member in its valve open position and movable into and out of latchable relation with said member, latch actuating means operative to move said latch out of latchable relation with said member, biasing means yieldably opposing said latch actuating means, said latch actuating means including a pressure responsive means and a temperature responsive means, oil passage means for conducting oil to said pressure responsive means from the engine oil pressure lubrication system, said passage means having a pressure relieving opening, a closure for said opening, yieldable means biasing said closure to its closed position, and means operable in response to excess engine speed for opening said closure, said temperature responsive means including a body of thermally-expansive fluid, a second member confining said body, a third member through which coolant passes during normal operation of said coolant distribution system, said second member being in direct heat conducting relation with the coolant in said third member, one of said second and third members being in direct heat conducting relation with the engine exhaust gases in said exhaust gas duct:

2,731,002
DOUBLE-PISTON, INTERNAL-COMBUSTION ENGINE
Benno Fiala-Fernbrugg, Vienna, Austria
Application February 27, 1952, Serial No. 273,601
Claims priority, application Austria March 12, 1951
9 Claims. (Cl. 123—51)



1. An internal-combustion engine having a plurality of working cylinder liners with intake and exhaust ports and with two pistons for each working cylinder, one of said pistons controlling the intake port, the other of said pistons controlling the exhaust port, the engine comprising, moreover, a casing forming a frame for the working cylinder liners and a crankshaft, said crankshaft rectangularly intersecting the axes of the working cylinder liners outside said liners and having a crankpin, a separate main connecting rod attached to said crank pin, and means operatively connecting said main connecting rod to the exhaust controlling piston of a cylinder liner, and to the intake controlling piston of another cylinder liner of said cylinder liners to transmit motion to said crankshaft and to move the piston of each of said liners during a full crank turn toward each other, once for exhausting the burnt gases and once more for compressing the charge, and to move the pistons apart twice, for setting up negative pressure after the intake of the fresh mixture and for expansion after ignition, one of said approaches taking place after one piston has opened the exhaust port, the second approach taking place after the other piston, with a large spacing from the first one, has opened and closed the intake port after the closing of the exhaust port, said means comprising a linkage associated with each main connecting rod and composed of a link, rocker levers and intermediate connecting rods, one of said links and one of said rocker levers being supported in the casing.

2,731,003
INTERNAL-COMBUSTION ENGINE
Donald W. Morris, Berkeley, Calif., assignor to Morris Development Company, Los Angeles, Calif., a copartnership
Application February 23, 1952, Serial No. 273,049
9 Claims. (Cl. 123—53)



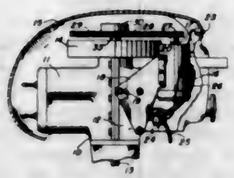
1. In an internal combustion engine of the type including a hollow framework having pairs of opposing intake and exhaust cylinders arranged in a diamond formation therein, each cylinder having a head engaging portion upon the end adjacent the opposing cylinder, and said framework having openings in the sides adjacent the head ends of each pair of cylinders of a size to pass a cylinder, a cylinder head removably closing each of said openings, exhaust manifold structures embracing the exhaust cylinders, opposed faces on the manifold structures and the exhaust cylinders generally tapered to permit tilting of the exhaust cylinders for removal thereof through the opening.

2,731,004
EXHAUST PORTS FOR INTERNAL-COMBUSTION ENGINES
Stephen Hopkins, Fishkill, N. Y., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application January 26, 1953, Serial No. 333,230
2 Claims. (Cl. 123—65)



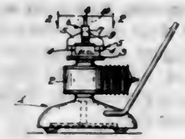
1. In an internal combustion engine of the reciprocating piston type operating with swirling of combustion gases about the axis of an engine cylinder, means for uniflow scavenging of waste combustion gases comprising a plurality of piston controlled exhaust ports in the side wall of said cylinder substantially equal and uniform in cross section throughout their lengths and connected to an exhaust manifold, the number of said ports being the maximum allowable in view of the structural strength of said cylinder, said ports being defined by parallel walls disposed generally tangentially to inscribed circles in a cross-sectional plane of said cylinder normal to the longitudinal axis thereof, each of said ports having a flow axis disposed at an acute angle to the cylinder radius at its point of intersection with said cylinder, said acute angle having a value such that the sum of the products of the flow coefficient of each port and its cross-sectional area is a maximum, said angle being within the limits of 25° to 35°.

2,731,005
ELECTRIC STARTERS FOR OUTBOARD MOTORS
Frederick W. Lausen, Gainesville, Tex.
Application August 14, 1952, Serial No. 304,300
3 Claims. (Cl. 123—179)



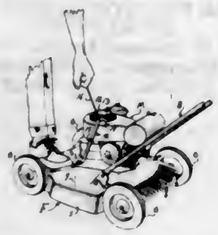
1. In an outboard motor having a drive shaft, an internal combustion engine for driving the shaft, a flywheel on the shaft overlying the engine and a shroud enclosing the engine and flywheel, the improvement which includes, an electric starter motor mounted on the engine adjacent the flywheel and within the shroud, an overrunning clutch overlying and securing the flywheel to the drive shaft and disposed within the shroud, a drive sprocket carried by the motor, a driven sprocket attached to the underside of the clutch above the flywheel, and an endless chain connecting the sprockets.

2,731,006
ADAPTERS FOR INTERNAL-COMBUSTION ENGINES
Gustav Hensel, Hillside, Ill.
Application October 25, 1954, Serial No. 464,359
1 Claim. (Cl. 123—179)



An adapter for engagement with a member to be rotated comprising: a reversible T-shape head for application, in one position, to the starter pulley of an engine shaft and for application in a second position to the starter drum of an engine shaft; a stem having a large portion and a diminished portion, the large stem portion being bifurcated and receiving said T-shape head, the width of the space between the bifurcated portions of said stem being materially greater than the thickness of said head at their point of juncture affording a limited movement of said head, and a pin pivotally connecting said head to stem supporting said head wholly above the base of said stem bifurcation in one position of said head and permitting oscillating movement of said head in the plane of said stem to provide centering means for aligning the axes of drive shaft and driven shaft to facilitate the starting operation, the diminished portion of said stem adapted to be received in the chuck of a machine.

2,731,007
GASOLINE MOTOR STARTING DEVICE
Don O. Benson, Minneapolis, Minn., assignor to Toro Manufacturing Corporation of Minnesota, Minneapolis, Minn., a corporation of Minnesota
Application January 22, 1953, Serial No. 332,616
4 Claims. (Cl. 123—185)



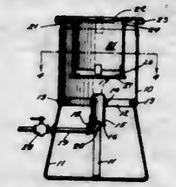
1. The combination of a low ambulant frame, a gasoline internal combustion motor mounted on said frame and having its drive shaft extending vertically, a starter drum fixedly mounted on one end portion of said shaft for rotation therewith, said starter drum having engagement means thereon adapted to engage one end of a starter line and being adapted to have such a starter line wound therearound for the purpose of imparting rotary movement thereto and thereby starting said motor, and a downwardly opening hook member mounted on said motor and positioned laterally of and on substantially the same level as said drum and extending substantially normal to a line drawn from said hook member tangential to said drum and being adapted to engage such a line when the latter is passed beneath the same and drawn upwardly whereby said motor may be relatively easily started by the operator by pulling upwardly on the free end of such line.

2,731,008
INTERNAL-COMBUSTION ENGINE AUXILIARY SHAFTS FOR DRIVING AUXILIARY ENGINE UNITS
Ferdinand A. E. Porsche, Stuttgart, and Robert Binder, Wiznenden, Germany, assignors to Dr. Ing. h. c. F. Porsche K.-G., Stuttgart-Zuffenhausen, Germany
Application September 29, 1953, Serial No. 383,038
Claims priority, application Germany October 15, 1952
3 Claims. (Cl. 123—195)



1. In an internal combustion engine provided with an auxiliary shaft driven by the engine for in turn driving auxiliary units such as an ignition distributor and a fuel pump, the improvement comprising a readily removable supporting standard mounted in an opening in the body of the engine and in which the auxiliary shaft is mounted and guided, means for supporting the auxiliary units on said standard in driving relation with said auxiliary shaft, said supporting standard comprising a hollow structure defining a chamber through which said auxiliary shaft extends in spaced relation to the inside wall surface of the chamber, said hollow structure and chamber extending above and below the opening in the body of the engine, bearings for said shaft located respectively at the upper and lower ends of said chamber, the bearing in said standard at the lower end of said chamber including a bearing surface generally normal to the axis of the auxiliary shaft, and a collar fixed to the shaft resting on said bearing surface and supporting the auxiliary shaft in position in the supporting standard, said supporting standard along with the auxiliary shaft and auxiliary units being readily removable as a whole from the body of the engine.

2,731,009
PORTABLE FUEL BURNING SPACE HEATER
Irving F. Pocrass, Charles W. Syak, and Bernard Pocrass, Youngstown, Ohio, assignors to The Bica Company, Girard, Ohio, a corporation of Ohio
Application June 24, 1952, Serial No. 295,158
3 Claims. (Cl. 126—85)



1. A portable space heater comprising a cylindrical casing open at its upper and lower ends and having an upwardly discharging tubular burner supported axially of and partially within its lower end and spaced with respect to said casing, and means for supplying a fuel mixture to said tubular burner, means supporting said cylindrical casing in elevated relation to a supporting surface, a dished deflector head supported by the upper end of said casing

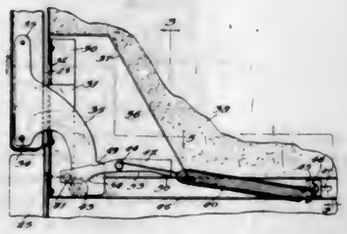
in spaced overlying relation thereto to form an annular opening therebetween, a cylindrical baffle supported vertically within said cylindrical casing and spaced with respect thereto and engaging said dished deflector head, and a flat circular baffle supported by the lower end of said cylindrical baffle and spaced with respect to the same and with respect to said tubular burner.

2,731,010
REFRACTORY ELEMENT FOR GAS FIRES AND LIKE SPACE HEATING MEANS
Charles James Moore and Stanley Horace Smith, Deepfields, near Bilston, England, assignors to Cannon Iron Foundries Limited, Deepfields, near Bilston, England, a British company
Application January 4, 1952, Serial No. 264,958
4 Claims. (Cl. 126—92)



1. A refractory element for a gas heater comprising, in combination, upstanding walls forming an elongated hollow block, smooth internal surfaces presented by the lower portion of said walls and defining an unobstructed combustion chamber in the base of the block, a bottom wall integral with said upstanding walls and providing a floor to the chamber, said bottom wall having at least one inlet opening arranged therein for the admission of fuel and air to the chamber, smooth inclined surfaces presented internally by said bottom wall and sloping up from said opening to meet the smooth internal surfaces of said upstanding walls, a part of one of said upstanding walls extending above the combustion chamber being penetrated by a series of elongated apertures arranged one above the other and extending each transversely across the block, said apertures communicating with the interior of the hollow block, and a series of conical heat-radiating points projecting into the interior of the block from the internal surfaces of an oppositely disposed pair of said upstanding walls where the latter extend above the combustion chamber.

2,731,011
STOVE CONSTRUCTION
Michael W. Maier, Beaver Dam, Wis., assignor to Malleable Iron Range Company, Beaver Dam, Wis., a corporation of Wisconsin
Application March 18, 1953, Serial No. 343,147
5 Claims. (Cl. 126—191)



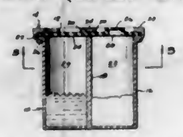
1. Hinge mechanism for an oven door comprising said oven door, a pivot therefor, a door stake secured to the oven door and movable therewith, a roller carried on said door stake at a point spaced radially from said pivot of said oven door, a pivotally mounted cam, a pivot for said cam disposed adjacent said roller when said door is in closed position and being located between said roller and said door pivot so that said roller engages said cam to rotate said cam in the same direction as the rotation of said door, said roller moving outwardly and away from said cam pivot as said door moves toward its open position, and a spring engaging said cam and biasing it toward door closed position, whereby the counterbalancing force applied by the spring to said door is modified by the angular disposition of said cam.

2,731,012
SEALED HYPODERMIC RECEPTACLE AND METHOD OF MAKING THE SAME
Edward Henderson, Montclair, N. J.
Application May 19, 1954, Serial No. 430,826
3 Claims. (Cl. 128—215)



1. A sealed hypodermic receptacle comprising: means providing a chamber for holding a preparation to be hypodermically dispensed; a hypodermic needle having a lumen extending therethrough mounted at one end of said means and communicating with said chamber; and a sheath-like hood made of thermoplastic material closed at its outer end disposed over and encasing the outer end and the sides of the needle, said sheath-like hood having a portion in fused sealing engagement with the needle.

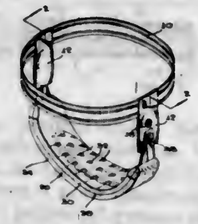
2,731,013
CONTAINER FOR HYPODERMIC INJECTION INGREDIENTS
Stannard D. Holmes, Hato Rey, Puerto Rico
Application December 23, 1954, Serial No. 477,200
3 Claims. (Cl. 128—272)



1. A container for hypodermic injection ingredients, comprising a receptacle formed open at one end and divided into a plurality of compartments for the several ingredients; a connector ring rotatably mounted on said end of the receptacle; and a receptacle lid engaged with the ring for rotation therewith and having at least one recess opening inwardly of the receptacle, said recess being adapted to bridge at least two of the compartments on rotation of the lid to a selected position, thus to communicate the bridged compartments with one another for intermixing of the ingredients contained therein.

2,731,014
SANITARY APPLIANCE
Irene M. Hollingsworth, Elwood, Ind.
Application June 29, 1954, Serial No. 439,981
1 Claim. (Cl. 128—290)

A sanitary pad comprising a soft pliable backing sheet of porous material, a moisture proof coating carried by a restricted area of one side of said backing sheet, a porous perforated cover sheet adhesively secured to the backing sheet and covering the coated area thereof, a pad of absorbent material disposed between the sheets in contact with the moisture proof coating, straps adhesively secured to adjacent faces of the backing sheet and the cover sheet and extending longitudinally from opposite ends of the pad for detachably connecting said pad to a support, said

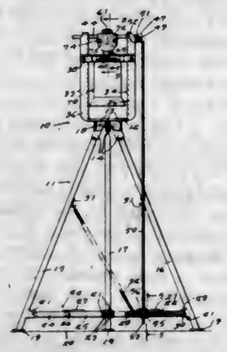


straps converging as they recede from the pad and carrying selected elements of separable fasteners, an elastic supporting belt, straps carried by the belt and extending downwardly therefrom in diametrically spaced relation thereto, cooperating elements of separable fasteners carried by the last named straps for engagement by the selected elements to detachably couple the pad to the belt, and cushions of pliable porous material enclosed in the straps carried by the belt.

2,731,015
ARTIFICIAL SPONGE AND METHOD OF MAKING IT
Harry A. Toulmin, Jr., Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio
No Drawing. Application March 16, 1953, Serial No. 342,751
16 Claims. (Cl. 128—296)

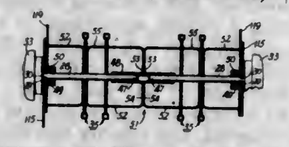
1. A firm, water-permeable, substantially water-insoluble sponge-like product consisting essentially of a porous mass of a substance selected from the group consisting of dextrans and dextran conversion products, said mass having, in cross-section, a cellular, foam-like structure.

2,731,016
POULTRY BEAK CUTTING DEVICE
Roy R. Miller, Merrill, Oreg.
Application June 11, 1954, Serial No. 436,113
4 Claims. (Cl. 128—303.1)



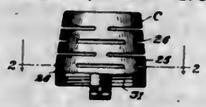
1. A poultry beak cutting and cauterizing device comprising an elongated substantially upright support, a knife, means swingably supporting said knife in an upper part of said support for vertical swinging movement of the knife, said support including a fixed anvil surface disposed beneath said knife, said knife having a sharpened bottom edge swingably movable toward and away from said anvil surface, means for heating said knife carried by said supporting means, and manually actuated means connected to said supporting means for swinging the supporting means and knife to move the knife downwardly and toward said anvil for cutting off a portion of a fowl's beak disposed between the bottom cutting edge of the knife and said anvil and for cauterizing the laceration simultaneously with the cutting stroke, said supporting means including a shaft journaled in the upper portion of said support, a tube having one end fixed to and suspended beneath said shaft, said tube extending transversely from the shaft and having an opposite end disposed remote from the shaft and against which the knife is secured and from which the cutting edge of the knife depends, said tube being formed of a heat conducting material, and a portion of said heating means extending into the first mentioned tube end.

2,731,017
ROTARY CARD FILING DEVICE
Hildaur L. Neilsen, Metuchen, N. J., assignor to Zephyr American Corporation, New York, N. Y., a corporation of New York
Application March 30, 1951, Serial No. 218,363
4 Claims. (Cl. 129—16)



1. In a rotary card filing device a shaft means and card-receiving rail means assembly comprising, in combination; shaft means comprising axially aligned rotatable lengths having opposed ends, coupling means receiving and connecting together said opposed ends, at least one of said shaft lengths being rotatable relatively to the other of said shaft lengths and to said coupling means, card-receiving rail means coaxially and slidably mounted on each of said shaft lengths in a relatively non-rotatable manner whereby each of said rail means is rotatable by the shaft length on which it is mounted, spacer means interposed between the rail means nearest their coupled ends, and separate means associated with each of said shaft lengths for separately rotating the latter.

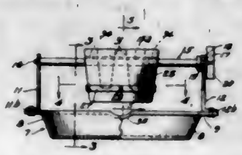
2,731,018
TOBACCO PIPE
Robert O. Ferguson, Bristol, Va., assignor of one-half to Bristol Steel & Iron Works, Inc., Bristol, Va.-Tenn., a corporation of Virginia; James R. Ferguson, administrator of said Robert O. Ferguson, deceased
Original application August 25, 1947, Serial No. 770,443. Divided and this application February 26, 1951, Serial No. 212,750
4 Claims. (Cl. 131—195)



4. An upper pipe bowl having means for connecting said pipe bowl to a lower pipe bowl, said upper bowl having a combustion chamber and an outer surface, means for cooling said upper pipe bowl comprising a plurality of slits in different planes around said surface, said slits being parallel to the top of said upper bowl and arranged in pairs, each pair comprising slits located in diagonally opposite portions of the outer surface, each slit of one pair being normal to a slit of another pair in the same plane and staggered about said bowl relative to the cuts in parallel planes, said slits extending

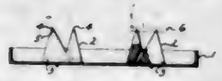
inwardly in said bowl toward said chamber, said slits being defined by concave, arc-shaped inner walls adjacent said chamber.

2,731,019
COMBINATION CIGARETTE EXTINGUISHER AND ASH TRAY
Alfred Rusch, Los Angeles, Calif.
Application May 1, 1953, Serial No. 352,400
3 Claims. (Cl. 131—235)



1. A device of the kind described comprising an ash tray, mounting means upstanding from opposite side portions of said ash tray, a horizontally extending shaft turnably carried by said mounting means and vertically spaced above said ash tray, a receiver for cigarette stubs carried by said shaft, said receiver having an open top, a closed bottom and an endless side wall, said receiver having an elongated diametrical slot extending through said wall, said shaft having a portion non-circular in cross section fitted within said slot in a non-rotatable relation to said receiver, spaced apart stop means carried by said receiver limiting the movement of said shaft in said slot so that when said shaft is turned through an angle of 180 degrees, inverting said receiver, said receiver will drop in relation to said shaft the distance permitted by said stop means and will receive an impact which will loosen adhering material from said receiver and facilitate the dumping thereof into said ash tray.

2,731,020
SMOKING ACCESSORY
Roy W. Hall, Oak Park, Ill.
Application November 2, 1953, Serial No. 389,674
4 Claims. (Cl. 131—235)



3. A device adapted to extinguish burning cigarettes and save the extinguished ends, comprising a pair of spaced grooves extending in substantially horizontal alignment and including one groove having a length not substantially exceeding the diameter of a cigarette, a pair of inclined grooves separated by a distance less than the length of a cigarette extending downwardly towards each other from said spaced grooves, and a tubular conformation adapted to receive the end of a cigarette with a sliding fit and extending in alignment with one of said inclined grooves in a manner that one side of said tubular conformation is defined by a continuation of said one inclined groove, said device being adapted to support a cigarette in said spaced grooves with the mouth end proximate that groove which is in alignment with said tubular conformation to permit sliding of the cigarette into said conformation upon sufficient burning of the cigarette to lose its support on the opposite spaced groove.

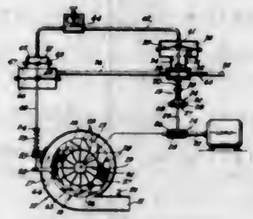
2,731,021
ART OF WAVING HUMAN HAIR
Gladys N. Oliveros, Houston, Tex.
Application June 19, 1950, Serial No. 168,990
10 Claims. (Cl. 132—33)

1. Apparatus for protecting the waved end portion of hair and being useful in imparting a permanent wave to the new-growth length portion of the hair adjacent the scalp, comprising, in combination, a rod on which the waved end portion of the hair is adapted to be wound, a cylinder comprising two hingedly connected cylindrical half-sections made of metal, the cylinder having a slit-like opening between two adjacent edges of the half-sections for the passage of the hair therethrough and adapted to be disposed about the rod and thereupon



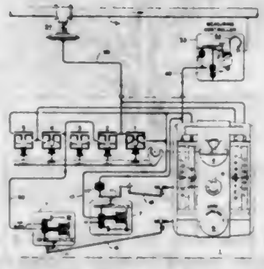
to enclose the hair wound thereon, said cylinder providing a mandrel on which the new-growth length portion of the hair to be waved may be curled preliminary to imparting a permanent wave thereto, and means extending along said opening for sealing the cylinder against the ingress of a liquid used in imparting said permanent wave.

2,731,022
SPEED REGULATING MECHANISM
Richard A. Fischer and Robert A. Arthur, Los Angeles, and James M. Kemper, Hollywood, Calif., assignors to The Garrett Corporation, Los Angeles, Calif., a corporation of California
Application May 10, 1950, Serial No. 161,226
2 Claims. (Cl. 137—34)



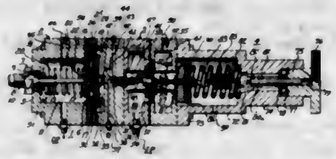
1. Speed controlling mechanism for a pneumatically driven prime mover of the type having a source of motive fluid, inlet control means between such source and the prime mover for controlling the flow of motive fluid to the latter and a governor responsive to the speed of the prime mover, said speed controlling mechanism comprising an actuator rod connected to the inlet control means, a resilient member normally urging said actuator rod toward a position to reduce the speed of the prime mover, a fluid pressure actuator including a chamber having a movable wall directly connected to said actuator rod and operative in response to the application of fluid pressure thereto to adjust the inlet control means in opposition to said resilient member toward a position to increase the speed of the prime mover, a fluid pressure supply conduit connected to the chamber of said fluid pressure actuator for conducting actuating fluid under pressure to said actuator, a pilot valve in said fluid pressure supply conduit, an operator for said pilot valve connected to the governor to open said pilot valve to reduce fluid pressure in the chamber of said fluid pressure actuator upon an increase in the speed of the prime mover, a fluid pressure responsive valve actuator directly connected to and movable in unison with said pilot valve, a sensing chamber having a movable wall thereof connected to be moved by said actuator rod, a fluid pressure transfer conduit interconnecting said fluid pressure responsive valve actuator and said sensing chamber whereby movements of the movable wall of said sensing chamber as effected by said actuator rod will effect operation of said valve actuator to move said pilot valve, and means for bleeding fluid from said sensing chamber for controlled dissipation of the fluid pressure applied to said valve actuator.

2,731,023
BIAS ADJUSTING APPARATUS FOR FLUID PRESSURE CONTROL
Michael Panich, Mayfield Heights, Jack F. Shannon, Euclid, and Paul S. Dickey, East Cleveland, Ohio, assignors to Bailey Meter Company, a corporation of Delaware
Application October 25, 1951, Serial No. 253,088
2 Claims. (Cl. 137—82)



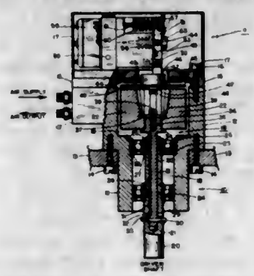
1. A selector station for a fluid pressure control system wherein a fluid pressure is produced by a variable representative of a condition and said condition is controlled either manually or automatically through said selector station, comprising in combination; a plurality of two-position valves; means for simultaneously mechanically actuating the valves, hand operated switching means for giving the mechanical actuating means two positions of rest; a hand actuated means for establishing a fluid pressure; input piping upon which is imposed a fluid pressure responsive to a variable; an expansible-contractible means responsive to the fluid pressure of the input piping; a pilot valve actuated by the expansible-contractible means for producing an output loading pressure; a mechanical means acting on the pilot valve in conjunction with the expansible-contractible means to bias the output loading pressure; output piping connected to some of the plurality of valves whose actuation selectively controls the condition in accordance with the manually controlled fluid pressure and that of the pilot valve; and two groups of substantially linear parallel pressure gage scales including cooperating pointers indicating the input and output fluid pressures; including, a first group having two pointers, a first of which continuously indicates the fluid pressure of the input piping, and a second of which is selectively actuated by the valves to indicate the fluid pressure output of the pilot valve and the fluid pressure output of the hand actuated means, a second group having two pointers, a first of which continuously indicates the fluid pressure of the output piping, and a second of which is selectively actuated by the valves to indicate the output of the pilot valve and the fluid pressure output of the hand actuated means.

2,731,024
PNEUMATIC RELAYS EMBODYING A SIGNAL INPUT PRESSURE RESPONSIVE PILOT VALVE AND A BOOSTER PILOT VALVE
Ray S. Williams, Orrville, Ohio, assignor to Hagan Corporation, Pittsburgh, Pa., a corporation of Pennsylvania
Application July 30, 1953, Serial No. 371,275
2 Claims. (Cl. 137—84)



1. A booster pilot valve sending relay comprising a body having therein a tandem assembly of a signal input pressure responsive pilot valve mechanism and a booster pilot valve pressure mechanism adapted to transmit a sending pressure; said signal input pressure responsive pilot valve mechanism comprising a diaphragm in the body providing a chamber therein on each side thereof, one of said chambers receiving a variable signal input pressure and the other the sending pressure of the booster pilot valve mechanism, a valve operatively connected to and actuated by said signal input pressure responsive diaphragm for establishing a variable output pressure that is linearly proportional to the signal input pressure; said booster pilot valve mechanism comprising a pair of spaced diaphragms having their central portions secured together, said pair of diaphragms forming in said housing on one side of the diaphragms a booster pressure sending chamber and on the other side a chamber for receiving the variable pressure from said signal input pressure pilot valve, a booster pilot valve having an exhaust port seat in the central portion of said pair of diaphragms that communicates with the space between them an exhaust passage in the body connecting said space with the atmosphere, a valve stem in the body having one end controlling the exhaust port seat, a pressure supply fitting in said body in line with said stem and having an inlet port seat, said stem having a valve adapted to engage said seat, the inlet and exhaust port seats being closed when the forces of the sending pressure and the variable pilot pressure acting on said pair of diaphragms are in balance, said body having a passage connecting the sending pressure chamber of the booster pilot valve to the sending pressure receiving chamber of the signal responsive pilot valve assembly, whereby the output pressure of the booster pilot valve assembly is caused to be equal to the signal input pressure.

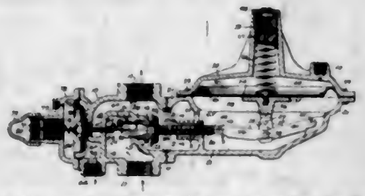
2,731,025
MAGNETIC DRAG SPEED MEASUREMENT DEVICE
Herbert A. Neuman, Wrentham, and Stuart W. Sweet, Mansfield, Mass., assignors to The Foxboro Company, Foxboro, Mass., a corporation of Massachusetts
Application August 31, 1954, Serial No. 453,384
1 Claim. (Cl. 137—85)



Speed measuring apparatus comprising, in combination, a shaft assembly mounted for rotation in response to the movement of a member the speed of which is to be measured, said shaft assembly comprising a sleeve member having a low temperature coefficient of expansion and an expansion shaft mounted in said sleeve member in piston fit relation therewith and pinned thereto at one end of said shaft, with said expansion shaft having a high temperature coefficient of expansion, said shaft, further, being provided with longitudinal slots which form pneumatic passages confined by said sleeve member and having an opening to atmosphere adjacent said pin, a magnet fixed on the other end of said expansion shaft and spaced from said sleeve member, for rotation with said shaft assembly, a fixed magnetic flux guide in spaced relation with said magnet, a drag member between said magnet and said keeper ring and mounted for rotational movement in predetermined spaced relation with said magnet and in the magnetic field thereof whereby said rotation of said magnet

produces, in said drag member, a force which at least tends to produce said rotation of said drag member in representation of the speed of said member under test, said force being variable with temperature changes in said drag member, and said expansion shaft providing automatic temperature compensation with respect to said force variation by automatically varying said spaced relation between said magnet and said flux guide in response to temperature variations in said apparatus, a supply and waste pneumatic system including a proportional feedback pneumatic nozzle-baffle-relay arrangement responsive to the interaction between said magnet and said drag member for producing a pneumatic pressure in representation of the speed being measured, and means for directing the waste of said pneumatic system to said drag member and from there into said pneumatic passages of said expansion shaft.

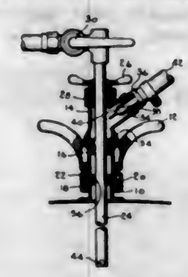
2,731,026
FLUID PRESSURE REGULATOR
George C. Hughes, Anderson, Ind., assignor to Reynolds Gas Regulator Company, Anderson, Ind., a corporation of Indiana
Application July 11, 1952, Serial No. 298,348
15 Claims. (Cl. 137—116.5)



8. In a gas pressure regulator, a valve body having an inlet and an outlet separated by a partition having a valve port opening extending therethrough, a valve seat at one end of said port, a valve movable to and from said seat to control the flow of fluid from the inlet to the outlet, a flexible diaphragm responsive to pressure at the outlet side of the regulator, an operating connection between said diaphragm and said valve including a compressible member through which the valve closing movement of the diaphragm is transmitted to such valve, a plunger extending through said valve and having a direct operating connection with the diaphragm whereby a rise in outlet pressure following the closing of the valve will cause the diaphragm to move the plunger relative to such valve, said body having an exhaust port in communication with the outlet but separated from the inlet by said partition wall, a valve movable to and from said last named port, resilient means biasing said last named valve to a closed position, a valve stem secured to said last named valve and arranged to abut said plunger when the first named valve is closed, whereby continued movement of said plunger after the first valve is closed will open the second named valve and relieve the pressure at the outlet side of the regulator, a chamber into which the exhaust discharges, a restricted discharge opening for said chamber, a pressure responsive member forming one wall of said chamber, an operating connection between said member and the second named valve whereby a predetermined increase of pressure in said chamber will cause said member to increase the opening movement of the last named valve.

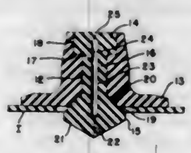
2,731,027
BEER DISPENSING APPARATUS
Carl L. Daun, Milwaukee, Wis., assignor to Research & Engineering Corporation, Milwaukee, Wis., a corporation of Wisconsin
Application March 19, 1951, Serial No. 216,378
4 Claims. (Cl. 137—170.1)

1. Apparatus for serially interconnecting a plurality of beer barrels to dispense the contents from a single faucet, comprising, a tap coupled to each barrel, a tap rod mounted in each tap and extending into the corresponding barrel through the aperture in the tap, a transverse conduit communicating with each tap aperture, a check valve in each conduit, conduit means connecting the tap rod of the first barrel to a faucet, conduit means



connecting the transverse tap conduit of a second barrel to a fluid pressure source, conduit means connecting the transverse tap conduit of said first barrel to the tap rod of the second barrel so the pressure applied to the second barrel effects transfer of beer to the first barrel as beer flows from the first barrel to said faucet.

2,731,028
VALVE
Georgie P. McCord, Oaklandon, Ind., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application August 20, 1952, Serial No. 305,338
10 Claims. (Cl. 137—223)

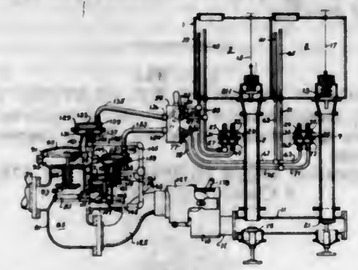


10. A valve comprising a valve casing having an axially extending bore therethrough, an elastic core member in said bore, said elastic core member having an axially extending inflating passage therethrough, said elastic core member having a retaining flange adjacent each end thereof, the spacing between said flanges when the core is in an unstretched condition being less than the length of said bore and the portion of said core between said flanges being of a diameter with respect to the diameter of the bore that said portion of the core when assembled in said bore is not compressed to any substantial extent whereby said portion of the core when assembled in said bore is maintained in axially tensioned condition and said flanges placed under compression to tightly seal the inflating passage therethrough.

2,731,029
BOTTOM FILL APPARATUS
Howard E. Rittenhouse, Fort Wayne, Ind., assignor of one-half to Bowser, Inc., Fort Wayne, Ind., a corporation of Indiana, and one-half to Tokheim Corporation, a corporation of Indiana
Application May 4, 1951, Serial No. 224,529
20 Claims. (Cl. 137—235)

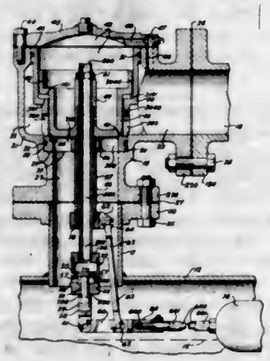
1. In an apparatus for filling a tank at a high rate of delivery comprising a liquid supply line under pressure, a delivery line communicating with said tank; a normally closed first valve connecting said lines and disposed entirely apart from the tank, a normally closed second valve in the delivery line, a motor for operating said first valve, means for balancing the pressure on opposite sides of the first valve when the second valve is closed including

means connecting said motor with said delivery line, said motor comprising means responsive to a change in pres-



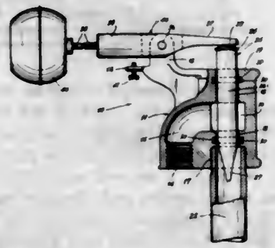
sure in said delivery line effected by opening the second valve for opening the first valve.

2,731,030
OVERFLOW FLOAT VALVES
Lyman W. Phillips and Godfrey H. Fox, Detroit, and William L. Bostwick, Pleasant Ridge, Mich., assignors to Petroleum Systems, Inc., a corporation of Michigan
Application August 31, 1954, Serial No. 453,344
3 Claims. (Cl. 137—413)



1. An overflow float valve of the type adapted to shut off fluid being supplied therethrough under pressure to a closed tank including a tank filler nozzle responsive to the fluid in the tank attaining a predetermined level comprising an L-shaped valve body mounted on the tank filler nozzle having a horizontal inlet thereto from a pressure fluid supply line and a vertical outlet therefrom communicating with said tank filler nozzle, a valve guide and valve seat element fixed in vertical relationship within said valve body with an annular primary inlet passage therearound communicating between said inlet and said outlet, a cup shaped main valve element reciprocatingly mounted in said valve guide and valve seat element adapted to seat and close off communication between said annular primary inlet passage and said outlet, the said valve guide and main valve element being provided with oppositely disposed annular shoulders forming an annular fluid chamber therebetween, the said cup shaped valve element forming a pressure chamber in said valve body thereabove, an auxiliary valve suspended from said main valve with a communicating passage from said pressure chamber to said auxiliary valve, said auxiliary valve having an outlet therefrom communicating with said tank, said L-shaped valve body having a continuously open secondary passage communicating between said inlet and said pressure chamber, the said valve guide and main valve element being generously spaced to provide a continuously open tertiary passage communicating between said inlet, said annular fluid chamber and said pressure chamber, the communicating passage between said main valve and said auxiliary valve and the outlet therefrom being larger than the combined secondary and tertiary passages, a float pivotally suspended from said valve guide and valve seat element linked to said auxiliary valve maintaining said main and auxiliary valves open during the filling of the said tank, said float closing said auxiliary valve sufficiently as it closes said main and auxiliary valves to reduce the auxiliary valve outlet to less area than the area of said secondary and tertiary passages causing a pressure to be built up on said main valve to finally close the same hydraulically, the said annular fluid chamber serving to prevent main valve hammering at final closing thereof and to prevent flutter at all stages of its operation.

2,731,031
BALL COCK
John S. Newhouse, St. Louis, Mo.
Application October 12, 1950, Serial No. 189,715
3 Claims. (Cl. 137—444)

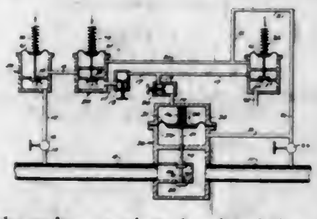


1. A ball cock comprising a valve body having an internal cavity, an inlet, and an outlet, said inlet and said outlet each communicating with the internal cavity, said body having also a cylindrical bore formed coaxially with said inlet and extending therefrom through said internal cavity and to an outside surface of said body, there being a first annular recess formed in the wall of said bore intermediate said cavity and said inlet and a second annular recess formed in the wall of said bore intermediate said cavity and said outside surface, a yieldable annular element removably disposed in each of said recesses, a plunger slidably disposed in said bore, said plunger having a cylindrical section and a tapered section, said cylindrical section being in constant slidable engagement with said annular element disposed in said second annular recess and being intermittently slidably engageable with said annular element disposed in said first annular recess, said plunger being adapted to respond to water pressure existing at said inlet whereby to displace said cylindrical section from engagement with said annular element disposed in said first annular recess and to dispose a portion of said tapered section radially inwardly thereof, and means responsive to a variable water level whereby to restrain said plunger from response to said water pressure existing at said inlet when said water level is at a predetermined minimum height, said means being also adapted to displace said tapered section from a position radially inwardly of said annular element disposed in said first annular recess and thereby to effect smooth compressive sliding engagement of said cylindrical section therewith upon rise of said variable water level to said predetermined minimum height.

2,731,032
FLUID PRESSURE REGULATING SYSTEM
George C. Hughes, Anderson, Ind., assignor to Reynolds Gas Regulator Company, Anderson, Ind., a corporation of Indiana
Application August 7, 1952, Serial No. 303,107
4 Claims. (Cl. 137—492)

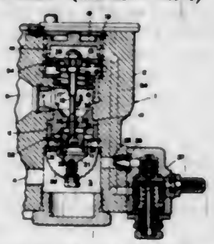
1. In a system for regulating the flow of gas from a high pressure main to a low pressure main, a diaphragm operated valve interposed between said mains to control the flow of fluid from one main to the other, a pilot pres-

sure regulator responsive to pressure in the low pressure main and having an inlet and an outlet, a high pressure auxiliary pressure regulator having an inlet connected with the high pressure main and an outlet normally set for a predetermined outlet pressure and connected with said pilot regulator inlet, a relief valve having an inlet and an exhaust outlet, a conduit connecting said relief inlet with the outlet of the pilot regulator, said relief valve being responsive to the pressure in the low pressure main and set to open when such pressure exceeds a predetermined maximum, a valve closing chamber below the diaphragm of the main valve and a valve opening chamber above said



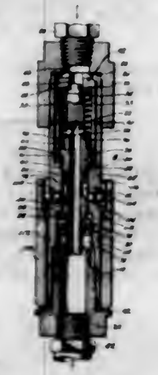
diaphragm, the valve opening chamber being connected to said conduit between the inlet of the relief valve and the outlet of the pilot regulator, a manually settable needle valve between the outlet of the pilot regulator and said opening chamber, a second manually settable needle valve between said chamber and the relief valve, a substantially unrestricted passageway between the closing chamber and the low pressure main said passageway being the only external fluid communication with said valve closing chamber, and a manually settable adjustable spring in the opening chamber and acting on said diaphragm to bias move the main valve to an open position.

2,731,033
AIR CONTROL VALVE
Walter L. Cable, Teaneck, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application April 6, 1953, Serial No. 347,127
2 Claims. (Cl. 137—494)



1. In a pressure responsive valve of the character described including a piston operated valve member to control axial flow of air from a high pressure chamber to an opposed low pressure chamber, a thickened annulus fitted in a passageway between the two chambers and having a frusto-conical well in each of the opposite ends thereof, the wider diameters of which wells extend into the opposed chambers, and the annulus having a reduced frusto-conical passage axially connecting the narrower end of one well with that of the other, the wider end of the axial passage facing the high pressure chamber, the piston including an elongated stem connecting the piston at one end with the valve member at the other end and passing axially and freely through the reduced frusto-conical passage, the low pressure chamber including a passage extending laterally therefrom and communicating with a chamber below the piston, the reduced conical passage serving to communicate air flow from the high pressure chamber to the low pressure chamber and inward toward the valve stem and away from the lateral passage, and the narrower end of the well communicating with the high pressure chamber providing a seat for the valve member.

2,731,034
LUBRICANT PRESSURE REGULATING VALVE
Henry T. Dinkelkamp, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a corporation of Virginia
Application August 10, 1950, Serial No. 178,713
5 Claims. (Cl. 137—495)

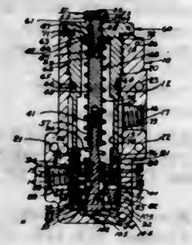


1. A lubricant pressure regulator having an inlet and an outlet, including in combination, cylinder forming means between the inlet and the outlet and having therein an inlet cylinder, a stem cylinder communicating with the inlet cylinder, and an outlet cylinder communicating with the outlet, an assembly including an inlet piston movable in the inlet cylinder, an outlet piston movable in the outlet cylinder, and a stem interconnecting the pistons and slidable in the stem cylinder, a valve controlling the flow of lubricant from the inlet to the inlet cylinder and having a valve member connected to the inlet piston and exposed to the force of lubricant pressure at the inlet to tend to move it to valve opening position, a conduit bypassing the valve and connecting the inlet with the inlet cylinder so that lubricant pressure at the inlet is applied to the inlet piston to tend to move the valve member to valve closing position, the relative effective areas of the valve member and the inlet piston being such that the forces acting thereon are substantially in equilibrium, a second conduit connecting the inlet cylinder at the outlet of the valve with the outlet cylinder, means biasing the assembly in such direction as to move the valve member to open position, cam-actuated latching means carried by said cylinder forming means and engageable with the stem of said assembly and adapted to hold the assembly in such position as to maintain the valve member in open position, and manually operable camming means for actuating said latching means, whereby the regulator may be used to regulate the pressure of lubricant at the outlet irrespective of lubricant pressure at the inlet when the latching means is in inoperative position and the regulator may be used to communicate lubricant at inlet pressure to the outlet when the latching means is in operative position.

2,731,035
SPRING LOADED DUAL TYPE RELIEF VALVE
Robert Stevenson, Barrington, R. I., assignor to Anco, Inc., a corporation of Rhode Island
Application August 30, 1951, Serial No. 244,312
3 Claims. (Cl. 137—512.1)

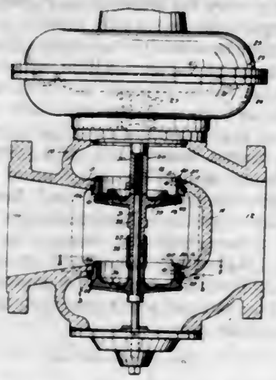
2. A spring loaded dual type relief valve consisting of a housing having a line port, a reservoir port and a

cylindrical bore communicating with said ports, a valve seat body provided with a vertical passageway forming a set of valve seats, secured in said cylindrical bore between said ports in fluid tight relationship, a circular set back in said valve seat body, orifices in said seat body connecting said vertical passageway with said circular set back, apertures in said valve seat body set transversely to said orifices, an auxiliary valve plug slidably mounted in said valve seat body and having a beveled



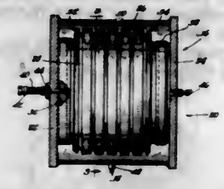
surface engageable with one of said set of valve seats, a plurality of vertical ports provided in said auxiliary valve plug, a second valve plug having a beveled surface engageable with the second of said set of valve seats, a valve stem extension adjustably secured to said second valve plug, a spring mounted on said valve stem extension and extending to said auxiliary valve plug, a gland adjustably secured in said housing abutting said valve stem extension.

2,731,036
VALVE SEAT STRUCTURE
George C. Hughes, Anderson, Ind., assignor to Reynolds Gas Regulator Company, Anderson, Ind., a corporation of Indiana
Application October 6, 1951, Serial No. 250,061
2 Claims. (Cl. 137—625.34)



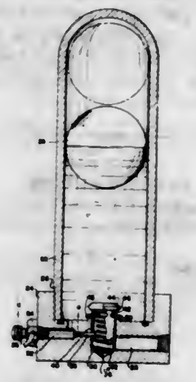
1. In a valve having a valve body provided with an inlet and outlet, separated by a partition wall having a pair of separated valve port openings, a valve seat associated with each port, a movable valve member coacting with each valve seat, means rigidly connecting said valve members, means to move both valve members simultaneously to and from their respective seats to control the passage of fluid through the associated valve ports wherein one of said seats comprises a sleeve slidably mounted in its respective valve port for movement in a direction substantially parallel with the direction of the closing movement of its respective valve member, said seat member having an external diameter less than the internal diameter of the associated valve port opening to permit limited movement of the valve seat in a radial direction, said seat member having a valve seat surface facing its respective valve member and an annular shoulder facing in the opposite direction and underlying the partition wall, a ring of rubber-like compressible resilient material encircling said sleeve and interposed between said shoulder and the associated partition wall to provide a fluid-tight seal therebetween, and means carried by the sleeve and coacting with said partition wall to pre-compress the ring between the shoulder and the partition wall and to limit the movement of the shoulder away from the partition while permitting movement of the shoulder toward the partition consequent upon pressure of the valve member on the valve seat surface in a closing direction.

2,731,037
HYDRAULIC ACCUMULATORS
Frank S. Schindler, Elgin, and Kenneth H. Myers, Maywood, Ill., assignors to Chicago Metal Hose Corporation, Maywood, Ill., a corporation of Illinois
Application September 23, 1950, Serial No. 186,426
6 Claims. (Cl. 138—30)



2. A hydraulic accumulator, comprising a casing providing a chamber adapted for connection with a hydraulic pressure system, a length of corrugated tubing disposed within said chamber, plate means at each end of the tubing for closing the tubing to provide an expansible gas container, at least one end of said tubing terminating in a conical portion mating with a bevelled surface on its associated plate means, means providing a hermetic seal between said conical portion and its associated plate means, a ring member overlying the tubing and conical portion for clamping said conical portion against said bevelled surface, and means for maintaining the ring member in its clamping position whereby to prevent the application of any undue stresses to said seal.

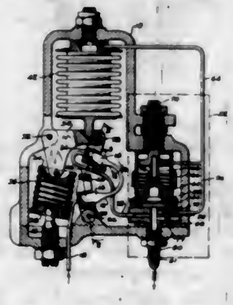
2,731,038
HYDRAULIC ACCUMULATOR
Howard Milne Purcell, Lansdowne, Pa.
Application January 26, 1953, Serial No. 333,322
3 Claims. (Cl. 138—30)



1. In a hydraulic accumulator; a cylindrical container having a bottom wall with a liquid flow passage therein opening axially into the container, a valve member in the passage having limited vertical reciprocatory movement therein between an upper flow passage open position and a lower flow passage closed position and spring

urged upwardly, said valve member having channel means extending upwardly therealong and opening from the side thereof outwardly into the container adjacent the upper end of the valve member, a head on the valve member, a resilient seal ring surrounding the valve member under the head, and a ball shaped element in the container floating on the liquid therein adapted for engaging said valve member and moving it downwardly until the head thereon presses the seal ring against the said bottom wall whereby discharge from said accumulator will be interrupted when the liquid level drops to a predetermined level therein, said ball-shaped element when located on the axis of said container having a small clearance therefrom completely around the element.

2,731,039
FLUID PRESSURE REGULATOR
Hillard E. Barrett, East Orange, and Ella A. Gallo, Englewood, N. J., assignors to Curtiss-Wright Corporation, a corporation of Delaware
Application March 11, 1952, Serial No. 276,016
8 Claims. (Cl. 138—45)



1. A fluid pressure regulator comprising an inlet passageway; an outlet passageway; an open-ended tube serially connected between said passageways, said tube having an arcuate bend intermediate its ends with said arcuate portion being elastically bendable and having a substantially flat cross-section such that the fluid flow resistance of said tube respectively increases and decreases with movement of the tube ends toward and away from each other; first means including a spring operatively connected to said tube between the tube ends for applying a force urging said tube ends relative to each other; and second means operatively connected to said tube between the tube ends for applying a control force in opposition to said spring force, the connection of one of said first and second means to said tube being such that the effectiveness of its force on said tube varies so as to reduce the maximum control force required.

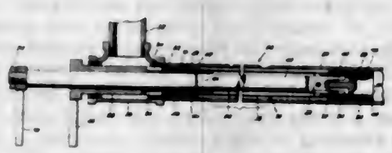
2,731,040
FLEXIBLE HOSE
Kenneth R. Warburton, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application March 2, 1953, Serial No. 339,503
18 Claims. (Cl. 138—49)



1. The method of making a flexible hose comprising, forming first and second strips of continuous or indefinite lengths from thermoplastic material and with mating complementary edges on each side of the strips formed to be interlocked together, forming said strips to cylindrical volutes with the convolutions of the first and second strips in side by side relationship and interlocking said complementary mating edges together.

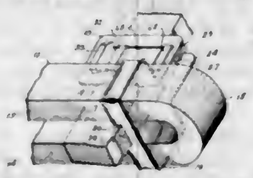
12. A flexible hose comprising, two side by side cylindrical volutes of thermoplastic material having mating complemental edges on each side thereof and said mating complemental edges being interlocked with each other one of said volutes being made of a comparatively stiff thermoplastic material, and the other being made of a more flexible thermoplastic material.

2,731,041
BY-PASS ASSEMBLY FOR SERVICE PIPES
Frank H. Mueller and Frederick Tratzik, Decatur, Ill., assignors to Mueller Co., Decatur, Ill., a corporation of Illinois
Application June 18, 1952, Serial No. 294,285
3 Claims. (Cl. 138—97)



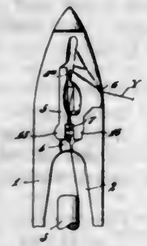
1. A by-pass assembly for insertion into a service pipe to isolate the walls of a section thereof, comprising: an open-ended tubular assembly having an unobstructed passageway therethrough and provided with an exterior circumferential groove adjacent each end thereof, said assembly having a body and separate end parts with said body forming the inner side walls and said end parts forming the outer side walls of said grooves, said end parts being threadedly mounted on said body for longitudinal adjustment thereon to vary the width of said grooves; an annular radially-expansible gasket ring in each of said grooves and having an outer diameter normally slightly less than the inner diameter of the service pipe; and means defining a key slot in said body adjacent each end thereof and in each of said end parts with the body and end part slots at one end of said assembly opening radially inwardly and being accessible from within said assembly and the body and end part slots at the other end of said assembly opening longitudinally outwardly and being accessible from said other assembly end, said slots being engageable by a wrench device removably inserted in said assembly for effecting longitudinal adjustment of said end parts relative to said body to narrow said grooves and expand said rings into peripheral sealing engagement with the interior surface of the pipe.

2,731,042
LUG STRAP BRACKET FOR PICKER STICK
Robert J. Higginbotham, Charlotte, N. C.
Application December 12, 1952, Serial No. 325,615
5 Claims. (Cl. 139—154)



1. In combination with a loom picker stick, a U-shaped lug strap extending around said stick with its closed end adjacent one edge of the stick and its legs disposed one at each side thereof, and a pad disposed between the closed end of said lug strap and said stick, a lug strap bracket comprising a bracket portion of rectangular shape extending laterally beyond the opposite sides of said stick and receiving the legs of said lug strap, side plates extending substantially perpendicularly from said bracket portion and disposed one at each side of said picker stick, an abutment plate slidably mounted on said side plates and bearing against the edge of said picker stick remote from said pad, and a nut and bolt means operatively engaging said side plates and said abutment plate to clamp said bracket on said picker stick.

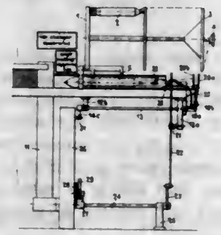
2,731,043
YARN TENSION AND TRAP FOR USE IN SELF-THREADING WEAVING SHUTTLES
Wilfrid J. Gosselin, Methuen, Mass., assignor to U S Bobbin & Shuttle Company, Lawrence, Mass., a corporation of Rhode Island
Application July 31, 1952, Serial No. 301,846
3 Claims. (Cl. 139—217)



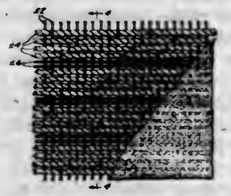
1. A threading block for use in a weaving shuttle of the automatic threading type, said block having a forwardly extending yarn passage through which the yarn normally passes to a lateral yarn-delivery eye, the block having a tensioning chamber and a pair of tensioning units located in said chamber one ahead of the other, each unit comprising a pair of independent vertically elongate tension pads of stiff material having opposed yarn-contacting faces, spring means urging the pads of each pair toward each other thereby frictionally to contact yarn moving along the normal path which it follows during the second and later picks of the shuttle after replenishment from the rear end of the block to the delivery eye, one pad of each pair having a yarn trapping finger integrally joined to its edge at a point above the level of said normal yarn path, each finger having an upper surface which slopes too steeply to support the yarn during the first pick of the shuttle after replenishment, each finger extending diagonally down and transversely across the space between the yarn-contacting faces of the pads, and terminating adjacent to but spaced from the edge of the opposed pad of the respective pair, one of said fingers being at the forward edge of its respective pad, and the other of said fingers being at the rear edge of its respective pad.

2,731,044
DEVICES FOR THREADING-IN THE WEFT IN AUTOMATIC LOOMS
Kurt Schwabe, Le Locle, Switzerland
Application June 6, 1950, Serial No. 166,335
11 Claims. (Cl. 139—259)

1. A threading apparatus comprising, in combination, supporting means; slay means pivotally mounted on said supporting means; an elongated shuttle mounted on said slay means for reciprocating movement and having a recess for receiving a cop, said shuttle being formed on the surface thereof with an elongated slot, and a transversal slot branching off from said elongated slot, and further formed with an eyelet passage extending normal to said longitudinal slot and opening and connecting the innermost portions of said longitudinal slot and of said transversal slot; a thread-engaging member located in said longitudinal slot between said recess and said transversal slot; cop changing means mounted on said supporting means supplying new cops and inserting the same into said recess in said shuttle; thread holding means mounted on said supporting means and adapted to hold the end of the thread of a newly inserted cop; fork-shaped guiding means mounted on said slay means substantially aligned with said longitudinal slot in said shuttle and adapted to hold and support a portion of a thread of a new cop extending between said shuttle and said holding means; a rocker arm mounted on said supporting means pivotally about an axis parallel to the direction of movement of said shuttle, said rocker arm having a thread engaging portion adapted to engage a thread extending from said cop and held by said thread holding means, said rocker arm passing during movement thereof into said fork-shaped guiding means so that said thread engaging portion thereof forms a loop of said thread, tensioning the same so as to wind off a portion thereof from said cop and to insert said thread portion into said longitudinal groove of said shuttle under said thread engaging member; a spring-loaded hook member mounted on said slay means pivotally normal to the direction of movement of said shuttle, between an inoperative and an operative position and adapted to engage in operative position said tensioned thread so as to insert the same into said transversal slot in said shuttle; thread inserting means reciprocably mounted on said slay and located between said hook member and said shuttle, said thread inserting means having a thread engaging portion movable substantially normal to the direction of movement of said shuttle and adapted to engage said thread so as to insert it into said eyelet passage of said shuttle; drive means operating said rocker arm, said hook member, and said thread inserting means; and motion transmitting means connecting said drive means with said rocker arm, said hook member, and said thread inserting means for consecutive movement.



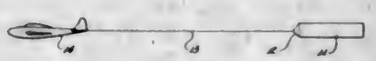
2,731,045
BLANKET AND NAPPED MATERIAL THEREFOR
Charles D. Owen, Jr., Biltmore, N. C., assignor to Beacon Manufacturing Company, a corporation of Massachusetts
Application March 17, 1953, Serial No. 342,776
4 Claims. (Cl. 139—391)



1. A household blanket composed of woven warp and filling yarns, said warp yarns being hard twisted yarns of relatively high strength and said filling yarns consisting in part of soft slack twisted yarns free of core threads and being uniformly napped to provide a high lofty nap which imparts warmth properties to the blanket, and the other filling yarns providing strength for the filling and

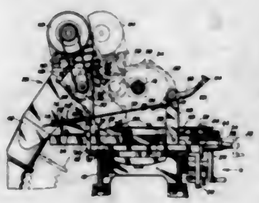
being hard twisted yarns of relatively great strength and located in parallel relationship with said napped soft filling yarns and the number of said napped filling yarns being at least twice the number of said hard twisted filling yarns with each hard twisted filling yarn being disposed adjacent a pick of the same yarn and being woven in the same shed with an adjacent napped filling yarn.

2,731,046
TOW TARGET
Martin Bachner, Pottstown, Pa., assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application October 1, 1951, Serial No. 249,116
3 Claims. (Cl. 139—420)



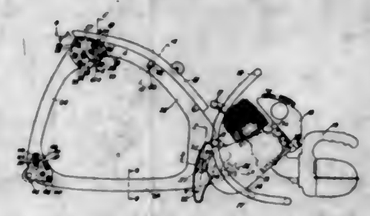
1. An aircraft tow target comprising essentially a sheet of an open weave fabric woven of monofilament polyethylene yarn, the diameter of filament being in the range of 0.010 to 0.050 inch, the weight of the fabric being less than 10 ounces per square yard, the breaking strength of the fabric being greater than 35 pounds per inch in both warp and filling, a substantial portion of the yarn carrying a thin coating of metal on the surface thereof.

2,731,047
DUPLICATING LATHE ATTACHMENT
Arthur G. Webb, Napa, Calif.
Application September 16, 1953, Serial No. 380,631
2 Claims. (Cl. 142—55)
(Granted under Title 35, U. S. Code (1952), sec. 266)



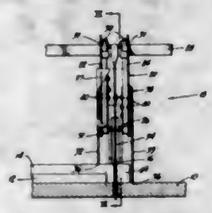
1. An attachment for forming a workpiece on a lathe provided with a carriage movable longitudinally along the workpiece, said attachment comprising a housing detachably and slidably mounted on one side of said carriage for reciprocatory movement transversely of the carriage toward and away from the workpiece, manually operable means for reciprocating the housing, a rotatable cutter carried by the housing with its rotational axis substantially parallel to that of said workpiece, means for rotating said cutter independently of said workpiece, a pair of guard members disposed on each side of the workpiece, one of said pair being pivotally carried by said reciprocable housing and the other pivotally mounted in a relatively fixed position on said carriage, and resilient linkages connected to each guard member and adapted upon said transversely reciprocating movement of said housing to swing said pair toward and away from each other for forming an umbrellaform protective cover for said cutter and workpiece during cutter engagement and for exposing said work piece during cutter retractions, each of said linkages being operatively coupled with a relatively stationary part of said lathe whereby reciprocatory movement of said housing relative to said stationary part varies said linkage tensions and causes said guard members to swing in the aforesaid manner.

2,731,048
BOW TYPE CHAIN SAW CONSTRUCTION
Robert D. Seizert, Lenawee County, Mich., assignor to Clinton Machine Company, Clinton, Mich., a corporation of Michigan
Application July 17, 1953, Serial No. 368,620
4 Claims. (Cl. 143—32)



1. In a saw of the class described, an endless saw chain; a frame having a track on its outer surface, said saw chain embracing said frame and travelling around the same in said track, said frame embodying a substantially U-shaped structure having a pair of spaced apart legs, said track adjacent the end of one of said legs being arcuate; a side swingably connected at one end to one of said legs adjacent its end and swingable at its opposite end in substantially the arc of said arcuate portion of said track; and means for securing said side in fixed relation to the ends of said legs in various positions of swingable movement.

2,731,049
SAW GUARD ASSEMBLY FOR ROTARY TABLE SAWS
Orville C. Akin, Vallejo, Calif.
Application June 10, 1954, Serial No. 435,947
3 Claims. (Cl. 143—159)
(Granted under Title 35, U. S. Code (1952), sec. 266)

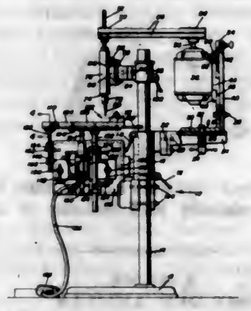


1. A saw guard assembly for use in association with a rotary table saw, comprising: a stationary frame supported above the saw blade; first and second vertical side guard plates spaced from one another to either side of said saw blade; means independently vertically reciprocably mounting each side guard plate to said frame with each said plate under force of gravity normally resting upon the table surface; the bottom leading edge of each side guard plate being rounded for upward camming engagement by a work-piece; a transparent front guard plate having a width sufficient to span the distance between said side guard plates; and means supporting said front guard plate generally toward the front and above the saw blade and in a position spanning the distance between but free from at least one of said side guard plates.

2,731,050
MULTIPLE SPINDLE DRILL
Barney P. Nunn, Marietta, Ga.
Application November 27, 1953, Serial No. 394,721
6 Claims. (Cl. 144—110)

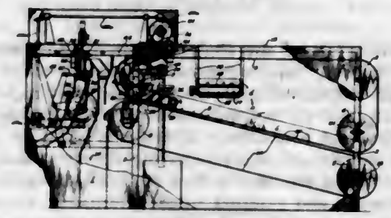
1. A multiple drill having a base and a vertical standard rising from said base, a carriage adjustably secured on said standard, a work table carried by said carriage, means for raising and lowering said work table secured to said carriage, motor mounting means, a plurality of motors secured to said mounting means, a mounting

bracket adjustably secured on said standard, a plurality of spindle housings carried by said bracket, spindles journaled through said housings, said motor mounting means



being vertically adjustable with relation to said carriage, said motor mounting means vertically adjusting said motors relative to said carriage, and drive means connecting said motors with said spindles.

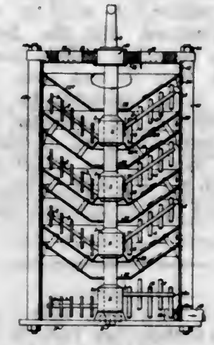
2,731,051
MACHINES FOR ORIENTATING AND STEMMING FRUIT WITH STEMS
Paul Wormser, San Francisco, and Herbert E. Metcalf, Los Angeles, Calif., assignors to S & W Fine Foods, Inc., San Francisco, Calif., a corporation of California
Application July 25, 1950, Serial No. 175,674
6 Claims. (Cl. 146—55)



1. In a machine for orientating fruit, a drum rotatable on a substantially horizontal axis, a carrier belt mounted to pass around said drum, means to rotate said drum to progress said belt around said drum from the bottom to the top thereof, said belt having a plurality of apertures therein having a diameter slightly greater than the fruit to be orientated, means for loading unstemmed fruit in said apertures with the stems of said fruit gripped between the outer surface of said drum and the inner surface of said belt adjacent said apertures, said fruit being held solely by said stems as said carrier moves around said drum, fruit transport means reciprocable over a horizontal path tangential to said drum at the top of said drum, means for reciprocating said transport means, fruit grasping means carried by said transport means, said transport means being synchronized to place said grasping means in a position to grasp the fruit as they arrive at the top of said drum, means for operating said grasping means to grasp said fruit when said fruit reaches the top of said drum, the reverse motion of said transport means separating the grasped fruit from the gripped stem.

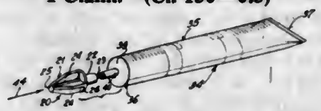
2,731,052
DECORTICATOR FOR HULLING GRAINS
Edgard Grimard, Liege, Belgium
Application April 23, 1952, Serial No. 283,858
Claims priority, application Belgium April 27, 1951
1 Claim. (Cl. 146—290)

A decorticator for hulling humidified grain including a vessel having a vertical cylindrical wall and an inlet and outlet at the top and bottom, respectively of the vessel, a vertical shaft mounted to revolve in said vessel and having a plurality of rotor elements each comprising a hub and two groups of arms extending radially therefrom in alternate positions and inclined upwardly with respect to the axis of rotation of the shaft, said rotor elements being spaced from each other on said shaft, a series of frustoconical baffles arranged in pairs between successive rotor elements and secured within said vessel at vertically spaced locations to define an annular space between each pair of baffles, the upper one of each of said pairs of baffles having discharge passages adjacent the outer periphery there-



of, and the lower baffle of each pair, at its inside edge, defining a central opening around said shaft, and a lowermost rotor element on said shaft comprising arms disposed perpendicularly to the shaft, whereby grain supplied to said vessel through said inlet is moved radially outward and upwardly by each of said plurality of rotor elements in turn over the upper one of the underlying pair of baffles to fall through said discharge passages into said annular space where the grain moves, by gravity, radially inward and downwardly to fall through said central opening for operation thereon by the next lower one of said plurality of rotor elements.

2,731,053
MEDICAL CONTAINERS AND THEIR CLOSURES
Marshall L. Lockhart, Rutherford, N. J., assignor to The Compule Corporation, Rutherford, N. J., a corporation of New Jersey
Application June 19, 1953, Serial No. 362,737
1 Claim. (Cl. 150—0.5)



A medical tube and closure therefor comprising, in combination; a container having a chamber and a projecting elongated neck of elastic plastic material, said container neck having a circular base at the container of certain outer diameter and an outer circular end of slightly less diameter and being uniformly tapered from the former to the latter with the provision of a longitudinally-extending core-receiving through bore communicating with the chamber; and a closure of elastic plastic material comprising a main body, an elongated generally cylindrical plugging element core integral with and extending from said body and an appreciably shorter elongated integral closure neck coaxially arranged about said core, said closure neck having a container neck-receiving circular socket flared slightly convergingly outward from its inner bottom end to its outer free edge wedgingly to receive said tapered container neck with appreciable face contact, said core having an outer end of a diameter appreciably less than the diameter of the container neck bore and being of a diameter at its base appreciably greater than that of the container neck bore and being

substantially uniformly tapered toward its outer end, said core being defined into a tip section and a base section with one side of the tip section being longitudinally flatted off appreciably less than one-half of its thickness to retain a circumferential surface appreciably more than 180° thereof, said flatted tip section extending an appreciable distance beyond the outer free edge of said closure neck and having a portion thereof wedged snugly into the container neck bore securely holding said closure to said container neck, said tip section being of a diameter at its juncture with said base section greater than the diameter of the container neck bore to limit initial insertion into the latter to a portion of said tip section while attaining such securement with the flatted off side of said tip section providing a fluid passage through the container neck bore to and from the chamber, said base section being insertable by force applied to said closure body into the container neck bore securely to seal the latter with swell of said tapered container neck in the flared closure socket to appreciable face contact between the side wall of the latter and the outer tapered surface of said container neck to supplement the bore seal.

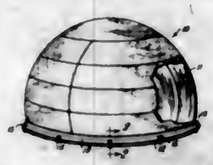
2,731,054
DECORATIVE HEARING AID CARRIER
Beatrice Driben, New York, N. Y.
Application July 13, 1953, Serial No. 367,549
2 Claims. (Cl. 150—.5)



1. An article of apparel for concealing a hearing aid or the like, said article comprising a pocket fabricated of flexible material and having a pair of opposed walls and an opening between the walls to permit of the insertion and withdrawal of said hearing aid, means to secure the opening in closed condition, and a flexible cover removably surrounding said pocket for ornamenting and concealing the latter, said securing means comprising a pair of extensions secured to said opposed walls on opposite sides of said pocket opening, one of said extensions being provided with a through aperture, the other of said extensions being considerably wider than the aperture and being removably insertable through said aperture for closing said pocket and for being thus shirred to simulate a bow, said cover comprising a flexible sheet adapted to carry ornamentation, and an elastic member along the margin of said sheet to releasably contract the same about said pocket, said cover having an orifice which is much smaller than the width of said apertured extension which is removably insertable in said orifice for shirring said apertured extension and for connecting said pocket to said cover.

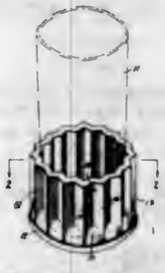
2,731,055
NONMETALLIC ENCLOSURE
Clifford D. Smith, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application August 21, 1951, Serial No. 242,814
1 Claim. (Cl. 150—52)

In a device for protecting delicate instruments from the ravages of weather, the combination of a flexible weather resistant gas impervious housing adapted to contain a volume of gas under pressure slightly greater than atmospheric; said housing comprising an expandable, air impervious hood shaped bladder, a non-extensible protective enclosure for said bladder coextensive therewith, a base plate, and common means for marginally joining



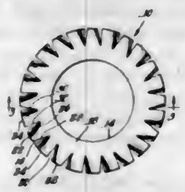
said bladder and said enclosure to said plate in fluid sealing engagement whereby said volume of air supports said housing.

2,731,056
MOLDED ARTICLE
Arthur H. Anson, Allentown, Pa.
Application April 14, 1953, Serial No. 348,609
2 Claims. (Cl. 150—52)



1. In an article of the character described, a unitary body for incasing objects generally similar in shape and within a predetermined range of sizes, said body including a base wall, and an integral annular wall extending upwardly from said base axially of said body to a rim portion that defines an object receiving opening, said annular wall being provided with a plurality of uniformly spaced internal and external ridges alternately arranged thereabout so as to define an endless series of pronounced pleats extending axially of said body, said internal and external ridges in the region of said rim portion being unrestrained against relative displacement to a maximum degree radially of said annular wall to increase to a maximum the effective internal diameter of the latter.

2,731,057
SCRAP ELIMINATING LOCK WASHER HAVING BITING TEETH
Ouglesa Jules Poupitch, Itasca, Ill., assignor to Illinois Tool Works, Chicago, Ill., a corporation of Illinois
Application March 30, 1953, Serial No. 345,606
4 Claims. (Cl. 151—35)



1. A locking device including an annular sheet metal body and a locking section formed integral with and extending radially outwardly from the outer margin of said body, said locking section being sheared at spaced intervals to present a plurality of adjacently positioned prong elements extending outwardly from said body margin, the circumferential width of said prong elements adjacent said body margin being substantially equal and

the circumferential width of alternate prongs at their outer free extremities being less than the corresponding width of the remaining adjacent prong elements, said prong elements being substantially bodily deflected from their roots to their outer extremities to present locking teeth normally positioned beyond opposite bounding planes of the body, substantially the entire circumferential extent of the sheet metal stock encircling said body being utilized for locking purposes.

2,731,058
LOCKING PAWL
John Smisko, Jackson, Mich., assignor to Aeroquip Corporation, Jackson, Mich., a corporation of Michigan
Application February 17, 1950, Serial No. 144,729
1 Claim. (Cl. 151—39)



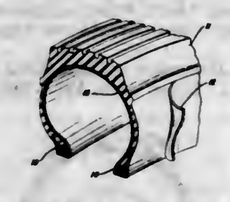
A locking pawl device comprising a backing ring and a metallic facing ring operatively connected together, means on the inner periphery of said backing ring for mounting said device on a member in non-rotatable relation thereto, a plurality of circumferentially spaced fingers extending from the outer periphery of one of said rings through notches in the other of said rings with their ends bent to slidably connect said rings together for limited axial relative movement, a plurality of pawl teeth stamped out of the inner peripheral portion of said facing ring, each of said pawl teeth comprising a substantially flat rectangular body portion, connected to said facing ring along one radially extending edge only and extending at an acute angle from said facing ring on the side opposite to said backing ring, and a spring between said rings urging them apart.

2,731,059
TIRE CHAIN APPLYING DEVICE
Edward R. Ford, Clarksburg, W. Va., assignor of one-half to Carroll N. Stephens, Salem, W. Va.
Application May 5, 1952, Serial No. 286,161
1 Claim. (Cl. 152—213)



In combination with a wheel rim having a tire mounted thereon, a tire chain applying and securing device for applying and securing an annular tire chain about the periphery of the tire, said device comprising a pair of channel shaped clips firmly embracing opposite flanges of the wheel rim in axial alignment with each other, said clips each including an integral inner and outer flange, said inner flange being positioned between the wheel rim and said tire, said outer flange being of a width substantially greater than the width of said inner flange to provide a greater bearing surface for said clip against the outer surface of the rim flange, and a composite hook member rigidly secured to the outer flange of each clip at the side of said wheel rim and providing a pair of hooks having opposed bill portions inclined axially outwardly and radially inwardly and arranged in spaced, coaxial relationship, each said hook being adapted to engage and secure an end of said tire chain.

2,731,060
STAIN-RESISTANT BARRIER
Walter Curtis Rowe, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application April 8, 1952, Serial No. 281,100
14 Claims. (Cl. 152—330)



1. In a white sidewall tire, in combination, a tread, a body portion which would normally stain the sidewall, bead portions, and a non-staining, weather-resistant, white sidewall portion, said white sidewall portion comprised of a blend of a vinyl resin polymer with a rubbery copolymer of a nitrile of an alpha-beta unsaturated organic acid having a straight chain consisting of three carbon atoms and an open-chain conjugated diolefin.

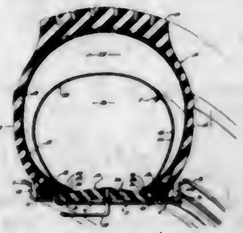
2,731,061
VALVE
Stanley M. Clark, Parma, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application November 17, 1953, Serial No. 392,637
3 Claims. (Cl. 152—341)



3. A valve construction adapted to be used with a tire whose interior is divided into an inner compartment and an outer compartment whereby air will be retained within said inner compartment to support said tire in the event of a blow-out with an explosive loss of air from said outer compartment, said valve comprising a central hollow stem, a first valve unit disposed within said stem, a second valve unit disposed in said stem and mechanically connected to said first unit whereby said units are opened and closed simultaneously, a chamber between said units and a passage leading from said chamber to said inner compartment, a third valve unit disposed in said stem, a second chamber between said second and third valve units and communicating with said first chamber when said first and second valve units are open, a third chamber on the opposite side of said third valve unit and a passage leading from said third chamber to said outer compartment, said third unit comprising a member and means normally urging said member into closed position, said member being movable into open position by the air pressure in said second chamber whenever such pressure exceeds the air pressure in said third chamber by an amount sufficient to overcome the force of said means whereby the pressure of the air in said third chamber and in said outer compartment is maintained at a lower value than the air in said first and second chambers and in said inner compartment, said member also being movable to open position by mechanical contact with said second valve unit when said second unit is moved radically beyond its nor-

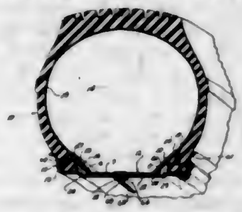
mally open position whereby the air in said inner and outer compartments may be released simultaneously and the tire deflated.

2,731,062
TUBELESS TIRE
William S. Coben, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application December 2, 1953, Serial No. 395,825
2 Claims. (Cl. 152—341)



1. In combination, a tire rim, an inflated tubeless tire mounted on said rim and a sealing member; and a safety diaphragm; said rim having a base portion and side flanges; said tire having laterally spaced bead portions engaging said flanges; said sealing member being disposed on said base portion and being clamped between and having its lateral edges in air tight contact with said bead portions when the tire is inflated, said sealing member being in the form of a molded endless band composed of resilient material of such thickness as to forcibly resist bending radially outwardly and having its middle portion concavo-convex in cross-section and whose radially inner surfaces, adjacent its lateral edges, are cylindrical and supported by said rim base; the surface of said concave portion facing radially inwardly and being spaced from said base portion; said concavo-convex portion being continuously pressed radially inwardly by air pressure whereby the edge portions of the sealing member are forced laterally outwardly by the force of the air in said inflated tire; said diaphragm being in the form of an open-beaded tire having laterally spaced inextensible bead portions removably mounted on the radially outer surface of said sealing member.

2,731,063
SEALING STRIP FOR TUBELESS TIRES
Robert P. Powers, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application May 22, 1952, Serial No. 289,232
1 Claim. (Cl. 152—363)



The combination of a tubeless tire having bead portions, a split tire rim on which the tire is mounted and a tire sealing band, the inside surface of the tire to be exposed to the tire inflating medium being covered with a lining which is impervious to such medium, said band having continuous edge portions which in section extend radially and axially outwardly, the radial outer margin of each edge portion contacting said lining to form a seal against escape of the inflating medium, said band being provided with an inflating valve communicating with the inside of said tire, said band having rubbery material extending its overall width and a base portion contacting said rim, each said edge portion being reinforced with a hoop joined thereto, said hoop having a peripheral edge that forms a circle, said hoop being composed of substantially rigid material and having a flat surface, of substantial width relative to the over-all width of said band, lying in an annular zone angular to the axis of said tire, said angularity being such, relative to the angularity of the inside wall of the tire beads, that when said outer margin of each said edge portion contacts said lining said edges of the band will bridge over and be spaced from the toes of the tire beads.

2,731,064
TIRE AND RIM
Robert P. Powers, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application September 29, 1954, Serial No. 459,130
1 Claim. (Cl. 152—378)



The combination of a rim and a pneumatic tire mounted thereon, said rim having conical bead seats the surfaces of which extend at an angle of 10°–20° to the axis of said rim, said bead seats terminating at radial side flanges, said tire having a body comprising a plurality of rubberized fabric plies whose cords are wrapped about and anchored to substantially inextensible metallic cores forming tire beads which seat on said annular bead seats adjacent said flanges, respectively, said beads having toe portions respectively, extending inwardly in an axial direction from surfaces substantially tangent to the inner sides of said cores and perpendicular to the bead seats and having heel portions extending outward in an axial direction from said surfaces and at an angle substantially equal to the angle of said bead seats, the toe portions of said beads being out of contact with said bead seats, and said heel portions having a tight compression fit with said bead seats, and bearing against said flanges whereby the forces of reaction between said tire and said rim are transmitted to said rim solely by said heel portions of said beads

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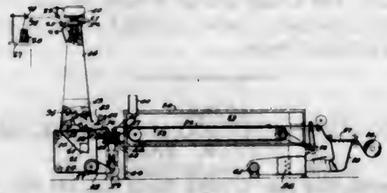
2,731,065
TUBELESS TRUCK TIRE RIM AND VALVE
Robert P. Powers, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application February 23, 1954, Serial No. 411,777
2 Claims. (Cl. 152—427)



1. A tire rim and valve stem assembly for a tubeless truck tire, said rim having a valve stem hole in a base portion thereof, said stem being of the angle type and having an end portion projected radially outwardly through said valve stem hole and a disance therebeyond, said projected end being externally threaded and having a nut in threaded relation therewith; a rubber-like washer, said rubber-like washer having a cylindrical portion projecting into said rim stem hole about said stem and having a flange portion overlying the rim base about said stem

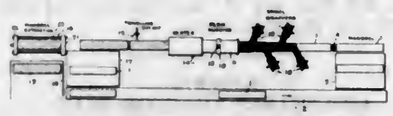
hole, said stem having a second thread portion exposed radially inwardly from the rim base, a second nut in threaded relation with said second threaded portion disposed in contact with the radial inner surface of the rim base and having a cylindrical portion projected into said valve hole and in contact with the cylindrical portion of the rubber-like washer, whereby said first mentioned nut may be tightened on the stem to provide an initial air-tight seal at said valve hole before a tire is mounted on the rim and the second mentioned nut may be used for additional tightening of the rubber-like washer when a tire is mounted on said rim.

2,731,066
REINFORCED FIBROUS PRODUCTS, METHOD AND APPARATUS FOR MAKING SAME
Henry R. Hogendobler, Toledo, and Allen L. Simison, Newark, Ohio, assignors to Owens-Corning Fiberglas Corporation, Toledo, Ohio, a corporation of Delaware
Application April 20, 1949, Serial No. 88,672
35 Claims. (Cl. 154—1.76)



34. In apparatus for producing reinforced non-woven fabric which comprises a chamber for collecting staple glass fibers, a movable support disposed in said chamber upon which said glass fibers are collected, and feeding mechanism associated with said chamber and operable for concurrently introducing long continuous length threads of glass fiber into said chamber and onto said movable support so as to become intertwined and interfelted with said staple fiber disposed on said movable support.

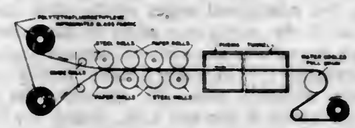
2,731,067
METHOD AND APPARATUS FOR MAKING FIBER GLASS PIPE
Roy G. Miller, Bayside, N. Y., assignor to East Coast Aeronautics, Inc., Mount Vernon, N. Y., a corporation of New York
Application November 20, 1950, Serial No. 196,605
10 Claims. (Cl. 154—1.7)



5. Method for the manufacture of reinforced thermosetting resin pipe which comprises forming a continuous cylindrical mandrel, winding said mandrel with strands of fiber glass all lying at an angle of about 63.4° to all planes lying in the axis of the mandrel, enclosing the wrapped mandrel in a layer of thermosetting resin in fluid state, hardening said resin, to produce the finished pipe, cutting said pipe and mandrel into axial sections, and removing the mandrel sections from the pipe sections.

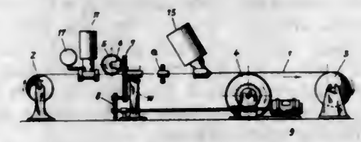
6. Apparatus for the manufacture of paper comprising a thermosetting resin matrix and fiber glass reinforcement, said apparatus including a plurality of cylindrical mandrel sections, means connecting said mandrel sections in end-to-end relation, said connecting means comprising disposable bushings having end portions adapted to fit into the ends of adjoining mandrel sections and a central cylindrical portion separating the end faces of adjoining mandrel sections, said central portion having readily distinguishable surface departure from the remainder of its surface which is reflected by a like departure in the surface of the pipe when formed on said mandrel sections and bushings, means for moving said connected mandrel sections longitudinally of the mandrel axis, means adjacent said connected mandrel sections for winding filamentary fiber glass around the same as they move longitudinally, means in the path of the wound mandrel sections for impregnating the same with thermosetting resin, means for hardening said resin, thereby to form a continuous fiber glass reinforced resin pipe, means for thereafter severing said pipe into sections comprising cutter means adjacent said pipe for cutting transversely through the pipe and the bushing at the central position thereof along a line coincident with said readily distinguishable surface departure, and means for separating each said pipe section from the mandrel section on which it was wound.

2,731,068
TETRAFLUOROETHYLENE POLYMER BONDED HEAT-RESISTANT FABRIC
Kurt Fred Richards, Park Forest, Ill., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application September 23, 1950, Serial No. 186,423
14 Claims. (Cl. 154—2.6)



1. A continuous process of producing a unitary structure which comprises arranging in superposed relation a plurality of continuous plies of woven fabric which have previously been impregnated with a polymeric material comprising tetrafluoroethylene units in preponderant amount and dried, lightly pressing successive portions of the assembled plies to form a coherent structure, and subsequently heating successive portions of the coherent structure at a temperature above the fusion point of the polymeric material in the absence of any applied pressure to weld all of the polymeric material together into a continuous length of laminated material, the fabric being one which will not decompose under the conditions recited.

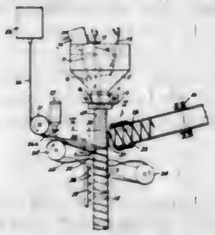
2,731,069
DEVICE FOR COMPOUNDING STRANDED CONDUCTORS
Heinz Horn, Koln-Mulheim, Germany, assignor to Felten & Guilleaume Carlswerk A. G., Koln-Mulheim, Germany
Application April 13, 1953, Serial No. 348,385
Claims priority, application Germany June 7, 1952
8 Claims. (Cl. 154—2.26)



1. An arrangement for compounding stranded conductors in which the stranded conductor is untwisted during the compounding while stretched in a line between an unwinding drum and a winding-on drum, comprising a rotary wheel between the unwinding and the winding-on drum supporting the stranded conductor wound thereon, and means for moving the whole of the wheel around the stranded conductor, whereby the part of the conductor in front of the said wheel is untwisted to the extent required for the compounding and the part of the conductor be-

hind the wheel is retwisted to the same extent, and means in front of the said wheel for pressing a compound mass into the intermediate spaces of the stranded conductor.

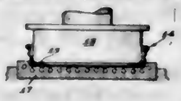
2,731,070
METHOD AND APPARATUS FOR FORMING REINFORCED TUBING
William E. Meissner, New York, N. Y.
Application November 20, 1952, Serial No. 321,672
20 Claims. (Cl. 154—5)



1. A method for forming a flexible tube comprising helically wrapping a plastic strip into a tubular shape with its edges in contiguity while concomitantly guiding a preformed helical reinforcing element longitudinally into position along the contiguous edges of the strip, coalescing the material of the contiguous edges to the element, and then setting the tubular assembly of element and strip.

12. Apparatus for forming flexible tubing comprising a hollow mandrel, means for mounting the mandrel for rotation about a vertical axis, means for helically winding a continuous plastic band about the mandrel and simultaneously advancing the convolutions thereof downwardly and axially of the mandrel, means adjacent the upper end of the winding means for guiding a preformed helical reinforcing element into helical disposition about the mandrel with its convolutions adjacent the edges of the convolutions of the helically wound band, and means for applying heat to the preformed helical element, said heating means being positioned outside the mandrel adjacent the guide means.

2,731,071
METHOD OF SECURING GASKETS IN CONTAINER CLOSURES
Charles W. Husum, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a corporation of Ohio
Application April 12, 1955, Serial No. 500,799
6 Claims. (Cl. 154—89)



1. The method which consists in coating the exterior surface of a vulcanized rubber tube with a heat and pressure sensitive adhesive, severing the tube into ring-type sealing gaskets, placing one such gasket in a closure shell with the coated surface in firm contact with that area of the closure surface to which the gasket is to be bonded, and applying heat and pressure to the closure shell and gasket to thereby effect the bond.

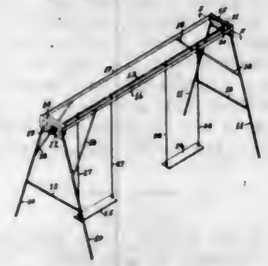
2,731,072
PORTABLE WALKER, CAR SEAT AND HIGH CHAIR COMBINATION
Daniel H. Post, Abilene, Tex.
Application June 8, 1953, Serial No. 360,168
4 Claims. (Cl. 155—38)

1. A walker unit having a flexible seat fastened upon a rectangular frame, said frame having supporting legs hinged thereto and foldable against the frame, a car seat unit having a flexible seat fastened upon a second rectangular frame, which frame has on one side upstanding hinge supports extending upwards at right angles thereto, said car seat unit having for its back a third rectangular frame hinged to the top of said hinge supports to swing through a right angle only to a position parallel to but



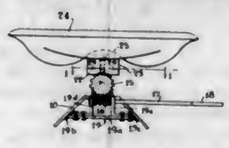
distant from said second frame, a seat placed on top of and covering said second rectangular frame provided with means for fastening it to the under side of the first rectangular frame, and a back placed in front of and covering said third rectangular frame provided with means for fastening it to said frame.

2,731,073
SWING WITH HORIZONTALLY SWINGABLE SUPPORT BAR
Joseph A. Tonne, Richmond, Ind.
Application July 6, 1954, Serial No. 441,565
4 Claims. (Cl. 155—64)



1. In a swing, a supporting structure, a rectangular frame located at each end of the supporting structure and forming portions thereof, a swing bar extending between the rectangular frames and having one end thereof pivotally secured in one of the frames, a roller positioned on the other end of the swing bar, and with the roller rolling in the other frame.

2,731,074
ADJUSTABLE TRACTOR SEAT
James R. Steinle, Greenville, Ohio
Application March 2, 1955, Serial No. 491,726
4 Claims. (Cl. 155—121)



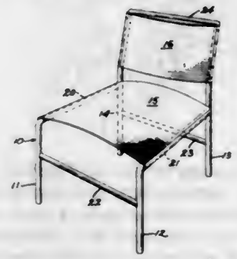
1. An adjustable seat comprising a base member, a horizontal shaft mounted for rotation on said base member, a worm wheel fixed to said shaft, a worm meshed with said worm wheel, said worm being mounted for rotation on said base member, means for rotating said worm to rotate said worm wheel and said shaft, a tiltable plate fixed to said shaft for rotation therewith, a turntable mounted on said plate, a vertical pivot extending through said turntable and said tiltable plate, said turntable being rotatable about said pivot, detent means engaging said tiltable plate and said turntable for yieldingly retaining said turntable in a selected rotated position on said plate, and a seat fixed to said turntable; whereby said seat may be adjusted in tilt about the axis of said horizontal shaft, rotated about said pivot, and yieldingly retained in a selected rotated position.

2,731,075
SPRING CONSTRUCTION
Hyland C. Flint, Birmingham, Mich., assignor to American Metal Products Company, Detroit, Mich., a corporation of Michigan
Application August 2, 1949, Serial No. 108,133
5 Claims. (Cl. 155—179)



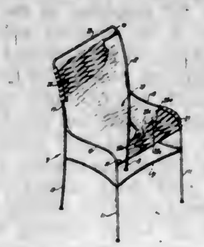
3. In a spring seat construction, the combination of a horizontal rear rail, a prearched zigzag spring strip having a load bearing portion extending over a substantial portion of the length of the strip and also having a rear support portion fixedly secured to the rail formed in continuation of the load bearing portion, the rear section of said load bearing portion being substantially no higher than a horizontal plane through the rear rail, said rear support including a deformable buckle enabling said load bearing portion to move lengthwise toward the rear rail as well as transversely when load is applied thereto, said buckle comprising a portion of the strip bent at an angle to the plane of said rear section and then reversely bent to extend back toward said plane, said buckle portion having an apex located on one vertical side of the rear section and an expansible and contractible mouth located substantially in the plane of the rear section, said buckle portion being bent at an included angle of more than 90 degrees with respect to the plane of said rear section and extending only rearwardly from said rear section.

2,731,076
FURNITURE SEATING
David L. Rowland, Stockton, Calif.
Application February 25, 1952, Serial No. 273,249
13 Claims. (Cl. 155—187)



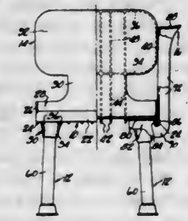
1. In a bulletproof chair seat or the like having two spaced-apart, generally parallel, rigid frame members and rigid means for holding said frame members apart at a substantially constant distance, the combination therewith of: a multiplicity of generally parallel spring wires each secured at each end to said frame members and arched between them, said wires being spaced apart from each other at a distance less than the caliber of the bullets which are to be stopped by said seat; a corresponding multiplicity of seamless rubbery plastic tubes, each fitting tightly around one said wire in the portion extending between said frame members; and a multiplicity of transverse nonmetallic filaments in contact with the exterior surfaces of said plastic tubes and adapted to maintain the spacing between adjacent wires, whereby said seat is a self-supporting cushion, is perforate so that it can breathe, and said wires will stop bullets from passing between them due to their spacing, their springiness serving to prevent them from being broken and their being secured to said frame members preventing their being pulled out therefrom.

2,731,077
CHAIR CONSTRUCTION
James O. Turner, Berkeley, Calif.
Application November 7, 1952, Serial No. 319,239
7 Claims. (Cl. 155—187)



1. A chair having an open framework including legs, laterally spaced seat side rails, laterally spaced back side rails, and cross members connecting said rails only at the upper ends of the back side rails and the forward ends of the seat side rails, the framework at the lower ends of the back side rails and the rear ends of the seat side rails being sprung inwardly, and a flexible load supporting surface extending between and connected to the seat and back side rails to maintain the framework in its sprung condition, said flexible load supporting surface being formed by webbing looped back and forth over and supported by the opposed side rails and certain of the cross members at an angle to said side rails greater than that made with the cross members, the adjacent reaches of the webbing being interwoven.

2,731,078
FURNITURE CONSTRUCTION
Harry H. Cadman and John J. Ducey, Elkhart, Ind.
Application July 30, 1949, Serial No. 107,728
11 Claims. (Cl. 155—191)



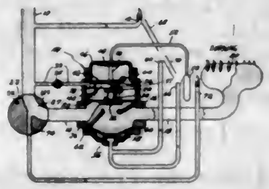
2. In a chair, a unitary integral plastic structure comprising a substantially horizontal seat panel, a support panel projecting upwardly and forwardly from the rear part of said seat panel, a substantially upright back panel projecting from and carried by the upper end of said support panel, flanges projecting from and integral with the side margins of said seat panel, said flanges depending from said seat panel at the front portion thereof and each having portions projecting both above and below said seat panel at the remainder thereof, the rear ends of the flange portions above said seat panel being integral with said support panel.

2,731,079
APPARATUS FOR ATOMIZING AND IGNITING SUBSTANCES
Wytze Beye Smits, Voorburg, Netherlands
Application January 22, 1953, Serial No. 332,697
10 Claims. (Cl. 158—28)



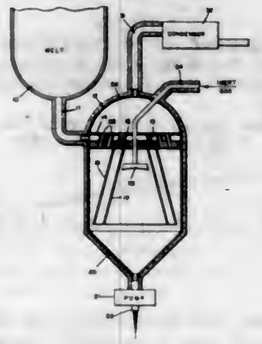
2. A device for atomizing and igniting a liquid fuel substance and comprising means forming a pressurizing chamber having at least one narrow orifice connecting the interior of said chamber with the surrounding atmosphere, and permitting entrance of atmospheric air into the chamber, means for supplying to the chamber the liquid fuel substance to be atomized and ignited, said chamber and orifice being so proportioned and arranged as to allow the simultaneous presence of air and said fuel substance, a substantially non-inductive spark bridge in said chamber and adjacent said fuel supplying means to contact a portion of said fuel, said spark bridge comprising two electrodes and means forming a semi-conductive fuel contacting spark creep surface disposed therebetween, a unidirectional capacitive voltage source, means connecting said voltage source directly to said spark bridge comprising a substantially non-inductive circuit to produce a substantially aperiodic spark discharge, whereby the ignition of the substance is started within the chamber to propel the ignited substance through said orifice.

2,731,080
GAS BURNER CONTROL
Clifton A. Cobb, Goshen, Ind., assignor to Penn Controls, Inc., Goshen, Ind., a corporation of Indiana
Application February 18, 1952, Serial No. 272,041
11 Claims. (Cl. 158—133)



10. A gas burner control of the character disclosed comprising a main burner, a gas supply conduit connected to the main burner, a sustaining pilot burner adjacent to the main burner, a booster pilot burner adjacent to the sustaining pilot burner and the main burner, a shut off valve and an automatic control valve in series in the supply conduit, a connection from the shut off valve to the sustaining pilot burner to supply fuel thereto when the shut off valve is open, a connection from the automatic valve to the booster pilot burner, an auxiliary valve and a main valve in the automatic valve controlling the supply of fuel to the booster pilot burner and the main burner respectively, means controlled by fuel pressure supplied to the automatic valve when the shut off valve is open to open the auxiliary valve, pressure responsive means responsive to the difference in pressure between the inlet side of the main valve and a point anterior to the shut off valve to operate the main valve, a by-pass through the main valve connecting said point to the main burner, a closure for the by-pass, and heat responsive means heated by the flash and booster pilot burners operable when cool to move the closure onto the by-pass and to close the main valve and when heated to move the closure away from the by-pass and allow the main valve to open.

2,731,081
METHOD FOR THE REMOVAL OF MONOMERS, ETC. FROM MOLTEN POLYMERS
Thomas S. Mayner, Chagrin Falls, Ohio, assignor to Industrial Rayon Corporation, Cleveland, Ohio, a corporation of Delaware
Application April 13, 1953, Serial No. 348,503
5 Claims. (Cl. 159—49)



1. A process for continuously evaporating undesirable quantities of monomers from a melt of polyamides obtained by the polymerization of a material selected from the group consisting of e-caprolactam and e-amino caproic acid which comprises, in a heated enclosure continuously gravitationally spreading a melt of said polyamides over the inner and outer surfaces of a right circular frusto-cone, allowing said melt to drop freely into a collecting sump from the lower edge of the frusto-cone, meanwhile subjecting said spreading melt to a sweeping flow of an inert gas; no additional heat being supplied to the flowing melt other than that contained in the melt and in the said gas, and continuously withdrawing the volatilized monomers and said inert gas.

2,731,082
SLAT LINK CLOSURE
Kurt T. Kiefer, Chicago, Ill., assignor to Kurdon, Inc., Chicago, Ill., a corporation of Illinois
Application November 10, 1954, Serial No. 468,015
5 Claims. (Cl. 160—118)



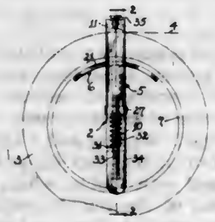
1. A slat link connector for a Venetian blind of the curtain type with vertical slats, said connector consisting in a pair of hook and catch members, each of said members comprising an elongated bar adapted to be horizontally positioned in the plane of the blind; a guide unit secured to one end of each bar and slidably connectable with a similar bar of an adjacent slat link; a slat holder on each guide unit, pivoted thereto for rotation about an axis normal to the corresponding bar and adapted to hold the lower end of an innermost slat of the blind; an upwardly open catch secured to the bar of the catch member at the end opposite the guide unit of that bar; and a hook secured to and downwardly extending from the bar of the hook member at the end opposite the guide unit of this last-mentioned bar, said last-mentioned bar having a lower edge adapted to rest on said catch and said hook having a depending edge extending in a general direction less than normal to said lower edge, whereby longitudinal tension between the hook and catch members ordinarily tends to close the connector but such tension automatically opens the connector when the upper ends of the innermost slats are moved away from one another.

2,731,083
METHOD AND MACHINE FOR CUTTING RUBBER THREAD WITH THE CUTTING ACTION PERIODICALLY INTERRUPTED
Edwin N. Broden, Assonet, Mass., and Robert A. MacAyeal, Tiverton, R. I., assignors to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application March 6, 1951, Serial No. 214,173
5 Claims. (Cl. 164—17)



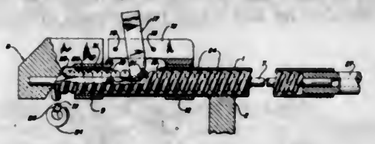
1. A cutter for rubber thread or the like comprising two cutter assemblies each having a plurality of axially spaced square edged cutting discs, a radially disposed surface of each individual disc of one assembly overlapping and contacting a radially disposed surface of one of the discs of the other assembly to form cooperating cutting pairs providing areas of mutual contact whereby to provide shearing action on a ribbon of rubbery material fed therethrough, each cutting pair spaced from the next axially adjacent cutting pair, and a slot having a depth less than the radial extent of said contacting surface in the peripheral edge of at least one of the discs of each cutting pair.

2,731,084
TAPE CUTTING DEVICE
Harvey R. Burns, North Royalton, Ohio
Application December 4, 1953, Serial No. 396,234
6 Claims. (Cl. 164—36)



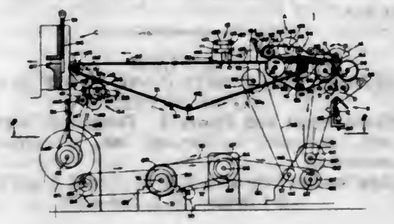
1. A tape cutting device for use upon a roll of tape wound on a tubular core comprising an outer member of U-shaped outline adapted to straddle a roll of tape, a cutting knife within said outer member attached to its web portion parallel with respect thereto, an inner member adapted to extend within the tubular core of said roll of tape including an arcuate shoe adapted to engage the inner periphery of the tubular core of said roll of tape, means removably coupling said outer and inner members to each other, and means yieldingly shifting the arcuate shoe of the inner member toward the web portion of the outer member to yieldingly engage the cutting knife of said outer member with the outmost convolution of said roll of tape and the arcuate shoe of said inner member with the inner periphery of the tubular core of the roll of tape.

2,731,085
MACHINE FOR CUTTING RUBBER GROMMETS
Edwin N. Broden, Assonet, Mass., assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application June 2, 1951, Serial No. 229,617
5 Claims. (Cl. 164—38)



1. For slitting a helix of rubber-like material into grommets, a tube, a cantilever arm extending through said tube and spaced from the interior surface to receive said helix, said tube extending substantially the entire length of said arm, a knife mounted in said tube and having a cutting edge extending in a generally radial direction at least as far as the surface of said arm, means mounted in said tube and adapted to advance said helix along said arm through said tube and against the edge of said knife to sever said helix into grommets, and a plow-shaped element aligned with said knife and mounted on the delivery side thereof, said element adapted to expand said grommets and permit said grommets to escape from the arm.

2,731,086
DEVICE FOR STACKING MAGAZINES PRIOR TO TRIMMING
Robert D. Easton, San Gabriel, Calif., assignor to Pacific Press, Inc., Los Angeles, Calif., a corporation of California
Application July 3, 1951, Serial No. 234,959
20 Claims. (Cl. 164—48)

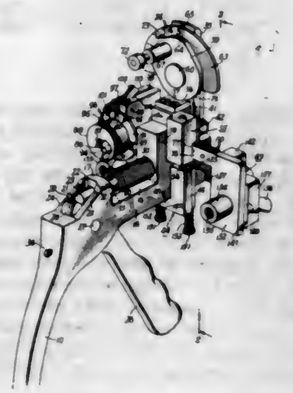


1. Apparatus for feeding articles such as magazines from a first mechanism which performs work on the articles singly and individually to a second mechanism which performs work on the articles when stacked in groups, comprising in combination: a transfer table, continuously operating upper and lower feed tapes for moving a series of articles between them singly to a stacking position on said transfer table, the surface of the transfer table being below the level of delivery of the articles from the feed tapes, so that the articles drop by gravity in stacking position, means for cyclically raising the delivery end of the upper feed tape, stop means for arresting forward motion of each article at said stacking position, means for cyclically moving the stop means to an inoperative position in timed relationship with the raising movement of the upper feed tape, and conveyor means for moving articles in stacked groups to said second mechanism.

2,731,087
CODE KEY CUTTING MACHINE
Joseph E. Cole, South Euclid, Ohio, assignor to Howard Freedman, Evanston, Ill.
Application October 14, 1950, Serial No. 190,127
14 Claims. (Cl. 164—50)

1. A portable hand key cutter for bitting a key blank for cutting bits of various depths at various locations on

the key blank having, in combination, a frame and a punch bar for cutting bits mounted thereon for sliding movement, a key blank clamping carriage on said frame transversely movable in respect of said punch bar, providing lengthwise shifting of the key blank in relation to the path of cutting of said punch bar, carriage shifting means to effect said transverse movement of said carriage, an extension on said frame transversely directed in respect



of the carriage, depth shifting low pitch cam means mounted on said extension, means for guiding the carriage for depth shifting along said extension, locating the key blank carried thereby across the path of movement of said punch bar, a cam follower co-acting with said depth shifting means and spring means for urging said cam follower into constant contact with said cam means, to hold the key blank carriage depthwise in the path of movement of said punch bar.

2,731,088
TEMPLATE FOR POSITIONING STRIP MATERIAL TO BE SEVERED
Eli Zimmerman and Henry L. Thompson, New Haven, Conn., assignors to Sarong, Inc., a corporation of Connecticut
Application February 9, 1953, Serial No. 335,834
5 Claims. (Cl. 164—59)



1. In an apparatus for cutting off successive sections of continuous tape material having fastener elements secured to one face thereof in accordance with a predetermined spacing pattern, a template mounted on said apparatus adapted to receive and position the leading end of said tape, said template having a slot extending longitudinally of the tape with an open side edge into which the tape may be laterally inserted, the slot having a part overhanging the tape with an opening therein adapted to receive a said element to position longitudinally the tape, said template being readily detachable for the substitution of other templates appropriate respectively to different tape material, a tape severing means located in the direction of tape supply from said template, and guide means for the tape positioned between said severing means and the source of supply.

2,731,089
PROTECTOR FOR FLEXIBLE FITTINGS FOR FLEXIBLE TANKS
James Kontos, Chicago, Ill.
Application August 8, 1952, Serial No. 303,303
2 Claims. (Cl. 164—78)



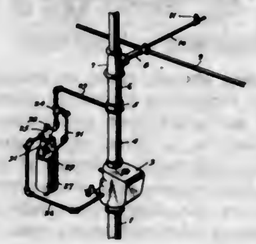
1. An open ended protector for a relatively soft fitting for the opening of a flexible closed container having an outer liner and wherein the fitting has a top surface and an opening which extends downwardly from said top surface and registers with the opening of the container and overlies the edge portions of the container which define the container opening including a portion of the outer liner adjacent said opening, said protector comprising a relatively flat flange portion which overlies a portion of the top surface of the fitting so that it does not completely cover said top surface and over which said liner is adapted to be disposed, said protector having a throat portion lying snugly within the opening of the fitting and terminating substantially flush with said flange portion, and means on the protector for detachably engaging the fitting and for holding the fitting and the protector together while the liner is cut around said flange, said protector being constructed of relatively hard material.

2,731,090
PETROLEUM PRODUCTION IN OIL BEARING FORMATIONS
Rowland W. Johnston, Jr., Bellaire, Tex., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application February 28, 1951, Serial No. 213,198
6 Claims. (Cl. 166—29)



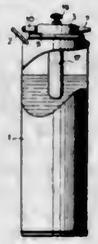
1. A method of producing petroleum from a well bore penetrating a porous subsurface petroleum-producing formation which formation immediately overlies a water table, the capillaries of said formation being occupied by a non-wetting liquid oil phase and a liquid phase of connate capillary formation water derived by capillary attraction from said water table, which formation water wets the surfaces of the capillaries of said formation, which comprises injecting from said well bore into the capillaries of said formation a fluent aqueous liquid capable of setting up, per se, to a solid, said aqueous liquid wetting the surfaces of the capillaries of said formation and being miscible with said capillary formation water and immiscible with said liquid oil phase contained in the capillaries of said formation, whereby said injected aqueous liquid displaces said capillary formation water from the capillaries of said formation and also some of the liquid oil phase from the normally oil-occupied portion of the capillaries for a substantial region surrounding said well bore, thereafter displacing said injected aqueous liquid out of the normally oil-occupied portion of the capillaries of said formation in said region surrounding said well bore by injecting into said formation from said well bore a second liquid which is non-wetting with respect to the surfaces of the capillaries of said formation in an amount sufficient at least to saturate the normally oil-occupied portion of the capillaries of said formation in said region undergoing treatment, said second liquid being immiscible with said aqueous liquid and miscible with said liquid oil phase contained in said capillaries, discontinuing the injection of said second liquid and permitting said injected aqueous liquid to set up to a solid within said capillaries and thereafter producing petroleum from said formation via said well bore.

2,731,091
ACCELERATORS FOR DRY PIPE SPRINKLER SYSTEMS
Robert R. Robbins, Winnipeg, Manitoba, Canada
Application June 1, 1953, Serial No. 358,819
5 Claims. (Cl. 169—17)



1. In a dry pipe sprinkler system having a dry pipe valve and an air pressured dry pipe line extending therefrom with fusible sprinkler units thereon; an accelerator for said system, comprising: a chamber in said dry pipe valve; a water clapper in said dry pipe valve for closing off a source of pressured water to said chamber; an air clapper between said chamber and said dry pipe line normally held closed by air pressure therefrom; said air clapper operably connected with said water clapper to normally hold said water clapper closed; a relief line from said dry pipe line to said chamber to neutralize the dry pipe line pressure on said air clapper for the opening of both clappers by said pressured water; an openable check valve closing off said relief line; a resiliently loaded push rod releasably operable to forcibly open said check valve; a bellows having the interior thereof in fluid communication with said dry pipe line and operable by fluctuations of the air pressure therein; and a restricted lost motion linkage between said bellows and said push rod, operable by the movement of said bellows and to permit a relative slow movement thereof without releasing said push rod but release said push rod when a relative fast movement of said bellows occurs.

2,731,092
EXTINGUISHER
Georges Beaumont, Paris, France
Application June 7, 1954, Serial No. 434,908
Claims priority, application France June 5, 1953
4 Claims. (Cl. 169—31)



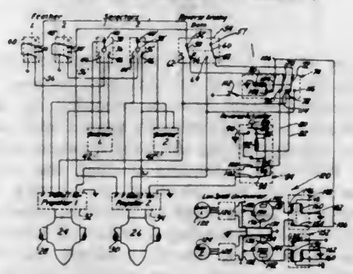
1. In a fire extinguisher, a container for a fluent extinguishing product, said container having an end wall with a dome-shaped inner surface, an outlet nozzle positioned in said end wall, a discharge passageway connecting said nozzle with the interior of said container, said passageway comprising a channel tangential to said dome-shaped inner surface and sloping to said nozzle, and valve means for closing said nozzle, said valve means being releasable to permit free flow of said extinguishing product from the interior of said container to said nozzle without abrupt change of direction.

2,731,093
FIRE EXTINGUISHER DEVICE
Robert Gordon, Chicago, Ill., assignor to Graphicolor, Inc., Evanston, Ill., a corporation of Illinois
Application June 20, 1955, Serial No. 516,487
2 Claims. (Cl. 169—35)



1. A fire extinguisher package, comprising a polyethylene bottle equipped with a threaded neck, an interiorly-threaded closure engaging said neck, a sealing member forming an airtight seal about said closure, said closure having a discharge passage extending therethrough and communicating with the interior of said bottle, a second closure for said discharge passage, said discharge passage having a diameter of about 3/16 of an inch, said bottle having an inner polyethylene surface formed by saturated polyethylene molecules and having an outer surface consisting substantially of highly unsaturated polyethylene molecules which roughen the surface and produce a drag against the fingers when the bottle is manually grasped, and a body of hygroscopic fire-extinguishing powder consisting principally of sodium bicarbonate within said chamber, said bottle, when the discharge passage in said closure is open, being manipulatable by rapid squeezing for the dispensing of the powder in the form of a cloud from the bottle.

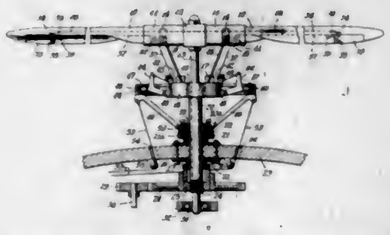
2,731,094
PROPELLER UNREVERSING SYSTEM
Edward K. Hine, North Caldwell, N. J., assignor to Curtiss-Wright Corporation, a corporation of Delaware
Application November 27, 1951, Serial No. 258,446
12 Claims. (Cl. 170—135.29)



1. In a propeller and powerplant system comprising two powerplants each driving a variable pitch propeller, each propeller including a pitch changing mechanism, a control connected to both mechanisms movable to arm both mechanisms to reverse the blade pitch thereof and movable to operate both mechanisms to restore the blade pitch of the propellers to the forward pitch range, an

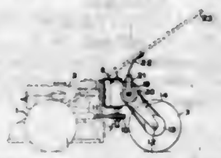
actuating member operable only after arming movement of said control connected with said control and mechanisms to actuate said mechanisms to the reverse pitch range, and means connected to both power plants responsive to underspeed of either one of the power plants below a preestablished minimum connected to actuate said control and both said mechanisms to restore both of said propellers to the forward pitch range from the reverse pitch range.

2,731,095
AIRCRAFT ROTOR AND CONTROL THEREFOR
Theodore M. Leka, Bridgeport, Conn.
Application January 3, 1952, Serial No. 264,736
12 Claims. (Cl. 170—160.25)



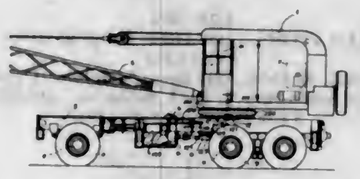
1. In an aircraft, a variable pitch bladed rotor mounted on a drive shaft and rotatable in a horizontal plane, said bladed rotor having portions vertically movable upwardly and downwardly; means for varying the pitch of said blades of the rotor including a rotatable member connected to and rotatable with the bladed rotor and adjustably movable axially of the shaft for varying the pitch of the blades while they are in rotation; and means including linkage means carried by the rotatable member and connected to the bladed rotor and an annular track cooperating with the linkage means to move said portions of the rotor upwardly and downwardly periodically in relation to the speed of rotation of the rotor.

2,731,096
DRIVEN CASTER WHEEL FOR A LAWN MOWER
Clement C. J. Thelander, Prophetstown, Ill., assignor to Buffalo-Eclipse Corporation, North Tonawanda, N. Y., a corporation of New York
Application March 16, 1953, Serial No. 342,483
2 Claims. (Cl. 180—19)



1. A caster assembly for a lawn mower, comprising a first bracket for mounting on the lawn mower, an adjustable two-arm second bracket mounted on the first bracket with its two arms vertically spaced and extending horizontally, a gear housing disposed between said arms, an upright first shaft extending through the arms and through the housing and pivoting the housing to said second bracket, a pulley fixed to the lower end of said upright shaft for receiving input power, a second shaft journaled in the housing, gearing drivingly interconnecting the two shafts, a wheel-mounting arm secured to and depending from the housing, a third shaft mounted at the lower end of said wheel-mounting arm, a second pulley fixed to the second shaft, a third pulley on the third shaft, a ground-engaging wheel on the third shaft, and a belt trained about and interconnecting the second and third pulleys to drive the wheel, said wheel being drivingly connected to the third pulley.

2,731,097
VEHICLE WITH SELECTIVE WHEEL DRIVE FROM EITHER OF TWO MOTORS
Roy H. Zellman and Alan Smythe, Elyria, Ohio, assignors to Thew Shovel Company, Elyria, Ohio, a corporation of Ohio
Original application September 17, 1945, Serial No. 616,868, now Patent No. 2,674,333, dated April 6, 1954. Divided and this application January 19, 1950, Serial No. 139,444.
6 Claims. (Cl. 180—23)



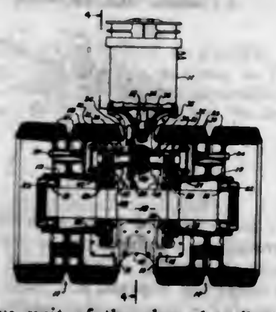
1. In a mobile shovel, crane or excavator having a vehicle chassis supporting propelling wheels therefor, a superstructure journalled upon said chassis and adapted for rotation thereon, a prime mover source of power carried by the superstructure driven at low speeds for propulsion of said chassis, and an automotive source of power carried by the chassis forwardly of said superstructure driven at relatively higher speeds for effecting travel of the vehicle, a universal power exchanger carried by the said chassis, means associated with said power exchanger and interchangeably receiving power from either said source, a pair of power delivering connections from said exchanger connected to said driving wheels of the vehicle, one of said connections transmitting driving torque to a set of rear propelling wheels of the vehicle and the other of said connections transmitting driving torque to a forward set of propelling wheels of the vehicle, clutch means associated with the said exchanger whereby either source of power may be selectively engaged to propel the vehicle through said connections at low or high speeds, and gear shifting means for the exchanger to vary the ratio of power transmission between the said power receiving means thereof and power delivery shafts thereof.

2,731,098
REAR DOOR AND FENDER AIR INLET PATH TO REAR ENGINE COMPARTMENT
Leon Salves, Billancourt, France, assignor to Regie Nationale des Usines Renault, Billancourt, France
Application November 21, 1952, Serial No. 321,791
Claims priority, application France November 30, 1951
1 Claim. (Cl. 180—54)



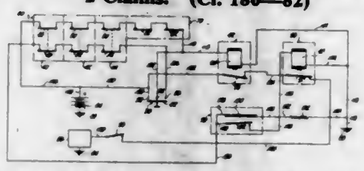
In a motor vehicle having a body and an engine mounted in the rear portion of said body, said body having rear side panels enclosing said engine and integral fenders formed therewith for shielding the rear wheels of the vehicle, rear doors having their rear edges directly forward of said rear fenders, means providing air inlets at the forward end of said fenders for receiving air to be supplied to said engine, and the rear doors each being formed with a depression extending from the rear edge of the door to a point substantially forwardly of said rear edge, said depression being tapered inwardly from its forward edge to define a confined air scoop in said door directly forward of the associated air inlet.

2,731,099
TRACTION UNIT FOR INDUSTRIAL TRUCKS
Charles S. Schroeder, Philadelphia, Pa., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn., a corporation of Connecticut
Application November 20, 1951, Serial No. 257,307
2 Claims. (Cl. 180—57)



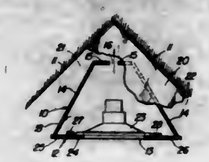
1. In a drive unit of the class described, a housing formed with opposed end openings and an internal chamber extending between said openings, a unitary axle positioned in said internal chamber and extending outwardly at each end through said openings, housing portions lying within the chamber intermediate the opposed ends of the housing, surfaces on said housing portions coacting with a mid-portion of the unitary axle to mount the axle in integral relation to the housing whereby the axle does not rotate or move axially relatively to the housing, a pair of wheels, a hub on each wheel encircling one end of the axle, a part of each hub extending through the corresponding end opening of the housing and positioned in the said internal chamber, bearings on the axle ends coacting with the wheel hubs to mount the wheels relatively to the housing in close-coupled relation to one another, a part of each wheel encircling and overlying an end of the housing, means on said housing intermediate those parts of the wheels that encircle the ends of the housing for mounting the drive unit on a truck, a motor carried by said housing, and differential drive means mounted within said internal chamber of the housing between the motor and each wheel hub whereby the motor rotates the wheels on the unitary axle.

2,731,100
TAXICAB CONTROL SYSTEM HAVING TIME DELAY MEANS
Oscar Butler, Kansas City, Mo.
Application February 18, 1952, Serial No. 272,167
2 Claims. (Cl. 180—82)



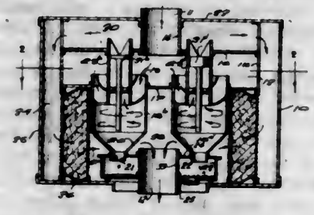
1. In a vehicle having a compressible passenger seat, an ignition circuit, a source of electrical energy, and a meter provided with a flag movable to and from a position rendering the meter operable, a control system comprising a first relay having an electromagnet and a normally open, relay switch; a second relay having an electromagnet and a normally closed, relay switch; conductive means coupling said relay switches and said ignition circuit in series with each other and across said source of energy; a pair of normally closed, seat switches operably connected with said seat for opening as a passenger sits upon the seat compressing the latter; conductive means coupling one of said seat switches and the electromagnet of said first relay in series with each other and across said source of energy; a normally open, double-pole, single-throw meter switch operably connected with said flag for closing of both poles thereof as the flag is moved to said position; conductive means coupling one pole of said meter switch and the electromagnet of said first relay in series with each other and across said source of energy; delayed action switching means having a control element and a normally open, delay switch adapted to close after the element has been energized for a predetermined period of time; conductive means coupling the other pole of said meter switch, the other of said seat switches, and said element in series with each other and across said source of energy; and conductive means coupling the delay switch and the electromagnet of said second relay in series with each other and in shunt with said element.

2,731,101
LOUD SPEAKER
Paul W. Klipsch, Hope, Ark.
Application June 6, 1952, Serial No. 292,080
13 Claims. (Cl. 181—31)



13. A corner horn loud speaker comprising a prismatic shaped housing for symmetric location in a corner formed by the walls of a room to provide the entire horn of the speaker between said housing and such walls, said housing comprising a hollow shell bounded by a substantially plane front panel and side panels converging rearwardly therefrom, the front panel of said housing having an opening therein to exhaust treble sounds from a driver unit mounted upon the front panel at the opening therein and immersed in the hollow shell formed by said housing, and the side panels of said housing converging rearwardly therefrom, said housing having a vertical slot formed centrally of its rear extremity to exhaust low frequency tones into the corner formed by the walls of the room.

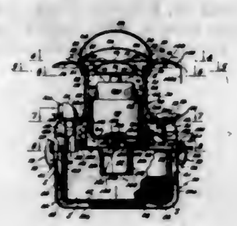
2,731,102
APPARATUS FOR REMOVING HEAVY DUST FROM AIR
William S. James, Providence, R. I., assignor to Fram Corporation, a corporation of Rhode Island
Application May 9, 1952, Serial No. 286,963
1 Claim. (Cl. 183—34)



Apparatus for effectively cleaning air passing therethrough at widely different flow rates, comprising a cylindrical casing having at its upper end a central inlet passage and containing several round centrifugal separators disposed in an upright position concentrically about the central axis of the inlet, said casing having inlet and outlet plenum chambers and each separator having an inlet communicating with the inlet chamber and an outlet conduit communicating with the outlet chamber, an annular filter element surrounding said separators and communicating with said outlet chamber so that the air that enters

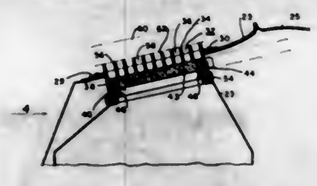
said inlet passes through one or more separators and then through the filter element, each separator except the first one having an automatic valve in its outlet conduit that will open as the pressure in its separator reaches a predetermined value, and said valves being differently loaded to cause the separators to cut in and out of action in a predetermined order as the pressure varies, and thereby control the volume of air that passes through each separator.

2,731,103
VACUUM CLEANING DEVICE
Mario De J. Ortega, Asharoken Beach, N. Y.; Pauline A. Ortega, administratrix of said Mario De J. Ortega, deceased
Application March 23, 1951, Serial No. 217,210
7 Claims. (Cl. 183—37)



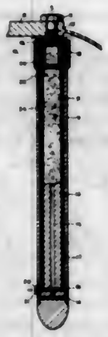
1. A cleaning device of the character described for removing water from floors or other surfaces comprising a main receptacle adapted to accumulate the removed water therein, a hollow removable cover member for said receptacle forming a closed chamber therewith, portions of said cover member providing a depressed area, electrical suction producing means having an intake opening supported by said cover member, a portion of said electrical suction producing means being received in said depressed area of said cover member, a tubular member, means for attaching said tubular member to said cover member, and a portion of said suction producing means projecting above said depressed area and into said tubular member, said tubular member being provided with upper and lower outwardly extending flanges, inlet means communicating with said closed chamber, said inlet means comprising a hose receiving member disposed in said lower flange, a hose member connected at one end to said hose receiving member and adapted to be wound around said tubular member and between said flanges, a labyrinth member comprising an outer cylindrical member and an inner cylindrical member nested in said outer cylindrical member, an opening in said outer cylindrical member communicating directly with said cover member, said inner cylindrical member communicating directly with the intake opening of said suction producing means and an opening in said inner cylindrical member communicating only with said outer cylindrical member, whereby when said suction producing means is rendered effective a mixture of air and water will be drawn into said closed chamber through said inlet, the water accumulating in said receptacle and the air being drawn through said labyrinth to be further relieved of its moisture, and means for rendering said suction producing means effective, means for automatically rendering said suction producing means ineffective when a predetermined amount of water has been accumulated in said receptacle, said last named automatic means comprising a float chamber communicating with the interior of said receptacle, a float member in said float chamber, and means whereby the raising of said float member in said chamber will automatically render said suction producing means ineffective.

2,731,104
AIR GRILLE
Albert D. Baker, Lansing, and Lloyd E. Muller, Flint, Mich., and Edward P. Harris, Dayton, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 8, 1953, Serial No. 384,984
4 Claims. (Cl. 183—44)



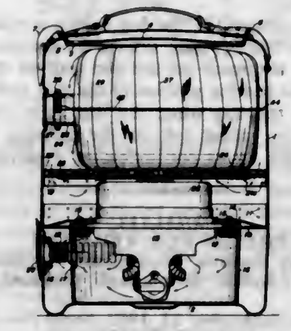
1. An air grille adapted to be associated with a support, comprising in combination; a frame-like border flange defining an opening, a filter carried by a portion of said border flange and disposed in a portion of said opening and a plurality of louvers substantially vertical to and carried by said flange and dividing the remainder of said opening into smaller openings, said louvers having top edge portions defining a plane spaced from a plane defined by said flange for providing a plurality of unrestricted openings between ends of said louvers and said flange when an article having a shape complementary to the plane of said louvers engages top portions of said louvers, and having bottom edge portions adapted for engaging a surface of said filter and being supported thereby when said filter is positioned on the portion of the border flange.

2,731,105
ELECTRIC APPARATUS, SUCH AS LIQUID IMMERSED SWITCHES, COMPRISING MEANS FOR DISCHARGING GASES PRODUCED DURING OPERATION OF THE APPARATUS
Hendrik A. Hidde Nijland, Laren, Netherlands, assignor to N. V. "COQ," Utrecht, Netherlands, a company of the Netherlands
Application August 23, 1954, Serial No. 451,587
Claims priority, application Netherlands August 24, 1953
4 Claims. (Cl. 183—45)



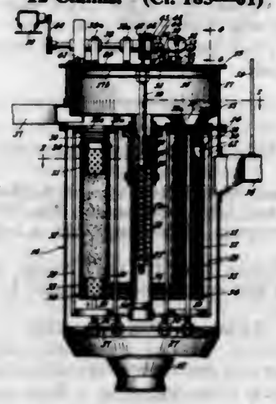
1. In electrical apparatus wherein electrically live parts are contained in a casing which is closed except for the hereinafter recited vent therein and said casing contains insulating liquid having a normal level lying somewhat below the top of the casing, the improved gas venting and liquid separating device which comprises a vent in the casing wall above the normal level of the liquid, a relatively small chamber within the casing having a space therewithin communicating with the vent, said chamber having its lower end immersed in the liquid, gas permeable means in the chamber having a large number of baffle surfaces, a first passage in the chamber connecting the bottom of the baffle-containing space therein to the space in the casing above the normal liquid level, and a second passage, of smaller effective cross sectional area than the first passage, connecting the bottom of the baffle-containing space in the chamber to the space in the casing below the normal liquid level therein.

2,731,106
SUCTION CLEANER WITH PLEATED FILTER
Werner G. Seck, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application March 16, 1953, Serial No. 342,400
5 Claims. (Cl. 183—51)



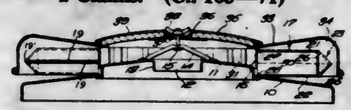
1. A filter for suction cleaners comprising a pair of identical cup-like parts each having a substantially plane circular section base portion joined to a substantially cylindrical wall portion having a plurality of spaced circumferential pleats therein of triangular shape having their apices merging into said base portions and their bases terminating in a radially outwardly directed flange forming the rim portion of said cylindrical wall, said cup-like parts being positioned in opposed relation with the flanges thereof in abutting relation, means securing said flanges together, and an inlet tube piercing the wall formed by said cylindrical wall portions.

2,731,107
FILTER
Henry J. Hersey, Jr., Chatham, N. J.
Application May 7, 1954, Serial No. 428,243
12 Claims. (Cl. 183—61)



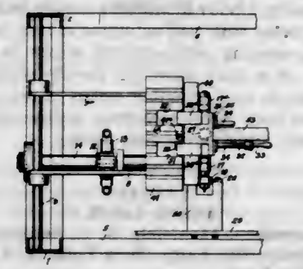
3. A filter, comprising a generally closed body member, a plurality of filter elements having upstream and downstream sides and supported in said body member, means for leading a particle-laden gas under pressure into said body member on the upstream side of said filter elements, means for permitting egress of said gas on the downstream side of said filter elements, a housing in said body member and defining a space substantially closed off from said body member, said space having a volume which is large compared to that of any one of said filter elements, said housing having an aperture formed therethrough, means for successively registering said aperture and at least one of said filter elements whereby said downstream side of said one filter element communicates substantially solely with said space, a plunger mounted in said space and movable toward and away from said aperture and any one of said filter elements in registration therewith, and means for rapidly moving said plunger through a distance such that it sweeps a volume which is large compared to that of any one of said filter elements and compresses the gas under the same thereby to force gas suddenly to counterflow substantially simultaneously through all of the filter element in registration with said aperture against said pressure.

2,731,108
PLEATED PAPER FILTER ELEMENT
Walter V. Kennedy, Central Falls, R. I., assignor to Fram Corporation, a corporation of Rhode Island
Application July 6, 1953, Serial No. 366,362
2 Claims. (Cl. 183—71)



1. A hollow filter element comprising a continuous sheet of porous paper provided with parallel score lines extending in one direction and provided with oppositely inclined pairs of fold lines extending between the parallel lines to form a row extending at right angles to the parallel lines, said sheet being folded at the location of said row along said inclined lines and along said score lines to provide an upper pleated wall having inclined panels and a lower pleated wall having inclined panels, and the fold lines of the upper and lower walls contacting along the alternate folds, whereby together they form a series of four-sided tubes connected one to the other, the ends of said folded sheet being secured together to form an annulus about a central hole, said sheet being folded only along the parallel lines and inclined lines above mentioned to form the filter element.

2,731,109
ELEVATING MECHANISM FOR WRAPPING MACHINES
Philip G. Schlemmer, Nanuet, N. Y., assignor to National Equipment Corporation, New York, N. Y., a corporation of New York
Application February 26, 1954, Serial No. 412,791
6 Claims. (Cl. 187—17)



1. In a wrapping machine of the character described, a reciprocating, box-lifting elevator provided with a box-supporting platen, a supplemental box-supporting platen member mounted adjacent to the platen and having its upper surface substantially flush with the upper face of

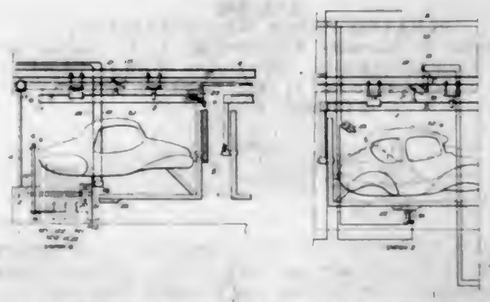
the platen, adjustable means for coupling the supplemental box-supporting platen member to the platen, whereby said member can be moved toward or away from the platen, the platen and said box-supporting platen member co-operating in forming a surface for supporting the box to be raised, which surface is increased or decreased in area by movement of the supplemental box-supporting platen member to or from the platen.

2,731,110

APPARATUS FOR TREATING WITH LIQUID A CAR BODY HAVING IRREGULAR NON-SYMMETRICAL SURFACES

Henry James Woolard, Farnborough, England, assignor to Carrier Engineering Company Limited, London, England, a British company

Application December 1, 1952, Serial No. 323,485
Claims priority, application Great Britain December 3, 1951
13 Claims. (Cl. 118—8)



1. Apparatus for treating bodies of different types and having irregular non-symmetrical surfaces, comprising a controllable device for projecting a treating liquid, a conveyor movable past said device and including a plurality of body supports each adapted to support a body substantially longitudinally of conveyor movement for rotation about an axis that is substantially longitudinal of conveyor movement, means for rotating the bodies as the respective body supports are advanced by the conveyor longitudinally past said liquid projecting device, control means operatively connected with said projecting device for controlling the operation of said device, said control means including a plurality of control mechanisms each of which corresponds to a particular type of body and a connector mechanism selectively cooperative with said control mechanisms and operatively connected with said liquid projecting device to control said liquid projecting device in accordance with the particular portions of a particular type of body within the range of said liquid projecting device, actuating means for selectively placing said connector mechanism and one of said control mechanisms in cooperative relation, and selector means including a body identifying means and being operatively connected with said actuating means, said identifying means presetting said actuating means in response to the passage of a body identified thereby along said conveyor to actuate said actuating means in accordance with the identified body when such body is disposed within the range of said liquid projecting device.

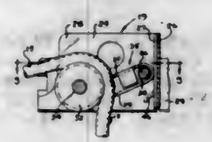
2,731,111

CORD LOCK

Hans K. Lorentzen, Montclair, N. J., assignor to Lorentzen Hardware Mfg. Corp., New York, N. Y., a corporation of New York

Application December 6, 1954, Serial No. 473,270
7 Claims. (Cl. 188—64)

1. A cord lock for the lift cords of a curtain comprising a housing having two generaly parallel side walls and a connecting end wall, means mounted on the housing presenting a cord-guiding surface extending between the side walls, a cord-locking dog loosely pivoted between the side walls of the housing, the dog having a cord-engaging finger, the dog being mounted to rotate said finger generally parallel to the side walls from a cord-locking position in which it confronts the guiding surface and presses the cord thereagainst to a cord-releasing position



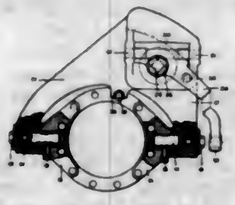
spaced from said surface, the dog having a rounded bearing portion on the opposite side of its pivotal axis from the finger, an abutment on the end wall of the housing confronting the bearing portion of the dog and sustaining the thrust on the dog when the dog is in cord-locking position and an inbent tab on the housing forming a stop for the dog in its cord-releasing position.

2,731,112

BRAKES FOR VEHICLES

Percival Walter Berrows, Birmingham, England, assignor to Girling Limited, Birmingham, England, a British company

Application September 23, 1952, Serial No. 311,004
6 Claims. (Cl. 188—72)



1. A brake of the kind specified comprising a brake disc including an outer part and having opposed parallel faces, a housing which straddles the outer part of the brake disc and is mounted to rock about a stationary axis which intersects the axis of the disc at right angles, said housing having axially aligned bores, friction pads mounted in each of said bores for engagement with said opposite faces of said disc, a part rigid with the housing and bearing on one of said pads, and a lever mounted to rock about a pivot on the housing and bearing on the other of said pads.

2,731,113

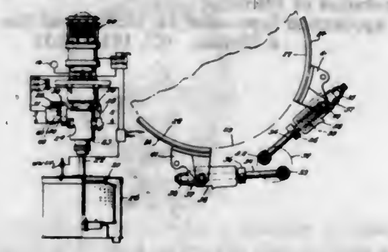
CENTRIFUGAL BRAKING AND CONTROL APPARATUS

Richard J. Huser, Mount Healthy, and Anthony H. Stuhlreyer, Silverton, Ohio, assignors to The Western States Machine Company, Hamilton, Ohio, a corporation of Utah

Original application June 21, 1947, Serial No. 756,308. Divided and this application November 1, 1952, Serial No. 318,258
5 Claims. (Cl. 188—105)

1. In a cyclically operated centrifugal machine including a basket carrying spindle, a rotary drive for the spindle, and a mechanical brake including a drum connected for rotation with said spindle and brake band means movable against said drum to decelerate the spindle, said brake including a brake-arm connected with said band means and movable to dispose the same in brake-on and brake-off positions, yieldable means normally acting upon said brake-arm with a predetermined brake unsetting force to bias the arm and band means to brake-off position, power

operated means for applying a predetermined brake setting force to said arm in a direction opposite to the brake unsetting force, a manually operable brake setting lever movable between an idle position and a brake setting position, said lever normally being unconnected with said arm and said band means so as to remain inactive upon movement of said arm and said band means by said power operated means, coacting means connected respectively with said



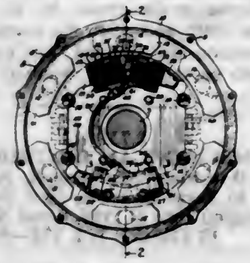
lever and said brake-arm responsive to movement of said lever away from its idle position to overcome said brake unsetting force and shift said arm to its brake-on position independently of said power operated means, said coacting means comprising a lateral extension on said arm and a cam member connected with said lever and movable against said extension by movement of said lever to thrust said arm to brake-on position.

2,731,114

FLUID-OPERATED BRAKE AND CUSHIONING MEANS THEREFOR

Homer T. Lambert, St. Joseph, Claude R. Myers, Galien, and Osborn A. Kershner, St. Joseph, Mich., assignors, by direct and mesne assignments, to Lambert Brake Corporation, St. Joseph, Mich., a corporation of Michigan

Application September 15, 1949, Serial No. 115,922
7 Claims. (Cl. 188—152)



1. A fluid-operated power device, comprising a cylinder having a fluid inlet, a piston axially movable therein, said piston being extended from one end of said cylinder and provided with a radially extended annular flange overlapping the adjacent end of said cylinder, an annular cushioning member of resilient material surrounding the extended end of said piston between its annular flange aforesaid and the adjacent end of said cylinder for limiting and yieldably cushioning inward movement of said piston, and a seal carried by said piston in overlying relation to said cushion member and the adjacent end of said cylinder.

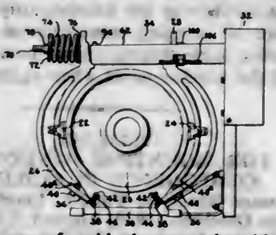
2,731,115

FRICTION BRAKE CONSTRUCTION

Howard E. Hodgson, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware

Application February 18, 1954, Serial No. 411,183
5 Claims. (Cl. 188—171)

2. The combination in a magnetically operated friction brake having a base member, a brake drum, a brake lining for engagement with said drum, an operating lever carrying said lining, and selectively operable means associated with said operating lever to effect engagement



and disengagement of said drum and said lining, of pivotal mounting means for said operating lever comprising a flexible metal strap fixed to said base and to said lever intermediate the ends thereof.

2,731,116

CORNER STUD CONSTRUCTION

Lloyd Hamilton Allison, Los Angeles, Calif., assignor to Plan-It Homes, Los Angeles, Calif., a corporation of California

Application March 24, 1952, Serial No. 278,262
4 Claims. (Cl. 189—38)



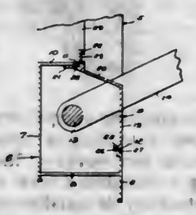
1. In a corner stud having an elongated sheet metal stud element bent into a rectangular shape having a longitudinal corner opening, spaced transverse plates fixed in said element, each said plate having three notches to form a serrated wedge-lock member approximating an outline of a letter M, with two corners of said M pointing toward said corner opening to define two lobes, and an elongated sheet metal element spanning said corner opening and formed to have an M-shaped cross-section substantially fitting and forming a mating engagement with said wedge-lock member.

2,731,117

SILL COVER FOR WINDOW DEVICES

Maurice Abelson, Miami, Fla.

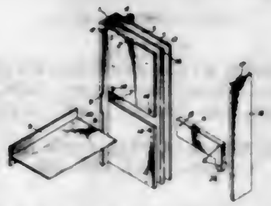
Application January 19, 1955, Serial No. 482,762
4 Claims. (Cl. 189—75)



1. The combination with a metallic window frame embodying parallel jamb members and a connecting sill member and with the sill member being open upon its forward side, a sill cover adapted to overlie and cover the open side of the sill, means whereby the sill cover has snapping engagement with the sill member whereby a forward wall of the sill cover is substantially flush with an outer wall of the sill member, the said sill cover being co-extensive in length with the sill member, the said sill cover adjacent each end being slotted for the passage of window operating cranks supported within the sill mem-

ber, the sill cover being provided with an upstanding rib for its full length and with the rib being provided upon its outer side with a groove for the reception of a weather strip whereby the weather strip will be disposed in the path of swinging movement of a window panel for providing a weathering engagement between the sill cover and the window panel when in the closed position.

2,731,118
MEANS FOR MOUNTING WINDOWS OR OTHER COMPONENTS IN BUILDINGS
Alfred James Naismyth, Putney, London, England, assignor to Quickthe (1928) Limited, London, England
Application October 6, 1954, Serial No. 460,627
Claims priority, application Great Britain October 23, 1953
7 Claims. (Cl. 189—76)



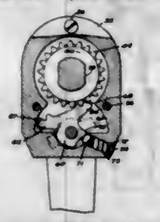
1. A curtain walling member for use in building construction comprising three spaced vertical components connected along one vertical edge which is adapted to be attached to a fixed framework, the two outer components being slotted or otherwise formed to provide for the attachment thereto of horizontal components which support window frames, wall panels, glass or other components.

2,731,119
HYDRAULIC COUPLING CONSTRUCTION
Harry W. Burdett, Ridgewood, and Peter H. Palen, Denville, N. J., assignors to Curtiss-Wright Corporation, a corporation of Delaware
Original application September 7, 1945, Serial No. 614,850, now Patent No. 2,544,542, dated March 6, 1951. Divided and this application December 30, 1950, Serial No. 203,674
2 Claims. (Cl. 192—3.2)



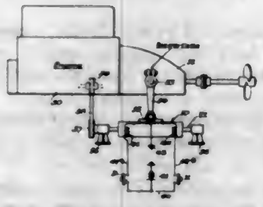
1. A hydraulic coupling comprising driving and driven coupling elements providing a chamber therebetween adapted to contain the working fluid of the coupling; means providing a cylindrical bore within which one of said coupling elements is axially movable toward and away from the other of said elements; means for supplying working fluid under pressure to said chamber; separate means for supplying a fluid under pressure to said bore behind said one coupling element at a pressure sufficient for axially moving said one coupling element toward the other coupling element against the pressure of the working fluid within said chamber; means operable independently of the supply of working fluid to the chamber for relieving the fluid pressure in said cylindrical bore means; and a pair of clutch members each drivably connected to one of said coupling elements, said clutch members being drivably engageable upon axial movement of said one coupling member toward the other coupling member.

2,731,120
RATCHET CRANK
Thomas B. Dalton, Muskegon, Mich., assignor to West Michigan Steel Foundry Co., Muskegon, Mich., a corporation of Michigan
Application September 14, 1953, Serial No. 379,761
6 Claims. (Cl. 192—43.1)



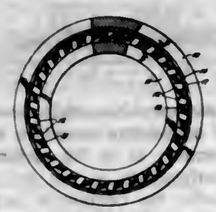
1. A crank structure comprising, a crank arm having means at one end for its manipulation, a housing at the opposite end, a ratchet member journalled in the housing and having an annular array of teeth thereon, a double ratchet pawl pivotally carried by the housing having two projecting arms, the pawl being selectively positionable for selective engagement of the arms with the teeth of the ratchet member, spring means acting upon the pawl for holding the selected arm thereof in engagement with teeth of the ratchet member, means on the ratchet member projecting from the housing and constructed and arranged to be slidably connected to a shaft, the ratchet member having a formation thereon for engagement with the shaft in relatively non-rotatable manner and for disengagement of the shaft incident to the sliding action, the interengagement of selected arm on the pawl with teeth on the ratchet member being such that when the crank is turned in one direction the pawl transmits torque to the ratchet member and holds it immovable relative to the crank, for the transmission of torque to the shaft, and when the crank is turned in the opposite direction the selected arm on the pawl rides over the teeth on the ratchet member.

2,731,121
ELECTRO-MECHANICAL CONTROL MECHANISM
Richard T. Wenstrom, Mattapoisett, Mass., assignor of one-half to Bertel S. Blom, New Bedford, Mass.
Application June 1, 1954, Serial No. 433,633
12 Claims. (Cl. 192—94)



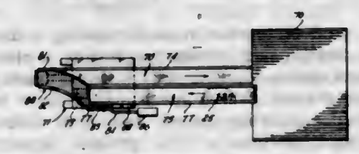
1. In a control device for a clutch intermediate a motor and a load, in combination, a shaft continuously rotated by said motor, said shaft having threaded sections of opposite hand spaced therealong, pairs of half nuts threaded in opposite hand spaced along said shaft, the half nuts of each pair being located on opposite sides of said shaft and being movable toward and away from each other to engage said threaded sections, said pairs of half nuts being connected together to move relative to said shaft under drive of said threaded sections, means connecting one of said relatively movable parts to a clutch operator and means for moving the half nuts of a selected pair into engaging position.

2,731,122
ONE WAY CLUTCHES
Adiel Y. Dodge, Rockford, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application April 10, 1951, Serial No. 220,250
8 Claims. (Cl. 192—45.1)



1. A one-way clutch comprising a plurality of tiltable grippers adapted to fit between coaxial ring surfaces and having transverse grooves in their ends, and a cage formed of a flat strip with a series of spaced openings between the sides thereof through which the grippers extend and bent into annular form to fit between the race surfaces, and integral inwardly projecting lugs on the sides of the strip to fit loosely in the grooves in the ends of the grippers and engageable with the sides of the grooves to limit both radial and tilting movements of the grippers relative to the cage.

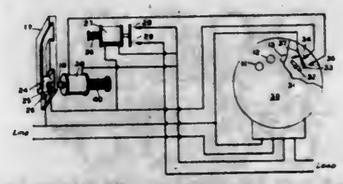
2,731,123
DIE CHANGING ARRANGEMENT FOR METAL WORKING APPARATUS
David A. Edgecombe, Beaver Falls, Pa., assignor to The Babcock & Wilcox Company, New York, N. Y., a corporation of New Jersey
Application January 30, 1953, Serial No. 334,211
6 Claims. (Cl. 193—38)



1. Transport means for transferring a metal working component between metal working apparatus and a processing station; said transport means comprising, in combination, a pair of substantially juxtaposed elongated channel chutes sloping in opposite longitudinal directions; means supporting said chutes in elevated relation, the chutes, at one end, being at substantially the same elevation; and a channel chute section hingedly mounted at said one end of the chutes with its hinge end longitudinally aligned with one chute and its free end longitudinally aligned with the other chute.

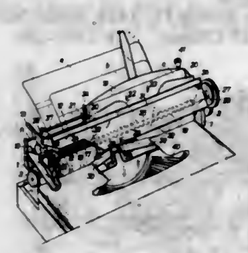
2,731,124
COIN-OPERATED METER FOR ELECTRICAL ENERGY
Stanley Kaplanowski, Grand Rapids, Mich.
Application October 30, 1950, Serial No. 192,892
2 Claims. (Cl. 194—6)

2. A circuit controller, comprising: switch means; first solenoid means, adapted to actuate said switch means; coin-receiving means including a chute; first contact means, associated with said coin-receiving means and adapted for actuation by a coin that has traversed said chute; second solenoid means; coin-ejecting means positioned by said second solenoid means and adapted to bar the passage of succeeding coins when in coin-ejecting position; first circuit means, associating said first solenoid means and said first contact means; metering means connected in series relationship with said switch means; second contact means, operated by said metering means; second circuit means, associating said second contact means and second solenoid means whereby the completion of the metering action causes said second solenoid



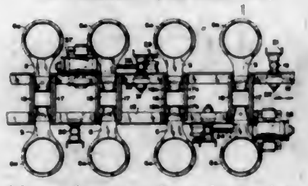
means to operate said coin-ejecting means and remove a coin from actuating position; third contact means operated by said metering means before, during, and after said second contact means, said second and third contact means including a flexible conducting arm adapted to flex to permit sequential contact at points thereon; and third circuit means associating said third contact means in shunt relationship with said first contact means.

2,731,125
TYPEWRITER FRONT-FEED ATTACHMENT
Walter Haselmeier, Cham, Switzerland
Application March 11, 1952, Serial No. 275,879
Claims priority, application Switzerland May 2, 1951
12 Claims. (Cl. 197—128)



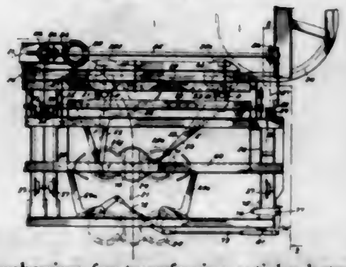
1. In a typewriter having a frame, a shiftable carriage and a rotatable platen mounted on the carriage for movement therewith, in combination, support means mounted on the carriage; an elongated sheet guide plate pivotally mounted on said support means for turning about an axis parallel to the axis of the platen, said sheet guide plate being arranged in front of the platen spaced therefrom and extending in the direction of the length thereof, said guide plate being turnable about its pivot axis between a raised inoperative position with its lower edge spaced from said platen and a lowered operative position with its lower edge closely adjacent to the platen for guiding the bottom edge of a sheet placed between said guide plate and the platen against and under the same so as to slide the sheet into writing position, the lower edge of said sheet guide plate being of stepped form and including a lower bottom edge portion, a higher bottom edge portion and a connecting edge portion extending between said bottom edge portions and arranged at obtuse angles thereto; and an elongated member fixed relative to the typewriter frame arranged below and in contact with said stepped lower edge of said sheet guide plate and coacting therewith for turning said sheet guide plate about its pivot axis automatically between the operative and inoperative positions thereof during movement of said sheet guide plate with the carriage while the latter is being shifted.

2,731,126
CENTERING AND HOLDING DEVICE
George B. Guthrie, Chester, W. Va., assignor to Taylor, Smith & Taylor, East Liverpool, Ohio, a corporation of Ohio; The Hall China Company, East Liverpool, Ohio, a corporation of Ohio; and Harker Pottery Co., Chester, W. Va., a corporation of Ohio
Application October 3, 1952, Serial No. 312,970
5 Claims. (Cl. 198—19)



1. In machinery for manufacturing articles having conveyors for moving workpieces to and from work stations and receptacles for the workpieces secured to the conveyors but having portions movable relative to the conveyors, a device for centering and holding the receptacles in desired positions relative to the work stations comprising retractable stops separately movable to engage the receptacles on opposite sides and in the line of movement of the receptacles, the stops being positioned so that when they engage the receptacles the receptacles are centered and held in the desired positions, and means for moving the stops to and away from the receptacles.

2,731,127
CONVEYOR TRANSFER MECHANISM
Homer S. Harrison, Detroit, Mich., assignor to Allied Steel and Conveyors, Inc., Detroit, Mich., a corporation of Michigan
Application March 11, 1950, Serial No. 149,056
15 Claims. (Cl. 198—20)



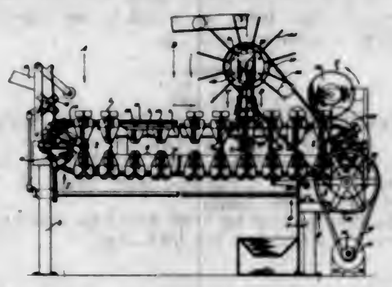
3. A mechanism for transferring articles between separate conveyors, at least one of which is continuously moving, characterized by a longitudinally extending frame adapted to move in a transverse path between said conveyors, a transfer carrier mounted on said frame for slidable movement in a longitudinal direction, an oblique guide anchored to a stationary member adapted to engage said carrier and convert a portion of its transverse movement into longitudinal movement while said carrier is traveling between said conveyors, and members on said continuously moving conveyor adapted to engage said carrier when it reaches the path of said conveyor and to impart longitudinal movement thereto, said carrier being adapted to engage an article carried by one conveyor and transfer it to the other conveyor.

2,731,128
AUTOMATIC FEED CONVEYORS
James L. Herold, St. Louis, and William J. Nekola, Normandy, Mo., assignors to Barry-Wehmiller Machinery Company, St. Louis, Mo., a corporation of Missouri
Application October 4, 1951, Serial No. 250,124
7 Claims. (Cl. 198—30)

2. In container conveying apparatus, a horizontally directed supply conveyor adapted to move containers in a haphazard crowd to a discharge zone, receiving conveyor means spaced from said supply conveyor to move containers out of the discharge zone in an orderly flow, and container agitating and transferring means disposed at the discharge zone in position to bridge the space between said conveyors, said last means including a member having a flat surface substantially level with said supply conveyor and upstanding container stirring elements carried by said member at its flat surface, said member being movable horizontally in the space between said conveyors to transfer the containers and said elements agitating the containers in the haphazard crowd.



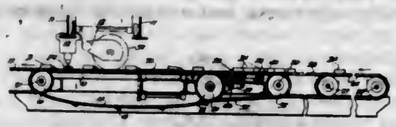
2,731,129
FRUIT POSITION INSPECTOR AND SEGREGATOR
Ellsworth W. Carroll, Redwood City, Calif., assignor to S & W Fine Foods, Inc., San Francisco, Calif., a corporation of California
Application October 17, 1949, Serial No. 121,854
18 Claims. (Cl. 198—33)



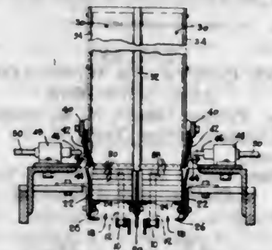
1. In a fruit orientation machine having a frame supporting a carrier, said carrier progressing a plurality of fruit support means, together with means operating during progression thereof over a horizontal path to orientate fruit in said supporting means with their indents in a predetermined position, a fruit position inspector and segregator comprising a rotary member positioned above said carrier and rotatable on a horizontal axis, a plurality of radially disposed fruit grasping means carried by said member, means for rotating said member in synchronism with said carrier to place a grasping means over a fruit support means in a position to grasp each fruit at a predetermined inspection point, indent sensing means attached to said frame positioned at said point and located to enter an indent only when an indent is in said predetermined position, and means for controlling the grasping means arriving at said inspection point in accordance with movement of said sensing means to cause said grasping means to grasp only the fruit whose indent is not entered by said sensing means.

2,731,130
FEED MECHANISM FOR LUMBER CONVEYOR
Charles Bickenderfer, Jr., Puyallup, Wash., assignor to Weyerhaeuser Timber Company, Tacoma, Wash., a corporation of Washington
Application June 13, 1950, Serial No. 167,877
12 Claims. (Cl. 198—34)

1. An intermittent feed mechanism for a conveyor comprising a first pivotally mounted stop arm having a movable end extending in the direction of travel of said conveyor, a second pivotally mounted stop arm having a movable end extending in the opposite direction at the side of said first arm, a rear stop on said first arm, a front stop on said second arm, a cam actuated rocker shaft, oppositely directed rocker arms on said rocker shaft supporting the movable ends of said stop arms for raising and lowering said arms in alternate relation, and auxiliary conveyor means on said second stop arm movable to positions below and above said rear stop by the movements of said stop arms.



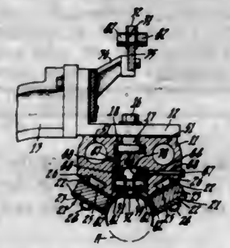
2,731,131
ARTICLE FEEDING
John L. Shannon, Bridgeport, Conn., assignor to Waterbury Tack Company, Inc., Shelton, Conn., a corporation of Connecticut
Application October 22, 1949, Serial No. 122,947
10 Claims. (Cl. 198—35)



1. An article feeding device comprising a receptacle for holding a vertical stack of articles with its bottom at a predetermined level; means periodically applying a shifting force to a portion of the stack having a predetermined height from the bottom of said stack and moving said portion laterally away from the stack in one direction, said receptacle being constructed to provide clearance space for simultaneous lateral passage of both the said stack portion and the next higher article in the said direction; impositive yielding means for simultaneously exerting a restraining force on said next higher article having a lateral component to normally prevent movement thereof with said shifting portion and having an upward component for supporting said next higher article so as to relieve the pressure of the stack from said portion moving laterally away from the bottom of the stack, said means being incapable to hold said next article if shifting force is applied thereto by said shifting means; means rendering said immediately preceding means inoperative to enable the remainder of said stack to drop so as to be bottomed again at said predetermined level after said portion has been moved out of the way; and means for continuously operating all of said previously recited means in sequence.

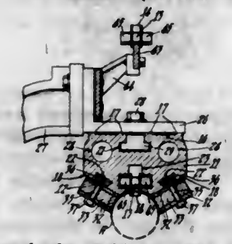
2,731,132
CAN BODY SUPPORT WITH CONVEYOR WEARING TRACKS
John E. Socke, Pelham Manor, N. Y., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application August 26, 1952, Serial No. 306,415
4 Claims. (Cl. 198—41)

4. A support for a can body treating machine, comprising a longitudinal extruded horn member of relatively soft material having a channel formed therein for a conveyor, support means secured to and extending along said horn member for supporting can bodies arranged in endwise relation, a conveyor movable through said channel in said horn member for propelling said bodies in processional order along said support means, said conveyor having laterally projecting rollers for supporting it during its passage through said channel, a pair of L-shaped supplemental tracks of relatively harder material than said horn member disposed in said channel and having horizontal legs for supporting the rollers of said conveyor and for protecting said horn member against



wear and improper operation of said conveyor, and a clamping bar of relatively hard material disposed within said channel adjacent each of said tracks and secured to said horn member for removably clamping said tracks in operative position, said clamping bars being disposed in spaced relation to the horizontal legs of said tracks for confining said conveyor rollers against vertical displacement.

2,731,133
CAN BODY MAKING MACHINE WITH IMPROVED BODY SUPPORT MEMBER
John E. Socke, Pelham Manor, N. Y., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application August 26, 1952, Serial No. 306,418
5 Claims. (Cl. 198—41)

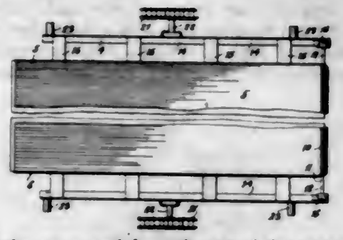


1. In a can body making machine, the combination of an elongated one-piece extruded longitudinal support member of relatively soft metal, said support member being free of threaded holes and having a longitudinal extruded recess therein, a conveyor disposed in said recess for advancing along said support member a procession of can bodies arranged in spaced endwise relation, means carried by said support member for yieldably holding the can bodies advanced by said conveyor, and a second extruded longitudinal recess in said support member spaced from said first mentioned recess and having means therein for removably securing said support member to the machine frame at spaced localities along said second recess without the necessity for threaded holes in said support member.

2,731,134
PLACQUES FOR CONFECTIONERY MACHINES
Max M. Guggenheim, New York, N. Y., assignor to National Equipment Corporation, New York, N. Y., a corporation of New York
Original application February 2, 1951, Serial No. 209,126, now Patent No. 2,704,519, dated March 22, 1955. Divided and this application November 9, 1954, Serial No. 467,718
10 Claims. (Cl. 198—108)

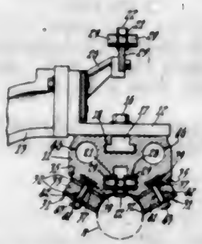
1. In a machine of the character described, a movable tray, retaining means at one end of the same, said re-

taining means having slots open at both ends, a placque having a rod extending across it at its forward end, said rod having end portions for reception in the slots through



one end of the same and for exit out of the opposite end, and spring detents in spaced relation in the slots for engaging the ends of the rod betwen them and retaining the same in the slots.

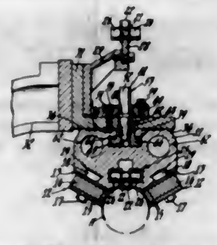
2,731,135
CAN BODY CONVEYOR WITH ADJUSTABLE RAILS
Lloyd H. Weber, Newark, N. J., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application August 26, 1952, Serial No. 306,335
4 Claims. (Cl. 198—179)



1. A magnetic support for a can body treating machine, comprising a longitudinal horn member including a pair of spaced converging magnetic rails extending along said horn member for magnetically supporting between them can bodies arranged in endwise relation, a plurality of longitudinal recesses disposed in transversely spaced relation within said horn adjacent said magnetic rails, a plurality of eccentric clamp elements removably carried by and longitudinally insertable within said recesses, said clamp elements being reversible end for end and longitudinally insertable in said clamping recesses for securing said rails in another position on said horn member for a different diameter can body, a pair of shim elements respectively interposed between said horn member and said rails for maintaining the latter in radially disposed relation to the longitudinal axis of said can body of different diameter, and means for drawing said clamp elements and said rails toward each other to tightly clamp said rails against said horn member.

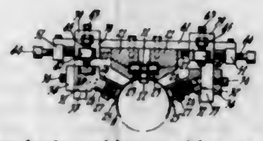
2,731,136
CAN BODY CONVEYOR WITH HORN ALIGNING DEVICE
John E. Socke, Pelham Manor, N. Y., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application August 26, 1952, Serial No. 306,416
5 Claims. (Cl. 198—179)

1. In a can body treating machine, the combination of an elongated relatively soft extruded metal horn member for supporting can bodies to be treated while being advanced therealong, said horn member having therein a longitudinal recess portions of which are wider than the mouth thereof, a rigid support mounting for said horn member, means including a clamping member in the wider portion of said recess for securing said horn member to said support, an aligning member confined against rotation in said recess, and a rotatable member carried



by said support and having an eccentric portion extending into said aligning member, whereby rotation of said rotatable member relative to said aligning member shifts the latter and said horn member laterally on and relative to said support for longitudinally aligning said elongated horn member for a can body treating operation.

2,731,137
CAN BODY CONVEYOR WITH ADJUSTABLE RAIL SUPPORTS
John E. Socke, Pelham Manor, N. Y., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application August 26, 1952, Serial No. 306,417
5 Claims. (Cl. 198—179)



1. In a can body making machine, the combination of an elongated track having a conveyor thereon for advancing the can bodies longitudinally of the machine, a slide bar supported by said track and extending transversely thereof, a pair of bearing members supported by said bar on opposite sides of said track for horizontal sliding movement on said bar, each bearing member having a depending shank thereon, a block member movably carried by each of said shanks for vertical sliding movement thereon, a pair of spaced rail members extending longitudinally of the machine on opposite sides of said conveyor, said rail members being respectively carried by said block members in inclined relation thereto for movably supporting the advancing can bodies with a minimum of friction in radial relation to the can body axes, means for locking said block members in vertically adjusted position on said depending bearing member shanks, and means for locking said bearing members in horizontally adjusted position on said slide bar, whereby the positions of said can body supporting rail members may be varied at will on opposite sides of said track so as to accommodate therebetween can bodies of different diameters while maintaining the desirable radially extending relation between said rail members and the can body axes.

2,731,138
BELT CONVEYOR FRAME CONSTRUCTION
Anthony Parisi, Pontiac, Mich., assignor to Pekay Machine and Engineering Co., Inc., Chicago, Ill., a corporation of Illinois
Application August 27, 1952, Serial No. 306,623
3 Claims. (Cl. 198—204)

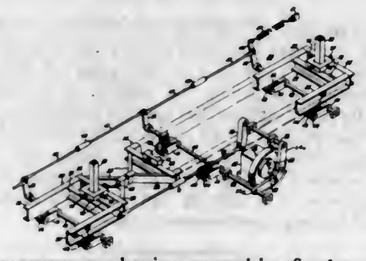
1. A conveyor belt construction comprising, an upright supporting frame, a drive roller mounted at opposite ends

of the frame having the conveyor belt supported thereon to provide at least an upper reach along which granular material is adapted to be carried, said frame including a plurality of upright structural members arranged in a pair of laterally spaced interconnected rows and an elongate generally horizontally arranged structural member connecting the uprights of each row, a pair of elongate continuous bracket plates rigidly secured on said frame between said rows and laterally spaced one from the other, each plate including a vertically arranged planar portion and a table portion extending outwardly relative to the



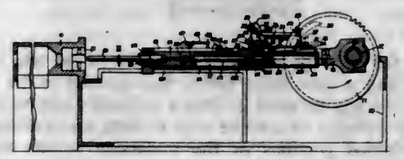
vertical portion and secured at points therealong to uprights of an adjacent row, the reach being supported along each side edge thereof by a said table portion and positioned over said space, a plurality of spaced idler rollers journalled at the ends thereof in said vertically arranged portions and positioned in said space supporting the said reach, a non-moving support member detachably mounted between said vertical portions and between each pair of idler rollers for supporting the portion of said reach between said rollers comprising, a triangular strut having an apex engaging the reach, said table portions extending beyond the side edges of the reach.

2,731,139
CONVEYOR MECHANISM
Ernest A. Smith, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application August 24, 1951, Serial No. 243,506
2 Claims. (Cl. 198—219)



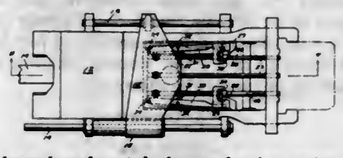
1. A conveyor mechanism comprising fixed means providing a substantially horizontal support, movable support means for raising a work-piece from said fixed support, moving it a predetermined distance substantially parallel with said fixed support and lowering it on to said fixed support again, a carriage movably supporting said movable support means, a plurality of levers supporting said carriage, a plurality of shafts to which said levers are connected, a rotatable cam, said cam comprising a first cylindrical surface concentrically disposed with respect to the axis of rotation of said cam and extending over a sector of approximately 90°, a second cylindrical surface concentrically disposed with respect to the axis of rotation of said cam and extending over a sector of approximately 90° diametrically opposite from said first surface, said second cylindrical surface being of a different radius than said first cylindrical surface, and surfaces connecting said first and second cylindrical surfaces to form a continuous cam surface extending around the axis of rotation of said cam, a first cam follower engaging said cam surface to operate said shafts and the levers thereon to raise and lower said carriage and said movable support means, a second cam follower engaging said cam surface approximately 90° from said first cam follower, means for urging said first and second cam followers into engagement with said cam surface, and a linkage connecting said second cam follower with said carriage for moving said carriage and said movable support means horizontally.

2,731,140
DRAWING PRESS
Otto Hermann May, Schwabisch Gmund, Germany, assignor to May-Pressenbau G. m. b. H., Schwabisch Gmund, Germany, a corporation of Pennsylvania
Application May 20, 1953, Serial No. 356,191
Claims priority, application Germany May 23, 1952
8 Claims. (Cl. 205—4)



1. In a press consisting of a frame, a main ram, a mechanism adapted to reciprocate the main ram through working strokes and retractive strokes, an auxiliary ram mounted for reciprocation between advanced and retracted positions on the main ram, coupling means adapted to couple and decouple the auxiliary ram relative to the main ram, and means for reciprocating the auxiliary ram relative to the main ram when the rams are decoupled, said coupling means comprising at least one movable key in the main ram and intersecting a notched portion of the auxiliary ram, spring means biasing the key into the notch for automatic coupling when the auxiliary is in advanced position on the main ram, a stationary cam on the frame, and movable engaging means on the main ram adapted upon a retractive stroke of the main ram to engage said cam and said key and to move so as to disengage the latter from said notch.

2,731,141
GRIP BUGGY AND EJECTOR FOR DRAW BENCHES
Wallace E. Kerr, Poland, Ohio
Application April 16, 1952, Serial No. 282,649
9 Claims. (Cl. 205—24)

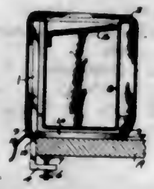


3. In a draw bench a grip buggy having guide surfaces thereon, grip bits carried by said buggy and slidable along said guide surfaces into and out of engagement with a workpiece, an ejector mechanism movable longitudinally on said buggy and including elements movable into and out of the workpiece space formed between said grip bits for ejecting a workpiece therefrom, flexible cables extending along said draw bench, loops in said cables engaged over said buggy and ejector mechanism and means for moving said cables to tighten and loosen said loops to cause movement of said ejector mechanism relative to said buggy.

2,731,142
HOLDERS IN WHICH SUTURE AMPULES MAY BE BROKEN
Allie A. Miley, Royal Oak Township, Oakland County, Mich.
Application October 18, 1954, Serial No. 462,890
1 Claim. (Cl. 206—1)

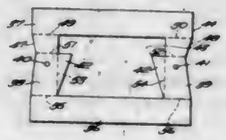
A holder in which ampules may be broken comprising a frame having means thereon for supporting the latter,

a substantially horizontal hoop carried by the upper extremity of the frame, a sterilizable fabric bag the closed extremity of which is mounted in the frame and extends through the hoop, the bag intermediately of its length being outwardly and downwardly folded over the hoop whereby the downwardly folded portion covers the frame,



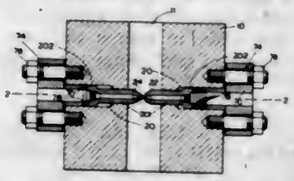
means for securing the open extremity of the bag to the frame, and a sterilizable fabric flap secured to the inner side of the bag between its closed extremity and its folded portion whereby an ampule may be held for breaking between folded portions of the underside of the flap to prevent pieces of glass from the ampule escaping from the bag during breakage.

2,731,143
CUSHION PAD FOR JEWELRY PACKING AND SHIPPING CONTAINER
William J. Thompson, Cranston, R. I., assignor to C & M Mfg. Co., a corporation of Rhode Island
Application August 9, 1952, Serial No. 303,579
3 Claims. (Cl. 206—75)



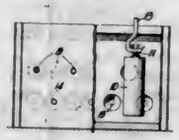
1. In a cardboard foundation of generally rectangular form adapted to be placed within a box, having a rectangular central opening providing a rectangular front strip, a rectangular rear strip, and side ridges respectively connected to the front and rear strip by fold lines, said side ridges each having an intermediate transverse fold line adjacent the rear strip, whereby said side ridges are adapted to be bent up into a front gently sloping section and a rear sharply sloping section of less length than the front section, said front sloping sections having article attaching openings therethrough.

2,731,144
EXTRUSION TOOL ASSEMBLY FOR LIGHT METAL CABLE SHEATHING PRESSES
Hans Dreyer, Dusseldorf, Germany, assignor to The Loewy Engineering Company Limited, London, England, a corporation of Great Britain
Application June 4, 1951, Serial No. 229,754
Claims priority, application Great Britain July 26, 1950
2 Claims. (Cl. 207—4)



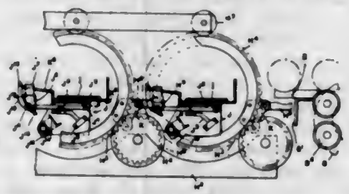
2. In an extrusion press for cable sheathing, said press having a billet container with a bore of uniform diameter from end to end for the extrusion of solid billets therefrom and axially aligned, smooth-walled crossbores, said crossbores each having spaced cylindrical bearing sections of different diameters, the bearing section nearest the billet container bore being of smaller diameter than the bearing section remote from the container bore, two oppositely arranged cooperating tubular extrusion tools consisting of a tubular mandrel and a die in said crossbores each having smooth wall sections of different diameter fitting the corresponding bearing surfaces of said crossbores, said mandrel and die being freely and slidably mounted in said crossbores so that they are free to move towards each other when the container bore is not filled with billet metal, the forward ends of said mandrel and die protruding into said container bore, a backstop for each tool having a sliding fit in the outer end of its adjacent crossbore and adapted to restrain outward movement of said tool, a cross-member for each of said backstops, said cross-member being arranged outside said container and extending across and beyond the outer circumference of said crossbores, tension elements connecting said cross-members and said container, said tension elements being laterally spaced apart from said crossbores and adapted to resist outwardly-directed pressure on said tools and said back-stops.

2,731,145
METHOD OF HOT-WORKING STEEL BILLETS BY FORGING OR EXTRUSION
Andrew F. Kritscher, Mount Lebanon Township, Allegheny County, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Application May 20, 1953, Serial No. 356,252
6 Claims. (Cl. 207—10)



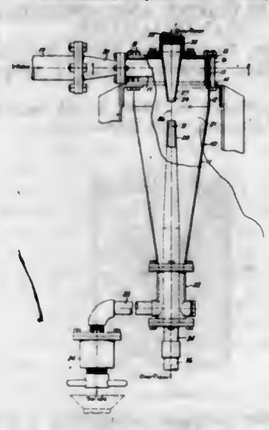
1. In a method of working metal billets by forging or extrusion, the steps including coating the exterior surface of a billet with a slip of clay and glass frit, heating the billet thereby first drying the coating to a bisque and then, as the billet approaches forging temperature, fusing the coating, applying to the coating after the billet reaches said temperature, a flux effective to reduce the viscosity and abrasiveness of the coating, and working the billet by engagement of a shaping tool with said surface, with the fluxed coating remaining thereon.

2,731,146
EGG GRADING MECHANISM
George A. Page, Detroit, Mich.
Application June 26, 1950, Serial No. 170,387
8 Claims. (Cl. 209—121)



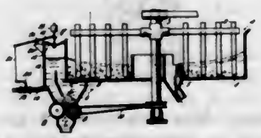
1. A grading unit comprising a series of weighing devices arranged side by side each set to be depressed by an article thereon which is of more than a predetermined weight, a conveyor extending adjacent to each of said weighing devices to receive therefrom the articles of those depressed, a carrier member extending the length of said series and mounted for cyclic movement through a cylindrical orbit surrounding and clearing all of said weighing devices and said conveyor, a rotary annular member forming a mounting for said carrier member and through which said conveyor has clear passage, and individual transfer members mounted on said carrier member, each adapted to pick up an article from outside said orbit and deposit it on the corresponding weighing device within said orbit, and means for separately removing from said weighing devices and from within said orbit all articles remaining thereon which are less than said predetermined weight.

2,731,147
HYDRAULIC CLASSIFIER
Kellogg Krebs, Palo Alto, Calif., assignor to Equipment Engineers, Inc., San Francisco, Calif., a corporation of California
Application April 24, 1953, Serial No. 351,006
5 Claims. (Cl. 209—211)



1. In hydraulic classifying apparatus, a stationary vertical chamber annular in section, the lower portion of said chamber being conical shaped, means for introducing hydrous slurry to be classified into the upper portion of said chamber and tangentially, and means for removing overflow material from a region located axially of the chamber and intermediate the end thereof, said last means including two conduits axially aligned with the axis of the chamber and having oppositely faced annular inlet ends, of substantially the same diameter.

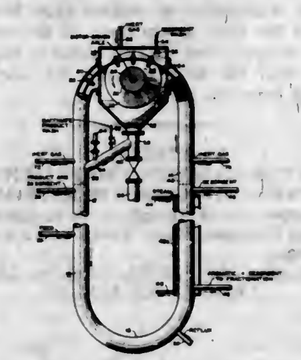
2,731,148
PROCESS AND APPARATUS FOR RELEASING OBSTRUCTIONS IN DISCHARGE OPENINGS OF CONCENTRATING PANS
Edmond Harvengt, Moustier sur Sambre, Belgium, assignor to Link-Belt Company, Chicago, Ill., a corporation of Illinois
Application June 28, 1951, Serial No. 234,097
18 Claims. (Cl. 209—465)



1. A process for releasing obstructions from the discharge openings of concentrating pans, comprising normally continuously supplying liquid at a moderate intensity to a confining zone adjacent the pan, passing a current of liquid from said zone through said openings in the opposite direction to that of the discharge of the materials, accumulating in said zone the part of said supply liquid that is prevented from passing through the openings when an obstruction occurs therein, and increasing the intensity of the liquid supplied to the confining zone in proportion to any increase that occurs in the pressure of the liquid accumulated in said zone.

9. A device for releasing obstructions from the discharge openings of concentrating pans, comprising a pan basin having a material discharge opening, a chamber attached to the pan basin to receive the material discharged through said opening, a material and liquid discharge opening for said chamber, means operatively associated with the chamber discharge opening for effecting the discharge of material, and for materially restricting the rate of discharge of liquid, through said opening, a liquid supply line communicating with the chamber, adjustable valve means in said supply line normally set to deliver liquid to the chamber at a sufficiently greater rate than the restricted rate of discharge of liquid from the chamber to maintain the chamber filled with liquid to the level of the material discharge opening of the pan basin and at a fluid pressure, when the pan basin opening is unobstructed, to produce a normal flow of liquid through said opening at a moderate intensity and in the opposite direction to the discharge of material from the pan basin, and automatically operative means for adjusting the valve means in relation to any reduction in the rate of discharge of material through the said pan basin opening, due to the obstructing of said latter opening, to increase the rate of flow of liquid into the chamber and thereby the intensity of the said flow of liquid from the chamber through the material discharge opening of the pan basin to effect release of the obstruction.

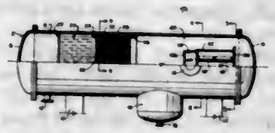
2,731,149
CONTINUOUS ADSORPTION-DESORPTION APPARATUS
Robert A. Findlay, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application January 4, 1950, Serial No. 136,773
2 Claims. (Cl. 210—42.5)



1. Apparatus for separating a mixture of organic liquids into fractions which comprises, in combination, a conduit having the general configuration of a vertical endless loop, the upper portion of the loop being shaped to define an enlarged housing, an endless flexible conveyor traversing the entire length of said conduit and extending through the housing portion thereof, means operatively connected to said conveyor to effect continuous movement thereof, said conveyor including a plurality of perforated disks spaced longitudinally therealong to transport particles of absorbent material through said conduit, whereby said particles are carried downwardly through one leg of the loop, traverse the bottom of the loop, thereafter are carried upwardly through the other leg of the loop and dumped into said housing, a spray head positioned within said housing so as to wash the absorbent material from said disks into the lower portion of the housing, a pipe depending from the lower part of said housing and communicating therewith for withdrawing adsorption material from the system, a pipe

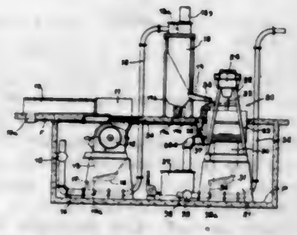
having one end thereof communicating with said last mentioned pipe and the other end thereof communicating with the central region of said one leg of the conduit, a jacket surrounding a substantial portion of the lower region of said other leg of the loop, means for introducing a heating fluid into said jacket and removing said heating fluid therefrom so as to heat the enclosed portion of the conduit, a line for introducing liquid desorbent material into said other leg above said jacket, a line for withdrawing liquid from the jacketed portion of said conduit, a line for introducing liquid into said one leg, and a line for withdrawing liquid from said one leg at a position above said liquid introduction line.

2,731,150
HORIZONTAL FILTER APPARATUS
Kelly F. McCann, Tulsa, Okla., assignor to Warner Lewis Company, Tulsa, Okla., a corporation of Delaware
Application May 26, 1952, Serial No. 290,068
3 Claims. (Cl. 210—43)



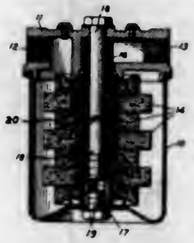
1. An oil-water separator, comprising a horizontal shell having an inlet in one end thereof to receive a mixture of oil and water, a repack in the shell adjacent the inlet to separate the oil and water, a plurality of horizontal baffles in the shell downstream of the repack to further separate the oil and water, an outlet in the lower portion of the shell adjacent the baffles for the separated water, a vertical baffle extending transversely in the shell downstream of the horizontal baffles to direct the separated oil upwardly in the shell, a plurality of surface type filter elements supported in the shell downstream of the vertical baffle to filter the separated oil, and an outlet in the shell communicating with the filter elements for discharging the separated oil from the shell.

2,731,151
SYSTEM FOR HANDLING METAL CHIPS AND EXTRACTING OIL THEREFROM
Allen O. Hopper, South Orange, N. J., assignor to Turbine Equipment Company, New York, N. Y., a corporation of New Jersey
Application May 5, 1951, Serial No. 224,736
7 Claims. (Cl. 210—68)



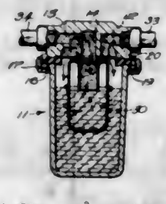
1. A system for treating metal chips mixed with a liquid to be extracted therefrom, which comprises a pair of separate conveyor pipes, one a feed pipe and the other a discharge pipe, blower means connected to the pipes for forcing air therethrough, a nozzle in each pipe through which the air flows at relatively high velocity to create a region of sub-atmospheric pressure in the pipe, a feed hopper for receiving the chips and having a discharge passage, a funnel for conveying chips from said passage into said region of the feed pipe, a surge bin to which the feed pipe leads for conveying chips pneumatically thereto, the bin having an air outlet, a centrifugal extractor having a hollow rotor provided with separate outlets for chips and extracted liquid, respectively, a device for feeding chips from the surge bin into the extractor rotor, control means connected to the rotor and the feeding device for rendering the feeding device inoperative in response to rotation of the rotor above a predetermined speed, a surge hopper underlying said chip outlet of the extractor rotor, means for decelerating the rotor below said predetermined speed to discharge the chips through the chip outlet and by gravity into the surge hopper, and a funnel for conveying chips from said last hopper into said sub-atmospheric pressure region of the discharge pipe.

2,731,152
FILTER ELEMENT AND METHOD OF MANUFACTURE
Arthur D. Redner, Farmington, Mich., assignor to General Filters, Inc., Detroit, Mich., a corporation of Michigan
Application March 14, 1949, Serial No. 81,242
7 Claims. (Cl. 210—120)



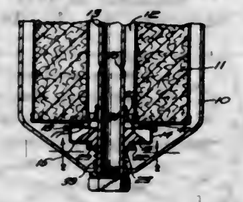
1. A liquid filter cartridge comprising a fibrous filter element having exposed inlet and outlet surfaces, a screen covering said outlet surface, said screen and said outlet surface being treated to a limited depth with an adhesive material insoluble in the liquid to be filtered, said adhesive securing the individual fibrous particles in said outlet surface to each other and to said screen in a manner adapted to prevent them from becoming dislodged for flow into the clean liquid stream.

2,731,153
FILTER FOR LIQUIDS
Walter V. Kennedy, Central Falls, R. I., assignor to Fram Corporation, Providence, R. I., a corporation of Rhode Island
Application February 16, 1954, Serial No. 410,674
1 Claim. (Cl. 210—165)



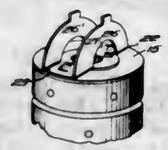
A volatile liquid filter, comprising a head having an inlet passage and an outlet passage and a central bore extending upwardly to the outlet passage, a dirt collecting bowl attached to the head; and a filter unit removably secured in said bowl and including a bridge plate clamped between the head and bowl and having an inverted cup supported thereby, and also a porous filter cup permanently attached to the lower portion of the inverted cup so that the liquid to be filtered passes through the filter walls to said central bore, and said inverted cup being provided with a vapor vent at its upper end beneath said bridge plate and shielded thereby.

2,731,154
AUTOMATIC RELIEF VALVE FOR FILTERS
William John Burnell, Cardiff, Wales, assignor to Fram Corporation, a corporation of Rhode Island
Application April 2, 1952, Serial No. 280,035
1 Claim. (Cl. 210—166)



In a filter, a liquid-confining casing having a high pressure area and a low pressure area, a center tube communicating with the low pressure area and leading from the casing, a filter element surrounding said tube, by-pass valve means disposed between the high pressure and low pressure areas, comprising a valve housing encircling said tube and having a wall extending in a plane at right angle to the tube and having an opening in said wall for the passage of liquid from the high to the low pressure area, an annular body of flexible rubber-like material having a cantilever portion that rests on said wall and normally covers said opening and operable to flex away from said wall under a substantial liquid pressure to allow liquid to pass through said opening, said housing having a protruding annular flange, and said body having a neck provided with an annular slot adapted snugly to receive said flange and thereby anchor the body in operating position in the housing.

2,731,155
FILTER CARTRIDGE PULL-OUT DEVICE
William S. James, Providence, R. I., assignor to Fram Corporation, a corporation of Rhode Island
Application March 27, 1953, Serial No. 345,183
2 Claims. (Cl. 210—169)



1. A filter cartridge comprising an annular filter body, a flat cap secured to each end of the filter body, a paper disc secured to the outer face of one of said caps and shaped to cover and protect this cap, the adjacent disc and cap having aligned central holes adapted to fit around a center tube and the paper disc being sufficiently yieldable to serve as an installation gasket, said disc having a central section strongly secured to its cap and having side sections that are scored to form handles attached to the central section by scored hinge lines, whereby the disc forms a cover that protects the cap when shipped and the side sections may be swung outwardly to form bail-like handles that serve as pull-out devices for the cartridge.

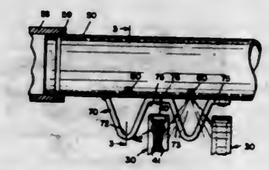
2,731,156
FILTER LEAVES
Louis E. Purmort, Lynwood, Calif.
Application April 26, 1954, Serial No. 425,353
1 Claim. (Cl. 210—195)

A filter comprising a hub having a radial passageway, said hub having a radial, annular flange, a radially disposed reticulated core member carried by said hub, a pair of radially disposed relatively fine meshed screen members carried by said hub one against each side of said core member, said core member and said screen members defining an annular outlet chamber communicating with said passageway, annular means closing the periphery of said outlet chamber, and means clamping the inner peripheries of said screen members against said flange, said last-mentioned means including a clamp ring,



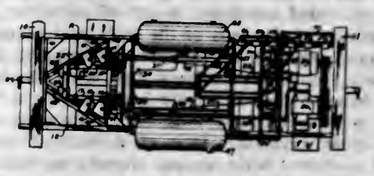
a plurality of spacer blocks circumferentially spaced around the hub between said ring and said flange, a backing ring on each side of said spacer blocks, said screen members being received between the backing ring and said flange and said clamp ring respectively, and securing means passing through said clamp ring, said backing rings and said spacer blocks.

2,731,157
FILTER
Louis E. Purmort, Lynwood, Calif.
Application January 15, 1954, Serial No. 404,229
4 Claims. (Cl. 210—200)



1. In a filter, the combination of a tank, a shaft mounted in the tank and disposed axially thereof, filter leaves mounted on and disposed radially of said shaft in parallel relationship and spaced apart longitudinally of the tank, a rotatable member disposed longitudinally of the tank adjacent the peripheral portions of said leaves, abutment elements carried by said member and presenting abutment portions normally projecting between said leaves, and liquid spray means positioned in said tank to project liquid sprays against the side surfaces of said leaves; said rotatable member being mounted for rotation about its longitudinal axis relative to said tank and said leaves whereby, in response to rotation thereof, to move said abutment portions from between said leaves.

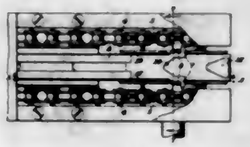
2,731,158
OVERHEAD CARRIER
Alfred Hugh Huntington, Willoughby, Ohio, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio, a corporation of Ohio
Application July 1, 1954, Serial No. 440,657
2 Claims. (Cl. 212—131)



1. In apparatus of the character referred to, an overhead trackway, a supporting member movably supported

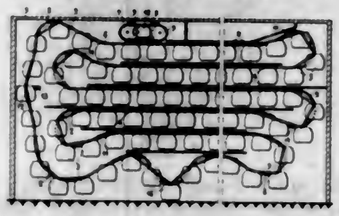
on said trackway, a supported member, power means for moving said supporting member along said trackway, means comprising three pairs of cables for suspending said supported member from said supporting member, means for operatively connecting the respective cables of each pair to one of said members at spaced points, means for operatively connecting said cables to the other of said members so that the respective cables of each pair are connected to said other of said members at substantially the same point but spaced from the points at which the other pairs of cables are connected, air operated means for simultaneously letting out and simultaneously taking up the respective cables of each pair including control means for controlling the operation of the air operated means comprising first switch means for stopping the operation of said air operated means and starting the operation of said power means to move said supporting member along said trackway, means for operating said switch means to start said power means when said supported member is within a predetermined distance of said supporting member, and second switch means to stop the operation of said power means and start the operation of said air operated means to let out said cables to lower said supported member.

2,731,159
DISCHARGE AND STACKING MECHANISM FOR SPACE BAND CLEANING MACHINES
William P. Donehower, Philadelphia, Pa., assignor to Maurice Hartzell and Blanche D. Hartzell, Chester, Pa.
Application April 27, 1951, Serial No. 223,424
5 Claims. (Cl. 214—6)



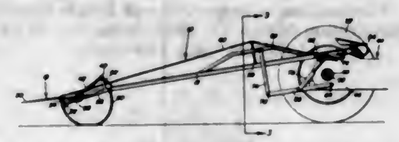
1. A discharging mechanism for a machine to clean space bands which have an elongated body portion and a telescoping portion provided with ears extending freely laterally of the widest part of the band at the leading end of the telescoping portion and in which machine the bands are successively moved horizontally in lengthwise position one after the other and in longitudinally spaced relation to each other with the band ears in the leading position comprising, in combination, means forming a substantially horizontal feeding surface along which the bands are fed, means for supporting a vertical stack of bands so that the lower rear edge of the lowermost band in the stack is spaced above the plane of said surface to receive the leading edge of an on-coming band, transversely spaced longitudinally movable feeding chains having lugs thereon for engaging the lateral ears, said lugs being continuously movable in one direction alongside of the telescoping portion of the band for pulling the bands to feed the same in their expanded telescopic condition along said surface and beneath the stack whereby the band can continue to be pulled under the stack to raise and simultaneously maintain the telescopic portions of the pulled band in its expanded condition, a set of sprockets disposed intermediate of the ends of the stack and around which said chains travel in a downward direction to disengage the chain lugs from the band ears after the bands are pulled beneath the stack, said bands having a V-shaped recess in their forward ends, and a forward abutment whose cross sectional area is of V-shape to be received in said V-shaped band recesses thereby to vertically and transversely align the forward ends of the bands as they are discharged.

2,731,160
MECHANICALLY OPERATED MULTI-STOREY GARAGE
Erwin Maier, Schaffhausen, Switzerland
Application November 15, 1954, Serial No. 468,904
Claims priority, application Switzerland November 30, 1953
16 Claims. (Cl. 214—16.1)



1. A mechanically operated multi-storey garage, comprising in combination: a plurality of floors vertically spaced from one another, a pair of endless conveyor chains passed overhead the individual floors and from one floor to another, carriers, capable of accommodating vehicles suspended at the articulation points of the said conveyer chains, guide rails guiding the said conveyer chains and having straight portions parallel to the said floors and curved portions leading from one floor to another of a radius of curvature larger than half the height of one storey and inversely curved transition portions leading back the said curved portions to the level of the adjacent straight portion.

2,731,161
FORK ATTACHMENT FOR TRACTORS
Earl J. Carstens, Fairbury, Nebr.
Application April 29, 1953, Serial No. 351,969
3 Claims. (Cl. 214—140)

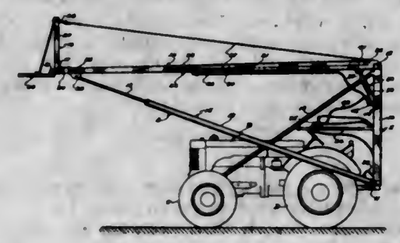


1. A hay bale fork attachment for tractors comprising an elongated boom having a forward end thereof pivotally securable to a tractor for vertical tilting by power means of the tractor, a skid carried by said boom at a rear end thereof in underlying relation thereto, a fork member pivotally secured to said boom at said rear end thereof, latch means carried by said boom and connected to said fork member for retaining said fork member in a generally horizontal hay bale engaging position, said skid being of a height for retaining said fork member at a hay bale engaging elevation, trip means connected to said latch means for selectively releasing said latch means to facilitate movement of said fork member to a downwardly directed hay bale disengaging position, said skid having a rear portion disposed in partial overlapping relation with said fork member and engageable by a hay bale carried by said fork member in its movement to a bale disengaging position to effect removal of a hay bale from said fork member.

2,731,162
LOADER WITH SELF-LEVELING CARRIER
Stanley R. Walstrom, Minneapolis, Minn., assignor to Superior Separator Company, Hopkins, Minn., a corporation of Delaware
Application November 19, 1953, Serial No. 393,169
5 Claims. (Cl. 214—140)

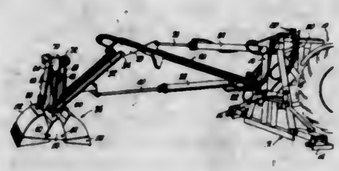
1. In a loader, a wheel borne frame having upper and lower pivots, a longitudinally arranged telescopic boom

pivoted at its rear end to the lower pivot for up and down swinging movements at its forward end, a radius member similarly pivoted at its rear end to the upper pivot, means pivotally connecting the forward end portions of the boom and radius member, a load carrier pivoted for tilting movements on the forward end of the boom and radius member assembly, means for extending the boom to swing the load carrier upwardly, a hydraulic cylinder



and a plunger and means connecting the latter to tilt the load carrier, means for supplying fluid to the cylinder for actuating the plunger and tilting the carrier, and another hydraulic cylinder and plunger connected between the frame and the said radius member and operative in response to upward and downward movement of the radius member for varying the volume of fluid in the cylinder which tilts the load carrier independently of said fluid supply.

2,731,163
DITCHING MACHINE HAVING SWINGABLY MOUNTED CLAMSHELL BUCKET
Marion C. Wills and Wayne J. Wills, Topeka, Kans., assignors to Shawnee Manufacturing Company, Inc., Topeka, Kans., a corporation of Kansas
Application March 4, 1953, Serial No. 340,316
4 Claims. (Cl. 214—147)



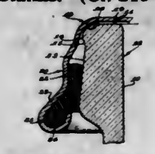
1. In materials handling equipment, a boom; a bucket arm depending from the boom and pivotally secured thereto for swinging movement about a horizontal axis; a T-shaped frame having a horizontal crossbeam pivotally secured to the arm at the lowermost end of the latter for swinging movement about an axis parallel with said horizontal axis, and an upstanding post rigidly secured to the cross-beam for swinging movement therewith; a clamshell bucket having a pair of opposed sections pivotally mounted on the crossbeam for swinging movement toward and away from each other about axes parallel with said horizontal axis; and a double-acting, hydraulic piston and cylinder assembly extending upwardly from each section respectively, each assembly being pivotally connected with a corresponding section for swinging the latter relative to the crossbeam, said assemblies being pivotally connected to said post at the uppermost end of the latter for swinging movement with the frame and the bucket as a unit relative to the arm as the latter swings relative to the boom, the center of gravity of said unit being below the axis of swinging movement of the crossbeam relative to the arm whereby said post tends to maintain an upright position.

2,731,164
STABILIZER FOR LIFTING CARRIAGE OF A LIFT TRUCK
Bronislaus I. Ulinski, Chicago, Ill., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn., a corporation of Connecticut
Application April 6, 1953, Serial No. 346,955
5 Claims. (Cl. 214—730)



1. In a lift truck of the class described, a pair of channel uprights, a load carriage at the front of said channel uprights, each opposed side of the carriage arranged relatively to a corresponding channel upright, upper and lower rollers on each side of said load carriage engaged in the channel of the corresponding upright in vertically aligned relation to mount the carriage for vertical movement relatively to the uprights, said uprights acting through said rollers to hold the carriage against tilting relatively to the uprights in a fore-and-aft direction, said carriage when supporting a load in a position offset transversely relatively to the pair of uprights tending to move the rollers transversely out of alignment with said uprights whereby to cock or wedge relatively to said uprights, a rack on each upright coextending linearly therewith, a pair of pinions, means mounting said pair of pinions on the load carriage to rotate in meshed relation to both racks as the carriage moves vertically on said uprights, and means connecting said pinions for rotation integrally with each other to hold the carriage with its rollers in vertically aligned relation to the uprights whereby to prevent the application of transverse bending stresses to the uprights when the carriage supports a load in transversely offset relation to the uprights.

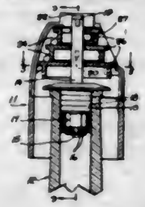
2,731,165
GLASS CONTAINERS AND CLOSURES FOR SAME
John Hohl, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a corporation of Ohio
Application June 3, 1953, Serial No. 359,259
5 Claims. (Cl. 215—40)



1. In combination, a glass container having a side wall terminating in an annular rim defining a filling opening, the external surface of said wall having a downwardly flared frusto-conical primary sealing surface inclined to the axis of the container at an angle between about 4° and 15°, an annular external bead at the upper margin of the primary sealing surface, said bead being generally arcuate in cross section and merging with the primary sealing surface through the medium of an annular inwardly and downwardly curved surface, said curved surface and a contiguous downwardly and outwardly facing area of the bead constituting a secondary sealing surface and stop immediately above the primary sealing surface, the primary sealing surface having an annular maximum compression zone of at least the same diameter as the annular bead diameter, a sheet-metal closure comprising a circular top portion, an annular skirt depending from the top portion and including a substantially cylindrical section disposed at an angle between about 4° and 15° to said sealing surface and an outwardly downwardly flared

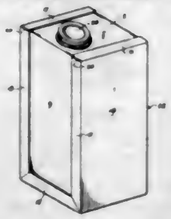
annular section of frusto-conical form depending from said substantially cylindrical section, and a sleeve-type compressible sealing gasket secured within the flared section and having an upper terminal portion extending above the juncture of the two skirt sections, the skirt at the annular line of juncture of the two sections being positioned radially outward from said maximum compression zone when the closure is fully applied and together with a circumferential ring section of the primary sealing surface located at a point at which said ring section is of greater diameter than the maximum diameter of the bead, defining said annular zone of maximum compression of the gasket.

2,731,166
CONTAINER LOCK
Walter Raphael, New York, N. Y., assignor to General Patent Production Company, New York, N. Y., a firm
Application June 14, 1952, Serial No. 293,570
5 Claims. (Cl. 215—52)



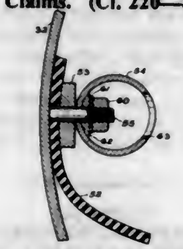
1. A container locking device comprising an elongatable stopper of resilient material formed with a circumferential ridge therein adapted to be rigidly positioned in partially compressed relationship within the mouth of a container and capable of removal therefrom only when further elongated in shape; a shaft member formed with a plurality of spaced substantially horizontal projections secured to said stopper at a point spaced from the top portion thereof, a plurality of rotatable disk members each provided with an opening to accommodate said projections when brought into registration therewith disposed about said shaft member, and a removable shield member provided with an opening therein held by said disk members and surrounding same.

2,731,167
HEAVY DUTY CONTAINERS
George Arlington Moore, New York, N. Y.
Application March 26, 1952, Serial No. 278,528
9 Claims. (Cl. 220—4)



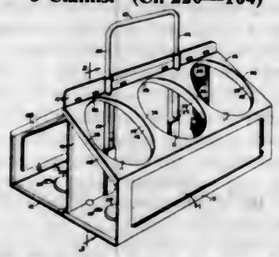
1. A rectangular shape hermetic container of rigid sheet drawn metallic material comprising an assembly of two pre-shaped structural components formed of said material, one of said components composed of flat wall forming portions of the container, which wall portions consist of two opposed end walls with two opposed side walls shaped in tubular form with open sides, the second of said components composed of other flat wall forming portions of said container, which portions consist of an enclosure end wall with two opposed alternate side walls, which walls are positioned to enclose open sides of said tubular wall component including one end wall thereof, said alternate side walls and bottom end wall thereof being provided with opposing pairs of marginal seam forming flanges along corner border edges of their respective corresponding wall portions, interior surfaces of which flanges being flatly disposed upon corresponding margins of exterior surface portions of walls provided by said tubular component, including wall surface engagement of one end wall thereof upon the interior surface of said enclosure end wall having a pair of said flanges, marginally opposed surface portions of the top end wall of the tubular component being engaged by clamping wall margins provided by a pair of said flanges along top corner edges of said alternate side walls and thereby secure said assembly, said clamped margins being transverse of said bottom end wall flanges both with respect to longitudinal direction thereof and surface plane of wall portional engagements thereof.

2,731,168
SYSTEM FOR GATHERING AND LOADING OIL FROM UNDERWATER OIL WELLS
Richard G. Watts, Dallas, Tex., assignor, by mesne assignments, to Socony Mobil Oil Company, Inc., a corporation of New York
Application November 17, 1952, Serial No. 321,028
2 Claims. (Cl. 220—85)



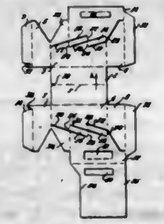
1. In an underwater oil storage tank having a flexible impervious membrane dividing said tank into an upper oil-containing section and a lower water-containing section, means positioned above said membrane within said oil-containing section for securing said membrane in liquid tight contact with the inside surface of said tank, said means comprising in combination a plurality of bolts secured to the inside surface of said tank and projecting inwardly therefrom, said bolts passing through said membrane near its periphery to maintain said membrane in position in said tank, a bar fitted on said bolts adjacent to said membrane holding said membrane in liquid tight contact with the inside surface of said tank, and means secured on said bolts to maintain said bar in position and to prevent said membrane from contacting the inward ends of said bolts.

2,731,169
BOTTLE CARRIER
Ernest T. Wahlbom, Rockford, Ill., assignor of one-half to Osborn E. Griggs, East Hartford, Conn.
Application May 26, 1953, Serial No. 357,554
3 Claims. (Cl. 220—104)



1. A bottle carrier comprising a generally flat bottom, flat sides upstanding from opposite margins of said bottom, flat top walls converging upwardly from said sides to a central peak and each having a row of elliptical holes punched therefrom to receive a plurality of bottles, the major diameters of said holes extending transversely of said top walls and in the direction of incline thereof, and elliptical flanges formed around each of said holes and projecting inwardly from and at right angles to the associated top wall, the width of the flanges along the lower edges of said holes being substantially smaller than the width of the flanges along the sides of the holes and the horizontal distance from the lowermost point on each flange to the uppermost point on the associated hole being substantially equal to the minor diameter of the hole whereby the projection on the base of the opening formed by the hole and the flange is generally circular.

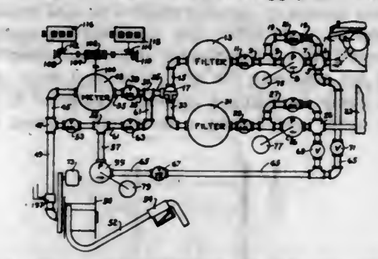
2,731,170
FULLY PARTITIONED COLLAPSIBLE BOTTLE CARRIER
Robert Morris Bergstein, Wyoming, Ohio, assignor to The Bergstein Packaging Trust, a trust composed of Robert M. Bergstein and Frank D. Bergstein
Application February 28, 1952, Serial No. 273,896
1 Claim. (Cl. 220—113)



In a flat-folded bottle carrier, a medially folded bottom, side walls articulated to opposite side edges of said bottom, partial end walls articulated to the ends of said side walls, attachment flaps connected to the outer ends of said partial end walls, the partial end walls at one end of the carrier lying in infolded condition underlying said side walls with the attachment flaps extending inwardly therebeyond in face-to-face relation with their contacting surfaces adhesively secured together, the partial end walls at the opposite end of the carrier extending outwardly beyond the side walls with the attachment flaps connected thereto infolded to underlie the said last named partial end walls, handle parts of a width substantially equal to the width of the side walls extending between the partial end walls at the opposite end of the carrier and overlying the outer surfaces of the attachment flaps, diagonally disposed transverse partition elements articulated to the side walls adjacent their upper edges and to the handle parts adjacent their lower edges along vertically extending lines of articulation, and a full width substantially full depth one piece center partition panel articulated along its top edge to one of said handle parts and extending downwardly between the said handle parts and the infolded attachment flaps at one end of the carrier, said center partition panel being adhesively secured to said last named attachment flaps, with said central partition panel cut away adjacent the attachment flaps which are adhesively secured together, whereby said carrier may be flexed inwardly in the direction of its longitudinal axis to accommodate it to a crate.

2,731,171
FUEL HANDLING SYSTEM
Paul A. Mankin, Gerald J. Klopfenstein, and James E. Doelling, Fort Wayne, Ind., assignors to Bowser, Inc., Fort Wayne, Ind., a corporation of Indiana
Application September 27, 1949, Serial No. 118,114
6 Claims. (Cl. 222—26)

1. In a fueling system, the combination of a source of fuel, a meter having an inlet and an outlet, said meter being operable by a flow in either direction through it, means for supplying a flow of fluid to the meter including a supply line connecting said source and inlet, a discharge line connected to the outlet, liquid moving means having an intake conduit connected to the supply line and valve



means for controlling said supply line and the conduit to control the direction of flow through the meter, a pair of registers and means responsive to operation of the meter in one direction for actuating one register and responsive to operation of the meter in the other direction for operating the other register.

2,731,172
BOTTLE STOPPERS AND LIQUID POURING DEVICES
Oscar Alvistur, San Francisco, Calif.
Application November 14, 1952, Serial No. 320,561
1 Claim. (Cl. 222—78)

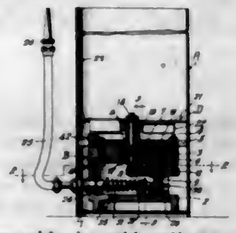


In combination with a liquid holding bottle and the open neck portion thereof, a stopper having a vertical bore therein and removably positioned in the neck of the bottle, a partly hollow inverted body simulating a female figure balanced by an inverted apertured arm on said stopper, and an elongated tube extending through the bore of the stopper and the apertured arm, valve means connected to said elongated tube for controlling the flow of the liquid to the hollow portion of the figure when the bottle is inverted, a second tube in the neck portion of the figure and in communication with the hollow portion of the figure and the open mouth of the figure, and valve means connected to said second tube for controlling the flow of liquid through the mouth of the figure to a container outside the head of the figure, the container being of the nature of a glass.

2,731,173
GREASE PUMP
William Harrigan, Rutherford, N. J.
Application September 20, 1952, Serial No. 310,664
2 Claims. (Cl. 222—227)

1. Apparatus of the character described comprising a container for a fluent substance to be dispensed under pressure, a gear pump having a casing removably mounted in said container and including a casing body with a pump chamber therein and a casing cover, two parallel rotatable shafts extending into said casing, one with its lower end projecting from the casing toward the bottom

of said container and the other shaft having one end projecting from said casing toward the top of the container, cooperating gears in said pump chamber each secured on one of said shafts and rotatable therewith, said pump having an outlet port and an inlet port opening into said container, means mounted on and rotatable with said second shaft within the container for agitating said substance within the container above said pump inlet, and means for actuating the first-mentioned shaft, a reciprocating pump including a cylinder connected to said gear pump outlet and having a discharge passage, a hollow



piston reciprocable in said cylinder with one end projecting from the end of the cylinder opposite said discharge passage, a driving connection between said end of said piston and said lower end of the first-mentioned shaft for reciprocating said piston, said piston having a valve opening and seat facing into said piston from said cylinder, a spring seated valve cooperative with said valve seat, there being a passage from said piston to the interior of said container at the side of said valve opposite said seat, said valve permitting flow of said substance from said cylinder through the piston into said container upon creation of a predetermined pressure in said cylinder.

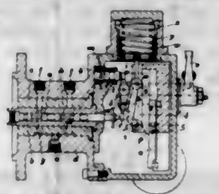
2,731,174
DISPENSER
Clem L. Voglesang, Cleveland, Ohio
Application June 17, 1953, Serial No. 362,270
6 Claims. (Cl. 222—246)



1. A dispenser for powdered or granular materials including a container for the materials terminating at its lower end in an outlet bore of less diameter than that of the container body, a plunger rod, a pair of relatively adjustable plungers on said rod and slidable within said bore, the wall of said bore having a radial opening therethrough, a radial notch in one of said plungers for alignment with said opening whereby a key or tool may be inserted to prevent relative circumferential motion between said wall and plunger when said other plunger is being adjusted axially on said rod.

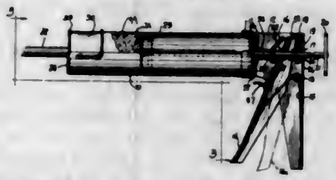
2,731,175
LIQUID FUEL INJECTION APPARATUS
Eric William Downing, Birmingham, England, assignor to Joseph Lucas (Industries) Limited, Birmingham, England
Application August 5, 1952, Serial No. 302,797
Claims priority, application Great Britain August 13, 1951
7 Claims. (Cl. 222—250)

1. A shuttle-type liquid fuel metering device comprising in combination a hollow and ported cylindrical rotary valve, a shuttle slidable in said valve, an inlet for supplying liquid fuel under pressure to the interior of said valve at opposite sides of said shuttle alternately, outlets through each of which fuel from the interior of said valve at one side of said shuttle is dischargeable by said shuttle under the pressure of liquid fuel admitted to the interior of said valve at the opposite side of said shuttle, a pair of stops for limiting the extent of the sliding movement of said shuttle, one of said stops being adjustable,



a contoured and endwise movable abutment, a rocker cooperating with said abutment for determining the position of said adjustable stop, means for effecting endwise movement of said abutment to cause said rocker to vary the position of said adjustable stop, and additional means responsive to air pressure for effecting endwise movement of said rocker relatively to said abutment to vary the position of said adjustable stop independently of endwise movement of said abutment.

2,731,176
EXTRUDING APPLICATOR FOR CALKING COMPOUND AND THE LIKE
Samuel Crewe, East Cleveland, Ohio
Application January 4, 1952, Serial No. 265,030
2 Claims. (Cl. 222—326)

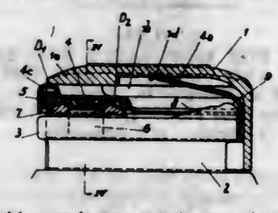


1. An extruding applicator for calking compound cartridges of the type having a fixed discharge end joined to the cartridge body by a beaded joint, and provided with a spout, and a head end closed by a follower movable upon application of pressure to force compound through the spout; the said applicator comprising handle means including a semi-cylindrical magazine for supporting the said cartridge, the said magazine having a seat at its near end for engaging the head end of said cartridge and a semi-circular flange including an inturned rim at its far end for engaging the beaded joint at the discharge end of said cartridge, the radius of curvature of the inturned rim portion of the flange being complementary to the cross-sectional radius of the cartridge bead so that when the cartridge is nested in the magazine the rim and the lower half of the bead will interlock; a pusher movably supported by said handle means and adapted to engage the follower and advance it into the cartridge, and manually operable mechanism operatively interconnecting said handle means and said pusher and actuatable for advancing said pusher and holding it in each position to which it is advanced.

2,731,177
CONTAINER CLOSURE DEVICE
Karl Ruetz, Zurich, Switzerland
Application February 19, 1952, Serial No. 272,420
Claims priority, application Switzerland March 2, 1951
8 Claims. (Cl. 222—505)

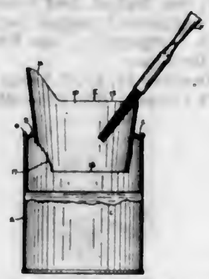
1. Closure apparatus comprising, in combination, a container having a top portion formed with an opening

located about a predetermined axis and through which the contents of the container is adapted to flow; closure means mounted on said top portion of said container for movement between a closed position over said opening and an open position away from said opening, said closure means including a sealing material engaging said top portion of said container about said opening thereof when said closure means is in said closed position thereof, and said closure means having a projection extending away from said container and located on one side of said axis when said closure means is in said closed position thereof; and operating means slidably mounted on said top



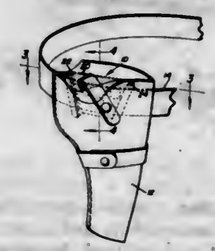
portion of said container and being operatively connected to said closure means for moving the latter between said closed and open positions thereof, said operating means having an end portion engaging and pressing against said projection of said closure means to press the latter against said container at said one side of said axis of said opening, and said operating means having a pair of spaced additional projections extending toward said container and respectively engaging and pressing against said closure means on the opposite side of said axis from said first mentioned projection to press said closure means against said container at a pair of spaced areas on said opposite side of said axis.

2,731,178
POURING ATTACHMENT FOR CONTAINERS
Robert T. Larsson, Springfield, Ohio, assignor to Harold E. Hamman, Dayton, Ohio
Application April 17, 1950, Serial No. 156,257
2 Claims. (Cl. 222—567)



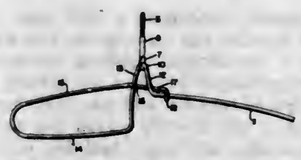
2. A device of the class described comprising a generally arcuate section of stiff, bendable sheet material adapted to be bent into generally frusto-conical form, kerfs in said section adjacent one end thereof, tabs at the other end of said section insertable through the kerfs to hold said section in frusto-conical condition, said section when bent being adapted to be inserted into the mouth of a container and having an outside diameter at the smaller end thereof which is smaller than the diameter of the mouth and an outside diameter at the larger end thereof which is larger than the diameter of said mouth so that when inserted said section will frictionally engage the mouth on a line intermediate the large and small ends thereof, there being an arcuate cutaway in the marginal edge of said section at the small end thereof extending toward the large end, said cutaway terminating close to but short of said line whereby no substantial amount of liquid will be trapped between said section and the container during pouring from said container, said section having an extension on the edge at the large end thereof arranged in alignment with the cutaway and forming a pouring lip or spout.

2,731,179
HOLSTER BRACKET
Patrick J. Bennett and Leonard Chatolan, Sacramento, Calif.
Application September 8, 1953, Serial No. 378,830
2 Claims. (Cl. 224—2)



1. A holster bracket comprising a first member adapted to be secured to the belt of the user, a second member adapted to be secured to a holster, said first member comprising a V-shaped back plate, a forwardly extending wall on each side of the back plate, a U-shaped channel member secured to the forward edge of each wall and spaced forwardly of said first named member thereby, said U-shaped channel members opening toward each other, said second member comprising a V-shaped plate having rearwardly extending walls at the sides thereof and an outwardly extending flange at the rear edge of said walls, said flanges being slidably received in the U-shaped channel members, and coacting snap action means in said channel members and on said flanges releasably securing said flanges in said channel members.

2,731,180
FISH STRINGER
George A. Fricker and Mayme E. Dart, Akron, Ohio
Application June 10, 1953, Serial No. 360,642
4 Claims. (Cl. 224—7)



1. In a fish stringer having a line with an eyelet on one end, a cross bar adapted to be removably attached to said eyelet, said cross bar consisting of a single piece of resilient wire having a substantially straight bar on one side and a loop on the other side, a central hump for extending through said eyelet and connecting said bar with one leg of said loop, and the other leg of the loop extending through said hump and terminating in an angular hook resiliently engaging under said bar adjacent to said hump.

2,731,181
AUTOMOBILE TOP CARRIERS FOR LARGE OBJECTS
Kenneth W. Binding, Medford, Mass., assignor to Leo M. Beckwith, Brookline, Mass.
Application September 24, 1953, Serial No. 382,032
4 Claims. (Cl. 224—42.1)

1. For attachment to an article carrier bar for automobile tops which bar when mounted on an automobile top extends transversely thereof and has an article supporting bridge portion intermediate its ends vertically spaced above the top and terminating inwardly of the

sides of the automobile and provided with apertures, and has at its ends downwardly extending legs and feet extending at an angle outwardly from the bottom of the legs toward the sides of the automobile, extension members for the ends of the bar, each extension member comprising a rigid extension bar one end of which overlaps the end of the bridge portion and has an aperture in registry with an aperture of the bridge portion, the opposite



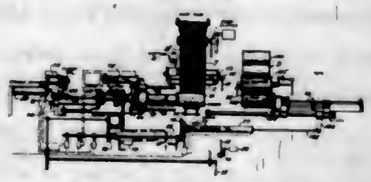
end of the extension bar extending outwardly toward the adjacent side of the automobile, and a brace connected to said opposite end and inclined downwardly and inwardly the opposite end of the brace bearing on the foot adjacent the junction of the leg and foot, and a fastening element extending through the registered apertures of the bridge portion and rigid extension bar for detachably fastening the extension member to the bridge portion.

2,731,182
BOTTLE CARRIER
Edgar J. Higgins, East Chicago, Ind.
Application September 3, 1953, Serial No. 378,237
1 Claim. (Cl. 224—42.46)



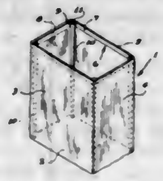
A bottle carrier, comprising a rigid liner having one flat side wall element and an opposite side wall element formed with a plurality of adjacent inwardly concave generally semicylindrical portions for holding a plurality of bottles in spaced relation, said side wall elements being joined by arcuate cylindrically curved end wall elements, a bag for enclosing said liner, said bag having flexible double walls with heat insulating material therebetween, an attachment bracket outside said bag for securing said bottle carrier to a support, and fastener means extending through said bag and rigidly connecting said bracket to said rigid liner.

2,731,183
MAKING OIL FILTER CARTRIDGES
Ernest C. Shaw, Flossmoor, Ill.
Application March 14, 1952, Serial No. 276,625
16 Claims. (Cl. 226—18)



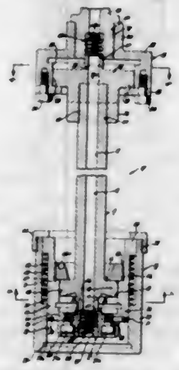
1. In a machine for making filter cartridges, a rotatable winding spindle, a clamp movable toward the spindle to hold against the spindle one end of a strip of sheet material to be wound, means to rotate the spindle, movable forming and limit means to yieldingly press material wound on the spindle during rotation, a movable cutter for the material, control means operable by the forming and limit means and responsive to the winding of a predetermined thickness of material on the spindle to stop the spindle and move the cutter into cutting engagement with an unwound portion of the strip, means to telescope the wound material into a container, and means to withdraw the spindle from the wound material.

2,731,184
SUPPORTS FOR DISPOSABLE REFUSE CONTAINERS AND COMBINATIONS THEREOF
Adolph E. Thurber, Jr., Brooklyn, N. Y.
Application May 28, 1952, Serial No. 290,425
6 Claims. (Cl. 226—59)



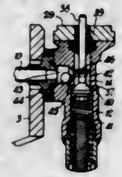
1. A bag support comprising a rectangular frame formed of rigid strip material of substantially greater width than thickness, said width of said material extending vertically, the upper surface of said frame lying in substantially a single plane legs fixedly connected to said frame to maintain a fixed angular relationship with respect to said frame with one of said legs within each corner thereof, said legs extending at substantially right angles with respect to the plane of the upper surface of said frame.

2,731,185
CAP FASTENER
Rufus P. Ranney, San Rafael, and Donald H. Reese, El Cerrito, Calif., assignors, by mesne assignments, to California Research Corporation, San Francisco, Calif., a corporation of Delaware
Application October 31, 1952, Serial No. 317,856
10 Claims. (Cl. 226—88)



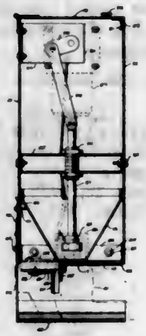
1. A device of the character described comprising a shaft, a chuck for holding and manipulating an object such as a screw cap, and a coupling connecting said chuck and shaft, said coupling comprising a polygonal head fixed to the shaft and a mating, polygonal member fixed to the chuck, said polygonal head having rounded edges for rolling on said mating member about a plurality of axes transverse to the axis of said shaft.

2,731,186
LIQUID-BOTTLING MACHINES
Douglas Percy Shoolbred Fox and William Arthur Clarke, London, England, assignors, by mesne assignments, to Vickers-Armstrongs Limited, London, England, a British company
Application May 25, 1953, Serial No. 357,218
Claims priority, application Great Britain June 16, 1952
3 Claims. (Cl. 226—115)



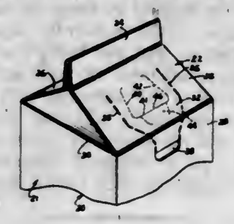
1. A filling head for an automatic rotary machine for filling vessels with liquid under counter pressure and having automatic valve means for controlling the sequential admission of liquid and counter-pressure to a vessel, the said valve means comprising control valves for the liquid and counter-pressure respectively, mechanical actuating means for the said valves, a counter-pressure safety valve in series with said counter-pressure control valve, and holding-off means operatively associated with said actuating means for said counter-pressure control valve and engageable with the said safety valve for holding it off its seating while the counter-pressure control valve is in an intermediate, open, position.

2,731,187
AUTOMATIC SMOKING PIPE FILLER
Alphonse J. Marquis, Sanford, Maine
Application April 10, 1953, Serial No. 347,939
4 Claims. (Cl. 226—125)



1. An automatic filler for tobacco smoking pipes comprising a housing having side walls and an apertured bottom wall, a discharge hopper mounted in said housing and communicating with the aperture in said bottom wall, a trough member pivoted to said housing below said bottom wall, means biasing said trough member to a position substantially parallel to said bottom wall below the aperture therein, whereby a smoking pipe may be supported on said trough member below said aperture, a plunger slidably mounted in said housing over said hopper, driving means on said hopper arranged to reciprocate said plunger, control means controlling said driving means and having a depending operating member and slidably supported from said bottom wall adjacent to said aperture and arranged to be operated by engagement with a smoking pipe placed beneath said aperture.

2,731,188
DISPENSING CONTAINER AND BLANK WITH IMPROVED POURING MECHANISM
Carroll R. Alden, Detroit, Mich., assignor to Ex-Cell-O Corporation, Detroit, Mich., a corporation of Michigan
Application June 16, 1953, Serial No. 361,950
17 Claims. (Cl. 229—17)



1. A container of paperboard or the like and comprising, in combination, a pouring opening panel and a wall panel, said panels being angularly disposed relative to each other and connected by a common score line, a lift tab severably attached to said pouring opening panel and having its major portion coplanar therewith, a pouring opening ply fixed in abutting relation with the inner faces of said pouring opening panel and said wall panel, said pouring opening ply having defined therein a pouring opening and a manipulable pouring lip adjacent said pouring opening, said pouring lip being initially disposed in a dormant position coplanar with said pouring opening ply, said pouring lip also having a downturned fully operative position with its free edge overhanging said wall panel, and a frangible connection between said pouring lip and said lift tab, said connection being constructed and arranged to rupture during initial elevation of said lift tab and after said pouring lip has been moved from its dormant position partially toward its downturned operative position.

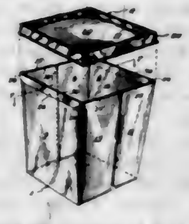
2,731,189
NESTING TYPE CONTAINER
George Arlington Moore, New York, N. Y.
Application May 3, 1952, Serial No. 285,873
7 Claims. (Cl. 229—23)



6. A cup-like container of sheet material comprising an assembly of two pre-cut strips of said material, each of said strips being of generally elongated rectangular shape and crossed centrally one across the other in cruciform relation which provides a uniformly flat reinforced two-ply bottom wall of rectangular shape of said container, each said bottom wall layer being adhesively united together, the inner wall layer of said bottom wall having two opposed integral side wall portions being folded upwardly from two substantially parallel corner edges of said bottom wall, the outer wall layer of said bottom wall having two opposed integral side wall portions being folded upwardly from two substantially parallel transverse corner edges of said bottom wall, the edges of the outer bottom wall layer and its two opposed integral side wall portions being provided with lateral flanges, the flanges of the side portions being joined to the corresponding flange of the bottom layer by a portion which makes these flanges continuous, the said continuous opposed lateral flanges being in overlapping relation to the corresponding

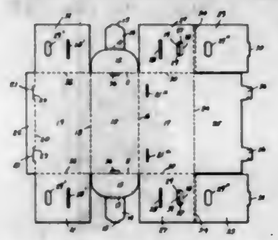
marginal surfaces of the first mentioned folded side wall portions which are integral with the inner bottom wall layer, all of which portions form the whole body side wall of the container, said overlapped margins thereof being adhesively united together in seam forming relationship, the alternate pairs of said side wall forming portions being shaped in contour defined as being of rectangular shape in horizontal cross section upwardly adjacent the corner edges of said bottom wall and being transitorily blended into circular shape adjacent the top periphery edges of said body side wall of the container, said periphery being formed into an outwardly disposed marginally curled helicoidal rim, said rim providing means which reinforces said body side wall to maintain substantially concentric circular shape around the open mouth thereof.

2,731,190
REFRIGERATOR CARTON
Robert A. Farrell, Menasha, Wis., assignor to Marathon Corporation, Rothschild, Wis., a corporation of Wisconsin
Application November 5, 1951, Serial No. 254,824
1 Claim. (Cl. 229—32)



A leak-proof container comprising a downwardly inwardly tapered paper receptacle portion and a flexible cover therefor, said receptacle portion being formed from a single folded paperboard blank suitably cut and scored to provide a bottom wall, opposed pairs of side walls connected to said bottom wall, one opposed pair of side walls having glue flaps connected along each side edge and overlying and adhered to said other pair of side walls, the flaps on each side wall of such one pair being together of dimension to extend adjacent the top edge of the wall to which they are adhered substantially across the entire width of such wall and being of dimension insufficient to overlap each other adjacent such top edge, whereby the top edge of said receptacle portion is of two ply thickness on the two sides thereof including said other pair of side walls, and a pair of second flaps each at its ends hingedly connected to the top edge of one of said one pair of side walls, said second flaps except for the hinge connections at their ends being separated from the walls to which they are hinged by a cut line and being folded over and adhered to the outer surface of the walls to which they are hinged adjacent the top edge thereof whereby the side walls of the receptacle portion adjacent the top edge present throughout the periphery thereof a two ply thickness and the top edge of the receptacle portion presents a substantially flat surface, said cover being provided with an inverted channel for receiving the uniform-thickness continuous top edge of the receptacle portion, the inner wall of said channel being untapered and vertical in attitude and having a continuous, vertical, flexible flange portion depending therefrom, said depending flexible flange portion continuously contacting the subtending continuous inner wall surface of said receptacle portion in sealing relation, the interior base of said channel being of dimension substantially equal to the thickness of the top edge of the receptacle portion to snugly embrace and engage said top edge to provide a liquid tight seal between the cover and the receptacle portion.

2,731,191
FIBREBOARD SHIPPING CONTAINER
Harold W. Layne, Beech Grove, Ind., assignor to Anderson Box Company, Indianapolis, Ind., a corporation
Application June 16, 1952, Serial No. 293,723
4 Claims. (Cl. 229—34)



1. A shipping container formed of a single blank of fibreboard including a one piece bottom panel having a slot at each end thereof, adjacent side panels to be folded upwardly therefrom, a hinged cover lid foldable over from the upper edge of one of the side panels, each of said side panels having end panels hingedly formed at opposite ends thereof respectively, the end panels of one side panel overlapping the end panels of the other side panel to provide the end walls when the side panels are erected, said end panels having registering slots and hand grip openings, said slots being located substantially midway thereof and below said openings, a clamping ear hingedly connected to opposite ends of said bottom panel adapted to be folded upwardly exteriorly of and adjacent the outer end panels and having an inner flap portion adapted to be inserted and extend through said slots for folding inwardly and downwardly adjacent the inner end panels, inner reinforcing locking panels hinged to the upper edges of the end panels of one of said side panels adapted to be folded inwardly and downwardly adjacent the inner end panels and over said flap portion, and locking projections on said flap portions and locking panels adapted to extend into and interlock with said bottom panel slots for clamping and securing said end panels in erected position.

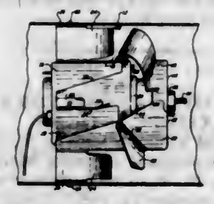
2,731,192
PISTON AND CYLINDER MECHANISM
Antonius M. J. F. Michels, Amsterdam, Netherlands, assignor to Stamicarbon N. V., Heerlen, Netherlands
Application March 28, 1955, Serial No. 497,331
5 Claims. (Cl. 230—21)



1. In a mechanism of the character described, a cylinder having a longitudinal bore therethrough, a driven piston reciprocably movable in the bore of said cylinder, said piston having a longitudinal counterbore in its head, means to reciprocate said piston in the bore of said cylinder, a working cylinder having a bore therethrough of less diameter than the bore of said first mentioned cylinder, the bore of said working cylinder being in longitudinal alignment with the bore of said first mentioned

cylinder, a floating member, said floating member having an end portion reciprocable in the bore of said working cylinder and forming a piston therein and a following portion of larger diameter than the end portion and forming a piston in the bore of said first mentioned cylinder above said driven piston, a guide pin extending from the free end of said following portion into the bore in the head of said driven piston, said guide pin having a cross-sectional dimension relative to a cross-sectional dimension of said following portion so that the area of the free end of said following portion surrounding said guide pin is substantially equal to the area of the head of the end portion of said floating member, the free ends of said following portion and said driven piston defining a space for a sealing liquid, means for connecting said last mentioned space with a space between the working cylinder and the head of said floating member.

2,731,193
AIR CIRCULATING FAN CONSTRUCTION AND METHOD OF MAKING THE SAME
Karl J. Lall and Beecher B. Cary, Jackson, Mich., assignors to Hayes Industries, Inc., Jackson, Mich., a corporation of Michigan
Application May 19, 1951, Serial No. 227,134
2 Claims. (Cl. 230—117)



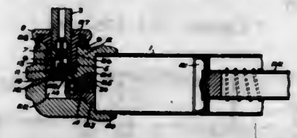
1. Structure for supporting a motor in a cylindrical air flow duct of a heating or ventilating system, such as is employed on automobiles, said structure providing in an integral sheet metal structure, a hollow hub portion formed by circumferentially spaced part cylindrical web portions extending axially from the outer periphery of a radial circular end wall having a central opening therein, said web portions having longitudinal edge portions, said hub portion being formed to support said motor therein and said opening permitting the motor shaft to project therethrough to the outside of said radial wall, a vane portion extending radially from the longitudinal edge portion of each said part cylindrical hub forming portion, and a transversely extending flange extending from the outer extremities of each of said vane portions, said flanges being engageable with the interior surface of said air flow duct and being formed to permit connection of said structure within the duct.

2,731,194
VACUUM CLEANER BLOWER
Moss A. Kent, White Plains, N. Y.
Application February 2, 1953, Serial No. 334,464
17 Claims. (Cl. 230—117)



1. In a vacuum cleaner, a receptacle having an open end and an inlet for dirt-moving air, and a suction head forming a closure for the open end of said receptacle, said suction head including a centrally apertured base member engageable on said receptacle, a motor-fan unit supported by said base member within the central aperture thereof, said unit having a motor housing providing a cooling air passage having inlet and outlet openings, a motor-driven first fan means arranged to move cooling air through said passage, a motor-driven second fan means arranged to draw dirt-moving air into and through said receptacle, a first space-enclosing means enclosing a space in which said first fan means operates, and a second space-enclosing means enclosing a space in which said second fan means operates, first and second air outlet means for said respective first and second space-enclosing means, a dome member surrounding said motor housing and enclosing a space in which said first air outlet means exhausts, said dome member having air outlet means opening to the atmosphere and having a top wall superimposed on said motor housing and provided with a central opening in axial line with said cooling air passage, and a muffler unit upon the top wall of said dome member interposed between said central opening thereof and the atmosphere.

2,731,195
PUMPS FOR INFLATING INFLATABLE BODIES
Wilhelm Blome, Sundern, Germany
Application November 17, 1952, Serial No. 320,965
Claims priority, application Germany July 28, 1952
4 Claims. (Cl. 230—172)

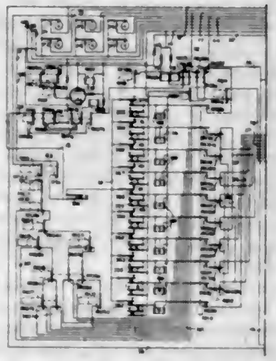


1. In combination an air pump cylinder, a nipple body supported by one end of said cylinder and defining an internal air chamber, a check valve arranged within said nipple body to control the flow of compressed air between said cylinder and said chamber, a valve opening abutment within said nipple body, a tubular sealing body of an elastic material adapted for insertion of tubular valve stems arranged within a recess of said nipple body in coaxial relation to and spaced from said valve opening abutment, a passage formed in said nipple body connecting said chamber with the space of said recess situated immediately adjacent said chamber to cause the end of said sealing body adjacent said chamber to be acted upon in a direction longitudinally thereof by the pressure of air contained in said chamber to deform said sealing body by said pressure to provide a tight fit between said sealing body and any tubular valve inserted into said sealing body.

2,731,196
SELF-CHECKING NUMBER PUNCH
Hans P. Luhn, Armonk, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application November 14, 1951, Serial No. 256,310
12 Claims. (Cl. 235—58)

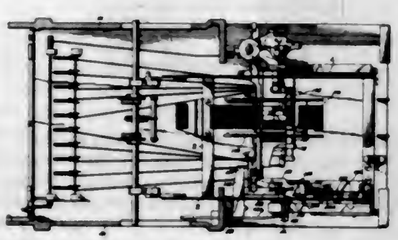
12. In an apparatus of the class described, punch operating means, a set of settable devices comprising a plurality of relays for representing digital values in code, means for successively entering the digits of a multidenominational amount in said devices, means for converting alternate digits of said amount prior to being entered in said devices, said alternate digits being converted pursuant to a predetermined plan, said devices progressively registering the units sum of said entered digits, and means

controlled by said devices for effecting said punch means in accordance with the complementary value of the units



sum standing in said devices after the last digit of said amount has been entered into said devices.

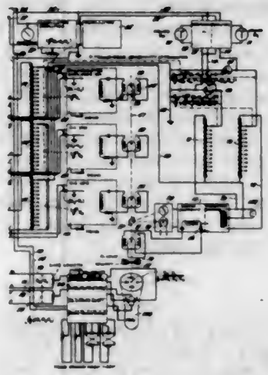
2,731,197
PIN BOX CONTROL MECHANISM
Charles A. Parker, Chicago, Ill., and Clifton K. Rainey, Knoxville, Tenn., assignors, by mesne assignments, to Burroughs Corporation, a corporation of Michigan
Original application June 14, 1949, Serial No. 99,081, now Patent No. 2,696,945, dated December 14, 1954. Divided and this application February 23, 1952, Serial No. 272,977
7 Claims. (Cl. 235—60)



5. In an accounting machine, a stop pin box mounted for stepwise movement from normal position responsive to pin setting and return, an operating member movable through a cycle of operations of the machine, latching means for holding the stop pin box against movement in either direction, cam means on said operating member positioned operatively to engage said latching means at the start of the cycle of operations to render said latching means effective until camming engagement is reestablished near the end portion of the cycle of operations to return said latching means to inoperative position, and means responsive to movement of the cycling member during its cycle of operations for generating a resilient force operative to effect movement of the stop pin box towards normal position upon release by said latching means.

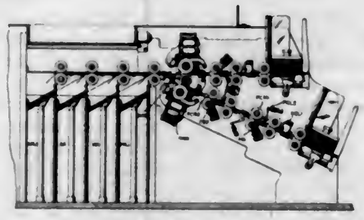
2,731,198
PRINCIPAL STRAIN COMPUTERS
Claude M. Hathaway, Denver, Colo., assignor to Hathaway Instrument Company, Denver, Colo., a corporation of Colorado
Application August 22, 1951, Serial No. 243,147
10 Claims. (Cl. 235—61)

10. In an electrical system for solving an equation, the combination of electrodynamic means having a plurality of sets of coils, each for producing a torque proportional to the production of two electrical quantities, one of said sets of coils being connected to means for opposing the torque produced by the remaining coil sets and connected to a source of voltage generated by photoelectric amplifier means controlled by a mirror connected



to said electrodynamic means, and circuit means for obtaining from said source an electrical quantity proportional to the square root of the sum of the electrical quantities producing said torque.

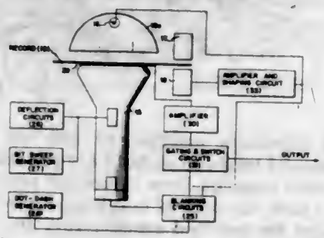
2,731,199
COMPUTING MECHANISMS FOR CHECKING COMPUTATIONS
Ioino Ghertman and Edmond Febvre, St. Mande, France, assignors to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application September 11, 1952, Serial No. 309,111
Claims priority, application France October 6, 1951
11 Claims. (Cl. 235—61.7)



11. In a machine for deriving from a number a checking symbol characterized by two coded components, the combination of means for setting and storing up representations of the digits of the number, means for receiving the results of each computation for representing one component, two other means for receiving and representing subcomponents from which the other component is derived, computing means comprising 1, 2, and 4 digit multiplying means for multiplying under control of the units, thousands and millions digit storing means, said digits by 1, for multiplying under control of the tens, tens of thousands, and tens of millions digit storing means the digits by 2, and for multiplying under control of the hundreds, thousands, and millions digit storing means the digits by 4, means for adding each product in said first named receiving means and for casting out 9's from each product whereby said first named receiving means represents said one component, means controlled by said computation result receiving means and responsive to 9 or multiple of 9's representations therein ofter each multiplying and adding computation to effect an entry in one subcomponent receiving means, means controlled by the 1, 2 and 4 digit multiplying means for controlling entries in the other

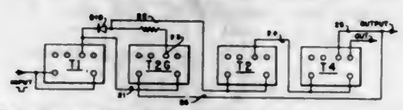
subcomponent receiving and representing means in accordance with the presence of 9's in each product, and means controlled by both of said subcomponent receiving means to derive said other component.

2,731,200
DOCUMENT SENSING DEVICE
Albert C. Koelsch, Jr., Poughkeepsie, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application October 5, 1954, Serial No. 460,335
13 Claims. (Cl. 235—61.11)



11. A combined record sensing and storage system comprising an electrostatic storage tube, a source of radiation directed onto the charge storage element of said tube, means for establishing a raster of charges of a first type on said element, said raster conforming with the arrangement of radiant energy passing positions of a record indicative of data recorded, means for positioning such a record intermediate said source of radiation and said charge storage element and in alignment with said raster, and means for causing said source of radiation to function and thereby cause those charges subjected to the radiation to change to a second type.

2,731,201
ELECTRONIC COUNTER
Leonard R. Harper, Poughkeepsie, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application December 21, 1950, Serial No. 202,120
36 Claims. (Cl. 235—92)

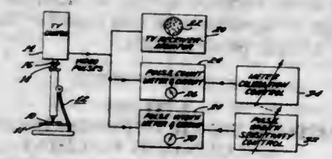


1. An electronic counter comprising at least four bistable devices connected in cascade, an input and an output for said cascade and means for altering the number of pulses required to be applied to said input to produce an output, said alteration being from the number that would be required during unaltered straight cascade operation to a lesser number, said means for altering comprising one single diode only controlled by a single one only of said devices for operation by a pulse to selectively flip or not to flip one other device only in accordance with the on or off status of said controlling device

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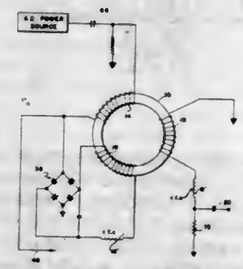
2,731,202
ELECTRONIC PARTICLE COUNTING APPARATUS
Winthrop Seeley Pike, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application April 3, 1951, Serial No. 219,000
6 Claims. (Cl. 235—92)

1. In a particle counting apparatus of the type wherein a field of view, in which particles appear against a background contrasting in appearance with said particles, is scanned with a beam of energy, and wherein detecting means determine the number of times said particles intercept said scanning beam, the combination of means responsive to interception of said beam by said particles for determining the average diameter of said particles, and ganged, adjustable means coupling said detecting



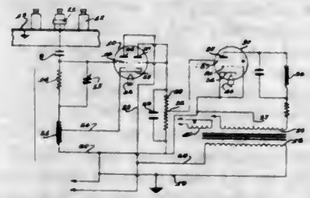
means and said diameter determining means to determine how many particles of diameter equal to said average is represented by said detecting means.

2,731,203
SATURABLE CORE CIRCUITS FOR COUNTING AND THE LIKE
James G. Miles, Minneapolis, Minn., assignor, by mesne assignments, to Sperry Rand Corporation, New York, N. Y., a corporation of Delaware
Application May 24, 1951, Serial No. 227,962
19 Claims. (Cl. 235—92)



1. In a device having a saturable core, a reactance winding and a feedback winding arranged on the core, means connected with the windings for supplying electric current thereto so that the device has first and second critical states of flux saturation in the core beyond which the device will drive itself to first and second stable states, triggering means for shifting the circuit from either stable state to the other, the triggering means comprising a triggering winding on the core, the trigger-winding being connected with a capacitance in a resonant circuit, and means for causing the flow of an oscillatory surge of electric current through the triggering winding, the oscillation being of sufficient magnitude to drive the core flux beyond either one of the critical states and into the opposite stable state.

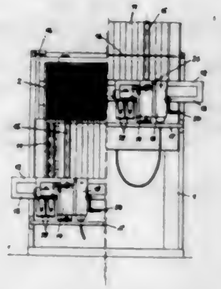
2,731,204
METHOD OF COUNTING ARTICLES
Jack C. Darling and John Hayes, Streator, Ill., assignors to Owens-Illinois Glass Company, a corporation of Ohio
Application May 1, 1951, Serial No. 223,934
8 Claims. (Cl. 235—98)



1. The method of counting glass articles which comprises heating the articles to a sufficiently high temperature to render them electrically conductive, grounding the articles, and while grounded and at said high temperature conveying them in succession past an electrically conduc-

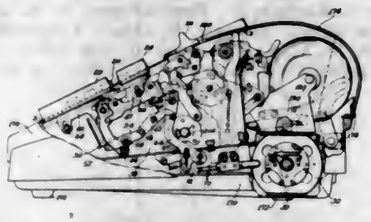
tive element insulated from ground and close enough to the path of the articles to form with each passing article a capacitor, and as each article approaches said element, inducing in an electrical circuit an electrical impulse by the change in capacitance of said capacitor caused by the presence of each passing article.

2,731,205
AUTOMATIC TICKET PRINTING AND ACCOUNTING MACHINE
Scipione Innocenti, Bologna, Italy
Application July 27, 1953, Serial No. 370,526
Claims priority, application Italy August 5, 1952
22 Claims. (Cl. 235—101)



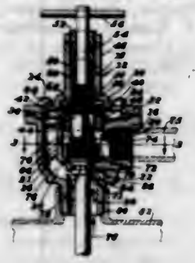
1. An automatic ticket-printing and accounting machine comprising a fixed frame: a plane magazine mounted on said frame and embodying a plurality of frontally opened stations arranged in horizontal rows and vertical columns, and each of which stations is adapted to removably receive for filing a matrix plate, bearing printing types and code means; an horizontal index arranged on the front of said magazine; a station name board on which the names of the station are arranged in vertical columns and horizontal lines in an order according to that in which the corresponding matrix plates are inserted in said magazine stations, means by which said station board is shiftably mounted for movement in a vertical direction along the front of said magazine rearwardly of said horizontal index; horizontal guide members carried by said station board and a printing carriage slidably mounted along said horizontal guide members and provided with a vertical index projecting thereabove and crossing the said horizontal index in correspondence of the name of the station for which the ticket is to be printed, means operable for locking the printing carriage in correspondence with any of the stations of the matrix plates in the magazine, a matrix-hooking device for extracting of the desired matrix from its station in the magazine and for introducing said extracted matrix into the printing carriage, and for re-filing the matrix into the said magazine all of said last-named operations taking place in planes at right angles to the plane of the matrix magazine, a device for the introduction of the ticket to be printed into the printing carriage by shifting the same horizontally and parallel with the plane of the station board and for its adjustment in correspondence of the matrix plate extracted from the magazine and introduced into the printing carriage, vertically shiftable means for pressing the ticket to be printed against the matrix plate, a device for the ejection of the printed ticket from the printing carriage, means for printing data relating to the issued tickets on a continuous control tape, means for driving the printing carriage mechanisms, and means controlled by the said ticket to be printed, when it is introduced into the printing carriage, for starting said printing carriage driving means and for the stopping thereof after the ticket has been printed and ejected from said printing carriage.

2,731,206
CALCULATING MACHINE FUNCTION CONTROL KEYS INTERLOCK
Erhard M. Lippert, Ralph L. Schultz, and Albert V. Neyfeldt, Chicago, Ill., assignors to Victor Adding Machine Co., Chicago, Ill., a corporation of Illinois
Application September 20, 1951, Serial No. 247,491
9 Claims. (Cl. 235—130)



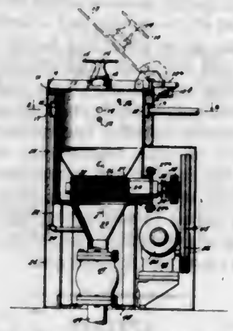
1. In a calculating machine, an add key, a subtract key, a combined total and subtotal key pivoted for movement in either direction from its normal position, a non-add key, a stem for each of said keys, a pivoted locking arm adjacent the add and subtract keys and cooperable with means on their stems to prevent depression of these keys when the locking arm is in one position, a slide cooperable with said locking arm to move it to locking position, means operable by the total and subtotal key when moved in either direction from its normal position to move said slide and locking arm to key locking position, and means operable by the non-add key to move said slide and locking arm to locking position.

2,731,207
RELIEF VALVE
Frank H. Mueller and Earl E. Tinker, Decatur, Ill., assignors to Mueller Co., Decatur, Ill., a corporation of Illinois
Application September 26, 1951, Serial No. 248,328
8 Claims. (Cl. 236—92)



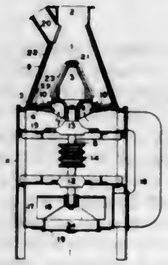
1. A relief valve comprising: a housing provided with vertically-spaced upper and lower transverse partitions connected at one side by a vertical wall spaced from the outer wall of said housing to form a passage therebetween, said partitions separating the interior of said housing into an inlet chamber and an outlet chamber and having a pair of aligned openings therethrough; an upwardly-facing valve seat about said opening in said upper partition; a reciprocating valve in said inlet chamber engageable with said seat; yieldable means for normally holding said valve against said seat; an extension on said valve slidably and sealingly engaged in an opening in an outer wall of said housing for exposure of the outer end of said extension to atmospheric pressure, said extension being of substantially the same area in cross section as that encompassed by said valve seat; a thermally-responsive element including a bellows positioned in said outlet chamber in alignment with said partition openings for lifting engagement with said valve and a depending tubular portion sealingly and slidably extending through said opening in said lower partition into said inlet chamber; and stop means for preventing downward movement of said element through said last-mentioned opening, whereby predetermined thermal expansion of said element will lift said valve from its seat, and bodily-upward movement of said element by a predetermined pressure in said inlet chamber will lift said valve from its seat.

2,731,208
APPARATUS FOR DISPOSING OF CONTAMINATED WASTE
Thomas G. Dodd, Fairfax, Va., assignor to Hospital Sanitation Equipment Corporation, Washington, D. C., a corporation of Delaware
Application January 28, 1952, Serial No. 268,496
9 Claims. (Cl. 241—41)



1. An apparatus for sterilizing and disposing of contaminated waste or waste containers such as sputum cups and the like comprising a hopper for receiving a batch of contaminated waste, a shredder connected to the bottom of said hopper, a valve connected to the bottom of said shredder and a waste line connected to said valve, means for closing said valve and means for closing said hopper after the batch of waste has been placed therein, means for admitting steam to the closed hopper for completely sterilizing the waste therein so as to destroy virulent bacteria, means for driving said shredder for cutting up said waste after it has been sterilized, means for opening said valve to said waste line for feeding the sterilized waste to said waste line, and means for admitting water to said hopper for washing the sterilized and cut up waste into said waste line.

2,731,209
CYCLONE MILLS
Ernest Mare, Johannesburg, Transvaal, Union of South Africa
Application October 8, 1952, Serial No. 313,671
10 Claims. (Cl. 241—56)



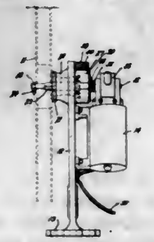
1. A cyclone mill comprising a housing having walls forming a chamber, a rotor having a conical upper surface and a flange-shaped base both rotatably supported in said chamber, said rotor having fins projecting radially from said conical surface, said base having beater bars on its upper side forming grooves therebetween and extending radially from adjacent the bottom of said conical surface to the periphery of said base, said base also having passageways extending through it from bottom to top, said passageways including means for forcing air upwardly through them, the peripheral edge of said base and the adjacent portion of said chamber walls being inclined upwardly and outwardly relative to the bottom of said base to form an annular space of matching inclination, and means for forcing a stream of air upwardly through said annular space and for assisting flow through said passageways.

2,731,210
CYLINDRICAL ROTATING MILL WITH STEPPED AND STUDDED LINER FOR AUTOMATIC CLASSIFICATION OF GRINDING BALLS AND MATERIAL
Jacques Fernand Henricot, Court Saint-Etienne, Belgium
Application July 13, 1953, Serial No. 367,649
Claims priority, application Great Britain August 6, 1952
1 Claim. (Cl. 241—183)



A cylindrical rotating mill for ball grinding comprising an inlet for the material to be treated at one end, an outlet for the ground material at the opposite end, a lining within said cylindrical part, an annular group of projecting studs on the inner face of the lining arranged for exerting a gripping action on said material and on said balls during rotation of the mill, said studs having their heads at varying distances from the mill axis and being so grouped that in a longitudinal section through the mill, said heads appear as successive taper steps such that in each of the latter, the stud heads farthest from the mill axis are seated nearer to the inlet end of the mill than the heads of the taper step considered which are nearer to the mill axis, the slope of cone generatrix with regard to the mill axis decreasing stepwise when considering successive taper steps farther away from said inlet end and the dimensions and spacings of said studs decreasing when progressing towards the outlet end of said mill.

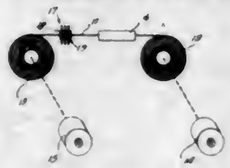
2,731,211
FILM REWINDING DEVICE
Stanley A. Moquist, Denver, Colo., assignor to Schoen Products, Gardena, Calif.
Application August 31, 1953, Serial No. 377,437
2 Claims. (Cl. 242—55)



1. A film winding device comprising: a stationary vertical frame plate; a winding shaft horizontally journalled in said frame plate; a circular clutch flange fixedly mounted on the rear extremity of said winding shaft; means on the forward extremity of said shaft for receiving a motion picture reel; a clutch block concentrically secured to said clutch flange; a conical concentric clutch cavity in said clutch block; a drive shaft projecting concentrically into and terminating within said clutch cavity; bearing means supporting said drive shaft; threads formed on the extremity of said drive shaft within said cavity; a tapered

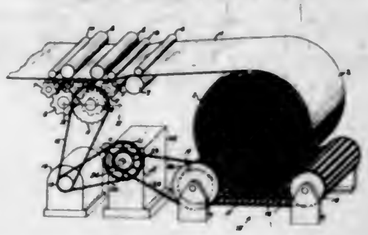
friction clutch member threaded onto said threads and adapted to move forwardly on the threads on said drive shaft into engagement with the walls of said clutch cavity when said drive shaft rotates forwardly, and to move rearwardly on the threads on said drive shaft out of engagement with the walls of said clutch cavity when said clutch block rotates forwardly at a relatively higher speed than said drive shaft; a stop member affixed to the extremity of said drive shaft and projecting radially therefrom within said cavity between the bottom of said clutch cavity and said clutch member; and an abutment on said clutch member positioned to contact said stop member to prevent further forward entering movement of said clutch member beyond a preset point.

2,731,212
POLYPHASE ELECTROMAGNET STRIP GUIDING AND TENSION DEVICE
Richard S. Baker, Butler, Pa.
Application February 13, 1953, Serial No. 336,744
9 Claims. (Cl. 242—75)



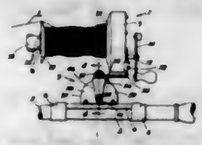
9. Tension apparatus for use with strip metal moving means comprising a magnetic device for producing a motor thrust to tension said strip metal and comprising a magnetic core mounted adjacent the plane of and substantially aligned with the strip, a plurality of spaced magnetizing windings surrounding said core and a polyphase energizing circuit therefor, said circuit being operable to energize said windings to produce a traveling magnetic field and thereby inducing a motor thrust in the strip in the direction of travel of said field.

2,731,213
STRIP STOCK FEEDER
Alvin F. Groll, Napoleon, Ohio
Application June 29, 1951, Serial No. 234,243
5 Claims. (Cl. 242—78)



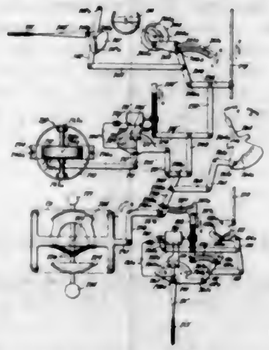
4. In a device for feeding strip stock, in combination, a cradle adapted to support a roll of strip stock during unreeling thereof, feeding rolls adapted to withdraw stock from the roll, said rolls being adapted to drive the cradle by force transmitted through the stock, a power source, power transmission means connecting the power source to the feeding rolls, a friction clutch in said transmission means for limiting the torque transmitted to the feed rolls, a second force transmission system operatively connecting the power source to the cradle, said second system being arranged to drive the cradle at a slower speed than the feeding rolls withdraw stock, and an overrunning clutch included in the second system whereby said second system positively drives the cradle when the friction clutch slips.

2,731,214
FISHING REEL
Roy L. Bogar, Stockton, Calif.
Application June 7, 1954, Serial No. 435,006
7 Claims. (Cl. 242—84.5)



1. A fishing reel comprising a hand crank actuated reel assembly including a spool having a free end, and a mount adapted to secure the reel assembly to a rod; said mount embodying a rotatable spindle, means securing the reel assembly on asid spindle as a unit rigid therein for manual rotary adjustment of the spindle and assembly between one position with the spool extending lengthwise of the rod with said free end foremost, and another position with the spool extending transversely of the rod, and releasable means to hold the reel assembly in either of said positions; means mounting the spindle for independent swinging movement about an axis transversely of the rod, and means between the spindle and mount responsive to rotation of the spindle upon adjustment of the reel assembly from said one position to said other position operative to swing the spindle about said axis in a direction to cause the reel assembly to move closer to the rod.

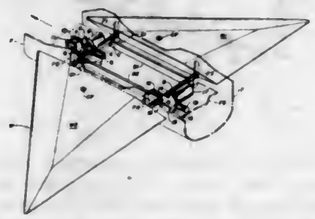
2,731,215
AUTOMATIC CONTROL SYSTEM FOR ROTATING WING AIRCRAFT
Harold T. Avery, Oakland, Calif., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Continuation of application Serial No. 669,790, May 15, 1946. This application December 8, 1952, Serial No. 324,810
33 Claims. (Cl. 244—17.13)



1. In rotary wing aircraft having a rotor comprising a hub and a plurality of blades attached thereto, mechanism for cyclically controlling the pitch of the respective blades, and a member positionable to selectively control the cyclic pitch mechanism to alter the lateral attitude of the craft; the combination of a detector selectively displaceable relative to the craft by lateral accelerations of the craft, the direction of displacement of said detector relative to the craft being directly related to and indicative of the direction of lateral acceleration of the craft causing said displacement, two elements, means interconnecting said detector and one of said elements, said means being actuated by the displacement of said detector relative to the craft for displacing said elements relative to each other, the direction of the relative displacement of said two elements imparted by said means being directly related to and indicative of the direction of the displacement of said

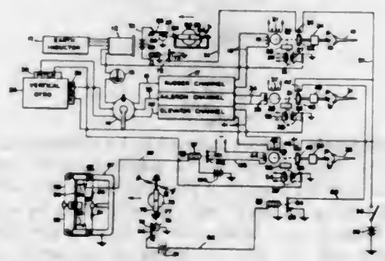
detector causing said relative displacement, means interconnecting said member and said elements, said last named means being controlled by such relative displacement of said two elements for positioning said member, the direction of the displacement of said member caused by each relative displacement of said two elements being in the direction which produces a change in the lateral attitude of the craft opposite in direction to that of the acceleration which caused the displacement of the detector and hence the relative displacement of said two elements to produce the displacement of said member, a manual control handle, and means interconnecting said member, said handle, and the other of said elements, said last named means being jointly responsive to said member and said handle for altering the relative displacement of said two elements.

2,731,216
VARIABLE INCIDENCE AIRFOIL SYSTEM
William A. Dillman, Seattle, Wash., assignor to Boeing Airplane Company, a corporation of Delaware
Application September 23, 1952, Serial No. 310,995
12 Claims. (Cl. 244—48)



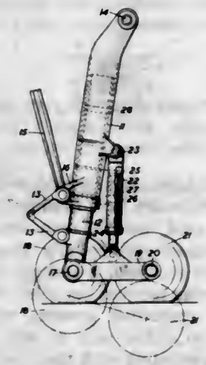
2. In an aircraft control system including a longitudinally extending body and a transversely extending surface, a transversely extending member fixed to a forward portion of said surface slidably mounted for arcuate movement within said body, a transversely extending rear member fixed to an aft portion of said surface rotatively mounted within said body, and means including a power driven arm pivotally supported upon said body in sliding engagement with said forward member for selectively moving said forward member of said surface in a direction perpendicular with respect to the longitudinal axis of said body.

2,731,217
POSITIONING SYSTEM MONITOR
Paul A. Noxon, Tenafly, and Alan M. MacCallum, Maywood, N. J., assignors to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application April 11, 1950, Serial No. 155,228
11 Claims. (Cl. 244—77)



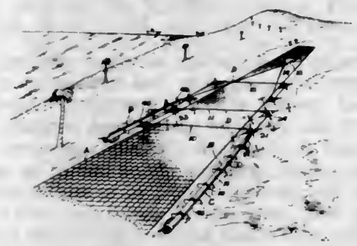
1. The combination with an aircraft automatic pilot having a servomotor for operating a control surface to displace the craft about an axis thereof, of means responsive to a predetermined rate of craft displacement about said axis, and means operated by said rate responsive means for making said motor ineffective on said surface.

2,731,218
AIRCRAFT ALIGHTING GEAR
Patrick Bonar, Cheltenham, England, assignor to Dowty Equipment Limited, Cheltenham, England
Application November 1, 1950, Serial No. 193,366
Claims priority, application Great Britain November 10, 1949
6 Claims. (Cl. 244—104)



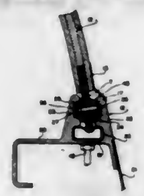
5. An aircraft landing gear comprising linkage means, said means including a two-part, generally upright telescopic leg, said leg having a lower part slidable relative to an upper part, a generally horizontally disposed lever having one end portion pivotally connected to said lower part of said leg, a two-part, generally upright shock absorber means pivotally connected at its upper end to said upper part of said leg and at its lower end to an intermediate point of said lever, a ground engaging wheel rotatably mounted on said linkage means at a location on the same side of said shock absorber means as said leg, and a ground engaging wheel rotatably mounted on said lever on the side of said shock absorber means opposite from said leg.

2,731,219
AIRCRAFT ARRESTING MEANS
Robert B. Cotton, Media, Pa., and Donald B. Doolittle, Wilmington, Del., assignors, by mesne assignments, to All American Engineering Company, Wilmington, Del., a corporation of Delaware
Application July 21, 1952, Serial No. 300,014
10 Claims. (Cl. 244—110)



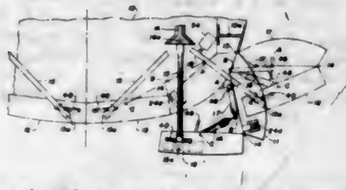
5. An aircraft arresting unit having an arresting cable, a fluid loaded stationary cylinder mounted in a horizontal plane adjacent a landing surface, a hollow piston in the cylinder, said piston comprising a head portion with a hollow cylindrical nose formed with fluid inlet ports, cable couplers secured to said piston at the said nose, a valve supporting body rearward of the nose mounted concentrically in the piston including a valve seat rearward of said inlet ports, a valve engageable with said seat carried by the said body, a valve loading fluid chamber and means for supplying fluid into said chamber to maintain said valve in closed position until released by a relatively greater counter force resulting from pull on said arresting cable.

2,731,220
AIRCRAFT SEALED COCKPIT MOVABLE CANOPY MOUNTING
James T. Power, Van Nuys, Calif., assignor to Lockheed Aircraft Corporation, Burbank, Calif.
Application September 20, 1951, Serial No. 247,393
7 Claims. (Cl. 244—121)



1. In an aircraft fuselage provided with a cockpit, the combination of tracks on said fuselage extending along opposite edges of said cockpit, each track comprising a wide-mouthed elongate cylindrically shaped groove, the bottom of which is recessed, a canopy for covering the cockpit including edge tongues on either side thereof projecting into their respective groove, opposed pairs of projecting guides on either side of said tongues having curved surfaces cooperating with their respective cylindrically shaped groove, each one of said pairs having a single radius of curvature, the origin of which lies on the longitudinal axis of its respective cylindrically shaped groove, said radius of curvature of said pairs being equal, each of said tongues being of a width substantially less than the mouth of its respective groove, and each tongue extending into its respective recess, the sides of said recess serving as stops for said tongue to limit the relative angular movement of said guides.

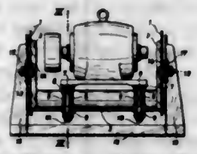
2,731,221
AIRCRAFT DOOR INSTALLATION
Edward C. Holton, Los Angeles, Calif., assignor to North American Aviation, Inc.
Application June 25, 1952, Serial No. 295,483
12 Claims. (Cl. 244—129)



1. In an aircraft, a fuselage having an opening therein, a first door panel hinged to said fuselage at a lateral edge of said opening, a second door panel hinged to the free edge of said first door panel, a link pivotally mounted upon said fuselage and pivotally connected to said second door panel, actuating means carried by said first door panel and pivotally connected to said second panel for moving both said panels in cooperation with said link between open and closed positions, and means associated with said actuating means and said first door panel for locking both said panels at an intermediate position in which one of said panels serves as a walkway for providing access to said fuselage opening.

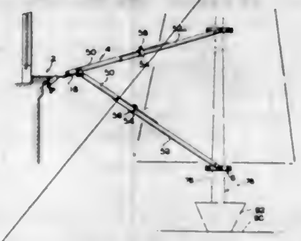
2,731,222
ROCKERS
Rudolf Poeschl, Vienna, and Wilhelm Poeschl, Rohrbach, Austria
Application January 23, 1952, Serial No. 267,880
5 Claims. (Cl. 248—23)

1. In a support for a rotary machine, a mounting for said machine, side pieces at opposite sides of said mounting, means connecting said side pieces, adjustable means securing the mounting to said connecting means to vary the angular relation between said mounting and said side pieces, two spaced standards one adjacent one of said side pieces and the other adjacent the other of said side



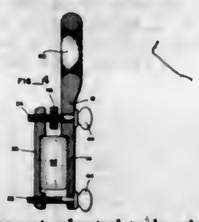
pieces, means pivotally connecting each of said side pieces to its adjacent standard, and means for changing the position of said pivot means in relation to said connecting means.

2,731,223
TREE HOLDER
Theodore A. Riccio, Newington, Conn.
Application March 1, 1955, Serial No. 491,341
4 Claims. (Cl. 248—41)



1. A tree holder comprising upper and lower tree clamps adapted to fasten about a tree trunk, four adjustable length arms, two of the arms being pivotally connected to the upper tree clamp and the other two arms being similarly connected to the lower tree clamp, and a pair of window sill clamps, each sill clamp having pivotally connected thereto one of said arms from the upper tree clamp and each of said arms from the upper tree clamps having pivotally connected thereto one of the said arms from the lower tree clamp.

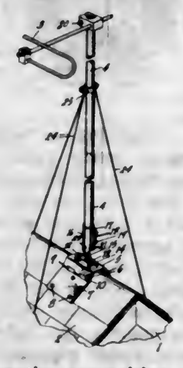
2,731,224
FISHING POLE SUPPORT AND POSITIONING DEVICE
Keith B. MacDonald, Seattle, Wash.
Application June 14, 1952, Serial No. 293,626
3 Claims. (Cl. 248—42)



3. A fishing pole support adapted to be clamped on the side of a boat, comprising: a fork member having means on its lower end for clamping the support to the side of a boat and having its upper end formed as an upwardly extending integral arm bifurcated to form a first and a second prong side by side bordering an upwardly open slot, the base of said slot substantially defining a semicircle having its center adjacent the vertical axis of said arm, said first and second prong diverging outwardly from said semicircle approximately at the chordal diameter of the semicircle which forms an angle with said vertical axis of approximately 50 degrees, said first prong extending over the base of said slot and terminating adjacent said

vertical axis and said second prong having a reverse curve at its upper end thereby forming an ogee inner curved surface, the distance between said prongs at the mouth of said slot being substantially one-half said diameter, whereby an object in said slot is obstructed from removal directly vertically and can only be removed by movement oblique to the vertical along said second prong.

2,731,225
ANTENNA MOUNTING
Julius N. Cayo, Benton Harbor, Mich.
Application March 7, 1952, Serial No. 275,383
1 Claim. (Cl. 248—44)



An antenna mounting comprising a base member of downwardly facing channel section, the arms of which terminate in integral flat attaching leaves bendably connected to their lower edges, the web of the base member having longitudinally spaced outwardly projecting perforated pivot ears integral therewith, a longitudinally split mast socket having opposed outwardly projecting flanges at the split thereof, said socket having opposed depending perforated pivot ears, an upright support member having a pair of integral aligned pivots coacting with the pivot ears of said base member and a pair of integral aligned pivots coacting with the pivot ears of said socket member, said support member being formed of flat stock and having a quarter twist between its pairs of pivots to present the pairs of pivots in 90° angular relation to each other, and clamping bolts disposed through said flanges of said socket member for clamping the socket upon a mast adjustably positioned therein.

2,731,226
CONTAINER HOLDER
Matthew C. Ricciardi, Phillipsburg, N. J.
Application March 18, 1952, Serial No. 277,334
3 Claims. (Cl. 248—196)



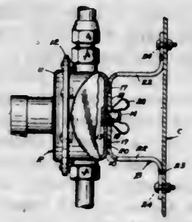
1. A stand for a container, a vertical front plate having a rear side, said front plate having a rectangular opening therein spaced from the boundaries thereof, said opening having an upper horizontal edge, a rearwardly extending flap on said upper edge, a vertical rear plate engaging the rear side of the front plate, means securing the rear plate to the front plate, said rear plate having vertical side edges, vertically elongated wings on said vertical side edges projecting rearwardly from said rear plate, said wings having lower ends, a generally rectangular opening in said rear plate registered with the opening in the front plate and extending into said wings, the portions of the opening in the wings having upper and lower edges and rear edges, the flap of the front plate extending in the opening of the rear plate and being engaged with said upper edges, a flap on said rear plate resting upon the said lower edges of the rear plate opening below the openings.

2,731,227
GUY ROD CLAMP FOR BRACKET ARM
W. Carl Anderson, Canton, Ohio, assignor to The Union Metal Manufacturing Company, Canton, Ohio, a corporation of Ohio
Application April 16, 1951, Serial No. 221,305
1 Claim. (Cl. 248—221)



Bracket arm guy rod clamp construction comprising a bent V-shaped plate including an apex portion having diverging leg members extending therefrom, substantially aligned openings in said leg members, a bracket arm extending through said aligned openings, a set screw in said apex portion abutting the bracket arm, one of the leg members being provided with spaced openings in portions remote from the apex portion with one spaced opening on either side of the bracket arm, and guy rods connected through said spaced openings to said one leg member and extending angularly therefrom, means for tensioning the guy rods, said tensioned guy rods rocking said one leg about the point of abutment of the set screw with the bracket arm as a fulcrum and digging the opposite edge of the aligned opening of said one leg member into the surface of said bracket arm to tightly engage said V-shaped plate with said bracket arm

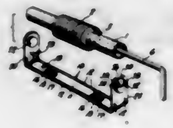
2,731,228
MOUNTING MEANS FOR REGULATORS
John D. Baldwin, Jr., Highland Heights, Theodore A. St. Clair, South Euclid, and Albert J. Weatherhead, Jr., Shaker Heights, Ohio, assignors to The Weatherhead Company, Cleveland, Ohio, a corporation of Ohio
Application October 9, 1951, Serial No. 250,492
2 Claims. (Cl. 248—300)



2. A pressure regulator assembly comprising a regulator casing having a substantially flat vertically disposed wall, a threaded stud fixed to and extending horizontally from said wall, a pair of fixed spaced projections extending outwardly from said wall, a U-shaped bracket having a flat central portion, legs extending angularly from said central portion adapted to be mounted on a mounting surface, said central portion being spaced from said mounting surface by said legs, said central portion having a

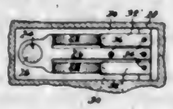
slot opening inwardly from one edge thereof to receive said stud, a clamp nut on said stud between said central portion and said mounting surface, a pair of spaced apertures in said central portion of said bracket receiving said spaced projections, said apertures and said projections providing engaging surfaces spaced from said slot whereby movement of said regulator with respect to the bracket is prevented.

2,731,229
INSTRUMENT MOUNTING AND CLIP THEREFOR
William L. Seitz, Cleveland, Ohio, assignor to Tinnerman Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application May 28, 1953, Serial No. 358,147
12 Claims. (Cl. 248—300)



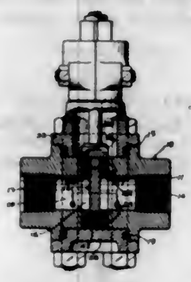
12. An instrument mounting for an instrument comprising a tubular instrument body and a movable member in said tubular instrument body having an axially adjustable rod projecting from one end of said tubular instrument body, said mounting for the instrument comprising a support and a fastening device comprising a piece of sheet metal providing a base attached to said support and a pair of arms extending substantially at right angles from said base, said arms engaging the ends of said tubular instrument body and mounting said tubular instrument body in substantially parallel relation to said support, one of said arms having a passage receiving said rod and tongues adjacent said passage defining gripping elements rigidly supporting said rod but adapted to permit axial adjustment of said rod.

2,731,230
VALVE STRUCTURE
Paul Schell, Elkhart, Ind., assignor to Penn Controls, Inc., Goshen, Ind., a corporation of Indiana
Application January 12, 1952, Serial No. 266,197
2 Claims. (Cl. 251—11)



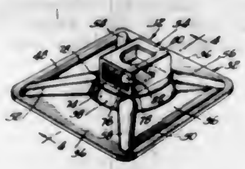
1. In a valve structure, a valve element movable to either of two positions and biased to one of said positions, means for imparting snap action to said valve element when moving to either of said positions, and means to move said valve elements to the other of said positions, means for moving said valve operating element to one of said positions comprising a bimetal element normally in one position, a heater therefor to move it to another position, an operative connection between said bimetal element and said valve element, and means for manually resetting said valve to said other of said positions comprising a movable element normally in one position and cooperable with said bimetal element when operated manually to move it to said another position, said bimetal element having a projection to retain said movable element when operated manually, said heating element upon warping said bimetal element beyond said another position removing said projection from cooperation with said movable element to permit it to return to its normal position.

2,731,231
RESILIENT SEAL VALVE
John C. Garrott, Houston, Tex.
Application April 10, 1951, Serial No. 220,289
6 Claims. (Cl. 251—328)



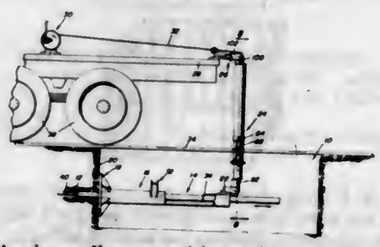
1. A gate valve, comprising, a valve housing having inlet and outlet openings therein, a gate chamber between said openings, a stem having an elongated tongue-shaped gate thereon, said gate being movably mounted in the housing for engaging a valve seat in said chamber and thereby closing said openings, said valve seat including a resilient U-shaped gasket seated on the bottom of said gate chamber and confined between the side and end walls thereof, a substantially rectangular resilient sealing washer circumferentially surrounding the body of the gate below its upper end, said washer engageably fitting between the arms of said U-shaped gasket and the side walls of said chamber when the gate is in contact with the bottom of the U-shaped gasket, a pair of removable wear rings seated in opposite side faces of said gasket encircling said openings and slidably engageable by the side faces of said gate when the latter is moved to the closed position, the peripheries of said rings being enclosed by said gasket and by the side portions of said washer when the gate is in the closed position, and abutment means on the gate confining the upper end of said washer, so that a closing force exerted upon said gate will cause said gasket and washer to flow into a fluid-tight seal about said gate and said rings.

2,731,232
LIFTING JACK
Millard B. Lucker, St. Joseph, Mich., assignor to Auto Specialties Manufacturing Company, St. Joseph, Mich., a corporation of Michigan
Application September 18, 1952, Serial No. 310,164
9 Claims. (Cl. 254—1)



1. A removable foot for a lifting jack, comprising a base member adapted to rest on a support surface, means providing a pair of plate members, one of said plate members being mounted on said base member, means mounting the other of said plate members spaced from said one plate member and said base member, said plate members having apertures therein for receiving and supporting an upstanding jack strut, said apertures being laterally offset from one another to support said strut at an angle from the vertical toward the rear edge of said base member whereby to provide greater resistance to forward tilting of the jack.

2,731,233
PIPE PULLER
William R. Lindsay, Madisonville, Ky.
Application May 29, 1953, Serial No. 358,341
6 Claims. (Cl. 254—29)



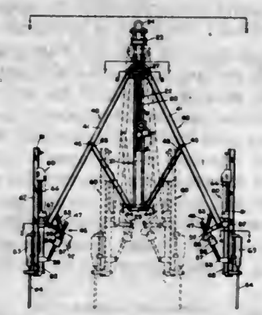
1. A pipe puller comprising a base member of elongated tubular configuration adapted to be placed in concentric relation with a pipe to be pulled, a support member pivotally secured at one end to an end of said base member, the other end of said support member being adapted to be secured to a stationary member, pulleys carried by said base member and said support member, and a cable trained over said pulleys, said support member including a pair of telescopically engaged tubular members, means for securing said tubular members in various intended positions, said means including a pair of semi-circular brackets removably interconnected at their opposite ends and disposed in embracing relation to one of said telescopically engaged members, each semi-circular bracket having a radially inwardly projecting pin for selective disposition within certain of a series of longitudinally spaced apertures in said one member.

2,731,234
FLUID HANDLING APPARATUS FOR USE WITH WELL DRILLING EQUIPMENT
Peter J. Bily, Brea, Calif., assignor to Chiksan Company, Brea, Calif., a corporation of California
Application April 14, 1952, Serial No. 282,134
2 Claims. (Cl. 255—24)



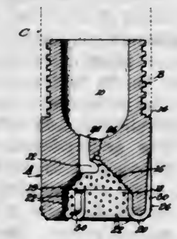
1. Apparatus for use with a well drilling rig adapted to operate a swivel over a well and including a vertically disposed derrick and a fluid supply pipe extending up to a point intermediate the upper and lower ends of the derrick and at the exterior of the derrick including, a substantially straight fluid handling arm of substantial length, means adapted to couple the pipe and the inner end of the arm with the arm extending laterally of the derrick at the exterior thereof including a fitting with parts pivotally connected for relative movement about vertical and horizontal axes, one of said parts being fixed to the pipe and another being fixed to the inner end of the arm and a flexible duct having one end coupled with the outer end of the arm and the other end adapted to be coupled to the swivel, the duct including rigid tubular members and swing joints connecting the members together in a continuous series, each swing joint having a single pivotal axis and having releasable couplings releasably connecting the joint to adjacent tubular members, each releasable coupling including means keying the said tubular members against relative rotation to the joint to which they are coupled and with the axis of the joint transverse of the duct, and the axes of the several joints being parallel with each other and transverse of the duct whereby the duct is flexible in one plane only.

2,731,235
SHAFT DRILL RIG
Raymond P. Dellner, North Olmstead, Ohio, assignor, by mesne assignments, to Westinghouse Air Brake Company, a corporation of Pennsylvania
Application May 7, 1952, Serial No. 286,509
7 Claims. (Cl. 255—51)



1. A drill rig including a substantially vertical support adapted to be suspended above the ground, a hanger box on the upper end of said support, a carriage mounted on said support for up or down movements thereon, means securing said carriage on said support, means connected to said support and carriage adapted to impart said up or down movements to the carriage, a pair of relatively long rigid legs having their upper ends pivotally connected to said carriage for up and down movement therewith and diverging downwardly therefrom, a drilling apparatus carried by the lower end of each of said legs, and supporting means pivotally pinned to said legs between the ends thereof and to said support causing said lower ends to move horizontally in or out by virtue of the up or down movements of said upper ends.

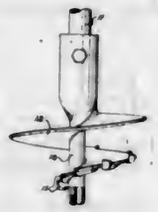
2,731,236
DIAMOND DRILL BIT
Floyd Bruce, Mountain Home, Ark.
Application October 5, 1953, Serial No. 384,358
3 Claims. (Cl. 255—61)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A rotary diamond drill bit adapted to be mounted in a rotary drill rod, which comprises a neck portion and a cutting head portion, the former being hollow and in-

cluding a water-supplying chamber, the latter having cutting surfaces including a cutting crown and a centrally disposed sectional work-chamber concentric with the longitudinal axis of the drill rod and composed of a pair of superposed communicating sections defining a peripheral juncture therebetween, which sections are respectively a substantially cylindrical section adjacent to the cutting crown and an upper conical section having an apex substantially coincident with the longitudinal axis of the bit, the conical section registering with and merging in a peripheral juncture with the cylindrical section, and cutting stones substantially uniformly distributed over the cutting surfaces of both sections and the crown and including a massive elongated apical cutting stone disposed substantially at the apex of the conical section coincident with the longitudinal axis of the bit and having its longitudinal axis positioned on the same angle to the longitudinal axis of the bit as the slope of the conical surface of the conical section, the conical section being provided with a crescent-shaped water-discharge opening adjacent to and substantially concentric with the apex of the section and partly enclosing the massive elongated apical cutting stone and communicating with the water-supplying chamber in the neck portion of the bit for directing drill water across the said massive stone and the entire cutting surfaces of the bit, the said lower section and crown surfaces of the bit being provided with a plurality of substantially equally spaced channels in the lower cylindrical section extending from the peripheral juncture between the upper conical section and around the cutting crown of the bit and thence upwardly along the outer periphery of the cutting crown for leading water from the said curved discharge opening around the crown to the outer periphery of the bit.

2,731,237
COMBINATION EARTH AUGER WITH ROCK DRILLING POINT
Frederick E. Henning, Fargo, N. Dak.
Application November 28, 1951, Serial No. 258,571
4 Claims. (Cl. 255—69)



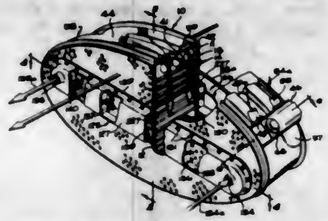
1. An earth drilling tool particularly constructed for drilling through rock and comprising an elongated upstanding axial hub member, a downwardly tapered spiral material-conveying body fixed to said hub with the lower end thereof having substantially the same radius as said hub and gradually increasing in radius toward the top, a rock drilling tip axially fixed at the lower end of said hub and extending downwardly from the lower extremity of said tapered body, a plurality of substantially radially disposed cutters fixed to the bottom end of said tip and extending outwardly in peripherally spaced relation one from the other, a plurality of side cutters extending upwardly from the outer ends of the respective bottom cutters and delivering material to the lower end of said material-conveying body, a plurality of peripherally spaced cutting bits mounted on the marginal portion of said spiral body in spaced relation therearound with the lowermost bit disposed adjacent the outer periphery of the cutting tip, and the other bits positioned to cut adjacent annular zones of progressively increasing diameter to enlarge the initial hole formed by said tip.

2,731,238
LOCKING DEVICE FOR PLAY PEN RAILS
Earl W. French and William B. King, Memphis, Tenn.
Application July 13, 1954, Serial No. 442,944
3 Claims. (Cl. 256—26)



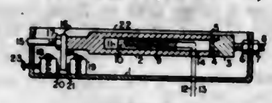
1. In a locking device, a flat elongated metal bar bridging the joint between a pair of members hinged together in end-to-end relation for relative swinging movements in one direction only, said bar having a slot formed adjacent one end and extending perpendicular with respect to the side edges of the bar and opening through the lower of said edges, said bar having a second slot formed adjacent the other of its ends and extending obliquely with respect to said side edges, pivot means carried by one of said members and engaged with said second slot, a keeper carried by the other of said members to be engaged by the first slot and to hold said members in alignment, said second slot having a cam-like action to tighten the slots into engagement with said pivot means and said keeper when the latter is engaged by the first slot, said bar being positioned on the sides of said members opposite from the sides on which the hinge is mounted.

2,731,239
OIL COOLER COOLED BY AIR AND FUEL
Soren K. Andersen, Los Angeles, Calif., assignor to The Garrett Corporation, Los Angeles, Calif., a corporation of California
Application June 15, 1951, Serial No. 231,863
1 Claim. (Cl. 257—2)



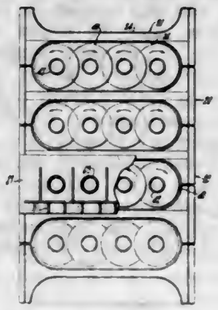
In a heat exchange apparatus: a tubular shell having an inlet port and an outlet port spaced therefrom; perforated header plates at respective ends of the shell; a plurality of thin walled radiator tubes extending longitudinally of the shell and having the respective ends thereof secured in the openings in said header plates, said tubes comprising the cooler core; a plurality of substantially parallel baffles within the core in laterally spaced relation with each other, thereby providing a series of compartments connected together at alternate ends so as to provide a tortuous flow passage through the core from said inlet port to said outlet port; means providing a flow path for a first coolant including elongated hollow caps secured to the respective header plates covering the respective ends of a group of tubes extending across the core so that there are tubes at the respective sides of the caps uncovered thereby, one of said caps having an inlet at one end and an outlet at the opposite end; baffle plates in said caps arranged so that a first coolant fluid entering the inlet of said one cap will flow back and forth through the tubes covered by said caps and be discharged from the outlet of said one cap; a second coolant being adapted to flow through the remaining tubes of the core; a flap for controlling the flow of the second coolant through said tubes; means for actuating said flap; and temperature responsive means for controlling the flap actuating means, said temperature responsive means being responsive to the temperature of oil being conditioned by said apparatus.

2,731,240
THERMAL PROPORTIONAL TIMERS
Malcolm J. Barr, Huntington Park, Calif., assignor to Wayne H. Allen, Phillip L. Savage, and Clarence L. Lapham, all of California
Application November 17, 1953, Serial No. 392,653
10 Claims. (Cl. 257—3)



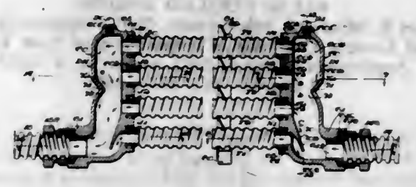
1. An electro-thermal device comprising, in combination, a thermal working body, electrical means for heating the same, other means for cooling the same, a thermally expansible member, electrical means separate from said prior heating means for heating the same, means for simultaneously applying electrical energy to both of said electrical heating means, a switch positioned in relation to said expansible member to open upon a predetermined linear expansion thereof, said switch connected between both said electrical heating means and a source of electric power to simultaneously remove electrical energy from both the electrical heating means, another switch positioned in relation to said expansible member to close upon approximately the same expansion of said member, said other switch connected between said cooling means and said source of power, said cooling means positioned to cool both said body and said expansible member with separate portions of the cooling medium of said cooling means, said other switch being opened upon contraction of said expansible member occasioned by said cooling.

2,731,241
HEAT EXCHANGE DEVICE
Joseph D. Christian, San Francisco, Calif.
Application September 7, 1955, Serial No. 532,985
10 Claims. (Cl. 257—79)



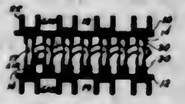
2. A heat exchange device for altering uniformly the heat content of a fluid material containing finely divided solid particles, said device comprising a trough-like casing having a material inlet adjacent one end thereof and a material outlet adjacent the other end thereof, at least one right and at least one left-hand screw mounted in said casing, said screws being interfolded with one screw extending within the rotational path of the other screw, each screw including a shaft having a hollow helical thread thereon having a leading face and a trailing face each extending outwardly from said shaft and mutually cooperating to form a closed fluid conduit, the trailing face on one screw cooperating with the leading face of the other screw to provide during rotation of the screws a space of variable volume in relation to the trough and to effect positive re-location of solid particles in the fluid in contact with said faces upon rotation of said screws, the pitch of each hollow helical thread being from about 30% to about 50% of the diameter of said helix, and the thickness of said thread, measured at a point radially about halfway between the shaft and the periphery of the helix, being not less than 25% of the distance measured substantially parallel to the axes of the screws and between a first plane and a second plane passed respectively through different interfolded screws, each plane being passed through a shaft normal thereto and through the hollow helical thread on said shaft at a point midway of said thread along said shaft, said trough fitting closely adjacent to the rotational path of said flights, means for circulating a heat exchange fluid through each hollow thread, and means for supporting said screws for rotation in opposite directions in said casing with one screw extending within the rotational path of the other screw.

2,731,242
RADIANT HEATING SYSTEMS AND APPARATUS THEREFOR
Gustave Adolph Borg, Watertown, Conn., and Edwin C. Barton, Tuckahoe, N. Y., assignors to Turbo-Ray, Inc., New Rochelle, N. Y., a corporation of New York
Application May 1, 1951, Serial No. 223,978
3 Claims. (Cl. 257—133)



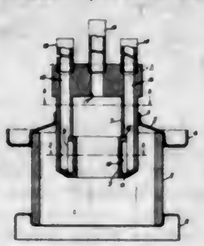
1. In a radiant heating unit, in combination, a heating fluid inlet header; a heating fluid discharge header positioned spaced from said inlet header; a plurality of nozzle tubes projecting outwardly from the opposite facing sides of said headers, respectively, said nozzle tubes on each of said headers being spaced apart and being in substantial axial alignment with the nozzle tubes, respectively, of the other of said headers; thin-walled spirally corrugated heating fluid circulating tubes mounted in position in general parallelism extending between and connecting said headers with the opposite ends of each of said circulating tubes being mounted over and receiving therein aligned nozzle tubes of said headers; and each of said headers comprising a casing having front, rear, inner side, outer side, and opposite end walls forming a fluid distributing chamber therewithin; said outer wall adjacent one end thereof having a fluid passage transversely therethrough; a baffle plate at the inner side of said inner wall within said chamber extended at an inclination inwardly from said inner wall across and spaced from the end of the nozzle tube opposite said fluid passage. said baffle plate having a width less than the width of the chamber within said casing and at its outer end being spaced from the adjacent end wall of the casing; the outer wall of said casing being formed with an inwardly extended baffle disposed therewithin and being extended transversely thereacross intermediate the opposite end walls of said casing, said transversely disposed baffle providing oppositely inclined baffle surfaces at the inner sides thereof facing the opposite end walls, respectively, of said casing; and the end portion of said front wall at the end of said casing opposite said fluid passage being inclined outwardly and inwardly to and being joined with the end wall adjacent thereto to provide at the inner side thereof an inwardly and outwardly inclined fluid flow directing surface.

2,731,243
MOUNTING OF SINUOUS FIN ELEMENTS
Glenn E. Flurschutz, Wellsville, N. Y., assignor to The Air Preheater Corporation, New York, N. Y., a corporation of New York
Application April 5, 1954, Serial No. 420,795
9 Claims. (Cl. 257—245)



1. A heat exchanger envelope having a pair of metallic plates spaced apart to form walls for a fluid passageway therebetween; a plurality of parallel channel members mounted in opposing pairs on said passage walls; a fin element made up of a metallic wire sinuously bent to form leg portions thereof extending in an upright relation between channel members and the intervening yoke portions disposed in alignment and fitted into one of a pair of opposed channels; and another similarly formed sinuous fin element having a majority of loops thereof fitted into a contiguous pair of opposed channel members and other loops offset into the plane of and aligned with the loops of said first element and fitted into related channels to tie said elements together.

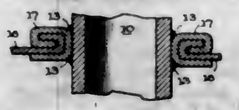
2,731,244
FLUID COOLED ANODE
Robert E. Manfredi, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application March 8, 1952, Serial No. 275,523
2 Claims. (Cl. 257—250)



1. A fluid cooled anode structure comprising a generally cylindrical solid body of conductive material, said body having a bore extending thereinto from one end and terminating short of the opposite end and a counterbore extending thereinto from said one end and terminating short of the bottom of said bore, said body having substantially thick side walls, an annular member having an inner diameter less than said bore and a circumferential recess in the outer surface thereof, said member being bonded to said body in said counterbore to provide an annular fluid passage between said member and said body, and a pair of spaced longitudinal passages extending into said side walls of said body through said opposite end and terminating short of said one end, said longitudinal passages communicating with said annular passage.

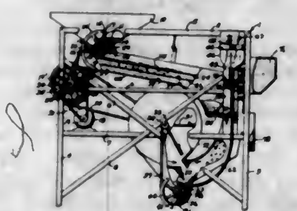
2,731,245
FINNED CONDUIT AND METHOD OF ATTACHING FINS TO CONDUIT
Vernon A. McChesney, Ypsilanti, Mich., assignor to Kaiser Aluminum and Chemical Corp., Oakland, Calif., a corporation of Delaware
Application September 14, 1951, Serial No. 246,555
12 Claims. (Cl. 257—262.16)

4. A heat exchanger comprised of a conduit and an imperforate sheet aluminum fin element having an edge attached to said conduit of a dissimilar metal incapable of being ordinarily soldered to said aluminum element, an intermediate, U-shaped, imperforate anchoring strip of the same material as the conduit interposed between the fin and the conduit elements of dissimilar metals, said U-shaped intermediate strip having the inner faces of its legs in intimate surface contact with and embracing the portions of the sheet aluminum fin element ad-



jacent its edge, the contacting faces of the sheet aluminum fin element and the anchoring strip being compressively joined over a large area in fixed, inseparable relation, the outer portion of the base of the U-shaped anchoring strip being soldered to said conduit element of a dissimilar metal.

2,731,246
SEED CLEANER, GRADER AND TREATER
Halbert C. Wallace and Charles H. Puckering, Fargo, N. Dak., assignors to Link Manufacturing Company, Inc., Fargo, N. Dak., a corporation of North Dakota
Application May 18, 1953, Serial No. 355,494
3 Claims. (Cl. 259—4)



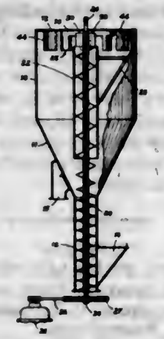
1. Apparatus for treating grain of the character described comprising, a framework having a longitudinal hopper for the grain, said hopper having downwardly converging side walls and an open bottom, a longitudinal housing hingedly connected to the lower edge of one of said downwardlly converging side walls and having its free edge terminating adjacent the free edge of the other downwardly converging side wall to form a passageway for said grain, a treating chamber, means on said hopper and cooperating with said housing for adjusting the size of said passageway, rotatable means in said housing, means for rotating said rotatable means, said rotatable means having angle portions thereon for catching said grain and delivering same through said passageway in regulated predetermined amounts and delivering same to said treating chamber in continuous flow, a container having a supply of liquid disinfectant therein, a tubing connecting the container to the treating chamber, means in said line for regulating flow of the liquid to said chamber, and means for agitating said grain in the treating chamber to mix the grain with said disinfectant and delivering said grain to storage.

2,731,247
APPARATUS FOR MALAXING AND MIXING
Charles Hudry, Roussillon, France, assignor to Societe Rhodiaceta, Paris, France, a body corporate of France
Application July 21, 1953, Serial No. 369,338
Claims priority, application France April 11, 1953
3 Claims. (Cl. 259—6)



1. An apparatus for continuously malaxing and mixing, which comprises a cylindrical casing having discontinuous ribs on its inner surface and axially spaced entrance and exit orifices, a member carrying interrupted worm threads mounted for rotation and reciprocation in said casing so as to permit passage of said ribs between the gaps in said interrupted worm threads, and an axially fixed member carrying a continuous worm thread rotatably mounted in said casing adjacent said entrance orifice, said continuous worm thread and said interrupted worm thread forming a channel within said casing between said entrance and exit orifices.

2,731,248
MIXER
Chester Donald Fisher, Muncy, Pa., assignor to Sprout, Waldron & Company, Muncy, Pa., a corporation of Pennsylvania
Application April 25, 1952, Serial No. 284,430
7 Claims. (Cl. 259—97)



1. A mixer especially adapted for effecting uniform mixing of granular materials of different particle size comprising a generally vertical casing, vertical conveyor means mounted within said casing to lift the materials therein to be mixed from the lower end to the upper end of said casing, rotary means cooperating with said conveyor means at the upper end thereof to cause said lifted materials to be discharged radially outwardly into the surrounding open portion of the casing, means forming a plurality of baffle members located at positions intermediate the discharge end of said conveyor means and the wall of said casing in the path of said radially discharged materials, said baffle members being angularly spaced and having an aggregate circumferential dimension of approximately one-half the total circumference of said baffle means to effect interception of approximately one-half of said discharged materials while permitting the remainder thereof to pass radially therebeyond, said baffle members being open along the lower edges thereof to cause said intercepted materials to drop within the inner portion of said casing, and each said baffle member having an inturned and generally radially arranged flange along the far edge thereof with respect to the direction of rotation of said rotary means to provide a relatively sharp cutoff between said intercepted materials and said materials passing beyond said baffle members.

2,731,249
HATCH LOADING TRANSIT CONCRETE MIXING DRUM
John Foster Oury, Du Page County, Ill., assignor to Oury Engineering Company, Wheaton, Ill., a copartnership
Application September 26, 1951, Serial No. 248,397
20 Claims. (Cl. 259—161)

1. An open ended concrete mixing drum having a plurality of spirally positioned blades interior of the said drum extending substantially the length of the drum secured to the side wall thereof and a closure member secured to the edges of the blades along their edges for a short distance at the open end of the said drum whereby the central opening between the edges of the blades is



closed and channels are formed about the outer surface of the said closure member.

2,731,250
SUPPLEMENTAL FEED APPARATUS FOR INTERNAL COMBUSTION ENGINE
William G. Yon, Altoona, Pa.
Application September 23, 1952, Serial No. 311,043
2 Claims. (Cl. 261—18)

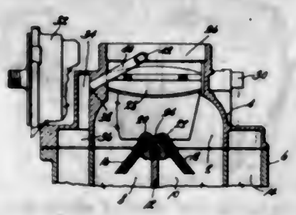


1. In combination with an internal combustion engine having an intake manifold and a charge forming device connected to said manifold, supplemental feed apparatus comprising a closed receptacle mounted in upright position adjacent the engine and containing a vaporizable liquid, a main air inlet tube extending from outside the receptacle eccentrically through the top portion thereof to a location adjacent the bottom of the receptacle to admit atmospheric air to the interior of said recepacle near the bottom of a body of liquid contained therein, means connected to said intake manifold providing a fluid passage leading to the interior of said manifold, a feed tube connected at one end to said means in communication with said fluid passage and connected at its other end centrally to the top portion of said receptacle and communicating with the interior of said receptacle near the inner surface of said top portion thereof for conducting vapor and air from said receptacle to said fluid passage, a reservoir containing highly volatile liquid disposed above said one end of said inlet tube and mounted thereon, and means connecting said reservoir to said air inlet tube at said one end of the latter and controlling the admission of liquid contained in said reservoir to said air inlet tube.

2,731,251
CARBURETOR VENTING DEVICE
Clarence R. Lunn, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application March 27, 1951, Serial No. 217,794
7 Claims. (Cl. 261—64)

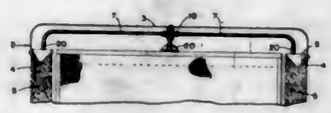
2. In a carburetor having a fuel supply chamber, an intake passage, an air intake opening therefor and means for supplying fuel thereto; venting means for said fuel chamber comprising a plurality of venting tubes in communication with the space above the fuel in said fuel chamber and extending into said intake passage relatively near to the air intake opening, the inner ends of said tubes being cut off at an angle to the axis of said tubes

and said tubes being adjustably supported in the body of the carburetor so that they can be rotated to position the inner ends thereof at any desired angle to the axis



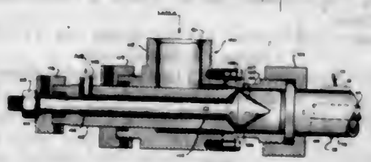
of the intake passage, so that the pressure above the fuel in the fuel chamber can be controlled by the position of said tubes, and means whereby the tubes can be retained in any set position.

2,731,252
FLOW DISTRIBUTION VALVES FOR EVAPORATIVE COOLERS
Gust Goettl, Phoenix, Ariz., assignor to International Metal Products Co., a corporation of Arizona
Application December 23, 1953, Serial No. 399,880
3 Claims. (Cl. 261—71)



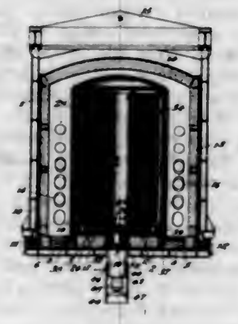
2. In an evaporative cooler having a case including a top, evaporative pads having V troughs at their tops, a distribution head secured to the central portion of the under side of said top, and distribution tubes extending outward from said head to said troughs with their outer ends bent downward toward the center of said troughs, a flow regulating and distribution valve for the ends of each of said distribution tubes composed of a body consisting of a disk of resilient sheet metal upwardly folded diametrically and having a horizontal tubular distribution channel along said fold, directing the flow of water from said tube toward each of the end portions of said V trough, and a vertical centrally disposed tubular socket formed between the adjacent upwardly folded portions of said disk, resiliently and frictionally engaging the outer end portion of said distribution tube; the said horizontal distribution channel having a bottom portion adapted to contact and seat on the end of said distribution tube when said body is pushed upward onto said tube and regulate and close the flow of water from said tube.

2,731,253
RUBBER FOAM MIXER
George A. Spencer, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application January 5, 1953, Serial No. 329,641
2 Claims. (Cl. 261—118)



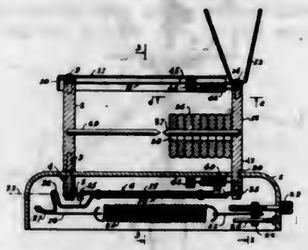
1. In apparatus for processing latex the combination of a foam mixer and an aerator, the mixer having circularly arranged stator blades, a driven shaft arranged axially of said stator blades, a rotor secured to said shaft and having blades arranged for cooperation with said stator blades, means defining a tubular inlet opening arranged coaxially of said shaft for feeding latex into said housing, the aerator having a T shaped conduit with conically tapered walls forming a passage defining a converging path of flow for latex through one arm, said arm attached to and axially aligned with said tubular inlet, a cylindrical housing provided with an axial bore, the housing of less diameter than and axially mounted in said passage with one end substantially concentric with said tapered walls, a metering rod of less diameter than said bore centered in and extending at least the length of said bore and adapted for longitudinal movement, means defining a tubular air inlet communicating with said bore, bore blocking means on the end of said rod at said one end of said housing and adapted to deflect the flow of air from the bore across said path of flow of latex in said passage, means on the end of said rod opposite said bore blocking means adapted to move said rod longitudinally in said bore, means on said conduit for varying the length of said housing in said passage, and a free end extension on said mixer shaft extending into said latex inlet opening, radially spaced from the walls thereof and axially aligned with said passage in said aerator, whereby the latex passing through said housing is aerated and formed into a tubular shape as it passes from the aerator to the mixer.

2,731,254
ANNEALING FURNACE STRUCTURE
George J. Campbell, Sparrows Point, and Lewis G. Coscia, Baltimore, Md., assignors to Bethlehem Steel Company, a corporation of Pennsylvania
Application October 11, 1951, Serial No. 250,852
10 Claims. (Cl. 263—40)



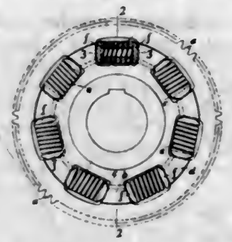
1. A heat-treating furnace comprising top, side and bottom walls, forming a closed heating chamber, heating means disposed adjacent thereto, a fan mounted centrally above the bottom wall, a diffuser plate formed of a plurality of segments surrounding the fan each of said segments having a base member and a plurality of tapered upstanding vanes formed integral therewith which define passageways of greater width at the outer periphery of the diffuser plate for gas circulation, the inner ends of the upstanding vanes extending outwardly in a direction substantially the same as that of the gas stream discharged by the fan and the outer ends of the vanes bent so as to extend in a direction substantially radial with respect to the center of the fan, the base member between the outer ends of the vanes having an upwardly curved surface to deflect upwardly the gas after passing through the passageways in the diffuser plate, a hearth plate mounted on the diffuser plate and secured to the tops of the vanes for supporting the material to be heated, and means for rotating the fan whereby gas is forced outwardly through the passageways in the diffuser plate.

2,731,255
WEIGHING MECHANISMS
William Stelzer, Summit, N. J.
Application November 25, 1953, Serial No. 394,344
5 Claims. (Cl. 265—63)



1. A weighing mechanism comprising a stationary frame, a pair of spaced horizontal parallel check links arranged one above the other consisting of flexible bands having good tensile strength, each having one end secured to said stationary frame, a load carrying member comprising a tray to carry a load to be weighed, said load carrying member being secured to the other ends of said check links so that said load carrying member is constrained to move vertically where all points of said load carrying member have equal velocity, a plurality of removable counterweights of known weight supported by said load carrying member, a spring type resistant arranged to act vertically to oppose the gravitational force acting on said load carrying member, and means located intermediate said check links and exerting a normally horizontal force against said load carrying member to place both of said check links under tension.

2,731,256
RESILIENT POWER-TRANSMISSION WHEELS
John Frederick Alcock, Leeds, England
Application April 13, 1951, Serial No. 220,743
Claims priority, application Great Britain December 29, 1950
2 Claims. (Cl. 267—1)



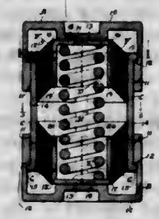
1. Means for supporting a helical compression spring, comprising the combination with the spring, and a pair of relatively movable members by which the spring is compressible, of a pair of similar supporting pads situated at opposite ends of the spring, one side of each pad being provided with a recess which accommodates the adjacent end of the spring, and the opposite side of each pad having thereon two parallel ribs which divide the last mentioned side into three substantially flat abutment surfaces, and through the medium of which the pad is supportable by both of the relatively movable members with a tenon-like part of one of the said members extending between the ribs and bearing against one of the abutment surfaces, and with the other of the said members housing the ribs and bearing against the other abutment surfaces, so that the ribs serve by co-operation with the adjacent parts of the said members to prevent lateral displacement of the pad irrespective of the relative positions occupied by the said members.

2,731,257
INDEPENDENT VEHICLE WHEEL SUSPENSIONS
Kai H. Hansen, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 4, 1952, Serial No. 318,701
1 Claim. (Cl. 267—8)



In an independent wheel suspension, the combination of a frame, a pair of vertically spaced wishbone control arms pivotally connected at one of their ends to said frame, a wheel supporting member pivotally mounted on the other ends of said arms, a mounting plate carried by the lower of said control arms and having an integral extension extending beyond each of the opposite side edges of said arm, a substantially vertically disposed, rectilinearly operating shock absorber operatively connected to one of said extensions and to said frame, a vehicle stabilizing torsion bar operatively connected to the other of said extensions and to said frame, a coil spring disposed between said mounting plate and said frame, said spring engaging said mounting plate at points disposed between the points of attachment thereon of said shock absorber and stabilizing torsion bar, and a seat formed in said mounting plate supporting said spring.

2,731,258
FRICTION SNUBBER FOR RAILWAY CAR TRUCK SPRINGS
Arnold E. Dentler, Western Springs, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a corporation of Delaware
Application November 3, 1952, Serial No. 318,407
4 Claims. (Cl. 267—9)

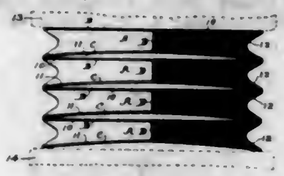


4. In a friction shock absorbing mechanism, the combination with a pair of friction casings having interior friction surfaces, said casings being relatively movable toward and away from each other; of friction shoes having their opposite ends slidingly engaged with said friction surfaces of said casings; a central member in each casing between said shoes, said central member being divided lengthwise into sections corresponding in number to said shoes, the sections being respectively opposed to said shoes, said central member being engaged by said casings and moved inwardly of the mechanism thereby; and a rubber pad interposed between each section and the corresponding shoe and vulcanized thereto, respectively.

2,731,259
RUBBER CUSHIONING MECHANISMS
Arnold E. Dentler, Western Springs, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a corporation of Delaware
Application April 28, 1953, Serial No. 351,639
3 Claims. (Cl. 267—63)

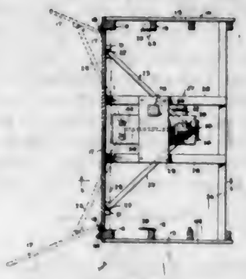
1. A shock absorbing mechanism comprising a plurality of units arranged in series, each unit comprising a pair

of metal plates and a rubber pad interposed between and bonded to said plates, one of said plates of each unit



being flat and the other plate thereof being curved, adjacent units facing each other, the flat plate of each unit facing the curved plate of the adjacent unit.

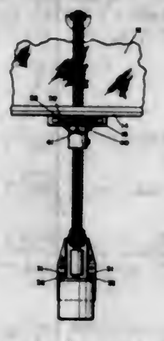
2,731,260
DOOR OPERATING MECHANISM
Beryl G. Freeman, Kilgore, Tex.
Application September 23, 1952, Serial No. 311,065
1 Claim. (Cl. 268—63)



In mechanism for opening and closing a door, a fixed support, a screw shaft mounted for axial rotation on the support, a traveler assembly mounted on the screw shaft, said assembly comprising a housing including a lateral guide portion, a nut rotatably confined in said housing and threaded on the screw shaft, an operating arm connected at one end to said housing and having another end connectible to a door to be opened and closed, said nut having circumferential teeth, a spring pressed two-way ratchet dog on said housing guide portion engaging the ratchet teeth and yieldably holding said nut against rotation relative to said housing, and a guide rod fixed on said support and engaging said housing guide portion, bumper springs on said support at the opposite ends of said screw shaft, said bumper springs being arranged to be engaged by said housing as said housing arrives at opposite ends of the screw shaft and gradually compressed whereby further travel of the housing along the screw shaft in the same direction is gradually arrested until the ratchet dog is released from teeth on the nut whereby the nut is temporarily free to rotate relative to the housing.

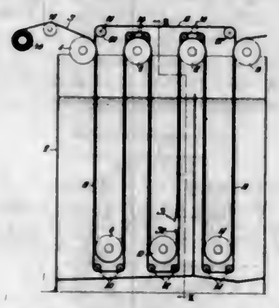
2,731,261
CONNECTING MEANS BETWEEN WINDOW AND ACTUATOR
Vern R. Drum, Cleveland, Ohio, assignor to The Cleveland Pneumatic Tool Company, Cleveland, Ohio, a corporation of Ohio
Application July 22, 1953, Serial No. 369,675
2 Claims. (Cl. 268—124)

1. In a device of the character described, a substantially vertical screw adapted to rotate on its own axis, supporting means for the ends of said screw, a reversible motor connected to said screw for imparting rotary motion thereto in either direction, a nut operatively engaging said screw for up and down movement thereon upon said rotary motion, a window movable up and down with said nut, a runner fixed to the lower side of said window, a leaf spring connected at its apex to said nut,



and means connecting the free ends of said spring to said runner for lengthwise movement relative thereto.

2,731,262
METHOD FOR THREADING STRIP THROUGH A CONTINUOUS STRIP PROCESSING LINE
Harry C. Morrow, Pittsburgh, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Application June 25, 1953, Serial No. 364,128
2 Claims. (Cl. 271—2.1)

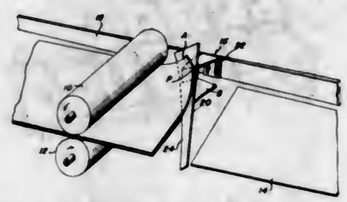


1. The method of fastening together broken ends of a strip passing through a tank having a liquid therein in a plurality of vertical passes around spaced apart upper rolls having at least the upper part thereof located above the liquid in said tank and spaced apart lower rolls located at the bottom of said tank with a reversible chain following the path of the strip through the tank on each side of said strip; which method comprises feeding that part of the strip in the exit end of the tank toward the exit end of the tank until the broken end is adjacent one of the rolls above the liquid level, pulling that part of the strip in the entry end of the tank backwardly toward the entry end of the tank until the broken end is adjacent one of the rolls above the liquid level, fastening the last named end of the strip to the chains, moving the chains with the attached strip toward the exit end of the tank until the last named end of the strip is adjacent the first named end, and then fastening the ends of the strip together.

2,731,263
SHEET SEPARATOR
Albert Baril, Jr., and Irvin H. De Barbieris, New Orleans, La., assignors to Thos. J. Moran's Sons Incorporated, New Orleans, La., a corporation of Louisiana
Application July 13, 1953, Serial No. 367,528
3 Claims. (Cl. 271—18)

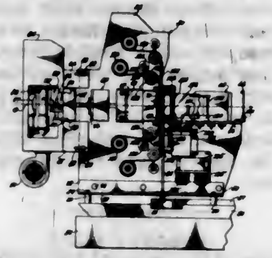
2. In a device for separating first and second sheets positioned one against the other, means for moving the sheets in a given direction, and a sheet separator means having a leading edge which is skewed to intersect the plane of the sheets in a given region of said plane at a

first acute angle and to intersect at a second acute angle a plane perpendicular to said direction of movement of the sheets so that a portion of the edge is first over the second sheet side, the arrangement being such that with the first sheet having a leading edge in said region in advance of the leading edge of the second sheet in said region, and with the second sheet in said region having a



leading edge at a greater angle than the said angle of intersection of the edge with the plane perpendicular to the direction of movement of the sheets, the said advance leading edge of the first sheet will first engage the edge and be deflected in a direction tending to separate the sheets and subsequently a leading point on the second sheet will be engaged by the edge and forced away from the first sheet.

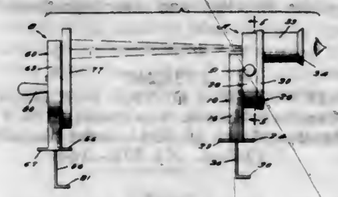
2,731,264
PROJECTOR SYSTEM FOR COMPOSING IN COLOR AND FORM
Charles R. Dockum, Pasadena, Calif.
Application November 20, 1952, Serial No. 321,700
15 Claims. (Cl. 272—10)



1. In a projector means for composing in color and in form, the combination of: a projector frame including a vertical mounting plate and a forwardly extending horizontal platform; a film aperture rearwardly of the platform; light beam projection means rearwardly of the aperture in alignment therewith including a light source, a light limiting means, a condensing lens assembly between the light source and the light limiting means, and a lens between the light limiting means and the aperture; a tiltable lens assembly operably positioned forwardly of the aperture on the platform; color filter means interposed in the path of the light beam, and carried by the frame; a plurality of film strips of selected patterns mounted on the frame and adapted to be moved across said aperture in closely spaced relation thereto one of said film strips being operably mounted on said horizontal platform for movement in angular relation to the movement of the other film strips whereby the selected patterns of the film strips when projected upon a screen interfuse to produce selective new pattern forms.

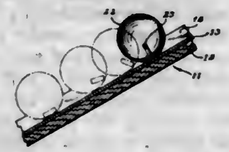
2,731,265
OPTICAL GAME DEVICES
Robert W. Schneider, Los Angeles, Calif.
Application September 17, 1952, Serial No. 309,986
4 Claims. (Cl. 273—1)

1. In a game of the character described, the combination of a hand supported sighting unit and a hand supported target unit, said sighting unit comprising a hollow cylindrical housing having a pair of aligned apertures in its front and rear walls, a sighting tube projecting from the said front wall in axial alignment with said apertures, a rotatable disk within said housing having an aperture to move across the line of sight through said apertures and the sighting tube, and means depending from within said housing for imparting rotational motion to said disk; said



target unit comprising a hollow circular housing, a shaft journalled through the front and rear walls of said housing, a wheel mounted on the forward end of said shaft at the outer side of said front wall and having indicia on its front face, and means depending from within said housing for imparting rotational motion to said wheel, said means of the two units to be manipulated by two individuals simultaneously.

2,731,266
MAGNETIC BALL GAME
Roger Neilson, New York, N. Y.
Application August 7, 1953, Serial No. 372,859
3 Claims. (Cl. 273—121)



1. A magnetic game device comprising a game board having an inclined surface of magnetic material, a ball shaped body rollable on said surface and having a thin wall of non-magnetic material surrounding an inner space, and a bar magnet confined in said space and having two pole ends resting on and contacting said wall simultaneously in the position of rest, said magnet being freely movable in said space whereby said magnet will tumble when said body rolls on said surface.

2,731,267
ROTATING CHANCE GAME APPARATUS
Charles Brenner, Philadelphia, Pa.
Application November 12, 1952, Serial No. 319,910
2 Claims. (Cl. 273—143)



2. In a game apparatus, a frame including a vertical partition wall, a casing having a pair of windows side by side in the top thereof and detachably mounted on the frame, an axle supported by the partition wall and having a journal projecting from each face of said partition wall, a disc wheel revolvably mounted on each axle journal and having marked segments on the periphery thereof visible through a window in the casing, a pinion connected to each disc wheel contiguous the partition wall, toothed operating levers on opposite sides of said partition wall for cooperation with the pinions, means mounting said

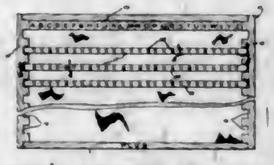
levers for oscillation and movement into and out of mesh with their respective pinions, said levers having ends projecting through slots in opposite sides of the casing for simultaneous depression by the thumb and fingers positioned on said opposite sides of the casing to rotate said levers in one direction and cause the toothed portions to engage the pinions, and spring means to rotate said levers in the opposite direction and disengage them from said pinions.

2,731,268
TOKEN-MIXING DEVICE FOR GAMES
Charles S. Raizen, New Rochelle, N. Y.
Application March 26, 1954, Serial No. 419,008
7 Claims. (Cl. 273—144)



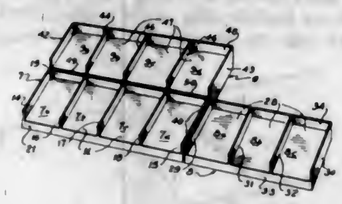
1. For a game of chance, a token-mixing device comprising a substantially cylindrical receptacle having an aperture in its periphery said entire receptacle being permanently rotatable about a horizontally extending axis, a substantially cylindrical stationary housing having a vertical front wall, a vertical rear wall and a peripheral wall surrounding said receptacle co-axially and having an inner radius considerably larger than the outer radius of said receptacle whereby a circular channel is left between the peripheries of said rotatable receptacle and stationary housing, and a wall affixed to said receptacle and extending across said channel, said housing having a front opening, the outer peripheral surface of said receptacle having a recess sloping toward a line under the top of said opening in a position in which said recess is higher than said axis, said recess being spaced in peripheral direction from said aperture, said wall being positioned immediately aside of said recess.

2,731,269
REBUS PUZZLE COMPUTER
Howard L. Frohman, New Haven, Conn.
Application June 19, 1953, Serial No. 362,873
2 Claims. (Cl. 273—148)



1. A rebus puzzle computer comprising a board inscribed adjacent to and inwardly of the marginal edge thereof with letters of the alphabet, support members on the board along the marginal edge of said board, strip members each having on a side face the letters of the alphabet inscribed thereon positioned in spaced relation inwardly of the marginal edge of said board and engageable with said support members, said strip members being shaped so that the letters of the alphabet are in registry with each other and with the letters of the alphabet adjacent the marginal edge of said board, each of said strip members being formed with a plurality of bores extending inwardly from the top face thereof and in registry with the letters of the alphabet on the side face thereof, and pegs conformably shaped to fit the bores in said strip members insertable in the bores in accordance with the letters of a word to be tabulated in solving a rebus puzzle.

2,731,270
FOLDABLE COMPARTMENTAL CARD HOLDER
C. Milton Schulz, Ventura, Calif.
Application October 27, 1953, Serial No. 388,518
2 Claims. (Cl. 273—148)



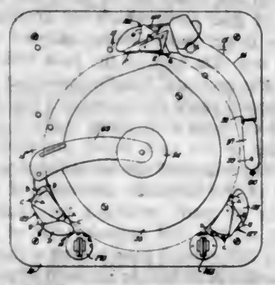
1. In a device of the kind described, a main card holding section comprising an elongated front floor having upstanding transverse wall portions spaced apart therealong affording between them card holding compartments, a rear card holding section comprising an elongated floor rearwardly bordering said front section and having downwardly directed flange portions which step it up in relation to said front floor section, said rear floor having upstanding transverse wall portions spaced apart therealong, affording between them card holding compartments, said rear compartments having open fronts and being aligned with compartments in said front floor section so that cards in the compartments of said rear section may be slid forwardly over cards in the compartments of said front section, an elongated auxiliary compartmental card holding section extending in an endwise manner from one end of said main section and being hinged thereto so as to be foldable over thereupon, and extensible hinge means connecting said rear section with said main section so that said rear section may be swung to open position adjacent said main section and after said auxiliary section has been folded over upon said main section said rear section may be upswung and superimposed upon said auxiliary section.

2,731,271
COMBINED DEALER, SHUFFLER, AND TRAY FOR PLAYING CARDS
Robert N. Brown, Gaylord, Mich.
Application July 14, 1952, Serial No. 298,696
13 Claims. (Cl. 273—149)



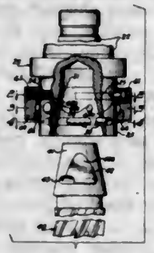
1. A card dealing device comprising a rotatable magazine for a stack of cards, a base comprising means for restraining the bottom card of the stack which is in said magazine whereby continued movement of said magazine angularly displaces said stack with reference to said bottom card whereby the outer corner of said bottom card projects outwardly beyond said stack at certain times, means engageable with said outer corner of said bottom card for deflecting the leading edge of said card out of the path of the bottom of said magazine, and means for ejecting the bottom card thus deflected.

2,731,272
PHONOGRAPH APPARATUS
Farlow B. Burt, South Bend, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application August 4, 1949, Serial No. 108,571
3 Claims. (Cl. 274—10)



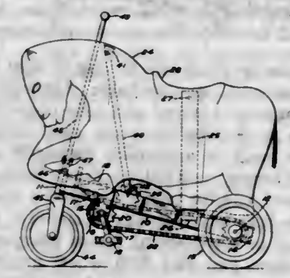
1. In a phonograph apparatus, in combination, a turntable for supporting a record during the reproduction of both sides thereof, a tone arm constructed and arranged to follow in the grooves on both sides of said record, means for positioning said tone arm in the grooves on either side of said record, said turntable being provided with a driving connection, a magazine for receiving a reproduced record, means for supporting a stack of records for release to said turntable one at a time upon actuation of said means, means for actuating said first named means, means for supporting said turntable in a first position below said stack of records and in a second position out from under said stack, means engageable with said driving connection when the turntable is in its first position for rotating the same and disengageable therefrom to permit movement of said turntable to its second position, and a mechanism for positioning said turntable in said first and second positions, said second named means including means for supporting a reproduced record for deposit in said magazine upon movement of said turntable to said second position.

2,731,273
TOOL HOLDERS
Ralph A. Edens, Grosse Pointe Woods, Mich., assignor to Falcon Tool Company, a corporation of Michigan
Application May 23, 1955, Serial No. 510,466
3 Claims. (Cl. 279—81)



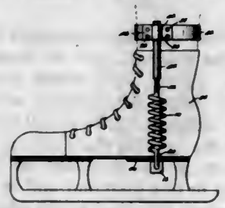
1. In combination, a tool holder having an axially disposed female taper therein, a pair of oppositely disposed reciprocating locking pins each having a cam head extending radially outwardly from said tool holder and a locking head extendable axially into said tapered bore, spring means constantly urging said locking pins radially outward, a cam lock ring having diametrically opposite locking cams formed therein, one of said locking cams being disposed over the cam head of each locking pin, a pair of fixed oppositely disposed locking pins extending through said tool holder presenting a portion thereof within said female taper in a plane below the plane occupied by said reciprocating locking pins, a tool including a male tapered shank formed complementary to the female taper in said tool holder with axially flat portions on opposite sides thereof and having a pair of locking cams formed at the base of said flat portions and extending partially around said tapered shank therefrom, the locking cams of said tool shank engaging the fixed locking pins of said tool holder to lock the tool in said tool holder when the tool shank is inserted into the tool holder taper and turned a partial turn in respect to said tool holder, the said reciprocating locking pins engaging the flat portions of said taper responsive to the turning of the said cam lock ring after the said tool has been positioned in said tool holder and turned to engage said locking cams with said locking pins, and means releasably maintaining said cam lock ring in the position to which it is turned.

2,731,274
ANIMAL SIMULATING VELOCIPEDE
Herbert J. McCauley, Jr., Buffalo, N. Y.
Application February 28, 1955, Serial No. 490,904
8 Claims. (Cl. 280—1.196)



1. In a wheeled toy vehicle having a frame structure and ground wheels rotatably supported thereby, an animal simulating body member including a rider-supporting saddle portion, means fixed to said frame structure and pivotally connected to said body member directly beneath said saddle portion, drive means including a pedal and drive sprocket mechanism carried by said frame structure, a driven sprocket connected to one of said ground wheels and a driving chain connecting said sprockets, and means for oscillating the body member about said pivotal connection comprising a third sprocket in meshing engagement with said chain between said first two sprockets and rotatably supported by said frame structure, and a link connected pivotally and eccentrically to said third sprocket at one end and to said body member at its other end.

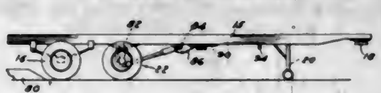
2,731,275
SKATER'S BRACE
Dale D. Paden, Omaha, Nebr.
Application May 9, 1952, Serial No. 286,989
1 Claim. (Cl. 280—11.36)



An ankle support for use with ice skates comprising a mounting plate adapted to be secured in a transversely disposed position to the under surface of a heel plate of a skate, the ends of said mounting plate being extended downwardly providing ears and said ears having openings therethrough, the opening of one ear being aligned with the opening of the other, an L-shaped rod having a horizontally disposed lower end pivotally mount-

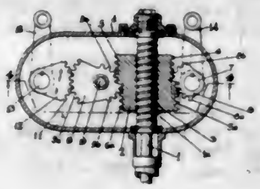
ed in said ears and a vertically disposed section in which a coil spring is provided extended from one end of the said lower end, a strap having a socket thereon adapted to be positioned around the leg of an individual with the socket aligned with the vertically disposed section of the L-shaped rod carried by a mounting plate on a heel plate of a skate on a shoe on the foot of the leg, and a sleeve held in the socket of the strap and in which the upper end of the vertically disposed section of the rod is slidably held whereby lateral bending of the leg is restricted with the restricting means slidable in relation to the leg.

2,731,276
SUPPLEMENTAL WHEEL ASSEMBLY FOR VEHICLES
Harold H. Cross, Flint, Mich.
Application September 29, 1950, Serial No. 187,504
2 Claims. (Cl. 280—81)



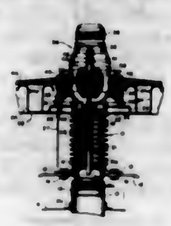
1. In a trailer or truck unit having at least one permanent wheel support, a detachable supplemental wheel support comprising, a wheel and axle combination, fifth wheel means to detachably secure said combination to the trailer or truck in a position forwardly of the permanent wheel support and independently thereof, a tongue member on said axle for connecting to the truck unit forwardly of the fifth wheel means to stabilize said supplemental support unit, coil spring means interposed between said combination and said fifth wheel means, threaded elevating means interconnecting said combination and said spring means facilitating adjustment of the stress in said spring means, whereby to equalize the load carried by said supplemental support and the permanent support on the truck unit and support means independent of said threaded elevating means for supporting the load of said spring means.

2,731,277
DIFFERENTIAL STEERING MECHANISM
Fred A. Pearne, Biggs, Calif.
Application June 20, 1955, Serial No. 516,500
2 Claims. (Cl. 280—93)



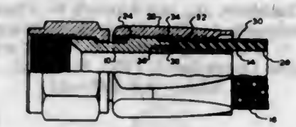
1. In a differential steering mechanism for automotive vehicles of the type having a pair of front wheels rotatably mounted on spindle arms which are arranged for pivotal movement about substantially vertical pivots, a steering shaft, an elongated differential rack mounted on and connected to the steering shaft and arranged for longitudinal movement in one direction on the shaft when the shaft is turned in one direction and in the reverse direction when the shaft is turned in the opposite direction, the said rack at one end portion having a set of longitudinally aligned teeth at one of its side edges and another set of longitudinally aligned teeth at its other side edge, one of such sets of teeth being arranged farther from the longitudinal axis of the rack than the other set of teeth, the said rack at its other end portion having similar sets of teeth adjoining but reversely arranged with respect to the first mentioned sets of teeth, a stub shaft mounted adjacent one side of the rack and arranged for pivotal movement about an axis at substantially right angles to the steering shaft, a differential gear secured to the stub shaft and having two adjoining sets of arcuately arranged peripheral teeth, one set being arranged along an arc having a substantially larger radius than the radius of the arc along which the other set of teeth are arranged, the particular set of gear teeth which are arranged along the arc having the larger radius being adapted to mesh with those teeth at one side edge of the rack which are closest to the axis of the rack and the particular set of gear teeth which are arranged along the arc having the smaller radius being adapted to mesh with those teeth at the last mentioned side edge of the rack which are farthest from the axis of the rack, a second similar differential gear pivotally mounted at the opposite side edge of the rack and having its sets of teeth arranged for engagement with the rack teeth on the said opposite side of the rack, the last mentioned differential gear having a third set of gear teeth, a segmental gear having its teeth engaging with the third set of gear teeth of the second differential gear, a stub shaft secured to the segmental gear, rigid arms secured to the stub shafts, and link means connecting the stub shafts to the spindle arms.

2,731,278
SELF-SEALING RELEASABLE COUPLING
Harry R. Soderstrom, Wichita, Kans., assignor to Boeing Airplane Company, a corporation of Delaware
Application June 9, 1953, Serial No. 360,518
3 Claims. (Cl. 284—19)



1. In a self-aligning flexible coupling assembly comprising a fixed coupling portion and a flexible coupling portion subject to being brought together with angularly misaligned axes; said fixed coupling portion having an annular end seal, a valve element operatively carried by said fixed coupling portion; said flexible coupling portion having an axially compressible bellows with a relatively fixed end and a relatively free end, said flexible coupling portion having an annular end seal formed at said free end arranged for mating and sealing fluid-tight engagement against said annular end seal of said fixed coupling portion, said flexible coupling portion carrying a first spider element having a central guide aperture carried by the relatively free end thereof, said flexible coupling portion carrying a second spider element having a central guide and support aperture carried by the relatively fixed end thereof, rod-like valve actuating means slidably and rockably associated in a centrally disposed relationship within the guide aperture of said first spider element, said actuating means having a shoulder engaging the said support aperture in said second spider element arranged to rockably support said actuating means while limiting relative axial movement with respect to said second spider element, resilient means interposed between said first spider element and said shoulder for maintaining said flexible coupling portion in an extended condition with said shoulder against said second spider element, said flexible coupling portion and said actuating means being unrestrained in the lateral sense about their normal central axis at said free end thereof and arranged when angularly misaligned for engagement of said annular end seal of said flexible coupling portion with said annular end seal of said fixed coupling portion accompanied by axial compression of said bellows and the self-aligning engagement of said actuating means with said valve element for the unseating thereof upon said axial compression of said bellows to a predetermined extent.

2,731,279
FITTING FOR REINFORCED HOSE
Benjamin A. Main, Jr., Jackson, Mich., assignor to Aeroquip Corporation, Jackson, Mich., a corporation of Michigan
Application September 14, 1950, Serial No. 184,813
5 Claims. (Cl. 285—86)



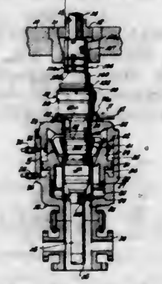
1. A hose and detachable reusable end fitting assembly of the type embodying a nipple and socket having threaded telescoping engagement upon relative rotation for exerting compressive forces upon the hose and located between opposed wall portions of the nipple and socket comprising a hose having a bore defined by an inner tubular portion of rubber-like relatively non-compressible material subject to flow under compressive forces as well as volumetric changes following assembly, an embracing outer tubular portion of said hose reinforcing said inner tubular portion, a circular slit extending axially inward from an end of said hose and forming from said inner tubular portion an annular sealing flap or tube portion, said nipple having an externally threaded body portion and inner and outer radially spaced concentric tubular nipple portions joined at one end to define an axially extending open end annular recess in which said sealing tube portion is disposed, said inner nipple portion being an extension of the bore defining portion of said nipple and having a snug fit within the bore of said hose and extending axially substantially beyond said outer nipple portion at one end of said nipple, said outer nipple portion being disposed in said annular slit and being relatively non-deformable by the compressive forces of assembly whereby said recess has a relatively fixed volume, the free end portion of the outer nipple being tapered, said socket having a bore portion to receive an end of said hose with a snug fit and having means to compress the hose outside of said recess between said socket and said outer and inner nipple portions, a part of said socket being internally threaded to receive the externally threaded portion of said nipple with the bore portion of said socket radially opposed to said outer nipple portion when assembled being radially spaced therefrom to receive the outer tubular portion of the hose which is disposed upon the outer wall of said outer nipple, the bore portion of said socket radially opposed when assembled to said inner nipple being radially spaced therefrom to receive that part of said hose axially spaced from said outer nipple, that portion of said hose embracing said sealing tube portion and having its inner wall defining said slit being disposed on the outer wall of said outer nipple portion and being subjected to the compressive forces of assembly between said nipple and socket with said sealing tube portion disposed in said recess having substantial freedom from such forces whereby sealing takes place between a wall of said recess and said sealing tubular portion primarily by relative fluid pressures and the compressive forces of assembly serve primarily to retain said hose within the socket.

2,731,280
RESILIENT PIPE-CONNECTOR WITH MULTIPART CLAMP
Arthur Walter Goodliffe, Wimborne, and Peter Gerard Proctor, Bognor Regis, England, assignors to Flight Refuelling Limited, London, England, a British company
Application July 10, 1953, Serial No. 367,126
Claims priority, application Great Britain July 22, 1952
4 Claims. (Cl. 285—129)



1. A lightweight pipe connector comprising a sealing sleeve of elastically deformable material having a cylindrical inner surface in which are preformed two shallow circumferential grooves of substantially arcuate cross-section adapted to receive circumferential bulges of similar cross-section formed in the pipe portions to be connected adjacent their ends, the outer surface of said sealing sleeve being cylindrical with chamfered ends, said respective ends occupying conical surfaces which converge outwardly of the sleeve, a pair of similar retaining rings, of sheet metal, each having at one margin an inclined inwardly directed flange, said flanges being complementary to the respective chamfered ends of said sealing sleeve and diverging radially inwardly of the sleeve, and each such ring having further at its opposite margin an outwardly directed flange inclined radially outwardly toward the corresponding flange of the other such ring, a split clamping ring of sheet metal, said clamping ring being of V-section adapted to engage over the inclined outwardly directed flanges of said retaining rings, and means for drawing together the ends of said clamping ring to contract the latter and cause it to exert a wedging action on the inclined outwardly directed flanges of said retaining rings to draw the latter towards one another.

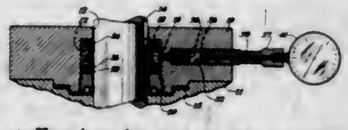
2,731,281
KELLY PACKER AND BLOWOUT PREVENTER
Granville S. Knox, Los Angeles, Calif., assignor to Hydril Corporation, Los Angeles, Calif., a corporation of California
Application August 19, 1950, Serial No. 180,480
10 Claims. (Cl. 286—16.1)



1. In a device of the character described, a housing having a vertically arranged, axial bore, a radially constrictable annular packing member in the housing and coaxial with the housing bore, means for controllably constricting said packer member and allowing it to expand; circumferentially arranged, rigid inserts carried by said packing member and individually movable radially inward and outward when the packing member is constrict-

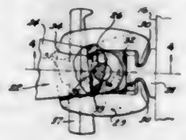
ing and expanding, respectively, a second housing removably entered in the housing bore above the packing member, there being an external annular groove in said second housing exposed within the bore of the first housing and in the horizontal plane of said inserts, said inserts entering said groove when the packing member is radially constricted and thereby holding the two housings against vertical separative movement, a sleeve rotatably mounted in said second housing and held against axial movement with respect thereto, said sleeve extending through and below said packing member, the packing member being operatively constrictable about the sleeve, and a second packing annulus of resilient, plastic material attached to the extended end of said sleeve and radially constrictable to close upon work extending axially through the sleeve bore.

2,731,282
SHAFT SEAL
Joseph D. McManus, deceased, late of Greenwich, Conn., by Cecilia D. McManus, executrix, Greenwich, Conn., and Oliver E. Duemler, Pasadena, Calif., assignors to Walworth Company, Boston, Mass., a corporation of Massachusetts
Application February 4, 1953, Serial No. 335,142
3 Claims. (Cl. 286—27)



1. In a stuffing box for a shaft, the combination of a member having an annular recess adapted to extend around the shaft, said recess having an open end and an oppositely disposed side wall, a packing gland for closing said open end of said recess and forming a side wall spaced from the first said side wall, a pair of sealing rings of synthetic plastic material having a relatively low coefficient of friction and each having an annular flange extending axially adjacent the inner circumference of said rings, said rings being seated respectively upon said side walls with said flanges extending toward each other for defining an annular chamber with the peripheral wall of said recess, said packing gland being adapted to position the ends of said flanges in proximate relation to each other for substantially closing said chamber adjacent the shaft, and means communicating with said peripheral wall of said recess for receiving a plastic packing under pressure for transmission into said chamber for urging said rings into sealing engagement with said member and shaft.

2,731,283
LOCKING MECHANISM FOR BULLDOZER BLADES
John E. Weischel, Milwaukee, Wis., assignor to The Heil Co., Milwaukee, Wis., a corporation of Wisconsin
Application January 9, 1953, Serial No. 330,391
10 Claims. (Cl. 287—20)



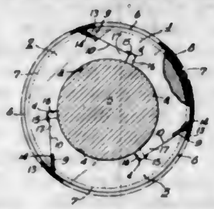
1. A thrust transmitting locking mechanism for connecting a supporting member having a supporting pivot pin to a supported member wherein the latter has an outer surface facing said supporting member and has an inner surface facing away from said supporting member, comprising: a clamping member having oppositely disposed legs embracing said pivot pin with said pin located intermediate the length of said clamping member legs and said clamping member having a shoulder which is engageable with the inner surface of the supported member, said clamping member also having a wall portion which is spaced from said pivot pin on the side of the latter which is opposite the side on which said supported member is located; a thrust member pivotally carried by said pin and having a face normally positioned for abutment with the outer surface of said supported member; and wedge means positioned to act between said pin and wall portion of the clamping member for urging said wall portion away from said pin to thereby clamp the supported member between said thrust member and the shoulder of said clamping member.

2,731,284
SEALING DEVICES
Albert M. Chambers, Jr., and Edward W. Fisher, Palmyra, N. Y., assignors to The Garlock Packing Company, Palmyra, N. Y., a corporation of New York
Application December 5, 1952, Serial No. 324,318
1 Claim. (Cl. 288—11)



A sealing device for effecting a seal between a machine casing and a shaft which extends through a shaft opening in said casing and is rotatable relatively to the latter, the said device comprising a continuous annular, cross-sectionally deformable, rubber mounting portion having an outer peripheral surface adapted to fixedly engage and effect a seal with an opposed cylindrical surface of said machine casing, an annular sealing portion extending radially inwardly from said mounting portion and adapted to effect a sliding seal with a surface associated with and turning with the shaft, and a reinforcing ring, of a single, substantially complete, non-continuous turn of material of substantially circular shape in cross section and split at one circumferential point with the ends thereof in intimate, face-to-face relationship, said reinforcing ring being fixedly embedded within the rubber constituting said mounting portion with a portion of the latter's rubber intervening between the reinforcing ring and said outer peripheral surface, said reinforcing ring being substantially non-resilient cicumferentially and adapted, in use, to compress such intervening rubber between it and said cylindrical surface.

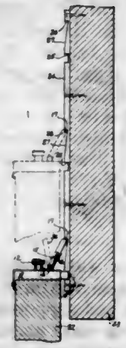
2,731,285
SEGMENTAL METALLIC PACKING RINGS
Edwin H. Cummings, Philadelphia, Pa., assignor to France Packing Company, Philadelphia, Pa., a corporation of Pennsylvania
Application March 31, 1953, Serial No. 345,782
3 Claims. (Cl. 288—13)



1. An annular packing ring, comprising a plurality of complementary flat sided segmental sections, the terminal portions of each section being in overlapped and interseated relation with the respective proximate terminal

portions of the adjoining sections, the interseating surfaces defining flat planes normal to the flat sides of the sections and tangent to a cylinder of greater diameter than the diameter of the inner peripheral surface of the ring and constituting the sole areas of contact between the sections, the confronting surfaces of the sections in the respective interseating areas being recessed and said recesses being disposed opposite to the terminal extremities of the respective overlapped portions so that said extremities are excluded from the said interseating surfaces.

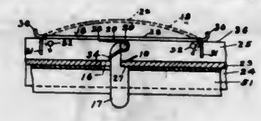
2,731,286
SASH LOCK
Isaac L. Bandy, Granbury, Tex.
Application May 14, 1954, Serial No. 429,849
2 Claims. (Cl. 292—5)



1. In a sash lock for a pair of relatively slidable sashes, a locking strip secured vertically on one sash, said strip having notch means therealong, a casing fixed on the other sash in line with the locking strip, said casing having an open end facing the locking strip, an opposed closed end, and a top wall, a locking bolt slidably confined in said casing and slidably engaging said top wall, said bolt having first and second ends and being arranged to occupy a retracted position in the casing with said first end out of contact with the locking strip and an extended position through the open end of the casing with said first end in contact with the locking strip, spring means acting between the closed end of the casing and said second end of the locking bolt and biasing the locking bolt into contact with the locking strip and into a notch thereof, the top wall of the casing having a longitudinal slot, and a thumbscrew having a shank threaded into said locking bolt at a point near said second end of the locking bolt, said thumbscrew having an enlarged head bearing upon the top wall of the casing, said thumbscrew being arranged to be tightened to hold the locking bolt in either a retracted or an extended position in engagement with said notch means, said notch means comprising succeeding pairs of notches, one of the notches of each pair having straight sided walls and the other of the notches of said pair having one straight sided wall and one sloping wall, a latch pivoted on said locking bolt, said latch having a free end, spring means biasing the free end of the latch into constant engagement with the locking strip even in the retracted position of the locking bolt, the free end of the latch being engageable in the other of the notches of each pair one at a time.

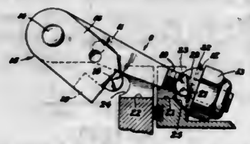
2,731,287
WINDOW SASH TENSIONING DEVICE
Joseph E. Haynes, Baltimore, Md.
Application March 29, 1952, Serial No. 279,303
4 Claims. (Cl. 292—76)

1. A device for holding a sash in a window frame: said device comprising an arcuate spring; a pin connected to the central portion of the concave side of said spring; a plate secured to said central portion adjacent to said pin; a locking arm pivoted to said pin and having a recess intermediate the ends thereof; a spring having an intermediate portion coiled around said pin, with one



end engaging said plate and the other end secured to said locking arm to urge it to a position in which an edge of said recess engages an abutment, when said arcuate spring is depressed, to hold said spring in such condition.

2,731,288
TOGGLE CLAMP
Gilbert B. Langford, Indianapolis, Ind., assignor to the United States of America as represented by the Secretary of the Navy
Application May 7, 1953, Serial No. 353,703
6 Claims. (Cl. 292—258)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A quick release clamp for use with a container and closure having slotted flanges respectively comprising a straight bar member of suitable size to fit the slots of said container and closure, a toggle member having sides pivoted to one end of said bar and constructed to receive said bar between said sides, said sides carrying laterally extending cylindrical bearing portions on the ends thereof which engage the face of one of said flanges, a bearing member having lateral cylindrical extensions thereon carried by the other end of said bar for engaging a face, said other of flanges, said bar and toggle member forming a toggle joint when in closed position.

2,731,289
RUBBER PNEUMATIC AUTO BUMPER ACCESSORIES
Jeff Corydon II, Chicago, Ill.
Application June 26, 1950, Serial No. 170,415
4 Claims. (Cl. 293—67)



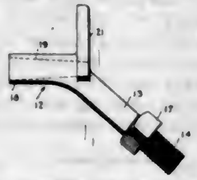
1. A rubber pneumatic auto accessory comprising a relatively narrow casing in comparison to an elongated vertical sectional shape similar to a kidney, said casing having a metallic plate molded in the smaller back side of said kidney shaped casing with a greater thickness of rubber to the outside of said plate than to the inside of said casing, said metallic plate having a threaded bolt-like element extending at right angle from the back of said plate and integral with it for insertion through a suitable hole in an auto bumper, means for fastening said bolt-like element to said bumper, and said casing having a protruding rubber rib running horizontally across the face of the larger side of said kidney shaped casing.

2,731,290
BUMPER GUARDS
Jeff Corydon II, Chicago, Ill.
Application June 19, 1951, Serial No. 232,425
6 Claims. (Cl. 293—71)



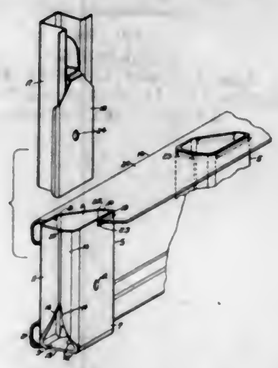
1. A bumper guard consisting of a hollow casing made out of resilient material and means coated with resilient material for fastening said casing to a bumper bar, said casing having a broad relatively flat lower rear wall, a rounded upper rear wall that rises in a smooth arc from said lower rear wall to a bulbous projection in the upper front of said casing, a narrow edge that rises substantially vertically from the central front section of said casing to join said bulbous projection, means in the upper rear wall for the passage of air into and out of said casing, a substantially vertical rectangular slot in said lower rear wall, said first mentioned means coated with resilient material fitted through said slot to said lower rear wall, and bolting means fastened to said same first mentioned means extending through said slot for fastening said casing to a bumper bar.

2,731,291
TOOL FOR USE IN SPLICING AND DEAD-ENDING ELECTRICAL CONDUCTORS
Robert Bellini, Twin Falls, and William H. Kibbie, Jerome, Idaho
Application November 13, 1950, Serial No. 195,404
1 Claim. (Cl. 294—19)



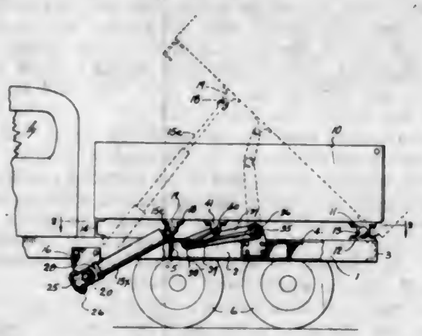
A tool for use in splicing and dead-ending electrical conductors comprising an elongated holding sleeve to be arranged generally horizontally in use, the sleeve having a bore extending through the forward and rear ends of the sleeve, said bore tapering toward the rear end of the holding sleeve, the holding sleeve having a longitudinal slot formed in its top and extending through the forward and rear ends of the sleeve and opening into said bore, the width of the slot being less than the diameter of the bore and sufficiently wide for the passage of the electrical conductor during the splicing operation, the tapered bore receiving a tapered splicing sleeve which cannot pass through the longitudinal slot and frictionally holding the splicing sleeve, the bore of the splicing sleeve then being in alignment with the tapered bore for receiving the ends of the conductors being spliced, a pair of spaced substantially vertical fingers carried by the rear end of the holding sleeve and substantially perpendicular thereto and disposed on opposite sides of the longitudinal slot and extending above the holding sleeve, the fingers defining a vertical passage leading to the longitudinal slot and rear end of the tapered bore, the vertical passage serving to guide one conductor into proper alignment with the adjacent end of said splicing sleeve, the substantially vertical fingers being insertable into a U-shaped dead-end coupling for forcing the same forwardly while the coupling engages upon said holding sleeve and is held substantially horizontally thereby, a shank carried by the holding sleeve and arranged at an inclined angle thereto, and an insulating handle secured to the shank.

2,731,292
STAKE POCKET FOR TRUCK BODIES
Nelson E. Cole, Reading, Pa., assignor to Dana Corporation, Toledo, Ohio, a corporation of Virginia
Application April 15, 1953, Serial No. 349,038
2 Claims. (Cl. 296—43)



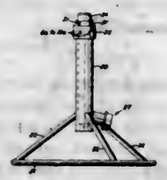
1. In combination with a vehicle body stake rail of channel form having an apertured top flange and a bottom flange for receiving and supporting an open ended stake pocket, of a one-piece stake pocket having a rigid narrow front wall, a resilient comparatively wide back wall and a connecting bottom web, a pair of wide side flanges on the front wall, a pair of narrow side flanges on the back wall, the side flanges extending toward each other and being cut away adjacent the bottom web to permit said back wall to flex, and a weld between said bottom web and the bottom flange of said stake rail.

2,731,293
DUMP TRUCKS
Archibald D. L. Hutchinson, Seattle, Wash.
Application June 18, 1951, Serial No. 232,171
12 Claims. (Cl. 298—22)



8. The combination of a dump truck having a chassis, a dump body hinged thereon, full oscillating means for lifting the body from loading to dumping positions and an equalizing and body guiding toggle linkage secured at one end to the chassis and at its other end to the dump body, said linkage comprising a cross-shaft revolubly mounted by the chassis at a distance spaced from and parallel to the hinge axis, toggle links fixed at one end on the cross-shaft and pivotally connected at their other end to the dump body at opposite sides thereof and at a substantial distance from the hinge axis.

2,731,294
PATTERN SPRINKLER
Jack W. Rothweiler, Portland, Oreg.
Application June 8, 1953, Serial No. 360,236
7 Claims. (Cl. 299—18)



1. A lawn sprinkler comprising a hollow stem adapted to be supplied with water under pressure, a hollow single walled rotary sprinkler head rotatably secured to said stem to have a close running fit with a cylindrical surface thereof, said stem and said head having water channels formed through the walls thereof, all of said channels terminating at said cylindrical surface, certain of said channels in said stem and said head being adapted to cooperate to pass water from said stem and sprinkle a predetermined circular area and to rotate said head, and certain other of said channels in said stem and said head being adapted to cooperate to pass water from said stem and sprinkle a predetermined area outside said circular area.

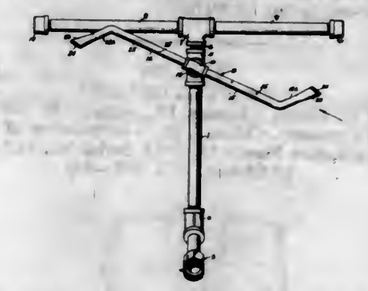
2,731,295
SPRAYING APPARATUS
Raymond M. Snow, Fresno, Calif.
Application June 21, 1954, Serial No. 438,114
3 Claims. (Cl. 299—30)



1. An apparatus for spraying a wide swath of row crops comprising a pair of supports spaced transversely of the rows of crops, each of the supports including a turret having a vertical and a horizontal pivot axle, an elongated boom extended between the supports, and having opposite ends connected to the horizontal pivot axles of the turrets, said boom having a telescopic section therein, a conduit mounted on the boom having an extensible section therein bridging the telescopic section of the boom, discharge nozzles on said conduit at spaced intervals therealong for directing spraying medium onto the crops, and carrying means for each of the supports for imparting earth traversing movement to the boom longitudinally of the row crops with the boom extended transversely thereof.

2,731,296
SPRINKLERS
Granville B. Griffith, McMinnville, Oreg.
Application May 11, 1953, Serial No. 354,159
1 Claim. (Cl. 299—69)

A lawn sprinkler comprising in combination a horizontal hollow tubular base turned upwardly at one of its ends and adapted at said end for attachment to a source of water supply, an upright tubular standard secured to and in open communication with the interior of said base, a bearing cap secured to the top end of said standard, an annular horizontal shoulder formed on the interior of said cap, a hollow vertical shaft rotatably and slidably mounted for vertical movement within said cap, a flange formed on the bottom end of said shaft and adapted under pressure of water passing upwardly through the cap to rotatably contact said shoulder, a T-fitting secured to and in permanent unrestricted open communication with the interior of said hollow shaft, a pair of radially extending perforated sprinkler arms adjustably and rotatably attached at their inner ends to said fitting and terminating at their outer ends in angularly offset nozzles, the outermost surface of each nozzle being flattened and tapered



outwardly with respect to the longitudinal axis of its respective arm to force a fanwise stream of water from said nozzle and whereby rotation of said arms about their longitudinal axes with respect to said fitting will vary the speed of their rotation in a horizontal plane about said standard.

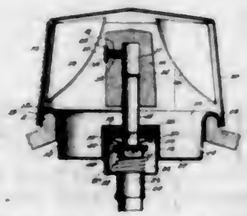
2,731,297
HYDRAULICALLY OPERATED LIQUID SPRAYER
Earl A. Meyer, Madison, Wis., assignor to Bjorksten Research Laboratories, Inc., a corporation of Illinois
Application September 19, 1952, Serial No. 310,449
2 Claims. (Cl. 299—92)



1. A device for spraying liquid comprising a substantially cylindrical chamber having a single inlet at one end thereof and a single outlet at the other end thereof and provided with a flexible partitioning member in the interior thereof, said member being secured thereto at a circumference thereof substantially midway between said inlet and said outlet, said partitioning member adapted to extend alternatively to one end of the chamber or to the other end and to conform with the interior contours of each end of said chamber, said inlet being provided with a check valve and with a three-position valve for shutting off and regulating the flow of liquid therethrough, having a drain-port in one side thereof and adapted to provide for flow from a supply source into said chamber, to shut off flow from said source and at the same time provide drain-flow from said chamber through said drain-port and to shut off all flow and inadapted to provide simultaneously a flow from said source and into said chamber and out said drain-port; said check valve being upstream of said three-way valve and being adapted to prevent back-flow of poison-containing fluids from said chamber into tubulature connected with said source and being entirely enclosed within a tube connected directly with said valve and adapted to be connected with a supply source; said outlet having attached directly thereto a

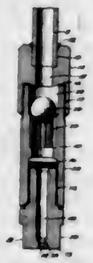
three-position valve and said valve having attached directly thereto a spraying nozzle and substantially funnel-shaped filling receptacle, said valve being adapted to provide for flow from said chamber through said spraying nozzle, to provide for flow from said receptacle into said chamber and to shut off all flow.

2,731,298
SPRAYING DEVICES
Edward H. Green, Chicago, Ill., assignor to Aerosol Research Company, Chicago, Ill., a corporation of Illinois
Application March 16, 1953, Serial No. 342,344
10 Claims. (Cl. 299—95)



1. A spraying device for material with a gas propellant, comprising: a head provided with means for holding it on the top of a receptacle and with a valve-chamber connected to receive material from the receptacle; an elastic disk secured in said head; an outlet valve seating on the disk; an upstanding stem on the outlet valve, supported by the disk, for opening said outlet valve, and provided with a substantially unrestricted passage, and a restricted orifice controlled by the outlet valve for metering the flow from said chamber into the steam; an inlet valve for controlling the flow of gas through said unrestricted passage directly from the stem into said chamber and bypassing said restricted orifice, said inlet valve being adapted to be opened by pressure of fluid independently of the outlet valve and an element removably secured to the stem and provided with a discharge nozzle.

2,731,299
FILTERING FUEL NOZZLE FOR PRESSURE STOVES AND LANTERNS
Carl Bramming, Nashville, Tenn., assignor to Aladdin Industries, Incorporated, Nashville, Tenn., a corporation of Illinois
Application May 1, 1953, Serial No. 352,330
5 Claims. (Cl. 299—107)



1. A fuel filtering burner nozzle, comprising body means having a discharge orifice therein of relatively small diameter and an inlet opening therein of relatively large diameter, means in said body means forming a passage interconnecting said discharge orifice and said inlet opening, said passage including a filtering chamber, a ball positioned in said chamber, said chamber and said ball defining filtering passage means therebetween of a size substantially less than the size of said discharge orifice so that particles in the fuel of a size sufficient to clog the orifice cannot pass said ball.

2,731,300
COW WASHER
Raymond K. Jansen, Ventura, Calif.
Application March 9, 1953, Serial No. 341,028
4 Claims. (Cl. 299—111)



3. In a cow washing device, an elongated, rigid conduit means having a normally closed, manually operable valve disposed intermediate its ends, swivel means for connecting one end of said conduit means to a supply hose adapted to permit said conduit means to be rotated about its longitudinal axis relative to the supply hose; the opposite end of said conduit means being formed in a wide sweeping curved portion terminating in an end extending transversely to the axis of rotation of said swivel means; said curved portion being of an extent sufficient to enable a user holding said device and standing in rear of a cow to position said last-named end beneath the udder of the cow with said curved portion extending past the legs of the cow on either side as may be preferred by rotation of said conduit means relative to the supply hose, nozzle means connected to said last-named end of said conduit means including a pair of oppositely disposed nozzles extending transversely to the longitudinal axis of the end of said conduit means to which said nozzles are connected and disposed so that in either position of use one of said nozzles will be directed toward the udder, and gravity responsive valve means interpose between said nozzles constructed and arranged to permit the flow of water only through the one of said nozzles that is directed upwardly incident to use of said device.

2,731,301
WHEEL COVER
George Albert Lyon, Detroit, Mich.
Application December 28, 1951, Serial No. 263,762
6 Claims. (Cl. 301—37)

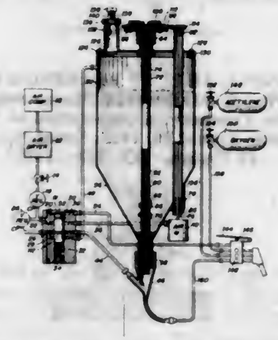


1. In a cover structure for a wheel including a tire rim supported on a dished wheel body having an annular bulge and having cover retaining spring clips radially inward of the bulge, a wheel cover comprising a circular member having a dished portion for nesting over said wheel bulge and apertured opposite the bulge to enhance the resilient flexibility of said portion whereby it can more readily feed over and retainingly engage said bulge, certain of the apertures in the dished portion being enlarged in a radial direction so that said spring clips can project therethrough.

2,731,302
AIR SWITCH AND PORTED CONTROL HEAD FOR POWDERED IRON DISPENSER
Charles Roland Upham, Gardena, Calif.
Application May 11, 1953, Serial No. 354,436
17 Claims. (Cl. 302—53)
(Granted under Title 35, U. S. Code (1952), sec. 266)

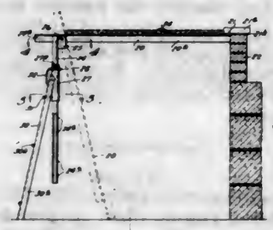
1. A dispenser comprising a receptacle adapted to be partially filled with a fluent material, a tube rotatably mounted in said receptacle, the inside of said tube communicating with the exterior of said receptacle and with the inside of said receptacle below the normal level of

the fluent material, a fluid-actuated motor for rotating said tube, a source of fluid under pressure, and a single control valve means communicating with said source and actuatable for directing said fluid simultaneously to said tube and said motor, said valve means including a valve housing having at least one inlet port connected to said



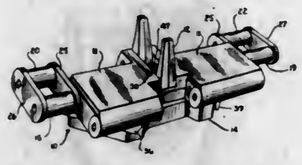
source, outlet ports connected to said receptacle and to said motor, a spring loaded valve piston having circumferential grooves thereon, fluid pressure means operable to move said piston against the force of said spring, said grooves being spaced axially on said piston so as to pass fluid to said outlet ports when said piston is moved against the force of said spring.

2,731,303
SCAFFOLD SUPPORT
Henry P. Albrecht and Kermit H. Wilson, Minneapolis, Minn., assignors to Waco Manufacturing Company, a corporation of Minnesota
Original application May 1, 1947, Serial No. 745,280, now Patent No. 2,636,785, dated April 28, 1953. Divided and this application March 23, 1953, Serial No. 343,814
1 Claim. (Cl. 304—10)



In a scaffold supporting structure, an elongated horizontal timber supporting member having a free end portion adapted to be disposed in a wall, a vertical post-like member horizontally pivoted to the other end portion of said horizontal member for upward and downward pivotal swinging movements of the free end of the horizontal member generally parallel thereto, the horizontal member being otherwise free and unsupported, a tubular guide member in which said post-like member is axially slidably mounted, means for locking the post-like member in various different adjusted positions in the tubular member, an inclined support comprising a pair of ground-engaging legs rigidly anchored to the tubular member at their upper ends and diverging downwardly with respect to one another and the tubular member and post-like member, said legs supporting the tubular guide member and post-like member with the lower end of the latter spaced above the ground, the said pair of legs diverging downwardly from the axes of the tubular member and post-like member in a direction away from a vertical plane intersecting the wall-engaging end portion of the horizontal member and perpendicular to the horizontal member, and the tubular member and the post-like member being otherwise unsupported from the ground.

2,731,304
LINK FOR ENDLESS TRACK
Le Roy M. Kubaugh, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application July 21, 1951, Serial No. 237,981
6 Claims. (Cl. 305—10)



1. A link for the endless track of a track-laying vehicle comprising a tubular framework including a central backbone member comprising a plurality of coaxially aligned tubular parts extending the full lateral width of the link, said parts being coupled by longitudinally extending members positioned between said parts, a set of tubular hinge parts extending between and secured to alternate pairs of said members on one side of said backbone member and a second set of tubular hinge parts secured to alternate pairs of members on the other side of said backbone member and being staggered with respect to said first set, the sets of said link being adapted to be inserted between and to be aligned with the sets of adjacent links to receive hinge rods extending through said aligned sets to join said links in hinged relationship, a metal tread plate secured to said tubular framework, said tread plate having cylindrical seats fitting snugly against certain of the tubular parts, said plate having diagonally extending grousers acting as struts to reinforce and stiffen the tubular framework.

2,731,305
HIGH SPEED THRUST BEARING STRUCTURE
Donald F. Wilcock, Marblehead, Mass., assignor to General Electric Company, a corporation of New York
Application September 11, 1952, Serial No. 308,969
7 Claims. (Cl. 308—73)

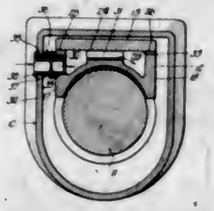


2. A bearing for carrying heavy loads at low power loss comprising a stationary member adapted for attachment to a housing for said bearing, a second member capable of transmitting load forces movable relative to said stationary member, lubricant inlet means connected with said bearing for providing a load supporting lubricant between adjacent bearing surfaces arranged on each of said members, one of said bearing surfaces comprising narrow lands forming a pocket, and high pressure generating means connected with said pocket and operable upon relative movement of said members to pressurize said lubricant for delivery to said pocket and between said bearing surfaces at a value corresponding to the load transmitted to said stationary member by said second member.

2,731,306
FLUID COOLED JOURNAL BEARING
William M. Keller, Evanston, Ill.
Application October 29, 1953, Serial No. 389,026
3 Claims. (Cl. 308—77)

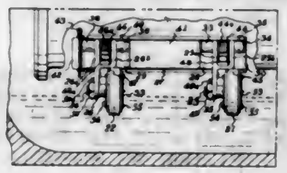
1. A railway car journal box having therein an axle journal upon which a journal bearing is mounted, there

being a pair of spaced horizontally disposed longitudinal grooves and a pair of spaced horizontally disposed transverse grooves formed in the top surface of the journal bearing, the ends of the longitudinal grooves intersecting with the ends of the transverse grooves to form continuous passageways for the circulation of air, a wedge having a flat under surface disposed between the journal bearing and the top wall of the journal box, said wedge defining the top of said passageways, a pair of flexible tubular conduits, one of said conduits extending from said pas-



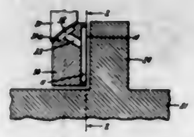
sageways to an opening in the upper part of one side wall of the journal box, and the other of said conduits extending from said passageways to an opening in the upper part of the opposite side wall of the journal box, each of said conduits disposed horizontally between said passageways and one of said openings in a side wall of the journal box, the conduit members affording means through which air from the exterior of the journal box flows through the passageways and removes heat units from the journal bearing and wedge.

2,731,307
JOURNAL LUBRICATING DEVICE
Victor J. Arblaster, Montreal, Quebec, Canada
Application August 14, 1953, Serial No. 374,185
5 Claims. (Cl. 308—91)



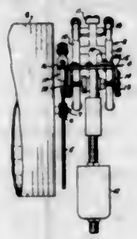
1. A lubricating arrangement comprising, a railway car journal, a railway car journal box of the type wherein a bearing is mounted in the upper part of the box to engage said journal and the base of the box forms a lubricant receptacle, a lubricating device for said journal, said device comprising at least two flat-sided cylindrical lubricant-conveying rollers formed of a rubbery material having a hardness from about 20 to 25 as measured with a type A Shore durometer, said rollers being mounted for rotation on non-rotating horizontal axles disposed below said journal, said axles being spaced apart longitudinally of the journal and being substantially co-axial with one another and substantially parallel to the longitudinal axis of said journal, each of said rollers being supported and biased to contact said journal at a point along its lowermost surface and be frictionally rotated by said journal as the latter rotates, the means for supporting and biasing each roller comprising a spring-controlled arm which extends from a point adjacent one of the inner side walls of said journal box and carries one of said axles at its outer end, and means for both detachably mounting each of said arms in said box and permitting said arms to rotate transversely of the longitudinal axis of said journal about axes which are parallel to said longitudinal axis and adjacent said side wall, said arms being bifurcated at the ends thereof opposite said rollers, said means for detachably rotatably mounting each of said arms comprising a plate detachably mounted at a point adjacent said side-wall, a pin secured at its opposite ends to brackets extending from said plate, the bifurcations of said arm being disposed between said brackets and being provided with aligned holes for the passage therethrough of said pin during the mounting of said arm.

2,731,308
SELF-ALIGNING THRUST BEARING STRUCTURE
Donald F. Wilcock, Marblehead, Mass., assignor to General Electric Company, a corporation of New York
Application August 30, 1952, Serial No. 307,351
10 Claims. (Cl. 308—160)



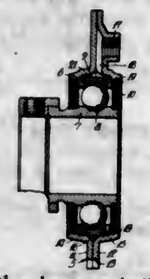
1. A self-aligning hydrodynamic thrust bearing comprising a stationary member having an arcuate bearing seat, a rotatable shaft member having a thrust collar, and a non-rotatable intermediate bearing member providing a first bearing surface for coacting with said thrust collar and a second bearing surface for coacting with said arcuate bearing seat; said first bearing surface comprising lands of uniform height surrounding a hydrodynamic pocket for containing a high pressure lubricant and a pumping land depressed below the level of said lands of uniform height forming a lubricant pressurizing pump in open communication with said pocket and operable upon the relative rotation between said non-rotatable intermediate bearing member and said rotatable shaft member to highly pressurize all of the lubricant in said pocket, said second bearing surface comprising lands of uniform height surrounding a second hydrodynamic pocket, and communication means between said hydrodynamic pockets whereby the pressure generated within said bearing by said pumping land is effective to transmit the thrust between said thrust collar and said stationary member and to provide for the substantially frictionless alignment of said non-rotatable bearing member with said thrust collar.

2,731,309
BEARING THRUST ADJUSTMENT
Norman E. Hart, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a corporation of New Jersey
Application May 12, 1953, Serial No. 354,577
15 Claims. (Cl. 308—178)



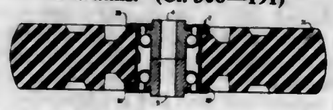
1. In a device of the class described, in combination, a U-shaped elastically deformable member, an arched rigid member spanning a portion of the base of said U-shaped member, and means for urging the portion of the base spanned by said rigid member into partial conformity therewith.

2,731,310
BEARING LUBRICATION MEANS
Howell L. Potter, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a corporation of Connecticut
Application February 12, 1954, Serial No. 409,991
6 Claims. (Cl. 308—187)



1. In a device of the character indicated, a housing for an anti-friction bearing, comprising a housing member having a bearing cavity, a bearing in said bearing cavity and including outer and inner bearing rings and interposed anti-friction bearing members, said outer ring fitting in said housing cavity, said cavities having a plurality of circumferentially spaced apart enlargements forming with said outer ring spaced apart lubricant chambers, said chambers terminating short of the ends of said cavity, whereby said outer ring is supported by said cavity wall outwardly of said chambers and by said cavity wall intermediate said chambers, a generally circumferentially extending lubricant passage communicating with said lubricant chambers, and apertures extending through said outer bearing ring and spaced circumferentially so that at least one aperture will always communicate with one of said lubricant chambers.

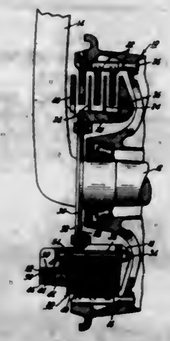
2,731,311
ANTIFRICTION BEARING
Leo A. Schwartz, Oklahoma City, Okla.
Application May 20, 1954, Serial No. 431,080
3 Claims. (Cl. 308—191)



1. In an anti-friction ball bearing unit for utilization with a wheel comprising a pair of upper and lower aligned sleeve members providing an inner race member adapted for use on a wheel axle, each sleeve member having a shoulder provided with a curved groove therein, a plurality of balls disposed in each groove, a bent flange portion disposed adjacent the balls forming an outer race member for the sleeves, a storage chamber between the upper and lower outer race members for receiving lubricant, a pair of outer sleeve members maintained in a tight fitting relationship for the outer race members and adapted to receive the wheel, and cover means cooperating between the first mentioned sleeve members and the outer sleeve members for holding them in unitary relationship, said cover means providing a pair of outwardly extending shoulders adapted to retain the wheel therebetween.

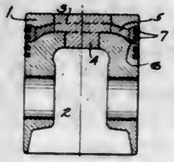
2,731,312
BRAKE ASSEMBLY
William H. Du Bois, South Bend, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application November 1, 1950, Serial No. 193,455
5 Claims. (Cl. 309—3)

1. An annular supporting member adapted for use with a friction brake mechanism, said member including a semi-annular rough cavity provided with a bottom portion, a plastic liner intimately fitted to the walls of said cavity and providing a semi-annular chamber, the rough



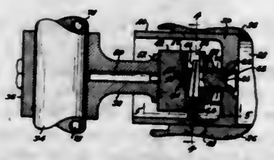
contour of the walls of said cavity tending to secure said liner in place, and a piston reciprocably received in said chamber, said chamber and said piston having uniform radial dimensions throughout their arcuate lengths.

2,731,313
INTERNAL COMBUSTION ENGINE PISTON
Samuel J. Walker, Lake Forest, and William G. Brown, Chicago, Ill.
Application May 4, 1950, Serial No. 159,888
9 Claims. (Cl. 309—9)



1. An internal combustion engine piston comprising a relatively thick head and a relatively thin depending skirt of aluminum, the head having a center core of ferrous metal extending from top to bottom of the head, the aluminum and ferrous metal parts being molecularly bonded together at their interface.

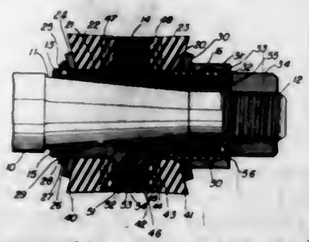
2,731,314
REFRIGERATING APPARATUS
Ralph W. Doeg, Detroit, Mich., assignor to Nash-Kelvinator Corporation, Detroit, Mich., a corporation of Maryland
Application October 5, 1953, Serial No. 384,071
4 Claims. (Cl. 309—19)



1. In a compressor, a connecting rod having a bifurcated end intersected by a transverse bore, a wrist pin rotatable in said rod bore, said wrist pin having a bore therein extending longitudinally of the wrist pin axis, a piston having a skirt, an extension member on said piston surrounded by said skirt, said extension member received by the bifurcated end of said rod and intersecting said wrist pin bore, said extension member having a transverse opening registering with said wrist pin bore, a tapered pin extending through said opening and wrist pin bore, and a spring having one end within said wrist pin engaging said tapered pin and the other end projecting

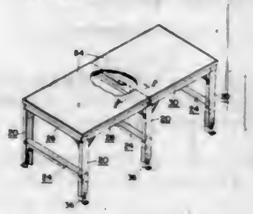
from said wrist pin engaging the inner wall surface of said piston skirt urging said tapered pin against and holding said extension member and said wrist pin together.

2,731,315
PISTON WITH MEANS FOR REMOVING SAME FROM ROD
Walter L. Church, Houston, Tex., assignor to Pioneer Specialties, Inc., Houston, Tex., a corporation of Texas
Application October 29, 1951, Serial No. 253,703
9 Claims. (Cl. 309—23)



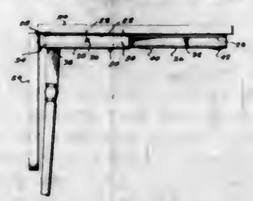
1. A piston comprising a piston rod having a conical portion near one end, a piston head having a conical opening fitting tightly on the conical portion of the piston rod, said piston head having an annular radial flange near its midsection, a pair of piston rings disposed over the ends of the piston head and held against said flange, a coarse thread around the end of said head having the smaller diameter opening, a solid collar disposed over said end adjacent one of said piston rings, an apertured cap disposed over the end of the piston rod and having a sleeve portion covering said thread and bearing at its end against said solid collar and having a radially inturned portion bearing against said end of the piston head, and means to secure said cap on said rod against axial displacement.

2,731,316
PREFABRICATED METAL-FRAME KNOCKDOWN WORK TABLE
Philip Cohen, Philadelphia, Pa.
Application April 22, 1954, Serial No. 424,870
8 Claims. (Cl. 311—4)



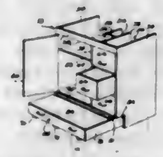
1. A knock-down table comprising a generally rectangular non-metal non-warping top; and a prefabricated sectional frame of pressed steel or the like, said frame including four generally vertical corner legs of U-shaped channel cross-section with a main web disposed at the side of the frame and with a pair of inwardly-directed flanges one of which is disposed at the end of the frame, a plurality of end frame members and side frame members extending generally horizontally between the upper ends of the corner legs and detachably secured thereto, each of said frame members having a generally vertically disposed web and a top flange of generally L-shaped cross-sectional configuration with a horizontal outwardly-extending portion of substantial width and a vertical upwardly-extending portion, means for releasably securing the ends of the side frame members to the outer face of the main web at the upper end of the corner leg, means for releasably securing the ends of the end frame members to the outer face of the endmost leg flange at the upper end of the corner leg, the corner ends of the outwardly-extending horizontal portions being cut at 45-degree angles so that the adjoining ends of the end frame members and the side frame members meet to form 90-degree miter corners, the upwardly-extending flange portions forming a generally continuous frame into which the top is adapted to fit in snug generally flush relationship; and means for releasably securing the edges of the top to the underlying outwardly-extending top flange portions.

2,731,317
METAL SLIDE SUPPORT FOR TABLE DROP LEAF
William A. Duncan, Statesville, N. C., assignor to Acme Homes Metal Works, Inc., a corporation of North Carolina
Application July 15, 1954, Serial No. 443,579
4 Claims. (Cl. 311—61)



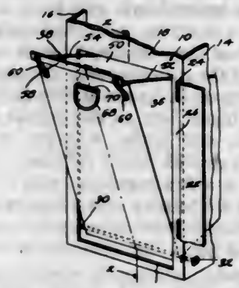
1. A supporting means for a table drop leaf, said means comprising a bracket member attachable in the form of an inverted channel to the underside of a main table surface adjacent a drop leaf hinged thereon, and a slide member supported within the channel formed by said bracket member for extension therefrom in supporting relation beneath said drop leaf when raised, said slide member and bracket member having cooperating abutment elements thereon limiting the extension of said slide member at a desired length beneath said drop leaf, said bracket member having an inwardly formed transverse ridge in its bottom face spaced adjacent the forward end thereof, and said slide member being of less height than that of the channel formed by said bracket member and having an outwardly formed longitudinal boss in its bottom face shaped with a substantial lengthwise portion of uniform height spaced from the rear slide member end for riding said bracket member ridge and thereby raising said slide member when fully extended from said bracket member to support said drop leaf at a level disposition.

2,731,318
PORTABLE LAVATORY CABINET WITH STEP DRAWER
David Hoff, Detroit, Mich.
Application July 17, 1953, Serial No. 368,782
2 Claims. (Cl. 312—210)



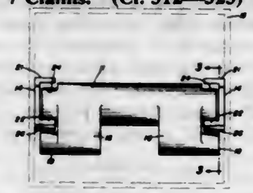
1. A step-up lavatory cabinet for insertion beneath a washbowl and its plumbing, said cabinet comprising an enclosing structure having side panels of lesser height than the height of the bottom edge of said washbowl, said structure having a rearwardly-open space therein and an open top and an open back communicating with said space for removably receiving the bottom of the washbowl and its plumbing respectively, and a step drawer slidably mounted in the lower portion of said structure for travel into and out of said structure, said step drawer having a step lid engaging and receiving support from the upper edge thereof, said step drawer having a lesser width than said side panels whereby to set back the front of said drawer rearwardly from the front of said cabinet and provide toe space beneath the front of said cabinet.

2,731,319
UTILITY BIN
Irvin W. Jacobs and Joseph W. Sims, Ainsworth, Nebr.
Application April 27, 1953, Serial No. 351,192
1 Claim. (Cl. 312—310)



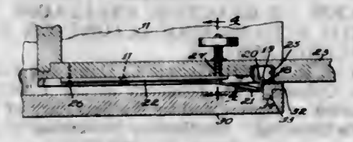
In combination with a base cabinet having opposing side walls and a front wall having an opening formed therein with a door closing said opening, a bin comprising a vertical front wall, an offset stop carried by the front wall above the upper edge thereof engageable against said front wall of said cabinet to locate said front wall of said bin in a perpendicular plane within said cabinet when said bin is in its innermost position, said bin having an open top and opposing sides having downwardly and rearwardly sloping upper edges and an upstanding stop at the inner end of the open top wall engageable with the front wall of the cabinet above the opening to limit the outward movement of the bin, means pivotally and removably mounting said bin in said cabinet, said means including a bottom wall for said bin, said front wall having an integral lip portion projecting below said bottom wall, a flange depending from said bottom wall and inwardly spaced from said lip, and a rod extending transversely between and detachably supported on the sides of and within said cabinet, said rod engaging said bottom wall and being embraced on opposite sides thereof by said lip and said flange.

2,731,320
SLIDING HINGE
Paul D. Belz, Glen Burnie, Md., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application August 1, 1952, Serial No. 302,221
7 Claims. (Cl. 312—323)



1. A mounting means comprising a spaced pair of opposed parallel channels fixedly mounted in a frame, an elongated supporting member extending between said channels and slidable therein, means on each end of said supporting member coacting with said channels to prevent rotation of the supporting member about its longitudinal axis as it is moved slidably along the channels, corresponding lateral depressions adjacent one end of both channels arranged to receive the ends of said member so that the member may be rotated about its longitudinal axis when its ends are seated in said depressions, and stop means affixed to said supporting member and positioned externally to said channels for engaging said channels to limit rotation of said supporting member when the ends thereof are seated in said depressions.

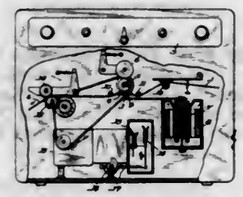
2,731,321
DRAWER CATCH
Bryan Thompson, Houston, Tex.
Application March 31, 1954, Serial No. 419,990
2 Claims. (Cl. 312—348)



2. In combination, a supporting structure provided with a drawer opening therein, a drawer slidably mounted in said opening, there being an elongated slot in each side of said drawer, a mounting plate seated in said slot and secured to said drawer, there being an opening in said drawer communicating with the front of said slot, a spring arm having the same width as said plate but being of greater length than said plate, securing elements connecting said arm to said plate, the front end of said arm being bent upon itself to provide a first flange, a second flange extending from said first flange and arranged in superposed relation with respect thereto, said flange being mounted for movement into and out of the opening in the side of the drawer, a band crimped on said arm and engaging a projecting portion of said second flange, there being registering apertures in the side of said drawer and in said plate, a thumb screw extending through said registering apertures and engaging said arm, a head on the inner end of said thumb screw, a washer circumposed on said thumb screw, resilient means interposed between said head and washer and circumposed on said thumb screw, there being a groove in said supporting structure, a stop including a tongue secured in said groove, and said tongue adapted to be engaged by said first flange

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2,731,322
RECORDING DEVICES
Rudolf Hell, Kiel-Dietrichsdorf, Germany
Application December 14, 1950, Serial No. 200,721
5 Claims. (Cl. 346—116)



1. A recording device comprising a recording tape and means for moving said tape, a printing roller disposed on one side of said tape with the axis thereof extending perpendicular to the direction of the motion of the tape, a roller for continuous inking coaction with said printing roller, a pair of idler rollers in engagement with said tape on the side thereof which faces said printing roller, stationary guide means disposed intermediate of said pair of idler rollers on the side of said tape which faces away from said printing roller for holding said tape slightly spaced therefrom substantially solely throughout a limited area in which recordings are effected thereon, said stationary guide means forming a gap extending on either side of an imaginary center line which intersects the axis

of said printing roller, a stylus extending with its axis along said imaginary center line on the side of said tape which faces away from said printing roller and projecting through said gap with its inner printing end in permanent engagement with said tape to hold said tape at the corresponding point of engagement therewith in contact with said printing roller, the inner walls of said guide means forming said gap being in close proximity to said stylus, and operating means for actuating said stylus to move it in a direction perpendicular to the direction of the motion of said tape to cause the inner printing end of said stylus to print corresponding impressions on said tape.

CHEMICAL

2,731,323
PROCESS OF REACTING CELLULOSE TEXTILE WITH BETA-PROPIOLACTONE OR BETA-ISO-VALEROLACTONE

Robert M. Reinhardt, George C. Daul, and John D. Reid, New Orleans, La., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application November 20, 1953, Serial No. 393,523
3 Claims. (Cl. 8—116)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A process comprising impregnating cellulose textile fibers with an aqueous 5 to 50 per cent alkali metal hydroxide solution, reacting the aqueous alkali wet fibers with a lactone selected from the group consisting of beta-propiolactone and beta-isovalerolactone at a temperature from about 0° C. to 30° C. until fibers are produced containing from about 0.5 to 26%, based on the weight of the original fibers, of the lactone reaction products combined with the cellulose, and removing uncombined substances from the resulting fibers.

2,731,324
CORROSION INHIBITOR CONTAINING ALKANOYLOXYACETIC ACID AND METHOD OF USING SAME

Lester W. Kalinowski, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y., a corporation of Maine

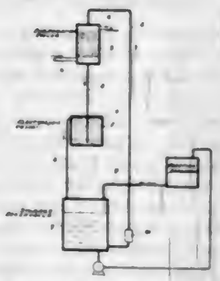
No Drawing. Application September 7, 1951, Serial No. 245,639
8 Claims. (Cl. 21—2.5)

1. An article of manufacture which is useful in the packaging of metal objects in order to prevent their corrosion, said article being a material to which has been applied a vapor phase corrosion inhibiting composition consisting essentially of a non-volatile heavy hydrocarbon vehicle and about 3 per cent to 10 per cent by weight based on the total composition of an alkanoyloxyacetic acid having from 8 to 12 carbon atoms in the alkanoyl group.

2,731,325
PROCESS FOR THE PREPARATION OF CHLORINE DIOXIDE

Edelbert E. Kesting, Munich, Germany

Application January 9, 1952, Serial No. 265,662
Claims priority, application Germany June 5, 1951
1 Claim. (Cl. 23—152)



A process of electrolytically manufacturing chlorine dioxide, including the steps of reacting an aqueous chlorate salt solution and hydrochloric acid so as to liberate chlorine dioxide in a reaction zone, discharging and storing in a storing vessel the weakened liquor containing said chlorate salt and the corresponding chloride, regenerating said weakened liquor, said regeneration including the steps of passing said liquor into an electrolysis chamber, electrolyzing therein said liquor, whereby to transform at least part of said chloride into a chlorate, cyclically pumping said liquor in a first pumping cycle between said reaction zone and the storing vessel and cyclically and independently of said first pumping cycle, lowering the temperature of said liquor by evaporation therefrom of a portion of the water acting as a solvent for said chloride and said chlorate, during the passage of said liquor from the storage vessel into the electrolysis chamber and returning the regenerated liquor from the electrolysis chamber into the storage tank.

2,731,326
PROCESS OF PREPARING DENSE AMORPHOUS SILICA AGGREGATES AND PRODUCT

Guy B. Alexander, Greenville, Ralph K. Iler, Wilmington, and Frederick J. Wolter, Greenville, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application August 31, 1951, Serial No. 244,722
27 Claims. (Cl. 23—182)

1. In a process in which silica is caused to accrete to aggregates larger than colloidal size, having reticulated structures of open-packed, dense, amorphous silica spheroids which are from 5 to 150 millimicrons in diameter, the step comprising mixing active silica with an aqueous suspension of the aggregates while maintaining the pH of the suspension at 8 to 11, the alkali metal ion concentration below 1 normal, and the temperature from 60 to 125° C., the rate of supplying active silica to the mixture being sufficiently slow that the specific surface area of the insoluble silica in the mixture decreases during said addition.

19. A pulverulent, dry silica xerogel composition in the form of aggregates larger than colloidal size, having a specific surface area of from 60 to 400 square meters per gram and consisting of dense, substantially uniform-sized, amorphous silica spheroids, joined together into open-packed, reticulated structures, the structures being uniformly reinforced with dense, amorphous silica and being so openly packed that the oil absorption in milliliters per 100 grams of solid is from 1 to 3 times the specific surface area in square meters per gram.

2,731,327
HYDROMETALLURGICAL TREATMENT OF TITANIFEROUS IRON MATERIAL

William W. Anderson, Metuchen, and Lancelot W. Rowe, Raritan Township, Section Fords, Middlesex County, N. J., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey

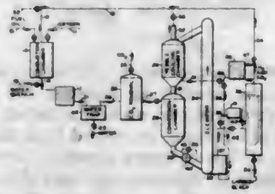
No Drawing. Application May 3, 1954, Serial No. 427,395
8 Claims. (Cl. 23—202)

1. Method for preparing a substantially iron-free titanium oxide material by reacting in a pressure vessel a mixture of titaniferous iron material containing ferric iron values, sulfuric acid, organic flotation agent, and reducing material which comprises the steps of: heating said mixture in said pressure vessel while maintaining the pressure within said pressure vessel in the range of from about 500 p. s. i. to about 2000 p. s. i. for a period of time sufficient to produce solubilized iron values in said mixture and directly convert the titanium values to substantially iron-free, relatively insoluble hydrated titanium dioxide, said reducing material being present in at least the theoretical amount required to reduce all of said ferric iron values to ferrous iron values, and said sulfuric acid being present in an amount sufficient to react with the ferrous iron values formed from said ferric iron and any additional ferrous iron values in said mixture, and thereafter separating said solubilized iron values from said insoluble, hydrated titanium dioxide.

2,731,328
CARBON BLACK MANUFACTURE

Robert George Atkinson, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application May 29, 1950, Serial No. 164,878
5 Claims. (Cl. 23—209.4)

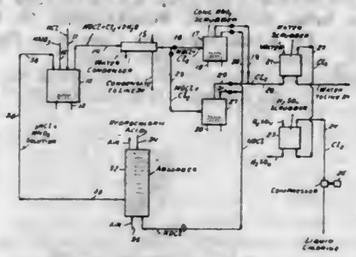


1. A process for the manufacture of carbon black, comprising admixing a hydrocarbon oil with oxygen and a stream of carbon dioxide and hydrogen described hereafter, in proportions to form carbon monoxide at a temperature of from 2000 to 3000° F. when the resulting admixture is burned; burning said admixture, whereby a combustion gas mixture is formed comprising carbon monoxide, hydrogen, carbon dioxide, and steam; quenching said combustion gas mixture to a temperature within the limits of 800 to 1200° F., whereby the concentration of carbon monoxide in said combustion gas mixture is maintained at a maximum; cooling the quenched combustion gas mixture to a temperature within the limits of 50 to 200° F. and removing water and carbon dioxide from the cooled gas; gravitationally passing a contiguous mass of pebbles from a source hereafter described through a conversion zone at an initial pebble inlet temperature within the limits of 300 to 700° F., and passing said cooled combustion gas freed of carbon dioxide and water through said chamber concurrently with said pebble mass therein, whereby said combustion gas is heated and carbon monoxide therein reacts exothermically to form carbon black together with carbon dioxide; maintaining a weight ratio of pebbles to gas introduced into said conversion zone within the limits of 8:1 to 15:1, whereby pebbles in said conversion zone absorb heat liberated from said exothermic reaction to maintain the temperature of said reaction below 1200° F.; discharging heated pebbles and total gaseous effluent from said conversion zone into a pebble-gaseous effluent separation zone and therein separating pebbles from said total gaseous effluent; said total gaseous effluent comprising a mixture of hydrogen, carbon dioxide, and carbon black suspended therein; cooling total gaseous effluent thus separated by mixing same in heat exchange relation with a cooler stream of carbon dioxide and hydrogen described hereafter, and passing the resulting admixture to a carbon black separation zone and therein separating the last said admixture into carbon black and total residual gas, said total residual gas comprising hydrogen and carbon dioxide; cooling at least a portion of said residual gas to a temperature within the limits of 100 to 200° F.; passing pebbles from said pebble-total gaseous effluent separation zone to a pebble cooling zone disposed above said conversion zone, passing a portion of cooled residual gas through said pebble cooling chamber in heat exchange relation with pebbles therein to cool said pebbles to a temperature within the limits of 300 to 700° F., said pebble cooling zone being the source above described of pebbles introduced into said conversion chamber; from said pebble cooling zone withdrawing a stream of said residual gas heated therein in heat exchange relation with hotter pebbles and admixing the withdrawn residual gas with said oil and oxygen as said stream of carbon dioxide and hydrogen, passing a portion of said cooled residual gas as said cooler stream of carbon dioxide and hydrogen with total gaseous effluent as described; and recovering carbon black from said carbon black separation zone.

2,731,329
PROCESS FOR OXIDIZING NITROSYL CHLORIDE

Jonas Kamlet, Easton, Conn., assignor, by mesne assignments, to The Kamlet Laboratory, New York, N. Y., a partnership

Application September 20, 1952, Serial No. 310,590
1 Claim. (Cl. 23—219)



A cyclic process for the oxidation of hydrochloric acid to high-strength chlorine which comprises reacting hydrochloric acid with nitric acid at elevated temperature to produce a gaseous mixture of nitrosyl chloride and chlorine, separating nitrosyl chloride and chlorine by dissolving the nitrosyl chloride from the gaseous mixture in concentrated nitric acid, recovering the chlorine, stripping the nitrosyl chloride from its nitric acid solution, oxidizing the nitrosyl chloride with excess air in the presence of an aqueous hydrochloric acid solution of about 5 per cent to about 40 per cent hydrogen chloride concentration at a temperature between about 0° and 50° C. to produce a mixture of concentrated hydrochloric and nitric acids, and recycling the acid mixture as charge stock.

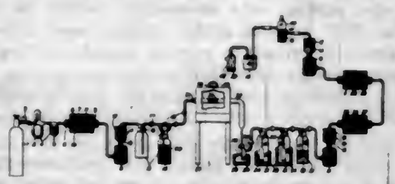
2,731,330
DETERMINATION OF OXYGEN IN TITANIUM AND TITANIUM ALLOYS

Maurice Codell and George Norwitz, Philadelphia, Pa., assignors to the United States of America as represented by the Secretary of the Army

Application December 10, 1954, Serial No. 474,633
4 Claims. (Cl. 23—230)
(Granted under Title 35, U. S. Code (1952), sec. 266)

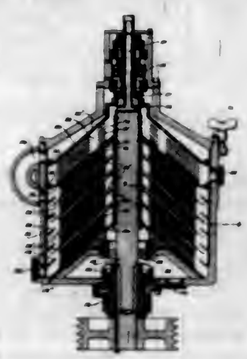
4. A process for quantitative determination of the oxygen content of titanium alloys comprising: purification of an inert gas at a rate of about 130 milliliters per minute by successive contact with copper and copper oxide maintained at about 500° C., sodium hydroxide and anhydrous magnesium perchlorate; saturation of the purified gas with bromine vapor by passing said gas as a carrier through liquid bromine; dehydration of the bromine vapor by

conducting the bromine-saturated gas through sulphuric acid; reaction of the bromine with a sample immersed in carbon in excess of stoichiometric quantity and maintained at about 815° C., by conducting the bromine-saturated gas over the sample; separation from the products of reaction of metallic bromides and unreacted bromine by progressive exposure to refrigerant at from about 0° C. to about minus 170° C.; separation from the products of



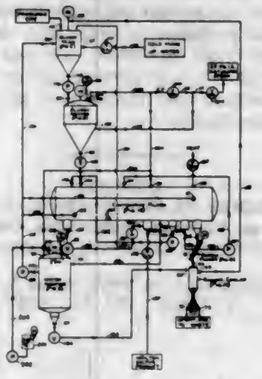
reaction of brominated carbon compounds by passing over silver maintained at about 600° C.; conversion of the remaining products of reaction to carbon dioxide and water by passing over copper oxide maintained at about 500° C.; removal of the water by passing through anhydrous magnesium perchlorate; and collection of the carbon dioxide as sodium carbonate and water by passing through sodium hydroxide and anhydrous magnesium perchlorate.

2,731,331
COUNTERCURRENT EXTRACTOR BOWL
George Julius Strezynski, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, Poughkeepsie, N. Y., a corporation of New Jersey
Application September 25, 1953, Serial No. 382,367
20 Claims. (Cl. 23—270.5)



1. A centrifugal machine for mixing and separating two liquids having different specific gravities, which comprises a stationary hollow shell forming an enclosed cavity, a rotor mounted to revolve in the cavity relative to the shell, baffles on the rotor spaced axially therealong and extending outwardly in the cavity with their outer edges in proximity to but spaced from the shell, the baffles forming a tortuous path for the lighter liquid winding alternately inward and outward relative to the rotor axis and substantially reversing its direction at said outer edges, the ends of said path being spaced apart axially of the rotor and forming, respectively, an inlet and an outlet for the lighter liquid, and ducts forming an inlet and outlet for the heavy liquid leading to and from the cavity outside said path at points spaced apart axially of the rotor, the stationary shell defining at the outer portion of the cavity a generally annular space extending around the baffles and forming between said inlet and outlet for the heavy liquid a passage by-passing the spaces between the baffles, whereby the heavy liquid moving from its inlet to its outlet forms an annulus against the shell around said path under the action of centrifugal force due to the revolving baffles, and turbulent flow with substantial intermixing and contact between the liquids occurs in the regions of said outer edges.

2,731,332
PROCESS FOR EXTRACTION OF SULFUR FROM SULFUR ORES
George Ford Ackert, Flushing, N. Y., and Russell A. Peterson, Hartford, Conn.
Application January 6, 1955, Serial No. 480,236
1 Claim. (Cl. 23—308)



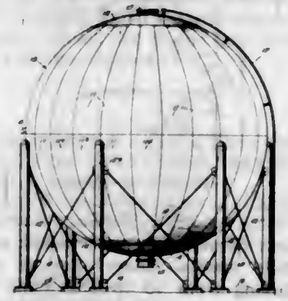
In the continuous process for extracting sulfur from ore which comprises heating an aqueous ore slurry stream made of a mixture of ore, an influx stream of cold water and a stream of hot water recovered from the process, first by a stream of low pressure steam recovered from the process, secondly by injecting into said slurry stream high pressure steam in sufficient quantity to melt the sulfur contained in said stream to a liquid of minimum viscosity, meanwhile said slurry stream is agitated to a degree sufficient to permit coalescence of the molten sulfur to liquid globules and to prevent stratification of the constituents of said slurry stream, said slurry stream is then deposited upon a continuous porous surface where the water and molten sulfur contained therein said slurry stream drains through and is collected and settled, the molten sulfur being drawn off from below and the water flowing over the body of molten sulfur, said water stream is then purified and is then returned to and reused in the process, meanwhile the stream of wet gangue is continuously discharged from the continuous porous surface in such a manner that the pressure of this spent ore stream is reduced thereby causing a portion of the water contained therein to evaporate and thus supply a stream of low pressure steam that is then returned to the process and used for heating and thus by this means both the temperature and water content of the exit stream of spent ore or gangue is reduced.

2,731,333
METHOD OF FORMING ORNAMENTED SURFACES
David W. Ko, Wesley Ko and William M. Auchenbach, Philadelphia, Pa., assignors to Komak, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application May 13, 1954, Serial No. 429,574
3 Claims. (Cl. 41—43)

1. A method of forming an ornamented surface which includes the steps of forming a laminate comprising at least two layers of different metals upon a nonmetal base; applying a coating of resist material, in appropriate design, to the outermost metal surface; treating the resist-coated laminate so as to remove the metal in the areas not covered by the resist; removing the resist coating; applying a second coating of resist material in a different design; treating the resist coated laminate so as to remove the metal in the areas not covered by the resist; and subsequently removing the second resist coating; one of the metal-removing operations being such that both metal layers are removed thereby, while the other metal-removing operation is such that only the metal of the outermost layer is removed thereby; whereby the nonmetal base and the under metal layer are visible in different areas in contrast to the outer metal coating.



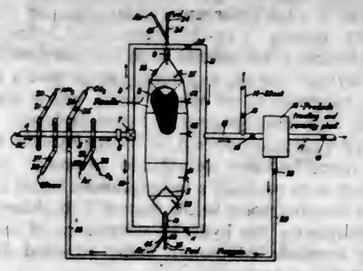
2,731,334
VAPOR STORAGE VESSEL AND METHOD OF MAKING SAME
Ivan L. Wissmiller and Lyle V. Larsen, Chicago, Ill., assignors to Chicago Bridge & Iron Company, a corporation of Illinois
Application August 17, 1951, Serial No. 242,222
7 Claims. (Cl. 48—178)



3. A vapor storage vessel having at least an upper substantially hemi-ellipsoidal shell portion arranged about a vertical axis, said shell portion being made of thin flexible plates each of a size incapable of retaining its shape without support, each plate being bent in a single plane to a curvature having an elliptical cross section taken in the single plane of bending, said elliptical cross section being of substantially the same dimensions as the ellipse of revolution of the ellipsoidal shell, said bent plates being edge-joined to each other along lines lying on meridians of the shell portion passing through its pole, said plates being joined together to hold the individual plates in said elliptical shape and said upper shell portion from collapse, said upper portion being joined to a round shell portion having a circumference substantially equal to the perimeter of the hemi-ellipsoidal portion at the juncture, and having a substantially horizontal annular plate interposed between the adjoining edges of the upper and lower shell portions with each portion being secured to the plate.

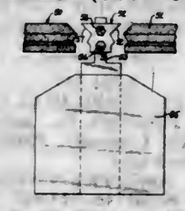
2,731,335
PROCESS OF TREATING GASIFORM FLUIDS AT ELEVATED TEMPERATURES
William W. Odell, Amherst, Va.
Application January 16, 1952, Serial No. 266,738
22 Claims. (Cl. 48—197)

1. The process of treating gasiform fluids containing a readily combustible substance, comprising, passing a gasiform stream initially containing said substance in admixture with a gasiform medium containing essentially steam and a predetermined relatively small amount of oxygen completely through a deep, continuous, stationary bed of small-size incombustible solids while said solids are confined in an upright reactor, longitudinally in contact with said solids from one end to the opposite end of said bed while maintaining a maximum temperature hot zone comprising a stratum only of said bed between the top and bottom thereof at an elevated reaction temperature above 400° F. but below about 1600° F., at such a velocity that said substance is rapidly heated in the latter stratum and reacted chemically as said stream passes through said stratum, thereby causing the reaction of said substance to occur substantially without the formation of carbon black, continuing this operation until the temperature of the mass of solids in said opposite end of said bed is heated to a temperature somewhat above the feed temperature by the sensible heat of the thus heated stream exiting therethrough, then reversing



the flow of said stream passing it through said bed in the opposite direction at a similar velocity causing said stream to first contact the heated solids adjacent the feed-end of said bed, becoming heated as the latter solids are thereby cooled, passing it on through the said hot stratum wherein it is heated to said elevated temperature and the reaction of additional amounts of said substance is promoted and passing it on out through the opposite end of said bed imparting heat to the solids adjacent the latter end until the latter solids are at a temperature somewhat above the feed temperature, said predetermined amount of oxygen being sufficient only to maintain said elevated temperature in said hot stratum by the oxidation in the latter stratum of a relatively small amount of combustible matter initially present in said admixture, the temperature within said bed being at all other portions lower than that within the maximum temperature hot zone.

2,731,336
METHOD OF MAKING FORM DRESSING TOOL
Donald J. Wallace and Leo Catallo, Detroit, Mich., assignors to Wheel Trueing Tool Company, Detroit, Mich., a corporation of Delaware
Application April 4, 1952, Serial No. 280,464
5 Claims. (Cl. 51—309)



5. The method of making a form dressing tool for dressing grinding wheels which comprises grinding a relatively rigid blade to provide a surface thereon having a contour the reverse of that to be reproduced on a grinding wheel, cutting with said blade a block of material suitable for use as a mold to provide on said block a molding surface having a contour the reverse of that of said blade, applying to said molding surface a layer of abrasive particles admixed with a binder therefor, backing said layer with a

mass of metallic particles and molding said mass and layer together under heat and pressure against said molding surface to form an abrasive surfaced form dressing tool having a contour the reverse of said molding surface and the reverse of that to be reproduced on a grinding wheel.

2,731,337

HERBICIDAL COMPOSITION COMPRISING 3-(P - CHLOROPHENYL) - 1,1 - DIMETHYLUREA

Henry L. Morrill, Clayton, and Ferdinand B. Zienty, Brentwood, Mo., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application November 26, 1951, Serial No. 258,292
18 Claims. (Cl. 71—2.4)

1. In a process for preparing free-flowing herbicidal compositions containing 3-(p-chlorophenyl)-1,1-dimethylurea and a solid absorbent carrier, the step comprising intimately mixing 3-(p-chlorophenyl)-1,1-dimethylurea, a mono-hydroxy substituted aromatic compound, and a solid absorbent carrier, in proportions to give a dry product, the temperature of mixing being below the melting point of 3-(p-chlorophenyl)-1,1-dimethylurea, the proportion of 3-(p-chlorophenyl)-1,1-dimethylurea in respect to the mono-hydroxy substituted aromatic compound being such as to produce a homogeneous liquid composite having a freezing point below that of 3-(p-chlorophenyl)-1,1-dimethylurea, the hydroxy substituent of said mono-hydroxy aromatic compound being attached directly to the aromatic nucleus.

2,731,338

EMULSIFYING AND DISPERSING AGENTS

Elmer A. Fike, Nitro, W. Va., and Henry L. Morrill, Clayton, Mo., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application January 5, 1951, Serial No. 204,688
11 Claims. (Cl. 71—2.6)

1. As a new composition, a homogeneous mixture of wetting agents for emulsifying and dispersing insoluble substances in water which mixture is soluble in water and organic solvents and consists essentially of 10–50% by weight of an amine salt of an alkylated benzene sulfonic acid containing at least 9 but not more than 16 carbon atoms in the alkyl group, wherein the amine salt forming group contains at least one hydrogen atom on the nitrogen and at least one organic radical containing less than 13 carbon atoms and said amine is selected from the group consisting of alkyl amines, ethanolamines, cyclohexylamines and 50–90% by weight of an alkylene oxide condensate of a long chain aliphatic compound selected from the group consisting of tall oil condensed with 10–15 moles of ethylene oxide per mole of tall oil, mercaptans containing at least 8 but not more than 12 carbon atoms condensed with 7–15 moles of ethylene oxide per mole of mercaptan, and mixtures thereof.

2,731,339

LOW VOLATILITY HERBICIDAL COMPOSITIONS

William R. Davie, Pittsburgh, Pa., assignor to Pittsburgh Coke & Chemical Company, Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application November 21, 1952, Serial No. 321,947
8 Claims. (Cl. 71—2.6)

1. A cold stable herbicidal concentrated solvent solution of a 2-ethyl hexanol-1 ester of at least one halogenated phenoxyacetic acid selected from the group consisting of 4-chloro-2 methyl phenoxyacetic acid, 2,4-dichlorophenoxyacetic acid and 2,4,5-trichlorophenoxyacetic acid, said concentrated solvent solution containing at least four pounds of equivalent acid as the ester per gallon of solution.

2,731,340

PHYSIOLOGICALLY VALUABLE XEROGELS AND MIXTURES CONTAINING THEM

Ernst Seifert, Kiel-Hammer, Germany, assignor, by mesne assignments, to Ernst Seifert, Kiel-Schulensee, and Heinz Lohmann, Cuxhaven, Germany

No Drawing. Application April 22, 1952, Serial No. 283,759
Claims priority, application Germany April 28, 1951
4 Claims. (Cl. 71—52)

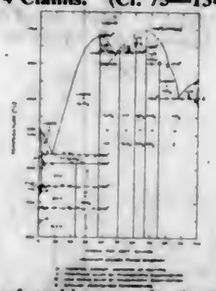
1. The process for the preparation of a xerogel which comprises adding to an aqueous alkali metal silicate solution a salt selected from the group consisting of salts of calcium and magnesium and a further salt selected from the group consisting of salts of manganese, copper and zinc, whereby there is precipitated a hydrogel of the corresponding mixed silicates, and thereafter drying said hydrogel.

2,731,341

URANIUM-SILICON ALLOY AND PROCESS OF PRODUCING SAME

Albert R. Kaufmann, Lexington, Mass., assignor to the United States of America as represented by the United States Atomic Energy Commission

Application July 7, 1948, Serial No. 37,408
4 Claims. (Cl. 75—134)



1. A process of making a soft, ductile and corrosion resistant article from a binary alloy of uranium and silicon containing from 15 to 25 atomic per cent of silicon which comprises chill casting the article from a melt of said alloy and then heat treating the cast article for at least ten hours at a temperature between 700° and 850° C.

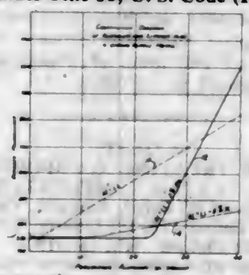
3. A corrosion resistant binary allow of uranium and silicon containing from 15 to 25 atomic percent of silicon wherein the normally brittle intermetallic compounds of uranium and silicon are present in the relatively soft and ductile epsilon phase.

2,731,342

WATER REACTIVE ALLOY

Otto T. Pfefferkorn, Arcadia, Calif.

Application March 24, 1952, Serial No. 278,284
4 Claims. (Cl. 75—134)
(Granted under Title 35, U. S. Code (1952), sec. 266)



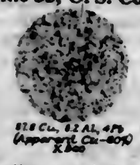
1. A water reactive composition consisting of lithium mixed with 1% to 25% by weight of aluminum and 1% to 10% by weight of an alkali metal from the group consisting of sodium and potassium.

2,731,343

COPPER BASE ALLOY

Edward J. Dunn, Arlington County, Va.

Application July 25, 1952, Serial No. 301,009
6 Claims. (Cl. 75—162)
(Granted under Title 35, U. S. Code (1952), sec. 266)



3. A copper base alloy consisting of 6.6 to 8.6 per cent aluminum, 2.7 to 10% lead and the balance copper.

2,731,344

PROCESS FOR MAKING PULP AND PAPER

Ralph H. McKee, New York, N. Y.

No Drawing. Application May 11, 1953, Serial No. 354,397
5 Claims. (Cl. 92—9)

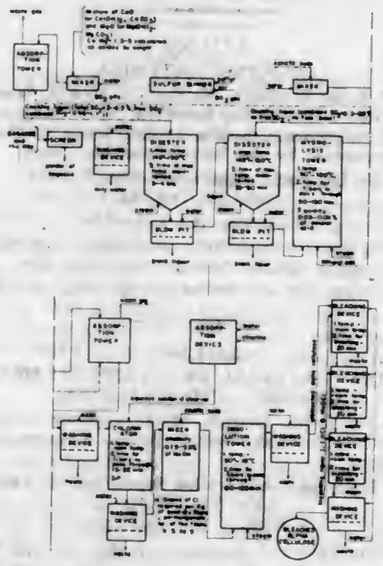
5. The process for making a paper pulp comprising heat-digesting a lignin containing cellulosic material with a hydrotropic salt solution, producing thereby a suspension of the crude cellulosic fiber pulp in said solution by keeping the pulp and the hydrotropic solution in mutual contact, cooling the pulp and the lignin solution and precipitating the hydrotropic lignin from its solution directly in and on the pulp by dilution of the same with cold water having a temperature of about 15° C.

2,731,345

PROCESS OF MAKING ALPHA CELLULOSE FROM FIBROUS LIGNO-CELLULOSE MATERIALS, PARTICULARLY FROM BAGASSE

I-Tsai Jen, Taipei, Taiwan, China

Application February 27, 1953, Serial No. 339,403
4 Claims. (Cl. 92—11)



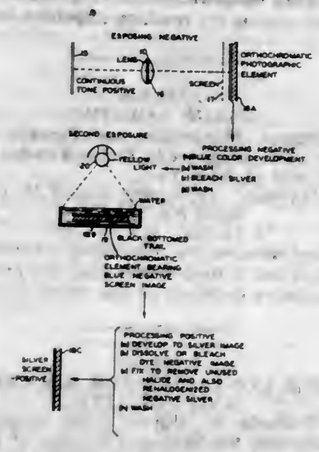
1. A process for producing alpha cellulose of high purity and high degree of polymerization from bagasse and like fibrous lignose-cellulose materials comprising digesting bagasse in an aqueous solution containing from about 3 to about 4.5% of sulfur dioxide in which the ratio of free sulfur dioxide to combined sulfur dioxide is about 0.95–1.1 to 1, on a weight basis, said sulfur dioxide content derived from magnesium sulfite, calcium sulfite and sulfurous acid, the ratio of magnesium to calcium being about 3–5 to 1, based on the oxides, said digestion carried out at a temperature from about 145° to about 150° C. for about 3 to 4 hours, thereafter digesting the recovered bagasse fibers suspended in an amount of about 5 to 10% by weight of said fibers in an aqueous neutral sodium sulfite solution containing from about .03 to about 0.8% sulfur dioxide, by weight at a temperature below about 145° C. for at least about 30 minutes and for less than about 1 hour.

2,731,346

PHOTOGRAPHIC METHOD OF MAKING INTAGLIO PRINTING ELEMENTS

Donald C. Gresham, New York, N. Y., assignor to McCorquodale-Gresham, Inc., Long Island City, N. Y., a corporation of New York

Application January 20, 1955, Serial No. 482,976
6 Claims. (Cl. 95—5)



1. The improved process for making printing plates which consists of making a continuous tone positive from an original subject and from this positive making a screen positive by exposing a plate behind a half-tone screen to light from a continuous tone positive of the original subject in a process wherein the lens opening is of substantially cruciform shape in which the lines of the cross are disposed substantially parallel with the lines of the screen, giving the plate a second flash exposure with the continuous tone positive removed, then developing to silver the latent image, with a developer that produces a dye in situ with the silver image, said dye image having a gamma value of at least 2.0, and bleaching the silver image, secondarily exposing said plate to light incident on the same side as the first exposure, said light being of a color to which the photographic emulsion is sensitive but which is absorbed by the said colored image, redeveloping said plate to a gamma of at least 2.0 in a developer which will not redevelop any rehalogenized silver negative image which may be present, removing the colored image and then fixing the plate to remove all residual silver halide, exposing a sheet of sensitized material suitable for preparing a permeable resist varying in thickness in accordance with the tones of a continuous tone positive, once behind said screen positive and once behind the continuous tone positive from which said screen positive was made, the successive prints being in register, processing the sensitized material to form an etching resist whose thickness varies in accordance with the tones of the continuous tone positive, said etching resist being superim-

posed on a printing plate material and finally etching the printing plate material to varying depths in accordance with varying thicknesses of the permeable resist.

2,731,347

PHOTOGRAPHIC EMULSIONS CONTAINING FLUORINE SUBSTITUTED ETHYLENE POLYMERS AS DELUSTERING AGENTS

Russell H. Gray, Red Bank, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application October 20, 1951, Serial No. 252,410
18 Claims. (Cl. 95—7)

1. A process of delustering water-permeable, organic, protective colloid layers which comprises admixing an aqueous solution of water-permeable, organic, protective colloid with an aqueous dispersion of finely divided particles of an ethylenic addition polymer at least 65% by weight of the polymer units being fluorine-substituted ethylene units containing 3 to 4 fluorine atoms, said particles having sizes within the range of 0.05 to 25.0 microns, and coating the resulting dispersion onto a sheet support.

2,731,348

SILAGE ADDITIVE

Alvin J. Striegel, Shimerville, and Franklin B. Wells, Allentown, Pa., assignors to Trojan Powder Company, a corporation of New York

No Drawing. Application August 21, 1953, Serial No. 375,823
5 Claims. (Cl. 99—8)

1. A silage preservative comprising a mixture of calcium formate and a food amino acid, the proportion of the formate being in excess of that of the amino acid.

2,731,349

EDIBLE CONTAINER FOR ICE CREAM AND THE LIKE

Harry A. Toulmin, Jr., Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio

No Drawing. Application July 22, 1953, Serial No. 369,741
10 Claims. (Cl. 99—88)

1. A shaped edible container for frozen comestibles, the walls of said container comprising a substantially preponderant amount of pure dextran having a molecular weight in the range of 5000 to 150×10^6, as determined by light scattering measurements, a molecular structural repeating alpha-1,6 to non-alpha-1,6 linkages ratio in the range between 1.9:1 and 30:1, dispersible in water to yield stable aqueous dispersions of from 0.5% to 50% by weight concentration, and having a colloidal osmotic pressure in liquids of from 1.0 mm. Hg to 300 mm. Hg.

2,731,350

PIE DOUGH AND METHOD OF MANUFACTURE THEREOF

Emil A. Busch, Sturgeon Bay, Wis.

No Drawing. Application January 2, 1952, Serial No. 264,694
4 Claims. (Cl. 99—92)

1. A method of making pie dough which comprises the creaming of the required flour, salt, and sugar with a high ratio shortening, in the absence of water, by thoroughly mixing the specified ingredients dry until their individual identities become invisible in the creamy mass, immediately followed by the addition of requisite water and further mixing until the water has disappeared and the mix is again creamed to the consistency of soft putty.

2,731,351

SOUP CONCENTRATES

Murray M. Scharf, Green Bay, Wis., assignor of fifty per cent to Bernard Greenblatt, Chicago, Ill.

No Drawing. Application March 19, 1953, Serial No. 343,528
16 Claims. (Cl. 99—124)

1. A concentrate having the property of retaining its color and flavor appreciably unimpaired over substantial periods of time and adapted upon the addition of water to form a soup, said concentrate containing, as essential ingredients, sugar, salt, cooked vegetable, and uncooked vegetable powder, the sugar and salt together comprising not substantially less than 40%, by weight of said concentrate, and the salt being present in substantially lesser proportions than the sugar but not substantially less than 5%, by weight of said concentrate, the cooked vegetable being present in proportions largely exceeding the proportions of the uncooked vegetable powder.

2,731,352

SOUP CONCENTRATES

Murray M. Scharf, Green Bay, Wis., assignor of fifty per cent to Bernard Greenblatt, Chicago, Ill.

No Drawing. Application April 29, 1953, Serial No. 352,056
16 Claims. (Cl. 99—124)

1. A concentrate having the property of retaining its color and flavor appreciably unimpaired over substantial periods of time and adapted upon the addition of water to form a soup, said concentrate containing, as essential ingredients, sugar, salt, hydrated vegetable, and uncooked vegetable powder, the sugar and salt together comprising not substantially less than 40%, by weight of said concentrate, and the salt being present in substantially lesser proportions than the sugar but not substantially less than 5%, by weight of said concentrate, the hydrated vegetable being present in proportions largely exceeding the proportions of the uncooked vegetable powder.

2,731,353

DE-ICING MATERIAL

Jacob M. Fain, Brooklyn, Norman L. Hewitt, Scarsdale, and William Rosenblatt, Brooklyn, N. Y., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Navy

No Drawing. Application June 9, 1953, Serial No. 360,592
10 Claims. (Cl. 106—13)

2. A de-icing composition comprising essentially in parts by weight lithium chloride 39.0, water 60.0, potassium chromate 1.0, and carboxymethyl cellulose 0.8.

2,731,354

COATING MATERIAL RESISTANT TO DETERIORATION AND CHALKING

Ralph J. Wirshing, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

No Drawing. Application September 29, 1951, Serial No. 249,003
3 Claims. (Cl. 106—14)

1. A protective and decorative coating material for use as an exterior gloss finish on automobiles and similar articles which are exposed to moisture and sunlight during normal usage, said coating material consisting predominantly of an organic vehicle selected from the group consisting of the natural and synthetic resins, the drying oil modified synthetic resins, the drying oils, and mixtures thereof, a pigment material selected from the group consisting of titanium oxide, zinc oxide and mixtures thereof, from about .25% to 10% by weight of an oxidizing agent to inhibit corrosion and chalking from light and moisture, and sufficient organic solvent to render said coating material fluid for application to the surface to be coated, said oxidizing agent being selected from the group consisting of the alkali metal dichromates and the alkali metal permanganates.

2,731,355

PROCESS OF PRODUCING A CRYSTALLINE MAGNESIUM-ALUMINUM-SILICATE MATERIAL

Kenneth G. Skinner, Norris, Tenn., assignor to the United States of America as represented by the Solicitor of the Department of the Interior

No Drawing. Application September 11, 1952, Serial No. 309,154
1 Claim. (Cl. 106—62)
(Granted under Title 35, U. S. Code (1952), sec. 266)

The process of producing a low thermal expansion highly crystalline cordierite ceramic material which comprises as a first stage melting natural magnesium containing rock of the class consisting of olivine, serpentine, talc and brucite, and containing natural impurities, mixed to produce a melt of magnesium silicate of the chemical composition corresponding to that of forsterite plus enstatite, and including in the melt sufficient iron to render it free from impurities, as a second stage adding natural aluminous material of the class consisting of kaolin, bauxite and silicious bauxite, together with silica to the molten magnesium silica at a temperature of at least 1475° C. in proportions to form a magnesium-aluminum-silicate melt of the chemical composition of cordierite, tapping the last mentioned melt and cooling it to about 800° C. in not less than about 8 hours, and then to room temperature in not less than about an additional 4 hours, whereby a highly crystalline cordierite ceramic material is formed having a low mean coefficient of thermal expansion of less than 3.0×10^{-6} cm./cm.° C. when reheated to about 20° to 1000° C.

2,731,356

A STENCIL FILLER SOLUTION

Earl G. Conley, Tulsa, Okla.

No Drawing. Application December 18, 1952, Serial No. 326,668
4 Claims. (Cl. 106—171)

1. A stencil filler solution consisting of methyl-cellulose, a solvent consisting of a mixture of methylene chloride, ethylene dichloride, carbon tetrachloride and methyl alcohol, and triethanolamine, said solution being characterized by its being not explosively inflammable and its rapid drying when applied to a foraminous painting screen to form a film which is water soluble and is impervious to the solvent action of organic diluents and cleaners used in silk screen processes.

2,731,357

COLOR STABILIZED WHITE PIGMENTED ETHYL CELLULOSE PLASTIC COMPOSITIONS

Albert B. Savage, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application July 15, 1954, Serial No. 443,701
3 Claims. (Cl. 106—176)

1. A white pigmented ethyl cellulose plastic composition comprising ethyl cellulose, a white pigment therefor and from 0.2 parts per million up to 10 per cent, based on the weight of ethyl cellulose, of 4,4'-bis(3,4-methylenedioxybenzamido)stilbene-2,2'-disulfonic acid.

2,731,358

PLASTIC FLOOR COVERINGS AND METHOD FOR PRODUCING SAME

James E. Hazeltine, Jr., Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania

No Drawing. Application November 10, 1952, Serial No. 319,795
4 Claims. (Cl. 117—15)

3. In the manufacture of block printed floor or wall coverings having a saturated felt backing and a fused vinyl resin top coat containing a plasticizer system having a solvent action on oleoresinous varnish, the improvement comprising coating said saturated felt with an intermediate composition, the binder of which contains about 3% to about 20% by weight of casein and about 97% to about 80% by weight oleoresinous varnish.

2,731,359

REFRACTORY FIBER BODY AND METHOD OF MAKING SAME

Kenneth C. Nicholson, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a corporation of Delaware

No Drawing. Application August 22, 1952, Serial No. 305,920
15 Claims. (Cl. 117—16)

13. A method of making a light-weight refractory body which comprises forming a non-woven mass of refractory fibers which are capable of standing up under the temperatures required for converting silicon powder to the desired silicide, incorporating a silicon powder within said mass of fibers, and heating the resulting mass in a non-oxidizing atmosphere selected from the group consisting of a carbonaceous atmosphere and a nitrogen-containing atmosphere to convert the metallic silicon to a silicide bond and thereby bond the refractory fibers together at their points of contact.

2,731,360

METHOD FOR INCORPORATING A SOLID LUBRICANT INTO A POROUS METALLIC SURFACE

Phil Prince Love, Wembley, England, assignor to The Glacier Metal Company Limited, Wembley, England, a British company

No Drawing. Application April 1, 1952, Serial No. 279,966
Claims priority, application Great Britain April 6, 1951
6 Claims. (Cl. 117—49)

1. A method for incorporating a solid non-metallic lubricant into a receptive metal surface comprising removing air from the surface by the application of sub-atmospheric pressure, thereafter applying the solid non-metallic lubricant to the receptive surface in the form of a colloidal suspension in a vaporizable carrier liquid, raising the pressure to drive the suspension into said surface, evaporating the carrier liquid to leave the solid lubricant in the receptive surface, repeating this cycle of treatment until the receptive surface is substantially filled with the solid lubricant, and then burnishing the impregnated surface to compact the solid lubricant therein.

2,731,361

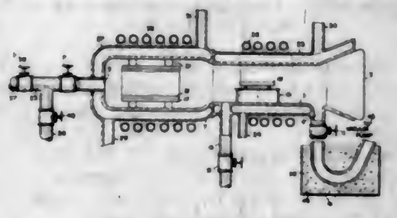
CATALYZED DEPOSITION OF METALS FROM THE GASEOUS STATE

Herman R. Nack, Troy, and John R. Whitacre, Dayton, Ohio, assignors to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio

Application December 9, 1952, Serial No. 324,962
5 Claims. (Cl. 117—50)

1. A process of gas plating a metal body with nickel from nickel carbonyl, said process comprising introducing said metal body to be gas plated in an encolsure along with nickel metal, heating said metal body to a temperature between about 500 and 800° F. and below the

softening point of the metal, heating said nickel metal to a temperature between about 1200–1525° F., passing a stream of carbon monoxide over said nickel metal and metal body while thus heated, and subsequently decreasing the temperature of said nickel metal and said metal



body, and thereafter contacting the metal body at said decreased temperature with carbon monoxide mixed with nickel carbonyl to cause decomposition of said nickel carbonyl and deposition of nickel onto the surface of said metal body.

2,731,362
ALUMINUM COATING OF FERROUS METAL ARTICLES

Kenneth James Brondyke, Oakmont, Pa., assignor to Aluminum Company of America, Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application January 2, 1953, Serial No. 329,469
10 Claims. (Cl. 117—51)

1. The method of coating a ferrous metal body with aluminous metal by the dip coating process wherein the aluminous metal is directly bonded to the ferrous metal body comprising covering the surface of said ferrous metal body with a dry solid chloride-free flux, said flux containing as its essential components from 65 to 85% by weight of at least one alkali metal bromide and from 15 to 35% of at least one fluoride of the group consisting of potassium fluoride and potassium acid fluoride, immersing said flux covered body in a bath of molten aluminous metal and thereafter withdrawing the body from the molten bath.

2,731,363
METHOD OF COATING LEATHER

Elvira Nappi, Ozone Park, N. Y.

No Drawing. Application May 21, 1952, Serial No. 289,212
1 Claim. (Cl. 117—55)

The method of treating and thereby preserving leather, which consists in first cleaning the leather to be treated, applying volatile alcohol thereto and drying the leather, then applying to the latter a preservative composition of matter to form a thin coating thereon which comprises about 10% of Portland cement, about 45% of common tar, and about 45% of alcohol of the class consisting of ethyl and methyl alcohol, and finally drying the leather thus treated for a period of time ranging from several hours to twenty four hours with said composition of matter applied on said leather.

2,731,364
PROCESS FOR IMPROVING CELLULOSE TEXTILE MATERIALS AND PRODUCT THEREOF

Bruno v. Reibnitz, Mannheim-Feudenheim, and Wilhelm Ruemens and Kurt Beideck, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

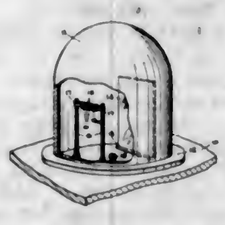
No Drawing. Application August 16, 1952, Serial No. 304,842
Claims priority, application Germany August 18, 1951
12 Claims. (Cl. 117—64)

1. A process for the production of impregnations on cellulose textiles which comprises impregnating the textiles with a solution of a methylol compound of a 4,5-dihydroxyimidazolidone in the presence of an acid-reacting hardening catalyst, drying and heating then the impregnated textiles to harden the impregnating agent employed.

2,731,365
METHOD OF VAPOR DEPOSITING COATINGS OF ALUMINUM

Arthur R. Weinrich, Dallas, Tex., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio

Original application December 28, 1948, Serial No. 67,610. Divided and this application June 21, 1951, Serial No. 232,700
2 Claims. (Cl. 117—107)

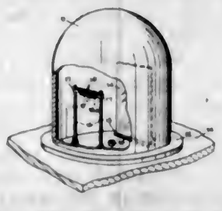


1. The method of providing a smooth, uniform coating of aluminum on a surface, which consists in providing a filament selected from the group consisting of tungsten, molybdenum, tantalum and columbium, placing on said filament an aluminum alloy containing between 0.5% and 10.0% molybdenum and the balance substantially aluminum, said molybdenum coacting with said filament and said aluminum to retard the speed at which the aluminum spreads out on the filament when heated preliminarily to being evaporated, and heating said aluminum alloy to evaporate the aluminum component thereof from said filament onto a surface to be coated.

2,731,366
METHOD OF VAPOR DEPOSITING COATINGS OF ALUMINUM

Arthur R. Weinrich, Dallas, Tex., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio

Original application December 28, 1948, Serial No. 67,609. Divided and this application June 21, 1951, Serial No. 232,787
5 Claims. (Cl. 117—107)



1. The method of providing a smooth uniform coating of aluminum on a surface, which consists in providing a filament selected from the group consisting of tungsten, molybdenum, tantalum and columbium, placing on said filament an aluminum alloy containing between 0.25% and 10% tungsten and the balance substantially aluminum, said tungsten coacting with said aluminum and said filament to retard the speed at which the aluminum spreads out upon the filament when heated preliminarily to being evaporated, and heating said aluminum alloy to evaporate the aluminum component thereof from said filament onto a surface to be coated.

2,731,367
SIZED AND ANTI-STATIC COATED SYNTHETIC FIBER AND PROCESS OF COATING

Remus F. Caroselli, Manville, R. I., assignor to Owens-Corning Fiberglas Corporation, a corporation of Delaware

No Drawing. Application December 20, 1951, Serial No. 262,650
9 Claims. (Cl. 117—126)

8. In the anti-static treatment of synthetic fibers and fabrics formed thereof, the steps of sizing the fibers with an aqueous composition containing a film forming material for sizing the fibers and containing in addition to the film forming material 0.1 to 2.0 percent by weight of a water soluble polysiloxanolate in which the organic radicals attached directly to the silicon atoms are saturated and contain from 1–10 carbon atoms.

2,731,368
TREATMENT OF TEXTILE MATERIALS

Fred Fortess, Summit, and Marshall Duke, Morristown, N. J., assignors to Celanese Corporation of America, New York, N. Y., a corporation of Delaware

No Drawing. Application February 20, 1952, Serial No. 272,686
1 Claim. (Cl. 117—139.4)

Process for improving the resistance to creasing of a textile material containing cellulose acetate yarn, which comprises immersing the said fabric for 30 seconds into a latex of a fully polymerized butadiene-styrene copolymer maintained at 50° C., and drying the so treated textile material, the proportion of the copolymer retained on said textile material being 0.625% by weight, based on the weight of the textile material.

2,731,369
CHEMICALLY RESISTANT COTTON MATERIALS

George L. Deniston, Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio

Original application August 14, 1951, Serial No. 241,740, now Patent No. 2,706,690, dated April 19, 1955. Divided and this application May 4, 1954, Serial No. 430,219
4 Claims. (Cl. 117—143)



1. A cotton product impregnated and coated with a benzyl ether of dextran formed in and on the product while the cotton is in swollen condition, the impregnated product being dimensionally stabilized by the benzyl ether and potentially tacky by treatment with an organic solvent for the benzyl ether.

2,731,370
PACKAGE COATED WITH PARAFFIN AND A POLYMERIZED PRODUCT OF A CYCLOPENTADIENE

Heinrich Tramm, Mulheim-Ruhr-Speldorf, and Otto Roelen, Oberhausen-Holten, Germany, assignors to Ruhrchemie Aktiengesellschaft, Oberhausen-Holten, Germany, a German corporation

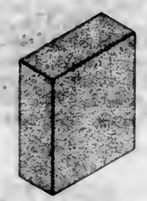
No Drawing. Application May 7, 1953, Serial No. 353,662
Claims priority, application Germany May 14, 1952
5 Claims. (Cl. 117—155)

1. A sterilizable package for solid and liquid consumer goods comprising a base material defining the package and a surface coating of paraffin having a melting point of above 90° C., said coating additionally containing from 2–70% of a polymerization product having a melting point in excess of 100° C. and selected from the group consisting of polymerization products of cyclopentadien, dicyclopentadien and hydrogenated polymerization products of cyclopentadien and dicyclopentadien.

2,731,371
ELECTRICAL CONTACT BRUSH

Dimiter Ramadanoff, Berea, Ohio, assignor to Union Carbide and Carbon Corporation, a corporation of New York

Application March 29, 1952, Serial No. 279,319
7 Claims. (Cl. 117—228)



1. An electrical contact brush comprising at least one of the materials in the group consisting of carbon and graphite, and coumarone-indene resin.

2,731,372
METHOD OF REMOVING THE INSULATION FROM THE ENDS OF ASSEMBLED COMMUTATOR WIRES

Carl W. Kirsch, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio

Original application May 6, 1948, Serial No. 25,461, now Patent No. 2,671,913, dated March 16, 1954. Divided and this application June 6, 1952, Serial No. 292,173
13 Claims. (Cl. 134—2)



1. The method of removing the insulation from and cleaning the ends of assembled armature wires preparatory to securing the ends to the commutator segments comprising, the steps of applying a flame ot the insulation on the ends of the wires to char the insulation at the ends while protecting the insulation on the remainder of the wires from the heat of the flame, applying a rotative abrasive brushing action downwardly against the ends of the wires to remove the charred insulation from one side of the wires and to polish one side of the wires, moving the ends of the wires upwardly to expose the other side of the wires and applying a rotative abrasive brushing action upwardly against the exposed ends of the wires to remove the charred insulation from the other side of the ends of the wires and to polish the ends of the wires, the foregoing steps being carried out in sequence.

2,731,373
ELECTRODE FLUX COVERING FOR COPPER AND COPPER-BASE ALLOY CORE MATERIALS

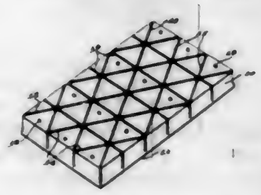
Rene David Wasserman, Stamford, Conn., and Joseph Quaas, Island Park, N. Y., assignors to Eutectic Welding Alloys Corporation, New York, N. Y., a corporation of New York

No Drawing. Application August 10, 1954, Serial No. 448,995
5 Claims. (Cl. 148—26)

4. A composition suitable for application to a metallic electrode core for use in an electric arc welding operation comprising a mixture of substantially equal parts of calcium carbonate, calcium fluoride, lepidolite, and titanium dioxide, said ingredients aggregating 80 per cent

by weight of the total mixture, the remainder consisting of deoxidizers selected from the group consisting of metal alloy powders and graphite and slag-forming constituents selected from the group consisting of talc, zirconium silicate, potash, feldspar, aluminum silicate and clay.

2,731,374
INSULATION FOR SPHERICAL SURFACES
Marinus E. De Reus, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a corporation of Ohio
Application April 11, 1952, Serial No. 281,778
4 Claims. (Cl. 154—44)



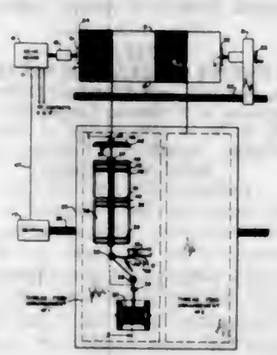
1. Insulation for spherical surfaces comprising a unitary block of form-retaining, non-compressible insulating material, a sheet of flexible material adhered to one face of said block, said block having a multiplicity of members formed by intersecting grooves in the other face thereof extending partly through the entire thickness of the block and through the greater portion of the thickness, each said groove extending in a straight line to the extremities of said block, the intersecting grooves defining angles of approximately 60° with each other, said grooves forming lines of weakness in said block whereby, when the block is placed on a curved surface with the grooves adjacent to the surface and pressure is applied thereto, the block will flex along said grooves and will conform to the surface, said grooves having substantially parallel walls spaced apart at such distance that when the block is so flexed the said surfaces are convergent with the edges of the grooves brought together at the face of the block opposite from that to which the said sheet is adhered, said sheet retaining the block as a single, integrated unit when it is flexed along the grooves with entrapped air in said grooves forming dead air spaces, and a layer of the block material separating the grooves from the said sheet of flexible material.

2,731,375
METAL BUILDING MATERIAL
Harry A. Toulmin, Jr., Dayton, Ohio, assignor to Midland Chemical Corporation, Dayton, Ohio, a corporation of Delaware
Application August 19, 1953, Serial No. 375,089
3 Claims. (Cl. 154—45.9)



1. As a new article of manufacture, metal building material comprising a metal sheet, a layer of bituminous-carrying fibrous material covering and bonded to a surface of the metal sheet, and an outer, weatherproofing layer self-adhered to the surface of the fibrous layer removed from the metal sheet and formed by depositing on said fibrous layer surface a blend consisting of (*a*) a liquid, resinous condensate of components consisting essentially of a polyhydric alcohol and a substance selected from the group consisting of straight-chain alpha-unsaturated-alpha, beta-dicarboxylic acids and anhydrides thereof with (*b*) from 5 to 50 parts by weight of a monovinylpyridine per 100 parts of the condensate, and curing the blend on the fibrous layer to set it in hard, infusible, insoluble condition.

2,731,376
METHOD OF MAKING HOLLOW LAMINATED ARTICLES FROM UNWOVEN FABRIC
Adolphe Rusch, Rumson, N. J., assignor to the United States of America as represented by the Secretary of the Army
Application December 3, 1953, Serial No. 396,086
7 Claims. (Cl. 154—83)
(Granted under Title 35, U. S. Code (1952), sec. 266)



7. A method of manufacturing a storage battery case comprising the steps of applying silicone grease to a substantially rectangular hollow form, spinning the form about a first axis through the form, said axis passing through the centers of a first pair of opposite sides of said form, feeding glass yarn from a spool through a polyester resin bath through a reed onto said form while moving said reed in a direction substantially parallel to said spin axis along the entire extent of said form, repeating the immediately preceding step first while spinning said form about a second axis through said form and then about a third axis through said form, said second axis passing through the centers of a second pair of opposite walls of said form and said third axis passing through the centers of the third pair of opposite walls of said form, repeating the spinning and feeding steps set forth above until the desired number of laminating layers are built up, applying pressure to the laminate covering the form after the completion of the feeding operations set forth above so as to cure said laminate, removing the resultant structure from said form by cutting through the cured laminate about the longest perimeter thereof parallel to the base of said form.

2,731,377
CEMENTITIOUS COMPOSITION AND PROCESS OF PRODUCING THE SAME
Wallace C. Riddell, Berkeley, and George B. Kirk, Redwood City, Calif., assignors, by mesne assignments, to Kaiser Gypsum Company, Inc., a corporation of Washington
No Drawing. Application August 13, 1951, Serial No. 241,698
5 Claims. (Cl. 154—88)

1. Process for making a low-density cellular gypsum wallboard which comprises preparing a water slurry containing calcined gypsum and from 0.05% to 1.0%, based on the total dry weight, of at least one substance chosen from the group consisting of the petroleum hydrocarbon-insoluble fraction of the coal-tar extract of pine wood and a water-soluble salt of said fraction, thoroughly mixing said slurry mixture to form fine textured foam therein, depositing said foam-containing slurry between fibrous liners, drying and hardening.

2,731,378
PROCESS FOR APPLYING A LAMINATE TO SUPPORTING SURFACE
Allister Strachan, Columbus, Ohio, assignor to Midcontinent Adhesive Company, Grove City, Ohio, a corporation of Ohio
Application December 13, 1952, Serial No. 325,805
4 Claims. (Cl. 154—120)



1. The method of applying a laminate to a supporting surface with the laminate of a size to fit exactly the supporting surface which comprises applying cement to the supporting surface and applying cement to a surface of the laminate, placing a sheet of material, which will not adhere to the cemented surfaces without pressure, between the cemented surfaces which are disposed in superimposed relationship with the sheet of material having its edges coinciding with the corresponding edges of the laminate except that one of its edges extends beyond the corresponding edge of the laminate so that it can be pulled readily from between the laminate and the supporting surface, gradually withdrawing said sheet from between such surfaces by pulling on the extended edge thereof to cause portions of such surfaces to progressively contact with each other, and progressively pressing together the contacting portions of such surfaces.

2,731,379
METHOD OF MAKING HONEYCOMB MATERIAL
Donald B. Wheeler, Hudson Falls, N. Y., assignor to Union Bag & Paper Corporation, New York, N. Y., a corporation of New Jersey
Application April 21, 1953, Serial No. 350,019
10 Claims. (Cl. 154—124)



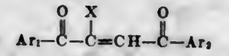
1. The method of making honeycomb material which comprises providing a continuous unexpanded cellular pack of uniform thickness, applying pressure against the cell ends at two spaced positions and advancing the pack at a higher rate of speed at the second position than at the first to effect a stretching action between positions, applying pressure against the sides of the pack while it is maintained in a single plane and as it advances from the first position to the second to compress the pack to a predetermined width, which stretching and side pressure open the pack into a continuous expanded honeycomb material.

2,731,380
METHOD FOR CONTROLLING GASTROPODA WITH OCTYL VINYL SULFONE
Roland S. Shumard, Brentwood, Mo., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
No Drawing. Application December 29, 1951, Serial No. 264,253
1 Claim. (Cl. 167—22)

The method for controlling Gastropoda comprising contacting Gastropoda with octyl vinyl sulfone.

2,731,381
PESTICIDAL COMPOSITIONS AND THEIR USE
Jack S. Newcomer, Grand Island, N. Y., assignor, by mesne assignments, to The Pennsylvania Salt Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania
No Drawing. Application May 21, 1951, Serial No. 227,522
13 Claims. (Cl. 167—30)

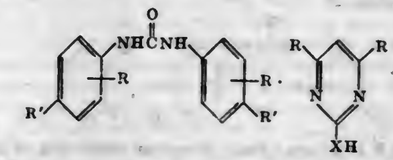
1. A composition prepared for use in combating microorganisms comprising a surface active agent, and a compound having the formula



wherein each of Ar_1 and Ar_2 represent an aryl radical selected from the group consisting of phenyl, biphenylyl, terphenylyl and naphthyl radicals, said radicals having from 0 to 3 substituents selected from the group consisting of halogen and alkyl radicals containing less than six carbon atoms; and wherein X represents halogen.

2,731,382
PYRIMIDINE SUBSTITUTED UREA COMPLEXES AND PROCESSES FOR PREPARING THE SAME
Arthur J. Basso, Colonia, N. J., and Robert C. O'Neill, New York, N. Y., assignors to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey
No Drawing. Application December 29, 1954, Serial No. 478,514
20 Claims. (Cl. 167—53.1)

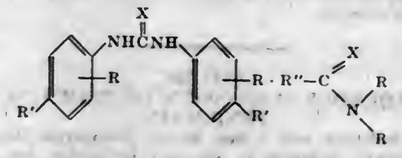
17. A composition useful against coccidiosis which comprises an inert carrier and a compound represented by the formula



wherein R is selected from the group consisting of hydrogen and lower alkyl groups, R′ is an electron withdrawing group and X is selected from the group consisting of oxygen and sulfur.

2,731,383
SUBSTITUTED UREA-AMIDE COMPLEX
Robert C. O'Neill, New York, N. Y., and Arthur J. Basso, Colonia, N. J., assignors to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey
No Drawing. Application February 11, 1955, Serial No. 487,721
18 Claims. (Cl. 167—53.1)

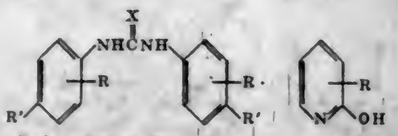
13. A composition useful against coccidiosis which comprises an inert carrier and a compound represented by the formula—



wherein R is selected from the group consisting of hydrogen and lower alkyl groups, R′ is an electron withdrawing group, R″ is selected from the group consisting of hydrogen and alkyl and aryl radicals containing less than eight carbon atoms and X is selected from the group consisting of oxygen and sulfur.

2,731,384
2-HYDROXY PYRIDINE SUBSTITUTED UREA COMPLEX
Robert C. O'Neill, New York, N. Y., and Arthur J. Basso, Colonia, N. J., assignors to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey
No Drawing. Application February 28, 1955, Serial No. 491,224
9 Claims. (Cl. 167—53.1)

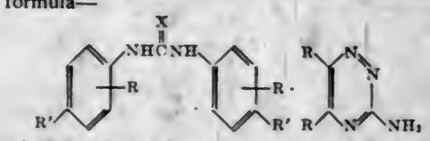
7. A composition useful against coccidiosis which comprises an inert carrier and a compound represented by the formula—



wherein R is selected from the group consisting of hydrogen and lower alkyl groups, R' is an electron withdrawing group and X is selected from the group consisting of oxygen and sulfur.

2,731,385
3-AMINO-AS-TRIAZINE-SUBSTITUTED UREA COMPLEXES AND PROCESSES FOR PREPARING THE SAME
Robert C. O'Neill, New York, N. Y., and Arthur J. Basso, Colonia, N. J., assignors to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey
No Drawing. Application March 10, 1955, Serial No. 493,613
14 Claims. (Cl. 167—53.1)

11. A composition useful against coccidiosis which comprises an inert carrier and a compound represented by the formula—



wherein R is selected from the group consisting of hydrogen and lower alkyl groups, R' is an electron withdrawing group and X is selected from the group consisting of oxygen and sulfur.

2,731,386
ANTIFUNGAL COMPOSITION
Laszlo Reiner, Essex Fells, N. J., assignor to Wallace & Tiernan Company, Inc., a corporation of New Jersey
No Drawing. Application September 6, 1951, Serial No. 245,431
6 Claims. (Cl. 167—58)

5. An antifungal composition comprising as active ingredients at least three different compounds selected from the class consisting of salicylanilide and halogen derivatives of salicylanilide that contain less than five halogen atoms, the halogen atoms of said derivatives being of greater atomic weight than fluorine, and the entire halogen content in each derivative being of a single haolgen element.

2,731,387
AQUEOUS SUSPENSION OF PROCAINE PENICILLIN
Ernst Aubagen and Klaus Bauer, Wuppertal-Elberfeld, Germany, assignors to Schenley Industries, Inc., New York, N. Y., a corporation of Delaware
No Drawing. Application May 13, 1952, Serial No. 287,598
Claims priority, application Germany May 15, 1951
6 Claims. (Cl. 167—65)

1. An aqueous suspension comprised of finely divided particles of the procaine salt of penicillin in which the proportion of salt materially exceeds about 10% by weight of the total weight of the suspension, characterized by improved fluidity and substantial stability of antibiotic potency when stored under ordinary conditions, that comprises additionally, in solution in the aqueous component of the suspension, a purified salt of a bile acid derived from hydrolyzed ox-bile.

2,731,388
RECOVERY AND PURIFICATION WITH ORGANIC SOLVENT OXIMES OF SUBSTANCES HAVING VITAMIN B_{12} ACTIVITY
Jerry Robert D. McCormick, New City, N. Y., and Siegfried A. Muller, Westwood, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Application November 7, 1951, Serial No. 255,322
12 Claims. (Cl. 167—81)

1. A method of purifying materials having vitamin B12 activity which comprises extracting a source of said material with a solvent comprising an oxime of the group consisting of those represented by the formula:



in which R is a phenyl radical, separating the oxime solution of vitamin B12 material from the source material and recovering the vitamin material from said oxime solvent.

2,731,389
RECOVERING VITAMIN B_{12} MATERIALS FROM ORGANIC OXIME SOLUTIONS OF THE SAME WITH AMINES
Jerry Robert D. McCormick, New City, N. Y., and Siegfried A. Muller, Westwood, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Application November 7, 1951, Serial No. 255,324
11 Claims. (Cl. 167—81)

4. A method of recovering vitamin B_{12} from solution in a liquid oxime organic solvent which comprises adding to said solution a quantity of amine having a pK_b value of less than 11 approximately molecularly equivalent to the quantity of said oxime solvent and recovering from said mixture vitamin B_{12}.

2,731,390
STABILIZED FOLIC ACID AND VITAMIN COMPOSITION
Robert P. Tansey, Newark, and George H. Schneller, Basking Ridge, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Application February 12, 1953, Serial No. 336,641
6 Claims. (Cl. 167—81)

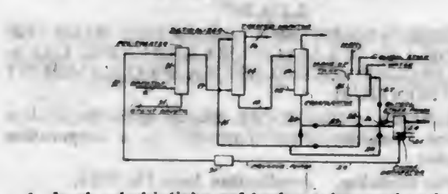
1. A stable therapeutic vitamin preparation comprising folic acid, B-complex vitamins, water and antioxidants from the group consisting of nordihydroguaiaretic acid, a butylated hydroxy anisole and ethyl hydrocaffeate, having a pH between 3.5 and 5.5.

2,731,391
CLOUD POINT REDUCTION OF MINERAL WHITE OILS
Leo Salzmann, Petrolia, Pa., assignor to L. Sonneborn Sons, Inc., a corporation of Delaware
No Drawing. Application September 19, 1950, Serial No. 185,693
10 Claims. (Cl. 196—17)

1. Method for the reduction of the normally relatively high cloud point of a mineral white oil, the cloud point

of which is due to the less than 1% of wax contained therein, which comprises intimately contacting such white oil with an adsorbent carrying dispersed therethrough urea, at least a portion of which is in adsorbed condition resulting from alcoholic urea solution contact, and recovering mineral white oil of lower cloud point, said urea-carrying adsorbent being present in amount sufficient to lower said cloud point at least 15° F.

2,731,392
DETHIOLIZING HYDROCARBONS
James L. Meadows, Wiley P. Ballard, and William B. Chandler, Port Arthur, Tex., assignors to The Texas Company, New York, N. Y., a corporation of Delaware
Application September 30, 1952, Serial No. 312,292
16 Claims. (Cl. 196—32)



1. In the dethiolizing of hydrocarbons wherein the hydrocarbon is contacted with a treating solution of aqueous alkali metal hydroxide in an organic solvent selected from the group consisting of glycol ethers and alkanolamines, the treating solution treated to remove mercaptans and regenerate said solution for re-use in dethiolizing, the process that comprises withdrawing regenerated treating solution from the regeneration step and concentrating it to cause autogenous phase separation into a solvent-rich phase and an aqueous phase containing impurities, returning the solvent-rich phase to the dethiolizing step and withdrawing the aqueous phase containing the impurities.

2,731,393
DESULFURIZATION AND SWEETENING PROCESS
Erving Arundale, Westfield, and John P. Thorn, Elizabeth, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application March 2, 1953, Serial No. 339,804
17 Claims. (Cl. 196—32)

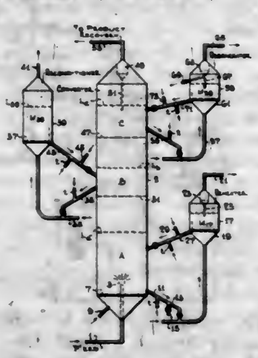


1. Process for refining a sulfur-containing hydrocarbon fraction which comprises contacting said fraction with a treating mixture comprising an alkali selected from the class consisting of the alkali metal carbonates and bicarbonates, an aliphatic aldehyde and a compound of the general formula



where R_1 is a radical selected from the group consisting of hydrogen, alkyl and hydroxy alkyl, and R_2 is a radical selected from the group consisting of alkyl and hydroxy alkyl, and thereafter water washing the treated fraction.

2,731,394
CONVERSION OF HEAVY HYDROCARBON OILS
Clark E. Adams, Robert W. Krebs, and Charles N. Kimberlin, Jr., Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application May 25, 1951, Serial No. 228,234
6 Claims. (Cl. 196—49)

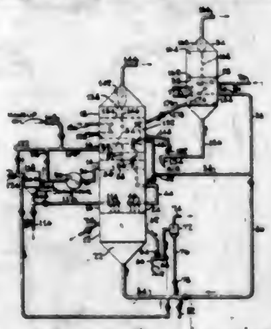


1. In the process of producing lower boiling hydrocarbons from heavy hydrocarbonaceous residues which tend to produce finely divided contaminants for catalysts by coking said residues in contact with a dense, turbulent, fluidized mass of catalytically substantially inert solids maintained at a coking temeperature in a coking zone and passing the volatile coking products including entrained particles of heavy liquid without intermediate condensation of constituents desirable for cracking through a dense fluidized mass of cracking catalyst maintained at a cracking temperature, the improvement which comprises maintaining in a vertical elongated contacting zone a lower dense fluidized mass catalytically inert solids at a coking temperature, an intermediate separate dense fluidized mass of catalytically inert solids which is maintained at a temperature not exceeding the coking temperature in the lower mass and sufficiently low to collect high boiling hydrocarbons from coked vapor products in sufficient quantities to separate catalyst contaminant materials from said vapor products by adhesion, and an upper separate dense fluidized mass of cracking catalyst maintained at said cracking temperature, feeding said residues to said lower mass, passing voltatile effluent of said lower mass in series upwardly through said intermediate and upper masses, separating the entrained liquid particles and finely divided contaminants in said intermediate mass by adhesion as aforesaid, withdrawing catalytically cracked volatile products from said upper mass, passing solids from said intermediate mass to a separate reconditioning zone, removing constituents undesirable in catalytic cracking from said solids in said reconditioning zone and returning solids so reconditioned to said intermediate mass.

2,731,395
CONVERSION OF HYDROCARBONS IN TWO STAGES WITH INERT AND CATALYST PARTICLES
Charles E. Jahnig, Red Bank, and Frank T. Barr, Summit, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application June 29, 1951, Serial No. 234,384
8 Claims. (Cl. 196—49)

1. In a method of producing lower boiling hydrocarbon oils from a heavy residual petroleum oil comprising the steps of coking said residual oil in a coking zone in the presence of a dense fluidized highly turbulent bed of finely divided solid particles in the bottom portion of a contacting zone, said bed being maintained at a temperature in the range of 900° to 1300° F., for a time sufficient to effect cracking and coking of the residual

oil; passing the vaporous products upwardly through a bed of treating catalyst to refine said vapors to remove gum-forming materials, said bed being arranged in the top portion of the contacting zone and then removing treated vapors from the top portion, the improvement which comprises passing the vaporous products from the coking



step upwardly countercurrently to incoming oil feed and further upwardly through a liquid slurry of oil and some of said solid particles, said slurry comprising a partial condensation zone intermediate to the coking and catalyst beds thereby excluding solid particles and higher boiling constituents from the bed of treating catalyst.

2,731,396

COMBINATION CRUDE DISTILLATION AND CRACKING PROCESS

Clarke T. Harding, Hillside, Maurice W. Mayer, Summit, and Richard O. Wright, Cranford, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Original application June 3, 1950, Serial No. 165,982, now Patent No. 2,644,785, dated July 7, 1953. Divided and this application July 30, 1952, Serial No. 301,716

12 Claims. (Cl. 196—49)

1. In a combination crude distillation and hydrocarbon conversion process, the improvement which comprises subjecting crude oil to distillation in a distillation zone to produce distillate fractions including a gas oil fraction and a naphtha cut and reduced crude, passing said reduced crude to a low pressure product fractionation zone, catalytically cracking said gas oil fractions and stripping said reduced crude in said product fractionation zone with vapors from said catalytic cracking operation subjecting a naphtha cut of said distillate fractions to catalytic reforming in a reforming zone yielding hydrogen, recovering stripped reduced crude bottoms from said product fractionation zone, withdrawing distillate fractions from said product fractionation zone and treating one of said last named distillate fractions with said hydrogen outside said reforming and product fractionation zones.

2,731,397

CONVERSION OF HYDROCARBON OILS WITH THE USE OF A SILICA-MAGNESIA CRACKING CATALYST INCORPORATED WITH A SMALL AMOUNT OF STRONTIUM

Henry Erickson, Calumet City, Ill., assignor to Sinclair Refining Company, New York, N. Y., a corporation of Maine

No Drawing. Application June 14, 1950, Serial No. 168,155

2 Claims. (Cl. 196—52)

2. In the conversion of hydrocarbon oils at a cracking temperature in the presence of a cracking catalyst which is cyclically regenerated by combustion of adherent carbonaceous matter with an oxygen-containing gas, the improvement which consists of contacting the hydrocarbon oil with a silica-magnesia cracking catalyst which has been modified by the incorporation of a small proportion of strontium in an amount of 0.1% to 2% based on the weight of the catalyst.

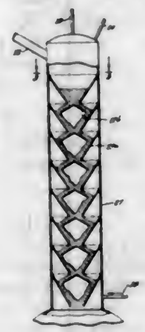
2,731,398

CATALYTIC CONVERSION OF HYDROCARBONS WITH THE STRIPPING OF THE FOULED CATALYST PARTICLES

Arnold Belchetz, Larchmont, N. Y., assignor to The M. W. Kellogg Co., Jersey City, N. J., a corporation of Delaware

Continuation of application Serial No. 772,170, September 4, 1947. This application May 24, 1951, Serial No. 228,010

1 Claim. (Cl. 196—52)



A continuous process for the catalytic conversion of hydrocarbons wherein said hydrocarbons are contacted in gaseous form with powdered solid catalyst, and wherein said powdered catalyst is continuously circulated within an enclosed system through a recation zone and a regeneration zone, which process includes the steps of: continuously introducing said hydrocarbons into the lower portion of said reaction zone and passing same upwardly to form a suspension of said powdered catalyst in upflowing reactant gases; separating catalyst from reactant gases and continuously withdrawing a stream of reactant gases from which catalyst has been separated from said enclosed system; introducing said separated catalyst into the upper region of a vertically extended stripping zone and maintaining a continuously flowing stream of said catalyst passing downwardly within said stripping zone; introducing a stream of stripping gas into the lower region of said stripping zone and flowing said stripping gas countercurrently up through descending solids; discharging catalyst from the lower region of said stripping zone; feeding said withdrawn catalyst into a regenerating gas in said regeneration zone; regenerating said catalyst in said regeneration zone and reintroducing said regenerated catalyst into said reaction zone.

2,731,399

REACTION VESSEL FOR COKE REMOVAL

Leland W. T. Cummings, Wyncote, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

Application January 21, 1952, Serial No. 267,476

2 Claims. (Cl. 196—122)



1. Means for removing deposits of carbon from a hydrocarbon reaction vessel comprising the combination, with an open-ended cylindrical reaction vessel of uniform cross-sectional area with removable end heads having inlets and outlets opening directly into the cylindrical reaction vessel, of an open-ended liner to which deposited carbon is adherent and shaped to conform to, and of greater length than, the wall of the reaction vessel and having its free ends extending outward under, and confined by, the end heads when applied to the reaction vessel, and an ejector conforming approximately in shape and area to the cross-sectional shape and area of the liner and, upon removal of one end head, insertable in that end of, and slidable throughout the length of, the reaction vessel and, upon removal of the other end head, so operable axially of the then open-ended reaction vessel as to slide the liner and carbonaceous deposits thereon as a unit and simultaneously eject them as a unit from the other end of the reaction vessel.

2,731,400

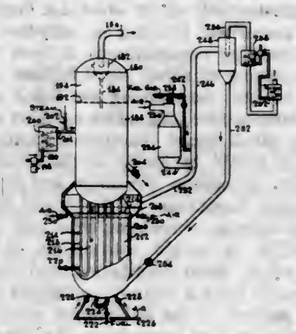
CONVERSION OF HYDROCARBONS

Charles E. Jahnig, Red Bank, Harvey E. W. Burnside, Rumson, and James W. Brown, Elizabeth, N. J., assignors to Standard Oil Development Company, a corporation of Delaware

Application June 2, 1951, Serial No. 229,584

6 Claims. (Cl. 202—14)

1. In a process wherein high boiling residual petroleum hydrocarbons which contain constituents unvaporizable at ordinary pressures without cracking are converted into lower boiling hydrocarbons in contact with a dense fluidized bed of finely divided coke maintained at a coking temperature of about 800 to 1400° F. in a coking zone and wherein vapors of said lower boiling hydrocarbons are removed overhead from said coking zone while coke product is withdrawn from the dense bed, the improvement in supplying heat to said coking zone which comprises downwardly withdrawing a multiplicity of individual confined narrow streams of said finely divided coke in dense phase from the bottom of said bed, circulating each withdrawn stream along a U-shaped confined path back into a bottom portion of said bed, injecting an inert gas into the bottom portion of the upflow leg of each said U-shaped paths to control the circulation rate of the coke, maintaining said coke in said confined U-shaped paths within a heating zone in indirect heat exchange relation with another dense bed of finely divided solid heat carrier particles having a disperse phase of heat carrier particles and gas thereabove, passing a fluidizing gas upwardly through the last-named dense bed at a superficial velocity of less than about 10 ft./sec., said heating zone being arrange beneath said coking zone and being maintained at a temperature above said coking temperature and within the range of about 1000 to 1500° F. and at substantially atmospheric pressure, continuously withdrawing a portion of said disperse phase containing heat carrier particles from an upper portion of said heating zone, heating the withdrawn disperse phase to a temperature not in excess of 2000° F. by mixing it in a confined elongated burner zone with hot gases at a superficial gas velocity of about 10 to 60 ft./sec., separating hot heat carrier solids from said disperse phase, and returning said hot separated solids to said dense bed in the heating zone.



6. An apparatus for the conversion of hydrocarbons including in combination a coking vessel adapted to contain a fluidized bed of inert solids, means for introducing oil to be converted into said coking vessel, means for removing vaporized reaction products and coked particles from said vessel, U-shaped tubes hanging from the lower end of said vessel with the upper ends of the U-shaped tubes in communication with the lower portion of said vessel whereby solid particles from said vessel may be circulated down through one leg and up through another leg of each U-shaped tube, means for introducing a gas into the upflow leg of each U-tube to assist in the circulation of solids, a heating chamber surrounding said U-shaped tubes including the lowermost portions thereof, said heating chamber being adapted to contain a dense fluidized bed of inert solid particles superimposed by a dilute suspension of solids, means for introducing fuel and air into a lower portion of said heating chamber for burning therein and for supplying fluidizing gas for said bed, an outlet line at the upper portion of said heating chamber for removing combustion gases and entrained solids therefrom, separating means associated with said outlet line for separating entrained solids from gases and pipe means for returning separated solids from said separating means to a lower portion of said heating chamber, means for introducing a controlled amount of gas into the upper portion of said heating chamber for regulating the entrainment from the fluidized bed and thereby regulating the circulation of solids through said outlet line, and pipe means for introducing fuel into said outlet line for supplying additional heat to the circulating solids.

2,731,401

RECOVERY OF EXCESS ACRYLONITRILE FROM THE CYANOETHYLATION OF COTTON BY STEAM STRIPPING

Herman F. Karnes and Arnold H. Gruber, Stamford, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application October 14, 1954, Serial No. 462,377
9 Claims. (Cl. 202—46)

1. A process of recovering acrylonitrile from a reaction mixture for the cyanoethylation of cellulose using a strong alkali as a catalyst which comprises neutralizing the mixture until alkalinity due to strong alkali is at least substantially destroyed and removing acrylonitrile by steam distillation.

2,731,402

PRODUCTION OF METALLIC TITANIUM

Alfred A. Topinka and Quentin H. McKenna, Cleveland, and Stuart S. Carlton, Parma, Ohio, assignors, by mesne assignments, to Horizons Titanium Corporation, Princeton, N. J., a corporation of New Jersey

No Drawing. Application July 3, 1952, Serial No. 297,158
5 Claims. (Cl. 204—10)

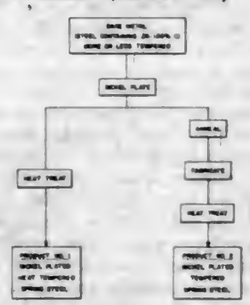
1. A method of producing metallic titanium in the form of particles substantially all of which are larger than 325 mesh which comprises: forming an anhydrous fused salt electrolyte consisting essentially of at least one salt of the group consisting of alkali metal halides and alkaline earth metal halides, maintaining the fused salt bath at an elevated temperature and under an inert atmosphere, providing an alkali metal fluotitanate containing more than a total of 0.02% by weight of the trivalent impurities: aluminum, chromium, vanadium and iron, purifying the alkali metal fluotitanate to the extent that its total content of aluminum, chromium, iron and vanadium is less than 0.02% by weight, introducing an amount of the purified alkali metal fluotitanate into the fused salt bath sufficient to form a mixture containing between 0.5 and 35 mol percent of the fluotitanate, electrolyzing the so-formed mixture and recovering the titanium as an electrodeposit consisting of particles substantially all of which are larger than 325 mesh.

2,731,403

MANUFACTURE OF NICKEL-PLATED STEEL

Michael M. Rubin, Warren, Ohio, assignor to Pittsburgh Steel Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application November 8, 1952, Serial No. 319,549
4 Claims. (Cl. 204—37)



1. The method of making a coated steel product from hardenable steel selected from the group consisting of plain carbon steels containing from .26% to 1.50% carbon and alloy steels which are hardenable by being heated to a temperature within the range of from about 1450° F. to about 1650° F., said method comprising electro-depositing a coating of nickel on said steel, subjecting the coated steel to a treatment in which the steel is hardened by being heated to a temperature within the range of from about 1450° F. to about 1650° F. and cooled, and then tempered, said treatment resulting in the formation of an intimate bonding of the nickel coating with the steel, which is then substantially free from embrittlement, a hardening of the steel, and the development of desired physical properties in the steel.

2,731,404

PRODUCTION OF TITANIUM METAL

Eugene Wainer, Cleveland Heights, Ohio, assignor, by mesne assignments, to Horizons Titanium Corporation, Princeton, N. J., a corporation of New Jersey

No Drawing. Application October 29, 1952, Serial No. 317,577
13 Claims. (Cl. 204—64)

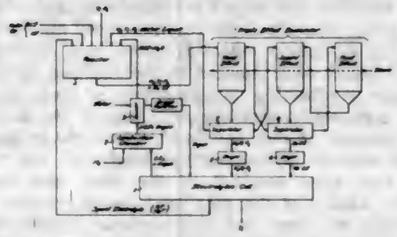
1. The method of producing metallic titanium from a titanium tetrahalide other than the fluoride which comprises: establishing an anhydrous molten bath consisting essentially of at least one alkali metal salt from the group consisting of alkali metal fluotitanates and mixtures of at least one alkali metal fluotitanate with at least one alkali metal halide other than the fluoride, establishing a voltage between electrodes in contact with the bath, introducing the titanium tetrahalide into the molten bath, maintaining the voltage between the said electrodes sufficient to maintain a cathode current density of at least 50 and not more than 500 amperes per square decimeter during the introduction of the tetrahalide, thereby depositing titanium at the cathode.

2,731,405

METHOD OF PREPARING ELECTROLYTE

Thomas R. Young, Riverside, Conn., and Robert L. Somerville, Neshanic, N. J., assignors, by mesne assignments, to Horizons Titanium Corporation, Princeton, N. J., a corporation of New Jersey

Application January 21, 1953, Serial No. 332,327
4 Claims. (Cl. 204—64)



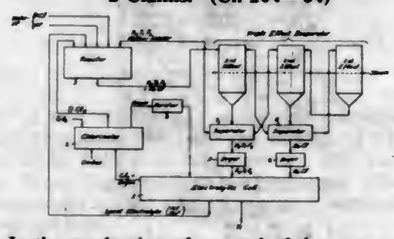
1. In the production of a metal of the group consisting of titanium and zirconium wherein a fused salt bath consisting essentially of an alkali metal chloride and a double fluoride of an alkali metal and a metal of the group consisting of titanium and zirconium in electrolytically decomposed with (1) the resulting production of an electrodeposit of said metal on a cathode, (2) the evolution of chlorine gas at an anode and (3) the formation of a spent electrolyte consisting essentially of at least one alkali metal fluoride; the improvement which comprises regenerating material suitable for reuse as the fused salt bath in the aforesaid electrolytic process from said evolved chlorine and said spent electrolyte as follows: reacting the evolved chlorine with hydrogen to form hydrogen chloride; heating to up to about 100° C. an aqueous solution of the spent electrolyte and said hydrogen chloride and a compound of said metal from the group consisting of compounds of the said metal and at least one element of the group consisting of oxygen and carbon in which the relative amounts of alkali metal, halogen and metal values present are substantially the stoichiometric amounts necessary to produce the desired double fluoride of an alkali metal and the metal of the group consisting of titanium and zirconium and recovering said double fluoride and said alkali chloride produced in said heated solution for reuse in a repetition of the electrolysis.

2,731,406

PREPARATION OF ELECTROLYTE

Thomas R. Young, Riverside, Conn., and Robert L. Somerville, Neshanic, N. J., assignors, by mesne assignments, to Horizons Titanium Corporation, Princeton, N. J., a corporation of New Jersey

Application January 21, 1953, Serial No. 332,328
2 Claims. (Cl. 204—64)



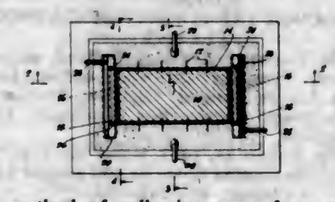
1. In the production of a metal of the group consisting of titanium and zirconium wherein a fused salt bath consisting essentially of an alkali metal chloride and a double fluoride of an alkali metal and a metal of the group consisting of titanium and zirconium is electrolytically decomposed with, (1) the resulting production of an electrodeposit of said metal on a cathode, (2) the evolution of chlorine gas at an anode, and (3) the formation of a spent electrolyte consisting essentially of at least one alkali metal fluoride; the improved method of regenerating material suitable for reuse as the fused salt bath in the aforesaid electrolytic process from said evolved chlorine and said spent electrolyte as follows: reacting the evolved chlorine with carbon and an oxidic compound of said metal to produce a tetrachloride of said metal; heating to up to about 100° C. an aqueous solution of the spent electrolyte and said tetrachloride in which the relative amounts of the alkali metal, halogen and metal of the group consisting of titanium and zirconium present are substantially the stoichiometric proportions necessary for the formation of a double fluoride of an alkali metal and of said metal and an alkali metal chloride thereby producing an aqueous solution of a double fluoride of said metal and an alkali metal and an alkali metal chloride, and recovering said products for reuse in a repetition of the electrolytic process.

2,731,407

METHOD OF COLLECTING GASES FROM ALUMINUM FURNACES

Mathias O. Sem, Smestad, Oslo, and Johannes Sejersted, Roa, Oslo, Norway, assignors to Elektrokemisk A/S, Oslo, Norway, a corporation of Norway

Application February 12, 1952, Serial No. 271,132
Claims priority, application Norway February 20, 1951
2 Claims. (Cl. 204—67)



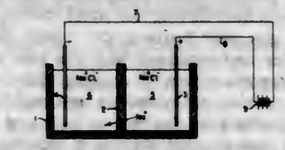
1. A method of collecting gases from an aluminum furnace of the type comprising a pot for the furnace charge, a rectangular casing for guiding the electrode down toward the pot and a rectangular carbonaceous electrode in said casing of greater length than width which comprises the steps of maintaining within the pot a charge of alumina dissolved in molten cryolite under conditions which result in a crust forming on such charge, maintaining a layer of alumina directly on such crust exposed at its upper surface to the outer air which layer contacts the casing along its longer sides to form a seal between the crust and the casing, maintaining conditions so that a gas channel of extended length forms along the side of the electrode beneath said crust, withdrawing gases from within said channel at the ends thereof while the channel is so maintained so that gas pressure under said layer is prevented from building up sufficiently to cause the gases to break through such layer, conducting said gases substantially out of contact with the air to a point removed from the crust and burning them at such point.

2,731,408

ELECTRICALLY CONDUCTIVE MEMBRANES AND THE LIKE COMPRISING COPOLYMERS OF DIVINYL BENZENE AND OLEFINIC CARBOXYLIC COMPOUNDS

John Thacher Clarke, Newton Highlands, Mass., assignor to Ionics, Incorporated, Cambridge, Mass., a corporation of Massachusetts

Application January 25, 1952, Serial No. 268,242
12 Claims. (Cl. 204—151)



10. The method of treating solutions to remove cations therefrom without the substantial transfer of anions thereto, comprising separating said solution from a second electrolytic solution by means of a cation-permeable solid barrier comprising an insoluble infusible copolymeric matrix containing divinyl benzene and a monomer of the group consisting of olefinic carboxylic acids and the anhydrides, esters, and acid chlorides thereof, in the proportions of not more than 8 mols of carboxylic compound per mol of divinyl benzene, said matrix being in gel relationship with at least 20 per cent of solvent by weight, based on the weight of polymer including solvent and said solvent presenting a continuous phase throughout said gel, and passing a direct electric current in series through said solutions and barrier in the direction to cause the migration of cations from the first solution to the second solution.

2,731,409

PHOTOCHEMICAL PRODUCTION OF BENZENE HEXACHLORIDE

Bernard H. Nicolaisen, Lewiston, N. Y., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia

No Drawing. Application August 1, 1951, Serial No. 239,843
6 Claims. (Cl. 204—163)

1. In the production of benzene hexachloride by contacting liquid benzene and chlorine in the presence of light, the improvement which comprises introducing into the mixture of benzene and chlorine to be reacted a sulfur oxychloride promoter in an amount within the range of about 1 to about 15 weight per cent based on the chlorine introduced.

2,731,410

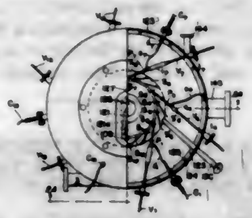
PRODUCTION OF COMPOUNDS BY MEANS OF THE ELECTRIC ARC

Horace M. Weir, Philadelphia, Pa.

Application February 28, 1951, Serial No. 213,205
25 Claims. (Cl. 204—164)

1. The process of subjecting a gas and solid particles suspended therein to the action of the electric arc which

comprises the steps of passing the gas into a gas confining chamber continuously at a regulated rate, maintaining at least one electric arc in said chamber, adding solid particles of predetermined size at a regulated rate to suspend said particles discretely in said gas, imparting differing velocities to said gas and to said particles to force a substantial fraction of the total number of said suspended particles to repeatedly traverse at least part of the locus of said electric arc, and removing the gas phase and solids from the chamber.



24. An apparatus for continuously reacting a gas phase in passage through a zone of high concentration of suspended solid particles retained in said zone by the action of centrifugal forces which comprises a gas chamber of circular cross-section having an axial outlet, a plurality of convergent gas inlet ports spaced about the periphery of said chamber and arranged with the axis of each port at an angle not greater than 16 degrees with the respective tangent plane, means to introduce and regulate the flow of a stream of solid particles into at least one of said inlet ports, at least one pair of electrodes positioned at, and spaced around the periphery of the said chamber, means to initiate and to maintain an electric arc between said electrodes and in the path of the particles which are impelled to traverse a circular path near the periphery of said chamber, means to direct at least a portion of the gas entering the said chamber in an upward direction to oppose the action of gravity on said suspended particles, a slot in the base of the said chamber near its periphery and in communication with means to collect solids outside said chamber while avoiding substantial outward flow of gas through said slot, and means to cool the gas phase and solids emerging from said chamber.

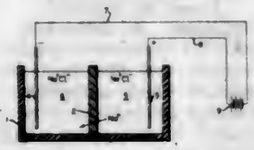
2,731,411

ELECTRICALLY CONDUCTIVE MEMBRANES AND THE LIKE COMPRISING THE SULFONATED POLYMERIZATES OF POLYVINYL ARYL COMPOUNDS

John Thacher Clarke, Newton Highlands, Mass., assignor to Ionics, Incorporated, Cambridge, Mass., a corporation of Massachusetts

Application December 5, 1951, Serial No. 260,079

15 Claims. (Cl. 204—180)



1. As an article of manufacture a solid infusible, unfractured structure in the form of a sheet or membrane comprising a coherent matrix of an insoluble, infusible copolymer of a polyvinyl aromatic compound and a monovinyl aromatic compound having sulfonic groups chemically bonded to the aromatic nuclei of said matrix, said copolymer being in gel relationship with at least 25 per cent, by volume on total volume, of a solvating liquid which presents a continuous phase throughout said gel.

2,731,412

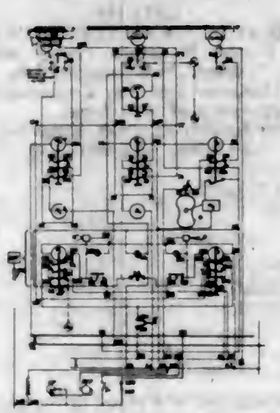
FUSED SALT ELECTROLYTIC CELLS

Louis Ferrand, Paris, France

Application May 22, 1951, Serial No. 227,545

Claims priority, application France December 29, 1945

7 Claims. (Cl. 204—223)



1. In a cell for the electrolysis of molten salts comprising a fixed sole, a plurality of normally horizontal current conductive rock shafts mounted for axial rotation above said sole, anodes depending from said shafts and extending towards said sole, power means for controlling the vertical position of the ends of said shafts, power mechanism for rocking said shafts upon their axes to provide an oscillatory motion of said anodes, a first voltage-responsive relay connected for operation in accordance with the voltage across said cell, circuit means connecting said first relay and said power means for controlling the latter, a second voltage-responsive relay connected across the cell terminals, connections from said second relay to said power mechanism to control the latter, and means responsive to the condition of said second relay for rendering the operation of said first relay ineffective to energize said power means during operation of said power mechanism, the improvement which comprises means for sensing the temperature of said cell, means controlled by said temperature sensing means for breaking the circuit to said first voltage-responsive relay when the temperature of the cell passes outside predetermined limits, whereby said first voltage-responsive relay is rendered ineffective when said temperature lies outside said limits, switch means adapted to be actuated by said temperature sensing means when said temperature departs from said limits to make the circuit to said power means for controlling the height of the ends of said anode shafts, said switch means energizing said power means to lift said anodes when said temperature falls below said limits and to lower said anodes when said temperature rises above said limits.

2,731,413

ION-EXCHANGE TREATMENT OF GASWORKS EFFLUENT

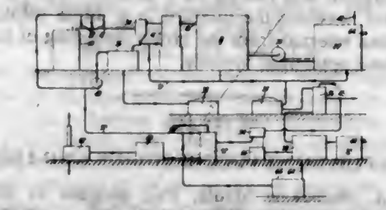
Frank Sutcliffe Townend, London, England, assignor to The Permutit Company Limited, London, England, Stewarts & Lloyds Limited, Glasgow, Scotland, and Woodall-Duckham Construction Company Limited, London, England

Application August 21, 1953, Serial No. 375,772

Claims priority, application Great Britain August 26, 1952

4 Claims. (Cl. 210—24)

1. In a method of concentrating the noxious inorganic substances present in gas produced by carbonisation, removing an ammoniacal liquor from said gas, distilling a fraction of said liquor in a primary ammonia still, subjecting the liquid effluent from said distillation to anion-exchange to remove noxious substances therefrom on anion-exchange material, periodically regenerating said anion-exchange material, distilling the effluent regenerant in a secondary still, flushing said gas as it leaves the carbonising plant with a continuously circulating fraction of said ammoniacal liquor, continuously withdrawing a fraction of said continuously circulating ammoniacal liquor containing some of the noxious substances, distilling said withdrawn fraction in said secondary still, and collecting the effluent from said secondary ammonia still containing substantially all the noxious inorganic substances in concentrated form.



2,731,414

WATER FLOODING SECONDARY RECOVERY METHOD

George G. Binder, Jr., Robert C. West, and Kurt H. Andresen, Tulsa, Okla., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application February 5, 1952, Serial No. 270,116

5 Claims. (Cl. 252—8.55)

1. In a secondary recovery process in which at least one injection well is drilled into an oil bearing formation penetrated by at least one producing well, the steps which comprise injecting a body of viscous aqueous solution into said injection well, said body of viscous solution having a volume of about 0.05 to 0.3 of the hydrocarbon pore space of the formation being treated, and said aqueous solution having a viscosity in the range of about 100 to 1000 centipoises, and thereafter injecting water into said formation through the injection well whereby oil in the formation is displaced by the viscous aqueous solution which in turn is displaced by water.

2,731,415

TALL OIL PITCH-PHOSPHORUS SULFIDE REACTION PRODUCT AND METALLIC SALTS AS DISPERSANTS FOR LUBRICATING OILS

Edwin O. Hook, New Canaan, and Lindley C. Beegle, Darien, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application February 6, 1953, Serial No. 335,606

11 Claims. (Cl. 252—32.7)

8. A lubricating oil composition comprising a hydrocarbon lubricating oil having dissolved therein a detergent composition operative to assist in preventing the deposition of hard deposits due to sludge formation in the oil, said detergent composition comprising as its essential ingredient a neutralized reaction product resulting from chemically reacting phosphorus sesquisulfide with a mixture comprising a material containing a member of the group consisting of an unsaturated ester wax, a partially saponified unsaturated ester wax, and a completely saponified unsaturated ester wax and a material of the group consisting of refined tall oil pitch, partially saponified refined tall oil pitch, and completely saponified refined tall oil pitch in the presence of a free-oxygen containing gas and at a temperature to promote such a reaction; and neutralizing the product of such reaction with a member of the group consisting of metal oxides and hydroxides.

2,731,416

CHEMICAL COMPOUNDS, METHODS OF MAKING SAME, AND LUBRICANTS CONTAINING THE CHEMICAL COMPOUNDS

Oliver L. Brandes, Gibsonia, and Earl L. Humphrey, Penn Township, Allegheny County, Pa., assignors to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

No Drawing. Application April 2, 1953, Serial No. 346,542

17 Claims. (Cl. 252—37.7)

1. A method of preparing a new compound, which comprises reacting a mixture consisting essentially of naphthenic acids and at least one phenol wherein at least one mol of the phenol is present for each mol of naphthenic acids in the presence of a Friedel-Crafts catalyst at an elevated temperature of at least 200° F. for a time sufficient to effect reaction between the naphthenic acids and the phenol, and thereafter reacting the resulting reaction product with an inorganic metal salt capable of forming the corresponding metal salt thereof.

2,731,417

WATER RESISTANT SODA BASE GREASE

Laurence F. King, Sarnia, Ontario, and Warren C. Pattenden, Courtright, Ontario, Canada, assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application March 31, 1953, Serial No. 346,012

8 Claims. (Cl. 252—42.1)

1. A lubricating grease composition prepared by thickening a major proportion of lubricating oil with a sodium soap of a high molecular weight fatty acid, admixing 0.1 to 10% by weight, based on the total composition, of sodium methyl siliconate of approximate formula $CH_3Si(OH)_2ONa$ in the presence of water, and heating the grease to a dehydrating temperature.

2,731,418

HYDRAULIC TRANSMISSION FLUID

William C. Howell, Jr. and Jones I. Wasson, Union, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application August 26, 1952, Serial No. 306,500

3 Claims. (Cl. 252—42.7)

1. A lubricant composition of high detergency and superior anti-friction properties, comprising a major proportion of a liquid lubricating oil base, 1 to 6% by weight, based on the total composition of an H_2S free alkaline earth metal salt of alkyl phenol sulfide as a detergent, 0.2 to 1% of fatty acid of the C_{12} to C_{22} range, and 0.2 to 0.5% of C_8 to C_{24} alkyl mercapto acetic acid.

2,731,419

FERROELECTRIC CERAMIC COMPOSITION

Gilbert Goodman, Albany, N. Y., assignor to General Electric Company, a corporation of New York

No Drawing. Application August 12, 1954, Serial No. 449,507

15 Claims. (Cl. 252—62.9)

1. A ferroelectric ceramic composition consisting essentially of a vitrified combination of lead oxide, niobium pentoxide, an oxide of a metal selected from a first group consisting of titanium and zirconium and an oxide of a metal selected from a second group consisting of chromium and tungsten in such proportions that the metal content is in approximately the molar ratio

$$Pb:Nb_{2-(x+y)}:A_x:B_y$$

wherein A and B represent a metal selected from the first and second groups, respectively, and x and y have a minimum value of about 0.001, a maximum value of about 0.225 when A is zirconium and B is chromium,

when A is zirconium and B is tungsten, when A is titanium and B is chromium and a maximum value of about 0.150 when A is titanium and B is tungsten.

2,731,420

NITROGEN-CONTAINING TARNISH INHIBITORS IN DETERGENT COMPOSITIONS

Herbert Smith Sylvester, Leonia, N. J., assignor to Colgate-Palmolive Company, Jersey City, N. J., a corporation of Delaware

No Drawing. Application May 2, 1951, Serial No. 224,267

3 Claims. (Cl. 252—137)

1. A detergent composition tending in normal use to cause tarnishing of a copper base alloy in water solution consisting essentially of a water-soluble polyphosphate salt selected from the group consisting of tripolyphosphates and pyrophosphates, and having present therein a minor amount of a nitrogen-containing compound selected from the group consisting of ammonium hydroxide, diammonium phosphate, ammonium nitrate, ammonium sulphate, ethylene diamine, hydroxyethyl ethylene diamine, diethylene triamine, triethylene tetramine, taurine, methyl taurine, glycine, monoethanolamine, and 2-aminoethylsulphuric acid sufficient to inhibit said tarnishing.

2,731,421

DETERGENT COMPOSITIONS

Richard D. Stayner, Berkeley, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware

No Drawing. Application February 13, 1953, Serial No. 336,889

6 Claims. (Cl. 252—137)

6. A detergent composition, characterized by a high degree of persistence of the foam of its dilute aqueous solutions under conditions of agitation and in the presence of soil, said composition consisting essentially of a water-soluble salt of a C_9–C_{18} monoalkyl benzene sulfonic acid as its major organic detergent ingredient normally tending to sequester oil from human skin and to cause irritation thereof, and from 5 to 20%, based on the weight of said sulfonic acid salt, of a water-soluble salt of an N-alkyl imino diacetic acid, in which the alkyl group contains from 10 to 16 carbon atoms as a foam persistence improver and an inhibitor of skin irritation.

2,731,422

NON-SOAP DETERGENT COMPOSITIONS

John Ross, Ramsey, N. J., assignor to Colgate-Palmolive Company, Jersey City, N. J., a corporation of Delaware

No Drawing. Application October 18, 1949, Serial No. 122,133

2 Claims. (Cl. 252—161)

1. A detergent composition consisting essentially of a water-soluble higher fatty acid monoglyceride monosulfate detergent having about 8–22 carbons in the fatty acyl group, and in minor proportion thereto and from about 1 to about 10% by weight of a primary saturated monohydric fatty alcohol of about 14 to 18 carbon atoms.

2,731,423

ELECTROLUMINESCENT MATERIALS AND METHOD OF PREPARATION

Jerome S. Prener, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

Application September 8, 1951, Serial No. 245,696

16 Claims. (Cl. 252—301.6)

1. An electroluminescent phosphor comprising a zinc oxide removed remainder of a fired mixture of about 60 parts zinc sulfide, 15 parts zinc selenide, 25 parts zinc oxide and about 0.5 part copper.

13. The method of producing an electroluminescent phosphor which comprises heating a mixture of zinc sulfide, zinc selenide, the ratio of zinc sulfide to zinc selenide being 3 to 4 parts by weight zinc sulfide to 1 part zinc selenide, approximately 25% by weight of zinc oxide, and about 0.5% copper to a temperature of about 1100° C. in an inert atmosphere for about one-half hour, reheating to a temperature of about 1100° C. in an atmosphere containing oxygen for about one-half hour, washing the mixture in a boiling 50% solution of acetic acid, and further washing the mixture in a dilute solution of a compound selected from the group consisting of sodium cyanide and potassium cyanide.

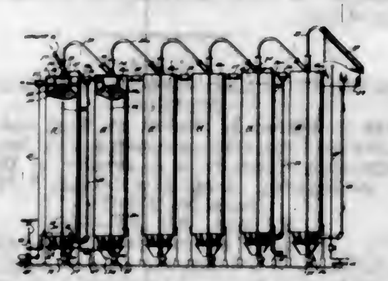
2,731,424

SYSTEM FOR CONTACTING SOLIDS AND LIQUIDS

Hubert A. Shabaker, Media, Pa., assignor to Houdry Process Corporation, Wilmington, Del., a corporation of Delaware

Application July 10, 1952, Serial No. 298,154

15 Claims. (Cl. 252—450)



1. In a method for contacting granular solids with liquid, wherein said solids are passed sequentially through a horizontal series of confined contact zones having progressively higher liquid levels while contact liquid is passed in reverse sequence through said series by gravity overflow between said zones, the steps of: passing said solids downwardly by gravity flow as a compact bed through the first of said contact zones and from the bottom thereof into a separate lower confined zone positioned beneath said first contact zone, introducing said contact liquid into said lower confined zone and then upwardly through said first contact zone at a velocity insufficient to effect substantial lifting of said solids, elevating said solids by means of a confined rising stream of liquid from said lower confined zone to the top of the second contact zone, passing said solids downwardly by gravity flow as a compact bed through said second contact zone while contacting said solids with said contact liquid, removing said solids from the bottom of said second contact zone, and removing said contact liquid from the top of said first contact zone.

13. Apparatus for countercurrently contacting granular solids and a liquid comprising a first contact chamber, a confined chamber positioned beneath said first contact chamber, a second contact chamber laterally adjacent to said first contact chamber, conduit means for conveying overflow liquid by force of gravity from said second contact chamber to said first contact chamber, means for admitting liquid to said confined chamber, means for admitting solids to the top of said first contact chamber, a conduit extending from said confined chamber to the top of said second chamber, liquid eductor means in said conduit for impelling solids from said confined chamber through said conduit to the top of said second chamber, means for removing liquid from the top of said first chamber and means for removing solids from the bottom of said second chamber.

2,731,425

ELECTRICALLY CONDUCTIVE MEMBRANES AND THE LIKE COMPRISING CONDENSATION POLYMERS CONTAINING POLYALKYLENE POLYAMINES

Walter Juda, Lexington, and Andrew A. Kasper, Watertown, Mass., assignors to Ionics, Incorporated, Cambridge, Mass., a corporation of Massachusetts

No Drawing. Application April 11, 1951, Serial No. 220,544

10 Claims. (Cl. 260—2.1)

1. In the method of forming a solid unfractured structure of alkylene polyamine-phenol-aldehyde condensation products having at least two dimensions each in excess of 0.25 inch, and comprising as an essential part extending substantially throughout said structure a predominant amount of anion exchange resin, the step of condensing to the water insoluble infusible stage a water-dispersible reaction product of an alkylene polyamine, a methylol-forming phenol and an aldehyde, while maintained in an aqueous dispersion containing at least 30 per cent of water, based on the weight of condensation product after drying to constant weight at 105° C., under saturated aqueous conditions preventive of substantial evaporation.

2,731,426

SULFONATED COPOLYMERS OF DICYCLOPENTADIENE AND MALEIC ANHYDRIDE WHICH ARE CROSS-LINKED BY SULFONE GROUPS AND HAVE CATION-ADSORBING PROPERTIES

Earl W. Lane, Philadelphia, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application April 3, 1953, Serial No. 346,789

2 Claims. (Cl. 260—2.2)

1. An insoluble cation-exchange resin which contains cation-adsorbing sulfonate groups and carboxylate groups and which is a sulfonated copolymer of dicyclopentadiene and maleic anhydride in which the linear chains of said copolymer are joined and cross-linked by sulfone groups,

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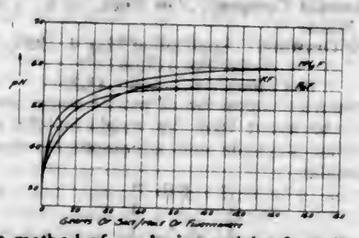
2,731,427

MANUFACTURE OF RUBBER GOODS FROM A LATEX CONTAINING A FLUOTITANATE AND A FLUORIDE

George H. McFadden, Worthington, Bailey Bennett, Columbus, and Robert E. Boyd, Lima, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application October 11, 1952, Serial No. 314,264

10 Claims. (Cl. 260—2.5)



1. In a method of producing articles from latex selected from a group consisting of natural rubber latex, aqueous dispersions of rubbery polymers of butadiene containing hydrocarbons and aqueous dispersions of polychloroprene, including a delayed coagulant which is selected from the class consisting of sodium and potassium fluotitanate, that step of increasing the fluoride anion concentration in the latex by the addition of a soluble alkali fluoride selected from the class of fluorides consisting of sodium, potassium and ammonium fluoride in quantities of between 7.5 grams and 9.5 grams per mole of fluotitanate used, said addition being mixed with the delayed coagulant prior to its addition to the latex.

2,731,428

COPOLYMERS OF PHENOLIC RESIN ESTERS AND COMPOUNDS CONTAINING A VINYL-BENZENE NUCLEUS

Stuart A. Harrison, Minneapolis, Minn., assignor to General Mills, Inc., a corporation of Delaware

No Drawing. Application September 13, 1954, Serial No. 455,793

11 Claims. (Cl. 260—19)

1. A copolymer of a compound selected from the group consisting of styrene, the methyl substituted styrenes and the chlorine substituted styrenes and an unsaturated higher fatty acid ester of a phenol-formaldehyde resin, the fatty acid containing from 8 to 18 carbon atoms, the copolymer containing from about 5% to about 40% of said compound by weight, based on the weight of the phenolic resin ester.

2,731,429

EPOXY PHENOLIC ETHERS IN MANUFACTURE OF OIL ALKYDS

William P. Cody, Lombard, and Telford C. Wollan, Cicero, Ill., assignors to Alkydol Laboratories, Inc., Cicero, Ill., a corporation of Illinois

No Drawing. Application April 13, 1951, Serial No. 220,980

12 Claims. (Cl. 260—22)

1. In the production of oil-modified alkyd resin having an acid value in the range from 1 to 30 by reaction of acidic material selected from the group consisting of dicarboxylic organic acids and their anhydrides, aliphatic polyhydric alcohol for poly-functional reaction with said acidic material, and glycerides of fatty acid selected from the group consisting of saturated and unsaturated monocarboxylic fatty acids having upwardly from 8 carbon atoms, the improvement comprising substituting for at least a portion of said aliphatic polyhydric alcohol, normally fluid epoxy-containing ether which is the product of etherifying monohydric phenol with a primary alkyl alcohol selected from the group consisting of glycidol and 1-2-epoxy-3-4-dihydroxy-n-butane for ester-formation with the acidic material, said ether constituting from about 10% to 60% by weight of the ingredients forming the resin.

2,731,430

VINYL AROMATIC HYDROCARBONS REACTED WITH GLYCERIDE OILS USING BORON HALIDE CATALYST

Henry Brunner, Langley, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application July 27, 1951, Serial No. 239,025

Claims priority, application Great Britain August 4, 1950

3 Claims. (Cl. 260—22)

1. A coating composition forming haze-free films comprising an oleoresinous vehicle selected from the group consisting of linseed oil and linseed oil-modified alkyd resin and the interpolymer produced by reacting a monovinyl monocyclic aromatic hydrocarbon with from 0.1 to 10 per cent, by weight of the hydrocarbon, of a drying oil in the presence of a halide of boron as catalyst.

2,731,431

METHYLPOLYCHLORO FATTY ACID ESTERS STABILIZED WITH EPOXIDIZED FATTY OIL AND COMPOSITIONS THEREOF WITH POLYVINYL RESINS

Paul Robitschek, Buffalo, and Dean B. Stormon, Niagara Falls, N. Y., assignors to Hooker Electrochemical Company, Niagara Falls, N. Y., a corporation of New York

No Drawing. Application October 6, 1951, Serial No. 250,188
4 Claims. (Cl. 260—23)

1. A composition comprising: a polymer of vinyl chloride; a methylpolychlorostearate having between about three and six chlorine atoms per molecule; and as a stabilizer therefor, an epoxidized unsaturated fatty oil containing at least one epoxide linkage in the acid portion of the fatty oil which is effective in stabilization of chlorine containing organic compounds.

2,731,432

COATING COMPOSITIONS COMPRISING PARTICULATE POLYAMIDES DISPERSED IN AQUEOUS SOLUTIONS OF ALKALI METAL SILICATES

Harry A. Toulmin, Jr., Dayton, Ohio, assignor to Midland Chemical Corporation, Wilmington, Del., a corporation of Delaware

No Drawing. Application March 11, 1953, Serial No. 341,824
18 Claims. (Cl. 260—29.2)

1. A liquid coating composition comprising a dispersion of a particulate polyamide having the amide groups thereof as integral members of the polymer chain, a molecular weight of at least 5,000 and an average particle size such that at least 90% of the particles are capable of passing through a 100 to 400-mesh Tyler sieve, in an aqueous solution of from about 20% to about 40% by weight of an alkali metal silicate having an XO_2 to SiO_2 ratio between about 1:1.7 to 1:3.9, X representing the alkali metal, the amount of particulate polyamide in the composition being between about 5 lbs. and 18 lbs. thereof per gallon of the aqueous alkali metal silicate solution.

2,731,433

FREEZE RESISTANT AQUEOUS POLYMER BASED PAINT CONTAINING AN ARYLSULFONAMIDE

Paul H. Johnson, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application February 18, 1953, Serial No. 337,638
8 Claims. (Cl. 260—29.7)

3. A water paint containing an oil-in-water emulsion polymer, of a polymerizable ethylenically unsaturated compound, and about 5 to 60% based on the weight of polymer of an aryl sulfonamide selected from the group consisting of p-toluenesulfonamide and p-phenylene dibenzenesulfonamide, said paint having improved freeze-stability.

2,731,434

FREEZE RESISTANT AQUEOUS POLYMER-CONTAINING PAINT CONTAINING A HYDRAZINE DERIVATIVE AS A FREEZE-THAW STABILIZER

Paul H. Johnson, Akron, John H. Munch, Silver Lake, and Cullen W. Metzger, Massillon, Ohio, assignors to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application February 18, 1953, Serial No. 337,641
6 Claims. (Cl. 260—29.7)

4. A paint of improved freeze-stability containing an aqueous oil-in-water emulsion polymer of a polymerizable ethylenically unsaturated compound and about 2 to about 10% based on the weight of polymer of a compound selected from the group consisting of hydrazine hydrate and alkyl, cycloalkyl, aralkyl, aryl and alkylene substituted hydrazines.

2,731,435

FREEZE RESISTANT AQUEOUS POLYMER BASED PAINT CONTAINING GUANIDINE THIOCYANATE

Paul H. Johnson, Akron, John H. Munch, Silver Lake, and Cullen W. Metzger, Massillon, Ohio, assignors to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application February 18, 1953, Serial No. 337,642
6 Claims. (Cl. 260—29.7)

3. An oil-in-water emulsion paint containing a polymer of a polymerizable ethylenically unsaturated compound and a quantity of guanidine thiocyanate which is relatively small in relation to the quantity of said polymer, said paint having improved freeze-stability.

2,731,436

METALLIC PAINT

Robert J. Stetz, Westlake, and Edmund Rogers, South Euclid, Ohio, assignors to The Engine Parts Manufacturing Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application February 25, 1950, Serial No. 146,406
9 Claims. (Cl. 260—33.6)

1. A bronzing lacquer comprising a finely divided metallic pigment, a poly-alkyl acrylate lacquer base in a solvent for said lacquer base, and an amount by volume approximately equal to the foregoing ingredients of fluorochloromethane.

2,731,437

DIGLYCIDYL THIOETHERS OF DITHIOLS CONTAINING OXYGEN PREPARATION AND REACTION PRODUCTS

Howard L. Bender, Bloomfield, Alford G. Farnham, Caldwell, and John W. Guyer, Verona, N. J., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application April 29, 1953, Serial No. 352,024
16 Claims. (Cl. 260—42)

1. The diglycidyl thioethers of the formula:



where R is the radical

$$-(C_2H_4OCH_2OC_2H_4SS)_nC_2H_4OCH_2OC_2H_4-$$

and n is an integer having a value from 0 to 50.

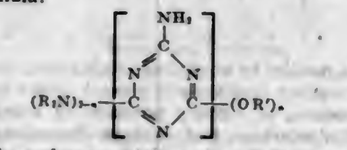
2,731,438

TRIAZINE-ALDEHYDE-POLYSILOXANE RESINOUS COMPOSITION AND PROCESS FOR PREPARING

Martha K. Layman, Stamford, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application May 4, 1954, Serial No. 427,667
13 Claims. (Cl. 260—45.2)

1. A resinous composition of matter comprising from about 10% to about 90% by weight of the reaction product of an aldehyde and a compound represented by the formula:



wherein n is an integer of from 0 to 2; R is a member selected from the group consisting of hydrogen, an

ethylenically unsaturated hydrocarbon radical containing from 3 to 4 carbon atoms and an alkyl radical containing from 4 to 8 carbon atoms; R' is a member selected from the group consisting of an ethylenically unsaturated hydrocarbon radical containing from 3 to 4 carbon atoms and an alkyl radical containing from 4 to 8 carbon atoms and at least one of the members R and R' is an ethylenically unsaturated hydrocarbon radical containing from 3 to 4 carbon atoms; and from about 90% to about 10% by weight of a partially condensed polysiloxane containing attached to the silicon atoms methyl and phenyl substituents.

2,731,439

REACTION PRODUCTS OF HYDROGENATED RUBBERY POLYMERS WITH ACRYLONITRILES

Rufus V. Jones and Peter J. Canterino, Bartlesville, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application November 17, 1952, Serial No. 321,030
11 Claims. (Cl. 260—45.5)

1. Thermoplastic rubbery material comprising the reaction product of a partially hydrogenated synthetic rubbery polymer, said polymer being a polymer of a conjugated diene which has had its unsaturation reduced to 15 to 90 per cent of theoretical by hydrogenation, with a compound selected from the group consisting of acrylonitrile and methacrylonitrile, said reaction product having from 0.1 to 16 weight per cent nitrogen based upon the total weight of said reaction product.

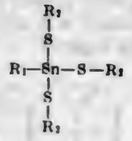
2,731,440

STABILIZATION OF VINYL CHLORIDE RESINS WITH ORGANOTIN TRIMERCAPTIDES

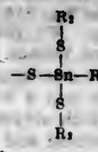
Eugene P. Stefl, Churchill Valley, Pa., and Chris E. Best, Franklin Township, Summit County, Ohio, assignors to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application October 5, 1950, Serial No. 188,654
22 Claims. (Cl. 260—45.75)

1. A resinous composition which is stable to heat and mechanical working, comprising a resin selected from the group consisting of polymers of vinyl chloride and copolymers thereof with other ethylenically unsaturated compounds copolymerizable therewith and containing at least 60% of vinyl chloride copolymerized therein, together with from 0.25% to 5%, based on the weight of vinyl chloride resin in the composition, of a compound of the formula



in which formula R_1, independently in each occurrence, represents an organic radical consisting of and containing from 1 to 22 carbon atoms, hydrogen, carbon-carbon single bonds, carbon-hydrogen bonds, up to 11 aromatic ring carbon-carbon double bonds, and up to 4 innocuous structures selected from the group consisting of carbon-carbon triple bonds, aliphatic carbon-carbon double bonds, ether linkages, thioether linkages, carboxylic ester groups bonded to carbon atoms, fluorine atoms bonded to carbon and halogen atoms bonded to aromatic ring carbon atoms, each R_1 being linked to the tin atom in the formulae hereinabove and hereinbelow by one of its carbon atoms, and R_2, independently in each occurrence, represents an organic radical consisting of and containing from 1 to 22 carbon atoms, hydrogen, carbon-carbon single bonds, carbon-hydrogen bonds, up to 11 aromatic ring carbon-carbon double bonds, and up to 4 innocuous structures selected from the group consisting of carbon-carbon triple bonds, aliphatic carbon-carbon double bonds, ether linkages, thioether linkages, carboxylic ester groups bonded to carbon, sulfhydryl groups bonded to carbon, ether linkages, thioether linkages, carboxylic ester groups bonded to carbon, carboxylic amide groups bonded to carbon, fluorine atoms bonded to carbon, halogen atoms bonded to aromatic ring carbon and groups of the formula



under the same notation, each of the radicals R_2 being linked to its respective sulfur atom in the formulae by one of its carbon atoms.

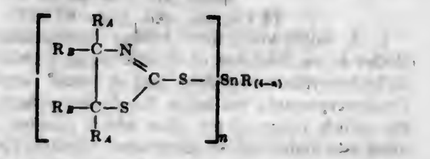
2,731,441

STABILIZATION OF VINYL CHLORIDE RESINS WITH ORGANOTIN MERCAPTIDES OF 2-MERCAPTOTHIAZOLE AND ITS DERIVATIVES

Eugene P. Stefl, Churchill Valley, Pa., and Chris E. Best, Franklin Township, Summit County, Ohio, assignors to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application September 6, 1951, Serial No. 245,417
18 Claims. (Cl. 260—45.75)

1. A composition stable to heat and mechanical working comprising a resin selected from the group consisting of polymers of vinyl chloride and copolymers thereof with other unsaturated compounds copolymerizable therewith containing at least 60%, based on the weight of said copolymers, of vinyl chloride copolymerized therein, together with from 0.2 to 5.0%, based on the weight of the resin in said composition, of an organometallic tin mercaptide of the formula



wherein n is an integer from 2 to 3 inclusive, R, independently in each occurrence, represents an organic radical consisting of, and containing, from 1 to 22 carbon atoms, hydrogen, carbon-carbon single bonds, carbon-hydrogen bonds, up to 11 aromatic ring carbon-carbon double bonds, and up to 4 innocuous structures selected from the group consisting of carbon-carbon triple bonds, aliphatic carbon-carbon double bonds, ether linkages, thioether linkages, carboxylic ester groups bonded to carbon atoms, fluorine atoms bonded to carbon atoms and halogen atoms bonded to aromatic ring carbon atoms, each R being linked to the tin atom in the formula hereinabove by one of its carbon atoms, R_A, independently in each occurrence, represents a substituent selected from the group consisting of the hydrogen atom, alkyl, cycloalkyl, aryl and aralkyl groups, and, in the case of any two radicals R_A on adjacent carbon atoms, hydrocarbon chains extending from the position occupied by one of said two radicals R_A to the position occupied by the other of said radicals R_A and constituting, with said two adjacent carbon atoms, cyclic structures, and R_B, independently in each occurrence, represents a substituent selected from the group consisting of the hydrogen atom, alkyl, cycloalkyl, aryl and aralkyl groups, and, in the case of any two radicals R_B on adjacent carbon atoms, an additional valence bond extending from the position occupied by one of said two radicals R_B to the position occupied by the other of said two radicals R_B.

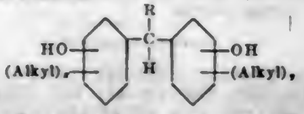
2,731,442

SULFUR VULCANIZABLE RUBBER STABILIZED WITH A MIXTURE OF AN ALKYL SUBSTITUTED PHENOL AND AN ALKYL SUBSTITUTED DI(HYDROXYPHENYL) ALKANE

Lawrence E. Forman, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application September 20, 1952, Serial No. 310,725
12 Claims. (Cl. 260—45.95)

1. A sulfur-vulcanized rubber composition which includes as an inhibitor of deterioration a small amount of alkyl-substituted phenol and a small amount of di(hydroxyphenyl)alkane; which alkyl-substituted phenol contains at least one substituent and a total of at least four substituent carbon atoms; and which di(hydroxyphenyl)-alkane has the formula



in which *x* and *y* are each numbers greater than zero and not larger than 2; the alkyl groups each contain one to sixteen carbon atoms; the hydroxy-substituted nuclei are selected from the class consisting of 2-hydroxy and 4-hydroxy nuclei; and R is of the group consisting of hydrogen and alkyl groups of one to ten carbon atoms.

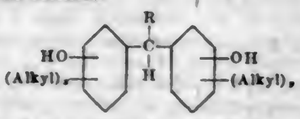
2,731,443

VULCANIZED RUBBER STABILIZED WITH A MIXTURE OF A DI(HYDROXYPHENYL) SULFIDE AND A DI(ALKYLHYDROXYPHENYL) METHANE

Lawrence E. Forman, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application September 20, 1952, Serial No. 310,726
19 Claims. (Cl. 260—45.95)

1. A sulfur-vulcanized rubber composition which includes as an inhibitor of deterioration a small amount of di(hydroxyphenyl)sulfide and a small amount of di-(hydroxyphenyl) methane; the hydroxyphenyl groups of the sulfide being of the class which consists of unsubstituted and hydrocarbon-substituted 2-hydroxyphenyl and 4-hydroxyphenyl groups; and the di(hydroxyphenyl)methane having the formula



in which *x* and *y* are 1 to 4, each alkyl contains one to sixteen carbon atoms, the hydroxy nuclei are selected from the class consisting of the 2-hydroxy and 4-hydroxy nuclei and R is of the group consisting of hydrogen and alkyl groups of one to ten carbon atoms.

2,731,444

EPOXIDE RESIN CURED WITH A POLYHYDRIC ALIPHATIC ALCOHOL

Sylvan Owen Greenlee, Racine, Wis., assignor to Devoe & Raynolds Company, Inc., Louisville, Ky., a corporation of New York

No Drawing. Application October 21, 1952, Serial No. 316,078
15 Claims. (Cl. 260—47)

1. An epoxide resin composition comprising an epoxide resin which is a polyether derivative of a dihydric phenol having terminal epoxide groups and free from reactive groups other than epoxide aliphatic hydroxyl groups and a polyhydric aliphatic alcohol containing only carbon, hydrogen and oxygen and selected from the group which consists of aliphatic hydrocarbons substituted only by hydroxyl groups, polyglycols, polyglycerols and polypentaerythritols free from oxygen containing groups other than ether oxygen and hydroxyl groups and said polyhydric alcohol having at least two primary hydroxyl groups as a cross-linking reactant for the epoxide resin, the proportions of epoxide resin and polyhydric alcohol being such that the epoxide groups of the resin are at least equal to the primary alcoholic groups of the alcohol.

2,731,445

POLYURETHANES FROM PIPERAZINES

Emerson L. Wittbecker, West Chester, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application March 30, 1953, Serial No. 345,727
12 Claims. (Cl. 260—47)

1. A high melting piperazine polyurethane which is a 1,4-piperazinedicarboxylate polyester of a dihydroxy aromatic hydrocarbon of 6 to 16 carbon atoms wherein the shortest chain of carbon atoms connecting the two hydroxy radicals includes at least three carbon atoms of one ring.

2,731,446

POLYURETHANES FROM PIPERAZINE

Emerson L. Wittbecker, West Chester, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application March 30, 1953, Serial No. 345,728
12 Claims. (Cl. 260—77.5)

1. A high melting piperazine polyurethane, the 1,4-piperazine-dicarboxylate polyester of a dihydric alcohol selected from the group consisting of ethylene glycol, pentaglycol, 1,4-cyclohexanediol and bis-2,2(4-hydroxycyclohexyl)propane.

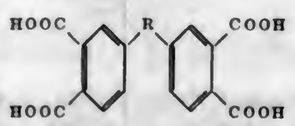
2,731,447

NOVEL POLYIMIDES

William F. Gresham and Marcus A. Naylor, Jr., Wilmington, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 11, 1954, Serial No. 436,249
4 Claims. (Cl. 260—78)

1. A linear polyimide in which the diamine component is a diaminoalkane having at least four carbon atoms separating primary amino groups and in which the other imide-forming component is a member of the class consisting of acids of the formula



wherein —R— is a member of the class consisting of —O— and bivalent 2,2-propane radicals.

2,731,448

COPOLYMERS OF ALLYL ESTERS AND ITACONATES

La Verne N. Bauer, Philadelphia, Harry T. Neher, Bristol, and William L. Van Horne, Cheltenham, Pa., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application April 29, 1952, Serial No. 285,082
3 Claims. (Cl. 260—78.5)

1. A copolymer of (A) an allyl ester of a saturated unsubstituted aliphatic monocarboxylic acid of 16 to 18 carbon atoms in a straight chain and (B) didodecyl itaconate, the ratio of units from allyl ester to units from the itaconate being from about 1:0.5 to about 1:5.

2,731,449

VINYL CHLORIDE RESINS FOR APPLICATION AS SOLVENT SOLUTIONS

George P. Rowland, Jr., and Robert A. Piloni, Pottstown, Pa., assignors to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application May 3, 1954, Serial No. 427,364
15 Claims. (Cl. 260—78.5)

1. A copolymer of

	Per cent
Vinyl chloride	55–75
A dialkyl ester of an acid selected from the group consisting of maleic, fumaric, and chloromaleic acids containing 4–22 carbon atoms	14–35
A monoalkyl monohydrogen ester of an acid selected from the group consisting of maleic, fumaric, and chloromaleic acids containing 3–12 carbon atoms	5–10
Trichloroethylene	1.5–6.5

the percentages being based on the total weight of the copolymer.

2,731,450

THERMOSETTING RESINS

George E. Serniuk, Roselle, and Lester Marshall Welch, Madison, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application November 1, 1951, Serial No. 254,444
1 Claim. (Cl. 260—80.7)

A thermosetting tripolymer resin prepared by copolymerizing a mixture of from 0.4 to 6 parts of divinyl benzene, from 54.8 to 52 parts of butadiene, and from 44.8 to 42 parts of diisobutylene with a dissolved Friedel-Crafts catalyst at a temperature of −70° to +50° C.

2,731,451

METHOD OF PREPARING A COPOLYMER OF 2-CHLOROACRYLAMIDE AND METHACRYLONITRILE

John A. Price, Stamford, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application December 12, 1951, Serial No. 261,377
1 Claim. (Cl. 260—85.5)

The method of preparing a copolymer of 2-chloroacrylamide and methacrylonitrile which comprises heating together under reflux for four hours a mixture of 7.5 parts of methacrylonitrile, 2.5 parts of 2-chloroacrylamide, 240 parts of water and 0.2 part of potassium persulfate, and isolating the copolymer of methacrylonitrile and 2-chloroacrylamide thereby produced from the reaction means.

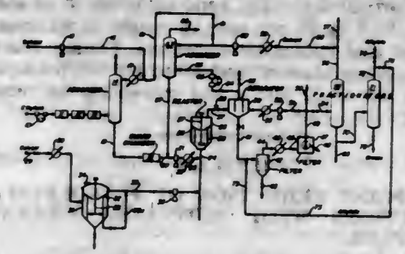
2,731,452

GROUP VIA OXIDE—ALKALINE EARTH METAL HYDRIDE CATALYZED POLYMERIZATION OF OLEFINS

Edmund Field and Morris Feller, Chicago, Ill., assignors to Standard Oil Company, Chicago, Ill., a corporation of Indiana

Application December 6, 1952, Serial No. 324,607
18 Claims. (Cl. 260—88.1)

1. In a process for the production of a polymer having a molecular weight of at least about 300, the steps of contacting a normally gaseous olefin selected from the class consisting of ethylene, propylene and mixtures containing ethylene and propylene with the hydride of a metal selected from the group consisting of Be, Mg, Ca, Sr and Ba and an oxide of a metal of group 6*a* of the



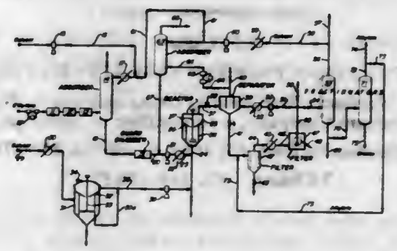
Mendeleef Periodic Table at a reaction temperature between about 75° C. and about 325° C., and separating a polymer having a molecular weight of at least about 300 thus produced.

2,731,453

CONVERSION OF ETHYLENE AND PROPYLENE TO SOLID POLYMERS WITH GROUP 6a METAL OXIDES AND COMPLEX METAL ALUMINUM HYDRIDE CATALYSTS

Edmund Field and Morris Feller, Chicago, Ill., assignors to Standard Oil Company, Chicago, Ill., a corporation of Indiana

Application December 6, 1952, Serial No. 324,608
15 Claims. (Cl. 260—88.1)



1. In a process for the production of a polymeric hydrocarbon material having a molecular weight of at least 300, the steps of contacting a normally gaseous olefin selected from the class consisting of ethylene, propylene and mixtures containing ethylene and propylene with a catalytic mixture prepared by admixing an alkali metal aluminum hydride with an oxide of a metal of group 6*a* of the Mendeleeff Periodic Table supported upon a difficultly reducible metal oxide at a reaction temperature between about 130° C. and about 325° C., and separating a polymeric hydrocarbon material having a molecular weight of at least 300 thus produced.

2,731,454

POLYMER-BORIC ANHYDRIDE REACTION PRODUCTS

James T. Edmonds, Jr., Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application April 13, 1953, Serial No. 348,589
14 Claims. (Cl. 260—94.7)

1. The process of preparing a resin-like material from a compound selected from the group consisting of hy-

droxylated natural rubber hydroxylated polymers of conjugated dienes and hydroxylated copolymers of conjugated dienes with compounds copolymerizable therewith containing a vinylidene group, comprising mixing with said hydroxylated material boric anhydride in an amount of from 0.05 to 20 per cent by weight based upon the weight of said hydroxylated material, heating said mixture at a temperature of from 80 to 200° C. for a period of from 0.5 to 20 hours, and recovering the resulting product.

2,731,455

POUR POINT REDUCTION OF PETROLEUM OIL FRACTIONS WITH ACTIVATED UREA-WAX COMPLEX

Leo Salzmann, Petrolia, Pa., Lucian J. Leta, Boulder City, Nev., and Leslie C. Borell, Franklin, Pa., assignors to L. Sonneborn Sons, Inc., a corporation of Delaware

No Drawing. Application September 19, 1950, Serial No. 185,692

8 Claims. (Cl. 260—96.5)

1. Method for obtaining urea activated for petroleum wax-urea complex formation, which comprises subjecting urea at least twice to the cycle of contacting urea with a wax bearing petroleum oil fraction to thereby obtain a complex between said urea and wax in said fraction, intimately contacting the resulting complex with a petroleum oil fraction of the kerosene range in amount normally sufficient to form a solution of the amount of wax carried by said urea complex, at a temperature not appreciably less than 165° F. and in the presence of about ¼–5% of water by weight of urea, and separating the resulting urea substance.

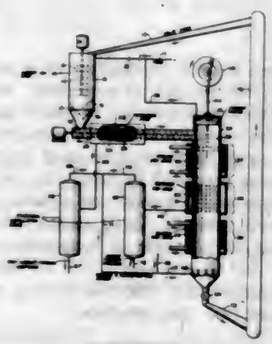
2,731,456

SEPARATION PROCESS AND APPARATUS

John A. Weedman, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application October 23, 1950, Serial No. 191,676

7 Claims. (Cl. 260—96.5)



1. A process for washing and decomposing a crystalline adduct formed by reacting an adduct-forming organic compound with an amide selected from the group consisting of urea and thiourea wherein said adduct contains an occluded impurity which comprises maintaining a column of said amide and an adduct of said adduct-forming organic compound with said amide as a compact mass of crystals, feeding said adduct to one end of said column, withdrawing washed amide from the other end of said column, feeding a liquid washing and decomposition medium to said other end of the column whereby the adduct crystals are countercurrently washed by said medium as they travel through the column from said one end to said other end, supplying heat to the material adjacent said other end of the column to define an adduct-decomposition zone, withdrawing said adduct-forming compound together with a portion of said liquid medium at a filtering zone near the center of said column, withdrawing heat from said column adjacent said one end thereof so as to cool the adduct without decomposing it, pressing a member impervious to solid crystalline material but porous to said liquid medium against said one end of the column longitudinally thereof in the proper direction to compress and compact the column of crystalline material whereby an efficient washing action is obtained by contact of the said medium and crystals in the cooling zone and the rest of said liquid medium passes through said member, and withdrawing the rest of said liquid medium after it has passed through said member.

5. Apparatus for treating crystalline materials which comprises, in combination, an elongated vessel, feeding means connected to said vessel adjacent one end thereof to introduce crystalline material into said vessel, a crystal withdrawal conduit connected to and communicating with said vessel adjacent the other end thereof, a filter located at an intermediate region of said vessel including a member communicating with the interior of said vessel, said member being pervious to liquids but impervious to crystalline material, means for withdrawing filtrate from said filter, a cooling device located between said filter and said feeding means in thermal contact with said vessel, means for circulating a cooling medium through said device, a heating device located between said filter and said outlet conduit, said heating device being in thermal contact with said vessel, means for circulating a heating medium through said heating device, a piston located within said vessel at said one end thereof and arranged to move longitudinally within said vessel, said piston being formed from a material which is pervious to liquids but impervious to crystalline material, and means for reciprocating said piston.

2,731,457

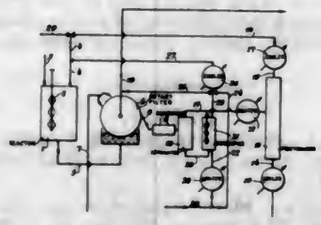
PRODUCTION AND USE OF A UREA SUSPENSION IN OIL

Leslie S. Thornes, Sunbury-on-Thames, England, assignor to The British Petroleum Company Limited, a corporation of Great Britain

Application May 16, 1951, Serial No. 226,557

Claims priority, application Great Britain May 17, 1950

7 Claims. (Cl. 260—96.5)



1. A process for the production of a urea-containing agent for use in the formation of urea adducts, which comprises contacting urea with hydrocarbon oil at elevated temperature, forming an emulsion of liquid urea in the oil and shock cooling the emulsion to form a urea suspension in oil by a rapid addition of a hydrocarbon oil at a temperature below that of the emulsion and in an amount sufficient to solidify the urea.

2,731,458

ALKYLATION OF YELLOW PHOSPHORUS WITH OLEFINS

William E. Garwood, Haddonfield, and Lyle A. Hamilton, Pitman, N. J., assignors to Socony Mobil Oil Company, Inc., a corporation of New York

Application December 30, 1952, Serial No. 328,704

15 Claims. (Cl. 260—139)

1. A process for preparing organic phosphorus-containing reaction products having the properties both of a tertiary phosphine and of a weak acid and having phosphorus to phosphorus linkages, which comprises reacting ethylenically-unsaturated hydrocarbon, yellow phosphorus, and an organic peroxide, in a molar proportion of between about 1:0.001:0.001, respectively, and about 1:1:1, respectively, at a temperature of between about 20° C. and about 250° C., and in the absence of oxygen.

2. A process for preparing organic phosphorus-containing reaction products, which comprises reacting ethylenically-unsaturated hydrocarbon, yellow phosphorus and an organic peroxide, in a molar proportion of between about 1:0.001:0.001, respectively, and about 1:1:1, respectively, at a temperature of between about 20° C. and about 250° C., and in the absence of oxygen, to produce a residual product, and sulfurizing said residual product at a temperature of between about 120° C. and about 180° C.

2,731,459

TRISAZO-DYESTUFFS

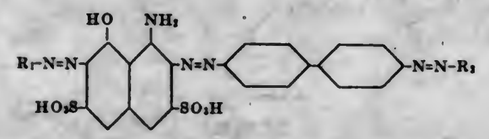
Raymond Gunst, Binningen, Switzerland, assignor to Ciba Limited, Basel, Switzerland, a Swiss firm

No Drawing. Application May 19, 1952, Serial No. 288,753

Claims priority, application Switzerland June 25, 1951

7 Claims. (Cl. 260—171)

1. A trisazo-dyestuff which corresponds to the formula



in which R_1 represents a benzene radical, R_2 represents the radical of a mono-hydroxynaphthalene, each of the radicals R_1 and R_2 contains at least one sulfonic acid group, the two radicals R_1 and R_2 together contain at least three sulfonic acid groups, and the hydroxy group and sulfonic acid groups are the single substituents present in the radical R_3.

2,731,460

PROCESS FOR PRODUCING AMMONIA DERIVATIVES OF POLYNITROALCOHOLS

Friedrich Rudolf Schenck and Gustav Allan Wetterholm, Gyttorp, Sweden, assignors to Nitroglycerin Aktiebolaget, Gyttorp, Sweden

No Drawing. Application July 3, 1952, Serial No. 297,166

Claims priority, application Sweden July 10, 1951

12 Claims. (Cl. 260—239)

1. The process which comprises reacting, in the presence of an inert solvent, a polynitroalcohol, having at least two nitro groups attached to one carbon atom and a primary hydroxyl group attached to a second carbon atom adjacent to the aforesaid carbon atom, with a nitrogen compound containing the group NH_2— and selected from the class consisting of ammonia, primary amines, carboxylic acid amides and hydrazine, and recovering the resulting polynitroamine compound.

2,731,461

17-HYDROXY COMPOUNDS OF THE STEROID SERIES

Heinrich Rascig, Bad Soden am Taunus, and Werner Fritsch, Josef Schmidt-Thomé, and Werner Haede, Frankfurt am Main, Germany, assignors to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Brüning, Frankfurt am Main Hochst, Germany, a German company

No Drawing. Application November 24, 1953, Serial No. 394,224

Claims priority, application Germany November 28, 1952

6 Claims. (Cl. 260—239.55)

1. A process for preparing 17-hydroxy compounds of the steroid series, which comprises acylating 3-hydroxy-20-ketimines of the pregnene series by means of a member selected from the group consisting of carboxylic acid chlorides and anhydrides, partially hydrolyzing the reaction products by means of alkaline reagents, converting the hydrolysis products into the 17,20-oxido-compounds by means of organic peracids and hydrolyzing said oxido-compounds by means of dilute alkaline solutions.

2,731,462

BASIC KETONES AND A PROCESS OF PREPARING THEM

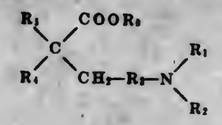
Gustav Ehrhart, Frankfurt am Main Hochst, and Walter Bestian, Frankfurt am Main Zeilsheim, Germany, assignors to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius und Brüning, Frankfurt am Main Hochst, Germany, a German company

No Drawing. Application January 30, 1952, Serial No. 269,116

Claims priority, application Germany February 8, 1951

1 Claim. (Cl. 260—247.1)

The process which comprises reacting carboxylic acid esters of the formula



wherein R_1 and R_2 are members selected from the group consisting of lower alkyl radicals and further members wherein R_1 and R_2 taken together with —N< form piperidine, morpholine and pyrrolidine, R_3 stands for a member selected from the group consisting of CH_2 and CH_2 substituted by lower alkyl, R_4 stands for a member selected from the group consisting of pyridine, thiazol and pyrimidine radicals a nuclear carbon-atom of which is directly connected with the central carbon-atom, R_5 stands for a member selected from the group consisting of phenyl and alkoxyphenyl, R_6 means lower alkyl, with alkyl magnesium halides in a substantially anhydrous inert organic solvent and hydrolyzing the addition product so formed.

2,731,463

MANUFACTURE OF CYCLONITE

Werner E. Bachmann, Ann Arbor, Mich., Edward L. Jenner, Wilmington, Del., and Lawrence B. Scott, Emeryville, Calif., assignors to the United States of America as represented by the Secretary of War

No Drawing. Application March 19, 1947, Serial No. 735,820

6 Claims. (Cl. 260—248)

1. A process for obtaining a large percentage yield of cyclonite from the reaction mixture which consists in treating hexamine with nitric acid, acetic anhydride and lithium nitrate in the presence of a large excess of ammonium nitrate.

2,731,464

PRODUCTION OF VAT DYESTUFFS

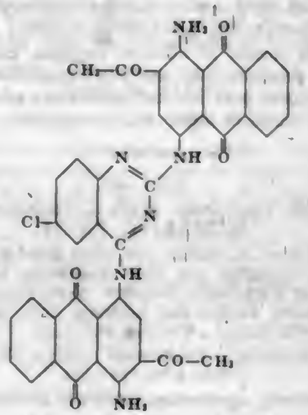
Friedrich Ebel, Mannheim-Feudenheim, Walter Rupp, Ludwigshafen (Rhine-Oppau), and Walter Keller, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

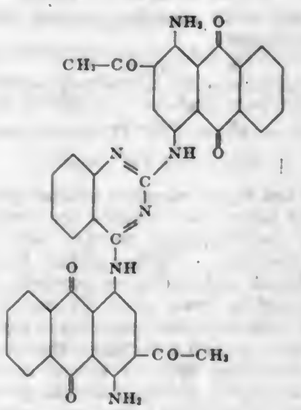
No Drawing. Application September 4, 1952, Serial No. 307,902

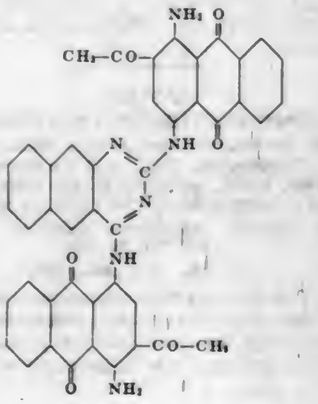
Claims priority, application Germany September 20, 1951

6 Claims. (Cl. 260—256.4)

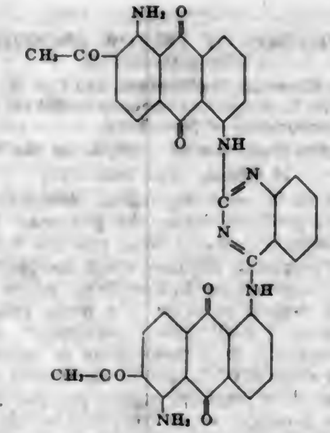
1. A compound selected from the group consisting of the compounds having the following structural formulas:

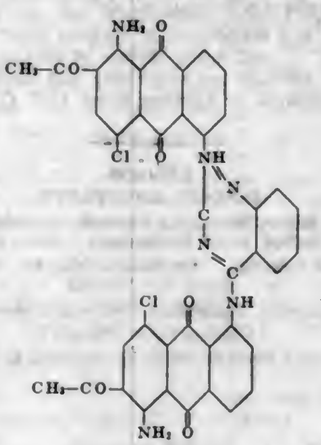






and





2,731,465

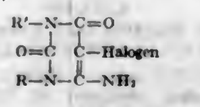
5-HALO-6-AMINO-URACILS AND DERIVATIVES THEREOF

Elmer F. Schroeder, Chicago, Ill., assignor to G. D. Searle & Co., Chicago, Ill., a corporation of Illinois

No Drawing. Application October 27, 1953, Serial No. 388,691

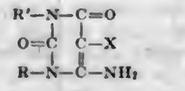
20 Claims. (Cl. 260—256.4)

1. A compound of the structural formula

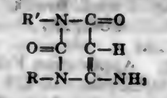


wherein R and R′ are members of the class consisting of hydrogen, lower alkyl, lower alkenyl and lower hydroxyalkyl radicals and wherein the halogen atom has an atomic weight greater than 30.

11. The process of preparing a compound of the structural formula



wherein R and R′ are members of the class consisting of hydrogen, lower alkyl, lower alkenyl and lower hydroxyalkyl radicals and X is a halogen radical of an atomic weight greater than 30, which comprises the treatment of a compound of the structural formula



with one equivalent of X_2 in an anhydrous, organic solvent in the presence of one equivalent of base.

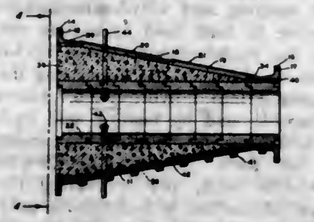
2,731,466

QUENCH SECTION FOR CARBON BLACK PRODUCTION FURNACE

Robert E. Heffner, Idaho Falls, Idaho, assignor to Phillips Petroleum Company, a corporation of Delaware

Application November 26, 1951, Serial No. 258,238

9 Claims. (Cl. 23—259.5)



1. A quench section for a carbon black producing furnace comprising a hollow truncated conical shell having flanges on either end, a truncated conical body of a first refractory fitted into said hollow shell, said first refractory having a cylindrical conduit therethrough, the axis of said conduit coinciding with the axes of said hollow conical shell and said conical body of first refractory, an elongated hollow cylindrical body of a second refractory disposed axially within and rigidly attached to said first refractory, a second conduit extending through said hollow truncated conical shell and said first and second refractories, a pipe disposed within said second conduit and extending from a point outside said shell to a point in the hollow space within the cylindrical body of said second refractory, and a spray nozzle disposed on the end of said pipe within said hollow space.

2,731,467

ESTERS OF HETEROCYCLIC ACIDS AND 1,2,3,4-TETRAHYDROISOQUINOLINE-2-ALKANOLS

John W. Cusic, Skokie, Ill., assignor to G. D. Searle & Co., Chicago, Ill., a corporation of Illinois

No Drawing. Application February 19, 1954, Serial No. 411,545

9 Claims. (Cl. 260—287)

1. A 1,2,3,4-tetrahydroisoquinoline derivative of the structural formula

X—COO—A—Q

wherein X is a member of the class consisting of 2-furyl, 2-thienyl and pyridyl radicals, A is a lower alkylene radical and Q is a 2-(1,2,3,4-tetrahydro)isoquinoline radical containing attached to the carbon atoms of the nitrogen-containing ring members of the class consisting of hydrogen and lower alkyl radicals.

2,731,468

SEPARATION OF ALKENYLPYRIDINES FROM ALKYLPYRIDINES

Robert A. Findlay, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application June 12, 1953, Serial No. 361,230

9 Claims. (Cl. 260—290)

1. A process for resolving a mixture of an alkenylpyridine and an alkylpyridine corresponding thereto, said alkenylpyridine having at least one alkenyl group with the double bond in the alpha position and having from two to ten carbon atoms in side chains, which comprises, cooling said mixture with anhydrous ammonia as an internal refrigerant to produce crystals of one of said pyridines and to produce a mother liquor enriched in the other of said pyridines, and separating and recovering said crystals from said mother liquor.

7. A process for the separation and recovery of 2-methyl-5-vinylpyridine from a feed mixture of 2-methyl-5-vinylpyridine and 2-methyl-5-ethylpyridine, said feed mixture having more than about 30 weight per cent 2-methyl-5-vinylpyridine, which comprises cooling said feed mixture to crystallize the 2-methyl-5-vinylpyridine therein by adding anhydrous ammonia to said feed mixture and subjecting said feed mixture to conditions of reduced pressure in a first cooling zone, separating the resulting crystals of 2-methyl-5-vinylpyridine from the resulting mother liquor, passing said mother liquor to a solvent extraction zone and therein subjecting said mother liquor to liquid-liquid countercurrent flow solvent extraction with aqueous ammonia to produce an extract rich in 2-methyl-5-vinylpyridine and a raffinate rich in 2-methyl-5-ethylpyridine, subjecting said extract to conditions of reduced pressure in a second cooling zone to cool said extract to a temperature near but above the freezing temperature of said extract, adding the cooled extract to said feed mixture, producing said conditions of reduced pressure in said cooling zone by passing a jet of steam at high velocity in aspirating relation to said cooling zones whereby the steam takes up ammonia from said cooling zones and forms an ammonia-containing water, fractionating said ammonia-containing water in a ammonia distillation zone to produce anhydrous ammonia in the overhead and aqueous ammonia in the bottoms of said ammonia distillation zone, passing the anhydrous ammonia thus produced to said feed mixture and passing the aqueous ammonia thus produced to said solvent extraction zone.

2,731,469

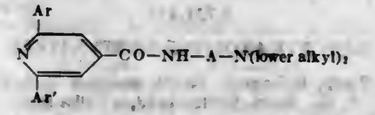
N-DIALKYLAMINOALKYL DERIVATIVES OF DIARYLISONICOTINAMIDES

Carl Peter Krimmel, Mundelein, Ill., assignor to G. D. Searle & Co., Chicago, Ill., a corporation of Illinois

No Drawing. Application October 23, 1953, Serial No. 388,057

6 Claims. (Cl. 260—295)

1. A compound of the structural formula



wherein Ar and Ar′ are aryl hydrocarbon radicals with six membered rings containing 6 to 8 carbon atoms and A is a lower alkylene radical separating the two nitrogen atoms attached thereto by at least two carbon atoms.

2,731,470

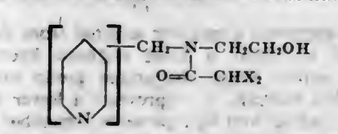
N-PYRIDYLMETHYL, N-HYDROXYETHYL DIHALO ACETAMIDES

Edward F. Elslager and Franklin W. Short, St. Clair Shores, and Elinor S. Lademan, Detroit, Mich., assignors to Parke, Davis & Company, Detroit, Mich., a corporation of Michigan

No Drawing. Application December 23, 1954, Serial No. 477,409

10 Claims. (Cl. 260—295)

1. A compound of the class consisting of a free base and its acid addition salts, the said free base having the formula,



where X is a member of the class consisting of chlorine and bromide radicals.

2,731,471

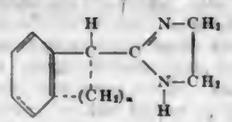
IMIDAZOLINE DERIVATIVES

Martin E. Synerholm, Leonard H. Jules, and Melville Sahyun, Santa Barbara, Calif., assignors to Melville Sahyun, doing business as Sahyun Laboratories, Santa Barbara, Calif.

No Drawing. Application May 21, 1954, Serial No. 431,618

10 Claims. (Cl. 260—301)

1. A compound selected from the group consisting of (*a*) those compounds having the formula:



wherein *n* is an integer from two to three inclusive, and (*b*) stable, non-toxic acid addition and quaternary ammonium salts thereof.

2,731,472

PRODUCTION OF HETEROCYCLIC COMPOUNDS FROM GLYOXAL AND UREA

Bruno v. Reibnitz, Mannheim, Germany, assignor to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application July 25, 1952, Serial No. 300,979

Claims priority, application Germany August 2, 1951

5 Claims. (Cl. 260—309.7)

1. A process for the production of 4,5-dihydroxy imidazolidone-2 which comprises adjusting an aqueous glyoxal solution by the addition of an inorganic acid binding agent to a pH value of from 5 to 9 and reacting this solution with the urea until the crystalline 4,5-dihydroxy imidazolidone-2 has been formed.

2,731,473

NEW PYRAZOLONE DERIVATIVES

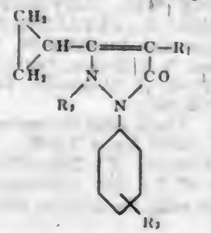
William Taub, Rehovoth, Israel, assignor to J. R. Geigy A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application August 9, 1954, Serial No. 448,735

Claims priority, application Switzerland August 21, 1953

4 Claims. (Cl. 260—310)

1. A pyrazolone derivative of the general formula:



wherein R_1 represents a member selected from the group consisting of hydrogen, a lower aliphatic hydrocarbon radical, the amino group, the amino group substituted by lower alkyl radicals, R_2 represents a lower aliphatic hydrocarbon radical and R_3 represents a member selected from the group consisting of hydrogen, an alkyl group and an alkoxy group, alkyl being lower alkyl.

2,731,474

HYDROXYTETRAHYDROCARBAZOLES

Robert Sidney Long, Bound Brook, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application Feb. 16, 1954, Serial No. 410,729

4 Claims. (Cl. 260—315)

1. A process of preparing 2-hydroxy-5,6,7,8-tetrahydrocarbazole-3-carboxy-p-chloranilide from 4-aminosalicylic acid which comprises (1) converting the 4-aminosalicylic acid into 4-hydrazinosalicylic acid by diazotizing the 4-aminosalicylic acid and reacting the diazo compound with sodium hydrosulfite in an aqueous medium to form 4-hydrazinosalicylic acid, (2) recovering the 4-hydrazinosalicylic acid so obtained, (3) converting the 4-hydrazinosalicylic acid into the cyclohexanone hydrazone thereof by reacting said 4-hydrazino-salicylic acid with cyclohexanone to form said hydrazone compound, (4) recovering the cyclohexanone-4-carboxy-3-hydroxyphenylhydrazone so obtained, (5) converting the said hydrazone compound into 2-hydroxy-5,6,7,8-tetrahydrocarbazole-3-carboxylic acid by heating said hydrazone compound in acidic medium to effect rearrangement and cyclization and form 2-hydroxy-5,6,7,8-tetrahydrocarbazole-3-carboxylic acid, (6) recovering the 2-hydroxy-5,6,7,8-tetrahydrocarbazole-3-carboxylic acid so obtained, (7) converting the 2-hydroxy-5,6,7,8-tetrahydrocarbazole-3-carboxylic acid into the p-chloranilide thereof by reacting said carboxylic acid with p-chlor-aniline and (8) recovering the 2-hydroxy-5,6,7,8-tetrahydrocarbazole-3-carboxy-p-chloranilide so obtained.

2,731,475

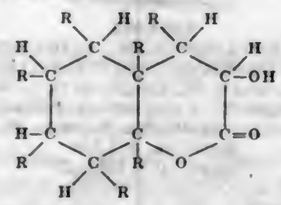
METHOD OF PRODUCING LACTONES

John C. Hillyer and James T. Edmonds, Jr., Bartlesville, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware

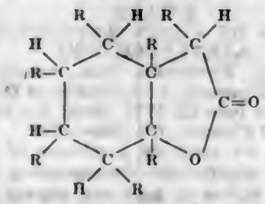
No Drawing. Application December 3, 1951, Serial No. 259,738

9 Claims. (Cl. 260—343.3)

1. A method for the production of the lactone of a cis-cyclohexanol-2-acetic acid comprising oxidizing a compound of the formula



where R is selected from the group consisting of H, CH_3, C_2H_5, C_3H_7, and C_4H_9, not more than two R groups being alkyl, with an alkali metal dichromate present in not in excess of a mol/mol ratio in the presence of an acid selected from the group consisting of H_2SO_4 and monocarboxylic organic acids containing 2 to 4 carbon atoms in aqueous solution at a temperature of from 30 to 150° F., employing a reaction time of 1 to 24 hours, and recovering as a product a compound having the formula



where R is selected from the group consisting of H, CH_3, C_2H_5, C_3H_7, and C_4H_9, not more than two R groups being alkyl.

2,731,476

SULFONIC ACID AMIDES OF THE ANTHRAQUINONE SERIES

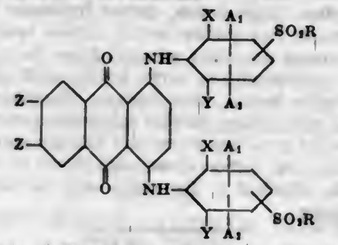
Albin Peter, Binningen, and Erhard Wydler, Basel, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application October 6, 1952, Serial No. 313,348

Claims priority, application Switzerland October 18, 1951

6 Claims. (Cl. 260—371)

1. A sulfonic acid amide of the anthraquinone series, which corresponds to the formula



wherein each of X and Y stands for a member selected from the group consisting of methyl and ethyl, Z stands for a member selected from the group consisting of hydrogen, chlorine and bromine, A_1 stands for a member selected from the group consisting of hydrogen, methyl, ethyl, chlorine and bromine, A_2 stands for a member selected from the group consisting of hydrogen, methyl and ethyl, and R is the radical of an amine.

2,731,477

PROCESS FOR THE MANUFACTURE OF ANTHRAQUINONE DYESTUFFS SUITABLE FOR DYEING CELLULOSE ACETATE ARTIFICIAL SILK

Paul Grossmann, Binningen, Switzerland, assignor to Ciba Limited, Basel, Switzerland, a Swiss firm

No Drawing. Application May 22, 1953, Serial No. 356,907

Claims priority, application Switzerland May 30, 1952

14 Claims. (Cl. 260—378)

1. Process for the manufacture of dyestuffs suitable for dyeing cellulose acetate artificial silk which comprises causing an aliphatic amine and ammonia to react simultaneously upon 1:4-dihydroxyanthraquinone in the presence of a leuco-compound of an anthraquinone which contains as a substituent in each of the 1- and 4-positions a substituent selected from the group consisting of a hydroxyl and an amino group.

2,731,478

PROCESS FOR THE MANUFACTURE OF BENZOQUINONE

Jonas Kamlet, Easton, Conn.

No Drawing. Application August 14, 1953, Serial No. 374,429

11 Claims. (Cl. 260—396)

1. A process for the manufacture of p-benzoquinone which comprises the steps of: (*a*) oxidizing aniline in an aqueous sulfuric acid medium with Weldon mud, and separating the p-benzoquinone thus formed from the residual aqueous solution of manganous sulfate, (*b*) reacting the manganous sulfate solution with a substantially equimolecular amount of calcium chloride and separating the resultant precipitate of calcium sulfate from the resultant solution of manganous chloride, and (*c*) reacting the manganous chloride solution with an equimolecular amount of lime in the presence of substantial excess of lime and passing an oxygen-containing gas through the resultant suspension of manganous hydroxide and excess lime in calcium chloride solution whereby the major portion of the divalent manganese is oxidized to the tetravalent state, separating the resultant Weldon mud containing the equivalents of a major amount of MnO_2 and minor amounts of MnO and CaO from the solution of calcium chloride, and returning the said Weldon mud to the first step of the process.

2,731,479

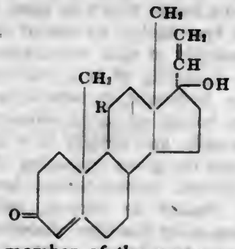
11-OXYGENATED 17α-VINYLTESTOSTERONE AND PROCESS

Charles W. Marshall, Chicago, Ill., assignor to G. D. Searle & Co., Chicago, Ill., a corporation of Illinois

No Drawing. Application January 26, 1953, Serial No. 333,343

5 Claims. (Cl. 260—397.45)

1. A member of the group consisting of compounds of the formula



wherein R is a member of the group consisting of oxo and hydroxyl.

2,731,480

PROCESS FOR THE PRODUCTION OF ε-ACYL LYSINES

Winfried Kruckenberg, Leverkusen, Germany, assignor to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

Application March 18, 1954, Serial No. 417,125

Claims priority, application Germany March 19, 1953

3 Claims. (Cl. 260—404.5)

1. In the process for the production of an ε-acyl lysine by chlorinating an N-acyl-ε-amino caproic acid, in which the acyl group is an aliphatic acyl group, and thereafter aminating the chlorinated product, the improvement which comprises effecting the chlorination, using a water-free salt of the N-acyl-ε-amino caproic acid as the starting material and sulfuryl chloride in the presence of thionyl chloride as the chlorinating agent.

2,731,481

DIMERIC FATTY ACIDS

Stuart A. Harrison and Kirtland E. McCaleb, Minneapolis, Minn., assignors to General Mills, Inc., a corporation of Delaware

No Drawing. Application August 1, 1951, Serial No. 239,846

4 Claims. (Cl. 260—407)

1. Process of dimerizing a compound selected from the group consisting of higher fatty acids containing only one double bond, and lower aliphatic monohydric alcohol esters thereof, which comprises heating said compound to a temperature in excess of 100° C. in the presence of organic peroxide having the formula $ROOR^1$ in which R is a tertiary alkyls group and R^1 is selected from the group consisting of tertiary alkyl and tertiary alkyl peroxyalkyl groups.

2,731,482

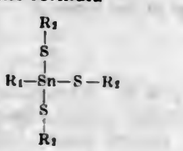
ORGANOTIN TRIMERCAPTIDES

Eugene P. Stefl, Churchill Valley, Pa., and Chris E. Best, Franklin Township, Summit County, Ohio, assignors to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application October 5, 1950, Serial No. 188,653

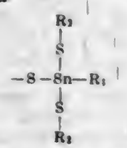
6 Claims. (Cl. 260—429)

1. A compound of the formula



in which formula R_1, independently in each occurrence,

represents an organic radical consisting of and containing from 1 to 22 carbon atoms, hydrogen, carbon-carbon single bonds, carbon-hydrogen bonds, up to 11 aromatic ring carbon-carbon double bonds, and up to 4 innocuous structures selected from the group consisting of carbon-carbon triple bonds, aliphatic carbon-carbon double bonds, ether linkages, thioether linkages, carboxylic ester groups bonded to carbon, fluorine atoms bonded to carbon, and halogen atoms bonded to aromatic ring carbon, each R_1 being linked to the tin atom in the formulae hereinabove and hereinbelow by one of its carbon atoms, and R_2, independently in each occurrence, represents an organic radical consisting of and containing from 1 to 22 carbon atoms, hydrogen, carbon-carbon single bonds, carbon-hydrogen bonds, up to 11 aromatic ring carbon-carbon double bonds, and from 0 to 4 innocuous structures selected from the group consisting of carbon-carbon triple bonds, aliphatic carbon-carbon double bonds, hydroxyl groups bonded to carbon, sulfhydryl groups bonded to carbon, ether linkages, thioether linkages, carboxylic ester groups bonded to carbon, carboxylic amide groups bonded to carbon, fluorine atoms bonded to carbon, halogen atoms bonded to aromatic ring carbon, and groups of the formula



under the same notation, each of the radicals R_2 being linked to its respective sulfur atom in the formulae by one of its carbon atoms.

2,731,483

PROCESS FOR THE PRODUCTION OF ZINC FORMALDEHYDE SULPHOXYLATE FROM BASIC ZINC FORMALDEHYDE SULPHOXYLATE

Alfons Janson, Ludwigshafen (Rhine) Oppau, Germany assignor to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application November 2, 1951, Serial No. 254,635

Claims priority, application Germany November 7, 1950

3 Claims. (Cl. 260—429)

1. A process for the production of the zinc formaldehyde sulphoxylate from the basic zinc formaldehyde sulphoxylate which comprises acting on said basic salt with such amounts of sulfurous acid that zinc sulfite which precipitates, and the zinc formaldehyde sulphoxylate are formed, separating the precipitated zinc sulfite from the solution and then recovering the said zinc formaldehyde sulphoxylate from the solution.

2,731,484

PREPARATION OF ORGANOTIN MERCAPTIDES

Chris E. Best, Franklin Township, Summit County, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

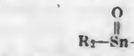
No Drawing. Application June 27, 1950, Serial No. 170,692

6 Claims. (Cl. 260—429.7)

1. Process which comprises reacting together a mercaptan of the formula

$$R_1—S—H$$

with a stannone of the formula



in which formulae R_1, independently in each occurrence represents an organic radical consisting of and containing from 1 to 22 carbon atoms, hydrogen, carbon-carbon single bonds, carbon-hydrogen bonds, up to 11 aromatic ring carbon-carbon double bonds, and up to 4 innocuous structures selected from the group consisting of carbon-carbon triple bonds, aliphatic carbon-carbon double bonds, hydroxyl groups bonded to carbon, sulfhydryl groups bonded to carbon, ether linkages, thioether linkages, carboxylic ester groups bonded to carbon atoms, carboxylic amide groups bonded to carbon atoms, fluorine atoms bonded to carbon atoms and halogen atoms bonded to aromatic ring carbon atoms, and R_2, independently in each occurrence, represents an organic radical consisting of and containing from 1 to 22 carbon atoms, hydrogen, carbon-carbon single bonds, carbon hydrogen bonds, up to 11 aromatic ring carbon-carbon double bonds, and up to 4 innocuous structures selected from the group consisting of carbon-carbon triple bonds, aliphatic carbon-carbon double bonds, ether linkages, thioether linkages, carboxylic ester groups bonded to carbon atoms, fluorine atoms bonded to carbon atoms and halogen atoms bonded to aromatic ring carbon atoms, the atoms in the groups R_1 and R_2 attached to the sulfur and tin atoms being carbon atoms.

2,731,485

POLYSILOXANES PRODUCED BY THE REACTION OF DIALKYLDIALKOXYSILANES IN THE PRESENCE OF ALUMINUM OR BORON HALIDES

George H. Wagner, Kenmore, and Charles E. Erickson, Buffalo, N. Y., assignors, by mesne assignments, to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application July 26, 1949, Serial No. 106,972

2 Claims. (Cl. 260—448.2)

1. A process for preparing polysiloxanes which consists of heating substituted silanes of the type:

$$R''_2Si(OR)_2$$

where R and R'' are alkyl radicals, in the presence of a catalyst taken from the group consisting of the halides of aluminum and boron to a temperature of above about 300° C. to evolve an alkyl ether and recovering a siloxane polymer from the reaction product.

2,731,486

CATALYTIC HYDROGENATION OF CARBON MONOXIDE

Walter Rottig, Oberhausen Sterkrade-Nord, Germany, assignor to Ruhrchemie Aktiengesellschaft, Oberhausen-Holten, Germany, a joint-stock company of Germany

No Drawing. Application December 6, 1949, Serial No. 131,517

Claims priority, application Germany December 23, 1948

5 Claims. (Cl. 260—449.6)

1. In the method for the catalytic hydrogenation of carbon monoxide in which a high formation of relatively low-molecular weight hydrocarbons is produced along with a low formation of methane and high-molecular weight hydrocarbons, the improvement which comprises subjecting carbon monoxide to hydrogenation at a pressure not substantially in excess of normal in the presence of a precipitated iron catalyst of the contact type, said catalyst being impregnated with a polybasic acid whose hydrogen is partially replaced by an alkali metal to form an acid alkali metal salt of a polybasic acid, thereafter any excess alkali removed by neutralization and washing, and reduced with a reducing gas at reduction temperatures of 170–250° C. and at gas velocities of 1–1.5 meters per second, and recovering the resulting hydrocarbon product rich in low-molecular weight hydrocarbons.

2,731,487

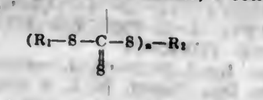
ASYMMETRIC TERTIARY ALKYL TRITHIOCARBONATES

Joseph T. Basbour, New York, N. Y., assignor to Stauffer Chemical Company, a corporation of Delaware

No Drawing. Application August 11, 1951, Serial No. 241,492

7 Claims. (Cl. 260—455)

1. As a new composition of matter, a compound having the formula:



wherein n is an integer of from 2 to 4, R_1 is a tertiary alkyl radical having from 4 to 16 carbon atoms and R_2 is a radical chosen from the group consisting of aliphatic, aromatic, alkaryl, aralkyl and halogen substituted aromatic radicals.

2,731,488

PRODUCTION OF ALIPHATIC NITRILES FROM IMINES

Benjamin Thompson, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application January 16, 1952, Serial No. 266,779

5 Claims. (Cl. 260—465.1)

1. Method for the preparation of a nitrile comprising the steps of vaporizing an unsaturated secondary imine, reacting the thus vaporized imine with an amount of gaseous ammonia, in excess of the ratio of one mole of ammonia per mole of the imine, over a dehydration-hydrogenation catalyst selected from the group consisting of metals, metal oxides and metal alloys at a temperature in the range of about 200°–600° C. and a space velocity in the range of about 100–5000, and recovering nitrile formed by the reaction in the ratio of approximately two moles of nitrile per mole of imine employed.

2,731,489

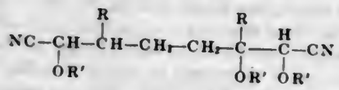
DINITRILES AND PROCESS FOR THEIR PREPARATION

Harry A. Stansbury, Jr., South Charleston, and Howard R. Guest, Charleston, W. Va., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application April 28, 1954, Serial No. 426,304

13 Claims. (Cl. 260—465.4)

1. Chemical compounds having the formula:



wherein R is a member selected from the class consisting of hydrogen and methyl radicals and R' is a member selected from the class consisting of hydrogen and aliphatic acyl radicals containing from 2 to 10 carbon atoms.

2,731,490

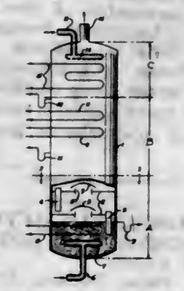
METHOD OF MAKING CYANOHYDRINS

George Barsky, New York, N. Y.

Application January 28, 1953, Serial No. 333,803

10 Claims. (Cl. 260—465.6)

1. A continuous method of making cyanohydrins which comprises passing a gas containing HCN upwardly through successive zones of reaction, introducing aqueous alkali solution into the uppermost zone and causing the same to flow downwards, introducing into the intermediate zone a liquid carbonyl substance taken from the class consisting of aldehydes and ketones, and introducing into the



lowermost zone an acid sufficient in amount to provide a pH less than 7.

2,731,491

CONDENSATION PRODUCT OF NAPHTHENIC ACIDS AND PHENOLS AND METHODS OF MAKING SAME

Oliver L. Brandes, Gibsonia, and Earl L. Humphrey, Penn Township, Allegheny County, Pa., assignors to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

No Drawing. Application April 2, 1953, Serial No. 346,541

12 Claims. (Cl. 260—468)

1. A method of preparing a new compound, which comprises reacting a mixture comprising naphthenic acids and at least one phenol in the presence of a Friedel-Crafts catalyst at an elevated temperature of at least about 200° F. for a time sufficient to effect reaction between the naphthenic acids and the phenol.

5. A method of preparing a new compound, which comprises reacting a mixture comprising naphthenic acids and p-cresol in the presence of a Friedel-Crafts catalyst at an elevated temperature of at least about 300° F. for a time sufficient to effect reaction between the naphthenic acids and p-cresol.

2,731,492

PROCESS FOR THE MANUFACTURE OF ACETYLSALICYLIC ACID

Jonas Kamlet, Easton, Conn.

No Drawing. Application April 29, 1954, Serial No. 426,573

5 Claims. (Cl. 260—480)

1. A cyclic process for the manufacture of acetylsalicylic acid which comprises the steps of: (*a*) reacting salicylic acid with at least an equimolar amount of acetic anhydride in the presence of an organic diluent, at a temperature between 50° C. and 120° C., for a period of time sufficient to cause substantially complete acetylation of the salicylic acid with the formation of acetylsalicylic acid and acetic acid; (*b*) cooling the reaction mixture to a terminal temperature between 0° C. and 50° C., precipitating a major portion of the acetylsalicylic acid formed in step (*a*) and separating said precipitated acetylsalicylic acid from the mother liquor; (*c*) reacting the mother liquor from step (*b*) containing a minor amount of unrecovered acetylsalicylic acid, free acetic acid formed as a by-product in the acetylation step (*a*) and organic diluent, with ketene in quantity sufficient to convert at least a major portion of said free acetic acid to acetic anhydride, and recycling the resultant mother liquor containing acetic anhydride and organic diluent to step (*a*) of the process for further reaction with salicylic acid.

2,731,493

CHOLINE ESTERS

John Alfred Aeschlimann, Montclair, and Arthur Stempel, River Edge, N. J., assignors to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application January 25, 1954, Serial No. 406,056
5 Claims. (Cl. 260—490)

1. A compound of the group consisting of benzenesulfonic acid salts of lower aliphatic acid esters of choline and toluene-sulfonic acid salts of lower aliphatic acid esters of choline.

2,731,494

NEW AND BIOLOGICALLY ACTIVE DIPHENYLMETHANE DERIVATIVES AND METHOD OF MAKING THE SAME

Ladislaus Arthur Hahn, Malmo, Sweden, and Janos Fekete, Lorena, Brazil, assignors to Aktiebolaget Ferrosan, Malmo, Sweden, a corporation of Sweden

No Drawing. Application September 9, 1952, Serial No. 308,704
Claims priority, application Sweden December 9, 1949
1 Claim. (Cl. 260—507)

A compound selected from the group consisting of methylene-di-(2.5-dihydroxy-mono-sulfo-benzoic acid) and its polycondensation products all of which compounds are condensation products of monosulfo gentisic acid and formaldehyde.

2,731,495

PRODUCTION OF SEBACIC ACID

Robert Steele Emslie, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application August 13, 1951, Serial No. 241,703
8 Claims. (Cl. 260—537)

1. A process for obtaining pure sebacic acid from an impure alkali sebacate comprising initially acidifying an aqueous alkaline solution of said sebacate to a pH ranging from 6 to 7.5, removing from the solution liberated fatty acid product resulting from said initial acidification, further acidifying the resulting, partially purified solution to a pH ranging from 4.7 to 6, removing therefrom organic contaminants formed as a result of said further acidification, and then acidifying the solution obtained as a result of said organic contaminant removal to a pH of below about 3 and recovering the sebacic acid product which becomes liberated.

2,731,496

METHOD OF MAKING THIOSEMICARBAZIDE

George E. Taylor, St. Louis, Mo., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application January 28, 1953, Serial No. 333,840
7 Claims. (Cl. 260—552)

1. In the process for preparing thiosemicarbazide by the rearrangement of hydrazine thiocyanate, the step which comprises heating a suspension of hydrazine thiocyanate in a water-immiscible inert organic liquid to effect rearrangement to thiosemicarbazide, the reaction system being maintained at a pH in the range of from about 5.0 to about 6.0.

2,731,497

PRODUCTION OF TETRACYCLINE

Jerry R. D. McCormick, Mahwah, and Neva-Tay Kathleen Smith, Park Ridge, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application May 14, 1954, Serial No. 429,986
6 Claims. (Cl. 260—559)

6. A method for the hydrogenolysis of chlortetracycline to tetracycline which comprises reducing with hydrogen at a temperature in the range of 0° C. to 100° C. a solution of chlortetracycline in a solvent therefor and having suspended therein about 5% to 20% on the weight of said chlortetracycline of a catalyst comprising palladium hydroxide distributed on a finely divided porous carrier.

2,731,498

BASIC DERIVATIVE OF 4-CYCLOHEXYL-CYCLOHEXANONE AND PROCESS FOR THE MANUFACTURE THEREOF

Max Walter, Basel, Switzerland, assignor to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application April 28, 1954, Serial No. 426,309
Claims priority, application Switzerland May 12, 1953
4 Claims. (Cl. 260—563)

1. A member of the group consisting of 2-dimethylaminomethyl-4-cyclohexyl-cyclohexanone and acid addition salts thereof.

2,731,499

PROCESS FOR PREPARING OXIMINOACETONE

George R. Coraor, Woodbury, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application February 5, 1954, Serial No. 408,385
3 Claims. (Cl. 260—566)

1. A process for producing oximinoacetone which comprises reacting an alkyl nitrite having at least three carbon atoms with acetone in the presence of a hydrochloric acid catalyst at a temperature between 0° and 70° C., the mole ratio of the acetone to the alkyl nitrite being at least 2 to 1 and the weight ratio of the acid catalyst to the alkyl nitrite being at least 0.05 to 1.

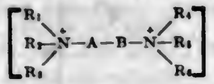
2,731,500

BIS-QUATERNARY AMMONIUM SALTS

Ronald Wien, Julius Nicholson Ashley and William George Leeds, Dagenham, England, assignors to May & Baker Limited, Dagenham, England, a British company

No Drawing. Application February 24, 1953, Serial No. 338,618
Claims priority, application Great Britain February 28, 1952
10 Claims. (Cl. 260—567.6)

1. Bis-quaternary ammonium salts; the cations of which are represented by the following general formula:



in which R_1, R_2, R_3, R_4, R_5 and R_6 represent each a member of the class consisting of methyl and ethyl groups, A represents a cyclohexyl radical linked in the 1- and 4-positions, and B represents an alkylene radical containing not more than 8 carbon atoms; and the anions of which are the anions of therapeutically acceptable non-toxic acids.

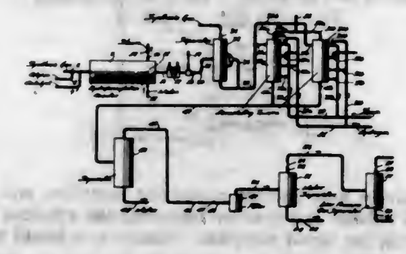
2,731,501

PURIFICATION OF HYDROFORMYLATION REACTION PRODUCTS

Arnold G. Anderson, Plum Township, Allegheny County, and Bernard H. Gwynn, Fawn Township, Allegheny County, Pa., assignors to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

Application November 21, 1952, Serial No. 321,904
3 Claims. (Cl. 260—604)

1. A process which comprises reacting an olefin with hydrogen and carbon monoxide in the presence of a cobalt salt at an elevated temperature and a pressure above about 1500 pounds per square inch to obtain a hydroformylation mixture comprising an aldehyde and at least one metal carbonyl, passing said mixture at a pressure of about 25 to about 500 pounds per square inch and a temperature initially below the decomposition temperature of the metal carbonyl with the lowest decomposition temperature at said latter pressure through a demetalling zone containing packing material, passing steam and an inert gas upwardly through said demetalling zone, the amount and pressure of said steam being adjusted to heat the hydroformylation mixture in the demetalling zone to the decomposition temperature of the metal carbonyl with the highest decomposition temperature present in the hydroformylation mixture, removing the demetalled hydroformylation mixture admixed with water from the demetalling zone and passing said demetalled hydroformylation product to a separation zone maintained at the same pressure as that existing in the demetalling zone, removing water from said separation zone, and removing the demetalled hydroformylation product substantially free of water from said separation zone.



2,731,502

HYDROXYLATION PROCESS

Curtis W. Smith, Berkeley, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application September 26, 1952, Serial No. 311,801
8 Claims. (Cl. 260—635)

1. A process for the hydroxylation of a mono-olefinic compound containing the olefinic linkage between two aliphatic carbon atoms, each of which carbon atoms has the two remaining valences satisfied by single-bonded linkage to separate atoms, and said compound containing no other elements than carbon, hydrogen, oxygen and halogen which comprises reacting said olefinic compound with hydrogen peroxide at a temperature between about 0° C. and about 100° C. in the presence of a catalytic amount between about 1 and about 20 mole percent, based on said olefinic compound, of an organic sulfonic acid of the group consisting of aliphatic sulfonic acids of 1 to 18 carbon atoms per molecule and aromatic carbocyclic sulfonic acids having 6 to 24 carbon atoms per molecule.

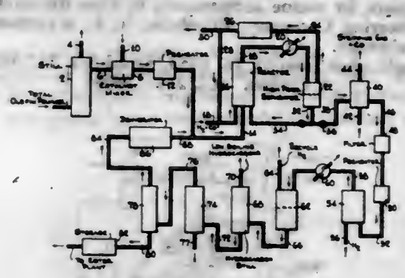
2,731,503

ALCOHOL SYNTHESIS PROCESS

William J. Mattox, Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application May 10, 1951, Serial No. 225,548
6 Claims. (Cl. 260—638)

1. An improved process for producing octyl alcohols of high quality in increased yields which comprises passing an olefin mixture consisting essentially of hexene and heptene produced by the polymerization of a light gaseous hydrocarbon feed comprising at least a major proportion of propylene and substantially free of isobutylene, into a carbonylation zone, treating said hexene-heptene mixture with CO and H_2 under elevated temperatures and pressures with a cobalt carbonylation catalyst, whereby heptyl and octyl aldehydes are obtained, reducing said aldehydes to the corresponding alcohols, separating heptyl from octyl alcohols, converting heptyl alcohols to heptenes, said heptenes having olefinic unsaturation



substantially on terminal carbon atoms, passing said heptenes to said carbonylation zone, and recovering increased amounts of high quality octyl alcohols.

2,731,504

PRODUCTION OF ALIPHATIC ALCOHOLS FROM OLEFINS

Walter Reppe, Ludwigshafen (Rhine), Nikolaus v. Kutepow, Karlsruhe-Rueppurr, and Manfred Heintzeler, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen am Rhine, Germany

No Drawing. Application April 16, 1952, Serial No. 282,683
Claims priority, application Germany May 2, 1951
9 Claims. (Cl. 260—638)

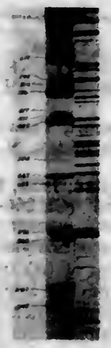
1. A process for the production of aliphatic alcohols which comprises heating to temperatures exceeding 80° C. and under pressures exceeding 50 atmospheres in an aqueous from neutral to alkaline reaction medium an olefinic hydrocarbon with a soluble salt of formic acid as a source of carbon monoxide in the presence of iron carbonyl.

2,731,505

PROCESS OF PREPARING BROMOCHLORODIFLUOROMETHANE BY REACTING CHLORODIFLUOROMETHANE AND BROMINE

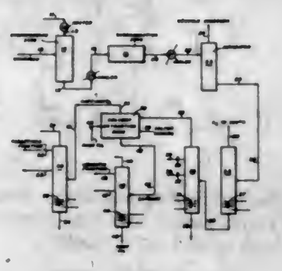
William S. Barnhart, Cranford, N. J., assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio

Application June 24, 1952, Serial No. 295,241
7 Claims. (Cl. 260—653)



6. A process which comprises brominating chlorodifluoromethane by passing a vapor mixture thereof with bromine through a zone heated to a temperature between about 300° C. and the pyrolysis temperature under the conditions employed.

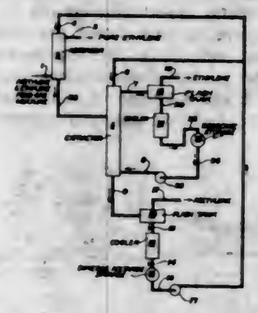
2,731,506
PRODUCTION OF HYDROCARBON SOLVENTS OF LOW ACID WASH COLOR
Robert M. Love and Richard E. Tannich, Baytown, Tex., assignors, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
Application January 28, 1953, Serial No. 333,682
8 Claims. (Cl. 260—668)



1. A method for producing hydrocarbon solvents having a low acid wash color which comprises the steps of hydroforming a naphthenic hydrocarbon fraction containing a small amount of olefins less than about 2% by volume and boiling in the range between 200° and 300° F. under hydroforming conditions of temperature and pressure in a first zone to convert naphthenes to aromatics and to form a total first vaporous product including unreacted hydrogen, unreacted feed and reacted products having a high concentration of acid wash color forming bodies in the 200° to 300° F. boiling range, reducing the temperature of the total first product to a temperature below 700° F., immediately passing said total vaporous first product at said reduced temperature after said total first product leaves said first zone into a second zone, hydrogenating said total first product in said second zone in the absence of extraneously added hydrogen in the presence of a hydrogenating catalyst selected from the group consisting of nickel-tungsten sulfide, platinum, Raney nickel, and cobalt molybdate at a temperature below 700° F. and at a space velocity higher than a space velocity in said hydroforming step to form a second product having a low concentration of acid wash color forming bodies in the 200° to 300° F. boiling range and distilling said second product to recover a fraction boiling in the range between 200° and 300° F. having solvent properties and an acid wash color not in excess of 6.

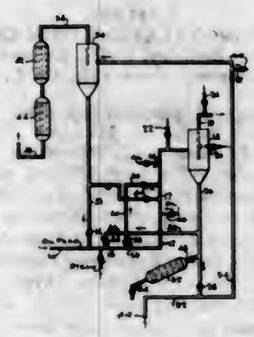
2,731,507
RECOVERY OF ACETYLENE FROM GAS MIXTURES BY ABSORPTION IN SELECTIVE SOLVENTS
George A. Akin, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application January 14, 1953, Serial No. 331,281
6 Claims. (Cl. 260—679)

1. In a process for the recovery of acetylene in pure form from a gas mixture of acetylene and ethylene, which process includes the steps of (*a*) treating the gas mixture with a liquid solvent having a preferential affinity for acetylene to form a solution rich in acetylene and containing a relatively small amount of ethylene as an impurity, (*b*) removing the ethylene impurity from the solution, and (*c*) subsequently liberating acetylene in a pure form from the solution, the steps (*a*) and (*b*) being conducted at potentially dangerous high temperatures and pressures, an improved method for conducting the step (*b*) ethylene impurity removal safely and efficiently comprising subjecting the acetylene-rich solution containing the ethylene impurity to a counter-current liquid-liquid extraction with an extracting solvent having a preferential affinity for the ethylene impurity



and relatively little solvent power for acetylene and the acetylene solvent and thereby removing the ethylene impurity from the liquid acetylene solution as a liquid solution of ethylene.

2,731,508
CONVERSION OF HYDROCARBONS FOR THE PRODUCTION OF UNSATURATES AND GASOLINE WITH THE USE OF INERT SOLIDS
Charles E. Jahnig, Red Bank, and James W. Brown, Elizabeth, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application June 8, 1951, Serial No. 230,664
4 Claims. (Cl. 260—683)



1. The process of converting heavy petroleum oil to lower boiling hydrocarbons which comprises feeding said oil into contact with a rapidly flowing reaction stream of finely divided solid products which are substantially inert and are preheated to a temperature sufficiently high to raise the temperature of the oil to at least 1200° F., maintaining a contact time of 0.1 to 10 seconds to produce high temperature reaction products including substantial proportions of low molecular weight olefinic hydrocarbons, introducing a second stream of oil feed into the reaction stream after the aforesaid contacting in sufficient quantity to substantially reduce the reaction temperature to a range between about 950° and 1200° F. to quench conversion and degradation of said low molecular weight olefinic hydrocarbons and also to initiate conversion of said second stream to products including substantial proportions of hydrocarbons boiling in the gasoline boiling range, introducing additional hot solid particles into said reaction stream to maintain a conversion temperature within the range last specified, separating the reaction products from said solids and continuously reheating and recycling at least a portion of said solid particles to maintain continuous operation in both stages.

ELECTRICAL

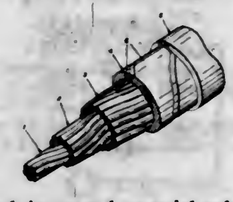
2,731,509
APPARATUS FOR SUPPRESSING GALLOPING CONDUCTORS
Carl Becker, Oak Park, Ill.
Application April 21, 1951, Serial No. 222,275
3 Claims. (Cl. 174—42)



1. In apparatus for suppressing wind-induced galloping oscillations in aerial conductors, the combination of spaced supporting structures, insulator strings hanging from said supporting structures, hanger means suspended from each of said insulator strings, and a conductor supported by said hanger means and extending in spans between said supporting structures, each of said hanger means comprising a downwardly facing clevis having laterally spaced side arms, a pivoting tongue extending into the space between said clevis side arms, a pivot bolt extending through said pivoting tongue and side arms and projecting outwardly from the outer sides of the latter, a conductor clamp carried by said pivoting tongue below said clevis and adapted to have clamping engagement over said conductor, a pair of damping arms pivotally mounted on said pivot bolt on opposite sides of said clevis for independent pivotal movement, said damping arms extending outwardly in opposite directions from said clevis, one arm above one span of said conductor extending in one direction from said conductor clamp, and the other damping arm above the other span of said conductor extending in the opposite direction from said clamp, apertured guide portions on the outer ends of said damping arms having free sliding fit over their respective spans of said conductor at points spaced substantial distances outwardly from said conductor clamp, whereby vertical galloping oscillation occurring in either span tends to cause vertical pivoting motion in its respective damping arm, a friction disk on the inner portion of each arm, a cooperating friction plate on each side arm of said clevis for cooperation with said friction disks, friction material between each friction disk and friction plate, compression springs mounted on the outer portions of said pivot bolt for pressing said friction disks of both arms inwardly against said friction material and friction plates, and a weight suspended below said conductor clamp and rigidly joined thereto for increasing the inertia of said hanger means and the point of reaction of said pivoted damping arms.

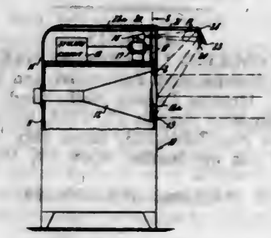
2,731,510
OVERHEAD ELECTRIC LINES AND CONDUCTORS THEREFOR
Leslie Giddens Brazier, Datchet, and William George Hawley, Hinchley Wood, Esher, England, assignors to British Insulated Callender's Cables Limited, London, England, a British company
Application August 8, 1951, Serial No. 240,828
Claims priority, application Great Britain August 29, 1950
4 Claims. (Cl. 174—114)

1. An overhead line conductor for high voltage electric power transmission lines, comprising a steel cored aluminum wire strand having a continuous covering layer of fibrous filling material surrounding said strand, and a tube having a thin, gas-impervious wall of metal selected from the group consisting of aluminum and aluminum rich alloys of good electrical conductivity, said tube having a circumferentially continuous wall with a smooth circular continuous outer surface and fitting closely on and



being supported in spaced co-axial relationship to said strand by said fibrous covering layer and forming a complete gas-tight and water-tight envelope for said fibrous covering layer and said strand.

2,731,511
COLOR TELEVISION SYSTEMS
Bernard Wiesen, New York, N. Y.
Application November 28, 1950, Serial No. 197,899
2 Claims. (Cl. 178—5.4)

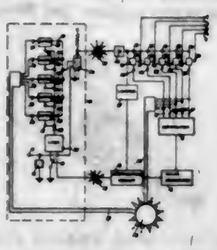


1. In a television receiver, in combination, a cathode ray tube including a fluorescent screen having an outer surface and an inner surface on which normally black and white pictures are reproduced, a source of polychrome light positioned remote from said cathode ray tube, movable optical means for directing light from said light source over a predetermined path onto said outer surface of said fluorescent screen, a rotatable filter in said path having portions of different color transmission, and control means rotating said filter, thereby successively placing respective ones of said portions in said path, said optical means comprising a mirror normally positioned forwardly of said rotatable filter and said fluorescent screen, said mirror being movable for placement rearwardly of said filter to interrupt impingement of said light upon said screen.

2,731,512
MULTICHANNEL COMMUNICATION SYSTEMS
Maurice Moise Levy, Ottawa, Ontario, Canada, assignor to The General Electric Company Limited, London, England
Application October 17, 1950, Serial No. 190,532
Claims priority, application Great Britain October 26, 1949
14 Claims. (Cl. 179—18)

1. A multi-channel communication system including a first signalling station, a second signalling station, a plurality of communication channels extending between said stations, and apparatus at said first station for identifying all free ones of said channels, said apparatus comprising a generator continuously producing a plurality of pulsating voltages of different characteristics, each voltage

identifying a different one of said communication channels, an electrically-controllable cancelling circuit, means to apply said voltages to said cancelling circuit, means connecting said cancelling circuit to all the communication channels in the system, and means connected to all the communication channels in said system to provide a first voltage condition in each communication channel when the channel is free and to provide a second voltage



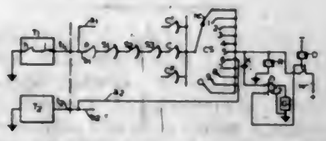
condition in each communication channel when the channel is engaged, said cancelling circuit including means responsive to said second voltage conditions in different engaged ones of the said communication channels to cancel different voltages respectively from the output of said cancelling circuit whereby free ones of the said communication channels are identified by the characteristics of the voltages appearing at the output of said cancelling circuit.

2,731,513
AUTOMATIC TELEPHONE SYSTEMS

Theodorus Reumerman, Zandvoort, and Willem H. T. Helmig, Leiden, Netherlands

Original application August 27, 1948, Serial No. 46,494, now Patent No. 2,646,923, dated July 28, 1953. Divided and this application April 19, 1951, Serial No. 221,761

9 Claims. (Cl. 179—18)



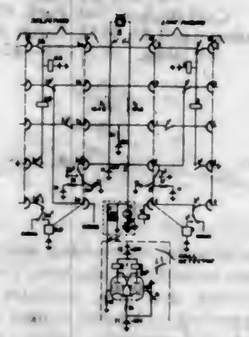
1. An automatic telephone exchange, comprising a plurality of lines each leading to the telephone apparatus of a subscriber, and each identified by a telephone number consisting of a sequence of figures corresponding with the line in question, and an additional check symbol computed from the figures of said sequence according to a predetermined arithmetical rule, pulsing means operable by a calling subscriber to dial a sequence identifying a line to be called, means including a plurality of impulse-operated selector switches to prepare a connecting circuit between the line of said calling subscriber and the line identified by the sequence dialled, a plurality of impulse-operated checking switches, each having a plurality of positions with a contact at each position, means for connecting one of said checking switches with the line of a calling subscriber in such manner that it is actuated by impulses representing a check symbol dialled by said calling subscriber, means connected only with the contact of said checking switch at the position assumed by said checking switch when the correct check symbol is dialled and actuated by said checking switch only when in said position to complete said connecting circuit, so that the same is only completed if the check symbol dialled by the calling subscriber corresponds according to said arithmetical rule with the sequence dialled and means for indicating a wrong number connected to all the other of said contacts of said checking switch.

2,731,514
LOCKOUT ELECTRONIC LINE CIRCUIT

Roelof Maarten Marie Oberman, The Hague, Netherlands, assignor to De Staat der Nederlanden, Ten Deze Vertegenwoordigd Door de Directeur-Generaal der Posterijen, Telegrafie en Telefonie, The Hague, Netherlands

Application January 8, 1952, Serial No. 265,455

17 Claims. (Cl. 179—18)



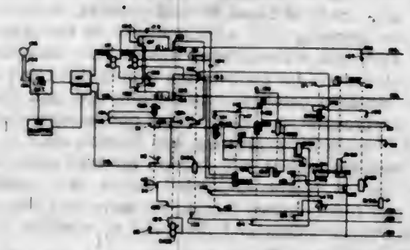
1. A subscriber line circuit to an exchange of a telecommunication system, comprising: a subscriber's set, a pair of wires, resistances in series with said wires, a voltage source having its opposite poles connected in series through said pairs of wires and said resistances, a junction between said resistances in said line circuit of said wires, a call detector connected to said junction and common to a plurality of subscriber's line circuits, an electrical element connected to said junction, and means connected to said junction for operating said electrical element to prevent the reoperation of said call detector after a call has been completed over said subscriber line circuit and said line circuit remains connected between said poles.

2,731,515
CIRCUITS-FLAT TYPE SWITCH

John Wicks, Biloxi, Miss., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware

Application March 9, 1953, Serial No. 341,187

25 Claims. (Cl. 179—18)



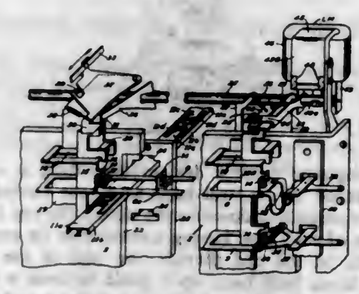
1. In a telephone system including an automatic switch having wipers with a normal position and having a single driving means together with a control magnet and an armature-controlled mechanism for causing an operation of said driving means while said magnet is energized to move said wipers in one direction and for causing an operation of said driving means while said magnet is deenergized to move said wipers in another direction, a calling line over which impulses are received, means associated with said line and switch responsive to the initiation of a call over said calling line for energizing said control magnet, means responsive to each impulse in a series of impulses thereafter received over said calling line for operating said driving means, a changeover relay, means responsive to the termination of said series of impulses for operating said relay, means responsive to the operation of said relay for deenergizing said magnet, means for thereafter selectively operating said driving means and for switching through connections to said wipers, means responsive to the termination of said call for energizing said magnet a second time, and an armature-controlled mechanism for restoring said wipers to normal in response to said second energization of said magnet.

2,731,516
COORDINATE ELECTRICAL SWITCHING MEANS

Andrew W. Vincent, Rochester, N. Y.

Application December 14, 1951, Serial No. 261,673

22 Claims. (Cl. 179—27.54)



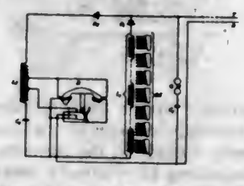
15. In an interconnecting electrical switch, a plurality of spaced, straight parallel connecting strips made of resilient electrically-conducting material extending generally in a common plane, said strips being movable throughout the major portions of their lengths in a direction perpendicular to their flat surfaces, a plurality of parallel rigid connecting bars made of electrically conducting material, said bars being rigidly and insulatedly supported to lie generally in a plane parallel to but slightly spaced from said first plane and to extend in a direction to cross said strips, a pusher comprising insulating material at each point of crossing, each pusher being spring-restored to a given normal position and having a lug supporting a portion of a strip out of engagement with the bar at the crossing point, means to operate an allotted pusher to deflect a portion of a strip into electrical engagement with a bar at a point of crossing without substantially deflecting other portions of said connecting strip at its other points of crossing, the unoperated pushers of a given line strip being the sole means for substantially preventing deflection of remaining portions of the connecting strip at other points of crossing, and means to allot a pusher for use.

2,731,517
PRESET CALL TRANSMITTER

Armand L. Jeanne, Garden City, and Arthur C. Keller, Bronxville, N. Y., and Samuel D. White, Stelton, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Original application June 20, 1951, Serial No. 232,642, now Patent No. 2,697,749, dated December 21, 1954. Divided and this application July 16, 1954, Serial No. 443,788

3 Claims. (Cl. 179—90)



1. In a telephone system, a subscriber's station set comprising a plurality of differently tuned vibratile members of magnetic material arranged in a plurality of separate groups, manually adjustable means associated with each group of members for conditioning selected combinations of said members to vibrate, an electromagnetic pick-up coil inductively coupled with all of said members so as to have an electrical potential induced therein when said selected members are vibrated, and means under the control of a subscriber for causing a selected plurality of members in each group to vibrate simultaneously.

2,731,518
TELEPHONE UNIT

Carl A. P. Johnson, North Quincy, Mass., assignor to S. H. Couch Company, Inc., North Quincy, Mass., a corporation of Massachusetts

Application March 17, 1952, Serial No. 276,949

9 Claims. (Cl. 179—100)



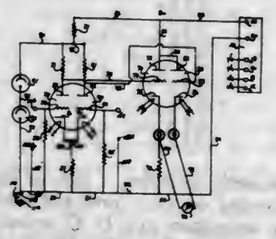
1. A flush wall telephone receiver and transmitter mounting comprising as a unitary structure, an insulating plate element having top and bottom parallel flanges projecting from the top and bottom front portion of the plate element telephone transmitting and receiving elements supported in said insulating plate, a pair of top and bottom end supporting plates each secured to said insulating plate element of a different one of said flanges, said end supporting plates being drilled for the application of said unitary structure to a flush wall mounting panel.

2,731,519
SPECIAL LOW IMPEDANCE OUTPUT CIRCUIT FOR HIGH CHAIN BRIDGE AMPLIFIER

Robert W. Bordewieck, Southboro, Mass., assignor to Moore Electronic Laboratories, Incorporated, Worcester, Mass., a corporation of Massachusetts

Application June 22, 1950, Serial No. 169,723

2 Claims. (Cl. 179—171)



1. The combination with a bridge amplfier circuit of a special low impedance output, said circuit comprising a source of voltage, two cathode follower tubes and two bridge amplifier tubes, the cathode follower tubes being connected by their grids to the plates of the bridge amplifier tubes and the first cathode follower tube only having the cathode thereof connected through a cathode load resistor to the low voltage return of said source of voltage, the cathode of the second cathode follower tube being connected through an electro-mechanically driven device to the cathode of the first cathode follower tube.

2,731,520
PULSE-AMPLITUDE MEASURING CIRCUIT COMPENSATED FOR VARYING FREQUENCY

Harold M. Richardson, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application March 10, 1952, Serial No. 275,739
2 Claims. (Cl. 179—171)

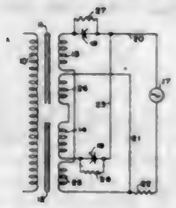


1. In a circuit for measuring the average amplitude of a sequence of electrical pulses, in combination, a vacuum tube having an anode, a cathode, a control grid and a screen grid, means for applying operating potentials to said anode and said screen grid such that the tube operates at the portion of its characteristic where there is a hyperbolic relationship between gain and the direct voltage bias applied to said control grid, means for applying said pulses to said control grid, a multivibrator circuit including two electron tubes each having an anode, a cathode, and a control grid, a first resistance-capacitance network connecting the control grid of one electron tube to the anode of the other electron tube, a second resistance-capacitance network connecting the control grid of said other tube to the anode of said one tube, said networks being arranged so that a pulse applied to the control grid of one tube produces a pulse of constant amplitude and width at the anode of the other tube, means connecting said pulse applying means to the control grid of said one tube, means for integrating and rectifying the pulses produced at the anode of said other tube to provide a direct bias voltage proportional to the frequency of occurrence of said pulses and independent of their amplitude, and means for applying said direct voltage to said control grid of said vacuum tube.

2,731,521
MAGNETIC AMPLIFIERS

Jack A. Crawford, China Lake, Calif., assignor to the United States of America as represented by the Secretary of the Navy

Application August 12, 1952, Serial No. 304,049
2 Claims. (Cl. 179—171)
(Granted under Title 35, U. S. Code (1952), sec. 266)

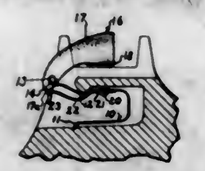


1. In a magnetic amplifier, a pair of magnetic cores, a primary winding on said cores and having a pair of terminals for connection to a D. C. source, a secondary circuit having a pair of parallel branch circuits and a pair of terminals for connection to an A. C. source, each of said branch circuits comprising a secondary winding, a cross-over winding and a rectifier connected in series, each of said cores having thereon the secondary winding in one branch circuit and the cross-over winding in the other branch circuit, the rectifiers being arranged so that the branch circuits are energized on alternate half cycles, resistance means shunting said rectifiers and having electrical resistance substantially less than the back resistance of said rectifiers whereby known back currents will flow through said branch circuits, each of the cross-over windings being of such size and so wound on the core relative to the secondary winding on the same core that the flux produced by the current flowing through a given cross-over winding during said alternate half cycles will compensate for the flux produced by said known back current through the secondary winding on the same core.

2,731,522
TELEPHONE CONTROL DEVICE

Maneck K. Anklesaria, Los Angeles, Calif.

Application November 15, 1954, Serial No. 468,650
2 Claims. (Cl. 179—178)

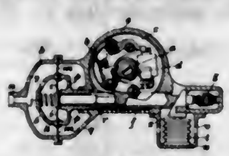


1. A telephone control device comprising a substantially U-shaped spring steel base, said base having a lateral groove extending downwardly across the top thereof, the bottom of said base having a transverse lip extending downwardly at the end thereof, the end of the top of said base being bent back upon itself to form a tube, a rod extending through said tube, a control member having a pair of side walls with aligned openings therein, the ends of said rod being pivotally mounted in said openings, said control member having a pair of integral flanges extending outwardly from the bottom of said side walls adjacent the opposite end of said walls from said openings, the end of said control member adjacent said openings being bent back upon itself to provide a semi-circular portion extending transversely across the end of said control member, a spring clip attached to the inside of the top of said base, said spring clip having an arcuate portion disposed beneath the groove in the top of said base, the end of said spring clip being provided with a reversely curved lip, said lip extending upwardly from said groove and then downwardly adjacent the end of said spring clip, the end of said spring clip being disposed directly beneath the semi-circular portion at the end of said control member, said control member adapted to be manually pivoted on said rod with respect to said base, with said semi-circular portion engaging one side or the other of said lip to hold said control member in raised or lowered position.

2,731,523
INTERRUPTERS FOR SPARK-IGNITION APPARATUS

Eric William Downing, Handsworth Wood, Birmingham, England, assignor to Joseph Lucas (Industries) Limited, Birmingham, England

Application February 11, 1952, Serial No. 270,958
Claims priority, application Great Britain February 21, 1951
2 Claims. (Cl. 200—31)



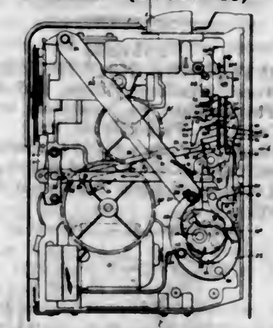
2. An interrupter of the kind specified comprising in combination mutually engageable contacts, a rotary cam for intermittently separating the contacts, a spring-loaded timing unit consisting of relatively movable parts, angularly movable means responsive to movement of the timing unit as a whole, and to relative movement of the parts

of the timing unit, for varying the relative positions of the contacts and cam, and thereby varying the ignition timing of the engine, an adjustable stop against which the timing unit bears under its spring loading, and which serves to determine the position of the timing unit when the latter is at rest, means responsive to the manifold depression, of pressure for effecting relative movement of the parts of the timing unit or moving the timing unit away from the stop depending on the extent of the said depression, and means responsive to atmospheric pressure for adjusting the position of the stop when the timing unit is moved away from the stop.

2,731,524
PROTECTIVE SYSTEMS FOR TIME RECORDER MOTORS

Joseph W. Miles, East Molesey, England, assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York

Application March 6, 1952, Serial No. 275,104
Claims priority, application Great Britain March 14, 1951
3 Claims. (Cl. 200—33)

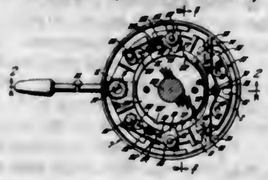


1. In a switch actuating device, an operating arm having a periodic translatory movement, a rod movable with said arm, a switch including a pair of contact closing blades, a latch means under control of said operating arm for engaging with one of said blades to close said switch, a second means engaging the other switch blade to urge said blades apart, a third means engaging with said second means to normally restrain said second means from becoming effective, and a fourth means for normally holding said third means against movement, said fourth means being displaced to release said third means by actuation of said latch means in response to a translatory movement of said operating arm, whereby complete movement of said third means to release said second means from engagement by said third means is effected upon engagement of said third means by said rod following progressive movement of said rod resulting from a predetermined number of translatory movements of said operating arm.

2,731,525
DIRECTION SIGNALING DEVICE

David C. Redick, Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application October 17, 1951, Serial No. 251,785
8 Claims. (Cl. 200—61.34)

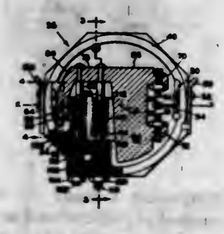


1. In a device of the class described, the combination of a switch movable from an open neutral position to circuit closing positions at opposite sides of said neutral position, a fixed support for said switch, an operating member for said switch mounted on said support, oppositely disposed pawls pivotally mounted on said operating member, flexible means on said operating member adapted to engage said pawls, said flexible means comprising a pair of spring members, one for each of said pawls, means for mounting said spring members between said operating member and said pawls, rotatable means having operating lugs thereon, and means for yieldingly retaining said pawls in such position as to cause engagement of one of said pawls by said lugs when said operating member is adjusted to one of its switch closing positions and to cause engagement of the other of said pawls by said lugs when said operating member is adjusted to the other of its switch closing positions, said spring members being adapted to yieldingly resist rotation of said pawls in one direction when no external force is applied to hold said operating member against movement and to yieldingly allow rotation of said pawls in said one direction when external force is applied to hold said operating member against movement.

2,731,526
ACCELERATION RESPONSIVE SWITCH

Walter D. Teague, Jr., Alpine, and Howard H. Laucks, Sparta, N. J., assignors to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware

Original application March 24, 1951, Serial No. 217,394. Divided and this application March 29, 1952, Serial No. 279,262
7 Claims. (Cl. 200—61.51)



1. A "G" acceleration responsive switch comprising a housing, electrical terminals carried by said housing, pivot means in said housing, a metallic mass pivotally mounted on said pivot means, spring means operatively associated with said mass whereby said mass is adapted for pivotal movement in response to both negative and positive "G" acceleration, means for adjusting said spring means to thereby vary the responsiveness of said mass to negative and positive "G" acceleration, spaced electrical contacts carried by said mass, a lead connecting said mass to one of the electrical terminals carried by said housing, an electrical contact carried by said housing and connected to the other of said electrical terminals, said last named electrical contact being positioned between the electrical contacts carried by said mass whereby the pivotal movement of said mass in response to negative or positive "G" accelerations engages one or the other of the electrical contacts carried by said mass to the electrical contact carried by said housing to thereby connect the terminals carried by said housing.

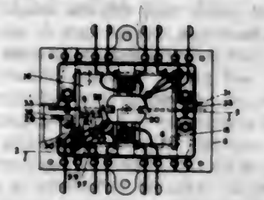
2,731,527
ELECTROMAGNETIC RELAYS

Gareld E. Marsh, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.

Application November 4, 1952, Serial No. 318,577
4 Claims. (Cl. 200—87)

1. In an electromagnetic relay structure, an armature operable to either of two positions, a movable contact structure attached to said armature and operable between fixed front and back contacts comprising a rigid

contact carrier attached to said armature at one end and bifurcated at the other end, two contact springs one on each side of said contact carrier, and both springs having their inner ends permanently attached to said contact carrier, but having their outer ends formed into hooks to



engage their respective bifurcations of said contact carrier and both said springs being bent to provide predetermined trapped pressures against their respective bifurcations, and a contact point attached to each contact spring at a mid-point of its length such as to cooperate with a corresponding fixed contact point.

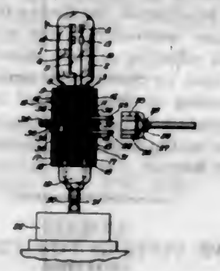
2,731,528
FUSE
Charles G. Kovacik, Donora, Pa., assignor of forty per cent to Thomas J. Malia, Donora, Pa.
Application April 9, 1954, Serial No. 422,038
2 Claims. (Cl. 200—129)



1. A fuse comprising a body of insulating material having a first terminal at one end and an external threaded sleeve forming a second terminal, a pair of spaced recesses in the upper face of said body, a first pair of electrical conductive snap sections embedded in said body having portions thereof extending into said recesses, conductors interconnecting said first and second terminals with said snap sections, a cap of insulative material having a pair of projections on the lower face thereof, and a second pair of snap sections embedded in said projections, said second pair of snap sections being hollow and adapted to receive and resiliently engage said first pair of snap sections with said projections being received in said recesses, and a fusible link interconnecting said snap sections, said fusible link being embedded in said cap, and resilient pads in said recesses, said first pair of snap sections extending upwardly through said pads, said projections engaging said pads.

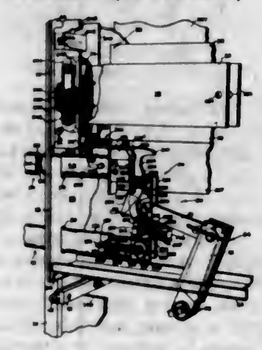
2,731,529
AUTOMATIC CONTROL DEVICE
Oscar J. Leins, Milwaukee, Wis., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis., a corporation of Wisconsin
Application December 13, 1950, Serial No. 200,614
3 Claims. (Cl. 200—138)

1. In a temperature responsive control, a connector block having a first pair of plug-in terminals for plug-in connection with a source of electricity, said block also having a second pair of plug-in terminals for plug-in connection therewith of an electrically powered heat generating device, said block also being provided with a pair of contacts and having means including a manual switch for connecting said pairs of terminals and said pair of contacts in series circuit relation, and a thermostat removably mounted on said block and comprising a sealed envelope, said thermostat having a base



affording quick detachable plug-in connection of the contacts thereof with the contacts of said block, wherefore the current flow from said source to an electrically powered device connected thereto can be interrupted by either said manual switch or said thermostat.

2,731,530
HIGH VOLTAGE CIRCUIT BREAKERS
Joseph D. Wood, Strafford Village, and Arthur Stephen Caswell, Philadelphia, Pa., assignors to I-T-E Circuit Breaker Company, Philadelphia, Pa.
Original application January 11, 1947, Serial No. 721,648, now Patent No. 2,613,299, dated October 7, 1952. Divided and this application September 4, 1952, Serial No. 307,842
2 Claims. (Cl. 200—147)



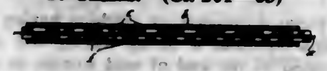
1. In a circuit breaker, a fixed contact having a main contact member and an arcing contact member, a conductor, an insulator member extending between said conductor and arcing contact member for spacing said contact member a predetermined distance from said conductor, a movable contact having a main contact for engaging said main contact of said fixed contact and an arcing contact for engaging the arcing contact member of said fixed contact, a floating pivot and an extension on said movable contact for electrically cooperating with said conductor, said extension being positioned further from said floating pivot than said movable contacts that after said arcing contacts separate a predetermined distance the arcing path from said fixed arcing contact to said conductor and thence to said extension forms a lower impedance path than the arcing path between said arcing contacts, and a blow-out coil connected between said arcing member of said first contact and said conductor, the spacing of said conductor and arcing member being arranged to provide a relatively low impedance path compared to the impedance of the blow-out coil for short circuit currents of large value and a relative high impedance path compared to the impedance of the blow-out coil for short circuit currents of small value to produce current flow in said blow-out coil which varies inversely as the fault current.

2,731,531
SWITCHING ASSEMBLY
Marvin C. Carlson, Valparaiso, Ind., assignor to McGill Manufacturing Company, Inc., Valparaiso, Ind., a corporation of Indiana
Application June 9, 1954, Serial No. 435,590
5 Claims. (Cl. 200—153)



1. A switching assembly including in combination, an electrically conductive body portion having an opening therein, an electrically conductive member rotatably mounted within said opening and in electrical contact with said body portion, said rotatably mounted member having an aperture therein eccentrically positioned with respect to the axis of rotation thereof, and a stationary electrically conductive contact member disposed within said aperture in said rotatably mounted member, said contact member contacting said rotatably mounted member when said rotatably mounted member is in a first angular position, and said contact member being out of electrical contact with said rotatably mounted member when said rotatably mounted member is in a second angular position.

2,731,532
TEMPERATURE CHANGE DETECTORS AND METHOD FOR PRODUCING SAME
Anders Mathisen, St. James's, London, England, assignor of one-half to Graviner Manufacuring Company Limited, London, England, a British company, and one-half to The Wilkinson Sword Company Limited, London, England, a British company
Application July 17, 1952, Serial No. 299,400
Claims priority, application Great Britain August 3, 1951
10 Claims. (Cl. 201—63)



1. A temperature change detector comprising an inner metallic electrical conductor, a tubular outer metallic electrical conductor enclosing said inner conductor and normally electrically unconnected therewith, beads of refractory material loosely threaded on said inner conductor and spaced apart along the length thereof, and a filling of glass completely occupying the remaining space within the outer conductor, said glass embedding the refractory beads being in intimate contact with the inner surface of the outer conductor and the outer surface of the inner conductor substantially throughout the length of said conductors and having the characteristic of being non-conductive below a predetermined temperature and increasingly conductive above said predetermined temperature, whereby a continuous electrically conductive path may be established from any point on the inner surface of said outer conductor to an adjacent point on the surface of said inner conductor upon heating the detector at said point above said predetermined temperature.

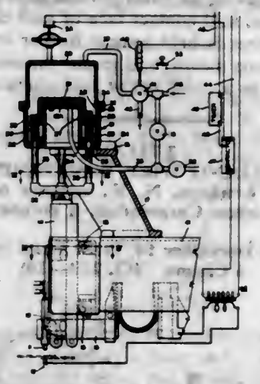
2,731,533
MOUNTING BASE FOR BOLOMETER
Richard A. Magrath, Boston, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application May 5, 1953, Serial No. 353,109
12 Claims. (Cl. 201—63)

6. In an electrical instrument for measuring radiant energy and including a base portion, a cap portion having a window transparent to radiation, said cap portion being hermetically sealed to said base portion, a plurality of terminal leads mounted in said base portion and extending on both sides of said base portion, said leads being insulated with respect to said base portion, the improvement comprising, a disk of insulating material within said cap portion and disposed in parallel spaced relation with the inner surface of said base portion, spaced segments of



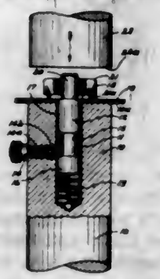
conductive material coated on one face of said disk, wires conductively secured to each of said segments and in parallel spaced relation with respect to each other, at least one end of each wire being conductively secured to one of said terminal leads, and thermosensitive material in strip form interconnecting said terminal wires.

2,731,534
FLUID PRESSURE ACTUATOR FOR MACHINE COMPONENTS
Hans H. Hansen and Melvin M. Seeloff, Warren, Ohio, assignors to The Taylor-Winfield Corporation, Warren, Ohio, a corporation of Ohio
Application February 26, 1948, Serial No. 11,302
6 Claims. (Cl. 219—4)



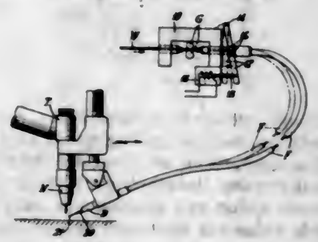
6. A movable electrode assembly for a low-inertia resistance welding machine having quick weld follow-up characteristics, comprising an elongated housing having a longitudinal opening therethrough, a reciprocable slide member housed within said opening and carrying a movable electrode extending from one end of said housing, said slide member having a transverse size less than that of said opening, a plurality of rollable members spaced radially about and also spaced longitudinally of said slide member and having rolling contact therewith, said rollable members maintaining said slide member in axial position relative to said housing and providing for anti-friction axial reciprocation of said slide member within said housing opening, a cylinder mounted on the end of said housing opposed to said electrode and having an aperture for introducing fluid pressure thereinto, a lightweight piston disposed within said cylinder and connected to said slide member, said piston having a diameter less than that of said cylinder to eliminate frictional contact between the opposing walls thereof, and a flexible diaphragm connected at its opposite ends to said piston and cylinder respectively so that fluid pressure entering said cylinder will move said piston and slide member in a direction toward the work to be welded with a minimum of resistance, whereby the end of the movable electrode will follow up the receding work surface as such surface softens under the heat generated by the welding current.

2,731,535
ELECTRODE FOR ATTACHING WELD NUTS
Gregory F. Grey, Berea, Ohio, assignor to The Ohio Nut & Bolt Company, Berea, Ohio, a corporation of Ohio
Application January 21, 1954, Serial No. 405,476
14 Claims. (Cl. 219—4)



1. In welding apparatus for indexing and welding a weld nut or the like on a support member, an electrode having a body portion having an end contact face and a bore extending into said body portion from said end contact face, a pilot member slidably supported for longitudinal movement in said bore, means for urging said pilot member outwardly of said bore, and stop means for limiting the outward movement of said pilot member, said pilot member having an index portion having an end face disposed beyond said contact face of said electrode when said pilot member is held against further outward movement by said stop means, and means for moving said end face inwardly to a point below said contact face.

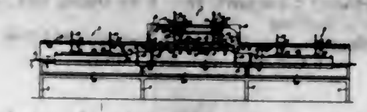
2,731,536
WELDING WIRE POSITIONING
Eugene Laur, Lewiston, N. Y., assignor to Union Carbide and Carbon Corporation, a corporation of New York
Application December 14, 1953, Serial No. 397,956
6 Claims. (Cl. 219—10)



1. In a method of inert gas shielded arc welding in which the arc forms a weld puddle, the weld puddle is shielded by a stream containing inert gas, and a wire is fed by wire feeder means along inside a conduit and through a guide into the weld puddle, the improvement which comprises positioning the end of the wire longitudinally with respect to said guide by causing relative movement of said conduit and guide longitudinally of the wire with respect to said wire feeder means.

2,731,537
MOISTURE TRAP FOR ELECTRONIC CURING ASSEMBLY
George P. Bosomworth, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a corporation of Ohio
Application October 28, 1950, Serial No. 192,802
6 Claims. (Cl. 219—10.71)

1. An electronic curing assembly comprising a lower electrode, a vertically adjustable upper electrode over a portion of said lower electrode, defining a heating oven, a vertically adjustable plate over another portion of said lower electrode, spaced from said upper electrode and defining a wave trap, and a pliable, moisture-retaining



sheet closing all openings between the upper electrode and lower electrode, between the said plate and lower electrode, and between said upper electrode and said plate.

2,731,538
METAL DISINTEGRATING MACHINE
Clarence A. Sherman, Detroit, and Terry Merritt, Clinton, Mich., assignors to Clinton Machine Company, Clinton, Mich.
Application December 28, 1953, Serial No. 400,707
5 Claims. (Cl. 219—15)



1. In a metal disintegrating machine having a reciprocating hollow spindle, a fitting having the upper end thereof secured to the end of said spindle in embracing relation, and having the lower end thereof projecting outwardly from the spindle, there being an opening formed through said fitting in alignment with the bore of the spindle and said lower projecting end of said fitting being hollow; an inwardly projected flange between the upper and lower ends of said fitting, said flange engaging the end of the spindle; a block of compressible material positioned in said lower projecting end of said fitting and abutting said flange and having a central opening formed therethrough in alignment with the bore of said spindle for projection of an electrode therethrough into said spindle, the outer face of said block being positioned inwardly of the lower end face of said fitting; a block of rigid material engaging at one end in the lower projecting end of said fitting and having a central opening formed therethrough in alignment with the opening in said compressible block; and a collet threaded on the lower end of said fitting for delivering a thrust to said rigid block for compressing said compressible block around an electrode projected therethrough and into sealing engagement with the inner surface of said fitting.

2,731,539
FOOD HEATER AND COOKER
Joseph Pavelka, Jr., St. Louis, Mo., assignor to The Toastwell Company, Inc., St. Louis, Mo., a corporation of Missouri
Application December 17, 1952, Serial No. 326,392
4 Claims. (Cl. 219—19)

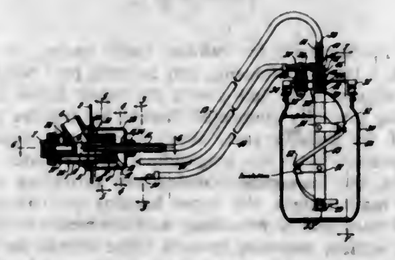
3. In a heater of the class described, an open top housing with side and end walls and a bottom wall, two cross bars extending between the tops of the side walls and

spaced equally from the adjacent end walls and from each other, food containers with outturned rims supported on said cross bars and the upper edges of said side and end walls, said containers having their bottoms spaced above said housing bottom wall, narrow and relatively long heating elements extending horizontally above



said bottom wall beneath a portion of the bottom wall of one end container and beneath the space between the said container and the middle container, and similarly long and narrow baffle plates overlying said heaters and each directing convection currents of air in substantially equal proportions towards the end of the housing and towards the middle of the housing.

2,731,540
ELECTRIC CIGARETTE LIGHTER
Glen A. Guernsey, West Springfield, and Arthur H. Green, East Longmeadow, Mass., assignors to Wico Electric Company, West Springfield, Mass., a corporation of Massachusetts
Application December 11, 1952, Serial No. 325,366
1 Claim. (Cl. 219—32)



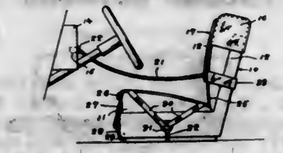
A cigarette lighter adapted to be mounted on the instrument panel of an automobile, comprising, a metallic casing having an outer part with a flange at one end adapted to abut and make electrical contact with the outer face of such panel and an inner part adapted to pass through an opening in such panel, said casing having a chamber therein and a cigarette-receiving socket in said outer part leading into the chamber, a closure of insulating material for the inner end of said chamber, a screw fixed to said closure, a U-shaped clamp adapted to straddle said inner part and closure and having a cross bar portion through which said screw passes and having two spaced legs the ends of which are adapted to engage the inner face of said panel, a nut on said screw for moving said clamp and forcing said ends against said inner face of the panel to clamp the casing thereto, a pair of conducting rods fixed in said closure and projecting into said chamber, an electrical igniter electrically connected to and supported between said rods adjacent the inner end of said opening, a terminal located on and outside said closure and electrically connected to one said rod and adapted for connection to one terminal of an electrical supply source having its other terminal in electrical connection with said panel, a contact on said closure inside said chamber and electrically connected to the other rod, a metallic plunger slidable in said metallic casing and adapted when moved inwardly to engage said contact and complete a circuit from such electrical source, a button fixed to the outer end of said plunger and located outside and adjacent the other end of said outer part, and a spring for holding said plunger out of engagement with said contact.

2,731,541
CATALYTIC STRUCTURE AND APPARATUS
Eugene J. Houdry, Ardmore, and Wilfred M. Adey, Paoli, Pa., assignors to Oxy-Catalyst, Inc., a corporation of Pennsylvania
Application July 9, 1954, Serial No. 442,258
16 Claims. (Cl. 219—39)



1. A catalytic structure comprising an electric resistance element provided with a thin, adherent, superficial film of catalytic material, said film having a thickness of from .0001" to .006" and being comprised of a difficultly reducible inorganic oxide in a catalytically active form resulting from the dehydration of a hydrated form of the oxide under controlled conditions to produce a dehydrated structure of large internal pore volume and surface area, said oxide being of a type which is difficultly reducible and which may be prepared in the form of a gelatinous hydrated oxide that may be dehydrated under controlled conditions to form dehydrated structures of large internal pore volume and surface area, said film of oxide being impregnated with a finely divided catalytically active metal.

2,731,542
SEAT BACK WARMER
David Daniels, Kearny, N. J.
Application April 15, 1955, Serial No. 501,507
2 Claims. (Cl. 219—46)



2. In a seat back warmer, in combination with a vehicle seat of the type including a base and a back rest, a casing arranged over the upper end of said back rest, a heating pad secured to said casing and arranged contiguous to the front surface of said back rest, a band secured to said pad and surrounding said back rest, a plurality of straps secured to said pad, a crosspiece secured to said straps, a pair of strap members secured to said crosspiece, a ring connected to said strap members, a hook extending from said ring for engagement with said base, straps extending from said heater, a ring arranged in engagement with said last named straps, a hook extending from said last named ring for engagement with the base of the seat, straps extending from the side of the heater, a ring arranged in engagement with said last named straps, a hook extending from said last named ring for engagement with the base of the seat, said pad including an outer cover, insulating material arranged in said cover, heating elements embedded in said insulated material, wires extending from the pad and connected to said heating elements, a rheostat connected to said wires, a plug connected to said wires and adapted to be arranged in engagement with the lighter receptacle of the vehicle.

2,731,543
SPOTLIGHT MOUNTING HEAD
Arthur I. Appleton, Northbrook, Ill.
Application August 2, 1950, Serial No. 177,238
1 Claim. (Cl. 240—4.2)

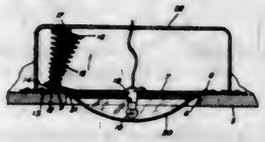
An automotive spotlight head comprising, in combination, a swivel mounted supporting stem, a flange integral

with said supporting stem and having an upwardly extending tail portion, said flange and its tail portion presenting a concave upper face, a lamp housing fixed to said flange of said supporting stem in nested and abutting relation with said concave upper face, said lamp housing having a convex exterior surface and a concave interior surface, a plurality of rivets disposed in projecting relation through said flange and said lamp housing and rigidly securing the latter to the former, one of said rivets passing through said tail portion of said flange and having



a longitudinal axis skewed relative to the tangential plane of said housing at the point of entry of such axis on said convex exterior face, said one rivet also having a tapped axial bore therein adapted for threaded engagement with a mounting screw for an accessory such as a mirror bracket, and a laterally enlarged wedge-shaped head on said one rivet disposed in snug abutting engagement with said concave interior surface of said lamp housing, said head having a seating face bearing against said concave interior surface and skewed relative to said longitudinal axis of said one rivet.

2,731,544
RETRACTIBLE CLEARANCE LIGHT FOR TRUCKS AND THE LIKE
Raymond F. Kayser, Sr., Shreveport, La.
Application November 2, 1953, Serial No. 389,616
3 Claims. (Cl. 240—7.1)



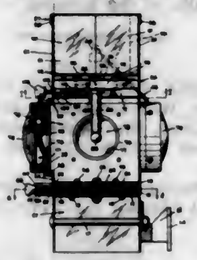
1. A clearance lamp for vehicle bodies comprising a lamp mounting, means pivotally attaching the mounting at the inside of the body in the region of an opening therein for swinging inwardly behind the opening, a lamp carried at the front of the mounting, a lens for the lamp carried by the mounting and projecting outwardly through the opening in the path of an object impacting the body to retract the lamp and lens, a relatively stationary rod on which the mounting is slidable, and spring means supported by the rod behind the mounting and opposing lens retracting movement thereof.

2,731,545
FLASHLIGHT
George Noel Bolinger, Shelbyville, Ill.
Application August 25, 1952, Serial No. 306,099
7 Claims. (Cl. 240—10.68)



1. A flashlight comprising an insulating case, a cap structure for each end of said case, one of which cap structures comprises a reflector having means for supporting therein a light bulb with its base contact engaging the center contact of a battery in said case, a switch element having a straight shank portion mounted in said case and having a finger piece projecting therefrom for longitudinal movement of said switch element into electrical engagement with said one cap structure, and a single spring mounted in said case and comprising a coil substantially fitting within said case said shank portion of said switch element lying between said case and said coil and contacting with said coil, said spring having a bend seated against the other cap structure and having an end projecting from said bend radially inwardly and away from such other cap structure in engagement with the end of a battery in said case to urge said center contact into engagement with the base contact of the bulb.

2,731,546
MARKER LIGHT
Lewis G. Clevidence and Richard B. Crippen, Toledo, Ohio, assignors of one-third to said Clevidence, one-third to said Crippen and one-third to Henry A. Barror, Toledo, Ohio
Application February 8, 1955, Serial No. 486,942
5 Claims. (Cl. 240—24)

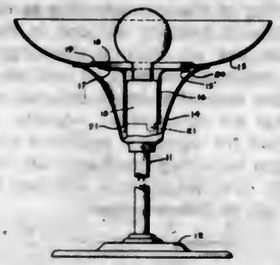


1. A marker light for railway trains having, in combination, a two part housing, one housing part being vertically aligned with and above the other housing part and being pivotally connected thereto for relative movement of the housing parts about a vertically extending axis concentric with the longitudinal axes of both housing parts, the lowermost housing part providing a base for the marker light, the upper housing part having an internal horizontally extending wall forming two chambers in vertical sequence to each other within the housing part, said wall having electro-conductive bus parts on its upper surface and a lamp bulb socket on its lower surface, means including a switch on said wall electrically connecting said bus elements to said lamp bulb socket, the lowermost chamber having a plurality of lensed ports in focus with a lamp bulb positioned in said lamp bulb socket and having focal axes at right angular relation to each other whereby when electric current is conducted to said lamp bulb socket in the lowermost chamber of the upper housing part to energize a lamp bulb disposed therein, light beams will be cast through said lensed ports and in such directions in reference to vertical axes of said housing parts as the upper housing part pivotally bears to the lower housing part and its supporting means.

2,731,547
LAMP ASSEMBLY
Robert L. Callard, Painted Post, N. Y., assignor to Corning Glass Works, Corning, N. Y., a corporation of New York
Application September 10, 1951, Serial No. 245,797
2 Claims. (Cl. 240—51)

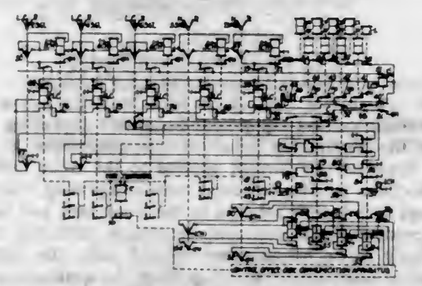
1. In combination with a lamp standard equipped with a lamp socket and a shade support surrounding such socket, a lamp shade resting on said support and having an aperture therethrough and a bead surrounding said aperture, and a tubular member having at one end tabs tensioned for resilient frictional engagement of said socket and having at the other end an outwardly extending flange, the peripheral annular portion of said flange being axially off-set with respect to the remainder thereof a distance

substantially equal to the thickness of the bead on the shade and comprising a seat engageable by that portion



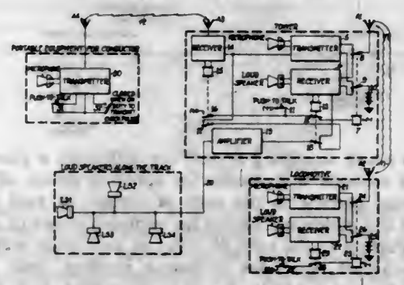
of the shade immediately bordering its aperture, and tabs integral with the flange and crimped about the bead to tightly clamp the shade to the flange.

2,731,548
CENTRALIZED TRAFFIC CONTROL SYSTEMS FOR RAILROADS
Nelson B. Coley, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.
Application August 3, 1951, Serial No. 240,087
10 Claims. (Cl. 246—3)



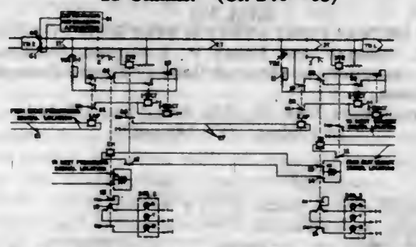
1. A centralized traffic control system for railroads for the control of a plurality of track switches and signals at a field station by code communication from a distant control office comprising in combination, a normally-at-rest code communication system connecting the control office and the field station and effective when initiated at the control office to transmit selected control codes to the field station and effective when initiated at the field station to transmit selected indication codes to the control office, manually operable switch control designation means at the control office for designating respective switch control codes for transmission to the field station, said switch control designation means being effective when actuated to initiate said code communication system, normal and reverse magnetic stick indication relays at the control office for the respective normal and reverse positions of the respective track switches, circuit means for energizing each of said magnetic stick relays with one polarity in response to the designation by said manually operable means of the opposite position of the associated track switch or with the opposite polarity in response to the communication by said code communication system of the corresponding position of the associated track switch, and manually operable designation means at the control office for designating respective signal control codes for transmission to the field station, said signal designation means being effective when actuated to designate the clearing of a signal to initiate said code communication system, but not until one of said magnetic stick indication relays is actuated in correspondence with the full normal or full reverse position of its associated track switch for each track switch included in an available route emanating from the signal that has been designated.

2,731,549
RADIO COMMUNICATION SYSTEM
Alfred V. Dasburg, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.
Application August 29, 1951, Serial No. 244,158
12 Claims. (Cl. 246—7)



1. A system of communication for railroad switching yards comprising a first radio transmitter and a first radio receiver at a fixed location respectively operative to transmit and receive messages over a first carrier frequency, a mobile radio transmitter and receiver located on a movable vehicle and operative to transmit and receive messages over said first carrier frequency, a portable radio transmitter operative to transmit messages over a second carrier frequency, a second radio receiver at said fixed location operative to receive messages over said second carrier frequency and operative to cause said first transmitter to repeat messages thus received, a series of loudspeakers along the trackway of the switching yard connected to reproduce messages as received by said first and second radio receivers selectively at said fixed location, and selecting means governed by said receivers at said fixed location for selecting which of said receivers shall supply its output to said loudspeakers.

2,731,550
CAB SIGNALLING SYSTEM FOR RAILROADS
Chester Friend Stafford, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.
Application June 30, 1950, Serial No. 171,423
15 Claims. (Cl. 246—63)



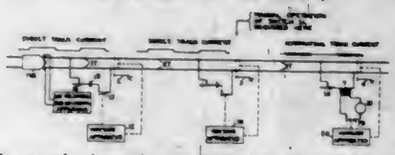
1. In a cab signalling system for coded track circuits having code pulses of unidirectional current applied to the track rails at different rates dependent upon traffic conditions, vehicle-carried equipment comprising, receiver coils positioned in inductive relation to the track rails, means including capacitance and resistance connected with said receiver coils for damping said coils substantially to the critical value for giving a unidirectional output voltage of one polarity when each code pulse is applied and of the opposite polarity when each code pulse is removed, relay means having two different operating windings, means including a vacuum tube amplifier responsive to the output voltages of said receiver coils for supplying current to said windings of said relay means alternately as each code pulse is respectively applied and removed, and decoding means governed by said relay means for operating contacts differently in accordance with the rate of the code pulses existing in the track rails.

2,731,551

CAB SIGNALLING SYSTEM FOR RAILROADS

Chester Friend Stafford, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.

Application June 30, 1950, Serial No. 171,424
10 Claims. (Cl. 246—63)



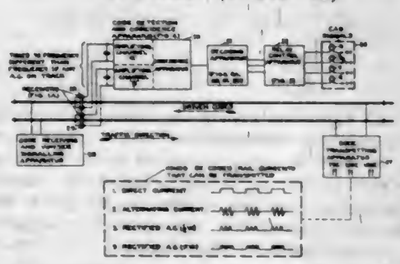
1. In a cab signalling system for railroads, a plurality of track sections with means for applying pulses of unidirectional current to the rails of certain of said track sections and additional means for applying pulses of alternating current to the rails of other of said track sections, vehicle-carried apparatus including receiver coils positioned adjacent the rails of said track section, first circuit means including a condenser to tune said receiver coils to a relatively low frequency as compared to the usual power frequencies and damping means for damping the electrical oscillations in said receiver coils to provide distinctive output voltages of opposite polarity corresponding respectively to the beginning and end of each unidirectional track current pulse, second circuit means including a condenser to tune said receiver coils to the frequency of said alternating current and also including means for providing distinctive output voltages of opposite polarity corresponding respectively to the beginning and end of each alternating track current pulse, manually operable selector means for associating either said first or said second circuit means with said receiver coils, circuit means including electron discharge tubes for amplifying the distinctive output voltages provided by either said first or said second circuit means, relay means including a two-position relay operable to either of its two different positions and actuated alternately to its opposite positions in response to said distinctive voltages, and decoding means governed by said relay means and selectively operated according to the rate of coding of either said unidirectional or said alternating track current.

2,731,552

CAB SIGNALLING SYSTEM FOR RAILROADS

Hugh C. Kendall and Frank P. Zaffarano, Rochester, N. Y., assignors to General Railway Signal Company, Rochester, N. Y.

Application May 19, 1951, Serial No. 227,164
26 Claims. (Cl. 246—63)



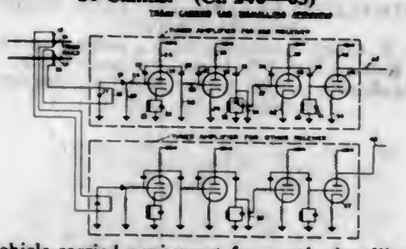
1. In a continuous inductive cab signal system, track circuits including track rails, some of said track circuits being supplied with coded unidirectional rail currents and others being supplied with coded alternating rail currents of a selected frequency, said rail currents being applied throughout the "on" periods of any one of a plurality of different code rates dependent upon traffic conditions, vehicle-carried equipment including a receiver winding in inductive relation to each track rail and tuned to a frequency different from said selected alternating coded rail current frequency, said receiver windings having transient voltages induced therein upon the application and removal of rail current, an amplifier for each receiver including a vacuum tube having its grid-cathode circuit connected across the winding of the corresponding receiver and responsive to transient voltages induced in that winding, and means including an electron discharge tube controlled by the combined outputs of said amplifiers and rendered effective only if voltages induced in both said receiver windings are coincidental, whereby an effective output is obtained for transients produced by changes in coded rail current occurring simultaneously in both track rails but not by stray interference affecting the receiver winding separately at different times.

2,731,553

CODED CAB SIGNALLING SYSTEM FOR RAILROADS

Frank P. Zaffarano and Wilho K. Maenpaa, Rochester, N. Y., assignors to General Railway Signal Company, Rochester, N. Y.

Application August 13, 1951, Serial No. 241,576
20 Claims. (Cl. 246—63)



1. Vehicle-carried equipment for a cab signalling system of the continuous inductive type responsive to different kinds of rail current applied to the track rails of track sections at different code rates comprising, receiver windings in inductive relation to the track rails and tuned to a predetermined resonant frequency different from that likely to be encountered in said rails, the voltage induced in said receiver windings upon the application and removal of each kind of rail current having a transient component with a fundamental frequency corresponding with said resonant frequency of the receiver winding, damping means associated with said receiver winding for damping said transient component of induced voltage so that distinct time separations exist between successive induced transient voltages transient responsive apparatus including a vacuum tube amplifier connected to said receiver windings and tuned to have the maximum gain for a limited band of frequencies including only the principal frequency components constituting said transients, and decoding means connected to said amplifier and establishing different control circuits in response to the time separation of outputs from said transient responsive apparatus, said tuned amplifier acting to discriminate between the principal frequency components of the transients induced in said receiver windings by the application and removal of the different kinds of rail current and the frequency of voltages otherwise induced in said receiver windings during operation of the vehicle by substantially attenuating other lower or higher frequencies.

2,731,554

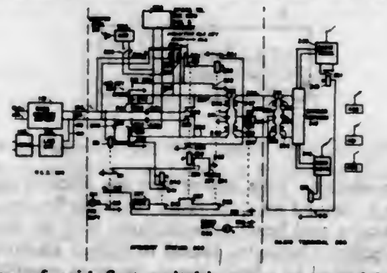
PRIVATE AUTOMATIC EXCHANGE LINE ADAPTER FOR MOBILE RADIO SYSTEM

Leonard G. Eckmann, Berkeley, and Edward J. Zaruba, Villa Park, Ill., assignors to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware

Application August 28, 1952, Serial No. 306,816
10 Claims. (Cl. 250—6)

1. In a radio telephone system, a telephone exchange having a plurality of subscriber stations connected thereto, a radio transmitter, and an attendant station com-

prising an operator's telephone circuit, a line for connecting said exchange to said attendant station, means in said exchange controlled by a calling one of said subscriber stations for connecting to and seizing said line, a radio trunk for connecting said radio transmitter to said attendant station, a first switching means, a first operation of said first switching means connecting said operator's telephone circuit to said line, a second



operation of said first switching means energizing said radio transmitter and connecting said operator's telephone circuit to said radio trunk, a second switching means for connecting said line to said radio trunk, and means operated only in response to release of said line by said calling subscriber station for independently and simultaneously disconnecting said line from said radio trunk and de-energizing said transmitter.

2,731,555

RADIO SET HOUSING AND MOUNTING

Charles E. Beck, Park Ridge, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois

Application October 5, 1950, Serial No. 188,639
7 Claims. (Cl. 250—16)



5. A housing for a communications unit including a box-shaped base member constructed of sheet metal and having a bottom, side walls and a closed end with an open top and an open end, said side walls having lips formed at the top thereof, said closed end having an inwardly projecting peripheral edge, a movable top constructed of sheet metal and having outwardly flaring edges cooperating with said lips on said base member to seat said top, said top having a portion adapted to be positioned under said inwardly projecting peripheral edge, and a removable end member fitted over the open end of said base member and having a peripheral flange overlapping said base member and said movable top, said peripheral edge on said closed end and said peripheral flange of said removable end member engaging the opposite ends of said top to retain said top in assembled relation on said base member when said removable end member is in engagement with said base member, and latch means for holding said removable end member in engagement with said base member, said housing when assembled forming a weathertight closure.

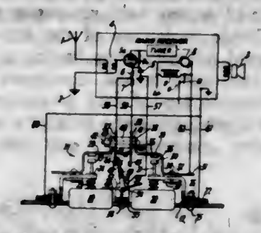
2,731,556

TWO BUTTON ARRANGEMENT FOR SIGNAL SEEKING TYPE RADIO RECEIVERS

Verlis Wiley, Kenmore, N. Y., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts

Application March 9, 1953, Serial No. 341,022
5 Claims. (Cl. 250—20)

1. In a signal seeking receiver having a motor effective to scan the spectrum and stop on a signal of more than a predetermined minimum strength, said receiver including a sensitivity control means having a plurality of portions corresponding to different sensitivities of the receiver, first and second means to control the motor, third



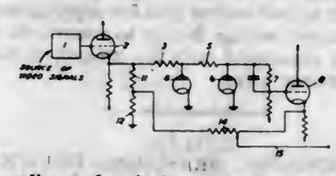
means connected to a portion of said sensitivity control means, fourth means connected to a different portion of said sensitivity control means, and unicontrol means for simultaneously operating said first and third or second and fourth means.

2,731,557

NONLINEAR ELECTRICAL CONTROL CIRCUITS

Ronald Thomas Clayden, East Sheen, London, England, assignor to Electric & Musical Industries Limited, Hayes, Middlesex, England, a company of Great Britain

Application July 19, 1950, Serial No. 174,605
Claims priority, application Great Britain July 21, 1949
12 Claims. (Cl. 250—27)



1. A nonlinear electrical control circuit comprising first means for deriving, from applied signals, signals with an instantaneous level related to the instantaneous level of the applied signals in accordance with one characteristic, second means for deriving, from the applied signals, signals with an instantaneous level related to the instantaneous level of the applied signals in accordance with a different characteristic, one at least of said characteristics being curved, an output channel, a bridged T potential attenuator for feeding signals from said first means to said channel, and a second bridged T potential attenuator for feeding signals derived from said second means to said channel, whereby output signals are set up across said load with an instantaneous level related to that of the input signals in accordance with a nonlinear characteristic having a curvature adjustable between said first and second curvatures by adjustment of said attenuators.

2,731,558

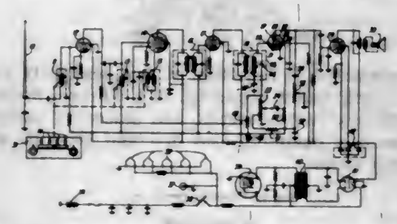
RADIO RECEIVER WITH AUTOMATIC GAIN CONTROL FOR AUDIO STAGE

Bjarne Anthun, Chicago, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois

Application September 13, 1954, Serial No. 455,377
5 Claims. (Cl. 250—20)

1. In a radio receiver of the superheterodyne type adapted to be used to receive amplitude modulated waves of widely varying strengths, a combined detector-amplifier circuit including in combination, an electron discharge valve having a cathode, an anode, a remote cutoff control grid, a secreen grid and a suppressor grid, said valve also having an auxiliary anode cooperating with said cathode and forming an electron path outside the electron path to said first anode, a detector circuit connected between said cathode and said auxiliary anode for

applying an amplitude modulated intermediate frequency wave thereto, a volume control potentiometer in said detector circuit including resistance means having one terminal coupled to said auxiliary anode so that a voltage wave is developed across said resistance means in response to amplitude variations of the intermediate frequency wave, said potentiometer having a movable tap engaging said resistance means, condenser means connecting said movable tap of said potentiometer to said control grid for applying thereto at least a portion of the alternating current component of said voltage wave de-



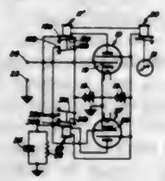
veloped across said potentiometer, filter means connected to said one terminal of said resistance means for deriving the direct current component from said voltage wave thereacross and including second condenser means across which a negative direct current voltage is developed varying with the strength of the intermediate frequency wave, and second resistance means connecting said second condenser means to said control grid for applying said varying direct current voltage thereto to control the gain of said valve in accordance with the strength of the intermediate frequency wave.

2,731,559

ELECTRONIC MEASURING DEVICE

Neil A. Marshall, San Francisco, and Jason A. Adler, Beverly Hills, Calif., assignors to the United States of America as represented by the Secretary of the Navy

Application July 11, 1952, Serial No. 298,478
3 Claims. (Cl. 250—27)
(Granted under Title 35, U. S. Code (1952), sec. 266)



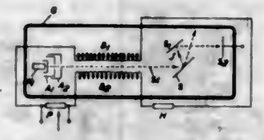
1. An arrangement for indicating the time constant of an electronic circuit comprising first and second electronic tubes, each tube having a cathode, a plate, and a control grid; a plate circuit for each tube including a source of current supply connected in series between the plate and cathode of each tube; a grid circuit for each tube including means for connecting each grid in series with its respective cathode; means to apply a negative potential to the control grids of both of said tubes, said last-named means being actuable in response to the flow of current in the plate circuit of one of said tubes and said last-named means being also actuable with equal effectiveness in response to the flow of current in the plate circuit of the other of said tubes, said potential being of a value sufficient to preclude the flow of current through said tubes; means in the grid circuit of said first tube for establishing a predetermined rate for the potential on the grid of said first tube to diminish, and means for connecting the electronic circuit to the control grid of said second tube whereby its potential diminishes at a rate determined by the time constant of the electronic circuit.

2,731,560

ELECTRON TUBE WITH DEFLECTION CONTROL

Guenther H. Krawinkel, Frankfurt am Main-Eschersheim, Germany

Application February 5, 1953, Serial No. 335,283
Claims priority, application Germany February 5, 1952
10 Claims. (Cl. 250—27)



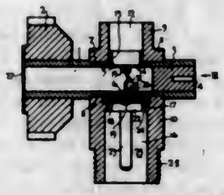
1. An electron tube comprising an electron gun for emitting a focused electron beam; beam deflection means for deflecting said beam in accordance with an input signal; collection electrodes biased to collect electrons secondarily emitted by a beam target-electrode assembly, and said latter assembly comprising, a backing member; a plurality of elongated conductive elements arranged in parallel relation across the face of said backing member to form a composite beam-receiving target; and element biasing means for imposing different electric potentials on respectively adjacent elements whereby as the beam impinges on the elements causing secondary electron emission therefrom, part of the electrons emitted by the relatively more negative elements will be collected by the relatively more positive elements, the potential difference between adjacent elements being graduated in intensity across the face of the target assembly to vary the amount of secondary emission from the assembly to the collection electrodes in accordance with the position of the beam on the target assembly.

2,731,561

CRYSTAL CONTACT DEVICES

Emrys Gwynne James, Planer, and Aubrey Oscar Edgar Lindell, Southgate, England, assignors to The General Electric Company Limited, London, England

Application February 8, 1950, Serial No. 143,134
Claims priority, application Great Britain February 10, 1949
1 Claim. (Cl. 250—31)



A crystal contact device for use at millimetric wavelengths comprising an elongated one-piece length of waveguide of uniform cross-section along its total length, said wave guide having a fixed preadjusted termination, means to couple the end of said waveguide section remote from said termination to a further section of waveguide, a crystal element, a mounting for the crystal element alone secured solely to one side of the waveguide on one side of the longitudinal axis thereof, a metal whisker bearing against the crystal element, a mounting for the metal whisker alone secured solely to the side of the waveguide opposite to the side to which the mounting for the crystal element is secured and on the other side of the longitudinal axis of the waveguide, and a coaxial output coupling having inner and outer contacts which are electrically connected one to the crystal element and the other to the metal whisker.

2,731,562

SYSTEM OF CONTROLLING ELECTRON CURRENT IN MULTIPLE ELECTRODE TUBES

Koichi Miyaji, Tokyo, Japan, assignor to Japan Broadcasting Corporation, Tokyo, Japan

Application September 5, 1950, Serial No. 183,131
Claims priority, application Japan October 7, 1949
4 Claims. (Cl. 250—36)



3. A pentode of the disc-sealed type for ultra high frequency oscillator use having a cathode, a first, a second and a third grid and an anode spaced in that order from the cathode, in combination with a first cavity resonator connected between the second and third grids, and a second cavity resonator with output circuit connected between the third grid and anode said first and second cavity resonators being substantially resonant at the frequency of the output signal, a feed back coupling provided between said first and second cavity resonators, and direct current potential means maintaining said anode and second grid at positive potentials with respect to said cathode and third grid to establish a virtual cathode between said second and third grids, and to make the conductance between said second and third grids substantially zero at the operating frequency.

2,731,563

STABILIZATION BY MOLECULAR BEAMS

Alfred C. Schroeder, Southampton, Pa., assignor to Radio Corporation of America, a corporation of Delaware

Application October 10, 1950, Serial No. 189,315
8 Claims. (Cl. 250—36)



3. An oscillator comprising, frequency determining apparatus consisting solely of a first delay line and a second delay line connected together, first amplifier means coupled for controlling one component of the current flowing in said frequency determining apparatus in accordance with the voltage at the output end of said first delay line, and second amplifier means coupled for controlling another component of the current flowing in said frequency determining apparatus in accordance with the voltage at the output end of said second delay line, both of said amplifier means having sufficient gain to produce oscillations having a frequency determined by the respective lengths of said delay lines and the relative amplitudes of said current components.

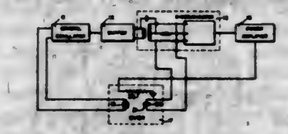
2,731,564

BARIUM TITANATE TEMPERATURE CONTROL

Harold Edelstein, Long Branch, N. J., assignor to the United States of America as represented by the Secretary of the Army

Application November 5, 1951, Serial No. 254,967
2 Claims. (Cl. 250—36)
(Granted under Title 35, U. S. Code (1952), sec. 266)

2. An oven temperature control apparatus comprising, an oven including therein a heating element, a piezo-electric crystal and a temperature sensitive condenser having a negative temperature coefficient of capacity, a power amplifier having an output circuit connected to said heater to supply the heating energy therefor, an oscillator and a connection from said piezo-electric crystal thereto to determine the stable frequency thereof, a tuned frequency discriminator coupled to the output of said oscillator, a connection from said temperature sensitive condenser to



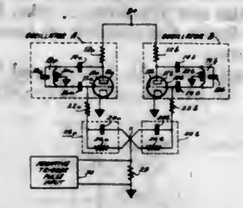
the tuning of said discriminator to determine the tuned frequency thereof, and a bias connection from the output of the discriminator to the control grid of said power amplifier, whereby a deviation of oven temperature from normal alters the reactance of said temperature sensitive condenser in such sense as to counteract said temperature deviation.

2,731,565

OSCILLATOR SYSTEM

Eugene O. Keizer and Marlin G. Kroger, Princeton, N. J., assignors to Radio Corporation of America, a corporation of Delaware

Application December 29, 1951, Serial No. 264,104
6 Claims. (Cl. 250—36)



1. A dual oscillator circuit having two stable states comprising, in combination, two oscillators, a separate biasing circuit for each of said oscillators adapted to develop a bias in response to the presence of sustained oscillations, common biasing circuit means connected to said separate biasing circuits for applying thereto a part of said oscillation-sustained bias such that the sustained oscillations of one oscillator prevents oscillation in the other, means for applying trigger pulses to said common biasing circuit of sufficient magnitude to cut off all oscillations, and means including a bias delay network for retaining a part of said oscillation-sustained bias on a previously operating oscillator after the cessation of its oscillation such that a previously operating oscillator is prevented from becoming operative for a predetermined period after the termination of a trigger pulse, whereby the stable state of said dual oscillator circuit is alternately changed in response to said trigger pulses.

2,731,566

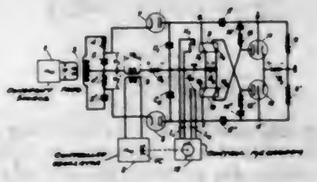
FREQUENCY STABILIZING DEVICE

Christian Chalhoub, Paris, France

Application October 9, 1952, Serial No. 313,949
Claims priority, application France April 11, 1947
3 Claims. (Cl. 250—36)

1. A device for stabilizing the frequency of a controllable frequency oscillator with respect to that of a constant frequency voltage source, comprising mixer circuits including means for obtaining from said oscillator and source first and second substantially sinusoidal beat voltages phase-shifted with respect to each other by substantially ninety degrees, means for obtaining from said beat voltages first and second derived voltages respectively proportional to the time derivatives of each one of said

beat voltages, first and second electron tubes each having a cathode, an anode and a control grid, biassing means for applying between said grids and cathodes direct-current voltages to prevent anode current flow through said tubes when no signal is applied to said grids, means for respectively applying to the control grids of said first and second tubes said first and second derived voltages, first and second electromagnetic relays each provided with at



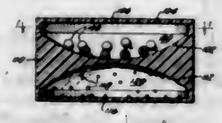
least one winding, means for impressing upon the winding of said first relay a current proportional to said first beat voltage and the anode current of said second tube, means for impressing upon the winding of said second relay a current proportional to said second beat voltage and the anode current of said first tube, and contacts actuated by said relays and operating a control mechanism controlling the frequency of said controllable frequency oscillator.

2,731,567
TRANSISTOR RELAXATION OSCILLATOR
George C. Sziklai and Winthrop S. Pike, Princeton, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application October 31, 1952, Serial No. 317,854
16 Claims. (Cl. 250—36)



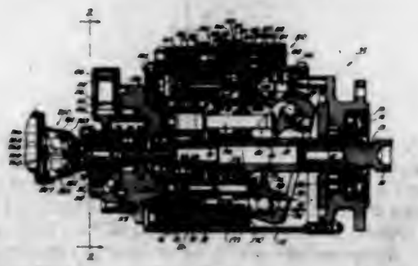
1. A relaxation oscillator circuit, comprising in combination, a semi-conductor device including an emitter electrode, a base electrode and a collector electrode, means for applying operating potentials to said electrodes, an impedance element connected with said emitter electrode, and a storage element connected between said collector electrode and an intermediate point on said impedance element.

2,731,568
RADIATION DETECTION DEVICE
Gioacchino Failla, New York, N. Y., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application August 14, 1951, Serial No. 241,778
8 Claims. (Cl. 250—83.3)



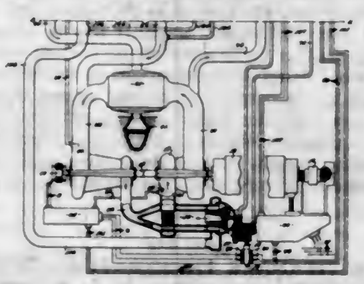
1. A device for indicating the presence and intensity of ionizing radiation which comprises a sealed container containing a dielectric material, an ionizable gas within said container, at least one small spherical element within said container free to move in said container in contact with the dielectric material to separate triboelectric charge and at least another such spherical element within said container being adapted to be displaced by said charge against the force of gravity.

2,731,569
HYDRAULIC TRANSMISSION AND CONTROL
Joseph S. Cardillo, Melvin M. Hann, and Carl L. Sadler, Jr., Rockford, Ill., and Folke G. Lundgard, Del Mar, Calif., assignors to Sundstrand Machine Tool Co., a corporation of Illinois
Application July 8, 1952, Serial No. 297,628
18 Claims. (Cl. 290—4)



8. A hydraulic system for drivingly connecting together an engine and a generator to drive the generator from the engine or to start the engine from power supplied by the generator comprising a wobbler-type fluid displacement device connected to the engine and a wobbler-type fluid displacement device connected to the generator with each fluid displacement device being adapted to operate as a pump and as a motor, passage means for connecting the inlet and outlet of the device operating as a pump with the outlet and inlet respectively of the device acting as a motor, means for shifting the wobbler of the fluid displacement device connected to the generator toward maximum stroke position when electrical power is supplied to the generator to drive the generator connected device to pump fluid under pressure through said passage means, means for shifting the wobbler of the fluid displacement device connected to the engine into maximum stroke position for rotation by said fluid to rotate the engine, and means for maintaining the wobbler of the generator connected device in maximum stroke position and for varying the position of the wobbler of the engine connected device upon engine start up whereby to control the flow of fluid pumped by the engine connected device to the generator connected device to drive the generator at a predetermined speed.

2,731,570
CONSTANT TEMPERATURE-VARIABLE DENSITY GAS TURBINE POWER PLANT
Vladimir H. Pavlecka, Pacific Palisades, Calif.
Application July 28, 1952, Serial No. 301,224
18 Claims. (Cl. 290—4)



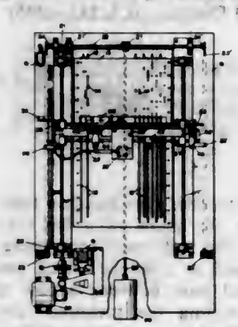
1. A gas turbine power plant comprising a main compressor and a main turbine; an auxiliary compressor and an auxiliary turbine; a combustion heat generator connecting the output side of said main compressor with the input side of said main turbine; a first duct connecting the exhaust side of said main turbine to the input side of said auxiliary turbine; a second duct connecting said first duct to the input side of said main compressor; a third duct connecting the output side of said auxiliary compressor to said second duct, a valve in said first duct for disconnecting the input side of said auxiliary turbine from the exhaust side of said main turbine; and an electrical machine connected to and rotatable with said auxiliary turbine, said electrical machine having means for operating as a generator or as a motor.

2,731,571
DELAY CIRCUIT
Britton Chance, Cambridge, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application December 27, 1945, Serial No. 637,507
3 Claims. (Cl. 307—88.5)



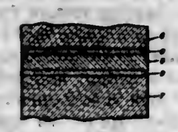
1. A delay circuit comprising, first and second input terminals, first and second output terminals, a coupling capacitor connected between said first input terminal and said first output terminals, said second input and second output terminals being connected together, a first germanium crystal connected between said first and second output terminals in such a way that said first crystal conducts current readily when a voltage impressed across said first and second input terminals causes said first output terminal to be at a negative potential with respect to said second output terminal, a second germanium crystal and a bias voltage source connected in series across said first and second output terminals, said second germanium crystal being so connected that it conducts current readily when a voltage impressed across said first and second input terminals causes said first output terminal to be at a positive potential, exceeding said bias voltage, with respect to said second output terminal.

2,731,572
ELECTRICAL CONTROL MECHANISM
Arthur J. Cobert, Chattanooga, Tenn.
Original application June 21, 1952, Serial No. 294,804. Divided and this application March 30, 1953, Serial No. 345,441
12 Claims. (Cl. 307—112)



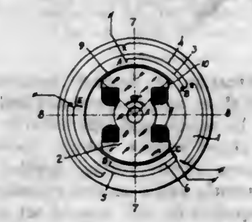
12. Mechanism for controlling a machine operated by a plurality of pieces of electrical apparatus comprising a panel, electrical contacts mounted on said panel, a carriage mounted for movement adjacent said contacts, contact fingers carried by said carriage and biased for engagement with said contacts, a pattern card interposed between said contacts and said contact fingers, said card being perforated according to a predetermined pattern to govern the contacting of said contacts by said fingers to selectively control the completion of electrical circuits for the operation of said pieces of electrical apparatus, step-by-step means for advancing said carriage from a starting point along said pattern card, a signal generator responsive to said machine and connected to supply an impulse to said step-by-step means to advance said carriage along said pattern card, counter mechanism selectively excited to interrupt the connection of said signal generator to said step-by-step means for a predetermined impulse count by said counter mechanism, and means operatively connected to said carriage for returning said carriage to said starting position in response to an impulse from said signal generator upon the completion of a cycle of operation of said machine.

2,731,573
ULTRASONIC COUPLING MEANS FOR PIEZO-ELECTRIC CRYSTALS
J. Richard Hansen, Pittsburgh, and Gerhard Sprengling, Verona, Pa., assignors to the United States of America as represented by the Secretary of the Navy
Application October 17, 1952, Serial No. 325,602
7 Claims. (Cl. 310—8.3)



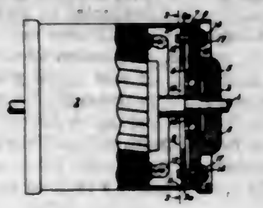
1. A coupled piezo-electric unit for high frequency vibrations comprising a piezoelectric crystal, an acoustical transmitting material, and a bond connecting said crystal and material selected from the group consisting of paramethoxybiphenyl and benzil.

2,731,574
DYNAMO ELECTRIC MACHINE FOR TELEMETERING ANGLE DATA
Sven Gunnar Söredal, Stockholm, Sweden, assignor to Svenska Ackumulator Aktiebolaget Jungner, Stockholm, Sweden, a corporation of Sweden
Application April 29, 1952, Serial No. 284,985
Claims priority, application Sweden May 4, 1951
9 Claims. (Cl. 310—49)



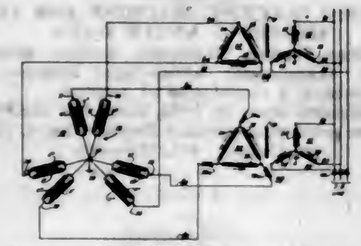
1. An electric machine with a stator and a rotor for transforming angle data applied to the rotor of the machine into desired functions of these data and/or for transducing such data or functions thereof from one place to one or more distant places either directly or via a servo system, the machine comprising one or more pairs of poles, windings consisting of one or more winding phases and are laid down in slots in the machine, each winding phase consisting of two or more coils per pole, in which machine the number of slots receiving the windings is odd and each winding phase includes coils with both equal and different angular span, at least the coils with equal angular span having different number of winding turns.

2,731,575
END SHIELD AND BEARING LOCKING ARRANGEMENT
Doran D. Hershberger, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application July 17, 1953, Serial No. 368,799
4 Claims. (Cl. 310—90)



1. In a dynamoelectric machine having a shell, an end shield abutting said shell and a rotatable shaft within said shell supported by a bearing seated in said end shield, improved means for fastening said bearing in place in said end shield and said end shield in place at an end of said shell comprising a retaining and locking member, said shell having openings to accommodate the extremities of said member, means adjustably securing together said member and said end shield, said member being arranged on the side of said bearing remote from said end shield and being so formed as to force said bearing against said end shield when said means are used to draw said member and said end shield together, and being further formed to bear against said shell at said openings when said member and said end shield are drawn together whereby said shell and said end shield are secured together.

2,731,576
6-PHASE, 2-CIRCUIT GENERATORS
John E. McElligott, Pasadena, Calif., assignor to General Electric Company, a corporation of New York
Application October 18, 1954, Serial No. 462,693
12 Claims. (Cl. 310—202)



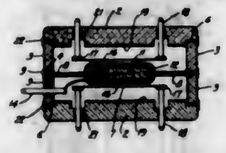
6. In a combination, a 6-phase generator provided with a first set of three supply terminals and a second set of three supply terminals and operative to generate an asymmetrical 6-phase supply voltage including a first symmetrical 3-phase supply voltage applied to said first set of supply terminals and a second symmetrical 3-phase supply voltage applied to said second set of supply terminals with a fixed phase angle in a given direction between said first 3-phase supply voltage and said second 3-phase supply voltage, a 3-phase device provided with a set of three input terminals and a set of three output terminals and operative in response to the application of a 3-phase input voltage to said set of input terminals to produce a 3-phase output voltage applied to said set of output terminals with a phase shift between said 3-phase input voltage and said 3-phase output voltage through said fixed phase angle in a direction opposite to said given direction, connections between said first set of supply terminals and said set of input terminals, whereby said 3-phase output voltage applied to said set of output terminals and said second 3-phase supply voltage applied to said second set of supply terminals are in-phase with respect to each other, and a 3-phase load circuit commonly supplied from said second set of supply terminals and said set of output terminals.

2,731,577
STROBOSCOPE LAMP
Oscar H. Floyd, Chicago, Ill., assignor to Kemlite Laboratories, Chicago, Ill., a partnership
Application August 28, 1951, Serial No. 243,993
3 Claims. (Cl. 313—110)



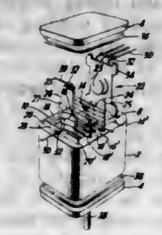
1. A stroboscope lamp comprising a base member, a gaseous-discharge tube containing ionizable gas, said tube being provided with a pair of terminal electrodes, means rigidly securing said tube in a fixed position relative to said base member, a metal cylindrical shell surrounding said tube, said shell having one end received within said base member and having its other end modified to form a lens holder, means sealing said shell within said base member operative to hold said lens holder at a predetermined fixed position relative to said tube, a lens carried in said lens holder for focusing into a beam light emitted by said tube, a control electrode for said tube, said electrode being constrained to movement in a predetermined locus relative to said tube, manually adjustable means carried by said base member, partially external and partially internal thereof, said manually adjustable means being mechanically linked to said control electrode whereby manual adjustment of said adjustable means will cause systematic change in the position of said control electrode without affecting the relative position of the tube and the lens, and circuit means electrically connecting said cylindrical shell and one of said terminal electrodes.

2,731,578
ELECTRON TUBE
Jack A. McCullough, Millbrae, Calif., assignor to Eitel-McCullough, Inc., San Bruno, Calif., a corporation of California
Application April 30, 1951, Serial No. 223,708
8 Claims. (Cl. 313—245)



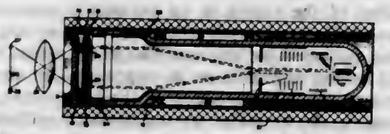
7. A stacked ceramic type electron tube comprising an envelope having the shape of a flat cylinder with side and end walls, the side wall comprising metalized ceramic rings sealed in a vertical stack and providing an annular side wall joint between a pair of said rings, a metallic layer uniting the metalized ceramic rings at said joint, one of said end walls providing an anode having an inner anode surface lying substantially parallel with the plane of said joint, a cathode structure in the envelope having an emitting surface substantially parallel with said anode surface, a conductive support for said cathode extending inwardly from said side wall joint, and a terminal on the envelope connected to said cathode support through the metallic layer of said joint.

2,731,579
ELECTRON DISCHARGE DEVICE
Mortimer E. Weiss, Flushing, N. Y., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application September 30, 1952, Serial No. 312,185
8 Claims. (Cl. 313—249)



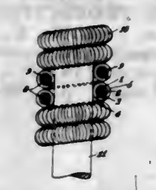
1. An electron discharge device having a hermetically sealed envelope, a number of electrodes having oppositely extending lateral supporting portions contained within said envelope, and said envelope having recesses oppositely disposed along substantially straight lines on its inner surface, said recesses each being adapted to engage said electrode supporting portions at a plurality of points, whereby said electrodes are maintained in predetermined, spaced relationship.

2,731,580
TARGET ELECTRODES FOR USE IN TELEVISION PICK-UP TUBE OR THE LIKE
George Stanley Percival Freeman, Chiswick, London, England, assignor to Cinema-Television Limited, London, England, a British company
Application October 22, 1949, Serial No. 122,925
Claims priority, application Great Britain November 22, 1948
2 Claims. (Cl. 313—326)



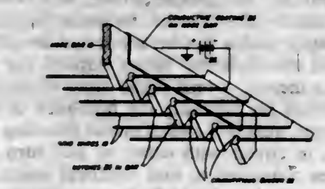
1. A target electrode for a picture-converting device comprising: a thin electron-permeable aluminum film; a thin semi-conducting glass plate supported parallel and in close proximity to said film; and a thin layer of insulating secondary-electron-emitting material spaced from said plate and affixed to the surface of said film facing said plate.

2,731,581
ELECTRODE FOR GASEOUS DISCHARGE LAMPS
Hermann Eduard Krefft, Buenos Aires, Argentina
Application December 18, 1950, Serial No. 201,331
4 Claims. (Cl. 313—343)



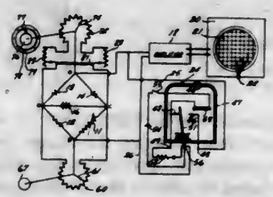
1. An activated electrode for high pressure and super high pressure gaseous electric discharge devices comprising a core composed of a plurality of refractory metal wires, which are twisted with respect to the axis of said core, a tungsten wire coil helically wound about said core and in contact therewith throughout its length, the pitch of the coil being very low and constant throughout the length thereof, and the individual convolutions of said coil being closely adjacent one another whereby said coil forms a protecting wall about said core and whereby small pockets are formed between the coil and the core wires and among the core wires themselves throughout the length thereof, said electrode being in the form of a coiled coil, an activating material selected from the group consisting of barium, calcium, strontium, thorium, and zirconium, deposited in said pockets to form a continuous tortuous path of activated material and wherein said coil serves to shield said core wires and activating materials against rapid deterioration by the high pressure discharge.

2,731,582
GRID STRUCTURE FOR COLOR TELEVISION TUBE
Leslie J. Cook, Lafayette, Calif., assignor to Chromatic Television Laboratories, Inc., New York, N. Y., a corporation of California
Application March 23, 1953, Serial No. 343,887
9 Claims. (Cl. 315—14)



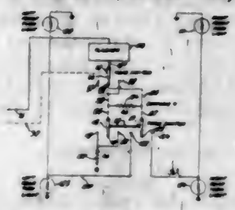
1. In a cathode-ray tube designed for the reconstitution of polychrome images, a color-control grid structure of parallel wires lying in a plane adjacent to the surface of the target electrode scanned by the electron beam of said cathode-ray tube, and means for materially reducing any tendency the parallel grid wires of said color-control structure may have to vibrate when different color-control potentials are cyclically applied thereto, said vribation-reducing means including insulating means for effectively dividing each grid wire into a plurality of sections each of which has a higher natural resonant frequency than that possessed by the wire prior to its effective division.

2,731,583
ELECTRIC SIGNAL MEASURING APPARATUS WITH DYNAMIC NULL BALANCE
Greer Ellis, Pelham, N. Y.
Application September 24, 1951, Serial No. 248,017
8 Claims. (Cl. 315—26)



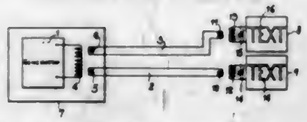
1. A dynamic null balance indicator comprising an indicating device for variable dynamic signals, a bridge circuit from which said signals are supplied to said device, means for producing a reference signal on said indicating device, and apparatus for changing the level of the dynamic signals with respect to the reference signal to make peaks of the dynamic signals equal on the indicating device with the level of the reference signal, said apparatus including a variable impedance in the bridge circuit and a movable element that adjusts the impedance, and an indicator for showing the extent of movement of said element required to change the level of the dynamic signal with respect to the reference signal.

2,731,584
VEHICLE ILLUMINATION SYSTEM
George W. Onksen, Jr., Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 4, 1952, Serial No. 291,639
6 Claims. (Cl. 315—81)



4. A vehicle illumination system including a source of electrical power, an operating lamp circuit having a plurality of operating lamps and switch means connecting said operating lamps to said electrical source, a turn signal circuit having a pair of turn indicator lamps connected in separately energizable circuits, turn switch means connecting either of said turn indicator lamps to said electrical source and a flasher connected in circuit with either of said turn indicator lamps through the said turn switch means thereof, a turn signal lamp dimming circuit including means for dimming the brilliance of said turn indicator lamps, auxiliary switch means inserting said dimming means in circuit with either of said turn indicator lamps, means connected to said electrical source through said auxiliary switch and said flasher maintaining the load on the flasher substantially constant in both the brilliant and dimmed condition of said turn indicator lamps, and manually operable gang means interconnecting said switch means of said operating lamp circuit and said auxiliary switch means of said turn signal lamp dimming circuit and permitting switching of said dimming means in and out of said turn signal lamp circuit simultaneously with the operation of said switch means of said operating lamp circuit.

2,731,585
LUMINOUS DISPLAY APPARATUS
Robert Rousseau, Evry-Petit-Bourg, France, assignor to Andres Soriano, New York, N. Y., and Ansor Corporation, New York, N. Y., a corporation of Delaware
Application April 21, 1952, Serial No. 283,286
Claims priority, application France June 15, 1951
4 Claims. (Cl. 315—248)



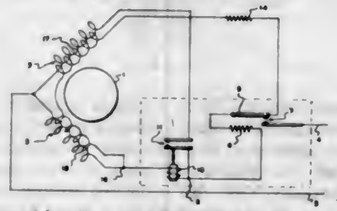
1. In a luminous display apparatus in which a plurality of independent gaseous discharge tubes may be positioned for inductive excitation by high frequency fields and in varied numbers, the combination of a high frequency generator fixedly tuned to generate constant frequency, a step down transformer having a primary winding and a secondary winding and having its primary winding electrically connected to the output of said generator, a shield surrounding said generator and step down transformer, a step up transformer having a primary winding and a secondary winding having terminals, a two-wire transmission line electrically connected to the secondary winding of said step-down transformer and to the primary winding of said step-up transformer, said transmission line having an impedance substantially equal to the characteristic impedance of the primary winding of said step-up transformer, a display device for energizing a variable number of gaseous discharge tubes, comprising two spaced apart insulated electrodes respectively connected to the terminals of the secondary winding of said step-up transformer, means for supporting a plurality of said discharge tubes in inducting relationship to said electrodes in the vicinity of and in the field of said electrodes and tuning means in the circuit constituted by the secondary winding of the step-up transformer, the electrodes and tubes supported in the vicinity of and in the field of said electrodes comprising a variable condenser electrically connected to said electrodes and said secondary winding of said step-up transformer, whereby said circuit constituted by said secondary winding of said step-up transformer and said electrodes and tubes supported in the vicinity of and in the field of said electrodes may be tuned to the frequency of said generator when the number of tubes is varied, without varying the frequency of said generator.

2,731,586
HEARING AID
Elroy W. Born, Minneapolis, Minn., assignor to The Maico Company, Incorporated, Minneapolis, Minn., a corporation of Minnesota
Application April 20, 1953, Serial No. 349,871
4 Claims. (Cl. 317—99)



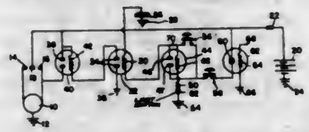
1. In a hearing aid, a casing containing an electronic amplifier, said casing having a slide-receiving recess opening through the wall thereof, a slide mounted and guided for endwise sliding movements within said opening from a retracted operative position completely within the confine of the recess to an outwardly extended inoperative position, a battery-receiving recess in said slide, a terminal-equipped battery mounted in the recess in said slide and having terminals on its opposite sides, the slide being extendable to allow access to the battery externally of the casing, the amplifier having opposed resilient terminals orientated for cooperative engagement with the battery terminals only upon closing of the slide, and yielding means urging said slide toward said extended inoperative position, the bottom of said slide bearing upon the adjacent wall of the casing during extending movements thereof, said bottom being formed to provide a latch adjacent its outer end portion engageable with the inner surface of the adjacent wall of the casing when the slide is retracted, said slide being yieldingly urged toward engagement of said shoulder with the inner surface of said casing when said slide is moved to its operative retracted position.

2,731,587
MOTOR PROTECTIVE SYSTEM
John B. Brightman, Louisville, Ky., assignor to General Electric Company, a corporation of New York
Application September 16, 1954, Serial No. 456,386
3 Claims. (Cl. 318—221)



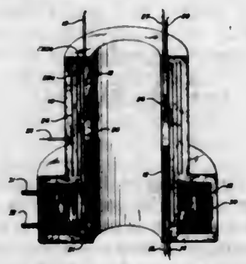
1. In combination, a single phase motor including a rotor, a starting winding, and a running winding, starting and running circuits for the motor, said starting circuit including said starting winding, said running circuit including said running winding, an auxiliary circuit, a power supply line, overload contacts in said power supply line to connect said circuits with said power supply line, means in said running circuit to break said overload contacts to open said circuits when said current in said portion of said running circuit in which said breaking means are disposed exceeds a predetermined value, said auxiliary circuit including said breaking means and an induced voltage coil in said auxiliary circuit in magnetic relationship with said starting and running windings to prevent said current in said portion of said running circuit in which said breaking means are disposed from exceeding said predetermined value when said rotor is rotating.

2,731,588
AUTOMOBILE TOP AND WINDOW ACTUATING CIRCUIT RESPONSIVE TO MOISTURE CONDITIONS
Stewart B. McLeod, Dearborn, Mich., assignor to Detroit Harvester Company, Detroit, Mich., a corporation of Michigan
Application July 7, 1952, Serial No. 297,583
8 Claims. (Cl. 318—483)



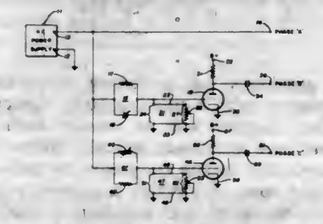
1. A closure member movable between open and closed positions, power means for opening and closing said member including an electric motor, a circuit for energizing said motor including a power source, manual opening and closing switches in said circuit for selectively connecting said power source and motor to energize said motor in closure opening and closing directions, a rain cell adapted to be conductive only when wet connected between said power source and ground, a first relay having a coil and normally open contacts connected in parallel with said closure closing switch, a second relay having a coil and normally open contacts adapted when closed to energize the coil of said first relay, circuit means connecting said rain cell in series with the coil of said second relay, circuit means connecting the other side of said coil to the power source including a holding circuit energized by momentary contact, and a limit switch operable by movement of said closure to closed position to de-energize said holding circuit.

2,731,589
HIGH VOLTAGE APPARATUS
James C. Marsh, Indianapolis, Ind., assignor to Ransburg Electro-Coating Corp., Indianapolis, Ind., a corporation of Indiana
Application September 13, 1954, Serial No. 455,520
9 Claims. (Cl. 321—15)



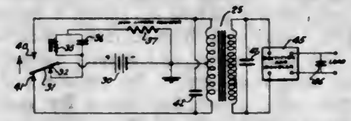
1. A doubler circuit for producing rectified high voltage comprising: a high voltage supply line, a source of low voltage alternating current, a transformer core, an annular primary transformer coil mounted over said core and connected to said low voltage current source, an annular secondary transformer coil encircling said primary coil, a first split cylindrical plate lying in part between said primary coil and said secondary coil and connected to ground, a second split cylindrical plate spaced from said first plate and lying in part between said primary coil and said secondary coil and connected to an end of said secondary coil, a third split cylindrical plate surrounding a portion of said second plate and connected to said high voltage supply line, and a pair of rectifiers in series between ground and said high voltage line connected to pass electrons in the same direction between ground and said high voltage line, the end of said secondary coil opposite to the end connected to said second plate being connected between said rectifiers, said first and second cylindrical plates serving as one capacitor and said second and third cylindrical plates serving as another capacitor in the doubler circuit.

2,731,590
POLYPHASE VOLTAGE GENERATOR
Bob Hugh Smith, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application July 21, 1954, Serial No. 444,929
3 Claims. (Cl. 321—36)



1. In a phase generator, the combination comprising a source of alternating voltage having a pair of output terminals, a vacuum tube having at least an anode, control grid and cathode, means connected between anode and cathode of said tube for impressing an operating potential, a phase shift network connected between one of said output terminals and the control grid of said tube, a section of transmission line having an input end and a terminal end with the input end connected between the contro! grid and cathode of said tube, and a variable resistance connected across the terminal end of said line, said line having an electrical length equal to one-eighth of the wave length at the frequency of said source whereby the voltage at the anode of said tube has a predetermined phase relationship with respect to the voltage between said output terminals which may be varied by said resistance while the value of voltage remains constant.

2,731,591
VOLTAGE REGULATOR
Ordean Kiltie, Fort Wayne, Ind., assignor to Ballastran Corporation, Fort Wayne, Ind., a corporation of Indiana
Application February 23, 1952, Serial No. 272,943
4 Claims. (Cl. 321—49)



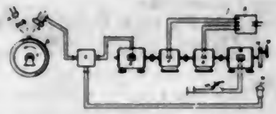
1. In combination, a transformer provided with a closed core having primary and secondary leg portions and a magnetic shunt around said secondary leg portion, a primary winding energizable by an alternately con-

nected direct current source variable from a maximum to a minimum voltage and being wound on said primary leg portion, and a secondary winding wound on said secondary leg portion, the relative reluctance of said portions of the closed core being such that the secondary portion and the shunt portion are saturated by the current flowing in the primary winding when the direct current source provides its minimum voltage, and a vibrator actuated by current flowing from one terminal of the direct current source through a nonlinear resistor to the other terminal of the direct current source and periodically interrupting the direct current flowing to said primary winding of said transformer.

2,731,592
PHOTOELECTRICALLY CONTROLLED APPARATUS FOR PRODUCING ALTERNATING CURRENTS IN SYNCHRONISM WITH ROTATION OF STRUCTURE

Klaus Federn, Darmstadt, Germany, assignor to Carl Schenck Maschinenfabrik G. m. b. H., Darmstadt, Germany, a corporation of Germany

Application September 4, 1952, Serial No. 307,837
Claims priority, application Germany October 10, 1951
4 Claims. (Cl. 322—26)

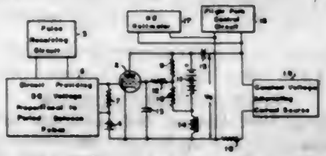


1. Electric apparatus for producing alternating current in synchronism with a rotating body, comprising a rotatable surface member with an annular surface zone having only two zone sections of optically different reflectivity, a photo-electric pickup responsive to radiation reflected from said zone to produce a current pulse during each full rotation of said member, a synchronous motor, amplifying circuit means electrically connecting said motor with said pickup, rotary alternating-currrent generator means mechanically connected with said synchronous motor, and a separately energized auxiliary motor also connected with said generating means and having a driving power corresponding substantially to the average torque requirement of said generating means.

2,731,593
ELECTRICAL SYSTEM

Robert Hauptman, Baltimore, Md., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy

Application May 14, 1949, Serial No. 93,289
2 Claims. (Cl. 323—30)

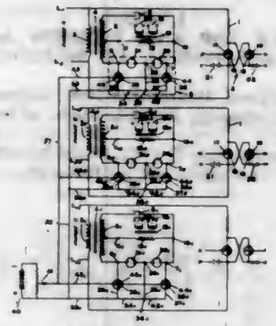


1. In an electrical system comprising means for producing varying direct current voltages, the combination of a vacuum tube having therein an anode, a cathode and a control grid, a source of direct current, a choke connected in series with said source, said serially connected source and choke being connected to the cathode and anode of the vacuum tube, connecting means for applying said varying direct current voltages to the control grid, a substantially constant voltage alternating current source, a resistor connected in series with said alternating current source, said serially connected alternating current source and resistor being connected to the cathode and anode of the vacuum tube in parallel with the direct current source and choke, whereby the alternating current voltage across the vacuum tube is a function of the varying direct current voltages applied to the control grid, and electrically actuated means responsive to the alternating current potential across said vacuum tube and connected thereto.

2,731,594
PHASE SHIFTING DEVICE FOR THREE PHASE POWER

Stuart C. Rockafellow, Farmington, Mich., assignor to Robotron Corporation, Detroit, Mich., a corporation of Michigan

Application December 17, 1951, Serial No. 262,079
2 Claims. (Cl. 323—119)

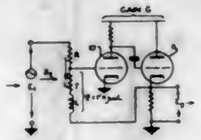


1. In apparatus for simultaneously shifting the phase of each phase circuit of a multi-phase system, the combination comprising: a phase shifting circuit in the circuit of each phase in said system, said phase shifting circuit including as the controllable element therein a vacuum type electric discharge device and said phase shifting circuit being so arranged that variation in the potential of the control electrode of said electric discharge device will shift the phase of that phase of said system into which each respective phase shifting circuit is connected; a source of multi-phase alternating current and means connecting each phase thereof respectively to the input terminals of each of said phase-shift circuits; a first conductor connecting together the control electrodes of each of said electric discharge devices; a second conductor connecting together the cathodes of each electric discharge device; means imposing a predetermined D. C. potential between said first and second conductors.

2,731,595
PHASE SHIFTING CIRCUIT

George R. Gamertsfelder, Watertown, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy

Application December 18, 1945, Serial No. 635,789
2 Claims. (Cl. 323—119)

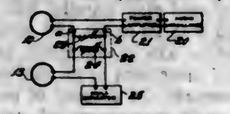


1. A device comprising an impedance network made up of resistance and inductive elements, an electronic amplifier whose grid input is tapped to a portion of said impedance network, a second electronic stage connected as a cathode follower and having its grid capacitively coupled to the output of said amplifier, one end of said impedance network being tied to the cathode of said cathode follower so as to form a degenerative feedback loop from the output of said cathode follower to the input of said amplifier, whereby the impedance of that portion of said impedance network used as a degenerative feedback loop is so affected by the overall gain of said amplifier as to cause an effective shortening of the transient time constant of said impedance network.

2,731,596
METHOD AND APPARATUS FOR GEOPHYSICAL EXPLORATION

James R. Wait, Jerome, and Arthur A. Brant, Clarkdale, Ariz., assignors to Newmont Mining Corporation, New York, N. Y., a corporation of Delaware

Application February 21, 1952, Serial No. 272,734
12 Claims. (Cl. 324—6)

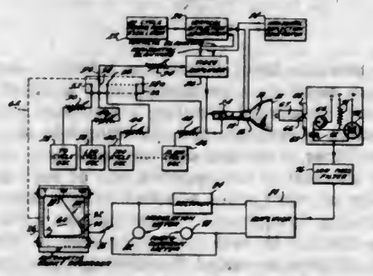


1. Apparatus for use in making low frequency, electromagnetic, geophysical explorations and comprising a primary coil disposed in the region to be investigated; a source of alternating current connected to the primary coil and including means for varying the current frequency within the range of 10–1,000 cycles; a calibrated adjustable impedance network connected in series with the said source and primary coil, said impedance network including a calibrated resistor and reactor connected in parallel; a secondary coil spaced from the primary coil and disposed in a plane normal thereto, and a null detector, said detector and said secondary coil being connected in series across the impedance network and in a sense such that the voltage induced in the secondary coil is opposed to the voltage drop across the impedance network.

2,731,597
APPARATUS FOR MEASURING THE QUALITY OF A KINESCOPE

Otto H. Schade, West Caldwell, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application October 1, 1954, Serial No. 459,774
11 Claims. (Cl. 324—20)

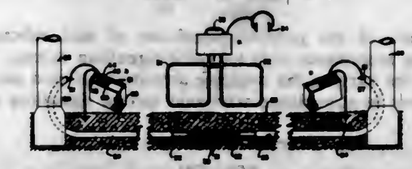


1. Apparatus for measuring the optical response of a kinescope having a screen and a grid, said apparatus comprising means to scan said screen periodically with an electron beam in two substantially perpendicular directions simultaneously at two different frequencies respectively, means to modulate said grid with repetitive electrical A.-C. waves of a frequency differing from an integral multiple of said scanning frequency in one of said two directions by a predetermined number of cycles per second whereby to obtain a repetitive optical image on said screen drifting in said one of said two directions with a drift frequency of said predetermined number of cycles per second, means to convert the light from said drifting image at a predetermined point on said screen into electrical signals, means to filter said electrical signals with a low pass filter adapted to pass signals at said drift frequency and to attenuate signals at said scanning frequencies and higher, means to detect said passed signals, and means to indicate visually the amplitude of said detected passed signals.

2,731,598
APPARATUS FOR TRACING UNDERGROUND CABLES AND DETECTING FLAWS THEREIN

Earl Herbert, St. Joseph, Mo., assignor of one-fourth to Elliot Marshall, one-fourth to Ivan Thomas and one-fourth to Whitney W. Potter, St. Joseph, Mo.

Application August 17, 1951, Serial No. 242,197
6 Claims. (Cl. 324—52)

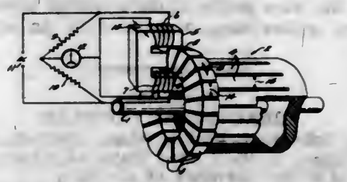


1. Apparatus for tracing underground cables and detecting flaws therein including, electrical oscillation generators for producing different frequencies in a section of underground cable for connection with opposite ends thereof; detecting means for traversing the course of the cable above ground including two detecting circuits separately tuned for receiving the two corresponding oscillation frequencies applied to the ends of the cable section, a separate pick-up coil for each detecting circuit suspended from the detecting means, an indicator, and switching means for applying the detected oscillations of either of said detecting circuits to the indicator or both simultaneously.

2,731,599
VARIABLE RELUCTANCE ROTARY SPEED SENSING ELEMENT

Lawrence H. Groeper, Canoga Park, Calif., assignor to the United States of America as represented by the Secretary of the Air Force

Application June 10, 1952, Serial No. 292,757
6 Claims. (Cl. 324—70)



1. A magnetic speed sensing device comprising a plurality of armatures of magnetic material arranged in a circle whose center is located at a point on the axis of rotation of the shaft whose speed is to be sensed, means to support each of said armatures so that each will move radially of said circle due to centrifugal force resulting from rotation of said shaft, a magnetic circuit including an air gap positioned such that said armatures pass through said air gap in succession and positioned so that the magnetic relation of said armatures with respect to said air gap is such that the reluctance of said air gap is a function of radial movement of said armatures and means for sensing changes in reluctance of said magnetic circuit.

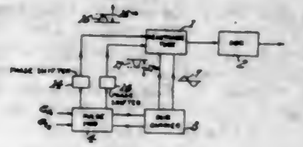
2,731,600
COMMUNICATION SYSTEM

Edward J. Stachura, Arlington, Va.

Application April 2, 1951, Serial No. 219,502
4 Claims. (Cl. 332—21)

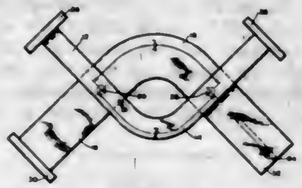
3. A transmitter for transmitting a plurality of frequency modulated signals comprising; means for gen-

erating a carrier wave signal; a source of subcarrier wave signals; means for frequency modulating said carrier wave at the subcarrier frequency for producing a positive and negative frequency swing in said carrier wave by an amount determined by the subcarrier wave amplitudes; a first and second signalling voltage; means for varying the



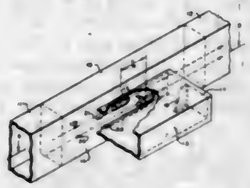
amplitude of the positive amplitude of said subcarrier wave in accordance with said first signalling voltage, and means for varying the negative amplitude of said subcarrier wave in accordance with said second signalling voltage.

2,731,601
WAVE-GUIDE DIRECTIONAL COUPLER
Ralph J. Harrison, New York, N. Y., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application November 13, 1945, Serial No. 628,281
7 Claims. (Cl. 333—10)



1. A directional coupler comprising two rectangular wave guides having right angle bends, one being bent in the plane of its wide dimension and the other being bent in the plane of its narrow dimension, said wave guides being crossed with their bends pointed in opposite directions, there being coupling holes through the adjacent walls of the wave guides at the crossover points, one of said wave guides being terminated by an absorber at one end.

2,731,602
DIRECTIONAL COUPLER
Julian S. Schwinger, Boston, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application January 10, 1946, Serial No. 640,278
10 Claims. (Cl. 333—10)



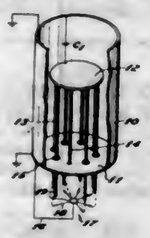
1. In a wave guide system, directional coupling means comprising a first section of rectangular wave guide joined longitudinally to a second section of rectangular wave guide so that the common wall between said sections of wave guide is part of a wide side of said first section and a narrow side of said second section, said common wall being provided with apertures spaced apart laterally each side of center within the narrow side of said second section and spaced apart longitudinally a distance of substantially a quarter wave length in the wave guide.

2,731,603
MATCHED WAVE GUIDE ATTENUATORS
Ernst Weber, Mount Vernon, and John Ebert, Woodside, N. Y., assignors to Polytechnic Institute of Brooklyn, Brooklyn, N. Y., a corporation of New York
Original application November 2, 1946, Serial No. 707,468, now Patent No. 2,705,780, dated April 5, 1955. Divided and this application February 11, 1953, Serial No. 336,264
5 Claims. (Cl. 333—81)



1. A variable attenuator for a wave guide comprising an elongated loss-producing plate-like element positioned within a longitudinal slot formed in the wall of said guide with the plane of said plate parallel with the electric field in said guide and with its major axis substantially parallel with the longitudinal axis of said guide, and means mounting said plate for movement in its own plane transversely of said guide, whereby the amount of penetration of said plate into said guide may be varied, said plate having a main attenuating section and a matching end portion of the same width as said attenuating section and presenting a higher impedance than said attenuating section, said matching end portion being of uniform construction throughout its width.

2,731,604
RESONATOR TUNER
Merle R. Hubbard, Cedar Rapids, Iowa, assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application September 18, 1952, Serial No. 310,289
3 Claims. (Cl. 333—82)



1. A resonator tuner comprising, a hollow, conductive cylindrical member, a conducting disc attached to one end of said cylindrical member, a first wire having one end attached to said disc and extending into the confines of said cylinder, a shorting disc insulated from said cylinder and attached to the opposite end of said first wire, a plurality of other wires attached to said shorting disc and extending through said conducting disc, a plurality of openings formed in said conducting disc to allow said plurality of wires to extend therethrough, and a multiple switch connected to said conducting disc and including means to conductively connect the free ends of said plurality of wires.

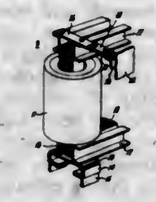
2,731,605
WIND-UP COIL
Melvin L. Doelz, Glendale, Calif., assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application April 24, 1952, Serial No. 284,081
3 Claims. (Cl. 336—15)

1. Apparatus comprising, a base plate, a pair of end plates attached to said base plate, a coil form of insulating material rotatably supported between said end plates, a pair of lead screws rotatably supported between said end plates, a roller assembly threadedly supported by the pair of lead screws, a pair of rollers mounted on the roller assembly, a flexible conductor wound about one end of said coil form, passing over the rollers and wound about the opposite end of said coil form, a first wiper contact mounted to one end plate and engageable with one end of said flexible conductor, a second wiper conductor attached to the other end plate and engageable



with the opposite end of said coil, a third wiper contact mounted on said roller assembly and engageable with said flexible conductor between the rollers, a driving means connected to said coil form and said pair of lead screws, a conducting bar mounted between said end plates, and a fourth slide contact extending from said roller assembly to said conductor bar.

2,731,606
STRUCTURE FOR REDUCTION OF AUDIBLE SOUND
Harold C. Stewart, Pittsfield, and James E. Holcomb, Lanesboro, Mass., assignors to General Electric Company, a corporation of New York
Application July 26, 1951, Serial No. 238,757
1 Claim. (Cl. 336—65)



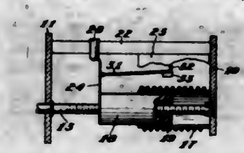
In a transformer apparatus comprising a metallic magnetic core enclosed within a metallic tank, said tank having a bottom portion and vertical side walls, said core spaced from said bottom portion and said side walls, supporting means for supporting said core on said bottom portion comprising a plurality of pieces of structurally rigid material interposed between a bottom portion of said core and said tank bottom portion, said plurality of pieces spacing said core from said tank bottom portion, said plurality of pieces being vertically superposed with respect to each other, a vertically uppermost of said vertically superposed pieces contacting said core bottom portion and a vertically lowermost of said vertically superposed pieces contacting said tank bottom portion, said vertically uppermost piece having an acoustic impedance widely different from the acoustic impedance of said core bottom portion and said vertically lowermost piece having an acoustic impedance widely different from the acoustic impedance of said tank bottom portion, each of said plurality of pieces having an acoustic impedance widely different from the acoustic impedance of pieces immediately adjacent to said each piece, and means for laterally supporting said core with respect to said side walls comprising a second plurality of superposed pieces of structurally rigid material interposed between an upper portion of said core and one of said side walls, only one of said second plurality of pieces contacting said upper core portion and only another of said second plurality of pieces contacting said one side wall, said one piece having an acoustic impedance widely different from the acoustic impedance of said upper core portion and said another piece having an acoustic impedance widely different from the acoustic impedance of said one side wall, each of said second plurality of pieces having an acoustic impedance widely different from the acoustic impedance of pieces immediately adjacent to said last-mentioned each piece.

2,731,607
CAST STRUCTURE FOR INDUCTION DEVICE
Herbert R. Gould, Danville, Ill., and Richard L. Hamilton, Fort Wayne, Ind., assignors to General Electric Company, a corporation of New York
Application May 28, 1954, Serial No. 433,108
5 Claims. (Cl. 336—96)



1. An inductive device comprising a laminated core; a coil positioned thereon; means for clamping said core comprising a pair of members positioned respectively at each face of said core, a plurality of elongated members each extending through both of said pair of members and having an end projecting past one of said pair of members, and a plurality of stud members secured respectively to the projecting ends of said elongated members thereby to clamp said pair of members to said core; terminal means secured between said stud members; and a mass of insulating material arranged as a housing to enclose said core said coil and said clamping members, at least a part of said terminal means being arranged to extend outside said material.

2,731,608
INDUCTANCE CORRECTOR
Leo V. Mifflin, Cedar Rapids, Iowa, assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application February 29, 1952, Serial No. 274,211
4 Claims. (Cl. 336—130)

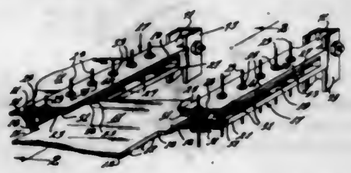


1. Apparatus for controlling the tuning characteristic of a slug-tuned coil comprising, a pair of end plates, guide means connecting said end plates, a tuning shaft rotatably supported between said end plates, a hollow coil form mounted to one of said end plates and concentric about said tuning shaft, a slug threadedly received on the portion of said tuning shaft between said end plates, a bifurcated portion attached to one end of said tuning slug and engageable with said guide, a cam surface attached to said guide, a lever arm attached to said bifurcated member and engaging said cam surface, and a mass of core material mounted on said lever arm and supported adjacent to and external of said coil.

2,731,609
SLIDING CONNECTOR FOR PRINTED CIRCUIT BOARDS
John A. Sobel III, Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application September 29, 1954, Serial No. 459,104
7 Claims. (Cl. 339—17)

1. A connector for use with a printed circuit board having terminals spaced along at least one of two parallel edges thereof, said board having a tab extending from

each of said parallel edges at one end thereof, said connector comprising an elongated member having longitudinal grooves extending along either side and terminating at one end thereof forming upper and lower flanges and having transverse apertures aligned therealong and extending therethrough from top to bottom, an electrical conductor extending through each of said transverse apertures, electrical contact members mounted on said connector and attached at an intermediate point to each conductor, the free ends of each of said contact members extending through each of said lower flanges and being



disposed above said flanges, a ledge extending along each of said lower flanges, each of said ledges being discontinuous at the closed end of its corresponding groove, the length of said discontinuity corresponding to the width of said tab, and means mounted on each of said upper flanges for urging said printed circuit board downward toward its corresponding flange, said tab being adapted to ride on said ledge when said board is being inserted from the open end of said groove, said board being urged downwardly by said last-named means when said tab moves off said ledge at said closed end of said groove whereby said tab is received in said discontinuity.

2,731,610
ELECTRICAL CONNECTORS
Ralph S. Thacker, Flintridge, Calif., assignor, by mesne assignments, to Titeflex, Inc., Newark, N. J., a corporation of Massachusetts
Application March 19, 1952, Serial No. 277,424
5 Claims. (Cl. 339—89)



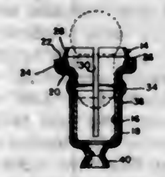
1. A multi-cable connector including two sections with front faces that confront one another when the sections are in assembled relation with one another, electrical elements including pin contacts extending from the front face of one section, complementary electrical elements including sockets in the other section and accessible to the pins through openings in the front face of said other section, each section including a body having a longitudinal passage therethrough tapered throughout at least a portion of its length with the smaller cross-section of the taper toward the front end of the section, a core of electrical insulating material in each body and within which the electrical elements are held, each core being tapered to fit the tapered passage in the body, forward end faces of the cores constituting the areas of the front faces of the connector sections through which the pins extend and through which the sockets are accessible, a separate wire leading from each of the electrical elements of each section through an individual passage in the core in which that electrical element is held, each individual passage having a taper that increases the cross-section of the passage toward its rearward end, means for sealing around the wires where they come out of each core through the rearward face of the core including sealing insulation sleeves fitting snugly over the wires and having tapered outside surfaces that fit the tapered passages in the cores and that extend beyond the rearward ends of said passages, and common clamping means at the rearward end of each core in position to exert an end pressure against all of the sleeves in that core and the core itself to wedge the sleeves against the wires and the sides of the tapered passages and to wedge the core against the body.

2,731,611
ELECTRICAL CONNECTORS
Lawrence J. Kamm, New York, N. Y.
Application July 24, 1953, Serial No. 370,200
6 Claims. (Cl. 339—94)



4. An electrical connector comprising a socket and a plug; said socket comprising a plurality of contacts, insulating means supporting said contacts, a housing enclosing said contacts and having a fixed opening, a closure formed to substantially fit said opening, means for slidably guiding said closure towards said opening, a spring urging said closure towards said opening, and openable moisture-sealing means between said closure and said opening; and said plug comprising a body supporting a second plurality of contacts disposed to mate with the first-mentioned plurality of contacts, a portion of said body being proportioned to enter said fixed opening and to displace said closure while entering said fixed opening; and openable moisture-sealing means for uniting said plug and said housing during entrance of said plug into said fixed opening.

2,731,612
BULB SOCKET HAVING INTEGRAL MEANS FOR ATTACHMENT TO AN APERTURED PANEL
Robert M. Heller, Birmingham, Mich.
Application September 21, 1953, Serial No. 381,216
2 Claims. (Cl. 339—128)



1. A bulb socket for use with a bulb of the type having radially extending pins on its base and adapted to be mounted in an opening in a panel, said socket comprising a one-piece metal body having an annular rear end portion provided with an opening for an electrical conductor and an integral elongated generally cylindrical portion extending forwardly from said annular portion and open at its forward end for the reception of the base of a bulb, the generally cylindrical portion of the body having elongated slots extending rearwardly from its front edge for the major portion of the length of said generally cylindrical portion and dividing the generally cylindrical portion of said body into a plurality of arms which due to their arcuate cross-section are substantially rigid but which are sufficiently outwardly yieldable to receive and resiliently retain the base of a bulb therein, said arms intermediate their ends being provided at their inner

sides with circumferentially aligned inwardly concave channels extending completely across said arms for the reception of the pins on the base of a bulb mounted in said socket, the forward ends of said arms having panel-engaging mounting portions including substantially rigid forwardly and inwardly inclined camming portions, said camming portions and the generally cylindrical portion of said body being dimensioned with respect to the panel opening and bulb base respectively so as to press said arms firmly against the bulb base to insure good electrical contact upon insertion of said socket with a bulb therein in the panel opening.

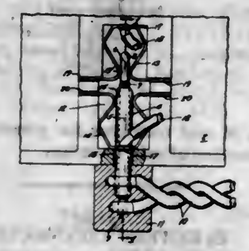
2,731,613
BULB MOUNTING ASSEMBLY FOR ATTACHMENT TO A PERFORATED MOUNTING PANEL
Robert M. Heller, Birmingham, Mich.
Application September 21, 1953, Serial No. 381,218
11 Claims. (Cl. 339—128)



1. A bulb mounting assembly comprising an annular mounting member having a generally cylindrical rear sleeve portion and an outwardly flared front portion, a generally cylindrical bulb socket having its rear end portion received in the sleeve portion of said mounting member and an open front end extending forwardly of said mounting member for the reception of the base of a light bulb, the front portion of said mounting member having two diametrically opposed pairs of closely spaced axially extending slots extending from the front end of said mounting member substantially to the rear sleeve portion thereof and dividing the forward portion of said mounting member into two diametrically opposed relatively narrow relatively flexible latching fingers, and two diametrically opposed relatively wide relatively rigid locator portions, said locator portions having intermediate portions extending radially outwardly and reversely to provide abutments to limit movement of said assembly through an opening in a mounting panel, said fingers at their forward ends having radially outwardly extending engagement portions located forwardly of said abutments and movable through the panel opening on radially inward flexing of said fingers and movable outwardly upon radial outward flexing of said fingers to engage the side of the panel at the opposite side thereof from the abutments on said relatively rigid locator portions, and a yieldable sealing cover overlying the slots in said mounting member and extending forwardly to overlie the forward surfaces of said abutments.

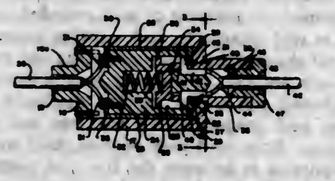
2,731,614
COAXIAL-TYPE MULTIPLE CONDUCTOR CONTACT PLUG
Robert L. Geib and Donald F. Pennie, Minneapolis, Minn., assignors to The Maico Company, Incorporated, Minneapolis, Minn., a corporation of Minnesota
Application December 17, 1951, Serial No. 262,048
3 Claims. (Cl. 339—183)

1. A coaxial-type multiple conductor contact plug comprising a rigid elongated tubular outer conductor, an inner conductor extending axially through but insulated from the tubular outer conductor and having uninsulated contact portions beyond opposite ends of the tubular outer conductor, a pair of lead wires externally anchored each to a corresponding end portion of a different one of said conductors, the point of anchorage of the lead wire to the inner conductor being axially outwardly of the adjacent end of the tubular outer conductor, and a plug



head having the said corresponding end portions of the coaxial outer and inner conductors and the said anchored end portions of the lead wires potted therein defining a potted assembly, said potted assembly locking the conductors against axial movement relative to each other and preventing movement of the lead wires relative to the conductors and to each other.

2,731,615
ELECTRIC SOCKET AND PLUG CONSTRUCTION
Lysle L. Hazen, Detroit, Mich.
Application May 3, 1954, Serial No. 427,056
6 Claims. (Cl. 339—189)

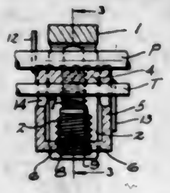


1. An electric socket and plug construction of the class described comprising: a socket housing; a terminal retainer mounted in said housing and spaced from the ends thereof, said retainer having a socket formed in one end; a pair of conducting bars mounted on said retainer and having the opposite ends thereof angularly turned to provide terminals, one of said ends overlying the socket in said retainer; a presser member loosely mounted in the socket in said retainer; a spring engaging said presser member and normally urging the same outwardly of said socket; a socket plug comprising a body; a pair of contact members mounted on said body and projecting outwardly beyond the periphery of said body and engageable behind and in contact with the ends of said conductor overlying the socket in said retainer, the end of said body engaging said presser member and said presser member normally retaining said contact members on said body in contact with said overlying ends.

2,731,616
WIRE CONNECTOR
Joseph Pavelka, St. Louis, Mo., assignor to Joseph Pavelka, Jr., St. Louis, Mo.
Application February 9, 1953, Serial No. 335,810
8 Claims. (Cl. 339—249)

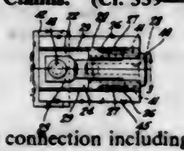
8. In a wire connector, a bolt comprising a head member and a split shank projecting therefrom, a pressure member slidable lengthwise of said shank, there being opposing clamping faces on said members, a part threaded to said shank for moving said pressure member relative to said head member to bring said opposed clamping faces

toward each other, and bendable elements on at least one of said members and movable independently of the rela-



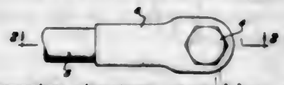
tive position of said members for gripping a wire during relative movement of said members.

2,731,617
ELECTRIC CONNECTOR
Harry C. Doane, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 20, 1951, Serial No. 257,347
3 Claims. (Cl. 339—256)



1. A separable connection including a receptacle in the form of a channel shaped sheet metal member having rounded corners between the flanges and the web portion, a cooperating flat blade plug member narrower than the internal distance between said flanges but wider than said web portion and having its edge portions parallel to said rounded corners and extending in line contact with intermediate portions of said rounded corners when inserted in said receptacle, and a spring tongue extending within said channel member and having one end anchored to said web portion, said spring tongue having adjacent said anchored end a first portion displaced away from said web, said tongue having the free end portion displaced away from said web portion, said tongue having the mid-portion in between the free end portion and said first portion displaced toward said web portion into spring contact with the adjacent face of said plug when in the receptacle for holding the edges of said plug in line contact with the inner rounded edges of said channel member, said free end portion and said channel member being provided with an interengaging limit stop arrangement to limit its movement away from said web portion when said plug is inserted.

2,731,618
CONNECTOR
Ulysses Grant Aberle, Los Angeles, Calif., assignor to The Garrett Corporation, Los Angeles, Calif., a corporation of California
Application September 22, 1952, Serial No. 310,793
2 Claims. (Cl. 339—268)



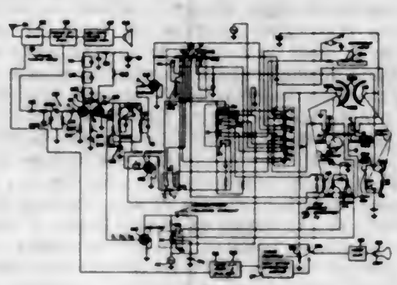
1. A connector structure comprising: a plurality of segments having inner terminal engaging surfaces, a nut surrounding said segments, thread and cam means interengaging said segments and said nut for forcing said segments inwardly during relative rotation of said nut and segments, a conductor member connected with said segments and disposed outwardly of said nut and extending longitudinally of said segments, said segments being adapted to receive a terminal therebetween at one end thereof, said nut extending beyond the opposite ends of said segments, said conductor member being tubular and surrounding said nut.

2,731,619
BRAKE LINING SIGNAL
Clarence F. Fratus, Providence, R. I.
Application September 27, 1954, Serial No. 458,635
4 Claims. (Cl. 340—52)



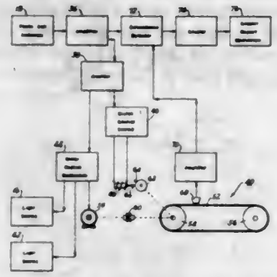
1. In a warning system to prevent undue wear on vehicle brakes, a brake shoe, a brake lining secured to said shoe, a contact assembly disposed below the normal wear surface of said lining, said assembly including a pair of contacts, one of said contacts being disposed further below the normal wear suface of the lining than the other contact, said one contact being connected to a warning device and the other contact being associated with the vehicle ignition system whereby when wear on the lining progresses to a point wherein the one contact is engaged, during brake application, against an associated brake drum a warning device will be energized and whereby continued wear will cause engagement of the other contact with an associated brake drum to interrupt the vehicle ignition operation.

2,731,620
PULSE RESPONSIVE CONTROL APPARATUS IN A COIN DEMAND SELLING SYSTEM
Robert E. Gottfried, West Los Angeles, Calif., assignor, by mesne assignments, to International Telemeter Corporation, a corporation of Delaware
Application May 10, 1951, Serial No. 225,653
4 Claims. (Cl. 340—147)



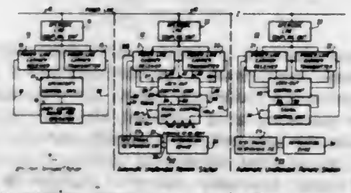
1. In a selling system of the type including a transmitter having a source of a first pulse series and a second pulse series occurring recurrently and alternately representative of data including pricing data which it is desired to transmit to a receiver to enable apparatus to establish a variable price coin demand at said receiver and to enable purchase at said receiver by satisfaction of said coin demand, said receiver including means to receive said pulses from said transmitter, means for establishing a variable price coin demand responsive to a complete first pulse series, open-circuit network means coupling said means to receive said pulses and said means for establishing a coin demand, means for closing said open-circuit network means responsive to pulses from said second pulse series whereby said means to establish a coin demand is actuated by a complete first pulse series, means to acknowledge the coin demand established by said actuation to effectuate a purchase, and means to restore said means for establishing a coin demand to an initial position responsive to a termination of pulses from said source.

2,731,621
COUNTERFEIT DETECTOR
Carl G. Southeimer, Riverside, Conn., assignor to C. G. S. Laboratories, Inc., Stamford, Conn., a corporation of Connecticut
Application April 1, 1952, Serial No. 279,739
9 Claims. (Cl. 340—149)



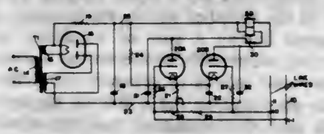
1. Apparatus for verifying the genuineness of a printed document comprising means for holding and moving at constant speed along a predetermined path a document to be verified, optical scanning means arranged to produce electrical signals in accordance with the variations in reflectivity of different scanned portions of said document, a record having a predetermined series of verification signals recorded thereon, a reproducer associated with said record, means driving said record in synchronized relationship with the movement of said document to produce a second time-sequence of signals, a coincidence detector coupled to said reproducer and to said scanning means and responsive to the reception of simultaneous signals therefrom, a counter circuit under the control of said coincidence detector, and an accept-reject mechanism under the control of said counter circuit.

2,731,622
LOCK-OUT SYSTEM
John A. Doremus, Charles Keith Stenerson, and Herbert C. Waterman, Chicago, Ill., assignors to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application December 26, 1952, Serial No. 328,105
14 Claims. (Cl. 340—163)



1. In a carrier wave communication system of the type having a plurality of stations, each of which includes a transmitter and a receiver operating on the same carrier frequency with the receiver normally energized and the transmitter normally de-energized, and including means operating automatically in response to a signal to be transmitted, the lockout control system whereby simultaneous transmission of signals by two or more transmitters is prevented including a unit at each station having in combination, first means adapted to be energized in response to a signal to be transmitted to preliminarily energize the transmitter and de-energize the receiver of the station, said first means at the various stations in the system including means providing energization thereof for different lengths of time, second means adapted to be energized in response to the de-energization of said first means and operating after a predetermined time delay interval to energize the transmitter and de-energize the receiver of the station for transmitting the signal therefrom, and third means responsive to the reception of a carrier signal by the receiver of the station for disabling the energization of said first and second means and thereby preventing the energization of the transmitter of the station.

2,731,623
ELECTRONIC SHUNT DETECTOR FOR A CODE COMMUNICATION SYSTEM
Hugh C. Kendall, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.
Application November 9, 1954, Serial No. 467,775
7 Claims. (Cl. 340—163)



7. In a code communication system, a pair of line wires connecting a central office with each of a plurality of field stations, said line wires having direct-current stepping pulses of one polarity and alternate indication transmission pulses of the opposite polarity applied thereto successively during a cycle of operation, said line wires being selectively shunted on each indication transmission pulse by a respective one of said field stations, shunt detecting means at an indication repeater station having a first and a second electron discharge tube each biased to be normally nonconductive, two resistors of equal value connected in series across said line wires, each of said tubes having its cathode connected through a biasing network to the junction of said resistors, each of said tubes having its control grid connected through a grid leak resistor to a respective one of said line wires, said first tube becoming conductive on each stepping pulse and said second tube becoming conductive on each indication transmission pulse provided said line wires are not shunted, a relay having two windings, one winding of said relay being energized by the plate current of said first tube through a front contact of said relay and the other winding of said relay being energized directly by the plate current of said second tube, whereby said relay is continually in a picked-up condition as said stepping and indication transmission pulses are successively applied to said line wires but is dropped away when said line wires are shunted on any indication transmission pulse and remains dropped away for the next following stepping pulse.

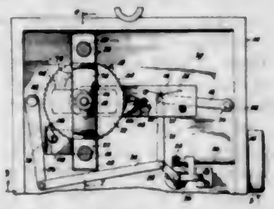
2,731,624
ELECTROMAGNETIC ROD-POSITION INDICATOR
Darwin Krucoff, Chicago, Ill., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application June 19, 1953, Serial No. 362,800
4 Claims. (Cl. 340—196)



1. Means to indicate the position of a movable device comprising, in combination, a housing having a magnetic

permeability of the order of magnitude of that of air and provided with an elongated channel therein, an elongated member slidably disposed within the channel, said member having a portion constructed of material having a magnetic permeability at least ten times that of the housing, and a second portion adjacent thereto constructed of material having a magnetic permeability approximately equal to that of the housing, a pair of electromagnets mounted on the exterior of the housing adjacent to the portion of the member constructed of material having magnetic permeability approximately equal to that of the housing, said electromagnets being angularly positioned relative to each other on a plane normal to the axis of elongation of the member within the housing, one of said electromagnets having a pair of windings, one of said windings being electrically connected to a source of electrical power, and means to measure the relative magnitudes of the electrical currents flowing through the other winding of said electromagnet and the winding of the other electromagnet.

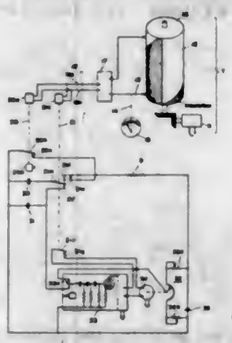
2,731,625
TELEMETRIC SYSTEM
Daniel Melcher, Montclair, and David Hilowitz, West Caldwell, N. J.
Application September 26, 1951, Serial No. 248,326
10 Claims. (Cl. 340—203)



1. In a remote reading gas meter system wherein a gas meter is connected to a remote integrating register by means of electrical conductors, the combination with a gas meter having a sealed gas meter wall, of a magnetic circuit comprising a generally U-shaped member and a bar member, one of said members being permanently magnetized and the other being permeable, the legs of said U-shaped member passing through the aforesaid wall and being sealed thereto with a gas-tight seal, the bar member being pivotally mounted for rotational movement inside the wall relative to the U-shaped member, means operatively linking said bar member with the regular linkage of the gas meter for rotation thereby, said means including a unidirectional connection such that the bar member can turn ahead of the linkage under magnetic attraction after being moved by the linkage to a point beyond magnetic dead center, and a coil on said U-shaped member outside the wall for connection to conductors leading from said coil to a remote pulse operated integrating register, the movement of the magnetic system caused by the gas meter linkage being the sole source of electrical power for the system.

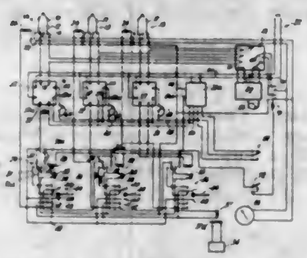
2,731,626
IMPULSE TELEMETERING SYSTEMS
James B. Carolus, Elkins Park, Pa., assignor to Leeds and Northrup Company, Philadelphia, Pa., a corporation of Pennsylvania
Application July 1, 1950, Serial No. 171,735
16 Claims. (Cl. 340—206)

1. In an impulse telemetering system, a receiver comprising a capacitor, means for charging said capacitor at a controlled rate, an electrical instrument in circuit with a potential difference of known magnitude and including means for adjusting said potential difference to equal to the voltage acquired by said capacitor and applied to said instrument, and relay-actuated means operable solely in response to and under the control of telemetering impulses for discharging said capacitor and for connecting said capacitor to said charging means for a period representative of the length of a telemetering impulse,



thereby to produce a voltage on said capacitor representative of the length of said telemetering impulse, for disconnecting said capacitor from said charging means and for connecting said capacitor to said electrical instrument in series with said adjustable potential difference.

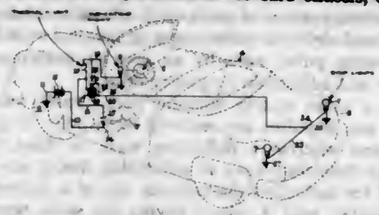
2,731,627
THERMOCOUPLE MONITORING SYSTEM
John A. Herbst, Montville, N. J., assignor to Bogue Electric Manufacturing Co., Paterson, N. J., a corporation of New Jersey
Application March 10, 1953, Serial No. 341,537
11 Claims. (Cl. 340—213)



1. In combination, a plurality of thermocouples each thermocouple comprising a test junction and a reference junction in circuit therewith, means for maintaining said reference junctions at a constant elevated temperature higher than the temperature to which the test junctions are exposed, said interconnected junctions providing an electrical output inversely related to changes in temperature at said test junctions, an electrically operated audible alarm means, a circuit controlling the operation of said alarm means, switch means associated with each thermocouple for controlling said circuit, and means operative in response to a decrease in electrical output of each thermocouple for actuating the switch means associated therewith.

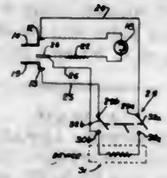
2,731,628
STOP LIGHT INDICATOR
Nick J. Campanella, Bound Brook, N. J.
Application August 16, 1952, Serial No. 304,765
2 Claims. (Cl. 340—252)

1. An electric indicator and stop light system of the character described, adapted for use upon an automobile provided with a brake pedal and a rear stop light for indicating operation of the brake pedal, said system including an electric current source having one pole grounded to the chassis of the car, a stationary first contact located in insulated condition upon the chassis, a movable contact electrically connected to the other pole of said current source adjacent to the stationary contact and mechanically connected to the brake pedal to be brought by the latter into active contact with said stationary contact upon depression of said brake pedal, an indicator disposed in the field of view of the driver of the automobile and having one pole thereof connected to said chassis, a relay coil with a core being connected at one end to the first stationary contact and at the other end to one pole of the rear stop light, the other pole of said rear stop light being connected to said chassis, conductor



means interconnecting the other pole of said indicator and the first mentioned one end of said relay coil, a second stationary contact forming a relay contact connected to the last mentioned conductor means and located adjacent to said relay coil, an electrical resistance control unit connected in said conductor means between said second stationary contact and said relay coil, a movable relay contact operable adjacent to the relay core to make active contact with the second stationary contact, a conductor interconnecting the movable relay contact and the other end of said relay coil and also connected to the first mentioned one pole of said rear stop light.

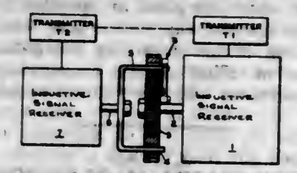
2,731,629
WIRING ASSEMBLY WITH INDICATOR MEANS
Joseph A. Siderman, Red Bank, N. J.
Application January 6, 1955, Serial No. 480,106
11 Claims. (Cl. 340—252)



1. An electrical wiring assembly, which comprises an insulating housing, a pair of main terminals within the housing, an auxiliary terminal within the housing, a connection between one main terminal and the auxiliary terminal including an indicating device and a resistance in series therewith, a three conductor cable having its conductors connected at one end within the housing to the main and auxiliary terminals, respectively, and a switch having a pair of terminals connected to the other ends of the conductors leading from the main terminals within the housing, a second pair of terminals adapted to be connected to a load, and blades attached to the terminals of the first pair and operable to connect them to respective terminals of the second pair, the third conductor of the cable connecting the auxiliary terminal to one of the second pair of switch terminals.

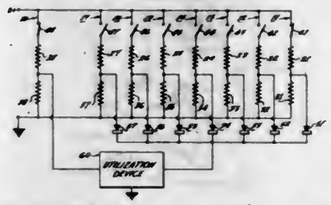
2,731,630
MONITORING SYSTEM FOR INDUCTIVE SIGNALING DEVICES
John C. Karlson, Brooklyn, N. Y., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application March 27, 1953, Serial No. 345,074
9 Claims. (Cl. 340—268)

1. A monitoring system for a signal system having a signal transmitter and a signal receiver energized thereby, comprising a second signal transmitter, said transmitters including rotors slaved together, and a second signal receiver energized by the second transmitter, said receivers



each including a rotor, and a yieldable driving coupling connecting the receiver rotors, arranged for deflection by differences in torque in the receiver rotors.

2,731,631
CODE CONVERTER CIRCUIT
Spencer W. Spaulding, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application October 31, 1952, Serial No. 317,871
13 Claims. (Cl. 340—318)



1. A code converter circuit for converting binary encoded signal messages, formed by permutations of *n* signals of either of two types corresponding to permutations of *n* binary digits, to different magnitude signals each representative of a different permutation of said binary digits, said circuit comprising a plurality of impedance elements having different impedance magnitudes, one of said impedance elements being associated with one of said digits, each of the others of said impedance elements being associated with a different permutation of the others of said digits, switch means responsive to a signal representing said one digit for controlling current flow in said one impedance element, additional switch means for controlling current flow in each of said other impedance elements in response to signals representing the associated permutation of said other digits, a first output terminal coupled to said one impedance element, a second output terminal coupled to said other impedance elements in parallel, and means coupled between said output terminals for algebraically combining output signals produced at said first and second output terminals.

2,731,632
CHANGEABLE INDICATOR
Oscar S. Field and Ralph W. Hewes, Rochester, N. Y., assignors to General Railway Signal Company, Rochester, N. Y.
Application February 13, 1952, Serial No. 271,406
9 Claims. (Cl. 340—378)



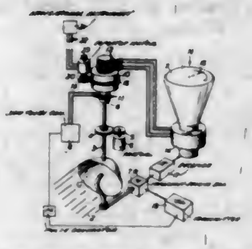
1. A changeable indicator unit comprising in combination, a continuously driven gear wheel, a rotatable drum carrying the different indicia to be displayed and operable to corresponding positions, spring biased locking means having a plurality of different positions for positively locking said drum in each of said different op-

erated positions, an electromagnetic clutch effective when energized to actuate said spring biased locking means to unlock said drum, said electromagnetic clutch also being effective when energized to operably connect said drum to said continuously driven gear wheel, and circuit controlling means governing energization of said electromagnet including contacts cooperating with cams driven in accordance with the rotation of said drum.

2,731,633
AZIMUTH STABILIZED PLAN POSITION INDICATOR

Bernard J. O'Kane, Harrow-on-the-Hill, and Eric J. Dickie, Rayne, near Braintree, England, assignors to The General Electric Company Limited, London, England

Application July 25, 1947, Serial No. 763,568
In Great Britain May 16, 1945
Section 1, Public Law 690, August 8, 1946
Patent expires May 16, 1965
8 Claims. (Cl. 343—11)

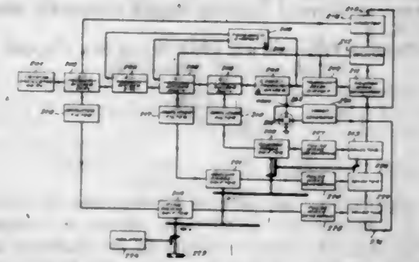


1. In radio navigation apparatus for use on a mobile craft, a pulse modulated radio transmitter-receiver, a rotatable directive aerial device, switching means connecting said aerial selectively with the transmitting and receiving portions of said transmitter-receiver in a selected time sequence, a cathode ray tube indicator connected to the receiver portion of said transmitter-receiver for modulation thereby, a radial time base generator assembly connected to said cathode ray tube indicator, means on the craft responsive to changes in the heading of the craft, and differential means connected to said second-named means and to said rotatable directive aerial device to maintain the orientation of the display on the cathode ray tube indicator constant during change of the compass heading of the said mobile craft, said differential means including means for controlling the rotation of the time base in accordance with both the rotation of said directive aerial device and the changes in compass heading of the said mobile craft.

2,731,634
TIMING APPARATUS

Winslow Palmer, West Hempstead, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware

Application December 7, 1945, Serial No. 633,473
55 Claims. (Cl. 343—103)



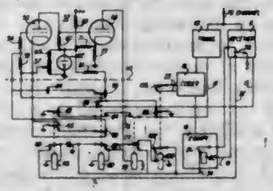
1. In electronic timing apparatus, means for producing a first series of waves having a substantially constant fundamental frequency, means for producing a second series of waves having a fundamental frequency related to the fundamental frequency of said first series of waves by an adjustable ratio, means responsive to the fundamental component of each wave of said first series for shifting the phase thereof, means for initiating reference and delayed pulse waves at said adjustable frequency and means for terminating said reference and delayed pulse waves in response to a particular wave of said first series and the phase-shifted component of a particular wave of said first series, respectively, subsequent to a predetermined portion of each wave of said second series, whereby said delayed pulse wave is delayed relative to said reference pulse wave by an interval unchanged by change in said adjustable frequency ratio.

28. In a radio system wherein periodically recurring A pulses and B pulses are received from pairs of ground stations and wherein a deflecting wave of fixed timing and a like deflecting wave of adjustable timing are to be produced for deflecting the cathode ray of a cathode ray tube indicator, said A pulses having the same repetition period as said B pulses, said repetition period being different for each pair of ground stations, means including an oscillator followed by a chain of frequency dividers for producing a square wave having the same repetition period as that of the A and B pulses received from a particular pair of ground stations, the half cycle of said square wave that occurs during the occurrence of a B pulse being identified as the slave period, means for obtaining from said last means a continuous sine wave signal having a fixed phase with respect to said slave period for any of said ground station repetition rates, a phase shifter through which said sine wave signal is passed to obtain a phase-shifted wave, means for converting said phase-shifted wave to short-duration timing pulses, means for selecting a desired one of said timing pulses, and means for producing said adjustable deflecting wave in response to the occurrence of said selected pulse whereby said adjustable deflecting wave may be shifted to a desired position along a time axis by selecting a desired timing pulse and by shifting the phase of the selected timing pulse by said phase shifter.

2,731,635
PRIORITY CONTROL APPARATUS FOR A COMMUNICATION SYSTEM

Leonard G. Walker, Oak Park, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois

Application August 9, 1954, Serial No. 448,641
9 Claims. (Cl. 340—163)



1. In a communication system of the type having a plurality of stations, each of which includes signal transmitting and receiving means operating in the system, and with the receiving means adapted to operate equipment in response to received information signals of certain duration and normally operative to receive signals and the transmitting means adapted to transmit signals indicating the condition of the equipment and normally inoperative, the priority control system whereby an order of preference is established for stations initiating transmissions of information substantially at one time, said system including at each station the combination of, first means adapted to render operative said transmitting means for transmission of a query signal and render

inoperative said receiving means in response to information to be transmitted, timing means operated by said first means to render inoperative said transmitting means and operate said receiving means to terminate said query signal after a first time interval which interval is substantially the same for all stations in the system, said first time interval being of a duration too short to cause operation of said equipment, said timing means providing a second time interval following said first time interval with said second time interval being different for different stations in the system, means operating upon termination of said second time interval to render inoperative said receiving means and to operate said transmitting means for transmission of the information, said receiving means including signal presence means responsive to a signal in the system from another station for preventing operation of said transmitting means, and means coupled to said timing means and operating in response to operation of said signal presence means during said second time interval to restart said second time interval when operation of said signal presence means is terminated, whereby a station with the shorter second interval is operated first in the event of simultaneous operation of said first means at two stations.

DESIGNS

JANUARY 17, 1956

176,652
COMBINATION CASEMENT WINDOW HOUSING AND WINDOW OPERATOR
Donn C. Blanchard, North Miami, Fla., assignor, by mesne assignments, to Stanley Building Specialties Company, a corporation of Florida
Application July 13, 1955, Serial No. 36,947
Term of patent 14 years
(Cl. D10—10)



176,653
COMBINATION CASEMENT WINDOW HOUSING AND WINDOW OPERATOR
Donn C. Blanchard, North Miami, Fla., assignor, by mesne assignments, to Stanley Building Specialties Company, a corporation of Florida
Application July 13, 1955, Serial No. 36,948
Term of patent 14 years
(Cl. D10—10)



176,654
COMBINATION CASEMENT WINDOW HOUSING AND WINDOW OPERATOR
Donn C. Blanchard, North Miami, Fla., assignor, by mesne assignments, to Stanley Building Specialties Company, a corporation of Florida
Application July 13, 1955, Serial No. 36,949
Term of patent 14 years
(Cl. D10—10)



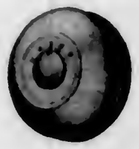
176,655
STOCKING
Eric Boettcher, Southampton, Pa.
Application October 13, 1953, Serial No. 27,161
Term of patent 3½ years
(Cl. D47—7)



176,656
ELECTRIC SWITCH
Russell S. Davis and Elwood T. Platz, Detroit, Mich., assignors to BullDog Electric Products Co., Detroit, Mich., a corporation of West Virginia
Application July 1, 1952, Serial No. 20,441
Term of patent 14 years
(Cl. D26—13)



176,657
CONTROL INSTRUMENT
Henry Dreyfuss, South Pasadena, Calif., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application June 1, 1953, Serial No. 25,258
Term of patent 14 years
(Cl. D52—7)



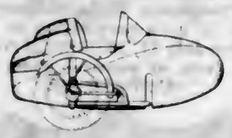
176,658
HAND SCOOP
William M. Emerson, Kansas City, Mo.
Application May 17, 1955, Serial No. 36,059
Term of patent 14 years
(Cl. D44—29)



176,659
NOVELTY CIGAR CONTAINER OR THE LIKE
Howard L. Epperson, Sweetwater, and Matthew J. Nesbit and Robert F. Myrick, Jr., Concord, Tenn.
Application May 18, 1955, Serial No. 36,081
Term of patent 14 years
(Cl. D29—23)



176,660
MOTORCYCLE SIDECAR
Roger L. Gamaunt, Redondo Beach, Calif.
Application October 22, 1953, Serial No. 27,278
Term of patent 3½ years
(Cl. D90—8)



176,661
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 7, 1955, Serial No. 36,850
Term of patent 7 years
(Cl. D45—16)



176,662
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 13, 1955, Serial No. 36,929
Term of patent 7 years
(Cl. D45—16)



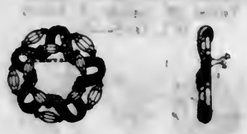
176,663
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 13, 1955, Serial No. 36,940
Term of patent 7 years
(Cl. D45—16)



176,664
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 13, 1955, Serial No. 36,941
Term of patent 7 years
(Cl. D45—16)



176,665
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 13, 1955, Serial No. 36,942
Term of patent 7 years
(Cl. D45—19)



176,666
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 13, 1955, Serial No. 36,943
Term of patent 7 years
(Cl. D45—9)



176,667
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 21, 1955, Serial No. 37,052
Term of patent 7 years
(Cl. D45—4)



176,668
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 21, 1955, Serial No. 37,053
Term of patent 7 years
(Cl. D45—16)



176,669
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 21, 1955, Serial No. 37,054
Term of patent 7 years
(Cl. D45—19)



176,670
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 21, 1955, Serial No. 37,055
Term of patent 7 years
(Cl. D45—9)



176,671
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 21, 1955, Serial No. 37,057
Term of patent 7 years
(Cl. D45—16)



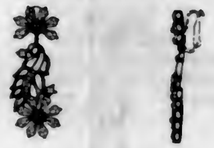
176,672
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 21, 1955, Serial No. 37,058
Term of patent 7 years
(Cl. D45—19)



176,673
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 21, 1955, Serial No. 37,059
Term of patent 7 years
(Cl. D45—9)



176,674
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 21, 1955, Serial No. 37,060
Term of patent 7 years
(Cl. D45—9)



176,675
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 21, 1955, Serial No. 37,061
Term of patent 7 years
(Cl. D45—16)



176,676
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 21, 1955, Serial No. 37,062
Term of patent 7 years
(Cl. D45—16)



176,677
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,151
Term of patent 7 years
(Cl. D45—9)



176,678
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,155
Term of patent 7 years
(Cl. D45—16)



176,679
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,156
Term of patent 7 years
(Cl. D45—19)



176,680
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,157
Term of patent 7 years
(Cl. D45—16)



176,681
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,158
Term of patent 7 years
(Cl. D45—16)



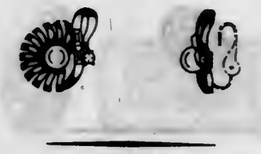
176,682
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,160
Term of patent 7 years
(Cl. D45—9)



176,683
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,161
Term of patent 7 years
(Cl. D45—16)



176,684
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,163
Term of patent 7 years
(Cl. D45—9)



176,685
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,165
Term of patent 7 years
(Cl. D45—16)



176,686
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,166
Term of patent 7 years
(Cl. D45—16)



176,687
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,167
Term of patent 7 years
(Cl. D45—16)



176,688
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,168
Term of patent 7 years
(Cl. D45—16)



176,689
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,169
Term of patent 7 years
(Cl. D45—9)



176,690
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 3, 1955, Serial No. 37,286
Term of patent 7 years
(Cl. D45—4)



176,691
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 3, 1955, Serial No. 37,287
Term of patent 7 years
(Cl. D45—19)



176,692
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 3, 1955, Serial No. 37,288
Term of patent 7 years
(Cl. D45—4)



176,693
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 3, 1955, Serial No. 37,289
Term of patent 7 years
(Cl. D45—16)



176,694
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 3, 1955, Serial No. 37,290
Term of patent 7 years
(Cl. D45—9)



176,695
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 3, 1955, Serial No. 37,291
Term of patent 7 years
(Cl. D45—19)



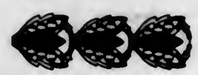
176,696
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 3, 1955, Serial No. 37,292
Term of patent 7 years
(Cl. D45—16)



176,697
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 3, 1955, Serial No. 37,293
Term of patent 7 years
(Cl. D45—19)



176,698
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 3, 1955, Serial No. 37,294
Term of patent 7 years
(Cl. D45—4)



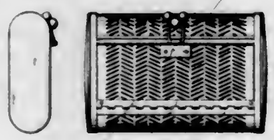
176,699
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 3, 1955, Serial No. 37,295
Term of patent 7 years
(Cl. D45—19)



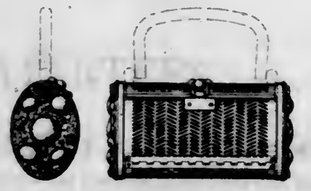
176,700
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 3, 1955, Serial No. 37,296
Term of patent 7 years
(Cl. D45—9)



176,701
HANDBAG
Harry T. Silverman, Forest Hills, N. Y.
Application July 19, 1955, Serial No. 37,035
Term of patent 3½ years
(Cl. D87—3)



176,702
HANDBAG
Harry T. Silverman, Forest Hills, N. Y.
Application July 19, 1955, Serial No. 37,036
Term of patent 3½ years
(Cl. D87—3)



176,703
HOLDER FOR TOILET PAPER
Denzil D. Snively, San Francisco, Calif.
Application September 27, 1954, Serial No. 32,452
Term of patent 3½ years
(Cl. D4—3)



176,704
SPECTACLE FRAME
Maury Spencer, Virginia Beach, Va.
Application May 10, 1954, Serial No. 30,386
Term of patent 7 years
(Cl. D57—1)



176,705
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,152
Term of patent 7 years
(Cl. D45—19)



176,706
BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,154
Term of patent 7 years
(Cl. D45—4)



LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 17TH DAY OF JANUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Graf, Fred V. Brassiere. Re. 24,111, 1–17–56, Cl. 2—42.
Motorola, Inc.: *See*—
Winkler, Marion R. Re. 24,110.
Winkler, Marion R., to Motorola, Inc. Audio compression system. Re. 24,110, 1–17–56, Cl. 332—18.

LIST OF PLANT PATENTEES

Armstrong, John A., to Armstrong Nurseries, Inc. Rose plant. 1,448, 1–17–56, Cl. 47—61.
Armstrong Nurseries, Inc.: *See*—
Armstrong, John A. 1,448.
Swim, Herbert C. 1,450.
Perrine, David B. Peach tree. 1,449, 1–17–56, Cl. 47—62.
Swim, Herbert C., to Armstrong Nurseries, Inc. Rose plant. 1,450, 1–17–56, Cl. 47—61.

LIST OF DESIGN PATENTEES

Blanchard, Donn C., to Stanley Building Specialties Company. Combination casement window housing and window operator. 176,652, 1–17–56, Cl. D10—10.
Blanchard, Donn C., to Stanley Building Specialties Company. Combination casement window housing and window operator. 176,653, 1–17–56, Cl. D10—10.
Blanchard, Donn C., to Stanley Building Specialties Company. Combination casement window housing and window operator. 176,654, 1–17–56, Cl. D10—10.
Boettcher, Eric. Stocking. 176,655, 1–17–56, Cl. D47—7.
BullDog Electric Products Co.: *See*—
Davis, Russell S., and Platz. 176,656.
Coro, Inc.: *See*—
Katz, Adolph. 176,661–176,700.
Katz, Adolph. 176,705.
Katz, Adolph. 176,706.
Davis, Russell S., and E. T. Platz, to BullDog Electric Products Co. Electric switch. 176,656, 1–17–56, Cl. D26—13.
Dreyfuss, Henry, to Minneapolis-Honeywell Regulator Company. Control instrument. 176,657, 1–17–56, Cl. D52—7.
Emerson, William M. Hand scoop. 176,658, 1–17–56, Cl. D44—29.
Epperson, Howard L., M. J. Nesbit, and R. F. Myrick, Jr. Novelty cigar container or the like. 176,659, 1–17–56, Cl. D29—23.
Gamaunt, Roger L. Motorcycle sidecar. 176,660, 1–17–56, Cl. D90—8.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,661, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Link chain for a bracelet or the like. 176,662, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,663, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,664, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,665, 1–17–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,666, 1–17–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Link chain for a bracelet or the like. 176,667, 1–17–56, Cl. D45—4.
Katz, Adolph, to Coro, Inc. Necklace or the like. 176,668, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,669, 1–17–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,670, 1–17–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,671, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,672, 1–17–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,673, 1–17–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,674, 1–17–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Link chain for a bracelet or the like. 176,675, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,676, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,677, 1–17–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Necklace or the like. 176,678, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,679, 1–17–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Necklace or the like. 176,680, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,681, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,682, 1–17–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,683, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,684, 1–17–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,685, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,686, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,687, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,688, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,689, 1–17–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Link chain for a bracelet or the like. 176,690, 1–17–56, Cl. D45—4.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,691, 1–17–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Link chain for a bracelet or the like. 176,692, 1–17–56, Cl. D45—4.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,693, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,694, 1–17–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,695, 1–17–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Necklace or the like. 176,696, 1–17–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,697, 1–17–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,698, 1–17–56, Cl. D45—4.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,699, 1–17–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,700, 1–17–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,705, 1–17–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Bracelet or the like. 176,706, 1–17–56, Cl. D45—4.
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Myrick, Robert F., Jr.: *See*—
Epperson, Howard L., Nesbit, and Myrick. 176,659.
Nesbit, Matthew J.: *See*—
Epperson, Howard L., Nesbit, and Myrick. 176,659.
Platz, Elwood T.: *See*—
Davis, Russell S., and Platz. 176,656.
Silverman, Harry T. Handbag. 176,701, 1–17–56, Cl. D87—3.
Silverman, Harry T. Handbag. 176,702, 1–17–56, Cl. D87—3.
Snively, Denzil D. Holder for toilet paper. 176,703, 1–17–56, Cl. D4—3.
Spencer, Maury. Spectacle frame. 176,704, 1–17–56, Cl. D57—1.
Stanley Building Specialties Company: *See*—
Blanchard, Donn C. 176,652.
Blanchard, Donn C. 176,653.
Blanchard, Donn C. 176,654.

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TO WHOM

PATENTS WERE ISSUED ON THE 17TH DAY OF JANUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Abelson, Maurice. Slit cover for window devices. 2,731,117, 1–17–56, Cl. 189—75.
Aberle, Ulysses G., to The Garrett Corp. Connector. 2,731,618, 1–17–56, Cl. 339—268.
Ackert, George F., and R. A. Peterson. Process for extraction of sulfur from sulfur ores. 2,731,332, 1–17–56, Cl. 23—308.
Acme Homes Metal Works, Inc.: *See*—
Duncan, William A. 2,731,317.
Adams, Clark E., R. W. Krebs, and C. N. Kimberlin, Jr., to Esso Research and Engineering Co. Conversion of heavy hydrocarbon oils. 2,731,394, 1–17–56, Cl. 196—49.
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Mitchell, Lester F. 2,730,948.
Mitchell, Lester F. 2,730,949.
Adey, Wilfred M.: *See*—
Houdry, Eugene J., and Adey. 2,731,541.
Adler, Jason A.: *See*—
Marshall, Neil A., and Adler. 2,731,559.
Aeroquip Corp.: *See*—
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Smisko, John. 2,731,058.
Aerosol Research Co.: *See*—
Green, Edward H. 2,731,298.
Aeschlimann, John A., and A. Stempel, to Hoffmann-La Roche Inc. Choline esters. 2,731,493, 1–17–56, Cl. 260—490.
Aetna-Standard Engineering Co., The: *See*—
Hale, Andrew, and McClellan. 2,730,755.
Agriculture, United States of America as represented by the Secretary of: *See*—
Reinhardt, Robert M., Daul, and Reid. 2,731,323.
Aircraft-Marine Products, Inc.: *See*—
Macy, James C. 2,730,718.
Air Force, United States of America as represented by the Secretary of the: *See*—
Groeper, Lawrence H. 2,731,599.
Air Preheater Corp., The: *See*—
Flurschutz, Glenn E. 2,731,243.
Air Products Inc.: *See*—
Steele, Arthur E. 2,730,870.
Akin, George A., to Eastman Kodak Co. Recovery of acetylene from gas mixtures by absorption in selective solvents. 2,731,507, 1–17–56, Cl. 260—679.
Akin, Orville C. Saw guard assembly for rotary table saws. 2,731,049, 1–17–56, Cl. 143—159.
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Aladdin Industries, Inc.: *See*—
Bramming, Carl. 2,731,299.
Albrecht, Henry P., and K. H. Wilson, to Waco Mfg. Co. Scaffold support. 2,731,303, 1–17–56, Cl. 304—10.
Alcock, John F. Resilient power-transmission wheels. 2,731,256, 1–17–56, Cl. 267—1.
Alden, Carroll R., to Ex-Cell-O Corp. Dispensing container and bland with improved pouring mechanism. 2,731,188, 1–17–56, Cl. 229—17.
Alexander, Guy B., R. K. Iler, and F. J. Wolter, to E. I. du Pont de Nemours and Co. Process of preparing dense amorphous silica aggregates and products. 2,731,326, 1–17–56, Cl. 23—182.
Alkydol Laboratories, Inc.: *See*—
Cody, William P., and Wollan. 2,731,429.
All American Engineering Co.: *See*—
Cotton, Robert B., and Doolittle. 2,731,219.
Allen, Wayne H.: *See*—
Barr, Malcolm J. 2,731,240.
Allied Steel and Conveyors, Inc.: *See*—
Harrison, Homer S. 2,731,127.
Allison, Lloyd H., to Plan-It Homes. Corner stud construction. 2,731,116, 1–17–56, Cl. 189—38.
Aluminum Co. of America: *See*—
Brondyke, Kenneth J. 2,731,362.
Alunas, John. Paper clips. 2,730,781, 1–17–56, Cl. 24—85.
Alvistur, Oscar. Bottle stoppers and liquid pouring devices. 2,731,172, 1–17–56, Cl. 222—78.
American Can Co.: *See*—
Campbell, Denis J., Jr., and Kaiser. 2,730,983.
Socke, John E. 2,730,982.
Socke, John E. 2,731,132.
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Socke, John E. 2,731,136.
Socke, John E. 2,731,137.
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Hook, Edwin O., and Beegle. 2,731,415.
Karnes, Herman F., and Gruber. 2,731,401.
Layman, Martha K. 2,731,438.
Long, Robert S. 2,731,474.
McCormick, Jerry R. D., and Smith. 2,731,497.
McCormick, Jerry R. D., and Muller. 2,731,388.
McCormick, Jerry R. D., and Muller. 2,731,389.
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Tansey, Robert P., and Schneller. 2,731,390.
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American Metal Products Co.: *See*—
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American Optical Co.: *See*—
De Angelis, Armand. 2,730,924.
Kavanagh, Arthur J. 2,730,925.
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Stevenson, Robert. 2,731,035.
Andersen, Soren K., to The Garrett Corp. Oil cooler cooled by air and fuel. 2,731,239, 1–17–56, Cl. 257—2.
Anderson, Arnold G., and B. H. Gwynn, to Gulf Research & Development Co. Purification of hydroformylation reaction products. 2,731,501, 1–17–56, Cl. 260—604.
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Layne, Harold W. 2,731,191.
Anderson, W. Carl, to The Union Metal Mfg. Co. Guy rod clamp for bracket arm. 2,731,227, 1–17–56, Cl. 248—221.
Anderson, Walter A., to Underwood Corp. Type bar for accounting machine. 2,730,945, 1–17–56, Cl. 101—109.
Anderson, William W., and L. W. Rowe, to National Lead Co. Hydrometallurgical treatment of titaniferous iron material. 2,731,327, 1–17–56, Cl. 23/202.
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Anklesaria, Maneck K. Telephone control device. 2,731,522, 1–17–56, Cl. 179—178.
Anper, Inc.: *See*—
Perugia, André. 2,730,736.
Anson, Arthur H. Molded article. 2,731,056, 1–17–56, Cl. 150—52.
Ansor Corp.: *See*—
Rousseau, Robert. 2,731,585.
Anthony, Russel W., and J. A. Psenka, to National Broach & Machine Co. Broaching tool. 2,730,793, 1–17–56, Cl. 29—95.1.
Anthum, Bjarne, to Motorola, Inc. Radio receiver with automatic gain control for audio stage. 2,731,558, 1–17–56, Cl. 250—20.
Appleton, Arthur I. Spotlight mounting head. 2,731,543, 1–17–56, Cl. 240—4.2.
Arblaster, Victor J. Journal lubricating device. 2,731,307, 1–17–56, Cl. 308—91.
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Artese, Dominick, and S. Ciambriello. Sweeper. 2,730,739, 1–17–56, Cl. 15—104.
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Fischer, Richard A., Arthur, and Kemper. 2,731,022.
Arundale, Erving, and J. P. Thorn, to Esso Research and Engineering Co. Desulfurization and sweetening process. 2,731,393, 1–17–56, Cl. 196—32.
Ashley, Julius N.: *See*—
Wien, Ronald, Ashley, and Leeds. 2,731,500.
Atkinson, Robert G., to Phillips Petroleum Co. 2,731,328, 1–17–56, Cl. 23—209.4.
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Automatic Electric Laboratories, Inc.: *See*—
Eckman, Leonard G., and Zaruba. 2,731,554.
Wicks, John. 2,731,515.
Avery, Harold T., to Minneapolis-Honeywell Regulator Co. Automatic control system for rotating wing aircraft. 2,731,215, 1–17–56, Cl. 244—17.13.
Ayres, Waldemar A., to White Sewing Machine Corp. Sewing machine. 2,730,978, 1–17–56, Cl. 112—228.
Babbage, Neville F. Sanitary appliance for children's use. 2,730,726, 1–17–56, Cl. 4—141.
Babcock & Wilcox Co., The: *See*—
Edgecombe, David A. 2,731,123.
Bachmann, Werner E., E. L. Jenner, and L. B. Scott, to United States of America as represented by the Secretary of War. Manufacture of cyclonite. 2,731,463, 1–17–56, Cl. 260—248.

Bachner, Martin, to The Firestone Tire & Rubber Co. Tow target. 2,731,046, 1–17–56, Cl. 139—420.
Back, Frank G., and H. Lowen. Catadioptric telephoto objective systems. 2,720,926, 1–17–56, Cl. 88—57.
Bacon, John H. Musical whistle. 2,730,920, 1–17–56, Cl. 84—380.
Badische Anilin- & Soda-Fabrik Aktiengesellschaft: *See*—
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Janson, Alfons. 2,731,483.
Reppe, Walter, V. Kutepow, and Heintzeler. 2,731,504.
V. Reibnitz, Bruno. 2,731,472.
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Bailey, Russell L. Safety paper box cutter. 2,730,800, 1–17–56, Cl. 30—2.
Baker, Albert D., K. L. Jones, and E. A. Leavengood, to General Motors Corp. Refrigerating apparatus. 2,730,866, 1–17–56, Cl. 62—4.
Baker, Albert D., L. E. Muller, and E. P. Harris, to General Motors Corp. Air grille. 2,731,104, 1–17–56, Cl. 183—44.
Baker, Richard S. Polyphase electromagnet strip guiding and tension device. 2,731,212, 1–17–56, Cl. 242—75.
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Baldwin, John D., Jr., T. A. St. Clair, and A. J. Weatherhead, Jr., to The Weatherhead Co. Mounting means for regulators. 2,731,228, 1–17–56, Cl. 248—300.
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Bandy, Isaac L. Sash lock. 2,731,286, 1–17–56, Cl. 292—5.
Baril, Albert, Jr., and I. H. De Barbieris, to Thos. J. Moran's Sons Inc. Sheet separator. 2,731,263, 1–17–56, Cl. 271—18.
Barnhart, William S., to The Firestone Tire & Rubber Co. Process of preparing bromochlorodifluoromethane by reacting chlorodifluoro methane and bromine. 2,731,505, 1–17–56, Cl. 260—653.
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Barrett, Hilliard E., and E. A. Gallo, to Curtiss-Wright Corp. Fluid pressure regulator. 2,731,039, 1–17–56, Cl. 138—45.
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Barsky, George. Method of making cyanohydrins. 2,731,490, 1–17–56, Cl. 260—465.6.
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O'Neill, Robert C., and Basso. 2,731,384.
O'Neill, Robert C., and Basso. 2,731,385.
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Baughan, Graham O. Oscillatable paste dispensing unit. 2,730,991, 1–17–56, Cl. 118—415.
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Beard, Arthur D., to Radio Corp. of America. Photoelectric inspection by a coincident method. 2,730,922, 1–17–56, Cl. 88—14.
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Hofmann, Hugo. 2,730,757.
Bechtold, Karl. Method and apparatus for securing work pieces. 2,730,787, 1–17–56, Cl. 26—15.
Beck, Charles E., to Motorola, Inc. Radio set housing and mounting. 2,731,555, 1–17–56, Cl. 250—16.
Beck, Hans J., and E. F. Schmid, to SKF Kugellagerfabriken Gesellschaft mit beschränkter Haftung. Top roller for spinning machines. 2,730,771, 1–17–56, Cl. 19—142.
Becker, Carl. Apparatus for suppressing galloping conductors. 2,731,509, 1–17–56, Cl. 174—42.
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Belz, Paul D., to the United States of America as represented by the Secretary of the Navy. Sliding-hinge. 2,731,320, 1–17–56, Cl. 312—323.
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Binder, George G., Jr., R. C. West, and K. H. Andresen, to Esso Research and Engineering Co. Water flooding secondary recovery method. 2,731,414, 1–17–56, Cl. 252—8.55.
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Porsche, Ferdinand A., E., and Binder. 2,731,008.
Binding, Kenneth W., to L. M. Beckwith. Automobile top carriers for large objects. 2,731,181, 1–17–56, Cl. 224—42.1.
Birkner, Max. Furnace and boiler plant. 2,730,971, 1–17–56, Cl. 110—40.
Birkner, Max. Apparatus for burning solid fuel. 2,730,998, 1–17–56, Cl. 122—4.
Birkner, Max. Furnace and boiler plant. 2,730,999, 1–17–56, Cl. 122—4.
Birkner, Max K. Burning solid fuel. 2,730,997, 1–17–56, Cl. 122—4.
Bjorksten Research Laboratories, Inc.: *See*—
Meyer, Earl A. 2,731,297.
Blatherwick, Delbert T., to Robertson Photo-Mechanix, Inc. Process camera backs. 2,730,939, 1–17–56, Cl. 95—49.
Blattner, Meyer S. Apparatus for comparing and analyzing handwriting. 2,730,817, 1–17–56, Cl. 35—36.
Blickenderfer, Charles, Jr., to Weyerhaeuser Timber Co. Feed mechanism for lumber conveyor. 2,731,130, 1–17–56, Cl. 198—34.
Blom, Bertel S.: *See*—
Wenstrom, Richard T. 2,731,121.
Blomberg, Richard N.: *See*—
Bruce, William F., and Blomberg. 2,730,892.
Blome, Wilhelm. Pumps for inflating inflatable bodies. 2,731,195, 1–17–56, Cl. 230—172.
Bloss, Richard R., to Dresser Equipment Co. Wire line sheave and method of fabrication. 2,730,795, 1–17–56, Cl. 29—159.
Boeing Airplane Co.: *See*—
Dillman, William A. 2,731,216.
Soderstrom, Harry R. 2,731,278.
Bogar, Roy L. Fishing reel. 2,731,214, 1–17–56, Cl. 242—84.5.
Bogue Electric Mfg. Co.: *See*—
Herbst, John A. 2,731,627.
Bolinger, George N. Flashlight. 2,731,545, 1–17–56, Cl. 240—10.68.
Bonar, Patrick, to Dowty Equipment Ltd. Aircraft alighting gear. 2,731,218, 1–17–56, Cl. 244—104.
Bordewieck, Robert W., to Moore Electronic Laboratories, Inc. Special low impedance output circuit for high chain bridge amplifier. 2,731,519, 1–17–56, Cl. 179—171.
Bordigon, Otto. Adjustable tooth harrow. 2,730,854, 1–17–56 Cl. 55—103.
Borell, Leslie C.: *See*—
Salzmann, Leo, Leta, and Borell. 2,731,455.
Borg, Gustave A., and E. C. Barton, to Turbo-Ray, Inc. Radiant heating systems and apparatus therefor. 2,731,242, 1–17–56, Cl. 257—133.

Borg-Warner Corp.: *See*—
Dodge, Adiel Y. 2,731,122.
Born, Elroy W., to The Maico Co., Inc. Hearing aid. 2,731,586, 1–17–56, Cl. 317—99.
Bosomworth, George P., to The Firestone Tire & Rubber Co. Moisture trap for electronic curing assembly. 2,731,537, 1–17–56, Cl. 219—10.71.
Bostwick, William L.: *See*—
Phillips, Lyman W., Fox, and Bostwick. 2,731,030.
Bourquard, Louis M. E., to "Societe d'Exploitation des Materials Hispano-Suiza," S. A. Launching devices for self-propelled missiles. 2,730,927, 1–17–56, Cl. 89—1.7.
Bowser, Inc.: *See*—
Mankin, Paul A., Klopfenstein, and Doelling. 2,731,171.
Rittenhouse, Howard E. 2,731,029.
Boyd, Robert E.: *See*—
McFadden, George H., Bennett, and Boyd. 2,731,427.
Boyle, Farnham F., to Ritepoint Pen and Pencil Co. Ink reservoir for ball point pen. 2,730,993, 1–17–56, Cl. 120—42.4.
Brace, George A., to The Hoover Co. Wheel adjustment for suction cleaners. 2,730,751, 1–17–56, Cl. 15—333.
Braithwaite, Isaac, & Son Engineers Ltd.: *See*—
Howlett, Edward J. 2,730,887.
Bramming, Carl, to Aladdin Industries, Inc. Filtering fuel nozzle for pressure stoves and lanterns. 2,731,299, 1–17–56, Cl. 299—107.
Brandes, Oliver L., and E. L. Humphrey, to Gulf Research & Development Co. Chemical compounds, methods of making same and lubricants containing the chemical compounds. 2,731,416, 1–17–56, Cl. 252—37.7.
Brandes, Oliver L., and E. L. Humphrey, to Gulf Research & Development Co. Condensation product of naphthenic acids and phenols and methods of making same. 2,731,491, 1–17–56, Cl. 260—468.
Brant, Arthur A.: *See*—
Wait, James R., and Brant. 2,731,596.
Brazier, Leslie G., and W. G. Hawley, to British Insulated Callender's Cables Ltd. Overhead electric lines and conductors therefor. 2,731,510, 1–17–56, Cl. 174—114.
Brenner, Charles. Rotating chance game apparatus. 2,731,267, 1–17–56, Cl. 273—143.
Brenner, Joseph A. Guard and guide for foot valve or the like. 2,730,959, 1–17–56, Cl. 103—202.
Bressler, Louis R. Brush having relatively movable bristle carrying sections. 2,730,747, 1–17–56, Cl. 15—201.
Brightman, John B., to General Electric Co. Motor protective system. 2,731,587, 1–17–56, Cl. 318—221.
Brinkoeter, Clinton: *See*—
Hardin, Hubert W., and Brinkoeteer. 2,730,873.
Bristol Aeroplane Co. Ltd., The: *See*—
Stapeneli, Samuel J. 2,730,847.
Bristol Steel & Iron Works, Inc.: *See*—
Ferguson, Robert O. 2,731,018.
British Insulated Callender's Cables Ltd.: *See*—
Brazier, Leslie G., and Hawley. 2,731,510.
British Petroleum Co. Ltd., The: *See*—
Thornes, Leslie S. 2,731,457.
Broden, Edwin N., and R. A. MacAyeal, to The Firestone Tire & Rubber Co. Method and machine for cutting rubber thread with the cutting action periodically interrupted. 2,731,083, 1–17–56, Cl. 164—17.
Broden, Edwin N., to The Firestone Tire & Rubber Co. Machine for cutting rubber grommets. 2,731,085, 1–17–56, Cl. 164—38.
Broden, Gustaf W. Tool bit micrometer. 2,730,810, 1–17–56, Cl. 33—185.
Brondyke, Kenneth J., to Aluminum Co. of America. Aluminum coating of ferrous metal articles. 2,731,362, 1–17–56, Cl. 117—51.
Brown, James W.: *See*—
Jahnig, Charles E., Burnside, and Brown. 2,731,400.
Jahnig, Charles E., and Brown. 2,731,508.
Brown, Robert N. Combined dealer, shuffler and tray for playing cards. 2,731,271, 1–17–56, Cl. 273—149.
Brown, William G.: *See*—
Walker, Samuel J., and Brown. 2,731,313.
Bruce, Floyd. Diamond drill bit. 2,731,236, 1–17–56, Cl. 255—61.
Bruce, William F., and R. N. Blomberg, to American Home Products Corp. Melting point bar. 2,730,892, 1–17–56, Cl. 73—17.
Bruggemeier, George L.: *See*—
Glass, George J., and Bruggemeier. 2,730,759.
Brundage, James W., to National Rubber Machinery Co. Tire curing press. 2,730,763, 1–17–56, Cl. 18—17.
Brunner, Henry, to Imperial Chemical Industries Ltd. Vinyl aromatic hydrocarbons reacted with glyceride oils using boron halide catalyst. 2,731,430, 1–17–56, Cl. 260—22.
Büchi, Alfred. Means for charging and scavenging internal combustion engines. 2,730,861, 1–17–56, Cl. 60—13.
Buffalo-Eclipse Corp.: *See*—
Thelander, Clement C. J. 2,731,096.
Burdett, Harry W., and P. H. Palen, to Curtiss-Wright Corp. Hydraulic coupling construction. 2,731,119, 1–17–56, Cl. 192—3.2.
Burnell, William J., to Fram Corp. Automatic relief valves for filters. 2,731,154, 1–17–56, Cl. 210—166.
Burney, Charles D., to Fresh Frozen Foods Ltd. Trawling gear. 2,730,829, 1–17–56, Cl. 43—8.
Burns, Harvey R. Tape cutting device. 2,731,084, 1–17–56, Cl. 164—36.
Burnside, Harvey E. W.: *See*—
Jahnig, Charles E., Burnside, and Brown. 2,731,400.
Burroughs Corp.: *See*—
Parker, Charles A., and Rainey. 2,731,197.
Burt, Farlow B., to Bendix Aviation Corp. Phonograph apparatus. 2,731,272, 1–17–56, Cl. 274—10.
Busch, Emil A. Pie dough and method of manufacture thereof. 2,731,350, 1–17–56, Cl. 99—92.
Butler, Oscar, Taxicab control system having time delay means. 2,731,100, 1–17–56, Cl. 180—82.
C. G. S. Laboratories, Inc.: *See*—
Sontheimer, Carl G. 2,731,621.
C & M Mfg. Co.: *See*—
Thompson, William J. 2,731,143.
Cable, Walter L., to Bendix Aviation Corp. Air control valve. 2,731,033, 1–17–56, Cl. 137—494.
Cadman, Harry H., and J. J. Ducey. Furniture construction. 2,731,078, 1–17–56, Cl. 155—191.
California Research Corp.: *See*—
Ranney, Rufus P., and Reese. 2,731,185.
Stayner, Richard D. 2,731,421.
Callard, Robert L., to Corning Glass Works. Lamp assembly. 2,731,547, 1–17–56, Cl. 240—81.
Campanella, Nick J. Stop light indicator. 2,731,628, 1–17–56, Cl. 340—252.
Campbell, Denis J., Jr., and E. W. Kaiser, to American Can Co. Method of forming cemented lock and lap side seams having welded lap portions. 2,730,983, 1–17–56, Cl. 113—120.
Campbell, George J., and L. G. Coscia, to Bethlehem Steel Co. Annealing furnace structure. 2,731,254, 1–17–56, Cl. 263—40.
Campbell, Lyman L.: *See*—
Garapolo, Orlando, Richter, and Campbell. 2,730,963.
Cannon Iron Foundries Ltd.: *See*—
Moore, Charles J., and Smith. 2,731,010.
Canterino, Peter J.: *See*—
Jones, Rufus V., and Canterino. 2,731,439.
Carborundum Co., The: *See*—
Nicholson, Kenneth C. 2,731,359.
Cardillo, Joseph S., M. M. Hann, C. L. Sadler, Jr., and F. G. Lundgard, to Sundstrand Machine Tool Co. Hydraulic transmission and control. 2,731,569, 1–17–56, Cl. 290—4.
Caretti, Louis S. Artificial bait. 2,730,828, 1–17–56, Cl. 43—2.
Carlin, Edward J. Heels. 2,730,820, 1–17–56, Cl. 36—36.
Carlson, Clarence O., W. O. Everling, and F. E. Robinson, to United States Steel Corp. Method and apparatus for breaking scale from a rod. 2,730,791, 1–17–56, Cl. 29—81.
Carlson, Marvin C., to McGill Mfg. Co., Inc. Switching assembly. 2,731,531, 1–17–56, Cl. 200—153.
Carlton, Stuart S.: *See*—
Topinka, Alfred A., McKenna, and Carlton. 2,731,402.
Carolus, James B., to Leeds and Northrup Co. Impulse telemetering system. 2,731,626, 1–17–56, Cl. 340—206.
Caroselli, Remus F., to Owens-Corning Fiberglas Corp. Sized and anti-static coated synthetic fiber and process of coating. 2,731,367, 1–17–56, Cl. 117—126.
Carrier Engineering Co. Ltd.: *See*—
Woolard, Henry J. 2,731,110.
Carroll, Ellsworth W., to S & W Fine Foods, Inc. Fruit position inspector and segregator. 2,731,129, 1–17–56, Cl. 198—33.
Carstens, Earl J. Fork attachment for tractors. 2,731,161, 1–17–56, Cl. 214—140.
Cary, Beecher B.: *See*—
Lall, Karl J., and Cary. 2,731,193.
Cassidy, John F. Bulldozer blade. 2,730,823, 1–17–56, Cl. 37—144.
Castellan, Carl A., to American Viscose Corp. Apparatus for producing reinforced tubing. 2,730,761, 1–17–56, Cl. 18—13.
Castner, George P., to Speed-Flex, Inc. Clothes washing machines. 2,730,886, 1–17–56, Cl. 68—23.
Caswell, Arthur S.: *See*—
Wood, Joseph D., and Caswell. 2,731,530.
Catallo, Leo: *See*—
Wallace, Donald J., and Catallo. 2,730,848.
Wallace, Donald J., and Catallo. 2,730,851.
Wallace, Donald J., and Catallo. 2,731,336.
Cayo, Julius N. Antenna mounting. 2,731,225, 1–17–56, Cl. 248—44.
Celanese Corp. of America: *See*—
Fortess, Fred, and Duke. 2,731,368.
Century Engineering Co.: *See*—
Ross, Harold M., and Cowen. 2,730,974.
Chaffee, Stephen E. Method of pollination. 2,730,839, 1–17–56, Cl. 47—58.
Chalhoub, Christian. Frequency stabilizing device. 2,731,566, 1–17–56, Cl. 250—36.
Chambers, Albert M., Jr., and E. W. Fisher, to The Garlock Packing Co. Sealing devices. 2,731,284, 1–17–56, Cl. 288—11.
Chance, Britton, to the United States of America as represented by the Secretary of the Navy. Delay circuit. 2,731,571, 1–17–56, Cl. 307—88.5.
Chandler, William B.: *See*—
Meadows, James L., Ballard, and Chandler. 2,731,392.
Chatolan, Leonard: *See*—
Bennett, Patrick J., and Chatolan. 2,731,179.
Chicago Bridge and Iron Co.: *See*—
Larsen, Lyle V. 2,730,798.
Wissmiller, Ivan L., and Larsen. 2,731,334.
Chicago Metal Hose Corp.: *See*—
Schindler, Frank S., and Myers. 2,731,037.
Chiksan Co.: *See*—
Billy, Peter J. 2,731,234.
Chillson, Charles W., to Curtiss-Wright Corp. Worm drive mechanism. 2,730,908, 1–17–56, Cl. 74—425.
Christian, Joseph D. Heat exchange device. 2,731,241, 1–17–56, Cl. 257—79.
Chromatic Television Laboratories, Inc.: *See*—
Cook, Leslie J. 2,731,582.
Church, Walter L., to Pioneer Specialties, Inc. Piston with means for removing same from rod. 2,731,315, 1–17–56, Cl. 309—23.

Ciaglia, Vito W. Ejector forks. 2,730,802, 1–17–56, Cl. 30—129.
Ciambriello, Sam: *See*—
Artese, Dominick, and Ciambriello. 2,730,739.
Ciba Ltd.: *See*—
Grossmann, Paul. 2,731,477.
Gunst, Raymond. 2,731,459.
Cincinnati Milling Machine Co., The: *See*—
Ernst, Hans. 2,730,843.
Ernst, Hans. 2,730,845.
Cinema-Television Ltd.: *See*—
Freeman, George S. P. 2,731,580.
Clark, Peter H. Apparatus for making and separating envelopes and other containers. 2,730,852, 1–17–56, Cl. 53—84.
Clark, Stanley M., to The Firestone Tire & Rubber Co. Valve. 2,731,061, 1–17–56, Cl. 152—341.
Clarke, John T., to Ionics, Inc. Method of manufacturing electrically conductive membranes and the like. 2,730,768, 1–17–56, Cl. 18—58.
Clarke, John T., to Ionics, Inc. Electrically conductive membranes and the like comprising copolymers of divinyl benzene and olefinic carboxylic compounds. 2,731,408, 1–17–56, Cl. 204—151.
Clarke, John T., to Ionics, Inc. Electrically conductive membranes and the like comprising the sulfonated polymerizates of polyvinyl aryl compounds. 2,731,411, 1–17–56, Cl. 204—180.
Clarke, William A.: *See*—
Fox, Douglas P. S., and Clarke. 2,731,186.
Clayden, Ronald T., to Electric & Musical Industries Ltd. Nonlinear electrical control circuits. 2,731,557, 1–17–56, Cl. 250—27.
Cleveland Crane & Engineering Co., The: *See*—
Huntington, Alfred H. 2,731,158.
Cleveland Pneumatic Tool Co., The: *See*—
Drum, Vern R. 2,731,261.
Cleveland Trencher Co., The: *See*—
Fetzner, Frank J. 2,730,821.
Clevidence, Lewis G., and R. B. Crippen, ½ to said Clevidence, ½ to said Crippen, and ½ to H. A. Barror. Marker light. 2,731,546, 1–17–56, Cl. 240—24.
Clinton Machine Co.: *See*—
Selzert, Robert D. 2,731,048.
Sherman, Clarence A., and Merritt. 2,731,538.
Cobb, Clifton A., to Penn Controls, Inc. Gas burner control. 2,731,080, 1–17–56, Cl. 158—133.
Coben, William S., to The Firestone Tire & Rubber Co. Tubeless tire. 2,731,062, 1–17–56, Cl. 152—341.
Cobert, Arthur J. Electrical control mechanism. 2,731,572, 1–17–56, Cl. 307—112.
Codell, Maurice, and G. Norwitz, to the United States of America as represented by the Secretary of the Army. Determination of oxygen in titanium and titanium alloys. 2,731,330, 1–17–56, Cl. 23—230.
Cody, William P., and T. C. Wollan, to Alkydol Laboratories, Inc. Epoxy phenolic ethers in manufacture of oil-alkyds. 2,731,429, 1–17–56, Cl. 260—22.
Cohen, Meyer P. Service stripe holder and clip. 2,730,824, 1–17–56, Cl. 40—1.5.
Cohen, Philip. Prefabricated metal-frame knockdown work table. 2,731,316, 1–17–56, Cl. 311—4.
Colangelo, Elena V. Ladies' hairpiece and hat combination. 2,730,722, 1–17–56, Cl. 2—202.
Cole, Joseph E., to H. Freedman. Code key cutting machine. 2,731,087, 1–17–56, Cl. 164—50.
Cole, Nelson E., to Dana Corp. Stake pocket for truck bodies. 2,731,292, 1–17–56, Cl. 296—43.
Coley, Nelson B., to General Railway Signal Co. Centralized traffic control systems for railroads. 2,731,548, 1–17–56, Cl. 246—3.
Colgate-Palmolive Co.: *See*—
Ross, John. 2,731,422.
Sylvester, Herbert S. 2,731,420.
Collins, Jack B., to The Firestone Tire & Rubber Co. Measuring device. 2,730,807, 1–17–56, Cl. 33—125.
Collins Radio Co.: *See*—
Doelz, Melvin L. 2,731,605.
Hubbard, Merle R. 2,731,604.
Mifflin, Leo V. 2,731,608.
Commercial Solvents Corp.: *See*—
Giachino, Marcello T. 2,730,814.
Commonwealth Engineering Co. of Ohio, The: *See*—
Deniston, George L., Jr. 2,731,369.
Ernst, Walter. 2,730,981.
Nack, Herman R., and Whitacre. 2,731,361.
Toulmin, Harry A., Jr. 2,731,615.
Toulmin, Harry A., Jr. 2,731,349.
Compuie Corp., The: *See*—
Lockhart, Marshall L. 2,731,053.
Con-Dor Corp. of America: *See*—
Logue, Glenn I. 2,730,773.
Conklin, Robert M.: *See*—
Rockwood, Albert M., and Conklin. 2,730,850.
Conley, Earl G. Stencil filler solution. 2,731,356, 1–17–56, Cl. 106—171.
Continental Foundry & Machine Co.: *See*—
Hibner, Delos E., Jr. 2,730,749.
Cook, Leslie J., to Chromatic Television Laboratories, Inc. Grid structure for color television tube. 2,731,582, 1–17–56, Cl. 315—14.
Copien, George. Holding devices for ribbon-type can-opening keys. 2,730,729, 1–17–56, Cl. 7—1.
Coraor, George R., to E. I. du Pont de Nemours and Co. Process for preparing oximinoacetone. 2,731,499, 1–17–56, Cl. 260—566.
Corning Glass Works: *See*—
Callard, Robert L. 2,731,547.
Corydon, Jeff, II. Rubber pneumatic auto bumper accessories. 2,731,289, 1–17–56, Cl. 293—67.
Corydon, Jeff, II. Bumper guards. 2,731,290, 1–17–56, Cl. 293—71.
Coscia, Lewis G.: *See*—
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Cotton, Robert B., and D. B. Doolittle, to All American Engineering Co. Aircraft arresting means. 2,731,219, 1–17–56, Cl. 244—110.
Couch, S. H., Co., Inc.: *See*—
Johnson, Carl A. P. 2,731,518.
Cowen, Robert: *See*—
Ross, Harold M., and Cowen. 2,730,974.
Cozzoli, Michael. Candle holders. 2,730,884, 1–17–56, Cl. 67—27.
Crafton, Marvin J., and P. Rekettye, to The Sun Rubber Co. Apparatus for making hollow bodies with sound effects. 2,730,765, 1–17–56, Cl. 18—39.
Craig, Frank S., to General Railway Signal Co. Method of treating mounted glass disc to resist breakage. 2,730,840, 1–17–56, Cl. 49—79.
Crawford, Jack A., to the United States of America as represented by the Secretary of the Navy. Magnetic amplifiers. 2,731,521, 1–17–56, Cl. 179—171.
Crewe, Samuel. Extruding applicator for caulking compound and the like. 2,731,176, 1–17–56, Cl. 222—326.
Crippen, Richard B.: *See*—
Clevidence, Lewis G., and Crippen. 2,731,546.
Cross, Harold H. Supplemental wheel assembly for vehicles. 2,731,276, 1–17–56, Cl. 280—81.
Cummings, Edwin H., to France Packing Co. Segmental metallic packing rings. 2,731,285, 1–17–56, Cl. 288—13.
Cummings, Leland W. T., to Sun Oil Co. Reaction vessel for coke removal. 2,731,399, 1–17–56, Cl. 196—122.
Curry, Malcolm, to The American Thread Co. Machine for stretching nylon thread. 2,730,789, 1–17–56, Cl. 28—62.
Curtiss-Wright Corp.: *See*—
Barrett, Hilliard E., and Gallo. 2,731,039.
Burdett, Harry W., and Palen. 2,731,119.
Chillson, Charles W. 2,730,908.
Gallo, Joseph E. 2,730,815.
Hine, Edward K. 2,731,094.
Cusic, John W., to G. D. Searle & Co. Esters of heterocyclic acids and 1,2,3,4 - tetrahydroisoquinoline - 2 - alkanols. 2,731,467, 1–17–56, Cl. 260—287.
Cutler-Hammer, Inc.: *See*—
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Dalton, Thomas B., to West Michigan Steel Foundry Co. Ratchet crank. 2,731,120, 1–17–56, Cl. 192—43.1.
Dana Corp.: *See*—
Cole, Nelson E. 2,731,292.
Daniels, David. Seat back warmer. 2,731,542, 1–17–56, Cl. 219—46.
Darling, Jack C., and J. Hayes, to Owens-Illinois Glass Co. Method of counting articles. 2,731,204, 1–17–56, Cl. 235—98.
Dart, Mayme E.: *See*—
Fricker, George A., and Dart. 2,731,180.
Dasburg, Alfred V., to General Railway Signal Co. Radio communication system. 2,731,549, 1–17–56, Cl. 246—7.
Daugusta, Nathan D. Tool post and tool holder. 2,730,918, 1–17–56, Cl. 82—36.
Daul, George C.: *See*—
Reinhardt, Robert M., Daul, and Reid. 2,731,323.
Daun, Carl L., to Research & Engineering Corp. Beer dispensing apparatus. 2,731,027, 1–17–56, Cl. 137—170.1.
Davis, William F., to R. Hoe & Co., Inc. Inking mechanism for printing machines. 2,730,947, 1–17–56, Cl. 101—366.
Davis, William R., to Pittsburgh Coke & Chemical Co. Low volatility herbicidal compositions. 2,731,339, 1–17–56, Cl. 71—2.6.
De Angelis, Armand, to American Optical Co. Ophthalmic mountings. 2,730,924, 1–17–56, Cl. 88—41.
De Barbieris, Irvin H.: *See*—
Barli, Albert, Jr., and De Barbieris. 2,731,263.
De Boisblanc, Deslonde R., to Phillips Petroleum Co. Circuit for measuring the average intensity of disturbances. 2,730,896, 1–17–56, Cl. 73—116.
Deedman, Alfred R., and W. G. Lambrou. Slicer having a tensioned wire cutting element. 2,730,801, 1–17–56, Cl. 30—114.
De Laval Separator Co., The: *See*—
Strezynski, George. 2,731,331.
Dellner, Raymond P., to Westinghouse Air Brake Co. Shaft drill rig. 2,731,235, 1–17–56, Cl. 255—51.
Deniston, George L., to The Commonwealth Engineering Co. of Ohio. Chemically resistant cotton materials. 2,731,369, 1–17–56, Cl. 117—143.
Dentler, Arnold E., to W. H. Miner, Inc. Friction snubber for railway car truck springs. 2,731,258, 1–17–56, Cl. 267—9.
Dentler, Arnold E., to W. H. Miner, Inc. Rubber cushioning mechanisms. 2,731,259, 1–17–56, Cl. 267—63.
De Reus, Marius E., to Owens-Illinois Glass Co. Insulation for spherical surfaces. 2,731,374, 1–17–56, Cl. 154—44.
De Staat der Nederlanden, Ten Deze Vertegenwoordigd Door de Directeur-Generaal der Posterijen, Telegrafie en Telefonie: *See*—
Oberman, Roelof M. M. 2,731,514.
Detroit Harvester Co.: *See*—
McLeod, Stewart B. 2,731,588.
Devoe & Raynolds Co., Inc.: *See*—
Greenlee, Sylvan O. 2,731,444.
Dick, A. B., Co.: *See*—
Du Bois, Edgar H., Zahradnik, and Tonkin. 2,730,946.
Dickerson, Delbert J., to Ardell Mfg. Co. Wheel structure. 2,730,906, 1–17–56, Cl. 74—230.05.
Dickey, Paul S.: *See*—
Panich, Michael, Shannon, and Dickey. 2,731,023.
Dickie, Eric J.: *See*—
O'Kane, Bernard J., and Dickie. 2,731,633.

Dickson, John, and V. E. Schafer, Jr., to General Motors Corp. Engine safety shut-down device. 2,731,001, 1–17–56, Cl. 123—41.15.

Dillman, William A., to Boeing Airplane Co. Variable incidence airfoil system. 2,731,216, 1–17–56, Cl. 244—48.

Dinkelkamp, Henry T., to Stewart-Warner Corp. Lubricant pressure regulating valve. 2,731,034, 1–17–56, Cl. 137—495.

Doane, Harry C., to General Motors Corp. Electric connector. 2,731,617, 1–17–56, Cl. 339—256.

Doble, Abner, to McCulloch Motors Corp. Fluid pressure engines. 2,730,996, 1–17–56, Cl. 121—102.

Dockum, Charles R. Projector system for composing in color and form. 2,731,264, 1–17–56, Cl. 272—10.

Dr. Ing. h. c. F. Porsche K.-G.: *See*—
Porsche, Ferdinand A. E., and Binder. 2,731,008.

Dodd, Thomas G., to Hospital Sanitation Equipment Corp. Apparatus for disposing of contaminated waste. 2,731,208, 1–17–56, Cl. 241—41.

Dodge, Adiel Y., to Borg-Warner Corp. One way clutches. 2,731,122, 1–17–56, Cl. 192—45.1.

Doeg, Ralph W., to Nash-Kelvinator Corp. Refrigerating apparatus. 2,731,314, 1–17–56, Cl. 309—19.

Doelling, James E.: *See*—
Mankin, Paul A., Klopfenstein, and Doelling. 2,731,171.

Doelz, Melvin L., to Collins Radio Co. Wind-up coil. 2,731,605, 1–17–56, Cl. 336—15.

Donehower, William P., to M. and B. D. Hartzell. Discharge and stacking mechanism for space band cleaning machines. 2,731,159, 1–17–56, Cl. 214—6.

Donelian, Khatchik O., and J. R. Menke, to the United States of America as represented by the United States Atomic Energy Commission. Electromagnetic centrifugal pump. 2,730,951, 1–17–56, Cl. 103—1.

Doolittle, Donald B.: *See*—
Cotton, Robert B., and Doolittle. 2,731,219.

Doremus, John A., C. K. Stenerson, and H. C. Waterman, to Motorola, Inc. Lock-out system. 2,731,622, 1–17–56, Cl. 340—163.

Dorey, George B., to Enterprise Railway Equipment Co. Dump door mechanism for a railway car. 2,730,965, 1–17–56, Cl. 105—289.

Dorey, George B., to Enterprise Railway Equipment Co. Hopper door latching mechanism. 2,730,966, 1–17–56, Cl. 105—308.

Dossie, Thomas J., and M. J. Parnes. Hinge aligning. 2,730,812, 1–17–56, Cl. 33—197.

Dow Chemical Co., The: *See*—
Savage, Albert B. 2,731,357.

Downing, Eric W., to Joseph Lucas (Industries) Ltd. Liquid fuel injection apparatus. 2,731,175, 1–17–56, Cl. 222—250.

Downing, Eric W., to Joseph Lucas (Industries) Ltd. Interrupters for spark-ignition apparatus. 2,731,523, 1–17–56, Cl. 200—31.

Dowty Equipment Ltd.: *See*—
Bonar, Patrick. 2,731,218.

Dresser Equipment Co.: *See*—
Bloss, Richard R. 2,730,795.

Dreyer, Hans, to The Loewy Engineering Co. Ltd. Extrusion tool assembly for light metal cable sheathing presses. 2,731,144, 1–17–56, Cl. 207—4.

Driben, Beatrice. Decorative hearing aid carrier. 2,731,054, 1–17–56, Cl. 150—.5.

Drum, Vern R., to The Cleveland Pneumatic Tool Co. Connecting means between window and actuator. 2,731,261, 1–17–56, Cl. 268—124.

Du Bois, Edgar H., G. J. Zahradnik, and K. J. Tonkin, to A. B. Dick Co. Cylinder demounting mechanism for duplicators. 2,730,946, 1–17–56, Cl. 101—216.

Du Bois, William H., to Bendix Aviation Corp. Brake assembly. 2,731,312, 1–17–56, Cl. 309—3.

Du Bose, Bruse W.: *See*—
Loden, Roy M. 2,730,976.

Ducey, John J.: *See*—
Cadman, Harry H., and Ducey. 2,731,078.

Duemler, Oliver E.: *See*—
McManus, Joseph D., and Duemler. 2,731,282.

Duke, Marshall: *See*—
Fortess, Fred, and Duke. 2,731,368.

Duncan, William A., to Acme Homes Metal Works, Inc. Metal slide support for table drop leaf. 2,731,317, 1–17–56, Cl. 311—61.

Dunlop Tire and Rubber Corp.: *See*—
Gatling, Anthony D. 2,730,859.
Holroyd, Eric, and Hurst. 2,730,930.

Dunn, Edward J. Copper base alloy. 2,731,343, 1–17–56, Cl. 75—162.

Dunn, William M. S.: *See*—
Wright, Charles R., Stansbury, and Dunn. 2,730,962.

Du Pont, E. I., de Nemours and Co.: *See*—
Alexander, Guy B., Iler, and Wolter. 2,731,326.
Coraor, George R. 2,731,499.
Emslie, Robert S. 2,731,495.
Gray, Russell H. 2,731,347.
Gresham, William F., and Naylor. 2,731,447.
Richards, Kurt F. 2,731,068.
Wittbecker, Emerson L. 2,731,445.
Wittbecker, Emerson L. 2,731,446.

East Coast Aeronautics, Inc.: *See*—
Miller, Roy G. 2,731,067.

Eastman Kodak Co.: *See*—
Akin, George A. 2,731,507.
Thompson, Benjamin. 2,731,488.

Easton, Robert D., to Pacific Press, Inc. Device for stacking magazines prior to trimming. 2,731,086, 1–17–56, Cl. 164—48.

Ebel, Friedrich, W. Rupp, and W. Keller, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Production of vat dyestuffs. 2,731,464, 1–17–56, Cl. 260—256.4.

Ebert, John: *See*—
Weber, Ernst, and Ebert. 2,731,603.

Eckmann, Leonard G., and E. J. Zaruba, to Automatic Electric Laboratories, Inc. Private automatic exchange line adapter for mobile radio system. 2,731,554, 1–17–56, Cl. 250—6.

Edelstein, Harold, to the United States of America as represented by the Secretary of the Army. Barium titanate temperature control. 2,731,564, 1–17–56, Cl. 250—36.

Edens, Ralph A., to Falcon Tool Co. Tool holders. 2,731,273, 1–17–56, Cl. 279—81.

Edgecombe, David A., to The Babcock & Wilcox Co. Die changing arrangement for metal working apparatus. 2,731,123, 1–17–56, Cl. 193—38.

Edmonds, James T., Jr.: *See*—
Hillyer, John C., and Edmonds. 2,731,475.

Edmonds, James T., Jr., to Phillips Petroleum Co. Polymerboric anhydride reaction products. 2,731,454, 1–17–56, Cl. 260—94.7.

Edwards, Fredrick B.: *See*—
Gray, Warren E., and Edwards. 2,730,990.

Edwards, John E. Multiple window sash unit or assembly. 2,730,775, 1–17–56, Cl. 20—52.1.

Ehrhart, Gustav, and W. Bestian, to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius und Bruning. Basic ketones and a process of preparing them. 2,731,462, 1–17–56, Cl. 260—247.1.

Eitel-McCullough, Inc.: *See*—
McCullough, Jack A. 2,731,578.

Electric & Musical Industries Ltd.: *See*—
Clayden, Ronald T. 2,731,557.

Elektrokemisk A/S: *See*—
Sem, Mathias O., and Sejersted. 2,731,407.

Ellis, Greer. Electric signal measuring apparatus with dynamic null balance. 2,731,583, 1–17–56, Cl. 315—26.

Elslager, Edward F., F. W. Short, and E. S. Lademan, to Parke, Davis & Co. N-pyridylmethyl, N-hydroxyethyl dihalo acetamides. 2,731,470, 1–17–56, Cl. 260—295.

Empire Brushes, Inc.: *See*—
Zottola, Frank. 2,730,742.
Zottola, Frank. 2,730,743.

Emslie, Robert S., to E. I. du Pont de Nemours and Co. Production of sebacic acid. 2,731,495, 1–17–56, Cl. 260—537.

Engine Parts Mfg. Co., The: *See*—
Stetz, Robert J., and Rogers. 2,731,436.

Enterprise Railway Equipment Co.: *See*—
Dorey, George B. 2,730,965.
Dorey, George B. 2,730,966.
Gunnison, Richard N. 2,730,967.

Entwistle, James J., Co.: *See*—
Nelson, Alden W. 2,730,987.

Equipment Engineers, Inc.: *See*—
Krebs, Kellogg. 2,731,147.

Erickson, Charles E.: *See*—
Wagner, George H., and Erickson. 2,731,485.

Erickson, Henry, to Sinclair Refining Co. Conversion of hydrocarbon oils with the use of a silica-magnesia cracking catalyst incorporated with a small amount of strontium. 2,731,397, 1–17–56, Cl. 196—52.

Ernst, Hans, to The Cincinnati Milling Machine Co. Cambering mechanism. 2,730,843, 1–17–56, Cl. 51—94.

Ernst, Hans, to The Cincinnati Milling Machine Co. Centerless grinding machine and method. 2,730,845, 1–17–56, Cl. 51—103.

Ernst, Walter, to The Commonwealth Engineering Co. of Ohio. Press platen stop block. 2,730,981, 1–17–56, Cl. 113—45.

Esso Research and Engineering Co.: *See*—
Adams, Clark E., Krebs, and Kimberlin. 2,731,394.
Arundale, Erving, and Thorn. 2,731,393.
Binder, George G., Jr., West, and Andresen. 2,731,414.
Harding, Clarke T., Mayer, and Wright. 2,731,396.
Howell, William C., Jr., and Wasson. 2,731,418.
Jahnig, Charles E., and Barr. 2,731,395.
Jahnig, Charles E., and Brown. 2,731,508.
King, Laurence F., and Pattenden. 2,731,417.
Love, Robert M., and Tannich. 2,731,506.
Mattox, William J. 2,731,503.
Serniuk, George E., and Welch. 2,731,450.

Eutectic Welding Alloys Corp.: *See*—
Wasserman, Rene D., and Quaas. 2,731,373.

Everling, Walter O.: *See*—
Carlson, Clarence O., Everling, and Robinson. 2,730,791.

Ex-Cell-O Corp.: *See*—
Alden, Carroll R. 2,731,188.

Fafnir Bearing Co., The: *See*—
Potter, Howell L. 2,731,310.

Fagan, Roscoe, and W. Meyst. Identity recorder. 2,730,936, 1–17–56, Cl. 95—1.1.

Failla, Gioacchino, to the United States of America as represented by the United States Atomic Energy Commission. Radiation detection device. 2,731,568, 1–17–56, Cl. 250—83.3.

Fain, Jacob M., N. L. Hewitt, and W. Rosenblatt, to the United States of America as represented by the Secretary of the Navy. De-icing material. 2,731,353, 1–17–56, Cl. 106—13.

Falcon Tool Co.: *See*—
Edens, Ralph A. 2,731,273.

Farbenfabriken Bayer Aktiengesellschaft: *See*—
Kruckenberg, Winfried. 2,731,480.

Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius und Bruning: *See*—
Ehrhart, Gustav, and Bestian. 2,731,462.

Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Bruning: *See*—
Ruschig, Heinrich, Fritsch, Schmidt-Thorne, and Haede. 2,731,461.

Farnham, Alford G.: *See*—
Bender, Howard L., Farnham, and Guyer. 2,731,437.

Farrell, Robert A., to Marathon Corp. Refrigerator carton. 2,731,190, 1–17–56, Cl. 229—32.

Faulk, Clarence E. and P. D. Goose caller. 2,730,836, 1–17–56, Cl. 46—180.

Faulk, Paul D.: *See*—
Faulk, Clarence E. and P. D. 2,730,836.

Faus, Herbert W. Means for protecting lading in cars. 2,730,968, 1–17–56, Cl. 105—369.

Febvre, Edmond: *See*—
Ghertman, Ioino, and Febvre. 2,731,199.

Federn, Klaus, to Carl Schenck Maschinenfabrik G. m. b. H. Photoelectrically controlled apparatus for producing alternating currents in synchronism with rotation of structure. 2,731,592, 1–17–56, Cl. 322—26.

Fekete, Janos: *See*—
Hahn, Ladislaus A., and Fekete. 2,731,494.

Feller, Morris: *See*—
Field, Edmund, and Feller. 2,731,452.
Field, Edmund, and Feller. 2,731,453.

Fellows Gear Shaper Co., The: *See*—
Miller, Edward W. 2,730,929.

Felten & Guilleaume Carlswerk A. G.: *See*—
Horn, Heinz. 2,731,069.

Felty, Harry C.: *See*—
Reed, Claude D., Felty, Hackett, and Hottenstein. 2,730,730.

Ferguson, James R.: *See*—
Ferguson, Robert O. 2,731,018.

Ferguson, Robert O., deceased; J. R. Ferguson, administrator, ½ to Bristol Steel & Iron Works, Inc. Tobacco pipe. 2,731,018, 1–17–56, Cl. 131—195.

Ferrand, Louis. Fused salt electrolytic cells. 2,731,412, 1–17–56, Cl. 204—223.

Ferrari, Andres, Jr.: *See*—
Gorham, George, and Ferrari. 2,730,923.

Fetzner, Frank J., to The Cleveland Trencher Co. Bucket cleaner for excavating machine. 2,730,821, 1–17–56, Cl. 37—97.

Feustel, Ernest A. Carrier tube. 2,730,882, 1–17–56, Cl. 66—126.

Fiala-Fernbrugg, Benno. Double-piston, internal-combustion engine. 2,731,002, 1–17–56, Cl. 123—51.

Fidelity Machine Co., Inc.: *See*—
Larkin, Walter. 2,730,880.

Field, Edmund, and M. Feller, to Standard Oil Co. Group VI A oxide-alkaline earth metal hydride catalyzed polymerization of olefins. 2,731,452, 1–17–56, Cl. 260—88.1.

Field, Edmund, and M. Feller, to Standard Oil Co. Conversion of ethylene and propylene to solid polymers with groups 6a metal oxides and complex metal aluminum hydride catalysts. 2,731,453, 1–17–56, Cl. 260—88.1.

Field, Oscar S., and R. W. Hewes, to General Railway Signal Co. Changeable indicator. 2,731,632, 1–17–56, Cl. 340—378.

Fike, Elmer A., and H. L. Morrill, to Monsanto Chemical Co. Emulsifying and dispersing agents. 2,731,338, 1–17–56, Cl. 71—2.6.

Findlay, Robert A., to Phillips Petroleum Co. Continuous adsorption-desorption apparatus. 2,731,149, 1–17–56, Cl. 210—42.5.

Findlay, Robert A., to Phillips Petroleum Co. Separation of alkenylpyridines from alkylpyridines. 2,731,468, 1–17–56, Cl. 260—290.

Fink, Frank E.: *See*—
Williams, Edward E., and Fink. 2,730,806.

Firestone Tire & Rubber Co., The: *See*—
Bachner, Martin. 2,731,046.
Barnhart, William S. 2,731,505.
Best, Chris E. 2,731,484.
Bosomworth, George P. 2,731,537.
Broden, Edwin N. 2,731,085.
Broden, Edwin N., and MacAyeal. 2,731,083.
Clark, Stanley M. 2,731,061.
Coben, William S. 2,731,062.
Collins, Jack B. 2,730,807.
Forman, Lawrence E. 2,731,442.
Forman, Lawrence E. 2,731,443.
Glass, George J., and Bruggemeier. 2,730,759.
Johnson, Paul H. 2,731,433.
Johnson, Paul H., Musch, and Metzger. 2,731,434.
Johnson, Paul H., Musch, and Metzger. 2,731,435.
Kubaugh, Le Roy M. 2,731,304.
Morrell, John W., and Smith. 2,730,758.
Powers, Robert P. 2,731,063.
Powers, Robert P. 2,731,064.
Powers, Robert P. 2,731,065.
Rowe, Walter C. 2,731,060.
Rowland, George P., Jr., and Piloni. 2,731,449.
Smith, Clifford D. 2,731,055.
Spencer, George A. 2,731,253.
Steń, Eugene P., and Best. 2,731,440.
Steń, Eugene P., and Best. 2,731,441.
Steń, Eugene P., and Best. 2,731,482.
Thomas, Talbott E. 2,730,767.

Fischer, Richard A., R. A. Arthur, and J. M. Kemper, to The Garrett Corp. Speed regulating mechanism. 2,731,022, 1–17–56, Cl. 137—34.

Fisher, Chester D., to Sprout, Waldron & Co. Mixer. 2,731,248, 1–17–56, Cl. 259—97.

Fisher, Edward W.: *See*—
Chambers, Albert M., Jr., and Fisher. 2,731,284.

Flicker, Howard D., to Jasco Aluminum Products Corp. Window sash mounting and locking arrangement. 2,730,776, 1–17–56, Cl. 20—52.2.

Flight Refuelling Ltd.: *See*—
Goodliffe, Arthur W., and Proctor. 2,731,280.

Flint, Hyland C., to American Metal Products Co. Spring construction. 2,731,075, 1–17–56, Cl. 155—179.

Flord, Oscar H., to Kemlite Laboratories. Stroboscope lamp. 2,731,577, 1–17–56, Cl. 313—110.

Flurschutz, Glenn E., to The Air Preheater Corp. Mounting of sinuous fin elements. 2,731,243, 1–17–56, Cl. 257—245.

Ford, Edward R., ½ to C. N. Stephens. Tire chain applying device. 2,731,059, 1–17–56, Cl. 152—213.

Forman, Lawrence E., to The Firestone Tire & Rubber Co. Sulfur vulcanizable rubber stabilized with a mixture of an alkyl substituted phenol and an alkyl substituted di (hydroxyphenyl) alkane. 2,731,442, 1–17–56, Cl. 260—45.95.

Forman, Lawrence E., to The Firestone Tire & Rubber Co. Vulcanized rubber stabilized with a mixture of a di (hydroxyphenyl) sulfide and a di (alkylhydroxyphenyl) methane. 2,731,443, 1–17–56, Cl. 260—45.95.

Fortess, Fred, and M. Duke, to Celanese Corp. of America. Treatment of textile materials. 2,731,368, 1–17–56, Cl. 117—139.4.

Foust, Orville N., to United Shoe Machinery Corp. Composite insoles, including micro-porous polymeric material. 2,730,819, 1–17–56, Cl. 36—22.

Fox, Douglas P. S., and W. A. Clarke, to Vickers-Armstrongs Ltd. Liquid-bottling machines. 2,731,186, 1–17–56, Cl. 226—115.

Fox, Godfrey H.: *See*—
Phillips, Lyman W., Fox, and Bostwick. 2,731,030.

Foxboro Co., The: *See*—
Neuman, Herbert A., and Sweet. 2,731,025.

Fram Corp.: *See*—
Burnell, William J. 2,731,154.
James, William S. 2,731,102.
James, William S. 2,731,155.
Kennedy, Walter V. 2,731,108.
Kennedy, Walter V. 2,731,153.

France Packing Co.: *See*—
Cummings, Edwin H. 2,731,285.

Fratus, Clarence F. Brake lining signal. 2,731,619, 1–17–56, Cl. 340—52.

Frederick, Edward B., and F. F. Balas, to the United States of America as represented by the Secretary of the Army. Thread strength and friction tester. 2,730,891, 1–17–56, Cl. 73—12.

Freedman, Howard: *See*—
Cole, Joseph E. 2,731,087.

Freman, Beryl G. Door operating mechanism. 2,731,260, 1–17–56, Cl. 268—63.

Freeman, George S. P., to Cinema-Television Ltd. Target electrodes for use in television pick-up tubes or the like. 2,731,580, 1–17–56, Cl. 313—326.

French, Earl W., and W. B. King. Locking device for play pen rails. 2,731,238, 1–17–56, Cl. 256—26.

Fresh Frozen Foods Ltd.: *See*—
Burney, Charles D. 2,730,829.

Fricker, George A., and M. E. Dart. Fish stringer. 2,731,180, 1–17–56, Cl. 224—7.

Friedman, Isadore. Clock mechanisms. 2,730,913, 1–17–56, Cl. 74—675.

Friedrich, Ed Inc.: *See*—
Hardin, Hubert W., and Brinkoeter. 2,730,873.

Fritsch, Werner: *See*—
Ruschig, Heinrich, Fritsch, Schmidt-Thomé, and Haede. 2,731,461.

Frohman, Howard L. Rebus puzzle computer. 2,731,269, 1–17–56, Cl. 273—148.

Fry, Horace P., Jr., to American Viscose Corp. Apparatus for continuously measuring drying strains and residual shrinkage. 2,730,898, 1–17–56, Cl. 73—159.

G. M. Pfaff A.-G.: *See*—
Benink, Christian J. M. 2,730,980.

Gadd, Charles W., to General Motors Corp. Displacement pick-up device. 2,730,895, 1–17–56, Cl. 73—70.

Gallo, Elia A.: *See*—
Barrett, Hillard E., and Gallo. 2,731,039.

Gallo, Joseph R., to Curtiss-Wright Corp. Simulated radio range tuning control. 2,730,815, 1–17–56, Cl. 35—10.2.

Gamertsfelder, George R., to the United States of America as represented by the Secretary of the Navy. Phase shifting circuit. 2,731,595, 1–17–56, Cl. 323—119.

Gantz, Harry. Combined cleaning mop and wringer. 2,730,741, 1–17–56, Cl. 15—116.

Garapolo, Orlando, W. J. Richter, and L. L. Campbell, to Wilson & Co., Inc. Beef dropper. 2,730,963, 1–17–56, Cl. 104—96.

Garlock, Fred G., to General American Transportation Corp. Hopper car. 2,730,964, 1–17–56, Cl. 105—248.

Garlock Packing Co., The: *See*—
Chambers, Albert M., Jr., and Fisher. 2,731,284.

Garrett Corp., The: *See*—
Aberle, Ulysses G. 2,731,618.
Anderson, Soren K. 2,731,239.
Fischer, Richard A., Arthur, and Kemper. 2,731,022.
Schelp, Helmut R. 2,730,874.

Garrett, Norman J. Rosary device. 2,730,816, 1–17–56, Cl. 35—23.

Garrott, John C. Resilient seal valve. 2,731,231, 1–17–56, Cl. 251—328.

Garwood, William E., and L. A. Hamilton, to Socony Mobil Oil Co., Inc. Alkylation of yellow phosphorous with olefins. 2,731,458, 1–17–56, Cl. 260—139.

Gatling, Anthony D., to Dunlop Tire and Rubber Corp. Apparatus for plying yarns. 2,730,859, 1–17–56, Cl. 57—58.3.

Gavurin, Jacob. Die rolling machine. 2,730,916, 1–17–56, Cl. 80—2.

Geib, Robert L., and D. F. Pennie, to The Maico Co., Inc. Coaxial-type multiple conductor contact plug. 2,731,614, 1–17–56, Cl. 339—183.

Geigy, J. R., A. G.: *See*—
Taub, William. 2,731,473.

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General Electric Co.: *See*—
Brightman, John B. 2,731,587.
Goodman, Gilbert. 2,731,419.
Gould, Herbert R., and Hamilton. 2,731,607.
Heliar, Martin W., Jr., and Shepard. 2,730,899.
Hershberger, Doran D. 2,731,575.
Manfredi, Robert E. 2,731,244.
McElligoot, John E. 2,731,576.
Prener, Jerome S. 2,731,423.
Sinks, Allen T. 2,730,813.
Smith, Ernest A. 2,731,139.
Stewart, Harold C., and Holcomb. 2,731,606.
Wilcock, Donald F. 2,731,305.
Wilcock, Donald F. 2,731,308.

General Electric Co. Ltd., The: *See*—
James, Emrys G., and Lindell. 2,731,561.
Levy, Maurice M. 2,731,512.
O'Kane, Bernard J., and Dickie. 2,731,633.

General Filters, Inc.: *See*—
Redner, Arthur D. 2,731,152.

General Mills, Inc.: *See*—
Harrison, Stuart A. 2,731,428.
Harrison, Stuart A., and McCaleb. 2,731,481.

General Motors Corp.: *See*—
Baker, Albert D., Jones, and Leavengood. 2,730,866.
Baker, Albert D., Muller, and Harris. 2,731,104.
Dickson, John, and Schafer. 2,731,001.
Doane, Harry C. 2,731,617.
Gadd, Charles W. 2,730,895.
Hansen, Kai H. 2,731,257.
Light, James W. 2,730,994.
Lunn, Clarence R. 2,731,251.
McFadden, George H., Bennett, and Boyd. 2,731,427.
Onksen, George W., Jr. 2,731,584.
Redick, David C. 2,731,525.
Wirshing, Ralph J. 2,731,354.

General Patent Production Co.: *See*—
Raphael, Walter. 2,731,166.

General Railway Signal Co.: *See*—
Coley, Nelson B. 2,731,548.
Craig, Frank S. 2,730,840.
Dasburyg, Alfred V. 2,731,549.
Field, Oscar S., and Hewes. 2,731,632.
Kendall, Hugh C. 2,731,623.
Kendall, Hugh C., and Zaffarano. 2,731,552.
Marsh, Gareld E. 2,731,527.
Stafford, Chester F. 2,731,550.
Stafford, Chester F. 2,731,551.
Zaffarano, Frank P., and Maenpaa. 2,731,553.

Gerber, Dale C., to The Hoover Co. Suction cleaner brush. 2,730,753, 1–17–56, Cl. 15—399.

Gesellschaft fuer Linde's Eismaschinen Aktiengesellschaft: *See*—
Ranke, Fritz. 2,730,875.

Ghertman, Ioino, and E. Febvre, to International Business Machines Corp. Computing mechanisms for checking computations. 2,731,199, 1–17–56, Cl. 235—61.7.

Giachino, Marcello T., to Commercial Solvents Corp. Process for drying materials of high moisture diffusion resistance. 2,730,814, 1–17–56, Cl. 34—9.

Girling Ltd.: *See*—
Berrows, Percival W. 2,731,112.

Glacier Metal Co. Ltd., The: *See*—
Love, Phil P. 2,731,360.

Glass, George J., and G. L. Bruggemeier, to The Firestone Tire & Rubber Co. Reclaim processing apparatus. 2,730,759, 1–17–56, Cl. 18—12.

Glebovich, Alex. Lock and wear plate assembly for tillers. 2,730,941, 1–17–56, Cl. 97—216.

Globe Automatic Sprinkler Co. of Pennsylvania: *See*—
Rowley, Arthur C. 2,730,900.

Godman, H. C., Co., The: *See*—
Weber, Donald P. 2,730,724.

Goettl, Gust, to International Metal Products Co. Flow distribution valves for evaporative coolers. 2,731,252, 1–17–56, Cl. 261—71.

Goldhammer, Albert. Stereoscopic camera. 2,730,938, 1–17–56, Cl. 95—18.

Goodliffe, Arthur W., and P. G. Proctor, to Flight Refuelling Ltd. Resilient pipe-connector with multipart clamp. 2,731,280, 1–17–56, Cl. 285—129.

Goodman, Gilbert, to General Electric Co. Ferroelectric ceramic composition. 2,731,419, 1–17–56, Cl. 252—62.9.

Gordon, Richard A. Trimming and method of making same. 2,730,724, 1–17–56, Cl. 2—278.

Gordon, Robert, to Graphicolor, Inc. Fire extinguisher device. 2,731,093, 1–17–56, Cl. 169—35.

Gorham, George, and A. Ferrari, Jr., to Scopicon, Inc. Unitary microscope-support and lamp. 2,730,923, 1–17–56, Cl. 88—40.

Gosselin, Wilfrid J., to U. S. Bobbin & Shuttle Co. Yarn tension and trap for use in self-threading weaving shuttles. 2,731,043, 1–17–56, Cl. 139—217.

Gottfried, Robert E., to International Telemeter Corp. Pulse responsive control apparatus in coin demand selling system. 2,731,620, 1–17–56, Cl. 340—147.

Gould, Herbert R., and R. L. Hamilton, to General Electric Co. Cast structure for induction device. 2,731,607, 1–17–56, Cl. 336—96.

Gouldsmith, Noel H., Jr. Center punching assembly. 2,730,811, 1–17–56, Cl. 33—189.

Graphicolor, Inc.: *See*—
Gordon, Robert. 2,731,093.

Grassl, Leon J. Air pressure system for the skeleton wheels of an off-set printing press. 2,730,950, 1–17–56, Cl. 101—420.

Graviner Mfg. Co. Ltd.: *See*—
Mathisen, Anders. 2,731,532.

Gray, Russell H., to E. I. du Pont de Nemours and Co. Photographic emulsions containing fluorine substituted ethylene polymers as delustering agents. 2,731,347, 1–17–56, Cl. 95—7.

Gray, Warren E., and F. B. Edwards. Tape dispenser. 2,730,990, 1–17–56, Cl. 118—235.

Green, Arthur H.: *See*—
Guernsey, Glen A., and Green. 2,731,540.

Green, Edward H., to Aerosol Research Co. Spraying devices. 2,731,298, 1–17–56, Cl. 299—95.

Greenblatt, Bernard: *See*—
Scharf, Murray M. 2,731,351.
Scharf, Murray M. 2,731,352.

Greene, Leo. Putty applicator or tool. 2,730,756, 1–17–56, Cl. 18—3.5.

Greenlee, Sylvan O., to Devoe & Raynolds Co., Inc. Epoxide resin cured with a polyhydric aliphatic alcohol. 2,731,444, 1–17–56, Cl. 260—47.

Gresham, Donald C., to McCorquodale-Gresham, Inc. Photographic method of making intaglio printing elements. 2,731,346, 1–17–56, Cl. 95—5.

Gresham, William F., and M. A. Naylor, Jr., to E. I. du Pont de Nemours and Co. Novel polyimides. 2,731,447, 1–17–56, Cl. 260—78.

Grey, Gregory F., to The Ohio Nut & Bolt Co. Electrode for attaching weld nuts. 2,731,535, 1–17–56, Cl. 219—4.

Griffith, Granville B. Sprinklers. 2,731,296, 1–17–56, Cl. 299—69.

Griggs, Osborn E.: *See*—
Wahlbom, Ernest T. 2,731,169.

Grimard, Edgard. Decorticator for hulling grains. 2,731,052, 1–17–56, Cl. 146—290.

Groeper, Lawrence H., to the United States of America as represented by the Secretary of the Air Force. Variable reluctance rotary speed sensing element. 2,731,599, 1–17–56, Cl. 325—70.

Groll, Alvin F. Strip stock feeder. 2,731,213, 1–17–56, Cl. 242—78.

Grossmann, Paul, to Ciba Ltd. Process for the manufacture of anthraquinone dyestuffs suitable for dyeing cellulose acetate artificial silk. 2,731,477, 1–17–56, Cl. 260—378.

Gruber, Arnold H.: *See*—
Karnes, Herman F., and Gruber. 2,731,401.

Guernsey, Glen A., and A. H. Green, to Wico Electric Co. Electric cigarette lighter. 2,731,540, 1–17–56, Cl. 219—32.

Guest, Howard B.: *See*—
Stansbury, Harry A., Jr., and Guest. 2,731,489.

Guggenheim, Max M., to National Equipment Corp. Placques for confectionery machines. 2,731,134, 1–17–56, Cl. 198—108.

Gulf Research & Development Co.: *See*—
Anderson, Arnold G., and Gwynn. 2,731,501.
Brandes, Oliver L., and Humphrey. 2,731,416.
Brandes, Oliver L., and Humphrey. 2,731,491.

Gunnison, Richard N., to Enterprise Railway Equipment Co. Operating head for dump door mechanism. 2,730,967, 1–17–56, Cl. 105—311.

Gunst, Raymond, to Ciba Ltd. Trisazo-dyestuffs. 2,731,459, 1–17–56, Cl. 260—171.

Guthrie, George B., to Taylor, Smith & Taylor, The Hall China Co., and Harker Pottery Co. Centering and holding device. 2,731,126, 1–17–56, Cl. 198—19.

Guyer, John W.: *See*—
Bender, Howard L., Farnham, and Guyer. 2,731,437.

Gwynn, Bernard H.: *See*—
Anderson, Arnold G., and Gwynn. 2,731,501.

Hackett, Jay W.: *See*—
Reed, Claude D., Felty, Hackett, and Hottenstein. 2,730,730.

Haede, Werner: *See*—
Ruschig, Heinrich, Fritsch, Schmidt-Thomé, and Haede. 2,731,461.

Hagan Corp.: *See*—
Williams, Ray S. 2,731,024.

Hahn, Ladislaus A., and J. Fekete, to Aktiebolaget Ferrosan. New and biologically active diphenylmethane derivatives and method of making the same. 2,731,494, 1–17–56. Cl. 260—507.

Hale, Andrew, and B. A McClellan, to The Aetna-Standard Engineering Co. Continuous mill. 2,730,755, 1–17–56, Cl. 18—2.

Hall China Co., The: *See*—
Guthrie, George B. 2,731,126.

Hall, James A., to Reynolds Metals Co. Evaporator incorporating accumulator wells and feed grid. 2,730,872, 1–17–56, Cl. 62/126.

Hall, Roy W. Smoking accessory. 2,731,020, 1–17–56, Cl. 131—235.

Hamilton, Lyle A.: *See*—
Garwood, William E., and Hamilton. 2,731,458.

Hamilton, Richard L.: *See*—
Gould, Herbert R., and Hamilton. 2,731,607.

Hamman, Harold E.: *See*—
Larsson, Robert T. 2,731,178.

Hamran, Olav. Tractor mounted blasting punch. 2,730,972, 1–17–56, Cl. 111—89.

Hann, Melvin M.: *See*—
Cardillo, Joseph S., Hann, Sadler, and Lundgard. 2,731,569.

Hannable, Daniel W., and E. W. Stacey, deceased (by H. M. Stacey, executrix), to United Shoe Machinery Corp. Machines for preparing soles for attachment. 2,730,735, 1–17–56, Cl. 12—85.1.

Hansen, Hans H.: *See*—
Seeloff, Melvin M., and Hansen. 2,730,995.

Hansen, Hans H., and M. M. Seeloff, to The Taylor-Winfield Corp. Fluid pressure actuator for machine components. 2,731,534, 1–17–56, Cl. 219—4.

Hansen, J. Richard, and G. Sprengling, to the United States of America as represented by the Secretary of the Navy. Ultrasonic coupling means for piezoelectric crystals. 2,731,573, 1–17–56, Cl. 310—8.3.

Hansen, Kai H., to General Motors Corp. Independent vehicle wheel suspensions. 2,731,257, 1–17–56, Cl. 267—8.

Hardin, Hubert W., and C. C. Brinkoeter, to Ed Friedrich, Inc. Room air conditioners. 2,730,873, 1–17–56, Cl. 62—129.

Harding, Clarke T., M. W. Mayer, and R. O. Wright, to Esso Research and Engineering Co. Combination crude distillation and cracking process. 2,731,396, 1–17–56, Cl. 196—49.

Harker Pottery Co.: *See*—
Guthrie, George B. 2,731,126.

Harper, Leonard R., to International Business Machines Corp. Electronic counter. 2,731,201, 1–17–56, Cl. 235—92.

Harrigan, William. Grease pump. 2,731,173, 1–17–56, Cl. 222—227.

Harris, Edward P.: *See*—
Baker, Albert D., Muller, and Harris. 2,731,104.

Harrison, Homer S., to Allied Steel and Conveyors, Inc. Conveyor transfer mechanism. 2,731,127, 1–17–56, Cl. 198—20.

Harrison, Ralph J., to the United States of America as represented by the secretary of the Navy. Wave-guide directional coupler. 2,731,601, 1–17–56, Cl. 333—10.

Harrison, Stuart A., to General Mills, Inc. Copolymers of phenolic resin esters and compounds containing a vinylbenzene nucleus. 2,731,428, 1–17–56, Cl. 260—19.

Harrison, Stuart A., and K. E. McCaleb, to General Mills, Inc. Dimeric fatty acids. 2,731,481, 1–17–56, Cl. 260—407.

Hart, Norman E., to Toledo Scale Co. Bearing thrust adjustment. 2,731,309, 1–17–56, Cl. 308—178.

Hartzell, Blanche D. *See*—
Donehower, William P. 2,731,159.

Hartzell, Maurice: *See*—
Donehower, William P. 2,731,159.

Harvengt, Edmond, to Link-Belt Co. Process and apparatus for releasing obstructions in discharge openings of concentrating pans. 2,731,148, 1–17–56, Cl. 209—465.

Haselmeier, Walter. Typewriter front-feed attachment. 2,731,125, 1–17–56, Cl. 197—128.

Hathaway, Claude M., to Hathaway Instrument Co. Principal strain computers. 2,731,198, 1–17–56, Cl. 235—61.

Hathaway Instrument Co.: *See*—
Hathaway, Claude M. 2,731,198.

Hauptman, Robert, to the United States of America as represented by the Secretary of the Navy. Electrical system. 2,731,593, 1–17–56, Cl. 323—30.

Hawley, William G.: *See*—
Brazier, Leslie G., and Hawley. 2,731,510.

Hayes Industries, Inc.: *See*—
Lall Karl J., and Cary. 2,731,193.

Hayes, John: *See*—
Darling, Jack C., and Hayes. 2,731,204.

Hayes, Robert A., and G. M. Reimer, to Union Special Machine Co. Feed mechanism for sewing machines. 2,730,977, 1–17–56, Cl. 112—214.

Haybarst, Ernest R. Electrical moving chart. 2,730,826, 1–17–56, Cl. 40—32.

Haynes, Joseph E. Window sash tensioning device. 2,731,287, 1–17–56, Cl. 292—76.

Hayward, Frank W., C. J. Zablocki, and K. R. Scribner, to the United States of America as represented by the Secretary of the Navy. Oxy-hydrogen flash detonator tester. 2,730,893, 1–17–56, Cl. 73—35.

Hazeltine, James E., Jr., to Armstrong Cork Co. Plastic floor coverings and method for producing same. 2,731,358, 1–17–56, Cl. 117—15.

Hazen, Lysle L. Electric socket and plug construction. 2,731,615, 1–17–56, Cl. 339—189.

Heffner, Robert E., to Phillips Petroleum Co. Quench section for carbon black production furnace. 2,731,466, 1–17–56 Cl. 23—259.5.

Heil Co., The: *See*—
Weischel, John E. 2,731,283.

Heineman, Robert K. Cutting tool grinding fixture. 2,730,846, 1–17–56, Cl. 51—122.

Heintzeler, Manfred: *See*—
Reppe, Walter, v. Kutepow, and Heintzeler. 2,731,504.

Heil, Rudolf. Recording devices. 2,731,322, 1–17–56, Cl. 346—116.

Heliar, Martin W., Jr., and B. R. Shepard, to General Electric Co. Dynamic balancing apparatus. 2,730,899, 1–17–56, Cl. 73—463.

Heller, Robert M. Bulb socket having integral means for attachment to an apertured panel. 2,731,612, 1–17–56, Cl. 339—128.

Heller, Robert M. Bulb mounting assembly for attachment to a perforated mounting panel. 2,731,613, 1–17–56, Cl. 339—128.

Helmig, Willem H. T.: *See*—
Reumerman, Theodorus, and Helmig. 2,731,513.

Henderson, Edward. Sealed hypodermic receptacle and method of making the same. 2,731,012, 1–17–56, Cl. 128—215.

Henning, Frederick E. Combination earth auger with rock drilling point. 2,731,237, 1–17–56, Cl. 255—69.

Henricot, Jacques F. Cylindrical rotating mill with stepped and studded liner for automatic classification of grinding balls and materials. 2,731,210, 1–17–56, Cl. 241—183.

Hensel, Gustav. Adapters for internal-combustion engines. 2,731,006, 1–17–56, Cl. 123—179.

Herbert, Earl, ¼ to E. Marshall, ¼ to I. Thomas, and ¼ to W. W. Potter. Apparatus for tracing underground cables and detecting flaws therein. 2,731,598, 1–17–56, Cl. 324—52.

Herbst, John A., to Bogue Electric Mfg. Co. Thermocouple monitoring system. 2,731,627, 1–17–56, Cl. 340—213.

Hercules Powder Co.: *See*—
Seely, George A., Segl, and Wilson. 2,730,888.

Herman, Louis. Brush rotating and positioning device. 2,730,737, 1–17–56, Cl. 15—21.

Herndon, Marion E., Jr.: *See*—
Higginbotham, Robert J., and Herndon. 2,730,770.

Herold, James L., and W. J. Nekoln, to Barry-Wehmiller Machinery Co. Automatic feed conveyors. 2,731,128, 1–17–56, Cl. 198—30.

Hersey, Henry J., Jr. Filter. 2,731,107, 1–17–56, Cl. 183—61.

Hershberger, Doran D., to General Electric Co. End shield and bearing locking arrangement. 2,731,575, 1–17–56, Cl. 310—90.

Hewes, Ralph W.: *See*—
Field, Oscar S., and Hewes. 2,731,632.

Hewitt, Norman L.: *See*—
Fain, Jacob M., Hewitt, and Rosenblatt. 2,731,353.

Hibner, Delos E., Jr., to Continental Foundry & Machine Co. Soot blower control and operating system. 2,730,749, 1–17–56, Cl. 14—318.

Hidde, Nijland Hendrika, to N. V. "COQ." Electric apparatus, such as liquid immersed switches, comprising means for discharging gases produced during operation of the apparatus. 2,731,105, 1–17–56, Cl. 183—45.

Higginbotham, Robert J., and M. E. Herndon, Jr.: said Herndon assor. to said Higginbotham. Clearing rolls for textile machines. 2,730,770, 1–17–56, Cl. 19—140.

Higginbotham, Robert J. Lug strap bracket for picker stick. 2,731,042, 1–17–56, Cl. 139—154.

Higgins, Edgar J. Bottle carrier. 2,731,182, 1–17–56, Cl. 224—42.46.

Hillyer, John C., and J. T. Edmonds, Jr., to Phillips Petroleum Co. Method of producing lactones. 2,731,475, 1–17–56, Cl. 260—343.3.

Hilowitz, David: *See*—
Melcher, Daniel, and Hilowitz. 2,731,025.

Hine, Edward K., to Curtiss-Wright Corp. Propeller unreversing system. 2,731,094, 1–17–56, Cl. 170—135.29.

Hodgson, Howard E., to Cutler-Hammer, Inc. Friction brake construction. 2,731,115, 1–17–56, Cl. 188—171.

Hoe, R., & Co., Inc.: *See*—
Davis, William F. 2,730,947.

Hoff, David. Portable lavatory cabinet with step drawer. 2,731,318, 1–17–56, Cl. 312—210.

Hoffmann-La Roche Inc.: *See*—
Aeschlimann, John A., and Stempel. 2,731,493.
Walter, Max. 2,731,498.

Hofmann, Hugo, to Beaunit Mills, Inc. Method and apparatus for producing novelty yarn. 2,730,757, 1–17–56, Cl. 18—8.

Hogendobler, Henry R., and A. L. Simison, to Owens-Corning Fiberglas Corp. Reinforced fibrous products, method and apparatus for making same. 2,731,066, 1–17–56, Cl. 154—1.76.

Hohl, John, to Owens-Illinois Glass Co. Glass containers and closures for same. 2,731,165, 1–17–56, Cl. 215—40.

Holcomb, James E.: *See*—
Stewart, Harold C., and Holcomb. 2,731,606.

Hollingsworth, Irene M. Sanitary appliance. 2,731,014, 1–17–56, Cl. 128—290.

Holmes, Stannard D. Container for hypodermic injection ingredients. 2,731,013, 1–17–56, Cl. 128—272.

Holroyd, Eric, and N. A. Hurst, to Dunlop Tire and Rubber Corp. Apparatus for the removal of flash from a welded wire joint. 2,730,930, 1–17–56, Cl. 90—15.

Holton, Edward C., to North American Aviation, Inc. Aircraft door installation. 2,731,221, 1–17–56, Cl. 244—129.

Hook, Edwin O., and L. C. Beegle, to American Cyanamid Co. Tall oil pitch-phosphorus sulfide reaction product and metallic salts as dispersants for lubricating oil. 2,731,415, 1–17–56, Cl. 252—32.7.

Hooker Electrochemical Co.: *See*—
Robitschek, Paul, and Stormon. 2,731,431.

Hoover Co., The: *See*—
Gerber, Dale C. 2,730,753.
Brace, George A. 2,730,751.
Kirsch, Carl W. 2,731,372.
La Briere, Nelson W. 2,730,750.
Ripple, Melvin H. 2,730,901.
Seck, Werner G. 2,730,752.
Seck, Werner G. 2,731,106.
Warburton, Kenneth R. 2,731,040.

Hopkins, Stephen, to The Texas Co. Exhaust ports for internal-combustion engines. 2,731,004, 1–17–56, Cl. 123—65.

Hopper, Allen O., to Turbine Equipment Co. System for handling metal chips and extracting oil therefrom. 2,731,151, 1–17–56, Cl. 210—68.

Horizons Titanium Corp.: *See*—
Topinka, Alfred A., McKenna, and Carlton. 2,731,402.
Walner, Eugene. 2,731,404.
Young, Thomas R., and Somerville. 2,731,405.
Young, Thomas R., and Somerville. 2,731,406.

Horn, Heinz, to Felten & Guilleaume Carlswerk A. G. Device for compounding stranded conductors. 2,731,069, 1–17–56, Cl. 154—2.26.

Hornschuch, Hanns, to Ingersoll-Rand Co. Sealing device for pumps. 2,730,954, 1–17–56, Cl. 103—111.

Hospital Sanitation Equipment Corp.: *See*—
Dodd, Thomas G. 2,731,208.

Hottenstein, Carl C.: *See*—
Reed, Claude D., Felty, Hackett, and Hottenstein. 2,730,730.

Houdry, Eugene J., and W. M. Adey, to Oxy-Catalyst, Inc. Catalytic structure and apparatus. 2,731,541, 1–17–56, Cl. 219—39.

Houdry Process Corp.: *See*—
Shabaker, Hubert A. 2,731,424.

Howell, William C., Jr., and J. I. Wasson, to Esso Research and Engineering Co. Hydraulic transmission fluid. 2,731,418, 1–17–56, Cl. 252—42.7.

Howlett, Edward J., to Isaac Braithwaite & Son Engineers Ltd. Rotary machine for use in washing dry cleaning and dyeing garments and other articles. 2,730,887, 1–17–56, Cl. 68—139.

Hubbard, Merle R., to Collins Radio Co. Resonator tuner. 2,731,604, 1–17–56, Cl. 333—82.

Hudry, Charles, to Societe Rhodiaceta. Apparatus for malaxing and mixing. 2,731,247, 1–17–56, Cl. 259—6.

Hughes, George C., to Reynolds Gas Regulator Co. Fluid pressure regulator. 2,731,026, 1–17–56, Cl. 137—116.5.

Hughes, George C., to Reynolds Gas Regulator Co. Fluid pressure regulating system. 2,731,032, 1–17–56, Cl. 137—492.

Hughes, George C., to Reynolds Gas Regulator Co. Valve seat structure. 2,731,036, 1–17–56, Cl. 137—625.34.

Humes, Donald T. Power driven applicator for liquid materials. 2,730,738, 1–17–56, Cl. 15—24.

Humphrey, Earl L.: *See*—
Brandes, Oliver L., and Humphrey. 2,731,416.
Brandes, Oliver L., and Humphrey. 2,731,491.

Huntington, Alfred H., to The Cleveland Crane & Engineering Co. Overhead carrier. 2,731,158, 1–17–56, Cl. 212—131.

Hurst, Norman A.: *See*—
Holroyd, Eric, and Hurst. 2,730,930.

Husa, Howard W., to Standard Oil Co. Portable quench oil tester. 2,730,894, 1–17–56, Cl. 73—53.

Huser, Richard J., and A. H. Stuhlreyer, to The Western States Machine Co. Centrifugal braking and control apparatus. 2,731,113, 1–17–56, Cl. 188—105.

Husum, Charles W., to Owens-Illinois Glass Co. Method of securing gaskets in container closures. 2,731,071, 1–17–56, Cl. 154—89.

Hutchinson, Archibald D. L. Dump trucks. 2,731,293, 1–17–56, Cl. 298—22.

Hydril Corp.: *See*—
Knox, Granville S. 2,731,281.

I-T-E Circuit Breaker Co.: *See*—
Wood, Joseph D., and Caswell. 2,731,530.

Iler, Ralph K.: *See*—
Alexander, Guy B., Iler, and Wolter. 2,731,326.

Illinois Tool Works: *See*—
Nielsen, Moritz H. 2,730,732.
Poupitch, Ougljesa J. 2,730,780.
Poupitch, Ougljesa J. 2,731,057.

Imperial Chemical Industries Ltd.: *See*—
Brunner, Henry. 2,731,430.

Incorvaia, Leo. Butter saver for "corn on the cob." 2,730,878, 1–17–56, Cl. 65—12.

Industrial Rayon Corp.: *See*—
Mayner, Thomas S. 2,730,889.
Mayner, Thomas S. 2,731,081.

Ingersoll-Rand Co.: *See*—
Hornschuch, Hanns. 2,730,954.

Innocenti, Scipione. Automatic ticket printing and accounting machine. 2,731,205, 1–17–56, Cl. 235—101.

Interior, United States of America as represented by the Solicitor of the Department of the: *See*—
Skinner, Kenneth G. 2,731,355.

International Business Machines Corp.: *See*—
Ghertman, Iolno, and Febvre. 2,731,199.
Harper, Leonard R. 2,731,201.
Koelsch, Albert G., Jr. 2,731,200.
Luhn, Hans P. 2,731,196.
Miles, Joseph W. 2,731,524.

International Metal Products Co.: *See*—
Goettl, Gust. 2,731,252.

International Telemeter Corp.: *See*—
Gottfried, Robert E. 2,731,620.

Ionics, Inc.: *See*—
Clarke, John T. 2,730,768.
Clarke, John T. 2,731,408.
Clarke, John T. 2,731,411.
Juda, Walter, and Kasper. 2,731,425.

Iorio, Amedeo. Resonance augmenting means or accordions. 2,730,919, 1–17–56, Cl. 84—376.

Isenberg, Alexander H. Method for making thermal insulated pipe. 2,730,769, 1–17–56, Cl. 18—59.

Jacobs, Irvin W., and J. W. Sims. Utility bin. 2,731,319, 1–17–56, Cl. 312—310.

Jahnig, Charles E., and F. T. Barr, to Esso Research and Engineering Co. Conversion of hydrocarbons in two stages with inert and catalyst particles. 2,731,395, 1–17–56, Cl. 196—49.

Jahnig, Charles E., H. E. W. Burnside, and J. W. Brown, to Standard Oil Development Co. Conversion of hydrocarbons. 2,731,400, 1–17–56, Cl. 202—14.

Jahnig, Charles E., and J. W. Brown, to Esso Research and Engineering Co. Conversion of hydrocarbons for the production of unsaturates and gasoline with the use of inert solids. 2,731,508, 1–17–56, Cl. 260—683.

James, Emrys G., and A. O. E. Lindell, to The General Electric Co. Ltd. Crystal contact devices. 2,731,561, 1–17–56, Cl. 250—31.

James, Harold V., to O. K. Rubber, Inc. Tire recapping machines. 2,730,764, 1–17–56, Cl. 18—18.

James, William S., to Fram Corp. Apparatus for removing heavy dust from air. 2,731,102, 1–17–56, Cl. 183—34.

James, William S., to Fram Corp. Filter cartridge pull-out device. 2,731,153, 1–17–56, Cl. 210—169.

Jansen, Raymond K. Cow washer. 2,731,300, 1–17–56, Cl. 299—111.

Janson, Alfons, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Process for the production of zinc formaldehyde sulphoxylate from basic zinc formaldehyde sulphoxylate. 2,731,483, 1–17–56, Cl. 260—429.

Japan Broadcasting Corp.: *See*—
Miyaji, Koichi. 2,731,562.

Jasco Aluminum Products Corp.: *See*—
Flicker, Howard D. 2,730,776.

Jeanne, Armand L., A. C. Keller, and S. D. White, to Bell Telephone Laboratories, Inc. Preset call transmitter. 2,731,517, 1–17–56, Cl. 179—90.

Jen, I-Tsai. Process of making alpha cellulose from fibrous ligno-cellulose materials, particularly from bagasse. 2,731,345, 1–17–56, Cl. 92—11.

Jette, Emile. Knitting machine. 2,730,879, 1–17–56, Cl. 66—13.

Johnson, Carl A. P., to S. H. Couch Co., Inc. Telephone unit. 2,731,518, 1–17–56, Cl. 179—100.

Johnson Gage Development Co., The: *See*—
Johnson, Stanley G. 2,730,808.

Johnson, Paul H., to The Firestone Tire & Rubber Co. Freeze resistant aqueous polymer-based paint containing an arylsulfonamide. 2,731,433, 1–17–56, Cl. 260—29.7.

Johnson, Paul H., J. H. Musch, and C. W. Metzger, to The Firestone Tire & Rubber Co. Freeze resistant aqueous polymer-containing paint containing a hydrazine derivative as a freeze-thaw stabilizer. 2,731,434, 1–17–56, Cl. 260—29.7.

Johnson, Paul H., J. H. Musch, and C. W. Metzger, to The Firestone Tire & Rubber Co. Freeze resistant aqueous polymer based paint containing guanidine thiocyanate. 2,731,435, 1–17–56, Cl. 260—29.7.

Johnson, Stanley G., to The Johnson Gage Development Co. Taper gage having means for gaging smaller diameters. 2,730,808, 1–17–56, Cl. 33—174.

Johnston, Rowland W., Jr., to The Texas Co. Petroleum production in oil bearing formations. 2,731,090, 1–17–56, Cl. 166—29.

Jones, Gustaf P. Trailer wall construction. 2,730,772, 1–17–56, Cl. 20—4.

Jones, Kenneth L.: *See*—
Baker, Albert D., Jones, and Leavengood. 2,730,866.

Jones, Rufus V., and P. J. Canterino to Phillips Petroleum Co. Reaction products of hydrogenated rubbery polymers with acrylonitriles. 2,731,439, 1–17–56, Cl. 260—45.5.

Jonsson, Greta M. Leg closure in child's garment. 2,730,723, 1–17–56, Cl. 2—270.

Juda, Walter, and A. A. Kasper, to Ionics, Inc. Electrically conductive membranes and the like comprising condensation polymers containing polyalkylene polyamines. 2,731,425, 1–17–56, Cl. 260—2.1.

Jules, Leonard H.: *See*—
Synerholm, Martin E., Jules, and Sahyun. 2,731,471.

Kaiser Aluminum and Chemical Corp.: *See*—
McCheaney, Vernon A. 2,731,245.

Kaiser, Edward W.: *See*—
Campbell, Denis J., Jr., and Kaiser. 2,730,983.

Kaiser Gypsum Co., Inc.: *See*—
Riddell, Wallace C., and Kirk. 2,731,377.

Kalart Co., Inc., The: *See*—
Kaprelian, Edward K. 2,730,885.

Kalinowski, Lester W., to Sinclair Refining Co. Corrosion inhibitor containing alkanoyloxyacetic acid and method of using same. 2,731,324, 1-17-56, Cl. 21—2.5.

Kamlet, Jonas, to The Kamlet Laboratory. Process for oxidizing nitrosyl chloride. 2,731,329, 1–17–56, Cl. 23—219.

Kamlet, Jonas. Process for the manufacture of benzoquinone. 2,731,478, 1–17–56, Cl. 260—396.

Kamlet, Jonas. Process for the manufacture of acetylsalicylic acid. 2,731,492, 1–17–56, Cl. 260—480.

Kamlet Laboratory, The: *See*—
Kamlet, Jonas. 2,731,329.

Kamm, Lawrence J. Electrical connectors. 2,731,611, 1–17–56, Cl. 339—94.

Kaplanowski, Stanley. Coin-operated meter for electrical energy. 2,731,124, 1–17–56, Cl. 194—6.

Kaprelian, Edward K., to The Kalart Co. Inc. Photoflash equipment. 2,730,885, 1–17–56, Cl. 67—31.

Karlson, John C., to Bendix Aviation Corp. Monitoring system for inductive signal devices. 2,731,630, 1–17–56, Cl. 340—268.

Karlstrom, Karl A. S. Vibrator. 2,730,902, 1–17–56, Cl. 74—87.

Karnes, Herman F., and A. H. Gruber, to American Cyanamid Co. Recovery of excess acrylonitrile from the cyanoethylation of cotton by steam stripping. 2,731,401, 1–17–56, Cl. 202—46.

Kasper, Andrew A.: *See*—
Juda, Walter, and Kasper. 2,731,425.

Kaufmann, Albert R., to the United States of America as represented by the United States Atomic Energy Commission. Uranium-silicon alloy and process of producing same. 2,731,341, 1–17–56, Cl. 75—134.

Kavanagh, Arthur J., to American Optical Co. Two component eye lens system. 2,730,925, 1–17–56, Cl. 88—57.

Kayser, Raymond F., Sr. Retractible clearance light for trucks and the like. 2,731,544, 1–17–56, Cl. 240—7.1.

Kelzer, Eugene O., and M. G. Kroger, to Radio Corp. of America. Oscillator system. 2,731,565, 1–17–56, Cl. 250—36.

Kelbert, Rudolph S., and B. Vidal. Timepiece for automotive vehicle. 2,730,860, 1–17–56, Cl. 58—46.

Keller, Arthur C.: *See*—
Jeanne, Armand L., Keller, and White. 2,731,517.

Keller, Walter: *See*—
Ebel, Friedrich, Rupp, and Keller. 2,731,464.

Keller, William M. Fluid cooled journal bearing. 2,731,306, 1–17–56, Cl. 308—77.

Kellogg, M. W., Co., The: *See*—
Belchetz, Arnold. 2,731,398.

Kemlite Laboratories: *See*—
Floyd, Oscar H. 2,731,577.

Kemper, James M.: *See*—
Fischer, Richard A., Arthur, and Kemper. 2,731,022.

Kendall, Hugh C., and F. P. Zaffarano, to General Railway Signal Co. Cab signalling system for railroads. 2,731,552, 1–17–56, Cl. 246—63.

Kendall, Hugh C., to General Railway Signal Co. Electronic shunt detector for a code communication system. 2,731,623, 1–17–56, Cl. 340—163.

Kennedy, Walter V., to Fram Corp. Pleated paper filter element. 2,731,108, 1–17–56, Cl. 183—71.

Kennedy, Walter V., to Fram Corp. Filter for liquids. 2,731,153, 1–17–56, Cl. 210—165.

Kennison, Hugh F., to Lock Joint Pipe Co. Apparatus for forming concrete pipes and other hollow bodies. 2,730,783, 1–17–56, Cl. 25—30.

Kent-Moore Organization, Inc.: *See*—
Pyclak, Roman J. 2,730,842.

Kent, Moss A. Vacuum cleaner blower. 2,731,194, 1–17–56, Cl. 230—117.

Kerr, Wallace E. Grip buggy and ejector for draw benches. 2,731,141, 1–17–56, Cl. 205—24.

Kershner, Osborn A.: *See*—
Lambert, Homer T., Myers, and Kershner. 2,731,114.

Kessler, Joseph S., to Ladish Co. Convertible milking and washing pipe line system. 2,730,992, 1–17–56, Cl. 119—14.03.

Keuling, Edelbert E. Process for the preparation of chlorine dioxide. 2,731,325, 1–17–56, Cl. 23—152.

Kibbie, William H.: *See*—
Bellini, Robert, and Kibbie. 2,731,291.

Kiefer, Kurt T., to Kurdon, Inc. Slat link closure. 2,731,082, 1–17–56, Cl. 160—118.

Klitle, Ordean, to Ballastran Corp. Voltage regulator. 2,731,591, 1–17–56, Cl. 321—49.

Kimball, George F. Adjustable hedge and tree trimming power saw. 2,730,803, 1–17–56, Cl. 30—167.

Kimberlin, Charles N., Jr.: *See*—
Adams, Clark E., Krebs, and Kimberlin. 2,731,394.

Kindstrand, Claes A., and E. A. E. Pettersson. Method of eliminating strain in fabric. 2,730,786, 1–17–56, Cl. 26—1.

King, Laurence F., and W. C. Pattenden, to Esso Research and Engineering Co. Water resistant soda base grease. 2,731,417, 1–17–56, Cl. 252—42.1.

King, William B.: *See*—
French, Earl W., and King. 2,731,238.

Kirk, George B.: *See*—
Riddell, Wallace C., and Kirk. 2,731,377.

Kirsch, Carl W., to The Hoover Co. Method of removing the insulation from the ends of assembled commutator wires. 2,731,372, 1–17–56, Cl. 134—2.

Klein, Robert B. Freeze-proof vent damper. 2,730,943, 1–17–56, Cl. 98—119.

Klipsch, Paul W. Loud speaker. 2,731,101, 1–17–56, Cl. 181—31.

Klopfenstein, Gerald J.: *See*—
Mankin, Paul A., Klopfenstein, and Doelling. 2,731,171.

Knox, Granville S., to Hydril Corp. Kelly packer and blowout preventer. 2,731,281, 1–17–56, Cl. 286—16.1.

Ko, David W. and W., and W. M. Auchenbach, to Komak, Inc. Method of forming ornamented surfaces. 2,731,333, 1–17–56, Cl. 41—43.

Ko, Wesley: *See*—
Ko, David W. and W., and Auchenbach. 2,731,333.

Koelsch, Albert C., Jr., to International Business Machines Corp. Document sensing device. 2,731,200, 1–17–56, Cl. 235—61.11.

Komak, Inc.: *See*—
Ko, David W. and W., and Auchenbach. 2,731,333.

Kontos, James. Protector for flexible fittings for flexible tanks. 2,731,089, 1–17–56, Cl. 164—78.

Koriagin, Vsevolod B., to Lockheed Aircraft Corp. Canopy mounting. 2,730, 777, 1–17–56, Cl. 20—56.4.

Kovacik, Charles G., 40% to T. J. Malia. Fuse. 2,731,528, 1–17–56, Cl. 200—129.

Krause, Gerhard P. High pressure pump or compressor. 2,730,960, 1–17–56, Cl. 103—216.

Krawinkel, Guenther H. Electron tube with deflection control. 2,731,560, 1–17–56, Cl. 250—27.

Krebs, Kellogg, to Equipment Engineers, Inc. Hydraulic classifier. 2,731,147, 1–17–56, Cl. 209—211.

Krebs, Robert W.: *See*—
Adams, Clark E., Krebs, and Kimberlin. 2,731,394.

Krefft, Hermann E. Electrode for gaseous discharge lamps. 2,731,581, 1–17–56, Cl. 313—343.

Krimmel, Carl P., to G. D. Searle & Co. N-dialkylaminoalkyl derivatives of diarylisonicotinamides. 2,731,469, 1–17–56, Cl. 260—295.

Kritscher, Andrew F., to United States Steel Corp. Method of hot-working steel billets by forging or extrusion. 2,731,145, 1–17–56, Cl. 207—10.

Kroger, Marlin G.: *See*—
Kelzer, Eugene O., and Kroger. 2,731,565.

Kruckenberg, Winfried, to Farbenfabriken Bayer Aktiengesellschaft. Process for the production of E-acyl lysines. 2,731,480, 1–17–56, Cl. 260—404.5.

Krucoff, Darwin, to the United States of America as represented by the United States Atomic Energy Commission. Electromagnetic rod-position indicator. 2,731,624, 1–17–56, Cl. 340—196.

Kubaugh, Le Roy M., to The Firestone Tire & Rubber Co. Link for endless track. 2,731,304, 1–17–56, Cl. 305—10.

Kurdon, Inc.: *See*—
Kiefer, Kurt T. 2,731,082.

La Briere, Nelson W., to The Hoover Co. Low height suction cleaner arrangement. 2,730,750, 1–17–56, Cl. 15—324.

Lademan, Elinor S.: *See*—
Elslager, Edward F., Short, and Lademan. 2,731,470.

Ladish Co.: *See*—
Kessler, Joseph S. 2,730,992.

Lall, Karl J., and B. B. Cary, to Hayes Industries, Inc. Air circulating fan construction and method of making the same. 2,731,193, 1–17–56, Cl. 230—117.

Lambert Brake Corp.: *See*—
Lambert, Homer T., Myers, and Kershner. 2,731,114.

Lambert, Homer T., C. R. Myers, and O. A. Kershner, to Lambert Brake Corp. Fluid-operated brake and cushioning means therefor. 2,731,114, 1–17–56, Cl. 188—152.

Lambrou, William G.: *See*—
Deedman, Alfred R., and Lambrou. 2,730,801.

Lamy, René L., to Societe du Carburateur Zenith. Electric ignition control in starting devices for turbo-engines. 2,730,862, 1–17–56. Cl. 60—39.14.

Lane Co., Inc.: *See*—
Bibby, Ralph D. 2,730,760.

Lane, Earl W., to Rohm & Haas Co. Sulfonated copolymers of dicyclopentadiene and maleic anhydride which are cross-linked by sulfone groups and have cation-adsorbing properties. 2,731,426, 1–17–56, Cl. 260—2.2.

Langford, Gilbert B., to the United States of America as represented by the Secretary of the Navy. Toggle clamp. 2,731,288, 1–17–56, Cl. 292—258.

Lapham, Clarence L.: *See*—
Barr, Malcolm J. 2,731,240.

Larkin, Walter, to Fidelity Machine Co., Inc. Transfer bit, transfer bit blank and method of producing the bit. 2,730,880, 1–17–56, Cl. 66—95.

Larsen Lyle V.: *See*—
Wissmiller, Ivan L., and Larsen. 2,731,334.

Larsen, Lyle V., to Chicago Bridge and Iron Co. Method of constructing a field-erected vapor-storage vessel. 2,730,798, 1–17–56, Cl. 29—475.

Larsson, Robert T., to H. E. Hamman. Pouring attachment for containers. 2,731,178, 1–17–56, Cl. 222—567.

Lathrop, Homer H.: *See*—
Svoboda, Edward F., and Lathrop. 2,730,909.

Laucks, Howard H.: *See*—
Teague, Walter D., Jr., and Laucks. 2,731,526.

Laur, Eugene, to Union Carbide and Carbon Corp. Welding wire positioning. 2,731,536, 1–17–56, Cl. 219—10.

Lausen, Frederick W. Electric starters for outboard motors. 2,731,005, 1–17–56, Cl. 123—179.

Layman, Martha K., to American Cyanamid Co. Triazinealdehyde-polysiloxane resinous composition and process for preparing. 2,731,438, 1–17–56 Cl. 260—45.2.

Layne, Harold W., to Anderson Box Co. Fibreboard shipping container. 2,731,191, 1–17–56, Cl. 229—34.

Lea, Edward S. Machines for grinding hypodermic needles. 2,730,844, 1–17–56, Cl. 51—98.

Leavengood, Ernest A.: *See*—
Baker Albert D., Jones, and Leavengood. 2,730,866.

Leeds and Northrup Co.: *See*—
Carolus, James B. 2,731,626.

Leeds, William G.: *See*—
Wien Ronald, Ashley, and Leeds. 2,731,500.

Leins, Oscar J., to Milwaukee Gas Specialty Co. Automatic control device. 2,731 529, 1–17–56, Cl. 200—138.

Leka, Theodore M. Aircraft rotor and control therefor. 2,731,095, 1–17–56, Cl. 170—160.25.

Leta Lucian J.: *See*—
Salzmann Leo, Leta, and Borell. 2,731,455.

Levy, Maurice M., to The General Electric Co. Ltd. Multichannel communication systems. 2,731,512, 1–17–56. Cl. 179—18.

Libbey-Owens-Ford Glass Co.: *See*—
Weinrich, Arthur R. 2,731,365.
Weinrich, Arthur R. 2,731,366.

Light James W., to General Motors Corp. Actuator control system and valve mechanism therefor. 2,730,994, 1–17–56, Cl. 121—40.

Lindbeck, Laurel B. Power drawn scraper. 2,730,822, 1–17–56, Cl. 37—129.

Lindell, Aubrey O. E.: *See*—
James, Emrya G. and Lindell. 2,731,561.

Lindsay, William R. Pipe puller. 2,731,233, 1–17–56. Cl. 254—29.

Link-Belt Co.: *See*—
Harvengt, Edmond. 2,731,148.

Link, Donald F.: *See*—
McElwain, Alan C., and Link. 2,730,915.

Link Mfg. Co., Inc.: *See*—
Wallace, Halbert C., and Puckering. 2,731,246.

Linpert, Erhard M., R. L. Schultz, and A. V. Neyfeldt, to Victor Adding Machine Co. Calculating machine function control keys interlock. 2,731,206 1–17–56, Cl. 235—130.

Lipski, Abraham. Method of simultaneously springing two girders. 2,730,797, 1–17–56, Cl. 29—452.

Little, Howard W. Underwater viewing device. 2,730,921, 1–17–56, Cl. 88—1.

Lockhart, Marshall L., to The Compule Corp. Medical containers and their closures. 2,731,053, 1–17–56, Cl. 150—.5.

Lockheed Aircraft Corp.: *See*—
Koriagin, Vsevolod B. 2,730,777.
Power, James T. 2,731,220.
Price, Nathan C. 2,730,863.

Lock Joint Pipe Co.: *See*—
Kennison Hugh F. 2,730 783.

Loden, Roy M., 10% to B. W. Du Bose. Sewing machine attachment for applying band loop and band and lining to trousers. 2,730,976, 1–17–56, Cl. 112—151.

Loewy Engineering Co. Ltd., The: *See*—
Dreyer, Hans. 2,731,144.

Logue, Glenn L., to Con-Dor Corp. of America. Packaged door unit. 2,730,773, 1–17–56, Cl. 20—12.

Lohmann, Heinz: *See*—
Seifert, Ernst. 2,731,340.

Long, Robert S., to American Cyanamid Co. Hydroxytetrahydrocarbazoles. 2,731,474, 1–17–56, Cl. 260—315.

Lorentzen, Hans K., to Lorentzen Hardware Mfg. Corp. Cord lock. 2,731,111, 1–17–56, Cl. 188—64.

Lorentzen Hardware Mfg. Corp.: *See*—
Lorentzen, Hans K. 2,731,111.
Love, Phil P., to The Glacier Metal Co. Method for incorporating a solid lubricant into a porous metallic surface. 2,731,360, 1–17–56, Cl. 117—49.
Love, Robert M., and R. E. Tannich, to Esso Research and Engineering Co. Production of hydrocarbon solvents of low acid wash color. 2,731,506, 1–17–56, Cl. 260—668.
Lowen, Herbert: *See*—
Back, Frank G., and Lowen. 2,730,926.
Lucas, Joseph, (Industries) Ltd.: *See*—
Downing, Eric W. 2,731,175.
Downing, Eric W. 2,731,523.
Lucker, Millard B., to Auto Specialties Mfg. Co. Lifting jack. 2,731,232, 1–17–56, Cl. 254—1.
Ludwinski, Mitchell. Automatic hose clamp lock. 2,730,782. 1–17–56, Cl. 24—274.
Luhn, Hans P., to International Business Machines Corp. Self-checking number punch. 2,731,196, 1–17–56, Cl. 235—58.
Lundgard, Folke G.: *See*—
Cardillo, Joseph S., Hann, Sadler, and Lundgard. 2,731,569.
Lunn, Clarence R., to General Motors Corp. Carburetor venting device. 2,731,251, 1–17–56, Cl. 261—64.
Lyon, George A. Wheel cover. 2,731,301, 1–17–56, Cl. 301—37.
MacAyeal, Robert A.: *See*—
Broden, Edwin N., and MacAyeal. 2,731,083.
MacCallum, Alan M.: *See*—
Noxon, Paul A., and MacCallum. 2,731,217.
MacDonald, Keith B. Fishing pole support and positioning device. 2,731,224, 1–17–56, Cl. 248—42.
MacLean, Norman E. Heat transfer system. 2,730,871, 1–17–56, Cl. 62—125.
Macy, James C., to Aircraft-Marine Products Co. Method of applying electrical connectors. 2,730,718, 1–17–56, Cl. 1—68.
Maenpaa, Wilho K.: *See*—
Zaffarano, Frank P., and Maenpaa. 2,731,553.
Magrath, Richard A., to the United States of America as represented by the Secretary of the Navy. Mounting base for bolometer. 2,731,533, 1–17–56, Cl. 201—63.
Maico Co., Inc., The: *See*—
Born, Elroy W. 2,731,586.
Geib, Robert L., and Pennie. 2,731,614.
Maier, Erwin. Mechanically operated multi-story garage. 2,731,160, 1–17–56, Cl. 214—16.1.
Maier, Michael W., to Malleable Iron Range Co. Stove construction. 2,731,011, 1–17–56, Cl. 126—191.
Main, Benjamin A., Jr., to Aeroquip Corp. Fitting for reinforced hose. 2,731,279, 1–17–56, Cl. 285—86.
Malia, Thomas J.: *See*—
Kovacik, Charles G. 2,731,528.
Malleable Iron Range Co.: *See*—
Maier, Michael W. 2,731,011.
Maloon, Earl B., to Southwest Welding & Mfg. Co. Compactor. 2,730,935, 1–17–56, Cl. 94—50.
Manfredi, Robert E., to General Electric Co. Fluid cooled anode. 2,731,244, 1–17–56, Cl. 257—250.
Mankin, Paul A., G. J. Klopfenstein, and J. E. Doelling, to Bowser, Inc. Fuel handling system. 2,731,171, 1–17–56, Cl. 222—26.
Manning, Douglas H., to Tex Tan of Yoakum. Stirrup leather attaching means for saddles. 2,730,853, 1–17–56, Cl. 54—46.
Marathon Corp.: *See*—
Farrell, Robert A. 2,731,190.
Mare, Ernest. Cyclone mills. 2,731,209, 1–17–56, Cl. 241—56.
Marean, Dale F. Variable ratio transmission. 2,730,907. 1–17–56, Cl. 74—325.
Marinelli, Arthur N. Sectional crankshaft. 2,730,912, 1–17–56, Cl. 74—597.
Marquis, Alphonse J. Automatic smoking pipe filler. 2,731,187, 1–17–56, Cl. 226—125.
Marsh, Gareld E., to General Railway Signal Co. Electromagnetic relays. 2,731,527, 1–17–56, Cl. 200—87.
Marsh, James C., to Ransburg Electro-Coating Corp. High voltage apparatus. 2,731,589, 1–17–56, Cl. 321—15.
Marshall, Charles W., to G. D. Searle & Co. 11-oxygenated 17α-vinyltestosterone and process. 2,731,479, 1–17–56, Cl. 260—397.45.
Marshall, Elliot: *See*—
Herbert, Earl. 2,731,598.
Marshall, Neil A., and J. A. Adler, to the United States of America as represented by the Secretary of the Navy. Electronic measuring device. 2,731,559, 1–17–56, Cl. 250—27.
Martin, Frank V. Protective device for door locks. 2,730,970. 1–17–56, Cl. 109—32.
Martin, Paul S., and S. N. Shore. Cameras. 2,730,937, 1–17–56, Cl. 95—11.5.
Maschinenfabrik Augsburg-Nürnberg A. G.: *See*—
Schörner, Christian. 2,730,704.
Mathers, Alfred L. Adjustable outrigger fishing snap. 2,730,832, 1–17–56, Cl. 43—43.11.
Mathisen, Anders, ½ to Graviner Mfg. Co. Ltd., and ½ to The Wilkinson Sword Co. Ltd. Temperature change detectors and method for producing same. 2,731,532, 1–17–56, Cl. 201—63.
Mattox, William J., to Esso Research and Engineering Co. Alcohol synthesis process. 2,731,503, 1–17–56, Cl. 260—638.
May & Baker Ltd.: *See*—
Wien, Ronald, Ashley, and Leeds. 2,731,500.
May, Otto H., to May-Pressenbau G. m. b. H. Drawing press. 2,731,140, 1–17–56, Cl. 205—4.
May-Pressenbau G. m. b. H.: *See*—
May, Otto H. 2,731,140.
Mayer, Maurice W.: *See*—
Harding, Clarke T., Mayer, and Wright. 2,731,396.
Mayner, Thomas S., to Industrial Rayon Corp. Reel for the fluid treatment of thread. 2,730,889, 1–17–56, Cl. 68—205.
Mayner, Thomas S., to Industrial Rayon Corp. Method for the removal of monomers, etc. from molten polymers. 2,731,081, 1–17–56, Cl. 159—49.
McCaleb, Kirtland E.: *See*—
Harrison, Stuart A., and McCaleb. 2,731,481.
McCann, Kelly F., to Warner Lewis Co. Horizontal filter apparatus. 2,731,150, 1–17–56, Cl. 210—43.
McCauley, Herbert J., Jr. Animal simulating velocipede. 2,731,274, 1–17–56, Cl. 280—1.196.
McChesney, Vernon A., to Kaiser Aluminum and Chemical Corp. Finned conduit and method of attaching fins to conduit. 2,731,245, 1–17–56, Cl. 257—262.16.
McClellan, Boyd A.: *See*—
Hale, Andrew, and McClellan. 2,730,755.
McCord, Georgie P., to United States Rubber Co. Valve. 2,731,028, 1–17–56, Cl. 137—223.
McCormick, Jerry R. D., and N. K. Smith, to American Cyanamid Co. Production of tetracycline. 2,731,497, 1–17–56, Cl. 260—559.
McCormick, Jerry R. D., and S. A. Muller, to American Cyanamid Co. Recovery and purification with organic solvent oximes of substances having vitamin B12 activity. 2,731,388, 1–17–56, Cl. 167—81.
McCormick, Jerry R. D., and S. A. Muller, to American Cyanamid Co. Recovering vitamin B12 material from organic oxime solutions of the same with amines. 2,731,389. 1–17–56, Cl. 167—81.
McCorquodale-Gresham, Inc.: *See*—
Gresham, Donald C. 2,731,346.
McCrystle, John D., and E. F. Townsend, to The Sandy Hill Iron & Brass Works. Apparatus for interval feed and jet screening of stock. 2,730,932, 1–17–56, Cl. 92—30.
McCulloch Motors Corp.: *See*—
Doble, Abner. 2,730,906.
McCullough, Jack A., to Eitel-McCullough, Inc. Electron tube. 2,731,578, 1–17–56, Cl. 313—245.
McElligott, John E., to General Electric Co. 6-phase, 2-circuit generators. 2,731,576, 1–17–56, Cl. 310—202.
McElwain, Alan C., and D. F. Link. Disk sharpener. 2,730,915, 1–17–56, Cl. 76—89.2.
McFadden, George H., B. Bennett, and R. E. Boyd, to General Motors Corp. Manufacture of rubber goods from a latex containing a fluotitanate and fluoride. 2,731,427, 1–17–56, Cl. 260—2.5.
McGill Mfg. Co., Inc.: *See*—
Carlson, Marvin C. 2,731,531.
McKee, Ralph H. Process for making pulp and paper. 2,731,344, 1–17–56, Cl. 92—9.
McKenna, Quentin H.: *See*—
Topinka, Alfred A., McKenna, and Carlton. 2,731,402.
McLeod, Stewart B., to Detroit Harvester Co. Automobile top and window actuating circuit responsive to moisture conditions. 2,731,588, 1–17–56, Cl. 318—483.
McManus, Cecilia D.: *See*—
McManus, Joseph D., and Duemler. 2,731,282.
McManus, Joseph D., deceased, by C. D. McManus, executrix, and O. E. Duemler, to Walworth Co. Shaft seal. 2,731,282, 1–17–56, Cl. 286—27.
Meadows, James L., W. P. Ballard, and W. B. Chandler, to The Texas Co. Dethiolizing hydrocarbons. 2,731,392, 1–17–56, Cl. 196—32.
Meissner, William E. Method and apparatus for forming reinforced tubing. 2,731,070, 1–17–56, Cl. 154—5.
Mekalainas, John. Aerator attachment for lawn mowers. 2,730,856, 1–17–56, Cl. 56—249.
Meicher, Daniel, and D. Hilowitz. Telemetric system. 2,731,625, 1–17–56, Cl. 340—203.
Menke, John R.: *See*—
Donellan, Khatchik O., and Menke. 2,730,951.
Menser, Henry E. Pipe aligning apparatus. 2,730,796, 1–17–56, Cl. 29—287.
Merck & Co., Inc.: *See*—
Basso, Arthur J., and O'Neill. 2,731,382.
O'Neill, Robert C., and Basso. 2,731,383.
O'Neill, Robert C., and Basso. 2,731,384.
O'Neill, Robert C., and Basso. 2,731,385.
Merritt, Terry: *See*—
Sherman, Clarence A., and Merritt. 2,731,538.
Metcalf, Herbert E.: *See*—
Wormser, Paul, and Metcalf. 2,731,051.
Metzger, Cullen W.: *See*—
Johnson, Paul H., Musch, and Metzger. 2,731,434.
Johnson, Paul H., Musch, and Metzger. 2,731,435.
Meyer, Earl A., to Bjorksten Research Laboratories, Inc. Hydraulically operated liquid sprayer. 2,731,297, 1–17–56, Cl. 299—92.
Meyst, William: *See*—
Fagan, Roscoe, and Meyst. 2,730,936.
Michels, Antonius M. J. F., to Stamicarbon N. V. Piston and cylinder mechanism. 2,731,192, 1–17–56, Cl. 230—21.
Midcontinent Adhesive Co.: *See*—
Strachan, Allister. 2,731,378.
Midland Chemical Corp.: *See*—
Toulmin, Harry A., Jr. 2,731,375.
Toulmin, Harry A., Jr. 2,731,432.
Mifflin, Leo V., to Collins Radio Co. Inductance corrector. 2,731,608, 1–17–56, Cl. 336—130.
Miles, James G., to Sperry Rand Corp. Saturable core circuits for counting and the like. 2,731,203, 1–17–56, Cl. 235—92.
Miles, Joseph W., to International Business Machines Corp. Protective systems for the time recorder motors. 2,731,524, 1–17–56, Cl. 200—33.
Miley, Allie A. Holders in which suture ampules may be broken. 2,731,142, 1–17–56, Cl. 206—1.
Miller, Edward W., to The Fellows Gear Shaper Co. Work and cutter spindle positioning mechanism. 2,730,929, 1–17–56, Cl. 90—7.

Miller, Roy G., to East Coast Aeronautics, Inc. Method and apparatus for making fiber glass pipe. 2,731,067, 1–17–56, Cl. 154—1.7.
Miller, Roy R. Poultry beak cutting device. 2,731,016, 1–17–56, Cl. 128—303.1.
Milwaukee Gas Specialty Co.: *See*—
Leins, Oscar J. 2,731,529.
Miner, W. H., Inc.: *See*—
Dentler, Arnold E. 2,731,258.
Dentler, Arnold E. 2,731,259.
Minneapolis-Honeywell Regulator Co.: *See*—
Avery, Harold T. 2,731,215.
Mitchell, Lester F., to Addressograph-Multigraph Corp. Clamp for master sheets of printing machines. 2,730,948, 1–17–56, Cl. 101—415.1.
Mitchell, Lester F., to Addressograph-Multigraph Corp. Clamp for master sheets of printing machine. 2,730,949. 1–17–56, Cl. 101—415.1.
Miyaji, Koichi, to Japan Broadcasting Corp. System of controlling electron current in multiple electrode tubes. 2,731,562, 1–17–56, Cl. 250—36.
Mizzy, Inc.: *See*—
Saupe, Karl W. 2,730,804.
Monsanto Chemical Co.: *See*—
Fike, Elmer A., and Morrill. 2,731,338.
Morrill, Henry L., and Zienty. 2,731,337.
Rossin, Elmer H. 2,730,790.
Shumard, Roland S. 2,731,380.
Taylor, George E. 2,731,496.
Moore, Charles J., and S. H. Smith, to Cannon Iron Foundries Ltd. Refractory element for gas fires and like space heating means. 2,731,010, 1–17–56, Cl. 126—92.
Moore Electronic Laboratories, Inc.: *See*—
Bordewieck, Robert W. 2,731,519.
Moore, George A. Heavy duty containers. 2,731,167, 1–17–56, Cl. 220—4.
Moore, George A. Nesting type container. 2,731,189, 1–17–56, Cl. 229—23.
Moquist, Stanley A., to Schoen Products. Film rewinding device. 2,731,211, 1–17–56, Cl. 242—55.
Moran's, Thos. J., Sons Inc.: *See*—
Baril, Albert, Jr., and De Barbieris. 2,731,263.
Moritt, Irving J.: *See*—
Bell, Sidney R. 2,730,979.
Morrell, John W., and W. J. Smith, to the Firestone Tire & Rubber Co. Method and apparatus for the production of crimped filaments. 2,730,758, 1–17–56, Cl. 18—8.
Morrill, Henry L.: *See*—
Fike, Elmer A., and Morrill. 2,731,338.
Morrill, Henry L., and F. B. Zienty, to Monsanto Chemical Co. Herbicidal composition comprising 3-(P-chlorophenyl)-1,1-dimethylurea. 2,731,337, 1–17–56, Cl. 71—2.4.
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Morris, Donald W. 2,731,003.
Morris, Donald W., to Morris Development Co. Internal-combustion engine. 2,731,003, 1–17–56, Cl. 123—53.
Morrow, Harry C., to United States Steel Corp. Method for threading strip through a continuous strip processing line. 2,731,262, 1–17–56, Cl. 271—2.1.
Morse, Howard H. Fuel system tester. 2,730,897, 1–17–56, Cl. 73—118.
Motorola, Inc.: *See*—
Anthun, Bjarne. 2,731,558.
Beck, Charles E. 2,731,555.
Doremus, John A., Stenerson, and Waterman. 2,731,622.
Walker, Leonard G. 2,731,635.
Mueller, Co.: *See*—
Mueller, Frank H., and Tinker. 2,731,207.
Mueller, Frank H., and Tratzik. 2,731,041.
Mueller, Frank H., and F. Tratzik, to Mueller Co. By-pass assembly for service pipes. 2,731,041, 1–17–56, Cl. 138—97.
Mueller, Frank H., and E. E. Tinker, to Mueller Co. Relief valve. 2,731,207, 1–17–56, Cl. 236—92.
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Baker, Albert D., Muller, and Harris. 2,731,104.
Muller, Siegfried A.: *See*—
McCormick, Jerry R. D., and Muller. 2,731,388.
McCormick, Jerry R. D., and Muller. 2,731,389.
Mundean Mfg. Co.: *See*—
Salisbury, Ellsworth C. 2,730,867.
Murdock, Albert L. Automatic ice making apparatus. 2,730,865, 1–17–56, Cl. 62—2.
Musch, John H.: *See*—
Johnson, Paul H., Musch, and Metzger. 2,731,434.
Johnson, Paul H., Musch, and Metzger. 2,731,435.
Myers, Carl E. Weed-cutting attachment for lawn mowers. 2,730,857, 1–17–56, Cl. 56—249.
Myers, Claude R.: *See*—
Lambert, Homer T., Myers, and Kershner. 2,731,114.
Myers, Kenneth H.: *See*—
Schindler, Frank S., and Myers. 2,731,037.
N. V. "COQ": *See*—
Hidde Nijland, Hendrik A. 2,731,105.
Nack, Herman R., and J. R. Whitacre, to The Commonwealth Engineering Co. of Ohio. Catalyzed deposition of metals from the gaseous state. 2,731,361, 1–17–56, Cl. 117—50.
Nappi, Elvira. Method of coating leather. 2,731,363, 1–17–56, Cl. 117—55.
Nash-Kelvinator Corp.: *See*—
Doeg, Ralph W. 2,731,314.
Philipp, Lawrence A. 2,730,868.
Nasmyth, Alfred J., to Quicktho (1928) Ltd. Means for mounting windows or other components in buildings. 2,731,118, 1–17–56, Cl. 189—76.
National Broach & Machine Co.: *See*—
Anthony, Russel W., and Paenka. 2,730,793.
National Equipment Corp.: *See*—
Guggenheim, Max M. 2,731,134.
Schlemmer, Philip G. 2,731,109.
National Lead Co.: *See*—
Anderson, William W., and Rowe. 2,731,327.
National Research Corp.: *See*—
Patton, Paul W. 2,730,986.
National Rubber Machinery Co.: *See*—
Brundage, James W. 2,730,763.
Navy, United States of America as represented by the Secretary of the: *See*—
Belz, Paul. 2,731,320.
Chance, Britton. 2,731,571.
Crawford, Jack A. 2,731,521.
Fain, Jacob M., Hewitt, and Rosenblatt. 2,731,353.
Gamertsfelder, George R. 2,731,595.
Hansen, J. Richard, and Sprengling. 2,731,573.
Harrison, Ralph J. 2,731,601.
Hauptman, Robert. 2,731,593.
Hayward, Frank W., Zablocki, and Scribner. 2,730,893.
Langford, Gilbert B. 2,731,288.
Magrath, Richard A. 2,731,533.
Marshall, Neil A., and Adler. 2,731,559.
Schwinger, Julian S. 2,731,602.
Naylor, Marcus A., Jr.: *See*—
Gresham, William F., and Naylor. 2,731,447.
Neher, Harry T.: *See*—
Bauer, La Verne N., Neher, and Van Horne. 2,731,448.
Neilsen, Hildaur L., to Zephyr American Corp. Rotary card filing device. 2,731,017, 1–17–56, Cl. 129—16.
Neilson, Roger. Magnetic ball game. 2,731,266, 1–17–56, Cl. 273—121.
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Nelson, Alden W., to James L. Entwistle Co. Apparatus for automatically vacuum coating of interior of glass tubes with metal. 2,730,987, 1–17–56, Cl. 118—49.
Nelson, Robert A. Dripless measuring liquid dispenser. 2,730,958, 1–17–56, Cl. 103—178.
Neuman, Herbert A., and S. W. Sweet, to The Foxboro Co. Magnetic drag speed measurement device. 2,731,025, 1–17–56, Cl. 137—85.
Newcomer, Jack S., to The Pennsylvania Salt Mfg. Co. Pesticidal compositions and their use. 2,731,381, 1–17–56, Cl. 167—30.
Newell, Carl W. Leader holder. 2,730,833. 1–17–56, Cl. 43—57.5.
Newhouse, John S. Ball cock. 2,731,031, 1–17–56, Cl. 137—444.
Newmont Mining Corp.: *See*—
Walt, James R., and Brant. 2,731,596.
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Lippert, Erhard M., Schultz, and Neyfeldt. 2,731,206.
Nicholson, Kenneth C., to The Carborundum Co. Refractory fiber body and method of making same. 2,731,359, 1–17–56, Cl. 117—16.
Nicolaisen, Bernard H., to Olin Mathieson Chemical Corp. Photochemical production of benzene hexachloride. 2,731,409, 1–17–56, Cl. 204—163.
Nielsen, Moritz H., to Illinois Tool Works. Method of and apparatus for assembling nut and washer elements. 2,730,732, 1–17–56, Cl. 10—155.
Nitroglycerin Aktiebolaget: *See*—
Schenck, Friedrich R., and Wetterholm. 2,731,460.
Norman, Vera. Wash cloths. 2,730,745, 1–17–56, Cl. 15—122.
Norris, Archie B. Animal trap. 2,730,834, 1–17–56, Cl. 43—69.
Norris-Thermador Corp.: *See*—
Pence, Frederick M. 2,730,905.
North American Aviation, Inc.: *See*—
Holton, Edward C., 2,731,221.
Norwitz, George: *See*—
Codell, Manrice, and Norwitz. 2,731,330.
Novak, James V. Drill bit grinding fixtures. 2,730,849, 1–17–56, Cl. 51—219.
Noxon, Paul A., and A. M. MacCallum, to Bendix Aviation Corp. Positioning system monitor. 2,731,217, 1–17–56, Cl. 244—77.
Nunn, Barney P. Multiple spindle drill. 2,731,050, 1–17–56, Cl. 144—110.
O. K. Rubber, Inc.: *See*—
James, Harold V. 2,730,764.
Oberman, Roelof M. M., to De Staat der Nederlanden, Ten Deze Vertegenwoordigd Door de Directeur-Generaal der Posterijen, Telegrafie en Telefonie. Lockout electronic line circuit. 2,731,514, 1–17–56, Cl. 179—18.
Obloy, Leo A. Lathe center. 2,730,917, 1–17–56, Cl. 82—33.
O'Brien, John V. Sewer cleaning machines. 2,730,740, 1–17–56, Cl. 15—104.3.
Odell, William W. Process of treating gasiform fluids at elevated temperatures. 2,731,335, 1–17–56, Cl. 48—197.
Ohio Nut & Bolt Co., The: *See*—
Grey, Gregory F. 2,731,535.
O'Kane, Bernard J., and E. J. Dickie, to The General Electric Co. Ltd. Azimuth stabilized plan position indicator. 2,731,633, 1–17–56, Cl. 343—11.
Olin Mathieson Chemical Corp.: *See*—
Nicolaisen, Bernard H. 2,731,409.
Olliveros, Gladys N. Art of waving human hair. 2,731,021, 1–17–56, Cl. 132—33.
O'Neill, Robert C.: *See*—
Basso, Arthur J., and O'Neill. 2,731,382.
O'Neill, Robert C., and A. J. Basso, to Merck & Co., Inc. Substituted urea-amide complex. 2,731,383, 1–17–56, Cl. 167—53.1.
O'Neill, Robert C., and A. J. Basso, to Merck & Co., Inc. 2-hydroxy pyridine substituted urea complex. 2,731,384, 1–17–56, Cl. 167—53.1.
O'Neill, Robert C., and A. J. Basso, to Merck & Co., Inc. 3-amino-as-triazine, substituted urea complexes and processes for preparing the same. 2,731,385, 1–17–56, Cl. 167—53.1.
Onksen, George W., Jr., to General Motors Corp. Vehicle illumination system. 2,731,584, 1–17–56, Cl. 315—81.

Ortega Mario D., deceased: P. A. Ortega, administratrix. Vacuum cleaning device. 2,731,103, 1-17-56, Cl. 183—37.
Ortega, Pauline A.: *See*—
Ortega, Mario D. 2,731,103.
Oury Engineering Co.: *See*—
Oury, John F. 2,731,249.
Oury, John F., to Oury Engineering Co. Hatch loading transit concrete mixing drum. 2,731,249, 1-17-56, Cl. 259—161.
Owen, Charles D., Jr., to Beacon Mfg. Co. Blanket and napped material therefor. 2,731,045, 1-17-56, Cl. 139—391.
Owens-Corning Fiberglas Corp.: *See*—
Caroselli, Remus F. 2,731,367.
Hogendobler, Henry R., and Simison. 2,731,066.
Darling, Jack C., and Hayes. 2,731,204.
De Reus, Marinus E. 2,731,374.
Hohl, John. 2,731,165.
Husum, Charles W. 2,731,071.
Oxy-Catalyst, Inc.: *See*—
Houdry, Eugene J., and Adey. 2,731,541.
P. B. A. Co.: *See*—
Salisbury, Thomas C. 2,730,784.
Pacific Press, Inc.: *See*—
Easton, Robert D. 2,731,086.
Paden, Dale D. Skater's brace. 2,731,275, 1-17-56, Cl. 280—11.36.
Page, George A. Egg grading mechanism. 2,731,146, 1-17-56, Cl. 209—121.
Palen, Peter H.: *See*—
Burdett, Harry W., and Palen. 2,731,119.
Palmer, Winslow, to Sperry Rand Corp. Timing apparatus. 2,731,634, 1-17-56, Cl. 343—103.
Panich, Michael, J. F. Shannon, and P. S. Dickey, to Bailey Meter Co. Bias adjusting apparatus for fluid pressure control. 2,731,023, 1-17-56, Cl. 137—82.
Parisi, Anthony, to Pekay Machine and Engineering Co., Inc. Belt conveyor frame construction. 2,731,138, 1-17-56, Cl. 198—204.
Parke, Davis & Co.: *See*—
Elslager, Edward F., Short, and Lademan. 2,731,470.
Parker, Charles A., and C. K. Rainey, to Burroughs Corp. Pin box control mechanism. 2,731,197, 1-17-56, Cl. 235—60.
Parker, Ray G., to Bethlehem Steel Co. Method and apparatus for launching marine vessel. 2,730,864, 1-17-56, Cl. 61—67.
Parks, Charles H. Pivoted fluke anchor having multiple cross arms. 2,730,984, 1-17-56, Cl. 114—208.
Parnes, Max J.: *See*—
Dossie, Thomas J., and Parnes. 2,730,812.
Patent and Development, Inc.: *See*—
Wilson, Robert W. 2,730,838.
Pattenden, Warren C.: *See*—
King, Laurence F., and Pattenden. 2,731,417.
Patterson, Lois M. Toy kit. 2,730,827, 1-17-56, Cl. 41—10.
Patton, Paul W., to National Research Corp. Coating. 2,730,986, 1-17-56, Cl. 118—49.
Pavelka, Joseph, to J. Pavelka, Jr. Wire connector. 2,731,616, 1-17-56, Cl. 339—249.
Pavelka, Joseph, Jr.: *See*—
Pavelka, Joseph. 2,731,616.
Pavelka, Joseph, Jr., to The Toastswell Co., Inc. Food heater and cooker. 2,731,539, 1-17-56, Cl. 219—19.
Pavlecka, Vladimir H. Constant temperature-variable density gas turbine power plant. 2,731,570, 1-17-56, Cl. 290—4.
Pax, William J. Metal awning. 2,730,778, 1-17-56, Cl. 20—57.5.
Pearce Development Co.: *See*—
Pearce, Lewis C. 2,730,989.
Pearce, Lewis C., to Pearce Development Co. Adhesive applying apparatus for envelope making machines. 2,730,989, 1-17-56, Cl. 118—221.
Pearne, Fred A. Differential steering mechanism. 2,731,277, 1-17-56, Cl. 280—93.
Pekay Machine and Engineering Co., Inc.: *See*—
Parisi, Anthony. 2,731,138.
Pelhat, Raymond. Compound internal-combustion engine. 2,731,000, 1-17-56, Cl. 123—11.
Pence, Frederick M., to Norris-Thermador Corp. Pulley friction drive. 2,730,905, 1-17-56, Cl. 74—206.
Penn Controls, Inc.: *See*—
Cobb, Clifton A. 2,731,080.
Schell, Paul. 2,731,230.
Pennie, Donald F.: *See*—
Gelb, Robert L., and Pennie. 2,731,614.
Pennsylvania Salt Mfg. Co., The: *See*—
Newcomer, Jack S. 2,731,381.
Pensabene, Nicolò. Electric induction motor-pump. 2,730,953, 1-17-56, Cl. 103—87.
Permutit Co. Ltd., The: *See*—
Townend, Frank S. 2,731,413.
Perry, Manuel S. Hip, ridge and valley roofing shingle. 2,730,969, 1-17-56, Cl. 108—24.
Perugia, André, to Anper, Inc. Method of making shoes. 2,730,736, 1-17-56, Cl. 12—142.
Peter, Albin, and E. Wydler, to Sandoz A. G. Sulfonic acid amides of the anthraquinone series. 2,731,476, 1-17-56, Cl. 260—371.
Peterson, Carl M. F., to The Wakefield Co. Combination luminous ceiling and air conditioning system. 2,730,942, 1-17-56, Cl. 98—40.
Peterson, Russell A.: *See*—
Ackert, George F., and Peterson. 2,731,332.
Petroleum Systems, Inc.: *See*—
Phillips, Lyman W., Fox, and Bostwick. 2,731,030.
Pettersson, Eric A. E.: *See*—
Kindstrand, Claes A., and Pettersson. 2,730,786.
Pfefferkorn, Otto T. Water reactive alloy. 2,731,342, 1-17-56, Cl. 75—134.
Philipp, Lawrence A., to Nash-Kelvinator Corp. Multiple temperature refrigerating apparatus. 2,730,868, 1-17-56, Cl. 62—6.
Phillips, Lyman W., G. H. Fox, and W. L. Bostwick, to Petroleum Systems, Inc. Overflow float valves. 2,731,030, 1-17-56, Cl. 137—413.
Phillips Petroleum Co.: *See*—
Atkinson, Robert G. 2,731,328.
De Boisblanc, Deslonde R. 2,730,896.
Edmonds, James T., Jr. 2,731,454.
Findlay, Robert A. 2,731,149.
Findlay, Robert A. 2,731,468.
Heffner, Robert E. 2,731,466.
Hillyer, John C., and Edmonds. 2,731,475.
Jones, Rufus V., and Canterino. 2,731,439.
Province, John H. 2,730,910.
Richardson, Harold M. 2,731,520.
Weedman, John A. 2,731,456.
Platt, Ralph E. Undertaking appliance for covering portions of the torso. 2,730,788, 1-17-56, Cl. 27—21.
Pike, Winthrop S.: *See*—
Sziklai, George C., and Pike. 2,731,567.
Pike, Winthrop S., to Radio Corp. of America. Electronic particle counting apparatus. 2,731,202, 1-17-56, Cl. 235—92.
Piloni, Robert A.: *See*—
Rowland, George P., Jr., and Piloni. 2,731,449.
Pioneer Specialties, Inc.: *See*—
Church, Walter L. 2,731,315.
Pittsburgh Coke & Chemical Co.: *See*—
Davie, William R. 2,731,339.
Pittsburgh Steel Co.: *See*—
Rubin, Michael M. 2,731,403.
Plan-It Homes: *See*—
Allison, Lloyd H. 2,731,116.
Pocrass, Bernard: *See*—
Pocrass, Irving F., Syak, and B. Pocrass. 2,731,009.
Pocrass, Irving F., C. W. Syak, and B. Pocrass, to The Bica Co. Portable fuel burning space heater. 2,731,009, 1-17-56, Cl. 126—85.
Poeschl, Rudolf and W. Rockers. 2,731,222, 1-17-56, Cl. 248—23.
Poeschl, Wilhelm: *See*—
Poeschl, Rudolf and W. 2,731,222.
Polytechnic Institute of Brooklyn: *See*—
Weber, Ernst, and Ebert. 2,731,603.
Porsche, Ferdinand A. E., and R. Binder, to Dr. Ing. h. c. F. Porsche K.-G. Internal-combustion engine auxiliary shafts for driving auxiliary engine units. 2,731,008, 1-17-56, Cl. 123—195.
Post, Daniel H. Portable walker, car seat and high chair combination. 2,731,072, 1-17-56, Cl. 155—38.
Potter, Howell L., to The Fafnir Bearing Co. Bearing lubrication means. 2,731,310, 1-17-56, Cl. 308—187.
Potter, Whitney W.: *See*—
Herbert, Earl. 2,731,598.
Poupitch, Ongjlesa J., to Illinois Tool Works. Hub cap clip. 2,730,780, 1-17-56, Cl. 24—73.
Poupitch, Ongjlesa J., to Illinois Tool Works. Scrap eliminating lock washer having biting teeth. 2,731,057, 1-17-56, Cl. 151—35.
Power, James T., to Lockheed Aircraft Corp. Aircraft sealed cockpit movable canopy mounting. 2,731,220, 1-17-56, Cl. 244—121.
Powers, Robert P., to The Firestone Tire & Rubber Co. Sealing strip for tubeless tires. 2,731,063, 1-17-56, Cl. 152—363.
Powers, Robert P., to The Firestone Tire & Rubber Co. Tire and rim. 2,731,064, 1-17-56, Cl. 152—378.
Powers, Robert P., to The Firestone Tire & Rubber Co. Tubeless truck tire rim and valve. 2,731,065, 1-17-56, Cl. 152—427.
Prener, Jerome S., to General Electric Co. Electroluminescent materials and method of preparation. 2,731,423, 1-17-56, Cl. 252—301.6.
Price, John A., to American Cyanamid Co. Method of preparing a copolymer of 2-chloroacrylamide and methacrylonitrile. 2,731,451, 1-17-56, Cl. 260—85.5.
Price, Nathan C., to Lockheed Aircraft Corp. Gaseous fuel turbine power plant having parallel connected compressors. 2,730,863, 1-17-56, Cl. 60—39.15.
Proctor, Peter G.: *See*—
Goodliffe, Arthur W., and Proctor. 2,731,280.
Prondecki, Eugene F. Fluid pump or motor. 2,730,956, 1-17-56, Cl. 103—125.
Province, John H., to Phillips Petroleum Co. Air actuated control system. 2,730,910, 1-17-56, Cl. 74—472.
Psenka, Joseph A.: *See*—
Anthony, Russel W., and Psenka. 2,730,793.
Puckering, Charles H.: *See*—
Wallace, Halbert C., and Puckering. 2,731,246.
Purcell, Howard M. Hydraulic accumulator. 2,731,038, 1-17-56, Cl. 138—30.
Purmort, Louis E. Filter leaves. 2,731,156, 1-17-56, Cl. 210—195.
Purmort, Louis E. Filter. 2,731,157, 1-17-56, Cl. 210—200.
Pyclak, Roman J., to Kent-Moore Organization, Inc. Carbon blaster mechanism. 2,730,842, 1-17-56, Cl. 51—8.
Quaas, Joseph: *See*—
Wasserman, Rene D., and Quaas. 2,731,373.
Quicktho (1928) Ltd.: *See*—
Nasmyth, Alfred J. 2,731,118.
Radio Corp. of America: *See*—
Beard, Arthur D. 2,730,922.
Kelzer, Eugene O., and Kroger. 2,731,565.
Pike, Winthrop S. 2,731,202.
Schade, Otto H. 2,731,597.
Schroeder, Alfred C. 2,731,563.
Sobel, John A., III. 2,731,609.
Spaulding, Spencer W. 2,731,631.
Sziklai, George C., and Pike. 2,731,567.

Rainey, Clifton K.: *See*—
Parker, Charles A., and Rainey. 2,731,197.
Raizen, Charles S. Token-mixing device for games. 2,731,268, 1-17-56, Cl. 273—144.
Ramadanoff, Dimiter, to Union Carbide and Carbon Corp. Electric contact brush. 2,731,371, 1-17-56, Cl. 117—228.
Ranke, Fritz, to Gesellschaft fuer Linde's Eismaschinen Aktien-Gesellschaft. Process of operating regenerator pairs in gas separating installations. 2,730,875, 1-17-56, Cl. 62—175.5.
Ranney, Rufus P., and D. H. Reese, to California Research Corp. Cap fastener. 2,731,185, 1-17-56, Cl. 226—88.
Ransburg Electro-Coating Corp.: *See*—
Marsh, James C. 2,731,589.
Starkey, William A. 2,730,988.
Raphael, Walter, to General Patent Production Co. Container lock. 2,731,166, 1-17-56, Cl. 215—52.
Rasmussen, Chris M. Dish cloth holder having spring wire and runner. 2,730,746, 1-17-56, Cl. 15—154.
Raspa, Francisco. Thread-waxing apparatus. 2,730,975, 1-17-56, Cl. 112—42.
Redick, David C., to General Motors Corp. Direction signaling device. 2,731,525, 1-17-56, Cl. 200—61.34.
Redner, Arthur D., to General Filters, Inc. Filter element and method of manufacture. 2,731,152, 1-17-56, Cl. 210—120.
Reed, Claude D., H. C. Felty, J. W. Hackett, and C. C. Hottenstein, to Bethlehem Steel Co. Slotting machine for mine rods. 2,730,730, 1-17-56, Cl. 10—11.
Reese, Donald H.: *See*—
Ranney, Rufus P., and Reese. 2,731,185.
Regie Nationale des Usines Renault: *See*—
Saives, Leon. 2,731,098.
Reid, John D.: *See*—
Reinhardt, Robert M., Daul, and Reid. 2,731,323.
Reimer, George M.: *See*—
Hayes, Robert A., and Reimer. 2,730,977.
Reiner, Laszlo, to Wallace & Tiernan Co., Inc. Antifungal composition. 2,731,386, 1-17-56, Cl. 167—58.
Reinhardt, Robert M., G. C. Daul, and J. D. Reid, to the United States of America as represented by the Secretary of Agriculture. Process of reacting cellulose textile with beta-propiolactone or beta-isovalerolactone. 2,731,323, 1-17-56, Cl. 8—116.
Reisten, Werner. Mill for fibrous substances. 2,730,931, 1-17-56, Cl. 92—26.
Rekettye, Paul: *See*—
Crafton, Marvin J., and Rekettye. 2,730,765.
Rennerfelt, Sven B. Continuously variable speed gears. 2,730,904, 1-17-56, Cl. 74—200.
Reppe, Walter, N. v. Kutepow, and M. Heintzeler, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Production of aliphatic alcohols from olefins. 2,731,504, 1-17-56, Cl. 260—638.
Republic Aviation Corp.: *See*—
Russell, Charles W. 2,730,876.
Research & Engineering Corp.: *See*—
Daun, Carl L. 2,731,027.
Reunerman, Theodorus, and W. H. T. Helmig. Automatic telephone systems. 2,731,513, 1-17-56, Cl. 179—18.
Reynolds Gas Regulator Co.: *See*—
Hughes, George C. 2,731,026.
Hughes, George C. 2,731,032.
Hughes, George C. 2,731,036.
Reynolds Metals Co.: *See*—
Hall, James A. 2,730,872.
Reynolds, William G. Method and apparatus for the manufacture of sheet material from solid particles suspended in liquid media. 2,730,933, 1-17-56, Cl. 92—38.
Ricciardi, Matthew C. Container holder. 2,731,226, 1-17-56, Cl. 248—196.
Riccio, Theodore A. Tree holder. 2,731,223, 1-17-56, Cl. 248—41.
Richards, Kurt F., to E. I. du Pont de Nemours and Co. Tetrafluoroethylene polymer bonded heat-resistant fabric. 2,731,068, 1-17-56, Cl. 154—2.6.
Richardson, Harold M., to Phillips Petroleum Co. Pulse-amplitude. 2,731,520, 1-17-56, Cl. 179—171.
Richter, Walter J.: *See*—
Garapolo, Orlando, Richter, and Campbell. 2,730,963.
Riddell, Wallace C., and G. B. Kirk, to Kaiser Gypsum Co., Inc. Cementitious composition and process of producing the same. 2,731,377, 1-17-56, Cl. 154—88.
Riede, Peter M., to Union Carbide and Carbon Corp. Apparatus for pumping a volatile liquid. 2,730,957, 1-17-56, Cl. 103—153.
Rimple, Edward J., to Be-Ge Mfg. Co. Scraper blade for reversible disc plows. 2,730,940, 1-17-56, Cl. 97—31.
Ripple, Melvin H., to The Hoover Co. Food mixers. 2,730,901, 1-17-56, Cl. 74—16.
Ritepoint Pen and Pencil Co.: *See*—
Boyle, Farnham F. 2,730,993.
Rittenhouse, Howard E., ½ to Bowser, Inc., and ½ to Tokheim Corp. Bottom fill apparatus. 2,731,029, 1-17-56, Cl. 137—235.
Robbins, Robert R. Accelerators for dry pipe sprinkler systems. 2,731,091, 1-17-56, Cl. 169—17.
Roberts, Virginia T. Divided bed cover. 2,730,728, 1-17-56, Cl. 5—334.
Robertson Photo-Mechanix, Inc.: *See*—
Blatherwick, Delbert T. 2,730,939.
Robinson, Frank E.: *See*—
Carlson, Clarence O., Everling, and Robinson. 2,730,791.
Robitschek, Paul, and D. B. Stormon, to Hooker Electrochemical Co. Methylpolychloro fatty acid esters stabilized with epoxidized fatty oil and compositions thereof with polyvinyl resins. 2,731,431, 1-17-56, Cl. 260—23.
Robotron Corp.: *See*—
Rockafellow, Stuart C. 2,731,594.
Rockafellow, Stuart C., to Robotron Corp. Phase shifting device for three phase. 2,731,594, 1-17-56, Cl. 323—119.
Rockwell Spring and Axle Co., The: *See*—
Rockwell, Walter F. 2,730,914.
Rockwell, Walter F., to The Rockwell Spring and Axle Co. Multi-speed planetary vehicle drive mechanism. 2,730,914, 1-17-56, Cl. 74—695.
Rockwood, Albert M., and R. M. Conklin, to The Wolf Machine Co. Sharpening attachment for a cloth cutting machine. 2,730,850, 1-17-56, Cl. 51—249.
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Tramm, Heinrich, and Roelen. 2,731,370.
Rogers, Edmund: *See*—
Stetz, Robert J., and Rogers. 2,731,436.
Rogge, Glenn A.: *See*—
Williams, Roger F., and Rogge. 2,730,785.
Rohm & Haas Co.: *See*—
Bauer, La Verne N., Neher, and Van Horne. 2,731,448.
Lane, Earl W. 2,731,426.
Rohrlick, Michael K. Apparatus for the formation and assembly of slide-fastener-carrying garment fly pieces. 2,730,973, 1-17-56, Cl. 112—2.
Ronan, Lerned F. Metal cutting saw. 2,730,792, 1-17-56, Cl. 29—95.
Rosenblatt, William: *See*—
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Ross, Harold M., and R. Cowen, to Century Engineering Co. Device for spiral stitching. 2,730,974, 1-17-56, Cl. 112—2.
Ross, John, to Colgate-Palmolive Co. Non-soap detergent compositions. 2,731,422, 1-17-56, Cl. 252—161.
Rossin, Elmer H., to Monsanto Chemical Co. Treatment of textile fibers. 2,730,790, 1-17-56, Cl. 28—75.
Rothweiler, Jack W. Sprinkler. 2,731,294, 1-17-56, Cl. 299—18.
Rottig, Walter, to Ruhrchemie Aktiengesellschaft. Catalytic hydrogenation of carbon monoxide. 2,731,486, 1-17-56, Cl. 260—449.6.
Rousseau, Robert, to Andres Soriano, and Ansor Corp. Luminous display apparatus. 2,731,585, 1-17-56, Cl. 315—248.
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Anderson, William W., and Rowe. 2,731,327.
Rowe, Walter C., to The Firestone Tire & Rubber Co. Stain-resistant barrier. 2,731,060, 1-17-56, Cl. 152—330.
Rowland, David L. Furniture seating. 2,731,076, 1-17-56, Cl. 155—187.
Rowland, George P., Jr., and R. A. Piloni, to The Firestone Tire & Rubber Co. Vinyl chloride resins for application as solvent solutions. 2,731,449, 1-17-56, Cl. 260—78.5.
Rowley, Arthur C., to Globe Automatic Sprinkler Co. of Pennsylvania. Load supporting thermosensitive linkage. 2,730,900, 1-17-56, Cl. 74—2.
Rubin, Michael M., to Pittsburgh Steel Co. Manufacture of nickel-plated steel. 2,731,403, 1-17-56, Cl. 204—37.
Ruemens, Wilhelm: *See*—
V. Reibnitz, Bruno, Ruemens, and Beideck. 2,731,364.
Ruetz, Karl. Container closure device. 2,731,177, 1-17-56, Cl. 222—505.
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Rottig, Walter. 2,731,486.
Tramm, Heinrich, and Roelen. 2,731,370.
Rupp, Walter: *See*—
Ebel, Friedrich, Rupp, and Keller. 2,731,464.
Rusch, Adolphe, to the United States of America as represented by the Secretary of the Army. Method of making hollow laminated articles from unwoven fabric. 2,731,376, 1-17-56, Cl. 154—83.
Rusch, Alfred. Combination cigarette extinguisher and ash tray. 2,731,019, 1-17-56, Cl. 131—235.
Ruschig, Heinrich, W. Fritsch, J. Schmidt-Thomé and W. Haede, to Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Bruning. 17-hydroxy compounds of the steroid series. 2,731,461, 1-17-56, Cl. 260—239.55.
Russell, Charles W., to Republic Aviation Corp. Universal joint adapter. 2,730,876, 1-17-56, Cl. 64—17.
SKF Kugellagerfabriken Gesellschaft mit beschränkter Haftung: *See*—
Beck, Hans J., and Schmid. 2,730,771.
S & W Fine Foods, Inc.: *See*—
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Wormser, Paul, and Metcalf. 2,731,051.
Sadler, Carl L., Jr.: *See*—
Cardillo, Joseph S., Hann, Sadler, and Lundgard. 2,731,569.
Saetter-Lassen, Erik. Machine gun. 2,730,928, 1-17-56, Cl. 89—190.
Sagstuen, Clarence. Multi-joint spring anchor. 2,730,774, 1-17-56, Cl. 20—16.
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Synerholm, Martin E., Jules, and Sahyun. 2,731,471.
Sahyun, Melville: *See*—
Synerholm, Martin E., Jules, and Sahyun. 2,731,471.
St. Clair, Theodore A.: *See*—
Baldwin, John D., Jr., St. Clair, and Weatherhead. 2,731,228.
Saives, Leon, to Regie Nationale des Usines Renault. Rear door and fender air inlet path to rear engine compartment. 2,731,098, 1-17-56, Cl. 180—54.
Salisbury, Ellsworth C., to Mundean Mfg. Co. Refrigeration unit. 2,730,867, 1-17-56, Cl. 62—4.
Salisbury, Thomas C., to P. B. A. Co. Paving dowel supporting construction. 2,730,784, 1-17-56, Cl. 25—118.
Salzmann, Leo, to L. Sonneborn Sons, Inc. Cloud point reduction of mineral white oils. 2,731,391, 1-17-56, Cl. 196—17.
Salzmann, Leo, L. J. Leta, and L. C. Borell, to L. Sonneborn Sons, Inc. Pour point reduction of petroleum oil fraction with activated urea. 2,731,455, 1-17-56, Cl. 260—96.5.
Sandoz, A. G.: *See*—
Peter, Albin, and Wydler. 2,731,476.

Sandy Hill Iron & Brass Works, The, : *See*—
McCrystle, John D., and Townsend. 2,730,932.
Sarong, Inc. : *See*—
Zimmerman, Eli, and Thompson. 2,731,088.
Saunders, Clare C. Bathing and shower cap. 2,730,720, 1–17–56, Cl. 2—68.
Saupe, Karl W., to Mizzy, Inc. Dental hand abrasive separator device. 2,730,804, 1–17–56, Cl. 32—58.
Savage, Albert B., to The Dow Chemical Co. Color stabilized white pigmented ethyl cellulose plastic compositions. 2,731,357, 1–17–56, Cl. 106—176.
Savage, Phillip L. : *See*—
Barr, Malcolm J. 2,731,240.
Schade, Otto H., to Radio Corp. of America. Apparatus for measuring the quality of a kinescope. 2,731,597, 1–17–56, Cl. 324—20.
Schaeffer, Joseph M., to The Waterbury Farrel Foundry & Machine Co. Cut-off mechanism for headers or like machines. 2,730,731, 1–17–56, Cl. 10—25.
Schafer, Vernon E., Jr. : *See*—
Dickson, John, and Schafer. 2,731,001.
Scharf, Murray M., 50% to B. Greenblatt. Soup concentrates. 2,731,351, 1–17–56, Cl. 99—124.
Scharf, Murray M., 50% to B. Greenblatt. Soup concentrates. 2,731,352, 1–17–56, Cl. 99—124.
Schell, Paul, to Penn Controls, Inc. Valve structure. 2,731,230, 1–17–56, Cl. 251—11.
Schelp, Helmut R., to The Garrett Corp. Air conditioner employing an expansion evaporation air cycle. 2,730,874, 1–17–56, Cl. 62—138.
Schenck, Carl : *See*—
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Schenck, Friedrich R., and G. A. Wetterholm, to Nitroglycerin Aktiebolaget. Process for producing ammonia derivatives of polynitroalcohols. 2,731,460, 1–17–56, Cl. 260—239.
Schenley Industries, Inc. : *See*—
Auhagen, Ernst, and Bauer. 2,731,387.
Schindler, Frank S., and K. H. Myers, to Chicago Metal Hose Corp. Hydraulic accumulators. 2,731,037, 1–17–56, Cl. 138—30.
Schleimer, Floyd V. Awning construction. 2,730,779, 1–17–56, Cl. 20—57.5.
Schlemmer, Philip G., to National Equipment Corp. Elevating mechanism for wrapping machines. 2,731,109, 1–17–56, Cl. 187—17.
Schmid, Erwin F. : *See*—
Beck, Hans J., and Schmid. 2,730,771.
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Ruschig, Heinrich, Fritsch, Schmidt-Thomé, and Haede. 2,731,461.
Schneider, Robert A. Apparatus for removing the casing of link sausage and structurally like products. 2,730,754, 1–17–56, Cl. 17—1.
Schneider, Robert W. Optical game devices. 2,731,265, 1–17–56, Cl. 273—1.
Schneller, Arthur J. Foldable seat and bed construction. 2,730,727, 1–17–56, Cl. 5—38.
Schneller, George H. : *See*—
Tansey, Robert P., and Schneller. 2,731,390.
Schonen Products : *See*—
Moquist, Stanley A. 2,731,211.
Schörner, Christian, to Maschinenfabrik Augsburg-Nürnberg A. G. Method and apparatus for finishing turbine blades. 2,730,794, 1–17–56, Cl. 29—156.8.
Schroeder, Alfred C., to Radio Corp. of America. Stabilization by molecular beams. 2,731,563, 1–17–56, Cl. 250—36.
Schroeder, Charles S., to The Yale & Towne Mfg. Co. Traction unit for industrial trucks. 2,731,099, 1–17–56, Cl. 180—57.
Schroeder, Elmer F., to G. D. Searle & Co. 5-Halo-6-aminouracils and derivatives thereof. 2,731,465, 1–17–56, Cl. 260—256.4.
Schultz, Ralph L. : *See*—
Lippert, Erhard M., Schultz, and Neyfeldt. 2,731,206.
Schulz, C. Milton. Foldable compartmental card holder. 2,731,270, 1–17–56, Cl. 273—148.
Schuster, Ulysse. Printing machine. 2,730,944, 1–17–56, Cl. 101—68.
Schwabe, Kurt. Devices for threading-in the weft in automatic looms. 2,731,044, 1–17–56, Cl. 139—259.
Schwartz, Leo A. Antifriction bearing. 2,731,311, 1–17–56, Cl. 308—191.
Schwinger, Julian S., to the United States of America as represented by the Secretary of the Navy. Directional coupler. 2,731,602, 1–17–56, Cl. 333—10.
Scopicon, Inc. : *See*—
Gorham, George, and Ferrari. 2,730,923.
Scribner, Kenneth R. : *See*—
Heyward, Frank W., Zabiocki, and Scribner. 2,730,893.
Searight, Charles E. Production of silicone-coated glass beads. 2,730,841, 1–17–56, Cl. 49—79.
Searle, G. D., & Co. : *See*—
Cusic, John W. 2,731,467.
Krimmel, Carl P. 2,731,469.
Marshall, Charles. 2,731,479.
Schroeder, Elmer F. 2,731,465.
Seck, Werner G., to The Hoover Company. Nozzle adjustment for suction cleaner. 2,730,752, 1–17–56, Cl. 15—361.
Seck, Warner G., to The Hoover Company. Suction cleaning with pleated filter. 2,731,106, 1–17–56, Cl. 183—51.
Seeloff, Melvin M. : *See*—
Hansen, Hans H., and Seeloff. 2,731,534.
Seeloff, Melvin M., and H. H. Hansen, to The Taylor-Winfield Corp. Pneumatic actuation of machine elements, particularly resistance welding electrodes. 2,730,995, 1–17–56, Cl. 121—48.
Seely, George A., W. E. Segl, and E. S. Wilson, to Hercules Powder Co. Apparatus for treating pulp with liquid. 2,730,888, 1–17–56, Cl. 68—181.
Segl, Walter E. : *See*—
Seely, George A., Segl, and Wilson. 2,730,888.
Seifert, Ernst, to E. Seifert and H. Lohmann. Physiologically valuable xerogels and mixtures containing them. 2,731,340, 1–17–56, Cl. 71—52.
Seitz, William L., to Tinnerman Products, Inc. Instrument mounting and clip therefor. 2,731,229, 1–17–56, Cl. 248—300.
Seisert, Robert D., to Clinton Machine Co. Bow type chair saw construction. 2,731,048, 1–17–56, Cl. 143—32.
Sejersted, Johannes : *See*—
Sem, Mathias O., and Sejersted. 2,731,407.
Selman, Victor. Gage cap. 2,730,809, 1–17–56, Cl. 33—178.
Sem, Mathias O., and J. Sejersted, to Elektrokoemisk A/S. Method of collecting gases from aluminum furnaces. 2,731,407, 1–17–56, Cl. 204—67.
Serniuk, George E., and L. M. Welch, to Esso Research and Engineering Co. Thermosetting resins. 2,731,450, 1–17–56, Cl. 260—80.7.
Servel, Inc. : *See*—
Stubblefield, Edward M. 2,730,869.
Shabaker, Hubert A., to Houdry Process Corp. System for contacting solids and liquids. 2,731,424, 1–17–56, Cl. 252—450.
Shannon, Jack F. : *See*—
Panich, Michael, Shannon, and Dickey. 2,731,023.
Shannon, John L., to Waterbury Tack Co., Inc. Article feeding. 2,731,131, 1–17–56, Cl. 198—35.
Share, Barnett. Pump drive control. 2,730,955, 1–17–56, Cl. 103—113.
Shaw, Ernest C. Making oil filter cartridges. 2,731,183, 1–17–56, Cl. 226—18.
Shawnee Mfg. Co., Inc. : *See*—
Wills, Marion C. and W. J. 2,731,163.
Shell Development Co. : *See*—
Smith, Curtis W. 2,731,502.
Shepard, Billy R. : *See*—
Heliar, Martin W., Jr., and Shepard. 2,730,899.
Sherman, Clarence A., and T. Merritt, to Clinton Machine Co. Metal disintegrating machine. 2,731,538, 1–17–56, Cl. 219—15.
Shore, Sidney X. : *See*—
Martin, Paul S., and Shore. 2,730,937.
Short, Franklin W. : *See*—
Elslager, Edward F., Short, and Lademan. 2,731,470.
Shumard, Roland S., to Monsanto Chemical Co. Method for controlling gastropoda with octyl vinyl sulfone. 2,731,380, 1–17–56, Cl. 167—22.
Siderman, Joseph A. Wiring assembly with indicator means. 2,731,629, 1–17–56, Cl. 340—252.
Silberstein, Victor. Flywheels. 2,730,911, 1–17–56, Cl. 74—572.
Simison, Allen L. : *See*—
Hogendobler, Henry R., and Simison. 2,731,066.
Sims, Joseph W. : *See*—
Jacobs, Irvin W., and Sims. 2,731,319.
Sinclair Refining Co. : *See*—
Erickson, Henry. 2,731,397.
Kalinowski, Lester W. 2,731,324.
Sinks, Allen T., deceased, by A. C. Sinks, administratrix, to General Electric Co. Gyroscope. 2,730,813, 1–17–56, Cl. 33—204.
Sinks, Anna C. : *See*—
Sinks, Allen T. 2,730,813.
Skinner, Kenneth G., to the United States of America as represented by the Solicitor of the Department of the Interior. Process of producing a crystalline magnesium-aluminum-silicate material. 2,731,355, 1–17–56, Cl. 106—62.
Skole, Viggo. Stocking and method of producing a ravel trap. 2,730,883, 1–17–56, Cl. 66—187.
Smisko, John, to Aeroquip Corp. Locking pawl. 2,731,058, 1–17–56, Cl. 151—39.
Smith, Bob H., to the United States of America as represented by the United States Atomic Energy Commission. Polyphase voltage generator. 2,731,590, 1–17–56, Cl. 321—36.
Smith, Clifford D., to The Firestone Tire & Rubber Co. Nonmetallic enclosure. 2,731,055, 1–17–56, Cl. 150—52.
Smith, Curtis W., to Shell Development Co. Hydroxylation process. 2,731,502, 1–17–56, Cl. 260—635.
Smith, Ernest A., to General Electric Co. Conveyor mechanism. 2,731,139, 1–17–56, Cl. 198—219.
Smith, Neva-Tay K. : *See*—
McCormick, Jerry R. D., and Smith. 2,731,497.
Smith, Stanley H. : *See*—
Moore, Charles J., and Smith. 2,731,010.
Smith, Walter J. : *See*—
Morrell, John W., and Smith. 2,730,758.
Smith, William L. Fishing device. 2,730,830, 1–17–56, Cl. 43—25.
Smits, Wytze B. Apparatus for atomizing and igniting substances. 2,731,079, 1–17–56, Cl. 158—28.
Smolka, Robert F. Denture demonstrators. 2,730,805, 1–17–56, Cl. 32—71.
Smyth, Elbert D. Detachable, adjustable shape mop head. 2,730,748, 1–17–56, Cl. 15—229.
Smythe, Alan : *See*—
Zellman, Roy H., and Smythe. 2,731,097.
Snow, Raymond M. Spraying apparatus. 2,731,295, 1–17–56, Cl. 299—30.
Sobel, John A., III, to Radio Corp. of America. Sliding connector for printed circuit boards. 2,731,609, 1–17–56, Cl. 339—17.
"Societe d'Exploitation des Materials Hispano-Suiza," S. A. : *See*—
Boutquard, Louis M. E. 2,730,927.
Societe du Carburateur Zenith : *See*—
Lamy, René L. 2,730,862.
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Socke, John E., to American Can Co. Soldering machine cooling system. 2,730,982, 1–17–56, Cl. 113—98.
Socke, John E., to American Can Co. Can body support with conveyor wearing tracks. 2,731,132, 1–17–56, Cl. 198—41.
Socke, John E., to American Can Co. Can body making machine with improved body support member. 2,731,133, 1–17–56, Cl. 198—41.
Socke, John E., to American Can Co. Can body conveyor with horn aligning device. 2,731,136, 1–17–56, Cl. 198—179.
Socke, John E., to American Can Co. Can body conveyor with adjustable rail supports. 2,731,137, 1–17–56, Cl. 198—179.
Socony Mobil Oil Co., Inc. : *See*—
Garwood, William E., and Hamilton. 2,731,458.
Watts, Richard G. 2,731,168.
Soderstrom, Harry R., to Boeing Airplane Co. Self-sealing releasable coupling. 2,731,278, 1–17–56, Cl. 284—19.
Somerville, Robert L. : *See*—
Young, Thomas R., and Somerville. 2,731,405.
Young, Thomas R., and Somerville. 2,731,406.
Sonneborn, L., Sons, Inc. : *See*—
Salzmann, Leo. 2,731,391.
Salzmann, Leo, Leta, and Borell. 2,731,455.
Sontheimer, Carl G., to C. G. S. Laboratories, Inc. Counterfeit detector. 2,731,621, 1–17–56, Cl. 340—149.
Söredal, Sven G., to Svenska Ackumulator Aktiebolaget Jungner. Dynamo electric machine for telemetering angle data. 2,731,574, 1–17–56, Cl. 310—49.
Soriano, Andres : *See*—
Rousseau, Robert. 2,731,585.
Sornin de Leysat, Henri A. M. J. H. Knitting needle. 2,730,881, 1–17–56, Cl. 66—117.
Southwest Welding & Mfg. Co. : *See*—
Maloon, Earl B. 2,730,935.
Spaulding, Spencer W., to Radio Corp. of America. Code converter circuit. 2,731,631, 1–17–56, Cl. 340—318.
Speed-Flex, Inc. : *See*—
Castner, George P. 2,730,886.
Spencer, George A., to The Firestone Tire & Rubber Co. Rubber foam mixer. 2,731,253, 1–17–56, Cl. 261—118.
Sperry Rand Corp. : *See*—
Miles, James G. 2,731,203.
Palmer, Winslow. 2,731,634.
Sprengling, Gerhard : *See*—
Hansen, J. Richard, and Sprengling. 2,731,573.
Sprout, Waldron & Co. : *See*—
Fisher, Chester D. 2,731,248.
Stacey, Ernest W. : *See*—
Hannable, Daniel W., and Stacey. 2,730,735.
Stacey, Helen M. : *See*—
Hannable, Daniel W., and Stacey. 2,731,735.
Stachura, Edward J., Communication system. 2,731,600, 1–17–56, Cl. 332—21.
Stack, Mary E. Improved bedpan. 2,730,725, 1–17–56, Cl. 4—112.
Stafford, Chester F., to General Railway Signal Co. Cab signalling system for railroads. 2,731,550, 1–17–56, Cl. 246—63.
Stafford Chester F., to General Railway Signal Co. Cab signalling system for railroads. 2,731,551, 1–17–56, Cl. 246—63.
Stamicarbon N. V. : *See*—
Michels, Antonius M. F. F. 2,731,192.
Standard Oil Co. : *See*—
Field, Edmund, and Feller. 2,731,452.
Field, Edmund, and Feller. 2,731,453.
Husa, Howard W. 2,730,894.
Standard Oil Development Co. : *See*—
Jahnig, Charles E., Burnside, and Brown. 2,731,400.
Stansbury, Harry A., Jr., and H. R. Guest, to Union Carbide and Carbon Corp. Dinitriles and process for their preparation. 2,731,489, 1–17–56, Cl. 260—465.4.
Stansbury, Marcellus M. : *See*—
Wright, Charles R., Stansbury, and Dunn. 2,730,962.
Stapenell, Samuel J., to The Bristol Aeroplane Co. Ltd. Forming rounded edges on blade-like elements. 2,730,847, 1–17–56, Cl. 51—144.
Starkey, William A., to Ransburg Electro-Coating Corp. Electrostatic coating apparatus. 2,730,988, 1–17–56, Cl. 118—51.
Stauffer Chemical Co. : *See*—
Bashour, Joseph T. 2,731,487.
Stayner, Richard D., to California Research Corp. Detergent compositions. 2,731,421, 1–17–56, Cl. 252—137.
Steele, Arthur E., to Air Products Inc. Method and apparatus for pumping volatile liquids. 2,730,870, 1–17–56, Cl. 62—122.
Stell, Eugene P., and C. E. Best, to The Firestone Tire & Rubber Co. Stabilization of vinyl chloride resins with organotin trimercaptides. 2,731,440, 1–17–56, Cl. 260—45.75.
Stell, Eugene P., and C. E. Best, to The Firestone Tire & Rubber Co. Stabilization of vinyl chloride resins with organotin mercaptides of 2-mercaptothiazole and its derivatives. 2,731,441, 1–17–56, Cl. 260—45.75.
Stell, Eugene P., and C. E. Best, to The Firestone Tire & Rubber Co. Organotin trimercaptides. 2,731,482, 1–17–56, Cl. 260—429.
Steiner, Alois. Staple clinching tool. 2,730,719, 1–17–56, Cl. 1—187.
Steiner, Howard F. Mower guard. 2,730,858, 1–17–56, Cl. 56—307.
Steinle, James R. Adjustable tractor seat. 2,731,074, 1–17–56, Cl. 155—21.
Stelzer, William. Weighing mechanisms. 2,731,255, 1–17–56, Cl. 265—63.
Stempel, Arthur : *See*—
Aeschlimann, John A., and Stempel. 2,731,493.
Stenerson, Charles K. : *See*—
Doremus, John A., Stenerson, and Waterman. 2,731,622.
Stephens, Carroll N. : *See*—
Ford, Edward R. 2,731,059.
Stetz, Robert J., and E. Rogers, to The Engine Parts Mfg. Co. Metallic paint. 2,731,436, 1–17–56, Cl. 260—33.6.
Stevenson, Robert, to Anco, Inc. Spring loaded dual type relief valve. 2,731,035, 1–17–56, Cl. 137—512.1.
Stewart, Harold C., and J. E. Holcomb, to General Electric Co. Structure for reduction of audible sound. 2,731,606, 1–17–56, Cl. 336—65.
Stewart-Warner Corp. : *See*—
Dinkelkamp, Henry T. 2,731,034.
Stewarts & Lloyds Ltd. : *See*—
Townend, Frank S. 2,731,413.
Stormon, Dean B. : *See*—
Robitschek, Paul, and Stormon. 2,731,431.
Strachan, Allister, to Midcontinent Adhesive Co. Process for applying a laminate to supporting surface. 2,731,378, 1–17–56, Cl. 154—120.
Strezynski, George J., to The De Laval Separator Co. Countercurrent extractor bowl. 2,731,331, 1–17–56, Cl. 23—270.5.
Striegel, Alvin J., and F. B. Wells, to Trojan Powder Co. Silage additive. 2,731,348, 1–17–56, Cl. 99—8.
Stubblefield, Edward M., to Servel, Inc. Purging device for closed refrigeration systems. 2,730,869, 1–17–56, Cl. 62—119.
Stuhlreyer, Anthony H. : *See*—
Huser, Richard J., and Stuhlreyer. 2,731,113.
Süberkrub, Frans A. Fluid coupling. 2,730,877, 1–17–56, Cl. 64—26.
Sun Oil Co. : *See*—
Cummings, Leland W. T. 2,731,399.
Sun Rubber Co., The : *See*—
Crafton, Marvin J., and Rekettye. 2,730,765.
Sundstrand Machine Tool Co. : *See*—
Cardillo, Joseph S., Hann, Sadler, and Lundgard. 2,731,569.
Superior Separator Co. : *See*—
Walstrom, Stanley R. 2,731,162.
Svenska Ackumulator Aktiebolaget Jungner : *See*—
Söredal, Sven G. 2,731,574.
Svoboda, Edward F., and H. H. Lathrop. Manual control for automatic transmissions. 2,730,909, 1–17–56, Cl. 74—472.
Sweet, Stuart W. : *See*—
Neuman, Herbert A., and Sweet. 2,731,025.
Syak, Charles W. : *See*—
Pocrass, Irving F., Syak, and Pocrass. 2,731,009.
Sylvania Electric Products Inc. : *See*—
Weiss, Mortimer E. 2,731,579.
Wiley, Verlis. 2,731,556.
Sylvester, Herbert S., to Colgate-Palmolive Co. Nitrogen-containing tarnish inhibitors in detergent compositions. 2,731,420, 1–17–56, Cl. 252—137.
Synerholm, Martin E., L. H. Jules, and M. Sahyun, to M. Sahyun d. b. a. Sahyun Laboratories. Imidazoline derivatives. 2,731,471, 1–17–56, Cl. 260—301.
Sziklai, George C., and W. S. Pike, to Radio Corp. of America. Transistor relaxation oscillator. 2,731,567, 1–17–56, Cl. 250—36.
Tannich, Richard E. : *See*—
Love, Robert M., and Tannich. 2,731,506.
Tansey, Robert P., and G. H. Schneller, to American Cyanamid Co. Stabilized folic acid and vitamin composition. 2,731,390, 1–17–56, Cl. 167—81.
Taub, William, to J. R. Geigy A. G. New pyrazolone derivatives. 2,731,473, 1–17–56, Cl. 260—310.
Taylor, George E., to Monsanto Chemical Co. Method of making thiosemicarbazide. 2,731,496, 1–17–56, Cl. 260—552.
Taylor, Smith & Taylor : *See*—
Guthrie, George B. 2,731,126.
Taylor-Winfield Corp., The : *See*—
Hansen, Hans H., and Seeloff. 2,731,534.
Seeloff, Melvin M., and Hansen. 2,730,995.
Teague, Walter D., Jr., and H. H. Laucks, to Bendix Aviation Corp. Acceleration responsive switch. 2,731,526, 1–17–56, Cl. 200—61.51.
Tex Tan of Yoakum : *See*—
Manning, Douglas H. 2,730,853.
Texas Co., The : *See*—
Hopkins, Stephen. 2,731,004.
Johnston, Rowland W., Jr. 2,731,090.
Meadows, James L., Ballard, and Chandler. 2,731,392.
Thacker, Ralph S., to Titeflex, Inc. Electrical connectors. 2,731,610, 1–17–56, Cl. 339—89.
Thelander, Clement C. J., to Buffalo-Eclipse Corp. Driven caster wheel for a lawn mower. 2,731,096, 1–17–56, Cl. 180—19.
Thew Shovel Co. : *See*—
Zellman, Roy H., and Smythe. 2,731,097.
Thomas, Ivan : *See*—
Herbert, Earl. 2,731,598.
Thomas, Sid B. Device for recovering cotton. 2,730,855, 1–17–56, Cl. 56—28.
Thomas, Talbott E., to The Firestone Tire & Rubber Co. Curing bag construction. 2,730,767, 1–17–56, Cl. 18—45.
Thompson, Benjamin, to Eastman Kodak Co. Production of aliphatic nitriles from imines. 2,731,488, 1–17–56, Cl. 260—465.1.
Thompson, Bryan. Drawer catch. 2,731,321, 1–17–56, Cl. 312—348.
Thompson, Henry L. : *See*—
Zimmerman, Eli, and Thompson. 2,731,088.
Thompson, William J., to C & M Mfg. Co. Cushion pad for jewelry packing and shipping container. 2,731,143, 1–17–56, Cl. 206—75.
Thorn, John P. : *See*—
Arundale, Erving, and Thorn. 2,731,393.
Thornes, Leslie S., to The British Petroleum Co. Ltd. Production and use of a urea suspension in oil. 2,731,457, 1–17–56, Cl. 260—96.5.

Thurber, Adolph E., Jr. Supports for disposable refuse containers and combinations thereof. 2,731,184, 1-17-56, Cl. 226—59.

Tinker, Earl E.: *See*—
Mueller, Frank H., and Tinker. 2,731,207.

Tinnerman Products, Inc.: *See*—
Seitz, William L. 2,731,229.

Titeflex, Inc.: *See*—
Thacker, Ralph S. 2,731,610.

Toastawell Co., Inc., The: *See*—
Pavelka, Joseph, Jr. 2,731,539.

Tokheim Corp.: *See*—
Rittenhouse, Howard E. 2,731,029.

Toledo Scale Co.: *See*—
Hart, Norman E. 2,731,309.

Tompkins, Ernest E., to Tompkins Rubber Co. Plunger plugs for hypodermic cartridges and methods of an apparatus for making the same. 2,730,766, 1-17-56, Cl. 18—42.

Tompkins Rubber Co.: *See*—
Tompkins, Ernest E. 2,730,766.

Tonkin, Kenneth J.: *See*—
Du Bois, Edgar H., Zahradnik, and Tonkin. 2,730,946.

Tonne, Joseph A. Swing with horizontally swingable support bar. 2,731,073, 1-17-56, Cl. 155—64.

Topinka, Alfred A., Q. H. McKenna, and S. S. Carlton, to Horizons Titanium Corp. Production of metallic titanium. 2,731,402, 1-17-56, Cl. 204—10.

Toro Mfg. Corp. of Minnesota: *See*—
Benson, Don O. 2,731,007.

Toulmin, Harry A., Jr., to The Commonwealth Engineering Co. of Ohio. Artificial sponge and method of making it. 2,731,015, 1-17-56, Cl. 128—296.

Toulmin, Harry A., Jr., to The Commonwealth Engineering Co. of Ohio. Edible container for ice cream and the like. 2,731,349, 1-17-56, Cl. 99—88.

Toulmin, Harry A., Jr., to Midland Chemical Corp. Metal building material. 2,731,375, 1-17-56, Cl. 154—45.9.

Toulmin, Harry A., Jr., to Midland Chemical Corp. Coating compositions comprising particulate polyamides dispersed in aqueous solutions of alkali metal silicates. 2,731,432, 1-17-56, Cl. 260—29.2.

Townend, Frank S., to The Permutit Co. Ltd., Stewarts & Lloyd Ltd., and Woodall-Duckham Construction Co. Ltd. Ion-exchange treatment of gasworks effluent. 2,731,413, 1-17-56, Cl. 210—24.

Townsend, Edward F.: *See*—
McCrystle, John D., and Townsend. 2,730,932.

Tramm, Heinrich, and O. Roelen, to Ruhrchemie Aktiengesellschaft. Package coated with paraffin and polymerized products of a cyclopentadiene. 2,731,370, 1-17-56, Cl. 117—155.

Tratzik, Frederick: *See*—
Mueller, Frank H., and Tratzik. 2,731,041.

Trautman, Walter C., and L. L. Arnes, to Walker Mfg. Co. of Wisconsin. Lifting jack. 2,730,903, 1-17-56, Cl. 74—141.5.

Trojan Powder Co.: *See*—
Striegel, Alvin J., and Wells. 2,731,348.

Turbine Equipment Co.: *See*—
Hopper, Allen O. 2,731,151.

Turbo-Ray, Inc.: *See*—
Borg, Gustave A., and Barton. 2,731,242.

Turner, James O. Chair construction. 2,731,077, 1-17-56, Cl. 155—187.

Ulinski, Bronislaus I., to The Yale & Towne Mfg. Co. Stabilizer for lifting carriage of a lift truck. 2,731,164, 1-17-56, Cl. 214—730.

Underwood Corp.: *See*—
Anderson, Walter A. 2,730,945.

Union Bag & Paper Corp.: *See*—
Wheeler, Donald B. 2,731,379.

Union Carbide and Carbon Corp.: *See*—
Bender, Howard L., Farnham, and Guyer. 2,731,437.
Laur, Eugene. 2,731,536.
Ramadanoff, Dimiter. 2,731,371.
Riede, Peter M. 2,730,957.
Stansbury, Harry A., Jr., and Guest. 2,731,489.
Wagner, George H., and Erickson. 2,731,485.

Union Metal Mfg. Co., The: *See*—
Anderson, W. Carl. 2,731,227.

Union Special Machine Co.: *See*—
Hayes, Robert A., and Reimer. 2,730,977.

United Shoe Machinery Corp.: *See*—
Foust, Orville N. 2,730,819.
Hannable, Daniel W., and Stacey. 2,730,735.
Walsh, John E. 2,730,733.

United States Atomic Energy Commission, United States of America as represented by the: *See*—
Donelian, Khatchik O., and Menke. 2,730,951.
Failla, Gioacchino. 2,731,568.
Kaufmann, Albert R. 2,731,341.
Krucoff, Darwin. 2,731,624.
Smith, Bob H. 2,731,590.

U S Bobbin & Shuttle Co.: *See*—
Gosselin, Wilfrid J. 2,731,043.

United States Rubber Co.: *See*—
McCord, Georgie P. 2,731,028.

United States Steel Corp.: *See*—
Carlson, Clarence O., Everling, and Robinson. 2,730,791.
Kritscher, Andrew F. 2,731,145.
Morrow, Harry C. 2,731,262.

Upham, Charles R. Air switch and ported control head for powdered iron dispenser. 2,731,302, 1-17-56, Cl. 302—53.

Van der Meulen, Leonard. Machine for manufacturing bags. 2,730,934, 1-17-56, Cl. 93—18.

Van Horne, William L.: *See*—
Bauer, La Verne N., Neher, and Van Horne. 2,731,448.

Van Veen, Frederick J. P. Sleeping bag structure. 2,730,721, 1-17-56, Cl. 2—69.5.

Vaughan, Charles H. Control mechanism for toy. 2,730,837, 1-17-56, Cl. 46—210.

Vaughn, Sidney P. Wringer type mop device, cam operated. 2,730,744, 1-17-56, Cl. 15—119.

Vickers-Armstrongs Ltd.: *See*—
Fox, Douglas P. S., and Clarke. 2,731,186.

Victor Adding Machine Co.: *See*—
Lippert, Erhard M., Schultz, and Neyfeldt. 2,731,206.

Vidal, Raul: *See*—
Kelbert, Rudolph S., and Vidal. 2,730,860.

Vincent, Andrew W. Coordinate electrical switching means. 2,731,516, 1-17-56, Cl. 179—27.54.

V. Kutepow, Nikolaus: *See*—
Reppe, Walter, V. Kutepow, and Heintzler. 2,731,504.

Voglesang, Clem L. Dispenser. 2,731,174, 1-17-56, Cl. 222—246.

V. Reibnitz, Bruno, W. Ruemens, and K. Beideck, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Process for improving cellulose textile materials and products thereof. 2,731,364, 1-17-56, Cl. 117—64.

V. Reibnitz, Bruno, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Production of heterocyclic compounds from glyoxal and urea. 2,731,472, 1-17-56, Cl. 260—309.7.

Waco Mfg. Co.: *See*—
Albrecht, Henry P., and Wilson. 2,731,303.

Wagner, George H., and C. E. Erickson, to Union Carbide and Carbon Corp. Polysiloxanes produced by the reaction of dialkyldialkoxyallanes in the presence of aluminum or boron halides. 2,731,485, 1-17-56, Cl. 260—448.2.

Wahlbom, Ernest T., ½ to O. E. Griggs. Bottle carrier. 2,731,169, 1-17-56, Cl. 220—104.

Walner, Eugene, to Horizons Titanium Corp. Production of titanium metal. 2,731,404, 1-17-56, Cl. 204—64.

Wait, James R., and A. A. Brant, to Newmont Mining Corp. Method and apparatus for geophysical exploration. 2,731,596, 1-17-56, Cl. 324—6.

Wakefield Co., The: *See*—
Peterson, Carl M. F. 2,730,942.

Walker, David C., to Walker Well Heads Inc. Method of fabricating well heads. 2,730,799, 1-17-56, Cl. 29—480.

Walker, Leonard G., to Motorola, Inc. Priority control apparatus for a communication system. 2,731,635, 1-17-56, Cl. 340—163.

Walker Mfg. Co. of Wisconsin: *See*—
Trautman, Walter C., and Arnes. 2,730,903.

Walker, Samuel J., and W. G. Brown. Internal combustion engine piston. 2,731,313, 1-17-56, Cl. 309—9.

Walker Well Heads Inc.: *See*—
Walker, David C. 2,730,799.

Wallace, Donald J., and L. Catallo, to Wheel Trueing Tool Co. Form dressing tool. 2,730,848, 1-17-56, Cl. 51—204.

Wallace, Donald J., and L. Catallo, to Wheel Trueing Tool Co. Method of form dressing of abrasive wheels. 2,730,851, 1-17-56, Cl. 51—283.

Wallace, Donald J., and L. Catallo, to Wheel Trueing Tool Co. Method of making form dressing tool. 2,731,336, 1-17-56, Cl. 51—309.

Wallace, Halbert C., and C. H. Puckering, to Link Mfg. Co., Inc., Seed cleaner, grader and treater. 2,731,246, 1-17-56, Cl. 259—4.

Wallace & Tiernan Co., Inc.: *See*—
Reiner, Laszlo. 2,731,386.

Walsh, John E., to United Shoe Machinery Corp. Heel lasting machines. 2,730,733, 1-17-56, Cl. 12—10.5.

Walstrom, Stanley R., to Superior Separator Co. Loader with self-leveling carrier. 2,731,162, 1-17-56, Cl. 214—140.

Walter, Max, to Hoffmann-La Roche Inc. Basic derivative of 4-cyclohexyl-cyclohexanone and process for the manufacture thereof. 2,731,498, 1-17-56, Cl. 260—563.

Walworth Co.: *See*—
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Warburton, Kenneth R., to The Hoover Co. Flexible hose. 2,731,040, 1-17-56, Cl. 138—49.

Warner Lewis Co.: *See*—
McCann, Kelly F. 2,731,150.

Wasserman, Rene D., and J. Quaas, to Eutectic Welding Alloys Corp. Electrode flux covering for copper and copper-base alloy core materials. 2,731,373, 1-17-56, Cl. 148—26.

Wasson, Jones I.: *See*—
Howell, William C., Jr., and Wasson. 2,731,418.

Waterbury Farrel Foundry & Machine Co., The: *See*—
Schaeffer, Joseph M. 2,730,731.

Waterbury Tack Co., Inc.: *See*—
Shannon, John L. 2,731,131.

Waterman, Herbert C.: *See*—
Doremus, John A., Stenerson, and Waterman. 2,731,622.

Watts, Richard G., to Socony Mobil Oil Co., Inc. System for gathering and loading oil from underwater oil wells. 2,731,168, 1-17-56, Cl. 220—85.

Weatherhead, Albert J., Jr.: *See*—
Baldwin, John D., Jr., St. Clair, and Weatherhead. 2,731,228.

Weatherhead Co., The: *See*—
Baldwin, John D., Jr., St. Clair, and Weatherhead. 2,731,228.

Webb, Arthur G. Duplicating lathe attachment. 2,731,047, 1-17-56, Cl. 142—55.

Weber, Donald P., to The H. C. Godman Co. Machine for cutting a rand on soles. 2,730,734, 1-17-56, Cl. 12—17.

Weber, Ernst, and J. Ebert, to Polytechnic Institute of Brooklyn. Matched wave guide attenuators. 2,731,603, 1-17-56, Cl. 333—81.

Weber, Lloyd H., to American Can Co. Can body conveyor with adjustable rails. 2,731,135, 1-17-56, Cl. 198—179.

Weedman, John A., to Phillips Petroleum Co. Separation process and apparatus. 2,731,456, 1-17-56, Cl. 260—96.5.

Weinberger, Joseph M. Stroboscopic apparatus for calibrating time indicating devices. 2,730,890, 1-17-56, Cl. 73—6.

Weinrich, Arthur R., to Libbey-Owens-Ford Glass Co. Method of vapor depositing coatings of aluminum. 2,731,365, 1-17-56, Cl. 117—107.

Weinrich, Arthur R., to Libbey-Owens-Ford Glass Co. Method of vapor depositing coatings of aluminum. 2,731,366, 1-17-56, Cl. 117—107.

Weir, Archie G. Collapsible drawing board easel. 2,730,835, 1-17-56, Cl. 45—131.

Weir, Horace M. Production of compounds by means of the electric arc. 2,731,410, 1-17-56, Cl. 204—164.

Weischel, John E., to The Hell Co. Locking mechanism for bulldozer blades. 2,731,283, 1-17-56, Cl. 287—20.

Weiss, Mortimer E., to Sylvania Electric Products Inc. Electron discharge device. 2,731,579, 1-17-56, Cl. 313—249.

Welch, Lester M.: *See*—
Sernluk, George E., and Welch. 2,731,450.

Wells, Franklin B.: *See*—
Striegel, Alvin J., and Wells. 2,731,348.

Wenstrom, Richard T., ½ to B. S. Blom. Electro-mechanical control mechanism. 2,731,121, 1-17-56, Cl. 192—94.

West Michigan Steel Foundry Co.: *See*—
Dalton, Thomas B. 2,731,120.

West, Robert C.: *See*—
Binder, George G., Jr., West, and Andresen. 2,731,414.

Western States Machine Co., The: *See*—
Huser, Richard J., and Stuhlreyer. 2,731,113.

Westinghouse Air Brake Co.: *See*—
Dellner, Raymond P. 2,731,235.

Wetterholm, Gustav A.: *See*—
Schenck, Friedrich R., and Schenck. 2,731,460.

Weyerhaeuser Timber Co.: *See*—
Hickenderfer, Charles, Jr. 2,731,130.

Wheel Trueing Tool Co.: *See*—
Wallace, Donald J., and Catallo. 2,730,848.
Wallace, Donald J., and Catallo. 2,730,851.
Wallace, Donald J., and Catallo. 2,731,336.

Wheeler, Donald B., to Union Bag & Paper Corp. Method of making honeycomb material. 2,731,379, 1-17-56, Cl. 154—124.

Whiffen, Edwin J. Variable capacity pump. 2,730,952, 1-17-56, Cl. 103—37.

Whitacre, John R.: *See*—
Nack, Herman R., and Whitacre. 2,731,361.

White, Samuel D.: *See*—
Jeanne, Armand L., Keller, and White. 2,731,517.

White Sewing Machine Corp.: *See*—
Ayres, Waldemar A. 2,730,978.

Wicks, John, to Automatic Electric Laboratories, Inc. Circuits-flat type switch. 2,731,515, 1-17-56, Cl. 179—18.

Wico Electric Co.: *See*—
Guernsey, Glen A., and Green. 2,731,540.

Wien, Ronald, J. N. Ashley, and W. G. Leeds, to May & Baker Ltd. Bis-quaternary ammonium salts. 2,731,500, 1-17-56, Cl. 260—567.6.

Wiesen, Bernard. Color television systems. 2,731,511, 1-17-56, Cl. 178—5.4.

Wilcock, Donald F., to General Electric Co. High speed thrust bearing structure. 2,731,305, 1-17-56, Cl. 308—73.

Wilcock, Donald F., to General Electric Co. Self-aligning thrust bearing structure. 2,731,308, 1-17-56, Cl. 308—160.

Wilds, David L. Combination rack and price tagging device. 2,730,825, 1-17-56, Cl. 40—10.

Wiley, Verlis, to Sylvania Electric Products Inc. Two button arrangement for signal seeking type radio receivers. 2,731,556, 1-17-56, Cl. 250—20.

Wilkinson Sword Co. Ltd., The: *See*—
Mathisen, Anders. 2,731,532.

Williams, Edward E., and F. E. Fink; said Williams assor. to said Fink. Lead sight for guns. 2,730,806, 1-17-56, Cl. 33—51.

Williams, Ray S., to Hagan Corp. Pneumatic relays embodying a signal input pressure responsive pilot valve and a booster pilot valve. 2,731,024, 1-17-56, Cl. 137—84.

Williams, Roger F., and G. A. Rogge. Concrete form. 2,730,785, 1-17-56, Cl. 25—130.

Williams, Sam W. Fishing device. 2,730,831, 1-17-56, Cl. 43—36.

Wills, Wayne J.: *See*—
Wills, Marion C. and W. J. 2,731,163.

Wills, Marion C., and W. J. Wills, to Shawnee Mfg. Co., Inc. Ditching machine having swingably mounted clamshell bucket. 2,731,163, 1-17-56, Cl. 214—147.

Wilson & Co., Inc.: *See*—
Garapolo, Orlando, Richter, and Campbell. 2,730,963.

Wilson, Ernest S.: *See*—
Seely, George A., Segl, and Wilson. 2,730,888.

Wilson, Kermit H.: *See*—
Albrecht, Henry P., and Wilson. 2,731,303.

Wilson, Robert W., to Patent and Development, Inc. Applicator for applying chemicals to tobacco plants. 2,730,838, 1-17-56, Cl. 47—1.

Wingate, John L. Implement for engaging a line with a remote object. 2,730,985, 1-17-56, Cl. 114—230.

Wirshing, Ralph J., to General Motors Corp. Coating material resistant to deterioration and chalking. 2,731,354, 1-17-56, Cl. 106—14.

Wissmiller, Ivan L., and L. V. Larsen, to Chicago Bridge & Iron Co. Vapor storage vessel and method of making same. 2,731,334, 1-17-56, Cl. 48—178.

Wittbecker, Emerson L., to E. I. du Pont de Nemours and Co. Polyurethanes from piperazines. 2,731,445, 1-17-56, Cl. 260—47.

Wittbecker, Emerson L., to E. I. du Pont de Nemours and Co. Polyurethanes from piperazine. 2,731,446, 1-17-56, Cl. 260—77.5.

Wolf Machine Co., The. *See*—
Rockwood, Albert M., and Conklin. 2,730,850.

Wollan, Telford C.: *See*—
Cody, William P., and Wollan. 2,731,429.

Wolter, Frederick J.: *See*—
Alexander, Guy B., Iler, and Wolter. 2,731,326.

Wood, Joseph D., and A. S. Caswell, to I-T-E Circuit Breaker Co. High voltage circuit breakers. 2,731,530, 1-17-56, Cl. 200—147.

Woodall-Duckham Construction Co. Ltd.: *See*—
Townend, Frank S. 2,731,413.

Woolard, Henry J., to Carrier Engineering Co. Ltd. Apparatus for treating with liquid a car body having irregular non-symmetrical surfaces. 2,731,110, 1-17-56, Cl. 118—8.

Wormser, Paul, and H. E. Metcalf, to S & W Fine Foods, Inc. Machines for orientating and stemming fruit with stems. 2,731,051, 1-17-56, Cl. 146—55.

Wright, Charles R., M. M. Stansbury, and W. M. S. Dunn. Apparatus for laying railway rails. 2,730,962, 1-17-56, Cl. 104—2.

Wright, Richard O.: *See*—
Harding, Clarke T., Mayer, and Wright. 2,731,396.

Wydler, Erhard: *See*—
Peter, Albin, and Wydler. 2,731,476.

Yale & Towne Mfg. Co., The: *See*—
Schroeder, Charles S. 2,731,099.
Ulinski, Bronislaus I. 2,731,164.

Yeomans Brothers Co.: *See*—
Yeomans, Charles. 2,730,961.

Yeomans, Charles, to Yeomans Brothers Co. Control system. 2,730,961, 1-17-56, Cl. 103—238.

Yon, William G. Supplemental feed apparatus for internal-combustion engine. 2,731,250, 1-17-56, Cl. 261—18.

Young, Thomas R., and R. L. Somerville, to Horizons Titanium Corp. Method of preparing electrolyte. 2,731,405, 1-17-56, Cl. 204—64.

Young, Thomas R., and R. L. Somerville, to Horizons Titanium Corp. Preparation of electrolyte. 2,731,406, 1-17-56, Cl. 204—64.

Zablocki, Charles J.: *See*—
Hayward, Frank W., Zablocki, and Scribner. 2,730,893.

Zaffarano, Frank P.: *See*—
Kendall, Hugh C., and Zaffarano. 2,731,552.

Zaffarano, Frank P., and W. K. Maenpaa, to General Railway Signal Co. Coded cab signalling system for railroads. 2,731,553, 1-17-56, Cl. 246—63.

Zahradnik, George J.: *See*—
Du Bois, Edgar H., Zahradnik, and Tonkin. 2,730,946.

Zaruba, Edward J.: *See*—
Eckman, Leonard G., and Zaruba. 2,731,554.

Zellman, Roy H., and A. Smythe, to Thew Shovel Co. Vehicle with selective wheel drive from either of two motors. 2,731,097, 1-17-56, Cl. 180—23.

Zephyr American Corp.: *See*—
Nellsen, Hildaur L. 2,731,017.

Zienty, Ferdinand B.: *See*—
Morrill, Henry L., and Zienty. 2,731,337.

Zimmerman, Ell, and H. L. Thompson, to Sarong, Inc. Template for positioning strip material to be severed. 2,731,088, 1-17-56, Cl. 164—59.

Zottola, Frank, to Empire Brushes, Inc. Combined mop and wringer. 2,730,742, 1-17-56, Cl. 15—116.

Zottola, Frank, to Empire Brushes, Inc. Butterfly type sponge mops. 2,730,743, 1-17-56, Cl. 15—116.

CLASSIFICATION OF PATENTS

ISSUED JANUARY 17, 1956

NOTE.—First number—class, second number—subclass, third number—patent number

1— 68: 2,730,718
187: 2,730,719
2— 42: Re.24,111
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260— 2.1: 2,731,425
2.2: 2,731,426
2.5: 2,731,427
19: 2,731,428
22: 2,731,429
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23: 2,731,431
29.2: 2,731,432
29.7: 2,731,433
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33.6: 2,731,436
42: 2,731,437
45.2: 2,731,438
45.5: 2,731,439
45.75: 2,731,440
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45.95: 2,731,442
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47: 2,731,444
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77.5: 2,731,446
78: 2,731,447
78.5: 2,731,448
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80.7: 2,731,450
85.5: 2,731,451
88.1: 2,731,452
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94.7: 2,731,454
96.5: 2,731,455
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139: 2,731,458
171: 2,731,459
239: 2,731,460
239.55: 2,731,461
247.1: 2,731,462
248: 2,731,463
256.4: 2,731,464
2,731,465
287: 2,731,467
290: 2,731,468
295: 2,731,469
2,731,470
301: 2,731,471
309.7: 2,731,472
310: 2,731,473
315: 2,731,474
343.3: 2,731,475
371: 2,731,476
378: 2,731,477
396: 2,731,478
397.45: 2,731,479
404.5: 2,731,480
407: 2,731,481
429: 2,731,482
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429.7: 2,731,484
448.3: 2,731,485
449.6: 2,731,486
455: 2,731,487
465.1: 2,731,488
465.4: 2,731,489
465.6: 2,731,490
260— 468: 2,731,491
480: 2,731,492
490: 2,731,493
507: 2,731,494
537: 2,731,496
552: 2,731,496
559: 2,731,497
563: 2,731,498
566: 2,731,499
567.6: 2,731,500
604: 2,731,501
635: 2,731,502
638: 2,731,503
2,731,504
653: 2,731,505
668: 2,731,506
679: 2,731,507
683: 2,731,508
261— 18: 2,731,250
64: 2,731,251
71: 2,731,252
118: 2,731,253
263— 40: 2,731,254
265— 63: 2,731,255
267— 1: 2,731,256
8: 2,731,257
9: 2,731,258
63: 2,731,259
268— 63: 2,731,260
124: 2,731,261
271— 2.1: 2,731,262
18: 2,731,263
272— 10: 2,731,264
273— 1: 2,731,265
121: 2,731,266
143: 2,731,267
144: 2,731,268
148: 2,731,269
2,731,270
149: 2,731,271
274— 10: 2,731,272
279— 81: 2,731,273
280— 1.196: 2,731,274
11.36: 2,731,275
81: 2,731,276
93: 2,731,277
284— 19: 2,731,278
285— 86: 2,731,279
129: 2,731,280
286— 16.1: 2,731,281
27: 2,731,282
287— 20: 2,731,283
288— 11: 2,731,284
13: 2,731,285
290— 4: 2,731,569
2,731,570
292— 5: 2,731,286
76: 2,731,287
258: 2,731,288
296— 67: 2,731,289
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294— 19: 1,731,291
296— 43: 2,731,292
298— 22: 2,731,293
299— 18: 2,731,294
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69: 2,731,296
92: 2,731,297
95: 2,731,298
107: 2,731,299
111: 2,731,300
301— 37: 2,731,301
302— 53: 2,731,302
304— 10: 2,731,303
305— 10: 2,731,304
307— 88.5: 2,731,571
112: 2,731,572
308— 73: 2,731,305
77: 2,731,306
91: 2,731,307
160: 2,731,308
178: 2,731,309
187: 2,731,310
191: 2,731,311
309— 3: 2,731,312
9: 2,731,313
19: 2,731,314
23: 2,731,315
310— 8.3: 2,731,573
49: 2,731,574
90: 2,731,575
202: 2,731,576
311— 4: 2,731,316
61: 2,731,317
312— 210: 2,731,318
310: 2,731,319
323: 2,731,320
348: 2,731,321
313— 110: 2,731,577
245: 2,731,578
249: 2,731,579
326: 2,731,580
343: 2,731,581
315— 14: 2,731,582
26: 2,731,583
81: 2,731,584
315— 248: 2,731,585
317— 99: 2,731,586
318— 221: 2,731,587
483: 2,731,588
321— 15: 2,731,589
36: 2,731,590
49: 2,731,591
322— 26: 2,731,592
323— 30: 2,731,593
119: 2,731,594
2,731,595
324— 6: 2,731,596
20: 2,731,597
52: 2,731,598
70: 2,731,599
332— 18: Re.24,110
21: 2,731,600
333— 10: 2,731,601
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81: 2,731,603
82: 2,731,604
336— 15: 2,731,605
65: 2,731,606
96: 2,731,607
130: 2,731,608
339— 17: 2,731,609
89: 2,731,610
94: 2,731,611
128: 2,731,612
2,731,613
183: 2,731,614
199: 2,731,615
249: 2,731,616
256: 2,731,617
268: 2,731,618
340— 52: 2,731,619
147: 2,731,620
149: 2,731,621
163: 2,731,622
2,731,623
2,731,635
196: 2,731,624
203: 2,731,625
206: 2,731,626
213: 2,731,627
252: 2,731,628
2,731,629
268: 2,731,630
316: 2,731,632
318: 2,731,631
343— 11: 2,731,633
103: 2,731,634
346— 116: 2,731,322

CLASSIFICATION OF DESIGNS

D 4— 3: Des. 176,703
D10—10: Des. 176,652
Des. 176,653
Des. 176,654
D26—13: Des. 176,656
D29—23: Des. 176,659
D44— 9: Des. 176,689
29: Des. 176,658
D45— 4: Des. 176,667
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D45— 4: Des. 176,692
Des. 176,698
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Des. 176,677
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D45— 9: Des. 176,684
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Des. 176,700
16: Des. 176,661
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Des. 176,671
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Des. 176,699
Des. 176,705
D47— 7: Des. 176,655
D52— 7: Des. 176,657
D57— 1: Des. 176,704
D87— 3: Des. 176,701
Des. 176,702
D90— 8: Des. 176,660

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
January 17, 1956 Volume 702 Number 3

TRADEMARKS

NOTICES

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 20,405. (See TM 201,694.)

TM 95,296. (See TM 201,694.)

TM 95,900. (See TM 201,694.)

TM 106,852. (See TM 201,694.)

TM 131,535 ("La Rosa" and design), V. Lopez & Company, Inc., Butter; **TM 313,418**, same, V. La Rosa & Sons, Inc., Alimentary paste products; **TM 209,808**, same, Butter, macaroni products, etc.; **TM 293,297** ("La Rosa Grade A" and design), same, Alimentary pastes, filed July 25, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 15730, *V. La Rosa & Sons, Inc. v. Joseph Maggio et al.* Order of discontinuance Nov. 16, 1955.

TM 190,028. (See TM 201,694.)

TM 190,246. (See TM 201,694.)

TM 201,694 (Cadillac), General Motors Corp., Automobiles; **TM 20,405**, **TM 224,249** (Oldsmobile), same; **TM 216,070** (Chevrolet), same; **TM 222,073** (Pontiac), same; **TM 201,706** (trademark design), same; **TM 511,088**, **TM 562,305** (trademark design), same, Automobiles and structural parts thereof; **TM 511,093** (Buick), same; **TM 106,852** ("Buick" and design), same, Motor-vehicles; **TM 232,086** ("Buick," etc. and design), same, Second-hand Buick automobiles repaired, refinished, etc.; **TM 190,246** (Buick), **TM 202,413** ("Buick" and design), same, Motor-driven vehicles; **TM 95,900** (Chevrolet), **TM 190,028** ("Chevrolet" and design), **TM 95,296** (trademark design), same, Automobiles, motor vehicles, and parts thereof; **TM 288,418** ("Chevrolet" and design), same, Combined automobile body polish and cleaner in liquid form; **TM 293,706** (trademark design), same, Motor driven vehicles—namely, automobiles, trucks, etc.; **TM 245,099** ("Oldsmobile" and design), same, Automobiles and motor-driven trucks and construction parts thereof; **TM 518,133** (trademark design), same, Automobiles and their structural parts; **TM 547,763** (Silver Streak), same, Automobiles and bodies thereof, filed Aug. 3, 1953, D. C., N. D. Ill. (Chicago), Doc. 53c1696, *General Motors Corp. v. Jewelcrest Industries, Inc. et al.* Except pursuant to written agreement, defendants enjoined from using the words "Cadillac," "Buick," "Oldsmobile," "Pontiac," "Chevrolet," and "Silver Streak," and insignia crests or emblems; counterclaim and case dismissed with prejudice (notice Nov. 1, 1955).

TM 201,706. (See TM 201,694.)

TM 202,413. (See TM 201,694.)

TM 216,070. (See TM 201,694.)

TM 222,073. (See TM 201,694.)

TM 224,249. (See TM 201,694.)

TM 232,086. (See TM 201,694.)

TM 245,099. (See TM 201,694.)

TM 288,418. (See TM 201,694.)

TM 293,297. (See TM 131,535.)

TM 293,706. (See TM 201,694.)

TM 313,418. (See TM 131,535.)

TM 350,640 (Nicolet), Bayer, Pretzfelder & Mills, Inc., Watches and clocks, filed Nov. 4, 1955, D. C., S. D. N. Y., Doc. 104/350, *Bayer, Pretzfelder & Mills, Inc. v. Winton Watch Co., Inc.*

TM 361,448 ("Bantamac" and design), Adirondack Sportswear Inc., Sportswear and wearing apparel—namely, golf jackets, rain coats, ski jackets, etc.; **TM 400,630**, same, Marcus Breier's Sons, same; **TM 467,965** ("Umbrella" and design), same; **TM 557,483** ("Weather-Perfect Bantamac" and design), Marcus Breier Sons, Inc., Sports jackets and coats for men and women; **TM 569,714** ("Bantamac Bantamates" and design), same, Men's and women's jackets and trousers, filed

CONDITION OF TRADEMARK APPLICATIONS AS OF DECEMBER 23, 1955

Total number of applications awaiting action (excluding renewals and republications)	8,805
Date of oldest new application	May 2, 1955
Date of oldest amended application	Oct. 3, 1955

MERCHANT, JOHN, Executive Examiner

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application	
	New	Amended
I. STERBA, J. R., Classes 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 33, 35, 44, 52	5-9-55	10-10-55
II. SHRYOCK, R. F. (Acting), Classes 2, 6, 18, 22, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107	5-2-55	10-3-55
III. WENDT, C. M. (Acting), Classes 1, 3, 7, 8, 9, 10, 11, 15, 17, 20, 29, 31, 32, 34, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	6-2-55	10-13-55
Renewals (All Classes)	11-4-55	12-12-55
Sec. 12 (c) Publications (All Classes)	11-10-55	12-9-55

Applications Filed During Week Ending December 23, 1955—386

Registrations Issued 471—No. 619,226 to No. 619,695
Renewals Issued 69

Nov. 9, 1955, D. C., S. D. N. Y., Doc. 104/379, *Marcus Breier Sons, Inc.* v. *Schindler & Co. Inc.*

TM 372,500 ("Life" and design), Time, Inc., Weekly magazine and pamphlets containing material taken from such magazine; **TM 380,316** (Life presents), same, Motion picture films, sound films, etc., filed Nov. 4, 1955, D. C., District of Columbia, Doc. 4888/55, *Time, Inc.* v. *John Anthony Carbone.*

TM 380,316. (See TM 372,500.)

TM 389,868. (See TM 131,535.)

TM 400,630. (See TM 361,448.)

TM 407,965. (See TM 361,448.)

TM 511,603. (See TM 201,694.)

TM 511,688. (See TM 201,694.)

TM 518,133. (See TM 201,694.)

TM 547,743. (See TM 201,694.)

TM 557,483. (See TM 361,448.)

TM 560,087 (Riverdale), Fluegelman-Riverdale, Inc., doing business as Riverdale Mfg. Co., Draperies—namely, window and shower curtains, etc., filed Aug. 1, 1952, D. C., S. D. N. Y., Doc. 77/373, *Riverdale Mfg. Co., Inc.* v. *Riverdale Fabrics Corp.* Stipulation and order of discontinuance Nov. 4, 1955.

TM 562,305. (See TM 201,694.)

TM 569,714. (See TM 361,448.)

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.
As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 659,685. Theodor, Los Angeles, Calif. Filed Jan. 18, 1954.

SOFTGLOW

For Leather-in-the-Piece.
Use since Aug. 15, 1951.

SN 683,392. General Latex and Chemical Corporation, Cambridge, Mass. Filed Mar. 14, 1955.

VULT-N

Applicant claims ownership of Reg. No. 240,652.
For Liquid Synthetic Latex, Concentrated or Unconcentrated, Prevulcanized or Unvulcanized, Comprising a Copolymer of Butadiene and Acrylonitrile in Any Ratio.
Use since Aug. 23, 1954.

SN 683,393. General Latex and Chemical Corporation, Cambridge, Mass. Filed Mar. 14, 1955.

VULT-S

Applicant claims ownership of Reg. No. 240,652.
For Liquid Synthetic Latex, Concentrated or Unconcentrated, Prevulcanized or Unvulcanized, Comprising a Copolymer of Butadiene and Styrene in Any Ratio.
Use since Aug. 23, 1954.

SN 685,892. Eastern Seed Company, Limited, Taft, Tex. Filed Apr. 20, 1955.

ESCO

Applicant claims ownership of Reg. No. 330,558.
For Field Seeds and Garden Seeds.
Use since 1928 on garden seeds.

CLASS 2

SN 663,422. The William Bayley Company, d. b. a. Ross Equipment Co., Springfield, Ohio. Filed Mar. 29, 1954. Sec. 2(f).

ROSS

For Metal Silos and Grain Tanks.
Use since Jan. 14, 1912, on silos.

SN 674,034. Lincoln Metal Products Corporation, Brooklyn, N. Y. Filed Sept. 2, 1954. Sec. 2(f).

BeautyCan

Applicant does not claim any trademark rights in the word "Can" apart from the mark shown. Applicant claims ownership of Reg. No. 528,530.
For Disposal Step-On Cans Made of Sheet Metal.
Use since May 23, 1946.

SN 676,434. Worcester Pressed Steel Company, Worcester, Mass. Filed Nov. 10, 1954.

HI-PAC

For Low and High Pressure Gas Containers and Chemical Containers.
Use since Mar. 29, 1951.

SN 682,297. Anne Silver, d. b. a. S. Silver Company, New York, N. Y. Filed Feb. 24, 1955.

WET-ME-NOT

For Plastic Sheath for Wet Umbrella and Carrying Case.
Use since Dec. 18, 1954.

SN 687,464. Gits Molding Corporation, Chicago, Ill. Filed May 13, 1955.

Colorvision

For Snack Sets Including Cups and Plates of Plastic Material.
Use since July 1, 1954.

SN 688,155. J-L Plastic Enterprises, Flint, Mich. Filed May 24, 1955.

Dial-a-Shot

For Plastic Boxes.
Use since Feb. 3, 1955.

SN 689,672. Standard Packaging Corporation, Chicago, Ill. Filed June 16, 1955.

PROTECOTE

Applicant claims ownership of Reg. No. 425,300.
For Flexible Coated Bags.
Use since Dec. 21, 1945.

SN 689,887. Standard Packaging Corporation, Chicago, Ill. Filed June 20, 1955.

POLY-COTE

For Flexible Moisture-Proof Composition Bags.
Use since June 2, 1955.

SN 690,063. Coates Board & Carton Co. Inc., Garfield, N. J. Filed June 23, 1955.

CBC

For Collapsible Glued Boxes, Cartons, and Trays Made of Boxboard, Paperboard or Cardboard.
Use since May 28, 1955.

SN 693,702. Arthur E. Rineer, Centerville, Ohio. Filed Aug. 25, 1955.

CRIBLOCK

For Receptacle for Holding Bits, Taps, Punches, Nail Sets, et Cetera.
Use since Nov. 20, 1954.

CLASS 3

SN 683,212. Latama Cutlery, Inc., New York, N. Y. Filed Mar. 10, 1955.

GENTRY

For Wallets, Money Clips, Pocket Secretaries, and Key Cases, Made in Whole or in Part of Leather, and Leather Substitutes.
Use since Feb. 25, 1955.

CLASS 4

SN 678,597. Clemtex, Inc., Houston, Tex. Filed Dec. 20, 1954.



For Sandblasting Sand as Used by Commercial Sandblasters and Industry for Preparation of Steel or Other Metal Surfaces for Painting or Covering With Some Protective Covering.
Use since Oct. 12, 1953.

CLASS 5

SN 687,432. Scheidemandel-Motard-Werke, A. G., Berlin-Spandau, Germany. Filed Mar. 22, 1955.



Applicant claims ownership of German Reg. No. 266,294, dated May 31, 1921.
For Glues, Adhesives, and Gelatine.

SN 687,435. Scheidemandel-Motard-Werke, A. G., Berlin-Spandau, Germany. Filed Mar. 22, 1955.

Bukol

Applicant claims ownership of German Reg. No. 493,455, dated May 13, 1937.
For Animal Glues in Liquid or Solid Condition.

CLASS 6

SN 666,016. G & H Products Company, Evanston, Ill. Filed May 10, 1954.

esteem

For Textile Finishing Composition Diluted or Dilutable With Water for Use in the Finishing of Fabrics by Steam Ironing and Steam Pressing.
Use since May 7, 1954.

SN 669,712. Virginia-Carolina Chemical Corp., Richmond, Va., to Diamond Black Leaf Company, Cleveland, Ohio. Filed July 9, 1954.



The drawing is lined for the color red. Applicant claims ownership of Reg. Nos. 266,166, 266,175, and 513,110.
For Insecticides, Weedicides, Rodenticides, Fungicides, Algacides, Parasiticides, Nematocides for Agricultural, Horticultural, Veterinary, Poultry, Household, and Sanitary Uses.
Use since February 1950.

SN 669,713. Virginia-Carolina Chemical Corp., Richmond, Va., to Diamond Black Leaf Company, Cleveland, Ohio. Filed July 9, 1954.



Applicant claims ownership of Reg. Nos. 266,166, 266,175, and 513,110.
For Insecticides, Weedicides, Rodenticides, Fungicides, Algacides, Parasiticides, Nematocides for Agricultural, Horticultural, Veterinary, Poultry, Household, and Sanitary Uses.
Use since December 1910.

SN 679,624. Wyandotte Chemicals Corporation, Wyandotte, Mich. Filed Jan. 7, 1955.

TETRONIC

For Nonionic Polymerized Alkylene Oxide Compound Having Surface Active Properties.
Use since May 6, 1953.

SN 680,551. Rockwood Sprinkler Company, Worcester, Mass. Filed Jan. 26, 1955. Sec. 2(f).

ROCKWOOD

Applicant claims ownership of Reg. Nos. 512,680 and 513,556.
For Foam Liquid and Wetting Agent.
Use since on or about Oct. 16, 1947.

SN 681,503. Ferguson Fumigants, Inc., Ferguson, Mo. Filed Feb. 11, 1955. Sec. 2(f).

DAWSON

Applicant claims ownership of Reg. No. 579,234.
For Fumigant.
Use since Oct. 24, 1949.

SN 682,086. United Carbon Company, Inc. (Maryland), Charleston, W. Va. Filed Feb. 21, 1955.

CROFLEX

For Carbon Black for Use as a Filler in Rubber and Synthetic Rubber Compounds, as a Pigment for Paints and Inks, and Other Related Uses.
Use since May 3, 1935.

SN 686,046. The Fuller Brush Company, Hartford, Conn. Filed Apr. 22, 1955.

ful-kill

For Insecticide.
Use since on or about May 19, 1954.

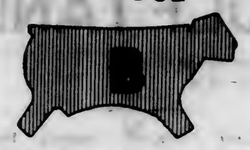
SN 686,080. Permagile Corporation of America, Long Island City, N. Y. Filed Apr. 22, 1955.

PERMAGILE

For Preparation of Liquid and Paste for Repairing Structural Defects in Building Materials and Masonry Foundations and Structures, and for Coating Bonding and Waterproofing Building Materials and Masonry Foundations and Structures.
Use since Jan. 31, 1955.

SN 686,270. Barrentan Testing & Research Corporation, Port Allegany, Pa. Filed Apr. 26, 1955.

DRIOSE



The drawing is lined for red.
For Tanning Materials for Leather.
Use since Jan. 28, 1955.

SN 686,415. Andover Silver Company, Inc., Andover, Mass. Filed Apr. 28, 1955.

ANT-LINE

For Insecticides.
Use since Feb. 28, 1955.

SN 687,278. Geigy Chemical Corporation, New York, N. Y. Filed May 11, 1955.

IRAGEN

For Dyes and Dyestuffs.
Use since Mar. 30, 1955.

SN 687,561. Gulf Oil Corporation, Pittsburgh, Pa. Filed May 16, 1955.



The drawing is lined for orange and blue.
For Liquefied Petroleum Gas.
Use since Oct. 21, 1954.

SN 687,572. Gulf Oil Corporation, Pittsburgh, Pa. Filed May 16, 1955.



The drawing is lined for orange and blue. Applicant claims ownership of Reg. No. 344,601.
For Radiator Sealer.
Use since on or about June 1, 1942.

SN 687,578. Gulf Oil Corporation, Pittsburgh, Pa. Filed May 16, 1955.

GULF

Applicant claims ownership of Reg. No. 374,936.
For Anti-Freeze Solution.
Use since Aug. 9, 1939.

SN 687,586. Gulf Oil Corporation, Pittsburgh, Pa. Filed May 16, 1955.

GULFTANE

For Liquefied Petroleum Gas.
Use since Oct. 21, 1954.

SN 687,714. Nopco Chemical Company, Harrison, N. J. Filed May 17, 1955.

NOPCO CP

Applicant claims ownership of Reg. Nos. 121,927, 578,081, and others.
For Processing Oil for Textile Fibers.
Use since May 14, 1937.

SN 687,715. Nopco Chemical Company, Harrison, N. J. Filed May 17, 1955.

NOPCO FUA

Applicant claims ownership of Reg. Nos. 121,927, 578,081, and others.
For Processing Oil for Textile Fibers.
Use since Apr. 5, 1945.

SN 687,750. American Chemical Paint Company, Ambler, Pa. Filed May 18, 1955.

meeno

For Chemical Preparations for Defoliating Plants.
Use since May 17, 1955.

SN 687,751. American Cyanamid Company, New York, N. Y. Filed May 18, 1955.

CYANATEX

Applicant claims ownership of Reg. Nos. 589,706 and 602,013.
For Dyeing Assistant.
Use since Mar. 30, 1955.

SN 687,901. Southern Dyestuff Corporation, Charlotte, N. C. Filed May 19, 1955.

EVERBLUE

For Dyestuffs.
Use since May 5, 1955.

CLASS 7

SN 691,274. Broderick & Bascom Rope Company, St. Louis, Mo. Filed July 14, 1955.

STEELOC

For Wire Rope Slings.
Use since August 1954.

CLASS 11

SN 691,844. Engraved Stationery Manufacturers Research Institute, Inc., Washington, D. C. Filed July 25, 1955.



ESMA DRI INK

No claim is made to a right to the exclusive use of the word "Ink" apart from the other features of the mark shown.
For Printing Inks.
Use since July 20, 1955.

CLASS 12

SN 666,511. Oregon Windor Co. Inc., Long Island City, N. Y. Filed May 17, 1954.

TRIM-PAK

For Wooden Trim for Windows and Doors.
Use since May 3, 1954.

SN 672,503. Engineered Products, Inc., Hialeah, Fla. Filed Aug. 31, 1954.

Jal-Kit

For Windows, Doors, Window Hardware, Mechanical Operating Parts for Windows, Sold as a Unit, Glass, Wood and Aluminum Louvers, Frames, Jalousies, Screens.
Use since June 1, 1952.

SN 676,421. Jack B. Tizer, Philadelphia, Pa. Filed Nov. 10, 1954.

TRANGO

For Synthetic Flexible Floor and Wall Tile.
Use since Oct. 25, 1954.

SN 676,422. Jack B. Tizer, Philadelphia, Pa. Filed Nov. 10, 1954.

TRIANGLE

For Synthetic Flexible Floor and Wall Tile.
Use since Nov. 5, 1954.

SN 676,833. Charles C. Plumb, d. b. a. C. C. Plumb Company, Warwick, R. I. Filed Nov. 17, 1954.

Ebonite

For Bituminous Road Materials.
Use since May 1953.

SN 677,812. Roddis Plywood Corporation, Marshfield, Wis. Filed Dec. 6, 1954.

Roddiscraft
Laminated Hardboard

Without waiver of common law rights the words "Laminated" and "Hardboard" are disclaimed apart from the mark as shown. Applicant claims ownership of Reg. No. 415,451.
For Hardboard.
Use since June 3, 1954.

SN 677,813. Roddis Plywood Corporation, Marshfield, Wis. Filed Dec. 6, 1954.

Roddiscraft
Tongue and Groove

Without waiver of common law rights the words "Tongue" and "Groove" are disclaimed apart from the mark as shown. Applicant claims ownership of Reg. No. 415,451.
For Hardboard.
Use since June 3, 1954.

SN 678,817. Seidelhuber Iron & Bronze Works, Inc., Seattle, Wash. Filed Dec. 22, 1954.

Car-Baña

For Pre-Fabricated Carport Type Buildings.
Use since Oct. 14, 1954.

SN 679,209. C. Conradty, Nurnberg, Germany. Filed Dec. 31, 1954.



Applicant claims ownership of German Reg. No. 649,852, dated Dec. 11, 1953.
For Carbon and Graphite Blocks for Lining Tanks, Baths, Containers and Apparatus, and for the Construction of Chemical Equipment.

SN 684,391. Black-Brollier, Incorporated, Houston, Tex. Filed Mar. 29, 1955.

Desertone

For Synthetic Limestone Facing Material Manufactured in Colors.
Use since Mar. 1, 1955.

SN 686,003. John G. Teichman, Durand, Mich. Filed Apr. 21, 1955.

HYDREX

For Plastic Composition in the Nature of So-Called Putty.
Use since Mar. 26, 1931.

SN 686,385. New Castle Products, Inc., New Castle, Ind. Filed Apr. 27, 1955.

FOLDMASTER

For Fabric and Like Covered Collapsible Metal Frames Serviceable as Partition and Door Type Closures.
Use since Dec. 21, 1954.

SN 687,621. Plastic-Stone Products Co., d. b. a. Plastic-Stone Products, Seattle, Wash. Filed May 16, 1955.

Plastic-Stone

For Synthetic Rubber Surface Covering Material—Namely, Floor Covering, Deck Covering and Wall Covering Applied in Mastic Form.
Use since Apr. 15, 1953.

SN 691,000. Bourne Products, Inc., El Cajon, Calif. Filed July 11, 1955.

"DUAL-FIN"

For Metallic Window Frames.
Use since Mar. 30, 1950.

SN 691,024. The Far Islands Timber Company, Los Angeles, Calif. Filed July 11, 1955.

SEALUAN

For Philippine Mahogany Wall Paneling.
Use since Apr. 30, 1955.

SN 691,280. The Crossett Company, Crossett, Ark. Filed July 14, 1955.

American Beauty

For Wood Trim Sold in Packages.
Use since July 15, 1953.

SN 691,319. Panther Oil & Grease Mfg. Co., Fort Worth, Tex. Filed July 14, 1955.

glas-web

For Roof Covering Material in the Nature of a Fabric Impregnated With Glass and Presaturated With a Waterproofing Asphalt.
Use since June 15, 1955.

SN 691,386. Malcolm Payne, d. b. a. National Roofing Aggregates Company, Denver, Colo. Filed July 15, 1955.

GEOROCK

For Roof or Roofing Aggregate—Namely, Scoria or Volcanic Ash, Crushed and Screened to Proper Size as a Substitute for Gravel or Slag on Gravel Type Roofs.
Use since May 11, 1955.

SN 691,989. Entec Products Corporation, New York, N. Y. Filed July 27, 1955.

decobrik

For Sections, Shaped To Imitate Cut Brick or Stone, and Made From Cork, for Use as Surfacing on Interior Walls and Ceilings.
Use since Apr. 20, 1955.

SN 692,081. Precision Parts Corporation, Nashville, Tenn. Filed July 28, 1955.

SIMPLEX

For Folding Stairways.
Use since Apr. 20, 1954.

SN 692,218. Fred Ex Enterprises, Inc., Chicago, Ill. Filed Aug. 1, 1955.

X

For Vehicle Parking Barriers.
Use since April 1954.

SN 692,246. Mancuna Engineering Limited, Manchester, England. Filed Aug. 1, 1955.

MANCUNA

Applicant claims ownership of British Reg. No. 736,227, dated Nov. 17, 1954.
For Industrial Doors.

SN 692,997. American-Marietta Company, d. b. a. Keystone Asphalt Products Company, Chicago, Ill. Filed Aug. 15, 1955.

KAPSEAL

For Crack Filler.
Use since July 6, 1955.

SN 693,010. The Cambridge Tile Manufacturing Co., Inc., Cincinnati, Ohio. Filed Aug. 15, 1955.

SUNTEX

For Floor and Wall Tile.
Use since Sept. 20, 1954.

SN 693,219. Wesco Materials, Inc., Chattanooga, Tenn. Filed Aug. 16, 1955.

WESCOL-MIX

For Asphaltic Concrete Cold Mix of the Liquefier Type.
Use since July 13, 1955.

SN 693,357. Armstrong Cork Company, Lancaster, Pa. Filed Aug. 19, 1955.

ARMAGLAS

For Glass Fiber Thermal and Sound Insulation Products.
Use since June 10, 1955.

SN 693,498. Southern Lumber Company, Warren, Ark. Filed Aug. 22, 1955.

Southern

For Finished and Unfinished Lumber and Flooring.
Use since 1903 on lumber.

SN 694,383. Phlomax (Overseas) Limited, Redhill, England. Filed Sept. 8, 1955.

PHLOMAX

Applicant claims ownership of British Reg. No. 718,681, dated June 4, 1953.
For Concrete Articles All for Use in Building and Construction and Water Supply and Sewerage and Like Disposal Including Concrete Pipes, Gullys, Cesspits, Manholes, Soakaways.

SN 695,387. Cannelton Sewer Pipe Co., Cannelton, Ind. Filed Sept. 27, 1955.

TRANSLOT

For Filter Floor Blocks.
Use since Aug. 30, 1955.

SN 695,830. Mayfield Manufacturing Co., Birmingham, Ala. Filed Oct. 4, 1955.

MAYCO

For Roof Flashings.
Use since March 1940.

SN 695,856. Floyd D. Stoner, Defiance, Ohio. Filed Oct. 4, 1955.

GREEN ACRES HOMES

For Prefabricated Houses and Garages.
Use since on or about Mar. 2, 1955.

SN 696,435. Thomas Edwin Greenstreet, d. b. a. Ceramichrome Laboratories, Los Angeles, Calif. Filed Oct. 14, 1955.

BEAUTY FLO

For Liquid Glaze for Ceramic Articles.
Use since Oct. 3, 1955.

SN 696,436. Thomas Edwin Greenstreet, d. b. a. Ceramichrome Laboratories, Los Angeles, Calif. Filed Oct. 14, 1955.

CERAMICHROME

For Liquid Glazes, Liquid Underglazes, Powdered Glazes, Liquid Engobes, Casting Slip, and Translucent Underglaze.
Use since March 1949.

CLASS 13

SN 646,796. National Lock Company, Rockford, Ill. Filed May 11, 1953.

"Select-a-Pak"

For Hardware Items, Such as Screws, Bolts, and the Like Assembled in Display Racks.
Use since September 1952.

SN 665,926. Kirkhill Inc., Downey, Calif. Filed May 7, 1954.

FLUSH-O-MATIC

For Tank Ball and Guide Assemblies.
Use since July 1953.

SN 667,323. The Mennen Company, Morristown, N. J. Filed May 28, 1954.

FOAMATIC

For Valves for Pressurized Shaving Cream Cans.
Use since Apr. 5, 1954.

SN 678,435. Canmy Toiletries Co., Inc., New York, N. Y. Filed Dec. 16, 1954.



The representation of the goods shown is disclaimed apart from the mark as shown.
For Slide Fasteners and Zipper-Sliders for Garments, Slippers, and Similar Articles.
Use since Sept. 8, 1954.

SN 679,088. Edlu Designing Co., Chicago, Ill. Filed Dec. 29, 1954.

POLYPHAN

For Rod Devices for Supporting Clothes Hangers To Save Space, and Parts Thereof.
Use since Dec. 3, 1954.

SN 682,344. C. Hager & Sons Hinge Mfg. Co., St. Louis, Mo. Filed Feb. 25, 1955.

Luma-Sheen

For Door Hinges.
Use since on or about May 21, 1954.

SN 684,482. Sherwatt Equipment & Manufacturing Co., Inc., New York, N. Y. Filed Mar. 29, 1955.



For Wire Cloth.
Use since on or about Mar. 1, 1953.

SN 684,771. United States Steel Corporation, Pittsburgh, Pa. Filed Apr. 1, 1955. Sec. 2(f).

AMERICAN GLIDDEN

Applicant claims ownership of Reg. Nos. 85,639 and 297,446.
For Barbed Wire.
Use since at least as early as the year 1880 as to "Glidden"; and since Mar. 23, 1909, as to the mark shown.

SN 686,224. Quinn Manufacturing Company, Detroit, Mich. Filed Apr. 25, 1955.



The words "Quinn Quality," apart from the mark, are disclaimed.
For Screw Nuts.
Use since Mar. 26, 1955.

SN 688,004. Benjamin Allaun, Los Angeles, Calif. Filed May 23, 1955.

WALL-TACH

For Retainers for Holding Pictures and Other Objects in Position on a Wall.
Use since Dec. 8, 1954.

CLASS 14

SN 674,610. National Cylinder Gas Company, Chicago, Ill. Filed Oct. 11, 1954.



The mark is an insignia comprised of a combination of letters "PFC."
For Steel Forgings.
Use since Oct. 5, 1912.

SN 676,139. Thomas N. Scoville, d. b. a. Standard Foundry Products, New York, N. Y. Filed Nov. 5, 1954.

STANDARDITE

For Ferrous Metal.
Use since May 12, 1954.

SN 690,980. United States Steel Corporation, Pittsburgh, Pa. Filed July 8, 1955.

PAR-TEN

For Steel Sheets.
Use since June 10, 1955.

SN 692,560. Armco Steel Corporation, Middletown, Ohio. Filed Aug. 8, 1955.

SHEF-TEN

For Alloy Carbon Steel for Structural Shapes—Namely, Bars, Hot Rolled Bars, Bar Size Shapes, Plates, and Strip.
Use since Mar. 1, 1955.

SN 693,089. Republic Steel Corporation, Cleveland, Ohio. Filed Aug. 15, 1955.

REPUBLIC
PRECISION WOUND

No claim to the words "Precision Wound" is made apart from the mark as shown. Applicant claims ownership of Reg. Nos. 178,246 and 307,970.
For Coils of Wire.
Use since Apr. 1, 1955.

CLASS 15

SN 663,668. The Lubri-Loy Company, St. Louis, Mo. Filed Mar. 31, 1954.



The mark consists of a band of alternate black and white diagonal stripes around the lower portion of the container for the goods.
For Oil Additive for Use in Automotive and Engine Lubrication, Same Being Added to Lubricating Oils in Automobile Engines and Other Lubricating Oils and Greases, To Prevent Sticky Valves and To Reduce Friction.
Use since on or about Jan. 2, 1952.

SN 678,118. John Manufacturing Company, Phoenix, Ariz. Filed Dec. 10, 1954.

PC-50

For Specially Compounded Mixture of Liquefied Petroleum Products to Automatically Trigger Ignition and Maintain Combustion of Regular Fuels When Starting Internal Combustion Engines.
Use since Aug. 21, 1954.

SN 685,685. Everybody's Oil Corporation, Anderson, Ind. Filed Apr. 18, 1955.

Zinqo

For Petroleum Products—Namely, Heater Oil, Furnace Oil, Kerosene Motor Oils, Greases, Gear Lubricants, and Gasoline.
Use since Mar. 21, 1934.

SN 686,198. William A. Marsden, San Diego, Calif. Filed Apr. 25, 1955.

ALL COLORS OF THE RAINBOW!
DelMar

No claim is made to the words "All Colors of the Rainbow" apart from the mark as shown.
For Candles.
Use since Apr. 1, 1954.

SN 687,577. Gulf Oil Corporation, Pittsburgh, Pa. Filed May 16, 1955.

GULF

Applicant claims ownership of Reg. Nos. 342,770 and 379,158.
For Industrial and Technical Oils and Greases—Namely, Flushing and Slushing Oil, Quenching Oil, Transformer Oil, Cutting Oil, Thread Grinding Oil, Shock Absorber Oil, Oil and Grease for Protecting Metal and/or Concrete Surfaces, and Metal Roll and Press Oil.
Use since October 1920.

SN 688,627. Colonial Candle Co. of Cape Cod, Inc., Barnstable, Mass. Filed June 1, 1955.

Spiralite

For Twisted Candles.
Use since on or about May 20, 1954.

CLASS 16

SN 655,675. The Lord Baltimore Press, Incorporated, Baltimore, Md. Filed Nov. 2, 1953.

PAR-A-VEL

For Protective Wax Coating Applied to Cardboard Cartons.
Use since Aug. 3, 1953.

SN 662,391. Reliance Varnish Company, Inc., Louisville, Ky. Filed Mar. 10, 1954.

SPECK-L-TONE

For Coating Compositions Intended for Use as Finishing Materials and Consisting of Ready-Mixed Multi-Color Suspension Liquid Lacquer Enamels.
Use since Feb. 2, 1954.

SN 662,650. The Lord Baltimore Press, Incorporated, Baltimore, Md. Filed Mar. 15, 1954.

PAR-A-GLO

For Protective Wax Coating Applied to Cardboard Cartons.
Use since Nov. 26, 1953.

SN 684,576. The Martin-Senour Company, Chicago, Ill. Filed Mar. 30, 1955.

FIN-L-WASH

For Paint Solvents.
Use since Oct. 1, 1954.

SN 686,411. C. A. Woolsey Paint & Color Co. Inc., New York, N. Y. Filed Apr. 27, 1955.



Applicant claims ownership of Reg. Nos. 69,989, 523,109, and others.
For Varnishes, Chemical Varnish Remover, Paint Thinners or Diluents, Wood Sealers, Paint Primers, Cementitious Preparations To Be Used for Surfacing and as a Filler for Cracks in Wood, Canvas or Metal To Provide a Smooth Protective Coating Prior to the Application of the Finishing Paint, Anti-Fouling Paints, Marine Paints, and Paint Enamels.
Use since about April 1948; since at least June 1891 as to "Woolsey"; since December 1884 as to a representation of a mermaid; and since in June 1941 as to a pilot wheel design.

SN 689,905. Welco Manufacturing Company, Kansas City, Mo. Filed June 20, 1955.

Wel-Cote
TEXT

Applicant claims ownership of Reg. No. 560,385.
For Primarily Protective Coating and Interior Finishing Material in Powdered Form for Resurfacing and Redecorating Cracked Walls, Ceilings, and Wallboards.
Use since March 1952.

SN 690,370. Crosby Forest Products Co., Picayune, Miss. Filed June 28, 1955.



For Paints and Paint Products—Namely, Marine Spar, Floor, Gymnasium and Utility Varnishes, Masonry Sealer, Floor Sealer, Outside White Paint, Penta and Thinner.
Use since Dec. 3, 1954, on marine spar varnish.

SN 690,744. Old Colony Paint & Chemical Co., Los Angeles, Calif. Filed July 5, 1955.



For Ready-Mixed Oil and Water Paints; Oil and Water Paste Paints; Resin Paints; Emulsion Paints; Oil and Resin Paints in Flat; Semi-Gloss and Gloss Finishes for Interior and Exterior Use; Dry Paint Colors; Paint Thinners; Zinc Oxide and Titanium Paint Pigments; Prepared Shellac Ready for Use; Paint Enamels; Lacquers; Lacquer Thinner; Varnish; Oil and Japan Colors; Oil Stains; Cement Stains; and Ingredients of Paints—Namely, White Lead Pigments and Vehicles Consisting of Turpentine and Linseed Oil.
Use since 1938.

SN 690,996. Balcrank, Inc., Cincinnati, Ohio. Filed July 11, 1955.

anoTONE

For Coating Composition in the Nature of a Colored Finish for Metal Furniture—Namely, Tables, Chairs, and Chaises.
Use since July 6, 1955.

SN 691,102. Surface Chemicals, Inc., McKees Rocks, Pa. Filed July 11, 1955.

ISOTHANE

For Protective Coatings of Plastic Material That Incidentally Have Heat-Insulating and Sound-Deadening Properties, and Which Are Used on Metallic and Non-Metallic Articles.
Use since May 25, 1955.

SN 692,950. Old Colony Paint & Chemical Co., Los Angeles, Calif. Filed Aug. 12, 1955. Sec. 2(f).

SELECTONE

Applicant claims ownership of Reg. No. 528,924.
For Interior Paints, Including Flat Wall Paint, Semi-Gloss Paints, Gloss Enamels; Exterior Paints, Including Prepared House Paints, Sash and Trim Paints, and Masonry Paints; Pigmented Primers; Oil Coloring.
Use since Aug. 2, 1948, on interior paints.

SN 693,082. Paint Fair Stores, Inc., New York, N. Y. Filed Aug. 15, 1955.

mutual

For Paints and Varnishes.
Use since May 1, 1955.

SN 693,371. Fulton Asphalt Company, Chicago, Ill. Filed Aug. 19, 1955.

FULTON 1870

For Acidproof Coatings, Asphalt Primers, and Rubber Plastic Acidproof Coatings.
Use since 1870.

SN 694,567. Galvicon Corp., New York, N. Y. Filed Sept. 13, 1955.

GALVICON

For Galvanizing and Rust-Resistant Paints and Solvents for Metals.
Use since Feb. 4, 1953.

SN 695,152. The Foy Paint Company, Inc., d. b. a. Johnston Paint Company, Cincinnati, Ohio. Filed Sept. 22, 1955.

plast-over

For Oil Base, Texture Finish for Use on Plaster, Wall Board, and Previously Painted Surfaces.
Use since March 1955.

SN 695,153. The Foy Paint Company, Inc., d. b. a. The A. Burdsal Company, Indianapolis, Ind. Filed Sept. 22, 1955.

Hide-a-Wal

For Oil Base, Texture Finish for Use on Plaster, Wall Board, and Previously Painted Surfaces.
Use since March 1955.

SN 695,154. The Foy Paint Company, Inc., Cincinnati, Ohio. Filed Sept. 22, 1955.

Levelon

For Interior Flat Wall Paint.
Use since Aug. 29, 1955.

SN 695,701. Cowman-Campbell Paint Co., Inc., Seattle, Wash. Filed Oct. 3, 1955.

CAN-DO

For Ready Mixed Paint.
Use since Sept. 21, 1955.

SN 696,052. Lacquer Corporation of America, Brooklyn, N. Y. Filed Oct. 7, 1955.

LACOA

For Paints and Enamels.
Use since Mar. 1, 1955.

CLASS 17

SN 691,950. Madéhn A. G., also d. b. a. Madéhn S. A. and/or Madéhn Ltd., Arlesheim, Switzerland. Filed July 26, 1955.

North Pole

Priority is claimed under Sec. 44(d). Swiss application filed June 20, 1955; Reg. No. 156,654, dated June 20, 1955.
For Cigarettes.

CLASS 18

SN 657,104. Baxter Laboratories, Inc., Morton Grove, Ill. Filed Nov. 30, 1953.

VACUTROL

Applicant claims ownership of Reg. No. 579,604.
For Fluids for Parenteral Use and Medical Preparations for Topical Application.
Use since Nov. 16, 1953.

SN 664,719. Zenith Laboratories, Inc., Great Neck, N. Y. Filed Apr. 16, 1954.

Lapsules

For Capsules Containing Drugs Which Are Anti-Spasmodic, Sedative, Hypnotic, or Central Nervous System Stimulants in Nature, Coated With Materials So as To Release These Drugs Over a Prolonged Period of Time.
Use since Jan. 4, 1954.

SN 667,564. E. T. Krebs, d. b. a. John Beard Memorial Foundation, San Francisco, Calif. Filed June 2, 1954.

Biovix

For Nutritional Vitamin Supplement.
Use since May 3, 1954.

SN 667,970. Frederick G. Mayer, South Norwalk, Conn. Filed June 9, 1954.

HYDROTOX

For Ointment for the Relief of Athlete's Foot, Ringworm, and Other Fungus Infections.
Use since May 19, 1954.

SN 685,164. Brewer Pharmacal Company, Inc., Upper Montclair, N. J. Filed Apr. 8, 1955.

SiccoiD

For Aspirin, Pediatric Aspirin, Mephenesin, Hematinic Tablets, Special Supplement (Dietary Supplement During Pregnancy and Lactation).
Use since Mar. 16, 1953.

SN 685,174. The Drug Products Co., Inc., Brooklyn, N. Y. Filed Apr. 8, 1955.

FERROMANG

Applicant claims ownership of Reg. Nos. 291,393 and 362,391.
For Medicinal Preparation Used as a Dietary Supplement.
Use since Feb. 1, 1945.

SN 685,177. The Drug Products Co., Inc., Brooklyn, N. Y. Filed Apr. 8, 1955.

IODOCAL

Applicant claims ownership of Reg. No. 192,178.
For Iodized Calcium Medication Put Up in Solid Form, Also as an Emulsion Used in the Treatment of Bronchitis, Non-Diptheritic Croup, Laryngitis, Pharyngitis, Pneumonia, and Catarrhal Conditions of the Respiratory Tract.
Use since Jan. 2, 1915.

SN 685,443. Foster-Milburn Company, Buffalo, N. Y. Filed Apr. 13, 1955. Sec. 2(f).

Crestwood

Applicant claims ownership of Reg. No. 322,648.
For Medicated Jelly for Treatment and Prevention of Vaginal Infections and Medicated Soapless Cleansing Preparation for the Treatment and Prevention of Skin Irritations.
Use since Dec. 28, 1932.

SN 687,150. Warner-Lambert Pharmaceutical Company, New York, N. Y. Filed May 9, 1955.

KALUSIL

For Anti-Diarrheal Preparation.
Use since Apr. 25, 1955.

SN 688,205. American Scientific Laboratories, Inc., Madison, Wis. Filed May 25, 1955.

NEWVAX

For Newcastle Disease Vaccine B–1 Strain for Poultry.
Use since May 5, 1955.

SN 688,206. American Scientific Laboratories, Inc., Madison, Wis. Filed May 25, 1955.

DRINCASTLE

For Newcastle Disease Vaccine for Poultry for Drinking Water.
Use since Apr. 6, 1955.

SN 688,358. Sandoz Chemical Works, Inc., Hanover, N. J. Filed May 26, 1955.

SPACETABS

For Medicated Delayed Action Tablets for Use in the Treatment of Spasms, Allergies, Cardiovascular Diseases, and Anxiety States.
Use since Apr. 29, 1955.

SN 692,085. Rystan Company, Mount Vernon, N. Y. Filed July 28, 1955.

Topizyme

For Healing Ointment.
Use since June 29, 1955.

SN 692,086. Rystan Company, Mount Vernon, N. Y. Filed July 28, 1955.

Panafil

For Healing Ointment.
Use since June 29, 1955.

SN 692,100. The Upjohn Company, Kalamazoo, Mich. Filed July 28, 1955.

Delta-Cortef

For Hormonal Preparation.
Use since Feb. 8, 1955.

CLASS 19

SN 679,789. Dennis Mitchell Industries, Philadelphia, Pa. Filed Jan. 12, 1955.

PONY PEN

For Baby Seat Which is To Be Attached to the Motor Vehicle.
Use since May 24, 1954.

SN 680,301. Peerless Manufacturing Corporation, Fort Wayne, Ind. Filed Jan. 21, 1955. Sec. 2(f).

Peerless

Applicant claims ownership of Reg. No. 428,570.
For Mobile Homes.
Use since June 1944.

SN 685,251. Andrew G. Carter, d. b. a. Life-Gard Co., Grand Rapids, Mich. Filed Apr. 11, 1955.

Life LG Gard

For Safety Belts for Use in Automobiles and Other Vehicles.
Use since Oct. 15, 1954.

SN 685,252. Andrew G. Carter, d. b. a. Life-Gard Co., Grand Rapids, Mich. Filed Apr. 11, 1955.



The representation of the goods is disclaimed apart from the mark as shown.
For Safety Belts for Use in Automobiles and Other Vehicles.
Use since Oct. 15, 1954.

SN 686,953. C & D Manufacturing Company, Perkins, Calif. Filed May 6, 1955.

Movall

For Rear Dump Wagons.
Use since Feb. 11, 1955.

SN 687,138. Strick Company, d. b. a. Strick Co., Philadelphia, Pa. Filed May 9, 1955.

Strickroof

Applicant claims ownership of Reg. No. 541,737.
For Automotive Vehicle Trailers and Truck Bodies.
Use since on or about Feb. 2, 1953.

SN 691,343. The Acme Specialty Manufacturing Co., Toledo, Ohio. Filed July 15, 1955.

MIRRORAMA

For Rear-View Mirrors for Vehicles.
Use since Mar. 8, 1955.

SN 691,960. Howard M. Rand, West Orange, N. J. Filed July 26, 1955.

MY MAN FRIDAY

For Hand Carts and Hand-Wheeled Carriers.
Use since May 24, 1954.

SN 692,646. Southwest Engineering and Manufacturing Company, Inc., Phoenix, Ariz. Filed Aug. 8, 1955.

"SWEMCO"

For Air Conditioning Apparatus for Automotive Vehicles.
Use since Apr. 15, 1955.

CLASS 21

SN 661,020. Ideal Industries, Inc., Sycamore, Ill. Filed Feb. 12, 1954. Sec. 2(f).

WIRE-NUTS

Applicant claims ownership of Reg. Nos. 424,062 and 531,715.
For Connecting Members for Joining the Ends of Electric Wires or Conductors.
Use since Feb. 1, 1939.

SN 670,427. Jefferson Electric Company, Bellwood, Ill. Filed July 22, 1954. Sec. 2(f).

SAF-T-LAG

Applicant claims ownership of Reg. No. 503,542.
For Thermal Time Delay Fuses.
Use since July 22, 1946.

SN 674,498. Calcinator Corporation, Bay City, Mich. Filed Oct. 8, 1954.

ELECTRA-CAL

For Electric Refuse Incinerators.
Use since Sept. 20, 1954.

SN 676,352. Budd & Weston (Special Machines) Limited, London, England. Filed Nov. 8, 1954.

Solo

For Electric Soldering Tools.
Use since October 1953.

SN 678,847. Dynamo Battery Company, San Diego, Calif. Filed Dec. 23, 1954.

DYNAMO

The drawing is lined for yellow but no claim is made as to color.
For Storage Batteries.
Use since July 15, 1954.

SN 680,648. The Acme Wire Company, Hamden, Conn. Filed Jan. 28, 1955.

NYVAR

For Insulated Wire.
Use since May 10, 1950.

SN 680,649. The Acme Wire Company, Hamden, Conn. Filed Jan. 28, 1955.

FORMBOND

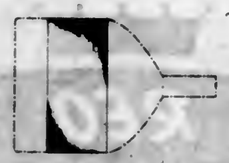
For Insulated Wire.
Use since July 6, 1954.

SN 683,000. Trojan Battery Company, Los Angeles, Calif. Filed Mar. 7, 1955.

MILEAGE MASTER

For Electric Storage Batteries.
Use since April 1954.
Subj. to Intf. with SN 689,537.

SN 688,724. General Dynamics Corporation, San Diego, Calif. Filed June 2, 1955.



The parallel lines are black and blue.
For Cathode-Ray Tubes.
Use since Feb. 1, 1955.

SN 689,557. Eastern Fixture Company, Roxbury, Mass. Filed June 15, 1955.

Eastern

Applicant claims ownership of Reg. No. 509,304.
For Electric Lighting Fixtures.
Use since Aug. 1, 1945.

SN 690,279. Howard W. Kendrick, d. b. a. K. D. Mfg. Co., Zanesville, Ohio. Filed June 27, 1955.

BOOSTABAT

For Battery Powered Auxiliary Ignition System for Use on Vehicles, Airplanes, Etc.
Use since Apr. 10, 1955.

SN 690,912. Superior Cable Corporation, Hickory, N. C. Filed July 7, 1955.

"Super-Splice"

For Plastic Telephone Cable Splicing Sleeves.
Use since Dec. 15, 1954.

SN 692,674. West Bend Aluminum Co., West Bend, Wash. Filed Aug. 1, 1955. Sec. 2(f).

HEAT-RITE

For Electrically Heated Hot Plates Providing Heat and Support for Containers Placed Thereon.
Use since September 1932.

SN 692,787. Frederick L. Kohler, Washington, D. C. Filed Aug. 10, 1955.

KLUBMASTER

For Speaker's Stand Having Electrical Apparatus Associated Therewith, Such as an Amplifier, Record Player, Loud Speaker, and Microphone.
Use since Mar. 17, 1955.

SN 692,880. Sylvania Electric Products Inc., Salem, Mass. Filed Aug. 11, 1955.

GLOSTAT

For Fluorescent Lamp Starters.
Use since June 27, 1946.

SN 693,031. Felts Corporation, South Pasadena, Calif. Filed Aug. 15, 1955.

MINI-NOISE

For Electrical Cables and Electrical Cable Assemblies.
Use since Apr. 1, 1952.

SN 693,071. Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Filed Aug. 15, 1955.

FIRE-BELLE

For Control Panels of Electric Fire Alarm Systems.
Use since Feb. 25, 1955.

SN 693,155. The James Knights Company, Sandwich, Ill. Filed Aug. 16, 1955.

Glasline

For Enclosed Piezoelectric Crystals.
Use since July 21, 1955.

SN 693,204. Schulmerich Carillons, Incorporated, Sellersville, Pa. Filed Aug. 16, 1955.

MARIAN

For Program or Manually Controlled Electric Bell Instruments.
Use since May 26, 1955.

CLASS 22

SN 684,003. X-Acto, Inc., Long Island City, N. Y. Filed Mar. 22, 1955.

SUJI

For Toys—Namely, a Wire Construction Kit.
Use since Feb. 18, 1955.

SN 684,664. Kalamazoo Sled Company, Kalamazoo, Mich. Filed Mar. 31, 1955.

Champion "Flying Disc"

Applicant claims ownership of Reg. No. 430,420.
For Dished Disk-Like Coasters and Water Skis.
Use since Feb. 25, 1955.

SN 685,195. Louis Marx & Company, Inc., New York, N. Y. Filed Apr. 8, 1955.

SITTING BULL

For Toy Guns.
Use since Mar. 28, 1955.

SN 685,197. Louis Marx & Company, Inc., New York, N. Y. Filed Apr. 8, 1955.

Johnny West

For Toy Guns.
Use since Mar. 28, 1955.

SN 685,271. H & H Lure Manufacturing Company, Phoenix, Ariz. Filed Apr. 11, 1955.

H-H Scorpion

For Fishing Lure.
Use since Aug. 1, 1954.

SN 685,392. Parker Brothers, Inc., Salem, Mass. Filed Apr. 12, 1955.

BANTU

For Board Game Played With Movable Pieces.
Use since Apr. 5, 1955.

CLASS 23

SN 601,625. H. D. Hudson Manufacturing Company, Chicago, Ill. Filed Aug. 2, 1950. Sec. 2(f) as to "Misty."

SUPER-MISTY

The word "Super" is disclaimed apart from the mark as shown. Applicant claims ownership of Reg. No. 195,745.
For Hand Operated Compression Sprayers Used to Atomize Fly Oils, Soluble Insecticides, Fungicides, Weed Killers; Also Used to Spray Deodorants, and Any Light to Heavy Sediment-Free Liquid.
Use since Jan. 20, 1950; and since Apr. 1, 1910, as to "Misty."

SN 644,861. National Pneumatic Co., Inc., Boston, Mass. Filed Apr. 7, 1953.

Power Check

For Mechanical Feed Controller Apparatus for Controlling the Feed of a Machine Tool.
Use since Nov. 25, 1952.

SN 657,641. Reo Motors, Inc., Lansing, Mich., to Motor Wheel Corporation, Lansing, Mich. Filed Dec. 8, 1953.

REO ROYALE

The drawing is lined for the color red, but color is not claimed. The term "De Luxe" is disclaimed apart from the mark as shown.
For Gasoline Powered Reel Type Power Lawn Mower.
Use since Apr. 28, 1948.

SN 657,642. Reo Motors, Inc., Lansing, Mich., to Motor Wheel Corporation, Lansing, Mich. Filed Dec. 8, 1953.

REO

The term "Lawn" is disclaimed apart from the mark as shown. The drawing is lined for red, yellow, and black, but color is not considered an essential feature.
For Gasoline Powered Rotary Type Power Lawn Mower.
Use since May 25, 1953.

SN 657,643. Reo Motors, Inc., Lansing, Mich., to Motor Wheel Corporation, Lansing, Mich. Filed Dec. 8, 1953.

REO SNOW-JET

The drawing is lined for red but color is not claimed.
For Rotary Snow Plow Attachment for Power Lawn Mower.
Use since Sept. 18, 1952.

SN 661,317. Cecil O. Carl and Charles B. Jobes, San Diego, Calif. Filed Feb. 19, 1954.



Applicants make no claim to the words "Sickle Hoe" and the slogan "Sharp as a Sickle" apart from the mark as shown.

The drawing is lined for green but color is not claimed as a feature.
For Hoes.
Use since Jan. 20, 1954.

SN 669,832. E. R. Wagner Manufacturing Company, Milwaukee, Wis. Filed July 12, 1954.

Aristocrat

For Carpet Sweepers of the Mechanical Type.
Use since June 7, 1954.

SN 673,559. Firma Anton Wingen Jr. Kommanditgesellschaft, Solingen, Germany. Filed Sept. 21, 1954.

OTHELLO

Applicant claims ownership of German Reg. No. 606,556, dated Feb. 3, 1950.
For Cutlery—Namely, Knives and Scissors, Complete Table Service, Forks, Spoons, Carving Services, Striking and Spearing Weapons, Letter Openers, Corkscrews, Bottle Openers, Nut Picks, Nut Crackers, Cigar Box Openers, Hair Cutting Instruments, Cigar Clippers.

SN 674,526. Oneida Ltd., Oneida, N. Y. Filed Oct. 8, 1954.

BALTIC

For Stainless Steel Tableware.
Use since Nov. 10, 1953.

SN 676,156. N. A. Woodworth Company, Ferndale, Mich. Filed Nov. 5, 1954.

CONE-LOK

For Clamping Fixtures of the Type Adapted to Hold a Workpiece During a Machining Operation.
Use since Nov. 1, 1954.

SN 680,558. United Aircraft Corporation, Windsor Locks, Conn. Filed Jan. 26, 1955.



The drawing is lined for red and gold. No claim is made to the words "Hamilton" and "Standard" apart from the mark as shown. Claims ownership of Reg. Nos. 225,307, 542,404, and others.
For Hydraulic Pumps, Starters for Gas Turbine Engines, Fuel Controls for Gas Turbine Engines, and Auxiliary Power Generating Units for Missile Controls, and Parts Thereof.
Use since about Nov. 29, 1950.

SN 689,063. Mann Edge Tool Company, Lewistown, Pa. Filed June 7, 1955. Sec. 2(f) as to "Mann's."

Rapid-Ho

Applicant claims ownership of Reg. No. 612,490.
For Garden Tools.
Use since Apr. 28, 1955.

SN 689,065. Thomas Mendenhall, d. b. a. Easy Way Garden Tool Company, Chicago, Ill. Filed June 7, 1955.

CRAB JACK

For Hand Tools Used as Diggers and For Removing Weeds.
Use since Mar. 30, 1955.

SN 689,331. Raymond W. Kerr, d. b. a. Kerrco Products, Hastings, Nebr. Filed June 10, 1955.

Jetcast

For Marking Stamps or Dies, Embossing Dies, Mold Cavities and Forces, Templates, Patterns, Jigs, and Fixtures.
Use since Apr. 23, 1955.

SN 691,452. Ekco Products Company, Chicago, Ill. Filed July 18, 1955.

FLINT

Applicant claims ownership of Reg. Nos. 411,860 and 411,861.
For Tableware—Namely, Knives, Forks and Spoons.
Use since on or about July 1, 1954.

SN 692,755. The X-4 Corporation, West Concord, Mass. Filed Aug. 9, 1955.

X-4

For Geared Wrenches and Parts Therefor.
Use since on or about Nov. 10, 1953.

CLASS 26

SN 595,940. Cambosco Scientific Company, Brighton, Mass. Filed Apr. 19, 1950. Sec. 2(f).

LABGRADE

For Laboratory Apparatus Employed in Educational Institutions in Connection With the Study of Chemistry, Physics and Biology, and Including Chemical Apparatus, Chemicals, Physical Apparatus and Biological Equipment.
Use since 1931.

SN 660,758. Surface Checking Gage Company, Los Angeles, Calif. Filed Feb. 8, 1954.

SURF-CHEK

Applicant claims ownership of Reg. No. 412,664.
For Surface Roughness Gage.
Use since July 20, 1944.

SN 677,330. Carl Mahr, G. m. b. H., Esslingen, Germany. Filed Nov. 26, 1954.

Millimess

Applicant claims ownership of German Reg. No. 525,353, dated July 29, 1940.
For Precision Measuring Instruments Such as Micrometers, Dial Gauges, and the Like.
Use since Aug. 3, 1950.

SN 683,698. Minnesota Mining & Manufacturing Company, St. Paul, Minn. Filed Mar. 17, 1955.

"Secretary"

For Electrically Operated Machine Employing High Intensity Radiation for Producing Copies of Printed or Pictorial Matter by Means of Heat Sensitive Paper.
Use since at least as early as Dec. 30, 1954.

SN 684,999. Builders-Providence, Incorporated, Providence, R. I., to B-I-F Industries, Inc., Providence, R. I. Filed Apr. 6, 1955.

Auto-Central

For Multiple Valve Control System and Unit Control Panel Therefor Comprising a Plurality of Valve Controls, Motor Controls, Indicators, and Recorders.
Use since Mar. 26, 1954.

SN 687,248. Charles Baptista, d. b. a. C. O. Baptista Films, Wheaton, Ill. Filed May 11, 1955.

Tel-n-See

For Stripfilm Projector and Film Strips Therefor for Bible Lessons, Bible Stories, and for Educational Purposes, and Sound Tapes to Go With the Above Filmstrips.
Use since October 1951.

SN 688,105. Vitacolor, Burbank, Calif., to Vitacolor Corporation, Burbank, Calif. Filed May 23, 1955.

VITACHROME

Applicant claims ownership of Reg. No. 602,697.
For Unexposed Color Film and Exposed and Developed Color Film, Prints, Slides and Strips.
Use since 1938.

SN 688,823. Isco Optische Werke GmbH, Gottingen-Weende, Germany. Filed June 3, 1955.

KIPTAR

Applicant claims ownership of German Reg. No. 617,832, dated Dec. 3, 1952.
For Photographic Objectives.

SN 690,405. Pneu-Trol Devices, Inc., Chicago, Ill. Filed June 28, 1955.

AUTOPONENTS FOR INDUSTRY

For Valves, Time Delay Switches, Control Panels, and Miscellaneous Parts, for the Installation of Automatic and Semi-Automatic Control Systems for Machinery and Machine Tools.
Use since on or about Apr. 28, 1955.

SN 690,902. Glen Piland Co., Bakersfield, Calif. Filed July 7, 1955.

Analeaf

For Kit of Chemicals and Testing Equipment for Plant and Soil Analysis.
Use since Apr. 1, 1954.

SN 691,242. Standard-Toch Chemicals, Inc., Staten Island, N. Y. Filed July 13, 1955.



For Machine for Automatically Selecting, Volumetrically Measuring and Dispensing Differently Colored Paints or Pigments, the Combination of Which Is Intended To Produce a Final Color Tone.
Use since June 11, 1953.

SN 692,001. Intelligent Machines Research Corporation, Arlington, Va. Filed July 27, 1955.

IMR

For Automatic Character Sensing Equipment and Attachments for Coordinating Electric Typewriters With Electric Key Punches.
Use since Feb. 3, 1954.

SN 693,069. Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Filed Aug. 15, 1955.

FLAME-GUARD

For Electronic Flame Detector Unit Having a Lead Sulfide Photocell Therein.
Use since Aug. 20, 1953.

CLASS 27

SN 689,716. General Time Corporation, La Salle, Ill. Filed June 17, 1955.

TRADITION

For Clocks.
Use since 1941.
Subj. to Intf. with Reg. No. 610,673.

SN 692,008. Mt. Vernon Watch Co. Inc., New York, N. Y. Filed July 27, 1955. Sec. 2(f).

MT.VERNON

For Watches and Parts Thereof, Watch Cases, and Watch Movements.
Use since Jan. 5, 1935.

CLASS 28

SN 649,016. Opalite, Inc., Philadelphia, Pa. Filed June 18, 1953.

OPALITE

For Hollow-ware Made of Precious Metal and Plated With Precious Metal.
Use since on or about Jan. 1, 1946.

SN 654,975. International Fraternity of Delta Sigma Pi, Inc., Chicago, Ill. Filed Oct. 19, 1953.

Δ

Σ Π

For Fraternity Pins and Badges.
Use since Nov. 7, 1907.

SN 670,104. Hickok Manufacturing Co. Inc., Rochester, N. Y. Filed July 16, 1954.

Capri

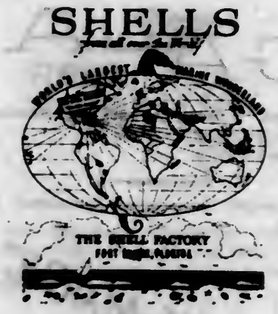
For Buckles, Tie Holders, Key Chains, Cuff Links, Collar Holders, Watch Bands, Money Clips, and Pocket Knives, All Made in Whole of, in Part of, or Plated With Precious Metal.
Use since May 5, 1954.

SN 671,445. Solomon Mantzowitz, d. b. a. The Solomon Mantzowitz Manufacturing Company, New York, N. Y. Filed Aug. 10, 1954.



For Religious Jewelry Including Crosses, Mazuzahs, Stars, Medals, Tablets and Torahs, Religious Charms, Novelty Charms, Bracelets, Discs, and Lockets.
Use since June 1953.

SN 679,864. The Shell Factory Inc., Fort Myers, Fla. Filed Jan. 13, 1955.



All wording on the mark is disclaimed apart from the mark as shown.
For Jewelry Made of Sea Shell and Coral.
Use since 1948.

SN 689,974. R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Filed June 21, 1955.

SILVER SWIRL

For Sterling Silver Flatware, i. e., Knives, Forks and Spoons.
Use since April 1955.

SN 690,948. Fabil Mfg. Corp., New York, N. Y. Filed July 8, 1955.



No claim is made to the words "Styled by" apart from the mark as shown.
For Boys' and Girls' Jewelry Consisting of Cuff Links, Tie Clasp and Tie Slides, Barrettes, Charm Bracelets, Scatter Pins, and Necklaces.
Use since in the year 1945.

SN 691,047. C. A. Kiger Company Jewelry Corporation, Kansas City, Mo. Filed July 11, 1955.



Applicant disclaims exclusive use of the word "Diamonds" and of the representation of a diamond apart from the mark shown.
For Diamonds.
Use since July 5, 1955.

SN 691,207. Gay Tool Co., Inc., Providence, R. I. Filed July 13, 1955.

GALA

For Men's and Women's Jewelry for Personal Wear or Adornment, Not Including Watches.
Use since June 22, 1955.

SN 692,096. Speidel Corporation, Providence, R. I. Filed July 28, 1955.

BLACK MAGIC

For Watch Bracelets (Not Including Watches).
Use since Jan. 18, 1955.

CLASS 29

SN 675,223. Ox Fibre Brush Co., Inc., Frederick, Md. Filed Oct. 21, 1954.

SPEEDY CLEAN

For Mops, Brooms and Brushes Intended for Cleaning Purposes.
Use since Oct. 19, 1954.

CLASS 30

SN 687,094. The Nippon Toki Kaisha, Ltd., Nishiku, Nagoya, Japan. Filed May 9, 1955.

Applicant claims ownership of Reg. Nos. 531,660 and 581,039.
For Dinnerware and Tableware, Made of China.
Use since Oct. 20, 1952; design portion Oct. 20, 1947.

SN 687,095. The Nippon Toki Kaisha, Ltd., Nishiku, Nagoya, Japan. Filed May 9, 1955.

NO. 175

Applicant claims ownership of Reg. No. 530,825.
For Dinnerware and Tableware, Made of China.
Use since Jan. 1, 1939.

SN 687,096. The Nippon Toki Kaisha, Ltd., Nishiku, Nagoya, Japan. Filed May 9, 1955.

Applicant claims ownership of Reg. Nos. 531,661 and 581,038.
For Dinnerware and Tableware, Made of China.
Use since Oct. 20, 1952; design portion Jan. 1, 1933.

SN 687,097. The Nippon Toki Kaisha, Ltd., Nishiku, Nagoya, Japan. Filed May 9, 1955.

Noritake

Applicant claims ownership of Reg. No. 531,659.
For Dinnerware and Tableware, Made of China.
Use since Jan. 1, 1918.

SN 687,098. The Nippon Toki Kaisha, Ltd., Nishiku, Nagoya, Japan. Filed May 9, 1955.

Applicant claims ownership of Reg. No. 531,660.
For Dinnerware and Tableware, Made of China.
Use since Oct. 20, 1947.

CLASS 31

SN 653,292. Creamery Package Mfg. Company, Chicago, Ill. Filed Sept. 17, 1953. Sec. 2(f).

MILKEEPER

For Refrigerator for Liquids.
Use since on or about Aug. 20, 1953.

SN 682,835. Suchar Engineering and Sales Company, New York, N. Y. Filed Mar. 4, 1955.

FAS-FLO

For Leaf Filters for Industrial Uses.
Use since Dec. 1, 1954.

CLASS 32

SN 651,061. J. Francis Kennedy, London, England. Filed July 29, 1953.

SLIDS

Applicant claims ownership of British Reg. No. B686,849 Jl.3,782, dated Mar. 1, 1950.
For Cupboards; Kitchen Cabinets; Shelves and Sets of Shelves With or Without Means for Suspending Containers From Their Under Surface and Adapted to Be Mounted to a Horizontal or Vertical Surface.
Use since on or before June 15, 1950.

SN 671,584. Proctor & Schwartz, Inc., Philadelphia, Pa. Filed Aug. 12, 1954.

For Metal Shelving for Cabinets or Other Temporary Use.
Use since Mar. 1, 1953.

SN 675,185. Watson Manufacturing Company, Inc., Jamestown, N. Y. Filed Oct. 20, 1954.

RECORD-FLOW

Applicant claims ownership of Reg. No. 543,464.
For Filing and Record Equipment, Particularly Metal Cases and Shelves With Sliding Drawers and Rolling Tray Assembly.
Use since Oct. 4, 1954.

SN 679,262. Aetna Steel Products Corporation, d. b. a. Arnot-Jamestown Division, New York, N. Y. Filed Jan. 3, 1955.

OFFICE-ettes

For Office Furniture—Namely, Desks; Drawers, Pedestals, and Legs For Desks; Bookshelves; and Movable Partitions and Doors Therefor.
Use since Dec. 1, 1951, on desks.

SN 684,484. Sleepmaster Products Company, Inc., Newark, N. J. Filed Mar. 29, 1955.

BEDMASTER

For Furniture Frames for Beds, Rail Extensions for Beds, Legs, Brackets for Beds, Mattresses, Bed Springs, Box Springs, Springs Used in the Manufacture of Upholstered Furniture, Pillows, Studio Couches, Sofa Beds, Metal Beds, Wooden Beds, Cushions for Seats, Backs, and Arms of Furniture, Folding Cots, Gliding Couch Hammocks, Rubber and Synthetic Rubber Products Used as Fillers for the Finished Products Aforesaid, Upholstered Arm Chairs, and Upholstered Sofas.
Use since Mar. 17, 1945.

SN 684,511. Forest Wilson Associates, Inc., Chicago, Ill. Filed Mar. 29, 1955.

THE jolly hostess

For Living-Room and Occasional Furniture.
Use since Mar. 14, 1955.

SN 684,512. Forest Wilson Associates, Inc., Chicago, Ill. Filed Mar. 29, 1955.

THE jolly host

For Living-Room and Occasional Furniture.
Use since Mar. 14, 1955.

SN 684,513. Forest Wilson Associates, Inc., Chicago, Ill. Filed Mar. 29, 1955.

a FOREST WILSON design

For Furniture—Specifically, Upholstered Chairs, Sofas, Living-Room Tables, Dining-Room Tables, Dining-Room Chairs, Sideboards, Chests of Drawers, Beds, and Bedroom Tables.
Use since Mar. 14, 1955.

SN 685,165. The E. O. Bulman Manufacturing Company, Inc., Grand Rapids, Mich. Filed Apr. 8, 1955.

drug-a-door

For Cabinets Having Doors.
Use since Mar. 21, 1955.

SN 687,030. Aireloom Bedding Company, Alhambra, Calif. Filed May 9, 1955.

VITAGENIC

For Mattresses, Box Springs, and Bed Bolsters.
Use since October 1954 on mattresses and box springs.

SN 687,031. Aireloom Bedding Company, Alhambra, Calif. Filed May 9, 1955.

HOLLANDAIRE

For Mattresses, Box Springs, and Bed Bolsters.
Use since January 1952 on mattresses and box springs.

SN 688,238. Greensboro Vending Machine Co., Greensboro, N. C. Filed May 25, 1955.

VEND A SNACK

For Vending Machine Cabinet Fronts and Vending Machine Panels.
Use since February 1955.

SN 691,301. Lane Jasper, d. b. a. West Coast Rattan Import Company, Arcadia, Calif. Filed July 14, 1955.

Sumatra Gold

For Rattan Furniture Including Chairs, Tables, Coffee Tables, End Tables, Stools, Magazine Holders, Baskets, and the Like.
Use since November 1953.

SN 691,313. Nachman Corporation, Chicago, Ill. Filed July 14, 1955.

VELDURE

For Cushions for Use in Upholstered Furniture and Mattresses.
Use since May 20, 1955.

SN 691,339. The United States Bedding Co., St. Paul, Minn. Filed July 14, 1955.

Equapedic

For Innerspring Mattresses.
Use since June 29, 1955.

SN 691,431. Capitol Chair Company, Inc., Culver City, Calif. Filed July 18, 1955.

Swivel King

No claim is made to the word "Swivel" apart from the other features of the mark.
For Swivel Chairs.
Use since Nov. 29, 1954.

SN 691,606. Cenit-Noll Sleep Products, Inc., Amityville, N. Y. Filed July 20, 1955.

PLEASURE REST

For Mattresses.
Use since June 13, 1955.

SN 691,657. Auto Glass Mfg. Co., Detroit, Mich. Filed July 21, 1955.

Party Pull-Up

For Folding Tables.
Use since June 2, 1955.

CLASS 33

SN 689,943. Houze Glass Corporation, Point Marion, Pa. Filed June 21, 1955.

Lo-tran

For Window Glass.
Use since June 2, 1955.

CLASS 34

SN 666,291. Majestic Manufacturing Company, St. Louis, Mo., to Universal Match Corporation, St. Louis, Mo. Filed May 13, 1954.

Majestic

Applicant claims ownership of Reg. Nos. 45,252, 392,603, and others.
For Electric Ranges and Stoves, Including Combination Electric and Coal, Oil, or Gas, and Electric Water Heaters.
Use since January 1950.

SN 677,958. Holt-Howard Associates, Stamford, Conn. Filed Dec. 8, 1954.

Heritage Brass

For Brass Candle Sticks, Candelabra, and Wall Sconces.
Use since Feb. 19, 1954.

SN 678,986. Holly Manufacturing Company, Pasadena, Calif. Filed Dec. 27, 1954. Sec. 2(f).

NARROWALL

Applicant claims ownership of Reg. No. 556,796.
For Space Wall Heaters.
Use since Nov. 2, 1949.

SN 679,866. Société Anonyme Activit, Paris, France. Filed Jan. 13, 1955.

IGNIFLUID

Priority is claimed under Sec. 44(d). French application filed July 28, 1954; Seine Tribunal of Commerce Reg. No. 445,120, dated July 28, 1954. (Natl. Inst. No. 40,762).
For Apparatus in the Nature of Boilers for Carrying Out Chemical and Heat Reactions Such as Combustion, Gasification, Carbonization, and Oxidation of Various Substances.

SN 682,480. Redmond Company, Inc., Owosso, Mich. Filed Feb. 28, 1955. Sec. 2(f).

Redmond

Applicant claims ownership of Reg. No. 425,643.
For Electric Motor Driven Blowers for Heating and Ventilating Purposes.
Use since January 1947.

SN 682,576. C. L. Miller Company, Inc., New York, N. Y. Filed Mar. 1, 1955.

Simplaire

For Air Conditioners.
Use since Nov. 12, 1954.

SN 682,703. C & H Air Conditioning Fan Company, Inc., Atlanta, Ga. Filed Mar. 3, 1955.

DYNA-AIRE

For Ventilating and Air Moving Fans.
Use since Jan. 10, 1952.

SN 686,665. Lindberg Industrial Corporation, Chicago, Ill. Filed May 2, 1955.

For Industrial Furnaces.
Use since Feb. 7, 1955.

SN 687,081. Master Metal Products, Inc., Buffalo, N. Y. Filed May 9, 1955.

BAR-B-CUTIE

For Portable Cooking Grills.
Use since 1947.

SN 687,165. Anchor Post Products, Inc., Baltimore, Md. Filed May 10, 1955.

fluid aire

For Central Cooling Units.
Use since June 14, 1954.

SN 687,206. Kelley Manufacturing Company, Houston, Tex. Filed May 10, 1955.

Kellco PERFECT

Applicant claims ownership of Reg. No. 587,907.
For Grilles for Outdoor Cooking.
Use since Sept. 1, 1953.

SN 687,311. Mine Safety Appliances Company, Pittsburgh, Pa. Filed May 11, 1955.

MSA SAFETY EQUIPMENT HEADQUARTERS

The words "Safety Equipment Headquarters" are disclaimed apart from the mark shown.
For Combination Air Blowing and Fume Exhausting Apparatus, Air Purifying Apparatus, Acetylene and Propane Torches, and Parts Therefor.
Use since at least as early as January 1953.

CLASS 35

SN 679,877. Jurid Werke A. G., Duesseldorf-Grafenberg, Germany. Filed Jan. 13, 1955.

JURID

Applicant claims ownership of German Reg. No. 609,304, dated July 18, 1951.
For Brake Linings, Tires, Belts for Ventilators and Motorcycles, Rubber Belts Especially for Ventilators and Motorcycles.

SN 683,433. Rapid Specialties Company, Cedar Rapids, Iowa. Filed Mar. 14, 1955.

Safe Tee Flex

The representation of the goods is disclaimed apart from the mark as shown.
For Gas Appliance Connecting Hose.
Use since Mar. 4, 1955.

SN 689,438. Tire Wholesalers, Inc., Richfield Springs, N. Y. Filed June 13, 1955.

WYRE-TRED

For Vehicle Tires.
Use since January 1953.

SN 691,287. The Firestone Tire & Rubber Company, Akron, Ohio. Filed July 14, 1955.

BLOWOUT LIFE PROTECTOR

Applicant claims ownership of Reg. No. 381,407.
For Safety Diaphragms for Tubeless Tires.
Use since Apr. 14, 1955.

CLASS 36

SN 648,301. Antonio J. Fuentes, New York, N. Y. Filed June 5, 1953.

Fuentes

For Grooved Phonograph Records.
Use since July 1940.

SN 683,782. Kohler & Campbell, Inc., New York, N. Y. Filed Mar. 18, 1955.

STEPHEN FOSTER

For Musical Instruments—Namely, Pianos and Organs.
Use since on or about Feb. 8, 1955.

CLASS 37

SN 624,442. B.B Pen Company, Inc., Los Angeles, Calif. Filed Feb. 2, 1952.

B·B

For Ball Point Pens.
Use since Jan. 10, 1947.

SN 651,788. The United Mfg. Corp., Springfield, Mass. Filed Aug. 13, 1953.



No claim is made to the words "Strength," "Service," and "Printability," apart from the mark as shown.
For Cloth Lined Paper and Cover Paper.
Use since at least as early as Jan. 3, 1944.

SN 658,899. Eureka Specialty Printing Company, Scranton, Pa. Filed Jan. 4, 1954. Sec. 2(f).

MAIL AID

For Gummed, Perforated Blank Sheets of Typewriting Paper Used in Making Address Labels and the Like.
Use since on or about Jan. 1, 1937.

SN 683,767. Eureka Specialty Printing Company, Scranton, Pa. Filed Mar. 18, 1955.

DUPLISNAP

Applicant claims ownership of Reg. No. 433,876.
For Gummed, Perforated Sheets of Blank Labels.
Use since Sept. 18, 1954.

SN 683,997. Sauquoit Paper Co., Inc., Gardner, Mass. Filed Mar. 22, 1955.

Award

For Toilet Tissue, Paper Napkins, and Paper Towels.
Use since Feb. 23, 1955, on toilet tissue.

CLASS 38

SN 672,349. David Phillips, Omaha, Nebr. Filed Aug. 27, 1954.

Wish You Were Here

For Travel Features Written by the Applicant and Distributed by Him to Newspapers, Magazines, and Other Publications.
Use since May 6, 1954.

SN 676,495. Goodren Products Corp., Englewood, N. J. Filed Nov. 12, 1954.

"GOODSTIX"

For Printed Transparent, Plastic, Point of Purchase Signs Containing Strips of Pressure Sensitive Adhesive Tape.
Use since Apr. 25, 1952.

SN 676,690. Van Valkenburgh, Nooger & Neville, Inc., New York, N. Y. Filed Nov. 15, 1954.

TRAINER-TESTER

For Sheets Containing Printed or Pictorial Matter Issued From Time to Time.
Use since May 1953.

SN 679,896. Cummins Engine Company, Inc., Columbus, Ind. Filed Jan. 14, 1955.

PT FACTS

For Trade Circulars and Pamphlets.
Use since Nov. 18, 1954.

SN 684,877. The Psychological Corporation, New York, N. Y. Filed Apr. 4, 1955.

Ψ

For Manuals, Casebooks, Catalogues, and Reports on Psychological Studies.
Use since on or about Apr. 18, 1950.

SN 685,407. Vaughn Shoemaker, Carmel, Calif. Filed Apr. 12, 1955.



For Column in Periodicals.
Use since Aug. 19, 1954.

SN 689,451. Addison-Wesley Publishing Company, Inc., Cambridge, Mass. Filed June 14, 1955.



For Books.
Use since February 1942.

SN 689,660. Edwin A. Scott Publishing Corporation, Tarrytown, N. Y. Filed June 16, 1955.

AA Airconditioned Age

For Periodical.
Use since June 6, 1955.

SN 690,163. Hearst Publishing Company, Inc., San Francisco, Calif. Filed June 24, 1955.

LIFE WITH HOMER

For Newspaper Cartoons.
Use since Mar. 7, 1952.

SN 690,164. Hearst Publishing Company, Inc., San Francisco, Calif. Filed June 24, 1955.

THE GOOD NEIGHBOR

For Newspaper Columns.
Use since February 1934.

SN 690,687. Darlington International Raceway, Inc., Darlington, S. C. Filed July 5, 1955.

THE SOUTHERN 500

For Periodical Publication, Published Quarterly, Furnishing Information Concerning Automobile Races.
Use since June 1, 1955.

SN 690,741. New England Trading Corporation, Boston, Mass. Filed July 5, 1955.

REDI-CASH

For Coupons Redeemable in Merchandise.
Use since Mar. 4, 1955.

SN 690,748. Record Whirl Publishing Co., Chicago, Ill. Filed July 5, 1955.

RECORD Whirl

For Periodical.
Use since Apr. 10, 1955.

SN 690,836. Show-House, New York, N. Y. Filed July 6, 1955.

BEST in the HOUSE

For Advertising Sections in Magazine Publications.
Use since November 1954.

SN 690,880. G. P. Gundlach & Co., Inc., Cincinnati, Ohio. Filed July 7, 1955.

Dairy Chef

For Periodical Published From Time to Time.
Use since 1920.

SN 690,999. Borax Consolidated, Limited, d. b. a. Pacific Coast Borax Co., division of Borax Consolidated, Limited, Los Angeles, Calif. Filed July 11, 1955.



Applicant claims ownership of Reg. Nos. 327,549 and 588,361.
For Periodical Publication in the Nature of a News Brochure Relating to Agricultural Subjects.
Use since Sept. 30, 1939.

SN 691,860. Hearst Publishing Company, Inc., San Francisco, Calif. Filed July 25, 1955.

Sports Parade

For Newspaper Columns.
Use since Apr. 29, 1931.

CLASS 39

SN 652,716. Fordham Shirt Company, Incorporated, New York, N. Y. Filed Sept. 3, 1953.

Lavanshire

For Men's Dress and Sport Shirts.
Use since Dec. 1, 1935.

SN 655,131. Hickey-Freeman Company, Rochester, N. Y. Filed Oct. 21, 1953.

ROYAL CASHMERE

Applicant disclaims exclusive right to the use of the word "Cashmere" apart from the mark as shown.
For Outercoats.
Use since on or about Apr. 29, 1948.

SN 657,468. Tru-Step Hosiery Company, Milwaukee, Wis. Filed Dec. 4, 1953.

2 in 1

For Men's, Ladies', Children's, and Infants' Hosiery.
Use since Nov. 16, 1953.

SN 658,134. N. M. Patton & Company, Decherd, Tenn. Filed Dec. 17, 1953.

F.A. Famous American Tailors

The term "Famous American Tailors" is disclaimed apart from the mark.
For Men's and Ladies' Suits.
Use since Oct. 9, 1950.

SN 661,611. Fred L. Ayers, Palmyra, Pa., to Strait-Step Shoes, Inc., Palmyra, Pa. Filed Feb. 25, 1954.

STRAIT-STEP

For Children's Shoes.
Use since June 6, 1952.

SN 666,730. Chez Nous, Inc., New York, N. Y. Filed May 20, 1954.

CHEZ NOUS

For Women's Skirts, Blouses, Raincoats, Hostess Gowns, Scarves, and Belts.
Use since Apr. 6, 1954.

SN 671,330. Goodwins, Inc., Los Angeles, Calif. Filed Aug. 9, 1954. Sec. 2(f).

GOODWINS

For Men's, Women's, and Children's Shoes.
Use since Aug. 4, 1933.

SN 675,303. Dana E. Morrison, Jr., d. b. a. Dana E. Morrison, Jr. Co., Chicago, Ill. Filed Oct. 22, 1954.

DEMCO

For Athletic Goods, Such as Jackets, Coats, Down and Other Type of Batting Filled Outer Coats, Football Jerseys and Pants, Scrimmage Vests, Sweaters, Sweat Shirts, Athletic Stockings, and Athletic Shoes.
Use since Aug. 26, 1953.

SN 676,494. Rolf Glaeser, d. b. a. Glaser-Strumpf-Wirkerei Rolf Glaeser, Heidelberg, Germany. Filed Nov. 12, 1954.

For Stockings for Ladies, Men, and Children, Socks for Ladies, Men, and Children, and Anklets for Ladies, Men, and Children.
Use since May 15, 1953.

SN 676,948. Ann Gannon, New York, N. Y. Filed Nov. 19, 1954.

Ann Gannon Comfort-Zip

For Bathing Suits.
Use since Sept. 20, 1954.

SN 677,315. Sam Green, Detroit, Mich. Filed Nov. 26, 1954.

SHOCK STOP Shoes

The word "Shoes" is disclaimed apart from the mark as shown.
For Shoes for Use of Men, Women, Children, and Infants.
Use since Nov. 9, 1954.

SN 678,246. Modern Manufacturing Co. Inc., New York, N. Y. Filed Dec. 13, 1954.

Meg Marlowe

For Dresses and Housedresses, Aprons, Hooverettes (i. e. Wrap Around Aprons), Pajamas for Women, Misses, and Children.
Use since Nov. 5, 1954, on dresses for women, misses, and children, aprons, and hooverettes.

SN 679,029. Alamo Manufacturing Co., Inc., New York, N. Y. Filed Dec. 28, 1954.

Charleston

For Ladies' Dresses.
Use since Dec. 13, 1954.

SN 681,088. International Shoe Company, St. Louis, Mo. Filed Feb. 4, 1955.



The English translation of the Spanish words "Gatito Gris" is "Small Grey Cat." Exclusive use of the words "Shoes for Boys and Girls" is not claimed apart from the rest of the mark. Applicant claims ownership of Reg. No. 189,408.
For Children's and Women's Footwear.
Use since Dec. 29, 1954.

SN 681,256. Colura, Inc., New York, N. Y. Filed Feb. 8, 1955.

Colura

Applicant claims ownership of Reg. Nos. 379,361 and 517,264.
For Ladies' Hose.
Use since Nov. 2, 1953.

SN 681,699. Lanolized, Incorporated, Dover, Del. Filed Feb. 15, 1955.

Lanolastic

Applicant claims ownership of Reg. Nos. 595,606 and 602,421.
For Women's Brassieres, Corsets, Girdles, Garter Belts, and Hosiery.
Use since Feb. 4, 1955.

SN 683,099. California Sportwear Company, Los Angeles, Calif. Filed Mar. 9, 1955.

ACE OF SUEDES

For Men's, Women's, and Children's Sport Coats, Sport Jackets, and Outer Jackets Made of Leather or Fabric and/or Combinations Thereof.
Use since Jan. 18, 1954.

SN 683,291. Good Maid Undergarment Company, Kansas City, Mo. Filed Mar. 11, 1955.

Good Maid

For Ladies' Undergarments.
Use since Feb. 12, 1954.

SN 683,614. Model Brassiere Corp., New York, N. Y. Filed Mar. 16, 1955.

daisy fresh

For Brassieres and Corsets.
Use since Feb. 8, 1955.

SN 683,706. Pachter Garment Company, Inc., Kansas City, Mo. Filed Mar. 17, 1955.

Marcé-ette ORIGINAL

The word "Original" is disclaimed apart from the mark as shown. Applicant claims ownership of Reg. No. 597,937.
For Ladies' Coats and Suits.
Use since on or about Mar. 1, 1953.

SN 683,992. Rich's, Inc., Atlanta, Ga. Filed Mar. 22, 1955.

Loafette

For Women's and Men's Shoes, Shirts, Blouses, Sweaters, Coats, Hats, Stockings, Gloves, Skirts, and Trousers.
Use since Apr. 18, 1954.

SN 685,585. Ireland Brothers, New York, N. Y. Filed Apr. 15, 1955.

Syl-flex

For Ladies' Gloves Made of Cloth.
Use since Jan. 3, 1955.

SN 686,628. Emons Shoe Co., Inc., Auburn, Maine. Filed May 2, 1955.



For Boots and Shoes.
Use since June 1, 1946.

SN 686,629. Emons Shoe Co., Inc., Auburn, Maine. Filed May 2, 1955.

Slicker

For Boots and Shoes.
Use since Mar. 15, 1946.

SN 686,973. Hardwick Woolen Mills, Inc., Cleveland, Tenn. Filed May 6, 1955.

DUNCAN AMES

For Men's, Students', Cadets', and Boys' Suits, Slacks, Topcoats, Sport Coats, and Jackets.
Use since Jan. 10, 1955.

SN 687,534. G. and H. Manufacturing Company, Belton, S. C. Filed May 16, 1955.

originals by Miriam of CAROLINA

The words "Originals by" and "Of Carolina" are disclaimed apart from the mark as shown.

For Sport Clothes—Namely, Beach Shorts, Bermuda Shorts, Slacks, Blouses, Jackets, Halters, Play Caps, Beach Bags, Beach Shirts, Italian Pants, Pedal Pushers, Shirts, Skirts, Kerchiefs, Beach Robes, and Wrap-Arounds.

Use since May 5, 1955.

SN 688,734. Huntington Mfg. Co., Inc., Chicago, Ill. Filed June 2, 1955.

Toni Hunt

For Women's, Misses', and Girls' Dresses.
Use since about May 9, 1955.

SN 688,915. A. J. Edlin Manufacturing Co., Inc., St. Louis, Mo. Filed June 6, 1955.

KIPS BAY

For Children's Blouses, Skirts, Jackets, Shorts, Pants, and Dresses.
Use since Jan. 2, 1955.

SN 688,955. Natric Sales Co., Inc., New York, N. Y. Filed June 6, 1955.

Knit-Tricks

Applicant claims ownership of Reg. No. 601,378.

For Women's and Misses' Outerwear—Namely, Skirts, Shorts, T-Shirts, Blouses, Sweaters, Stoles, and Scarves.

Use since June 1, 1951.

SN 690,089. P. W. Minor & Son, Inc., Batavia, N. Y. Filed June 23, 1955.

Tee Timers

For Women's Golf Shoes.
Use since Apr. 29, 1955.

SN 690,134. Chipman Knitting Mills, Easton, Pa. Filed June 24, 1955.

TRU-SHEER

Applicant claims ownership of Reg. No. 329,897.
For Women's Hosiery.
Use since June 13, 1934.

SN 690,201. Joseph Siegel, New York, N. Y. Filed June 24, 1955.

Café Society

For Ladies' Hosiery.
Use since Sept. 1, 1953.

SN 690,361. Berkshire Knitting Mills, Wyomissing, Pa. Filed June 28, 1955.

"Honey Bee"

For Hosiery.
Use since June 1, 1955.

SN 690,418. Van Raalte Company, Inc., New York, N. Y. Filed June 28, 1955.

SEAMS AWAY

For Women's Hosiery.
Use since June 14, 1955.

SN 690,846. Stern Shoe Company, Philadelphia, Pa. Filed July 6, 1955.

PLAYKINS

For Women's Shoes.
Use since February 1955.

SN 691,011. The Coward Shoe, Inc., New York, N. Y. Filed July 11, 1955.

MINUTE WOMAN

For Women's Shoes.
Use since Aug. 17, 1942.

SN 692,770. De Laire Fashions, Inc., Pana, Ill. Filed Aug. 10, 1955.

de Lairé

For Women's and Misses' Dresses and Suits.
Use since Apr. 15, 1955.

SN 692,918. Fortuna Foundations, Inc., New York, N. Y. Filed Aug. 12, 1955.

HI-TENSION

For Girdles and Panty Girdles.
Use since June 13, 1955.

SN 692,968. Super-Form Brassiere, Inc., New York, N. Y. Filed Aug. 12, 1955.

THE 4-WARD LOOK

For Brassieres.
Use since May 1955.

CLASS 40

SN 661,204. I. B. Kleinert Rubber Company, New York, N. Y. Filed Feb. 17, 1954.

STAZON

For Dress Shields.
Use since Jan. 14, 1954.

SN 661,901. Edward Lind, New York, N. Y., to Aero Kollar-Keepers Co., Inc., New York, N. Y. Filed Mar. 2, 1954.

KOLLAR-KEEPERS

For Devices To Hold Ladies', Men's, Children's Collar Points or Wings Down Against Body of Garment.
Use since Nov. 6, 1953.

SN 679,770. Lucille Gmitro, d. b. a. Gmitro Industries, Minneapolis, Minn. Filed Jan. 12, 1955.

Kiddie Klips

For Elastic Securing Members for Children's Clothes.
Use since Dec. 14, 1954.

CLASS 42

SN 664,329. Knoll Associates Inc., New York, N. Y. Filed Apr. 12, 1954.

K+

Applicant claims ownership of Reg. No. 557,746.

For Upholstery Fabrics of Cotton, Wool, Silk, and Synthetic Fibers, and of Plastic Yarn.

Use since Apr. 8, 1954.

SN 674,627. Roanoke Mills Company, Roanoke Rapids, N. C. Filed Oct. 11, 1954.

CUSTOM COTTONS

No claim is made to the word "Cottons" per se, apart from the mark shown.

For Piece Goods Made Wholly of Cotton or in Substantial Part of Cotton for Wearing Apparel.

Use since Jan. 27, 1953.

SN 676,423. Troy Blanket Mills, Troy, N. H. Filed Nov. 10, 1954. Sec. 2(f).

"so nice to have around you."

Applicant claims ownership of Reg. No. 443,727.

For Automobile Robes and Blankets.

Use since Oct. 23, 1946.

SN 678,366. Milton C. Blum, Inc., New York, N. Y. Filed Dec. 15, 1954.

Peau de Lene

For Cotton Piece Goods.
Use since May 26, 1954.

SN 679,360. Wendell Plastic Fabrics Corp., New York, N. Y. Filed Jan. 3, 1955.

MELLOTONE

For Woven Grille Saran Cloth for Speaker Coverings for Radio and Television.
Use since Sept. 1, 1954.

SN 681,078. Export-Import Woolens Corp., New York, N. Y. Filed Feb. 4, 1955.



Apart from the mark shown, and only for the purpose of registration, the words "Biella, Italy," and the representation of the map of Italy, are disclaimed.

For Piece Goods of Wool or Mohair, or Combinations Thereof, With or Without Silk.

Use since Nov. 19, 1954.

SN 681,079. Export-Import Woolens Corp., New York, N. Y. Filed Feb. 4, 1955.

E
I
W

For Piece Goods of Wool or Mohair, or Combinations Thereof, With or Without Silk.

Use since Nov. 19, 1954.

SN 682,840. The Warren Woolen Company, Stafford Springs, Conn. Filed Jan. 18, 1955.

VELESIA

For Woolen Fabrics in the Piece.
Use since Mar. 1, 1954.

SN 685,449. M. Lowenstein & Sons, Inc., New York, N. Y. Filed Apr. 13, 1955.

His Lordship

For Cotton and/or Rayon Piece Goods and/or Combinations Thereof.
Use since Nov. 26, 1954.

SN 685,450. M. Lowenstein & Sons, Inc., New York, N. Y. Filed Apr. 13, 1955.

DRY NU

For Cotton and/or Rayon Piece Goods and/or Combinations Thereof.
Use since Nov. 26, 1954.

SN 685,488. D. B. Fuller & Co., Inc., New York, N. Y. Filed Apr. 14, 1955.

DECORAMA

Applicant claims ownership of Reg. No. 335,519.
For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since Apr. 19, 1954.

SN 687,984. Rand Rubber Company, Inc., Brooklyn, N. Y. Filed May 20, 1955.

Breeth-ees

Applicant claims ownership of Reg. No. 551,776.
For Plastic Film Material Used in the Manufacture of Baby Pants, Bibs, Crib Sheets, and the Like.
Use since December 1951.

SN 687,995. Textured Yarn Company, Philadelphia, Pa. Filed May 20, 1955.

TYCORA

For Fabrics of Synthetic Fibres.
Use since Aug. 1, 1954.
Subj. to Intf. with SN 677,677.

SN 688,040. Hartford Textile Corporation, New York, N. Y. Filed May 23, 1955.

Beutalon

Applicant claims ownership of Reg. Nos. 435,199 and 601,407.
For Plastic Sheeting for Use in Covering Upholstery, Headboards, Hassocks, Cornices, Etc.
Use since Feb. 21, 1955.

SN 688,119. The Apponaug Company, Apponaug, R. I. Filed May 24, 1955.

DYNASCOPE

For Cotton and Rayon Fabrics in the Piece.
Use since Apr. 1, 1955.

SN 691,150. Popular Merchandise Company, Inc., Fairlawn, N. J. Filed July 12, 1955.

POPULAR HOMES

For Blankets.
Use since July 1953.

SN 691,204. D. B. Fuller & Co., Inc., New York, N. Y. Filed July 13, 1955.

PERMANETTE

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since Apr. 1, 1936.

SN 691,238. Shirley Fabrics Corporation, New York, N. Y. Filed July 13, 1955.

PERK-UP

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since Feb. 15, 1954.

CLASS 44

SN 660,635. Acme Protection Equipment Company, Chicago, Ill. Filed Feb. 5, 1954.

Full Vision

Applicant claims ownership of Reg. No. 376,583.
For Gas Masks.
Use since Sept. 15, 1937.

SN 689,825. Elkins-Ewall Rubber Co., Inc., Philadelphia, Pa. Filed June 20, 1955.

DUROCEL

For Fracture Padding.
Use since Mar. 23, 1955.

SN 692,369. Andrew Fabric Corporation, Needham, Mass. Filed Aug. 3, 1955.

Andrew

For Elastic Hosiery and Knee Bands.
Use since June 28, 1951.

SN 696,619. Universal Dental Company, Philadelphia, Pa. Filed Oct. 28, 1955.

UNIVAC

For Artificial Teeth.
Use since Oct. 20, 1955.

CLASS 45

SN 679,373. Ben Domont, Indianapolis, Ind., to Jump Corporation, Indianapolis, Ind. Filed Jan. 4, 1955.

Jump

Applicant claims ownership of Reg. No. 342,773.
For Soft Drinks.
Use since Sept. 29, 1954.

SN 690,200. The Seven-Up Company, St. Louis, Mo. Filed June 24, 1955. Sec. 2(f).

YOU LIKE IT
IT LIKES YOU

Applicant claims ownership of Reg. No. 535,842.
For Carbonated, Non-Alcoholic, Non-Cereal, Maltless Beverages.
Use since March 1937.

CLASS 46

SN 668,107. Melitta-Werke Bentz & Sohn, Minden, Germany. Filed June 11, 1954.

Melitta

Applicant claims ownership of German Reg. No. 518,332, dated Dec. 28, 1939.
For Coffee, Tea, and Coffee Substitutes.

SN 675,760. Bradford Feed and Grain Co., Bryan, Ohio. Filed Nov. 1, 1954.

Bart's Mix

For Dog Food, Cat Food, Poultry Feed, and Livestock Feed.
Use since Apr. 3, 1954.

SN 678,426. Ty-Phoo Tea Limited, Birmingham, England. Filed Dec. 15, 1954.



The words "Tea," "Delicious," "Economical," and "Refreshing" are disclaimed apart from the mark as a whole. Applicant claims ownership of Reg. Nos. 200,960 and 200,961.
For Tea.
Use since May 1954.

SN 679,459. Stella D'Oro Biscuit Co. Inc., New York, N. Y. Filed Jan. 5, 1955.



The English translation of "Stella D'Oro" is "Star of Gold."
For Cookies and Biscuits.
Use since Mar. 10, 1950.

SN 679,565. Stella D'oro Biscuit Co. Inc., New York, N. Y. Filed Jan. 7, 1955.



"Stella D'oro" is translated as "Star of Gold."
For Cookies and Biscuits.
Use since Feb. 21, 1952.

SN 679,719. Stella D'oro Biscuit Co. Inc., New York, N. Y. Filed Jan. 11, 1955.



The English translation of "Stella D'oro" is "Star of Gold."
For Cookies and Biscuits.
Use since Apr. 15, 1953.

SN 681,628. Pelolan Fruit Distributors, Dinuba, Calif. Filed Feb. 14, 1955.

Mr. CAMPBELL RANCH

For Fresh Grapes and Fresh Deciduous Fruits.
Use since June 1947.

SN 682,429. Holly Hill Fruit Products, Incorporated, Davenport, Fla. Filed Feb. 28, 1955. Sec. 2(f) as to "Holly Hill."

HOLLY HILL TANJOPA

Applicant claims ownership of Reg. Nos. 516,628, 512,724, and others.
For Canned Citrus Fruit Juices.
Use since Aug. 16, 1946; and since 1927 as to "Holly Hill."

SN 682,824. The C. M. Pitt & Sons Co., Baltimore, Md. Filed Mar. 4, 1955. Sec. 2(f) as to "Pitt's."

PITT'S

Applicant claims ownership of Reg. Nos. 405,988 and 372,286.
For Glace and Drained Fruits; Mixed Fruits and Peels; Conserved Fruits; Preserved Fruits; Crushed Preserved Fruits; Maraschino Cherries; Icing Bases in Paste Form; Food Flavors in Extract and Syrup Form; Fudge, Fruit, Nut, and Marshmallow Toppings; and Chocolate Syrups for Food Purposes.
Use since May 1951; and since February 1933 as to "Pitt's."

SN 683,135. Queen Anne Dri-Juices, Ltd., New York, N. Y. Filed Mar. 9, 1955.

LEMON QUEEN BRAND

For Dehydrated Lemon Juice.
Use since Oct. 26, 1954.

SN 683,240. Standard Brands Incorporated, New York, N. Y. Filed Mar. 10, 1955.

VOL-WHIP

For Frozen Egg White.
Use since Feb. 14, 1955.

SN 683,507. The John Hilberg & Sons Co., Cincinnati, Ohio. Filed Mar. 15, 1955.

jon-henri

For Wieners.
Use since Feb. 14, 1955.

SN 683,740. Washington Co-Operative Farmers Association, Seattle, Wash. Filed Mar. 14, 1955.

LYNDEN

Applicant claims ownership of Reg. No. 522,121.
For Canned Poultry Products—Namely, Boned Chicken and Broth, Minced Chicken and Broth, Turkey Fricassee, Chicken Giblet Gravy, Chicken Broth, Boneless Chicken Tamale, Chicken Spread for Sandwiches, Chicken Fat; Fresh and Frozen Poultry and Shell Eggs.
Use since 1936.

SN 683,920. Roma Macaroni Company, also d. b. a. Roma Macaroni Factory, San Francisco, Calif. Filed Mar. 21, 1955.

SLENDERONI

For Macaroni, Vermicelli, Egg Noodles, Spaghetti, and Dried Beans.
Use since Feb. 23, 1955.

SN 683,971. Frigid Packing Co., West Collingswood Heights, N. J. Filed Mar. 22, 1955.



For Frozen Meats—Namely, Beef Steaks.
Use since Nov. 8, 1954.

SN 684,138. The Kelling Nut Co., Chicago, Ill. Filed Mar. 24, 1955.

MOVIE MIX

For Salted Nuts.
Use since Dec. 28, 1954.

SN 684,361. Swift & Company, Chicago, Ill. Filed Mar. 28, 1955.

Pow-R-Pac

Applicant claims ownership of Reg. No. 588,575.
For Animal Feeds—Namely, Cattle Feed, Poultry Feed, and Hog Feed.
Use since Feb. 26, 1952, on cattle feed.

SN 684,377. Alamo Products Corp., also d. b. a. Alamo Products Company, Alamo, Tex. Filed Mar. 29, 1955.

GARDEN PRIDE

For Canned Vegetables.
Use since Nov. 15, 1954.

SN 684,412. Samuel Feld, d. b. a. Eastern Stock Food Co., Brooklyn, N. Y. Filed Mar. 29, 1955.

TALO-FAT

For Toasted Bread Crumbs for Animal and Poultry Feeding.
Use since Oct. 27, 1954.

SN 684,420. The Gippert Co., Inc., New York, N. Y. Filed Mar. 29, 1955.

Saborrico

For Canned Cooked Chicken.
Use since Nov. 9, 1954.

SN 684,468. Quaker State Foods Corporation, Pittsburgh, Pa. Filed Mar. 29, 1955.

ONE EYED ESKIMO BRAND

For Frozen, Cooked Dinners, Each Comprising Either Meat or Poultry Together With a Vegetable.
Use since August 1949.

SN 684,654. General Mills, Inc., Minneapolis, Minn. Filed Mar. 31, 1955.

Diet Savor

For Mono Ammonium Glutamate Used as a Food Seasoning.
Use since Feb. 28, 1955.

SN 684,727. Gebhardt Chili Powder Company, San Antonio, Tex. Filed Apr. 1, 1955. Sec. 2(f).

Gebhardt's

Applicant claims ownership of Reg. Nos. 370,069, 68,358, and 527,990.
For Barbecue Sauce, Deviled Sandwich Spread, Tamales With Chili Gravy, Chili Beans, Chili Powder, Chili Hot Dog Sauce With Meat, Preparation for Seasoning and Thickening Chili Con Carne, Chili With Beans, Chili Con Carne With Beans, Chili Without Beans, Chili Con Carne Without Beans.
Use since Jan. 1, 1896.

SN 684,728. Gebhardt Chili Powder Company, San Antonio, Tex. Filed Apr. 1, 1955.

EAGLE

Applicant claims ownership of Reg. Nos. 527,990, 102,562, and others.
For Chili Powder, Deviled Sandwich Spread, Chili Con Carne Without Beans, Chili Con Carne With Beans, Chili Beans, Chili With Beans, Chili Without Beans.
Use since Jan. 1, 1896.

SN 684,729. Gebhardt Chili Powder Company, San Antonio, Tex. Filed Apr. 1, 1955. Sec. 2(f).

Chili-Quik

Applicant claims ownership of Reg. No. 353,305.
For Powdered Seasoning To Be Mixed With Water and Meat in Making Chili Con Carne.
Use since Aug. 11, 1936.

SN 684,842. Hubbard & Petersen, Inc., Manson, Wash. Filed Apr. 4, 1955.

BEST BITE



For Fresh Apples.
Use since Nov. 19, 1954.

SN 684,912. R. Paul Gilmore, d. b. a. Gilmore Produce Company, Brownsville, Tex. Filed Apr. 25, 1955.

B I G-G

For Fresh Vegetables.
Use since Jan. 1, 1941.

SN 685,137. Donald B. Sovel, d. b. a. Sovel Enterprises, Detroit, Mich. Filed Apr. 7, 1955.

La Ronz

For Packages Containing Powdered Coffee, Sugar, and Powdered Cream.
Use since Mar. 1, 1955.

SN 685,151. Sunshine Biscuits, Inc., Long Island City, N. Y. Filed Apr. 20, 1955.

MULTI KREEM LUNCHIES

Applicant claims ownership of Reg. Nos. 97,628 and 339,824.
For Biscuits.
Use since August 1941; since Jan. 20, 1914, as to "Multi"; and since May 28, 1936, as to "Lunchies."

SN 686,068. Lobue Brothers, Lindsay, Calif. Filed Apr. 22, 1955.

SUN GROVE

For Fresh Citrus Fruits.
Use since April 1950.

SN 686,541. The Grand Union Company, East Paterson, N. J. Filed Apr. 29, 1955.

GRAND UNION FOOD MARKETS

Applicant claims ownership of Reg. Nos. 46,832, 427,406, and others.

For Raw Onions, Canned Vegetables, Canned Beans With Pork, Spaghetti, Canned Fruits, Cranberry Sauce, Applesauce, Jellies, Fruit Preserves, Mayonnaise, Catsup, Maple Syrup, Frozen Concentrated Orange Juice, Instant Coffee, Evaporated Milk, Flour, Bottled Grape Juice, Peanut Butter, Margarine, Olives, Olive Oil, Canned Fish, Vegetable Shortening, Salad Dressing, Bread, Frozen Concentrated Grape Juice, Bakery Products—Namely, Rolls, Buns, Doughnuts, Cakes, and Dessert Cups, Prepared Mustard, Mince Meat, Dried Fruits and Prunes, Dry Macaroni, Canned Tomato Juice, and Frozen Vegetables.
Use since February 1952 on raw onions.

SN 687,137. Steinfeld's Products Company, Portland, Oreg. Filed May 9, 1955. Sec. 2(f) as to "Steinfeld's."

Steinfeld's WESTERN ACRES

For Pickles and Canned Sauerkraut.
Use since Mar. 30, 1955; and since 1922 as to "Steinfeld's."

SN 688,607. Peter J. Wegesser, d. b. a. Crystal Food Products Company, San Francisco, Calif. Filed May 31, 1955.

ACE OF HEARTS

For Frozen Fresh Berries, Fruits, and Vegetables.
Use since May 17, 1955, on frozen berries.

SN 688,608. Peter J. Wegesser, d. b. a. Crystal Food Products Company, San Francisco, Calif. Filed May 31, 1955.

KING OF HEARTS

For Frozen Fresh Berries, Fruits, and Vegetables.
Use since May 17, 1955, on frozen berries.

SN 688,609. Peter J. Wegesser, d. b. a. Crystal Food Products Company, San Francisco, Calif. Filed May 31, 1955.

QUEEN OF HEARTS

For Frozen Fresh Berries, Fruits, and Vegetables.
Use since May 17, 1955, on frozen berries.

SN 689,142. Lance, Incorporated, Charlotte, N. C. Filed June 8, 1955.

BIG TOWN

Applicant claims ownership of Reg. No. 370,782.
For Cakes.
Use since on or about Feb. 14, 1939.

SN 689,143. Lance, Incorporated, Charlotte, N. C. Filed June 8, 1955.

GOLD-N-CHEES

Applicant claims ownership of Reg. No. 334,299.
For Crackers.
Use since on or about Mar. 16, 1955.

SN 689,407. R. C. Nicoll, d. b. a. Valerie Jean Date Shop, Thermal, Calif. Filed June 13, 1955.

DESERT SNOW

For Frozen Date Preparation for Use in Making Date Milk Shakes or for Use as a Dessert.
Use since Apr. 26, 1955.

SN 692,685. Royal Souders, Inc., Dayton, Ohio. Filed Aug. 18, 1955. Sec. 2(f).

SOUDERS

For Food Colors and Flavoring Extracts for Foods.
Use since 1885.

CLASS 47

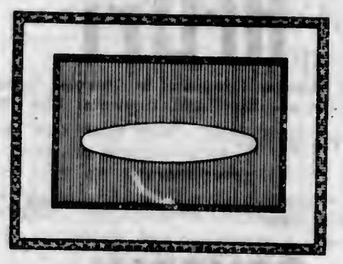
SN 687,159. Wine Growers Guild, Lodi, Calif. Filed May 9, 1955.

Guild
Vino di
MONTAGNA

No claim is made to the term "Vino Di Montagna" apart from the mark as shown. "Vino Di Montagna" is the Italian equivalent of "Wine of Mountain." Applicant claims ownership of Reg. Nos. 530,801, 593,988, and others.
For Wines.
Use since Sept. 2, 1954.

CLASS 48

SN 681,774. Liebmann Breweries, Inc., Brooklyn, N. Y. Filed Feb. 16, 1955.



The drawing is lined to indicate the colors red, white, and gold. Applicant claims ownership of Reg. Nos. 381,444 and 382,109.
For Beer.
Use since Apr. 19, 1954.

CLASS 49

SN 658,067. Carl Mampe Aktiengesellschaft, Berlin, Germany. Filed Dec. 16, 1953.



Applicant claims ownership of German Reg. No. 1,343, dated Dec. 21, 1894; and U. S. Reg. No. 317,836, and the trademark embodied in U. S. Reg. No. 71,980.
For Brandy, Whiskey, and Liqueurs.

CLASS 50

SN 668,544. E. I. du Pont de Nemours and Company, Wilmington, Del. Filed June 21, 1954.

MYLAR

Applicant claims ownership of Reg. No. 539,948.
For Flexible Film for Plastic Glazing Used as a Window Glass Substitute.
Use since June 21, 1951.

SN 679,725. Franco Galeazzi, Milan, Italy. Filed Jan. 11, 1955.

VAPSOL

Applicant claims ownership of Italian Reg. No. 119,881, dated Nov. 25, 1954.
For Closures for Bottles.

SN 681,919. Handicraft Creators, Inc., Brooklyn, N. Y. Filed Feb. 18, 1955.

GIFT-O-RAMA

For Kit Containing Metal Material, Tools, and Instruction Books for Making Costume Jewelry and Artistic Gifts.
Use since May 15, 1954.

CLASS 51

SN 685,588. Mervin L. Jordahl, d. b. a. Fluor-Amm-Ine Co., Minneapolis, Minn. Filed Apr. 15, 1955.

Fluoramine

Applicant claims ownership of Reg. No. 521,193.
For Dentifrice.
Use since Mar. 10, 1948.

CLASS 52

SN 671,312. George B. Dennis, d. b. a. Dennis Enterprises, South Bend, Ind. Filed Aug. 9, 1954.

"ZEOPRENE"

For Cleaner and Conditioner for All Types of Water Softeners, Filters, and Iron Removers Capable of Removing Encrusted Deposits From Ion Exchange Systems and of Redissolving Precipitated Salts and Dispersing Foreign Particles From Mineral Beds of Water Softening Systems.
Use since July 23, 1954.

SN 675,954. Armour and Company, Chicago, Ill. Filed Nov. 3, 1954.

SUPER-CHARGE

For General Cleaning Product for Use by Commercial Laundries.
Use since Sept. 3, 1954.

SN 676,006. Product Manufacturing & Sales, Inc., Royal Oak, Mich. Filed Nov. 3, 1954.

PRODUCT-SOL

For Cleaning Compounds Adapted for Cleaning Surfaces of Motors, Metal Parts, Painted Surfaces, Chromium, Glass, Wood, Concrete, Rubber, and Plastic.
Use since Sept. 15, 1954.

SN 679,493. The Sanfax Company, Atlanta, Ga. Filed Jan. 5, 1955.



The color lining shown on the drawing is for red and yellow.
For Cleaning and Sanitary Chemical Compounds and Mix-

tures Used in Cleaning Buildings of All Types and Fixtures and Attachments Therein; To Clean All Types of Equipment—Namely, Industrial Equipment, Transportation Equipment and Food Processing Equipment; To Clean Meat in the Process of Being Slaughtered for Human Consumption; To Clean All Types of Sewer Lines; for Use in Laundries in the Course of Cleaning Clothing.
Use since May 1950.

SN 682,622. Colgate-Palmolive Company, Jersey City, N. J. Filed Mar. 2, 1955.

QUICK-O-MATIC

For Sudsing Cleaner, Cleanser, and Detergent.
Use since Sept. 22, 1954.

SN 686,012. Waverly Petroleum Products Company, Philadelphia, Pa. Filed Apr. 21, 1955.

Hi-Dri

For Floor Cleaning Compound in Granular Form Having Oil- and Water-Absorbent and Incidental Fire Prevention Properties.
Use since Feb. 23, 1955.

SN 686,356. Colgate-Palmolive Company, Jersey City, N. J. Filed Apr. 27, 1955.

BEVERLY

For Toilet Soap.
Use since July 1927.

SERVICE MARKS

CLASS 101

SN 682,096. Spartan Printing and Paper Company, Inc., Spartanburg, S. C. Filed Feb. 7, 1955.



For Job Printing.
Use since May 23, 1946.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

619,226. SUNBEAM FOX. Ritter Bros. Inc. SN 676,838. Pub. 10–18–55. Filed 11–17–54.

619,227. COY IN REPRESENTATION OF A DIAMOND FIGURE IN A HEART DESIGN. Coy Delinting Company. SN 678,520. Pub. 10–18–55. Filed 12–17–54.

619,228. EASTMAN. Eastman Kodak Company. SN 678,849. Pub. 10–18–55. Filed 12–23–54.

619,229. BIRD IN CAGE DESIGN. Courtaulds, Inc. SN 681,002. Pub. 10–18–55. Filed 2–3–55.

619,230. JACK AND JILL AND DESIGN. Columbia Silica Sand Co. SN 681,069. Pub. 10–18–55. Filed 2–4–55.

CLASS 2

619,231. PLA-TANK. The Chemical Corporation. SN 650,621. Pub. 10–18–55. Filed 7–22–53.

619,232. GRAVERSPHERE. Graver Tank & Mfg. Co., Inc. SN 661,886. Pub. 10–18–55. Filed 3–2–54.

619,233. TITELOK. Sutherland Paper Company. SN 665,071. Pub. 10–18–55. Filed 4–22–54.

619,234. KOLD-VAT. Cherry-Burrell Corporation. SN 668,374. Pub. 10–18–55. Filed 6–17–54.

619,235. "LADY'S PRIDE". Ohio Bag Corp. SN 671,660. Pub. 10–18–55. Filed 8–13–54.

619,236. I-C-PAK. Golden State Sales Corporation, now by change of name Foremost Sales Corporation. SN 674,387. Pub. 10–18–55. Filed 10–6–54.

619,237. PORTASILO. Portasilo Limited. SN 676,024. Pub. 10–18–55. Filed 10–18–54.

619,238. RIP-COR. The Corrugated Container Company. SN 676,362. Pub. 10–18–55. Filed 11–10–54.

619,239. DIAPERAMA. Margaret Rice Mason. SN 679,788. Pub. 10–18–55. Filed 1–12–55.

619,240. GARB-BIN. Everglades Industries Corporation. SN 679,807. Pub. 10–18–55. Filed 1–13–55.

619,241. SKOTCH JUG. The Hamilton Metal Products Company. SN 682,261. Pub. 10–18–55. Filed 2–24–55.

619,242. "MINE." Ginmart Co. SN 683,039. Pub. 10–18–55. Filed 3–8–55.

619,243. PERFECTPAK. Ernest D. Clark. SN 683,966. Pub. 10–18–55. Filed 3–22–55.

619,244. E & T KOINTUBE. F. Stevens Epps, d. b. a. Kointainer Co. SN 684,824. Pub. 10–18–55. Filed 4–4–55.

619,245. RAINCOATED. Fibreboard Products (Eastern Division) Inc. SN 686,633. Pub. 10–18–55. Filed 5–2–55.

619,246. KODASLIDE. Eastman Kodak Company. SN 687,456. Pub. 10–18–55. Filed 5–13–55.

619,247. REZLOK. Bemis Bro. Bag Company. SN 687,845. Pub. 10–18–55. Filed 5–19–55.

CLASS 4

619,248. SOF-SAND. Merit Products, Inc. SN 672,426. Pub. 10–18–55. Filed 8–30–54.

CLASS 5

619,249. STANLEY. Stanley Home Products, Inc. SN 675,947. Pub. 10–18–55. Filed 11–2–54.

CLASS 6

619,250. TWIN-PAK. The Sterling Co., Inc. SN 647,559. Pub. 10–18–55. Filed 5–22–53.

619,251. ALPHANOL. Imperial Chemical Industries Limited. SN 655,250. Pub. 6–21–55. Filed 10–23–53.

619,252. VISCASIL. General Electric Company. SN 662,212. Pub. 10–18–55. Filed 3–8–54.

619,253. DR. HUBBARD'S VEGETABLE GERMICIDE BRAND AND DESIGN. J. Hubbard & Co. SN 664,608. Pub. 10–18–55. Filed 4–15–54.

619,254. PHOSTOXIN. Deutsche Gesellschaft für Schädlingsbekämpfung m. b. H. SN 666,742. Pub. 4–5–55. Filed 5–20–54.

619,255. QUADROL. Wyandotte Chemicals Corporation. SN 667,661. Pub. 10–18–55. Filed 6–3–54.

619,256. NIBRITE. The Harshaw Chemical Company. SN 669,329. Pub. 10–18–55. Filed 7–2–54.

619,257. EMKANYL. Société Anonyme dite: Manufactures de Produits Chimiques du Nord Etablissements Kuhlmann. SN 669,938. Pub. 10–18–55. Filed 7–13–54.

619,258. VINYLETTE. Champion Textile Finishing Company. SN 670,274. Pub. 10–18–55. Filed 7–20–54.

619,259. INFRA. General Aniline & Film Corporation. SN 670,781. Pub. 10–18–55. Filed 7–29–54.

619,260. LAS AND DESIGN. Foote Mineral Company. SN 670,918. Pub. 10–18–55. Filed 8–2–54.

619,261. S-P-A. American Cyanamid Company. SN 672,777. Pub. 10–18–55. Filed 9–7–54.

619,262. SKRAM AND DESIGN. Magna, Inc. SN 673,188. Pub. 10–18–55. Filed 9–14–54.

619,263. ZIRCO. Advance Solvents & Chemical Corporation. SN 674,548. Pub. 10–18–55. Filed 10–11–54.

619,264. NCR. The National Cash Register Company. SN 674,609. Pub. 10–18–55. Filed 10–11–54.

619,265. LACTOGNOST. Heyl & Co. Chemisch-Pharmazeutische Fabrik. SN 675,388. Pub. 10–4–55. Filed 10–25–54.

619,266. DETERO. American Maintenance Supply Co. SN 675,460. Pub. 10–18–55. Filed 10–26–54.

619,267. GOLD BOND. J. A. H. Junker, Inc. SN 677,715. Pub. 10–18–55. Filed 12–3–54.

619,268. HOT SHOT. R-H Products Company. SN 678,473. Pub. 10–18–55. Filed 12–16–54.

619,269. LUMATEX. Badische Anilin- & Soda-Fabrik Aktiengesellschaft. SN 678,587. Pub. 6–28–55. Filed 12–20–54.

619,270. AKAR. Geigy Chemical Corporation. SN 680,072. Pub. 10–18–55. Filed 1–18–55.

619,271. TUCO. The Upjohn Company. SN 680,330. Pub. 10–18–55. Filed 1–21–55.

619,272. UPCO. The Upjohn Company. SN 680,334. Pub. 10–18–55. Filed 1–21–55.

619,273. SEPARAN 2610. The Dow Chemical Company. SN 681,074. Pub. 10–18–55. Filed 2–4–55.

619,274. DUCK-PLUCK AND DESIGN. Clifton E. Merritt and Jack W. Korn, d. b. a. Duck-Pluck. SN 681,283. Pub. 10–18–55. Filed 2–8–55.

619,275. TWITCHELL. Emery Industries, Inc. SN 681,429. Pub. 10–18–55. Filed 2–10–55.

619,276. DELSAN. E. I. du Pont de Nemours and Company. SN 681,684. Pub. 10–18–55. Filed 2–15–55.

619,277. QUAKER REACTANT. Quaker Chemical Products Corporation. SN 682,062. Pub. 10–18–55. Filed 2–21–55.

619,278. MESITOL. Farbenfabriken Bayer Aktiengesellschaft. SN 682,138. Pub. 10–18–55. Filed 2–23–55.

619,279. SAFE-T-SEAL AND DESIGN. Stanley L. Fabian, d. b. a The Safe-T-Seal Laboratories. SN 682,719. Pub. 10–18–55. Filed 3–3–55.

619,280. AIRCO AND DESIGN. Air Reduction Company, Incorporated. SN 682,773. Pub. 10–18–55. Filed 3–4–55.

619,281. AIRCOSIL. Air Reduction Company, Incorporated. SN 682,774. Pub. 10–18–55. Filed 3–4–55.

619,282. AQUA GRO. Aquatrols Corporation of America. SN 682,849. Pub. 10–18–55. Filed 3–7–55.

619,283. HYCHEX. Hychex Products. SN 682,926. Pub. 10–18–55. Filed 3–7–55.

619,284. DEEEP. The Diversey Corporation. SN 683,185. Pub. 10–18–55. Filed 3–10–55.

CLASS 7

619,285. ATLAS FIELD TEST AND DESIGN (REPRESENTATION OF ATLAS AND A SEAL). Howard Duizend, d. b. a. Atlas Cordage Company. SN 678,714. Pub. 10–18–55. Filed 12–21–54.

619,286. ROYAL CHINOOK. The Linen Thread Co., Inc. SN 682,649. Pub. 10–18–55. Filed 3–2–55.

619,287. GLO-GRAIN. General Printed String Company. SN 682,725. Pub. 10–18–55. Filed 3–3–55.

619,288. BLACK STALLION AND DESIGN. Cuban Cordage & Rope Co. S. A. SN 683,009. Pub. 10–18–55. Filed 3–1–55.

CLASS 9

619,289. FIRECHO. John A. Chambliss. SN 678,763. Pub. 10–18–55. Filed 12–22–54.

619,290. FIRESCAPER. John A. Chambliss. SN 678,764. Pub. 10–18–55. Filed 12–22–54.

619,291. FIREXPOSER. John A. Chambliss. SN 678,765. Pub. 10–18–55. Filed 12–22–54.

619,292. FIREVEALER. John A. Chambliss. SN 678,766. Pub. 10–18–55. Filed 12–22–54.

619,293. SEARSOUNDER. John A. Chambliss. SN 678,767. Pub. 10–18–55. Filed 12–22–54.

CLASS 10

619,294. FIESTAR, ETC. AND DESIGN. Fiestar, Inc. SN 681,763. Pub. 10–18–55. Filed 2–16–55.

CLASS 12

619,295. PIPETITE-STIK. Lake Chemical Co. SN 659,482. Pub. 10–18–55. Filed 1–14–54.

619,296. KEM-BLO. United States Rubber Company. SN 670,135. Pub. 10–18–55. Filed 7–16–54.

619,297. LOK-JOINT LATH. Minnesota and Ontario Paper Company. SN 680,482. Pub. 10–18–55. Filed 1–25–55.

619,298. AMER-PLY-WOOD. Lehwood Corporation. SN 681,020. Pub. 10–18–55. Filed 2–3–55.

619,299. VEGALITE. Harbison-Walker Refractories Company. SN 682,425. Pub. 10–18–55. Filed 2–28–55.

619,300. ARMADILLO DESIGN. Wm. C. Peters Co. SN 682,974. Pub. 10–18–55. Filed 3–7–55.

619,301. CADMUS SILVER JOIST AND DESIGN. Cadmus Long Span and Joist Corporation. SN 683,096. Pub. 10–18–55. Filed 3–9–55.

619,302. CELO-SIDING. The Celotex Corporation. SN 683,846. Pub. 10–18–55. Filed 3–21–55.

619,303. REXALT. The Flintkote Company. SN 684,206. Pub. 10–18–55. Filed 3–25–55.

619,304. DIERKS D PENTA AND DESIGN. Dierks Forests, Inc. SN 685,173. Pub. 11–8–55. Filed 4–8–55.

619,305. SUPERTHIK. National Gypsum Company. SN 687,971. Pub. 10–18–55. Filed 5–20–55.

619,306. T & T. The Celotex Corporation. SN 688,127. Pub. 10–18–55. Filed 5–24–55.

619,307. PRE-KRETE AND DESIGN. Pocono Fabricators, Inc. SN 688,182. Pub. 10–18–55. Filed 5–24–55.

619,308. CERAMIDUCT. Straitsville Brick Company. SN 688,194. Pub. 10–18–55. Filed 5–24–55.

619,309. COMBO AND DESIGN. Wallace W. Miller. SN 688,342. Pub. 10–18–55. Filed 5–26–55.

619,310. VOLL-O-BORD. Vollstedt Kerr Lumber Co. of Portland. SN 688,485. Pub. 10–18–55. Filed 5–27–55.

619,311. LATCH TRACK. Vonnegut Hardware Company. SN 688,486. Pub. 10–18–55. Filed 5–27–55.

619,312. SCRIPT-O-RAMIC. Keasbey Corporation. SN 688,539. Pub. 10–18–55. Filed 5–31–55.

CLASS 13

619,313. LITH-O-WARE. Lith-O-Ware Products, Inc. SN 651,266. Pub. 10–18–55. Filed 8–3–53.

619,314. RAINRITE. The Rainrite Sprinkler Company. SN 657,232. Pub. 10–18–55. Filed 12–1–53.

619,315. SONIUM AND DESIGN (SIX DIAMONDS). Ernest Sohn Creations, Incorporated. SN 669,417. Pub. 10–18–55. Filed 7–6–54.

619,316. PILOTAIR. Westinghouse Air Brake Company. SN 672,472. Pub. 10–18–55. Filed 8–30–54.

619,317. MRS. McGREGORS. United States Steel Corporation. SN 680,918. Pub. 10–18–55. Filed 2–1–55.

619,318. ALAR. Alar Products, Inc. SN 681,819. Pub. 10–18–55. Filed 2–17–55.

619,319. ALAR AND DESIGN. Alar Products, Inc. SN 681,820. Pub. 10–18–55. Filed 2–17–55.

619,320. KEY GARD AND DESIGN. Pierce Adams, d. b. a. Armand Manufacturing Company. SN 681,970. Pub. 10–18–55. Filed 2–21–55.

619,321. LEVOLOR. Levolor Lorentzen, Inc. SN 684,443. Pub. 9–20–55. Filed 3–29–55.

619,322. LINEN FRESH. Levolor Lorentzen, Inc. SN 685,032. Pub. 9–27–55. Filed 4–6–55.

619,323. SPENCE. Spence Engineering Company, Inc. SN 689,313. Pub. 10–18–55. Filed 6–10–55.

619,324. WEDLOK. Raybestos-Manhattan, Inc. SN 689,654. Pub. 10–18–55. Filed 6–16–55.

CLASS 14

619,325. CUPROVAC. Vacuum Metals Corporation. SN 638,456. Pub. 2–9–54. Filed 11–21–52.

619,326. ILLINOIS LITHO-SELECT AND DESIGN. Illinois Zinc Company. SN 657,781. Pub. 10–18–55. Filed 12–10–53.

619,327. "REAPAK." Rea Magnet Wire Company, Incorporated. SN 671,375. Pub. 10–18–55. Filed 8–9–54.

619,328. ROLL COAT. Roll Coater Incorporated. SN 682,190. Pub. 10–18–55. Filed 2–23–55.

619,329. LINEN FRESH. Levolor Lorentzen, Inc. SN 685,031. Pub. 10–11–55. Filed 4–6–55.

619,330. MEL. Magnesium Elektron Limited. SN 685,597. Pub. 10–18–55. Filed 4–15–55.

619,331. MOBEFI. Engineering Foundry Inc. SN 686,817. Pub. 10–18–55. Filed 5–4–55.

CLASS 16

619,332. BARREL DESIGN LINED FOR BLUE. Nuodex Products Co., Inc. SN 576,876. Pub. 6–24–52. Filed 4–9–49.

619,333. GALVARCO. The Arco Company. SN 603,038. Pub. 7–15–52. Filed 9–1–50.

619,334. KAISER-TEX AND DESIGN. Kaiser Gypsum Company, Inc. SN 657,399. Pub. 10–18–55. Filed 11–23–53.

619,335. KAISER-TEX AND DESIGN. Kaiser Gypsum Company, Inc. SN 657,402. Pub. 10–18–55. Filed 11–23–53.

619,336. FINISHINE. Finishine Laboratories, Inc. SN 667,514. Pub. 10–18–55. Filed 6–2–54.

619,337. CHARCOTE. Charleston Rubber Co. SN 685,656. Pub. 10–18–55. Filed 4–18–55.

619,338. FLACO. Frank L. Adams & Son Co., d. b. a. Frank L. Adams Company of Massachusetts. SN 688,292. Pub. 10–18–55. Filed 5–26–55.

619,339. IDCO AND DESIGN. Iddings Paint Company, Inc. SN 688,536. Pub. 10–18–55. Filed 5–31–55.

619,340. FAD. Republic Paint & Varnish Co. SN 689,078. Pub. 10–18–55. Filed 6–7–55.

619,341. CHROME-BOND AND DESIGN. Albert W. Locuoco, d. b. a. The Riverbed Chemical Research Company. SN 689,949. Pub. 10–18–55. Filed 6–21–55.

CLASS 17

619,342. BARKING DOG AND DESIGN. Philip Morris & Co. Ltd., Incorporated, now by change of name to Philip Morris Incorporated. SN 681,096. Pub. 10–18–55. Filed 2–4–55.

619,343. CASA BLANCA. Casa Blanca Cigar Company. SN 681,744. Pub. 10–18–55. Filed 2–16–55.

619,344. GARCIA DELIGHT. Casa Blanca Cigar Company. SN 681,745. Pub. 10–18–55. Filed 2–16–55.

619,345. ADMIRAL. D W G Cigar Corporation. SN 681,998. Pub. 10–18–55. Filed 2–21–55.

CLASS 18

619,346. NICOTIBINA. Lepetit, S. p. A. SN 634,415. Pub. 11–17–53. Filed 8–25–52.

619,347. STREPTOTIBINA. Lepetit, S. P. A. SN 634,983. Pub. 11–24–53. Filed 9–8–52.

619,348. TEBAFEN. Geigy Chemical Corporation. SN 658,524. Pub. 10–18–55. Filed 12–24–53.

619,349. ANSUB. John D. Lauricella. SN 666,115. Pub. 10–18–55. Filed 5–11–54.

619,350. PROMETIC. The Harrower Laboratory, Inc. SN 671,941. Pub. 10–18–55. Filed 8–19–54.

619,351. WC AND DESIGN. Warner-Hudnut, Inc., now by change of name Warner-Lambert Pharmaceutical Company. SN 676,151. Pub. 10–18–55. Filed 11–5–54.

619,352. WC. Warner-Hudnut, Inc., now by change of name Warner-Lambert Pharmaceutical Company. SN 676,153. Pub. 10–18–55. Filed 11–5–54.

619,353. TEFLONE. Organon Inc. SN 676,401. Pub. 10–18–55. Filed 11–10–54.

619,354. NOLVASAN. Imperial Chemical (Pharmaceuticals) Limited. SN 677,504. Pub. 10–18–55. Filed 11–30–54.

619,355. PHOTODYN. Nordmark-Werke Gesellschaft mit Beschraenkter Haftung. SN 677,804. Pub. 10–18–55. Filed 12–6–54.

619,356. DELESTROGEN. Olin Mathieson Chemical Corporation. SN 677,901. Pub. 10–18–55. Filed 12–7–54.

619,357. METACORTALONE. Schering Corporation. SN 678,049. Pub. 10–18–55. Filed 12–9–54.

619,358. METACORTIN. Schering Corporation. SN 678,816. Pub. 10–18–55. Filed 12–22–54.

619,359. MICOSTATIN. Olin Mathieson Chemical Corporation. SN 679,472. Pub. 10–18–55. Filed 1–5–55.

619,360. DEPRESSIN. American Home Products Corporation, d. b. a. Wyeth Laboratories, Division of American Home Products Corporation. SN 679,506. Pub. 10–18–55. Filed 1–6–55.

619,361. PHTHALAMAQUIN. The New York Quinine & Chemical Works Inc. SN 680,011. Pub. 10–18–55. Filed 1–17–55.

619,362. STA-PAS. Societe Anonyme des Laboratoires du Docteur Debat. SN 680,106. Pub. 10–18–55. Filed 1–18–55.

619,363. UPCOMYCIN. The Upjohn Company. SN 680,326. Pub. 10–18–55. Filed 1–21–55.

619,364. RQ-20. Armour and Company. SN 680,444. Pub. 10–18–55. Filed 1–25–55.

619,365. METICORTELONE. Schering Corporation. SN 680,809. Pub. 10–18–55. Filed 1–31–55.

619,366. K-NUFF. Margaret Knuff, d. b. a. K-Nuff. SN 682,157. Pub. 10–18–55. Filed 2–23–55.

619,367. CO-PAR-DENE AND DESIGN. The Baltimore Engineering & Chemical Company, d. b. a. Associated Research Laboratory. SN 682,228. Pub. 10–18–55. Filed 2–24–55.

619,368. QUINTAMIN NO. 2. E. F. Drew & Co., Inc. SN 682,247. Pub. 10–18–55. Filed 2–24–55.

619,369. QUINTAMIN NUMBER—1. E. F. Drew & Co., Inc. SN 682,248. Pub. 10–18–55. Filed 2–24–55.

619,370. ATENSYN. Irwin, Neisler and Company. SN 683,296. Pub. 10–18–55. Filed 3–11–55.

619,371. MIRADON. Schering Corporation. SN 683,318. Pub. 10–18–55. Filed 3–11–55.

619,372. THERAXANE. Process Laboratories, Inc. SN 683,429. Pub. 10–18–55. Filed 3–14–55.

619,373. BIG CHIEF. Barney Thomas Scruggs, d. b. a. Big Chief Medicine Company. SN 683,445. Pub. 10–18–55. Filed 3–14–55.

619,374. ALUMINOSIOMY. Wesley J. Richards, d. b. a. Wesley J. Richards Pharmaceutical Specialties. SN 683,557. Pub. 10–18–55. Filed 3–15–55.

619,375. TOTS. George J. Kraupner, d. b. a. Kraupner Pharmaceutical Co. SN 683,600. Pub. 10–18–55. Filed 3–16–55.

619,376. DARFLAVIN. Norman Dartell, d. b. a. Dartell Laboratories. SN 683,859. Pub. 10–18–55. Filed 3–21–55.

619,377. FEROWEET. Barth Levitt Products. SN 684,139. Pub. 10–18–55. Filed 3–24–55.

619,378. ELEVITES. Barth Levitt Products. SN 684,140. Pub. 10–18–55. Filed 3–24–55.

619,379. JONKEN FORMULA. Blue Crest Products Co. SN 684,525. Pub. 10–18–55. Filed 3–30–55.

619,380. MULVIDREN. The Stuart Company. SN 684,892. Pub. 10–18–55. Filed 4–4–55.

619,381. ORVIBON. Chas. Pfizer & Co., Inc. SN 684,965. Pub. 10–18–55. Filed 4–5–55.

619,382. COGESIC–16. Puget Sound Pharmacal Co., Inc. SN 684,966. Pub. 10–18–55. Filed 4–5–55.

619,383. KERATONE. The Keratone Co., Inc. SN 685,027. Pub. 10–18–55. Filed 4–6–55.

619,384. SULISOCOL. The Drug Products Co., Inc. SN 685,176. Pub. 10–18–55. Filed 4–8–55.

619,385. PAN-VI-SOL. Mead Johnson & Company. SN 685,285. Pub. 10–18–55. Filed 4–11–55.

CLASS 19

619,386. ROYAL AND DESIGN. D. P. Harris Hardware & Manufacturing Co., Inc. SN 660,943. Pub. 10–18–55. Filed 2–11–54.

619,387. MASTER-CRAFT SQUIRES MFG. CO. SINCE 1925 AND DESIGN. Squires Manufacturing Company. SN 661,966. Pub. 10–18–55. Filed 3–3–54.

619,388. INVICTA, ETC. AND SCROLL DESIGN. J. A. Phillips & Company Limited. SN 666,516. Pub. 10–18–55. Filed 5–17–54.

619,389. FRATE-GATE. Gar Wood Industries, Inc. SN 670,422. Pub. 10–18–55. Filed 7–22–54.

619,390. FEADSHIP HOLLAND AND DESIGN. Feadship, Inc. SN 671,320. Pub. 10–18–55. Filed 8–9–54.

619,391. MARECO. George A. Maximoff. SN 672,163. Pub. 10–11–55. Filed 8–24–54.

619,392. THE PIT DEVIL AND DESIGN. Texas Pit Service, Inc. SN 679,502. Pub. 10–18–55. Filed 1–5–55.

619,393. CAMP E-Z. Lester George Mocroft, d. b. a. Camp E-Z Co. SN 682,452. Pub. 10–18–55. Filed 2–28–55.

619,394. FARBER'S JET. Farber Brothers, Inc. SN 684,935. Pub. 10–18–55. Filed 4–5–55.

619,395. C-V CONVAIR AND DESIGN. General Dynamics Corporation. SN 685,901. Pub. 10–18–55. Filed 4–20–55.

619,396. ULTRA-RAK. Market Forge Company. SN 691,057. Pub. 10–18–55. Filed 7–11–55.

CLASS 20

619,397. DECORAY. Armstrong Cork Company. SN 681,244. Pub. 10–18–55. Filed 2–8–55.

619,398. TEXTELLE. Armstrong Cork Company. SN 681,566. Pub. 10–18–55. Filed 2–14–55.

CLASS 21

619,399. DIPROFIL. Engis Equipment Company, to Diamantprodukter Aktiebolag. SN 657,341. Pub. 2–8–55. Filed 12–3–53.

619,400. CHROMICON. Cathodeon Limited. SN 658,240. Pub. 5–3–55. Filed 12–21–53.

619,401. COAST CABLE. Coast Cable, Inc. SN 661,413. Pub. 10–18–55. Filed 2–23–54.

619,402. TELE VEAR AND DESIGN. Albert Freeman, d. b. a. The Televear Company. SN 671,068. Pub. 10–18–55. Filed 8–3–54.

619,403. MAGNAPAK. Rea Magnet Wire Company, Inc., to Essex Wire Corporation. SN 672,980. Pub. 10–4–55. Filed 9–9–54.

619,404. HIPPO CLIP. Mueller Electric Company. SN 673,929. Pub. 10–18–55. Filed 9–28–54.

619,405. CHECK MARK AND LIGHTNING DASH IN JOINED CIRCLES. The Ferro Electric Products, Inc. SN 677,048. Pub. 10–18–55. Filed 11–22–54.

619,406. MULTISTROB. Strobo Research. SN 678,823. Pub. 10–18–55. Filed 12–22–54.

619,407. GRILLALL. Du-Wal Inc. SN 680,737. Pub. 10–18–55. Filed 1–31–55.

619,408. ELIPTICONE. The Art Metal Company. SN 680,854. Pub. 10–18–55. Filed 2–1–55.

619,409. TAPERDRUM. The Art Metal Company. SN 680,855. Pub. 10–18–55. Filed 2–1–55.

619,410. LENSDRUM. The Art Metal Company. SN 680,856. Pub. 10–18–55. Filed 2–1–55.

619,411. AMCOLENS. The Art Metal Company. SN 680,857. Pub. 10–18–55. Filed 2–1–55.

619,412. MILLERS FALLS. Millers Falls Company. SN 681,470. Pub. 10–18–55. Filed 2–1–55.

619,413. A. American Measuring Instrument Corp. SN 681,565. Pub. 10–18–55. Filed 2–14–55.

619,414. HOMEMASTER. Porter-Cable Machine Company. SN 681,794. Pub. 10–18–55. Filed 2–16–55.

619,415. PARANITE. Essex Wire Corporation. SN 682,789. Pub. 9–20–55. Filed 3–4–55.

619,416. TOUCHTRON. General Electric Company. SN 687,556. Pub. 10–18–55. Filed 5–16–55.

CLASS 22

619,417. SPIN-IN MINNY. Tradewinds, Inc. SN 650,229. Pub. 10–18–55. Filed 7–13–53.

619,418. CONTINENTAL AND DESIGN. Continental Gummiwerke Aktiengesellschaft. SN 651,807. Pub. 10–18–55. Filed 8–14–53.

619,419. AMSCO DOLL-E-SWEEPER AND DESIGN. American Metal Specialties Corporation. SN 663,094. Pub. 10–18–55. Filed 3–23–54.

619,420. SPORTLINE AND DESIGN. C. & R. Mfg. Co. SN 675,257. Pub. 10–18–55. Filed 10–22–54.

619,421. MONO AND DESIGN. Hugh Wiley. SN 675,518. Pub. 10–18–55. Filed 10–26–54.

619,422. BANBALL AND DESIGN. Anne Carroad, d. b. a. Banball Co. SN 676,784. Pub. 10–18–55. Filed 11–17–54.

619,423. LING-WHIST. Games of the Month Inc. SN 679,663. Pub. 10–18–55. Filed 1–10–55.

619,424. PAYLOADER. The Frank G. Hough Co. SN 681,357. Pub. 10–18–55. Filed 2–9–55.

619,425. TRIPLE "V". J. de Beer & Son. SN 681,496. Pub. 10–18–55. Filed 2–11–55.

619,426. PETER PIE PAN. Transogram Company, Inc. SN 681,724. Pub. 10–18–55. Filed 2–15–55.

619,427. TRU BILT AND DESIGN. A. G. Spalding & Bros. Inc. SN 681,886. Pub. 10–18–55. Filed 2–17–55.

619,428. KIWI. Tigrett Industries, Inc., d. b. a. Tigrett Enterprises. SN 682,083. Pub. 10–18–55. Filed 2–21–55.

619,429. STRAUSS. John E. Strauss, d. b. a. Strauss Skate Company. SN 682,303. Pub. 10–18–55. Filed 2–24–55.

CLASS 23

619,430. VICKERY. Vickerys Ltd. SN 551,210. Pub. 7–13–54. Filed 3–4–48.

619,431. ARONSON AND DESIGN. Charles N. Aronson, d. b. a. Aronson Machine Company. SN 602,925. Pub. 10–18–55. Filed 8–30–50.

619,432. GERO. N. V. Gerofabriek. SN 633,266. Pub. 10–18–55. Filed 7–30–52.

619,433. STRONGHOLD AND DESIGN. The British Tap and Die Company Limited. SN 635,579. Pub. 7–5–55. Filed 9–22–52.

619,434. WHIRLWIND AND DESIGN. The British Tap and Die Company Limited. SN 635,581. Pub. 7–5–55. Filed 9–22–52.

619,435. GYRAJAW. Louis W. Johnson, d. b. a. El-Jay Manufacturing Co. SN 650,518. Pub. 12–28–54. Filed 7–20–53.

619,436. LANCASTER. Lancaster Pump and Manufacturing Co., Inc. SN 663,108. Pub. 10–18–55. Filed 3–23–54.

619,437. ESTATE. Saladmaster Sales, Inc. SN 665,522. Pub. 8–23–55. Filed 4–30–54.

619,438. DANISH CROWN. Saladmaster Sales, Inc. SN 665,524. Pub. 10–18–55. Filed 4–30–54.

619,439. PRINCESS JAN. Saladmaster Sales, Inc. SN 665,525. Pub. 10–18–55. Filed 4–30–54.

619,440. BLACKMER, ETC. AND DESIGN. Blackmer Pump Company. SN 667,373. Pub. 10–18–55. Filed 6–1–54.

619,441. FLEX-PROP. Mid-States Manufacturing Corporation, Inc. SN 669,789. Pub. 10–18–55. Filed 7–12–54.

619,442. SOL-DOR. The Sol-Dor Company. SN 670,386. Pub. 10–18–55. Filed 7–21–54.

619,443. POWER-DASH. Joseph S. Barlow. SN 670,530. Pub. 10–18–55. Filed 7–26–54.

619,444. GRILL KING. American Vending Corp. SN 671,289. Pub. 10–18–55. Filed 8–9–54.

619,445. JUICEMART. National Vendors, Inc. SN 671,659. Pub. 10–18–55. Filed 8–13–54.

619,446. FAST-MAC. Reed Research, Inc. SN 678,151. Pub. 10–18–55. Filed 12–10–54.

619,447. DELTA ROCKWELL AND DESIGN. Rockwell Manufacturing Company. SN 679,488. Pub. 10–18–55. Filed 1–5–55.

619,448. GRASNIP. The Village Blacksmith Company. SN 680,439. Pub. 10–18–55. Filed 1–24–55.

619,449. MEPACO. Meat Packers Equipment Co. SN 680,775. Pub. 10–18–55. Filed 1–31–55.

619,450. AMC. The Associated Merchandising Corporation. SN 680,859. Pub. 10–18–55. Filed 2–1–55.

619,451. GAY BLADE AND DESIGN. Yasoo Manufacturing Company, Inc. SN 680,923. Pub. 10–18–55. Filed 2–1–55.

619,452. HAHN HI-BOY AND DESIGN. Hahn, Inc. SN 680,952. Pub. 10–18–55. Filed 2–2–55.

619,453. CIRCLE. Allis-Chalmers Manufacturing Company. SN 681,562. Pub. 10–18–55. Filed 2–14–55.

619,454. BRAVE. Blackhawk Mfg. Co. SN 681,830. Pub. 10–18–55. Filed 2–17–55.

619,455. LATHEMASTER. Marvic, Inc. SN 681,927. Pub. 10–18–55. Filed 2–18–55.

619,456. ACME-GRIDLEY. The National Acme Company. SN 682,169. Pub. 9–27–55. Filed 2–23–55.

619,457. "GROW IT YOURSELF." The Village Blacksmith Company. SN 682,308. Pub. 10–18–55. Filed 2–24–55.

619,458. DROTT. Drott Manufacturing Corporation. SN 682,335. Pub. 10–18–55. Filed 2–25–55.

619,459. CARVEL HALL AND DESIGN. Chas. D. Briddell, Inc. SN 682,618. Pub. 10–18–55. Filed 3–2–55.

619,460. IMPAK. Imperial Knife Company, Inc. SN 682,645. Pub. 10–18–55. Filed 3–2–55.

619,461. CORINTH. Corinth Machinery Company. SN 683,366. Pub. 10–18–55. Filed 3–14–55.

619,462. BERRYPAK-ER. Process Machinery Company, Inc. SN 683,430. Pub. 10–18–55. Filed 3–14–55.

619,463. GRIPSO-MATIC. H. R. Basford Co. SN 683,655. Pub. 10–18–55. Filed 3–17–55.

619,464. CHIPMUNK AND DESIGN. Strunk Equipment Company. SN 683,723. Pub. 10–18–55. Filed 3–17–55.

619,465. STRUNK RITE-OIL-FLO. Strunk Equipment Company. SN 683,726. Pub. 10–18–55. Filed 3–17–55.

619,466. BLUE JET. Titan Chain Saws, Inc., d. b. a. Blue-Jet Chain Division. SN 684,364. Pub. 10–18–55. Filed 3–28–55.

619,467. MALL. Mall Tool Company. SN 684,570. Pub. 10–18–55. Filed 3–30–55.

619,468. MICHIGAN. Clark Equipment Company. SN 684,632. Pub. 10–18–55. Filed 3–31–55.

619,469. UNI-SET. W. F. Meyers Company, Inc. SN 684,856. Pub. 10–18–55. Filed 4–4–55.

CLASS 24

619,470. AQUA SPIN. The Firestone Tire & Rubber Company. SN 688,634. Pub. 10–18–55. Filed 6–1–55.

CLASS 26

619,471. MIRROTEL. Wollensak Optical Company. SN 631,836. Pub. 10–18–55. Filed 6–26–52.

619,472. LAB-JACK. Central Scientific Company. SN 663,878. Pub. 10–18–55. Filed 4–5–54.

619,473. PHILLIPS LEVEL EYE. Wayland N. Phillips, conservator of the estate of Harry A. Phillips, d. b. a. H. A. Phillips & Company. SN 666,683. Pub. 10–18–55. Filed 5–19–54.

619,474. DISTOMETER (FANCIFUL). Rolatape, Inc. SN 668,413. Pub. 9–27–55. Filed 6–17–54.

619,475. VIVID. Bell & Howell Company. SN 668,437. Pub. 10–18–55. Filed 6–18–54.

619,476. THE GOLD BOND LINE. Kingston Pencil Corporation. SN 669,268. Pub. 10–18–55. Filed 7–1–54.

619,477. RECONOSCOPE. Columbia Broadcasting System, Inc. SN 669,861. Pub. 10–18–55. Filed 7–13–54.

619,478. KILN-GARD (DESIGN, TWO MEN). Charles H. Strange. SN 671,390. Pub. 10–18–55. Filed 8–9–54.

619,479. ZERO SPINDLE. N. A. Woodworth Company. SN 671,476. Pub. 10–18–55. Filed 8–10–54.

619,480. BARMOTIVE, ETC. AND DESIGN. Barmotive Products, Incorporated. SN 677,693. Pub. 10–18–55. Filed 12–3–54.

619,481. HORVEX. Metrawatt Aktiengesellschaft Fabrik Elektrischer Messgerate. SN 679,855. Filed 7–19–55. Filed 1–13–55.

619,482. HALPIN COAIRDINATOR. Halpin Co-Airdinator Company. SN 683,199. Pub. 10–18–55. Filed 3–10–55.

619,483. DRY-EYE. Ansul Chemical Company. SN 685,882. Pub. 10–18–55. Filed 4–20–55.

619,484. ROASTMETER. Philco Corporation. SN 686,773. Pub. 10–18–55. Filed 5–3–55.

619,485. MERSEMETRIC. Milton Roy Company. SN 688,963. Pub. 10–18–55. Filed 6–6–55.

619,486. HYROYMETRIC. Milton Roy Company. SN 688,964. Pub. 10–18–55. Filed 6–6–55.

619,487. POLAPAN. Polaroid Corporation. SN 689,961. Pub. 10–18–55. Filed 6–21–55.

619,488. PORTA TRACE. Antoine F. Gagne, Jr. SN 690,000. Pub. 10–18–55. Filed 6–22–55.

CLASS 29

619,489. EASY DAY LINT-AWAY. Easy Day Manufacturing Company. SN 678,440. Pub. 10–18–55. Filed 12–16–54.

619,490. LUCKY DOLLAR. Red & White Corporation. SN 681,102. Pub. 10–18–55. Filed 2–4–55.

619,491. MIRASYN. Asbod of California, Inc., d. b. a. Pit-Bar Manufacturing Co. SN 681,568. Pub. 10–18–55. Filed 2–14–55.

619,492. 'SHOE CADDEE.' Robert H. Zoffer, d. b. a. Travel Aids Co. SN 681,658. Pub. 10–18–55. Filed 2–14–55.

CLASS 31

619,493. TASTE-MASTER. Filtrine Manufacturing Company. SN 680,071. Pub. 10–18–55. Filed 1–18–55.

619,494. S. B. R. National Aluminate Corporation. SN 681,780. Pub. 10–18–55. Filed 2–16–55.

CLASS 32

619,495. CARDA. AB Åtvidaberga Butiksinredningar. SN 671,076. Pub. 10–18–55. Filed 8–4–54.

619,496. YOUR HOUSEHOLD BUDGET BUDDY. Clyde S. Tompkins, Jr. SN 675,849. Pub. 10–18–55. Filed 11–1–54.

619,497. ENGLANDER BABEE GRAND. The Englander Company, Inc. SN 676,308. Pub. 10–18–55. Filed 11–9–54.

619,498. TURN-ALL. Shagg Studios, Ltd. SN 681,946. Pub. 10–18–55. Filed 2–18–55.

CLASS 34

619,499. MERCHANT. The Miller Company. SN 671,046. Pub. 10–18–55. Filed 8–3–54.

619,500. EDICK AND DESIGN. Elkhart Heater Corporation. SN 675,552. Pub. 10–18–55. Filed 10–27–54.

619,501. DUDE WAGON. The Majestic Company, Inc. SN 679,001. Pub. 10–18–55. Filed 12–27–54.

619,502. HIDE-AWAY. Burnham Corporation. SN 681,832. Pub. 10–18–55. Filed 2–17–55.

619,503. LUNGS FOR INDUSTRY. General Blower Company. SN 681,846. Pub. 10–18–55. Filed 2–17–55.

619,504. RAYTEX. The Coleman Company, Inc. SN 682,127. Pub. 10–18–55. Filed 2–23–55.

619,505. WONDERGLAS. The Hotstream Heater Company. SN 682,151. Pub. 10–18–55. Filed 2–23–55.

CLASS 35

619,506. ASBESTAN. Johns-Manville Corporation. SN 674,162. Pub. 10–11–55. Filed 10–1–54.

CLASS 36

619,507. MUSICHORD. Janssen Piano Co., Inc. SN 679,467. Pub. 10–18–55. Filed 1–5–55.

CLASS 37

619,508. CHECK-PAK. Craig Machine, Inc. SN 667,298. Pub. 10–18–55. Filed 5–28–54.

619,509. NOX-TARNISH. Nox-Rust Chemical Corporation, now by change of name Daubert Chemical Company. SN 669,351. Pub. 10–18–55. Filed 7–2–54.

619,510. "FAITH PACKAGES." Faith Simpson. SN 669,924. Pub. 10–18–55. Filed 7–13–54.

619,511. 3-D. The Gummed Products Company. SN 670,355. Pub. 10–18–55. Filed 7–21–54.

619,512. "CAN'T-FORGET-ER." Joe C. Jenkins. SN 672,737. Pub. 10–18–55. Filed 9–3–54.

619,513. "TT." Ticketag Corporation. SN 673,143. Pub. 10–18–55. Filed 9–13–54.

619,514. "75" PM. A. Kimball Company. SN 677,577. Pub. 10–18–55. Filed 12–1–54.

619,515. CROWN KOKUA. Crown Zellerbach Corporation. SN 678,206. Pub. 10–18–55. Filed 12–13–54.

619,516. UNI-SALE. Union Bag & Paper Corporation. SN 678,488. Pub. 10–18–55. Filed 12–16–54.

619,517. CZ AND DESIGN (CROWN). Crown Zellerbach Corporation. SN 679,983. Pub. 10–18–55. Filed 1–17–55.

619,518. TAYLOR. Taylor Instrument Companies. SN 681,891. Pub. 10–18–55. Filed 2–17–55.

CLASS 39

619,519. LUCKY STAR BY SANTONE AND STAR DESIGN. The Juvenile Mfg. Co., Inc. SN 672,581. Pub. 10–18–55. Filed 9–1–54.

619,520. LOPA AND DESIGN. Apacs International Corporation. SN 676,452. Pub. 10–18–55. Filed 11–12–54.

619,521. ACCENTUETTE. California Forms, Inc. SN 676,939. Pub. 10–18–55. Filed 11–19–54.

619,522. CHANEL. Chanel, Inc. SN 677,201. Pub. 10–18–55. Filed 11–24–54.

619,523. CROYDON. Woolf Brothers, Inc. SN 677,470. Pub. 10–18–55. Filed 11–29–54.

619,524. TRI-ETTE. I. B. Kleinert Rubber Company. SN 678,404. Pub. 10–18–55. Filed 12–15–54.

619,525. CURVETTE. Hollywood-Maxwell Co. SN 678,723. Pub. 10–18–55. Filed 12–21–54.

619,526. CORALSANDS. Cavalier Cravet Company. SN 678,762. Pub. 10–18–55. Filed 12–22–54.

619,527. FURIGINAL. Style Trends, Inc. SN 681,215. Pub. 10–18–55. Filed 2–7–55.

619,528. STUBBORN MULE. Evins, Inc. SN 681,912. Pub. 10–18–55. Filed 2–18–55.

619,529. HIP-NIP. Peter Pan Foundations, Inc. SN 681,940. Pub. 10–18–55. Filed 2–18–55.

619,530. SECOND SKIN. Prim Hosiery, Incorporated. SN 681,941. Pub. 10–18–55. Filed 2–18–55.

CLASS 42

619,531. ATOMIC AND DESIGN. Tallman-McCluskey Fabrics Co. SN 672,119. Pub. 10–18–55. Filed 8–23–54.

619,532. ELÉGANCE. Chatham Manufacturing Company. SN 673,165. Pub. 10–18–55. Filed 9–14–54.

619,533. REX. The John P. King Mfg. Co. SN 677,881. Pub. 10–18–55. Filed 12–7–54.

619,534. PEIRCE-TEX AND DESIGN. Peirce and Company. SN 678,341. Pub. 10–18–55. Filed 12–14–54.

619,535. CILINA AND DESIGN. Aktiengesellschaft Cilander. SN 679,364. Pub. 10–18–55. Filed 1–4–55.

619,536. ROYAL CHINOOK. The Linen Thread Co., Inc. SN 682,648. Pub. 10–18–55. Filed 3–2–55.

CLASS 43

619,537. PA INC. AND DESIGN (REPRESENTATION OF A KEYSTONE). Penn Associates, Inc. SN 667,898. Pub. 10–18–55. Filed 6–8–54.

619,538. DAR'CARA. M. K. M. Hosiery Mills, Inc. SN 677,073. Pub. 6–28–55. Filed 11–22–54.

CLASS 45

619,539. TEDYBAR AND DESIGN. Harold R. Robbins. SN 672,352. Pub. 10–18–55. Filed 8–27–54.

CLASS 46

619,540. DARISWEET. Albers Milling Company. SN 574,126. Pub. 1–22–52. Filed 2–19–49.

619,541. FANCIFUL FIGURE. Sunshine Biscuits, Inc. SN 601,482. Pub. 4–8–52. Filed 7–29–50.

619,542. ABC DEE-LISH. ABC Vending Corporation. SN 626,360. Pub. 10–18–55. Filed 3–13–52.

619,543. CAFE RICO AND DESIGN. Cooperativa Cafeteros de Puerto Rico. SN 630,058. Pub. 2–24–53. Filed 5–22–52.

619,544. CAFE RICO. Cooperativa Cafeteros de Puerto Rico. SN 630,059. Pub. 2–24–53. Filed 5–22–52.

619,545. RICO. Cooperativa Cafeteros de Puerto Rico. SN 630,060. Pub. 2–24–53. Filed 5–22–52.

619,546. CAFÉ RICO AND DESIGN. Cooperativa Cafeteros de Puerto Rico. SN 630,666. Pub. 2–24–53. Filed 6–3–52.

619,547. CIRCLETS (FANCIFUL). Vernon Lee Gunn. SN 644,299. Pub. 11–23–54. Filed 3–27–53.

619,548. SWEET FEAST. Pillsbury Mills, Inc. SN 648,040. Pub. 10–18–55. Filed 6–1–53.

619,549. WRIGLEY'S JUICY FRUIT BRAND AND DESIGN. Wm. Wrigley Jr. Company. SN 650,141. Pub. 10–18–55. Filed 7–10–53.

619,550. WHET. Carnation Company. SN 650,159. Pub. 10–18–55. Filed 7–13–53.

619,551. GLASS HOUSE AND DESIGN. The Interstate Co. SN 651,589. Pub. 10–18–55. Filed 8–10–53.

619,552. BAKER'S. Baker Extract Company. SN 655,028. Pub. 10–18–55. Filed 10–20–53.

619,553. CORONETS. Horace Leroy Masterson, d. b. a. The Coronets Co. SN 659,638. Pub. 10–18–55. Filed 1–18–54.

619,554. DOUGHBOY. Doughboy Industries, Inc. SN 660,788. Pub. 10–18–55. Filed 2–9–54.

619,555. MORTON HOUSE. Otoe Food Products Company. SN 660,814. Pub. 10–18–55. Filed 2–9–54.

619,556. ENGELHORN'S AND DESIGN. John Engelhorn & Sons. SN 667,106. Pub. 10–18–55. Filed 5–26–54.

619,557. UMBRIA. H. Kohnstamm & Co., Inc. SN 667,558. Pub. 10–18–55. Filed 6–2–54.

619,558. VEROLINE. H. Kohnstamm & Co., Inc. SN 667,559. Pub. 10–18–55. Filed 6–2–54.

619,559. WHIRL. Daggett Chocolate Company, d. b. a. Master Chocolate Makers. SN 667,614. Pub. 10–18–55. Filed 6–3–54.

619,560. CERTIFIED. Fitz-Gerald & Litrov. SN 668,899. Pub. 10–18–55. Filed 6–25–54.

619,561. HAPPY TIME CANDIES. King Candy Company, d. b. a. Southern Candy Co. SN 670,112. Pub. 10–18–55. Filed 7–16–54.

619,562. C V C. Coöperatieve Vee-afzet en Verwerkingscentrale G. A. (bij verkorting genaamd Vleeschcentrale). SN 670,173. COLLECTIVE MARK. Pub. 10–18–55. Filed 7–19–54.

619,563. RED PARROT BRAND, ETC. AND DESIGN. Alejandro Sanchez, d. b. a. A. Sanchez. SN 670,439. Pub. 10–18–55. Filed 7–22–54.

619,564. COHEN'S CHICKEN ON A TRAY AND DESIGN (REPRESENTATION OF A ROOSTER). Sam Cohen, d. b. a. Cohen's Chicken House. SN 671,023. Pub. 10–18–55. Filed 8–3–54.

619,565. KREEM KING AND DESIGN. Kreem King Corporation. SN 673,748. Pub. 10–18–55. Filed 9–24–54.

619,566. OCOMA. Omaha Cold Storage Company, d. b. a. Ocoma Foods Company. SN 677,345. Pub. 10–18–55. Filed 11–26–54.

619,567. BIG LEAGUE AND DESIGN. Los Angeles Nut House. SN 678,241. Pub. 10–25–55. Filed 12–13–54.

619,568. "AT HOME ON THE RANGE." Maurer-Neuer Corporation. SN 678,465. Pub. 10–18–55. Filed 12–16–54.

619,569. VEGEBITS. The Pacific Union Association of Seventh-Day Adventists, d. b. a. Loma Linda Food Company. SN 678,551. Pub. 10–25–55. Filed 12–17–54.

619,570. DORCO BRAND. Sturgeon Bay Cherry Growers, Inc. SN 678,687. Pub. 10–18–55. Filed 12–20–54.

619,571. RED COMB SUP-PEL. Hales & Hunter Co. SN 679,390. Pub. 10–25–55. Filed 1–4–55.

619,572. NUTKOFE'. Basil D. Huff. SN 679,465. Pub. 10–25–55. Filed 1–5–55.

619,573. SUNRISE AND DESIGN. A. B. C. Packing Co. SN 680,054. Pub. 10–25–55. Filed 1–18–55.

619,574. TUCO. The Upjohn Company. SN 680,331. Pub. 10–18–55. Filed 1–21–55.

619,575. UPCO. The Upjohn Company. SN 680,332. Pub. 10–18–55. Filed 1–21–55.

619,576. IGLOO. H. P. Hood & Sons, Inc. SN 680,886. Pub. 10–25–55. Filed 2–1–55.

619,577. AXELROD'S. A. M. Axelrod & Son, Inc. SN 680,928. Pub. 10–18–55. Filed 2–2–55.

619,578. PAULY. Swift & Company, d. b. a. Pauly Cheese Company, Division of Swift & Company. SN 681,047. Pub. 10–18–55. Filed 2–3–55.

619,579. PLUMBRIDGE NEW YORK. Madelyn C. Hoey, d. b. a. Plumbridge. SN 681,271. Pub. 10–25–55. Filed 2–8–55.

619,580. LADY ROWENA. Ivanhoe Fruit Association. SN 681,359. Pub. 10–25–55. Filed 2–9–55.

619,581. FRANK'S DOVE BRAND. The Frank Tea & Spice Company. SN 681,506. Pub. 10–18–55. Filed 2–11–55.

619,582. FRANK'S. The Frank Tea & Spice Company. SN 681,507. Pub. 10–18–55. Filed 2–11–55.

619,583. LANSMITH. Lansmith Cherry & Fruit Co. SN 681,604. Pub. 10–25–55. Filed 2–14–55.

619,584. ORCHARD QUEEN. Lansmith Cherry & Fruit Co. SN 681,605. Pub. 10–25–55. Filed 2–14–55.

619,585. WOODLAKE GOLD. Woodlake Packing House. SN 681,657. Pub. 10–25–55. Filed 2–14–55.

619,586. KAND-AID. Perkins Products Company. SN 681,790. Pub. 10–25–55. Filed 2–16–55.

619,587. OMEL. William H. Oldach. SN 683,424. Pub. 10–25–55. Filed 3–14–55.

619,588. PRETTY PLEASE. Santa Cruz Canning Co. SN 683,623. Pub. 10–25–55. Filed 3–16–55.

619,589. LFI. Louis Furth, Inc. SN 683,672. Pub. 10–25–55. Filed 3–17–55.

619,590. TRI-VALLEY TV AND DESIGN. Tri-Valley Packing Association. SN 683,731. Pub. 10–25–55. Filed 3–17–55.

CLASS 47

619,591. MM BLAU ROT AND DESIGN (REPRESENTATION OF SHIELD). Matheus Muller Kommandit Gesellschaft Auf Aktien. SN 671,765. Pub. 10–25–55. Filed 8–16–54.

619,592. NAPA ROSE AND DESIGN. De La Salle Institute, d. b. a. Mont La Salle Vineyards and as The Christian Brothers of California. SN 679,146. Pub. 10–25–55. Filed 12–30–54.

619,593. BLEND TEN. Bartolomeo Pio, Inc. SN 680,510. Pub. 10–25–55. Filed 1–26–55.

619,594. MASSON. Paul Masson, Inc., d. b. a. Paul Masson and Paul Masson Vineyards. SN 681,281. Pub. 10–25–55. Filed 2–8–55.

619,595. QUALITY AND DESIGN. American Wine Growers, d. b. a. The Pommerelle Company. SN 682,846. Pub. 10–18–55. Filed 3–7–55.

CLASS 49

619,596. TROPAL. Rum Company Ltd. SN 670,980. Pub. 10–25–55. Filed 8–2–54.

619,597. MASSON. Paul Masson, Inc., d. b. a. Paul Masson and Paul Masson Vineyards. SN 681,280. Pub. 10–25–55. Filed 2–8–55.

CLASS 50

619,598. DESIGN (A LONGITUDINAL RED MARKING ON THE EDGE OF MATERIAL). Flex-O-Glass, Inc. SN 618,317. Pub. 10–25–55. Filed 9–1–51.

619,599. CHRISTMAS STAR-BAND. Elizabeth Hanna, d. b. a. Elizabeth Hanna Imports. SN 631,055. Pub. 10–25–55. Filed 6–11–52.

619,600. MOSSTYPE AND DESIGN. Mosstype Roller Co., Inc., to Mosstype Corporation. SN 637,202. Pub. 10–18–55. Filed 10–27–52.

619,601. IRV-O-THIN. Irvington Varnish and Insulator Company Western, to Minnesota Mining & Manufacturing Company. SN 651,257. Pub. 10–25–55. Filed 8–3–53.

619,602. ROOTWELL. William Glowth. SN 652,186. Pub. 10–25–55. Filed 8–24–53.

619,603. "OLD TIMERS." Associated Advertising. SN 658,172. Pub. 10–25–55. Filed 12–18–53.

619,604. TRINKIT. William Brokaw Price. SN 666,782. Pub. 10–18–55. Filed 5–20–54.

619,605. GARANTA. Garantol-Gesellschaft Grube & Co. SN 669,182. Pub. 10–18–55. Filed 6–30–54.

619,606. SENTIMENTALLY YOURS. Dion. SN 671,094. Pub. 10–18–55. Filed 8–4–54.

CLASS 51

619,607. LAN AND DESIGN. Tripoli Barber Supply Co. SN 627,909. Pub. 10–18–55. Filed 4–10–52.

619,608. LANO-BLEND. Helene Curtis Industries, Inc. SN 652,758. Pub. 10–5–54. Filed 9–4–53.

619,609. LANOLIN DISCOVERY. Helene Curtis Industries, Inc. SN 656,776. Pub. 10–18–55. Filed 11–23–53.

619,610. RHAPSODY. Helene Curtis Industries, Inc. SN 659,343. Pub. 10–18–55. Filed 1–12–54.

619,611. ADORN. The Gillette Company, d. b. a. The Toni Company. SN 665,414. Pub. 10–18–55. Filed 4–29–54.

619,612. STAY-WELL. Inter-Continental Corporation. SN 670,837. Pub. 10–18–55. Filed 7–30–54.

619,613. LADY GAY'S. June Cameron, d. b. a. Lady Gay. SN 670,899. Pub. 10–18–55. Filed 8–2–54.

619,614. COMING ATTRACTION. Ritornelle, Inc. SN 680,901. Pub. 10–18–55. Filed 2–1–55.

619,615. AMERICAN GIRL. Sales Affiliates, Inc. SN 680,906. Pub. 10–18–55. Filed 2–1–55.

CLASS 52

619,616. KOCAL. Milner Products Company. SN 629,680. Pub. 11–4–52. Filed 5–14–52.

619,617. PAX F-54. G. H. Packwood Manufacturing Co. SN 645,067. Pub. 8–3–54. Filed 4–10–53.

619,618. YOUNG FOLKS. Richard Hudnut. SN 665,824. Pub. 10–18–55. Filed 5–6–54.

619,619. RAZE. The Du Bois Co., Inc. SN 671,560. Pub. 10–18–55. Filed 8–12–54.

619,620. PINTOFF. International Paint Company, Inc. SN 671,920. Pub. 10–18–55. Filed 8–18–54.

619,621. DYNASOL. Chemical Cleaning Service Inc. SN 674,052. Pub. 10–18–55. Filed 9–30–54.

619,622. DIAMOND SPARKLE. Armour and Company. SN 680,995. Pub. 10–18–55. Filed 2–3–55.

619,623. SILVER SPARKLE. Armour and Company. SN 680,996. Pub. 10–18–55. Filed 2–3–55.

619,624. WRITE GO. A. L. Wilson Chemical Company. SN 681,319. Pub. 10–18–55. Filed 2–8–55.

619,625. CLASSIC. Swift & Company. SN 684,763. Pub. 10–18–55. Filed 4–1–55.

Service Marks

CLASS 100

619,626. PGA. The Professional Golfers' Association of America. SN 634,759. Pub. 10–18–55. Filed 9–2–52.

619,627. EI. Experiment Incorporated. SN 664,517. Pub. 10–18–55. Filed 4–14–54.

619,628. PAK-RATED. Fruit Industries Research Foundation. SN 669,760. Pub. 10–18–55. Filed 7–12–54.

619,629. ROADSIDER AND DESIGN (REPRESENTATION OF A LOG). Arthur P. MacArthur. SN 670,364. Pub. 10–18–55. Filed 7–21–54.

619,630. TOPAZ AND DESIGN. Tod Pazdral. SN 676,224. Pub. 10–18–55. Filed 11–8–54.

619,631. 'THE PDQ TECHNIQUE.' The Parco Company, Incorporated. SN 678,044. Pub. 10–18–55. Filed 12–9–54.

619,632. PARK AND EAT ETC. AND DESIGN. Best Restaurants United, Inc. SN 680,354. COLLECTIVE MARK. Pub. 10–18–55. Filed 1–24–55.

619,333. PHILADELPHIA ELECTRIC COMPANY ETC. AND DESIGN. Philadelphia Electric Company. SN 680,792. Pub. 10–18–55. Filed 1–31–55.

CLASS 101

619,634. ARS ET VITA OSBORNE AND DESIGN. The Osborne Company. SN 633,864. Pub. 10–18–55. Filed 8–13–52.

CLASS 102

619,635. SUNNY MONEY AND DESIGN. Kansas City Life Insurance Company. SN 635,698. Pub. 10–18–55. Filed 9–24–52.

619,636. R-S AND DESIGN. Reynolds-Shaffer Corporation. SN 640,226. Pub. 10–18–55. Filed 12–31–52.

619,637. CM. The Connecticut Mutual Life Insurance Company. SN 669,971. Pub. 10–18–55. Filed 7–14–54.

CLASS 103

619,638. ADD-A-WEAR. Standard Laundry and Linen Supply Company. SN 669,578. Pub. 10–18–55. Filed 7–7–54.

619,639. FAIRMONT. Fairmont Machinery Company. SN 671,246. Pub. 10–18–55. Filed 8–6–54.

CLASS 104

619,640. BEELINE. McClatchy Broadcasting Company. SN 674,831. Pub. 10–18–55. Filed 10–14–54.

619,641. NBC. National Broadcasting Company, Inc. SN 542,154. Pub. 6–7–49. Filed 11–24–47.

CLASS 105

619,642. TIME-SAVER SERVICE B & O T-S AND DESIGN. The Baltimore & Ohio Railroad Company. SN 659,525. Pub. 10–18–55. Filed 1–15–54.

CLASS 106

619,643. REPRESENTATION OF A ROBOT. Young & Bertke Company. SN 660,098. Pub. 10–18–55. Filed 1–25–54.

619,644. CHROMALLIZING. Chromalloy Corporation. SN 670,903. Pub. 10–18–55. Filed 8–2–54.

CLASS 107

619,645. STORYBOOK DOGS. Mary J. Collett. SN 669,745. Pub. 10–18–55. Filed 7–12–54.

619,646. BADGE 714. Sherry TV, Inc. SN 676,762. Pub. 10–18–55. Filed 11–16–54.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 1

619,647. Hubbard Farms, Inc., Walpole, N. H. SN 680,196. Filed P. R. 1–20–55. Am. S. R. 11–2–55.

HUBBARD FARMS

For Live Baby Chicks and Hatching Eggs.
Use since July 15, 1954.

CLASS 2

619,648. Needham Manufacturing Company Inc., Needham Heights, Mass. SN 677,085. Filed P. R. 11–22–54. Am. S. R. 10–4–55.

SAVE SPACE WITH Needham HAND-E-WRAP

For Paper Food Patty Separating Trays.
Use since June 15, 1954.

CLASS 3

619,649. Coronet Tie Shops, Inc., Atlanta, Ga. SN 657,115. Filed P. R. 11–30–53. Am. S. R. 6–1–55.

LADY ASHLEY

For Leather Goods—Namely, Portfolios, Luggage, Travelling Bags, Suit Cases, Pocketbooks, and Wallets.
Use since Oct. 30, 1945.

619,650. Nash Inc., Jersey City, N. J. SN 677,340. Filed P. R. 11–26–54. Am. S. R. 10–21–55.

Sir Drake

For Wallets and Billfolds.
Use since May 22, 1953.

CLASS 9

619,651. Pioneer Tent and Awning Company, Boise, Idaho. SN 661,496. Filed P. R. 2–23–54. Am. S. R. 1–27–55.

EUBANKS LEATHER BOISE, IDAHO

For Pistol and Gun Holsters, Cartridge Belts, Gun Scabbards, Cartridge Boxes and Pouches, Made of Leather.
Use since Nov. 9, 1948.

619,652. S.A.F.F.A. S.p.A. Fabbriche Fiammiferi ed Affini, Milan, Italy. SN 672,431. Filed P. R. 8–30–54. Am. S. R. 10–4–55.



For Safety Matches.
Applicant claims priority under Sec. 44 (d). Italian applications filed April 1, 1954, Reg. No. 119,639 dated Oct. 19, 1954.

619,653. Italo D. Vironda, Battle Creek, Mich. SN 684,706. Filed 3–31–55.

VIRONDA

For Gun Choke.
Use since October 1952.

CLASS 12

619,654. Self Storing Window Company, Inc., Minneapolis, Minn. SN 632,179. Filed P. R. 7–5–52. Am. S. R. 9–19–55.

SELF STORING Glass-Walls

For Porch Enclosure Assemblies Comprised of Window Frames Having Screens Across the Front Thereof and Tracks Built Therein With a Plurality of Sashes Slidable Relative to Each Other and to the Tracks and Mounted Within the Tracks, the Sashes Each Carrying a Glass Panel Therein.
Use since on or about Feb. 1, 1947.

619,655. Keasbey & Mattison Company, Ambler, Pa. SN 693,384. Filed 8–19–55.

"NON-SWEAT"

For Insulating Jackets and Coverings, Particularly Adapted for Applications to Conduits and Pipes.
Use since on or about Aug. 2, 1954.

CLASS 14

619,656. E. L. Post & Co., Inc., New York, N. Y. SN 693,085. Filed 8–15–55.

MOTOR MARINE

For Babbitt and Anti-friction Metal.
Use since 1911.

CLASS 22

619,657. Burke Golf Equipment Corporation, Newark, Ohio. SN 636,628. Filed P. R. 10–15–52. Am. S. R. 1–13–55.

SHOT SAVER

For Golf Clubs.
Use since Oct. 1, 1952.

CLASS 23

619,658. Kipton Industries, Inc., Kipton, Ohio. SN 648,180. Filed P. R. 6–3–53. Am. S. R. 11–30–54.

Palm-Grip

For Mechanics' Hand Tools—Namely, Screw Drivers, Nut Drivers, Ratchets, and Socket Adapters Therefor.
Use since Nov. 23, 1951.

619,659. Wadell Tools, d. b. a. Wadell Equipment Company, Garwood, N. J. SN 674,111. Filed P. R. 9–30–54. Am. S. R. 10–24–55.

WADELL WT

For End Mills.
Use since June 11, 1954.

619,660. The Wean Engineering Company, Inc., Warren, Ohio. SN 690,108. Filed 6–23–55.

"COMBINATION SYSTEM"

For Mechanical Feeder, Catcher and Conveying Means for Conveying Packs to and From and Through Heating Furnaces, All for Sheet and Tin Mills.
Use since Dec. 26, 1931.

CLASS 28

619,661. Julius Gotbeter, d. b. a. Class Watch Strap Company, New York, N. Y. SN 682,343. Filed P. R. 2–25–55. Am. S. R. 10–26–55.

DUO-TONE

For Leather Watch Straps.
Use since Oct. 5, 1954.

CLASS 29

619,662. Hillman V. Howren, Atlanta, Ga. SN 669,438. Filed P. R. 7–6–54. Am. S. R. 8–18–55.

Y-PiT

For Wiping Cloths—Namely, Untreated Simple Cotton Cloths for Collecting Dirt and Lint From Objects and for Polishing Such Objects.
Use since May 17, 1954.

CLASS 37

619,663. Emmett E. MacKenzie, Denver, Colo. SN 655,679. Filed P. R. 11–2–53. Am. S. R. 5–23–55.

DOODLE-PAD

For Scratch Pads.
Use since on or about Sept. 17, 1953.

619,664. Champion-International Company, Lawrence, Mass. SN 667,380. Filed P. R. 6–1–54. Am. S. R. 9–6–55.

CI *Standard of Excellence in Coated Papers* CI

For Coated Papers.
Use since October 1952.

619,665. Pen-Cil-Pen Company, Inc., Shelbyville, Tenn. SN 675,226. Filed P. R. 10–21–54. Am. S. R. 9–1–55.

PEN-CEL-PEN

For Wood Encased Ball Point Pen, Simulating a Pencil.
Use since May 14, 1954.

619,666. Otilio Nadol, New York, N. Y. SN 677,084. Filed P. R. 11–22–54. Am. S. R. 8–25–55.

NADAL

For Ball Point Pens.
Use since January 1954.

CLASS 38

619,667. Mac Nair-Dorland Company, New York, N. Y. SN 668,178. Filed P. R. 6–14–54. Am. S. R. 9–12–55.

SOAP

and Chemical Specialties

For Periodical Publication.
Use since May 22, 1954.

619,668. J. P. Herke, Yakima, Wash. SN 673,027. Filed P. R. 9–10–54. Am. S. R. 8–9–55.

VEHICLE DRIVER REMINDER

For Printed Vehicle Windshield Stickers.
Use since June 19, 1954.

619,669. Heating Publishers, Inc., New York, N. Y. SN 675,632. Filed P. R. 10–28–54. Am. S. R. 9–2–55.

GAS HEAT

For Periodical Published From Time to Time.
Use since June 1950.

619,670. Norcross, Inc., New York, N. Y. SN 677,264. Filed 11–15–54.

a yard of card

For Greeting Cards and Printed Greeting Folders.
Use since on or about Dec. 14, 1948.

619,671. Gillette Publishing Company, Chicago, Ill. SN 683,497. Filed 3–15–55.

CAMINOS Y CONSTRUCCION PESADA

For Magazine Published Monthly.
Use since July 1953.

619,672. Service Publishing Corporation, New York, N. Y. SN 685,618. Filed 4–15–55.

SHOW IN PRINT

For Section in a Periodical Publication Dealing With Food Served at Counter and Fountain Restaurants.
Use since May 1952.

CLASS 39

619,673. Samuel C. Lazan, Washington, D. C. SN 638,592. Filed P. R. 11–25–52. Am. S. R. 11–7–55.

Town & Casual

For Women's Shoes.
Use since May 1, 1952.

619,674. Shane Shoe Co., Inc., New York, N. Y. SN 638,978. Filed P. R. 12–4–52. Am. S. R. 9–13–54.

Town and Travel

For Men's, Women's, and Children's Shoes.
Use since Nov. 1, 1952.

619,675. Kam Mfg. Co., Inc., Philadelphia, Pa. SN 646,773. Filed P. R. 5–11–53. Am. S. R. 1–18–54.

KENLON

For Swim Suits With a Built-in Supporter Made of Knitted Acetate for Men and Boys.
Use since Oct. 1, 1952.

619,676. Gittelman's Sons, Inc., Philadelphia, Pa. SN 649,205. Filed P. R. 6–10–53. Am. S. R. 5–6–54.

Gilson

For Mink Capes, Mink Stoles, Mink Jackets, and Mink Coats.
Use since Dec. 15, 1952.

619,677. Knit Products Corporation, Belmont, N. C. SN 650,450. Filed P. R. 7–17–53. Am. S. R. 3–2–55.

Ensemble

For Ladies' Hosiery.
Use since June 18, 1953.

619,678. Manos and Block Furs Inc., New York, N. Y. SN 665,831. Filed P. R. 5–6–54. Am. S. R. 9–23–55.

"PETITE *Furs*" PRECISION FIT FOR WOMEN 5' 4" AND UNDER

For Fur Garments.
Use since Apr. 1, 1953.

619,679. Debutante Furs Inc., New York, N. Y. SN 669,532. Filed P. R. 7–7–54. Am. S. R. 8–26–55.

Typical American Miss

For Fur Coats, Fur Jackets, Fur Scarfs, Fur Capes, and Fur Wraps.
Use since June 23, 1954.

619,680. The La Resista Corset Company, Bridgeport, Conn. SN 671,441. Filed P. R. 8–10–54. Am. S. R. 8–22–55.

It may feel grand when you stand,
but how will it fit when you sit?

For Foundation Garments and Panty Girdles.
Use since on or about Aug. 5, 1954.

619,681. Nursewear, Inc., Boston, Mass. SN 672,526. Filed P. R. 8–31–54. Am. S. R. 6–13–55.

NURSEWEAR

For Student and Graduate Nurses', Waitresses', Maids', Doctors', and Dentists' Uniforms, and Interns' Shirts, Jackets and Trousers.
Use since Jan. 1, 1938.

619,682. Burnsville Hosiery Mills, Inc., Burnsville, N. C. SN 673,726. Filed P. R. 9–24–54. Am. S. R. 8–16–55.

DUB-L-KNIT

For Men's Socks.
Use since Aug. 6, 1954.

619,683. The Wolfson Company, Cincinnati, Ohio. SN 677,915. Filed 12–7–54.

Shorts "that give you a fit"

For Women's Clothing—Namely, Abbreviated Trousers or Trunks for Outer Wear.
Use since on or about July 1, 1951.

619,684. Ann Costa, Miami, Fla. SN 678,205. Filed P. R. 12–13–54. Am. S. R. 9–12–55.

figure XXI

For Ladies' and Women's Dresses, Coats, Suits.
Use since May 15, 1954.

619,685. Bear Brand Hosiery Co., Chicago, Ill. SN 690,426. Filed 6–29–55.

ETON

For Hosiery.
Use since June 20, 1934.

CLASS 42

619,686. Massachusetts Textile Company (Bernhard Altmann) Inc., New York, N. Y. SN 680,285. Filed P. R. 1–21–55. Am. S. R. 9–14–55.

The House of Cashmere

For Cashmere Fabrics.
Use since in the year 1949.

619,687. D. B. Fuller & Co., Inc., New York, N. Y. SN 682,792. Filed P. R. 3–4–55. Am. S. R. 9–1–55.

FULLER-SARI

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres and Mixtures Thereof.
Use since Feb. 23, 1954.

619,688. Bigelow-Sanford Carpet Company, Inc., Wilmington, Del. SN 686,605. Filed 5–2–55.

Loktuft

For Pile Carpets, Rugs and Floor Coverings.
Use since Jan. 2, 1951.

619,689. D. B. Fuller & Co., Inc., New York, N. Y. SN 687,461. Filed P. R. 5–13–55. Am. S. R. 10–26–55.

BIANCO

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres and Mixtures Thereof.
Use since Mar. 29, 1954.

619,690. Mandee Fabrics, Inc., New York, N. Y. SN 687,871. Filed 5–19–55.

Adds Function to Fashion

For Textile Fabrics in the Piece Composed of Cotton.
Use since May 11, 1954.

CLASS 45

619,691. Sociedad Anónima Vichy Catalán, Barcelona, Spain. SN 658,751. Filed P. R. 12–29–53. Am. S. R. 9–28–55.

VICHY CATALAN

For Mineral Water.

619,692. Saratoga Quevic Spring Corporation, Saratoga Springs, N. Y. SN 674,191. Filed P. R. 10–1–54. Am. S. R. 9–30–55.

QUEVIC VICHY

Saratoga Springs NATURAL FLAVORS SPRING WATER QUEVIC VICHY

For Carbonated Waters.
Use since Sept. 1, 1952.

619,693. Jic-Jac, Inc., d. b. a. The Jic Jac Company, St. Louis, Mo. SN 676,117. Filed P. R. 11–5–54. Am. S. R. 10–31–55.

"The Red Refresher"

For Soft Drink, and an Extract Used in the Preparation of Said Soft Drink.
Use since on or about Mar. 1, 1954.

CLASS 49

619,694. Marshall, Taplow Limited, Stratford, London, England. SN 676,647. Filed P. R. 11–15–54. Am. S. R. 9–29–55.



For Scotch Whisky.
Use since Oct. 28, 1935.

CLASS 50

619,695. The Barash Company, Inc., New York, N. Y. SN 651,631. Filed P. R. 8–11–53. Am. S. R. 5–19–54.

CAPE HYDE

For Leather Substitute Composed of Synthetic Resin Coated Fabric.
Use since Aug. 4, 1952.

619,696. John M. Thompson, Sr., d. b. a. Thompson Manufacturing Co., Axtell, Kans. SN 674,110. Filed P. R. 9–30–54. Am. S. R. 10–27–55.

Lapdesk

For Portable Writing Boards.
Use since January 1952.

TRADEMARK REGISTRATIONS RENEWED

105,910. KURLEY KEW. Cl. 40. 8–24–15.
106,244. ESJAYEM. Cl. 37. 10–19–15.
106,245. THE ESJAYEM CELEBRATED TYPEWRITER PAPERS AND DESIGN. Cl. 37. 10–19–15.
107,067. FRONT RANK. Cl. 34. 11–9–15.
107,339. ECONOMY. Cl. 34. 11–23–15.
108,183. CALOL. Cl. 6. 1–18–16.
108,981. DIAMOND STATE. Cl. 46. 3–14–16.
109,151. NATIONAL. Cl. 29. 3–21–16.
109,187. CORROSIRON. Cl. 14. 3–28–16.
109,290. ROYLACE. Cl. 37. 3–28–16.
109,567. LILLY. Cl. 18. 4–11–16.
109,623. OLD TRAIL AND DESIGN. Cl. 46. 4–11–16.
109,624. DIVIDEND AND DESIGN. Cl. 46. 4–11–16.
316,481. REPRESENTATION OF MEN ON HORSE-BACK, DOGS, AND DESIGN. Cl. 47. 8–28–34.
317,428. REPRESENTATION OF MAN ON HORSE-BACK AND DESIGN. Cl. 47. 9–25–34.
318,324. HUNT'S. Cl. 47. 10–23–34.
319,263. K-O-P ETC. AND DESIGN. Cl. 18. 11–20–34.
322,818. MM SOLITÄR MATHEUS MULLER ELTVILLE. Cl. 47. 3–19–35.
325,999. FOUR SQUARE AND DESIGN. Cl. 17. 7–9–35.
326,290. PAL. Cl. 52. 7–23–35.
327,430. LA CROSSE AND DESIGN. Cl. 2. 8–27–35.
327,887. SERVICE TO YOU AND DESIGN. Cl. 2. 9–10–35.
328,527. XEXON. Cl. 26. 10–1–35.
328,880. PURSPUN AND DESIGN. Cl. 39. 10–8–35.
329,049. AUTOMATIC BOND. Cl. 37. 10–15–35.
329,148. WESTOFUME. Cl. 6. 10–15–35.
329,301. EASTBROOK. Cl. 49. 10–22–35.
329,393. SOLITONE. Cl. 39. 10–29–35.
329,551. GRADE A QUALITY AND DESIGN. Cl. 45. 11–5–35.
329,616. SYNTREX. Cl. 44. 11–5–35.
329,617. SKIPPER. Cl. 39. 11–5–35.
329,804. SEEDS WITH A FUTURE. Cl. 1. 11–12–35.
329,823. VICTOR ETC. AND DESIGN. Cl. 23. 11–12–35.
329,856. PUFFY DOT. Cl. 42. 11–12–35.
330,035. WILLOW. Cl. 37. 11–19–35.
330,084. BLACK-DRAUGHT. Cl. 18. 11–19–35.
330,193. HARCRAFT. Cl. 37. 11–26–35.
330,266. TEE-TONE. Cl. 18. 11–26–35.
330,372. PEACHE AND DESIGN. Cl. 6. 12–3–35.
330,433. VEGETHIN. Cl. 18. 12–3–35.
330,443. DAIRYCO. Cl. 6. 12–3–35.
330,664. PARAPHAKIN. Cl. 18. 12–10–35.
330,845. PERNOSTON. Cl. 18. 12–17–35.
331,364. UNIWALL. Cl. 12. 1–7–36.
331,387. HUDDLESPUN. Cl. 42. 1–7–36.
331,427. SNAPPY AND DESIGN. Cl. 46. 1–7–36.
331,464. NIAGARETTE. Cl. 23. 1–7–36.
331,480. JEAN VAL JEAN. Cl. 47. 1–7–36.
331,519. AMUNO. Cl. 6. 1–14–36.
331,594. FITRITE. Cl. 43. 1–14–36.
331,800. INS-T JOINT KAFER AND DESIGN. Cl. 13. 1–21–36.
331,805. LUBRIPLATE ETC. AND DESIGN. Cl. 15. 1–21–36.
332,257. R-P-M. Cl. 15. 2–4–36.
332,438. SURREY HOUSE. Cl. 51. 2–11–36.
332,445. GRIZZLY BRAND AND DESIGN. Cl. 14. 2–11–36.
332,991. GENERAL ELECTRIC GE. Cl. 23. 3–10–36.
330,066. AZUCENA AND DESIGN. Cl. 42. 3–10–36.
333,081. GE AND DESIGN. Cl. 23. 3–10–36.
333,127. LAZY BONES ETC. Cl. 39. 3–10–36.
333,208. I UNDERTAKE AND I PERFORM AND DESIGN. Cl. 6. 3–10–36.
333,441. RAWHIDE. Cl. 39. 3–24–36.
333,442. DESIGN OF BULL AND CIRCLE. Cl. 39. 3–24–36.
333,469. COOLEEMEE AND DESIGN. Cl. 42. 3–24–36.
333,524. NORLEE. Cl. 46. 3–24–36.
333,558. CLOTHCRAFT STANDARD AND DESIGN. Cl. 39. 3–24–36.
333,657. CRESCA ETC. AND DESIGN. Cl. 46. 3–31–36.
333,659. JOLLY ROGER. Cl. 46. 3–31–36.
333,695. SILVER FLEET. Cl. 46. 3–31–36.
333,750. ALOYCO AND DESIGN. Cl. 13. 4–7–36.

TRADEMARK REGISTRATIONS CANCELED

Section 8

73,094. EAGLE. Cl. 46. 3–16–09.
73,096. EAGLE AND REPRESENTATION OF EAGLE. Cl. 46. 3–16–09.
73,440. KEYSTONE DESIGN. Cl. 42. 4–20–09.
75,154. ALOXITE. Cl. 4. 9–7–09.
130,372. LOUVRE. Cl. 46. 4–20–20.
186,884. BILTEX. Cl. 39. 7–22–24.
193,405. FISCHER'S DE LUXE HAM FISCHER MEAT CO. AND DESIGN. Cl. 46. 12–30–24.
200,352. EUGÈNEOL. Cl. 6. 6–30–25.
202,760. EUGÈNEOL. Cl. 40. 9–1–25.
222,033. NEWSBOY. Cl. 46. 12–21–26.
223,852. SETAGÈNE. Cl. 6. 2–15–27.
224,981. BEN-HUR. Cl. 46. 3–8–27.

234,012. MIRIAM RUTH. Cl. 39. 10–18–27.
234,013. FLAVIA. Cl. 39. 10–18–27.
234,015. DOROTHY HELEN. Cl. 39. 10–18–27.
234,241. ILEANA. Cl. 39. 10–18–27.
234,977. WINNIE MODES. Cl. 39. 11–8–27.
236,576. GERMAINE. Cl. 39. 12–13–27.
236,577. COLLÈGA. Cl. 39. 12–13–27.
239,547. DIFR-ENSHAL-VACM. Cl. 34. 3–6–28.
246,592. THE JURIST. Cl. 3. 9–11–28.
249,954. RAIL BIRD U. S. LINE COMPANY AND REPRESENTATION OF BIRD WITH FISH. Cl. 22. 11–27–28.
250,077. SATISFACTION AND REPRESENTATION OF BIRD WITH FISH. Cl. 22. 11–27–28.
252,467. SELECT AND DESIGN. Cl. 46. 2–5–29.
254,394. HARVEST GEMS. Cl. 46. 3–26–29.
254,422. SWANFELT MATTRESS. Cl. 32. 3–26–29.
254,927. REPRESENTATION OF ROLLING-MILL ROLL WITH WABBLERS PAINTED WHITE IN CONTRAST TO THE BODY OF THE ROLL. Cl. 23. 4–2–29.
255,749. RESTFORM. Cl. 39. 4–30–29.
255,882. COURDEJUILLE. Cl. 42. 4–30–29.
256,592. THERMIL. Cl. 42. 5–21–29.
256,636. PARACORD. Cl. 22. 5–21–29.
256,935. WEARFLEX SPORT. Cl. 39. 5–28–29.
257,486. BIRDIE FOUR. Cl. 39. 6–11–29.
258,105. JUST KIDS. Cl. 38. 6–25–29.
261,625. AIR GLIDE. Cl. 32. 9–17–29.
264,972. SUNBEAM. Cl. 44. 12–10–29.
277,346. HOLO-KROME AND DESIGN. Cl. 13. 11–11–30.
294,603. THIMBLE THEATRE, STARRING POPEYE. Cl. 38. 6–7–32.
332,200. SILVER CIRCLE. Cl. 46. 2–4–36.
351,660. COMFLEX. Cl. 32. 11–2–37.
351,801. SUMMER TIME. Cl. 46. 11–9–37.
353,853. GILT EDGE. Cl. 45. 1–18–38.
359,172. ELK RIVER COAL. Cl. 1. 8–9–38.
373,762. PULL-A-WAY. Cl. 22. 12–19–39.
389,823. PARID. Cl. 6. 8–19–41.
390,484. CHILD SAVER. Cl. 39. 9–23–41.
390,863. PARASOL WITHIN OVAL DESIGN. Cl. 6. 10–7–41.
391,207. SOLVO. Cl. 6. 10–28–41.
405,609. 8 IN 1 AND DESIGN. Cl. 6. 2–8–44.
406,336. GAME-TIME. Cl. 22. 3–28–44.
414,120. "ESSENTIAL". Cl. 6. 5–29–45.
418,280. ESTRELLA. Cl. 27. 12–11–45.
435,611. BURNISHED LEAVES. Cl. 37. 1–6–48.
437,585. NIBCO WITHIN OVAL DESIGN. Cl. 13. 3–30–48.
441,510. JITTER BALL AND DESIGN. Cl. 22. 11–30–48.
442,169. KC AND DESIGN. Cl. 50. 3–1–49.
442,170. KC SAFE SEAL AND DESIGN. Cl. 50. 3–1–49.
513,238. REPRESENTATION OF BOY AND GIRL HOLDING BANNER. Cl. 39. 8–9–49.
513,239. FOSTER'S CREO-TOLU COMPOUND. Cl. 6. 8–9–49.
513,241. NOSTAL. Cl. 6. 8–9–49.
513,253. ASK FOR ROYALTON QUALITY COAL AND DESIGN. Cl. 1. 8–9–49.
513,255. MAYFAIR MAYFAIR AND SHIELD DESIGN. Cl. 17. 8–9–49.
513,256. SARATOGA. Cl. 41. 8–9–49.
513,258. LASH-MASTER. Cl. 22. 8–9–49.
513,259. FLEXOR. Cl. 8. 8–9–49.
513,260. DE LANE FASHION AND REPRESENTATION OF NEEDLE. Cl. 39. 8–9–49.
513,261. MAC GREGOR GOLD SMITH. Cl. 22. 8–9–49.
513,263. REPRESENTATION OF MERCURY. Cl. 22. 8–9–49.
513,264. SONOCIDE. Cl. 16. 8–9–49.
513,265. JINGLE BALL. Cl. 22. 8–9–49.
513,274. 3–35. Cl. 22. 8–9–49.
513,275. TÄCE AND DESIGN. Cl. 46. 8–9–49.
513,276. ELECTRO-UTEROGRAPH. Cl. 44. 8–9–49.
513,277. CAMERONOMETER. Cl. 44. 8–9–49.
513,281. 80 AND 20. Cl. 16. 8–9–49.
513,283. MB AND DESIGN. Cl. 28. 8–9–49.
513,284. NATIONETTE. Cl. 39. 8–9–49.
513,288. STERLCUP. Cl. 35. 8–9–49.
513,291. SPARROW. Cl. 22. 8–9–49.
513,293. LAZY-SUSAN. Cl. 39. 8–9–49.
513,294. LADY COTTON AND PORTRAIT OF WOMAN ON BACKGROUND DESIGN. Cl. 39. 8–9–49.
513,308. TARGET. Cl. 43. 8–9–49.
513,309. GLADIATOR. Cl. 22. 8–9–49.
513,312. RANCHO EL CAMINO. Cl. 47. 8–9–49.
513,316. 1884. Cl. 48. 8–9–49.
513,323. B-R BEST RESULT QUICK DRY ENAMEL WITH-IN TRIANGLE DESIGN. Cl. 16. 8–9–49.
513,327. "36" LINE. Cl. 16. 8–9–49.
513,328. GEOMETRIC DESIGN. Cl. 1. 8–9–49.
513,329. GEOMETRIC DESIGN. Cl. 1. 8–9–49.
513,333. CHEEZ-DILLITES. Cl. 46. 8–9–49.
513,338. SLUMBER LURE. Cl. 32. 8–9–49.
513,339. KARPEN REST. Cl. 32. 8–9–49.
513,340. MEPA. Cl. 27. 8–9–49.
513,342. HANG-ZIT. Cl. 13. 8–9–49.
513,343. WATERWITE. Cl. 32. 8–9–49.
513,344. FLEXOTYPE. Cl. 35. 8–9–49.
513,345. MEDALLION. Cl. 35. 8–9–49.
513,346. PIEDMONT. Cl. 35. 8–9–49.
513,347. SPIN CRAFT SHORT CENTER. Cl. 35. 8–9–49.
513,348. TRIANGLE. Cl. 35. 8–9–49.
513,349. HOEF-TE-DOO. Cl. 22. 8–9–49.
513,351. SQUARE. Cl. 35. 8–9–49.
513,356. CARL'S AND REPRESENTATION OF LEAF. Cl. 46. 8–9–49.
513,357. FROM MISS HICKORY'S ORCHARD AND DESIGN. Cl. 46. 8–9–49.
513,362. SKY MASTER AND REPRESENTATION OF TOY AIRPLANE. Cl. 22. 8–9–49.
513,363. PIXI-ROX. Cl. 1. 8–9–49.
513,365. BUENILUM. Cl. 13. 8–9–49.
513,369. DUTCH GIRL AND REPRESENTATION OF DUTCH GIRLS. Cl. 43. 8–9–49.
513,373. TOWN AND COUNTRY AND DESIGN. Cl. 45. 8–9–49.
513,381. NUGGET AND DESIGN. Cl. 8. 8–9–49.
513,382. NUGGET GOLD AND DESIGN. Cl. 8. 8–9–49.
513,383. BARBARA LEE. Cl. 39. 8–9–49.
513,385. SIEGLER. Cl. 13. 8–9–49.
513,387. NATA PAX. Cl. 39. 8–9–49.
513,391. WHITE MAPLE. Cl. 2. 8–9–49.
513,392. DE–85. Cl. 12. 8–9–49.
513,394. CYRENA. Cl. 28. 8–9–49.
513,395. GERMAINE. Cl. 28. 8–9–49.
513,396. JEANNENE. Cl. 28. 8–9–49.
513,397. KATHLEEN. Cl. 28. 8–9–49.
513,398. MONSIEUR. Cl. 28. 8–9–49.
513,399. REMINISCENCE. Cl. 28. 8–9–49.
513,400. MT. CARMAN. Cl. 47. 8–9–49.
513,406. PRAYER DOLL AND REPRESENTATION OF DOLL. Cl. 22. 8–9–49.
513,408. E WITHIN TRIANGLE DESIGN. Cl. 43. 8–9–49.
513,409. TROJAN. Cl. 13. 8–9–49.
513,412. SHAKY. Cl. 22. 8–9–49.
513,413. AMITY AND DESIGN. Cl. 13. 8–9–49.
513,418. BONGO AND PORTRAIT OF INDIAN. Cl. 22. 8–9–49.
513,445. SAFETUPIK. Cl. 44. 8–9–49.
513,449. FLO-PHANE. Cl. 1. 8–9–49.
513,451. BALLERINA. Cl. 22. 8–9–49.
513,454. ASHLAR. Cl. 43. 8–9–49.
513,459. EVENING STAR. Cl. 28. 8–9–49.
513,460. NEPTUNE. Cl. 28. 8–9–49.
513,461. BEECH CREEK. Cl. 12. 8–9–49.
513,466. MULFI. Cl. 27. 8–9–49.
513,467. TULIPAN. Cl. 28. 8–9–49.
513,468. GEMLIN. Cl. 27. 8–9–49.
513,474. REPRESENTATION OF LAMB WITH BALL OF YARN. Cl. 43. 8–9–49.
513,475. BABYSHIP. Cl. 43. 8–9–49.
513,476. LADYSHIP. Cl. 43. 8–9–49.
513,477. VENETIAN DANDRO AND DESIGN. Cl. 6. 8–9–49.
513,478. AZIA. Cl. 27. 8–9–49.
513,479. MARINE. Cl. 35. 8–9–49.
513,487. NO-SNAG. Cl. 6. 8–9–49.
513,488. TRUFLEX. Cl. 43. 8–9–49.
513,489. NIMBLE AND REPRESENTATION OF LEG. Cl. 6. 8–9–49.
513,496. DIAMOND TOOTH WITH DI-MOND SMILE AND PORTRAIT OF A. MALEK. Cl. 55. 8–9–49.

513,497. AETLA WITHIN CIRCULAR DESIGN. Cl. 55. 8–9–49.
513,499. NATIONAL STATIONERS ASSOCIATION ETC. AND DESIGN. Cl. 55. 8–9–49.
513,506. AIR. Cl. 55. 8–9–49.
513,509. LONDON CHARACTER LOUNGERS AND DESIGN. Cl. 39. 8–9–49.
513,510. SPOR-T-WOOL AND REPRESENTATION OF LAMB. Cl. 39. 8–9–49.
513,511. GRAPHITSTEEL. Cl. 14. 8–9–49.
513,512. BUDDY CARROLL. Cl. 39. 8–9–49.
513,514. KWICK-BURGER SANDWICH SYSTEM AND DESIGN. Cl. 46. 8–9–49.
513,515. EVERBEST AND DESIGN. Cl. 46. 8–9–49.
513,516. KAMP TOGS KAMPERALL. Cl. 39. 8–9–49.
513,517. WOOD-HILL. Cl. 46. 8–9–49.
513,519. SMOOTH-TEX. Cl. 46. 8–9–49.
513,520. SAFE-T-TRAY AND DESIGN. Cl. 2. 8–9–49.
513,521. FEATHERLITE. Cl. 39. 8–9–49.
513,524. "THE SEAL OF SEED INTEGRITY" SEEDSMEN MAYO. KNOXVILLE AND DESIGN. Cl. 1. 8–9–49.
513,526. CHROM-WALLS. Cl. 19. 8–9–49.
513,527. "SNUG STITCH". Cl. 39. 8–9–49.
513,531. SNAP-E-TOGS AND SHIELD DESIGN. Cl. 39. 8–9–49.
513,532. OLD RELIABLE POWDER. Cl. 6. 8–9–49.
513,533. FROM THE DESIGN STUDIO BY SHILLITO'S AND DESIGN. Cl. 39. 8–9–49.
513,535. DR. WHITE AND PORTRAIT OF MAN. Cl. 32. 8–9–49.
513,536. LILLY OF CALIFORNIA, INC. AND REPRESENTATION OF LILY. Cl. 39. 8–9–49.
513,538. EVEN SITE AND DESIGN. Cl. 26. 8–9–49.
513,539. "LACET SCROLLS". Cl. 39. 8–9–49.
513,541. "FOR PEACEFUL WRITING". Cl. 37. 8–9–49.
513,542. JOYCE LANE. Cl. 39. 8–9–49.
513,543. KISTERS FURS AND REPRESENTATION OF POLAR BEAR. Cl. 39. 8–9–49.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

219,072. DELTOX AND DESIGN. Cl. 42. 10–12–26. Deltox Rug Company, Oshkosh, Wis. Amended: In the statement, column 2, lines 2, 3, and 4, 'No claim is made for the words "Carpets" and "Rugs," apart from the mark as shown.' is deleted; and the drawing is amended to appear:

DELTOX

229,928. KAUFMANN'S RICHELIEU ETC. AND DESIGN. Cl. 42. 7–12–27. Kaufmann Department Stores, Inc. The May Department Stores Company, St. Louis, Mo. Amended: The third paragraph of the statement is deleted and 'No claim is made to the word "Kaufmann's" apart from the mark shown.' is inserted in lieu thereof, and the drawing is amended to appear:

Richelieu

Kaufmann's

240,479. THE LAKELAND AND DESIGN. Cl. 39. 3–27–28. H. J. Holman & Sons Inc. Lakeland Manufacturing Company, Sheboygan, Wis. Amended to appear:

Lakeland

320,008. EXSIZE. Cl. 6. 12–18–34. Premier-Pabst Corporation. Pabst Brewing Company, Chicago, Ill. Corrected: In line 5 of the statement, "sizing" should be *desizing*.

330,849. CALVET. Cl. 49. 12–17–35. J. Calvet & Cie., S. A. R. L., Bordeaux, France. Corrected: In the Renewal Certificate, on the page containing the statement, strike out the incorrect endorsement of renewant at the bottom thereof and insert instead:

RENEWED

Societe J. Calvet, Ancienne Maison J. Calvet & Cie., Societe a Responsabilite. Limitee of Bordeaux, France.

395,278. RAIN DROPS ETC. AND DESIGN. Cl. 6. 5–19–42. Bu-Tay Products, Inc. Bu-Tay Products, Ltd., Los Angeles, Calif. Amended: The second paragraph of the statement is deleted, and the drawing is amended to appear:

RAIN DROPS

403,972. SEAPORCEL. Cl. 16. 10–26–43. Seaporcel Corporation. Seaporcel Metals, Inc., Long Island City, N. Y. Amended: The description of goods, with the exception of "porcelain enamel," is deleted.

406,875. BALLCREST AND DESIGN. Cl. 46. 5–2–44. F. M. Ball & Company, Oakland, Calif. Corrected: In line 4 of the certificate, and in line 3 of the statement, "California" should be *Nevada*.

416,941. ADELINA AND DESIGN. Cl. 46. 10–9–45. F. M. Ball & Company, Oakland, Calif. Corrected: In line 4 of the certificate, and in line 3 of the statement, "California" should be *Nevada*.

417,503. MEMPHIS BELLE. Cl. 46. 10–30–45. McDonald and Olliff, Inc., Wauchula, Fla. Amended: In line 10 of the statement, "fresh" is deleted.

417,634. WAHOO. Cl. 46. 11–6–45. McDonald and Olliff, Inc., Wauchula, Fla. Amended: In line 8 of the statement, "fresh" is deleted.

429,450. P K AND DESIGN. Cl. 41. 4–29–47. Polan, Katz & Company, Inc., Baltimore, Md. Corrected: In the statement, column 2, line 3, "June 15, 1946" should be *the year 1906*.

511,102. SHADOWLINE. Cl. 39. 6–14–49. Lingerie, Inc., now by change of name Shadowline, Inc., Morganton, N. C. Amended: In the certificate, lines 2 and 13; in the heading and signature to the registration; and in line 1 of the statement and line 2 of the declaration, after "Inc.," *now by change of name Shadowline, Inc.*, is inserted.

511,487. FAIRWAY. Cl. 6. 6–21–49. Twin City Wholesale Grocer Co., now by change of name Fairway Foods, Inc., St. Paul, Minn. Amended: In the certificate, lines 3 and 13; in the heading and signature to the registration; in line 1 of the statement and line 3 of the declaration, after "Co.," *now by change of name Fairway Foods, Inc.*, is inserted; in line 4 of the statement "2285 University" is deleted and *1930 Como* is inserted in lieu thereof; and the drawing is amended to appear:

FAIRWAY

513,494. FAIRWAY. Cl. 45. 8–9–49. Twin City Wholesale Grocer Co., now by change of name Fairway Foods, Inc., St. Paul, Minn. Amended: In the certificate, lines 3 and 13; in the heading and signature to the registration; in line 1 of the statement and line 3 of the declaration, after "Co.," *now by change of name Fairway Foods, Inc.*, is inserted; in line 4 of the statement "2285 University" is deleted and *1930 Como* is inserted in lieu thereof; and the drawing is amended to appear:

FAIRWAY

515,243. IN THE OPEN AND DESIGN. Cl. 38. 9–20–49. The Register and Tribune Company, Des Moines, Iowa. Amended: In the statement, lines 9 to 13, "containing a photographic reproduction of the head of Ries Tuttle, a resident of Des Moines, Iowa, consent for the use of which has been furnished with application for registration of trade-mark," is deleted; and the drawing is amended to appear:

In The OPEN

524,339. LAZARUS "THE 42ND STREET" AND DESIGN. Cl. 39. 4–25–50. The F. & R. Lazarus Company, assignor to Federated Department Stores, Inc., Cincinnati, Ohio. Corrected: In line 6 of the statement, "boys' " should be *men's*.

527,824. EXSIZE-T. Cl. 6. 7–18–50. Pabst Brewing Company, Chicago, Ill. Corrected: In line 7 of the statement, "sizing" should be *desizing*.

533,950. FIGUREMASTER MARCHANT AND DESIGN. Cl. 26. 11–28–50. Marchant Calculating Machine Company. Marchant Calculators, Inc., Oakland, Calif. Amended to appear:

Figuremaster

590,970. FLO-SEAL. Cl. 2. 6–15–54. Floseal Corporation, Seattle, Wash. Corrected: In the certificate, lines 2 and 13, and in line 1 of the printed copy of the registration, "Flo-Seal" should be *Floseal*.

611,659. 400. Cl. 12. 9–6–55. Mycalex Corporation of America, Clifton, N. J., Corrected: In the certificate, line 3 (second occurrence), and in line 1 of the printed copy of the registration, "New Jersey" should be *New York*.

611,660. 410. Cl. 12. 9–6–55. Mycalex Corporation of America, Clifton, N. J. Corrected: In the certificate, line 3 (second occurrence), and in line 1 of the printed copy of the registration, "New Jersey" should be *New York*.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 16

120,466. Feb. 5, 1918. William H. Wright, Schenectady, N. Y. Pub. by Schenectady Varnish Company, Inc., Schenectady, N. Y.



For Varnishes, Enamels, Stains, and Colors in Oil.

CLASS 17

150,841. Jan. 10, 1922. John C. Herman & Company, Harrisburg, Pa. Pub. by Charles M. Grumbine, Hanover, Pa.

KING OSCAR

For Cigars.

CLASS 18

396,173. June 30, 1942. Sunway Vitamin Co., Chicago, Ill. Pub. by registrant.

SUNWAY

For Therapeutic Vitamin Preparation.

CLASS 26

107,910. Jan. 4, 1916. E. and T. Fairbanks and Company, St. Johnsbury, Vt. Pub. by Fairbanks, Morse & Co., Chicago, Ill.



For Weighing Machines and Parts Thereof.

332,176. Feb. 4, 1936. E. and T. Fairbanks and Company, St. Johnsbury, Vt. Pub. by Fairbanks, Morse & Co., Chicago, Ill.



No claim is made to the use of the words "Weigher" and "Scales" apart from the trademark as shown. The shape of the plate does not form part of the mark.

For Weighing Machines and Parts Thereof.

336,839. July 21, 1936. E. and T. Fairbanks and Company, St. Johnsbury, Vt. Pub. by Fairbanks, Morse & Co., Chicago, Ill.



No claim is made to the use of the word "Scales" apart from the trademark as shown, nor to the representation of the name plate.

For Weighing Machines and Parts Thereof.

CLASS 32

442,069. Feb. 8, 1949. Massachusetts Mattress Company, Boston, Mass. Pub. by registrant.



For Bedding, Including Mattresses, Box Springs, Studio Couches, and Sofa Beds.

442,253. Mar. 15, 1949. Massachusetts Mattress Company, Boston, Mass. Pub. by registrant.

LadyElaine

For Bedding, Consisting of Mattresses and Box Springs.

442,254. Mar. 15, 1949. Massachusetts Mattress Company, Boston, Mass. Pub. by registrant.

QueenGuinevere

For Bedding, Consisting of Mattresses and Box Springs.

442,255. Mar. 15, 1949. Massachusetts Mattress Company, Boston, Mass. Pub. by registrant.

Sir Galahad

For Bedding, Consisting of Mattresses and Box Springs.

442,256. Mar. 15, 1949. Massachusetts Mattress Company, Boston, Mass. Pub. by registrant.

Sir Lancelot

For Bedding, Consisting of Mattresses and Box Springs.

CLASS 37

438,801. May 11, 1948. James Jewett Bradford, Burbank, Calif. Pub. by registrant.

MINIMOUNT

For Paper Film Mounts for Use With Picture Projection Machines Sold as Such.

CLASS 39

333,105. Mar. 10, 1936. Eby Shoe Corporation, Ephrata, Pa. Pub. by registrant.



No claim is made to the exclusive use of the words "The Line Beautiful" apart from the mark as shown.

For Shoes Made of Leather, Rubber, Canvas, Fabric, or Composition, or Combinations Thereof.

397,421. Sept. 8, 1942. Leopold B. Schwab, New York, N. Y. Pub. by Murphy, Brill and Sahner, Incorporated, New York, N. Y.



No claim is made to the words "Sox" and "As Durable as the Name Implies" apart from the mark shown on the drawing.

For Men's Hosiery.

CLASS 43

313,577. June 5, 1934. Emile Bernat & Sons Co., Jamaica Plain, Mass. Pub. by registrant.



For Woolen, Cotton, Linen, Silk, and Artificial Silk Yarn.

390,817. Oct. 7, 1941. Emile Bernat & Sons Co., Jamaica Plain, Mass. Pub. by registrant.



For Yarns.

CLASS 45

105,566. Aug. 3, 1915. Stevenson & Howell, Limited, London, England. Pub. by registrant.

ORANA

For Non-Alcoholic Carbonated Beverages and Fruit Essences for Making Same.

CLASS 49

46,616. Sept. 26, 1905. G. F. Heublein & Bro., Hartford, Conn. Pub. by Heublein, Inc., Hartford, Conn.

The Club

For Cocktails.

96,292. Apr. 14, 1914. G. F. Heublein & Bro., Hartford, Conn. Pub. by Heublein, Inc., Hartford, Conn.

MILSHIRE

For Gin.

371,835. Oct. 10, 1939. J. A. Dougherty's Sons, Inc., Distillers, Philadelphia, Pa. Pub. by J. A. Dougherty's Sons, Incorporated, Distillers, Philadelphia, Pa.

Dougherty's

For Whiskey.

390,041. Sept. 2, 1941. G. F. Heublein & Bro., Hartford, Conn. Pub. by Heublein, Inc.

Huguenot

For Brandy.

395,217. May 19, 1942. J. A. Dougherty's Sons, Incorporated, Distillers, Philadelphia, Pa. Pub. by registrant.

COUNTRY GENTLEMAN

For Whiskey.

LIST OF REGISTRANTS OF TRADEMARKS

AB Atvidabergs Butiksinredningar, Stockholm, Sweden. 619,495, pub. 10–18–55. Cl. 32.

A. B. C. Packing Co., Homestead, Fla. 619,573, pub. 10–25–55. Cl. 46.

ABC Vending Corp., New York, N. Y. 619,542, pub. 10–18–55. Cl. 46.

Abercrombie & Fitch Co., New York, N. Y. 513,256, canc. Cl. 41.

Adams, Frank L., Co. of Massachusetts: *See*—
Adams, Frank L., & Son Co.

Adams, Frank L., & Son Co., d. b. a. Frank L. Adams Co. of Massachusetts, Worcester, Mass. 619,338, pub. 10–18–55. Cl. 16.

Adams, Pierce, d. b. a. Armand Mfg. Co., Kansas City, Mo. 619,320, pub. 10–18–55. Cl. 13.

Advance Solvents & Chemical Corp., New York, N. Y. 619,263, pub. 10–18–55. Cl. 6.

Aetna Life Insurance Co., Hartford, Conn. 513,497, canc. Cl. 35.

Air Cargo, Inc., Wilmington, Del, and Washington, D. C. 513,506, canc. Cl. 55.

Aird-Don Co., Troy, N. Y. 513,409, canc. Cl. 13.

Air Reduction Co., Inc., New York, N. Y. 619,280, pub. 10–18–55. Cl. 6.

Aktiengesellschaft Cilander, Herisau, Switzerland. 619,535, pub. 10–18–55. Cl. 42.

Alar Products, Inc., Cleveland, Ohio. 619,318–19, pub. 10–18–55. Cl. 13.

Albers Milling Co., Los Angeles, Calif. 619,540, pub. 1–22–52. Cl. 46.

Allis-Chalmers Mfg. Co., West Allis, Wis. 619,453, pub. 10–18–55. Cl. 23.

Alloy Steel Products Co., Boston and Dorchester, Mass., to Alloy Steel Products Co., Linden, N. J. 333,750, ren. 4–7–56. Cl. 13.

American Beverage Corp., Brooklyn, N. Y. 513,373, canc. Cl. 45.

American Cyanamid Co., New York, N. Y. 619,261, pub. 10–18–55. Cl. 6.

American Home Products Corp., d. b. a. Wyeth Laboratories, Division of American Home Products Corp., Philadelphia, Pa. 619,360, pub. 10–18–55. Cl. 18.

American Maintenance Supply Co., Chicago, Ill. 619,266, pub. 10–18–55. Cl. 6.

American Measuring Instrument Corp., Long Island City, N. Y. 619,413, pub. 10–18–55. Cl. 21.

American Metal Specialties Corp., Hatboro, Pa. 619,419, pub. 10–18–55. Cl. 22.

American Sugar Refining Co., The, New York, N. Y. 73,094, canc. Cl. 46.

American Sugar Refining Co., The, New York, N. Y. 73,096, canc. Cl. 46.

American Vending Corp., Oakbrook, Hinsdale, Ill. 619,444, pub. 10–18–55. Cl. 23.

American Wine Growers, d. b. a. The Pommerelle Co., Seattle, Wash. 619,595, pub. 10–18–55. Cl. 47.

Ames Co., Inc.: *See*—
Riedel-de-Haen, Inc.

Ames Co., Inc., Elkhart, Ind. 513,241, canc. Cl. 6.

Amity Notion Co., Inc., New York, N. Y. 513,413, canc. Cl. 13.

Andrew, Lucy B.: *See*—
Brett, William J.

Ansul Chemical Co., Marinette, Wis. 619,483, pub. 10–18–55. Cl. 26.

Apacs International Corp., New York, N. Y. 619,520, pub. 10–18–55. Cl. 39.

Aquatrols Corp. of America, Bryn Mawr, Pa. 619,282, pub. 10–18–55. Cl. 6.

Arco Co., The, Cleveland, Ohio. 619,333, pub. 7–15–52. Cl. 16.

Arden, Elizabeth, Sales Corp., New York, N. Y. 513,477, canc. Cl. 6.

Armand Mfg. Co.: *See*—
Adams, Pierce.

Armour and Co., Chicago, Ill. 513,344–8, canc. Cl. 35.

Armour and Co., Chicago, Ill. 513,351, canc. Cl. 35.

Armour and Co., Chicago, Ill. 619,364, pub. 10–18–55. Cl. 18.

Armour and Co., Chicago, Ill. 619,622–3, pub. 10–18–55. Cl. 52.

Armstrong Cork Co., Lancaster, Pa. 619,397–8, pub. 10–18–55. Cl. 20.

Aronson, Charles N., d. b. a. Aronson Machine Co., Arcade, N. Y. 619,431, pub. 10–18–55. Cl. 23.

Aronson Machine Co.: *See*—
Aronson, Charles N.

Art Metal Co., The, Cleveland, Ohio. 619,408–11, pub. 10–18–55. Cl. 21.

Arthur-Brandt Corp., New York, N. Y. 513,527, canc. Cl. 39.

Associated Advertising, Weston, Ontario, Canada. 619,603, pub. 10–25–55. Cl. 50.

Associated Merchandising Corp., The, New York, N. Y. 513,383, canc. Cl. 39.

Associated Merchandising Corp., The, New York, N. Y. 619,450, pub. 10–18–55. Cl. 23.

Associated Research Laboratory: *See*—
Baltimore Engineering & Chemical Co., The.

Asgod of California, Inc., d. b. a. Pit-Bar Mfg. Co., Los Angeles, Calif. 619,491, pub. 10–18–55. Cl. 29.

Atlas Cordage Co.: *See*—
Dulzend, Howard.

Axelrod, A. M., & Son, Inc., Englewood, N. J. 619,577, pub. 10–18–55. Cl. 46.

B. R. Co.: *See*—
Bronson Reel Co.

Bache, Semon, & Co., New York, N. Y. 513,343, canc. Cl. 32.

Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen on Rhine, Germany. 619,269, pub. 6–28–55. Cl. 6.

Bailey, Carolyn S., Temple, N. H. 513,357, canc. Cl. 46.

Baker Extract Co., Springfield, Mass. 619,552, pub. 10–18–55. Cl. 46.

Baldwin & Walker Ltd., Halifax, Yorkshire, England. 513,474–6, canc. Cl. 43.

Ball, F. M., & Co., Oakland, Calif. 406,873, cor. Cl. 46.

Ball, F. M., & Co., Oakland, Calif. 416,941, cor. Cl. 46.

Baltimore Engineering & Chemical Co., The, d. b. a. Associated Research Laboratory, Baltimore, Md. 619,367, pub. 10–18–55. Cl. 18.

Baltimore & Ohio Railroad Co., The, Baltimore, Md. 619,642, pub. 10–18–55. Cl. 105.

Banball Co.: *See*—
Carroad, Anne.

Barash Co., Inc., The, New York, N. Y. 619,695. Cl. 50.

Barlow, Joseph S., Altadena, Calif. 619,443, pub. 10–18–55. Cl. 23.

Barmotive Products, Inc., San Leandro, Calif. 619,480, pub. 10–18–55. Cl. 26.

Barth Levitt Products, Lynbrook, N. Y. 619,377–8, pub. 10–18–55. Cl. 18.

Basford, H. R., Co., San Francisco, Calif. 619,463, pub. 10–18–55. Cl. 23.

Bates & Co. (Huddersfield), Ltd., Huddersfield, England. 513,454, canc. Cl. 43.

Bayshore Industries, Inc., Elkton, Md. 441,510, canc. Cl. 22.

Bear Brand Hosiery Co., Chicago, Ill. 619,685. Cl. 39.

Bell & Howell Co., Chicago, Ill. 619,475, pub. 10–18–55. Cl. 26.

Bemis Bros. Bag Co., Minneapolis, Minn. 619,247, pub. 10–18–55. Cl. 2.

Bercut Richards Packing Co., Sacramento, Calif. 333,659, ren. 3–31–56. Cl. 46.

Bernahl, Adelina C., d. b. a. Gara Venta, Grass Valley, Calif. 513,363, canc. Cl. 1.

Bernat, Emile, & Sons Co., Jamaica Plain, Mass. 313,577, 12(c) pub. 1–17–56. Cl. 43.

Bernat, Emile, & Sons Co., Jamaica Plain, Mass. 390,817, 12(c) pub. 1–17–56. Cl. 43.

Best Restaurants United, Inc., Richmond, Va. 619,632, pub. 10–18–55. Cl. 100.

Big Chief Medicine Co.: *See*—
Scruggs, Barney T.

Bigelow-Sanford Carpet Co., Inc., Wilmington, Del. 619,688. Cl. 42.

Billow, Benjamin, New York, N. Y. 186,884, canc. Cl. 39.

Billow, Benjamin, New York, N. Y. 390,484, canc. Cl. 39.

Blackhawk Mfg. Co., West Allis, Wis. 619,454, pub. 10–18–55. Cl. 23.

Blackmer Pump Co., Grand Rapids, Mich. 619,440, pub. 10–18–55. Cl. 23.

Blue Crest Products Co., Los Angeles, Calif. 619,379, pub. 10–18–55. Cl. 18.

Bluejet Chain Division: *See*—
Titan Chain Saws, Inc.

Blue Ribbon Paint Co., Wheeling, W. Va. 513,323, canc. Cl. 16.

Bogan, Mattie W., d. b. a. T. C. Bogan, Chicago, Ill. 513,239, canc. Cl. 6.

Bogan, T. C.: *See*—
Bogan, Mattie W.

Boucher, Marcel, et Cie, New York, N. Y. 513,283, canc. Cl. 28.

Bradford, James J., Burbank, Calif. 438,801, 12(c) pub. 1–17–56. Cl. 37.

Brett, William J., to L. B. Andrew, New York, N. Y. 105,910, ren. 8–24–55. Cl. 40.

Briddell, Chas. D., Inc., Crisfield, Md. 619,459, pub. 10–18–55. Cl. 23.

Bridgeton Co., Inc., The, Pascoag, R. I. 513,369, canc. Cl. 43.

British Tap and Die Co. Ltd., The, Edmonton, London, England. 619,433–4, pub. 7–5–55. Cl. 23.

Bronson Reel Co., Bronson, now by change of name B. R. Co., to McAleer Mfg. Co., Rochester, Mich. 513,309, canc. Cl. 22.

Buehner & Wanner, Inc., New York, N. Y. 513,365, canc. Cl. 13.

Burke Golf Equipment Corp., Newark, Ohio. 619,657. Cl. 22.

Burnham Corp., Irvington, N. Y. 619,502, pub. 10–18–55. Cl. 34.

Burnsville Hosiery Mills, Inc., Burnsville, N. C. 619,682. Cl. 39.

Bu-Tay Products, Inc. Bu-Tay Products, Ltd., Los Angeles, Calif. 395,278. Am. 7(d). Cl. 6.

Bu-Tay Products, Ltd.: *See*—
Bu-Tay Products, Inc.

C. & R. Mfg. Co., Kearney, Nebr. 619,420, pub. 10–18–55. Cl. 22.

Cadmus Long Span and Joist Corp., Alexandria, Va. 619,301, pub. 10–18–55. Cl. 12.
California Forms, Inc., Culver City, Calif. 619,521, pub. 10–18–55. Cl. 39.
Calvet, J., & Cie., S. A. R. L., Bordeaux, France. 330,849, cor. Cl. 49.
Cameron Heartometer Co., Chicago, Ill. 513,276–7, canc. Cl. 44.
Cameron, June, d. b. a. Lady Gay, New York, N. Y. 619,613, pub. 10–18–55. Cl. 51.
Camp E-Z Co.: *See*—
Mocraft, Lester G.
Campbell & Sons Mfg. Corp., Yonkers, N. Y. 513,521, canc. Cl. 39.
Cannon, H. P., & Son, Inc., Bridgeville, Del. 108,981, ren. 3–14–56. Cl. 46.
Caoutchouc Laboratories, Inc., to Filatex Corp., New York, N. Y. 331,594, ren. 1–14–56. Cl. 43.
Carborundum Co., The, Niagara Falls, N. Y. 75,154, canc. Cl. 4.
Carnation Co., Los Angeles, Calif. 619,550 pub. 10–18–55. Cl. 46.
Carroad, Anne, d. b. a. Banball Co., Elmhurst, N. Y. 619,422, pub. 10–18–55. Cl. 22.
Carté Co., Chicago, Ill. 513,489, canc. Cl. 6.
Casa Blanca Cigar Co., York, Pa. 619,343–4, pub. 10–18–55. Cl. 17.
Castmaster Fishing Reel Corp., Tulsa, Okla. 513,258, canc. Cl. 22.
Cathodeon Ltd., Cambridge, England. 619,400, pub. 5–3–55. Cl. 21.
Cavalier Cravat Co., Louisville, Ky. 619,526, pub. 10–18–55. Cl. 39.
Celotex Corp., The, Chicago, Ill. 619,302 pub. 10–18–55. Cl. 12.
Celotex Corp., The, Chicago, Ill. 619,306, pub. 10–18–55. Cl. 12.
Central Scientific Co., Chicago, Ill. 619,472, pub. 10–18–55. Cl. 26.
Chambliss, John A., Chattanooga, Tenn. 619,289–93, pub. 10–18–55. Cl. 9.
Champion-International Co., Lawrence, Mass. 619,664. Cl. 37.
Champion Textile Finishing Co., Chicago, Ill. 619,258, pub. 10–18–55. Cl. 6.
Chanel, Inc., New York, N. Y. 619,522, pub. 10–18–55. Cl. 39.
Charleston Rubber Co., Charleston, S. C. 619,337, pub. 10–18–55. Cl. 16.
Chatham Mfg. Co., Elkin, N. C. 619,532, pub. 10–18–55. Cl. 42.
Chattanooga Medicine Co., The, Chattanoogs, Tenn. 330,084, ren. 11–19–55. Cl. 18.
Chemical Cleaning Service Inc., New York, N. Y. 619,621, pub. 10–18–55. Cl. 52.
Chemical Corp., The, Springfield, Mass. 619,231, pub. 10–18–55. Cl. 2.
Chemische Fabriken Dr. Joachim Wiernik & Co. Aktiengesellschaft, Berlin-Waidmannlust, Germany, to Veritas Drug Co. Ltd., Shrewsbury, England. 330,664, ren. 12–10–55. Cl. 18.
Cherry-Burrell Corp., Chicago, Ill. 619,234, pub. 10–18–55. Cl. 2.
Chicago Flexible Shaft Co., Chicago, Ill. 264,972, canc. Cl. 44.
Christian Brothers of California, The: *See*—
De La Salle Institute.
Chromalloy Corp., New York, N. Y. 619,644, pub. 10–18–55. Cl. 106.
Chula Vista Mutual Lemon Assn., Chula Vista, Calif. 353,853, canc. Cl. 45.
Cincinnati Soap Co., The, to The Procter & Gamble Co., Cincinnati, Ohio. 326,290, ren. 7–23–55. Cl. 52.
Cinelli, Matthew N., d. b. a. Durrelle Products Co., to Durrelle, Inc., New York, N. Y. 513,418, canc. Cl. 22.
Clamp Nail Co., Chicago, Ill. 513,385, canc. Cl. 13.
Clark Equipment Co., Buchanan, Mich. 619,468, pub. 10–18–55. Cl. 23.
Clark, Ernest D., Worcester, Mass. 619,243, pub. 10–18–55. Cl. 2.
Class Watch Strap Co.: *See*—
Gotbeter, Julius.
Coast Cable, Inc., Los Angeles, Calif. 619,401, pub. 10–18–55. Cl. 21.
Cohen, Sam, d. b. a. Cohen's Chicken House, Junction City, Kans. 619,564, pub. 10–18–55. Cl. 46.
Cohen, Sue S., d. b. a. Sue Sets, New York, N. Y. 513,293, canc. Cl. 39.
Cohen's Chicken House: *See*—
Cohen, Sam.
Coleman Co., Inc., The, Wichita, Kans. 619,504, pub. 10–18–55. Cl. 34.
Collett, Mary J., Denver, Colo. 619,645, pub. 10–18–55. Cl. 107.
Colorado Milling and Elevator Co., The: *See*—
Wilson Milling & Elevator Co., The.
Columbia Broadcasting System, Inc., New York, N. Y. 619,477, pub. 10–18–55. Cl. 26.
Columbia Eastern Corp., New York, N. Y. 418,280, canc. Cl. 27.
Columbia Silica Sand Co., Columbia, S. C. 619,230, pub. 10–18–55. Cl. 1.
Conkey, G. E., Co.: *See*—
Conkey, G. E., Co., The.
Conkey, G. E., Co., The, to G. E. Conkey Co., Cleveland, Ohio. 513,532, canc. Cl. 6.
Connecticut Mutual Life Insurance Co., The, Hartford, Conn. 619,637, pub. 10–18–55. Cl. 102.
Consolidated Millinery Co., Chicago, Ill. 234,012–13, canc. Cl. 39.
Consolidated Millinery Co., Chicago, Ill. 234,015, canc. Cl. 39.
Consolidated Millinery Co., Chicago, Ill. 234,241, canc. Cl. 39.
Consolidated Millinery Co., Chicago, Ill. 234,977, canc. Cl. 39.
Consolidated Millinery Co., Chicago, Ill. 236,576–7, canc. Cl. 39.
Continental Gummiwerke Aktiengesellschaft, Hannover, Germany. 619,418, pub. 10–18–55. Cl. 22.
Cook, L. P.: *See*—
Cook, Lucius P.
Cook, L. P., & Son, Inc.: *See*—
Cook, Lucius P.
Cook, Lucius P., d. b. a. L. P. Cook, to L. P. Cook & Son, Inc., Memphis, Tenn. 329,804, ren. 11–12–55. Cl. 1.
Cooper, William, & Nephews, Inc., Chicago, Ill. 333,208, ren. 3–10–56. Cl. 6.
Coöperatieve Vee-afzet en Verwerkingscentrale G. A. (bij verkorting genaamd Vleeschcentrale), Rotterdam, Netherlands. 619,562, pub. 10–18–55. Cl. 46.
Cooperativa Cafeteros de Puerto Rico, Ponce, Puerto Rico. 619,543–6, pub. 2–24–53. Cl. 46.
Corinth Machinery Co., Corinth, Miss. 619,461, pub. 10–18–55. Cl. 23.
Coronet Tie Shops, Inc., Atlanta, Ga. 619,649. Cl. 3.
Coronets Co., The: *See*—
Masterson, Horace L.
Corrugated Container Co., The, Columbus, Ohio. 619,238, pub. 10–18–55. Cl. 2.
Costa, Ann, Miami, Fla. 619,684. Cl. 39.
Coty, Inc., New York, N. Y. 414,120, canc. Cl. 6.
Courtaulds, Inc., Wilmington, Del. 619,229, pub. 10–18–55. Cl. 1.
Coy Delinting Co., Coy, Ark. 619,227, pub. 10–18–55. Cl. 1.
Crafton Mutual Orchards, Mentone and Crafton, to Crafton Orange Growers Association, Mentone, Calif. 333,695, ren. 3–31–56. Cl. 46.
Crafton Orange Growers Association: *See*—
Crafton Mutual Orchards.
Craig Machine, Inc., Danvers, Mass. 619,508, pub. 10–18–55. Cl. 37.
Cresca Co., Inc., New York, N. Y. 333,657, ren. 3–31–56. Cl. 46.
Cross-Country Pencil Corp., Cleveland, Ohio. 513,541, canc. Cl. 37.
Crown Zellerbach Corp., d. b. a. National Paper Products Co. and Nata Products Co., San Francisco, Calif. 513,387, canc. Cl. 39.
Crown Zellerbach Corp., San Francisco, Calif. 619,515, pub. 10–18–55. Cl. 37.
Crown Zellerbach Corp., San Francisco, Calif. 619,517, pub. 10–18–55. Cl. 37.
Cuban Cordage & Rope Co. S. A., Guanajay, Cuba. 619,288, pub. 10–18–55. Cl. 7.
Cucamonga Valley Wine Co.: *See*—
Val, Giovanni.
Curtis, Helene, Industries, Inc., Chicago, Ill. 619,608, pub. 10–5–54. Cl. 51.
Curtis, Helene, Industries, Inc., Chicago, Ill. 619,609–10, pub. 10–18–55. Cl. 51.
D W G Cigar Corp., Detroit, Mich. 619,345, pub. 10–18–55. Cl. 17.
Daggett Chocolate Co., d. b. a. Master Chocolate Makers, Cambridge, Mass. 619,559, pub. 10–18–55. Cl. 46.
Dartell Laboratories: *See*—
Dartell, Norman.
Dartell, Norman, d. b. a. Dartell Laboratories, Los Angeles, Calif. 619,376, pub. 10–18–55. Cl. 18.
Daubert Chemical Co.: *See*—
Nox-Rust Chemical Corp.
De Beer, J., & Son, Albany, N. Y. 619,425, pub. 10–18–55. Cl. 22.
Debutante Furs Inc., New York, N. Y. 619,679. Cl. 39.
Decatur Pump Co., Decatur, Ill. 331,464, ren. 1–7–56. Cl. 23.
Delane Dress Co. Inc., New York, N. Y. 513,260, canc. Cl. 39.
De La Salle Institute, d. b. a. Mont La Salle Vineyards and as The Christian Brothers of California, Napa, Calif. 619,592, pub. 10–25–55. Cl. 47.
Deltox Rug Co., Oshkosh, Wis. 219,072. Am. 7(d). Cl. 42.
De Trey, Emanuel, Pully/Lausanne, Switzerland. 329,616, ren. 11–5–55. Cl. 44.
Deutsche Gesellschaft für Schädlingsbekämpfung m. b. H., Frankfurt am Main, Germany. 619,254, pub. 4–5–55. Cl. 6.
Diamantprodukter Aktiebolag: *See*—
Engis Equipment Co.
Dierks Forests, Inc., Kansas City, Mo. 619,304, pub. 11–8–55. Cl. 12.
Dion, Ponca City, Okla. 619,606, pub. 10–18–55. Cl. 50.
Divak Furniture Co., New York, N. Y. 513,535, canc. Cl. 32.
Diversey Corp., The, Chicago, Ill. 619,284, pub. 10–18–55. Cl. 6.
Dixie Cup Co.: *See*—
Individual Drinking Cup Co. Inc.
Dobie, George, & Son Ltd., Paisley, Scotland. 325,999, ren. 7–9–55. Cl. 17.
Doeskin Products, Inc.: *See*—
San-Nap-Pak Mfg. Co., Inc.
Doughboy Industries, Inc., New Richmond, Wis. 619,554, pub. 10–18–55. Cl. 46.
Dougherty's, J. A., Sons, Inc., Distillers, by J. A. Dougherty's Sons, Inc., Distillers, Philadelphia, Pa. 371,835, 12(c) pub. 1–17–56. Cl. 49.
Dougherty's, J. A., Sons, Inc., Distillers, Philadelphia, Pa. 395,217, 12(c) pub. 1–17–56. Cl. 49.

Dow Chemical Co., The, Midland, Mich. 619,273, pub. 10–18–55. Cl. 6.
Drew, E. F., & Co., Inc., New York, N. Y. 619,368–9, pub. 10–18–55. Cl. 18.
Drott Mfg. Corp., Wausau, Wis. 619,458, pub. 10–18–55. Cl. 23.
Drug Products Co., Inc., The, Brooklyn, N. Y. 619,384, pub. 10–18–55. Cl. 18.
Du Bois Co., Inc., The, Cincinnati, Ohio. 619,619, pub. 10–18–55. Cl. 52.
Duck-Pluck: *See*—
Merritt, Clifton E., and Korn.
Dulzend, Howard, d. b. a. Atlas Cordage Co., Chicago, Ill. 619,285, pub. 10–18–55. Cl. 7.
Dunham, C. A., Co., Chicago, Ill. 239,547, canc. Cl. 34.
Dunhill, Alfred, of London, Inc., New York, N. Y. 513,381–2, canc. Cl. 8.
Du Pont, E. I., de Nemours and Co., Wilmington, Del. 619,276, pub. 10–18–55. Cl. 6.
Durrelle, Inc.: *See*—
Cinelli, Matthew N.
Durrelle Products Co.: *See*—
Cinelli, Matthew N.
Du-Wal Inc., River Grove, Ill. 619,407, pub. 10–18–55. Cl. 21.
Eagle-Picher Co., The, Cincinnati, Ohio. 513,392, canc. Cl. 12.
Eastman Kodak Co., Rochester, N. Y. 619,228, pub. 10–18–55. Cl. 1.
Eastman Kodak Co., Rochester, N. Y. 619,246, pub. 10–18–55. Cl. 2.
Easy Day Mfg. Co., Brookline, Mass. 619,489, pub. 10–18–55. Cl. 29.
Eby Shoe Corp., Ephrata, Pa. 333,105, 12(c) pub. 1–17–56. Cl. 39.
Eddystone Mfg. Co., The, Eddystone, Pa. 73,440, canc. Cl. 42.
Eight in One Co., Chicago, Ill. 405,609, canc. Cl. 6.
El-Jay Mfg. Co.: *See*—
Johnson, Louis W.
Elkhart Heater Corp., Elkhart, Ind. 619,500, pub. 10–18–55. Cl. 34.
Elmore Corp., The, Spindale, N. C. 513,408, canc. Cl. 43.
Emery Industries, Inc., Cincinnati, Ohio. 619,275, pub. 10–18–55. Cl. 6.
Empire Mfg. Co., Winder, Ga. 333,441–2, ren. 3–24–56. Cl. 39.
Endicott Johnson Corp., Endicott, N. Y. 255,749, canc. Cl. 39.
Endicott Johnson Corp., Endicott, N. Y. 256,636, canc. Cl. 22.
Endicott Johnson Corp., Endicott, N. Y. 256,935, canc. Cl. 39.
Endicott Johnson Corp., Endicott, N. Y. 257,486, canc. Cl. 39.
Eneré Co., The: *See*—
Gordon, Irene.
Engelhorn, John, & Sons, Newark, N. J. 619,556, pub. 10–18–55. Cl. 46.
Engineering Foundry Inc., Cedar Springs, Mich. 619,331, pub. 10–18–55. Cl. 14.
Engis Equipment Co., Chicago, Ill., to Diamantprodukter Aktiebolag, Hagersten, Sweden. 619,399, pub. 2–8–55. Cl. 21.
Englander Co., Inc., The, Chicago, Ill. 619,497, pub. 10–18–55. Cl. 32.
Englander Spring Bed Co., Brooklyn, N. Y. 261,625, canc. Cl. 32.
Englander Spring Bed Co. Inc., The, Brooklyn, N. Y. 351,660, canc. Cl. 32.
Epps, F. Stevens, d. b. a. Kointainer Co., Homer, Mich. 619,244, pub. 10–18–55. Cl. 2.
Erwin Cotton Mills Co., The, West Durham, to Erwin Mills, Inc., Durham, N. C. 333,066, ren. 3–10–56. Cl. 42.
Erwin Cotton Mills Co., The, West Durham, to Erwin Mills, Inc., Durham, N. C. 333,469, ren. 3–24–56. Cl. 42.
Erwin Mills, Inc.: *See*—
Erwin Cotton Mills Co., The.
Essex Wire Corp.: *See*—
Rea Magnet Wire Co., Inc.
Essex Wire Corp., Detroit, Mich. 619,415, pub. 9–20–55. Cl. 21.
Eugene Fruit Growers Assn., Eugene, Oreg. 351,801, canc. Cl. 46.
Eugene, Ltd., New York, N. Y. 200,352, canc. Cl. 6.
Eugene, Ltd., New York, N. Y. 202,760, canc. Cl. 40.
Eugene, Ltd., New York, N. Y. 223,852, canc. Cl. 6.
Everglades Industries Corp., Miami, Fla. 619,240, pub. 10–18–55. Cl. 2.
Evins, Inc., New York, N. Y. 619,528, pub. 10–18–55. Cl. 39.
Exhibit Supply Co., Chicago, Ill. 513,451, canc. Cl. 22.
Experiment Inc., Richmond, Va. 619,627, pub. 10–18–55. Cl. 100.
Fabian, Stanley L., d. b. a. The Safe-T-Seal Laboratories, Los Angeles, Calif. 619,279, pub. 10–18–55. Cl. 6.
Fabrique de Montres Avia, Degoumois & Co. S. A.: *See*—
Fabrique des Montres Avia Degoumois & Co.
Fabrique des Montres Avia Degoumois & Co., now by change of name Fabrique de Montres Avia, Degoumois & Co. S. A., Neuchatel, Switzerland. 513,478, canc. Cl. 27.
Fabrique d'Horlogerie Henri Muller et Fils S. A. Montres Mulli, La Chaux-de-Fonds, Switzerland. 513,466, canc. Cl. 27.
Fairbanks, E. and T., and Co., St. Johnsbury, Vt., by Fairbanks, Morse & Co., Chicago, Ill. 107,910, 12(c) pub. 1–17–56. Cl. 26.
Fairbanks, E. and T., and Co., St. Johnsbury, Vt., by Fairbanks, Morse & Co., Chicago, Ill. 332,176, 12(c) pub. 1–17–56. Cl. 26.
Fairbanks, E. and T., and Co., St. Johnsbury, Vt., by Fairbanks, Morse & Co., Chicago, Ill. 336,839, 12(c) pub. 1–17–56. Cl. 26.
Fairbanks, Morse & Co.: *See*—
Fairbanks, E. and T., and Co.
Fairmont Machinery Co., Fairmont, W. Va. 619,639, pub. 10–18–55. Cl. 103.
Fairway Foods, Inc.: *See*—
Twin City Wholesale Grocer Co.
Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. 619,278, pub. 10–18–55. Cl. 6.
Farber Brothers, Inc., Memphis, Tenn. 619,394, pub. 10–18–55. Cl. 19.
Feadship, Inc., Greenwich, Conn. 619,390, pub. 10–18–55. Cl. 19.
Federated Department Stores, Inc.: *See*—
Lazarus, F. & R., Co., The.
Ferro Electric Products, Inc., The, Kirkland, Ill. 619,405, pub. 10–18–55. Cl. 21.
Fibreboard Products (Eastern Division) Inc., Philadelphia, Pa. 619,245, pub. 10–18–55. Cl. 2.
Fiestar, Inc., Roslyn Heights, N. Y. 619,294, pub. 10–18–55. Cl. 10.
Filatex Corp.: *See*—
Caoutchouc Laboratories, Inc.
Filtrine Mfg. Co., Brooklyn, N. Y. 619,493, pub. 10–18–55. Cl. 31.
Finishine Laboratories, Inc., Syracuse, N. Y. 619,336, pub. 10–18–55. Cl. 16.
Firestone Tire & Rubber Co., The, Akron, Ohio. 619,470, pub. 10–18–55. Cl. 24.
Fischer Meat Co., St. Louis, Mo. 193,405, canc. Cl. 46.
Fiske Brothers Refining Co., Newark, N. J. 331,805, ren. 1–21–56. Cl. 15.
Fitz-Gerald & Litrov, El Centro, Calif. 619,560, pub. 10–18–55. Cl. 46.
Flex-O-Glass, Inc., Chicago, Ill. 619,598, pub. 10–25–55. Cl. 50.
Flintkote Co., The, New York, N. Y. 619,303, pub. 10–18–55. Cl. 12.
Floseal Corp., Seattle, Wash. 590,970, cor. Cl. 2.
Foote Mineral Co., Philadelphia, Pa. 619,260, pub. 10–18–55. Cl. 6.
Foremost Sales Corp.: *See*—
Golden State Sales Corp.
Foster Canning Co., Inc., The, Farmingdale, N. J. 331,427, ren. 1–7–56. Cl. 46.
Frank Tea & Spice Co., The, Cincinnati, Ohio. 619,581–2, pub. 10–18–55. Cl. 46.
Franklin County Coal Corp., Chicago, Ill. 513,253, canc. Cl. 1.
Freeman, Albert, d. b. a. The Televear Co., New York, N. Y. 619,402, pub. 10–18–55. Cl. 21.
Fried Leather Co., Inc., New York, N. Y. 513,479, canc. Cl. 35.
Fruit Industries Research Foundation, Yakima, Wash. 619,628, pub. 10–18–55. Cl. 100.
Fuller, D. B., & Co., Inc., New York, N. Y. 619,687. Cl. 42.
Fuller, D. B., & Co., Inc., New York, N. Y. 619,689. Cl. 42.
Furth, Louis, Inc., New York, N. Y. 619,589, pub. 10–25–55. Cl. 46.
Gagne, Antoine F., Jr., Binghamton, N. Y. 619,488, pub. 10–18–55. Cl. 26.
Galloway Coal Co., Memphis, Tenn. 359,172, canc. Cl. 1.
Games Of The Month Inc., New York, N. Y. 619,423, pub. 10–18–55. Cl. 22.
Gara, Venta: *See*—
Bernahl, Adelina C.
Garantol-Gesellschaft Grube & Co., Grotzingen, Baden, Germany. 619,605, pub. 10–18–55. Cl. 50.
Geigy Chemical Corp., New York, N. Y. 619,270, pub. 10–18–55. Cl. 6.
Geigy Chemical Corp., New York, N. Y. 619,348, pub. 10–18–55. Cl. 18.
General Aniline & Film Corp., New York, N. Y. 619,259, pub. 10–18–55. Cl. 6.
General Blower Co., Morton Grove, Ill. 619,503, pub. 10–18–55. Cl. 34.
General Cosmetics Corp., to Surrey Products, Inc., New York, N. Y. 332,438, ren. 2–11–56. Cl. 51.
General Dynamics Corp., San Diego, Calif. 619,395, pub. 10–18–55. Cl. 19.
General Electric Co., Schenectady, N. Y. 332,991, ren. 3–10–56. Cl. 23.
General Electric Co., Schenectady, N. Y. 333,081, ren. 3–10–56. Cl. 23.
General Electric Co., Schenectady, N. Y. 619,252, pub. 10–18–55. Cl. 6.
General Electric Co., Bridgeport, Conn. 619,416, pub. 10–18–55. Cl. 21.
General Printed String Co., Milwaukee, Wis. 619,287, pub. 10–18–55. Cl. 7.
General Refractories Co., Philadelphia, Pa. 513,461, canc. Cl. 12.
Gillette Co., The, d. b. a. The Toni Co., Boston, Mass. 619,611, pub. 10–18–55. Cl. 51.
Gillette Publishing Co., Chicago, Ill. 619,671. Cl. 38.
Ginmart Co., Scarsdale, N. Y. 619,242, pub. 10–18–55. Cl. 2.
Gittelman's Sons, Inc., Philadelphia, Pa. 619,676. Cl. 39.
Glaser, Crandell Co., Chicago, Ill. 513,515, canc. Cl. 46.
Glowth, William, West Palm Beach, Fla. 619,602, pub. 10–25–55. Cl. 50.
Golden State Sales Corp., San Francisco, Calif., now by change of name Foremost Sales Corp. 619,236, pub. 10–18–55. Cl. 2.

Gordon, Irene, d. b. a. The Eneré Co., Dorchester, Mass. 513,487, canc. Cl. 6.
Gotbeter, Julius, d. b. a. Class Watch Strap Co., New York, N. Y. 619,661. Cl. 28.
Govier, G. E., & Co., Ltd., Montreal, Quebec, Canada. 513,328–9, canc. Cl. 1.
Graham Paper Co., St. Louis, Mo. 329,049, ren. 10–15–55. Cl. 37.
Grant, W. T., Co., New York, N. Y. 513,542, canc. Cl. 39.
Graver Tank & Mfg. Co., Inc., East Chicago, Ind. 619,232, pub. 10–18–55. Cl. 2.
Grubb, John H., to Norma J. Grubb, Decatur, Ill. 319,263, ren. 11–20–54. Cl. 18.
Grubb, Norma J.: *See*—
Grubb, John H.
Grumbine, Charles M.: *See*—
Herman, John C., & Co.
Gulf States Paper Corp., Tuscaloosa, Ala. 513,391, canc. Cl. 2.
Gummed Products Co., The, Troy, Ohio. 619,511, pub. 10–18–55. Cl. 37.
Gunn, Vernon L., Lombard, Ill. 619,547, pub. 11–23–54. Cl. 46.
Hahn, Inc., Evansville, Ind. 619,452, pub. 10–18–55. Cl. 23.
Hales & Hunter Co., Chicago, Ill. 619,571, pub. 10–25–55. Cl. 46.
Halpin Co-Airdinator Co., Washington, D. C. 619,482, pub. 10–18–55. Cl. 26.
Hamilton Metal Products Co., The, Hamilton, Ohio. 619,241, pub. 10–18–55. Cl. 2.
Hand, Paul, Newark, Ohio. 513,526, canc. Cl. 19.
Handal, S., & Sons, Inc., New York, N. Y. 513,294, canc. Cl. 39.
Hang-Zit Co., The: *See*—
Schudy, Frank.
Hanna, Elizabeth, d. b. a. Elizabeth Hanna Imports, San Francisco, Calif. 619,599, pub. 10–25–55. Cl. 50.
Hanna, Elizabeth, Imports: *See*—
Hanna, Elizabeth.
Harbison-Walker Refractories Co., Pittsburgh, Pa. 619,299, pub. 10–18–55. Cl. 12.
Harcraft Co., Torrance, Calif. 330,193, ren. 11–26–55. Cl. 37.
Harris, D. P., Hardware & Mfg. Co., Inc., New York, N. Y. 619,386, pub. 10–18–55. Cl. 19.
Harrower Laboratory, Inc., The, Jersey City, N. J. 619,350, pub. 10–18–55. Cl. 18.
Harshaw Chemical Co., The, Cleveland, Ohio. 619,256, pub. 10–18–55. Cl. 6.
Haynes-Langenberg Mfg. Co., to Liberty Foundry Co., St. Louis, Mo. 107,067, ren. 11–9–55. Cl. 34.
Heating Publishers, Inc., New York, N. Y. 619,669. Cl. 38.
Heddon's, James, Sons, Dowagiac, Mich. 513,274, canc. Cl. 22.
Herald Knitwear Co., Inc.: *See*—
Knitwear Mfg. Co., Inc.
Herke, J. P., Yakima, Wash. 619,668. Cl. 38.
Herman, John C., & Co., Harrisburg, by Charles M. Grumbine, Hanover, Pa. 150,841, 12(c) pub. 1–17–56. Cl. 17.
Heublein, G. F., & Bro., by Heublein, Inc., Hartford, Conn. 46,616, 12(c) pub. 1–17–56. Cl. 49.
Heublein, G. F., & Bro., by Heublein, Inc., Hartford, Conn. 96,292, 12(c) pub. 1–17–56. Cl. 49.
Heublein, G. F., & Bro., by Heublein, Inc., Hartford, Conn. 390,041, 12(c) pub. 1–17–56. Cl. 49.
Heublein, Inc.: *See*—
Heublein, G. F., & Bro.
Heyl & Co., Chemisch-Pharmazeutische Fabrik, Berlin-Steglitz, Germany. 619,265, pub. 10–4–55. Cl. 6.
Hipsh, Inc., Kansas City, Mo. 513,510, canc. Cl. 39.
Hoefer, Leroy C., Minneapolis, Minn. 513,349, canc. Cl. 22.
Hoey, Madelyn C., d. b. a. Plumbridge, New York, N. Y. 619,379, pub. 10–25–55. Cl. 46.
Hollywood-Maxwell Co., Los Angeles, Calif. 619,525, pub. 10–18–55. Cl. 39.
Holman, H. J., & Sons Inc. Lakeland Mfg. Co., Sheboygan, Wis. 240,479. Am. 7(d). Cl. 39.
Holo-Krome Screw Corp., The, West Hartford, Conn. 277,346, canc. Cl. 13.
Honeck, Bertha E., Milwaukee, Wis. 513,406, canc. Cl. 22.
Hood, H. P., & Sons, Inc., Boston, Mass. 619,576, pub. 10–25–55. Cl. 46.
Hotstream Heater Co., The, Cleveland, Ohio. 619,505, pub. 10–18–55. Cl. 34.
Hough, Frank G., Co., The, Libertyville, Ill. 619,424, pub. 10–18–55. Cl. 22.
Howren, Hillman V., Atlanta, Ga. 619,662. Cl. 29.
Hubbard Farms, Inc., Walpole, N. H. 619,647. Cl. 1.
Hubbard, J., & Co., Nashua, N. H. 619,253, pub. 10–18–55. Cl. 6.
Hudnut, Richard, New York, N. Y. 619,618, pub. 10–18–55. Cl. 52.
Huff, Basil D., Wilkes-Barre, Pa. 619,572, pub. 10–25–55. Cl. 46.
Hunt, Roope & Co.: *See*—
Newman, Robert L.
Hunt, Roope & Co. Ltd.: *See*—
Newman, Robert L.
Hunt, Roope, Teage & Co.: *See*—
Newman, Robert L.
Hychex Products, Chicago, Ill. 619,283, pub. 10–18–55. Cl. 6.
Iddings Paint Co., Inc., Long Island City, N. Y. 619,339, pub. 10–18–55. Cl. 16.
Illinois Zinc Co., Chicago, Ill. 619,326, pub. 10–18–55. Cl. 14.
Imperial Chemical Industries Ltd., Millbank, London, England. 619,251, pub. 6–21–55. Cl. 6.
Imperial Chemical (Pharmaceuticals) Ltd., Millbank, London, England. 619,354, pub. 10–18–55. Cl. 18.
Imperial Knife Co., Inc., Providence, R. I. 619,460, pub. 10–18–55. Cl. 23.
Individual Drinking Cup Co. Inc., to Dixie Cup Co., Easton, Pa. 327,887, ren. 9–10–55. Cl. 2.
Inter-Continental Corp., Haledon, N. J. 619,612, pub. 10–18–55. Cl. 51.
International Heater Co., Utica, N. Y. 107,339, ren. 11–23–55. Cl. 34.
International Paint Co. Inc., New York, N. Y. 619,620, pub. 10–18–55. Cl. 52.
Interstate Co., The, Chicago, Ill. 619,551, pub. 10–18–55. Cl. 46.
Irvington Varnish and Insulator Co. Western, Monrovia, Calif., to Minnesota Mining & Mfg. Co., St. Paul, Minn. 619,601, pub. 10–25–55. Cl. 50.
Irwin, Neisler and Co., Decatur, Ill. 619,370, pub. 10–18–55. Cl. 18.
Ivanhoe Fruit Assn., Ivanhoe, Calif. 619,580, pub. 10–25–55. Cl. 46.
Janssen Piano Co., Inc., New York, N. Y. 619,507, pub. 10–18–55. Cl. 36.
Jaques Mfg. Co., Chicago, Ill. 442,169–70, canc. Cl. 50.
Jenkins, Joe C., Gainesville, Fla. 619,512, pub. 10–18–55. Cl. 37.
Jic Jac Co., The: *See*—
Jic-Jac, Inc.
Jic-Jac, Inc., d. b. a. The Jic Jac Co., St. Louis, Mo. 619,693. Cl. 45.
Johns-Manville Corp., New York, N. Y. 619,506, pub. 10–11–55. Cl. 35.
Johnson, Louis W., d. b. a. El-Jay Mfg. Co., Eugene, Oreg. 619,435, pub. 12–28–54. Cl. 23.
Johnson Steel & Wire Co., Inc., Worcester, Mass. 332,445, ren. 2–11–56. Cl. 14.
Joseph & Feiss Co., The, Cleveland, Ohio. 333,558, ren. 3–24–56. Cl. 39.
Junker, J. A. H., Inc., Pittsburgh, Pa. 619,267, pub. 10–18–55. Cl. 6.
Juvenile Mfg. Co., Inc., The, San Antonio, Tex. 619,519, pub. 10–18–55. Cl. 39.
Juvenile Shoe Corp. of America, The, Aurora, Mo. 333,127, ren. 3–10–56. Cl. 39.
Kaiser Gypsum Co., Inc., Oakland, Calif. 619,334–5, pub. 10–18–55. Cl. 16.
Kam Mfg. Co., Inc., Philadelphia, Pa. 619,675. Cl. 39.
Kamp Togs, Inc., St. Louis, Mo. 513,516, canc. Cl. 39.
Kansas City Life Insurance Co., Kansas City, Mo. 619,635, pub. 10–18–55. Cl. 102.
Karpen, S., & Bros., Chicago, Ill. 513,338–9, canc. Cl. 32.
Kaufmann Department Stores, Inc. The May Department Stores Co., St. Louis, Mo. 229,928. Am. 7(d). Cl. 42.
Kaufmann Department Stores, Inc., Pittsburgh, Pa. 246,592, canc. Cl. 3.
Keasbey Corp., Keasbey, N. J. 619,312, pub. 10–18–55. Cl. 12.
Keasbey & Mattison Co., Ambler, Pa. 619,655. Cl. 12.
Kellogg, P. P., & Co.: *See*—
United States Envelope Co.
Keratone Co., Inc., The, New York, N. Y. 619,383, pub. 10–18–55. Cl. 18.
Kiger, C. A., Co., Kansas City, Mo. 513,394–9, canc. Cl. 28.
Kimbal, A., Co., New York, N. Y. 619,514, pub. 10–18–55. Cl. 37.
King Candy Co., d. b. a. Southern Candy Co., Fort Worth, Tex. 619,561, pub. 10–18–55. Cl. 46.
King Features Syndicate, Inc., New York, N. Y. 258,105, canc. Cl. 38.
King Features Syndicate, Inc., New York, N. Y. 294,603, canc. Cl. 38.
King, John P., Mfg. Co., The, Augusta, Ga. 619,533, pub. 10–18–55. Cl. 42.
Kingston Pencil Corp., Chattanooga, Tenn. 619,476, pub. 10–18–55. Cl. 26.
Kipton Industries, Inc., Kipton, Ohio. 619,658. Cl. 23.
Kisters Furs: *See*—
Kisters, Gerry H.
Kisters, Gerry H., d. b. a. Kisters Furs, Bloomington, Ind. 513,543, canc. Cl. 39.
Klein, D. Emil, Co., Inc., New York, N. Y. 513,255, canc. Cl. 17.
Kleinert, I. B., Rubber Co., New York, N. Y. 619,524, pub. 10–18–55. Cl. 39.
Knit Products Corp., Belmont, N. C. 619,677. Cl. 39.
Knitwear Mfg. Co., Inc., Brooklyn, to Herald Knitwear Co., Inc., New York, N. Y. 331,387, ren. 1–7–56. Cl. 42.
K-Nuff: *See*—
Knuff, Margaret.
Knuff, Margaret, d. b. a. K-Nuff, Garden City Park, N. Y. 619,366, pub. 10–18–55. Cl. 18.
Kohnstamm, H., & Co., Inc., New York, N. Y. 619,557–8, pub. 10–18–55. Cl. 46.
Kointainer Co.: *See*—
Epps, F. Stevens.
Korn, Jack W.: *See*—
Merritt, Clifton E., and Korn.
Kraupner, George J., d. b. a. Kraupner Pharmaceutical Co., Brooklyn, N. Y. 619,375, pub. 10–18–55. Cl. 18.
Kraupner Pharmaceutical Co.: *See*—
Kraupner, George J.
Kreem King Corp., Cleveland, Ohio. 619,565, pub. 10–18–55. Cl. 46.
Kurfees, J. F., Paint Co., Louisville, Ky. 513,281, canc. Cl. 16.
Lady Gay: *See*—
Cameron, June.
Lake Chemical Co., Chicago, Ill. 619,295, pub. 10–18–55. Cl. 12.
Lakeland Mfg. Co.: *See*—
Holman, H. J., & Sons Inc.

Lancaster Pump and Mfg. Co., Inc., Lancaster, Pa. 619,436, pub. 10–18–55. Cl. 23.
Lansmith Cherry & Fruit Co., Ripley, N. Y. 619,583–4, pub. 10–25–55. Cl. 46.
La Resista Corset Co., The, Bridgeport, Conn. 619,680. Cl. 39.
Laucks, I. F., Inc., Seattle, Wash., to Natco Corp., Pittsburgh, Pa. 331,364, ren. 1–7–56. Cl. 12.
Lauricella, John D., Long Beach, Calif. 619,349, pub. 10–18–55. Cl. 18.
Lazan, Samuel C., Washington, D. C. 619,673. Cl. 39.
Lazarus, F. & R., Co., The, to Federated Department Stores, Inc., Cincinnati, Ohio. 524,339, cor. Cl. 39.
Lazarus, F. and R. and, Co., The: *See*—
Shillito, John, Co., The.
Lee, George, & Sons Ltd., Westgate and Wakefield, England. 513,308, canc. Cl. 43.
Lehwood Corp., Mishawaka, Ind. 619,298, pub. 10–18–55. Cl. 12.
Lepetit, S. p. A., Milan, Italy. 619,346, pub. 11–17–53. Cl. 18.
Lepetit, S. p. A., Milan, Italy. 619,347, pub. 11–24–53. Cl. 18.
Levolor, Lorentzen, Inc., New York, N. Y. 619,321, pub. 9–20–55. Cl. 13.
Levolor Lorentzen, Inc., New York, N. Y. 619,322, pub. 9–27–55. Cl. 13.
Levolor Lorentzen, Inc., New York, N. Y. 619,329, pub. 10–11–55. Cl. 14.
Liberty Foundry Co.: *See*—
Haynes-Lagenberg Mfg. Co.
Lilly, Eli, and Co.: *See*—
Lilly, Eli, and Co., The.
Lilly, Eli, and Co., The, to Eli Lilly and Co., Indianapolis, Ind. 109,567, ren. 4–11–56. Cl. 18.
Lilly of California, Inc., Los Angeles, Calif. 513,536, canc. Cl. 39.
Limpert Bros., Inc., Vineland, N. J., and New York, N. Y. 513,519, canc. Cl. 46.
Linen Thread Co., Inc., The, New York, N. Y. 619,286, pub. 10–18–55. Cl. 7.
Linen Thread Co., Inc., The, New York, N. Y. 619,536, pub. 10–18–55. Cl. 42.
Lingerie, Inc., now by change of name Shadowline, Inc., Morganton, N. C. 511,102. Am. 7(d). Cl. 39.
Litchfield Mfg. Co., Litchfield, Mich. 373,762, canc. Cl. 22.
Litchfield Mfg. Co., Litchfield, Mich. 406,336, canc. Cl. 22.
Lith-O-Ware Products, Inc., Chicago, Ill. 619,313, pub. 10–18–55. Cl. 13.
Lloyd Mfg. Co., Inc., Apponaug, R. I. 513,488, canc. Cl. 43.
Locuoco, Albert W., d. b. a. The Riverbed Chemical Research Co., Cleveland, Ohio. 619,341, pub. 10–18–55. Cl. 16.
Loma Linda Food Co.: *See*—
Pacific Union Assn. of Seventh-Day Adventists, The.
London Character Shoes Corp., New York, N. Y. 513,509, canc. Cl. 39.
Lonel, Jacques L., Paris, France. 513,259, canc. Cl. 8.
Los Angeles Nut House, Los Angeles, Calif. 619,567, pub. 10–25–55. Cl. 46.
M. K. M. Hosiery Mills, Inc., Jamaica Plain, Boston, Mass. 619,538, pub. 6–28–55. Cl. 43.
MacArthur, Arthur P., Milford, Pa. 619,629, pub. 10–18–55. Cl. 100.
MacKenzie, Emmett E., Denver, Colo. 619,663. Cl. 37.
MacNair-Dorland Co., New York, N. Y. 619,667. Cl. 38.
Magna, Inc., Bensenville, Ill. 619,262, pub. 10–18–55. Cl. 6.
Magnesium Elektron Ltd., Clifton Junction, near Manchester, England. 619,330, pub. 10–18–55. Cl. 14.
Majestic Co., Inc., The, Huntington, Ind. 619,501, pub. 10–18–55. Cl. 34.
Majestic Wine & Spirits, Inc., Camden, N. J. 331,480, ren. 1–7–56. Cl. 47.
Malek, A., San Pedro, Calif. 513,496, canc. Cl. 55.
Mall Tool Co., Chicago, Ill. 619,467, pub. 10–18–55. Cl. 23.
Mandee Fabrics, Inc., New York, N. Y. 619,690. Cl. 42.
Manos and Block Furs Inc., New York, N. Y. 619,678. Cl. 39.
Marchant Calculating Machine Co. Marchant Calculators, Inc., Oakland, Calif. 533,950. Am. 7(d). Cl. 26.
Marchant Calculators, Inc.: *See*—
Marchant Calculating Machine Co.
Market Forge Co., Everett, Mass. 619,396, pub. 10–18–55. Cl. 19.
Marshall, Taplow Ltd., Stratford, London, England. 619,694. Cl. 49.
Marvic, Inc., San Mateo, Calif. 619,455, pub. 10–18–55. Cl. 23.
Mason, Margaret R., Cincinnati, Ohio. 619,239, pub. 10–18–55. Cl. 2.
Massachusetts Mattress Co., Boston, Mass. 442,069, 12(c) pub. 1–17–56. Cl. 32.
Massachusetts Mattress Co., Boston, Mass. 442,253–6, 12(c) pub. 1–17–56. Cl. 32.
Massachusetts Textile Co. (Bernhard Altmann) Inc., New York, N. Y. 619,686. Cl. 42.
Masson, Paul: *See*—
Masson, Paul, Inc.
Masson, Paul, Inc., d. b. a. Paul Masson and Paul Masson Vineyards, Cupertino, Calif. 619,594, pub. 10–25–55. Cl. 47.
Masson, Paul, Inc., d. b. a. Paul Masson and Paul Masson Vineyards, Cupertino, Calif. 619,597, pub. 10–25–55. Cl. 49.
Masson, Paul, Vineyards: *See*—
Masson, Paul, Inc.
Master Chocolate Makers: *See*—
Daggett Chocolate Co.
Masterson, Horace L., d. b. a. The Coronets Co., Seattle, Wash. 619,553, pub. 10–18–55. Cl. 46.
Mats Brewing Co., Bellaire, Ohio. 513,316, canc. Cl. 48.
Maurer-Neuer Corp., Kansas City, Kans. 619,568, pub. 10–18–55. Cl. 46.
Maximoff, George A., Pacoima, Calif. 619,391, pub. 10–11–55. Cl. 19.
May Department Stores Co., The: *See*—
Kaufmann Department Stores, Inc.
Mayfair Chenilles, Inc., New York, N. Y. 513,539, canc. Cl. 39.
Mayo, D. R., Seed Co., Inc., Knoxville, Tenn. 513,524, canc. Cl. 1.
McAleer Mfg. Co.: *See*—
Bronson Reel Co.
McClatchy Broadcasting Co., Sacramento, Calif. 619,640, pub. 10–18–55. Cl. 104.
McDonald and Olliff, Inc., Wauchula, Fla. 417,503. Am. 7(d). Cl. 46.
McDonald and Olliff, Inc., Wauchula, Fla. 417,634. Am. 7(d). Cl. 46.
Mead Johnson & Co., Evansville, Ind. 619,385, pub. 10–18–55. Cl. 18.
Meat Packers Equipment Co., Oakland, Calif. 619,449, pub. 10–18–55. Cl. 23.
Mepa Trading Co., New York, N. Y. 513,340, canc. Cl. 27.
Merck & Co. Inc., Rahway, N. J. 331,519, ren. 1–14–56. Cl. 6.
Mercury Industries, Inc., Chicago, Ill. 513,263, canc. Cl. 22.
Merit Products, Inc., Culver City, Calif. 619,248, pub. 10–18–55. Cl. 4.
Merritt, Clifton E., and J. W. Korn, d. b. a. Duck-Pluck, Cadillac, Mich. 619,274, pub. 10–18–55. Cl. 6.
Mesta Machine Co., West Homestead, Pa. 254,927, canc. Cl. 23.
Metrawatt Aktiengesellschaft Fabrik Elektrischer Messgerate, Nurnberg-O, Germany. 619,481, pub. 7–19–55. Cl. 26.
Meyers, W. F., Co., Inc., Bedford, Ind. 619,469, pub. 10–18–55. Cl. 23.
Mid-States Mfg. Corp., Inc., Pittsburg, Kans. 619,441, pub. 10–18–55. Cl. 23.
Miller Co., The, Meriden, Conn. 619,499, pub. 10–18–55. Cl. 34.
Miller, Wallace W., El Cajon, Calif. 619,309, pub. 10–18–55. Cl. 12.
Millers Falls Co., Greenfield, Mass. 619,412, pub. 10–18–55. Cl. 21.
Milner Products Co., Jackson, Miss. 619,616, pub. 11–4–52. Cl. 52.
Minnesota Mining & Mfg. Co.: *See*—
Irvington Varnish and Insulator Co. Western.
Minnesota and Ontario Paper Co., Minneapolis, Minn. 619,297, pub. 10–18–55. Cl. 12.
Mitchell, Stephen J., to H. P. Stackler, New York, N. Y. 106,244–5, ren. 10–19–55. Cl. 37.
Mocroft, Lester G., d. b. a. Camp E-Z Co., Greeley, Colo. 619,393, pub. 10–18–55. Cl. 19.
Mont La Salle Vineyards: *See*—
De La Salle Institute.
Morgan & Allen Co., San Francisco, Calif. 513,468, canc. Cl. 27.
Morris, Philip, & Co. Ltd., Inc., New York, N. Y., now by change of name to Philip Morris Inc. 619,342, pub. 10–18–55. Cl. 17.
Morris, Philip, Inc.: *See*—
Morris, Philip, & Co. Ltd., Inc.
Mosstype Corp.: *See*—
Mosstype Roller Co., Inc.
Mosstype Roller Co., Inc., Brooklyn, to Mosstype Corp., New York, N. Y. 619,600, pub. 10–18–55. Cl. 50.
Mueller Electric Co., Cleveland, Ohio. 619,404, pub. 10–18–55. Cl. 21.
Muller, Matheus, Kommandit-Gesellschaft auf Aktien, Eltville-on-the-Rhine, Germany. 322,818, ren. 3–19–55. Cl. 47.
Muller, Matheus, Kommandit Gesellschaft auf Aktien, Eltville-on-the-Rhine, Germany. 619,591, pub. 10–25–55. Cl. 47.
Murphy, Brill and Sahner, Inc.: *See*—
Schwab, Leopold B.
Mycalex Corp. of America, Clifton, N. J. 611,659–60, cor. Cl. 12.
N. V. Gerofabriek, Zeist, Netherlands. 619,432, pub. 10–18–55. Cl. 23.
Nadal, Otilio, New York, N. Y. 619,666. Cl. 37.
Nash Inc., Jersey City, N. J. 619,650. Cl. 3.
Nata Products Co.: *See*—
Crown Zellerbach Corp.
Natco Corp.: *See*—
Laucks, I. F., Inc.
National Acme Co., The, Cleveland, Ohio. 619,456, pub. 9–27–55. Cl. 23.
National Aluminate Corp., Chicago, Ill. 619,494, pub. 10–18–55. Cl. 31.
National Broadcasting Co., Inc., New York, N. Y. 619,641, pub. 6–7–49. Cl. 104.
National Broom Mfg. Co.: *See*—
Wheatley, W. T.
National Cash Register Co., The, Dayton, Ohio. 619,264, pub. 10–18–55. Cl. 6.
National Gypsum Co., Buffalo, N. Y. 619,305, pub. 10–18–55. Cl. 12.
National Millinery Co., Baltimore, Md. 513,284, canc. Cl. 39.
National Paper Products Co.: *See*—
Crown Zellerbach Corp.
National Stationers Association, Washington, D. C. 513,499, canc. Cl. 55.

National Vendors, Inc., St. Louis, Mo. 619,445, pub. 10–18–55. Cl. 23.
Nature Food Centres, Inc., Cambridge, Mass. 330,433, ren. 12–3–55. Cl. 18.
Needham Mfg. Co., Inc., Needham Heights, Mass. 619,648. Cl. 2.
Neptune Sea Food Co., San Diego, Calif. 130,372, canc. Cl. 46.
Newman, Robert L., d. b. a. Hunt, Roope, Teage & Co., and also d. b. a. Hunt, Roope & Co., London, England, and Oporto, Portugal, to Hunt, Roope & Co. Ltd., London, England. 316,481, ren. 8–28–54. Cl. 47.
Newman, Robert L., d. b. a. Hunt, Roope, Teage & Co., and also d. b. a. Hunt, Roope & Co., London, England, and Oporto, Portugal, to Hunt, Roope & Co. Ltd., London, England. 317,428, ren. 9–25–54. Cl. 47.
Newman, Robert L., d. b. a. Hunt, Roope, Teage & Co., and also d. b. a. Hunt, Roope & Co., London, England, and Oporto, Portugal, to Hunt, Roope & Co. Ltd., London, England. 318,324, ren. 10–23–54. Cl. 47.
New York Mills Corp., New York, N. Y. 253,882, canc. Cl. 42.
New York Quinine & Chemical Works Inc., The, New York, N. Y. 619,361, pub. 10–18–55. Cl. 18.
Norcross, Inc., New York, N. Y. 619,670. Cl. 38.
Nordmark-Werke Gesellschaft mit beschraenkter Haftung, Hamburg, Germany. 619,355, pub. 10–18–55. Cl. 18.
Norfolk Packing Co., Norfolk, Nebr. 252,467, canc. Cl. 46.
Norfolk Packing Co., Norfolk, Nebr. 254,394, canc. Cl. 46.
Northern Indiana Brass Co., Elkhart, Ind. 437,585, canc. Cl. 13.
Nox-Rust Chemical Corp., Chicago, Ill., now by change of name Daubert Chemical Co. 619,509, pub. 10–18–55. Cl. 37.
Nuodex Products Co., Inc., Elizabeth, N. J. 619,332, pub. 6–24–52. Cl. 16.
Nursewear, Inc., Boston, Mass. 619,681. Cl. 39.
Ocoma Foods Co.: *See*—
Omaha Cold Storage Co.
Ohio Bag Corp., New York, N. Y. 619,235, pub. 10–18–55. Cl. 2.
Oldach, William H., Philadelphia, Pa. 619,587, pub. 10–25–55. Cl. 46.
Olin Mathieson Chemical Corp., New York, N. Y. 619,356, pub. 10–18–55. Cl. 18.
Olin Mathieson Chemical Corp., New York, N. Y. 619,359, pub. 10–18–55. Cl. 18.
Omaha Cold Storage Co., d. b. a. Ocoma Foods Co., Omaha, Nebr. 619,566, pub. 10–18–55. Cl. 46.
Organon Inc., Orange, N. J. 619,353, pub. 10–18–55. Cl. 18.
Osborne Co., The, Clifton, N. J. 619,634, pub. 10–18–55. Cl. 101.
Otoe Food Products Co., Nebraska City, Nebr. 619,555, pub. 10–18–55. Cl. 46.
Pabst Brewing Co.: *See*—
Premier-Pabst Corp.
Pabst Brewing Co., Chicago, Ill. 527,824, cor. Cl. 6.
Pacific Foundry Co., to Pacific Foundry Co., Ltd., San Francisco, Calif. 109,187, ren. 3–28–56. Cl. 14.
Pacific Foundry Co., Ltd.: *See*—
Pacific Foundry Co.
Pacific Union Association of Seventh-Day Adventists, The, also d. b. a. Loma Linda Food Co., Glendale, Calif. 619,569, pub. 10–25–55. Cl. 46.
Packwood, G. H., Mfg. Co., St. Louis, Mo. 619,617, pub. 8–3–54. Cl. 52.
Parco Co., Inc., The, New York, N. Y. 619,631, pub. 10–18–55. Cl. 100.
Pauly Cheese Co., Division of Swift & Co.: *See*—
Swift & Co.
Pazdral, Tod, Houston, Tex. 619,630, pub. 10–18–55. Cl. 100.
Peirce and Co., Los Angeles, Calif. 619,534, pub. 10–18–55. Cl. 42.
Pen-Cil-Pen Co., Inc., Shelbyville, Tenn. 619,665. Cl. 37.
Penn Associates, Inc., Philadelphia, Pa. 619,537, pub. 10–18–55. Cl. 43.
Perkins Products Co., Chicago, Ill. 619,586, pub. 10–25–55. Cl. 46.
Peter Pan Foundations, Inc., New York, N. Y. 619,529, pub. 10–18–55. Cl. 39.
Peters, Wm. C., Co., Detroit, Mich. 619,300, pub. 10–18–55. Cl. 12.
Petrolite Corp., Ltd., St. Louis, Mo. 389,823, canc. Cl. 6.
Petrolite Corp., Ltd., St. Louis, Mo. 390,863, canc. Cl. 6.
Petrolite Corp., Ltd., St. Louis, Mo. 391,207, canc. Cl. 6.
Pettibone Mulliken Corp., Chicago, Ill. 513,511, canc. Cl. 14.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 619,381, pub. 10–18–55. Cl. 18.
Philadelphia Electric Co., Philadelphia, Pa. 619,633, pub. 10–18–55. Cl. 100.
Philco Corp., Philadelphia, Pa. 619,484, pub. 10–18–55. Cl. 26.
Phillips, H. A., & Co.: *See*—
Phillips, Wayland N.
Phillips, Harry A.: *See*—
Phillips, Wayland N.
Phillips, J. A., & Co. Ltd., Smethwick, Birmingham, England. 619,388, pub. 10–18–55. Cl. 19.
Phillips, Wayland N., conservator of the estate of Harry A. Phillips, d. b. a. H. A. Phillips & Co., Chicago, Ill. 619,473, pub. 10–18–55. Cl. 26.
Pifalo, Michael, Malden, Mass. 513,412, canc. Cl. 22.
Pillsbury Mills, Inc., Minneapolis, Minn. 619,548, pub. 10–18–55. Cl. 46.
Pio, Bartolomeo, Inc., Philadelphia, Pa. 619,593, pub. 10–25–55. Cl. 47.
Pioneer Tent and Awning Co., Boise, Idaho. 619,651. Cl. 9.
Pit-Bar Mfg. Co.: *See*—
Asrod of California, Inc.
Plough, Inc., Memphis, Tenn. 330,266, ren. 11–26–55. Cl. 18.
Plumbridge: *See*—
Hoey, Madelyn C.
Plymouth Wholesale Dry Goods Corp., New York, N. Y. 513,512, canc. Cl. 39.
Pocono Fabricators, Inc., East Stroudsburg, Pa. 619,307, pub. 10–18–55. Cl. 12.
Polan, Katz & Co., Inc., Baltimore, Md. 429,450, cor. Cl. 41.
Polaroid Corp., Cambridge, Mass. 619,487, pub. 10–18–55. Cl. 26.
Pommerelle Co., The: *See*—
American Wine Growers.
Popper-Morson Co.: *See*—
United Spirit & Wine Inc.
Portasilo Ltd., York, England. 619,237, pub. 10–18–55. Cl. 2.
Porter-Cable Machine Co., Syracuse, N. Y. 619,414, pub. 10–18–55. Cl. 21.
Post, E. L., & Co., Inc., New York, N. Y. 619,656. Cl. 14.
Premier-Pabst Corp. Pabst Brewing Co., Chicago, Ill. 320,008, cor. Cl. 6.
Price, William B., Bloomington, Ill. 619,604, pub. 10–18–55. Cl. 50.
Prim Hosiery, Inc., Chester, Ill. 619,530, pub. 10–18–55. Cl. 39.
Process Laboratories, Inc., New York, N. Y. 619,372, pub. 10–18–55. Cl. 18.
Process Machinery Co., Inc., Durham, N. C. 619,462, pub. 10–18–55. Cl. 23.
Procter & Gamble Co., The: *See*—
Cincinnati Soap Co., The.
Professional Golfers' Assn. of America, The, Chicago, Ill. 619,626, pub. 10–18–55. Cl. 100.
Puget Sound Pharmacal Co., Inc., Seattle, Wash. 619,382, pub. 10–18–55. Cl. 18.
Quaker Chemical Products Corp., Conshohocken, Pa. 619,277, pub. 10–18–55. Cl. 6.
R-H Products Co., Memphis, Tenn. 619,268, pub. 10–18–55. Cl. 6.
Rainrite Sprinkler Co., The, Burbank, Calif. 619,314, pub. 10–18–55. Cl. 13.
Raybestos-Manhattan, Inc., Passaic, N. J. 619,324, pub. 10–18–55. Cl. 13.
Rea Magnet Wire Co., Inc., Fort Wayne, Ind. 619,327, pub. 10–18–55. Cl. 14.
Rea Magnet Wire Co., Inc., to Essex Wire Corp., Fort Wayne, Ind. 619,403, pub. 10–4–55. Cl. 21.
Reading Foundry Co.: *See*—
Reading Foundry & Supply Co.
Reading Foundry & Supply Co., to Reading Foundry Co., Reading, Pa. 331,800, ren. 1–21–56. Cl. 13.
Red & White Corp., Chicago, Ill. 619,490, pub. 10–18–55. Cl. 29.
Redlands Co-Operative Fruit Assn., Redlands, Calif. 222,033, canc. Cl. 46.
Redlands Co-Operative Fruit Assn., Redlands, Calif. 224,981, canc. Cl. 46.
Reed Research, Inc., Washington, D. C. 619,446, pub. 10–18–55. Cl. 23.
Register and Tribune Co., The, Des Moines, Iowa. 515,243. Am. 7(d). Cl. 38.
Republic Paint & Varnish Co., Chicago, Ill. 619,340, pub. 10–18–55. Cl. 16.
Reynolds-Shaffer Corp., Pittsburgh, Pa. 619,636, pub. 10–18–55. Cl. 102.
Richards, Wesley J., d. b. a. Wesley J. Richards Pharmaceutical Specialties, Santa Monica, Calif. 619,374, pub. 10–18–55. Cl. 18.
Richards, Wesley J., Pharmaceutical Specialties: *See*—
Richards, Wesley J.
Riedel-de Haen, Inc., New York, N. Y., to Ames Co., Inc., Elkhart, Ind. 330,845, ren. 12–17–55. Cl. 18.
Ritornelle, Inc., New York, N. Y. 619,614, pub. 10–18–55. Cl. 51.
Ritter Bros. Inc., New York, N. Y. 619,226, pub. 10–18–55. Cl. 1.
Riverbed Chemical Research Co., The: *See*—
Locuoco, Albert W.
River Plate Dairy Co., Ltd., The, to River Plate Dairy Co., S. A., Buenos Aires, Argentina. 330,872, ren. 12–3–55. Cl. 6.
River Plate Dairy Co., Ltd., The, to River Plate Dairy Co., S. A., Buenos Aires, Argentina. 330,443, ren. 12–3–55. Cl. 6.
River Plate Dairy Co., S. A.: *See*—
River Plate Dairy Co., Ltd., The.
Robbins, Harold R., Des Moines, Iowa. 619,539, pub. 10–18–55. Cl. 45.
Robinson & Golluber, to Robinson & Golluber, Inc., New York, N. Y. 328,889, ren. 10–8–55. Cl. 39.
Robinson & Golluber, Inc.: *See*—
Robinson & Golluber.
Rockwell Mfg. Co., Pittsburgh, Pa. 619,447, pub. 10–18–55. Cl. 23.
Rolatape, Inc., Santa Monica, Calif. 619,474, pub. 9–27–55. Cl. 26.
Roll Coater Inc., Pendleton, Ind. 619,328, pub. 10–18–55. Cl. 14.
Roy, Milton, Co., Philadelphia, Pa. 619,485–6, pub. 10–18–55. Cl. 26.
Royal Lace Paper Works, to Royal Lace Paper Works, Inc., Brooklyn, N. Y. 109,290, ren. 3–28–56. Cl. 37.
Royal Lace Paper Works, Inc.: *See*—
Royal Lace Paper Works.
Rum Co. Ltd., Basel, Switzerland. 619,596, pub. 10–25–55. Cl. 49.

S. A. F. F. A. S. P. A. Fabbriche Fiammiferi Ed Affini, Milan, Italy. 619,652. Cl. 9.
Safe-T-Seal Laboratories, The: *See*—
Fabian, Stanley L.
Saladmaster Sales, Inc., Dallas, Tex. 619,437, pub. 8–23–55. Cl. 23.
Saladmaster Sales, Inc., Dallas, Tex. 619,438–9, pub. 10–18–55. Cl. 23.
Sales Affiliates, Inc., New York, N. Y. 619,615, pub. 10–18–55. Cl. 51.
Sanches, A.: *See*—
Sanchez, Alejandro.
Sanchez, Alejandro, d. b. a. A. Sanches, Benlajan, Murcia, Spain. 619,563, pub. 10–18–55. Cl. 46.
San-Nap-Pak Mfg. Co., Inc., to Doeskin Products, Inc., New York, N. Y. 330,035, ren. 11–19–55. Cl. 37.
Santa Cruz Canning Co., Moss Landing, Calif. 619,588, pub. 10–25–55. Cl. 46.
Saratoga Quevic Spring Corp., Saratoga Springs, N. Y. 619,692. Cl. 45.
Schenectady Varnish Co., Inc.: *See*—
Wright, William H.
Schering Corp., Bloomfield, N. J. 619,357–8, pub. 10–18–55. Cl. 18.
Schering Corp., Bloomfield, N. J. 619,365, pub. 10–18–55. Cl. 18.
Schering Corp., Bloomfield, N. J. 619,371, pub. 10–18–55. Cl. 18.
Schlampp, P., & Son, Minneapolis, Minn. 329,393, ren. 10–29–55. Cl. 39.
Schlesinger, L., & Son, New York, N. Y. 513,531, canc. Cl. 39.
Schnefel Bros., Corp.: *See*—
Schnefel Brothers, Inc.
Schnefel Brothers, Inc., to Schnefel Bros., Corp., Newark, N. J. 327,430, ren. 8–27–55. Cl. 2.
Schneider, Jos., and Co. Optische Werke: *See*—
Schneider, Margarete.
Schneider, Margarete, d. b. a. Jos. Schneider and Co. Optische Werke, Kreuznach, Rhineland, Germany. 328,527, ren. 10–1–55. Cl. 26.
Schudy, Frank, d. b. a. The Hang-Zit Co., Kansas City, Mo. 513,342, canc. Cl. 13.
Schwab, Leopold B., by Murphy, Brill and Sahner, Inc., New York, N. Y. 397,421. 12(c) pub. 1–17–56. Cl. 39.
Scruggs, Barney T., d. b. a. Big Chief Medicine Co., Charlotte, N. C. 619,373, pub. 10–18–55. Cl. 18.
Seaporcel Corp. Seaporcel Metals, Inc., Long Island City, N. Y. 403,972. Am. 7(d). Cl. 16.
Seaporcel Metals, Inc.: *See*—
Seaporcel Corp.
Selectronic Corp.: *See*—
Selectronic Dispersions, Inc.
Selectronic Dispersions, Inc., to Selectronic Corp., Montclair, N. J. 513,449, canc. Cl. 1.
Self Storing Window Co., Inc., Minneapolis, Minn. 619,654. Cl. 12.
Seneca Textile Corp., to United Merchants and Manufacturers, Inc., New York, N. Y. 329,856, ren. 11–12–55. Cl. 42.
Service Publishing Corp., New York, N. Y. 619,672. Cl. 38.
Shadowline, Inc.: *See*—
Lingerie, Inc.
Shagg Studios, Ltd., Chicago, Ill. 619,498, pub. 10–18–55. Cl. 32.
Shane Shoe Co. Inc., New York, N. Y. 619,674. Cl. 39.
Sherry TV, Inc., Beverly Hills, Calif. 619,646, pub. 10–18–55. Cl. 107.
Sherwin-Williams Co., The, Cleveland, Ohio. 513,327, canc. Cl. 16.
Shillito, John, Co., The, Cincinnati, to The F. and R. Lazarus and Co., Columbus, Ohio. 513,533, canc. Cl. 39.
Shreveport Mattress Co., Shreveport, La. 254,422, canc. Cl. 32.
Simpson, Faith, St. Paul, Minn. 619,510, pub. 10–18–55. Cl. 37.
Sky Master Mfg. Co.: *See*—
Waldock, Dominic L.
Smith, Frank, Silver Co., Gardner, Mass. 513,467, canc. Cl. 28.
Sociedad Anónima Vichy Catalán, Barcelona, Spain. 619,691. Cl. 45.
Societe Anonyme des Laboratoires du Docteur Debat, Paris, France. 619,362, pub. 10–18–55. Cl. 18.
Société Anonyme dite: Manufactures de Produits Chimiques du Nord Etablissements Kuhlmann, Paris, France. 619,257, pub. 10–18–55. Cl. 6.
Sohn, Ernest, Creations, Inc., New York, N. Y. 619,315, pub. 10–18–55. Cl. 13.
Sol-Dor Co., The, Athens, Ohio. 619,442, pub. 10–18–55. Cl. 23.
Sonoco Products Co., Hartsville, S. C. 513,264, canc. Cl. 16.
Southern Candy Co.: *See*—
King Candy Co.
Southern Mills, Inc., Atlanta, Ga. 256,592, canc. Cl. 42.
Spalding, A. G., & Bros. Inc., Chicopee, Mass. 619,427, pub. 10–18–55. Cl. 22.
Spence Engineering Co., Inc., Walden, N. Y. 619,323, pub. 10–18–55. Cl. 13.
Sport Products, Inc., Cincinnati, Ohio. 513,261, canc. Cl. 22.
Squires Mfg. Co., Milan, Mich. 619,387, pub. 10–18–55. Cl. 19.
Stackler, Howard P.: *See*—
Mitchel, Stephen J.
Standard Laundry and Linen Supply Co., Kansas City, Mo. 619,638, pub. 10–18–55. Cl. 103.
Standard Oil Co., Richmond, Calif., to Standard Oil Co. of California, Wilmington, Del. 108,183, ren. 1–18–56. Cl. 6.
Standard Oil Co. of California: *See*—
Standard Oil Co.
Standard Oil Co. of California, Wilmington, Del. 332,257, ren. 2–4–56. Cl. 15.
Stanley Home Products, Inc., Westfield, Mass. 619,249, pub. 10–18–55. Cl. 5.
Sterling Co., Inc., The, St. Louis, Mo. 619,250, pub. 10–18–55. Cl. 6.
Sterling Packing & Gasket Co., Houston, Tex. 513,288, canc. Cl. 35.
Stevenson & Howell, Ltd., London, England. 105,566, 12(c) pub. 1–17–56. Cl. 45.
Stone Straw Corp., Washington, D. C. 513,445, canc. Cl. 44.
Straitsville Brick Co., New Straitsville, Ohio. 619,308, pub. 10–18–55. Cl. 12.
Strange, Charles H., White Plains, N. Y. 619,478, pub. 10–18–55. Cl. 26.
Strattman, C. E., San Diego, Calif. 513,356, canc. Cl. 46.
Strauss, John E., d. b. a. Strauss Skate Co., St. Paul, Minn. 619,429, pub. 10–18–55. Cl. 22.
Strauss Skate Co.: *See*—
Strauss, John E.
Strobo Research, Milwaukee, Wis. 619,406, pub. 10–18–55. Cl. 21.
Strunk Equipment Co., Coatsville, Pa. 619,464–5, pub. 10–18–55. Cl. 23.
Stuart Co., The, Pasadena, Calif. 619,380, pub. 10–18–55. Cl. 18.
Sturgeon Bay Cherry Growers, Inc., Sturgeon Bay, Wis. 619,570, pub. 10–18–55. Cl. 46.
Style Trends, Inc., New York, N. Y. 619,527, pub. 10–18–55. Cl. 39.
Sue Sets: *See*—
Cohen, Sue S.
Sunshine Biscuits, Inc., Long Island City, N. Y. 619,541, pub. 4–8–52. Cl. 46.
Sunway Vitamin Co., Chicago, Ill. 396,173, 12(c) pub. 1–17–56. Cl. 18.
Supreme Wines, Inc., New York, N. Y. 513,400, canc. Cl. 47.
Surrey Products, Inc.: *See*—
General Cosmetics Corp.
Sutherland Paper Co., Kalamazoo, Mich. 619,233, pub. 10–18–55. Cl. 2.
Swift & Co., d. b. a. Pauly Cheese Co., Division of Swift & Co., Chicago, Ill. 619,578, pub. 10–18–55. Cl. 46.
Swift & Co., Chicago, Ill. 619,625, pub. 10–18–55. Cl. 52.
Tace Co., The, Pasadena, Calif. 513,275, canc. Cl. 46.
Tallman-McCluskey Fabrics Co., Kirkwood, Mo. 619,531, pub. 10–18–55. Cl. 42.
Taylor Instrument Companies, Rochester, N. Y. 619,518, pub. 10–18–55. Cl. 37.
Televear Co., The: *See*—
Freeman, Albert.
Texas Pit Service, Inc., Houston, Tex. 619,392, pub. 10–18–55. Cl. 19.
Thompson, John M., Sr., d. b. a. Thompson Mfg. Co., Axtell, Kans. 619,696. Cl. 50.
Thompson Mfg. Co.: *See*—
Thompson, John M., Sr.
Ticketag Corp., High Point, N. C. 619,513, pub. 10–18–55. Cl. 37.
Tigrett Enterprises: *See*—
Tigrett Industries, Inc.
Tigrett Industries, Inc., d. b. a. Tigrett Enterprises, Jackson, Tenn. 619,428, pub. 10–18–55. Cl. 22.
Titan Chain Saws, Inc., d. b. a. Bluejet Chain Division, Seattle, Wash. 619,466, pub. 10–18–55. Cl. 23.
Tompkins, Clyde S., Jr., Kansas City, Mo. 619,496, pub. 10–18–55. Cl. 32.
Toni Co., The: *See*—
Gillette Co., The.
Tradewinds, Inc., Tacoma, Wash. 619,417, pub. 10–18–55. Cl. 22.
Transogram Co., Inc., New York, N. Y. 619,426, pub. 10–18–55. Cl. 22.
Travel Aids Co.: *See*—
Zoffer, Robert H.
Tripoli Barber Supply Co., Philadelphia, Pa. 619,607, pub. 10–18–55. Cl. 51.
Tri-Valley Packing Assn., San Francisco, Calif. 619,590, pub. 10–25–55. Cl. 46.
Twin City Wholesale Grocer Co., now by change of name Fairway Foods, Inc., St. Paul, Minn. 511,487. Am. 7(d). Cl. 6.
Twin City Wholesale Grocer Co., now by change of name Fairway Foods, Inc., St. Paul, Minn. 513,494. Am. 7(d). Cl. 45.
Union Bag & Paper Corp., New York, N. Y. 619,516, pub. 10–18–55. Cl. 37.
United Merchants and Manfacturers, Inc.: *See*—
Seneca Textile Corp.
United Spirit & Wine Inc., to Popper-Morson Co., New York, N. Y. 329,301, ren. 10–22–55. Cl. 49.
United States Envelope Co., d. b. a. under the name and style of one of its divisions, P. P. Kellogg & Co., Springfield, Mass. 435,611, canc. Cl. 37.
U. S. Line Co.: *See*—
United States Whip Co.
United States Rubber Co., New York, N. Y. 619,296, pub. 10–18–55. Cl. 12.
United States Steel Corp., Pittsburgh, Pa. 619,317, pub. 10–18–55. Cl. 13.
United States Whip Co., d. b. a. U. S. Line Co., Westfield, Mass. 249,954, canc. Cl. 22.
United States Whip Co., d. b. a. U. S. Line Co., Westfield, Mass. 250,077, canc. Cl. 22.

Upjohn Co., The, Kalamazoo, Mich. 619,271–2, pub. 10–18–55. Cl. 6.
Upjohn Co., The, Kalamazoo, Mich. 619,363, pub. 10–18–55. Cl. 18.
Upjohn Co., The, Kalamazoo, Mich. 619,374–5, pub. 10–18–55. Cl. 46.
Vacuum Metals Corp., Cambridge, Mass. 619,325, pub. 2–9–54. Cl. 14.
Val, Giovanni, d. b. a. Cucamonga Valley Wine Co., Ontario, Calif. 513,312, canc. Cl. 47.
Vanguard Corp., Springfield, Mass. 513,265, canc. Cl. 22.
Veritas Drug Co. Ltd.: *See*—
Chemische Fabriken Dr. Joachim Wiernik & Co. Aktiengesellschaft.
Vermillion, W. R., Co., Inc., Kansas City, Mo. 513,520, canc. Cl. 2.
Vickerys Ltd., London, England. 619,430, pub. 7–13–54. Cl. 23.
Victor Saw Works, Inc., Middletown, N. Y. 329,823, ren. 11–12–55. Cl. 23.
Village Blacksmith Co., The, Watertown, Wis. 619,448, pub. 10–18–55. Cl. 23.
Village Blacksmith Co., The, Watertown, Wis. 619,457, pub. 10–18–55. Cl. 23.
Vironda, Italo D., Battle Creek, Mich. 619,653. Cl. 9.
Vollstedt Kerr Lumber Co. of Portland, Portland, Oreg. 619,310, pub. 10–18–55. Cl. 12.
Vonnegut Hardware Co., Indianapolis, Ind. 619,311, pub. 10–18–55. Cl. 12.
Wadell Equipment Co.: *See*—
Wadell Tools.
Wadell Tools, d. b. a. Wadell Equipment Co., Garwood, N. J. 619,659. Cl. 23.
Waggoner, Norman L., Inc., San Jose, Calif. 333,524, ren. 3–24–56. Cl. 46.
Waldock, Dominic L., d. b. a. Sky Master Mfg. Co., Plymouth, Mich. 513,362, canc. Cl. 22.
Warner-Hudnut, Inc., New York, N. Y., now by change of name Warner-Lambert Pharmaceutical Co. 619,351–2, pub. 10–18–55. Cl. 18.
Warner-Lambert Pharmaceutical Co.: *See*—
Warner-Hudnut, Inc.
Warwick Club Ginger Ale Co., Inc., West Warwick, R. 329,551, ren. 11–5–55. Cl. 45.
Wean Engineering Co., Inc., The, Warren, Ohio. 619,660. Cl. 23.
Weezel Bait Co., The, Cincinnati, Ohio. 513,291, canc. Cl. 22.
Weinreich Brothers Co., New York, N. Y. 513,459–60, canc. Cl. 28.
West Coast Gouley Burcham Co., Ltd., Los Angeles, Calif. 332,200, canc. Cl. 46.
West Disinfecting Co., Long Island City, N. Y. 329,148, ren. 10–15–55. Cl. 6.
Westinghouse Air Brake Co., Wilmerding, Pa. 619,316, pub. 10–18–55. Cl. 13.
Wheatley, W. T., to National Broom Mfg. Co., to National Broom Mfg. Co., Pueblo, Colo. 109,151, ren. 3–21–56. Cl. 29.
Wiley, Hugh, Foresthill, Calif. 619,421, pub. 10–18–55. Cl. 22.
Wills, Harold H., Rushville, Ill. 513,514, canc. Cl. 46.
Wilson, A. L., Chemical Co., Kearney, N. J. 619,624, pub. 10–18–55. Cl. 52.
Wilson Brothers, Chicago, Ill. 329,617, ren. 11–5–55. Cl. 39.
Wilson Milling & Elevator Co., The, Wilson, Kans., and Denver, Colo., to The Colorado Milling and Elevator Co., Denver, Colo. 109,623–4, ren. 4–11–56. Cl. 46.
Winn, Donald L., Tulsa, Okla. 513,333, canc. Cl. 46.
Wolfson Co., The, Cincinnati, Ohio. 619,683. Cl. 39.
Wollensak Optical Co., Rochester, N. Y. 619,471, pub. 10–18–55. Cl. 26.
Wood, E. R., & Co., Holcomb, N. Y. 513,517, canc. Cl. 46.
Wood, Gar, Industries, Inc., Wayne, Mich. 619,389, pub. 10–18–55. Cl. 19.
Woodlake Packing House, Woodlake, Calif. 619,585, pub. 10–25–55. Cl. 46.
Woodworth, N. A., Co., Ferndale, Mich. 619,479, pub. 10–18–55. Cl. 26.
Woolf Brothers, Inc., Kansas City, Mo. 619,523, pub. 10–18–55. Cl. 39.
Wright, William H., by Schenectady Varnish Co., Inc., Schenectady, N. Y. 120,466, 12(c) pub. 1–17–56. Cl. 16.
Wrigley, Wm., Jr., Co., Chicago, Ill. 619,549, pub. 10–18–55. Cl. 46.
Wyandotte Chemicals Corp., Wyandotte, Mich. 619,255, pub. 10–18–55. Cl. 6.
Wyeth Laboratories, Division of American Home Products Corp.: *See*—
American Home Products Corp.
X-Cel Optical Co., Sauk Rapids, Minn. 513,538, canc. Cl. 26.
Yazoo Mfg. Co., Inc., Jackson, Miss. 619,451, pub. 10–18–55. Cl. 23.
Young & Bertke Co., Cincinnati, Ohio. 619,643, pub. 10–18–55. Cl. 106.
Yunker Mfg. Co., Inc., Point Pleasant, W. Va. 513,238, canc. Cl. 39.
Zoffer, Robert H., d. b. a. Travel Aids Co., Brooklyn, N. Y. 619,492, pub. 10–18–55. Cl. 29.

U. S. GOVERNMENT PRINTING OFFICE: 1956

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January 24, 1956 Volume 702 Number 4

PATENTS

NOTICES

Disclaimers

2,624,308.—*Albert Wittlin*, Chicago, Ill. LIQUID FLOW INDICATOR. Patent dated Jan. 6, 1953. Disclaimer filed Dec. 22, 1955, by the inventor.

Hereby enters this disclaimer to claims 3 and 6 of said patent.

2,678,982.—*Edward V. Sundt*, Wilmette, Ill. LOW AMPERAGE FUSE. Patent dated May 18, 1954. Disclaimer filed Dec. 12, 1955, by the assignee, *Sundt Engineering Company*.

Hereby enters this disclaimer to claims 1, 3, 5, 6, and 7 of said patent.

Foreign Patents Received in the Scientific Library as of Dec. 31, 1955

Country	Date received	Highest number
Australia	Dec. 20, 1955	164,145
Austria	Nov. 18, 1955	183,650
Belgium	Nov. 28, 1955	521,700
Canada	Dec. 28, 1955	518,123
Czechoslovakia	June 26, 1952	81,300
Denmark	Nov. 14, 1955	79,825
Egypt	Nov. 1, 1955	549
Finland	Nov. 14, 1955	27,659
France (*Patents*)	Dec. 28, 1955	1,105,650
(*Additions*)	Dec. 28, 1955	64,800
Germany	Nov. 29, 1955	932,540
Great Britain	Dec. 28, 1955	741,720
Hungary	Sept. 20, 1951	140,582
India	Sept. 28, 1955	52,414
Ireland	Dec. 16, 1955	20,500
Italy	July 15, 1955	484,500
Japan	Dec. 15, 1955	8,300
Netherlands	Dec. 19, 1955	79,771
Norway	Oct. 13, 1955	85,870
Philippines	Oct. 13, 1954	190
Poland	July 5, 1955	37,399
Sweden	Oct. 24, 1955	151,197
Switzerland	Dec. 23, 1955	310,176
U. S. S. R.	Apr. 10, 1928	2,406
Yugoslavia	Feb. 17, 1955	16,461

Australia: First 2,000 incomplete
Belgium: First printed 493,079.
Canada: First printed 453,746
Finland: First printed 19,428
First 500 incomplete
Hungary: First printed 5,792
Ireland: First received 10,001
Italy: First 243,000 incomplete
Japan: "Publication number"
U. S. S. R.: File incomplete
Yugoslavia: First received 10,001

Erratum

All references to Patent No. 2,730,509 to Ronald J. Baird for Printing Ink Compositions Containing Dialdehyde Derivatives of Sugars or Lower Polyhydric Alcohols appearing in the OFFICIAL GAZETTE of Jan. 10, 1956, should be deleted as the application was withdrawn from issue and the patent was not issued.

Patents Available for Licensing or Sale

Non-exclusive licenses on reasonable terms may be acquired under any of the following five patents by addressing the owner, Bausch & Lomb Optical Co., Rochester 2, N. Y.

2,360,667. Navigation Watch.
2,389,249. Calculating Device.
2,390,361. Median Device.
2,428,662. Timing Device.
2,432,874. Evanescent Recording Device Permitting Median Determination.

2,726,758. Card Case. Floyd D. Brower, P. O. Box 3, Freeland, Wash.

General Electric Company is prepared to grant non-exclusive licenses under the following 66 patents on reasonable terms to domestic manufacturers.

Applications for license may be addressed to: General Electric Company, Patent Counsel, Chemical and Metallurgical Division, 1 River Road, Schenectady 5, N. Y.

2,218,373. Process of Making Laminated Articles.
2,372,983. Spinning Bucket.
2,444,270. Method of Preparing Organogermanium Halides.
2,444,784. Method of Preparation of Alkylated Silanes.
2,451,871. Dimethyl Germanium Dichloride.
2,454,759. Method of Preparation of Dimethyl Silicone Gums.
2,456,627. Method for Making Polysiloxane Resins.
2,469,890. Linear Methylpolysiloxanes.
2,470,479. Process for Making Polysiloxane Resins.
2,470,497. Preparation of Polysiloxane Resins.
2,483,158. Liquid Organo-Substituted Polysiloxanes.
2,483,209. Method for Hydrolyzing Chlorosilanes and Preparing Polysiloxane Resins.
2,491,833. Hydrocarbon-Substituted Silyl Methane Compounds.
2,501,525. Method of Preparing Organo-Polysiloxanes.
2,518,160. Curing of Hydrocarbon-Substituted Polysiloxane Resins With Benzyl Trimethyl Ammonium Butoxide.
2,519,879. Method for Preparing Alkylfluorosilanes.
2,534,149. Preparation of Organo-Substituted Polysiloxanes.

New Applications Received During November 1955

Patents	6,116
Designs	442
Plants	15
Reissues	13
Total	6,586

Issue

Patents	916	No. 2,731,636 to No.	2,732,551, incl.
Designs	41	No. 176,707 to No.	176,747, incl.
Plants	2	No. 1,451 to No.	1,452, incl.
Reissues	3	No. 24,112 to No.	24,114, incl.
Total	962		

2,541,851. Process for Making Putty-Like Elastic Plastic Siloxane Derivative Composition Containing Zinc Hydroxide.
2,547,678. Liquid Polysiloxanes.
2,552,247. Preparation of Organopolysiloxanes.
2,554,976. Polymers of Polymethylsilylenes and Method of Preparing the Same.
2,561,178. Organopolysiloxanes.
2,575,141. Surfaces Having Low Adhesion to Ice.
2,575,912. Silicone Resin Solutions.
2,579,341. Preparation of Phenylchlorosilanes.
2,587,295. Alkyd-Polysiloxane Resins.
2,594,838. Molded Tubular Body.
2,594,946. Method for Separating Diorganohalogenosilanes From Mixtures of the Latter and Organotrihalogenosilanes.
2,595,767. Synthesis of Phenylchlorosilanes.
2,595,890. Linear Methyl Siloxanes Having Hydrogen Directly Linked to Silicon.
2,595,891. Cyclopolysiloxanes.
2,597,045. Lubricating Oils.
2,598,402. Polysiloxane Resins With Lead Tetraphenyl Catalyst.
2,598,435. Process for Treating Organopolysilanes.
2,600,307. Method of Making Methyl-Substituted Disiloxane Diols.
2,601,336. Process of Adhering Silicone Rubber to Copper.
2,602,728. Preparation of Chloropolysilanes.
2,604,486. Organo Polysiloxane Oils.
2,613,199. Elastic Hydrocarbon-Substituted Polysiloxane and Aliphatic Azo Compounds as Catalysts.
2,623,019. Lubricating Oils.
2,635,040. Silicone-Impregnated Surfaces Suitable for Ironing.
2,636,895. Method for Preparing Organohalogenosilanes.
2,639,276. Organopolysiloxanes of Improved Adhesion Containing Peroxides.
2,641,605. Triorganosilylbenzaldehydes.
2,647,136. Preparation of Methylchlorosilanes.
2,666,041. Silicone Rubbers With Improved Compression Set.
2,667,501. Cyclopentadienylsilanes.
2,671,099. Hexaorganoethynyl Silicon Derivatives.
2,671,100. Hydrolyzable Organosilylethynes.
2,671,101. Organoethynyl Hydrolyzable Organosilanes.
2,671,795. Organoethynyl Organosilanes.
2,678,938. Unsaturated Siloxanediols.
2,679,491. Waterproofing of Cement and Allied Compositions.
2,682,507. Silicone Oils Having Low Viscosity Temperature Coefficients.
2,684,177. Coated Baking Pan and Method of Making Same.
2,689,859. Chlorinated Organopolysiloxanes.
2,698,333. Tertiary-Butylphenyl Chlorosilanes.
2,707,191. Reaction Products of Organosilanes and Methylol Benzenes.
2,710,289. Elastic Organopolysiloxanes of Improved Heat Resistance.
2,711,382. Method of Forming and Applying Metal Heat Exchange Fins.
2,711,399. Silicone Rubber With Preaged Carbon Black.
2,711,417. Preparation of Organosilylphenols.
2,713,545. Water-Base Paints and Process of Making.
2,716,638. Divinyltetramethyldisiloxane and Polymers Therefrom.
2,717,257. Redistribution of Organosilanes.
2,719,165. Triorganosilylmethyl Sulfur Derivatives.

CONDITION OF PATENT APPLICATIONS AS OF NOVEMBER 30, 1955

Total number of pending applications (excluding Designs)	220,996
Total number of pending Design applications	7,046
Total number of applications awaiting action (excluding Designs)	135,527
Total number of Design applications awaiting action	3,108
Date of oldest new application	July 20, 1954
Date of oldest amended application	Sept. 28, 1953

ROSA, M. C., Executive Examiner

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 48, 51, 54, 60, 70.
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 18, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	12-14-54	1-28-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	5-2-55	11-15-54
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	3-2-55	12-14-53
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	3-3-55	2-11-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	2-2-55	5-20-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic, Amides, Amines, General Organic Processes	1-12-55	4-2-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	3-7-55	12-14-53
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	11-26-54	4-14-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	2-24-55	3-22-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	3-17-55	6-4-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	2-14-55	11-6-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	2-14-55	2-10-54
14. (III) MANIAN, J. C., (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire, Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	1-27-55	3-8-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	3-1-55	3-30-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	12-23-54	1-5-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	3-4-55	6-4-54
18. (VI) KURZ, J. A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	12-7-54	1-7-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	3-8-55	4-16-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	3-21-55	4-22-54
21. (III) MADER, R. C., Textiles	3-8-55	3-22-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	3-2-55	3-11-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	8-17-54	9-30-53
24. (III) DRACOPOULOS, P. T., (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	2-2-55	10-4-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	3-3-55	3-1-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	4-12-55	10-11-54
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	2-24-55	7-21-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	2-15-55	5-14-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	2-4-55	7-15-54
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	4-28-55	7-2-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application	
	New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	1-12-55	6-1-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	3-18-55	9-13-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	3-1-55	1-29-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	2-21-55	2-18-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	3-1-55	5-20-54
36. (V) McFADYEN, A. D., Measuring and Testing	1-24-55	11-10-54
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	1-25-55	5-24-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g. Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	2-17-55	6-6-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	3-9-55	4-2-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	2-23-55	5-3-54
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	9-13-54	11-20-53
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	12-1-54	5-19-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	3-8-55	1-25-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	2-10-55	11-3-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	3-14-55	8-17-54
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	11-19-54	1-7-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	1-25-55	8-2-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	3-17-55	4-7-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	2-21-55	2-17-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	2-25-55	4-21-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	3-11-55	3-5-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	1-6-55	2-8-54
55. (VII) KLINE, J. R., Surgery; Dentistry: Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	11-1-54	2-10-54
56. (I) KEELY, J. E., (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	2-14-55	5-5-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	4-29-55	6-18-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	3-9-55	2-4-54
59. (I) HENKIN, B., (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	3-2-55	3-5-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	2-15-55	8-9-54
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	2-14-55	7-30-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	1-31-55	1-15-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	3-14-55	2-23-54
66. (V) LISANN, I., Geometric Instruments; Automatic Weighing Scales; Acoustics	2-11-55	3-15-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	1-26-55	10-4-54
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	2-2-55	11-19-53
70. (II) BREWRINK, J. L., Explosive Weapons, Ammunition, Charges and Composition; Explosive Charge Manufacturing; Jet Motor Processes; Torpedoes; Radar; Sonar; Automatic Pilots; Antennas; Actinide Series (e. g. Fissionable) Compounds; Irradiation Chemistry; Mass Spectrometers	7-20-54	9-28-53
CLASS. DIVS — I (VII) LANHAM, B. E., Paper Making	3-7-55	11-1-54
CLASS. DIVS — II (II) LADY, J. E., Oscillators; Amplifiers	3-3-55	2-10-54
CLASS. DIVS — III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	5-5-55	8-2-54
CLASS. DIVS — IV (VI) SMITH, (Mrs.) M. P., Harrows; Plows; Earth Rollers	3-25-55	7-26-54
CLASS. DIVS — V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	3-1-55	12-6-54
DESIGNS (III) — A—BREHM, G. I., Industrial Arts	5-6-55	5-23-55
DESIGNS (III) — B—GRAY, M. A., Household, Personal and Fine Arts	4-14-55	4-15-55

The following divisions have been abolished: 10, 44, 46, 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during January 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1953*.

Patents..... Numbers 2,142,080 to 2,145,843, inclusive
Plant Patents..... Numbers 307 to 312, inclusive

DECISIONS IN PATENT CASES

Commissioner's Decision

JAMES *v.* GITTENS

Interference No. 85,328. Decided May 7, 1954

INTERFERENCE—PHOTOSTATS ATTACHED TO PETITION FOR RECONSIDERATION SUBMITTED AS EVIDENCE.

In a situation where an interferant, upon the basis of attached photostats, requested reconsideration of a decision of the Board of Patent Interferences awarding priority to the opposing party *Held* that "• • • those photostats were not part of the record as the case came on for final hearing," that "they did not become a part of the record by attachment to • • • petition for reconsideration," and that "in the absence of a stipulation • • • the photostats were not open for consideration by the Board."

ON PETITION.

DENIED.

H. L. Godfrey for James.

Campbell, Brumbaugh & Free for Gittens.

CROCKER, *Assistant Commissioner*.

The party Gittens petitions the Commissioner to direct the Board of Patent Interferences to consider on the merits the "evidence" which he says he submitted to the Board in connection with a petition for reconsideration, brought by him after the Board had awarded priority to his opponent, James.

That alleged evidence includes photostats attached by Gittens to his petition for reconsideration. As the Board observed in its decision denying Gittens' petition for reconsideration, those photostats were not a part of the record as the case came on for final hearing. They did not become a part of the record by attachment to Gittens' petition for reconsideration. In the absence of a stipulation, which was not forthcoming, the photostats were not open for consideration by the Board, and the Board properly so held. Basis by Gittens for invoking the requested exercise of supervisory authority accordingly is utterly lacking.

The petition is denied.

DENIED.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

2,131,005, D. H. Chason, Tension device for sewing machines, **filed** Jan. 12, 1955, D. C., S. D. N. Y., Doc. 98/102, *The Singer Mfg. Co. v. Better Service Sewing Machine Co. Inc. et al.* Consent judgment; no injunction issued (notice Nov. 22, 1955).

2,187,752, 2,307,899, A. C. Olsen, Building structure, **filed** Nov. 30, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16074, *Anders C. Olsen et al. v. United States Gypsum Co. et al.*

2,216,915, E. T. Johnson, Puzzle, **filed** Mar. 26, 1954, D. C., S. D. N. Y., Doc. 92/103, *D. Robbins & Co. et al. v. Bangor Products Co.* Consent judgment; defendants discontinued making products claimed in patent Nov. 22, 1955.

2,226,449, F. C. Stephens, Method of repairing textile fabrics, **filed** Nov. 21, 1955, D. C., N. D. Tex. (Wichita Falls), Doc. 972, *National Multiweaving Co., Inc. et al. v. Mrs. Myra Hodges.*

2,282,473, J. A. Hoffmann, Copy character holder, **filed** Aug. 30, 1951, D. C., S. D. N. Y., Doc. 69/205, *H. P. Preis Engraving Machine Co. v. New Hermes Inc. et al.* Stipulation and order of dismissal with prejudice; counterclaim withdrawn Nov. 25, 1955.

2,307,899. (See 2,187,752.)

2,362,695, H. A. Rohdin, Method and apparatus for heat sealing, **filed** Sept. 9, 1954, D. C., S. D. N. Y., Doc. 95/301, *Packaging Industries Limited, Inc. et al. v. Hilker Products Corp.* Defendant enjoined Nov. 29, 1955.

2,476,153, Little and Gross, Knitted fabric, **filed** Nov. 28, 1955, D. C. Mass. (Boston), Doc. 55/1040–S, *Fairhope Fabrics, Inc. v. Mohawk Carpet Mills, Inc. et al.*

2,477,531, H. J. Wolman, Magnetic dart game, **filed** Mar. 4, 1953, D. C., S. D. N. Y., Doc. 83/130, *Toy Enterprises of America, Inc. v. Pressman Toy Corp.* Complaint dismissed (notice Nov. 28, 1955).

2,510,622, A. P. Denis, Cable shortening device, **appeal** filed Jan. 24, 1955, C. C. A., 1st Cir., Doc. 4926, *Ellis, Inc. v. Albert P. Denis et al.* Judgment of District Court affirmed (notice July 26, 1955).

2,536,842, A. F. McFarland, Pump, **filed** Aug. 16, 1954, D. C., S. D. Tex. (Houston), Doc. 8428, *McFarland Mfg. Corp. v. V. H. Payne.* Stipulation and order of dismissal with prejudice Nov. 25, 1955.

2,545,818. (See Re. 23,662.)

2,598,026, J. J. Warner, Phonograph having speaker pickup unit, **filed** Nov. 17, 1955, D. C., N. D. Calif. (San Francisco), Doc. 35064, *Eunice N. Van Winkle v. Happy Toy Mfg. Co.*

2,613,166, G. E. Gronemeyer, Thermal insulation, **filed** Nov. 18, 1955, D. C. N. J. (Trenton), Doc. 1095/55, *Hunter Mfg. Corp. v. Mirror Insulation Co. Inc. et al.*

2,615,505, T. A. Friedlander, Chair construction, **filed** Nov. 29, 1955, D. C. Md. (Baltimore), Doc. 8616, *Thomas A. Friedlander v. Union Brothers et al.*

2,646,115, Bucher and Skiver, Venetian blind, **filed** Nov. 29, 1955, D. C., S. D. N. Y., Doc. 105/177, *Levolor Lorentzen, Inc. v. Hunter Douglas Corp.*

2,649,853. (See Re. 23,662.)

2,653,329, R. Coopersmith, Sofa bed, **filed** Aug. 19, 1954, D. C., E. D. Mo. (St. Louis), Doc. 9928(3), *Smith and Davis Mfg. Co. v. American Bed and Spring Co., Inc. et al.* Consent order adding additional parties defendant: The Patti Ann Trust, The Vicki Rae Trust, The Lynn Marie Trust, The Karen Sue Trust, The Maxine Ruby Trust, The Leslie Hart Trust, The Michael Hart Trust, The Jill Ann Trust, Lester Sterling, Tr., Victor Packman, Tr., Jack Edlin, Tr., Julius Greenblatt, Tr., and Jack Lipsitz, Tr.; consent order of dismissal; plaintiff's petition for a Declaratory Judgment, and defendants' answer and counterclaim dismissed with prejudice (notice Nov. 28, 1955).

2,657,618, W. Elsbein, Developing apparatus, **filed** Nov. 23, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c2178, *Copeane Mfg. Co., Inc. v. Poray, Inc.*

2,663,558, Ornitz and English, Furnace conveyer element, **filed** Feb. 1, 1955, D. C. Del. (Wilmington), Doc. 1685, *The Duraloy Co. v. Blaw-Knox Co.* Consent decree; patent held invalid; counterclaim dismissed Nov. 25, 1955.

2,686,322, Blanke and Sands, Five-way type of bed assembly, **filed** Oct. 24, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 15094, *The Harvard Mfg. Co. v. Adlerx Bed Spring Corp.* Case dismissed Nov. 25, 1955. Same, **filed** Nov. 3, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c1990, *The Harvard Mfg. Co. v. The Seng Co.* Decree as above.

2,692,746, H. P. Thomas, Supporting clip, **filed** Mar. 31, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18044–C, *Exacto Industries, Inc. v. Thomas Associates et al.* Stipulation and order of dismissal with prejudice (notice Nov. 22, 1955).

2,702,998, J. J. Purcell, Surgical stocking, **filed** Nov. 23, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c2172, *Johnson & Johnson et al. v. The Scholl Mfg. Co., Inc. et al.*

2,705,283, J. C. Thomas, Sharply directional wide band antenna, **filed** May 6, 1955, D. C., S. D. N. Y., Doc. 100/277, *Technical Appliance Corp. v. Radio Merchandise Sales Inc.*

and Victory Specialties Co. Inc. Consent judgment; defendant Radio Mdse Sales Inc. enjoined; counterclaims of both defendants dismissed with prejudice Nov. 18, 1955.

2,711,714, L. G. Timeus, Aquarium feeding device, **filed** Aug. 22, 1955, D. C., S. D. N. Y., Doc. 103/36, *Lawrence G. Timeus v. Saxon Plastics Corp.* Stipulation and order of discontinuance (notice Nov. 25, 1955).

2,714,269, G. R. S. Charles, Ornamental beaded necklace, **filed** Nov. 28, 1955, D. C., E. D. Pa. (Philadelphia), Doc. 19684, *The Richelieu Corp. v. John Wanamaker.* **Same**, D. C., W. D. N. Y. (Buffalo), Doc. 6803, *The Richelieu Corp. v. J. N. Adam's.*

2,719,402, K. O. Schmidt, Case for watch, **filed** Nov. 29, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16073, *Karl Otto Schmidt v. I D Watch Case Co. Inc.*

Re. 23,662 (of **2,545,818**), C. R. Larkin, Barbecue appliance; **2,649,853**, same, Bun warmer, **filed** Apr. 24, 1953, D. C., S. D. Calif. (Los Angeles), Doc. 15425–Y, *Charles R. Larkin et al. v. Jay Specialty Products, Inc. et al.* (Re. 23,622 and 2,649,853 included by amended and supplemental complaint filed Oct. 12, 1953). Consent judgment; Re. 23,662 and 2,649,853 held infringed by defendants Jay Specialty Products, Inc., Wm. Yanchor and Alan T. Fischer; injunction issued; order for defendants to assign plaintiffs all rights to patent Des. 168,722; cross-complaint of defendant Jay Specialty Products, Inc. ordered dismissed with prejudice (notice Nov. 22, 1955).

Des. 164,782, J. J. Librizzi, Decorative light bulb or similar article, **filed** Nov. 29, 1951, D. C., S. D. N. Y., Doc. 71/235, *Radiant Glass Fibers Co. Inc. v. Colonial Decorative Display Co., Inc.* Stipulation and order of discontinuance Nov. 28, 1955.

REISSUES

JANUARY 24, 1956

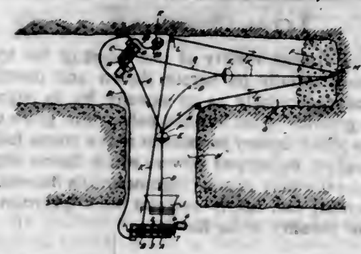
Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,112
MACHINE FOR CONVEYING BULK MATERIAL AND CONTROL THEREFOR

Mentor C. Addicks, Minneapolis, Minn.

Original No. 2,699,919, dated January 18, 1955, Serial No. 287,396, May 12, 1952. Application for reissue August 29, 1955, Serial No. 531,310

18 Claims. (Cl. 254—187)



1. In a device of the class described, a supporting structure; a winding drum journaled for rotation on the supporting structure; a drive shaft; power transmission mechanism connecting the drive shaft to the winding drum, said power transmission mechanism including a low torque transfer friction coupling comprising relatively rotary driving and driven elements, the former of which is connected to the drive shaft and the latter of which is connected to the drum, and a releasable high torque transfer coupling connecting the drive shaft to the drum; and means for varying the torque transferability of said low torque transfer coupling, said means comprising an adjustment member operative to increase or decrease the frictional load applied by one of said elements to the other thereof.

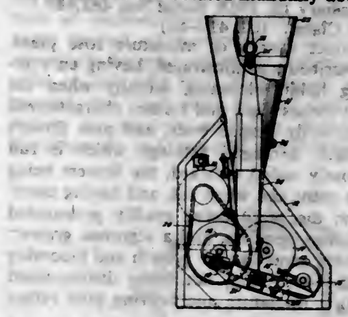
24,113
SHIP LOADING AND TRIMMING MACHINE

Francis X. Landrey, South Portland, Maine, assignor to Stephens-Adamson Mfg. Co., a corporation of Illinois

Original No. 2,687,798, dated August 31, 1954, Serial No. 260,475, December 7, 1951. Application for reissue May 17, 1955, Serial No. 509,130

3 Claims. (Cl. 198—128)

1. In a machine for loading bulk material into the hold of a ship, a thrower including a frame, pulleys journaled on horizontal axes fixed in the frame, a conveyor belt trained around said pulleys, a chute adapted to receive the material to be loaded and deliver it to the belt, and a motor driving the belt for projecting said delivered material in the form of a stream in a single direction, means supporting the thrower frame rigidly on and below the chute, and a fastening element mounted on the chute in [substantially the axis] *substantial alignment with the axis* thereof for attachment to a single line fall rope supporting the machine whereby the machine may be hung from a derrick and rotated manually about the axis of the



fall rope by an operator grasping the frame of the thrower, *said fastening element comprising a spider element secured within said chute and a substantial distance down inside it.*

24,114
ARTIFICIAL FOLIAGE AND METHOD OF MAKING SAME

Joseph I. Adler, Jr., Chicago, Ill.

Original No. 2,716,828, dated September 6, 1955, Serial No. 411,731, February 23, 1954. Application for reissue November 21, 1955, Serial No. 548,296

5 Claims. (Cl. 41—13)



1. An artificial leaf comprising a flexible fabric sheet preformed to simulate the configuration of a natural leaf and having reproduced on each surface thereof a leaf design replicating color, veins and surface texture of a natural leaf, a stem-forming member secured to a surface of said sheet, said sheet having a coating of transparent, non-inflammable plastisol on said surfaces and encasing the stem member, said coating being thin and substantially uniform whereby light reflected from said artificial leaf appears to an observer to have originated from within said leaf in simulation of natural leaf effects.

PLANT PATENTS

GRANTED JANUARY 24, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,451
ROSE PLANT
Ralph S. Moore, Visalia, Calif.
Application January 18, 1955, Serial No. 482,689
1 Claim. (Cl. 47—61)

A new and distinct variety of miniature rose plant, substantially as described and illustrated, having an everblooming climbing habit, blooming initially when the plant is six to eight inches high; and further characterized by substantially perfectly shaped buds, and pink flowers with double regularly arranged petalage which is full with the petals loosely rolled outward, the flowers being long lasting on the plant and when cut, and having excellent color stability; the plant being readily propagated by budding or cuttings, seedless, and a vigorous grower; and such plant having generally the growth and blooming habits of the High Noon rose, but being distinguished therefrom by being a miniature and bearing pink rather than yellow flowers.

1,452
ROSE PLANT
Mathias Tantau, Uetersen, Holstein, Germany, assignor to Jackson & Perkins Company, Newark, N. Y., a corporation of New York
Application March 11, 1955, Serial No. 493,844
1 Claim. (Cl. 47—61)

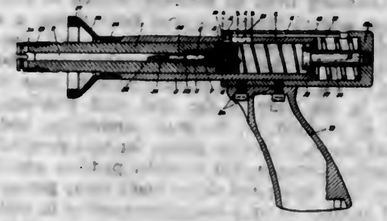
A new and distinct variety of rose plant of the hybrid tea class, substantially as herein shown and described, characterized particularly as to novelty by its vigorous and upright growth, by the unusual pale yellow green color of its foliage which is very prominent in the young foliage, its hooded sepals, its cupped flowers which flatten slightly with age, the extremely strong fragrance of its flowers, and the rich Carmine red, lightly overcast with Spectrum red, general color tonality of its flowers.

PATENTS

GRANTED JANUARY 24, 1956

GENERAL AND MECHANICAL

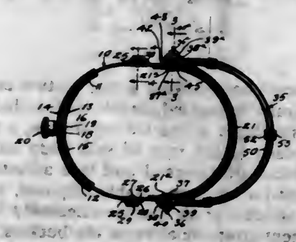
2,731,636
IMPROVEMENTS IN EXPLOSIVELY ACTUATED FASTENER DRIVING TOOLS
Jacques Bumiller, Valence, France, assignor to Societe de Prospection & d'Inventions Techniques Spit, Bourg-les-Valence, France, a French company
Application June 26, 1953, Serial No. 364,433
Claims priority, application Spain August 20, 1952
3 Claims. (Cl. 1—44.5)



1. An explosively actuated fastener driving tool comprising: a breech block; a barrel removably secured to said breech block; a firing pin carried by said breech block; an elongated housing slidably guided over said barrel and said breech block and able to perform a limited longitudinal movement with respect thereto; spring means located between the rear end of the said breech block and the rear end of the said housing for normally pushing said housing opposite the front end of said barrel which normally projects from the front end of said housing; a striker having a front end in said housing for actuating said firing pin, said striker and said housing having limited longitudinal slidable movement relative to one another; a firing pin actuating sleeve slidably guided over the rear end portion of said housing and supporting said striker for movement therewith; and a spring, stronger than said first mentioned spring means and located between the rear end of said housing and the rear end of said sleeve, for normally urging back said sleeve and said striker with respect to said housing, said striker pin being normally separated from said firing pin a greater distance than the extent to which said housing can move longitudinally with respect to said barrel, and said housing being rotatable relative to said pin whereby after said rotatable movement the said striker may be moved to a position to actuate the firing pin.

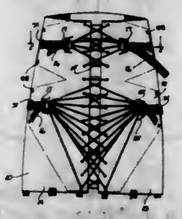
2,731,637
SUNSHADE
Harry Leland Kaplan and Howard G. Singer, Houston, Tex.
Application April 14, 1954, Serial No. 423,165
1 Claim. (Cl. 2—9)

In a sun visor including head band means formed of relatively rigid heavy plastic material, said head band means being in the form of an oval having arcuately shaped front and rear ends and substantially straight sides, said head band means being split at its said rear end to provide a pair of overlapping ends, said overlapping ends having elongated slots formed therein adapted to register with one another, a flattened tubular member surrounding said overlapping ends and extending across the arc at said rear end of said head band means, said tubular member having a pair of oppositely disposed apertures formed therein adapted to register with said slots formed in said head band means, adjustable bolt fastening means extending through said bolts and apertures, flattened tubular sweat band means surrounding the front arc end of said split band, a band having a pair of ends and having integrally formed therewith an inclined visor, said last-named band and visor being formed of transparent plastic material, a pair of oppositely disposed adjustable bolt means on said straight sides of said split head band means adjacent said front arcuate end, said ends of said last-named band each having an aperture extending therethrough to receive therethrough said last-named adjustable bolt means for



pivotal movement thereon with said visor being inclined toward said rear end of said head band means, a transparent arcuate shield detachably secured to said last-named band intermediate said front end of said head band means and said last-named band, said sweat band means having end portions thereof extending across said last-named adjustable bolt means on the inner ends thereof, intermediate adjustable bolt means on said split band between each of said last-named adjustable bolt means and said split ends, and a head strap extending between said intermediate bolt means, said head strap means having elongated slots at both ends through which said intermediate bolts pass for adjustment of said head strap relative to said head band.

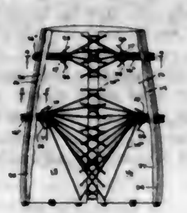
2,731,638
CORSET
Anna Sturz, New York, N. Y.
Application January 28, 1953, Serial No. 333,646
3 Claims. (Cl. 2—39)



1. In a corset body having a rear section comprising a pair of centrally separated panels and including a network of cluster laces across the separation, buckles to which the cluster laces are fastened, and lace adjustment straps on which said buckles are slidably disposed, said buckles including a slidable cross bar for releasably locking said lace adjustment straps relative to the buckles, a pair of rings on each of said cross bars, a supplementary

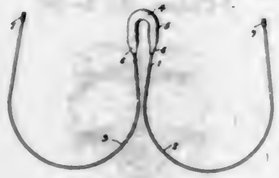
draw lace for each buckle and having ends respectively secured to each of the rings of a cross bar, a rear shield covering said panels and buckles and being removably connected to the panels, each of the supplementary draw laces extending through holes formed through said rear shield so as to be externally manually accessible whereby said cross bars may be actuated externally of said shield to adjust the cluster laces.

2,731,639
HEALTH CORSET
Anna Sturz, New York, N. Y.
Application January 21, 1954, Serial No. 405,406
3 Claims. (Cl. 2—39)



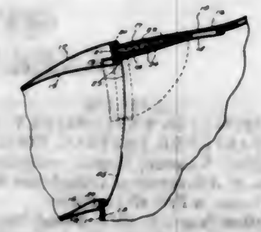
1. In a corset body having a rear section comprising a pair of centrally separated panels and including a network of cluster laces across the separation, a plurality of buckles disposed at the rear of said body and to which the cluster laces are fastened and lace adjustment straps on which said buckles are slidably disposed, said buckles including a slidable cross bar for releasably locking said lace adjustment straps relative to the buckles, a plurality of supplementary draw laces each secured to one of the cross bars, a rear shield having side edges secured over said panels and covering said buckles, each of the supplementary draw laces having single lengths thereof each individually extending through one of spaced holes formed through said rear shield so as to be externally manually accessible whereby said cross bars may be manually actuated externally of said shield to adjust the cluster laces, said rear shield having its said side edges stitched to said rear section on both sides of said central separation, said rear shield covering said net-work of cluster laces and said buckles.

2,731,640
WIRE FOR BRASSIERES
Arthur Garson, New York, N. Y.
Application February 9, 1954, Serial No. 409,116
1 Claim. (Cl. 2—42)



A wire reinforcement for brassieres and similar garments comprising a double-loop wire frame formed with a central loop apex, a soft and compressible rubber material in the form of a non-shiftable, intimately-attached sleeve located over the central loop apex and adherently bonded thereto, the adherence of the sleeve to the portion of the wire over which it is applied being such as to hold the sleeve against longitudinal as well as rotative movement on the wire.

2,731,641
GARMENT CONSTRUCTION
Francis D. Toscani, Drexel Hill, and Nicholas Ippoliti, Broomal, Pa.
Application March 14, 1955, Serial No. 493,960
6 Claims. (Cl. 2—93)



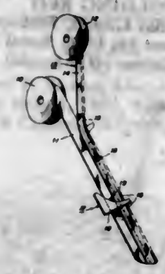
1. In a suit coat, jacket or the like, a coat body, a sleeve extending from an armhole formed in said coat body and seamed thereto, a coat body lining, a sleeve lining, shoulder padding inserted between said coat body and coat body lining adjacent said armhole, said shoulder padding having an edge in registry with the edge of said armhole in the body of the coat, said padding being secured in position by the seam connecting said coat body and sleeve, protective means for said shoulder padding inserted between said shoulder padding and lining, said coat body lining and sleeve lining being permanently stitched together along a line corresponding to said armhole in the coat body, said protective means being disposed upon the inner face of said lining in overlying relation to said lining seaming in order to protect said shoulder padding from the stitches that close said lining seaming, said stitches being permanent stitches extending entirely through said seamed lining and being free of said overlying shoulder padding so that insertion of additional shoulder padding therebetween is facilitated, and means provided by said seamed lining for affording access to the space between the lower surface of said padding and the inner surface of said seamed lining for inserting the additional shoulder padding.

2,731,642
TIE ATTACHMENT
Gerald E. Storts, Springfield, Ohio
Application November 18, 1953, Serial No. 392,858
4 Claims. (Cl. 2—132)



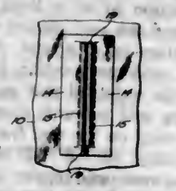
1. A tie attachment comprising a transversely extending member adapted to be positioned under a collar, downwardly extending rod members secured to said transverse member, said transverse member adapted to support a tie at a point substantially at the center of the former and said rod members being positioned at opposite sides of the tie, a cylinder having a closed lower end slidably mounted on the lower end of each rod member, and having a vertical slot therein, a coil spring in the cylinder under the rod and bearing against the closed end of the cylinder to project the cylinder downwardly, said spring including a horizontal upper end portion connected to the lower portion of the rod and slidable in said slot and at least one prong extending from the lower end of each cylinder.

2,731,643
MANUFACTURE OF TROUSER FLIES
George Waldes, Jackson Heights, N. Y., assignor to Waldes Kohinoor, Inc., Long Island City, N. Y., a corporation of New York
Application June 16, 1953, Serial No. 361,972
2 Claims. (Cl. 2—234)



1. A method of manufacturing trouser flies, which comprises the steps of progressively associating a continuous slide fastener stringer with a continuous strip of fly piece material, sewing said stringer and fly strip together in a continuous operation, causing the combined stringer and fly strip to move in a linear path, severing from the advancing end of said combined stringer and fly strip a succession of lengths thereof corresponding to the desired length of trouser fly, and in each said severing operation simultaneously forming a straight top-end edge on each severed length and a curved end edge on the advancing end of the combined stringer and fly strip, the curvature of which corresponds to that of the bottom crotch-end edge of a trouser fly.

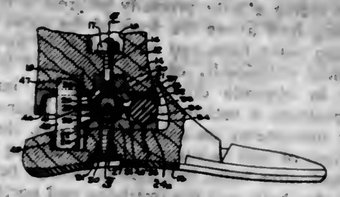
2,731,644
METHOD OF MAKING BUTTONHOLES
Roland A. Matthies, Needham, Mass.
Application May 12, 1953, Serial No. 354,472
1 Claim. (Cl. 2—266)



The method of making buttonholes comprising the steps of placing an elongated rectangular piece of fabric on the face of a garment, positioning spaced parallel cords longitudinally on said fabric, folding said fabric over said cords with the longitudinal side edges in contiguous relationship between said cords, sewing spaced parallel longitudinal stitches through said folded fabric and said garment to lock said cords and fabric to said garment, cutting said garment and said fabric between said cords to form a cut having triangular end flaps at each end, turning said fabric, flaps, and cords through said cut to the rear of said garment, and stitching said flaps in turned position.

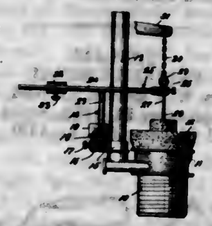
2,731,645
ANKLE JOINT FOR ARTIFICIAL LIMBS
Carl Woodall, Downey, Calif.
Application October 20, 1952, Serial No. 315,654
7 Claims. (Cl. 3—6)

1. An ankle joint for artificial limbs including a leg section and a foot member, comprising: a universal joint for connecting said leg section and foot member together in spaced relation; a resilient cushion disposed in said space, said cushion comprising a cylindrically shaped instep portion disposed forwardly of the ball and socket joint and extending transversely of said foot member;



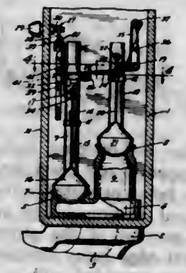
and a pair of cylindrically shaped torque action portions disposed adjacent each side of said joint, the parts of said cushion being connected together by a web.

2,731,646
FLUSH VALVE ASSEMBLY
James T. Hughes, West Davenport, N. Y.
Application October 2, 1953, Serial No. 383,797
1 Claim. (Cl. 4—57)



In a toilet flush tank including a flush seat and a valve ball for disposition thereon and an overflow tube adjacent thereto; a pivoted structure, a riser affixed to said ball and to said pivoted structure, said riser being provided with means whereby the same and its ball can be lifted, said pivoted structure being composed of a clamp on the overflow tube and an elongated structure provided with a leg pivotally secured to the clamp structure, said elongated structure being in the form of a rigid U-shaped yoke embracing said overflow tube, said U-shaped yoke being provided with an extension at its bite portion and having an opening for receiving the riser, said extension having a set screw adapted to engage said riser, and an adjustable weight on one of the leg portions of the U-shaped yoke.

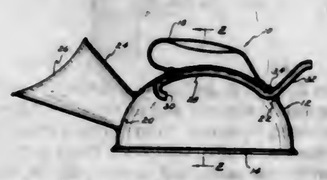
2,731,647
DUAL TYPE FLUSH VALVE AND SELECTIVE OPERATOR THEREFOR
Endle P. Groth and George R. Weisz, Brainerd, Minn.
Application May 25, 1955, Serial No. 511,056
2 Claims. (Cl. 4—67)



1. A closet bowl flushing device for use in a flushing tank comprising, a pair of horizontally disposed valve seats at different levels, a pair of valve-acting balls one each mounted for raising and lowering movements with respect to one of said valve seats, conduit means including branches leading from said valve seats to said closet

bowl, and means for independently imparting valve-opening movements to said valve balls, said last-mentioned means including a lever pivotally secured to the wall of the flushing tank above the level of the valve seats and cooperating valve balls and terminating at its outer end in a handle exteriorally of said wall, said lever being movable in opposite directions from an intermediate neutral position, a rocker arm mounted intermediate its ends for movements on a horizontal axis, the opposite end portions of said rocker arm each overlying a different one of said valve balls, lost motion linkage between one of said valve balls and the overlying end portion of said rocker arm, lost motion linkage between the other of said valve balls and the inner end portion of said lever, and linkage connecting the inner end portion of said lever and said rocker arm and responsive to movement of said lever in one direction only from said neutral position to impart movement to said rocker arm in a direction to raise one of said valve balls, movement of the lever in the opposite direction from said neutral position imparting raising movements to the other of said valve balls independently of said one thereof.

2,731,648
FEMALE URINAL
Henry W. Clement, Rutland, Vt.
Application September 11, 1952, Serial No. 309,087
3 Claims. (Cl. 4—110)



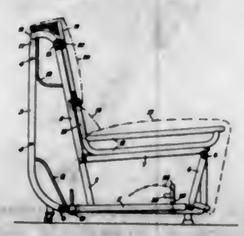
3. A female urinal comprising a receptor, a spout at one end of said receptor communicating with the interior thereof, and a vent tube extending longitudinally along the upper wall of said receptor and terminating at one end in a sharp reverse curve adjacent the inner end of said spout, the other end of said tube extending through said wall at the opposite end of the receptor and in a direction away from said spout.

2,731,649
STOPPER FOR GARBAGE DISPOSAL UNIT
James M. Valentine, Vandalia, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 15, 1952, Serial No. 320,641
2 Claims. (Cl. 4—286)



1. A closure for an opening including a structure having an edge shaped to rest upon the edge of the opening, said structure being provided with a circular trough and a raised central portion within and surrounded by said trough, the portion of the structure between the trough and the first edge being substantially impervious, said structure being provided with a plurality of symmetrically positioned upwardly flanged openings within said central portion, a cover for said openings having a continuous rim extending into said trough, said cover being provided with a plurality of projections extending into said openings when said rim is in said central portion of said trough, said structure having supporting means located sufficiently high between said openings for supporting said projections and said cover sufficiently high to raise its rim above the bottom but below the top of the trough.

2,731,650
FOLDING BED
Göte Yngve Mattias Göpert, Jonkoping, Sweden
Application August 19, 1952, Serial No. 305,128
2 Claims. (Cl. 5—44)



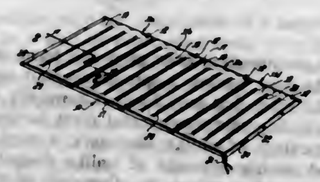
1. In a structure of the character set forth, the combination with two end members formed of metal tubes and having a substantially vertical rear frame portion, of a back member, which comprises a closed frame of metal tubes including two substantially vertical frame portions parallel to and detachably connected with the rear frame portions of the end members, an unfoldable bed frame comprising a back section, a seat section, a fore section and a lower section hingedly connected one to another, one of said sections being pivoted in the metal tubes of the end members, said back section having its upper portion bent backwards and resting with a horizontal end tube upon an upper tube portion of the back member so as to carry thereby the seat section, two metal rods extending each from the bent portion to the straight portion of a longitudinal frame portion of the back section so as to bear from the side against said upper tube portion of the back member, a seat frame connected to said seat section and having its rear portion directed upwards along the back section so as to limit the angle between the back section and the seat section and thereby maintain the back section in a proper position resting on the back member, said rear portion further serving as a leg structure for the unfolded seat section, a lower back upholstery covering said upwards directed portion, a removable frame resting on the seat frame and carrying an upper back upholstery, curved rods mounted on vertical bars extending between said upper tube portion and a lower tube portion of the back member for guiding a transverse end tube member of the lower section between a lower and an upper position as the bed is being unfolded, and adjustable means provided on the lower section and engaging the end members for supporting this section when the bed is unfolded.

2,731,651
CONVERTIBLE FURNITURE
Joseph R. Thomas, Chicago, Ill.
Application April 26, 1952, Serial No. 284,496
14 Claims. (Cl. 5—53)



1. Convertible furniture comprising a frame, a foldable bed having connected sections which fold and unfold relatively to each other, means connected to the frame and to at least one of the folding bed sections for mounting the bed to move from a seat position within the frame to a bed position extending from the frame, a movable end rest pivotally connected at the end of one of the bed sections, and means connecting the rest and said mounting means for positively moving the rest relative to said one section when the bed is moved from a seat position to a bed position.

2,731,652
AIR MATTRESS
Edward P. Bishop, Glendale, Calif.
Application June 1, 1951, Serial No. 229,490
10 Claims. (Cl. 5—348)



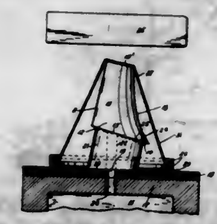
1. A pneumatic mattress comprising superimposed sheets of substantially air impermeable flexible plastic material heat sealed together to form an air tight inflatable mattress having said sheets as its upper and lower walls, said sheets forming said upper and lower walls having superimposed portions heat sealed together in substantially fixed relative positions along a plurality of elongated seal areas extending generally parallel and transversely of the mattress and dividing the mattress into a series of transverse inflatable compartments, each of said compartments having a dimension longitudinally of the mattress which is small as compared with its dimension transversely of the mattress, said superimposed sheets of plastic material being heat sealed together at each seal area along a pair of essentially parallel transverse lines which are spaced apart sufficiently to cause the portions of the sheets at the seal areas to act as a series of flexible hinges allowing relative folding movement of successive compartments at said areas, said transverse seal areas being positioned at a plurality of locations spaced along the major portion of the length of the mattress to allow for longitudinal folding of the mattress at different locations spaced along most of its length, and air inlet means for inflating the mattress.

2,731,653
MOCCASIN SHOE PROCESS
James Glassman, South Portland, Maine
Application June 2, 1955, Serial No. 512,751
1 Claim. (Cl. 12—142)



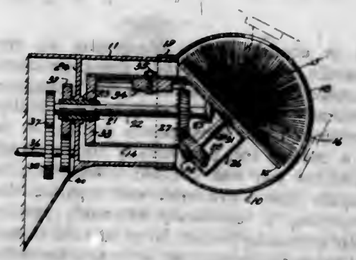
The process of making moccasin type shoes from a vamp and a plug having corresponding preformed stitch holes in their margins, comprising first uniting the vamp and plug in dry condition by a series of bar stitches inserted through said preformed stitch holes and spaced from each other about the tip and forepart, then soaking these partially united parts, forcing a last beneath the plug and into the vamp and thereby partially conforming these parts to the last, and finally uniting the vamp and plug by a hand sewn moccasin seam formed through the said preformed stitch holes while the bar stitches remain in place holding the vamp and plug in proper relation for such stitching while on the last.

2,731,654
METHOD OF COVERING ARTICLES
Roger L. Nowak, West Boylston, Mass., assignor to Van Brode Milling Co., Inc., Clinton, Mass., a corporation of Massachusetts
Application November 23, 1953, Serial No. 393,676
1 Claim. (Cl. 12—147)



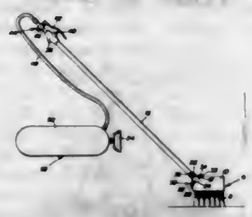
The method of covering a heel core with a layer obtained from a sheet of thermoplastic material, which consists in mounting the heel core, provided with a film of cement on its breast, sides, curved back and along the peripheral portion of its heel attaching face, on a support so as not to cover the cement on said peripheral portion, said heel core being mounted on said support so that its breast extends at a substantial angle to a vertical plane passing through said support, placing the sheet clamped between rings on the heel core, applying heat to the sheet to effect plasticity in its material, stretching the plasticized sheet by the weight of said rings over the heel core below the supported face of the latter and closing the shell so formed around said core, and creating a partial vacuum in said shell whereby the latter is made to assume the conformation of the core and to adhere to the same by said film of cement.

2,731,655
GREASE FITTING CLEANER
George E. Newberry, Ruth, Ky.
Application April 29, 1952, Serial No. 284,905
4 Claims. (Cl. 15—22)



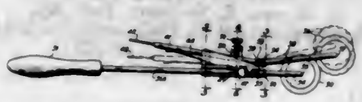
4. In a motor brush, a motor housing, a first motor driven shaft journalled in said motor housing longitudinally thereof, a bearing sleeve journalled in the housing longitudinally thereon, a gear case fixed to said sleeve, a second shaft journalled in said gear casing and extending through the sleeve into the motor housing, a third shaft journalled in said gear casing at an angle to said second shaft and extending outwardly and beyond said gear case, a brush head fixed to the outer end of said third shaft, a gear train in said motor housing operatively connecting said second shaft to said first shaft and said first shaft to said sleeve and gears connecting said second shaft to said third shaft, whereby said brush head is rotatable about an axis coincident with the axis of said second shaft and rotatable about an axis coincident with the axis of said third shaft.

2,731,656
FOUNTAIN BRUSH
Richard E. Payne, San Bernardino, Calif.
Application April 20, 1953, Serial No. 349,636
3 Claims. (Cl. 15—128)



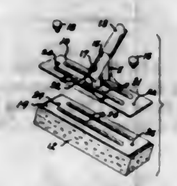
1. A fountain brush comprising a rigid back equipped with bristles and having a plurality of paint distributing and delivery passages communicating with the bristles, said back having groove means and said passages communicating with said groove means, and a T-shaped handle having a handle portion which is hollow and a head portion which is also hollow and constitutes a manifold, said manifold being commensurate in length with and fitting rotatably into said groove means and having orifices registerable with said passages upon limited angular rotation of said manifold, and straps having end portions secured to said back and having intermediate portions bridging said groove means and adjacent portions of the manifold and serving to maintain the manifold in the groove means.

2,731,657
APPLICATOR ROLL AND CLAMPING MEANS THEREFOR
Axel E. Ogren, Chicago, Ill., assignor to The Sherwin-Williams Company, Cleveland, Ohio, a corporation of Ohio
Application January 2, 1953, Serial No. 329,233
3 Claims. (Cl. 15—132.5)



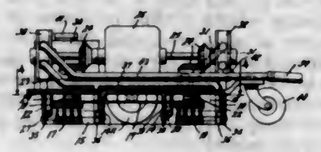
1. A coating device comprising an applicator roll, a handle, and a connecting shank structure, said shank structure comprising a rearwardly extending portion and a laterally extending portion lying laterally of said applicator roll and substantially parallel to the axis thereof; a coating roll peripherally communicating with said applicator roll and laterally offset therefrom having a separate shank structure, said separate shank structure comprising a rearwardly extending portion and a laterally extending portion lying laterally of said coating roll and substantially parallel to the axis thereof; and clamping means for pivotably holding said shank structures in laterally fixed relationship while permitting movement about a single axis parallel to the axes of rotation of said rolls, which clamping means comprises a body having a formed lower portion adapted to engage rigidly the lateral portion and the rearwardly extending portion of the shank structure of said applicator roll, a slot formed in an upper and rearward portion of said body adapted to permit vertical movement therein of the rearwardly extending portion of the shank structure of the coating roll, and means associated with said body for engaging and holding the laterally extending portion of the shank structure of said coating roll in laterally fixed relationship to the shank structure of said applicator roll while permitting movement about the axis of the laterally extending portion.

2,731,658
FLOOR MOP HAVING A DETACHABLE CLEANING ELEMENT
Walter F. Miller, Dayton, Ohio
Application August 31, 1950, Serial No. 182,436
2 Claims. (Cl. 15—244)



2. In a combination floor mop and hand cleaning device of the type having a sponge element secured to a sheet metal plate that may be used manually, the combination including said sheet metal plate having a pair of tapped openings of unlike diameters, a mop head, said mop head having openings of unlike diameters aligned with said tapped openings, the diameters of the openings in the mop head being unequal and at least as large as the corresponding openings in the plate, and cap screws passing through said openings and having threaded portions engaging the tapped openings in said sheet metal plate, the smaller opening in the mop head having a diameter less than the larger cap screw so as to limit the connection of the sheet metal plate to one relative position with respect to the mop head.

2,731,659
FLOOR SCRUBBING MACHINE
George Coplen, Cripple Creek, Colo.
Application December 8, 1952, Serial No. 324,671
2 Claims. (Cl. 15—320)



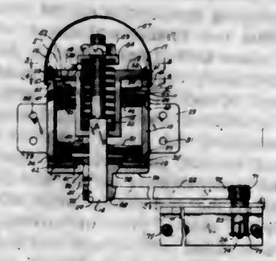
1. A floor scrubbing device comprising: an open-bottomed housing; partition means extending transversely of said housing and dividing the latter into a front brush compartment and a rear brush compartment; vertical brush shafts rotatably mounted in said housing, there being one brush shaft extending downwardly medially of each compartment; a crank member mounted on the lower extremity of each brush shaft; an eccentric crank pin carried by each crank member and projecting downwardly therefrom; a horizontally positioned brush frame supported by and extending between said crank pins and through openings provided in said partition means; a brush in each of said compartments, both of said brushes being fixedly secured to said brush frame and extending downwardly therefrom into contact with the floor; a bevel gear on the upper extremity of each brush shaft; a horizontal drive shaft extending between said brush shafts; bevel gears on said drive shaft meshing with the bevel gears on said brush shafts; an electric motor operatively connected with said drive shaft for rotating the latter; a water pump; a suction pump, said pumps being driven from said drive shaft; supply conduits extending from said pumps to said compartments for supplying water thereto; suction hoods in said compartments positioned in close relation to the floor; and suction conduits extending from said hoods to said suction pump for removing water from said compartments.

2,731,660
ANCHOR EDGE
Joseph M. White, Yorktown Village, Md.
Application October 2, 1952, Serial No. 312,783
11 Claims. (Cl. 16—7)



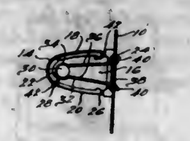
9. An anchor edge for installation of a carpet in close proximity to a wall or other abutments including an integral one-piece longitudinally extending U-shaped trim, said U-shaped trim comprising parallel upper and lower sections connected by a downwardly and inwardly extending edge, the lower section having means for securing said trim to the flooring, said means comprising a plurality of apertures in the lower section adapted to be installed directly over an adhesively coated floor surface whereby said adhesive is adapted to seep into said apertures to create a lock between said trim and the flooring, and means for securing the carpet to the opposite section of said trim and means for protecting the outer edge of said carpet comprising an angular plate, said angular plate having a plurality of openings in the upper part thereof, said angular plate adapted to be secured over the edge of a carpet and the front portion of said U-shaped trim whereby the edge of said carpet is concealed and protected, and screws passing through said protective plate adapted to pass through a carpet and passing through said trim whereby said angular plate is secured over said carpet and trim.

2,731,661
DOOR CLOSER AND STOP
John A. Wagner, St. Petersburg, Fla.
Application September 4, 1952, Serial No. 307,796
4 Claims. (Cl. 16—65)



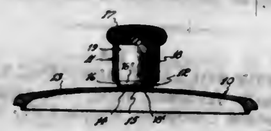
1. A door closer comprising a housing adapted to be positioned on a door frame, a bracket having an elongated slot therein adapted to be positioned on a door, a shaft positioned in the housing and extended from one end thereof, an arm carried by the shaft, a pin carried by the arm and positioned to extend through the slot of the bracket, a disc in the lower end of the housing on the shaft and adapted to rotate with the shaft, a second disc in the upper end of the housing fixed thereto, resilient means for rotating the shaft fixed at one end to the disc in the lower end of the housing and at its opposite end to the disc in the upper end of the housing, means mounted on the shaft for frictionally controlling the rotation of the shaft, and means in said friction controlling means for holding the shaft in various positions to which it is turned by opening the door.

2,731,662
OVEN DOOR HANDLE
Herbert E. Mills, Detroit, Mich., assignor to Mills Products, Inc., Walled Lake, Mich., a corporation of Michigan
Application February 19, 1954, Serial No. 411,352
2 Claims. (Cl. 16—111)



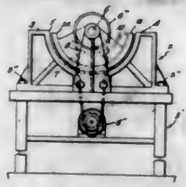
1. A handle assembly for a door panel or the like, comprising a pair of mounting posts each comprising a hollow body having a vertically disposed end wall and peripheral walls projecting laterally from said end wall, said body being open on the side thereof opposite said end wall and having a vertical surface disposed normal to said end wall adapted to be seated against the door panel, said posts being arranged in spaced relation with said peripheral walls projecting toward each other in the assembly, said peripheral walls having spaced slots therein extending from said open sides, an elongated handle member having curled longitudinal edges receivable in and seated against the bottoms of the slots in said walls with the end portions of said handle overlying said wall between said slots for securing said handle to said posts, said posts each having a boss projecting inwardly from said end wall and spaced from said peripheral walls, and a substantially U-shaped spring member having its central portion telescoped onto said boss, said vertical surface of said post having an opening therein, the ends of said spring projecting through said opening beyond said surface for insertion in an opening in the door panel.

2,731,663
POT LID WITH MAGNETIC QUICK-DETACHABLE HANDLE
Murray Thompson, New City, N. Y.
Application October 15, 1953, Serial No. 386,168
2 Claims. (Cl. 16—114)



1. A cooking utensil device comprising: a lid having an armature of paramagnetic material with upwardly presented seating face of fixed outline and area; and a handle for said lid having an attaching magnet with a seating face of outline and area matching the mated face of the lid armature constructed and arranged to fit the seating face of said lid armature, whereby the handle will be bound in seated position by magnetic attraction, said lid armature having an upwardly opening shallow flaring socket to receive the lower end portion of the handle magnet and providing an inclined inner side face for wedging handle-rocking contact with the said lower end of the magnet when slid sideways to release the latter from magnetic attachment to the seating face of the lid armature, the degree of shallowness of the armature socket and of inclination of the inner side face thereof being such that the interengaged portions of the handle magnet and lid armature are united rigidly by magnetic attraction alone and that there will be no mechanical resistance to relative rocking motion thereof and lengthwise withdrawal.

2,731,664
ROTARY-ACTING FOWL TENDON PULLER AND LEG SEVERER
Stuart B. Osborne, Medway, Mass.
Application March 4, 1953, Serial No. 340,212
2 Claims. (Cl. 17—11.3)



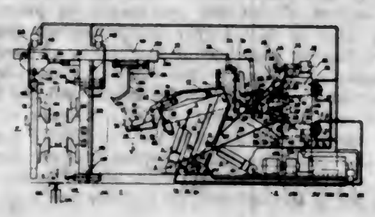
1. An automatic turkey-leg severing and tendon pulling machine comprising, a basal fixed element having a parti-cylindrical axially elongate upwardly open trough-like cavity presenting a concave working face of substantial circumferential linear extent and having substantially diametrically opposed entrance and exit ends, a cooperative rotary element formed with a convex face of like circumferential linear extent but of lesser radius and having leading and trailing ends, means for rotatively mounting the rotary element upon a horizontal axis concentrically with the fixed element for continuous revolution of the convex face along past and in closely spaced parallelism with the concave face, said spacing being substantially less than the thickness of the average leg to be severed and drawn, power means to drive the rotary element continuously in one direction, the entrance end of the concave-faced cavity and the leading end of the rotary element having cooperative dull rounded edge formations adapted for crush-shearing but non-tendon-severing interaction upon a turkey-leg inserted into the cavity in advance of the revolving rotary element, and the leading end of the rotary element being formed to engage behind and to push the sheared leg portion through the cavity and simultaneously to pull the attached upper leg tendons along through the circumferential and linearly extensive channel defined between the then opposed concave and convex faces of the fixed and the rotary elements and then to eject the leg and tendons at the exit end of the cavity.

2,731,665
SHACKLE FOR POULTRY DRESSING MACHINES
Ralph S. Zebarth, Hickman Mills, Mo., assignor to Gordon W. Johnson Company, Kansas City, Mo., a corporation of Missouri
Application September 5, 1950, Serial No. 183,125
3 Claims. (Cl. 17—44.1)



1. A poultry shackle comprising a support element adapted to be suspended at its uppermost extremity; an elongated plate rigidly secured to the lowermost extremity of the element and supported by the latter in transversely inclined disposition when the element is normally suspended, said plate being provided with a pair of spaced, elongated, transverse, fowl leg-receiving slots extending downwardly from the uppermost edge of the plate toward the lowermost edge thereof; a substantially omega-shaped, resilient holding member having a bight, including a substantially V-shaped central portion extending laterally in one direction, and a pair of opposed, outer, arcuate stretches extending from the opposite extremities of the bight in said one direction and each terminating in an end; and means attaching the ends of said member to said plate between the slots with a part of said central portion and one part of each of said stretches slidably resting upon the upper face of the plate and another part of each of said stretches partially overlapping a corresponding slot adjacent the uppermost end of the latter to present yieldable, gate structure therefor.

2,731,666
MACHINE FOR EXTRACTING VULCANIZATION BAGS FROM PNEUMATIC TIRES
Noël Nebout, Montlucon, France, assignor of one-half to Societe Anonyme des Pneumatiques Dunlop, Paris, France, a French company
Application September 8, 1953, Serial No. 378,991
Claims priority, application France June 10, 1953
11 Claims. (Cl. 18—2)

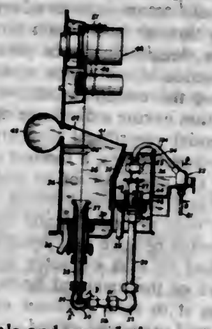


1. A machine designed for the extraction of vulcanising or heat-treatment bags from pneumatic rubber tyres, said machine comprising an articulated lever system provided with gripping members and constituting a mechanical arm, said lever system including two articulated levers, one of which pivots about a fixed axis while the other carries said gripping members, a second articulated lever system including two further articulated levers, one of which pivots about a fixed axis, separate power-actuated devices for selectively operating and controlling the angular movement of each of the said two articulated levers of said first articulated system, control means for independently controlling the power supply to each of said power-actuated devices, and means for controlling said control means in dependence on the movement of each lever constituting the said second articulated, lever system, whereby the desired cycle of movement traced by said second articulated lever system and required for the extraction of the said bag, is repeated by said articulated lever system under power-operation.

2,731,667
WET SPINNING APPARATUS
William H. Bradshaw, New Rochelle, N. Y., assignor to Celanese Corporation of America, New York, N. Y., a corporation of Delaware
Application May 16, 1951, Serial No. 226,593
5 Claims. (Cl. 18—8)

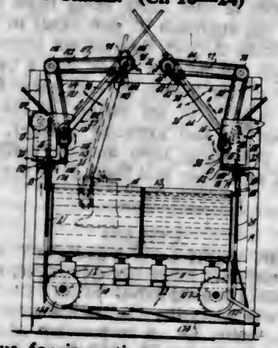
1. An apparatus for the production of filamentary materials comprising a trough for holding a coagulating medium, a second trough contiguous to said first trough, a channel communicating with said troughs for conducting overflow coagulating medium from said first trough to said second trough, a spinning jet positioned in said first trough for extruding a filament-forming composition into said coagulating medium in the form of filamentary materials,

and a generally U-shaped spinning tube extending from said first trough to said second trough for carrying the



filamentary materials and coagulating medium from said first trough to said second trough.

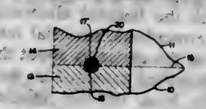
2,731,668
DIPPING MACHINE FOR FORMING RUBBER ARTICLES
Samuel S. Miner, Mishawaka, Ind., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application February 6, 1953, Serial No. 335,440
8 Claims. (Cl. 18—24)



1. Apparatus for imparting a predetermined path of movement to an article comprising, a frame, a hollow shaft rotatably mounted on said frame, an elongated rod, means mounting said rod for rotary movement with said shaft and linear movement with respect to said shaft, means for rotating said shaft, means for effecting linear movement of said rod, an arm rotatably mounted on said rod adjacent one end thereof, means for attaching an article to said arm, a pair of elongated members hinged together at one of their ends, one of said members being rotatably mounted at its other end on said shaft, the other end of the other member being rotatably secured to said arm, a second shaft rotatably mounted in said hollow shaft, first pulley means secured to said second shaft, second pulley means rotatably mounted on said hinged members at their hinge point, third pulley means connected to said arm, flexible driving means interconnecting said pulley means, and means for rotating said second shaft.

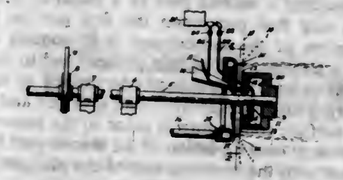
2,731,669
SPONGE RUBBER MOLD
Joseph Anton Talalay, New Haven, Conn., assignor, by mesne assignments, of one-half to The Dayton Rubber Company, Dayton, Ohio, a corporation of Ohio, and one-half to The B. F. Goodrich Company, Akron, Ohio, a corporation of New York
Application March 2, 1950, Serial No. 147,243
9 Claims. (Cl. 18—42)

9. Molding apparatus for forming shaped, cellular articles of a foamed, aqueous dispersion of rubber or rubber-like material comprising a mold having a cavity therein for receiving the dispersion and forming it into an article of the desired shape, said mold including a plurality of mold sections each provided with a peripherally extending lip of substantial width adapted to meet with a lip of another mold section when the mold is closed and confine the dispersion within the cavity of the mold, and means between said lips for permitting air and gas to escape from the mold cavity during expansion of the foamed dispersion and for intercepting any of the foamed dispersion attempting to follow the air and gas



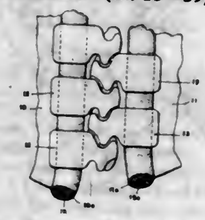
out of the mold and for congealing an ingredient of the dispersion so as to form a barrier to the flow of any additional dispersion out of the mold, said means including a strand of fibrous, porous material extending peripherally around the mold between the lips for presenting to the dispersion coming into contact therewith an extensive surface for congealing said ingredient of the dispersion by extensive surface contact therewith, the width of said strand being substantially less than the width of said lips so that said strand may be wholly confined within the space between the lips of adjoining mold sections.

2,731,670
REMOVAL OF SLAG FROM IRON DISTRIBUTORS USED IN THE PRODUCTION OF MINERAL WOOL
Richard M. Downey, North Judson, Ind., assignor to United States Gypsum Company, Chicago, Ill., a corporation of Illinois
Application November 1, 1951, Serial No. 254,375
1 Claim. (Cl. 18—47.2)



Method of facilitating the removal of hot adherent slag from a rotating metallic surface which comprises interposing a parting compound periodically between the slag and said metallic surface.

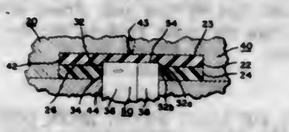
2,731,671
METHOD OF MANUFACTURING PLASTIC SLIDE FASTENERS
Abraham Zimmerman, Forest Hills, N. Y., assignor to Waldes Kohinoor, Inc., Long Island City, N. Y., a corporation of New York
Application June 6, 1951, Serial No. 230,197
5 Claims. (Cl. 18—59)



1. The method of manufacturing a slide fastener having fastener elements of thermoplastic material cast on

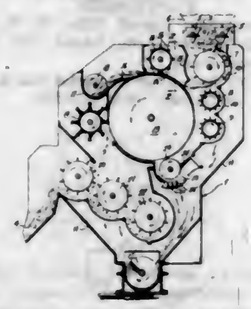
to the bead of the fastener tape, comprising the steps of applying to the bead of said fastener tape prior to its introduction into a mold employed in the casting operation, a thermosetting resin having the property of curing at the temperature at which the thermoplastic material for the fastener elements is supplied to the mold and within approximately the time required for said molding operation, and when cured of bonding the elements to the tape with a strength exceeding that of the thermoplastic material of said elements, positioning the tape in the mold in such manner that the bead projects into the cavities of the mold in which the fastener elements are formed, injecting heated thermoplastic material into the mold cavities thereby to cast the elements about the tape bead, and curing the thermosetting material in the mold under the influence of the heat of the injected thermoplastic material.

2,731,672
METHOD OF FORMING AN ORNAMENTAL PLASTIC ARTICLE
Raymond C. Davis, Joseph H. Overwein, and Murray S. Millhouse, Dayton, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application February 25, 1953, Serial No. 338,832
4 Claims. (Cl. 18—59)



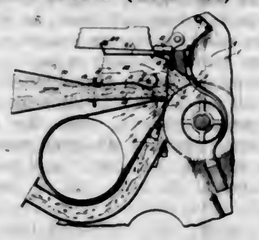
1. In a method of forming an ornamental design in a layered plastic article wherein the design appears in relief within the layers of the article, the steps comprising; molding a first part of colored plastic material having an apertured design extending therethrough, inserting a plunger having a predetermined contour through said aperture, molding a second part of a material that contrasts with said first part upon the first part so that a surface portion of the second part is in contact with a portion of a terminal end of said plunger and in intimate contact with at least a portion of one surface of the first part, removing said plunger from said aperture and finally forming a surface contrasting in color to the materials of both layers on at least a portion of the second part formerly in contact with the terminal end of the plunger.

2,731,673
EXTRACTOR FEEDERS FOR EXTRACTING LIMBS FROM SEED COTTON
Jeffrey J. Wallace, Amite, La., assignor to Gullett Gin Company, Amite, La., a corporation of Louisiana
Application October 21, 1954, Serial No. 463,662
7 Claims. (Cl. 19—35)



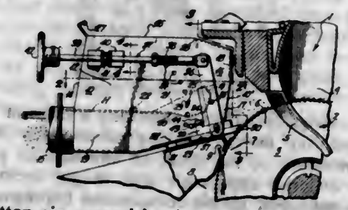
1. An extractor of limbs from seed cotton comprising a casing and instrumentalities mounted therein including means for feeding a controlled column of cotton downward, a drum below said feeding means studded with peripheral spikes, rotatable below said feeding means in the path of flow of said cotton column whereby the spikes of said drum comb through said cotton arranging the limbs that they engage, longitudinally in planes perpendicular to the axis of rotation of said drum, a partition about said drum for holding the cotton in tractive relation to said drum, said partition having a discharge opening positioned to afford tangential centrifugal discharge of the cotton including the arranged limbs, a toothed extractor cylinder positioned with the upper arc of its path of rotation laterally adjacent said discharge opening, in the trajectory path of cotton with arranged limbs discharged through said opening, means beneath said drum in operative proximity thereto and to said extractor cylinder for taking cotton, exclusive of the arranged limbs, from said drum and transferring it to said extractor cylinder below the point at which said extracting cylinder receives said limbs clothing said extractor cylinder with a cushioning layer of cotton which underlies said limbs in said upper arc, a stripper cylinder above said extractor cylinder having longitudinal peripheral vanes, so positioned with respect to said extractor cylinder that the path of revolution of the vanes intersects the path of revolution of the cotton on the extractor cylinder, whereby the arranged limbs are depressed by said vanes into said cushioning layer while the higher riding smaller trash is stripped off by said vanes, the leading ends of said limbs being tilted tangentially upward upon the approach of said vanes to the trailing ends of said limbs through the resilient recovery of said cushioning layer behind said vanes, and a baffle beyond said stripper cylinder having an edge thereof positioned in skimming relation to the surface of the cushioning layer of cotton on said extractor cylinder, intervening betwe n said cushioning layer and the uptilted ends of said limbs for separating said limbs from the cotton.

2,731,674
COTTON GIN WITH LOW VELOCITY AIR BLAST FOR DEMOTING LINT ON GINNING CYLINDER ANTERIOR TO DOFFING POINT
Jeffrey J. Wallace, Amite, La., assignor to Gullett Gin Company, Amite, La., a corporation of Louisiana
Application November 28, 1952, Serial No. 322,902
4 Claims. (Cl. 19—58)



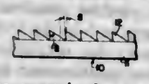
1. Cotton gin comprising in combination, a saw cylinder, ginning ribs and doffing means, conventionally correlated, said gin providing a moting chamber in which said saw cylinder is exposed throughout an area extending from said ginning ribs substantially to said doffing means, wall structure bounding said moting chamber on the side opposite said saw cylinder, said wall structure forming the front wall of an air inlet duct, an air inlet nozzle through said wall structure at an intermediate point in the height thereof constructed and positioned to direct an air blast across said moting chamber toward the upper part of said exposed area adjacent said ribs, a mote discharge duct below said wall structure having a mouth confronting the lower part of said exposed area, said mote discharge duct communicating with air evacuating means for inducing a looping blast in said moting chamber, the position of said nozzle and mouth, and the force and volume of the air blast being so correlated that reversal in the direction of said blast takes place in the path of travel of the lint fringe outstanding from the saw cylinder, whereby said blast blows transversely through said lint fringe in opposite directions respectively in the upper and lower parts of said exposed area, and, intermediately, in the direction of travel of said lint fringe, at less velocity than the peripheral speed of said saw cylinder.

2,731,675
COTTON GIN COMBINING PNEUMATIC AND MECHANICAL MOTING
Jeffrey J. Wallace, Amite, La., assignor to Gullett Gin Company, Amite, La., a corporation of Louisiana
Application February 24, 1954, Serial No. 412,288
3 Claims. (Cl. 19—58)



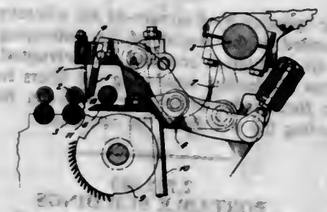
1. Cotton gin comprising in combination, a saw cylinder, ginning ribs and doffing means, conventionally correlated, said gin providing a moting chamber in which said saw cylinder is exposed throughout an area extending substantially from said ginning ribs to said doffing means a casing confronting said moting chamber opposite said saw cylinder, having opposite side walls and a transverse partition dividing it into an inlet duct communicating with the upper part of said moting chamber and a mote discharge duct having its mouth at the lower part of said moting chamber and communicating therewith, said mote discharge duct being connectable to an evacuating means for circulating an air blast through said moting chamber, a mote board forming the lower lip of the mouth of said discharge duct, extending the full width of said casing, said mote board being adjustable toward said saw cylinder, means mounted on the side walls of said casing, connected to said mote board for adjusting it in a forward and backward direction and cooperating stop means on the side walls of said casing and on said mote board for limiting the approach of said mote board toward said saw cylinder.

2,731,676
SERRATED WIRE OR STRIP FOR USE IN CARDING ENGINES AND THE LIKE
Alan Ernest Apthorp, Harrow, England, and Alexis Edmond Joseph Morel, Lille, France, assignors to J. W. & H. Platt Limited, Harrow, England
Application October 19, 1953, Serial No. 387,016
Claims priority, application Great Britain November 10, 1952
2 Claims. (Cl. 19—114)



1. A serrated wire or strip for use in carding engines, doffers or the like for the final stages of the carding or combing of natural or synthetic fibers; said wire strip comprising a relatively thick base and a thinner upper portion having stamped notches therein to produce a plurality of teeth, each of said teeth having a height from said base to the point of the related tooth not less than .010" and not more than .065" so that said teeth are sufficiently high to hold the fibres and to create air currents for aligning the fibers but sufficiently short as substantially to eliminate the presence of any gap or channel between the rows of teeth when the wire strip is wound on a carding cylinder, doffer or the like or when sections of the wire are arranged side by side on a carding flat.

2,731,677
TOP COMB
John S. Dudley, Douglas, Mass., assignor to Whitin Machine Works, Whitinsville, Mass., a corporation of Massachusetts
Application November 25, 1952, Serial No. 322,471
3 Claims. (Cl. 19—116)



3. In a comber, the combination with upper and lower detaching rolls, of a top comb having a depending body portion and a lower end portion bent forwardly of the plane of the body portion; needles seated against and secured to the said forwardly bent portion; the depending ends of the needles lying wholly on the roll side of the plane of the comb body portion and, when the comb is in its forward position, on the roll side of a line tangent to the said rolls.

2,731,678
TOP ROLL
Heber A. Hopkins, West Roxbury, Mass.
Application September 29, 1953, Serial No. 382,940
7 Claims. (Cl. 19—142)

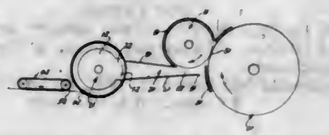


1. A top roll for textile machines comprising two axially aligned, spaced shells, a central shaft on which the shells are adapted to rotate, a tube fitted rigidly into both shells, replaceable load-applying bearing structure in the space between the shells for transmitting loading force to the tube, said bearing structure including rolling anti-friction elements, inner rotating race structure for the rolling elements, said inner race structure fitting the tube and turning therewith, and outer, normally non-rotating structure, and bearing sealing elements of compressible material positioned between each shell and said outer normally non-rotating structure and under compression between the shell and said outer normally non-rotating structure in a direction axially of the roll so as to press axially against the shell and said outer normally non-rotating structure.

2,731,679
METHOD OF MAKING NONWOVEN FABRIC
Heath O. Kennette, Plainfield, N. J., Charles H. Plummer, Springfield, Mass., and John J. Smith, Highland Park, N. J., assignors to Chicopee Manufacturing Corporation, a corporation of Massachusetts
Application June 3, 1952, Serial No. 291,464
3 Claims. (Cl. 19—156)

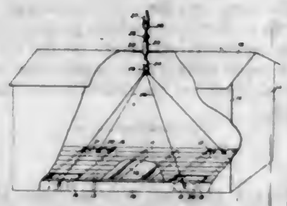
1. The method for forming an isotropic fibrous web which comprises feeding a mass of fibres to the main cylinder of a conventional card; transferring the fibers from the main cylinder to the surface of a conventional

doffer cylinder revolving in the same angular direction as the main cylinder at a peripheral speed greater than the peripheral speed of the main cylinder, whereby the fibers are substantially individualized and separated from each other; pneumatically doffing the separated fibers from



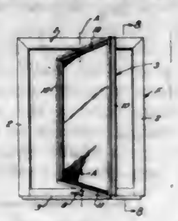
the doffer cylinder by a stream of air whereby the fibers are suspended in the stream of air; conveying the fibers and the air through a confined uninterrupted path to a foraminous condenser; separating the fibers from the air upon the foraminous condenser to give a fibrous web; and removing the web from the condenser.

2,731,680
PORTABLE BUILDINGS
Harry C. Bolt, Hampstead, London, England
Application April 1, 1954, Serial No. 420,390
4 Claims. (Cl. 20—2)



1. A portable building having a floor frame, a floor on said frame, uprights connected to the frame, a roof on said uprights, four spaced anchor members two spaced apart adjacent one side of the floor and the other two spaced apart along the other side of the floor said anchor members being fixed to said frame, and an aperture in the roof centrally of said anchor members in plan view.

2,731,681
WINDOW
George R. Gall, Bedford, Ohio, assignor to George R. Gall, Jr.
Application November 2, 1950, Serial No. 193,723
20 Claims. (Cl. 20—12)



1. In a window, the combination of a frame, a sash pivotally supported in said frame, sash lifting means engageable with said sash independently of said frame for raising and lowering said sash relative to and within the plane of said frame, top and bottom jambs engaging said sash in closed position, one of said jambs being fixed in the frame and the other movable in the direction of sash movement, and means associated with the sides of said frame for engaging and releasing said sash.

2,731,682
REFRIGERATOR DOOR AND METHOD OF MAKING THE SAME
Winfield C. Evans, Mount Airy, Md., assignor to Jamison Cold Storage Door Company, Hagerstown, Md., a corporation of Maryland
Application October 27, 1953, Serial No. 388,637
3 Claims. (Cl. 20—35)



1. A refrigerator door comprising a mass of temperature insulating material having substantially the shape and dimensions of the door, an envelope of permeable flexible material completely and snugly enclosing said mass, a thermoset plastic composition impregnating said envelope and bonding said envelope to said mass, and an outer covering of thermoset plastic composition integrally connected with the impregnated envelope and completely enclosing the same, said thermoset composition being cured under heat and pressure to provide a rigid finished door.

2,731,683
JALOUSIE WINDOW CONSTRUCTION
George R. Stoltz, North Miami, Fla., assignor to Felix Van Dam, Caracas, Venezuela, and Michel A. Picard, Miami, Fla.
Application January 15, 1954, Serial No. 404,216
5 Claims. (Cl. 20—42)



1. In a jalousie window construction having a frame defining a pair of opposed jambs and a plurality of panels arranged therebetween for oscillation between open and closed positions, the combination therewith of a pair of brackets supporting each panel laterally endwise thereof, each of said brackets including a crank arm pivotably connected to the jamb adjacent thereto, each of said crank arms having an angled slot comprising a terminal region and an intermediate region, said slots defining a pair of opposed internal cam surfaces, crank pins received in said slots and engageable with said cam surfaces to pivot said crank arms for the simultaneous oscillation of said panels, common carrying means for said crank pins operable for the actuation thereof in operative engagement with said cam surfaces.

2,731,684
REPLACEMENT WINDOW CONSTRUCTION
Zan Rechin, Bayonne, N. J.
Application March 31, 1953, Serial No. 345,811
1 Claim. (Cl. 20—49)



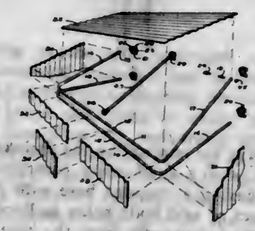
A replacement window construction comprising a pair of sash guides each having a pair of channels in their outer-face, and a channel in their inner-face lying between the outer-face channels, a flange extending from the back of each outer-face channel toward the front thereof, sash carriers slidably disposed in each of the outer face channels, sashes positioned between the sash guides, members extending laterally from each of the sashes at the bottom thereof and entering holes in the sash carriers, strips attached to each of the sashes and bent to slidably engage the corresponding flange on two sides, pulleys disposed at the top of each of the outer-face channels and extending into the inner-face channel, cords running over the pulleys, spring attached to the sash guides and to the cords in each inner-face channel, springs attached to each of the sashes and to the ends of the cords in the outer-face channels, spring pressed latches extending from the sides of the sashes and engaging the front edge of each of the channels, and an extended portion of each of the latches disposed on the top of each sash.

2,731,685
AWNING CONSTRUCTION
Albert Silvers and James L. Cotter, Hastings, Mich., assignors to Hastings Aluminum Products, Inc., Hastings, Mich., a corporation of Michigan
Application November 29, 1951, Serial No. 258,805
8 Claims. (Cl. 20—57.5)



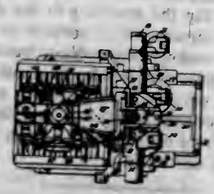
1. An awning construction, including a pair of edge-to-edge interconnected elongated panel forming slats, said slats each including an uninterrupted top panel portion having on one edge a first downwardly directed planar flange, and on an opposite edge a second downwardly directed planar flange including a bight portion terminating in an upwardly turned portion defining an upwardly opening channel terminating and disposed entirely below and laterally spaced from said top panel portion, said channel embraceably receiving in uninterrupted contact between side wall portions thereof opposite sides of the first downwardly extending planar flange of an adjacent interconnected slat, a transverse support member for said slats, a securing member including a recess portion receiving said interconnected slats therein, and means for applying force to the interconnected slats while received in the recess for fixedly retaining the first downwardly directed flange in the upwardly opening channel, the securing member having direct fastening engagement with both said second downwardly directed flange and its upwardly turned portion and retaining said first downwardly directed flange therebetween, said means for applying force to the interconnected slats comprising fastening element means transversely extending through one side of the securing member and intersecting the recess portion thereof for direct engagement with an outer surface portion of the upwardly opening channel.

2,731,686
AWNING ASSEMBLY
William E. Ball, Clayton, Mo.
Application May 8, 1953, Serial No. 353,805
1 Claim. (Cl. 20—57.5)



An awning assembly comprising a frame structure including U-shaped bails disposed in superposed and spaced apart relationship to each other with intermediate portions thereof substantially parallel and the legs of the upper bail inclined upwardly from the corresponding legs of the lower bail, a brace strut connected at one end to the intermediate portion of said upper bail and extending substantially perpendicularly from the associated intermediate portion with its longitudinal center line substantially in a plane including the longitudinal center line of said upper bail, mounting brackets detachably secured to the distal ends of the legs of said bails and to the free end of said strut, bodies of self-reinforced sheet material extending across the space between and around said upper and lower bails and secured to said bails to hold said bails in superposed and spaced apart relationship relative to each other, and a body of self-reinforced sheet material extending over the area within said upper bail and marginally secured to the latter, said bodies of corrugated sheet material being formed of a colored and light transmitting material.

2,731,687
MOLDING MACHINE
Hugo L. Kuehlthau, Elmhurst, Ill., assignor to Pettibone Mulliken Corporation, Chicago, Ill., a corporation of Delaware
Application August 14, 1952, Serial No. 304,318
8 Claims. (Cl. 22—42)



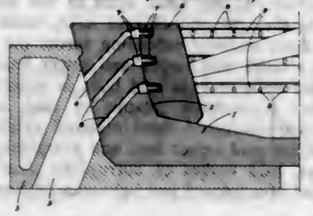
4. In a molding machine, a head comprising a cylinder and piston rod projecting from said cylinder, a spider rigidly secured to the projecting end of said piston rod, a pair of parallel tie rods secured to opposite edges of said spider, a pair of parallel clamping shoes each mounted loosely on corresponding end portions of both of said tie rods, each of said shoes having a slot in its center portion, and an equalizer bar pivotally secured at its center to said spider, the opposite ends of said equalizer bar loosely engaging said slots to permit independent tilting movement of each of said shoes in its vertical plane.

2,731,688
SHRINKAGE CONTROL DEVICE FOR CAST METAL
Wendell L. Jenkins and Walter J. Bennett, Canton, Ohio, assignors to The Canton Chaplet & Manufacturing Company, Canton, Ohio, a corporation of Ohio
Application November 21, 1952, Serial No. 321,806
9 Claims. (Cl. 22—174)



1. An element for controlling the shrinkage of molten metal as it is cast in a mold cavity, comprising a channel-shaped body having a rounded base with divergent legs, the end surfaces of said body being inclined toward each other in direction outwardly from the base, and a prong extending from one end of the base.

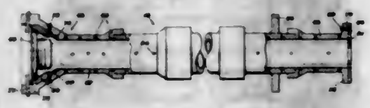
2,731,689
METHOD OF DIE CASTING THE TREAD DESIGN IN A MATRIX BLANK
John J. Fannen, Lodi, Calif., assignor to Super Mold Corporation of California, Lodi, Calif., a corporation of California
Continuation of application Serial No. 88,178, April 18, 1949. This application December 16, 1952, Serial No. 326,219.
1 Claim. (Cl. 22—203)



In the tire treading industry, the method of forming and anchoring a tread design fin on the initially plain working face of a tire-tread matrix blank with the aid of a segmental die block grooved to provide a tread-fin pattern, comprising first cutting a continuous annular groove in said face of the matrix blank, placing the die block against the face of the matrix blank in successive steps for the full circumferential extent of said matrix blank so that with each step the grooving in the die block communicates with a corresponding portion of the groove in the matrix blank, and forcing molten tread-design metal into the die block grooving for the length thereof and into the corresponding portion of the annular groove to completely fill such grooving and groove portion, and repeating such metal forcing operation with each successive step positioning of the die block.

2,731,690
METHOD FOR THE MANUFACTURE OF CENTRIFUGALLY CAST TUBULAR METAL ARTICLES
Frank H. Coupland, Jr., Edwin H. Phelps, John M. Cranford, and Kenneth R. Daniel, Birmingham, Ala., assignors to American Cast Iron Pipe Company, Birmingham, Ala., a corporation of Georgia
Application July 29, 1954, Serial No. 446,488
18 Claims. (Cl. 22—200.5)

3. A method of centrifugally casting tubular metal articles of the type wherein a charge of molten metal is introduced into a refractory lined metal mold while the mold is rotating about a substantially horizontal axis, characterized by the steps of providing a rotatable hollow metal mold having vents in the wall thereof, and lining said mold with a material composed of a granular refractory and a thermosetting resin while rotating said mold



to uniformly distribute the lining material circumferentially over the inner surface of the mold and maintaining its temperature within the range from 300° to 600° F. so that the heat of the mold fuses the refractory-resin material into a strongly bonded coating adherent to the inner surface of said mold.

2,731,691
WIRE TENSIONING DEVICE
Herbert C. Filud, Eltham, London, England
Application January 10, 1951, Serial No. 205,251
Claims priority, application Great Britain January 10, 1950
10 Claims. (Cl. 24—71.2)



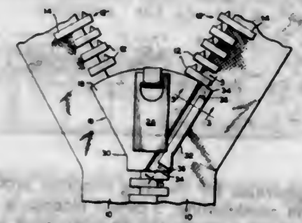
1. A wire tensioning appliance of the midwire take-up type comprising in combination a tensioning tool consisting of an elongated tapered body portion, a hook termination to the narrow end of the body portion, said body portion being formed with a spiral groove of increasing diameter proceeding from the hook termination along the body portion, and an anchoring device carried by the tool adjacent to the groove end opposite the hook termination whereby a loop formed in the wire by rotation of the tensioning tool is automatically transferred on to the anchoring device, the said tensioning tool being removable from the anchoring device.

2,731,692
SWALLOWPROOF SAFETY PIN
Steven J. Steven, Brookfield, Ill.
Application November 3, 1952, Serial No. 318,374
2 Claims. (Cl. 24—157)



1. As an article of manufacture, a swallow-proof safety pin comprising: a stationary leg; a movable leg biased to move away from the stationary leg; a keeper fixed on said stationary leg and engaging the movable leg to hold it substantially parallel to the stationary leg when the pin is closed; a relatively large generally planar member attached to the stationary leg and extending laterally therefrom in both directions, said member being large enough to prevent swallowing the pin by a baby; and a locking means integral with the planar member and rotatable around the stationary leg as an axis and engageable with the movable leg to prevent its movement towards the stationary leg and out of engagement with the keeper thereby to prevent accidental opening of the safety pin.

2,731,693
SLIDER FOR SLIDE FASTENER
Clayton J. Faulkner, Washington, D. C.
Application March 31, 1953, Serial No. 345,976
2 Claims. (Cl. 24—205.15)



1. A slider for slide fasteners comprising complementary spaced upper and lower guide plates, means at one end of said guide plates connecting said guide plates together in spaced relationship, one of said guide plates having a recessed slot provided in one of its side edges, flange members along the other of said side edges of the guide plates projecting toward the opposed guide plates, a substantially L-shaped member mounted for pivotal movement in the recess in said one of said guide plates, an upstanding rib member on said one of said guide plates adjacent the pivotally mounted L-shaped member and coextensive therewith normally maintaining one of the legs of the L-shaped member in a position of projection toward the complementary guide plate, and a pull tab pivotally secured to the upper face of the upper guide plate.

2,731,694
HOOK
Lawrence Steinmetz, Brooklyn, N. Y.
Application September 29, 1952, Serial No. 312,080
1 Claim. (Cl. 24—227)



A preformed sheet metal fastener hook for garment fabric, said hook having a base portion, a reversely curved hook portion extending from said base portion, upwardly and outwardly formed shoulder portions extending from said base portion on each side of the center line of the hook portion, rivet prong members spaced outwardly from said base portion and extending from each of said shoulder portions and adapted to be passed through fabric, a rivet plate member having apertures for receiving each of said rivet prong members, said plate member having a trough extending between said apertures and providing a raised portion on the opposite side of said trough, said plate member being adapted to be positioned with the bottom of said trough nearest the side of the fabric opposite the side to which the base portion of said hook member is positioned, each of said rivet prong members passing through respective ones of said apertures in the assembled relation of said hook and fabric and bent inwardly to extend in said trough and clinch the fabric in the space provided by said shoulder portions, the raised portion of said plate member positioned between said shoulders, the outer surfaces of said shoulder portions providing a ledge between said base portion and said prong members for receiving a riveting tool.

2,731,695
JEWELRY CLASP
Louis E. Valcourt, East Providence, R. I., assignor to Kestenman Bros. Mfg. Co., Providence, R. I., a corporation of Rhode Island
Application March 5, 1953, Serial No. 340,495
2 Claims. (Cl. 24—235)



1. In a clasp of the type indicated, an ornamental housing, a pivot-stud mounted fast in said housing, a pair of hooked arms having bearing portions pivoted on said stud to adapt said arms to swing about a common axis, a base-plate for supporting said pivot-stud, a strip of metal projecting upwardly at each side of said base-plate in the form of an abutment, a stop-lug projecting radially from the bearing portion of each of the arms for engagement with one or the other of said abutments on the base-plate to limit the swinging motion of each arm, and an ornamental cover member attached to the base-plate in overlying relation to the bearing portions of the arms and provided with depending sides forming an opening at the front of the clasp, said stop-lugs adapted to engage with the abutments on the base-plate to limit the swinging movement of the arms in either direction and prevent them from striking against the sides of the housing.

2,731,696
ADJUSTABLE CLAMPS
Gerald John Sutton, London, England, assignor to Griffin & George Limited, London, England, a British company
Application June 2, 1952, Serial No. 291,208
Claims priority, application Great Britain June 7, 1951
4 Claims. (Cl. 24—247)

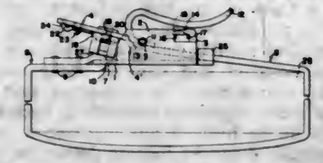


1. An adjustable clamp comprising a rod, two jaws, each of which jaws is formed solely from two separate sheet metal plates, spacing means between each pair of plates, securing means holding the two plates together, one pair of which plates is formed both with a socket which grips the end of the rod, and a lug projecting from the socket, a pivotal connection between said lug and one end of the other jaw, a trunnion pivotally mounted between each pair of plates and disposed away from said pivotal connection, which trunnions are provided with opposite threaded bores and a screw jack engaging said threaded bores.

2,731,697
CLAMP BUCKLE
Harold O. Galloway, Sandusky, Ohio
Application November 29, 1952, Serial No. 323,228
1 Claim. (Cl. 24—273)

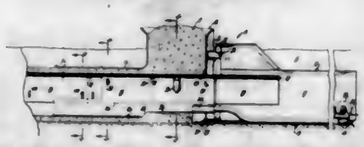
In a belt buckle having a base with side walls, said base being adapted to have one end of a belt secured to one

end thereof, each of said side walls being provided with a ramp and a locking slot, the ramps sloping in opposite directions and the slots extending in opposite directions, a clamping lever connected by transverse pivot means to said side walls between said locking slots and the point of connection of said end of said belt to said base, said clamping lever being provided with an opening adjacent its pivotal axis to receive the free end of said belt so as to be threaded therethrough, said clamping lever having a locking lever secured by a pivot extending perpendicularly to said clamping lever, spring means for normally resiliently maintaining said locking lever with its two ends extending transversely of said side walls, said clamping



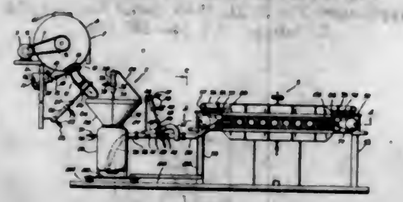
lever being adapted to be rotated about its transverse pivot means forwardly to bring the two ends of said locking lever into top surface engagement with said oppositely extending ramps to automatically swing said locking lever about its pivot, against the action of said spring means, which spring means snaps automatically said locking lever into locking engagement with the locking slots in said side walls, whereby the free end of said belt, upon pivotal movement of said clamping lever to bring said locking lever into locked position in the locking slots of said side walls, exerts a tensioning clamping effect on said belt in addition to that manually exerted in the threading of the free end of said belt through the opening in said clamping lever.

2,731,698
APPARATUS FOR FORMING CONCRETE PIPE IN SITU
Elmer Le Roy Tunsen, Modesto, Calif., assignor to No-Joint Concrete Pipe Company, Butte County, Calif., a corporation of California
Application December 5, 1950, Serial No. 199,246
8 Claims. (Cl. 25—32)



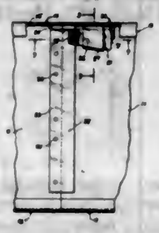
1. An apparatus for producing cementitious conduits in a trench or ditch, comprising an upright movable barrier having a configuration substantially conforming to the cross sectional configuration of the ditch in which the conduit is to be formed and adapted to be moved along the ditch with its plane arranged normal to the longitudinal axis of the ditch, an inner form comprising a lower movable member secured to the barrier inwardly of the bottom and sides thereof and extending rearwardly from the barrier and defining a space with the bottom of said ditch, said form including an upper member composed of a plurality of sections releasably secured together, disposed in overlapping slidable relationship with respect to the lower movable member and extending through the barrier in slidable sealing engagement therewith, an outer form member secured to the barrier and defining a space with respect to said upper member, said outer form member having an opening therein communicating with the space between the inner form and the outer form member and between the inner form and the bottom of the ditch for the introduction of settable material, and means for moving said barrier longitudinally of the ditch and with respect to said upper member.

2,731,699
APPARATUS FOR MAKING CONCRETE PRODUCTS
Carbon C. Dubbs, Orange, Calif., assignor to Carbon P. Dubbs, Chelston, Paget East, Bermuda
Application April 21, 1950, Serial No. 157,343
5 Claims. (Cl. 25—41)



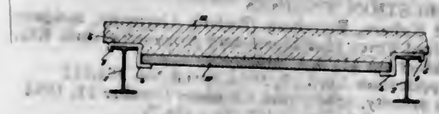
1. An apparatus for molding concrete products which comprises in combination, a closed receptacle for holding a bulk supply of a concrete mix containing an excess of water, an enclosed mold, means for establishing superatmospheric pressure in said receptacle, pipe means connecting said receptacle to said mold to pass a portion of said mix to said mold to fill said mold, means for simultaneously blocking the flow of mix from the receptacle to the mold when the mold is filled and discharging the remaining portion of the mix from the receptacle, means within said mold for establishing a condition of superatmospheric pressure within the mix in the mold to express excess water from the mix, means within the mold for segregating said excess water from the mix, and means for discharging said excess water from the mold.

2,731,700
CONSTRUCTION FORMS
Richard C. Yates, Binghamton, N. Y., assignor to Binghamton Metal Forms, Inc., Binghamton, N. Y., a corporation of New York
Application August 10, 1951, Serial No. 241,227
17 Claims. (Cl. 25—118)



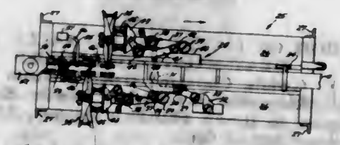
1. In construction apparatus, first and second channel-shaped form members in abutting end-to-end engagement, each said member comprising a web and upper and lower flanges on said web, an angle bar having horizontal and vertical sides secured to said first member and extending into overlapping relation with said second member, the vertical side of said bar engaging the webs of said members and the horizontal side thereof engaging the lower faces of said upper flanges, a locking slide, and means forming a slot on said second member for guiding and retaining said slide, the lower edge of said slot being inclined at an angle to the horizontal toward said first member, said slide consisting of a metallic sheet formed to comprise an upward projection and a web, the forward marginal portion of which is bent to ride upon said vertical side of the angle bar and press the same against the web of said second member and the lower edge of which is tapered correspondingly to and engages the lower edge of said slot, whereby upon movement of the slide up said incline, the forward upper edge of said slide engages the horizontal side of said angle bar and presses the same against the upper flange of said second member and said upward projection engages said upper flange of the second member.

2,731,701
CLIPS FOR FACILITATING THE ERECTION AND STRIPPING OF CONCRETE FORMS FOR THE BUILDING INDUSTRY
Edward S. Klausner, New York, N. Y.
Application May 27, 1952, Serial No. 290,157
5 Claims. (Cl. 25—131.5)



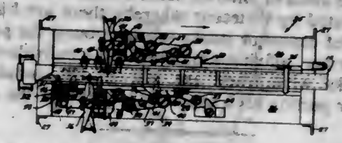
1. In combination with spaced structural steel beams, a plurality of discrete clips engaging the tops of said steel beams for temporarily and directly supporting thereon concrete molding forms without the intermediary of centering, each of said clips comprising a horizontal web portion extending transversely across the top of a steel beam and terminating in a downwardly extending hook at one end thereof adapted to interlock with an external part of a structural beam for support thereby and merging with a downwardly extending web portion at the end thereof opposite said hook, and a lug at the bottom of said last-mentioned web portion forming a continuation from the plane thereof and projecting substantially horizontally therefrom for support of the molding forms directly and solely thereon, the positioning of said lug being controllable to eliminate the supporting function performed thereby.

2,731,702
MACHINE FOR CUTTING TIES IN VENETIAN BLINDS TAPES HAVING PAIRED STRAPS
Edward Schilke, Middletown, Conn.
Application April 5, 1955, Serial No. 499,449
5 Claims. (Cl. 26—11.4)



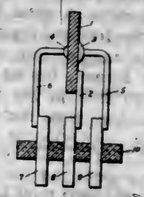
1. In a machine for cutting the ties in a Venetian blind tape comprising a pair of elongated superimposed webs which are connected by threads along both longitudinal edges and which threads form the ties and slat-supporting straps of the tape and wherein the machine includes a table, a slide reciprocable along the table and having means engageable with the tape to advance the same from one end of the table toward the other end thereof during movement of the slide in one direction, means engageable with the tape to hold the same while the slide moves in the oppoiste direction, and cutting means operatively associated with said slide and constructed and arranged to be inserted between the webs from the longitudinal edges thereof to cut a tie adjacent each longitudinal edge during movement of the slide in said opposite direction, the improvement comprising at least one leaf spring supported adjacent said one end of the table to apply spring force upwardly against the tape, and means holding the tape in firm engagement with the leaf spring, the spring force being applied to tension the tape so that a tie along each longitudinal edge of the tape will be properly positioned for engagement by the cutting means.

2,731,703
MACHINE FOR CUTTING TIES IN VENETIAN BLIND TAPES HAVING STAGGERED STRAPS
Edward Schilke, Middletown, Conn.
Application April 5, 1955, Serial No. 499,450
6 Claims. (Cl. 26—11.4)



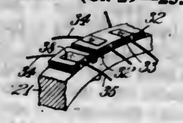
1. In a machine for cutting the ties in a Venetian blind tape comprising a pair of elongated superimposed webs which are connected by threads forming the ties and the slat-supporting straps and wherein the machine includes a table, a slide reciprocable along the table and having means engageable with the tape to advance the same in one direction during movement of the slide in said one direction, means engageable with the tape to hold the same while the slide moves in the opposite direction, and cutting means operatively associated with said slide and constructed and arranged to be inserted between the webs to cut a tie during movement of the slide in said opposite direction, the improvement comprising a stop operatively associated with said slide and constructed and arranged to engage said threads between the webs and to apply force to the tape in said opposite direction when the cutting means is inserted between the webs to cut a tie, the said force being applied to position a tie for engagement by the cutting means.

2,731,704
METHOD OF MAKING TRANSISTORS
John Spanos, Billerica, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application December 27, 1952, Serial No. 328,175
5 Claims. (Cl. 29—25.3)



1. The method of making a transistor which includes the steps of forming a body of indium, washing said body in a dilute solution of nitric acid, rinsing said body in pure water, drying said body, and fusing said body to an n-type semiconductor member.

2,731,705
MANUFACTURE OF CAPACITORS
Richard Alfred Grouse, London, England, assignor to A. H. Hunt Capacitors, Limited, London, England, a British company
Application September 11, 1951, Serial No. 246,113
Claims priority, application Great Britain December 13, 1950
10 Claims. (Cl. 29—25.42)



1. A process of manufacture of stacked electrical capacitors comprising in combination the steps of pro-

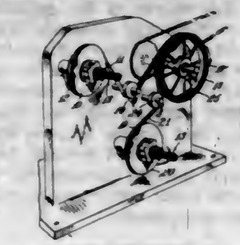
viding thin flexible strip dielectric material bearing on one face a plurality of metallized areas separated from one another by unmetallized spaces, winding said strip dielectric material around a former to produce an annulus made up of a plurality of turns and in which the metallized areas in different turns overlie one another and are separated by dielectric whereby there are built up a plurality of capacitor stacks spaced around the periphery of the former, affixing terminals to the individual capacitor stacks while they are still in the annulus, and thereafter parting each capacitor stack from the annulus.

2,731,706

MANUFACTURE OF CAPACITORS

Richard Alfred Grouse, London, England, assignor to A. H. Hunt Capacitors Limited, London, England, a British company

Application September 11, 1951, Serial No. 246,114
Claims priority, application Great Britain December 13, 1950
5 Claims. (Cl. 29—25.42)



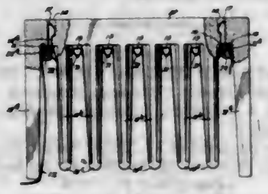
1. A process of manufacture of stacked capacitors comprising the steps of taking thin flexible metallized dielectric strip material and winding it spirally around a former to produce an annulus composed of a plurality of layers in which successive layers of metallization are separated by dielectric, impregnating the anulus with a solidifiable impregnating material and solidifying said material after impregnation to cause the annulus to adhere temporarily to the former, forming individual capacitors by cutting the annulus into segments which remain adhering to the former, testing the individual capacitors while they are still on the former, and thereafter parting the capacitors from the former.

2,731,707

METHOD OF ASSEMBLING A FILAMENT AND SUPPORT

Dudley C. Pulliam, Chicago, Ill.

Application June 14, 1950, Serial No. 168,115
4 Claims. (Cl. 29—155.5)



1. The method of assembling a heater filament and support structure therefor having a frame equipped with spaced-apart filament-carrying tines and hooks carried at the base of the tines and interposed therebetween and a slot adjacent each end thereof for receiving clamp members, comprising the steps of extending a filament strip the length of said frame in planar alignment with said tines and securing a free end thereof, advancing the filament into engagement with said tines, pressing the filament downwardly between said tines and advancing clamp members into engagement with said filament and toward said slots, seating the filament upon said hooks and advancing said clamps into said slots to clamp said filament to said frame, and severing said filament at points adjacent said slots.

2,731,708

PROCESS FOR MANUFACTURE OF HOLLOW POPPET VALVES ESPECIALLY FOR INTERNAL-COMBUSTION ENGINES

Gerhard Kubera, Blumberg (Baden), Germany, assignor to Alfred Teves Maschinen- und Armaturenfabrik KG, Frankfurt am Main, Germany

Application April 27, 1953, Serial No. 351,212
Claims priority, application Germany October 31, 1952
9 Claims. (Cl. 29—156.7)



1. A process for making hollow poppet valves for internal combustion engines which comprises piercing a blind hole in a billet, inserting a hard metal core into said billet hole with a large portion of said core extending beyond said billet, drawing the closed portion of said core and billet whereby said billet and said core are simultaneously reduced to form the shank portion of said poppet while leaving the other end of the billet and the projecting end of the core larger in diameter than said reduced shank, forming said projecting end of said core in the shape of a shorter and wider head to facilitate withdrawal of said core from said hole and withdrawing said core from the shaped valve member.

2,731,709

METHOD OF MAKING INTERNALLY FINNED HEAT EXCHANGER TUBES

Hugh L. Gaddis, Cleveland Heights, Glenn W. Myers, North Ridgeville, and Oral S. Welsh, Elyria, Ohio, assignors to Brown Fintube Company, Elyria, Ohio, a corporation of Ohio

Application September 18, 1950, Serial No. 185,418
4 Claims. (Cl. 29—157.3)



1. A method of making internally finned heat exchanger tubes comprising the steps of inserting separately formed fin members each having a base and at least one fin portion projecting from the base into a tube so that the fin members extend longtudinally of the tube with the outer edges of the fin portions in firm contact with the internal surface of the tube, the fin portions extending inwardly therefrom and each edge of each base making contact with an edge of the base of an adjacent fin member, temporarily supporting the fin members when inserting them into the tube and removing such support when the fin members have been located in their final positions in the tube, leaving said fin members supported solely by the contact of the edges of the bases thereof, and thereafter brazing the outer edges of the fin portions to the tube while said fin members are supported solely by said contact of the edges of the bases thereof.

2,731,710

SINTERED CARBIDE COMPOSITIONS

George W. Lucas, St. Clair Shores, and Carl S. Wiedman, Oakland, Mich., assignors to General Electric Company, a corporation of New York

Application May 13, 1954, Serial No. 429,446
5 Claims. (Cl. 29—182.7)



1. A sintered, hard metal composition consisting essentially of from about 60 to about 90%, by weight of the sintered product, of macro-crystalline tungsten carbide in which more than 50% of the crystals are larger than 25 microns, from about 5 to about 30%, by weight of the sintered product, of at least one additional carbide selected from the group consisting of titanium carbide, tantalum carbide, zirconium carbide and columbium carbide, and about 1.5 to about 10%, by weight of the sintered product, of a binder metal for said carbides selected from the group consisting of cobalt, nickel, iron and mixtures thereof.

2,731,711

SINTERED TUNGSTEN CARBIDE COMPOSITION

George W. Lucas, St. Clair Shores, Mich., assignor to General Electric Company, a corporation of New York

Application May 13, 1954, Serial No. 429,445
5 Claims. (Cl. 29—182.8)



1. A sintered hard metal composition consisting essentially of from about 40 to 95% by volume of tungsten carbide in which over 50% of the tungsten carbide constituent is in the form of crystals larger than 20 microns, and 5 to 60% by volume of a binder selected from the group consisting of cobalt, nickel, iron and mixtures thereof.

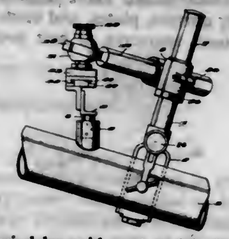
2,731,712

POSITIONING TOOL FOR ESTABLISHING WORKING SURFACES

Leon E. Laux, Baltimore, Md., assignor to The Glenn L. Martin Company, Middle River, Md., a corporation of Maryland

Application May 2, 1950, Serial No. 159,482
6 Claims. (Cl. 29—284)

1. A positioning tool for locating working surfaces on a jig or fixture comprising a main support, a clamping means carried on said support adjacent one end thereof for attaching said tool to said jig or fixture, a cross-head slidably carried by said main support and being rotationally and axially movable thereon, an arm slidably carried by said cross-head and being rotationally and axially movable relative thereto, clamping means carried by said cross-head for independently controlling said movements, a universal swivel element carried by said arm for universal movement, clamping means acting between said arm and said swivel element for controlling said movement, a post carried by said swivel, said post being axially and rotationally movable therein, clamping means carried by said swivel for controlling the rotational movement of said post, means acting between said swivel and said post for continuously controlling the axial movement of said



post, a head carried by said post and including a locator, and means mounting said locator for movement on said head in all directions within a given plane transversely of the axis of said post, and screw means for continuously controlling said locator movement.

2,731,713

METHOD OF MAKING A FOCUSED MULTICELL

Vincent J. Schaefer, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

Application November 23, 1951, Serial No. 257,694
8 Claims. (Cl. 29—423)



1. The method of preparing a multicell which comprises winding a corrugated strip along with a flat strip to form a roll having a plurality of cells in parallel axial alignment, deforming said roll to give it a concave configuration on one side and a convex configuration on the other, heating said roll to fix said roll in the concave-convex position, filling said cells with liquid, solidifying said liquid, and forcing said solidfied liquid-filled roll to a flat-end configuration whereby the axes of said cells are brought to a substantially common focus.

2,731,714

PROCESS FOR REMOVING EXPANDED TUBES

Frank E. Dudley, Philadelphia, Pa.

Application July 25, 1950, Serial No. 175,679
1 Claim. (Cl. 29—427)



The process of removing a tube which has been rolled-in and thereby expanded by cold work in a tube sheet, which comprises grasping the tube internally at numerous spaced portions around the internal circumference of the tube at a point closely adjacent to the point of expansion by cold work, and, without further rolling the tube internally, turning the tube continuously in the tube sheet in the same direction, thereby reducing the exterior diameter of the tube and removing the expansion effect due to the previous cold work, and then pulling out the tube.

2,731,715

PAPER CARTON CUTTER

Herman Reiss, New York, N. Y.

Application April 5, 1955, Serial No. 499,311
2 Claims. (Cl. 30—2)

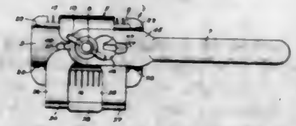
1. A paper carton cutting device comprising a member including a flat-sided body portion and a handle unitary therewith, said body portion having an extension from one side thereof providing carton corner engageable right

angularly disposed shoulders, said body portion being further provided at the opposite side thereof with a recess having right angularly disposed edge walls, a rectangular plate removably supported in said recess with edges thereof engaged with said walls, a second rectangular plate, a rectangular double-edged blade disposed between said plates, said body portion, plates, and blade being provided with axially alined apertures, a bolt projecting through



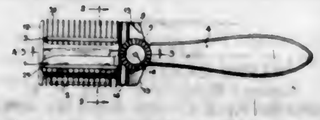
said apertures and being provided with a nut engageable with one of said plates for removably retaining the other plate in said recess, and means rigid with one plate and projecting through alined apertures in said blade and second plate for preventing rotation thereof about the axis of said bolt, and said blade being supported by said plates with its cutting edge projecting below one of said shoulders in angular relation thereto.

2,731,716
HAIRCUTTING DEVICE
Vincenzo Graziani, San Francisco, Calif.
Application May 19, 1953, Serial No. 355,977
3 Claims. (Cl. 30—30)



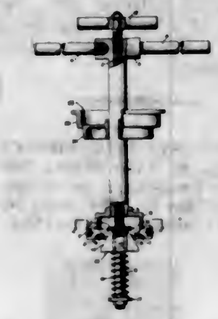
1. A hair cutting device comprising a razor blade, a guard upon which said razor blade is mounted, a clamp over said blade for holding the latter on said guard, a plate over said clamp for holding said guard and blade at a certain angle during hair cutting operation, said plate consisting of a central section lying over said clamp, a thumb piece curved upwardly and connected with the central section on one side thereof, an intermediate section connected to the central section on the other side thereof, and a finger piece connected to the intermediate section and extending downwardly, said blade being at a certain angle to the plane connecting the outer tip of the finger piece and the active cutting edge of said blade, and means for holding said guard, blade, clamp and plate together.

2,731,717
HAIR CUTTERS
Abraham N. Spanel, Princeton, N. J., assignor to Cutter Corporation, Wilmington, Del., a corporation of Delaware
Application June 27, 1951, Serial No. 233,775
Claims priority, application Great Britain July 12, 1950
15 Claims. (Cl. 30—31)



1. A hair cutter comprising a blade position fixing means adapted to position a cutting blade with an edge in a selected cutting position, and a guard, said position fixing means and guard being operatively interconnected, said guard comprising a frame from which a plurality of spaced apart ribs project having inner surfaces which incline toward a side of a positioned blade to form therewith a hollow compartment and outer surfaces forming a plane for supporting the cutter on the hair in proper position for cutting in substantially all cutting positions of the blade, the outermost portions of the ribs forming the front of the guard, the guard and blade position fixing means being relatively adjustable to effect relative transverse movement between a positioned blade and the guard, means for retaining the guard and positioned blade in any one of a plurality of selected transverse cutting positions, one position wherein the cutting edge is in close proximity to the outermost portions of the ribs, and another position wherein the cutting edge is spaced apart a substantial distance from both the inner surfaces of the ribs and transversely from the outermost portions of the ribs, said blade position fixing means and guard being constructed and arranged so as to maintain the cutting edge of the blade and the front of the guard in continuous parallel position with each other throughout the relative transverse movement between the guard and blade position fixing means.

2,731,718
INSIDE PIPE CUTTER
Harry E. Goss, San Francisco, Calif.
Application June 4, 1954, Serial No. 434,430
2 Claims. (Cl. 30—107)



1. A device for scoring pipe circumferentially thereof comprising an elongated, internally threaded, tubular handle, a coaxial housing secured to one end of said handle and provided with radial apertures therethrough, a plurality of radially extending fingers having cutting wheels mounted at the outer ends therof and radially reciprocable in said apertures with said cutting wheels outside said housing, a rod threadedly received through said handle and extending through said housing and between the inner ends of said fingers, a wedge member slidably mounted on said rod, spaced from said one end of said handle, and having slanted faces in engagement with said inner ends of said fingers, and a spring coacting between said rod and said member whereby when said housing is inserted into a pipe to be scored and said rod is threaded through said handle said wedge member yieldably urges said cutting wheels into engagement with the inside wall of said pipe for scoring said pipe as said handle is rotated about its longitudinal axis.

2,731,719
KNIFE HANDLE CONSTRUCTION
James Tabellario, Cranston, R. I., assignor to Federal Knife Company, a corporation of Rhode Island
Application June 8, 1951, Serial No. 230,493
1 Claim. (Cl. 30—164)

In a knife construction, a knife body having upper and lower liner plates, bolsters at each end of the liner plates, and cover plates over the liner plates and intermediate the bolsters, each liner plate end having a raised

portion, a piercing, and a rivet opening intermediate the raised end portion and the piercing, each bolster having a dome shaped cap terminating in a hook lug at its outer end adapted to seat beneath the associated liner plate end, and having a narrow extension from its inner end extending downwardly and then outwardly over the liner plate, said extension having a rivet opening in alignment with the associated liner plate rivet opening and a terminal snap tab adapted to snap seat in the associated liner plate piercing, each cover plate having



a longitudinal groove at each end adapted to seat over the associated narrow bolster extension and a rivet opening aligned with the bolster extension and liner plate rivet openings, each cover plate having spacing mounting fingers on at least one end thereof adapted to receive the downwardly extending portion of the associated bolster tension therebetween and to seat within the bolster dome, and rivets extending through the aligned linear plate, bolster extension, and cover plate rivet openings.

2,731,720
COMB BLADE STRUCTURE AND ARRANGEMENT FOR ADJUSTABLE HAIR CLIPPER
Glen L. Henard, Los Gatos, Calif.
Application June 25, 1954, Serial No. 439,230
2 Claims. (Cl. 30—201)



1. In a power driven hair clipper having an elongated housing and a laterally reciprocable power driven upper cutter blade with a row of forwardly projecting shearing teeth aligned along its forward edge, a comb blade mounted on the housing beneath the upper blade, a plurality of shearing teeth aligned along the forward edge of the comb blade in shearing contact with the teeth of the upper blade, the comb blade teeth being of substantially greater length than the teeth of the upper cutter blade, means for relatively adjusting the blades from a position wherein the forward ends of the teeth of both blades are substantially aligned to a position wherein the rear ends of the teeth of both blades are substantially aligned, in which latter position the teeth of the comb blade project beyond the teeth of the upper blade by a distance equal substantially to the desired maximum length of the hair to be cut on the crown of a person's head, and a rib formed integrally with each comb blade tooth the forward end of each rib being rounded off on a circular arc having its axis of curvature located on a line along the forward ends of the teeth of the upper cutter blade with the comb blade in its maximum position of relative forward adjustment, and the outer end of such radius located at the forward ends of the comb teeth in such forward limit of adjustment, whereby with the comb blade in its forward position of adjustment, the clipper may be swung from a position with the bases of the ribs riding on the scalp of a person whose hair is being cut to a position with the rounded ends of such ribs riding on the scalp without changing the length of cut.

2,731,721
POWER-OPERATED SHEARS
Alfons Traurig, Lam, Germany, assignor of one-half to Dr. Max Mayer, Lam, Germany
Application February 1, 1954, Serial No. 407,554
Claims priority, application Germany February 10, 1953
8 Claims. (Cl. 30—228)



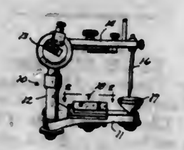
1. Power-operated shears comprising in combination a normally stationary lower blade guided at its upper end, a driven upper blade pivoted on said normally stationary lower blade, a motor driven crank mechanism constituting the driving means for said upper blade, a housing accommodating said crank mechanism, and a manipulating means for adjusting said stationary blade partly relatively to said driven blade enclosed in and partly projecting from said housing.

2,731,722
DENTAL ATTACHMENT
Jesse Wiles, Brooklyn, N. Y.
Application August 9, 1954, Serial No. 448,640
4 Claims. (Cl. 32—28)



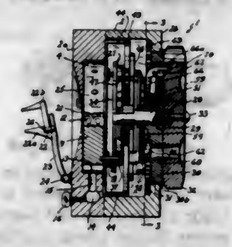
1. An attachment for a dental drill, comprising a member having integrally formed spoon-shaped retractor means, water fountain means, means having inherent resiliency for detachably securing said member to a dental drill, said retractor means having concave and convex surfaces wherein the convex surface functions as a retractor and said concave surface being disposed in a plane that is coaxially concentric with and spaced from an abradant wheel rotated by the dental drill and said concave surface being polished to reflect light on to the tooth being ground by the abradant wheel.

2,731,723
ARTICULATORS USED IN THE PRODUCTION OF DENTURE PROSTHESIS
Filip Brandhandler, Chicago, Ill.
Application November 24, 1954, Serial No. 470,948
6 Claims. (Cl. 32—32)



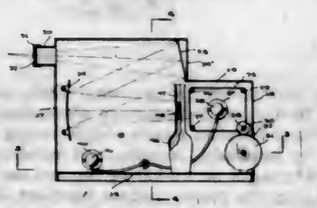
1. In combination with an articulator having a base portion, a pair of plates, one of said plates being slidable relative to the other of said plates and constituting a mounting plate adapted to support a denture model, and screw operated means in said base portion for supporting the other of said plates for vertical adjustment.

2,731,724
APPARATUS FOR EXTRACTING MERCURY FROM AMALGAM
Robert S. Nordeen, Albuquerque, N. Mex.
Application September 15, 1954, Serial No. 456,289
13 Claims. (Cl. 32—40)



1. In an apparatus for extracting mercury from amalgam contained in a porous wrapper, the combination of a housing, an extracting member rotatably mounted in said housing and provided at the center thereof with a chamber to receive a wrapper containing amalgam, a plurality of work engaging jaws slidable radially in said member in and out of said chamber, means provided at the outside of said housing for sustaining a portion of the stated wrapper against movement, means for simultaneously sliding said jaws, and means for rotating said member when said jaws are slid into said chamber.

2,731,725
OPTICAL TEST APPARATUS FOR MEASURING THE FAT CONTENT OF LIQUIDS
Eugene M. Stefacek, Omaha, Nebr.
Application November 20, 1953, Serial No. 393,253
3 Claims. (Cl. 33—125)



1. An optical test apparatus for measuring the fat content of liquids comprising a support, a vessel having a restricted upper portion and adapted to contain liquid under test, a scale chart, said chart comprising a flexible endless strip of material adjustably mounted on said support and having a calibrated portion, said vessel being arranged with said restricted upper portion thereof adjacent said calibrated portion of said scale chart in a position to be viewed thereagainst, said scale chart having a starting reference mark, and means for moving said chart to register said reference mark with a desired location on said restricted portion of the vessel.

2,731,726
EDGE FINDERS
Henry Timpner, Milwaukee, Wis.
Application February 24, 1953, Serial No. 338,490
1 Claim. (Cl. 33—172)

An edge finder including a shank element for retention within a vertical chuck, a ball integral at the lower end of said shank, a socket element retaining said ball with a sliding fit, an indicator mechanism subjoined to said socket element, actuating means depending from said indicator mechanism, a ball at the lower end of said actuating means, a vertical sleeve enclosing said actuating means, said sleeve having horizontally registering opposed apertures, a bolt having an upper central transverse slot therein slidable in said apertures, said bolt receiving the actuating means ball in said slot, spring



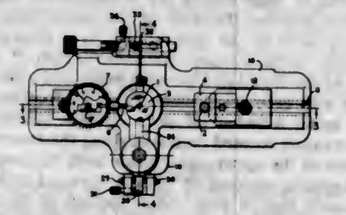
pressed means for frictionally engaging said bolt held therebeneath in said sleeve, and threaded means in the lower end of said sleeve for altering pressure of said spring-pressed means.

2,731,727
ADJUSTABLE RING, PLUG, AND RADIUS GAGES
Myer M. Shuster, Philadelphia, Pa.
Application August 16, 1951, Serial No. 242,168
11 Claims. (Cl. 33—178)
(Granted under Title 35, U. S. Code (1952), sec. 266)



11. In a dual purpose gage for alternatively checking the dimensional accuracy of internal and external contours, the combination of a body having inside and outside reference contours of identical shape but respectively of a size different from the internal and external contours whose dimensional accuracy is to be checked, gaging members in said body and positionable so as alternatively to project selectable equal amounts from said body's inside and outside reference contours, and headed adjusting screws in said body and disposed so that the respective screw's heads each operatively engage corresponding ones of said gaging members for moving the gaging members with reference to said body's reference contours.

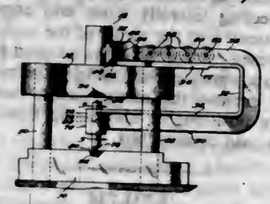
2,731,728
GEAR TESTERS
Lloyd E. Turner, Indianapolis, Ind., assignor to the United States of America as represented by the Secretary of the Navy
Application April 9, 1954, Serial No. 422,281
1 Claim. (Cl. 33—179.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)



A gear tester for comparing a first gear with a second gear, said tester comprising a bed with ways, a first arbor adapted to receive one of said gears centered over and carried by said ways, an elongated bearing carried by said bed and displaced laterally from said ways, an arm pivotly mounted at one end on said bearing, a second

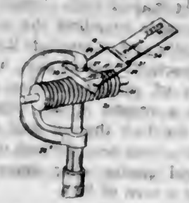
arbor adapted to receive the other of said gears mounted on the other end of said arm, the second arbor position being substantially centered over said ways; the center lines of said arbors and said bearing being precisely parallel, a leaf spring attached to the arbor-end of said arm and extending beyond the end of the arm to a point laterally of said ways opposite said bearing, a calibrated plunger slidably mounted to said ways, a stub shaft attached to said calibrated plunger, and at least one roller rotatably mounted on said stub shaft and engaging said leaf spring whereby different longitudinal positions of said calibrated plunger change the degree of flexure of said leaf spring.

2,731,729
DIE SET CENTER LOCATOR
Albert Tomaska, Franklin Park, Ill.
Application October 26, 1954, Serial No. 464,681
9 Claims. (Cl. 33—189)



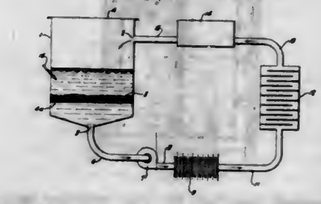
1. A center locator for a die set that includes a punch holder having a protruding shank from one surface thereof, a die holder confronting the other surface of the punch holder, and leader pins disposed through the punch holder and die holder maintaining these elements in adjustable-spaced, parallel relationship, comprising a U-shaped arm having a Y-shaped end normal to the plane of the arm adapted to be disposed in contact with the shank of the punch holder and a flat inner surface adjacent to the Y-shaped end and normal to the plane of the arm, a bore extending through the other end of the arm normal to the flat surface, said bore being disposed on an axis passing through the bisector of the angle formed by the Y-shaped end of the arm, said arm having a channel therein extending into the bore, a ball disposed within the channel, a spring disposed within the channel abutting the ball and biasing the ball toward the bore, and a pin disposed within the bore in contact with the ball.

2,731,730
THREAD GAUGE
Maynard E. Kraushaar, Pasadena, Calif.
Application May 18, 1953, Serial No. 355,783
2 Claims. (Cl. 33—199)



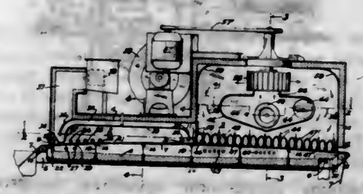
1. A thread gauge, comprising a small metal block any transverse section of which is an equilateral triangle, said block having an axial bore formed therethrough and of substantial diameter, a light-weight rigid metal bail having parallel sides extending transverse to the axis of said block and connected at their ends remote from said block by an integral end portion formed parallel to said axis, the ends of said bail sides adjacent said block being inwardly bent at right angles to said sides and extending loosely into opposite ends of said bore, and a thin strip of highly flexible material mounted on said end portion of said bail, said thin strip being adapted to be held by an operator during the final portions of a gauging operation.

2,731,731
METHOD OF DRYING HEAT SENSITIVE BIOLOGICALLY ACTIVE SUBSTANCES
John H. Hink, Jr., Berkeley, and Frederick F. Johnson, Orinda, Calif., assignors to Cutter Laboratories, Berkeley, Calif., a corporation of California
Application March 7, 1952, Serial No. 275,362
4 Claims. (Cl. 34—5)



1. The process of drying a wet, heat sensitive, biologically active substance containing an aqueous phase comprising: freezing said substance, continuously flowing a body of cold, highly volatile, water-miscible, organic solvent inert with respect to said frozen substance in closed circuit through a body of frozen fragments of said substance, through a body of a regenerable chemical desiccant and through a refrigerator at a rate which will insure that the concentration of said solvent is always at least ninety per cent (90%) of the total volume.

2,731,732
APPARATUS AND METHOD FOR SETTING AND DRYING MOISTURE SETTABLE INK
James C. Harris, Jr., Berkeley, Andrew A. Caridis, Daly, and Burt C. Kendall, Menlo Park, Calif., assignors of one-half to Crown Zellerbach Corporation, San Francisco, Calif., a corporation of Nevada, and one-half to Heat and Control, Inc., San Francisco, Calif., a corporation of California
Application May 19, 1953, Serial No. 355,964
12 Claims. (Cl. 34—18)

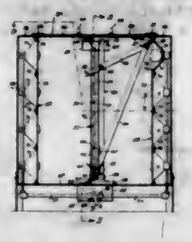


11. The method of preventing steam from condensing in an enclosed zone wherein steam is supplied over a web of material moving through the zone for effecting setting of moisture settable ink on the web, and the inked web is subsequently dried in an independent enclosed drying zone, which comprises utilizing hot gas for subsequently drying said web in said drying zone, providing a passageway over said web and extending through said ink setting zone, and causing flow of some of said hot gas through said passageway to prevent condensation of steam.

2,731,733
MATRIX DRYING APPARATUS AND MACHINE
Leslie J. Griner, Detroit, Mich., assignor to Alico, Inc., West Springfield, Mass., a corporation of Massachusetts
Application April 20, 1951, Serial No. 222,074
5 Claims. (Cl. 34—60)

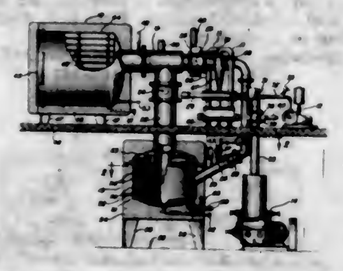
1. A matrix drying machine comprising a cabinet having a matrix drying chamber therein, a matrix holder in

said chamber having a vertically-disposed matrix-retaining device adapted to hold said matrix in a substantially vertical position, heaters disposed in said drying chamber on opposite sides of said matrix in said holder, an air inlet port in the lower part of said cabinet disposed beneath said holder, an air outlet port in the upper part of said cabinet disposed adjacent the upper portion of said retaining device, said cabinet having an access opening adjacent said holder, a closure disposed in closing



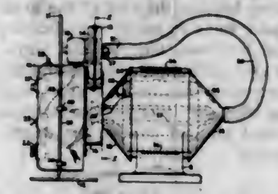
relationship with said opening, a portion of said matrix-retaining device being mounted for motion between open and closed positions relatively to the remainder thereof, and mechanism operatively connecting the movable portion of said matrix-retaining device to said closure, said mechanism being responsive to the opening motion of said closure for shifting said movable matrix-retaining portion to its open position relatively to said remainder thereof.

2,731,734
VACUUM DEHYDRATION APPARATUS
George H. Bancroft, Rochester, N. Y., assignor, by mesne assignments, to Consolidated Vacuum Corporation, Rochester, N. Y., a corporation of New York
Application June 9, 1953, Serial No. 360,528
4 Claims. (Cl. 34—76)



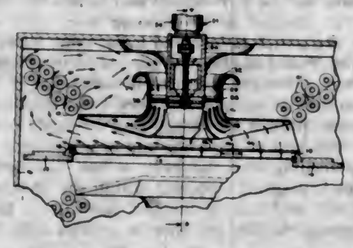
1. Vacuum dehydration apparatus comprising an evacuable dehydration chamber, high vacuum pumping means disposed adjacent to said chamber, a primary conduit connecting said chamber directly to the intake side of said high vacuum pumping means, valve means in said primary conduit between said chamber and said high vacuum pumping means, condenser means disposed adjacent to said chamber, a branch conduit opening directly from said primary conduit into said condenser means, said branch conduit being joined to said primary conduit between said chamber and said valve means, a secondary conduit opening out of said condenser means remote from said branch conduit and connecting said condenser means with the intake side of said high vacuum pumping means, mechanical pumping means, discharge conduit means connecting said mechanical pumping means with the discharge side of said high vacuum pumping means, valve means in said discharge conduit means, bypass conduit means connecting said condenser means with said mechanical pumping means, and valve means in said bypass conduit means.

2,731,735
MOTOR DRIER
Harry A. Hartwig, Wausau, Wis.
Application September 8, 1953, Serial No. 378,913
11 Claims. (Cl. 34—164)



1. A drier for electric motor frames, comprising, an electrical control box, a frame having a pair of uprights cooperable with opposite sides of said control box for supporting the same in elevated condition, an electric heater element projecting laterally from said control box and adapted to extend into the stator of the motor frame, and a pair of opposed conical reflectors adapted for disposition and retention against opposite ends of the motor frame to substantially enclose the motor stator, one of said reflectors being positionable about said heater element in proximity to said control box.

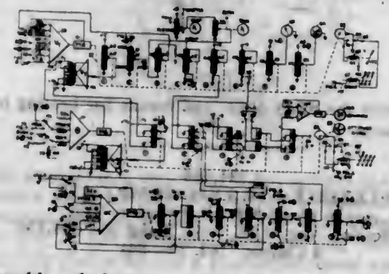
2,731,736
DRYER FOR PIECE GOODS
Hilmar Vits, Dusseldorf, Germany, assignor to Vits-Elektro G. m. b. H., Dusseldorf, Germany, a corporation of Germany
Application May 13, 1952, Serial No. 287,485
Claims priority, application Germany May 15, 1951
3 Claims. (Cl. 34—158)



1. In a dryer, for use in connection with movably suspended sheet material, having a nozzled casing and blower means, in combination, said blower means including at least one axial blower having its axis substantially centrally of said sheet relative to said casing and perpendicularly to the extension of said material, said blower including two trumpet-shaped walls forming an intake duct for the blower operable to admit the air throughout its circumference radially and to conduct it through an angle of 90° into the direction of said axis, and a diffusor including a plurality of curved annular guides extending downwardly from a region at the exhaust side of the blower and near the hub thereof and so arranged that the air will be blown from near the hub of said blower and be blown into said casing after being conducted outwardly throughout a turn of 90°.

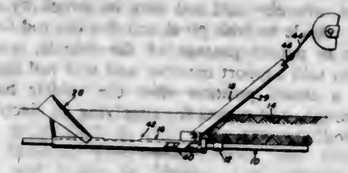
2,731,737
AIRCRAFT TRAINING APPARATUS FOR SIMULATING LANDING AND RELATED MANEUVERS
Robert G. Stern, Caldwell, N. J., assignor to Curtiss-Wright Corporation, a corporation of Delaware
Application December 23, 1949, Serial No. 134,623
26 Claims. (Cl. 35—12)

14. In grounded aircraft training apparatus having simulated aircraft controls, flight computing means responsive to the operation of said controls by a student for representing flight conditions including altitude, rate of pitch and pitch, a plurality of simulated flight indicating instruments including a pitch indicator responsive to said computing means, a first relay response to said computing means according to rate of pitch, a second relay means dependent on the operation of said computing means and operable according to simulated altitude, a switch responsive to said computing means and operable according to pitch attitude for representing nose wheel contact on takeoff and landing maneuvers, and a nose wheel relay



operable only in response to concurrent operation of said first and second relays and said switch whereby zero altitude, negative rate of pitch and three-point ground position are simultaneously represented, said nose wheel relay being adapted in one control position to control said flight computing means for limiting negative representations of pitch and pitch rate whereby said pitch indicator represents normal nose wheel contact on the runway, said pitch indicator representing lifting of the nose wheel from the runway during takeoff in another control position of said nose wheel relay.

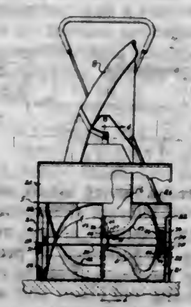
2,731,738
UNDERGROUND PIPE STRIPPER
Edwin H. Koss, Beeville, Tex., assignor of five per cent to Robert D. Nogueira, Beeville, Tex.
Application March 30, 1953, Serial No. 345,402
1 Claim. (Cl. 37—1)



A device for exposing buried pipe comprising a tubular sleeve adapted to receive and be pulled along a pipe and having front and rear ends, a shoe inclining upwardly and rearwardly from the top of the sleeve and having one end fixed to said sleeve adjacent said rear end and also having upwardly and rearwardly diverging side wings for spreading earth above said sleeve, said sleeve having a longitudinal top slot therein directly in front of said shoe for the escape of earth out of said sleeve to be spread by said shoe, and means attached to the front end of the shoe for pulling the same.

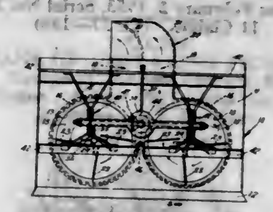
2,731,739
SNOW PLOW
William F. Miller, Minneapolis, Minn., assignor to Toro Manufacturing Corporation, Minneapolis, Minn., a corporation of Minnesota
Application July 18, 1952, Serial No. 299,585
11 Claims. (Cl. 37—43)

1. In a snow plow, the combination of a moldboard having a tangential discharge opening therein, a rotor mounted transversely of said moldboard and having a plurality of generally helically arranged blades terminating ahead of the discharge opening of said moldboard and feeding snow thereto, and a snow-abutting and guiding wall separate from said blades and fixedly connected to said moldboard and extending upwardly therewithin ahead of said opening and at the end of said blades and



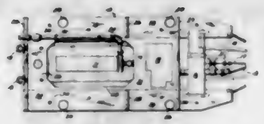
across the rear portion only of the area defined by the orbits of said blades and cooperating with said blades to cause the snow to be flung upwardly by said blades through the discharge opening of said moldboard, said wall together with said blades and said moldboard constituting the sole snow-flinging means of the plow.

2,731,740
ROTARY SNOWPLOW ATTACHMENT FOR POWERED VEHICLES
Ervin F. Rasmussen, Spangle, Wash.
Application June 23, 1953, Serial No. 363,535
1 Claim. (Cl. 37—43)



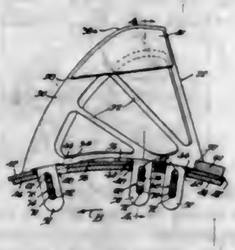
A rotary snow plow attachment for powered vehicles comprising a frame having a ground engaging forwardly arcuate scoop disposed horizontally along its lower edge; said frame having front and rear spaced walls defining a central opening; a retaining wall secured at its side edges to the front and rear walls and defining a pair of horizontally disposed annular cavities therebetween having an upwardly open vertical discharge tube; a dividing panel extending vertically midway the marginal edges of said tube and defining an individual tube for each cavity; a rotatable nozzle having baffles adapted to discharge snow at an angle relative to said tube rotatably communicating with the open upper end thereof; said front wall of the frame being provided with circular openings of a diameter substantially the same as said annular cavities; vertically disposed discs journaled on said frame and contained one in each said cavity; power means for rotating said discs with their inner edges moving toward said discharge tube; circumferentially spaced radially offset blades secured to the forward faces of said discs in planes at right angles to the plane of the discs; a forwardly extending shaft on the frame driven by said first named means; a transverse shaft disposed in advance of the front wall operably connected to said forwardly extending shaft for rotary motion; and snow breaking bars carried by said transverse shaft and adapted to pulverize the snow in advance of the discs whereby the snow may enter the cavities as the plow is moved forwardly therein.

2,731,741
PORTABLE DREDGE
Carl P. Kaufmann, Baltimore, Md., assignor to Ellicott Machine Corporation, Baltimore, Md., a corporation of Maryland
Application November 2, 1950, Serial No. 193,710
4 Claims. (Cl. 37—54)



1. A portable dredge having a hull comprising a main section and a pair of buoyant side sections, a pump and power unit centrally mounted in said main section, said main section being proportioned to provide a displacement exceeding the total weight of the main section plus the weight of the pump and power unit whereby the main section may be separably floatable in a stable up-right position, rigid fastening means connecting said side sections and said main section, said connecting means transmitting a portion of the weight of the main section to the side sections whereby said main section is supported by said side sections so that the assembled hull floats higher out of the water than the main section floating separately.

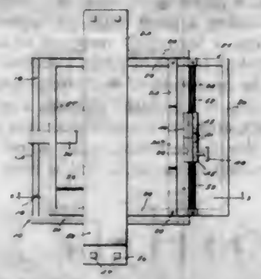
2,731,742
BLADE FOR EXCAVATING MECHANISM
Gustaf A. Johansson, Chicago, Ill., assignor to The United Electric Coal Companies, Chicago, Ill., a corporation of Delaware
Application February 2, 1953, Serial No. 334,647
11 Claims. (Cl. 37—189)



1. A cutting blade for excavating apparatus comprising a body portion having a base and tapering upwardly and forwardly with respect to said base, lugs extending from said base in a direction opposite to said body portion, said lugs each having a slot therein, and wedge members adapted to be inserted in said slots to secure the cutting blade to excavating apparatus, said wedge members comprising a wedge block and shim means adapted to be secured to said wedge block to vary the thickness thereof.

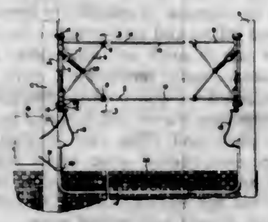
2,731,743
PRESSING MACHINE
Lloyd D. Baldwin, Tupelo, Miss.
Application May 27, 1953, Serial No. 357,697
6 Claims. (Cl. 38—12)

1. A pressing machine of the character stated comprising a supporting frame, a carriage mounted on said frame for horizontal rectilinear movement, means carried by the carriage for supporting a piece of material in a prescribed position for pressing, a pair of opposed press plates mounted on said frame in spaced relation one above the other, said material supporting means being adapted to be positioned to introduce the material between said plates when said carriage is moved in one direction, means for moving one of said plates into and out of pressing



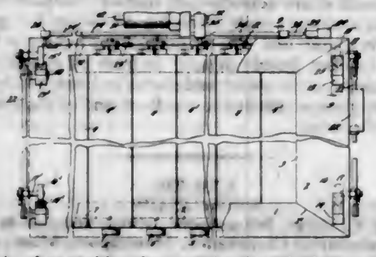
relation with the other plate, and means for heating one of the plates.

2,731,744
FLEXIBLE BAR TYPE BUMP GATE
Aaron Lloyd Schnell, Perryton, Tex.
Application August 25, 1952, Serial No. 306,138
4 Claims. (Cl. 39—84)



1. An electrically charged gate structure comprising a support member, a cantilever whip-like gate rod having one end free and one end pivotally mounted upon said support member for swinging of the free end of said rod in a horizontal plane, said rod being tapered lengthwise from a point adjacent its pivotal connection to its free end, the mass of said rod decreasing and its flexibility increasing from a point adjacent its pivotal connection to its free end, whereby said rod may be struck by a rapidly moving vehicle to both pivot and flex the rod to an open position to permit passage of the vehicle, means connected to said support member and said rod biasing said rod to a closed position after the vehicle has passed therethrough, and means for supplying an electric charge to said rod.

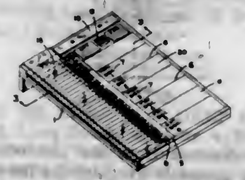
2,731,745
CHANGEABLE SIGN
Ralph A. O'Neill, Englewood, N. J.
Application July 17, 1952, Serial No. 299,444
24 Claims. (Cl. 40—76)



1. A changeable sign mechanism including a front frame, a back frame, a plurality of first named rectangular display elements mounted on the front frame, a plurality of second named rectangular display elements mounted on the back frame, means for moving the frames

relatively toward and away from each other, and means carried by the respective frames responsive to the movement between the frames away from each other to rotate the rectangular display elements.

2,731,746
CALENDAR
Richard J. Newman, East Orange, N. J.
Application March 4, 1953, Serial No. 340,339
1 Claim. (Cl. 40—122)



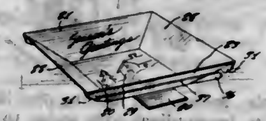
In a calendar, a supporting-carrying body having a disposable sheet carrying portion and a removable memorandum blank receiving pocket extending entirely along one side of said disposable sheet carrying portion, said receiving pocket having a transparent cover and having its outer edge open to receive memorandum blanks, a plurality of individual memorandum receiving blanks removably and interchangeably stacked in said pocket, a plurality of disposable day and date indicating sheets carried by said sheet carrying portion in stacked relationship, said blanks being of a length equal to the length of the disposable sheets and disposed in longitudinal edge-to-edge relationship therewith, said disposable sheets having a series of designations of days of the week along the edge thereof adjacent to said pocket and date-indicating numbers on said memorandum blanks along their edge portions adjacent to said disposable sheets, said disposable sheets having indicia thereon cooperating with the days of the week indicia to indicate the specific week the days and dates of which are indicated on the respective disposable sheet, said memorandum blanks and said disposable sheets having coacting strip portions along their adjacent edges of substantially equal width and length, certain of said disposable sheets having portions thereof cut away to exhibit certain predetermined portions of the disposable sheet therebelow, said portions so cut away as to leave said coacting strips along their edges intact.

2,731,747
REFLECTOR DISPLAY DEVICE
Kenneth Marshall Hazelroth, Rivera, and Rudolf R. Diesen and James O. Melton, Los Angeles, Calif., assignors to R. R. Kellogg Advertising Services, Inc., Los Angeles, Calif., a corporation of California
Application July 19, 1951, Serial No. 237,622
2 Claims. (Cl. 40—126)



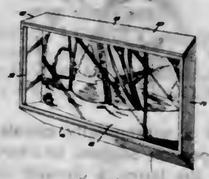
1. A display device comprising a vertically elongated transparent chamber simulating a liquid container, an enclosed bubbling tube containing a low-boiling liquid and having an elongated stem thereof positioned inside the chamber adjacent an inside wall thereof with the upper portion of the stem spaced farther from the wall than the lower portion, a lower bulb thereof adjacent the lower end of the chamber and an upper bulb thereof adjacent the upper end of the chamber, a generally concave elongated inverted cone-shaped reflector positioned intermediate the stem and an inside wall of the chamber with the face thereof adjacent the stem for reflecting images of bubbles passing through the stem into the interior of the chamber, and a source of heat and light adjacent the bulb for forming gas bubbles in the bubbling tube and for transmitting light into the tube for internal transmission and reflection through the stem thereof.

2,731,748
DISPLAY DEVICE
Harvey H. Poley, Manhattan Beach, N. Y.
Application December 20, 1952, Serial No. 327,065
3 Claims. (Cl. 40—155)



1. A display device which is transported in a flat plane and automatically assumes a three dimensional configuration upon display, said device comprising: a central portion having a plurality of straight edges; a peripheral frame element along each of said edges, and extending the length thereof, hinged to said central portion and having edges abutting against each other in display position; a hook portion on each of said elements which in display position abut against adjacent elements; and elastic means extending about said hook portions biasing said elements out of the plane of said central portion.

2,731,749
MEANS OF DISPLAYING PICTURES
George M. Tarzian, Chicago, Ill.
Application April 29, 1953, Serial No. 351,835
2 Claims. (Cl. 40—160)

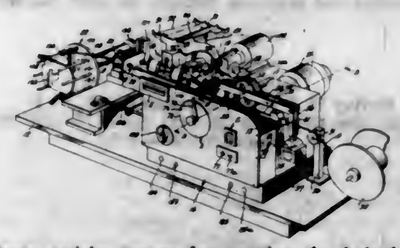


1. An illuminated picture display comprising, in combination, a curved transparent plate having the foreground portion of a picture attached to its surface, a flat transparent plate having the background of the picture attached to it, a pair of flat reflecting surfaces perpendicularly intersecting the edges of the cylindrical plate and diverging radially outward and lying in radii of circle on which the curved transparent plate was formed, a frame surrounding the picture plates and reflecting surfaces, an illuminating means within the frame in front of the flat background plate, and a second illuminating means disposed in back of the flat groundplate to afford illumination therefor.

2,731,750
AUTOMATIC WIRE MARKING MACHINE
Harvey D. Adams, Playa del Rey, John E. Geasland, El Segundo, and Elmo L. Montague, West Los Angeles, Calif., assignors to Douglas Aircraft Company, Inc., Santa Monica, Calif.
Application April 23, 1953, Serial No. 350,738
24 Claims. (Cl. 41—1)

17. Apparatus for processing a linear article, comprising: a base adapted to support the components of the

apparatus; a first source of power mounted on said base for driving connection to the apparatus; feeding means drivenly connected to said power source and mounted on said base and adapted to receive the leading end of said linear article and advance same onwardly in the apparatus; means operatively associated with the article-receiving and advancing means and adapted for alternately effecting advancing and halting of said article; marking means disposed on said base onwardly in the apparatus of said advancing means for marking the halt-



ed linear article; means for rotating the halted linear article about its longitudinal axis so as to enable the article to be marked on each of two opposite sides thereof by said marking means; and overall, or main, control means operatively connected to each of the aforesaid means for effecting pre-timed sequential operation thereof so as to issue the linear article from the apparatus bearing markings on each of two opposite sides thereof that are located at predetermined longitudinally spaced loci.

2,731,751
DECORATIVE COVER PLATE
Joseph Green, Long Island City, N. Y., assignor to Spectoyculars Incorporated, Long Island City, N. Y., a corporation of New York
Application October 22, 1954, Serial No. 464,062
10 Claims. (Cl. 41—10)



1. A cover for a substantially circular article, comprising a central portion adapted to overlie said circular article and cover the latter, a circular rim portion connected to and surrounding said central portion, said rim portion projecting at an angle with respect to the general plane of said central portion to thereby encompass the periphery of said circular article, said cover being formed of relatively stiff material and having at least two spaced slots formed therein, and a relatively flat pliable member having two spaced end portions connected with an intermediate portion, said intermediate portion of said pliable member extending between two of said slots and underlying said central portion, said spaced end portions of said member extending through said slots and outwardly beyond said rim portion.

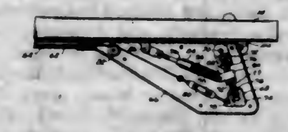
2,731,752
ARTIFICIAL TREE AND METHOD OF MAKING
Charlotte Erickson and Lennart G. Erickson, Hillsborough, Calif.
Application April 28, 1953, Serial No. 351,554
4 Claims. (Cl. 41—15)

1. A display device in the form of an artificial tree comprising a plurality of translucent layers each of loop configuration wherein the internal and external peripheries of each of the layers are irregularly and generally haphazardly contoured, flexible means for hanging the layers in spaced apart relation and generally axially one with respect to another, the internal and external peripheral dimensions of each of the layers respectively increasing along the common axis from the point of sup-



port with the distance from the common axis to the periphery being generally irregular for the stacked layers and means for directing light onto the layers through the central area of the largest of the layers to effect glowing in each of the layers.

2,731,753
FIREARM WITH DEVICE FOR MOVING THE MUZZLE DOWNWARDLY
Henry A. Mathieu, Willimantic, Conn.
Application March 26, 1949, Serial No. 83,639
7 Claims. (Cl. 42—74)



1. In combination with a hand operated firearm including a barrel and a stock connected thereto, compensating means for moving the muzzle end of the firearm downwardly from an upwardly deflected position caused by the firing of said firearm comprising a shoulder piece on the stock movable relative to said firearm incident to the recoil thereof in recoil direction, a depending link pivotally connected to the muzzle portion of the firearm, compressible means engaging said link so as to resist rearward movement thereof, means connecting the lower end of said link and a shoulder piece to transmit forces in a rearward direction to said end of said link during recoil of the firearm and such force opposing the force exerted by the compressible means, and means for adjusting the effective length of the last-named means.

2,731,754
ADJUSTABLE CHOKE FOR DOUBLE BARRELED SHOTGUNS
Clyde M. Gibson, Huntington, W. Va.
Application February 23, 1950, Serial No. 145,818
2 Claims. (Cl. 42—79)



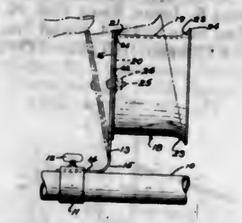
1. A choke device for a double barreled shotgun, comprising a housing carried by the muzzle ends of the barrels, said housing having a pair of bores axially aligned with and forming continuations of the gun barrel bores, but having larger diameters than said gun barrel bores, a pair of tubular choke sleeves mounted one in each bore of said housing, said choke sleeves having axially slotted forward wall portions and cam shaped forward end portions, means for retaining said choke sleeves in said housing, a pair of tubular cam members positioned one in each of said housing bores forwardly of said choke sleeves, said cam members having rear cam surfaces cooperating with the cam shaped forward ends of said choke sleeves so as to cause contraction of the forward portions of said choke sleeves on rearward movement of said cam members, a helical groove in each cam member, and an element located between said cam members and cooperating with said helical grooves and with said housing for holding said cam members in said housing and for causing axial movement of the cam members when they are rotated.

2,731,755
GUIDE OR LURE FOR DEEP FISHING
Jack H. Ward, Long Beach, and Roy A. Ross, Santa Ana, Calif.; said Jack H. Ward assignor to said Roy A. Ross
Application March 27, 1953, Serial No. 345,062
4 Claims. (Cl. 43—13)



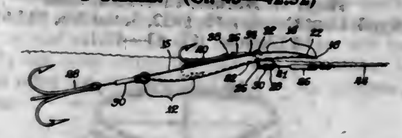
1. A guide or fishing lure comprising a tubular body having open forward and rear ends, a weight attached to said body at the forward end thereof, said body having slots formed therein at the rear end in diametrically opposite portions defining the respective top and bottom of the body, said slots extending forwardly from the rear edge of said body for a distance less than half the length of the body, and the forward end of said body being cut at an angle to the longitudinal axis thereof to form an ellipse like opening, a fishing line secured at one end to the body, a second line secured at one end to the fishing line, and means adjustably securing the other end of said second line to the forward end of said body.

2,731,756
AUXILIARY SPINNING REEL
Elmer T. Nelson, San Francisco, Calif.
Application June 15, 1953, Serial No. 361,581
5 Claims. (Cl. 43—20)



1. An auxiliary spinning reel for fishing rods comprising a resilient bracket mountable on a fishing rod, and when so mounted, having a leg extending outwardly from the rod, and a spool mounted at one of its axial ends on the bracket and having a spindle face about which a fishing line may be wound, said spool being mounted on the bracket fixed against rotation, said leg of the bracket being of sufficient length whereby the circumference of the spool may be spaced from the fishing rod, the spool and brackets being mountable on the rod whereby the axis of the spool is normally substantially parallel with the rod, and the resilience of the bracket providing for manual tipping of the axis of the spool to an angular position relative to the rod, whereby the space may be selectively increased between the circumferential forward edge of the spool and the rod on which the bracket and spool are mounted for facilitating winding of the fishing line on the spool.

2,731,757
VARIABLE ACTION BAIT
Carl J. Porth, West Bend, Wis.
Application September 1, 1951, Serial No. 244,777
2 Claims. (Cl. 43—42.52)



1. A diving surface lure comprising, in combination: a one-piece concavo-convex body formed of sheet material and having a central main upwardly concave portion extending longitudinally; a stern portion at the rear of said central portion and integral therewith; said stern portion being upwardly concave and merging smoothly with said central portion and having an arcuate marginal edge defining the trailing edge of the body; whereby said portions, when trailing along on the surface of the water, tend to automatically maintain themselves with their concavities facing away from the water, in the direction herein identified as up; a pilot portion at the front end of said main portion; said pilot portion merging smoothly with said main portion and being upwardly concave throughout at least the rear part of its longitudinal extent; the forward end of said pilot portion having its upper surface curving downwardly; line attachment means for towing said lure projecting downwardly from the convex side of said central portion substantially midway between the sides thereof and substantially at the front end thereof; and hook means attached to said trailing edge of said stern portion.

2,731,758
FISHING LINE ATTACHMENT
James R. Coe, New York, N. Y.
Application October 12, 1954, Serial No. 461,787
3 Claims. (Cl. 43—42.72)



2. A fishing line having a baitable hook on its lower end and a freely yielding spring device interposed between sections of the line above the baitable hook, said spring device including an inner cylinder having a closed upper end provided with a line connector, an outer cylinder telescoped on the inner cylinder and provided with a closed outer end, a rod sliding through the closed outer end of the outer cylinder and into the inner cylinder and provided with a line connector, a spring follower on said rod and disposed in said inner cylinder, a coil spring around said rod in said inner cylinder engaged by said spring follower, a stop for said spring secured in said inner cylinder, a second coil spring around said rod engaged with the closed end of the outer cylinder, a spring follower engaged with said second-named coil spring, and a member secured on said rod and spaced from said last-named spring follower, the first-named coil spring being yieldable under

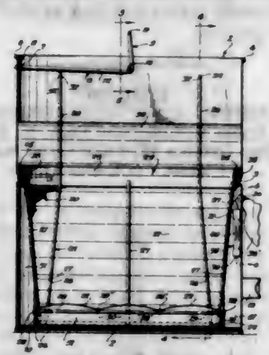
the pull of a fish and the second-named coil spring being yieldable under the pull of a larger and stronger fish only after the member on the rod is engaged with said second-named spring follower and said first-named coil spring is under partial compression from the pull of a fish on said hook, said rod being freely yieldable in said cylinders under the pull of a fish grasping said hook.

2,731,759
FISH NET FLOAT
Hugo W. Hornke, Cleveland, Ohio
Application October 30, 1952, Serial No. 317,615
2 Claims. (Cl. 43—43.1)



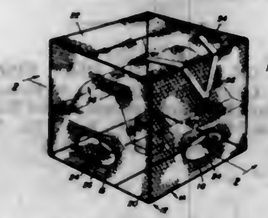
1. A fishing net float comprising a hollow elongated body having smooth rounded ends merging into the surfaces of the sides of said body and having tubular bores formed therein which extend from the center of the ends of the body diagonally toward each other and which terminate at one side of the body in close proximity to each other adjacent to and on opposite sides of the transverse center line of said body, said body being formed of such a configuration that the exterior surface thereof is devoid of external projection.

2,731,760
AERATED BAIT CONTAINER
Edward A. Ebert, Snyder, N. Y.
Application December 30, 1952, Serial No. 328,760
9 Claims. (Cl. 43—57)



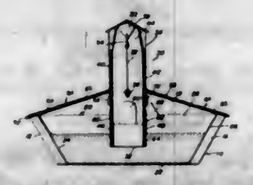
1. A bait bucket, comprising a container to hold a liquid, a generally cup-shaped aerator wall arranged within said container and spaced from said container, and having its upper part arranged below and adjacent the normal level of liquid maintained in said container, a frame mounted on said container and supporting said wall, an enclosed air chamber including said wall within the container, said wall over substantially its full area being formed of a perforated material, the perforations of which are each not greater than about .00195 of a square inch in area and which freely pass air when the surface of said wall is dry or which freely pass liquid when liquid is on both sides of said wall but which perforations are each bridged over by a film of said liquid due to surface tension thereof when said material is wetted and has air on one side and liquid on the other, said films resisting free passage of air therethrough into said liquid but maintaining intimate contact of the air and liquid for absorption of the former by the latter, said films also being subject to rupture by air pressure applied thereto of sufficient magnitude to break said films to allow ingress of said air into the liquid in minute increments through said perforations, and means arranged to supply compressed air to said chamber.

2,731,761
CRAB TRAP
Norman S. Marshall, Atlantic, Va.
Application June 8, 1954, Serial No. 435,311
2 Claims. (Cl. 43—100)



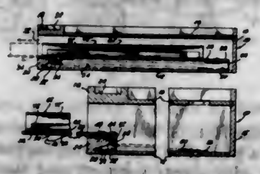
1. In a wire mesh trap comprising a main body divided into bait and trap chambers, the main body having an entrance passageway leading into said bait chamber, a bait cup in said bait chamber, a partition of inverted U-shape dividing the bait and trap chambers, said inverted U-shaped partition having an opening at the top thereof to give communication with the trap chamber; the improvement comprising a rigid, rectangular box-like, skeleton supporting frame disposed within the wire mesh of said trap, said mesh being formed over the edge forming members of said supporting frame, and means interlacing said wire mesh and the edge forming members of said supporting frame maintaining the shaping of said mesh in conforming relation to said frame and rigidly attaching said mesh to said frame, said wire mesh consisting of two separate rectangular panels, each having folds to provide three sections, each panel covering three faces of said skeleton frame, the edges of said panels mating with one another along the edge forming members of said supporting frame, said interlacing means facing said mating edges to one another and to said edge forming members, and said skeleton frame on one side having not more than three edges.

2,731,762
BUG AND MOSQUITO CATCHER
James F. Jones, Snow Hill, N. C.
Application June 1, 1954, Serial No. 433,348
6 Claims. (Cl. 43—113)



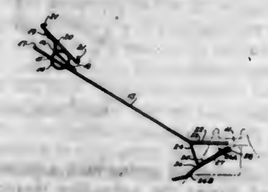
1. An insect catcher comprising an elongated trough adapted to receive a quantity of liquid, said trough including a pair of end walls interconnected by opposed side walls, an insect attractor assembly secured to and between said end walls and projecting upwardly therefrom, said assembly having an open framework covered on opposite sides with foraminous material, said opposite sides of the assembly being spaced inwardly of corresponding side walls of the trough, and an elongated illuminating tube carried by said assembly closely adjacent the surface of the liquid adapted to be placed in said trough, whereby the light emitted from said tube will be diffused by said foraminous material to attract insects and reflection of light from the surface of the liquid will entice insects to fly into the liquid.

2,731,763
MANIFOLD HOUSING AND TELEPHONE SUPPORT
Karl Domberger, Maspeth, and Sol Rael, Jackson Heights, N. Y.
Application December 7, 1953, Serial No. 396,631
3 Claims. (Cl. 45—.5)



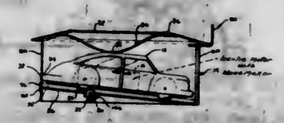
1. A device of the character described comprising a substantially flat housing of rectangular configuration and having a bottom wall, side walls and a top wall defining a telephone receiving and locating platform and having a front opening formed therein, an upwardly directed ledge disposed on the forward border of said bottom wall along said opening, a plate movable through said front opening between an advanced position and a retracted position relative to said housing, a pair of laterally spaced skids depending from the rear portion of said plate and having forwardly directed bottom legs abutting said bottom wall, a pair of recesses formed in the rear of said ledge in longitudinal alignment with said skid legs and having rearwardly upwardly inclined upper surfaces, a crank member having transversely extending shafts and located in the vicinity of said ledge and having laterally extending shafts rotatably engaged by said housing side walls, one of said shafts projecting through said side wall and terminating in a finger piece, said crank having an eccentric portion adapted to raise the forward portion of said plate upon rotation of said shaft, a detent depending from the forward portion of said plate and adapted to engage the rear surface of said ledge when said plate is in retracted position, a rod supported by and between said shafts, below and parallel to said shafts, and a helical tension spring having one end secured to the rear portion of said housing, passing around said rod and having its other end secured to the rear portion of said plate.

2,731,764
TELEPHONE ATTACHED PAD HOLDER
Charles E. Zeller, St. Catharines, Ontario, Canada
Application November 12, 1954, Serial No. 468,492
1 Claim. (Cl. 45—.5)



A writing pad holder for attachment to a telephone base having a recess opening rearwardly and located below the upper surface of the base and forming a handle between the recess and the upper surface below the hand set receiving cradle, said handle underlying such cradle and projecting rearwardly and having a rib projecting downwardly at its rear edge, said pad holder including a body upon which a writing pad may be mounted, means to removably secure a writing pad to the pad holder body, a U-shaped clamp having the legs thereof converging from the bight portion of the clamp toward the free ends thereof, one of said legs being fixedly secured to the end of said pad holder body and projecting at an obtuse angle therefrom, said one leg being adapted to engage an appreciable area over the upper surface of said handle of said telephone base, the free end of the other leg of said U-shaped clamp being resiliently urged toward said one leg for engagement against the lower surface of the handle and forwardly of the rib at the rear portion of said telephone base handle, said other leg of said U-shaped clamp having a portion fixed thereon for engaging the edge of the lower surface of said recess whereby the pad holder will be retained by the lever action between said pad holder body and said other leg of said clamp and by the resiliency of the clamp.

2,731,765
TOY EMERGENCY VEHICLE WITH HOUSING
Richard N. Carver, Erie, Pa., assignor to Louis Marx & Company, Inc., New York, N. Y., a corporation of New York
Application June 16, 1953, Serial No. 361,956
12 Claims. (Cl. 46—12)



1. A toy comprising, in combination, a simulated vehicle and a station for the same, said vehicle having an inertia motor and a wheel driven thereby, and said station having a frictional roller running transversely of the direction of the vehicle when in the station, said roller being disposed in the station in such position that the driven wheel of the vehicle rests on the roller when the vehicle is in the station, means limiting rearward movement of the vehicle when its wheel is on the roller, and means to drive the roller at high speed, whereby the rotation of the roller energizes the inertia motor, and stoppage of rotation of said roller causes the vehicle to run out of the station.

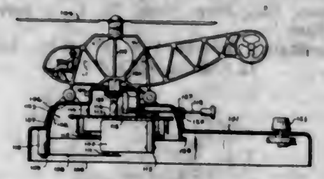
2,731,766
PICTURE WITH FIGURE FORMING CUTOUTS
Barbara Blair Rubin, North Hills, N. Y.
Application April 5, 1954, Serial No. 420,891
1 Claim. (Cl. 46—35)



A toy comprising a flat board of uniform thickness imprinted on one of its faces with a complete recognizable picture including three picturizations of a four legged animal, comprising a plurality of pictorial elements arranged to cooperate while on the board in the formation of said picture, some of said elements, including portions of said picturizations, being imprinted directly on and forming a unitary part of the board and inseparable therefrom, the remainder of said elements including the remaining portions of said picturizations being in the form of cutouts separable from the board, said remaining portions comprising two inverted U-shaped parts simulating the lower rear body and legs of two of the animals and a part simulating the upper

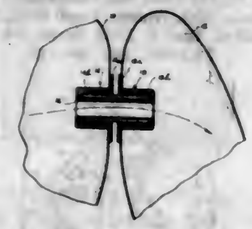
body of the third animal, and when separated from the board leaving discrete complementary recesses in the board each completely surrounded by the unitary portion of the picture, and a backing for the board closing one side of the recesses to form pockets for removably containing the cutouts, said leg part cutouts being notched at the top of the bight, the width of the notches being substantially the thickness of the board, whereby the leg parts can be crossfitted on the upper body part to produce a separable three dimensioned standable replica of the animal depicted in said complete picture, said cutouts when in place in said board forming parts of the separate picturizations of said animal.

2,731,767
TOY AIRCRAFT AND LAUNCHING DEVICE THEREFOR
Ralph D. Holt, Canton, Ohio
Application September 24, 1951, Serial No. 247,952
7 Claims. (Cl. 46—75)



3. A toy launching device for a vehicle comprising a support, a platform mounted for movement on the support, driving means having a part for engaging and rotating a propeller shaft carried by a vehicle, locking means mounted on the platform whereby a vehicle may be held in relation to the platform until the propeller shaft has attained a predetermined speed, and said device having a single manual control operatively connected to the platform and to the locking means for control thereof.

2,731,768
INFLATABLE TOY DEVICE
Elliott D. Harrowe, Hollis, N. Y., assignor to Ideal Toy Corporation, Hollis, N. Y., a corporation of New York
Application September 11, 1952, Serial No. 309,116
5 Claims. (Cl. 46—87)



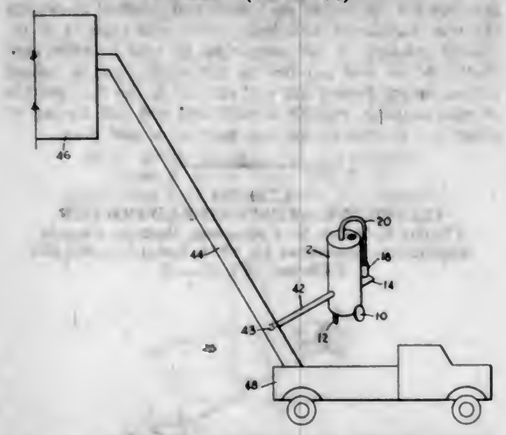
1. An inflatable toy device comprising a main body portion and a plurality of separate, inflatable limb portions relatively movable with respect to said main body portion, each of said limb portions being associated with said body portion by means of a hollow connector element permitting automatic inflation and simultaneous relative movement between said limb and body portion upon inflation of said body portion, and adapter elements secured to said body portion and to each of said limb portions for air-tight and movable association with said connector element, said connector element having a series of unconnected grooves perpendicular to the axis of the connector and said adapter elements having preformed complementary grooves for permitting a readily rotatable fit between the adapters and connector.

2,731,769
TOY AIRCRAFT AND LAUNCHING DEVICE THEREFOR
Ralph D. Holt, Beloit, Wis.
Application August 21, 1950, Serial No. 180,639
8 Claims. (Cl. 46—243)



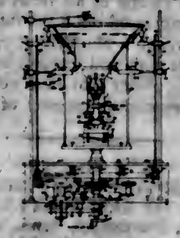
8. In combination: a launching device and an aeroplane having a propeller shaft, front supports and a tail part provided with a rear support, said launching device comprising a housing provided with an upper substantially horizontal wall providing a rest for the rear support and an adjacent upstanding wall provided with an opening, a power unit disposed in the housing, said power unit having a drive shaft accessible through said opening, an extension projecting outwardly from the housing in a plane lower than the rest for supporting the front supports of the aeroplane, the tail part of the aeroplane being provided with an abutment, a yieldable latch engaging the abutment and serving to hold the aeroplane in a launching position on the launching device and the propeller shaft coupled with the drive shaft, and manual means operatively connected to the latch for releasing it from said abutment.

2,731,770
METHOD OF TREATING SEEDS
John E. Rhea, Billings, Okla., assignor of one-half to Donald L. Curby, Billings, Okla.
Application March 26, 1951, Serial No. 217,517
1 Claim. (Cl. 47—58)



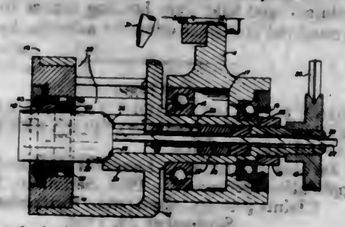
A method of treating grains with a poisonous preserving compound during the unloading thereof from a bin in a manner to prevent any filtration of the poisonous preserving compound, which consists of discharging the grain from a bin in a closed grain chute, spraying the discharging grain with an aerated and agitated mixture of the poisonous compound at an intermediate portion of the grain chute, dispersing the grains in the chute upstream from the point of spraying to assure an efficient coating of each grain.

2,731,771
CATHODE-RAY TUBE SEALING APPARATUS
Arthur J. Harder, Jr., Chicago, Ill., assignor to The Rauland Corporation, a corporation of Illinois
Application November 15, 1949, Serial No. 127,457
5 Claims. (Cl. 49—1)



1. Apparatus for sealing together a vitreous neck portion and a metallic conical portion of a cathode-ray tube envelope comprising: a supporting table; a first tubular member rotatably supported by said table; a second tubular member slidably mounted coaxially with said first tubular member for rotation therewith; a driving mechanism mechanically coupled to one of said tubular members for imparting rotational motion to said tubular members; an annular bracket mounted on said first tubular member and having a plurality of permanent magnets disposed around its periphery for firmly supporting said conical portion coaxially with said tubular members; a supporting structure secured to said second tubular member for supporting said neck portion coaxially with said conical portion but initially spaced from the small end of said conical portion; and a shifting mechanism mechanically coupled to said second tubular member for moving said neck portion into contact with the small end of said conical portion.

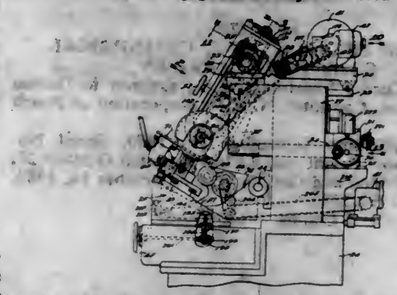
2,731,772
TUBULATING MACHINE CHUCK
John Ehret, Jr., and Edward A. Heckman, Allentown, Pa., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application March 30, 1953, Serial No. 345,518
5 Claims. (Cl. 49—64)



1. In a tubulating machine, a hollow support having a centerline, a stop mounted within the support, an annular locating member carried by the support to receive a bulb and locate it adjacent the stop with its centerline coincident with the centerline of the hollow support, means to grip the bulb and hold it in said position, and a chuck for a tube mounted within the support and adapted to removably hold the tube in abutting engagement with the bulb with its centerline in alignment with the centerline of the bulb and coincident with the centerline of the hollow support.

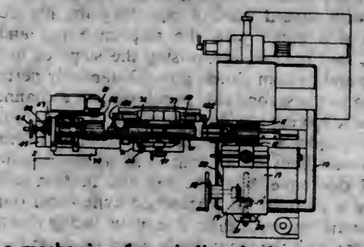
2,731,773
DRESSING FIXTURE FOR GRINDING MACHINES
Alfred C. Page, Detroit, Mich.
Application January 14, 1952, Serial No. 266,284
17 Claims. (Cl. 51—95)

1. In a device of the class described, a work spindle adapted to rotatably support the work, a grinding wheel spindle, a swinging frame pivoted on a swing axis and having a longitudinal track thereon, a slide supported on said track and holding said grinding wheel spindle, a dressing element adjacent said work spindle, the grinding wheel spindle being movable about said swing axis between a grinding position adjacent said work spindle



and a dressing position adjacent said dressing element, and means for moving said slide on said frame, said means being actuated by movement of the grinding wheel spindle from said grinding position to said dressing position, whereby said grinding wheel spindle is fed toward said dressing element.

2,731,774
CENTERLESS GRINDING MACHINE WITH WORK ROTATING AND FEEDING WORK SUPPORT
Edward J. Sieber, Jr., and Wallace L. Davis, Cincinnati, Ohio, assignors to The Cincinnati Milling Machine Co., Cincinnati, Ohio, a corporation of Ohio
Application June 28, 1954, Serial No. 439,524
7 Claims. (Cl. 51—103)



1. In a mechanism for grinding the journal portion on the end of heavy axles by the centerless infeed method, the combination with a centerless grinder having a grinding wheel, slide means having a workrest blade and a regulating wheel mounted thereon for engaging spaced points on the periphery of said journal portion for alignment parallel to the axis of the grinding wheel, of an outboard work support having means for engaging spaced points on the periphery of the work and aligned in cooperative relation with the workrest blade to support the axis of the work parallel to the axis of the grinding wheel, feeding means for said slide means, and power operated means operated and controlled by said slide means for feeding said outboard support means in synchronism with the rate of movement of said slide means to support and maintain the axis of the work parallel to the axis of the grinding wheel during the infeeding cycle.

2,731,775
METHOD OF CLEANING AND DECOLORIZING SHOES AND OTHER LEATHER ARTICLES
Kristian Julius Simonsen, Nasbypark, Sweden
No Drawing. Application March 4, 1953, Serial No. 340,377
Claims priority, application Sweden March 5, 1952
3 Claims. (Cl. 51—282)

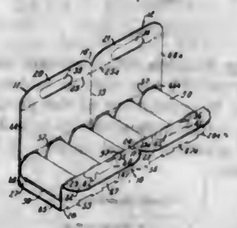
1. A method of cleaning used leather which comprises blasting the leather in dry condition with a current of

air at a pressure within the range from 1.25 to 11 kilograms per square centimeter, said current of air having suspended therein round-grained sand of a size within the range from 0.05 to 1.5 millimeters.

2,731,776
METHOD OF PACKAGING CYLINDRICAL OBJECTS IN CARRIERS

Grover C. Currie, Charlotte, N. C., assignor to Ducam Corporation, Charlotte, N. C., a corporation of North Carolina

Original application September 15, 1950, Serial No. 185,072, now Patent No. 2,656,950, dated October 27, 1953. Divided and this application October 16, 1950, Serial No. 190,327
5 Claims. (Cl. 53—5)



1. A method of packaging cylindrical objects in a carrier formed from a flat blank having a bottom panel, a first side panel hingedly connected to a side edge of said bottom panel, a second side panel having one side edge hingedly connected to the opposite side edge of the bottom panel, a top panel hingedly connected to the other side edge of the second side panel and said blank being provided with spaced lines of cut along the junction of the second side panel with the respective top and bottom panels, said method comprising the steps of first folding the top and bottom panels into substantially perpendicular relation to the second side panel to form a channel-shaped receptacle having a width substantially equal to the height of the cylindrical objects, and said folding forming openings at said lines of cut spaced along the junction of the second side panel with the top and bottom panels, then moving a plurality of juxtaposed cylindrical objects in a continuous row with their side walls facing down into engagement with the second side panel to cause the cylindrical objects to register with the spaced openings to prevent displacement of the cylindrical objects longitudinally of the channel-shaped receptacle, and guiding and confining the ends of the cylindrical objects during their movement into the channel-shaped receptacle by the top and bottom panels to prevent displacement of the cylindrical objects laterally of the channel-shaped receptacle and thereafter folding the first side panel over the cylindrical objects and into parallel relation to the second side panel.

2,731,777
APPARATUS AND PROCESS FOR MOLDING POWDER PUFFS

Richard J. Wollersheim, Milwaukee, Wis., assignor to Kolmar Laboratories, Inc., Milwaukee, Wis., a corporation of Delaware

Application July 5, 1951, Serial No. 235,173
7 Claims. (Cl. 53—11)

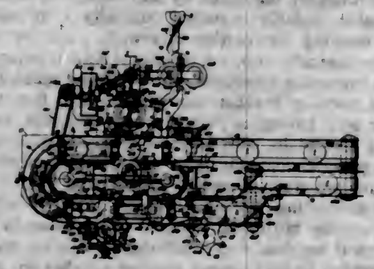


1. In an apparatus for forming envelopes of cosmetic powder in the making of powder puffs having a powder-porous fabric face, a die comprising a die plate with a plurality of spaced recesses therein of the size and shape of one side of the envelopes to be formed, porous means at the bottom of each recess, means for supporting and positioning the porous means to support a porous fabric and to provide for the escape of air from a charge of powder as the latter is compressed upon the fabric, and a pressure mechanism comprising a plurality of spaced plungers disposed in alignment with said recesses and adapted to compress a charge of powder into each pocket formed in the fabric in the corresponding recesses of said die plate.

2,731,778
APPARATUS FOR APPLYING RIP STRIPS TO RECEPTACLES

Louis F. Loufek, Davenport, Iowa, assignor to Ralston Purina Company, St. Louis, Mo., a corporation of Missouri

Application February 1, 1952, Serial No. 269,544
29 Claims. (Cl. 53—61)

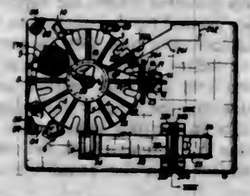


1. Apparatus for applying to a container a rip strip for ripping a wrapper subsequently to be applied around the container to hold a cap on the container, comprising means for applying adhesive peripherally around the container along a rip line adjacent the line of the rim of the cap, means for releasably holding an individual rip strip, means for bringing the container into engagement with the rip strip as releasably held by said holding means for securement of an end portion of the strip to the container by the adhesive, and means for relatively rotating the container and said strip holding means to apply the strip around the container upon the adhesive by wrapping.

2,731,779
MACHINE FOR THE PRODUCTION OF BAGS CONTAINING A SUBDIVIDED, PULVERULENT OR GRANULAR PRODUCT

Jacques F. Milliquet, Lausanne, Switzerland

Application December 6, 1951, Serial No. 260,266
Claims priority, application Switzerland September 28, 1951
10 Claims. (Cl. 53—70)



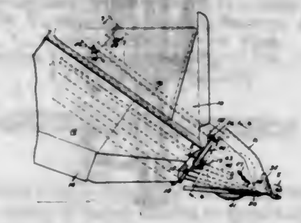
7. In a machine for making prismatic substantially square bags from thin metal blanks, for filling the bags with subdivided material and for closing same, the combination of a frame, a drum revolubly carried by said frame to rotate round a vertical axis registering with the axis of the drum, a power unit, means controlled by said power unit to make the drum progress intermittently by equal angular shiftings, a plurality of equidistant outwardly apertured vertical blank-folding dies distributed

at the periphery of the drum, angularly equidistant pairs of parallel vertical guiding plates radially rigid with said drum, the plates in each pair extending to either side of a corresponding die to carry same between them, a vertical prismatic former vertically and horizontally reciprocatable between and outside the plates of each pair of plates, adapted to cooperate with the die for the folding of the blank, carrier means for each former, adapted to move horizontally and vertically with reference to the corresponding plates, means for feeding a blank to each die entering a predetermined position in space, means controlled by the power unit and controlling said carrier means as the drum stops with the die lying in said predetermined position in space, means for filling the successive bags and a device for closing the filled bags, including a pair of rocking lateral claws lying above the die carrying the filled bags, and adapted to form in the upper part of the side walls of the bag two reentrant folds, a first vertical oscillating control shaft, a transmission including a crank arm, a slider and connecting links operatively connecting said first control shaft with said claws, a second vertical rocking control shaft, a transmission controlled by said second shaft, two sliders provided with associated crimping impressions controlled by last mentioned transmission and adapted to move in opposite directions with reference to one another to urge said crimping impressions to move to either side of a geometrical plane tangent to the cylinder generated by the vertical axis of symmetry of the bag carried along by the drum, means for securing a label in the upper end of each bag, and including a spool, a strip of label-forming material wound over said spool, guiding means urging the free end of said strip into the upper end of the bag along a line that is oblique with reference to the square cross-section of the bag, means for cutting the strip at a predetermined height above the bag, the sliders provided with crimping impressions being adapted to produce corrugations simultaneously on the opposite sides of the bag and on the label, said label being thus held fast between the crimping corrugations with the interposition of said sides of the closed bag.

2,731,780
PLANT LIFTER FOR HARVESTING MACHINE

Robert H. Witt, Royal Oak, Mich., assignor, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware

Application March 12, 1953, Serial No. 341,926
4 Claims. (Cl. 56—119)

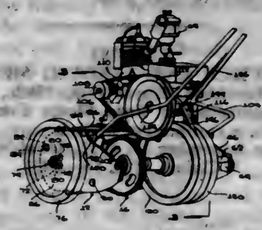


1. In a harvester having a pair of relatively rotatable crop-stripping elements disposed between a pair of flare sheets, a plant lifter assembly comprising a housing disposed at the forward end of each flare sheet and having a smooth exterior surface forming a continuation of said flare sheet, a vertically adjustable shoe secured to said housing at the forward end thereof, laterally and rearwardly directed primary tines carried by said housing for elevating lower plant portions for exposure to said stripping elements, and a secondary tine carried by said shoe in advance of said primary tines, the forward end of said secondary tine being disposed beneath said primary tines to elevate lower plant portions adjacent the ground and the trailing end of said secondary tine being disposed above the adjacent primary tines to transfer plant portions lifted thereby to said primary tines.

2,731,781
LAWN MOWER HAVING REMOVABLE CUTTING REEL

Frank F. MacVicar, Syracuse, N. Y.

Application July 17, 1953, Serial No. 368,797
3 Claims. (Cl. 56—249.5)

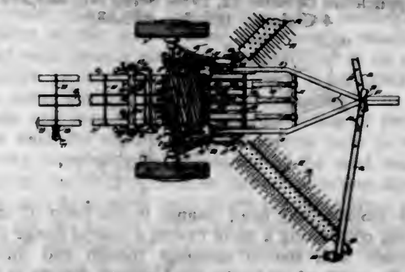


1. In a lawn conditioning machine of the reel type, a main frame having an open front and including a pair of side plates fixedly connected in spaced relation; a reel assembly including a reel frame adapted to be bodily shifted along a generally horizontal path through said open front to a position within the space between said side plates, the reel frame having a pair of side plates disposed flat against the main frame side plates in said position of the reel assembly and a plurality of reel frame tie bars rigidly secured at their opposite ends to and extending between the respective reel frame side plates; fastening elements removably extended through the contacting reel frame and main frame side plates, to separably connect the reel frame to the main frame in said position of the reel assembly, and a bed knife extending between the reel frame side plates and tiltably mounted upon one of said tie bars.

2,731,782
DEVICE FOR PICKING UP AND COMPRESSING LOOSE MATERIALS

William C. Mason, Slingerlands, N. Y.

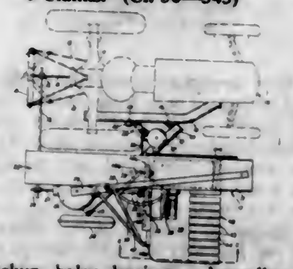
Application September 15, 1948, Serial No. 49,321
3 Claims. (Cl. 56—341)



1. A hay pressing machine of the ambulatory type comprising the combination with mechanism, including an elongated tubular element and a pair of compressing rolls disposed in substantially fixed relation to said element, for compressing a mass of loose hay into an elongated column in said element; of a knife for cutting said column into bale length; a mounting for said knife adapting it to reciprocate transversely through said element; hydraulically actuated means for reciprocating said knife; means adapted operatively to connect the last mentioned means to the hydraulic mechanism of a tractor; means carried by said machine for conveying loose mown hay from a zone directly in front of said conveying means to said compressing rolls, ground wheels on which said machine is carried, a pair of rotatable rakes disposed

in front of said machine and carried thereby, one at each side of said conveying means and converging towards said conveying means, for raking loose mown hay from zones at each side of said machine into a zone directly in front of said conveying means; means adapted to be connected to a source of power for driving said compressing rolls, said conveying means and said rakes; and means for varying the degree of convergence of said rakes; whereby the width of the zone from which the loose mown hay is raked may be varied depending upon the weight of the hay per unit area of said zone.

2,731,783
BALER PICKUP AND FEEDING MECHANISM
Vernon O. Hauswirth, Royal Oak, Mich., assignor, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application September 18, 1952, Serial No. 310,281
8 Claims. (Cl. 56—343)



1. In a pickup baler having a laterally extending pickup reel, the improvement comprising means providing a hay accumulating space rearwardly of said reel, a bale case generally overlying said pickup and said accumulating space and having a baling chamber directly overlying said accumulating space adjacent one lateral extremity thereof, a feed arm pivoted to said bale case and depending therefrom, and means for actuating said arm for reciprocatory movement laterally across said space and upwardly into said baling chamber.

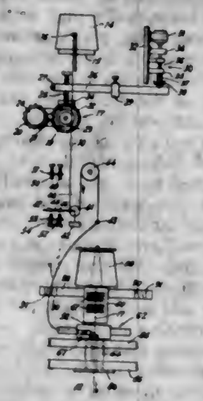
2,731,784
CLEANING ATTACHMENT FOR RAKES
Joseph P. Noll, Eatontown, N. J.
Application October 22, 1954, Serial No. 463,899
4 Claims. (Cl. 56—400.08)



1. A toothed rake head cleaner in the form of an attachment comprising a plate having a lateral flange along its bottom with spaced openings therein and through which the teeth of said rake head extend, having at least one lateral flange on its top which extends over the back of said rake head, said plate also having a handle accommodation notch which is slidably cooperable with the usual handle which is attached to said head, and means for securely but detachably securing said attachment to said head.

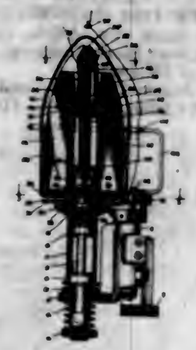
2,731,785
METHOD OF AND APPARATUS FOR PLYING STRANDS
Alfred W. Vibber, Ridgewood, N. J.
Application January 26, 1953, Serial No. 333,242
17 Claims. (Cl. 57—58.36)

1. Apparatus for handling elongated flexible material comprising a hollow shaft, a balloon creating flyer mounted coaxial of the shaft for independent rotation with respect thereto, means for rotating the flyer, a driven material feeding means supported by the flyer for rotation therewith about the axis of the flyer, and means drivingly connecting the shaft to the feeding means whereby the material feeding means is driven by the rotation of the flyer relative to the shaft, a generally radial material



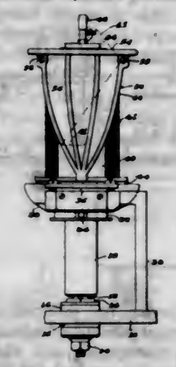
conducting passage in the flyer radially outwardly of the material feeding means, the shaft and the driving connection between it and the feeding means being so positioned relative to the flyer as to leave unimpeded a zone of the flyer at the axis thereof and beyond the shaft whereby material may be fed from the feeding means in the flyer into and through the shaft.

2,731,786
TWISTER
Norman E. Klein, Stamford, Conn., assignor, by mesne assignments, to Deering Milliken Research Corporation, near Pendleton, S. C., a corporation of Delaware
Application December 15, 1949, Serial No. 133,047
13 Claims. (Cl. 57—58.83)



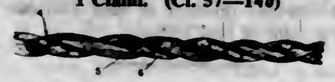
7. The two-for-one twister assembly comprising in combination a rotatable spindle, a flyer fixed to said spindle for rotation therewith, a support carried by said spindle above said flyer, said spindle having a passage therein for flow of yarn therethrough, stabilizing means for preventing rotation of said support, a tubular yarn guide coaxial with the spindle and carried thereabove by said support, a hollow member mounted on said tubular guide and carrying an annular yarn guide at its upper end, the upper end of said tubular guide extending into said member, yarn tensioning means positioned at a level adapted to be above a yarn supply package carried by said support, and means pivotally mounting said tensioning means as a unit within said hollow member so as to be retractible from the yarn path during threading of the twister, said hollow member having an opening in the wall thereof for accommodation of said tensioning means when retracted from yarn engaging position.

2,731,787
TWISTER
Henry R. Marsh, Saco, Maine, assignor to Saco-Lowell Shops, Boston, Mass., a corporation of Maine
Application July 23, 1952, Serial No. 300,439
6 Claims. (Cl. 57—58.83)



1. In a 2 for 1 twister, a rotatable spindle having an axial yarn passage therethrough, a normally stationary yarn package carrier rotatably mounted on said spindle, an upwardly extending hollow shaft member mounted on said yarn package carrier in rotatably fixed position, an upper flier including a horizontal disc mounted for free rotation on said shaft member above said package carrier to guide yarn being unwound from a yarn package on said carrier, and a friction disc mounted on said shaft member in rotatably fixed position above said upper flier disc to frictionally engage the upper surface of said upper flier disc, whereby the frictional engagement of the surfaces of said friction disc and said upper flier disc provides a pretension on a yarn being removed from said yarn package.

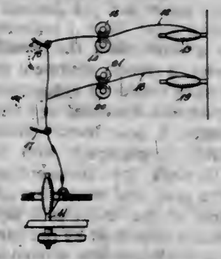
2,731,788
COMPOSITE THREAD
Harry C. Donaldson, Jr., Brunswick Township, Rensselaer County, N. Y., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y., a corporation of New York
Application October 8, 1949, Serial No. 120,245
1 Claim. (Cl. 57—140)



A composite sewing thread for use in stitching together superposed layers of textile fabrics to form a seam having minimum shrinkage and stitch pucker, which comprises a multiple ply, relatively highly twisted, sewing thread, one ply of which is of water soluble polyvinyl alcohol, and another ply of which is substantially water-insoluble and in itself a complete sewing thread.

2,731,789
METHOD OF FORMING NOVELTY YARN
James Bowmen Holder, deceased, late of Clemson, S. C., by Decein Rouda Holder, administratrix, Seneca, S. C.
Application March 4, 1953, Serial No. 340,246
3 Claims. (Cl. 57—160)

1. A method of forming a novelty yarn having spaced elongated seeds which are of substantially the same diameter throughout substantially their entire length, comprising continuously feeding a core yarn downwardly in a longitudinal direction and twisting the strands of the core yarn so that the core yarn is rotated upon its longitudinal axis, applying an effect yarn to the core yarn, feeding the effect yarn continuously in a longitudinal direction toward and transversely of said core yarn and at a speed in excess of the longitudinal feeding of the core yarn, holding the effect yarn against lateral movement at a point spaced from the core yarn and at a selected elevation, spirally winding in an upward direction the effect yarn upon the downwardly traveling core yarn by the rotation of the core yarn, and thereby forming a spiral first layer which is of substantially the same diameter substantially throughout its length and having its upper end arranged at an elevation above said holding point, arranging that portion of the effect yarn extending between the holding point and the first layer at an upwardly inclined angle while causing the spirally wound first layer to rotate with the core yarn, folding back the effect yarn upon the upper end of the rotating spirally wound first layer and thereby spirally winding in a downward direc-



tion the effect yarn about the first layer and continuing such spiral winding for producing a second spiral layer having substantially the same diameter throughout substantially its entire length and discontinuing such downward spiral winding of the second layer at an elevation below the holding point and thereby defining the length of the second layer, arranging that portion of the effect yarn between the holding point and the lower end of the second layer at a downwardly inclined angle, folding back the downwardly inclined portion of the effect yarn upon the lower end of the second layer while continuing the rotation of the second layer and thereby winding the effect yarn spirally about the second layer in an upward direction to form a third layer which is of substantially the same diameter throughout substantially its entire length and continuing the upward winding of the effect yarn until the upper end of the second layer is reached thereby completing the formation of the seed, and then winding the effect yarn in an upward direction about the core yarn to a point well above the third layer so that that portion of the effect yarn next to the core yarn assumes the upwardly inclined position, and then repeating the cycle of operation.

2,731,790
ENERGY EQUALIZING SYSTEM FOR SPRING OPERATED MECHANISMS
Helmut Junghans, Schramberg-Sulgau, and Leo Hartner, Schramberg, Germany, assignors to Gebruder Junghans A. G., Schramberg/Schwarzwald, Germany
Application July 5, 1951, Serial No. 235,351
3 Claims. (Cl. 58—48)

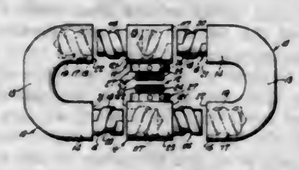
1. Power equalizing system for spring operated mechanisms comprising a stationary housing having a circular opening therein, a brake means in the form of a ring provided in the circular opening, said brake ring having a cut-out portion therein so that the ring brake is non-continuous, an abutting shoulder provided on the end of

the brake ring near said cut-out portion, a shaft coaxial to the circular opening and passing therethrough and being connected with the spring of the spring operated mechanism, a carrier disc having an abutment engaging said abutting shoulder mounted to rotate with and on the shaft and freely rotatable in the circular opening of the housing, means to secure the ring brake on one side of the disc with movement in a radial direction, a double armed lever of which one arm is much longer than the other arm, said lever being pivotally mounted on the carrier disc on the same side thereof as the brake ring and having its shorter arm projecting into the cut-out portion of the brake ring and engaging the other end of the brake ring, the breadth of the cut-out portion being



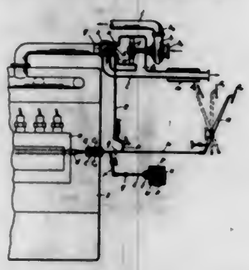
only slightly greater than the breadth of the shorter arm of the lever, a second abutment on the disc, a spring having one end in tensioned engagement with the shorter arm of the lever and the other end tensioned against said second abutment, a gear loosely rotatable on the shaft and in operative engagement with the spring operated mechanism through the last-mentioned spring, a pin mounted in the gear, and means for coupling the pin with the longer arm of the lever, said last-mentioned spring being periodically tensioned by the spring operated mechanism, upon a predetermined movement of the gear and pin relative to the disc, with the brake ring and the housing being braked relative to each other until the spring has given up its energy to the gear.

2,731,791
CHAIN SHACKLE
Mortimer Russell Dock, Washington, D. C.
Application May 29, 1952, Serial No. 290,739
9 Claims. (Cl. 59—86)



4. In a sectioned chain shackle of the cross stud type a pair of opposed U-shaped end sections and a pair of laterally-spaced intervening side sections threadably mounted rigidly together, said side sections being adapted to be rotated, relative to said end sections threadably to disconnect the shackle sections from each other, a pair of stud lugs each mounted upon and extending from one side of each of said side sections to be disposed in spaced-apart, substantially aligned relation when said shackle sections are threadably tightened home in connected relation, and a pair of threaded abutment members with one threadably mounted on the outer end of each of said stud lugs to be run out to abutting engagement of each other upon substantial alignment of said stud lugs temporarily to hold said stud lugs in such alignment with said shackle sections thereby locked in assembled positions, said abutment members being threadably retractable to permit relative rotation of said stud lugs and attendant disassembly of said shackle sections.

2,731,792
MEANS TO DELAY FUEL ENRICHMENT WHEN STARTING TURBO-SUPERCHARGER FOR INTERNAL-COMBUSTION ENGINES
Friedrich K. H. Nallinger, Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application October 9, 1950, Serial No. 189,085
In Switzerland October 7, 1949
Public Law 619, August 23, 1954
Patent expires October 7, 1969
10 Claims. (Cl. 60—13)



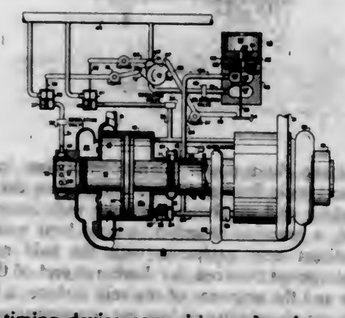
1. A control device for internal combustion engines having a supercharger blower, comprising switching means for engaging and disengaging said blower, control means for varying the quantity of fuel fed to the engine from a no-load quantity to a normal full-load quantity with said blower disengaged and therebeyond to an overload quantity with said blower engaged, first means for adjusting said control means, second means for adjusting said switching means, common actuating means for both said first and second adjusting means adjustable from a no-load position over a normal full-load position to an overload position including third means for adjusting said second adjusting means during movement of said common actuating means from a normal full-load position to an overload position thereof and further means for adjusting said first adjusting means with delay during movement of said common actuating means from a normal full-load position to an overload position thereof.

9. Regulating device for internal combustion engines comprising a supercharger blower, regulating means for positively varying the amount of fuel fed to the engine from a no-load quantity through a normal full-load quantity to an overload quantity, and means operatively connected with said blower and said regulating means for engaging said blower only in the range between said full load quantity and said overload quantity and for temporarily delaying adjustment of said regulating means from said full-load quantity to said overload quantity upon engagement of said blower.

2,731,793
STARTER FOR FREE PISTON GAS GENERATOR
Frank M. Lewis, Weston, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application August 9, 1954, Serial No. 448,788
4 Claims. (Cl. 60—14)

1. A starter for an internal combustion engine of the free piston type having a pneumatic direct bounce chamber, the compression of air in which tends to move the engine piston in the direction of its compression stroke, and a pneumatic reverse bounce chamber, the compression of air in which tends to move the engine piston in the direction of its outward stroke, said starter comprising means for injecting air under pressure into said reverse bounce chamber and then into said direct bounce chamber, the air injected into said reverse bounce chamber exerting a greater force than the air injected into said direct bounce

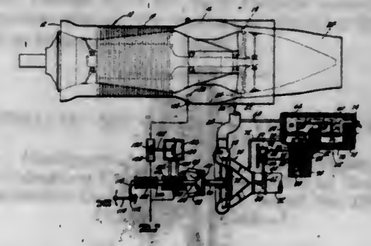
chamber to move the engine piston through its outward stroke, an exhaust valve for exhausting said compressed air from said reverse bounce chamber into the atmosphere, means for biasing said exhaust valve to the closed position, mechanism responsive to air pressure for opening said exhaust valve, and timing means for supplying said last named air pressure to said mechanism for a predetermined period of time, said timing means comprising an actuating chamber communicating with said mechanism, a conduit for admitting air under pressure to said actuating chamber and to said mechanism to open said exhaust valve, a vertical cylinder having exhaust ports in the upper end thereof, and a weighted piston in said cylinder covering said ports and adapted to be moved upwardly therein for a fixed distance without uncovering said ports and for an additional distance upwardly for uncovering said ports by the air pressure in said actuating chamber, said ports being of sufficient size to reduce the pressure of the air in said actuating chamber and said mechanism to below the pressure at which said mechanism maintains said exhaust valve in the open position.



4. A timing device comprising a housing providing a vertical timing cylinder, exhaust ports in the housing communicating with the cylinder, a weighted piston within said cylinder adapted for vertical movement and normally covering said ports, an air chamber within said housing and below the cylinder, a partition in the housing separating the air chamber and the cylinder and having an aperture of less cross sectional area than the aggregate cross sectional area of said exhauts ports, a fluid pressure responsive valve for said aperture, means for supplying air under pressure to the air chamber, releasable holding means for said valve for controlling the flow of air under pressure from the air chamber to the cylinder to force the weighted piston upwardly to uncover the ports, connections for said timing cylinder to receive air under pressure therefrom for an interval of time equal to the time between the opening of said valve and the exhaustion of said air under pressure through the ports to the atmosphere and for releasing said holding means, and means connected to said means for introducing air under pressure into the air chamber to control the pressure of the air so introduced whereby the time of rise of said weighted piston may be regulated.

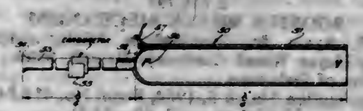
2,731,794
EXHAUST GAS TEMPERATURE RESPONSIVE FUEL SYSTEM FOR GAS TURBINE POWER PLANT
Bruce N. Torell, Wethersfield, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application February 27, 1952, Serial No. 273,615
17 Claims. (Cl. 60—39.28)

1. A fuel system for a combustion engine in which fuel flow to the engine is metered as a function of the temperature of engine exhaust gases, said system including fuel metering means, rotor means driven by said exhaust gases, means regulating the flow of said exhaust gases through said rotor and maintaining a constant pres-



sure ratio across said rotor, and rotor speed responsive means actuating said fuel metering means.

2,731,795
ACOUSTIC PULSE JET ENGINE WITH ACOUSTIC AIR INTAKE SYSTEM
Albert G. Bodine, Jr., Van Nuys, Calif.
Application September 1, 1955, Serial No. 532,017
18 Claims. (Cl. 60—39.77)

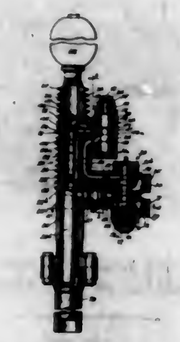


5. In a jet propulsion apparatus, the combination of: a resonant sonic column means adapted to have a standing wave established therein and comprising a tube closed at one end to provide a pressure anti-node of said standing wave thereadjacent and having an opening at the far extremity to provide a velocity anti-node of said standing wave thereadjacent, there being a combustion zone at said closed end, said tube containing combustion products forming a fluid column, means for admitting a combustible charge to said combustion zone and for exploding same therein at the frequency of said standing wave so as to resonate said fluid column, said last mentioned means embodying an air induction pipe opening on said combustion zone and of a length corresponding substantially to one-quarter of the wavelength of the wave pattern in said fluid column whereby said air induction pipe resonates with said fluid column and whereby the end of said air induction pipe farthest removed from said combustion zone represents a zone of minimum pressure variation.

2,731,796
HYDRAULIC DRIVING APPARATUS
Ira Sublett and Charles D. Johnson, Fairmont, Minn., assignors to Fairmont Railway Motors, Incorporated, Fairmont, Minn., a corporation of Minnesota
Application February 17, 1955, Serial No. 488,836
7 Claims. (Cl. 60—51)

1. A hydraulic driving apparatus comprising a hydraulically responsive reciprocating element, a source of hydraulic pressure, a reservoir for hydraulic fluid, a hydraulic pressure accumulator communicating with said source and operatively connected to act on one portion of said element to effect at a predetermined time movement of said element in one relative direction, and adjustable means operatively connected to said source, said reservoir, a second portion of said element, and said accumulator; said means, when in one position of adjustment, being responsive to said accumulator pressure and effecting interconnection of said source and said second element portion whereby said element is actuated in a second relative direction and, when in a second position of adjust-

ment, being out of communication with said accumulator and effecting interconnection of said reservoir and said



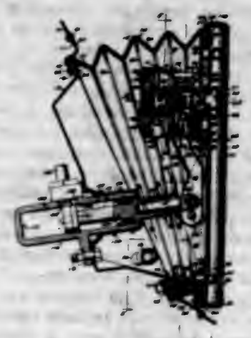
second element portion whereby said element is actuated in said one direction by said accumulator pressure.

2,731,797

BOOSTER BRAKE MECHANISM

David T. Ayers, Jr., Birmingham, Mich., assignor to Kelsey-Hayes Wheel Company, Detroit, Mich., a corporation of Delaware

Application March 8, 1954, Serial No. 414,840
18 Claims. (Cl. 60—54.6)



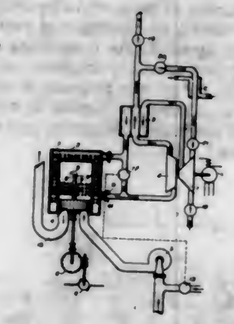
1. A booster brake mechanism for a motor vehicle comprising a master cylinder, a piston therein, a fluid motor having a wall fixed with respect to said master cylinder, a movable pressure wall, a flexible casing connected between said walls, a lever having a first pivot adjacent one end pivotally connecting it to said movable wall, a second pivot spaced from said first pivot and connecting said piston to said lever, a valve mechanism comprising a casing carried by said movable wall and into which the other end of said lever projects, a valve in said valve casing having a normal position connecting the interior of said motor to the atmosphere and being movable for connecting the interior of said motor to a source of sub-atmospheric pressure, said other end of said lever having a normal position in which a portion thereof is spaced from a portion of said valve to be engaged by the latter when hydraulic pressure in said master cylinder swings said lever about said first pivot, spring means biasing said other end of said lever to said normal position, and means subject to the degree of sub-atmospheric pressure in the interior of said motor for opposing movement of said valve from its normal position.

2,731,798

GAS TURBINE PLANT COMPRISING A ROTARY REGENERATIVE HEAT EXCHANGER FOR THE COMBUSTION OF AIR-GAS MIXTURES OF LOW GAS CONCENTRATION AND METHOD OF OPERATION THEREOF

Robert James Welsh and Reuel Duncan van Millingen, Rugby, England, assignors to The English Electric Company Limited, London, England

Application June 18, 1951, Serial No. 232,116
Claims priority, application Great Britain June 23, 1950
19 Claims. (Cl. 60—59)



1. An elastic fluid power plant comprising in combination: an elastic fluid turbine, a compressor driven by the said turbine and supplying the same with compressed elastic fluid, a reaction chamber, a cold heat exchanger pass in indirect heat exchange with the said reaction chamber interposed between the discharge end of the said compressor and the entrance of the said turbine, a blower supplying a gas-air mixture of low gas concentration, non-combustible at atmospheric temperature, to the said combustion chamber, a rotary regenerative heat exchanger transferring heat from the exhaust gases leaving the said reaction chamber to the fresh gas mixture entering the same, raising the latter to a temperature at which it becomes combustible, a by-pass line shunting across the said cold heat exchanger pass of the reaction chamber and regulating valve means arranged in the said by pass line.

12. A process of operating an elastic fluid turbine plant with a methane-air mixture of a methane-concentration below 1% as a fuel comprising the steps of positively passing a stream of the said methane-air mixture through an exothermic reaction regeneratively transferring heat from the burnt gases leaving the said reaction to the fresh methane-air mixture raising the same to a temperature at which it becomes combustible, compressing a separate elastic fluid, transferring heat by indirect exchange from the said reaction to the said compressed elastic fluid, extracting mechanical energy from said compressed and heated elastic fluid, and using this mechanical energy partly for compressing said elastic fluid and partly for driving an external load.

2,731,799

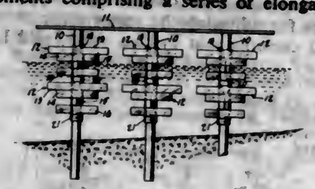
SHORE PROTECTIVE DEVICES

William H. Lange, Milwaukee, and Harry A. Schmitt, Shorewood, Wis.

Application April 13, 1950, Serial No. 155,646
3 Claims. (Cl. 61—4)

1. A shore protective device comprising a plurality of fixedly positioned vertical pillars arranged adjacent the shore, and a plurality of water engaging elements mounted in superimposed relationship and independently rotatable on each of said pillars for damping the motion of the water whereby the motion of the water is stilled to

release and deposit solid matter suspended therein, each of said elements comprising a series of elongated arms



arranged in tiers radiating from and symmetrically disposed about a central axis.

2,731,800

METHOD OF LAYING AND RETRIEVING UNDERWATER PIPE LINE

Samuel V. Collins, Port Lavaca, Tex.

Original application July 13, 1950, Serial No. 173,623. Divided and this application August 7, 1951, Serial No. 240,762
8 Claims. (Cl. 61—72)



1. A method of floating, and then releasing an element, comprising the steps of attaching floats to the element in spaced apart relation along the length thereof by means of extending bands around the element and the floats and through band clippers on the floats, connecting the ends of the bands, moving the element on the water to a predetermined position as the floats buoyantly support the element, and then actuating the band clippers to sever the bands and thereby free the floats and release the element therefrom.

2,731,801

RELIEF VALVE FOR VAPORIZER

Daniel J. Reed, Milwaukee, Wis., assignor, by mesne assignments, to John M. Stover, Oklahoma City, Okla.

Application August 7, 1952, Serial No. 303,198
2 Claims. (Cl. 62—1)



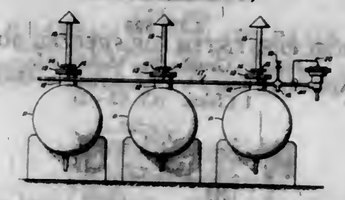
1. In a vaporizing apparatus for vaporizing liquid fuel, a housing, a vaporizing chamber in said housing, a fuel inlet passage extending through the housing and having an end thereof communicating with the vaporizing chamber, a biased valve member disposed within said vaporizing chamber and carrying a valve in position for biased closing of the valve across the entry of the inlet fuel passage to control the entry of liquid fuel into said chamber, said valve member being formed with a recess therein communicating with the vaporizing chamber and having a passageway providing communication between said recess and said inlet fuel passage when the valve is closed, said passageway being axially aligned with said inlet fuel passage and communicating directly with said end of the inlet fuel passage when said valve member is positioned to close off the entry of liquid fuel into the vaporizing chamber, and relief valve means disposed within said recess in position to open the recess for entry of fuel vapor into the recess from the vaporizing chamber for discharge to the inlet passage when the vapor pressure in said vaporizing chamber exceeds the pressure of the liquid fuel in the inlet fuel passage.

2,731,802

AUTOMATIC SHUT-OFF VALVE IN LIQUEFIED GAS SYSTEM

Charles MacSporran, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application December 29, 1952, Serial No. 328,327
14 Claims. (Cl. 62—1)



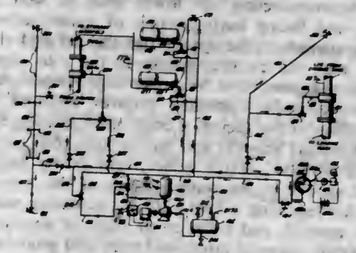
11. A liquefied petroleum gas storage system comprising a pressure storage vessel, a pressure relief valve disposed at least in part in said vessel and in the portion of said vessel normally containing vapor, an exhaust conduit in communication with the outlet of said relief valve, a drainage conduit in communication with said exhaust conduit, and a motor valve in communication with said drainage conduit to control the flow of said petroleum gas therethrough.

2,731,803

HYDRAULIC CONTROL SYSTEM FOR LIQUEFIED GAS FLOW CONTROL VALVES

Edwin E. Reed, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

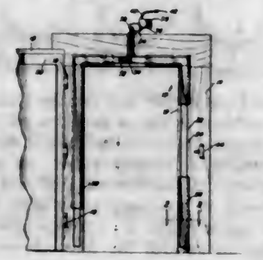
Application April 13, 1953, Serial No. 348,343
14 Claims. (Cl. 62—1)



1. A liquefied gas storage and dispensing system comprising, in combination, a plurality of tanks, a separate liquid inlet and outlet line in communication with each tank, a motor valve in each line controlling the flow of liquefied gas to and from each respective tank, a pressure liquid conduit, means to supply pressure liquid in said conduit, the motor of each motor valve biasing its valve in a normally closed position, a separate conduit connecting the motor of each motor valve to said pressure liquid conduit, a separate valve in each of the separate conduits for selectively transmitting pressure liquid from said pressure liquid to the respective motors to open said motor valves and for selectively relieving pressure liquid from said respective motors to close said motor valves, a valve means in communication with said pressure liquid conduit for relieving all tank valve motors of said pressure liquid simultaneously, said means to supply pressure liquid in said conduit comprises a pump adapted to impart pres-

sure to liquid being pumped, a pressure liquid surge tank in communication with the discharge of said pump, said pressure liquid conduit communicating with said pressure liquid surge tank, a first pressure response control means communicating with said pressure liquid surge tank and being adapted to maintain the pressure within said surge tank between predetermined upper and lower limits, and a second pressure responsive control means communicating with said pressure liquid surge tank and being adapted to shut off said pump when the pressure of the liquid in said surge tank decreases to a predetermined pressure below the aforementioned lower limit to bias said motor valve closed.

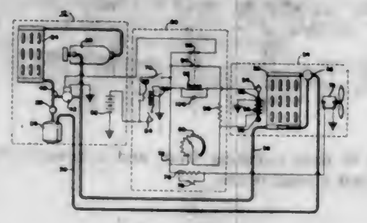
2,731,804
FROST PREVENTER FOR FREEZER DOORS
John V. Grubbs, Sr., Mobile, Ala.
Application June 11, 1954, Serial No. 436,031
1 Claim. (Cl. 62—2)



A frost prevention device for use in conjunction with an entrance opening in a walk-in type low temperature compartment having a pivotally mounted closure door attached to the wall adjacent the opening, said door engaging a facing about three sides of the opening, said door having a peripheral gasket for engaging the outer surface of the facing, said facing having a pair of spaced parallel grooves in the outer surface therefor at each side edge of the opening, said facing having a transverse groove interconnecting the lower ends of said spaced grooves, said facing having a pair of spaced grooves in the front surface at the upper edge thereof and communicating with the parallel groove in the side edges, the upper of said grooves in the upper edge terminating centrally in vertically extending grooves disposed in the outer surface of the facing, a continuous heating element disposed in said grooves and having free ends connected to a thermostatic control device, said facing having an enlarged groove in the outer surface of the upper edge thereof for receiving a heat bulb for actuating said thermostatic control, and a flat cover plate of non-corrosive heat resistant material positioned over said grooves in the facing and forming a smooth seat for engagement by the gasket on the pivotal closure door, said cover plate conducting heat from the heating element for melting frost from the facing and closure door adjacent the opening.

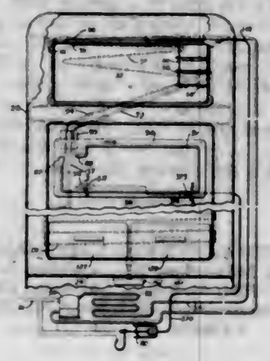
2,731,805
REFRIGERATING APPARATUS
Albert J. Kuhn, Dayton, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application August 16, 1952, Serial No. 304,745
6 Claims. (Cl. 62—3)

2. In an air conditioning system, an evaporator, a compressor, a condenser, means for connecting the outlet of said compressor to the inlet of said condenser, means for connecting the outlet of said condenser to the inlet of said evaporator, means for connecting the outlet of said evaporator to the inlet of said compressor, refrigerant by-pass means for returning refrigerant leaving said condenser to the inlet of said compressor without passing through said evaporator, a valve in said by-pass means, a thermostat for controlling said by-pass valve, and means for adjusting the temperature at which said thermostat controls said by-pass valve, said last named



means comprising a heater in thermal exchange relationship to said thermostat and a rheostat for controlling said heater, and means for increasing the current flowing through said heater in response to opening of said valve.

2,731,806
REFRIGERATING APPARATUS, INCLUDING DEFROSTING MEANS
Clifford H. Wurtz, Oakwood, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application January 4, 1952, Serial No. 264,915
4 Claims. (Cl. 62—4)



1. Refrigerating apparatus including an above freezing food compartment and a below freezing compartment, a thermal heat transfer barrier between said compartments, a refrigerant liquefying means, a freezing evaporating means in heat exchange relation with said below freezing compartment and having its inlet connected to an outlet of said liquefying means, a food compartment evaporating means in heat exchange relation with said food compartment and having its inlet connected to an outlet of said freezing evaporating means, means for returning evaporated refrigerant from said freezing and food compartment evaporating means to said liquefying means, and thermostatic cycling control means set to operate upon a defrosting cycle for controlling the operation of said liquefying means, said food compartment evaporating means including a refrigerant passage extending from its inlet to its outlet, said control means including a first thermosensitive element located in intimate heat exchange relationship with one portion of the food compartment evaporating means, said control means also including a second thermosensitive element located in poor heat exchange relationship with another portion of the food compartment evaporating means.

2,731,807
METHOD OF AND APPARATUS FOR CONTROLLING THE TEMPERATURE OF TRAILER CARGO AND THE LIKE
Rollin F. Allyne, Newport News, Va.
Original application January 18, 1950, Serial No. 139,279, now Patent No. 2,589,031, dated March 11, 1952. Divided and this application January 10, 1952, Serial No. 265,763
9 Claims. (Cl. 62—6)



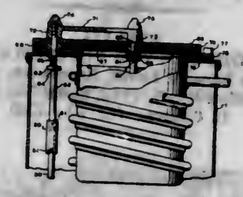
1. Apparatus for controlling the temperature of trailer cargo and the like, comprising a wall defining a space at the forward end of said trailer or the like, said wall being spaced from the bottom of said trailer by an opening and having at least one air discharge opening adjacent the top; a Dry Ice bunker for cooling air to a temperature below that of the desired temperature of said cargo, said wall being insulated between said bunker and said cargo; continuously operating air impulse means for imparting an impulse to said air at least at one point above said bunker normally to effect a circulation of air by drawing air from the lower portion of said cargo space through said lower opening and upwardly along said bunker and then discharging said air into said trailer through said top discharge opening so that said air passes around said cargo to cool the same and then returns to said lower opening for recirculation, said air impulse means also being operable at a lower rate of air impulse which produces not more than very little circulation of air through said cargo space but is sufficient to prevent a back flow of cold air from said bunker to the lower portion of said cargo; and means for controlling said air impulse means in accordance with the temperature in said cargo space so that said air impulse means operates at said higher rate when cooling is required and at said lower rate when cooling is not required.

2,731,808
REFRIGERATED CLOTHING
Virgil Stark, New York, N. Y.
Application April 22, 1955, Serial No. 503,313
11 Claims. (Cl. 62—9)



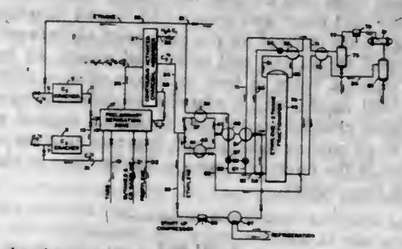
4. A portable system of maintaining a protective and comfort promoting intermediate environment between parts of a human body and the ambient atmosphere comprising suitable body encompassing means including a garment and headcover providing space surrounding the parts of the body upon which it is adapted to be worn and having vertical passages for circulation of air and vapor, cooling means therefor in said garment and head cover associated with a top passage in said body encompassing means and arranged for causing thermal circulation of the atmosphere within said intermediate environment, a refillable finned container providing a source of replaceable vaporizable refrigerant for said cooling means, and vaporization regulating and flow control means associated therewith for accommodating the system to changing conditions of thermolysis by varying the temperature, humidity, volume and velocity of flow of air-vapor mixture and rate of absorption thereby of the heat dissipated by the body.

2,731,809
ICE CREAM MAKING APPARATUS
James S. Hackney, Los Angeles, Calif.
Application April 11, 1952, Serial No. 281,761
11 Claims. (Cl. 62—114)



1. In combination with a refrigerating unit having refrigerant circulating tubes, an apparatus for making ice cream comprising a casing supported by the unit, a can mounted in the casing, means for extending the tubes around the can, an ice cream container removably positioned in the can, a vertical shaft removably supported by a central annular upstanding bearing in the bottom of the container, a plurality of paddles mounted on the shaft, a pair of cross arms mounted on the shaft, scraping vanes mounted on the cross arms, and means to rotate the shaft including a cover, said cover being removably attached to said vertical shaft.

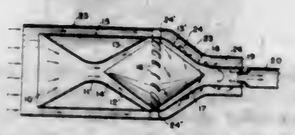
2,731,810
FRACTIONAL DISTILLATION METHOD AND APPARATUS
Karl H. Hachmuth, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Original application January 4, 1949, Serial No. 69,147, now Patent No. 2,600,110, dated June 10, 1952. Divided and this application January 2, 1952, Serial No. 264,450
13 Claims. (Cl. 62—122)



1. An internal-refrigerant low-temperature fractional distillation process for separating a multi-component mixture of vaporizable material into a low-boiling fraction and a high-boiling fraction which comprises, passing said mixture into a fractionation zone, withdrawing a liquid stream of kettle product from said fractionation zone, passing at least a portion of said stream through an expansion zone and therein vaporizing at least a portion of and cooling same, passing said expanded material in indirect heat-exchange relationship with overhead vapors of said

fractionation zone to condense at least a portion of said overhead vapors, utilizing resulting condensed liquid as refluxing liquid in said fractionation zone, withdrawing a further portion of said overhead vapors as said low-boiling fraction of said multi-component mixture, withdrawing a further portion of kettle product from said fractionation zone, passing said withdrawn liquid stream through an expansion zone and vaporizing at least a portion of and cooling the same and passing resulting expanded and cooled material in indirect heat-exchange relationship with said mixture passed into said fractionation zone, compressing and partially cooling said expanded material, subsequently passing said compressed material into direct heat-exchange relationship with the kettle product of said fractionation zone to transfer heat from said material to said kettle product, and withdrawing at least a portion of said kettle product as said high-boiling fraction of said multi-component mixture.

2,731,811
VORTEX TYPE AIR COOLER
Ben Bernard Levitt, Brunswick, Ga.
Application July 1, 1952, Serial No. 296,620
12 Claims. (Cl. 62—136)



12. An air cooler comprising inner wall means defining a converging cone-shaped air intake, said inner wall means converging to form a throat and then diverging beyond said throat, an accelerating cone positioned within said diverging inner wall means to form therewith an annular diverging channel which decreases in area while increasing in diameter, said inner wall means extending beyond the maximum diameter of said accelerating cone and then converging into an exhaust tube, said accelerating cone tapering beyond said maximum diameter into a point adjacent the entrance into said exhaust tube and cooperating with said inner wall means to form an annular converging channel of decreasing area, a plurality of deflecting vanes between said accelerating cone and said inner wall means to impart vortical motion to air passing through said air intake to said exhaust tube to create an inner vortex of air in said annular converging channel, orifice means adjustably mounted adjacent the outlet end of said exhaust tube for selectively bleeding off air emerging from said exhaust tube, outer wall means surrounding said inner wall means and spaced therefrom to form an outer channel for the passage of air between said outer wall means and said inner wall means, air in said outer channel being in heat exchange relation with said inner wall means, and a plurality of deflecting vanes in said outer channel constructed to impart vortical movement to air passing therethrough to create an outer vortex rotating in the direction opposite the direction of rotation of said inner vortex.

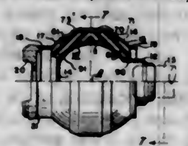
2,731,812
COMBINED ORNAMENTAL CHARM AND HOUSING
George Dewey Sullivan, New York, N. Y.
Application April 13, 1953, Serial No. 348,314
4 Claims. (Cl. 63—23)

1. As a new article of manufacture, an ornamental housing comprising a pair of hollow hemispherical sections meeting in an equatorial plane, said sections when together defining a sphere having an axis lying in a meridian plane and terminating at opposite poles, hinge means at said equatorial plane of said housing and mounting said sections for swinging movement, a lock ring pivotally supported at the pole of one of said sections and movable to an operative position surrounding said sections and substantially in said meridian plane, cooperating releasable catch means on said ring and at the pole of the other



of said sections and engaged when said ring is in said operative position for locking said sections together and for maintaining said ring in said operative position, and plural picture-carrying elements hingedly interconnected for extension into end to end alignment, said elements being arrangeable in stacked formation for storage within said hollow housing.

2,731,813
UNIVERSAL JOINT
Frederick W. Sampson, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Original application December 6, 1949, Serial No. 131,287, now Patent No. 2,628,416, dated February 17, 1953. Divided and this application July 23, 1952, Serial No. 306,465
1 Claim. (Cl. 64—11)



A universal joint comprising an inner spherical torque member having a projecting cylindrical portion extending axially outwardly, a two-part outer spherical torque member, each part having a pair of coaxially spaced flanges, a flange on each part of said outer spherical torque member coacting with a corresponding flange of said other part to define a cylindrical juncture, an intermediate resilient spherical segment bonded to each of said torque members and contacting at said cylindrical juncture, each of said segments being under tension in a direction tending toward separation of said torque members, a clamping ring extending around said cylindrical juncture, said inner and outer members and said clamping ring cooperating to retain said resilient material under tension, said resilient material extending at least partially within said flanges whereby said torque members are contained in a concentric relationship.

2,731,814
OVERLOAD SAFETY DEVICE FOR HOISTING APPARATUS OR THE LIKE
Heinrich Gunkel, Dusseldorf, Germany, assignor to Hans Putzer, Dusseldorf, Germany
Application January 2, 1953, Serial No. 329,376
1 Claim. (Cl. 64—30)



A safety clutch for incorporation in the drive of hoisting or like apparatus, comprising a driving member and

a load carrying driven member coaxially arranged one about the other, opposed surfaces of the said driving and the said driven member being formed of hardened and ground wear-resistant material, and a friction ring trapped between said members to engage the said opposed surfaces thereof and having resiliency in substantially radical direction, the said opposed surfaces of the said members being spaced such that the frictional resistance to relative movement between the members corresponds to the torque transmitted through said safety clutch when the apparatus carries its maximum safe working load.

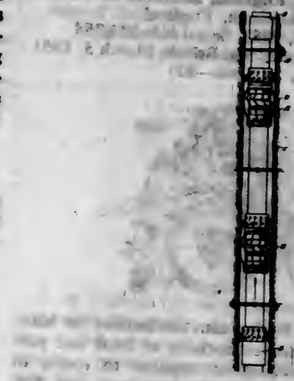
2,731,815
KNITTING MACHINE FOR KNITTING PLAIN AND PURLED STITCHES
Erich Piltz, Markdorf, Baden, Germany, assignor to Willy Werner Lenkeit, Markdorf, Baden, Germany
Application February 10, 1954, Serial No. 409,463
Claims priority, application Germany May 13, 1953
8 Claims. (Cl. 66—6)



1. Hand-operated knitting machine for alternate knitting of plain and purled stitches comprising a horizontal needle bed, in which the knitting needles lie side by side, an eccentric lock movable perpendicularly to the longitudinal direction of the knitting needles, said lock being provided with a thread guide or carrier and a stitch stripper or repusher, a looping comb, the upward directed teeth of which are arranged between said knitting needles and an additional comb provided with machine knitting needles arranged in front of said looping comb, the needles of the additional comb being located, on the insertion of the thread by the thread guide, for forming spaced stitches of a stitch row, between the horizontal machine knitting needles.

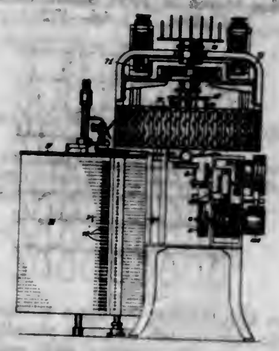
2,731,816
PROCESS FOR CONDITIONING WELLS FOR CEMENTING
Jesse E. Hall, Sr., Weatherford, Tex.
Original application February 23, 1952, Serial No. 273,006. Divided and this application June 16, 1954, Serial No. 437,190
5 Claims. (Cl. 166—21)

1. A process of conditioning a well bore in which a casing is suspended and thereafter cementing said casing in the well bore by introducing a cement slurry to the angular space between the casing and well bore and permitting it to harden as an annular seal or column, the casing being provided on its exterior with a plurality of stop elements spaced longitudinally thereof at succeeding intervals and having mounted thereon between each pair of stop elements an abrading element including a snugly fitting collar encircling the casing and slidable longitudinally thereon between said stop elements, the stop element between two abrading elements serving as a common stop for both, comprising the step of reciprocating the casing during the conditioning and cementing operation through a stroke greater than the interval between the stop elements to cause both abrasion of the



well wall and scraping of the exterior surface of the casing.

2,731,817
ELECTRICALLY OPERATED KNITTING MACHINE
Paul L. Thurston, Martinsburg, W. Va., assignor to Interwoven Stocking Company, New Brunswick, N. J., a corporation of New Jersey
Application November 16, 1953, Serial No. 392,283
11 Claims. (Cl. 66—43)



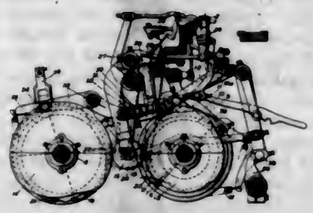
1. In a knitting machine, a series of independent needles, electrically controlled means for individually operating the needles, an electrical power supply, a first series of individual switches for controlling individual needles, a second series of individual switches for controlling individual needles, means connecting the operating means of each needle to the power supply through a switch of said first series and a switch of said second series so that said operating means is energized only when said switch of the first series and said switch of the second series are actuated, selecting means for periodically actuating selected ones of the switches of said first series, means for sequentially actuating switches of the second series comprising an armature associated with each of said switches and movable to actuate the switch, an electromagnet, means for moving the electromagnet along a defined path in proximity to said armatures to attract said armatures successively and thereby actuate the respective switches and means for connecting said electromagnet to the power supply including means for periodically disconnecting said electromagnet from the power supply to deenergize said magnet so that it does not actuate said switches of the second series.

2,731,818

CAM MECHANISM OF KNITTING MACHINES

John Edward Lynam, Nottingham, and Basil Pomeroy Cooper, Loughborough, England, assignors to William Cotton Limited, Loughborough, England

Application March 4, 1952, Serial No. 274,758
Claims priority, application Great Britain March 5, 1951
9 Claims. (Cl. 66—82)



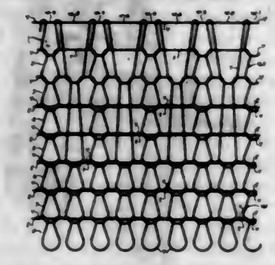
1. A knitting machine having cam mechanism for actuating parts of the machine comprising at least one pair of complementary cams coupled together to rotate in unison about substantially parallel axes, and cam follower means comprising truck means rotatable about a single axis between and parallel to the cam axes and closely constrained by the peripheries of the cams so as to be positively displaced thereby in opposite directions transversely between the cam axes.

2,731,819

ELASTIC SELVAGE TOP FOR KNITTED ARTICLES AND METHOD

Herman E. Crawford, Kernersville, N. C.

Application March 26, 1952, Serial No. 278,587
12 Claims. (Cl. 66—172)



1. A plain knit stocking having a selvage top formed from inelastic yarn in each of a first plurality of courses, alternate loops drawing together such courses to form a ridge about the top of the stocking, a second plurality of courses immediately subsequent to the first plurality of courses, each of the second plurality of courses also being knitted from the inelastic yarn, an elastic yarn laid in said second plurality of courses and alternate loops in said second plurality of courses also being formed so as to draw together said second plurality of courses to form a rounded selvage top to the stocking with a ridge projecting from the juncture of the selvage top with the plain knit fabric.

2,731,820

FIBER TREATING TANK

Anton F. Burkardt, New York, N. Y., and Edward H. Boeglin, Washington, R. L, assignors to Sativa Corporation, a corporation of New Jersey

Original application July 6, 1949, Serial No. 103,262. Divided and this application October 11, 1951, Serial No. 250,848
1 Claim. (Cl. 68—207)

Apparatus for treating fibres including an elongated tank; a perforated bottom above the bottom of said tank; a plurality of upstanding standpipes extending through said perforated bottom and in fluid communication with said tank below said perforated bottom; steam pipes extending into said standpipes, said steam pipes having lon-



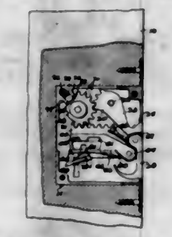
gitudinally directed orifices at a point below said perforated bottom; and means connected to said steam pipes to supply steam thereto.

2,731,821

SLIDING DOOR LOCK

Claire Lloyd, West Palm Beach, Fla.

Application August 26, 1952, Serial No. 306,352
2 Claims. (Cl. 70—100)



1. A lock comprising a casing having parallel side walls and a face plate, said plate having a slot therethrough, said casing being adapted to be disposed in a mortise recess of a sliding door, a first gear pivotally mounted between and supported by said walls, a second gear meshing with said first gear, said second gear having an arm extending therefrom, said arm having a hooked outer end adapted to project through said slot in one position of rotation of said second gear and to retract within the casing in another position of rotation of said second gear, an abutment within the casing for limiting the retraction of said hooked outer end to a position substantially flush with said face plate, means for yieldably holding said second gear in different positions of rotation corresponding to said positions of said second gear, a key actuatable mechanism, said mechanism including a slidable rack connected to said first gear.

2,731,822

ROTARY-BOLT LOCK

Theodore Bargman, Detroit, Mich.

Application September 15, 1952, Serial No. 309,715
6 Claims. (Cl. 70—135)



1. A rotary-bolt lock comprising a rotary-bolt, a rotor connected to said bolt for rotation therewith, projections on said rotor, a spring-pressed latch lever constantly urged toward locking engagement with said rotor, a latch dog on said lever normally engaging said projections to prevent door opening direction rotation of said rotor to latch a door and to permit door closing rotational rotation of said rotor in closing a door, an outside pull lever having a hand portion, a flat lever cam on said pull lever, and a flat cam on said latch lever engageable by said pull lever flat cam to disengage said latch dog

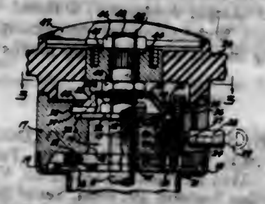
from said rotor projections to release said rotor for door opening directional rotation to permit opening of a door; and inside handle, a shaft pivotally supporting said handle for rotational movement therewith, a cam carrier fixed on said shaft for rotational movement therewith, and a cam lobe on said carrier adapted to engage said latch lever to depress said latch dog out of engagement with said rotor projections via pivoting said handle to permit said rotor turning in a door opening direction.

2,731,823

STEERING WHEEL MOUNTING DEVICE

Fred W. Crew, Detroit, Mich.

Application October 26, 1953, Serial No. 388,386
7 Claims. (Cl. 70—218)



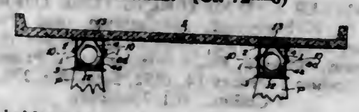
1. A vehicle steering wheel mounting mechanism comprising a first member adapted to be connected to a steering post for turning movement therewith, a second member, retainer means concealed between a part of said second member and said first member and releasably secured to said steering post and rotatably securing said second member on said first member, means on said second member adapted to receive the steering wheel, and locking means mounted in said second member movable in one direction into engagement with said first member thereby to couple said members together to render said steering wheel effective to turn said steering post, said locking means being movable in the opposite direction to lock said second member to said retainer means whereby said second member and retainer means may be moved as a unit to release said retainer means from said steering post.

2,731,824

BRIDGES AND BOX GIRDERS THEREFOR

Homer M. Hadley, Seattle, Wash.

Application December 10, 1952, Serial No. 325,116
11 Claims. (Cl. 72—8)



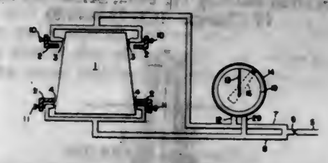
1. A bridge construction comprising a plurality of box girders spaced apart transversely, each including two spaced-apart web plates and flange plates joined to and connecting the web plates at top and bottom, to form a box section, and zig-zag reinforcing bars slanted as a whole to span each of the two upper corners of the box section, and joined at their successive apices to the web plate and to the flange plate which meet at such corners, respectively, at points located in each instance intermediate the edges of such plate, and successively spaced longitudinally from the preceding apical point of juncture, piers supporting said girders, a concrete deck extending between the two girders, resting directly upon the upper flange plate of each, and means at frequent intervals directly interconnecting said deck and the contacted flange plates at points substantially coinciding with selected apical junctures with such flange plates of the respective reinforcing bars, whereby the concrete deck serves for transmission of lateral stresses between the girders.

2,731,825

COMPARATOR FOR TAPERED PIECES

Ambrose E. Le Van, Sellersville, Pa., assignor to American Machine and Metals, Inc., Moline, Ill., a corporation of Delaware

Application April 2, 1952, Serial No. 280,095
3 Claims. (Cl. 73—37.5)



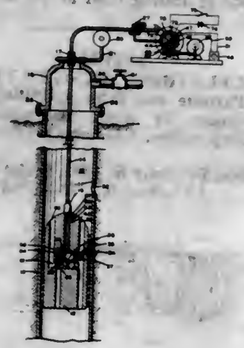
1. In a device for measuring two diameters of a tapered piece simultaneously; the combination comprising a casing, a dial mounted in the casing, a pressure responsive means, a pointer actuated by said means and passing over said dial, a second pressure responsive means, a second pointer actuated by said second means and concentric with the first pointer passing over the same dial, adjustable limit pointers connected to one of said pointers and movable therewith, an air supply line having a restricted portion therein, two branches beyond said restricted portion, an operative connection from each branch to one of said pressure responsive means, a plurality of spaced air jets directed at said tapered piece at the end of each branch, and means for varying the distance between the air jets at the end of at least one branch to adjust one of said pressure actuated pointers to zero position, said adjustable limit pointers cooperating with the pressure actuated pointer movable relative thereto so as to show if the piece is within the desired taper limits.

2,731,826

APPARATUS FOR DETECTING LEAKS IN GAS WELLS

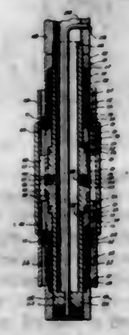
Bruce F. Wiley, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application October 30, 1951, Serial No. 253,937
11 Claims. (Cl. 73—40.5)



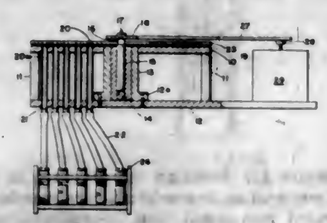
1. Apparatus for detecting the presence of a leak in a gas well comprising, in combination, a member adapted to be lowered into a gas well, means secured to said member and extending outward therefrom to make sealable sliding contact with the interior wall of a gas well when said member is lowered therein, said member having an orifice therein through which gas can flow between regions in said well on opposite sides of said member, and temperature sensing means positioned on each side of said orifice to detect flow of gas therethrough.

2,731,827
HYDRAULIC COLLAR TESTER
Glenn L. Loomis, McAllen, Tex., assignor, by mesne assignments, of one-half to G. L. Loomis, one-sixteenth to John Stahl, one-sixteenth to R. T. Elmore, one-eighth to estate of Florence L. Stahl, deceased, one-twelfth to J. P. King, Sr., one-twelfth to J. P. King, Jr., and one-twelfth to W. F. King
Application January 11, 1952, Serial No. 266,041
11 Claims. (Cl. 73—40.5)



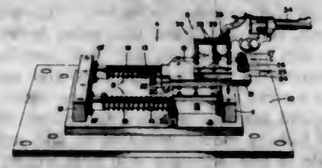
1. A collar testing apparatus for testing for leaks in collar joints formed by a collar coupling together adjacent lengths of a well pipe, comprising a tester body having an inner passage therein for receiving a testing fluid under pressure, packers mounted exteriorly of said body to seal off a collar joint in a well pipe, wedging sleeves slidably mounted on said body, passages in said body to permit testing fluid under pressure to urge said wedging sleeves into contact with said packers for causing said packers to initially seal off said collar joint, and a valve in said body set to open at a predetermined pressure of testing fluid higher than the pressure of testing fluid necessary to actuate said wedging sleeves to cause said packers to initially seal off said collar joint, said valve when operable admitting the testing fluid into the well pipe between said packers to release said wedging sleeves from contact with said packers and maintain said packers in sealing engagement with said well pipe so that any leaks in the collar joint will be detected by a loss of pressure or the appearance of testing fluid at the collar joint.

2,731,828
GELATION TIMING DEVICE
Richard L. Parrette and John S. Billheimer, Pasadena, Calif., assignors, by mesne assignments, to Aerojet-General Corporation, Cincinnati, Ohio, a corporation of Ohio
Application February 6, 1951, Serial No. 209,594
1 Claim. (Cl. 73—150)



A timing device for determining the gelation period of a resin comprising: a fixed platform, means for supporting said platform, bearing supporting means projecting upwardly from said platform, a shaft bearing within said bearing supporting means, a second fixed platform supported by said bearing supporting means, a movable shaft within said shaft bearing, said shaft resting on a second bearing means located at the bottom of said shaft bearing, the upper end of said shaft extending beyond the end of said shaft bearing and said second fixed platform, means for securing a disc to said shaft, said disc just clearing said second fixed platform and being provided with a plurality of groups of holes on radii, each group of said holes having their centers on a same radius, said radii being spaced a uniform angular distance apart on said disc, driving means connected to the end of said shaft above said disc securing means, a plurality of tubes having their axes falling on a straight line positioned to correspond to a row of holes in said disc, said tubes extending through said second fixed platform and having an opening flush with the upper surface of said second fixed platform, a plurality of resin sample containers, means for communicating said tubes with corresponding ones of said sample containers, a timed constant speed driving means, and means for connecting said constant speed driving means to the driving means on the end of said shaft.

2,731,829
PISTOL MOUNT FOR SHOOTING TESTS
Everett E. Wigington, Knoxville, Tenn., and Alva G. Nichols, Dahlgren, Va.
Application January 29, 1954, Serial No. 407,187
6 Claims. (Cl. 73—167)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A pistol mount for shooting tests comprising a carriage having forward and after ends, means supporting the carriage for forward and aft horizontal reciprocatory movement between foward and aft positions, sping means biasing the carriage for movement toward said forward position, a member hinged to the after end portion of the carriage so as to ride on and swing upwardly from the carriage, spring means downwardly biasing the member, and means for releasably affixing the pistol at its butt end to the member with its barrel pointing forwardly of the carriage.

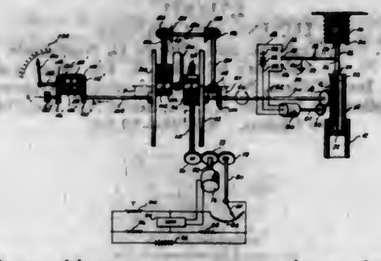
2,731,830
ROTAMETER AND METERING TUBE THEREFOR
Henry F. Eichenberger, Doylestown, and Nathaniel Brewer, Newton, Pa., assignors to Fischer & Porter Company, Hatboro, Pa., a corporation of Pennsylvania
Application February 14, 1952, Serial No. 271,536
3 Claims. (Cl. 73—209)



1. A rotameter including an elongated vertical transparent metering tube having a small-diametered inlet

opening and a tapered inner bore of progressively increasing cross-sectional area and having not less than three flat guiding surfaces formed on the inner wall, said guiding surfaces arranged equi-distantly around and tangent to a cylinder of a diameter substantially equal to the inner diameter of the inlet-opening of the metering tube and each of said guiding surfaces occupying a plane substantially parallel to the longitudinal axis of the metering tube, said metering tube having an upper cylindrical extension and a generally cylindrical lower extension formed integrally therewith and each of said flat guiding surfaces terminating short of said cylindrical extensions, and a flow-constricting metering float having a diameter substantially the same as said cylinder and related to said flat guiding surfaces so as to make point-contact therewith.

2,731,831
BAROMETRIC ALTIMETER
Carl F. Schaefer, Pleasantville, N. Y., assignor, by mesne assignments, to Norden-Ketay Corporation, a corporation of Illinois
Application May 14, 1952, Serial No. 287,719
8 Claims. (Cl. 73—387)



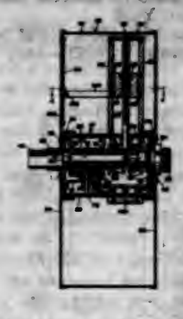
1. In an altimeter, a means responsive to changes in pressure, a temperature responsive means, a multiplier having two input means and an output producing means, a divider having two input means and an output producing means, means for introducing the response of the pressure change responsive means to one input means of the multiplier and to one input means of the divider, said one input means of said divider being initially set to represent a predetermined pressure, means for introducing the response of the temperature responsive means to the other input means of the multiplier, means for introducing the output of the multiplier to the other input means of the divider, means for indicating altitude, and means responsive to the output producing means of the divider for actuating the altitude indicating means.

2,731,832
WATER-COOLED GAS SAMPLING DEVICE
James A. Johnson, Rahway, N. J., assignor to The American Metal Company, Ltd., New York, N. Y., a corporation of New York
Application January 5, 1954, Serial No. 402,268
1 Claim. (Cl. 73—421.5)



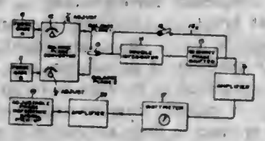
A device for sampling gas from a reverberatory metal smelting furnace and the like comprising in combination, a tubular metal casing one end of which is adapted to be located in the gaseous atmosphere of the furnace, said casing having mounted therein a gas sampling tube the gas intake end of which terminates in and is secured to an end wall of the casing which is adapted to be located in the gaseous atmosphere and a water supply tube extending through and being secured to an end wall of the casing, said water tube being disposed in spaced relation between the gas sampling tube and the side wall of the casing and encompassing the gas sampling tube for the greater part of its length, the end walls closing off the casing except for passages for the tubes, one end of said gas sampling tube extending through the corresponding end of the water supply tube and adapted for connection with means for aspirating gas from the furnace atmosphere, the water supply tube having its water induct end spaced inwardly from the outlet end of the gas sampling tube and a packed gland at said end of said water supply tube engaging around the gas sampling tube whereby said sampling tube may move axially due to expansion and contraction, relatively to the water supply tube and to the casing.

2,731,833
WHEEL BALANCER
Granvil Henry Jones, San Diego, Calif.
Application June 8, 1953, Serial No. 360,287
8 Claims. (Cl. 73—458)



1. A wheel balancer comprising a center shaft, a housing rotatably mounted on said center shaft, a screwed shaft rotatably mounted in said housing and extending radially of said center shaft, a correction weight threadedly engaged on said screwed shaft, guide means fixedly mounted on said housing, said guide means locking said correction weight against rotation, an inner sleeve rotatable and axially slidable on said center shaft, a pair of spaced drive collars fixed on said inner sleeve, a driving disc fixed to said screwed shaft, said driving disc being between and spaced from said drive collars, whereby said inner sleeve may be slid in either direction to cause the drive collars to engage selectively with said driving disc, and means for rotating said housing relative to said center shaft.

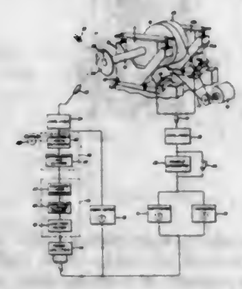
2,731,834
DYNAMIC BALANCING APPARATUS
Robert O. Fehr and Charles S. Duckwald, Schenectady, N. Y., Robert J. Ringlee, Pittsfield, Mass., and Martin W. Hellar, Jr., Schenectady, N. Y., assignors to General Electric Company, a corporation of New York
Application August 19, 1952, Serial No. 305,271
10 Claims. (Cl. 73—463)



1. Dynamic balancing apparatus comprising a pair of rigidly supported spaced bearings for journalling a body to be balanced; means including force gages connected to said bearings for developing two force gage output voltages proportional to the unbalance forces exerted upon said bearings by a journalled rotating body; an electric balance plane converter connected to receive

said two force gage voltages for providing two output voltages proportional to the unbalance mass components existing within two preselected balancing planes of the body to be balanced; means in said electric balance plane converter for arbitrarily selecting said two balancing planes of the body to be balanced; said two output voltages being dependent on and varying with the output voltages of the force gages, the ratio of the distance between one bearing and an adjacent one of the preselected balancing planes to the distance between the two preselected balancing planes, and the ratio of the distance between the bearings to the distance between the two preselected balancing planes; and means for measuring either of said two balance plane converter output voltages.

2,731,835
UNBALANCE POSITION INDICATOR FOR DYNAMIC BALANCING APPARATUS
Martin W. Hellar, Jr., Schenectady, and Billy R. Shepard, Scotia, N. Y., assignors to General Electric Company, a corporation of New York
Application August 19, 1952, Serial No. 305,272
5 Claims. (Cl. 73—463)



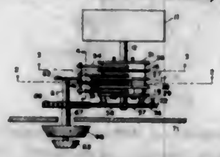
1. Apparatus for analyzing unbalance in a rotating body comprising, means coupled to said rotating body for generating a first series of voltage pulses corresponding to a predetermined angular position of the rotating body, a pulse delay circuit connected to receive said first series of voltage pulses and energizable in response to each voltage pulse in said first series for providing a second series of voltage pulses each adjustably delayed to the same extent from each energizing pulse of said first series, means in said pulse delay circuit for varying the delay of said second series of voltage pulses, means connected to receive said second series of voltage pulses for generating a first alternating voltage synchronized in frequency and phase to said second voltage pulse series, means connected to receive said first voltage pulse series and said first alternating voltage for measuring the phase difference between said first voltage pulse series and said first alternating voltage, means connected to said rotating body for developing a second alternating voltage having a frequency corresponding to the speed of rotation of said body, an amplitude proportional to the extent of unbalance and a phase dependent upon an unknown angular position of unbalance, and a wattmeter and varmeter connected in parallel to receive both alternating voltages to indicate simultaneously values proportional to their product in their respective in-phase and 90 degree out-of-phase conditions, whereby, when said pulse delay varying means is adjusted for minimum value of said product indicated on said varmeter, the value of said product indicated on said wattmeter is indicative of the extent of unbalance of said rotating body and the phase difference between said first voltage pulse series and said first alternating voltage indicates the angular position of unbalance in said rotating body.

2,731,836
SYMMETRICAL GYROSCOPE
Harry C. Wendt, Saugus, Mass., assignor to General Electric Company, a corporation of New York
Application December 12, 1952, Serial No. 325,577
18 Claims. (Cl. 74—5.7)



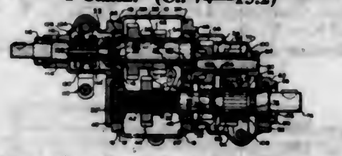
1. A gyroscopic device comprising two gyro rotor elements, means mounting said rotor elements for rotation about one spin axis in an axially-spaced relationship, and flat plate means intermediate said rotor elements supporting said mounting means for pivotal movement about an axis normal to said spin axis.

2,731,837
TUNING MECHANISM
David C. Felt, Teaneck, and Clifford D. Nestlerode, Fairlawn, N. J., assignors to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application January 2, 1952, Serial No. 264,574
5 Claims. (Cl. 74—10.54)



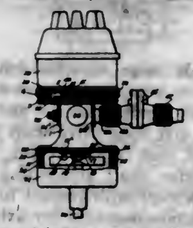
1. A tuning mechanism comprising a tuning shaft, a plurality of drive plates positioned on said shaft, a detent formed in the surface of each respective drive plate, a plurality of driving arms each having a projection and positioned so that each projection engages the surface of a respective drive plate, means to rotate said drive plates to selectively engage said detents with said projections, means to move said driving arms laterally with respect to the axis of said drive plates said means comprising a link arm to which said driving arms are coupled, and a rotatable cam positioned against said link arm.

2,731,838
POWER TAKE-OFF
Robert W. Wagner, Chelsea, Mich.
Application August 15, 1951, Serial No. 241,963
1 Claim. (Cl. 74—15.2)



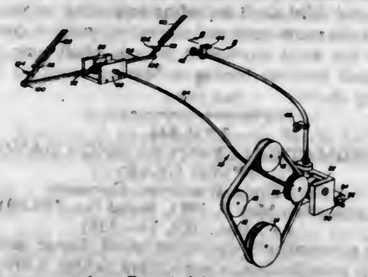
In a power take-off unit having a main hollow casing with opposite side walls having openings and a bottom opening through which gearing on a first shaft supported in said casing is capable of being engaged with the gearing of a main transmission for rotating other gearing mounted upon a second shaft within said casing, the provision of means closing said side wall openings and operatively associated with said gearing to provide power take-off shafts extending from opposite sides of said casing, said means comprising first and second separate casing parts, said first casing part being demountably connected with said main casing in closing relation to a said opening in one side wall of the main casing, and said second casing part being demountably connected with said main casing in closing relation to openings in the opposite side of the main casing in which the corresponding ends of said second shaft and a third shaft in said main casing are rotatably mounted, said second shaft carrying a gear unit composed of two gear rings, one of which is in constant mesh with a gear ring on said first shaft and said third shaft carrying a gear ring axially adjustable thereon for alternative engagement with a gear ring on said first shaft or with a gear ring of said gear unit, said first casing part housing a power take-off shaft and including means for alternatively connecting said power take-off shaft for rotation or non-rotation by said second shaft in the main casing and said second casing part housing a second power take-off shaft carrying an axially adjustable sleeve and gear ring, a stub shaft with a gear cluster thereon and including means for connecting said second power take-off shaft for rotation through selected gear rings of said gear cluster.

2,731,839
TACHOGRAPH ADAPTERS FOR GASOLINE ENGINES
William R. Hendry, Calgary, Alberta, Canada
Application August 18, 1952, Serial No. 305,029
1 Claim. (Cl. 74—15.8)



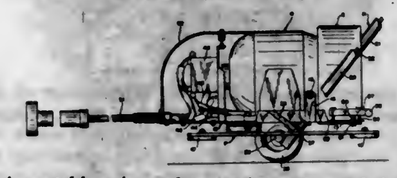
An adapter comprising an upstanding casing having a circular, pocketed upper end and a disclike base, a vertical transmission shaft rotatably mounted in the casing and having its upper end terminating within the pocket and its lower end extending beyond the disclike base, a driving disc secured to the lower end of the shaft, said disc having a recess formed therein for the reception of a pin, a rotor secured to the upper end of the shaft and provided with an upstanding, eccentric pin, said rotor and pin being within the pocket, a countershaft rotatably carried by and crossing the casing and intermeshed worm gears of predetermined gear ratio secured to the transmission shaft and the countershaft.

2,731,840
POWER TAKE-OFF
Carl J. Barba, Johnson City, N. Y.
Application September 28, 1954, Serial No. 458,735
4 Claims. (Cl. 74—15.8)



1. A power take-off and drive system for a windshield wiper for use in combination with the fan belt of an automotive vehicle comprising a pivotally mounted housing, a shaft journaled in said housing, a pulley secured to said shaft and adapted to engage the fan belt, brake means positioned about said pulley, a cable having a fitting secured to said brake means with said fitting engaging said housing whereby upon longitudinal displacement of said cable, said housing will be pivoted to engage and disengage said pulley with said fan belt and upon rotation of said cable, said fitting will actuate said brake means.

2,731,841
WHEEL SPINNER
Marcellus Samuel Merrill and Lowell H. Erickson, Denver, Colo.; said Erickson assignor to said Merrill
Application March 27, 1953, Serial No. 344,991
7 Claims. (Cl. 74—16)



1. A portable spinner for rotating a suspended vehicle wheel or the like, comprising, in combination, a base adapted to rest on a support surface, a spinning unit pivotally mounted on the base for swinging movement about a generally vertical axis, the spinning unit including a driving motor and a spinning wheel connected to the motor and spaced horizontally from the vertical swinging axis of the unit, a long transport handle swingably connected to the spinning unit, and a pair of retractable transport wheels intereonnected with the handle near the pivotal connection of the latter to the spinning unit to be moved downwardly to an operative transport position extending below the base and retracted by vertical swinging movement of the handle in opposite directions, the handle serving as a convenient means for applying high leverage turning force to the spinning unit to carry the spinning wheel horizontally into firm engagement with a wheel to be rotated when the transport wheels have been retracted and the spinner is resting on the base.

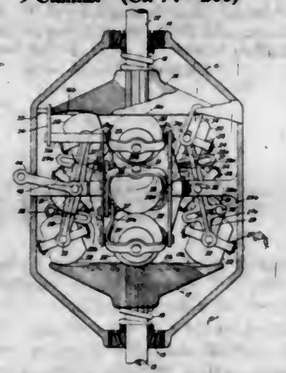
2,731,842
LIFTING DEVICE
Ferdinand Braselmann, Ennepetal-Oberbauer, Germany, assignor to Firma Ferd. Braselmann, Ennepetal-Oberbauer, Germany
Application November 8, 1951, Serial No. 255,406
Claims priority, application Germany November 9, 1950
11 Claims. (Cl. 74—141.5)



1. A jack, comprising in combination, an elongated shaft; a forked member having a first prong and a second prong, each of said prongs having an aperture surrounding said shaft; a first clamping member having an aperture surrounding said shaft; a second clamping member having an aperture surrounding said shaft, said clamping members being arranged between said prongs of said forked member, said first prong of said forked member being arranged adjacent to said first clamping member; releasable means for force-locking said first prong of said forked member with said first clamping member; resilient means inserted between said second clamping member and said second prong of said forked member; and means for exerting an oscillating force on said

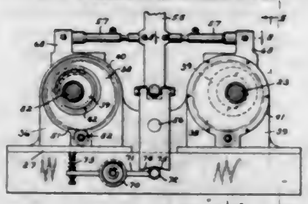
clamping members whereby said clamping members are alternately clamped to said shaft and said forked member is moved step-wise along said shaft.

2,731,843
POWER TRANSMISSION DEVICE
Donald P. Ryan, Montreal, Quebec, Canada
Application April 9, 1953, Serial No. 347,654
9 Claims. (Cl. 74—200)



1. A power transmission device, which comprises a driving member and a driven member mounted for coaxial rotation and having opposed operating surfaces, an epicyclic train of an odd number of rollers disposed in alignment between the members and having a contacting peripheral friction faces of spherical curvature, the friction faces of the end rollers in the train engaging the operating surfaces of the members respectively adjacent thereto, supports for the individual rollers having pins, on which the rollers are freely rotatable, the supports being movable to cause the individual rollers to be rocked on axes normal to their pins, and means for moving the supports simultaneously to cause all the rollers to be rocked on said axes with alternate rollers in the train rocking in opposite directions.

2,731,844
DRIVE FOR SAW MILL CARRIAGES AND THE LIKE
Ernest E. Washburn, Brunswick, Maine
Application December 3, 1954, Serial No. 472,849
13 Claims. (Cl. 74—202)



1. In a machine for driving a saw mill carriage or the like, comprising a driven feed drum, a pair of friction drives arranged to peripherally engage said feed drum, the friction drives being fixedly mounted upon parallel shafts constantly rotating in opposite directions relative to each other during operation of the machine, an eccentric journal mounting surrounding each friction drive shaft and including an applying eccentric adapted to act upon its associated shaft to move said shaft in a lateral direction for placing its friction drive into or out of driving relation with the feed drum during rotation of said applying eccentric in the required direction, the applying eccentric of one mounting being oppositely disposed with respect to the applying eccentric of the other mounting and thus serving, when both applying eccentrics are rotated in the same direction, to laterally move one friction drive toward the peripheral face of the feed drum while at the same time laterally moving the other friction drive to inoperative position in a direction away from said feed drum, said oppositely disposed applying eccentrics being coupled together by means requiring rotation of said applying eccentrics simultaneously in the same direction, whereby when said applying eccentrics are oscillated back and forth said friction drives are alternately placed in peripheral engagement with the feed drum for intermittently rotating said feed drum in opposite directions incident to moving a log carriage toward and away from the saw during a log sawing operation.

2,731,845
VARIABLE DRIVE MECHANISM
Leonard McGibbon, San Leandro, Calif., assignor to King Sales & Engineering Co., as trustee, San Francisco, Calif., a corporation of California
Application October 11, 1952, Serial No. 314,337
3 Claims. (Cl. 74—230.17)



1. In a multiple stage variable drive mechanism, a housing having two compartments, a wall in said housing between said compartments and having spaced parallel bosses, a first stage drive shaft journalled in said housing in one of said compartments, a variable drive pulley on said drive shaft comprising a section fixed against axial movement with respect to said drive shaft and a movable section mounted for axial shifting movement, a bearing for said movable section and said drive shaft, a mounting sleeve for said bearing slidably mounted in one of said bosses, a second shaft journalled in the other said bosses and having an endwise adjustable connection to said housing, a variable drive pulley on said second shaft, a V-belt connecting said respectively variable drive pulleys, said second shaft extending freely through said second boss and having a plurality of variable drive pulleys mounted thereon in the other of said compartments, one section of each of said plurality of variable drive pulleys being held against axial movement and the other section of each of said variable drive pulleys being mounted for axial movement with respect to said second shaft, means interconnecting said movable pulley sections of said plurality of pulleys, spring means interposed between said shaft and said movable sections of said plurality of variable drive pulleys, a third shaft journalled in said housing in axial alignment with said first shaft, and a plurality of variable drive pulleys carried by said third shaft including respective sections fixed against axial movement and respective sections connected together for axial movement on said shaft, one of said last named sections having a bearing mounted in said mounting sleeve.

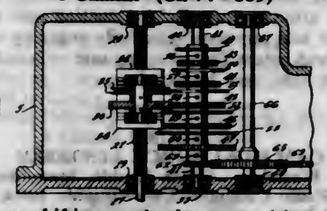
2,731,846
AUTOMATICALLY OPERATING CHANGE SPEED GEAR
Fritz Kreis, Wurzburg, Germany
Application May 7, 1951, Serial No. 224,891
4 Claims. (Cl. 74—336)

1. An automatically operating speed change gear, comprising in combination, a supporting casing; a drive shaft rotatably mounted in said casing; driven means coaxially arranged with said drive shaft rotatably mounted in said supporting casing; a plurality of toothed wheels fixedly mounted on said drive shaft for common rotation; a plurality of secondary shafts rotatably mounted in said casing and extending parallel to said drive shaft; a plurality of centrifugal clutch means, each clutch means mounted on one of said secondary shafts and including a first member fixedly secured to said secondary shaft and a freely rotatable second clutch member, said first and second clutch members engaging at predetermined rotary speeds due to centrifugal force, successive clutch means of said plurality of centrifugal clutch means engaging at successively higher



speeds, the clutch means on each of said secondary shafts being arranged in substantially the same plane as the clutch means on the other secondary shafts; a plurality of gears, each gear associated with the second clutch member of one of said clutch means for common rotation; and transmission means connecting each of said secondary shafts with said driven means, at least some of said transmission means including free wheel means.

2,731,847
GEAR SHIFTING MECHANISM
Paul F. Bronckhurst, Los Angeles, Calif., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Air Force
Application August 2, 1954, Serial No. 447,083
8 Claims. (Cl. 74—339)



1. A gear shifting mechanism comprising a casing, a splined drive shaft rotatable in said casing, a rocker arm having a gear mounted on said splined shaft and rotatable by and with said shaft, a second gear in constant mesh with said first gear, means for mounting said second gear on said arm, said second gear being adapted to be moved in an arc about said splined shaft, a second shaft mounted in said casing parallel with said splined shaft, a plurality of driven gears of different diameters mounted on said second shaft, means rotatable with said second gear, and means associated with each of said gears on said second shaft for frictionally contacting said means rotatable with said second gear at mutually exclusive times for rotating said respective gear at substantially the same speed of said second gear.

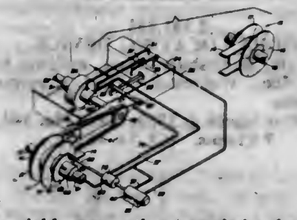
2,731,848
POWER TRANSMISSION
Richard H. Ebsworth, Laguna Beach, Calif.
Application March 7, 1950, Serial No. 148,227
23 Claims. (Cl. 74—472)

1. In a power transmission in a motor vehicle, in combination: a drive shaft; a driven shaft; a fluid pump supplying fluid pressure; a planetary gearset having a sun gear, planet gears, a planet carrier and an annulus gear; a direct connection from said drive shaft to a member of said gearset; a brake to check the rotation of another member of said gearset, said brake being held disengaged by fluid pressure from said fluid pump; a clutch spring biased to engagement and serving to connect two members of said gearset to lock said gearset and to connect said drive shaft to said driven shaft for unitary rotation; a direct connection from a third member of said gearset to said driven shaft; hydraulic mechanism in connection with said clutch; valve means in connection with said hydraulic mechanism; an operator's gear-selector handle serving for the control through said valve means of said hydraulic mechanism; and a manually operated lever operably connected to said brake to apply said brake and



check the movement of the motor vehicle when said clutch is engaged; and a second valve, placed between said valve means and said hydraulic mechanism; said lever, when operated to apply said brake, actuating said second valve to directly drain said hydraulic mechanism in any setting of said handle and the first said valve means; thus serving to insure the engagement of said clutch at the same time that said lever mechanically applies said brake.

2,731,849
POWER TRANSMISSION CONTROL
Albert M. Rockwood, Columbus, James E. Ballmer, Canal Winchester, and Claude Hector May, Columbus, Ohio, assignors, by direct and mesne assignments, to The Murray Corporation of America, Detroit, Mich., a corporation of Delaware
Application September 8, 1952, Serial No. 308,482
38 Claims. (Cl. 74—472)

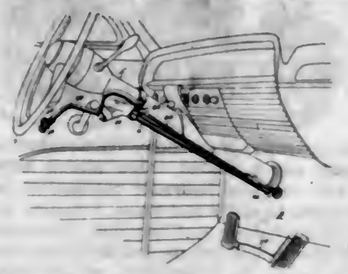


1. In a variable gear-ratio transmission having, a driver pulley connected to driving means provided with a power control, said driver pulley comprising a fixed flange and a movable flange, a driven pulley comprising a fixed flange and a movable flange, and a belt between said driver pulley and said driven pulley; means for controlling the gear ratio between said driver pulley and said driven pulley comprising, in combination: means responsive to the combination of the setting of said power control and the speed of said driving means, comprising means connected to said driving means and responsive to the speed thereof and means connected to said driving-means-speed-responsive means and to said power control; and means responsive to said power-speed-combination-responsive means, to control the position of said movable flange of said driver pulley.

2,731,850
CONTROL DEVICE FOR MOTOR VEHICLES
Arthur C. Otto and Earl A. Otto, Chilton, Wis.
Application May 22, 1951, Serial No. 227,615
2 Claims. (Cl. 74—484)

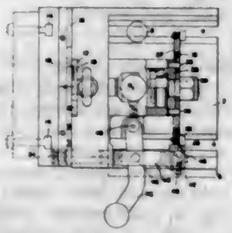
1. A hand-controlled mechanism for use in operating the carburetor valve control arm, pivoted brake rod of a brake actuating mechanism, and dimmer light switch of a motor vehicle, comprising a tube, means for rotatably securing the tube to the steering column of a motor vehicle in longitudinal spaced relation therewith, a lever housing rigidly secured to the upper end of said tube directly under the steering wheel of the vehicle, con-

necting means between the lower end of said tube and carburetor valve control arm, a dimmer light control rod extending through said tube, the upper end of said rod extending into said lever housing, the lower end of said rod extending beyond the lower end of said tube, a dimmer light control switch operating arm pivotally supported intermediate its ends at the lower end of said rod, the lower end of said rod normally resting against one end of said arm, the other end of said arm adapted to engage said dimmer light switch, operating said dimmer



light switch upon downward movement of said rod, an operating lever pivotally connected with the housing extending into the housing adapted to rotate said housing and tube, operating said carburetor control valve, said lever resting against the upper end of said rod for moving said rod longitudinally of the tube in one direction operating said dimmer light, and a brake control rod pivotally connected with one end of said operating lever adapted to move said brake control rod vertically operating said brake actuating mechanism.

2,731,851
WORK LOCATING DEVICE
Armand G. Calo, Shrewsbury, Mass., assignor to Johnson & Bassett, Inc., Worcester, Mass., a corporation of Massachusetts
Application March 4, 1953, Serial No. 340,261
7 Claims. (Cl. 74—527)



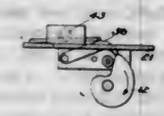
1. A work locating device comprising in combination, a base, a shaft rotatably mounted in said base, an index plate attached to one end of said shaft for the support of a workpiece in any one of a number of angularly displaced positions as determined by the location of a series of indexing openings arranged around the periphery of said index plate, a movable locking member slidably mounted on the base for engagement with said indexing openings of said index plate to angularly locate a workpiece thereon and lock it in position, means for moving said locking member into and out of engagement with the indexing openings, a selector plate secured to said shaft at the end opposite to said index plate, with the plane of said selector plate disposed at right angles to the path of movement of said locking member, and a plurality of selector elements mounted on said selector plate and angularly displaced around the periphery thereof to correspond with the location of certain of said indexing openings, said locking member cooperating with said selector elements so that it is engageable only with certain of said indexing openings and so that the workpiece on said index plate may be successively indexed to different angular positions determined by the arrangement of said selector elements.

2,731,852
ELECTRICALLY CONTROLLED PEDAL LOCK
Gilmore W. Agnew, San Diego, Calif.
Application January 16, 1953, Serial No. 331,705
5 Claims. (Cl. 74—539)



1. A hill holder comprising means for selectively locking foot pedal actuated brakes including a tiltably mounted pedal extension adapted to be secured on a brake pedal, an aperture through said pedal extension, a rod extending through said aperture, said aperture having its axis extending at an acute angle with respect to the longitudinal axis of said rod whereby said rod is frictionally engageable with said pedal extension, the axis of said aperture extending at a direction relative to said rod axis such that forward tilting of said pedal extension increases the angle between the rod axis and said axis of said aperture, a locking lever, said rod being pivotally attached to said locking lever, an electromagnetic device including a movable armature, a coil for actuating said armature, a detent on said armature selectively engaging said locking lever, and means for actuating said coil to disengage said detent from said locking lever.

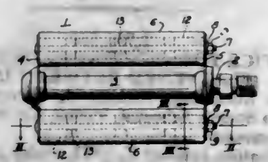
2,731,853
CAM PAWL SHOCK ABSORBER
Harold I. Woolridge, Cedar Rapids, Iowa, assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application June 24, 1954, Serial No. 439,114
6 Claims. (Cl. 74—569)



1. Shock absorbing means for a pair of cam followers engaging respective cams which have substantially radial repositioning peripheries and smoothly varying control peripheries comprising, a frame member, a cam shaft rotatably supported by said frame, said cams mounted on said cam shaft, a tuning plate reciprocally supported from said frame with a pair of openings formed adjacent to said cams, a pair of lower blocks fixed to said plate adjacent to said openings, a follower shaft rotatably supported by said lower blocks, said cam followers fixed to said follower shaft to engage the respective cams, spring means connected between said tuning plate and frame to maintain said followers in engagement with said cams, a pair of pawls pivotally supported by said lower blocks respectively in alignment with said openings, the pivot point of said pawls located on the leading side of said follower with respect to the rotation of said cams, a pair of pawl projections extending from said pawls adjacent each cam and follower, said projections located on the side of said followers opposite the pivot points, a pair of stop pins projecting from said lower blocks and engaging

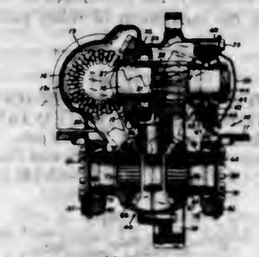
the respective pawls to maintain the projections out of engagement with said control periphery, a pair of upper blocks fixed to said tuning plates adjacent the respective openings, a pair of capped pins supported from said upper blocks over the respective openings, and a pair of springs supported by said capped pins and engaging the respective pawls to bias them against the stop pins.

2,731,854
BICYCLE PEDALS
Ruben L. Pawsat, Maysville, Ky.
Application September 14, 1954, Serial No. 456,039
3 Claims. (Cl. 74—594.4)



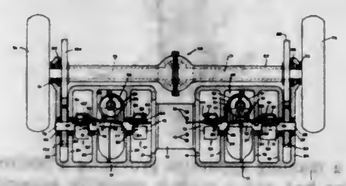
2. A bicycle pedal comprising an elongated hollow tread member of plastic material of rubber-like character, a central support member extending through the tread member, and a hollow elongated intermediate member having spaced bearings on its outer surface for contacting the tread member and spaced bearings on its inner surface for contacting the central support member, said bearings being spaced to provide alternate bearing contacts of the intermediate member on the tread member and on the central support member, whereby to provide a cellular, light weight pedal of sturdy construction.

2,731,855
REAR AXLE CARRIER UNIT
Alois H. Schmal, Westfield, N. J., assignor to Mack Manufacturing Corporation, New York, N. Y., a corporation of Delaware
Application February 10, 1951, Serial No. 210,410
4 Claims. (Cl. 74—606)



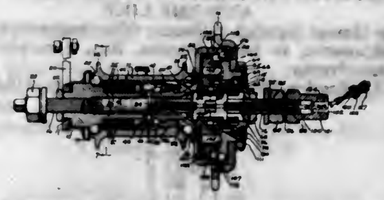
1. A rear axle carrier housing having angularly related front and side walls, a top wall and a base flange to secure the housing to an axle housing, said carrier housing having openings in said front wall and in one of said side walls, and a bottom opening within the perimeter of said flange, a bearing for receiving a drive shaft detachably mounted in the opening in said front wall, bearing means mounted in the opening in said side wall to detachably receive one end of a reduction shaft having a gear thereon, a semi-circular bearing support fixed to and extending downwardly from the top wall of said carrier housing, a semi-circular bearing retainer detachably connected to said semi-circular bearing support to form therewith a ring for receiving a bearing on said reduction shaft and holding it in alignment with said bearing means, said bottom opening being sufficiently large to enable the reduction shaft and the gear and bearing thereon to be inserted as a unit into said housing through said bottom opening into engagement with said bearing means and into said bearing support, said retainer releasably holding said bearing in said bearing support and holding said shaft in said bearing means and in said housing, said housing being devoid of openings, other than the bottom opening, large enough to admit said reduction shaft gear and bearing thereon as a unit into said carrier housing.

2,731,856
VEHICLE DRIVE MEANS
George Spatta, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a corporation of Michigan
Application July 17, 1952, Serial No. 299,469
9 Claims. (Cl. 74—720)



1. For use in a vehicle having a drive axle driven from a differential case, drive means comprising an electric motor including an armature shaft rotatable in either direction, variable torque multiplication means, means for coupling said variable torque multiplication means to said armature shaft responsive to rotation thereof in one direction and for uncoupling said variable torque multiplication means from said shaft responsive to rotation of the latter in the opposite direction, means for coupling said variable torque multiplication means to the differential case, and said variable torque multiplication means providing the required torque multiplication when said armature shaft rotates in said one direction in order that the torque requirements imposed on said electric motor will remain substantially constant under varying conditions of vehicle operation.

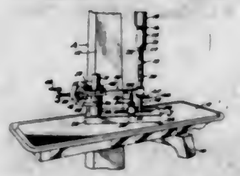
2,731,857
DRIVING MECHANISM FOR CYCLES
Salvatore F. Marino, Bristol, Conn., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application March 2, 1950, Serial No. 147,289
8 Claims. (Cl. 74—781)



1. In a device of the character indicated, a cycle hub, a rotatable controlling member for controlling driving of the hub, an internal gear portion on the controlling member, a rotatably driven carrier projecting into the controlling member, a plurality of stepped planetary pinions rotatable on the carrier, each planetary pinion having a similar set of gear teeth meshing with the internal gear, each pinion also having a second set of gear teeth axially spaced from and having a different pitch circle from that of its first set of teeth, a ring gear meshed with said second sets of pinion teeth and having a set of internal teeth, a rotatable sun gear, a non-rotatable set of clutch teeth engageable with the sun gear, means to shift the sun gear into simultaneous operable engagement with the ring gear and with the planetary pinions or into sclectively operable engagement with the planetary pinions or the ring gear and into engagement with said

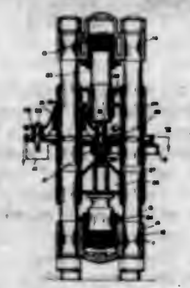
clutch teeth to provide different predetermined gear ratios between the carrier and the controlling member, and means disengaging the sun gear from operable engagement during its shift between each of said driving ratios.

2,731,858
CONNECTING ROD JIG FOR LINE REAMING AND BORING MACHINE
William H. Evans, Miami Beach, Fla.
Application December 29, 1951, Serial No. 264,169
5 Claims. (Cl. 77—62)



1. In a reaming apparatus providing a horizontal work supporting bed and a reamer rotatably suspended thereabove for vertical movement toward said bed during reaming operations, a jig for holding a connecting rod while reaming the upper bearing, comprising a base resting on said bed, a post mounted on said base and extending vertically upward therefrom, a liner engaging said post and having an outer surface mating with the upper integral portion of the lower bearing of said connecting rod, clamping means for grasping the shoulders of said connecting rod and pulling said rod toward said post with said liner therebetween, and a vertically adjustable support carried by said base beneath said connecting rod at a spaced distance from said post, said support providing a bearing plate pivotally mounted on an axis aligned with the longitudinal axis of said connecting rod and solidly engaging the underside of said connecting rod while at the same time permitting the supported portion of said rod to adjust its position during the reaming of the upper bearing of said rod, whereby said upper bearing can be reamed in accurate alignment with said lower bearing even though said bearings are considerably out of alignment at the start of the reaming operation.

2,731,859
PRODUCTION APPARATUS FOR SHELL CASINGS AND THE LIKE
Edgar Homer Kendall, Alliance, Ohio, assignor, by mesne assignments, to Salem-Brosius, Inc., a corporation of Pennsylvania
Application March 31, 1951, Serial No. 218,685
7 Claims. (Cl. 78—9)



1. In apparatus for producing shell casings and the like the combination of a forging press having a pair of vertically disposed tie rods, a die turret rotatably mounted on one of said rods and mounting a plurality of circumferentially spaced ring-like dies, a turret rotatably mounted on the other of said rods and slideably mounting a plurality of piercing dies, crossheads at the top and bottom of said rods each mounting a centrally disposed cylinder, rams in said cylinders, an anvil slideably mounted on said rods and adapted to be moved upwardly by the bottom ram to close off the bottom of one of said ring-like dies when the latter is indexed to central position in the press, said upper ram being adapted to engage and move downwardly one of said piercing dies when the same is indexed to central position in the press, means to load elongated billets vertically into said ring-like dies at a station away from said central position, and means to eject pierced and forged billets downwardly through the open bottom ends of said ring-like dies at another station away from said central position.

2,731,860
DEVICE FOR CENTERING DISKS TO BE FLATTENED BETWEEN DIES
Guillaume Schaming, Richmond, Surrey, England, assignor to Societe Schostal, Vaduz, Liechtenstein, a joint-stock company
Application January 7, 1953, Serial No. 330,102
Claims priority, application Switzerland January 15, 1952
5 Claims. (Cl. 78—17)



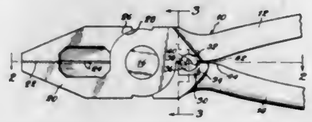
1. A device for centering metal bar sections at the entrance to dies adapted to flatten them comprising a plurality of pairs of jaws radially arranged with reference to the center of the dies, means for slidably supporting the jaws, means for urging the jaws outwardly and a plurality of revolving peripheral rings provided with ramps adapted to bear against the outer ends of opposed pairs of jaws to move them inwardly, the movement of each pair being independent of the movement of other pairs of jaws.

2,731,861
BOTTLE AND JAR OPENER HAVING ADJUSTABLE PIVOTED JAW
Diedrich Wendelken, New York, N. Y.
Application October 5, 1953, Serial No. 384,253
2 Claims. (Cl. 81—3.44)



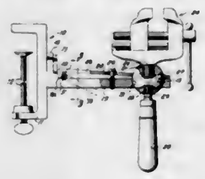
1. A screw cap opener of the kind described comprising an elongated flat plate, a gripping jaw on one end of the plate, said plate having a longitudinally disposed elongated slot with one straight edge and with the other edge provided with notches joined by edge portions, a lever pivotally and slidably connected to the plate, a gripping jaw on one end of said lever adapted to cooperate with the gripping jaw on the plate, said pivotal and slidable connection including a pin carried by the lever having a body of substantially elliptical form in cross section extending through the slot in the plate, the body portion of the pin being adapted to selectively engage in any one of the spaced notches when the plate and lever are disposed at an angle of divergence, the edge portions of said slot between the notches being straight and extending in nonparallel relationship with the opposite straight edge of the slot, each edge portion extending divergently from the opposite straight edge in a direction away from the jaw of the plate whereby sliding movement of the lever in one direction is permitted and sliding movement in the opposite direction retarded.

2,731,862
CONNECTOR CRIMPING PLIERS
William G. Schinske, Sycamore, Ill., assignor to Ideal Industries, Inc., Sycamore, Ill., a corporation of Delaware
Application March 23, 1953, Serial No. 343,977
2 Claims. (Cl. 81—15)



1. In a pair of electrician's pliers, two members connected near one end by a pivot with jaw portions on one side of the pivot and elongated handle portions on the other, opposed die surfaces adjacent the pivot on the handle portions adapted to coact with one another upon manual manipulation of the handle portions to effect a crimping action when a crimping sleeve surrounding the stripped ends of electric wires is positioned between them, the die surfaces including a male die with a projecting crown on one handle portion and a concave rceessed female die on the other to receive a crimping sleeve, the projecting crown on the male die extending a predetermined distance into the recessed female die when the jaw portions are closed and defining a longitudinally arcuate, laterally disposed crimping cavity between the female die and the projecting crown, the male die being laterally recessed adjacent the projecting crown to allow for flaring of the ends of the electric wires and crimping sleeve during the latter portion of a crimping operation, the point of maximum penetration of the projecting crown on the male die into the concave recessed female die being determined by contact between the jaw portions, the die surfaces being positioned directly adjacent the pivot so that a maximum leverage can be applied to them while using a minimum force on the handle portions to overcome the resistance offered by the electric wires and crimping sleeve during crimping operations.

2,731,863
HAND SUPPORTABLE CLAMP AND BENCH MOUNT THEREFOR
Foy E. Bellows, Dallas, Tex.
Application November 19, 1954, Serial No. 470,022
7 Claims. (Cl. 81—41)



3. A hand supportable clamp and bench mount therefor comprising a support, an extension secured at one end to said support for rotation about an axis parallel with the longitudinal axis of said extension, said extension having a spherical seat formed in its opposite end, a ball oscillatable in said seat, a work-holding clamp detachably secured to said ball above said extension, a handle detachably secured to said ball and depending therefrom below said extension, a clamping plate mounted on said extension and frictionally engaging said ball at one end and means for raising and lowering the opposite end of said clamping plate to move the same into and out of frictional engagement with said ball.

2,731,864
TORQUE-RELEASE WRENCH
John W. Davies, Roseland, Martin L. Kapin, Roselle, and William C. Kothe, Rutherford, N. J.; said Kapin and said Kothe assignors to said Davies
Application January 8, 1954, Serial No. 402,921
1 Claim. (Cl. 81—52.4)



In a torque-release wrench of the character described, a tool member and a handle member held and coupled together in aligned and longitudinally-spaced relation with respect to each other, said members being provided at the respective adjacent ends thereof with similar circular flanges, and coupling means holding said members in aligned and longitudinally-spaced relation and for rotation relatively with respect to each other about their common axis; said coupling means comprising a cup-shaped and cylindrically-shaped housing fitted looselv on said handle member and engaging said flange thereof, a nut fitted loosely on said tool member and threaded into the open end of said housing and engaging said flange of said tool member, circular plates disposed between said flanges and within said housing and having a loose fit with respect to the latter, one of said plates being flush with and engaging one of said flanges, one of said plates being flush with and engaging the other of said flanges, and resilient means disposed between said plates and compressed between the same to a degree sufficient to maintain a condition whereat said plates are pressed firmly against the respective adjacent faces of said flanges.

2,731,865
PREDETERMINED TORQUE RELEASE SOCKET WRENCH
Robert Glen Woods, Huntington Park, Calif., assignor to Jo-Line Tools Inc., South Gate, Calif., a corporation of Ohio
Application February 15, 1954, Serial No. 410,112
5 Claims. (Cl. 81—52.4)



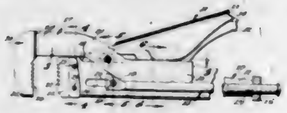
1. An adjustable torque wrench, comprising: a head; a load-engaging member pivotally mounted at the front of said head; a lever extending away from the rear of said head; an arm member rigidly secured to said load-engaging member and extending rearwardly therefrom; a roller carried by the free end of said arm; an adjustment bushing carried by the rear of said head and having a passage; a plunger slidably disposed within said passage for movement toward and away from said roller; a ball disposed within the front portion of said passage and at the rear portion of said roller; resilient means for constantly biasing said plunger forwardly toward said roller; and means for adjusting said bushing toward and away from said roller.

2,731,866
READILY REPOSITIONABLE SLIDABLE JAW WRENCH
Leonard Erickson, Grand Rapids, Minn.
Application August 18, 1952, Serial No. 304,965
4 Claims. (Cl. 81—53)



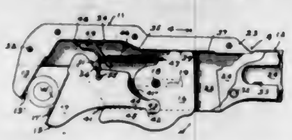
1. A quick-action wrench comprising a stationary jaw and an adjustable jaw, said jaws having rigid opposing gripping surfaces at the inner edges thereof, a handle connected with said jaws for applying torque to a nut or other object to be turned, one of said jaws having formed along its inner edge, contiguous to and inwardly of its said gripping surface, an open recessed portion adapted to accommodate at least the marginal portion of a nut or other object to be turned and a single, resilient, yieldable element anchored in said recessed portion of said last mentioned jaw and extending inwardly therefrom in the direction of said opposed jaw and adapted to engage the rear portion of a nut and to yieldingly resist displacement of the wrench in a direction to accommodate a portion of the nut in said recess whereby a nut may be turned through an arc by swinging of said handle and then with the reverse swinging movement of said handle and simultaneous slight outward longitudinal thrust thereof in opposition to said resilient element, the wrench may be swung relative to said nut with said recess accommodating a portion of said nut and brought into a new torque-applying position with said gripping surfaces then operatively engaging said nut.

2,731,867
PLIER-TYPE SLIDABLE JAW WRENCH
Arthur Daugherty, Sardis, British Columbia, Canada
Application December 15, 1954, Serial No. 475,355
2 Claims. (Cl. 81—85)



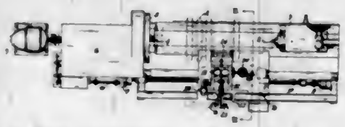
1. In a wrench, a body member including a pair of spaced parallel side walls, an arcuate web interconnecting said side walls, there being a first and second slot in each of said side walls, the pairs of slots being arranged in opposed relation with respect to each other, a rod extending between said side walls and including an exteriorly threaded end portion, a securing element arranged in engagement with said threaded end portion, a lip arranged on the inner end of said rod and provided with a shoulder thereon, said lip having an aperture registering with the first slots in said side walls, a pivot pin extending through the aperture in said lip and through said first slots, a stationary jaw secured between said pair of side walls and provided with a plurality of teeth thereon, a movable jaw including a straight section having teeth thereon mounted for movement towards and away from said stationary jaw, a shank extending from the straight section of said movable jaw and including a first portion and a second portion arranged angularly with respect to each other, a third portion extending from said second portion, a handle including a pair of spaced parallel side members interconnected by an arcuate portion, a securing element extending between the side members of said handle and through the second slots in said body member and through the second portion of said shank, said pivot pin extending between the side members of said handle, and a spring member having one end secured to said handle and its other end engaging the shank of said movable jaw.

2,731,868
PIPE WRENCH HAVING A PIVOTABLE AND LONGITUDINALLY MOVABLE INNER JAW
Elmer Nickerson, Outlook, Mont., assignor to Lorna E. Harris, Concord, Calif.
Application November 14, 1951, Serial No. 256,182
6 Claims. (Cl. 81—92)



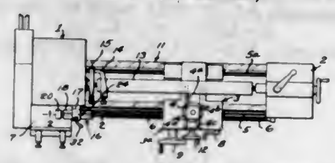
1. In a pipe wrench, an elongated stock providing a jaw extending fixedly from the front side thereof and having a working edge portion directed transversely of said stock side, said stock having a line of dogging elements provided along said side thereof, a movable jaw comprising a plate member having a working edge portion for work-gripping coaction with the working edge of said fixed jaw, a catch plate hingedly connected to the movable jaw plate to extend rearwardly thereof, said catch plate having dogging elements along a back edge portion thereof for cooperatively engaging the dogging elements of the stock, spaced cheek-plate member portions of the stock extending beyond said front side having the dogging elements and cooperative to guidedly and retainedly receive the jaw plate and catch plate between them, and means pivotally mounting the catch member directly on the cheek-plates for its rocking between positions in which its dogging teeth are operative or inoperative with respect to the dogging elements of the stock and for its sliding adjustment along the stock when the dogging elements are inoperative.

2,731,869
CONTROLLING AND COMPENSATING APPARATUS FOR LATHES AND THE LIKE
George Breza, Baldwin, and Finn B. Abramsen, Whitehall, Pa., assignors, by mesne assignments, to E. W. Bliss Company, Canton, Ohio, a corporation of Delaware
Application March 6, 1951, Serial No. 214,172
4 Claims. (Cl. 82—14)



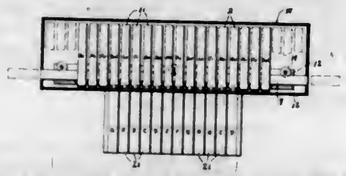
1. In a lathe comprising a frame, a carriage movable linearly on said frame, a power-screw driven at a selected constant speed for propelling said carriage, a cross-slide in said carriage and traversable angularly to the direction of travel of said carriage; electrical tracer control comprising in combination a compensating nut on said power-screw and connected with said carriage acting by its rotation to modify longitudinal propulsion of said carriage by said power-screw without alteration in the speed of the power screw, a variable speed longitudinal speed modifying motor for rotating said compensating nut, a reversible motor for traversing said cross-slide at variable speed, a tracer mounted on said cross-slide to follow the contour of a form, and electrical means controlling simultaneous coordinated energization of said compensating motor and said cross-slide motor both from said tracer, the said electrical means acting under the effect of a single signal therefrom, in correspondence with the magnitude of energization of the said reversible motor with equal magnitude to energize the compensating motor to modify the effect of the constant speed of the said power-screw.

2,731,870
STOP FOR LATHE CARRIAGE
Roderick M. Colman, New York, N. Y.
Application February 18, 1953, Serial No. 337,516
4 Claims. (Cl. 82—21)



1. Stop means for a carriage of a lathe having guide ways for the carriage comprising an anular holder, means for clamping the holder onto one of the guide ways in the path of the carriage apron, an elongated member rotatively and axially slidable in the holder, said member having a plurality of longitudinal grooves and a single carriage abutment surface adapted to contact the said carriage apron in all rotative positions of the elongated member, an adjustable stop settably secured in each groove, and an inwardly extending fixed stop secured to the holder and adapted to extend into each of the several grooves selectively and limit the axial movement of the elongated member in said holder by abutment with an adjustable stop.

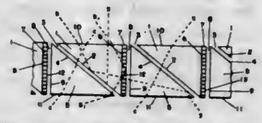
2,731,871
MEANS FOR TEACHING MUSIC
Carrie Loughrie, Warren, Ohio
Application November 4, 1952, Serial No. 318,667
3 Claims. (Cl. 84—470)



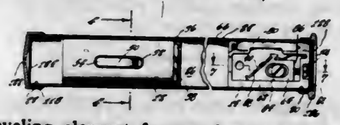
1. Apparatus for music instruction comprising a plurality of members each having indicia indicating a tonal note of the musical scale and said members being arranged in a row in side-by-side relation and in consecutive order of the tonal scale, each member being pivoted adjacent one end to provide a longer end on which is designated the note of the scale and a shorter end having a laterally off-set portion, said members being movable from normally horizontal position wherein said laterally off-set ends are generally up-right to an upright position to display the tonal indicia thereon, and a plurality of keys for cooperation with said members, each key being pivoted adjacent one end and having its free end overlying the laterally off-set portion of a corresponding member, whereby depression of the free end of a key causes swinging movement of its corresponding member to upright position, and removal of pressure from said key causes the parts to assume their normal position through weight of the larger end of the member.

2,731,872
ANGULAR DISCRIMINATING OPTICAL DEVICE
Otto G. Schwede, Ventura, Calif.
Application June 10, 1952, Serial No. 292,775
2 Claims. (Cl. 88—1)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. An angular discriminating optical device comprising a first transparent prism having an entrance face, a second face and a third face, said second face being disposed at an acute angle to the entrance face such that a portion of the light rays entering the entrance face is totally reflected and a portion of said rays is transmitted by said second face depending on their angles of incidence, a second transparent prism having an entrance face and an emergent face, said entrance face of said second prism being parallel to said third face of said first prism, said emergent face of said second prism being parallel to the entrance face of said first prism, an optical double layer disposed between said third face of said first prism and the entrance face of said second prism, said double layer consisting of a light filter in contact with said third face of said first prism and a transparent lamina having an index of refraction less than that of said first transparent prism adjacent to and in continuous contact with said filter and said last mentioned entrance face, a third transparent prism having an entrance face parallel to said second face of said first prism and an emergent face parallel to the entrance face of said first prism and in the same plane as the emergent face of said second prism, a second transparent lamina of low index of refraction interposed between said second face of said first prism and the entrance face of said third prism, said second transparent lamina consisting of a medium having an index of refraction less than that of said prisms, and wherein said optical double layer is disposed substantially normal to the entrance face of said first prism.



2,731,873
HAND SURVEYING INSTRUMENT
Leopold Churgin, New York, N. Y., and Donald N. Grundberg, Stoneham, Mass., assignors to C. L. Berger & Sons, Inc., Boston, Mass., a corporation of Massachusetts
Application January 24, 1952, Serial No. 268,062
2 Claims. (Cl. 88—2.3)

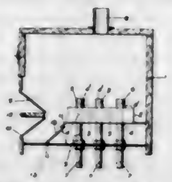


2. A leveling element for use in a surveying instrument, including a fixed member disposable within the main optical tube of said surveying instrument and fixedly supporting a bubble tube; a mirror positioning member axially and slidably disposed with respect to said fixed member, and to said bubble tube; and means to fix the positioning of said mirror with respect to said fixed member in operative alignment with said bubble tube, said means including a locking screw engagable with a slot in said mirror positioning member and a threaded opening in said fixed member; said screw including a head portion and a threaded shaft portion, said portion having first means for engagement with a tool, said threaded shaft portion having second means engageable with a second tool.

2,731,874
SMOKE DETECTING APPARATUS
Cyril Clifford Hall, Ealing, London, England, assignor to Specialties Development Corporation, Belleville, N. J., a corporation of New Jersey
Application October 1, 1952, Serial No. 312,612
5 Claims. (Cl. 88—14)

1. Apparatus for smoke detection comprising an outer casing defining a darkened chamber, an air outlet means

from said chamber, a plurality of transparent tubes in said chamber, each of said tubes being adapted to be connected to an air line, an inner light-proof casing surrounding at least a portion of each of said tubes, at least



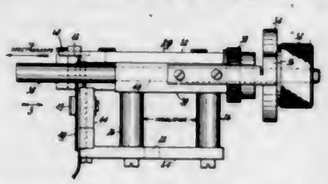
one illuminating light source within said casing close to said tubes, the upper end of said tubes opening into the darkened chamber and means for viewing the inside of said darkened chamber screened from direct illumination from said light source.

2,731,875
POLARIMETER
John H. Gould, Hyattsville, Md., assignor to the United States of America as represented by the Secretary of Commerce
Application December 23, 1952, Serial No. 327,705
6 Claims. (Cl. 88—14)
(Granted under Title 35, U. S. Code (1952), sec. 266)



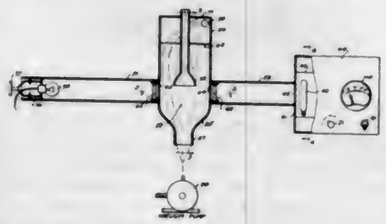
1. A polarimeter for measuring the optical rotation and rotatory dispersion characteristics of a specimen, comprising a source of parallel rays of light, means for plane-polarizing the beam of light, means for passing a first portion of the polarized beam of light through the specimen, and means for determining the phase angle between the first portion of the beam and the remaining portion of the beam, said last-named means including continuously rotating analyzer prism means positioned to intercept both portions of the beam.

2,731,876
EXCITER STAND FOR SPECTROGRAPH
Holle C. Luechauer, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 27, 1953, Serial No. 351,298
7 Claims. (Cl. 88—14)



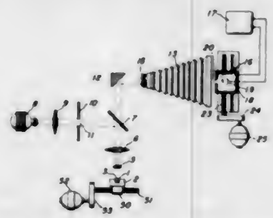
1. An exciter stand for use with a spectrograph using a sparking electrode and adapted for maintaining a surface of a specimen in adjusted spaced relation to said electrode comprising in combination; a support, a pair of spaced elements rotatable relative to said support, a sparking electrode carried by said support and spaced with reference to said elements, a pair of shafts extending in the same direction in spaced parallel relation and operatively connected with said elements, said shafts being constructed and arranged for supporting a specimen therebetween and for moving a surface of said specimen into an adjusted spaced relation with said electrode as said elements are rotated with reference to said support.

2,731,877
PNEUMATIC REFRACTOMETER
Hans Georg Clamann, Converse, Tex., assignor to the United States of America as represented by the Secretary of the Air Force
Application July 20, 1953, Serial No. 369,258
11 Claims. (Cl. 88—14)
(Granted under Title 35, U. S. Code (1952), sec. 266)



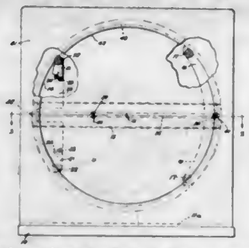
3. A fast and continuous acting pneumatic refractometer comprising an analyzing cell, means to direct a reference fluid and an unknown fluid in contact through said cell in laminar flow without substantial intermixing of the two fluids, said fluids being of different chemical composition, means to direct a beam of light across said cell transversely to the flow of and through said fluids, said laminar flow being such that a central layer of unknown fluid has a layer of reference fluid on either side of it whereby a portion of the light will pass through reference and unknown fluid and another portion of the light will pass through reference fluid only, so it is possible to separately analyze and compare the refracted light from said unknown fluid with the refracted light from said reference fluid in such a manner that the composition of the unknown fluid is quantitatively indicated and wherein variations of light intensity of said beam of light are automatically compensated.

2,731,878
METHOD OF AND APPARATUS FOR DETERMINING THE MICROCONSTITUENT CONTENT OF METALS
Leo H. Sherwin, Pittsburgh, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Application March 10, 1954, Serial No. 415,271
4 Claims. (Cl. 88—14)



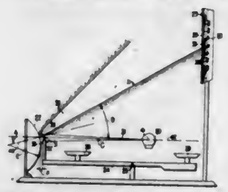
2. A method of determining the metallographic constituent content of a metal specimen which comprises producing an illuminated reproduction of an etched surface of the specimen, electrically scanning the intensity of illumination from each point of said reproduction along a line extending transversely thereof to produce electrical intelligence in the form of an electric force varying with the intensity of illumination along said line, and recording the variations in said electric force to provide a record of microconstituents of said specimen.

2,731,879
OPTICAL TESTING DEVICES OF THE PERIMETER TYPE
William G. Conover, Philadelphia, Pa.
Application May 22, 1951, Serial No. 227,644
5 Claims. (Cl. 88—20)



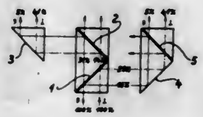
1. An optical testing device of the perimeter type comprising a vertically disposed opaque plate member the front face of which provides a visual field, said plate member being made of non-magnetic material, a mark on the front face of said visual plate member for indicating the visual center thereof, a bridge member mounted to the rear of and extending diametrically across said plate member, means for supporting said bridge member whereby it may be rotated to selective diametral positions about an axis passing through the visual center of the plate member, said means comprising a plate member spaced from the rear face of the visual field plate member and having a central opening providing a circular track, and rollers supported from the bridge member engaging said track, a support carried by the bridge member and shiftable thereon along a straight diametral line passing through the axis of rotation of the bridge member, a magnet carried by said support, and a target ball of magnetic material supported on the front face of the plate member solely by said magnet and movable thereon by the shifting of the support and the magnet carried thereby, the movement of the bridge member and the magnet being concealed from the front by the visual plate member.

2,731,880
WEIGHING SCALE APPARATUS WITH LIGHT BEAM INDICATING MEANS
John D. Beeson, Columbus, Ohio, assignor to The Exact Weight Scale Company, Columbus, Ohio, a corporation of Ohio
Application November 2, 1951, Serial No. 254,498
4 Claims. (Cl. 88—24)



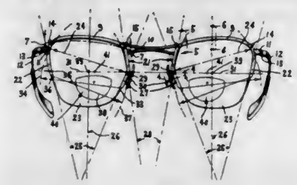
1. In a weighing apparatus, in combination, a scale beam; means forming a light source for emitting rays of light in substantially beam-like form; a convex spherical reflecting means disposed in the path of said rays of light, the principal axis of the spherical reflecting means being arranged parallel with and spaced from the axis of the rays; a screen means adjacent the reflecting means and interposable in the path of the rays of light, said screen means having an area at least equal to the cross sectional area of the rays of light adjacent the reflecting means, said screen means having a leading edge in straight line form, one of said means being attached to and movable with the scale beam; and a reference scale dial disposed in the path of light rays reflected from the reflecting means.

2,731,881
PRISM SYSTEM FOR BINOCULAR TUBES
Dierick Koessel and Paul Sindel, Wetzlar, Germany, assignors to Ernst Leitz, G. m. b. H., a corporation of Germany
Application November 9, 1951, Serial No. 255,586
Claims priority, application Germany November 16, 1950
3 Claims. (Cl. 88—39)



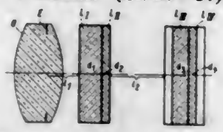
1. An optical light beam splitting system for binocular tubes comprising a plurality of light transmitting and light reflecting prisms having light transmitting and light reflecting layers consisting of a first such layer for transmitting and reflecting, respectively, the incoming light rays; a second such layer for reflecting and transmitting, respectively, the transmitted rays from the said first layer; and a third such layer for transmitting and reflecting, respectively, the said reflected rays from the said first layer; each of said transmitting and reflecting layers having transmitting and reflecting powers approximately fulfilling the equation $R\perp \cdot D\perp = R\| \cdot D\|$, wherein R⊥ and D⊥ represent the reflected and transmitted components polarized at a right angle to the plane of incidence, and R‖ and D‖ represent the components polarized parallel to the plane of incidence according to the known Fresnel's formulae.

2,731,882
OPHTHALMIC MOUNTINGS
Elmer L. Schumacher and Armand De Angelis, Southbridge, Mass., assignors to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Application November 8, 1951, Serial No. 255,421
3 Claims. (Cl. 88—41)



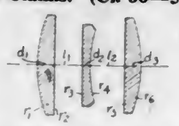
1. An ophthalmic mounting comprising a pair of meniscus-shaped lenses and half-frame members shaped to follow the upper, nasal and temporal sides of said lenses, each having an inner groove extending longitudinally thereof, the groove in the portions of the half-frame members shaped to follow the nasal and temporal sides of the lenses having a width approximating that of the adjacent edge thickness of the lens assembled therewith, so as to have a relatively intimate resilient gripping fit with the nasal and temporal sides of the lens, and the inner groove throughout the upper portion of the half-frame members being of a width greater than the width of the groove in said side portions of the half-frame members to accommodate the meniscus shape of the respective lenses while permitting the side portions thereof to have said relatively intimate fit with the adjacent edges of the lenses, and said half-frame members being connected on their nasal sides by a bridge member and having temple connection means adjacent their temporal sides.

2,731,883
AFOCAL ANAMORPHOTIC CYLINDRICAL OBJECTIVE LENS SYSTEM
Horst Köhler, Heidenheim (Brenz), Wurttemberg, and Helmut Knutti, Oberkochen, Wurttemberg, Germany, assignors to Carl Zeiss, Heidenheim (Brenz), Germany
Application August 5, 1953, Serial No. 372,442
Claims priority, application Germany June 20, 1953
3 Claims. (Cl. 88—57)



1. An afocal anamorphosing cylindrical objective lens system to be arranged in the projection path of the rays of a spherical projection and camera objective lens and comprising respectively, a positive cylindrical lens component adjacent to the spherical lens and a diverging cylindrical lens component axially air separated apart with their cylindrical axes parallel to each other and with each of said two components formed of a converging lens cemented to a diverging lens and with the cylindrical cemented surface in the diverging component having a converging effect and with its concave surface turned toward the converging component and the cemented surface of the converging component having a diverging effect and with its converging surface turned toward the diverging component, the outer surfaces of the diverging component being turned toward its cemented surface and the outer surfaces of the converging component turned away from its cemented surface, in each said components the difference in refractive index of the cemented lenses being larger than 0.1 and the absolute values of the radii of the cemented surfaces in each component being between 0.35 and 0.60 of the individual focal lengths f_1; f_2 of the respective components.

2,731,884
TRIPLET-TYPE PHOTOGRAPHIC OBJECTIVE LENS
Theodor Brendel, Munich, Germany, assignor to Agfa Camera-Werk Aktiengesellschaft, Munich, Germany, a corporation of Germany
Application April 15, 1954, Serial No. 423,373
Claims priority, application Germany April 28, 1953
5 Claims. (Cl. 88—57)



1. A triplet-type photographic objective having a minimum aperture ratio of 1:40 comprising a biconcave negative lens between two positive lenses, the sum $[\Sigma(d+l)]$ of the thicknesses (d) and the axial separating distances (l) of said lenses being between 0.25 times and 0.45 times the focal length (f) of the objective, the sum (Σl) of said lenses being between 1.40 times and 1.80 times the sum (Σd) of said axial thicknesses of said lenses, and the constructional factors of said objective fulfilling all the following conditions:

$$(a) \qquad n_2 < 1.70 < \frac{n_1+n_3}{2}$$

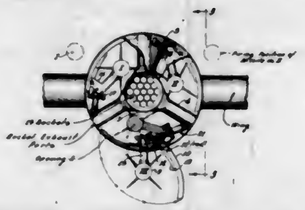
$$(b) \qquad 1.05 < \frac{r_1}{\Sigma(d+l)} < 1.25$$

and

$$1.05 < \frac{r_4}{\Sigma(d+l)} < 1.25$$

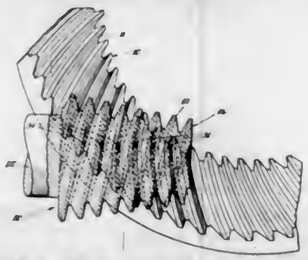
(c) r_3 amounts to at least 0.5 times and at most 0.8 times the focal length (f) of the objective where n_1, n_2, . . . represent the indices of refraction, r_1, r_3 and r_4 represent the radii of curvature, and subscripts are counted from the front of said objective.

2,731,885
ROCKET STOWAGE AND LAUNCHING MECHANISM
Auldin D. Nolan, Palos Verdes, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application August 30, 1952, Serial No. 307,280
6 Claims. (Cl. 89—1.7)



4. A rocket launching device comprising: a generally cylindrical streamlined shell; wall portions of said shell defining an opening in the wall of said shell; a cover for said opening pivotally mounted on said shell and movable between a closed position closing said opening and an open position spaced externally from said shell; a rocket launching beam pivotally mounted on said shell and having a first position within said shell adjacent said opening and cover when the latter is in said closed position; said beam being movable from said first position through said opening to a second position located externally of said shell; means for moving said beam between said first and second positions thereof; and linkage means pivoted to and extending between said beam and cover to move the latter between said open and closed position thereof simultaneously with the movement of said beam; said cover moving through a greater arc in moving between said open and closed position thereof than said beam in moving between said first and second position thereof.

2,731,886
METHOD OF MAKING SPEED-REDUCTION GEARING
Oliver E. Saari, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a corporation of Illinois
Original application July 12, 1954, Serial No. 442,553, now Patent No. 2,696,125, dated December 7, 1954. Divided and this application August 19, 1954, Serial No. 450,959
2 Claims. (Cl. 90—4)



1. The method of making a face-type gear for use with a frusto-conical worm having a thread of uniform lead, which comprises hobbing a gear blank with a frusto-conical hob of taper angle T having a thread of uniform lead L and of uniform cross-sectional shape defined by a pressure angle between 20° and 45° on its high side and a pressure angle between 0° and 25° on its low side, rotating the hob and the gear blank during the hobbing at a speed ratio K in excess of 9:1 and feeding the hob into a position in which its axis is at an angle E between 45° and 135° to the axis of the gear at a distance C therefrom which is less than the outer radius R of the gear blank and in which its smaller and larger ends are at the same side of the common perpendicular to the axes of the gear and worm and at distances x_1 and x_2 from this line and in which the apex of the outer conical surface of the hob lies at the opposite side of this line at a distance a therefrom, the distances C, x_1, x_2 and a being related to the axis angle E, the speed ratio k and the taper angle T and lead L of the hob in accordance with the following equation:

$$L=\frac{2\pi(C-P\sin\phi)}{K\csc E-\left[\frac{x}{P}\cos\phi+\left(\frac{C}{P}\sin\phi-1\right)\cot E\right]}$$

where

$$P=(a+x)\tan T$$

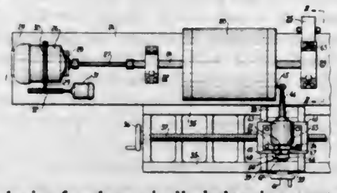
$$\sin\phi=\frac{B-A\sqrt{A^2+B^2-1}}{A^2+B^2}$$

$$A=-\cot E\cot T$$

$$B=\frac{P+x\cot T}{C}$$

and x has a value between x_1 and x_2, so that the teeth formed on the gear are substantially free from inoperative fillets.

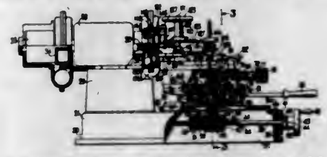
2,731,887
BALANCING ROTATABLE BODIES
Hjalmar Emanuel Sjöstrand, Saxdalen, Sweden
Application November 15, 1951, Serial No. 256,467
15 Claims. (Cl. 90—11)



2. A device for dynamically balancing a rotating body, which comprises a pair of bearings for rotatably mounting the body to be balanced, at least one of said bearings being sufficiently elastic in at least one radial direction to permit the rotating body to oscillate in synchronism with the rotation of the axial plane passing through the center of unbalance of the rotating body, driving means for rotating said body in said bearings, means for adjusting the weight of the rotating body at a point on the body spaced from the center of rotation, a rotating member for positively controlling the operation of said weight adjusting means so as to make same intermittently effective within a comparatively small radial sector of the body to be balanced during revolution of said body, means responsive to said oscillations for bringing the symmetry plane of said radial sector into coincidence with the radial plane passing through the center of unbalance of said body, and means for stopping the operation of said weight adjusting means when oscillation of the rotating body diminishes to a substantial degree due to weight adjustment caused by said weight adjusting means.

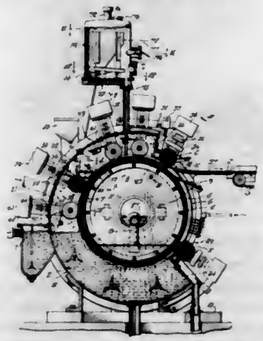
2,731,888
MACHINE FOR MILLING BRAKE SHOE LININGS
Sydney P. Lowe, Columbus, Ohio, assignor to Bigelow, Inc., Columbus, Ohio, a corporation of Ohio
Application October 3, 1951, Serial No. 249,561
6 Claims. (Cl. 90—20)

5. A brake shoe machine for milling a brake shoe lining, comprising in combination, a base having a guideway; a rotatable cutting mechanism for milling the peripheral surface of a brake lining and carried by the base; a brake shoe supporting mechanism, one of said mechanisms having a guideway cooperating with and guided by the guideway of the base and movable relative to the base, a threaded shaft rotatably carried by the base, a nut threaded on the shaft for longitudinal movement along said shaft when said shaft is rotated, said brake supporting mechanism including a turntable and means for pivotally mounting the turntable on the supporting mechanism for oscillation on an axis disposed transversely of the axis of



said shaft, a handle for oscillating the turntable, a plate pivotally mounted on the turntable means for shifting the plate about its pivotal connection and for holding the plate in adjusted position on said turntable, means on the plate for supporting a curved brake shoe thereon with the axis of the brake shoe curve disposed transversely of said shaft, the pivotal point of said plate on the turntable being adjacent the periphery of the brake shoe when the brake shoe is in position on the machine.

2,731,889
METHOD OF AND MACHINE FOR PRODUCING CONTINUOUS STRIPS OF FIBROUS SHEET MATERIAL
Alvan D. Simpson, Plainfield, N. J., assignor to The Forming Machine Company of America, Inc., Bound Brook, N. J., a corporation of Delaware
Application May 11, 1951, Serial No. 225,878
10 Claims. (Cl. 92—43)

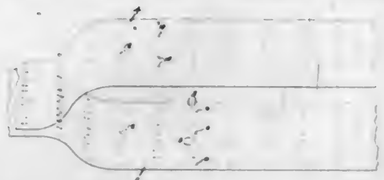


1. The method comprising separating and forming a strip of solid materials from a mix of the order of liquid having cement and fibers in suspension, moving said strip while the strip is wet through a pressure chamber with one side exposed to the atmosphere and the other side subjected to a gas pressure substantially above atmospheric pressures to force liquid from said strip and form pores in said strip, and spreading a layer of a wet mix of a surfacing substance on the second-mentioned side of said strip while the strip with said layer of surfacing substance thereon is moving through said pressure chamber thereby causing said surfacing substances to flow into said pores.

2,731,890
WEB SLITTING AND CROSS PASTING APPARATUS
Rudolph P. Bechle, Yonkers, N. Y., assignor to Potdevin Machine Company, Teterboro, N. J., a corporation of New York
Application March 25, 1952, Serial No. 278,520
4 Claims. (Cl. 93—8)

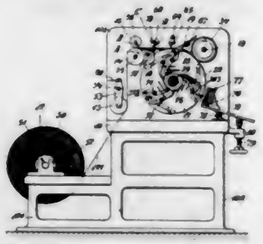
2. In web slitting and cross pasting mechanism, the combination of pairs of rotatable slitting and anvil roll-

ers adapted simultaneously to slit a plurality of webs moving in different planes, manually operated means for independently adjusting each pair of rollers transversely of the webs to accommodate webs of different widths and to stagger the slits in one web relatively to those in another web to any extent desired, a rotatable cross paster for cross pasting one web simultaneously with



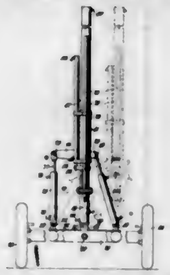
the slitting of the web, driving mechanism for the said slitting rollers and cross paster to impart to these elements a pulsating cyclic motion and to drive the slitters at a speed varying from maximum to minimum and back to maximum on each revolution, and means for varying the setting of the driving mechanism to vary the maximum and minimum speeds of the slitters.

2,731,891
MACHINES FOR SEALING BAGS
Peter Weisshuhn, Stuttgart, and Erich Jäggle, Stuttgart-Feuerbach, Germany
Application September 23, 1952, Serial No. 310,985
Claims priority, application Germany September 25, 1951
3 Claims. (Cl. 93—13)



1. Machine for manufacturing heat-sealed bags from a continuous heat-sealable film, comprising in combination a film transporting mechanism, cross-cutting means adapted to transversely cut the continuous film into sections, the cutting means moving in a fixed relationship to the other movable parts of the machine, a rotating main cylinder rotating in fixed relationship to the cutting means and the other movable parts of the machine, a plurality of gripper means being arranged on the main cylinder and preferably disposed by equal distances in circumferential direction, cam means mounted on the main cylinder and adapted to control the gripper means in fixed relation to the position of the main cylinder, a plurality of sealing means having sealing surfaces, said sealing means being arranged on the main cylinder and preferably disposed by equal distances in circumferential direction, a folding means adapted to double up the sections after the latter are gripped, a pressure roller rotating in a fixed relationship to the main cylinder, pressure means arranged on said pressure roller, said pressure means having pressure surfaces adapted to cooperate with the sealing surfaces of the sealing means, swingable ejector means for ejecting the sealed bags, said ejector means having an ejector rail, preferably comb-shaped, cam means secured to the main cylinder and adapted to control the swinging action of the ejector rail in such a manner that the ejector rail advances between the gripping and sealing means when the bags are completely sealed.

2,731,892
ROAD WORKING AND DITCHING MACHINE
Wayne W. Simmonds, Mission, Kans., assignor, by mesne assignments, to L. A. Young Spring & Wire Corporation, Detroit, Mich., a corporation of Michigan
Application August 20, 1952, Serial No. 305,349
4 Claims. (Cl. 94—49)

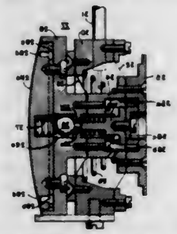


1. An apparatus mounting a portable hammer unit on a vehicle having a wheel supported frame and a source of fluid pressure thereon, said portable hammer unit having a hammer carrying structure and mechanism for effecting up and down movement of said hammer in a fixed path relative to the hammer carrying structure; a post unit having an upright post and a sleeve thereon, means pivotally mounting the post on the frame for swinging movement of the post from side to side, said sleeve being horizontally arranged and fixed adjacent the upper end of the post with the axis of said sleeve substantially parallel to the pivotal axis of the post, a spindle rotatably mounted in said sleeve, means pivotally mounting the hammer carrying structure on the spindle for swinging movement of said structure about a substantially horizontal axis arranged transversely to the axis of the sleeve, brace means having one end connected to the hammer carrying structure and the other end to the spindle for retaining the hammer carrying structure in operative position and at fixed angularity relative to the axis of the spindle, extensible means operated by fluid pressure and having one end pivotally connected to the post unit and the other end pivotally connected to the frame for swinging the post unit about the axis of the pivotal mounting thereof, and second extensible means operated by fluid pressure having one end pivotally connected to the frame and the other end pivotally connected to the spindle for swinging movement of the hammer carrying structure about the axis of the sleeve whereby operation of the first named extensible means and second named extensible means effect bodily movement of the hammer carrying structure and tilting of the hammer carrying structure.

2,731,893
FILM-POSITIONING APPARATUS FOR CAMERAS
Nelson Kling, Roslyn, and Steve Ronai, Greenlawn, N. Y., assignors to Fairchild Camera and Instrument Corporation, a corporation of Delaware
Application June 18, 1951, Serial No. 232,226
7 Claims. (Cl. 95—11)

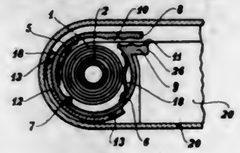
1. In a camera, a film-positioning apparatus comprising: a stationary support; a movable film-supporting member normally spaced from said support to provide for movement of a film therebetween and having a series of passages terminating in the face thereof adjacent an interposed film; means for pressing said member into registry with said support; a fluid conduit in communication with said passages and adapted to be connected to a source of fluid pressure less than that surrounding said film to cause an interposed film to adhere to and conform to the adjacent surface of said member; a spring-biased check valve in the fluid connection to said passages for limiting the initial fluid flow through said passages; and fluid-actuated

means responsive to the fluid pressure of a connected source for releasing said check valve when said fluid pres-



sure falls below a predetermined value after said film is sealed to the periphery of said support.

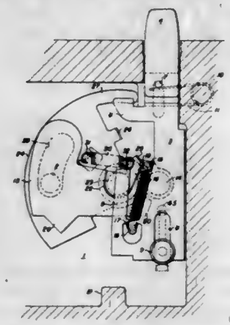
2,731,894
FILM CONTAINER FOR ROLL FILM CAMERA
Ludwig Leitz and Hugo Wehrenfennig, Wetzlar (Lahn), Germany, assignors to Ernst Leitz, G. m. b. H., a corporation of Germany
Application July 25, 1951, Serial No. 271,334
Claims priority, application Germany July 31, 1950
3 Claims. (Cl. 95—31)



1. In combination, a camera, a removable cover therefor and means on the cover to lock the same to the camera, a film container for said camera comprising two halves container portions hinged together lengthwise to form a container with the said two halves container portions movable about said hinge towards and away from each other to close and open the container, guide means on said container portions forming a channel only when said container is closed, a container opening member on said camera locking means automatically entering said channel to widen said channel to open the container when said locking means are actuated to lock the cover on the camera, said film container being a separate film containing unit manually insertable and detachable from said camera, means engaging said container halves to keep the container lighttightly closed after removal from the camera, a film gripping jaw formed on each of said container halves, said jaws opposing each other in film gripping relation when said container halves are closed to form a container, said jaws having opposed inner waved surfaces intermeshing in film gripping relation.

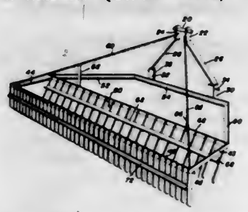
2,731,895
BLADE AND COVER BLIND SHUTTER
Edward S. McKee, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application October 25, 1954, Serial No. 464,379
2 Claims. (Cl. 95—60)

2. A shutter for cameras, comprising a support having an aperture therein, a trigger movable on the support, a cover blind movable on the support to uncover and cover the aperture, a shutter blade movable on the support to cover and uncover the aperture, spring connections between the trigger and cover blind and the cover blind and shutter blade, a latch between the cover blind and shutter blade for holding the former by the latter whereby the trigger may be moved to tension the spring between the trigger and cover blind while the latter is held against movement by the latch, and means on the trigger for engaging the shutter blade moving said blade to release the latch whereby the cover blind may move, said movement of the cover blind tensioning the spring con-



necting the cover blind and shutter blade operating the shutter blade after the cover blind is moved by the spring connecting the trigger and the cover blind.

2,731,896
MULTIPLE PURPOSE RAKE
Roland E. Wurster, Ypsilanti, Mich.
Application December 18, 1950, Serial No. 201,310
5 Claims. (Cl. 97—47.2)

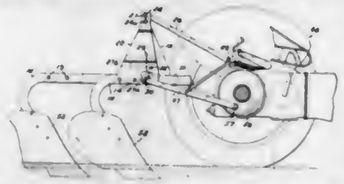


4. An earth moving and working tool which comprises a mounting frame to be spaced from the ground comprising a series of joined members lying in a plane and enclosing a substantial area, said plane being adapted to be positioned substantially horizontally, a forward yoke member rising vertically from said frame, fastening means to associate said frame with a power device such as a tractor, and a double set of tines fastened in fore and aft spaced relation to said frame extending downwardly from said frame to the ground, said forward tines being arranged at a positive rake angle with respect to the ground when said main frame member is horizontally disposed, said rear set of tines being relatively closely spaced together and having a relatively neutral rake angle with respect to the ground when said frame is horizontally positioned to permit said rear set of tines to be readily moved rearwardly thereby to move quantities of earth with a bull-dozing action and to permit in forward movement a chopping action by the forward teeth and a smoothing and leveling action by the rearward teeth.

2,731,897
ADJUSTING MECHANISM FOR FARM IMPLEMENTS
Ralph C. Frevik, Detroit, Mich., assignor, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application January 5, 1950, Serial No. 136,885
7 Claims. (Cl. 97—47.55)

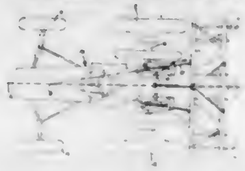
1. For use with a tractor having a pair of laterally spaced, vertically swingable draft links and a pivoted top link, a plow frame comprising a pair of beams, means for securing said beams in spaced parallel relationship, an upstanding plate member mounted on each of said beams in

opposed relationship, means for pivotally connecting the tractor top link between the top portions of said plate members, a drawbar having a generally angular lengthwise configuration so that the end portions thereof are angularly disposed relative to each other, means for mounting said drawbar on said plate members with said angularly disposed end portions lying in a horizontal plane permitting



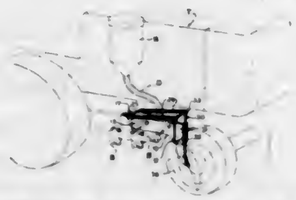
generally arcuate, transverse movement of said drawbar relative to the plow beams, means for securing said drawbar in any selected transverse position relative to the plow beams, and means on the respective ends of said drawbar for attachment to the tractor draft links, whereby the angular relationship of the plow frame relative to the draft axis of the tractor may be adjusted.

2,731,898
IMPLEMENT HITCH FOR TRACTORS
Ralph C. Frevik, Detroit, and Frederick D. Sawyer, Wayne, Mich., assignors, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application June 30, 1951, Serial No. 234,597
4 Claims. (Cl. 97—47.65)



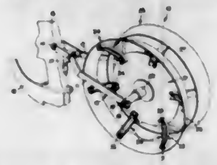
1. In an implement hitch for a tractor, a pair of trailing laterally spaced draft links convergent toward a central vertical draft plane of the tractor and each of which comprises a forward link element attachable to said tractor for free vertical swinging movement about an axis located on the tractor and having a rearwardly extending free end, a rear link element pivotally attached to the rear end of said forward element for horizontal swinging movement about an axis rearwardly of and spaced from said tractor, means extending from said rear element to said tractor for limiting free horizontal movement thereof, and means at the free rearward end of said rear element for attachment to an implement.

2,731,899
PLOW WITH AUTOMATIC TRIPPER
James W. Abrams, Newberry, S. C.
Application September 15, 1952, Serial No. 309,708
4 Claims. (Cl. 97—47.83)



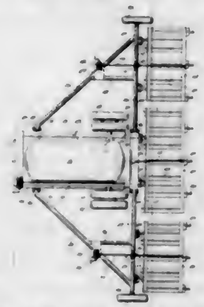
4. A plow structure for ready attachment to and detachment from a movable supporting frame comprising a pair of upstanding spaced plates, connecting means to secure and maintain the plates in spaced relation, means for fixedly attaching said spaced plates to a movable supporting frame, an upstanding plow supporting arm between and closely adjacent said plates for guidance thereby and pivotally mounted intermediate its ends on said spaced plates well below the upper edges of said plates and closely adjacent the lower edges of said plates, said connecting means providing a stop closely adjacent the upper edge of said plates for limiting the movement of said arm in one direction, tension spring means for urging said arm to its upstanding position, means for securing the tension spring means to the upper end portion of said arm and to said spaced plates at a location on said plates spaced from said pivot, and means for securing a plow blade to the lower end of said arm whereby the plow blade may operate in the earth and may yield against the tension of said spring means when the plow blade engages an obstruction lying in the path of such blade.

2,731,900
PRESS WHEEL FOR PLANTERS
William P. Oehler, Moline, Ill., assignor to Deere & Company, Moline, Ill., a corporation of Illinois
Application April 10, 1952, Serial No. 281,547
2 Claims. (Cl. 97—56)



1. A press wheel for planters and the like, comprising a relatively solid disk central section having a hub, a pair of axially spaced apart rim sections, said disk section having a diameter several times the diameter of said hub and said disk section extending radially the major portion of the distance from the center of the hub to said rim sections, whereby to minimize the tendency of stalks, trash and the like to become entangled in the wheels, and peripherally spaced apart struts connecting said rim sections to the peripheral portion of said disk section, the generally axial spacing between adjacent edges of said rim sections being slightly less than the shortest distance from the edge of said disk section to the adjacent inner edge of either of said rim sections.

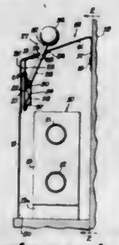
2,731,901
MACHINE FOR PUTTING FLUID FERTILIZER INTO THE SOIL
Fred Tye, Endicott, Wash.
Application July 30, 1953, Serial No. 371,210
4 Claims. (Cl. 97—235)



1. In a machine of the class described, an elongated central frame having parallel side frame pieces and having

means at the front end for attaching it to a towing vehicle, wheels supporting the rear end of said frame, an upright frame at the rear end of said frame and side frame members extending upwardly and rearwardly from the forward portion of the central frame to the upright frame, and forming with the upright frame and central frame a trailer vehicle, two laterally extending frames hinged to the side frame pieces of said central frame, means on the central frame to swing the laterally extending frames into upright position, means on the upright frame to secure the laterally extending frames in upright position, said laterally extending frames having rear frame pieces extending outwardly from the rear end of the central frame, a wheel supporting the outer end of each laterally extend- wheel supported central frame, two triangular frames, one ing frame, a framework hinged to and trailing each frame and having soil penetrating bars thereon, and means on each frame for lifting the framework hinged thereto about the hinges.

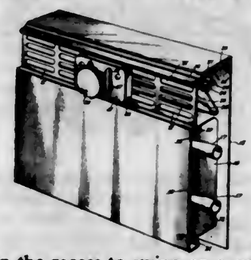
2,731,902
DAMPER MECHANISM FOR RADIATOR HOUSING
John Sebaski, Rosemount, Quebec, Canada, assignor to Vapor Heating Corporation, Chicago, Ill., a corporation of Delaware
Application August 9, 1952, Serial No. 303,541
3 Claims. (Cl. 98—40)



1. The combination of a space heating radiator housing provided with an outlet for discharging heated air therefrom, a damper pivotally supported wholly within the housing for opening and closing said outlet, and means for actuating the damper comprising a lever pivotally supported on an interior portion of the housing and extending through a slot therein for external operation, a bowed metal strap secured to an inner face portion of the damper and cooperating with said face to provide an elongated slot for slidably receiving a portion of the lever, whereby movement of the lever in one direction moves the damper to a position for closing said outlet and movement of the lever in the opposite direction moves the damper in a direction to open said outlet, and a bowed leaf spring having its opposite ends secured to the damper and positioned with its bowed portion engaging said lever at a location between the inner face of the damper and said bowed metal strap for releasably holding the damper in its opened and closed positions and functioning as an anti-rattle engagement between the lever and the damper.

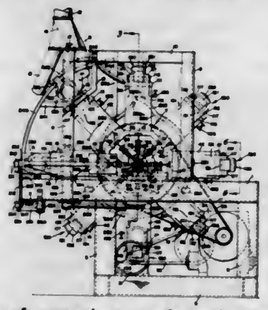
2,731,903
BASEBOARD RADIATORS
Courtland G. Newton and Donald Rousey, Chicago, Ill., assignors to Kritzer Radiant Coils, Inc., Chicago, Ill., a corporation of Delaware
Application August 22, 1952, Serial No. 305,864
11 Claims. (Cl. 98—40)

1. A register for a sheet metal baseboard forming a radiator housing, provided with an air inlet in its lower portion and outlet slots in its upper portion, comprising a sheet metal damper for controlling the flow of air through the outlet slots, having its upper end pivotally supported in the casing and an upwardly extending flange at its lower end forming a longitudinal extending channel and adapted to engage a slotted portion of the casing, and a damper control device including a mounting plate fitting over a slotted portion of the casing, means for removably securing the mounting plate on the front of the casing, a back plate on the inner side of the mounting plate provided with a substantially horizontal slot, a recess being provided between the plates adjacent the slot in the back plate, a shifter including a strip of wire with



a pintle held in the recess to swing on a substantially vertical axis, a member extending inwardly from the pintle and through the slot in the back plate and a resilient arm extending angularly downward from said member and adapted to swing longitudinally into the channel in the damper, an operating element supported in the mounting plate, and means at the back of the mounting plate rotatable by the operating element for shifting the arm.

2,731,904
CEREAL PUFFING MACHINE
Fred C. Van Arsdell, Medina, and Elmer G. Gustavson, Stow, Ohio, assignors to The Quaker Oats Company, Chicago, Ill., a corporation of New Jersey
Application September 19, 1951, Serial No. 247,271
39 Claims. (Cl. 99—238)

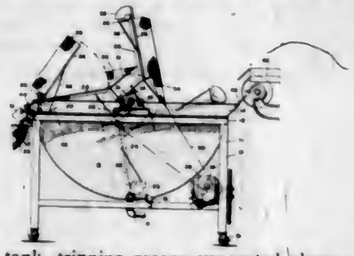


1. A machine for treating cereals or the like comprising a turret, means to rotate the turret continuously, a plurality of treating chambers on the turret, movable closures at the ends of the chambers, means to admit steam to the interiors of the chambers while they are rotating, means located in the cycle of the turret acting on the closures to bring them successively onto the ends of the chambers and lock them in that position while the turret is rotating, and means operated by the rotation of the turret to release the closures at a further point in the cycle of the turret.

2,731,905
MACHINE FOR PROCESSING SLICED MATERIAL
Arthur H. Morgan and Guy A. Shuey, Knoxville, Tenn., assignors to The University of Tennessee Research Corporation, Knoxville, Tenn., a corporation of Tennessee
Application November 12, 1952, Serial No. 320,074
10 Claims. (Cl. 99—239)

1. In a machine for treating sliced fruit and analogous material, a frame, a semi-circular open tank supported in said frame, a treating bath in said tank, a rotor structure rotatably mounted across the upper center of said

tank, arms extending outwardly from said rotor structure, rectangular, open basket frames supported on said rotor arms throughout their length and pivotally mounted at their outer extremities thereon for rotative movement



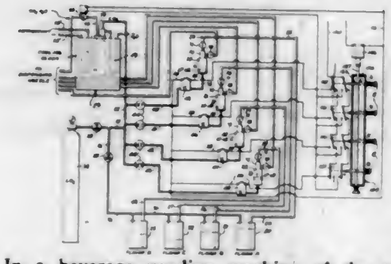
through staid tank, tripping means supported above one extremity of said tank whereby said basket frames may be tilted with respect to said rotor arms as their outer extremities are engaged by said tripping means.

2,731,906

AUTOMATIC BEVERAGE VENDING MACHINES

William V. King, Stamford, Conn., assignor, by mesne assignments, to Rowe Specarb, Inc., New York, N. Y., a corporation of New York

Application October 17, 1951, Serial No. 251,774
16 Claims. (Cl. 99—275)



1. In a beverage vending machine of the type described, a carbonator, a plurality of individual syrup sources, a source of CO_2 gas under pressure, a plurality of conduits for conducting CO_2 gas from said source to said carbonator and to each of said syrup sources, a metallic block surrounding said carbonator, separate conduits for refrigerant and sweet water cast into said block, said sweet water conduit communicating with said carbonator, a plurality of syrup measuring valves in contact with said metallic block for heat exchanging relationship therewith, each said valves comprising a cylindrical member having closures at either end thereof, a floating piston therein, a CO_2 conduit communicating with one end of said cylindrical member and said CO_2 source, two other conduits communicating with the other end of said cylindrical member one of said conduits communicating with one of said syrup sources and the other said conduit allowing egress of syrup from the cylindrical element, and a control valve element for each said syrup measuring valve positioned in the CO_2 conduit communicating with said one end of said cylindrical member, said control valve element having positions for permitting fluid communication between said CO_2 source and said cylindrical element, and preventing such communication and opening said cylindrical element to atmospheric pressure.

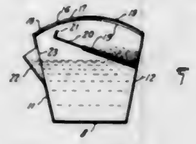
2,731,907

COMBINATION COFFEE AND TEA MAKER

Harold M. Brown, Redwood City, Calif.

Application January 23, 1953, Serial No. 332,836
1 Claim. (Cl. 99—316)

A device of the character described comprising a container having a top opening therein, a slidable lid for said container for covering and uncovering the top opening, and an inclined perforated plate mounted within said container and below said lid for receiving thereon the coffee and tea making ingredients, vertical reinforcing side plates of the general configuration of the side



walls but of lesser height and abutting the side walls and to support said lid, one end of said plate being equipped with an upwardly extending lip to prevent displacement of the coffee and tea making ingredients, and shoulders internally provided on said plates to support said perforated plate.

2,731,908

IMMERSION CONTAINER FOR FOOD SEASONING OR THE LIKE

Susan Morena, Bronx, N. Y.

Application June 26, 1952, Serial No. 295,700
3 Claims. (Cl. 99—414)



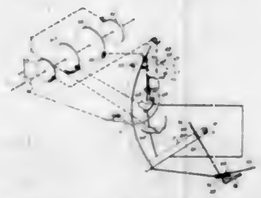
1. An immersion container for dissolving solid matter in a moving fluid comprising a hollow, perforated casing, having a perforated disc constituting the bottom of said casing and spaced from the bottom end edge of the casing and a disc member having grooves, said disc member being secured to the perforated disc, whereby agitated bubbling is prevented, said grooves being on the peripheral margin of the disc and in the form of opposed grooves.

2,731,909

TWINE TENSIONING ATTACHMENT FOR BALING MACHINE

Carl S. Rudeen, Pocatello, Idaho

Application January 23, 1953, Serial No. 332,936
4 Claims. (Cl. 100—22)



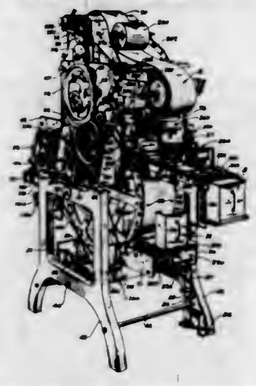
1. The combination with a baling machine having a baling chamber, twine knotting mechanism positioned adjacent said chamber, a needle for carrying twine movable through said baling chamber toward and away from said knotting mechanism, and driving means operatively connected to said needle for effecting the movement of the latter; of twine tensioning means carried by said baling machine and operable by said driving means when said needle is within a predetermined distance of said knotting mechanism to apply tension to said twine, said twine tensioning means including a pair of leaves for receiving the twine therebetween positioned adjacent said needle, one of said leaves being fixed and the other of said leaves being movable toward and away from said one leaf, a resilient bar extending tranversely of said leaves and having one end connected to said movable other leaf, a crankshaft spaced transversely of said bar and carried by the baling chamber, and a resilient arm projecting perpendicularly from the intermediate portion of said crankshaft and engageable with said resilient bar.

2,731,910

MACHINE FOR FEEDING AND TREATING LITHOGRAPHIC ADDRESS PRINTING PLATES

John H. Gruver, Cleveland Heights, Ohio, assignor to Addressograph-Multigraph Corporation, Wilmington, Del., a corporation of Delaware

Application August 28, 1952, Serial No. 306,876
20 Claims. (Cl. 101—47)



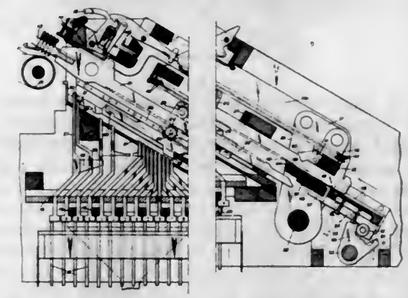
1. In a printing machine through which a series of individual printing devices each bearing a lithographically reproducible image may be passed one by one, a printing device carriage for transporting a plurality of spaced printing devices through the machine, a supply magazine adapted to hold a supply of such printing devices, means for withdrawing printing devices one-by-one from the supply magazine and feeding such printing devices to the carriage in succession, driving means operable to drive the printing device carriage at a constant speed in a predetermined direction, the speed of the withdrawing means corresponding to the speed of the carriage, rotating means disposed at respective points along the path of the printing device carriage adapted to clean and moisten the surface of each printing device, rotating means disposed at another point along the path of the printing device carriage and operable to apply ink to the image bearing surface of each printing device after the same has been cleaned and moistened, a rotating blanket disposed at a point along the path of the printing device carriage and defining a transfer station at which the blanket is adapted to make a rolling contact with the image bearing surface of each printing device as such printing device is advanced beyond the inking means by said carriage, a platen means associated with the blanket and defining a printing station at which the platen means may press an advancing sheet to be printed against the blanket to effect ink transfer from such blanket on to such sheet, a blanket cleaning means operating on the blanket between the printing station and the transfer station whereby the blanket may be cleaned after printing is effected and before a new image is off-set on to the blanket, a preservative applying means disposed at a point along the path of the printing device carriage and operable to apply a coating of preservative to each printing device after the same has passed beyond the transfer station, and a collecting magazine in position to receive the printing devices after the same have been operated on by the preservative applying means and removed from the carriage by the withdrawing means.

2,731,911

RECORD-CONTROLLED TYPE BAR SETTING MECHANISM

Charles Thomas Arthur Jones, Wallington, England, assignor to Powers-Samas Accounting Machines Limited, London, England, a British company

Application June 26, 1953, Serial No. 364,401
Claims priority, application Great Britain August 25, 1952
5 Claims. (Cl. 101—93)

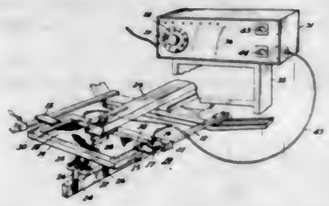


1. In a statistical machine controlled by record cards, apparatus comprising the combination with a plurality of differentially settable type element carrying members, and a row of control stops settable under control of a record card to control the setting of said type element carrying members, of a differential device for each row of control stops, said device being supported for movement over and lengthwise of the row of control stops and including a cage, a first toothed rack supporting a type element carrying member, a second toothed rack, said racks being movable with the cage and lengthwise relatively one to the other and to the cage, and a rotatable pinion supported by the cage and coupling said racks, a first abutment member on said cage, said abutment member having three abutments each for co-operation with a predetermined one of three control stops forming a first group of stops in said row and arranged on engagement of any one of the abutments with the stop appropriated thereto to arrest movement of the cage, a second abutment member on said second rack to arrest movement thereof on engagement with an actuated stop of a second group of stops in said row, resilient means acting on said first rack and tending to urge the differential device towards said first group of stops and to effect relative movement between the racks on arrest of the cage by a stop of said first group, a restoring element common to the differential devices and co-operating with the first racks thereof to permit movement of the differential devices from a starting position therefor under control of said resilient means and to restore the devices to said starting position, an eliminator stop for each said differential device and supported for movement under control of a record card into the path of said second rack when the latter is in the starting position thereof to prevent movement of the rack from its starting position, a coupling between said eliminator stop and a predetermined one of the stops of said first group whereby on movement of the eliminator stop into the path of the second rack said predetermined control stop is simultaneously interposed into the path of a predetermined one of the abutments of the abutment member on said cage thereby to render the differential device inoperative on operation of the restoring element to permit movement of differential devices under control of said resilient means.

2,731,912
METHOD AND APPARATUS FOR APPLYING RESINOUS OR THERMOPLASTIC COLORS TO OBJECTS

Regis Welsh, Pittsburgh, Pa., assignor to The O. Hommel Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application March 23, 1950, Serial No. 151,366
7 Claims. (Cl. 101—129)



1. A method of printing a non-smearing design of a solid thermoplastic color ink on a ware comprising, providing a porous screen coated with a masking material to form an open mesh design on the screen, placing a thermoplastic printing color ink on the screen to cover the design to be printed, generating and maintaining heat in the design surface of the screen to develop a uniform controlled temperature therein to melt the thermoplastic and to produce a proper viscosity on the screen for the thermoplastic to pass through the screen under a squeegee pressure to develop only a printing film on the ware, placing the ware to receive the printed design under the design of the screen and positively pushing the fluid thermoplastic through the screen to develop a design of the thermoplastic on the ware corresponding to the design of the screen, maintaining the temperature of the ware below the melting point of the thermoplastic to cause the film to set almost instantly to a non-tacky, non-smearing print.

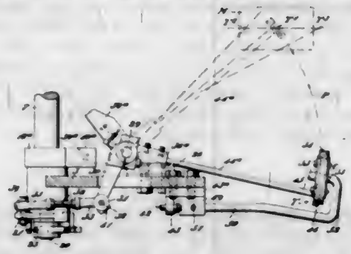
5. A screening apparatus for applying thermoplastic colors to wares comprising, a supporting frame, a fabric screen attached to the frame, masked and unmasked areas on the fabric defining a desired pattern, a ware holder positioned under the screen at the position of the pattern, a series of closely spaced electrical resistance wires contacting the surface of the fabric over the area of the pattern, an electrical terminal connected with said series of resistance wires at each of the opposite sides of the frame, means for supplying electrical power to said heating wires to melt and make fluid a thermoplastic on the screen, and a squeegee mounted on an arm to move over the screen in contact with the thermoplastic to place sufficient pressure on the heated thermoplastic to force a thin film of thermoplastic through the screen to be deposited on the ware.

2,731,913
LABEL DATING MECHANISM FOR LABELING MACHINES

Sidney T. Carter, Worcester, Mass., assignor to Geo. J. Meyer Manufacturing Co., Cudahy, Wis., a corporation of Wisconsin

Application April 28, 1951, Serial No. 223,510
9 Claims. (Cl. 101—305)

1. Apparatus for use in marking the exposed face of a label held in a magazine, said apparatus comprising in combination a rock shaft which rocks back and forth through an arc of limited extent, a stamp holder, means supporting the stamp holder to move back and forth in an arcuate path about an axis which is substantially perpendicular to the plane of the exposed face of the label in the magazine, one terminus of said path being such that when the stamp holder arrives at said terminus, it is registered with the label but spaced from the latter, an inking element located adjacent to the other terminus of said arcuate path, means operative to move said holder in timed relation to the rock shaft, so that while approaching and again in receding from the last-named terminus of said path, a stamp, carried by the holder, makes wiping contact with the inking element, and means including

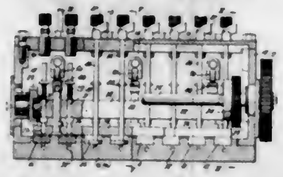


ing a resiliently yieldable part operative to move the stamp holder, while at the first-named terminus of said path, so as to contact a stamp within the holder with the exposed face of the label in the magazine.

2,731,914
INKING MECHANISM FOR PRINTING MACHINES

Thomas Ewart Phythian, Leeds, and William Dudley Lawson, Branhope, near Leeds, England, assignors to R. Hoe & Co. Inc., New York, N. Y., a corporation of New York

Application July 25, 1950, Serial No. 175,672
4 Claims. (Cl. 101—365)



1. For use in a printing machine, a support, a plurality of ink supply units on the support, for supplying ink to an ink roller, and each including a casing having a series of ink conveying ducts each communicating with the roller, a plurality of ink pumps in the casing each communicating with a duct, a drive shaft on the support to operate the pumps to deliver ink to the roller, first control means to regulate the output of each of the pumps individually, second control means for each pump, independently operable to render it inoperative to pump ink through its duct, and comprising a two way valve device movable to one position to direct ink from the pump to a duct, and to another position to return ink from the pump to the casing and to close the duct, and means for quickly detaching any unit from the support and disconnecting its pumps from the drive shaft.

2,731,915
CUSHION FOOT FOR PORTABLE STAMPING MACHINES

Edward S. Garvey, Clayton, Mo.

Application July 12, 1954, Serial No. 442,733
1 Claim. (Cl. 101—368)

For use with a portable stamping machine having a frame provided with an apertured bottom plate, a cushion foot for the underside of said bottom plate, said cushion foot comprising a flat pad of rubber-like material, a set of relatively short cylindrical necks provided integrally at spaced points on the upper surface of said pad and adapted to be received in and frictionally fit the apertures in said bottom plate, a set of frusto-conical heads provided integrally on the respective necks and having relatively wide bottom portions affording keeper shoulders adapted to engage the upper surface of said plate, the upper ends of said heads being smaller in diameter than said necks and said heads being resiliently compressible to facilitate passage thereof through the apertures of said plate during installation, and a set of relatively long cylindrical stems provided integrally at

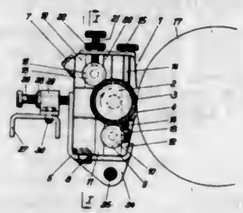


and conforming substantially to the diameter of the upper ends of said heads, said stems affording finger-pieces for pulling said heads through the apertures in said plate during installation and being separable from the heads by tearing after the cushion foot is installed.

2,731,916
DEVICE FOR CLEANING CYLINDERS

Werner Koch, Offenbach (Main), Germany, assignor to Faber & Schleicher Aktiengesellschaft, Offenbach (Main), Germany, a German body corporate

Application December 24, 1952, Serial No. 327,883
Claims priority, application Germany January 4, 1952
5 Claims. (Cl. 101—425)



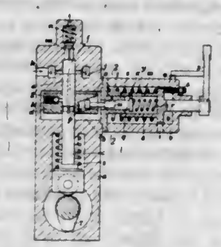
5. In a device for cleaning cylinders, in combination with a cylinder, a liquid container adjacent the said cylinder and a cleaning roller partly submerged in the liquid of said container, a sleeve of liquid-absorbing material on said cleaning roller for contact with the said cylinder, a pressure roll in said liquid container above and in contact with the said cleaning roller, means for adjusting said pressure roll toward and away from said cleaning roller thereby to regulate the quantity of liquid to be taken up by the said cleaning roller, and means for moving said cleaning roller into operative contact with the cylinder to be cleaned.

2,731,917
LIQUID FUEL PUMPS

Fraser Mackie Evans, Acton, London, England, assignor to C. A. V. Limited, Acton, London, England

Application January 21, 1953, Serial No. 332,302
Claims priority, application Great Britain January 25, 1952
4 Claims. (Cl. 103—41)

1. A liquid fuel pump of the kind specified, comprising in combination a body having therein a spill chamber provided with an outlet, a reciprocatory plunger extending through said spill chamber and having a spill passage therein, a sleeve slidable on said plunger for controlling communication between said spill passage and chamber, and a spring-loaded axially movable and rotatable control member engaging said sleeve and co-operating with said outlet so that axial movement of said control member serves to move said sleeve relatively to said plunger, and

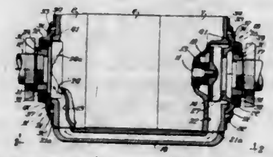


angular movement of said control member serves to vary the effective area of said outlet.

2,731,918
MOTOR PUMP UNIT

Edward J. Schaefer, Fort Wayne, Ind.

Application October 3, 1951, Serial No. 249,565
5 Claims. (Cl. 103—87)

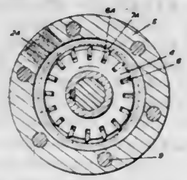


1. A motor pump unit comprising an elongated housing with a generally rounded external contour and having a motor section sealed against the access of pumped fluid thereto, a pump and fluid inlet section at one end of said motor section, and a fluid discharge section at the opposite end of said motor section, a motor in said motor section, an impeller in said pump and fluid inlet section operatively connected to the motor, an elongated manifold mounted at the exterior of said housing at one side thereof and parallel to the axis thereof, and coacting means at the opposite ends of said manifold and said housing for securing the manifold to the housing with the manifold spaced outwardly from the housing intermediate its ends, said manifold having fluid communication at its ends with the end sections of said housing for permitting the passage of pumped fluid therethrough without contact with said motor and said manifold also having transverse curvature to conform generally to the rounded contour of said housing.

2,731,919
PUMP OR MOTOR

Charles Scott Prendergast, Eashing, England, assignor of one-half to Hamilton Gordon, Weyburn, England

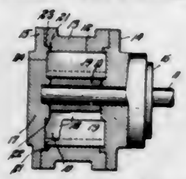
Application June 4, 1952, Serial No. 291,594
2 Claims. (Cl. 103—120)



1. A rotary pump or motor comprising a rotor rotatable within a surrounding stator and an even number of vanes radially slidable in equidistant recesses formed in the rotor, the space between the rotor and the stator bore in front of each vane in the order of rotation of the rotor being freely connected to the space at the bottom of the

pertaining recess, the end of each vane in contact with the stator affording one fixed line of contact with the stator proximate the rear edge of the vane in the order of rotation of the rotor which line does not vary in relation to the rest of the vane as the rotor rotates, the stator bore being formed of two equal diametrically disposed arcs of major radius, two equal arcs of minor radius whose chords are at 90° to those of the arcs of major radius, and four equal joining curves each joining adjacent major and minor arcs, characterised in that each joining curve has an angular length double the angular distance between adjacent vanes and formed with radii that respectively decrease and increase in length from the major and minor arcs according to the square of their angular distance therefrom to a mid point of radius which is the mean of the radii of the major and minor arcs.

2,731,920
ROTARY PUMP
Frank Scognamillo, Ramsey, N. J., assignor to Scognamillo Engineering Company, Bronx, N. Y., a company
Application April 24, 1952, Serial No. 284,110
7 Claims. (Cl. 103—136)



1. A rotary machine of the character disclosed comprising a casing having a cylindrical body portion and end walls cooperatively forming a cylindrical pump chamber, a shaft journaled eccentrically in said cylindrical pump chamber, a rotor carried by said shaft in eccentric relation to said cylindrical pump chamber, the cylindrical body portion of the casing having inlet and outlet ports at opposite sides of said rotor, said rotor having radial slots therein, blades slidingly confined in said slots and having the ends of the same flush with the opposite ends of the rotor, said rotor having annular recesses in the ends of the same about the shaft and intercepted by said slots whereby the inner edges of the blades at opposite ends will be exposed in said annular recesses, a first pair of annular members one between each of said end walls and the adjacent end of the rotor and extending into the annular recess at that end of the rotor, said first pair of annular members engaging said opposite ends of the inner edges of the blades, and a second pair of annular members of larger diameter than said first pair, one between each of said end walls and the adjacent end of the rotor, said second pair of annular members engaging the opposite ends of the outer edges of the blades.

2,731,921
VACUUM AND FLUID TRAPS FOR OIL WELLS
Herman L. Seward, Haynesville, La.
Application October 6, 1952, Serial No. 313,208
3 Claims. (Cl. 103—229)

1. In a trap for use on the lower end of a standing valve having a cylindrical valve seat and a valve element or head in oil wells, the combination which comprises a tubular stem extended from the valve element through the valve seat and having an inverted cup member on the lower end, a tube depending from said cylindrical seat, a plug having an opening therethrough positioned in the lower end of the tube, said plug having a valve seat in the upper end, a valve member positioned to coact with the valve seat for closing the opening through the plug, a cylindrical housing having vertically disposed fluid ports in the lower part thereof extended upwardly from the valve seat of the plug, said cylindrical housing also having slots in the upper part thereof and levers pivotally mounted in the valve member and positioned to extend through the slots in the upper part of the cylindrical housing whereby extended ends of the levers are positioned to be engaged by said inverted cup member where-



in the inverted cup member rests upon the extended ends and the weight of the cup member, valve element and tubular stem urges the ends of the levers downwardly raising the valve member above the seat in the plug opening the valve and wherein the removal of said cup member permits the valve member to drop upon the seat closing the valve.

2,731,922
VEHICLE FOR TRAVERSE ON A MONORAIL SYSTEM
William Muir Robb, West Drayton, England, assignor of one-half to Road Machines (Drayton) Limited, West Drayton, England, a British company
Application April 28, 1953, Serial No. 351,565
7 Claims. (Cl. 105—156)

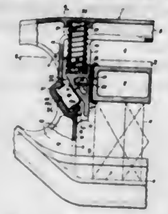


1. A vehicle for traverse on a monorail system wherein a pair of bogie units are turnable in a vehicle frame each of said bogie units having a section of track extending fore and aft on each side thereof, a roller engaging each such track section, said rollers being carried by said vehicle frame, said track sections having inclines extending upwardly toward the mid part of said vehicle frame to effect a positive tilting of the vehicle relative to the bogie units when the track wheels of the bogie units are turned out of alignment with the longitudinal axis of the vehicle.

2,731,923
RAILWAY TRUCK
Glenn F. Couch, Buffalo, N. Y., assignor to The Symington-Gould Corporation, Depew, N. Y., a corporation of Maryland
Application January 9, 1950, Serial No. 137,630
23 Claims. (Cl. 105—197)

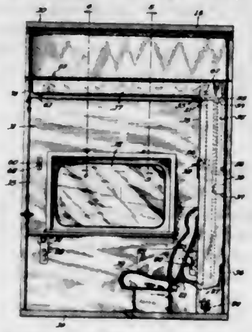
17. In a railway truck of the type having a pair of members movable relative to each other in a plurality of directions, the combination of rollable means carried by one of said members and rollable in one direction only relative thereto, a friction surface movable with said other member, and friction shoe means in frictional contact with said friction surface and in frictional and rolling

contact with said rollable means for snubbing relative movement of said members in one direction while per-



mitting relatively free movement therebetween in the rolling direction of said rollable means.

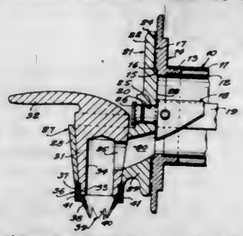
2,731,924
RAILWAY SLEEPING CAR
Harold L. Norby, Chicago, and Basil E. Jones, Flossmoor, Ill., assignors to Pullman-Standard Car Manufacturing Company, Chicago, Ill., a corporation of Delaware
Application February 14, 1951, Serial No. 210,921
15 Claims. (Cl. 105—315)



1. A railway sleeping car having a ceiling and a plurality of walls defining a passenger room, including a first pair of opposite walls establishing a first dimension of the room and a second pair of opposite walls establishing a second dimension of the room, a lower bed having a length substantially equal to said first dimension extending in operative position horizontally lengthwise along said first dimension with its plan projection extending substantially fully along said first dimension and partially across said second dimension and movable to an inoperative position projecting to a level above its operative position level and within said plan projection, an upper bed of substantially the same size as the lower bed movable from an operative position occupying the plan projection of the lower bed on a horizontal plane above the operative position level and below the inoperative position level of the lower bed to an inoperative position on a horizontal plane adjacent said ceiling above said lower bed inoperative position level, positioning means maintaining the upper bed against horizontal displacement and constraining it to move in a substantially accurately vertical path during movement between its operative and inoperative positions whereby the upper bed remains at all times within the plan projection of the lower bed in operative position, and mechanism operatively connected with the upper bed for counterbalancing it in its movement between operative and inoperative positions.

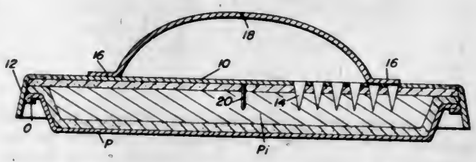
2,731,925
ONE-PIECE BARREL END AND DISPENSER TIP
Thomas Carvel, Hartsdale, N. Y.
Application August 25, 1951, Serial No. 243,671
1 Claim. (Cl. 107—14)

The combination with an annulus forming the end support for two concentric cylinders constituting a congealing chamber in which operates a centrally disposed shaft supporting a scraping and agitating mechanism, of a one-piece structure forming a combination closure for the chamber, an end bearing for the shaft and a valve-controlled dispensing unit, and wherein said one-piece structure constitutes a flange formation adapted for concentric association with said annulus and a valve housing forming a part of the dispensing unit and extending beyond said flange formation, the latter having a central bore forming the end bearing for the shaft, and wherein a downwardly biased passage is provided in the flange formation and connects the interior of the congealing



chamber with said valve housing, and wherein said valve housing has a conical interior, a conical valve body operative therein and having a downwardly opening central passage, a horizontal passage in said valve body connecting its central passage with said downwardly biased passage provided in said flange formation, and wherein the lower end of said valve body extends beyond said valve housing, and a dispensing tip in substantially the shape of an inverted crown removably associated with that lower end of said valve body, the diameter of the upper end of said inverted crown being substantially larger than the diameters of the lower end thereof and the central passage in said valve body.

2,731,926
PIE MARKER
Orville E. Eckhoff, San Antonio, Tex.
Application May 18, 1953, Serial No. 355,630
1 Claim. (Cl. 107—49)

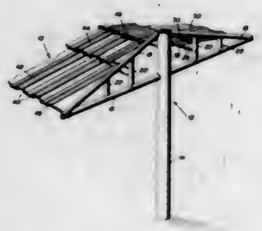


As a new article of manufacture, a pie marker comprising a plate member having a peripheral flange adapted to engage over the rim of a pie pan, a pie puncturing lug projecting downwardly from the center of the plate member, and circumferentially spaced radially disposed rows of spaced marker teeth carried by the plate member, said teeth being flat, pointed and triangular and being struck from said plate member to provide ventilating openings in the plate member, adjacent teeth of each row of teeth being spaced apart an equal distance.

2,731,927
FLEXIBLE INTERLOCKING VENTED AWNING CANOPY
Harvey E. McCain, San Angelo, Tex.
Application December 29, 1952, Serial No. 328,444
3 Claims. (Cl. 108—1)

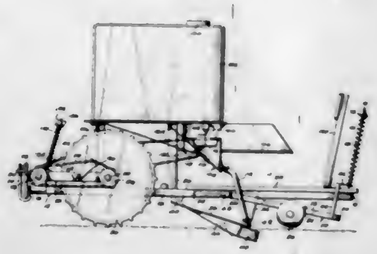
1. A flexible canopy comprising a pair of supports, flexible cables mounted upon and disposed between said sup-

ports, a plurality of elongated panels carried by said cables and forming a roof, said panels being disposed in rows extending longitudinally of said cables, the panels in each row extending transversely of said cables and being disposed in side-by-side relation, said cables positioned below and supporting the undersurface of said



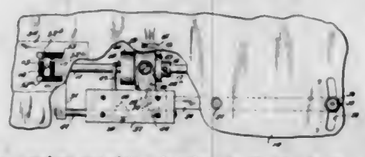
panels, means for adjustably tensioning said cables, detachable means interconnecting said panels and cables for holding said panels on said cables, and means on adjacent side edges of adjacent panels for pivotally securing said adjacent panels together, said interconnecting means being disposed at the midportion of said panels between said pivotal securing means.

2,731,928
TRANSPLANTER
Jonas A. (Jack) Jackson, Lebanon, Tenn.
Application November 14, 1951, Serial No. 256,223
2 Claims. (Cl. 111—7)



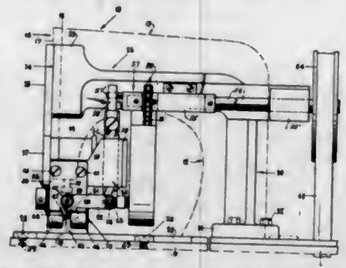
1. A transplanter comprising an elongated frame, means carried by the frame intermediate the ends thereof for opening a furrow in the ground beneath the frame, furrow closing means carried by the frame behind the means for opening the furrow, a ground wheel carried by the frame in advance of the means for opening the furrow, a water tank carried by the frame above the ground wheel, a water receiver carried by the tank above the means for opening the furrow, a water discharge pipe carried by and opening into the water receiver, the pipe having a discharge opening between the means for opening the furrow and the furrow closing means, a shaft mounted in the water receiver for rocking movement about a horizontal axis, a cap fixed to said shaft for rocking movement therewith, a lever arm carried by said shaft at one side of the water receiver, a spring connected at one end to a part fixed to the water tank and connected at its other end to the lever arm holding the cup upright, a valve carried by the water tank above the cup and communicating with the water tank for regulating the flow of water from the tank into the cup, and means driven by the ground wheel and periodically engaging the lever arm for moving said lever against the effort of the spring and tilting the cup.

2,731,929
SEWING MACHINE
Waldemar A. Ayres, Lakewood, Ohio, asisgnor to White Sewing Machine Corporation, Lakewood, Ohio, a corporation of Delaware
Application October 7, 1953, Serial No. 384,734
20 Claims. (Cl. 112—205)



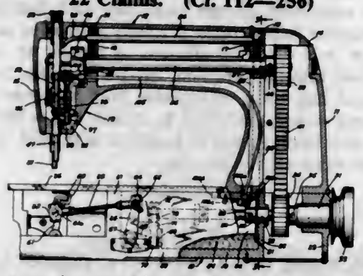
1. In a sewing machine having in the bed plate thereof a feed dog arrangement for feeding the material being sewed to produce straight line stitching therein and mechanism for actuating said feed dog arrangement including a feed shaft beneath the bed plate; a second feed dog arrangement in the bed plate and arranged in predetermined relationship to the first feed dog arrangement, and means operatively interconnecting said second feed dog arrangement with said feed shaft for imparting to it independently of the movement of the first feed dog arrangement reciprocating feeding movement in a direction transverse to the straight line feeding movement produced by the latter to produce zigzag stitching in the material.

2,731,930
PORTABLE THREAD SEVERING ATTACHMENT FOR SEWING MACHINES
Joseph Galkin, New York, N. Y.
Application March 29, 1954, Serial No. 419,491
4 Claims. (Cl. 112—252)



2. In a sewing machine comprising a work-supporting base, a main shaft, a needle, and a feed-dog; a portable thread severing attachment having a base fixed to said work-supporting base rearward of the line of stitching for severing the chaining thread between successively stitched articles, including a bracket having a head and a lateral extension having an upright guideway, a stationary cutting blade fixed to said head extension and having a pivot screw and a guideway in alinement with the line of stitching, a shaft rotatably mounted on said bracket and having an eccentric pin at one end, a link mounted on said eccentric pin, a movable blade pivotally mounted on the pivot screw of said stationary blade and having a substantially horizontal extension and a pin at its free end, spring means mounted on said pivot screw, pressing against said movable blade and biasing said movable blade against said stationary blade, a slide bar mounted in said upright guideway and having a slot at its lower end for receiving the pin on said movable blade and being thereby operatively connected to said movable blade, said slide bar being pivotally connected at its upper end to said link, whereby rotation of said bracket shaft will actuate said movable blade into cutting relation with said stationary blade, and means at the free end of said attachment shaft for rotating said shaft from the main shaft of said sewing machine.

2,731,931
SEWING MACHINE OIL RETURN SYSTEM
John G. Attwood, Oak Park, Ill., assignor to Union Special Machine Company, Chicago, Ill., a corporation of Illinois
Application October 1, 1952, Serial No. 312,503
22 Claims. (Cl. 112—256)



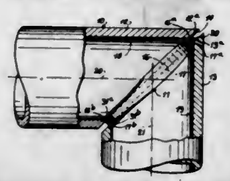
1. In a sewing machine having operating parts to be lubricated, a lubricant reservoir, means for delivering lubricant from said reservoir to said parts and a sump disposed above the highest level of lubricant in said reservoir arranged to collect excess lubricant delivered to said parts, the combination of automatically operable means for returning lubricant from said sump to said reservoir which comprises a conduit extending upwardly from said sump, laterally therefrom and downwardly to said reservoir, the inlet end of said conduit at said sump having a porous plug therein with the lower end of said plug positioned adjacent the bottom of the sump, said plug filling the inlet end of the conduit and being of such density as to provide capillary passages therethrough adapted to lift lubricant from said sump by capillary action into the interior of said conduit and to provide a surface tension sufficient to resist the suction head created by the lubricant in said conduit, and the outlet end of said conduit at said reservoir having a discharge passage of smaller cross sectional area than that of said plug, the lower end of said discharge passage being at a lower level than the lower end of said plug.

2,731,932
WELDING CLAMP
Christian Petersen, De Witt, Nebr., assignor to Petersen Mfg. Co., Inc., De Witt, Nebr., a corporation of Nebraska
Application September 24, 1952, Serial No. 311,233
1 Claim. (Cl. 113—99)



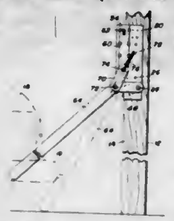
In a welding clamp a pair of pivotally related members, a pair of substantially U-shaped jaw elements formed from flat resilient metallic material and secured at the yoke portions thereof to each of said members with the leg portions of said jaw elements extending forwardly from said members in substantially flat opposed relationship, flat extensions at the free ends of the leg portions of the lower of said jaw elements and downwardly extending portions at the free ends of the legs of the upper of said jaw elements in substantial alignment with said flat extensions for clamping engagement with work supported on said extensions and integral strengthening ribs formed in the legs of each jaw element, said ribs terminating short of said yoke portions to render said legs relatively rigid but permitting independent flexing thereof in each yoke portion whereby at least two work pieces of different thicknesses may be clamped between said downwardly extending portions and said free extensions.

2,731,933
WELDING RING
Stanley L. Phillips, Cleveland, Ohio, assignor to Wedge Protectors, Inc., Cleveland, Ohio, a corporation of Ohio
Application April 30, 1952, Serial No. 285,100
5 Claims. (Cl. 113—111)



1. A welding ring comprising, a metal strip annulus having a substantially elliptical perimetrical shape longitudinally of the strip, the outer longitudinal periphery of the ring having an external ridge projection thereon of substantially narrower width than the strip and lying substantially in the mid-plane of the ring, the segment of the ring at one end of its major axis having side portions on opposite sides of said ridge projection which are divergently inclined relative to said mid-plane and in a direction away from the top of said ridge projection, the segment of the ring at other end of its major axis having side portions on opposite sides of said ridge projection which are divergently inclined in a direction away from the base of said ridge projection and define with said ridge projection a pair of grooves extending longitudinally around the periphery of the last-mentioned segment on opposite sides of said ridge projection, the sides of said ridge projection at the junction of the latter with the strip defining a pair of longitudinal shoulders located on opposite sides of and extending along the base of said ridge projection, said ridge projection extending longitudinally in continuous relation along said outer periphery for the full length thereof and being of a substantially uniform height which is substantially equal to the depth of said grooves.

2,731,934
PARKING GUIDE
Edgar C. Hausmann and Gustav Wille, Detroit, Mich.
Application August 16, 1954, Serial No. 449,902
4 Claims. (Cl. 116—28)

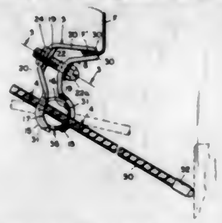


1. A parking guide comprising a bracket mounted on a vertical supporting wall, an elongated indicating member pivotally mounted on said bracket, an elongated arm pivotally mounted on said bracket for movement in a vertical plane perpendicular to the wall and plane of movement of the indicating member and extending into the path of movement of a vehicle moving towards the supporting wall, and means interconnecting said arm and indicating member for moving the indicating member when a vehicle engages and moves the elongated arm.

2,731,935
CURB INDICATOR
Fred J. Aves, Los Angeles, Calif.
Application January 11, 1955, Serial No. 481,150
5 Claims. (Cl. 116—28)

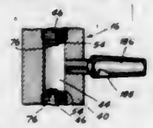
1. In a curb indicator device having bracket means adapted to be attached to an automobile, the combina-

tion with said bracket means of an elongated tubular antenna element carried by said bracket, said antenna element comprising an elongated strip of flat resonant



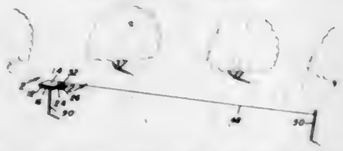
metal formed into a loose spiral presenting a longitudinally extending spiral space separating contiguous whorls of said spiral.

2,731,936
ALARM SYSTEM FOR PNEUMATIC TIRES
Frank Edward Fowler, Athens, Ga.
Application June 12, 1952, Serial No. 293,038
3 Claims. (Cl. 116—34)



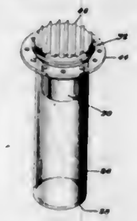
1. An alarm system for the dual pneumatic tires of a vehicle comprising an air pressure responsive valve unit secured to one wheel including a casing, a connection between the valve stem of each tire mounted on each wheel and opposite ends of said casing, each valve stem being connected to one end of said casing, a valve in each end of said casing normally closing off a central chamber from communication with said connections, said valves opening on drop of pressure in the respective tire to which it is connected, and a warning device connected into said central chamber including a whistle mounted on said casing for receiving air directly from said central chamber.

2,731,937
AUDIBLE ALARM ASSEMBLY
Lonzo H. Rhodes, Yakima, Wash.
Application April 19, 1954, Serial No. 424,194
1 Claim. (Cl. 116—87)



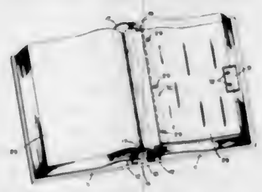
An alarm assembly comprising a housing having upstanding sides defining an open top, a downwardly extending support rod secured on a lower portion of said housing, a cover pivotally secured to said housing at one end thereof for closing said open top, means mounted adjacent an opposite end of said housing for engaging said cover to retain the same in closed position, force transmitting means connected to said first mentioned means for actuating the same to release said cover, an audible alarm mounted in said housing, actuating means in said housing for engaging said alarm, said actuating means being actuated by pivotal movement of said cover away from said housing, said first named means comprising a pivoted latch fixedly mounted in spaced relation to said housing for relative movement thereto, said latch having a latching portion extending in overlying juxtaposed relationship to an edge of said cover, and a spring member engageable with said pivotal latch for urging it into latching contact with said cover, said audible alarm and actuating means including a pan having an open top being carried in said housing, a cap supporting anvil contained in said pan, a spring urged hammer element engageable with the cap on said anvil, a first flap element pivotally supported though overlying said hammer element, a second flap element pivotally supported in spaced relation to said first flap element to overlie an end portion of said first flap opposite the pivot of the first flap, said second flap being engageable with an inner portion of the cover when the cover is closed, and a spring element in said housing and engageable with said cover for urging the same off the housing.

2,731,938
FUEL TANK GAGE
Norton D. Eagon, Grand Prairie, Tex., assignor, by mesne assignments, to Chance Vought Aircraft, Incorporated, a corporation of Delaware
Application September 10, 1953, Serial No. 379,333
6 Claims. (Cl. 116—118)



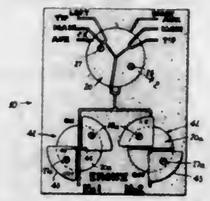
1. A liquid level indicator for an airplane wing fuel tank comprising a cage member having an open base inserted into said tank, a colored float within said cage member to serve as a signal, a transparent closure for the upper end of said cage member having a substantially flat lower surface, and an upper surface substantially flush with the surface of the airplane wing, and a series of parallel prisms integral with the upper surface of said cover each having one plane surface disposed on a plane substantially normal to the lower surface of the cover and a reflecting surface angularly disposed to said one plane surface, whereby a view of said colored float is provided along a line of vision angularly disposed to the reflecting surface of said prisms when the liquid within said tank is substantially at the capacity of said tank.

2,731,939
BINDER DEVICE
James R. Fellabaum, Vandalia, Ohio
Application September 21, 1953, Serial No. 381,423
4 Claims. (Cl. 116—119)



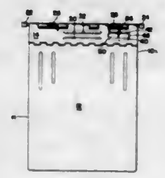
1. A device of the character described comprising a cover having a back piece, a panel affixed to the inner face of said back piece, a plurality of binder rods, and means for detachably connecting said binder rods in spaced parallel relation to said panel, said means including an inwardly extending arcuate rod affixed to each end of said panel, and a latch carried at each end of each of said binder rods, said latches being engageable with said arcuate rods.

2,731,940
PANEL AND DIAL ASSEMBLIES
Edwin A. Neugass, Port Chester, N. Y.
Application April 13, 1953, Serial No. 348,348
11 Claims. (Cl. 116—124)



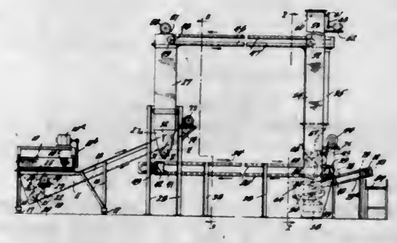
1. A panel and dial assembly comprising a panel having at least one circular opening therein, a circular dial fitting in said opening and rotatable in the latter, said dial and panel having cooperating markings thereon, means preventing axial removal of said dial from said opening with the front faces of said dial and panel being co-planar so that the cooperating markings on the dial and panel may be viewed without parallax, and two slender, elongated members extending axially from said dial at diametrically opposed locations spaced from the axis of rotation of the dial to be grasped in effecting rotation of the dial while providing minimal interference to viewing of the cooperating markings on the dial and panel.

2,731,941
WARNING SIGNAL FOR A CHART HOLDER
Elsie G. Anderson, Seattle, Wash.
Application June 1, 1954, Serial No. 433,466
4 Claims. (Cl. 116—135)



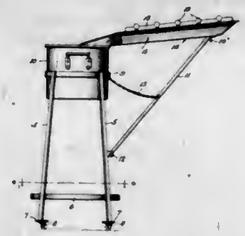
1. A warning signal for a metal hospital chart holder of the type having a cover divided into a short top section and a long bottom section hingedly connected together and having a back with a spring loaded hinged connection to the top section for clamping charts therebetween, comprising: a track at a corner of said top section formed by a pair of parallel spaced apart lips struck out from the material forming said top section and tending to converge as they extend outwardly from the plane of said top section, a pair of contrastingly colored, high light reflective plates positioned side by side between said lips, a sliding plate mounted on top of said colored plates and guided by said lips and manually movable along said track from a first position covering one colored plate to a second position covering the other colored plate, a spring blade secured at one end to the under surface of said upper section, an upstanding stop pin secured to said spring blade intermediate its ends and normally biased by the blade to an upper position between said colored plates blocking passage of said sliding plate between said first and second positions, an opening through said top section and a push button mounted in said opening and secured to the other end of said spring blade and manually depressible to move said stop pin to a lower position permitting said sliding plate to pass.

2,731,942
APPARATUS FOR BREADING SHRIMP
Robert T. Anderson, Brunswick, Ga., assignor to Colter Corporation, Palacio, Tex., a corporation of Texas
Application February 9, 1954, Serial No. 409,102
5 Claims. (Cl. 118—16)



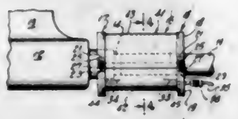
1. A machine for continuously breading shrimp, comprising a bath of liquid batter for moistening the shrimp, means for depositing shrimp in said bath, a pair of horizontally spaced hoppers respectively for applying breading material to the lower and upper surfaces of the moistened shrimp, conveyor means extending between and beneath said hoppers for advancing the moistened shrimp therebetween, a feed conveyor partially immersed in said bath for advancing the shrimp from said bath to said conveyor means, means for continuously supplying breading material to the upper ends of said hoppers, and means including an elevator means for collecting and reconditioning surplus breading material received by said conveyor means from said hoppers for return to the upper ends of said hoppers.

2,731,943
DEVICE FOR USE IN GLAZING DOUGHNUTS
Clayton D. Randall, Ironwood, Mich.
Application March 18, 1954, Serial No. 417,142
1 Claim. (Cl. 118—31)



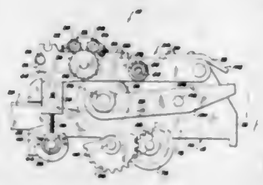
In combination, a round pot for holding heated doughnut glazing material, an annular pot supporting band engaging about the pot, supporting legs fixed to and extending downwardly from said band, casters on the lower ends of said legs, a ring-shaped base fixed to said legs adjacent the lower ends thereof, a draining pan formed with a flat bottom and upwardly divergent sides, an upwardly divergent outer end wall, a semi-circular flange at the inner end of said bottom engaging over the rim of the pot, an upwardly extending elongated bar fixed to each side and formed with spaced notches, a plurality of transversely disposed doughnut supporting rods seated in said notches, a cleat fixed to the lower side of said bottom adjacent the outer end thereof, a U-shaped draining pan support having the bight thereof engaging said cleat, a pair of ears fixed to one pair of said legs, means pivotally securing the lower inner ends of said support to said ears, and a pair of chains connected between said band and the parallel sides of said support.

2,731,944
HOUSING FOR REMOVABLE ATTACHMENT TO A SHAFT
John P. Francis, Haverhill, Mass.
Application June 30, 1952, Serial No. 296,533
2 Claims. (Cl. 118—58)
(Granted under Title 35, U. S. Code (1952), sec. 266)



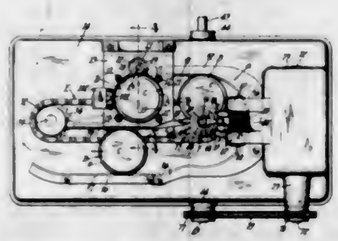
1. A housing for removable attachment to a shaft, said housing comprising a pair of split-ring assemblies in axial alignment and in axially-spaced relation, each split-ring assembly including a first ring half and a similar second ring half assembled in mirror-image relation to said first ring half, means for detachably fastening said first and second ring halves in assembled relation, a pair of baffle plates extending toward each other from the surfaces of the bottom ring halves facing each other, inlet means in one of said split-ring assemblies; a cover assembly including a first shell forming substantially a half cylinder, a second shell forming a cylinder of slightly more than 180° arc, said shells being of different radii, said shells being coaxially and rotatably mounted on said split-ring assemblies, said shells being independently mounted on said split-ring assemblies, said covers being arrangeable in closed position with the covers in overlapping complementary relationship to form a tubular enclosure, said covers being rotatable relative to each other into open position with said covers along one side being withdrawn from each other to provide access from the outside to the inside of said cover assembly.

2,731,945
GLUING MACHINE FOR SHEET MATERIAL
Charles F. Schaefer, Stratford, Conn.
Application March 19, 1954, Serial No. 417,470
8 Claims. (Cl. 118—246)



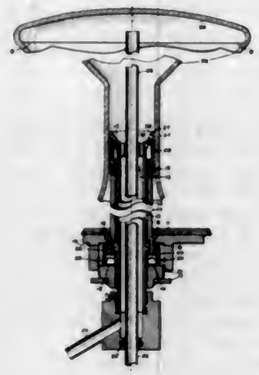
1. A gluing machine comprising a main frame, a tank for adhesive supported on said main frame and removable from the latter, a tank roller, means rotatably supporting said tank roller on said main frame so that the tank roller normally dips into the contents of said tank, an auxiliary frame swingably mounted on said main frame and rotatably carrying a gluing roller, said auxiliary frame being swingable between an operative position in which said gluing roller contacts said tank roller and a raised, cleaning position, and means operative to lift said tank roller out of said tank in response to swinging of said auxiliary frame to its raised cleaning position and to hold the tank roller in an elevated position so that sufficient clearance is provided therebeneath to permit withdrawal of said tank from said frame.

2,731,946
MACHINE FOR TREATING ANNULAR AREAS OF MAGNETIZABLE CIRCULAR ARTICLES
Stellan Birkland, San Francisco, Calif., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application June 2, 1954, Serial No. 433,961
19 Claims. (Cl. 118—321)



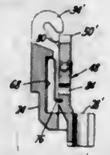
1. In a machine for treating an annular area of a magnetizable circular article, the combination of means for treating said article, means for continuously advancing said article along a fixed path of travel underneath and in alignment with said treating means for a full treating cycle, and a stationary rail disposed adjacent said path of travel, said stationary rail being magnetized for attracting the circular periphery of said article thereto to cause said article to continuously roll along said rail beneath said treating means during said treating cycle without substantial slippage, whereby said annular area of said article is progressively presented to said treating means for treatment as said article rolls along said magnetic rail below said treating means.

2,731,947
LINE-CONTACT SEALING FIXTURE
Arthur J. Harder, Jr., Franklin Park, Ill., assignor to The Rauland Corporation, a corporation of Illinois
Application April 4, 1952, Serial No. 280,693
5 Claims. (Cl. 118—500)



1. A line-contact sealing fixture comprising: a mounting member; a sealing member affixed to said mounting member, said sealing member including a tubular base portion having a free end constituting a sealing rim and further including a flange portion joined to and depending inwardly from said tubular base portion, the external surfaces of said tubular portion and said flange portion joining at an angle no greater than 45 degrees at said sealing rim; and a piston adjustably mounted in coaxial relation with said sealing member in position to engage an internal surface on said flange portion thereof.

2,731,948
WORK PIECE HOLDER
Raymond E. Fleming, Philadelphia, Pa., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application June 20, 1952, Serial No. 294,737
14 Claims. (Cl. 118—503)



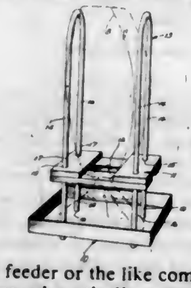
1. In an article holder including a support member, a body member, and a combined latch and jaw member, first cooperating means on said support and body members detachably mounting said body member on said support member, second cooperating means on said body and latch members detachably mounting said latch member on said body member, said latch and jaw member having an operative position relative to said body member for preventing detachment of said body member from said support member and for gripping an article, and resilient means biasing said latch and jaw member into said operative position and preventing unintentional detachment of said latch and jaw member from said body member.

2,731,949
PARAKEET MIRROR PERCH
Marcel M. Arnould, East Orange, N. J.
Application April 30, 1954, Serial No. 426,676
7 Claims. (Cl. 119—26)



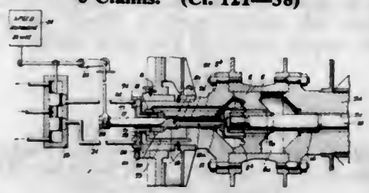
1. A parakeet mirror perch comprising a bracket adapted to be vertically mounted upon a wall, said bracket having vertical and horizontal portions, a perch horizontally supported from said bracket, a dropping tray spaced vertically beneath the perch on a horizontal portion of the bracket, means on said tray for releasably engaging said horizontal portion of the bracket, a mirror mounted on the vertical portion of the bracket and means for mounting said bracket vertically upon a wall.

2,731,950
ANIMAL FEEDER
Charles L. Davidson, Lithonia, Ga.
Application November 13, 1953, Serial No. 391,904
10 Claims. (Cl. 119—52)



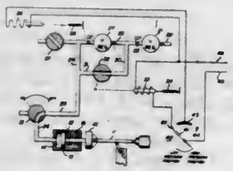
1. An animal feeder or the like comprising a tray, a bag support plate, spaced vertically extending support means secured at the periphery of said bag support plate for holding said bag support plate in substantially a horizontal position in vertically spaced relation to said tray, said plate having a relatively small opening adapted for alignment with an opening in a feed bag, and means integral with said support means extending above said bag support plate for holding a feed bag in a vertical position with its bottom on the bag support plate whereby feed will leave an opening in the bottom of said bag and drop through the opening of said plate into said tray.

2,731,951
FLUID TRANSFER CONNECTION BETWEEN A FIXED FLUID CONDUIT AND A ROTATING CYLINDER
Henri Peyrin and Severin Xavier Casacci, Grenoble, France, assignors to Etablissements Neyrpic, Grenoble, France, a corporation of France
Application July 19, 1951, Serial No. 237,632
Claims priority, application France July 25, 1950
6 Claims. (Cl. 121—38)



1. A coupling for transferring fluid, comprising a fixed conduit for said fluid, a rotatable member having a passage for said fluid, a coupling member, one of said members having a cylindrical recess to rotatably receive a cylindrical projection on the other member, said recess and projection being concentric with the axis of rotation of said rotatable member, one of said members having a groove therein concentric with said axis and covered by the other member, said coupling member having a fluid passage extending therethrough, the two ends of said passage being in fluid communication with said fixed conduit and said groove respectively, stationary bearing means encircling said rotatable member with a radial clearance relatively large as compared to the radial clearance between said rotatable member and said coupling member, and a projection on said stationary bearing means, said projection extending radially inward, said coupling member having an aperture larger than said projection for receiving the same, said projection and said aperture cooperating to fix said coupling member against rotation while permitting said coupling member to move relative to said bearing means throughout the range permitted by said clearances so that substantially no stress can be transmitted between said rotatable member and said fixed member, through said coupling member.

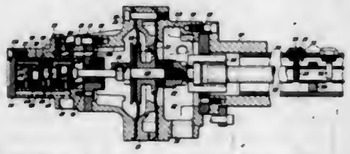
2,731,952
FLUID SYSTEM HAVING SELECTABLE FLUID OPERATING PRESSURES
Ferdinand W. Szabo, Maple Heights, Ohio
Application September 26, 1951, Serial No. 248,431
4 Claims. (Cl. 121—38)



1. Control means for controlling flow of fluid from a pressure source and selectively applying high and low

pressure to a chamber, said control means comprising first conduit means connecting said pressure source to said chamber, said first conduit means comprising a fixed fluid path and a manually operated on-and-off valve in said fixed fluid path, a pressure reducing valve in said first conduit means to admit fluid of a pressure lower than said pressure source to said chamber through said first conduit means, by-pass conduit means connected in parallel with said pressure reducing valve, a control valve in said by-pass conduit means, electrical control means to actuate said control valve to open and closed positions, said control valve in said open position admitting fluid to said chamber of a pressure higher than that admitted to said chamber by said pressure reducing valve, exhaust means under control of said electrical control means and communicating with said chamber to momentarily exhaust fluid therefrom to reduce the pressure therein as said control valve is being actuated by said electrical control means from open to closed position, and said electrical control means comprising separately energized circuits to insure that said exhaust means is open at a time when said control means is closed, and manually operable contact means to separately energize said circuits.

2,731,953
HYDRAULIC OSCILLATORS
Harold Eric Balliol Scott, Weybridge, England
Application December 22, 1950, Serial No. 202,167
2 Claims. (Cl. 121—157)



1. In a hydraulic motor: a member reciprocable by the application of a pressure differential alternately on opposite sides thereof; a valve mechanism comprising a casing having inlet and discharge ports, a sleeve valve reciprocable within said casing, a pilot valve reciprocable within said sleeve valve, said sleeve valve having means coacting with the inlet and discharge ports of said casing for alternating said pressure differential between opposite sides of said member, said sleeve valve having two pairs of inlet and discharge ports coacting with said pilot valve for connecting opposite ends of the interior of said sleeve valve alternately with the inlet and discharge ports of said casing; means producing reciprocation of said pilot valve within said sleeve valve as a concomitant of the reciprocation of said member, said pilot valve having spaced lugs fitting the interior of said sleeve valve, said lugs being connected by a portion of reduced diameter, the length of said lugs and the spacing of each pair of ports in said sleeve valve being so proportioned that during advance of said pilot valve within said sleeve valve in either direction, the discharge port of the pair of ports toward which the lug advances, is closed before the inlet port of such pair is opened, whereby continued advance of said pilot valve moves the sleeve valve, within said casing in a direction opposite to that of the advance of the pilot valve.

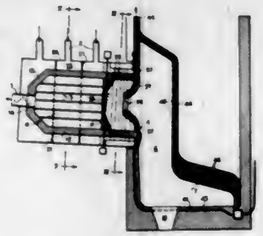
2,731,954
DIFFERENTIAL FLUID PRESSURE MOTORS
William Edward O'Shei, London, England
Application January 12, 1953, Serial No. 330,787
Claims priority, application Great Britain January 18, 1952
5 Claims. (Cl. 121—186)

1. An automatic valve for a differential fluid pressure motor, comprising a valve chamber having a valve seating, and an automatic valve mechanism within said valve chamber consisting of a semi-rotary valve having a valve face and a pair of spaced ears formed integrally therewith and made from a synthetic rubber having a degree of flexibility such that the ears can flex relative to said valve face, said valve being arranged so that said valve



face can move over said valve seating between two limiting positions, a kicker adapted to engage said ears to move said semi-rotary valve between said two positions, and means for actuating said kicker including an over-centre spring mechanism to snap the valve quickly from one limiting position to the other.

2,731,955
PULVERIZED COAL FURNACE
Emil Lenhart, Bonn, and Johann Zaoralek, Essen, Germany, assignors to Firma Steinkohlen-Elektrizitat Aktiengesellschaft, Essen, Germany
Application October 4, 1951, Serial No. 249,654
Claims priority, application Germany October 5, 1950
2 Claims. (Cl. 122—336)

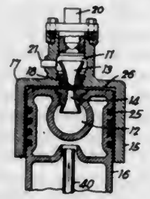


1. A combustion apparatus for pulverized fuel comprising a substantially cylindrical combustion chamber having a cyclone burner fired first portion, said first portion having a circumferential wall and secondary air admission means equally distributed all around and over the whole length of said wall for cooling said first portion exclusively by secondary combustion air, the longitudinal axis of said combustion chamber being substantially horizontal and declining somewhat in the general direction of the flow of the combustion gases, said combustion chamber having a second portion having a water-cooled circumferential wall, and guide means for the burning gases disposed in said combustion chamber between said first and said second portion, said second portion having a rear wall and openings in said rear wall affording passage of the hot combustion gas to its place of use and flow of slag out of said second portion.

2,731,956
INTERNAL COMBUSTION ENGINE
Heinrich Schneider, Kittredge, Colo.
Application August 12, 1952, Serial No. 303,985
26 Claims. (Cl. 123—32)

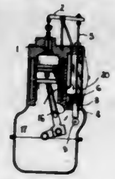
1. An internal combustion engine comprising a power cylinder and a piston reciprocable therein, the combination of a precombustion chamber into which the fuel is injected, and an ante-combustion chamber, each having a nozzle, the orifice of each nozzle connecting its respective chamber with the cylinder, the nozzles being in spaced substantially coaxial relation with the mouths of said

nozzles arranged in such close proximity that the major portion of the fuel of the jet of fuel, air and gas from



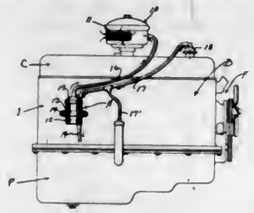
the nozzle of either chamber can enter the opposite chamber through the orifice in its respective nozzle.

2,731,957
VALVE MECHANISM SILENCING DEVICE
Ian H. Abercrombie, Calgary, Alberta, Canada
Application November 24, 1952, Serial No. 322,177
1 Claim. (Cl. 123—90)



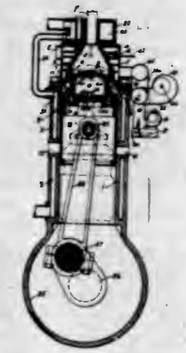
A preloader device for the silencing of the valve mechanism noise in overhead internal combustion engines adapted to be situated between the lower end of the associated push rod and the upper end of the associated cam follower, said preloader device consisting of a substantially cylindrical body portion, a concavo-convex head on said body portion, a horizontal flange extending outwardly from said head, the concave portion of said head constituting a cup for receiving the lower end of the associated push rod and a breather hole situated at the bottom of said cup and extending through said head to the interior of said body portion, said preloader device being submerged in an oil bath, the base of said body portion being spaced above the associated cam follower actuating said push rod, and spring means reacting between the underside of said flange and said cam follower, whereby said push rod is in contact with the base of said cup.

2,731,958
MOTOR MOISTURE FILTER AND FUME CONTROL
Arthur C. Robley, Milwaukee, Wis., assignor of forty-nine per cent to Elmer J. Oleniczak and fifty-one per cent to Frank J. Kaczorek, both of Milwaukee, Wis.
Application January 27, 1953, Serial No. 333,559
1 Claim. (Cl. 123—119)



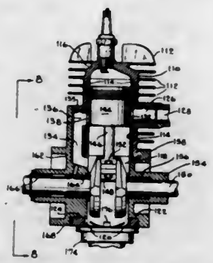
A crank case ventilated apparatus, including in combination, a condenser secured to the internal combustion engine, said condenser having an outer body portion opened at one end, a cover for said opened end, an inner container carried by said cover, said inner condenser extending into the outer condenser when said cover is in its proper position and having communication with said outer container through an opening in the lower portion of said inner container, a series of baffles in said inner container for directing fluid downward, a conduit providing communication between the crank case of the internal combustion engine and said outer container, a conduit providing communication between the air cleaner of the internal combustion engine and said inner container, and an opened drain tube communicating with the bottom of said outer chamber, whereby fumes and moisture laden air withdrawn from the crank case will have the moisture condensed and removed and clean air delivered to the air cleaner.

2,731,959
INTERNAL COMBUSTION ENGINE
Herbert J. Kratzer, St. Louis, Mo.
Application December 5, 1951, Serial No. 259,943
16 Claims. (Cl. 123—142.5)



1. In an internal combustion engine, a cylinder, a water circulating cooling system for the major portion of the cylinder, and an air circulating heating system for the upper end of the cylinder.

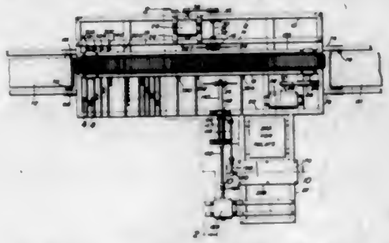
2,731,960
INTERNAL COMBUSTION ENGINE WITH DIE CAST BLOCK
Ralph N. Kircher, West Bend, and Herman D. Palmer, Hartford, Wis., assignors to West Bend Aluminum Co., West Bend, Wis., a corporation of Wisconsin
Application October 29, 1952, Serial No. 317,512
4 Claims. (Cl. 123—195)



1. In an engine, the combination in a single casting of: a cylinder with external radially extending cooling fins and an internal bore, said cylinder having oppositely related inlet and exhaust chambers unobstructedly opening laterally outwardly of said cylinder; a head with external longitudinally extending cooling fins; a crank case having walls and a bottom defining an interior unobstructedly opening downwardly from said cylinder bore and crank case interior, said crank case bottom having an opening large enough to permit the insertoon of a piston into said

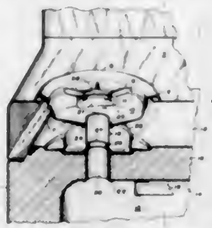
bore; said cylinder having fuel transfer passage extending from the interior of said crank case to said inlet chamber; said crank case wall having a bearing cage opening large enough to permit a crankshaft to be inserted longitudinally into said crank case.

2,731,961
SLATE TRIMMING MACHINE
Fernand Van de Ponseele and John D. Williams, Arvonia, Va.
Application October 9, 1953, Serial No. 385,054
8 Claims. (Cl. 125—23)



1. A slate trimmer comprising a frame, a conveyor, means to firmly retain a slate chip on said conveyor, a rotary trimming knife journaled on said frame and fixed in proximity to one side of said conveyor, said trimming knife rotating in a plane parallel to the side of said conveyor, mounted on said frame, a rotary trimming knife journaled in said carriage for rotation in a plane parallel to the plane of said first-mentioned trimming knife, means for moving said carriage toward or away from said conveyor, selector switches operable to determine the maximum standard rectangle in a slate chip carried by said conveyor, said selector switches being operable to energize said moving means, said selector switches having primary corner responsive switches to locate the maximum corners of a rectangle and subtractor switches to reduce the rectangle in response to concavities in the sides of a chip, said switches each including an air nozzle and a movable contact supported by a blast of air from said nozzle.

2,731,962
OVEN VENT
Joseph J. Woodburn, Cincinnati, Ohio, assignor to Avco Manufacturing Corporation, Cincinnati, Ohio, a corporation of Delaware
Application November 28, 1952, Serial No. 322,844
3 Claims. (Cl. 126—21)



1. In combination in a range, an oven within the range, a work surface located above said oven, said work surface defining a surface burner opening directly above said oven, a surface burner disposed within the surface burner opening, an apertured reflector shield disposed closely beneath said surface burner, said surface burner including a heating means and a medallion centrally disposed above the aperture of said reflector shield, an oven vent comprising a vent pipe including a lower section and a removable upper section, said lower section being in communication with said oven and being disposed vertically below and in alignment with said medallion, an annular drip pan, said pan being integrally secured to and surrounding said upper section of said vent pipe, said upper section being disposed in vertical alignment with said lower section, said medallion being disposed in covering relationship above the upper end of said upper section, said upper section projecting with clearance through the aperture of said reflector shield to a point directly beneath said medallion, whereby vapors from said oven may pass through said vent to the region of said surface burner, said medallion preventing spillage from entering said vent, such spillage being directed by said medallion to said reflector shield by which it is directed to the exterior of said upper section and to said drip pan.

2,731,963
AIR-VENT MEANS FOR MEDICAL CASTS
Ferdinand Blank, Mount Clemens, Mich.
Application November 17, 1954, Serial No. 469,526
2 Claims. (Cl. 128—91)



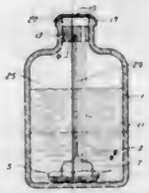
1. A ventilating nipple for surgical casts comprising: a hollow conically shaped stem having an enlarged head on the lower end thereof and a sharp point on the upper end thereof; a plurality of serrations on the outer surface of the stem and adjacent the lower end theerof; and, a plurality of radially disposed passages on the lower surfaces of the enlarged head and communicating with the hollow inside of the stem.

2,731,964
AMPOULE FOR CLEANING HYPODERMIC NEEDLES
Hans Emrich, Eschwege, Germany, assignor to Luise A. K. Theune, Elmont, N. Y.
Application September 14, 1954, Serial No. 455,944
6 Claims. (Cl. 128—218)



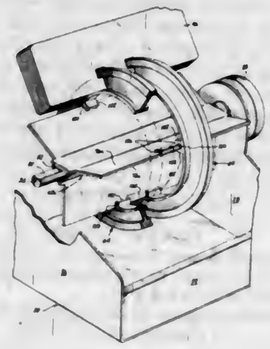
1. A cylindrical ampoule which comprises a slidable rubber plunger at one end, a rubber stopper at the other end, and compression means for separating the plunger and the stopper.

2,731,965
PHARMACEUTICAL DISPENSER
Robert H. Haralson, Jr., Maryville, Tenn.
Application September 26, 1952, Serial No. 311,749
9 Claims. (Cl. 128—272)



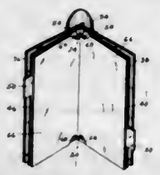
1. A pharmaceutical dispenser comprising a solvent container, a closure for said solvent container, an air conduit through said closure to the bottom of said solvent container, a sealed solute container within said solvent container, means for shock rupture of the wall of said solute container in juxtaposition to said solute container and extending through said solvent container closure, and a gas-tight sealing element covering said solvent container closure and that portion of said rupture means extending therethrough.

2,731,966
ROTARY CARD-FILING DEVICE
Hildaur L. Neilsen, Metuchen, N. J., assignor to Zephyr American Corporation, New York, N. Y., a corporation of New York
Application March 26, 1953, Serial No. 344,749
8 Claims. (Cl. 129—16)



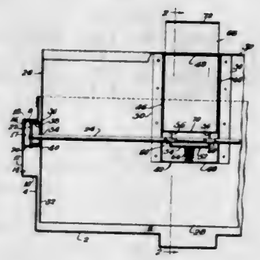
1. In a rotary card-filing device, a rotatable shaft, means rotatably supporting said shaft, a wheel mounted on said shaft and fixed against rotation relative thereto, a plurality of substantially circular bead rings fixedly mounted on said wheel and a plurality of cards engaged by said bead rings, said wheel being constituted of a plurality of substantially identical segments, each segment comprising an intermediate longitudinally extending hub portion engaging said shaft and an outer longitudinally extending fin portion integral with said intermediate portion and extending radially outwardly therefrom on each side thereof, the fin portions of adjacent segments being in parallel face-to-face contact, and said bead rings being annuli snugly surrounding said fin portions and each comprising a pair of internal adjacent lugs extending radially inwardly therefrom and frictionally engaging opposite side surfaces of a pair of said face-to-face fins.

2,731,967
NOTE BOOKS
Charles F. Allison, Chicago, Ill.
Application July 16, 1952, Serial No. 299,170
6 Claims. (Cl. 129—18)



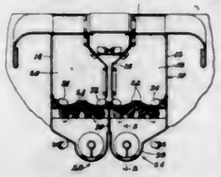
1. A loose leaf note book that comprises a front cover, a rear cover, a resilient binding element, confining surfaces on said front and rear covers in the form of passages extending through said covers that loosely surround and receive said resilient binding element, notched leaves, and alternated notches and projections on the rear edges of said front and rear covers, said front cover and the projections thereon being substantially flat, said rear cover and the projections thereon being substantially flat, the notches and projections on said rear cover registering with the projections and notches on said front cover, said projections and said covers being stiff whereby separating movement of the front edges of said front and rear covers will cause said projections on the rear edge of said front cover to move into the notches in the rear edge of said rear cover and will cause said projections on the rear edge of said rear cover to move into the notches in the rear edge of said front cover to enable said projections to act as a hinge, said confining surfaces being intermediate said projections and the front edges of said front and rear covers, said resilient binding element extending between said confining surfaces and spanning the space between said front and rear covers and biasing said front and rear covers together at said confining surfaces, said notched leaves normally being held in assembled relation with said front and rear covers by the lodging of said resilient binding element in the notches of said notched leaves, said resilient binding element being extensible and said resilient binding element being movable relative to said confining surfaces to permit said covers to be rotated to a position one hundred and eighty degrees apart, said resilient element being held in assembled relation with said front and rear covers by said surfaces during rotation of said covers and during the insertion and removal of leaves.

2,731,968
FILING CABINET DRAWER AND FOLLOWER BLOCK THEREFOR
Joseph A. Cellini, Chicago, Ill.
Application February 28, 1952, Serial No. 274,009
1 Claim. (Cl. 129—30)



In a file drawer having spaced side walls and a bottom, a follower disposed within the drawer, a rack provided on each side wall, a shaft journaled on the follower and extending between the side walls, gears fixed on the ends of the shaft in meshing engagement with their respective racks, a latch supported on the follower for reciprocative movement transversely of said shaft between a shaft locking position and a shaft release position and having two spaced upwardly projecting bifurcated arms providing U-shaped recesses to receive said shaft, the upper ends of said recesses being enlarged to rotatably receive said shaft when the latch is in its shaft release position, portions of said shaft adjacent each arm having diametrically opposed flat surfaces to be slidably and non-rotatively engaged within the lower ends of said recesses when the latch is disposed in its normal shaft locking position, a latch actuating member on the follower operable to move the latch downwardly from its shaft locking position to its shaft release position, said member having a portion engaged against the upper ends of said arms to close the recesses therein, and resilient means to yieldably resist movement of said latch from its shaft locking position to its shaft release position.

2,731,969
CORN HUSKER HAVING SHELLED CORN SEPARATOR
Joe H. Hoeksema, Des Moines, Iowa, assignor to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa
Application November 7, 1951, Serial No. 255,256
4 Claims. (Cl. 130—5)



2. In corn husking mechanism having a husking bed for receiving unhusked corn ears and including husking devices for removing husks from such ears and for discharging such husks and incidental shelled corn downwardly through the bed, the improvement comprising: a husk-receiving trough disposed below the bed for receiving husks and having a closed end and an opposite open end; a husk-conveying auger rotatable in the trough to move husks toward the open end of the trough and having opposite end portions respectively proximate to the ends of the trough; said trough being perforated adjacent its open end to permit such shelled corn to sift therethrough; bearing means coaxial with the auger at only the closed end of the trough for supporting the proximate end of the auger; and means running lengthwise of the trough and secured to and upstanding from the interior of the trough in the zone of the perforations and below the auger and providing angularly spaced ribs on which the periphery of the auger rides in radially spaced relation to the bottom of the trough at the open end of the trough.

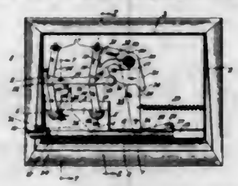
2,731,970
BEAN AND PEA POD SPLITTER
Fred S. Hughes, Augusta, Ga.
Application February 26, 1954, Serial No. 412,921
3 Claims. (Cl. 130—30)



1. A bean and pea pod splitter comprising an upstanding support member having an inwardly and longitudinally convergent feed passage, a cutting blade secured to said support member and projecting longitudinally in the narrow inner portion of said passage, a guide arm pivoted in said passage opposite said blade for rotation around an axis normal to the plane of said blade, and spring means urging said guide arm toward said blade, whereby said arm acts to hold a pod against the blade as said pod is passed inwardly through said passage between said arm and the blade.

2,731,971
CIGARETTE MAKING MACHINE
Karl Kastner, Montreal, Quebec, Canada
Application June 4, 1952, Serial No. 291,698
3 Claims. (Cl. 131—70)

1. In a cigarette making machine of the type having a tobacco compacting member movable within a tobacco receiving chamber to and from a tobacco compacting position, a pair of toggle joints and a link pivoted on said joints for actuating said tobacco compacting member to and from said compacting position; a manually operated axle, a cam secured to said axle for displacing said link and with the outer cam edge of which one end of said link is in riding contact, the outer edge of said cam being defined by a curved recess extending inwardly towards said axle and in substantial alignment with a radius of



said axle, a circular portion co-axial with said axle and merging with one curved side of said recess and a curved finger forming the opposite curved side of said recess, said finger extending to and terminating at a point outwardly spaced from the point where the said circular portion merges with said first named side of said recess whereby rotation of said cam will cause said one end of said link to successively engage said circular portion and said recess of said cam.

2,731,972
COVER DEVICE
Virgilius Joseph Braun, Los Angeles, Calif., assignor, by mesne assignments, to Hughes Aircraft Company, a corporation of Delaware
Application January 19, 1953, Serial No. 332,030
2 Claims. (Cl. 135—5)



1. A cover device adapted for disposition over articles to be protected comprising, in combination: a hub member; a plurality of flexible rods cylindrical in cross section, having ends thereof secured to a peripheral portion of said hub member and normally biased for disposition radially outwardly therefrom, said rods being adapted for flexation to establish a generally conical frame structure; laterally disposed notches in each of said rods adjacent free ends thereof remote from said secured ends; an unsecured protective cover positioned on said rods, said cover having a configuration conforming to said generally conical frame structure established by said rods; a resilient banding member having free ends disposed about said protective cover and overlying said notches in said rods for maintaining said rods in a flexed position and securing said cover thereto; and an electrically fusible link connected to said ends of said banding member for maintaining said ends together, said rods being adapted for flexation toward said normal radial position thereof upon fusation of said link to effect removal of the cover and rods from said article being protected.

2,731,973
TILTABLE UMBRELLA
Alice L. Roth and James C. Witty, Troy, Ohio, assignors to The Troy Sunshade Company, Troy, Ohio, a corporation of Ohio
Application June 8, 1953, Serial No. 360,078
13 Claims. (Cl. 135—20)

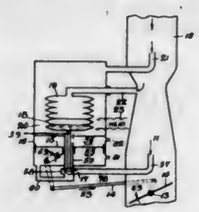
1. A tiltable umbrella having a canopy adapted to be supported at different angles comprising an upper shaft

to which the canopy is attached, a lower shaft, means for supporting said lower shaft in predetermined fixed relation at a substantial angle to the vertical, a guide member rotatably mounted on said lower shaft and angularly adjustable to different positions with respect thereto, and



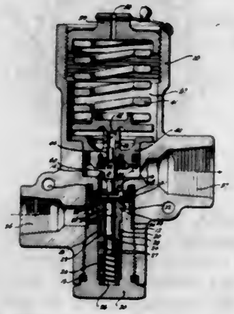
means connecting said guide member to said upper shaft to support said upper shaft in different angular positions while providing for the tilting thereof and of said canopy in response to angular adjustment of said guide member upon said lower shaft.

2,731,974
CONSTANT WEIGHT FLOW FLUID FLOW CONTROL VALVE
Rudolph Ernest Krueger III, Burbank, Calif.
Application June 5, 1951, Serial No. 230,004
22 Claims. (Cl. 137—80)



1. In a mechanism for controlling fluid flow to a selected weight flow rate, comprising: a flow duct; a throttle valve therein; a servomotor for actuating said valve to vary the flow through said duct; control means comprising a housing defining a pressure chamber, means in said duct for registering the total pressure including static pressure and velocity pressure of the fluid flowing in said duct and for transmitting said total pressure to said pressure chamber, a pair of pressure sensitive elements in said pressure chamber, both subjected externally to said total pressure therein, means for registering said static pressure and transmitting it to the interior of one of said elements to cause the same to respond to changes in velocity pressure as the differential between said total and static pressures, the other of said elements being a closed cell responding directly to changes in said total pressure, said elements being arranged in series in an assembly one end of which is mounted to said housing and the other end of which is free to register changes in the length of said assembly as the cumulative deflections of both said elements; and means for utilizing movements of said free end of the assembly to control the action of said servomotor to operate said throttle valve so as to maintain the rated weight flow.

2,731,975
FLUID PRESSURE REDUCING AND REGULATING VALVE
Wayne S. Boals, Los Angeles, Calif., assignor to Hughes Tool Company, Houston, Tex., a corporation of Delaware
Application February 6, 1952, Serial No. 270,209
4 Claims. (Cl. 137—116.5)

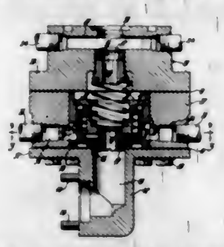


1. In a fluid-pressure reducing and regulating valve having inlet and outlet pressure chambers with a connecting passageway, a spring-actuated valve adapted for closing said passageway, a spring-loaded piston having an exhaust port and adapted for movement in response and proportion to fluid-pressure in the outlet chamber, and means responsive to such piston movement for maintaining the magnitude of such fluid-pressure between preselected minimum and maximum values having a fixed difference, said means comprising: a control element interconnecting the spring-loaded piston and the spring-actuated valve such that the force of the piston loading-spring effects a closed condition of the exhaust port and an open condition of the connecting passageway while fluid-pressure in the outlet chamber is less than the preselected minimum value, and such that movement of the spring-loaded piston is accompanied by movement of the spring-actuated valve for effecting a closed condition of said passageway while maintaining the closed condition of said exhaust port when outlet chamber pressure equals the preselected minimum value; said control element being constructed to respond to fluid-pressure such that the closed condition of said exhaust port is maintained by fluid-pressure in the outlet chamber after the passageway-closing action of the spring-actuated valve; and means associated with the connection between said control element and the spring-actuated valve for effecting an open condition of the exhaust port when the spring-loaded piston has moved in response and proportion to fluid-pressure in the outlet chamber having a value exceeding the preselected maximum, said last named means being characterized by its ability to permit a fixed amount of free relative movement of the control element with respect to the spring-actuated valve to provide a fixed difference between the fluid-pressure required to effect closure of the connecting passageway and the fluid-pressure required to open the exhaust port, and by its ability to permit said control element to position itself such that reclosure of the exhaust port is effected when fluid-pressure in the outlet chamber has decreased to a value substantially equal to the preselected minimum.

2,731,976
ENGINE FUEL SYSTEM
Edward Orent and Stuart F. Kutsche, Grand Rapids, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 26, 1951, Serial No. 223,060
14 Claims. (Cl. 137—118)

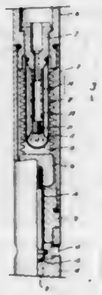
1. A flow divider comprising, in combination, a cylinder, a piston freely reciprocable therein and provided with

a constant-area restricted fluid passage between the faces thereof, a fluid inlet at one end of the cylinder, a first fluid outlet at the other end of the cylinder, resilient means biasing the piston toward the inlet end of the cylinder, and a fluid metering port formed in the wall of the cylinder, the metering port being connected to a



second fluid outlet, the port being located so as to be closed by the piston in its normal biased position at the inlet end of the cylinder and to be opened by the piston by movement of the piston from the normal position, the said restricted fluid passage being the sole outlet for fluid entering the inlet when the piston is in the said normal position.

2,731,977
BELLOWS PROTECTOR
Harold E. McGowen, Jr., Houston, Tex., assignor to Camco, Incorporated, Houston, Tex., a corporation of Texas
Application January 20, 1955, Serial No. 483,144
14 Claims. (Cl. 137—155)



1. In an automatic gas lift valve operable in response to pressure of the gas controlled thereby, a liquid containing chamber having a pair of spaced apart flexible walls, a liquid filling said chamber and serving as an incompressible motion transmitting strut between said walls, one of which walls is exposed to said pressure gas and is operably connected for expansion-contraction movement with the valve, a rigid backing presenting a solid face with which the other of said walls seats coextensively when fully contracted, a closed chamber containing a compressible gas under predetermined control pressure and communicating through said backing with the seating face of the last mentioned flexible wall for exerting thereon a wall expanding elastic force.

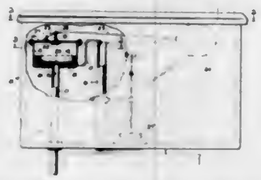
2,731,978
SLEEVE SAND VALVE
John F. Comer, Mechanicville, N. Y.
Application July 8, 1952, Serial No. 297,696
1 Claim. (Cl. 137—382)

A sleeve valve for a sand supply line comprising an elongated tubular member adapted to be secured at one end to a sand supply line, the other end of said tubular member being closed, sand outlet openings in said tubular member adjacent the closed end thereof, a valve member slidably mounted on said tubular member and being normally gravity urged to a valve closing position overlying said outlet openings, said valve member being shorter than said tubular member and being movable to a position adjacent said one end of said tubular member to an outlet opening uncovering position, a hood carried by said tubular member adjacent said one end, said hood extending towards said other end of said tubular member and having a major portion thereof spaced from said tubular member, said hood enclosing an end of said valve member disposed remote from said outlet openings and pro-



tecting said end of said valve member and an adjacent portion of said tubular member from ice and other foreign matter to assure freedom of movement of said valve member, said valve member being provided intermediate its ends with an annular projection engageable with said hood to limit movement of said valve member therein, said annular projection being engageable with a portion of a container surrounding a filler opening therein to automatically move said valve member to a valve-open position in response to the insertion of said other end of said tubular member into a filler opening.

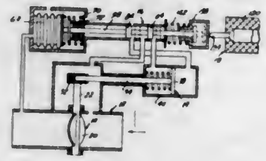
2,731,979
INLET VALVE FOR TOILET FLUSH TANK
Thomas E. Crockett, Corpus Christi, Tex., assignor to Earnest L. Crockett, Corpus Christi, Tex.
Application September 24, 1953, Serial No. 382,071
3 Claims. (Cl. 137—414)



1. A valve device for toilet flush tanks comprising an inlet water pipe rising from the bottom of the tank, a cylindrical valve casing secured to the upper end of said inlet pipe and communicating therewith and having a discharge opening in its lower end, a vertically movable rubber disc valve element including an annular marginal flange which is flexible disposed within said casing, the disc valve element substantially covering the lower end of the casing, inlet pipe and discharge opening and having a weep opening communicating with the inlet pipe and casing, said marginal flange extending axially above the disc valve element and contacting the side wall of the cylindrical casing, and float controlled valve means for the upper end of the casing.

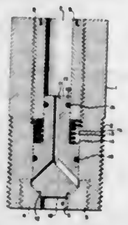
2,731,980
PRESSURE REGULATING AND SHUT-OFF VALVE
William E. Diefenderfer, Wethersfield, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application October 3, 1952, Serial No. 312,979
5 Claims. (Cl. 137—488)

1. In a fluid conduit pressure regulating and shut-off valve assembly of the type having a throttle movable between open and closed positions in the conduit and fluid pressure responsive actuating means operatively connected to the throttle, the combination comprising a pilot valve housing having an inlet for fluid under pressure and two outlets connected to said actuating means, a valve member disposed in said pilot valve housing for movement between one position wherein fluid flows through only one of said outlets to said actuating means whereby said actuating means closes said throttle and another position wherein fluid flows through only the other of said



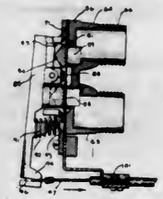
outlets to said actuating means whereby said actuating means opens said throttle, means responsive to conduit pressure downstream of said throttle engageable with said valve member to urge the same towards said one position, a spring disposed in said pilot valve housing and engaging said valve member to urge the same towards said other position, spring biased means adapted to engage said valve member to resiliently hold the same in said one position, and solenoid operated means engageable with said spring biased means to disengage the same from said valve member.

2,731,981
PRESSURE RELEASE VALVE
Irving A. Glasser, Pawtucket, R. I., assignor to the United States of America as represented by the Secretary of the Navy
Application August 12, 1952, Serial No. 304,048
2 Claims. (Cl. 137—536)
(Granted under Title 35, U. S. Code (1952), sec. 266)



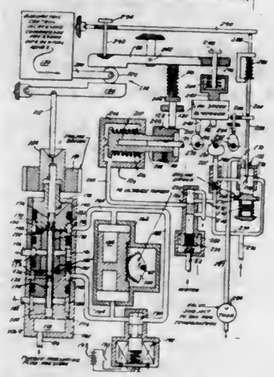
1. A pressure release valve of the character disclosed comprising, a body having a cylindrical bore therein, a member having a second bore of a greater diameter than the first named bore and in adjacent relation therewith, and a second member having a third bore of the same diameter as the first named bore, all of said bores being in coaxial alignment, a beveled valve seat disposed between said third and second bores and having an enlarged annular recess adjacent said second bore, a movable valve element having a cylindrical portion slidably disposed within said second bore and a cylindrical stem slidably disposed within said first named bore and a tapered valve surface at one end thereof adapted to engage said beveled seat when the valve element is closed, means for sealing said stem to the first named bore and the cylindrical portion of the valve to the larger bore, said sealing means permitting free sliding action of the valve, a branched duct within the valve element for establishing communication with said recessed portion and the first named cylindrical bore of the valve body whereby communication between said first named and third bores is established as the valve element is opened, and means for yieldably biasing the valve element against said seat whereby the valve is opened in response to a pressure differential of predetermined value applied thereto and closed when the pressure differential is reduced to less than said predetermined value.

2,731,982
WATER SUPPLY CONTROL FOR WASHING MACHINES
Alvin Lodge, Erie, Pa., assignor to Blackstone Corporation, Jamestown, N. Y., a corporation of New York
Application March 19, 1952, Serial No. 277,475
8 Claims. (Cl. 137—607)



1. Mechanism for controlling the flow of hot and cold water to a receptacle comprising a mixing unit having an interior compartment, hot and cold water inlets opening into said compartment, an outlet connected with said compartment, a diaphragm in said compartment overlying the openings of said inlets and said outlet, means engageable with and operable to deflect said diaphragm into variable proximity with either of said inlets, and other means for deflecting a portion of said diaphragm into sealing contact with said outlet, said other means being responsive to deflection of said diaphragm under compulsion of water pressure in said compartment.

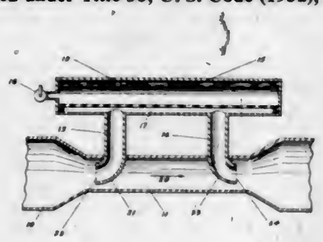
2,731,983
CONTROL VALVE APPARATUS FOR TURBO-JET ENGINE
Leighton Lee II, Rocky Hill, Conn., assignor, by mesne assignments, to Pratt & Whitney Company, Incorporated, West Hartford, Conn., a corporation of Delaware
Original application November 21, 1947, Serial No. 787,416. Divided and this application September 17, 1953, Serial No. 380,767
7 Claims. (Cl. 137—622)



1. A spool valve comprising a valve member having a pair of lands, separated by a recess, a pair of cylindrical seat members, each having a central bore to receive said valve member and a larger bore concentric with said central bore and extending inwardly from one end, and a sleeve having locating faces in its opposite ends and longer than the combined depth of the larger bores of both said seat members, said seat members and said sleeve being assembled with said larger bores aligned and said sleeve received in said larger bores, said sleeve being

effective to maintain the adjacent ends of said seat members spaced apart, said seat members having ports extending through the walls of said larger bores adjacent to the inner ends thereof, said sleeve having radial grooves cut in said locating faces to provide valve ports, the distance between the bottoms of the grooves at one end of said sleeve and the bottoms of the grooves at the other end being equal to the distance between said valve lands, said grooves communicating with said ports in the seat members, and said sleeve having a port extending therethrough to provide fluid communication with the recess between said lands.

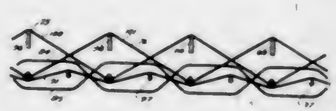
2,731,984
ADJUSTABLE SURGE ALLEVIATOR
Wilhelm S. Everett, Santa Paula, Calif.
Application March 30, 1953, Serial No. 345,745
9 Claims. (Cl. 138—30)
(Granted under Title 35, U. S. Code (1952), sec. 266)



4. An adjustable surge alleviator which comprises a first conduit adapted to be connected into a fluid conveying system and conduct a fluid stream longitudinally therethrough, a closed container having a cavity formed therein, means for introducing into and venting gas from said cavity, means for introducing into and venting liquid from said cavity, a plurality of connecting conduits opening into said first conduit at longitudinally spaced portions thereof and communicating with said cavity.

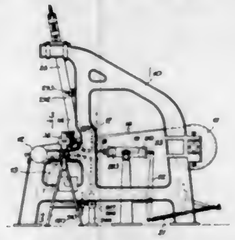
5. A device as defined in claim 4 including a piston means slidably positioned within each of said connecting conduits.

2,731,985
APPARATUS FOR WEAVING PILE FABRICS
Frank W. E. Hoeselbarth, Carlisle, Pa., assignor to C. H. Masland & Sons, Carlisle, Pa., a corporation of Pennsylvania
Application March 3, 1952, Serial No. 274,566
2 Claims. (Cl. 139—39)



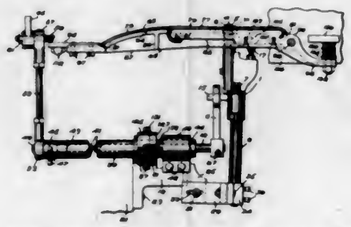
1. The process of weaving a carpet, which comprises interweaving a plurality of pile warps, binder warp ends, stuffer warp ends and wefts according to the velvet carpet system, and raising all of the ends of each of the pile warps at different times in each cycle over wires of different kinds of a wire set in which the wire repeat throughout the wire set is an odd number where the number of different pile warps is even and an even number where the number of different pile warps is odd, whereby a wire of a given kind will operate on one of the pile warps on one cycle and on another of the pile warps on another cycle.

2,731,986
WIRE WEAVING LOOMS
Herman C. Frentzel, Milwaukee, Wis., assignor to Appleton Wire Works, Inc., Appleton, Wis., a corporation of Wisconsin
Application December 6, 1950, Serial No. 199,482
30 Claims. (Cl. 139—126)



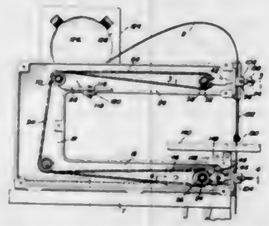
1. In a loom, a weft-inserting gripper shuttle, a shuttle box adapted to receive the shuttle, a releasable shuttle-braking means, and impelling means for continuing the terminal travel of the shuttle after braking of the shuttle.

2,731,987
WEFT PARTERS
Lloyd G. Urquhart, Westboro, Mass., assignor to H. F. Livermore Corporation, Allston, Mass., a corporation of Delaware
Application February 19, 1953, Serial No. 337,779
10 Claims. (Cl. 139—267)



10. A weft parting mechanism for looms having in combination a lay, a shuttle box, a weft parter and holder, a shuttle binder having a passage therethrough for the weft parter and holder and a slot extending from such passage toward the inner end of the binder and through the latter's top edge, and a shuttle feeler adapted to engage a weft parted and held by the said parter and holder and to lift the weft out through the slot and over the shuttle binder.

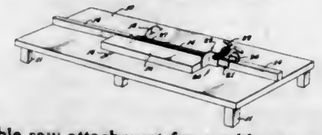
2,731,988
TOOL HOLDING AND RECIPROCATING APPARATUS
Alois Steiner, Hoboken, N. J.
Application May 29, 1952, Serial No. 290,632
5 Claims. (Cl. 143—70)



1. A tool reciprocating apparatus comprising a hollow substantially U-shaped frame having upper and lower portions, upper and lower spaced parallel transverse shafts rotatably supported on said upper and lower portions, a

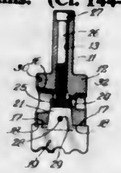
vertically swingable member journaled on each shaft, means carried by one of said shafts and engaging the member journaled on said one of said shafts for imparting swinging movement to the member journaled on said one of said shafts during rotation of the latter, a pair of chains terminally attached to said members and located completely within said frame, and guide means within the frame over which the chains extend, said guide means including a horizontal shaft paralleling said upper and lower shafts and rotatably supported on the frame, a cam secured to said horizontal shaft, a pair of antifriction rollers engaged on said cam and receiving the chains, and a knob attached to the horizontal shaft exteriorly of the frame and manually rotated to tension the chains.

2,731,989
CROSS CUTTING TABLE SAW GAGE ATTACHMENT
Robert A. Valcourt and Wright F. Huff, Los Angeles, Calif.
Application February 3, 1955, Serial No. 485,912
10 Claims. (Cl. 143—174)



6. A table saw attachment for a table saw comprising: a pair of L-shaped plate angles, each L-shaped plate angle having a vertical and a horizontal side; a stop angle having a first side connected to the vertical side of one of the L-shaped plate angles and having a second side extending at a predetermined angle with respect to the first side and to the vertical side of said one of the L-shaped plate angles in order to provide a stop for lumber to be cut on the table saw; variable means connected to the first side of the stop angle and to the other L-shaped plate angle to form a U-shaped bracket of the pair of L-shaped plate angles; and spring means supported by the variable means to pressurably separate the L-shaped plate angles, said variable means being capable of varying the width of the U-shaped bracket against the pressure of the spring means.

2,731,990
BLADE ATTACHMENT FOR ROTARY SHAPER HEADS
Chester F. Cerkleski, Norridge, Ill.
Application August 3, 1953, Serial No. 372,001
2 Claims. (Cl. 144—218)



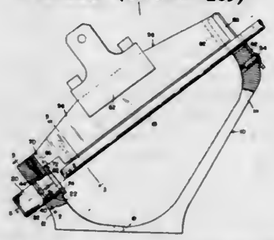
1. A tool holder comprising a shank and a head, a longitudinal conical bore in said head, a transverse slot across the lower end of said head intersecting diametrically the wider end of said bore, a conical blade holder mounted in said bore and having a diametral slot across the wider end thereof, a blade having a tapered shank and oppositely extending shoulders, said shank extending into the slot in said blade holder with its side edges flush with the conical surface of said holder and said shoulders engaging in said transverse slot of the head, and a bolt extending through said shank and head and engageable with a threaded bore in the narrow end of said conical blade holder for securing said blade and holder to said tool.

2,731,991
MOLDING HEAD AND CUTTER
William E. Cowley, Louisville, Ky., assignor to American Saw & Tool Company, Louisville, Ky., a corporation of Kentucky
Application June 15, 1953, Serial No. 361,677
3 Claims. (Cl. 144—229)



1. A molding head and cutter comprising a head member adapted to be rotated about a given axis in a given direction, said head member having a peripherally open slot therein, a cutter bit positioned in said slot and including a portion extending beyond the periphery of said head member, said slot being inclined forwardly and peripherally outwardly from the inner end thereof to the periphery of said head member in the direction of rotation of said head member whereby said bit upon engagement with a work piece is forced against the bottom and the back wall of said slot, said head member having a bore therein extending from forwardly of said slot in the direction of rotation of said head member into said slot, and a screw threaded in said bore and engaging said bit, said bore being inclined with respect to said slot to define an angle of less than 90 degrees between the open ends of said slot and said bore whereby said screw is adapted to force said bit against the bottom and back wall of said slot, said screw having an axially located center of gravity, the axis of said bore being inclined with respect to a line extending from the axis of rotation of said head member to the center of gravity of said screw in such direction as to define an angle of less than 90 degrees between the head end of said screw and said line, whereby said screw is continuously biased upon rotation of said head member by a component of the centrifugal force acting thereon into forcible engagement with said bit.

2,731,992
ARROW FLETCHING FIXTURE
Alfred W. Lozon, Marine City, Mich.
Application April 27, 1953, Serial No. 351,411
4 Claims. (Cl. 144—289)



1. An arrow fletching fixture comprising spaced frame members for supporting the shaft of an arrow, a nock holder rotatably supported on one of said frame members and having a portion for receiving the nock of the arrow, means on the other frame member for rotatably supporting the shaft of the arrow, a feather holding clamp comprising a pair of plates pivoted together for movement toward and away from each other, guide means on each of said frame members for supporting said clamp adjacent to one side of and in general alignment with the shaft of the arrow thus supported, each of said guide means having a slot extending radially of the shaft of the arrow for receiving opposite ends of one of said plates,

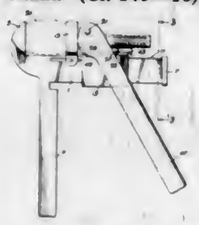
the bottom of the slot in the guide means on said one frame member providing a positive abutment located to engage said one plate and support the adjacent portions of said clamp in spaced relation to the shaft.

2,731,993
MAGNETIC HAMMERS
George W. Mount, Greenfield, Mass.
Application January 4, 1952, Serial No. 265,034
3 Claims. (Cl. 145—30)



2. A magnetic hammer having a head provided with a handle opening and formed of a body of non-magnetic material, said head being provided with a chamber forming bore opening to and extending from the striking end of the head part way of the handle receiving opening of the head, a permanent magnet secured therein with its outer end flush with said striking end of the head, a cap member formed of magnetic material permanently secured to the striking end of the head and forming the striking face of the head, said bore and magnet extending at substantially right angles to said face, said head consisting essentially of non-magnetic material except for said magnet and cap member, said chamber being of greater length than the magnet, the head being formed with an opening to said chamber rearwardly of the magnet, and means formed of non-magnetic material extending through said opening and into contact with the rear end of the magnet to hold the forward end of the magnet in permanent contact with said cap member.

2,731,994
RECIPROCATING JAW NUTCRACKER
Harm D. Snell, Port Arthur, Tex.
Application April 7, 1953, Serial No. 347,268
1 Claim. (Cl. 146—16)



In a nut cracker, a bar having a toothed top edge and a lower edge provided with an outwardly extending hand grip, a fixed jaw on the top edge of the bar, a sliding carriage on the bar, said carriage being slidably operable forwardly along said bar toward said fixed jaw, releasable pawl and ratchet devices on said carriage and upper edge respectively, said devices holding said carriage in forwardly operated position, a movable jaw between said carriage and fixed jaw, a stem on said movable jaw forwardly slidable in the carriage parallel to said bar, said stem supporting said movable jaw for guided movement forwardly relative to the carriage toward the fixed jaw, spring means in the carriage operatively connected to said stem and opposing forward sliding of the stem, and a swingable hand lever for moving said movable jaw extending outwardly of said lower edge for grasping and operation by a hand gripping the hand grip and having a bifurcated end straddling said bar and carriage and pivoted on the carriage for swinging of said lever in opposite directions, said bifurcated end having a pair of terminal cam ears thereon operatively engaging said movable jaw upon opposite sides of the stem upon swinging of said lever in one direction, a pair of lateral pins on opposite sides of said pawl, and a pair of lugs on opposite sides of said bifurcated end engaged with said pins upon swinging of said lever in the opposite direction to release said pawl.

2,731,995
ROTOR CONSTRUCTION FOR ENSILAGE AND FORAGE CUTTER
Gail R. Sutherland, Blaine W. Gustafson, and Arnold B. Skromme, Ottumwa, Iowa, assignors to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa
Application June 20, 1951, Serial No. 232,558
8 Claims. (Cl. 146—108)



7. A rotor of the class described, comprising a rotor member having a flat face, a center and an outer periphery; means at the center of the member for carrying the member for rotation in one direction about an axis normal to said face; and a plurality of elongated arms arranged on said face in uniform angularly spaced relation and extending from the center of the member to outer ends radially beyond the periphery of the member; characterized in that each arm includes a first flange projecting in an axial direction from and having an inner edge lying along and secured to said one face, and a second flange joined to and sloping outwardly away from the first flange at an acute angle to said one face and having an outer mounting surface inclined outwardly from said face and in the direction of rotation of the member to present a leading edge spaced axially outwardly from and parallel to said face, the junction of said flanges with each other including an integral curved section on a relatively large radius to provide on the arm a smooth concave leading surface and a convex trailing surface; the first flange terminates closely adjacent to the periphery of the plate and the second flange is materially longer and extends radially beyond the periphery of the plate; and said second flange includes, in the portion thereof that extends beyond said periphery, part of said curved section and has an inner edge lying axially midway between the plane of said face and the leading edge of the second flange.

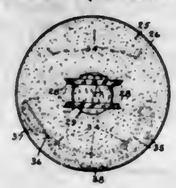
2,731,996
REMOVABLE INSERT FOR A LUNCH BOX
Harold L. Hayes, Long Beach, Calif.
Application January 10, 1955, Serial No. 480,655
1 Claim. (Cl. 150—.5)



A removable insert for a lunch box having a rectangular open-topped compartment, said insert being formed entirely of a pliable form-retaining, washable and liquid-resistant material, comprising: a rectangular container having integral bottom, side and end walls; integral vertical spacers interconnecting said walls so as to define food-receiving chambers; and a cover for said container,

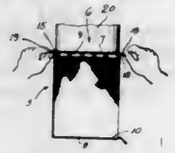
said cover having a rectangular flat plate which telescopically interfits within the upper portion of said container, flanges formed on the sides and ends of said plate which slant upwardly and outwardly relative to said plate so as to be wedgeable within the upper portions of the side and end walls of said container, and sealing lips depending from the underside of said cover for frictionally engaging the upper portions of said spacers, the lower ends of said lips being normally spaced closer together than the upper ends thereof whereby said lower ends will be wedged apart as said cover is fitted upon said container.

2,731,997
COMBINED BAG AND FLAT CLOTH ARTICLE
Esther Aldean Muth, Bellevue, and Beatrice J. Mills, Seattle, Wash.
Application September 8, 1952, Serial No. 308,326
1 Claim. (Cl. 150—11)



A combined bag and flat cloth article comprising a circular cloth member having a top and bottom side; two parallel spaced apart hanger straps of equal length each positioned the same distance as the other on opposite sides of the center of the top side of said circular cloth member and having means securing the end portions of said straps to said cloth; a plurality of sling strap receiving loops secured to the bottom side of said cloth member in a circle positioned both in spaced relation to the periphery of said cloth member and to each other thereby providing segments of said circular cloth member between said spaced apart loops for adjusting the bag volume to varying volumes to be carried; a sling strap slidably engaged within said sling strap receiving loops which strap, when pulled, purses the engaged portions; and a circular bottom plate of relatively stiff material releasably held in the center of said cloth member by said hanger straps, said plate giving uniformity of shape to the cloth member as a bag when the sling strap is in pursing position.

2,731,998
LOCATOR FOR BAG CLOSURE TAPE
Lawrence W. Harris, Jr., Portland, Oreg., assignor to Ames Harris Neville Co., Portland, Oreg., a corporation of California
Application October 18, 1954, Serial No. 462,842
4 Claims. (Cl. 150—11)



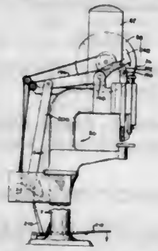
1. In combination with an open mouthed mesh bag having a stitched side seam, a fabric draw tape woven into said bag about the mouth thereof with the ends of the tape caught in said stitched side seam, that portion of the tape which is most distant from said side seam being folded laterally back upon itself and stitched through and laterally across the end thus folded closely adjacent the fold line with a length of the stitching extending beyond at least one side of the tape in definition of a readily grasped and a protruding locator pull tab for the draw tape.

2,731,999
PROTECTIVE COVER DEVICE
Ida Grace Burns, New York, N. Y.
Application October 12, 1953, Serial No. 385,365
6 Claims. (Cl. 150—52)



1. A carton cover device comprising a top wall, a pair of side walls depending substantially perpendicularly from side edges of said top wall, a pair of end walls depending from end edges of said top wall, and combining therewith to define a downwardly open chamber for the reception of the upper portion of a container or the like, abutting marginal portions of one of said side walls and one of said end walls adjacent thereto being free from mutual direct engagement with each other, to define therebetween a marginal elongated opening communicating with the interior of said downwardly open chamber, and arranged for snug interfitting engagement with one of the corner edges of said container.

2,732,000
APPARATUS FOR ATTACHING BRIDGE STOPS TO SLIDE FASTENERS
Harry Levine, Brooklyn, N. Y.
Application April 11, 1951, Serial No. 220,490
5 Claims. (Cl. 153—1)



1. In a machine for mounting on slide fastener stringers bridge stops including two legs disposed at an angle to one another and joined by a base, each of said legs being of U-shaped cross-section: a clinching mechanism comprising a stationary frame, a transfer nest including two transfer halves, means resiliently urging said halves into abutment, said halves when abutted forming a pocket having a passageway leading from the side of the nest into said pocket to freely admit a bridge stop, said pocket opening from top to bottom when the halves are moved apart, means mounting said halves for joint vertical reciprocation with respect to said frame, means resiliently biasing said transfer nest upwardly, means limiting upward movement of said transfer nest, a plunger, means to mount said plunger for vertical reciprocation with respect to said frame in vertical alignment with said pocket and into and out of the same from above, said pocket having an upwardly extending passageway to freely admit said plunger, means including a spring vertically reciprocating said plunger, said plunger spring being stronger than the means biasing the transfer nest upwardly whereby when the plunger descends and engages a bridge stop in the pocket it will force the transfer nest downwardly, an anvil fixed to the frame beneath the transfer nest, a gage plate mounted on said anvil in line with one of said halves and clear of the other half and against which the end elements of a pair of slide fastener stringers are adapted to be abutted, abutment means limiting downward movement of the transfer nest when the transfer nest is adjacent the gage plate, said pocket hav-

ing a bottom on which a stop in said pocket rests, each of said halves including a portion of said bottom, the said portions of the said opposite halves converging downwardly toward one another to provide cam surfaces which spread the halves apart when the stop is pressed down after downward movement of the transfer nest is halted whereby continued downward movement of the plunger will spread the halves of the transfer nest and drive a bridge stop between said halves down to the anvil alongside the gage plate, said anvil being formed adjacent the gage plate with a positioning nub against which a bridge stop is located between the spread halves of the transfer nest after being driven down, means limiting compression of the plunger spring whereby after an interval following the spreading of the transfer halves and descent of the bridge stop the plunger will clinch the legs of said stop, a pair of fingers, a member, means mounting the member for vertical reciprocation with regard to said frame, means urging said member upwardly to an uppermost position, means mounting said fingers on said member for rotation about horizontally spaced parallel axes, means biasing the tips of said fingers apart, means limiting said biasing movement to a position with the tips of the fingers inclined downwardly toward one another, said fingers in uppermost position being disposed above the anvil a short distance from the nub, and means operatively associated with said plunger reciprocating means to move said member downwardly after the halves are spread and before the legs of the bridge stop are clinched whereby said fingers will engage the tapes of slide fastener stringers on the anvil and force the beaded edges thereof together and into the U-shaped legs of a bridge stop on the anvil.

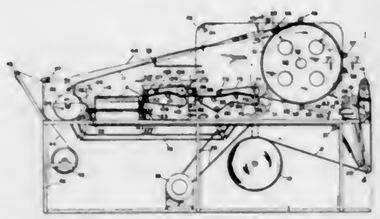
2,732,001

MACHINE FOR FORMING WIRE REINFORCED TYING DEVICES

Paul R. Halstead, Portland, Oreg., assignor to General Container Corporation, Portland, Oreg., a corporation of California

Application November 12, 1953, Serial No. 391,517

8 Claims. (Cl. 154—1.6)



1. In a machine for gluing together with a fluid adhesive overlapping layers of continuous strip material, the invention comprising means for pressing said layers together with a fluid adhesive therebetween, said means comprising a driven wheel or drum of relatively large diameter having a relatively wide peripheral surface formed with a circumferential groove therein, means for guiding said layers flatwise onto the flat surface of said wheel with the layer next adjacent said surface positioned with an edge thereof in alignment with the edge of said groove whereby adhesive expressed from between said layers will flow into said groove, and strip tensioning means cooperatively arranged with said wheel for retaining said layers in tension whereby they are held in pressurable engagement with at least a portion of the circumference of said wheel.

2,732,002

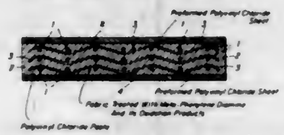
BONDING YARNS TO POLYVINYL CHLORIDES IN MAKING COMPOSITE ARTICLES

Brian C. Gardner, Coventry, and Edwin H. Sharples, Kenilworth, England, assignors to Courtaulds Limited, London, England, a British company

Application February 2, 1954, Serial No. 407,796

Claims priority, application Great Britain March 9, 1953

4 Claims. (Cl. 154—4)



1. A process for the production of composite articles formed of yarns bonded to polyvinyl chloride compositions comprising treating the yarns with *meta*-phenylene diamine, bringing the yarns into contact with a polyvinyl chloride composition, and bonding the yarns with the polyvinyl chloride composition by heat and pressure.

3. A composite article comprising a polyvinyl chloride composition bonded to a yarn by means of a material consisting essentially of *meta*-phenylene diamine and its oxidation products.

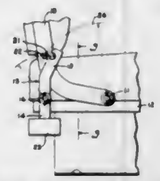
2,732,003

INERTIA LOCK FOR TILTING AUTO SEATS

Albert E. Williams, Wichita, Kans., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application January 28, 1953, Serial No. 333,651

7 Claims. (Cl. 155—5)



1. In a vehicle seat having a forward tilting seat back which is hinged on a lateral axis to fixed vehicle structure, a gravity released inertia engaged seat back locking mechanism comprising: a pendulum pivoted intermediate its ends on vehicle structure and freely swingable by inertia forces; and integral means carried by said pendulum normally un-engaged with said seat back and engageable therewith to maintain it against forward tilting movement when said pendulum is swung by inertia forces as a result of sudden interruption in the forward travel of the vehicle.

2,732,004

INVALID WALKER

Clarence H. Forbes, Salt Lake City, Utah

Application August 27, 1953, Serial No. 376,825

2 Claims. (Cl. 155—22)



2. An invalid walker comprising a front section including upper and lower cross members, vertical spacer members integrally connected to said cross members,

right and left side wings hingedly mounted on said front section, each wing including a pair of upwardly converging tubular body members, a pair of offset parallel top sections on each pair of wing body members, a brace integrally connecting said top sections, an arcuate arm rest, a pair of adjusting arms secured to said rest, said arms extending into said top sections, said arms being constructed as a U-shaped member rigidly secured to said arcuated rest.

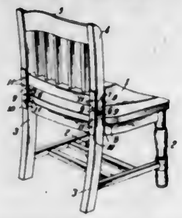
2,732,005

CHAIRS

Walter D. Corning, Knoxville, Tenn.

Application January 23, 1952, Serial No. 267,777

8 Claims. (Cl. 155—77)



5. A chair comprising a seat, a support element rigid with said seat, a leg beneath said support element, an insert of non-metallic resilient material disposed between the lower face of said support element and the upper face of said leg, said insert comprising a block of uniform thickness and extending substantially throughout the area of the opposing faces of said leg and support element, and means for securing said support element and said leg together on opposite sides of said block.

2,732,006

ADJUSTABLE CHAIR WITH INVISIBLE MECHANISM

Henri Alexandre Crescent, Arques-la-Bataille (Seine Inferieure), France

Application October 17, 1952, Serial No. 315,382

Claims priority, application France October 30, 1951

2 Claims. (Cl. 155—88)



1. An adjustable chair comprising, in combination, a pair of cross-braced rear legs, a pair of standards, the lower portions of which constitute front legs, each one of said front legs being pivoted on the mating rear leg in X-fashion, cross-bracing members secured on the upper portion of said standards to constitute therewith a back for said chair, a seat member having its front edge pivoted on the upper ends of said rear legs, a pair of coaxial pins secured thereto and spaced rearwardly from the rear edge of said seat member, a longitudinal groove along the rear inner edge of each of said standards, a set of notches opening in the bottom of each of said longitudinal grooves, the notches of both standards being disposed pairwise at different horizontal levels and a pair of said notches receiving said pins to thereby removably articulate the rear edge of said seat member at different levels on said standards, a pair of elastic upright locking bars for said pins shaped so as to fit into said longitudinal grooves to conceal said grooves, notches and pins and to reconstitute the normal outline of said standards, said bars having their lower ends secured on said front legs so that when stressed they insure the elastic locking of said pins in the pair of notches of any desired level and said bars being sufficiently yielding to permit shifting of said pins between the different levels of notches, a cross member connecting the upper ends of the locking bars and a latch means on one of the cross bracing members engaged with such cross member to hold the locking bars in locking position.

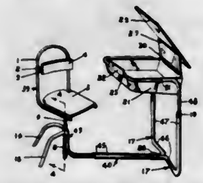
2,732,007

ADJUSTABLE CHAIR-DESK

William B. MacWhirter, Grand Rapids, Mich.

Application February 23, 1952, Serial No. 273,013

5 Claims. (Cl. 155—124)



1. A unitary school desk and chair comprising a pair of medially-disposed, fore and aft, symmetrical members each including parallelly-positioned, contiguous base portions, transverse portions extending from the forward end of said base portions, vertical portions extending upwardly from the outer ends of said transverse portions, a U-shaped frame carried at the upper ends of said vertical portions; a desk secured within said U-shaped frame; a pair of inverted, substantially U-shaped portions joined by one leg thereof commonly to the rear extremity of said base portions, the plane of each U being substantially vertical; a socket carried by said commonly joined U-shaped portions; a spindle rotatably received in said socket, and a seat supported on said spindle.

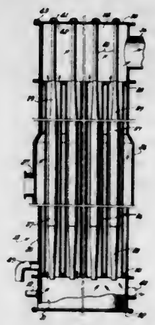
2,732,008

PROCESS OF LOW TEMPERATURE EVAPORATION

James E. Seeley, Long Beach, Calif., assignor to E. A. Silzle Corporation, Anaheim, Calif., a corporation of California

Application December 8, 1951, Serial No. 260,703

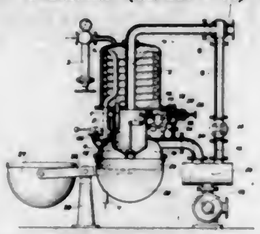
4 Claims. (Cl. 159—1)



1. A continuous process for the concentrating of juice at relatively low temperatures comprising forcing a supply of juice at about room temperature as a film over a heating medium for a period of a few seconds wherein the heating medium has a temperature not greater than about 212° F., discharging the heated juice at a temperature about 45° higher than its initial temperature into a vapor separator, drawing off released water vapor in a generally upward direction, drawing off juice concentrated

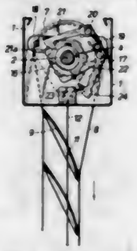
by extraction of water in a generally downward direction, recirculating a portion of said concentrated juice into the incoming juice during passage of the incoming juice to the heating medium and tapping off another portion of the concentrated juice when the concentrate reaches a predetermined degree of concentration.

2,732,009
APPARATUS FOR BOILING A SUGAR MASS
Hermann Thürlings, Viersen (Rhineland), Germany
Application March 6, 1953, Serial No. 340,806
Claims priority, application Germany October 17, 1952
2 Claims. (Cl. 159—44)



1. Apparatus for boiling sugar solutions comprising a continuously operable heater for a sugar solution to be thickened, a coil for receiving the sugar solution and boiling it, said coil being disposed in said heater, a vessel for receiving the heated sugar solution and for discharging it therefrom, an intermediate chamber disposed between said heater and said vessel, said coil having a free end discharging into said intermediate chamber for supplying the heated sugar solution thereto, a bottom opening in said intermediate chamber for discharging the heated sugar solution into said vessel, a valve for controlling said bottom opening, a vacuum pump in communication with said vessel, a conduit connecting said intermediate chamber to said vacuum pump, three-way valve means disposed in said conduit for selectively connecting said intermediate chamber either to said vacuum pump or to atmosphere, and a throttling device provided in said conduit between said valve means and said vacuum pump, whereby the pressure in said intermediate chamber may be adjusted to any desired value between that of said vacuum pump and atmospheric.

2,732,010
VENETIAN BLINDS
Fritz Griesser, Aadorf, Switzerland
Application September 18, 1953, Serial No. 381,027
Claims priority, application Switzerland February 21, 1953
5 Claims. (Cl. 160—170)



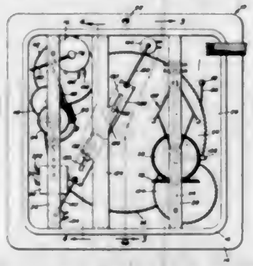
1. In a Venetian blind of the type having a winding shaft, tilting frames pivoted thereon, ladder tapes suspended from said tilting frames, laths carried by said ladder tapes and adjustable by tilting of said tilting frames, a winding drum mounted on said winding shaft, pull members attached to the lowermost lath and windable around said winding drum for raising and lowering of the blind, that improvement comprising a ratchet and pawl device for pivoting the tilting frame to adjust the laths comprising a ratchet wheel rigidly mounted on said winding shaft, a sleeve portion rotatably mounted on the winding shaft and secured to the tilting frame, a plate carried by said sleeve, two pawl arms pivotally mounted on said plate adapted to cooperate with said ratchet wheel, one being acted on by said ratchet wheel to tilt said tilting frame in one direction when said winding shaft is operated to raise the blind and the other being acted on by said ratchet wheel to tilt said tilting frame in the opposite direction when said winding shaft is operated to lower the blind, and means to operate said winding shaft.

2,732,011
VENETIAN BLIND
Charles S. Evans, Atherton, Calif.
Application October 10, 1950, Serial No. 189,365
5 Claims. (Cl. 160—173)



1. A saddle piece for demountably connecting the two webs of a length of ladder tape to the tilt rail in a Venetian blind structure, comprising a flexible sheet having substantially the shape of an elongated ring, the length of the ring being sufficient to overlie the top face of the tilt rail and extend in flexible tab ends past the lateral sides of the tilt rail and the hole of the ring being long enough to overlie a lateral side, and a fastener element in each tab end for union with a companion fastener element on the tape web.

2,732,012
TIME CONTROL FOR TELEPHONE CIRCUITS
Loy E. Thomas, Knightsville, Ind.
Application August 24, 1953, Serial No. 375,925
2 Claims. (Cl. 161—1)



1. A time controller comprising a switch, first means for moving said switch to an open position, second means for moving said switch to a closed position, said first and second means including a common drive wheel having an eccentric drive pin, said drive pin being engaged with an actuator for said switch, said actuator including a slotted member restrained to linear movement, a switch lever, and a link pivotally connected to said lever and pivotally connected to said slotted member, said first means including a drive motor drivingly connected to said drive wheel for driving said drive wheel in a first direction, said second means including a spring motor for driving said drive wheel in the opposite direction to said first direction, said spring motor being energized in response to rotation of said drive wheel by said drive motor, a governor operatively connected to said drive wheel for controlling the speed of rotation thereof.

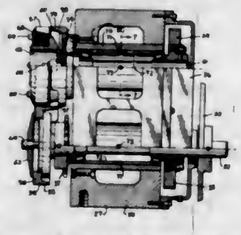
2,732,013
METHOD OF CUTTING SYMMETRICAL BALLOON GORES AND CONSTRUCTION TABLE FOR PRACTICING THE METHOD
William F. Huch, St. Paul, and Raymond I. Hakomaki and Charles B. Moore, Jr., Minneapolis, Minn., assignors to General Mills Inc., a corporation of Delaware
Application May 9, 1950, Serial No. 160,972
8 Claims. (Cl. 164—17)



1. The method of cutting symmetrical balloon gores from a continuous flat tube of thermoplastic sheet material having upper and lower layers joined by integral spaced folded edges, the width of the tube being substantially less than the maximum gore width but at least as great as one-half of said maximum gore width, with the aid of a pattern shaped corresponding to a half-gore and having a straight edge corresponding to a centerline of the desired gore and a curved edge corresponding to the desired gore edge shape, which comprises superimposing the tube on the pattern with one folded edge of the tube in alignment with said straight edge, cutting the tube along said curved edge to form a first gore doubled along its centerline, reversing the tube and advancing it relative to the pattern to cover the pattern with the opposite tube edge in alignment with said straight edge, cutting the tube along said curved edge to form a second gore, and successively reversing the tube between the cutting of each gore and the next succeeding gore and thereby using the opposite folded edges of the tube alternately as the centerlines of successive gores.

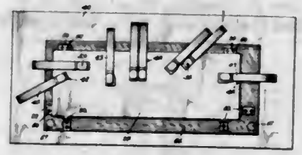
5. A balloon construction table having a surface corresponding to a half-gore of the balloon and defined by a straight edge corresponding to a centerline of a complete gore and a curved edge tapering toward the straight edge at each end corresponding to the desired gore edge contour, supporting means adjacent one end of the table for a supply roll of flat tubular thermoplastic sheet material, the supporting means being located with the axis of the supply roll perpendicular to the straight table edge and with one end of the supply roll in line with said straight edge, and means rotatably carrying said supporting means for rotation of the supply roll through at least 180° to align the opposite end of the supply roll with said straight edge.

2,732,014
CUTTING MACHINE HAVING ROTATABLE COMPLEMENTAL CUTTERS ADJUSTABLY MOUNTED IN BEARING ELEMENTS
Glenn C. Luther, Brooklyn Center, Minn., assignor to The Olm Company, Minneapolis, Minn., a copartnership
Application May 14, 1951, Serial No. 226,248
3 Claims. (Cl. 164—61)



1. In a machine of the character described, a bearing member, first upper and lower bearing elements, supported within said bearing member, one of said first bearing elements being mounted for rotatable adjustment, second upper and lower bearing elements supported within said first upper and lower bearing elements, respectively, for adjustment longitudinally thereof, one of the second bearing elements being eccentrically situated in the first bearing element which is rotatably adjustable, upper and lower parallel shafts rotatably mounted in said second upper and lower bearing elements, respectively, and each having first and second end portions extending beyond oppositely disposed sides, respectively, of said bearing members, means for rotating one of said parallel shafts, intermeshing gears fixed upon the first end portions of said upper and lower shafts, and complementary die cutters removably supported upon the second end portions of said upper and lower shafts.

2,732,015
PUNCH AND DIE ASSEMBLY
Lawrence V. Whistler and Sanford A. Whistler, Tonawanda, N. Y., assignors, by direct and mesne assignments, of one-half to Lawrence V. Whistler and one-half to Lawrence V. Whistler, Jr., both of Tonawanda, N. Y.
Application February 16, 1951, Serial No. 211,206
5 Claims. (Cl. 164—94)

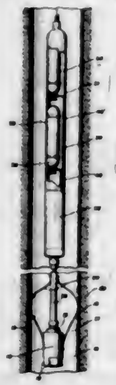


1. A unitary perforating unit, comprising an elongated frame or body having a punch-holding arm and a die-holding arm connected together at one end to form a long work-receiving throat between the two, a die-bushing removably fastened in said die-holding arm, said punch-holding arm having an elongated opening at its outer or free end with opposite ends thereof rounded on spaced-apart centers, a punch-retainer vertically movable in said elongated opening and having a cross sectional formation conforming substantially to the outline of said opening, said punch-retainer having a downwardly-opening bore coaxial with the center of the rounded portion of said opening at one end thereof, a punch removably entered in said bore, a fastening screw threaded into said punch-retainer from the bottom near its other end and engaging said punch to removably hold the same in place, a stripper-device secured to said punch and having at least a portion thereof in contact with the underside of said punch-holding arm, spring means to hold said punch-retainer elevated and said stripper device against the bottom of said punch-holding arm and thereby keep said punch properly spaced from said die to enable a work-piece to be passed between the two and entered the desired distance into said work-receiving throat, said punch-retainer being depressible against the action of said spring means.

2,732,016
APPARATUS FOR PRODUCING PULSATIONS TO CLEAR WELL CASING PERFORATIONS
Norman A. MacLeod, Altadena, Calif.
Application September 30, 1950, Serial No. 187,812
10 Claims. (Cl. 166—63)

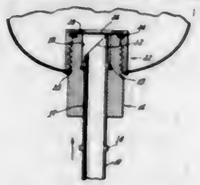
1. In a device for producing pulsations in a well: means for defining in the well a chamber having communication with the interior of the well; separate container means for explosive components; means operative to consecutively feed separate quantities of said components into said chamber so as to form separate quantities of ex-

plosive mixture in said chamber; and means operative to consecutively explode said separate quantities of said



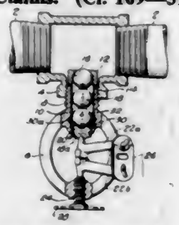
explosive mixture in said chamber so as to transmit pulsations from said chamber into the well.

2,732,017
FIRE EXTINGUISHER FOR AUTO TIRES
Jere B. Fleming, New York, N. Y.
Application December 7, 1954, Serial No. 473,631
3 Claims. (Cl. 169—31)



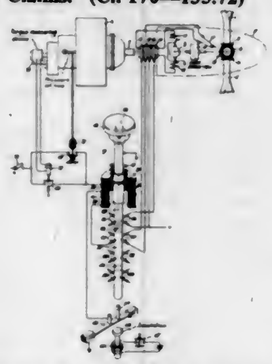
1. A fire extinguisher for putting out tire fires and having a high pressure resistant container comprising a pressure resistant container having a mouth aperture, a tubular bushing mounted in the mouth aperture of the container having an internal seat and having internally disposed screw threads hermetically secured to the walls of said container aperture, a pierceable disc seated hermetically on said bushing seat, a tubular collar secured in said bushing against said disc, and a pointed tubular element moveably and captively disposed partially within said collar whereby movement of said tube toward said container effects rupture of said disc thereby permitting the high pressure gas to escape through said tubular element.

2,732,018
PENDENT SPRINKLER HEAD
Lester A. Grimes, New Rochelle, N. Y., assignor to The Reliable Automatic Sprinkler Co. Inc., a corporation of New York
Application November 15, 1954, Serial No. 468,889
9 Claims. (Cl. 169—39)



1. A pendent sprinkler head for a fire extinguishing system having a supply pipe comprising in combination a tubular member adapted at its upper end to be connected with the supply pipe and having a discharge outlet at its lower end, means at the upper end of said tubular member defining a valve seat, a plurality of discrete elements disposed one above the other within said member, the uppermost element being shaped to engage said seat and serve as an inlet valve, releasable means engaging the lowermost of said elements for maintaining said elements within said tubular member and for transmitting pressure to said uppermost element to retain the same against said seat, and fusible means coupled to said releasable means for releasing the same when the temperature exceeds a predetermined value, all of said discrete elements falling freely through and out of said member upon release of said releasable means to provide an unobstructed path for flow of fluid from the inlet to the outlet of said tubular member.

2,732,019
APPARATUS FOR FEATHERING AIRCRAFT PROPELLER BLADES
Frederick O. Stebbins, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application July 28, 1951, Serial No. 239,052
7 Claims. (Cl. 170—135.72)

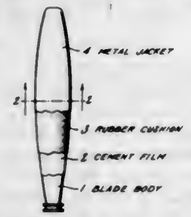


3. In an apparatus for feathering the blades of a propeller driven by a prime mover, electrically actuated means for changing the pitch of said blades in either direction, means including a solenoid and a switch means that is operated in response to a failure condition of the prime mover for controlling said electrically actuated means, means for electrically aiding the manual disengagement of said switch means after said switch means has been operated, said electrically aiding means including a circuit breaker mechanism responsive to engagement of said switch means for deenergizing said solenoid, a second solenoid connected in circuit with said switch means and responsive to engagement of said switch means for maintaining said switch means in closed condition with a holding force little more than said spring biasing, whereby said switch means may be manually disengaged by the application of a much lesser force than provided by said solenoid in actuating said switch means thereby simplifying the manual interruption of said feathering operation.

2,732,020
ELECTROPLATED STRUCTURE ADAPTED FOR USE AS AIRFOIL SECTION
Elwood L. Scholl, Detroit, Mich., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application May 4, 1950, Serial No. 159,926
1 Claim. (Cl. 170—159)

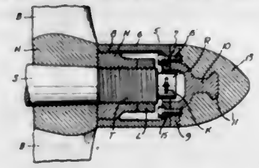
A substantially rigid aeroplane propeller blade having a slight degree of flexibility along its longitudinal medial plane, said blade including an inner, preformed, relatively rigid core of metal functioning to give con-

figuration and strength to the blade, an intermediate layer of a rubber-like cushioning material enclosing the core and an outer skin of metal electrodeposit enclosing the layer of cushioning material, presenting a continuous unbroken surface to the air-beating portions of the blade and defining the leading edge, the trailing edge and the tip of the blade and between the leading and trailing edges forming the upper and lower camber portions of the blade, said outer metal skin being of relatively thin cross section of material in its camber-



forming portion to provide for flexibility and thus to provide for a hinge effect along the medial plane of the blade, and said metal skin in the parts forming the leading and trailing edges having a cross section of material greater than the portions which form the camber portions, thus providing more rigidity in the edges than in the camber portions, thereby to provide a relatively thin and more flexible cross section of material in that portion of the skin which forms the camber portions of the blade than in the edge forming portions.

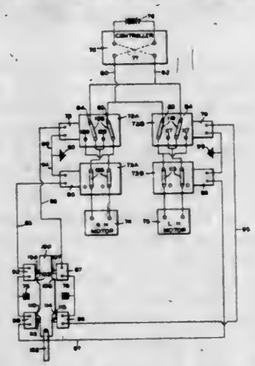
2,732,021
CORROSION PREVENTING FAIRWATER CAPS
John G. Taft, Brooklyn, N. Y., assignor to Godfrey Propeller Adjusting Corporation, Brooklyn, N. Y., a corporation of New York
Application March 16, 1953, Serial No. 342,657
10 Claims. (Cl. 170—159)



1. A fairwater cap for securement upon and rearwardly of a marine propeller and shaft assembly, including a supporting element formed of a given metal, means for supporting said element removably from and at the rear end of the propeller and shaft assembly, a separable bi-metal assembly formed as a whole to constitute a rearward fairwater continuation of said supporting element, and comprising a base of the same metal as the supporting element and positioned, when assembled, in contact therewith, and a shroud cast upon said base and formed of a metal higher than such given metal in the electromotive series, and removable means normally holding said supporting element and said separable bi-metal assembly together, with the two like metals in contact.

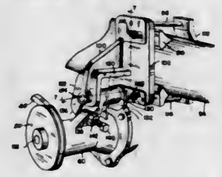
2,732,022
STEERING CONTROL MEANS FOR ELECTRIC MOTOR DRIVEN VEHICLE WHEELS
Robert Lapsley, Berrien Springs, and George L. Turner, Niles, Mich., assignors to Clark Equipment Company, Buchanan, Mich., a corporation of Michigan
Application December 2, 1949, Serial No. 130,622
5 Claims. (Cl. 180—6.28)

1. For use with an electric truck having independent forward drive wheels at one end thereof, and steering means adjacent the opposite end of the truck, a control circuit comprising an electric motor connected to and driving each of the drive wheels, a source of electrical potential, an electrical circuit between said source of electrical potential and said motors, solenoid actuated switch means interposed in said circuit for independently reversing the flow of current to said motors, solenoid actuated switch means interposed in said circuit for independently interrupting the flow of current to said motors, cam actuated switch means having connection with said



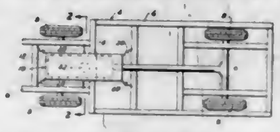
solenoid actuated switch means, a cam for actuating said last named switch means responsively to rotary movement of the steering means for actuating certain of said cam actuated switch means, and the said cam actuated switch means being connected to the said solenoid actuated switch means in a manner such that the flow of current to the motor at the drive wheel on the inside of the direction of turn is successively interrupted and reversed as the steering means moves from a neutral position toward one extreme of its operating range.

2,732,023
TRACTOR WITH POWER TAKE-OFF DRIVEN IMPLEMENT SUPPORTED FROM THE AXLE THEREOF
William A. Goss, Zanesville, Ohio, assignor to Detroit Harvester Company, Detroit, Mich., a corporation of Michigan
Original application March 7, 1951, Serial No. 214,337, now Patent No. 2,709,881, dated June 7, 1955. Divided and this application May 27, 1952, Serial No. 290,239
3 Claims. (Cl. 180—53)



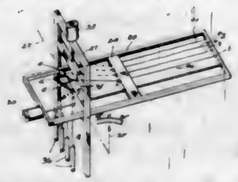
2. In combination with a tractor having a power take-off device adjacent the rear thereof and having a tapered rear axle and a pair of raised pads on the rear axle spaced apart transversely thereof and having tapped holes therein, a bracket for supporting an implement drive shaft in position to be connected to the power take-off device of the tractor, said bracket comprising a plate portion having an edge portion engaged with the rear axle adjacent the pads thereon, adjustable threaded abutments on said plate portion engageable with the pads on the axle, a plate positioned at the opposite side of the axle from said plate portion, and means connecting said plate and plate portion to clamp them against the tractor axle.

2,732,024
MOTOR VEHICLE OIL DRIP GUARD
Milton H. Schonwald, Oklahoma City, Okla., assignor of one-half to Mayer B. Goren, Oklahoma City, Okla.
Application December 16, 1954, Serial No. 475,660
1 Claim. (Cl. 180—69.1)



An oil drip guard for use under the engine and transmission of a motor vehicle, comprising a substantially rectangular frame covering an area substantially equal to the combined bottom area of the vehicle engine and transmission, said frame having a plurality of sockets formed in spaced relation around the periphery thereof, a tension spring pivotally secured at one end in each of said sockets, hooks secured to the opposite ends of said springs arranged to engage the motor vehicle and retain the frame around the lower portion of the vehicle engine and transmission, and a cover loosely stretched over the frame to form a pocket under the engine and transmission for receiving and collecting dripping oil from the engine and transmission, and an absorbent pad secured on the top surface of said cover to absorb the collected oil.

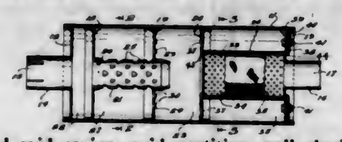
2,732,025
METHOD AND APPARATUS FOR ANALYSIS OF SEISMOGRAPHIC RECORDS
Burton D. Lee, Houston, Tex., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Continuation of application Serial No. 141,689, February 1, 1950. This application February 26, 1954, Serial No. 412,909
5 Claims. (Cl. 181—.5)



1. In vibration wave analysis of a plurality of traces, the method of continuously determining the amount of time correction required to bring each separate and individual trace into phase-time coincidence with the output of the receptor at the disturbance point, which comprises effecting a continuous mechanical displacement proportional to t_0, the time required for a reflected sound wave to reach a receptor substantially at the point of disturbance, effecting a separate continuous mechanical displace ment proportional to t_a where t_a is the distance between the disturbance point and another receptor divided by the instaneous value of average velocity, combining said displacements vectorially so as to produce a resultant proportional to the time required for a reflected sound wave to reach said other receptor, and then combining said displacement proportional to t_0 and said resultant to produce a scaler difference indicative of the magnitude of said time correction.

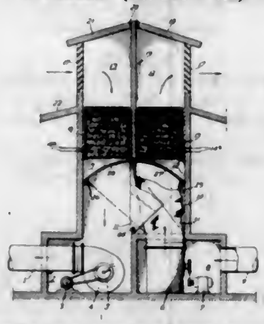
2,732,026
MUFFLER WITH FLASHING AND SPARK ELIMINATING MEANS
Burr C. Folts, Herkimer, N. Y.
Application August 6, 1952, Serial No. 302,946
2 Claims. (Cl. 181—57)

1. In a muffler, a metal casing having inner and outer end walls provided with inlet and outlet openings respectively, a partition wall disposed intermediate said end walls, a foraminous tubular wall secured in fixed position between said partition wall and said outer end wall with the outer end of said tubular wall surrounding the outlet opening to thereby provide an outlet chamber in communication with the outlet opening and a chamber surrounding said tubular wall and located between the



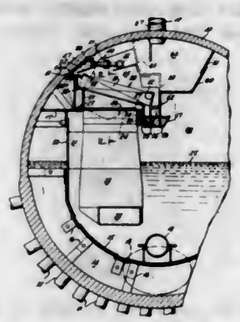
same and said casing, said partition wall closing the inner end of said outlet chamber and having apertures opening into said surrounding chamber for the flow of exhaust gases into said surrounding chamber and through said tubular wall into the outlet chamber, and a wire screen surrounding and closely fitting said tubular wall for arresting sparks passing with the exhaust gases and for preventing flashing of unconsumed gases in the outlet chamber.

2,732,027
VENTILATING APPARATUS WITH HEAT EXCHANGE MEANS
Sven Werner Wallin, Jonkoping, Sweden, assignor to Aktiebolaget Svenska Flaktfabriken, Stockholm, Sweden
Application December 7, 1951, Serial No. 260,526
Claims priority, application Sweden December 13, 1950
3 Claims. (Cl. 183—4.1)



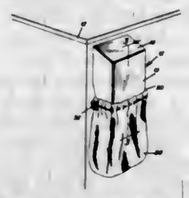
1. For a ventilating plant employing a continuous supply of atmospheric air and exhausting continuously waste air, a regenerative heat exchanger for transferring heat from said waste air to said atmospheric air, a first fan chamber, a fan in said chamber for supplying atmospheric air to said ventilating system, a second fan chamber, a fan in said second chamber for discharging exhaust air from said ventilating system, a shaft in open communication at one end with one of said fan chambers, partition means in said shaft dividing the other end thereof into two parallel channels, openings in said channels affording open communication thereof with the atmosphere, a bed of heat accumulating composition in each channel intermediate said openings and said one fan chamber, and a flexible tubular element connected at one end to the other of said fan chambers and movable at the other end between a first position in fluid communication with one of said parallel channels, and a second position in fluid communication with the other of said parallel channels, said tubular element in its first position effecting flow of air through said other fan chamber and said one channel in one direction, and affording flow of air through said other channel and said one fan chamber in the opposite direction, and in the second position affording flow of air through the one channel and said one fan chamber in the said opposite direction, and effecting flow of air through said other fan chamber and said other channel in said one direction.

2,732,028
STEAM PURIFIER
Earl E. Coulter, Deerfield, Ohio, assignor to The Babcock & Wilcox Company, New York, N. Y., a corporation of New Jersey
Application January 6, 1953, Serial No. 329,783
9 Claims. (Cl. 183—31)



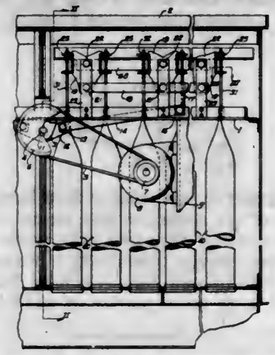
9. In a steam boiler, a horizontally disposed steam and water drum having upper outlet means for steam and lower outlet means for water, a row of cyclonic steam and water separators disposed along a longitudinal side of said drum intermediate the height thereof, and having an outlet in the upper portion thereof for the upward discharge of substantially dry steam therefrom, means for tangentially delivering steam and water mixture to said cyclonic separators, a washer positioned above the steam outlet from said cyclonic separators for direct contact between a wash water and the steam discharging from said cyclonic separators, a trough extending longitudinally of said drum adjacent the upper portion of the row of cyclonic separators and arranged to receive the wash water discharging from the lower edge portion of the washer, and a plate member positioned in the upper portion of said drum with its upper edge attached to said drum and its lower edges submerged in the wash water within said trough.

2,732,029
LINT FILTER FOR CLOTHES DRYERS
Albert Hoffmann, Powell, Wyo., assignor of forty-four per cent to Walter Zimmerman, three and one-third per cent to E. F. Engebretson, three and one-third per cent to Gordon V. Cox, and three and one-third per cent to William R. Pearce, all of Bismarck, N. Dak.
Application November 20, 1953, Serial No. 393,326
1 Claim. (Cl. 183—43)



A lint filter of the class described comprising a vertically elongated tubular metal duct having a flat rear wall formed with an opening in its upper portion, a rearwardly projecting attaching flange in the region of the opening, said duct having a tapering lower end provided with an opening in the bottom thereof and formed with an external peripheral rib, and a filter bag having a mouth portion in which the tapered lower end of the duct is received, said bag having a drawstring in the region of the mouth of the bag and positioned above the rib for securing the bag to the duct.

2,732,030
AIR FILTERING APPARATUS
Morton I. Dorfan, Pittsburgh, Pa.
Application March 23, 1954, Serial No. 418,152
7 Claims. (Cl. 183—58)



1. In air filtering apparatus, a vertical filter bag having an open lower end and a closed upper end, said upper end being provided at one side with an inverted pocket open at the bottom, a metal hanger supporting the upper end of the bag, said hanger having a vertical shank formed for suspension by its upper end, and an integral vertical loop at the lower end of the shank, the loop projecting up into said pocket through its open bottom and having an upper portion engaging the top of the pocket to support the bag.

2,732,031
COMBINATION SEAL AND GASKET FOR END OF PLEATED CARTRIDGE
Milton Rabbitt, Gregory, and Carl F. Binder, Ann Arbor, Mich., assignors to Fram Corporation, a corporation of Rhode Island
Application May 7, 1953, Serial No. 353,469
1 Claim. (Cl. 183—69)

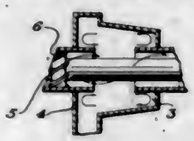


A filter element comprising an annulus formed of a pleated porous fibrous sheet having the pleats extending longitudinally of the annulus, and a combined closure and gasket for an end of the pleated annulus and which is formed throughout of a resilient rubber-like impermeable plastic consisting of a vinyl resin compound molded to shape with the ends of the pleats embedded therein and having an integral molded gasket of the same material protruding from an outer face of the closure.

2,732,032
DUST COLLECTOR
Alexander G. Sandison, Brantford, Ontario, Canada, assignor to Waterous Limited, Brantford, Ontario, Canada, a corporation of Canada
Application August 14, 1953, Serial No. 374,399
Claims priority, application Canada October 10, 1952
2 Claims. (Cl. 183—80)

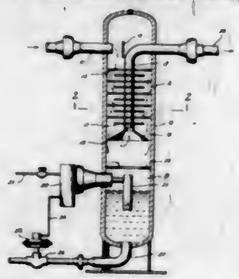
1. Apparatus for the separation of suspended material from a stream of fluid, comprising an inlet tube adapted to receive the stream of fluid, an outlet tube substantially coaxial with and of substantially the same cross-section as the inlet tube, the tubes being spaced axially to leave a gap between the outlet end of the inlet tube and the

inlet end of the outlet tube, means for forcing a stream of fluid through said tubes, means in said inlet tube for imparting swirl to the stream of fluid, an eddy-confining chamber surrounding said gap and located to receive material centrifugally separated in said gap, said chamber comprising a substantially conical frustum disposed co-



axially with respect to said tubes with its larger end facing the inlet side of the apparatus and means for withdrawing separated material from said eddy-confining chamber, said withdrawing means comprising a bunker connected to the larger end of said eddy-confining chamber and a discharge port in the lower portion of said bunker.

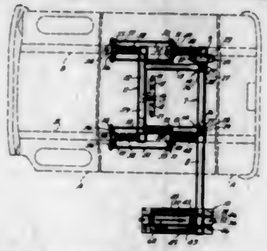
2,732,033
SEPARATOR
Asbury S. Parks, Houston, Tex.
Application October 31, 1952, Serial No. 317,932
2 Claims. (Cl. 183—111)



1. A separator including, a substantially cylindrical vertically disposed vessel, an inlet pipe extending radially into the upper portion of the vessel, an elongate axially disposed conduit having its lower end open and spaced from the inlet pipe with the upper end of said conduit being directed outwardly through the wall of the vessel, an outlet pipe connected with the conduit, a plurality of transverse baffle plates disposed in horizontal planes and supported upon the conduit in spaced relationship, each baffle having a flow opening permitting downward flow past the baffle, and a generally conical deflector baffle secured to the lower end of the conduit and having its peripheral edge in close proximity to but spaced from the inner wall of the vessel to provide an annular space whereby the flow stream passing downwardly around the baffle plates passes downwardly around the conical deflector baffle and is directed into intimate contact with the wall of the vessel, the liquids precipitating downwardly into the lower end of the vessel and the well stream flowing upwardly around the deflector baffle and through the conduit to the outlet conductor.

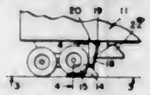
2,732,034
VEHICLE JACK
Louie F. Latimer, Gainesville, Fla.
Application December 7, 1954, Serial No. 473,502
4 Claims. (Cl. 187—8.72)

1. In a device of the class described, a horizontally disposed torque shaft which is substantially longer than the width of a vehicle with which said device is to be used, a floor-engaging bearing on the inner end of said torque shaft, a floor-engaging base on the outer end of said torque shaft, leg structure journalled to and projecting laterally from said torque shaft in a direction longitudinally of the vehicle, a pair of lifting arms secured at their inner ends to said torque shaft one adjacent the inner end thereof and the other to the intermediate portion thereof, a pair of secondary lifting arms pivotally secured at their inner ends to said leg structure in spaced relation to said torque shaft for swinging movements about a common axis parallel to the torque shaft axis, and each in a plane parallel to the planes of movement of said first-mentioned lifting arms, rigid



links connecting the outer end portion of each of said lifting arms with the outer end portion of a cooperating one of said secondary lifting arms, said base extending laterally from the outer end of said torque shaft in the same direction as said leg structure, and power operated mechanism on said base for imparting rotary movement to said torque shaft in an upward direction to cause engagement of the extended ends of said lifting arms with the frame of a vehicle.

2,732,035
TRUCK-TRAILER EMERGENCY BRAKE
Kirk Besoyan, Los Angeles, Calif.
Application January 19, 1953, Serial No. 331,961
3 Claims. (Cl. 188—4)

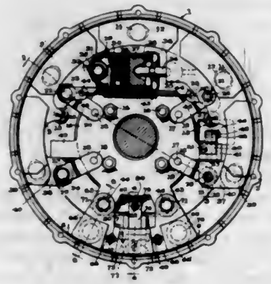


1. In a vehicle having a body portion supported from the ground surface by a wheel, an emergency brake comprising a shoe characterized by its ability to gradually absorb forward momentum of said vehicle by smooth, frictional, non-tilting engagement with said ground surface, said shoe having an elongated smooth bottom ground-engaging surface and longitudinal and upwardly disposed wall surfaces defining a wheel-receiving cradle above said ground-engaging surface, and roller means carried by said shoe and spaced above said ground-engaging surface in position for engagement by the periphery of a wheel in said cradle; said longitudinal surface extending forwardly from a point behind the axis of rotation of said wheel to a point forwardly of said axis below the front peripheral surface portion of said wheel, said upwardly disposed surface extending upwardly from said longitudinal surface a distance at least one-third the diameter of said wheel, and said ground-engaging surface extending forwardly from a point beneath the rear end portion of said longitudinal surface to a point spaced forwardly of the top end portion of said upwardly disposed surface a distance equal at least to one-third the diameter of said wheel.

2,732,036
DISC BRAKES OF THE SEGMENTAL DISC TYPE
Claude R. Myers, Galien, Mich., assignor, by mesne assignments, to Lambert Brake Corporation, St. Joseph, Mich., a corporation of Michigan
Application July 29, 1952, Serial No. 301,558
22 Claims. (Cl. 188—72)

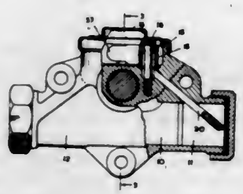
2. A friction device of the class described, comprising in combination, a support, a rotary member to be braked,

service braking means carried by said support and engageable with said rotary member, and auxiliary braking means also carried by said support and engageable with said rotary member, said service and auxiliary braking means each comprising a double-disc assembly, the discs of said double-disc assembly being in the form of segments of an annulus, means carried by the service braking means for actuating the same, means carried by the



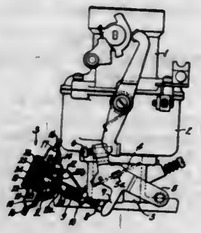
auxiliary braking means for actuating the same, and energizing means between the discs of each of said double-disc assemblies, said support constituting an anchor for at least one disc of each of said double-disc assemblies, and said rotary member having opposed radially disposed friction faces engageable by the discs of either of said inner double-disc assemblies upon operation of the respective actuating means.

2,732,037
HYDRAULIC DAMPER WITH ADJUSTABLE VALVES
Charles Samuel Roberts Stock, Shirley, near Birmingham, England, assignor to Girling Limited, Birmingham, England, a British company
Application February 15, 1952, Serial No. 271,661
Claims priority, application Great Britain February 16, 1951
7 Claims. (Cl. 188—88)



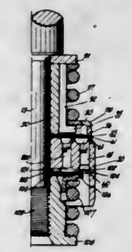
1. An hydraulic damper comprising, in combination, a damper body defining a piston cylinder closed at its ends and a recuperation chamber from which make-up liquid can pass to the working spaces, said damper being adapted to be mounted for use in a position where the recuperation chamber is above the piston cylinder, a valve housing formed separately from the damper body and detachably secured within and against a wall of the recuperation chamber, means in said damper body and housing establishing communication between opposite ends of the cylinder, adjustable valves in said housing controlling said means, and a removable cover for the recuperation chamber which, when removed, exposes the valve housing and enables adjustment of the valves and removal of the housing to be effected without loss of liquid while the damper is mounted for use.

2,732,038
ANTI-STALL DEVICE
Elmer Olson, John Martin Kelly, George L. Gibbs, Jr., and Erwin J. Reppert, Rochester, N. Y., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 7, 1950, Serial No. 166,748
7 Claims. (Cl. 188—96)



1. A dash pot for retarding the closing movements of a carburetor throttle valve which is provided with an arm movable therewith for engagement by a control member of said dash pot, said dash pot comprising a housing, a diaphragm dividing said housing into two chambers and operative when moved to transfer air from one chamber to the other, said control member connected to said diaphragm and extending outwardly of the housing, means forming an unrestricted orifice through which air is forced when the diaphragm is moved in one direction, means for preventing flow of air through said orifice when the diaphragm is moved in the other direction, means forming a restricted orifice through which air is forced when the diaphragm is moved in said other direction, means providing an unrestricted air passage connecting one of said chambers with both said orifices and effective to convey air from said chamber to the unrestricted orifice when the diaphragm is moved in one direction and from the restricted orifice to said chamber when the diaphragm is moved in the other direction whereby movement of the control member in one direction is retarded and movement thereof in the opposite direction is unretarded.

2,732,039
SHOCK ABSORBER CONTROL VALVE
Mearick Funkhouser, Dayton, Ohio, and George A. Brundrett, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 20, 1952, Serial No. 321,604
5 Claims. (Cl. 188—100)



1. In an hydraulic shock absorber, a control valve for the same including in the combination, a piston body having passage means therein for flow of fluid between opposite ends of said piston, a valve disc on one end of said piston closing said passage means against flow of fluid through the same, said valve disc having a plurality of orifices disposed in circular arrangement therein for flow of fluid through said valve disc before said valve disc opens said passage means, an orifice flow control disc positioned on said valve disc and having an opening therein having a length that is a multiple of the distance between the said orifices to provide for uncovering of a

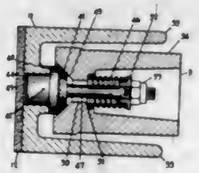
predetermined number of orifices irrespective of the radial position of the said opening relative to said valve disc, a check valve disc positioned on said orifice flow control disc to close said opening therein and prevent flow of fluid in one direction through said orifices, and resilient means operatively effective on said valve disc urging the same to maintain closed passage means.

2,732,040
CONSTANT RESISTANCE SHOCK ABSORBING DEVICE
Valmore F. De Vost, Washington, D. C., and Jonathan C. Fisher, Riverdale, Md., assignors to the United States of America as represented by the Secretary of the Navy
Application March 23, 1953, Serial No. 344,255
6 Claims. (Cl. 188—101)
(Granted under Title 35, U. S. Code (1952), sec. 266)



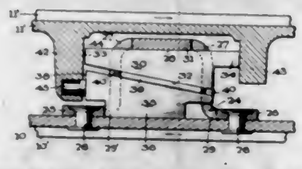
1. A constant resistance shock absorbing device of the character disclosed comprising a cylindrical container characterized by elasticity, a particulate mass disposed within and filling said container, a base plate, a centrally disposed boss integral with said base plate and disposed within one end of the container, means including a strap disposed about one end of the container for clamping the container to the boss, and an adjustable ram in engagement with said mass and in threaded engagement with said boss for packing the mass sufficiently to cause the container to be filled therewith.

2,732,041
BRAKE
John Norman Anderson, Hoboken, N. J., assignor to Otis Elevator Company, New York, N. Y., a corporation of New Jersey
Application June 8, 1950, Serial No. 166,925
2 Claims. (Cl. 188—171)



1. Brake mechanism comprising; a brake drum; a brake shoe for engaging said drum; a pivoted operating arm for said shoe; operating mechanism for said arm; and means mounting said shoe on said arm, said mounting means including a socket on said arm, a ball on said shoe and extending into said socket, the center of the thus formed ball and socket joint coinciding with the resultant of the friction forces between said shoe and said drum, abutment means secured to said shoe at the upper end thereof for limiting movement of said shoe about said joint with respect to said arm when said shoe is released, said abutment means providing a slight operating clearance with respect to said operating arm when the shoe is applied, and spring actuated means at the lower end of the said shoe for biasing said ball into said socket and for maintaining the upper end of said shoe in engagement with said drum when said shoe is being released until said operating clearance is taken up.

2,732,042
AUTOMATIC ADJUSTER FOR DISC BRAKES AND THE LIKE
Millard B. Lucker, St. Joseph, Mich., assignor, by mesne assignments, to Lambert Brake Corporation, St. Joseph, Mich., a corporation of Michigan
Application December 9, 1952, Serial No. 324,905
12 Claims. (Cl. 188—196)



1. An automatic adjuster of the class described adapted to adjust the relative positions of a pair of relatively shiftable members, comprising a pair of spaced relatively fixed abutments, supporting means disposed intermediate said abutments, and one-way adjusting means shiftably carried by said supporting means and disposed for engagement at the opposite ends thereof with said abutments for allowing said abutments to be shifted in one direction relative to said supporting means but prohibiting retrograde movement thereof, said one-way adjusting means comprising cooperative wedge means, including a longitudinally extended wedge element disposed for engagement at its opposite ends with said abutments, a cooperative relatively movable wedge element, an anti-thrust plate between said wedge elements, and means normally maintaining said wedge elements and said plate in wedging engagement with one another, with the first-mentioned wedge element engaged with at least one of said abutments.

2,732,043
CAST BRAKE BEAM WITH SUPPORT SHOE
Carl E. Tack, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application March 13, 1952, Serial No. 276,369
1 Claim. (Cl. 188—213)



A cast truss type brake beam comprising tension and compression members and a central strut, said strut extending transversely of the beam and integrally connected at opposite ends to the members centrally thereof, a third point support shoe cast integrally with the strut and tension member, said shoe extending downwardly from the plane of the beam and presenting on the lower end thereof a flat oval friction surface, said friction surface being arranged to diverge rearwardly from the horizontal plane of the beam at an angle of approximately 15°, said shoe being located on the tension member and strut and offset slightly to one side of the transverse center line of the beam.

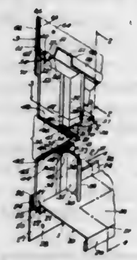
2,732,044
PREFABRICATED CONSTANT PRESSURE JOINT CONSTRUCTION
Wallace O. McClune, New York, N. Y.
Application April 16, 1954, Serial No. 423,867
5 Claims. (Cl. 189—36)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A construction for demountable structural units assembled in adjacent edge-to-edge relation, comprising a plurality of pairs of parallel panel units, each unit including a pair of mutually spaced, registering panels, clamp-engaging strips attached to inner surfaces of said parallel panels, one strip adjacent each abutting panel edge, each of said strips having one surface thereof aligned with an abutting panel edge and an opposite non-planar surface facing inwardly of each said panel unit, means on said clamp-engaging strips for guiding abutting edges of said pairs of panels into registering position, flexible clamp means including a pair of non-planar portions joined by a planar web portion having apertures therein, said flexible clamp means being disposed in contacting engagement with the clamp-engaging strips along abutting edges of each unit, the non-planar portions of said flexible clamp means having a smaller radius of curvature than the non-planar portion of said clamp-engaging strips, interlocking means including a plurality of lugs carried by and extending outwardly through the apertures in the web portion of one of said flexible clamps



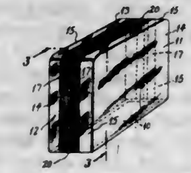
at one abutting edge of each of said units, means for drawing said units down upon and securing them to a base structure, each of said lugs having a projection including a rearwardly inclined edge terminating in a notch for engaging the web portion of an adjacent unit through the apertures thereof, the rearwardly inclined edge of each of said projections coacting with an edge of each of said apertures in the web portion of an adjacent unit urging the web portions of flexible clamps on adjacent units into face contact and simultaneously urging facing surfaces of said flexible clamp means and said strips into continuous surface contact and seating said contacting web portions in said notches when said units are drawn down upon a base structure by said securing means thereby stressing said flexible clamp means to provide a constant pressure on said clamp strips to seal the joint at abutting edges of said units.

2,732,045
FLASHING SURROUNDS
Edwin H. Herlocker, Los Angeles, Calif.
Application December 30, 1952, Serial No. 328,560
7 Claims. (Cl. 189—75)



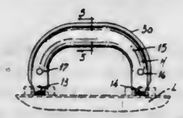
1. A flashing surround for windows and the like comprising a frame formed with a lower member, a pair of side members, and a header member, said frame also including a marginal external flange forming a part of said lower member, said side members and said header member, a sill flashing formed with a sill plate, a flange-receiving recess, and a rear vertical sill flashing plate extending above and below said flange recess, which recess is adapted to receive the lower portion of said marginal external frame flange extending along the front of said lower frame member, side flashings formed with side vertical recesses respectively to receive the outer edge portions of the outer marginal frame flanges extending along the outer side of said side frame members respectively, and a header flashing formed with an upwardly extending flange receiving recess to receive the upper edge portion of said outer marginal frame flange extending along the outer side of said upper frame member, and a rear vertical plate flashing member extending above, and extending below said recess and forming the rear wall of said recess and engaging the rear side of said upper marginal frame flange.

2,732,046
LUGGAGE COVERS
Harry Smallberg, Brooklyn, N. Y., assignor to General Sewing Corporation, New York, N. Y., a corporation of New York
Application May 11, 1953, Serial No. 354,136
4 Claims. (Cl. 190—26)



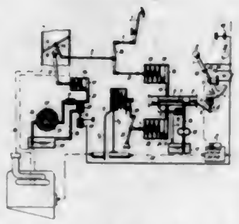
1. A cover for an article of luggage of the character described comprising a unitary bottom wall of substantially rectangular shape, side walls of flexible inelastic woven fabric, each connected by one edge to an edge of said bottom wall, and a pair of gusset sections, each forming top and end wall portions of the cover and each consisting of an outer portion of inelastic woven fabric extending from the side and top edges of a side wall and from an end edge of the bottom wall, and a continuous elastic strip connected by one longitudinal edge to the contiguous edge of the inelastic fabric portion of the gusset section and by its end edges to the end edges of the bottom wall and having slide fastener tape connected to the other longitudinal edge thereof.

2,732,047
HANDLE
William Finkelstein, Philadelphia, Pa.
Application July 22, 1953, Serial No. 369,693
1 Claim. (Cl. 190—57)



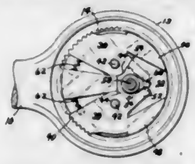
A U-shaped handle for luggage comprised of a generally circular pressed metal stamping having inner and outer edges, said blank being semi-circular in cross-section in the portion that is engaged by the hand, said blank having portions 180° apart that are flat in cross-section, said blank folded at said flat portions so that said semi-circular cross-section portions fold toward each other with their edges adjacent one another, a pre-formed insert with a groove on each side of the longitudinal length of said insert, the inner edges of said blank abutting one another and the outer edges of said blank interfitting with said grooves in said pre-formed grooved insert to provide a neat finish to the outer edges of said handle and to conceal the opening between the outer edges of said semi-circular portions.

2,732,048
DRIVING DEVICE FOR INTERNAL COMBUSTION ENGINES
Hans J. M. Förster and Karl Adolf Kollmann, Stuttgart-Bad Cannstatt, Germany, assignors to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application February 23, 1951, Serial No. 212,324
Claims priority, application Germany February 24, 1950
24 Claims. (Cl. 192—.08)



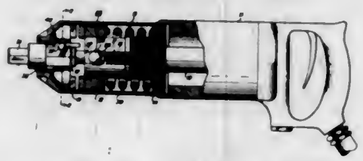
3. A driving device comprising, a prime mover, a clutch having a primary driving member driven by said prime mover and a secondary driving member disconnectable from said primary driving member, a change-speed gear in driving connection with said secondary driving member, means for controlling said prime mover, means for shifting said change-speed gear, means for actuating said control means dependent upon the difference in speed between said primary and secondary driving members to accelerate said prime mover when the speed of said primary driving member is slower than the speed of said secondary driving member, and to retard said prime mover when the speed of said primary driving member is faster than the speed of said secondary driving member, and means for rendering said actuating means inoperative with said shift means in a position corresponding to a speed of said change-speed gear and for rendering said actuating means operative with said shift means in a position between speeds.

2,732,049
ROUND HEAD RATCHET WRENCH
John J. Delliso, Shrewsbury, Mass.
Application June 24, 1952, Serial No. 295,147
3 Claims. (Cl. 192—43.1)



1. A ratchet wrench comprising a head, a plate therein, a pair of pins, a pawl pivoted on each pin, springs urging the pawls oppositely, into engagement with the head, a flat area on the plate for each pawl, a pair of mutually angular walls defining each flat area, each pawl being located between the walls of its flat area and being sector-shaped, each pawl having a pair of angular side edges arranged at an angle less than that of the flat area walls, the pawl edges abutting the respective walls in each extreme position of pivoting motion, the walls of each flat area being connected by a curved wall in continuation thereof, each pawl at its apex being rounded to fit its respective curved wall and bearing thereon, avoiding wear on the pawl pins, a finger on each pawl projecting rearwardly therefrom past the respective curved wall, the latter having an opening to accommodate the finger, means selectively disengaging the pawls from the head, and means on the plate for ratchet operation in either direction of rotation of the head, said pawl disengaging means comprising a shaft mounted for rotative action in the head, a radial operator thereon engaged by both fingers under action of the springs to yieldingly hold the operator in neutral position.

2,732,050
TORQUE RELEASE CLUTCH
Paul R. Van Sittert, Cleveland, Ohio, assignor to The Rotor Tool Company, a corporation of Ohio
Application September 21, 1951, Serial No. 247,675
16 Claims. (Cl. 192—56)



3. A torque wrench for turning a turnable object, a driven member for turning said object, a driving member for driving said driven member, first and second clutch means disposed between said driven member and said driving member, said first clutch means including a driven clutch part connected to rotate with said driven member, said second clutch means including a driving clutch part connected to said driving member, said driven member and said driven clutch part being longitudinally shiftable to an extended position and to a retracted position relative to said driving clutch part, said first and second clutch means being operable through a work cycle with said driven member in said extended position being a rest condition of said cycle, said cycle including a driving condition and a release condition, resilient means urging said driven member longitudinally of said driving member to said rest condition, both said driven member and said driven clutch part in said rest condition being disconnected from said driving clutch part, said resilient means resisting axial pressure exerted against said turnable object, longitudinal movement of said driving member toward said turnable object with said driven member engaging said turnable object overcoming the force of said resilient means and longitudinally shifting said driven member to said retracted position and thereby establishing said driving condition between said driven and driving members, said second clutch means including cam means tending to disengage said second clutch means from said driven member, force means urging said second clutch means towards an engaged position, said cam and force means being responsive to torque transmitted from said driving member to said driven member to disengage said second clutch means and thereby establish said release condition between said driven and driving members with said driven member still pressed to said retracted position under axial pressure exerted against said turnable object, means in response to disengagement of said second clutch means to provide a continuous release condition between said driven and driving members, removal of said driven member away from said turnable object and release of said axial pressure causing the resilient means to shift said driven member to said extended position and thereby restore said driven member to said rest condition with said driven clutch part disconnected from said driving clutch part.

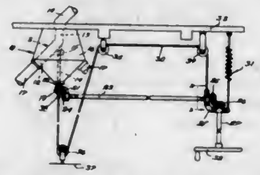
2,732,051
CENTRIFUGAL CLUTCHES
William P. Dalrymple, Rochester, N. Y., assignor to American Brake Shoe Company, Wilmington, Del., a corporation of Delaware
Application August 1, 1951, Serial No. 239,789
3 Claims. (Cl. 192—105)

1. In a centrifugal clutch, a driving member and a driven member, a plate connected to the driving member, a plate connected to the driven member, said plates together defining a clutch housing, a flange on the second-named plate affording a clutch drum, a plurality of centrifugally actuatable clutch segments disassociated one from the other within said clutch housing, a spring within said clutch housing normally holding the clutch segments on the driving member in non-engaged relation with respect to said clutch drum, each of said clutch segments being formed at the trailing end with a relatively large recess displacing the center of gravity of each clutch segment substantially forwardly of the physical center thereof, each of said recesses affording a radially inwardly facing and inclined cam surface, and wedge acting blocks pivotally carried by the first-named plate within said



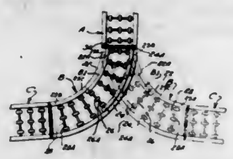
recesses in position to bear against the corresponding cam surfaces on the clutch segments normally leaving exposed a substantial portion of said recesses forwardly of the blocks whereby, when the driving member accelerates to clutch engaging speed, said clutch segments first pivot independently of one another at their leading ends radially outwardly about said blocks until portions thereof engage said clutch drum whereupon rotative movement of the clutch segments is retarded causing the cam surfaces on the clutch segments to independently advance along said blocks serving to wedge each of the clutch segments gradually into engagement with the clutch drum from the leading end of the clutch segments rearwardly to the trailing ends thereof.

2,732,052
CONTROL APPARATUS FOR GRAIN DISTRIBUTING SPOUTS
Linden C. Campbell and Robert W. Brandt, Spokane, Wash.
Application December 14, 1953, Serial No. 397,976
3 Claims. (Cl. 193—23)



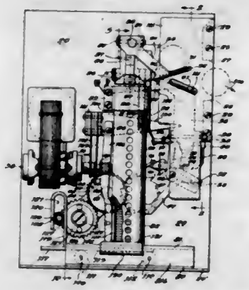
1. In a grain distributing spout having latch means for accurately positioning said spout in communication with selected ones of plural pipes the improvement comprising; a vertically disposed rotatable distributor shaft fixed to said spout and reciprocable with relation thereto; a spring yieldably holding said distributor shaft in its normal longitudinal raised position; said distributor shaft being operably connected to selectively actuate said latch means when moved from its normal position; an angularly disposed driving shaft operably connected to said distributor shaft for simultaneous rotation; manually operated means operably connected to said driving shaft for selective manual rotation; said manually operated means being yieldably supported for manual reciprocation; and a flexible cable secured to said manually operated means and connected for axial pull on said distributor shaft whereby the distributor shaft may be reciprocated or rotated independently of the other movement.

2,732,053
AMBIDEXTEROUS CONVEYOR
John J. McLaughlin, Philadelphia, Pa., assignor to The Wilkie Company, Philadelphia, Pa., a partnership
Application August 20, 1952, Serial No. 305,399
5 Claims. (Cl. 193—36)



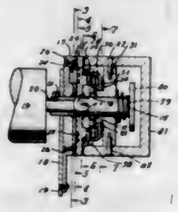
1. A curved gravity sectional article conveyor wherein the articles coming from a single conveyor may be caused to travel in either of two directions 180° apart in a horizontal plane and wherein the height of the supporting legs for the conveyor need not be changed to adjust for pitch but remains the same when the direction of travel of the articles is changed 180°, comprising a plurality of arcuate conveyor sections which jointly subtend an angle of 90°, one of said arcuate sections being pivotally connected at one of its ends and having a free outer end, and means to engage the ground and to support said arcuate conveyor sections in a predetermined position, said pivotal connection of said one arcuate section being attached to substantially the 45° point of said other arcuate section and said pivoted section having its said outer free end adapted to be raised higher than its pivotal attachment in order to provide sufficient pitch to convey articles by gravity.

2,732,054
COIN CHANGING DEVICE
Louis F. Hehn, Chicago, Ill., assignor to Mills Industries, Incorporated, Chicago, Ill., a corporation of Illinois
Application January 10, 1948, Serial No. 1,498
17 Claims. (Cl. 194—10)



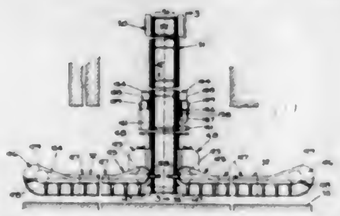
1. A coin changing device comprising: a coin passage into which a coin to be changed may be passed; a pivotally mounted coin seat in said passage adapted to receive said coin and be held in a pivoted position thereby; a coin gate adjacent said coin seat for retaining said coin upon the latter; a switch held in a closed position by said coin seat while the latter is in said pivoted position; a change supply container; a coin dispensing slide in association with said container; a solenoid energized upon the closing of said switch, said solenoid having a movable armature in operative connection with said slide for moving the same to eject change from said container; a dash-pot for controlling the speed of movement of said armature; a ratchet wheel rotatively advanced in the movement of said armature; means for holding said wheel in advanced position; and means operable by said wheel when the same has advanced to a predetermined position to release said holding means and to move said gate to release said coin from said seat.

2,732,055
TYPEWRITER PLATEN LOCKING DEVICE
Howard L. Williams, Wichita, Kans.
Application June 5, 1953, Serial No. 359,927
4 Claims. (Cl. 197—141)



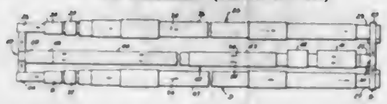
1. Pre-settable delayed action mechanism for arresting the rotation of the platen of a typewriter after the typing operation has caused the platen to rotate through a selected number of degrees, comprising: a shaft connected to and extending axially from one end of the typewriter platen; a plate mounted on and rotatable with said shaft in a plane normal to the shaft axis, said plate having a spiral groove in one side surface surrounding said shaft; and a groove following stop mounted on the typewriter frame and projecting therefrom into the spiral groove in said plate, whereby as the platen and plate rotate during the typing operation and the end of the spiral groove contacts said stop, further rotation of the platen is prevented by such contact; a manually operable knob mounted on said shaft adjacent said plate; and means operably connecting the knob to said plate for moving the plate axially along the shaft away from said stop in response to slight rotation of the knob, for the purpose of unseating the stop from the spiral groove to release the platen.

2,732,056
LOADER-CONVEYOR APPARATUS
David Pearson, Wakefield, England, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Application October 4, 1952, Serial No. 313,111
2 Claims. (Cl. 198—8)



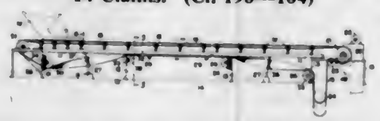
1. Mine conveyer apparatus adapted to load coal removed from a long wall mine face including an endless chain conveyer mounted on an extensible and contractible frame means having a relatively fixed discharge end and having a receiving end which is movable longitudinally with respect to said discharge end toward the mine face, power means for extending said frame means to feed the receiving end of said conveyer longitudinally toward the mine face and away from said discharge end, a motor supported on the discharge end of said frame means connected to a head shaft which provides for driving said chain conveyer from a relatively fixed position, a foot shaft driven by said chain conveyer, a pair of power transmission means supported by said frame means and movable therewith one of said pair on each side of the receiving end of said chain conveyer and including sprockets driven from said foot shaft, a pair of endless gathering and feeding chain conveyers including a plurality of pivotally connected sections movable with said frame means and over which the flights of said gathering and feeding conveyers extend and which extend laterally at right angles one of said pair on each side of the receiving end of the first said chain conveyer whereby said sections can be flexed to provide for maintaining the gathering and feeding conveyers substantially parallel to the mine face and in position to gather coal removed from the mine face as the mining progresses and discharge said coal onto the receiving end of the first said conveyer, said gathering and feeding conveyers being driven from said sprockets in the power transmission means and being movable with the receiving end of the first said conveyer without requiring the discharge end and motor of the first said conveyer to be moved.

2,732,057
BAKERY CONVEYOR SYSTEM
Hiram E. Temple, San Gabriel, Calif., assignor to Read Standard Corporation, a corporation of Delaware
Application December 5, 1951, Serial No. 260,061
11 Claims. (Cl. 198—85)



1. In a conveyor system, the combination of: first, second and third conveyors each having inlet and outlet ends; transfer means communicating with said outlet ends of said first and third conveyors and said inlet end of said second conveyor for transferring first-conveyor articles from said first conveyor to said second conveyor and third-conveyor articles from said third conveyor to said second conveyor, said transfer means including means for staggering the first-conveyor articles relative to the third-conveyor articles transversely of said second conveyor; and selective distributing means communicating with said outlet end of said second conveyor and said inlet ends of said first and third conveyors for transferring the first-conveyor articles from said second conveyor to said first conveyor and the third-conveyor articles from said second conveyor to said third conveyor, said selective distributing means being responsive to the staggering of the first-conveyor articles relative to the third-conveyor articles on said second conveyor.

2,732,058
APPARATUS FOR TRAINING TWISTED CONVEYOR BELTS
John D. Nigra, Negaunee, and Geno Colombo, Princeton, Mich., assignors to Chain Belt Company, Milwaukee, Wis., a corporation of Wisconsin
Application June 28, 1952, Serial No. 296,142
14 Claims. (Cl. 198—184)



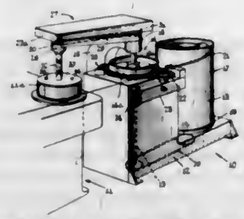
1. Apparatus for training and stabilizing a twisted conveyor belt having a dirty side upon which material may be placed for conveyance and a clean side for engagement with supporting idlers, said apparatus comprising a pulley adjacent one end of a twisted portion of the belt and rotatably supported with its axis generally perpendicular to the belt centerline, means for adjusting the angular relationship between the pulley axis and the belt centerline to initially train the belt for its normal transverse stress distribution, and a guide assembly having means straddling the belt substantially centrally of its twisted portion, said means having one deflection limiting element engageable with the dirty belt side and a second deflection limiting element engageable with the clean belt side during deflection from the path for which the belt was initially trained whereby to limit the deflection of the belt from its initially trained position during changes from the aforesaid normal transverse stress distribution.

2,732,059
BELT CONVEYOR
Maurice J. Erisman, Oak Park, Ill., assignor to Link-Belt Company, a corporation of Illinois
Application October 8, 1951, Serial No. 250,321
9 Claims. (Cl. 198—203)



2. A belt conveyor, comprising an endless flexible conveying belt providing a continuous load carrying surface and having a relatively narrow serrated surface forming a part of and extending throughout the length of the non-load carrying surface of the belt, means for supporting said belt, and an endless drive belt having a serrated surface meshing with the serrated surface of said conveyor belt for driving the latter.

2,732,060
WIRE PACKAGING ATTACHMENT AND DRIVE MEANS THEREFOR
Victor A. Zaveruha, Trumbull, Conn., assignor to The Coulter & McKenzie Machine Co., Inc., Bridgeport, Conn., a corporation of Connecticut
Application March 30, 1954, Serial No. 419,789
5 Claims. (Cl. 203—200)



1. A wire packaging attachment adapted to be connected to a projecting rotary driven member of a wire processing machine comprising a frame having a rotary wire feeding and an interconnected vertical rotary packaging device thereon; a drive shaft therefor projecting above the frame; a post on the frame projecting above the frame and having a bearing for the end of the shaft; an overarm mounted on the post to pivot about said shaft and projecting beyond the sides of the frame; a stub shaft rotatably mounted on the arm adjacent the other end thereof; drive means carried by the arm connecting the stub shaft and drive shaft; and a universal connection secured to said stub shaft and having means thereon adapted to be connected to said projecting driven member of the wire processing machine to be driven thereby so as to rotate said wire feeding and packaging devices in timed relation to said wire processing machine.

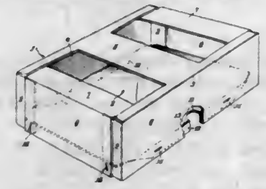
2,732,061
SPECTACLE CASES
Edward A. Wilcox, Chicago, Ill.
Application August 11, 1954, Serial No. 449,037
1 Claim. (Cl. 206—5)

A spectacle case comprising a pair of flexible leather members of co-extensive shape and size and having parallel lateral edges, both of said members being of sufficient length and width to receive a pair of spectacles between them, and both having similar rounded edges at each end, one of said leather members being split into two layers along one of its parallel side edges from the open rounded end to a point nearer the closed end, and said split extending laterally into said latter leather member to a line parallel to the side edge, to form an elongated narrow pocket for receiving an identification card for return of the spectacles when lost, and a line of stitching extending through both said members and through both layers of the latter member, where it is split, and securing



them together around one end and along the two parallel sides to points short of the rounded edges at the other end, leaving the latter end open, and the unsecured rounded edges being separable flaps for access to the spectacles and to one edge of the card at its outer end, the said card being retained in place in said elongated pocket by friction, and the pressure engagement of the faces of the two split layers forming the elongated pocket.

2,732,062
DISPLAY BOX
Willard E. Pratt, San Francisco, and Jacob Wilbur Hendrickson, Jr., Sunnyvale, Calif., assignors to Container Corporation of America, Chicago, Ill., a corporation of Delaware
Application September 14, 1953, Serial No. 379,769
2 Claims. (Cl. 206—45.31)



1. A container top portion formed of paperboard sheet material comprising a rectangular top panel, a side wall panel hingedly joined to each side edge of said top panel, end wall supporting strips hingedly joined adjacent their extremities to the end edges of said top panel a rectangular end wall panel hingedly joined to each end wall supporting strip intermediate its extremities, said end wall panels being struck from the material of the opposite end portions of said top panel, corner flaps hingedly joined to the end edges of said side wall panels said side wall panels being folded downwardly substantially at right angles to said top panel, said end wall supporting strips being folded through approximately 180 degrees to a position just below and in substantial parallelism with said top panel, said end wall panels being folded through approximately 270 degrees to a downwardly extending position substantially at right angles to said top panel, and said corner flaps on opposite side wall panels being folded toward one another to positions in partial face to face contact with said end wall panels, and means for securing said corner flaps to said end wall flaps.

2,732,063
WRAPPER
Frank G. Dedek, Detroit, and Marvin George Schaar, Dearborn, Mich., assignors to Burroughs Corporation, Detroit, Mich., a corporation of Michigan
Application February 20, 1952, Serial No. 272,604
6 Claims. (Cl. 206—46)

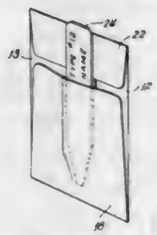
6. A wrapper comprising a generally rectangular, elongated strip of flexible material having a gradually nar-

rowed end portion of a generally trapezoidal shape, a self-sealing adhesive area at the end of said end portion, a second self-sealing adhesive area spaced from said first named area longitudinally of and on the other side of said strip but remote from the other end thereof, said



strip having a pair of cutouts spaced longitudinally of said strip and disposed at opposite ends of said second area, and perforations extending between said cutouts on opposite sides of said second area to form a removable tear portion for breaking the seal of a package wrapped in the wrapper.

2,732,064
SEED PACKAGE
Edward W. Quackenbush, Chicago, Ill.
Application January 10, 1952, Serial No. 265,845
3 Claims. (Cl. 206—47)



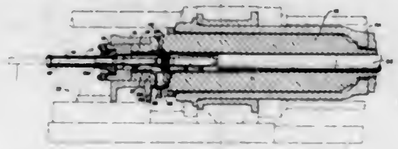
1. A seed package comprising an envelope open at one end containing seeds and having a short flap contiguous to said open end to close the envelope and a long flap contiguous to the other end secured to one side of said envelope to form a pocket, and rigid marker means inserted in said pocket and extending outwardly over said short flap engaging the short flap and holding it closed when the short flap is folded inwardly toward said pocket to close the envelope, said marker having indicia thereon identifying the seeds in the package and being so constructed and arranged as to be insertable in the ground after the seeds are planted.

2,732,065
DISPENSING ROLL OF NON-SKID TAPE FOR ICY SURFACES
Andrew S. Marchese, Brooklyn, N. Y.
Application August 17, 1953, Serial No. 374,682
1 Claim. (Cl. 206—56)



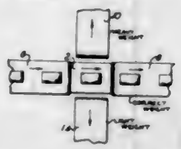
An anti-skid tape for application to the undersides of shoes and other footwear, comprising a tape body in roll formation, means on one face thereof for attaching the same to a shoe or the like, means on the other face thereof having a friction-producing surface, the tape body having lateral enlargements spaced longitudinally thereof to widen the body at predetermined locations, thereby to increase the transverse area of said body and thus afford an increased friction-producing surface on the underside of the shoe at the location of each enlargement, the body having said enlargements disposed in pairs with the enlargements of each pair being spaced closely apart providing short tongue members therebetween and the pairs being spaced substantial distances apart longitudinally of the body providing elongated tongue members therebetween, thus to permit removal of one tape portion having an enlargement and an elongated tongue member for application to the sole of a shoe and a second tape portion having an enlargement and short tongue members at diametrically opposite locations thereupon for application to the heel of said shoe, the body having score lines extending transversely thereof at opposite sides of that enlargement of each pair that forms a part of the second tape portion.

2,732,066
MANDREL COOLING FOR EXTRUSION PRESSES
Heinrich B. Albers, Malverne, N. Y., assignor to Hydropress, Incorporated, New York, N. Y., a corporation of Delaware
Application June 21, 1952, Serial No. 294,779
6 Claims. (Cl. 207—16)



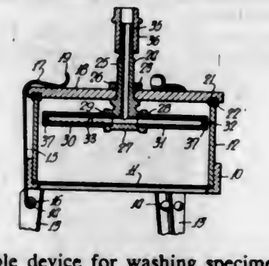
6. In an extrusion press or the like having a die arrangement wherein metal at a high temperature is to be shaped, an extrusion stem reciprocable toward and away from the die arrangement for forcing metal through a die, said stem having a passage therethrough, reciprocable means connected to said stem and operable to move the stem relative to the die arrangement, a mandrel movable through said stem in said passage and forming with said passage fluid channel means, mandrel actuating means connected to said mandrel and operable to project the operating part of said mandrel through said passage beyond said stem toward the die arrangement and to withdraw said operating part away from the die arrangement into said passage between operations, and means selectively delivering cooling fluid to said fluid channel means.

2,732,067
WEIGHING AND CLASSIFYING APPARATUS
James L. Cunningham, Sr., and James L. Cunningham, Jr., Augusta, Ga.
Application April 21, 1954, Serial No. 424,731
8 Claims. (Cl. 209—121)



1. Apparatus for weighing and classifying articles and commodities comprising a conveyor for advancing the articles or commodities, means for driving said conveyor, a weighing scale having a movable balance member, a turntable carried solely by said movable balance member, an article-receiving endless belt conveyor carried by said turntable and forming a part of a conveyor system over which the articles are moved from said first-named conveyor, a motor for driving said endless belt conveyor, a conveyor disposed to receive articles from said endless belt conveyor when it is in alignment with said first-named conveyor, said turntable and the endless belt conveyor carried thereby being movable into a position which is at an acute angle with respect to said first-named conveyor, a conveyor disposed for alignment with the discharge end of said endless belt conveyor when it and said turntable are rotated into the acute angular relationship aforesaid, means for continuing the straight-forward movement of said endless belt conveyor when the articles or commodities are of acceptable weight, and means for rotating said turntable and said endless belt conveyor into the aforementioned relationship if said article or commodity is of unacceptable weight.

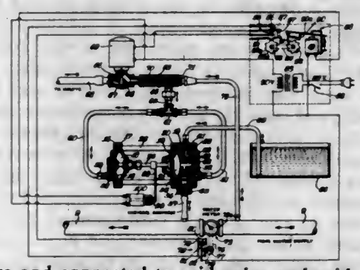
2,732,068
PORTABLE SAMPLE WASHERS
Henry V. Howe and Nathaniel Rogan Terry, Baton Rouge, La., assignors to Board of Supervisors of Louisiana State University and Agricultural and Mechanical College, Baton Rouge, La.
Application May 28, 1954, Serial No. 433,074
2 Claims. (Cl. 209—273)



1. A portable device for washing specimens, comprising, in combination, a cylindrical housing, a screen in the base of said housing, means for supporting said housing and screen in a position permitting the free flow of liquid and fines through said screen, a liquid tight closure for the top of said housing, said closure having a central opening, a fixed fitting passing through said central opening, two conduits in said housing extending in opposite directions from said fitting in substantially longitudinal alignment with each other and both positioned above said screen, one of said conduits having therein a series of spaced openings arranged to form a plurality of jets of liquid each at an angle of from 30° to 45° to said screen, the other of said conduits having therein a series of spaced openings to form jets extending in a direction diametrically opposite to that of the first-mentioned jets, the second-mentioned jets being at an angle of from 30° to 45° to said screen and both series of jets being directed for the most part in a direction towards the wall of said housing, whereby the liquid thus projected through said jets forms a continuously flowing rotating cushion of liquid over the surface of said screen, which effects rotation of the constituents of said specimens, and movement thereof in a circular path over the surface of the screen, so that the fine particles are washed through the openings of said screen leaving coarser particles on said screen.

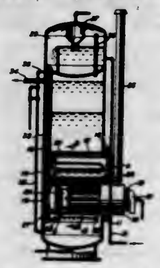
2,732,069
FLUID FEED APPARATUS
Clark T. Henderson, Wheaton, Ill.
Application January 10, 1950, Serial No. 137,825
9 Claims. (Cl. 210—40)

1. A liquid feed apparatus for feeding an additive liquid to a second liquid which comprises a pump adapted to be connected to a source for said additive liquid and to said second liquid for withdrawing a quantity of additive liquid from said source on the suction stroke and for forcing said additive liquid into said second liquid on the pumping stroke and a valve between said pump and said source of additive liquid adapted to be in closed position during the pumping stroke and in open position on the suction stroke, and a variable pressure mechanism adapted to be connected to a conduit for liquid under



pressure and connected to said valve and said pump and operable by said liquid under pressure for creating alternately a vacuum to simultaneously effect opening of the valve and a suction stroke of said pump and a pressure to simultaneously effect closing of said valve and a pumping stroke of said pump.

2,732,070
SYSTEMS FOR TREATING OIL WELL EMULSION STREAMS
Clarence O. Glasgow and Joseph L. Maher, Tulsa, Okla., assignors to National Tank Company, Tulsa, Okla., a corporation of Nevada
Application November 23, 1951, Serial No. 257,884
6 Claims. (Cl. 210—52.5)



1. An apparatus for treating oil field emulsion streams which includes, a vessel constructed to contain a body of heated liquid, means for maintaining said body of liquid at a predetermined liquid level and for drawing off clean oil from the vessel, a conductor discharging the emulsion stream into said body, a hot fluid generator disposed in the vessel below the predetermined liquid level, the generator being constructed to be immersed in the body of heated liquid for heating said body and emulsion stream to break down the emulsion, a pre-heating conductor in the hot fluid generator and within the vessel, means for conducting an emulsion stream to the pre-heating conductor, means for conducting the emulsion stream from the pre-heating conductor to the first-named conductor, and means for drawing off water from the vessel, the hot fluid generator including an enclosure constructed to contain a body of heat exchange fluid, heating means in the enclosure arranged to be immersed in the body of heat exchange fluid, and the pre-heating conductor being exposed to the body of heat exchange fluid.

2,732,071
TANK BLEEDER
Amos E. Crow, Long Beach, Calif.
Application May 19, 1952, Serial No. 288,685
2 Claims. (Cl. 210—56)

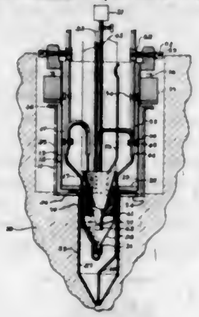
1. A tank bleeder for separating and drawing off two layers of liquids of different specific gravities from a tank

due to the hydraulic head to which the lowermost layer is subjected, which includes: an outlet pipe having a substantially vertical portion; a horizontally disposed, generally frusto-conical collector extending downwardly from said outlet portion, said collector having a continuous side wall in which a plurality of apertures is formed in the upper portion thereof; a base plate of substantially the same shape and size as the lower end of said collector; means to hold said plate in fixed, vertically spaced parallel relationship with the lower extremity of said collector, said plate and collector defining a continuous opening therebetween of such area that fluid can flow therethrough without appreciable turbulence at the maximum rate said fluid can be discharged from said outlet when said fluid to be separated is subjected to the maximum hydraulic head possible in said tank; a frusto-conical turbulence shield situated within said collector and in communication with said outlet pipe, said shield formed with a continuous side wall disposed at a lesser angle with the ver-



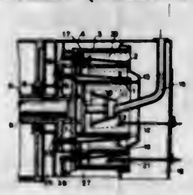
tical than said side wall of said collector to define an annulus-shaped space therebetween, with said shield terminating in a lower horizontal edge intermediately disposed between the lower extremity of said collector and the upper surface of said base plate; and a tubular member extending from said tank through which the lower of the two fluid layers may flow due to the hydraulic head of the upper layer thereon, said fluid after entering said bleeder being separated into a first moving stream flowing into said annulus, and a second more rapidly moving stream flowing upwardly inside said turbulence shield, the relative rates of flow of said streams being determined by the total area of said apertures and the spacing between the lower extremity of said shield and said plate, which ratio is such that portions of said upper fluid layer inadvertently mixed with said lower fluid layer as it enters said bleeder will be directed due to its natural tendency to rise into said first stream and continue said rise as said first stream flows through said apertures to return to the main body of said upper layer.

2,732,072
FILTERING APPARATUS
Richard W. Dodson, Patchogue, and Gerhart Friedlander, Bluepoint, N. Y., Lindsay Helmholz, St. Louis, Mo., and Peter H. Watkins, Cambria, Va., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application March 14, 1950, Serial No. 149,516
3 Claims. (Cl. 210—62)



1. Apparatus for isolating small amounts of radioactive material within the container in which it is shipped, comprising in combination, an outer-encasing receptacle of radiation-opaque material, a shipping container seated in said receptacle, a removable filtering unit provided with an outlet and seated concentrically with fluid-tight connection in said shipping container, a first connecting duct communicating with the interior of said shipping container and said filtering unit for delivering slurry from said shipping container to said filtering unit, a second connecting duct communicating with the outlet of said filtering unit and the interior of said shipping container for delivering filtrate from said filtering unit into said shipping container, said second connecting duct being connected to the outlet of said filtering unit in an airtight manner whereby pressure in said shipping container is excluded from said filtering unit, and means for alternately introducing pressure and partial vacuum into said shipping container whereby slurry is forced by pressure from said shipping container into said filtering unit for filtering and filtrate is forced by partial vacuum from said filtering unit into said shipping container for recycling.

2,732,073
MULTI-STAGE PUSH-TYPE CENTRIFUGAL MACHINE
Ernst Rüegg, Kusnacht, Switzerland, assignor to Escher Wyss Aktiengesellschaft, Zurich, Switzerland, a corporation of Switzerland
Application November 18, 1954, Serial No. 469,791
Claims priority, application Switzerland November 23, 1953
12 Claims. (Cl. 210—67)



1. In a push-type centrifugal machine in combination a rotary driving shaft; a series of at least two radially spaced foraminous separator cages overhung on said driving shaft and arranged coaxially thereto, and connected to rotate with said driving shaft, the outer one of two consecutive separator cages surrounding the inner one in such a manner as to leave an annular gap between the two; means for supplying material to be centrifuged to the innermost of the separator cages; pusher means co-operating with each of the separator cages, each of said separator cages and said pusher means co-operating therewith being axially shiftable in relation to each other so that, by a relative reciprocating movement of the two, material to be centrifuged situated in a layer on the separator cage is conveyed in axial direction and successively discharged therefrom; means for leading the materal discharged from each of the separator cages which precede the outermost separator cage to the next following separator cage by which it is surrounded; means for collecting the centrifuged material which is discharged from the outermost separator cage; and means for collecting liquid which is separated from the said layers of material situated on the separator cages.

2,732,074
ACCUMULATOR DRIER FOR REFRIGERATING APPARATUS
Charles H. Kuthe, Detroit, Mich., assignor to Calumet & Hecla, Inc., Calumet, Mich., a corporation of Michigan
Application November 10, 1952, Serial No. 319,737
6 Claims. (Cl. 210—131)

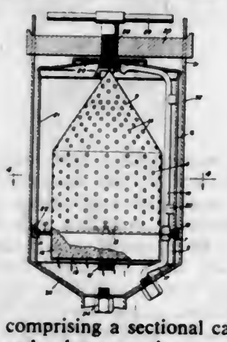
1. In refrigerating apparatus, a tubular casing of circular cross section having an inlet opening at one end and an outlet opening at the opposite end, a foraminous bag containing a desiccant material supported within the casing between the openings, a polygonally shaped baffle

plate supported within the casing between the bag and inlet opening being so dimensioned and arranged as to entirely shield the bag from direct impingement by a stream of refrigerant entering the inlet opening, said baffle plate having a central portion positioned in alignment with the inlet opening lengthwise of the casing and having portions diverging from opposite sides of the central portion toward the outlet opening, the opposite



side edges of the plate frictionally engaging the inner surface of the casing at points spaced circumferentially of the casing to hold said baffle plate in place, said opposite side edges coacting with adjacent walls of the casing to form openings enabling refrigerant to bypass the baffle plate, and the side wall of said bag being spaced inwardly of said casing to define an annular passage extending lengthwise of the casing from said outlet opening to said bypass opening.

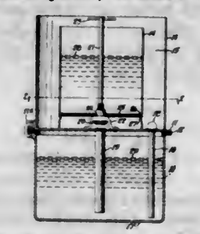
2,732,075
OIL FILTER
Leon W. Bender, Baraboo, Wis.
Application December 7, 1953, Serial No. 396,373
2 Claims. (Cl. 210—140)



2. An oil filter comprising a sectional casing including an upper section and a lower section, supporting means for the casing, a replaceable filtering cartridge having an external annular flange supported between the meeting edges of the upper and lower casing sections to separate the casing into an upper chamber and a lower chamber, an oil inlet pipe connected to the lower section and extending upwardly therein, a nipple extending vertically through the flange and having a telescoping engagement at its lower end with said inlet pipe, a pipe leading upwardly from the nipple in the upper chamber and overlying the top of the cartridge to discharge oil in a precipitating action onto the cartridge, an oil outlet for the lower chamber, said cartridge having perforations in its upper portion at a point above the flange to form a sludge chamber at the bottom of said upper chamber, said cartridge also having perforations in its lower portions for the passage of oil from the upper chamber through the cartridge to the lower chamber, a clamping bar above the casing and engaging the supporting means, and a clamping screw carried by the bar and engaging the top of the casing for securing the sections of the casing in assembled relation to the supporting means.

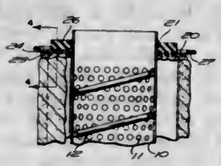
2,732,076
JUICE EXTRACTOR
Rema V. Kuehn, Portland, Oreg.
Application September 25, 1953, Serial No. 382,408
5 Claims. (Cl. 210—150.5)

5. A liquid filter comprising a juice receiver container having a pressure-tight cover adapted for the boiling of water at a pressure above atmospheric, a water well on said cover having a valve controlled tube connecting said well with the lower portion of said receiver whereby the steam pressure of boiling water in said covered receiver may be caused to transfer substantially all the water to said well leaving said receiver substantially filled with a steam atmosphere, a mash receptacle on said



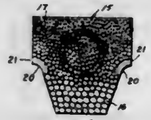
cover having a wall separating said receptacle from liquid communication with said well, a screen bottom in said receptacle, and a chamber beneath said screen bottom having a valve controlled port communicating through said cover with said juice receiver for drawing liquid from said mash receptacle by gravity and the suction created by a partial vacuum in said receiver when the receiver full of steam is cooled.

2,732,077
SEAL FOR A COALESCER
John Warren Robinson, Atlantic Beach, Fla., assignor to Fram Corporation, a corporation of Rhode Island
Application July 18, 1952, Serial No. 299,658
1 Claim. (Cl. 210—169)



A cylindrical shaped coalescing unit comprising a relatively stiff supporting wall of permeable material formed with outwardly extending pleats arranged with the pleats extending lengthwise of the cylinder, a layer of batt-like coalescing glass fibers through which liquid to be treated may pass and which covers the lengthwise extending pleats, a closure wall at an end of said pleats, a rubber-like gasket held by the closure wall in sealing relation with the ends of said pleats, and a coalescing gasket of batt-like glass fibers compressed between the rubber-like gasket and ends of the pleats to an extremely slight thickness and which batt-like gasket is expanded adjacent the pleat ends to a number of times its compressed thickness into contact with the first mentioned coalescing material, to thereby prevent the liquid from passing between the two coalescing materials without being subjected to the coalescent treatment.

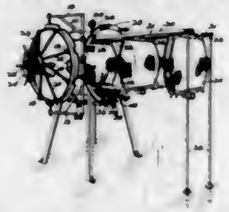
2,732,078
CEMENTED GRAVEL FILTER BLOCK
Chester Ellsworth Records, Columbus, Ohio
Application June 17, 1952, Serial No. 294,038
4 Claims. (Cl. 210—171)



1. A block for use in a filter bed comprising gravel having the contact points thereof bonded together to

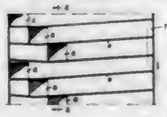
form a porous molded block, said block having the gravel disposed in strata with the gravel in each stratum being of generally uniform grade, the gravel being of diminishing size from the bottom to the top of the block, said block having a channel forming recess in a lower surface face opening toward the bottom thereof and extending the length of the block, said block having a layer of nonporous material lining an upper portion of said surface face of said channel recess thereby causing fluid to diffuse through all the strata of the block in its passage to and from said channel recess.

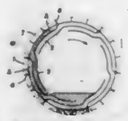
2,732,079
HOLLOW LEAF PRESSURE FILTER
Charles E. Hunziker, Ridgewood, N. J.
Continuation of abandoned application Serial No. 715,094, December 9, 1946. This application April 28, 1954, Serial No. 426,071
5 Claims. (Cl. 210—182)



2. In a pressure-leaf filter, a tank having a normally closed open end, a filter pack having a plurality of leaves and normally disposed in said tank and coacting with the lower portion of said tank to define a sump, sump filtering means detachably mounted in said tank subjacent said pack above said sump and readily removable from said tank upon removal of said pack, tracks having outer and inner sections with the latter being disposed within and fixed to said tank, said leaves equipped with means for slidably mounting said leaves on said tracks, means connecting said pack and said filtering means together outside of said tank and including means for rendering said pack and said filtering means effective in a predetermined order for filtering liquid from outside of said tank and from said sump, respectively, said sections of said track being detached when said end is closed and attached and extending outwardly from said tank and said inner sections when said end is open to permit quick shifting of said leaves from said inner sections to said outer sections to facilitate fast removal of said filtering means and cleaning of said sump.

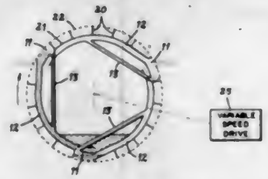
2,732,080
FILTER HAVING WARPED CELL WALLS
John Strindlund, Upsala, Sweden, assignor to The Black-Clawson Company, Hamilton, Ohio, a corporation of Ohio
Application July 8, 1952, Serial No. 297,746
4 Claims. (Cl. 210—199)





1. A rotary suction filter drum comprising a cylindrical casing, a cylindrical strainer disposed in spaced relation to the outer surface of said casing, generally radially arranged walls extending substantially parallel with the axis of said casing in the space between said casing and said strainer to form in said space a circumferential row of longitudinally extending cells, outlets in said casing connecting said cells with the interior of said drum, additional walls within said cells forming in each said cell a pocket of lesser volume than said cell, each said pocket opening toward the direction of rotation of said drum and connecting at the rearward side thereof with one of said outlets, said additional pocket walls being inclined forwardly from the outlet therein in the direction of rotation of said drum with respect to a line passing therethrough and parallel with the rotational axis of said drum to conduct liquid lengthwise of said drum to said outlet, and said cell walls having perforations therein for transmitting liquid from each said cell to the pocket in the next following said cell.

2,732,081
ROTARY SUCTION FILTER DRUM
John Strindlund, Upsala, Sweden, assignor to The Black-Clawson Company, Hamilton, Ohio, a corporation of Ohio
Application February 19, 1953, Serial No. 337,826
5 Claims. (Cl. 210—202)



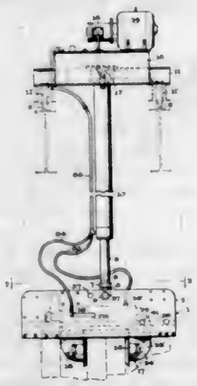
1. A rotary suction filter drum including a cylindrical casing, a cylindrical strainer disposed in spaced relation to the outer surface of said casing, a circumferential row of longitudinally extending cells between said casing and said strainer, outlets in said casing leading from each one of said cells, rearwardly bent discharge ducts connecting said outlets with the interior of said drum and each extending in part through the subsequent said cell, and means for admitting air into said cells during the rising period of the movement of said cells in such manner that the discharge ducts will not be blocked until a sufficient amount of liquid will have accumulated therein to maintain a vacuum in said cells all the time until the outlet ends of said ducts have reached below the interior liquid level, said last named means comprising a conduit connecting each said cell with the rear portion of the corresponding discharge duct in such manner that during rotation of said drum, air is admitted into said cell through said conduit at the same time as liquid from said cell flows freely into said discharge duct until said liquid closes the outlet of said conduit into said discharge duct.

2,732,082
BOOKRACKS
Eugene M. Schleicher, Woodstock, N. Y.; Agnes E. Schleicher, executrix of the estate of said Eugene M. Schleicher, deceased
Application October 26, 1951, Serial No. 253,299
1 Claim. (Cl. 211—43)



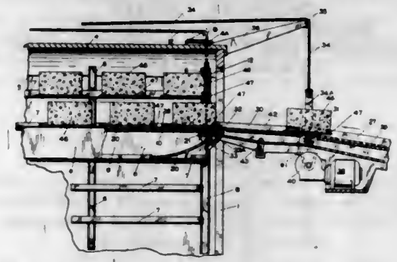
In a bookrack, the combination of a base plate having an underside and an upper side, hinges at both transverse ends of said base plate, and a pair of substantially rectangular end members being pivotally connected by said hinges to said transverse ends of said base plate, a first side of each of said end members forming continuation of said underside of said base plate when said end members are pivoted outwardly and away from said base plate, and a second side of each of said end members being in faying parallel relationship with said upper side of said base plate when said end members are pivoted onto said base plate, the length of said base plate being in excess of the combined length of said second sides of said end members, said second sides of said end members being of different length, and said first and said second sides of each of said end members being of a length sufficient to form a stable and substantially vertical support for the books placed onto said upper side of said base plate, whereby said bookrack is adapted to support a column of books extending the full length of said upper side of said base plate when said end members are pivoted outwardly to form with said first sides thereof continuations of said underside of said base plate, or columns of books shorter than said base plate when the one, the other, or both said end members are pivoted onto said upper side of said base plate.

2,732,083
ARTICLE HANDLER
Arthur Dean Smith, Spokane, Wash., assignor to Kaiser Aluminum & Chemical Corporation, Oakland, Calif., a corporation of Delaware
Application September 18, 1951, Serial No. 247,143
5 Claims. (Cl. 214—1)



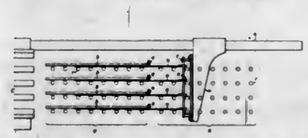
1. In a hoisting apparatus of the type described which is adapted to securely engage and then transport a coil of metal or the like from one location to another, the combination of a hoisting frame member, a plurality of clamping tongs carried by said frame member, one of said clamping tongs being arranged for reciprocating movement toward and away from another of said tongs, hydraulic cylinder and piston means for actuating said reciprocating tong, a second hydraulic cylinder and piston means attached to the hoisting frame member for lifting and lowering the said frame member, pump means for supplying fluid under pressure to both of said cylinder and piston means, conduit means connecting said pump means to said first mentioned cylinder means, conduit means connecting said pump means to said second mentioned cylinder means, said second conduit means including a portion in common with said first mentioned conduit means, a fluid pressure operated valve located between the common portion of said first and second mentioned conduit means and said second mentioned cylinder and piston means for causing fluid to be passed first to the cylinder means adapted to actuate said reciprocating tong and then to said cylinder means adapted to lift said hoisting frame member, and valve means for cutting off the flow of fluid under pressure from said pump means to said common conduit means, whereby a back pressure will be exerted upon the piston of said tong actuating piston and cylinder means due to the weight imposed upon said second mentioned piston and cylinder means.

2,732,084
CURING CHAMBERS
Russel L. Chaussee and Francis P. Chaussee, Wenatchee, and Earl L. Dial, Kennewich, Wash., assignors of one-fourth to Harvey Stoller, Kennewich, Wash.
Application December 19, 1952, Serial No. 327,012
7 Claims. (Cl. 214—16.4)



1. A storage chamber comprising an enclosure, a plurality of pairs of spaced rails disposed in vertically spaced alignment and extending longitudinally in said enclosure, a loading and unloading conveyor extending longitudinally of said enclosure, means movably supporting said conveyor for vertical movement between the respective rails of said pairs of rails for selective cooperation with each pair of rails, a supply conveyor and a discharge conveyor pivotally connected to the respective ends of said loading conveyor and vertically movable therewith, said supply conveyor comprising a main section and a sub-section in alignment and pivotally connected together, said sub-section being disposed between said main section and said loading conveyor, and means movably supporting said supply conveyor at the pivotal connection between said sections, said supporting means for said loading and supply conveyors comprising power operated means for moving said conveyors vertically, said power operated means moves said supply conveyor at a slower rate than said loading conveyor, said conveyor moving means comprising cables supporting said conveyors and wound on driven drums, the drum on which the supply conveyor cables are wound having a smaller diameter than the other said drums.

2,732,085
METHOD AND APPARATUS FOR MOVING PLATE-LIKE MATERIAL INTO A STORAGE FRAME
Eugen Siempelkamp, Krefeld, Germany
Application June 13, 1952, Serial No. 293,262
Claims priority, application Germany January 15, 1952
3 Claims. (Cl. 214—16.6)



1. An apparatus for moving superimposed plate-like material into a multi-storied storage frame comprising a plurality of superimposed supporting plates for the plate-like material, pulling means for moving said supporting plates in a direction coinciding with the planes of said plates, a multiple storied frame for receiving said supporting plates and placed in line with the storage frame for the plate-like material, said storage frame and said frame for the supporting plates affording passage of said pulling means therethrough, said pulling means including clamping means, hooks protruding from said supporting

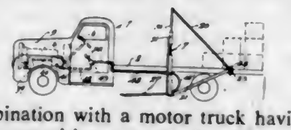
plates and adapted to be engaged by said clamping means, and arresting means connected with the storage frame and adapted to engage the plate-like material resting on said supporting plates while the latter are pulled by said pulling means through the storage frame for arresting the plate-like material in the desired position in the storage frame and affording continued pulling of the supporting plates from underneath the plate-like material into said frame for the supporting plates.

2,732,086
APPARATUS FOR FEEDING SOLIDS INTO PRESSURE VESSELS
Auxilius P. Schnyder, Teaneck, N. J.
Application June 9, 1954, Serial No. 435,430
4 Claims. (Cl. 214—17)



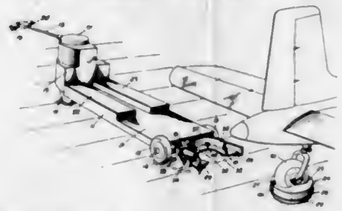
1. Apparatus for transferring material from one pressure zone to a different pressure zone and without appreciable loss of pressure medium from the high-pressure zone to the low-pressure zone which comprises an upper transfer chamber connected to a lower transfer chamber and a common transfer opening therebetween, each of said chambers having two diametrically opposite concave cylindrically curved walls, an opening into the upper chamber for introducing material to be transferred and an opening in the lower chamber for discharging the material, a quadrant-sector valve rotatably mounted on a horizontal shaft in the upper chamber, said sector valve having four sectors with concave cylindrically curved surfaces and four blades each having a sealing edge means for making sealing contact with the inner surfaces of the curved walls of the upper chamber during rotation, a bilateral valve rotatably mounted on a horizontal shaft parallel to the aforementioned shaft and having two blades each having sealing edge means for making sealing contact with the inner surfaces of the curved walls of the lower chamber during rotation, means for turning the quadrant-sector valve one-quarter turn intermittently while the bilateral valve is still and turning the bilateral valve one-half turn intermittently while the quadrant-sector valve is still, thereby transferring the material from the opening into the upper chamber through the chambers and discharging it from the opening in the lower chamber.

2,732,087
BALED HAY LOADER FOR TRUCKS
Cameron Pratt, Rockford, Wash.
Application October 24, 1952, Serial No. 316,578
1 Claim. (Cl. 214—75)



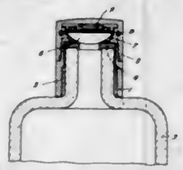
In a combination with a motor truck having a bed, a bale loader comprising a vertically disposed mounting frame having tubular side bars and upper and lower cross bars; a shank extending laterally from one side bar and formed with an opening intermediate its length; a tubular member mounted upon the truck bed at one side thereof said shank fitting into said tubular member and having its opening registering with an opening in the tubular member; a removable fastener extending through the registering opening and releasably securing the shank therein; an elevator having a back provided with vertical side bars and upper and lower cross bars; vertical sleeves carried by the ends of the upper cross bar and slideably fitting about the tubular side bars of said frame; bale pick-up tines projecting forwardly from the last named lower cross bar at a slight downward angle; weight depressible dogs on said tines for restricting movement of bales forwardly therefrom; a jack having a cylinder mounted vertically on said frame at its lower end and a piston rod extending upwardly from the upper end of the cylinder and at its upper end connected to said elevator; manually controlled fluid pressure means operably associated with said jack for selectively controlling the flow of fluid under pressure to the cylinder, to effect vertical movements of said tines; and braces secured to the frame at its upper and lower ends and extending rearwardly at angles to a common point remote from said tubular member and releasably fixed to said truck bed.

2,732,088
AIRCRAFT HANDLING DEVICES
Alfred Erwin Reginald Arnot, Basingstoke, England, assignor to John Reginald Sharp and Emmanuel Kaye, Basingstoke, England
Application May 6, 1952, Serial No. 286,382
10 Claims. (Cl. 214—332)



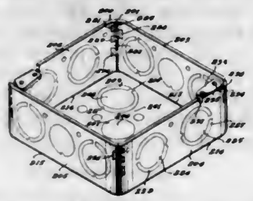
1. A device for handling aircraft having in combination a truck mounted on wheels in fixed axes at one end and provided with a steering wheel at the other end, a divided ring-member capable of assembly around a portion of an aircraft undercarriage which it is desired to lift, a lifting member on the truck between the wheels which are in fixed axes which lifting member has an opening in the front and is shaped to fit beneath and around the ring-member bearing elements on the lifting member which permit relative rotation between the lifting member and ring-member and lifting means on the truck to raise the lifting-member and with it the ring and aircraft undercarriage from the ground.

2,732,089
STOPPING DEVICES
Sophie Frydlender, Paris, France, assignor to Lancôme S. A., Courbevoie, France, a corporation of France
Application January 19, 1953, Serial No. 331,825
Claims priority, application France June 11, 1952
3 Claims. (Cl. 215—43)



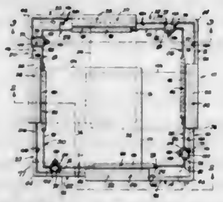
1. A sealing device for a bottle and the like comprising an externally screw threaded sleeve having an inwardly extending annular flange, an annular gasket of plastic material, said sleeve being tightly secured by means of a sealing material to the neck of a bottle with said gasket clamped between the end of said neck and said annular flange and said annular gasket defining an opening to be sealed, an internally screw threaded one-piece cap adapted to be screwed onto said sleeve, a stopper member of glass-like material having a convex surface adapted to contact said gasket and seal said opening, spring means within said cap urging said stopper member outwardly toward said gasket, means for retaining said stopper member within said cap and limiting the projection of said stopper member with respect to said cap such that at least one full thread of said cap and sleeve may be engaged before the convex surface of said stopper member engages said plastic gasket.

2,732,090
ELECTRICAL CONNECTION BOX
Irving Karlin, Brooklyn, N. Y.
Application September 8, 1950, Serial No. 183,776
2 Claims. (Cl. 220—3.2)



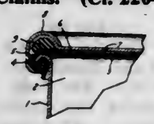
1. A non-separating corner one-piece rectangular integral junction box having a rectangular base and rectangular sides integral with said base perpendicular to the base with four 90° quarter cylindrical rounded corners with the adjacent side edges of each wall forming a 45° eighth cylindrical portion of each rounded corner and said 45° cylindrical rounded edges having interlocking dovetail connections, said box being of the type in which the rectangular base and the rectangular sides are stamped as a single flat blank out of one sheet of metal and the sides are then folded upwardly to a position at right angles to the base with the adjacent side edges of said rectangular base being rounded into said non-separating corners, said corners consisting of alternating interlocking dovetail projections and dovetail recesses limited to and extending transversely across and around said quarter cylindrical rounded corners, the dovetail projections adjacent the base of the box extending to and terminating at the center of the rounded corner and the projections adjacent the edge of the box extending around the entire corner.

2,732,091
ADJUSTABLE FLOWER BOX
Sidney Kass, New York, N. Y.
Application November 12, 1954, Serial No. 468,384
6 Claims. (Cl. 220—8)



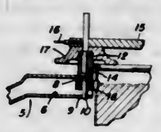
1. An adjustable flower box comprising a lower rectangular box-shaped structure composed of four relatively-slidable lower corner units each forming approximately one quarter thereof, each lower corner unit having two side walls connected perpendicularly to one another and a bottom wall connected perpendicularly to said side walls, the adjacent portions of said walls being disposed in overlapping horizontal sliding engagement, an upper rectangular side wall extension structure disposed in telescoping relationship with said lower structure and composed of four relatively slidable upper corner units, each upper corner unit forming approximately one quarter of said upper structure and having mutually perpendicular upper side walls with portions thereof disposed in overlapping sliding engagement with adjacent portions of other upper side walls, means interconnecting said lower and upper structures for holding said structures in their adjusted positions relatively to one another, and means on certain of said walls engageable with adjacent portions of other of said walls for holding said units in their adjusted positions.

2,732,092
CLOSURE DEVICE
Sigmund J. Lawrence, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application August 18, 1954, Serial No. 450,610
6 Claims. (Cl. 220—44)



3. A closure device for containers having liquids confined therein which evolve gaseous hydrogen, said device comprising (1) a polymeric membrane comprising polyethylene, (2) a perforated lid for said closure device, and (3) a porous interliner positioned between the membrane and the outer lid capable of affording free passage of the hydrogen gas therethrough from any portion of the membrane through the opening in the lid.

2,732,093
CAN SEALING STRIP REMOVER
Fred W. Chincholl, Topeka, Kans.
Application August 28, 1952, Serial No. 306,864
2 Claims. (Cl. 220—52)

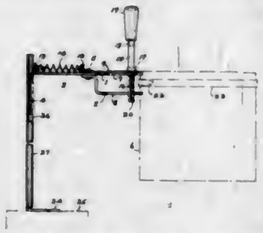


1. A can sealing strip remover comprising an elongated hollow body having a hand gripping rear end portion and an open front end portion, a housing on top of the body adjacent its open front end, a vertical shaft journaled in the housing, a key at the lower end of the shaft and slidable vertically in the front end portion of the body, said open end of the body being adapted for placing against a side of a can in the region of a can sealing strip for receiving the can sealing strip for winding on the key in a concealed position in the body, said key being retractable in the housing for removal from the wound strip, stop means on the shaft and positioned in the housing to hold the shaft captive therein, and a handle attached to the upper end of the shaft for turning the latter.

2,732,094
OPENING DEVICE FOR TEARING STRIP CAN
Robert A. Gilmour, Somerset, Pa.
Application July 7, 1953, Serial No. 366,481
4 Claims. (Cl. 220—52)

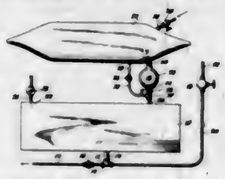
2. A can opener of the class described, comprising, in combination, a pair of flat guide plates joined together

in spaced relation to each other and being provided with parallel longitudinally extending slots, a spring actuated bearing element shiftably mounted on one of said plates, a removable shaft revolubly mounted in said slots and in said element, said element operable for exerting a forward



thrust on said shaft, the free end portion of said shaft being provided with a longitudinally disposed open slot extending between said plates, manually operable means carried by said shaft for rotating the latter in said slots and in said element, and a bracket member for securing the device to a supporting structure.

2,732,095
EXPLOSION-PROOF GASOLINE TANK
Alexander Fashay, Long Island City, N. Y., assignor of thirty per cent to Leo C. Krazinski, New York, N. Y.
Application June 26, 1952, Serial No. 295,802
3 Claims. (Cl. 220—88)



1. In a fuel tank explosion preventive device of the type having a fuel tank sealed from the atmosphere, a flexible envelope containing a supply of inert gas, conduit means including a manually operable valve for initially conveying inert gas from said flexible envelope to said tank when the latter is empty, second conduit means including a differential valve for controlling inert gas flow, said differential valve comprising a rigid casing, a pair of flexible diaphragms in said casing for providing two compartments therein, one compartment in direct communication with said envelope and the other compartment in direct communicatoin with the fuel tank, means including a cylinder having at least one transverse opening in said casing and a sleeve having at least one transverse opening slidable in said cylinder for controlling communication between said compartments, said sleeve being rigidly secured at one end thereof to an intermediate portion of one of said diaphragms and thus movable therewith, a spring for urging the other end of said sleeve into a valve closing position whereby said transverse openings are normally out of registration, and manually operated means for urging said sleeve into a valve opening position whereby said transverse openings are placed in registration and communication is established between said compartments and in turn between said envelope and fuel tank.

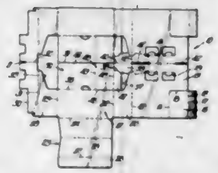
2,732,096
EGG BASKET WITH HANDLE
Anthony J. Siciliano, Vineland, N. J., assignor to Keen Manufacturing Corporation, Vineland, N. J., a corporation of New Jersey
Application December 12, 1951, Serial No. 261,210
1 Claim. (Cl. 220—95)

A basket for holding a quantity of eggs or other fragile articles comprising a receptacle having a circular upper rim and a handle comprising a rigid cross bar having a straight portion equal in length to the diameter of the rim, parallel connecting rods depending right-angularly from the ends of the cross bar and pivotally connected at their free ends to diametrically opposite points on said rim, and a brace for the cross bar comprising a stiffening rod having its intermediate portion spaced beneath and parallel to the intermediate portion of the cross bar and having its ends inclined up toward and directly connected to the ends of the cross bar adjacent the junctions thereof with



the connecting rods, and a sheet of metal wrapped around the spaced parallel portions of the cross bar and stiffening rod to secure them together, the lengths of the two connecting rods being the same and being such that when the handle is swung down to horizontal position the inner edge margin of the central portion of the brace rests on that portion of the rim which is midway between said opposite points thereon and the entire handle clears the inner area defined by the rim so that no part of the handle impinges on any of the contents of the basket.

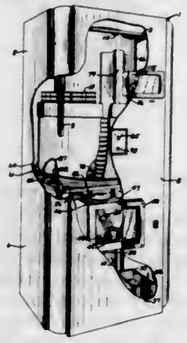
2,732,097
ARTICLE CARRIER
Edwin L. Arneson, Morris, Ill., assignor to Morris Paper Mills, Chicago, Ill., a corporation of Illinois
Application August 22, 1951, Serial No. 243,057
2 Claims. (Cl. 220—113)



1. A paperboard bottle carrier formed from a one-piece blank and comprising opposed side and end walls, a bottom extending between said side walls, a longitudinal partition disposed medially of and parallel to said side walls and extending between said end walls, a cross partition unit comprising a panel integrally connected on a horizontal hinge to a side wall and extending from adjacent one end thereof, and disposed in side-by-side relation thereto, said panel having a cross partition panel element integrally connected on a vertical hinge thereto and having its end fixedly secured to said longitudinal partition panel in vertically hinged relation thereto, and a further cross partition element integrally connected at one end on a vertical hinge to said longitudinal partition panel, said further partition element having its other end fixedly secured to said first named panel in vertically hinged relation thereto on a vertical hinge line intermediate the ends of said first named panel.

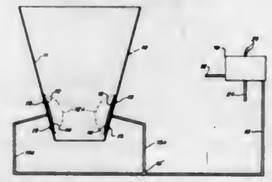
2,732,098
HOT BEVERAGE VENDING MACHINE
Ermal J. Lime and Charles S. Hedges, Kansas City, Mo., assignors to Crelo Manufacturing Company, Inc., Kansas City, Mo., a corporation of Missouri
Application February 9, 1952, Serial No. 270,884
3 Claims. (Cl. 221—11)

1. A cup storage and dispensing mechanism for use in hot beverage vending machines comprising, a cylindrical wall, a circular member having a bottom and a wall spaced from the cylindrical wall for defining a space therebetween adapted to contain a plurality of stacks of nested beverage cups, said bottom having spaced apertures therein for passage of stacks of cups, a vertically arranged partition fixed in the space between the cylindrical wall of the circular member substantially at the adjacent edges of said apertures, cup dispensing mechanism under and aligned with each aperture for receiving and supporting stacks of cups moved through the respective apertures in the bottom of the circular member, each cup dispenser mechanism being individually operable to drop one cup at a time, means rotatable in the space between the cylindrical wall and the wall of the circular member and having portions



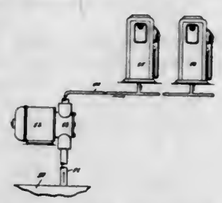
engageable with the stacks of cups remote from the apertures, means responsive to a predetermined minimum in the stack of cups supported by one cup dispensing mechanism for effecting rotation of the rotatable means to move the stacks of cups toward the respective aperture for said one dispensing mechanism for aligning and dropping a stack therethrough into nested relation with the cups remaining in said one dispensing mechanism, and means responsive to a predetermined minimum in the stack of cups supported by the other cup dispensing mechanism for effecting rotation of the rotatable means to move the stack of cups toward the respective aperture for said other dispensing mechanism for aligning and dropping a stack therethrough into nested relation with the cups remaining in said other cup dispensing mechanism.

2,732,099
HOPPER CONTROL APPARATUS AND METHOD
Edward A. Davis, Ruxton, Md., assignor to Gerotor May Corporation, a corporation of Maryland
Application December 6, 1950, Serial No. 199,489
9 Claims. (Cl. 222—1)



1. In combination, a hopper for the passage therethrough of granular and generally similar substances; an elastic membrane provided on the interior wall of said hopper and adapted to be distended and collapsed in pulsating manner, through the admittance and expulsion of air behind said membrane; a source of high pressure air; an air line connecting said source with said hopper wall and membrane for admitting air between the same; and a control means in said air line and physically removed from said hopper, said control means including means for throttling the high pressure air, valve means for intermittently and alternately connecting the membrane air line, first with the throttled air and then with an exhaust line to the atmosphere, and a pressure switch operable as an incident to the pressure of air in said line and membrane, to control, upon reaching its low pressure and high pressure limit positions, the operation of said valve means.

2,732,100
REMOTE-CONTROL DISPENSING APPARATUS AND VALVE MECHANISM THEREFOR
Ernest E. Jackson and Otto R. Scheurer, Fort Wayne, Ind., assignors to Tokheim Corporation, a corporation of Indiana
Application July 11, 1951, Serial No. 236,134
10 Claims. (Cl. 222—73)



1. In liquid-fuel dispensing apparatus for dispensing liquid fuel from a storage supply through a pressure line leading to a remote dispensing point and through a control valve at said point by which control of flow through said apparatus is primarily controlled, valve-mechanism in said pressure line ahead of said control valve, comprising a modulating valve, a by-pass around said modulating valve and having restricted communication with said pressure line upstream of said modulating valve, and means controlling the position of said modulating valve in response to the pressure differential between said by-pass and said pressure line upstream of said modulating valve.

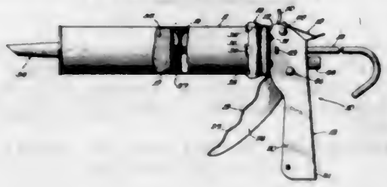
2,732,101
DISPENSER FOR PASTY MATERIALS
Friedrich Söhn, Schwelm, Germany, assignor to Firma Gerdes & Co., Schwelm, Westphalia, Germany
Application February 11, 1953, Serial No. 336,409
Claims priority, application Germany March 19, 1952
14 Claims. (Cl. 222—320)



1. A dispenser comprising, in combination, a container having a closed bottom and an open top; a cover covering said open top of said container; a piston slidably mounted in said container for movement toward and away from said bottom thereof; a hollow piston rod fixed to said piston and communicating with the space located between the latter and said bottom of said container, said piston rod extending through said cover; a plurality of ratchet teeth joined to said piston rod at one side thereof and extending along the length thereof; a lever turnably engaging said cover, being located between the latter and said container, and having an operating end portion extending through said cover; a pawl turnably engaging said lever for movement about a predetermined axis and being lo-

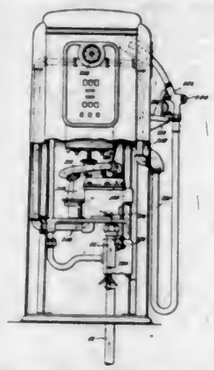
cated opposite said ratchet teeth; and a single spring engaging said pawl between said predetermined axis and said piston rod and urging said pawl and said lever therewith toward said cover.

2,732,102
CAULKING GUN
William J. S. Ekins, Garfield Heights, Ohio
Application November 29, 1951, Serial No. 258,788
8 Claims. (Cl. 222—327)



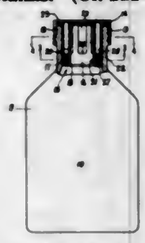
1. In a caulking gun having a means for progressively moving a pressure transmitting plunger and feed rod along the interior of a compound storing container to effect the extrusion of such compound from such container, means for progressively withdrawing the plunger from the compound stored within the container thereby to stop its extrusion from the container, comprising in combination, a feed dog mounted about the feed rod, a pivotal lever engageable with said feed dog for causing the same to grip the feed rod and move the latter therewith away from the container, a spring means for advancing such feed dog along the feed rod in opposition to its movement by said lever, and a lock bar for gripping and holding the feed rod stationary during the advancing movement of said feed dog.

2,732,103
LIQUID FUEL DISPENSING APPARATUS
George W. Wright, Robert J. Jauch, Joseph D. Clymer, Ernest E. Jackson, and Otto R. Scheurer, Fort Wayne, Ind., assignors to Tokheim Corporation, a corporation of Indiana
Application September 26, 1950, Serial No. 186,815
12 Claims. (Cl. 222—330)



1. Liquid-fuel dispensing apparatus, comprising an impeller pump adapted to be submerged in a liquid supply, a motor operatively connected to drive said pump, a plurality of dispensing stands each comprising a dispensing line terminating with a manually-controlled valved dispensing nozzle and each having means for energizing said motor, conduits connecting said pump to said plurality of stands and adapted to transmit pump discharge pressure to said plurality of stands when any of them is activated to energize said motor, means at each stand normally closing its line against flow and transmission of pressure through such line from its connecting conduit, manually operable means at each stand for initially equalizing pressure across the closing means thereof when the stand is activated for a dispensing operation, and subsequently operable means to open said closing means to pass dispensing flow through the line of the operated stand.

2,732,104
DOSAGE ADMINISTERING BOTTLE
John E. De Baun, Ridgewood, N. J.
Application April 17, 1952, Serial No. 282,791
4 Claims. (Cl. 222—335)



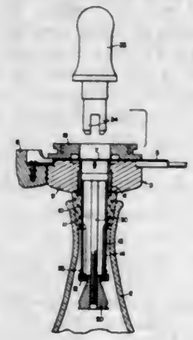
1. In a dosage measuring and administering bottle having a neck portion for holding and dispensing a liquid, a cover threadably mounted on said neck portion, a dosage measuring annular pocket insert member mounted in said neck portion, said pocket member having an apertured central portion providing communication of the main body of said bottle with the neck portion of said bottle, and suction and venting passages communicating with said annular pocket member and discharging at the outlet face portion of the neck of said bottle, whereby the user may, by shaking said bottle while covered, fill said annular pocket, and by removing said cover permit placing an apertured portion of the upper surface of the pocket member in his mouth, suck the liquid deposit from said pocket while air passes into said pocket from the remainder exposed portion of said suction passages and thereby secure a pre-measured dosage of said liquid and without the use of a spoon.

2,732,105
CARBONATED BEVERAGE DISPENSING SYSTEM
Randolph D. Hillis, Columbus, Ohio, assignor to Nehi Corporation, Columbus, Ga., a corporation of Delaware
Original application June 26, 1950, Serial No. 170,395. Divided and this application September 15, 1954, Serial No. 456,264
9 Claims. (Cl. 222—386.5)



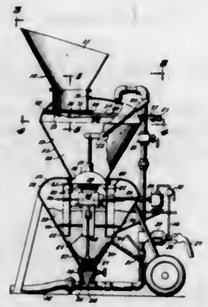
1. A beverage dispensing mechanism comprising a container, a pair of valve housings communicating with said container and each having a valve seat, a spring-pressed outwardly closing valve engageable with each seat, and a head for each valve body, each head having a downwardly extending tubular member engageable with the associated valve to unseat it when the head is placed in position on the valve body, each head and the associated valve body having portions inter-engageable for locking each head in position on the associated valve body, each head having an aperture communicating with its tubular extension, one of said apertures being adapted for connection with a dispensing conduit and the other being adapted for connection with a source of gas pressure for displacing beverage from the container.

2,732,106
ANCHORING DEVICES FOR BOTTLE CLOSURES
Philip W. Harland, Quakertown, Pa., assignor to American Machine and Metals, Inc., New York, N. Y., a corporation of Delaware
Application December 2, 1950, Serial No. 198,848
9 Claims. (Cl. 222—561)



1. A bottle closure comprising, in combination, a body adapted to be seated in the throat of a bottle, said body having a central discharge passage therethrough, a plurality of spring fingers extending downward from said body and whose ends can readily pass through the throat of the bottle, a cone bearing against said fingers, said cone having a threaded hole therein, a threaded stud fitting said threaded hole for supporting said cone at a fixed distance from said body and extending down through said central passage, a head on said stud bearing against said body, and means for turning said stud in said cone to change the position of the cone relative to said fingers whereby the ends of the fingers are spread into a circle having a larger circumference than the throat of the bottle.

2,732,107
METERING AND SHAKEDOWN MEANS FOR CEMENT GUN APPARATUS
Ian M. Ridley, Los Angeles, Calif.
Application May 11, 1953, Serial No. 354,017
3 Claims. (Cl. 222—561)



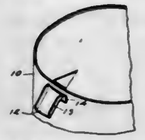
1. In an apparatus for air placement of cementitious materials, and the like, comprising a hopper means and a housing means including a material inlet for the housing adapted to receive said materials from the hopper means, and valve means including a plate for said inlet, the improvement comprising guide means for said valve means, said guide means comprising horizontally spaced abutments defining openings therebetween, said abutments being adapted to engage said plate at spaced points thereunder at opposite side edges of said plate.

2,732,108
NON-DRIP POURING CAP AND SPOUT
Chefik Haddad, Washington, D. C.
Application December 30, 1952, Serial No. 328,733
1 Claim. (Cl. 222—564)



A cap and spout for removable attachment to a liquid container adapted to be tilted during the operation of pouring liquid therefrom, said cap and spout having communicating liquid flow passages therethrough and the spout having a liquid outlet which is at substantially right angles to the plane of the level of the liquid in the container when the container is in normal upright non-pouring position, and said cap being formed with a cavity in the upper wall of the liquid flow passage, the cavity having a contour substantially coincident with a hemispherical surface and adapted to receive liquid as it flows from the container to create a rotary action in the liquid, and means in the spout for creating a rotary action in the liquid flowing therethrough, the rotary action of the liquid in the cap and spout being such that it will draw back into the cap and spout the liquid adjacent the outlet of the spout when the container is returned to normal upright position following a pouring operation to thereby eliminate external dripping from the spout.

2,732,109
SPOUT FOR CONTAINER
Milburn Siddons, Flint, Mich.
Application July 6, 1953, Serial No. 366,107
1 Claim. (Cl. 222—566)

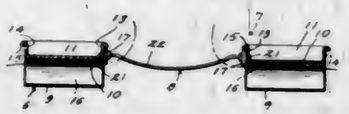


In a container of the type having a top wall and at least one side wall the combination therewith of a pouring spout comprising a relatively thin rectangular metallic blank having a pair of spaced apart parallel side edges, a pair of spaced apart parallel end edges, said end edges being substantially shorter than said side edges, a score line formed in one surface of said blank extending between said side edges parallel to but spaced from one of said end edges a pair of score lines formed in said one surface of said panel and extending parallel to but spaced from said opposite side edges between said first mentioned score line and the other of said end edges, said blank having one end portion thereof extending downwardly at an angle to the remaining portion thereof with said end portion delineated by said first named score line and having opposite side portions extending upwardly at an angle to the remaining portion with said side portions delineated by said parallel score lines and means securing said one end portion of said blank to the said side wall of said container.

2,732,110
SHOULDER SUPPORTED MULTIPLE RECEPTACLE
Leona J. Lauraitis, Wheatfield, Ind.
Application June 8, 1953, Serial No. 360,285
3 Claims. (Cl. 224—5)

1. A dual container structure of the character described comprising a pair of corresponding elongated open

top containers each provided with an upwardly bowed longitudinally extending bottom portion defining a transverse shoulder engaging recess, a connecting member extending between and connecting said containers adjacent corresponding rear ends thereof, said connecting member being adapted to bear against the upper portion of a person's back for maintaining the containers positioned on the shoulders and with the recessed bottom portions thereof conformably fitting over the shoulders, said con-



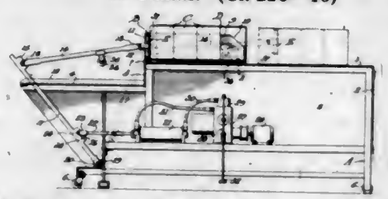
necting member comprising an elongated deformable element adapted to be bent to engage across the back beneath and adjacent the level of the shoulders and having non-deformable head portions at the ends thereof provided with outwardly opening threaded recesses, said heads engaging against adjacently disposed side walls of the containers, and fastening elements extending through said container side walls and threadedly secured in the head recesses for anchoring the connecting member to the containers.

2,732,111
EXPENDABLE BANDOLEER
William K. Fogle, Mount Vernon, Ohio, assignor, by mesne assignments, to Continental Can Company, Inc., New York, N. Y., a corporation of New York
Application May 21, 1952, Serial No. 289,163
1 Claim. (Cl. 224—17)



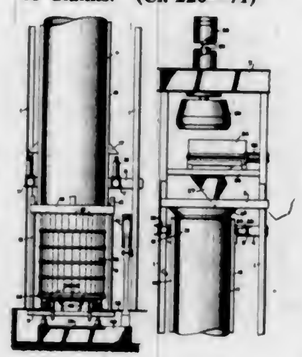
A carrier for ammunition clips which is adapted to be discarded after a single use, said carrier comprising a generally elongate container formed of a flexible laminated sheet material, the outer ply of said material being cloth and the inner ply thereof being a substantially waterproof and heat-sealable continuous plastic film, said container being heat sealed along the sides and ends and being provided with a plurality of longitudinally spaced transverse heat seals separating the same into a plurality of individual completely sealed pockets and each pocket having an ammunition clip enclosed therein, a carrying strap attached at its ends to the opposite ends of said container to support the same on the body of the user, and means to facilitate tearing the material along a longitudinal edge to release successive ammunition clips from said individual pockets.

2,732,112
CONTAINER FILLING APPARATUS
Allen L. Conrad, New Iberia, La.
Application September 24, 1953, Serial No. 382,161
13 Claims. (Cl. 226—18)



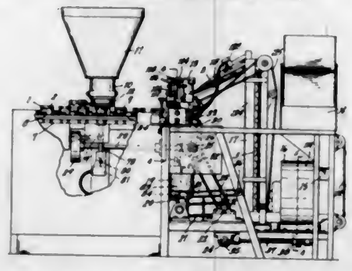
12. In a container filling apparatus, a horizontal tray for receiving filler material; means supporting the tray at one end thereof so as to leave substantially the entire length of the tray unobstructed marginally to enable a container having an open end and a closed end to be fitted over the other end of said tray and substantially enclose said tray with the closed end of said container in substantially the same plane as said other end of said tray; a pusher member mounted to move from said one end of said tray along the tray towards and beyond the other end of said tray for pushing filler material on the tray into a container so fitted over said tray; a receiving slab disposed at a lower level than said tray and extending beyond the latter in the direction of pushing movement of said pusher member; and means for driving said pusher member to force said filler material into said container and into engagement with said closed end of said container to move the filled container beyond said tray and over said slab to be dropped thereupon.

2,732,113
TOBACCO WEIGHING AND PACKING APPARATUS
William L. Rice, Asheville, N. C.
Application October 1, 1952, Serial No. 312,469
15 Claims. (Cl. 226—71)



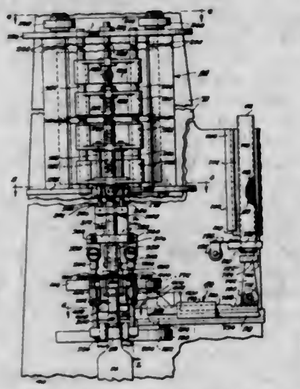
1. In a press for packing tobacco in hogheads, the combination with means for supporting a hogshead to be packed, a charger, means for raising and lowering said charger, means independent of the hogshead and of said raising and lowering means for supporting said charger above the hogshead, and a press plunger operating within said charger.

2,732,114
MACHINE FOR FILLING AND CAPPING PAPER CARTONS
James E. Annen, Kalamazoo, Mich., assignor to Sutherland Paper Company, Kalamazoo, Mich.
Application May 14, 1951, Serial No. 226,161
10 Claims. (Cl. 226—75)



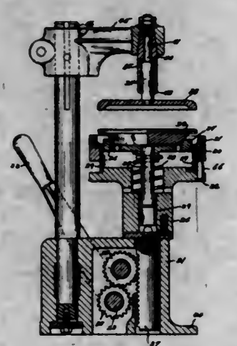
1. In a machine for filling truncated conical cartons having a cylindrical upper rim and capping said cartons with circular covers having depending cylindrical flanges, means for translating cartons past a filling station to a capping station in upright position, a vertically reciprocable elevator positioned to receive said cartons individually from said translating means and move said cartons upwardly through a distance greater than the height of the cartons, a fixed socket plate positioned along the path of travel of said elevator and forming a circular socket opening through which said cartons are translated, said socket plate having a lateral side opening to said socket opening, reciprocable means for introducing a cover into said socket opening through said lateral opening in downwardly opening position, said socket opening having a cover supporting lip around the bottom thereof and being slightly smaller than said covers to support said covers, a carriage vertically reciprocably and yieldably supported below said socket plate, an annular ring carried by said carriage and aligned with and positioned between said elevator and said socket opening and adapted to have cartons advanced therethrough, upwardly and inwardly inclined spring fingers mounted around the upper edge of said ring and positioned to extend into said socket opening and a cover therein in the raised position of said carriage, carriage depressing pins extending upwardly from the lower portion of said carriage and engageable with an under surface of said elevator to depress said carriage and ring in the lowered position of said elevator, a fixed abutment plate mounted in spaced relationship above said socket plate by a distance greater than the height of the said containers and adapted to have a covered carton pressed thereagainst in the fully elevated position of said elevator, laterally swingable support means located between said socket plate and said abutment plate on opposite sides of said socket opening and biased toward each other to engage the under edge of a cover pressed against said abutment, and an ejector reciprocable with said cover introducing means to engage and push a cover and the carton which it is attached to from between said laterally swingable supporting means and said abutment.

2,732,115
BAND-APPLYING MACHINE AND METHOD
Howard G. Allen, Niagara Falls, N. Y., assignor to American Machine & Foundry Company, a corporation of New Jersey
Original application September 21, 1944, Serial No. 555,188, now Patent No. 2,579,458, dated December 25, 1951. Divided and this application April 28, 1950, Serial No. 158,670
15 Claims. (Cl. 226—80)



8. In a method for opening banding sleeves made of flexible material and having the inner surfaces of the opposed walls thereof flattended into face-to-face contact, the steps of successively removing individual banding sleeves in flattened condition from a source of supply, supporting each of said banding sleeves removed from said source of supply in flattened condition, and slidably moving limited portions of said walls relative to one another within the plane of face-to-face contact of the inner surfaces thereof whereby to force other portions of said inner surfaces to separate.

2,732,116
METHOD AND APPARATUS FOR APPLYING CLOSURES TO OPEN CONTAINERS
Bennett W. Merrill, Chicago, Ill., assignor to Standard Packaging Corporation, Chicago, Ill., a corporation of Virginia
Application April 22, 1954, Serial No. 424,886
19 Claims. (Cl. 226—84)

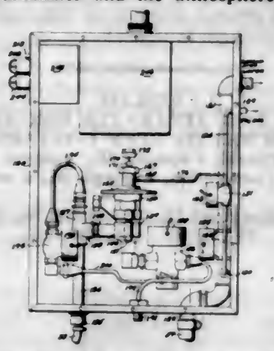


1. In a device for securing a metal foil closure to the perimeter of the top end of an open, metal foil container, said container having a bottom portion, a frustoconical side wall portion rising from said bottom portion, a flange extending outwardly from the top of said frustoconical wall portion forming the perimeter of said container, in combination; a device housing, a movable base table, a substantially stationary presser-plate supported by said housing over said table, a forming die resiliently carried by said table, an anvil ring inside said die and adjacent thereto, said anvil ring rigidly secured to said table, said table adapted to receive a container with a closure loosely applied thereon when said table is in its lower and normal position, means to move said table upwardly causing said presser-plate to contact said closure positioned upon said container when said table is raised upwardly, said presser-plate forcing the edge of said closure to contact said forming die to impose an inward turning action to said edge portion of the closure, also causing a downward movement of said forming die in yielding relation thereto, and subsequently forcing said edge portion of said closure against said anvil ring to secure said closure to said container.

2,732,117
CARBONATED BEVERAGE PRE-MIXING SYSTEM
Randolph D. Hillis, Columbus, Ohio, assignor to Nehi Corporation, Columbus, Ga., a corporation of Delaware
Application June 26, 1950, Serial No. 170,395
23 Claims. (Cl. 226—111)

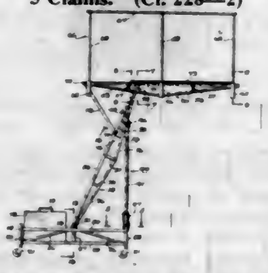
1. In a system for filling a container with a carbonated beverage, a conduit communicating with the interior of the container, a gas pipe connecting said conduit to a source of gas pressure, a liquid pipe connecting said conduit to a source of carbonated liquid, a gas valve in said gas pipe, a liquid valve in said liquid pipe, said gas valve being adapted to be opened while said liquid valve is closed to charge the container with gas, means subject to operation solely by pressure in the container and operative when the pressure in the container reaches a predetermined point for closing said gas valve and opening said liquid valve, and means simultaneously operable by said last

named means for providing controlled communication between the container and the atmosphere to maintain



a predetermined pressure in the container while the latter is being filled with carbonated liquid.

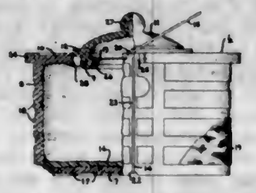
2,732,118
MOVABLE ELEVATED WORK PLATFORM SUPPORTING STRUCTURE
John P. Reinhardt, Brooklyn, N. Y.
Application April 26, 1952, Serial No. 284,564
5 Claims. (Cl. 228—2)



1. A movable platform supporting structure comprising a wheeled base member, an inclined ladder having its lower end secured to the base member and comprising a plurality of spaced rungs, a platform member pivotally connected intermediate its ends to the upper end of the ladder for swinging movement about a horizontal axis to either a horizontal position or to an inclined position in alignment with said ladder with one end of the platform member extending upwardly beyond the upper end of the ladder, said platform member comprising a plurality of spaced rungs in the portion thereof extending beyond the ladder, a floor member removably mounted on said platform member over the rungs thereof, a first connecting means on the opposite end of the platform, a second connecting means on an intermediate portion of the ladder, said connecting means being spaced an equal radial distance from said pivotal axis of said platform member, a removable brace member having means at the opposite ends thereof for connection with each of said two connecting means, respectively, to support said platform member in said horizontal position, and means for mutually securing said connecting means to each other to maintain said platform member in said inclined position.

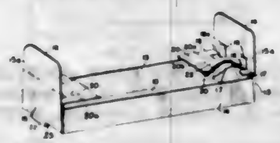
2,732,119
MOLDED PULP BAIT CONTAINER
Arthur H. Risch, Wauwatosa, Wis., assignor to Pulp Reproduction Company, Milwaukee, Wis., a corporation of Wisconsin
Application August 9, 1952, Serial No. 303,509
1 Claim. (Cl. 229—2.5)

A live bait container comprising, a unitary molded pulp receptacle adapted to receive and retain a supply of water, said receptacle having a top wall provided with a restricted access opening surrounded by a recessed flange defining an outwardly open annular recess, said flange being formed with diametrically opposed slots extending from said recess to the interior of said receptacle, and a unitary hollow molded pulp cover for said receptacle having a main dome-shaped body portion of smaller diameter and less overall height than the diameter of said opening and provided with an outwardly directed annular flange of larger diameter than said opening adapted for reversible



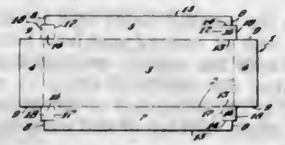
seating within said recesses and of slightly smaller diameter than the diameter defined by said opposed slots to permit passage of said cover endwise through said opening, said cover being provided with a restricted access opening defined by an internal inwardly projecting annular ridge on the side of its said flange remote from its dome whereby said cover may be used in alternate positions with its said dome projecting outwardly or inwardly of said receptacle top wall to cover the access opening of said receptacle while being positively seated in either position.

2,732,120
TOMATO TRAY
Meyer Glazer, Norfolk, Va.
Application April 12, 1954, Serial No. 422,366
2 Claims. (Cl. 229—31)



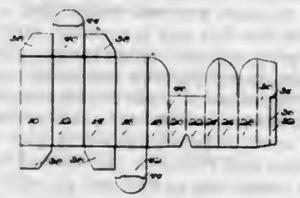
1. A foldable tray blank comprising a sheet of material scored along longitudinal and transverse lines to form a bottom, side walls and end walls, a pair of corner forming panels at each end of the blank, each panel being integrally joined to the adjacent side and end walls along said score lines, each corner forming panel, beginning at the juncture of said score lines, being cut and scored diagonally for a portion of its length, the scored portion lying intermediate said cut portions along said diagonal, a cut portion extending to the outer marginal edge of said panel, an end panel hinged to each corner forming panel along a score line, a tab integral with said corner forming panel struck from said end panel; an end wing integrally joined to said end panel along a score line extending for a portion of the width of said panel and wing, the remaining portion of said length being separated by a cut line beginning where said last mentioned score line terminates and extending a predetermined length longitudinally towards the end of the blank and then extending substantially at right angles thereto to the outer-side margin of the blank; the end panels and end wings on one side of the blank being slightly wider than the corresponding members on the other side of the blank, to overlap said members for an adhesive connection when the blank is folded; the portions of the end panels formed by said cut line forming a locking tongue when joined in overlapping relation; said corner forming panels folding along said scored lines and lying parallel to the adjacent end walls when the blank is erected, said tabs extending above said panels and lying parallel to their respective end walls; the diagonal score lines of said corner forming panels meeting substantially along the longitudinal center line of said end walls; the end panels being foldable over said corner forming panels along the score lines connecting them; said bottom being provided with a transverse slot at each end substantially centrally thereof and inwards of said transverse score lines; the locking tongue of said end panels entering said slot to lock the tray in erected position when said end panels are folded over said corner forming panels, said end wings simultaneously being foldable along score lines to lie parallel to said bottom on each side of each locking tongue.

2,732,121
DISPLAY BOX
Henry P. McGovern, Fayville, Mass., assignor to Dennison Manufacturing Company, Framingham, Mass., a corporation of Massachusetts
Application August 28, 1952, Serial No. 306,766
2 Claims. (Cl. 229—32)



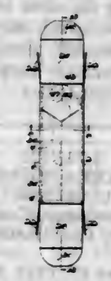
1. A box blank comprising a sheet having lines of fold defining a base and side walls, the side walls being rectangular and their lengths being substantially equal to the corresponding dimensions of the base, certain side walls having pairs of spaced cuts extending thereinto from the ends thereof toward the opposite ends, one cut of each pair being intermediate the fold line and outer edge of the side wall and the other cut being along the fold line, the portions of the side walls between the pairs of cuts being extended to form flaps the inner ends of which are disposed within the outline of the side walls and the outer ends of which project beyond the ends of the side walls, whereby when the sides are folded to form a box the flaps extend obliquely across the corners of the box without attachment at their free ends.

2,732,122
PROTECTIVE CARTON
Hubert V. Bolding, Jeffersonville, Ind., assignor to The Bradley & Gilbert Company, Louisville, Ky., a corporation of Kentucky
Application April 30, 1954, Serial No. 426,642
19 Claims. (Cl. 229—38)



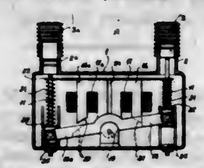
1. A collapsible single-blank carton having a first set and a second set of longitudinally extending, hingedly interconnected opposed outer wall panels which define a rectangle in transverse cross section when the carton is erected, and a collapsible liner for resiliently supporting an article within said outer wall panels including longitudinally extending hinge means fixedly secured to each of the first set of opposed wall panels, two longitudinally extending spaced buffer panels hingedly connected to said hinge means and extending between said first set of opposed wall panels, the adjacent two hinge connections between the buffer panels and the hinge means on each of the first set of opposed wall panels being spaced apart and each of said buffer panels having a transverse dimension greater than the transverse span between its hinge connections to enable outward bellying thereof toward its respective adjacent wall panel of said second set of opposed wall panels, said hinge means including a lap panel fixedly secured in face-to-face relation to one of said first set of opposed wall panels and integrally hinged to the adjacent one of said second set of wall panels, an intermediate anchor panel fixedly secured in face-to-face relation to the other of said first set of opposed wall panels, and an end anchor panel fixedly secured in face-to-face relation to said lap panel.

2,732,123
SHOCKPROOF CARTON
Hubert V. Bolding, Jeffersonville, Ind., assignor to The Bradley & Gilbert Company, Louisville, Ky., a corporation of Kentucky
Application September 25, 1952, Serial No. 311,515
6 Claims. (Cl. 229—39)



1. A collapsible carton comprising four outer wall panels hingedly interconnected at their longitudinal edges to form an enclosed chamber rectangular in tranverse cross section, two spaced dividing walls hingedly connected at their respective longitudinal edges to a pair of opposed outer wall panels, one of said dividing walls having a cut positioned longitudinally and centrally of one end portion thereof, and a pair of divergent hinge score lines extending from the inner end of said cut transversely and outwardly through part of said one end portion and ending at the longitudinal hinge connections for said one of said dividing walls, said longitudinal hinge connections being cut from the points of juncture of the score lines therewith forwardly to the end of said one end portion, the resultant freely hinged segments forming a loading ramp adapted for hinging action toward the adjacent outer wall panel upon insertion of an article between said dividing walls to facilitate the loading operation.

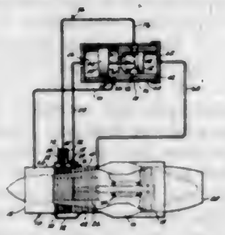
2,732,124
GAS COMPRESSOR
Alejandro Poliansky, Buenos Aires, Argentina
Application January 16, 1952, Serial No. 266,615
1[illegible] Claims. (Cl. 230—55)



1. Gas compressor having a sealed casing with an entrance opening for the gas to be compressed and at least one pressure chamber for receiving the compressed gas, and comprising at least one pair of compressor heads secured to the walls of the compressor casing and communicated on the one hand with the interior of said casing and on the other hand with said pressure chamber, a

non-return valve provided in the latter for controlling the communications between the compressor heads and the pressure chamber, a spring-loaded piston movably arranged in each compressor head and comprising an axially projecting front portion for prematurely closing the communication between the compressor head and the pressure chamber to provide for the formation of a shock-absorbing gas cushion in said compressor head for said compressing piston, each compressing piston having a piston rod extending into the interior of the compressor casing, at least one pair of electromagnets fixedly arranged within said compressor casing and formed by stationary cores and coils carried by leg portions of said cores and by armature bodies movably arranged in front of said cores for being attracted thereby in a direction substantially coaxial to said coils, lever means carrying said armature bodies and pivotally connected with said piston rods for transmitting and increasing the oscillating movements of said armature bodies to said compressing pistons, spring means secured to said piston rods for mitigating the movements of said pistons at the end of their working strokes and for assisting the same in initiating their working strokes, and electric switch means including at least one contact carrier movably arranged within the compressor casing for alternately supplying electric current to the coils of said electromagnets.

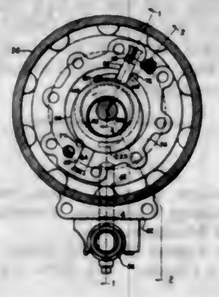
2,732,125
DIFFERENTIAL AREA COMPRESSOR BLEED CONTROL
Lowell E. Ruby, Marlborough, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application October 17, 1952, Serial No. 315,289
6 Claims. (Cl. 230—115)



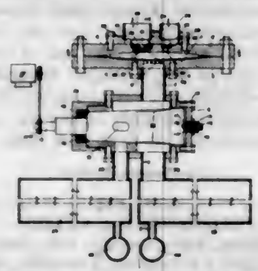
1. A multi-stage axial flow compressor having means for bleeding an intermediate stage thereof and means for regulating flow through said bleeding means in combination with a bleed control comprising a housing containing a differential area piston capable of reciprocal motion therein, means subjecting one end of said piston to compressor discharge pressure and the other end to the pressure at the intermediate compressor stage being bled so that said piston is moved as a function of compressor pressure ratio, and means controlled by motion of said piston for admitting compressor discharge pressure to said flow regulating means to actuate said flow regulating means and control compressor bleeding.

2,732,126
REFRIGERATING APPARATUS
Rolf M. Smith, Dayton, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application August 27, 1951, Serial No. 243,799
7 Claims. (Cl. 230—145)

1. A rotary compressor including an impeller casing provided with spaced parallel plane wall surfaces and a round wall surface extending between the plane wall surfaces, an impeller within the casing having surfaces in sealing relation with the spaced walls of the casing, a plurality of spaced sealing means extending between a plurality of spaced points on the casing and on the impeller to divide the space between the impeller and the casing into a plurality of pumping chambers, means for moving the peripheral surface of the impeller progressively into sealing relation with successive portions of the round wall surface of the casing, a separate inlet port for each pumping chamber in the plane wall surface adjacent one side of each sealing means located so as to be covered and uncovered by the impeller during each revolution, the radially outer edge of each of said inlet ports substantially coinciding with the adjacent peripheral portion of the impeller when the impeller is about ⅗ of a revolution in advance of the completion of the compression stroke, and outlet means for each of said pumping chambers.



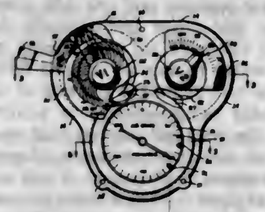
2,732,127
DIAPHRAGM PUMP
Eugene T. Booth, New York, N. Y., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application February 13, 1943, Serial No. 475,845
1 Claim. (Cl. 230—162)



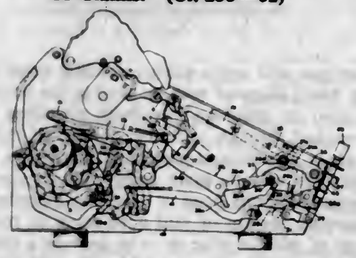
In combination, means defining a pumping chamber and an actuating chamber including a casing and a thin metal diaphragm between said chambers, a first source of positive pressure, a second independent source of suction pressure less than said first source, valve means operable to connect said actuating chamber alternately with said first and second pressure sources to reciprocably vibrate said diaphragm in a positive manner in respectively opposite directions, and means in said casing operable to alternately admit and discharge a fluid from said pumping chamber upon each reciprocal vibration of the diaphragm, said means comprising an inlet and an outlet valve in said casing each having a flexible reed closure member and means operable to limit maximum opening of said reed with respect to said valve.

2,732,128
CALCULATING DEVICE
Harlan A. Gurney, Woodland Hills, and Morel D. Guyot, North Hollywood, Calif.
Application April 14, 1954, Serial No. 423,132
9 Claims. (Cl. 235—61)

1. In a calculator, the combination comprising: a movable member having an indexing line; a stationary scale disposed in cooperative relationship with respect to said movable member, said stationary scale having a peripheral edge of given shape; and a movable scale mounted adjacent said stationary scale for movement independently of said movable member, said movable scale being arranged to extend partially under the peripheral edge of the stationary scale, whereby said indexing line on said movable member is cooperable with both said stationary and movable scales simultaneously, and movement of said movable scale results in the eclipsing of portions thereof by said peripheral edge of the stationary scale.

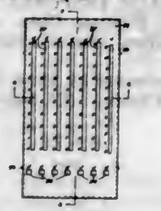


2,732,129
STOPPING MEANS FOR CALCULATING MACHINES
Herman Gang, Livingston, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a corporation of Delaware
Application February 6, 1953, Serial No. 335,435
11 Claims. (Cl. 235—62)



1. In a motor driven calculating machine including means for initiating and means for terminating operation of the machine; the combination with means adjustable to control the machine to perform a calculation comprising a program of operations; of a stop key, a device operable upon operation of said stop key to initiate operation of said terminating means, and a member rendered effective by said machine control means upon adjustment to controlling position to disable said device.

2,732,130
CALCULATING APPARATUS
Gerhard Rosenberg, Guildford, England
Application July 7, 1952, Serial No. 297,423
Claims priority, application Great Britain September 13, 1951
5 Claims. (Cl. 235—71)



1. Calculating apparatus comprising a casing having a removable lid, perforated endless bands arranged side by side and each being marked on its outer surface with graduated scales, a supporting sprocket wheel arranged at either end of each endless band, the teeth of the sprockets engaging the perforations provided in the associated endless band, the sprockets at opposite ends of the plurality of endless bands being mounted on a pair of shafts arranged in parallel spaced relationship in a supporting framework removably mounted in the casing; said framework consisting of a pair of side members arranged in spaced relationship with one another and between which the sprocket carrying shafts extend, a plurality of spacing members the number of which corresponds to the number of endless bands arranged side by side between the frame side members, clamping means passing through aligned holes provided in the side members and spacing members to unite said framework in a rigid assembly; a groove extending longitudinally of the length of each spacing member for engagement by the point of a stylus to guide the same during longitudinal movement of an endless band, a series of parallel slots in the removable lid corresponding in number to the number of endless bands, one said slot being associated with each endless band to permit the stylus to be inserted into engagement with a band, inspection windows in the removable lid, one for each endless band and through which a number resulting from manipulation of the endless bands can be viewed, and means associated with each adjacent pair of endless bands for transmitting longitudinal movement from one endless band as the same moves to the limit of its scales to the adjacent endless band.

2,732,131
TELEPHONE CALL COUNTER
Abraham C. Mager, Brooklyn, N. Y.
Application July 19, 1951, Serial No. 237,555
2 Claims. (Cl. 235—125)

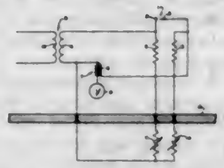


1. The combination with a turnable dial of a telephone having a slightly raised circular central portion, of a call counter detachably mounted on said central portion, said counter comprising a base having a compartment formed therein, a top wall with depending skirt covering said compartment, said top wall having spaced windows and a slot therein, said base having a circular recess in its bottom face with a slitted wall portion fitted over said raised portion of the dial, pairs of drums rotatably mounted in alignment on the base in said compartment, an endless band movably supported on each pair of drums, said bands being movable behind said windows, one band carrying indicia constituting units, the other band carrying indicia constituting tens, manual means for moving the drum with the band carrying the units indicia across one of said windows, and means for automatically and intermittently moving said other drum with its band across the other window, said manual means including an annular flange fixed on said drum mounting the units carrying band and protruding outwardly of and beyond the slot in said top wall.

2,732,132
FAST CYCLING THERMOSTAT CIRCUIT
Henry R. Hulett, Redwood City, Calif., assignor to Detroit Controls Corporation, Detroit, Mich., a corporation of Michigan
Application August 23, 1954, Serial No. 451,558
2 Claims. (Cl. 236—91)

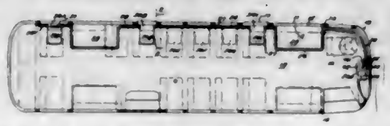
1. A control circuit for controlling a heating system comprising: a first permanently closed circuit including a first thermistor having a negative coefficient of resistance, a first resistor and a source of voltage; and a second thermistor having a negative coefficient of resistance and

a second resistor shunted across said first thermistor and first resistor through a thermostat including a blade and



a contact, said first and second resistors being located in heat transfer relation with respect to said blade.

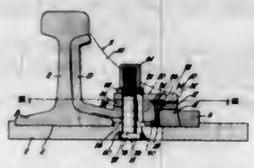
2,732,133
VEHICLE HEATING SYSTEM
Alfred R. Lintern, Detroit, Mich., assignor to A. R. Lintern, Inc., a corporation of Michigan
Application August 20, 1951, Serial No. 242,658
2 Claims. (Cl. 237—12.3)



1. In a vehicle fresh-air ventilating and heating system a rearmost unit located to the rear of the rear wheel houses of the vehicle and spaced from a blank inside wall of the vehicle, a foremost unit located adjacent the driver, an integral cover on said foremost unit sealably connecting the foremost unit to the side wall, a false bottom in said foremost unit sealably connected to the side wall, intermediate units located on the floor of the vehicle and in spaced relation to the inside wall, heating medium supply and return tubes connecting all said units in series with the cooling system of the vehicle engine and connected to said rearmost unit and intermediate unit in the space between said units and the inside wall of the vehicle and to said foremost unit via the space provided by said false bottom, auxiliary saddles sealably connecting the intake side of said units with the inside wall of the vehicle and providing a cover extending from said units over said tubes, said rearmost unit saddle having apertures for receiving air to permit the air in the rear of the vehicle to enter the intake side of said rearmost unit, the inside wall of the bus having apertures within the saddles of said foremost and intermediate units, said apertures communicating with a space between the inside and outside walls of the vehicle between the vehicle body posts, air scooping louvers in the vehicle outside wall preferably adjacent the vehicle side windows and correspondingly located relative to the openings in the vehicle inside wall so that air entering said louvers travels to the intake side of said foremost and intermediate units via the space between the vehicle walls and posts, the openings in the inside wall and said saddles being disposed so that, when the vehicle is in motion, air under pressure is supplied to said foremost and intermediate units, said units being equipped with directional louvers on their exhaust sides for venting air to the vehicle interior from said units.

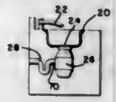
2,732,134
ADJUSTABLE RAIL BRACE
John B. Taylor, Johnstown, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Application March 4, 1953, Serial No. 340,259
1 Claim. (Cl. 238—292)

An adjustable device for bracing a railway rail comprising a tie plate having a rail seat thereon and an abutment thereacross spaced from said rail seat, said tie plate having an elongated hole extending vertically therethrough intermediate said rail seat and said abutment, an adjustable brace member mounted on said tie plate with one side thereof engaging a rail disposed on said rail seat, an overhanging cover extending to said abutment from the side of said brace opposite said one side, a wedge member disposed under said cover and laterally engaging said brace and said abutment for maintaining said brace in position, said wedge having an inclined face on the side thereof adjacent said abutment, the side of said abutment facing said wedge being undercut to accommodate said inclined face, the inclined side of said wedge and the undercut face of said abutment being adapted to cooperate to prevent vertical displacement of said wedge, the side of said wedge adjacent the brace being serrated, said brace member having a vertical aperture through the midportion thereof, said aperture having first and second portions with vertical shoulders therebetween, said aperture communicating with the hole in said tie plate, a locking plate having a vertical opening therethrough and a stud depending therefrom, and means for holding said brace on said tie plate and securing said locking plate on said brace; said means including a cap nut, and a bolt having



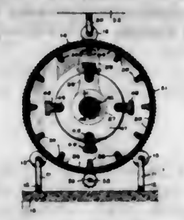
a head on one end and a shaft extending from said head, said bolt being disposed with its head in the bottom of the hole in said tie plate and its shaft extending upwardly therefrom and through said first portion of the aperture in said brace with its end projecting therefrom, a portion of the hole in said tie plate being of such size so as to permit passage of the head of said bolt therethrough and the remaining portion of said hole being of reduced size at the top of said tie plate so as to provide a shoulder between the top and bottom of said plate, the head of said bolt being adapted to bear against said last named shoulder to prevent vertical displacement of said bolt, said locking plate being disposed on said brace with its opening engaging the projecting end of said bolt shaft and said stud fitting into the second portion of said aperture, said nut being threaded on the projecting end of said bolt shaft above said locking plate, said cap nut being threaded on and enclosing the projecting end of said bolt shaft above said locking plate, serrations on the outer side of said stud engaging the serrations on said wedge, the inner side of said stud bearing against the vertical shoulders in said aperture, said overhanging cover and said locking plate overlying and covering the interengaged serrations of said stud and said wedge.

2,732,135
GARBAGE DISPOSAL DEVICE
George B. Long, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application September 28, 1954, Serial No. 458,731
4 Claims. (Cl. 241—46)



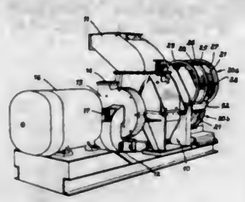
1. Comminuting apparatus including metal walls provided with cutting edges enclosing a cutting chamber, an impeller located in the bottom portion of said cutting chamber, a transverse wall forming the bottom of said cutting chamber, said transverse wall being provided with an annular groove concentric with said impeller and an outlet from said groove, a motor connected to said impeller for rotating the impeller, said impeller being provided with a movable appearing and disappearing vane, said vane being provided with a lifting projection extending into said groove for lifting the vane when the impeller rotates and the projection impinges upon liquid in the groove.

2,732,136
PULVERIZING MACHINE
Albert Brewster, Auburndale, Fla., assignor of thirty per cent to Earl J. Hensel, Jr., Lakeland, Fla.
Application March 23, 1953, Serial No. 344,086
2 Claims. (Cl. 241—54)



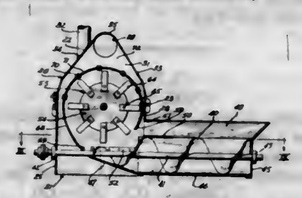
1. In a fluid swept pulverizer a cylindrical casing mounted for rotation on a horizontal axis, an inlet for supplying material to be pulverized centrally into said casing at one end thereof, a plurality of curved plates juxtaposed to form a complete lining for the cylindrical wall of the casing, each curved plate having a longitudinal integral rib of tapered form adapted to carry material in the casing upwardly to permit the same to fall by gravity, a rotor within the casing, a plurality of radially projecting hammers pivotally mounted on the rotor and having enlarged outer ends, independent motor means for driving said casing and rotor in opposite directions, said hammers when rotated extending outwardly toward the casing and their ends being spaced from the ribs a substantial distance, whereby the material to be pulverized falling by gravity from the upper part of the casing is struck by the hammers in mid air reducing the impact of the material upon the casing and the consequent damage thereto, and a centrally located outlet in the other end of said casing for withdrawing pulverized material from said casing.

2,732,137
HAMMER MILL WITH SEPARATELY USABLE SCREENS
Chester Donald Fisher, Muncy, Pa., assignor to Sprout, Waldron and Company, Inc., Muncy, Pa., a corporation of Pennsylvania
Application March 24, 1953, Serial No. 344,380
10 Claims. (Cl. 241—89)



1. A hammer mill adapted for quick changing of the screen without interruption of operation, comprising a main housing having rotating hammers therein, a screen separate from said housing, means in said housing for supporting said screen in operative relation with said hammers, means in a vertical outer wall of said housing forming a slot proportioned to receive said screen therethrough and aligned with said supporting means to provide for insertion of the front end of said screen therethrough into supported relation with said supporting means, said slot being substantially wider than the thickness of said screen to facilitate insertion of said screen and especially to provide for ready removal of said screen in the event of damage thereto by a foreign body in the material being treated in said mill, and a flange on the rearward end of said screen of greater width than said slot to form a closure for said slot in the fully inserted position of said screen.

2,732,138
HAMMERMILL
Murray W. Forth, Champaign, Ill., assignor to Fairbanks, Morse & Co., Chicago, Ill., a corporation of Illinois
Application March 27, 1952, Serial No. 278,939
3 Claims. (Cl. 241—186)

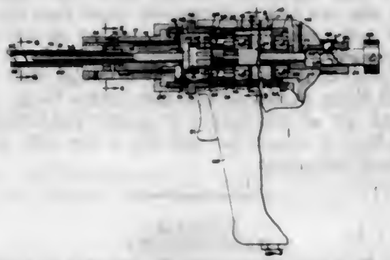


1. In a hammermill, a casing, a rotary hammer assembly in the casing with its axis of rotation horizontal, said hammer assembly providing pivoted, material comminuting hammers the free ends of which in hammer assembly rotation, move through a generally circular path, a material feed trough extending horizontally at the lower end of said casing, said trough including a conically constricted delivery end portion extending within the casing beneath said hammer assembly, said delivery end portion opening upwardly along and relatively closely adjacent the lowermost portion of said generally circular path of movement of the free ends of said hammers, a positive displacement screw conveyor extending longitudinally in said trough and providing a terminal end portion located in and conforming to the conical constriction of said delivery end portion of the trough, the upper end portion of said casing providing a chamber above the hammer assembly, a comminuting material discharge conduit opening to said chamber and a blower included in said conduit and operative to establish air flow entering the casing through said trough and passing upwardly about the hammer assembly and in said chamber to and through said discharge conduit, the air flow in passage about the hammer assembly and in said chamber, entraining therein hammer-comminuted material.

2,732,139
TOOL FOR APPLYING A CONDUCTOR TO A TERMINAL
Ernest H. Shaff, Hamilton, Ind., assignor, by mesne assignments, to Gardner-Denver Company, a corporation of Delaware
Application April 4, 1952, Serial No. 280,571
7 Claims. (Cl. 242—7)

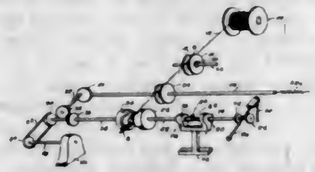
1. In a power operated tool for applying a conducting wire to a terminal, the combination of a hollow spindle, drive means for rotating said spindle in one direction, a normally disengaged driving connection interposed between said drive means and said spindle engaged in response to application of power to the tool to actuate said drive means, a wire wrapping member rigid with said spindle for rotation therewith, said wire wrapping member being adapted to be telescoped over the terminal and having a forwardly open recess therein eccentrically disposed with respect to its rotational axis for receiving the

wire, means effective upon disengagement of said connection in response to interruption of power supply to said drive means for reversely rotating said spindle, and



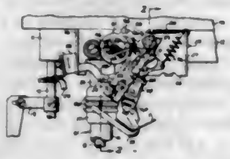
stop means operative upon reverse rotation of said spindle to define a particular angular reset position of said spindle, wire wrapping member and its wire receiving recess with respect to the tool axis.

2,732,140
COIL WINDER
Robert Loring Martin, Monterey Park, Calif., assignor to Standard Coil Products Co., Inc., Los Angeles, Calif., a corporation of Illinois
Application February 2, 1953, Serial No. 334,460
3 Claims. (Cl. 242—13)



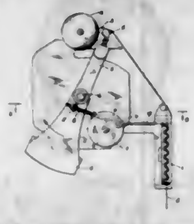
1. A winding machine for winding a coil of wire on a rotor having a wire receiving slot, the center line of which is at a skewed acute angle with respect to the axis of the rotor including means for mounting the rotor for rotation on an axis normal to the axis of the rotor; a source of supply for wire; means for guiding the wire into the slot as the rotor is rotated; said means comprising a pair of spaced rotatable guide cams mounted for rotation on the same axis as the rotor is rotated; said cams having surfaces at an angle to the axis of rotation of the cams; and surfaces combining to form a slot parallel to and coinciding substantially with the path of the skewed rotor slot and guiding the wire along a line substantially parallel at any instant to the center line of the slot, and means for guiding said wire to said slot intermediate said cams at a uniformly moving rate in a direction parallel to the rotary axis of said cams.

2,732,141
AUTOMATIC TAIL-CUTTER FOR WINDING MACHINES
Charles D. Lucas, Clemson, S. C., assignor, by mesne assignments, to Deering Milliken Research Corporation, near Pendleton, S. C., a corporation of Delaware
Application August 25, 1952, Serial No. 306,199
13 Claims. (Cl. 242—19)



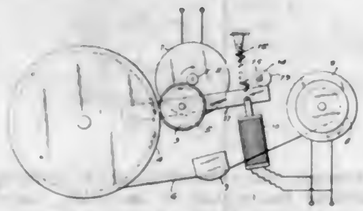
1. In a semi-automatic winding machine having a bunch builder for winding yarn onto bobbins, said bunch builder including a ratchet and pawl operated cam controlled yarn guide, an eccentric pin on said cam, a tail-cutter carried by said yarn guide and a tail-cutter actuating arm pivotally supported by said bunch builder, improved tail-cutter actuating means comprising a cam element carried by said tail-cutter actuating arm engageable by said eccentric pin upon predetermined movement of said ratchet and a semi-rigid element connected to said tail-cutter and slidably penetrating said tail-cutter actuating arm.

2,732,142
THREAD WINDING APPARATUS
Hermann Grein, Remscheid-Lennep, Germany, assignor to Barmer Maschinenfabrik Aktiengesellschaft, Wuppertal-Oberbarmen, Germany
Application November 29, 1951, Serial No. 258,790
Claims priority, application Germany December 4, 1950
3 Claims. (Cl. 242—45)



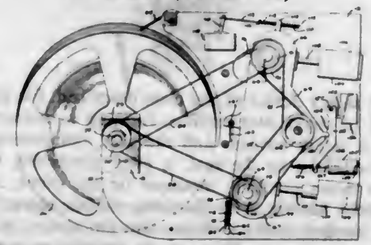
1. Thread winding apparatus, comprising in combination, a take-up spool; a thread tension means along which thread travels to said take-up spool to be wound thereon, said thread tension means comprising a movably mounted tension adjusting part having a magnetic portion; a circular magnet turnably mounted on the apparatus adjacent to said tension adjusting part for movement about a stationary axis passing through the center of said magnet from a first position where a pole of said magnet is located closely adjacent said portion of said tension adjusting part to produce a relatively large force on said portion of said tension adjusting part to a second position where said pole of said magnet is more distant from said portion of said tension adjusting part to produce a relatively small force on said portion of said tension adjusting part; and linkage means bearing against said take-up spool and connected at one end to said magnet for turning said magnet toward said second position as the amount of thread on said take-up spool increases.

2,732,143
MECHANISM FOR AN ELECTROMAGNETIC SOUND RECORDING AND REPRODUCING APPARATUS
Jan Sluijters, Loenersloot, Netherlands, assignor to Technische Import-Export en Fabricage "Amroh," Herengracht, Muiden, Netherlands
Application June 27, 1951, Serial No. 233,740
Claims priority, application Netherlands July 1, 1950
2 Claims. (Cl. 242—54)



1. Winding mechanism for an electromagnetic sound recording and reproducing apparatus, comprising, in combination, a first rotatable winding reel on which an elongated magnetic sound record carrier is wound; a second rotatable winding reel arranged spaced from said first winding reel on which said elongated magnetic sound record carrier is adapted to be wound up from said first winding reel and vice versa; first motor means for rotating said second winding reel whenever desired; a first rotatable turning member mounted for engagement with said first winding reel for rotating the same; a second rotatable turning member adapted to be engaged by said first rotatable turning member for rotating the same; spring means permanently urging said first turning member toward said second turning member and into engagement with the latter; electromagnetic operating means actuated simultaneously with said first motor means during operation thereof so as to move during such operation said first rotatable turning member away from said second rotatable turning member out of engagement with the same; second motor means; motion transmitting means interconnecting said second motor means with said second rotatable turning member; and a friction slip coupling forming part of said motion transmitting means.

2,732,144
AUTOMATIC TAPE PLAYER
Ulisses M. Jones, Huntington, W. Va.
Application September 4, 1953, Serial No. 378,612
11 Claims. (Cl. 242—55)



10. In a tape transport mechanism of the type including a support, a pair of reel-supporting spindle elements rotatably mounted on said support and adapted to engage respective reels having the respective opposite end portions of a magnetic tape wound thereon and extending from one reel to the other, a magnetic transducer head mounted on the support, and guide means on the support arranged to guide the tape past said head, the improvement comprising a second support pivoted to said first support, a pair of drive capstans journaled on said second support adjacent the path of the tape, means driving said capstans in opposite directions of rotation, a pair of electromagnetic devices connected to the second support and arranged to rotate said second support respectively in opposite directions to respectively engage engage the capstans with the tape responsive to energization of the respective electromagnetic devices, an electric motor, means drivingly coupling said motor to the capstans and arranged to drive said capstans in opposite directions, means drivingly coupling said motor to said spindle elements and arranged to rotate said spindle elements synchronously in one direction or in the opposite direction in accordance with the rotated position of said second support, a source of current, circuit means connecting said source of current to said motor, a current regulating rheostat connected in said circuit means, and means adjusting said rheostat in accordance with the potential of said current source.

2,732,145
PAPER CUTTER
Peter J. Serrone, Kansas City, Mo.
Application January 5, 1953, Serial No. 329,620
2 Claims. (Cl. 242—55.5)

1. A holder and cutter device for use with a tubular roll of paper comprising an elongated blade having a longitudinal cutting edge; an L-shaped, roll-holding member for each end of the blade respectively, each member having a roll-receiving, trunnion leg and an extension leg; and means for each member respectively mounting the extension leg thereof on the blade adjacent a corresponding end of the latter, said extension legs extending laterally from the blade in spaced parallelism with each other and being restrained by said mounting means against rotative movement relative to the longitudinal axis of the blade to maintain the trunnion legs in spaced alignment,



said mounting means for at least one of said members comprising a rail connected to the extension leg of said one member and extending therefrom in spaced parallelism with the trunnion leg of said one member, track structure on the blade adjacent one end thereof receiving the rail for free sliding movement of the rail longitudinally of the blade, and a spring interconnecting the rail and the blade and yieldably biasing the rail toward the opposite end of the blade, whereby the trunnion leg of said one member is reciprocable in a linear path toward and away from the trunnion leg of the other member.

2,732,146
RETAINING MEANS FOR FILMS WOUND ON REELS
Frank Donald Napolitani, New York, N. Y.
Application October 20, 1952, Serial No. 315,646
1 Claim. (Cl. 242—74)

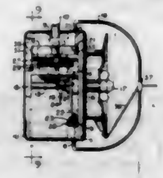


In a motion picture reel having side flanges for winding a non-magnetic film strip thereon, said reel having a hub and permanently magnetized arc-shaped sections fixed to said hub in spaced-apart relation with the north and south poles of adjacent sections arranged to follow each other, the outer surface of said permanent magnets lying in a single periphery, and a film having magnetically permeable arcuate elements secured at both ends thereof and curved to embrace a portion of said outer surfaces to be magnetized on contact with said permanent magnets and thereby held in unitary relation with said reel, thereby permitting winding of said film on said reel while guided by said side flanges, each magnetic section being of a length less than the length of said magnetic gripper to cause said magnetic gripper to contact two end poles of adjacent magnet sections, said magnetic gripper and said magnets having arcuate surfaces of equal radius, causing contact of said magnet gripper along an extensive surface area of said magnets, whereby said film is secured to said magnets and to said hub with an intensive grip facilitating the winding of said film.

2,732,147
SPINNING REEL
Theodore Rotter, Denver, Colo., assignor of thirty-five per cent to Charles E. Friend, Denver, Colo.
Application January 19, 1953, Serial No. 331,792
1 Claim. (Cl. 242—84.4)

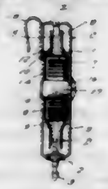
A casting reel comprising a mounting plate, a driven shaft journaled in said mounting plate, a line carrying

spool mounted on said driven shaft, a U-shaped winding arm having a pair of ends pivotally mounted on said mounting plate and carrying a line guide, drive means for rotating said driven shaft to wind line on said spool, locking means attached to said mounting plate and to one of the pair of ends of said winding arm for holding said winding arm in a lowered position normal to said spool and with said line guide in alignment with the axis of rotation of said driven shaft, means on said driven shaft for unlocking said locking means when said driven shaft is rotated, means for oscillating said winding arm when said winding arm is in a raised position, a frame member



attached to said mounting plate, said means for driving said driven shaft including a drive shaft journaled in said frame member, a first bevel gear on said drive shaft, said driven shaft having a second bevel gear mounted thereon engaging said first bevel gear, said means for oscillating said winding arm including a cam rotatably mounted on said drive shaft and means for rotating said cam at a slower rate than the rate of rotation of said driven shaft including a reducing gear assembly connected to said driven shaft and said cam and a linkage connected to the other of the pair of ends of said winding arm engaging said cam.

2,732,148
RETRACTING REEL
Wilburn Russell Lummis, Pasadena, Calif.
Application November 1, 1951, Serial No. 254,237
1 Claim. (Cl. 242—107)



A retractable reel key chain for omnidirectional operation from a fixed location comprising in combination: a hollow centrally ported casing including complemental casing elements cooperatively providing parallel relatively spaced side walls and having abutting mating portions to form a peripheral wall connecting said side walls, said mating portions having complemental recesses in their abutting edges to provide an aperture adapted to receive and retain a grommet to thereby prevent relative rotation of said casing elements; a mandrel carried by one of said ported side walls and having end portions bearing against internal surfaces of both of said side walls to maintain them in predetermined spaced relation; said mandrel carrying a rotatable spool comprising a pair of side plates apertured to provide bearings upon said mandrel, said plates being provided with oppositely offstanding circular bosses adapted for bearing contact with the inner surfaces of the respective side walls to provide spaces between peripheral portions of said plates and said side walls, the peripheries of said bosses being provided with circumferentially spaced openings; a hub extending between said plates axially of said mandrel and having its ends seated in said bosses and provided with tabs passing through the openings in said bosses and clinched against the peripheral portions of said plates, the bosses being offset from the peripheral portions of the said plates a distance greater than the thicknes of the tabs so that the tab ends lie within said spaces out of contact with said side walls; a coil spring wound upon said mandrel and having is ends connected respectively to said mandrel and said hub; and a flexible chain of a width to closely fit between said plates and connected with said hub for winding and unwinding with respect thereto and confined thereon between said plates, said flexible member passing through said grommet to the exterior of said casing for withdrawal in any direction.

2,732,149
AUTOMATIC SAFETY REEL FOR AIRPLANE PILOTS
John C. Whittingham and Proctor W. Nichols, Colorado Springs, Colo.
Application January 4, 1954, Serial No. 402,081
6 Claims. (Cl. 242—107)

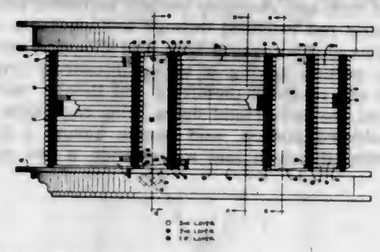


4. A safety device of the class described, for pilot seats subject to rapid deceleration, forming a connection between a safety harness and the seat, comprising a base for attachment to the seat, a pivot projecting from the base, a drum pivotally mounted on the pivot, said base and drum having drum latching means comprising opposed ratchet teeth, a cover for the drum, permanent magnets attached to the cover in position to support the drum in freely rotatable position, the side of the drum facing the base having an annular chamber concentric with the pivot, the inner surface of the wall surrounding the annular chamber having helical gear teeth forming an internal gear, a helical pinion pivotally mounted on the base in position for operative engagement with the internal gear, friction means operatively associated with the base and the pinion, means for adjusting the effectiveness of said friction means to vary its resistance, the drum having a cable groove in its peripheral surface, a cable having one end fastened to the drum and wound about the drum in the groove, the other end of the cable having means for effecting a connection with a safety harness, spring motor means carried by the base, positioned in the annular chamber in operative engagement with the internal gear for exerting a rotary force on the drum in a direction to wind the cable thereonto, said helical gear and pinion forming means for producing a force component in a direction to move the drum towards latching position when the cable is unwound therefrom, whereby when the cable is unwound at a fast rate the drum will be moved into latching position, and manually operable means for shifting the drum along its pivot and for returning the drum to unlatched position.

2,732,150
BALANCED CABLE SPOOLING
Franklin L. Le Bus, Sr., Longview, Tex.
Application June 25, 1953, Serial No. 364,071
5 Claims. (Cl. 242—117)

1. A cable winding apparatus, comprising a circular drum core having flanges on the opposite ends thereof, a set of circumferential grooves on the outer periphery of the drum core adapted to receive a cable, said grooves extending parallel to the flanges of a length less than a

semi-circular portion of the drum core, a similar set of grooves on the diametrically opposite semi-circular portion of the drum core, and of less length than said portion,



the space between the two sets of grooves providing two smooth surface control areas on the drum core, and means adjacent one end of the drum core to force the first wind of cable on the drum core at an angle in said control areas.

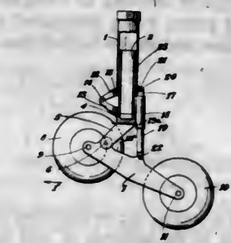
2,732,151
HYDRAULIC STEERING MECHANISM
Charles F. U. Stoner, Waynesboro, Pa.
Application February 16, 1952, Serial No. 271,955
19 Claims. (Cl. 244—50)



6. In mechanism for steering a supporting wheel of a vehicle and mounted thereon for castering about a substantially vertical axis in response to a predetermined lateral force on said wheel, the combination of a source of fluid pressure capable of applying a force in excess of said castering force, a cylinder connected to said source by a pressure line, a return fluid line connected to said cylinder and leading therefrom, a piston in said cylinder between said pressure and return line connections thereto and adapted to be driven by fluid pressure from said source and force the fluid into said return line, operative connections between said piston and said wheel for steering the same about said axis, first valve means interposed in said pressure and return lines for controlling the supply and return of fluid to and from said cylinder to steer the wheel at will and pressure reducing means interposed between said source and said cylinder to apply sufficient pressure on said piston to prevent unintended turning of said wheel, said pressure being less than said castering force.

2,732,152
AIRCRAFT LANDING GEAR WITH MEANS FOR MINIMIZING WHEEL DRAG LOAD INCIDENT TO LANDING
Christopher Bernard Vere Neilson, Lymm, and Robert George Hoare, Warrington, England, assignors to Electro-Hydraulics Limited, Warrington, England, a company of Great Britain
Application November 21, 1952, Serial No. 321,824
Claims priority, application Great Britain June 5, 1947
11 Claims. (Cl. 244—104)

9. A component of aircraft alighting gear comprising a two part telescopic leg having a lower part slidable relative to a fixed upper part; a lever pivotally attached to the lower part of said leg; a first wheel journalled on one end of said lever; a second wheel journalled on the other end of said lever; and shock absorber means extensible to and compressible from a lower limit position and operatively connected between the fixed upper part of said leg and an intermediate point on said lever, said shock absorber means being of a capacity when the



aircraft is groundborne to wholly support the weight to be borne by said component, and being adapted in association with the telescopic leg when the aircraft is airborne and the leg fully extended to maintain the second wheel at a lower level than the first wheel.

2,732,153
DELAY OPENING PARACHUTE AND PYROLYTIC RELEASE THEREFOR
Leonard P. Frieder, Great Neck, and Walter S. Finken, Brooklyn, N. Y.; said Finken assignor to said Frieder
Application December 3, 1953, Serial No. 395,878
10 Claims. (Cl. 244—150)

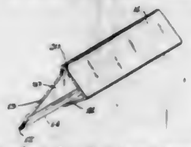


1. A delay opening parachute comprising in combination a parachute having a canopy provided with a hem and shroud lines adapted to support a load, a reefing band having a pair of ends and encompassing the said canopy adjacent the hem thereof, a delay device including a powder train housing and a firing pin casing, said housing being formed with means permitting the escape of gases therefrom, a heat severable link disposed within said housing and connected between the ends of said reefing band, a powder train in said powder train housing having its end positioned adjacent said link, a firing pin disposed within said casing, means actuated by the parachute shroud lines to release said firing pin to ignite said powder train and a flexible seal between said housing and said casing, the construction and arrangement being such that said flexible seal prevents the buildup of pressure within said container during the burning of said combustible means.

2,732,154
BRANCH HOLDER
Byron L. Wilson, Saginaw, Mich.
Application August 31, 1951, Serial No. 244,588
1 Claim. (Cl. 248—42)

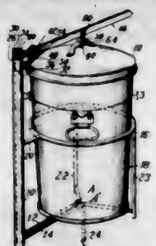
A holding device adapted to impinge the trunk of a tree or post for securing a round shafted object thereto and for retarding the tendency of said round shafted object to rotate which includes: an elongate sleeve forming

in cross section a substantially equilateral triangle with three planal surfaces and being split at the planal intersection of two of said surfaces; a prong extending from said sleeve and being a substantially planal extension of one of said surfaces forming an elongate right triangle, the point of said prong being positioned on the edge of one of said surfaces and at the intersection of the hypote-



nuse of the right triangle, the hypotenuse intersecting with the terminal edge of an adjacent of said surfaces to form the small base of the right triangle; and a ridge upset in the planal side extending to form said prong, running substantially a part of the length of said prong side and extending substantially the length of said prong and offset from the point thereof.

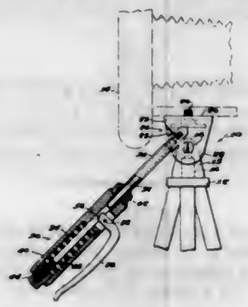
2,732,155
RECEPTACLE SUPPORT
Jack S. Stanley, Lubbock, Tex.
Application January 29, 1953, Serial No. 334,041
1 Claim. (Cl. 248—147)



A support for a refuse receptacle or the like, having a receptacle body and a lid therefor, comprising an upright member, a receptacle body support carried by said upright member, a lid support means comprising a rotatable member carried vertically on the upright portion of said upright member, a pair of parallel horizontally extending spaced brackets secured to said rotatable member, a pivot pin fixed to and extending between said pair of brackets, an arm, said arm pivotally mounted at one end to said pivot pin, the other end of said arm extending over the container lid and projecting beyond the periphery thereof at a point remote from the pivotal connection, a member carried by the center portion of the arm securing the container lid to the arm, a first horizontally extending pin secured to the rotatable member below the spaced brackets, a second horizontally extending pin secured to the arm between the pivotal connection between the arm and the spaced brackets and the member carrying the container lid, said first and second pins extending outwardly beyond the spaced brackets on each side thereof, and a spring extending between the first and second pins below the level of the pivot pin on each side of the pair of brackets, whereby the pivot pin lies above the spring connections between the arm and the rotatable member when the lid is in a substantially horizontal position, and below said spring connection when the arm is in a substantially vertical position.

2,732,156
ADJUSTABLE CAMERA MOUNTING
James P. Whelan, Braintree, Mass.
Application October 11, 1952, Serial No. 314,391
5 Claims. (Cl. 248—185)

4. In an adjustable camera mounting having a split clamping element comprising a fixed portion and a flexible portion, said fixed portion having a threaded opening and said flexible portion having a clearance opening provided with a shouldered portion, a locking handle associated with said clamping element including an elongated central rod extended through said clearance opening and threadedly engaged with said threaded opening, a handle portion having a sleeve threadedly engaged therewith and extended therefrom and slidably mounted on said rod, the end of said sleeve being engageable with said shouldered portion, said handle having a hollow portion through which said rod extends, a nut secured



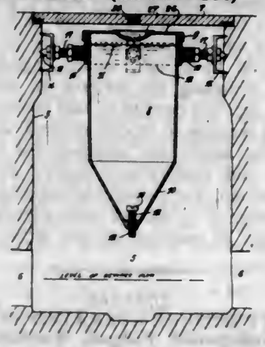
to the outer end of said rod and slidably engaged with said hollow portion, a spring interposed between said nut and the closed end of said hollow portion arranged to urge the sleeve into clamping engagement with said shouldered portion, said rod having a cutout portion in one side thereof, and a trigger pivotally carried by said handle and engageable with said cut-out portion to effect retraction of said sleeve from clamping engagement free of said shouldered portion to permit adjustment of said camera mounting, said spring effecting automatic clamping of the camera mounting upon release of said trigger.

2,732,157
CHAIR BASE
Earl F. Hamilton, Columbus, Ind.
Application May 12, 1953, Serial No. 354,509
5 Claims. (Cl. 248—194)



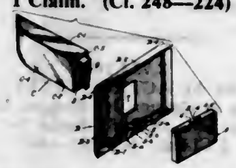
1. In an article of furniture, a base having an outwardly projecting, generally horizontal leg of sheet metal formed into an inverted U-shape in cross-section, a caster-pin socket located within and secured to said leg near its outer end, said socket comprising a pair of opposed sheet-metal stampings formed to provide opposed grooves cooperating to define a passage adapted to receive a caster-pin, one of said stampings having at its lower end an outwardly projecting tongue having a first portion which slopes upwardly, a second portion which extends downwardly, and a third portion which extends upwardly in opposed spaced relation to said second portion to define an upwardly opening groove the bottom of which lies approximately at the same level as the lower end of said passage, said leg having an integral end wall the lower edge of which is received in said last mentioned groove to locate the lower end of the socket longitudinally of the leg.

2,732,158
SUPPORT-PENETRATING BRACKET
Arnold H. Haverlee, West Nyack, N. Y.
Application September 8, 1952, Serial No. 308,364
1 Claim. (Cl. 248—216)



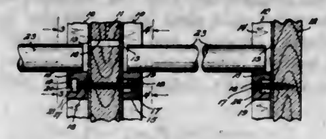
In a device for disinfecting a sewer system by a gravity disinfecting dosing tank supported within a manhole in the system above the flow line of the sewage therein, said tank having an open top surrounded by a flange secured to the tank, means for supporting said dosing tank within a manhole comprising a ring formed member adapted to enclose and support the tank by engaging the same beneath the said flange thereon, a plurality of extensible circumferentially and uniformly spaced members carried by said ring formed tank support and extending outwardly therefrom, each of said extensible members consisting of a screw bolt, jaw means carried on the outer end of each of said bolts in freely rotatable relation thereto, a threaded bearing on said ring formed member for each of said extensible members for supporting said screw bolt in threaded engagement therewith, a squared portion on the screw bolt for rotating the same to cause said jaw means to forcibly engage the wall of the manhole to firmly brace the said ring formed tank supporting member within the manhole, a lock nut for locking each of the extended bolts in position between its said threaded bearing and the wall of the manhole, said bolts having pointed ends to engage the wall of the manhole and in alinement with the said jaw means to cooperate therewith.

2,732,159
FIXTURE SUPPORT
James J. Connors and Charles W. Elsenheimer, Meriden, Conn., assignors to The Charles Parker Company, Meriden, Conn.
Application July 15, 1952, Serial No. 298,976
1 Claim. (Cl. 248—224)



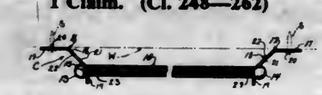
In a fixture support, the combination of a plate adapted to be attached to a wall and having a downwardly convergent key-way; a convergent key removably received in said key-way; a post having a plane end face and a boss projecting rearwardly from said face, said key projecting integrally from said boss; a housing member having an outer face and edge walls, removably covering said plate and having an opening in which said boss closely fits when said end face abuts the outer face of said housing and said key is received in said key-way; and a screw-bolt threaded through one of the walls of said housing and bearing against said plate to lock said key in said key-way and said boss in said opening.

2,732,160
TRAY OR SHELF SUPPORTING STRUCTURE
Robert V. Welhoefer, Waterloo, Wis.
Application March 18, 1952, Serial No. 277,125
4 Claims. (Cl. 248—243)



1. A tray or shelf supporting structure comprising a vertically disposed U-shaped channel member including a flat base portion provided with a series of vertically aligned spaced holes and a pair of parallel side flanges, a supporting block for reversible selective positioning between the side flanges of said channel member, said supporting block including one face adapted for contact with the base of said channel member, a pair of sides disposed adjacent said flanges to precluded rotary movement of said block in said channel, an aperture extending through said supporting block from front to rear thereof, a nut receiving recess at one extremity of said aperture, and a flared recess disposed at the opposite extremity of said aperture, and anchoring means being received through said aperture and a selected hole in the base of said channel member for releasably retaining said channel member and said supporting block in associated relationship.

2,732,161
SPRING SASH CURTAIN ROD
Benedict E. Moriarty, Kenosha, Wis.
Application February 18, 1952, Serial No. 272,109
1 Claim. (Cl. 248—262)

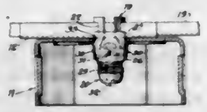


In combination, a spring sash curtain rod of the type having a coil spring body and ball ends; a pair of identical brackets secured in spaced parallel relation adapted to receive the ball ends of the curtain rod and to hold the coil spring body under tension, each bracket including a base portion adapted to be secured to a window surface, an intermediate section connected to the base portion, said intermediate sections each extending diagonally from a respective base portion toward said other intermediate section, and an outer end portion connected to each intermediate section and extending outwardly therefrom in spaced parallel relation, one to the other, said base section, intermediate section and end portion of each bracket being so constructed and arranged that said end section and said base section are in a 90 degree relationship one to the other, said base section, intermediate section and end portion of each bracket being provided with a keyhole slot with the larger opening being of a greater diameter than the ball and lying totally within the intermediate section and the narrow elongated opening of the slot being of a less diameter than the ball end and having a portion lying in both the intermediate section and the end portion of the bracket, whereby, the portion of the narrow opening lying in the intermediate section will act as a cam to guide the respective ball end of the rod into its curtain holding position under tension of said coil spring body.

2,732,162
OUTLET BOX SUPPORT
Benjamin P. McKinley, Evanston, Ill.
Application February 2, 1953, Serial No. 334,558
3 Claims. (Cl. 248—343)

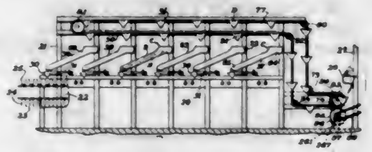
1. In an outlet box support, a slide member having a transverse passage for receiving a supporting bracket and

movable along the same and having a threaded screw receiving opening therein, a shell comprising a threaded cylindrical end portion for supporting a fixture, and a shell-supporting screw extending axially through the shell into threaded engagement with the threaded opening of said slide member, said shell being provided with a pair of diametrically opposed and circumferentially spaced apart wing sections integral with said cylindrical threaded portion for continually engaging opposed sides of said



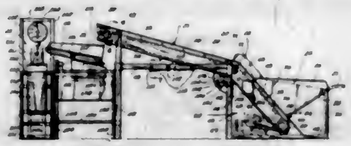
supporting bracket for preventing rotation of the shell when said shell is supported by said bracket and a pair of outwardly flaring spring members each disposed between adjacent sides of said wing members and sufficiently flexible to be compressible at their upper ends to enable snap engagement with the margins of a shell-receiving opening of an outlet box passed over said shell and adapted to press the box against said supporting bracket as the screw is tightened.

2,732,163
FEEDING APPARATUS
Iro Senzani, Faenza, Italy
Application July 27, 1954, Serial No. 445,972
16 Claims. (Cl. 249—2)



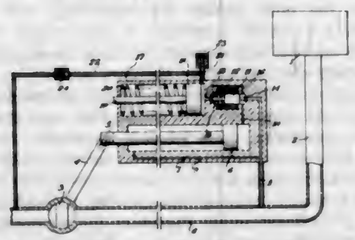
1. In filling apparatus of the type having a plurality of single compartmented, article receiving containers, endlessly traveling along a straight path, scale mechanism with a plurality of single compartmented weigh receptacles mounted above said path, a plurality of resiliently mounted longitudinally vibratory, inclined chutes each feeding a weigh receptacle and means actuated by said scale mechanism for controlling the vibration of said chutes, the combination of article separating means on each chute, said means including a bottom wall formed with a plurality of steps extending laterally thereacross, each step having a substantially horizontal tread and a substantially upright closed riser and a plurality of substantially upright baffle plates, each extending laterally across said chute at a spaced distance in front of the forward edge of a step and at a spaced distance above the tread of the next lower step.

2,732,164
SORTING AND BAGGING APPARATUS
Jack Bayard Legrow, South Gate, and Paul C. Joratz, Bell, Calif.
Application March 3, 1950, Serial No. 147,524
8 Claims. (Cl. 249—17)



2. In a sorting and bagging apparatus the combination which includes: a hopper; a traveling belt loader for advancing material from said hopper; a vertically movable platform positioned at the discharge end of said loader; a counterweighted lever to balance the weight of said platform; a receptacle pivotally mounted on said platform and normally horizontal to hold a quantity of material received from said loader and manually movable to a forwardly and downwardly sloping position for dispensing material therefrom; means engaging with said platform for weighing the material in said receptacle; means on the forward portion of said receptacle for holding a bag in a position to receive material dispensed from said receptacle; means for stopping the travel of said loader when said receptacle is moved away from the horizontal position; and means for stopping the travel of said loader when it is moved downwardly by a predetermined weight of material on said receptacle.

2,732,165
FLUID PRESSURE OPERATED SYSTEMS
Frank M. Collingwood, Padgate, Warrington, England, assignor to Electro-Hydraulics Limited, Warrington, England, a company of Great Britain
Application January 9, 1952, Serial No. 265,667
6 Claims. (Cl. 251—25)



4. A fluid operated system comprising a main valve movable between open and closed positions, an inlet line leading to said valve, an outlet line leading from said valve, a motor separate from said main valve and comprising a cylinder having a piston therein and a piston rod extending therefrom and mechanically connected to said main valve, means responsive to fluid pressure for biasing said piston for movement toward one end of said cylinder to move said main valve to one of its positions, a second cylinder, a piston therein having means biasing it for movement toward one end thereof, a fluid line connecting said end of said second cylinder to said outlet line, a check valve in said fluid line closing away from said outlet line, and means for alternately selectively connecting said end of said motor cylinder to said inlet line, to move said valve to its other position, and to said end of said second cylinder.

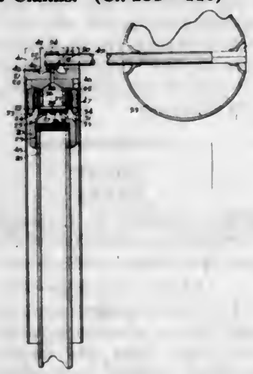
2,732,166
DUAL ACTION VALVE
George A. Rayner, Jr., Bangor, Maine
Application June 19, 1953, Serial No. 362,932
1 Claim. (Cl. 251—88)



A dual-actuatable pressure-fluids shut-off valve comprising a body defining a valve chamber containing a valve seat, a bonnet for the chamber, inlet and outlet

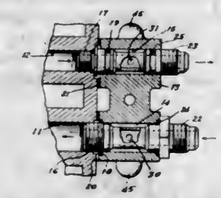
connections communicating with the chamber at opposite sides of the valve seat, a valve member bodily rectilineally movable to and from the valve seat, a non-threaded valve stem extending through the bonnet and having the inner end swivel-connected to the valve member, a carrier having a sleeve portion internally slidably receiving the valve stem for straight lineal reciprocating actuation, said carrier sleeve portion externally threadedly engaged in the bonnet so as at all times to be free for bodily axially rotative actuation of the carrier and valve stem as a unit in and relative to the bonnet, a flexible diaphragm on and in sealing engagement with the valve member and with the surrounding wall of the bonnet at a level spaced from the valve seat so as to partition and supplementally seal the valve seat portion of the chamber from the valve-actuating parts while providing for seating and unseating actuation of the valve in the direction of the stem axis, said carrier including a support portion projecting from the bonnet, a handled lever element pivotally mounted on said carrier support portion on an axis normal to the valve stem axis, and a positive quick-action two-way push-pull cam device on and operatively connecting said lever element and the valve stem including outer and inner arcuate cam formations on the lever element eccentric to the pivot axis thereof and respectively coacting outer and inner follower formations on the valve stem, said lever element, cam device and carrier constituting a common manual operating means operative upon the valve independently of fluid flow and pressure in either direction relative to the valve and whereby pivoting of the lever element on the carrier in one and the opposite direction positively pushes and pulls the valve stem and valve to and from the valve seat with a rapid action and whereby turning of the lever element about the valve-stem axis at any time at the will of the operator produces freely available bodily axial turning of the carrier and valve stem as a unit in and relative to the bonnet and thereby effects similar but slower and screw-powered closing and opening of the valve.

2,732,167
FLUID PRESSURE ACTUATED DIAPHRAGM VALVE WITH HUSH TUBE
Glenn M. Stout and John M. Stout, Minneapolis, and Worden L. Cooper, St. Louis Park, Minn., assignors to Midwest Automatic Valve Company, Minneapolis, Minn., a firm
Application November 6, 1948, Serial No. 58,726
5 Claims. (Cl. 251—118)



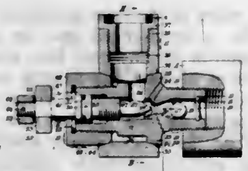
1. In a device of the class described, a depending hush tube, a cap closing the upper end of the tube and having a depending cylindrical portion extending into the tube and secured thereto, a body member having an upstanding cylindrical portion extending into the depending cylindrical portion of the cap and having screw-threaded engagement therewith, said body member also having a depending cylindrical portion spaced from the tube, an upright pipe extending into the depending cylindrical portion of the body member and secured thereto, an axial passageway in the body member and a seat surrounding the same, an axial port in the cap, a discharge port in the body member above said seat and leading from the interior of the upstanding cylindrical portion thereof, a closure member for said seat having an upstanding cylindrical retaining member telescoped into the upstanding cylindrical portion of the body member, said retaining member having on its upper end an outturned flange clamped between the cap and the upper end of the upstanding cylindrical portion of the body member, an anti-collapse sleeve in the retaining member, and a small axial port in the closure member.

2,732,168
BY-PASS VALVE FOR POWER STEERING SYSTEMS
Henry Richard Greenley, Detroit, Mich., assignor to Airway Products, Inc., Pontiac, Mich.
Application January 13, 1954, Serial No. 403,681
2 Claims. (Cl. 251—142)



1. A by-pass valve for interposing in a fluid pressure system having a pump provided with a pressure port and a return port, a valve housing having a pair of openings therethrough and an internal passage connecting said openings together, a connector engaging through each opening for connection with the pump and the adjacent ends of the system, each connector having a peripheral groove and a radial opening whereby fluid may flow from one connector through said passage into the other connector, a normally closed valve plug slidable in said housing and intersecting said passage, and means connected with said valve plug for moving the latter to open position.

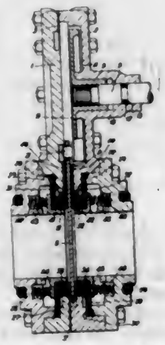
2,732,169
VALVE ASSEMBLY
Joseph F. Matteo, Clifton Heights, Pa., assignor to The Pennsylvania Railroad Company, Philadelphia, Pa., a corporation of Pennsylvania
Application November 8, 1950, Serial No. 194,708
1 Claim. (Cl. 251—148)



An angle fitting for a pair of fluid conduits disposed at angles to one another comprising a stud piece in the form of a generally cylindrical piece of pipe having one end threaded for connection to one of said fluid conduits and the other end also threaded, a swivel element in the form of another generally cylindrical piece of pipe having transversely arranged apertures larger than the body of

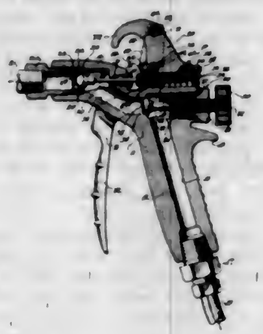
the stud piece whereby said swivel element is slidable on and off said body of said stud piece while its axis is at substantially right angles to the axis of said stud piece, said stud piece having a generally axial passage therein connected to a branch passage, said passages connecting one of said conduits to said swivel element, means forming a valve seat located adjacent the end of said generally axial passage, a union piece having threads engaging said other end of said stud piece for compressing said stud piece and swivel element together, said stud piece and swivel element having meeting seal members in the form of circular ring members one of which has a curved cross section whereby said swivel element is constructed and arranged for limited rocking movement longitudinally of the axis of said stud piece while in contact with said stud piece when said swivel element and said stud piece are not compressed together, said swivel element also having capacity concurrently with said limited longitudinal rocking movement to swing around the axis of said stud piece, said swivel element being thereby adapted for adjustment and connection to the second fluid conduit, said union piece being constructed and arranged to engage the stud piece within said swivel element and to bear against said swivel element to hold it against said stud piece, and a valve stem extending through said union piece and threadedly engaged within said stud piece, said stem including a valve portion coacting with said valve seat to open and close said generally axial passage, said union piece and said swivel element being slidable axially off said valve stem.

2,732,170
VALVES
Stanley Grapes Shand, Cwmbran, Newport, England, assignor to Saunders Valve Company Limited, Cwmbran, Newport, England, a British company
Application May 22, 1951, Serial No. 227,550
18 Claims. (Cl. 251—172)



1. In a gate valve of the type comprising a body with a through bore, a bevel-edged gate in the body and operating mechanism for the gate also within the body, the combination of at least one flexible resilient sealing ring surrounding the bore and a counter-surface therefor, the ring being on one side of the gate and the counter-surface on the other, means sealing the ring to the valve body, and spring means pressing the ring towards the gate, the bevel angle of the gate and the flexibility and resilience of the ring being so related that the ring makes joint with the counter-surface when the valve is open, partly with the counter-surface and partly with the gate when the valve is partly open, and with the gate when the valve is closed, so that when the valve is used with the ring on the upstream side, the ring seals off the operating mechanism from the controlled fluid at all positions of the gate.

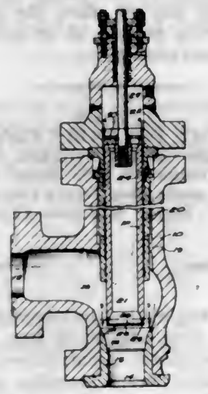
2,732,171
HAND VALVE
Francis C. Paradise, Libertyville, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a corporation of Virginia
Application February 24, 1953, Serial No. 338,327
1 Claim. (Cl. 251—233)



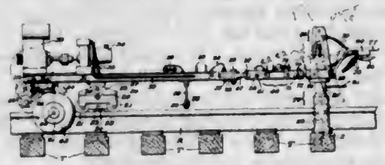
A high pressure hand valve comprising, in combination, a pistol-shaped valve body including a handle portion and a barrel section, said body defining a passageway therein extending outwardly through said barrel section, a valve seat in said barrel section, a closure member movably disposed on the pressure side of said seat, a grip lever including a handle extending downwardly generally alongside said handle and a pair of arms reaching upwardly along opposite sides of said body, a slide slidably disposed within said body between said arms and connected to said closure member, means pivotally connecting said slide to said arms, a support member on said body extending upwardly between said arms, a first pair of transverse fulcrums on opposite sides of said support member, said arms defining a first pair of slots therein receiving said respective fulcrums, the structure of said arms at one end of said slots forming fulcrum seats separably engageable with said fulcrums to provide for a high leverage unseating action of said lever on said closure member, a second pair of fulcrums on said support member disposed a substantial distance above said first pair of fulcrums, said arms defining a second pair of slots receiving said respective second fulcrum, and the structure of said arms at one end of said second slots defining second fulcrum seats separably engageable with said second fulcrums to provide for low leverage continued unseating movement of said closure member beginning simultaneously upon completion of pivotal unseating movement of said lever about said first fulcrums.

2,732,172
VALVE
John R. Curran, Cranston, R. I., assignor to Hammel-Dahl Company, a corporation of Rhode Island
Application November 1, 1952, Serial No. 318,224
1 Claim. (Cl. 251—282)

A valve comprising a body having an inlet port and an outlet port with a conduit between said ports, an annular sealing seat along said conduit between said ports, a cylindrical guiding bore communicating with said conduit and having an axis extending perpendicular to said annular seat, a plug mounted for reciprocation in said cylindrical bore, said plug having an annular sealing surface adjacent one end to engage said annular seat and seat therewith and provide an axial portion of the plug exposed to the fluid at one port and a cross-sectional portion of the plug exposed to the fluid at the other port, said plug having an axial opening therethrough to expose its opposite end portions to the same pressure, a wall extending across the seating end of the axial opening of said plug and a plurality of openings in said wall each with its sides beveled.



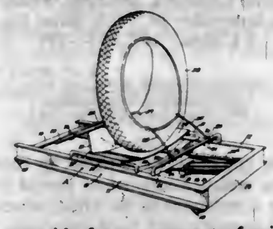
2,732,173
SPIKE PULLING APPARATUS
Samuel R. Hursh, Bala Cynwyd, Pa.
Application October 16, 1953, Serial No. 386,495
9 Claims. (Cl. 254—18)



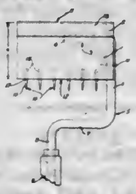
1. In an apparatus for removing spikes from track ties, the combination comprising a truck having wheels constructed to move along the track, said truck also carrying adjustable wheels normally supported above the first mentioned wheels, said adjustable wheels being movable up and down to and from a lower, ground-engaging position, an elongated body member pivoted to the truck for swinging movement in an arc above the track, at an angle extending upwardly with respect to the horizontal, said body member comprising two body portions pivoted together by means of a substantially universal pivot, rigidifying means for said pivot, a spike pulling grapple carried by the body member and spaced along said body member from said truck, power means supported by the truck, and flexible connecting means extending along said body member for connecting said power means to said grapple for operating the grapple.

2,732,174
TIRE SPREADER
Simon E. Kossman, Cleveland, Miss.
Application December 19, 1952, Serial No. 326,958
10 Claims. (Cl. 254—50.3)

6. In apparatus for spreading tires and the like and having stationary hooks carried by an outer frame and hooks carried by a movable frame, means for supporting a tire to be gripped by said hooks comprising an arcuate sling extending transversely of said outer frame, said sling being mounted intermediate the hooks carried by said outer frame and inner frame, and elongated support members carried upon said outer frame on opposite sides thereof, said sling being slidably carried by said elongated members to provide free movement of said sling relative to the longitudinal axis of said outer frame.

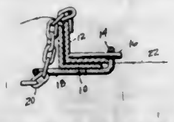


2,732,175
WEB STRETCHING DEVICE
George W. Mount, Greenfield, Mass.
Application February 12, 1953, Serial No. 336,580
1 Claim. (Cl. 254—79)



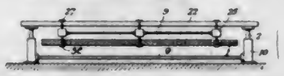
A web stretcher comprising an elongated block having opposed parallel arcuate edges of substantially one-half inch cross-sectional radius and spaced substantially two inches apart, a handle extending from one end of the block in the direction of the width of the block, and inwardly, substantially half the length of the block in spaced relation to the adjacent arcuate edge of the block, and outwardly therefrom at substantially right angles thereto, the arcuate longitudinal edge of the block remote from the handle being provided with a friction surface and forming a rolling fulcrum about which the block may be swung by said handle, the arcuate longitudinal edge of the block adjacent the handle being provided along its center line with a row of spaced web engaging pins extending radially from said arcuate edge, the arcuate surface at either side of said row of pins providing a substantially uniformly increased area of surface engagement of the web and block as increasing tension is applied to a web, engaged by the pins, upon swinging movement of the block about the opposite arcuate edge as a fulcrum.

2,732,176
WIRE FENCE STRETCHING CLAMP
Raymond G. Martin, Mount Vernon, Iowa
Application December 24, 1953, Serial No. 400,336
2 Claims. (Cl. 254—83)



1. In a wire fence clamp; an angle member; a boss loop secured to said angle member; a pull loop secured to said angle member at the outside of the vertex of the angle of said angle member; a second angle member having a length approximately that of said angle member; a boss secured to said second angle member; flexible means secured to said second angle member at a point corresponding to the location of said pull loop on said angle member with reference to length and on the opposite leg of said second angle member as that carrying said boss.

2,732,177
APPARATUS FOR HOISTING HEAVY SLABS
Johann Wilhelm Ludowici, Jockgrim, Pfalz, Germany
Application September 18, 1953, Serial No. 381,030
6 Claims. (Cl. 254—89)



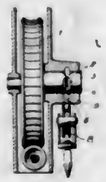
1. A hoisting apparatus comprising, in combination, a rigid supporting member adapted to extend in horizontal direction along a structure to be lifted; operating means for raising and lowering said rigid supporting member; a plurality of spaced equalizing members, each equalizing member including two parts movable relative to each other and defining together a pressure chamber of variable volume adapted to contain a fluid pressure medium, one of said parts being attached to said rigid supporting member and the other of said parts including means for connecting the same to a structure to be lifted; and conduit means interconnecting said pressure chambers of said equalizing members for equalizing the fluid pressure in the same whereby the forces transmitted by said equalizing members between said rigid supporting member and the lifted structure are equalized.

2,732,178
HAND CHAIN FOR HOISTS
Louis C. Chaney, Grosse Pointe Woods, Mich.
Application April 1, 1953, Serial No. 346,149
6 Claims. (Cl. 254—169)



1. In a chain hoist having a hoist mechanism and a load chain actuated thereby, a hand chain for operating said hoist mechanism, said hand chain having one or more of its links provided with directional indicia to indicate the direction in which the load chain would be moved upon operation of the hand chain.

2,732,179
CHAIN PULLEY BLOCK
Heinrich Gunkel, Dusseldorf, Germany
Application August 13, 1951, Serial No. 241,625
Claims priority, application Germany August 28, 1950
2 Claims. (Cl. 254—170)



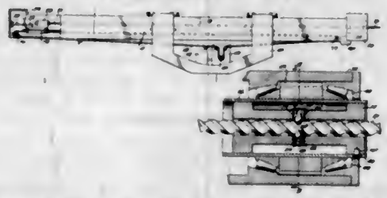
1. A chain pulley block comprising a housing, a driving toothed wheel in said housing, a unitary cylindrical pin projecting from and coaxial with said driving wheel, said pin forming one journal of said driving wheel and being of the same diameter throughout its length, a bearing integral with said housing and encircling said pin, three circumferential aligned chain pockets in said pin, two bottom openings in said bearing in alignment with said chain pockets, said bottom openings forming passages for the lifting chain, and a groove in the bearing connecting these openings for the passage of the chain, said bearing contacting said pin along the entire length of the lower supporting portion of its cylindrical surface which lies within said housing.

2,732,180
SAFETY DEVICE FOR CABLE CONNECTIONS
Jean Louis Gratzmuller, Paris, France
Application February 2, 1953, Serial No. 334,489
Claims priority, application France February 12, 1952
10 Claims. (Cl. 254—172)



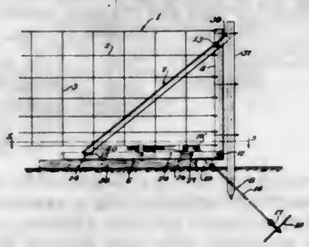
1. A cable winding mechanism comprising in combination, a rotatable drum adapted to have a cable wound thereabout, a drive motor, a shaft driven by said motor, a differential gearing means including plural rotatable components, one component of said differential means being operably coupled with said drive shaft, a second component of said differential means being operably coupled with said drum, a cylinder, a reciprocal piston mounted within the cylinder, resilient means operably associated with said piston to constitute a yielding resistance opposing the movement of the piston in one direction, gearing means operatively coupling a third component of said differential to said piston whereby the resistance of the piston against axial displacement in said direction will, through said differential means, cause said drive shaft to rotate said drum so as to wind on or unwind cable from the drum while resistance of said drum against cable winding rotation will cause said drive shaft to tend to move said piston through the action of said differential gearing means in said one direction and braking means operatively associated with said drive shaft and operable to hold said drive shaft against rotation whereby rotation of said drum in a cable unwinding direction will tend to advance said piston in said one direction.

2,732,181
DRILLING MECHANISM
Ray J. Farmer, Sr., Carlsbad, N. Mex., assignor to International Minerals & Chemical Corporation, New York, N. Y., a corporation of New York
Application June 9, 1952, Serial No. 292,556
3 Claims. (Cl. 255—46)



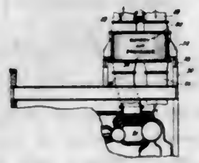
1. In a drilling apparatus, a boom, a rotatable auger type drill, thrust means supported by the boom and in contact with the end of said drill, said thrust means being adapted to exert longitudinal axial pressure on said drill, and a drill driving mechanism mounted on said boom, said drill driving mechanism comprising: a tubular drill chuck surrounding said drill; means rotatably supporting said drill chuck on said boom; power means for rotating said drill chuck about its longitudinal axis; a pair of diametrically oppositely positioned, threaded apertures in said tubular drill chuck; a threaded stud in each of said apertures; a drill engaging member on the inner end of each of said studs, said drill engaging members being positioned within adjacent valleys between flights of said drill whereby rotation of said chuck causes rotation of said drill, said studs being individually and independently adjustable radially of said chuck to position said drill with its longitudinal axis coinciding with the longitudinal axis of said chuck.

2,732,182
FENCE BRACE AND TENSIONING MEANS
Carl E. Funk, Earl Park, Ind.
Application October 6, 1954, Serial No. 460,604
8 Claims. (Cl. 256—37)



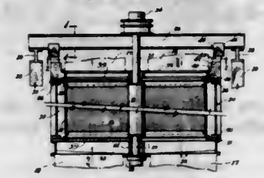
1. A device for adjustably securing an end portion of a flexible fence in tension the opposite end of which is substantially immovably anchored which comprises, a fence bar to which the adjustable end portion of the flexible fence is secured, a base member secured to said fence bar adjacent a lower portion thereof, a brace member secured to said fence bar and base member, whereby said fence bar, said base member and said brace may be moved as a unit away from the anchored end of the fence to tension the fence, an anchor lug positioned for slidable movement upon said base member, an anchor member having an end substantially immovably anchored, the opposite end of said anchor member being connected to said anchor lug, and means engageable with said anchor lug and base member for securing said anchor lug to said base member at a predetermined position along the length of the base member when the fence has been tensioned to sustain the tension of the fence upon the anchor member.

2,732,183
SUPPORTING ROTOR INDEPENDENTLY OF HOUSING IN AIR PREHEATERS
William E. Hammond, Wellsville, N. Y., assignor to The Air Preheater Corporation, New York, N. Y.
Application May 22, 1951, Serial No. 227,677
12 Claims. (Cl. 257—6)



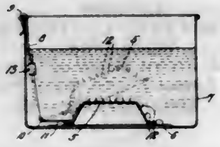
1. In apparatus having a cylindrical rotor turning with a vertical rotor shaft and carrying material for contact by hot and relatively cool fluids and a housing surrounding the rotor and provided with end plates formed at opposite sides of the rotor axis with apertures for the admission to and the discharge from the rotor of said fluids; a horizontally mounted structural member extending transversely of the housing in a central location and in vertically spaced relation with respect thereto; connecting means between a central portion of said housing and said structural means for the support of the housing thereby; and a support bearing for said rotor shaft carried by said structural means for separately supporting said rotor independently of said housing.

2,732,184
PIVOTALLY SUPPORTED HOUSING FOR ROTARY REGENERATORS
Clayton A. Ballard, Belmont, and Edward P. Horn, Wellsville, N. Y., assignors to The Air Preheater Corporation, New York, N. Y.
Application August 14, 1951, Serial No. 241,822
3 Claims. (Cl. 257—6)



1. In an air preheater or like apparatus having a cylindrical rotor turning with a vertical shaft and carrying material for contact by hot and relatively cool fluids and a housing surrounding the rotor and provided with end plates formed at opposite sides of the rotor axis with apertures for the flow of said fluids; a horizontal beam fixed to upright structural work is at the sides of the preheater assembly and extending centrally across the top of the preheater; a bearing mounted on said beam and connected to the shaft of the rotor for suspending the latter from said beam; a duct connecting member of continuous form positioned between said beam and the preheater and attached to the housing; at least a pair of pivoted link means having their upper ends connected to said beam at points spaced equally on either side of the rotor shaft and their opposite ends pivotally connected to said member to permit unequal expansion and contraction of the housing.

2,732,185
AUTOMATIC STIRRER OR AGITATOR FOR COOKING AND WASHING VESSELS
Alphonso F. Albano, Poughkeepsie, N. Y.
Application September 3, 1953, Serial No. 378,324
2 Claims. (Cl. 259—101)

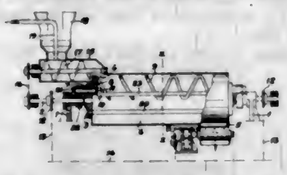


1. For agitating and stirring the contents of a cooking or washing vessel, the combination comprising a cooking or washing vessel, a support removably mounted in said vessel and an inverted, generally conical, closed pressure accumulating container hingedly connected with said support and having a flange about the lower edge of the same positioned by said support in sealing engagement with the bottom of the vessel.

2,732,186
MIXER FOR THE CONTINUOUS MIXING OF MIXED PRODUCTS
Nemo Viktor Mauritz Ivarsson, Johanneshov, Sweden, assignor to Kooperativa Förbundet, Ekonomisk Förening, Stockholm, Sweden
Application June 1, 1953, Serial No. 358,605
Claims priority, application Sweden June 6, 1952
3 Claims. (Cl. 259—102)

1. A mixer comprising a stationary tank, end walls of said tank each comprising a disc rotatable in and forming part of said end walls, said discs being axially aligned, driving means to rotate said discs in unison, hollow shafts mounted eccentrically of and passing through each of said discs, pinions formed on the outer ends of said hollow shafts, stationary gears mounted coaxially with the said

discs and meshing with said pinions, a crank carried by each of the said hollow shafts on their inboard ends, a stirrer mounted on said cranks, second cranks within the



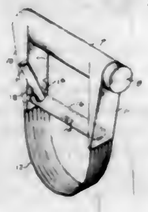
tank mounted on shafts passing through the hollows of said hollow shafts, and a second stirrer mounted on said second cranks.

2,732,187
MANUAL BEATER
Roberto Benedetto, Buenos Aires, Argentina
Application August 27, 1952, Serial No. 306,583
8 Claims. (Cl. 259—144)



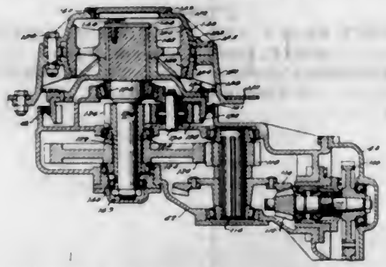
1. A hand beater device, comprising, in combination, an elongated hollow combined handle and container member; a beater member at one end of said elongated hollow combined handle and container member; and a hollow combined connecting and dispensing member connecting said beater member to said combined handle and container member so that said beater member may be manipulated by said combined handle and container member, said combined connecting and dispensing member being formed with a least one opening in the wall thereof communicating through the hollow interior of said combined connecting and dispensing member with the hollow interior of said combined handle and container member for dispensing a substance contained in the latter member into material being beaten by said beater member.

2,732,188
COMBINED PIE CRUST CUTTER AND WATER DISPENSER
Harold M. Brown, Redwood City, Calif.
Application August 2, 1954, Serial No. 447,206
1 Claim. (Cl. 259—144)



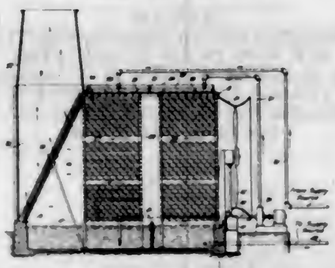
A device of the character described comprising a tubular handle for holding a supply of water therein, a pair of hollow side arms depending from said handle and in communication therewith for receiving water from said handle, an apertured tubular member interposed between and connected to said arms for receiving the flow of water therefrom, an apertured sleeve encompassing said tubular member and capable of rotary movement thereon, the apertures in the tubular member and sleeve being arranged to be brought in and out of registry by rotation of the sleeve, a manually actuated operating handle secured to said sleeve for rotating the latter, and a plurality of spaced curved cutting wires fixed at their upper ends to the lower extremities of said arms, the wires capable of receiving thereon the water passing through and dripping from said tubular member.

2,732,189
CONCRETE MIXER
Chris Gerst, Detroit, Mich., assignor, by mesne assignments, to Westinghouse Air Brake Company, a corporation of Pennsylvania
Application December 5, 1952, Serial No. 324,370
13 Claims. (Cl. 259—177)



1. A supporting and driving arrangement for the mixing drum of a concrete mixer comprising, a transmission adjacent one end of said drum including a housing and a driving member projecting from said housing toward the end wall of said drum, coupling means secured to said drum and wall concentric with the drum axis, said coupling means defining a spherical socket disposed entirely within the confines of said drum but sealed therefrom and said driving member projecting into said socket, a coupling member driven by said driving member and cooperable with said socket to provide a universal coupling between said driving member and said drum, and means providing a driving connection between said coupling member and said socket for drivingly connecting said driving member and drum.

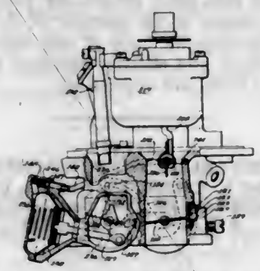
2,732,190
CROSS FLOW COOLING TOWER HAVING RECYCLING SYSTEM
Leon T. Mart, Mission Township, Johnson County, Kans., assignor to The Marley Company, a corporation of Delaware
Application September 24, 1952, Serial No. 311,227
2 Claims. (Cl. 261—21)



1. Structure for the air cooling of water comprising a hollow housing having a portion at one end thereof extending upwardly into a vertical stack discharging above the top of the housing; an air inlet tube at the opposite end of the housing; a fill assembly in the housing between the tube and said portion, and including an inner section and an outer section; a hot water receiving basin overlying the assembly at said top of the housing and provided with a perforated bottom wall; a partition in the basin subdividing the same into a tray for each of said sections respectively; a sump at the bottom of the housing; a partition in the sump subdividing the same into an inner catch basin beneath said portion and said inner section and an outer catch basin beneath the outer section; a hot water feed pipe discharging into the tray overlying the inner section; means for pumping water from the inner catch basin and discharging the same into the other tray;

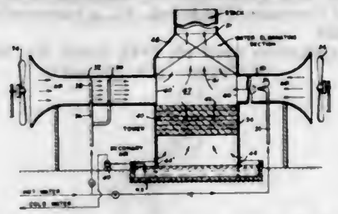
conduit means for draining water from the outer catch basin; and a fan within the tube for directing currents of air through the fill assembly, transversely across the water gravitating therethrough, and thence to said portion of the housing to the stack for discharge therefrom.

2,732,191
DUAL CARBURETOR
Marion L. Smitley, Huntington Woods, Mich., assignor to Holley Carburetor Company, Detroit, Mich., a corporation of Michigan
Application August 4, 1953, Serial No. 372,325
1 Claim. (Cl. 261—23)



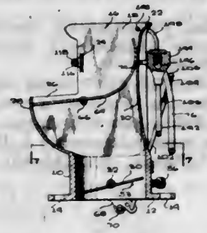
In a two stage carburetor having a primary and a secondary venturi, mixing chambers and two mixture outlets in parallel, two butterfly throttles, one in each outlet, means for positively opening the throttle controlling the primary mixture outlet, said secondary throttle being offset so that the upstream lip is longer than the downstream lip by approximately $^{55}/_{1000}$" where the throttle has a diameter of about 1.31 inches so as to be held closed by inlet manifold suction, a one-way lost motion connection from the primary to said secondary throttle so that the primary throttle positively closes said secondary throttle when the primary throttle is closed, a chamber, a moving wall therein positively connected to said secondary throttle lever, a passage from said chamber to the throat of the primary venturi of said primary mixing chamber, a check valve therein, a valve seat therefor, a light spring pushing said valve on said seat and a restricted by pass around said valve to admit air freely to said chamber when said secondary throttle is positively closed and to delay the automatic opening of said secondary throttle by delaying the admission of low pressure air to said chamber through said restricted by pass, said moving wall being responsive to the suction admitted past said check valve to said chamber and positively connected to the secondary throttle.

2,732,192
INDUSTRIAL WATER COOLING SYSTEM
Paul A. Johnson and Paul C. Johnson, Tarrytown, N. Y.
Application December 14, 1953, Serial No. 397,990
11 Claims. (Cl. 261—23)



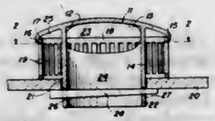
5. Industrial water cooling apparatus including tower means, a plurality of upper and lower, spaced, water cooling type packings in said tower means, the upper of such packings being of water-air separation type, means to admit cool air to the tower means beneath both packings, conduit means opening into the tower means between the packings, air impeller means directed through said conduit means toward said tower means, and hot water flow means directed through said conduit toward said tower means.

2,732,193
CARBURETOR
Cecil L. Wentz, Jr., Sheridan, Wyo.
Application December 19, 1952, Serial No. 326,902
4 Claims. (Cl. 261—34)



1. In a carburetor, a hollow body having upstanding walls open at both ends to define a continuous air-fuel passage therethrough, one end of said body formed as a throat connectable to an engine manifold and the other end open to the atmosphere, a throttle valve mounted in said throat for movement about an axis extending transversely therethrough to open and close said passage, an air intake control valve mounted in said passage between said throat and said other end of said body for movement about an axis extending transversely through said body parallel to said first-mentioned axis into engagement with adjacent portions of opposite walls of the body to bridge and close said passage and to define a movable venturi wall, one of said opposite walls defining a fixed venturi wall which along with said movable venturi wall defining a venturi of regulatable cross sectional area, a fuel nozzle opening into said venturi carried in said fixed wall and being closed when engaged by said movable wall, and linkage operatively connected between said throttle valve and said air intake control valve to open said nozzle and vary the cross sectional area of the venturi in proportion to the opening of said passage effected by movement of said throttle valve.

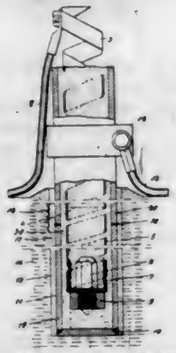
2,732,194
BUBBLE CAP
Winston J. Jackson, Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application February 10, 1954, Serial No. 409,441
1 Claim. (Cl. 261—114)



A bubble cap assembly for mounting on a tray provided with an aperture comprising a ceramic cup and a generally cylindrical ceramic riser integrally formed thereto, said riser being concentric to said cup and depending therefrom through said aperture and in spaced relation to said aperture, said riser having radially extending port means therein adjacent said cup providing communication therebetween, said cup having an inner peripheral recess formed in an edge thereof concentric with and radially outwardly spaced from said riser, a generally cylindrical ring having two opposed ends, said ring having vertically elongated radial slots around the periphery thereof between said ends, one said end being received in said

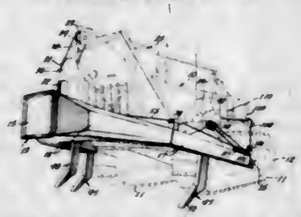
recess, the other said end resting on said tray to support said cup in spaced relation from said tray, said riser having a pair of opposed apertures in the cylindrical portion thereof underlying said tray, and wedge means passing through said opposed apertures and engaging said tray on the under side thereof to releasably hold said assembly on said tray.

2,732,195
METHOD OF TREATING OIL SHALE AND RECOVERY OF OIL AND OTHER MINERAL PRODUCTS THEREFROM
Fredrik Ljungström, Fiskebackskil, Sweden, assignor to Svenska Skifferolje Aktiebolaget, Orebro, Sweden, a corporation of Sweden
Application June 24, 1947, Serial No. 756,624
In Sweden December 4, 1941
Section 1, Public Law 690, August 8, 1946
Patent expires December 4, 1961
17 Claims. (Cl. 262—3)



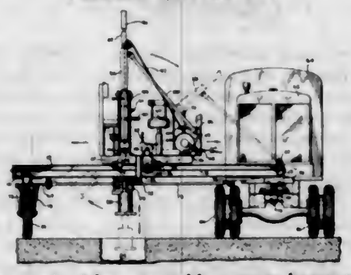
1. The method of recovering hydrocarbon products from a subterraneous mineral deposit containing such products which includes the steps of forming a group of channels penetrating such a deposit, placing heating elements in said channels at the level of the deposit to be treated and of less cross sectional dimensions than the channels, whereby the heating elements are in spaced relation from the walls of the respective channels, filling the spaces between the heating elements and the walls of the respective channels with a mass of granular heat conducting material, heating said elements to transfer the heat through said masses to the deposit while utilizing the masses to prevent flow of gasified products toward and upwardly along said elements, and forming another group of channels penetrating said deposit and laterally spaced from the heated channels for recovering said products from said deposit.

2,732,196
SCARIFIER APPARATUS
Jay J. Wood, Bellflower, Calif., assignor of one-half to Charles T. Brown, doing business as Charles T. Brown Company, San Fernando, Calif.
Application November 27, 1951, Serial No. 258,320
13 Claims. (Cl. 262—8)



1. In an earth working machine having a main frame and a U-shaped pusher frame extending around the front and sides of the main frame with rearwardly extending legs pivoted to the main frame, the combination of: a plurality of ripper teeth, each of said teeth being pivotally mounted intermediate the ends thereof on said U-shaped pusher frame, said ripper teeth having forwardly directed earth penetrating points on their lower ends, the center of gravity of each tooth being located between said pivotal mounting and said point whereby the teeth tend to swing by gravity into effective earth ripping positions; stop means on said U-shaped frame to hold said teeth in said effective earth ripping positions in opposition to moments created by forward movement of the teeth against the earth; a sheave mounted to the end of each tooth opposite said earth penetrating point; and power means under control of the operator of the machine, including a cable engaging each of said sheaves, to rotate said teeth between said effective positions and ineffective positions away from said stop means.

2,732,197
PORTABLE POWER HAMMERS
Walter V. Cornett, Los Angeles, Calif.
Application June 26, 1952, Serial No. 295,784
6 Claims. (Cl. 262—15)



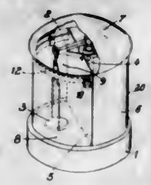
1. In a truck driven portable power hammer device having a pneumatic tool for impact breaking and tamping work on roadways and backfills, a trailer consisting of a pair of spaced parallel longitudinally extending rails, a swiveled hitch connection fixed to one end of said rails, a carriage movably mounted on said rails adaptable for axial adjustment along the length of said trailer, and supporting said pneumatic tool between said rails, an axle supporting the other end of said rails, a road wheel swivelly mounted under each end of said axle adaptable for either normally longitudinally adjustment for transportation from place to place, or transverse alignment normal to the longitudinal axis of the trailer for straddling operation over trenches and roadways to one side of said truck, and a link adaptable for hitching said axle to the side of said truck for sueh straddling operation.

2,732,198
MINING MACHINE CUTTER BIT
Joseph F. Joy, Pittsburgh, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application April 10, 1948, Serial No. 20,254
4 Claims. (Cl. 262—33)



1. A cutter bit comprising a bit body having a shank and an integral outer end portion providing a plane front face disposed at an oblique angle with respect to the shank and a receding outer surface, said front face and said receding surface converging forwardly and outwardly at the bit point, said end portion having an opening formed therein centrally between the sides thereof and in close adjacency to said front face and opening outwardly through said bit point, the forward wall of said opening inclined at a slight angle with respect to said front face, said opening being tapered in longitudinal section with its narrow end opening out through the bit point and its wider end extending into the bit shank, and a hard metallic material in said opening and secured by bonding therein and extending to the bit point to provide a wear resisting cutting tip, said forward wall of said opening at and in adjacency to the bit point being relatively thin whereby as the cutting tip wears away during use, the wear resisting material is gradually exposed to provide a tip which is self-sharpening.

2,732,199
BALANCE
Friedrich Meinig, Gottingen, Germany
Application April 13, 1950, Serial No. 155,614
Claims priority, application Germany August 18, 1949
8 Claims. (Cl. 265—54)



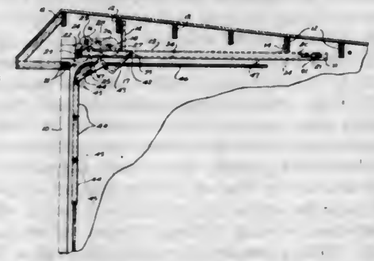
1. A precision balance comprising, in combination, a cylindrical base; a partition fixed to said base and extending upwardly therefrom; a column mounted on said base; a balance beam pivotally mounted intermediate its ends on said column and having two arms one of which extends across said partition to one side thereof and the other of which is adapted to be connected to a weighing mechanism located on the other side of said partition; a pan suspended from a free end portion of said one arm of said balance beam; a cylindrical wall mounted on said base, extending upwardly therefrom, and engaging said partition to form with said opposite side thereof a chamber open only at the top and adapted to house the weighing mechanism, said wall being formed in part by a door of part-cylindrical shape facing said one side of said partition to give access to said pan; and a lid located over and covering the space defined by said wall.

2,732,200
VEHICLE OPERATED DOOR MECHANISM
Nicholas Demosthenes, Savannah, Ga.
Application December 29, 1952, Serial No. 328,395
7 Claims. (Cl. 268—58)



1. In an overhead garage door, a mechanism operatively connected to the door for selectively raising and lowering the same, said mechanism comprising a horizontal shaft operatively connected to the door and having counterweight means thereon for the purpose of raising the door and cushioning closing movement of the door, forward and rearwardly swingable levers operatively connected to the shaft for selectively rotating the shaft clockwise and anti-clockwise, spaced forward and rear vertical pedestals adjacent an edge of a driveway in front of the garage door, forward and rear posts rotatably supported in horizontally extending relationship on the pedestals and connected together to rotate in unison, a bumper engaging member secured to each post, the bumper engaging member on the forward post being disposed at right angles to the bumper engaging member on the rear post, and means operatively connecting the posts to the levers to swing one of the levers in opposite directions as one of the posts is rotated by a vehicle engaging and moving a first bumper engaging member, and for swinging said levers in an opposite direction as the other bumper engaging member on the other post is moved in response to a vehicle engaging the same.

2,732,201
DOOR OPERATING MECHANISM
John S. Franko, Cleveland, Ohio
Application January 19, 1955, Serial No. 482,793
3 Claims. (Cl. 268—59)

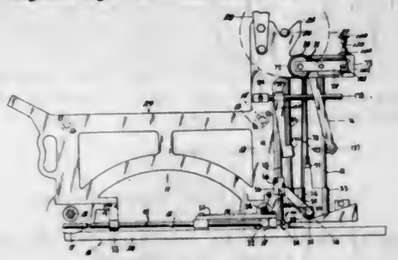


1. An overhead door assembly comprising the combination with a door having hinged panels, a track for guiding the ends of said panels from a vertical position in which the door is closed to a horizontal overhead position in which the door is open, a channel superjacent the horizontal portion of said track, inwardly directed ledges disposed in a common vertical plane in spaced relation with each other on the horizontal flanges of said channel, a vertical plate intermediate and slidably engaged with the confronting edges of said ledges, forward and rearward cover plates affixed to the first named plate and arranged with the top and bottom edges thereof in overlapped sliding relation with the faces of said ledges, a vertically disposed tongue on the rearward cover plate, a yoke in the top thereof, a chain in said channel, the tines of said yoke being engaged with one of the cross pins in said chain, and an arm pivotally connected to said plates and to the top panel of the door for raising and lowering the door upon operation of said chain.

2,732,202
AUTOMATIC CLOTH LAYING-UP MACHINE
Nathan Obedin, Brooklyn, N. Y.
Application January 24, 1951, Serial No. 207,520
2 Claims. (Cl. 270—31)

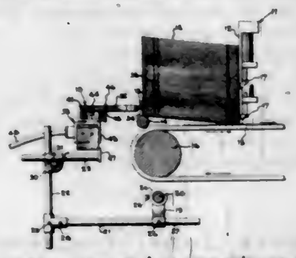
1. In combination with a fabric laying-up machine having a carriage comprising two wheel supported end walls movable on a table, said table having a track at one side thereof and on which said wheels are rollable, and a fabric folding member supported by rock-shafts in said carriage and rotatable on said rock-shafts, bearings and said rock-shafts for said folding member vertically mov-

ably mounted on guide rods in said carriage to and from said table, said rock-shafts being mounted in said bearings, said folding member being channel-shaped and having upper and lower parallel faces, said folding member being mounted on said rock-shafts eccentrically of its lengthwise center line of gravity to permit either of said faces to be swung substantially into contact with said table when said folding member is in lowermost position on said carriage, a frame reciprocably mounted in bearings on said carriage adjacent an outer face thereof, said frame comprising a rack-gear and a vertical rod, one of said rock-shafts having an extension facing said frame, a dog fixed to said extension and having two radially extending arms positioned to form a substantially ninety degree angle between them, a lever having one



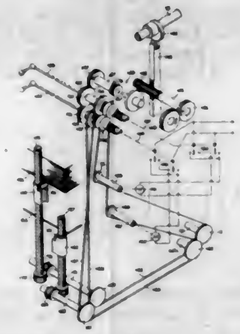
end rotatably mounted on said extension, said lever having a pin extending between said arms for oscillating said dog and said rock-shaft, said lever having its opposite end in slidable engagement with said rod, a pinion gear carried by one of said wheels and in meshed relation with said rack gear, reciprocating motion of said frame by said pinion gear causing partial rotation of said lever which carries said folding member upwardly through an angle substantially greater than ninety degrees to bring its lengthwise center line of gravity beyond the vertical plane through the center line of said rock-shafts, whereby the momentum of said folding member in motion will cause said folding member to rotate through a further angle to complete a partial rotation of one hundred and eighty degrees and reverse the position of said parallel faces.

2,732,203
MEANS FOR PREVENTING ERRORS IN THE PACKAGING OF ARTICLES OF MANUFACTURE
Peter Stancheff, North College Hill, Ohio, assignor to Richardson Taylor-Globe Corporation, Cincinnati, Ohio, a corporation of Ohio
Application May 29, 1953, Serial No. 358,295
4 Claims. (Cl. 271—57)



1. Means to prevent errors in automatic machine packaging operations wherein at least two different kinds of boxes which are visually similar and which are formed from identical box blanks are used, and in which an identifying notch is provided at a different place in one of the edges of each kind of box blanks, and in which the box blanks of each kind are stacked so that the notches in the respective edges of the blanks within the stack form a vertical channel in the side thereof, said means comprising a switch member associated with feed mechanism of a machine to which said stack is presented, said switch means effective upon being tripped to shut down said machine, a finger adapted upon being contacted to trip said switch, said finger arranged to reside within said channel at a place where the notches of the respective box blanks of the stack must pass in order to be fed into said machine wherein said finger is positioned to be contacted by the edge of a box blank having a notch located at a place different from the notches in the box blanks of the stack intended to be fed into said machine.

2,732,204
SHEET STACK FEEDING MECHANISM
Lewis C. Pearce, Berea, Ohio, assignor to Pearce Development Company, Cleveland, Ohio, a corporation
Original application October 10, 1950, Serial No. 189,362, now Patent No. 2,589,428, dated March 18, 1952. Divided and this application January 11, 1952, Serial No. 266,074
7 Claims. (Cl. 271—62)

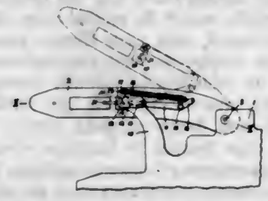


6. A sheet stack feeding mechanism for feeding sheets singly to a machine, comprising guides for guiding a stack of sheets, a first set of feed screws having feed nuts and being rotatable to drive the nuts upwardly or downwardly, a second set of feed screws having feed nuts and being rotatable to drive the nuts upwardly or downwardly, the second-named nuts being arranged to bypass the first-named nuts, a removable platform for each set of feed nuts whereby a reduced stack of sheets can be replenished by placing a new stack of sheets on the platform of the lower inactive feed nuts and raising the platform thereof to run the new stack of sheets against the upper platform, then removing the upper platform and running the upper feed nuts downwardly to a position to receive a new stack, means for driving the feed nuts, and means for inactivating the driving means of said machine whenever the top of the stack rises beyond a predetermined level or falls below another lower predetermined level.

2,732,205
DELIVERY FRAME IN SHEET PRINTING PRESS
Paul Dietrich and Hans Bayer, Augsburg, Germany, assignors to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a corporation of Germany
Application May 12, 1951, Serial No. 225,969
Claims priority, application Germany May 19, 1950
5 Claims. (Cl. 271—79)

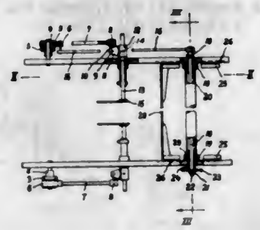
1. In a printing press having a chain delivery mechanism for conveying printed sheets and a frame therefor adapted to be moved from an operating position into a plurality of raised positions about a pivot adjacent one end thereof, the combination which comprises a support member for supporting said frame on said press and disposed substantially in the same horizontal plane as said frame in said operating position thereof, torsion spring means

in substantially the same horizontal plane as said frame for counterbalancing said frame, supplementary spring means interconnecting said support member and said frame for compensating for varying turning moments of



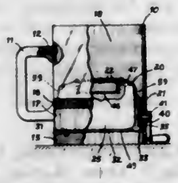
said frame about said pivot to maintain said frame in any of said positions, and latching means on said frame positively engaging said press in said operating position of said frame.

2,732,206
ADJUSTABLE JOGGING MECHANISM IN SHEET PRINTING PRESS
Paul Dietrich, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a corporation of Germany
Application May 12, 1951, Serial No. 225,971
Claims priority, application Germany May 25, 1950
4 Claims. (Cl. 271—89)



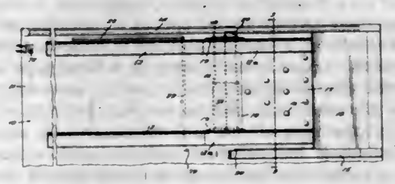
1. Printing press sheet jogging mechanisms adapted to be adjusted for various size sheets while the press is in operation comprising in combination a rear jogger, a drive shaft for said rear jogger, drive means for imparting oscillating motion to said drive shaft, rack and pinion gear means interconnecting said shaft and said jogger for imparting reciprocating motion to said jogger, means for selectively engaging and disengaging said rack and pinion gear means from said drive shaft, and means for adjusting the positioning of said pinion along said rack when disengaged from said drive shaft.

2,732,207
ILLUSION APPARATUS
Greer M. Maréchal, Jr., Dayton, Ohio
Application May 26, 1952, Serial No. 290,012
7 Claims. (Cl. 272—8)



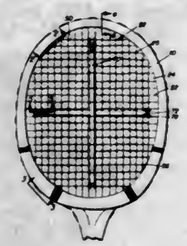
2. Illusion apparatus of the character described for secretly depositing a hidden object in a designated location while giving the illusory appearance of depositing a different visible object in said location comprising in combination a container adapted to simulate the appearance of a flour sifter, said container being open at both ends and at least the upper portion of said container being substantially transparent, a movable partition transversely of said container dividing said container into an upper visible chamber and a lower chamber, means for releasably suspending said hidden object within said lower chamber with said partition in a raised position, means for suspending said visible object in said upper visible chamber, and means for releasing said suspended hidden object from said lower chamber, said releasing means including means for simultaneously lowering said movable partition and said visible object at least partially below said transparent portion and into the space in said container occupied by said hidden object prior to the release thereof.

2,732,208
DEVICE FOR HANDLING BOWLING PINS
Samuel Ficara, Peabody, Mass.
Application May 3, 1951, Serial No. 224,354
4 Claims. (Cl. 273—54)



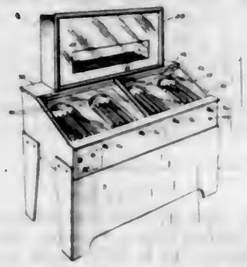
1. In combination with a bowling alley, vertically movable gutter sections, a sweep board movable across the floor surface of the alley to engage and sweep fallen pins lying, in a certain area, between the "deadline" and the foul line end of the alley into one of the aforementioned gutter sections, sweep rods movable lengthwise of the gutter sections to engage and direct into the gutter sections fallen pins projecting there-across and touching the side walls of the alley between the "deadline" and the pit end of the alley, pushers movable lengthwise of and within the gutter sections, when the latter are displaced from their operative position, to direct the pins therein to the alley pit, and a shaft extending beneath the alley and connected with the gutter sections, sweep board, sweep rods and pushers to actuate the same in predetermined sequence.

2,732,209
FLEXIBLE WIRE RACKET
Clarence H. Forbes, Salt Lake City, Utah
Application January 8, 1953, Serial No. 330,237
4 Claims. (Cl. 273—73)



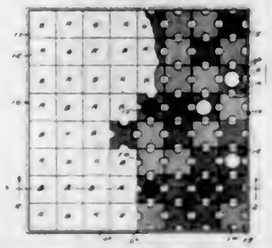
1. A playing racket comprising a wood frame having spaced string receiving apertures therein, resilient wire strings mounted through said apertures and protecting sleeves secured in said apertures, said string being provided with spaced lateral bends in the plane of said frame, said bends being arranged all in the same plane whereby said strings are substantially flat surfaces.

2,732,210
RACING GAME APPARATUS
Stanford M. Heide, Kenosha, Wis., assignor to Chicago Coin Machine Co., Chicago, Ill., a corporation of Illinois
Application June 9, 1952, Serial No. 292,473
2 Claims. (Cl. 273—86)



1. A game apparatus which may be played by a single player or by a plurality of players, comprising a plurality of horses each carried at one end of a movable element and movable from a starting position in horizontal planes parallel with respect to each other to a finish position in said planes, electrically actuated means for advancing said movable elements and said horses step by step in said planes, an operating circuit for said electrically actuated means including ball-actuated switches and a starting switch, a circuit having a coin-actuated switch therein for conditioning said operating circuit for operation, means actuated by certain of said ball-actuated switches cooperating with the remaining switches of said operating circuit for conditioning a sprint circuit for energizing said electrically actuated advancing means independently of said operating circuit, a reset coil in said operating circuit for returning said horses to a starting position in said planes, said reset coil being in circuit with a holding switch and energized by said coin actuated switch for returning said horses to a starting position, said circuit holding switch and said reset coil deenergized by an arm carried by each of said horses when said horses return to said starting position, and means at the finish position in said planes and coupled with said operating circuit for deenergizing said operating circuit when one of said horses reaches said finish position by the actuation of said operating circuit or said sprint circuit, said last-named means including a normally open switch adjacent to said finish position in said planes so as to be closed by said arm carried by the first of said horses to reach said finish position.

2,732,211
MOVABLE CHECKERBOARD GAME DEVICE
Earl Hagin Foster, Los Angeles, Calif.
Application August 21, 1952, Serial No. 305,663
1 Claim. (Cl. 273—131)



In combination with a square checkerboard of the type having an upstanding peripheral flange surrounding a plurality of squares of one color and an equal plurality of squares of another color with the squares arranged with colors alternating in both a lateral and longitudinal direction, a plurality of flat reversible square playing surface sections equal in number to the squares of both colors of said checkerboard, said sections being supported on said checkerboard, each of said sections having one side colored to substantially match the first color of the squares on said checkerboard and the opposite side colored to substantially match the second color of the squares on said checkerboard, with each section positioned over a corresponding square on said checkerboard with the exposed color on each section initially corresponding to the color of the square supporting the section, each of said sections having finger-engaging cutout portions on each marginal edge thereof to facilitate reversal thereof with the cutout portions of adjacent sections being juxtaposed to form a recess therebetween of the size to permit insertion of a finger therein, a plurality of checkers and a second plurality of checkers having a color contrasting to that of said first plurality of colors, said first and second plurality of checkers being movably supported on said playing surface sections, said playing surface sections being individually reversible to produce a playing surface section pattern varying from the established starting pattern.

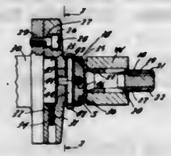
2,732,212
RECORD CHANGE CYCLE CONTROL SYSTEM FOR AUTOMATIC RECORD CHANGERS
Benjamin R. Carson, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application August 31, 1951, Serial No. 244,649
3 Claims. (Cl. 274—1)



1. In an automatic phonograph record changer the combination with a motor, a power switch for said motor, a turntable driven by the motor, a control button for operating said power switch, and a tone arm pivoted at one end for movement across said turntable, of a movable record change cycle control slide having a rotary drive cam therefor eccentrically mounted thereon for rotation from a neutral inoperative position to move the slide and initiate a record change cycle, means providing at least one stud projection on said cam whereby it is actuated to move from said neutral position, a first resilient lever means coupled to said control button for movement in one direction to engage said stud projection means and actuate said cam, whereby said control button effectively controls said motor and the record change cycle operation jointly, and a second resilient lever means coupled to said tone arm for engaging said stud projection means upon movement of the tone arm to a predetermined position automatically to initiate a record change cycle independently of the control button.

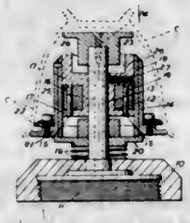
2,732,213
EXPANDING MANDREL CHUCK
Charles E. Drew, Racine, Wis.
Application September 8, 1953, Serial No. 378,854
5 Claims. (Cl. 279—2)

1. In a chuck, the combination with a spindle provided with means for mounting an expanding mandrel thereon to receive a work piece having a finished bore and an unfinished end surface, of stop mechanism for said work piece including a movable stop adapted for spaced three-point contact with said unfinished surface, and mounting means for said stop including a spherically curved surface on said spindle engaged by said stop and per-



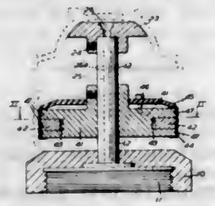
mitting it to oscillate about a point in the central axis of said spindle to automatically accommodate said stop to said unfinished surface.

2,732,214
POTTERS' LATHES AND CHUCKS
Maurice W. Abberley, Stoke-on-Trent, England
Application November 30, 1951, Serial No. 259,068
3 Claims. (Cl. 279—3)



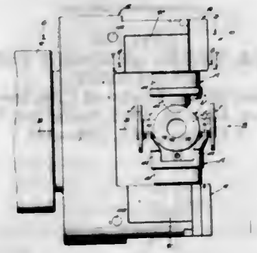
1. A chuck for articles of the type having one end substantially closed and the opposite end open comprising a support for engaging the substantially closed end of the article, means engageable with the article adjacent the open end thereof to form an air seal within the article between said means and the substantially closed end of the article, further means mounting said air seal forming means for axial movement relative to the rotational axis of the chuck, and centrifugal acting means operatively connected with the air seal forming means serving to hold such air seal forming means in a fixed position on the article when the chuck is rotating at its working speed, and means to exhaust the air from said zone between the closed end of the article and the air seal forming means.

2,732,215
POTTERS' LATHES AND CHUCKS
Maurice W. Abberley, Stoke-on-Trent, England
Application November 30, 1951, Serial No. 259,069
8 Claims. (Cl. 279—3)



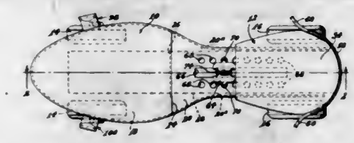
1. A chuck for articles having one end substantially closed and the other end open comprising means for forming an air seal within the article, means for exhausting the closed cavity thereby obtained, said seal-forming means being of a resilient character, and associated with said seal-forming means to expand such means radially.

2,732,216
INDEXING-TYPE CHUCK
Harry E. Sloan, Hartford, Jerome J. Rutherford, Windsor, and Herbert W. Hickey, Hartford, Conn., assignors to The Cushman Chuck Company, Hartford, Conn., a corporation of Connecticut
Application June 8, 1953, Serial No. 360,136
12 Claims. (Cl. 279—5)



1. In a chuck of the indexing type having rotary jaws mounted on non-rotatable carriers on a chuck body of which at least one carrier is movable toward and away from the other carrier, the combination of a disc journalled with its periphery in said one carrier and turnable with the associated jaw, said disc having in its periphery angularly spaced locking surfaces and similarly spaced shallow depressions; a latch element mounted in said one carrier for movement into and from engagement with any adjacent lock surface on said disc periphery for releasably arresting the jaw on said one carrier against rotation in any one of a number of predetermined angular positions; and a spring-urged detent in said one carrier adapted to register with any one of said depressions in said disc periphery in order yieldingly to resist rotation of the jaw on said one carrier from any one of said predetermined angular positions.

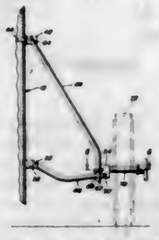
2,732,217
EXTENSIBLE ROLLER SKATE WITH TOE CLAMPING MEANS
Frank M. Dore, Boston, Mass.
Application June 24, 1953, Serial No. 363,725
4 Claims. (Cl. 280—11.26)



1. A roller skate comprising a platform having a forepart section and a rearpart section, a pair of rollers mounted on each said section, said forepart section comprising two superimposed plate elements of which the upper one has marginal portions thereof turned over edge portions of the underlying one securing them together, means on said underlying plate element providing a longitudinally extending space between said plate elements along the central region of the forepart section, said rearpart section comprising two superimposed plate elements of which the upper one has marginal portions thereof turned over edge portions of the underlying one securing them together, said underlying rearpart plate element having a relatively long generally rectangular portion extending forwardly into said central space between said forepart plate elements, and also having a pair of parallel guide grooves therein rearwardly of said forwardly extending portion, said underlying forepart plate element having a rearwardly extending portion overlying said underlying plate element of the rearpart section and having

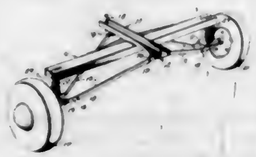
flanges slidably engaging in said guide grooves of said rearpart underlying plate element, and manually releasable means for selectively locking said rearwardly extending portion of the forepart underlying plate element and said forwardly extending portion of the rearpart underlying plate element against relative movement longitudinally of said platform.

2,732,218
FOLDABLE WHEEL ASSEMBLY FOR GOLF BAG CARTS
Anton Resch, Rockwell City, Iowa
Application June 28, 1955, Serial No. 518,504
6 Claims. (Cl. 280—38)



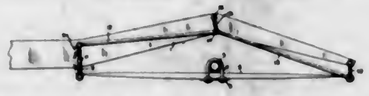
1. In a golf bag cart, a body having means for receiving and supporting golf clubs and a foldable wheel assembly on said body, said wheel assembly including at least one support, means mounting said support upon said body for pivoting movement thereon between an extended and a folded position, a member pivotally mounted upon said support, a spindle journaling a supporting wheel thereon, a brace rod pivoted to said body, a retainer on said member engaging said brace rod and slidable thereon upon pivoting of said support, means securing said spindle to said member for pivotal movement therewith and for securing said retainer in slidably adjusted position upon said brace rod.

2,732,219
VEHICLE SUB-FRAME AND SPRING SUSPENSION ASSEMBLY
Willis H. Miller, Irving, Tex.
Application October 15, 1953, Serial No. 386,220
4 Claims. (Cl. 280—106.5)



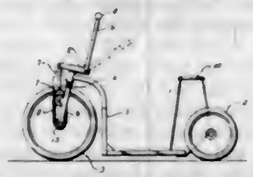
1. A vehicle sub-frame and wheel suspension assembly comprising a rigid superstructure composed of a transverse frame member and a longitudinal frame member affixed thereto at right angles, a stub axle and wheel at each end of said transverse frame member, a plate affixed to each stub axle, a bracket affixed to the underside of said longitudinal frame member adjacent each end thereof, a pair of substantially V-shaped torque frames, each comprising a pair of arms having parallel ends affixed to said plate one on each side of said stub axle, said arms being upwardly divergent toward opposite ends of said longitudinal frame member, and pivoted to said brackets to form fulcrum points about which said arms oscillate, a coil spring interposed between the outer ends of said transverse frame member and said plate therebelow and means for securing said springs against longitudinal and lateral displacement.

2,732,220
VEHICLE SPRING SUSPENSION
Lyle O. Ward, Port Huron, Mich.
Application June 12, 1953, Serial No. 361,279
3 Claims. (Cl. 280—124)



1. In a vehicle spring suspension, the combination with the rear axle of a vehicle, a frame surmounting and elongated transversely to such axle and having an arched rear portion affording clearance for relative vertical play between the frame and axle, a spring mounting the frame on the axle and elongated transversely to the axle and upwardly bowed in extending from the axle, and means securing the mid portion of such spring rigidly to the axle, of a pair of front and rear shackles mounting the frame on the spring ends and affording such ends a swinging travel relative to and lengthwise of the frame, one of such shackles being formed as the lower arm of a lever also having an upper arm, a shackle disposed substantially above the axle and having its upper end pivoted on the arched portion of the frame, and a pair of link bars forming swinging connections from the last-mentioned shackle to the front and rear shackles, one of the link bars engaging said upper arm.

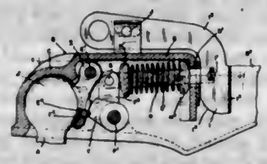
2,732,221
HAND PROPELLED VEHICLE
John M. Welch, Nacogdoches, Tex.; Veva M. Crouch, executrix of said John M. Welch, deceased
Application July 15, 1952, Serial No. 298,952
1 Claim. (Cl. 280—246)



In a hand driven vehicle, a framework, wheels on said framework, one of said wheels being a driven and a steering wheel, a steering fork on said framework, a bell-crank pivotally mounted on said steering fork and having a hand grip at one end and a pivotally mounted driving fork connected at the other end by a link, said driving fork having depending arms, a pair of driving wheels in vertical alignment on said steering fork, one of said wheels being coaxially secured to the driven wheel on said vehicle, a belt connecting said driving wheel, dogs on the depending ends of said driving fork arms, means on said belt adapted to be engaged by one of said dogs when said driving fork is moved in either direction and stops on said driving fork arms for yieldingly maintaining each of said dogs in a forward or reverse position.

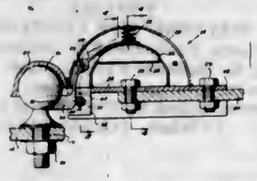
2,732,222
BALL AND SOCKET TYPE VEHICLE COUPLING
Ray W. Harroun and Carl J. Wagner, Sturgis, Mich., assignors to Marvel Industries, Inc., Sturgis, Mich., a corporation of Michigan
Application March 16, 1953, Serial No. 342,428
1 Claim. (Cl. 280—512)

In a trailer hitch, a coupling member having a segmental spherical projection which is greater in extent than one-half of a sphere, a cooperating coupling member having a rigid segmental spherical socket which is no greater in extent than one-half a sphere and is adapted to receive and fit the aforesaid spherical member, a member movably attached to said cooperating member having a segmental spherical socket bearing portion which in one position thereof is complementary to said rigid socket to form therewith more than one-half of a sphere embracing the spherical portion of said first mentioned member, and means for positively locking said bearing member in its complementary position, said member having a spherical socket bearing being a rock arm pivotally attached to said cooperating member to swing from its complementary position to a position clearing entrance to said fixed



socket, a second rock arm pivotally attached to said cooperating member to move said first mentioned rock arm into its complementary position and forming the means for positively locking it in such position, a link pivotally connected at one end to said second rock arm, a lever connected to the opposite end of said link to move the same and said second arm to clear position, and a spring for moving the link in its opposite direction and said second arm into locking engagement with said first arm.

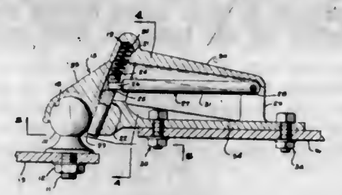
2,732,223
SELF-LATCHING TRAILER HITCH
Robert E. Deebel, Torrance, Calif.
Application December 10, 1954, Serial No. 474,395
1 Claim. (Cl. 280—512)



A trailer hitch comprising a ball, a hollow arcuate housing, a socket member secured to one end of said housing and being adapted to receive said ball, a lever pivoted at its intermediate portion in said housing, a locking element on one end of said lever extending subjacent said socket member and being lockingly engageable with said ball, spring means in said housing biasing said lever into locking engagement with said ball, and a manually actuated plunger element movably mounted in said housing beneath the other end of said lever, said plunger element projecting below the intermediate portion of said housing and being movable upwardly to rotate said lever in a direction to disengage said locking element from said ball.

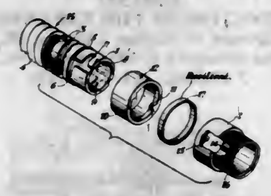
2,732,224
SELF LATCHING BALL AND SOCKET TYPE COUPLING
Robert E. Deebel, Torrance, Calif.
Application April 29, 1955, Serial No. 504,831
3 Claims. (Cl. 280—513)

2. A trailer hitch assembly comprising a ball, an upstanding housing having a downwardly opening socket at one end thereof adapted to receive said ball, said housing having an opening extending transversely therethrough and providing a handle extending longitudinally of said housing, a plunger mounted within said housing for upwardly and downwardly movement and having its lower end portion projecting into said socket and engageable with said ball to prevent removal of said ball therefrom, an arm having its intermediate portion disposed within said opening and extending parallel with said handle and having one end pivotally connected to said housing adjacent to the other end thereof for swinging movement upon a horizontal axis, said arm having its other end



operatively connected to said plunger adjacent the other end of the latter for effecting movement of said plunger upwardly out of engagement with said ball, and spring means in said housing biasing said plunger to its downward position.

2,732,225
COUPLING FOR FLEXIBLE METALLIC CONDUITS
Robert Mills, New York, N. Y., assignor to Westinghouse Air Brake Company, a corporation of Pennsylvania
Application May 19, 1951, Serial No. 227,141
3 Claims. (Cl. 285—2)

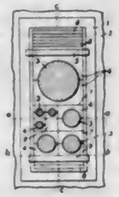


1. A coupling for flexible metallic conduits, comprising a tubular first section adapted for attachment to the end of a conduit and having a portion which is to extend beyond the length of said conduit when said first section is attached to the conduit, said projecting portion of said first section being provided with longitudinal slots, each slot having a circumferential branch extending in one direction and an axially spaced circumferential branch extending in the other direction, a collar slidable over said projecting portion of said first section and having inwardly projecting pins for engaging the circumferential branch of the slots extending in one direction to form a bayonet type connection between said first section and the collar whereby said collar provides a protective covering for the joint formed between the end of the conduit and said first section when said bayonet type connection is completed, a second section also slidable over said projecting portion of said first section and having inwardly projecting pins at one end for engaging the circumferential branch of the slots extending in the other direction to form a bayonet type connection between said first and said second sections, said second section having means for connecting said second section to a junction box, signal case or the like.

2,732,226
PRESSURE-TIGHT PACKING ASSEMBLY FOR CONDUCTORS PASSING THROUGH A WALL
Nils Brattberg, Karlskrona, Sweden
Application April 20, 1953, Serial No. 349,693
Claims priority, application Sweden March 9, 1950
4 Claims. (Cl. 285—2)

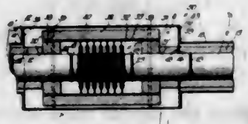
2. A pressure-tight packing assembly for a plurality of conductors passing through a wall, comprising a short rectangular frame adapted to be inserted in the wall, at least partly elastic gauge blocks shaped with respect to the cross-section of the respective conductors and arranged

to fill up the spaces between the separate conductors and the spaces between the conductors and the frame, said gauge blocks being dimensioned in accordance with a modulus system permitting said frame to be substantially filled by blocks of equal or different sizes, the gauge blocks being compressed to obtain sealing between themselves, the conductors and said frame, an elastic member in-



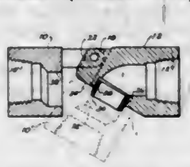
serted in the space left between the inner sides of the frame and the compressed gauge blocks, means to exert pressure on said elastic member, and non-elastic plates provided on either side of said elastic member at the ends of said frame and adapted to limit extension of the elastic member longitudinally of the frame at the exertion of pressure on the elastic member.

2,732,227
WELDED ENCLOSURE FOR EXPANSION JOINT
Edward W. Kaiser, Chicago, Ill.
Application February 1, 1951, Serial No. 208,922
3 Claims. (Cl. 285—22)



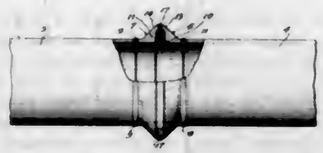
1. In combination, a pair of endwise spaced relatively coaxially arranged elongated housings, a pipe in and extending through said housings in spaced relation thereto, expansion means interposed in said pipe between said housings, sheet metal annular flanges extending radially outwardly from and welded to the opposed ends of said housings, and sheet metal enclosure means surrounding said expansion means and welded to the outer peripheries of said flanges and capable of transmitting tension and compression stresses between said housings, one only of said sheet metal annular flanges having an integral inwardly projecting flange portion extending to said pipe and rigidly secured thereto and constituting an anchor portion whereby substantially no relative movement between said pipe and the housing associated therewith can take place where they are interconnected by said anchor portion.

2,732,228
SYPHON ELBOW ASSEMBLY
Adam E. Armstrong, Three Rivers, Mich., assignor to The Johnson Corporation, Three Rivers, Mich., a corporation of Michigan
Application July 6, 1953, Serial No. 366,353
1 Claim. (Cl. 285—110)



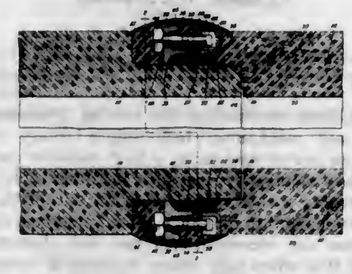
A syphon elbow assembly comprising a pair of hollow cylindrical body parts of the same diameter having passageways therethrough and having coaxially recessed portions at opposite ends thereof for the connection of pipe sections coaxially thereto, said body parts having pivotal interconnecting means permitting said body parts to be swung into axial alignment with their outer contours defining a common cylindrical contour, said pivotal interconnecting means lying wholly within said common cylindrical contour, one of said body parts having a first end face adjacent the other of said body parts, said first end face having a first opening therein of a diameter at least as great as the inside diameter of a said pipe section and communicating with the hollow interior of said one body part, said first end face extending from said pivotal interconnecting means away from said other body part and lying wholly within said common cylindrical contour when said body parts are axially aligned, said other body part having a second end face adjacent said one body part, said second end face having a second opening therein of a diameter at least as great as the inside diameter of a said pipe section and communicating with the hollow interior and axially offset from the axis of said other body part, said pivotal interconnecting means being connected to said second end face adjacent one side thereof and said second opening being disposed adjacent the other side thereof so that said pivotal connecting means and said second opening are disposed adjacent opposite sides of said second end face, and sealing means disposed about one of said openings and projecting beyond its associated end face so that when said body parts are swung together said openings will be brought into registry and said sealing means will complete a closed fluid passageway through both said body parts.

2,732,229
WELDING PIPE COUPLING
Gilbert A. Gaum, Louisville, Ky., assignor, by mesne assignments, to National Cylinder Gas Company, Chicago, Ill., a corporation of Delaware
Application August 13, 1951, Serial No. 241,583
2 Claims. (Cl. 285—111)



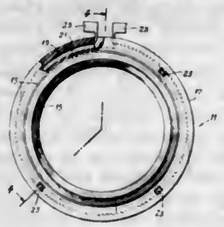
1. A welding coupling for interconnecting the ends of a pair of conduit elements comprising a generally tubular female fitting and a generally tubular male fitting, each of said fittings being adapted to be connected respectively with the end faces of the conduit elements and having an inner surface conforming with the inner surface of the connected conduit element, said male fitting having an annular projection extending axially from the inner edge of the mating face thereof and adapted to project into a recess provided by a counterbore in the mating face of said female fitting with its end surface abutting the bottom surface of the recess to provide a conduit having uniform interior wall surfaces through both of said fittings when said fittings are in mating relation, said fittings further having radially extending annular portions spaced from each other and formed to provide opposed surfaces for cooperation with the metal of an annular weld when said fittings are in abutting mating relation as described, and said fittings cooperating to define an annular chamber generally surrounding the abutting surfaces, which chamber is adapted to accommodate excess weld metal which may flow inwardly from the weld between the opposed spaced surfaces.

2,732,230
RECESSED JOINT FOR CONCRETE PIPE
Roger E. Risley and George D. Kish, Bradford, Pa., assignors to Dresser Industries, Inc., Dallas, Tex., a corporation of Pennsylvania
Application October 31, 1951, Serial No. 254,073
1 Claim. (Cl. 285—135)



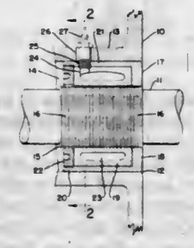
In a concrete pipe line, end abutting sections of concrete pipe, one of said sections having a bell end defining an annular recess adjacent the axial opening through said section and the other of said sections having a projecting portion received in said recess, a ring positioned at the end of said first-named pipe section adjacent the outer periphery thereof, an axially-extending sleeve adjoining said ring and extending outwardly from the end of said first-named pipe section to define an annular gasket recess adajcent but apart from said first-named recess and spaced radially outwardly therefrom, a plurality of integral bolt-head sockets defined by a continuous ring of uniform thickness having a plurality of circumferentially spaced axially offset portions and secured to said first-named ring, anchor means for securing said first ring to said first-named pipe section, compressible gasket means on said projecting portion engageable in said gasket recess provided in the bell end of said first-named pipe section adjacent said first-named recess, follower means exteriorly of said pipe sections for compressing said gasket means in said gasket recess, and bolt means loosely engageable with said follower means for urging said follower means toward said first-named pipe section, said bolt means having head portions engageable in said sockets and being actuatable to compress said gasket wholly from the exterior of said pipe sections, said socket members being provided with bolt receiving slots extending radially inwardly from the exterior of said continuous ring adapted to permit insertion of the bolt heads into said sockets entirely from the exterior of the pipe sections after embedment of the socket members in said sections.

2,732,231
PIPE JOINT WITH DETENT AND GASKET FOR DIVING SUIT
Gerald Zobel, New York, N. Y.
Application October 21, 1952, Serial No. 316,109
1 Claim. (Cl. 285—174)
(Granted under Title 35, U. S. Code (1952), sec. 266)



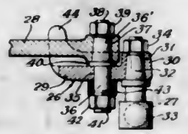
A watertight garment-joint coupling comprising a first annular member having a tongue-shaped projection thereon and having an annular opening therein, a second annular member having a groove-shaped depression therein sealingly receiving said projection, a resilient one piece split-ring positioned in said annular opening in said first member, the ends of said ring extending outwardly therefrom, compression grips on the ends of said ring, said ring being biased into the outer peripheral portion of said opening, axial openings in and circumferentially spaced around the closure edge of said first member and extending to said opening, and hooks circumferentially spaced around and rigidly mounted on the closure edge of said second member and adapted to enter through said axial openings for detachably engaging the outer peripheral portion of said ring.

2,732,232
SHAFT SEAL
Joseph E. Whitfield, Erie, Pa., assignor to Read Standard Corporation, New York, N. Y., a corporation of Delaware
Application April 1, 1952, Serial No. 279,749
3 Claims. (Cl. 286—9)



1. A seal for a stationary casing and a rotatable shaft extending therethrough comprising, an annular stationary housing projecting from said casing in concentric but spaced relation to said shaft to form therebetween an annular compartment, the portion of said shaft within said housing having a plurality of closely spaced circumferential ridges and grooves, a cylindrical annularly shaped sealing body in said compartment formed of a metal softer than said shaft and adapted to bear against the ridges of said shaft, said body having an annular chamber therein, and means for supplying a flowable material under pressure to said chamber whereby the cross sectional area of said body is expanded and forced towards said shaft to produce ridges and grooves therein complementary to the ridges and grooves in said shaft.

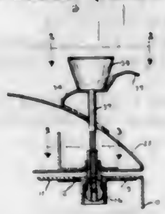
2,732,233
TOE CHANGE CORRECTIVE DEVICE
Charles W. MacMillan and Burton A. Richards, Rock Island, Ill., assignors to Bear Manufacturing Company, Rock Island, Ill., a corporation of Delaware
Application October 6, 1954, Serial No. 460,603
3 Claims. (Cl. 287—54)



2. A device for correcting toe of the steering mechanism of an automotive vehicle which comprises, a body, one end portion of said body being provided with a tapered aperture for the reception of a tie rod connecting pin, a pin having a tapered portion carried upon said body in spaced relationship to said aperture for engagement with a tapered hole provided in a steering arm, the

axes of said aperture and said pin being parallel and the tapered portion of said pin and said aperture being offset in planes at right angles to their axes, and a pair of spaced lugs carried upon said body adjacent said tapered portion of said pin for engagement with opposite sides of said steering arm to prevent rotation of said body with respect to said steering arm.

2,732,234
LATCH STRUCTURE
Kermit A. Lundell, Jamestown, N. Y., assignor to Weber-Knapp Company, Jamestown, N. Y., a corporation of New York
Application April 15, 1953, Serial No. 348,960
4 Claims. (Cl. 292—1)



1. A latch structure for securing a pair of relatively separable members in close proximity comprising a keeper mounted in one of said members, an annular shoulder formed in the walls of an aperture extending through said keeper, a sleeve mounted in the other of said members, cooperating parts of said sleeve and the other member preventing rotation and allowing axial movement of said sleeve with respect to the other member, a rotatable shaft having threaded engagement with said sleeve, an expandable ring encircling said sleeve adjacent one end thereof, means carried by said sleeve operable to effect expansion of said ring into engagement with the walls and shoulder of the aperture of said keeper, when said shaft has been rotated and axially moved said sleeve a predetermined extent.

2,732,235
MULTIPLE LATCH FOR A REFRIGERATOR DOOR
William J. Schemers, Detroit, Mich.
Application June 2, 1952, Serial No. 291,248
4 Claims. (Cl. 292—34)



1. An anti-warp door-latching mechanism comprising a pair of latch bolt housings secured in longitudinally-spaced relationship to the open edge of the door, a latch bolt reciprocably mounted in each housing, means responsive to the locking reciprocation of said bolt for urging said door into a closing and sealing engagement with the door frame, a resilient element operatively connected to each latch bolt and yieldingly urging said latch bolt in a latching direction, a motion-transmitting bolt-retracting device including a vertically-disposed rotatable rod operatively interconnecting said bolts in simultaneous actuating relationship, and a handle operatively connected to said rod intermediate said bolts.

2,732,236
LATCH FOR PHOTOGRAPHIC CAMERAS
Hermann Bretthauer, Braunschweig, Germany, assignor to Franke & Heidecke, Fabrik Photographischer Prazisions-Apparate, Braunschweig, Germany, a firm
Application June 19, 1952, Serial No. 294,385
Claims priority, application Germany June 20, 1951
7 Claims. (Cl. 292—65)



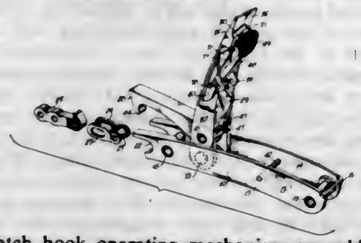
3. In a latch mechanism for use on a photographic camera, said mechanism including a rotary member mounted on one of said parts, a latch member controlled by the rotary member for engaging the other of said parts, means forming a cam slot element on one of the members, a pin element on the other of said members engaging in said cam slot element, said cam slot element being so shaped that when said rotary member is turned, said pin element travels along said cam slot element to cause movement of said latch member, and a spring-influenced lever pivoted to one of said members and carrying one of said elements.

2,732,237
DOOR BOLT
Albert Kihn and Oscar Swanson, Milk River, Alberta, Canada
Application September 4, 1953, Serial No. 378,518
1 Claim. (Cl. 292—67)



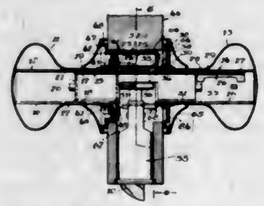
A door bolt for selectively retaining a door in closed position, the door being hinged to one side of a frame with the other side of the frame having a door stop and an apertured striker plate mounted on said door stop, said bolt comprising an elongated bar disposed along the inner surface of the door, an L-shaped bracket attached to the door with one leg thereof projecting perpendicularly therefrom in general parallel relation to the striker plate, said one leg of the bracket having an aperture therein slidably receiving said bar and permitting limited pivotal movement thereof, said bar having a stop lug on the inner surface thereof for engagement with the periphery of the aperture in said one leg on the face thereof disposed remotely from the striker plate for limiting movement of the bar towards the striker plate, said bar terminating in a pointed end for engagement with the aperture in the striker plate, said pointed end being defined by a flat inner surface and a rounded outer surface forming a cam surface for urging the bar into a retracted position when the cam surface engages the outer edge of the striker plate, a tension spring connected between the L-shaped bracket and the bar for urging the bar towards the striker plate whereby the pointed end thereof will be disposed in the apertured leg when the door is closed for locking the door, said bar having an inclined projecting pin detachably receiving one end of said spring, said pin being inclined away from said L-shaped bracket, a hinge plate mounted on the inner surface of the door in spaced relation to the L-shaped bracket, an apertured lug on said hinge plate, an inwardly projecting apertured hinge lug on said bar with the hinge lug on the bar being a greater distance from the L-shaped bracket than the apertured lug on the hinge plate, a loop shaped pivot link interconnecting the apertured lugs to permit arcuate swinging movement of the bar, said link being normally disposed in an inclined manner to permit the lugs to move into general longitudinal alignment with the link and bar generally parallel to the door and the bar retracted, a push plate on the outer surface of said bar in spaced relation to the link and disposed remotely of the L-shaped bracket whereby inward movement of the push plate will cause arcuate swinging movement of the bar for retracting the pointed end thereof from engagement with the striker plate.

2,732,238
LATCH
Lawrence H. Dornberg, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application July 11, 1952, Serial No. 298,253
4 Claims. (Cl. 292—113)



4. A latch hook operating mechanism assembly controllable by one continuous hand motion of an operator for installation in a structure of minimum depth comprising a housing frame attachable to a structure with its major axis perpendicular to an edge of the structure, consisting of two, flat, vertical, spaced, longitudinal sides interconnected near their ends; a handle pivotally connected to the housing near the edge of the housing frame nearest the edge of a structure, completely insertable into the housing in a flush relationship; a spring held handle catch pivotally attached to the handle; an anchoring pin secured to the housing to receive the handle catch, cams integral with the handle catch for guiding and closing the catch about the anchoring pin and for raising the handle as the handle catch is rotatably released; a spring held latch hook pivotally mounted on the handle near the pivot of the handle but spaced therefrom and insertable within both the handle and housing in a flush relationship; a spring held hook catch pivotally attached to the handle to override the mounted end of the latch hook as the handle is pivoted clear of the housing frame, so that upon the reverse motion of the handle, the hook is rotated clear of the structure.

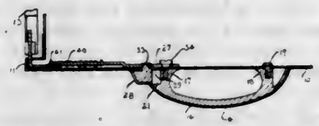
2,732,239
DOOR LATCH
William B. Wilson, La Habra, Calif., assignor to National Lock Company, Rockford, Ill., a corporation of Delaware
Application August 7, 1952, Serial No. 303,100
7 Claims. (Cl. 292—169)



2. In a door latch having a retractable latch bolt, a cam tube assembly including a housing adapted to be disposed in an opening of a door or other closure and a pair of longitudinally slotted tubular cam members each provided with an arcuate camming end within the housing for retracting the latch bolt, the camming end of one member being enlarged and overlapping the other,

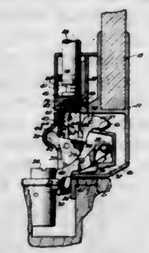
a reinforcing tube disposed within the adjacent ends and extending for a substantial portion of the lengths of the cam members and connecting said members, and a knob mounted upon the slotted outer end of each of said cam members at the opposite sides of the closure whereby turning of a knob rotates its cam member and arcuate camming end to retract the latch bolt and permit opening of the closure.

2,732,240
COMBINED HANDLE AND DRAWER LATCH
Howard E. Hutzelman, Corry, Pa., assignor to Corry-Jamestown Manufacturing Corporation, Corry, Pa., a corporation of New York
Application August 17, 1953, Serial No. 374,534
2 Claims. (Cl. 292—175)



1. Latch structure for securing a drawer within an enclosure comprising a slidable bar located adjacent the inner face of the front of said drawer, a hook at one end of said bar adapted to engage a keeper on said enclosure, a drawer handle having one end fixed to the outer face of the drawer front and including an exposed recess at its other end, said recess registering with an aperture in the drawer front, a slidable thumb member projected through an opening in said front into and filling said recess and constituting an endwise continuation of said handle, a shoulder on the base of said member, a laterally offset pin extending from said shoulder and projecting into an opening in said bar and being permanently joined thereto, said shoulder serving to space the base of said member from said bar a distance greater than the thickness of said drawer front, and means projecting through an opening in said front and engaging and securing said other handle end to said front, a part of said means being within a slot at the other end of said bar to limit operative movement thereof and render said member incapable of movement to an extent to expose the aperture in said drawer front.

2,732,241
FIRE-EXIT LOCK
Walter A. Scheidler, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a corporation of Connecticut
Application February 25, 1950, Serial No. 146,227
10 Claims. (Cl. 292—198)



1. In a latch device of the character indicated, a latch movable to an extended position and to a retracted position and formed to move from the retracted position to the extended position upon engagement with a strike, means urging said latch normally into the retracted position, a second latch movable into a position to dog said first latch upon movement of said first latch to the extended position, whereby upon engagement with a strike

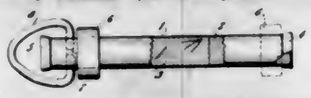
said first latch will be moved to and automatically dogged in the extended position, dogging means normally urged in the direction of dogging said second latch and engageable with said second latch when the latter is in dogging relation with said first latch, and manual actuating means including a single member connected in common to said second latch and to said dogging means for breaking the dogging relation and for actuating said second latch in a single manual operation of said actuating means.

2,732,242
GATHERING DEVICE
Richard Belford, Pittsfield, Mass.
Application March 28, 1952, Serial No. 279,000
1 Claim. (Cl. 294—61)



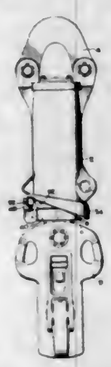
A trash spear comprising: an elongated handle; an elongated, cylindrical body rigid at one end with the handle and formed to a reduced diameter as compared to the diameter of the handle to define therebetween a first shoulder; an elongated rod rigid at one end with the other end of said body and reduced in diameter as compared to the diameter of the body; a cylindrical, elongated head rigid at one end with the other end of said rod and formed to a diameter equal to that of the body to define, between the head and rod, a second shoulder, the other end of the head having a plurality of longitudinal sockets related obliquely to one another; a series of gathering pins embedded in and projecting out of said sockets, said pins being spring tensioned in a direction to bias the projecting portions thereof away from one another; an elongated tubular member formed to an inner diameter equal to the diameter of said body, and to a length closely approximating the distance between said first shoulder and said other end of the head, said tubular member being slidably mounted on the body and head with the elongated formation of the body and head being adapted to permit sliding of the tubular member in opposite directions for substantial distances without disengaging the same from the body and head, the tubular member, when slidably adjusted in one direction, being adapted to contact the pins to strip trash therefrom while biasing the pins inwardly to a position in which they are recessed in the tubular member; an internal sleeve fixedly secured to the tubular member intermediate said body and head, the rod extending through the sleeve and the sleeve having an inner diameter substantially equaling that of the rod to provide a guide for the rod during said slidable movement of the tubular member; and a spring surrounding the rod within the tubular member and abutting at its ends against the sleeve and the second shoulder respectively, said spring being under continuous compression in each position to which the tubular member is shifted, and normally urging the tubular member into engagement with said first shoulder, to a pin-exposing position.

2,732,243
HAND MAGNETIC PICK UP TOOL
George W. Mount, Greenfield, Mass.
Application March 13, 1952, Serial No. 276,394
3 Claims. (Cl. 294—65.5)



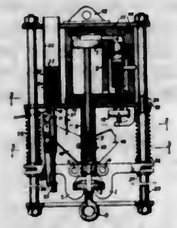
1. A magnetic lifting hand tool which comprises a hollow cylinder formed of non-magnetic metal, a cylindrical permanent magnet having an outer diameter substantially equal to the inner diameter of said hollow cylinder fitted snugly in one end of the hollow cylinder with one end of the magnet positioned flush with the adjacent end of the hollow cylinder, a cylindrical wooden filler piece having an outside diameter substantially equal to the inside diameter of the hollow tube fitted snugly within the hollow cylinder with its end tightly engaging the inner end of the magnet, a steel cap engaging the outer end of the magnet and secured to and closing the adjacent end of the hollow cylinder, and means to secure said wooden filler piece in the hollow cylinder and in said tight engagement with the inner end of the magnet, said wooden filler piece filling the major portion of the hollow cylinder to limit the magnetic field produced by the magnet to the end portion of the hollow cylinder in which the magnet is located.

2,732,244
HOOK POSITIONER
William P. Gaines, Vista, Calif.
Application December 5, 1950, Serial No. 199,229
15 Claims. (Cl. 294—82)



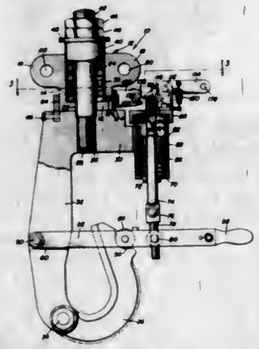
10. A hook structure for use in raising or lowering well pipe or rods comprising, in combination: a supporting member having means for connecting said hook structure to raising and lowering means; a load-carrying member rotatively supported by said supporting member and having means for suspending a load therefrom; one of said members including a housing and the other member including a shouldered shank axially slidable and rotatable in said housing; a compression spring interposed between the shank shoulder and the housing for resisting axial movement of said shank relative to said housing in one direction, said spring being compressible to permit such movement; and cooperating cam elements comprising a cam and a cam follower, one associated with said housing and the other associated with said shank, said cam elements coacting during expansion of said spring, in the event of relative rotation between said shank and housing, to cam said housing and shank into predetermined oriented relation when said spring is fully expanded.

2,732,245
AUTOMATIC PARACHUTE RELEASE COUPLING
Pierre Marcel Lemoigne, Montrouge, France
Application April 22, 1953, Serial No. 350,376
Claims priority, application France May 5, 1952
12 Claims. (Cl. 294—83)



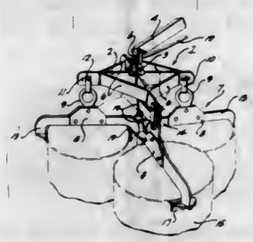
1. An automatic parachute release coupling comprising, in combination, a casing for connection with at least one parachute, dash pot means including a piston operating in a cylinder mounted in said casing, a piston rod on said piston, a plurality of hooks each articulated around an axis mounted on said piston rod exteriorly of said cylinder, a suspension member adapted for connection with a load to be parachuted and having a part engageable in interlocking position with said hooks, resilient means to bias said hooks into operative position when said piston is in its original retracted position, said resilient means biasing said hooks into inoperative position upon movement of said piston in said cylinder a predetermined distance from its original position.

2,732,246
SELF RELEASING HOOK
Alv W. Bernhart, New Orleans, La., assignor to Higgins, Inc., New Orleans, La., a corporation of Louisiana
Application September 25, 1953, Serial No. 382,362
14 Claims. (Cl. 294—83)



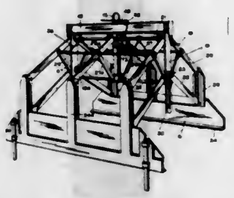
12. A self releasing hook of the type having a vertical shank portion and a pivoted bill portion, said hook including a latch member carried by said shank portion for retaining said bill portion in a hook forming position, means for retaining said latch member in an operative position, a yoke, said shank portion being slidably carried by said yoke, resilient means carried by said yoke normally urging said shank portion to an upper position, said first mentioned means including a latch member actuating arm, a dog retaining said actuating arm in an inoperative position, means carried by said yoke for tripping said dog upon reduction of a load on said shank portion below a present limit, a safety catch engaging said actuating arm to render release of said dog ineffective, manually controlled means for selectively releasing said first mentioned means and said catch member, said manually controlled means including a lost motion connection whereby said safety catch may be first released.

2,732,247
BARREL LIFTING TOOL
Theodore Thomas Violette, Long Beach, Calif.
Application May 10, 1952, Serial No. 287,133
5 Claims. (Cl. 294—87.22)



1. A barrel lifting tool comprising a frame, a hook fixture on said frame attachable to a hoist beam of a lifting crane, a plurality of radially extending arms on said frame, a tong unit on each of said arms, mounting means on each of the tong units, each of said arms having an elongated slot therein to receive the mounting means, each tong unit including a pair of hooks engageable with the outer surface of a barrel means pivotally mounting the hooks on said mounting means, all of said tong units being simultaneously raised and lowered with said frame.

2,732,248
LIFTING DEVICE
Gebhard Jaeger, Columbus, Ohio, assignor to The Jaeger Machine Company, Columbus, Ohio, a corporation of Ohio
Application May 27, 1953, Serial No. 357,765
8 Claims. (Cl. 294—88)

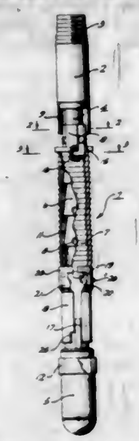


1. A lifting device comprising a pivoted tong structure for gripping material and which tends to contract into gripping position upon the application of a lifting force thereto, a fluid actuated unit connected to said tong structure and including a cylinder and a piston operating therein, a by-pass connecting the ends of the cylinder, a one-way check valve for controlling said by-pass which is seated by pressure in said by-pass created by said tong structure tending to contract and is unseated by pressure in said by-pass created by expansion of said tong structure, and actuating means for positively unseating said check valve for free flow of fluid through said by-pass for contraction of said tong structure.

2,732,249
RELEASABLE PIPE ENGAGING SPEAR
Dante A. Siracusa, Huntington Beach, Calif.
Application September 26, 1952, Serial No. 311,607
6 Claims. (Cl. 294—96)

1. A releasable pipe engaging spear comprising a coupling, a mandrel depending from the coupling, tapered cam seats on the mandrel, a plurality of slips surrounding the mandrel and resting on the cam seats, releasable means engaging the upper ends of each of the slips releasably holding the slips in raised position, a sleeve

slidably mounted on the mandrel and positioned below the slips, a finger on each of the slips at the lower end



thereof, means on the sleeve engaged by the finger to attach the sleeve to the slip.

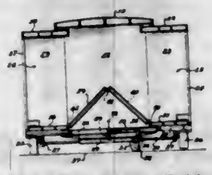
2,732,250
FISHING TOOL
Louis R. Wise, Stamford, Tex.
Application October 6, 1952, Serial No. 313,240
6 Claims. (Cl. 294—102)



1. A well fishing tool comprising an upper part and a lower part removably connected, a chamber formed in said upper part and a second chamber formed in said lower part, and a washing fluid passageway extending between both of said chambers, additional washing fluid passageways leading outwardly of the upper part chamber and in communication therewith, said additional passageways communicating with a groove concentrically arranged with respect to said chambers formed in said upper part and also constituting a fluid passageway, a second groove concentrically arranged with respect to said chambers formed in said lower part and in open communication with the first mentioned groove, and forming a fluid passageway, said second part having channels extending from the groove formed therein parallel to the chamber therein, said channels constituting wash fluid conduits and opening outwardly of said tool adjacent the lower end thereof.

2,732,251
COLLAPSIBLE HOUSE TRAILER
Archibald G. Meaker, Chandler, Ariz.
Application December 27, 1954, Serial No. 477,691
4 Claims. (Cl. 296—23)

1. In a collapsible house trailer having a chassis frame, a pair of oppositely disposed side floor pieces movable transversely on said chassis frame, a pair of jackknife floor elements pivotally connected to each other and to the inner edges of said side floor pieces, road engaging wheels mounted on each of said side floor pieces, a lift-up caster mounted on one side of said chassis frame, fluid pressure means for actuating said caster to raise the road wheels on one side of said trailer for contact with the ground surface, fluid pressure means for extending and retracting each of said side floor pieces, pop-up fluid pressure means engaging said jackknife floor element at their pivotal interconnection when in horizontal dead center posi-



tion, control means for applying fluid pressure to either of said fluid pressure means for extending and retracting said side floor pieces, further fluid pressure control means operable by the movement of said control means for the side floor pieces to raise said pop-up fluid pressure means when either of said side floor pieces are retracted and to lower said pop-up fluid pressure means when either of said side floor pieces are extended, and still further fluid pressure control means operable wherever said side floor pieces are retracted or extended to cause fluid pressure means for said caster to operate to raise one wheel of said trailer.

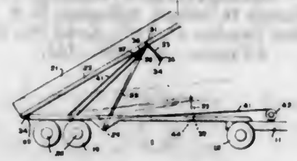
2,732,252
END GATE FOR WAGON BOXES
Sherman Stekelenburg, Park Rapids, Minn.
Application October 14, 1952, Serial No. 314,611
2 Claims. (Cl. 296—51)

1. In a wagon box of the type having a horizontal floor and mounting an end gate at one end thereof for movement in an arcuate path about an axis spaced from said floor from a closed to an open position, a pair of stakes in spaced parallel relation carried by said end gate and arranged to move in parallel rectilinear paths intersecting the arcuate path in which the end gate moves, a pair of stake-receiving pockets carried by said wagon box in spaced relation to each other to receive respective ones of said pair of stakes when said stakes are moved in their respective rectilinear paths to intersect the arcuate path of said end gate for securing the end gate in its closed position, a pair of parallel guide rails carried by said end gate between and in parallel relation to said stakes, a slidable closure having its opposite edges received in said guide rails, a pair of levers for lifting said closure, each lever of said pair pivotally attached intermediate its ends to said closure and pivotally connected at its upper end to an adjacent guide rail, and means to move said stakes in their rectilinear paths.

2,732,253
VEHICLE DUMP UNIT WITH INITIAL LIFTING AID
Billy G. Birdwell, Odessa, Tex.
Application April 12, 1955, Serial No. 500,724
6 Claims. (Cl. 298—21)

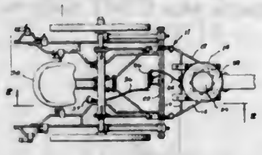
1. In a device of the character described spaced parallel frame members, a body pivoted at its rear end to the

rear end of such frame members, strut means for raising the forward portion of said body, said strut means having the lower end thereof pivoted to said frame members forwardly of the pivotal connection between the body and the frame members, a shaft pivoted transversely on the upper end of said strut means, a bell crank having lever arms pivotally carried by said shaft so that movement of one lever arm will move the other, one lever arm being mounted in a position to engage said frame members and the other being provided with a series of sheave wheels, a series of sheave wheels pivoted



in fixed position on said frame members, a trackway on the body, the upper end of the strut means being movable along said trackway, a cable extending around each series of sheave wheels and operable for moving them for initially swinging said lever arms so that the first lever arm is swingable downwardly toward the frame members and the second lever arm is swingable toward the fixed sheaves, whereby to impart initial raising motion to said body and with said cable thereafter continuing the movement of said strut means and the raising of said body.

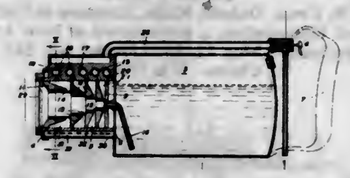
2,732,254
SPRAY ATTACHMENT FOR A CULTIVATOR
James G. Gibson, Lowrys, S. C.
Application July 30, 1954, Serial No. 446,840
2 Claims. (Cl. 299—30)



1. In a cultivator, a spray attachment comprising a vertical tank adapted to contain spray liquid, a pair of base bars secured to the bottom of the tank and arranged to be supported on the frame of the cultivator, respective clamping plates arranged below and parallel to the base bars, bolts connecting said clamping plates to said base bars, said clamping plates being engageable with the cultivator frame for clampingly securing said base bars to the cultivator frame, a horizontal U-shaped bracket member, means securing the bight portion of said bracket member to the cultivator frame, a control valve mounted on said bracket member between the arms thereof, a sprinkler head, a downwardly and rearwardly extending malleable conduit connected between one side of said control valve and said sprinkler head, and an additional conduit connected between the bottom of said tank and the other side of said valve, whereby discharge of liquid from said sprinkler head may be controlled by said valve.

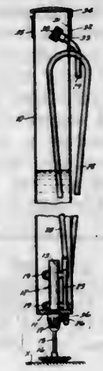
2,732,255
APPARATUS FOR OBTAINING AN EXCEEDINGLY FINE ATOMIZATION
Jose Luis Pascual de Zulueta Adan, Barcelona, Spain
Application February 8, 1952, Serial No. 270,628
In Spain July 31, 1946
Section 1, Public Law 690, August 8, 1946
Patent expires July 31, 1966
10 Claims. (Cl. 299—86)

1. An apparatus for atomizing liquids, comprising an atomizing nozzle having a body with an outlet, a cylindrical chamber in said body, a liquid projecting nozzle at the end thereof opposite said outlet, a plurality of discs arranged inside said chamber axially thereof defining with the wall of said chamber a series of pressure chambers extending axially of said chamber, each of said discs having a hole the diameter of the hole in each said disc being larger than the diameter of the hole in the preced-



ing disc in the direction of the outlet, a cylindrical collar connected to certain of said discs adjacent the hole therein extending into the hole of a succeeding disc and defining with the wall of said hole of said succeeding disc an annular passage connecting said series of pressure chambers with the outlet of said apparatus and means for supplying a gas under pressure to said pressure chambers.

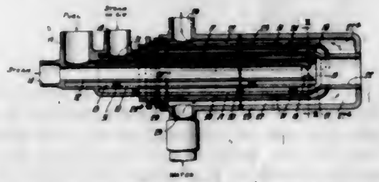
2,732,256
DEVICE FOR SPRAYING INSECTICIDES AND WEED KILLERS
Clare E. West, Minneapolis, and Arthur C. Cragg, St. Paul, Minn., assignors to Donaldson Company, Inc., St. Paul, Minn., a corporation of Delaware
Application January 17, 1955, Serial No. 482,185
4 Claims. (Cl. 299—98)



1. In a portable hand-operated liquid container and sprayer, an elongated normally vertically disposed tubular outer casing that is closed at its bottom and is adapted to store liquid to a predetermined maximum level spaced below the top thereof, a piston pump in the bottom portion of the tubular outer casing below the normal maximum fluid level therein, said pump comprising a pressure cylinder carried by and extending upwardly from the closed bottom of the tubular outer casing, a reciprocating piston mounted in said pressure cylinder, a piston rod extending from the pressure piston and working through one end of the pressure cylinder and the corresponding end of the outer casing, a spring yieldably urging the pressure piston and plunger in the direction of piston rod extension, the pressure cylinder being provided with check valve equipped inlet and outlet passages located adjacent the bottom interior portion of the outer casing, the said check valve equipped inlet passage being in liquid receiving communication with the liquid containing lower portion of the tubular outer casing, and a flexible delivery conduit extending from the check valve equipped outlet passage of the pressure pump upwardly through and to a level above the maximum liquid level in the outer casing

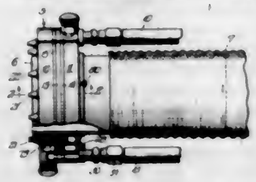
and from thence outwardly through the side of the latter, and a spray nozzle on the outer end of the flexible conduit.

2,732,257
LIQUID-FUEL BURNER FOR FURNACES OR THE LIKE
Howard S. Cress, Duluth, Minn., assignor to United States Steel Corporation, a corporation of New Jersey
Application May 11, 1951, Serial No. 225,770
1 Claim. (Cl. 299—140)



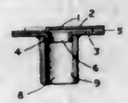
A burner comprising a central tube having one end adapted to be connected to a source of gas, said tube having a substantially hemispherical concave mouth at the other end thereof and a frusto-conical restriction inwardly of said mouth and converging toward the latter, a second tube surrounding said central tube, coaxial therewith, spaced radially therefrom, having one end adapted to be connected to a source of fuel and having the other end substantially coterminous with said other end of said central tube, said other end of said second tube being beveled externally, and a third tube surrounding said second tube, coaxial therewith, spaced radially therefrom, having one end adapted to be connected to a source of gas and having a frusto-conical constricting portion at the other end adjacent the beveled end of said second tube, said third tube having a cylindrical nozzle projecting forwardly from the minimum diameter of said frusto-conical constricting portion, whereby said second tube discharges a tubular cylindrical fuel jet and said central and said third tubes discharge diverging and converging gas jets, respectively, intermingling with said fuel jet in said nozzle.

2,732,258
MULTI-CHAMBER SPRAY GUN
Emery J. Fisher, Chicago, Ill.
Application April 10, 1953, Serial No. 348,008
5 Claims. (Cl. 299—140)



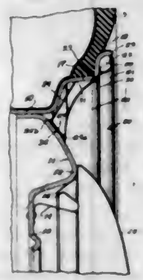
1. A spray head for spraying a plurality of materials from a plurality of sets of nozzles, comprising, a rear base section having at least two concentric annular chambers in the front face thereof, inlet ports in said rear section communicating with said chambers, a front cover section having concentric annular chambers in the rear face thereof and each of which registers with one of said chambers in said rear base section, inlet ports in said cover section communicating with said chambers therein, a separator disposed between said base and cover sections so as to close off and separate said chambers in said base section from those in said cover section, and means securing said rear base section, cover section and separator together in fluid-tight relationship, said cover section having a plurality of sets of discharge nozzle openings arranged around the front face thereof with the openings in each set communicating with one of said annular chambers therein, and said separator providing a plurality of sets of communicating passageways communicating between said registering annular chambers in said cover and base sections and each of said communicating passageways being coaxially aligned with one of said nozzle openings.

2,732,259
DISTRIBUTION NOZZLE
Joseph H. Sebald, Arlington, N. J.
Application October 13, 1953, Serial No. 385,873
6 Claims. (Cl. 299—141)



1. A distribution nozzle comprising a pair of flat discs lying in flat face engagement with each other, one of said discs provided with an opening therethrough at its axis, the other of said discs having a portion thereof offset laterally from its axis to its perimeter to form a fluid passage forming space between the discs communicating with the axial opening in the other disc and opening out at the perimeter of the discs, a nipple attached to and extending laterally from said disc and provided with the axial opening and communicating with the axial opening in said disc, and means attaching said discs in flat engagement one to the other.

2,732,260
WHEEL COVER
George Albert Lyon, Detroit, Mich.
Application May 6, 1952, Serial No. 286,229
3 Claims. (Cl. 301—37)

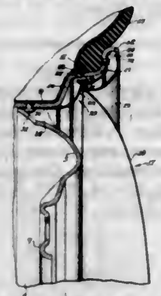


1. In a wheel structure including a wheel having a multi-flanged tire rim and a body part, an annular trim ring comprising concentric radially inner and outer portions of curved cross section having at their junction a tire rim contacting portion for maintaining both the inner and the outer ring portions out of contact with the rim and for centering the ring on the wheel, said inner portion terminating in overlying close proximity to but spaced from the wheel body part and having its inner margin turned inwardly back on itself, the turned back portion being formed into rim engaging means for retaining the ring on the wheel.

2,732,261
WHEEL COVER
George Albert Lyon, Detroit, Mich.
Application September 11, 1952, Serial No. 308,971
9 Claims. (Cl. 301—37)

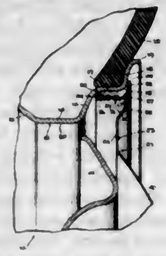
1. In a wheel structure including a wheel body and a tire rim, the tire rim having retaining clips extending generally radially and having opposite leg portions, means for attaching said opposite leg portions fixedly

to the tire rim, each of the clips having an intermediate cover-retaining recessed loop portion, and a cover for



the outer side of the wheel having a retaining portion engaging in snap-on, pry-off relation with said recessed retaining loop portions of the clips.

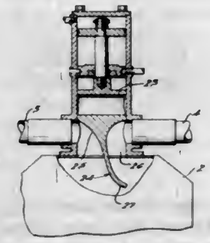
2,732,262
ORNAMENTAL WHEEL ASSEMBLY
Herbert Buerger, Walton, N. Y.
Application September 15, 1953, Serial No. 380,190
3 Claims. (Cl. 301—37)



1. An ornamental assembly adapted to be mounted on a vehicle wheel, said assembly comprising an annular mounting ring, an ornamental cover plate secured to said mounting ring, and a plurality of resilient detent members each extending longitudinally in a direction substantially tangential to the mounting ring and being secured to the exterior surface thereof at a central portion of said detent member, the ends of the latter projecting oppositely and being spaced radially outwardly of said exterior surface of the mounting ring, said detent members each having at the opposite projecting ends thereof an integral bent portion forming a tooth extending in a direction approximately radially outwardly, said integral portions being bent along lines at an acute angle with respect to the longitudinal axis of the detent member, the two bending lines at the opposite projecting ends of each detent member converging in an axially outward direction.

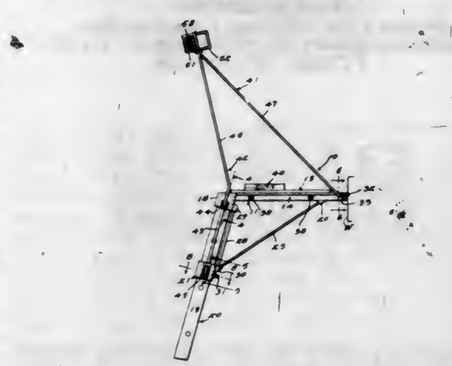
2,732,263
DIVERTER VALVES FOR PNEUMATIC CONVEYING SYSTEMS
Albert O. Riordan, Saginaw, Mich., assignor to Baker Perkins Inc., Saginaw, Mich., a corporation of New York
Application September 30, 1952, Serial No. 312,256
5 Claims. (Cl. 302—28)

1. In a pneumatic conveying system, the combination of a pneumatic conveying conduit, a receptacle having enclosing walls one of which is provided with an inlet opening, a diverter valve having a housing forming a cylindrical chamber open at one end, said housing being mounted with the open end of the housing connected to the wall opening, said housing having a pair of radial ports spaced axially from the open end of the housing and connected respectively to adjacent ends of the conveying conduit, and an axially movable valve element in said housing chamber having a passageway formed therein which connects said radial ports when the valve element is in one position, said element having a deflecting portion projecting through said open end of the housing and into the receptacle for engaging pneumatically conveyed material which enters one of said radial ports when



the valve element is moved axially away from said open end of the chamber into another position and deflecting said material into the receptacle, said deflecting portion defining at its side opposite to that engaged by the conveyed material a passageway connecting the open end of the valve chamber to the other radial port through which air may discharge from the receptacle.

2,732,264
LADDER STAGE
Archie T. Smith, Framingham, and Wallace L. Smith, Hopkinton, Mass.
Application March 20, 1953, Serial No. 343,633
5 Claims. (Cl. 304—10)



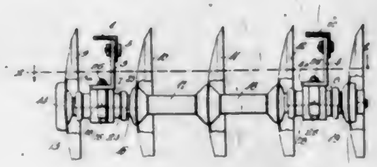
1. A ladder stage comprising a pair of ladder brackets each including an arm having an inner end provided with a downwardly opening socket and an outer end forming a foot member, said sockets of the ladder brackets being adapted to receive the upper ends of the stiles or side rails of a ladder for supporting the arms thereon, said foot members being adapted to bear against an upright member, each of said ladder brackets including a stile engaging sleeve member adapted to be disposed on the ladder stile below the socket of said bracket, a first brace member having an upper end secured to the socket and a lower end thereof secured to said ladder stile engaging sleeve, a second diagonal brace member having an upper end secured to the arm adjacent the foot member thereof and a lower end secured to said ladder stile engaging member, a platform resting on and supported by said arms, and means adjustably and detachably securing the platform to each of said arms for varying the spacing between said brackets to accommodate the ladder jack to ladder stiles spaced different distances apart, said platform and means constituting the sole connection between the ladder brackets.

2,732,265
ENDLESS BAND DEVICES
James A. Cuthbertson, Biggar, Scotland
Application March 13, 1953, Serial No. 342,249
Claims priority, application Great Britain March 7, 1949
12 Claims. (Cl. 305—10)



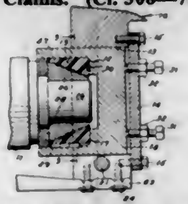
1. An endless band device comprising a series of flexible units each having two longitudinally spaced transversely extending rows of guide means and a flexible tension member extending in a transverse zig-zag path around the guide means from one row of guide means to the other to form a transverse series of substantially coplanar loops, the tension member being capable of deformation in the plane of the loops so as to be slidable around the guide means under uneven tension transversely of the device, and connection means interconnecting the guide means of adjacent units, whereby tension in the device is transmitted through said loops and an increase in tension in any one loop is distributed around the guide means to another loop.

2,732,266
BEARING CONSTRUCTION FOR ROTATABLE DISC HARROWS
Jackson Perry Robertson, Columbus, Miss.
Application January 16, 1953, Serial No. 331,677
8 Claims. (Cl. 308—19)



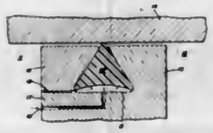
1. Supporting means for disc-type harrows, comprising a substantially cylindrical sleeve forming a spacer member for the discs of a disc gang assembly, said spacer member having a pair of centrally arranged relatively closely spaced flanges thereon and a pair of more widely spaced flanges, one of said last-mentioned flanges being arranged adjacent one end of said spacer member and the other of said last-mentioned flanges being disposed adjacent the other end of said spacer member, a housing comprising a pair of substantially semi-cylindrical upper and lower portions, said portions being alignable with respect to each other above and below said spacer member and having internal grooves therein aligned with the flanges on said spacer member, unitary means for suspending said substantially semi-cylindrical upper and lower portions of said housing and simultaneously maintaining the said portions in confined relation to said spacer member and means for introducing lubricant through the upper portion of said housing in a position intermediate the grooves therein, the lower portion of said housing serving as a catch basin for lubricant into which the centrally arranged flanges on said spacer member extend as the disc gang revolves, said more widely spaced flanges on said spacer member and the coacting grooves in the portions of said housing coacting to obstruct leakage of lubricant from said housing and to prevent entry of dirt thereto.

2,732,267
BEARING ASSEMBLY
Ancil C. Stover, Louisville, Ky., assignor to William W. Eisenhauer, William P. Ellwood, Ida J. Eisenhauer, and Leigh E. Eisenhauer, copartners, doing business as The Eisenhauer Manufacturing Company
Application October 14, 1953, Serial No. 386,036
4 Claims. (Cl. 308—70)



1. A bearing assembly particularly for relatively low speed oscillating loads comprising a retainer having a cylindrical recess, a trunnion extending into said recess in concentric relation thereto, said trunnion having a shoulder spaced inwardly from its outer end, a first bearing ring formed of a non-metallic plastic material characterized by the ability to withstand extremely high impact loads, low coefficient of friction and relatively low modulus of elasticity in comparison with steel, said recess having a transverse surface against which the outer end of said first bearing ring is seated, said first bearing ring having a radially inner frusto-conical bearing surface concentric with said recess and tapered outwardly toward the axis of said trunnion, a second bearing ring formed of metal encircling said trunnion, said second bearing ring having its inner end seated against the shoulder on said trunnion, said second bearing ring being located concentrically within said first bearing ring and having a radially outer frusto-conical bearing surface tapered outwardly toward the axis of said trunnion to the same degree as the radially inner bearing surface of said first bearing ring and having full surface to surface contact therewith, and means operatively connected to one of said retainer and trunnion for relatively moving said retainer and trunnion toward each other to force the radial bearing surfaces of said rings together under substantial pressure to preload said bearing.

2,732,268
DELTA-RING HYDRAULIC PACKING
Robert E. Duval, United States Navy, assignor, by mesne assignments, to the United States of America
Application August 1, 1952, Serial No. 302,203
2 Claims. (Cl. 309—31)



2. A packing construction for pistons or the like having a surrounding cylindrical surface comprising, a piston having a main body portion and a removable portion, said main body portion having a first annular surface, said main body portion being cut away adjacent said first annular surface to form an annular groove having two walls converging to form in cross-section a base and one side of a triangular groove, said removable body portion being threadedly connected to said main body portion and having a second annular surface axially spaced from said first annular surface, the removable body portion being cut away adjacent said second annular surface to form a wall which is the second side of said triangular groove, the base of the triangular groove being remote from said annular surfaces and the space between said annular surfaces forming a narrow slit at the apex of the triangular groove, packing material lying in said triangular groove in contact with only the two side walls thereof and being substantially triangular in cross-section, the sides of the triangular packing material having surfaces complementary to the two side walls of the groove, the surfaces of the side walls of the groove engaging substantially the entire surfaces of the complementary sides of the packing material, the apex portion of the packing material projecting outwardly beyond said annular surfaces through said narrow slit to engage said surrounding cylindrical surface, said main body portion having a hollow passage extending into the base of said groove for the application of pressure to the innermost area of said packing material to maintain sealing engagement between the apex portion of the packing material and the surrounding cylindrical surface.

2,732,269
ARM AND LEG SUPPORT
Leo M. Astroff, Ste. Agathe des Monts, Quebec, Canada
Application April 30, 1954, Serial No. 426,813
2 Claims. (Cl. 311—11)



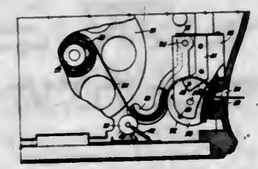
1. In a device for supporting a patient's arm or leg in surgical treatments having a single supporting leg and an arm or leg receiving tray mounted on one end thereof, an elongated flat base, the other end of said leg being pivotally attached to said base adjacent one end thereof for swinging movement in the longitudinal direction of the base, said base having a plurality of transversely extending grooves therein located between said leg and the other end of said base, and a brace having one end pivoted to said leg and its other end engageable with one of said grooves to lock the leg in fixed position with respect to said base.

2,732,270
TIE BAG
Thomas S. Bily, Winnipeg, Manitoba, Canada
Application January 12, 1953, Serial No. 330,789
1 Claim. (Cl. 312—3)



A bag for the storage and protection of ties and the like, comprising in combination an elongated, vertical, substantially rectangular container, flap means selectively closing the upper end thereof, and means extending through the upper end of said bag adapted to suspend the bag when in use, and also adapted to support the ties when in said container, said means taking the form of a hanger component, said component including a shank extending through the wall of said container, a countercurved horn on the inner end of said shank, a substantially vertical stem extending from the inner end of said horn, a cross-bar extending from the lower end of said stem, a further substantially vertical stem extending upwardly from the other end of said cross bar, a further horn extending from the upper end of said last mentioned stem, said last-mentioned horn being spaced apart from said shank whereby the associated tie may be placed on said cross-bar, said horns adapted to overlie the upper edge of said container when in the closed position, said cross-bar adapted to lie inside said container when in the closed position.

2,732,271
STAMP DISPENSER FOR INSURANCE POLICY VENDING AND VALIDATING MECHANISM
Theodore L. Hanson, Kansas City, Mo., assignor to Tele-Trip Policy Company, Inc., a corporation of Delaware
Application September 8, 1952, Serial No. 308,378
1 Claim. (Cl. 312—39)

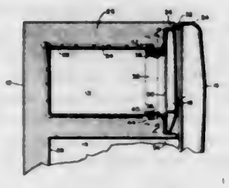


In a stamp vending machine, a drive shaft, a driven shaft extending parallel to said drive shaft, first arm means fixed at one end thereof to said drive shaft and extending toward said driven shaft, second arm means swingably mounted on said driven shaft and extending toward said drive shaft, a stamp feeding drum fixed on said driven shaft, means for rotating said drum including ratchet means mounted on said driven shaft and pawl means mounted on said second arm means and engageable with said ratchet means, means interconnecting said first and second arm means comprising a block rotatably mounted on the other end of said first arm means, said second arm means being formed with an elongated slot radially related to the axis of said driven shaft for receiving said block for longitudinal, non-rotatable movement therein and stop means positioned in the path of movement of said pawl means for limiting the movement of said pawl means and said second arm means in one direction, said stop means including means for directing said pawl means into engagement with said ratchet means.

2,732,272
REFRIGERATING APPARATUS
Leonard J. Mann, Dayton, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application July 23, 1952, Serial No. 300,438
3 Claims. (Cl. 312—214)

1. In a refrigerator, an outer shell having an opening at its front side, an outer door for closing said opening, an inner liner forming a food storage compartment, said inner liner having a flange adjacent its front edge spaced inwardly from said front opening and arranged perpendicular to the side walls of said inner liner, insulation

between said outer shell and said inner liner, breaker strip means between said outer shell and said inner liner, said breaker strip means comprising a one-piece molded element having an offset intermediate portion forming an inner door jamb and door seat, a flange provided on said



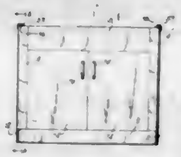
breaker strip means abutting said first named flange, clamp means straddling said flanges, said clamp means and said molded element having interlocking portions for holding said clamp means in clamping engagement with said flanges, and an inner door cooperating with said door seat to close said food storage compartment.

2,732,273

SECTIONAL KNOCK DOWN METAL KITCHEN CABINET

Theodore Schaffner, New York, N. Y., assignor to Mareth Steel Corp., New York, N. Y., a corporation of New York

Application July 31, 1953, Serial No. 371,434
4 Claims. (Cl. 312—257)



1. A knockdown sheet metal cabinet comprising separable rectangular panel sections including a front section, a bottom section and two opposed side sections, said front section including top and bottom panels and connecting upright corner posts, all of said panels having flanged edges extending normal to the plane of the panels, the flanged edges of said front and bottom sections terminating in marginal portions parallel to the planes of said sections, three of the four flanged edges of each side section terminating in marginal portions parallel to the planes of said side sections, means for detachably connecting the flanged edges of said side sections and said corner posts, and separate means for interlocking the top and bottom ends of said posts and side sections, said means including hooks carried at the bottom ends of the bottom panel of the front section for interlocking with the bottom ends of said side sections.

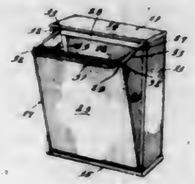
2,732,274

CLOTHES HAMPER

Truman W. Cottom, Geneva, Ill., assignor, by mesne assignments, to Melvin E. Hall

Application December 22, 1952, Serial No. 327,336
2 Claims. (Cl. 312—280)

1. A clothes hamper comprising an outer enclosure completely open at the front and provided with a base, side walls and a fixed top providing a rigid support for articles to be placed thereon, a removable clothes bin conformably received in said enclosure and pivotally mounted at its lower, front edge upon the adjacent front edge of the base of the enclosure, said clothes bin having a base, spaced side, front and rear walls with the upper end of the bin open and its upper edge defining said opening being inclined downwardly and rearwardly to permit the upper end of the clothes bin to be opened and closed as this clothes bin is pivoted about its lower forward edge upon the upper, outer edge of the base of the enclosure, and a pivotally mounted handle member of substantially U-shape having the ends of its spaced sides anchored to the interior of the opposite side walls of the clothes bin adjacent the upper end of said side walls, the sides of said handle member when in lowered position and the



clothes bin is moved to closed position in the enclosure projecting over and outwardly from the upper forward edge of the clothes bin and between this edge and the top of the enclosure to provide a handle and towel rack spaced forwardly of and along the front of said clothes bin, said handle when pulled forward pivoting the clothes bin about its lower front edge to open position and when the clothes bin is open and the handle is lifted and pivoted to its elevated, substantially upright position, further lifting of the handle bodily lifts and removes the clothes bin from the enclosure and permits the clothes bin to be carried about suspended and balanced from the handle.

2,732,275

MAGNETIC RECORDING HEAD

John H. MacNeill, Melbourne, Fla., assignor to the United States of America as represented by the Secretary of the Air Force

Application December 28, 1954, Serial No. 478,214
7 Claims. (Cl. 346—74)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A multichannel magnetic recording head comprising a main body having a pair of parallel aligning pins supported thereby; a plurality of identical individual recording heads each having a magnetic core with a recording air gap, a core supporting means attached to said core and having a pair of openings adapted to accurately fit said aligning pins, said openings being centered with respect to an axis passing through said gap, and a coil surrounding said core on one side of said axis and separated from said axis by an amount greater than the maximum extension of said core on the other side of said axis; said individual heads being stacked over said aligning pins with the coils of adjacent heads on opposite sides of said axis.

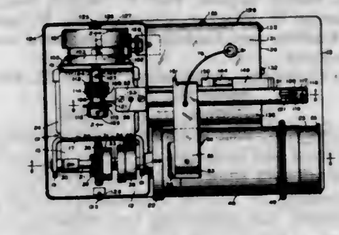
2,732,276

FACSIMILE TRANSMISSION SYSTEMS AND APPARATUS

Garvice H. Ridings, Summit, N. J., John H. Hackenberg, Flushing, N. Y., Raleigh J. Wise, Arlington, N. J., George B. Worthen, New York, N. Y., and Douglas M. Zabriskie, Northvale, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a corporation of New York

Application June 16, 1948, Serial No. 33,354
19 Claims. (Cl. 346—139)

1. In a facsimile machine having a rotary drum, the combination of a stationary tube arranged parallel with said drums, a carriage slidably mounted on said tube and carrying means to scan a sheet on the drum, driving mechanism including a line arranged within said tube and attached at its free end to said carriage, the other end of the line being connected to said mechanism, and means whereby a pull on the line in one direction by said mech-



anism causes the line to feed the carriage along said tube in the opposite direction.

CHEMICAL

2,732,277

MOTHPROOFING WITH SOLUBLE DICYANAMIDES

Bruce D. Gleissner, Old Greenwich, and Daniel E. Nagy, Stamford, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application September 12, 1951, Serial No. 246,344
10 Claims. (Cl. 8—94.14)

1. A process for mothproofing keratinaceous materials subject to attack by larvae of clothes moths, carpet beetles, and their allies, which comprises immersing such material in an aqueous solution of a dicyanamide salt, said water soluble salt having the formula: $Me[N(CN)_2]_x$, where Me is a radical selected from the group consisting of ammonium, an alkali metal, and an alkaline earth metal and x is an integer corresponding to the valence of Me as defined, withdrawing said material from the solution and hot draft drying the same.

2,732,278

TANNING WITH TETRAKIS-(HYDROXYMETHYL) PHOSPHONIUM CHLORIDE

Edward M. Filachione, Philadelphia, Pa., assignor to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application March 22, 1955, Serial No. 496,086
3 Claims. (Cl. 8—94.33)
(Granted under Title 35, U. S. Code (1952), sec. 266)

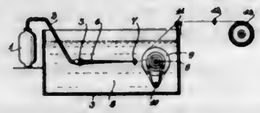
1. A process for tanning hides comprising treating the hides with tetrakis-(hydroxymethyl) phosphonium chloride at a pH of about 2 to 12.

2,732,279

PROCESS FOR MANUFACTURING OF ARTIFICIAL FIBER BY VISCOSE METHOD

Shozo Tachikawa, Kyoto, Japan

Application December 29, 1951, Serial No. 264,137
2 Claims. (Cl. 18—54)



1. The process of manufacturing artificial fiber by the viscose method comprising spinning into a bath having an acid concentration lower than 30 grams per liter and a salt concentration of lower than 50 grams per liter and a temperature below 30° centigrade, a viscose composed of a cellulose xanthate dissolved in water to a concentration which varies inversely with the degree of polymerization from at least 6% for a degree of polymerization of 350 to at least 1.5% for a degree of polymerization above 750 and an alkali concentration not exceeding 2.5 mols per mol of cellulose, and positively drawing the filaments while immersed within the bath at a controlled speed which increases progressively and continuously with the progress of regeneration of the filaments until the regeneration is complete.

2,732,280

DISPROPORTIONATION OF CHLOROSILANES EMPLOYING CYANAMIDE CATALYSTS

Donald L. Bailey, Snyder, and George H. Wagner, Clarence, N. Y., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application March 25, 1953, Serial No. 344,681
19 Claims. (Cl. 23—14)

1. A process of disproportionating a chlorosilane containing at least one hydrogen atom bonded to silicon which comprises treating said silane with an aliphatic hydrocarbyl cyanamide catalyst and recovering two different silane compounds, one of which contains more chlorine atoms and fewer hydrogen atoms attached to silicon than the starting chlorosilane, and the other contains more hydrogen atoms and fewer chlorine atoms attached to silicon than the starting chlorosilane.

2,732,281

DISPROPORTIONATION OF CHLOROSILANES EMPLOYING METALLIC-HALIDE-TREATED CYANAMIDES AS CATALYSTS

Donald L. Bailey, Snyder, and George H. Wagner, Clarence, N. Y., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application March 25, 1953, Serial No. 344,682
21 Claims. (Cl. 23—14)

1. A process of disproportionating a chlorosilane containing at least one hydrogen atom bonded to silicon which comprises treating said silane with a catalyst comprising an aliphatic hydrocarbyl cyanamide treated with a Friedel-Crafts catalyst and recovering two different silane compounds, one of which contains more hydrogen atoms and fewer chlorine atoms attached to silicon than the starting chlorosilane, and the other of which contains more chlorine atoms and fewer hydrogen atoms attached to silicon than the starting chlorosilane.

2,732,282

DISPROPORTIONATION OF CHLOROSILANES EMPLOYING NITRILE CATALYSTS

Donald L. Bailey, Snyder, Paul W. Shafer, Niagara Falls, and George H. Wagner, Clarence, N. Y., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application March 25, 1953, Serial No. 344,684
21 Claims. (Cl. 23—14)

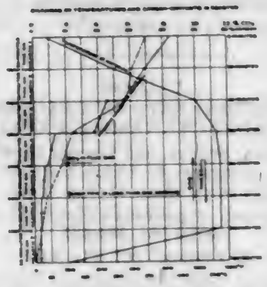
1. A process of disproportionating a chlorosilane containing at least one hydrogen to silicon bond which comprises treating said silane with a catalyst taken from the group consisting of acyclic hydrocarbyl nitriles and hydrogen cyanide and recovering two different silane compounds, one of which contains more hydrogen atoms and fewer chlorine atoms attached to silicon than the starting chlorosilane, and the other contains more chlorine atoms and fewer hydrogen atoms attached to silicon than the starting chlorosilane.

2,732,283

PROCESS OF RECOVERING CRYOLITE, ALUMINA, AND OTHER BATH VALUES

Wayne H. Clukey, Tacoma, Wash., assignor to Kaiser Aluminum & Chemical Corporation, Oakland, Calif., a corporation of Delaware

Application February 24, 1953, Serial No. 338,235
34 Claims. (Cl. 23—88)



1. A method of recovering cryolite, alumina, and other bath values which have become contaminated with carbon during aluminum reduction cell operation which comprises the steps of preheating the contaminated values in particulate form at a temperature below the fusion point of sodium hydroxide and in contact with carbon dioxide gas for a time sufficient to convert substantially all the contained sodium hydroxide to sodium carbonate, and subsequently heating the contaminated values at a temperature sufficient to cause oxidation and removal of substantially all of the carbon.

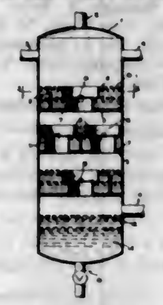
2,732,284

PROCESS AND APPARATUS FOR THE CATALYTIC DECOMPOSITION OF ALKALI METAL AMALGAMS

Walter J. Sakowski, Youngstown, N. Y., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia

Application June 29, 1954, Serial No. 440,111
3 Claims. (Cl. 23—184)

1. In a vertical flow process for decomposing dilute alkali metal amalgams with an amalgam-decomposing fluid in the presence of a graphite catalyst the improvement which comprises flowing dilute alkali metal amalgam and amalgam-decomposing fluid concurrently downwardly through an amalgam-decomposing zone, maintaining in said zone a plurality of horizontal amalgam-decomposing fluid interfaces each of said interfaces being formed by a layer of amalgam and a supernatant layer of decomposing fluid, said interfaces being separated from each other and disposed one above the other in said zone, maintaining graphite catalyst in contact with each interface, maintaining open passage zones in each interface in said decomposition zone to allow flow of amalgam and decomposing fluid downwardly in said zone and flow of hydrogen produced by the decomposition of amalgam upwardly in said zone, removing mercury from the lower portion of said zone, and drawing off decomposing fluid from the lower portion of said zone.

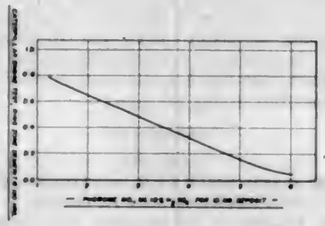


2,732,285

METHOD FOR DETERMINING THE DEPOSIT-FORMING TENDENCIES OF OILS

Charles S. Lynch, Plainfield, and Elmer B. Cyphers, Cranford, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application December 23, 1952, Serial No. 327,516
9 Claims. (Cl. 23—230)



7. A method for testing the internal combustion engine deposit forming tendencies of mineral lubricants which comprises the steps of determining standard test conditions in which a mixture comprising a major amount of a mineral lubricant, and in the range of about 0.5 to 25% by weight, based on the lubricant, of an alpha, beta unsaturated ketone, and sulfuric acid are agitated together at a temperature in the range of about 200 to 450° F., in the presence of a deposit accumulator, forming a high molecular weight synthetic sludge, at least a portion of which tenaciously adheres to the surface of said accumulator, and determining the amount of said tenaciously adhering deposits on said accumulator, and then determining the comparative amount of said surface deposits formed when treating another lubricant under said standard test conditions.

2,732,286

METHOD OF MAKING PRINTED IMAGES

Georg Pröpstl, Zell am Neckar, Wurttemberg, Germany, assignor to Robert Bosch G. m. b. H., Stuttgart, Germany

Application September 30, 1953, Serial No. 383,217
8 Claims. (Cl. 41—41)

1. A recording method comprising the steps of providing a base member having deposited thereon a coherent layer consisting of highly-dispersed metallic particles and having a thickness of from 0.005 to 2μ, applying to selected areas of said layer conforming to the outline of a record to be produced a pressure to affect the rate of reaction of the layer metal with a disintegrating agent, to thereby form a latent image of said record, and subjecting said layer to a disintegrating agent during a predetermined time period, to cause a differential disintegration at the activated and non-activated areas, respectively, of the layer metal, whereby to convert said latent image into a visible image upon said member.

2,732,287

METHOD OF MAKING COPIES AND REPRODUCTIONS

Georg Pröpstl, Wurttemberg, Germany, assignor to Robert Bosch G. m. b. H., Stuttgart, Germany

Application September 30, 1953, Serial No. 383,235
9 Claims. (Cl. 41—41)

1. A recording method comprising the steps of providing a base member having deposited thereon a coherent layer consisting of highly dispered metallic particles and having a thickness of from 0.005 to 2μ, applying to selected areas of said layer conforming to the outline of a record to be produced an activating substance suitable to affect the rate of reaction of the layer metal with a disintegrating agent, to thereby form a latent image of said record, and subjecting said layer to a disintegrating agent during a predetermined time period, to cause a differential disintegration at the activated and non-activated areas, respectively, of the layer metal, whereby to convert said latent image into a visible image upon said member.

2,732,288

MANUFACTURE OF METAL MESH SCREENS

Herbert Edward Holman, West Drayton, and Leslie James White, Hayes, England, assignors to Electric & Musical Industries Limited, Hayes, England, a British company

Application June 17, 1952, Serial No. 293,898
Claims priority, application Great Britain June 19, 1951
6 Claims. (Cl. 41—42)

1. A method of making a metal mesh screen from an unperforated metal member formed with ribs corresponding to the mesh to be formed and continuous with thinner areas bridging said ribs, which consists in effecting chemical decomposition of said ribs and thinner areas by subjecting said member to a decomposing action in a liquid for intervals during which the metal bridging said ribs is decomposed more rapidly than said ribs, discontinuing said decomposing action before the areas between said ribs are perforated and thereafter repeatedly subjecting said member to said decomposing action until the areas bridging said ribs are perforated to provide ribs of substantially the same thickness and apertures of substantially the same size.

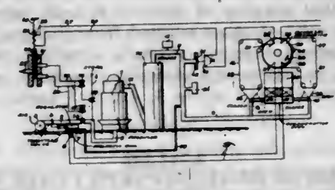
2,732,289

CONTROL APPARATUS FOR GAS PRODUCERS COMBINED WITH REGENERATIVE OVENS

Eberhard Goeke, Witten, Germany, assignor, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware

Application June 16, 1951, Serial No. 231,966
11 Claims. (Cl. 48—76)

1. Gas flow control apparatus for a gas producer combined with regenerative ovens by a gas line leading from the gas producer to the regenerators of the oven to underfire the ovens with lean gas from the producer, comprising: a throttle valve in conduit means to the producer for controlling the flow of gas making gaseous medium into the producer; pressure responsive regulating apparatus responsive to gas pressure in the line leading from the gas producer to the regenerative oven, for regulating the throttle valve by and in accordance with the gas pressure in said gas line; separate throttle means located beyond said throttle valve in said conduit means to the producer, for controlling the flow of gas making gaseous medium into the producer separately from and independently of said throttle valve; actuating means for said throttle means and regulating means associated with said actuating means, for operating the same to actuate said throttle means independently of said throttle valve and its actuating apparatus as well as independently of the pressure of gas passing from the producer to the regenerators of the oven; two sets of gas cocks for controlling the flow of lean gas from the gas line into the regenerators of a said regenerative oven; reversal apparatus for operating the two sets of gas cocks to first close one set and then later open the other set after a time pause in



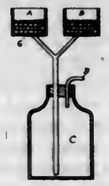
timed sequence and in alternation; means operatively connecting said regulating means for the actuating means for said separate throttle means with said reversal apparatus for operation in synchronism therewith to operate the actuating mechanism to actuate said separate throttle means to close said conduit means to flow of gas making medium at least as soon as the reversal apparatus operates to first close one set of said lean gas cocks, and to open the conduit means to flow of gas making gaseous medium to the producer after the time pause but at least as soon as the reversal apparatus operates to open the other set of said lean gas cocks; and actuating means including regulating means associated with the reversal apparatus, to open said throttle valve, irrespective of the pressure responsive regulating apparatus on said throttle valve, just before the reversal mechanism operates to open the other set of said lean gas cocks.

2,732,290

FUSED VITREOUS COMPOSITIONS AS NUTRIENTS FOR PLANT GROWTH

Charles A. Vana, Brecksville, and Guido E. Di Geronimo, Chagrin Falls, Ohio, assignors to Ferro Corporation, Cleveland, Ohio, a corporation

Application October 31, 1955, Serial No. 543,928
7 Claims. (Cl. 71—1)



1. A composition of matter compatible with and capable of supplying nutrients to growing plants, comprising a substantially amorphous fused synthetic vitreous mass comprising a matrix having chemically combined therewith at least one minor element necessary for proper plant growth, said vitreous mass made by fusion and fritting, consisting of 50 per cent to 98 per cent matrix and chemically combined therewith from 2 per cent to 50 per cent of at least one of the following minor elements iron,

manganese, copper, zinc, boron, cobalt and molybdenum, said entire vitreous mass comprising 26 per cent to 85 per cent SiO_2 and said vitreous mass having a minor element extraction value of 50 parts per million to 7500 parts per million when extracted by the ammonium acetate extraction test as herein disclosed.

2,732,291

LOW VOLATILITY HERBICIDAL COMPOSITIONS

William R. Davie, Pittsburgh, Pa., assignor to Pittsburgh Coke & Chemical Company, Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application November 26, 1952, Serial No. 322,828
14 Claims. (Cl. 71—2.6)

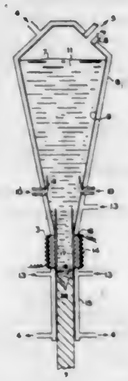
13. A herbicidal mixture of esters characterized by its low volatility, said mixture being the esters of (1) 2,4,5-trichlorophenoxyacetic acid and (2) a mixture containing a substantial quantity of each of at least three primary saturated octyl alcohols selected from the group consisting of trimethyl pentyl alcohols, dimethyl hexyl alcohols and methyl heptyl alcohols, in which said methyl groups are attached to the 3, 4 and 5 carbon atoms.

2,732,292

PROCESS OF HEATING PARTICULATE METAL

James Fernando Jordan, Huntington Park, Calif., assignor of one-third to the estate of James Jordan, deceased, and one-third to Abigail Jordan

Application September 22, 1952, Serial No. 310,911
8 Claims. (Cl. 75—10)



1. The process of heating a sub-divided metal selected from the group consisting of titanium and zirconium, which comprises: dispersing said metal within a molten salt bath that is essentially inert towards said metal, said molten salt bath containing a compound whose boiling point lies above the temperature to which said dispersed metal is to be heated within said molten salt bath, said temperature being in the range between above the melting point and below the boiling point of said molten salt bath; and heating said molten salt bath containing said dispersed metal to said temperature by contacting and retaining at least a portion of said molten salt bath with a layer of gas containing said compound in vapor phase, said layer of gas being formed by inductively-heating a carbon-bearing refractory body that is positioned beneath the upper surface and at the lateral side of said molten salt bath, said heating being conducted at a sufficiently fast rate to evaporate said compound out of said molten salt bath adjacent to said refractory body to form said layer of gas between said molten salt bath and said refractory body.

2,732,293

PROCESS FOR RECOVERING MANGANESE FROM BASIC OPEN-HEARTH SLAGS

Rene Perrin, Paris, France, assignor to Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine, Paris, France

No Drawing. Application June 9, 1953, Serial No. 360,581
8 Claims. (Cl. 75—24)

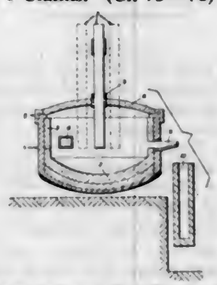
1. A process for recovering manganese from basic open-hearth slags containing iron and manganese oxides and also containing phosphorus and sulphur as impurities, which comprises converting the basic slag to an acid slag, subjecting the acid slag to partial reduction, regulating the amount of reduction to eliminate from the slag the greater part of the phosphorus and sulphur while retaining the greater part of the manganese in the slag in the form of oxide, separating the slag from the metal bath resulting from said partial reduction operation, and reusing the thus purified slag as a raw material for the recovery of manganese.

2,732,294

MANUFACTURE OF COPPER

Thomas Hewitt, Zamalek, Cairo, Egypt, and Herbert John Miller, Huyton, and Jesse Varley, Eccleston, England; said Miller assignor to British Insulated Callender's Cables Limited, London, England, a British company, and said Hewitt and said Varley assignors to British Copper Refiners Limited, London, England, a British company

Application September 17, 1951, Serial No. 246,908
Claims priority, application Great Britain September 28, 1950
8 Claims. (Cl. 75—76)



1. A single stage process for the production of phosphorus deoxidised copper which comprises the steps of introducing into a furnace, of the kind in which gases generated by the combustion of fuel do not make contact with the contents of the furnace, blister copper containing not more than 99.8% copper, not more than 0.03% sulphur, from 0.1% to 0.5% oxygen, not more than 0.03% iron and substantially no antimony, bismuth, lead, selenium or tellurium, melting said copper, controlling the conditions in the furnace to assist the removal of volatile impurities during said melting, continuing the heating of said molten copper under said controlled conditions until its composition is suitable for phosphorus deoxidation, adding sufficient phosphorus to said copper to completely deoxidise said copper and casting said copper into moulds.

2,732,295

METHOD OF MAKING MINERAL WOOL INSULATION

Frederick H. Hollenberg, Jr., Maple Heights, Ohio, assignor to Baldwin-Hill Company, Trenton, N. J., a corporation of New Jersey

No Drawing. Original application May 2, 1946, Serial No. 666,807. Divided and this application September 22, 1952, Serial No. 310,920
9 Claims. (Cl. 92—21)

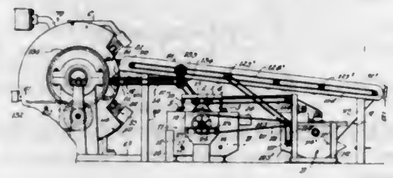
1. The process for producing mineral wool insulation in board form possessing a low density of between about 6 and 25 pounds per cubic foot, high strength, fire resistance and waterproofness which comprises mixing, with water, nodulized mineral wool, bentonite and a synthetic thermosetting condensation product selected from the group consisting of phenol-formaldehyde, resorcinol-formaldehyde, urea-formaldehyde and furfural-formaldehyde condensation products to provide a suspension in which the concentration of bentonite is between about 1% and about 18%, by weight, and of condensation product is between about 1½% and about 20%, by weight; continuously feeding said suspension to a continuously moving screen; drawing water from said suspension through said screen whereby the mineral wool fibres, with which bentonite and condensation product in intimate mixture with each other are associated, are felted into a thick sheet; drying and heating said sheet to convert the condensation product therein into the insoluble, infusible, state.

2,732,296

METHOD AND APPARATUS FOR FORMING A CONTINUOUS SHEET OR STRIP OF ASBESTOS-CEMENT COMPOSITION OR OTHER LIKE MATERIAL

Alvan Doswell Simpson, Plainfield, N. J., assignor to The Forming Machine Company of America, Inc., Bound Brook, N. J., a corporation of Delaware

Application July 28, 1952, Serial No. 301,184
7 Claims. (Cl. 92—39)



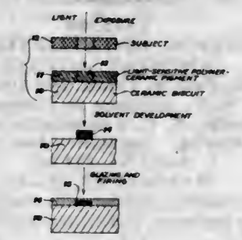
1. In apparatus for forming a continuous strip or sheet of asbestos-cement composition or other like material, the combination of a first forming machine including a tank containing a wet mix of such material, a hollow cylindrical drum rotatable in said tank and having a porous cylindrical wall a portion of the periphery of which is disposed below the mix level in the tank with the interior of the drum subject to atmospheric pressure, a perforated screen belt partially encircling said drum in contact with said portion of the periphery of the drum, and means for removing at least a portion of the water which passes from the wet mix into the interior of the drum through the belt and said porous wall, the pressure differential due to the static head of the wet mix at one side of said belt and atmospheric pressure at the other side of said belt being such as to produce a preliminary film of said material out of the wet mix on said belt without forcing said material into the interstices of the belt; a second forming machine including a tank containing a second wet mix of material, and having an opening therein to the atmosphere, a hollow cylindrical drum rotatable in said tank and having a porous cylindrical wall a portion of which is disposed below the mix level in the tank, said belt encircling and engaging said portion of the periphery of the drum and exposing another portion of said periphery of the drum through said opening, means for raising the pressure in the tank above the mix substantially above atmospheric pressure independently of the static head of the mix, and other means for removing at least a portion of the liquid which passes from the second wet mix into the interior of the drum, whereby an additional layer of material is deposited on said preliminary film from said second mix.

2,732,297

DECORATING CERAMIC OBJECTS

Louis M. Minsk and Werter P. Van Deusen, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application October 1, 1952, Serial No. 312,474
3 Claims. (Cl. 95—5.5)



1. A method for decorating ceramic ware which comprises coating a ceramic biscuit with a resinous coating containing a mixture of a ceramic pigment which will be colored after firing and a light-sensitive synthetic polymer having combined polymeric units of structure

$$R-CH=CH-CO-O-\underset{|}{CH}-CH_2-$$

wherein R represents a mononuclear aryl group of the benzene series, exposing the coating to an image to render only the exposed region insoluble in organic solvents in which the unexposed region is soluble, removing only the unexposed region of the coating with an organic solvent, and glazing and firing the biscuit.

2,732,298

METHOD OF PRODUCING A PHOTOGRAPH ON GLASS

Stanley Donald Stookey, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a corporation of New York

No Drawing. Application December 5, 1952, Serial No. 324,415
16 Claims. (Cl. 95—5.5)

1. The method of producing a permanent two-dimensional photographic image within the surface of a silicate glass containing an alkali metal oxide, which comprises forming on such surface a chemically fixed, photographic image comprising silver, and heating the glass together with the image in the presence of air containing up to 25% by volume of SO_2 at a temperature between about 125° C. below the strain point of the glass and just below its softening point for a time sufficient to oxidize and ionize the silver and to cause migration of silver ions into the glass.

2,732,299

LIGHT SENSITIVE, HEAT DEVELOPABLE RECORDING PAPERS

Montford Morrison, Rochester, N. Y.

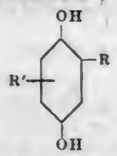
No Drawing. Application July 22, 1952, Serial No. 300,350
4 Claims. (Cl. 95—6)

1. The process of producing a light-sensitive heat-developable recording element, which comprises applying to a carrier a coating including a light-sensitive diazo compound and an azo coupling compound having a predetermined velocity of reaction with a solution of an ammoniate developer-compound selected from the group consisting of urea and the lower alkyl substituted ureas and said developer-compound having a solid state critical temperature thermal decomposition ammoniate reaction with said coating at temperatures substantially above solution temperatures, applying said selected compound in a solution state at a temperature substantially below said solid state critical temperature to said coating in a separate stratum, and solidifying the solute and

evaporating the solvent from said solution state within a time less than that required by said predetermined velocity of reaction to appreciably ammoniate said coating in the absence of a chemical reaction-inhibitor for the coupling reaction of said diazo compound and azo coupling compound.

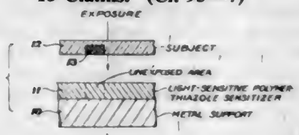
2,732,300
UNSYMMETRICAL DIALKYL HYDROQUINONE ANTISTAIN AGENTS
John R. Thirtle, Paul W. Vittum, and Arnold Weissberger, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
No Drawing. Application June 3, 1953, Serial No. 359,442
4 Claims. (Cl. 95—6)

1. A color-forming photographic emulsion having reduced fogging tendency, comprising a silver halide emulsion having incorporated therein a non-diffusing coupler compound capable of coupling with the oxidation product of a primary aromatic amino color developer to form a dye and as an antistain agent an unsymmetrical dialkyl hydroquinone having the formula

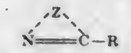


where R represents an alkyl group of from 2 to 18 carbon atoms and R' represents a methyl group, R' being attached to the hydroquinone nucleus in a position selected from the class consisting of 5 and 6 positions.

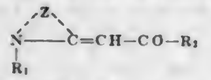
2,732,301
PHOTOSENSITIZATION OF POLYMERS CONTAINING CINNAMOYL GROUPS
Earl M. Robertson and William West, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application October 15, 1952, Serial No. 314,806
13 Claims. (Cl. 95—7)



1. A photomechanical resist composition comprising as a combined carrier and light-sensitive material an organic solvent soluble polymeric material selected from the class consisting of cinnamic acid esters of polyvinyl alcohol, cinnamic acid esters of cellulose, cinnamic acid esters of hydroxyalkyl-celluloses, benzal - ar - vinylacetophenone polymers, and cinnamalvinyl ketone polymers, and as a light-sensitizing agent for the polymeric material a member of the class consisting of (1) compounds having the general formula



wherein Z represents the non-metallic atoms necessary to complete a thiazole nucleus and R represents a member of the class consisting of hydrogen, aryl, alkyl and alkylidene groups, (2) compounds having the general formula



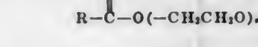
wherein Z represents the atoms necessary to complete thiazole and selenazole nuclei, R_1 represents an alkyl group and R_2 represents a member of the class consisting of hydrogen, alkyl and mononuclear aryl groups, and quaternary nitrogen salts of said compounds, and (3) cyanine dyes derived from thiazoles, benzothiazoles, benzoselenazoles, naphthathiazoles and benzoxazoles.

2,732,302
SILVER HALIDE EMULSION CONTAINING MOLECULAR COMPOUNDS OF MERCURY SALTS WITH AMIDINES
Edward B. Knott and John Morgan, Harrow, England, assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
No Drawing. Application November 8, 1952, Serial No. 319,600
11 Claims. (Cl. 95—7)

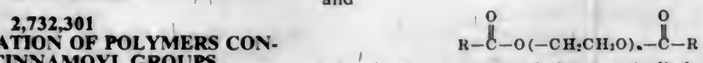
1. A light-sensitive silver halide emulsion containing a small amount of a molecular addition compound of a mercuric halide with an amidine hydrohalide.

2,732,303
ANTIFOGGING AND HARDENING AGENTS FOR PHOTOGRAPHIC EMULSIONS
John Morgan and Donald Arthur John Starkey, Harrow, England, assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
No Drawing. Application September 16, 1953, Serial No. 380,586
13 Claims. (Cl. 95—7)

1. A photographic silver halide emulsion containing at least one compound selected from the group consisting of those represented by the following two general formulas:

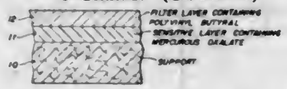


and



wherein R represents a halogenated alkyl group containing from 1 to 2 carbon atoms and *n* represents a positive integer.

2,732,304
STABILIZATION OF PHOTOTHERMOGRAPHIC PRINTS
Waldemar Vanselow and John A. Leermakers, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application October 15, 1953, Serial No. 386,359
3 Claims. (Cl. 95—7)

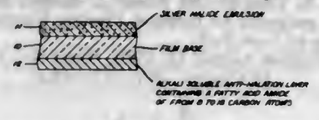


2. A stabilized heat developable photosensitive element comprising a support, a sensitive colloid layer thereon including as its primary photosensitive constituent a metal oxalate selected from the group consisting of silver oxalate and mercurous oxalate and a protective overcoating on the colloid containing a compound selected from the group consisting of polyvinyl butyral, polyvinyl alcohol, sugars, salicylaldehyde, piperonal acetophenone, benzoylacetone, diacetyl, and ethylene glycol monoethyl ether.

2,732,305
ANTI-HALATION LAYERS CONTAINING FATTY ACID AMIDES
Seymour Richman and Russell P. Easton, Binghamton, N. Y., assignors to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware
Application November 7, 1950, Serial No. 194,579
12 Claims. (Cl. 95—8)

1. A light sensitive photographic element comprising a support carrying a gelatino silver halide layer, said

element having an anti-halation backing layer comprising a resin soluble in alkaline photographic processing solu-



tions, and having dispersed in said backing layer, a fatty acid amide characterized by the following general formula:

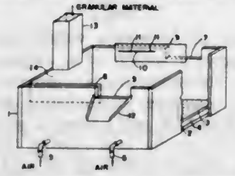
$$RCONH_2$$

wherein R represents an aliphatic hydrocarbon chain of from 7 to 17 carbon atoms.

2,732,306
MALT BEVERAGE
Arnold S. Wahl, Chicago, Ill.
No Drawing. Application June 17, 1954, Serial No. 437,579
13 Claims. (Cl. 99—48)

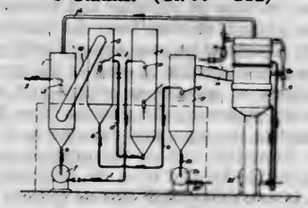
1. The method of treating a malt beverage comprising adding thereto a solution including an anti-oxidant selected from the group consisting of guaiaretic acid, nordihydroguaiaretic acid and homologues of nordihydroguaiaretic acid, a water soluble metabisulfite and a base that forms a salt of an anti-oxidant which is soluble in aqueous solutions.

2,732,307
METHOD OF CONTINUOUSLY BLENDING STREAMS OF POTATO GRANULES
George H. Neel, Albany, and Manley W. Cole, San Pablo, Calif., assignors to the United States of America as represented by the Secretary of Agriculture
Application February 26, 1953, Serial No. 339,192
6 Claims. (Cl. 99—207)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A method for continuously blending a plurality of streams of potato granules of different characteristics to form a uniform material and continuously separating the uniform material into a plurality of streams of predetermined proportions which comprises continuously introducing into a zone a first stream of potato granules having a particular moisture content, simultaneously and continuously introducing into said zone at least one other stream of potato granules having a moisture content different from the granules in the first stream, continuously maintaining the potato granules in said zone in the form of a bed in a fluidized state by continuously forcing minute streams of a gaseous medium upwardly through the bed of potato granules in said zone, the bed of potato granules thereby assuming the characteristics of a liquid in that it keeps a level surface and is capable of pouring, the granules of the separate streams being thereby intimately mixed to form a uniform blended product, and continuously removing said product in the form of at least two separate streams each of different volume by continuously exposing the bed of fluidized, blended granules while at constant level to apertures of predetermined cross-sectional area whereby to divide the blended granules into a plurality of streams, each stream having the same uniform moisture content but the volume of each stream being a function of the cross-section of the aperture through which it passes.

2,732,308
METHOD AND DEVICE FOR PASTEURIZING OR STERILIZING LIQUID OR SEMI-LIQUID PRODUCTS
Pierre Robert Laguilharre, Enghien-les-Bains, France
Application March 20, 1952, Serial No. 277,676
Claims priority, application France March 3, 1952
3 Claims. (Cl. 99—212)

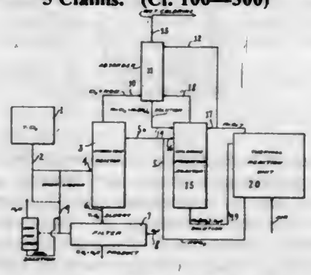


1. The method of producing a sterilized liquid food product in a continuous vacuum pasteurization process, which comprises introducing the liquid food stuff to a preheating zone at a temperature of the order of 15° C., advancing the liquid food stuff from the preheating zone to a closed pasteurizing zone in a finely divided state and there directly subjecting same to ordinary steam to heat the product to about 80° C., thereafter introducing the liquid food stuff in liquid state to a closed expansion zone also in finely divided state and cooling the liquid down by expansion to approximately 50° C. and creating vapors, conducting the vapors from said expansion zone to the preheating zone for preliminarily heating the liquid food stuff therein to a temperature of the order of 45° C., applying sub-atmospheric pressure to the preheating and expansion zones, maintaining said zones under sub-atmospheric pressure, and withdrawing the treated product from the expansion zone.

2,732,309
PROCESS FOR THE PRODUCTION OF COLD WATER DISPERSIBLE STARCH PRODUCTS AND THE PRODUCTS THEREOF
Ralph W. Kerr, Riverside, Ill., assignor to Corn Products Refining Company, New York, N. Y., a corporation of New Jersey
No Drawing. Application August 28, 1952, Serial No. 306,964
22 Claims. (Cl. 106—213)

15. Cold water dispersible, cold water soluble starch in dry form consisting essentially of a completely gelatinized lower alkyl starch ether with a degree of substitution within the range of about 0.02 to about 0.1 and degraded to a fluidity level within the range of about 40 to about 90.

2,732,310
PRODUCTION OF TITANIUM DIOXIDE
Ralph Miller, Pleasantville, N. Y., assignor to The Chemical Foundation, Incorporated, a New York membership corporation
Application May 6, 1952, Serial No. 286,384
5 Claims. (Cl. 106—300)



1. The process of producing rutile type, pure titanium dioxide from a titanium containing raw material which

comprises contacting said raw material with a carbonaceous reducing agent and chlorine at an elevated temperature to form titanium tetrachloride, recovering said titanium tetrachloride, purifying the titanium tetrachloride so that it is substantially free from deleterious impurities, reacting the purified titanium tetrachloride with nitric acid and water to form rutile type hydrated titanium dioxide and a gaseous mixture of chlorine and nitrosyl chloride, separating the gaseous mixture from the titanium dioxide, contacting the separated gaseous mixture with an aqueous slurry of manganese dioxide to convert the nitrosyl chloride to a solution of manganous nitrate and manganous chloride thereby separating the chlorine from the nitrosyl chloride, recycling the separated chlorine to the titanium tetrachloride formation step of the process, reacting the manganous chloride formed from the manganese dioxide with nitric acid and manganese dioxide to form additional gaseous chlorine and additional manganous nitrate, separating the gaseous chlorine from the manganous nitrate, thermally reacting the separated manganous nitrate with air and water to form manganese dioxide and nitric acid separating the manganese dioxide from the nitric acid and recycling the separated manganese dioxide to the slurry contacting step and the nitric acid to the titanium dioxide formation step.

5. A process in accordance with claim 1 in which the titanium dioxide formation reaction is carried out in the presence of a substantially inert pigment extender.

2,732,311

COATING PROCESS OF PRODUCING RADIATION-REFLECTIVE ROOFING GRANULES

George Hartwright, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a corporation of Illinois

No Drawing. Application January 15, 1952, Serial No. 266,591
7 Claims. (Cl. 117—27)

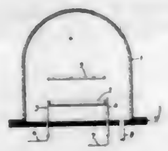
1. Process of producing roofing granules covered with thin radiation-reflecting metallic flakes which comprises coating mineral granules with a mixture of clay and an alkali silicate having an alkali-oxide to silica ratio at least as high as 1:2, partially drying the coating thus produced to render it tacky, then covering the coating with minute radiation-reflecting metallic flakes, and heating the thus covered granules to a temperature within the range of from about 500° F. to just below the melting point of the metallic flakes, whereby to bond them to the granules.

2,732,312

METHOD OF MAKING A COATED TRANSPARENT FLUORESCENT SCREEN

Andrew H. Young, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

Application August 25, 1951, Serial No. 243,687
4 Claims. (Cl. 117—33.5)



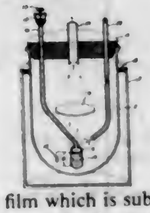
1. The method of making a fluorescent screen which consists in depositing a transparent film on a base support in a vacuum by condensing volatilized material selected from the class consisting of zinc, cadmium, zinc halide, cadmium halide, and mixtures thereof, and heating the resulting film to a temperature of approximately 500° C. and bringing hydrogen sulfide gas into contact therewith to convert the same to a sulfur compound.

2,732,313

CATHODE RAY LUMINESCENT SCREENS

Dominic A. Cusano and Frank J. Studer, Schenectady, N. Y., assignors to General Electric Company, a corporation of New York

Application August 23, 1951, Serial No. 243,271
10 Claims. (Cl. 117—33.5)



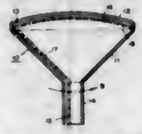
1. A luminescent film which is substantially immune to the accumulation of electric charges thereon comprising the combination of a transparent support, a transparent film of titanium dioxide on said support and an overlying transparent film thereon consisting of activated material comprising a metal selected from the class consisting of zinc, cadmium and mixtures thereof chemically combined with a non-metal selected from the class consisting of sulfur and selenium, the electrical resistance of said titanium dioxide film being as low as about 4000 ohms per square.

2,732,314

CATHODE-RAY TUBE COATING

Sam H. Kaplan, Chicago, Ill., assignor to The Rauland Corporation, a corporation of Illinois

Application May 27, 1953, Serial No. 357,677
8 Claims. (Cl. 117—33.5)



1. The method of forming a volatilizable organic film upon the luminescent screen of a cathode-ray envelope comprising the following steps: introducing a casting liquid into said envelope; maintaining said envelope in a first position in which said screen is substantially horizontal and is covered by said casting liquid; depositing on said casting liquid a filming solution, comprising a volatilizable organic material, which is substantially immiscible with and has a lower specific gravity than said casting liquid, the quantity of said filming solution exceeding that required to form a film upon said luminescent screen; rotating said envelope in a first direction, through a preselected angle sufficient to decant substantially all of said casting liquid from said envelope to form a layer of said filming solution upon the surface of said screen; thereafter rotating said envelope in a direction opposite said first direction to a second position in which said screen is approximately vertical; retaining said envelope in said second position for a predetermined period to drain any excess of said filming solution from said layer and reduce said layer to a relatively thin film; and subsequently drying said film.

2,732,315

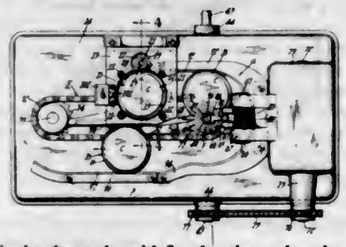
METHOD OF AND APPARATUS FOR TREATING PREDETERMINED AREAS OF DISC-LIKE ARTICLES

Stellan Birkland, San Francisco, Calif., assignor to American Can Company, New York, N. Y., a corporation of New Jersey

Application June 2, 1954, Serial No. 433,969
15 Claims. (Cl. 117—43)

1. A method of treating a predetermined area of a disc-like article, which method comprises advancing an article

in a predetermined arcuate path bodily around a fixed point at the center of curvature of said path, no radius of curvature of said path being greater than the diameter of said article, simultaneously rotating the advancing article on its own axis, said advancement along said predetermined path directing said predetermined area of the article



progressively through said fixed point, whereby the entire predetermined area of said advancing and rotating article is passed through said fixed point, and treating at said fixed point the predetermined area of said advancing and rotating article as said area progressively passes through said fixed point.

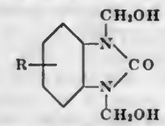
2,732,316

HARDENING OF GELATIN

George July, Edward Bowes Knott, and Felix Pollak, Wealdstone, Harrow, England, assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application December 3, 1952, Serial No. 323,924
7 Claims. (Cl. 117—62)

4. A method of hardening a gelatin layer which comprises immersing the layer in an aqueous solution of a compound having the structural formula



R being a substituent selected from the group consisting of hydrogen, lower alkyl chlorine, bromine and fluorine.

2,732,317

MODIFIED CELLULOSE AND METHOD OF MAKING SAME

James Emory Kirby, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application July 8, 1952, Serial No. 297,765
15 Claims. (Cl. 117—63)

1. Process which comprises impregnating cellulose with a solution of a polymerizable monomeric quaternary ammonium salt containing a vinylidene group, said solution further containing in solution an initiator for the addition polymerization thereof, polymerizing the impregnated monomer in situ in the cellulose, and extracting the cellulose impregnated with the polymer with a solvent for the latter until the polymer is removed from the surface.

2,732,318

PRESSURE-SENSITIVE TAPES OF ORGANOSILOXANE MATERIAL WITH TITANIUM RELEASE COATING

Joseph W. Kell, Midland, Mich., assignor to Dow Corning Corporation, Midland, Mich., a corporation of Michigan

Application October 7, 1954, Serial No. 460,845
3 Claims. (Cl. 117—68.5)

1. A pressure-sensitive tape comprising: (A) a flexible backing consisting essentially of an organopolysiloxane free of organic silicates, (B) on one side of said flexible backing, a coating of a silicone adhesive; and (C) on the side opposite the silicone adhesive, a dried coating of a titanium compound selected from the group consisting of titanium compounds having the general formula $Ti(OR)_4$



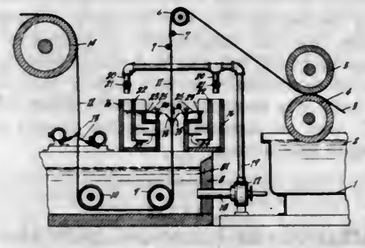
and aliphatic hydrocarbon soluble partial hydrolyzates thereof in which compounds R is selected from the group consisting of aliphatic hydrocarbon radicals of less than 13 carbon atoms, and hydroxylated aliphatic hydrocarbon radicals of less than 13 carbon atoms and containing less than 4 hydroxy radicals.

2,732,319

METHOD FOR COATING PAPER WITH THERMOPLASTIC MATERIAL AND COOLING

Daniel L. Cree, Parchment, Mich., assignor to Kalamazoo Vegetable Parchment Co., Parchment, Mich.

Application May 7, 1951, Serial No. 225,024
9 Claims. (Cl. 117—103)



1. The method of coating paper comprising the steps of applying a coating of melted thermoplastic coating material at a temperature between 180° and 250° F. to at least one side of a traveling web of paper, passing the traveling web with the coating thereon into a coating chilling water bath with the web traveling downwardly in a substantially vertical plane as it enters the water of the bath, the temperature of the water of the bath being of the order of 32° to 46° F., and impinging downwardly directed sheets of water of a temperature approximately that of the water bath upon the opposite sides of the web in advance of but adjacent the point of entrance of the web into the water, the sheets of water when impinging the web having a speed in the direction of travel of the web less than but at least approximately one-third the speed of travel of the web, the water so discharged upon the web remaining thereon in the form of films at the point of the web's entrance into the water of the chilling bath.

2,732,320

PROCESS OF PREPARING ORGANOPOLYSILOXANE COATINGS

Clement Joseph Guillissen, Uccle-Brussels, and Abraam Gancberg, Forest-Brussels, Belgium

No Drawing. Application February 7, 1955, Serial No. 486,711
Claims priority, application Belgium January 31, 1951
9 Claims. (Cl. 117—103)

2. A process of providing on a supporting surface a firm, smooth, non-tacky coating of a hydrocarbon-substituted polysiloxane which comprises mixing, at substantially room temperature, a resinous, polymerizable, hydrocarbon-substituted polysiloxane varnish, wherein the hydrocarbon substituent is selected from the group consisting of the phenyl radical and alkyl radicals having from 1 to 10 carbon atoms, with a polymerization catalyst consisting essentially of an alkyl orthotitanate to form a mixture of said catalyst and said varnish, and before exposing said mixture to substantially higher temperatures

applying a thin layer of said mixture to said supporting surface, and baking said layer of the polysiloxane and orthotitanate mixture on said supporting surface by subjecting said layer to a temperature below 150° C.

2,732,321

PLATING PROCESSES AND COMPOSITIONS

Charles B. Gill, Albert W. Schlechten, and Martin E. Straumanis, Rolla, Mo.

No Drawing. Application September 18, 1953, Serial No. 381,124

17 Claims. (Cl. 117—131)

1. A process for plating of metal onto a surface which can be heated to a temperature of at least 700° C. without destruction which comprises immersing the surface to be plated in a fused bath of inorganic, normally solid material of the group consisting of inorganic salts and inorganic bases which does not decompose when heated to temperatures between about 700° and 1000° C., introducing a plating material from the group consisting of titanium metal, zirconium metal, hafnium metal, uranium metal, alloys thereof and compounds thereof which pyrolytically decompose into said metals at a temperature not greater than the temperature of operation defined herein into said bath, bringing said plating material in the bath into close proximity to said surface, and maintaining said bath at a temperature between about 700° and 1000° C. until an appreciable coating of said metal is formed upon said surface.

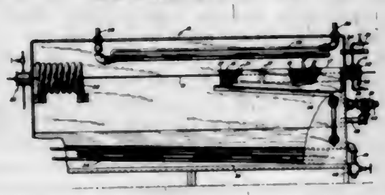
2,732,322

METHODS OF CLEANING ARTICLES

Guy E. Murray, Towson, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York

Application August 18, 1950, Serial No. 180,156

2 Claims. (Cl. 134—9)



2. The method of cleaning metallic filaments, which comprises advancing a filament along a predetermined path, simultaneously scouring and applying a liquid solvent to the filament, then advancing the filament through an atmosphere of vaporized solvent, condensing the solvent vapor onto the filament, precipitating solvent vapor above the filament so that drops of solvent fall onto and drench the advancing filament, and then heating the filament to dry it.

2,732,323

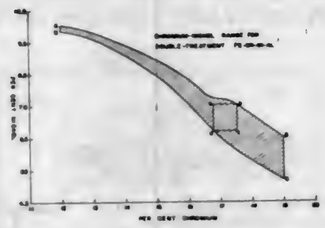
PROCESS OF WELDING AND HEAT TREATING STAINLESS STEEL

George Edwin Linnert, Baltimore, Md., assignor to Armco Steel Corporation, a corporation of Ohio

Application December 6, 1951, Serial No. 260,138

7 Claims. (Cl. 148—21.54)

1. In the fabrication of precipitation-hardened stainless steel articles of composition substantially in accordance with the area ABCD of the accompanying diagram and in which aluminum is the hardening alloy, the art which comprises, first heating the parts to be welded at a temperature of 1200° to 1600° F. and cooling; resistance spot-welding the parts; and thereupon heat-treating



the fabricated and welded assembly at a temperature of 700° to 1200° F. and cooling.

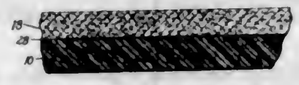
2,732,324

LAMINATION OF FIBROUS AND PLASTIC SHEET MATERIALS

Thomas C. Morris, Lexington, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey

Application April 18, 1952, Serial No. 282,988

1 Claim. (Cl. 154—103)



The method of preparing porous laminates which comprises assembling a microporous non-fibrous sheet of ester plasticized vinyl chloride polymer resin and porous fibrous sheets on opposite faces of said microporous sheet with thin, discontinuous, layers of thermoplastic resin particles between said resin sheet and fibrous sheets, said resin particles being of a similar composition as but having a lower softening point than the resin of said sheet, heating and pressing the assembly to a temperature at which the particles soften to unite the resin particles to the faces of said resin sheet and to cause the particles to adhere to the faces of said fibrous sheets, but below that temperature at which the porous resin sheet will be harmed, said heating and pressing operating to bond said sheets into a porous composite sheet, and thereafter splitting the composite sheet through the microporous resin sheet lamina so as to form two porous sheets each of which is a laminate of ester plasticized vinyl chloride polymer resin and a porous fibrous sheet.

2,732,325

MODIFIED DIAMINOTRIAZINE-ALDEHYDE RESINOUS COMPOSITIONS AND PRODUCTS COMPRISING THE SAME

Richard Lindenfelser, Darien, and Martha Katherine Kilthau, Stamford, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application June 18, 1953, Serial No. 362,677

17 Claims. (Cl. 154—121)

1. A resinous composition comprising a compatible blend of (1) an uncured resinous product of reaction of ingredients comprising (A) an aldehyde and (B) a 4,6-diaminotriazine wherein the amino groups attached to the carbon atoms in the 4- and 6-positions are unsubstituted and the carbon atom in the 2-position has attached thereto a radical selected from the class consisting of (*a*) acyclic aliphatic hydrocarbon radicals containing from 3 to 9 carbon atoms, inclusive, (*b*) cycloaliphatic hydrocarbon

radicals, (*c*) aralkyl radicals, (*d*) aryl radicals and (*e*) mono- and di-substituted amino radicals, the substituent or substituents attached to the nitrogen atom of the amino grouping of (*e*) being any of those defined in (*a*) to (*d*), inclusive, the aldehyde of (A) and the 4,6-diaminotriazine of (B) being employed in a molar ratio of about 1:1 to about 4:1 and the said ingredients of (A) and (B) being caused to react at a temperature of from about 60° to about 200° C. until a condensation product is formed, a 50% solution of which in ethyl alcohol is stable at 20°–25° C. for at least 5 hours, but the reaction not being allowed to proceed beyond the point where the condensation product has a plasticity of about 60 mils as determined by the Cyanamid test method, and (2) from about 10% to about 50%, based on the total weight of (1) and (2), of a polyvinyl plasticizer having a hydroxyl content of from about 3.5% to about 25% and selected from the class consisting of polyvinyl acetals and partially hydrolyzed polyvinyl acetates.

12. A process of producing a laminated product having a craze-resistant surface which comprises applying to a core a surface sheet coated with a resinous composition as in claim 1, and consolidating the assembly under heat and pressure.

15. A heat- and pressure-consolidated laminate having a hard, craze-resistant surface and which comprises a core having bonded thereto a surface sheet on which there is a coating of a cured resinous material, said material in uncured state being a resinous composition as in claim 1.

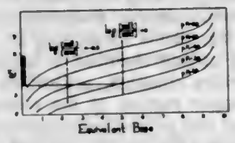
2,732,326

ANTIMICROBIC COMPOSITION OF PEPTONE BASE BUFFERED WITH GLUCONIC ACID

Benjamin P. Hecht, Dorchester, and Edwin J. Fredenburgh, Concord, Mass.

Application February 5, 1951, Serial No. 209,475

3 Claims. (Cl. 167—58)



1. A compound for topical application to the human skin for antimicrobic action, comprising a peptone base buffered with gluconic acid having initially a salt to acid ratio in which

$$\log\frac{\text{salt}}{\text{acid}} = -0.5$$

with the acid providing a pH of the composition within the range of 3 and 4.

2,732,327

ANTI-PERSPIRANT STICK

W Kedzie Teller, Riverside, Calif., assignor to Pharma-Craft Corporation, a corporation of Delaware

No Drawing. Application July 5, 1955, Serial No. 520,094

3 Claims. (Cl. 167—90)

1. A stable anti-perspirant stick having a base comprising a sodium stearate-aqueous alcohol gel and having dispersed therein within said base as an active anti-perspirant agent sodium zirconium lactate.

2,732,328

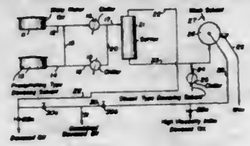
TWO-STAGE SOLVENT DEWAXING OF LUBRICATING OIL

Robert A. Macke, Baytown, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware

Application September 8, 1952, Serial No. 308,322

5 Claims. (Cl. 196—18)

1. A method for separating a waxy mineral oil into several components including the steps of adding to the waxy mineral oil a methyl ethyl ketone toluol mixture consisting of a major portion of methyl ethyl ketone such that a solvent rich phase containing low viscosity index oil and a solvent lean phase containing high viscosity index oil will form at a temperature at least approximately 40° F. higher than a selected dewaxing temperature, chilling the resultant solution to the selected dewaxing temperature to cause it to form a solvent rich phase containing low viscosity index oil, a solvent lean phase containing



high viscosity index oil and solidified wax, settling under quiescent conditions to separate the solvent rich phase from the remainder, recovering a first dewaxed oil phase from the solvent rich phase, adding a toluol-methyl ethyl ketone mixture consisting of a major portion of toluol to said remainder in an amount sufficient to wash substantially all of the oil from the solidified wax and subsequently separating in a second separation step a second dewaxed oil phase containing dewaxed oil of high viscosity index from a wax phase.

2,732,329

GASOLINE REFORMING PROCESS EMPLOYING A NICKEL SULPHATE ON ALUMINA CATALYST

Thomas F. Doumani, Los Angeles, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California

No Drawing. Application July 6, 1951, Serial No. 235,578

9 Claims. (Cl. 196—50)

1. A process for the catalytic reforming of gasoline boiling range hydrocarbons to improve the octane rating thereof which comprises contacting said hydrocarbons at a temperature between about 850° and 1000° F. with hydrogen and a catalyst, said catalyst consisting essentially of an intimate mixture of (1) between about 0.4% and 20% by weight of nickel, (2) between about 0.6% and 30% by weight of combined sulfate radicals, and (3) a major proportion of a predominantly alumina carrier, and continuing said contacting for a sufficient length of time to effect a substantial improvement in octane rating of said hydrocarbons.

2,732,330

CONVERSION OF HYDROCARBON OILS WITH THE USE OF FLUIDIZED SOLID PARTICLES

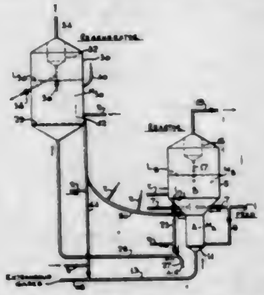
Robert W. Krebs and Charles N. Kimberlin, Jr., Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application October 31, 1950, Serial No. 193,062

6 Claims. (Cl. 196—52)

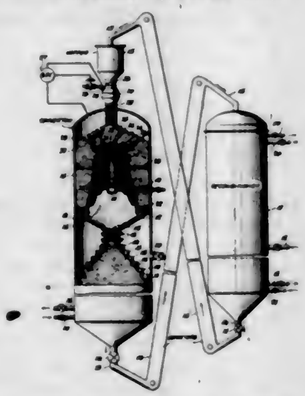
1. In the process of producing distillate fractions from heavy residual hydrocarbon oils by contacting heavy residual hydrocarbon oil at coking conditions with a dense turbulent mass of subdivided hot solids fluidized by an upwardly flowing gasiform medium, the improvement which comprises introducing an original gasiform medium, which is only a minor part of the total fluidizing medium required, into the bottom of the dense turbulent mass, supplementing said medium by producing a major proportion of said gasiform medium requirements by contacting a minor proportion of liquid heavy residual hydrocarbon oil for a relatively short time with a narrowly confined fluidized mass of said hot solids maintained at a relatively high coking temperature and fluidized at a

relatively high linear gas velocity, said minor proportion of liquid being introduced above the bottom of said mass and separately from the original gasiform medium so as to coke and gasify said minor proportion substantially completely within said short time, passing gases so produced into a laterally expanded second mass of hot solids superimposed on and in direct contact with said first named mass, the two masses constituting a single uninterrupted fluidized bed, so as to fluidize said second mass at a relatively low linear gas velocity, supplying a major proportion of the heavy residual hydrocarbon oil



directly to said second mass, contacting said major oil proportion with said second mass for a relatively long time sufficient for converting said major oil proportion into distillate oils and coke, recovering distillate oils overhead from the fluidized bed, passing coke-carrying solids from said bed to a combustion zone, burning coke off said coke-carrying solids in said combustion zone to reheat said solids to a temperature substantially higher than said relatively high coking temperature and returning at least a portion of the solids so reheated to said first named mass to supply said hot solids thereto.

2,732,331
LIQUID HYDROCARBON CONVERSION METHOD AND APPARATUS
Anthony J. Wesh, Woodbury, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York
Application August 2, 1951, Serial No. 239,890
9 Claims. (Cl. 196—52)



1. A process for the conversion of high boiling liquid hydrocarbons to lower boiling hydrocarbons in the presence of a substantially compact, moving column of granular contact material which comprises: maintaining a substantially compact moving column of granular contact material within the lower section of a confined conversion zone, maintaining a gas space in the upper section of said conversion zone above said contact material column, removing contact material from the lower section of said column, passing contact material into said gas space by means of a plurality of passages laterally confined by solid surfaces terminating at successively lower levels within said gas space, discharging contact material from each passage over the confining surface of the passage which terminates next below whereby said surface will be scrubbed free of any coke formed thereon, passing the contact material so discharged to said compact column spraying a high boiling liquid hydrocarbon charge into the portion of said gas space lying beneath the uppermost of said passages, passing said liquid charge through said column to effect its conversion to lower boiling hydrocarbons and removing said lower boiling hydrocarbons from the conversion zone.

2,732,332
COKING OF BITUMINOUS SUBSTANCES
Julius Geller, Bad Homburg, Germany, assignor to Rutgerswerke-Aktiengesellschaft, Frankfurt am Main, Germany
Application April 25, 1951, Serial No. 222,880
6 Claims. (Cl. 202—17)

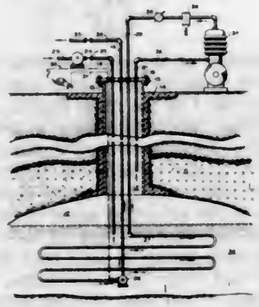


4. Apparatus for coking pitch from coal tar, lignite tar, and high boiling mineral oil residue, as well as similar meltable bituminous starting materials containing high-boiling volatile ingredients comprising an elongated vertically extending coking chamber, a heating jacket surrounding the coking chamber, a distilling column positioned on the upper portion of the coking chamber in vertical alignment and in direct communication therewith, a heating jacket surrounding the distilling column, means for introducing starting material into the upper portion of the distilling column, said column having an outlet in its upper portion for discharge of volatile material, means at the lower portion of the distilling column for dividing viscous material resulting from distillation of the starting material and dropping it into the upper portion of the coking chamber for free falling downwardly through the coking chamber, a calcining chamber positioned beneath the coking chamber in vertical alignment and in direct communication therewith for receiving coked particles from the coking chamber, means for feeding combustion supporting air into the lower portion of the calcining chamber, the upper portion of the calcining chamber being of larger area than the lower portion of the coking chamber to provide a discharge at the upper peripheral portion of the calcining chamber for products of combustion.

2,732,333
GRAPHITE CONTAINING METALLURGICAL COKE AND PROCESS FOR ITS MANUFACTURE
Andrew P. Smith, Homer City, Pa., assignor to Smith-Byrne Company, Inc., Graceton, Pa., a corporation of Pennsylvania
No Drawing. Application September 20, 1954, Serial No. 457,305
12 Claims. (Cl. 202—33)

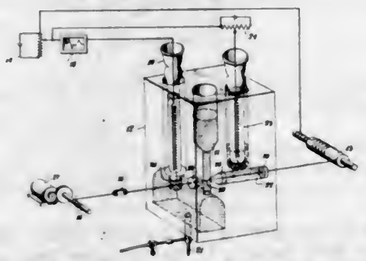
5. The process of manufacturing metallurgical coke which comprises pulverizing caking coal to pass through a ⅜ inch mesh screen, adding natural, amorphous graphite to the pulverized coal in the ratio of approximately 4–20 parts by weight graphite to approximately 100 parts coal, thoroughly blending the mixture of graphite and coal into a substantially homogeneous mass, then coking the mass in a beehive oven for 72–96 hours.

2,732,334
REMOVAL OF LIQUIDS FROM UNDERGROUND STORAGE FREE OF DISSOLVED IMPURITIES
Lyle W. Pollock, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application October 1, 1953, Serial No. 383,585
9 Claims. (Cl. 202—75)



3. The method of storing liquids which comprises forming a storage cavern in an earth formation which is somewhat soluble in the liquid being stored, passing liquid to be stored into the underground cavern, subsequently removing vapor of said liquid from a region above the surface of the liquid within the cavern, compressing said vapor, passing said compressed vapor in heat exchange relationship with the liquid in the cavern thereby to condense said compressed vapor, and removing the compressed vapor as a liquid from the cavern.

2,732,335
ELECTRODE SYSTEM FOR POLAROGRAPHIC ANALYSIS
John R. Glass, Glassboro, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York
Application October 6, 1952, Serial No. 313,301
5 Claims. (Cl. 204—1)



1. A method for making a polarographic determination, which comprises continuously drawing an electrically conducting wire at a constant rate through a prepolarizing zone and thereafter through a measuring cell containing an electrolytic test solution, applying a gradually increasing voltage to said wire as it passes through said prepolarizing zone, applying a substantially equal gradually increasing voltage to said wire as it passes through said measuring cell so that current conducted through the wire in the measuring cell due to causes other than electroreaction of material undergoing investigation in said test solution is practically negligible, continuously flowing said test solution through said measuring cell over a constant exposed surface of wire passing therethrough and recording the change in current of the wire in said measuring cell with change in applied voltage.

5. An electrode system adapted for polarographic analysis comprising an electrically conducting wire, a prepolarizing cell, a measuring cell, means for continuously drawing said wire at a constant rate successively through said prepolarizing cell and said measuring cell, means for applying voltage to said wire during passage thereof through said prepolarizing cell, means for applying voltage to said measuring cell and means for continuously flowing an electrolytic test solution through said measuring cell over a constant exposed surface area of said wire passing therethrough whereby current flowing through said wire in said measuring cell is attributable solely to electroreaction occurring in said test solution.

2,732,336
ELECTROPLATING COMPOSITION FOR COPPER
Barnet D. Ostrow, North Bellmore, N. Y., assignor to Elechem Corp., Jersey City, N. J., a corporation of New Jersey
No Drawing. Application April 20, 1953, Serial No. 349,935
5 Claims. (Cl. 204—52)

1. An electrolytic bath comprising an aqueous alkaline solution of a cyanide of copper, a soluble selenium compound taken from the class consisting of selenides, selenoureas, selenocyanates, selenites, selenates, and compounds of the formula RSeH wherein R is an organic radical taken from the class consisting of alkyl radicals of 1 to 6 carbon atoms and aryl radicals of 6 to 12 carbon atoms said selenium compound being present in an amount from .0001 to 5 grams per liter, together with a soluble compound of a metal taken from the class consisting of lead and antimony in which the metal is present in an amount from .001 to 5 grams per liter.

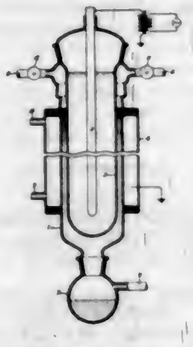
2,732,337
PHOTO-OXIDATION OF ERGOSTEROL
Rudolf E. Tögel, Vienna, Austria
No Drawing. Application September 29, 1954, Serial No. 459,206
2 Claims. (Cl. 204—158)

1. The method of producing an irradiated oxidation product of ergosterol which comprises: dissolving ergosterol and a small amount of hematoporphyrin in alcohol, refluxing the alcoholic solution for at least 60 hours while passing molecular oxygen through the solution and irradiating the solution with visible light, separating the oxidation product from the alcohol solvent, saponifying the oxidation product with dilute methanolic caustic, removing a resinous by-product from the non-resinous saponified oxidation product, dissolving the latter in ether, and irradiating the ether solution with rays from a quartz mercury-vapor lamp.

2,732,338
OXIDATION OF ORGANIC COMPOUNDS
Leroy S. Moody, Pittsfield, Mass., assignor to General Electric Company, a corporation of New York
Application April 14, 1953, Serial No. 348,639
15 Claims. (Cl. 204—165)

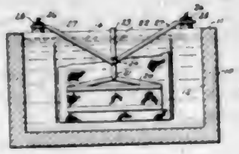
1. In a continuous, countercurrent method of preparing oxygenated organic compounds employing as a reactor an ozone generator producing a continuous silent electric discharge, the steps which comprise reacting a liquid organic compound with a reactive oxygen containing gas continuously produced by the influence of said silent electric discharge on an oxygen containing feed gas, said electric discharge being continuously produced by electrodes forming integral parts of said generator, said generator being operated at a voltage of 27 to 35 kv, said feed gas being continuously introduced into the said generator, under a pres-

sure of 1/100 to 30 atmospheres, through an inlet positioned below the midpoint of said generator, said organic compound, at a temperature of —76° C. to 110° C., being continuously introduced into said generator through an inlet positioned above the midpoint of said generator, the introduction of said reactants being simultaneous and countercurrent to one another, said organic compound al-



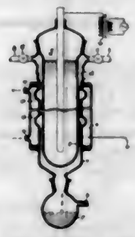
ways being available in sufficient quantity to react with said reactive gas as rapidly as generated, continuously recovering oxygenated organic compounds as rapidly as produced, and continuously recirculating an outgas, comprised of unreacted feed gas containing only a negligible quantity of reactive gas, to the said feed gas inlet of the generator.

2,732,339
ELECTROLYTIC FUSED SALT CLEANING BATH
Hugh Graham Webster and Ray W. Thomas, Detroit, Mich., assignors to J. H. Shoemaker, Detroit, Mich.
Application August 2, 1951, Serial No. 239,934
2 Claims. (Cl. 204—243)



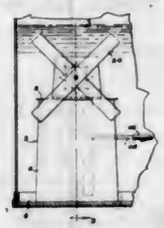
1. An electrolytic fused salt cleaning bath for cleaning a metal work piece suspended in the liquid of said bath by passing electric current therethrough while maintaining the work piece for at least about one half of the electrolytic treatment period as a cathode, comprising an open top container forming a cell, two bus bars mounted substantially parallel along opposite upper edges of said container, a pair of V-shaped metallic stirrup members disposed a substantial distance from each other having each of their arms removably but firmly fastened to an opposite bus bar in current conductive support with the crotches of the said V members depending a substantial distance downward into the container as supporting members for objects positionable below the upper surface level of bath liquid in said container, a basket of foraminous metal comprising a work holder within which the work pieces may be disposed, said basket having a pair of horizontal supporting lugs each laterally extending from an opposite end thereof, each positioned to be engaged within a depending crotch of one of the V-shaped stirrups for gravitational support and temporary electroconductive contact therewith, whereby the foraminous basket is supported through said lugs between the pair of V-shaped stirrups gravitationally without further fastening while being disposed completely immersed within the liquid of said bath.

2,732,340
OZONE OXIDATION REACTOR
David W. Caird, Pittsfield, Mass., assignor to General Electric Company, a corporation of New York
Application March 27, 1953, Serial No. 344,950
3 Claims. (Cl. 204—321)



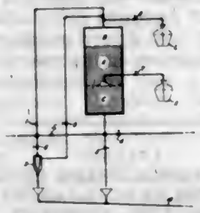
1. An apparatus of the silent electric discharge type for the in situ treatment of liquid organic compounds with ozone generated by the silent electric discharge of an oxygen containing gas, comprising a smaller inner dielectric tubular member positioned within an outer tubular member and in spaced relationship therewith, a portion of the walls of said tubular members defining a reaction zone which is under electrical stress during reaction, an inlet positioned adjacent the top of said outer tubular member for introducing an organic feed into the reaction zone, weirs in said outer tubular member positioned adjacent to and below said inlet for distributing the organic feed around the inner surface of said outer tubular member, the walls of one of the tubular members within the stressed reaction zone of the apparatus having a series of spaced circumferential recesses whereby the flow of organic feed is controlled and improved to give superior liquid film distribution and enhanced turbulent exposure of reactive organic surface in the reaction zone of said apparatus, means for introducing an oxygen-containing gas into the reaction zone, and electrodes for producing the silent electric discharge consisting of a salt solution contained in said inner tube and in a jacket surrounding the outer tube.

2,732,341
FILTER AND AERATOR
Donald W. Huff, Peekskill, N. Y.
Application September 11, 1953, Serial No. 379,504
1 Claim. (Cl. 210—16)



A device for filtering and aerating aquaria water comprising a filter housing having an upper end wall, a cap mounted on said end wall, the latter extending outwardly beyond said cap and being apertured to permit the passage of aquaria water into said housing, an aerating conduit within said housing adapted for connection with a source of air under pressure, said conduit having one end opening into said housing adjacent the lower end thereof and a discharge end opening into said cap whereby aquaria water may be drawn through said housing and conduit and discharged into said cap when said conduit is connected with air under pressure, means rotatably mounted in said cap for more complete agitation of the air water mixture, said means comprising a finned shaft and aperture means in said cap permitting discharge of water therefrom into the aquaria.

2,732,342
PROCESS AND APPARATUS FOR THE REMOVAL OF SALTS FROM WATER
Otto Frey, Rieden, near Baden, Switzerland, assignor to Aktiengeselischaft Brown, Boveri & Cie, Baden, Switzerland, a joint-stock company
Application May 19, 1952, Serial No. 288,721
Claims priority, application Switzerland May 31, 1951
6 Claims. (Cl. 210—24)

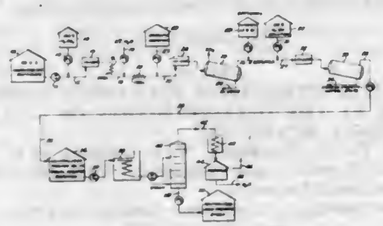


1. In a process for the separation of salts from water comprising passing the water through a closed chamber containing a bed of a mixture of two resins in granular form, one resin being capable of anion exchange and the other being capable of cation exchange, separating the resins into zones in said chamber by slurrying with water, regenerating the resins by treatment with alkali and acid and re-mixing the resins by levitation with air, the improvement which consists in effecting the mixing of the resins by creating a partial vacuum in said chamber and admitting air at a higher pressure than said partial vacuum but not greater than atmospheric pressure into the bed of resins.

2,732,343
DRILLING FLUID
David A. Rowe, Houston, Tex., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
No Drawing. Application December 31, 1952, Serial No. 329,129
9 Claims. (Cl. 252—8.5)

1. A drilling fluid comprising salt water containing at least 50,000 p. p. m. of salt and having dispersed therein chrysotile asbestos of grade designation in the range inclusive of No. 1 to No. 6 (Standard Canadian Chrysotile Asbestos Classification), said asbestos being of a fineness such that it will pass 100 mesh and being present in amount to substantially increase viscosity, and an amount of organic colloid effective to inhibit separation of the dispersion.

2,732,344
METHOD FOR PRODUCING NEUTRALIZED ACID-TREATED OIL AND RECOVERING MOTOR OIL STOCK AND SULFONATES
Ulric B. Bray, Pasadena, Calif., assignor to Bray Oil Company, Los Angeles, Calif., a limited partnership
Application October 27, 1951, Serial No. 253,529
17 Claims. (Cl. 252—33)



1. A method for producing hydrocarbon fractions including the steps of: preliminarily treating a hydrocarbon oil fraction of lubricating viscosity to remove readily polymerizable constituents and separating such constituents; subjecting the resultant lubricating oil fraction to the action of fuming sulfuric acid to effect sulfonation of remaining sulfonatable constituents and yield an oil-containing sulfuric acid and sulfonic acids; intimately commingling with such acid oil, before substantial separation of acid sludge therefrom, a small amount of water approximating 1% to 2% and then intercommingling therewith an approximately equal volume of largely aromatic naphtha having an end boiling point below about 300° F.; separating the acid sludge from the naphtha solution of said oil; treating the resultant naphtha-oil solution with an aqueous alkaline alkali-metal agent to neutralize such solution, and yield sulfonates dissolved in said oil-naphtha solution; separating from the resultant mixture an aqueous phase and accompanying salts contained in said aqueous phase; removing said naphtha from the oil-sulfonate phase; treating the alkali-metal sulfonate-in-oil solution with a soluble polyvalent metal salt in the presence of water and a relatively water-insoluble oil-soluble emulsion-breaking liquid solvent consisting of carbon, hydrogen and oxygen selected from the group consisting of alcohols, ethers, esters and ketones containing 4 to 8 carbons per molecule, to convert said alkali-metal sulfonates to polyvalent metal sulfonates dissolved in said oil and avoiding appreciable emulsification effects; and recovering the polyvalent metal sulfonates in solution in the oil.

2,732,345
SOLUBLE OILS
Walter Kroenig and Walter Hinsch, Hamburg, Germany, and Martinus J. van der Zijden and Willem Frederik Jense, Amsterdam, Netherlands, assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
No Drawing. Application March 13, 1952, Serial No. 276,448
Claims priority, application Germany March 17, 1951
12 Claims. (Cl. 252—33.4)

1. A one-phase soluble oil composition comprising a major amount of a mineral oil, a minor but effective corrosion inhibiting amount up to 10% of an oil-insoluble nitrite, from about 1% to about 10% of a solutizer for the oil-insoluble nitrite, said solutizer being selected from the class of aliphatic diols and aliphatic ketols having from 4 to 10 carbon atoms and from 5% to 40% of an organic emulsifying agent having amphipathic properties and which forms oil-in-water emulsions.

2,732,346
SULFURIZED HYDROCARBON LUBRICANT ADDITIVE
Robert H. Jones, Irvington, N. Y., and Elmer B. Cyphers, Cranford, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application May 29, 1952 Serial No. 290,836
20 Claims. (Cl. 252—45)

9. A multi-functional lubricant additive obtained by reacting a substantially non-olefinic hydrocarbon feed stock, having an average molecular weight of at least 200 and containing at least about 20% by weight of alkyl aromatics, with elemental sulfur in an amount in the range of about 7 to 30% by weight based on the total reaction mixture, said reaction being carried out at a temperature in the range of about 400° to 500° F. for a time sufficient to form a product containing in the range of about 20 to 30% by weight of the originally added sulfur in chemically bound form.

16. A substantially non-corrosive motor lubricant composition comprising a mineral lubricating oil containing a detergent amount of the product obtained by reacting a substantially non-olefinic petroleum base stock

comprising alkyl aromatics and having a viscosity (Saybolt) at 210° F. above 75 seconds, a molecular weight above 200, and an A. P. I. gravity below 30° with elemental sulfur in an amount in the range of about 7 to 30% by weight based on the total reaction mixture, said reaction being carried out at a temperature in the range of about 400° to 500° F. for a time sufficient to form a product containing in chemically bound form in the range of about 20 to 30% by weight of the originally added sulfur.

2,732,347

LUMINESCENT ZINC, CADMIUM, AND ZINC-CADMIUM SULPHIDES

Harold F. Ward, Rugby, England, assignor to General Electric Company, a corporation of New York

No Drawing. Application May 31, 1950, Serial No. 165,353
Claims priority, application Great Britain December 21, 1948
9 Claims. (Cl. 252—301.6)

6. A phosphor consisting essentially of the fired reaction product of a sulphide from the group consisting of zinc sulphide, cadmium sulphide, and zinc-cadmium sulphide, 0.02–0.2 per cent silver, by weight, as an activator, and a flux consisting of 2–5 per cent, by weight, of a chloride and 6–20 per cent, by weight, of an alkali metal phosphate, said chloride taken from the group consisting of alkali metal, alkaline earth, and ammonium chlorides.

2,732,348

OIL-IN-WATER METALWORKING LUBRICANT

Willem Frederik Jense, Amsterdam, Netherlands, and Cyril Brynmor Davies, Cheshire, England, assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application January 12, 1953, Serial No. 330,898
Claims priority, application Netherlands February 15, 1952
10 Claims. (Cl. 252—33.3)

1. An improved oil-in-water metal working emulsion lubricant concentrate consisting essentially of a major amount of oil-in-water emulsion stabilized by addition thereto of a minor, but stabilizing amount, of an oil-soluble alkali metal petroleum sulfonate, and from a fraction of 1% up to 20% by weight of polyvinyl chloride polymer having an average molecular weight of from 40,000 to 100,000.

2,732,349

METHOD OF PREPARING HYDROFORMING CATALYSTS

Julius P. Bilisoly, Edward A. Hunter, Joseph A. Polack, and Marnell A. Segura, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application May 31, 1951, Serial No. 229,244
6 Claims. (Cl. 252—439)

1. A process of manufacturing catalysts consisting of a metal selected from the group consisting of platinum and palladium carried upon an alumina spacing agent which comprises passing an inert gas through finely divided alumina catalyst support particles to form a dense, fluidized, liquid-simulating bed, passing hydrogen fluoride and inert gas through said fluidized bed at temperatures from room temperature to about 1100° F. to incorporate from 0.2 to about 10 wt. per cent of fluoride ion in said support treating the fluoride containing support with a solution of a compound selected from the group consisting of chloroplatinic acid, ammonium chloroplatinate, and palladium chloride and with hydrogen sulfide to thereby incorporate 0.01 to 5.0 weight per cent of the catalytic metal on said support, drying and calcining the resultant composition.

2,732,350

POLYELECTROLYTES COMPRISING COPOLYMERS OF VINYL AROMATIC COMPOUNDS AND COMPOUNDS CONTAINING ALKYL VINYL PYRIDINIUM

John T. Clarke, Newton Highlands, Mass., assignor to Ionics, Incorporated, Cambridge, Mass., a corporation of Massachusetts

No Drawing. Application January 22, 1953, Serial No. 332,744
11 Claims. (Cl. 260—2.1)

1. The method of preparing polyelectrolytes comprising polymerizing an N-alkyl vinyl pyridinium salt with an aromatic vinyl hydrocarbon in the ratio of about one mol of pyridinium salt to each vinyl equivalent of aromatic hydrocarbon.

2,732,351

N-ALKYLATED COPOLYMERS OF VINYL PYRIDINE AND POLYVINYL AROMATIC COMPOUNDS AND THE PRODUCT OBTAINED THEREBY

John T. Clarke, Newton Highlands, Mass., assignor to Ionics, Incorporated, Cambridge, Mass., a corporation of Massachusetts

No Drawing. Application January 22, 1953, Serial No. 332,745
12 Claims. (Cl. 260—2.1)

1. The method of forming infusible, unfractured, and electrically conductvie anion permeable solvated gel structures in the form of membranes of quaternized copolymers of a vinyl pyridine compound of the class consisting of monovinyl pyridine and the alkyl substituted monovinyl pyridines, the alkyl substituents of which are attached to the carbon of the pyridine ring, and a polyvinyl aromatic hydrocarbon, which includes the steps of dissolving the monovinyl pyridine compound and the polyvinyl aromatic hydrocarbon in about 20 to about 70 per cent, by volume on total volume, of a common solvent therefor, disposing the solution to the membrane form, polymerizing the solute to form said copolymer and quaternizing the copolymer, each step being effected under conditions substantially preventive of the escape of solvent to form a solid, coherent, uniform, unfractured gel structure, said solvent being one which is capable of being uniformly and homogeneously occluded in said copolymer.

2,732,352

TERTIARY AMINO ANION EXCHANGE RESINS

Lloyd Eugene Van Blaricom and Kenneth Russell Gray, Shelton, Wash., assignors to Rayonier Incorporated, Shelton, Wash., a corporation of Delaware

No Drawing. Application April 14, 1953, Serial No. 348,802
7 Claims. (Cl. 260—2.1)

1. A phenol - formaldehyde - alkylenepolyamine exchange resin in solid particulate form having dimensional stability and a porous structure capable of effectively adsorbing organic anions, and characterized by the fact that the nitrogen-containing groups are exclusively tertiary amino groups, in which methyl groups are substituted for hydrogen on the nitrogen of the resin.

2,732,353

METHOD OF EXPANDING POLYMERIC COMPOSITIONS BY THE DECOMPOSITION OF p-CARBOMETHOXY BENZAZIDE

Mack F. Fuller, Woodbury, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application October 31, 1952, Serial No. 318,087
1 Claim. (Cl. 260—2.5)

A method for the preparation of expanded cellular products which includes the essential steps of intimately mixing p-carbomethoxy benzazide with a portion of an organic polymer composition, heating the resultant mixture to a temperature within the range of from about 200° F. to about 400° F. for a period of time sufficient to decompose the p-carbomethoxy benzazide and release a gas thereby foaming and expanding the organic polymer, said heating period being of sufficiently long duration to accomplish setting of the resultant foam.

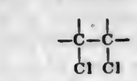
2,732,354

CHLORINE DERIVATIVES OF ISOOLEFIN-POLYOLEFIN POLYMERS AND COMPOSITIONS COMPRISING THE SAME

Richard T. Morrissey, Cuyahoga Falls, and Marvin R. Frederick, Wadsworth, Ohio, assignors to The B. F. Goodrich Company, New York, N. Y., a corporation of New York

No Drawing. Application December 5, 1952, Serial No. 324,412
10 Claims. (Cl. 260—5)

1. A solid, rubbery, partially chlorinated interpolymer of 90 to 99 weight percent of an isoolefin containing from 4 to 8 carbon atoms and a terminal methylene group with 1 to 10 weight percent of a polyolefin containing 4 to 18 carbon atoms, said chlorinated interpolymer retaining a portion of its original olefinic unsaturation, being essentially undegraded and having essentially the same molecular weight as the parent unchlorinated interpolymer, and containing chlorine in an amount from about 0.4 to about 2.3 weight percent, the chlorine being present in essentially the structure



said chlorinated interpolymer being prepared by reacting said interpolymer with a chlorinating agent in the presence of an organic liquid at a temperature between about −20° C. and −165° C.

2,732,355

WET INK FINISHING VARNISH COMPRISING AN OIL-ALKYD, A LIQUID HALOGENATED AROMATIC HYDROCARBON AND A POLYMETHYL SILICONE

Jerome A. Ryan, Cleveland, Ohio, assignor to The Sherwin-Williams Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application July 23, 1952, Serial No. 300,521
12 Claims. (Cl. 260—22)

1. A metal decorating wet ink finishing varnish comprising an oil-modified alkyd resin carried in a petroleum hydrocarbon solvent, from about 4% to about 8% by volume of a normally liquid halogenated aromatic hydrocarbon having a boiling point in excess of about 200° C., and from .001% to .2% by weight of the entire composition of a polymethyl silicone having a viscosity of from about 75 to about 150 centistokes.

2,732,356

OIL COMPOSITION FOR AIR FILTERS

Charles E. Paxton, Jamesburg, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application February 11, 1952, Serial No. 271,079
7 Claims. (Cl. 260—23)

7. A tacky oil composition having the property of adhering to fibrous filter media and the like and having a tacky surface characteristic such as to retain dust particles coming in contact therewith, comprising a mineral oil of lubricating grade and viscosity, a lithium soap in proportions of 0.25 to 0.5% by weight, based on the total composition, and 0.08 to 0.2% of a viscous tacky polyisobutylene of 25,000 to 125,000 molecular weight.

2,732,357

SUSPENSIONS OF POLYMERIC CHLOROTRIFLUOROETHYLENE

Murray M. Sprung, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

No Drawing. Application November 25, 1949, Serial No. 129,532
13 Claims. (Cl. 260—30.4)

1. A liquid suspension comprising a dispersed phase consisting essentially of finely divided, solid, high molecular weight polychlorotrifluoroethylene as the sole solid polymeric ingredient and a dispersing medium for the solid polychlorotrifluoroethylene comprising (1) an organic liquid which is a solvent for the aforesaid solid polymer at elevated temperatures but below the boiling point of the aforesaid liquid and being selected from the class consisting of liquid fluorinated-chlorinated aliphatic hydrocarbons of the C_3 and C_4 series containing at least two chlorine atoms and boiling above 110° C., and liquid low molecular weight polymers of chlorotrifluoroethylene having the recurring structural unit $(CF_2—CFCl)_n$ where n is an integer equal from 4 to 16, inclusive, and boiling above 110° C., and (2) a non-solvent liquid oxygen-containing diluent having a boiling point above 50° C. and selected from the class consisting of aliphatic ethers, saturated aliphatic monohydric alcohols, aliphatic esters, mixtures of monohydric saturated aliphatic alcohols and dihydric saturated aliphatic alcohols, and mixtures of all the foregoing oxygen-containing compounds.

2,732,358

COPOLYMERS OF ACRYLONITRILE AND N-BENZYLACRYLAMIDE

Wilford Donald Jones, Summit, N. J., assignor to Celanese Corporation of America, New York, N. Y., a corporation of Delaware

No Drawing. Application September 26, 1952, Serial No. 311,779
8 Claims. (Cl. 260—30.8)

1. A copolymer of N-benzylacrylamide and acrylonitrile containing at least about 50 mole percent of acrylonitrile and substantially free from other polymerizable substances.

2,732,359

SOLUTIONS OF ACRYLONITRILE POLYMERS IN MOLTEN TRICHLORONITROPROPANOL

Hobson D. De Witt, Decatur, Ala., assignor to The Chemstrand Corporation, Decatur, Ala., a corporation of Delaware

No Drawing. Application December 8, 1954, Serial No. 474,040
12 Claims. (Cl. 260—32.4)

1. A new composition of matter comprising a homogenous miscible mixture of molten trichloronitropropanol and a polymer of which acrylonitrile is at least 70 percent of the total polymerized monomer content.

2,732,360

RUBBER COMPOSITIONS CONTAINING A SILICA AND ALKALI METAL OXIDE FILLER

Adolf Voigt, Beuel (Rhine), and Kurt Andrich, Oberursel, Germany, assignors to Deutsche Gold- und Silber-Scheideanstalt vormals Roessler, Frankfurt am Main, Germany, a corporation of Germany

No Drawing. Application December 4, 1951, Serial No. 259,884
Claims priority, application Germany December 7, 1950
4 Claims. (Cl. 260—37)

1. A vulcanized composition containing a rubber selected from the group consisting of natural rubber and silicone rubber and as a filler a precipitated silica with a 2 to 20% water content and a 1 to 10% alkali metal oxide content, the quantity of said filler being 30 to 60 parts by weight of the rubber.

2,732,361
VULCANIZATION OF COPOLYMERS OF METHACRYLONITRILE AND ALKYL ACRYLATE WITH A MIXTURE OF SULFUR AND TRIETHYLENE TETRAMINE

Edward M. Filachione, Philadelphia, and Charles F. Woodward, Abington, Pa., and John E. Hansen, Wilmington, Del., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application April 24, 1953,
Serial No. 351,058
10 Claims. (Cl. 260—41)
(Granted under Title 35, U. S. Code (1952), sec. 266)

4. A vulcanized elastomer consisting essentially of a vulcanized mixture of a copolymer of 5 to 15 percent of methacrylonitrile with 95 to 85 percent of an alkyl acrylate in which the alkyl group contains not more than 8 carbon atoms, carbon black as a reinforcing agent for said copolymer, and from 0.5 to 2.0 percent of sulfur and 1 to 3 percent of triethylene tetramine, the latter percentages being based on the said copolymer, as the vulcanizing agent for the said copolymer.

2,732,362
VULCANIZATION OF RUBBER WITH HEXACHLOROCYCLOPENTADIENE

Elbert C. Ladd, Passaic, N. J., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application October 30, 1952,
Serial No. 317,829
5 Claims. (Cl. 260—41.5)

1. A process of vulcanizing a sulfur-vulcanizable rubbery hydrocarbon polymerizate derived from a conjugated diene which comprises heating the same in the presence of at least about one percent by weight, based on the rubbery polymerizate, of hexachlorocyclopentadiene at a temperature and for a time sufficient to vulcanize the polymerizate.

2,732,363
POLYMERIZATION OF ACRYLONITRILE IN THE PRESENCE OF PREFORMED INTERPOLYMERS

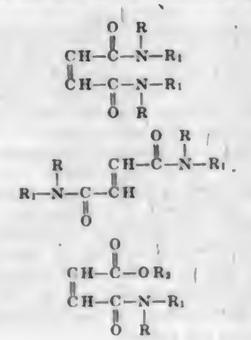
Harry W. Coover, Jr., and Joseph B. Dickey, Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 21, 1952,
Serial No. 316,058
17 Claims. (Cl. 260—45.5)

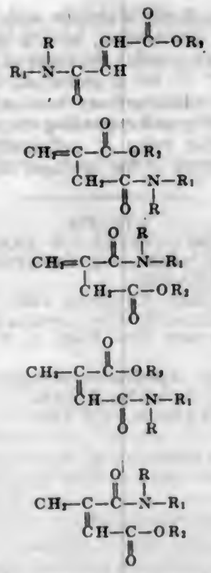
1. A process for preparing resinous compositions comprising heating in the presence of a polymerization catalyst from 5 to 95 parts by weight of a dispersion comprising as the sole polymerizable components a minor proportion by weight of a monoethylenically unsaturated, polymerizable organic compound containing a

$$-CH=C<$$

group and a major proportion by weight of a different monomeric compound selected from the group consisting of those represented by the following general formulas:



and



wherein R and R_1 represents a member selected from the group consisting of a hydrogen atom and an alkyl group containing from 1 to 4 carbon atoms and R_2 represents an alkyl group containing from 1 to 4 carbon atoms, until interpolymerization is substantially complete, adding to the polymerization reaction mixture containing the interpolymer from 95 to 5 parts by weight of acrylonitrile, and heating the reaction mixture until the added acrylonitrile has polymerized to form a product containing 5 to 95 percent acrylonitrile.

2,732,364
POLYMERIZATION METHOD FOR ACRYLONITRILE-VINYLPYRIDINE COPOLYMERS

Costas H. Basdekis, Longmeadow, Mass., assignor, by mesne assignments, to The Chemstrand Corporation, a corporation of Delaware

No Drawing. Application April 20, 1953,
Serial No. 349,955
6 Claims. (Cl. 260—45.5)

1. In a process for copolymerizing a mixture, the sole polymerizable components of which are acrylonitrile and a vinylpyridine the improvement which comprises permitting the polymerization reaction to proceed substantially to completion, then adding about 10% of styrene, based on the total monomer weight, to the reaction mixture, and maintaining polymerization conditions until substantially all the added styrene is polymerized.

2,732,365
RUBBERY CONJUGATED DIENE POLYMERS STABILIZED WITH MONOARYL PHOSPHITES

John C. Bill, Naugatuck, and Byron A. Hunter, Seymour, Conn., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application September 4, 1952,
Serial No. 307,928
5 Claims. (Cl. 260—45.7)

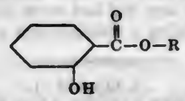
1. A rubbery conjugated diene polymerizate stabilized with a small stabilizing proportion of a monoaryl phosphite of the formula Aryl—O—P—$(OH)_2$ in which Aryl is a benzene nucleus which is directly linked to at least one alkyl substituent having at least four carbon atoms.

2,732,366
VINYL AROMATIC RESIN COMPOSITIONS CONTAINING A PLURALITY OF LIGHT STABILIZING AGENTS

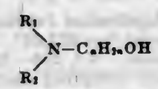
Bernard H. Tubbs, Clare, and Floyd B. Nagle and Paul C. Woodland, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application July 30, 1954,
Serial No. 446,972
9 Claims. (Cl. 260—45.8)

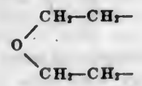
1. A composition of matter comprising a resinous thermoplastic polymer selected from the group consisting of at least one polymerized monovinyl aromatic hydrocarbon of the benzene series and copolymers of a major proportion of at least one such monovinyl aromatic hydrocarbon and a minor proportion of an alkenyl aromatic hydrocarbon of the benzene series having a single isopropenyl radical directly attached to a carbon atom of the aromatic nucleus, and as stabilizing agents for inhibiting discoloring of the polymer upon exposure to light, from 0.04 to 2 per cent by weight of a salicylic acid ester selected from the group consisting of ethylene glycol disalicylate propylene glycol disalicylate and esters of salicylic acid having the general formula:



wherein R represents an alkyl radical containing from 1 to 8 carbon atoms, and from 0.04 to 2 per cent by weight of an alkanolamine having the general formula:



wherein *n* is an integer from 2 to 3 and R_1 and R_2 represent at least one member of the group consisting of hydrogen, an alkyl radical containing from 1 to 4 carbon atoms, the radical $—C_nH_{2n}OH$ wherein *n* is an integer from 2 to 3 and the bivalent radical:



wherein both valences are attached to the nitrogen atom of the alkanolamine, the representation of the monovalent members just mentioned being by R_1 and R_2 individually and of said bivalent radical being by R_1 and R_2 collectively.

2,732,367
POLYEPOXIDES REACTED WITH A PHOSPHONIC ACID

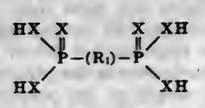
Edward C. Shokal, Walnut Creek, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application August 31, 1953,
Serial No. 377,693
18 Claims. (Cl. 260—47)

1. A phosphorus-containing resinous product obtained by heating at least one polyepoxide with a phosphonic acid group consisting of (1) monophosphonic acids of the formula



wherein R is a member of the group consisting of monovalent hydrocarbon and heterocyclic radicals and halogen, ether and ester substituted derivatives thereof, and X is a member of the group consisting of oxygen, sulfur, selenium and tellurium, and (2) polyphosphonic acids of the formula



wherein R_1 is a member of the group consisting of bivalent hydrocarbon and heterocyclic radicals and halogen, ether and ester substituted derivatives thereof, and X is a member of the group consisting of oxygen, sulfur, selenium and tellurium.

2,732,368
TYPE III PHENOLIC RESINS AND THEIR PREPARATION

Alvin F. Shepard, Le Roy, N. Y., assignor to Hooker Electrochemical Company, Niagara Falls, N. Y., a corporation of New York

No Drawing. Application December 18, 1952,
Serial No. 326,782
12 Claims. (Cl. 260—53)

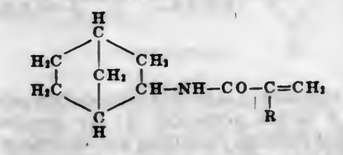
1. The reaction product of 3,5-diisopropylphenol and an aldehyde, said reaction product containing more than 1 mol of combined aldehyde per mol of 3,5-diisopropylphenol and being permanently fusible and soluble.

2,732,369
POLYMERS OF N-2-NORCAMPHANYL-ACRYLAMIDES

John R. Caldwell and Edward H. Hill, Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application August 4, 1954,
Serial No. 447,900
20 Claims. (Cl. 260—82.1)

1. A polymer of an N-2-norcamphanylacrylamide monomer of the formula



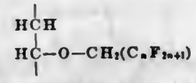
wherein R is selected from the group consisting of hydrogen and methyl groups.

2,732,370
FLUOROCARBON VINYL ETHERS AND POLYMERS

Donald W. Codding, St. Paul, Minn., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a corporation of Delaware

No Drawing. Application May 17, 1952,
Serial No. 288,540
6 Claims. (Cl. 260—91.1)

3. Polymers having a skeletal chain containing fluorinated vinyl ether units indicated by the formula:



where *n* has an integer value of 3 to 11.

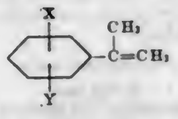
2,732,371
ALPHA ALKYL STYRENE DIMER POLYMERIZATION MODIFIERS

Henry W. Wehr and Floyd B. Nagle, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Michigan

No Drawing. Application May 25, 1951,
Serial No. 228,351
9 Claims. (Cl. 260—93.5)

1. In a process for polymerizing a monomeric material consisting of a monovinyl aromatic compound selected

from the group consisting of the monovinyl aromatic hydrocarbons containing not more than 10 carbon atoms in the aromatic nucleus and nuclear halogenated derivatives thereof, the improvement which comprises carrying out the polymerization in the presence of from 0.001 to 5 per cent by weight of the polymerizable material, of an unsaturated dimer of a monomeric alpha-alkyl styrene having the formula:



wherein X and Y each represents a member of the group consisting of hydrogen, halogens, and lower alkyl radicals containing not more than three carbon atoms.

2,732,372

CHROMABLE MONOAZO DYESTUFFS

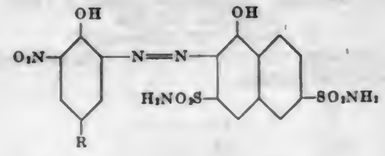
Werner Kuster and Guido Schetty, Basel, Switzerland, assignors to J. R. Geigy A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application March 16, 1953, Serial No. 342,712

Claims priority, application Switzerland March 28, 1952

5 Claims. (Cl. 260—151)

1. A dyestuff selected from the class consisting of (*a*) the monoazo dyestuffs having the formula:



wherein R represents a saturated hydrocarbon radical with from 4 to 8 carbon atoms and (*b*) the chromium complexes of said dyestuffs containing one chromium atom in complex linkage with two molecules of dyestuff.

2,732,373

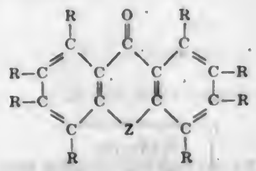
BASIC HETEROCYCLIC ETHERS

Norbert Steiger, Nutley, N. J., assignor to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application June 14, 1954, Serial No. 436,717

8 Claims. (Cl. 260—279)

1. A compound selected from the class consisting of bases having the formula



wherein Z is a bivalent radical selected from the group consisting of imino, oxo and thio, and each R is a monovalent radical selected from the group consisting of hydrogen, lower alkyl and di(lower alkyl)amino(lower alkoxy); at least one but not more than two of the radicals R being a di(lower alkyl)amino(lower alkoxy) radical and salts of said bases.

2,732,374

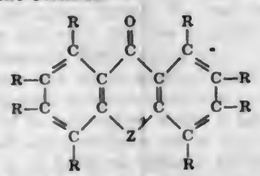
BASIC ETHERS OF ACRIDONES AND THIAXANTHONES

Norbert Steiger, Nutley, N. J., assignor to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application February 8, 1955, Serial No. 486,983

9 Claims. (Cl. 260—279)

1. A compound selected from the class consisting of bases having the formula



wherein Z is a bivalent radical selected from the group consisting of imino and thio, and each R is a monovalent radical selected from the group consisting of hydrogen, halogen, lower alkyl and di-(lower alkyl)-amino-(lower alkoxy); at least one, but not more than two, of the radicals R being a di-(lower alkyl)-amino-(lower alkoxy) radical, and at least one, but not more than two additional, of the radicals R being a halogen and salts of said bases.

2,732,375

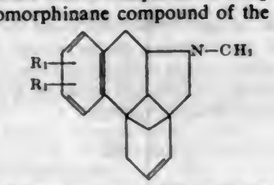
THEBAINE DERIVATIVES AND PROCESS FOR MANUFACTURING THE SAME

Marshall D. Gates, Jr., Pittsford, N. Y., assignor to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey

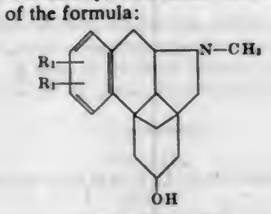
No Drawing. Application February 18, 1952, Serial No. 272,247

13 Claims. (Cl. 260—285)

1. The process which comprises reacting an N-methyl-Δ^6-dehydroisomorphinane compound of the formula:



wherein R_1 is a member selected from the group consisting of hydrogen and alkoxy, with dilute sulfuric acid to form a compound of the formula:



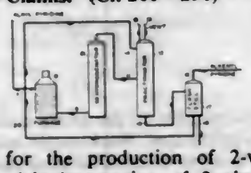
2,732,376

PRODUCTION OF ALKENYLPYRIDINES

Cary R. Wagner, Utica, Ohio, assignor to Phillips Petroleum Company, a corporation of Delaware

Original application November 26, 1943, Serial No. 511,892. Divided and this application August 9, 1948, Serial No. 43,237

9 Claims. (Cl. 260—290)



1. A process for the production of 2-vinylpyridine which comprises dehydrogenation of 2-ethylpyridine in the presence of a solid dehydrogenation catalyst at a temperature within the range of approximately 800° to approximately 1200° F. to produce 2-vinylpyridine.

2,732,377

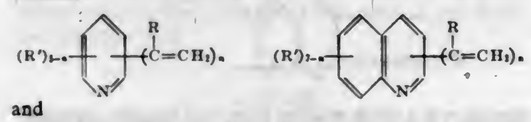
STABILIZATION OF POLYMERIZABLE HETEROCYCLIC NITROGEN COMPOUNDS

John E. Mahan and Mack F. Potts, Bartlesville, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware

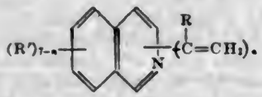
No Drawing. Application November 28, 1952, Serial No. 323,136

12 Claims. (Cl. 260—290)

1. A polymerizable heterocyclic nitrogen base selected from the group consisting of compounds having the formula



and



where *n* is an integer selected from the group consisting of 1 and 2. R is selected from the group consisting of H and CH_3, and R′ is selected from the group consisting of H and alkyl groups, not more than 12 carbon atoms being present in the total of said R′ groups, said heterocyclic nitrogen base being stabilized by the addition of a stabilizing amount of an iron halide selected from the group consisting of chlorides, bromides, and iodides.

2,732,378

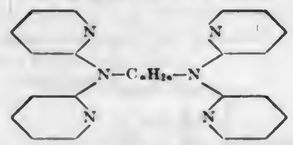
TETRAPYRIDYL-ALKYLENEDIAMINES

Chester John Cavallito, Decatur, Ill., assignor to Irwin, Neisler and Company, Decatur, Ill., a corporation of Illinois

No Drawing. Application February 19, 1953, Serial No. 337,887

10 Claims. (Cl. 260—296)

1. A compound selected from the group consisting of (*a*) compounds having the formula:



wherein *n* is an integer from three to twelve inclusive, (*b*) acid addition salts, and (*c*) hydrocarbon halide quaternary ammonium salts thereof.

2,732,379

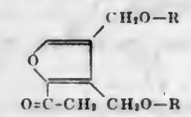
METHOD OF PREPARING VITAMIN B_6

John S. Webb, Warren Township, Somerset County, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application July 30, 1953, Serial No. 371,430

6 Claims. (Cl. 260—297.5)

1. A method of preparing vitamin B_6 which comprises heating a compound having the formula:



in which R is a member of the group consisting of hydrogen and a lower alkanoic acyl radical, with an ammonium salt of a strong inorganic acid in the presence of water and recovering said product.

2,732,380

PROCESS FOR THE PRODUCTION OF 2.4-DITHIO-5.5 - HEPTAMETHYLENE - SPIROHYDANTOIN AND PRODUCT

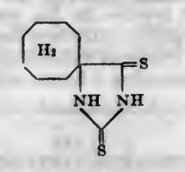
Walter Reppe and Otto Schlichting, Ludwigshafen (Rhine), Franz Westphal, Ludwigshafen (Rhine-Oppau), and August Amann, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application July 26, 1954, Serial No. 445,904

Claims priority, application Germany July 31, 1953

3 Claims. (Cl. 260—309.5)

1. The 2,4-dithio-5.5-heptamethylenespirohydantoin of the formula:



2.732.381

LYSIDINE SALTS

Paul Lafumas and Jules Aboulenc, Choisy-le-Roi, France, assignors to Societe des Usines Chimiques Rhone-Poulenc, Paris, France, a French body corporate

No Drawing. Application July 21, 1955, Serial No. 523,614

Claims priority, application France July 27, 1954

3 Claims. (Cl. 260—309.6)

1. Lysidine gentisate.

2,732,382

RESIN ANTHRAQUINONE DYES

Louis M. Minsk and Jonas John Chechak, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application March 3, 1953, Serial No. 340,164

9 Claims. (Cl. 260—379)

1. A resin-dye of the anthraquinone dye series containing a hydroxyalkyl group selected from the group consisting of C-hydroxyalkyl and N-hydroxyalkyl groups, the hydroxyl group of said hydroxyalkyl group having been esterified by a synthetic polymer containing a group selected from the group consisting of carboxylic halide and carboxylic anhydride groups, said synthetic polymer being a polymer of a polymerizable, unsaturated compound containing a $CH_2{=}C<$ group.

2,732,383

PREGNADIENES AND METHOD OF PREPARING THE SAME

Seymour Bernstein, Pearl River, and Ruddy Littell, Ridgefield Park, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application May 27, 1953, Serial No. 357,902

1 Claim. (Cl. 260—397.45)

A method of preparing $\Delta^{4,9(11)}$-pregnadiene-17α,21-diol-3,20-dione which comprises reacting Δ^5-pregnene-11β,-17α,21 - triol-3,20-dione-21-acetate-3.20-di-ethylene ketal with phosphorous oxychloride in an alkaline solvent, subsequently hydrolyzing the reaction product under acid conditions and recovering said product therefrom.

2,732,384
3-KETO-11β-HYDROXY-4,17(20)-PREGNADIENE-21-al AND PROCESS

Philip F. Beal III, Portage Township, Kalamazoo County, and John A. Hogg, Kalamazoo Township, Kalamazoo County, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application June 8, 1953, Serial No. 360,374
2 Claims. (Cl. 260—397.45)

1. 3-keto-11β-hydroxy-4,17(20)-pregnadiene-21-al.

2,732,385
PREPARATION OF 4-BROMO STEROIDS

George R. Krsek, Espy, Pa., assignor to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey

No Drawing. Application November 18, 1953, Serial No. 393,019
16 Claims. (Cl. 260—397.45)

1. An improved process for the monobromination of steroids which comprises reacting a steroid with bromine in the presence of p-toluene sulfonic acid as a catalyst to produce the corresponding 4-bromo-steroid.

2,732,386
STABILIZED UNSATURATED COMPOSITIONS AND STABILIZER THEREFOR

Noel H. Kuhrt, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 22, 1951, Serial No. 252,573
9 Claims. (Cl. 260—398.5)

1. A stabilized composition of matter comprising a predominantly non-polar unsaturated vehicle normally subject to oxidation stabilized by a hydrohalide of ethylene diamine tetra-acetic acid incorporated in said vehicle, said vehicle being selected from the class consisting of fats containing substantial amounts of unsaturated glycerides, oils containing substantial amounts of unsaturated glycerides, unsaturated free fatty acids, and unsaturated fatty acid partial esters of polyhydric alcohols.

2,732,387
METHOD OF MAKING MONOGLYCERIDES OR THE LIKE

George Y. Brokaw and Milton I. Van Graafeiland, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application December 8, 1951, Serial No. 260,774
11 Claims. (Cl. 260—410.7)

1. The method which comprises reacting a fatty material with an excess fo a polyhydric alcohol in a reaction mixture with dioxane and a basic metal soap catalyst, said dioxane amounting to at least 5% by weight but less than the combined weight of said fatty material and said alcohol, said reacting being effected at a temperature of at least 170° C. and at a pressure sufficient to maintain a substantial proportion of said dioxane in liquid form at the reaction temperature.

2,732,388
TREATMENT OF FATTY OILS

Fred S. Sadler, Savannah, Ga., assignor to The Sharples Corporation, a corporation of Delaware

No Drawing. Application May 14, 1953, Serial No. 355,179
9 Claims. (Cl. 260—425)

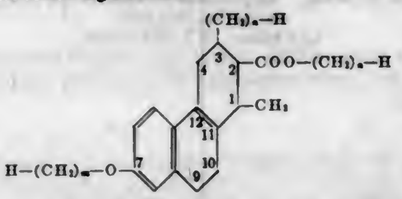
1. A process for treating a gum-containing crude fatty oil to condition said oil for refining which comprises admixing with said oil sodium hydrosulphite to condition said gums for said refining, the amount of said sodium hydrosulphite admixed with said oil being at least 0.01% by weight of said oil.

2,732,389
1-METHYL-2-CARBOXY-7-OXY DERIVATIVES OF HYDROPHENANTHRENES AND PROCESS

John A. Hogg, Kalamazoo, Mich., assignor to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

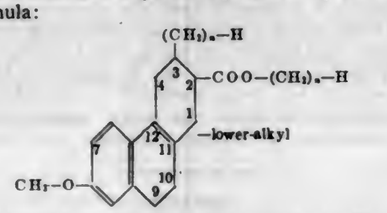
No Drawing. Application October 18, 1951, Serial No. 251,990
15 Claims. (Cl. 260—473)

1. A compound selected from the group consisting of a 1,2,3,4,9,10-hexahydrophenanthrene compound represented by the following formula:

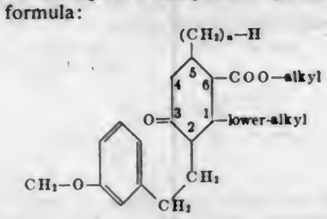


wherein *n* is a whole number from zero to eight, inclusive, and wherein *m* is a whole number from zero to one, inclusive, and a 3,4,9,10-tetrahydrophenanthrene represented by the same formula with a $\Delta^{1(2)}$-double bond.

4. In a process for the production of a compound selected from the group consisting of a 1,2,3,4,9,10-hexahydrophenanthrene compound represented by the following formula:



wherein *n* is a whole number from zero to eight, inclusive, and a 3,4,9,10-tetrahydrophenanthrene compound represented by the same formula with a $\Delta^{1(2)}$-double bond, the step which comprises: cyclizing, by the action of a mineral acid dehydrating agent, a compound selected from the group consisting of a compound represented by the following formula:



wherein *n* is a whole number from zero to eight, inclusive, and a $\Delta^{1(2)}$-unsaturated compound otherwise represented by the same formula.

2,732,390
SALTS OF ORGANOSILANOLS

Harold A. Clark, Midland, Mich., assignor to Dow Corning Corporation, Midland, Mich., a corporation of Michigan

No Drawing. Application September 9, 1954, Serial No. 455,087
3 Claims. (Cl. 260—448.2)

1. A salt of the formula

$$(MO)_aO_{\frac{3-b}{2}}SiCH_2Si(OM)_bO_{\frac{2-a}{2}}$$

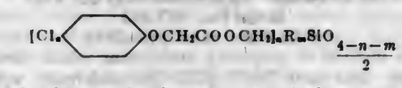
in which M is an alkali metal, *b* has a value from 1 to 3 inclusive, and *a* has a value from 1 to 2 inclusive.

2,732,391
HALOGENATED ORGANOSILICON COMPOUNDS

John E. Noll, Monroeville, Pa., assignor to Dow Corning Corporation, Midland, Mich., a corporation of Michigan

No Drawing. Application December 29, 1954, Serial No. 478,543
6 Claims. (Cl. 260—448.2)

1. An organosilicon compound having the formula



$$\frac{4-n-m}{2}$$

in which *a* has a value from 1 to 5 inclusive, *n* has a value from 1 to 2 inclusive, *m* has a value from 0 to 3 inclusive and R is selected from the group consisting of monovalent hydrocarbon radicals and halogenated aryl hydrocarbon radicals.

2,732,392
PRODUCTION OF ISOCYANATES FROM ISOCYANIC ACID AND AMINES OR AMINE HYDROHALIDES

James H. Saunders and William B. Bennet, Anniston, Ala., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application January 8, 1953, Serial No. 330,364
18 Claims. (Cl. 260—453)

1. The method of preparing monocarbamyl halides and the corresponding isocyanic acid esters, which comprises reacting together, in the vapor phase, a material selected from the group consisting of isocyanic acid and compounds decomposing into isocyanic acid, a compound selected from the group consisting of organic primary amines and their hydrogen halide salts, and a hydrogen halide, said first two reactants being employed in a molar ratio of the first reactant, basis isocyanic acid, to the second of about 1.0 to about 8.0, said third reactant being employed in an amount varying from about 1 equivalent up to substantially in excess of that stoichiometrically required to convert the product of the reaction into the corresponding carbamyl halide and said reaction being carried out at a temperature sufficiently high to convert said reactants into the vapor phase but below that temperature at which substantial decomposition of the resulting isocyanic acid esters takes place.

2,732,393
SEPARATION OF POSITION ISOMERS

William B. Hardy, Bound Brook, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application March 5, 1953, Serial No. 340,668
7 Claims. (Cl. 260—457)

1. As a new method of separating the position isomers of a di-substituted aromatic compound having the following formula:

Y—Ar—Z'

in which Z is a reactive substituent selected from the class consisting of hydroxy and amino groups, Ar is a divalent aromatic nucleus containing at least one benzenoid ring and not more than two such rings, and Y is an inert substituent non-reactive with tertiary amine-sulfur trioxide compounds, from mixtures thereof containing a position isomer A having the groups Y and Z attached to adjacent substituted ring carbons thereof and another position isomer B having the inert group Y attached to a ring carbon remote from the ring carbon attached to the reactive group Z thereof, the improved method which comprises reacting a mixture of said position isomers A and B with a tertiary amine-sulfur trioxide compound, in the presence of a solvent, to selectively convert the B isomer into a derivative thereof containing a SO_3 group and having markedly different properties, separating the said derivative of isomer B from the unreacted isomer A, recovering the so-separated isomer A as a substantially pure compound, hydrolyzing the said derivative of isomer B to regenerate the isomer B and recovering the so regenerated isomer B as a substantially pure compound.

2,732,394
MANUFACTURE OF DIALKYL ARYL PHOSPHATES

Harold Coates, Birmingham, England, assignor to Albright & Wilson Limited, Birmingham, England, a British company

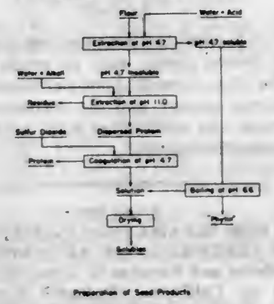
No Drawing. Application August 13, 1951, Serial No. 241,686
Claims priority, application Great Britain August 16, 1950
6 Claims. (Cl. 260—461)

1. A process for the manufacture of dialkyl aryl phosphates which comprises reacting under substantially anhydrous conditions a lower dialkyl phosphonate with a mononuclear phenol in the presence of an inorganic base selected from the group consisting of carbonates, oxides and hydroxides of alkali metals and alkaline earth metals and with a polyhalogenated hydrocarbon selected from the group consisting of carbon tetrachloride, carbon tetrabromide, trichlorobromomethane, bromodichloromethane, bromoform, hexachloroethane and pentachloroethane.

2,732,395
PROCESS FOR SEPARATION OF "PHYTIN" FROM SEEDS

Don S. Bolley, Watchung, N. J., Ralph H. McCormack, Detroit, Mich., and Frank C. Naughton, North Bergen, N. J., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey

Application May 20, 1952, Serial No. 288,938
5 Claims. (Cl. 260—461)



1. A method for producing "phytin" from the protein flour of an oil seed, which comprises leaching said flour with acidulated water at a pH of 4.5 to 4.9, adjusting the pH of the solution obtained in said leaching step to between 6.4 and 7.0 by the use of an alkali metal hydroxide, boiling the solution so as to coagulate and precipitate its "phytin" content, and separating the precipitated "phytin."

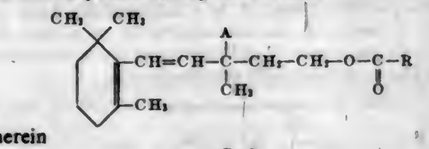
2,732,396

VITAMIN A INTERMEDIATE

Joseph Donald Surmatis, Pompton Plains, and Benjamin Richard Juliano, Linden, N. J., assignors to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application March 24, 1953, Serial No. 344,458
2 Claims. (Cl. 260—461)

1. A compound having the formula



wherein



represents a carbonylic acyl radical of an organic carboxylic acid, and —A represents a monovalent halogen-containing non-hydroxylic inorganic acid radical.

2,732,397

PREPARATION OF ALIPHATIC NITRILES

David C. Hull, Longview, Tex., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application May 5, 1953, Serial No. 353,051
9 Claims. (Cl. 260—465.2)

1. A process for the production of an aliphatic nitrile which comprises reacting gaseous ammonia with an aliphatic carboxylic acid containing 2 to 4 carbon atoms at a temperature within the range of about 180–212° C. to form an aliphatic amide-acid mixture, distilling the amide-acid mixture to separate the acid, and thereafter dehydrating the amide in the said mixture to the aliphatic nitrile by passing over a dehydration catalyst.

2,732,398

FLUOROCARBON SULFONIC ACIDS AND DERIVATIVES

Thomas J. Brice and Paul W. Trott, St. Paul, Minn., assignors to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a corporation of Delaware

No Drawing. Application August 9, 1954, Serial No. 448,784
10 Claims. (Cl. 260—503)

1. The new and useful fluorocarbon compounds of the class consisting of the saturated fluorocarbon sulfonic acids represented by the formula:

$$R_fSO_3H$$

where "R_f" is a saturated fluorocarbon structure containing 1 to 18 carbon atoms, each of which is present in a group of the class consisting of perfluoroalkyl and perfluorocyclohexyl groups, and the corresponding acid anhydrides, metal and ammonium salts, acid fluorides, acid chlorides, and sulfonamides.

2,732,399

PROCESS FOR SEPARATING ISOPHTHALIC ACID AND TEREPHTHALIC ACID MIXTURES

Earl F. Carlston and Funston G. Lum, Richmond, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware

No Drawing. Application January 2, 1953, Serial No. 329,470
11 Claims. (Cl. 260—525)

1. A process for separating mixtures of an alkali metal salt of isophthalic acid and the same alkali metal salt of terephthalic acid which comprises forming an intimate mixture of the salts with a concentrated aqueous solution of a water-miscible alcohol, said aqueous solution being insufficient to dissolve all of the mixed alkali metal phthalates and separating a solid phase and a liquid phase from the intimate mixture.

2,732,400

METHOD OF PREPARING METHIONINE

Martin J. Weiss, Highland Park, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application May 25, 1953, Serial No. 357,353
8 Claims. (Cl. 260—534)

1. A method of preparing methionine which comprises reacting beta-methylmercaptopropionaldehyde with an alkali metal cyanide and an ammonium salt in an aqueous lower aliphatic alcoholic solvent at a temperature below 50° C. in the presence of an excess of ammonia to produce alpha-amino-gamma-methylmercaptobutyronitrile, treating said nitrile under alkaline conditions and recovering methionine therefrom.

2,732,401

PREPARATION OF DITHIOOXAMIDE

George B. De La Mater, St. Johns, Mo., assignor to Mallinckrodt Chemical Works, St. Louis, Mo., a corporation of Missouri

No Drawing. Application March 26, 1953, Serial No. 344,910
5 Claims. (Cl. 260—551)

1. The process of preparing dithiooxamide which comprises passing gaseous cyanogen into an aqueous solution of a compound selected from the group consisting of sodium sulfhydrate, potassium sulfhydrate, calcium sulfhydrate, magnesium sulfhydrate, ammonium sulfhydrate, sodium sulfide and ammonium sulfide while maintaining the pH between approximately 6 and 10 by addition of an acid selected from the group consisting of the mineral acids and acetic acid.

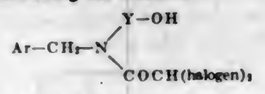
2,732,402

N-BENZYL-N-(HYDROXYALKYL) DIHALOACETAMIDES AND THEIR PREPARATION

Alexander R. Surrey, Albany, N. Y., assignor to Sterling Drug Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application January 2, 1953, Serial No. 329,447
28 Claims. (Cl. 260—562)

1. An N-(substituted-benzyl)-N-(lower hydroxyalkyl)-dihaloacetamide having the formula



where Ar is a phenyl radical substituted by from one to three radicals selected from the class consisting of halogen, lower alkyl, lower alkoxy, lower alkylmercapto, lower alkylsulfonyl and nitro, and Y is a member of the group consisting of lower alpha,beta-alkylene radicals and lower alpha,gamma-alkylene radicals.

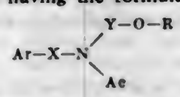
2,732,403

N-ARALKYL-N-HYDROCARBYLOXYALKYL-HALOGENATED-ALKANAMIDES AND THEIR PREPARATION

Alexander R. Surrey, Albany, N. Y., assignor to Sterling Drug Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application February 19, 1954, Serial No. 411,554
21 Claims. (Cl. 260—562)

1. A compound having the formula



where Ar is a member selected from the group consisting

of phenyl, naphthyl, biphenylyl, furyl, pyridyl and theinyl radicals and such radicals substituted by from one to three substituents selected from the group consisting of halo, lower alkoxy, lower alkyl, lower alkylmercapto, lower alkylsulfonyl, nitro and di(lower alkyl)amino, X is a lower alkylene radical having one to four carbon atoms, Y is a lower alkylene radical having two to six carbon atoms and having its two free valence bonds on different carbon atoms, R is a hydrocarbyl radical having from one to eight carbon atoms and Ac is a lower halogenated-alkanoyl radical having one to four carbon atoms.

2,732,404

PROCESS FOR THE MANUFACTURE OF DIMETHYLGLYOXIME AND DIACETYL

Jonas Kamlet, Easton, Conn., assignor to National Distillers Products Corporation, New York, N. Y., a corporation of Virginia

No Drawing. Application May 25, 1953, Serial No. 357,365
6 Claims. (Cl. 260—566)

5. A process for the manufacture of dimethylglyoxime and diacetyl which comprises heating diacetylmonoxime at a temperature between 88° C. and 125° C. in the presence of a minor amount of an acidic catalyst, distilling off the diacetyl formed and recovering dimethylglyoxime from the remaining residue.

2,732,405

METHOD FOR PRODUCING A HEXADECAHYDROCHRYSENE COMPOUND

Raymond M. Dodson, Park Ridge, and Paul B. Sollman, Evanston, Ill., assignors to G. D. Searle & Co., Chicago, Ill., a corporation of Illinois

No Drawing. Application October 1, 1952, Serial No. 312,652
1 Claim. (Cl. 260—586)

The preparation of 1-(β-hydroxyacetyl)-1-hydroxy-10a, 12a - dimethyl - 1,2,3,4,4a,4b,5,6,8,9,10,10a,10b,11,12,12a - hexadecahydrochrysen - 8 - one which comprises the treatment of 1 - vinyl - 1 - hydroxy - 10a,12a - dimethyl - 1,2,3,4,4a,4b,5,6,8,9,10,10a,10b,11,12,12a - hexadecahydrochrysen-8-one with hydrogen peroxide and osmium tetroxide in an anhydrous organic solvent.

2,732,406

NEW ASYMMETRIC DIPHENYLOL METHANES

Arthur Lambert, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application March 2, 1953, Serial No. 339,931
Claims priority, application Great Britain March 11, 1952
12 Claims. (Cl. 260—619)

1. New chemical compounds, namely 2:2'-dihydroxy-5:5'-dimethyldiphenylmethanes to the 3 position of which there is attached the tertiary carbon atom of a tertiary alkyl group of 4–8 carbon atoms and to the 3' position a radical of the group consisting of cyclohexyl, bornyl, isobornyl and methyl radicals.

2,732,407

NEW DIARYLMETHANE DERIVATIVES, THEIR MANUFACTURE AND APPLICATION

Arthur Lambert and Gwyn Elfon Williams, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application April 12, 1954, Serial No. 422,670
Claims priority, application Great Britain April 22, 1953
5 Claims. (Cl. 260—619)

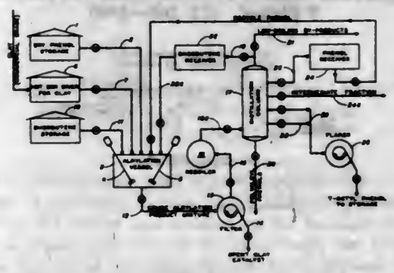
1. A compound selected from the group consisting of 2:2'-dihydroxy-5:5'-dimethyldiphenylmethanes to the 3 position of which there is attached the tertiary carbon atom of a tertiary alkyl group of 4–8 carbon atoms and to the 3' position an α-alkylcycloalkyl group, in which the cycloalkyl substituent is selected from the group consisting of cyclopentyl, methylcyclopentyl, cyclohexyl and methylcyclohexyl substituents and the alkyl substituent has not more than 4 carbon atoms, and is attached to the α-carbon atom of the cycloalkyl group, and the normal and basic aluminum, barium, calcium, magnesium, strontium and zinc salts of these compounds.

2,732,408

PROCESS FOR MAKING TERTIARY-OCTYLPHENOL

John K. Foote, El Cerrito, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware

Application June 29, 1953, Serial No. 364,554
4 Claims. (Cl. 260—624)



1. A process for preparing tertiary-octylphenol which comprises reacting substantially anhydrous phenol with substantially anhydrous diisobutene at a temperature from about 30 to about 90° C. in the presence of an acid-activated clay characterized by a moisture content of from about 0.5 to about 5% by weight, removable by azeotropic distillation with toluene.

2,732,409

PARTIALLY DECHLORINATED HEXACHLOROCYCLOPENTADIENE

Elbert C. Ladd, Passaic, N. J., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application October 30, 1952, Serial No. 317,830
1 Claim. (Cl. 260—648)

The compound $C_{10}Cl_{10}$ melting at about 123–124° C., obtained by partial dechlorination of hexachlorocyclopentadiene.

2,732,410

PROCESS FOR PREPARING TETRAFLUORO ETHYLENE BY REACTING CARBON AND A BINARY HALOGEN FLUORIDE

Mark W. Farlow, Holly Oak, and Earl L. Muetterties, Hockessin, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application January 12, 1955, Serial No. 481,482
4 Claims. (Cl. 260—653)

1. The process for the preparation of tetrafluoroethylene which comprises reacting carbon, at a temperature of at least 1500° C. with a binary halogen fluoride and immediately thereafter removing the halogen fluoride and any halogen of atomic number less than 53 from the reaction product.

2,732,411

PREPARATION OF TETRAFLUOROETHYLENE

Mark W. Farlow, Wilmington, and Earl L. Muetterties, Hockessin, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application June 1, 1955, Serial No. 512,582
5 Claims. (Cl. 260—653)

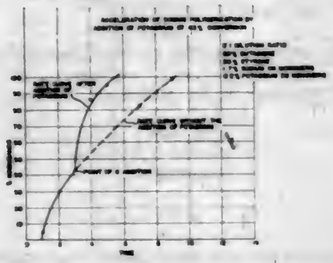
1. The process for the preparation of tetrafluoroethylene which comprises reacting elemental fluorine with carbon at a temperature of at least 1400° C., immediately quenching the reaction products below about 500° C. and removing any elemental fluorine therefrom.

2,732,412

ACCELERATING SODIUM POLYMERIZATIONS

Anthony H. Gleason, Westfield, and Joseph F. Nelson, Rahway, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application October 15, 1952, Serial No. 314,782
9 Claims. (Cl. 260—669)



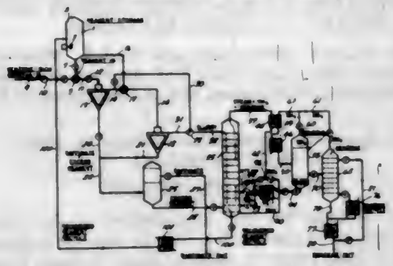
1. In a process for copolymerizing a mixture from 75 to 85 per cent of butadiene and 25 to 15 per cent of styrene in 50 to 500 parts by weight of a hydrocarbon diluent, per 100 parts of monomers and 1 to 100 parts by weight of a member of the group consisting of aliphatic ethers of 4 to 8 carbon atoms, dioxane-1,4 and the methyl and ethyl derivatives of dioxane-1,4 in the presence of 1.2 to 8 parts by weight of finely divided sodium at a temperature between 40 and 95° C. in which the reaction has slowed down or completely stopped prior to the completion of the reaction, the improvement which comprises adding 0.1 to 1.5 weight per cent of finely divided potassium, based on monomers, at the point at which the reaction slows down or stops whereby the reaction is reactivated.

2,732,413

PROCESS FOR THE RECOVERY OF BENZENE BY SELECTIVE CLATHRATION

Arthur Letcher Jones and Philip S. Fay, Lyndhurst, Ohio, assignors to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio

Application August 1, 1952, Serial No. 302,144
9 Claims. (Cl. 260—674)



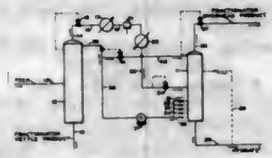
1. A cyclic process adapted for continuous operation for the recovery of benzene of high purity from benzene-containing hydrocarbon stocks which comprises subjecting the stock to the action of nickel ammonia cyanide to form a solid clathrate compound with benzene, separating the clathrate compound from the stock, treating the clathrate compound with steam in the presence of ammonia to decompose it into benzene and nickel ammonia cyanide, recovering benzene and recycling the nickel ammonia cyanide to process another portion of the stock.

2,732,414

PROCESS AND APPARATUS FOR REMOVING HYDRATES FROM FRACTIONATOR OVERHEAD PRODUCT

Forrest D. Stoops, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application November 19, 1951, Serial No. 257,147
15 Claims. (Cl. 260—676)



1. The method of treating a hydrocarbon stream containing water and sulfides, comprising separating said stream into a propane and heavier fraction and an ethane and lighter fraction in a fractionating zone; cooling said latter fraction to form hydrogen sulfide and hydrocarbon hydrates therein, and recovering ethane from the lighter fraction.

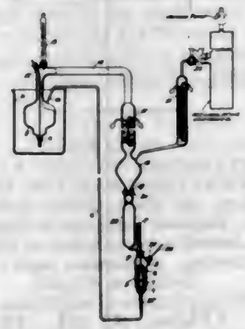
9. Apparatus for treating a hydrocarbon stream containing hydrocarbons, water and sulfides comprising a fractionator and a hydrate forming accumulator; a feed conduit extending into the central portion of said fractionator; a kettle product removal conduit in the lower portion of said fractionator; an overhead conduit from the upper portion of said fractionator to the central portion of said accumulator; a heater in said conduit; a compressor in said conduit downstream of said heater; a cooler in said conduit downstream of said compressor; a removal line leading from the lower portion of the accumulator; a reflux return conduit extending from a point above said removal line in the lower portion of the accumulator to the upper portion of the fractionator; a conduit extending from said reflux return conduit to the upper portion of the accumulator; and an overhead removal conduit extending from the upper portion of the accumulator.

2,732,415

METHOD AND APPARATUS FOR EXTRACTING A SOLUBLE COMPONENT FROM MATERIALS

Erwin Klinge, Munich, Germany

Application April 12, 1950, Serial No. 155,442
9 Claims. (Cl. 260—705)



9. A method of extracting heat-sensitive material, which comprises the steps of carrying out the extraction by a solvent with exclusion of heating and under atmospheric pressure, intermittently removing the extracted material with the solvent, separating the extracted material from said solvent by heating the latter to moderately increased temperature below one injuriously affecting the extractive and by intermittently sucking the solvent off under reduced pressure, condensing the vapors thereof, and returning the liquid solvent to the extracting step.

ELECTRICAL

2,732,416

TEMPERATURE-MEASURING APPARATUS

Donald Robertson, Philadelphia, Pa., assignor to Leeds and Northrup Company, Philadelphia, Pa., a corporation of Pennsylvania

Application February 1, 1952, Serial No. 269,428
22 Claims. (Cl. 136—4)



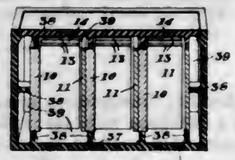
1. An assembly for measuring temperature comprising a housing, a plug removably secured to said housing and having a passage extending lengthwise thereof and closed at the end remote from said housing, a sensing element within said closed end of said plug, said plug having radially extending surface structure, and means including an insulating jacket surrounding said housing and said plug and having radially extending surface structure normally abutting and pressed against that of said plug to form a seal therewith and slidable relative to said housing for access to the interior thereof.

2,732,417

PRIMARY CELL USING A DEPOSITED CATHODE

Kenneth Norman Barnard, Jayson H. Greenblatt, and Patrick Sullivan, Halifax, Nova Scotia, Canada, assignors to The Minister of National Defence of Her Majesty's Canadian Government, Ottawa, Ontario, Canada

Application July 10, 1952, Serial No. 298,158
Claims priority, application Canada July 11, 1951
21 Claims. (Cl. 136—100)



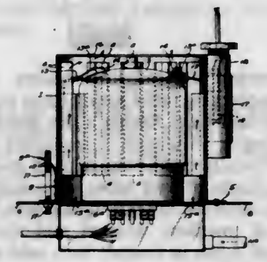
1. A primary cell comprising an anode of a metal high in the electro-chemical series, a cathode of a metal low in the electro-chemical series, a second cathode electrolytically deposited over the anode surface and linked to the first cathode, and an insulating layer between the anode and the deposited cathode comprising a naturally formed corrosion product of the anode formed during the electrolysis.

2,732,418

TUBE SHIELD

Frederick A. Lindley, Jr., Flushing, N. Y., assignor to Smith-Meeker Engineering Co., New York, N. Y., a corporation of New York

Application December 1, 1951, Serial No. 259,405
4 Claims. (Cl. 174—16)



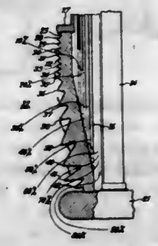
1. In combination with a radio tube socket, a shield retainer, a cylindrical open ended aluminum shield surrounding the socket and secured by the retainer and having heat dissipating fins on its inner face, the inner surface of the shield including the fins being treated to form a coating of aluminum oxide thereon and being dyed with a dull black aniline dye, and blower means communicating with the space within the shield.

2,732,419

ELECTRICAL BUSHING

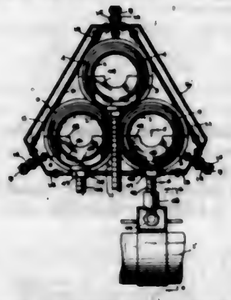
Walter R. Wilson, Drexel Hill, Pa., assignor to General Electric Company, a corporation of New York

Application January 20, 1950, Serial No. 139,746
3 Claims. (Cl. 174—31)



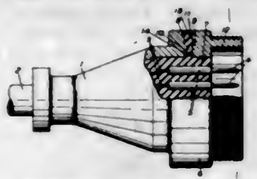
1. In combination with tank-enclosed, oil-immersed electric apparatus, an electrical insulating bushing assembly which passes through a surface of said tank comprising an electrical conductor, a convoluted ceramic insulating member surrounding said conductor, a metal grounding sleeve surrounding said insulating member in the region where said insulating member passes through said tank surface, at least part of the bushing insulating surface contained in said tank being immersed in said oil, an electric field surrounding said insulating member when said conductor is energized, the normally-immersed part of said insulating surface throughout substantially its entire extent being so shaped with respect to said electric field as to define interface surfaces disposed at an angle of not less than 45 degrees to the direction of electrical stress of said field.

2,732,420
ELECTRICAL TRANSMISSION SYSTEM
Isaac D. Sillman, New York, N. Y.
Application April 30, 1954, Serial No. 426,821
28 Claims. (Cl. 174—68)



1. An electrical transmission system comprising a plurality of conducting tubes parallel and adjacent to each other, each of said tubes having a slot along a substantial part of its length, insulation surrounding each tube at intervals, electrically conducting takeoff members in contact with the inside of said tubes, electrically conducting clamping means on the outside of said tubes and attached to said takeoff members through said slots, means for supporting said tubes in contact with said insulation and binding said insulation together, a transverse plane passing through said supporting means also passing through said insulation of said tubes at said intervals.

2,732,421
ELECTRIC COUPLING HAVING MOLDED END SEAL FOR CONDUCTOR
Joseph Edward Geoffrey Chapman, Workington, Cumberland, England, assignor to British Insulated Callender's Cables Limited, London, England, a British company
Application June 7, 1950, Serial No. 166,753
Claims priority, application Great Britain July 8, 1949
3 Claims. (Cl. 174—76)



1. Electrical apparatus comprising a metal casing having a spew-hole, an outer part of which is of greater cross-sectional area than that of an inner part, a mouldable insulating material in the casing, a head of insulating material in the outer part of the spew-hole and a shank of insulating material in the inner part thereof, said head and shank forming a single integral body with the insulating material in the casing whereby contraction of the insulating material in the casing draws the head into sealing engagement with the walls of the spew-hole sealing the metal casing against the entry of moisture through the spew-hole, and a conducting member supported by the insulating material in the casing.

2,732,422
ELECTRIC CABLE
Howard C. Rapp, Richmond, Ind., assignor to Belden Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application September 17, 1952, Serial No. 309,969
6 Claims. (Cl. 174—121)

1. An electric cable having easy stripping characteristics comprising a plurality of elongated metallic conductors, an insulating coating surrounding each conductor, said insulated conductors being wound around each other throughout their respective lengths, fibrous filler material spirally wound with said insulated conductors in such manner as to form a central assembly having a generally circular cross section, a porous, non-woven tape laterally



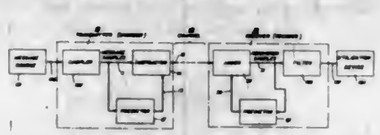
disposed about and enveloping the central assembly and a jacket of flexible insulating material disposed about said porous tape, a portion of said insulating material of said jacket extending through the pores of said tape and being adhesively secured to at least some of the outer fibers of the filler material.

2,732,423
PLASTIC-IMPREGNATED CABLE SUSPENSION
Jay W. Morrison, Newark, N. J.
Application July 16, 1951, Serial No. 236,979
3 Claims. (Cl. 174—209)



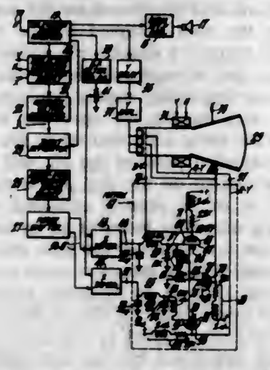
1. A highly flexible suspension for high tension cables comprising a narrow, elongated member made of glass fiber base having at least its outer portion impregnated with a rubbery insulating silicone material, and at least one glass fiber-silicone laminate disk surrounding said member and bonded directly thereto.

2,732,424
LINEAR PREDICTOR CIRCUITS
Bernard M. Oliver, Morristown, N. J., assignor to Bell Telephone Laboratories, Incorporated, a corporation of New York
Application April 13, 1951, Serial No. 220,741
6 Claims. (Cl. 178—5)



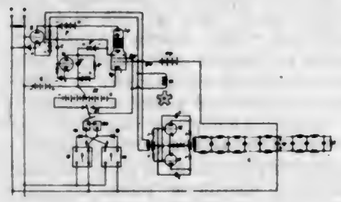
6. In a television transmission system, means to be supplied with a television wave for providing a succession of wave samples, delay means to be supplied with said succession of samples for providing at each instant a wave sample delayed substantially one television field time less one half a television line time and a wave sample delayed substantially one television field time plus one half a television line time, means for combining said delayed samples for deriving at each instant a predicted value sample, and means for comparing at each instant an instant sample and the predicted value sample for deriving an error signal for transmission to a receiving point.

2,732,425
COLOR TELEVISION MATRIX SYSTEM
Dalton H. Pritchard, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application September 20, 1954, Serial No. 457,055
9 Claims. (Cl. 178—5.4)



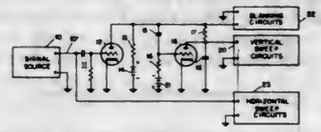
1. A matrix circuit including a plurality of amplifier tubes each having a control grid, an anode and a cathode, a fixed potential terminal, a mutual impedance, means for coupling the cathodes of said amplifier tubes together to form a common cathode terminal, means for coupling said mutual impedance between said common cathode terminal and said fixed potential terminal, a first input terminal coupled to the control grid of one of said amplifier tubes, a second input terminal coupled to the control grid of another of said amplifier tubes, means for coupling the control grid of the last of said amplifier tubes to said fixed potential terminal, a first output circuit coupled to the anode of said one amplifier tube, a second output circuit coupled to the anode of said other amplifier tube, a further output circuit coupled to the anode of the said last amplifier tube, a signal translating circuit, said signal translating circuit having predetermined frequency characteristics and coupled between said first input terminal and said common cathode terminal whereby prescribed signal frequencies translated by said signal translating circuit are caused to have predetermined phase relationship to any signal developed at said common cathode terminal having said prescribed signal frequencies.

2,732,426
HIGH SPEED TELEGRAPHIC SYSTEM
Georges Valensi, Paris, France
Original application March 30, 1950, Serial No. 147,463, now Patent No. 2,620,394, dated December 2, 1952, which is a continuation of abandoned application Serial No. 623,941, October 23, 1945. Divided and this application August 27, 1952, Serial No. 306,564. In France April 17, 1943
Section 1, Public Law 690, August 8, 1946
Patent expires April 17, 1963
30 Claims. (Cl. 178—15)



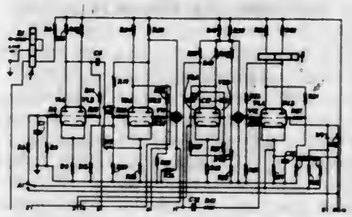
1. A high speed telegraphic system for transmission of telegrams consisting of characters comprising, in combination, a transmitting station including a plurality of keyboards each including a plurality of keys associated with said characters, said keys being arranged in groups and in transmitting, respectively, combinations of two impulses forming a preliminary signal and a code signal, the time elapsing between said two impulses depending on the character to be transmitted and being determined by the depression of said key associated with said character to be transmitted, said code signals form groups inserted, respectively, between two consecutive preliminary signals and including one code signal from each of the telegrams to be transmitted, said keys transmitting discriminating signals having a predetermined frequency and being associated, respectively, with said groups of keys, said transmitting station including a magnetic ribbon recorder for recording said preliminary signals, said code signals, and said discriminating signals; a receiving station including at least one electro-optical relay; and a line connecting said transmitting station with said receiving station.

2,732,427
PULSE SEPARATING CIRCUIT
Richard C. Palmer, Pompton Plains, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application December 27, 1951, Serial No. 263,593
7 Claims. (Cl. 178—69.5)



1. An electrical circuit for separating pulses in an interlaced television system, said circuit comprising a source of voltage pulses, some of said pulses being relatively long and others of said pulses being relatively short; an electrical differentiating network connected to said source to differentiate said voltage pulses; an integrating circuit comprising two elements in series, connected to said source to integrate said voltage pulses; a clamping circuit having an input and an output, said input being connected to be energized by the differentiated pulses from said differentiating circuit; and a connection between said output and one of said components in said integrating circuit to clamp the voltage thereacross to a predetermined reference level upon actuation of said clamping circuit by said differentiated pulses.

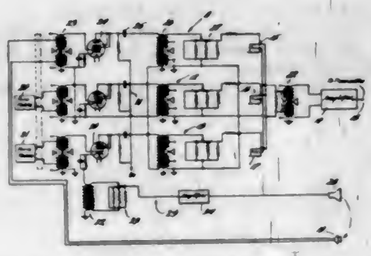
2,732,428
REGENERATIVE REPEATERS FOR USE IN TELEGRAPH SYSTEMS
Gordon T. Dain and Arthur V. Williams, Taplow, England, assignors to British Telecommunications Research Limited, Taplow, England, a British company
Application January 4, 1951, Serial No. 204,448
Claims priority, application Great Britain January 17, 1950
10 Claims. (Cl. 178—70)



1. In a regenerative repeater for start-stop telegraph systems, a multivibrator having a period equal to the length of each code element, a receiving relay, means

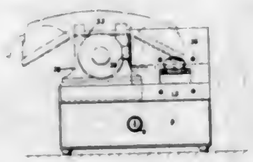
responsive to the operation of said receiving relay on receipt of a signal of the polarity of a start signal for setting said multivibrator in operation to generate pulses, a cyclic counter, means for transmitting pulses from said multivibrator to said counter to effect its sequential operation, means in said counter for generating pulses, a retransmitting relay, means for transmitting pulses from said counter to said retransmitting relay, means responsive to each pulse from said counter for setting said retransmitting relay in accordance with the instantaneous setting of said receiving relay and means in said counter for stopping the operation of said multivibrator in response to the receipt of a predetermined number of pulses.

2,732,429
MULTICHANNEL COMMUNICATION CIRCUIT
Benjamin Wolfe, Baltimore, Md.
Application May 29, 1953, Serial No. 358,283
8 Claims. (Cl. 179—1)



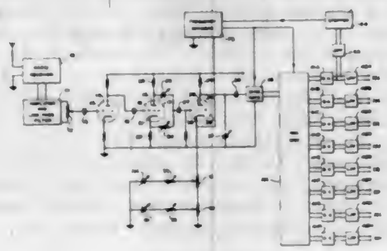
1. In an audio communication circuit having a plurality of interconnected channels for conveying intelligence from different sources, an amplifier in each of said channels, an acoustic input means for one channel, and an acoustic output means for another channel, said input means and output means being positioned within acoustic coupling range the amplifier in the second mentioned channel having a plate, grid, and cathode; an input circuit to said grid and an output circuit from said cathode, said grid and cathode circuits being also connected to a common point, a network in said cathode output circuit between the cathode and said common point for applying the audio intelligence in said second mentioned channel to said acoustic output means, said network comprising a low resistance transformer in said cathode output circuit, and means responsive to the transformer output for driving said acoustic output means, whereby feedback to the second mentioned channel amplifier plate circuit caused by acoustic coupling between said output means and said input means does not cause sustained oscillations.

2,732,430
COIN CONTROL ATTACHMENT FOR DIAL TELEPHONES
Charles L. Hare, Baltimore, Md.
Application May 27, 1952, Serial No. 290,184
1 Claim. (Cl. 179—6.3)



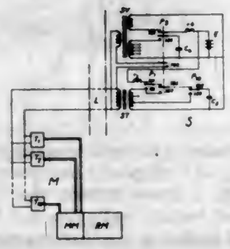
An attachment for dial telephone sets including a base and a one-piece transmitting and receiving unit adopted to be receivable within a cradle on the base for normally supporting the unit upon the base comprising, in combination, a relatively low supporting element for the telephone set having a portion of its upper surface in a horizontal plane and of such size as to conveniently accommodate the base of the set, means for securing the base to the supporting element, a coin operated control mechanism for the said dial positioned on the supporting element adjacent the area occupied by the telephone set and to one side thereof, a slidable pin carried by the control mechanism and movable relative to the edge of the dial, a coin carrying slide, means connecting the coin carrying slide with the pin for operating the same, the connecting means being such that when the coin slide is in its normal extended position the pin will be extended, holding means carried on the dial for engaging the pin when the pin is in its normal extended position, the coin slide being manually movable to an inwardly position when a coin is inserted in the slide withdrawing the pin from the dial holding means, a latch mechanism for holding the coin slide in its inwardly position, vertical movable means carried adjacent the cradle connected with the latch mechanism adapted to release the latch from the slide when depressed by the transmitting and receiving unit when placed in the cradle, whereby the slide moves to its normal withdrawn position moving the pin outwardly in engagement with the dial holding member.

2,732,431
CROSS-TALK SUPPRESSION
John E. Boughtwood, Halesite, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a corporation of New York
Application April 17, 1951, Serial No. 221,470
5 Claims. (Cl. 179—15)



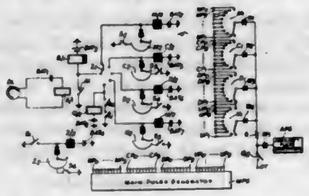
1. A multi-channel pulse modulation system receiver, comprising phase shifting means having an input circuit and an output circuit and being arranged to shift the phase of frequencies lying within a first given range with respect to the phase of frequencies lying within a second given range lower than said first given range, means to apply received pulses having sloping leading and trailing edges and including frequency components lying within said first and second given ranges to the input circuit of said phase shifting means thereby substantially to steepen the leading edges of said received pulses, a differentiating network coupled to the output circuit of said phase shifting means, said network including means to differentiate said pulses thereby to produce correcting pulses, means to combine said correcting pulses and said received pulses thereby substantially to steepen the trailing edges of said received pulses, a plurality of receiving channels, means including an electronic distributor arranged to commutate said receiving channels, means coupled to said combining means to apply said received pulses to said electronic distributor, means coupled to said receiving channels to derive therefrom modulation components proportional to long-term cross-talk present in said receiving channels, and means to apply said modulation components to each of said receiving channels in a sense to suppress long-term cross-talk therein.

2,732,432
AUDIO-FREQUENCY SYSTEM
Erik Waldemar Hullegard, Stockholm, Sweden, assignor to Telefonaktiebolaget L M Ericsson, Stockholm, Sweden, a Swedish company
Application June 25, 1952, Serial No. 295,480
Claims priority, application Sweden July 13, 1951
3 Claims. (Cl. 179—16)



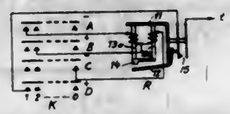
1. In an automatic telephone system, the combination of a sender, a telephone exchange, a two wire line connecting said sender with said exchange, a receiver at said exchange including a plurality of filters tuned for different frequencies, a registering device at said exchange connected with said receiver, switch means connecting said line to said receiver, a transformer in said sender having at least two windings, switch means for connecting one of said windings to said line, a condenser in said sender including connections with said line, a power source for charging said condenser, and means for connecting said charged condenser across the other winding of said transformer to generate an alternating current signal, said signal being transmitted over said line to said receiver and registering device through one of said filters corresponding to the frequency of said signal.

2,732,433
AUTOMATIC TELEPHONE EXCHANGES
Alexander Albert Chubb, Coventry, and Ronald Mawson, Farnborough, England, and Maurice Moise Levy, Ottawa, Ontario, Canada, assignors to The General Electric Company Limited, London, England
Application September 18, 1951, Serial No. 247,073
Claims priority, application Great Britain September 22, 1950
5 Claims. (Cl. 179—18)



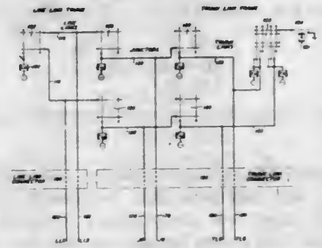
1. Coding apparatus for automatic exchanges, comprising a main input terminal to receive dialling impulses, a plurality of selector switching devices each having a plurality of input terminals and an output terminal, control apparatus to actuate said selector switching devices in response to dialling impulses, means to apply dialling impulses from said main input terminal to said control apparatus to select different ones of the said input terminals of said selector switching devices for connection to said output terminals thereof respectively, a source of voltages of different characteristics, means to apply said voltages to the input terminals of said selector switching devices, different voltages being applied to different ones of the last said terminals, a combining circuit connecting the output terminals of said selector switching devices to provide a combined output from said selector switching devices, a source of signalling voltage, a further combining circuit, a main output terminal, means connecting said further combining circuit between the first said combining circuit and said main output terminal, and means to apply signal voltage from the last said source to said further combining circuit to produce at said main output terminal a signal having characteristics related to said dialling impulses and to a signal from the last said source.

2,732,434
DEVICE FOR IDENTIFICATION OF NUMBERS
Karl Georg Johnson, Stockholm, Sweden, assignor to Telefonaktiebolaget L M Ericsson, Stockholm, Sweden, a Swedish company
Application February 10, 1953, Serial No. 336,175
Claims priority, application Sweden February 25, 1952
7 Claims. (Cl. 179—18)



1. In an automatic telephone system, registering means for registering a multiple digit call number, said registering means including a plurality of electric registering mechanisms one for registering each digit of the call number, electromagnetic relay means, electric control means controlled by the energization of said relay means, and control circuit means for connecting said registering means with said relay means in an energizing circuit, the said control circuit means including several preparatory circuits each controlled by a registering mechanism registering its digit, completion of all said preparatory circuits completing said energizing circuit for the relay means.

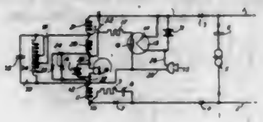
2,732,435
CHANNEL SELECTING CIRCUIT
Myron E. Krom, Convent Station, N. J., and Francis C. Kuchas, Manhasset, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application October 11, 1954, Serial No. 461,448
10 Claims. (Cl. 179—22)



1. In a crossbar telephone system, links for inclusion in telephone connections, a sleeve conductor for each link, a hold magnet connected between negative battery and said sleeve conductor, common control means, means in said common control means for operating the hold magnet of a link when it is to be included in a telephone connection, means for locking said hold magnet operated over said telephone connection, the release of said telephone connection permitting said hold magnet to release, the release of said hold magnet generating a negative surge in said sleeve conductor, link testing means in said common control means, means for connecting said link testing means to said link sleeve conductor when it is desired to include said link in a telephone connection, means for indicating that said link is not available for inclusion in a telephone connection, and means in said testing means for operating said indicating means comprising means operated under the control of said hold magnet locking means and means operated in response to said negative surge.

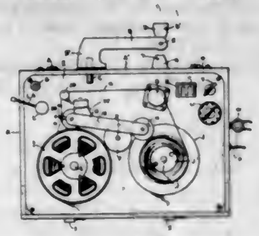
702 O. G.—62

2,732,436
SUBSCRIBER TELEPHONE SET
Andrew J. Aikens, East Orange, Nelson Botsford, Morristown, and Albert P. Boysen, Jr., Basking Ridge, N. J., Eginhard Dietze, deceased, late of Clearwater, Fla., by Katherine R. Dietze, executrix, Clearwater, Fla., and Walter D. Goodale, Jr., Summit, and Alfred H. Inglis, Upper Montclair, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Original application December 22, 1947, Serial No. 793,170. Divided and this application April 1, 1952, Serial No. 279,834
7 Claims. (Cl. 179—81)



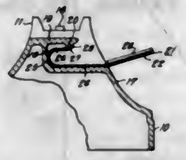
1. A subscriber telephone set circuit, a set of dial contacts therein, a radio interference suppressor circuit shunting said contacts, said suppressor consisting of a condenser and a non-inductive resistance connected in series, and one terminal of said suppressor circuit connected directly to a telephone inductance coil in said set circuit, said coil a component in the telephone speech path of said telephone set circuit, so that said inductance coil may aid in radio interference suppression.

2,732,437
MAGNETIC TAPE RECORDER
Albert C. Travis, Jr., Richmond Hill, N. Y., assignor to Broadcast Equipment Specialties Corp., New York, N. Y., a corporation of New York
Application May 10, 1952, Serial No. 287,171
5 Claims. (Cl. 179—100.2)



1. In a magnetic tape recorder including supporting structure, the improved tape drive mechanism mounted in said structure and comprising a rotatable drive shaft, a first tape reel, means for moving said first reel into and out of an operative position in which said first reel is in operative engagement with said drift shaft for rotation of said reel, a first biasing means yieldingly holding said first reel out of its said operative position, a second tape reel, means for moving said second tape reel into and out of an operative position in which the tape wound on said second reel is in operative engagement with said drive shaft for rotation of said second reel, a second biasing means tending to maintain said second tape reel in its operative position, means selectively operable to respectively maintain one or the other of said reels in its said operative position while the other of said reels is held out of its operative position, a spring motor mounted in said structure, and having a winding shaft with one end of said shaft extending away from said structure, and in which said drive shaft is the output shaft of said spring motor and carries a drive wheel, and having an idler wheel movable into and out of a position in which it operatively connects said drive wheel to the tape wound on said second reel.

2,732,438
TELEPHONE RECEIVER RESTS
Carman R. Mansell and Harold D. Davis, Dallas, Tex., assignors of one-fourth to Lewis F. Petersen and one-fourth to James M. Railey, both of Dallas, Tex.
Application November 9, 1953, Serial No. 390,866
2 Claims. (Cl. 179—146)



1. A telephone receiver-transmitter rest for attachment to the housing of a telephone instrument having a sloping rear wall with a recess therein, the recess having horizontal top and bottom walls, the rest being substantially T-shaped and including a transverse member for supporting the receiver-transmitter, a resilient clip element for frictional engagement with the top and bottom recess walls, a shank connecting the clip element to one longitudinal margin of the member intermediate its ends, the shank and element extending at substantially a right angle to said member and being of a width less than the width of the recess, said element including a flange overlying said shank in spaced relation and bearing against the top recess wall to hold said shank in flat engagement with the bottom recess wall, said member extending at a slight upward inclination to said shank and having its connected longitudinal margin bearing against the sloping rear wall of the housing whereby said member assists in supporting the receiver-transmitter.

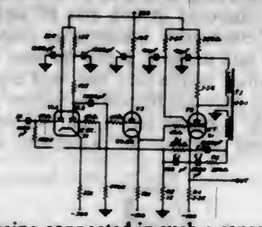
2,732,439
TELEPHONE ATTACHMENT FOR SHOULDER REST
Arthur Garfinkle, Brooklyn, N. Y.
Application June 1, 1953, Serial No. 358,749
6 Claims. (Cl. 179—157)



1. A support for a telephone hand piece having grooves extending along either side thereof comprising an elongated inverted substantially V-shaped hollow yieldable body adapted to surround the body of a hand piece of a portable telephone, and opposed studs extending inwardly from the sides of the yieldable body at one end thereof and engageable in the grooves of a handpiece.

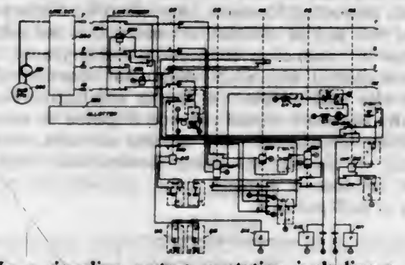
2,732,440
ELECTRONIC PULSE OUTPUT CIRCUITS
Edward Arthur Newman, Teddington, England, assignor to National Research Development Corporation, London, England, a corporation of Great Britain
Application January 8, 1951, Serial No. 205,004
Claims priority, application Great Britain January 14, 1950
3 Claims. (Cl. 179—171)

1. A circuit for feeding pulses having short times of rise or fall into frequency dependent impedances, said circuit comprising a thermionic valve having means to feed said pulses to the grid thereof, a resistance in the cathode circuit of said valve across which the output is developed, a step-down transformer having a primary winding in the anode circuit of said valve and a secondary winding, a network having a low impedance at high frequencies and a high impedance at low frequencies, means to feed the output of said secondary winding to said network and means to feed the output of said network to said cathode resistance and means to take the output of said circuit from across said cathode resistance, the said



transformer being connected in such a sense that its output is substantially in phase with the signal on the cathode resistance.

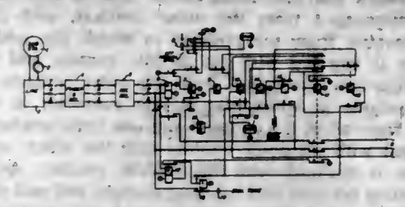
2,732,441
TESTING MEANS IN A SIGNALING SYSTEM
Ernest H. Gatzert, Rochester, N. Y., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application March 16, 1953, Serial No. 342,345
5 Claims. (Cl. 179—175.2)



1. In a signaling system, a station including a signal transmitter, a signal responsive circuit, means responsive to said signal transmitter for selectively establishing a connection to said signal responsive circuit, means in said circuit for transmitting signals over said established connection to said station, means responsive to the seizure of said signal responsive circuit for operating said transmitting means in said circuit, a pair of stepping switches in said circuit, one of said switches being responsive to signals from said station signal transmitter, means for driving the other of said switches automatically at a uniform rate, means responsive to said station signal transmitter for starting and for stopping said driving means, means for thereafter automatically driving said first one of said switches and means jointly controlled by said stepping switch during said automatic movement of said first switch for operating said transmitting means in said circuit differently for different positions of said other switch.

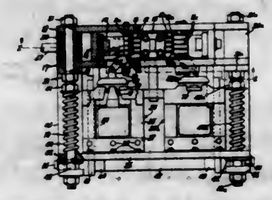
2,732,442
TESTING MEANS FOR TELECOMMUNICATION SYSTEM
James S. Murray, Tampa, Fla., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application July 19, 1952, Serial No. 299,857
6 Claims. (Cl. 179—175.21)

1. In a switching system, a test switch having access to a plurality of circuits to be tested, said switch having tip, ring and sleeve wipers, a magnet to drive it in a primary direction and a magnet to drive it in a secondary direction to place its said tip, ring and sleeve wipers on corresponding tip, ring and sleeve terminals of one of said circuits, a circuit for said switch including means responsive to encounter with a barring potential on said sleeve terminal for transmitting a busy tone, means responsive to the absence of barring potential on said sleeve terminal for effectively connecting said switch circuit over said tip and ring wipers to said circuit, means responsive to a normal reaction of said seized circuit to seizure for transmitting a different tone and means for preparing a secondary circuit for said secondary direction magnet for further direc-



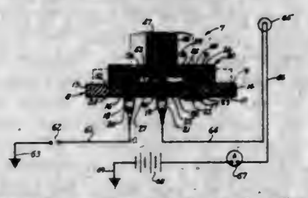
tive operation thereof, said means responsive to said normal reaction of said seized circuit including means for disabling said secondary circuit for said secondary direction magnet.

2,732,443
FRICTION LATCHED ELECTRORESPONSIVE SWITCH
Adrian W. Roth, Media, Pa., assignor to General Electric Company, a corporation of New York
Application February 28, 1952, Serial No. 273,999
16 Claims. (Cl. 200—5)



1. An electroresponsive switch mechanism having in combination, a friction clamping device having a clamping member and electroresponsive releasing means therefor, and a circuit controlling switch having a biased current carrying switch contact member directly frictionally clamped by the clamping member to be released for circuit controlling operation upon response of the electroresponsive releasing means to a predetermined electrical condition.

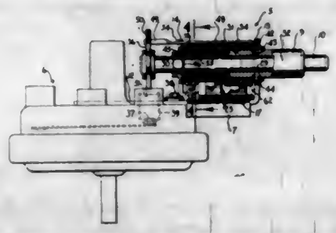
2,732,444
MANUAL SWITCH FOR AUTOMOBILE DOME LIGHT CIRCUITS
Charles C. King, Crockett, Va.
Application November 6, 1953, Serial No. 390,533
4 Claims. (Cl. 200—16)



1. In a manual control switch for a plurality of circuits, a dielectric base havit ; longitudinally spaced contacts on one side thereof including a middle contact and outer contacts, a housing mounted on said base having a web extending along and spaced from said one side of the base, a dielectric slide positioned within said housing between said one side of the base and said web and slidably movable on said base, said web having a longitudinal opening therein and said slide having a finger piece projecting through said opening, a conductive bridging member located between said one side of the base and said slide and operatively engaged with the slide so as to be movable longitudinally of the base by manipulation of said finger

piece, and contactors on said bridging element including a middle contactor and outer contactors, the contactors being spaced from each other with the middle contactor in engagement with the middle contact and the outer contactors disengaged from the outer contacts, said slide being movable from the position in which the middle contactor is engaged with the middle contact and the outer contactors disengaged from the outer contacts, to outer positions in which the middle contactor is disengaged from all of the contacts and one outer contactor is engaged with an outer contact and the other outer contactor is engaged with the middle contact, spring means acting between said bridging element and said slide and urging said bridging element and the contactors thereon toward said contacts, said contacts comprising concave elements and said contactors comprising convex elements engageable into the concave elements.

2,732,445
FILL CONTROL UNIT FOR AUTOMATIC WASHING MACHINES
Irving Gebel, Oak Park, Ill., assignor to Soreng Products Corporation, Schiller Park, Ill., a corporation of Illinois
Application January 13, 1954, Serial No. 403,755
8 Claims. (Cl. 200—18)



2. A control unit of the character described, comprising: a mounting bracket having a channel shaped portion providing spaced apart front and rear flanges; a shaft projecting through both of said flanges and rotatably supported thereby; a sleeve of insulative material confined lengthwise between said flanges, said sleeve encircling the portion of said shaft lying between the flanges and being supported on the shaft for rotation relative thereto but coaxially thereof, said sleeve having a noncircular bore in the front portion thereof adjacent to the front flange; a driver for rotating said sleeve, said driver encircling the shaft and projecting forwardly through the front flange to have its front portion accessible for manual actuation from a location ahead of the front flange and having a noncircular portion received in and fitting said noncircular bore in the front portion of the sleeve to provide a rotation transmitting connection between the driver and said sleeve; a switch mounted on the bracket between the flanges thereof and including a movable contactor; actuating means on the exterior of said sleeve for effecting motion of the switch contactor between switch on and switch off positions in consequence of rotation of the sleeve by its driver; and a cam on the projecting rear end of the shaft, behind the rear flange, for adjusting an element of an associated instrumentality adjacent to the mounting bracket.

2,732,446
TEST PROBE ADAPTOR HEAD
James P. Gilmore, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application June 2, 1952, Serial No. 291,175
The terminal 15 years of the term of the patent to be granted has been disclaimed
4 Claims. (Cl. 200—51.1)

1. A test probe adaptor to be used with a fuse holder of the type comprising a hollow cylindrical member of insulating material adapted to receive a fuse and said adaptor therein, a plug having contact prongs extending externally thereof, a first pair of conductive connections oppositely disposed in one end of said adaptor, a second pair of conductive connections disposed in the opposite end of said adaptor, a cap for said adaptor and a cylinder contained within said cap, said cap having oppositely disposed passages therein to receive said prongs, a pair of flexible contacts and a pair of depending oppositely positioned elements for detachably securing said



adaptor disposed in said cylinder, said flexible contacts and said depending elements adapted to be interconnected, said first pair of conductive connections and said second pair of conductive connections being placed in an electrical contact with each other upon insertion of said prongs into said adaptor, a further conductive element integrally mounted in said cap and disposed to normally electrically interconnect said flexible contacts, said second pair of connections being disconnected from said further conductive element upon introduction of said prongs in said passages.

2,732,447
COMBINED ELECTRIC SWITCH AND GEARSHIFT LEVER
Howard J. Findley, Cleveland, Ohio, assignor to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application December 17, 1952, Serial No. 326,497
8 Claims. (Cl. 200—61.54)

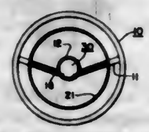


1. In an electric switch, a first member comprising a lever having fulcrum means thereon and an extension stem portion projecting axially beyond said fulcrum means, a second member having a bearing portion journaled on said fulcrum means and another portion substantially axially coextensive with said extension stem portion, said second member being rockable on said fulcrum means and tiltable relative to said extension stem portion, cooperating switch contacts one of which is movable and another of which is carried by said extension stem portion and is engaged by the movable contact in response to the tilting of said second member relative to said extension stem portion, and means effective between said members and normally urging said second member toward a position corresponding with an open condition of said contacts.

2,732,448
ATTACHMENT DEVICE
Philip J. Berner and James D. Connell, Dayton, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 25, 1954, Serial No. 452,089
10 Claims. (Cl. 200—61.56)

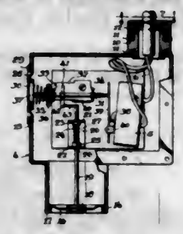
1. An attachment device for attaching a first member to a second member wherein the first member is formed

of relatively soft material and includes an aperture therein of substantial depth having an axially extending positioning spline on the peripheral wall thereof, said device having an element of relatively hard metal carried by said first member and adapted to engage a part of said second member for securing the members to one another, said element including an elongated split substantially cylindrical body portion disposed in the aperture of said first member, means for locating said element in a predetermined position on said first member relative to the axis of the aperture therein, said means comprising the edges of said split cylindrical body portion of said element engaging opposed sides of said spline in the aperture as



said element is inserted therein, means for holding the body portion of said element in said aperture against removal therefrom, said last named means comprising an ear stamped from said element body portion and having a sharp edge normally extending laterally beyond the outer surface thereof, said sharp edge on said ear being compressed against the wall of the aperture upon forcing the split cylindrical body portion of said element thereinto, and said sharp edge on said ear being adapted to bite into said wall of the aperture when a force is applied to said element in a direction tending to remove the same from the aperture whereby said element becomes firmly locked in the aperture.

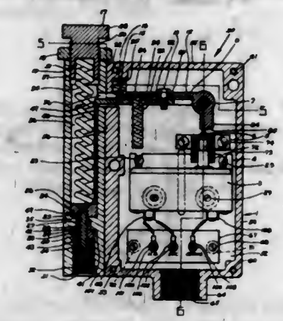
2,732,449
PRESSURE CONTROLLED SWITCH ACTUATING MECHANISM
Morris A. Gilman and Morris Riback, Chicago, and Morris B. Levin, Skokie, Ill., assignors to Expert Tool and Manufacturing Company, Chicago, Ill., a partnership
Application August 13, 1953, Serial No. 374,042
7 Claims. (Cl. 200—81.5)



1. A switch actuating mechanism comprising a rod, pressure responsive means for moving said rod axially into position to close said switch, an annular disk clutch encircling said rod, a second rod, said second rod being operatively connected to said clutch, and separate pressure responsive means for moving said second rod to tilt said clutch, said clutch in such tilted position providing clearance for axial movement of said first rod only towards switch closing position and binding against said first rod to prevent movement thereof in the opposite direction.

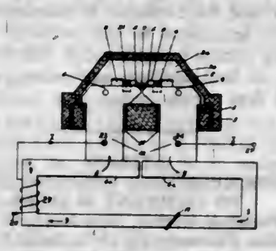
2,732,450
HYDRO-ELECTRIC SWITCH
Robert Stevenson, Barrington, R. I., assignor to Anco, Inc., a corporation of Rhode Island
Application October 6, 1951, Serial No. 250,045
3 Claims. (Cl. 200—82)

3. A hydro-electric switch having in combination a tube comprising a fluid pressure chamber and a second chamber, means responsive to the fluid pressure in said fluid pressure chamber comprising a second chamber pin, a plunger resiliently mounted in said plunger, means surrounding said plunger pin to form a fluid tight seal, a pivotally mounted actuator resiliently held in engagement with said plunger, a pivotally mounted bell crank trip



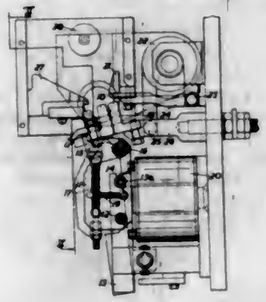
lever yieldingly held in engagement with said actuator, an adjustment between said actuator and said bell crank trip lever controlling the engagement between said actuator and bell crank trip lever, an arm on said bell crank trip lever, an electric switch having a movable contact, said arm engaging, to actuate, said movable contact.

2,732,451
ELECTRO-MAGNETIC SWITCH
Heinrich Degler, Zurich, Switzerland, assignor to FKG Fritz Kesselring Geratebau A. G., Bachtobel-Weinfelden, Thurgau, Switzerland, a corporation of Switzerland
Application July 20, 1951, Serial No. 237,693
5 Claims. (Cl. 200—87)



1. An electro-magnetic switch, said switch comprising a magnetic circuit and an electrical circuit, a portion of said magnetic circuit coinciding with a portion of said electrical circuit, said magnetic circuit comprising pairs of magnetic poles; said poles having a plurality of laminations; said laminations being partly of good conducting material and partly of good magnetic material, said high conductivity laminations being placed outwardly with respect to said magnetic laminations; said electrical circuit comprising pairs of stationary contacts and complementary contacts, a contact bridge extending from a high conductivity lamination to a stationary contact and from there to another high conductivity lamination, said complementary contacts being resiliently mounted on said poles, insulation blocks between said complementary contacts and said poles, each of said complementary contacts completing the circuit between a pair of said stationary contacts at the switch closing time and making the said flux carrying poles also current carrying, a housing comprising a base and a cover, said switch being mounted on said base and being enclosed by said cover, sealing means between said base and said cover; a vacuum within said housing for protecting said contact.

2,732,452
ELECTRIC SWITCHGEAR
James A. Jackson, Hounslow, and Melbourne Dewhurst, Cranford, Hounslow, England, assignors to Dewhurst and Partner Limited, Hounslow, England, a British company
Application November 9, 1951, Serial No. 255,584
4 Claims. (Cl. 200—87)



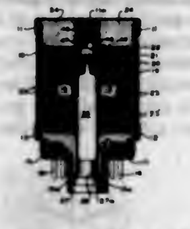
1. An electromagnetic contactor, comprising a field member, an armature movably mounted on a fixed part, said armature being attractable to and releasable from said field member, a carrier element pivotally mounted on said armature, a movable contact mounted on said carrier element pivotal about an axis spaced apart from the axis of the carrier element, a relatively stationary fixed contact, first spring means biasing said movable contact relative to said carrier element, to a given limit in the direction towards said fixed contact, and second spring means biasing said carrier element relative to said armature to a given limit in the direction to move said movable contact towards said fixed contact, the movement of said armature, when attracted to said field member, being in the direction to move said movable contact to said fixed contact, whereby, upon engagement of said movable contact with said fixed contact in response to the movement of said armataure to the attracted position, said second spring means initially yields before the armature has reached its final position, and subsequently recovers, leaving said first spring means in a condition of yield.

2,732,453
CONTACTOR RESISTING OPENING IN RESPONSE TO CURRENT SURGES
Frank A. Talbot, New York, N. Y.
Application February 29, 1952, Serial No. 274,209
9 Claims. (Cl. 200—87)



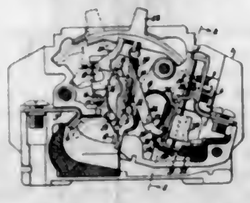
1. In an electrical switch, a stationary abutment contact, a swingable arm carrying a movable contact adapted to swing to a position engaging said abutment contact, a shiftable detent contact engaging said movable contact on a side substantially opposite said abutment contact, a flexible U-shaped electrically conductive member mechanically connected to said detent contact and in circuit relationship therewith to shift the detent contact into more positive engagement to cause increased contact pressure beween the movable contact and said abutment contact upon the occurrence of current surge through the U-shaped conductive member.

2,732,454
POLAR RELAY
William D. Buckingham, Southampton, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a corporation of New York
Application May 1, 1953, Serial No. 352,355
12 Claims. (Cl. 200—87)



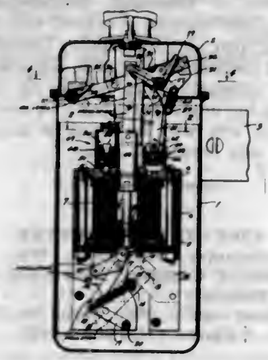
4. A polar relay unit comprising a molded body of insulating material, magnetic core structure within said body comprising two legs respectively having two ends thereof positioned adjacent to each other in spaced relation to provide poles with an operating gap between them, operate windings positioned around said legs and responsive to received signals for inducing opposite magnetic poles respectively therein, said body having an aperture extending therethrough and intersecting said operating gap, a sealed tube composed of non-magnetic material and a permanent magnet and an associated armature and contact assembly in a non-ionizable medium enclosed within the tube, the tube being removably positioned in said aperture in the body with one pole of said permanent magnet adjacent to said opposite magnetic poles and the armature subject to the resultant flux field established in the operating gap, a biasing magnet positioned in said aperture of the body with the external field of the magnet adjacent to said operating gap, said last named magnet having means for enabling it to be oriented, through said aperture, to prevent undesired signal bias during operation of said armature.

2,732,455
OVERLOAD RELEASING MECHANISM FOR AUTOMATIC CIRCUIT BREAKER
Eric A. Ericson and Raymond N. Rowe, Plainville, Conn., assignors to General Electric Company, a corporation of New York
Application March 3, 1953, Serial No. 340,024
6 Claims. (Cl. 200—88)



1. In an electric circuit breaker having separable switch contacts and a releasable tripping member movable to separate said contacts automatically, a latch member and a magnetizable armature member loosely connected together and movably mounted, said latch member having a portion operable to release said releasable tripping member, an elongated bimetallic member connected in circuit with said contacts and having a movable end coupled to move said latch member to releasing position, and a U-shaped magnetizable core member fixedly mounted to embrace said bimetallic member for magnetization by the current conducted therethrough and providing spaced-apart pole pieces to attract said armature, said bimetallic member and said latch member each including a portion movable within said core member in a tripping direction, said armature being wider than the space between said pole pieces and being movable into engagement with said pole pieces upon a predetermined amount of movement of said portion of said bimetallic member and said latch member within said core member, the loose connection of said latch and armature members permitting thermal responsive overtravel of said bimetallic member due to heat stored therein after release of said releasable tripping member and following said engagement of said armature member with said pole pieces.

2,732,456
LOCK-IN CIRCUIT INTERRUPTER
Anthony Van Ryan, South Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application May 19, 1951, Serial No. 227,149
4 Claims. (Cl. 200—89)



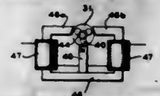
1. A circuit interrupter having two time current characteristics comprising electro-magnetic means including an energizing coil and an armature, switch means operated from said armature and arranged to open on overload, cumulative means adapted to be advanced in a step-by-step manner upon successive operations of said circuit interrupter, normally ineffective time delay means for delaying the opening of said circuit interrupter, said time delay means being controlled by said cumulative means and becoming effective when said cumulative means has been advanced to a predetermined intermediate position, and normally ineffective lock-in means controlled by said cumulative means and rendered effective by said cumulative means when said cumulative means has been advanced to a position beyond said intermediate position.

2,732,457
VIBRATOR MECHANISM
Herman J. Wise, Indianapolis, Ind., assignor to P. R. Mallory & Co., Inc., Indianapolis, Ind., a corporation of Delaware
Application May 10, 1954, Serial No. 428,399
11 Claims. (Cl. 200—90)



1. A small vibrator mechanism comprising a plurality of frames placed back to back, each of said frames having a fixed contact arm connected thereto adapted to have a contact thereon, a reed contact arm having a contact-making face for making contact with said fixed contact arm, a vibrating reed having an armature, said reed and reed arm adapted to be connected together, said reed further being adapted to be mounted between said frames of said vibrator, a driver coil for said mechanism, and a vibrator pole piece connected to one of said frames and adapted to activate said armature upon the excitation of said driven coil whereby high contact pressure is obtained between said contacts.

2,732,458
POLAR RELAY
William D. Buckingham, Southampton, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a corporation of New York
Application August 27, 1952, Serial No. 306,690
16 Claims. (Cl. 200—93)



1. A polar relay comprising a magnetic core structure having two adjacent opposed poles and an operate winding responsive to received signals for inducing opposite magnetic poles alternatively therein, a permanent magnet having one pole thereof adjacent to said opposed poles, a sealed tube composed of non-magnetic material, a contact assembly in a non-ionizable medium enclosed within said tube, said contact assembly being positioned between said poles and subject to the resultant flux field produced thereby, said contact assembly comprising a conducting member having a contact surface and two other conducting members respectively having oppositely disposed contact surfaces, an armature comprising a conductive body of magnetic material held in contact continuously with said first named contact surface by the attraction of the permanent magnet pole and operative to travel back and forth on said first named contact surface in response to changes in the polarities of said opposed poles to selectively contact said oppositely disposed contact surfaces alternatively to bridge, and close a circuit between, either of these surfaces and said first named contact surface.

2,732,459
MEANS FOR PREVENTING CONTACT STICKING IN MERCURY CONTACT SWITCHES
Charles E. Pollard, Jr., Hohokus, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application September 21, 1953, Serial No. 381,449
6 Claims. (Cl. 200—112)

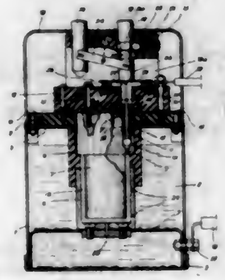


1. In an electric switch of the type employing engageable wetted contacts, an agent for wetting the contacts comprising copper-mercury solution.

2,732,460
ELECTRIC RELAYS OF THE LIQUID RESISTANCE TYPE
Norbert R. Benchemoul, Paris, France
Application January 29, 1954, Serial No. 407,026
Claims priority, application France January 29, 1953
16 Claims. (Cl. 200—114)

1. An electric relay comprising a liquid-resistance cell having two closely-spaced electrodes with opposite sur-

faces bounding a narrow compartment, a vaporizable conductive liquid inside said electrodes for passing electrical energy from the terminals, through the conductive liquid, when voltage is applied to said terminals; a vessel containing a reserve supply of said conductive liquid; passage means for connecting said vessel with said compartment, said passage means being designed for offering substantial resistance to flow therethrough at least in the



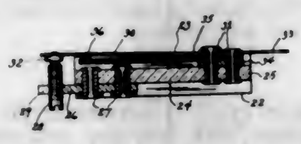
direction of flow from said compartment to said vessel; a chamber of variable volume having a movable wall element and communicating with said compartment; an electric circuit; switching means in said circuit, having at least one contact; and contact control means, operatively associated with said movable wall element, for opening and closing said electric circuit in response to a displacement of said wall element.

2,732,461
BIMETALLIC SNAP-ACTION SWITCH
Jakob Huber, Baden, Switzerland, assignor to J. Huber & Cie. Aktiengesellschaft, Baden, Switzerland, a corporation of Switzerland
Application April 9, 1952, Serial No. 281,358
Claims priority, application Switzerland April 10, 1951
9 Claims. (Cl. 200—138)



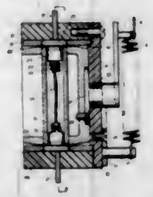
1. A bimetallic snap-action switch comprising a lenticular casing formed of two sheet metal plates with dished rims meeting at substantially the median plane of the casing, an imperforate domed bimetallic disk constituting a movable switch blade, one of said metal plates having an outer edge extending over the other plate to hold the same in assembled position and said other plate having a shallow radial flange constituting a circumferential seat for said disk, the outer edge of said disk resting loosely on said seat and having two end positions according to the existing temperature at which its outer edge portion bears against the inner surface of the dished rim of one or the other of said casing plates, a contact mounted axially on one of said plates, and terminal means for said bimetallic disk and said contact; the terminal means for said bimetallic disk including said lenticular casing.

2,732,462
THERMOSTATIC SWITCH
Ramon Font, Richmond Hill, N. Y., assignor to Premier Research Laboratories, Inc., New York, N. Y., a corporation of New York
Application February 3, 1955, Serial No. 485,886
4 Claims. (Cl. 200—138)



1. A thermostatic switch comprising a support, a first contact member mounted on said support, a resilient contact arm secured to said support and overlying said first contact member, a bimetallic, temperature-responsive strip secured to said support in contact with and underlying said contact arm, and a depending conical indentation formed in said resilient contact arm, said conical indentation having a relatively sharp bottom tip engaging said bimetallic strip and urged thereagainst by said arm, whereby said contact arm will be flexed in accordance with the flexure of said bimetallic strip.

2,732,463
CIRCUIT INTERRUPTER
Alwin G. Steinmayer, Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application April 7, 1953, Serial No. 347,326
6 Claims. (Cl. 200—146)

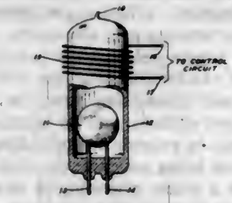


1. A circuit interrupter comprising a tubular housing having a bore, a tubular insulating liner in said bore concentric with the longitudinal axis of said tubular housing, stationary contact members communicating with said bore and lying in a plane substantially normal to said longitudinal axis and in diametrically opposed relationship with one another, a rotatable insulating member concentric with and journaled at the longitudinal axis of said bore, said rotatable member including a pair of movable contact members electrically connected with one another and lying substantially in the same plane as said stationary contact members, said rotatable insulating member comprising an arc-extinguishing material capable of evolving un-ionized cooling gases in the presence of an arc, spring means biasing said movable contact members towards electrical engagement with said opposed stationary contact members, and an over-center toggle biasing means for providing a quick-break separation of said movable contact members with said stationary contact members.

2,732,464
ELECTRICAL CONTACTING DEVICES
Russell S. Ohl, Fair Haven, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application July 18, 1951, Serial No. 237,347
9 Claims. (Cl. 200—166)

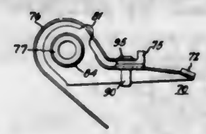
2. An electrical contacting device comprising a pair of metallic electrodes, a sphere of base metal resting upon at

least one of said electrodes, an electroplated layer of the



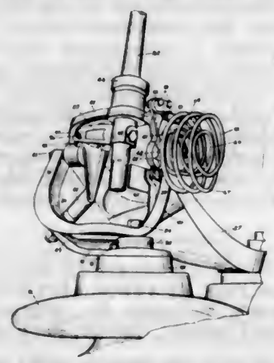
element gallium upon said sphere, and means for raising said sphere off said electrode.

2,732,465
IGNITION DISTRIBUTOR
Max G. Bales, Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Original application November 16, 1950, Serial No. 196,045. Divided and this application September 7, 1951, Serial No. 245,470
4 Claims. (Cl. 200—166)



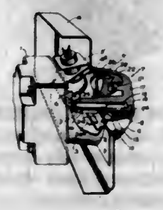
1. A spring biased circuit breaker having a contact arm portion and a pivot portion on one end thereof comprising in combination, a radially extending ear on said pivot portion and a leaf spring having a single point of attachment on said arm portion and a portion spaced from said pivot portion having an elongated aperture therein adapted to receive said extending ear only to prevent said spring from pivoting about said point of attachment.

2,732,466
TORSIONAL SPRING
Leonard A. Hulteen and Walter Kowalski, Milwaukee, Wis., assignors to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application July 13, 1953, Serial No. 367,630
8 Claims. (Cl. 200—166)



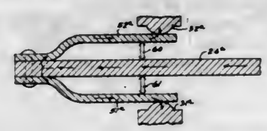
8. In an electrical switch having a movable switch blade pivoted on a stationary support, means for counterbalancing the weight of said blade comprising a torsion spring having a plurality of convolutions forming an inner helix and a plurality of convolutions forming an outer helix of larger radius than and surrounding the inner helix, the spring being a continuous rod having the two rod ends terminating at the same end of the spring with one rod end secured to said movable blade, an indexing member pivoted to move angularly relative to said support and secured to the other rod end, and means for releasably holding said indexing member in either of a plurality of angular positions relative to said support.

2,732,467
SWITCH CONTROL AND INDICATOR
Raymond N. Slate, Detroit, Mich., assignor to Moffats Limited, Weston, Ontario, Canada, a corporation
Application December 3, 1953, Serial No. 396,033
7 Claims. (Cl. 200—167)



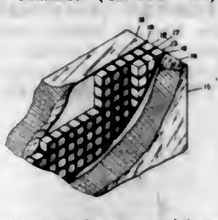
1. A rotatable switch position control knob comprising a body of light-transmitting material having a front surface around the rotational axis of the knob and from which the body is viewed and a rear surface around the axis of the knob, and means for illuminating that portion of the front surface of the body occupying a predetermined position with predominant illumination the colour of which is variable by rotating the knob and for illuminating adjacent portions of the front surface which forms an annulus with said portion with more dim illumination differently coloured than the predominant illumination; said means comprising a stationary light source spaced rearwardly from the body opposite the predetermined position, and a plurality of differently coloured light filtering areas located side by side closely adjacent one another in circular order coaxially with the knob and covering substantially the whole of said rear surface of the body and so located on the body that as the knob rotates the light filtering areas pass sequentially in front of the light source, the filtering area in front of the light source transmitting light from the light source to the first-mentioned portion of the front surface of the body, adjacent filtering areas transmitting light from the light source to said adjacent portions of the front surface of the body, said rear surface on which the light filtering areas are located, the mass of the body in front of said rear surface, and said annulus of said front surface providing a continuous ring, the entire ring being light-transmitting.

2,732,468
ELECTRIC SWITCH
Thomas E. Curtis, Hampton, Ga., and George N. Lemmon, Birmingham, Ala., assignors to Southern States Equipment Corporation, a corporation of Georgia
Application September 4, 1952, Serial No. 307,894
13 Claims. (Cl. 200—170)



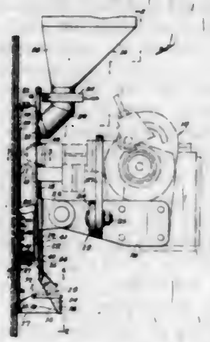
12. In an electric switch, rigid stationary contact members, a rigid blade, and resilient contact members secured to the blade and cooperating with the stationary contact members, constructed and arranged for all the current to flow through the blade and through the resilient contact members in parallel paths in opposite directions.

2,732,469
PHOTOSENSITIVE DEVICE
Richard C. Palmer, Pompton Plains, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application October 8, 1952, Serial No. 313,642
9 Claims. (Cl. 201—63)



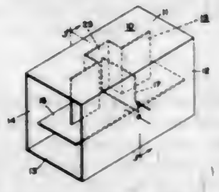
1. A photosensitive device comprising a pair of photosensitive layers, said layers having oppositely facing surfaces adapted to be illuminated by respective light sources, and also having juxtaposed faces which are conductively connected over their entire surfaces.

2,732,470
FLUX CONTROL APPARATUS
Rea A. Clotfelter, South Gate, Calif.
Application October 25, 1954, Serial No. 464,268
7 Claims. (Cl. 219—8)



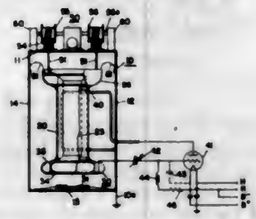
1. In welding apparatus, means to control flow of flux, said means comprising a longitudinally flared control hopper of channel-shaped cross-section, said hopper being connected between its ends to a welding head, a flux-feeding hopper connected by a swivel to one end of said control hopper and located to one side of said welding head, the other end of said control hopper being open, and flux-flow-regulating means in said hopper adjacent said open end.

2,732,471
RESONANT HIGH-FREQUENCY HEATING APPLICATOR
Foster M. Sweets, Prospect, Ky., assignor, by mesne assignments, to National Cylinder Gas Company, Chicago, Ill., a corporation of Delaware
Application February 26, 1953, Serial No. 339,007
9 Claims. (Cl. 219—10.55)



7. A high-frequency heating applicator comprising a pair of electrodes supported in spaced relation one from the other, conductive structure electrically connected at one end to one of said electrodes and extending away from said one electrode, a housing enclosing said structure and the space between said electrodes, means including walls of said housing electrically interconnecting the other end of said conductive structure with the other of said electrodes, said conductive structure comprised of spaced apart aligned sections, and an intermediate section joined said sections to present an unbroken surface, said intermediate section being substantially U-shaped in cross-section to provide a recess extending in direction parallel to the current flow through said structure, the recess extending from one end of said conductive structure to the other end thereof, and a coupling loop having a side positioned within the recess.

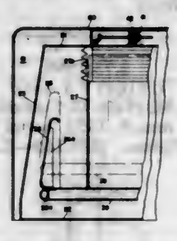
2,732,472
RESONANT HIGH-FREQUENCY HEATING APPLICATOR
Carl E. Ellsworth, Anchorage, Ky., assignor, by mesne assignments, to National Cylinder Gas Company, Chicago, Ill., a corporation of Delaware
Application February 26, 1953, Serial No. 339,054
6 Claims. (Cl. 219—10.55)



3. A high-frequency heating applicator comprising a pair of electrodes supported in spaced relation one from the other, at least one of said electrodes being long and narrow, conductive structure electrically connected at one end to said one of said electrodes and extending away from said one electrode, a housing enclosing said structure and the space between said electrodes, means including walls of said housing electrically interconnecting the other end of said conductive structure with the other of said electrodes, said applicator being resonant at a frequency predominantly determined by the inductance of said conductive structure and the capacity between said electrodes, said conductive structure being substantially U-shaped in cross-section transverse to the direction of current flowing therethrough, each side portion of said structure comprising a column which along the length of said one electrode is long compared to its width, said columns of said conductive structure having rounded side portions to reduce the concentrations of current flowing therein, and a coupling loop in part disposed within the open portion of said U-shaped conductive structure.

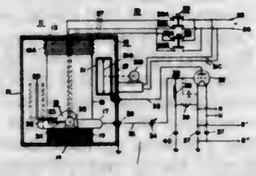
2,732,473
DIELECTRIC HEATING APPLICATOR
Carl E. Ellsworth, Anchorage, Ky., assignor to National Cylinder Gas Company, Chicago, Ill., a corporation of Delaware
Application May 28, 1953, Serial No. 358,051
13 Claims. (Cl. 219—10.55)

2. A dielectric-heating applicator comprising an electrically conductive housing having a vertical wall, upper and lower heating electrodes, said vertical wall being inclined at an acute angle with said lower heating electrode and at one end electrically interconnected thereto, means including an inductive element for electrically connecting said upper electrode and an opposite end of said inclined wall, means for effecting vertical movement of said upper electrode to increase or decrease the spacing between it and said lower electrode, and means for minimizing the variation in total capacitance of the applicator as the upper electrode is moved vertically, said means



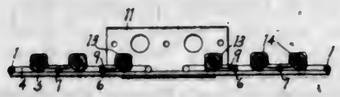
comprising a capacitive surface mounted on said electrode substantially parallel with said inclined vertical wall of said housing.

2,732,474
VARIABLE CAPACITOR FOR HIGH-FREQUENCY DIELECTRIC HEATING APPLICATOR
Carl E. Ellsworth, Anchorage, Ky., assignor to National Cylinder Gas Company, Chicago, Ill., a corporation of Delaware
Application September 28, 1953, Serial No. 382,526
21 Claims. (Cl. 219—10.55)



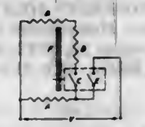
3. A dielectric-heating applicator comprising an electrically conductive housing, a heating electrode within said housing and spaced from wall structure thereof, an inductance element electrically connected at one end to said electrode and at the opposite end electrically connected to wall structure of said housing, and a supplemental capacitive element supported by said heating electrode and extending therefrom in spaced relation to said inductance element and housing, said supplemental capacitive element being movable relative to said electrode and housing and independent of variation in electrode spacing to vary the resonant frequency of said applicator.

2,732,475
HEATING ELEMENT UNIT FOR OVENS AND THE LIKE
Charles C. Averill, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich.
Application October 8, 1951, Serial No. 250,296
8 Claims. (Cl. 219—19)



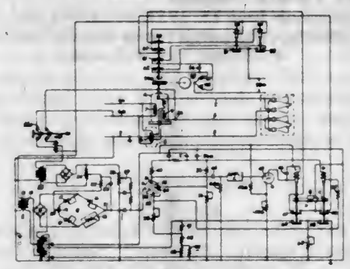
1. A heating unit comprising spaced frame members, a crossrod fixedly secured to said frame members, a plurality of crossarms of bendable wire stock fixedly secured to said rod in spaced parallel relation and having upwardly offset downwardly facing rectangular insulator-receiving loops at their ends, and peripherally grooved insulators disposed in said loops, the outer arms of the loops terminating in bendable fingers disposed in the grooves of the insulators to releasably retain the insulators within the loops, the grooves being disposed generally circularly around the insulators, the rectangular loops being radially spaced from the radially innermost portions of the grooves at the junctures of the sides of the loops.

2,732,476
COMPENSATED THERMOSTATIC CONTROL FOR ELECTRIC RANGES
Elmore Stanley Smith, North York Township, York County, Ontario, Canada, assignor to Moffats Limited, Weston, Ontario, Canada, a corporation
Application June 30, 1951, Serial No. 234,498
6 Claims. (Cl. 219—20)



1. A range oven comprising primary heating means for heating the oven and connectible to provide a high heat output when initially energized and a lower heat output when subsequently energized, a thermostat located where it is responsive to the heat output of the primary heating means, auxiliary heating means located adjacent the thermostat for supplying additional heat to the thermostat, first connecting means initially connecting in circuit the primary heating means and the auxiliary heating means, the primary heating means being connected by the first connecting means to provide the high heat output when said circuit is energized, the auxiliary heating means when energized in said circuit being of sufficient heating capacity to minimize time lag between the temperature of the oven and that of the thermostat, the first connecting means being actuated by the thermostat when the oven has reached a predetermined temperature to alter said circuit to reduce the heat outputs of the primary and auxiliary heating means when the circuit is energized thereafter, and second connecting means actuated by the thermostat to energize and de-energize said altered circuit.

2,732,477
CONTROL SYSTEM
Lewis R. Runaldue, Dalton, and Morris T. Reese, Pittsfield, Mass., assignors to General Electric Company, a corporation of New York
Application December 5, 1952, Serial No. 324,229
9 Claims. (Cl. 219—20)



1. A temperature responsive system for varying the energy output of a heater element in response to changes in temperature, said system comprising a source of electrical power connected to said heater element, a voltage regulator for varying the voltage across said heater element, a reference circuit including a temperature-sensitive element which is disposed so as to be substantially unaffected by the energy emitted by said heater element, said reference circuit having a direct voltage output varying as a function of said temperature, an indicating circuit having a direct voltage output which is a function of the output voltage of the voltage regulator, means for obtaining an algebraic sum of the output voltages of said reference circuit and said indicating circuit so as to produce an error signal which is a function of said sum, means for filtering said error signal to provide a substantially pure direct voltage, control means for vary-

ing the voltage output of said voltage regulator, said control means being responsive to variations in said filtered error signal to cause said voltage regulator to vary the voltage applied to the heater so as to produce the desired energy output for a given temperature.

2,732,478
IMMERSION HEATER
Theodor H. Stiebel, Holzminden (Weser), Germany
Application December 22, 1952, Serial No. 327,194
16 Claims. (Cl. 219—41)



5. Electrical immersion heater comprising heating means, a hollow handle, a shank connecting the heating means and the handle, switching means within the handle adapted to connect a source of electrical potential to the heating means, thermally responsive means adapted to actuate the switching means, and selective means within the handle and independent of the spatial position occupied by the heater operable from the exterior of the handle to condition the switching means to either the condition where it will be actuated once to disconnect the heating means from the source or to the condition where it will successively be actuated to disconnect and reconnect the heating means and the source repeatedly.

2,732,479
ELECTRIC HEATING ELEMENTS
Leonard Rowland, Leicester, England, assignor to Hobourn Aero Components Limited, Rochester, Kent, England, a British company
Application June 15, 1953, Serial No. 361,767
Claims priority, application Great Britain May 30, 1951
4 Claims. (Cl. 219—46)



3. A flexible heating element comprising essentially a substantially inextensible flexible support at least one electrical resistance wire carried by said support and a slightly extensible enclosing sleeve of braided heat-resisting electrically-insulating fibrous material, said support being constituted by a core of straight strands of heat-resisting electrically-insulating fibrous material and upon said core a body of braided strands of heat-resisting electrically-insulating fibrous material, and said at least one electrical resistance wire being braided into the outer layer of said body strands to guide it in a sinuous path to separate successive portions from self short-circuiting contact and to expose short portions of said resistance wire along the surface of said outer layer of body strands, so that said portions of wire are concealed solely by the slightly extensible enclosing braided sleeve.

2,732,480
UTILITY LAMP
William M. Wells II, Columbia, S. C.
Application June 9, 1952, Serial No. 292,425
2 Claims. (Cl. 240—2.13)



1. An electric light comprising a casing for holding one terminal of a battery in engagement with one terminal of an associated bulb, a support for said casing, cooperating switch means carried by said support, said switch means being actuated by movement of said casing with respect to said support, said support including a spring having spaced points of contact with said casing, said casing forming a lead for connecting a second terminal of the battery with a second terminal of the bulb, one end of said casing being insulated from the other, said spring being adapted to simultaneously contact both ends of said casing to complete a circuit between the battery and the bulb, said support including a housing having a sleeve portion guidingly receiving said casing and providing a permanent support for the same.

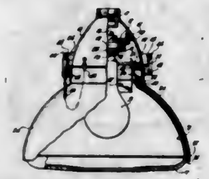
2,732,481
ILLUMINATED WORK SUPPORT
Nelson P. King, Jamestown, N. Dak.
Application September 15, 1953, Serial No. 380,193
5 Claims. (Cl. 240—4)



1. A free standing device of the character described comprising a work board, a substantially straight arm hinged intermediate the ends thereof to the upper portion of said board to provide a downwardly extending portion for free standing engagement with a table top or similar supporting surface and an upwardly extending portion, illuminating means carried upon said upwardly extending portion and disposed above said board for illuminating an object thereon, and adjustable means connected to said board and to the downwardly extending portion of said arm for holding them in a desired angular relationship.

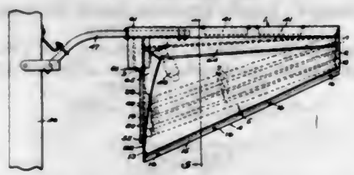
2,732,482
ENCLOSED DIRECT LIGHTING FIXTURES
Vearl S. Wince, Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y., a corporation of Delaware
Application November 14, 1951, Serial No. 256,170
7 Claims. (Cl. 240—11.2)

5. A lighting fixture tight against dust and/or vapor, comprising a canopy provided with an upper downwardly facing annular flange and carrying a pendant lamp socket, the said upper flange and socket being sealed vapor tight so that vapor cannot pass through the canopy or socket, the canopy having a lower, inwardly extending annular flange, an annular impervious sheet metal cover having its upper end in the form of an outwardly extending flange of the same diameter as the canopy flange and below the said canopy flange, a collar



outside the cover immediately below the cover flange, a gasket between the flanges opposed canopy and cover, means carried by the canopy and collar for forcing the canopy and cover flanges toward one another to form a tight joint for preventing the entrance of dust or vapors, and an impervious light transmitting bottom sealed to the bottom of the cover so as to form a tight chamber below the lamp socket.

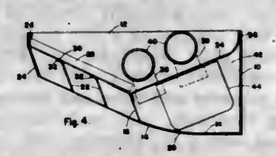
2,732,483
STREET LIGHTING LUMINAIRE
William B. Elmer, Boston, Mass.
Application February 24, 1953, Serial No. 338,538
4 Claims. (Cl. 240—25)



1. A street lighting luminaire comprising a housing having a horizontally-disposed top element which is wider at its rear end than at its front end, a vertically disposed rear end element which is wider at its top than at its bottom, a vertically disposed front end element which is also wider at its top than at its bottom, said rear end element being longer than the front end element, both end elements having the same width at the bottom, a bottom element connecting the bottom edges of the two end elements, said bottom element having a substantially uniform width which corresponds to the width of the end elements at their bottom ends, said top element having on its under face two panel-receiving grooves, one on each side of its medial line, said grooves converging toward each other from the rear to the front, each end element having on its inner face two panel-receiving grooves, one on each side of its median line, the two grooves on each end element converging from the top to the bottom and terminating at the edge of the bottom element, two flat side panels of light transmitting material mounted in said grooves, retaining members secured to the bottom member and engaging the bottom edges of the side panels and retaining the latter in place, sockets mounted on the end members, and fluorescent lamps mounted in said sockets.

2,732,484
COVE LIGHTING FIXTURE
Willis L. Lipscomb, San Diego, Calif.
Application October 22, 1952, Serial No. 316,254
10 Claims. (Cl. 240—51.11)

1. A cove lighting fixture comprising an open topped casing having a vertical side for securement on a wall, said casing having an open portion at the bottom, an imperforate panel closing the remainder of the bottom of the casing, a lamp operatively mounted in the casing vertically above said panel, and louvers in the open



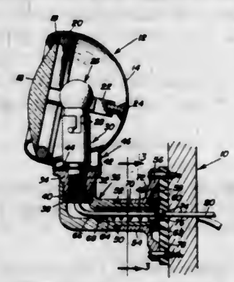
portion of the bottom of the casing allowing circulation of air upwardly through said open portion while shielding said lamp from view through said open portion, said louver slats being fixed in said casing.

2,732,485
LUMINAIRE
Weinreich E. Kuhrt, Newark, N. J.
Application December 19, 1950, Serial No. 201,548
3 Claims. (Cl. 240—51.12)



1. A fluorescent lamp and support therefor comprising a lamp envelope substantially in the shape of a hollow torus, said support comprising an elongated U-shaped structure having a base portion and sides substantially perpendicular thereto, said sides extending substantially parallel of each other and then converging toward each other to form a rigid housing, a transformer constituting an operating means for said lamp within said housing, each of said converged portions of said sides having a pair of parallel laterally spaced C-shaped arms extending from the longitudinal edge thereof, each pair of said C-shaped arms being positioned to face the other pair for embracing said lamp envelope, means interconnecting said converged portions, said envelope being seated within said C-shaped arms, the free ends of opposite pairs of said C-shaped arms being secured to each other to embrace said envelope and secure said envelope in fixed position.

2,732,486
ROTATABLE CONNECTING MEANS FOR LAMPS
Baltazar J. Osowski, Cicero, Ill., assignor of one-half to Frank E. Stacknik, Cicero, Ill.
Application April 23, 1953, Serial No. 350,715
1 Claim. (Cl. 240—61.12)



A rotatable mounting for lamps comprising a base assembly adapted to be secured to a support, a lamp

supporting neck rotatably carried by said base assembly, a bulb secured to said neck, a stationary contact on said base assembly, a source of current connected to said contact, a conductive washer in contiguous relation to said stationary contact, and electrically connected to said bulb, said base assembly comprising a hub receiving said neck and an insulating plate underlying said hub, said plate carrying said stationary contact, said hub having a recessed portion adjacent said plate and having a chamber communicating therewith, said neck having a reduced portion received within the chamber and extending adjacent said plate, means on the free end of said reduced portion for preventing longitudinal movement of the neck, said neck being tubular and slidably receiving an insulating thimble, said conductive washer being secured to said thimble, a shoulder in said neck, and spring means engaging said thimble and said shoulder and extending therebetween to urge said thimble and said conductive washer into engagement with said stationary contact.

2,732,487
ADJUSTABLE LAMP
Alvin L. Crider, Hot Springs, Ark.
Application May 13, 1952, Serial No. 287,558
1 Claim. (Cl. 240—81)



An adjustable lamp comprising a base, a hollow standard mounted on said base and having a slot formed therein and extending throughout its length, a collar including an aperture slidably mounted on said standard, a locking wing bolt in said collar and operative against said standard to maintain said collar in a selected vertical position, a lug mounted in said collar and projecting into said slot to maintain said aperture aligned therewith, an open ended arm pivotally mounted on said collar adjacent said aperture, a lamp unit mounted on said arm, and an electric cord extending from said base through said standard, aperture and arm to said lamp unit, said arm being telescopic and said cord being frictionally held by said aperture so as to form a slack loop when said arm is in non-extended position, said base including an arcuate conduit terminating at said standard and said cord being armored from a point adjacent said aperture to a point exterior of said base in a position of maximum height adjustment to minimize friction and permit ready sliding movement of said cable through said standard and said conduit.

2,732,488
DIRECT LIGHTING FIXTURES
Vearl S. Wince, Newark, Ohio, assignor to Holophane Company, Inc., New York, N. Y., a corporation of Delaware
Application November 14, 1951, Serial No. 256,169
3 Claims. (Cl. 240—93)

2. A luminaire having a concentrated light source, a downwardly and outwardly flaring annular, specular reflector intercepting light in regions above and below the source and having a contour to focus reflected light without crossing the reflector toward points in an annular region below the reflector and a light transmitting closure plate disposed between the reflector and said focal points and through which direct and reflected light passes, said

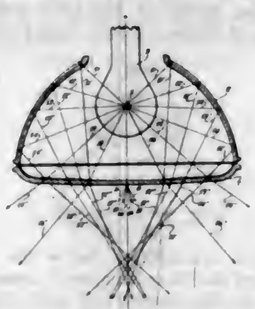
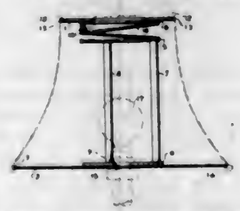


plate having in the annular region where the dominant reflected light converges toward said points, light splitting prisms which spread the reflected light falling thereon in directions lateral of the radial plane through the same and substantially reduce the brightness of said region with respect to what it would be without such spreading.

2,732,489
LAMPSHADES
Harold C. Leech, Brighton Beach, Durban, Union of South Africa
Application December 5, 1950, Serial No. 199,209
Claims priority, application Union of South Africa December 31, 1949
7 Claims. (Cl. 240—108)

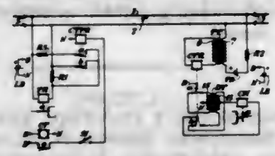


1. A lampshade comprising a deformable tubular canopy tensionable to a desired form, upper and lower marginal elastic beads on said canopy, a support for holding said canopy radially and axially to said form in tautened condition, said support comprising an annulus having a greater perimeter than the perimeter of said upper canopy bead and adapted to engage said upper canopy bead throughout its entire length upwardly thereunder, a second annulus having a greater perimeter than the said lower canopy bead and adapted to engage said lower canopy bead throughout its entire length downwardly thereover, and spring means inserted between said two annuli to urge them into upward and downward engagement with their respective canopy beads, said spring means disposed adjacent the center of the space enclosed by said canopy.

2,732,490
SUPERIMPOSED CODED SIGNALING SYSTEMS
William L. McNabb, Turtle Creek, Pa., assignor to Westinghouse Air Brake Company, a corporation of Pennsylvania
Application February 27, 1951, Serial No. 212,884
11 Claims. (Cl. 246—34)

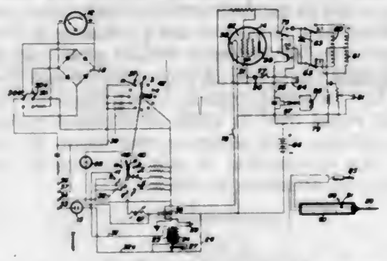
1. In combination, a pair of conductors, a source of direct current energy connected across said conductors

at one end thereof and an electro-responsive device connected across said conductors at the other end thereof, said electro-responsive device being responsive to a predetermined minimum value of energy supplied thereto over said conductors, means located at one end of said pair of conductors for recurrently changing the value of energy supplied from said source to said electro-responsive



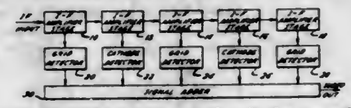
device between a first value which is greater than said predetermined minimum value and a second value which is greater than said first value, and means located at the other end of said pair of conductors responsive to changes of energy supplied from said source to said conductors, when said changes are recurrent and are at least as great as the difference between said first and said second values.

2,732,491
TESTING INSTRUMENT ASSEMBLY
Vicente A. Jeannot, New York, N. Y.
Application July 14, 1949, Serial No. 104,691
11 Claims. (Cl. 250—20)



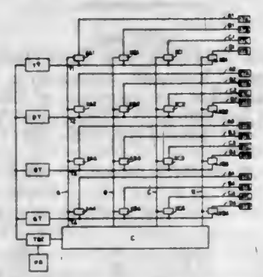
1. A measuring and testing assembly for testing radio and television sets, comprising an instrument box, a milliammeter provided with a multimeter scale, two ganged switches each provided with a movable contact arm and with a contact bank, said contact arms moving in conjunction over their banks for connecting corresponding contacts on the banks with the contact arms, terminal contacts for a connection with the sets to be tested, one of the terminal contacts being connected with the movable contact arm of the first one of the ganged switches, resistances for measuring voltages on the multimeter scale milliammeter, connected with some contacts on the contact bank of the first one of the two ganged switches, said resistances being connected with a conductor leading to one side of the multimeter scale milliammeter and with a conductor leading to the movable contact arm of the second one of the ganged switches, a variable resistance connected with the source of current and with one bank contact of the first one of the ganged switches, a further terminal contact for connection with the set to be tested, connected with a conductor leading to the multimeter scale milliammeter for measuring ohmic resistances in the circuits of the set to be tested when connected with said further terminal contact, further resistances connected with contacts of the contact bank of the second one of the two ganged switches and connected with a conductor leading to the multimeter scale milliammeter, the corresponding contacts of the contact bank of the first one of the ganged switches being connected with the movable arm of the second one of the ganged switches and with one of the conductors leading to the multimeter scale milliammeter, said further resistances providing means for measuring the current intensity of currents sent through the set to be tested, a rectifier connected with conductors leading to the multimeter scale milliammeter and switching means inserted into the connections between said milliammeter and said rectifier, selectively making either a direct connection with the conductors leading to the milliammeter or making a connection with the milliammeter through the said rectifier.

2,732,492
IMPROVED AMPLIFIER-DETECTOR CIRCUIT
David E. Sunstein, Bala-Cynwyd, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application February 11, 1953, Serial No. 336,250
14 Claims. (Cl. 250—20)



1. A signal amplifier-detector circuit for providing an output signal which changes substantially for relatively small percentage changes in the amplitude of the input signal supplied thereto, said circuit comprising a plurality of carrier frequency amplifier stages connected in cascade, means for supplying an input signal to the first amplifier in said cascade arrangement, detector means associated with more than one of said amplifier stages, and means for combining the outputs of said detector means, said combining means being so constructed and arranged that the detected output of at least one of said detector means tends to cancel the detected output of at least one other detector means.

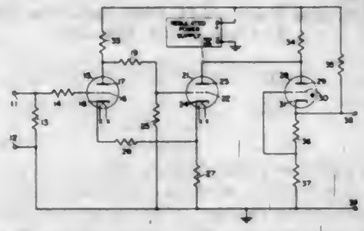
2,732,493
ELECTRONIC STORAGE ARRANGEMENTS
George Thomas Baker, Taplow, England, assignor to British Telecommunications Research Limited, Taplow, England, a British company
Application October 30, 1951, Serial No. 253,840
Claims priority, application Great Britain November 4, 1950
5 Claims. (Cl. 250—27)



1. In an electronic storage arrangement, a switching arrangement comprising a plurality of similar high-speed storage devices located in proximity to one another and each having its storage capacity divided into a plurality of portions, switching means for selectively giving access to said different portions of storage capacity, a plurality of similar responding devices located in proximity to one another for receiving information from said storage devices and respectively individual to each of said storage devices, the responding devices associated with any storage device corresponding respectively to the different portions of storage capacity of said storage device, switching means individual to each of said responding devices for selectively associating the said devices with the corresponding storage devices, and control means common to all said storage devices for simultaneously controlling all said access switch-

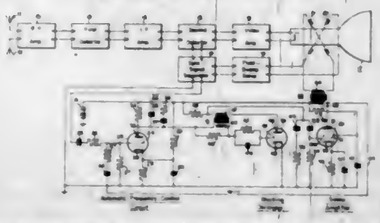
ing means and all the individual switching means corresponding to similar portions of storage capacity of the different storage devices so as to ensure that any individual responding device is always associated with the same portion of the storage capacity of its corresponding storage device.

2,732,494
VOLTAGE LIMITER
Orville C. Hall, Baltimore, Md., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application July 8, 1953, Serial No. 366,658
4 Claims. (Cl. 250—27)



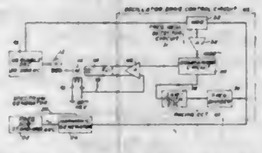
1. A voltage limiter comprising a gas filled electron tube having a cold cathode and an anode, first resistor means connected in series with said cathode, a regulated power supply to supply energy to said gas tube, a second resistor connecting the positive side of said power supply to said anode, a third resistor connecting the positive side of said power supply to the junction between said cathode and said said first resistor means, the negative side of said power supply being connected to the end of said first resistor which is remote from said cathode, means connected to said anode for preventing said gas tube from conducting in the absence of an input signal, means for rendering said gas tube conductive in the presence of a positive input signal, and output terminals connected across said first resistor means whereby a first constant output voltage other than zero is applied to said output terminals in the absence of an input signal and second constant output voltage is applied to said output terminals in the presence of a positive input signal.

2,732,495
AUTOMATIC FREQUENCY-CONTROL CIRCUIT
Jack E. Bridges, Cicero, Ill., assignor to Zenith Radio Corporation, a corporation of Illinois
Application September 27, 1950, Serial No. 187,120
6 Claims. (Cl. 250—36)



1. An automatic frequency-control circuit for synchronizing the frequency of a periodic-wave generator with incoming synchronizing pulses comprising: an electron-discharge device normally maintained in a non-conductive state; means for deriving pulses from said generator having an individual duration short compared with the period of said generator and for applying said derived pulses to said discharge device with a polarity and amplitude to render said device conductive; means for supplying said synchronizing pulses to said device with a polarity and amplitude to return said device to a non-conductive state for the portion of each of said synchronizing pulses occurring in time-coincidence with said derived pulses, thereby giving rise to current pulses in said device width-modulated in accordance with the phase relation of said synchronizing pulses and said derived pulses; an integrating output circuit for said device for producing a control potential having amplitude variations proportional to variations in the average space current flowing in said device; and means for applying said control potential to said periodic-wave generator to control the operating frequency thereof.

2,732,496
FREQUENCY CONTROL SYSTEM
Thaddeus Slonczewski, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application November 10, 1950, Serial No. 195,075
10 Claims. (Cl. 250—36)



9. A generator of electrical alternating current whose frequency is varied continuously with time at a substantially constant rate which comprises means for generating said current, means for varying the frequency of said current at an arbitrary rate, means for measuring the deviations in time of the generation of a multiplicity of values of frequency by said generating means from the prescribed times of generation of said frequencies by said generating means as said frequency of said current is varied over its range of variation comprising a timing voltage wave generator, and means for adjusting said rate of variation of said frequency in accordance with said deviations in time.

2,732,497
PULSE GENERATOR
Robert D. Hancock, Compton, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application December 5, 1950, Serial No. 199,172
7 Claims. (Cl. 250—36)

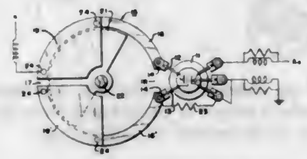


1. A pulse generator comprising a tube having an envelope containing an anode and a plurality of cold cathodes immersed in an ionizable gas at glow discharge pressure, a separate and different time constant circuit connectable between each of said cathodes and said anode through a potential source sufficient to strike all of said cathodes, means for connecting all of said time constant circuits simultaneously to said source to strike said cathodes in the order of the time constants of the circuits connected thereto, and means for differentiating resultant changes in current flow to said anode as output pulses.

2,732,498
SERIES TUNED HIGH FREQUENCY OSCILLATORS
Charles E. Pfund, Takoma Park, Md., assignor to Development Engineering Service, Montgomery County, Md., a partnership
Application January 2, 1951, Serial No. 203,927
20 Claims. (Cl. 250—36)

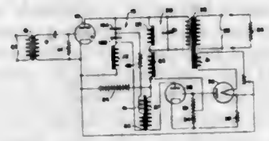
1. A high frequency oscillator comprising a discharge device having at least an electron source, a plate electrode

and a control electrode, conductors from said electrodes terminating in spaced relation, a series circuit unitary inductance-capacitance variational tuner including a pair of capacitor stators of generally sectoral shape disposed in adjacent quadrants of a circle, projections from the peripheral portions of said stators into the other quadrants of said circle and terminating in a single gap, the spacing across said gap substantially corresponding to said spaced relation and a movable element adapted for isolated



movement parallel to the plane of said circle for capacitive variational relation with said stators and inductive variational relation with said projections, and contactors connected at the gap terminations of said projections contacting with low inductance the terminal portions of said conductors respectively, said tuner substantially eliminating the inductance of said projections connected to said conductors for the high frequency position of said element.

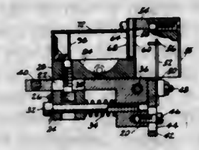
2,732,499
LOW DISTORTION GENERATOR
Adolph C. Bunblasky, Ridgefield, and Allen K. Brown, Stamford, Conn., assignors to Sorensen & Company, Inc., Stamford, Conn., a corporation of Connecticut
Application February 9, 1952, Serial No. 270,886
2 Claims. (Cl. 250—36)



1. An alternating current generator comprising; a gas-filled three electrode discharge device having an anode, a cathode, and a control electrode; a series resonant circuit which includes at least a capacitor and an inductor connected between the anode and the cathode; means for supplying an alternating frequency to the control electrode and the cathode; a parallel resonant circuit connected between the anode and one terminal of a second inductor, the other terminal of which is connected to the positive terminal of an anode potential supply; and tuning means connected across part of the series resonant circuit for varying the resonance and thereby changing the voltage across an output circuit.

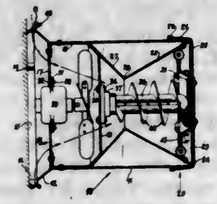
2,732,500
ION SOURCE
Ian H. McLaren, Dearborn, and William C. Wiley, Detroit, Mich., assignors to Bendix Aviation Corporation, Detroit, Mich., a corporation of Delaware
Application April 18, 1951, Serial No. 221,554
21 Claims. (Cl. 250—41.9)

1. An ion source, including, means for forming an electron stream, means for introducing a plurality of molecules into the electron stream for ionization by the electrons and for retention in the potential well created by the electron stream, means for cutting off the electron stream, and means for imposing a pulsed force upon the ions at a predetermined time relative to the cutting off



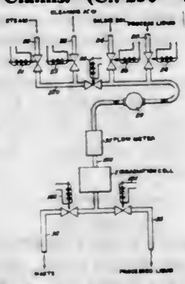
of the electron stream to remove the ions in a pulse from the potential well.

2,732,501
ULTRAVIOLET AIR DISINFECTING APPLIANCE
Joseph Blacker, Brooklyn, N. Y.
Application November 30, 1950, Serial No. 198,323
9 Claims. (Cl. 250—43)



5. A double action air disinfecting appliance, comprising a tubular casing having an inlet at one end and an outlet at the other end, said casing having a venturi-type inner casing including a conical reflecting surface at said outlet end, an ultra-violet lamp positioned axially of said casing, an air circulating means within said casing causing movement of air against said ultra-violet lamp to be disinfected inside said appliance, a helical light shielding member mounted on said lamp, said helical shielding member comprising an annular spring-like element of considerable radial extent but of a size smaller in outer diameter than said conical outlet and terminating in a solid end member, said shielding member increasing in diameter toward the outlet of said venturi-type casing, said shielding member being arranged to prevent exposure of direct rays of light from said ultra-violet lamp to an observer, said conical reflecting outlet causing rays reflected from said ultra-violet lamp to pass outwardly of said appliance and disinfect the air outside said appliance by reflected rays in annular beam form.

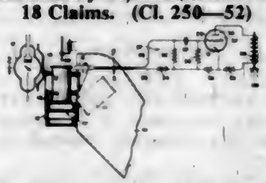
2,732,502
CONTROL SYSTEM FOR IRRADIATOR UNIT
Harold E. Darney, Bloomfield, N. J., assignor to Hanovia Chemical and Mfg. Company, Newark, N. J., a corporation of New Jersey
Application September 20, 1951, Serial No. 247,521
15 Claims. (Cl. 250—45)



10. Apparatus for controlling an irradiation cycle including an ultraviolet ray irradiation cell of the type wherein a gaseous discharge lamp is mounted in close association therewith to generate the irradiations, said cell including a fluid passageway through which fluid is forced

to travel vertically through the path of said irradiations, the passageway having a depth which does not exceed the maximum thickness to which a film of the liquid to be treated may be formed before it becomes opaque to ultraviolet rays, a supply conduit and a delivery conduit connected to the ingress and egress respectively of said cell passageway, a source of steam, a steam conduit interconnecting said source with said supply conduit, a first electrically operated valve means interposed in said steam conduit and operable to admit steam into said supply conduit, an acid supply source connected to said supply conduit and a second electrically operated valve means interposed between said acid source and said supply conduit, a saline solution supply source connected to said supply conduit and a third electrically operated valve means interposed between said saline source and said supply conduit, an electrically operated cut-off valve interposed in said supply conduit between said acid and said saline inlets and operable to cut off flow of both the steam and acid into the supply pipe; a process fluid supply source connected by means of a fourth electrically operated valve to said supply circuit, pump means in said supply pipe operable to deliver the various fluids to said cell, waste and processed liquid collecting means in said delivery conduit controlled by fifth and sixth electrically operated valves, and an electrical time controlled circuit means interconnecting said various valves for sequential operation including a manually operable sequence timer means and an interval timer means arranged to be electrically actuated by said sequence timer means, said sequence timer means serving to alternately actuate the several valves to admit cleaning and flushing fluid to said cell prior to the admission of the process fluid, said interval timer means being actuated prior to a final admission of flushing fluid to said cell, and wherein said interval timer means has a maintaining circuit having a predetermined maintaining interval and including a change-over relay circuit, said sequence timer means being responsive to said change-over relay circuit to actuate said valve means to readmit saline solution to said cell.

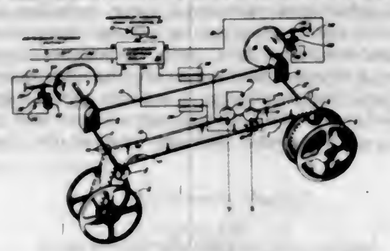
2,732,503
INSPECTION DEVICE
John E. Jacobs, Milwaukee, Wis., assignor to General Electric Company, a corporation of New York
Application January 24, 1952, Serial No. 267,947
18 Claims. (Cl. 250—52)



1. Inspection apparatus comprising a source of X-rays of cyclically pulsating intensity, a ray sensitive semiconductor element disposed in position to receive a ray from said source through a container, and means to measure the alternating current impedance of said semiconductor element, as distinguished from the direct current resistance thereof, whereby to determine the presence or absence of container contents at the level of penetration of the ray therethrough.

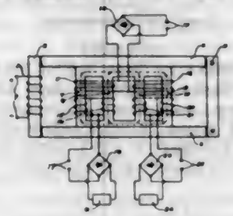
2,732,504
LINEAR CAM COMPUTER
Floyd G. Steele, Long Beach, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application September 28, 1948, Serial No. 51,563
22 Claims. (Cl. 250—208)

1. A function generator comprising a linear cam, a signal generating record on said cam representing a function, means for progressing said cam in either direction and in uniform increments in accordance with the sense



and amount of an independent variable, and means for generating an output signal in accordance with the direction and amount of movement of said record.

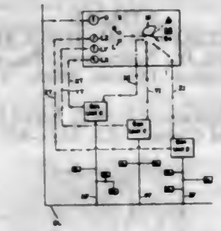
2,732,505
ELECTRIC CONTROL APPARATUS
Alec Hervey Benhett Walker and Kenneth G. King, London, England, assignors to Westinghouse Brake and Signal Company Limited, London, England
Application August 26, 1953, Serial No. 376,546
Claims priority, application Great Britain September 15, 1952
5 Claims. (Cl. 307—11)



1. Electric control apparatus comprising, in combination, a magnetic core structure having a closed magnetic circuit comprising a first limb and a second limb, a first detector winding on said first limb, a second detector winding on said second limb, means providing a substantially constant magneto-motive force across said magnetic circuit, a member of said core structure having a control winding thereon, means for energizing said control winding with direct current to produce in said magnetic circuit a flux opposing the flux due to said substantially constant magneto-motive force and having a normal magnitude such that there is no resultant error flux, variations in said direct current in said control winding causing deviation from said normal magnitude and thus causing an error flux to flow in said magnetic circuit, bias means causing a uni-directional flux to flow round said magnetic circuit, the arrangement being such that the error flux causes a decrease in the flux flowing in one of said limbs, means causing an alternating current to flow in said first detector winding, means causing a separate alternating current to flow in said second detector winding, and control apparatus operated by each of said alternating currents.

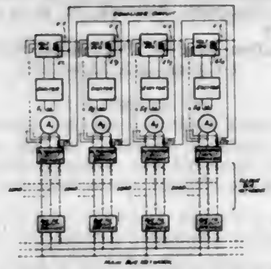
2,732,506
SYSTEMS FOR CONTROLLING GENERATING UNITS
James B. Carolus, Elkins Park, Pa., assignor to Leeds and Northrup Company, Philadelphia, Pa., a corporation of Pennsylvania
Application October 27, 1951, Serial No. 253,533
17 Claims. (Cl. 307—57)

1. An arrangement for controlling two or more generating units interconnected to supply power to a common system and having signal channels to a supervisory station comprising means at said station responsive to deviations from a schedule value of a system variable, means for providing at said station effects respectively varying with change in output of the individual generating units, means for providing at the supervisory station signals demanding corrective change of output dependent upon the sense of the deviation, and switching means operable



for small deviations to route said signals to said channels in sequence selected to maintain desired relation of the magnitude of said effects and operable for large deviations to route said signals to at least one channel regardless of the relative magnitudes of said effects and to other channels dependent upon the relative magnitudes of said effects.

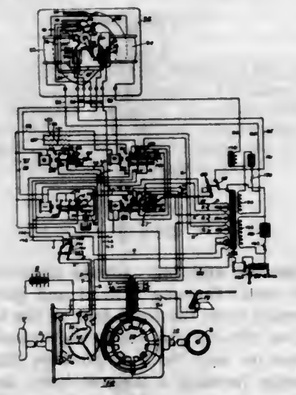
2,732,507
PROTECTIVE APPARATUS FOR POWER SYSTEMS HAVING ALTERNATORS OPERATING IN PARALLEL
Russell W. Stineman, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application March 21, 1952, Serial No. 277,762
23 Claims. (Cl. 307—57)



20. In a multiple three-phase alternator power generating and distribution system generally of the type including separate alternator feeder bus networks, individual alternator breakers normally connecting such feeder bus networks to the respective alternators, a main bus network, bus tie breakers normally connecting such main bus network to the respective feeder bus networks, voltage regulators controlling the respective alternators, and equalizer circuit means having therein a series of current transformers energized by the respective alternators and energizingly connected to the voltage regulators of said alternators in a manner tending to equalize reactive current in the different alternators; the combination with said alternators, said equalizer circuit and current transformers therein, and said bus tie breakers of protective apparatus comprising a plurality of similar units operatively associated with the respective alternators, each such unit comprising a voltage comparison circuit having two branches, each branch including a separate three-phase rectifier bank therein, energizing means connected for energization by three-phase voltage of the related alternator and having three conductors connected for applying three-phase voltage to both of said rectifier banks related both in phase and in amplitude to such alternator voltage, sensing transformer means having a primary winding connected in the equalizer circuit across the particular alternator's equalizer circuit current

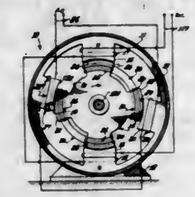
transformer and a secondary winding interposed in series with one of said three conductors at a location therein whereby the voltage of said secondary winding is applied to but one of said rectifier banks thereby to vary the rectified output of such bank relative to the other bank in accordance with the difference between lagging reactive current of the particular alternator and the effective average of all the alternators, and balancing means energized by both of said rectifier banks, said latter means being connected to the bus tie breaker of the particular alternator and being arranged to operate such breaker automatically in response to material unbalance in one direction between such outputs, corresponding to materially above-average lagging reactive current in the particular alternator.

2,732,508
ELECTRICAL AUTOMOTIVE TRANSMISSION SYSTEM WITH CHANGEABLE RATIOS
Thomas D. Bowes, Bala-Cynwyd, Pa.
Application November 5, 1952, Serial No. 318,945
9 Claims. (Cl. 310—102)



1. A transmission comprising a dynamoelectric unit having an input shaft for coupling to a prime mover and an output shaft for coupling to a load, means in the unit developing load currents variable in amplitude in response to relative rotations of the input and output shafts, means for utilizing said load currents for changing the ratio of input to output between the respective shafts, and means responsive to variations in amplitude of said load currents for determining the time for changing said ratios.

2,732,509
ALTERNATING CURRENT DYNAMO-ELECTRIC MACHINE
Henry H. Hammerstrom and Lee B. Woodruff, Los Angeles, Calif.
Application November 13, 1952, Serial No. 320,252
14 Claims. (Cl. 310—168)



1. A dynamoelectric machine comprising a pair of relatively rotating sections, means forming a plurality of magnetic poles on a first of said sections, electrical winding means on the second section including a conductor moving relative to the first section across the field of a first one of said poles to generate an electric current, said

winding means having a portion energized by said generated current and adapted when thus energized to set up a magnetic pole in a predetermined portion of the second section, and an electrically conductive winding carried by the first section in addition to said means forming said poles thereon and having a portion positioned to be essentially opposite said pole in the second section when that pole is energized by said generated current and to be crossed by the field of said pole in the second section as a result of the relative rotation of said sections, and to thereby effect a conversion of energy between the mechanical energy of relative movement of said sections and electrical energy of current flowing in said last mentioned winding.

2,732,510
ELECTRON EMITTER
Michael J. Zunick, Greenfield, Wis., assignor to General Electric Company, a corporation of New York
Application March 13, 1952, Serial No. 276,313
12 Claims. (Cl. 313—37)



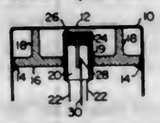
1. An electron emitting cathode structure comprising a block of metal forming a head and provided with a groove opening upon the front face of the block, an electron emission element and mounting means for supporting the same on said block in position disposed in said groove, means forming a support base, and a plurality of supporting stems secured on and extending from said base, said stems being secured to said head to mount the same on the base, at least one of said stems being electrically insulated from said head and comprising electrical conducting means connected with said emission element for electrically energizing the same.

2,732,511
ELECTROSTATIC LENS
Channing Dichter, Syracuse, N. Y., assignor to General Electric Company, a corporation of New York
Application April 3, 1953, Serial No. 346,673
6 Claims. (Cl. 313—82)



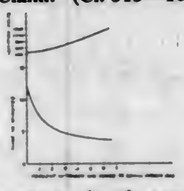
1. An electrostatic lens system comprising three coaxial electrode members, said members including an intermediate cylinder and a pair of end cylinders, said end cylinders each having a portion received within said intermediate cylinder and insulated therefrom, said electrode members being cooperable to provide an electrostatic field, one of said end cylinders including an apertured end wall defining a beam passage, and said end wall having a surface shaped to correspond generally to an end portion of said electrostatic field.

2,732,512
ELECTRON TUBE STRUCTURE
Thomas H. Briggs, Jr., Norristown, Pa., assignor to Burroughs Corporation, Detroit, Mich., a corporation of Michigan
Application October 15, 1952, Serial No. 314,917
14 Claims. (Cl. 313—85)



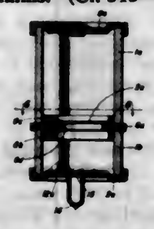
1. The combination of an insulating spacer disc having integral ridges, a cathode heater assembly affixed to said disc comprising a heater body and a tack shaped metallic cathode intimately contacting the heater body, a metallic grid aperture cup, and means affixing said spacer disc and said cup together by shoulders impressed into the walls of said cup to establish a close dimensional spacing between said cathode and the grid aperture by holding said integral ridges on said spacer disc in contact with the bottom of said aperture cup.

2,732,513
VAPOR DISCHARGE DEVICE
William T. Anderson, Jr., Maplewood, and Franklin Clark, Chatham, N. J., assignors to Hanovia Chemical and Mfg. Company, Newark, N. J., a corporation of New Jersey
Application June 13, 1950, Serial No. 167,866
1 Claim. (Cl. 313—185)



A high pressure vapor electric gaseous discharge arc device comprising a light transmissive envelope containing spaced electrodes connective to a source of voltage, a vaporizable metal and a starting gas composed of a mixture of nitrogen and argon within said envelope, said nitrogen constituting from about 0.1% to about 0.2% of said mixture and operable to increase the rate of vaporization of said vaporizable metal, the pressure within said device being above about 190 mm. Hg.

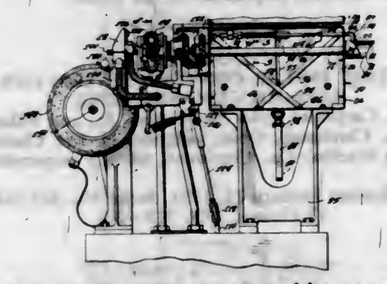
2.732,514
ELECTRON TUBE
Joseph E. Henderson, Seattle, Wash.
Application December 30, 1944, Serial No. 570,690
7 Claims. (Cl. 313—246)



1. In an electron tube construction, an envelope fabricated into a continuous enclosure, and a control element

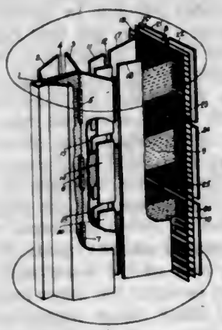
located crosswise of the envelope, said control element having a self-embodied portion biased to bear outwardly against the envelope thereby to retain said element in position.

2,732,515
ILLUMINATION ELECTRIC ARCS
Orrin Millie, Queens, Joseph Rubey, New York, and Jean Paul Latil, Queens, N. Y., assignors to Genarco, Inc., Long Island City, N. Y., a corporation of New York
Application September 19, 1952, Serial No. 310,398
13 Claims. (Cl. 314—42)



1. Electric arc construction comprising: a carbon rod feed means and a carbon rod magazine; said carbon rod magazine having automatic means for singly advancing carbon rods to said feed means; a negative carbon electrode and means for advancing the same to maintain a substantially constant electrode gap; said electrode being in the form of a circular disk; said means including first means for rotating said disk about an axis through the center thereof, at a substantially constant angular velocity, and second means for laterally shifting said axis at a substantially constant linear velocity.

2,732,516
VACUUM TUBE GATES AND GATING CIRCUITS
Charles Brian Speedy, London, England, assignor to Commonwealth Scientific and Industrial Research Organization, East Melbourne, Victoria, Australia, a body corporate
Application August 30, 1954, Serial No. 452,841
Claims priority, application Australia September 8, 1953
10 Claims. (Cl. 315—13)



1. An electron beam vacuum tube gate device comprising means for generating an electron beam, means for effectively dividing the electron beam into two sections; a bi-stable element including the first section of the electron beam and a divided target electrode cross-connected to a first pair of deflecting electrodes, said first pair of deflecting electrodes also operating to deflect the second section of the electron beam, a second pair of deflecting electrodes for the said first section of the electron beam, means for applying control signals to said second pair of deflecting electrodes whereby to shift the electron beam from one stable state where it falls on one part of the divided target to the other stable state where it falls on the other part of the divided target; a gating element including the said second section of the electron beam, the said first pair of deflecting electrodes, a divided target electrode for the said second section of the electron beam, and a further pair of deflecting electrodes for the said second section of the electron beam, the division between the parts of the last-mentioned target electrode and the potentials applied to the deflecting electrodes being such that in the absence of signals applied to the said further pair of deflecting electrodes the said second section of the electron beam falls on the same part of the target electrode in both of its stable positions, and means for applying gating signals to the said further deflecting electrodes whereby when the electron beam is in one stable state the gating signals transfer the said second section of the electron beam from the aforesaid "same" part of the target electrode for the gating element to the other part but when the electron beam is in the other stable state the gating signals do not so transfer the said second section of the electron beam.

2,732,517
STATIC ELECTRICITY DISCHARGERS
Albert Ernest Alabaster, Wrecclesham, Farnham, England, assignor to National Research Development Corporation, London, England, a British corporation
Application February 25, 1952, Serial No. 273,293
9 Claims. (Cl. 317—2)

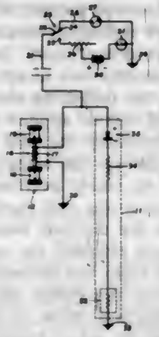


1. A static electricity discharger for discharging static electricity from a charged body into a surrounding atmosphere and comprising a probe having a multiplicity of fine wire bristles at one end thereof, a conductor in the probe and connected to the bristles, conductive means for electrically connecting the discharger to the body and a resistance and an inductance connected in series between the conductive means and the other end of the probe.

2,732,518
BORE HOLE DETECTING CIRCUIT AND BORE HOLE FIRING CIRCUIT UTILIZING A COMMON TRANSMISSION CHANNEL
Joseph M. Bricaud, Houston, Tex., assignor, by mesne assignments, to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application November 22, 1952, Serial No. 322,070
4 Claims. (Cl. 317—80)

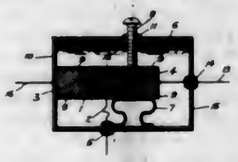
1. In bore hole apparatus, the combination of relatively high impedance magnetic induction conductor means adapted to be lowered into a bore hole for producing a signal indicative of a condition within the bore hole, a relatively low impedance electrical utilization circuit mounted in fixed relation to said magnetic induction conductor means and electrically connected in parallel therewith, an electrical element connected in said utilization circuit having a relatively high impedance to revers-

ing current and a relatively low impedance to unidirectional current, an electrical circuit common to said parallel connected utilization circuit and magnetic induction conductor means and including a single electrical con-



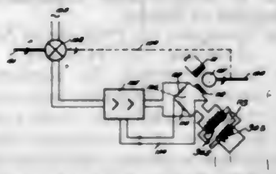
ductor extending to the surface of the earth, a source of unidirectional electrical current, electrical indicating means responsive to said signal, and electrical means for selectively connecting said source and said indicating means in said common electrical circuit.

2,732,519
METHODS OF MAKING TRANSISTORS AND ASSEMBLY THEREOF
George Freedman, Newton, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application December 19, 1952, Serial No. 326,947
7 Claims. (Cl. 317—235).



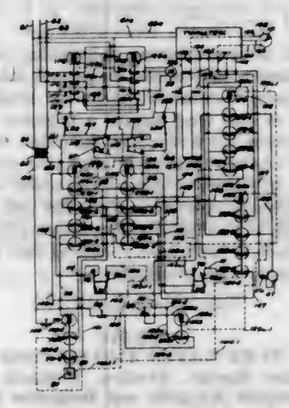
2. A transistor assembly comprising an n-type single crystal semiconductor body composed of an element selected from the group consisting of germanium and silicon and a trace of an n-type impurity element selected from the fifth periodic group, means for applying and maintaining a stress on a section of said body to change said section to the p-type state and to retain said section in said state, and leads connected to said section and said body.

2,732,520
ELECTRICAL SERVO-MECHANISMS
Georges René Couanault, Vitry-sur-Seine, France, assignor to Societe Alsacienne de Constructions Mecaniques, Paris, France, a corporation of France
Application December 11, 1952, Serial No. 325,411
Claims priority, application France December 18, 1951
6 Claims. (Cl. 318—18)



1. In a servo-mechanism comprising a two phase motor having a rotor and stator, a pair of stator windings one of which is supplied by an error discriminator, a negative feedback amplifier including a feedback circuit, the torque of said motor reacting upon the discriminator, the feedback circuit of said amplifier comprising a Wheatstone bridge of a given arms ratio, one diagonal of which is supplied by said amplifier and the other diagonal of which is connected back to said amplifier, two arms of said Wheatstone bridge being constituted by one of the windings of said motor and by a balancing network respectively, the impedance of said network being in said ratio with the apparent impedance of said motor, said network providing across its terminals a non-linear apparent impedance which is a function of the intensity of the current which flows through it and reproduces in said ratio the non-linear apparent impedance of the motor.

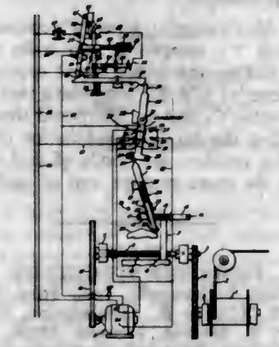
2,732,521
ELECTRIC MOTOR CONTROL SYSTEM FOR A REPRODUCING MACHINE
Edwin O. Carpenter, John M. Morgan, Jr., and Milton V. Waters, Cincinnati, Ohio, assignors to The Cincinnati Milling Machine Co., Cincinnati, Ohio, a corporation of Ohio
Application January 11, 1951, Serial No. 205,568
17 Claims. (Cl. 318—39)



15. A control mechanism for a machine tool slide which is supported for movement in two angularly related directions, said control mechanism including a slide feeding motor and feed motor actuating circuit, a slide indexing motor and index motor actuating circuit, and a pilot control circuit variably effective to determine the operative effects of the index motor and feed motor actuating circuits, said pilot circuit including a two position limit switch for controlling the feed motor circuit, dog means movable by the feed motor for determining the positionings of the limit switch, a control relay circuit including a control relay activatable by one direction of movement of the limit switch, a timer operating circuit including a timer relay, switch means movable by activation of the control relay circuit to energize the timer relay, an index motor circuit control switch, a control relay for the index motor circuit control switch, means for completing the pilot circuit by way of the timer and the control relay circuit switch to energize the index motor circuit control relay, a second index motor control circuit including a second control relay, and a selector switch for determining the effective coupling of the timer controlled pilot circuit with one or the other of said index motor circuit control relays, a second limit switch coupled to control the feed motor circuit, a selector in the pilot circuit intervening the timer and the index motor circuit control relays to determine the effective coupling of the pilot circuit with the respective limit switches, a reversing switch for the feed motor circuit, an additional timer completable pilot control circuit, and means to couple said circuit with said motor reversing switch to close the switch and initiate reverse operation of the feed motor upon firing of the timer,

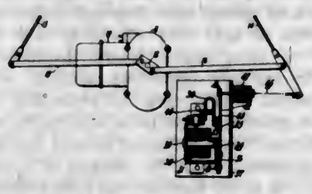
and a holding circuit for the motor reverser switch including a switch element in series with the limit switch and movable with the reverser switch to complete the holding circuit and maintain the reverser switch in timer pilot circuit effected position.

2,732,522
CABLE DRUM OPERATING AND CONTROL SYSTEM
Jesse T. Hill, Jacksonville, Fla.
Application March 1, 1955, Serial No. 491,316
6 Claims. (Cl. 318—266)



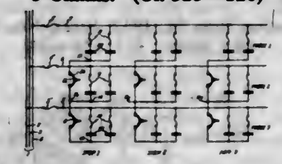
1. A cable drum operating and control system comprising a drum, a threaded shaft, a motor connected to drive said drum and said shaft, a traveling nut on said shaft, a relay, a remote momentary closing manual switch connected to actuate said relay from de-energized into an energized condition, catch means engageable by a portion of said relay upon release thereof from said energized condition, trip means for engaging said catch means to release said relay into said first de-energized condition, said relay comprising first switch means closed when said relay is in said de-energized condition and when said relay is in said energized condition and open when said relay is engaged against said catch means, said first switch means being connected in series with said manual switch, said relay comprising second switch means closed only when said relay is engaged against said catch means, said motor being connected for operation in response to closing of said second switch means, lost motion over-center coupling means connecting said nut and said trip means for actuation of said trip means in response to predetermined travel of said nut, said coupling means comprising a reversing switch for said motor operative to reverse the connections to said motor upon each operation of said coupling means to actuate said trip means.

2,732,523
MOTOR CONTROL MEANS
William K. Schnepf, Webster, N. Y., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 6, 1953, Serial No. 347,106
14 Claims. (Cl. 318—466)



1. In motor control means of the character described, an electric motor operatively connected to and driving a member imposing a variable load thereon, a circuit arrangement for controlling the energization of said motor including automatic switch means for deenergizing said motor at a first predetermined position of said member, and means to modify the operation of said automatic switch means so that regardless of the variable load imposed by said member, the motor will always have sufficient coasting inertia after deenergization to move said member to a second predetermined position.

2,732,524
SHUNT CAPACITOR ARRANGEMENT
Henry H. Strozier, Atlanta, Ga., assignor to General Electric Company, a corporation of New York
Application April 21, 1955, Serial No. 502,801
5 Claims. (Cl. 323—128)



5. A three-phase shunt capacitor bank arrangement selective for connection across a three-phase power circuit and removal therefrom comprising, in combination, three vertically stacked elongated supporting racks, three equal reactance groups of capacitors each having a connection to a different line of said three phase power circuit and a neutral terminal, each group being mounted in a different supporting rack, an ungrounded neutral bus, a direct connection between one neutral terminal and said neutral bus, a pair of switching devices mounted on the ends of two of said supporting racks and connected respectively between the remaining two neutral terminals and said neutral bus, and means for closing and opening said switching devices, whereby said switching devices are protected from overload conditions in the line by said capacitors and whereby closing of both switching devices will apply the voltage to neutral of each line of said circuit to a different group of capacitors and opening of both switching devices will interrupt all flow in all three groups of capacitors.

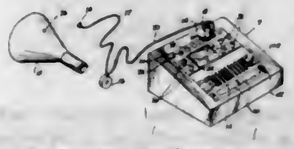
2,732,525
ELECTRODE CARRIER MEANS FOR WELL LOGGING APPARATUS
Andre Blanchard, Houston, Tex., and Maurice Mennecier, deceased, late of Houston, Tex., by Aline Mennecier, executrix, Houston, Tex., assignors to Schlumberger Well Surveying Corporation, Houston, Tex., a corporation of Delaware
Application June 27, 1952, Serial No. 295,996
5 Claims. (Cl. 324—10)



1. Bore hole apparatus comprising an elongated support adapted to be moved through a bore hole, a plurality of bowed spring members secured at opposite ends to members mounted for limited sliding movement on said support, said bowed spring members having intermediate portions normally urged outwardly towards the wall of the bore hole, a hollow closed cushion member enclosing a nonconducting liquid and having a front wall and a rear wall of flexible insulating material, said rear wall of said cushion member being mounted on said intermediate portion of one of said bowed spring mem-

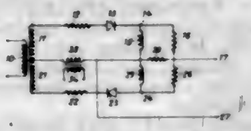
bers, at least one electrode carried by said front wall of said cushion member and adapted to be in electrical communication with the wall of the bore hole, and conductor means connected to said electrode and passing through said cushion member from said front wall to said rear wall, the portion of said conductor means passing through said cushion member having sufficient slack to accommodate relative movement between said front wall and said rear wall.

2,732,526
APPARATUS FOR TESTING CATHODE RAY TUBES
Julius Futterman, New York, N. Y., assignor to Precision Apparatus Co., Inc., Elmhurst, N. Y., a corporation of New York
Application June 21, 1952, Serial No. 294,819
20 Claims. (Cl. 324—24)



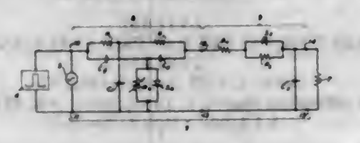
1. Apparatus for testing the beam current of a CR tube by means of a conventional emission type vacuum tube tester having a meter with a word scale with about half the scale used for "replace" or equivalent and about half of the scale used for "good" or equivalent, said apparatus comprising an accessory amplifier tube outside the tube tester between the beam current circuit of the CR tube and the meter, and circuit elements associated with the amplifier tube to so flatten the tube characteristic that the "replace" and "good" markings of the scale will be applicable to the beam current of CR tubes.

2,732,527
DEVICE FOR GENERATION OF PULSES
Gunnar Gideon Emanuelsson, Hagersten, Sweden, assignor to Telefonaktiebolaget L M Ericsson, Stockholm, Sweden, a company of Sweden
Application June 7, 1952, Serial No. 292,337
Claims priority, application Sweden June 12, 1951
8 Claims. (Cl. 332—9)



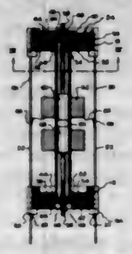
1. A network for producing short pulses having a high amplitude comprising two circuit systems for generating two voltages having sharply defined steps, each of said circuit systems including a source of voltage of comparatively high frequency connected in series with resistance means, rectifying means and inductance means, the said two inductance means being connected with one end to a common point and with the other end through two resistance means in series, the total resistance of one of said circuit systems being different from that of the other circuit system by a resistance value corresponding to the desired width of the short pulses delivered by the network, and the said rectifying means being connected in opposition to permit in one circuit system a current flow through one of said inductance means to the common point and in the other circuit system from the common point through the other inductance means thereby generating voltages having opposite signs over said inductance means, the common point of the two inductances and the common point of the two resistance means constituting the output terminals for the pulses.

2,732,528
WAVE FILTER
John R. Anderson, Berkeley Heights, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application June 6, 1952, Serial No. 292,075
10 Claims. (Cl. 333—75)



7. A wave filter comprising two T's connected in parallel, one of said T's comprising two series resistors each of value R_1 and an interposed shunt capacitor of value C_1, and the other of said T's comprising two series capacitors each of value C_2 and an interposed shunt impedance branch including the parallel combination of a resistor of value R_2 and a rectifier, the anode of said rectifier being connected to the more positive end of said resistor value R_2.

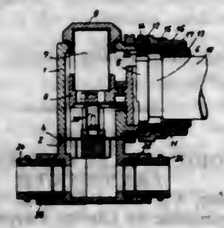
2,732,529
INDUCTOR STRUCTURE
Robert L. Reid, Indianapolis, Ind., John Laban, Grass Lake, Mich., George E. Archenbronn, Galeta, Calif., and Albert E. Slayton, Jackson, Mich., assignors to Radio Television Products Corporation, Grass Lake, Mich., a corporation of Michigan
Application April 21, 1948, Serial No. 22,408
8 Claims. (Cl. 333—78)



3. An inductor unit comprising a pair of molded end parts of insulating material, a centrally located longitudinally extended tubular member disposed between said parts, recesses defined in the opposed faces of said parts in which the ends of said member are telescopically received, slots defined in opposed sides of each end part in axial alignment with the slots of the associated end part, longitudinally extending conductive tie rods of flat stock closely fitted in the axially aligned slots of said parts, said rods having integral projections thereon deflected into overlapping arrangement with said end parts to clamp said member between said end parts, said rods having connection-terminal portions extending beyond one of said end parts and said deflected portion associated therewith.

7. An inductor unit comprising a member having an unthreaded smooth bore opening defined therein, a tubular coil supporting member axially aligned with said opening, a length of spring wire disposed across said opening with the ends of said wire affixed to said first member to support the same against lateral displacement, a core supported in said coil supporting member, an adjustment screw connected to said core and extending through said smooth bore opening, a portion of said spring wire between the ends thereof being deflected by and having tangential stressed engagement with the threads of said adjustment screw to act as a nut therefor, said wire constituting the sole means in cooperation with said threads for axially moving said screw relative to said first member upon rotation of said screw as well as constituting a locking means for said screw against unintentional rotation.

2,732,530
MOUNTINGS FOR TUBULAR ELECTRIC DISCHARGE LAMPS, SUCH AS FLUORESCENT LAMPS, OR FLUORESCENT TUBES
Hermann Dahlhaus, Ludenscheid, Westphalia, and Albert Winterhoff, Leifringhausen, Westphalia, Germany, assignors to Vossloh-Werke G. m. b. H., Werdohl, Westphalia, Germany, a limited corporation of Germany
Application September 25, 1952, Serial No. 311,456
Claims priority, application Germany December 6, 1951
7 Claims. (Cl. 339—52)



1. A mounting for a tubular electric discharge lamp, comprising a base part having means to effect a water- and gas-tight connection of a feed cable thereto, a terminal block seated in said base part, said block including a plurality of terminals and conductive members projecting from selected ones of the terminals, an upper part detachably and sealingly connected to the base part, contact elements carried by said upper part and adapted for automatic engagement with and disengagement from said members responsive to connection and disconnection, respectively, of the upper and base parts, one of said elements being arranged for engagement with a complemental contact of an electric discharge lamp, a sealing sleeve carried by said upper part and including reinforced end flanges, one of said end flanges being circumposed about and being clampingly engaged with the lamp-engaging contact element of the upper part, the other end flange being formed as a sealing rim circumposed about the lamp, and a flared clamping ring circumposed about said rim and mounted on the upper part for axial displacement into engagement with the rim, to radially contract the same into sealing engagement with the lamp.

2,732,531
LOCKABLE ELECTRIC CONNECTOR
Edward V. Janowiec, Minneapolis, Minn.
Application March 18, 1953, Serial No. 343,124
3 Claims. (Cl. 339—75)



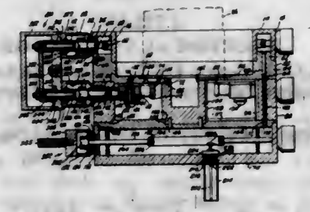
1. An electrical connector for establishing an electrical circuit between conducting leads comprising, a dielectric body having a pair of spaced openings therein terminating outwardly in orifices which are adapted to receive the perforate prongs of a standard electric plug, an electrical contact member in each of said openings, each contact member being connectable to a conductor, a locking pin pivotaliy mounted adjacent each of said spaced openings and having a laterally formed end projectable against resilient pressure into each of said openings, a portion of each of said locking pins extending outwardly through said body for manual depression thereof whereby said projecting portion will be retracted for insertion of said perforate prong plug and may be released to permit each of said locking pins to engage the respective perforations of said prong plug to operatively lock the electrical plug to the electrical connector.

2,732,532
LAMP BASE LEAD-IN CONNECTION
George A. Tamis, Nahant, Mass., assignor to Consolidated Electric Lamp Company, Lynn, Mass., a corporation of Massachusetts
Application December 28, 1953, Serial No. 400,562
1 Claim. (Cl. 339—146)



A lamp base comprising a circumferential shell, a ring of insulation fast to the tip end of the shell with its aperture approximately coaxial with the shell, a contact plate mounted on the outer end of the ring in a plane extending transversely of the axis of the shell, the plate being cut from the center outwardly in several directions to provide pointed lips, and a lead wire extending through said aperture into said plane, said lips lying in said plane with their edges abutting each other so as to close said end of the shell and with their pointed tips pinched against the lead wire from several directions firmly to hold the end of the wire in said plane.

2,732,533
ADAPTER FOR CAPACITANCE METERS
David H. Andrews, Glen Cove, and Benjamin Bernstein and Robert J. Wohl, New York, N. Y.
Application May 12, 1954, Serial No. 429,411
13 Claims. (Cl. 339—156)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A capacitance adaptor for mounting an electrical component having a pin-type base and for electrically connecting selected elements or combinations of elements of the electrical component to the input terminals of a capacitance meter while minimizing stray capacitance and minimizing contact resistance; said adaptor comprising a cylindrical body, a pair of shielded, insulated, parallel plug-type terminals fixed to said body and extending from one end thereof whereby said adaptor may be plugged into corresponding input terminals of a capacitance meter, a first bridging ring, a first series of coplanar equally spaced terminals mounted on said body with a portion of each accessible externally of said body, insulating means and grounded-to-said-body electrostatic shielding means for the accessible portion of each of said first series of terminals, each of said first series of terminals being electrically connected to and rigidly supporting said first bridging ring in said body, means for connecting said first bridging ring to one of said parallel pair of plug-type terminals whereby each of said first series of terminals is connected to said one of said parallel pair of plug-type terminals, a second bridging ring, a second series of coplanar equally spaced terminals equal in number to said first series of terminals and mounted on said body in axial alignment with said first series of terminals with a portion of each of said second series of terminals accessible externally of said body, insulating means and ground-to-said-body electrostatic shielding means for the accessible portion of each of said second series of terminals, each of said second series of terminals being electrically connected to and rigidly supporting said second bridging ring in said body, means for connecting said second ring to the other of said parallel pair of plug-type terminals

whereby each of said second series of terminals is connected to said other of said parallel pair of plug-type terminals, a third series of coplanar equally spaced terminals equal in number to said first and second series of terminals and mounted on said body in axial alignment with said first and said second series of terminals with a portion of each of said second series of terminals accessible externally of said body, said body being centrally formed with axial bores equal in number to said series of terminals for defining a socket for mounting an electrical component having a pin-type base, electrical connecting means for each of said third series of terminals disposed is cooperative relationship with corresponding ones of the axial bores formed in said body for defining the socket whereby the base pins of an electrical component mounted in said adaptor is electrically connected to corresponding ones of said third series of terminals, bridging means for electrically connecting any of said third series of terminals to axially aligned corresponding terminals of either said first or said second series of terminals, grounding means for selected ones of said third series of terminals not directly involved in a capacitance measurement, shielding means for any of said first and said second series of terminals not directly involved in a capacitance measurement, said body being suitably formed to preclude leakage, and all of said terminals and connecting means being so disposed within said body whereby stray capacitance introduced into a measurement is negligible relative to the sensitivity of an associated capacitance meter.

2,732,534

ELECTRICAL CONNECTOR

George J. Giel, Venice, Calif., assignor to Audio Products Corporation, Los Angeles, Calif., a corporation of California

Application January 15, 1954, Serial No. 404,244
6 Claims. (Cl. 339—176)



1. An electric connector, comprising: a wall defining an elongate tube, said tube having a side opening; a closure in an end of said tube, said closure having a recess defining a socket opening into the outer end thereof adapted to receive a companion connection plug therein; a male contact member projecting into said socket; a closely coiled and substantially noncompressible spring electrically connected with said male member and projecting from the inner end of said closure into the interior of said tube, adapted to grippingly engage the end of a conductor when inserted endwise through said side opening and pushed between coils of said spring.

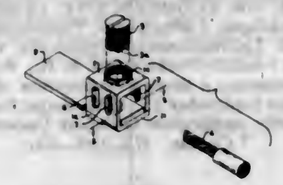
2,732,535

ELECTRIC TERMINAL CONNECTOR

Herman J. Hammerly, Plainville, Conn., assignor to General Electric Company, a corporation of New York

Application February 14, 1955, Serial No. 487,855
8 Claims. (Cl. 339—272)

1. An electric terminal connector comprising a generally rectangular tubular clamping member having a flat bottom wall, a top wall having a threaded aperture therein and generally parallel opposite side walls, a clamping screw threadedly engaged in said threaded aperture in said top wall, and a pair of generally parallel closely-spaced inwardly-directed embossed ribs in each of said opposite side walls extending generally parallel to the longitudinal axis of said clamping screw, the ribs of



each pair being substantially equally spaced from said axis of said screw.

2,732,536

CYLINDRICAL ELECTROMECHANICAL TRANSDUCER

Harry B. Miller, Cleveland Heights, Ohio, assignor, by mesne assignments, to Clevite Corporation, Cleveland, Ohio, a corporation of Ohio

Application May 5, 1950, Serial No. 160,365
14 Claims. (Cl. 340—8)



1. A transducer for operation in a medium and for transducing therein between electrical and mechanical types of energy comprising: a hollow cylinder having a length not substantially greater than half its circumference and of electromechanically sensitive material; and means, including electrodes on said cylinder and provisions for causing one surface of said cylinder to be acoustically exposed to said medium and the other surface of said cylinder to be acoustically shielded from said medium when said cylinder is immersed in said medium, for applying one of said types of energy to said cylinder and for deriving the other of said types therefrom.

2,732,537

WITHDRAWN

2,732,538

ALTIMETER GLIDESLOPE FOR DISTANCE MEASURING EQUIPMENT

Joseph L. De Celles, Levittown, N. Y., assignor to Trans World Airlines, Inc., Kansas City, Mo., a corporation of Delaware

Application February 2, 1953, Serial No. 334,497
9 Claims. (Cl. 340—26)



1. Glide-slope altitude-reference indicating apparatus for use in aircraft provided with an altimeter having a rotatable pointer adapted for indicating the altitude of the aircraft and with distance measuring equipment adapted for making measurements of the distance of the aircraft from a preselected ground point and having a variable

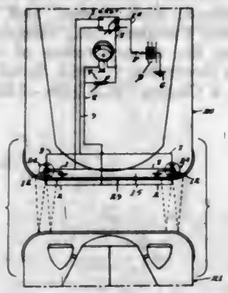
output corresponding to said measurements, said apparatus comprising a rotatable altitude-reference indicating device; structure mounting the device in proximity to the pointer for rotation about an axis in alignment with the axis of rotation of the pointer; a prime mover operatively coupled to the device for rotating the device when the prime mover is operated; and control means operatively coupling the prime mover with the equipment and adapted for controlling the operation of the prime mover responsive to said output of the equipment to rotate the device in predetermined, dependent relationship to said measurements made by the equipment, said control means comprising a variable-output mechanism having moveable parts operatively coupled with the device for movement thereby as the device is rotated, the output of said mechanism being variable as said parts are moved and thereby dependent upon the rotational position of the device, and variable-output differential means coupled to the output of the equipment and to the output of the mechanism and adapted for offsetting the output of the mechanism against the output of the equipment to produce a variable, resultant output from the differential means corresponding to a difference between the outputs of the mechanism and the equipment, the output of the differential means being coupled to the prime mover and adapted for controlling the operation of the latter.

2,732,539

ELECTRONIC DISTANCE GAUGING DEVICE FOR MOTOR VEHICLES

John Andresen, Ocala, Fla.

Application June 18, 1952, Serial No. 294,289
1 Claim. (Cl. 340—61)



In an electronic distance gauging device, the combination with a vehicle, of a light source mounted on the vehicle in an exposed position adjacent an outer portion of the vehicle and outwardly from which vehicle portion the light rays from the light source are directed, photoelectric cell means disposed around said light source and arranged to receive the light rays from the light source reflected back toward the light source and said vehicle portion, means for shielding said photoelectric cell means from direct light rays from the light source, an electric circuit in which said photoelectric cell means is interposed, a microvolt movement type meter interposed in said electric circuit and supported on the vehicle in a position visible to the vehicle operator, light rays from said light source being adapted to be reflected from an object forming an obstruction to the vehicle toward which said vehicle portion is approaching whereby said photoelectric cell means is excited by the reflected light rays impinging thereagainst for energizing said electric circuit to produce a reading on the meter indicating the distance between the light source and the obstruction being approached, a switch for energizing and de-energizing said light source, a second switch interposed in said electric circuit of the photoelectric cell means for de-energizing said electric circuit, and said meter being provided with a shunt circuit including a variable resistor for varying the current supplied to the microvolt movement type meter whereby the photoelectric cell circuit may be energized in the daylight with said light source de-energized for producing a reading on the meter and whereby shadows from an obstruction toward which the vehicle portion is approaching will affect the photoelectric cell means and produce a variation in the meter reading to indicate that the vehicle portion is approaching an obstruction and the distance between the obstruction and said vehicle portion.

2,732,540

BICYCLE LIGHTS

Paul H. MacMahon, Alexandria, Va.

Application January 21, 1955, Serial No. 483,403
8 Claims. (Cl. 340—87)



1. In a bicycle light, the combination of a casing so mounted on a pedal journaled on a pedal-carrying shaft of the bicycle as to be moved by the pedal in a circular orbit, said shaft moving in said orbit and being rotated in said casing by said movement; a cam adjustably mounted on said shaft; an electric lamp removably mounted in said casing; an electric battery on the pedal; an electric circuit connecting said lamp and said battery; and a reciprocable switch arm pivoted in said casing and adapted to open and close said circuit, said arm being reciprocated by said cam by rotation of said shaft.

2,732,541

SIGNALLING DEVICES

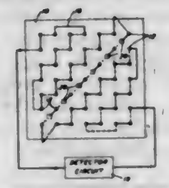
Paul H. MacMahon, Alexandria, Va.

Application September 10, 1952, Serial No. 308,767
13 Claims. (Cl. 340—134)



1. In a signalling device for a bicycle having a pedal journaled on a pedal-carrying shaft, the combination of an electric lamp on the pedal; an electric battery on the pedal; an electric circuit connecting said lamp and said battery; and means operated by rotation of the shaft relative to the pedal, adapted to open and close said circuit, said means being operative and inoperative when the pedal is disposed in two positions relative to the shaft, respectively.

2,732,542
READ-OUT ARRANGEMENT FOR A MAGNETIC CORE MATRIX
Robert C. Minnick, Marlboro, Mass., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application September 13, 1954, Serial No. 455,659
14 Claims. (Cl. 340—174)

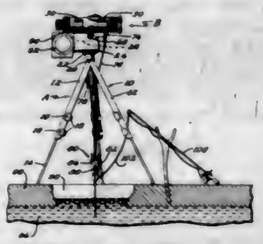


1. A magnetic core matrix comprising a plurality of magnetic cores in an n by n array, where n is any integer, a plurality of selection wires intersecting each of said cores, all of the selection wires intersecting any one core being in the same direction, and a single read-out wire intersecting all of said cores, said read-out wire intersecting said cores of the first row of the array such that the direction of the read-out wire through said cores is the same for the integral part of

$$\frac{(n+1)}{2}$$

cores and the opposite for the remainder of the cores of said first row and the pattern thus established in said first row is repeated in each succeeding row but successively shifted by s cores, where s and n are relatively prime.

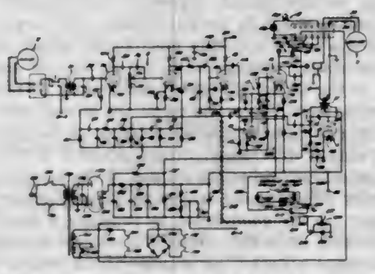
2,732,543
FISHERMEN'S INDICATING LIGHT
Eben F. Mogren, Weaver, Minn.
Application June 30, 1951, Serial No. 234,509
7 Claims. (Cl. 340—213)



1. In combination a signaling device for fishermen comprising an adjustable leveling support, a vertically pivotal mounted flashlight carried by said support, said flashlight being normally balanced in a horizontal position on said adjustable leveling support, weight actuated switch means carried by said flashlight including a member capable of rolling between circuit opening and closing positions, and pressure releasable line clamping means associated with said flashlight from the horizontal position for causing tilting of said flashlight from the horizontal position when a pull is exerted on said line means.

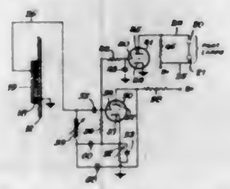
2,732,544
TESTING MEANS FOR AN INTRUDER DETECTION SYSTEM
Samuel M. Bagno, Astoria, N. Y., assignor to Walter Kidde & Company, Inc., Belleville, N. J., a corporation of New York
Application September 27, 1954, Serial No. 458,507
21 Claims. (Cl. 340—214)

7. In an intruder detection system comprising an oscillator generating oscillations of a given high frequency, means operatively connected thereto for transmitting said oscillations into a space to be protected, means for receiving oscillations from said space, a circuit operatively connected to said receiving means and comprising, in series, a high-pass filter, a first detector, a low pass filter, and a second detector the output of which is adapted to actuate an alarm, the output of said oscillator being connected to said circuit after said high-pass filter, whereby said alarm is actuated whenever said receiving means receives oscillations from said space having a frequency different from that of said transmitted oscillations by a predeter-



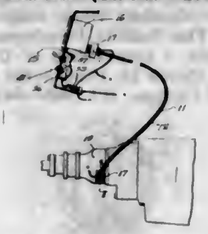
mined difference frequency; a testing system comprising means for causing said oscillator to function cyclically in pulses, the frequency of the pulsation cycle, or a harmonic thereof, corresponding to said predetermined difference frequency, means for operatively disconnecting said oscillator from said circuit, a third detector in advance of said low-pass filter for detecting the output from said high-pass filter, and control means operatively connected to said testing system components for rendering them operative for testing purposes or inoperative to permit said system to detect intruders in normal fashion.

2,732,545
PILOT LIGHT SWITCH
Edward B. Passow, Park Ridge, and Anthony C. De Napoli, Mount Prospect, Ill., assignors to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application December 1, 1953, Serial No. 395,372
4 Claims. (Cl. 340—258)



1. In a television receiver having a cabinet with a front panel therefor, a chassis supported within the cabinet, a control shaft extending from the chassis through an enlarged aperture in the front panel, and a translucent control knob mounted on the shaft on the side of the front panel remote from the chassis, the combination of, a pilot lamp for illuminating the control knob mounted within the cabinet adjacent the aperture in the front panel, a metallic plate mounted on the front panel on the side thereof remote from the chassis and adjacent said control knob and subject to exhibit capacity variations with respect to a point of reference potential upon the grasping of said knob by the hand of an operator, an energizing circuit for said pilot lamp including switching means for controlling the energization of said lamp, an oscillator coupled to said energizing circuit for actuating said switching means in response to frequency variations of said oscillator from a selected frequency, and means for coupling said metallic plate to said oscillator to produce frequency variations thereof from said selected frequency in response to such changes in the capacity of said plate with respect to said point of reference potential, thereby to cause said pilot lamp to be energized when the hand of the operator grasps said control knob and to be de-energized upon the withdrawal of the hand.

2,732,546
SPEEDOMETER CABLE DISCONNECT DETECTOR
Roscoe Magers, Vallejo, Calif.
Application April 1, 1955, Serial No. 498,632
3 Claims. (Cl. 340—280)



1. In a motor vehicle, a speedometer shaft detachably connected to a rotary element of the vehicle, an indicating circuit comprising a grounded portion, a switch, an indicator, a fuse, and a battery, all connected in series, whereby said indicator will normally be energized when said switch is closed, a conductor connected to the ungrounded side of said indicator and secured to said speedometer shaft adjacent its connection to the rotary element, and grounded contact means arranged to conductively engage said conductor when the shaft is moved toward a disconnected position relative to said rotary element, whereby said fuse will be blown, and whereby said indicator will not be energized when said switch is closed.

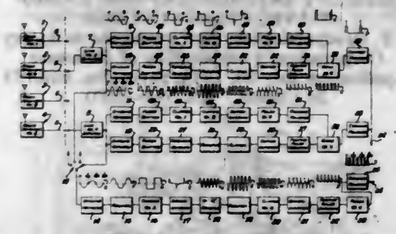
2,732,547
SIREN
John F. Fletcher, Cleveland, Miss.
Application June 2, 1953, Serial No. 359,011
5 Claims. (Cl. 340—405)



1. In a siren having a motor, a housing with sound discharge ports, a rotor driven by said motor in said housing, a shutter for opening and closing intermittently said ports for giving an interrupted siren sound, and means for actuating said shutter, said means comprising a solenoid, the armature of which constitutes a rotatable and longitudinally movable shaft, a train of gears connecting said shaft to said motor, and means actuated by said shaft when displaced upon energizing said solenoid for intermittently closing said shutter.

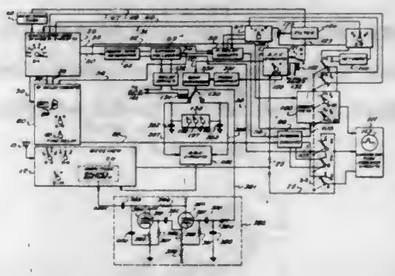
2,732,548
ELECTRONIC SYSTEM FOR CORRELATING PHASE-MODULATED SIGNALS
William W. Brockway, Los Angeles, Calif.
Application March 20, 1950, Serial No. 150,683
9 Claims. (Cl. 343—101)

1. In apparatus for correlating and comparing signals phase displaced from reference signals in accordance with variables and producing therefrom a visible display indicating said displacements, the combination of: a plurality of spaced radio receivers, each responsive to input signals of two harmonically related frequencies; means associated with each of said receivers for producing relatively long duration pulses in timed relation with the occurrence of a predetermined value of an input signal of the lower of said frequencies and relatively short duration pulses in timed relation with the occurrence of a predetermined value of an input signal of the higher of said frequencies and generating an output intelligence signal when said two pulses are produced simultaneously; means for generating output reference signals in timed relation with the occurrence of predetermined values of input reference signals; cathode ray tube means including means for producing an electron beam and sweep



circuits for deflecting said beam in angularly related directions; means for combining said output intelligence signals into a series of signals and impressing said series upon the beam producing means; and means for effectively impressing said output reference signals upon said sweep circuits and thereby synchronizing the latter whereby the cathode-ray tube means produces a visible display of said output intelligence signals positioned in accordance with their phase displacements from the output reference signals.

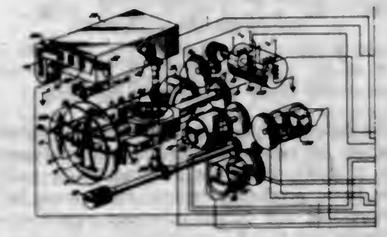
2,732,549
AUTOMATIC AMPLITUDE BALANCE CONTROL SYSTEM FOR HYPERBOLIC NAVIGATION RECEIVER
Wilbert P. Frantz, Long Beach, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application January 13, 1954, Serial No. 403,771
7 Claims. (Cl. 343—103)



1. A hyperbolic navigation receiver responsive to recurrent A pulses transmitted from a master station and to recurrent B pulses transmitted from a slave station, each of said recurrent B pulses arriving at the receiver at a time delayed from the arrival of each of corresponding recurrent A pulses, said receiver including an electrically controllable variable gain amplifier, relay means having a movable contact coupled to the output of said receiver, said relay means having first and second stationary contacts, first condenser means coupled to said first stationary contact, second condenser means coupled to said second stationary contact, means energizing said relay for coupling said movable contact to said first stationary contact during reception of the A pulses and for coupling said movable contact to said second stationary contact during the reception of the B pulses, said first condenser means being charged to a first direct potential according to the strength of said received A pulses, said second condenser means being charged to a second direct potential according to the strength of said received B pulses, the voltage on said movable contact alternating between said first direct potential and said second direct potential, and means

coupling said alternating voltage to the gain controlling circuit of said hyperbolic navigation receiver for varying the gain of said receiver during the reception of one of said recurrent A or B pulses to maintain the received output A pulses substantially equal in magnitude to the received output B pulses.

2,732,550
DISPLAY INSTRUMENT FOR RADIO NAVIGATION SYSTEMS
Eugene F. Reedy, Merrick, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application July 30, 1954, Serial No. 446,753
20 Claims. (Cl. 343—107)



1. A radio navigation display instrument for enabling a pilot to maneuver an aircraft so as to approach and thereafter maintain a selected course defined by a radio beam propagated from a selected station comprising an aircraft reference index adapted to indicate the direction of travel of said aircraft, a pointer simulating by its shape the direction of propagation of said radio beam, means responsive to deviations in the heading of said aircraft from the bearing of said selected course for producing relative rotation between said reference index and said pointer, and means controlled in accordance with the magnitude and sense of the displacement of said craft from said beam for producing relative radial displacement between said reference index and said pointer whereby said instrument indicates to the pilot not only the lateral position and the heading of said aircraft relative to said beam but also whether the aircraft is proceeding toward or away from said radio beam station.

2,732,551
SPHERICAL CAGE ANTENNA
John D. Kraus, Columbus, Ohio, assignor, by mesne assignments, to The Battelle Development Corporation, Columbus, Ohio, a corporation of Delaware
Application March 24, 1954, Serial No. 418,312
9 Claims. (Cl. 343—843)



1. An antenna comprising: a plurality of conductors; each said conductor formed in a substantially circular loop; said loops having equal diameters and being disposed with a diameter of each loop substantially coinciding with a diameter of each of the other loops and with the planes of said loops disposed around said common diameter at equal angles to the planes of adjacent loops; alternate loops, forming a first group, being connected together at one end of said common diameter; the remaining alternate loops, forming a second group, being connected together at the opposite end of said common diameter; first conducting means connected to the common connection of said first group of alternate loops; and second conducting means connected to the common connection of said second group of alternate loops.

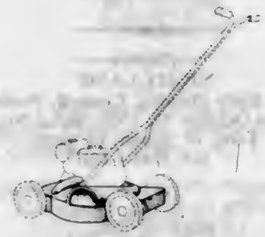
DESIGNS

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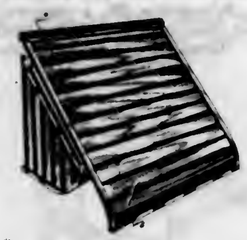
176,707
CHILD'S STOOL
Haskell Benson, Chicago, Ill.
Application June 9, 1954, Serial No. 30,889
Term of patent 14 years
(Cl. D15—8)



176,708
POWER LAWN MOWER
Eliad A. Bovee, Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a corporation of Michigan
Application December 27, 1954, Serial No. 33,682
Term of patent 14 years
(Cl. D40—1)



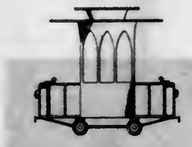
176,709
AWNING
Frederick S. Brennan, Evanston, Ill., and Forrest H. Hudson, Tucker, Ga., assignors to Ray-O-Lite Corporation of America, Atlanta, Ga., a corporation of Georgia
Application July 20, 1955, Serial No. 37,049
Term of patent 14 years
(Cl. D21—6)



176,710
POWER MOWER RIDING ATTACHMENT
Ellsworth F. Brewer, Milwaukee, Wis., assignor to E. F. Brewer Company, a corporation of Wisconsin
Application July 11, 1955, Serial No. 36,888
Term of patent 14 years
(Cl. D40—1)



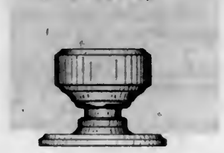
176,711
MINIATURE TROLLEY CAR OR SIMILAR ARTICLE
Frederick H. Bultman, Lakewood, Ohio
Application January 19, 1955, Serial No. 34,069
Term of patent 14 years
(Cl. D34—15)



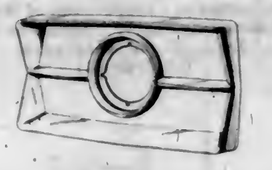
176,712
PORTABLE AUTOMOBILE WARNING AND UTILITY LIGHT
Albert G. Busch, Des Plaines, and Joseph W. Focosi, Chicago, Ill.
Application January 17, 1955, Serial No. 34,005
Term of patent 14 years
(Cl. D48—20)



176,713
COMBINED DOOR KNOB AND ROSE
Charles A. Ellis, Hamden, Conn., assignor to Sargent & Company, New Haven, Conn., a corporation of Connecticut
Application June 4, 1954, Serial No. 30,802
Term of patent 14 years
(Cl. D10—8)



176,714
OPEN ESCUTCHEON FOR A DOOR KNOB
Warren W. Fitzgerald, South San Francisco, Calif., assignor to Schlage Lock Company, a corporation
Application July 11, 1955, Serial No. 36,891
Term of patent 14 years
(Cl. D50—6)



176,715
TEXTILE FABRIC
George W. Fry, Columbus, Ga., assignor to Swift Manufacturing Company, Columbus, Ga., a corporation of Georgia
Application June 10, 1955, Serial No. 36,444
Term of patent 3½ years
(Cl. D92—1)



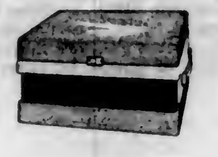
176,716
TEXTILE FABRIC
George W. Fry, Columbus, Ga., assignor to Swift Manufacturing Company, Columbus, Ga., a corporation of Georgia
Application June 10, 1955, Serial No. 36,445
Term of patent 3½ years
(Cl. D92—1)



176,717
TEXTILE FABRIC
George W. Fry, Columbus, Ga., assignor to Swift Manufacturing Company, Columbus, Ga., a corporation of Georgia
Application June 10, 1955, Serial No. 36,446
Term of patent 3½ years
(Cl. D92—1)



176,718
COMBINED TAPE RECORDER AND PLAYER
Kjell M. R. Gaarder, Stevensville, Mich., assignor to V-M Corporation, Benton Harbor, Mich., a corporation of Michigan
Application July 27, 1954, Serial No. 31,621
Term of patent 7 years
(Cl. D26—14)



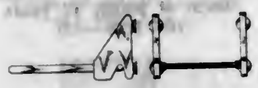
176,719
NIGHT LAMP
Lee Retta Haddox, Connell, Wash.
Application October 10, 1955, Serial No. 38,309
Term of patent 14 years
(Cl. D48—20)



176,720
STEP STOOL
Samuel L. Hudd, Bellwood, Ill., assignor to Hub Plating Works, Inc., Broadview, Ill., a corporation of Illinois
Application December 21, 1954, Serial No. 33,628
Term of patent 14 years
(Cl. D15—8)



176,721
WALL DRYING RACK
William J. Irwin, Concord, N. H.
Application December 20, 1954, Serial No. 33,608
Term of patent 14 years
(Cl. D49—1)



176,722
SOFA OR THE LIKE
Monte Le Roy Johnson, Culver City, Calif., assignor to Capitol Chair Company, Inc., Culver City, Calif.
Application April 12, 1955, Serial No. 35,471
Term of patent 7 years



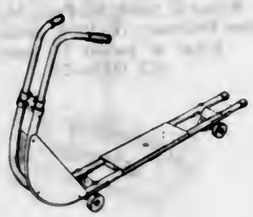
176,723
SPACE HEATER
John B. Koch, Detroit, Mich., assignor to American Blower Corporation, Detroit, Mich., a corporation of Michigan
Application August 26, 1954, Serial No. 32,034
Term of patent 14 years
(Cl. D81—10)



176,724
PRESSURE GAUGE
Frank J. Kuenzl, Chicago, Ill., assignor to The Bastian-Blessing Company, Chicago, Ill., a corporation of Illinois
Application September 14, 1954, Serial No. 32,282
Term of patent 14 years
(Cl. D78—1)



176,725
SCOOTER
Jules Laibow, Merchantville, and Jack W. Vasikonis, Audubon, N. J., assignors to Safe-Play Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania
Application May 20, 1955, Serial No. 36,130
Term of patent 14 years
(Cl. D34—15)



176,726
COASTER OR SIMILAR ARTICLE
Joseph Matys, Brimfield, Mass.
Application February 16, 1955, Serial No. 34,536
Term of patent 14 years
(Cl. D44—10)



176,727
BOTTLE
Barry V. Nolan, Chicago, Ill., assignor to Bluhill Foods, Inc., Denver, Colo., a corporation of Colorado
Application April 25, 1955, Serial No. 35,657
Term of patent 14 years
(Cl. D58—8)



176,728
BOTTLE
Barry V. Nolan, Chicago, Ill., assignor to Bluhill Foods, Inc., Denver, Colo., a corporation of Colorado
Application April 25, 1955, Serial No. 35,658
Term of patent 14 years
(Cl. D58—8)



176,729
ARTICLE DISPENSER OR SIMILAR ARTICLE
Kenneth D. Olsen, Madison, N. J.
Application January 31, 1955, Serial No. 34,303
Term of patent 14 years
(Cl. D58—12)



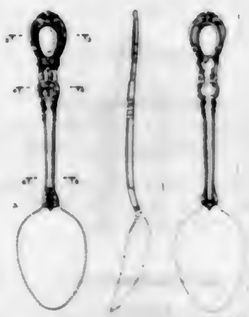
176,730
ARTICLE DISPENSER OR SIMILAR ARTICLE
Kenneth D. Olsen, Madison, N. J.
Application January 31, 1955, Serial No. 34,304
Term of patent 14 years
(Cl. D58—12)



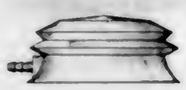
176,731
ARTICLE DISPENSER OR SIMILAR ARTICLE
Kenneth D. Olsen, Madison, N. J.
Application January 31, 1955, Serial No. 34,305
Term of patent 14 years
(Cl. D58—12)



176,732
SPOON OR SIMILAR ARTICLE
Frank R. Perry, Oneida, N. Y., assignor to Oneida Ltd., Oneida, N. Y., a corporation of New York
Application September 30, 1954, Serial No. 32,484
Term of patent 14 years
(Cl. D54—12)



176,733
FOOT PUMP
William F. Pollnow, Ladue, Mo.
Application June 10, 1955, Serial No. 36,459
Term of patent 14 years
(Cl. D65—1)



176,734
COMBINATION SHIPPING AND DISPLAY BOX
Walter A. Reich, Kansas City, Mo., assignor to A. Reich & Sons, Inc., Kansas City, Mo., a corporation of Missouri
Application May 5, 1955, Serial No. 35,845
Term of patent 14 years
(Cl. D58—12)



176,735
PENDANT TYPE BAROMETER OR THE LIKE
Jean Otis Reinecke, Oak Park, Ill., assignor to Airguide Instrument Company, Chicago, Ill., a corporation of Illinois
Application July 5, 1955, Serial No. 36,822
Term of patent 14 years
(Cl. D52—7)



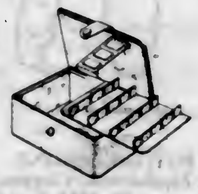
176,736
CHILD'S COASTER VEHICLE
John C. Rumsey, Lawrence, Kans.
Application May 5, 1955, Serial No. 35,846
Term of patent 7 years
(Cl. D34—15)



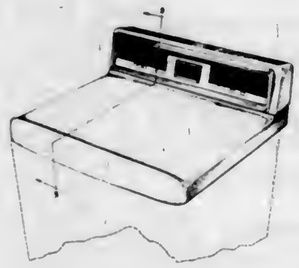
176,737
BUILDING BRICK
Byron E. Scott, St. Paul, Minn.
Application February 16, 1955, Serial No. 34,542
Term of patent 14 years
(Cl. D18—2)



176,738
STUD BOX
William H. St. Thomas, Gloversville, N. Y., assignor to St. Thomas Inc., Gloversville, N. Y., a corporation of New York
Application May 2, 1955, Serial No. 35,770
Term of patent 14 years
(Cl. D58—12.6)



176,739
LAUNDRY MACHINE CABINET OR SIMILAR ARTICLE
Carl W. Sundberg, Birmingham, Mich., assignor, by mesne assignments, to Whirlpool-Seeger Corporation, St. Joseph, Mich., a corporation of Delaware
Application August 5, 1954, Serial No. 31,740
Term of patent 14 years
(Cl. D49—1)



176,740
TOY PLAY TABLE OR SIMILAR ARTICLE
Don A. Taylor, Wadsworth, Ohio
Application April 21, 1955, Serial No. 35,618
Term of patent 14 years
(Cl. D34—15)



176,741
PENDANT TYPE BAROMETER OR THE LIKE
Howard S. Taylor, Fox River Grove, Ill., assignor to Airguide Instrument Company, Chicago, Ill., a corporation of Illinois
Application July 5, 1955, Serial No. 36,800
Term of patent 7 years
(Cl. D52—7)



176,742
PENDANT TYPE BAROMETER OR THE LIKE
Howard S. Taylor, Fox River Grove, Ill., assignor to Airguide Instrument Company, Chicago, Ill., a corporation of Illinois
Application July 5, 1955, Serial No. 36,801
Term of patent 7 years
(Cl. D52—7)



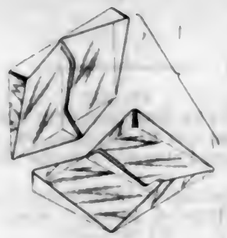
176,743
PENDANT TYPE BAROMETER OR THE LIKE
Howard S. Taylor, Fox River Grove, Ill., assignor to Airguide Instrument Company, Chicago, Ill., a corporation of Illinois
Application July 5, 1955, Serial No. 36,804
Term of patent 7 years
(Cl. D52—7)



176,744
LAMP OR SIMILAR ARTICLE
John W. Webb, Cleveland, Ohio
Application October 12, 1955, Serial No. 38,342
Term of patent 14 years
(Cl. D48—20)



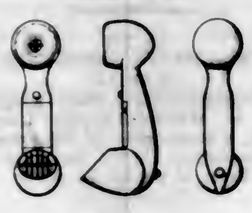
176,745
BOX
Paul A. Witte, Levittown, Pa.
Application May 16, 1955, Serial No. 36,020
Term of patent 14 years
(Cl. D58—12)



176,746
LUBRICATING UNIT
Clyde E. Wright, Elyria, Ohio, assignor to The Ridge Tool Company, Elyria, Ohio
Application February 24, 1955, Serial No. 34,685
Term of patent 14 years
(Cl. D46—1)



176,747
TOY TELEPHONE
Jay V. Zimmerman, Clayton, Mo.
Application January 20, 1954, Serial No. 28,606
Term of patent 14 years
(Cl. D34—15)



LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 24TH DAY OF JANUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Addicks, Mentor C. Machine for conveying bulk material and control therefor. Re. 24,112, 1–24–56, Cl. 254—187.

Adler, Joseph I., Jr. Artificial foliage and method of making same. Re. 24,114, 1–24–56, Cl. 41—13.

Landrey, Francis X., to Stephens-Adamson Mfg. Co. Ship loading and trimming machine. Re. 24,113, 1–24–56, Cl. 198—128.

Stephens-Adamson Mfg. Co.: *See*—
Landrey, Francis X. Re. 24,113.

LIST OF PLANT PATENTEES

Jackson & Perkins Co.: *See*—
Tantau, Mathias. 1,452.

Moore, Ralph S. Rose plant. 1,451, 1–24–56, Cl. 47—61.

Tantau, Mathias, to Jackson & Perkins Co. Rose plant. 1,452, 1–24–56, Cl. 47—61.

LIST OF DESIGN PATENTEES

Airguide Instrument Co.: *See*—
Reinecke, Jean O. 176,735.
Taylor, Howard S. 176,741.
Taylor, Howard S. 176,742.
Taylor, Howard S. 176,743.

American Blower Corp.: *See*—
Koch, John B. 176,723.

Bastian-Blessing Co., The: *See*—
Kuenzl, Frank J. 176,724.

Benson, Haskell. Child's stool. 176,707, 1–24–56, Cl. D15—8.

Bluhill Foods, Inc.: *See*—
Nolan, Barry V. 176,727.
Nolan, Barry V. 176,728.

Bovee, Eliad A., to Motor Wheel Corp. Power lawn mower. 176,708, 1–24–56, Cl. D40—1.

Brennan, Frederick S., and F. H. Hudson, to Ray-O-Lite Corp. of America. Awning. 176,709, 1–24–56, Cl. D21—6.

Brewer, E. F., Co.: *See*—
Brewer, Ellsworth F. 176,710.

Brewer, Ellsworth F., to E. F. Brewer Co. Power mower riding attachment. 176,710, 1–24–56, Cl. D40—1.

Bultman, Frederick H. Miniature trolley car or similar article. 176,711, 1–24–56, Cl. D34—15.

Busch, Albert G., and J. W. Focosi. Portable automobile warning and utility light. 176,712, 1–24–56, Cl. D48—20.

Capital Chair Co., Inc.: *See*—
Johnson, Monte L. 176,722.

Ellis, Charles A., to Sargent & Co. Combined door knob and rose. 176,713, 1–24–56, Cl. D10—8.

Fitzgerald, Warren W., to Schlage Lock Co. Open escutcheon for a door knob. 176,714, 1–24–56, Cl. D50—6.

Focosi, Joseph W.: *See*—
Busch, Albert G., and Focosi. 176,712.

Fry, George W., to Swift Mfg. Co. Textile fabric. 176,715, 1–24–56, Cl. D92—1.

Fry, George W., to Swift Mfg. Co. Textile fabric. 176,716, 1–24–56, Cl. D92—1.

Fry, George W., to Swift Mfg. Co. Textile fabric. 176,717, 1–24–56, Cl. D92—1.

Gaarder, Kjell M. R., to V-M Corp. Combined tape recorder and player. 176,718, 1–24–56, Cl. D26—14.

Haddox, Lee R. Night lamp. 176,719, 1–24–56, Cl. D48—20.

Hub Plating Works, Inc.: *See*—
Hudd, Samuel L. 176,720.

Hudd, Samuel L., to Hub Plating Works, Inc. Step stool. 176,720, 1–24–56, Cl. D15—8.

Hudson, Forrest H.: *See*—
Brennan, Frederick S., and Hudson. 176,709.

Irwin, William J. Wall drying rack. 176,721, 1–24–56, Cl. D49—1.

Johnson, Monte L., to Capital Chair Co., Inc. Sofa or the like. 176,722, 1–24–56, Cl. D15—11.

Koch, John B., to American Blower Corp. Space heater. 176,723, 1–24–56, Cl. D81—10.

Kuenzl, Frank J., to The Bastian-Blessing Co. Pressure gauge. 176,724, 1–24–56, Cl. 78—1.

Laibow, Jules, and J. W. Vasikonis, to Safe-Play Mfg. Co. Scooter. 176,725, 1–24–56, Cl. D34—15.

Matys, Joseph. Coaster or similar article. 176,726, 1–24–56, Cl. D44—10.

Motor Wheel Corp.: *See*—
Bovee, Eliad A. 176,708.

Nolan, Barry V., to Bluhill Foods, Inc. Bottle. 176,727, 1–24–56, Cl. D58—8.

Nolan, Barry V., to Bluhill Foods, Inc. Bottle. 176,728, 1–24–56, Cl. D58—8.

Olsen, Kenneth D. Article dispenser or similar article. 176,729, 1–24–56, Cl. D58—12.

Olsen, Kenneth D. Article dispenser or similar article. 176,730, 1–24–56, Cl. D58—12.

Olsen, Kenneth D. Article dispenser or similar article. 176,731, 1–24–56, Cl. D58—12.

Oneida Ltd.: *See*—
Perry, Frank R. 176,732.

Perry, Frank R., to Oneida Ltd. Spoon or similar article. 176,732, 1–24–56, Cl. D54—12.

Pollnow, William F. Foot pump. 176,733, 1–24–56, Cl. D65—1.

Ray-O-Lite Corp. of America: *See*—
Brennan, Frederick S., and Hudson. 176,709.

Reich, A., & Sons, Inc.: *See*—
Reich, Walter A. 176,734.

Reich, Walter A., to A. Reich & Sons, Inc. Combination shipping and display box. 176,734, 1–24–56, Cl. D58—12.

Reinecke, Jean O., to Airguide Instrument Co. Pendant type barometer or the like. 176,735, 1–24–56, Cl. D52—7.

Ridge Tool Co., The: *See*—
Wright, Clyde E. 176,746.

Rumsey, John C. Child's coaster vehicle. 176,736, 1–24–56, Cl. D34—15.

Safe-Play Mfg. Co.: *See*—
Laibow, Jules, and Vasikonis. 176,725.

St. Thomas Inc.: *See*—
St. Thomas, William H. 176,738.

St. Thomas, William H., to St. Thomas Inc. Stud box. 176,738, 1–24–56, Cl. D58—12.6.

Sargent & Co.: *See*—
Ellis, Charles A. 176,713.

Schlage Lock Co.: *See*—
Fitzgerald, Warren W. 176,714.

Scott, Byron E. Building brick. 176,737, 1–24–56, Cl. D18—2.

Sundberg, Carl W., to Whirlpool-Seeger Corp. Laundry machine cabinet or similar article. 176,739, 1–24–56, Cl. D49—1.

Swift Mfg. Co.: *See*—
Fry, George W. 176,715.
Fry, George W. 176,716.
Fry, George W. 176,717.

Taylor, Don A. Toy play table or similar article. 176,740, 1–24–56, Cl. D34—15.

Taylor, Howard S., to Airguide Instrument Co. Pendant type barometer or the like. 176,741, 1–24–56, Cl. D52—7.

Taylor, Howard S., to Airguide Instrument Co. Pendant type barometer or the like. 176,742, 1–24–56, Cl. D52—7.

Taylor, Howard S., to Airguide Instrument Co. Pendant type barometer or the like. 176,743, 1–24–56, Cl. D52—7.

V-M Corp.: *See*—
Gaarder, Kjell M. R. 176,718.

Vasikonis, Jack W.: *See*—
Laibow, Jules, and Vasikonis. 176,725.

Webb, John W. Lamp or similar article. 176,744, 1–24–56, Cl. D48—20.

Whirlpool-Seeger Corp.: *See*—
Sundberg, Carl W. 176,739.

Witte, Paul A. Box. 176,745, 1–24–56, Cl. D58—12.

Wright, Clyde E., to The Ridge Tool Co. Lubricating unit. 176,746, 1–24–56, Cl. D46—1.

Zimmerman, Jay V. Toy telephone. 176,747, 1–24–56, Cl. D34—15.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 24TH DAY OF JANUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Abberley, Maurice W. Potters' lathes and chucks. 2,732,214, 1–24–56, Cl. 279—3.

Abberley, Maurice W. Potters' lathes and chucks. 2,732,215, 1–24–56, Cl. 279—3.

Abercrombie, Ian H. Valve mechanism silencing device. 2,731,957, 1–24–56, Cl. 123—90.

Aboulenc, Jules: *See*—
Lafumas, Paul, and Aboulenc. 2,732,381.

Abrams, James W. Plow with automatic tripper. 2,731,899, 1–24–56, Cl. 97—47.83.

Abramsen, Finn B.: *See*—
Breza, George, and Abramsen. 2,731,869.

Adams, Harvey D., J. E. Geasland, and E. L. Montague, to Douglas Aircraft Co., Inc. Automatic wire marking machine. 2,731,750, 1–24–56, Cl. 41—1.

Addressograph-Multigraph Corp.: *See*—
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Agriculture, United States of America as represented by the Secretary of: *See*—
Filachione, Edward M. 2,732,278.
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Aikens, Andrew J., N. Botsford, A. P. Boysen, Jr., E. Dietze, deceased, by K. R. Dietze, executrix, W. D. Goodale, Jr., and A. H. Inglis, to Bell Telephone Laboratories, Inc. Subscriber telephone set. 2,732,436, 1–24–56, Cl. 179—81.

Air Force, United States of America as represented by the Secretary of the: *See*—
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Albano, Alphonso F. Automatic stirrer or agitator for cooking and washing vessels. 2,732,185, 1–24–56, Cl. 259—101.

Albers, Heinrich B., to Hydropress, Inc. Mandrel cooling for extrusion presses. 2,732,066, 1–24–56, Cl. 207—16.

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Allison, Charles F. Note books. 2,731,967, 1–24–56, Cl. 129—18.

Allyne, Rollin F. Method of and apparatus for controlling the temperature of trailer cargo and the like. 2,731,807, 1–24–56, Cl. 62—6.

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American Can Co.: *See*—
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Birkland, Stellan. 2,732,315.

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Anderson, Elsie G. Warning signal for a chart holder. 2,731,941, 1–24–56, Cl. 116—135.

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Anderson, John R., to Bell Telephone Laboratories, Inc. Wave filter. 2,732,528, 1–24–56, Cl. 333—75.

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Andresen, John. Electronic distance gauging device for motor vehicles. 2,732,539, 1–24–56, Cl. 340—61.

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Arnould, Marcel M. Parakeet mirror perch. 2,731,949, 1–24–56, Cl. 119—26.

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Aves, Fred J. Curb indicator. 2,731,935, 1–24–56, Cl. 116—28.

Ayers, David T., Jr., to Kelsey-Hayes Wheel Co. Booster brake mechanism. 2,731,797, 1–24–56, Cl. 60—54.6.

Ayres, Waldemar A., to White Sewing Machine Corp. Sewing machine. 2,731,929, 1–24–56, Cl. 112—205.

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Bailey, Donald L., and G. H. Wagner, to Union Carbide and Carbon Corp. Disproportionation of chlorosilanes employing cyanamide catalysts. 2,732,280, 1–24–56, Cl. 23—14.

Bailey, Donald L., and G. H. Wagner, to Union Carbide and Carbon Corp. Disproportionation of chlorosilanes employing metallic-halide-treated cyanamides as catalysts. 2,732,281, 1–24–56, Cl. 23—14.

Bailey, Donald L., P. W. Shafer, and G. H. Wagner, to Union Carbide and Carbon Corp. Disproportionation of chlorosilanes employing nitrile catalysts. 2,732,282, 1–24–56, Cl. 23—14.

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Bales, Max G., to General Motors Corp. Ignition distributor. 2,732,465, 1–24–56, Cl. 200—106.

Ball, William E. Awning assembly. 2,731,686, 1–24–56, Cl. 20—57.5.

Ballard, Clayton A., and E. P. Horn, to The Air Preheater Corp. Pivotally supported housing for rotary regenerators. 2,732,184, 1–24–56, Cl. 257—6.

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Bancroft, George H., to Consolidated Vacuum Corp. Vacuum dehydration apparatus. 2,731,734, 1–24–56, Cl. 34—76.

Barba, Carl J. Power take-off. 2,731,840, 1–24–56, Cl. 74—15.8.

Bargman, Theodore. Rotary-bolt lock. 2,731,822, 1–24–56, Cl. 70—135.

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Barnard, Kenneth N., J. H. Greenblatt, and P. Sullivan, to the Minister of National Defence of her Majesty's Canadian Government. Primary cell using a deposited cathode. 2,732,417, 1–24–56, Cl. 136—100.

Basdekis, Costas H., to The Chemstrand Corp. Polymerization method for acrylonitrile-vinylpyridine copolymers. 2,732,364, 1–24–56, Cl. 260—45.5.

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Bellows, Foy E. Hand supportable clamp and bench mount therefor. 2,731,863, 1–24–56, Cl. 81—41.

Benchemoul, Norbert R. Electric relays of the liquid resistance type. 2,732,460, 1–24–56, Cl. 200—114.

Bender, Leon W. Oil filter. 2,732,075, 1–24–56, Cl. 210—140.

Bendix Aviation Corp.: *See*—
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Benedetto, Roberto. Manual beater. 2,732,187, 1–24–56, Cl. 259—144.

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Berger, C. L., & Sons, Inc.: *See*—
Churgin, Leopold, and Grundberg. 2,731,873.

Berner, Philip J., and J. D. Connell, to General Motors Corp. Attachment device. 2,732,448, 1–24–56, Cl. 200—61.56.

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Bernstein, Seymour, and R. Littell, to American Cyanamid Co. Pregnadienes and method of preparing the same. 2,732,383, 1–24–56, Cl. 260—397.45.

Besoyan, Kirk. Truck-trailer emergency brake. 2,732,035, 1–24–56, Cl. 188—4.

Bigelow, Inc.: *See*—
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Birkland, Stellan, to American Can Co. Machine for treating annular areas of magnetizable circular articles. 2,731,946, 1–24–56, Cl. 118—321.

Birkland, Stellan, to American Can Co. Method of and apparatus for treating predetermined areas of disc-like articles. 2,732,315, 1–24–56, Cl. 117—43.

Bishop, Edward P. Air mattress. 2,731,652, 1–24–56, Cl. 5—348.

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Strindlund, John. 2,732,080.
Strindlund, John. 2,732,081.

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Blaeker, Joseph. Ultraviolet air disinfecting appliance. 2,732,301, 1–24–56, Cl. 250—43.

Blanchard, Andre, and M. Mennecier, deceased (by A. Mennecier, executrix), to Schlumberger Well Surveying Corp. Electrode carrier means for well logging apparatus. 2,732,525, 1–24–56, Cl. 324—10.

Blank, Ferdinand. Air-vent means for medical casts. 2,731,963, 1–24–56, Cl. 128—91.

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Boals, Wayne S., to Hughes Tool Co. Fluid pressure reducing and regulating valve. 2,731,975, 1–24–56, Cl. 127—116.5.

Bodine, Albert G., Jr. Acoustic pulse jet engine with acoustic air intake system. 2,731,795, 1–24–56, Cl. 60—39.77.

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Bolding, Hubert V., to The Bradley & Gilbert Co. Shockproof carton. 2,732,123, 1–24–56, Cl. 229—39.

Bolley, Don S., R. H. McCormack, and F. C. Naughton, to National Lead Co. Process for separation of "phytin" from seeds. 2,732,395, 1–24–56, Cl. 260—461.

Bolt, Harry C. Portable buildings. 2,731,680, 1–24–56, Cl. 20—2.

Booth, Eugene T., to the United States of America as represented by the United States Atomic Energy Commission. Diaphragm pump. 2,732,127, 1–24–56, Cl. 230—162.

Borg-Warner Corp.: *See*—
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Bosch, Robert, G. m. b. H.: *See*—
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Pröpstl, Georg. 2,732,287.

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Boughtwood, John E., to The Western Union Telegraph Co. Cross-talk suppression. 2,732,431, 1–24–56, Cl. 179—15.

Bowes, Thomas D. Electrical automotive transmission system with changeable ratios. 2,732,508, 1–24–56, Cl. 310—102.

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Bolding, Hubert V. 2,732,123.

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Brandhandler, Filip. Articulators used in the production of denture prosthesis. 2,731,723, 1–24–56, Cl. 32—32.

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Brattberg, Nils. Pressure-tight packing assembly for conductors passing through a wall. 2,732,226, 1–24–56, Cl. 285—2.

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Bray, Ulric B., to Bray Oil Co. Method for producing neutralized acid-treated oil and recovering motor oil stock and sulfonates. 2,732,344, 1–24–56, Cl. 252—33.

Brendel, Theodor, to Agfa Camera-Werk Aktiengesellschaft. Triplet-type photographic objective lens. 2,731,884, 1–24–56, Cl. 88—57.

Bretthauer, Hermann, to Franke & Heidecke, Fabrik Photographischer Prazisions-Apparate. Latch for photographic cameras. 2,732,236, 1–24–56, Cl. 292—65.

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Breza, George, and F. B. Abramsen, to E. W. Bliss Co. Controlling and compensating apparatus for lathes and the like. 2,731,869, 1–24–56 Cl. 82—14.

Bricaud, Joseph M., to Borg-Warner Corp. Bore hole detecting circuit and bore hole firing circuit utilizing a common transmission channel. 2,732,518, 1–24–56, Cl. 317—80.

Brice, Thomas J., and P. W. Trott, to Minnesota Mining & Mfg. Co. Fluorocarbon sulfonic acids and derivatives. 2,732,398, 1–24–56, Cl. 260—503.

Bridges, Jack E., to Zenith Radio Corp. Automatic frequency-control circuit. 2,732,495, 1–24–56, Cl. 250—36.

Briggs, Thomas H., Jr., to Burroughs Corp. Electron tube structure. 2,732,512, 1–24–56, Cl. 313—85.

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Hewitt, Thomas, Miller, and Varley. 2,732,294.

British Telecommunications Research Ltd.: *See*—
Baker, George T. 2,732,493.
Dain, Gordon T., and Williams. 2,732,428.

Broadcast Equipment Specialties Corp.: *See*—
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Brockway, William W. Electronic system for correlating phase-modulated signals. 2,732,548, 1–24–56, Cl. 343—101.

Brokaw, George Y., and M. I. Van Graafeiland, to Eastman Kodak Co. Method of making monoglycerides or the like. 2,732,387, 1–24–56, Cl. 260—410.7.

Bronckhurst, Paul F., to the United States of America as represented by the Secretary of the Air Force. Gear shifting mechanism. 2,731,847, 1–24–56, Cl. 74—339.

Brown, Allen K.: *See*—
Bunblasky, Adolph C., and Brown. 2,732,499.

Brown, Charles T.: *See*—
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Brown, Charles T., Co.: *See*—
Wood, Jay J. 2,732,196.

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Brown, Harold M. Combination coffee and tea maker. 2,731,907, 1–24–56, Cl. 99—316.

Brown, Harold M. Combined pie crust cutter and water dispenser. 2,732,188, 1–24–56, Cl. 259—144.

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Buckingham, William D., to The Western Union Telegraph Co. Polar relay. 2,732,458, 1–24–56, Cl. 200—93.

Buerger, Herbert. Ornamental wheel assembly. 2,732,262, 1–24–56, Cl. 301—37.

Bumiller, Jacques, to Societe de Prospection & d'Inventions Techniques Spit. Improvements in explosively actuated fastener driving tools. 2,731,636, 1–24–56, Cl. 1—44.5.

Bunblasky, Adolph C., and A. K. Brown, to Sorensen & Co., Inc. Low distortion generator. 2,732,499, 1–24–56, Cl. 250—36.

Burkhardt, Anton F., and E. H. Boeglin, to Sativa Corp. Fiber treating tank. 2,731,820, 1–24–56, Cl. 68—207.

Burns, Ida C. Protective cover device. 2,731,999, 1–24–56, Cl. 150—52.

Burroughs Corp.: *See*—
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Caird, David W., to General Electric Co. Ozone oxidation reactor. 2,732,340, 1–24–56, Cl. 204—321.

Caldwell, John R., and E. H. Hill, to Eastman Kodak Co. Polymers of N-2-norcamphanylacrylamides. 2,732,369, 1–24–56, Cl. 260—82.1.

California Research Corp.: *See*—
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Camco, Inc.: *See*—
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Campbell, Linden C., and R. W. Brandt. Control apparatus for grain distributing spouts. 2,732,052, 1–24–56, Cl. 193—23.

Canadian Government, Minister of National Defence of her Majesty's: *See*—
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Jenkins, Wendell L., and Bennett. 2,731,688.

Caridis, Andrew A.: *See*—
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Carlston, Earl F., and F. G. Lum, to California Research Corp. Process for separating isophthalic acid and terephthalic acid mixtures. 2,732,399, 1–24–56, Cl. 260—525.

Carolus James B., to Leeds and Northrup Co. Systems for controlling generating units. 2,732,506, 1–24–56, Cl. 307—57.

Carpenter, Edwin O., J. M. Morgan, Jr., and M. V. Waters, to The Cincinnati Milling Machine Co. Electric motor control system for a reproducing machine. 2,732,521, 1–24–56, Cl. 318—39.

Carson, Benjamin R., to Radio Corp. of America. Record change cycle control system for automatic record changers. 2,732,212, 1–24–56, Cl. 274—1.

Carter, Sidney T., to Geo. J. Meyer Mfg. Co. Label dating mechanism or labeling machines. 2,731,913, 1–24–56, Cl. 101—305.

Carvel, Thomas. One-piece barrel end and dispenser tip. 2,731,923, 1–24–56, Cl. 107—14.

Carver, Richard N., to Louis Marx & Co. Toy emergency vehicle with housing. 2,731,765, 1–24–56, Cl. 46—12.

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Celanese Corp. of America: *See*—
Bradshaw, William H. 2,731,667.
Jones, Wilford D. 2,732,358.

Cellini, Joseph A. Filing cabinet drawer and follower block therefor. 2,731,968, 1–24–56, Cl. 129—30.

Cerkleski, Chester F. Blade attachment for rotary shaper heads. 2,731,990, 1–24–56, Cl. 144—218.

Chain Belt Co.: *See*—
Nigra, John D., and Colombo. 2,732,058.

Chance Vought Aircraft, Inc.: *See*—
Eagon, Norton D. 2,731,938.

Chaney, Louis C. Hand chain for hoists. 2,732,178, 1–24–56, Cl. 254—169.

Chapman, Joseph E. G., to British Insulated Callender's Cables Ltd. Electric coupling having molded end seal for conductor. 2,732,421, 1–24–56, Cl. 174—76.

Chaussee, Francis P.: *See*—
Chausee, Russel L. and F. P., and Dial. 2,732,084.

Chaussee, Russel L. and F. P., and E. L. Dial, ¾ to H. Stoller. Curing chambers. 2,732,084, 1–24–56, Cl. 214—16.4.

Chechak, Jonas J.: *See*—
Minsk, Louis M., and Chechak. 2,732,382.

Chemical Foundation, Inc., The: *See*—
Miller, Ralph. 2,732,310.

Chemstrand Corp., The: *See*—
Basdekis, Costas H. 2,732,364.
De Witt, Hobson D. 2,732,359.

Chicago Coin Machine Co.: *See*—
Heide, Stanford M. 2,732,210.

Chicopee Mfg. Corp.: *See*—
Kennette, Heath O., Plummer, and Smith. 2,731,679.

Chincholl, Fred W. Can sealing strip remover. 2,732,093, 1–24–56, Cl. 220—52.

Chubb, Alexander A., R. Mawson, and M. M. Levy, to The General Electric Co. Ltd. Automatic telephone exchanges. 2,732,433, 1–24–56, Cl. 179—18.

Churgin, Leopold, and D. N. Grundberg, to C. L. Berger & Sons, Inc. Hand surveying instrument. 2,731,873, 1–24–56, Cl. 88—2.3.

Cincinnati Milling Machine Co., The: *See*—
Carpenter, Edwin O., Morgan, and Waters. 2,732,521.
Sieber, Edward J., Jr., and Davis. 2,731,774.

Clamann, Hans G., to the United States of America as represented by the Secretary of the Air Force. Pneumatic refractometer. 2,731,877, 1–24–56, Cl. 88—14.

Clark Equipment Co.: *See*—
Lapsley, Robert, and Turner. 2,732,022.
Spatta, George. 2,731,856.

Clark, Franklin: *See*—
Anderson, William T., Jr., and Clark. 2,732,513.

Clark, Harold A., to Dow Corning Corp. Salts of organosilanols. 2,732,390, 1–24–56, Cl. 260—448.2.

Clarke, John T., to Ionics, Inc. Polyelectrolytes comprising copolymers of vinyl aromatic compounds and compounds containing alkyl vinyl pyridinium. 2,732,350, 1–24–56, Cl. 260—2.1.

Clarke, John T., to Ionics, Inc. N-alkylated copolymers of vinyl pyridine and polyvinyl aromatic compounds and the product obtained thereby. 2,732,351, 1–24–56, Cl. 260—2.1.

Clement, Henry W. Female urinal. 2,731,648, 1–24–56, Cl. 4—110.

Clevite Corp.: *See*—
Miller, Harry B. 2,732,536.

Clotfelter, Rea A. Flux control apparatus. 2,732,470, 1–24–56, Cl. 219—8.

Cluett Peabody & Co., Inc.: *See*—
Donaldson, Harry C., Jr. 2,731,788.

Clukey, Wayne H., to Kaiser Aluminum & Chemical Corp. Process of recovering cryolite, alumina, and other bath values. 2,732,283, 1–24–56, Cl. 23—88.

Clymer, Joseph D.: *See*—
Wright, George W., Jauch, Clymer, Jackson, and Scheurer. 2,732,103.

Coates, Harold, to Albright & Wilson Ltd. Manufacture of dialkyl aryl phosphates. 2,732,394, 1-24-56, Cl. 260—461.

Codding, Donald W., to Minnesota Mining & Mfg. Co. Fluorocarbon vinyl ethers and polymers. 2,732,370, 1–24–56, Cl. 260—91.1.

Coe, James R.: Fishing line attachment. 2,731,758, 1–24–56, Cl. 43—42.72.

Cole, Manley W.: *See*—
Neel, George H., and Cole. 2,732,307.

Collingwood, Frank M., to Electro-Hydraulics Ltd. Fluid pressure operated systems. 2,731,165, 1–24–56, Cl. 251—25.

Collins Radio Co.: *See*—
Woolridge, Harold I. 2,731,853.

Collins, Samuel V. Method of laying and retrieving underwater pipe line. 2,731,800, 1–24–56, Cl. 61—72.

Colman, Roderick M. Stop for lathe carriage. 2,731,870, 1–24–56, Cl. 82—21.

Colombo, Geno: *See*—
Nigra, John D., and Colombo. 2,732,058.

Colter Corp.: *See*—
Anderson, Robert T. 2,731,942.

Comer, John F. Sleeve sand valve. 2,731,978, 1–24–56, Cl. 137—382.

Commerce, United States of America as represented by the Secretary of: *See*—
Gould, John H. 2,731,875.

Commonwealth Scientific and Industrial Research Organization: *See*—
Speedy, Charles B. 2,732,516.

Connell, James D.: *See*—
Berner, Philip J., and Connell. 2,732,448.

Connors, James J., and C. W. Eisenheimer, to The Charles Parker Co. Fixture support. 2,732,159, 1–24–56, Cl. 248—224.

Conover, William G. Optical testing devices of the perimeter type. 2,731,879, 1–24–56, Cl. 88—20.

Conrad, Allen L. Container filling apparatus. 2,732,112, 1–24–56, Cl. 226—18.

Consolidated Electric Lamp Co.: *See*—
Tamis, George A. 2,732,532.

Consolidated Vacuum Corp.: *See*—
Bancroft, George H. 2,731,734.

Container Corp. of America: *See*—
Pratt, Willard E., and Hendrickson. 2,732,062.

Continental Can Co., Inc.: *See*—
Fogle, William K. 2,732,111.

Cooper, Basil P.: *See*—
Lynam, John E., and Cooper. 2,731,818.

Cooper, Worden L. *See*—
Stout, Glenn M. and J. M., and Cooper. 2,732,167.

Coover, Harry W., Jr., and J. B. Dickey, to Eastman Kodak Co. Polymerization of acrylonitrile in the presence of preformed interpolymers. 2,732,363, 1–24–56, Cl. 260—45.5.

Copien, George. Floor scrubbing machine. 2,731,659, 1–24–56, Cl. 15—320.

Corn Products Refining Co.: *See*—
Kerr, Ralph W. 2,732,309.

Cornett, Walter V. Portable power hammers. 2,732,197, 1–24–56, Cl. 262—15.

Corning Glass Works: *See*—
Stookey, Stanley D. 2,732,298.

Corning, Walter D. Chairs. 2,732,005, 1–24–56, Cl. 155—77.

Corry-Jamestown Mfg. Corp.: *See*—
Hutzelman, Howard E. 2,732,240.

Cotter, James L.: *See*—
Silvers, Albert, and Cotter. 2,731,685.

Cottom, Truman W., to M. E. Hall. Clothes hamper. 2,732,274, 1–24–56, Cl. 312—280.

Cotton, William, Ltd.: *See*—
Lynam, John E., and Cooper. 2,731,818.

Couanault, Georges R., to Societe Alsacienne de Constructions Mecaniques. Electrical servo-mechanisms. 2,732,520, 1-24-56, Cl. 318—18.

Couch, Glenn F., to The Symington-Gould Corp. Railway truck. 2,731,923, 1–24–56, Cl. 105—197.

Coulter, Earl E., to The Babcock & Wilcox Co. Steam purifier. 2,732,028, 1–24–56, Cl. 183—31.

Coulter & McKenzie Machine Co., Inc.: *See*—
Zaveruha, Victor A. 2,732,060.

Coupland, Frank H., Jr., E. H. Phelps, J. M. Cranford, and K. R. Daniel, to American Cast Iron Pipe Co. Method for the manufacture of centrifugally cast tubular metal articles. 2,731,690, 1–24–56, Cl. 22—200.5.

Courtaulds Ltd.: *See*—
Gardner, Brian C., and Sharples. 2,732,002.

Cowley, William E., to American Saw & Tool Co. Molding head and cutter. 2,731,991, 1–24–56, Cl. 144—229.

Cox, Gordon V.: *See*—
Hoffmann, Albert. 2,732,029.

Cragg, Arthur C.: *See*—
West, Clare E., and Cragg. 2,732,256.

Cranford, John M.: *See*—
Coupland, Frank H., Jr., Phelps, Cranford, and Daniel. 2,731,690.

Crawford, Herman E. Elastic selvage top for knitted articles and method. 2,731,819, 1–24–56, Cl. 66—172.

Cree, Daniel L., to Kalamazoo Vegetable Parchment Co. Method for coating paper with thermoplastic material and cooling. 2,732,319, 1–24–56, Cl. 117—103.

Crelo Mfg. Co., Inc.: *See*—
Lime, Ermal J., and Hedges. 2,732,098.

Crescent, Henri A. Adjustable chair with invisible mechanism. 2,732,006, 1–24–56, Cl. 155—88.

Cress, Howard S., to United States Steel Corp. Liquid-fuel burner for furnaces or the like. 2,732,257, 1–24–56, Cl. 299—140.

Crew, Fred W. Steering wheel mounting device. 2,731,823, 1–24–56, Cl. 70—218.

Crider, Alvin L. Adjustable lamp. 2,732,487, 1–24–56, Cl. 240—81.

Crockett, Earnest L.: *See*—
Crockett, Thomas E. 2,731,979.

Crockett, Thomas E., to E. L. Crockett. Inlet valve for toilet flush tank. 2,731,979, 1–24–56, Cl. 137—414.

Crouch, Veva M.: *See*—
Welch, John M. 2,732,221.

Crow, Amos E. Tank bleeder. 2,732,071, 1–24–56, Cl. 210—56.

Crown Zellerbach Corp.: *See*—
Harris, James C., Jr., Caridis, and Kendall. 2,731,732.

Cunningham, James L., Jr.: *See*—
Cunningham, James L., Sr., and J. L., Jr. 2,732,067.

Cunningham, James L., Sr., and J. L., Jr. Weighing and classifying apparatus. 2,732,067, 1–24–56, Cl. 209—121.

Curby, Donald L.: *See*—
Rhea, John E. 2,731,770.

Curran, John R., to Hammel-Dahl Co. Valve. 2,732,172, 1–24–56, Cl. 251—282.

Currie, Grover C., to Dacam Corp. Method of packaging cylindrical objects in carriers. 2,731,776, 1–24–56, Cl. 53—5.

Curtis, Thomas E., and G. N. Lemmon, to Southern States Equipment Corp. Electric switch. 2,732,468, 1–24–56, Cl. 200—170.

Curtiss-Wright Corp.: *See*—
Stern, Robert G. 2,731,737.

Cusano, Dominic A., and F. J. Studer, to General Electric Co. Cathode ray luminescent screens. 2,732,313, 1–24–56, Cl. 117—33.5.

Cushman Chuck Co., The: *See*—
Sloan, Harry E., Rutherford, and Hickey. 2,732,216.

Cuthbertson, James A. Endless band devices. 2,732,265, 1–24–56, Cl. 305—10.

Cutter Corp.: *See*—
Spanel, Abraham N. 2,731,717.

Cutter Laboratories: *See*—
Hink, John H., Jr., and Johnson. 2,731,731.

Cyphers, Elmer B.: *See*—
Jones, Robert H., and Cyphers. 2,732,346.
Lynch, Charles S., and Cyphers. 2,732,285.

Dacam Corp.: *See*—
Currie, Grover C. 2,731,776.

Dahlhaus, Hermann, and A. Winterhoff, to Vossloh-Werke G. m. b. H. Mountings for tubular electric discharge lamps such as fluorescent lamps, or fluorescent tubes. 2,732,530, 1–24–56, Cl. 339—52.

Daimler-Benz Aktiengesellschaft: *See*—
Förster, Hans J. M., and Kollmann. 2,732,048.
Nallinger, Friedrich K. H. 2,731,792.

Dain, Gordon T., and A. V. Williams, to British Telecommunications Research Ltd. Regenerative repeaters for use in telegraph systems. 2,732,428, 1–24–56, Cl. 178—70.

Dairymple, William P., to American Brake Shoe Co. Centrifugal clutches. 2,732,051, 1–24–56, Cl. 192—105.

Daniel, Kenneth R.: *See*—
Coupland, Frank H., Jr., Phelps, Cranford, and Daniel. 2,731,690.

Darney, Harold E., to Hanovia Chemical and Mfg. Co. Control system for irradiator unit. 2,732,502, 1–24–56, Cl. 250—45.

Daugherty, Arthur. Plier-type slidable jaw wrench. 2,731,867, 1–24–56, Cl. 81—85.

Davidson, Charles L. Animal feeder. 2,731,950, 1–24–56, Cl. 119—52.

Davie, William R., to Pittsburgh Coke & Chemical Co. Low volatility herbicidal compositions. 2,732,291, 1–24–56, Cl. 71—2.6.

Davies, Cyril B.: *See*—
Jense, Willem F., and Davies. 2,732,348.

Davies, John W., M. L. Kapin, and W. C. Kothe; said Kapin and said Kothe assors. to said Davies. Torque-release wrench. 2,731,864, 1–24–56, Cl. 81—52.4.

Davis, Edward A., to Gerotor May Corp. Hopper control apparatus and method. 2,732,099, 1–24–56, Cl. 222—.1.

Davis, Harold D.: *See*—
Mansell, Carman R., and Davis. 2,732,438.

Davis, Raymond C., J. H. Overwein, and M. S. Millhouse, to General Motors Corp. Method of forming an ornamental plastic article. 2,731,672, 1–24–56, Cl. 18—59.

Davis, Wallace L.: *See*—
Sieber, Edward J., Jr., and Davis. 2,731,774.

Dayton Rubber Co., The: *See*—
Talalay, Joseph A. 2,731,669.

De Angelis, Armand: *See*—
Schumacher, Elmer L., and De Angelis. 2,731,882.

De Baun, John E. Dosage administering bottle. 2,732,104, 1–24–56, Cl. 222—335.

De Celles, Joseph L., to Trans World Airlines, Inc. Altimeter glidescope for distance measuring equipment. 2,732,538, 1–24–56, Cl. 340—26.

Dedek, Frank G., and M. G. Schaar, to Burroughs Corp. Wrapper. 2,732,063, 1–24–56, Cl. 206—46.

Deebel, Robert E. Self-latching trailer hitch. 2,732,223, 1–24–56, Cl. 280—512.

Deebel, Robert E. Self latching ball and socket type coupling. 2,732,224, 1–24–56, Cl. 280—513.

Deere & Co.: *See*—
Oehler, William P. 2,731,900.

Deere Mfg. Co.: *See*—
Hoeksema, Joe H. 2,731,969.
Sutherland, Gail R., Gustafson, and Skromme. 2,731,995.

Deering Milliken Research Corp.: *See*—
Klein, Norman E. 2,731,786.
Lucas, Charles D. 2,732,141.

Degler, Heinrich, to F K G Fritz Kesselring Geratebau A. G. Electro-magnetic switch. 2,732,451, 1–24–56, Cl. 200—87.

De La Mater, George B., to Mallinckrodt Chemical Works. Preparation of dithiooxyamide. 2,732,401, 1–24–56, Cl. 260—551.

Delliso, John J. Round head ratchet wrench. 2,732,049, 1–24–56, Cl. 192—43.1.

Demosthenes, Nicholas. Vehicle operated door mechanism. 2,732,200, 1–24–56, Cl. 268—58.

De Napoli, Anthony C.: *See*—
Passow, Edward B., and De Napoli. 2,732,545.

Dennison Mfg. Co.: *See*—
McGovern, Henry P. 2,732,121.

Detroit Controls Corp.: *See*—
Hylett, Henry R. 2,732,132.

Detroit Harvester Co.: *See*—
Goss, William A. 2,732,023.

Deutsche Gold- und Silber-Scheideanstalt vormals Roessler: *See*—
Voigt, Adolf, and Andrich. 2,732,360.

Development Engineering Service: *See*—
Pfund, Charles E. 2,732,498.

De Vost, Valmore F., and J. C. Fisher, to the United States of America as represented by the Secretary of the Navy. Constant resistance shock absorbing device. 2,732,040, 1–24–56, Cl. 188—101.

Dewhurst, Melbourne: *See*—
Jackson, James A., and Dewhurst. 2,732,452.

Dewhurst and Partner Ltd.: *See*—
Jackson, James A., and Dewhurst. 2,732,452.

De Witt, Hobson D., to The Chemstrand Corp. Solutions of acrylonitrile polymers in molten trichloronitropropanol. 2,732,359, 1–24–56, Cl. 260—32.4.

Dial, Earl L.: *See*—
Chaussee, Russel L. and F. P., and Dial. 2,732,084.

Dichter, Channing, to General Electric Co. Electrostatic lens. 2,732,511, 1–24–56, Cl. 313—82.

Dickey, Joseph B.: *See*—
Coover, Harry W., Jr., and Dickey. 2,732,363.

Diefenderfer, William E., to United Aircraft Corp. Pressure regulating and shut-off valve. 2,731,980, 1–24–56, Cl. 137—488.

Diesen, Rudolph R.: *See*—
Hazelroth, Kenneth M., Diesen, and Melton. 2,731,747.

Dietrich, Paul, and H. Bayer, to Maschinenfabrik Augsburg-Nurnberg A. G. Delivery frame in sheet printing press. 2,732,205, 1–24–56, Cl. 271—79.

Dietrich, Paul, to Maschinenfabrik Augsburg-Nurnberg A. G. Adjustable jogging mechanism in sheet printing press. 2,732,206, 1–24–56, Cl. 271—89.

Dietze, Eginhard: *See*—
Aikens, Andrew J., Botsford, Boysen, Dietze, Goodale, and Inglis. 2,732,436.

Dietze Katharine R.: *See*—
Aikens, Andrew J., Botsford, Boysen, Dietze, Goodale, and Inglis. 2,732,436.

Di Geronimo, Guido E.: *See*—
Vana, Charles A., and Di Geronimo. 2,732,290.

Dock, Mortimer R. Chain shackle. 2,731,791, 1–24–56, Cl. 59—86.

Dodson, Richard W., G. Friedlander, L. Helmholz, and P. H. Watkins, to the United States of America as represented by the United States Atomic Energy Commission. Filtering apparatus. 2,732,072, 1–24–56, Cl. 210—62.

Dodson, Raymond M., and P. B. Soliman, to G. D. Searle & Co. Method for producing a hexadecahydrochrysene compound. 2,732,405, 1–24–56, Cl. 260—586.

Domberger, Karl, and S. Rael. Manifold housing and telephone support. 2,731,763, 1–24–56, Cl. 45—5.

Donaldson Co., Inc.: *See*—
West, Clare E., and Cragg. 2,732,256.

Donaldson, Harry C., Jr., to Cluett Peabody & Co., Inc. Composite thread. 2,731,788, 1–24–56, Cl. 57—140.

Dore, Frank M. Extensible roller skate with toe clamping means. 2,732,217, 1–24–56, Cl. 280—11.26.

Dorfan, Morton I. Air filtering apparatus. 2,732,030, 1–24–56, Cl. 183—58.

Dornberg, Lawrence H., to Boeing Airplane Co. Latch. 2,732,238, 1–24–56, Cl. 292—113.

Douglas Aircraft Co., Inc.: *See*—
Adams, Harvey D., Geasland, and Montague. 2,731,750.

Doumani, Thomas F., to Union Oil Co. of California. Gasoline reforming process employing a nickel sulphate on alumina catalyst. 2,732,329, 1–24–56, Cl. 196—50.

Dow Chemical Co., The: *See*—
Tubbs, Bernard H., Nagle, and Woodland. 2,732,366.
Wehr, Henry W., and Nagle. 2,732,371.

Dow Corning Corp.: *See*—
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Downey, Richard M., to United States Gypsum Co. Removal of slag from iron distributors used in the production of mineral wool. 2,731,670, 1–24–56, Cl. 18—47.2.

Dresser Industries, Inc.: *See*—
Risley, Roger E., and Kish. 2,732,230.

Drew, Charles E. Expanding mandrel chuck. 2,732,213, 1–24–56, Cl. 279—2.

Dubbs, Carbon C., to C. P. Dubbs. Apparatus for making concrete products. 2,731,699, 1–24–56, Cl. 25—41.

Dubbs, Carbon P.: *See*—
Dubbs, Carbon C. 2,731,699.

Duckwald, Charles S.: *See*—
Fehr, Robert O., Duckwald, Ringlee, and Hellar. 2,731,834.

Dudley, Frank E. Process for removing expanded tubes. 2,731,714, 1–24–56, Cl. 29—427.

Dudley, John S., to Whitin Machine Works. Top comb. 2,731,677, 1–24–56, Cl. 19—116.

Du Mont, Allen B., Laboratories, Inc.: *See*—
Felt, David C., and Neatlerode. 2,731,837.
Palmer, Richard C. 2,732,427.
Palmer, Richard C. 2,732,469.

Du Pont, E. I., de Nemours and Co.: *See*—
Farlow, Mark W., and Muetterties. 2,732,410.
Farlow, Mark W., and Muetterties. 2,732,411.
Fuller, Mack F. 2,732,353.
Kirby, James E. 2,732,317.

Duval, Robert E., to the United States of America. Deltaring hydraulic packing. 2,732,268, 1–24–56, Cl. 309—31.

Eagon, Norton D., to Chance Vought Aircraft, Inc. Fuel tank gage. 2,731,938, 1–24–56, Cl. 116—118.

Eastman Kodak Co.: *See*—
Brokaw, George Y., and Van Graafeiland. 2,732,387.
Caldwell, John R., and Hill. 2,732,369.
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Hull, David C. 2,732,397.
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July, George, Knott, and Pollak. 2,732,316.
Knott, Edward B., and Morgan. 2,732,302.
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Morgan, John, and Starkey. 2,732,303.
Robertson, Earl M., and West. 2,732,301.
Thirtle, John R., Vittum, and Weissberger. 2,732,300.
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Ebert, Edward A. Aerated bait container. 2,731,760, 1–24–56, Cl. 43—57.

Ebsworth, Richard H. Power transmission. 2,731,848, 1–24–56, Cl. 74—472.

Eckhoff, Orville E. Pie marker. 2,731,924, 1–24–56, Cl. 107—49.

Ehret, John, Jr., and E. A. Heckman, to Western Electric Co., Inc. Tubulating machine chuck. 2,731,772, 1–24–56, Cl. 49—64.

Eichenberger, Henry F., and N. Brewer, to Fischer & Porter Co. Rotameter and metering tube therefor. 2,731,830, 1–24–56, Cl. 73—209.

Eisenhauer, Ida J.: *See*—
Stover, Ancil C. 2,732,267.

Eisenhauer, Leigh E.: *See*—
Stover, Ancil C. 2,732,267.

Eisenhauer Mfg. Co., The: *See*—
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Eisenhauer, William W.: *See*—
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Elechem Corp.: *See*—
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Electro-Hydraulics Ltd.: *See*—
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Neilson, Christopher B. V., and Hoare. 2,732,152.

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Ellsworth, Carl E., to National Cylinder Gas Co. Resonant high-frequency heating applicator. 2,732,472, 1–24–56, Cl. 219—10.55.

Ellsworth, Carl E., to National Cylinder Gas Co. Dielectric heating applicator. 2,732,473, 1–24–56, Cl. 219—10.55.

Ellsworth, Carl E., to National Cylinder Gas Co. Variable capacitor for high-frequency dielectric heating applicator. 2,732,474, 1–24–56, Cl. 219—10.55.

Ellwood, William P.: *See*—
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Elmer, William B. Street lighting luminaire. 2,732,483, 1–24–56, Cl. 240—25.

Elmore, R. T.: *See*—
Loomis, Glenn L. 2,731,827.

Elsenheimer, Charles W.: *See*—
Connors, James J., and Elsenheimer. 2,732,159.

Emanuelsson, Gunnar G., to Telefonaktiebolaget L M Ericsson. Device for generation of pulses. 2,732,527, 1–24–56, Cl. 332—9.

Emrich, Hans, to L. A. K. Theune. Ampoule for cleaning hypodermic needles. 2,731,964, 1–24–56, Cl. 128—218.

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Erickson, Charlotte and L. G. Artificial tree and method of making. 2,731,752, 1–24–56, Cl. 41—15.

Erickson, Lennart G.: *See*—
Erickson, Charlotte and L. G. 2,731,752.

Erickson, Leonard. Readily repositionable slidable jaw wrench. 2,731,866, 1–24–56, Cl. 81—53.

Erickson, Lowell H.: *See*—
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Ericson, Eric A., and R. N. Rowe, to General Electric Co. Overload releasing mechanism for automatic circuit breaker. 2,732,455, 1–24–56, Cl. 200—88.

Erisman, Maurice J., to Link-Belt Co. Belt conveyor. 2,732,059, 1–24–56, Cl. 198—203.

Escher Wyss Aktiengesellschaft: *See*—
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Esso Research and Engineering Co.: *See*—
Billisoly, Julius P., Hunter, Polack, and Segura. 2,732,349.
Gleason, Anthony H., and Nelson. 2,732,412.
Jones, Robert H., and Cyphers. 2,732,346.
Krebs, Robert W. and Kimberlin. 2,732,330.
Lynch, Charles S., and Cyphers. 2,732,285.
Macke, Robert A. 2,732,328.
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Peyrin, Henri, and Casacci. 2,731,951.

Evans, Charles S. Venetian blind. 2,732,011, 1–24–56, Cl. 160—173.

Evans, Fraser M., to C. A. V. Ltd. Liquid fuel pumps. 2,731,917, 1–24–56, Cl. 103—41.

Evans, William H. Connecting rod jig for line reaming and boring machine. 2,731,858, 1–24–56, Cl. 77—62.

Evans, Winfield C., to Jamison Cold Storage Door Co. Refrigerator door and method of making the same. 2,731,682, 1–24–56, Cl. 20—35.

Everett, Wilhelm S. Adjustable surge alleviator. 2,731,984, 1–24–56, Cl. 138—30.

Exact Weight Scale Co., The: *See*—
Beeson, John D. 2,731,880.

Expert Tool and Mfg. Co.: *See*—
Gilman, Morris A., Riback, and Levin. 2,732,449.

F K G Fritz Kesselring Geratebau A. G.: *See*—
Degler, Heinrich. 2,732,451.

Faber & Schleicher Aktiengesellschaft: *See*—
Koch, Werner. 2,731,916.

Fairbanks, Morse & Co.: *See*—
Forth, Murray W. 2,732,138.

Fairchild Camera and Instrument Corp.: *See*—
Kling, Nelson, and Ronai. 2,731,893.

Fairmont Railway Motors, Inc.: *See*—
Sublett, Ira, and Johnson. 2,731,796.

Fannen, John J., to Super Mold Corp. of California. Method of die casting the tread design in a matrix blank. 2,731,689, 1–24–56, Cl. 22—203.

Farlow, Mark W., and E. L. Muetterties, to E. I. du Pont de Nemours and Co. Process for preparing tetrafluoro ethylene by reacting carbon and a binary halogen fluoride. 2,732,410, 1–24–56, Cl. 260—653.

Farlow, Mark W., and E. L. Muetterties, to E. I. du Pont de Nemours and Co. Preparation of tetrafluoroethylene. 2,732,411, 1–24–56, Cl. 260—653.

Farmer, Ray J., Sr., to International Minerals & Chemical Corp. Drilling mechanism. 2,732,181, 1–24–56, Cl. 255—46.

Fasbay, Alexander, 30% to L. C. Kraxinski. Explosion-proof gasoline tank. 2,732,095, 1–24–56, Cl. 220—88.

Faulkner, Clayton C. Slider for slide fastener. 2,731,693, 1–24–56, Cl. 24—205.15.

Fay, Philip S.: *See*—
Jones, Arthur L., and Fay. 2,732,413.

Federal Knife Co.: *See*—
Tabellario, James. 2,731,719.

Fehr, Robert O., C. S. Duckwald, R. J. Ringlee, and M. W. Hellar, Jr., to General Electric Co. Dynamic balancing apparatus. 2,731,834, 1–24–56, Cl. 73—463.

Fellabaum, James R. Binder device. 2,731,939, 1–24–56, Cl. 116—119.

Felt, David C., and C. D. Mestlerode, to Allen B. Du Mont Laboratories, Inc. Tuning mechanism. 2,731,837, 1–24–56, Cl. 74—10.54.

Ferro Corp.: *See*—
Vana, Charles A., and Di Geronimo. 2,732,290.

Ficara, Samuel. Device for handling bowling pins. 2,732,208, 1–24–56, Cl. 273—54.

Filachione, Edward M., to the United States of America as represented by the Secretary of Agriculture. Tanning with tetrakis-(hydroxymethyl)phosphonium chloride. 2,732,278, 1–24–56, Cl. 8—94.33.

Filachione, Edward M., C. F. Woodward, and J. E. Hansen, to the United States of America as represented by the Secretary of Agriculture. Vulcanization of copolymers of methacrylonitrile and alkyl acrylate with a mixture of sulfur and triethylene tetramine. 2,732,361, 1–24–56, Cl. 260—41.

Findley, Howard J., to Eaton Mfg. Co. Combined electric switch and gearshift lever. 2,732,447, 1–24–56, Cl. 200—61.54.

Finkelstein, William. Handle. 2,732,047, 1–24–56, Cl. 190—57.

Finken, Walter S.: *See*—
Frieder, Leonard P., and Finken. 2,732,153.

Firma Ferd. Braselmann: *See*—
Braselmann, Ferdinand. 2,731,842.

Firma Gerdes & Co.: *See*—
Söhn, Friedrich. 2,732,101.

Firma Steinkohlen-Elektrizitat Aktiengesellschaft: *See*—
Lenhart, Emil, and Zaoralek. 2,731,955.

Fischer & Porter Co.: *See*—
Eichenberger, Henry F., and Brewer. 2,731,830.

Fisher, Chester D., to Sprout, Waldron and Co., Inc. Hammer mill with separately usable screens. 2,732,137, 1–24–56, Cl. 241—89.

Fisher, Emery J. Multi-chamber spray gun. 2,732,258, 1–24–56, Cl. 299—140.

Fisher, Jonathan C.: *See*—
De Vost, Valmore F., and Fisher. 2,732,040.

Fleming, Jere B. Fire extinguisher for auto tires. 2,732,017, 1–24–56, Cl. 169—31.

Fleming, Raymond E., to Sylvania Electric Products Inc. Work piece holder. 2,731,948, 1–24–56, Cl. 118—503.

Fletcher, John F. Siren. 2,732,547, 1–24–56, Cl. 340—405.

Flind, Herbert C. Wire tensioning device. 2,731,691, 1–24–56, Cl. 24—71.2.

Fogle, William K., to Continental Can Co., Inc. Expendable bandoleer. 2,732,111, 1–24–56, Cl. 224—17.

Folts, Burr C. Muffler with flashing and spark eliminating means. 2,732,026, 1–24–56, Cl. 181—57.

Font, Ramon, to Premier Research Laboratories, Inc. Thermostatic switch. 2,732,462, 1–24–56, Cl. 200—138.

Foote, John K., to California Research Corp. Process for making tertiary-octylphenol. 2,732,408, 1–24–56, Cl. 260—624.

Forbes, Clarence H. Invalid walker. 2,732,004, 1–24–56, Cl. 155—22.

Forbes, Clarence H. Flexible wire racket. 2,732,209, 1–24–56, Cl. 273—73.

Ford Motor Co.: *See*—
Frevik, Ralph C. 2,731,897.
Frevik, Ralph C., and Sawyer. 2,731,898.
Hauswirth, Vernon O. 2,731,783.
Witt, Robert H. 2,731,780.

Forming Machine Co. of America, Inc., The: *See*—
Simpson, Alvan D. 2,731,889.
Simpson, Alvan D. 2,732,296.

Förster, Hans J. M., and K. A. Kollmann, to Daimler-Benz Aktiengesellschaft. Driving device for internal combustion engines. 2,732,048, 1–24–56, Cl. 192—.08.

Forth, Murray W., to Fairbanks, Morse & Co. Hammermill. 2,732,138, 1–24–56, Cl. 241—186.

Foster, Earl H. Movable checkerboard game device. 2,732,211, 1–24–56, Cl. 273—131.

Fowler, Frank E. Alarm system for pneumatic tires. 2,731,936, 1–24–56, Cl. 116—34.

Fram Corp.: *See*—
Rabbitt, Milton, and Binder. 2,732,031.
Robinson, John W. 2,732,077.

Francis, John P. Housing for removal attachment to a shaft. 2,731,944, 1–24–56, Cl. 118—58.

Franke & Heidecke, Fabrik Photographischer Prazisions-Apparate: *See*—
Bretthauer, Hermann. 2,732,236.

Franko, John S. Door operating mechanism. 2,732,201, 1–24–56, Cl. 268—59.

Frantz, Wilbert P., to Sperry Rand Corp. Automatic amplitude balance control system for hyperbolic navigation receiver. 2,732,549, 1–24–56, Cl. 343—103.

Fredenburgh, Edwin J.: *See*—
Hecht, Benjamin P., and Fredenburgh. 2,732,326.

Frederick, Marvin R.: *See*—
Morrissey, Richard T., and Frederick. 2,732,354.

Freedman, George, to Raytheon Mfg. Co. Methods of making transistors and assembly thereof. 2,732,519, 1–24–56, Cl. 317—235.

Frentzel, Herman C., to Appleton Wire Works, Inc. Wire weaving looms. 2,731,986, 1–24–56, Cl. 139—126.

Frevik, Ralph C., to Ford Motor Co. Adjusting mechanism for farm implements. 2,731,897, 1–24–56, Cl. 97—47.55.

Frevik, Ralph C., and F. D. Sawyer, to Ford Motor Co. Implement hitch for tractors. 2,731,898, 1–24–56, Cl. 97—47.65.

Frey, Otto, to Aktiengesellschaft Brown, Boveri & Cie. Process and apparatus for the removal of salts from water. 2,732,342, 1–24–56, Cl. 210—24.

Frieder, Leonard P., and W. S. Finken; said Finken assor. to said Frieder. Delay opening parachute and pyrolytic release therefor. 2,732,153, 1–24–56, Cl. 244—150.

Friedlander, Gerhart: *See*—
Dodson, Richard W., Friedlander, Helmholz, and Watkins. 2,732,072.

Friend, Charles E.: *See*—
Rotter, Theodore. 2,732,147.

Frydlender, Sophie, to Lancôme S. A. Stopping devices. 2,732,089, 1–24–56, Cl. 215—43.

Fuller, Mack F., to E. I. du Pont de Nemours and Co. Method of expanding polymeric compositions by the decomposition of p-carbomethoxy benzazide. 2,732,353, 1–24–56, Cl. 260—2.5.

Funk, Carl E. Fence brace and tensioning means. 2,732,182, 1–24–56, Cl. 256—37.

Funkhouser, Mearick, and G. A. Brundrett, to General Motors Corp. Shock absorber control valve. 2,732,039, 1–24–56, Cl. 188—100.

Futterman, Julius, to Precision Apparatus Co., Inc. Apparatus for testing cathode ray tubes. 2,732,526, 1–24–56, Cl. 324—24.

Gaddis, Hugh L., G. W. Myers, and O. S. Welsh, to Brown Fintube Co. Method of making internally finned heat exchanger tubes. 2,731,709, 1–24–56, Cl. 29—157.3.

Gaines, William P. Hook positioner. 2,732,244, 1–24–56, Cl. 294—82.

Galkin, Joseph. Portable thread severing attachment for sewing machines. 2,731,930, 1–24–56, Cl. 112—252.

Gall, George R., to G. R. Gall, Jr. Window. 2,731,681, 1–24–56, Cl. 20—12.

Gall, George R., Jr.: *See*—
Gall, George R. 2,731,681.

Galloway, Harold O. Clamp buckle. 2,731,697, 1–24–56, Cl. 24—273.

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Guillissen, Clement J., and Gancberg. 2,732,320.

Gang, Herman, to Monroe Calculating Machine Co. Stopping means for calculating machines. 2,732,129, 1–24–56, Cl. 235—62.

Gardner, Brian C., and E. H. Sharples, to Courtaulds Ltd. Bonding yarns to polyvinyl chlorides in making composite articles. 2,732,002, 1–24–56, Cl. 154—4.

Gardner-Denver Co.: *See*—
Shaff, Ernest H. 2,732,139.

Garfinkle, Arthur. Telephone attachment for shoulder rest. 2,732,439, 1–24–56, Cl. 179—157.

Garson, Arthur. Wire for brassieres. 2,731,640, 1–24–56, Cl. 2—42.

Garvey, Edward S. Cushion foot for portable stamping machines. 2,731,915, 1–24–56, Cl. 101—368.

Gates, Marshall D., Jr., to Merck & Co., Inc. Thebaine derivatives and process for manufacturing the same. 2,732,375, 1–24–56, Cl. 260—285.

Gatzert, Ernest H., to General Dynamics Corp. Testing means in a signaling system. 2,732,441, 1–24–56, Cl. 179—175.2.

Gaum, Gilbert A., to National Cylinder Gas Co. Welding pipe coupling. 2,732,229, 1–24–56, Cl. 285—111.

Geasland, John E.: *See*—
Adams, Harvey D., Geasland, and Montague. 2,731,750.

Gebel, Irving, to Soreng Products Corp. Fill control unit for automatic washing machines. 2,732,445, 1–24–56, Cl. 200—18.

Gebruder Junghans A. G.: *See*—
Junghans, Helmut, and Hartner. 2,731,790.

Geigy, J. R., A. G.: *See*—
Kuster, Werner, and Schetty. 2,732,372.

Geller, Julius, to Rutgerswerke-Aktiengesellschaft. Coking of bituminous substances. 2,732,332, 1–24–56, Cl. 202—17.

Genarco, Inc.: *See*—
Millie, Orrin, Rubey, and Latil. 2,732,515.

General Aniline & Film Corp.: *See*—
Richman, Seymour, and Easton. 2,732,305.

General Container Corp.: *See*—
Halstead, Paul R. 2,732,001.

General Dynamics Corp.: *See*—
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Murray, James S. 2,732,442.

General Electric Co.: *See*—
Caird, David W. 2,732,340.
Cusano, Dominic A., and Studer. 2,732,313.
Dichter, Channing. 2,732,511.
Ericson, Eric A., and Rowe. 2,732,455.
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Hammerly, Herman J. 2,732,535.
Hellar, Martin W., Jr., and Shepard. 2,731,835.
Jacobs, John E. 2,732,503.
Lawrence, Sigmund J. 2,732,092.
Lucas, George W. 2,731,711.
Lucas, George W., and Wiedman. 2,731,710.
Moody, Leroy S. 2,732,338.
Roth, Adrian W. 2,732,443.
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Sprung, Murray M. 2,732,357.
Stebbins, Frederick O. 2,732,019.
Strozier, Henry H. 2,732,524.
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General Electric Co. Ltd., The: *See*—
Chubb, Alexander A., Mawson, and Levy. 2,732,433.

General Mills, Inc.: *See*—
Huch, William F., Hakomaki, and Moore. 2,732,013.

General Motors Corp.: *See*—
Bales, Max G. 2,732,405.
Berner, Philip J., and Connell. 2,732,448.
Davis, Raymond C., Overwein, and Millhouse. 2,731,672.
Funkhouser, Mearick, and Brundrett. 2,732,039.
Kuhn, Albert J. 2,731,805.
Long, George B. 2,732,135.
Luechauer, Hollo C. 2,731,876.
Mann, Leonard J. 2,732,272.
Marino, Salvatore F. 2,731,857.
Olson, Elmer, Kelly, Gibbs, and Reppert. 2,732,038.
Orent, Edward, and Kutsche. 2,731,976.
Sampson, Frederick W. 2,731,813.
Schnepf, William K. 2,732,523.
Smith, Rolf M. 2,732,126.
Valentine, James M. 2,731,649.
Williams, Albert E. 2,732,003.
Wurtz, Clifford H. 2,731,806.
General Sewing Corp.: *See*—
Smallberg, Harry. 2,732,046.
Gerotor May Corp.: *See*—
Davis, Edward A. 2,732,099.
Gerst, Chris, to Westinghouse Air Brake Co. Concrete mixer. 2,732,189, 1–24–56, Cl. 259—177.
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Olson, Elmer, Kelly, Gibbs, and Reppert. 2,732,038.
Gibson, Clyde M. Adjustable choke for double barreled shotguns. 2,731,754, 1–24–56, Cl. 42—79.
Gibson, James G. Spray attachment for a cultivator. 2,732,254, 1–24–56, Cl. 299—30.
Giel, George J., to Audio Products Corp. Electrical connector. 2,732,534, 1–24–56, Cl. 339—176.
Gill, Charles B., A. W. Schlechten, and M. E. Straumanis. Plating processes and compositions. 2,732,321, 1–24–56, Cl. 117—131.
Gilman, Morris A., M. Riback, and M. B. Levin, to Expert Tool and Mfg. Co. Pressure controlled switch actuating mechanism. 2,732,449, 1–24–56, Cl. 200—81.5.
Gilmore, James P., to Radio Corp. of America. Test probe adaptor head. 2,732,446, 1–24–56, Cl. 200— 51.1.
Gilmour, Robert A. Opening device for tearing strip can. 2,732,094, 1–24–56, Cl. 220— 52.
Girling Ltd.: *See*—
Stock, Charles S. R. 2,732,037.
Glasgow, Clarence O., and J. L. Maher, to National Tank Co. Systems for treating oil well emulsion streams. 2,732,070, 1–24–56, Cl. 210—52.5.
Glass, John R., to Socony Mobil Oil Co., Inc. Electrode system for polarographic analysis. 2,732,335, 1–24–56, Cl. 204—1.
Glasser, Irving A., to the United States of America as represented by the Secretary of the Navy. Pressure release valve. 2,731,981, 1–24–56, Cl. 137—536.
Glassman, James. Moccasin shoe process. 2,731,653, 1–24–56, Cl. 12—142.
Glazer, Meyer. Tomato tray. 2,732,120, 1–24–56, Cl. 229—31.
Gleason, Anthony H., and J. F. Nelson, to Esso Research and Engineering Co. Accelerating sodium polymerizations. 2,732,412, 1–24–56, Cl. 260—669.
Gleissner, Bruce D., and D. E. Nagy, to American Cyanamid Co. Moth proofing with soluble dicyanamides. 2,732,277, 1–24–56, Cl. 8—94.14.
Godfrey Propeller Adjusting Corp.: *See*—
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Goeke, Eberhard, to Koppers Co., Inc. Control apparatus for gas producers combined with regenerative ovens. 2,732,289, 1–24–56, Cl. 48—76.
Goodale, Walter D., Jr.: *See*—
Aikens, Andrew J., Botsford, Boysen, Dietze, Goodale, and Inglis. 2,732,436.
Goodrich, B. F., Co., The: *See*—
Morrissey, Richard T., and Frederick. 2,732,354.
Talalay, Joseph A. 2,731,669.
Göpert, Göte Y. M. Folding bed. 2,731,650, 1–24–56, Cl. 5—44.
Gordon, Hamilton: *See*—
Prendergast, Charles S. 2,731,919.
Goren, Mayer B.: *See*—
Schonwald, Milton H. 2,732,024.
Goss, Harry E. Inside pipe cutter. 2,731,718, 1–24–56, Cl. 30—107.
Goss, William A., to Detroit Harvester Co. Tractor with power take-off driven implement supported from the axle thereof. 2,732,023, 1–24–56, Cl. 180—53.
Gould, John H., to United States of America as represented by the Secretary of Commerce. Polarimeter. 2,731,875, 1–24–56, Cl. 88—14.
Gratzmuller, Jean L. Safety device for cable connections. 2,732,180, 1–24–56, Cl. 254—172.
Gray, Kenneth R.: *See*—
Van Blaricom, Lloyd E., and Gray. 2,732,352.
Graziani, Vincenzo. Haircutting device. 2,731,716, 1–24–56, Cl. 30—30.
Green, Joseph, to Spectoculars Inc. Decorative cover plate. 2,731,751, 1–24–56, Cl. 41—10.
Greenblatt, Jayson H.: *See*—
Barnard, Kenneth N., Greenblatt, and Sullivan. 2,732,417.
Greenley, Henry R., to Airway Products, Inc. By-pass valve for power steering systems. 2,732,168, 1–24–56, Cl. 251—142.
Grein, Hermann, to Barmer Maschinenfabrik Aktiengesellschaft. Thread winding apparatus. 2,732,142, 1–24–56, Cl. 242—45.
Griesser, Fritz. Venetian blinds. 2,732,010, 1–24–56, Cl. 160—170.
Griffin & George Ltd.: *See*—
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Grimes, Lester A., to The Reliable Automatic Sprinkler Co. Inc. Pendent sprinkler head. 2,732,018, 1–24–56, Cl. 169—39.
Griner, Leslie J., to Alico, Inc. Matrix drying apparatus and machine. 2,731,733, 1–24–56, Cl. 34—60.
Groth, Endie P., and G. R. Weisz. Dual type flush valve and selective operator therefor. 2,731,647, 1–24–56, Cl. 4—67.
Grouse, Richard A., to A. H. Hunt Capacitors Ltd. Manufacture of capacitors. 2,731,705, 1–24–56, Cl. 29—25.42.
Grouse, Richard A., to A. H. Capacitors Ltd. Manufacture of capacitors. 2,731,706, 1–24–56, Cl. 29—25.42.
Grubbs, John V., Sr. Frost preventer for freezer doors. 2,731,804, 1–24–56, Cl. 62—2.
Grundberg, Donald N.: *See*—
Churgin, Leopold, and Grundberg. 2,731,873.
Gruver, John B., to Addressograph-Multigraph Corp. Machine for feeding and treating lithographic address printing plates. 2,731,910, 1–24–56, Cl. 101—47.
Guilliksen, Clement J., and A. Ganeberg. Process of preparing organo-polysiloxane coatings. 2,732,320, 1–24–56, Cl. 117—103.
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Wallace, Jeffrey J. 2,731,675.
Gunkel, Heinrich, to H. Putzer. Overload safety device for hoisting apparatus or the like. 2,731,814, 1–24–56, Cl. 64—30.
Gunkel, Heinrich. Chain pulley block. 2,732,179, 1–24–56, Cl. 254—170.
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Gustafson, Blaine W.: *See*—
Sutherland, Gail R., Gustafson, and Skromme. 2,731,905.
Gustavson, Elmer G.: *See*—
Van Arsdell, Fred C., and Gustavson. 2,731,904.
Guyot, Morel D.: *See*—
Gurney, Harlan A., and Guyot. 2,732,128.
Hachmuth, Karl H., to Phillips Petroleum Co. Fractional distillation method and apparatus. 2,731,810, 1–24–56, Cl. 62—122.
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Ridings, Garvice H., Hackenberg, Wise, Worthen, and Zabriskie. 2,732,276.
Hackney, James S. Ice cream making apparatus. 2,731,809, 1–24–56, Cl. 62—114.
Haddad, Chefik. Non-drip pouring cap and spout. 2,732,108, 1–24–56, Cl. 222—564.
Hadley, Homer M. Bridges and box girders therefor. 2,731,824, 1–24–56, Cl. 72—8.
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Hall, Cyril C., to Specialties Development Corp. Smoke detecting apparatus. 2,731,874, 1–24–56, Cl. 88—14.
Hall, Jesse E., Sr. Process for conditioning wells for cementing. 2,731,816, 1–24–56, Cl. 166—21.
Hall, Melvin E.: *See*—
Cottom, Truman W. 2,732,274.
Hall, Orville C., to the United States of America as represented by the Secretary of the Navy. Voltage limiter. 2,732,494, 1–24–56, Cl. 250—27.
Halstead, Paul R., to General Container Corp. Machine for forming wire reinforced tying devices. 2,732,001, 1–24–56, Cl. 154—1.6.
Hamilton, Earl F. Chair base. 2,732,157, 1–24–56, Cl. 248—194.
Hammel-Dahl Co.: *See*—
Curran, John R. 2,732,172.
Hammerly, Herman J., to General Electric Co. Electric terminal connector. 2,732,535, 1–24–56, Cl. 339—272.
Hammerstrom, Henry H., and L. B. Woodruff. Alternating current dynamo-electric machine. 2,732,509, 1–24–56, Cl. 310—168.
Hammond, William E., to The Air Preheater Corp. Supporting rotor independently of housing in air preheaters. 2,732,183, 1–24–56, Cl. 257—6.
Hancock, Robert D., to Northrop Aircraft, Inc. Pulse generator. 2,732,497, 1–24–56, Cl. 250—36.
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Hanson, Theodore L., to Tele-Trip Policy Co., Inc. Stamp dispenser for insurance policy vending and validating mechanism. 2,732,271, 1–24–56, Cl. 312—39.
Haralson, Robert H., Jr. Pharmaceutical dispenser. 2,731,965, 1–24–56, Cl. 128—272.
Harder, Arthur J., Jr., to The Rauland Corp. Cathode-ray tube sealing apparatus. 2,731,771, 1–24–56, Cl. 49—1.
Harder, Arthur J., Jr., to The Rauland Corp. Line-contact sealing fixture. 2,731,947, 1–24–56, Cl. 118—500.
Hardy, William B., to American Cyanamid Co. Separation of position isomers. 2,732,393, 1–24–56, Cl. 260—457.
Hare, Charles L. Coin control attachment for dial telephones 2,732,430, 1–24–56, Cl. 179—6.3.
Harland, Philip W., to American Machine and Metals, Inc. Anchoring devices for bottle closures. 2,732,106, 1–24–56, Cl. 222—561.
Harris, James C., Jr., A. A. Caridis, and B. C. Kendall, ½ to Crown Zellerbach Corp., and ½ to Heat and Control, Inc. Apparatus and method for setting and drying moisture settable ink. 2,731,732, 1–24–56, Cl. 34—18.
Harris, Lawrence W., Jr., to Ames Harris Neville Co. Locator for bag closure tape. 2,731,998, 1–24–56, Cl. 150—11.
Harris, Lorna E.: *See*—
Nickerson, Elmer. 2,731,868.

Harroun, Ray W., and C. J. Wagner, to Marvel Industries, Inc. Ball and socket type vehicle coupling. 2,732,222, 1–24–56, Cl. 280—512.
Harrowe, Elliott D., to Ideal Toy Corp. Inflatable toy device. 2,731,768, 1–24–56, Cl. 46—87.
Hartner, Leo: *See*—
Junghans, Helmut, and Hartner. 2,731,790.
Hartwig, Harry A. Motor drier. 2,731,735, 1–24–56, Cl. 34—104.
Hartwright, George, to United States Gypsum Co. Coating process of producing radiation-reflective roofing granules. 2,732,311, 1–24–56, Cl. 117—27.
Hastings Aluminum Products, Inc.: *See*—
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Hausmann, Edgar C., and G. Wille. Parking guide. 2,731,934, 1–24–56, Cl. 116—28.
Hauswirth, Vernon O., to Ford Motor Co. Baler pickup and feeding mechanism. 2,731,783, 1–24–56, Cl. 56—343.
Haverlee, Arnold H. Support-penetrating bracket. 2,732,158, 1–24–56, Cl. 248—216.
Hayes, Harold L. Removable insert for a lunch box. 2,731,996, 1–24–56, Cl. 150—.5.
Hazelroth, Kenneth M., R. R. Diesen, and J. O. Melton, to R. R. Kellogg Advertising Services, Inc. Reflector display device. 2,731,747, 1–24–56, Cl. 40—126.
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Hellar, Martin W., Jr., and B. R. Shepard, to General Electric Co. Unbalance position indicator for dynamic balancing apparatus. 2,731,835, 1–24–56, Cl. 73—463.
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Henderson, Clark T. Fluid feed apparatus. 2,732,069, 1–24–56, Cl. 210—40.
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Sloan, Harry E., Rutherford, and Hickey. 2,732,216.
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Bernhart, Alv W. 2,732,246.
Hill, Edward H.: *See*—
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Hillis, Randolph D., to Nehi Corp. Carbonated beverage dispensing system. 2,732,105, 1–24–56, Cl. 222—386.5.
Hillis, Randolph D., to Nehi Corp. Carbonated beverage premixing system. 2,732,117, 1–24–56, Cl. 226—111.
Hink, John H., Jr., and F. F. Johnson, to Cutter Laboratories. Method of drying heat sensitive biologically active substances. 2,731,731, 1–24–56, Cl. 34—5.
Hinsch, Walter: *See*—
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Hoeselbarth, Frank W. E., to C. H. Masland & Sons. Apparatus for weaving pile fabrics. 2,731,985, 1–24–56, Cl. 139—39.
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Steiger, Norbert. 2,732,374.
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Holder, James B., deceased, by D. R. Holder, administratrix. Method of forming novelty yarn. 2,731,789, 1–24–56, Cl. 57—160.
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Wince, Pearl S. 2,732,488.
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Holt, Ralph D. Toy aircraft and launching device therefor. 2,731,769, 1–24–56, Cl. 46—243.
Hommel, O., Co., The: *See*—
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Shepard, Alvin F. 2,732,368.
Hopkins, Heber A. Top roll. 2,731,678, 1–24–56, Cl. 19—142.
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Huber, Jakob, to J. Huber & Cie. Aktiengesellschaft. Bimetallic snap-action switch. 2,732,461, 1–24–56, Cl. 200—138.
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Hughes, Fred S. Bean and pea pod splitter. 2,731,970, 1–24–56, Cl. 130—30.
Hughes, James T. Flush valve assembly. 2,731,646, 1–24–56, Cl. 4—57.
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Hull, David C., to Eastman Kodak Co. Preparation of aliphatic nitriles. 2,732,397, 1–24–56, Cl. 260—465.2.
Hullegard, Erik W., to Telefonaktiebolaget L M Ericsson. Audio-frequency system. 2,732,432, 1–24–56, Cl. 179—16.
Hulteen, Leonard A., and W. Kowalski, to McGraw Electric Co. Torsional spring. 2,732,466, 1–24–56, Cl. 200—166.
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Grouse, Richard A. 2,731,706.
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Bill, John C., and Hunter. 2,732,365.
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Ideal Toy Corp.: *See*—
Harrowe, Elliott D. 2,731,768.
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Saari, Oliver E. 2,731,886.
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Clarke, John T. 2,732,351.
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Jackson, Ernest E., and O. R. Scheurer, to Tokheim Corp. Remote-control dispensing apparatus and valve mechanism therefor. 2,732,100, 1–24–56, Cl. 222—73.

Jackson, James A., and M. Dewhurst, to Dewhurst and Partner Ltd. Electric switchgear. 2,732,452, 1–24–56, Cl. 200—87.

Jackson, Jonas A. (Jack). Transplanter. 2,731,928, 1–24–56. Cl. 111—7.

Jackson, Winston J., to Eastman Kodak Co. Bubble cap. 2,732,194, 1–24–56, Cl. 261—114.

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Jense, Willem F.: *See*—
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Jense, Willem F., and C. B. Davies, to Shell Development Co. Oil-in-water metal working lubricant. 2,732,348, 1–24–56, Cl. 252—33.3.

Johansson, Gustaf A., to The United Electric Coal Companies. Blade for excavating mechanism. 2,731,742, 1–24–56, Cl. 37—189.

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Johnson, Gordon W., Co.: *See*—
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Johnson, James A., to The American Metal Co., Ltd. Water-cooled gas sampling device. 2,731,832, 1–24–56, Cl. 73—421.5.

Johnson, Karl G., to Telefonaktiebolaget L M Ericsson. Device for identification of numbers. 2,732,434, 1–24–56, Cl. 179—18.

Johnson, Paul A. and P. C. Industrial water cooling system. 2,732,192, 1–24–56, Cl. 261—23.

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Johnson, Paul A. and P. C. 2,732,192.

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Jones, Arthur L., and P. S. Fay, to The Standard Oil Co. Process for the recovery of benzene by selective clathration. 2,732,413, 1–24–56. Cl. 260—674.

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Jones, Granvil H. Wheel balancer. 2,731,833, 1–24–56, Cl. 73—458.

Jones, James F. Bug and mosquito catcher. 2,731,762, 1–24–56, Cl. 43—113.

Jones, Robert H., and E. B. Cyphers, to Esso Research and Engineering Co. Sulfurized hydrocarbon lubricant additive. 2,732,346, 1–24–56, Cl. 252—45.

Jones, Ulisses M. Automatic tape player. 2,732,144, 1–24–56, Cl. 242—55.

Jones, Wilford D., to Celanese Corp. of America. Copolymers of acrylonitrile and N-benzylacrylamide. 2,732,358, 1–24–56, Cl. 260—30.8.

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Jordan, James F., ⅛ to the estate of J. Jordan, deceased, and ⅛ to A. Jordan. Process of heating particulate metal. 2,732,292, 1–24–56, Cl. 75—10.

Joy, Joseph F., to Joy Mfg. Co. Mining machine cutter bit. 2,732,198, 1–24–56, Cl. 262—33.

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Karlin, Irving. Electrical connection box. 2,732,090, 1–24–56, Cl. 220—3.2.

Kass, Sidney. Adjustable flower box. 2,732,091, 1–24–56, Cl. 220—8.

Kastner, Karl. Cigarette making machine. 2,731,971, 1–24–56, Cl. 131—70.

Kaufmann, Carl P., to Ellicott Machine Corp. Portable dredge. 2,731,741, 1–24–56, Cl. 37—54.

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Keil, Joseph W., to Dow Corning Corp. Pressure-sensitive tapes of organo-siloxane material with titanium release coating. 2,732,318, 1–24–56, Cl. 117—68.5.

Kellogg, R. R., Advertising Services, Inc.: *See*—
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Kendall, Burt C.: *See*—
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Kendall, Edgar H., to Salem-Brosius, Inc. Production apparatus for shell casings and the like. 2,731,859, 1–24–56, Cl. 78—9.

Kennette, Heath O., C. H. Plummer, and J. J. Smith, to Chicopee Mfg. Corp. Method of making nonwoven fabric. 2,731,679, 1–24–56, Cl. 19—156.

Kerr, Ralph W., to Corn Products Refining Co. Process for the production of cold water dispersible starch products and the products thereof. 2,732,309, 1–24–56, Cl. 106—213.

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Kihn, Albert, and O. Swanson. Door bolt. 2,732,287, 1–24–56, Cl. 292—67.

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Loomis, Glenn L. 2,731,837.

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King, William V., to Rowe Spacarb, Inc. Automatic beverage vending machines. 2,731,906, 1–24–56, Cl. 99—275.

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Kircher, Ralph N., and H. D. Palmer, to West Bend Aluminum Co. Internal combustion engine with die cast block. 2,731,960, 1–24–56, Cl. 123—195.

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Klausner, Edward S. Clips for facilitating the erection and stripping of concrete forms for the building industry. 2,731,701, 1–24–56, Cl. 25—131.5.

Klein, Norman E., to Deering Milliken Research Corp. Twister. 2,731,786, 1–24–56, Cl. 57—58.83.

Kling, Nelson, and S. Ronal, to Fairchild Camera and Instrument Corp. Film-positioning apparatus for cameras. 2,731,893, 1–24–56, Cl. 95—11.

Klinge, Erwin. Method and apparatus for extracting a soluble component from materials. 2,732,415, 1–24–56, Cl. 260—705.

Knott, Edward B., and J. Morgan, to Eastman Kodak Co. Silver halide emulsion containing molecular compounds of mercury salts with amidines. 2,732,302, 1–24–56, Cl. 95—7.

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Koch, Werner, to Faber & Schleicher Aktiengesellschaft. Device for cleaning cylinders. 2,731,916, 1–24–56, Cl. 101—423.

Köhler, Horst, and H. Knutti, to C. Zeiss. Afocal anamorphotic cylindrical objective lens system. 2,731,883, 1–24–56, Cl. 88—57.

Kollmann, Karl A.: *See*—
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Kolmar Laboratories, Inc.: *See*—
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Koppers Co., Inc.: *See*—
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Kossman, Simon E. Tire spreader. 2,732,174, 1–24–56, Cl. 254—50.3.

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Kratzer, Herbert J. Internal combustion engine. 2,731,959, 1–24–56, Cl. 123—142.5.

Kraus, John D., to The Battelle Development Corp. Spherical cage antenna. 2,732,551, 1–24–56, Cl. 343—843.

Kraushaar, Maynard E. Thread gauge. 2,731,730, 1–24–56, Cl. 33—199.

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Krebs, Robert W., and C. N. Kimberlin, Jr., to Esso Research and Engineering Co. Conversion of hydrocarbon oils with the use of fluidized solid particles. 2,732,330, 1–24–56, Cl. 196—52.

Kreis, Fritz. Automatically operating change speed gear. 2,731,846, 1–24–56, Cl. 74—336.

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Krom, Myron E., and F. C. Kuchas, to Bell Telephone Laboratories, Inc. Channel selecting circuit. 2,732,435, 1–24–56, Cl. 179—22.

Kraek, George R., to Merck & Co., Inc. Preparation of 4-bromo steroids. 2,732,385, 1–24–56, Cl. 260—397.45.

Krueger, Rudolph E. Constant weight flow fluid flow control valve. 2,731,974, 1–24–56, Cl. 137—80.

Kubera, Gerhard, to Alfred Teves Maschinen- und Armaturenfabrik KG. Process for manufacture of hollow poppet valves especially for internal-combustion engines. 2,731,708, 1–24–56, Cl. 29—156.7.

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Krom, Myron E., and Kuchas. 2,732,435.

Kuehlthau, Hugo L., to Pettibone Mulliken Corp. Molding machine. 2,731,687, 1–24–56, Cl. 22—42.

Kuehn, Rema V. Juice extractor. 2,732,076, 1–24–56, Cl. 210—150.5.

Kuhn, Albert J., to General Motors Corp. Refrigerating apparatus. 2,731,805, 1–24–56, Cl. 62—3.

Kuhrt, Noel H., to Eastman Kodak Co. Stabilized unsaturated compositions and stabilizer therefor. 2,732,386, 1–24–56, Cl. 260—398.5.

Kuhrt, Weinreich E. Luminaire. 2,732,485, 1–24–56, Cl. 240—51.12.

Kuster, Werner, and G. Schetty, to J. R. Geigy A. G. Chromable monoazo dyestuffs. 2,732,372, 1–24–56, Cl. 260—151.

Kuthe, Charles H., to Calumet & Hecla, Inc. Accumulator drier for refrigerating apparatus. 2,732,074, 1–24–56, Cl. 210—131.

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Ladd, Elbert C., to United States Rubber Co. Partially dechlorinated hexachlorocyclopentadiene. 2,732,409, 1–24–56, Cl. 260—648.

Lafumas, Paul, and J. Aboulenc, to Societe des Usines Chimiques Rhone-Poulenc. Lysidine salts. 2,732,381, 1–24–56, Cl. 260—309.6.

Laguilharre, Pierre R. Method and device for pasteurizing or sterilizing liquid or semi-liquid products. 2,732,308, 1–24–56, Cl. 99—212.

Lambert, Arthur, to Imperial Chemical Industries Ltd. New asymmetric diphenylol methanes. 2,732,406, 1–24–56, Cl. 260—619.

Lambert, Arthur, and G. E. Williams, to Imperial Chemical Industries Ltd. New diarylmethane derivatives, their manufacture and application. 2,732,407, 1–24–56, Cl. 260—619.

Lambert Brake Corp.: *See*—
Lucker, Millard B. 2,732,042.
Myers, Claude R. 2,732,036.

Lancôme S. A.: *See*—
Frydlender, Sophie. 2,732,089.

Lange, William H., and H. A. Schmitt. Shore protective devices. 2,731,799, 1–24–56, Cl. 61—4.

Lapsley, Robert, and G. L. Turner, to Clark Equipment Co. Steering control means for electric motor driven vehicle wheels. 2,732,022, 1–24–56, Cl. 180—6.28.

Latil, Jean P.: *See*—
Millie, Orrin, Rubey, and Latil. 2,732,515.

Latimer, Louie F. Vehicle jack. 2,732,034, 1–24–56, Cl. 187—8.72.

Lauraitis, Leona J. Shoulder supported multiple receptacle. 2,732,110, 1–24–56, Cl. 224—5.

Laux, Leon E., to The Glenn L. Martin Co. Positioning tool for establishing working surfaces. 2,731,712, 1–24–56, Cl. 29—284.

Lawrence, Sigmund J., to General Electric Co. Closure device. 2,732,092, 1–24–56, Cl. 220—44.

Lawson, William D.: *See*—
Phythian, Thomas E., and Lawson. 2,731,914.

Le Bus, Franklin L., Sr. Balanced cable spooling. 2,732,150, 1–24–56, Cl. 242—117.

Lee, Burton D., to The Texas Co. Method and apparatus for analysis of seismographic records. 2,732,025, 1–24–56, Cl. 181—.5.

Lee, Leighton, II, to Pratt & Whitney Co., Inc. Control valve apparatus for turbo-jet engine. 2,731,983, 1–24–56, Cl. 137—622.

Leech, Harold C. Lampshades. 2,732,489, 1–24–56, Cl. 240—106.

Leeds and Northrup Co.: *See*—
Carolus, James B. 2,732,506.
Robertson, Donald. 2,732,416.

Leermakers, John A.: *See*—
Vanselow, Waldemar, and Leermakers. 2,732,304.

Legrow, Jack B., and P. C. Joratz. Sorting and bagging apparatus. 2,732,164, 1–24–56, Cl. 249—17.

Leitz, Ernst, G. m. b. H.: *See*—
Kossel, Dierick, and Sindel. 2,731,881.
Leitz, Ludwig, and Wehrenfennig. 2,731,894.

Leitz, Ludwig, and H. Wehrenfennig, to Ernst Leitz, G. m. b. H. Film container for roll film camera. 2,731,894, 1–24–56, Cl. 95—31.

Lemmon, George N.: *See*—
Curtis, Thomas E., and Lemmon. 2,732,468.

Lemoigne, Pierre M. Automatic parachute release coupling. 2,732,245, 1–24–56, Cl. 294—83.

Lenhart, Emil, and J. Zaoralek, to Firma Steinkohlen-Elektrizitat Aktiengesellschaft. Pulverized coal furnace. 2,731,955, 1–24–56, Cl. 122—336.

Lenkeit, Willy W.: *See*—
Piltz, Erich. 2,731,815.

Le Van, Ambrose E., to American Machine and Metals, Inc. Comparator for tapered pieces. 2,731,825, 1–24–56, Cl. 73—37.5.

Levin, Morris B.: *See*—
Gilman, Morris A., Riback, and Levin. 2,732,449.

Levine, Harry. Apparatus for attaching bridge stops to slide fasteners. 2,732,000, 1–24–56, Cl. 153—1.

Levitt, Ben B. Vortex type air cooler. 2,731,811, 1–24–56, Cl. 62—136.

Levy, Maurice M.: *See*—
Chubb, Alexander A., Mawson, and Levy. 2,732,433.

Lewis, Frank M., to the United States of America as represented by the Secretary of the Navy. Starter for free piston gas generator. 2,731,793, 1–24–56, Cl. 60—14.

Lime, Ermal J., and C. S. Hedges, to Crelo Mfg. Co., Inc. Hot beverage vending machine. 2,732,098, 1–24–56, Cl. 221—11.

Lindenfelser, Richard, and M. K. Kilthau, to American Cyanamid Co. Modified diaminotriazine-aldehyde resinous compositions and products comprising the same. 2,732,325, 1–24–56, Cl. 154—121.

Lindley, Frederick A., Jr., to Smith-Meeker Engineering Co. Tube shield. 2,732,418, 1–24–56, Cl. 174—16.

Link-Belt Co.: *See*—
Erisman, Maurice J. 2,732,059.

Linnert, George E., to Armco Steel Corp. Process of welding and heat treating stainless steel. 2,732,323, 1–24–56, Cl. 148—21.54.

Lintern, Alfred R., to A. R. Lintern, Inc. Vehicle heating system. 2,732,133, 1–24–56, Cl. 237—12.3.

Lintern, A. R., Inc.: *See*—
Lintern, Alfred R. 2,732,133.

Lipscomb, Willis L. Cove lighting fixture. 2,732,484, 1–24–56, Cl. 240—51.11.

Littell, Ruddy: *See*—
Bernstein, Seymour, and Littell. 2,732,383.

Livermore, H. F., Corp.: *See*—
Urquhart, Lloyd G. 2,731,987.

Ljungström, Fredrik, to Svenska Skifferolje Aktiebolaget. Method of treating oil shale and recovery of oil and other mineral products therefrom. 2,732,195, 1–24–56, Cl. 262—3.

Lloyd, Claire. Sliding door lock. 2,731,821, 1–24–56, Cl. 70—100.

Lodge, Alvin, to Blackstone Corp. Water supply control for washing machines. 2,731,982, 1–24–56, Cl. 137—607.

Long, George B., to General Motors Corp. Garbage disposal device. 2,732,135, 1–24–56, Cl. 241—46.

Loomis, G. L.: *See*—
Loomis, Glenn L. 2,731,827.

Loomis, Glenn L., ½ to G. L. Loomis, 1/16 to J. Stahl, 1/16 to R. T. Elmore, ⅛ to Estate of F. L. Stahl, deceased, 1/32 to J. P. King, Sr., 1/32 to J. P. King, Jr., and 1/32 to W. F. King. Hydraulic collar tester. 2,731,827, 1–24–56, Cl. 73—40.5.

Loufek, Louis F., to Ralston Purina Co. Apparatus for applying rip strips to receptacles. 2,731,778, 1–24–56, Cl. 53—61.

Loughrie, Carrie. Means for teaching music. 2,731,871, 1–24–56, Cl. 84—470.

Louisiana State University and Agricultural and Mechanical College, Board of Supervisors of: *See*—
Howe, Henry V., and Terry. 2,732,068.

Lowe, Sydney P., to Bigelow, Inc. Machine for milling brake shoe linings. 2,731,888, 1–24–56, Cl. 90—20.

Lozon, Alfred W. Arrow fletching fixture. 2,731,992, 1–24–56, Cl. 144—289.

Lucas, Charles D., to Deering Milliken Research Corp. Automatic tail-cutter for winding machines. 2,732,141, 1–24–56, Cl. 242—19.

Lucas, George W., and C. S. Wiedman, to General Electric Co. Sintered carbide compositions. 2,731,710, 1–24–56, Cl. 29—182.7.

Lucas, George W., to General Electric Co. Sintered tungsten carbide composition. 2,731,711, 1–24–56, Cl. 29—182.8.

Lucker, Millard B., to Lambert Brake Corp. Automatic adjuster for disc brakes and the like. 2,732,042, 1–24–56, Cl. 188—196.

Ludowici, Johann W. Apparatus for hoisting heavy slabs. 2,732,177, 1–24–56, Cl. 254—89.

Luechauer, Holle C., to General Motors Corp. Exciter stand for spectrograph. 2,731,876, 1–24–56, Cl. 88—14.

Lum, Funston G.: *See*—
Carlston, Earl F., and Lum. 2,732,399.

Lummis, Wilburn R. Retracting reel. 2,732,148, 1–24–56, Cl. 242—107.

Lundell, Kermit A., to Weber Knapp Co. Latch structure. 2,732,234, 1-24-56, Cl. 292—1.

Luther, Glenn C., to The Olm Co. Cutting machine having rotatable complemental cutters adjustably mounted in bearing elements. 2,732,014, 1–24–56, Cl. 164—61.

Lynam, John E., and B. P. Cooper, to William Cotton Ltd. Cam mechanism of knitting machines. 2,731,818, 1–24–56, Cl. 66—82.

Lynch, Charles S., and E. B. Cyphers, to Esso Research and Engineering Co. Method for determining the deposit-forming tendencies of oils. 2,732,285, 1–24–56, Cl. 23—230.

Lyon, George A. Wheel cover. 2,732,260, 1–24–56, Cl. 301—37.

Lyon, George A. Wheel cover. 2,732,261, 1–24–56, Cl. 301—37.

Mack Mfg. Corp.: *See*—
Schmal, Alois H. 2,731,855.

Macke, Robert A., to Esso Research and Engineering Co. Two-stage solvent dewaxing of lubricating oil. 2,732,328, 1–24–56, Cl. 196—18.

MacLeod, Norman A. Apparatus for producing pulsations to clear well casing perforations. 2,732,016, 1–24–56, Cl. 166—63.

MacMahon, Paul H. Bicycle lights. 2,732,540, 1–24–56, Cl. 340—87.

MacMahon, Paul H. Signalling devices. 2,732,541, 1–24–56, Cl. 340—134.

MacMillan, Charles W., and B. A. Richards, to Bear Mfg. Co. Toe change corrective device. 2,732,233, 1–24–56, Cl. 287—54.

MacNeill, John H., to the United States of America as represented by the Secretary of the Air Force. Magnetic recording head. 2,732,275, 1–24–56, Cl. 346—74.

MacSporran, Charles, to Phillips Petroleum Co. Automatic shut-off valve in liquefied gas system. 2,731,802, 1–24–56, Cl. 62—1.

MacVicar, Frank F. Lawn mower having removable cutting reel. 2,731,781, 1–24–56, Cl. 56—249.5.

MacWhirter, William B. Adjustable chair-desk. 2,732,007, 1–24–56, Cl. 155—124.

Mager, Abraham C. Telephone call counter. 2,732,131, 1-24-56, Cl. 235—125.

Magers, Roscoe. Speedometer cable disconnect detector. 2,732,546, 1–24–56, Cl. 340—280.

Mahan, John E., and M. F. Potts, to Phillips Petroleum Co. Stabilization of polymerizable heterocyclic nitrogen compounds. 2,732,377, 1–24–56, Cl. 260—290.

Maher, Joseph L.: *See*—
Glasgow, Clarence O., and Maher. 2,732,070.

Mallinckrodt Chemical Works: *See*—
De La Mater, George B. 2,732,401.

Mallory, P. R., & Co., Inc.: *See*—
Wise, Herman J. 2,732,457.

Mann, Leonard J., to General Motors Corp. Refrigerating apparatus. 2,732,272, 1–24–56, Cl. 312—214.

Mansell, Carman R., and H. D. Davis, ¼ to L. F. Petersen, and ¼ to J. M. Ralley. Telephone receiver rests. 2,732,438, 1–24–56, Cl. 179—146.

Marchese, Andrew S. Dispensing roll of non-skid tape for icy surfaces. 2,732,065, 1–24–56, Cl. 206—56.

Maréchal, Greer M., Jr. Illusion apparatus. 2,732,207, 1–24–56, Cl. 272—8.

Mareth Steel Corp.: *See*—
Schaffner, Theodore. 2,732,273.

Marino, Salvatore F., to General Motors Corp. Driving mechanism for cycles. 2,731,857, 1–24–56, Cl. 74—781.

Marley Co., The: *See*—
Mart, Leon T. 2,732,190.

Marsh, Henry R., to Saco-Lowell Shops. Twister. 2,731,787, 1–24–56, Cl. 57—58.83.

Marshall, Norman S. Crab trap. 2,731,761, 1–24–56, Cl. 43—100.

Mart, Leon T., to The Marley Co. Cross flow cooling tower having recycling system. 2,732,190, 1–24–56, Cl. 261—21.

Martin, Glenn L., Co., The: *See*—
Laux, Leon E. 2,731,712.

Martin, Raymond G. Wire fence stretching clamp. 2,732,176, 1–24–56, Cl. 254—83.

Martin, Robert L., to Standard Coil Products Co., Inc. Coil Winder. 2,732,140, 1–24–56, Cl. 242—13.

Marvil Industries, Inc.: *See*—
Harroun, Ray W., and Wagner. 2,732,222.

Marx, Louis, & Co., Inc.: *See*—
Carver, Richard N. 2,731,765.

Maschinenfabrik Augsburg-Nurnberg A. G.: *See*—
Dietrich, Paul. 2,732,206.
Dietrich, Paul, and Bayer. 2,732,205.

Masland, C. H., & Sons: *See*—
Hoeselbarth, Frank W. E. 2,731,985.

Mason, William C. Device for picking up and compressing loose materials. 2,731,782, 1–24–56, Cl. 56—341.

Mathieu, Henry A. Firearm with device for moving the muzzle downwardly. 2,731,753, 1–24–56, Cl. 42—74.

Matteo, Joseph F., to The Pennsylvania Railroad Co. Valve assembly. 2,732,169, 1–24–56, Cl. 251—148.

Matthies, Roland A. Method of making buttonholes. 2,731,844, 1–24–56, Cl. 2—266.

Mawson, Ronald: *See*—
Chubb, Alexander A., Mawson, and Levy. 2,732,433.

May, Claude H.: *See*—
Rockwood, Albert M., Ballmer, and May. 2,731,849.

Mayer, Dr. Max: *See*—
Traurig, Alfons. 2,731,721.

McCain, Harvey E. Flexible interlocking vented awning canopy. 2,731,927, 1–24–56, Cl. 108—1.

McClune, Wallace O. Prefabricated constant pressure joint construction. 2,732,044, 1–24–56, Cl. 189—36.

McCormack, Ralph H.: *See*—
Bolley, Don S., McCormack, and Naughton. 2,732,395.

McGibon, Leonard, to King Sales & Engineering Co., as trustee. Variable drive mechanism. 2,731,845, 1–24–56, Cl. 74—230.17.

McGovern, Henry P., to Dennison Mfg. Co. Display box. 2,732,121, 1–24–56, Cl. 229—32.

McGowen, Harold E., Jr., to Camco, Inc. Bellows protector. 2,731,977, 1–24–56, Cl. 137—155.

McGraw Electric Co.: *See*—
Hulteen, Leonard A., and Kowalski. 2,732,466.
Steinmayer, Alwin G. 2,732,463.
Van Ryan, Anthony. 2,732,456.

McKee, Edward S., to Eastman Kodak Co. Blade and cover blind shutter. 2,731,895, 1–24–56, Cl. 95—60.

McKinley, Benjamin P. Outlet box support. 2,732,162, 1–24–56, Cl. 248—343.

McLaren, Ian H., and W. C. Wiley, to Bendix Aviation Corp. Ion source. 2,732,500, 1–24–56, Cl. 250—41.9.

McLaughlin, John J., to The Wilkie Co. Ambidextrous conveyor. 2,732,053, 1–24–56, Cl. 193—36.

McNabb, William L., to Westinghouse Air Brake Co. Superimposed coded signaling systems. 2,732,490, 1–24–56, Cl. 246—34.

Meaker, Archibald G. Collapsible house trailer. 2,732,251, 1–24–56, Cl. 296—23.

Meinig, Friedrich. Balance. 2,732,199, 1–24–56, Cl. 265—54.

Melton, James O. *See*—
Hazelroth, Kenneth M. Diesen, and Melton. 2,731,747.

Mennecier, Aline: *See*—
Blanchard, Andre, and Mennecier. 2,732,525.

Mennecier, Maurice: *See*—
Blanchard, Andre, and Mennecier. 2,732,525.

Merck & Co., Inc.: *See*—
Gates, Marshall D., Jr. 2,732,375.
Kersek, George R. 2,732,385.

Merrill, Bennett W., to Standard Packaging Corp. Method and apparatus for applying closures to open containers. 2,732,116, 1–24–56, Cl. 226—84.

Merrill, Marcellus S., and L. H. Erickson; said Erickson assor. to said Merrill. Wheel spinner. 2,731,841, 1–24–56, Cl. 74—16.

Meyer, Geo. J., Mfg. Co.: *See*—
Carter, Sidney T. 2,731,913.

Midwest Automatic Valve Co.: *See*—
Stout, Glenn M. and J. M., and Cooper. 2,732,167.

Miller, Harry B., to Clevite Corp. Cylindrical electromechanical transducer. 2,732,536, 1–24–56, Cl. 340—8.

Miller, Herbert J.: *See*—
Hewitt, Thomas, Miller, and Varley. 2,732,294.

Miller, Ralph, to The Chemical Foundation, Inc. Production of titanium dioxide. 2,732,310, 1–24–56, Cl. 106—300.

Miller, Walter F. Floor mop having a detachable cleaning element. 2,731,658, 1–24–56, Cl. 15—244.

Miller, William F., to Toro Mfg. Corp. Snow plow. 2,731,739, 1–24–56, Cl. 37—43.

Miller, Willis H. Vehicle sub-frame and spring suspension assembly. 2,732,219, 1–24–56, Cl. 280—106.5.

Millhouse, Murray S.: *See*—
Davis, Raymond C., Overwein, and Millhouse. 2,731,672.

Millie, Orrin, J. Rubey, and J. P. Latil, to Genarco, Inc. Illumination electric arcs. 2,732,515, 1–24–56, Cl. 314—42.

Milliquet, Jacques F. Machine for the production of bags containing a subdivided, pulverulent or granular product. 2,731,779, 1–24–56, Cl. 53—70.

Mills, Beatrice J.: *See*—
Muth, Esther A., and Mills. 2,731,997.

Mills, Herbert E., to Mills Products, Inc. Oven door handle. 2,731,662, 1–24–56, Cl. 16—111.

Mills Industries, Inc.: *See*—
Hehn, Louis F. 2,732,054.
Mills, Herbert E. 2,731,662.

Mills, Robert, to Westinghouse Air Brake Co. Coupling for flexible metallic conduits. 2,732,225, 1–24–56, Cl. 285—2.

Miner, Samuel S., to United States Rubber Co. Dipping machine for forming rubber articles. 2,731,668, 1–24–56, Cl. 18—24.

Minnesota Mining & Mfg. Co.: *See*—
Brice, Thomas J., and Trott. 2,732,398.
Codding, Donald W. 2,732,370.

Minnick, Robert C., to Bell Telephone Laboratories, Inc. Read-out arrangement for a magnetic core matrix. 2,732,542, 1–24–56, Cl. 340—174.

Minsk, Louis M., and W. P. Van Deusen, to Eastman Kodak Co. Decorating ceramic objects. 2,732,297, 1–24–56, Cl. 95—5.5.

Minsk, Louis M., and J. J. Chechak, to Eastman Kodak Co. Resin anthraquinone dyes. 2,732,382, 1–24–56, Cl. 260—379.

Moffats Ltd.: *See*—
Slate, Raymond N. 2,732,467.
Smith, Elmore S. 2,732,476.

Mogren, Eben F. Fisherman's indicating light. 2,732,543, 1–24–56, Cl. 340—213.

Monroe Calculating Machine Co.: *See*—
Gang, Herman. 2,732,129.

Monsanto Chemical Co.: *See*—
Saunders, James H., and Bennet. 2,732,392.

Montague, Elmo L.: *See*—
Adams, Harvey D., Geasland, and Montague. 2,731,750.

Moody, Leroy S., to General Electric Co. Oxidation of organic compounds. 2,732,338, 1–24–56, Cl. 204—165.

Moore, Charles B., Jr.: *See*—
Huch, William F., Hakomaki, and Moore. 2,732,013.

Morel, Alexis E. J.: *See*—
Apthorp, Alan E., and Morel. 2,731,676.

Morena, Susan. Immersion container for food seasoning or the like. 2,731,908, 1–24–56, Cl. 99—414.

Morgan, Arthur H., and G. A. Shuey, to The University of Tennessee Research Corp. Machine for processing sliced material. 2,731,905, 1–24–56, Cl. 99—239.

Morgan, John: *See*—
Knott, Edward B., and Morgan. 2,732,302.

Morgan, John, and D. A. J. Starkey, to Eastman Kodak Co. Antifogging and hardening agents for photographic emulsions. 2,732,303, 1–24–56, Cl. 95—7.

Morgan, John M., Jr.: *See*—
Carpenter, Edwin O., Morgan, and Waters. 2,732,521.

Moriarty, Benedict E. Spring sash curtain rod. 2,732,161, 1–24–56, Cl. 248—262.

Morris Paper Mills: *See*—
Arneson, Edwin L. 2,732,097.

Morris, Thomas C., to United Shoe Machinery Corp. Lamination of fibrous and plastic sheet materials. 2,732,324, 1–24–56, Cl. 154—103.

Morrison, Jay W. Plastic-impregnated cable suspension. 2,732,423, 1–24–56, Cl. 174—209.

Morrison, Montford. Light sensitive, heat developable recording papers. 2,732,299, 1–24–56, Cl. 95—6.

Morrissey, Richard T., and M. R. Frederick, to The B. F. Goodrich Co. Chlorine derivatives of isoolefin-polyolefin polymers and compositions comprising the same. 2,732,354, 1–24–56, Cl. 260—5.

Motorola, Inc.: *See*—
Passow, Edward B., and De Napoli. 2,732,545.

Mount, George W. Magnetic hammers. 2,731,993, 1–24–56, Cl. 145—30.

Mount, George W. Web stretching device. 2,732,175, 1–24–56, Cl. 254—79.

Mount, George W. Hand magnetic pick up tool. 2,732,243, 1–24–56, Cl. 294—65.5.

Muetterties, Earl L.: *See*—
Farlow, Mark W., and Muetterties. 2,732,410.
Farlow, Mark W., and Muetterties. 2,732,411.

Murray Corp. of America, The: *See*—
Rockwood, Albert M., Ballmer, and May. 2,731,849.

Murray, Guy B., to Western Electric Co., Inc. Methods of cleaning articles. 2,732,322, 1–24–56, Cl. 134—9.

Murray, James S., to General Dynamics Corp. Testing means for telecommunication system. 2,732,442, 1–24–56, Cl. 179—175.21.

Muth, Esther A., and B. J. Mills. Combined bag and flat cloth article. 2,731,997, 1–24–56, Cl. 150—11.

Myers, Claude R., to Lambert Brake Corp. Disc brakes of the segmental disc type. 2,732,036, 1–24–56, Cl. 188—72.

Myers, Glenn W.: *See*—
Gaddis, Hugh L., Myers, and Welsh. 2,731,709.

Nagle, Floyd B.: *See*—
Tubbs, Bernard H., Nagle, and Woodland. 2,732,366.
Wehr, Henry W., and Nagle. 2,732,371.

Nagy, Daniel E.: *See*—
Gleissner, Bruce D., and Nagy. 2,732,277.

Nallinger, Friedrich K. H., to Daimler-Benz Aktiengesellschaft. Means to delay fuel enrichment when starting turbo-supercharger for internal-combustion engines. 2,731,792, 1–24–56, Cl. 60—13.

Napolitani, Frank D. Retaining means for films wound on reels. 2,732,146, 1–24–56, Cl. 242—74.

National Cylinder Gas Co.: *See*—
Ellsworth, Carl E. 2,732,472.
Ellsworth, Carl E. 2,732,473.
Ellsworth, Carl E. 2,732,474.
Gaum, Gilbert A. 2,732,229.
Sweets, Foster M. 2,732,471.

National Distillers Products Corp.: *See*—
Kamlet, Jonas. 2,732,404.

National Lead Co.: *See*—
Bolley, Don S., McCormack, and Naughton. 2,732,395.

National Lock Co.: *See*—
Wilson, William B. 2,732,239.

National Research Development Corp.: *See*—
Alabaster, Albert E. 2,732,517.
Newman, Edward A. 2,732,440.

National Tank Co.: *See*—
Glasgow, Clarence O., and Maher. 2,732,070.

Naughton, Frank C.: *See*—
Bolley, Don S., McCormack, and Naughton. 2,732,395.

Navy, United States of America as represented by the Secretary of the: *See*—
De Vost, Valmore F., and Fisher. 2,732,040.
Glasser, Irving A. 2,731,981.
Hall, Orville C. 2,732,494.
Lewis, Frank M. 2,731,793.
Turner, Lloyd E. 2,731,728.

Nebout, Noël, ½ to Societe Anonyme des Pneumatiques Dunlop. Machine for extracting vulcanization bags from pneumatic tires. 2,731,666, 1–24–56, Cl. 18—2.

Neel, George H., and M. W. Cole, to the United States of America as represented by the Secretary of Agriculture. Method of continuously blending streams of potato granules. 2,732,307, 1–24–56, Cl. 99—207.

Nehl Corp.: *See*—
Hillis, Randolph D. 2,732,105.
Hillis, Randolph D. 2,732,117.

Nellsen, Hildaur L., to Zephyr American Corp. Rotary card-filling device. 2,731,966, 1–24–56, Cl. 129—16.

Nellson, Christopher B. V., and R. G. Hoare, to Electro-Hydraulics Ltd. Aircraft landing gear with means for minimizing wheel drag load incident to landing. 2,732,152, 1–24–56, Cl. 244—104.

Nelson, Elmer T. Auxiliary spinning reel. 2,731,756, 1–24–56, Cl. 43—20.

Nelson, Joseph F.: *See*—
Gleason, Anthony H., and Nelson. 2,732,412.

Nestlerode, Clifford D.: *See*—
Felt, David C., and Nestlerode. 2,731,837.

Neugass, Edwin A. Panel and dial assemblies. 2,731,940, 1–24–56, Cl. 116—124.

Newberry, George E. Grease fitting cleaner. 2,731,655, 1–24–56, Cl. 15—22.

Newman, Edward A., to National Research Development Corp. Electronic pulse output circuits. 2,732,440, 1–24–56, Cl. 179—171.

Newman, Richard J. Calendar. 2,731,746, 1–24–56, Cl. 40—122.

Newton, Courtland G., and D. Rousey, to Kritzer Radiant Coils, Inc. Baseboard radiators. 2,731,903, 1–24–56, Cl. 98—40.

Nichols, Alva G.: *See*—
Wigington, Everett E., and Nichols. 2,731,829.

Nichols, Proctor W.: *See*—
Whittingham, John C., and Nichols. 2,732,149.

Nickerson, Elmer, to L. E. Harris. Pipe wrench having a pivotable and longitudinally movable inner jaw. 2,731,868, 1–24–56, Cl. 81—92.

Nigra, John D., and G. Colombo, to Chain Belt Co. Apparatus for training twisted conveyor belts. 2,732,058, 1–24–56, Cl. 198—184.

Nogueira, Robert D.: *See*—
Kossa, Edwin H. 2,731,738.

No-Joint Concrete Pipe Co.: *See*—
Tunsen, Elmer L. 2,731,698.

Nolan, Auldin D., to Northrop Aircraft, Inc. Rocket stowage and launching mechanism. 2,731,885, 1–24–56, Cl. 89—1.7.

Noll, John E., to Dow Corning Corp. Halogenated organo-silicon compounds. 2,732,391, 1–24–56, Cl. 260—448.2.

Noll, Joseph P. Cleaning attachment for rakes. 2,731,784, 1–24–56, Cl. 56—400.08.

Norby, Harold L., and B. E. Jones, to Pullman-Standard Car Mfg. Co. Railway sleeping car. 2,731,824, 1–24–56, Cl. 105—315.

Norden-Ketay Corp.: *See*—
Schaefer, Carl F. 2,731,831.

Nordeen, Robert S. Apparatus for extracting mercury from amalgam. 2,731,724, 1–24–56, Cl. 32—40.

Northrop Aircraft, Inc.: *See*—
Hancock, Robert D. 2,732,497.
Nolan, Auldin D. 2,731,885.
Steele, Floyd G. 2,732,504.

Nowak, Roger L., to Van Brode Milling Co., Inc. Method of covering articles. 2,731,654, 1–24–56, Cl. 12—147.

Obedin, Nathan. Automatic cloth laying-up machine. 2,732,202, 1–24–56, Cl. 270—31.

Oehler, William P., to Deere & Co. Press wheel for planters. 2,731,900, 1–24–56, Cl. 97—56.

Ogren, Axel E., to The Sherwin-Williams Co. Applicator roll and clamping means therefor. 2,731,657, 1–24–56, Cl. 15—132.5.

Ohl, Russell S., to Bell Telephone Laboratories, Inc. Electrical contacting devices. 2,732,464, 1–24–56, Cl. 200—166.

Oleniczak, Elmer J.: *See*—
Robley, Arthur C. 2,731,958.

Olin Mathieson Chemical Corp.: *See*—
Sakowski, Walter J. 2,732,284.

Oliver, Bernard M., to Bell Telephone Laboratories, Inc. Linear predictor circuits. 2,732,424, 1–24–56, Cl. 178—5.

Olm Co., The: *See*—
Luther, Glenn C. 2,732,014.

Olson, Elmer, J. M. Kelly, G. L. Gibbs, Jr., and E. J. Reppert, to General Motors Corp. Anti-stall device. 2,732,038, 1–24–56, Cl. 188—96.

O'Neill, Ralph A. Changeable sign. 2,731,745, 1–24–56, Cl. 40—76.

Orent, Edward, and S. F. Kutsche, to General Motors Corp. Engine fuel system. 2,731,976, 1–24–56, Cl. 137—118.

Osborne, Stuart B. Rotary-acting fowl tendon puller and leg severer. 2,731,664, 1–24–56, Cl. 17—11.3.

O'Shei, William E. Differential fluid pressure motors. 2,731,954, 1–24–56, Cl. 121—186.

Osowski, Baltazar J., ½ to F. E. Stacknik. Rotatable connecting means for lamps. 2,732,486, 1–24–56, Cl. 240—61.12.

Ostrow, Barnet D., to Elechem Corp. Electroplating composition for copper. 2,732,336, 1–24–56, Cl. 204—52.

Otis Elevator Co.: *See*—
Anderson, John N. 2,732,041.

Otto, Arthur C. and E. A. Control device for motor vehicles. 2,731,850, 1–24–56, Cl. 74—484.

Otto, Earl A.: *See*—
Otto, Arthur C. and E. A. 2,731,850.

Overwein, Joseph H.: *See*—
Davis, Raymond C., Overwein, and Millhouse. 2,731,672.

Page, Alfred C. Dressing fixture for grinding machines. 2,731,773, 1–24–56, Cl. 51—95.

Palmer, Herman D.: *See*—
Kircher, Ralph N., and Palmer. 2,731,960.

Palmer, Richard C., to Allen B. Du Mont Laboratories, Inc. Pulse separating circuit. 2,732,427, 1–24–56, Cl. 178—60.5.

Palmer, Richard C., to Allen B. Du Mont Laboratories, Inc. Photosensitive device. 2,732,469, 1–4–56, Cl. 201—63.

Paradise, Francis C., to Stewart-Warner Corp. Hand valve. 2,732,171, 1–24–56, Cl. 251—233.

Parker, Charles, Co., The: *See*—
Connors, James J., and Eisenheimer. 2,732,159.

Parks, Asbury S. Separator. 2,732,033, 1–24–56, Cl. 183—111.

Parrette, Richard L., and J. S. Billheimer, to Aerojet-General Corp. Gelatin timing device. 2,731,828, 1–24–56, Cl. 73—150.

Pascual de Zulueta Adan, Jose L. Apparatus for obtaining an exceedingly fine atomization. 2,732,255, 1–24–56, Cl. 299—86.

Passow, Edward B., and A. C. De Napoli, to Motorola, Inc. Pilot light switch. 2,732,545, 1–24–56, Cl. 340—258.

Pawsat, Ruben L. Bicycle pedals. 2,731,854, 1–24–56, Cl. 74—594.4.

Paxton, Charles E., to Esso Research and Engineering Co. Oil composition for air filters. 2,732,356, 1–24–56, Cl. 260—23.

Payne, Richard E. Fountain brush. 2,731,656, 1–24–56, Cl. 15—128.

Pearce Development Co.: *See*—
Pearce, Lewis C. 2,732,204.

Pearce, Lewis C., to Pearce Development Co. Sheet stack feeding mechanism. 2,732,204, 1–24–56, Cl. 271—62.

Pearce, William R.: *See*—
Hoffmann, Albert. 2,732,029.

Pearson, David, to The Jeffrey Mfg. Co. Loader-conveyor apparatus. 2,732,056, 1–24–56, Cl. 198—8.

Pennsylvania Railroad Co., The: *See*—
Matteo, Joseph F. 2,732,169.

Perrin, Rene, to Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine. Process for recovering manganese from basic open-hearth slags. 2,732,293, 1–24–56, Cl. 75—24.

Petersen, Christian, to Petersen Mfg. Co., Inc. Welding clamp. 2,731,932, 1–24–56, Cl. 113—99.

Petersen, Lewis F.: *See*—
Mansell, Carman R., and Davis. 2,732,438.

Petersen Mfg. Co., Inc.: *See*—
Petersen, Christian. 2,731,932.

Pettibone Mulliken Corp.: *See*—
Kuehlthau, Hugo L. 2,731,687.

Peyrin, Henri, and S. X. Casacci, to Etablissements Neyrpic. Fluid transfer connection between a fixed fluid conduit and a rotating cylinder. 2,731,951, 1–24–56, Cl. 121—38.

Pfund, Charles E., to Development Engineering Service. Series tuned high frequency oscillators. 2,732,498, 1–24–56, Cl. 250—36.

Pharma Craft Corp.: *See*—
Teller, W. Kedzie. 2,732,327.

Phelps, Edwin H.: *See*—
Coupland, Frank H., Jr., Phelps, Cranford, and Daniel. 2,731,690.

Philco Corp.: *See*—
Sunstein, David E. 2,732,492.

Phillips Petroleum Co.: *See*—
Hachmuth, Karl H. 2,731,810.
MacSporran, Charles. 2,731,802.
Mahan, John E., and Potts. 2,732,377.
Pollock, Lyle N. 2,732,334.
Reed, Edwin E. 2,731,803.
Stoops, Forrest D. 2,732,414.
Wagner, Cary R. 2,732,376.
Wiley, Bruce F. 2,731,826.

Phillips, Stanley L., to Wedge Protectors, Inc. Welding ring. 2,731,933, 1–24–56, Cl. 113—111.

Phythian, Thomas E., and W. D. Lawson, to R. Hoe & Co. Inc. Inking mechanism for printing machines. 2,731,914, 1–24–56, Cl. 101—365.

Picard, Michel A.: *See*—
Stoltz, George R. 2,731,683.

Piltz, Erich, to W. W. Lenkeit. Knitting machine for knitting plain and purled stitches. 2,731,815, 1–24–56, Cl. 66—6.

Pittsburgh Coke & Chemical Co.: *See*—
Davie, William R. 2,732,291.

Platt, J. W. & H., Ltd.: *See*—
Apthorp, Alan E., and Morel. 2,731,676.

Plummer, Charles H.: *See*—
Kennette, Heath O., Plummer, and Smith. 2,731,679.

Polack, Joseph A.: *See*—
Billsoly, Julius P., Hunter, Polack, and Segura. 2,732,349.

Polay, Harvey H. Display device. 2,731,748, 1–24–56, Cl. 40—155.

Pollansky, Alejandro. Gas compressor. 2,732,124, 1–24–56, Cl. 230—55.

Pollak, Felix: *See*—
July, George, Knott, and Pollak. 2,732,316.

Pollard, Charles E., Jr., to Bell Telephone Laboratories, Inc. Means for preventing contact sticking in mercury contact switches. 2,732,459, 1–24–56, Cl. 200—112.

Pollock, Lyle W., to Phillips Petroleum Co. Removal of liquids from underground storage free of dissolved impurities. 2,732,334, 1–24–56, Cl. 202—75.

Porth, Carl J. Variable action bait. 2,731,757, 1–24–56, Cl. 43—42.52.

Potdevin Machine Co.: *See*—
Bechle, Rudolph P. 2,731,890.

Potts, Mack F.: *See*—
Mahan, John E., and Potts. 2,732,377.

Powers-Samas Accounting Machines Ltd.: *See*—
Jones, Charles T. A. 2,731,911.

Pratt, Cameron. Baled hay loader for trucks. 2,732,087, 1–24–56, Cl. 214—75.

Pratt & Whitney Co., Inc.: *See*—
Lee, Leighton, II. 2,731,983.

Pratt, Willard E., and J. W. Hendrickson, Jr., to Container Corp. of America. Display box. 2,732,062, 1–24–56, Cl. 206—45.31.

Precision Apparatus Co., Inc.: *See*—
Futterman, Julius. 2,732,526.

Premier Research Laboratories, Inc.: *See*—
Font, Ramon. 2,732,462.

Prendergast, Charles S., ½ to H. Gordon. Pump or motor. 2,731,919, 1–24–56, Cl. 103—120.

Pritchard, Dalton H., to Radio Corp. of America. Color television matrix system. 2,732,425, 1–24–56, Cl. 178—5.4.

Pröpstl, Georg, to Robert Bosch G. m. b. H. Method of making copies and reproductions. 2,732,287, 1–24–56, Cl 41—41.

Pröpstl, Georg, to Robert Bosch G. m. b. H. Method of making printed images. 2,732,286, 1–24–56, Cl. 41—41.

Pulliam, Dudley C. Method of assembling a filament and support. 2,731,707, 1–24–56, Cl. 29—155.5.

Pullman-Standard Car Mfg. Co.: *See*—
Norby, Harold L., and Jones. 2,731,924.

Pulp Reproduction Co.: *See*—
Risch, Arthur H. 2,732,119.

Putzer, Hans: *See*—
Gunkel, Heinrich. 2,731,814.

Quackenbush, Edward W. Seed package. 2,732,064, 1–24–56, Cl. 206—47.

Quaker Oats Co., The: *See*—
Van Arsdell, Fred C., and Gustavson. 2,731,904.

Rabbitt, Milton, and C. F. Binder, to Fram Corp. Combination seal and gasket for end of pleated cartridge. 2,732,031, 1–24–56, Cl. 183—69.

Radio Corp. of America: *See*—
Carson, Benjamin R. 2,732,212.
Gilmore, James P. 2,732,446.
Pritchard, Dalton H. 2,732,425.

Radio Television Products Corp.: *See*—
Reid, Robert L., Laban, Archenbronn, and Slayton. 2,732,529.

Rael, Sol: *See*—
Domberger, Karl, and Rael. 2,731,763.

Railey, James M.: *See*—
Mansell, Carman R., and Davis. 2,732,438.

Ralston Purina Co.: *See*—
Loufek, Louis F. 2,731,778.

Randall, Clayton D. Device for use in glazing doughnuts. 2,731,943, 1–24–56, Cl. 118—31.

Rapp, Howard C., to Belden Mfg. Co. Electric cable. 2,732,422, 1–24–56, Cl. 174—121.

Rasmussen, Ervin F. Rotary snowplow attachment for powered vehicles. 2,731,740, 1–24–56, Cl. 37—43.

Rauland Corp., The: *See*—
Harder, Arthur J., Jr. 2,731,771.
Harder, Arthur J., Jr. 2,731,947.
Kaplan, Sam H. 2,732,314.

Rayner, George A., Jr. Dual action valve. 2,732,166, 1–24–56, Cl. 251—88.

Rayonier Inc.: *See*—
Van Blaricom, Lloyd E., and Gray. 2,732,352.

Raytheon Mfg. Co.: *See*—
Freedman, George. 2,732,519.
Spanos, John. 2,731,704.

Read Standard Corp.: *See*—
Temple, Hiram E. 2,732,057.
Whitfield, Joseph E. 2,732,232.

Records, Chester E. Cemented gravel filter block. 2,732,078, 1–24–56, Cl. 210—171.

Reed, Daniel J., to J. M. Stover. Relief valve for vaporizer. 2,731,801, 1–24–56, Cl. 62—1.

Reed, Edwin E., to Phillips Petroleum Co. Hydraulic control system for liquefied gas flow control valves. 2,731,803, 1–24–56, Cl. 62—1.

Reedy, Eugene F., to Sperry Rand Corp. Display instrument for radio navigation systems. 2,732,550, 1–24–56, Cl. 343—107.

Reese, Morris T.: *See*—
Runaldue, Lewis R., and Reese. 2,732,477.

Reid, Robert L., J. Laban, G. E. Archenbronn, and A. E. Slayton, to Radio Television Products Corp. Inductor structure. 2,732,529, 1–24–56, Cl. 333—78.

Reinhardt, John P. Movable elevated work platform supporting structure. 2,732,118, 1–24–56, Cl. 228—2.

Reiss, Herman. Paper carton cutter. 2,731,715, 1–24–56, Cl. 30—2.

Reliable Automatic Sprinkler Co. Inc., The: *See*—
Grimes, Lester A. 2,732,018.

Reppe, Walter, O. Schlichting, F. Westphal, and A. Amann, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Process for the production of 2,4-dithio-5,5-heptamethylene-spirohydantoin and product. 2,732,380, 1–24–56, Cl. 260—309.5.

Reppert, Erwin J.: *See*—
Olson, Elmer, Kelly, Gibbs, and Reppert. 2,732,038.

Resch, Anton. Foldable wheel assembly for golf bag carts. 2,732,218, 1–24–56, Cl. 280—38.

Rhea, John E., ½ to D. L. Curby. Method of treating seeds. 2,731,770, 1–24–56, Cl. 47—58.

Rhodes, Lonzo H. Audible alarm assembly. 2,731,937, 1–24–56, Cl. 116—87.

Riback, Morris: *See*—
Gilman, Morris A., Riback, and Levin. 2,732,449.

Rice, William L. Tobacco weighing and packing apparatus. 2,732,113, 1–24–56, Cl. 226—71.

Richards, Burton A.: *See*—
MacMillan, Charles W., and Richards. 2,732,233.

Richardson Taylor-Globe Corp.: *See*—
Stancheff, Peter. 2,732,203.

Richman, Seymour, and R. P. Easton, to General Aniline & Film Corp. Anti-halation layers containing fatty acid amides. 2,732,305, 1–24–56, Cl. 95—8.

Ridings, Garvice H., J. H. Hackenberg, R. J. Wise, G. B. Worthen, and D. M. Zabriskie, to The Western Union Telegraph Co. Facsimile transmission systems and apparatus. 2,732,276, 1–24–56, Cl. 346—139.

Ridley, Ian M. Metering and shakedown means for cement gun apparatus. 2,732,107, 1–24–56, Cl. 222—561.

Ringlee, Robert J.: *See*—
Fehr, Robert O., Duckwald, Ringlee, and Hellar. 2,731,834.

Riordan, Albert O., to Baker Perkins Inc. Diverter valves for pneumatic conveying systems. 2,732,263, 1–24–56, Cl. 302—28.

Risch, Arthur H., to Pulp Reproduction Co. Molded pulp bait container. 2,732,119, 1–24–56, Cl. 229—2.5.

Risley, Roger E., and G. D. Kish, to Dresser Industries, Inc. Recessed joint for concrete pipe. 2,732,230, 1–24–56, Cl. 285—135.

Road Machines (Drayton) Ltd.: *See*—
Robb, William M. 2,731,922.

Robb, William M., ½ to Road Machines (Drayton) Ltd. Vehicle for traverse on a monorail system. 2,731,922, 1–24–56, Cl. 105—156.

Robertson, Donald, to Leeds and Northrup Co. Temperature-measuring apparatus. 2,732,416, 1–24–56, Cl. 136—4.

Robertson, Earl M., and W. West, to Eastman Kodak Co. Photosensitization of polymers containing cinnamoyl groups. 2,732,301, 1–24–56, Cl. 95—7.

Robertson, Jackson P. Bearing construction for rotatable disc harrows. 2,732,266, 1–24–56, Cl. 308—19.

Robinson, John W., to Fram Corp. Seal for a coalescer. 2,732,077, 1–24–56, Cl. 210—169.

Robley, Arthur C., 49% to E. J. Oleniczak, and 51% to F. J. Kaczorek. Motor moisture filter and fume control. 2,731,958, 1–24–56, Cl. 123—119.

Rockwood, Albert M., J. E. Ballmer, and C. H. May, to The Murray Corp. of America. Power transmission control. 2,731,849, 1–24–56, Cl. 74—472.

Ronai, Steve: *See*—
Kling, Nelson, and Ronai. 2,731,893.

Rosenberg, Gerhard. Calculating apparatus. 2,732,130, 1–24–56, Cl. 235—71.

Ross, Roy A.: *See*—
Ward, Jack H., and Ross. 2,731,755.

Roth, Adrian W., to General Electric Co. Friction latched electroresponsive switch. 2,732,443, 1–24–56, Cl. 200—5.

Roth, Alice L., and J. C. Witty, to The Troy Sunshade Co. Tiltable umbrella. 2,731,973, 1–24–56, Cl. 135—20.

Rotor Tool Co., The: *See*—
Van Sittert, Paul R. 2,732,050.

Rotter, Theodore, 35% to C. E. Friend. Spinning reel. 2,732,147, 1–24–56, Cl. 242—84.4.

Rousey, Donald: *See*—
Newton, Courtland G., and Rousey. 2,731,903.

Rowe, David A., to Sun Oil Co. Drilling fluid. 2,732,343, 1–24–56, Cl. 252—8.5.

Rowe, Raymond N.: *See*—
Ericson, Eric A., and Rowe. 2,732,455.

Rowe Spacarb, Inc.: *See*—
King, William V. 2,731,906.

Rowland, Leonard, to Hobourn Aero Components Ltd. Electric heating elements. 2,732,479, 1–24–56, Cl. 219—46.

Rubey, Joseph: *See*—
Millie, Orrin, Rubey, and Latil. 2,732,515.

Rubin, Barbara B. Picture with figure forming cutouts. 2,731,766, 1–24–56, Cl. 46—35.

Ruby, Lowell E., to United Aircraft Corp. Differential area compressor bleed control. 2,732,125, 1–24–56, Cl. 230—115.

Ruchin, Zan. Replacement window construction. 2,731,684, 1–24–56, Cl. 20—49.

Rudeen, Carl S. Twine tensioning attachment for baling machine. 2,731,909, 1–24–56, Cl. 100—22.

Rüegg, Ernst, to Escher Wyss Aktiengesellschaft. Multi-stage push-type centrifugal machine. 2,732,073, 1–24–56, Cl. 210—67.

Runaldue, Lewis R., and M. T. Reese, to General Electric Co. Control system. 2,732,477, 1–24–56, Cl. 219—20.

Rutgerswerke-Aktiengesellschaft: *See*—
Geller, Julius. 2,732,332.

Rutherford, Jerome J.: *See*—
Sloan, Harry E., Rutherford, and Hickey. 2,732,216.

Ryan, Donald P. Power transmission device. 2,731,843, 1–24–56, Cl. 74—200.

Ryan, Jerome A., to The Sherwin-Williams Co. Wet ink finishing varnish comprising an oil-alkyd, a liquid halogenated aromatic hydrocarbon and a polymethyl silicone. 2,732,355, 1–24–56, Cl. 260—22.

Saari, Oliver E., to Illinois Tool Works. Method of making speed-reduction gearing. 2,731,886, 1–24–56, Cl. 90—4.

Saco-Lowell Shops: *See*—
Marsh, Henry R. 2,731,787.

Sadler, Fred S., to The Sharples Corp. Treatment of fatty oils. 2,732,388, 1–24–56, Cl. 260—425.

Sakowski, Walter J., to Olin Mathieson Chemical Corp. Process and apparatus for the catalytic decomposition of alkali metal amalgams. 2,732,284, 1–24–56, Cl. 23—184.

Salem-Brosius, Inc.: *See*—
Kendall, Edgar H. 2,731,859.

Sampson, Frederick W., to General Motors Corp. Universal joint. 2,731,813, 1–24–56, Cl. 64—11.

Sandilson, Alexander G., to Waterous Ltd. Dust collector. 2,732,032, 1–24–56, Cl. 183—80.

Sativa Corp.: *See*—
Burkardt, Anton F., and Boeglin. 2,731,820.

Saunders, James H., and W. B. Bennet, to Monsanto Chemical Co. Production of isocyanates from isocyanic acid and amines or amine hydrohalides. 2,732,392, 1–24–56, Cl. 260—453.

Saunders Valve Co. Ltd.: *See*—
Shand, Stanley G. 2,732,170.

Sawyer, Frederick D.: *See*—
Frevik, Ralph C., and Sawyer. 2,731,898.

Schaar, Marvin G.: *See*—
Dedek, Frank G., and Schaar. 2,732,063.

Schaefer, Carl F., to Norden-Ketay Corp. Barometric altimeter. 2,731,831, 1–24–56, Cl. 73—387.

Schaefer, Charles F. Gluing machine for sheet material. 2,731,945, 1–24–56, Cl. 118—246.

Schaefer, Edward J. Motor pump unit. 2,731,918, 1–24–56, Cl. 103—87.

Schaefer, Vincent J., to General Electric Co. Method of making a focused multicell. 2,731,713, 1–24–56, Cl. 29—423.

Schaffner, Theodore, to Mareth Steel Corp. Sectional knock down metal kitchen cabinet. 2,732,273, 1–24–56, Cl. 312—257.

Schaming, Guillaume, to Societe Schostal. Device for centering disks to be flattened between dies. 2,731,860, 1–24–56, Cl. 78—17.

Scheidler, Walter A., to The American Hardware Corp. Fire-exit lock. 2,732,241, 1–24–56, Cl. 292—198.

Schemers, William J. Multiple latch for a refrigerator door. 2,732,235, 1–24–56, Cl. 292—34.

Schetty, Guido: *See*—
Kuster, Werner, and Schetty. 2,732,372.

Scheurer, Otto R.: *See*—
Jackson, Ernest E., and Scheurer. 2,732,100.
Wright, George W., Jauch, Clymer, Jackson, and Scheurer. 2,732,103.

Schilke, Edward. Machine for cutting ties in Venetian blind tapes having paired straps. 2,731,702, 1–24–56, Cl. 26—11.4.

Schilke, Edward. Machine for cutting ties in Venetian blind tapes having staggered straps. 2,731,703, 1–24–56, Cl. 26—11.4.

Schinske, William G., to Ideal Industries, Inc. Connector crimping pliers. 2,731,862, 1–24–56, Cl. 81—15.

Schlechten, Albert W.: *See*—
Gill, Charles B., Schlechten, and Straumanis. 2,732,321.

Schleicher, Agnes E.: *See*—
Schleicher, Eugene M. 2,732,082.

Schleicher, Eugene M., deceased; A. E. Schleicher, executrix. Bookracks. 2,732,082, 1–24–56, Cl. 211—43.

Schlichting, Otto: *See*—
Reppe, Walter, Schlichting, Westphal, and Amann. 2,732,380.

Schlumberger Well Surveying Corp.: *See*—
Blanchard, Andre, and Mennecier. 2,732,525.

Schmal, Alois H., to Mack Mfg. Corp. Rear axle carrier unit. 2,731,855, 1–24–56, Cl. 74—606.

Schmitt, Harry A.: *See*—
Lange, William H., and Schmitt. 2,731,799.

Schneider, Heinrich. Internal combustion engine. 2,731,956, 1–24–56, Cl. 123—32.

Schnell, Aaron L. Flexible bar type bump gate. 2,731,744, 1–24–56, Cl. 39—84.

Schnepf, William K., to General Motors Corp. Motor control means. 2,732,523, 1–24–56, Cl. 318—466.

Schnyder, Auxilius P. Apparatus for feeding solids into pressure vessels. 2,732 086, 1–24–56, Cl. 214—17.

Scholl, Elwood L., to United States Rubber Co. Electroplated structure adapted for use as airfoil section. 2,732,020, 1–24–56, Cl. 170—159.

Schonwald, Milton H., ½ to Mayer B. Goren. Motor vehicle oil drip guard. 2,732,024, 1–24–56, Cl. 180—69.1.

Schumacher, Elmer L., and A. De Angelis, to American Optical Co. Ophthalmic mountings. 2,731,882, 1–24–56, Cl. 88—41.

Schwede, Otto G. Angular discriminating optical device. 2,731,872, 1–24–56, Cl. 88—1.

Scognamillo Engineering Co.: *See*—
Scognamillo, Frank. 2,731,920.

Scognamillo, Frank, to Scognamillo Engineering Co. Rotary pump. 2,731,920, 1–24–56, Cl. 103—136.

Scott, Harold E. B. Hydraulic oscillators. 2,731,953, 1–24–56, Cl. 121—157.

Searle, G. D., & Co.: *See*—
Dodson, Raymond M., and Sollman. 2,732,405.

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Stelger, Norbert, to Hoffmann-La Roche Inc. Basic ethers of aeridones and thiaxanthones. 2,732,374, 1-24-56, Cl. 260—279.
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January 24, 1956 Volume 702 Number 4

TRADEMARKS

NOTICES

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 32,400. (See TM 506,820.)

TM 273,106. (See TM 300,504.)

TM 300,504 (Yo-Yo), Donald F. Duncan, Inc., Bandalore toy spinning tops; **TM 273,106** ("Flores Yo-Yo" within a circle design), Flores Yo-Yo Corporation, Toys of the bandalore type, etc., suit for Declaratory Judgment filed Apr. 13, 1951, D. C., N. D. Ill. (Chicago), Doc. 51c615, *Royal Tops Mfg. Co.* v. *Donald F. Duncan, Inc. et al.* Consent judgment, complaint and counterclaim dismissed except as to finding of validity of the trademarks Nov. 21, 1955.

TM 300,714 (Let the Dog Be the Judge), N. C. Coan, doing business as Animal Foods Company, Dog food, filed Mar. 19, 1954, D. C., S. D. Tex. (Houston), Doc. 8097, *Animal Foods Co. et al.* v. *Canning Corp. of America et al.* Order of dismissal by agreement Nov. 21, 1955.

TM 340,502 (Super Value), Royal Blue Stores, Inc., Coffee, wheat flour, and vinegar, filed Sept. 12, 1955, D. C., S. D. Calif. (San Diego), Doc. 1777–SD, *Super Valu Stores, Inc.* v. *Super-Valu, Inc.* Consent judgment; defendant restrained from use of names "Super-Valu, Inc." and "Super-Valu" (notice Nov. 29, 1955).

TM 350,284 (V. P. D.), Joshua Meier, Incorporated, Transparent envelopes; **TM 564,335** (Spel-Binder), Joshua Meier Company, Inc., Display albums and loose leaf binders, filed Apr. 6, 1955, D. C., S. D. N. Y., Doc. 99/389, *Joshua Meier Co., Inc.* v. *Albany Novelty Mfg. Co.*

TM 411,887 ("Rembrandt Masterpieces" and design), **TM 545,296** (Rembrandt), Rembrandt Lamp Corporation, Tables suitable for use as occasional furniture; **TM 414,292** ("Rembrandt Lamp Masterpieces" and design), **TM 542,137** (Rembrandt), same, Floor lamps, table lamps, torchieres, etc.; **TM 549,261** (Rembrandt), **TM 557,240** ("Rembrandt Lamp Masterpieces" and design), same, Lamp shades, primarily intended for electrical lamps; **TM 558,728** (Rembrandt), same, Electric fans, filed Nov. 22, 1954, D. C., N. D. Ill. (Chicago), Doc. 54c1727, *Rembrandt Lamp Corp.* v. *Rembrandt Art Products, Inc. et al.* Consent decree; trademark registrations held valid and infringed; injunction granted Nov. 23, 1955.

TM 414,292. (See TM 411,887.)

TM 506,398 (all), Detergents, Inc., Detergents for use as a laundry powder; **TM 528,159** ("all" and design), same, Laundry powder, filed Nov. 25, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16072, *Monsanto Chemical Co.* v. *P. C. Richard & Son Inc.* Consent decree Dec. 12, 1955.

TM 528,159. (See TM 506,398.)

TM 532,543. (See TM 508,820.)

TM 534,012 ("Handy Andy" and design), Skil-Craft Corporation, Hand woodworking tools, raw materials, etc., and intended primarily for children's use, filed Nov. 30, 1955, D. C., S. D. N. Y., Doc. 105/184, *Skil-Craft Corp.* v. *M. Lober & Associates et al.*

CONDITION OF TRADEMARK APPLICATIONS AS OF DECEMBER 30, 1955

Total number of applications awaiting action (excluding renewals and republications)..... 9,057
Date of oldest new application..... May 2, 1955
Date of oldest amended application..... Oct. 3, 1955

MERCHANT, JOHN, Executive Examiner

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application	
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I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	6-20-55	10-10-55
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	5-2-55	10-3-55
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	6-8-55	10-13-55
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Registrations Issued..... 467—No. 619,697 to No. 620,163
Renewals Issued..... 59

For the quarter October 1, 1955 to December 31, 1955

Applications filed..... 5247
Registrations issued..... 5082
Renewals issued..... 961
Cancellations, Sec. 8..... 2115

TM 542,137. (See TM 411,887.)

TM 545,298. (See TM 411,887.)

TM 549,361. (See TM 411,887.)

TM 552,446 (Flint-Top), Stewart Paint Mfg. Co., Enamel paint and varnish, filed Nov. 22, 1955, D. C. Minn. (Minneapolis), Doc. 5307, *Stewart Paint Mfg. Co. v. United Hardware Distributing Co.*

TM 556,390 ("Season-all"), Aluminum Fabricating Company of Pittsburgh, Storm sash for permanent mounting and sealing on windows, filed Nov. 30, 1955, D. C., S. D. N. Y., Doc. 105/186, *Aluminum Fabricating Co. of Pittsburgh et al. v. Season-All Window Corp.*

TM 557,240. (See TM 411,887.)

TM 564,335. (See TM 359,284.)

TM 565,961 (Paper Mate), Frawley Corporation, Ball-point pens, filed Mar. 17, 1954, D. C., S. D. N. Y., Doc. 92/21, *Frawley Corp. et al. v. George Grodin Pens, Inc.* Stipulation and order of discontinuance Nov. 28, 1955.

TM 568,466 (Spray net), Helene Curtis Industries, Inc., Wave setting lotion, filed Sept. 12, 1955, D. C., S. D. N. Y., Doc. 103/211, *Helene Curtis Industries, Inc. v. Rexall Drug Co., Inc. et al.* Stipulation and order of dismissal Nov. 22, 1955. Same, filed Nov. 30, 1955, D. C., S. D. N. Y., Doc. 105/178, *Helene Curtis Industries, Inc. v. Apex News & Hair Co., Inc.*

TM 571,203 (Lekas and Drivas), Lekas & Drivas, Inc., Cheese, filed June 17, 1953, D. C., S. D. N. Y., Doc. 86/4, *Lekas & Drivas, Inc. v. Epicure Fruit Gift Shop.* Consent judgment for injunction (notice Nov. 28, 1955).

TM 588,728. (See TM 411,887.)

TM 598,820 (Cinderella), S. Goldberg & Co., Inc., House slippers for men, women, and children; **TM 32,490** ("The Cinderella Shoe", etc. and design), **TM 532,543** (Cinderella), The Charles Meis Shoe Mfg. Co., Ladies' shoes, filed Nov. 30, 1955, D. C. N. J. (Newark), Doc. 1110/55, *S. Goldberg & Co., Inc. v. Cinderella Shoe Co.*

TM 602,421 (Lanolized), W. F. Doyle, Hosiery for men, women, and children; **TM 609,933**, same, Lanolized, Incorporated, Hosiery, underwear, handkerchiefs, etc. for men, women and children, women's slips, etc., filed Nov. 28, 1955, D. C., S. D. N. Y., Doc. 105/153, *Lanolized, Inc. v. Sidney J. Kreiss, Inc.*

TM 608,167 ("Sur Luster" and design), J. W. Robinson, Combined cleaning and polishing preparation for automobiles and the like, in cans and in bottles, filed Nov. 25, 1955, D. C., W. D. La. (Shreveport), Doc. 5268, *J. W. Robinson Co. et al. v. Beauty Luster, Inc. et al.*

TM 609,933. (See TM 602,421.)

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.
As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 657,244. The Sponge Rubber Products Company, Shelton, Conn., to The B. F. Goodrich Company, Akron, Ohio. Filed Dec. 1, 1953.

CELL-TITE

Applicant claims ownership of Reg. Nos. 356,438 and 357,290.

For Waterproof Sheet Material More Specifically Crepe Rubber.

Use since Nov. 19, 1951.

SN 671,650. Robert W. Lang, d. b. a. Planters Aide Products, Chicago, Ill. Filed Aug. 13, 1954.

Planters Aide

For Potting Soil.

Use since July 15, 1953.

SN 679,814. Polymer Industrie Chimiche S. p. A., Milan, Italy. Filed Oct. 11, 1954.



Priority under Sec. 44(d). Italian application filed on Apr. 14, 1954; Reg. No. 118,870, dated July 29, 1954. The drawing is lined for blue.

For Staple and Continuous Single-Filaments and Multi-Filaments of Synthetic Textile Material—Namely, of Polyvinyl Chloride.

SN 684,179. B. D. Eisendrath Tanning Company, Chicago, Ill. Filed Jan. 27, 1955.

VICUNA CALF

Exclusive use of the word "Calf" apart from the mark as shown is disclaimed.

For Leather.

Use since Aug. 25, 1954.

SN 684,388. Norman E. Baughn, d. b. a. Hickory-Nuggets Co., Wilmette, Ill. Filed Mar. 29, 1955.

Hickory-Nuggets

For Cooking Fuel Comprising Pieces of Wood.

Use since April 1954.

SN 684,508. Garfield Williamson, Inc., Jersey City, N. J. Filed Mar. 29, 1955.

FARMINGDALE

For Grass Seed.

Use since Aug. 1, 1948.

SN 686,932. Victrylite Candle Company, Oshkosh, Wis. Filed May 5, 1955.

FIRE WHIZ

For Fire Starters Comprising Excelsior Pads Dipped in Wax, With Twelve of Which Packaged Together.

Use since May 3, 1955.

CLASS 2

SN 679,367. Celluplastic Corporation, Newark, N. J. Filed Jan. 4, 1955. Sec. 2(f).

CLEARSITE

Applicant claims ownership of Reg. No. 322,634.

For Receptacles Made of Plastic Materials and More Specifically Vials for Medicaments, Dispensers for Liquid and Powdered Materials, and General Purpose Cylindrical Containers and Bottles.

Use since Feb. 2, 1934.

SN 680,480. Me-Kox Industri, Oslo, Norway. Filed Jan. 25, 1955.

JIFFY POTS

No claim is made to the exclusive use of the word "Pots" apart from the mark as shown.

For Plant Containers in the Nature of Flower Pots Having Incidental Fertilising Properties.

Use since Sept. 9, 1954.

SN 687,867. Krafco Container Corporation, West Monroe, La. Filed May 19, 1955.



Applicant disclaims the clause "Let Us Solve Your Boxing Problems" apart from the mark as shown. Applicant claims ownership of Reg. No. 563,539.

For Cartons and Boxes Made of Pasteboard, Cardboard, Corrugated Board, and the Like.

Use since Jan. 17, 1955.

SN 689,590. Robert Pulido, d. b. a. Kra-Si Tray Mfg., Tampa, Fla. Filed June 15, 1955.

Kra-Si Tray

The word "Tray" is disclaimed separate and apart from the mark as shown.
For General Utility Metal Trays.
Use since May 23, 1955.

SN 690,141. Giles A. Eldred, d. b. a. Fol-Da-Tank Co., Rock Island, Ill. Filed June 24, 1955.

FOL-DA-TANK

For Water Tanks.
Use since Aug. 17, 1954.

SN 690,456. Charles S. O'Donnell, d. b. a. Go-Go Company, Ardsley-on-Hudson, N. Y. Filed June 29, 1955.

Go-Go

For Disposable Receptacles for Use by Cats, Dogs, and Other Animals.
Use since June 6, 1955.

SN 695,169. Verna L. Merritt, Houston, Tex. Filed Sept. 22, 1955.

"Bottlette" of merit by merritt

For Cloth Bottle Carrier Having Individual Pockets Therein for Carrying Bottles or Cans.
Use since Aug. 15, 1955.

CLASS 3

SN 692,352. Stomar Manufacturing Company, Lansdowne, Pa. Filed Aug. 5, 1955.

COLOR-CHROME

For Bird Cages.
Use since Apr. 25, 1955.

SN 692,603. Hume Manufacturing Co., Inc., North Kansas City, Mo. Filed Aug. 8, 1955.

For Bird Cages.
Use since July 11, 1955.

SN 692,885. Clarence Whitman & Sons, Inc., d. b. a. Prince Gardner Company, St. Louis, Mo. Filed Aug. 11, 1955.

THE REGISTRAR GENERAL

For Billfolds.
Use since July 1, 1955.

SN 692,955. Shwayder Brothers, Inc., Denver, Colo. Filed Aug. 12, 1955.

V.I.P.

For Trunks, Suitcases, Traveling Bags, Brief Cases, Hand Bags, Portfolios, and Wallets.
Use since on or about Dec. 1, 1952.

CLASS 5

SN 672,184. Ruhrchemie Aktiengesellschaft, Oberhausen-Holten (North Rhine), Westphalia, Germany. Filed Aug. 24, 1954.

Ruhrchemie

Priority under Sec. 44(d). German application filed on Feb. 27, 1954; Reg. No. 658,706, dated June 6, 1954.
For Adhesives and Plastics, Resins, and Rubber Substitutes Used in an Adhesive.

CLASS 6

SN 668,287. Watco Ltd., London, England. Filed June 15, 1954.

WATCO

For Liquid Dressing for Stone, Concrete, and Wood Surfaces To Harden the Surface, To Make It Dustless and To Impart Other Properties Thereto.
Use since on or about Sept. 4, 1923.

SN 675,387. Heyl & Co. Chemisch-Pharmazeutische Fabrik, Berlin-Steglitz, Germany. Filed Oct. 25, 1954.

Hydroselector

Applicant claims ownership of German Reg. No. 663,784, dated Nov. 2, 1951.
For Reducing Agents, Especially Double Hydrides for Commercial, Scientific, and Photographic Purposes, Fire-Extinguishing Agents, Tempering and Soldering Agents.

SN 676,157. Bohme Fettchemie GmbH., Dusseldorf, Germany. Filed Nov. 4, 1954.

Lorikal

Applicant claims ownership of German Reg. No. 448,951, dated Oct. 4, 1932.
For Fatty Tanning Materials for Use as Wetting, Coloring, Finishing, Washing, and Bleaching Agents in Textile and Leather Industries.

SN 676,341. Seidlitz Paint & Varnish Co., Kansas City, Mo. Filed Nov. 9, 1954.

FORMULA 55

For Clear, Fortified, Water Repellent Wood Preservative.
Use since Oct. 15, 1954.

SN 679,019. Tatge Chemical Company, Herington, Kans. Filed Dec. 27, 1954.

TOX-O-WIK

For Insecticide.
Use since Oct. 23, 1954.

SN 679,950. UHU-Werk H. u. M. Fischer, Buhl/Baden, Germany. Filed Jan. 14, 1955.

UHU-Line

Applicant claims ownership of German Reg. No. 657,565, dated Sept. 2, 1951.
For Polymery Plastic Preparations—Namely, Dispersions in Form of Pastes Used as Vehicles or Ingredients for Dressing and Finishing of Laundry, Starch for Linen.

SN 681,022. Mastercraft Plastics Co., Inc., Jamaica, N. Y. Filed Feb. 3, 1955.

MONOCIDE

For Germicide for Household or Industrial Use.
Use since on or about July 1, 1953.

SN 682,965. Montrose Chemical Corporation of California, Los Angeles, Calif. Filed Mar. 7, 1955.

Krisp-Chips

For Technical DDT.
Use since Jan. 21, 1955.

SN 683,344. Bengal Company, New York, N. Y. Filed Mar. 14, 1955.

707-B

For Insecticides.
Use since Mar. 15, 1954.

SN 684,119. Farbwerke Hoechst Aktiengesellschaft, vormals Meister Lucius und Brüning, Frankfurt am Main Hochst, Germany. Filed Mar. 24, 1955.

OFNA-PERL

Applicant claims ownership of German Reg. No. 663,908, dated Oct. 7, 1954, and U. S. Reg. No. 565,556.
For Chemicals for Industrial Purposes—Namely, Colour Salts, Colouring Materials and Dyestuffs.

SN 684,324. The Master Builders Company, Cleveland, Ohio, to American-Marietta Company, Chicago, Ill. Filed Mar. 28, 1955.

OMICRON MORTARPROOFING

Applicant claims ownership of Reg. Nos. 258,695 and 325,008.
For Composition To Be Incorporated in Concrete and Mortar Mixes To Improve the Properties Thereof, Particularly To Reduce Shrinkage, To Increase Hardness and Density and To Render the Same More Water Resistant.
Use since 1937.

SN 684,773. Vaughan's Seed Company, Chicago, Ill. Filed Apr. 1, 1955.

SODAR

For Crab Grass Killer.
Use since on or about Feb. 1, 1955.

SN 686,609. Celanese Corporation of America, New York, N. Y. Filed May 2, 1955.

CHEMCEL

For Chemicals for Industrial and Commercial Use, Such as Alcohols, Ketones, Aldehydes, Aliphatic Acids, and Vinyl Compounds.
Use since Feb. 11, 1955.

SN 686,774. Purex Corporation, Ltd., South Gate, Calif. Filed May 3, 1955.

SKYRAY

For Liquid Bleach Having Sanitizing and Deodorizing Properties and Used for Household Purposes.
Use since Apr. 4, 1955.

SN 686,790. R. T. Vanderbilt Company, Inc., New York, N. Y. Filed May 3, 1955.

Butyl Namate

The word "Butyl" is disclaimed except in connection with the mark as shown.
For Rubber Accelerators.
Use since Feb. 15, 1943.

SN 687,428. Wallerstein Company, Inc., New York, N. Y. Filed May 12, 1955.

SACON

Applicant claims ownership of Reg. No. 531,079.
For Sizing Compositions for Use in the Textile Industry.
Use since on or about February 1955.

SN 687,713. Nopco Chemical Company, Harrison, N. J. Filed May 17, 1955.

TANOYL HDF

Applicant claims ownership of Reg. No. 519,872.
For Fat Liquoring and Finishing Compositions.
Use since Jan. 23, 1948.

SN 688,029. Fritzsche Brothers, Inc., New York, N. Y. Filed May 23, 1955.

PŪTROL

For Industrial Odorants—Namely, Masking Agents.
Use since May 6, 1955.

SN 688,117. American Alcolac Corporation, Baltimore, Md. Filed May 24, 1955.

SIPAMIDE

For Stearic Acid Amide, Lauric Acid Amide.
Use since Mar. 2, 1955.

SN 688,152. Philip A. Hunt Company, Palisades Park, N. J. Filed May 24, 1955.

PROVON

For Photographic Film Developer.
Use since Apr. 29, 1955.

SN 691,318. Oxy-Dry Sprayer Corporation, New York, N. Y. Filed July 14, 1955.

Oxy-Dry

Applicant claims ownership of Reg. No. 524,366.
For Anti-Offset Powder.
Use since about March 1942.

CLASS 7

SN 692,353. John A. Roebling's Sons Corporation, Trenton, N. J. Filed Aug. 2, 1955.

Royal Blue

Applicant claims ownership of Reg. No. 119,213.
For Wire Rope.
Use since Feb. 1, 1955.

SN 692,848. The Linen Thread Co., Inc., New York, N. Y. Filed Aug. 11, 1955.

DYAK

For Seine Twine.
Use since Nov. 4, 1954.

CLASS 8

SN 692,890. Astoloid Manufacturing Company, Inc., d. b. a. Judson Manufacturing Company, Brooklyn, N. Y. Filed Aug. 12, 1955.

E-Z FILL

For Cigarette Lighters.
Use since July 14, 1955.

SN 693,491. Ritepoint Pen and Pencil Company, St. Louis, Mo. Filed Aug. 22, 1955.

Life-Liter

For Cigarette Lighters.
Use since May 2, 1955.

SN 694,824. Joseph M. Rubin & Sons, Gloversville, N. Y. Filed Sept. 16, 1955.

Car-Mates

For Cigarette Lighters and Cigarette Cases.
Use since May 1, 1955.

CLASS 9

SN 678,613. Dynamit-Actien-Gesellschaft vormals Alfred Nobel & Co., Troisdorf, Germany. Filed Dec. 20, 1954.



For Ammunition—Namely, Percussion Caps Used With Hunting and Military Rifles, Bullet and Shot Percussion Caps, Cartridge Shells, Cartridges, Lead and Metal Cased Bullets and Shot Pellets.
Use since in or about 1898.

CLASS 10

SN 660,214. Harold J. McVey, Walled Lake, Mich. Filed Jan. 27, 1954.

CHEM-O-SOIL

For Liquid Fertilizer for Aiding Plant Growth.
Use since Oct. 1, 1951.

SN 675,235. Smith-Douglass Company, Incorporated, Norfolk, Va. Filed Oct. 21, 1954.



Applicant disclaims the word "Guano" apart from the mark as shown.
For Fertilizers.
Use since spring of 1934.
Subj. to Intf. with Reg. No. 598,362.

CLASS 11

SN 678,000. Sterling Carbon & Ribbon Co., Irvington, N. J. Filed Dec. 8, 1954.



For Carbon Paper.
Use since Mar. 10, 1952.

CLASS 12

SN 656,596. Spring Packing Corporation, Chicago, Ill. Filed Nov. 18, 1953. Sec. 2(f).

MR. ESPEY

For Waterproofing and Insulating Bituminous Composition for Application to Houses and Other Structures, and for Woven Glass-Impregnated Reinforcing Material for Use With Materials Such as Asphalt or Mica for Coating Buildings or Other Structures.
Use since July 11, 1952.

SN 678,263. Roddis Plywood Corporation, Marshfield, Wis. Filed Dec. 13, 1954.

Roddiscraft
Striated Hardboard

Without waiver of common law rights the words "Hardboard" and "Striated" are disclaimed apart from the mark as shown.
For Hardboard.
Use since June 3, 1954.

SN 679,314. Clarence Le Roy Olson, d. b. a. Le Roy Olson Company, San Francisco, Calif. Filed Jan. 3, 1955.

UNI-BOND

For Construction Materials—Namely, Precast Composition Sleepers and Dry Mixes for Preparation of Cast-in-Place Sleepers.
Use since 1931.

SN 680,827. United States Plywood Corporation, New York, N. Y., to Internationella Siporex AB, Stockholm, Sweden. Filed Jan. 31, 1955.

SIPOREX

Applicant claims ownership of Reg. No. 546,826.
For Lightweight Mineral Structural Building Materials in the Form of Slabs, Lintels, Columns, Beams, Blocks, All Having Insulating Properties.
Use since Mar. 13, 1953.

SN 681,279. Richard A. Maryanski, Chicago, Ill. Filed Feb. 8, 1955.

TILE-BRIC

The illustration of a wall covering element is disclaimed apart from the mark as shown.
For Wall Covering Elements of Various Sizes and Shapes and Made Primarily of Cork.
Use since on or about Jan. 20, 1955.

SN 681,447. Meyer Machine, Inc., Red Wing, Minn. Filed Feb. 10, 1955.

TULITO

For Towers for Flood Lights and the Like.
Use since Mar. 29, 1954.

SN 683,735. Welsh Plywood Corp., Memphis, Tenn. Filed Mar. 17, 1955.

WEEK-ENDER

For Plywood, Doors, Veneer Plywood Edging, Plywood Panels.
Use since Mar. 1, 1954.

SN 686,696. N. V. Schokbeton, Zeist, Netherlands. Filed May 2, 1955.



Applicant claims ownership of Dutch Reg. No. 103,805, dated Jan. 25, 1950.

For Mechanically Compacted Molded Concrete Elements for Structural Building Purposes, Road Paving Purposes, Floor Paving Purposes, and as Stands for Bicycles.

SN 686,718. Arcon (Proprietary) Limited, London, England. Filed May 3, 1955.

ARCON

Applicant claims ownership of British Reg. No. 722,732–3, dated Oct. 15, 1953.

For Prefabricated Buildings Which Are Permanent and Not Transportable; Casement Windows (Metal), Metal Doors, Roof Corrugated, Laminated and Transparent Plastics and Fibrous Materials for Skylights; Reinforced Corrugated Asbestos and Corrugated Asbestos, Fibreboard, Asbestos and Fibre Sheets All Used for Ceilings; Metal Roofs, Metal Gutters.

SN 686,819. Feather-Lite Manufacturing Co., Detroit, Mich. Filed May 4, 1955. Sec. 2(f).

Feather-Lite

For Storm Windows, Combination Windows, Doors, and Windows.

Use since on or about Oct. 1, 1946.

SN 692,072. William J. Mueller, Racine, Wis. Filed July 28, 1955.

MUELLER ROLL-RITE

The drawing is lined for the color yellow.

For Metal Roll-Up Awnings.

Use since June 30, 1955.

SN 693,601. R. Guastavino Company, Woburn, Mass. Filed Aug. 24, 1955. Sec. 2(f).

RUMFORD

For Ceramic Tile Used in Building Construction.

Use since Jan. 15, 1914.

SN 696,471. T-K Roofing Manufacturing Co., Chester, W. Va. Filed Oct. 14, 1955.

T-K

For Roofing Shingles, Mica Surfaced Roll Roofing Material, Mineral Surfaced Roll Roofing Material, Simulated Brick and Stone Siding Strips Formed of Flexible Sheet Material Impregnated With Asphalt or the Like in Roll Form, Plastic Roofing Cement, and Roofing Asphalt.

Use since June 1941.

SN 696,647. The Formigli Corporation, Berlin, N. J. Filed Oct. 18, 1955.

TWIN TEE

For Precast Concrete Roof and Floor Slabs for Use in Building Construction.

Use since Sept. 13, 1955.

SN 696,691. Brown Company, Berlin, N. H. Filed Oct. 19, 1955.

BERMIDRAIN

Applicant claims ownership of Reg. Nos. 91,941, 171,053, and 427,500.

For Fiber Conduits or Pipes for Drainage.

Use since Sept. 8, 1955.

SN 696,692. Brown Company, Berlin, N. H. Filed Oct. 19, 1955.

BERMISLEEVE

Applicant claims ownership of Reg. Nos. 91,941, 171,053, and 427,500.

For Fiber Pipes for Natural Gas Transmission.

Use since Sept. 8, 1955.

SN 696,693. Brown Company, Berlin, N. H. Filed Oct. 19, 1955.

BERMISEPTIC

Applicant claims ownership of Reg. Nos. 91,941, 171,053, and 427,500.

For Fiber Pipes for Sewerage Disposal.

Use since Sept. 8, 1955.

SN 696,694. Brown Company, Berlin, N. H. Filed Oct. 19, 1955.

BERMIROAD

Applicant claims ownership of Reg. Nos. 91,941, 171,053, and 427,500.

For Fiber Conduits or Pipes for Road Drainage.

Use since Sept. 8, 1955.

SN 696,695. Brown Company, Berlin, N. H. Filed Oct. 19, 1955.

BERMIGATION

Applicant claims ownership of Reg. Nos. 91,941, 171,053, and 427,500.

For Fiber Pipes for Irrigation Purposes.

Use since Sept. 8, 1955.

SN 696,879. Flamingo Tile Corporation, d. b. a. Flamingo Tile Corp., Lake Wales, Fla. Filed Oct. 21, 1955.



The drawing is lined for red.

For Ceramic Tiles.

Use since Jan. 3, 1953.

SN 696,880. Flamingo Tile Corporation, d. b. a. Flamingo Tile Corp., Lake Wales, Fla. Filed Oct. 21, 1955.

FLAMINGO TILE

The word "Tile" is disclaimed apart from the mark as shown.

For Ceramic Tiles.

Use since July 29, 1955.

SN 696,947. Ray E. Church, Cincinnati, Ohio. Filed Oct. 24, 1955.

multi-park

For Shelter Roof.

Use since Oct. 7, 1955.

SN 696,948. Ray E. Church, Cincinnati, Ohio. Filed Oct. 24, 1955.

patio-park

For Shelter Roof.

Use since Oct. 12, 1955.

CLASS 13

SN 665,202. Heat Timer Corporation, New York, N. Y. Filed Apr. 26, 1954.

VARIVALVE

For Adjustable Vent Valve and Part Thereof for Heating Apparatus.

Use since Mar. 1, 1954.

SN 695,031. S. S. Sarna, Inc., New York, N. Y. Filed Sept. 20, 1955.

Sarnabrass

For Trays, Bowls, Bases, Pitchers, Dishes, Trivets of Base Metalware.

Use since Feb. 15, 1955.

SN 695,282. Conoflow Corporation, Philadelphia, Pa. Filed Sept. 26, 1955.

CONOFLOW

For Gas and Water Pressure Regulators and Control Valves for Gas, Air, Liquids, Sludge, and Any Other Compositions and Compounds Which Flow Through Pipes.

Use since July 1945.

SN 695,364. Zephyr American Corporation, New York, N. Y. Filed Sept. 26, 1955.

Minilist

For Combined Address List and Key Chain.

Use since July 1, 1955.

SN 695,424. The Kennedy Valve Mfg. Co., Elmira, N. Y. Filed Sept. 27, 1955.

KENALLOY

For Valve Parts—Namely, Valve Stems.

Use since Feb. 15, 1954.

SN 695,517. Aluminum Specialty Company, Manitowoc, Wis. Filed Sept. 29, 1955.

BAKE 'N' TAKE

For Covered Cake Pan.

Use since Jan. 9, 1952.

SN 695,567. The Pyro-Chek Company, Bridgeport, Conn. Filed Sept. 29, 1955.

PYRO-CHEK

For Fuel Control Valves and Oil Tank Vent Caps.

Use since on or about June 21, 1952.

CLASS 14

SN 672,778. American Nickeloid Company, Peru, Ill. Filed Sept. 7, 1954. Sec. 2(f) as to "Nickeloid."

NICKELOID METALS

Applicant claims exclusive right to the word "Metals" as a part of the mark, but not otherwise. Applicant claims ownership of Reg. No. 353,829.

For Sheets, Strips, and Coils of Aluminum, Brass, Copper, Steel, and Zinc; Sheets, Strips, and Coils of Aluminum, Brass, Copper, Steel, and Zinc, Plated With Brass, Chromium, Copper, and Nickel and/or Coated With Lacquer or Other Protective and Decorative Coatings.

Use since on or about June 28, 1954; "Nickeloid" was first used on nickel plated sheet metal in July 1898.

SN 679,040. The Electric Materials Co., North East, Pa. Filed Dec. 28, 1954.

For Rough and Machined Castings, Rough and Machined Forgings, Rough and Machined Stampings and Extrusions, Cast, Forged, and Rolled Anodes for Electrolytic Plating, Brass and Copper Mill Products, and Soldering Coppers.
Use since Feb. 1, 1949.

SN 679,257. Illinois Zinc Company, Chicago, Ill. Filed Dec. 31, 1954. Sec. 2(f).

Applicant claims ownership of Reg. No. 118,299.
For Zinc, Metal in Sheet and Strip Form.
Use since 1929.

SN 696,828. Rea Magnet Wire Company, Inc., Fort Wayne, Ind. Filed Oct. 20, 1955.

For Packaged Wire.
Use since September 1954.

SN 697,385. David M. Morgenstern, Euclid, Ohio. Filed Oct. 31, 1955.

VACALOY

For Castings Produced Under Vacuum.
Use since Sept. 5, 1955.

SN 697,513. Vanadium-Alloys Steel Company, Latrobe, Pa. Filed Nov. 1, 1955.

CHROMEWEAR

For Cold Work Die Steel.
Use since Oct. 25, 1951.

CLASS 15

SN 672,180. Ruhrchemie Aktiengesellschaft, Oberhausen-Holten (North Rhine), Westphalia, Germany. Filed Aug. 24, 1954.

Ruhrchemie

Priority under Sec. 44(d). German application filed on Feb. 27, 1954; Reg. No. 658,706, dated June 11, 1954.
For Industrial Oils and Greases, Lubrication Oils, Lubricants, Synthetic Mineral Oils, Paraffins, Hard Paraffins, and Slab Paraffins.

SN 681,237. Wisconsin Independent Oil Company, Milwaukee, Wis. Filed Feb. 7, 1955.

The number "99" is disclaimed apart from the mark as shown.
For Gasoline.
Use since March 1952.
Subj. to Intf. with SN 689,536.

SN 689,536. Western Oil and Fuel Company, Minneapolis, Minn. Filed June 14, 1955. Sec. 2(f).

WESCO

Applicant claims ownership of Reg. Nos. 435,043, 600,640, and others.
For Motor Lubricants, Lubricating Oils, Lubricating Grease, and Fuel Oil.
Use since Sept. 30, 1932, on fuel oil.
Subj. to Intf. with SN 681,237 and SN 681,236.

SN 690,968. Pist-N-Lube, Inc., Akron, Ohio. Filed July 8, 1955. Sec. 2(f).

PIST-N-LUBE

Applicant claims ownership of Reg. No. 601,939.
For Lubricating Oil Used as an Additive to Motor Fuel To Lubricate Moving Parts in Motors.
Use since Jan. 21, 1950.

CLASS 16

SN 548,323. The Black Diamond Paint & Varnish Works, Inc., Cincinnati, Ohio. Filed Jan. 30, 1948. Sec. 2(f).

Watertite

The trademark comprises the word "Watertite" and the pictorial representation of a circle with water scene, buoy, flag, and leaf design outside the circle. Applicant claims ownership of Reg. No. 107,226.
For Dry Paints, Ready-Mixed Paints, Paints for Cement, Varnishes, Wood Stains, Lacquers, Paint Driers, Paste Paints, Heat Resisting Aluminum Paints, Paint Enamels, Permanent Colors in Oil; Waterproofings—Namely, Flat Cement and Stucco Paints, Swimming Pool Paint and Black Paint.
Use since 1914.

SN 678,853. Fidelity Chemical Products Corp., Newark, N. J. Filed Dec. 23, 1954.

"483"
SPRA-GARD

For Solution of a Plastic Which Is Applied by a Spray Gun and Which Dries on Evaporation of the Solvent Leaving a Plastic Coating on a Metal Surface as Protection Against Rusting and Abrasion.
Use since May 15, 1954.

SN 683,203. Indianapolis Paint & Color Co., Indianapolis, Ind. Filed Mar. 10, 1955. Sec. 2(f).

WEAR-RITE

Applicant claims ownership of Reg. No. 326,904.
For Varnish.
Use since on or about May 1, 1913.

SN 693,715. Shell Chemical Corporation, New York, N. Y. Filed Aug. 24, 1955.

NEOSOL

Applicant claims ownership of the mark shown in Reg. No. 377,368.
For Lacquer Thinner, Lacquer Solvent, Paint Thinner, and Paint Solvent.
Use since Nov. 13, 1939.

SN 695,024. Rinshed-Mason Company, Detroit, Mich. Filed Sept. 20, 1955.

PERMAPON

Applicant claims ownership of Reg. No. 296,298.
For Enamel, and Specifically Baking Enamel and Air Dry Enamel.
Use since Aug. 3, 1955.

SN 696,284. Binney & Smith Inc., New York, N. Y. Filed Oct. 12, 1955.

GENIE

Applicant claims ownership of Reg. Nos. 431,215 and 534,268.
For Ready-to-Use Paint.
Use since Sept. 2, 1955.

CLASS 17

SN 692,721. Larus & Brother Company, Richmond, Va. Filed Aug. 9, 1955.

EDGEWORTH
Junior

Applicant claims ownership of Reg. Nos. 128,095, 609,030, and others.
For Smoking Tobacco.
Use since Oct. 21, 1935.

SN 692,795. Frank P. McKeon, Troy, N. Y. Filed Aug. 10, 1955.

JOLLY PUFF

For Cigars.
Use since May 1, 1951.

CLASS 18

SN 651,767. Dr. L. D. Le Gear Medicine Company, St. Louis, Mo. Filed Aug. 13, 1953. Sec. 2(f) as to "Dr. Le Gear's" and "Rediwormer."

REDIWORMER
WITH
DR. LEGEAR'S
HOG WORM
POWDER

The words "Hog Worm Powder" are disclaimed apart from the rest of the mark. Applicant claims ownership of Reg. Nos. 293,263, 527,159, and 126,444.
For Vermifuge Admixed in an Animal Feed.
Use since July 2, 1953; and Oct. 15, 1918, as to "Dr. Le Gear's."

SN 657,714. Max J. Gruhin, d. b. a. Rofay Products, Jersey City, N. J. Filed Dec. 9, 1953.

Rofay

For Medicinal Ointment Used for Relief of Muscular Aches and Pains.
Use since on or about Jan. 1, 1947.

SN 669,238. Centrokomise, Podnik Zahraničního Obchodu pro Dovoz a Vývoz Potravin, Prague, Czechoslovakia. Filed July 1, 1954. Sec. 2(f).

NATURAL CARLSBAD SPRUDEL SALT

The words "Natural" and "Salt" are disclaimed when used apart from the mark. Applicant claims ownership of Czechoslovakian Reg. No. 150,475, dated Mar. 3, 1951.
For Mineral Salts Obtained From Mineral Waters.
Use since about 1920; since about 1843 as to "Natural Carlsbad Sprudel Salt."

SN 669,796. Nu-Health Laboratories, Inc., Lynbrook, N. Y. Filed July 12, 1954. Sec. 2(f).

ACTIVATOR X

For Unsaturated Fatty Acid Fractions, Derived From Mammalian and Fish Liver Oils, Used as an Ingredient for a Food Nutrient.
Use since Nov. 5, 1949.

SN 670,193. Otis E. Glidden & Company, Inc., Waukesha, Wis. Filed July 19, 1954.

Zylax

For Laxative Compound in Tablet Form.
Use since July 1, 1954.

SN 671,787. The Stuart Company, Pasadena, Calif. Filed Aug. 16, 1954.

SOFTAB

For Vitamin Preparations and Sulpha Drugs in Tablet Form.
Use since July 27, 1954.

SN 672,177. Nordmark-Werke Gesellschaft mit beschraenkter Haftung, Hamburg, Germany. Filed Aug. 24, 1954.

HEPATRAT

Applicant claims ownership of German Reg. No. 379,994, dated Jan. 16, 1928.
For Liver Extracts for Treatment of Pernicious Anaemia and Funicular Myelosis, Post-Convalescence, Sprue, Enterocolitis, Granulocytosis, the Myelopathies, Psoriasis, Pemphigus, Toxemia, Allergy Diseases, Poliomyelitis.

SN 672,738. Jessca, Inc., Columbus, Ga. Filed Sept. 3, 1954.

DERMABATH

For Dusting Powder for Treatment of Fungus Infections in Chinchillas, Suitable for Use as a Dust Bath.
Use since May 2, 1954.

SN 673,380. The Pinex Company, Inc., Fort Wayne, Ind. Filed Sept. 17, 1954.

PABASONE

For Medicinal Preparation in Tablet Form for the Relief of Pain of Arthritis, Rheumatism, and the Like.
Use since Aug. 31, 1954.

SN 673,802. Sidney Beskind, d. b. a. The Tanophene Co., Miami Beach, Fla. Filed Sept. 27, 1954.

SEA & SUN

For Medicinal Preparations in the Nature of Ointments and Lotions for the Treatment of Skin Irritations.
Use since June 22, 1954.

SN 674,572. Donley-Evans & Company, St. Louis, Mo. Filed Oct. 11, 1954.

LIPO-TRIAZINE

For Medicine, Containing a Combination of Sulfonamides in Oral Fat Emulsion Vehicle.
Use since Sept. 7, 1954.

SN 675,778. Evergreen Mills, Inc., Ada, Okla. Filed Nov. 1, 1954.

RUMENADE

For High Protein Cattle Feed Supplement.
Use since July 1953.

SN 676,788. The Creolin Co., Rahway, N. J. Filed Nov. 17, 1954. Sec. 2(f).

PEARSON

For Bactericide for Use as a Disinfectant, Antiseptic, and Deodorant.
Use since 1907.

SN 676,874. Crowl Chemical Company, Shamokin, Pa. Filed Nov. 18, 1954. Sec. 2(f).

CROWL'S

Applicant claims ownership of Reg. No. 373,861.
For Laxative Cold Tablets.
Use since Nov. 11, 1929.

SN 677,000. Chas. Pfizer & Co., Inc., Brooklyn, N. Y. Filed Nov. 19, 1954.

Poly terra

Applicant claims ownership of Reg. No. 547,146.
For Vitamin-Mineral Preparation.
Use since Jan. 9, 1950.

SN 678,360. American Cyanamid Company, New York, N. Y. Filed Dec. 15, 1954.

MEGASUL

Applicant claims ownership of Reg. No. 505,852.
For Coccidiostat, an Agent for the Prevention and Treatment of Coccidiosis in Poultry.
Use since June 27, 1949.

SN 679,117. Joseph J. Schwartz, d. b. a. Eagles Drug Co., Kansas City, Mo. Filed Dec. 29, 1954.

FAMILY BRAND

For Rubbing Alcohol, Castor Oil, Spirits of Turpentine for Medicinal Purposes, Solution of Hydrogen Peroxide, Epsom Salts, Soda Mints for Heartburn and Upset Stomach, Aspirin, Saccharin for Medical Purposes, Suppositories, Mercurial Antiseptic, Iodine, Spirits of Camphor, Camphorated Oil, Spirits of Nitre (an Alcoholic Solution of Ethyl Nitrite) and Mineral Oil.
Use since during the summer of 1947.

SN 679,987. C. E. Fulford Limited, Leeds, England. Filed Jan. 17, 1955.

SENLAX

Applicant claims ownership of British Reg. No. 434,100, dated Feb. 8, 1923.
For Laxative.

SN 681,252. Coffarom Aktiengesellschaft, Glarus, Switzerland. Filed Feb. 8, 1955.

LAEVOSTROPHAN

Applicant claims ownership of Swiss Reg. No. 127,493, dated Dec. 8, 1948, and U. S. Reg. Nos. 596,278 and 596,279.
For Pharmaceutical Preparations Containing Levulose for the Treatment of Heart and Blood Vessel Diseases.

SN 681,253. Coffarom Aktiengesellschaft, Glarus, Switzerland. Filed Feb. 8, 1955.

LAEVOTONIN

Applicant claims ownership of Swiss Reg. No. 130,011, dated June 1, 1949, and U. S. Reg. Nos. 596,278 and 596,279.
For Pharmaceutical Preparations Containing Levulose for Use as a Tonic in Convalescence and as a Stimulus of Physical and Intellectual Capacities.

SN 681,254. Coffarom Aktiengesellschaft, Glarus, Switzerland. Filed Feb. 8, 1955.

LAEVOPUR

Applicant claims ownership of Swiss Reg. No. 127,492, dated Dec. 8, 1948, and U. S. Reg. Nos. 596,278 and 596,279.
For Pharmaceutical Preparations Containing Levulose for Treatment of Liver Diseases and for Liver Protection Therapy.

SN 682,124. Chemical Hormone Corporation, New York, N. Y. Filed Feb. 23, 1955.

DESTEROLIN

For Pharmaceutical Preparations and Drugs Affecting the Cholesterol Content of the Blood.
Use since Feb. 1, 1955.

SN 684,031. F & R Chemical and Pharmaceutical Products, Cincinnati, Ohio. Filed Mar. 23, 1955.

SUN-VITE

The lining on the drawing indicates the color red, but no claim is made to such color.
For Vitamin-Mineral Supplementation Tablets.
Use since on or about Feb. 7, 1955.

SN 684,173. Wallace & Tiernan Incorporated, Belleville, N. J. Filed Mar. 24, 1955.

MALCOTRAN

For Preparation for the Treatment of Peptic Ulcer and Gastro-Intestinal Tract Spasm.
Use since Oct. 3, 1951.

SN 684,239. Schenley Laboratories, Inc., New York, N. Y. Filed Mar. 25, 1955.

NUCROSE

For Oral Fat Emulsion Used as a Dietary Supplement.
Use since Apr. 24, 1952.

SN 684,961. The Norwich Pharmacal Company, Norwich, N. Y. Filed Apr. 5, 1955.

Furamazone

Applicant claims ownership of Reg. Nos. 403,279, 587,238, and others.
For Antibacterial Preparation.
Use since Nov. 25, 1952.

SN 685,414. Trammell A. Wise, d. b. a. Swigs Company, Emory University, Ga. Filed Apr. 12, 1955.

Swigs

For Cough Remedy Known as a Cough Balsam, for the Relief of Coughs, Huskiness of the Voice, and Irritations Due to Colds.
Use since 1945.

SN 686,159. Cutter Laboratories, Berkeley, Calif. Filed Apr. 25, 1955. Sec. 2(f).

Poisonok

Applicant claims ownership of Reg. Nos. 432,782 and 522,866.
For Extract of the Active Principle of Rhus Diversiloba Used To Enable the System To Build Resistance to the Rash Produced by Poison Oak or Ivy.
Use since February 1924.

SN 688,737. Kremers-Urban Company, Milwaukee, Wis. Filed June 2, 1955.

SALIMEPH-C

For Analgesic-Skeletal Muscle Relaxant.
Use since Aug. 10, 1953.

SN 688,838. Middleton & Company, Inc., Gadsden, Ala. Filed June 3, 1955.

Myracal Mints

No claim is made to the word "Mints" apart from the mark shown.
For Medicinal Product for Preventing or Stopping Smoking.
Use since Oct. 4, 1954.

SN 688,934. Johnston Drug Corporation, Los Angeles, Calif. Filed June 6, 1955.

PEELS

For Non-Habit Forming Sleeping Tablet.
Use since May 13, 1955.
Subj. to Intf. with SN 690,818.

SN 689,051. Roy S. Lodolyn, d. b. a. Lodolyn Drug Products Co., Lakewood, Ohio. Filed June 7, 1955.

R-TRA-DOL

For Medicinal Preparation in Tablet Form for the Symptomatic Treatment of Muscular Aches, Headaches, Arthritis, and Rheumatism.
Use since May 9, 1955.

SN 690,818. Hood Sales Corporation, New York, N. Y. Filed July 6, 1955.

"PEELS"

For Aid for the Relief of Insomnia in Capsule Form.
Use since Apr. 9, 1954.
Subj. to Intf. with SN 688,934.

CLASS 19

SN 620,945. Whiteman Manufacturing Company, Los Angeles, Calif. Filed Nov. 6, 1951. Sec. 2(f).



The drawing is lined to indicate the colors red and gold.
For Powered Vehicle Having a Dump Container Thereon Used for Transporting Concrete, Cement, and the Like.
Use since July 28, 1947.

SN 659,333. Western Mfg. Co., Inc., Arkansas City, Kans. Filed Jan. 11, 1954.



For Merchandise Handling Apparatus Comprising Hand Trucks for Carrying Merchandise Such as Garments in a Store, Warehouse, Factory, or the Like.
Use since on or about June 1, 1953.

SN 662,449. Heir Manufacturing Company, Los Angeles, Calif. Filed Mar. 11, 1954.

HALL-MARK

For Windows for Automobile Trailers.
Use since Feb. 12, 1954.

SN 685,473. Bernard Cahn Co., Inc., New York, N. Y. Filed Apr. 14, 1955.

MOTORAMA

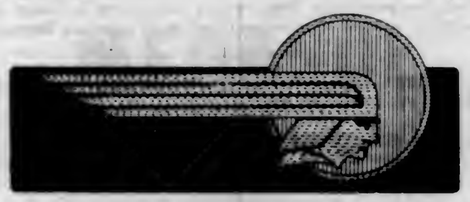
For Wallet-Type Container Especially Adapted for Holding Maps for Use on Automobile Sun Visors.
Use since Feb. 25, 1954.

SN 691,680. Electromite, Inc., Marianna, Fla. Filed July 21, 1955.

Electromite

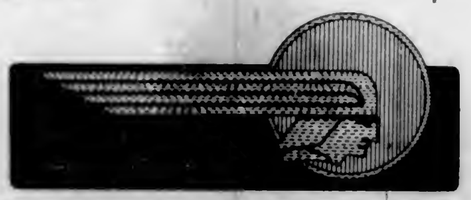
For Small Electrically Propelled Vehicles Using Storage Batteries for Power.
Use since June 1955.

SN 692,810. Spartan Aircraft Company, Tulsa, Okla. Filed Aug. 10, 1955.



The drawing is lined for silver, red, and gold, but no claim is made to color. Applicant claims ownership of Reg. Nos. 428,491, 503,966, and 516,021.
For Automotive Trailer House Coaches.
Use since Mar. 28, 1950.

SN 692,811. Spartan Aircraft Company, Tulsa, Okla. Filed Aug. 10, 1955.



The drawing is lined for silver, red, and gold, but no claim is made to color. Applicant claims ownership of Reg. Nos. 428,491, 503,966, and 516,021.
For Automotive Trailer House Coaches.
Use since Mar. 30, 1955.

SN 694,143. Libbey-Owens-Ford Glass Company, Toledo, Ohio. Filed Sept. 2, 1955.

CROMIR

For Rear View Mirrors for Automobiles and Trucks.
Use since Aug. 10, 1955.

SN 694,275. Thermo-Aire Manufacturing Company, Kansas City, Mo. Filed Sept. 6, 1955.



For Automotive Air Conditioners.
Use since Apr. 8, 1955.

SN 694,353. Carter Craft Corporation, Panama City, Fla. Filed Sept. 8, 1955. Sec. 2(f).

CARTER CRAFT

Applicant claims ownership of Reg. No. 571,858.
For Plywood Boats.
Use since July 1949.

SN 694,440. The Metropolitan Body Company, Bridgeport, Conn. Filed Sept. 9, 1955.

METRO-LITE

Applicant claims ownership of Reg. No. 345,861.
For Bodies for Commercial Motor Vehicles—Namely, Trucks, Busses, Coaches, and Particularly Bodies Used on Multi-Stop Chassis, and Structural Parts Thereof.
Use since Aug. 25, 1955.

CLASS 21

SN 649,381. Mitchell Manufacturing Company, Chicago, Ill. Filed June 25, 1953.



For Electrically Operated High Fidelity Record Players.
Use since June 19, 1953.

SN 672,733. Grundig Radio-Werke G. m. b. H., Furth, Germany. Filed Sept. 3, 1954.



Applicant claims ownership of German Reg. No. 612,070, dated Sept. 29, 1951.
For Radio Receivers and Parts Thereof, Television Receivers and Parts Thereof, Television Cameras, Apparatus for Sound Recording by Wire or Tape, Magnetic and Static Loudspeakers.
Use since March 1949.

SN 672,734. Grundig Radio-Werke G. m. b. H., Furth, Germany. Filed Sept. 3, 1954.

GRUNDIG

Applicant claims ownership of German Reg. No. 606,482, dated Apr. 11, 1952.
For Radio Receivers and Parts Thereof, Television Receivers and Parts Thereof, Television Cameras, Apparatus for Sound Recording by Wire or Tape, Magnetic and Static Loudspeakers.
Use since March 1949.

SN 672,735. Grundig Radio-Werke G. m. b. H., Furth, Germany. Filed Sept. 3, 1954.

Grundig

Applicant claims ownership of German Reg. No. 653,936, dated Feb. 24, 1954.
For Radio Receivers and Parts Thereof, Television Receivers and Parts Thereof, Television Cameras, Apparatus for Sound Recording by Wire or Tape, Magnetic and Static Loudspeakers.
Use since March 1949.

SN 673,254. Tropic-Aire, Incorporated, Elgin, Ill. Filed Sept. 15, 1954.

TROPIC-AIRE

Applicant claims ownership of Reg. Nos. 237,236 and 363,646.
For Electric Blankets, Electric Sheets, and Temperature Controls Therefor, Electric Convection and Reflection Air Heaters, Combined Electric Air Heaters and Electric Fans.
Use since during July 1952 on electric blankets.

SN 674,929. Atlas Consolidated Corp., Brooklyn, N. Y. Filed Oct. 18, 1954.

SKIN-TEX

For Sprayed Lampshades and Chinese Lanterns for Use With Electrical Lamps.
Use since June 10, 1954.

SN 676,808. Imperial Lighting Products Company, Latrobe, Pa. Filed Nov. 17, 1954.



For Incandescent Residential Lighting Fixtures.
Use since March 1938.

SN 677,042. Dripettes, Inc., Seattle, Wash. Filed Nov. 22, 1954.

DRIPETTES

For Disposable Foil Drip Pans for Burners of Electric Ranges.
Use since on or about May 1, 1954.

SN 677,130. Bantam-Lite, Inc., New York, N. Y. Filed Nov. 23, 1954.

VANITY-LITE

For Flashlight and Mirror Combination for Pocket or Purse Use.
Use since Oct. 5, 1954.

SN 677,309. Electroacustic G. m. b. H., Kiel, Germany. Filed Nov. 26, 1954.

ELECTROACUSTIC

Applicant claims ownership of German Reg. No. 632,460, dated Jan. 12, 1953.
For Phonograph Record Players and Phonograph Record Changers.

SN 678,420. Rome Cable Corporation, Rome, N. Y. Filed Dec. 15, 1954.

TREEPLEX

For Wire and Cable.
Use since Nov. 1, 1954.

SN 678,865. Ideal Industries, Inc., Sycamore, Ill. Filed Dec. 23, 1954.

Wrap-Cap

For Covers, Caps, or Insulators for Electrical Connections or Joints.
Use since Apr. 5, 1954.

SN 678, 984. General Electric Company, Schenectady, N. Y. Filed Dec. 27, 1954.

FILLERARC

For Electric Arc Welding Equipment and the Parts Thereof Including a Welding Gun, a Wire Drive Unit, and a Welding Generator.
Use since June 1953.

SN 679,210. C. Conradty, Nurnberg, Germany. Filed Dec. 31, 1954.

Applicant claims ownership of German Reg. No. 649,852, dated Dec. 11, 1953.
For Carbon Rods for Arc Lamps and Batteries; Artificial Graphite; Plates, Electrodes, Rods, and Other Molded Articles Made of Artificial Graphite; Molded Silicon Carbide Rods; Carbon and Graphite Sealing Gaskets; Carbon Plates; Carbon Rods; Carbon Electrodes for Primary Cells, for Storage Batteries, for Liquid and Solid Electrolysis, for the Production of Iron, Steel, Aluminum, Zinc, Carbide, Nitrogen and for Other Metallurgical Purposes; Carbon, Graphite, and Metal Brushes for Electric Generators and Motors, Automobile Starters, and Ignition Apparatus; Sliding and Pressure Contacts; Heating Rods for Thermal Apparatus; Carbon and Graphite Welding Rods for Electric Arc Welding; Telephone Carbons; Carbon Resistances for Lightning Rods and High Tension Safety Devices; and Film Resistances for Radio Apparatus and Measuring Instruments; Graphite Anodes for Electronic Tubes.

SN 679,484. Phelps Dodge Copper Products Corporation, New York, N. Y. Filed Jan. 5, 1955.

Styrofil

For Electric Cables.
Use since on or about Feb. 19, 1954.

SN 680,449. Buck Electrical Manufacturing Co., Roselle, N. J. Filed Jan. 25, 1955.

Buck

For Nylon Insulated Connectors and Copper Splicing Sleeves.
Use since June 7, 1954.

SN 680,560. Vectron, Inc., Waltham, Mass. Filed Jan. 26, 1955.

VECTRON

For Electronic Apparatus, and Electro-Mechanical Equipment Including Electronic Oscillators, Potentiometers.
Use since September 1950.

SN 681,058. Bell & Howell Company, Chicago, Ill. Filed Feb. 4, 1955.

For Electric Tape Sound Recorders and Reproducers.
Use since January 1954.

SN 682,100. Advance Machine Company, Minneapolis, Minn. Filed Feb. 23, 1955.

Gyro

For Electric Floor Polishing Machines.
Use since Nov. 29, 1954.

SN 685,477. Chicago Standard Transformer Corp., Chicago, Ill. Filed Apr. 14, 1955. Sec. 2(f).

CHICAGO

For Electric Transformers; Fixed and Variable Transformers—Namely, Miniature Transformers; Reactors—Namely, Audio and Power Reactors for Radio, Power Packs of the Dry Metallic Vacuum or Gaseous Tube Type; Transmitters—Namely, Radio Frequency Low Power Transmitters for Amateur and Industrial Uses, Amplifiers, Amplifier Kits; Voltage Adjusting and Regulating Equipment—Namely, Manually Operated Autotransformers and Voltage Adjusters; and Electronic Control Equipment—Namely, Autotransformers for Use With Manually Operated Switches for Adjustment of Amperage Coupled With Voltage Regulators and Indicators; Electric Reactors; and Electric Filters.
Use since July 31, 1930.

SN 688,184. Power Equipment Company, Detroit, Mich. Filed May 24, 1955.

PECO

The mark consists of the letters "Peco" set forth by use of various electronic symbols.
For Controlled Rectifier Power Supply A. C. Line Voltage Regulators; Telephone Battery Chargers; Telephone Battery Eliminators; Power Station Battery Chargers; Rectifiers for Printing Telegraph Equipment; Rectifiers for Telephone Type Switches; Push Key Switching Cabinets; Printing Telegraph Test Equipment, and Power Supplies for Regulated Direct Current.
Use since Nov. 29, 1943.

SN 689,251. Unilectric, Inc., Milwaukee, Wis. Filed June 9, 1955. Sec. 2(f).

NU-BLOK

Applicant claims ownership of Reg. No. 522,864.
For Junction Blocks for Electrical Wiring Harnesses.
Use since Mar. 1, 1948.

SN 689,440. Ultra-Violet Products, Inc., South Pasadena, Calif. Filed June 13, 1955.

STERILAIRE

Applicant claims ownership of Reg. No. 365,597.
For Ultra-Violet Lamps for Bactericidal Sterilization.
Use since on or about May 31, 1938.

SN 689,456. Auto-Lite Battery Corporation, Toledo, Ohio. Filed June 14, 1955.

USL

Applicant claims ownership of the mark in Reg. No. 98,222.
For Electric Storage Batteries and Parts Therefor.
Use since July 22, 1912.

SN 689,983. Burgess Battery Company, Freeport, Ill. Filed June 22, 1955.

Radar-Lite

For Electric Lanterns and Electric Dry Batteries.
Use since Apr. 29, 1955.

SN 691,245. Stewart Clay Co., Inc., New York, N. Y. Filed July 13, 1955.

'Craftkiln'

For Portable Electric Oven for Making of Porcelain and Metal Enamel, and Electric Cord, Asbestos Pad, Kiln Shelf and Pair of Tongs for the Same, Sold as a Unit.
Use since May 10, 1955.

SN 691,363. Electro-Matic Products Co., Chicago, Ill. Filed July 15, 1955.

NEUTROFIER

Applicant claims ownership of Reg. No. 562,245.
For Electro-Magnetic Chuck Controls, Parts and Accessories.
Use since June 7, 1946.

SN 691,792. Signal-Stat Corporation, Brooklyn, N. Y. Filed July 22, 1955.

SAFETY WHEREVER YOU TURN

For Vehicle Signaling and Directional Signaling Systems; Vehicle Signal and Indicator Lamps; Manual, Semi-Automatic, and Automatic Controls and Switches for Vehicle Signaling and Directional Signaling Systems; Cut-Off Switches for Vehicle Signaling and Directional Signaling Systems; Controls and Switches for Vehicle Emergency Warning Systems; Vehicle Signal and Indicator Lamps, Brake Lights, Stop Lights, Flashers, Circuit Breakers and Fuses; and Assemblies and Parts for Each Thereof.
Use since January 1953.

SN 691,794. Sprague Electric Company, North Adams, Mass. Filed July 22, 1955.

REZSEAL

For Electrical Capacitors.
Use since June 6, 1955.

SN 691,795. Sprague Electric Company, North Adams, Mass. Filed July 22, 1955.

LITTL-LYTIC

For Electrical Capacitors.
Use since Mar. 21, 1955.

SN 692,970. U. M. & F. Manufacturing Corporation, North Hollywood, Calif. Filed Aug. 12, 1955.

SeeZak

For Sheet Metal Products—Namely, Electronic Chassis and Panels.
Use since on or about Aug. 7, 1953.

SN 693,118. Benrus Watch Company, Inc., New York, N. Y. Filed Aug. 16, 1955.

BENRUS

Applicant claims ownership of Reg. Nos. 166,589, 422,103, and 560,559.
For Clock and Radio Combination, Sold as a Unit.
Use since Nov. 1, 1954.

SN 693,119. Benrus Watch Company, Inc., New York, N. Y. Filed Aug. 16, 1955.

Elegance

Applicant claims ownership of Reg. No. 560,559.
For Clock and Radio Combination, Sold as a Unit.
Use since Nov. 1, 1954.

SN 693,351. Aircraft-Marine Products, Inc., Harrisburg, Pa. Filed Aug. 19, 1955.

AMP

For Electrical Insulating Plastic Film and Molded Plastic Electrical Insulating Parts.
Use since Dec. 15, 1943.

SN 693,596. ESC Corporation, Palisades Park, N. J. Filed Aug. 24, 1955.



For Signal Delay Lines in Radio, Television, and Communication Systems, Their Component and Replacement Parts.
Use since Oct. 15, 1950.

SN 693,507. Finishine Laboratories, Inc., Syracuse, N. Y. Filed Aug. 24, 1955.

STIXFLO

For Electrically Heated Burning-in Knife.
Use since June 18, 1954.

SN 697,452. The Rajah Company, Newark, N. J. Filed Nov. 4, 1955.

Rajah

For Electrical Apparatus—Namely, Terminals, Hoods, and Rubber Safety Nipples for Spark Plugs.
Use since April 1904.

CLASS 22

SN 683,432. Protection Equipment Co., Sunbury, Pa. Filed Mar. 14, 1955.

ROLYONITE

For Protective Equipment for Athletes—Namely, Shoulder Pads, Thigh Guards, Hip Pads, Injury Pads, Helmet Liners, and Gym Mats.
Use since Jan. 4, 1955.

CLASS 23

SN 646,148. Man-Sew Corporation, New York, N. Y. Filed Apr. 29, 1953.

MAN-SEWMATIC

Applicant claims ownership of Reg. Nos. 357,406, 357,473, and 370,112.
For Industrial Sewing and Embroidery Machines, and Stands Therefor.
Use since on or about Dec. 1, 1952.

SN 654,180. J. N. Eberle & Co., Gesellschaft mit beschrankter Haftung, Augsburg, Germany. Filed Sept. 11, 1953.

Qualität 18812

The word "Qualität" is disclaimed apart from the mark shown. Applicant claims ownership of German Reg. No. 401,652, dated Apr. 20, 1929.
For Fret Saw Blades for Woodworking.
Use since in the year 1910.

SN 657,646. Reo Motors, Inc., Lansing, Mich., to Motor Wheel Corporation, Lansing, Mich. Filed Dec. 8, 1953.



The drawing is lined for red and gold, the crown being outlined in black, the words being superimposed, in part, upon a black panel. However, color is not considered an essential part of the mark.
For Electric Powered Reel Type Power Lawn Mowers.
Use since Aug. 17, 1949.

SN 663,743. National Cylinder Gas Company, Chicago, Ill. Filed Apr. 1, 1954.

tt

Applicant claims ownership of Reg. No. 523,795.
For Parts for Use on Machinery and Other Devices Where a Worked Metal Part Is Needed.
Use since at least as early as June 1946.

SN 664,135. The Coleman Company, Inc., Wichita, Kans. Filed Apr. 8, 1954. Sec. 2(f) as to "Coleman."

Coleman

Applicant claims ownership of Reg. Nos. 166,962, 516,713, and others.
For Heated Air Engines, Compressors, and Air Pumps.
Use since Apr. 1, 1953; and since May 6, 1921, as to "Coleman" on air pumps.

SN 669,159. Wales-Strippit Corporation, North Tonawanda, N. Y. Filed June 29, 1954.

Hydra Spring Device

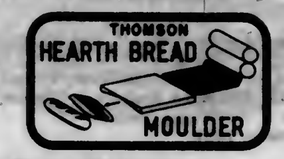
The word "Device" is disclaimed apart from the mark as shown.
For Liquid Springs—Namely, Hydraulic Cushioning Devices Comprising Cylinders Filled With Compressible Material Other Than a Coil Spring and Used for General Application.
Use since June 1, 1954.

SN 673,553. Thomson Machine Company, Belleville, N. J., now by merger Wallace & Tiernan Incorporated. Filed Sept. 21, 1954. Sec. 2(f) as to "Thomson."

THOMSON
CROSS-SHEETER

For Dough Working Machines.
Use since Aug. 2, 1954.

SN 673,554. Thomson Machine Company, Belleville, N. J., now by merger Wallace & Tiernan Incorporated. Filed Sept. 21, 1954. Sec. 2(f) as to "Thomson."



For Dough Working Machines.
Use since July 30, 1954.

SN 673,835. The Joyce-Cridland Company, Dayton, Ohio. Filed Sept. 27, 1954. Sec. 2(f) as to "Joyce."

JOYCE
X-MASTER

Applicant claims ownership of Reg. Nos. 351,262 and 510,586.
For Motor Vehicle Hydraulic Lifts.
Use since Sept. 5, 1952.

SN 674,682. P. R. Mallory & Co., Inc., Indianapolis, Ind. Filed Oct. 12, 1954.

NO-CHAT

For Lathe, Planer, Boring, and Shaper Tool Shanks Made of a Specific Proprietary Alloy.
Use since June 24, 1954.

SN 676,213. McGraw Electric Company, Canonsburg, Pa. Filed Nov. 8, 1954.

Seal-master

For Pumps.
Use since March 1954.

SN 676,295. American Machine & Foundry Company, New York, N. Y. Filed Nov. 9, 1954.

amf

Applicant claims ownership of Reg. Nos. 168,740, 441,863, and others.
For Drill Presses, Band Saw Vises and Work Holding Fixtures; Machinery for Working Wood, Plastics, and Metal,

Power Saws, and Accessories Therefor; Wrenches, Roll making Machines, Proofers, Conveyors, and Moulders; Separators, Threshers, Stemmers, Leaf Tobacco Feeders, Cutters, Bundle and Tie Leaf Openers, Filter Mouthpiece Machines, Steam Cylinders, and Conveyors.
Use since July 1, 1946.

SN 677,578. A. Kimball Company, New York, N. Y. Filed Dec. 1, 1954. Sec. 2(f).

KIMBALL

Applicant claims ownership of Reg. Nos. 508,751 and 513,651.
For Machines for Marking Price Tags, Tickets, and Labels and Machines for Attaching Such Tags, Tickets, and Labels to Merchandise.
Use since January 1924.

SN 677,777. Gehl Bros. Manufacturing Co., West Bend, Wis. Filed Dec. 6, 1954. Sec. 2(f) as to "Gehl."

GEHL
Chop-All

Without prejudice to common law rights and merely for the purposes of this registration, "Chop-All" is disclaimed separately and apart from the rest of the mark shown. Applicant claims ownership of Reg. Nos. 522,650 and 522,651.
For Forage Harvesters, and the Attachments Therefor.
Use since Nov. 9, 1954.

SN 677,960. Imperial Knife Company, Inc., Providence, R. I. Filed Dec. 8, 1954.

TOMORROW

For Stainless Steel Flatware.
Use since Nov. 18, 1954.

SN 677,990. Safeguard Corporation, Lansdale, Pa. Filed Dec. 8, 1954.

Chek-gard

For Check Writing Machines.
Use since Nov. 22, 1954.

SN 679,382. Lillian A. Fitzer, d. b. a. L. A. Fitzer Tool Works, Villa Park, Ill. Filed Jan. 4, 1955.

TAPER-TAIL

For Tools for Use in the Tail Stocks of Lathes in Place of the Conventional Lathe Center, for the Purpose of Attaining Predetermined Tapers on Work Supported Thereby.
Use since Dec. 6, 1954.

SN 680,423. Spinsavac Corporation, Charlotte, N. C. Filed Jan. 24, 1955.

SPINSAVAC

For Vacuum Cleaning Systems and Apparatus for Textile Machines.
Use since Jan. 7, 1955.

SN 680,424. Spinsavac Corporation, Charlotte, N. C. Filed Jan. 24, 1955.



For Vacuum Cleaning Systems and Apparatus for Textile Machines.
Use since Jan. 7, 1955.

SN 681,379. The Wellman Engineering Company, Cleveland, Ohio. Filed Feb. 9, 1955.

BALLWELL
FLYING SAUCER

Power-Driven Amalgamating Apparatus Such as is Employed in the Iron Ore Enrichment and in the Cement and Iron and Steel Industries, and the Like, for Making Nodules or Pellets From Pulverized or Similar Fine Material.
Use since Dec. 29, 1954.

SN 681,637. Reeves Pulley Company, Columbus, Ind., to The Reliance Electric and Engineering Company, Cleveland, Ohio. Filed Feb. 14, 1955.

FLEXI-SPEED

For Speed Varying Transmission Kits for Association With Power Source and Driven Equipment.
Use since Jan. 28, 1953.

SN 682,289. Nordischer Maschinenbau Rud. Baader, Lubeck, Germany. Filed Feb. 24, 1955.

Baader

Priority under Section 44(d). German application filed Sept. 18, 1954, Reg. No. 667,380, dated Nov. 30, 1954.
For Driving Motors and Parts Thereof, Gear Drives and Parts Thereof, Worm Drives and Parts Thereof, Machine Tools and Parts Thereof, and Fish and Meat Treating Machines and Parts Thereof.
Use since January 1951.

SN 683,368. The Deskfinder Company, Costa Mesa, Calif. Filed Mar. 14, 1955.

LINOPRESS

For Printing Presses.
Use since Nov. 18, 1954.

SN 683,681. Hartford Steel Ball Company, Incorporated, West Hartford, Conn. Filed Mar. 17, 1955. Sec. 2(f) as to "Hartford."



For Ball Bearings, Retainers for Ball Bearings, Bearing Parts, Ferrous, Non-Ferrous, Plastic, Nylon, and Glass Balls, Burnishing Balls, and Shapes and Tumbling Barrels.
Use since Jan. 10, 1955; and since 1926 as to "Hartford."

SN 684,171. Syko Engineering Corporation, Kansas City, Mo. Filed Mar. 24, 1955.

SYKO

For Bakery Rack Washing Machines.
Use since June 8, 1945.

SN 685,999. S. A. R. L. Dite: Societe Meusienne de Constructions Mecaniques, Ancerville, France. Filed Apr. 21, 1955.

HELICOGIR

Priority is claimed under Sec. 44(d). French Reg. No. 630, dated Oct. 25, 1954 (Bar-le-Duc); Natl. Inst. No. 49,909.
For Sand-Blasting Apparatus for Use on Ferrous Metals.

SN 687,154. Western Land Roller Company, Hastings, Nebr. Filed May 9, 1955.



No claim is made to the representation of the land roller aside from the mark as shown.
For Land Rollers.
Use since Jan. 11, 1930.

SN 687,524. The Baker-Raulang Company, Cleveland, Ohio. Filed May 16, 1955. Sec. 2(f).

Traveloader

Applicant claims ownership of Reg. No. 571,427.
For Material Handling Truck.
Use since on or about November 1948.

SN 688,653. Mutual Buying Syndicate, Inc., New York, N. Y. Filed June 1, 1955.

NORDAN

For Table Flatware Made of Stainless Steel.
Use since Jan. 15, 1954.

SN 689,439. The Toronto Star Limited, Toronto, Ontario, Canada. Filed June 13, 1955.

STARWRAPPER

Priority under Sec. 44(d). Canadian application filed Dec. 18, 1954, Reg. No. 101,027, dated July 15, 1955.
For Newspaper Wrapping Machines.
Use since Nov. 11, 1954.

SN 690,978. Triumph Machinery Division of Howard H. Samuel, Incorporated, Hackettstown, N. J. Filed July 8, 1955.



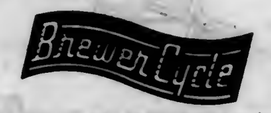
For Power Mower Attachment.
Use since May 1, 1954.

SN 690,992. Anderson, Clayton & Co., Houston, Tex. Filed July 11, 1955.

Long Reach

For Hydraulically Operated Clamp Attachments for Fork Lift Trucks, Rolling Bale Attachments, Quick Break Attachments for Cotton Bales, Rotating Carriages for Fork Lift Trucks, Booms for Fork Lift Trucks, Pallet Load Stabilizers, Hydraulically Operated Power Scoops for Fork Lift Trucks, Automatic Wire Buckle Manufacturing Machines, Cotton Bale Band Wagons, Cotton Scale Racks, Dinkey Presses, Cotton Band Riveting Hammers, Bench Shears, Cotton Band Rollers, Cotton Band Shears, Riveting Machines, Commodity and Warehouse Trailers, Hydraulically Operated Truck Dump Lifts, Safety Wire Buckles for Use on Cotton Bale Ties, Steel Cotton Tie Rivets, and Cotton Sampling Knives.
Use since Sept. 1, 1932, on safety wire buckles.

SN 691,003. E. F. Brewer Company, Butler, Wis. Filed July 11, 1955.



For Power Lawn Mower Guiding and Riding Attachments.
Use since on or about June 16, 1955.

SN 691,041. Inter-American Products Company, Detroit, Mich. Filed July 11, 1955.



For Rubber Stamp With or Without Self-Contained Ink Supply.
Use since June 18, 1955.

SN 691,071. Novo Pump & Engine Company of Ohio, Lansing, Mich. Filed July 11, 1955.

HELIOCENTRIC

For Mechanical Speed Reducers Adapted to Provide Rotative Movement at a Reduced Rate From Rotating Shafts and the Like.
Use since Nov. 8, 1929.

SN 691,299. International Harvester Company, Chicago, Ill. Filed July 14, 1955.

PAYSCRAPER

For Material Handling Vehicle for Scraping, Loading, Transporting, or Dumping.
Use since Apr. 5, 1955.

SN 692,209. Diamond Calk Horse Shoe Company, Duluth, Minn. Filed Aug. 1, 1955.

HANDYBOY

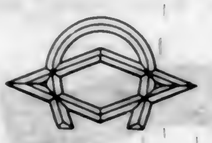
For Combination Plier and Wrench.
Use since Apr. 15, 1955.

SN 692,276. Schroeder Machines Corporation, Syracuse, N. Y. Filed Aug. 1, 1955.

QUADNUMATIC

For Machines for Advancing Corrugated Paperboard Cartons From a Supply, Expanding the Same, and Sealing the Cartons After Being Packed.
Use since Mar. 31, 1954.

SN 692,459. Diamond Calk Horse Shoe Company, Duluth, Minn. Filed Aug. 4, 1955.



Applicant claims ownership of Reg. No. 421,445.
For Adjustable Wrenches.
Use since on or about June 1, 1955.

SN 692,460. Diamond Calk Horse Shoe Company, Duluth, Minn. Filed Aug. 4, 1955.

DIAMALLOY

Applicant claims ownership of Reg. Nos. 401,456 and 585,695.
For Staple Pullers and Tinners Snips.
Use since on or about July 2, 1948.

SN 692,461. Diamond Calk Horse Shoe Company, Duluth, Minn. Filed Aug. 4, 1955.

DIAMOND

Applicant claims ownership of Reg. Nos. 209,074 and 401,457.
For Adjustable Wrenches.
Use since on or about Nov. 1, 1931.

SN 692,633. National Motor Bearing Co., Inc., Redwood City, Calif. Filed Aug. 8, 1955.

NATIONAL

Applicant claims ownership of Reg. No. 322,517.
For Bearings, Guard Bearings, Oil Circulators, and Journal Box Assembly Tools.
Use since Jan. 1, 1921, on bearings.

SN 693,017. Clipper Manufacturing Company, Kansas City, Mo. Filed Aug. 15, 1955.

RETRACT-A-TURN

For Masonry Saws and Pavement Cutting Machines.
Use since July 27, 1955.

SN 696,925. Diamond Chain Company, Inc., Indianapolis, Ind. Filed Nov. 7, 1955.

DIAMOND

Applicant claims ownership of Reg. Nos. 211,419, 514,675, and others.
For Bicycle Chains and Motorcycle Chains, Sprockets and Sprocket Wheels for Use With Power Transmission Chains, Conveyor Chains and Parts Thereof, and Chain Type Flexible Shaft-Couplings and Parts Thereof.
Use since Apr. 15, 1896.

CLASS 24

SN 672,278. General Motors Corporation, Detroit, Mich. Filed Aug. 26, 1954.

GM

Applicant claims ownership of Reg. Nos. 271,167, 283,227, and others.
For Clothes Ironers and Parts Thereof.
Use since in or before June 1947.

CLASS 26

SN 673,555. Triplett & Barton, Burbank, Calif. Filed Sept. 21, 1954.

TRI-IND-X

For X-Ray Apparatus Including X-Ray Power and Cooling Unit, High Voltage Transformer and X-Ray Tube-Head Unit, Master X-Ray Control Unit, and Rack Containing X-Ray Power and Control Cables, Coolant Hose, and Apparatus for Servicing X-Ray Equipment.
Use since Oct. 9, 1953.

SN 675,595. Simpson Electric Company, division of American Gage & Machine Company, Chicago, Ill. Filed Oct. 27, 1954.

varidot

For Linearity and Convergence Generators.
Use since Sept. 17, 1954.

SN 676,706. Becton, Dickinson and Company, Rutherford, N. J. Filed Nov. 16, 1954.

T@T

For Mechanical Timing Device for Indicating Temperature and Time of Sterilization.
Use since on or about Oct. 12, 1954.

SN 680,211. Philip J. Mastripolito, d. b. a. P. J. Master Co., Philadelphia, Pa. Filed Jan. 20, 1955.

GIDE-A-PLANE

For Adjustable Calibrated Guide Plate Attachments for Hand Planes.
Use since Jan. 7, 1955.

SN 686,951. Bourns Laboratories, Inc., Riverside, Calif. Filed May 6, 1955.

TRIMM

For Potentiometers.
Use since Mar. 4, 1955.

SN 690,877. Gisholt Machine Company, Madison, Wis. Filed July 7, 1955.

Dyn-Aut-Roni-C

For Balancing Machines.
Use since June 23, 1955.

SN 692,392. George Greiger, Flushing, N. Y. Filed Aug. 3, 1955.

SUN-BURST

For Electric Current Direction Tester for Three Phase Motors and Other Similar Devices.
Use since May 17, 1955.

SN 692,565. The Bin-Dicator Company, Detroit, Mich. Filed Aug. 8, 1955.

ROTO-BIN-DICATOR

For Bin or Tank Level Indicator and Control.
Use since July 8, 1955.

SN 692,836. Joseph Sidney Elwood Gary, New Iberia, La. Filed Aug. 11, 1955.



For Circular Slide Rule-Percent Profit Calculator.
Use since May 15, 1955.

SN 692,939. Hamilton Manufacturing Company, Two Rivers, Wis. Filed Aug. 12, 1955.



For Drafting Tables, Drawing Boards, Engineers' Desks, Filing Cabinets for Drawings, Filing Trays for Drawings, Filing Drawers for Drawings, Drafting Chairs and Stools, Tracing Tables.
Use since on or about Jan. 28, 1955, on drafting tables.

SN 692,942. Klix Products, Inc., Woodside, N. Y. Filed Aug. 12, 1955.

KLIX

For Air Pressure Warning Indicator for Vehicle Tires.
Use since Sept. 27, 1954.

SN 693,236. De Jur-Amsco Corporation, Long Island City, N. Y. Filed Aug. 17, 1955.

Eldorado

For Motion Picture Cameras and Projectors.
Use since Aug. 1, 1955.

SN 693,742. Fuji Photo Film Co., Ltd., Minami-Ashigara-machi, Ashigarakamigun, Kanagawa, Japan. Filed Aug. 26, 1955.

FUJINON

Applicant claims ownership of Japanese Reg. No. 450,483, dated Aug. 31, 1954, and U. S. Reg. No. 598,938.
For Photographic Lens.

SN 693,769. The Robson Corporation, New York, N. Y. Filed Aug. 26, 1955.

DOLLYDALE

For Measuring Scoop.
Use since Jan. 30, 1947.

SN 693,835. Marchant Research, Inc., Oakland, Calif. Filed Aug. 29, 1955.

Miniac

For Electronic Digital Computer.
Use since Aug. 14, 1953.

SN 693,907. Franke & Heidecke, Fabrik Photographischer Prazisions-Apparate, Braunschweig, Germany. Filed Aug. 30, 1955.

ROLLEIGHRAPHY

Applicant claims ownership of U. S. Reg. Nos. 271,192 and 368,216, and German Reg. No. 486,640, dated July 4, 1936.
For Illuminating Apparatus for Photographic Purposes; Optical Apparatus and Instruments and Devices—Namely, Objectives, Lenses and Supplementary Lenses, Light Filters, Light and Color Meters, Exposure Meters (Photometers); Range Finders, Picture Viewing Devices, Stereoscopes; Photo-

graphic and Cinematographic Cameras and Reproducers; Projectors and Their Parts; Diaphragms and Objective Shutters; Enlarging Apparatus, Duplicating Apparatus for Photographic Purposes; Photographic and Printing Press Products; Carrying Belts; Protective and Ever-Ready Cases for Photographic Cameras.

CLASS 27

SN 660,359. Societe Horlogere de Porrentruy, Phenix Watch Co. S. A., Porrentruy, Switzerland. Filed Jan. 29, 1954.

ROLLAMATIC

Applicant claims ownership of Swiss Reg. No. 145,730, dated Mar. 6, 1953, and U. S. Reg. No. 578,005.
For Clocks, Watches, Parts of Clocks and Watches, and Watch Cases.

SN 679,409. Rogers & Co., Incorporated, Indianapolis, Ind. Filed Jan. 4, 1955. Sec. 2(f).

ROGERS

For Watches.
Use since Nov. 21, 1936.

CLASS 28

SN 681,791. Eric C. Pieper, Providence, R. I. Filed Feb. 16, 1955.

JEWELRY BY TRINIDAD

The word "Jewelry" is disclaimed.
For Expansion Type Watch Bracelets, Cuff Links, and Tie Holders.
Use since Jan. 18, 1955.

SN 695,139. Coro, Inc., New York, N. Y. Filed Sept. 22, 1955. Sec. 2(f).

Glamour

For Charm Bracelets, Charms, Necklaces, Bracelets, Earrings, Jewelry Clips, Brooches, Lockets, Pearl Bracelets, Pearl Necklaces, Pearl Earrings, Pearl Brooches, Pearl Lockets, Pearl Jewelry Clips, and the Following Goods Made in Whole or in Part of Precious Metal or Plated With the Same: Beads, Pins, and Jewelry Initials.
Use since January 1941.

SN 695,339. Oscap Manufacturing Co., Inc., Washington, D. C. Filed Sept. 26, 1955. Sec. 2(f).

Rodin

Applicant claims ownership of Reg. No. 506,379.
For Jewelry for Personal Wear, Not Including Watches—Namely, Finger Rings, Brooches, Bracelets, Earrings, Pendants, Necklaces, Chains, Watch Bands, Cuff Links, Tie Holders, Collar Holders, Clasps, Charms, and Ring Mountings; and the Following Items Made in Whole of, or Plated With Precious Metal—Namely, Buckles, Lapel Emblems, Bill Clips, Spoons, Forks, Knives, Bowls, Trays, and Statuettes.
Use since May 10, 1947.

CLASS 31

SN 676,832. Philco Corporation, Philadelphia, Pa. Filed Nov. 17, 1954.

PHILCO

Applicant claims ownership of Reg. No. 402,135.
For Freezers and Parts Thereof.
Use since on or about Jan. 1, 1946.

SN 677,012. Tippett & Wood, Phillipsburg, N. J. Filed Nov. 19, 1954.

VERTICOOL

For Apparatus for Cooling Vegetable Products in a Continuous Vertically-Conveyed Flow.
Use since Oct. 7, 1954.

SN 683,410. M-C-M Machine Works, Oklahoma City, Okla. Filed Mar. 14, 1955.

LITTLE KING

For Water Conditioners for Softening Water, Filtering Water, and Treating Water To Reduce Electrotypes, Corrosion, and Oxidation.
Use since June 1, 1952.

SN 683,766. Engine Life Products Corp., El Monte, Calif. Filed Mar. 18, 1955.

ENGINE LIFE

Applicant claims ownership of Reg. No. 442,972.
For Mechanical Fluid Straining and Filtering Apparatus for Use as Accessories for Internal Combustion Engines, and Replacement Filtering Elements for Said Apparatus.
Use since on or about Nov. 20, 1943.

SN 684,060. Pint-O-Matic Corp., Butler, Wis. Filed Mar. 23, 1955.

pint O' matic

For Refrigerated Vending Machine for Packaged Foods.
Use since May 11, 1954.

CLASS 32

SN 691,760. Fisher Products Company, Chester, Pa. Filed July 22, 1955.

ROOMSAVER

For Convertible Sofa and Bed.
Use since Nov. 30, 1954.

SN 691,771. Metal Craft, Inc., Fort Lauderdale, Fla. Filed July 22, 1955.

METAL CRAFT

For Sun Cots and Canvas Covers for Sun Cots.
Use since June 17, 1955.

CLASS 33

SN 678,980. Federal Watch Crystal Company, Inc., New York, N. Y. Filed Dec. 27, 1954.

FEDERAL "FIREX"

For Watch Crystals.
Use since Apr. 1, 1954.

SN 678,981. Federal Watch Crystal Company, Inc., New York, N. Y. Filed Dec. 27, 1954.

FEDERAL AMERICA

For Watch Crystals.
Use since Aug. 15, 1954.

CLASS 34

SN 660,964. The Readybuilt Products Company, Baltimore, Md. Filed Feb. 11, 1954. Sec. 2(f).

READYBUILT

For Prefabricated Fireplaces.
Use since Feb. 24, 1927.

SN 669,415. The Emerson Electric Manufacturing Company, St. Louis, Mo. Filed July 6, 1954.

TILTAIRE

For Air Circulator.
Use since June 2, 1954.

SN 683,754. Chelsea Products Incorporated, Plainfield, N. J. Filed Mar. 18, 1955.

CHELSEA POWER LINE FANS

No claim is made to the word "Fans" apart from the mark as shown.
For Ventilating Fans.
Use since July 1951.

SN 683,912. Pioneer Specialties, Inc., Minneapolis, Minn. Filed Mar. 21, 1955.

Cinderella

For Outdoor Incinerators.
Use since Apr. 9, 1954.

SN 688,859. Ruud Manufacturing Company, Pittsburgh, Pa. Filed June 3, 1955.

Sanimaster

For Hot Water Heaters.
Use since October 1952.

SN 689,334. Barry-Wehmiller Machinery Company, St. Louis, Mo. Filed June 13, 1955. Sec. 2(f).

BARRY-WEHMILLER

For Pasteurizers.
Use since on or about Feb. 10, 1897.

SN 689,381. Gibson Refrigerator Company, Greenville, Mich. Filed June 13, 1955.



For Electric Air Cooling and Conditioning Units.
Use since Sept. 30, 1949.

SN 689,427. Surface Combustion Corporation, Toledo, Ohio. Filed June 13, 1955.

AX

For Gas Generators.
Use since June 24, 1948.

SN 689,428. Surface Combustion Corporation, Toledo, Ohio. Filed June 13, 1955.

HNX

For Gas Generators.
Use since Nov. 10, 1949.

SN 689,429. Surface Combustion Corporation, Toledo, Ohio. Filed June 13, 1955.

MRX

For Gas Generators.
Use since Oct. 2, 1946.

SN 689,430. Surface Combustion Corporation, Toledo, Ohio. Filed June 13, 1955.

NX

For Gas Generators.
Use since November 1943.

SN 689,432. Surface Combustion Corporation, Toledo, Ohio. Filed June 13, 1955.

MDX

For Gas Generators.
Use since Oct. 13, 1943.

SN 689,490. Home Comfort Mfg. Co., Peoria, Ill. Filed June 14, 1955. Sec. 2(f).

MULTI-PITCH

Applicant claims ownership of Reg. No. 566,161.
For Louver Type Ventilators.
Use since May 31, 1950.

SN 689,615. The Dortch Stove Works, Inc., Franklin, Tenn. Filed June 16, 1955.

Supreme

For Gas Ranges.
Use since 1945.

SN 689,694. Baker Perkins Limited, Peterborough, England. Filed June 17, 1955.

TURBORADIANT

Applicant claims ownership of British Reg. No. 699,380, dated June 28, 1951.
For Ovens for Industrial Purposes, and Parts Thereof.

SN 689,695. Baker Perkins Limited, Peterborough, England. Filed June 17, 1955.

TURBORADIANT

Applicant claims ownership of British Reg. No. 699,379, dated June 28, 1951.
For Ovens for Industrial Purposes, and Parts Thereof.

CLASS 35

SN 677,349. The Buxbaum Company, Canton, Ohio. Filed Dec. 1, 1954.

Akro

Applicant claims ownership of Reg. No. 540,427.
For Automobile Tire and Tube Patches.
Use since Oct. 27, 1954.

SN 692,255. National Motor Bearing Co., Inc., Redwood City, Calif. Filed Aug. 1, 1955.

NATIONAL

Applicant claims ownership of Reg. No. 322,517.
For Grease and Oil Retainers for Shafts, Journals, Valve Stems, Pistons, Piston Rods, and the Like; Shims; Dust Guard and Oil Sealing Devices for Journal Boxes; Gaskets; Dust Well Closures; and "O" Rings.
Use since 1923 on shims and grease and oil retainers for shafts.

SN 694,128. Crofts (Engineers) Limited, Bradford, England. Filed Sept. 2, 1955.

SUPROR

Applicant claims ownership of British Reg. No. 736,298, dated Nov. 18, 1954.
For Machine Belting and Parts Thereof.

CLASS 36

SN 655,885. Arnold Brilhart, Carlsbad, Calif. Filed Nov. 5, 1953.



The trademark consists of a mottled surface disk which is affixed to applicant's goods by means of inlay. Applicant claims ownership of Reg. Nos. 397,906 and 403,433.
For Mouthpieces for Wind Musical Instruments.
Use since Feb. 23, 1951.

SN 672,021. Simon and Schuster, Inc., New York, N. Y. Filed Aug. 20, 1954.

Golden Record

The word "Record" is disclaimed.
For Mechanically Grooved Phonograph Records.
Use since Apr. 25, 1948.

SN 685,227. Worldwide Musical Instrument Co. Inc., New York, N. Y. Filed Apr. 8, 1955.

Concerto

For Brass Wind Instruments—Namely, French Horns, Sousaphones, Tubas, Baritone Horns, Alto Horns, Trombones, Mellophones, Trumpets, Cornets, Bugles; and Woodwind Instruments—Namely, Bassoons, Clarinets, Oboes, Recorders and Saxophones.
Use since Jan. 10, 1953.

CLASS 37

SN 653,936. J. S. Staedtler, Nurnberg, Germany. Filed Sept. 29, 1953.

COCK

Applicant claims ownership of German Reg. No. 20,944, dated Dec. 9, 1896.
For Lead Pencils, Colored Pencils, Indelible Pencils, Chalk Pencils, and Mechanical Pencils.

CLASS 38

SN 679,697. The Williams and Wilkins Company, Baltimore, Md. Filed Jan. 10, 1955. Sec. 2(f).

CURRENT
Medical Digest

For Monthly Publication.
Use since October 1933.

SN 682,380. John K. Akers, Phoenix, Ariz. Filed Feb. 28, 1955. Sec. 2(f).

ARIZONA
BUILDER & CONTRACTOR

For Magazine of the Construction Industry.
Use since Aug. 15, 1937.

SN 684,395. Business Guides, Inc., New York, N. Y. Filed Mar. 29, 1955. Sec. 2(f).

CHAIN STORE
Guide

For Directory Published Periodically.
Use since September 1934.

SN 686,436. Fedsco Associates, Inc., New York, N. Y. Filed Apr. 28, 1955.

FEDSCO

For Premium Coupons and Catalogues.
Use since Mar. 22, 1955.

SN 688,776. Rolland J. Whitacre, Cleveland, Ohio. Filed June 2, 1955. Sec. 2(f).

Anesthesia
Digest

For Periodical Publication Devoted to Medical Subjects.
Use since Jan. 31, 1950.

SN 689,810. H. S. Crocker Company, Inc., San Bruno, Calif. Filed June 20, 1955.

Scenoramic

For Picture Post Cards.
Use since May 25, 1955.

SN 690,166. Hearst Publishing Company, Inc., San Francisco, Calif. Filed June 24, 1955.

On the Nose

For Newspaper Columns.
Use since May 1939.

SN 690,169. Hearst Publishing Company, Inc., San Francisco, Calif. Filed June 24, 1955.

Shadow Boxing

For Newspaper Columns.
Use since April 1935.

SN 697,451. National Association of County Agricultural Agents, Springfield, Mo. Filed Oct. 17, 1955.

THE COUNTY AGENT

For Magazine.
Use since February 1941.

CLASS 39

SN 671,817. I. Feingold & Co., Philadelphia, Pa. Filed Aug. 17, 1954.

del-mont

For Ladies' Cloth Coats and Suits.
Use since on or about July 16, 1954.

SN 677,229. Louisville Cap Co., Louisville, Ky. Filed Nov. 24, 1954.

AIR LIFT

For Reinforcing Frames for Men's Military Caps.
Use since on or about Sept. 8, 1954.

SN 679,813. Polymer Industrie Chimiche S. p. A., Milan, Italy. Filed Dec. 2, 1954.

MOVIL

Priority is claimed under Sec. 44(d). Italian application filed June 10, 1954; Reg. No. 119,887, dated Nov. 25, 1954.
For Hosiery for Men and Women, Socks, Stockings, Mantillas, Shawls, and the Like.

SN 681,345. Creative Closures, Denver, Colo. Filed Feb. 9, 1955.

FASTENATE

For Apparel Belts Having Ornamental Plastic Links.
Use since on or about Dec. 30, 1954.

SN 682,919. Grey Hosiery Mills, d. b. a. Mary Grey Hosiery Mills, Bristol, Va. Filed Mar. 7, 1955.

Mary Grey's MINI-LON

Consent to use and register the name "Mary Grey" is of record. Applicant claims ownership of Reg. Nos. 396,554, 565,274, and others.
For Hosiery for Women.
Use since Jan. 20, 1955; and since Feb. 11, 1937, as to "Mary Grey."

SN 684,273. Callaway Products, Inc., New York, N. Y. Filed Mar. 28, 1955.

CALPRO

Applicant claims ownership of Reg. No. 585,773.
For Athletic Clothing—Namely, Men's and Boys' Sweat Shirts, T-Shirts, Soft Ball Jerseys, Football Jerseys, Basketball Jerseys, Football Pants and Jackets, and Girls' Gymnasium Suits.
Use since Feb. 25, 1953.

SN 685,202. George McLachlan & Sons, Inc., Danbury, Conn. Filed Apr. 8, 1955.

KASHMIR - TEX

For Fur Felt Hats.
Use since on or about Aug. 25, 1954.

SN 685,809. Joseph Fleischer & Co., New York, N. Y. Filed Apr. 20, 1955.

Chi-Chignon*

The word "Chignon" is disclaimed apart from the mark as shown.
For Ladies' Hats.
Use since Sept. 14, 1954.

SN 687,186. Danzy Manufacturing Co., Tucson, Ariz. Filed May 10, 1955.

Danzy

For Clothing—Namely, Men's, Women's, and Children's Suede and Cape Leather Jackets; Women's and Children's Cloth and Leather Suits and Coats, and Fabric Skirts and Suits.
Use since in or about January 1952.

SN 687,199. Hardwick Woolen Mills, Inc., Cleveland, Tenn. Filed May 10, 1955.

LYLE STEVENS

For Men's, Students', Cadets', and Boys' Suits, Slacks, Topcoats, Sport Coats, and Jackets.
Use since Jan. 10, 1955.

SN 687,310. Mine Safety Appliances Company, Pittsburgh, Pa. Filed May 11, 1955.

MSA
SAFETY EQUIPMENT HEADQUARTERS

The words "Safety Equipment Headquarters" are disclaimed apart from the mark shown in the drawing. Applicant claims ownership of Reg. Nos. 339,911 and 399,929.
For Protective Wearing Apparel for Miners, Industrial Workers, Firefighters and Those Engaged in Hazardous Pursuits—Namely, Headgear, Hats, Caps, Winter Headwear, Headbands, Footwear, Safety Shoes, Boots, Safety Insoles, Hoods, Gloves, Mittens, Mitts, Suits, Coveralls, Jackets, Coats, Pants, Aprons, Spats, Leggings, Foot Protectors, Leg Protectors, Toe Protectors, Knee Pads, Sleeve Protectors, Arm Protectors, and Parts Therefor.
Use since at least as early as January 1953.

SN 690,804. Classical Girl Shoe Company, Lynn, Mass. Filed July 6, 1955.

mitten mocs

For Woman's Shoe (Moccasin Toe).
Use since Dec. 1, 1953.

SN 690,897. Midwest Footwear, Inc., Sullivan, Mo. Filed July 7, 1955.

Nite-Aires
LEISURE LOVELIES

Applicant claims ownership of Reg. No. 556,709.
For Women's Shoes and Slippers Made of Fiber, Leather, Cloth, Plastic, Rubber, and Combinations Thereof.
Use since December 1953.

SN 691,364. Endicott Johnson Corporation, Endicott, N. Y. Filed July 15, 1955.

NU-WALKER

For Shoes Made of Leather.
Use since on or about Dec. 6, 1954.

SN 691,691. The Hagerstown Rubber Company, Hagerstown, Md. Filed July 21, 1955.

MUSTANG

For Rubber Soles for Shoes.
Use since June 9, 1955.

SN 691,763. William Gluckin & Co., Inc., New York, N. Y. Filed July 22, 1955.

ASC

For Brassieres.
Use since Apr. 4, 1955.

SN 691,790. Selberling Latex Products, Inc., New Bremen, Ohio. Filed July 22, 1955.

Comfys

For Rubber Gloves.
Use since Feb. 17, 1955.

SN 691,982. Cannon Shoe Company, Baltimore, Md. Filed July 27, 1955.

Perfect Day

For Hosiery.
Use since May 19, 1955.

SN 692,004. Kabo, Inc., Chicago, Ill. Filed July 27, 1955.

JIF-EEZ

For Girdles.
Use since on or about Feb. 10, 1955.

SN 692,005. Kabo, Inc., Chicago, Ill. Filed July 27, 1955.

SUMMER-KOOLS

For Brassieres, Girdles, and Foundation Garments.
Use since on or about May 27, 1955.

SN 692,129. Fairy Silk Mills, Inc., Shillington, Pa. Filed July 29, 1955.

Expecto

For Slips for Feminine Wear.
Use since July 25, 1955.

SN 692,347. Ray J. Pastene, d. b. a. Pastene & Co., San Francisco, Calif. Filed Aug. 2, 1955.

Egyptian Walk

For Men's, Women's, and Children's Sandals.
Use since June 5, 1955.

SN 692,434. Sportogs, Inc., New York, N. Y. Filed Aug. 3, 1955.

THE CONTINENTAL Whaler

Applicant claims ownership of Reg. No. 326,445.
For Misses' and Juniors' Skirts and Jackets.
Use since February 1955.

SN 692,464. V. & F. W. Filoon Co., Brockton, Mass. Filed Aug. 4, 1955.

NOO-LIF

For Leather Innersoles, Leather Counters, and Leather Welting.
Use since Feb. 8, 1931.

SN 692,507. Craddock-Terry Shoe Corporation, Lynchburg, Va. Filed Aug. 5, 1955. Sec. 2(f).

Craddock

Applicant claims ownership of Reg. No. 552,114.
For Men's Shoes.
Use since Feb. 10, 1950.

SN 692,527. Kops Bros., Inc., New York, N. Y. Filed Aug. 5, 1955.

CHECKERS

For Foundation Garments, Including Girdles, Pantie Girdles, and Brassieres.
Use since July 6, 1955.

SN 692,580. Danvers Shoe Company, Inc., Manchester, N. H. Filed Aug. 8, 1955. Sec. 2(f).

Danvers

For Shoes—Namely, Shoes for Men, Women, and Children, Including Slippers and Moccasins.
Use since 1948.

SN 692,666. Wear-Right Gloves, Inc., New York, N. Y. Filed Aug. 8, 1955.

COBBLEPLEX

For Fabric Gloves.
Use since May 1, 1955.

SN 694,379. E. R. Moore Company, Chicago, Ill. Filed Sept. 8, 1955.

CHAPELCORD

For Gymnasium Suits, Dancing Suits, Sport Bloomers, Ecclesiastical Gowns, College Caps and Gowns, and Athletic Shorts and Trunks for Use of Men, Women, Boys, and Girls.
Use since on or about June 1955.

CLASS 40

SN 693,858. Sackner Products, Inc., Grand Rapids, Mich. Filed Aug. 29, 1955.

Cush-On-Strap

For Binding Tape.
Use since on or about Mar. 1, 1947.

SN 694,551. Dane Specialty Co. Inc., Plainfield, N. J. Filed Sept. 13, 1955.

VALMARK

For Skirt Markers.
Use since May 9, 1953.

SN 695,371. Allied Drug Co., Chicago, Ill. Filed Sept. 27, 1955.

Allied

For Combs.
Use since Sept. 2, 1955.

CLASS 42

SN 648,584. Charles Bloom Inc., New York, N. Y. Filed June 11, 1953.

BANJO CLOTH

The word "Cloth" is hereby disclaimed apart from the mark as shown.
For Fabrics in the Piece Made of Cotton, Silk, Wool, and Synthetic Fibres and Mixtures Thereof.
Use since June 15, 1952.

SN 679,392. Ideal Pleating Co., New York, N. Y. Filed Jan. 4, 1955.

Wash-a-Pleat

For Durable Pleated Fabrics.
Use since Dec. 6, 1954.

SN 679,786. M. Lowenstein & Sons, Inc., New York, N. Y. Filed Jan. 12, 1955.

Easytime

For Cotton and/or Rayon Piece Goods and/or Combinations Thereof.
Use since Nov. 10, 1954.

SN 688,405. Fruit of the Loom, Inc., Providence, R. I. Filed May 27, 1955.

PAMPERED COTTONS

For Cotton Piece Goods.
Use since May 2, 1955.

SN 691,453. Fablok Mills, Inc., Irvington, N. J. Filed July 18, 1955.

LANONET

For Textile Fabrics in Netted Form Made of Natural and/or Synthetic Fibers.
Use since June 21, 1955.

SN 692,124. Davis & Catterall, New York, N. Y. Filed July 29, 1955.

WRINKLESS

For Cotton Fabrics in the Piece.
Use since October 1954.

CLASS 43

SN 694,160. Sellers Manufacturing Company, Inc., Saxapahaw, N. C. Filed Sept. 2, 1955.

Egyptsulin

For Yarn.
Use since July 15, 1955.

SN 694,237. Lastex Yarn & Lactron Thread (Overseas) Limited, London, England. Filed Sept. 6, 1955.

LYLTERE

Applicant claims ownership of British Reg. No. 655,334, dated Jan. 9, 1947.
For Yarns and Threads All Made Wholly or Principally of India-Rubber.

SN 694,238. Lastex Yarn & Lactron Thread (Overseas) Limited, London, England. Filed Sept. 6, 1955.

Lyltex

Applicant claims ownership of British Reg. No. B655,336, dated Jan. 9, 1947.
For Yarns and Threads All Made of a Mixture of Cotton and India-Rubber, the Cotton Predominating.

SN 694,239. Lastex Yarn & Lactron Thread (Overseas) Limited, London, England. Filed Sept. 6, 1955.

Lyltron

Applicant claims ownership of British Reg. No. 655,335, dated Jan. 9, 1947.
For Yarns and Threads All Made Wholly or Principally of India-Rubber.

SN 694,311. The Firestone Tire & Rubber Company, Akron, Ohio. Filed Sept. 7, 1955.

Coron

For Elastic Thread.
Use since Apr. 22, 1955.

SN 694,420. Courtaulds Limited, London, England. Filed Sept. 9, 1955.

DURACOL

Applicant claims ownership of British Reg. No. 736,406, dated Nov. 22, 1954.
For Yarns and Threads.

CLASS 44

SN 672,784. C. J. Bates & Son, Chester, Conn. Filed Sept. 7, 1954.

PRECISION

For Manicure Implements Including Nail Files, Nail Clips, Tweezers, Nail Buffers, Manicure-Sticks, Manicure Knives, Nail-Scissors, Nail Nippers, and Nail Polishers.
Use since February 1946.

CLASS 45

SN 678,679. Sparkletts Drinking Water Corporation, Los Angeles, Calif. Filed Dec. 20, 1954.

SPARKLETTS

For Drinking Water.
Use since Aug. 17, 1925.

SN 695,388. Chippewa Springs Corporation, Minneapolis, Minn. Filed Oct. 3, 1955.

CHIPPEWA

The drawing is lined for red. Applicant claims ownership of Reg. Nos. 119,429, 130,164, and 504,649.
For Natural Spring Water, Orangeade, Root Beer, and Carbonated Beverages Sold as Soft Drinks and for Use as Mixers.
Use since September 1938.

CLASS 46

SN 640,120. Clarence T. Hawkins, d. b. a. Bob's Old Iron Kettle Products Co., Sharon Springs, Kans. Filed Dec. 29, 1952.

BOB'S OLD IRON Kettle

For Canned Vegetable-Beef Stews.
Use since on or about Oct. 31, 1950.

SN 640,218. Miller Brewing Company, Milwaukee, Wis. Filed Dec. 31, 1952.

HIGH LIFE

Applicant claims ownership of Reg. Nos. 151,345, 305,854, and 305,871.
For Dried Brewer's Grain Used as Feed for Livestock Such as Cattle.
Use since July 3, 1952.

SN 656,406. General Mills, Inc., Minneapolis, Minn. Filed Nov. 16, 1953.

Larro

The drawing is lined for blue and orange. Applicant claims ownership of Reg. Nos. 209,254, 260,585, and 360,441.
For Feeds for Calves, Cattle, Hogs, Poultry, Rabbits, Turkeys, and Dogs.
Use since Jan. 2, 1953.

SN 658,640. North River Meat Co., Inc., New York, N. Y. Filed Dec. 28, 1953.

NORTH RIVER

For Frozen and Cured Meats—Namely, Brisket, Tongue, and Pastrami.
Use since Sept. 20, 1952.

SN 659,819. Sarotti Aktiengesellschaft, Hattersheim (Main), Germany. Filed Jan. 20, 1954.

Sarotti

Applicant claims ownership of German Reg. No. 898, dated Dec. 6, 1894.
For Cocoa, Baking and Cooking Chocolate, Candy, Fruit Pastes, Biscuits, Cake, Pastries.

SN 666,868. Pulaski Products Co., Arlington, N. J. Filed May 21, 1954.

Pulaski

The portrait forming part of the trademark is that of General Pulaski of Revolutionary fame. Applicant claims ownership of Reg. Nos. 320,551 and 594,367.
For Mayonnaise, Mild Peppers, Cherry Peppers, Cucumber Pickles, Pure Egg Noodles, Pickled Tomatoes, Horseradish, Beet Horseradish, Mustard, Tea, and Coffee.
Use since March 1934 on mustard.

SN 669,806. Asher Scharfstein, d. b. a. Mogen David Candy Co., New York, N. Y. Filed July 12, 1954.

Mogen David

The outline of the six-pointed star, apart from the trademark as shown, is disclaimed.
For Candy.
Use since June 23, 1954.

SN 671,779. Harold F. Ritchie, Inc., Clifton, N. J. Filed Aug. 16, 1954.

LUCOZADE

Applicant claims ownership of Reg. Nos. 328,011, 439,537, and 440,846.
For Carbonated Glucose Food Beverage.
Use since on or about Sept. 19, 1930.

SN 672,296. Harold E. Kendall, d. b. a. Florida Growers Association, Goulds, Fla. Filed Aug. 26, 1954. Sec. 2(f).

Kendall

For Fresh Avocados, Limes, Mangos, Pineapples, Papayas, and Lemons; Canned Avocados, Limes, Mangos, and Pineapples; Frozen Avocados, Mangos, and Pineapple Slices.
Use since July 1939.

SN 672,327. Anderson, Clayton & Co., Sherman, Tex. Filed Aug. 27, 1954.

JAXMOR

For Vegetable Oil Shortening.
Use since Aug. 5, 1954.

SN 672,329. Anderson, Clayton & Co., Sherman, Tex. Filed Aug. 27, 1954.

Fy-Vaf

For Vegetable Oil Shortening.
Use since Aug. 5, 1954.

SN 673,436. The Farm Bureau Cooperative Association, Inc., Columbus, Ohio. Filed Sept. 20, 1954.

PRO-BLEND 50

For Cattle Feed Supplement.
Use since Aug. 26, 1954.

SN 676,108. Flavor Corporation of America, Chicago, Ill. Filed Nov. 5, 1954.

FEEDAROMA

For Flavorings for Animal Feeds.
Use since Aug. 17, 1954.

SN 679,801. Shore's Market, Inc., d. b. a. Shore's Markets, Providence, R. I. Filed Jan. 12, 1955.

ShoreFresh

For Dressed Poultry, Fresh Deciduous Fruit, Fresh Citrus Fruit, and Fresh Vegetables.
Use since on or about Jan. 3, 1955.
Subj. to Intf. with SN 689,020.

SN 680,687. Nash-Finch Company, Minneapolis, Minn. Filed Jan. 28, 1955.

PLEASMOR

For Candy and Unpopped Popcorn.
Use since May 11, 1948.

SN 682,428. Holly Hill Fruit Products, Incorporated, Davenport, Fla. Filed Feb. 28, 1955. Sec. 2(f) as to "Holly Hill."

HOLLY HILL CITROTANG

Applicant claims ownership of Reg. Nos. 516,628, 512,724, and others.
For Canned Citrus Fruit Juices.
Use since Sept. 16, 1946; and since 1927 as to "Holly Hill."

SN 686,437. A/S Frederiksavern Preserving Limited, Stavern, Norway. Filed Apr. 28, 1955.

King's Choice

For Brisling Sardines.
Use since Feb. 15, 1954.

SN 686,695. Charles A. Ross, d. b. a. Chefmaster Products Company, Chicago, Ill. Filed May 2, 1955.

Chefmaster

For Food Colors.
Use since Feb. 1, 1952.

SN 686,735. Arthur H. Greer, d. b. a. Ohio Steak and Barbecue Co., Columbus, Ohio. Filed May 3, 1955.

TEMPTASTE

For All Meat Wieners.
Use since Jan. 12, 1954.

SN 687,017. Tenco, Inc., Linden, N. J. Filed May 6, 1955.

TENCO

For Coffee.
Use since Oct. 1, 1954.

SN 687,263. Dairy Service Corporation, Washington, D. C. Filed May 11, 1955.

SunTop

For Frozen Concentrated Orange Juice.
Use since on or about May 1, 1955.

SN 687,421. Swift Canadian Co., Limited, Toronto, Ontario, Canada. Filed May 12, 1955.

UNION

For Bacon and Ham.
Use since 1938.

SN 694,542. Armen H. Thoumaian, Baltimore, Md. Filed Sept. 22, 1955.

"LOZAK"

For Cultured Milk.
Use since Feb. 1, 1907.

CLASS 47

SN 692,851. Meier's Wine Cellars, Inc., Silverton, Ohio. Filed Aug. 11, 1955.

MOUNTAIN MOONLITE

For White Grape Wine.
Use since on or about Jan. 27, 1938.

CLASS 49

SN 691,137. International Brands, Newark, N. J. Filed July 12, 1955.

VODKA YAR

The word "Yar" is of Russian origin, and refers to a type of old Russian inn, or tavern, where food and drink were sold.
Applicant disclaims the word "Vodka" apart from the mark as shown.
For Vodka.
Use since June 24, 1955.

CLASS 50

SN 685,821. Drusco Corporation, New York, N. Y. Filed Apr. 19, 1955.

Ambassador

For Men's Toiletry Kits, Containing Assorted Toilet Articles.
Use since in or about August 1954.

SN 686,560. Owens-Illinois Glass Company, Toledo, Ohio. Filed Apr. 29, 1955.

Applicant claims ownership of Reg. No. 269,225.
For Caps or Closures for Containers.
Use since on or about Apr. 1, 1954.

SN 686,617. Continental Can Company, Inc., New York, N. Y. Filed May 2, 1955.

TRIPLE SEAL

For Crown Caps.
Use since Apr. 5, 1955.

SN 686,618. Continental Can Company, Inc., New York, N. Y. Filed May 2, 1955.

Triple C Seal

The words "Triple Seal" are disclaimed apart from the mark as shown. Applicant claims ownership of Reg. Nos. 372,405 and 420,097.
For Crown Caps.
Use since Apr. 5, 1955.

SN 688,332. Klear-Vu Corporation, New York, N. Y. Filed May 26, 1955.

Hostess

For Article Covers Made From Plastic Material—Namely, Dish and Bowl Covers.
Use since May 3, 1955.

SN 692,495. Irwin William Tucker, d. b. a. Family Worship Foundation, Wynnewood, Okla. Filed Aug. 4, 1955.

Family Worship

For Prayer Altars and Accessories Therefor—Namely, Altar Scarfs, Kneeling Pads, Religious Statuary, Candelabras, Candle Holders, Placques Bearing Religious Phrases, Altar Bibles, Religious Crosses, and Religious Symbols.
Use since May 1, 1955, on prayer altars.

CLASS 51

SN 657,847. Nethercutt Laboratories, Los Angeles, Calif. Filed Dec. 11, 1953.

CARIBBEAN

For Cosmetics—Namely, Nail Polish.
Use since on or about Sept. 15, 1953.

SN 657,848. Nethercutt Laboratories, Los Angeles, Calif. Filed Dec. 11, 1953.

CUPID'S DART

For Cosmetics—Namely, Nail Polish.
Use since on or about Sept. 15, 1953.

SN 657,849. Nethercutt Laboratories, Los Angeles, Calif. Filed Dec. 11, 1953.

SASSY

For Cosmetics—Namely, Lipsticks and Nail Polish.
Use since on or about Sept. 15, 1953.

SN 669,305. James L. Younghusband, d. b. a. International Cosmetics Co., Chicago, Ill., to Saint Cornelius the Centurion Chapel of Valley Forge Military Academy, Wayne, Pa. Filed July 1, 1954.

Indelium

Applicant claims ownership of Reg. No. 441,075.
For Coloring Compounds for Lipsticks and Like Cosmetics.
Use since June 10, 1954.

SN 675,124. Beaute by Helene Inc., d. b. a. Beaute by Helene, Miami, Fla. Filed Oct. 20, 1954.

Pac

For Dentifrice Having Stain Removal Properties.
Use since May 1953.

SN 677,925. Associated Brands, Inc., Brooklyn, N. Y. Filed Dec. 8, 1954.



For Talcum Powder.
Use since Oct. 1, 1939.

SN 681,772. Imperial Toiletries Company, New York, N. Y. Filed Feb. 16, 1955.

NUTRICIA

For Cosmetic Skin Cream.
Use since May 1934.

SN 683,709. I. Posner, Inc., New York, N. Y. Filed Mar. 17, 1955.

POSNER'S ebonaire

For Pressing Cream for the Hair.
Use since Jan. 4, 1954.

SN 683,945. Irvin A. Willat, d. b. a. Heatless Permanent Wave Co., San Francisco, Calif. Filed Mar. 21, 1955. Sec. 2(f).

Willat

For Lotions for Permanent Waving of Hair, Lotions for the Skin, Hair Dressing Preparations, Hair Oils, Hair Tinting Compounds and Neutralizer Compounds for Neutralizing the Effect of Permanent Wave Lotions on the Hair.
Use since June 1, 1938.

SN 685,383. Murray's Superior Products Co., Chicago, Ill. Filed Apr. 12, 1955.

NuCo

For Hair Pressing Compound, Consisting of a Jelly-Like Preparation Applied to the Hair With a Pressing Comb.
Use since March 1954.

SN 685,405. Sales Affiliates, Inc., New York, N. Y. Filed Apr. 12, 1955.

wavette

For Permanent Waving Lotion and Neutralizer.
Use since Feb. 28, 1955.

CLASS 52

SN 668,578. Peck's Products Company, St. Louis, Mo. Filed June 21, 1954.

KEEP

Applicant claims ownership of Reg. No. 565,383.
For Liquid Detergent.
Use since February 1951.

SN 674,349. Post Institute, Inc., Tarpon Springs, Fla. Filed Oct. 5, 1954.

HYPERSONIC

Applicant claims ownership of Reg. Nos. 589,921 and 595,678.
For Shampoo and Soap.
Use since Aug. 17, 1949.

SN 679,160. The Hennafoam Company, Newark, N. J. Filed Dec. 30, 1954.

Hennafoam

For Liquid Hair Shampoo, Soaps, Color Shampoo, Soap in Liquid Form, and in Powder Form.
Use since Oct. 4, 1921.

SN 685,301. Red Top Products Incorporated, Omaha, Nebr. Filed Apr. 11, 1955.



The drawing is lined for red. The word "Cleaner" is disclaimed.
For Toilet Bowl Cleaner.
Use since Aug. 2, 1954.

SN 687,712. The Nestle-Lemur Company, New York, N. Y. Filed May 17, 1955.

MOTHER'S DARLING

For Shampoo.
Use since Apr. 15, 1955.

SN 688,617. Atlas Supply Company, Newark, N. J. Filed June 1, 1955.

ATLAS

Applicant claims ownership of Reg. Nos. 261,088, 595,677, and others.
For Rubber Cleaning Solvent for Use in Repairing Tubeless Tires.
Use since May 20, 1955.

SERVICE MARKS

CLASS 100

SN 653,905. Courteous Drivers, Inc., Rockford, Ill. Filed Sept. 29, 1953.



For Services Rendered to Motor Vehicle Owners With a View To Promoting Courteous and Safe Driving.
Use since Sept. 3, 1953.

CLASS 101

SN 655,307. Fair Lady-Lady Fair, also d. b. a. Fair Lady Advertising Company, South Pasadena, Calif. Filed Oct. 26, 1953.

Fair Lady, Lady Fair

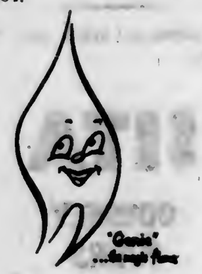
For Advertising the Goods and Services of Others Through the Medium of Advertising Material Placed in Beauty Salon Booths.
Use since Apr. 15, 1951.

SN 655,724. Travel Talk Co., Akron, Ohio, to Travel Talk, Inc. Filed Nov. 2, 1953.

Travel Talk

The drawing is lined for red.
For Making Available to the Public Coin-Operated Dictating Machines.
Use since Aug. 9, 1953.

SN 674,745. Genie Advertising Services, Chattanooga, Tenn. Filed Oct. 13, 1954.



For Advertising Services to the Gas Utility Industry—Namely, Designing, Preparing, and Distributing Advertising and Promotional Material, Including All Forms of Printed Matter, Displays, Novelties, and Radio and Television Advertisements.
Use since Aug. 3, 1954.
Subj. to Intf. with SN 688,558

SN 683,809. Picturama Corporation of America, New York, N. Y. Filed Mar. 18, 1955.

PICTURAMA

For Furniture Merchandising Services Rendered to Retailers Whereby Applicant Leases Viewing Boxes and Provides Slides Showing Furniture Pieces Thus Permitting the Retailer To Increase the Number of Items Displayed Without the Necessity of an Increase in Inventory.
Use since Oct. 22, 1954.

CLASS 105

SN 665,768. Grace Line Inc., New York, N. Y. Filed May 5, 1954.



For Water Transportation of Passengers and Cargo.
Use since Dec. 1, 1931.

SN 674,661. Cherry Transfer & Storage Co., Atlanta, Ga. Filed Oct. 12, 1954.



For Moving Goods of Others by Motor Vehicle and Arranging for the Shipment of Goods.
Use since Mar. 21, 1951.

SN 677,454. Sita-Adventure Trails, Inc., New York, N. Y. Filed Nov. 29, 1954.

SITA
ODYSSEY
TOURS

The mark sought to be registered consists of the words "Sita Odyssey Tours" but the word "Tours" is disclaimed except in the association shown.
For Conducting Escorted Travel Tours.
Use since Nov. 29, 1949.

SN 682,300. Sita-Adventure Trails, Inc., New York, N. Y. Filed Feb. 24, 1955.

SITA

For Conducting Escorted Travel Tours.
Use since Nov. 10, 1935.

SN 687,489. North Atlantic and Gulf Steamship Company, Incorporated, New York, N. Y. Filed May 13, 1955.



The drawing is lined for red.
For Water Transportation of Cargo.
Use since 1937.

SN 687,997. T. M. T. Trailer Ferry, Inc., New York, N. Y. Filed May 20, 1955.



Applicant disclaims the words "Trailer Ferry" apart from the mark as shown.
For Transporting, by Ferry, Loaded Trailer Truck Bodies.
Use since Oct. 30, 1954.

CLASS 106

SN 660,325. Defiance Manufacturing Company, Barrowsville, Mass. Filed Jan. 29, 1954.

ZURETTE

For Treatment of Textiles of Others To Effect a Stiffening Thereof by Chemical Conversion of Their Fibres.
Use since May 17, 1951.

SN 667,579. Rainbowlab, Inc., New York, N. Y. Filed June 2, 1954.



For Developing, Printing, Coloring, and Reproducing Motion Picture Color Film.
Use since Apr. 26, 1951.

CLASS 107

SN 614,305. R. H. Macy & Co., Inc., New York, N. Y. Filed May 24, 1951.

Kay Macy

For Information Service Rendered Through the Medium of a Radio Program Featuring Weather Reports, Theater Programs, Driving Safety Hints, Interviews With Celebrities, Daily Horoscope Predictions, Reports of Current Events, Household Hints, and Style Hints.
Use since Mar. 5, 1951.

SN 679,672. W. W. McMillan, d. b. a. W. W. McMillan & Company, Jacksonville, Fla. Filed Jan. 10, 1955.

YOUR
HOME
TODAY

For Entertainment Services in the Nature of Information on New Designs, Interior Decorations, and Current Fashions in the Field of Home Construction and Decorations, Rendered Through the Medium of a Television Program.
Use since January 1953.

SN 679,955. White and Petersen, Corte Madera, Calif. Filed Jan. 14, 1955.

Masters of Melody

For Title of a Radio Program, Identifying Entertainment Services in the Nature of a Musical Radio Program.
Use since May 15, 1952.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

619,697. TEXTRALIZED. Alexander Smith & Sons Carpet Company, now by change of name Alexander Smith, Incorporated. SN 607,766. Pub. 2–12–52. Filed 12–16–50.

619,698. GREEN CIRCLE. Garfield Williamson, Inc. SN 671,151. Pub. 11–1–55. Filed 8–5–54.

619,699. RETRACTYL. Societe Rhovyl. SN 671,388. Pub. 11–1–55. Filed 8–9–54.

619,700. HI-PRESS. Western Peat Company Limited. SN 671,474. Pub. 10–25–55. Filed 8–10–54.

619,701. SHERWOOD FOREST AND DESIGN. Chingos & Sons, Inc. SN 671,930. Pub. 11–1–55. Filed 8–19–54.

619,702. TREE-O. Thomas Burton Stribling, Jr., d. b. a. Stribling's Nurseries. SN 673,401. Pub. 10–25–55. Filed 9–17–54.

619,703. CHESAPEAKE. Oyster Shell Corporation. SN 676,751. Pub. 11–1–55. Filed 11–16–54.

619,704. NYLAM AND DESIGN. H & R Industries. SN 682,317. Pub. 11–1–55. Filed 2–23–55.

619,705. PERKIE PLANTS. H. Lee Hoffman, d. b. a. Ivy Hill Forest. SN 682,427. Pub. 11–1–55. Filed 2–28–55.

619,706. LEFALIN. Lefatex, Inc. SN 683,601. Pub. 11–1–55. Filed 3–16–55.

619,707. LEFAMID. Lefatex, Inc. SN 683,603. Pub. 11–1–55. Filed 3–16–55.

CLASS 2

619,708. TELESCOPE AND DESIGN. Hyman Badner, d. b. a. Le Roy Industries. SN 650,766. Pub. 11–1–55. Filed 7–24–53.

619,709. FOLD-AWAY. Fold-Away Basket Company, Inc. SN 653,829. Pub. 11–1–55. Filed 9–28–53.

619,710. PAK-AD. Wade A. Morehouse, d. b. a. The House of More. SN 664,874. Pub. 10–25–55. Filed 4–20–54.

619,711. AYER SEAL. Ayer Plastic Sales, Inc. SN 671,623. Pub. 10–25–55. Filed 8–13–54.

619,712. HUOT TULDEX. Huot Manufacturing Company. SN 671,646. Pub. 11–1–55. Filed 8–13–54.

619,713. USI. Pressed Steel Car Company, Inc., now by merger and change of name U. S. Industries, Inc. SN 674,621. Pub. 10–25–55. Filed 10–11–54.

619,714. IT'S A HUM-DINGER. The Maryland Cup Company. SN 680,008. Pub. 11–1–55. Filed 1–17–55.

619,715. STACK-N-NEST. G. B. Lewis Company. SN 682,571. Pub. 11–1–55. Filed 3–1–55.

619,716. TRANSIT. Transit-Tank Company. SN 688,097. Pub. 11–1–55. Filed 5–23–55.

619,717. TEMPER-PLAS. Brockway Glass Company, Inc. SN 688,299. Pub. 11–1–55. Filed 5–26–55.

CLASS 3

619,718. SAVOY. Hickok Manufacturing Co. Inc. SN 683,773. Pub. 11–1–55. Filed 3–18–55.

619,719. ULTRALITE. Shwayder Brothers, Inc. SN 684,598. Pub. 11–1–55. Filed 3–30–55.

619,720. MILES. Melville Shoe Corporation. SN 684,739. Pub. 11–1–55. Filed 4–1–55.

619,721. SOFKIT. Alfred Dunhill of London, Inc. SN 684,933. Pub. 11–1–55. Filed 4–5–55.

CLASS 4

619,722. MICA-NU AND DESIGN. Frank Filia. SN 668,549. Pub. 10–25–55. Filed 6–21–54.

619,723. LONG ISLAND. James H. Rhodes & Company. SN 671,380. Pub. 10–25–55. Filed 8–9–54.

619,724. GEE-I SHINE GOOD TO THE LAST SQUEEZE AND DESIGN. Winhart, Inc. SN 672,857. Pub. 11–1–55. Filed 9–7–54.

619,725. MIRITE. West Disinfecting Company. SN 675,940. Pub. 10–25–55. Filed 11–2–54.

619,726. GULF IN AN ORANGE AND BLUE CIRCLE DESIGN. Gulf Oil Corporation. SN 676,957. Pub. 10–25–55. Filed 11–19–54.

619,727. KARSEAL. Karseal Corporation. SN 677,575. Pub. 10–25–55. Filed 12–1–54.

619,728. METALITE. Norton Company. SN 682,457. Pub. 10–25–55. Filed 2–28–55.

619,729. IBBCO. Indianapolis Brush & Broom Mfg. Co. SN 682,738. Pub. 10–25–55. Filed 3–3–55.

CLASS 5

619,730. REE-STIK. Blenco Distributing Co. SN 666,431. Pub. 10–25–55. Filed 5–17–54.

CLASS 6

619,731. ACINTENE. Arizona Chemical Company. SN 656,690. Pub. 11–1–55. Filed 11–20–53.

619,732. IRGASOL. Geigy Chemical Corporation. SN 658,059. Pub. 10–25–55. Filed 12–16–53.

619,733. CETIOL. Dehydag Deutsche Hydrierwerke GMBH. SN 662,087. Pub. 11–1–55. Filed 3–5–54.

619,734. STENOL. Dehydag Deutsche Hydrierwerke GMBH. SN 668,535. Pub. 11–1–55. Filed 6–21–54.

619,735. ACTIFOS. Haas Miller Corporation, now by change of name to Harry Miller Corp. SN 668,573. Pub. 10–11–55. Filed 6–21–54.

619,736. CALEN-AID. Textile Adjuncts Corporation. SN 669,943. Pub. 11–1–55. Filed 7–13–54.

619,737. AEROMET. American Cyanamid Company. SN 671,233. Pub. 10–25–55. Filed 8–6–54.

619,738. FLY HOT LUNCH AND DESIGN (REPRESENTATION OF A GROTESQUE FLY). McConnon & Company. SN 672,425. Pub. 11–1–55. Filed 8–30–54.

619,739. FENAPLEX. General Aniline & Film Corporation. SN 674,458. Pub. 11–1–55. Filed 10–7–54.

619,740. WITTOX AND DESIGN (DIAMOND). Witco Chemical Company. SN 676,155. Pub. 11–1–55. Filed 11–5–54.

619,741. LUPOLEN. Badische Anilin- & Soda-Fabrik Aktiengesellschaft. SN 678,588. Pub. 11–1–55. Filed 12–20–54.

619,742. BASUDIN. Geigy Chemical Corporation. SN 680,073. Pub. 10–25–55. Filed 1–18–55.

619,743. DE-SOL-VALL. W & W Chemical Co., Inc. SN 682,511. Pub. 11–1–55. Filed 2–28–55.

619,744. RANEDARE AND DESIGN. Metro-Atlaftic Inc. SN 682,655. Pub. 10–25–55. Filed 3–2–55.

619,745. GALLICIDE. Gallowhur Chemical Corporation. SN 683,384. Pub. 10–25–55. Filed 3–14–55.

619,746. DB SOLVES DUST PROBLEMS AND DESIGN. Golden Bear Oil Co. SN 683,499. Pub. 11–1–55. Filed 3–15–55.

619,747. CITROFLEX. Chas. Pfizer & Co., Inc. SN 683,708. Pub. 11–1–55. Filed 3–17–55.

619,748. ADOMITE. Continental Oil Company. SN 683,852. Pub. 10–25–55. Filed 3–21–55.

619,749. CHEMBINE. Naftone, Inc. SN 683,902. Pub. 10–25–55. Filed 3–21–55.

619,750. KLEEN-MIX. Spray-O-Bond Company. SN 683,928. Pub. 10–25–55. Filed 3–21–55.

619,751. SUNAPTIC. Sun Oil Company. SN 683,934. Pub. 10–25–55. Filed 3–21–55.

619,752. BARCOLENE'S SUN-SOFT. The Barcolene Company. SN 683,958. Pub. 10–25–55. Filed 3–22–55.

619,753. POLY KLEEN. Roscoe H. Harper, to Hargivys, Incorporated. SN 684,218. Pub. 10–25–55. Filed 3–25–55.

CLASS 7

619,754. EDER-RAY AND DESIGN. The Linen Thread Co., Inc. SN 668,676. Pub. 10–25–55. Filed 6–22–54.

619,755. INDIAN HEAD DESIGN. Harrington Manufacturing Company, Inc. SN 669,190. Pub. 10–25–55. Filed 6–30–54.

619,756. CRAZY HORSE, HAY CHIEF, ETC., AND DESIGN. H. Paul Dee. SN 672,808. Pub. 11–1–55. Filed 9–7–54.

CLASS 8

619,757. CIG-A-DOUSE. Lyle H. Van Dyke. SN 660,576. Pub. 11–1–55. Filed 2–3–54.

CLASS 9

619,758. ANCHOR AND REPRESENTATION OF ANCHOR. Tang Kuen Hung, d. b. a. Wang Yick Fireworks Company. SN 659,146. Pub. 10–25–55. Filed 1–7–54.

619,759. AMERICAN BUFFALO AND REPRESENTATION OF A BUFFALO. W. J. Taylor, d. b. a. Taylor Fireworks Company. SN 666,992. Pub. 10–25–55. Filed 5–24–54.

619,760. KTF INDUSTRIAL PRODUCTS AND DESIGN. Trifari, Krussman & Fishel, Inc. SN 668,944. Pub. 10–25–55. Filed 6–25–54.

CLASS 10

619,761. S.I.A.P.E AND DESIGN. Societe Industrielle d'Acide Phosphorique et d'Engrais (S.I.A.P.E). SN 665,742. Pub. 10–25–55. Filed 3–24–54.

CLASS 12

619,762. UNA-TEE. The Edwin F. Guth Company. SN 672,074. Pub. 10–25–55. Filed 8–23–54.

619,763. BIO'PLATE. Llewellyn B. Griffith. SN 672,512. Pub. 10–25–55. Filed 8–31–54.

619,764. LABRO-CRETE. Labro-Crete Corp. SN 681,446. Pub. 10–25–55. Filed 2–10–55.

619,765. "GLITTER-WHITE." A. Courchesne, Inc. SN 683,182. Pub. 10–25–55. Filed 3–10–55.

619,766. K KAISER. Kaiser Gypsum Company, Inc. SN 684,663. Pub. 10–25–55. Filed 3–31–55.

610,767. GEOMETILE. Robbins Floor Products, Inc. SN 685,210. Pub. 10–25–55. Filed 4–8–55.

619,768. PURITAN PINE AND DESIGN. Warren Trask Company. SN 685,535. Pub. 10–25–55. Filed 4–14–55.

619,769. RESURFO. The Reardon Company. SN 687,414. Pub. 10–25–55. Filed 5–12–55.

619,770. CONTOUR FIT AND DESIGN. Sunshade Corp. SN 690,344. Pub. 10–25–55. Filed 6–27–55.

CLASS 13

619,771. CONSO AND DESIGN. The Consolidated Iron-Steel Mfg. Co. SN 678,308. Pub. 10–25–55. Filed 12–14–54.

619,772. WATER WATCHMAN. Water Watchman Company, Inc. SN 681,653. Pub. 10–25–55. Filed 2–14–55.

619,773. MAGIC MISER. Knickerbocker Rubber Company. SN 681,698. Pub. 9–20–55. Filed 2–15–55.

619,774. GG AND DESIGN. Gebr. Glittenberg G. m. b. H. SN 681,850. Pub. 10–25–55. Filed 2–17–55.

619,775. GIANT NEVER SAG GATE. Mid-States Steel & Wire Co. SN 682,034. Pub. 10–25–55. Filed 2–21–55.

619,776. USI AND DESIGN. U. S. Industries, Inc. SN 682,506. Pub. 10–25–55. Filed 2–28–55.

619,777. GREAT W. Tubbs Cordage Company. SN 683,245. Pub. 10–25–55. Filed 3–10–55.

619,778. GUNGA DIN WATER BOY AND DESIGN. Fred G. Hartman, Jr. SN 683,882. Pub. 10–25–55. Filed 3–21–55.

619,779. HAMMER CRAFT. Liberty Hardware Mfg. Corp. SN 684,054. Pub. 10–25–55. Filed 3–23–55.

619,780. MAGIC FOUNTAIN. Magic Fountain Inc. SN 684,141. Pub. 10–25–55. Filed 3–24–55.

619,781. RAIN ROSE. Murray G. Spencer, d. b. a. Ray Plastics. SN 684,162. Pub. 10–25–55. Filed 3–24–55.

619,782. DOOR SAVER AND DESIGN. The Door-Saver Manufacturing Company. SN 684,198. Pub. 10–25–55. Filed 3–25–55.

619,783. DIFAB (WITHIN CIRCLE). Fabri-Valve Company of America. SN 684,826. Pub. 10–25–55. Filed 4–4–55.

619,784. NO-SPAT-O. Homer H. Fair, d. b. a. Worthen & Fair. SN 689,028. Pub. 10–25–55. Filed 6–7–55.

619,785. JAKSON FIRST IN BATH FASHIONS AND DESIGN. Joseph A. Kaplan & Sons, Inc. SN 689,495. Pub. 10–25–55. Filed 6–14–55.

619,786. ALWAYS ON GUARD AND DESIGN. Reeves Fences, Inc. SN 689,965. Pub. 10–25–55. Filed 6–21–55.

619,787. PERK 'N SERVE. David Douglas & Co., Inc. SN 689,994. Pub. 10–25–55. Filed 6–22–55.

619,788. CAN-CAN. Jack Goldberg Company. SN 690,159. Pub. 10–25–55. Filed 6–24–55.

619,789. RAIN KIT. Pipe-Co, Incorporated. SN 690,191. Pub. 10–25–55. Filed 6–24–55.

CLASS 16

619,790. CHICAGO PAINTS, INC. AND DESIGN. Chicago Paints, Inc. SN 650,355. Pub. 10–25–55. Filed 7–16–53.

619,791. ELECTRONIC FINISH. Polar Ware Company. SN 664,255. Pub. 10–25–55. Filed 4–9–54.

619,792. TURCOFORM. Turco Products, Inc. SN 672,855. Pub. 10–25–55. Filed 9–7–54.

619,793. A & W. Interchemical Corporation. SN 673,105. Pub. 10–25–55. Filed 9–13–54.

619,794. SATINTONE. Seidlits Paint & Varnish Company. SN 674,287. Pub. 10–25–55. Filed 10–4–54.

619,795. OK PRODUCTS AND DESIGN. Watson-Standard Company. SN 675,935. Pub. 10–25–55. Filed 11–2–54.

619,796. SPRAY ART. U. S. Packaging Corporation. SN 676,425. Pub. 10–25–55. Filed 11–10–54.

619,797. WEATHERPROOF BEAUTY. Allentown Paint Manufacturing Company. SN 682,696. Pub. 10–25–55. Filed 3–3–55.

619,798. KEM KOLD BILD. The Sherwin-Williams Company. SN 683,627. Pub. 10–25–55. Filed 3–16–55.

619,799. A AND DESIGN. Advance Solvents & Chemical Corporation. SN 683,648. Pub. 10–25–55. Filed 3–17–55.

619,800. INANIMATE DESIGN. Wooster Finishes Corporation. SN 684,369. Pub. 10–25–55. Filed 3–28–55.

619,801. DESIGN OF PAINT SPRAYER. The Martin-Senour Company. SN 684,574. Pub. 10–25–55. Filed 3–30–55.

619,802. SYNTHOL COLOR-SOLV. The Martin-Senour Company. SN 684,575. Pub. 10–25–55. Filed 3–30–55.

619,803. VERSATITE. Bernard Reisman, d. b. a. Universal Specialties Co. SN 685,302. Pub. 10–25–55. Filed 4–11–55.

619,804. MARVALON. American Lacquer Solvents Company. SN 690,054. Pub. 10–25–55. Filed 6–23–55.

CLASS 18

619,805. TOCHERGAMINA. Farmaceutici Italia S. A. SN 660,646. Pub. 10–25–55. Filed 2–3–54.

619,806. SANHELIOS. Hermann F. Börner, d. b. a. Sanhelios Hermann F. Börner Pharmazeutische Fabriken. SN 670,648. Pub. 10–25–55. Filed 7–27–54.

619,807. CLOWN-LIKE FIGURE WITH BLACK GROTESQUE FIGURE INSIDE OR ON TOP. Hermann F. Börner, d. b. a. Sanhelios Hermann F. Börner Pharmazeutische Fabriken. SN 670,649. Pub. 10–25–55. Filed 7–27–54.

619,808. NEPTAZANE. American Cyanamid Company. SN 683,471. Pub. 10–25–55. Filed 3–15–55.

619,809. MILEX. Milex Products. SN 683,527. Pub. 10–25–55. Filed 3–15–55.

619,810. CEROFORT. White Laboratories, Inc. SN 683,570. Pub. 10–25–55. Filed 3–15–55.

619,811. COUNTERPAIN. Olin Mathieson Chemical Corporation. SN 683,693. Pub. 10–25–55. Filed 3–17–55.

619,812. OXYMETH. Chicago Pharmacal Company. SN 685,255. Pub. 10–25–55. Filed 4–11–55.

619,813. VERMIZINE. Chicago Pharmacal Company. SN 685,256. Pub. 10–25–55. Filed 4–11–55.

619,814. VIADRIL. Chas. Pfizer & Co., Inc. SN 685,395. Pub. 10–25–55. Filed 4–12–55.

619,815. VISNICO. The Drug Products Co., Inc. SN 685,671. Pub. 10–25–55. Filed 4–18–55.

619,816. AZPECO. Azpeco Chemical Company. SN 685,948. Pub. 10–25–55. Filed 4–21–55.

619,817. URANDIL. Azpeco Chemical Company. SN 685,950. Pub. 10–25–55. Filed 4–21–55.

619,818. VERALGIT. Azpeco Chemical Company. SN 685,951. Pub. 10–25–55. Filed 4–21–55.

619,819. DELCORTRIL. Chas. Pfizer & Co., Inc. SN 686,222. Pub. 10–25–55. Filed 4–25–55.

619,820. ADHEP. Research Laboratories, Inc. SN 686,851. Pub. 10–25–55. Filed 5–4–55.

619,821. TRUE-VITE. Anchor Serum Company. SN 686,873. Pub. 10–25–55. Filed 5–5–55.

619,822. RESP AID. Anchor Serum Company. SN 686,874. Pub. 10–25–55. Filed 5–5–55.

619,823. CHECKER-ETTS. Ralston Purina Company. CONSOLIDATED CERTIFICATE. SN 688,263, pub. 10–11–55, filed 5–25–55, Cl. 18; SN 655,601, pub. 10–11–55, filed 10–30–53, Cl. 46.

CLASS 19

619,824. CRAFT AND DESIGN. Sail and Power Craft, Inc. SN 687,634. Pub. 10–25–55. Filed 5–16–55.

619,825. BANTAM WATE AND DESIGN. The Aerotherm Corporation. SN 691,186. Pub. 10–25–55. Filed 7–13–55.

619,826. ACCEL-O-REST. The Dow Mechanical Corporation. SN 691,198. Pub. 10–25–55. Filed 7–13–55.

619,827. ELECTRA. Lockheed Aircraft Corporation. SN 691,311. Pub. 10–25–55. Filed 7–14–55.

619,828. JUMBO. The Schoellkopf Company. SN 691,328. Pub. 10–25–55. Filed 7–14–55.

619,829. SIMPLEX. American Steel Foundries. SN 691,542. Pub. 10–25–55. Filed 7–19–55.

619,830. LOAD-ROOSTER. Detroit Automotive Products Corporation. SN 691,609. Pub. 10–25–55. Filed 7–20–55.

CLASS 21

619,831. GOLDEN PHONOGRAPH. Spear Products Incorporated. SN 667,353. Pub. 10–25–55. Filed 5–28–54.

619,832. SIGNET. Signet Club Plan. SN 672,265. Pub. 10–25–55. Filed 8–25–54.

619,833. USI AND DESIGN. U. S. Industries, Inc. SN 679,429. Pub. 10–25–55. Filed 1–4–55.

619,834. SHURO. Heyer Industries Incorporated. SN 679,578. Pub. 10–25–55. Filed 1–7–55.

619,835. SIOUX AND DESIGN. Albertson & Company, Inc. SN 679,706. Pub. 10–25–55. Filed 1–11–55.

619,836. DESIGN OF CIRCLE. Litecraft Manufacturing Corporation. SN 680,086. Pub. 10–25–55. Filed 1–18–55.

619,837. GOURMET FRIER COOKER. A A A Sales Company. SN 681,126. Pub. 10–25–55. Filed 2–7–55.

619,838. EEC AND DESIGN. Ebert Electronics Corporation. SN 682,546. Pub. 10–25–55. Filed 3–1–55.

619,839. SMS AND DESIGN. Shaffer Music Co. SN 683,321. Pub. 10–25–55. Filed 3–11–55.

619,840. OXFORD BRAND AND DESIGN. Center Chemical Company. SN 683,577. Pub. 10–25–55. Filed 3–16–55.

619,841. RED-D. Diamond Wire & Cable Company. SN 684,027. Pub. 10–25–55. Filed 3–23–55.

619,842. SYNCROSCAN. General Railway Signal Company. SN 684,129. Pub. 10–25–55. Filed 3–24–55.

619,843. PACER. Sprague Electric Company. SN 684,163. Pub. 10–25–55. Filed 3–24–55.

619,844. FIXTOHM. Campbell Industries, Inc. SN 684,275. Pub. 10–25–55. Filed 3–28–55.

619,845. SPEEDY SLEVE. North Shore Nameplate Inc. SN 684,584. Pub. 10–25–55. Filed 3–30–55.

619,846. MITRA. Sovereign International Corporation. SN 684,691. Pub. 10–25–55. Filed 3–31–55.

619,847. FAXWRITER. Times Facsimile Corporation. SN 684,766. Pub. 10–25–55. Filed 4–1–55.

619,848. REGATRON. Electronic Measurements Company, Inc. SN 684,822. Pub. 10–25–55. Filed 4–4–55.

619,849. LIGHT MEANS PROGRESS AND DESIGN. Progress Manufacturing Company, Inc. SN 685,045. Pub. 10–25–55. Filed 4–6–55.

619,850. KNIGHT. Allied Radio Corporation. SN 685,080. Pub. 10–25–55. Filed 4–7–55.

619,851. INDITRON. National Union Electric Corporation. SN 685,204. Pub. 10–25–55. Filed 4–8–55.

619,852. MERCURY. Nutone, Inc. SN 685,294. Pub. 10–25–55. Filed 4–11–55.

619,853. CLADAMATIC AND DESIGN. Process Engineering Co., of Fort Worth. SN 685,297. Pub. 10–25–55. Filed 4–11–55.

619,854. TELECRANE. Mine Safety Appliances Company. SN 685,604. Pub. 10–25–55. Filed 4–15–55.

619,855. SIGNARAMA. Neon Products, Inc. SN 686,473. Pub. 10–25–55. Filed 4–28–55.

619,856. MECK. Scott Radio Laboratories, Inc. SN 686,697. Pub. 10–25–55. Filed 5–2–55.

619,857. CHRONOHM. Bendix Aviation Corporation. SN 686,877. Pub. 10–25–55. Filed 5–5–55.

619,858. DIRECTOR. Automatic Electric Company. SN 686,945. Pub. 10–4–55. Filed 5–6–55.

CLASS 22

619,859. TINTAIR. Bymart-Tintair, Inc., by change of name from Bymart, Inc. SN 616,472. Pub. 10–25–55. Filed 7–14–51.

619,860. DINKY TOYS. Meccano Limited. SN 648,898. Pub. 10–25–55. Filed 1–21–53.

619,861. PLAY-PAK. Toy Distributors, Inc. SN 662,481. Pub. 10–11–55. Filed 3–11–54.

619,862. JINGLE. Cleveland Mills Company. SN 663,560. Pub. 10–25–55. Filed 3–30–54.

619,863. PIC-A-TOY. Rack Service, Inc. SN 664,353. Pub. 10–25–55. Filed 4–12–54.

619,864. GOOSTER. Morgan E. Cartler. SN 669,313. Pub. 10–25–55. Filed 7–2–54.

619,865. REN LINE AND DESIGN. Radio Steel & Mfg. Co. SN 669,911. Pub. 10–25–55. Filed 7–13–54.

619,866. KIDDIE FINS. Globe Rubber Products Corp. SN 671,251. Pub. 10–25–55. Filed 8–6–54.

619,867. STAN GIBBS CAST-A GENUINE-LURE. Stanley J. Gibbs, d. b. a. Stan Gibbs Lures. SN 672,226. Pub. 10–25–55. Filed 8–25–54.

619,868. PLUG OF THE MONTH AND DESIGN. Sportsman's Gear, Inc. SN 676,842. Pub. 10–25–55. Filed 11–17–54.

619,869. PENNY-GO-ROUND. Charles A. Schoff. SN 677,005. Pub. 10–25–55. Filed 11–19–54.

619,870. KGLAS AND DESIGN. Kimball Manufacturing Corporation, to Kimball Manufacturing Corporation. SN 677,506. Pub. 10–25–55. Filed 11–30–54.

619,871. POLY WAGGLE. Ezra R. Miller. SN 677,799. Pub. 10–25–55. Filed 12–6–54.

619,872. HUBLEY. The Hubley Manufacturing Co. SN 678,534. Pub. 10–25–55. Filed 12–17–54.

619,873. EXTENDO. Orchard Industries, Inc. SN 682,175. Pub. 10–25–55. Filed 2–23–55.

619,874. KITE KADDY AND DESIGN. Trio Manufacturing Co. SN 684,252. Pub. 10–25–55. Filed 3–25–55.

CLASS 23

619,875. INDUMA. Induma Industria Lombarda Macchine Attrezzamenti. SN 657,037. Pub. 10–25–55. Filed 11–27–53.

619,876. HAUNI. Kurt Körber & Co. SN 663,376. Pub. 10–25–55. Filed 3–26–54.

619,877. HAUNI AND DESIGN. Kurt Körber & Co. SN 663,377. Pub. 10–25–55. Filed 3–26–54.

619,878. EZ CHECK. Pneumafil Corporation. SN 670,306. Pub. 10–25–55. Filed 7–20–54.

619,879. WILSEW. Jacob Goldfarb & Co. Inc. SN 680,882. Pub. 10–25–55. Filed 2–1–55.

619,880. DIAL-A-HITE. Roberton Manufacturing Co. SN 681,207. Pub. 10–4–55. Filed 2–7–55.

619,881. AUTOFAB. General Mills, Inc. SN 682,257. Pub. 10–25–55. Filed 2–24–55.

619,882. PORTA-DOCK. The Raymond Corporation. SN 682,474. Pub. 10–25–55. Filed 2–28–55.

619,883. NIPTROL. Rodney Hunt Machine Co. SN 683,044. Pub. 10–25–55. Filed 3–8–55.

619,884. KILLER KANE. Donaldson Company, Inc. SN 684,199. Pub. 10–25–55. Filed 3–25–55.

619,885. FLUIDIZER. Superior Separator Company. SN 691,169. Pub. 10–25–55. Filed 7–12–55.

619,886. EQUISEAL. Allis-Chalmers Manufacturing Company. SN 691,410. Pub. 10–25–55. Filed 7–18–55.

619,887. SUPER-SPRITE. The De Havilland Engine Company Limited. SN 691,446. Pub. 10–25–55. Filed 7–18–55.

619,888. STAIR-CHAIR. Sedgwick Machine Works, Inc. SN 691,516. Pub. 10–25–55. Filed 7–18–55.

619,889. RHYTHM. Shiriro Trading Corporation. SN 691,519. Pub. 10–25–55. Filed 7–18–55.

CLASS 24

619,890. NELSON. Nelson Manufacturing Co. SN 683,304. Pub. 10–25–55. Filed 3–11–55.

CLASS 26

619,891. REPRESENTATION OF AN EAGLE IN FLIGHT. Société Anonyme Dite: Messier. SN 627,533. Pub. 10–25–55. Filed 4–3–52.

619,892. KEARFOTT AND DESIGN (REPRESENTATION OF A CIRCLE AND SPIKE). Kearfott Company, Inc. SN 674,825. Pub. 10–25–55. Filed 10–14–54.

619,893. TIDE TIMER AND DESIGN (FISH). Dumal Corporation. SN 675,209. Pub. 10–25–55. Filed 10–21–54.

619,894. DESIGN OF GEAR. The National Cash Register Company. SN 675,997. Pub. 10–25–55. Filed 11–3–54.

619,895. PLANOMATIC. M & M Industries. SN 680,766. Pub. 10–25–55. Filed 1–31–55.

619,896. "PAMELON." Bar-Ray Products, Inc. SN 680,929. Pub. 10–25–55. Filed 2–2–55.

619,897. DOUBLETT. General Aniline & Film Corporation. SN 681,155. Pub. 10–25–55. Filed 2–7–55.

619,898. ADD PUNCH. Friden Calculating Machine Co., Inc. SN 682,903. Pub. 10–25–55. Filed 3–7–55.

619,899. FR. The FR Corporation. SN 684,723. Pub. 10–25–55. Filed 4–1–55.

619,900. SILHOUETTE—MAN. The FR Corporation. SN 684,724. Pub. 10–25–55. Filed 4–1–55.

619,901. AQUA-GILL. James P. Fay. SN 684,936. Pub. 10–25–55. Filed 4–5–55.

619,902. GORDENT. Alan B. Gordon, d. b. a. Gordon Enterprises. SN 685,700. Pub. 10–25–55. Filed 4–18–55.

619,903. DESIGN OF 2 HUMAN HEADS AND RECTANGLES. Erik A. Lindgren, d. b. a. Erik A. Lindgren and Associates. SN 686,194. Pub. 10–25–55. Filed 4–25–55.

619,904. FULSCOPE. Taylor Instrument Companies. SN 686,236. Pub. 10–25–55. Filed 4–25–55.

619,905. ALLSCOPE. Wollensak Optical Company. SN 686,410. Pub. 10–25–55. Filed 4–27–55.

619,906. ARC-LOCK. American Machine and Metals, Inc. SN 686,412. Pub. 10–25–55. Filed 4–28–55.

619,907. MICROTRIM. Bourns Laboratories, Inc. SN 686,419. Pub. 10–25–55. Filed 4–28–55.

619,908. MEDALIST. Marion Electrical Instrument Co. SN 686,671. Pub. 10–25–55. Filed 5–2–55.

619,909. METCO AND DESIGN. Metallizing Engineering Co. Inc. SN 687,967. Pub. 10–25–55. Filed 5–20–55.

619,910. MEDIAC. Nuclear Instrument and Chemical Corporation. SN 688,067. Pub. 10–25–55. Filed 5–23–55.

619,911. WOBBULATOR. Canoga Corporation. SN 688,503. Pub. 10–25–55. Filed 5–31–55.

619,912. P–28. Precision-Cosmet Company, Inc. SN 688,573. Pub. 10–25–55. Filed 5–31–55.

619,913. AIRFLO. Fluidless Contact Lenses, Inc. SN 688,722. Pub. 10–25–55. Filed 6–2–55.

619,914. SEA-SCANAR. Minneapolis-Honeywell Regulator Company. SN 688,744. Pub. 10–25–55. Filed 6–2–55.

619,915. ROBERTSON PHOTO-MECHANIX. Robertson Photo-Mechanix, Inc. SN 688,857. Pub. 10–25–55. Filed 6–3–55.

619,916. SUPER PROMINAR. Walter Futter. SN 689,617. Pub. 10–25–55. Filed 6–16–55.

619,917. SQUAR-EVEL. Macklanburg-Duncan Co. SN 690,012. Pub. 10–25–55. Filed 6–22–55.

619,918. MEMOMAT. General Aniline & Film Corporation SN 691,208. Pub. 10–25–55. Filed 7–13–55.

619,919. MEMARETTE. General Aniline & Film Corporation. SN 691,209. Pub. 10–25–55. Filed 7–13–55.

CLASS 27

619,920. LADY BELVEDERE. N. Engel & Co. SN 683,032. Pub. 10–25–55. Filed 3–8–55.

619,921. LORD BELVEDERE. N. Engel & Co. SN 683,033. Pub. 10–25–55. Filed 3–8–55.

619,922. GOLDEN MINUTE. Jefferson Electric Company. SN 686,831. Pub. 10–25–55. Filed 5–4–55.

CLASS 28

619,923. MASTER-GUILD. Mayer Bros. SN 687,083. Pub. 10–25–55. Filed 5–9–55.

CLASS 29

619,924. RAYNEL. E Z Paintr Corporation. SN 681,878. Pub. 10–25–55. Filed 2–17–55.

CLASS 31

619,925. E Z KLEEN. Research Products Corporation. SN 673,473. Pub. 10–25–55. Filed 9–20–54.

619,926. SEABLUE. Paddock of Texas. SN 673,856. Pub. 10–25–55. Filed 9–27–54.

CLASS 32

619,927. THE EASEMASTER. Tomlinson of High Point. SN 659,578. Pub. 9–14–54. Filed 1–15–54.

619,928. TAPER TREND. Du Page Precision Products Co. SN 680,591. Pub. 10–25–55. Filed 1–27–55.

619,929. INSO-PAD. Rockwell Spring and Axle Company. SN 680,629. Pub. 10–25–55. Filed 1–27–55.

619,930. CRES-COR. Crescent Metal Products, Inc. SN 681,751. Pub. 10–25–55. Filed 2–16–55.

619,931. BONTUFT. Bond Bedding Co. SN 682,113. Pub. 10–25–55. Filed 2–23–55.

619,932. CURVFORM. William Schenck & Company, Inc. SN 682,363. Pub. 10–25–55. Filed 2–25–55.

CLASS 33

619,933. G AND DESIGN. Gulfport Glass Corporation. SN 684,044. Pub. 10–25–55. Filed 3–23–55.

619,934. NESCARAFE. The Nestlé Company, Inc. SN 686,995. Pub. 10–25–55. Filed 5–6–55.

CLASS 34

619,935. CONIFER. Western Foundry, Inc. SN 680,831. Pub. 10–25–55. Filed 1–31–55.

619,936. OVENGLO. Ovenglo Company, Inc. SN 680,968. Pub. 10–25–55. Filed 2–2–55.

619,937. STEAM-PAKETTE. York-Shipley, Inc. SN 681,119. Pub. 10–25–55. Filed 2–4–55.

619,938. AREX. Arex Company. SN 681,477. Pub. 10–25–55. Filed 2–11–55.

CLASS 35

619,939. STAPATCH AND DESIGN. Martin O. Haney, d. b. a. Stapatch Tire Boot and Accessory Company. SN 686,738. Pub. 10–25–55. Filed 5–3–55.

619,940. OK AND DESIGN. O. K. Ko-Op Rubber Welding System. SN 687,490. Pub. 10–25–55. Filed 5–13–55.

619,941. FIESTA. The Goodyear Tire & Rubber Company. SN 691,130. Pub. 10–25–55. Filed 7–12–55.

619,942. SPEED CUSHION. The Firestone Tire & Rubber Company. SN 691,288. Pub. 10–25–55. Filed 7–14–55.

CLASS 36

619,943. DE SAYMONT AND DESIGN. De Saymont. SN 673,732. Pub. 10–25–55. Filed 9–24–54.

CLASS 37

619,944. SWAN CALLIGRAPH. Mabie, Todd & Company Limited. SN 653,387. Pub. 10–25–55. Filed 9–18–53.

619,945. MARK TWAIN. Brown & Bigelow. SN 674,443. Pub. 10–25–55. Filed 10–7–54.

619,946. CF AND DESIGN. Waterman Pen Company, Inc. SN 675,113. Pub. 10–25–55. Filed 10–19–54.

619,947. VALENTINE PULP & PAPER CO., INC. AND DESIGN. Valentine Pulp & Paper Co., Inc. SN 678,292. Pub. 10–25–55. Filed 12–13–54.

619,948. ADENA. The Chillicothe Paper Company. SN 678,377. Pub. 10–25–55. Filed 12–15–54.

619,949. QUIZ. The Ruwe Pencil Company. SN 680,037. Pub. 10–25–55. Filed 1–17–55.

619,950. BOUQUET. Strathmore Paper Company. SN 680,110. Pub. 10–25–55. Filed 1–18–55.

619,951. PALETTE. Strathmore Paper Company. SN 680,165. Pub. 10–25–55. Filed 1–19–55.

619,952. HOLIDAY. Strathmore Paper Company. SN 680,427. Pub. 10–25–55. Filed 1–24–55.

619,953. GEORG JENSEN INC. AND DESIGN. Georg Jensen Inc. SN 680,611. Pub. 10–25–55. Filed 1–27–55.

619,954. LED-FLO. American Lead Pencil Company. SN 680,712. Pub. 10–18–55. Filed 1–31–55.

619,955. DESIGN OF DEER. Doeskin Products, Inc. SN 680,943. Pub. 10–25–55. Filed 2–2–55.

CLASS 38

619,956. MERLEIGH-GREETS AND DESIGN. Mary L. Westphal. SN 681,558. Pub. 10–25–55. Filed 2–11–55.

619,957. CULPEPER STAR-EXPONENT. Newspaper Publishing Corporation. SN 681,875. Pub. 10–25–55. Filed 2–17–55.

619,958. QUALIFAX. United States Steel Corporation. SN 681,957. Pub. 10–25–55. Filed 2–18–55.

CLASS 39

619,959. GYMCLOTH. E. R. Moore Company. SN 655,537. Pub. 10–25–55. Filed 10–29–53.

619,960. LUCKY JEANS SANTONE AND DESIGN (REPRESENTATION OF A SIGN). The Juvenile Mfg. Co., Inc. SN 672,580. Pub. 4–5–55. Filed 9–1–54.

619,961. ALL HITES. Sears, Roebuck and Co. SN 673,392. Pub. 10–25–55. Filed 9–17–54.

619,962. GENTLEMEN JR. Gentlemen Jr. SN 680,640. Pub. 10–25–55. Filed 2–3–55.

619,963. ALATEX. Alabama Textile Products Corporation. SN 680,653. Pub. 10–25–55. Filed 1–28–55.

619,964. FAERIE TALES. Fairy Silk Mills, Inc. SN 681,147. Pub. 10–25–55. Filed 2–7–55.

619,965. LADY WINDSOR. Jack Schwartz, d. b. a. Jackson Hosiery Company. SN 681,551. Pub. 10–25–55. Filed 2–11–55.

619,966. BIRTHDAY. Morsly Handkerchief Co., Inc. SN 681,615. Pub. 10–25–55. Filed 2–14–55.

619,967. SAFETRED. The Bearfoot Sole Company, Inc. SN 681,670. Pub. 10–25–55. Filed 2–15–55.

619,968. CON-ITALS. Milford Shoe Company. SN 681,776. Pub. 10–25–55. Filed 2–16–55.

619,969. BARTON HALL IMPERIALS. Stone-Tarlow Co., Inc. SN 681,888. Pub. 10–25–55. Filed 2–17–55.

619,970. WIMBLEDON MODEL. Saks & Company. SN 682,073. Pub. 10–25–55. Filed 2–21–55.

619,971. FAIR PLAY. Chester H. Roth Co., Inc. SN 682,192. Pub. 10–25–55. Filed 2–23–55.

619,972. CONTRACT. George L. Kreider. SN 682,439. Pub. 10–25–55. Filed 2–28–55.

619,973. LEADA. Leada Baby Shoe, Inc. SN 682,569. Pub. 10–25–55. Filed 3–1–55.

619,974. THE LEADA. Leada Baby Shoe, Inc. SN 682,570. Pub. 10–25–55. Filed 3–1–55.

619,975. DURA-GRIP. United States Rubber Company. SN 683,156. Pub. 10–11–55. Filed 3–9–55.

CLASS 40

619,976. TIE KING. Mission Industries. SN 673,289. Pub. 10–25–55. Filed 9–16–54.

CLASS 42

619,977. FYBERLON. Mook Bros. Inc. SN 674,177. Pub. 11–1–55. Filed 10–1–54.

619,978. SOUTHBOUND. Mook Bros. Inc. SN 674,180. Pub. 11–1–55. Filed 10–1–54.

619,979. TEXTUF. E. W. Twitchell, Incorporated. SN 675,182. Pub. 11–1–55. Filed 10–20–54.

619,980. BROCATIS. Tootal Broadhurst Lee Company Limited. SN 680,167. Pub. 10–25–55. Filed 1–19–55.

619,981. WASH-A-PLUSH. Collins & Aikman Corporation. SN 680,732. Pub. 10–25–55. Filed 1–31–55.

619,982. CRYLNYL. Societe Rhodiaceta, to Societe Crylor. SN 681,714. Pub. 10–25–55. Filed 2–15–55.

619,983. CAMOSHEEN. C. M. De Land. SN 682,130. Pub. 10–25–55. Filed 2–23–55.

619,984. MONTEBELLO. C. M. De Land. SN 682,131. Pub. 10–25–55. Filed 2–23–55.

619,985. VELVEMONT. C. M. De Land. SN 682,132. Pub. 10–25–55. Filed 2–23–55.

619,986. SNOWFLURRY. Security Mills, Inc. SN 682,196. Pub. 10–25–55. Filed 2–23–55.

619,987. SECUROCRAT. Security Mills, Inc. SN 682,197. Pub. 10–25–55. Filed 2–23–55.

619,988. WONDER-DRI. Spartan Mills. SN 682,202. Pub. 10–25–55. Filed 2–23–55.

619,989. EPIC. Monarch Rug Mills. SN 682,277. Pub. 10–25–55. Filed 2–24–55.

619,990. PEARLANA. Forstmann Woolen Co. SN 682,339. Pub. 10–25–55. Filed 2–25–55.

619,991. PACAWEAVE. Bettermade Garment Company. SN 682,391. Pub. 10–25–55. Filed 2–28–55.

619,992. MIRON'S CRESCENT CLOTH. Miron Mills Inc. SN 682,451. Pub. 10–25–55. Filed 2–28–55.

619,993. COLORADO SPRINGS. H. W. Schwab Textile Corp. SN 682,492. Pub. 10–25–55. Filed 2–28–55.

619,994. THECO. Turner Halsey Company. SN 682,502. Pub. 11–1–55. Filed 2–28–55.

619,995. BEACRON. Beacon Manufacturing Company. SN 682,535. Pub. 10–25–55. Filed 3–1–55.

619,996. SPUNOAH. Beacon Manufacturing Company. SN 682,536. Pub. 10–25–55. Filed 3–1–55.

619,997. CRYLBENE. Societe Rhodiaceta, to Societe Crylor. SN 682,679. Pub. 10–25–55. Filed 3–2–55.

619,998. JIFFY-DRY. Bernhard Ulmann Co. Inc. SN 683,246. Pub. 11–1–55. Filed 3–10–55.

619,999. AUTUMN FOLIAGE TWEEDS. Daniel W. Farnsworth. SN 683,251. Pub. 11–1–55. Filed 3–15–55.

620,000. GEORGIAN. Cabin Crafts, Inc. SN 683,659. Pub. 11–1–55. Filed 3–17–55.

620,001. CRAD O CORD. Craddock Company. SN 683,855. Pub. 11–1–55. Filed 3–21–55.

CLASS 43

620,002. RETRACTYL. Societe Rhovyl. SN 671,387. Pub. 11–1–55. Filed 8–9–54.

620,003. CRYLNYL. Societe Rhodiaceta, to Societe Crylor. SN 681,715. Pub. 10–25–55. Filed 2–15–55.

CLASS 44

620,004. ESG SANITAS AND DESIGN. Electricitaetsgesellschaft Sanitas m. b. H. SN 670,471. Pub. 11–1–55. Filed 7–23–54.

620,005. ENZ. Youngs Rubber Corporation. SN 676,089. Pub. 11–1–55. Filed 11–5–54.

620,006. MONOSEAL. Horton & Converse. SN 677,655. Pub. 10–25–55. Filed 12–2–54.

620,007. MULTIFIT. Becton, Dickinson and Company. SN 677,928. Pub. 10–25–55. Filed 12–8–54.

620,008. TISSU-BLEND. The Jectron Company. SN 682,267. Pub. 10–25–55. Filed 2–24–55.

620,009. CAVITRON. Cavitron Corporation. SN 682,396. Pub. 10–25–55. Filed 2–28–55.

620,010. STRYKER. Orthopedic Frame Company. SN 682,462. Pub. 10–25–55. Filed 2–28–55.

620,011. ORALIX. N. V. Philips' Gloeilampenfabrieken. SN 682,467. Pub. 10–25–55. Filed 2–28–55.

620,012. JEL-JECTOR. Milex Products. SN 682,958. Pub. 11–1–55. Filed 3–7–55.

620,013. MELCO. Melchior, Armstrong, Dessau Co. of Delaware, Inc. SN 683,124. Pub. 11–1–55. Filed 3–9–55.

620,014. MILEX. Milex Products. SN 683,125. Pub. 11–1–55. Filed 3–9–55.

620,015. P AND DESIGN OF RETORT. Propper Manufacturing Company, Inc. SN 683,230. Pub. 11–1–55. Filed 3–10–55.

620,016. HYCHEX. Hychex Products. SN 683,511. Pub. 10–25–55. Filed 3–15–55.

620,017. COMPROL. Johnson & Johnson. SN 683,517. Pub. 11–1–55. Filed 3–15–55.

620,018. FIGURE WITH SWORD AND SHIELD. Youngs Rubber Corporation. SN 683,644. Pub. 10–25–55. Filed 3–16–55.

620,019. GUARDIAN HANDILUBE. Youngs Rubber Corporation. SN 683,645. Pub. 10–25–55. Filed 3–16–55.

620,020. ADAPT-O-MATIC. J. E. Hanger Company, Inc. SN 684,422. Pub. 10–25–55. Filed 3–29–55.

620,021. MAYBELLINE. Maybelline Co. SN 685,914. Pub. 10–25–55. Filed 4–20–55.

620,022. "KOLOR-MARK". The Seamless Rubber Company. SN 686,339. Pub. 10–25–55. Filed 4–26–55.

CLASS 45

620,023. NESBITT'S. Nesbitt Fruit Products Inc. SN 670,878. Pub. 10–25–55. Filed 8–2–54.

CLASS 46

619,823. CONSOLIDATED CERTIFICATE. See Class 18.

620,024. ELEPHANT SILHOUETTE. Manley, Inc. SN 569,385. Pub. 6–1–54. Filed 11–20–48.

620,025. SUPERSWEET. International Milling Company from Eagle Roller Mill Company. SN 640,675. Pub. 10–25–55. Filed 1–13–53.

620,026. FROZEN MATES. Leaf Brands, Inc. SN 647,698. Pub. 11–1–55. Filed 5–26–53.

620,027. INSTA-MIX. Prairie Farms Creameries. SN 648,792. Pub. 10–25–55. Filed 6–15–53.

620,028. MARVIN'S. Marvin P. Hallford, d. b. a. Marvin's Products Company. SN 649,782. Pub. 11–1–55. Filed 7–3–53.

620,029. DARI-GO-ROUND. Dari-Go-Round, Inc. (Florida corporation), to Dari-Go-Round, Inc. (Minnesota corporation). SN 650,359. Pub. 11–1–55. Filed 7–16–53.

620,030. MANNER BAR. Josef Manner & Comp. A. G. SN 651,605. Pub. 11–1–55. Filed 8–10–53.

620,031. RED TIP AND DESIGN. Premier Smoked Meats, Inc. SN 651,859. Pub. 10–25–55. Filed 8–14–53.

620,032. CORN CITY AND DESIGN. Koppenhofer Bros. SN 654,981. Pub. 11–1–55. Filed 10–19–53.

620,033. HOLLYWOOD. National Bakers Services, Inc. SN 657,057. Pub. 10–19–54. Filed 11–27–53.

620,034. NIK-L-NIP. The W. & F. Manufacturing Co., Inc. SN 658,424. Pub. 10–25–55. Filed 12–22–53.

620,035. RUDY'S, ETC. AND DESIGN. Redi-Food Co., Inc. SN 658,649. Pub. 11–1–55. Filed 12–28–53.

620,036. SIR APPLE AND DESIGN. Stephen "Bob" Scurich. SN 660,510. Pub. 4–27–54. Filed 2–2–54.

620,037. WHOLE SUN. Winter Garden Citrus Products Cooperative. SN 660,980. Pub. 10–25–55. Filed 2–11–54.

620,038. MARZETTI'S FAMOUS SALAD DRESSINGS AND DESIGN. T. Marzetti Company. SN 661,649. Pub. 10–25–55. Filed 2–25–54.

620,039. CHELTEN HOUSE. Penn Food Distributors, Inc. SN 662,136. Pub. 11–1–55. Filed 3–5–54.

620,040. POPSICLE. Joe Lowe Corporation. SN 662,372. Pub. 10–25–55. Filed 3–10–54.

620,041. PALATEX. Schenley Distillers, Inc. SN 662,819. Pub. 10–25–55. Filed 3–17–54.

620,042. ROGERS BABY GREEN. Rogers Canning Company. SN 663,515. Pub. 10–25–55. Filed 3–29–54.

620,043. REPRESENTATION OF PEANUT ON OUTLINE OF MAP OF GEORGIA. Georgia Peanut Company. SN 664,440. Pub. 10–25–55. Filed 4–13–54.

620,044. BAKEMAR. The Procter & Gamble Company. SN 665,226. Pub. 4–12–55. Filed 4–26–54.

620,045. "I NEED FAT" AND DESIGN. Darling & Company. SN 666,651. Pub. 10–25–55. Filed 5–19–54.

620,046. FISCHER'S PULLMAN AND DESIGN. Fischer Baking Company. SN 666,836. Pub. 10–25–55. Filed 5–21–54.

620,047. SUNNY SOUTHLAND AND DESIGN. Southland Cotton Oil Company. SN 666,877. Pub. 10–25–55. Filed 5–21–54.

620,048. HELEN HARRISON'S. Walter E. Bothe Foods, Inc. SN 667,014. Pub. 10–25–55. Filed 5–25–54.

620,049. BOTTLERS. H. Kohnstamm & Co., Inc. SN 667,540. Pub. 10–25–55. Filed 6–2–54.

620,050. SHAMROCK. H. Kohnstamm & Co., Inc. SN 667,546. Pub. 10–25–55. Filed 6–2–54.

620,051. GUM DROP. H. Kohnstamm & Co., Inc. SN 667,561. Pub. 10–25–55. Filed 6–2–54.

620,052. ICING. H. Kohnstamm & Co., Inc. SN 667,562. Pub. 10–25–55. Filed 6–2–54.

620,053. MARSHALL FARMS. Max Loewenstein and Eleanor S. Loewenstein. SN 667,969. Pub. 10–25–55. Filed 6–9–54.

620,054. SWANSON. C. A. Swanson & Sons, to Campbell Soup Company. SN 668,210. Pub. 10–25–55. Filed 6–14–54.

620,055. SHER-EEZ. Crest Foods Co. SN 668,972. Pub. 11–1–55. Filed 6–28–54.

620,056. DESIGN OF GIRL. Chunky Chocolate Corp., d. b. a. Chunky Chocolate Corporation. SN 670,462. Pub. 10–25–55. Filed 7–23–54.

620,057. BEN-HUR. McCormick & Company, Incorporated. SN 671,447. Pub. 10–25–55. Filed 8–10–54.

620,058. CHESDALE. N. Z. Cheese Limited. SN 671,852. Pub. 10–25–55. Filed 8–17–54.

620,059. NUCHEES. Louise Dart's Food Specialties, also d. b. a. Louise Dart. SN 671,934. Pub. 10–25–55. Filed 8–19–54.

620,060. MELLOGOLD. Foster Beef Company. SN 672,225. Pub. 11–1–55. Filed 8–25–54.

620,061. DERRY'S. Benjamin B. Deretchin, d. b. a. Derry Products Company. SN 672,723. Pub. 10–25–55. Filed 9–3–54.

620,062. 2 PLUS 2. G. F. Gundlach & Co. Inc. SN 672,814. Pub. 10–25–55. Filed 9–7–54.

620,063. SILVER WING. Piggly Wiggly Sims, Stores, Inc., by change of name from Tanner-Brice Company. SN 673,691. Pub. 11–1–55. Filed 9–23–54.

620,064. SPARKLING. Piggly Wiggly Sims Stores, Inc., by change of name from Tanner-Brice Company. SN 673,692. Pub. 11–1–55. Filed 9–23–54.

620,065. DELAGOLD. James P. Molica, d. b. a. J. P. Molica Company. SN 673,755. Pub. 10–25–55. Filed 9–24–54.

620,066. CRIX. Bermudex Biscuit Company Limited. SN 674,218. Pub. 10–25–55. Filed 10–4–54.

620,067. EDY'S. Edy's Character Candies. SN 674,378. Pub. 10–25–55. Filed 10–6–54.

620,068. CAMPUSNAX. Dorothy G. Williamson, d. b. a. Willi-Mar-Ket. SN 675,041. Pub. 10–25–55. Filed 10–18–54.

620,069. NORSE PEARL. B. Westergaard & Co. Inc. SN 675,242. Pub. 10–25–55. Filed 10–21–54.

620,070. HIMALAYA. J. Aron & Company, Inc., d. b. a. Supreme Sugar Refinery. SN 676,032. Pub. 10–25–55. Filed 11–4–54.

620,071. SWEET'N SLIM. Loft Candy Corporation. SN 677,665. Pub. 10–25–55. Filed 12–2–54.

620,072. THE SMOKE HOUSE AND DESIGN (REPRESENTATION OF A HOUSE). Andrew H. Brown, d. b. a. The Smokehouse. SN 678,086. Pub. 10–25–55. Filed 12–10–54.

620,073. ORIENTAL AND DESIGN. Oriental Show You Company, Inc. SN 678,140. Pub. 10–25–55. Filed 12–10–54.

620,074. MARUSKA. Dulcich Brothers. SN 683,029. Pub. 11–1–55. Filed 3–8–55.

620,075. FLAMINGO. Neil J. Morgan. SN 683,130. Pub. 11–1–55. Filed 3–9–55.

620,076. SARATOGA FARM. Tobin Packing Co., Inc. SN 683,243. Pub. 11–1–55. Filed 3–10–55.

620,077. PAYETTE VALLEY. Fruitland Canning Association, Inc. SN 683,288. Pub. 11–1–55. Filed 3–11–55.

620,078. CHILD'S HEAD AND DESIGN. Borck & Stevens, Incorporated. SN 683,348. Pub. 11–1–55. Filed 3–14–55.

620,079. TACEFINE. The Danahy Packing Company. SN 683,584. Pub. 11–1–55. Filed 3–16–55.

CLASS 50

620,080. TROPICRAFT (FANCIFUL). Tropicraft, Inc. SN 662,401. Pub. 10–25–55. Filed 3–10–54.

620,081. LITTLE LADY AND DESIGN. Helene Pessl, Inc. SN 667,434. Pub. 10–25–55. Filed 6–1–54.

620,082. GLITTER ART. Belmont Industries, Inc. SN 669,962. Pub. 10–25–55. Filed 7–14–54.

620,083. MITEE-STAR. Mitee Manufacturing Company, Inc. SN 671,106. Pub. 10–25–55. Filed 8–4–54.

620,084. AUTOLEVL. Cascades Plywood Corporation. SN 673,808. Pub. 10–25–55. Filed 9–27–54.

620,085. POLLY RED TOP. The American Thermos Bottle Company. SN 674,123. Pub. 10–25–55. Filed 10–1–54.

620,086. OUT-PAK. E. Greene and Company, Inc. SN 682,642. Pub. 10–25–55. Filed 3–2–55.

620,087. 'PLY-STIK.' Plymouth Rubber Company, Inc. SN 683,229. Pub. 10–25–55. Filed 3–10–55.

620,088. EVER-KLEEN. Abraham I. Bremen, d. b. a. Artex Rug Mfg. Co. SN 683,657. Pub. 11–1–55. Filed 3–17–55.

620,089. S5. Red Bird Aviaries. SN 684,066. Pub. 11–1–55. Filed 3–23–55.

CLASS 51

620,090. MASK AND STAR DESIGN. Max Factor & Co. SN 658,001. Pub. 11–1–55. Filed 12–15–53.

620,091. ALL STARS. Mathieson Products Corporation, to Lentheric, Inc. SN 660,879. Pub. 11–1–55. Filed 2–10–54.

620,092. KU-RILL. A. C. Hynd Corp. SN 661,639. Pub. 10–25–55. Filed 2–25–54.

620,093. CLOSE-UP. Mathieson Products Corporation, to Lentheric, Inc. SN 662,876. Pub. 10–25–55. Filed 3–18–54.

620,094. AND ONE TO GO. Mathieson Products Corporation, to Lentheric, Inc. SN 665,290. Pub. 10–25–55. Filed 4–27–54.

620,095. BONAT LANOLIN PERFECTION. Samuel Bonat & Bro., Inc. SN 668,725. Pub. 10–25–55. Filed 6–23–54.

620,096. CUBANA M ALY AND DESIGN. Società A. R. I. Aly Mariani & C. SN 672,109. Pub. 11–1–55. Filed 8–23–54.

620,097. INSTANT CLAIROL. Clairol Incorporated. SN 673,572. Pub. 10–25–55. Filed 9–22–54.

620,098. VARSITY. Hyman Frieden, d. b. a. Cavalier Laboratories. SN 673,909. Pub. 11–1–55. Filed 9–28–54.

620,099. SERTINE BY LONTREL. Peau Seche, Inc., d. b. a. Lontrel. SN 677,523. Pub. 10–25–55. Filed 11–30–54.

620,100. INSTANT GAMBY. Morton Hague, d. b. a. The Gamby Company. SN 678,916. Pub. 11–1–55. Filed 12–24–54.

620,101. LACTOPINE AND DESIGN. Swiss Pine Importing Co., Inc. SN 679,063. Pub. 10–25–55. Filed 12–28–54.

620,102. MODERNA. Helen Neushaefer, Inc. SN 681,704. Pub. 11–1–55. Filed 2–15–55.

620,103. TRIPLE-SURE. Sales Affiliates, Inc. SN 683,435. Pub. 11–1–55. Filed 3–14–55.

620,104. MUC-KO. Hattie Thompson. SN 692,820. Pub. 11–1–55. Filed 8–10–55.

CLASS 52

620,105. EASE. Ease, Incorporated. SN 644,293. Pub. 11–1–55. Filed 3–27–53.

620,106. SCOTTIE AND DESIGN. James A. Scott, Jr., d. b. a. Scott Chemical Company. SN 651,016. Pub. 11–1–55. Filed 7–28–53.

620,107. PRO. Nox-Rust Chemical Corporation, now by change of name Daubert Chemical Company. SN 652,471. Pub. 11–1–55. Filed 8–28–53.

620,108. FROIL FROIL FOILS FINGERPRINTS. Octagon Process, Inc. SN 653,704. Pub. 11–1–55. Filed 9–24–53.

620,109. PINK-N-BLUE WITHIN DESIGN. Duke and Benedict. SN 661,939. Pub. 11–1–55. Filed 3–3–54.

620,110. JOHNSON'S. Johnson & Johnson. SN 664,446. Pub. 11–1–55. Filed 4–13–54.

620,111. VEROPON. Verona Chemical Company. SN 666,890. Pub. 11–1–55. Filed 5–21–54.

620,112. KWIK. Chemical Products Company, Inc. SN 667,307. Pub. 11–1–55. Filed 6–2–54.

620,113. FINISHINE. Finishine Laboratories, Inc. SN 667,515. Pub. 11–1–55. Filed 6–2–54.

620,114. PINE-AIR. Delta Chemical Company, to Dust-A-Way, Inc. SN 668,536. Pub. 10–25–55. Filed 6–21–54.

620,115. X45. Chemical & Combustion Corp. SN 671,416. Pub. 10–25–55. Filed 8–10–54.

620,116. PRO-KLEEN. Pro-Kleen Industries, Inc. SN 672,100. Pub. 10–25–55. Filed 8–23–54.

620,117. BROWN'S B WINDOGLO AND DESIGN. Charles F. Brown, d. b. a. Tennessee Supply Company. SN 678,958. Pub. 10–25–55. Filed 12–27–54.

620,118. MICRO-SOLV. Microbiological Associates, Inc. SN 679,051. Pub. 10–25–55. Filed 12–28–54.

620,119. RUBBER TONE AND DESIGN. TJ Silber, d. b. a. Economy Products Company. SN 679,343. Pub. 10–25–55. Filed 1–3–55.

620,120. MANPRO. Manufacturers Processing Co. SN 680,209. Pub. 10–25–55. Filed 1–20–55.

620,121. KAR-KOTE COASTAL CO. Coastal Chemical Corporation. SN 684,538. Pub. 10–25–55. Filed 3–30–55.

620,122. TERG-A-TABS. Standard Scientific Supply Corp. SN 685,138. Pub. 10–25–55. Filed 4–7–55.

Service Marks

CLASS 100

620,123. BETZ AND DESIGN. W. H. & L. D. Betz. SN 668,627. Pub. 10–25–55. Filed 6–22–54.

CLASS 101

620,124. COURTESY ASSOCIATES AND DESIGN (PHONE). Jane E. Marilley, d. b. a. Courtesy Associates. SN 670,593. Pub. 10–25–55. Filed 7–26–54.

CLASS 102

620,125. INDUSTRIAL INDEMNITY. Industrial Indemnity Company. SN 667,403. Pub. 10–25–55. Filed 6–1–54.

620,126. INDUSTRIAL INDEMNITY AND DESIGN. Industrial Indemnity Company. SN 667,404. Pub. 10–25–55. Filed 6–1–54.

620,127. THE GATEWAY BANK. The First National Bank in Rockwood. SN 675,554. Pub. 10–25–55. Filed 10–27–54.

CLASS 105

620,128. MAC AND DESIGN. Detroit and Mackinac Railway Company. SN 660,261. Pub. 10–25–55. Filed 1–28–54.

620,129. PILOT AND DESIGN. Pilot Freight Carriers, Inc. SN 665,373. Pub. 10–25–55. Filed 4–28–54.

CLASS 106

620,130. IMMUNE AND DESIGN. Universal Dye Works, Inc. SN 642,379. Pub. 10–25–55. Filed 2–17–53.

620,131. "BOUND TO PLEASE." The Heckman Bindery, Inc. SN 657,530. Pub. 10–25–55. Filed 12–7–53.

620,132. VINYLETTE. Champion Textile Finishing Co. SN 670,275. Pub. 10–25–55. Filed 7–20–54.

CLASS 107

620,133. GUY KING. Leon Wyszatycki, d. b. a. Greater Erie Broadcasting Company and Radio Station WWOL. SN 671,798. Pub. 10–25–55. Filed 8–16–54.

620,134. "ROCK 'N ROLL PARTY." Gotham Broadcasting Corporation. SN 681,353. Pub. 10–25–55. Filed 2–9–55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 1

620,135. A. L. Gebhardt Co., Milwaukee, Wis. SN 667,233. Filed P. R. 5–27–54. Am. S. R. 9–26–55.

SPECIAL TANNED

No claim is made to the word "Tanned" apart from the mark shown.
For Tanned Leather Hides.
Use since in April 1944.

CLASS 4

620,136. Joseph Pine, d. b. a. Pine's Laboratory, Baltimore, Md. SN 684,875. Filed P. R. 4–4–55. Am. S. R. 11–2–55.

PINE'S

For Floor Wax, Furniture Wax, and Automobile Wax.
Use since June 12, 1951.

CLASS 6

620,137. Ren-Ite Plastics, Inc., Lansing, Mich. SN 663,830. Filed P. R. 4–2–54. Am. S. R. 10–24–55.

Comminuted . . . for Quality

For Synthetic Resins.
Use since Oct. 30, 1953.

CLASS 12

620,138. Lunday-Thagard Oil Company, South Gate, Calif. SN 676,210. Filed P. R. 11–8–54. Am. S. R. 11–4–55.

FLASHING

For Roofing Putty and Plastic Adhesive Sealing Compounds for Water Proofing in Building Construction.
Use since June 1951.

CLASS 19

620,139. Design-Rite Company, Brainerd, Minn. SN 674,948. Filed P. R. 10–18–54. Am. S. R. 10–31–55.

HITCH-RITE

For Trailer Hitches.
Use since Sept. 29, 1954.

CLASS 21

620,140. General Dynamics Corporation, Rochester, N. Y. SN 692,593. Filed 8–8–55.

THERE IS NOTHING FINER

For Radio Tuners, Amplifiers, Speakers, Speaker Baffles, Television Chassis, Record Changers and Parts Thereof.
Use since at least as early as Aug. 11, 1952.

620,141. Omar H. Shepard, Bridgeport, Conn. SN 693,346. Filed 8–18–55.

"DON'T LET YOUR CAR DIE WITH HEART TROUBLE"

For Storage Batteries.
Use since on or about Jan. 1, 1924.

CLASS 26

620,142. Dynacolor Corporation, Albion, N. Y. SN 684,934. Filed P. R. 4–5–55. Am. S. R. 8–17–55.

McGregor

For Sensitized Photographic Film.
Use since in or about March 1952.

CLASS 29

620,143. Joseph Schneider, d. b. a. Marks-Off Co., Wauwatosa, Wis. SN 677,176. Filed P. R. 11–23–54. Am. S. R. 10–24–55.

MARKS-OFF

For Mop Pads.
Use since Sept. 23, 1954.

CLASS 31

620,144. Automotive Utilities Company, Newark, N. J. SN 672,862. Filed P. R. 9–8–54. Am. S. R. 8–23–55.

PLEAT PAK

For Oil Filter Cartridges.
Use since Aug. 2, 1954.

CLASS 37

620,145. The Sawdon Company, Incorporated, New York, N. Y. SN 678,153. Filed P. R. 12–10–54. Am. S. R. 10–25–55.

Tu—Way

For Envelopes.
Use since February 1953.

CLASS 38

620,146. Oakes Consumer Catalogs, Chicago, Ill. SN 675,158. Filed P. R. 10–20–54. Am. S. R. 8–29–55.

Santa's Pack
TOYS AND GIFTS

For Consumer Catalogs Published Annually, Prepared for Distribution by Retail Merchants.
Use since Aug. 3, 1954.

620,147. McGraw-Hill Publishing Company, Inc., New York, N. Y. SN 676,385. Filed P. R. 11–10–54. Am. S. R. 10–21–55.

PETROLEUM WEEK

For Magazine Published Weekly.
Use since Oct. 11, 1954.

620,148. Norcross, Inc., New York, N. Y. SN 677,272. Filed 11–15–54.

Norcross Rose

For Greeting Cards and Printed Greeting Folders.
Use since on or about Jan. 8, 1951.

CLASS 39

620,149. Mann Overall Company, Inc., El Paso, Tex. SN 672,088. Filed P. R. 8–23–54. Am. S. R. 8–30–55.

SKINTITES

For Jeans and Western Pants.
Use since Aug. 18, 1954.

620,150. Moe Spiegler, d. b. a. National Neckwear Co., New York, N. Y. SN 686,490. Filed 4–28–55.

LEISURE TIE

For Novelty Neckwear for Men, Women, Boys, and Girls—Namely, Slide-Closed String-Band Necktles.
Use since on or about Apr. 20, 1954.

CLASS 46

620,151. Superior Feed Mills, Inc., Oklahoma City, Okla. SN 649,397. Filed P. R. 6–25–53. Am. S. R. 6–20–55.

Superior

For Poultry, Livestock and Pet Feeds, Including Feed for Dogs, Cats, Rabbits and Birds.
Use since Jan. 1, 1927.

620,152. Alfonso Gioia & Sons, Inc., d. b. a. Bravo Macaroni Co., Rochester, N. Y. SN 673,911. Filed P. R. 9–28–54. Am. S. R. 9–20–55.

Minute

For Macaroni.
Use since Sept. 13, 1954.

620,153. Alfonso Gioia & Sons, Inc., d. b. a. Bravo Macaroni Co., Rochester, N. Y. SN 673,912. Filed P. R. 9–28–54. Am. S. R. 9–19–55.

MinuteMAID

For Macaroni.
Use since Sept. 13, 1954.

620,154. Alfonso Gioia & Sons, Inc., d. b. a. Bravo Macaroni Co., Rochester, N. Y. SN 673,913. Filed P. R. 9–28–54. Am. S. R. 9–13–55.

60 SECOND

For Macaroni.
Use since Aug. 16, 1954.

620,155. L. D. Seymour & Company, New York, N. Y. SN 675,921. Filed P. R. 11–2–54. Am. S. R. 11–3–55.



For Tea.
Use since Oct. 9, 1954.

620,156. Orange Crystals, Inc., Oakland, Calif. SN 677,347. Filed P. R. 11–26–54. Am. S. R. 11–14–55.

McKee's

For Concentrated Orange Juice.
Use since on or about Oct. 12, 1954.

CLASS 49

620,157. Wiser's Distillery Limited, Montreal, Quebec, Canada. SN 669,381. Filed P. R. 7–2–54. Am. S. R. 6–10–55.

WISER'S
CANADIAN WHISKY
A BLEND
BLENDED AND BOTTLED UNDER THE SUPERVISION OF THE CANADIAN GOVERNMENT
90 U.S. PROOF
THIS WHISKY IS 6 YEARS OLD
Wiser's Distillery Limited
Belleville, Ontario
Canada
ESTABLISHED 1857

For Whisky.
Use since May 5, 1954.

CLASS 50

620,158. Walter G. Roeder, Horse Shoe, N. C. SN 653,400. Filed P. R. 9–18–53. Am. S. R. 10–18–55.

ROEDER

For Bird Feeding Stations and Bird Houses.
Use since Aug. 18, 1953.

620,159. Foley & Company, d. b. a. Fovan Chemical Div., Chicago, Ill. SN 668,984. Filed P. R. 6–28–54. Am. S. R. 2–7–55.

SNO WHITE

For Christmas Tree Artificial Snow Expelled by Aerosol Can.
Use since Mar. 10, 1953.

620,160. Bostwick Laboratories, Inc., Bridgeport, Conn. SN 670,654. Filed P. R. 7–27–54. Am. S. R. 3–21–55.

SNOW-IT

For Product Dispensed in Spray Form to Resemble Snow Flakes.
Use since June 1951.

620,161. Woodward Metal Cap, Inc., Brattleboro, Vt. SN 685,877. Filed P. R. 4–19–55. Am. S. R. 10–20–55.

METAL CAP

For Wooden Pallets.
Use since Aug. 2, 1954.

Service Marks

CLASS 101

620,162. The National Wegivway Company, Washington, Iowa. SN 654,270. Filed P. R. 10–6–53. Am. S. R. 9–30–55.

The NATIONAL
[illegible]
PLAN

For Services in Setting Up for and Arranging in Behalf of Merchants a Promotional Plan Enabling Merchants to Obtain Lists of Potential Customers.
Use since May 1, 1951.

CLASS 103

620,163. Brant Sewing Machine Co., Inc., Cincinnati, Ohio. SN 641,420. Filed P. R. 1–28–53. Am. S. R. 10–28–55.

Brant's
"Has the Town Sewed Up"

For Inspection, Maintenance and Repair of Sewing Machines.
Use since Aug. 14, 1949.

TRADEMARK REGISTRATIONS RENEWED

13,064. ORIGINAL BUDWEISER ETC. Cl. 48. 3–2–86.
106,205. DESIGN OF MEDALLION. Cl. 23. 10–19–15.
106,206. BLUE RIBBON. Cl. 23. 10–19–15.
106,207. BLUE RIBBON. Cl. 19. 10–19–15.
106,208. DESIGN OF MEDALLION. Cl. 19. 10–19–15.
106,209. DESIGN OF MEDALLION. Cl. 36. 10–19–15.
106,210. BLUE RIBBON. Cl. 36. 10–19–15.
106,211. BLUE RIBBON. Cl. 31. 10–19–15.
106,212. DESIGN OF MEDALLION. Cl. 31. 10–19–15.
106,366. THE WESTPOINTER. Cl. 39. 10–19–15.
106,376. SALCO. Cl. 44. 10–19–15.
107,370. OJ'S. Cl. 18. 11–23–15.
108,173. GLYROL. Cl. 18. 1–18–16.
109,309. BOUNCER. Cl. 46. 3–28–16.
109,348. TRACTOR FARMING AND DESIGN. Cl. 38. 4–4–16.
109,539. MULTOPROOF. Cl. 16. 4–11–16.
109,621. TWINIDA AND DESIGN. Cl. 46. 4–11–16.
325,711. DESIGN OF MAN'S HEAD. Cl. 49. 7–2–35.
325,904. NUJOL. Cl. 18. 7–9–35.
326,630. ADORABLE. Cl. 51. 7–30–35.
327,466. TRU WALK AND DESIGN. Cl. 39. 8–27–35.
328,159. COMMANDER AND DESIGN. Cl. 1. 9–17–35.
328,314. ARROW AND DESIGN. Cl. 28. 9–24–35.
328,583. EXAMEL. Cl. 18. 10–1–35.
328,840. GARDNERENCH. Cl. 23. 10–8–35.
329,149. KOPY KAT AND DESIGN. Cl. 37. 10–15–35.
329,275. THE CHRISTIAN HOME. Cl. 38. 10–22–35.
329,756. ROGERS CUTLERY CO. Cl. 28. 11–12–35.
329,757. 1865 WM. ROGERS MFG. CO. Cl. 28. 11–12–35.
329,930. WALDES THE SYMBOL OF QUALITY AND DESIGN. Cl. 13. 11–19–35.
329,995. DIETENE. Cl. 46. 11–19–35.
330,529. LA-CE-LASTIC. Cl. 40. 12–3–35.
330,606. ROGERS NICKEL SILVER. Cl. 23. 12–10–35.
330,653. MELCREST. Cl. 39. 12–10–35.

330,780. OLD SKIPPER AND DESIGN. Cl. 37. 12–17–35.
330,978. AMERITEX AND DESIGN. Cl. 42. 12–24–35.
331,001. AQUANOX. Cl. 12. 12–24–35.
331,064. GERM-I-TABS. Cl. 18. 12–24–35.
331,079. GAIETY. Cl. 49. 12–24–35.
331,162. GEARGLIDE ETC. AND DESIGN. Cl. 15. 12–31–35.
331,770. WONDERSOFT. Cl. 44. 1–21–36.
331,846. PRESSURE TROL. Cl. 26. 1–21–36.
331,904. WONDER FORM. Cl. 44. 1–21–36.
331,978. PERANDREN. Cl. 18. 1–28–36.
332,623. EL-SIXTY. Cl. 6. 2–18–36.
332,624. PERFLECTOL. Cl. 6. 2–18–36.
332,651. INVIZO SIZ-LOK BOW. Cl. 39. 2–18–36.
332,761. LIQUID AND DESIGN. Cl. 6. 2–25–36.
332,889. PURITY BODY FLAVOR AND DESIGN. Cl. 48. 3–3–36.
333,195. CLOUD DRIFT. Cl. 42. 3–10–36.
333,299. TRU-TYPE AND DESIGN. Cl. 46. 3–17–36.
333,341. DESIGN OF INKING RIBBON. Cl. 11. 3–17–36.
333,362. CRAIG-MARTIN. Cl. 51. 3–17–36.
333,483. G & W FIVE STAR. Cl. 49. 3–24–36.
333,653. DESIGN OF 2 TRIANGLES. Cl. 6. 3–31–36.
333,654. DESIGN OF 2 RECTANGLES. Cl. 6. 3–31–36.
333,661. DRISDOL. Cl. 18. 3–31–36.
333,663. CALIRAD. Cl. 18. 3–31–36.
333,745. LOS RIOS. Cl. 46. 4–7–36.

TRADEMARK REGISTRATIONS CANCELED

Section 8

79,442. OSHKOSH BREWING CO. CHIEF OSHKOSH AND PORTRAIT OF INDIAN. Cl. 48. 9–6–10.
113,165. LIGHTNING GUIDER. Cl. 22. 10–10–16.
125,332. SHIPMATE. Cl. 46. 5–13–19.
139,776. BEAVER KRAFT AND REPRESENTATION OF BEAVER WITHIN CIRCULAR DESIGN. Cl. 37. 2–22–21.
145,578. EVERYBODY'S. Cl. 46. 8–9–21.
196,741. WHITE SWAN AND REPRESENTATION OF SWAN. Cl. 46. 3–24–25.
229,123. MOUSELLA. Cl. 42. 6–21–27.
229,143. PALLINA. Cl. 42. 6–21–27.
231,501. GALCOTE. Cl. 2. 8–23–27.
231,738. JERSELLA. Cl. 42. 8–23–27.
233,384. MELVA. Cl. 42. 9–27–27.
233,842. SANDRA. Cl. 42. 10–11–27.
244,335. VALDEEMA. Cl. 42. 7–17–28.
244,855. TORLONA. Cl. 42. 7–31–28.
251,341. DUVA. Cl. 42. 1–1–29.
253,075. DAMEENA. Cl. 42. 2–19–29.
256,659. THE HOP LEAF AND REPRESENTATION OF LEAF. Cl. 48. 5–21–29.
257,829. SUNNY BOY AND REPRESENTATION OF BOY, DOG AND CAR WITHIN CIRCULAR DESIGN. Cl. 46. 6–18–29.
258,281. CREAM LOAF FLOUR AND REPRESENTATION OF WORLD MAP. Cl. 46. 7–2–29.
258,282. LARABEE'S BEST FLOUR AND REPRESENTATION OF WORLD MAP. Cl. 46. 7–2–29.
259,561. GIULIO CESARE AND PORTRAIT OF MAN. Cl. 46. 7–30–29.
259,924. HIGH SOCIETY AND DESIGN. Cl. 46. 8–13–29.
259,925. HIGH KICKER AND PORTRAIT OF FOOTBALL PLAYER. Cl. 46. 8–13–29.
260,743. HIGH TOP. Cl. 46. 8–27–29.
261,443. MARVA. Cl. 42. 9–17–29.
262,877. KASHMIRLUXA. Cl. 42. 10–29–29.
262,928. MANDALA. Cl. 42. 10–29–29.
274,897. CRYSANA. Cl. 42. 9–9–30.
276,059. REGA. Cl. 42. 10–7–30.
281,196. ORMINA. Cl. 42. 3–10–31.
281,893. DEBORA. Cl. 42. 4–7–31.
282,412. ANGELEEN. Cl. 42. 4–21–31.
284,589. CHIRARA. Cl. 42. 7–7–31.
284,591. CHULANA. Cl. 42. 7–7–31.
287,234. DS WITHIN DIAMOND DESIGN. Cl. 28. 9–15–31.
287,452. KASHMIRAC. Cl. 42. 9–29–31.
291,098. VELZARA. Cl. 42. 1–26–32.
292,772. BURMANA. Cl. 42. 3–29–32.
293,787. PARNELLA. Cl. 42. 5–3–32.
293,959. SUDANA. Cl. 42. 5–10–32.
299,355. KHARDA. Cl. 42. 11–29–32.
303,793. VALOBA. Cl. 42. 6–6–33.
314,803. CAZAPRA CAZALIS AND PRATS ETC. AND DESIGN. Cl. 47. 7–10–34.
338,946. PRIDE O' THE TOWN PRINTS. Cl. 42. 9–22–36.
342,408. STA-TOP AND DESIGN. Cl. 39. 1–19–37.
351,289. DUTCH OVEN SUSAN AND DESIGN. Cl. 21. 10–26–37.
351,321. DUTCH OVEN SUSAN. Cl. 21. 10–26–37.
353,123. W P AND DESIGN. Cl. 46. 12–28–37.
354,842. SUPERFLO. Cl. 15. 2–22–38.
356,388. NATURE'S FINER FLAVER. Cl. 45. 4–26–38.
357,055. NESCO NESCOWARE IS EVERYWHERE ETC. WITHIN DIAMOND DESIGN. Cl. 2. 5–24–38.
357,936. SUPER-STEEL. Cl. 23. 6–21–38.
358,399. LOBOY. Cl. 34. 7–12–38.
362,569. BONITA. Cl. 46. 11–22–38.
363,324. WESTERN GOLD. Cl. 46. 12–20–38.
370,329. RIGHTOWAY. Cl. 23. 8–22–39.
370,412. CHEERFUL CUP WAPLES-PLATTER COMPANY. Cl. 46. 8–29–39.
383,430. LEGAL-PAK EVANS BROS. AND DESIGN. Cl. 46. 12–10–40.
401,043. GOLD MEDAL. Cl. 50. 4–20–43.
404,993. LANAFUR. Cl. 1. 1–4–44.
407,809. TALK O' THE TOWN. Cl. 42. 6–27–44.
413,231. ROYAL. Cl. 13. 4–17–45.
414,642. DOUBLE TROUBLE. Cl. 38. 6–19–45.
418,994. ROCKWEAVE. Cl. 34. 1–15–46.
423,253. "BARONSIZED". Cl. 39. 8–27–46.
433,732. LABEL DESIGN. Cl. 6. 10–28–47.
437,483. GOLD TARGET TARGET BRAND AND DESIGN. Cl. 23. 3–23–48.
437,484. ARROW BRAND AND REPRESENTATION OF ARROW. Cl. 23. 3–23–48.
438,671. DISPLAY MASTER AND DESIGN. Cl. 32. 5–11–48.
439,407. BULL'S EYE BRAND AND REPRESENTATION OF ARROW AND TARGET. Cl. 23. 6–22–48.
439,408. BULLET BRAND AND REPRESENTATION OF BULLET AND TARGET. Cl. 23. 6–22–48.
439,791. INDIAN LAKES. Cl. 37. 7–20–48.
440,478. BLACK PEARL. Cl. 22. 9–7–48.
441,414. GINGISOL. Cl. 6. 11–23–48.
513,551. GEOMETRIC DESIGN. Cl. 26. 8–16–49.
513,554. RELIANCE AND REPRESENTATION OF LIFE PRESERVER. Cl. 16. 8–16–49.
513,555. CAVALIER. Cl. 28. 8–16–49.
513,557. GENERAL MILLS. Cl. 13. 8–16–49.
513,560. ADAMANT. Cl. 29. 8–16–49.
513,564. KEEL OF CALIFORNIA AND LANDSCAPE DESIGN. Cl. 39. 8–16–49.
513,567. FULL DRESS AND REPRESENTATION OF PENGUINS. Cl. 46. 8–16–49.
513,568. LIMITATOR. Cl. 26. 8–16–49.
513,569. ARIXPRINT. Cl. 26. 8–16–49.
513,572. CERNY. Cl. 6. 8–16–49.
513,574. CRADLE CRAFT. Cl. 28. 8–16–49.
513,578. GLENNA. Cl. 39. 8–16–49.
513,582. BETSY ROSS AND DESIGN. Cl. 28. 8–16–49.
513,587. GROVER. Cl. 39. 8–16–49.
513,590. GOLD BRAID. Cl. 46. 8–16–49.
513,594. LADOGA. Cl. 46. 8–16–49.
513,596. CARACALASKA. Cl. 1. 8–16–49.
513,597. HOFFCRETE. Cl. 12. 8–16–49.
513,603. CYCLE-TONE. Cl. 6. 8–16–49.
513,611. DIDI-DRI. Cl. 39. 8–16–49.
513,618. NORLIN SPLASH SHIELDS "SMILING IN THE RAIN" AND PORTRAITS OF WOMEN. Cl. 39. 8–16–49.
513,619. JANE WHITNEY. Cl. 39. 8–16–49.
513,621. JAY-EL FASHION. Cl. 39. 8–16–49.
513,622. WRIGHT. Cl. 39. 8–16–49.
513,626. FIT STOUT. Cl. 39. 8–16–49.
513,627. GLYDE-THRU. Cl. 40. 8–16–49.
513,628. PULPWOOD SUPERFINE. Cl. 23. 8–16–49.

513,631. DECO. Cl. 23. 8–16–49.
513,634. HOME SOFTENER SERVICE. Cl. 31. 8–16–49.
513,640. FLUSH O MATIC. Cl. 21. 8–16–49.
513,641. BUCKMINSTER. Cl. 39. 8–16–49.
513,649. AEROTOSTAT. Cl. 23. 8–16–49.
513,653. NUGGET KNOTS. Cl. 28. 8–16–49.
513,656. DE CO DELANEY WITHIN CIRCULAR DESIGN. Cl. 23. 8–16–49.
513,657. SHAMBLEN'S. Cl. 46. 8–16–49.
513,663. DRAKE-TONE. Cl. 16. 8–16–49.
513,664. WIPE-O-VAR. Cl. 16. 8–16–49.
513,666. ORANGE SHOW AND SEAL DESIGN. Cl. 46. 8–16–49.
513,669. "S" NITIE. Cl. 39. 8–16–49.
513,675. EVERLAST. Cl. 39. 8–16–49.
513,681. CO-MO-LITE AND DESIGN. Cl. 21. 8–16–49.
513,683. REITSMA CO. AND DESIGN. Cl. 40. 8–16–49.
513,689. ICE-PAK. Cl. 37. 8–16–49.
513,690. SONNY AND SIS AND REPRESENTATION OF BOY AND GIRL ON SEESAW. Cl. 39. 8–16–49.
513,691. SUSAN BLAKE. Cl. 39. 8–16–49.
513,692. MI-SUIT. Cl. 39. 8–16–49.
513,693. "BABE" RUTH. Cl. 39. 8–16–49.
513,695. BLUE STRIPE. Cl. 5. 8–16–49.
513,696. SNOW-LARK. Cl. 39. 8–16–49.
513,703. SEA SKIN. Cl. 39. 8–16–49.
513,705. NICOLET. Cl. 37. 8–16–49.
513,707. NEW YORK COUNTS. Cl. 46. 8–16–49.
513,709. TORRID. Cl. 21. 8–16–49.
513,712. DURACHROME. Cl. 39. 8–16–49.
513,713. PERMACOLOR. Cl. 39. 8–16–49.
513,714. PERMATONE. Cl. 39. 8–16–49.
513,715. ASHFIELD. Cl. 39. 8–16–49.
513,716. HI-SLAX AND DESIGN. Cl. 39. 8–16–49.
513,720. WILLIAMS. Cl. 22. 8–16–49.
513,723. H B CO. Cl. 23. 8–16–49.
513,724. GENUINE TROPHY. Cl. 3. 8–16–49.
513,730. REGNU. Cl. 39. 8–16–49.
513,731. CHARMAINE. Cl. 46. 8–16–49.
513,733. BULLS EYE AND REPRESENTATION OF ARROW IN TAGET. Cl. 23. 8–16–49.
513,739. PRESTILE AND DESIGN. Cl. 5. 8–16–49.
513,745. BOND-GARD PRIMER. Cl. 16. 8–16–49.
513,750. WHO REMEMBERS WHEN . . . Cl. 38. 8–16–49.
513,753. SANDRA. Cl. 28. 8–16–49.
513,754. YVONNE. Cl. 28. 8–16–49.
513,756. ABORTUSSIS. Cl. 6. 8–16–49.
513,757. LEXEDEX INDEX SYSTEM SPEED ACCURACY AND GLOBE DESIGN. Cl. 37. 8–16–49.
513,759. TOPPER. Cl. 37. 8–16–49.
513,762. FAM-PAK. Cl. 40. 8–16–49.
513,763. MAY LYNN. Cl. 39. 8–16–49.
513,766. LIGHT MASTER WITHIN CIRCULAR DESIGN. Cl. 21. 8–16–49.
513,770. TEMPLAR. Cl. 37. 8–16–49.
513,772. GRIP TIP. Cl. 40. 8–16–49.
513,773. GRIDALOY. Cl. 21. 8–16–49.
513,774. RECORDALOY. Cl. 21. 8–16–49.
513,778. LAN-NAL AND REPRESENTATION OF FEET. Cl. 37. 8–16–49.
513,779. MAGI-GRIP. Cl. 40. 8–16–49.
513,780. RITE-SNAP. Cl. 40. 8–16–49.
513,782. TIP TOP. Cl. 40. 8–16–49.
513,784. DUROPRINT. Cl. 40. 8–16–49.
513,786. GREAT LADY. Cl. 39. 8–16–49.
513,789. IT'S LEGAL TENDER. Cl. 38. 8–16–49.
513,790. WEATHER KOOL. Cl. 39. 8–16–49.
513,791. BRIARWOOD. Cl. 39. 8–16–49.
513,797. GOLDEN KEY. Cl. 37. 8–16–49.
513,799. MICHELENE MODES. Cl. 39. 8–16–49.
513,801. JUMPER FORE. Cl. 39. 8–16–49.
513,803. TOT LINES AND DESIGN. Cl. 39. 8–16–49.
513,812. LATITE. Cl. 37. 8–16–49.
513,815. B-TWEEN CUP. Cl. 39. 8–16–49.
513,817. NICOLET. Cl. 27. 8–16–49.
513,823. ORMOC. Cl. 28. 8–16–49.
513,825. TIMEASURE. Cl. 37. 8–16–49.
513,826. COLPRES 10. Cl. 5. 8–16–49.
513,827. NORTH STAR. Cl. 28. 8–16–49.
513,832. MAGNEHARTH. Cl. 12. 8–16–49.
513,833. WHIMSY. Cl. 26. 8–16–49.
513,834. HI LIGHTS. Cl. 40. 8–16–49.
513,835. LEONORA. Cl. 39. 8–16–49.
513,839. FISH DETECTIVE. Cl. 26. 8–16–49.
513,842. BANDMASTER. Cl. 28. 8–16–49.
513,845. HENDA. Cl. 28. 8–16–49.
513,851. ARIA. Cl. 27. 8–16–49.
513,852. CATNAPPER. Cl. 27. 8–16–49.
513,854. THE PEPPERELL SHEET. Cl. 38. 8–16–49.
513,855. DIAMONETTE HANDIKIT. Cl. 3. 8–16–49.
513,856. SURF. Cl. 38. 8–16–49.
513,859. KENGO. Cl. 38. 8–16–49.
513,860. POOR LITTLE RICH MAN. Cl. 38. 8–16–49.
513,863. MODULETTER. Cl. 38. 8–16–49.
513,864. ABD. Cl. 5. 8–16–49.
513,865. BRAD AND DESIGN. Cl. 28. 8–16–49.
513,866. FRIGID-GARD. Cl. 31. 8–16–49.
513,867. ZERO-GARD. Cl. 31. 8–16–49.
513,870. CUBE MASTER. Cl. 31. 8–16–49.
513,871. FATSO. Cl. 38. 8–16–49.
513,874. VENUS. Cl. 38. 8–16–49.
513,875. LANA. Cl. 38. 8–16–49.
513,876. FLEVO. Cl. 27. 8–16–49.
513,877. FRIGIDAIRIAN. Cl. 38. 8–16–49.
513,882. ENVOY. Cl. 3. 8–16–49.
513,885. MALDEN. Cl. 27. 8–16–49.
513,886. BIG DRIP. Cl. 6. 8–16–49.
513,891. BILTWELL. Cl. 27. 8–16–49.
513,892. LEOBE. Cl. 27. 8–16–49.
513,893. PATIO. Cl. 46. 8–16–49.
513,894. CIRO. Cl. 40. 8–16–49.
513,898. BEHRLON. Cl. 5. 8–16–49.
513,899. BEHRLON. Cl. 1. 8–16–49.
513,901. AERO-MAR, INC. AND DESIGN. Cl. 55. 8–16–49.
513,902. AMC. Cl. 55. 8–16–49.
513,903. INDUSTRIAL PRECISION GRINDING CO. AND DESIGN. Cl. 55. 8–16–49.
513,908. PANTOUR AND GLOBE DESIGN. Cl. 55. 8–16–49.
513,909. HEET-IT. Cl. 21. 8–16–49.
513,911. WRAPEASY. Cl. 2. 8–16–49.
513,912. HAMILTON. Cl. 36. 8–16–49.
513,914. TOAS-TITE. Cl. 13. 8–16–49.
513,915. FONDA. Cl. 27. 8–16–49.
513,917. PAKALL. Cl. 22. 8–16–49.
513,918. HOUSE OF VENDOME. Cl. 37. 8–16–49.
513,919. "SWEDISH". Cl. 22. 8–16–49.
513,922. SAFE-T-COLT AND REPRESENTATION OF HORSE'S HEAD. Cl. 22. 8–16–49.
513,924. FISHIN-KANE. Cl. 22. 8–16–49.
513,925. BULLET BALL. Cl. 37. 8–16–49.
513,926. VENT-RITE. Cl. 34. 8–16–49.
513,927. MONTANSIER PARFUMEUR ETC. AND LABEL DESIGN. Cl. 6. 8–16–49.
513,928. SMOKABATOR. Cl. 34. 8–16–49.
513,929. SHERI COLA AND DESIGN. Cl. 45. 8–16–49.
513,930. MARTIN AND DESIGN. Cl. 34. 8–16–49.
513,932. ENTIS. Cl. 46. 8–16–49.
513,934. SHIRTOPPER. Cl. 39. 8–16–49.
513,936. VINCENT SANGES. Cl. 39. 8–16–49.
513,938. CHANGE-EEZE. Cl. 3. 8–16–49.
513,941. VARIETY MERCHANDISER. Cl. 38. 8–16–49.
513,943. SKOOPED. Cl. 40. 8–16–49.

Vacation of Order of Cancellation

The order of cancellation dated December 2, 1955, cancelling Registration No. 512,966, was inadvertently entered and has been vacated.

The order of cancellation dated Sept. 23, 1955, cancelling Reg. No. 509,976, was inadvertently entered and has been vacated.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

75,707. DELTA AND DESIGN. Cl. 35. 11–2–09. New York Belting and Packing Company, Limited. United States Rubber Company, New York, N. Y. Amended to appear:

DELTA

107,527. INSTANT POSTUM. Cl. 46. 12–7–15. Postum Cereal Co., Limited. General Foods Corporation, White Plains, N. Y. Amended to appear:

Instant
POSTUM

109,938. ZANZIBAR AND DESIGN. Cl. 46. 4–25–16. B. Heller & Co. B. Heller & Company, Chicago, Ill. Amended to appear:



281,482. SITROUX AND DESIGN. Cl. 37. 3–17–31. Sitroux Importing Co., Inc. Sitrue Incorporated, New York, N. Y. Amended to appear:

SITROUX

362,506. MANNEQUIN MODELS ETC. Cl. 39. 11–15–38. Samuel Weinstat. Mannequin Shoes, Inc., New York, N. Y. Amended to appear:

mannequins
the model shoe

521,645. OUR SUN. Cl. 38. 2–28–50. Sun Oil Company, Philadelphia, Pa. Amended: In line 7 of the statement, "monthly" is deleted.

531,261. HILLCO AND DESIGN. Cl. 46. 9–26–50. H. G. Hill Company, Nashville, Tenn. Amended to appear:

HILLCO

534,559. DESERT FRAGRANCE. Cl. 46. 12–12–50. Desert Citrus Growers Company, Phoenix, Ariz. Corrected: In the certificate, lines 3 and 13; in the heading and signature to the statement; and in line 1 of the statement, "Association" should be *Company*.

613,573. FOODARAMA. Cl. 31. 10–4–55. American Motors Corporation, Detroit, Mich. Corrected: In the certificate, line 3 (second occurrence), and in line 1 of the printed copy of the registration, "Michigan" should be *Maryland*.

TRADEMARK REGISTRATIONS—NEW CERTIFICATES

New Certificates issued under sections 7(c), 7(f), 7(g) of the Trademark Act of 1946 for the unexpired term of the original registrations.

48,455. HYGEIA. Cl. 44. William More Decker. 1–2–06. New Cert. Sec. 7(c), to Ball Brothers Company, Incorporated, Muncie, Ind., 1–24–56.

521,113. PERALTA. Cl. 23. Hubert Duesberg. 2–21–50. New Cert. Sec. 7(c), to Duesberg-Bosson of America, Inc., Jefferson, Mass., 1–24–56.

609,053. RESQPAK. Cl. 22. Superior Plastics, Inc. 7–19–55. New Cert. Sec. 7(c), to The Muter Company, Chicago, Ill., 1–24–56.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 2

332,097. Feb. 4, 1936. The Lawrence Paper Company, Lawrence, Kans. Pub. by registrant.



For Paper and Fibre Boxes.

CLASS 16

421,454. June 4, 1946. C. J. Robison, d. b. a. Tex Products Company, Newark, N. J. Pub. by Tex Products, Inc., Newark, N. J.

Super-TEX

For Quick-Dry Color Varnish and Ready Mixed Household Paints.

CLASS 21

330,140. Nov. 19, 1935. Curtis Lighting, Inc., Chicago, Ill. Pub. by registrant.

EDGE-RAY

For Electric Lighting Fixtures for Illumination— to wit, Ceiling Fixtures, Pendant Fixtures, Floor Lamps, Table Lamps, Cove-Lighting, Wall Urns, and Wall Bracket Fixtures.

CLASS 22

426,630. Jan. 7, 1947. Jarman-Williamson Company, Portland, Oreg. Pub. by registrant.

BAG BOY

The exclusive use of the word "Bag" is disclaimed apart from the mark as shown.

For Collapsible Carts for Carrying Golf Bags on the Golf Course.

CLASS 23

418,001. Nov. 27, 1945. William J. Gibbs, d. b. a. Lowerator Manufacturing Co., Brooklyn, N. Y., to American Machine & Foundry Company. Pub. by American Machine & Foundry Co., New York, N. Y.

LOWERATOR

For Apparatus for Holding Articles or Layers of Articles Capable of Being Stacked, Such as Machine or Other Commercial Parts, Trays, Dishes, Cups, Plates, Saucers, Glasses or Other Articles, and for Raising or Lowering Said Articles a Predetermined Degree Upon Removal or Addition Respectively of One of said Articles or Layers of Articles, Said Apparatus Serving for the Dispensing or Receiving of the Articles Held Thereby.

CLASS 26

329,489. Oct. 29, 1935. Eastman Kodak Company, Rochester, N. Y. Pub. by Eastman Kodak Company, Flemington, N. J.

KODACHROME

For Motion Picture Film and Photographic Filters.

330,100. Nov. 19, 1935. Eastman Kodak Company, Rochester, N. Y. Pub. by Eastman Kodak Company, Flemington, N. J.

BANTAM

For Photographic Cameras.

CLASS 27

106,385. Oct. 19, 1915. Western Clock Co., Peru, Ill. Pub. by General Time Corporation, La Salle, Ill.

Pocket Ben

For Watches.

CLASS 32

442,252. Mar. 15, 1949. Massachusetts Mattress Company, Boston, Mass. Pub. by registrant.

King Arthur

For Bedding Consisting of Mattresses and Box Springs.

CLASS 38

235,721. Nov. 22, 1927. International Publications, Inc., New York, N. Y. Pub. by The Hearst Corporation, New York, N. Y.

American Druggist
The Pharmaceutical Business Paper

The words "The Pharmaceutical Business Paper" are disclaimed apart from the mark shown, no common law rights in said phrase being hereby disclaimed.

For Monthly Publication.

CLASS 39

239,283. Feb. 28, 1928. S. Liebovitz & Sons, Inc., New York, N. Y. Pub. by Publix Shirt Corporation, New York, N. Y.

OLYMPIAN

For Men's Pajamas and Night Robes.

297,234. Sept. 6, 1932. Merit Clothing Company, Mayfield, Ky. Pub. by registrant.

STYLE MART

For Men's, Young Men's, Youths', and Boys' Coats, Vests, Pants, Overcoats, and Topcoats.

CLASS 42

403,703. Oct. 12, 1943. Expert Bedding Co., Chicago, Ill. Pub. by George Adams and Walter Pietrzak, d. b. a. Better Bedding Co., Chicago, Ill.

ALTEX

For Pillow Casings, Mattress Covers, Mattress Pads, Spring Covers, Comforters, and Comforter Covers.

CLASS 46

65,822. Oct. 22, 1907. Closset & Devers, Portland, Oreg. Pub. by McCormick & Company, Incorporated, Baltimore, Md.

GOLDEN WEST

For Coffee.

165,781. Mar. 20, 1923. Perley G. Gerrish, Cambridge, Mass. Pub. by The Squirrel Brand Company, Cambridge, Mass.



No claim is made to the words "Nut Caramel" and "Caramel Nut" apart from the mark shown.
For Nut Caramels.

272,452. July 8, 1930. Eelbeck Milling Company, Inc., also known as Eelbeck Milling Co., Inc., Columbus, Ga. Pub. by registrant.



For Hominy Grits and Water-Ground Meal.

375,190. Feb. 13, 1940. The Squirrel Brand Company, Cambridge, Mass. Pub. by registrant.

YIP-PEES

For Candies.

CLASS 51

146,824. Sept. 20, 1921. Newbro Manufacturing Company, Atlanta, Ga. Pub. by registrant.

QVEEN

For Hair Pomade.

441,355. Nov. 16, 1948. Courtley, Ltd., New York, N. Y. Pub. by Lee Limited, Beverly Hills, Calif.



For Hair Dressings, Pre-Shave Lotion, After Shave Lotion, Talcum Powder, Body Powder and Dusting Powder, Cologne, Deodorants, Material Having Water Softening Property for Addition to Bath To Produce Bubble Bath, Perfumes, and Toilet Water and Shampoo.

CLASS 52

441,730. Dec. 28, 1948. Courtley, Ltd., New York, N. Y. Pub. by Lee Limited, Beverly Hills, Calif.



For Soaps, and Shaving Creams and Soaps.

LIST OF REGISTRANTS OF TRADEMARKS

A A A Sales Co., Philadelphia, Pa. 619,837, pub. 10–25–55. Cl. 21.
Abbott Laboratories, North Chicago, Ill. 513,756, canc. Cl. 6.
Abraham & Straus, Inc., Brooklyn, N. Y. 513,891, canc. Cl. 27.
Adams, George: *See*—
Expert Bedding Co.
Advance Solvents & Chemical Corp., New York, N. Y. 619,799, pub. 10–25–55. Cl. 16.
Aero-Mar, Inc., Miami, Fla. 513,901, canc. Cl. 55.
Aerotherm Corp., The, Bantam, Conn. 619,825, pub. 10–25–55. Cl. 19.
Alabama Textile Products Corp., Andalusia, Ala. 619,963, pub. 10–25–55. Cl. 39.
Alaska Chemical Corp., Paterson, N. J., and New York, N. Y. 513,596, canc. Cl. 1.
Albertson & Co., Inc., Sioux City, Iowa. 619,835, pub. 10–25–55. Cl. 21.
Allentown Paint Mfg. Co., Allentown, Pa. 619,797, pub. 10–25–55. Cl. 16.
Allied Radio Corp., Chicago, Ill. 619,850, pub. 10–25–55. Cl. 21.
Allis-Chalmers Mfg. Co., West Allis, Wis. 619,886, pub. 10–25–55. Cl. 23.
Ambidex, New York, N. Y. 513,909, canc. Cl. 21.
American Cyanamid Co., New York, N. Y. 619,737, pub. 10–25–55. Cl. 6.
American Cyanamid Co., New York, N. Y. 619,808, pub. 10–25–55. Cl. 18.
American Drug & Chemical Co., St. Paul, Minn. 331,064, ren. 12–24–55. Cl. 18.
American Lacquer Solvents Co., Phoenixville, Pa. 619,804, pub. 10–25–55. Cl. 16.
American Lead Pencil Co., Hoboken, N. J. 619,954, pub. 10–18–55. Cl. 37.
American Machine & Foundry Co.: *See*—
Gibbs, William J.
American Machine and Metals, Inc., Sellersville, Pa. 619,906, pub. 10–25–55. Cl. 26.
American Motors Corp., Detroit, Mich. 613,573, cor. Cl. 31.
American Steel Foundries, Chicago, Ill. 619,829, pub. 10–25–55. Cl. 19.
American Thermos Bottle Co., The, Norwich, Conn. 620,085, pub. 10–25–55. Cl. 50.
Anchor Serum Co., South St. Joseph, Mo. 619,821–2, pub. 10–25–55. Cl. 18.
Anderson, Lester L., d. b. a. Glyde-Thru Distributors, Lynbrook, N. Y. 513,627, canc. Cl. 40.
Anheuser-Busch, Inc.: *See*—
Conrad, C., & Co.
Arex Co., Chicago, Ill. 619,938, pub. 10–25–55. Cl. 34.
Arick, Walter R., Fort Wayne, Ind. 513,569, canc. Cl. 26.
Arizona Chemical Co., New York, N. Y. 619,731, pub. 11–1–55. Cl. 6.
Aron, J., & Co., Inc., d. b. a. Supreme Sugar Refinery, New Orleans, La. 620,070, pub. 10–25–55. Cl. 46.
Arrow Chain Mfg. Co.: *See*—
Rosenfeld, Jacob.
Arrow Jewelry Mfg. Co.: *See*—
Rosenfeld, Jacob.
Artex Rug Mfg. Co.: *See*—
Bremen, Abraham I.
Art-Mor Togs, Inc., New York, N. Y. 513,691, canc. Cl. 39.
Associated Merchandising Corp., The, New York, N. Y. 513,882, canc. Cl. 3.
Auburn, Aerotostat Co.: *See*—
Utley, Azle H.
Automatic Electric Co., Chicago, Ill. 619,858, pub. 10–4–55. Cl. 21.
Automotive Utilities Co., Newark, N. J. 620,144. Cl. 31.
Auto-Wrap Corp., New York, N. Y. 513,911, canc. Cl. 2.
Aviation Maintenance Corp., Van Nuys, Calif. 513,902, canc. Cl. 55.
Ayer Plastic Sales, Inc., Leominster, Mass. 619,711, pub. 10–25–55. Cl. 2.
Azpeco Chemical Co., Havana, Cuba. 619,816–18, pub. 10–25–55. Cl. 18.
Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen, Germany. 619,741, pub. 11–1–55. Cl. 6.
Badner, Hyman, d. b. a. Le Roy Industries, Brooklyn, N. Y. 619,708, pub. 11–1–55. Cl. 2.
Baker-Cammack Hosiery Mills, Inc., Burlington, N. C. 513,716, canc. Cl. 39.
Ball Brothers Co., Inc.: *See*—
Decker, William M.
Ballantine, P., and Sons, Newark, N. J. 332,889, ren. 3–3–56. Cl. 48.
Ballantyne Co., The: *See*—
Ballantyne, R. S.
Ballantyne, R. S., d. b. a. The Ballantyne Co., Omaha, Nebr. 513,766, canc. Cl. 21.
Bar-B-Buns, Inc., Cincinnati, Ohio. 513,914, canc. Cl. 13.
Barben, David J., d. b. a. Gingisol Laboratories, Cleveland, Ohio. 441,414, canc. Cl. 6.
Barcolene Co., The, Boston, Mass. 619,752, pub. 10–25–55. Cl. 6.
Baron, Herman, New York, N. Y. 323,253, canc. Cl. 39.
Bar-Ray Products, Inc., Brooklyn, N. Y. 619,896, pub. 10–25–55. Cl. 26.
Bausch & Lomb Optical Co., Rochester, N. Y. 513,833, canc. Cl. 26.
Bay State Milling Co., Winona, Minn. 109,309, ren. 3–28–56. Cl. 46.
Bayer Co., Inc., The, to Winthrop-Stearns Inc., New York, N. Y. 333,663, ren. 3–31–56. Cl. 18.
Bayer, Pretzfelder & Mills, Inc., New York, N. Y. 513,817, canc. Cl. 27.
Beagon Mfg. Co., Swannanoa, N. C. 619,995–6, pub. 10–25–55. Cl. 42.
Bearfoot Sole Co., Inc., The, Wadsworth, Ohio. 619,967, pub. 10–25–55. Cl. 39.
Becton, Dickinson and Co., Rutherford, N. J. 620,007, pub. 10–25–55. Cl. 44.
Behr-Manning Corp., Troy, N. Y. 513,898, canc. Cl. 5.
Behr-Manning Corp., Troy, N. Y. 513,899, canc. Cl. 1.
Belmont Industries, Inc., Chicago, Ill. 620,082, pub. 10–25–55. Cl. 50.
Ben-Burk, Inc., to Mr. Boston Distiller Inc., Boston, Mass. 325,711, ren. 7–2–55. Cl. 49.
Bendix Aviation Corp., Eatontown, N. J. 619,857, pub. 10–25–55. Cl. 21.
Bermudez Biscuit Co. Ltd., Port of Spain, Trinidad. 620,066, pub. 10–25–55. Cl. 46.
Better Bedding Co.: *See*—
Expert Bedding Co.
Bettermade Garment Co., Los Angeles, Calif. 619,991, pub. 10–25–55. Cl. 42.
Betz, W. H. & L. D., Philadelphia, Pa. 620,123, pub. 10–25–55. Cl. 100.
Bienco Distributing Co., Costa Mesa, Calif. 619,730, pub. 10–25–55. Cl. 5.
Big Drip: *See*—
Rinnman, Harry.
Billings & Spencer Co., The, Hartford, Conn. 328,840, ren. 10–8–55. Cl. 23.
Blair Corset Co., Inc., Chicago, Ill. 513,834, canc. Cl. 40.
Board of Publication of the Methodist Church, Inc., The: *See*—
Whitmore & Smith, Book Agents, Publishing House, M. E. Church, South.
Bonat, Samuel, & Bro., Inc., Paterson, N. J. 620,095, pub. 10–25–55. Cl. 51.
Bond Bedding Co., Jersey City, N. J. 619,931, pub. 10–25–55. Cl. 32.
Borck & Stevens, Inc., Bridgeport, Conn. 620,078, pub. 11–1–55. Cl. 46.
Börner, Hermann F., d. b. a. Sanhellos Hermann F. Börner Pharmazeutische Fabriken, Berlin-Schoneberg, Germany. 619,806–7, pub. 10–25–55. Cl. 18.
Bostwick Laboratories, Inc., Bridgeport, Conn. 620,160. Cl. 50.
Bothe, Walter E., Foods, Inc., Bloomington, Ill. 620,048, pub. 10–25–55. Cl. 46.
Bourns Laboratories, Inc., Riverside, Calif. 619,907, pub. 10–25–55. Cl. 26.
Brad's Jewelers, Inc., Brooklyn, N. Y. 513,865, canc. Cl. 28.
Brant Sewing Machine Co., Inc., Cincinnati, Ohio. 620,163. Cl. 103.
Brave Macaroni Co.: *See*—
Gioia, Alfonso, & Sons, Inc.
Bremen, Abraham I., d. b. a. Artex Rug Mfg. Co., Philadelphia, Pa. 620,088, pub. 11–1–55. Cl. 50.
Brinton, H., Co., Philadelphia, Pa. 513,723, canc. Cl. 23.
Brockway Glass Co., Inc., Brockway, Pa. 619,717, pub. 11–1–55. Cl. 2.
Brown, Andrew H., d. b. a. The Smokehouse, Lakeland, Fla. 620,072, pub. 10–25–55. Cl. 46.
Brown & Bigelow, St. Paul, Minn. 619,945, pub. 10–25–55. Cl. 37.
Brown, Charles F., d. b. a. Tennessee Supply Co., Greeneville, Tenn. 620,117, pub. 10–25–55. Cl. 52.
Buckley-Newhall Co., The, New York, to John Mullins & Sons, Inc., Brooklyn, N. Y. 106,205–6, ren. 10–19–55. Cl. 23.
Buckley-Newhall Co., The, New York and Brooklyn, to John Mullins & Sons, Inc., Brooklyn, N. Y. 106,207–8, ren. 10–19–55. Cl. 19.
Buckley-Newhall Co., The, New York and Brooklyn, to John Mullins & Sons, Inc., Brooklyn, N. Y. 106,209–10, ren. 10–19–55. Cl. 36.
Buckley-Newhall Co., The, New York and Brooklyn, to John Mullins & Sons, Inc., Brooklyn, N. Y. 106,211–12, ren. 10–19–55. Cl. 31.
Burroughs Adding Machine Co., to Burroughs Corp., Detroit, Mich. 333,341, ren. 3–17–56. Cl. 11.
Burroughs Corp.: *See*—
Burroughs Adding Machine Co.
Bymart, Inc.: *See*—
Bymart-Tintair, Inc.
Bymart-Tintair, Inc., New York, N. Y., by change of name from Bymart, Inc. 619,859, pub. 10–25–55. Cl. 22.
Cabin Crafts, Inc., Dalton, Ga. 620,000, pub. 11–1–55. Cl. 42.
Caltex Sportswear Co. of California, Inc., Los Angeles, Calif. 513,703, canc. Cl. 39.
Campbell Industries, Inc., Chattanooga, Tenn. 619,844, pub. 10–25–55. Cl. 21.
Campbell Soup Co.: *See*—
Swanson, C. A., & Sons.
Canoga Corp., Van Nuys, Calif. 619,911, pub. 10–25–55. Cl. 26.

Cartier, Morgan E., Grand Rapids, Mich.. 619,864, pub. 10–25–55. Cl. 22.
Cascades Plywood Corp., Portland, Oreg. 620,084, pub. 10–25–55. Cl. 50.
Cavalier Laboratories: *See*— Frieden, Hyman.
Cavitron Corp., Long Island City, N. Y. 620,009, pub. 10–25–55. Cl. 44.
Center Chemical Co., Atlanta, Ga. 619,840, pub. 10–25–55. Cl. 21.
Champion Textile Finishing Co., Chicago, Ill. 620,132, pub. 10–25–55. Cl. 106.
Chatfield and Woods Co., The, Cincinnati, Ohio. 139,776, canc. Cl. 37.
Chemical & Combustion Corp., New York, N. Y. 620,116, pub. 10–25–55. Cl. 52.
Chemical Products Co., Inc., Aberdeen, Md. 620,112, pub. 11–1–55. Cl. 52.
Chicago Paints, Inc., Chicago, Ill. 619,790, pub. 10–25–55. Cl. 16.
Chicago Pharmacal Co., Chicago, Ill. 619,812–13, pub. 10–25–55. Cl. 18.
Chicago Tribune-New York News Syndicate, Inc., New York, N. Y. 513,860, canc. Cl. 38.
Chillicothe Paper Co., The, Chillicothe, Ohio. 619,948, pub. 10–25–55. Cl. 37.
Chingos & Sons, Inc., New York, N. Y. 619,701, pub. 11–1–55. Cl. 1.
Chunky Chocolate Corp., d. b. a. Chunky Chocolate Corp., Brooklyn, N. Y. 620,056, pub. 10–25–55. Cl. 46.
Ciba Pharmaceutical Products Inc.: *See*— Society of Chemical Industry in Basle.
Clairol Inc., New York, N. Y. 620,097, pub. 10–25–55. Cl. 51.
Cleveland Mills Co., Lawndale, N. C. 619,862, pub. 10–25–55. Cl. 22.
Closset & Devers, Portland, Oreg., by McCormick & Co., Inc., Baltimore, Md. 65,822, 12(c) pub. 1–24–56. Cl. 46.
Coastal Chemical Corp., Garfield, N. J. 620,121, pub. 10–25–55. Cl. 52.
Cohn-Hall-Marx Co., to United Merchants and Manufacturers, Inc., New York, N. Y. 330,978, ren. 12–24–55. Cl. 42.
Collins & Aikman Corp., New York, N. Y. 619,981, pub. 10–25–55. Cl. 42.
Colorado Milling and Elevator Co., The: *See*— Twin Falls Milling & Elevator Co., The.
Columbia Fastener Co., Chicago, Ill. 513,780, canc. Cl. 40.
Columbia Fastener Co., Chicago, Ill. 513,782, canc. Cl. 40.
Comfort Mfg. Co., Chicago, Ill. 333,362, ren. 3–17–56. Cl. 51.
Commander Milling Co., Minneapolis, Minn. 259,924–5, canc. Cl. 46.
Conrad, C., & Co., Mainz, Gelsenheim-on-the-Rhine, Germany, and St. Louis, Mo., to Anheuser-Busch, Inc., St. Louis, Mo. 13,064, ren. 3–2–56. Cl. 48.
Consolidated Iron-Steel Mfg. Co., The, Cleveland, Ohio. 619,771, pub. 10–25–55. Cl. 13.
Consolidated Produce Co., Ltd., Los Angeles, Calif. 333,745, ren. 4–7–56. Cl. 46.
Continental Oil Co., Ponca City, Okla. 619,748, pub. 10–25–55. Cl. 6.
Courchesne, A., Inc., El Paso, Tex. 619,765, pub. 10–25–55. Cl. 12.
Courtesy Associates: *See*— Marilley, Jane E.
Courtley, Ltd., New York, N. Y., by Lee Ltd., Beverly Hills, Calif. 441,355, 12(c) pub. 1–24–56. Cl. 51.
Courtley, Ltd., New York, N. Y., by Lee Ltd., Beverly Hills, Calif. 441,730, 12(c) pub. 1–24–56. Cl. 52.
Craddock Co., Kansas City, Mo. 620,001, pub. 11–1–55. Cl. 42.
Crescent Metal Products, Inc., Cleveland, Ohio. 619,930, pub. 10–25–55. Cl. 32.
Crest Foods Co., Ashton, Ill. 620,055, pub. 11–1–55. Cl. 46.
Crown Zellerbach Corp., d. b. a. The Western Waxed Paper Co., San Francisco, Calif. 513,689, canc. Cl. 37.
Curtis Lighting, Inc., Chicago, Ill. 330,140, 12(c) pub. 1–24–56. Cl. 21.
Danahy Packing Co., The, Buffalo, N. Y. 620,079, pub. 11–1–55. Cl. 46.
Dari-Go-Round, Inc., Pensacola, Fla., to Dari-Go-Round, Inc. 620,029, pub. 11–1–55. Cl. 46.
Darling & Co., Chicago, Ill. 620,045, pub. 10–25–55. Cl. 46.
Dart, Louise: *See*— Dart's, Louise, Food Specialties.
Dart's, Louise, Food Specialties, also d. b. a. Louise Dart, Media, Pa. 620,059, pub. 10–25–55. Cl. 46.
Daubert Chemical Co.: *See*— Nox-Rust Chemical Corp.
Davidson Engineering Co., Winston-Salem, N. C. 513,631, canc. Cl. 23.
Davidson & Sons Jewelry Co., Inc., New York, N. Y. 513,845, canc. Cl. 28.
Davis Bros. Fisheries, Inc., Gloucester, Mass. 125,332, canc. Cl. 46.
Davis-Fisher-Kayne, Inc., Chicago, Ill. 513,789, canc. Cl. 38.
Dean, Herbert J., Bay City, Mich. 513,919, canc., Cl. 22.
Decker, William M., to Ball Brothers Co., Inc., Muncie, Ind. 48,455, new cert. Cl. 44.
Dee, H. Paul, Sioux Falls, S. Dak. 619,756, pub. 11–1–55. Cl. 7.
De Havilland Engine Co. Ltd., The, Leavesden, England. 619,887, pub. 10–25–55. Cl. 23.
Dehyding Deutsche Hydrierwerke GMBH, Duesseldorf-Holthausen, Germany. 619,733–4, pub. 11–1–55. Cl. 6.
De Land, C. M., New York, N. Y. 619,983–5, pub. 10–25–55. Cl. 42.
De Laney Co., The, Houston, Tex. 513,656, canc. Cl. 23.
Delta Chemical Co., to Dust-A-Way, Inc., Memphis, Tenn. 620,114, pub. 10–25–55. Cl. 52.
Deretchin, Benjamin B., d. b. a. Derry Products Co., Brooklyn, N. Y. 620,061, pub. 10–25–55. Cl. 46.
Derry Products Co.: *See*— Deretchin, Benjamin B.
De Saymont, Chicago, Ill. 619,943, pub. 10–25–55. Cl. 36.
Desert Citrus Growers Co., Phoenix, Ariz. 534,559, cor. Cl. 46.
Design-Rite Co., Brainerd, Minn. 620,139. Cl. 19.
Detroit Automotive Products Corp., Detroit, Mich. 619,830, pub. 10–25–55. Cl. 19.
Detroit Graphite Co., Detroit, Mich. 513,745, canc. Cl. 16.
Detroit and Mackinac Railway Co., Tawas City, Mich. 620,128, pub. 10–25–55. Cl. 105.
Diamond Blitz Co., Chicago, Ill. 513,855, canc. Cl. 3.
Diamond Silver Co., Lambertville, N. J. 287,234, canc. Cl. 28.
Diamond Wire & Cable Co., Sycamore, Ill. 619,841, pub. 10–25–55. Cl. 21.
Dick, A. B., Co., Chicago, Ill. 513,864, canc. Cl. 5.
Dietary Foods Co., to The Dietene Co., Minneapolis, Minn. 329,995, ren. 11–19–55. Cl. 46.
Dietene Co., The: *See*— Dietary Foods Co.
Doeskin Products, Inc., New York, N. Y. 619,955, pub. 10–25–55. Cl. 37.
Donaldson Co., Inc., St. Paul, Minn. 619,884, pub. 10–25–55. Cl. 23.
Door-Saver Mfg. Co., The, Omaha, Nebr. 619,782, pub. 10–25–55. Cl. 13.
Douglas, David, & Co., Inc., Manitowoc, Wis. 619,787, pub. 10–25–55. Cl. 13.
Dow Mechanical Corp., The, Thompsonville, Conn. 619,826, pub. 10–25–55. Cl. 19.
Drake Paint Co., Chicago, Ill. 513,663–4, canc. Cl. 16.
Driver, Wilbur B., Co., Newark, N. J. 513,773–4, canc. Cl. 21.
Drug Products Co., Inc., The, Brooklyn, N. Y. 619,815, pub. 10–25–55. Cl. 18.
Duchess Jewelry Mfg. Corp., New York, N. Y. 513,842, canc. Cl. 28.
Duchess Royal, Inc., New York, N. Y. 513,790, canc. Cl. 39.
Duesberg-Bosson of America, Inc.: *See*— Duesberg, Hubert.
Duesberg, Hubert, to Duesberg-Bosson of America, Inc., Jefferson, Mass. 521,113, new cert. Cl. 23.
Duke and Benedict, New York, N. Y. 620,109, pub. 11–1–55. Cl. 52.
Duke of Hollywood Co., Los Angeles, Calif. 513,715, canc. Cl. 39.
Dulcich Brothers, Earlimart, Calif. 620,074, pub. 11–1–55. Cl. 46.
Dumal Corp., Washington, D. C. 619,893, pub. 10–25–55. Cl. 26.
Dunhill, Alfred, of London, Inc., New York, N. Y. 619,721, pub. 11–1–55. Cl. 3.
Du Page Precision Products Co., Naperville, Ill. 619,928, pub. 10–25–55. Cl. 32.
Duroprint Co., Rutherford, N. J. 513,784, canc. Cl. 40.
Dust-A-Way, Inc.: *See*— Delta Chemical Co.
Duval, Germaine R., Suresnes, France. 513,572, canc. Cl. 6.
Dynacolor Corp., Albion, N. Y. 620,142. Cl. 26.
E Z Paintr Corp., Milwaukee, Wis. 619,924, pub. 10–25–55. Cl. 29.
Eagle Knitting Mills, Inc., Milwaukee, Wis. 513,696, canc. Cl. 39.
Eagle Roller Mill Co.: *See*— International Milling Co.
Ease, Inc., Burbank, Calif. 620,105, pub. 11–1–55. Cl. 52.
Eastman Kodak Co., Rochester, N. Y., by Eastman Kodak Co., Flemington, N. J. 329,489, 12(c) pub. 1–24–56. Cl. 26.
Eastman Kodak Co., Rochester, N. Y., by Eastman Kodak Co., Flemington, N. J. 330,100, 12(c) pub. 1–24–56. Cl. 26.
Ebert Electronics Corp., Queens Village, N. Y. 619,838, pub. 10–25–55. Cl. 21.
Eclipse Lawn Mower Co., Prophetstown, Ill. 370,329, canc. Cl. 23.
Economy Products Co.: *See*— Silber, TJ.
Edy's Character Candles, Oakland, Calif. 620,067, pub. 10–25–55. Cl. 46.
Eelbeck Milling Co., Inc., also known as Eelbeck Milling Co., Inc., Columbus, Ga. 272,452, 12(c) pub. 1–24–56. Cl. 46.
Electricitaetsgesellschaft Sanitas m. b. H., Berlin, Germany. 620,004, pub. 11–1–55. Cl. 44.
Electronic Measurements Co., Inc., Eatontown, N. J. 619,848, pub. 10–25–55. Cl. 21.
Elsworth, J. & J. W., Co., New York, N. Y. 513,707, canc. Cl. 46.
Engel, N., & Co., New York, N. Y. 619,920–1, pub. 10–25–55. Cl. 27.
Enterprise Mfg. Co., The, Akron, Ohio. 513,720, canc. Cl. 22.
Entis Food Products, Brooklyn, N. Y. 513,932, canc. Cl. 46.
Evans Bros., Riverside, Calif. 383,430, canc. Cl. 46.
Expert Bedding Co., by George Adams and Walter Pietrzak, d. b. a. Better Bedding Co., Chicago, Ill. 403,703, 12(c) pub. 1–24–56. Cl. 42.
FR Corp., The, New York, N. Y. 619,899–900, pub. 10–25–55. Cl. 26.
Fabrique de Montres Avia, Degoumois & Co, S. A.: *See*— Fabrique des Montres Avia Degoumois & Co.
Fabrique des Montres Avia Degoumois & Co., now by change of name Fabrique de Montres Avia, Degoumois & Co. S. A., Neuchatel, Switzerland. 513,851, canc. Cl. 27.
Fabri-Valve Co. of America, Portland, Oreg. 619,783, pub. 10–25–55. Cl. 13.
Factor, Max, & Co., Los Angeles, Calif. 620,090, pub. 11–1–55. Cl. 51.
Fair, Homer H., d. b. a. Worthen & Fair, Modesto, Calif. 619,784, pub. 10–25–55. Cl. 13.

Fair, The, Chicago, Ill. 513,641, canc. Cl. 39.
Fairy Silk Mills, Inc., Shillington, Pa. 619,964, pub. 10–25–55. Cl. 39.
Falls Paper & Power Co., Oconto Falls, Wis. 513,759, canc. Cl. 37.
Farmaceutici Italia S. A., Milan, Italy. 619,805, pub. 10–25–55. Cl. 18.
Farnsworth, Daniel W., New York, N. Y. 619,909, pub. 11–1–55. Cl. 42.
Fay, James P., Norwalk, Conn. 619,901, pub. 10–25–55. Cl. 26.
Felsenfeld, Jack J., New York, N. Y. 513,582, canc. Cl. 28.
Filla, Frank, Great Neck, N. Y. 619,722, pub. 10–25–55. Cl. 4.
Finishine Laboratories, Inc., Syracuse, N. Y. 620,113, pub. 11–1–55. Cl. 52.
Firestone Tire & Rubber Co., The, Akron, Ohio. 619,942, pub. 10–25–55. Cl. 35.
First National Bank in Rockwood, The, Rockwood, Tenn. 620,127, pub. 10–25–55. Cl. 102.
Fischer Baking Co., Newark, N. J. 620,046, pub. 10–25–55. Cl. 46.
Flevo Watch Corp., Inc., Whitestone, N. Y. 513,876, canc. Cl. 27.
Fluidless Contact Lenses, Inc., Detroit, Mich. 619,913, pub. 10–25–55. Cl. 26.
Fold-Away Basket Co., Inc., Madison, Ind. 619,709, pub. 11–1–55. Cl. 2.
Foley & Co., d. b. a. Fovan Chemical Div., Chicago, Ill. 620,159. Cl. 50.
Forstmann & Huffmann Co., Passaic, N. J. 229,123, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 229,143, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 231,738, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 233,384, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 233,842, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 244,335, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 244,855, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 251,341, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 253,075, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 261,443, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 262,877, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 262,928, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 274,897, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 276,059, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 281,196, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 281,893, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 282,412, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 284,589, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 284,591, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 287,452, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 291,098, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 292,772, canc. Cl. 42.
Forstmann & Huffmann Co., Passaic, N. J. 293,787, canc. Cl. 42.
Forstmann Woolen Co., Passaic, N. J. 293,959, canc. Cl. 42.
Forstmann Woolen Co., Passaic, N. J. 299,355, canc. Cl. 42.
Forstmann Woolen Co., Passaic, N. J. 303,793, canc. Cl. 42.
Forstmann Woolen Co., Passaic, N. J. 619,990, pub. 10–25–55. Cl. 42.
Foster Reef Co., Manchester, N. H. 620,060, pub. 11–1–55. Cl. 46.
Fovan Chemical Div.: *See*— Foley & Co.
Franklin Body & Equipment Corp., Brooklyn, N. Y. 513,866–7, canc. Cl. 31.
Friden Calculating Machine Co., Inc., San Leandro, Calif. 619,898, pub. 10–25–55. Cl. 26.
Frieden, Hyman, d. b. a. Cavalier Laboratories, Norfolk, Va. 620,098, pub. 11–1–55. Cl. 51.
Fruitland Canning Assn., Inc., Fruitland, Idaho. 620,077, pub. 11–1–55. Cl. 46.
Futter, Walter, New York, N. Y. 619,916, pub. 10–25–55. Cl. 26.
Gallowhur Chemical Corp., New York, N. Y. 619,745, pub. 10–25–55. Cl. 6.
Gamby Co., The: *See*— Hague, Morton.
Garfield, Williamson, Inc., Jersey City, N. J. 619,698, pub. 11–1–55. Cl. 1.
Gebhardt, A. L., Co., Milwaukee, Wis. 620,135. Cl. 1.
Gebr. Glittenberg G. m. b. H., Velbert, Rhineland, Germany. 619,774, pub. 10–25–55. Cl. 13.
Geigy Chemical Corp., New York, N. Y. 619,732, pub. 10–25–55. Cl. 6.
Geigy Chemical Corp., New York, N. Y. 619,742, pub. 10–25–55. Cl. 6.
General Aniline & Film Corp., New York, N. Y. 619,739, pub. 11–1–55. Cl. 6.
General Aniline & Film Corp., New York, N. Y. 619,897, pub. 10–25–55. Cl. 26.
General Aniline & Film Corp., New York, N. Y. 619,918–19, pub. 10–25–55. Cl. 26.
General Dynamics Corp., Rochester, N. Y. 620,140. Cl. 21.
General Foods Corp.: *See*— Postum Cereal Co., Ltd.
General Mills, Inc., Minneapolis, Minn., and Wilmington, Del. 513,557, canc. Cl. 13.
General Mills, Inc., Minneapolis, Minn. 619,881, pub. 10–25–55. Cl. 23.
General Motors Corp., Detroit, Mich. 513,877, canc. Cl. 38.
General Railway Signal Co., Rochester, N. Y. 619,842, pub. 10–25–55. Cl. 21.
General Refractories Co., Philadelphia, Pa. 513,832, canc. Cl. 12.
General Shoe Corp.: *See*— Miller, L., and Sons, Inc.
General Time Corp.: *See*— Western Clock Co.
Gentlemen Jr., Chicago, Ill. 619,962, pub. 10–25–55. Cl. 39.
Georgia Peanut Co., Moultrie, Ga. 620,043, pub. 10–25–55. Cl. 46.
Gerrish, Perley G., by The Squirrel Brand Co., Cambridge, Mass. 165,781, 12(c) pub. 1–24–56. Cl. 46.
Gibbs, Stan, Lures: *See*— Gibbs, Stanley J.
Gibbs, Stanley J., d. b. a. Stan Gibbs Lures, Bourne, Mass. 619,867, pub. 10–25–55. Cl. 22.
Gibbs, William J., d. b. a. Lowerator Mfg. Co., Brooklyn, to American Machine & Foundry Co., by American Machine & Foundry Co., New York, N. Y. 418,001, 12(c) pub. 1–24–56. Cl. 23.
Gimbel Brothers, Inc., New York, N. Y. 513,934, canc. Cl. 39.
Gingisol Laboratories: *See*— Barben, David J.
Giola, Alfonso, & Sons, Inc., d. b. a. Bravo Macaroni Co., Rochester, N. Y. 620,152–4. Cl. 46.
Glass, Max H., Chicago, Ill. 513,870, canc. Cl. 31.
Glenwear Inc., from Glenwear Ltd., to Oppenheim & Baruch Inc., New York, N. Y. 513,578, canc. Cl. 39.
Glenwear Ltd.: *See*— Glenwear Inc.
Globe Rubber Products Corp., Philadelphia, Pa. 619,866, pub. 10–25–55. Cl. 22.
Glyde-Thru Distributors: *See*— Anderson, Lester L.
Goldberg, Jack, Co., Chicago, Ill. 619,788, pub. 10–25–55. Cl. 13.
Golden Bear Oil Co., Los Angeles, Calif. 619,746, pub. 11–1–55. Cl. 6.
Goldfarb, Jacob, & Co. Inc., New York, N. Y. 619,879, pub. 10–25–55. Cl. 23.
Gooderham & Worts Ltd., Peoria, Ill. 333,483, ren. 3–24–56. Cl. 49.
Goodyear Tire & Rubber Co., The, Akron, Ohio. 619,941, pub. 10–25–55. Cl. 35.
Gordon, Alan B., d. b. a. Gordon Enterprises, North Hollywood, Calif. 619,902. pub. 10–25–55. Cl. 26.
Gordon Enterprises: *See*— Gordon, Alan B.
Gorham Mfg. Co., Providence, R. I. 513,555, canc. Cl. 28.
Gorham Broadcasting Corp. New York, N. Y. 620,134, pub. 10–25–55. Cl. 107.
Great American Tea Co., The, New York, N. Y. 513,797, canc. Cl. 37.
Great Lakes Coal & Dock Co., Minneapolis, to Great Lakes Coal & Dock Co., St. Paul, Minn. 328,159, ren. 9–17–55. Cl. 1.
Great Western Foods Co.: *See*— Waples Platter Co.
Greater Erie Broadcasting Co.: *See*— Wyzatycki, Leon.
Greene, E., and Co., Inc., Brooklyn, N. Y. 620,086, pub. 10–25–55. Cl. 50.
Griffith-Durney Co., San Francisco, Calif. 362,569, canc. Cl. 46.
Griffith, Llewellyn B., Arlington, Va. 619,763, pub. 10–25–55. Cl. 12.
Grover, J. J., Shoe Co., Inc., Haverhill, Mass. 513,587, canc. Cl. 39.
Gulf Oil Corp., Pittsburgh, Pa. 619,726, pub. 10–25–55. Cl. 4.
Gulfport Glass Corp., Gulfport, Miss. 619,933, pub. 10–25–55. Cl. 33.
Gundlach, G. P., & Co. Inc., Cincinnati, Ohio. 620,062, pub. 10–25–55. Cl. 46.
Guth, Edwin F., Co., The, St. Louis, Mo. 619,762, pub. 10–25–55. Cl. 12.
H & R Industries, Nazareth, Pa. 619,704, pub. 11–1–55. Cl. 1.
H & W Co., The, Newark, N. J. 513,626, canc. Cl. 39.
Hans Miller Corp., Philadelphia, Pa., now by change of name to Harry Miller Corp. 619,735, pub. 10–11–55. Cl. 6.
Hague, Morton, d. b. a. The Gamby Co., Chicago, Ill. 620,100, pub. 11–1–55. Cl. 51.
Hall Hardware Co., Minneapolis, Minn. 354,842, canc. Cl. 15.
Hall Hardware Co., Minneapolis, Minn. 357,936, canc. Cl. 23.
Hallford, Marvin P., d. b. a. Marvin's Products Co., Atlanta, Ga. 620,028, pub. 11–1–55. Cl. 46.
Hamilton Art Metal Corp., New York, N. Y. 513,912, canc. Cl. 36.
Haney, Martin O., d. b. a. Stapatch Tire Boot and Accessory Co., Iola, Kans. 619,939, pub. 10–25–55. Cl. 35.
Hanger, J. E., Co., Inc., Pittsburgh, Pa. 620,020, pub. 10–25–55. Cl. 44.
Hargivys, Inc.: *See*— Harper, Roscoe H.

Harper, Roscoe H., to Hargitvys, Inc., Lewistown, Pa. 619,753, pub. 10–25–55. Cl. 6.
Harrington Mfg. Co., Inc., Lewiston, N. C. 619,755, pub. 10–25–55. Cl. 7.
Hartford Products Corp., The, Hartford, Conn. 513,709, canc. Cl. 21.
Hartman, Fred G., Jr., Manlius, N. Y. 619,778, pub. 10–25–55. Cl. 13.
Hastings, Earl A., Georgetown, Del. 513,603, canc. Cl. 6.
Hearst Corp., The: *See*—
International Publications, Inc.
Hearst Corp., The, New York, N. Y. 414,642, canc. Cl. 38.
Hearst Corp., The, New York, N. Y. 513,871, canc. Cl. 38.
Heath, Frederick, Memphis, Tenn. 513,863, canc. Cl. 38.
Heckman Bindery, Inc., The, North Manchester, Ind. 620,131, pub. 10–25–55. Cl. 100.
Heller, B., & Co. B. Heller & Co., Chicago, Ill. 109,938. Am. 7(d). Cl. 46.
Helms, William H., d. b. a. The Unit–Record Co., San Jose, Calif. 513,825, canc. Cl. 37.
Heyer, Industries Inc., Belleville, N. J. 619,834, pub. 10–25–55. Cl. 21.
Hickok Mfg. Co. Inc., Rochester, N. Y. 513,653, canc. Cl. 28.
Hickok Mfg. Co. Inc., Rochester, N. Y. 619,718, pub. 11–1–55. Cl. 3.
Hilden, Edward R., Minneapolis, Minn. 513,750, canc. Cl. 38.
Hill, H. G., Co., Nashville, Tenn. 531,261. Am. 7(d). Cl. 46.
Hoffman, H. Lee, d. b. a. Ivy Hill Forest, Cockeysville, Md. 619,705, pub. 11–1–55. Cl. 1.
Hoffmann, George W., Corp., New York, N. Y. 513,597, canc. Cl. 12.
Home Softener Service: *See*—
McKays Co., The.
Horton & Converse, Los Angeels, Calif. 620,006, pub. 10–25–55. Cl. 44.
House of More, The: *See*—
Morehouse, Wade A.
Hubley Mfg. Co., The, Lancaster, Pa. 619,872, pub. 10–25–55. Cl. 22.
Hung, Tang K., d. b. a. Wang Yick Fireworks Co., Central Victoria, Hong Kong. 619,758, pub. 10–25–55. Cl. 9.
Hunt, Rodney, Machine Co., Orange, Mass. 619,883, pub. 10–25–55. Cl. 23.
Huot Mfg. Co., St. Paul, Minn. 619,712, pub. 11–1–55. Cl. 2.
Hychex Products, Chicago, Ill. 620,016, pub. 10–25–55. Cl. 44.
Hynd, A. C., Corp., Dayton, Ohio. 620,092, pub. 10–25–55. Cl. 51.
Indianapolis Brush & Broom Mfg. Co., Indianapolis, Ind. 619,729, pub. 10–25–55. Cl. 4.
Induma Industria Lombarda Macchine Attrezzamenti, Milan, Italy. 619,875, pub. 10–25–55. Cl. 23.
Industrial Hosiery Mills, Inc., Mohnton, Pa. 342,498, canc. Cl. 39.
Industrial Indemnity Co., San Francisco, Calif. 620,125–6, pub. 10–25–55. Cl. 102.
Industrial Precision Grinding Co., Chicago, Ill. 513,903, canc. Cl. 55.
Inland Fruit Dealers, Inc., Colton, Calif. 513,666, canc. Cl. 46.
Interchemical Corp., New York, N. Y. 619,793, pub. 10–25–55. Cl. 16.
Inter-City Mfg. Co., Detroit, Mich. 513,926, canc. Cl. 34.
Interior Flour Mills Co., The: *See*—
Larabee Flour Mills Co., The.
International Cellucotton Products Co. of Chicago, Ill.: *See*—
Kotex Co.
International Harvester Co.: *See*—
International Harvester Co. of America.
International Harvester Co. of America, to International Harvester Co., Chicago, Ill. 109,348, ren. 4–4–56. Cl. 38.
International Milling Co., Minneapolis, Minn., from Eagle Roller Mill Co. 620,025, pub. 10–25–55. Cl. 46.
International Publications, Inc., by The Hearst Corp., New York, N. Y. 235,721, 12(c) pub. 1–24–56. Cl. 38.
International Silver Co., to The International Silver Co., Meriden, Conn. 329,756–7, ren. 11–12–55. Cl. 28.
International Silver Co., to The International Silver Co., Meriden, Conn. 330,606, ren. 12–10–55. Cl. 23.
International Silver Co., The: *See*—
International Silver Co.
Ivy Hill Forest: *See*—
Hoffman, H. Lee.
J. G. Comfort Co., Inc., New York, N. Y. 404,993, canc. Cl. 1.
Jackson Hosiery Co.: *See*—
Schwartz, Jack.
Jarman-Williamson Co., Portland, Oreg. 426,639, 12(c) pub. 1–24–56. Cl. 22.
Jectron Co., The, Toledo, Ohio. 620,008, pub. 10–25–55. Cl. 44.
Jefferson Electric Co., Bellwood, Ill. 619,922, pub. 10–25–55. Cl. 27.
Jensen, Georg, Inc., New York, N. Y. 619,953, pub. 10–25–55. Cl. 37.
Johnson & Johnson, New Brunswick, N. J. 620,017, pub. 11–1–55. Cl. 44.
Johnson & Johnson, New Brunswick, N. J. 620,110, pub. 11–1–55. Cl. 52.
Joseph, David J., Co., The, Cincinnati, Ohio. 513,839, canc. Cl. 26.
Junior Mom Maternity Frocks, Inc., New York, N. Y. 513,786, canc. Cl. 39.
Juvenile Mfg. Co., Inc., The, San Antonio, Tex. 619,960, pub. 4–5–55. Cl. 39.
Kaiser Gypsum Co., Inc., Oakland, Calif. 619,766, pub. 10–25–55. Cl. 12.
Kaplan, Joseph A., & Sons, Inc., New York, N. Y. 619,785, pub. 10–25–55. Cl. 13.
Karseal Corp., Hollywood, Calif. 619,727, pub. 10–25–55. Cl. 4.
Katz, Joseph M.., & Co., Pittsburgh, Pa. 613,918, canc. Cl. 37.
Kearfott Co., Inc., Clifton, N. J. 619,892, pub. 10–25–55. Cl. 26.
Keel of California: *See*—
Robman, Kiel S.
Kengo Place Guides: *See*—
Nettleton, Kenneth E.
Kenley, Joan, Inc., New York, N. Y. 513,791, canc. Cl. 39.
Keystone Varnish Co., New York, to Keystone Paint and Varnish Corp., Brooklyn, N. Y. 109,539, ren. 4–11–56. Cl. 16.
Keystone and Varnish Corp.: *See*—
Keystone Varnish Co.
Kiger, C. A., Co., Kansas City, Mo. 513,753–4, canc. Cl. 28.
Kimball Mfg. Corp., to Kimball Mfg. Corp., San Francisco, Calif. 619,870, pub. 10–25–55. Cl. 22.
Kimberly-Clark Corp.: *See*—
Kotex Co.
Kline's, Inc., St. Louis, Mo. 513,619, canc. Cl. 39.
Knickerbocker Rubber Co., Chicago, Ill. 619,773, pub. 9–20–55. Cl. 13.
Kohnstamm, H., & Co., Inc., New York, N. Y. 620,049–52, pub. 10–25–55. Cl. 46.
Koppenhofer Bros., Deshler, Ohio. 620,032, pub. 11–1–55. Cl. 46.
Körber, Kurt, & Co., Hamburg-Bergedorf, Germany. 619,876–7, pub. 10–25–55. Cl. 23.
Kotex Co., to International Cellucotton Products Co. of Chicago, Ill., Chicago, Ill., to Kimberly-Clark Corp., Neenah, Wis. 331,770, ren. 1–21–56. Cl. 44.
Kotex Co., to International Cellucotton Products Co., of Chicago, Ill., Chicago, Ill., to Kimberly-Clark Corp., Neenah, Wis. 331,904, ren. 1–21–56. Cl. 44.
Kreider, George L., Palmyra, Pa. 619,972, pub. 10–25–55. Cl. 39.
Labro-Crete Corp., Garrettsville, Ohio. 619,764, pub. 10–25–55. Cl. 12.
Ladoga Canning Co., Indianapolis, Ind. 513,594, canc. Cl. 46.
Larabee Flour Mills Co., The, d. b. a. The Interior Flour Mills Co., Kansas City, Mo. 257,829, canc. Cl. 46.
Larabee Flour Mills Co., The, Kansas City, Mo. 258,281–2, canc. Cl. 46.
Larabee Flour Mills Co., The, Kansas City, Mo. 260,743, canc. Cl. 46.
Lawrence Paper Co., The, Lawrence, Kans. 332,097, 12(c) pub. 1–24–56. Cl. 2.
Leada Baby Shoe, Inc., Danvers, Mass. 619,973–4, pub. 10–25–55. Cl. 39.
Leading Comic Corp., New York, N. Y. 513,874, canc. Cl. 38.
Leaf Brands, Inc., Chicago, Ill. 620,026, pub. 11–1–55. Cl. 46.
Lee Ltd.: *See*—
Courtley, Ltd.
Lefatex, Inc., St. Louis, Mo. 619,706–7, pub. 11–1–55. Cl. 1.
Lentheric, Inc.: *See*—
Mathieson Products Corp.
Leonora Silk Underwear Co., Inc., New York, N. Y. 513,835, canc. Cl. 39.
Le Roy Industries: *See*—
Badner, Hyman.
Leventhal, Joe, Inc., New York, N. Y. 513,621, canc. Cl. 39.
Lewis, G. B., Co., Watertown, Wis. 619,715, pub. 11–1–55. Cl. 2.
Liberty Hardware Mfg., Corp., Long Island City, N. Y. 619,779, pub. 10–25–55. Cl. 13.
Liebovitz, S., & Sons, Inc., by Publix Shirt Corp., New York, N. Y. 239,283, 12(c) pub. 1–24–56. Cl. 39.
Lindgren, Erik A., d. b. a. Erik A. Lindgren and Associates, Chicago, Ill. 619,903, pub. 10–25–55. Cl. 26.
Lindgren, Erik A., and Associates: *See*—
Lindgren, Erik A.
Linen Thread Co., Inc., The, New York, N. Y. 619,754, pub. 10–25–55. Cl. 7.
Liquid Carbonic Corp., The, Chicago, Ill. 332,761, ren. 2–25–56. Cl. 6.
Litecraft Mfg. Corp., New York, N. Y. 619,836, pub. 10–25–55. Cl. 21.
Lockheed Aircraft Corp., Burbank, Calif. 619,827, pub. 10–25–55. Cl. 19.
Loewenstein, Eleanor S.: *See*—
Loewenstein, Max and E. S.
Loewenstein, Max and E. S., Detroit, Mich. 620,053, pub. 10–25–55. Cl. 46.
Loft Candy Corp., Long Island City, N. Y. 620,071, pub. 10–25–55. Cl. 46.
Lombardi, Cyrus, Brooklyn, N. Y. 513,894, canc. Cl. 40.
Lontrel: *See*—
Peau Seche, Inc.
Lowe, Joe, Corp., New York, N. Y. 620,040, pub. 10–25–55. Cl. 46.
Lowerator Mfg. Co.: *See*—
Gibbs, William J.
Lubin-Weeker Co., Inc., New York, N. Y. 513,669, canc. Cl. 39.
Lunday-Thagard Oil Co., South Gate, Calif. 620,138. Cl. 12.
M & M Industries, South Milwaukee, Wis. 619,895, pub. 10–25–55. Cl. 26.
Mable, Todd & Co. Ltd., London, England. 619,944, pub. 10–25–55. Cl. 37.
Macklanburg-Duncan Co., Oklahoma City, Okla. 619,917, pub. 10–25–55. Cl. 26.
Magic Fountain Inc., Waltham, Mass. 619,780, pub. 10–25–55. Cl. 13.
Magor Car Corp., New York, N. Y., and Passaic, N. J. 437,483–4, canc. Cl. 23.

Magor Car Corp., New York, N. Y., and Passaic, N. J. 439,407–8, canc. Cl. 23.
Maisak-Handler Shoe Co. Inc., St. Louis, Mo. 513,690, canc. Cl. 39.
Manley, Inc., Kansas City, Mo. 620,024, pub. 6–1–54. Cl. 46.
Mann Overall Co., Inc., El Paso, Tex. 620,149. Cl. 39.
Mannequin Shoes, Inc.: *See*—
Weinstat, Samuel.
Manner, Josef, & Comp. A. G., Vienna, Austria. 620,030, pub. 11–1–55. Cl. 46.
Manufacturers Processing Co., Detroit, Mich. 620,120, pub. 10–25–55. Cl. 52.
Marchand, O., Inc., New York, N. Y. 513,915, canc. Cl. 27.
Marilley, Jane E., d. b. a. Courtesy Associates, Washington, D. C. 620,124, pub. 10–25–55. Cl. 101.
Marion Electrical Instrument Co., Manchester, N. H. 619,908, pub. 10–25–55. Cl. 26.
Marjean Magazine Corp., New York, N. Y. 513,875, canc. Cl. 38.
Marks-Off Co.: *See*—
Schneider, Joseph.
Martie, R. B., Co., New York, N. Y. 513,823, canc. Cl. 28.
Martin-Senour Co., The, Chicago, Ill. 619,801–2, pub. 10–25–55. Cl. 16.
Martin Stamping & Stove Co. Madison County and Huntsville, Ala. 513,930, canc. Cl. 34.
Marvin's Products Co.: *See*—
Hallford, Marvin P.
Maryland Cup Co., The, Baltimore, Md. 619,714, pub. 11–1–55. Cl. 2.
Marzetti, T., Co., Columbus, Ohio. 620,038, pub. 10–25–55. Cl. 46.
Massachusetts Mattress Co., Boston, Mass. 442,252, 12(c) pub. 1–24–56. Cl. 32.
Mathieson Products Corp., to Lentheric, Inc., New York, N. Y. 620,091, pub. 11–1–55. Cl. 51.
Mathieson Products Corp., to Lentheric, Inc., New York, N. Y. 620,093–4, pub. 10–25–55. Cl. 51.
Maus, Geo. H., Inc., Amsterdam, N. Y. 401,043, canc. Cl. 50.
Maybelline Co., Chicago, Ill. 620,021, pub. 10–25–55. Cl. 44.
Mayer Bros., Seattle, Wash. 619,923, pub. 10–25–55. Cl. 28.
Mayer, William, New York, N. Y. 332,651, ren. 2–18–56. Cl. 39.
McConnon & Co., Winona, Minn. 619,738, pub. 11–1–55. Cl. 6.
McCormick & Co., Inc.: *See*—
Closset & Devers.
McCormick & Co., Inc., Baltimore, Md. 620,057, pub. 10–25–55. Cl. 46.
McGraw-Hill Publishing Co., Inc., New York, N. Y. 620,147. Cl. 38.
McKays Co., The, d. b. a. Home Softener Service, St. Paul, Minn. 513,634, canc. Cl. 31.
McKinney Industries, Inc., Chester, Pa. 513,922, canc. Cl. 22.
McLoughlin Mfg. Co., Indianapolis, Ind. 513,693, canc. Cl. 39.
Meccano Ltd., Liverpool, England. 619,860, pub. 10–25–55. Cl. 22.
Melchior, Armstrong, Dessau Co. of Delaware, Inc., Ridgefield, N. J. 620,013, pub. 11–1–55. Cl. 44.
Melville Shoe Corp., New York, N. Y. 619,720, pub. 11–1–55. Cl. 3.
Merit Clothing Co., Mayfield, Ky. 297,234, 12(c) pub. 1–24–56. Cl. 39.
Merrell, Wm. S., Co., The, to The Wm. S. Merrell Co., Cincinnati, Ohio. 328,583, ren. 10–1–55. Cl. 18.
Metallizing Engineering Co. Inc., Westbury, N. Y. 619,909, pub. 10–25–55. Cl. 26.
Metro-Atlantic Inc., Centredale, R. I. 619,744, pub. 10–25–55. Cl. 6.
Microbiological Associates, Inc., Miami, Fla. 620,118, pub. 10–25–55. Cl. 52.
Mid-States Gummed Paper Co., Chicago, Ill. 513,695, canc. Cl. 5.
Mid-States Steel & Wire Co., Crawfordsville, Ind. 619,775, pub. 10–25–55. Cl. 13.
Milex Products, Chicago, Ill. 619,809, pub. 10–25–55. Cl. 18.
Milex Products, Chicago, Ill. 620,012, pub. 11–1–55. Cl. 44.
Milex Products, Chicago, Ill. 620,014, pub. 11–1–55. Cl. 44.
Milford Shoe Co., Milford, Mass. 619,968, pub. 10–25–55. Cl. 39.
Miller, Ezra R., Montrose, Calif. 619,871, pub. 10–25–55. Cl. 22.
Miller, Harry, Corp.: *See*—
Haas Miller Corp.
Miller, I., and Sons, Inc., Long Island City, N. Y., to General Shoe Corp., Nashville, Tenn. 327,466, ren. 8–27–55. Cl. 39.
Miller, Rollin B., Detroit, Mich. 513,733, canc. Cl. 23.
Mine Safety Appliances Co., Pittsburgh, Pa. 619,854, pub. 10–25–55. Cl. 21.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn. 331,846, ren. 1–21–56. Cl. 26.
Minneapolis-Honeywell Regulator Co., Minneapolis, Minn. 619,914, pub. 10–25–55. Cl. 26.
Miron Mills Inc., Clinton, Mass. 619,992, pub. 10–25–55. Cl. 42.
Mission Industries, National City, Calif. 619,976, pub. 10–25–55. Cl. 40.
Mr. Boston Distiller Inc.: *See*—
Ben-Burk, Inc.
Mitee Mfg. Co., Inc., St. Paul, Minn. 620,083, pub. 10–25–55. Cl. 50.
Molica, J. P., Co.: *See*—
Molica, James P.
Molica, James P., d. b. a. J. P. Molica Co., Delano, Calif. 620,065, pub. 10–25–55. Cl. 46.
Monarch Rug Mills, Dalton, Ga. 619,989, pub. 10–25–55. Cl. 42.
Monsanto Chemical Co.: *See*—
Rubber Service Laboratories Co., The.
"Montansier" Parfumeur, Paris-France, Societe a Responsabilite Limitee, Colombes (Seine), France. 513,927, canc. Cl. 6.
Mook Bros. Inc., New York, N. Y. 619,977–8, pub. 11–1–55. Cl. 42.
Moore, E. R., Co., Chicago, Ill. 619,959, pub. 10–25–55. Cl. 39.
Morehouse, Wade A., d. b. a. The House of More, San Francisco, Calif. 619,710, pub. 10–25–55. Cl. 2.
Morgan, Neil J., New York, N. Y. 620,075, pub. 11–1–55. Cl. 46.
Morsly Handkerchief Co., Inc., New York, N. Y. 619,966, pub. 10–25–55. Cl. 39.
Mullins, John, & Sons, Inc.: *See*—
Buckley-Newhall Co., The.
Muter Co., The: *See*—
Superior Plastics, Inc.
N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. 620,011, pub. 10–25–55. Cl. 44.
N. Z. Cheese Ltd., Auckland, New Zealand. 620,058, pub. 10–25–55. Cl. 46.
Naftone, Inc., New York, N. Y. 619,749, pub. 10–25–55. Cl. 6.
Narrow Fabric Co., The, West Reading, Pa. 330,529, ren. 12–3–55. Cl. 40.
Narrow Fabric Co., The, West Reading, Pa. 513,772, canc. Cl. 40.
National Bakers Services, Inc., Chicago, Ill. 620,033, pub. 10–19–54. Cl. 46.
National Cash Register Co., The, Dayton, Ohio. 619,894, pub. 10–25–55. Cl. 26.
National Enameling and Stamping Co., Milwaukee, Wis. 231,501, canc. Cl. 2.
National Enameling and Stamping Co., Milwaukee, Wis. 351,289, canc. Cl. 21.
National Enameling and Stamping Co., Milwaukee, Wis. 351,321, canc. Cl. 21.
National Enameling and Stamping Co., Milwaukee, Wis. 357,055, canc. Cl. 2.
National Enameling and Stamping Co., Milwaukee, Wis. 358,399, canc. Cl. 34.
National Enameling & Stamping Co., Milwaukee, Wis. 413,231, canc. Cl. 13.
National Enameling & Stamping Co., Milwaukee, Wis. 418,994, canc. Cl. 34.
National Neckwear Co.: *See*—
Spiegler, Moe.
National Peanut Corp., Wilkes-Barre, Pa. 513,731, canc. Cl. 46.
National Union Electric Corp., Orange, N. J. 619,851, pub. 10–25–55. Cl. 21.
National Weglyway Co., The, Washington, Iowa. 620,162. Cl. 101.
Nelson Mfg. Co., Mosheim, Tenn. 619,890, pub. 10–25–55. Cl. 24.
Neon Products, Inc., Lima, Ohio. 619,855, pub. 10–25–55. Cl. 21.
Nesbitt Fruit Products Inc., Los Angeles, Calif. 620,023, pub. 10–25–55. Cl. 45.
Nestlé Co., Inc., The, White Plains, N. Y. 619,934, pub. 10–25–55. Cl. 33.
Nettleton, Kenneth E., d. b. a. Kengo Place Guides, Cheshire, Conn. 513,859, canc. Cl. 38.
Neushaefer, Helen, Inc., College Point, N. Y. 620,102, pub. 11–1–55. Cl. 51.
Newark, M. A., Co.: *See*—
Schuette, H. J.
New Aseptic Laboratories, Inc.: *See*—
Southern Aseptic Laboratories.
Newbro Mfg. Co., Atlanta, Ga. 146,824, 12(c) pub. 1–24–56. Cl. 51.
Newspaper Publishing Corp., Culpeper, Va. 619,957, pub. 10–25–55. Cl. 38.
New York Belting and Packing Co., Ltd. United States Rubber Co., New York, N. Y. 75,707. Am. 7(d). Cl. 35.
Nickell, Adnah A., Glendale, Calif. 513,778, canc. Cl. 37.
Norcross, Inc., New York, N. Y. 620,148. Cl. 38.
Norlin, Clarence F., d. b. a. Norlin Mfg. Co., Chicago, Ill. 513,618, canc. Cl. 39.
Norlin Mfg. Co.: *See*—
Norlin, Clarence F.
North Shore Nameplate Inc., Bayside, N. Y. 619,845, pub. 10–25–55. Cl. 21.
Norton Co., Worcester, Mass. 619,728, pub. 10–25–55. Cl. 4.
Norwich Line Co., Inc., Norwich, N. Y. 440,478, canc. Cl. 22.
Nox-Rust Chemical Corp., Chicago, Ill., now by change of name Daubert Chemical Co. 620,107, pub. 11–1–55. Cl. 52.
Nuclear Instrument and Chemical Corp., Chicago, Ill. 619,910, pub. 10–25–55. Cl. 26.
Nutone, Inc., Cincinnati, Ohio. 619,852, pub. 10–25–55. Cl. 21.
OJ's Beauty Lotion Co.: *See*—
Parham, Ortha J.
O. K. Ko-Op Rubber Welding System, Littleton, Colo. 619,940, pub. 10–25–55. Cl. 35.
Oakes Consumer Catalogs, Chicago, Ill. 620,146. Cl. 38.
Oakland Macaroni Co., Oakland, Calif. 259,561, canc. Cl. 46.
Oceanside Sports Products Co., Oceanside, N. Y. 513,917, canc. Cl. 22.
Octagon Process, Inc., Staten Island, N. Y. 620,108, pub. 11–1–55. Cl. 52.

Ogden, Russell A.: *See*—
Valley Forge Envelope & Paper Co.
Olin Mathieson Chemical Corp., New York, N. Y. 619,811, pub. 10–25–55. Cl. 18.
Oppenheim & Baruch Inc.: *See*—
Glenwear Inc.
Orange Crystals, Inc., Oakland, Calif. 620,156. Cl. 46.
Orchard Industries, Inc., Hastings, Mich. 619,873, pub. 10–25–55. Cl. 22.
Oriental Show You Co., Inc., Columbia City, Ind. 620,073, pub. 10–25–55. Cl. 46.
Orthopedic Frame Co., Kalamazoo, Mich. 620,010, pub. 10–25–55. Cl. 44.
Oshkosh Brewing Co., The, Oshkosh, Wis. 79,442, canc. Cl. 48.
Ovenglo Co., Inc., Milwaukee, Wis. 619,936, pub. 10–25–55. Cl. 34.
Oyster Shell Corp., Baltimore, Md. 619,703, pub. 11–1–55. Cl. 1.
Paddock of Texas, Dallas, Tex. 619,926, pub. 10–25–55. Cl. 31.
Pantelides, L., Inc., New York, N. Y. 513,675, canc. Cl. 39.
Pantour Inc., Duluth, Minn. 513,908, canc. Cl. 55.
Parham, Ortha J., to OJ's Beauty Lotion Co., Shreveport, La. 107,370, ren. 11–23–55. Cl. 18.
Parisi, Jules T., d. b. a. Pekay Machine Co., Chicago, Ill. 513,568, canc. Cl. 26.
Patch, E. L., Co., The, Boston, to The E. L. Patch Co., Stoneham, Mass. 108,173, ren. 1–18–56. Cl. 18.
Pate Oil Co., Milwaukee, Wis. 331,162, ren. 12–31–55. Cl. 15.
Peau Seche, Inc., d. b. a. Lontrel, Chicago, Ill. 620,099, pub. 10–25–55. Cl. 51.
Pekay Machine Co.: *See*—
Parisi, Jules T.
Penn Food Distributors, Inc., Philadelphia, Pa. 620,039, pub. 11–1–55. Cl. 46.
Pepperell Mfg. Co., Boston, Mass. 513,854, canc. Cl. 38.
Perfect Shoulder Co., New York, N. Y. 513,943, canc. Cl. 40.
Pessl, Helene, Inc., New York, N. Y. 620,081, pub. 10–25–55. Cl. 50.
Peter Pan Foundations, Inc., New York, N. Y. 513,815, canc. Cl. 39.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 619,747, pub. 11–1–55. Cl. 6.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 619,814, pub. 10–25–55. Cl. 18.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 619,819, pub. 10–25–55. Cl. 18.
Pietrzak, Walter: *See*—
Expert Bedding Co.
Piggly Wiggly Sims Stores, Inc., Vidalia, Ga., by change of name from Tanner-Brice Co. 620,063–4, pub. 11–1–55. Cl. 46.
Pilot Freight Carriers, Inc., Winston-Salem, N. C. 620,129, pub. 10–25–55. Cl. 105.
Pine, Joseph, d. b. a. Pine's Laboratory, Baltimore, Md. 620,136. Cl. 4.
Pine's Laboratory: *See*—
Pine, Joseph.
Pipe-Co., Inc., Seattle, Wash., 619,789, pub. 10–25–55. Cl. 13.
Plough, Inc.: *See*—
Stanco Inc.
Plymouth Rubber Co., Inc., Canton, Mass. 620,087, pub. 10–25–55. Cl. 50.
Pneumafil Corp., Charlotte, N. C. 619,878, pub. 10–25–55. Cl. 23.
Polar Ware Co., Sheboygan, Wis. 619,791, pub. 10–25–55. Cl. 16.
Porter, N., Saddle and Harness Co., Phoenix, Ariz. 513,724, canc. Cl. 3.
Postum Cereal Co., Ltd. General Foods Corp., White Plains, N. Y. 107,527. Am. 7(d). Cl. 46.
Prairie Farms Creameries, Chicago, Ill. 620,027. pub. 10–25–55. Cl. 46.
Precision-Cosmet Co., Inc., Minneapolis, Minn. 619,912, pub. 10–25–55. Cl. 26.
Premier Smoked Meats, Inc., Brooklyn, N. Y. 620,031, pub. 10–25–55. Cl. 46.
Pressed Steel Car Co., Inc., Chicago, Ill., now by merger and change of name U. S. Industries, Inc. 619,713, pub. 10–25–55. Cl. 2.
Prestile Mfg. Co., Chicago, Ill. 513,739, canc. Cl. 5.
Process Engineering Co. of Fort Worth, Fort Worth, Tex. 619,853, pub. 10–25–55. Cl. 21.
Procter & Gamble, The, Cincinnati, Ohio. 620,044, pub. 4–12–55. Cl. 46.
Progress Mfg. Co., Inc., Philadelphia, Pa. 619,849, pub. 10–25–55. Cl. 21.
Pro-Kleen Industries, Inc., New York, N. Y. 620,116, pub. 10–25–55. Cl. 52.
Propper Mfg. Co., Inc., Long Island City, N. Y. 620,015, pub. 11–1–55. Cl. 44.
Providence Braid Co., Pawtucket, R. I. 513,762, canc. Cl. 40.
Publix Shirt Corp.: *See*—
Liebovitz, S., & Sons, Inc.
Rack Service, Inc., Des Moines, Iowa. 619,863, pub. 10–25–55. Cl. 22.
Radio Station WWOL: *See*
Wyszatycki, Leon.
Radio Steel & Mfg. Co., Chicago, Ill. 619,865, pub. 10–25–55. Cl. 22.
Ralston Purina Co., St. Louis, Mo. 619,823. Pub. 10–11–55. Cl. 18; pub. 10–11–55. Cl. 46. (Consolidated certificate. Classes 18 and 46.)
Ray Plastics: *See*—
Spencer, Murray G.
Raymond Corp., The, Greene, N. Y. 619,882, pub. 10–25–55. Cl. 23.
Reardon Co., The, St. Louis, Mo. 619,769, pub. 10–25–55. Cl. 12.
Red Bird Aviaries, Sacramento, Calif. 620,089, pub. 11–1–55. Cl. 50.
Redi-Food Co., Inc., Bronx, N. Y. 620,035, pub. 11–1–55. Cl. 46.
Reeves Fences, Inc., Tampa, Fla. 619,786, pub. 10–25–55. Cl. 13.
Reisman, Bernard, d. b. a. Universal Specialties Co., Wilmington, Calif. 619,803, pub. 10–25–55. Cl. 16.
Reitsma Co., Midland Park, N. J. 513,683, canc. Cl. 40.
Reliance Paint Co., Inc., Brooklyn, N. Y. 513,554, canc. Cl. 16.
Reliance Pencil Corp., Mount Vernon, N. Y. 513,770, canc. Cl. 37.
Ren-ite Plastics, Inc., Lansing, Mich. 620,137. Cl. 6.
Research Laboratories, Inc., St. Joseph, Mo. 619,820, pub. 10–25–55. Cl. 18.
Research Mfg. Co., Savannah, Ga. 513,640, canc. Cl. 21.
Research Products Corp., Madison, Wis. 619,925, pub. 10–25–55. Cl. 31.
Rhodes, James H. & Co., Chicago, Ill. 619,723, pub. 10–25–55. Cl. 4.
Rianda, A. V., Jr., Salinas, Calif. 513,567, canc. Cl. 46.
Richmond Chase Co., San Jose, Calif. 145,578, canc. Cl. 46.
Rinnman, Harry, d. b. a. Big Drip, St. Charles, Ill. 513,886, canc. Cl. 6.
Robbins Floor Products, Inc., Tuscumbia, Ala. 619,767, pub. 10–25–55. Cl. 12.
Roberton Mfg. Co., Chicago, Ill. 619,880, pub. 10–4–55. Cl. 23.
Robertson Photo-Mechanix, Inc., Chicago, Ill. 619,915, pub. 10–25–55. Cl. 26.
Robison, C. J., d. b. a. Tex Products Co., by Tex Products, Inc., Newark, N. J. 421,454. 12(c) pub. 1–24–56. Cl. 16.
Robman, Kiel S., d. b. a. Keel of California, Los Angeles, Calif. 513,564, canc. Cl. 39.
Rockwell Spring and Axle Co., Coraopolis, Pa. 619,929, pub. 10–25–55. Cl. 32.
Roe, Wm. G., & Sons: *See*—
Winter Haven Fruit Sales Corp.
Roeder, Walter G., Horse Shoe, N. C. 620,158. Cl. 50.
Rogers Canning Co., Milton, Oreg. 620,042, pub. 10–25–55. Cl. 46.
Rogers Peet Co., New York, N. Y. 106,366, ren. 10–19–55. Cl. 39.
Rosenfeld, Jacob d. b. a. Arrow Chain Mfg. Co., to Arrow Jewelry Mfg. Co., New York, N. Y. 328,314, ren. 9–24–55. Cl. 28.
Roth, Chester H., Co., Inc., New York, N. Y. 513,712–14, canc. Cl. 39.
Roth, Chester H., Co., Inc., New York, N. Y. 619,971, pub. 10–25–55. Cl. 39.
Roth Fabrics Corp., New York, N. Y. 338,946, canc. Cl. 42.
Roth Fabrics Corp., New York, N. Y. 407,809, canc. Cl. 42.
Rothschild Bros. Hat Co., St. Louis, Mo. 513,622, canc. Cl. 39.
Rubber Service Laboratories Co., The, Akron, Ohio, to Monsanto Chemical Co., St. Louis, Mo. 332,623–4, ren. 2–18–56. Cl. 6.
Rubin-Meltzer Co.: *See*—
Rubin-Meltzer Corp.
Rubin-Meltzer Corp., to Rubin-Meltzer Co., New York, N. Y. 330,653, ren. 12–10–55. Cl. 39.
Rueschman, A. E., d. b. a. Rueschman's Store Fixture & Display Co., Akron, Ohio. 438,671, canc. Cl. 32.
Rueschman's Store Fixture & Display Co.: *See*—
Rueschman, A. E.
Ruwe Pencil Co., The, Greenwich, Conn. 619,949, pub. 10–25–55. Cl. 37.
Ryan, Grace G., Toledo, Ohio. 513,611, canc. Cl. 39.
Sail and Power Craft, Inc., Cleveland, Ohio. 619,824, pub. 10–25–55. Cl. 19.
Saks & Co., New York, N. Y. 619,970, pub. 10–25–55. Cl. 39.
Sales Affiliates, Inc., New York, N. Y. 620,103, pub. 11–1–55. Cl. 51.
Salsbury's, Dr., Laboratories, Charles City, Iowa. 433,732, canc. Cl. 6.
San Fernando Fruit Growers Association, San Fernando, Calif. 513,893, canc. Cl. 46.
Sanges, Vincent, Inc., Gloversville, N. Y. 513,936, canc. Cl. 39.
Sanhellos Hermann F. Börner Pharmazeutische Fabriken: *See*—
Börner, Hermann F.
Sawdon Co., Inc., The, New York, N. Y. 620,145. Cl. 37.
Schenck, William, & Co., Inc., Evans City, Pa. 619,932, pub. 10–25–55. Cl. 32.
Schenley Distillers, Inc., New York, N. Y. 620,041, pub. 10–25–55. Cl. 46.
Schmitt, Ludwig J., Chicago, Ill. 513,757, canc. Cl. 37.
Schneider, Joseph, d. b. a. Marks-Off Co., Wauwatosa, Wis. 620,143. Cl. 29.
Schneider, Mitchel, Co. Inc., Brooklyn, N. Y. 513,799, canc. Cl. 39.
Schoellkopf Co., The, Dallas, Tex. 619,828, pub. 10–25–55. Cl. 19.
Schoff, Charles A., Oakland, Calif. 619,869, pub. 10–25–55. Cl. 22.
Schuette, H. J., d. b. a. M. A. Newark Co., Los Angeles, Calif. 356,388, canc. Cl. 45.
Schwab, H. W., Textile Corp., New York, N. Y. 619,993, pub. 10–25–55. Cl. 42.
Schwartz, Jack, d. b. a. Jackson Hosiery Co., Springfield, Mass. 619,965, pub. 10–25–55. Cl. 39.
Scott Chemical Co.: *See*—
Scott, James A., Jr.
Scott, James A., Jr., d. b. a. Scott Chemical Co., Fairfield, Conn. 620,106, pub. 11–1–55. Cl. 52.

Scott Radio Laboratories, Inc., Plymouth, Ind. 619,856, pub. 10–25–55. Cl. 21.
Scurich, Stephen "Bob," Watsonville, Calif. 620,036, pub. 4–27–54. Cl. 46.
Seamless Rubber Co., The, New Haven, Conn. 620,022, pub. 10–25–55. Cl. 44.
Sears, Roebuck and Co., Chicago, Ill. 513,885, canc. Cl. 27.
Sears, Roebuck and Co., Chicago, Ill. 619,961, pub. 10–25–55. Cl. 39.
Security Mills, Inc., New York, N. Y. 619,986–7, pub. 10–25–55. Cl. 42.
Sedgwick Machine Works, Inc., New York, N. Y. 619,888, pub. 10–25–55. Cl. 23.
Seidlitz Paint & Varnish Co., Kansas City, Mo. 619,794, pub. 10–25–55. Cl. 16.
Seidman, Julius H., Newark, N. J. 513,938, canc. Cl. 3.
Sessions Clock Co., The, Forestville, Conn. 513,852, canc. Cl. 27.
Seymour, L. D., & Co., New York, N. Y. 620,155. Cl. 46.
Shaffer Music Co., Columbus, Ohio. 619,839, pub. 10–25–55. Cl. 21.
Shamblen, Lester E., d. b. a. Shamblen Milling Co., Omaha, Nebr. 513,657, canc. Cl. 46.
Shamblen Milling Co.: *See*—
Shamblen, Lester E.
Shepard, Omar H., Bridgeport, Conn. 620,141. Cl. 21.
Sheri Cola Co., The, West Columbia, S. C. 513,929, canc. Cl. 45.
Sherwin-Williams Co., The, Cleveland, Ohio. 619,798, pub. 10–25–55. Cl. 16.
Shriro Trading Corp., New York, N. Y. 619,889, pub. 10–25–55. Cl. 23.
Shwayder Brothers, Inc., Denver, Colo. 619,719, pub. 11–1–55. Cl. 3.
Signet Club Plan, Cambridge, Mass. 619,832, pub. 10–25–55. Cl. 21.
Silber, TJ, d. b. a. Economy Products Co., Los Angeles, Calif. 620,119, pub. 10–25–55. Cl. 52.
Simonds, H. & G., Ltd., Reading, England. 256,659, canc. Cl. 48.
Sitroux Importing Co., Inc. Sitrue Inc., New York, N. Y. 281,482. Am. 7(d). Cl. 37.
Sitrue Inc.: *See*—
Sitroux Importing Co., Inc.
Skater Mfg. Co. Inc., New York, N. Y. 513,925, canc. Cl. 37.
Smith, Alexander, Inc.: *See*—
Smith, Alexander, & Sons Carpet Co.
Smith, Alexander, & Sons Carpet Co., Yonkers, N. Y., now by change of name Alexander Smith, Inc. 619,697, pub. 2–12–52. Cl. 1.
Smokehouse, The: *See*—
Brown, Andrew H.
Società A. R. L. Alv Mariani & C., Rome, Italy. 620,096, pub. 11–1–55. Cl. 51.
Société Anonyme Dite: Messier, Paris, France. 619,891, pub. 10–25–55. Cl. 26.
Societe Cazalis & Prats, Sete, France. 314,903, canc. Cl. 47.
Societe Crylor: *See*—
Societe Rhodiaceta.
Societe Industrielle d'Acide Phosphorique et d'Engrais (S. I. A. P. E.), Paris, France. 619,761, pub. 10–25–55. Cl. 10.
Societe Rhodiaceta, to Societe Crylor, Paris, France. 619,982, pub. 10–25–55. Cl. 42.
Societe Rhodiaceta, to Societe Crylor, Paris, France. 619,997, pub. 10–25–55. Cl. 42.
Societe Rhodiaceta, to Societe Crylor, Paris, France. 620,003, pub. 10–25–55. Cl. 43.
Societe Rhovyl, Paris, France. 619,699, pub. 11–1–55. Cl. 1.
Societe Rhovyl, Paris, France. 620,002, pub. 11–1–55. Cl. 43.
Society of Chemical Industry in Basle, Basel, Switzerland, to Ciba Pharmaceutical Products Inc., Summit, N. J. 331,978, ren. 1–28–56. Cl. 18.
South Atlantic Sales Co., Inc., Baltimore, Md. 513,590, canc. Cl. 46.
Southern Aseptic Laboratories, to New Aseptic Laboratories, Inc., Columbia, S. C. 106,376, ren. 10–19–55. Cl. 44.
Southern Saw Works, Inc., Atlanta, Ga. 513,628, canc. Cl. 23.
Southland Cotton Oil Co., Dallas, Tex. 620,047, pub. 10–25–55. Cl. 46.
Southwest Tool & Die Co., Dallas, Tex. 513,924, canc. Cl. 22.
Sovereign International Corp., New York, N. Y. 619,846, pub. 10–25–55. Cl. 21.
Spartan Mills, Spartanburg, S. C. 619,988, pub. 10–25–55. Cl. 42.
Spear Products Inc., Bridgeport, Conn. 619,831, pub. 10–25–55. Cl. 21.
Spencer, Murray G., d. b. a. Ray Plastics, Toronto, Ontario, Canada. 619,781, pub. 10–25–55. Cl. 13.
Spiegler, Moe, d. b. a. National Neckwear Co., New York, N. Y. 620,150. Cl. 39.
Sportsman's Gear, Inc., West Palm Beach, Fla. 619,868, pub. 10–25–55. Cl. 22.
Sprague Electric Co., North Adams, Mass. 619,843, pub. 10–25–55. Cl. 21.
Spray-O-Bond Co., Milwaukee, Wis. 619,750, pub. 10–25–55. Cl. 6.
Springfield Coated Paper Corp., New York, N. Y., and Camden, N. J. 513,812, canc. Cl. 37.
Squirrel Brand Co., The: *See*—
Gerrish, Perley G.
Squirrel Brand Co., The, Cambridge, Mass. 375,190, 12(c) pub. 1–24–56. Cl. 46.
Stanco Inc., Wilmington, Del., and New York, N. Y., to Plough, Inc., Memphis, Tenn. 325,904, ren. 7–9–55. Cl. 18.
Standard Brands Inc., New York, N. Y. 333,653–4, ren. 3–31–56. Cl. 6.
Standard Novelty Works, Duncannon, Pa. 113,165, canc. Cl. 22.
Standard Scientific Supply Corp., New York, N. Y. 620,122, pub. 10–25–55. Cl. 52.
Standard Wine & Liquor Co., Inc., Long Island City, N. Y. 331,079, ren. 12–24–55. Cl. 49.
Stapatch Tire Boot and Accessory Co.: *See*—
Haney, Martin O.
Stone-Tarlow Co., Inc., Brockton, Mass. 619,969, pub. 10–25–55. Cl. 39.
Strathmore Paper Co., West Springfield, Mass. 619,950–2, pub. 10–25–55. Cl. 37.
Stribling, Thomas B., Jr., d. b. a. Stribling's Nurseries, Merced, Calif. 619,702, pub. 10–25–55. Cl. 1.
Stribling's Nurseries: *See*—
Stribling, Thomas B., Jr.
Stroock, S., & Co., Inc., New York, N. Y. 333,195, ren. 3–10–56. Cl. 42.
Sun Oil Co., Philadelphia, Pa. 521,645. Am. 7(d). Cl. 38.
Sun Oil Co., Philadelphia, Pa. 619,751, pub. 10–25–55. Cl. 6.
Sunshade Corp., Buffalo, N. Y. 619,770, pub. 10–25–55. Cl. 12.
Superior Feed Mills, Inc., Oklahoma City, Okla. 620,151. Cl. 46.
Superior Plastics, Inc., to The Muter Co., Chicago, Ill. 609,053, new certificate. Cl. 22.
Superior Separator Co., Hopkins, Minn. 619,885, pub. 10–25–55. Cl. 23.
Supreme Sugar Refinery: *See*—
Aron, J., & Co., Inc.
Surf Associates, New Orleans, La. 513,856, canc. Cl. 38.
Swanson, C. A., & Sons, Omaha, Nebr., to Campbell Soup Co., Camden, N. J. 620,054, pub. 10–25–55. Cl. 46.
Swiss Pine Importing Co., Inc., New York, N. Y. 620,101, pub. 10–25–55. Cl. 51.
Syndicate Store Merchandiser, Inc., New York, N. Y. 513,941, canc. Cl. 38.
Tanner-Brice Co.: *See*—
Piggly Wiggly Sims Stores, Inc.
Taylor Fireworks Co.: *See*—
Taylor, W. J.
Taylor Instrument Companies, Rochester, N. Y. 619,904, pub. 10–25–55. Cl. 26.
Taylor, John B., Liverpool, N. Y. 326,630, ren. 7–30–55. Cl. 51.
Taylor, W. J., d. b. a. Taylor Fireworks Co., Kansas City, Kans. 619,759, pub. 10–25–55. Cl. 9.
Tennessee Supply Co.: *See*—
Brown, Charles F.
Tex Products Co.: *See*—
Robinson, C. J.
Tex Products, Inc.: *See*—
Robinson, C. J.
Textile Adjuncts Corp., Brooklyn, N. Y. 619,736, pub. 11–1–55. Cl. 6.
Thompson, Hattie, Florence, Ala. 620,104, pub. 11–1–55. Cl. 51.
Tilton & Cook Co., Leominster, Mass. 513,779, canc. Cl. 40.
Timber Engineering Co., Washington, D. C. 513,826, canc. Cl. 5.
Times Facsimile Corp., New York, N. Y. 619,847, pub. 10–25–55. Cl. 21.
Tobin Packing Co., Inc., Rochester, N. Y. 620,076, pub. 11–1–55. Cl. 46.
Tomlinson of High Point, High Point, N. C. 619,927, pub. 9–14–54. Cl. 32.
Tootal Broadhurst Lee Co. Ltd., Manchester, England. 619,980, pub. 10–25–55. Cl. 42.
Tot Lines, Kirkland, Wash. 513,803, canc. Cl. 39.
Toy Distributors, Inc., Boston, Mass. 619,861, pub. 10–11–55. Cl. 22.
Transit-Tank Co., Richmond, Calif. 619,716, pub. 11–1–55. Cl. 2.
Transparent Products Corp., Los Angeles, Calif. 513,681, canc. Cl. 21.
Trask, Warren Co., Boston, Mass. 619,768, pub. 10–25–55. Cl. 12.
Tremco Mfg. Co., The, Cleveland, Ohio. 331,001, ren. 12–24–55. Cl. 12.
Trifari, Krussman & Fishel, Inc., New York, N. Y. 619,760, pub. 10–25–55. Cl. 9.
Trimble Laboratories, Inc., Los Angeles, Calif. 513,551, canc. Cl. 26.
Trio Mfg. Co., Forsyth, Ga. 619,874, pub. 10–25–55. Cl. 22.
Tropicraft, Inc., San Francisco, Calif. 620,080, pub. 10–25–55. Cl. 50.
Tubbs Cordage Co., San Francisco, Calif. 619,777, pub. 10–25–55. Cl. 13.
Turco Products, Inc., Los Angeles, Calif. 619,792, pub. 10–25–55. Cl. 16.
Turner Halsey Co., New York, N. Y. 619,994, pub. 11–1–55. Cl. 42.
Twin Falls Milling & Elevator Co., The, Twin Falls, Idaho, and Denver, Colo., to The Colorado Milling and Elevator Co., Denver, Colo. 109,621, ren. 4–11–56. Cl. 46.
Twitchell, E. W., Inc., Philadelphia, Pa. 619,979, pub. 11–1–55. Cl. 42.
Ullmann, Bernhard, Co. Inc., Long Island City, N. Y. 619,998, pub. 11–1–55. Cl. 42.
Unger Hosiery and Frocks, Inc., New York, N. Y. 513,730, canc. Cl. 39.
Unit-Record Co., The: *See*—
Helms, William H.
United Merchants and Manufacturers, Inc.: *See*—
Cohn-Hall-Marx Co.
U. S. Industries, Inc.: *See*—
Pressed Steel Car Co., Inc.
U. S. Industries, Inc., Chicago, Ill. 619,776, pub. 10–25–55. Cl. 13.

U. S. Industries, Inc., Chicago, Ill. 619,833, pub. 10–25–55. Cl. 21.
U. S. Kniltwear Co., New York, N. Y. 513,692, canc. Cl. 39.
U. S. Packaging Corp., Bridgeport, Conn. 619,796, pub. 10–25–55. Cl. 16.
United States Rubber Co.: *See*—
New York Belting and Packing Co., Ltd.
United States Rubber Co., New York, N. Y. 619,975, pub. 10–11–55. Cl. 39.
United States Steel Corp., Pittsburgh, Pa. 619,958, pub. 10–25–55. Cl. 38.
Universal Dye Works, Inc., Philadelphia, Pa. 620,130, pub. 10–25–55. Cl. 106.
Universal Specialties Co.: *See*—
Reisman, Bernard.
Utley, Azle H., d. b. a. Auburn Aerotostat Co., Auburn, Calif. 513,649, canc. Cl. 23.
Valentine Pulp & Paper Co., Inc., New Orleans, La. 619,947, pub. 10–25–55. Cl. 37.
Valley Forge Envelope & Paper Co., Philadelphia, to R. A. Ogden, Malvern, Pa. 329,149, ren. 10–15–55. Cl. 37.
Valley Forge Envelope & Paper Co., Philadelphia, to R. A. Ogden, Malvern, Pa. 330,780, ren. 12–17–55. Cl. 37.
Van Dyke, Lyle H., Portland, Oreg. 619,737, pub. 11–1–55. Cl. 8.
Vargas Mfg. Co., Providence, R. I. 513,574, canc. Cl. 28.
Verona Chemical Co., Newark, N. J. 620,111, pub. 11–1–55. Cl. 52.
W. & F. Mfg. Co., Inc., The, Buffalo, N. Y. 620,034, pub. 10–25–55. Cl. 46.
W & W Chemical Co., Inc., Levelland, Tex. 619,743, pub. 11–1–55. Cl. 6.
Waldes Koh-I-Noor, Inc., Long Island City, N. Y. 329,930, ren. 11–19–55. Cl. 13.
Wang Yick Fireworks Co.: *See*—
Hung, Tang K.
Waples Platter Co., Fort Worth, Tex. 353,123, canc. Cl. 46.
Waples Platter Co., d. b. a. Great Western Foods Co., Fort Worth, Tex. 363,324, canc. Cl. 46.
Waples Platter Co., Fort Worth, Tex. 370,412, canc. Cl. 46.
Waples-Platter Grocer Co., Fort Worth, Tex. 196,741, canc. Cl. 46.
Ward Paper Co., Merrill, Wis. 439,791, canc. Cl. 37.
Water Watchman Co., Inc., Chicago, Ill. 619,772, pub. 10–25–55. Cl. 13.
Waterman Pen Co., Inc., Seymour, Conn. 619,946, pub. 10–25–55. Cl. 37.
Watson-Standard Co., Pittsburgh, Pa. 619,795, pub. 10–25–55. Cl. 16.
Weinreich Brothers Co., New York, N. Y. 513,827, canc. Cl. 28.
Weinstat, Samuel, Mannequin Shoes, Inc., New York, N. Y. 362,506, Am. 7(d). Cl. 39.
West Disinfecting Co., Long Island City, N. Y. 619,725, pub. 10–25–55. Cl. 4.
Westergaard, H., & Co., Inc., Brooklyn, N. Y. 620,069, pub. 10–25–55. Cl. 46.
Western Clock Co., Peru, by General Time Corp., La Salle, Ill. 100,385, 12(c) pub. 1–24–56. Cl. 27.
Western Foundry, Inc., Portland, Oreg. 619,935, pub. 10–25–55. Cl. 34.
Western Peat Co., Ltd., Lulu Island, British Columbia, Canada. 619,700, pub. 10–25–55. Cl. 1.
Western Waxed Paper Co., The: *See*—
Crown Zellerbach Corp.
Westphal, Mary L., Madison, Wis. 619,956, pub. 10–25–55. Cl. 38.
Wheeling Furnace Corp., Martins Ferry, Ohio. 513,928, canc. Cl. 34.
White Laboratories, Inc., Kenilworth, N. J. 619,810, pub. 10–25–55. Cl. 18.
Whiting-Adams Co., Inc., Boston, Mass. 513,560, canc. Cl. 29.
Whitmore & Smith, Book Agents, Publishing House, M. E. Church, South, Nashville, Tenn., Dallas, Tex., and Richmond, Va., to The Board of Publication of the Methodist Church, Inc., Nashville, Tenn. 329,275, ren. 10–22–55. Cl. 38.
Williamson, Dorothy G., d. b. a. Willi-Mar-Ket, Lee's Summit, Mo. 620,068, pub. 10–25–55. Cl. 46.
Willi-Mar-Ket: *See*—
Williamson, Dorothy G.
Winhart, Inc., Morristown, N. J. 619,724, pub. 11–1–55. Cl. 4.
Winter Garden Citrus Products Cooperative, Winter Garden, Fla. 620,037, pub. 10–25–55. Cl. 46.
Winter Haven Fruit Sales Corp., to Wm. G. Roe & Sons, Winter Haven, Fla. 333,290, ren. 3–17–56. Cl. 46.
Winthrop Chemical Co., Inc., to Winthrop-Stearns Inc., New York, N. Y. 333,661, ren. 3–31–56. Cl. 18.
Winthrop-Stearns Inc.: *See*
Bayer Co., Inc., The.
Winthrop Chemical Co., Inc.
Wiser's Distillery Ltd., Montreal, Quebec, Canada. 620,157. Cl. 49.
Witco Chemical Co., New York, N. Y. 619,740, pub. 11–1–55. Cl. 6.
Woelx Brothers, Inc., Appleton, Wis. 513,705, canc. Cl. 37.
Wollensak Optical Co., Rochester, N. Y. 619,905, pub. 10–25–55. Cl. 26.
Wonder Maid, Inc., St. Louis, Mo. 513,763, canc. Cl. 39.
Woodward Metal Cap, Inc., Brattleboro, Vt. 620,161. Cl. 50.
Wooster Finishes Corp., Wooster, Ohio. 619,800, pub. 10–25–55. Cl. 16.
Worthen & Fair: *See*—
Fair, Homer H.
Wyszatycki, Leon, d. b. a. Greater Erie Broadcasting Co., and Radio Station WWOL, Buffalo, N. Y. 620,133, pub. 10–25–55. Cl. 107.
York-Shipley, Inc., York, Pa. 619,937, pub. 10–25–55. Cl. 34.
Yorkshire Knitting Co., Inc., New York, N. Y. 513,801, canc. Cl. 39.
Youngs Rubber Corp., New York, N. Y. 620,005, pub. 11–1–55. Cl. 44.
Youngs Rubber Corp., New York, N. Y. 620,018–19, pub. 10–25–55. Cl. 44.
Zelikovsky Bros. Co., Inc., New York, N. Y. 513,892, canc. Cl. 27.

U. S. GOVERNMENT PRINTING OFFICE: 0—1956

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
January 31, 1956 Volume 702 Number 5

PATENTS

NOTICES

Adjudicated Patent

(C. A. Iowa) Lucker Patent No. 2,630,295 (254—99), for an automobile jack. Claims 3 and 4 *Held* invalid. *Auto Specialties Manufacturing Co.* v. *Handler Motor Supply Co.*, 226 F.2d 853; 107 USPQ 216.

Patents Available for Licensing or Sale

Eastman Kodak Company announces that non-exclusive licenses upon reasonable terms are available to domestic applicants (under the circumstances prevailing at the time) under the following 249 U. S. patents:

2,183,524. Black Printer for Photomechanical Processes.
2,183,525. Black Printer.
2,231,668. Electric Circuit.
2,249,522. Electric Circuit for Color Correction.
2,253,086. Color Photography.
2,286,729. Light Modulation System.
2,286,730. Electric Circuit for Color Correction.
2,313,542. Electro-Optical Color Reproduction Circuit.
2,313,543. Electro-Optical System.
2,324,076. Optical System.
2,452,765. Multilayer Photographic Element Having a Mixed Grain Emulsion and Process Employing It.
2,453,317. Copolymer of Isopropenyl Acetate and Vinyl Chloride.
2,456,953. Photographic Reversal Processes.
2,456,954. Photographic Reversal Processes.
2,456,955. Photographic Processes and Light-Sensitive Elements Therefor.
2,472,605. Method of Depositing Optical Interference Coatings.
2,475,938. Four-Component Objective for Microcopying Cameras.
2,475,980. Light-Sensitive Piperine Compositions.
2,484,420. Process of Preparing Quaternized Salts of Resinous Organic Polymers Containing a Basic Tertiary Nitrogen Atom.
2,484,431. Method of Making Hydrolyzed Cellulose Acetate Printing Plates.
2,484,455. Method of Continuously Esterifying Cellulose.
2,487,850. Chemical Sensitization of Photographic Emulsions.
2,487,892. Manufacture of Cellulose Acetate.
2,490,749. Mixed Grain Photographic Emulsions.
2,490,751. Mixed Grain Multilayer Photographic Film and Process.
2,492,977. Cellulose Acetate Solution.
2,492,978. Cellulose Acetate Solution.
2,493,747. Acid Merocyanine Dyes.
2,493,748. Merocyanine Dyes.
2,494,025. Optical Objectives With Two-Part Negative Component Having Variable Central Air Space of Zero Power.
2,494,031. Dimethine Merocyanine Dyes.
2,494,032. Styryl Dyes.
2,494,038. Control Arrangement for Photographic Cameras.
2,494,041. Derivatives Obtained by Reacting Gelatin and Furoyl Halides.
2,494,042. Camera Shutter Trigger Lock.
2,494,053. Photolithographic Printing Materials.
2,494,054. Antistatic Photographic Film.
2,494,068. Photographic Relief Image.
2,496,824. Ferric Fluophosphate Glass.
2,496,928. Bayonet Lock.
2,496,936. Scale Engraving and Numbering Apparatus.
2,496,940. Mixed Grain Photographic Process.
2,496,943. Sound Film Scanning Apparatus With Automatic Light Variation Compensation.
2,496,947. Film Processing Machine With Film Operated Control Means for a Fluid Applicator.
2,496,959. Photographic Sound Track Scanning Apparatus With Light Flicker Compensation.
2,497,875. Direct Positive Photographs Using Aerial Fogging Developer.
2,497,876. Method of Producing Direct Positive Photographic Images.
2,497,889. Oxidation of Ethers Using Aldehyde-Activated Catalysts.
2,497,917. Method of Producing Direct Positive Photographs Having Increased Density.
2,499,392. Esters of α-Acyloxy Acrylic Acids.
2,499,393. Esters of α-Acyloxyacrylic Acids.
2,500,017. Apochromatic Telescope Objectives and Systems Including Same.
2,500,027. Frame Counter.
2,500,029. Cellulose Ester Materials Insoluble in Organic Solvents.
2,500,034. Camera Shutter Trigger Latch and Stop.
2,500,041. Apparatus for Changing Coating Solutions of Coating Machines.
2,500,045. Dianil Dye Photographic Filter Layer.
2,500,046. Petzval-Type Photographic Objective.
2,500,048. Clamping Device.
2,500,049. Apparatus for Making Color Prints.
2,500,050. Camera Lens Attaching and Clamping Mechanism.
2,500,052. Photographic Reversal Copying Process.
2,500,110. Bispyridyl Compounds Containing a Silicon Atom and Process of Preparation.
2,500,126. Thioketones.

New Applications Received During November 1955

Patents	6,116
Designs	442
Plants	15
Reissues	13
Total	6,586

Issue

Patents	887	No. 2,732,552	to No.	2,733,438, incl.
Designs	86	No. 176,748	to No.	176,833, incl.
Plants	3	No. 1,453	to No.	1,455, incl.
Reissues	3	No. 24,115	to No.	24,117, incl.
Total	979			

2,500,127. Process for Preparing Cyclammonium Quaternary Salts Containing an N-Substituted β-Aminovinyl Group.
2,500,128. Process for Preparing Cyanine Dye Intermediates.
2,500,140. Sensitive Photographic Materials.
2,503,244. Solutions of Acrylonitrile Polymers.
2,503,245. Solutions of Acrylonitrile Polymers.
2,503,709. Polymethine Dyes Containing a Triazole Nucleus.
2,503,714. Filter Holder for Projectors.
2,503,717. Photographic Filter and Antihalation Layers.
2,503,734. Bendable Film Spool Signal.
2,503,736. Shutter Actuator.
2,503,738. Extension Column Lock.
2,503,750. End Play Eliminating Means for Lens Tubes.
2,503,751. Photographic Objective of the Cooke Triplet Type.
2,503,756. Film Spool With Signal for Cameras.
2,503,758. Fusion Photothermography.
2,503,759. Evaporography.
2,503,775. Pyrroiocyanine Dyes Containing a Carboxyalkyl or Sulfoalkyl Group.
2,503,776. Cyanine Dyes Containing a Sulfohydrocarbon Radical.
2,503,777. Front Shutter Reflex Camera.
2,503,778. Method of Preparing N,N'-Diphenyl-p-Phenylenediamine.
2,503,789. Focusing Objective Lens.
2,503,790. Fluorescent Coloring Materials.
2,503,861. 2-(Mercaptoacetamido)-Benzothiazole and Its S-Acetyl Derivative.
2,507,148. Bulb Exposure Mechanism for Setting Shutters.
2,507,149. Two-Blade Setting Type Shutter.
2,507,150. Focusing Stop Mechanism for Camera Shutters.
2,507,154. Direct Positive Photographs Using Color Developers.
2,507,156. Double Exposure Prevention Device for Roll-Holding Cameras.
2,507,161. Film Gate Operating Mechanism.
2,507,164. Reverse Telephoto Lens for Enlargers.
2,507,175. Silver Recovery.
2,507,180. Cyano Acetamino Color Couplers.
2,507,181. N-Acyl Derivatives of Polyvinylamine.
2,507,182. Viscous Fluid Shutter Retard Mechanism.
2,507,183. Silver Bleach for Color Materials.
2,510,105. Process for the Manufacture of Organic Acids.
2,511,193. Process for the Production of Ditertiary Butyl Hydroquinone.
2,511,201. Automatic High-Speed Symmetrical Blade and Cover Blind Shutter.
2,511,212. Attaching Means for Lens Mounts.
2,511,215. Film and Shutter Winding Mechanism.
2,511,217. Foot Switch.
2,511,222. Pyrrocoline Polymethinecyanine Dyes.
2,511,224. Fluoride Glass.
2,511,225. Fluophosphate Glass.
2,511,226. Fluophosphate Glass.
2,511,227. Lead-Containing Fluophosphate Glass.
2,511,228. Lead Borate Glass.
2,511,231. 1-Cyanophenyl-3-Acylamino-5-Pyrazolone Couplers for Color Photography.
2,511,232. Film Loop Former.
2,514,505. Illumination Control Mounting Means for Photographic Printing Apparatus.
2,514,624. Copolymers of Acrylonitrile and Isopropenyl Acetate.
2,514,635. Method of Preparing Lowered Viscosity Gelatin.
2,514,649. Methine Dyes Containing a Pyrimidazolone Group.
2,514,650. Photographic Developing With Addition Products To Improve Image Quality.
2,514,669. Toggle Rebound Latch for Photographic Shutters.
2,514,672. Alpha-Substituted Acrylic Acid Esters and Process of Preparation.
2,514,683. Film Tensioning Device.
2,514,689. Sized Paper.
2,515,878. Arylaminomethine Compounds.
2,515,905. Pyrrole Dimethinecyanine Dyes.
2,515,912. Pyrrole Dimethinecyanine Dyes.
2,515,913. 2-Methyl-5-Phenylbenzothiazole and Quaternary Salts Thereof.
2,516,106. Aminobenzene Compounds Containing Fluorine.
2,516,107. Monocyclic Aminobenzene Compounds Containing Fluorine.
2,518,512. 1-Dicarbalkoxymethylene-2-Alkyl-1,2-dihydroisoquinolines and Method of Producing Them.
2,518,666. Method of Preparing Gelatin Derivatives.
2,518,671. Focusing Mechanism for Lens Mounts.
2,518,682. Fixed Plane Film Guiding Means for Viewing and Projection Devices.
2,518,685. Mechanism for Focusing and Sizing Images.
2,518,695. Photographic Print.
2,518,698. Chemical Sensitization of Photographic Emulsions.
2,518,706. Cellulose Esters of Sulfamic Acids.
2,518,719. Wide-Angle Camera Objective.
2,518,727. Transparency-Positioning Device for Photographic Apparatus.
2,518,737. Methine Dyes Containing an Isoquinoline Nucleus.
2,518,739. Method of Masking Photographic Color Images.
2,519,001. Merocyanine Dyes Containing a Carboxyalkyl Group or a Sulfoalkyl Group.
2,520,358. Heterocyclic Bis Acetones, Thioacetones and Selenoacetones.
2,521,897. Method of Preparing Aceto Acetic Acid Esters of Cellulose.
2,521,898. Polymers of Acrylonitrile With Isobutenyl Acetate.
2,521,902. N-Fluoroalkylacrylamides and Polymers Thereof.
2,521,903. Strap End Attaching Device.
2,521,908. 1-Hydroxy-2-Naphthamide Colored Couplers.
2,521,914. Resinous Copolymers Comprising Acetylated Products Obtained From the Enol Form of Ketoesters.
2,521,916. Manufacture of Organic Acid Esters of Cellulose.
2,521,925. Chemical Sensitization of Photographic Emulsions.
2,521,926. Chemical Sensitization of Photographic Emulsions.
2,521,932. Quick-Loading Roll Film Camera and Cartridge Therefor.
2,521,933. Film Counter for Cameras.
2,521,944. Polymethine Dyes and Process of Preparation.
2,521,951. Control for Photographic Recording Apparatus.
2,521,953. Method and Apparatus for Inspecting Light-Sensitive Coatings.
2,521,954. Apparatus for Making Color Prints.
2,521,956. Film Cradle for Roll Film Cameras.
2,521,957. Film-Feeding Mechanism.
2,524,786. Direct-Acting Shutter for Cameras.
2,525,514. Partially De-Etherified Cellulose Cyanoethyl Ethers and Their Preparation.
2,525,515. Process for Preparing Aminophenols.
2,525,520. Cyanine Dyes Containing a 3,4-Dihydroisoquinoline Nucleus.
2,525,521. Copolymers of Acrylonitrile and 2-Methallyl Alcohol.
2,525,522. Triple Head Rotary Registry Printer.
2,525,532. Simultaneously Developing and Fixing Photographic Images.
2,525,534. Elevating Mechanism.
2,525,549. Two-Blade Shutter-Leaf Control.
2,525,558. Parallax Free Multiple View Finder.
2,525,564. Slide-Changing Device.
2,525,753. Gelatin Derivatives.
2,526,632. Acid Merocyanine Dyes.
2,527,583. Merocyanine Filter and Backing Dyes.
2,529,894. Objective Mount.
2,529,896. Shutter for Motion-Picture Apparatus.
2,529,911. Copolymers of Acrylonitrile and N-Allyl and N-2-Methallyl Cyanides.
2,529,922. Color Process Involving Change in Isoelectric Point of Gelatin.
2,529,937. Liquid Metering Device.

2,529,943. Photographic Recording Equipment.
2,529,944. Multiple Image View Finder.
2,529,975. Method of Making Color Prints From Color Transparencies.
2,529,981. Bleaching Silver Images.
2,531,468. Polyvinyl Sulfonates and Process for Their Preparation.
2,531,469. Polyvinyl Sulfonates and Process for Preparing the Same.
2,533,203. Preparation of C-Alkyl Hydroquinones and C-Alkyl-p-Aminophenols.
2,533,206. Process for Preparing Oxonol Dyes.
2,533,424. Method and Apparatus for Stripping Multilayer Film.
2,533,426. Photographic Emulsions Sensitized With Supersensitizing Combinations of Acid Carbocyanine Dyes and Styryl Bases.
2,533,427. Supersensitization of Mesoaryl Carbocyanine Dyes.
2,533,441. Slide Changing Device.
2,533,447. Continuous Control Printer.
2,533,450. Impact Latch To Prevent Rebound in Camera Shutter Leaves.
2,533,452. Photographic Brightness Correction Mask.
2,533,454. Method of Plating Non-Metallic Surfaces.
2,533,463. Two-Bath Direct Positive Photographic Process.
2,533,472. Unsymmetrical Oxonol Filter and Antihalation Dyes.
2,533,474. Cemented Transparency.
2,533,478. Temperature Compensating Means for Lens Mounts.
2,533,481. Automatic Contact Printer.
2,533,489. Print Exposure Computer.
2,533,514. Photographic Emulsions Containing Color Couplers and Amide Coupler Solvents.
2,537,900. Temperature Compensating Lens Mount.
2,537,917. Reticle Mount.
2,541,013. Web Feeding Apparatus.
2,541,470. Photographic Silver Halide Developing Solutions Containing Calcium Precipitation Inhibitors.
2,548,513. Method of Making High Wet Strength Paper.
2,548,526. Mixed Grain Photographic Emulsions.
2,548,551. Apparatus for Inspection of Sensitized Materials.
2,548,573. Apparatus for Processing Continuous Film.
2,552,251. Photographic One-Step Process Print Making Machine.
2,552,275. Camera of the Reflex Type for Making Rapid Exposures.
2,556,515. Methine Dyes Containing a 3-Aryl-4-Thiazolidone Nucleus.
2,556,516. 2-Acylated Arylamino-2-Thioethylidene Derivatives of Heterocyclic Nitrogen Bases.
2,566,264. Method of Making Color Prints.
2,566,277. Method for Making Color Prints.
2,570,176. Film Loop Former.
2,571,657. Catadioptric Lens System.
2,571,697. Method for Correcting Photographic Color Prints.
2,575,020. Focus Adjusting Mechanism for Aerial Cameras.
2,578,283. Take-Up Magazine for Strip Material.
2,578,306. Process for Direct Oxidation of Aldehydes and Alcohol to Acid.
2,578,327. High-Speed Camera.
2,582,073. Photoelectric Plotting Densitometer.
2,588,954. Automatic Photographic Camera.
2,588,973. Machine for Applying Treatment Solution Over Limited Areas of Motion Picture Film.
2,596,740. Apparatus for Photographing and Exhibiting a Multiplicity of Different Pictures in Succession.
2,600,788. Halogen-Substituted Pyrazolone Couplers for Color Photography.
2,604,376. High-Speed Oscillograph Camera.
2,607,682. Method of Making Changeable Display Apparatus.
2,618,087. Changeable Picture Apparatus.
2,625,073. Multiprogram Projector.
2,629,304. Apparatus for Processing Film.
2,642,406. Solutions of Polymers of Acrylonitrile.
2,655,832. Range Finder Adjusting Mechanism.
2,659,264. Method of Determining the Velocity and Acceleration Characteristics of Moving Objects.
2,663,215. Method and Apparatus for Determining the Velocity and Acceleration Characteristics of Moving Objects.
2,663,217. Method for Determining the Velocity and Acceleration Characteristics of Moving Objects.
2,663,611. Mechanism for Producing Speed Indicating Markings on the Edges of Rapidly Moving Film.
2,675,315. Photosensitive Coating Containing a Hydrophilic Colloid and a Polyvinyl Chloride Dispersion.
2,691,696. Electrooptical Unsharp Masking in Color Reproduction.
2,698,794. Mixed Packet Photographic Emulsions.
2,698,797. Mixed Packet Photographic Emulsions Using Resin Couplers.
2,699,402. Method for the Manufacture of Plastic Articles Having Reflecting Surfaces Thereon.
2,718,835. High-Speed Large Aperture Photographic Shutter Mechanism.
2,718,975. Stereo Mounting Machine.
2,719,288. Circuit Failure Detecting Device.
2,721,799. Sensitized Photographic Emulsions.
2,721,892. Variable Electrooptical Color Correction.
Re. 23,606 (of 2,552,250). Automatic Photographic Camera.

Applications for license may be addressed to: Director, Patent Department, Eastman Kodak Company, 343 State Street, Rochester 4, New York.

CONDITION OF PATENT APPLICATIONS AS OF NOVEMBER 30, 1955

Total number of pending applications (excluding Designs)	220,996
Total number of pending Design applications	7,046
Total number of applications awaiting action (excluding Designs)	135,527
Total number of Design applications awaiting action	3,108
Date of oldest new application	July 20, 1954
Date of oldest amended application	Sept. 28, 1953

ROSA, M. C., Executive Examiner

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 48, 51, 54, 69, 70.
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 18, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	12-14-54	1-28-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	5-2-55	11-15-54
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	3-2-55	12-14-53
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	3-3-55	2-11-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	2-2-55	5-20-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic, Amides, Amines, General Organic Processes	1-12-55	4-2-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	3-7-55	12-14-53
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	11-26-54	4-14-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	2-24-55	3-22-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	3-17-55	6-4-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	2-14-55	11-6-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	2-14-55	2-10-54
14. (III) MANIAN, J. C., (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire, Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	1-27-55	3-8-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	3-1-55	3-30-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	12-23-54	1-5-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	3-4-55	6-4-54
18. (VI) KURZ, J. A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	12-7-54	1-7-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	3-8-55	4-16-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	3-21-55	4-22-54
21. (III) MADER, R. C., Textiles	3-8-55	3-22-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	3-2-55	3-11-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	8-17-54	9-30-53
24. (III) DRACOPOULOS, P. T., (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	2-2-55	10-4-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	3-3-55	3-1-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	4-12-55	10-11-54
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	2-24-55	7-21-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	2-15-55	5-14-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	2-4-55	7-15-54
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	4-28-55	7-2-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	1-12-55	6-1-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	3-18-55	9-13-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	3-1-55	1-29-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	2-21-55	2-18-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	3-1-55	5-20-54
36. (V) McFADYEN, A. D., Measuring and Testing	1-24-55	11-10-54
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	1-25-55	5-24-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g. Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	2-17-55	6-6-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	3-9-55	4-2-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	2-23-55	5-3-54
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	9-13-54	11-20-53
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	12-1-54	5-19-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilising and Disinfecting (except Wood Treatment Apparatus)	3-8-55	1-25-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	2-10-55	11-3-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	3-14-55	8-17-54
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	11-19-54	1-7-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	1-25-55	8-2-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	3-17-55	4-7-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	2-21-55	2-17-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	2-25-55	4-21-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	3-11-55	3-5-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	1-6-55	2-8-54
55. (VII) KLINE, J. R., Surgery; Dentistry: Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	11-1-54	2-10-54
56. (I) KEELY, J. E., (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	2-14-55	5-5-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	4-29-55	6-18-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	3-9-55	2-4-54
59. (I) HENKIN, B., (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	3-2-55	3-5-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	2-15-55	8-9-54
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	2-14-55	7-30-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	1-31-55	1-15-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	3-14-55	2-23-54
66. (V) LISANN, I., Geometric Instruments; Automatic Weighing Scales; Acoustics	2-11-55	3-15-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	1-26-55	10-4-54
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	2-2-55	11-19-53
70. (II) BREWRINK, J. L., Explosive Weapons, Ammunition, Charges and Composition; Explosive Charge Manufacturing; Jet Motor Processes; Torpedoes; Radar; Sonar; Automatic Pilots; Antennas; Actinide Series (e. g. Fissionable) Compounds; Irradiation Chemistry; Mass Spectrometers	7-20-54	9-28-53
CLASS. DIVS: I (VII) LANHAM, B. E., Paper Making	3-7-55	11-1-54
CLASS. DIVS: II (II) LADY, J. E., Oscillators; Amplifiers	3-3-55	2-10-54
CLASS. DIVS: III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	5-5-55	8-2-54
CLASS. DIVS: IV (VI) SMITH, (Mrs.) M. P., Harrows; Plows; Earth Rollers	3-25-55	7-26-54
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The following divisions have been abolished: 10, 44, 46, 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during January 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1953*.

Patents	Numbers 2,142,080 to 2,145,843, inclusive
Plant Patents	Numbers 307 to 312, inclusive

DECISIONS IN PATENT CASES

United States Court of Appeals
District of Columbia Circuit

BROWN & BIGELOW, PAUL W. FELT *v.* ROBERT C. WATSON, COMMISSIONER OF PATENTS

No. 12517. Decided December 29, 1955

[— F.2d —; 108 USPQ 30]

PATENTABILITY—FUNCTION OF DEVICE.

A claim to a method of charging a cigarette lighter *Held* properly refused, where the method could not be described without describing the characteristic function of the patented cigarette lighter, and the various steps of the method were described in almost exact detail in a claim of the patent.

APPEAL from the United States District Court for the District of Columbia.

AFFIRMED.

Almon S. Nelson for appellants.

E. L. Reynolds (*Joseph Schimmel* of counsel) for Robert C. Watson, Commissioner of Patents.

Clarence W. Moore, Solicitor, United States Patent Office, also entered an appearance for the Commissioner of Patents.

Before PRETTYMAN, WILBUR K. MILLER, and DANAHER, *Circuit Judges*

DANAHER, *Circuit Judge:*

Appellants asked the District Court to authorize the Patent Office to issue a method patent based upon the following claim:

"The method of charging a cigarette lighter with a supply of fuel which consists in, injecting a normally instantly volatile, compressed liquefied fuel in atmosphere, into a check valved fuel chamber of the lighter by attaching a cartridge filled with liquefied fuel to the lighter fuel pressure chamber, simultaneously piercing the cartridge and opening the valve to cause the compressed fuel in the cartridge to be transferred into the fuel pressure chamber of the lighter thus pressurizing the same with fuel, then, removing the cartridge when empty and simultaneously closing the check valve of the fuel chamber of the lighter thus maintaining the liquefied fuel under pressure in the fuel pressure chamber of the lighter."

The trial judge concluded, in effect, that a patent may not issue for a method "which is not separate and independent of the particular device described and claimed in the patent of which it is a division" where the claimed method cannot be described without describing the characteristic function of the patented device. He thereupon dismissed the complaint.

For purposes of ready comparison with claim 8, we reproduce from Patent 2,561,270 allowed claim 2, as follows:

"A pyrophoric lighter and the like having in combination a flint, an abrading element, a lever for operating said element to throw a spark from said flint, a cover for closing said lighter, an escapement valve assembly adjacent said flint wheel adapted to allow gas from a liquefied petroleum fuel to escape therethrough simultaneously with the operation of said flint and the raising of said cover by a single hand operation, a chamber for receiving a liquefied petroleum fuel under pressure, an injection valve assembly having a threaded portion and including a check valve to normally close said fuel chamber by the pressure of the liquefied fuel in said chamber, and a sealed supply cartridge of liquefied petroleum fuel having threads thereon for attaching said cartridge to said injection valve assembly to automatically transfer the liquefied fuel in said cartridge when said cartridge is pierced by attaching it to said injection valve assembly, said check valve automatically closing said injection valve assembly when said cartridge is withdrawn therefrom."

Appellants have asked us to reverse the trial court arguing that the "function of the device covered by appellants' patent is the production of a light. The claim involved, namely claim 8, is drawn to the method of charging or filling a lighter and no more. It is further submitted that the charging or filling of a lighter is *not the function* of a cigarette lighter. Thus, claim 8 is not drawn to the function of the lighter already patented. . . . Filling a lighter certainly cannot be said to be the function of a lighter. The parent application disclosed two inventions namely (1) a gas lighter, and (2) the method of filling a gas lighter. We are here concerned only with the latter invention."

Appellants have failed to sustain their burden of convincing us that the trial court erred. The inventive concept asserted for the method claim 8 seems to us to have been inextricably connected with appellants' claim 2 which has been allowed. The invention was not complete without apparatus with which to apply the process. A reading of allowed claim 2 discloses that the operation described inevitably requires a lighter, employing a gaseous fuel contained under pressure in the body of the lighter, so that when the lighter is operated some gas is released through a valve where, upon the operation of a flint wheel, the gas may be ignited. To be sure, supplying the gas in sealed disposable cartridges is desirable and affords an advantage over earlier methods which required the return of the entire lighter to the manufacturer that the tank might be refilled, or removing the fuel tank and forwarding it to a manufacturer to be refilled, or by a user's purchase of a new filled tank to be inserted in the body of the lighter. By contrast, the sealed cartridge here may be screwed into the lighter whereupon the cartridge is pierced so that a check valve in the body of the lighter will be opened to permit the transfer of gas from the cartridge into the lighter tank. Thereupon, the cartridge may be unscrewed and removed from the lighter and discarded.

The various steps claimed for the method are described in almost exact detail in the allowed claim 2. Indeed, therein lay the essence of the invention which the patentee was bound to point out. *Black-Clawson Co. v. Centrifugal Engineering & P. Corp.*, 83 F.2d 116 (6th Cir. 1936), cert. denied, 299 U. S. 554 (1936). Without the incorporation of the device so to be operated, there could have been no apparatus patent. *Kistler v. Coe*, 79 U. S. App. D. C. 36, 142 F.2d 94 (D. C. Cir. 1944); *Application of Ashbaugh*, 173 F.2d 273, 274 (CCPA 1949). Under the circumstances, there is no error in the judgment of the District Court.

Other points urged are sufficiently covered by what we have said. It now becomes unnecessary to consider appellants' claims that the District Court should have ruled on the question of double patenting and that there was error in the court's refusal to grant appellants' motion for rehearing.

AFFIRMED.

U. S. Court of Customs and Patent Appeals

IN RE WALLING

No. 6151. Decided December 8, 1955

[— F.2d—; — USPQ —]

PATENTABILITY—PARTICULAR SUBJECT MATTER—PEANUT BUTTER COMPOUND AND METHOD OF MAKING.

A claim to a peanut butter compound and another claim to a method of making a peanut butter compound *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Serial No. 228,971.

AFFIRMED.

Kimmel & Crowell (*A. Harry Crowell, Geo. P. Kimmel*, and *Frank H. Renaud* of counsel) for Walling.

Clarence W. Moore (*S. W. Cochrane* of counsel) for the Commissioner of Patents.

Before O'CONNELL, *Acting Chief Judge*, and JOHNSON, WORLEY, COLE, and JACKSON (retired), *Associate Judges*

O'CONNELL, *Acting Chief Judge*, delivered the opinion of the court.

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming the rejection by the Primary Examiner, on the ground of lack of invention over prior art, of claims 4 and 5 of appellant's application for a patent on a food product and method of making the same. The appealed claims read as follows:

4. A method of making a peanut butter food compound, consisting of the steps of adding fluid pectin and corn syrup in fluid condition to peanut butter and thoroughly admixing the ingredients, the pectin serving to reduce the oil content of the peanut butter whereby the spreading qualities of the peanut butter will be improved and whereby the adhesiveness of the peanut butter will be reduced and the syrup offsetting the bitter taste of the pectin, the pectin and corn syrup being less than 5% by weight of the peanut butter with which it is admixed.

5. An edible food product comprised of 16 parts peanut butter, 1 part liquid pectin, and 2 parts of corn syrup.

The references are: Sell, 1,416,387, May 16, 1922; Howe, 1,696,766, Dec. 25, 1928; Musher, 2,217,701, Oct. 15, 1940.

Appellant's alleged invention is a food compound comprising peanut butter to which liquid pectin and corn syrup have been added. A preferred ratio is 16 parts of peanut butter to 1 part of pectin and 2 of corn syrup. The claimed method consists merely in adding the pectin and syrup in fluid form to the peanut butter and thoroughly mixing them therewith. It is stated in the application that the added ingredients serve to improve the quality, smoothness and spreading qualities of the peanut butter and to reduce or eliminate its tendency to stick to the teeth and the roof of the mouth.

The patent to Sell discloses a food product comprising peanut butter to which has been added brown sugar, syrup, sorghum, honey or glucose in syrup form. It is stated that the resultant mixture will harden and may then be easily pulverized in which condition it may be kept until it is to be used, when it is mixed with water and heated to form a paste. The addition of the sugar or syrup is said to eliminate the oily taste of the product as well as its tendency to stick to the mouth.

The patent to Howe discloses the production of a peanut butter which will not stick to the mouth. The process described comprises the addition to the peanut butter of between 5% and 30% of a sugar or a syrup which may be malt syrup, sorghum syrup, corn syrup or maple syrup. When such syrups are used they are dried and powdered before they are incorporated in the peanut butter. The resultant product "possesses the appearance of ordinary peanut butter and is still in its paste form." The patentee also states that fruit or vegetable juices as well as proteins such as gelatine, albumen and their related forms mays be used in powdered form for the same purpose as the sugar or syrup, and that more than one of the materials given may be used at one time if desired.

The patent to Musher relates to a peanut butter which will be improved as to palatability and spreading properties, and which will not stick to the roof of the mouth. This result is produced by adding to the peanut butter one of a number of specified substances including cornstarch, pectin and various vegetable gums, in a pasty or gelatinized form. The final product is said to be more rigid than ordinary peanut butter, so that it may be made into bricks.

The cited references, like the appellant's application, are concerned with the problems of improving the flavor of peanut butter and reducing or eliminating its tendency to stick to the mouth, and they solve these problems by the addition of substances which include those recited in the appealed claims. Corn syrup is specifically mentioned by Howe and pectin by Musher. Howe also expressly suggests the use of two different added ingredients at the same time.

Under these circumstances we are in agreement with the Board of Appeals that the appealed claims cover nothing more than a matter of choice or selection which would be well within the skill of the ordinary worker in the art. There is nothing of record to show that pectin and corn syrup combine to produce any new or unexpected result, or that their total effect, when they are added to peanut butter, differs from the sum of their individual effects.

The particular proportions recited in the appealed claims have not been shown to be in any way critical. In fact, appealed claim 4 specifies that the pectin and corn syrup shall be less than 5% by weight of the peanut butter, whereas in the specific compound recited by claim 5, the pectin is 6¼% and the corn syrup 12½% by weight of the peanut butter. It seems clear, therefore, that patentability of the claims cannot be predicated on the specific amounts of the materials used. The amounts to be used in practice would depend upon the desired flavor and anti-clogging effect, and would be determined by taste and experiment.

The consistency of the final product is also considered to be a matter of choice. Sell and Musher produce compounds which differ in consistency from the original peanut butter, but, as above noted, Howe states that his product "possesses the appearance of ordinary peanut butter and is still in its paste form." The desired consistency may be obtained by employing the additives in dry or liquid form.

We are of the opinion that the appealed claims recite nothing more than the use of known materials for known purposes and in proportions which involve nothing more than the ordinary skill of the art.

[1] The decision of the Board of Appeals is affirmed.

AFFIRMED.

Jackson, J., retired, recalled to participate.

U. S. Court of Customs and Patent Appeals

IN RE INMAN

No. 6161. Decided December 8, 1955

[— F.2d —; — USPQ —]

1. PATENTABILITY—PRODUCT SUGGESTED BY THE PRIOR ART.
"While it may be true that a highly chlorinated product made from a kerosene refined as disclosed in appellant's application is superior, and perhaps even unexpectedly superior, to a similar product made from less highly refined kerosene, such superiority does not constitute a basis for the issuance of a patent where the idea of chlorinating the highly refined kerosene to the extent indicated by appellant was fairly suggested by the prior art."

2. SAME—RESULT FLOWING NATURALLY FROM PRIOR ART TEACHINGS.
Rule restated that "a patent should not be granted for appellant's discovery of a result that would flow naturally from the teachings of the prior art."

3. SAME—PARTICULAR SUBJECT MATTER—CHLORINATED PETROLEUM HYDROCARBON.
Claims to a chlorinated petroleum hydrocarbon *Held* properly rejected as unpatentable over the prior art.

APPEAL from the Patent Office. Serial No. 136,388.

AFFIRMED.

Dexter N. Shaw, Arvid E. Lyden, and *Harold L. Warner* (*Howson* and *Howson,* and *William A. Smith, Jr.,* of counsel) for Inman.

Clarence W. Moore (*J. Schimmel* of counsel) for the Commissioner of Patents.

Before O'CONNELL, *Acting Chief Judge,* and JOHNSON, WORLEY, COLE, and JACKSON (retired), *Associate Judges*

O'CONNELL, *Acting Chief Judge,* delivered the opinion of the court.

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming the rejection by the Primary Examiner of claims 9, 10, 15, and 16 of appellant's application No. 136,388 for a patent on a chlorinated hydrocarbon product on the grounds (1) as lacking invention over the cited prior art, and (2) failure to differentiate patentably from the claims of appellant's co-pending application No. 136,389, which is now before this court in companion appeal No. 6162.

Appellant requested reconsideration of the Board's pertinent rejections of the two cases hereinbefore described. The Board declined to make any change in its position.

Claim 10 of application No. 136,388, which is typical of the claims involved in the present appeal, is as follows:

10. A highly viscous to solid chlorinated petroleum hydrocarbon product having an average calculated molecular formula of $C_{18}H_{18\ to\ 30}Cl_{10\ to\ 16}$, a specific gravity at 20° C. of 1.5 to 1.8 and a thermal decomposition rate at 180° C. of less than 0.05 milligrams evolved HCl per gram of chlorinated products per minute after ¼ hour's continued heating at 180° C.

The references relied on are:

Clark, 2,214,877, Sept. 17, 1940
Dean et al., "Industrial and Engineering Chemistry," vol. 37, pages 181–5 (1945)
Kalichevsky et al., "Chemical Refining of Petroleum," second edition, page 108 (1942).

Appellant's present application, like that involved in Appeal No. 6162, relates to the chlorination of petroleum hydrocarbons having a carbon content per molecule generally corresponding to that of the kerosene range. In the present case, however, the hydrocarbon used is one that has been refined in such a manner as to remove substantially all the aromatics and olefins as well as the non-hydrocarbon impurities. The refined hydrocarbon is chlorinated to give a chlorine content of over 60% by weight and is found to have an unexpectedly high stability as compared with similar products having a lower chlorination.

The Clark patent and the Dean et al. article, above cited, are the references relied on by the Patent Office in Appeal No. 6162, and their disclosure is sufficiently pointed out in our decision of even date herewith in that appeal. The Kalichevsky et al. article relates to the refining of kerosene. It states that "Kerosene stock from parafin-base crude oil is usually free from aromatics and requires only mild treatment with acid or adsorbents for conversion into a high-grade kerosene."

In our opinion in Appeal No. 6162 we have held that the Clark patent discloses kerosene chlorinated to more than 70% and, for the reasons given in that opinion, the same holding is made here. It remains to be determined whether the claims here under consideration present a patentable distinction over the chlorinated kerosene of Clark.

The hydrocarbons disclosed in the present case include the range of hydrocarbon cuts commonly referred to as kerosene, and the appealed claims would be satisfied by the chlorination to 70% of kerosene which had been refined to such a point that it contained less than 1% olefins and aromatics, and from which other impurities had been substantially removed.

The record indicates some difference of opinion between appellant and the Patent Office as to whether ordinary commercial kerosene is refined to the extent set forth in the application here involved. However, appellant's brief contains the following statement:

The petroleum companies, however, have also recently placed on the market petroleum fractions having the same average molecule size [as kerosene] but treated so as to remove fairly completely everything but the saturated aliphatic (including cycloaliphatic) hydrocarbons. These materials were developed primarily for special uses other than burning, such as for the preparation of horticultural sprays, since the kerosenes generally satisfactory for burning, as in lamps, stoves, etc., were found to be unsatisfactory. These special petroleum hydrocarbons are premium products and because of the extra processing in their preparation command a premium price, costing about twice as much as the conventional kerosene.

Moreover, the appellant's specification in the case at bar states:

In preparing my highly chlorinated refined petroleum product, I prefer to use as a raw material petroleum hydrocarbons, consisting primarily of normal and branched paraffins and naphthenes, and existing in the range of C_{10} to C_{20}, treated (such as by acids; for example, sulfuric acid, and by distillation) so as to remove substantially all non-hydrocarbon impurities and almost all aromatics and olefins. Two specific examples of such materials are those at present sold in commerce under the trade names of "Ultrasene" and "Ultrax" manufactured by Atlantic Refining Company.

It is thus clear that kerosene refined to the extent specified by appellant in the instant case is a readily available commercial product. In view of that fact, and of Clark's broad disclosure of the chlorination of kerosene to 70% or above, we are of the opinion, as was the Board, that no invention would be involved in chlorinating highly refined kerosene to that extent.

It would normally be assumed, in the absence of any indication to the contrary, that a process suitable for ordinary kerosene would be also suitable for highly refined kerosene. Moreover, since Clark clearly states that he is dealing with aliphatic compounds, it is reasonable to infer that he desires to keep the amount of any non-aliphatic impurities present as low as practicable. So far as he may suggest the use of any

particular type of kerosene, therefore, it would appear to be one of a relatively high degree of refinement.

[1] While it may be true that a highly chlorinated product made from a kerosene refined as disclosed in appellant's application is superior, and perhaps even unexpectedly superior, to a similar product made from less highly refined kerosene, such superiority does not constitute a basis for the issuance of a patent where the idea of chlorinating the highly refined kerosene to the extent indicated by appellant was fairly suggested by the prior art. As we said in *In re Kepler,* 30 CCPA (Patents) 726, 132 F.2d 130, 56 USPQ 177:

[2] A patent should not be granted for appellant's discovery of a result that would flow naturally from the teachings of the prior art.

See also *In re Gauerke,* 24 CCPA (Patents) 725, 86 F.2d 330, 31 USPQ 330; *In re Christensen,* 23 CCPA (Patents) 1015, 82 F.2d 715, 29 USPQ 171; and *In re Leum et al.,* 34 CCPA (Patents) 762, 158 F.2d 311, 72 USPQ 127.

[3] For the reasons given herein, and in our opinion in companion Appeal No. 6162, we hold that the appealed claims in this case define nothing inventive over what is disclosed in the Clark patent. It is accordingly unnecessary to consider the further rejection based on an alleged lack of patentable distinction between the appealed claims and the claims of appellant's application No. 136,389.

The decision of the Board of Appeals is affirmed.

AFFIRMED.

JACKSON, *J.,* retired, recalled to participate.

U. S. Court of Customs and Patent Appeals

IN RE INMAN

No. 6162. Decided December 8, 1955

[— F.2d —; — USPQ —]

1. ANTICIPATION—INTERPRETATION OF REFERENCE PATENT.
"Where the meaning of the text of a patent is clear • • • it must be taken at its face value."

2. SAME—DOCTRINE OF *IN RE VON BRAMER ET AL.*
Where the reference patentee disclosed applicant's claimed chemical composition, *Held* that "it is immaterial whether he or his attorneys knew what its properties were, or even how it could be made."

3. PATENTABILITY—PARTICULAR SUBJECT MATTER—CHLORINATED PETROLEUM HYDROCARBON.
Claims to a chlorinated petroleum hydrocarbon *Held* properly rejected as unpatentable over the prior art.

APPEAL from the Patent Office. Serial No. 136,389.

AFFIRMED.

Dexter N. Shaw, Arvid E. Lyden, and *Harold L. Warner* (*Howson* and *Howson,* and *William A. Smith, Jr.,* of counsel) for Inman.

Clarence W. Moore (*J. Schimmel* of counsel) for the Commissioner of Patents.

Before O'CONNELL, *Acting Chief Judge,* and JOHNSON, WORLEY, COLE, and JACKSON (retired), *Associate Judges*

O'CONNELL, *Acting Chief Judge,* delivered the opinion of the court.

This is an appeal from a decision of the Board of Appeals of the United States Patent Office sustaining the Primary Examiner's rejection of claims 11, 12, 13, and 14 of appellant's application No. 136,389 for a patent on a chlorinated hydrocarbon on the grounds of unpatentability over prior art and failure to distinguish patentably from the claims of appellant's co-pending application No. 136,388, now involved here in Appeal No. 6161 which is a companion to the present appeal.

Claim 11, which is typical of the appealed claims, is as follows:

11. As a new product of manufacture, a chlorinated petroleum hydrocarbon of average carbon atom content in the molecule in the range of C_{10} to C_{16}, a combined chlorine content of over 65% chlorine by weight and a thermal stability as indicated by a thermo-decomposition rate at 180° C. of less than 0.10 milligrams evolved HCl per gram material per minute after two hours' continued heating at 180° C.

The references relied on are:

Clark, 2,214,877, Sept. 17, 1940
Dean et al., "Industrial and Engineering Chemistry," vol. 37, pages 181–185 (1945)

The application here involved is concerned with the chlorination of hydrocarbons, and especially those petroleum hydrocarbons having an average carbon atom content in the molecule in the range of C_{10} to C_{16}, which range includes the hydrocarbon cuts commonly referred to as kerosene. The method by which such chlorination is effected is not in question and need not be considered here, since all the claims are directed to the product.

It is stated in the specification in this case that petroleum hydrocarbon cuts having an average of twenty or more carbon atoms per molecule, where chlorinated to above 65% combined chlorine, are overly darkened and unsatisfactory unless chlorination is carried out in an inert medium, and that such chlorination involves a substantial extra cost. As to petroleum hydrocarbon cuts in the kerosene range, the specification further states that chlorination has been carried out up to about 60%, but that the products have increasing instability as the chlorine content increases, so that chlorination above 60% has not been considered practicable.

The appellant's alleged invention is based on the discovery that if chlorination of kerosene is continued beyond the former alleged limit of 60%, an abrupt change in stability takes place, so that a chlorination of 70% results in a product which not only is much more stable than one having 60% chlorination, but is also more stable than those having a chlorination of 40 or 50%. Since the value of such products as flame retarding agents, for which purpose they are frequently used, increases with the degree of chlorination, it is alleged, appellant's discovery makes available a new, stable and effective compound.

The Dean et al. publication discloses the chlorination of kerosene up to 60% and includes charts and tables giving the properties of chlorinated kerosenes at intervals of 5%, beginning at zero and running up to 55% chlorination.

The Clark patent relates to an insulating composition consisting essentially of trichlorobenzene, tetrachlorobenzene and a chlorinated hydrocarbon. The specification states that the invention "is based on the discovery that highly chlorinated high molecular weight aliphatic compounds, when suitably prepared and purified, can be used without corrosive effects when in contact with metals in electric devices."

The aliphatic compound selected by Clark for specific discussion and illustration of his invention, by way of example, is paraffin wax which falls outside the range of hydrocarbons claimed by the appellant. Clark

states that chlorination of the paraffin wax should be carried to "at least about 50 per cent chlorine, and preferably to about 75 per cent chlorine." He gives four specific examples of insulating compositions, the first two include "Chlorinated paraffin (71.7% Cl)" as an ingredient, while the last two include "Chlorinated paraffin wax (50% Cl)."

Immediately following the fourth example is the following statement:

> In a similar way, compositions may be prepared from chlorinated paraffin oil, chlorinated kerosene, and other chlorinated aliphatic hydrocarbons.

The principal issue in this appeal is whether the quoted sentence, taken in conjunction with the preceding portion of Clark's specification, fairly suggests the use of kerosene chlorinated to 70 per cent or above. If it does, the Clark patent anticipates all the appealed claims, since the properties which they recite, according to the Board, are inherent in such a chlorinated kerosene.

The Board also held that "A chlorinated kerosene containing 70% chlorine would provide an anticipation of the claims on appeal," and found that Clark disclosed such a chlorinated kerosene.

We agree with the Board of Appeals that the Clark patent would disclose to a person skilled in the art a kerosene chlorinated to 70% or above. There is nothing in the sentence above quoted to limit its application to the two examples immediately preceding it, in which only 50% chlorination is employed. In our opinion the quoted sentence would be normally understood as applying to all the previously described compositions in which a chlorinated aliphatic compound is employed, including those in which the chlorination is 71.7%. We find nothing in Clark's specification to indicate that the degree of chlorination of kerosene, when used, is to differ from that of the other aliphatic compounds named by him. The fact that kerosene chlorinated above 60% may not be mentioned elsewhere in the art does not justify placing an interpretation on the Clark disclosure at variance with the normal meaning of the language used.

There is no apparent reason, according to the Board, why a skilled worker seeking to carry out Clark's suggestion of using chlorinated kerosene in place of chlorinated paraffin wax should assume that he must use a different degree of chlorination than that specified by Clark for the wax. There is nothing of record to show that chlorination of kerosene to 70% or more was considered impossible prior to the appellant's entry into the field, or even that such chlorination could not be obtained by an obvious extension of the conventional methods of chlorination. Under these circumstances, the fact that some prior art publications might indicate that kerosene chlorinated above 60% was not sufficiently stable for certain uses for the purposes specified by Clark, does not detract from the value of Clark's disclosure.

It was apparent to the Board, upon consideration of Clark's specification as a whole, that a high degree of chlorination is one of the essential features of his invention and that he suggests, in general, the best results will be obtained by a chlorination of the aliphatic compound used to more than 70%. This holding seems clearly applicable to the chlorinated kerosene which Clark mentions as well as to the other chlorinated aliphatic compounds.

It is true that the sentence in the Clark patent which refers to kerosene does not expressly state that kerosene may be chlorinated in a similar way to paraffin wax, but in the opinion of the Board, that composition may be prepared in a similar way from chlorinated kerosene and chlorinated paraffin wax. The chlorination of the aliphatic compound to a high degree is one of the essential steps disclosed by Clark in making his final compositions and accordingly his assertion that such compositions may be prepared from chlorinated kerosene "in a similar way" to that disclosed in connection with paraffin wax clearly implies that the degree of chlorination shall be substantially the same in each case.

The record shows that during the prosecution of the application on which the Clark patent was granted, Clark's attorney made statements to the effect that chlorinated petroleum oils were notoriously unstable. From these statements appellant argues that Clark could not have known of kerosene chlorinated above 65% since, as shown by the present application, such kerosene is not unstable.

In considering a similar argument raised by appellant on the petition for rehearing, the Board of Appeals said:

> We do not believe it proper to resort to opinions expressed by counsel at the prosecution of the application which resulted in the Clark patent to provide a different interpretation of that patent than the language of the description thereof justifies. The contentions of counsel in support of the claims of a pending application or in avoidance of a reference cannot be relied on to modify the language of the text of the patent used as a reference. We accordingly feel constrained to confine our attention to the actual text of the Clark patent.

We are in agreement with that statement. [1] Where the meaning of the text of a patent is clear, as we have found it to be in the present case, it must be taken at its face value. [2] Moreover, since Clark disclosed kerosene chlorinated above 70%, it is immaterial whether he or his attorneys knew what its properties were, or even how it could be made. *In re Von Bramer et al.*, 29 CCPA (Patents) 1018, 127 F.2d 149, 53 USPQ 345; *In re Stoll et al.*, 34 CCPA (Patents) 1058, 161 F.2d 241, 73 USPQ 440; *In re Crosley et al.*, 34 CCPA (Patents) 882, 159 F.2d 735, 72 USPQ 499; *In re Shackell*, 39 CCPA (Patents) 847, 194 F.2d 720, 93 USPQ 34; *In re Kebrich*, 40 CCPA (Patents) 780, 201 F.2d 951, 96 USPQ 411. A patent may not be properly granted on the basis of the discovery of a new property in a substance disclosed by the prior art. *In re Heap*, 22 CCPA (Patents) 950, 74 F.2d 948, 24 USPQ 300; *In re Newton et al.*, 25 CCPA (Patents) 1106, 96 F.2d 291, 37 USPQ 541; *In re Lewis*, 27 CCPA (Patents) 801, 108 F.2d 248, 44 USPQ 76.

For the reasons hereinbefore stated, we conclude that the Clark patent discloses kerosene chlorinated above 70%, and that such disclosure constitutes an anticipation of the appealed claims. It is accordingly unnecessary to consider the further rejection based on an alleged lack of patentable distinction between the claims here involved and the claims of appellant's application No. 136,388.

[3] The decision of the Board of Appeals is affirmed.

AFFIRMED.

JACKSON, *J.*, retired, recalled to participate.

U. S. Court of Customs and Patent Appeals

IN RE LANGE

No. 6173. Decided December 8, 1955

[— F.2d —; — USPQ —]

PATENTABILITY—PARTICULAR SUBJECT MATTER—HOLDER FOR CUT FLOWERS.

Claims to a holder for cut flowers *Held* properly rejected as unpatentable over the cited prior art.

APPEAL from the Patent Office. Serial No. 256,649.

AFFIRMED.

James W. Dent for Lange.

Clarence W. Moore (*H. S. Miller* of counsel) for the Commissioner of Patents.

Before O'CONNELL, *Acting Chief Judge*, and JOHNSON, WORLEY, and COLE, *Associate Judges*

O'CONNELL, *Acting Chief Judge*, delivered the opinion of the court.

This is an appeal from a decision of the Board of Appeals of the United States Patent Office sustaining the rejection by the Primary Examiner of the only two claims of the appellant's application for a patent on a Holder For Cut Flowers. The appealed claims read:

> 6. A holder for cut flowers comprising a relatively stiff flat elongated body member made of cardboard or like material, and flaps extending from opposite side edges of the body member and located a substantial distance inwardly of one end edge constituting the outer edge of said body member, said flaps being joined to the body member along outwardly diverging fold lines, the flaps being folded inwardly to overlie one side of said flat body member and being of a width to have free end portions thereof in overlapping relation and with the flaps bowed slightly laterally away from the flat body members, means for securing the overlapping end portions of the flaps together, said flaps when connected constituting means for holding the stems of flowers against said flat body member, the outer part of the flat body member that extends outwardly beyond the flaps having side edges extending on lines forming continuations of said outwardly diverging fold lines and gradually increasing in width outwardly from the flaps and constituting a firm, flat, substantially rigid support outwardly beyond said flaps for the blossoms of flowers the stems of which are held between said flaps and the inner part of the body member.
>
> 7. A holder for cut flowers of the construction defined in claim 6 and wherein corresponding end edges constituting the outermost edges of the flaps extend in substantially a common plan transversely of the body member at substantially a right angle to the longitudinal axis of the body member.

The references are: Endres, 2,247,191, June 24, 1941; Gardner, 2,340,373, February 1, 1944.

The holder disclosed by appellant's application is formed from a blank of cardboard or similar material comprising a tapered backing portion having two wings, one at each side, which may be folded over the stems of flowers placed against the backing portion, so that the flaps overlap and may be secured together to form the completed holder. The backing portion extends considerably above the wings so that, when the latter have been folded together it provides a support for those parts of the flowers which extend above the flaps.

The basic reference relied on by the Patent Office tribunals is the patent to Endres [No. 2,247,191] which shows a cut flower holder consisting of a tapered backing portion and foldable wings arranged in substantially the same manner as in appellant's application. In the patented device, however, the tops of the wings when folded, are flush with the top of the backing member, so that there is no upwardly extending support for the flowers. Endres provides a dividing member consisting of a flat tapered piece of cardboard which may be forced down into the holder after the flowers are inserted, thus flattening the holder and causing it to grip the stems of the flowers.

The secondary reference cited is the patent to Gardner [No. 2,340,373] which shows a holder for plants formed from a flat blank having a substantially square base portion surmounted by an upwardly extending tapered portion. This blank may be rolled up to form a generally cylindrical container for plants and, when this is done, the tapered part of the blank provides a curved backing portion which is open on one side.

The appealed claims are clearly met by the device of the Endres patent except that that patent does not show a backing portion extending above the flaps for supporting the tops of the flowers in the holder. Such an extension, however, is clearly shown by the Gardner patent and we are of the opinion that, in view of Gardner's disclosure, it would not require invention to provide the Endres holder with an extension of the kind claimed here. The specific shape of the extension is a matter of choice and design, and we agree with the Board of Appeals that the particular shape adopted by the appellant is one which might be employed without the exercise of invention.

It is urged by the appellant that the Gardner patent cannot properly be relied on to supplement the showing of Endres for the reason that Gardner's holder is used for packaging plants to which the roots are still attached, whereas the holders of Endres and the appellant are designed to receive cut flowers. However, the problem is basically the same in each case, namely, to provide a support for the upper portions of the plants or flowers which project above the body of the holder, while at the same time permitting such upper portions to be displayed. The Gardner patent, showing how that problem can be solved in the case of plants would therefore fairly suggest a similar solution in the case of the cut flower holder of Endres.

There are of record affidavits to the effect that the appellant's device has enjoyed a considerable degree of commercial success and that it has outsold that of Endres by a wide margin. It is well settled, however, that commercial success cannot be relied on to establish patentability except in cases which are otherwise doubtful. *In re Russell*, 34 CCPA (Patents) 721, 157 F.2d 190, 71 USPQ 85; *In re Richmond*, 32 CCPA (Patents) 1084, 150 F.2d 124, 66 USPQ 45. In the present case, for the reasons above stated, we do not consider the question of patentability to be doubtful.

[1] The decision of the Board of Appeals is affirmed.

AFFIRMED.

U. S. Court of Customs and Patent Appeals

IN RE BIRDSALL P. LAWSON, DECEASED, (PILLING CHAIN CO., ASSIGNEE)

No. 6157. Decided December 8, 1955

[— F.2d —; — USPQ —]

1. INVENTION—RECOGNITION OF ADVANTAGES OF OLD STRUCTURE.

   "We feel that the element of invention is lacking in the present case since appellant, in essence, has merely recognized that the Schaye structure has an advantage, the non-jamming function, which the patentee Schaye apparently failed to detect."

2. SAME—CLAIMS CALLING FOR NON-INVENTIVE STRUCTURAL CHANGE.

   "• • • We have frequently held that when no new or unexpected result can be achieved by a structural change, thus rendering a change non-inventive, a recitation in a claim calling for such non-inventive structure which is not shown in the prior art does not make the claim patentable over the prior art."

3. SAME—PRIOR ART DEVICE INHERENTLY FUNCTIONING IN THE SAME MANNER.

Held that the facts tending to negate invention are clearer where the prior art device is not only capable of functioning in the manner proposed by applicant, but must inherently function in the same manner as applicant's device.

4. PATENTABILITY—PARTICULAR SUBJECT MATTER—SLIDER FOR SEPARABLE FASTENERS.

Claims to slider for separable fasteners *Held* properly rejected as unpatentable over the cited prior art.

APPEAL from the Patent Office. Serial No. 210,025.

AFFIRMED.

David J. Moscovitz (*Robert I. Dennison* and *Alfred E. Page* of counsel) for Birdsall P. Lawson, Deceased.

Clarence W. Moore (*S. W. Cochran* of counsel) for the Commissioner of Patents.

Before O'CONNELL, *Acting Chief Judge*, and JOHNSON, WORLEY, COLE, and JACKSON (retired), *Associate Judges*

JOHNSON, *J.*, delivered the opinion of the court.

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the holding of the Primary Examiner rejecting as unpatentable claims 1 to 14 in appellant's application for a patent for "Non-Jamming Slider for Separable Fasteners."

The appealed claims relate to a construction for the slider element which is used for engaging and disengaging the complementary opposed teeth (scoops) of a slide fastener. The slider element, that is, the part of the slide fastener which is adapted to be moved back and forth along the rows of teeth, consists broadly of two flat surfaces, or wings, which are connected to each other at one end by a post. Each wing has a pair of inwardly extending flanges extending therefrom, and the flanges on both wings are opposed to define a channel through which the rows of teeth pass during the operation of the slide fastener. The alleged invention is that the wings are tilted toward each other so that there is a greater clearance between the teeth and the wings at the post end of the slider than at the end remote from the post. The ultimate effect of such construction is to make the opposed flanges tend to converge toward each other. Thus if foreign material, such as threads from a garment, enters the portion of the slider which has greater clearance and tends to stop movement thereof by wedging between the flanges and the teeth, the slider can be "backed off" without causing jamming. It is also stated in the specification that the slider "• • • (by virtue of the resiliency in those portions of the opposing converging wings which establishes, under stress, a lever movement from the connecting post to the outer end of the channel, and the inherent resilience of the material of, or the method of forming, the slider) may function, in those cases where bunching is slight, to permit the bunched material to pass through the slider upon exercise of manual effort of the tab, since the wings spread from their normal converging relationship • • • to a position of parallelism which provides a channel of such greater depth than the height of the stringer scoop." On the other hand, if foreign material tends to cause jamming by attempting entrance at the end of the slider which has less clearance (the end remote from the post), the slider is manipulated back and forth until clearance occurs. It is to be noted at this point that there is clearance between the teeth and wings of the slider at both ends of the latter, the clearance at the post end of the slider being greater than the clearance at the opposite end thereof.

Claims 4 and 14, which are representative of the appealed claims, read as follows:

4. In a separable slide fastener assembly in combination with opposing stringers mounting scoops of common thickness and having parallel upper and lower surfaces, a slider having a pair of opposing wings and a neck defining post connecting the same at one end to define a "Y" channel formation, said wings converging in the vertical plane toward each other from said post toward the other ends thereof defining the stem of said "Y" channel formation, at least one of said wings being extended from said post at an angle less than normal to the post the vertical spacing of the wings at the zone of narrowest wing convergence being slightly greater than the scoop thickness to permit unhindered relative reciprocation at such zone of said slider and scoops.

14. In a separable slide fastener assembly in combination with opposing stringers mounting scoops of common thickness and having parallel upper and lower surfaces, a slider comprising overlying spaced wings formed to cooperatively provide a pair of angularly directed channels in the vertical plane extending to one end of the slider and merging into a central channel extending to the other end of the slider, and a post interconnecting said wings adjacent one end of the slider, the angularly directed channels being of greater height than the thickness of said scoops at such one end of the slider, said wings being connected to extend relative to each other at an angle less than parallelism, each said wing being of material capable of being flexed from angular relationship toward parallelism about an axis defined at the connecting point thereof, the amount of flexing displacement being proportional to the amount of stress applied thereto, said wings having inwardly directed rails extending along each outer longitudinal edge and the rails of one channel being spaced from those of the other channel to provide tape receiving slots, said rails being of the same height throughout their length, the normal unstressed wing spacing at the zone of narrowest wing convergence of the central channel being greater than that of the scoop thickness.

The reference relied on by the Patent Office tribunals is:

Schaye, 2,575,187, November 13, 1951 (Filed July 8, 1948)

The Schaye patent relates to a slide fastener which does not require any extraneous members for locking the slider at any point of its travel. The teeth of the slide fastener are of conventional construction. However, the slider has wings with flanges thereon, said wings being connected to each other at one end by a post in the same manner as appellant's slider. Furthermore, the wings are tilted toward each other so that the spacing between the wings at the post end is greater than the spacing between them at the other end of the slider. The slider is resilient, and when it is mounted in the rows of teeth, or stringers, the portions of the wings at the end of the slider which has the least spacing bear on the teeth which are positioned between the wings to provide friction against undesired movement of the slider. It is to be noted that there is no clearance between the wings and the teeth at the narrow end of the slider, but there is clearance at the post end of the slider. It is to be further noted that Schaye discusses a conventional slider structure which both from the drawing and specification appears to have parallel wings.

The Examiner rejected all of the claims as being unpatentable over Schaye. The Examiner stated that the only limitation in the claims which defined over the Schaye patent related to the spacing between the slider and the teeth at the narrowest portion of the slider. In this respect he stated, "Whether this spacing is exactly equal to (as in Schaye) or greater than the height of the scoops is patentably immaterial since the converging wings of the Schaye slider will function to dislodge foreign matter in the exact same manner as the slider of applicant."

The Board of Appeals affirmed this rejection. The Board also rejected the claims for the reason that "appellant's structure as claimed will not necessarily produce any result not produced by the conventional slider construction disclosed by Schaye." In this respect, it is to be noted that the Schaye specification broadly discusses a conventional slider construction. Relative to this conventional structure the Board stated, "Considering such conventional structure it is obvious that if extraneous matter enters between the slider wings with the stringers and the thickness of such material is less than the amount of clearance such material will pass through with the stringers without jamming. If the extraneous matter is substantially thicker than the clearance, it would abut against the curved ends of the wings whereupon the direction of movement of the slider could be reversed and the slider moved off the extraneous matter in the same manner as with appellant's structure." The Board concluded that although it did find a difference in appellant's structure over both the conventional structure and Schaye's structure, it felt that this difference was not sufficient to warrant the granting of a patent. It is to be further noted that the Board specifically stated, "• • • since Schaye taught bending the wings toward each other, although for a different purpose, and to a different degree from appellant and since the claims are broadly worded as to the degree of convergence and do not set forth the amounts of clearance they differ in an arbitrary and immaterial manner from the structure disclosed by Schaye • • •."

Before proceeding further with this opinion, we must again state that the only difference between appellant's structure and the Schaye structure is that the former has clearance between the teeth and the narrow portion of the slider, whereas the latter has no such clearance. As far as the functioning of the two sliders is concerned, the Schaye slider must inherently function to minimize jamming in the same manner as appellant's slider because of its similarity in structure to appellant's slider.

The specific question in this case, as we view it, is: Where the patent which is relied on as an anticipation is from the same art and inherently functions in the same manner and possesses substantially the same structure as the device sought to be patented, is the prior art patent a valid anticipitation when the patentee did not recognize that his device would give the same result which is claimed by the applicant?

It has been held in the past that where the prior art structure is substantially similar to the structure sought to be patented, even though its function might be different, the similarity in structure alone is sufficient to negative patentability, *In re Griswold*, 33 CCPA (Patents) 799, 152 F.2d 1014, 68 USPQ 176. It has also been held that where it is obvious that the prior art structure is substantially similar to and would perform the same function as the structure sought to be patented, the latter is unpatentable regardless of whether the prior art patentee intended the structure to be used for the same purpose. *In re George Langford*, 17 CCPA (Patents) 844, 37 F.2d 753, 4 USPQ 320. The rationale behind the denying of a patent under these circumstances appears to be that there is no invention in perceiving that the product which others had discovered had qualities they failed to detect; more than a new advantage of a product must be discovered in order to claim invention. *General Electric Co.* v. *Jewel Co.*, 326 U. S. 242, 249 (1945).

Appellant argues that the prior art does not disclose or contemplate appellant's novel concept for minimizing jamming. However, it is well settled that everything which is disclosed as being novel is not necessarily patentable because it must also be useful and involve invention. *In re Rose*, 42 CCPA (Patents) 817, 220 F.2d 459, 105 USPQ 237; *In re Green*, 25 CCPA (Patents) 1143, 97 F.2d 130, 37 USPQ 690. [1] We feel that the element of invention is lacking in the present case since appellant, in essence, has merely recognized that the Schaye structure has an advantage, the non-jamming function, which the patentee Schaye apparently failed to detect.

In reaching the foregoing conclusion, we are not unmindful of the fact that there is a structural difference between appellant's device and the Schaye device, namely, the clearance at one end of the slider. [2] However, we have frequently held that when no new or unexpected result can be achieved by a structural change, thus rendering a change non-inventive, a recitation in a claim calling for such non-inventive structure which is not shown in the prior art does not make the claim patentable over the prior art. *In re Bisley*, 39 CCPA (Patents) 982, 197 F.2d 355, 94 USPQ 80, and cases cited therein. It seems quite clear to us that the clearance at one end of the slider which is present in appellant's device but not in Schaye's does not give any new or unexpected results, and does therefore not involve invention.

The present case is very similar to the case of *In re Spears*, 42 CCPA (Patents) 1028, 223 F.2d 956, 106 USPQ 290 (1955). In that case the appellant had applied for a patent on a pin-type flower holder. A patent relating to a flower holder, which was very similar to the device described in the application, was cited as prior art. There were some structural differences between the two. However, the patent did not teach that the flower holder described therein could be used in the manner proposed by the appellant, and it was urged by the latter that he had disclosed a new concept. Notwithstanding that the appellant had disclosed a novel concept, this court stated that even though there was a structural difference between the devices of the application and the patent, it did not follow that the features claimed by the applicant necessarily involved invention.

It is to be noted that in *In re Spears*, supra, the device cited as prior art could be caused to function in the manner disclosed by the applicant, but did not inherently function in that manner. Thus based on the reasoning which found that there was no invention present in the Spears case, we are of the opinion there is no invention present in the instant case because the Schaye device is not only capable of functioning in the manner proposed by appellant, but must inherently function in the same manner as appellant's. [3] The facts tending to negate invention are thus clearer here than they were in the Spears case.

Since the rejection on Schaye must be sustained, there is no need to consider the other rejections of the claims. *In re Miller*, 34 CCPA (Patents) 910, 159

F.2d 756, 72 USPQ 512. We have fully considered the arguments presented by appellant. However, we feel that we need not discuss them since the foregoing opinion is determinative of the issues in this case.

[4] For the above reasons, the decision appealed from is affirmed.

AFFIRMED.

JACKSON, *J.*, retired, recalled to participate.

U. S. Court of Customs and Patent Appeals

IN RE TATINCLOUX ET AL.

No. 6067. Decided December 8, 1955

[— F.2d —; — USPQ —]

1. APPEAL TO THE U. S. COURT OF CUSTOMS AND PATENT APPEALS—PRACTICE—PUBLICATION OF OPINIONS.

"Pursuant to our practice, the decision was withheld from formal publication pending the exercise of appellants' right to petition under the rules of the court."

2. INVENTION—CARRYING OUT PROCESS STEPS SIMULTANEOUSLY.

Held that "in the absence of an unobvious result there would be no invention in performing the steps of filling the suspension with gas bubbles and flocculating it about them simultaneously instead of sequentially."

3. EVIDENCE—AFFIDAVIT TO SHOW SUPERIORITY OVER PRIOR ART.

Where an affidavit relied on as showing unobvious superiority of the product of appellants' claimed process of making a refractory over a product of a prior art process did not show application of the two procedures to identical mixes *Held* that the affidavit "does not prove that the superiority of the product produced by appellants' process resulted from that process rather than from the specific materials employed."

4. INVENTION—CARRYING OUT PROCESS STEPS SIMULTANEOUSLY.

"As a general rule, no invention is involved in the broad concept of performing simultaneously operations which have previously been performed in sequence. • • • An exception may be made where a new and unexpected result is obtained by performing the operations simultaneously • • •."

5. PATENTABILITY—PARTICULAR SUBJECT MATTER—PROCESS OF MAKING REFRACTORIES.

Certain claims to a process of making refractories *Held* properly rejected as unpatentable over the cited prior art but certain other claims *Held* adequately descriptive of the process and patentable over the cited prior art.

APPEAL from the Patent Office. Serial No. 1,665.

MODIFIED.

Bauer & Seymour (*John L. Seymour* of counsel) for Tatincloux et al.

Clarence W. Moore (*H. S. Miller* of counsel) for the Commissioner of Patents.

Before O'CONNELL, *Acting Chief Judge*, and JOHNSON, WORLEY, and COLE, *Associate Judges*

WORLEY, *J.*, delivered the opinion of the court.

On April 28, 1955, we sent to counsel for the parties in interest a decision affirming that of the Board of Appeals of the United States Patent Office as to claims 19 and 29, and reversing that tribunal as to claims 21 and 24, for an application for a patent on "Refractories and Method of Making Them."

[1] Pursuant to our practice, the decision was withheld from formal publication pending the exercise of appellants' right to petition under the rules of the court.

On May 11, 1955, appellants filed a petition for reconsideration of those parts of our decision relating to claims 19 and 29 of the application. That petition was granted and reargument was had on November 1, 1955.

We have carefully reconsidered the entire case in light of the petition and oral arguments of counsel for appellants and the Commissioner of Patents with respect thereto, and have made certain changes in the wording of our opinion. Consequently, our original opinion of April 28, 1955, is withdrawn and this opinion is substituted for it.

Two claims in appellants' application were allowed by the Primary Examiner. He rejected claims 19, 21 to 29, inclusive, and 31.

The Board of Appeals reversed the Examiner's rejection of claims 22, 23, 25, 26, 27, 28, and 31, and sustained his rejection of the other claims involved. On appeal here are claims 19, 21, 24, and 29. The first two are illustrative and read:

19. A process for making a refractory that comprises making an aqueous colloidal suspension of a refractory material, simultaneously filling the suspension with gas bubbles and flocculating said suspension about said bubbles, and thereafter drying and firing the product.

21. A process for making a refractory having a bubbly interior that comprises simultaneously generating bubbles in and flocculating slip by the reaction within the mass of a metal of the type of aluminum, zinc, and magnesium with an alkali metal hydroxide.

The invention is directed to the making of refractories, or, more specifically, bricks used in high temperature furnaces. They are characterized by their "bubbly" interiors which are said to provide high insulation properties. Appellants' specification states that the desired result is attained by placing the refractory material in colloidal suspension, filling the mass with bubbles, simultaneously flocculating it about the bubbles, then drying and firing the brick. It also advises that in the preferred form of the invention the refractory material, clay, is put in the form of a slip and the deflocculated mass simultaneously filled with gas bubbles and hardened by flocculating. The formation of the bubbles and the flocculating are carried out simultaneously by the reaction of a hydroxide, silicate, or carbonate of an alkaline metal with aluminum, zinc, or magnesium within the colloidal suspension. It is claimed that in the above method the bubbles are distributed very regularly throughout the mass, and the subsequent hardening of the refractory material produces bricks of uniform structure possessing great strength and high insulating qualities.

The references relied on are: Setterberg (Fr.), 281,254, April 12, 1928, and Nielsen, 2,151,932, March 28, 1939.

The patent to Setterberg discloses a mixing of finely powdered refractory materials with sufficient water to form a plastic dough, adding a substance such as aluminum, capable of evolving gas by reaction with water, forcibly mixing the reaction material into the plastic dough, and then molding the mixture into blocks which are dried and burned at high temperature. The specification states that "Through the gas-forming process a great number of pores are formed and if care is taken in shaping of the blocks, these pores will remain in the blocks so formed."

The patent to Nielsen relates to a process for manufacturing porous articles of clay. It discloses several known processes for producing such articles, including air injection, mixing clay with a previously formed foam or a foam-producing substance, and generating gas within the clay mass. It states that those processes require the clay mass to be "of a not too stiff consistency," the desired consistency usually being obtained by the addition of water; that certain drawbacks result therefrom in the molding of articles from the porous mass; and that the known methods of the manufacture of non-porous clay masses cannot be used to produce porous articles because the porous mass is too liquid to retain its shape. The patentee states that his invention eliminates those drawbacks by obtaining the desired liquid consistency without an increased admixture of water to the clay mass, but by adding a deflocculating agent, such as alkaline hydroxides or salts of alkalies and weak acids, such as potash, soda, water glass, etc., to produce a slip, the liquid mass stiffened by chemical means in order to mold it in the normal manner.

The claims before us were rejected by the Examiner on the patent to Setterberg, with claims 19 and 29 further rejected on Nielsen.

The Board sustained the rejection of claims 21 and 24 on Setterberg, holding they distinguish over that reference only by reason of the fluidity of the mixture, and that no unobvious or unexpected result would be attained by adding sufficient water to Setterberg's mixture so that it could be poured into molds. The Board stated such a mixture would constitute a "slip."

In comparing the Nielsen disclosure with claims 19 and 29, the Board held that although claim 19 requires an aqueous colloidal suspension of a refractory material and a simultaneous filling of the suspension with gas bubbles and flocculation of the suspension about said bubbles, Nielsen discloses first the forming of the gas bubbles, and then the addition of a solidifying agent. The Board added "It is not apparent that an unobvious or unexpected result would flow from adding the solidifying agent and forming the gas bubbles at the same time."

Claim 29 is dependent on claim 19 except for the limitation that the refractory material is clay. The Board observed that Nielsen uses clay as the refractory material and held that claim unpatentable for the same reasons applicable to claim 19.

Thereafter appellants petitioned for reconsideration of the Board's rejection of claims 19 and 29 on Nielsen, alleging that action to be contrary to its reasoning because of the statement quoted above.

The Board's attention was directed to an affidavit which alleged that tests made according to the Nielsen process and appellants' process show that "the comparable moduli of rupture for the refractories of applicants and of Nielsen are in the proportion of 19 for applicants' to about 5 for Nielsen's," and "Another astonishing advantage is also shown in that Nielsen refractory had a crushing strength of only 2 kg./sq.c. and another had a crushing strength of 8, whereas applicants' refractories had a crushing strength of 25 kg./sq.c."

The Board, after noting that appellants had been allowed specific claims, and observing that the involved claims were broadly drawn, denied relief and held that the affidavit "is not convincing in connection with this broad question since affiant did not apply these two procedures to similar mixes employing the same ingredients in each."

We are in agreement with the Board that claims 19 and 29 do not patentably distinguish over the Nielsen patent. A comparison of appellants' claim 19 with Nielsen's claim 1 reveals their similarity, the latter succinctly describing Nielsen's disclosure.

APPELLANTS' CLAIM 19	NIELSEN'S CLAIM 1
A process for making a refractory that comprises making an aqueous colloidal suspension of a refratory material, simultaneously filling the suspension with gas bubbles and flocculating said suspension about said bubbles, and thereafter drying and firing the product.	Process for the manufacture of porous ceramic articles of argillaceous materials, consisting in the following steps, first adding deflocculants to a stiff plastic mass of clay then making the thus produced fluid mass porous by incorporating gases therein and finally adding flocculants to the porous fluid mass and moulding the thus produced restiffened porous mass in known manner.

It will be noted that the only significant differences between the two claims are that claim 19 specifies a "colloidal suspension" instead of a "fluid mass," described in the specification of Nielsen as a "slip," and that it specifies "simultaneously" filling with bubbles and flocculating, instead of successively.

The fact that claim 19 specifies a "colloidal suspension" rather than a "slip" does not appear to describe the essential feature of appellants' invention. Their specification states that "In the preferred form of the invention a refractory body, such as clay, is put in the form of slip or barbotine and the deflocculated mass is simultaneously filled with gas bubbles and hardened by flocculating." Also in their brief the following appears:

It also seems that the Board has erred in pretending to themselves that the invention will not work except in true colloidal solutions. That is a theory for which they have no justification. It will work in slips as well as in true colloidal suspenisons, as the applicants have continuously asserted.

It would appear, therefore, that the basic question as to the patentability of claims 19 and 29 over the Nielsen reference relates to the simultaneity of the introduction of the gas and the flocculant. We are in agreement with the Board that such action does not constitute invention. That requirement of the claims would be met if, in the Nielsen disclosure, air were introduced and flocculants were added at the same time, but, as the Board said "It is not apparent that an unobvious or unexpected resul' would flow from adding the solidifying agent and forming the gas bubbles at the same time." Appellants interpret that as an argument in their favor, alleging "That statement does not deny that an unexpected result does occur, the Board simply states that it is not obvious that it would occur. • • • The Board has, therefore, found as a fact that what the applicant has done is unobvious."

It is hardly necessary to dissect appellants' reasoning to show the error therein. [2] As we understand the Board's decision, it merely holds that in the absence of an unobvious result there would be no invention in performing the steps of filling the suspension with gas bubbles and flocculating it about them simultaneously instead of sequentially; and that no such unobvious result has been shown. We concur in that holding.

[3] As was pointed out by the Board, the affidavit relied on by the appellants as showing unobvious superiority of their product over that of Nielsen did not show application of the two procedures to identical mixes and, therefore, does not prove that the

superiority of the product produced by appellants' process resulted from that process rather than from the specific materials employed.

[4] As a general rule, no invention is involved in the broad concept of performing simultaneously operations which have previously been performed in sequence. *In re Eksergian*, 25 CCPA (Patents) 734, 92 F.2d 811, 35 USPQ 530, and *In re Mink*, 27 CCPA (Patents) 726, 107 F.2d 586, 43 USPQ 456. An exception may be made where a new and unexpected result is obtained by performing the operations simultaneously but, as above indicated, it has not been satisfactorily shown in the present case that such a result is obtained. We concur with the Board that claims 19 and 29 do not define invention over Nielsen.

We can not, however, support the Board's reasoning with respect to claims 21 and 24. Those claims were rejected as unpatentable over the Setterberg reference alone. Although they specify "flocculating slip," the Board held they distinguish over the Setterberg reference only as to the fluidity of the mixture, and that no "unobvious or unexpected result would flow from adding sufficient water to the mixture of Setterberg to permit the same to be poured into molds. The mixture so diluted would, in our opinion, be a 'slip'." That holding, however, overlooks the fact that, as pointed out by appellants, Setterberg shows only a "plastic dough," which is neither a colloidal suspension nor a slip. Furthermore, it is apparent that Setterberg does not contemplate ever having a colloidal suspension or a slip, therefore there could be neither a deflocculation nor a flocculation.

We are of the opinion that appellants have adequately described their process in claims 21 and 24, and that the process is patentable over the disclosure of Setterberg. A suspension is required by the word "slip." It is stated that the suspension is "flocculated." The flocculation is simultaneous with the generation of bubbles. The simultaneous generation of bubbles and flocculation are caused "by the reaction within the mass of a metal of the type of aluminum, zinc, and magnesium with an alkali metal hydroxide." (Claim 21.)

Of the above limitations, Setterberg shows only the *generation of gas bubbles* within the mass by the same reaction. In view of the essential difference in the nature of the plastic mass of Setterberg and the slip called for by claims 21 and 24, we have grave doubts that the inventive concept of those claims is fairly suggested by the reference. Since, in our view, claims 21 and 24 sufficiently distinguish over the reference, it becomes necessary to reverse the decision of the Board as to those claims.

[5] As previously stated, we have reviewed our original decision in light of appellants' petition but find nothing therein to alter our original conclusion that the decision of the Board of Appeals should be, and it is hereby, affirmed as to claims 19 and 29, and reversed as to claims 21 and 24.

MODIFIED.

PATENT SUITS

Notices under 35 U. S. C. 290: Patent Act of 1952

1,754,440, 1,754,441, 1,754,443, 1,754,444, J. Sachs, Electric circuit controlling appliance: **1,993,416,** same, Electric switch, **filed** July 9, 1951, D. C., S. D. N. Y., Doc. 68/44, *Federal Electric Products Co.* v. *Frank Adam Electric Co.* Stipulation and order of discontinuance (notice Nov. 29, 1955).

1,754,441. (See 1,754,440.)

1,754,443. (See 1,754,440.)

1,754,444. (See 1,754,440.)

1,992,214, D. Katz, Traffic detector, **filed** Aug. 20, 1945, D. C., S. D. N. Y., Doc. 13/354, *David Katz* v. *Horni Signal Mfg. Corp.* Cause dismissed for lack of prosecution (notice Dec. 7, 1955).

1,993,416. (See 1,754,440.)

2,152,193, P. M. Johanning, Stone cutting machine, **filed** Dec. 7, 1955, D. C., W. D. Okla. (Oklahoma City), Doc. 6508, *G. B. Entz* v. *William (Bill) Grubbs.*

2,177,778, 2,228,396, C. H. Martin, Time-operated coin-controlled signal apparatus: **2,318,615,** same, Coin controlled time operated signaling mechanism, **filed** Dec. 7, 1955, D. C., E. D. Ill. (Danville), Doc. 1400–D, *Horace E. Allen, executor of the estate of Charles H. Martin, deceased* v. *James W. Menhall.*

2,199,427, J. M. Dohen, Head dress, **filed** May 28, 1952, D. C., S. D. N. Y., Doc. 76/88, *Scarves By Vera, Inc.* v. *Linbro Mfg. Corp. et al.* (Stipulation and order changing defendant Lerner Shops to Associated Lerner Shops of America, Inc.) Order of discontinuance (notice Dec. 7, 1955).

2,226,449. F. C. Stephens, Method of repairing textile fabrics, **filed** July 1, 1953, D. C., S. D. Miss. (Jackson), Doc. 1992, *National Multiweaving Co., Inc.* v. *Bob Lambright.* Defendant enjoined from further infringement of patent Nov. 16, 1955.

2,228,396. (See 2,177,778.)

2,233,322, B. E. Meurk et al., Steam plant installation and operating procedure for distilling water, **filed** Dec. 9, 1955, D. C. Md. (Baltimore), Doc. 8635, *Condenser Service & Engineering Co., Inc. et al.* v. *Bethlehem-Sparrows Point Shipyard, Inc.*

2,255,313, C. Ellis, Ethylenic-alpha-beta synthetic resins and process of making same, **filed** July 28, 1950, D. C., E. D. N. Y. (Brooklyn), Doc. 11017, *Ellis-Foster Co.* v. *Pittsburgh Plate Glass Co. et al.* Order of discontinuance Dec. 5, 1955.

2,278,383, P. Rosenblatt, Display device, **appeal** filed Dec. 12, 1955, C. C. A., 2nd Cir., Doc. 23915, *Alb, Inc.* v. *Noma Electric Corp. et al.*

2,282,917, M. Zawistowski, Cloth cutting machine, **substituted** for **2,480,278** by stipulation and order amending complaint filed Dec. 6, 1955, D. C., S. D. N. Y., Doc. 86/246, *Simplex Cloth Cutting Machine Co. Inc.* v. *H. Maimin Co. Inc.*

2,294,434, A. B. Wilson, Method and apparatus for forming Venetian blind slats and strip material therefor; **2,338,678,** same, Method of and apparatus for forming Venetian blind slats; **2,315,640,** L. S. Morse et al., Venetian blind slat, **appeal** filed Aug. 15, 1955, C. C. A., 4th Cir., Doc. 7073, *Acme Steel Co.* v. *The Eastern Venetian Blind Co.* Judgment of District Court affirmed Dec. 13, 1955.

2,301,061, B. Rosenberg, Window curtain, **filed** Oct. 6, 1954, D. C., S. D. N. Y., Doc. 96/76, *Cameo Curtains, Inc.* v. *Cortley Curtain Corp.* Stipulation and order of discontinuance (notice Dec. 8, 1955).

2,315,640. (See 2,294,434.)

2,318,615. (See 2,177,778.)

2,338,678. (See 2,294,434.)

2,351,004. (See Re. 23,311.)

2,351,005. (See Re. 23,311.)

2,351,007. (See Re. 23,311.)

2,351,008. (See Re. 23,311.)

2,351,011. (See Re. 23,311.)

2,381,124, J. F. Hart, Composition for cleaning metal such as aluminum and magnesium, **filed** Dec. 7, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c2273, *Kelite Corp.* v. *Khem Chemicals, Inc.*

2,411,848. (See Re. 23,311.)

2,418,251, E. A. Drott, Loader, **filed** Dec. 14, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c2308, *Edward A. Drott et al.* v. *Pettibone-Mulliken Corp.*

2,440,741, H. D. Drain, Sink mounting, **filed** Dec. 28, 1950, D. C., N. D. Ill. (Chicago), Doc. 50c1813, *Walter E. Selck and Co.* v. *Kinkead Industries Inc.* (Church of Religious Science substituted as party-plaintiff Apr. 4, 1955.) Patent held valid; injunction issued Dec. 1, 1955.

2,461,464, R. Aronstein, Filter for fluorescent screens, **filed** July 28, 1954, D. C., S. D. N. Y., Doc. 94/358, *Transmirra Products Corp. et al.* v. *A. B. Castro Television Laboratories.* Order dismissing cause for lack of prosecution (notice Dec. 7, 1955).

2,475,421. (See Re. 23,311.)

2,475,694. (See Re. 23,311.)

2,479,306. (See Re. 23,311.)

2,480,278. (See 2,282,917.)

2,502,255, D. N. Goldberg, Bucker tool, **filed** Jan. 13, 1955, D. C., N. D. W. Va. (Wheeling), Doc. 683–W, *David N. Goldberg* v. *Tri-State Industrial Supply Co.* Patent held valid and infringed; defendant enjoined from further infringement Dec. 9, 1955.

2,511,343, E. W. Kaiser, Prefabricated piping system; **2,570,246,** same, Expansion means for jacket or conduit system; **2,592,574,** same, Pipe joint fitting; **2,641,451,** same, Heat exchanger; **2,649,769,** same, Jacketed valve; **2,650,111,** same, Expansion joint enclosure; **2,658,527,** same, Conduit system; **2,658,530,** same, Combined support and turbulence effecting device; **2,674,947,** same, Fuel supply system; **2,680,901,** same, Method of assembling jacketed conduit systems; **2,696,835,** same, Conduit construction, suit for Declaratory Judgment filed Dec. 2, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c2249, *Ric-Wil Inc.* v. *E. B. Kaiser Co., Inc. et al.*

2,513,084, G. O. Hall, Curing of meat to inhibit undesirable color change, **filed** Dec. 7, 1955, D. C., E. D. Pa. (Philadelphia), Doc. 19931, *Hall Laboratories, Inc.* v. *Karl Seiler & Sons, Inc.*

2,519,864, P. B. Weisz, Geiger-Mueller counter tube, **filed** Oct. 11, 1954, D. C. N. J. (Newark), Doc. 797/54, *Paul B. Weisz et al.* v. *The Matheson Co., Inc.* Consent order; patent held infringed Dec. 8, 1955.

2,523,068, Simpson and Coffman, Safety head, **filed** Dec. 7, 1955, D. C. Del. (Wilmington), Doc. 1770, *Frangible Discs, Inc.* v. *Black, Siralls & Bryson, Inc.*

2,528,261. (See Re. 23,311.)

2,561,270, 2,594,755, P. W. Felt, Liquefied Petroleum gas lighter; **2,571,435,** A. L. Flamm, Gas fueled cigar lighter, **filed** Dec. 31, 1951, D. C., S. D. N. Y., Doc. 72/133, *Ronson Art Metal Works, Inc.* v. *Brown & Bigelow (Inc.).* Consent judgment; discontinuance of Oct. 28, 1955, superseded by this judgment and is vacated; complaint, supplemental complaint and counterclaims dismissed with prejudice Dec. 1, 1955.

2,565,191. (See Re. 23,311.)

2,570,246. (See 2,511,343.)

2,571,435. (See 2,561,270.)

2,574,971, H. Heitzer, Highway marking paint containing glass beads, **filed** Dec. 7, 1955, D. C., N. D. Ga. (Atlanta), Doc. 5448, *Minnesota Mining & Mfg. Co.* v. *William Armstrong Smith Co. (Inc.).*

2,592,574. (See 2,511,343.)

2,594,755. (See 2,561,270.)

2,603,721. (See Re. 23,311.)

2,610,230. (See Re. 23,311.)

2,615,846, Dvorkovitz and Hawley, Washing composition, **filed** Dec. 8, 1955, D. C., E. D. Wis. (Milwaukee), Doc. 55/c/332, *The Diversey Corp.* v. *Milport Chemical Co. et al.*

2,623,368, Des. 165,778, E. F. Olsen, Spillproof glass, **appeal** filed May 31, 1955, C. C. A., 2nd Cir., Doc. 23673, *Edward F. Olsen* v. *Baby World Co., Inc.* Judgment of District Court affirmed Dec. 5, 1955.

2,636,369, S. Tait, Jr., Stocking fabric, **filed** Dec. 8, 1955, D. C., W. D. N. C. (Charlotte), Doc. 1138, *Vogue Mfg. Corp.* v. *Chadbourn Gotham, Inc.*

2,641,451. (See 2,511,343.)

2,648,590. (See Re. 23,311.)

2,649,769. (See 2,511,343.)

2,650,111. (See 2,511,343.)

2,657,500, H.W. Samolewitz, Transparent doll eye, **filed** Dec. 1, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16079, *Margon Corp.* v. *Dollac Corp.* **Same,** Doc. 16080, *Margon Corp.* v. *Winslow Metal Mfg. Corp. et al.*

2,657,907, J. F. Cochran et al., Insert for drilling strings, **filed** Dec. 9, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 19183–C, *Driltrol* v. *Grant Oil Tool Co.*

2,658,527. (See 2,511,343.)

2,658,530. (See 2,511,343.)

2,665,728, S. Hyman, Lady's handbag, **filed** Apr. 2, 1954, D. C., S. D. N. Y., Doc. 92/180, *Prospect Leather Goods Co. Inc.* v. *Marguerite Novelty Co. Inc.* Cause dismissed for lack of prosecution (notice Dec. 7, 1955).

2,674,947. (See 2,511,343.)

2,677,990, Bienenfeld and Hurwitz, Mirror kit for home decoration, **filed** Dec. 1, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c2228, *Century Industries, Inc.* v. *Wieboldt Stores, Inc.*

2,680,901. (See 2,511,343.)

2,686,314, L. E. Pilla, Universal shoulder construction for garments, **filed** Nov. 30, 1955, D. C., S. D. N. Y., Doc. 105/182, *Lucian E. Pilla* v. *Baker Clothes, Inc. et al.*

2,689,134, A. Lachance, Nestable cart, **filed** Nov. 30, 1955, D. C., S. D. N. Y., Doc. 105/187, *American Metal Prod. Inc. et al.* v. *Conklin Telescope Carts, Inc. et al.*

2,696,835. (See 2,511,343.)

2,699,334, F. Pettit, Airplane toy, **filed** Dec. 14, 1955, D. C. N. J. (Newark), Doc. 1142/55, *Frank Pettit* v. *Associated Mechanical Devices, Inc. et al.*

2,714,269, G. R. S. Charles, Ornamental beaded necklace, **filed** Dec. 2, 1955, D. C., S. D. N. Y., Doc. 105/213, *The Richelieu Corp.* v. *D. Lisner & Co.* **Same,** Doc. 105/214, *The Richelieu Corp.* v. *Sam Davis Jewelry Co. Inc.* Same, **filed** Dec. 13, 1955, D. C. R. I. (Providence), Doc. 1946, *The Richelieu Corp.* v. *Arden Jewelry Mfg. Co. Inc.*

2,722,003, Erickson and Bullwinkle, Method of stud driving power control; **2,722,004,** Webber and Erickson, Method for explosive installation of studs, **supplemental** counterclaim filed Dec. 7, 1955, D. C., N. D. Ohio (Toledo), Doc. 7421, *Stemco Corp. et al.* v. *Powder Power Tool Corp.*

2,722,004. (See 2,722,003.)

Re. 23,311 (of **2,351,008**), M. Camras, Method of means for neutralizing inductive disturbances in magnetic reproducers; **2,351,004,** same, Method and means of magnetic recording; **2,351,005, 2,648,590,** same, Magnetic recorder; **2,351,007,** same, Magnetic recording head; **2,351,011,** same, Method of and means for energizing magnetic recorder heads; **2,411,848,** same, Neon lamp volume indicator; **2,475,421,** same, Combined erasing and recording magnetic transducer; **2,475,694,** same, Non-twisting paramagnetic record wire; **2,479,306,** same, Magnetic recorder head; **2,528,261,** same, Apparatus for magnetic recording; **2,603,721,** same, Magnetic recorder with pressure shoe for record members; **2,565,191,** R. E. Zenner, Eddy current shield in electromagnetic transducer heads; **2,610,230,** D. E. Wiegand, Integrator and hysteresis loop tracer, **filed** Dec. 1, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c2233, *Armour Research Foundation of Illinois Institute of Technology* v. *Webster-Chicago Corp.*

Des. 165,778. (See 2,623,368.)

Des. 171,091, D. Karpel, Curtain clip, **filed** July 1, 1954, D. C., S. D. N. Y., Doc. 94/131, *Ottavia Inc.* v. *Karpel Curtain Corp. et al.* Consent judgment; patent held invalid; defendants enjoined; counterclaim dismissed Dec. 8, 1955: Judgment of Dec. 8, 1955 recalled; the words "as against the plaintiff herein" were deleted Dec. 12, 1955.

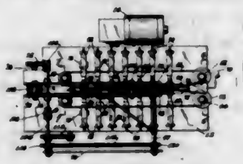
Des. 171,694, J. Gevirman, Smoker's pipe, **filed** July 21, 1954, D. C., S. D. N. Y., Doc. 94/306, *R. S. Herbert Co. Inc. et al.* v. *Rogers Imports, Inc. et al.* Stipulation and order of dismissal (notice Nov. 29, 1955).

REISSUES

JANUARY 31, 1956

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,115
SHRIMP PEELING AND VEINING MACHINE
Nikoll Miller, St. Simons Island, Ga.
Original No. 2,637,064, dated May 5, 1953, Serial No. 186,279, September 22, 1950. Application for reissue April 29, 1955, Serial No. 505,078
23 Claims. (Cl. 17—2)

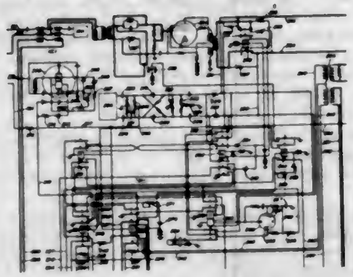


11. A shrimp peeling and veining machine comprising means to move a shrimp forwardly on its back, with head end foremost, said means comprising opposed members to grip opposite sides of the shrimp, an elongated tapering piercing tool centrally positioned between the gripping members and having a pointed end projecting rearwardly to penetrate longitudinally the body of a forwardly moved shrimp at the sand vein of the shrimp, means operatively associated with said moving means below said moving means to support the forwardly moved shrimp in advance of the tool and below the pointed end of the tool, and yieldable pressure means in advance of the pointed end of the tool and between the gripping means to press the leading end of the forwardly moved shrimp down against said supporting means, said pointed end of said tool being disposed above and spaced from said supporting means, whereby the point of the tool will engage the sand vein of the shrimp above the portion of the shell which contacts the supporting means, irrespective of the height of the shrimp and whereby the shell is separated at its top weakest portion and the shell and vein are removed from the shrimp and are urged downwardly, and the meat of the shrimp is directed over said tool.

24,116
ETHYL OXYETHYL CELLULOSE DERIVATIVE AND METHOD OF PREPARATION OF THE SAME
Eugene D. Klug, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Original No. 2,610,180, dated September 9, 1952, Serial No. 218,697, March 31, 1951. Application for reissue August 2, 1954, Serial No. 447,450
9 Claims. (Cl. 260—231)

8. In the process of producing an ethyl oxyethyl cellulose having oxyethyl and ethyl substituents, the improvement, by which a modified ethyl cellulose having a high aliphatic hydrocarbon tolerance is produced, which comprises causing hydroxyethyl cellulose, having a hydroxyethyl D. S. within the range of about 0.3 to about 0.9, in intimate admixture with sodium hydroxide and water to react with about 2.6 to about 2.9 moles ethyl chloride.

24,117
VOICE-FREQUENCY SIGNALING SYSTEM
Walter W. Fritschi, Bayside, and Charles W. Lucek, Port Chester, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Original No. 2,577,614, dated December 4, 1951, Serial No. 57,384, October 29, 1948. Application for reissue July 30, 1953, Serial No. 371,428
13 Claims. (Cl. 179—16)



1. In a signaling system in which the transmission of selective and supervisory signals over a telephone line is effected by impulses of alternating current of a particular frequency in the voice band, signal receiving means comprising an electronic circuit responsive to signal impulses and a relay controlled by said circuit and means in said circuit for delaying the response of said circuit to prevent its response to short impulses of said frequency occurring in speech thereby to prevent the control of said relay by said circuit, and signal transmitting means comprising a signal source and first means for connecting and disconnecting said source to and from said line to transmit impulses thereover and second means controlling said first means and operable to effect the transmission of intentional signals and relay means associated with said transmitting means and automatically effective at times under the control of said second means to increase the interval during which said source is connected to said line to insure its connection thereto for a sufficient length of time to insure the response by said circuit to intentional signals so as to insure the operation of said signal receiving relay.

PLANT PATENTS

GRANTED JANUARY 31, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,453
ROSE PLANT
Esther Gladys Fisher, Woburn, Mass., assignor to Arnold-Fisher Company, Woburn, Mass.
Application March 1, 1955, Serial No. 491,552
1 Claim. (Cl. 47—61)

The new and distinct variety of floribunda rose plant, substantially as herein shown and described, characterized particularly by the combination of its strong growth; its adaptability to greenhouse culture; its attractive bright green foliage; its long stems; and the Rose Doree to Peach Red color of its buds and individual flowers of miniature hybrid-tea form.

1,454
ROSE PLANT
Mathias Tantau, Uetersen, Holstein, Germany, assignor to Jackson & Perkins Company, Newark, N. Y., a corporation of New York
Application March 11, 1955, Serial No. 493,845
1 Claim. (Cl. 47—61)

A new and distinct variety of rose plant of the hybrid tea class, substantially as herein shown and described, characterized particularly as to novelty by its hooked leaves and prominent bracts, its compound leaves composed of from 1 to 7 leaflets, with prominent hooks on each leaflet, the prominent thorns, prickles and needles, the good size of the blooms which are borne on stems having characteristics of its antecedent specie multibracta, the unusual stiffness of the flower petals, the fruity fragrance of the blooms, and the distinctive Scarlet Red general color tonality of the blooms.

1,455
ROSE PLANT
Gordon J. Von Abrams, Scappoose, Oreg., assignor to Eldon Pinkeney Dering, doing business as Peterson & Dering, Scappoose, Oreg.
Application March 14, 1955, Serial No. 494,301
1 Claim. (Cl. 47—61)

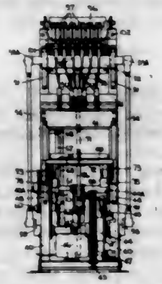
A new and distinct variety of rose plant of the floribunda class, substantially as herein shown and described, characterized particularly as to novelty by its compact, low-growing but vigorous and well-branched habits of growth, the abundance and good distribution of its foliage, its moderate to heavy flower productivity throughout the growing season, the loosely formed cluster habit of its flowers, with the clusters varying from small to medium size, and the unusual and distinctive combination of form and color of its high-centered pink flowers.

PATENTS

GRANTED JANUARY 31, 1956

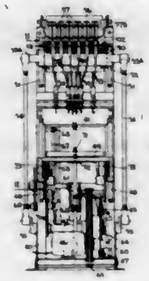
GENERAL AND MECHANICAL

2,732,552
BOX NAILING MACHINES
Edward H. T. Bensemann, Wellington, Wellington, New Zealand, assignor to N. Z. Inventions Development Company Limited, Wellington, Wellington, New Zealand, a New Zealand company
Original application March 5, 1948, Serial No. 13,157. Divided and this application August 31, 1953, Serial No. 377,577
15 Claims. (Cl. 1—15)



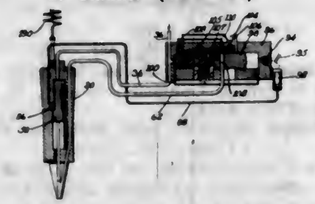
1. A nailing machine comprising nailing means, driving means for actuating the nailing means, a work supporting table positioned below the nailing means, means by which said table can be supported at selected height nailing positions in accordance with the depth of the article to be nailed, means actuated by said driving means to cause the table to drop by gravity in successive steps from its highest to its lowest nailing position, and means releasable by the said driving means for returning the table to its highest position.

2,732,553
SELECTIVE NAIL FEED MECHANISM
Edward H. T. Bensemann, Wellington, Wellington, New Zealand, assignor to N. Z. Inventions Development Company Limited, Wellington, Wellington, New Zealand, a company of New Zealand
Original application March 5, 1948, Serial No. 13,157. Divided and this application August 31, 1953, Serial No. 377,541
13 Claims. (Cl. 1—16)



1. Nail feed mechanism for a nailing machine, nail selector mechanism comprising nail support guides having slots for the nails, nail releasing means including a nail holding pin and a releasing pin traversing the slots of said support guides, a movable member by which said pins are carried, means actuated by nail driving mechanism of the machine to reciprocate said member to effect the reciprocal movement of the pins and thereby the entry and withdrawal of each of said pins alternately to each other, said releasing pin being resiliently mounted on said member to have resiliency in the direction of its movement, and nail selector means actuated by the nail driving mechanism and co-operating with said nail releasing means for the release or non-release of a nail for any predetermined nail driving stroke.

2,732,554
AUTOMATIC FASTENER DRIVING DEVICES
Clyde L. Knott, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application March 26, 1954, Serial No. 418,809
19 Claims. (Cl. 1—18)



1. A pneumatically actuated fastener feeding and driving device comprising: a driver movable between inoperative and operative positions; means for controlling the driver movements; a source of fastener supply remote from the driver; a pneumatic conduit having one end leading into the operative path of the driver for delivering a fastener thereinto, and having another end supported adjacent the fastener source; means, including a pneumatic pressure vent directed toward said other end of the conduit and operative in response to movement of the driver toward one position, for releasing a fastener from said source and blowing said fastener into open communication with said conduit; and means, responsive to movement of the driver toward the other position, for pneumatically delivering the fastener through said conduit.

2,732,555
FINGER SUPPORT FOR BOWLING
Taylor Paisley, Ferndale, Mich.
Application February 5, 1953, Serial No. 335,194
5 Claims. (Cl. 2—21)



1. A finger support comprising a pair of end walls joined at one end thereof, said end walls extending in angular relationship in approximately perpendicular planes, a side wall extending between and rigid with said end walls, and means for releasably securing said support to a finger whereby the inner surfaces of each of said end walls simultaneously abut the dorsal surfaces of the finger.

2,732,556
GIRDLE
Olga Erteszek, Los Angeles, Calif.
Application March 7, 1955, Serial No. 492,414
6 Claims. (Cl. 2—37)



1. A girdle having a front downwardly and inwardly sloping wide V waist edge lending freedom to the wearer at the front waist, a front center panel defined along its opposite sides by first edges which extend downwardly and outwardly from near the central portion of said waist edge, and by second edges which extend downwardly and inwardly from the lower extremities of said first edges, lower side sections for embracing the hips of the wearer and sewed to said second edges of the center panel, said lower side sections being formed of fabric having both horizontal and vertical elasticity and said center panel having relatively limited horizontal elasticity, and top side panels of relatively narrow vertical extent sewed to said first edges of the center panel and to the top edges of said lower side sections, said top side panels extending upwardly and outwardly from said center panel and along said sloping wide V waist edge and having elasticity in the direction of said waist edge tending when worn and stretched to exert an upward and outward pull on said first edges of the center panel, said top side panels being sewed to said top edges of the lower side sections along seams which incline progressively upwardly and outwardly in the direction of said wide V waist edge and which meet said first and second edges of the center panel at said lower extremities of said first edges.

2,732,557
SHIRT WITH COLLAR HOLD-DOWN ARRANGEMENT
Edwin V. Statia, Sr., Detroit, Mich., assignor of fifty per cent to Edward L. Chapman, Detroit, Mich.
Application June 11, 1954, Serial No. 436,011
5 Claims. (Cl. 2—132)



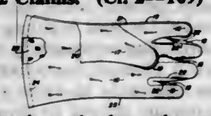
1. A flatly-held shirt and collar unit comprising a shirt body having an upper edge portion for the neck of the wearer, a collar attached to said upper edge portion and having an outside part extending downwardly into close proximity to said shirt body and terminating in corner points at the front thereof, said outside part of said collar being composed of outer and inner layers of sheet material, said inner layer of said outside collar part having a hole therethrough near its respective corner point and said shirt body having a hole therethrough disposed approximately opposite the hole in said inner layer of said respective corner part, and an approximately U-shaped clip having a pair of elongated upwardly-directed arms inserted through said holes and a bridge portion interconnecting said arms at substantially the lower ends thereof.

2,732,558
NECKTIE SPREADER
Alvah D. Booker, Gull Lake, Saskatchewan, Canada
Application September 25, 1952, Serial No. 311,453
6 Claims. (Cl. 2—157)



1. A tie spreader, comprising an elongated sheeet material body member having opposite edges adjacent one end thereof converging into an integral material impinging point extending outwardly of said one end, an ear extending laterally from said body member adjacent the opposite end thereof, a shaft slidably mounted on said ear and having a portion extending outwardly beyond said opposite end of the body member, material impinging means on said outwardly extending end portion of said shaft and directed generally oppositely from said material impinging point, and means for yieldably biasing said shaft outwardly endwise of said body member.

2,732,559
GLOVE
Irene E. Sabin, Youngstown, Ohio, assignor to Sabin Company Gloves, Youngstown, Ohio, a corporation of Ohio
Application April 7, 1954, Serial No. 421,494
2 Claims. (Cl. 2—169)

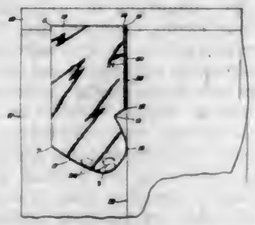


1. In a glove having a back portion with integral outwardly projecting finger back sections, a plurality of fourchettes and a palm portion with integral outwardly projecting finger front sections and an oppositely disposed integral inwardly extending cuff section; a thumb front integrally formed in a central side portion of said palm portion midway between the outer and inner ends of said palm portion, a section of said palm portion being cut away immediately below said thumb front, said thumb front having an extension beyond the adjacent side of said palm portion, said thumb front lying on an axis perpendicular to a diagonal fold line extending partially across said palm portion at the inner end of said thumb front from the inner end of said cutaway portion to the outer side of said palm portion adjacent the outer side of said thumb front, a thumb back secured at its inner edges to said palm portion and positioned partially within said cutaway portion and having its other edges secured to the edges of said thumb front, and the side edges of said back portion and palm portion secured to one another, said finger back sections, fourchettes and finger front sections having their respective edges secured to one another, the attached edges of said palm portion and back portion lying on a common longitudinal line outwardly and inwardly of said thumb front section of said glove.

2,732,560
TROUSERS POCKETS
Jordan W. Frederiksen, Sr., Chicago, Ill.
Application April 29, 1954, Serial No. 426,380
1 Claim. (Cl. 2—254)

A substantially oblong pocket for trousers and like articles of apparel adapted for attachment to the trousers

with the longer dimension vertically comprising a pair of walls of flexible, sheet material of like configuration placed in planar juxtaposition and joined along portions of their corresponding edges to form the pocket, an upper portion of one vertical edge of the pocket having a hand-receiving, access opening, and the margin of said opening being adapted for union with a corresponding opening in the vertical side seam of the trousers leg, the bottom edge of the pocket being convex downwardly and outwardly and that side of the pocket adjacent the said leg seam and below said opening also being convex rearwardly and outwardly and merging at the bottom with the curvature of said bottom edge, said convex side portion of the pocket having its upper termination forwardly of a line projected from the edge portions defining said



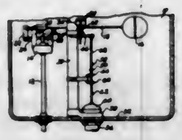
opening and joined to the lower end of the margin of said opening by a substantially straight, rear edge portion, said merging convex edges together defining a generally downwardly and rearwardly directed pouch at the lower part of the pocket, the projected line being tangent to the extreme part of the bulge of the side convexity to position said pouch forwardly of said seam when the person is erect, whereby said pocket, when carrying contents of sensible weight and the wearer is sitting or reclining, will sag about a line extending substantially from the junction of the front and top edges of the pocket to said straight rear edge portion effectively to cause the pouch of the pocket and the contents thereof to depend from the remainder of the pocket, the said line of sag serving to close off the pouch from the access opening of the pocket.

2,732,561
HIP BOOT HOLDUP HARNESS
Joseph W. Starr, Denver, Colo.
Application December 11, 1952, Serial No. 325,409
2 Claims. (Cl. 2—305)



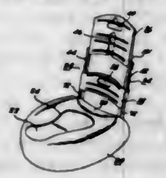
1. A hip boot holdup harness comprising a single strap folded upon itself at spaced points intermediate its ends with the portions at the folds being secured together in diverging relation and the ends of the strap being secured in overlapping relation with each end portion passing on opposite sides of the central portion of the strap between the fold points, each end of the strap being so secured to the strap at a point spaced from the other end as to thereby form a slot considerably longer than the width of the strap and in which said central portion can move freely through the slot and also freely shift longitudinally in the slot relatively to its ends, rings carried by the folded portions, an elongated resilient member secured at one of its ends to each ring, and a snap secured to the other end of each resilient member.

2,732,562
WATER CLOSET FLUSH TANKS
Henry Conte, Rochester, N. Y.
Application December 24, 1952, Serial No. 327,737
16 Claims. (Cl. 4—41)



4. In a water closet, a tank, an inlet valve, a flush valve, a float lever for opening and closing said inlet valve, a manual lever entirely independent of said inlet valve for actuating said flush valve, pivotal means supported in the tank independent of said inlet valve and constructed and arranged for directly engaging and locking said float lever in valve closed position upon reaching valve closed position, and means extending into the path of movement of said manual lever for actuating said pivotal means for unlocking said float lever solely in response to movement of said manual lever.

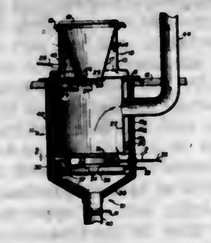
2,732,563
LOCKING MECHANISM FOR FOLDING BACK RESTS
Franklin L. Shively, Dayton, Ohio
Original application March 20, 1947, Serial No. 736,045, now Patent No. 2,523,452, dated September 26, 1950. Divided and this application August 25, 1950, Serial No. 188,982
1 Claim. (Cl. 4—112)



A bedpan comprising, in combination, a container, a pocket disposed beneath said container and permanently associated therewith, a folding back rest movable from back supporting position to folded position within said pocket, a pair of opposed tracks in said pocket, a pair of cams associated with the back rest and riding in said tracks, each of said tracks including a nesting notch at its inner end thereof adapted to receive one of said cams when the back rest is within the pocket, and a camming surface within said pocket at the bottom wall thereof and cooperating with a part of the back rest for causing said cams to be forced into said notches for locking the back rest in folded position.

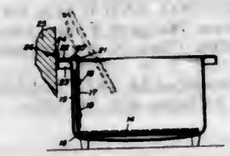
2,732,564
SANITARY CLOSET
Robert W. Potts, Fort Worth, Tex., assignor of twenty-five per cent to Ted Weiner and J. H. Snowden
Application October 13, 1952, Serial No. 314,468
3 Claims. (Cl. 4—131)

1. In a sanitary closet, an incinerator assembly comprising a vertical housing having a downwardly directed converging lower end and including an opening in the lowermost end of the latter, a vertical baffle within said housing and positioned around and spaced from the inner wall of said housing, an air inlet within the upper end of said housing, an air outlet through said baffle and extending through said housing, a horizontal plate having a depending flange therearound within the lower end of said housing and inwardly spaced from the inner surface of said baffle, an incinerator beneath said plate and positioned inwardly of said depending flange, and a receptacle positioned beneath said plate and said incinerator, the



outer dimensions of said receptacle being greater than the outer dimensions of said plate.

2,732,565
BATH TUB MAT
Fred U. Weber, Los Angeles, Calif.
Application October 20, 1952, Serial No. 315,711
3 Claims. (Cl. 4—185)



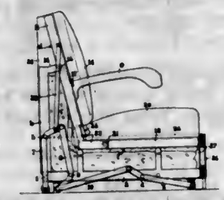
1. A bath tub mat comprising a flat member adapted for resting on the bottom of a bath tub, a bracket adapted for attaching to a supporting structure behind the top of the tub, and said bracket including a perpendicular portion extending downwardly into the tub and hinge means connecting the flat member to the lower portion of the bracket for swinging said member from a position at the bottom of the tub into a raised position above and toward one side of the tub.

2,732,566
AUXILIARY TOILET SEAT
Rudolph E. Bruelheide, McHenry, Ill.
Application September 11, 1953, Serial No. 379,519
1 Claim. (Cl. 4—239)



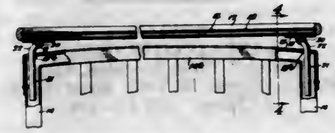
An auxiliary seat for a toilet having an upwardly opening seat provided with an opening therein comprising a pair of horizontally disposed upper and lower members, said members having circumferences thereof in alignment with each other, an apron secured to the circumference of said upper and lower members and extending between the same and partway around said circumferences to space the same from the second named seat, an opening in each of said members, a funnel mounted in said openings and extending therebetween, said apron terminating even with the upper surface of said upper member and below the lower surface of the lower member, a projection extending rearwardly from said upper member and engaging in the upper portion of the opening in the second named seat when the latter is open to retain the auxiliary seat in fixed position.

2,732,567
CONVERTIBLE SETTEES
Albert Ducrot, Paris, France
Original application July 18, 1949, Serial No. 105,303, now Patent No. 2,673,355, dated March 30, 1954. Divided and this application August 10, 1953, Serial No. 373,361
Claims priority, application France July 27, 1948
2 Claims. (Cl. 5—38)



1. A convertible settee-bed comprising a first mattress-supporting frame, another mattress-supporting frame hingedly connected through one end to said first frame, said first mattress-supporting frame being adapted to form an angle of about 90° relative to said other frame to act as a seat, and also to be positioned in coplanar relationship therewith in the bed condition of the structure, horizontal pivot pins mounted at one end of said first frame, a back pivotally mounted on said pins at about mid-height, a seat structure hingedly connected to the lower end of said back, said back and seat constituting a hinged unit adapted to be tilted back bodily outside said first and second mattress-supporting frames, a first set of legs hingedly mounted on said first frame, the fulcrum of said first set of legs being substantially coincident with the centre of gravity of said unit in its unfolded condition, another set of legs hingedly mounted on said other mattress-supporting frame, links pivoted on the one hand on said other frame and on the other hand on said legs, whereby their movements will take place in unison therewith, and other links pivoted on said first set of legs and on said back, above the pivot axis of said back.

2,732,568
BED FLOWER AND UTILITY STAND
James Kirkwood, Jr., Great Neck, N. Y., assignor to American Hospital Supply Corporation, Evanston, Ill., a corporation of Illinois
Application January 24, 1952, Serial No. 268,081
6 Claims. (Cl. 5—317)

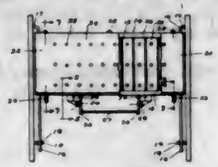


1. In combination with a bed having a pair of hollow posts at one end and a cross bar over said posts provided with openings aligned with said posts, a stand equipped with depending elongated supports removably received within said cross bar openings and within said posts for supporting said stand thereon, said supports having inwardly curved upper portions frictionally engaging the top portions of said cross bar for causing said supports to grip said cross bar.

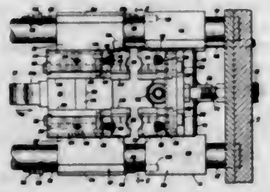
2,732,569
SAFETY GUARDS FOR CRIBS OR PLAY PENS
Bernard A. Rosen, Baltimore, Md.
Application July 17, 1952, Serial No. 299,329
4 Claims. (Cl. 5—331)

1. The combination with a crib or play pen having side fences with top and bottom rails at the opposite ends

of the fences, of a safety guard for each fence, said guard comprising plastic sheeting, strengthening spaced side members embedded in said sheeting, said members having curved projections extending above and below the ends of the sheeting fitting around the top and bottom rails, and said projections being also encased in plastic material.

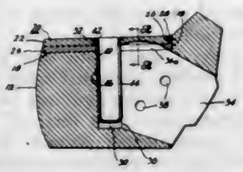


2,732,570
ADJUSTABLE PIPE FITTING CLAMP CONSTRUCTION FOR TAPPING MACHINE
Albert J. Carpenter, Canton, Ohio, assignor to The Cleveland Tapping Machine Company, Canton, Ohio, a corporation of Ohio
Application December 29, 1951, Serial No. 264,154
9 Claims. (Cl. 10—107)



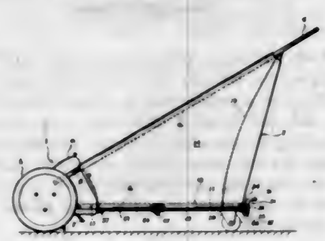
1. Work holder construction for a tapping machine including slide members, front and rear carrier members each separately reciprocable on the slide members and each movable on the slide members relative to the other, means engaging the front carrier for moving the front carrier in either direction relative to the rear carrier, means engageable between the front and rear carriers for moving the carriers in unison in either direction after a predetermined movement of the front carrier relative to the rear carrier, a plurality of work engaging jaw elements mounted on each carrier, means for adjusting each jaw element on its carrier in a plurality of directions normal to the direction of carrier movement, and means for clamping each jaw element in adjusted position on its carrier.

2,732,571
LAST CONSTRUCTION
Walter P. Field, Brockton, Mass.
Application October 26, 1953, Serial No. 388,104
2 Claims. (Cl. 12—136)



1. In a two-part pivoted, collapsible last having a heel part and a fore part releasably secured together, in combination, a flat seat on the cone portion of said heel part terminating at its forward end in an upright shoulder; a last top having an upper layer of hard fibre and a lower layer of cushioning material disposed on said flat seat with the forward end of said last top abutting said shoulder; an intermediately flanged prong the ends of which extend longitudinally into the adjacent abutting surfaces of the upper layer of said last top and said shoulder respectively; said heel part rearwardly of said prong being provided with a heightwise thimble bore extending downwardly through said last top and into the substance of the heel part therebelow; said heel part having a heightwise longitudinal slot intersecting said thimble bore and extending forwardly thereof and upwardly to said flat seat and arranged to receive pivotal means releasably securing said heel part and fore part together; said last top being rabbeted on its under side to form a longitudinally extending recess registering with and forming a heightwise extension of said longitudinal slot, said rabbeted recess extending into the upper layer of the last top but stopping short of the forward end of said last top; and means for securing the last top to the flat seat rearwardly of said longitudinal slot including a thimble provided at its upper end with an outward flange in engagement with said last top, disposed in said thimble bore, and secured against movement outwardly of said bore, and fastening means rearwardly of the thimble for securing the last top to the last.

2,732,572
LAWN, GROUND, AND WALK SWEEPERS
George W. Dunham, Westport, Conn., assignor to Savage Arms Corporation, Utica, N. Y., a corporation of Delaware
Application December 24, 1952, Serial No. 327,886
1 Claim. (Cl. 15—79)



In a lawn sweeper including a sweeper frame structure supported on a pair of spaced ground engaging wheels, and a U-shaped propelling handle extending rearwardly from said frame and having side members connected at their forward ends to the sweeper frame and connected adjacent their rear ends by a cross bar; a pair of spaced frame side members connected at their forward ends to the sweeper frame and extending rearwardly therefrom, a rear frame member connecting the rear ends of said frame side members and forming therewith an open frame, flexible hopper forming side and rear wall members respectively connected along their upper edges to said handle side members and cross bar and along their lower edges to said frame side members and said rear frame member, gusset members extending across the rear corner portions of said open frame and fixed thereto, spring struts connected at their upper ends to said cross bar, the lower ends of said struts releasably engaging said gusset members to hold said flexible hopper wall members extended between the frame and handle members to which they are attached, a hopper floor member pivoted intermediate its ends to the side members of said open frame on a transverse axis positioned forwardly of the center of gravity of the floor member to cause the forward portion of the latter to tilt upwardly and rearwardly and the rearward portion of the floor member to tilt downwardly and forwardly about said pivotal connection to the open frame side members upon upward and forward tilting of the open frame, and latch means mounted at the rear edge of said floor member, at least one of said gusset members being extended rearwardly of said frame for releasable engagement by said latch means.

2,732,573
SNOW AND ICE REMOVER
John E. Hyland, Little Falls, Minn.
Application August 11, 1952, Serial No. 303,671
6 Claims. (Cl. 15—82)



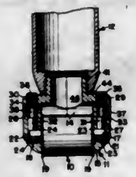
1. In a road snow and ice remover for attachment to a vehicle, a pair of elongated cylindrical brush units, frame means for attaching said units the vehicle comprising a pair of equalizer bars extending longitudinally and spaced transversely with respect to the normal direction of travel of the vehicle, said bars rotatably supporting the brush units transversely between them in longitudinally spaced relation for parallel rotation on their respective longitudinal axes, supports carried by the bars for attaching the same to the vehicle, said supports having pivotal connection with the bars on an axis lying centrally between and on a common plane with said longitudinal axes of the brush units.

2,732,574
COMBINED BRUSH AND MOP
Frank A. Gesell, Belleville, N. J., and Edwin N. Woistmann, Buffalo, N. Y., assignors, by mesne assignments, to General Mills, Inc., Minneapolis, Minn., a corporation
Application November 15, 1949, Serial No. 127,281
5 Claims. (Cl. 15—115)



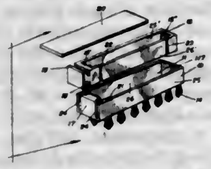
5. A mop construction comprising: a handle device; a plurality of normally flat, plan view circularly shaped blocks of porous, liquid-absorbing material resilient when moist, relatively arranged to provide a cleaning element; and means including a fastening device penetrating each of said blocks centrally thereof and engaging one end of said handle device locking said blocks thereto; said fastening device compressing substantially only the central portions of said blocks to an extent whereby the edge portions of said blocks extend generally radially outwardly in foliate relation from said one end of said handle device and define a cleaning element surface of generally hemispherical form extending beyond said one end of said handle device and enclosing the end of said fastening device remote from said one end of said handle device.

2,732,575
GLUING APPARATUS
Ralph M. Faust, Westchester, Ill., assignor to Swift & Company, Chicago, Ill., a corporation of Illinois
Application November 21, 1952, Serial No. 321,900
1 Claim. (Cl. 15—132.5)



A liquid dispenser applicator including a cylindrical roll having portions of either end thereof of greater diameter than the remainder of the roll, said portions having the periphery thereof knurled, said roll having axial shafts at each end thereof, a housing having an inner opening of greater size than the size of said roll, said inner opening extending through one side of said housing, the shape of said opening at said side being substantially identical to the shape of a cross section of said roll taken parallel to the axis of the roll to one side of said axis, said roll being mounted within said opening, said housing having recesses from said opening to receive said shafts and form bearings therefor, said recesses being elongated in a direction normal to said side to permit said roll to move toward and away from said side, said housing having bores generally normal to said side and intersecting said recesses, adjustable stop means within said bores to limit the movement of said shafts in said recesses, whereby to control the maximum distance between the edge of the inner opening of said housing and said cylindrical roll thereby to govern the amount of liquid to be dispensed by said roll, the ends of said stop means being accessible when said liquid dispenser is assembled and in an operative condition and resilient means cooperating with said stop means to urge said shafts toward said side.

2,732,576
DISPOSABLE TOOTH BRUSH
Bernard A. Rosen, Baltimore, Md.
Application December 27, 1954, Serial No. 477,666
3 Claims. (Cl. 15—137)



1. A tooth brush unit comprising a housing having parallel side walls, parallel end walls and a bottom wall secured to the said side and end walls, a cover for the open side of said housing, said bottom wall having a pair of parallel slots therethrough, brush bristles carried by and extending outwardly of said bottom wall in the vicinity of said slots, one of the aforesaid end walls having a pair of vertical parallel openings therethrough, a hollow shell comprising opposite side walls and parallel end walls secured to said side walls, said shell being slidably receivable in the housing with its side walls guided in the aforesaid parallel openings, said shell being adapted to receive a dentifrice through the open side of the housing, between its side walls and the bottom wall of the housing, and to dispense the dentifrice through the slots in the said bottom wall upon longitudinal sliding outward movement of the shell within the housing.

2,732,577
BRUSH
Hermann R. Abbrecht, Birmingham, Mich.
Application July 31, 1950, Serial No. 176,835
15 Claims. (Cl. 15—171)



1. A brush comprising an elongated core having sides, a front edge and a back, filler material elements doubled over the back of said core, separate elongated retainers

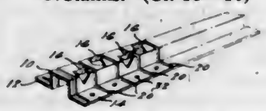
at the opposite sides of said core adjacent its front edge clamping the filler material elements against the opposite sides of said core, and tangs on the front edge of said core bent rearwardly and extending around the retainers to secure the retainers in place and to press the retainers against the filler material elements.

2,732,578
SEPARABLE PAINT BRUSH
Ernest L. Hawkins, Chicago, Ill.
Application February 28, 1951, Serial No. 213,105
2 Claims. (Cl. 15—202)



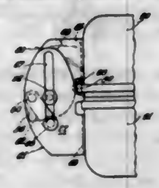
1. A paint brush comprising, a pair of brush heads having mating and engaging side surfaces, each brush head including a ferrule having a flat side, and curved ends, bristles carried at one edge of the ferrule and a handle portion carried at the other edge of the ferrule, a recess across the flat side of each ferrule parallel to and between the edges of the ferrule to form a transverse passage through the paint brush when the flat sides of the ferrules are brought together by bringing together the mating and engaging side surfaces of the brush heads, clips overlying the adjacent curved ends of the ferrules and having holes in alignment with the transverse passage, a bolt extending through the holes in the clips and along the recesses forming the transverse passage, and a nut carried by the bolt for clamping the clips to the ferrules for detachably holding the brush heads together.

2,732,579
CARPET-TACKING STRIP
Warren H. Farr, Grosse Pointe, Mich., assignor to Ainsworth Manufacturing Corporation, Detroit, Mich., a corporation of Michigan
Application January 2, 1953, Serial No. 329,190
8 Claims. (Cl. 16—16)



6. An elongated carpet nailing strip of sheet metal having a plurality of longitudinally spaced upstanding carpet-impaling prongs, each prong being formed from a generally triangular piece struck from the strip and said piece being rolled into a generally circular conformation with the side edges thereof disposed in abutting relation so as not to cut the carpet fabric impaled by the prong, each prong being inclined transversely of the strip and having the terminal portion thereof bent abruptly horizontally to overlie fabric in the carpet and to hold the latter down on the strip, said strip being slotted transversely at spaced points therealong and said slots extending substantially entirely across said strip but terminating short of the edges thereof and defining relatively narrow connecting portions at the ends of the slots which are readily flexible so as to permit the strip to be rolled for shipment and which are easily severable to facilitate cutting of the strip into sections of desired length.

2,732,580
HINGE FOR COOKING DEVICE
Fred C. Schwaneke, Chicago, Ill., assignor to Dormeyer Corporation, Chicago, Ill., a corporation of Illinois
Original application April 7, 1951, Serial No. 219,796. Divided and this application November 1, 1952, Serial No. 318,469
4 Claims. (Cl. 16—166)



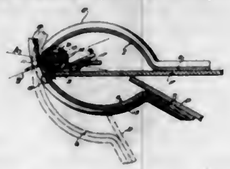
1. In a device of the class described having an upper and lower housing, a hinge element secured to the lower housing having a vertical track with a stop at its lower end, a second hinge element secured to the upper housing and having a member supported on said track for movement therealong above said stop, a link pivoted at one end to said upper element at one side of said member and at the other end having a means supported on said track for bodily displacement therealong towards and away from said stop below said member and adapted to engage said stop in weight bearing relationship said link displacing said upper element upwardly as the hinge is opened.

2,732,581
HINGE STRUCTURE FOR MOLDED PLASTIC BOXES
Ervin R. Heck, Westmont, Ill., assignor to Bradley Associates, Inc., Chicago, Ill., a corporation of Illinois
Application December 13, 1954, Serial No. 474,849
2 Claims. (Cl. 16—171)



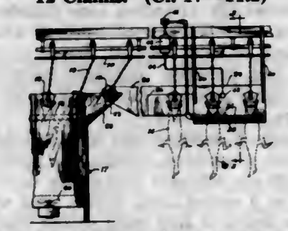
1. An integrally molded hinge for a pair of box sections forming a molded box structure of the character described, comprising a hinge pin formed integrally on the rear wall of one of said box sections and a hook formed integrally on the rear wall of the other box section and adapted to engage said hinge pin, said hook having a continuous internal annular channel, and said hinge pin having a boss adapted to be confined in said continuous channel and interlock with said hook.

2,732,582
FLUSH HINGE
Lloyd R. Poe, Los Angeles, Calif., assignor to Clark Hartwell and Eleanor M. Hartwell, copartners, doing business as Hartwell Aviation Supply Company, Los Angeles, Calif.
Application December 15, 1952, Serial No. 326,089
10 Claims. (Cl. 16—179)



1. A hinge construction comprising: a first hinge member having an arcuate portion, one arcuate extremity of said hinge member being folded under the arcuate portion to form a journal loop, said arcuate portion and journal loop having a plurality of circumferentially extending slots; a second hinge member having an arcuate surface adapted to ride on the arcuate portion of said first hinge member and including loop elements extending through said slots; and a hinge pin connecting said loop elements to retain said second hinge member on said first hinge member for relative movement of said hinge members about a primary axis located at the center of curvature of said arcuate portions and movement of said hinge members about a secondary axis located at the center of curvature of said journal loop and pin.

2,732,583
POULTRY PROCESSING APPARATUS
Delos B. Van Dolah, Chicago, Ill., assignor to Swift & Company, Chicago, Ill., a corporation of Illinois
Original application April 22, 1950, Serial No. 157,421, now Patent No. 2,663,049, dated December 22, 1953. Divided and this application August 21, 1952, Serial No. 305,599
12 Claims. (Cl. 17—11.2)



1. A device for scalding birds preparatory to picking the feathers therefrom, including a fluid container adapted to hold a heavier than air heated fluid in which the bodies of the said birds may be immersed, leg scalding means adjacent said container constructed and arranged to apply heated fluid to the legs only of the birds to additionally scald only the legs of the birds, and conveying and supporting means extending over said container and said scalding means and supporting the birds by the legs with the bodies of the birds in said container and said legs sequentially in said scalding means.

2,732,584
APPARATUS FOR HANDLING ARTICLES OF MANUFACTURE
Leonard J. Bishop, Birmingham, Mich., assignor to Mechanical Handling Systems, Inc., Detroit, Mich., a corporation of Michigan
Application November 24, 1952, Serial No. 322,325
17 Claims. (Cl. 18—4)



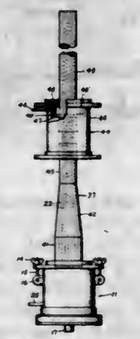
1. Apparatus of the class described comprising a conveyor movable along a predetermined path of travel, a mold assembly movable along said path of travel by the conveyor and having a base section and a cover section pivoted for swinging movement to open and closed positions relative to the base section, means pivotally mounting the base section on the conveyor for swinging movement relative to the conveyor about an axis extending in the direction of travel of the conveyor, and means positioned to one side of the conveyor and engageable with the mold assembly for holding said assembly in a vertical position relative to the conveyor.

2,732,585
SPINNER HEAD
Dan B. Wicker, Stamford, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
Application February 12, 1952, Serial No. 271,126
7 Claims. (Cl. 18—8)



1. A device for the extrusion of filaments of a coagulable material which comprises an indirect heat exchanger having a shell provided with walls supporting a plurality of conduits in which the coagulable material is heated while passing therethrough by heat transferred through the conduits from a heating medium circulating through the shell on the outside of the conduits, a cup-shaped spinneret provided with orifices through which the heated coagulable material is extruded in the form of filaments and a projecting flange of high thermal conductivity attached to a conduit outlet wall and extending into the spinneret in order to supply heat from the heating medium to the coagulable material immediately adjacent to the spinneret orifices.

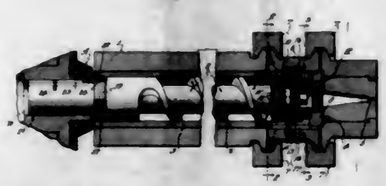
2,732,586
SPINNING OF FILAMENTARY MATERIALS
William H. Bradshaw, New Rochelle, N. Y., and Russell O. Denyes, Maplewood, N. J., assignors to Celanese Corporation of America, New York, N. Y., a corporation of Delaware
Application April 30, 1952, Serial No. 285,238
14 Claims. (Cl. 18—8)



1. In an apparatus for the spinning of filamentary materials, the combination with a spin pot, of a spinning

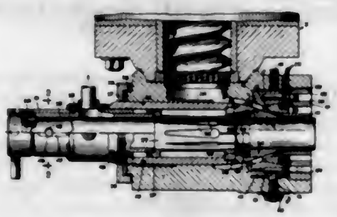
head including a spinnerette having at least 300 filament-forming apertures therein, means for introducing a coherent mass of liquid coagulating medium into said spin pot, means for introducing a spinning dope into the spinning head whereby it will flow through the filament-forming apertures in the spinnerette into the coagulating medium to form a bundle of filaments, and a spin tube through which the coagulating medium and the bundle of filaments pass upwardly from the spin pot, the internal diameter of said spin tube exceeding the diameter of the bundle of filaments by at most about 1 inch at any point along its length.

2,732,587
MASTICATING HEAD FOR AN EXTRUSION MACHINE
Edward S. Greene, Union, N. J.
Application March 23, 1953, Serial No. 343,846
4 Claims. (Cl. 18—12)



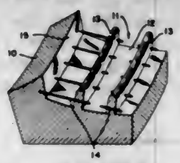
1. An extrusion machine comprising a cylinder; an adjustable length screw feeder in said cylinder so that said feeder is adapted to convey plastic material and discharge it from the cylinder under pressure; a chamber of conical shape removably secured to the discharge end of such cylinder; an internal toothed ring on the inner wall of such chamber and projecting outward therefrom; serrations on the inner wall of such chamber on both sides of the ring of teeth; a coaxial conical shaped extension of said feeder rotatable within the chamber; a recess in the surface of the extension adapted to accommodate the teeth of said ring in close proximity thereto; and serrations in the surface of the extension on both sides of said recess.

2,732,588
EXTRUDERS
Hubert A. Myers, North Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application August 7, 1951, Serial No. 240,643
11 Claims. (Cl. 18—13)



1. An extruder, which comprises an extruding head having a core passage and a socket concentric with the core passage, a core tube having a shank portion having a projection extending laterally thereof and designed to fit into the socket, and quick-detachable elongated draw means slidable in the passage and having a projection extending laterally thereof for engaging the projection on the shank portion to lock the core tube in the socket, said draw means extending from the exterior of the extruding head and being operable from the exterior of the head.

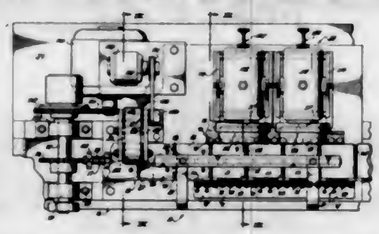
2,732,589
METHOD AND APPARATUS FOR MOLDING RUBBER
Audrey H. Steadman, Manhattan, Kans., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application May 28, 1952, Serial No. 290,427
6 Claims. (Cl. 18—44)



1. Apparatus for molding rubber vehicle tires comprising, a mold member having a cavity therein for receiving an uncured tire, an inwardly extending circumferential rib on the tread forming wall of the cavity, core members secured to said rib and extending transversely outwardly from said rib at a point spaced from said tread forming wall, at least a portion of the space between said outwardly extending core members and said tread forming wall being unobstructed, whereby when the tread stock of said uncured tire is caused to flow under heat and pressure, portions thereof will flow around said core members and reunite in said unobstructed space to form slits.

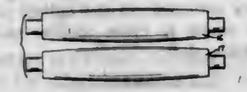
6. A method of molding slits in the tread of a rubber vehicle tire comprising, coating the tread of an uncured tire with an adhesion preventing substance, placing said tire in a curing mold having core sections supported in the cavity of said mold spaced from the tread forming wall thereof, portions of said space between said core sections and said tread forming surface being unobstructed, curing said tire under heat and pressure whereby portions of the rubber will flow on either side of said core sections and contact in said unobstructed space without adhesion because of the presence of the adhesion preventing substance and thereby form slits in the surface of the tire tread and removing said tire from said curing mold after curing.

2,732,590
METHOD OF AND APPARATUS FOR PRODUCING MICRO-DIMENSIONED CERAMIC TILE
Leon J. Le Clercq, Glendale, Calif., assignor to Gladding, McBean & Co., Los Angeles, Calif., a corporation of California
Application September 20, 1952, Serial No. 310,658
9 Claims. (Cl. 18—47.5)



8. In an apparatus for precisely dimensioning tile, the combination of: a conveyor means; a plurality of generally flat, normally horizontally disposed tile holders carried by the conveyor means for movement through a grinding zone; positioning means on each holder adapted to position a tile with one longitudinal edge face exposed and extending beyond said holder and lying parallel to the direction of movement; a contiguous edge face lying transversely to said direction of movement; and means at said grinding zone in engagement with each holder and adapted to engage a tile held by each holder during movement through said zone for maintaining said holders and tile in a selected path of travel and restraining against vertical and lateral deviation from said path; grinding means including a grinding face vertically disposed parallel and at one side of said selected path of travel of said holders and tile and adjustably movable into selected position therewith for grinding said exposed edge face into precise spaced parallel relation to the opposite edge face of said tile; and drive means for the conveyor means.

2,732,591
METHODS OF ROLLING SHEET MATERIAL
Warren C. Whittum, Ansonia, Conn., assignor to Farrel-Birmingham Company, Incorporated, Ansonia, Conn., a corporation of Connecticut
Application July 5, 1950, Serial No. 172,056
1 Claim. (Cl. 18—55)



The method of rolling sheet material which comprises passing the material between closely spaced rolls under pressure, each of said rolls being generally of crown shape but said shape being modified by an amount substantially equal to the differential expansion of the diameter of the roll at points along its length due to the differences of temperature at said points under working conditions whereby the distance between the roll surfaces is maintained substantially constant under changes in temperature during the operation and under pressure to which the rolls are subjected.

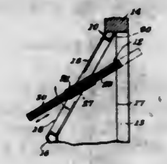
2,732,592
EXTRUSION OF THERMOPLASTIC MATERIAL
Eustace Tunnicliff, Leigh, and Ronald Barlow, Accrington, England, assignors to British Insulated Callender's Cables Limited, London, England, a British company
Application June 26, 1951, Serial No. 233,564
Claims priority, application Great Britain July 6, 1950
7 Claims. (Cl. 18—55)



1. A method of manufacturing an insulated electric conductor which comprises applying a covering of polyethylene to said conductor by extrusion, and passing said conductor during the cooling of said covering after extrusion through three zones, the temperatures of the zones and the rate of passage of the wire through them being so related that in the first zone, which is kept at a temperature of about 105° C., substantially all of the covering is reduced to between 105° C. and 110° C., in the second zone, which is kept at about 90° C., the covering solidifies completely and in the third zone the covering is cooled to the desired approach to the external temperature.

2,732,593
WINDOW CONSTRUCTION
Paul Judson, Alhambra, Calif.
Application June 22, 1953, Serial No. 363,291
2 Claims. (Cl. 20—40)

1. A wall window construction comprising a rectangular main frame mounted in said wall, two side sashes each having an outline of a triangle with a vertical base, two slanting sides and an apex, the apex of said triangle projecting outwardly beyond the plane of said wall, said side sashes lying in two parallel vertical planes perpendicular to the plane of said wall, upper and lower sashes closing off the space outlined by said main frame and the four slanting sides of said two side sashes, two pairs of pivots mounted respectively on the upper and lower slanting



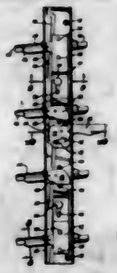
sides of said side sashes, and a U-shaped channel rotatably supported by each pivot, said lower and upper sashes being slidably mounted in the respective U-shaped channels, whereby said upper and lower sashes are rotatable around the two pivots and slidable in and out along said U-shaped channels upon the rotation of said sashes into open positions.

2,732,594
DOUBLE HUNG WINDOW SASH
Paul L. Adams, Wayne A. Norman, and Charles K. Sitterly, Dubuque, Iowa, assignors to Carr, Adams & Collier Company, Dubuque, Iowa, a corporation of Iowa
Application July 11, 1950, Serial No. 173,192
2 Claims. (Cl. 20—52)



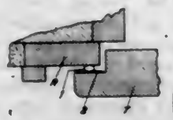
2. In combination, a window frame having opposite jambs, a sash having opposite stiles and top and bottom rails, each of the stiles being formed with a vertical confining channel adjacent their respective jambs terminating at its lower end in an outwardly opening recessed pocket, a prestressed, self-coiling ribbon spring rovingly mounted in said pocket and having a portion of its length extended tangentially therefrom into and through said confining channel, said channels having confining sides acting to confine said spring and prevent deflection of the spring due to the prestressing thereof, a reverse hook for holding each spring constructed to utilize the spring torque in holding the spring thereon, said hooks being anchored to the jamb in vertical alignment with said channels at a position just above each stile when the sash is in its lowermost position and comprising a mounting extending outwardly away from the jamb to a position overlying the window sash and a tongue extended generally horizontally and inwardly therefrom toward the jamb, the spring near its free end being provided with a slot for reception of the tongue to releasably connect the spring to the hook whereby to maintain constant tension counterbalance on the sash, the torque of the spring adjacent the hook urging the free end of the spring away from the jamb and toward the tongue mounting to assure maintenance of its connection with the hook fitting, said confining channels being shaped so that the spring hooks may be received therein as the sash is elevated so that raising of the sash will cause said channels to receive said hooks and permit continued elevation of the sash.

2,732,595
LOUVER CONSTRUCTION
Daniel H. Hartwell, Whittier, Calif.
Application December 3, 1954, Serial No. 472,815
1 Claim. (Cl. 20—62)



In louver hardware, a mechanism supporting strip adapted to fit against the wall of an opening, said supporting strip defining a substantially U-shaped channel, louver slat supports rotatably mounted in spaced relation along the supporting strip, elongate substantially vertically disposed offset bosses centered about said louver slat supports, said offset bosses being formed with inner offset edges in alignment, said slat supports having opposed side walls formed with a boss-engaging extension on each side for engaging an inner edge of a corresponding offset boss portion, the opposite side wall of each said such slat support having a flange portion adapted to make a slidable fit against the top of a respective corresponding boss portion to provide a weather seal, actuating cams attached to the supports for rotating the same upon actuation of the cams, a cam actuating bar slidably mounted adjacent the cams, cam actuating projections fixed in spaced relation to the bar and in sliding contact with the cams, bar actuating means for sliding the bar along the supporting strip, and washers mounted axially of corresponding slats and having radially extending fingers extending between said offset bosses and adapted to engage adjacent end portions of said bosses to seal thereagainst in the closed position of the slats.

2,732,596
DRAUGHT PREVENTERS FOR WINDOWS, DOORS, AND THE LIKE
Heinrich Kellner, Bernkastel-Kues, Germany
Application July 5, 1951, Serial No. 235,134
1 Claim. (Cl. 20—69)



A sealing strip comprising, in combination, an elongated tubular portion made of a resilient material; an elongated flat strip portion having opposite faces and being coextensive with said tubular portion, one of said faces being substantially tangent to and in intimate contact with the outer surface of said tubular portion; and permanent adhesive means on the other face of said strip portion for securing the same together with said tubular portion to a surface, whereby the sealing strip may be positioned relative to and adhered to a surface, without the intermediary of extraneous adhesive means, in such a manner that another surface may engage and compress said tubular portion, the latter thereby sealing the space between said surfaces.

2,732,597
METHOD OF MAKING WOODEN STRUCTURAL ELEMENTS, IN PARTICULAR FLOOR-COVERING SLABS AND A WOODEN STRUCTURAL ELEMENT MADE ACCORDING TO THIS METHOD, IN PARTICULAR A FLOOR COVERING SLAB
Lorenz Contratto, Sisikon, Switzerland
Application February 29, 1948, Serial No. 12,174
In Sweden December 21, 1944
Section 1, Public Law 690, August 8, 1946
Patent expires December 21, 1964
3 Claims. (Cl. 20—75)



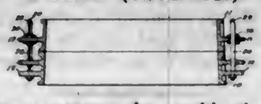
1. A method of making wooden covering slabs for walls and floors, consisting in arranging wooden splints in the form of match splints having corresponding dimensions parallel to each other and with the fibres of the splints running lengthwise thereof, impregnating the splints with a waterproofing and binding medium and exerting a heavy pressure on the splints to cause them to change their shape in cross section and to lie close together and form a slab.

2,732,598
WOOD PANEL CONSTRUCTION
David C. Crawford, Grosse Pointe Woods, Mich.
Application July 17, 1951, Serial No. 237,208
6 Claims. (Cl. 20—91)



1. A wood panel assembly comprising a frame having oppositely disposed frame members, a face member secured to only one side of said frame members, said face member being fabricated of material having a higher rate of expansion than that of the frame members, a pair of spaced backing strips secured to the other side of said frame members, said backing strips also being fabricated of material having a higher expansion rate than said frame members and having a total area less than that of said face member, and means causing said backing strips to coact with said frame members to counteract the tendency of said face member to bow said frame members.

2,732,599
MOLDER'S FLASK
Russell J. Hines, Lakewood, Ohio, assignor, by mesne assignments, to Hines Flask Company, Cleveland, Ohio, a corporation of Ohio
Application April 9, 1951, Serial No. 219,953
1 Claim. (Cl. 22—110)



In a molding apparatus, the combination of a mating pair of separable flask members adapted to be aligned in accurate registered relation with each other, one of said members having a receiving aperture along the axis of alignment, a pin carried at one end by the second member and extending in a direction parallel to the axis of alignment and through the receiving aperture for holding the members in accurate registered alignment with each other, said pin having a progressively increasing cross sectional area from said one end throughout the major portion of its length and tapering inwardly at the other end to a lesser cross section, said pin also having means for reducing the enlarged cross-sectional area by permitting the pin to the resiliently squeezed together for insertion into the receiving aperture, said means consisting of the axial portion of said pin having an open slit extending along its longitudinal axis from the inwardly tapered end throughout the major portion of its length and terminating short of said one end to form an integral base portion having a pair of outwardly diverging finger portions with inwardly tapered extremities, said finger portions being resiliently yieldable toward each other about a transverse axis through the split portion of a pin, the inwardly tapered surface of said other end of the pin being provided with a circumferential groove spaced from the pin extremity, and a ring occupying said groove to limit the spreading of the split end of the pin, the external diameter of said ring being less than the diameter of the integral base portion of said pin.

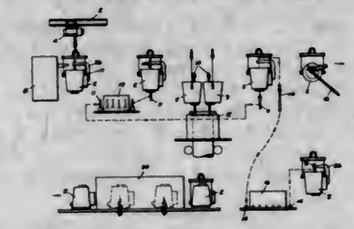
2,732,600
SAND CORES HAVING HIGH-TEMPERATURE STRENGTH AND METHOD OF PRODUCING SAME
Dean K. Haniak, Birmingham, and Robert E. Clague, Berkley, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 10, 1951, Serial No. 255,784
14 Claims. (Cl. 22—165)



1. A method of treating a sand core to increase its high-temperature strength which comprises immersing a sand core in an ethyl silicate solution for a period of time sufficient to soak substantially through said core, and subsequently immersing said core in a waterglass solution for a time sufficient to form a hard outer supporting layer.

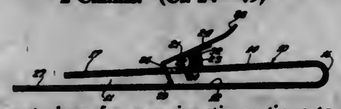
11. A unitary sand core characterized by high-temperature strength and having an interior portion impregnated with ethyl silicate and an outer layer impregnated with waterglass and ethyl silicate.

2,732,601
METHOD OF CONTINUOUS CASTING
Siegfried Junghans, Schorndorf, Wurttemberg, Germany
Application September 6, 1950, Serial No. 183,430
Claims priority, application Germany November 22, 1948
2 Claims. (Cl. 22—200.1)



1. A method for the continuous casting of a high melting metal such as steel comprising filling a first ladle having an off-center stopper therein with molten metal, then attaching a preferably preheated pouring nozzle to said first ladle, positioning said first ladle above a mold, opening said stopper and pouring metal in said mold while simultaneously turning said first ladle 180 degrees while moving the first ladle and nozzle from one side of the mold to the other to alter its position above said mold and provide clearance for a second ladle above the mold, said metal being transported to the mold and poured before said metal is cooled below casting temperature and before the useful life of the ladle is destroyed by the molten metal therein, positioning a second similar ladle above said mold and discharging its content into the mold immediately upon the exhaustion of said first ladle, and recycling said first and second ladles in a similar manner.

2,732,602
CRAVAT CLASP
Harvey Quimby, Caldwell, N. J.
Application August 14, 1952, Serial No. 304,411
2 Claims. (Cl. 24—49)



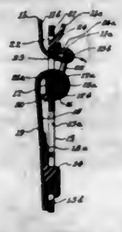
1. A cravat clasp for securing tie sections to the hem of a shirt in axially aligned central disposition thereon, comprising an open throat member having a first flat elongated bar section adapted to be disposed over the tie sections and a second flat bar section connected to the first bar section by an integral end, said second bar section being provided with a transverse opening located at approximately the longitudinal center of the first bar section, a bearing member on the second bar section, a latch plate pivotally connected to the bearing member, said latch plate having an inwardly directed nosing formed on one end for disposition in registration with the opening in the second bar section and freely movable therethrough, spring means engaging the second bar section and the latch plate for normally urging the nosing through said opening, responsive to said spring means, whereby the clasp may be supported on a shirt and tie by passing the free ends of the tie between the bar sections, while holding the latch plate nosing out of the opening and then centering the clasp and tie on the shirt and releasing the latch plate to engage the shirt hem responsive to the force of the spring, thereby holding the free ends of the tie and the clasp securely to the shirt in centered relation, the nosing forcing some of the shirt hem through the opening in the second bar section against the tie sections and against the inner face of the first flat bar section.

2,732,603
SECURING DEVICE
Eugene Morehouse, Providence, R. I., assignor to B. A. Ballou & Co., Incorporated, a corporation of Rhode Island
Application March 15, 1952, Serial No. 276,788
4 Claims. (Cl. 24—108)



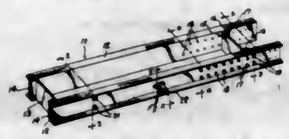
1. A securing device for a stud or the like comprising a two-part hollow cap with one part having a central opening therein through which a stud may pass, a clutch comprising a pair of jaws aligned with said opening to grip a stud extending therethrough, a narrow neck portion connecting each of said jaws to the two parts of the cap, said jaws being flexible at said neck portions to be swung out of the plane thereof, a generally arcuate lever extending from each jaw through said cap at a point substantially diametrically opposite said neck portion, said levers extending beyond the cap on a general upward slant sufficiently to allow them to be grasped with a squeezing force thereby causing the jaws to flex in a general upward arc at the narrow neck portions to separate the jaws to open position.

2,732,604
GIRDLE GARTER FASTENER
George R. Keltie, Woonsocket, R. I., assignor to American Wringer Company, Inc., Woonsocket, R. I., a corporation of Rhode Island
Application July 17, 1952, Serial No. 299,454
2 Claims. (Cl. 24—245)



1. Fastening means comprising a rigid frame having a pair of apertures with a cross piece therebetween and a first narrow slot at one extremity thereof, a resilient clip in said first slot, a first rigid loop pivotally connected to said clip for pivotal movement relative to said frame, a second rigid loop for engaging a stocking having means defining a second narrow slot at one extremity thereof receiving said clip, said second loop being narrowed at its opposite extremity, a garter button for said second loop adapted to force fit the narrowed extremity opposite said second slot, a flexible tab passing through the second slot having a resilient thickened end portion that is anchored by said clip in said second narrow slot and mounting said garter button at the opposite end, and a looped flexible strap extending through one of said apertures over said cross piece and through the other aperture and enveloping said first loop, said first loop being swingably movable about said clip and relative to said frame to move the enveloping strap in and out of clamping engagement against said frame.

2,732,605
APPARATUS FOR FORMING STONE BUILDING SLABS
William D. Johnson, Austin, Tex.
Application May 2, 1952, Serial No. 285,729
1 Claim. (Cl. 25—121)



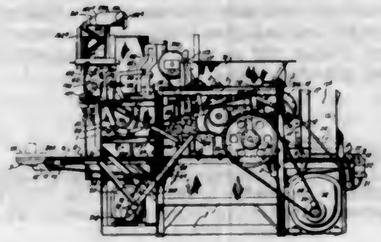
A block molding apparatus including a form comprising a pair of parallel, elongated, outwardly facing longitudinal channel bar members, a first transverse vertical plate member rigidly secured to the ends of the longitudinal channel bar members at one end of the form, a second transverse vertical plate member, respective flanges on the vertical ends of the second plate member, said flanges being perpendicular to said second plate member and being engageable in face to face relation with the inside surfaces of the longitudinal channel bar members, respective fastening members detachably securing said flanges to the webs of the channel bar members, said second plate member being located adjacent the other end of the form, respective horizontally active electric vibrators secured to the intermediate portions of the webs of the longitudinal channel bar members in transverse alignment with each other, a flat supporting body underlying said form, clamp means on said body engageable with the flanges of said channel members, a platform beneath said body, a plurality of pairs of wheels supporting said platform, and spring means supporting said body on said platform.

2,732,606
CONCRETE FORM TIE
John J. Wheeler, Staten Island, N. Y.
Application February 19, 1954, Serial No. 411,395
2 Claims. (Cl. 25—131)



1. In a concrete form tie, a pair of flexible coextensive rods having inner ends and outer ends, spacing means extending between and secured to the rods at a point intermediate the ends of the rods and rigidly spacing intermediate portions of the rods from each other, the portions of the rods between said spacing means and the outer ends of the rods being flexible relative to each other, split nut elements located between the rods and composed of nut sections fixed thereto at points between said spacing means and the outer ends of the rods, and lag screws threaded into said nut elements, said nut sections comprising pairs of flexible half coils, each pair of half coils comprising a coil having a laterally projecting coil terminal, and locking means for each nut element comprising a flexible ring slidably embracing the rods and movable therealong from an inoperative position inwardly of the related nut element to an operative position surrounding the related nut element, and a flexible locking arm fixed on the ring, said arm having an opening receiving the related coil terminal so as to lock the ring in operative position, said locking arm being flexible out of engagement with the coil terminal so as to release the ring for movement to inoperative position, the locking rings being dimensioned to compress the nut sections toward each other in the operative position of the rings.

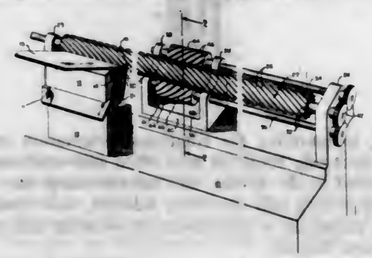
2,732,607
METHOD FOR MAKING STRUCTURAL MEMBERS
David H. Dodd, Gallatin, Tenn., assignor of one-half to W. C. Windsor, Jr., Dallas County, Tex.
Application May 31, 1950, Serial No. 165,184
8 Claims. (Cl. 25—154)



1. The method of molding a structural member from mortar or the like comprising: the placement by placing elements of reinforcing members in a mold, the deposit of a quantity of mortar within the mold about the reinforcing members, the withdrawal from the mold of the elements employed to place the reinforcing members, and vibrating the mortar with the reinforcing members therein after the withdrawal of the reinforcing placing elements.

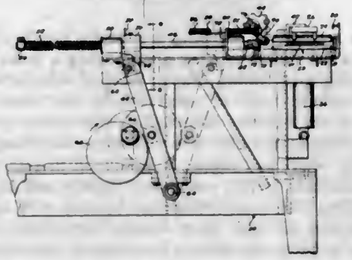
2,732,608
CLOTH SHEARING MECHANISM
Charles G. Richardson, Springfield, Vt., assignor to Parks & Woolson Machine Co., Springfield, Vt., a corporation of Vermont
Application November 4, 1952, Serial No. 318,605
3 Claims. (Cl. 26—15)

3. In a cloth shearing machine, a relatively long shearing cylinder having spaced and longitudinally extending blades at its periphery, end bearings supporting the shearing cylinder for rotation on its longitudinal axis, a ledger knife extending longitudinally of the shearing cylinder in shearing cooperation with the blades thereof, a cylindrical rotor parallel with and in peripheral supporting contact with an intermediate portion of the shearing cylinder between its blades and located at the side of the shearing cylinder opposite to that of the ledger knife, the ledger knife and rotor being disposed laterally and



at opposite sides of the shearing cylinder, a like cylindrical rotor disposed beneath and in like supporting contact with the shearing cylinder, bearings supporting the rotors for rotation on their longitudinal axes, the rotors being recessed longitudinally thereof to receive the blades thereinto, and means connecting the rotors for rotation on their longitudinal axes at equal peripheral speeds with the shearing cylinder.

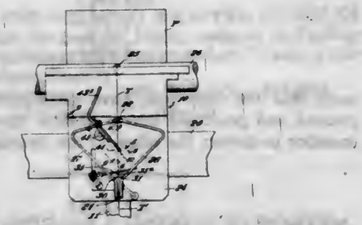
2,732,609
BOBBIN STRIPPER AND METHOD
Richard Ferguson, Charlotte, N. C., assignor to The Terrell Machine Company, a corporation of North Carolina
Application November 23, 1951, Serial No. 257,858
20 Claims. (Cl. 28—20)



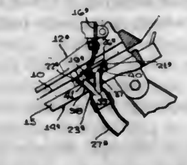
5. The method of stripping waste yarn windings in bobbin stripping apparatus from a spent bobbin of the type having a cylindrical barrel of substantially uniform diameter throughout its length which comprises gripping said waste yarn windings by means holding said windings in their original disposition along the cylindrical barrel of said spent bobbin, and then pushing said bobbin out of said windings by ejecting means operating axially of said first mentioned means while said windings are gripped and thereby held in said original disposition by said first mentioned means.

2,732,610
SLUB CATCHER
Winthrop L. Perry, Milford, N. H., assignor, by mesne assignments, to Abbott Worsted Mills, Incorporated, Wilton, N. H., a corporation of New Hampshire
Application July 29, 1950, Serial No. 176,625
10 Claims. (Cl. 28—64)

1. A slub catcher including two members having mutually abutting surfaces and having normally opposed faces defining a passage between the two members adapted to receive a running thread, the said members being inclined to the course of the running thread so as to deflect the thread laterally along said passage in a direction toward said abutting surfaces when an enlargement is encountered, and said two members being pivotally connected on an axis transverse to the direction of such lateral deflection of the yarn and being angularly displaceable, by relative rotation with respect to each other around said axis, while maintaining mutually abutting relation of said surfaces, so as to open said passage and expose both of the two normally opposed faces which normally define said passage, means for yieldingly urging one of said members in a direction which is toward the thread passage and the other member in the normally opposed relative position of said members, said yieldingly urging means being constructed to continue to urge said one member toward said other member during said relative rotation, and mechanism for causing said relative rotation of the members with respect to each other during such continued action of said yieldingly urging means.



2,732,611
VACUUM SLUB CATCHERS
Samuel R. Planer, Gastonia, N. C.
Application January 22, 1954, Serial No. 405,641
1 Claim. (Cl. 28—64)



In a slub catcher for a yarn winding machine, a frame, a comb pivoted on and extending across the frame, an anvil on and extending across the frame, a suction nozzle on and extending across the frame having intake opening means positioned close to the anvil and the comb, and means for applying suction to said nozzle, said intake opening means comprising a pair of divergent nozzle elements each having an elongated suction opening, said nozzle elements being positioned along opposite sides of the comb with their suction openings at the underside of and along opposite sides of the anvil and the comb.

2,732,612
DEBURRING TOOL
Clair L. Hallock, Baltimore, Md., assignor to The Glenn L. Martin Company, Middle River, Md., a corporation of Maryland
Application October 11, 1951, Serial No. 250,891
1 Claim. (Cl. 29—90)

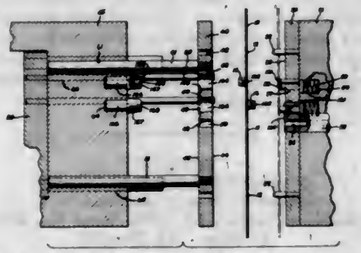
A deburring tool comprising a holder having an elongated shank at one end adapted to be gripped in a chuck of a rotary tool, and walls forming an open recess in the other end facing away from said shank and concentric therewith, a short length of flexible stranded wire cable having a central portion bent back upon itself so as to form a generally U-shaped loop portion of relatively short radius of curvature with the ends of the cable being arranged generally parallel and alongside one another, the ends of said loop received in said re-

cess and held by the said walls of said holder with the bisector of said loop aligned with the axis of rotation of said shank, the diameter of said stranded wire being



such that the loop will have sufficiently rigidity when rotated and projected into a circular opening in a metal member to deburr the edges of the opening.

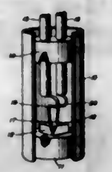
2,732,613
METHOD OF MAKING A BEARING STRUCTURE
Roy J. Renholts, Oakland, Calif., assignor to Friden Calculating Machine Co., Inc., a corporation of California
Application September 16, 1952, Serial No. 309,870
2 Claims. (Cl. 29—149.5)



1. The method of forming a nylon bearing on a metal supporting plate which comprises perforating said plate to provide an aperture therein, providing a mutilated chamfered surface in one side of said plate in the edge portion surrounding said aperture, positioning said plate between relatively movable dies so that the side opposite the mutilated surface in said plate is adjacent the face of one of said dies and the aperture therein is coaxially aligned with a mold cavity in said die, said mold cavity having an opening larger than said aperture and a coaxial core diametrically smaller than said aperture and of a length sufficient to extend through said aperture, providing the other of said dies with a passageway angularly disposed relative to the face of the die and having a plurality of ridges in the periphery of said passageway, said passageway converging into a reduced orifice opening into the mutilated end of said aperture, clamping said plate between said dies, forcing nylon under pressure through said passageway into said cavity until it completely fills said cavity and said aperture surrounding said core, and separating said dies leaving a bore completely through the bearing and causing the nylon sprue to be severed at the plate surface.

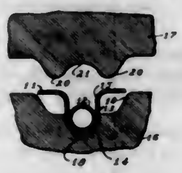
2,732,614
METHOD OF MAKING CONTACT POINTS
Edmund G. Shower, Quakertown, Pa., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application July 2, 1949, Serial No. 102,749
3 Claims. (Cl. 29—155.55)

1. The method of making a translating device having a pair of closely spaced electrodes with enantiomorphically related chisel points which comprises first securing a pair of spaced lead-in conductors to a mounting element of the device, securing an electrode to each conductor, bending the electrodes to form spring sections therein and to space the ends to the approximate dimension desired in the finished device, inserting a mandrel between the ends of the secured electrodes, shearing each electrode end portion to a chisel faced form which is enantiomorphically related to the chisel faced form on its associated electrode by closing a jaw on each electrode end and against said



mandrel, maintaining the rotational orientation of each sheared electrode about its axis when said electrodes are incorporated in the device, and incorporating the assemblage comprising said mounting element, said conductors and said electrodes in said device by securing said mounting element thereto.

2,732,615
METHOD OF SECURING A TUBE TO A SHEET METAL MEMBER
Ray A. Sandberg, Waukegan, Ill., assignor to Houdaille-Hershey Corporation, Detroit, Mich., a corporation of Michigan
Application January 22, 1953, Serial No. 332,693
11 Claims. (Cl. 29—157.3)

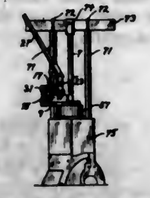


1. In a method of securing a straight length of metal tubing in a flat metal backing plate having a main groove for receiving said tubing that is formed with a semi-cylindrical bottom wall of substantially the same inside diameter as the outside diameter of said tubing and with plane upstanding parallel side wall portions rising above said tubing when said tubing is bottomed in said groove, the improvement which comprises rigidly and conformingly backing said semi-cylindrical bottom wall and also plane portions of said plate spaced outwardly of said side walls to leave upstanding portions of said side walls and contiguous plane portions of said plate unbacked, and exerting a reshaping pressure against only said unbacked portions to depress the metal of said contiguous plane portions into auxiliary grooves lying wholly on the same side of the general plane of said plate as said main groove and on either side of said main groove and simultaneously to form and move a fold of metal along the sides of said auxiliary grooves inwardly toward said main groove and to reshape said upstanding wall portions inwardly into conforming contact with said tubing, whereby metal of said plate is wrapped about more than one-half the periphery of said tubing without movement of said backed plane portions of the plate spaced outwardly of said side walls.

2,732,616
RESLEEVING TOOL
Lester S. Vegors, Stratford, Iowa, Stanley H. Vegors, Fort Wayne, Ind., and Orville W. Boynton, Fort Dodge, Iowa
Application May 11, 1950, Serial No. 161,274
6 Claims. (Cl. 29—252)

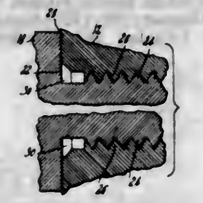
1. A tool for removing or inserting sleeves in a cylinder block comprising a head, a cylinder depending from the

underside of the head, a piston positioned in the cylinder, a piston rod carried by the piston and projecting through opposite ends of the cylinder to be selectively terminally anchored, means for admitting a mobile fluid selectively to opposite ends of the cylinder to effect bodily move-



ment of the same toward the anchored end of the piston rod, and sleeve seats mounted on the cylinder at opposite ends thereof to retain a sleeve on the cylinder as the latter is advanced through an engine block to insert the sleeve therein or withdrawn from the block to remove the sleeve therefrom.

2,732,617
METHOD OF MAKING AN INTERCHANGEABLE EXTENSION ARBOR
Lyman B. Pope, Kingston, and John W. Sjostrom, Salem, N. H., assignors to Pope Machinery Corporation, Haverhill, Mass., a corporation of Massachusetts
Application June 20, 1952, Serial No. 294,742
1 Claim. (Cl. 29—406)



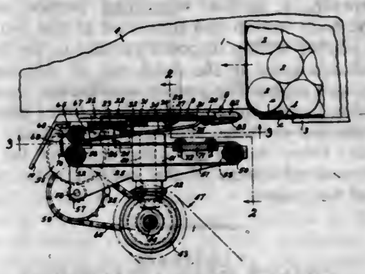
A method of centering an extension arbor relatively to a spindle shaft which comprises forming on an end portion of an extension arbor a screw-thread of the V type accurately coaxial therewith and a shoulder adjacent to said end portion in a plane perpendicular to the axis of the extension arbor, forming a screw-threaded bore in an end of said shaft with a thread accurately coaxial with the shaft and adapted to mate with the threaded portion of the arbor, relieving the orifice of said bore, forming a shoulder at said end of the shaft in a plane perpendicular to the axis of the shaft, screwing the threaded end of the extension arbor into said bore until said shoulders abut each other, then applying considerable torque to the extension arbor to press the shoulders tightly against each other, whereby the extension arbor is accurately centered by the mutual camming action of the threaded flanks.

2,732,618
METHOD OF MAKING TUBE JOINTS
Frank W. Schwinn, Chicago, Ill.
Application December 2, 1950, Serial No. 198,825
2 Claims. (Cl. 29—482)



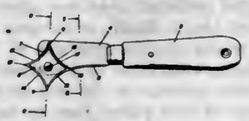
1. A process for joining the end of one tube to the side of a cylindrical tube, said process comprising forming a convex surface on the said end of one tube, changing a portion of said convex surface to concave by pressing the convex surface against the side of said cylindrical tube, the curvature of said concave portion conforming to the curvature of the side of the cylindrical tube, and bonding the concave portion of the one tube to the side of the cylindrical tube.

2,732,619
APPARATUS FOR OPENING WRAPPED BUNDLES
Roland A. Labine, Springfield, Mass., assignor to Package Machinery Company, East Longmeadow, Mass., a corporation of Massachusetts
Application January 11, 1955, Serial No. 481,083
12 Claims. (Cl. 30—2)



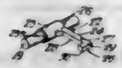
1. In apparatus for opening wrapped packages, the combination of a support having a surface over which a package is adapted to be advanced with one wrapper wall in contact therewith and cutting means substantially in the plane of said surface and mounted in the path of advance of the package to engage and sever the so-engaged wrapper wall as the package moves over said cutting means to open the package and release the contents from the constraint of said wrapper wall.

2,732,620
MULTIPLE BLADED ROOFING AND PRUNING KNIVES
Roy J. Gibbs, San Diego, Calif.
Application January 18, 1952, Serial No. 267,096
3 Claims. (Cl. 30—320)



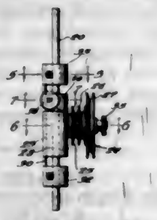
1. A multiple bladed knife, comprising a handle and secured thereto a flat shank in the form of a blade with a curved continuous cutting edge, said blade having a recess formed in the outer surface of the end portion of said blade, the curved cutting edge of said blade extending to but not beyond said recess; a metallic disc with a plurality of separate uniformly shaped cutting edges symmetrically and sequentially disposed about a common center, each of said cutting edges being curved and terminating in a sharpened arrow-head shaped point projecting outwardly from said center, and each of said edges when registered with the curved cutting edge of said blade forming a curved longitudinal extension thereof; the walls of said recess conforming to the shape of said disc and by registering contact therewith, causing the same to be seated against turning therein; and means for detachably and adjustably securing said disc within said recess so as to allow one of its cutting edges to be in curved alignment with the sharpened edge of said shank.

2,732,621
ARTIFICIAL DENTURE AND METHOD OF MANUFACTURE
Alfred Pelzmann, Glencoe, Ill., assignor to Samuel W. Kipnis, trustee for Judith Kegan, Daniel Kegan, and Franklin Kegan
Application April 15, 1954, Serial No. 423,315
13 Claims. (Cl. 32—2)



1. A device for positioning and retaining magnets in artificial dentures, including an integral molded nylon unit having a tubular body section having an inner cross-sectional perimeter adapted to fit tightly about the outer perimeter of the magnet to prevent relative movement therebetween, a section supporting portion extending from the body section and connected at one end thereto, and an anchor section disposed parallel to the body section and connected to the outer end of said supporting portion, said supporting portion and anchor section having relatively wide and rigid upper and lower bearing surfaces, whereby the force applied to said bearing surfaces by plaster forms during the construction of the denture will prevent movement of the integral nylon unit and hence of the magnet.

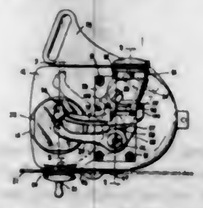
2,732,622
CHANGE SPEED ATTACHMENT
Paul La Hirt, Chicago, Ill.
Application February 8, 1954, Serial No. 408,767
5 Claims. (Cl. 32—23)



1. A change speed attachment for a dental engine having a driving motor, adjustable arms carrying flexible belt driving means and a hand piece having a driven rotary part, comprising: a rotatable compound pulley having a base and mounted upon one adjustable arm for sliding movement longitudinally of the arm clamp, clamp means secured to the arm on each side of the pulley for limiting said sliding movement to a portion of the length of the arm, means secured to the arm and slidingly engaging a portion of said pulley base to hold the pulley against rotation about the arm, a drive belt means passing over one portion of the pulley and connected to said motor for driving the pulley, said pulley having other portions of different diameter and a driven belt means selectively placeable on said other portions to vary the driven speed thereof, said compound pulley automatically adjusting its position along the arm under tension of said belt drive and driven means, said driven belt means being connected in driving relation with the rotary part of the hand piece to provide different speeds of the rotary part without changing motor speed.

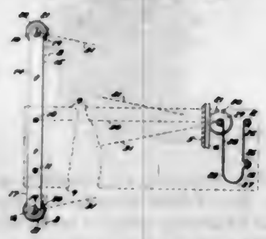
2,732,623
GLASS CUTTING MACHINE
William Vaughan, Woodstock, Conn., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Application June 21, 1951, Serial No. 232,819
16 Claims. (Cl. 33—28)

1. In a cutting machine of the character described, a base, a rotary work table journaled on the base, a pair of shafts journaled on the base for rotative movement about respective axes substantially parallel to the axis of said work table, said shafts each being longitudinally movable in said base, a clamp arm carried by one of said shafts and adapted to overlie and engage a piece of work on said work table, a cutter supporting arm carried by the other of said shafts and adapted to overlie said work, a cutting device carried by said cut-



ter supporting arm and adapted to engage said work, operating means carried by the base acting on the shaft carrying said clamp arm for causing said clamp arm to be moved toward and away from said work and further means cooperating with said operating means to rotate said other shaft for moving said arms simultaneously toward and away from one another into and out of overlying relation with said work.

2,732,624
DRAFTING EQUIPMENT
Harold E. Smith, Adrian, Mich.
Application January 26, 1953, Serial No. 333,043
1 Claim. (Cl. 33—80)



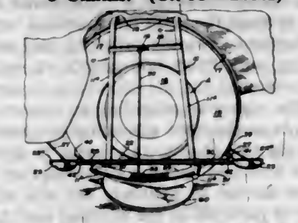
Drafting equipment comprising a plane portion marginally terminating in a pair of parallel bounds regions, there being first and second lineal seats, one at each bounds region and parallel to the plane portion, a strip of length spanning the plane portion and endwise extending to overlap beyond said regions, said strip having a width-providing side between parallel first and second straight edges, a U-form leaf spring of imperforate body thruout its entire length, said spring forming two legs spaced by a return bend, two strip engaging anchor pins, one of said pins being for one leg end of the spring in proximity to the first straight edge and spaced from the adjacent bounds region at the overlap underside of the strip, said other pin being adjacent the return bend in proximity to the second straight edge at the overlap underside of the strip, a first roller, a strip engaging mounting pin for the first roller on the free end of the other leg of the leaf spring in proximity to the first straight edge of the strip for riding in a bounds first lineal seat, said spring having an integral arc wrap of greater than semicylindrical extent in an embracing assembly at said anchor and mounting pins, second and third rollers anchored with the strip adjacent the second lineal strip, said rollers defining an isosceles triangle with the first roller at the apex and the triangle median in proximity to said first straight edge and remote from the second straight edge of the strip, the spring return bend and third roller being in proximity to the second straight edge of the strip, the second roller being more remote from the first edge than the third roller is from the second straight edge.

2,732,625
ELECTRONIC COMPARATOR
Pierre Buisson, Vanves, France
Application August 24, 1954, Serial No. 451,729
Claims priority, application France August 27, 1953
11 Claims. (Cl. 33—148)



1. A comparator constituted by a double condenser formed by two fixed external plates, the active surfaces of which lie in planes which meet in an axis, an intermediate plate movable around said axis, a source of alternating current potential connected to said etxernal plates, a device adapted to indicate variations in the said alternating current potential and connected between one of said external plates and the movable plate, and means to displace said movable plate as a function of the displacement of the feeler of said comparator, whereby a slight displacement of said feeler is transformed into a substantial and virtually linear variation of the potential applied to the said device, due to the fact that said movable plate is brought to a potential falling within the linear gradient of potential between said fixed external plates.

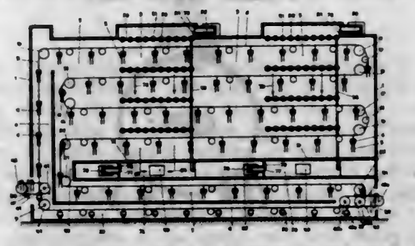
2,732,626
DEVICE FOR CHECKING WHEEL ALIGNMENT
Harry L. Knight, San Jose, Calif.
Application August 16, 1952, Serial No. 304,721
3 Claims. (Cl. 33—203.2)



3. Apparatus for measuring angular characteristics of the dirigible wheels of an automobile comprising a pair of frames constructed and arranged for mounting one on the tire of each of a pair of such dirigible wheels in predetermined relation to the plane of wheel rotation, portions of each frame extending forwardly and rearwardly of its wheel in equally spaced relation to the plane of wheel rotation, a rod support on each of said forwardly and rearwardly extending frame portions, a protractor mounted centrally below each rod support on one of said frames, and a pair of rods for seating on said supports to extend transversely from one of said frames to the other, said supports being located a sufficient distance from the wheel to position the rods clear of the wheel within predetermined turning limits of the wheel, one end portion each of said rods being smooth for free relative slidability on its support, the other end of said rod being notched for anchored engagement with its support against axial displacement, the rods being free for turning relative to their supports, the angle of turning of each rod being indicated on the protractors.

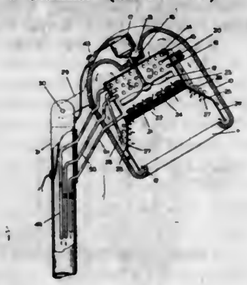
2,732,627
DRYING APPARATUS FOR ALIMENTARY PASTE OF FILAMENT SHAPE
Augusto Fava, Milan, Italy
Application December 19, 1952, Serial No. 326,814
Claims priority, application Italy December 19, 1951
3 Claims. (Cl. 34—48)

1. A drying apparatus for alimentary paste in filament shape, comprising a drying chamber, an inlet opening in the said chamber, conveying means for continuously introducing through the said inlet opening rods loaded with the dough filaments, other conveying means in the inside of the drying chamber for transporting the said rods along a plurality of superposed and successive horizontal runs which alternately move in opposite directions, a plurality of horizontally spaced rows of superposed heating elements, each heater of a row being disposed over a run of said conveying means, ventilating means above and below each row of heating elements, closed circuit means for heating medium and having said heating elements connected therein, a storage vessel for the heating me-



dium and a pump for circulating the heating medium interposed in said circuit means, a single heat source in said storage vessel, control means sensitive to the temperature of the air circulated by said ventilating means, a single regulating means actuated by said control means and acting on said source of heat, an outlet channel for the rods loaded with dough filaments and separated from the drying chamber whereby the dough filaments passing through said channel are shielded from action of the heating and ventilating means, an outlet opening and conveying means for continuously discharging the rods charged with dried filaments.

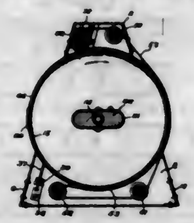
2,732,628
HAIR DRYERS
Anthony A. Giuffre, Milwaukee, Wis.
Application July 15, 1953, Serial No. 368,092
5 Claims. (Cl. 34—50)



1. A hair drying device of the character described comprising in combination, a hood open at its lower end, the open end of said hood having the outer edge turned upward toward the inside thereof, a vertical standard supported by a base, said hood pivotally mounted to said standard, said hood equipped with a motor driven suction fan, a filter unit disposed within said hood between said fan and the open end of said hood, a shell extending from said filter to the inward ends of said hood and spaced inwardly from the wall of said hood, an enclosure disposed within said hood between the filter and the closed upper end of said hood, said enclosure having apertures through its top and bottom walls, a condensation coil and an evaporator coil disposed within said enclosure between said fan and the perforated upper wall of the enclosure, a primary condenser coil disposed adjacent to said inner shell between said shell and hood, said primary condenser coil connected by tubular means to said first men-

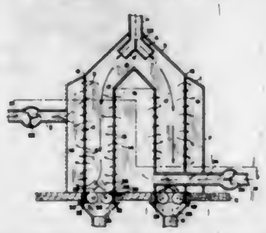
tioned condenser coil within said enclosure, in combination with a reservoir, a compressor, a humidity control, and a relay, all connected in a circuit with said motor driven fan, and actuated by a current supply, and tubular means for draining the condensation from said enclosure.

2,732,629
DRYING APPARATUS FOR PHOTOGRAPHIC PRINTS
Joseph S. Garfinkle, Boston, Mass.
Application December 10, 1952, Serial No. 325,201
1 Claim. (Cl. 34—123)



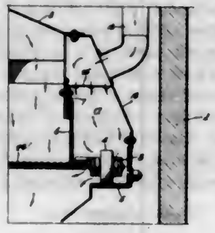
A drier for photographic prints comprising a supporting frame, a stationary shaft mounted on said frame, a drum rotatably mounted on said shaft, a heating element mounted within said drum, a pair of blocks mounted on said frame and slidable in a plane parallel to said shaft, a drive roll rotatably mounted on said blocks parallel to said axis, a hand knob attached to said drive roll for imparting rotation thereto, a pair of springs attached to said blocks and adapted to urge said blocks toward said drum, a plurality of rollers disposed parallel to said shaft adjacent to said drum, and a belt passing around said drive roll and said rollers, said rollers being arranged to hold a portion of said belt in contact with said drum, and said drive roll being so disposed as to drive said belt and said drum simultaneously by frictional engagement.

2,732,630
GRAIN DRYER
Andrew Markowich, Clairmont, Alberta, Canada
Application May 27, 1953, Serial No. 357,857
1 Claim. (Cl. 34—174)



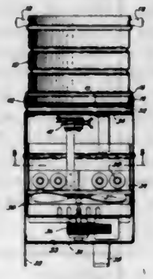
A device for removing moisture from grain or the like comprising in combination a substantially rectangular, vertical outer casing, an inner casing spaced from three of the walls of said outer casing the fourth wall of said outer casing being common to both casings, and a pair of vertical perforate partitions within said inner casing and parallel with the end walls thereof, said partitions constituting a central air distributor column being closed at both ends thereof, said partitions and said end walls constituting vertical grain channels on each side of said column, said end walls also being perforate, said end walls and the end walls of said outer casing constituting an air discharge manifold, an air intake duct communicating with the interior of said column, and an air exhaust duct communicating with the interior of said manifold, grain intake means situated at the upper end of said outer casing, and grain discharge means situated at the base of each of said grain channels, and means associated with the bases of said channels to control the volume of grain discharging therefrom, said grain intake means comprising a substantially vertical duct extending through the upper side of said outer casing and substantially in the centre thereof, the lower end of said duct being of an inverted Y configuration, and baffle means within said duct to control the direction of flow of grain therethrough.

2,732,631
CONVEYOR DRYERS
Harold G. Black, Glenside, Pa., assignor to Proctor and Schwartz, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application September 20, 1954, Serial No. 456,986
4 Claims. (Cl. 34—219)



1. In a dryer construction comprising a housing in which a drying medium is circulated vertically through material upon a foraminous endless conveyor having laterally spaced side chains supported for horizontal movement longitudinally through the dryer and provided with vertical side guards disposed inwardly adjacent said side chains and cooperating with fixed side guards in said housing to retain the material on the conveyor, a structure at each side of the conveyor providing in cooperation with said side guards a chamber extending longitudinally of and enclosing the side chains, and means to discharge air under pressure into said chambers and over and through the side chains therein to maintain the said side chains clean and free of particles of the material and dust.

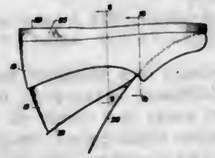
2,732,632
APPARATUS FOR USE IN DETERMINING MOISTURE CONTENT
Edward C. Koster, Shaker Heights, Ohio, assignor to The Vichek Tool Company, Cleveland, Ohio, a corporation of Ohio
Application September 8, 1951, Serial No. 245,739
1 Claim. (Cl. 34—233)



In a moisture tester unit, a drying air heater unit of cylindrical tubular form for causing upward axial drying air flow, a heating element and fan located in said unit with each extending substantially across the tubular bore, circumferentially spaced legs protruding downwardly as extensions from the peripheral surface and bottom of the cylindrical form to provide the intake of

said unit therebetween while the cylindrical top forms the outlet thereof and forms a cylindrical aligning seat and flange, a removable sample container of substantially the same tubular cylindrical form having a cylindrical lower flange removably fitting down within said cylindrical aligning flange and on said seat of said unit, and a screen across the bottom of said sample container across the full width of the tubular bore for supporting the sample therein and permitting the upward axial flow of drying air through said sample and axially through the cylindrical forms of both said unit and container.

2,732,633
SOFT-SOLED SLIPPER CONSTRUCTION
Harry Zeitz, Brooklyn, N. Y.
Application August 6, 1953, Serial No. 372,746
5 Claims. (Cl. 36—9)



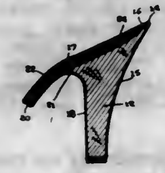
1. In a reversed soft sole shoe construction in preparation for a turning and finishing operation, an upper comprising an annular wall with opposite marginal portions, a lining comprising an annular wall with opposite marginal portions, adjacent edges of said upper and said lining being secured together to form a peripheral juncture, a flexible sole member attached to the marginal portion of the upper opposite said peripheral juncture, and an inner sole a marginal portion of which is in engagement with the marginal portion of said lining opposite said peripheral juncture, a rear portion of said inner sole being apertured, whereby said flexible sole member may be passed therethrough to effect an operative turning of the shoe preparatory to the finishing operation.

2,732,634
WEDGE-HEEL SANDAL CONSTRUCTION
Henry Lipton, Chicago, Ill.
Application June 16, 1953, Serial No. 361,951
2 Claims. (Cl. 36—11.5)



1. Sole structure comprising an outsole, a heel wedge disposed on said outsole, said outsole extending outwardly of said heel wedge to provide a marginal flange, a heel covering secured to said heel wedge with the lower margin thereof outturned and overlying and secured to said marginal flange, an insole overlying and secured to the forepart of said outsole, a portion of said insole having a cutout with the margin around said cutout engaging the lower margin of said heel covering and secured thereto, a tongue extending from the forepart of said insole into said cutout and being secured to the upper surface of said wedge, a sock lining having the rear portion thereof marginally slit to provide a tongue and marginal strip, said lining being secured to said insole with said last named tongue secured to the upper surface of said heel wedge and with the margin around said last named tongue extending around said heel wedge and having its lower margin outturned and secured to said margin of said insole.

2,732,635
OPEN-BACK SHOE CONSTRUCTION
Gustave Frost, Long Beach, N. Y., assignor to Andrew Geller, Inc., Brooklyn, N. Y., a corporation of New York
Application July 1, 1954, Serial No. 440,588
3 Claims. (Cl. 36—24.5)



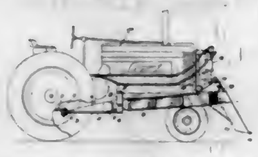
1. In a ladies' shoe, a heel having a concavity in its upper surface forming a heel seat with a raised rim extending around the sides and back of the seat, a sole structure including a heel section comprising a plurality of layers including a lower portion, an insole and a sock lining, said lower portion being convexly curved to fit into and being secured within the said concavity, the upper surface of the heel rim being at a level at least as high as the upper surface of the insole, said sock lining covering the entire heel portion of the insole, being secured thereto, and coacting with the heel rim to present a smooth, unbroken substantially flat surface clear to the edge of the heel.

2,732,636
ARCH SUPPORT CONSTRUCTION
Joseph A. Amico, Rochester, N. Y.
Application July 14, 1952, Serial No. 298,724
5 Claims. (Cl. 36—71)



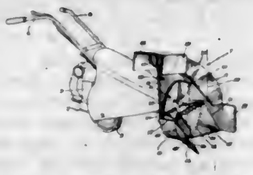
1. In an arch support construction for a shoe, a sole, an upper, a foundation insole superimposed over said sole, having ball shank and heel portions, said foundation insole having secured to the ball portion along a transverse region of maximum width thereof a hinged member, stitching extending from the outside of the foundation insole to substantially a midpoint thereof along a curved line concave toward the heel portion, for securing said member to said insole, said hinged member being free from the foundation insole on the inside side thereof, said member having an outside contour similar to the outside corresponding contour of said foundation member, and an inside contour including a wing arch support extension, a skin of thin dry absorbent clay-impregnated sole leather covering the upper side of said member and the upper side of the portion of the foundation sole forward of said member, said skin having edges turned under the edges of said member and foundation sole, rubber cement securing said skin to said member and foundation sole, a metatarsal pad positioned on said foundation sole beneath said member, immediately to the rear of said stitching and with its forward edge nesting in the curvature of said stitching, a wing cookie positioned on said foundation sole along the inside shank portion, said cookie having a substantially obtuse triangular mid-cross-section and having one surface adapted to support the wing of said member, and another surface adapted to engage the inside upper adjacent the foundation insole shank and laterally of said wing extension, a cushion pad of rubber underlying the entire under side of said hinged member except said wing extension, and a heel pad of resilient material mounted upon the heel portion of said foundation insole.

2,732,637
GROUND-CLEARING ATTACHMENT FOR TRACTORS
Tom C. Shadden, Henrietta, Tex.
Application July 24, 1950, Serial No. 175,553
1 Claim. (Cl. 37—2)



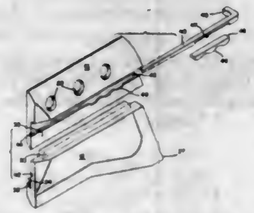
A ground clearing attachment for tractors comprising a crossbar engageable beneath the tractor frame, a pair of upstanding ears carried by said crossbar and adapted to be secured to the opposite sides of the tractor frame, an outer pair of ears fixed to said crossbar outwardly of said first pair of ears, an elongated tongue fixed to said crossbar and extending rearwardly and right angularly therefrom for fixed attachment to the rear portion of the tractor, a pair of rearwardly convergent struts fixed between said cross bar and the rear portion of said tongue, each strut being of right angular configuration in transverse section with one side horizontal and the other side vertical, said vertical side being fixed to the inner ear of said outer pair of ears, a pair of elongated arms pivotally disposed between said outer pair of ears, a pair of depending bars fixed to the forward ends of said arms, a blade fixed between the lower ends of said bars, a connecting bar fixed between the forward ends of said arms, and hydraulic lift means at the forward end of the tractor connected to said crossbar for raising or lowering said blade.

2,732,638
ROTARY SNOW PLOW
Karl J. G. Leufvenius, Minneapolis, Minn., assignor to Jari Products, Inc., Minneapolis, Minn., a corporation of Minnesota
Application April 12, 1952, Serial No. 282,009
4 Claims. (Cl. 37—43)



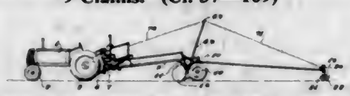
1. A snow plow of the class described, comprising a housing having means for removably attaching it to the forward end of a power unit provided with a drive shaft, said housing comprising an upright back wall, a top wall, a bottom wall and opposed side walls, one of which has a discharge opening therein, said back plate having an opening therein for receiving the forward end of said drive shaft, an impeller secured to the drive shaft within the housing, said impeller comprising a disc positioned in proximity to the back wall of the housing and having a plurality of blades secured to and extending forwardly from the front face of said discs, said blades being inclined in the direction of rotation of the impeller whereby snow and other material engaged thereby is urged towards said disc while being thrown outwardly by the centrifugal action of the impeller through the discharge opening of the housing, the front end of said housing being open to permit free entry of snow and other material thereinto and into engagement with the impeller, and a front wall portion secured to and depending from the top wall of the housing over a portion of the upper half of the impeller, said depending wall portion being inclined rearwardly and cooperating with said top wall to provide a trajectory path for the snow as it is discharged from the housing through said discharge opening.

2,732,639
REPLACEABLE CORNER PORTION FOR THE CUTTING EDGE OF BULLDOZER BLADES
Manford R. Lillengreen, Des Moines, Wash.
Application March 30, 1953, Serial No. 345,540
3 Claims. (Cl. 37—143)



1. The improvement in a bulldozer blade or the like, comprising: a moldboard, a two-piece corner assembly positioned in each lower end corner of said moldboard to form a replaceable blade corner comprising an upper mounting base and a lower removable blade member, said mounting base rear wall being in substantially full abutment with said moldboard from its upper to its lower margin, the front wall of the mounting base upper portion overhanging the front wall of the lower portion thereof forming a medial jutted wall therebetween which has a downwardly open groove including side and end groove walls and the rear wall of the groove being substantially coplanar with said lower portion front wall, said blade member having an upper portion lapping said front wall of said mounting base lower portion in substantially full abutment throughout its extent and having an upstanding marginal tongue on its top closely fitting said groove, the bottom of said mounting base extending sharply upwardly and rearwardly in a short bottom wall from the front wall to the rear wall thereof and to said moldboard forming a depending beveled marginal tongue and said blade member having a shallow corresponding and closely fitting medial groove in which said beveled tongue is positioned and the lower portion of said blade member below said groove therein being in abutment with said moldboard, a plurality of upper bolts securing said mounting base upper portion to said moldboard and said mounting base lower portion having a plurality of countersunk openings and a plurality of lower bolts positioned in said countersunk openings and secured to said moldboard and covered by said blade member, and the blade member rear wall and the mounting base front wall medially of said grooves having aligned horizontally elongated keyways open at one end thereof and a key positioned in said keyways through the open end thereof and securing said blade member against downward movement.

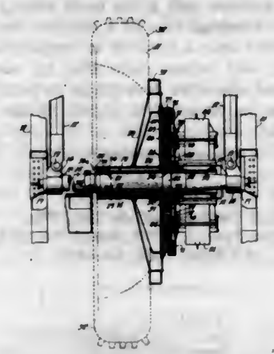
2,732,640
LAND LEVELLING MACHINE
Harold A. Kirchner, Lethbridge, Alberta, Canada
Application December 9, 1952, Serial No. 324,899
9 Claims. (Cl. 37—169)



1. An automatic land levelling device adapted to be drawn by a source of power comprising in combination, a framework hitched to said source of power and extending rearwardly therefrom, a pair of wheels supporting the rear end of said framework, earth moving means

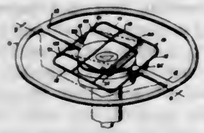
pivotally secured to the rear of said framework, means secured to said framework and cooperating with said earth moving means to raise and lower said earth moving means with relation to said framework, said means to raise and lower said earth moving means including further means coacting between said source of power and said earth moving means adapted to control the angle of attack of said earth moving means with the ground, and the height of said earth moving means with the ground, and depth control means secured to and extending rearwardly from said framework also coacting with said means to raise and lower said earth moving means.

2,732,641
SUPPORTING STRUCTURE FOR EXCAVATING WHEEL
Jens Jespersen, Chicago, Ill., assignor to The United Electric Coal Companies, Chicago, Ill., a corporation of Delaware
Application June 2, 1951, Serial No. 229,625
5 Claims. (Cl. 37—189)



1. For use in an excavating machine of the kind wherein a rotating excavating wheel is mounted adjacent the end of a digging ladder or other supporting structure, the combination of a shaft adapted to be connected adjacent its ends with the digging ladder, a tubular shaft supported on the first shaft, an excavating wheel rotatably mounted on the outer surface of said tubular shaft, and driving mechanism drivingly connected with said excavating wheel a portion of said driving mechanism having a part of its support on said tubular shaft and adapted to have a part of its support on said digging ladder.

2,732,642
MAP HOLDER
Richard W. Thompson, Detroit, Mich.
Application May 6, 1952, Serial No. 286,394
1 Claim. (Cl. 40—13)



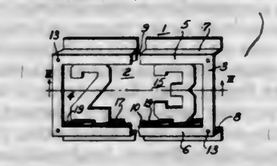
A map holder for attachment to a vehicle steering wheel comprising a frame having spaced sinuous side bars and spaced sinuous end bars, cross bars carried by the end bars and extending across the frame between the end bars to form with said frame a support, extensible members attached to selected sinuous bars for extension around the spokes of a steering wheel, a hook carried by each extensible member for engagement with the sinuous bar to which it is attached after its extension around a spoke, and a substantially U-shaped clamp carried by a side bar and yieldingly urged toward the support for engaging a sheet extending across the support and holding it in contact with the sinuous bars of the support.

2,732,643
NAME PANEL BOARD
Carl A. P. Johnson, North Quincy, Mass., assignor to S. H. Couch Company, Inc., North Quincy, Mass., a corporation of Massachusetts
Application September 18, 1951, Serial No. 247,162
7 Claims. (Cl. 40—125)



3. A panel board for removable insignia comprising a frame, a plurality of insignia boxes nested together side by side filling the frame, means removably supporting the boxes to the frame comprising a U-shaped channel member for each box having side prongs engaging the end walls of each box and the edges of the prongs filling against the side walls of each box, means mounting the channel members to the frame and removable insignia substantially filling the face of each box.

2,732,644
IDENTIFICATION DEVICES
Robert Graf, Detroit, Mich.
Application December 20, 1951, Serial No. 262,536
4 Claims. (Cl. 40—142)



2. In combination, a rectangular frame which is open at opposite ends and having an open face, said frame being composed of frame members connected at the four corners of the frame, one of said frame members having on its inner face a plurality of teeth having flat faces disposed at substantially right angles to said frame member, and an indicia member slidably disposed behind the frame member provided with said teeth and the opposite frame member, said indicia member having a resilient projecting prong located adjacent the trailing edge thereof and disposed to slide over said teeth as it is moved along said frame members in one direction and to register with a tooth to prevent movement of the same in the reverse direction along said frame members, the leading edge of said indicia being provided with a prong disposed to guide the indicia over said teeth as it moves through the frame in the direction in which the forwardly projection prong trails.

2,732,645
ORNAMENT IN THE NATURE OF A TREE
Bill Y. James, Miami, Okla.
Application September 10, 1953, Serial No. 379,386
4 Claims. (Cl. 41—15)

1. In a decoration, an elongated supporting pin; a body consisting of a plurality of tiers, each tier including a stack of elongated, initially flat strips of flexible material mounted on the pin, each strip being provided with a pin-receiving hole at each end thereof respectively and a pin-receiving hole intermediate the ends thereof, each strip being rebent upon itself from both ends thereof to align its holes and to present a pair of loops radiating in diametrically opposite directions from the pin, the loops

being disposed in spoke-like arrangement around the pin, the loops of each tier being offset relative to the loops of



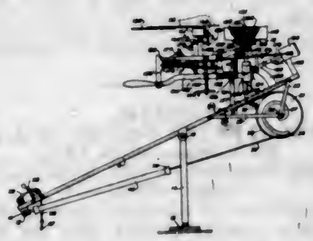
next adjacent tiers; and means on the pin for holding the strips thereon.

2,732,646
KNOCK-DOWN TYPE ORNAMENTAL TREE STRUCTURE
Bill Y. James, Miami, Okla.
Application September 21, 1953, Serial No. 381,253
4 Claims. (Cl. 41—15)



1. A decoration in the nature of a simulated tree and comprising an elongated, sectional standard including a plurality of end-to-end, interconnected sections, each section having a pin extending outwardly from one end thereof and a pin-receiving cavity therein at its opposite end; a base plate having a pin-receiving cavity therein; and a plurality of star-shaped figures, each having a number of radially extending fingers, each figure being provided with a central, pin-receiving hole having a diameter less than the diameter of the sections, each finger being provided with a central, longitudinal line of bend radiating outwardly from a point adjacent the corresponding hole, there being a line of fold interconnecting proximal fingers of each figure and terminating at a point spaced from the corresponding hole, said figures being mounted on the standard in superimposed relationship, each between a pair of proximal sections, said lines of fold and bend cooperating to present alternate ridges and valleys in the figures.

2,732,647
NET CASTING APPARATUS
Edgar W. Byars, Tampa, Fla.
Application June 8, 1953, Serial No. 360,018
11 Claims. (Cl. 43—8)



1. A net-casting apparatus comprising in combination, rotatable net-carrying means, means for holding a net thereon, means for imparting translatory motion to said rotatable means, and means for releasing said net from said holding means at a selected point in said translatory motion, during rotation of said net-carrying means.

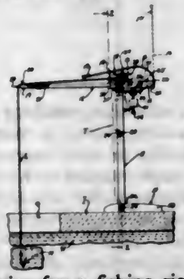
2,732,648
FISHING TACKLE
John G. Bryn, Chevy Chase, Md.
Application July 24, 1953, Serial No. 370,089
18 Claims. (Cl. 43—16)



1. The combination with a fish hook having means for connecting it to a fishing line, of a member movable relatively to the hook into a position to cooperate therewith to receive bait, and means controlled by movement of said member and operative in response to removal of bait from the hook to transmit a signal to the fisherman through the line

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2,732,649
ICE FISHING RIG
Earl Tuttle, Fond du Lac, Wis.
Application June 4, 1952, Serial No. 291,627
1 Claim. (Cl. 43—17)

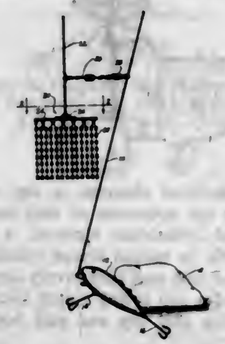


A balancing device for a fishing rig of the type having an operative position and a collapsible position, a base portion, a pair of parallel upright standards pivotably secured to the base, a fishing rod pivotably secured between the parallel standards adjacent the upper ends thereof, a fishing reel connected to the rod having a fishing line wound thereabouts and a resilient signal responsive to the paying out of the line, comprising, a rack secured to the under portion of said fishing rod adjacent the rear end thereof and extending longitudinally therewith, said rack being longitudinally slotted, a threaded bolt received in said slot and depending from said rack, a wing nut on said bolt adjacent the undersurface of said rack for slidably and adjustably mounting one end of said bolt to said rack, and a weight threadably received on said bolt, whereby a longitudinal and vertical adjustment of said weight for balancing the rod is obtained.

2,732,650
FISHING LURE RETRIEVER
Carl B. Passmore, Jr., Harrison, and Hubert C. Peterson, Sr., Marshall, Ark.
Application November 13, 1953, Serial No. 391,806
1 Claim. (Cl. 43—17.2)

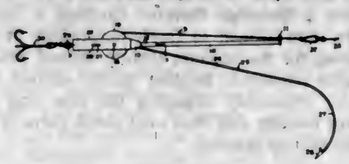
A retriever for a snagged fishing lure having a fishing line attached thereto, said retriever comprising a cord

manipulable at one end by the fisherman and the other end having a metal plate secured thereto, a chain secured to said plate and dependingly carried thereby, said chain being secured to said plate at spaced intervals along its length so as to provide pending spaced chain sections hung in festoons to define a depending curtain with alternate pairs of the depending chain sections being joined together at their bottoms to form loops, and a swivel



connector carried by said cord adjacent the end of said cord to which said metal plate is secured, said connector being adapted to be detachably connected to said fishing line and slidable therealong so that said plate and chain can be lowered in spaced relation to said fishing line and be guided to said lure, said curtain defined by said chain adapted to be hooked by said lure to free the lure from an underwater obstacle upon which said lure is snagged as said cord is manipulated by a fisherman.

2,732,651
COMBINED FISHHOOK AND GAFF
Yvan A. Godon, Edmonton, Alberta, Canada
Application September 22, 1953, Serial No. 381,572
1 Claim. (Cl. 43—37)



In a combined fish hooking and gaffing device, an elongated open frame having a length substantially greater than its width, said frame comprising a pair of laterally spaced side bars having forward ends and rear end portions, a cross bar extending between and secured to the forward ends of the side bars, said rear end portions converging rearwardly, an elongated rigid shaft having forward and rearward ends, said shaft having its forward end engaged between and secured to the converging rear end portions of the frame side bars, a pin secured to and extending between said side bars at a point forward of and near to said converging rear end portions of the side bars, a pulley journaled on said pin between the side bars, said pulley having a peripheral edge, a leader guide on the rearward end of the shaft, a leader extending forwardly through said guide and having a forward end portion trained around and secured to the peripheral edge of the pulley, a gaff having a normally forward end fixed to the pulley and projecting therefrom, said gaff having a normally rearward end having a gaffing hook, said peripheral edge of the pulley having a notch, said frame cross bar having an opening, a latch pin extending through said opening in line with the pulley, said latch pin having a forward end positioned forwardly of the cross bar and having a fish hook, said latch pin having a rearward end having a latch head engageable with the pulley notch, a cross head on said latch pin located forwardly of the latch head, said cross head having ends slidably engaging the frame side bars, and a helical spring circumposed on the latch pin and compressed between said cross bar and said cross head.

2,732,652
FISHING LEADER
Joseph W. Parks, Altoona, Pa.
Application January 4, 1952, Serial No. 264,879
1 Claim. (Cl. 43—44.83)



In combination with a fish hook having an eye formed therein, a filamentous member threaded through said eye and folded upon itself, one end portion of said member being folded upon itself and secured to said member immediately adjacent said one end portion to define a first loop, the other end portion of said member being folded upon itself and secured to said member immediately adjacent said other end portion to define a second loop in juxtaposed relation with said first loop, and at least one ring of elastic material encircling said folded member and normally holding contiguous parts thereof snugly together.

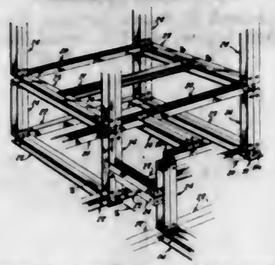
2,732,653
LIVE-BAIT CONTAINER
Hugh C. N. McGee, Dry Ridge, Ky.
Application June 10, 1952, Serial No. 292,690
1 Claim. (Cl. 43—55)



An angler's live-bait container comprising a dome-shaped, rigid, foraminous shell having a multiplicity of apertures therein such that live bait within said container may be viewed through said shell from above, means secured to the top center of said dome-shaped shell for suspending said container from an article of an angler's clothing with the mouth of the shell disposed downwardly, the mouth of said shell being circular, a thin-walled, circular diaphragm which is made of rubber, and means fastening said diaphragm in stretched condition over the mouth of said shell to constitute a floor for said container, said diaphragm having a slit therein to provide access into the container, said slit being substantially shorter than the diameter of the diaphragm and being disposed beneath the top center of the dome-like shell where live bait within the container tend to collect upon

being disturbed by an angler reaching his fingers into the container through the slit in said floor to capture a selected bait.

2,732,654
STRUCTURAL TOY OUTFIT
Roger M. Sullivan, Springfield Gardens, N. Y., assignor of one-half to John J. O'Connell, Hollis, N. Y.
Application March 24, 1948, Serial No. 16,833
6 Claims. (Cl. 46—16)



1. A structural toy outfit comprising means forming a rectangular frame comprising four members each having a web and four flanges to form an H, or double channel, cross-section, the members being in pairs of equal length for forming sides and ends of the frame, the members of the side forming pair being open at the ends and square, the members of the end forming pair each having the flanges along one side and the webs cut square at the ends and the flanges on the other side longer and infolded, the ends of the infolded flanges being spaced from the ends of the opposite flanges and their adjacent edges being spaced from one another and accommodating the ends of the flanges on one side of a side forming member and its interconnecting web so that when so assembled to form a corner the ends of the adjacent side and end forming members are secured together.

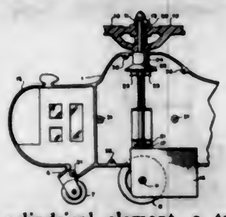
2,732,655
MOVABLE PICTURE TOY
Rudolph H. Dirckx, Dayton, Ohio
Application May 2, 1952, Serial No. 285,621
6 Claims. (Cl. 46—36)



1. The combination of a printed sheet of material with a disc assembly including a pair of disc members joined together in spaced relation from the margins of the disc members, at least one of the disc members having printed matter thereon such that as the disc member is rolled along the margin of the sheet member the printing on the disc member rotates in registry in seriatim with printing on the sheet material to complete the information conveyed by the printing, the two disc members straddling the margin of the sheet material.

2,732,656
TOY HELICOPTER
Irwin E. Cohn, Fitchburg, Mass.
Application May 29, 1953, Serial No. 358,382
2 Claims. (Cl. 46—75)

1. A toy helicopter comprising two half pieces having inwardly disposed support bars, an axle horizontally disposed beneath said half pieces and pivotally supported thereby, a pair of wheels disposed on said horizontally disposed axle, a spring power means for rotating said horizontally disposed axle, an apertured vertical cylindrical element disposed upon said bars, a top horizontally disposed helicopter blade element having an aperture therein, said aperture being disposed over the aper-



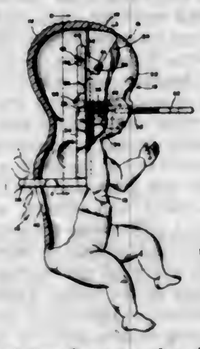
ture in said cylindrical element, a top axle vertically disposed through the apertures of said horizontal blade element and said cylindrical element, a bottom vertically disposed axle in spaced linear relation to said top vertically disposed axle and operatively connected to said power means, and a coil spring clutch frictionally engaging and connecting said top and said bottom vertically disposed axles.

2,732,657
JET DRIVEN AERIAL TOY
Adam Krautkrämer, Budenheim (Rhine), Germany
Application November 22, 1952, Serial No. 322,077
5 Claims. (Cl. 46—76)



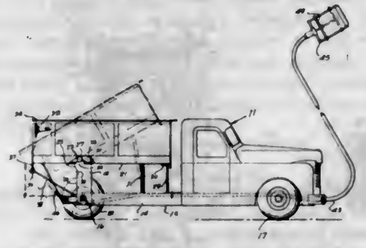
1. In combination, a toy projectile comprising a hollow, pressure-tight body, a jet outlet opening defined at one end of said body in communication with the hollow interior, and a launcher therefor carrying a fluid inlet check valve dimensioned to freely detachably fit said jet outlet opening for the perssure closure thereof, and manually operable releasable holding means carried by said launcher for releasably engaging the rear end of said projectile for holding said fluid inlet check valve in closure contact with said jet opening.

2,732,658
DOLL HEAD
Adolph Goldfarb, Skokie, Ill., assignor to Marvin I. Glass, Chicago, Ill.
Application March 4, 1952, Serial No. 274,721
5 Claims. (Cl. 46—116)



1. A toy doll of the character described comprising a hollow head having a translucent face portion, a movable member rockably mounted within said head and movable inside said head across and behind the face portion, said movable member having a light colored portion and a red colored portion thereon, and means for rocking said movable member in juxtaposition to said face so that said red colored portion is coextensive with said translucent face portion and visible through said translucent face portion to give to the face a feverish appearance.

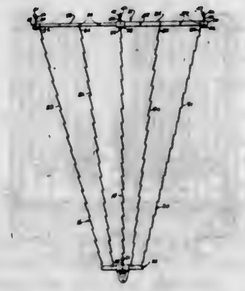
2,732,659
TOY DUMP TRUCKS
Tulane B. Howard, Washington, D. C.
Application September 25, 1953, Serial No. 382,253
3 Claims. (Cl. 46—210)



1. A toy dump truck comprising a wheeled frame including pending side flanges, an upstanding flange element secured to each of said side flanges adjacent the rear portion thereof, a vertical frame wall positioned transversely between said upstanding flange elements and connecting the latter together, an upstanding abutment member carried by said frame side flanges intermediate the ends thereof, a truck body having a bottom wall positioned horizontally and extending longitudinally of said frame and having the forward portion resting upon said abutment member, the top portions of said upstanding flange elements extending through said bottom wall and being within said truck body and above said bottom wall, said top portions of said upstanding flange elements being constructed so as to connect said truck body to said flange elements for movement of said truck body from its horizontal position to a position in which the forward portion of said truck body slopes upwardly with respect to said frame, spring means biasing the forward portion of said body toward said abutment member, a tailgate hinged to the rear portion of said truck body for outward swinging movement relative to said body, said tailgate having a portion normally depending below said truck body, link means connecting said last named portion to the rear portion of said frame, a guide sleeve secured longitudinally to said frame, and a flexible cable extending through said sleeve, one end of said cable being connected to the rear portion of said body for elevating said body responsive to a force exerted on said cable.

2,732,660
PLANT TRELLIS
Martin F. Morris, Banning, Calif.
Application April 9, 1954, Serial No. 422,209
1 Claim. (Cl. 47—47)

A plant trellis comprising a first bar having selectively adjustable telescoping sections, each of said sections having a plurality of longitudinally spaced transverse openings therethrough, a bracket carried by said bar intermediate its ends for detachable engagement on a supporting surface, means carried by each of said sections at the ends thereof remote from said bracket for detachable engagement with the supporting surface, and a second bar in spaced relation to said first bar and having a plurality of spaced openings therein, and wires extending between said bars having an intermediate portion thereof threaded through adjacent ones of said spaced openings in the second bar and secured at their free ends in selected ones of the openings in said sections of the first bar with said wires arranged in divergent relation from said second bar to said first bar and the degree of divergence being pro-

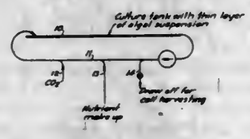


portional to the adjustment of said sections of said first bar, each of said wires having kinks arranged in spaced relation therealong and serving an anchors about which the plant stems may entwine.

2,732,661
PRODUCTION OF PROTEIN, LIPIDES, AND CARBOHYDRATES BY CULTURE OF ALGAE
Herman A. Spoehr and Harold W. Milner, Palo Alto, Calif., assignors to Carnegie Institution of Washington, Washington, D. C., a corporation of the United States
No Drawing. Application November 14, 1949, Serial No. 127,273
6 Claims. (Cl. 47—58)

1. In the method of producing protein, carbohydrate and lipid by cultivating green algae in a nutrient medium in the presence of light and carbon dioxide, the step of enhancing the percentage dry weight of lipide in the culture by controlling the nutrient medium to maintain a concentration of soluble fixed nitrogen constantly at least .001 molar until the desired cell count is obtained and thereafter continuing the cultivation in a medium having a fixed nitrogen concentration below .001 molar.

2,732,662
MASS CULTURE OF ALGAE
Jack Edgar Myers and Jesse Neal Phillips, Jr., Austin, Tex., assignors to Carnegie Institution of Washington, Washington, D. C., a corporation
Application December 22, 1950, Serial No. 202,294
7 Claims. (Cl. 47—58)

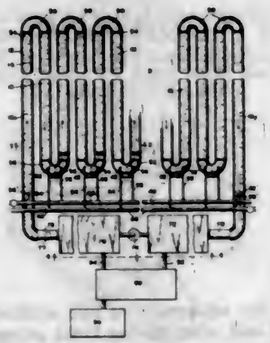


1. In a process for the mass culture of photosynthetic microorganisms, the steps of exposing an aqueous microorganism suspension to a source of light, the suspension having nutrients in its aqueous medium, and maintaining the suspension during light exposure in the form of a recirculating layer or film moving with respect to said source of light and measuring about one centimeter or less of thickness.

2,732,663
SYSTEM FOR PHOTOSYNTHESIS
Davis R. Dewey II, Lincoln, Mass.
Application May 21, 1952, Serial No. 289,225
13 Claims. (Cl. 47—58)

1. A device for large scale culture of photosynthetic microorganisms comprising a light-permeable flexible limp tube, means for supporting said tube in an approx-

imately horizontal position, means for introducing a liquid culture medium into one end of said approximately horizontal tube and thereby distending said tube into a cross-sectional shape having a predetermined height and

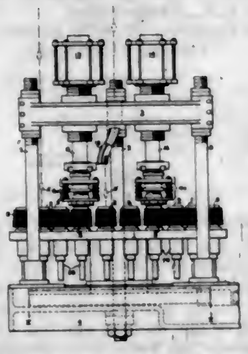


width, and means for introducing a gaseous nutrient into said tube under pressure effective further to distend said tube into another cross-sectional shape having a height greater than and a width less than said predetermined height and width.

2,732,664
METHOD OF TREATING CHRISTMAS TREES
Leonard A. De Klotz, Portland, Oreg.
No Drawing. Application December 22, 1952, Serial No. 327,450
5 Claims. (Cl. 47—58)

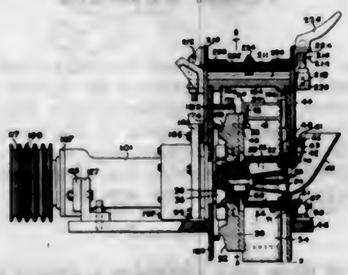
2. A method of treating needle bearing trees comprised of cutting the tree with an elongated cutting surface, then spraying the branches and immersing the cut portion of the trunk in a solution of water and calcium chloride.

2,732,665
APPARATUS FOR PRESS-MOLDING GLASS ARTICLES
Robert P. Cassell, Jeannette, Pa., assignor to The Jeannette Glass Company, Jeannette, Pa., a corporation of Pennsylvania
Application February 26, 1953, Serial No. 339,140
8 Claims. (Cl. 49—5)



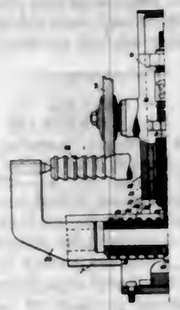
1. Press-molding apparatus for producing formed glass articles comprising a turntable, a plurality of uniformly spaced molds on said turntable, two feeding stations spaced apart three mold spaces and two pressing assemblies spaced apart an equal number of mold spaces with the spacing of the two said feeding stations, the said two feeding stations being positioned one to each side of one of the said pressing assemblies, and impelling means for the said turntable constructed and arranged to move the turntable intermittently through two mold spaces at each step to present two molds thereon simultaneously and in the said spaced relation to action at the said feeding stations and pressing assemblies, the longest horizontal dimension of the pressing assembly above each mold at a pressing station being greater than the distance between the centers of adjacent molds.

2,732,666
CENTRIFUGAL BLASTING APPARATUS
George W. Powell, Hagerstown, Md., assignor to Pangborn Corporation, Hagerstown, Md., a corporation of Maryland
Application September 23, 1952, Serial No. 311,122
4 Claims. (Cl. 51—9)



1. In a centrifugal throwing wheel assembly for projecting blastant particles, a throwing wheel, a rotatable shaft carrying said wheel at one end for rotation to tangentially project particles fed to the central portion of the wheel, a generally flat base, said shaft being mounted for rotation on said base, said base having an opening into which part of the wheel is fitted, and a housing mounted on said base and encircling the portions of the wheel that extend beyond said base, said shaft having an enlarged flange, and the wheel having a diameter larger than that of the flange and being secured to said flange, the housing having a shaft-admitting opening with a diameter large enough for the penetration of the flange, and a wear plate secured to the inner wall of the housing and partially covering said opening to define a second opening smaller than the flange but sufficient for the penetration of the balance of the shaft.

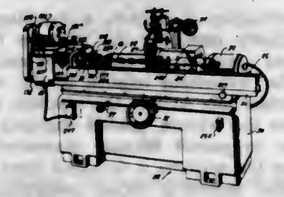
2,732,667
APPARATUS FOR CUTTING BROACHES BY GRINDING
Eugène Fouquet, Bois-Colombes, France
Application September 11, 1951, Serial No. 246,001
Claims priority, application Sweden September 25, 1950
7 Claims. (Cl. 51—100)



1. In a broach-making machine, a master broach pattern for guiding a grinding wheel so that the latter forms a broach according to the shape of the master pattern, the latter comprising, in combination, an elongated shaft; a plurality of discs, corresponding to broach teeth, each formed with a central opening passing therethrough and

having said shaft located therein, said discs being spaced from each other along said shaft and extending transversely thereto, and said discs being adapted to engage, on one side of said shaft, a member for changing the position of a grinding wheel; and a plurality of spacer members each formed with an opening passing therethrough and having said shaft located therein, said spacer members being respectively located against said plurality of discs and being arranged alternately with the same along said shaft to maintain said discs spaced from each other, and said spacer members having on said one side of said shaft edge portions located nearer to said shaft than the edge portions of said discs at said one side of said shaft to provide spaces between said discs at said one side of said shaft, said spacer members respectively having projections extending beyond said discs and located along a straight line parallel to said shaft and on the opposite side thereof from said one side, said projections being adapted to engage a control member for moving a broach blank after a broach tooth has been ground thereon.

2,732,668
METHOD AND MEANS FOR GRINDING CAMS
Olov J. E. Olsson, Dallas, Tex., assignor to Storm-Vulcan, Inc., Dallas, Tex., a corporation of Minnesota
Application August 11, 1952, Serial No. 303,677
17 Claims. (Cl. 51—101)



1. In a camshaft grinding machine having a grinding wheel; a longitudinally movable table; a cradle pivotally mounted on said table for transverse movement toward and away from said grinding wheel; a head stock having a spindle and a tail stock for rotatably supporting a camshaft having a plurality of cams to be ground; means for rotating said head stock spindle; means for mounting a master cam blank to be ground into a master cam on said head stock for rotation with said camshaft; a member for engaging unworn surfaces of a cam for imparting a pivotal movement to said cradle as said camshaft is revolved to cause said grinding wheel to grind said cam blank and generate a contour on said cam blank corresponding to the contour of the unworn surfaces of said cam; means for mounting said master cam on said head stock spindle in the same angular position relative to said cam previously held by said master cam blank; and a roller member for engaging said master cam for imparting a pivotal movement to said cradle as said head stock is revolved to generate a contour on said cam as it is ground corresponding to the contour of the unworn surface of the cam.

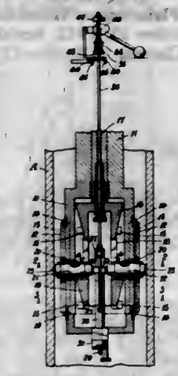
2,732,669
APPARATUS AND METHOD OF OIL POLISHING
Charles C. Conley, Detroit, Mich., assignor to Houdaille-Hershey Corporation, Detroit, Mich., a corporation of Michigan
Application October 31, 1952, Serial No. 317,857
8 Claims. (Cl. 51—141)

8. In an assembly for polishing a flat metal workpiece, an abrasive belt adapted to contact the workpiece, means for interposing lubricating oil between said belt and workpiece, a driven roll driving said belt and urging the belt against said workpiece, and friction drive means on said roll engaging said belt and defined by a resilient matrix peripheral contact portion having therein a plurality of minute chambers, those chambers within said matrix be-



ing filled with hard salt crystals to impart strength to the matrix and those chambers on the roll surface defining a plurality of minute suction cups to increase the frictional coaction between the roll and the belt.

2,732,670
SIZE-DETERMINING GAGES FOR HONING AND GRINDING APPARATUS
Shubel A. Foster, Birmingham, Mich., assignor to Foster Engineering Corporation, Royal Oak, Mich., a corporation of Michigan
Application October 9, 1953, Serial No. 385,150
5 Claims. (Cl. 51—165)



1. A stopping mechanism for an internal bore grinding machine having a rotary head, comprising a pair of radially extending gage pins oppositely mounted in the head, said pins being radially slidable within the head so that the outer ends of said pins being extended radially outwardly from said head to contact the walls of a bore, the inner ends of said pins being spaced from one another, a sizing block resting upon said inner ends of the pin and being of such a dimension as to pass between the pins completely from one side of said pins to the opposite side thereof when the pins slide radially to a predetermined distance, and a switch means operatively associated with said block and actuated by the passing block to shut off the grinding action of the head.

2,732,671
FLUID ACTUATED ROTARY TOOL
Fred McFadden, Chicago, Ill.
Application November 4, 1953, Serial No. 390,225
4 Claims. (Cl. 51—170)

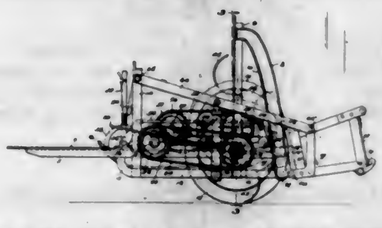
1. In a fluid actuated rotary tool, a tubular housing providing an elongated handle, a tube extending throughout the entire length of said tubular housing for receiving fluid therethrough, a fluid delivery section mounted on the upper extremity of said tubular housing and communicating with said tube to provide fluid thereto, a valve section mounted on the uppermost extremity of said tubular housing for controlling the flow of fluid from said fluid

delivery section to said tube, a drive housing secured to the lowermost extremity of said tubular housing, a rotor mounted in said drive housing, an intake duct in said drive housing communicating with said tube for directing fluid against said rotor for rotation thereof, an exhaust



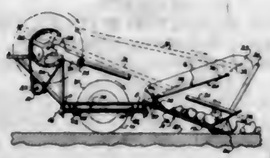
duct in said drive housing for discharging the fluid therein to the outside atmosphere, a drive shaft fixedly secured to said rotor for rotation therewith, and a grinding tool fixedly secured directly to said drive shaft to provide a cutting edge that maintains maximum speed.

2,732,672
ROTARY STONE RAKING AND REMOVING MACHINE
Joseph I. Fleischman, Marshfield, Wis.
Application October 23, 1952, Serial No. 316,385
4 Claims. (Cl. 55—17)



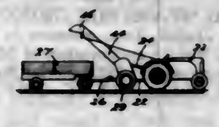
1. A machine of the class described, comprising a main frame, an auxiliary frame including an inverted U-shaped upright section, rising from said main frame, a vertically movable frame including vertically swinging parallel side bars mounted within said inverted U-shaped frame, a pick-up drum including a shaft rotatably mounted on said vertical swinging side bars, compression spring hangers connected between the shaft of said drum and U-shaped upright section of said auxiliary frame, yieldably supporting said drum, normally biasing said swinging side bars downwardly, and means for raising said vertically swinging side bars and drum.

2,732,673
ROCK COLLECTING APPARATUS HAVING A RECIPROCABLE GATHERING BLADE
John E. Henne, Alfred, N. Dak.
Application August 18, 1952, Serial No. 305,021
2 Claims. (Cl. 55—17)



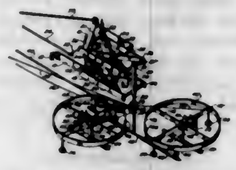
1. In an apparatus for collecting rocks from the surface terrain, the combination of a supporting structure having ground-contacting members such as wheels, a rock-scooping assembly secured to the supporting structure and having fixed teeth lying in a downwardly and forwardly disposed plane, a reciprocable blade for scraping a batch of rocks upwardly toward a discharge, and guide mechanism comprising track means mounted in diverging relation with the plane of the fixed teeth and having a resilient portion interposed at the beginning of divergence between said track means and said plane whereby the blade in its backward operating stroke will contact uniformly the plane of the teeth and upon its forward return stroke will be guided over said resilient portion onto said track means, above and in spaced clearance with said plane.

2,732,674
MACHINE FOR PICKING UP CUT FODDER LYING ON THE GROUND, CHOPPING IT, AND DELIVERING IT TO A TRAILER
Leslie Basil Thwaites, Cubbington, near Leamington Spa, England
Application July 11, 1952, Serial No. 298,312
Claims priority, application Great Britain December 29, 1951
6 Claims. (Cl. 55—118)



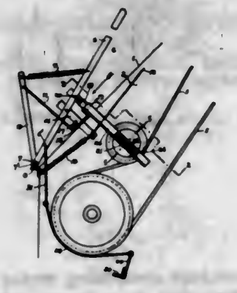
1. In combination a tractor, a machine, a trailer, means detachably mounting the machine between the tractor and the trailer on the rear of and entirely behind the tractor for movement relative to the tractor in a vertical direction only so that the machine is easily removable from the tractor, ground engaging wheels on said machine to permit manual maneuvering of the machine when the machine is detached from the tractor, said detachable mounting means comprising a lifting mechanism on the tractor for lowering said ground wheels into engagement with the ground and for raising said ground wheels clear of the ground so as to place the machine in a position to facilitate maneuvering the tractor, and means for pivotally hitching the trailer from the machine, said machine comprising means for gathering material and means for delivering the gathered material to the trailer.

2,732,675
ADJUSTABLE HORIZONTALLY ROTATED MULTI-BLADE MOWING ATTACHMENT
Alexander Smith and Burton D. Baggs, Sanford, Fla.
Application March 13, 1953, Serial No. 342,098
9 Claims. (Cl. 56—6)



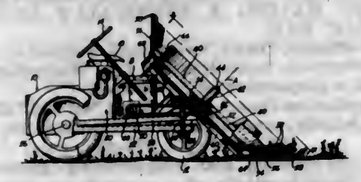
1. A mower attachment for tractors comprising attaching means including an elongated upright pivot, transverse pivots carried by said upright pivot one at a higher elevation than another, spaced parallel upper and lower frame members supported from said transverse pivots, an upright sleeve pivotally connected to said parallel frame members in spaced parallel relation to said upright pivot, spring means attached to said upper frame members adjacent said upright pivot and attached to said lower frame members in spaced relation to said upright pivots and permitting lowering movement of said upright sleeve against the action of said spring means, the construction allowing swinging of said upright sleeve in a substantially vertical plane, a supporting shaft journalled in said upright sleeve, a transverse bar fixed midway its length to the lower end of said supporting shaft, a cutter supporting frame pivotally mounted adjacent one lateral edge on said bar at each side of said supporting shaft, a cutter rotatably mounted beneath each cutter supporting frame and in spaced relation thereto, power means for rotating said cutters, and means for swinging said frame members and said supporting shaft horizontally and for revolving said supporting shaft to swing said cutter supporting frames and said cutters horizontally to locate them in a position between longitudinal and transverse alignment.

2,732,676
COMBINE PICKUP AND CONVEYOR WITH CONTROL MEANS THEREFOR
Paul E. Bernier, Fisher Branch, Manitoba, Canada
Application December 3, 1952, Serial No. 323,820
4 Claims. (Cl. 56—10)



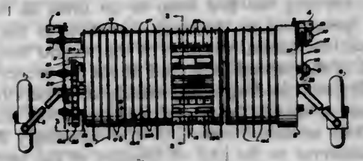
1. In a combine, the combination with the drive shaft driving the combine pick-up attachment and the grain receiving, elevating conveyor associated therewith and a belt driven pulley secured to said shaft, of a pivotally mounted lever conveniently operable by the combine attendant, a pulley movable with the lever towards and away from the belt, means releasably locking the lever in a position with the latter pulley engaged with the belt to take up slack therein, remotely controlled means for releasing said locking means, spring means acting through the lever to move the latter pulley away from the belt upon said locking means being released and means operating coincidently with the release of the locking means to apply a brake band on the first mentioned pulley.

2,732,677
CRANBERRY STRIPPING MACHINE
Elmer Nielsen, near Grayland, Wash.
Application April 30, 1954, Serial No. 426,742
15 Claims. (Cl. 56—330)



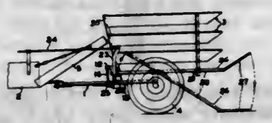
1. A cranberry harvesting machine comprising, in combination, a mobile carriage adapted for travel upon a cranberry field, an annular rotor member having a series of comb teeth thereon projecting from one end of said rotor member in a direction generally endwise therefrom at closely spaced locations around substantially the entire end periphery of said rotor member, means on said carriage supporting and guiding said rotor member thereon to rotate about an axis contained in a substantially vertical plane extending generally in the normal line of travel of said carriage, with the toothed end of said rotor member facing generally forwardly with relation to said carriage, said rotor member supporting and guiding means being constructed and arranged on said carriage to dispose those teeth which at any instant lie along the lower side of said rotor member in generally parallel relation to the ground, whereby forward movement of said carriage advances such comb teeth through cranberry plants growing thereon, a source of drive power mounted on said carriage, and rotational drive means interconnecting and transmitting power from said source to said rotor member for producing substantially continuous rotation thereof, whereby cranberry plants entering into the spaces between successive comb teeth on said rotor member accompanying forward travel of the carriage are stripped of berries by rotational translation of such comb teeth in a sense generally transverse of the length of such teeth about the rotor member's axis.

2,732,678
PICK-UP FOR SEED CROPS
Wilfred A. Blaser and Roy W. McLain, Davenport, Iowa, assignors to Innes Company, Bettendorf, Iowa, a corporation of Delaware
Application February 20, 1953, Serial No. 338,042
12 Claims. (Cl. 56—364)



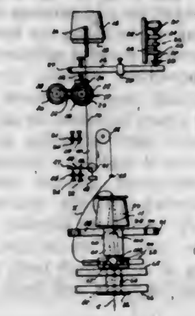
1. A pick-up comprising a plurality of shafts, said shafts having rollers and sprockets thereon, said sprockets having chains reeved around them, said rollers having channels extending lengthwise thereof, bars received in said channels and secured to corresponding links of the chains, fingers secured to the bars, belt driving means above and to the rear of the rollers, the shafts of said rollers being approximately the same distance from the ground, and a plurality of belts reeved around the rollers and the belt driving means, whereby there are formed loops between the belts and the rollers, the loops formed by the belts crossing the path of the ends of the fingers as they travel around the rollers.

2,732,679
BALE DROPPER
Chester Vernon McCombs, Sterling, Ill.
Application May 8, 1953, Serial No. 353,785
4 Claims. (Cl. 56—473.5)



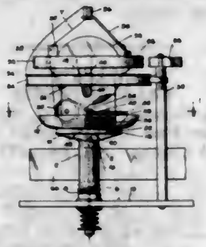
1. A bale dropping device for use with a baler comprising a mobile frame having transversely disposed pivot means, a basket having a floor and sides mounted on said pivot means forwardly of its longitudinal center and having latch means releasably connecting a forward portion of said basket to said frame, the said floor having upturned rear end portions and said sides being upwardly and outwardly inclined, and spring means interconnecting said basket and said frame to return said basket to loading position after a load has been dumped therefrom.

2,732,680
METHOD OF AND APPARATUS FOR PLYING STRANDS
Alfred W. Vibber, Ridgewood, N. J.
Application March 12, 1953, Serial No. 341,865
24 Claims. (Cl. 57—58.3)



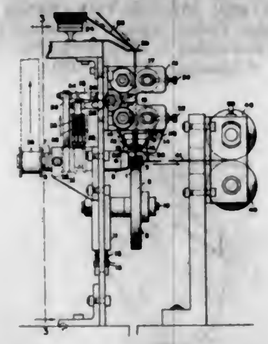
1. The method of twisting together two strands so as to form a two-ply strand which comprises feeding a first strand from a first source of supply into a first false twisting loop, feeding a second strand from a second source of supply into a second false twisting loop, rotating the second loop in one direction in an orbit about an axis from which the second loop extends generally radially, rotating the first loop in an orbit at the same angular speed and in the same direction as the second loop about the axis of rotation of the second loop, about the orbit of the second loop, and about the second source of supply, and feeding both strands in generally radial runs from substantially diametrically opposite directions at positively equalized rates and in substantially the same plane transverse to the axis of rotation of the loops from their respective loops into initial contact with each other at a point of plying on the axis of rotation of the loops, the rotation of the loops serving to twist the strands about each other.

2,732,681
TEXTILE PLYING OR TWISTING DEVICE
Norman E. Klein, Clemson, S. C., assignor to Deering Milliken Research Corporation, near Pendleton, Oconee County, S. C., a corporation of Delaware
Application April 12, 1951, Serial No. 220,665
10 Claims. (Cl. 57—58.65)



5. A twister comprising in combination a rotatable spindle, a stationary shaft about which said spindle is adapted to be rotated, a support platform carried by said spindle, means preventing rotation of said platform with said spindle, a yarn take-up device mounted on said platform, means for driving said take-up device from said spindle, a flier fixed to said spindle for rotation therewith and having a yarn storage surface thereon, yarn guide means supported from said platform at a location on the extended axis of said spindle, said shaft having an axial passage therein and said spindle having an orifice in the wall thereof terminating adjacent the yarn storage surface of said flier for passage of yarn therethrough, and means for driving said spindle, whereby when yarn is threaded through the axial passage of said shaft and is led out said orifice to said take-up device by way of said yarn storage surface of said flier and guide means, two twists are inserted in the yarn for each rotation of the spindle and the yarn balloons about the take-up device and platform in transit from the flier to the guide means.

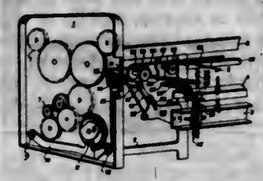
2,732,682
METHOD FOR SPINNING YARN FROM STAPLE FIBER
George J. Kyame, New Orleans, La., assignor to the United States of America as represented by the Secretary of Agriculture
Application June 24, 1952, Serial No. 295,377
1 Claim. (Cl. 57—58.91)
(Granted under Title 35, U. S. Code (1952), sec. 266)



A spinning machine comprising means for withdrawing a staple fiber yarn in a linear, substantially non-twisting manner, means for advancing a roving, and a rotatable member containing a helical passageway entering said rotatable member at a side, following a continuous curve of decreasing radius which approaches zero at the axis of rotation of said member, and emerging at an end of said member, whereupon as said roving is advanced into said helical passageway, the said rotatable member, within one revolution, separates an incremental strand of the roving having a length not exceeding the circumference of the said member, this incremental strand advancing in the passageway where the forward end fibers thereof are intermingled with the receding end fibers of the withdrawing yarn while the twist imparted to the said increment by the rotating member causes the said incremental strand to attach to the receding yarn at the point of intermingling.

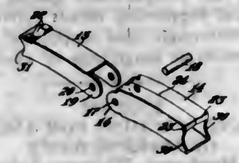
2,732,683
METHOD AND DEVICE FOR WINDING COPS IN RING-SPINNING AND RING-DOUBLING MACHINES HAVING A VERTICALLY MOVABLE SPINDLE RAIL
Walter Hoffmann, Zurich, Switzerland, assignor to Actiengesellschaft Joh. Jacob Rieter & Cie., Winterthur, Switzerland, a corporation of Switzerland
Application June 9, 1951, Serial No. 230,722
Claims priority, application Switzerland June 29, 1950
7 Claims. (Cl. 57—95)

1. In ring-spinning and ring-doubling machines, a vertically movable spindle rail, a vertically movable thread guide rail, means connecting both said rails for simultaneous vertical movement thereof, a swing lever having a free end, a power-driven cam engaging said lever for actuation thereof, a vertically movable ring rail, a shaft, a first pulley, a second pulley rigidly and coaxially connected with the first pulley, said pulleys being rotatably supported by said shaft, a first chain having one end connected with the free end of said swing lever, the other end of said chain being connected with said first pulley and said chain being laid over said first pulley for rotating said pulleys upon movement of said swing lever, a second chain laid over the second pulley and having an end connected therewith, a mechanism connected with said



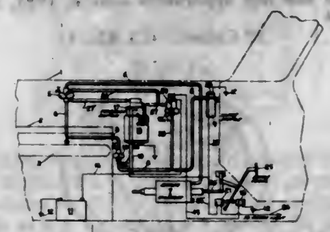
second chain for actuation thereby and being connected with said ring rail for moving it vertically upon winding and unwinding of the second chain on and from said second pulley, and means supporting said shaft and being connected with said spindle rail for displacing said shaft in accordance with the movements of said spindle rail.

2,732,684
TUBULAR EXPANSIBLE BAND WITH IMPROVED STOP MEANS
Karl C. Angenstein, Cranston, R. I., assignor to Speidel Corporation, Providence, R. I., a corporation of Rhode Island
Application September 25, 1952, Serial No. 311,496
7 Claims. (Cl. 59—79)



1. A tubular expansible band comprising a series of telescopical links pivotally connected end to end, each of said links including an outer tubular section, an inner tubular section telescopically received within the outer tubular section, each of said links having pivotal means on said outer and inner sections at opposite ends thereof for connecting said links to adjacent links of said series, stop means on the inner tubular section, stop means on the outer tubular section, said stop means cooperating when the sections are extended a predetermined amount relative to each other to limit further extension, a spring within the outer and inner sections, first retaining means associated with one end of the outer tubular section for holding the adjacent portion of the spring stationary relative to said end of said outer tubular section and second retaining means associated with the opposite end of the inner tubular section for holding the adjacent portion of the spring stationary relative to said end of said inner tubular section, whereby said spring urges said outer and inner tubular sections into contracted telescopical relation, said outer tubular section being made of a single piece of metal formed to a substantially tubular shape which is generally rectangular in cross section to provide top, bottom and side walls, said stop means on the outer section comprising an abutment member formed from the piece of metal from which the outer section is made, extending inwardly from one wall of the outer section and inwardly from at least one of the walls adjacent to said one wall and being integral with both said one wall and said adjacent wall, and said stop means on the inner tubular section comprising a portion of said inner section displaced outwardly away from a face of said inner section in a direction laterally along the width of said face with a bend line connecting said displaced portion and said face extending in a direction generally parallel to the longitudinal axis of the band, said displaced portion comprising wall means the length of which extends in a direction generally laterally along the transverse width of said face providing a transverse side for engagement with said abutment member.

2,732,685
VEHICLE BRAKE AND ACCESSORY SYSTEM
John R. Oishei, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y.
Application April 8, 1954, Serial No. 421,747
10 Claims. (Cl. 60—60)



1. In combination with an automotive vehicle having a power plant with a primary source of suction and a pneumatically powered accessory, a pneumatically powered brake connected to the primary source of suction, an auxiliary source of suction interposed between said brake and primary source, said auxiliary source of suction being operative when the vacuum created by said primary source drops below a predetermined magnitude, a conduit interconnecting said pneumatically powered accessory and said auxiliary source, a normally open valve in said conduit between said accessory and auxiliary source, and means to simultaneously close said valve and actuate said pneumatically powered brake.

2,732,686
PORTABLE AUTOMATICALLY RELEASED DAM
John E. Melin, Livingston, Mont., assignor of one-half to Allyn O'Hair, Livingston, Mont.
Application September 7, 1954, Serial No. 454,393
9 Claims. (Cl. 61—29)



1. A dam of the character described comprising a rigid support member adapted to span an irrigation ditch, a flexible dam element having an edge portion secured to said support member and extending across the ditch, an elongated prop having a forward end adapted to rest on the ditch bed upstream relatively to said support member, a hasp, means swingably supporting one end of the hasp beneath said support member for swinging movement of the hasp toward and away from the support member and longitudinally thereof, and detent means releasably supporting the other end of said hasp adjacent said support member, said hasp extending under a portion of the prop located remote from said forward prop end for supporting said last mentioned prop portion beneath and adjacent the support member, said prop supporting the flexible dam element in an upstream position relatively to the support member, said dam element having other edge portions engaging the banks and bed of the ditch for damming the ditch, and means for actuating said detent means to release the free end of the hasp for releasing the prop therefrom to permit said

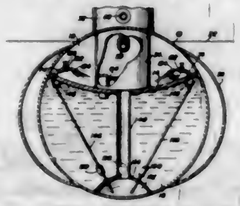
dam element to pass under the support member to a released position on the downstream side of the support member.

2,732,687
APPARATUS FOR THE STORAGE OF VOLATILE LIQUIDS

Clarence W. Brandon, Tallahassee, Fla., assignor, by direct and mesne assignments, of fifteen per cent to Harvey B. Jacobson, Washington, D. C., and forty-two and one-half per cent to N. A. Hardin, Hazel H. Wright, and Catherine H. Newton, all of Forsyth, Ga.

Original application July 16, 1948, Serial No. 39,154. Divided and this application June 6, 1951, Serial No. 230,124

27 Claims. (Cl. 62—1)



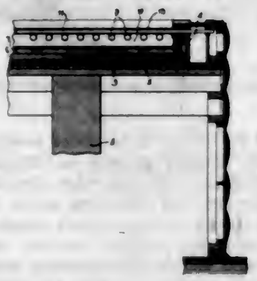
1. An apparatus for storing fluids comprising sealed storage and vapor compartments, discharge means responsive to a predetermined pressure for discharging fluid from said storage to said vapor compartment, means for cooling the discharged fluid, conduits for placing the cooled fluid in heat exchange relation with said storage compartment and return means for returning fluid from said vapor to said storage compartment when the pressure in the former exceeds that of the latter, said vapor and storage compartments being formed by a partition in a container, and a liquid condensate sump communicating with said vapor compartment but disposed remote therefrom and in said storage compartment.

2,732,688
ILLUMINATED SKATING RINK

Alpheus E. Dickson, Los Angeles, Calif., assignor to National Theatres, Inc., Los Angeles, Calif., a corporation of Delaware

Application March 19, 1953, Serial No. 343,479

9 Claims. (Cl. 62—12)



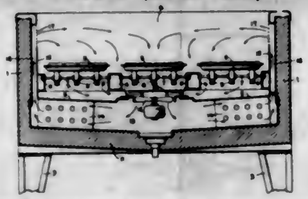
2. An illuminating ice skating rink comprising a watertight pan comprising a bottom and side walls; a plurality of parallel transparent tubes in said pan and closed to water in said pan, each of said tubes having an open end extending through the side wall of said pan and having a watertight seal sealing said tube and pan together where the tube passes from the pan; a plurality of illuminating bulbs lying loosely in each tube, and flexible electrical conductors lying loosely in each tube and connecting the illuminating bulbs in said tube in parallel electrical relationship, said illuminating bulbs and flexible conductors being removable through the open ends of said transparent tubes.

2,732,689
REFRIGERATED DISPLAY CABINET

Clifford B. Shreve, Buchanan, Mich., assignor to Tyler Refrigeration Corporation, a corporation of Michigan

Application April 15, 1953, Serial No. 348,948

1 Claim. (Cl. 62—89.5)



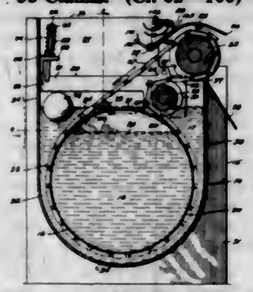
A refrigerated cabinet having an open topped compartment, said compartment having a bottom and opposite sides, a plenum chamber beneath said bottom near the center thereof and extending substantially the entire length of the cabinet, a restricted air inlet through said bottom into said plenum chamber and extending substantially the entire length of the cabinet, an air cooling element at each side of said plenum chamber in the direction of said sides, an air conduit leading from each of said cooling elements to the respective opposite sides of the compartment, an outlet passage from each conduit into said compartment at opposite sides and near the top thereof, a fan located to draw air from said compartment through said restricted air inlet and force it under pressure into said plenum chamber, means for supporting merchandise in said compartment spaced above the bottom thereof, said supporting means providing free passage of air therethrough, said supporting means being a conveyor transversable lengthwise of said compartment.

2,732,690
ICE BARS AND MACHINE FOR AND METHOD OF MAKING SAME

Ray M. Henderson, Whitmore Lake, Mich.

Application June 29, 1950, Serial No. 171,073

35 Claims. (Cl. 62—106)



1. In a machine for making ice bars, a heat exchange drum, and a heat exchange chain trained about a portion of the periphery of said drum, said chain including laterally spaced apart plate-like fins, normal to the periphery of the drum, said fins each having a concave edge and the concavity of each fin having a radius equal to the radius of the external periphery of said drum for surface to surface contact with the latter, and each fin provided with at least one arcuate laterally extending flange flush with its concave edge.

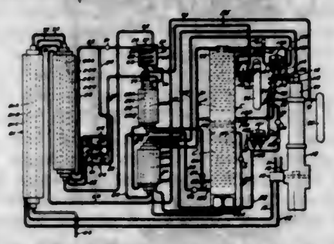
2,732,691
APPARATUS FOR TREATING GASES

Samuel C. Collins, Watertown, Mass., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application October 1, 1953, Serial No. 383,435

5 Claims. (Cl. 62—123)

1. In an apparatus for the separation of gases by the liquefaction and rectification of a mixture thereof, in combination, at least one heat exchanger, an evaporator-condenser, said evaporator-condenser having an oxygen conducting course and an air conducting course in close heat exchange relation with each other, another heat exchanger, an expansion engine, a double column having high and low pressure chambers, a liquid oxygen pump, means for connecting said at least one heat exchanger to deliver air under pressure in divided streams to the air conducting course of said evaporator-condenser and to said expansion engine, means for delivering air exhausted from said expansion engine to the high pressure chamber of said column via said other heat exchanger, means including a



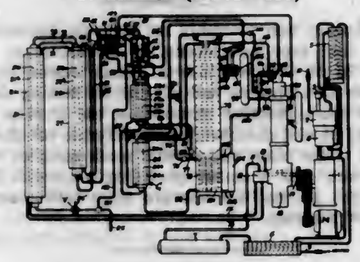
valve device for delivering air from the air conducting course of said evaporator-condenser via said other heat exchanger to the high pressure chamber of the column at the same pressure as the exhaust from the expansion engine, means including constant displacement metering devices for delivering nearly pure nitrogen and enriched air from the high pressure chamber of the column to the low pressure chamber thereof, means for connecting said liquid oxygen pump with the low pressure chamber of said column at a point at the normal liquid oxygen level therein, and means for conducting the discharge from said liquid oxygen pump to the oxygen conducting course of said evaporator-condenser.

2,732,692
METHODS OF AND MEANS FOR TREATING GASES

Samuel C. Collins, Watertown, Mass., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania

Continuation of application Serial No. 161,786, May 13, 1950. This application March 24, 1955, Serial No. 496,433

17 Claims. (Cl. 62—123)



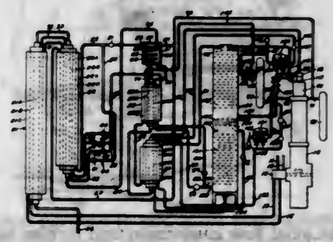
1. In a method of producing substantially pure gaseous oxygen from compressed air which includes the moving, through a heat exchanger and an evaporator-condenser, to a column, of a stream of air in heat exchange relation with a stream of liquid oxygen from the column at higher than column pressure, the improvement which consists in maintaining the relative pressures of the air and oxygen and their mass rates of flow so that there shall occur a partial vaporization of the leaving oxygen in the evaporator-condenser and a completion of the vaporization thereof in the heat exchanger, and complete liquefaction of the air in the evaporator-condenser by the absorption of the heat of condensation thereof by the partial vaporization of the oxygen.

2,732,693
METHODS OF TREATING GASES

Samuel C. Collins, Watertown, Mass., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application October 1, 1953, Serial No. 383,437

12 Claims. (Cl. 62—175.5)



1. Method of separating a gaseous mixture by refrigeration and rectification to provide a desired gaseous product which includes the delivery of a liquefied gaseous mixture, as rapidly as it is formed, into a column for rectification therein and maintaining the designed difference between the pressure of the liquefied gaseous mixture and the pressure within the column by passing such liquefied mixture through a metering device of the measuring chamber type having a fixed displacement rate slightly, but only slightly, exceeding the rate at which such liquid is produced.

2,732,694
EARRING WITH SPRING ACTUATED CLAMP

Ernest F. Gray, Los Angeles, Calif.

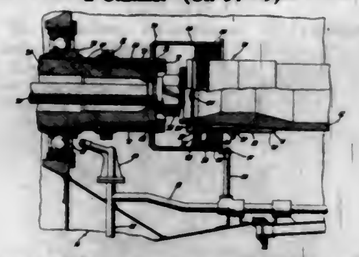
Application June 11, 1953, Serial No. 360,897

5 Claims. (Cl. 63—14)



1. In an earring, a U-shaped member dimensioned loosely to embrace the lobe of a human ear, said U-shaped member having a pair of substantially parallel arms, one of said arms being adapted to receive an ornament, the other of said arms acting as a pivot, an ear lobe clamping member having one end pivotally mounted adjacent the upper end of said pivot arm, said clamping member having an opposite free end, said clamping member normally extending substantially perpendicularly from adjacent the top of said pivot arm across the open end of said U-shaped member to adjacent the top of said ornament arm, a slot extending upwardly from the free end of said clamping member to divide said clamping member into two separate ear lobe engaging portions, one disposed on each side of said slot, said ear lobe engaging portions normally extending downwardly adjacent and substantially parallel to said ornament arm, resilient means acting on said clamping member to normally urge said ear lobe engaging portions toward said position, said ear lobe clamping member adapted to be pivoted against the urging of said resilient means to move said ear lobe engaging portions downwardly away from said ornament arm and toward the lower portion of said pivot arm until said ear lobe engaging portions extend substantially transversely to said pivot arm and are disposed on opposite sides thereof, with the lower portion of said pivot arm disposed within said slot to free the space between said arms for insertion and removal of the ear lobe.

2,732,695
THRUST BALANCING
Arthur M. Davis, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 11, 1952, Serial No. 293,016
2 Claims. (Cl. 64—9)



1. In an axial flow compressor and turbine each having axially aligned tubular rotor shafts with an axial clearance space therebetween and an axially extensible coupling device for coupling said rotor shafts, said coupling device comprising, in combination, a pair of helically splined coupling members detachably mounted on adjacent ends of the compressor and turbine shafts, one of said members on one of said shafts having an enlarged bell-shaped open end portion with helically splined teeth extending about the interior thereof, the other of said members on the other of said shafts having a ring portion with helically splined teeth about the periphery thereof engaging said internally splined teeth on said bell-shaped coupling member, an annular reservoir integral with the ring portion with openings through said ring portion connecting the reservoir with the interior of said coupling means, lubricating means adjacent the open end of said bell-shaped coupling member introducing lubricating coolant into the reservoir, and sealing means in the ends of said rotor shafts to prevent flow of lubricant therethrough.

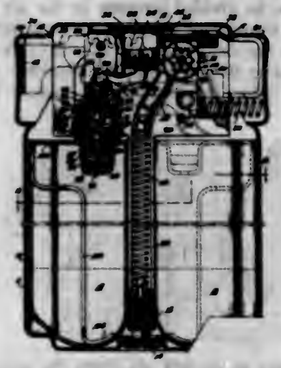
2,732,696
DISH
Nellie M. Baker, Boston, Ga.
Application January 9, 1953, Serial No. 330,437
1 Claim. (Cl. 65—15)



A dish assembly comprising a first dish having a continuous marginal wall rising upwardly from a central portion, said marginal wall including spaced side portions, a front end portion and a rear end portion, a spout formed in said front end portion, an elongated handle extending rearwardly from said rear end portion, a drain dish disposed within said first dish having an apertured bottom, a plurality of legs depending from said drain dish whereby said bottom is spaced above said central portion, said drain dish also having spaced side flanges and end flanges forming a retaining rim, and an upstanding guide member on each of said side portions of the first dish engaging a corresponding side flange of the drain dish.

2,732,697
SMOKER'S LIGHTER
Robert E. Peterson, New York, N. Y., and Roger S. Lancaster, Waterbury, Conn., assignors to Repeter Products, Inc., New York, N. Y., a corporation of New York
Application September 26, 1949, Serial No. 117,844
13 Claims. (Cl. 67—7.1)

3. A portable gas fuel lighter comprising a gaseous fuel supply means, a combustion chamber for burning a mixture of gas and air, ignition means adjacent said combustion chamber including a drive pinion, a carbureting device connected to said combustion chamber for supplying a combustible gas and air mixture to said combustion chamber, a valve means connected to said carbureting device and said fuel supply means for supplying fuel to said carbureting device when open, a gear

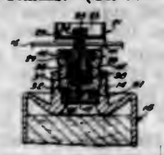


sector having a cam portion for opening said valve means, means to connect said cam portion and said valve means and a manually operated member having a first rack portion meshing with said gear sector for rotating said cam portion to open said valve and a second rack portion meshing with said pinion for initially opening said valve means and thereafter operating said ignition means.

2,732,698
PORTABLE LIGHTERS
Robert E. Peterson, New York, N. Y.
Application March 27, 1953, Serial No. 345,107
5 Claims. (Cl. 67—7.1)

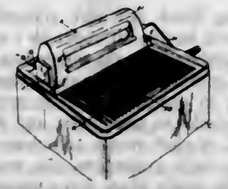
1. A burner unit assembly for portable lighters of the gaseous fuel type comprising, in combination, means adapted to be inserted into a lighter casing and providing ain air-aspirating and gas and air mixing chamber, a hollow mesh member mounted at the exterior of the outlet end of said chamber, an imperforate tubular shank attached to the inner end of said mesh member and extending into said chamber providing a conduit for the flow of the gas and air mixture from said chamber to said mesh member.

2,732,699
CIGARETTE LIGHTER AND VALVE
Lawrence T. Ward, Northampton County, Pa.
Application August 16, 1954, Serial No. 450,179
2 Claims. (Cl. 67—7.1)



2. A disposable cigarette lighter combination consisting of a valve combination having a cavitated housing, having exteriorly disposed screw-threads adapted to engage co-acting screw-threads of a fuel gas container, said housing having a conduit disposed in the cavitated bottom thereof, a tubular plunger having a bottom cut-off plug and a shoulder portion loosely disposed in the cavitated housing for reciprocal vertical movement therein, securing means for securing said plunger in said housing, spring coil means disposed about said plunger between and upon said plunger shoulder and securing means for continuously urging said plunger plug against said conduit to form a gas tight seal, and a flanged powdered porous metal disc adapted to engage said conduit of said housing in opposed relationship to the engagement of said plug of said plunger with said conduit, said disc having a pre-selected bottom recess adapted to permit a predetermined uniform passage of fuel gas therethrough and a high pressure resistant container having an integral nozzle, said nozzle having internally disposed screw-threads for engaging the exteriorly disposed screw-threads of said cavitated housing and further said nozzle having exteriorly disposed screw threads adapted to engage a corresponding interiorly disposed screw-threaded tubular element of a cigarette casing, said nozzle being further provided with an interiorly disposed annular rim adapted to engage said porous metal disc, said valve combination being threadingly disposed in said nozzle, said disc being disposed on said annular rim of said nozzle and beneath said housing, and a resilient gasket sealer ring disposed on the flange of said disc and the bottom of said housing to effect a gas tight seal therebetween.

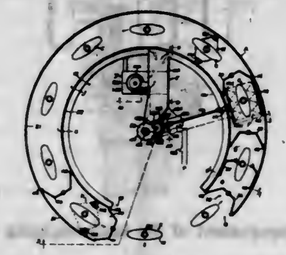
2,732,700
SLIDABLE LID FOR CLOTHES WRINGER AND WASHER CABINET
Harold George Dunn, Perivale, Greenford, England, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application April 23, 1952, Serial No. 283,802
Claims priority, application Great Britain April 24, 1951
3 Claims. (Cl. 68—14)



1. A clothes washing machine having a container of generally rectangular form in plan view, said container having a top opening, a wringer extending across the rear portion of the top opening, and a lid of smaller area than said top opening, said lid being mounted on said container to slide from a position where it is wholly or mainly under the wringer to a position in which it wholly or mainly covers the forward part of the top opening of the container not covered by the wringer.

2,732,701
APPARATUS FOR SPRAYING AND DRYING OPERATIONS
Cloyd D. Smith and Robert L. Matthews, West Los Angeles, Calif., assignors to Henry Stroh, Los Angeles, Calif.
Application December 30, 1952, Serial No. 328,712
20 Claims. (Cl. 68—20)

1. In a dry cleaning apparatus, a housing including radially spaced segmentally cylindrical vertical wall members defining an annular duct of split ring form having adjacent inlet and outlet ends; a series of pairs of swinging doors dividing said duct into a series of chambers including a relatively short spray chamber and a relatively long drying chamber; said housing further including a cap closing the top of said duct and providing thereabove a circumferentially continuous conveyor space a rotating overhead conveyor having a series of radial arms



with terminal portions in said space and projecting downwardly into the upper region of said annular duct, said terminal portions being adapted to support a series of garment hangers.

2,732,702
TUMBLER TYPE WASHING MACHINES
Henricus C. A. Zwaard, Rijswijk, Netherlands, assignor to Machinefabriek Reineveld N. V., Delft, Netherlands, a company of the Netherlands
Application December 26, 1951, Serial No. 263,401
Claims priority, application Netherlands January 2, 1951
3 Claims. (Cl. 68—143)

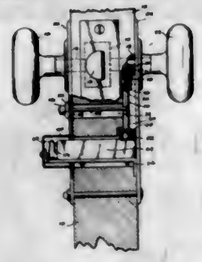


1. A washing machine comprising a stationary casing having a horizontal shaft, a shell mounted within the casing for rotation in one direction about said shaft, said shell being subdivided into a plurality of segmental compartments by partitions which are concave in cross-section as seen in the direction of rotation of the shell, said partitions extending from the shell inwards to the shaft, the shell segment of each compartment being covered by two spaced scoops extending in opposite circumferential direction to constitute a leading scoop and a trailing scoop, each compartment comprising individual portions defined by spaced apertures in the shell segment thereof, and the free edge of the leading scoop of a compartment projecting outwards in radial direction from the axis of the shaft relative to the free edge of the trailing scoop of the same compartment.

2,732,703
DOOR LOCK
Maurice J. Noregaard, Los Angeles, Calif.
Application September 9, 1952, Serial No. 308,600
10 Claims. (Cl. 70—211)

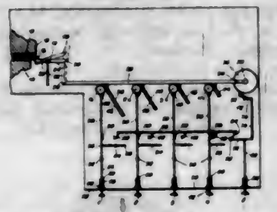
10. A lock for doors fitted with a door latch and comprising latch-engaging means positioned adjacent the latch and mounted for releasable locking engagement therewith, a pair of relatively movable plates having therein at least one pair of opposed recesses, one of the plates serving as an abutment for the latch-engaging means, and, movably mounted in said pair of recesses, a magnetic element normally positioned for interlocking the plates but adapted, upon the approach of a second magnetic ele-

ment, to be withdrawn from the recess in one of the plates, thereby permitting the relative movement of the plates



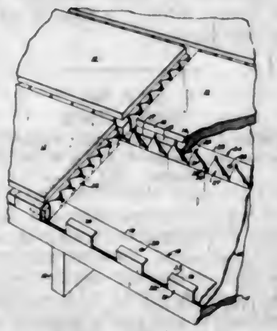
and the disengagement of the latch-engaging means from the latch.

2,732,704
PUSH BUTTON COMBINATION LOCK
James J. Murray, Solomons, Md.
Application February 17, 1953, Serial No. 337,450
11 Claims. (Cl. 70—313)
(Granted under Title 35, U. S. Code (1952), sec. 266)



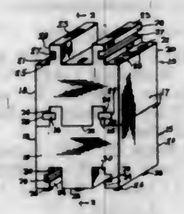
6. In a combination lock, an arm pivoted at one end and the other end movable in a curved path, lock release means in the path of the movable end of the arm and operated thereby when the arm is in a predetermined position, cumulative means for moving the end of the arm in the said path comprising a plurality of drivers at different distances from the pivoted end of the arm, means for operating each driver individually, each driver including an operating member extending from the arm at an angle thereto, and the operating means including a movable bar carrying a pinion, a rack to engage the pinion mounted on the operating member extending from the arm, and a push-button key attached to the bar for moving the arm a predetermined distance at each actuation of the key.

2,732,705
WALL STRUCTURE FOR BUILDINGS
Robert T. Ray, Albany, Ga.
Application September 3, 1954, Serial No. 454,040
7 Claims. (Cl. 72—24)



7. Wall structure comprising spaced studding members, insulating board secured to said studding members, a base strip secured to said board adjacent the lower edge thereof, said base strip comprising an elongated strip of metal, a flange projecting outwardly from said base strip, securing strips attached to said board in spaced relation to said base strip and spaced from each other, each securing strip comprising an elongated strip of metal, a flange projecting outwardly from said last named strip, said last named flange being slit at spaced intervals to provide a plurality of tabs, each of said last named tabs being twisted to provide oppositely projecting tongues and inclined lower surfaces on said tongues, and a plurality of blocks laid in courses one above the other and providing the outer siding of said wall structure, each block having an outwardly and downwardly inclined surface on each edge, the lower course of blocks being applied to said wall structure with the flange on said base strip engaging the lower edges of said lower course of blocks and with the inclined surfaces on the tongues on one side of the securing strip adjacent said base strip engaging the inclined surfaces on said lower course of blocks to secure the same in place, succeeding courses of blocks being secured in place solely by said last mentioned tongues and the tongues on succeeding securing strips.

2,732,706
INTERLOCKING PRE-CAST BUILDING BLOCKS
Herman Friedman, Hollywood, Fla.
Application August 23, 1952, Serial No. 305,985
2 Claims. (Cl. 72—38)

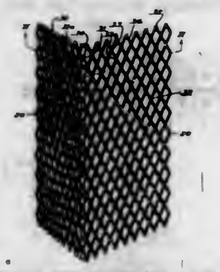


1. A building block structure comprising two superposed blocks each having an upper face and a lower face, projections extending from the upper faces and recesses in the lower faces complemental to said projections, a locking keyway groove in one side of each projection disposed substantially parallel to said faces, and a keyway groove in one sidewall of each recess complemental to the keyway groove in each projection, the projections on the upper face of the lower block being seated in the recesses in the lower face of the upper block and the keyway groove in each recess sidewall aligned with the keyway groove in the projection seated therein, and a locking key in the aligned grooves locking the blocks together, the lower face of each of said blocks also having a plurality of spaced male plugs perpendicular to said grooves and the upper face of each block having a plurality of like spaced female sockets, the male plugs on the upper block being seated in the female sockets in the lower block to provide an interlock between the blocks.

2,732,707
CORNER METAL LATH
William M. Ries, Beech Bottom, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a corporation of Delaware
Application April 15, 1949, Serial No. 87,600
4 Claims. (Cl. 72—121)

1. A corner metal lath comprising a corner-defining center member and a pair of expanded metal wings extending angularly outwardly from the center member substantially at right angles to each other, the center member having alternately raised and depressed portions corresponding to the pattern of raised and depressed portions

of the strands forming the expanded metal wings, the raised portions of the center member being sufficiently



high to extend beyond a line forming the apex of the angle between the planes in which the wings lie.

2,732,708
PLASTOMETER AND METHOD
Erwin F. Linhorst, Fort Wayne, Ind., assignor to United States Rubber Company, a corporation of New Jersey
Application March 21, 1952, Serial No. 277,779
2 Claims. (Cl. 73—15.6)



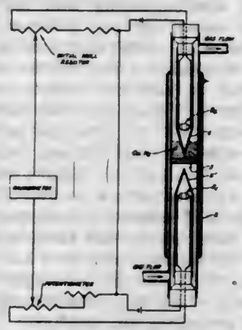
1. A plastometer comprising, a pair of spaced, parallel elongated side members, a first plate extending between and secured to said side members adjacent the lower ends thereof, a second plate extending between and secured to said side members adjacent the upper ends thereof, a flat, circular platen secured to the upper face of said first plate, a bar secured to and extending between said side members at a point adjacent to but spaced from said first plate, said second plate and said bar having openings therethrough which are in alignment with said platen, an elongated rod slidably mounted in said openings for movement towards and away from said platen, a second flat circular platen secured to the lower end of said rod, a cross bar secured to said rod adjacent to but spaced from the upper end thereof, a pair of screw eyes adjustably threaded one in each end of said cross bar, a pair of extension springs connected at one of their ends to said bar and at their other ends to said screw eyes whereby said second mentioned platen secured to the lower end of said rod is normally urged against said first mentioned platen to press a test sample therebetween, one of said side members extending above said second plate a substantial distance, a dial indicator secured to the extending portion of said one of said side members and having an actuating plunger in contact with the upper end of said rod whereby the thickness of the test sample placed between said platens will be indicated on said dial indicator, and a pin secured to and extending from said rod adjacent the upper end thereof to facilitate raising of the rod against the tension of said springs to permit insertion of a test sample between said platens.

2,732,709
BENCH TYPE FREEZEMETER
John W. Dickey, Newfield, N. Y., assignor to Bendix Aviation Corporation, a corporation of Delaware
Application May 11, 1953, Serial No. 354,260
6 Claims. (Cl. 73—17)



1. In a freezing point tester for liquids, a casing, a cylindrical sample-holding tube projecting therefrom having an inlet at its free end and a lateral outlet opening spaced therefrom, an inwardly opening check valve in said inlet, a thermometer comprising a cylindrical stem having a loose sliding fit in the tube with its temperature-sensitive element located between the free end of the tube and said lateral opening, manually operable means for causing relative longitudinal movement between the thermometer stem and the tube, spring actuated means in the casing opposing said manually operable means, releasable means for latching the tube and thermometer stem against the action of the spring, while permitting a limited relative reciprocatory movement of said parts, and a freezing chamber adapted to receive the stem and tube.

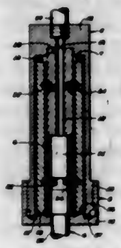
2,732,710
THERMISTOR BRIDGE FOR MOISTURE DETERMINATION
Edwin A. Richardson, Sulphur, La., assignor to Columbia-Southern Chemical Corporation, Allegheny County, Pa., a corporation of Delaware
Application May 1, 1953, Serial No. 352,493
2 Claims. (Cl. 73—29)



1. In a moisture detector bridge particularly adapted for use with corrosive gases, including a tubular gas conduit, a first thermistor disposed within the conduit, a hygroscopic material capable of liberating detectable amounts of heat energy disposed across the gas flow downstream of said first thermistor, and a second thermistor disposed within the conduit downstream of said hygroscopic substance, a terminal of each thermistor being electrically connected to the opposite ends respectively of a circuit including a variable resistance and a power source, and the other terminal of each thermistor being electrical-

ly connected with an electrical measuring instrument disposed to indicate electrical balance between a first circuit including one of said thermistors and a measurable resistance and a second circuit including the other thermistor and a measurable resistance, the improvement in structure comprising a permanently positioned plate of sufficient porosity to allow a sample gas flow through said conduit, the porosity of the plate being substantially uniform so as to produce an even flow of gas on the downstream side of the plate, said plate being positioned within said conduit between said thermistors as a support member for said hygroscopic substance, an envelope of inert material enclosing each thermistor, an end of said envelope being a known distance from said thermistor, the envelope enclosing the downstream thermistor being precisely repositionable with respect to said plate during assembly of said moisture detector bridge by abutment of said end of the envelope enclosing said downstream thermistor against said plate.

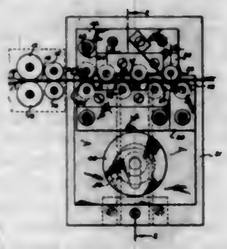
2,732,711
MEANS FOR PREVENTING LEAKAGE BETWEEN A ROTATED SHAFT AND A HOUSING
William J. Darmody, Philadelphia, Pa.
Application July 11, 1952, Serial No. 298,486
8 Claims. (Cl. 73—37.9)
(Granted under Title 35, U. S. Code (1952), sec. 266)



6. Apparatus, useful in the art of gaging dimensional accuracy by the use of air operated equipment, comprising: a housing having first and second openings thereinto and having a sealing surface circumferentially surrounding said first opening; a hollow shaft rotatably disposed in said housing, part of said shaft extending through said first opening; an air-supply conduit connected to said housing and communicating with the interior thereof through said second opening; a sleeve disposed about a portion of said shaft within said housing, one end of said sleeve being in slidable sealing contact with said housing's sealing surface; at least one resilient member being disposed between said shaft and said sleeve, said member being so constructed and arranged as to be in sealing engagement with said shaft and said sleeve and constantly to press said sleeve's end into slidable sealing contact with said housing's sealing surface; and an air operated dimensional gaging head secured in leakproof manner to that part of said shaft outside said housing and providing for emission of air; whereby said shaft and said gaging head are rotatable relative to said housing and to said conduit without leakage of air from said housing and also without twisting and entangling said conduit.

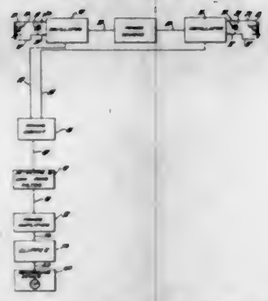
2,732,712
METHODS OF AND APPARATUS FOR TESTING WELDED STRIPS
Robert B. Reed, Westchester, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application November 23, 1951, Serial No. 257,727
11 Claims. (Cl. 73—100)

1. The method of testing welded strips, which comprises continuously flexing a bi-metallic strip having welded components of unequal strength sufficiently to cause slight humps in unwelded portions of the weaker



component, and then detecting any humps in the flexed strip.

2,732,713
STRAIN-MEASURING DEVICE
Samuel P. Willits, Chicago, Ill., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 6, 1951, Serial No. 204,765
5 Claims. (Cl. 73—136)

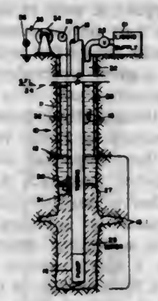


1. Apparatus for measuring the time integrated average torque produced in a rotatable member comprising, in combination, rotatable pickup means adapted for mounting on said member and comprising a pair of inductances variable in opposite senses in response to the torque to be measured, a pair of signal oscillators each including a different one of said variable inductances for controlling the signal frequency thereof, mixing means connected to said oscillators for beating said oscillator signals together and deriving a beat frequency signal corresponding to the difference frequency therebetween, and recording means responsive to said beat frequency signal connected to said mixing means, said recording means including counting means for recording the total number of cyclical variations of said beat frequency signal over a period of time as a function of the average torque produced in said member.

2,732,714
MEASUREMENT OF ANNULUS VOLUME IN WELLS
Arthur D. Bennett, Tulsa, Okla., assignor to Stanolind Oil and Gas Company, Tulsa, Okla., a corporation of Delaware
Application July 23, 1952, Serial No. 300,464
11 Claims. (Cl. 73—152)

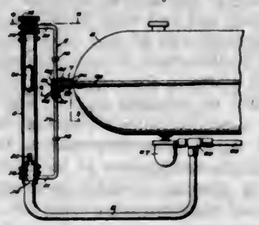
1. The method of determining variations in cross-sectional area of a well bore with depth in said bore which comprises the steps of positioning an identifiable marker in a liquid column in said bore, said liquid column being of a height to maintain the well formations substantially at a condition of static equilibrium, introducing liquid at a known rate into said column at one depth, withdrawing liquid from said column at another depth at the same rate on a weight basis as said known rate,

said depths being so located that said marker and a zone of interest lie between them, whereby said marker is caused to move past said zone of interest while said con-



dition of substantial static equilibrium is maintained, and recording as function of depth data indicative of the velocity of said marker.

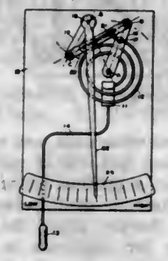
2,732,715
LIQUID LEVEL GAUGE
Robert E. Hawkins, Arcadia, Ind.
Application February 15, 1954, Serial No. 410,309
1 Claim. (Cl. 73—323)



A liquid level gauge comprising a transparent tube having a vent at its upper end, means for placing the lower end of said tube in communication with a tank, a bracket carrying said tube and having a vertically elongated rod-like portion at one side of said tube and an attaching clamp, said clamp having horizontal tank-engaging jaws to clamp a part of a tank, said clamp further having vertically depending bracket engaging jaws to clamp said vertically elongated bracket portion, the clamp comprising two spaced L-shaped members and a threaded fastener connecting the horizontal arms of said L-shaped members and spaced from the vertical arms of these members which are disposed at opposite sides of said vertically elongated bracket portion, the opposed faces of the vertical arms being longitudinally channeled to accommodate the rod-like portion of the bracket, and the upper horizontal arm having an opening therein aligned with the channeled portions for the passage of the rod-like portion of the bracket.

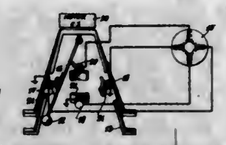
2,732,716
VAPOUR PRESSURE THERMOMETER
Lawrence E. Smith, Bethlehem, Conn., assignor to The Bristol Company, Waterbury, Conn., a corporation of Connecticut
Application September 8, 1950, Serial No. 183,823
3 Claims. (Cl. 73—369)

1. A vapor pressure indicating instrument capable of producing a linear indication comprising a Bourdon tube connected to a bulb containing a liquid having a non-linear vapor pressure-temperature characteristic, said Bourdon tube having a free end, first and second links each having oppositely extending ends, said first link being supported at one end for rotation about a fixed axis located substantially centrally of said Bourdon spring, the other end of said first link being free and extending beyond said Bourdon tube and the free end of said tube being connected to said first link radially outwardly of the axis of rotation of said first link, said second link being supported at one end for rotation about an axis parallel to but displaced from said first-named axis, the other end of said second link being free and extending from its axis of rotation in a direction generally opposite to the direction in which the free end of the first link extends from its axis of rotation, a third link extending between and pivotally connected to the free ends of said first



and second links, the lengths of the first and second links being such that the third link and the first link subtend therebetween an acute angle, and the third link and the second link subtend therebetween an acute angle, the lengths of the links being so proportioned that the said angles remain acute with said third link crossing a straight line between said axes in all positions of said third link within the range of said instrument, and a lever member fixed to the rotatably supported end of said second link for movement therewith.

2,732,717
GRAVITY METER
Francis Neill Rothacker, Rye, N. Y.
Application October 29, 1949, Serial No. 124,306
10 Claims. (Cl. 73—382)

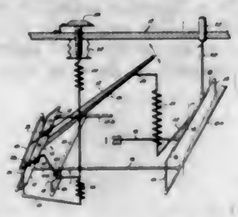


1. A gravity meter comprising a frame, a pendulum having a mounting permitting freedom to deviate in its movement, means to continuously move the pendulum from its suspended position in a predetermined path of movement under normal conditions and each repetition of movement constituting a cycle, pulse generating means carried by the pendulum and the frame and generating by the movement of the pendulum at least one electrical pulse for each cycle of movement of the pendulum, the amplitude of the pulse being responsive to a deviation in the path of movement of the pendulum from a normal path of movement because of a change in gravity, an indicator operated by the electrical pulse generating means to indicate the extent of deviation, means to apply a counteracting force upon the pendulum to restore it to its normal path of movement, and means to indicate the amount of counteracting force applied.

2,732,718
GRAVITY METER
Boyd Cornelison, Houston, Tex., assignor, by mesne assignments, to Texas Instruments Incorporated, Dallas, Tex., a corporation of Delaware
Application August 24, 1951, Serial No. 243,483
15 Claims. (Cl. 73—382)

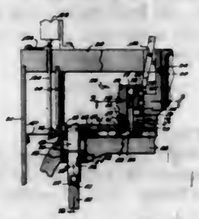
1. A temperature compensated gravity measuring device comprising, a gravity responsive system including a

moveably supported mass displaceable in response to gravity, the extent of such displacement being affected by temperature variation, an adjustable temperature compensating structure connected at each end to said system, said temperature compensating structure comprising bimaterial arms joined at one end and joined at



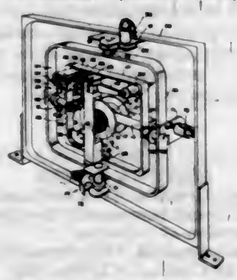
spaced points at their other ends, and resetting means connected to said system and one of said arms operable to restore the mass to a predetermined indicated position and operable to adjust the space between said other ends of said arms and thereby adjust the temperature compensation structure for variations in gravity on restoring said mass to said predetermined indicated position.

2,732,719
GYROSCOPE
James P. Watson, Lynwood, Calif.
Application March 22, 1954, Serial No. 417,598
15 Claims. (Cl. 74—5.1)



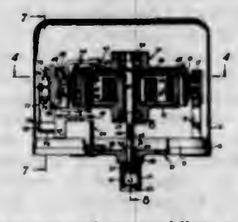
1. Apparatus for caging a gyroscope having a frame and a plurality of gimbals successively rotatably mounted, one within the other, and a rotor pivotally mounted to the innermost of said gimbals, comprising: means for rotating one of said gimbals with respect to the gimbal within which one said gimbal is mounted, means for latching said one gimbal to said gimbal within which said one gimbal is mounted, means for rotating another gimbal within its mounting, and means for latching said other gimbal to its mounting.

2,732,720
TWO AXES STABILIZED PLATFORM
Daniel G. Taylor, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application April 4, 1952, Serial No. 280,480
14 Claims. (Cl. 74—5.34)



1. A stabilizing device comprising, a platform adapted to be stabilized in space, a support for said platform, a gimbal structure mounting said platform on said support for displacement about a pair of mutually perpendicular axes and through relatively wide displacement angles relative to said support, a pair of identical high inertia gyroscope rotors, a pair of rotor mounting means each mounting one of said rotors for rotation about its spin axis and including a pivot structure normal to said spin axis for pivotally mounting said rotor mounting means on said platform for limited displacement relative thereto, said pair of rotor mounting means being so mounted on said platform that their respective displacement axes are normal to one another and each are disposed parallel with one or the other of said displacement axes of said gimbal structure, means for spinning each of said rotors mounted in part on said rotor mounting means and in part on said rotors, a direct current type of torquer for each rotor having a linear input to output torquer characteristics and each mounted in part on said platform and in part on said rotor mounting means and adapted to apply a torque to each rotor mounting means about its displacement axis, means mounted on said support for supplying said torquers with input signals from without said device to cause precession of said platform in space at rates proportional to the input signals, precessing means mounted in part on said platform and said gimbal structure and in part on said gimbal structure and said support for applying torques to said platform about said displacement axis of said gimbal structure to cause precession of said rotors and said rotor mounting means relative to said displacement axis of said rotor mounting means, means sensing displacement of said rotor mounting means relative to said platform for controlling respectively said precessing means to maintain each of said rotor mounting means in a predetermined position relative to said platform, and signal generating means associated with each of said displacement axes of said gimbal structure and adapted to produce a signal in proportion to displacement of said platform relative to said support about said displacement axes.

2,732,721
SPRING-DRIVEN GYROSCOPES
Thomas O. Summers, Jr., Encino, Calif.
Application August 2, 1954, Serial No. 447,226
24 Claims. (Cl. 74—5.41)



1. A free gyroscope for providing a reference substantially fixed in space, comprising first and second gimbals, a rotor supported by one of said gimbals and means entirely contained by said one gimbal for constantly accelerating said rotor of said gyroscope so that the spin axis of said rotor is maintained perpendicular to the axis of said other gimbal because of the torques resulting from the inertia of the gyro rotor.

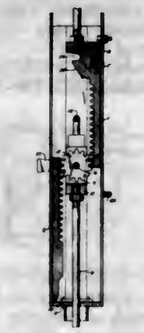
2,732,722
PUMP DRIVE MEANS
Arthur Wilshusen, Redondo Beach, Calif., assignor of one-third to Jay B. Hills and Madonna L. Hills, Los Angeles, Calif.
Application October 16, 1951, Serial No. 251,597
2 Claims. (Cl. 74—31)

1. In a pump jack, a frame providing laterally spaced upright frame elements, a reciprocatory member mounted between said frame elements for movement longitudinally thereof, an endless peripheral drive track on said reciprocatory member elongated in the direction of movement of said member, an arm pivotally mounted at one end on said frame about an axis normal to the direction of movement of and to one side of said reciprocatory member, a drive wheel carried by the free end of said arm engage-



able with said drive track, interengaging means on said reciprocatory member and said arm for maintaining said drive wheel in engagement with said drive track and for supporting said reciprocatory member on said arm when said drive whel is above said drive track, the ends of said drive track having arcuate portions formed on a radius of the arc described by the drive wheel as said arm pivots, and means for rotating said drive wheel.

2,732,723
AUTOMATIC STROKE-CHANGING APPARATUS FOR WINDMILLS
Wilfred B. Crofton, Johannesburg, Transvaal, Union of South Africa
Application October 27, 1952, Serial No. 317,064
8 Claims. (Cl. 74—110)



1. An automatic stroke changing device for coupling a reciprocable driven member to a reciprocating driving member, comprising fixed parallel guides, a pair of toothed racks reciprocable in said guides and disposed with their toothed sides facing and spaced from one another, a cage reciprocable parallel to said racks, a pinion rotatably mounted in said cage and meshing with both of said racks, driving connection between said driving member and one of said racks, herein designated the driven rack, the other of said racks, being freely reciprocable within fixed limits, a stop for limiting the movement of said other rack, driving connections between said cage and said driven member, means for releasably coupling said cage to said driven rack so that both racks and said cage reciprocate together and means responsive to the speed of reciprocation of the driving member for uncoupling said cage from the driven rack when said speed drops below a predetermined value so that the pinion is driven by the driven rack, the other rack being held stationary at one limit of its movement by said stop, and the cage is thereby driven by said pinion at half the speed and through half the stroke of said driven rack.

2,732,724
PHONOGRAPH WITH RESILIENT MOUNT FOR TURNTABLE DRIVING ELECTRIC MOTOR
Arthur K. Tateishi, Toronto, Ontario, Canada, assignor to Audio Tool and Engineering Limited, Toronto, Ontario, Canada
Application October 18, 1952, Serial No. 315,515
1 Claim. (Cl. 74—206)



In a phonograph of the type that embodies a horizontally disposed turntable with a depending annular flange on its outer margin; a unitary assembly operative to drive the turntable and comprising: a stationary horizontally extending mounting plate disposed a small distance beneath the turn table and provided with a hole therethrough; a horizontal idler wheel disposed above, and supported by, the mounting plate and arranged so that a portion of its periphery engages the inner periphery of the turntable flange; a two pole single speed electric motor positioned a small distance beneath the mounting plate and consisting of a rectangular horizontally extending laminated stator having a vertical hole in a portion thereof that is laterally offset an appreciable distance from the center of mass of the motor as a whole, a field coil mounted on a different portion of the stator, and a rotatable armature positioned in the last mentioned hole and provided with a fixed vertically extending armature shaft, the upper end of which extends through the hole in the mounting plate, is positioned in engagement with another portion of the periphery of the idler wheel and is adapted in connection with motor operation to drive said idler wheel for turntable driving purposes; and a resilient mount between the motor and the mounting plate, said resilient mount and motor being so arranged that in the event of vibration of the motor said upper end of the armature shaft is caused to move back and forth only substantially tangentially with respect to said another portion of the periphery of the idler wheel, said mount comprising a horizontal plate disposed directly over, and connected fixedly to, the stator of the motor and spaced a small distance beneath the mounting plate, and a plurality of laterally spaced resilient members disposed between and connected to the mounting plate and the second mentioned plate, said resilient members being three in number and arranged to form an equilateral triangle, the center of which lies in an imaginary vertical line extending through said center of mass of the motor, the armature of said motor being so positioned that its armature shaft is disposed directly adjacent to the central portion of one side of said equilateral triangle.

2,732,725
ELECTRO-MAGNETIC CHANGE-SPEED GEAR
Antoine Brueder, Paris, France, assignor to Societe Anonyme Andre Citroen, Paris, France
Application October 2, 1952, Serial No. 312,720
Claims priority, application France October 5, 1951
3 Claims. (Cl. 74—330)

1. An electromagnetic transmission comprising a rotary driving member, an outer ring member of magnetic ma-

terial coaxial with and rotatably fast with said driving member, a plurality of concentric hollow sleeves disposed one inside another coaxial with said driving member, inner ring members of magnetic material each fast respectively with one of said sleeves, a corresponding number of coaxial multiple disc clutches disposed between said outer and inner ring members, each of said clutches comprising two sets of interleaved parallel discs, the discs of one set being mounted inside said outer ring member for axial movement thereon and rotation therewith and the discs of the other set alternating with those of the first set and being mounted on the respective inner ring member for axial movement thereon and rotation therewith, a substantially annular stationary magnetic yoke which is U-shaped in axial section and comprising an



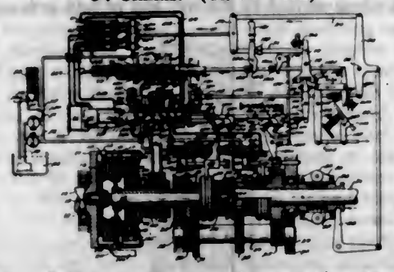
outer annular portion surrounding and spaced from said outer ring member, an inner annular portion disposed coaxially with said inner ring members and a radial portion connecting said inner and outer annular portions, an electromagnetic coil mounted in said yoke between said inner and outer portions, a selector ring of magnetic material and movable axially in the space between the outer ring member and the outer annular portion of said yoke to selected positions in each of which it completes a magnetic circuit through one or another of said inner rings and thereby produces the engagement of the clutch associated therewith, a concentric gear rotatably fast with each of said hollow sleeves, said gears being of different sizes, a driven rotary member and gears rotatably fast on said driven member and in constant meshing engagement with corresponding ones of the first mentioned gears.

2,732,726
GEARING
Alfred Hakanson, San Gabriel, Calif.
Application July 23, 1951, Serial No. 238,172
4 Claims. (Cl. 74—425)



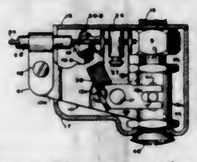
1. In combination, a housing having a pair of spaced parallel walls and a protrusion thereon having first and second openings therein, a pin connected to said walls and extending at right angles therebetween, a worm gear rotatable around said pin, a shaft having a worm thereon which engages said worm gear, the axis of said shaft being disposed substantially in the plane of rotation of said worm gear, a first bevel gear rigidly connected to said shaft and tapering toward the worm thereon, said shaft and said first bevel gear being located within the first of said openings, a second bevel gear located within the second of said openings and engaging said first bevel gear and tapering toward said worm, a drive shaft connected to said second bevel gear, the portion of said drive shaft adjacent said second bevel gear having an annular groove therein, and a closure plate for said first opening having a portion thereof which engages the annular groove in said drive shaft.

2,732,727
AUTOMATIC FLUID PRESSURE TRANSMISSION
William T. Livermore, Grosse Pointe Farms, Mich.
Continuation of application Serial No. 504,548, October 1, 1943. This application April 15, 1952, Serial No. 282,288
34 Claims. (Cl. 74—472)



1. In a fluid pressure operated automatic transmission for a self-propelled vehicle having an output shaft, an engine, a throttle therefor and throttle actuating means, a plurality of power trains of different ratios interposed between said engine and output shaft, selectively operable gradually engageable coupling means for establishing drive through said power trains, fluid pressure means for actuating said coupling means, a pressure control valve, means for connecting said valve with the said throttle actuating means to vary the pressure of the fluid delivered to said fluid pressure means in accordance with the extent of opening of said throttle, including means for effecting release of the pressure delivered to said fluid pressure means when said throttle actuating means is operated to move said throttle to closed position, and means connected with a power train of high speed ratio to prevent release of the fluid pressure upon release of the throttle actuating means when said transmission is operating in said high speed ratio.

2,732,728
BICYCLE TRANSMISSION SHIPPER OPERATING MECHANISM
Alvin P. Douglas, Cleveland, Ohio, assignor to The Murray Ohio Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application November 30, 1953, Serial No. 394,953
15 Claims. (Cl. 74—473)



1. A change speed shipper operating mechanism for a bicycle transmission comprising a bracket member, a rear bicycle axle having a centrally bored end, a speed change shipper rod disposed within the bore of the axle to terminate short of the axle end, said bracket member being shaped to fit on the bored end of the axle, means securing the bracket to the axle, a shipper rod operating lever pivotally supported on the bracket, and radially extending means supported by the axle and connecting the lever and shipper rod.

2,732,729
THROTTLE CONTROLLER FOR AUTOMOTIVE VEHICLES
Don R. Joyce, River Grove, Ill.
Application February 19, 1953, Serial No. 337,706
4 Claims. (Cl. 74—526)

1. A throttle controller adapted to be attached to a flat throttle operating accelerator pedal pivoted at one end for adjustably opening said throttle, comprising a spring metal strip bent at one end into a U-shaped clip to engage tightly opposite faces of said pedal, the remainder of said



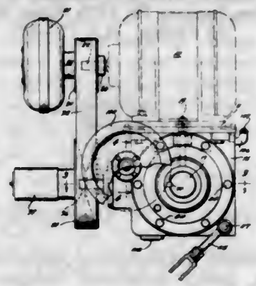
strip being curved reversely against the force of said spring through about 180°, said curvature being maintained by a compressible link interconnecting said clip and the other end of said strip.

2,732,730
PAWL AND RATCHET WHEEL
Charles Sernaker, Philadelphia, Pa.
Application January 18, 1951, Serial No. 206,591
1 Claim. (Cl. 74—577)



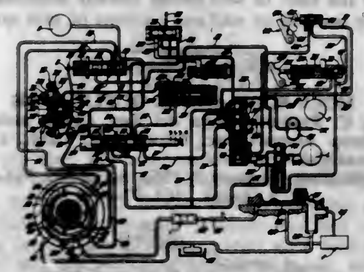
A pawl and ratchet wheel adapted for an embroidery machine comprising a pawl having an opening therein, teeth on said ratchet wheel, the free end of said pawl being adapted to engage the teeth on said ratchet wheel, a spring in said pawl opening, a spring pin abutting one end of said spring, and a pawl holding pin pivotally mounting said pawl having a flat portion so that one end of said spring pin abuts against said flat portion of said spring pin in order to hold said pawl against said ratchet wheel.

2,732,731
COTTON CARD ENGINE DRIVES
Walter P. Schmitter and Alfred G. Bade, Wauwatosa, Wis., and John W. FitzGerald, Arlington, Mass., assignors to The Falk Corporation, Milwaukee, Wis., a corporation of Wisconsin
Application November 30, 1951, Serial No. 259,122
7 Claims. (Cl. 74—665)



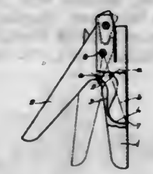
1. In a cotton card engine or the like having a main drive shaft, a drive unit for said card engine comprising, a quill shaft received on said main drive shaft, means to transmit rotation from said quill shaft to said drive shaft, a casing carried by said quill shaft, a bevel gear fixed on said quill shaft in said casing, a transmission shaft mounted in said casing, a bevel gear on the inner end of the transmission shaft in mesh with the first named bevel gear, a motor carried by said casing, means including a flexible belt to drive the transmission shaft from the motor, and means to adjust the angular position of the motor on the casing to vary the speed of the quill shaft.

2,732,732
TRANSMISSION CONTROL SYSTEM
August H. Borman, Jr., Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 30, 1952, Serial No. 317,710
25 Claims. (Cl. 74—732)



1. In a fluid controlled power transmission assembly for delivering the power of a vehicle engine to the vehicle wheels at variable speeds and torques, an output shaft drivingly connected to said wheels, a fluid torque converter having an input member driven by said engine and an output member, a change speed gear unit driven by said output member and driving said output shaft, a first fluid pressure system including a pump driven by said converter input member, a clutch member adapted to directly connect said engine and said output shaft, gear drive elements actuatable to provide reduction drive between said output member and said output shaft, fluid pressure operated mechanisms in said system for actuating said clutch and said gear drive elements, a valve member for controlling the selective actuation of said mechanisms, a second fluid pressure system including an output shaft driven pump, fluid from said second system being adapted to shift the valve member in accordance with output shaft speed, a second valve member responsive to the fluid pressure of said first system for connecting said systems in series upon the loss of pressure in said first system.

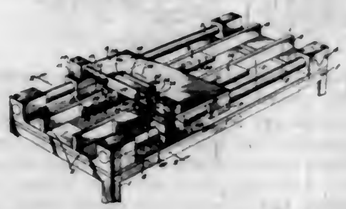
2,732,733
SPRING DEVICE PROVIDED BETWEEN THE CHEEKS OF A PAIR OF PLIERS OR A SIMILAR TOOL
Johan Martin Jonsson, Alfta, Sweden
Application October 20, 1954, Serial No. 463,449
Claims priority, application Sweden March 22, 1954
4 Claims. (Cl. 76—64)



1. In a saw set or like tool, the combination comprising first and second cheeks, pivot means connecting said cheeks together at their end portions for movement toward and away from each other, and a substantially S-shaped leaf spring interposed between said cheeks for urging said cheeks apart, said spring having oppositely bent-out end portions extending approximately at right angles to the middle portion of said spring, means attaching a first one of said end portions to the inner side of said first cheek substantially at the location where it meets said second cheek when said cheeks are in their initial spread-apart condition, and means attaching the second end portion of said spring to said second cheek at a point further from said pivot means than is said first end portion, the entire length of said spring being located to one side of a line

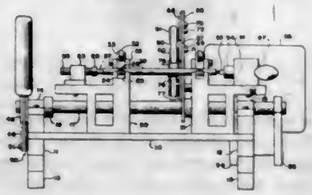
between said pivot means and the point of attachment of said second spring end portion to said second cheek when said cheeks are in their initial spread-apart condition, and said first end portion of said spring upon moving said cheeks towards each other being relocated to a position to the other side of said line and decreasing the distance between the ends of said spring thereby effecting an increase in bending of said end portions of said spring.

2,732,734
HOLE BORE ANGLE DUPLICATOR
Thomas C. Polliard, Playa del Rey, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application February 2, 1953, Serial No. 334,422
5 Claims. (Cl. 77—5)



1. In a duplicator machine having a work table to which are secured a part having drill holes therethrough and an identical workpiece to be drilled in exact accordance with said part, guide means on and extending along the margin of said table, and a carriage mounted for movement along said guide means; an elongated member, a pin guiding member mounted on said elongated member toward one end thereof for locating the holes in said part; a drill guiding member mounted toward the opposite end of the elongated member at a fixed distance from said pin; means mounting said elongated member for rotation about an axis transverse to the guide means extending along the margin of said table to effect drilling of holes in the workpiece on axes identically inclined to the axes of holes in the part; means mounting the pin and drill holding members for simultaneous and equal tilting adjustment; and means for clamping said elongated member and pin and drill holding members in adjusted position.

2,732,735
CENTERING AND DRILLING MACHINE
Lawrence Farnsworth, Racine, Wis., assignor of fifty per cent to Max Seft, Racine, Wis.
Application May 3, 1954, Serial No. 426,960
2 Claims. (Cl. 77—18)



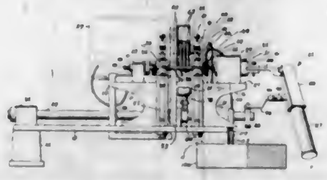
1. A centering machine for a cylindrical workpiece comprising a support structure, a pair of holding units longitudinally spaced along said structure and each unit comprising, opposed rollers secured to said structure and adjustable in a transverse direction in order to accommodate workpieces of varying diameter, and rotatably supporting said workpiece, a feedable tool mounted on said support structure in axial alignment with said workpiece, an arm oscillatingly mounted on said structure and having a third roller rotatably mounted thereon and shiftable into and out of holding engagement with said workpiece, means engageable with said arm to shift said third roller into or out of holding engagement with said workpiece; actuating means shiftably mounted on said machine for shifting said means into and out of holding position; a support member having a pair of spaced sheaves rotatably mounted thereon, a flexible belt trained around said sheaves and adapted to engage a substantial portion of the periphery of the workpiece in the driving position so as to rotate the latter, said support member being shiftable into and out of belt driving position with respect to the workpiece by said actuating means, said sheaves extending adjacent opposite sides of said workpiece when in driving position, and means to drive said belt.

2,732,736
OILER
Joseph M. Bonnie, Oakland, Calif.
Application November 7, 1949, Serial No. 126,019
9 Claims. (Cl. 222—123)



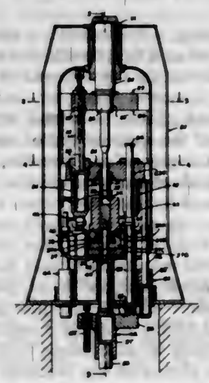
1. In an oiler having container and spout portions, a circular diaphragm comprising a part of the container wall and coaxial with the intake of the spout portion, and a piston member fixed to the diaphragm centrally and axially thereof and directly operative in the spout bore to create a solely hydraulic discharge pressure in the bore by and upon an inward displacement of the diaphragm in a working stroke thereof.

2,732,737
CONTROL AND FEED MECHANISM FOR CENTERING AND DRILLING MACHINES
Lawrence Farnsworth, Racine, Wis., assignor of fifty per cent to Max Seft, Racine, Wis.
Application January 13, 1955, Serial No. 481,625
12 Claims. (Cl. 77—18)



1. In a machine having support structure for rotatably supporting a driven cylindrical workpiece; a pair of clamping rollers mounted on said structure for swinging between an inoperative and a workpiece clamping position; drive means for said workpiece mounted on said structure for swinging between an inoperative and a workpiece driving position; a feedable tool mounted on said structure; said machine having a lubricant pump means adapted to discharge adjacent said tool; a main actuating member operatively mounted on said structure; connecting means between said member and said clamping rollers adapted to swing said rollers between an inoperative and a workpiece clamping position upon movement of the member, lockable connection means between said member and said drive means adapted to swing said drive means upon movement of said member and lock said drive means in the workpiece driving position, second connecting means between said member and said pump means for actuating said pump means upon movement of said member; a lever pivotally connected with said structure and with said tool for shifting the latter, said lever also connected with said main actuating member for movement thereof.

2,732,738
HYDRAULIC PRESS
Gerhard P. Krause, Harrison, N. Y., assignor to Hydropress, Incorporated, New York, N. Y., a corporation of Delaware
Application December 22, 1951, Serial No. 262,963
5 Claims. (Cl. 78—9)



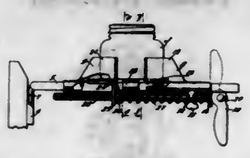
1. In a piercer press, or the like, the combination including a hydraulically operated tool moving means, a billet container having an aperture therethrough, an upsetting tool, a piercing tool movable relative to said upsetting tool, connections between said piercing tool and said hydraulically operated tool moving means, hydraulic coupling means releasably locking said tools together to move said tools in unison by said hydraulically operated tool moving means when the hydraulic coupling means is locked, means releasing fluid from said hydraulic coupling means to unlock the same upon completion of upsetting the billet so that said upsetting tool movement will be stopped while said piercing tool uninterruptedly continues its movement downward, a back-up plunger in the bottom of the aperture in said billet container closing the same, and means moving said back-up plunger downwardly when said piercing tool is a predetermined distance thereabove so as to remove a scrap piece from the bottom of the billet.

2,732,739
AUTOMOBILE ENTRY TOOL
Jack G. Liss, Livonia, Mich.
Application May 5, 1952, Serial No. 286,133
4 Claims. (Cl. 81—3)



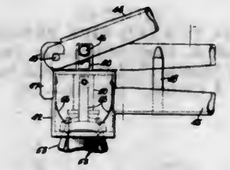
1. An automobile entry tool comprising an elongated rigid straight shank and a rigid finger extending transversely from one end of the shank, said finger being arcuate substantially about an axis parallel to the longitudinal axis of the shank and being of substantially less radial thickness than the shank.

2,732,740
JAR VISE
Vernon E. Holmen, Cameron, Wis.
Application August 17, 1953, Serial No. 374,510
1 Claim. (Cl. 81—3.32)



In a jar vise, the combination of a support having spaced bar portions, a pair of jaw members having base portions provided with flanges slidably mounted on said bar portions and having jaw portions provided with jar engaging facings of yieldable material, each base portion provided with an apertured depending flange, the apertured flange for one of said jaw members having a threaded part, the apertured flange of the other jaw member being unthreaded and depending from the rear portion of its base, an actuating rod extending loosely through the unthreaded flange and having a threaded portion engaging the threaded part of the other flange, a cam lever pivotally mounted on the exterior end of said rod and operatively engageable with said unthreaded flange to move said jaw members into clamping engagement with a jar after initial movement of said jaw members to a jar engaging position by the turning of said rod relative to said threaded part.

2,732,741
CLOSURE REMOVER WITH PLUNGER ACTUATED SIDE GRIPPERS
Josef Müller-Strobel, Zurich, Switzerland, assignor to The West Company, Inc., Phoenixville, Pa., a corporation of Pennsylvania
Application April 9, 1954, Serial No. 422,207
7 Claims. (Cl. 81—3.41)



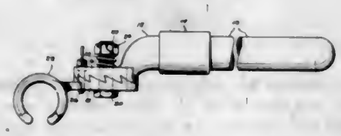
1. In a device for removing from a container a closure assembly constituted by an elastic sealing member and a cap which fits over the top of the container and is crimped inwardly to secure it to the container, a casing having an opening and an internal flange, a plurality of gripping members within said opening each having a shoulder intermediate its ends engaging said flange, whereby said members are pivotally supported by said casing to receive the upper part of the closure assembly, each of said members having means thereon below the pivot point to grip and exert inward pressure on the side of the closure assembly above the top of the container, thereby to lessen the hold of the cap on the container, spring means within said casing engaging said members above their pivot points to spread the lower portions of said members outwardly for insertion therebetween of the upper part of the closure assembly, a plunger movable between said members and engaging the upper portions thereof to actuate said members, and a pressure-exerting portion on said plunger engageable with the top of the closure assembly after the latter has been gripped by said members to exert pressure on the top of the closure assembly and to push the container free of the grip of the cap.

2,732,742
AUTOMATIC GRIPPING PIPE BENDER
Jacob W. Lewin, Oak Park, Ill.; Lillie E. Lewin, administratrix of said Jacob W. Lewin, deceased
Application September 13, 1951, Serial No. 246,441
1 Claim. (Cl. 81—15)



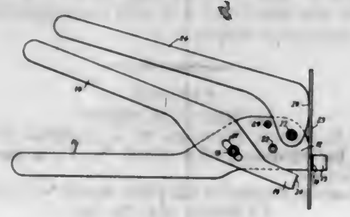
A pipe bender of the class described comprising, in combination, a body member including an arcuate trough defining two radially spaced, generally concentric, outwardly open arcuate grooves for bending pipe of different diameters, pivot means on said body member at one end of said trough and defining a pivotal axis located in offset relation to and in substantially parellel alinement with tangents to adjacent portions of said grooves, a pipe retaining hook pivotally mounted on said pivot means for arcuate swinging movement about said pivotal axis, adjustable stop means associated with said hook and said body member and selectively operable for terminating swinging movement of said hook in one direction at a pipe engaging position registering with either selected one of said grooves, a resilient spring interconnected between said hook and said body and stresses to continuously bias said hook toward said pipe engaging position, and said hook defining an abutment at the outer end thereof adapted to coact with a pipe to be bent to pivot said hook against the force of said spring into an inoperative position out of registration with said selected groove to permit seating of the pipe therein, said spring serving to automatically shift said hook back into said pipe engaging position upon seating of the pipe into said selected groove.

2,732,743
RATCHET ACTUATED PIPE BENDING TOOL
Frank A. Hart, Milwaukie, Oreg.
Application March 17, 1953, Serial No. 342,927
2 Claims. (Cl. 81—15)



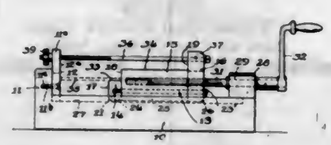
2. A pipe bending tool, comprising a handle, a first centrally perforated ratchet plate connected to the handle, a second centrally perforated ratchet plate engaging the first plate, a pivot pin penetrating the central perforations through the plates and extending outwardly therefrom, resilient means bearing against the ratchet plates and acting to maintain them in ratcheting engagement with each other, and a sleeve-like pipe engaging jaw member connected to the second ratchet plate with its longitudinal axis substantially perpendicular to the longitudinal axis of the pivot pin, the jaw member being disposed in a plane offset from the handle whereby to clear the latter during rotation of the ratchet, the jaw member having a bore dimensioned to receive the pipe and being discontinuous to provide a longitudinal peripheral opening for the introduction of the pipe into the jaw member, the opening being at an oblique angle to the longitudinal axis of the jaw member for releasably securing the pipe therein.

2,732,744
PIVOTED WORK HOLDING AND BENDING TOOL
Herbert Kuchman and August Deeg, New York, N. Y.
Application April 24, 1953, Serial No. 351,062
1 Claim. (Cl. 81—15)
(Granted under Title 35, U. S. Code (1952), sec. 266)



A tool comprising a first handle, a planar serrated jaw fixed to one end of said first handle to extend transversely of and to face toward the opposite end of said first handle, a second handle, a second planar serrated jaw fixed to one end of said second handle to extend transversely of and to face away from the opposite end of said second handle, a pintle mounted on one of said handles, the other of said handles formed with an elongated slot to register with said pintle whereby said handles are joined for pivotal movement with respect to each other with said first jaw at a greater distance from said pintle than said second jaw so that relative pivotal movement of said handles causes said jaws when in closed position to be disposed with said second jaw adjacent to said first jaw and between said first jaw and said pintle to define a spacing between said jaws that is variable in accordance with the position of said pintle in the elongated slot whereby a workpiece can be accommodated between said jaws and extend in a direction substantially perpendicular to a line between said first jaw and said pintle, a third handle, a peripheral cam fixed to one end of said third handle, and a second pintle mounted on said first handle adjacent said first jaw and to one side of a line between said first jaw and said first-mentioned pintle, said third handle pivotally mounted on said second pintle, said peripheral cam upon pivotal movement of said third handle being adapted for movement toward or away from said first jaw whereby a workpiece that is gripped between said first and second jaws is adapted to be progressively bent about said first jaw.

2,732,745
VISE HAVING STEPPED MOVABLE JAWS LOCKABLE TO FIXED JAW
Martin E. Behr, Chicago, Ill., assignor of fifty per cent to Irwin Panter
Application September 26, 1951, Serial No. 248,426
3 Claims. (Cl. 81—33)



3. A vise comprising a base, a fixed jaw on the front of said base, a plurality of movable jaws on said base, said movable jaws being rigidly connected to one another and movable toward or way from said fixed jaw, said movable jaws being of varying height and arranged in step fashion, each of said movable jaws being of lesser height than the movable jaw immediately therebehind, means to move said movable jaws toward or away from said fixed jaw, and means to lock said movable jaws and said fixed jaw in position of adjustment.

2,732,746
TORQUE LIMITING SCREWDRIVER
Frank W. Livermont, Duarte, Calif.
Application August 2, 1954, Serial No. 447,114
4 Claims. (Cl. 81—52.4)



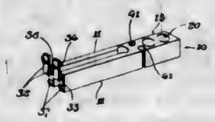
1. A torque limiting tool comprising in combination: a barrel, a coaxial tool holding member having a projecting element extending into said barrel, means providing a flange shoulder on the projecting end of said element, torque transmitting means encircling said element including axially spaced dimple plates each having a plurality of indentations, balls interposed between said dimple plates and extending into said indentations, means securing one of the dimple plates relative to said barrel, means mounting the other dimple plate for axial sliding movement relative to said projecting element but preventing relative rotary movement therebetween, resilient means interposed between said flange shoulder and the latter said dimple plate, and adjustable thrust receiving means limiting axial movement of said flange shoulder under force of said resilient means.

2,732,747
PREDETERMINED TORQUE RELEASE WRENCH AND SPRING ADJUSTING MEANS THEREFOR
Frank W. Livermont, Duarte, Calif.
Application March 9, 1953, Serial No. 341,123
32 Claims. (Cl. 81—52.5)



1. In a torque wrench, the combination of: a work-engaging member having a laterally projecting part, a housing, a block mounted for axial movement within the housing, resilient means acting to move the block axially, means including a transverse roller remote from the work-engaging member connecting the said part to the housing, and toggle means including a tiltable pawl interposed between the block and the said part.

2,732,748
TEMPERATURE COMPENSATION FOR TUNING FORKS
Boris F. Grib, Brooklyn, N. Y., assignor to Philamon Laboratories, Inc., Westbury, N. Y., a corporation of New York
Application June 30, 1950, Serial No. 171,480
10 Claims. (Cl. 84—457)



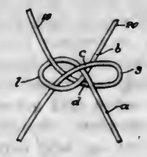
1. A temperature compensated tuning fork having a pair of tines and a temperature responsive element affixed adjacent the end of each tine, said element comprising a bi-metallic strip having two legs at right-angles to one another, one of said legs being parallel to the longitudinal axis of its respective tine, and having one end affixed adjacent the end of its respective tine, the other leg being perpendicular to said axis.

2,732,749
MALLEABLE SHEET METAL FASTENER
Theodore Pasternak, Detroit, Mich., assignor to Robert L. Brown, Ferndale, Mich.
Application October 14, 1953, Serial No. 385,965
1 Claim. (Cl. 85—38)



A malleable fastener for insertion into a hole through a panel, said fastener consisting of a single strip of sheet metal bent along a transverse line midway of an intermediate portion and having its end portions folded back to engage along the outer surfaces of the intermediate portion to provide two divergent arms of double thickness and a pair of normally parallel arms extending beyond said intermediate portion for entering the hole through the panel, the outer portion of the length of said divergent arms having a width greater than the size of the panel opening, the intermediate portion, the end portions adjacent said intermediate portion and said arms having a lesser width to enter the hole through the panel, and forming a Y, each portion of which is of double thickness and of a length slightly greater than the thickness of said panel, the outer ends of said parallel arms being reversely bent toward each other and terminating in contact with the bend of said intermediate portion.

2,732,750
KNOT AND ONE HALF
Rudolph Sonnberger, Chicago, Ill., assignor, by mesne assignments, to The Linen Thread Co., Inc., Paterson, N. J., a corporation of Delaware
Application September 4, 1952, Serial No. 307,793
2 Claims. (Cl. 87—12)



1. A net formed from a series of strands knotted together at intervals, each knot being formed from a first strand **18** and a second strand **20**, a loop *s* being formed in the first strand **18** with an upper leg *d* and a lower leg *c*, both of which lead away from said loop *s*, the upper leg *d* and the lower leg *c* crossing each other to form said loop *s*, a loop *l* being formed in the second strand **20** with an upper leg *b* and lower leg *a*, both of which lead away from said loop *l*, the upper leg *b* and the lower leg *a* crossing each other to form loop *l*, the legs *c* and *d* crossing each other within loop *l*, said leg *c* crossing over leg *d* where they cross each other within loop *l*, the legs *a* and *b* crossing each other within loop *s*, said leg *a* crossing over leg *b* where they cross each other within loop *s*, the upper leg *d* passing under leg *a* thence under leg *b* thence under leg *c* thence over leg *a* and out of said loop *l*, the lower leg *c* passing over leg *b* thence over leg *a* thence over leg *d* thence under leg *b* and out of said loop *l*, the upper leg *b* passing over leg *c* thence over leg *d* thence under leg *a* thence under leg *c* and out of said loop *s*, the lower leg *a* passing under leg *d* thence under leg *c* thence over leg *b* thence over leg *d* and out of said loop *s*, in the manner illustrated in Fig. 2.

2,732,751

MOUNTING RING FOR CAMERA ACCESSORIES

Reinhold Heidecke and Hermann Bretthauer, Braunschweig, Germany, assignors to Franke & Heidecke, Fabrik Photographischer Prazisions-Apparate, Braunschweig, Germany, a German firm

Application March 6, 1953, Serial No. 340,874
Claims priority, application Germany March 8, 1952
5 Claims. (Cl. 88—1)



5. An accessory mount for a photographic camera of the type having a lens and a ring provided with a plurality of bayonet flanges surrounding said lens, said mount comprising a first ring-shaped member having a plurality of radially outwardly extending lugs adapted to mate with and engage behind said bayonet flanges to hold said ring-shaped member on said camera, said ring-shaped member having a central opening alined with the camera lens when said member is mounted on said camera so that light may pass through said central opening toward said lens, means connected to said first member for mounting an accessory intended to be used with said camera, an actuating ring supported from said first member and rotatable with respect to said first member and restrained from axial movement relative to said first member, a plurality of brake shoes mounted for limited axial movement relative to said first member and restrained from rotary movement relative to it, and cooperating cam portions on said actuating ring and said brake shoes for moving said brake shoes axially relative to said first member when said actuating ring is turned relative to said first member, whereby when said accessory mount is mounted on said camera said actuating ring may be turned to move said brake shoes axially into contact with said bayonet flanges to clamp said accessory mount in non-rotatable relation to said bayonet flanges.

2,732,752

WITHDRAWN

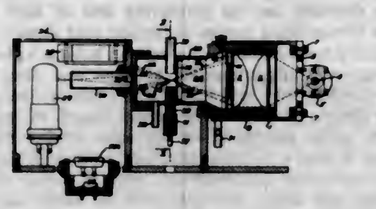
2,732,753

MEANS FOR CIRCULATING A PARTICLE CARRYING STREAM THROUGH AN ILLUMINATION ZONE

Chester T. O'Konski, Berkeley, Calif.

Continuation of abandoned application Serial No. 21,326, April 16, 1948. This application August 29, 1952, Serial No. 307,081
5 Claims. (Cl. 88—14)

1. In combination with a light source and optical means for illuminating, at a relatively small focus area, particles carried in a fluid medium through said focus area, the combination of elements comprising: means forming a closed chamber surrounding said focus area a first inlet tube adapted for connection to a source of substantially clear particle-free circulating fluid located exteriorly of said chamber; the inner end of said first inlet tube extending into the interior of said chamber from a first side thereof along an axis disposed perpendicular to the beam of light brought to focus at said focus area; the end extremities of said inner end portion of said first inlet tube terminating adjacent said focus area at the first side thereof and in axial alignment with the central point of said focus area; a second inlet tube adapated to be connected to a source of particle-carrying fluid to be illuminated in said focus area; the inner end portion of said second inlet tube being of substantially smaller diameter than said first inlet tube and disposed concentrically within said first inlet tube defining an annular fluid passage between the exterior surfaces of said second tube and the interior surfaces of said first inlet tube; the inner end of said second inlet tube terminating adjacent the inner end of said first inlet tube adjacent said focus area at the first side thereof; and an exhaust port formed in said chamber spaced from the inner end extremities of said first and second inlet tubes and located at the second side of said focus area opposite said first side, the space between the inner ends of said first and second tubes and said exhaust port being occupied solely by the atmosphere of said chamber.

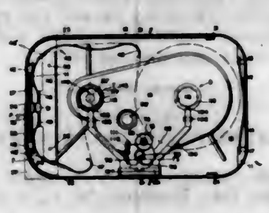


2,732,754

FILM CONTAINING MAGAZINES AND FILM HANDLING APPARATUS

Warren Dunham Foster, Eustis, Fla., and Oliver Whitwell Wilson, Arlington County, Va.

Application July 13, 1951, Serial No. 236,591
40 Claims. (Cl. 88—17)



1. In a film handling apparatus, a delivery support, a take-up support, an apertured gate therebetween, a pull-down for intermittently feeding a film from said delivery to said take-up support past said gate, an overrunning drive for said delivery support for propelling the film in a feeding direction from said delivery support toward said pull-down, a drive for said take-up support for concurrently revolving said take-up support in a feeding direction for winding up the film advanced thereto by said pull-down, tension controlling means cooperating with said gate to form a continuous channel for the film from said delivery support to said take-up support and conditioning the movement of the film, means for positively locking both of said supports so that unwanted unwinding of the film therefrom prior and subsequent to a regular feeding operation will not block said channel, and means for withdrawing said locking means from locking position so that such a feeding operation may be carried out.

2,732,755

CINEMATOGRAPH FILM PROJECTORS

Richard Ruhnau, Berlin-Tempelhof, Germany

Application April 21, 1952, Serial No. 283,322
Claims priority, application Germany April 21, 1951
2 Claims. (Cl. 88—17)



1. In a film projector, a film gate comprising a stationary plate for guiding the film on one edge, two arms pivotally mounted on the rear side of the stationary plate and having rectangularly bent flanges for guiding the film on the other edge, said arms being swingable in a plane parallel to the film channel about their pivot points so that when said arms are in their inoperative position the film may be inserted laterally.

2,732,756

ARRANGEMENT FOR THE SUPPORT OF THE FILM GUIDING COMPONENTS OF A CINEMA PROJECTOR

Richard Ruhnau, Berlin-Tempelhof, and Erich Welder and Günter Engelage, Langel, near Koln, Germany

Application November 15, 1952, Serial No. 320,788
Claims priority, application Germany December 8, 1951
5 Claims. (Cl. 88—17)



1. In a cinema projector, in which light is reflected from a source of light into the axis of projection, a frame, a fixed frame gate mounted on said frame, a unitary assembly comprising a bracket support, means for mounting said bracket support on said frame, a spring pressed countergate attached to said bracket support to resiliently engage said fixed frame gate, a deflecting mirror, pivotable means on said bracket support comprising two holding members clamping said mirror therebetween, mounting it perpendicularly to the plane containing said axis of projection and said source of light and permitting angular adjustments of said mirror for focussing light rays from said source of light to said frame gates, and a film guiding loop hingedly mounted on said bracket support and, in its normal, operative position, sideways gripping over said frame gates to edgewise engage one side of a film inserted between said frame gates and being adapted to be swung to a second, inoperative position away from said frame gates and said film.

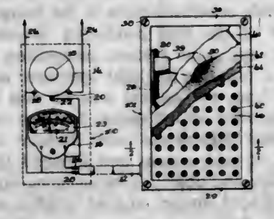
2,732,757

PHOTOMETRIC APPARATUS

Benjamin B. Bauer, Oak Park, Ill.

Application June 12, 1951, Serial No. 231,205
5 Claims. (Cl. 88—23)

1. In a photometric device embodying the principle of visual light balance, a screen member having a side exposed for viewing purposes and for the reception of external illumination to be measured, said screen member having a plurality of spaced apart local light-transmitting areas, the remainder of said screen member being substantially opaque and diffusely reflective on said exposed side thereof, a source of illumination on the side of said screen member opposite said exposed side thereof, a translucent quasi-black body member on the side of said screen member opposite said exposed side thereof and having a surface thereof arranged for the reception of illumination from said source of illumination and exposed for viewing and the reception of external illumination through said light-transmitting areas, and means for adjusting



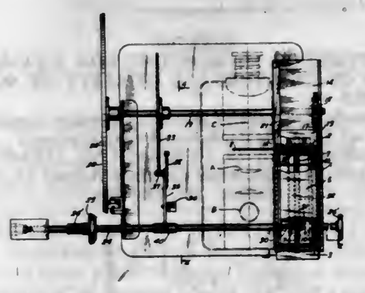
the illumination of said exposed surface of said black body member by said source of illumination to achieve visual light balance between external illumination impinging on the reflective areas of said screen member and the illumination of the quasi-black body areas visible through said light-transmitting areas due to the sum of the illuminating effects thereon of the external illumination and the illumination from said source of illumination, the illumination of said exposed surface of said quasi-black body member due to said source of illumination being sufficiently uniform over the area thereof that with uniform external illumination said visual light balance is achieved substantially simultaneously at said visible quasi-black body areas.

2,732,758

MAGAZINE SLIDE PROJECTOR

Fred Waller, Huntington, N. Y., assignor to The Vitarama Corporation, Huntington Station, N. Y., a corporation of New York

Application May 26, 1950, Serial No. 164,332
11 Claims. (Cl. 88—28)



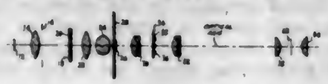
2. Apparatus for projecting pictures from slides, comprising, a magazine, a plurality of slide carriers movably mounted therein, means for moving said magazine to bring any slide carrier therein to a position in the plane of projection, means exterior of said magazine for engaging any slide carrier lying in the plane of projection to move said slide carrier into and out of projecting position, and a control rod mounted for rotational and sliding movement in which rotational movement of said rod actuates said magazine moving means, and sliding movement of said rod actuates the means for moving said slide carriers.

2,732,759

MICROSCOPE WITH VARIABLE MEANS FOR GRADUALLY ALTERING THE CONTRAST IN OPTICAL IMAGES

Harold Osterberg, Buffalo, N. Y., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts

Application July 26, 1949, Serial No. 106,898
9 Claims. (Cl. 88—39)



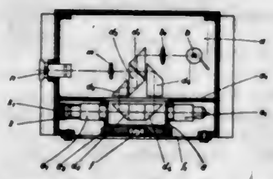
1. An optical system for obtaining uninterrupted progressively variable contrast effects in the image of an illuminated object of the type producing deviated and undeviated light rays, said system comprising diaphragm means having a plurality of light apertures equally radially displaced from the optical axis of said system and providing a plurality of individual bundles of light rays of predetermined dimensions and contour adjacent an entrance pupil of said system and directed through said system, condenser and objective means coacting to provide a plurality of spaced images of said bundles of light rays at said entrance pupil at an image plane adjacent the exit pupil of said condenser and objective means and equally radially spaced from said optical axis, said objective transmitting light rays deviated by an object at an object plane optically aligned therewith and focusing said deviated light rays at a focal plane conjugate thereto, light-modifying means positioned adjacent said image plane comprising a transparent plate-like element having a plurality of radially positioned equally circumferentially spaced composite light transmitting wedges formed thereon for intercepting and modifying the phase and amplitude characteristics of the light rays of said bundles of rays which are undeviated by said object, each of said composite wedges including a radially tapering wedge component and a superposed wedge component which tapers in a direction substantially at 90° relative to the radially tapering component, means for rotating one of said diaphragm and light-modifying means to provide relative rotational movement of the images of said bundles of light rays at said entrance pupil and said wedges, and means for varying the radial position of said images with respect to said wedges, said movements providing gradual alteration of said phase and amplitude characteristics of the light rays transmitted by said wedges.

2,732,760

INTERFERENCE MICROSCOPE FOR EXAMINATION OF THE SURFACE QUALITY OF SOLID BODIES

Kurt Räntsch, Heidenheim (Brenz), Germany, assignor to Carl Zeiss, Heidenheim (Brenz), Germany

Application July 28, 1951, Serial No. 239,047
Claims priority, application Germany August 16, 1950
3 Claims. (Cl. 88—39)



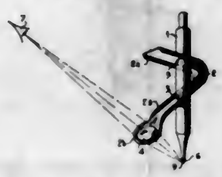
1. An interference microscope for examining the surface quality of solid bodies comprising in a housing a light source, a light partially reflecting and partially transmitting surface for splitting a light beam from said source into two coherent beams, a plurality of pairs of cooperating microscope objectives, each pair of objectives having equal optical properties as regards magnification and aperture, the said optical properties however differing from pair to pair, and an objective revolver disc pivoted rotatable about an axis and receiving said pairs of objectives with their optical axes aligned radially in a plane normal to said revolving axis, the objectives of each said pair lying opposite one another, means for rotating said objective revolver to bring any desired said objective pair into position of use, reflecting means disposed between said splitting surface and the respective said pair of cooperating objectives in use to direct each one of said coherent split beams into one objective of said pair in use, a standard comparison mirror surface being associated with and disposed normal to the axis of and lying in the outer focal plane of one objective of said pair of objectives in use, the surface of the said object under test disposed normal to the axis of and lying in the outer focal plane of the other objective of said pair of objectives in use, said reflecting means being disposed to reflect the respective said partial beams, reflected from said standard comparison mirror surface and said test body surface back through said objectives in use, to said partially reflecting and partially transmitting surface such that the said beams reflected from said standard mirror and test body surfaces respectively are partially reflected and partially transmitted and recombined in one coincident path of light, and means forming an image of the interference effects of said recombined partial beams.

2,732,761

MAGNIFYING GLASS WITH A GRIP

Werner Bender, Bern, and Johann Arni, Geneva, Switzerland, assignors to Tesa S. A., Renens, Switzerland, a corporation of Switzerland

Application October 20, 1954, Serial No. 463,548
Claims priority, application Switzerland
November 20, 1953
2 Claims. (Cl. 88—39)



1. A magnifying glass with a grip, comprising a substantially U-shaped spring blade the arms of which are provided each with an opening, the openings in the two arms registering with each other coaxially and being adapted to engage frictionally a tool to hold same during operation against fortuitous axial movement thereof with reference to the said tool-engaging openings and lateral flanges extending along both sides of at least one arm of the spring blade and forming together at the outer end of the corresponding arm a mount adapted to hold a magnifying glass and the axis of which crosses the axis of the openings registering with each other.

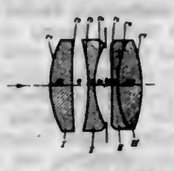
2,732,762

WIDE APERTURE PHOTOGRAPHIC OBJECTIVE COMPRISING THREE AIR SPACED COMPONENTS

Günther Lange, Konigsbronn, Wurttemberg, and Robert Richter, Heidenheim (Brenz), Germany, assignors to Carl Zeiss, Heidenheim (Brenz), Germany

Application June 9, 1952, Serial No. 292,504
Claims priority, application Germany June 12, 1951
3 Claims. (Cl. 88—57)

1. A highly corrected photographic objective with a relative aperture of at least f:3.5 of the type having two collective components spaced axially on opposite sides of a biconcave element in which type the front collective component is a single meniscus element, the rear collective component is compound consisting of a biconvex element cemented to a dispersive element both elements of opposite refractive power, the air separation between the said front collective component and the said biconcave middle element being smaller than the air separation



between the said biconcave middle element and the said rear collective component, and the cemented surface included between the elements in the rear component being collective and convex towards the said front component, and the following conditions being fulfilled simultaneously:

$$0.3 \cdot f < r_1 < 0.5 \cdot f$$
$$2 \cdot f < r_2 < 10 \cdot f$$
$$0.9 \cdot L < r_6 < 1.25 \cdot L$$
$$0.33 \cdot f < r_6 < 0.50 \cdot f$$
$$0.30 \cdot f < L < 0.42 \cdot f$$
$$0.85 \cdot f < r_1 + |r_7| < f$$
$$0.055 < n_I - n_{II} < 0.1$$
$$0.1 < n_{IV} - n_{III} < 0.25$$
$$1.64 < n_I < 1.84$$

f being the focal length and

L being the axial overall length of the objective,

r_1 being the radius of the front surface of the front meniscus,

r_2 being the radius of the rear surface of the front meniscus,

r_6 being the radius of the cemented surface of the rear component,

r_7 being the radius of the rear surface of the rear component,

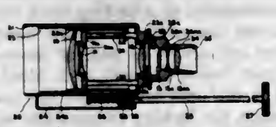
n_I, n_{II}, n_{III}, n_{IV} being the refractive indices of the single elements counted in the direction of the incident light.

2,732,763

VARIFOCAL LENS CONSTRUCTIONS AND DEVICES

Frank G. Back and Herbert Lowen, Glen Cove, N. Y.; said Lowen assignor to said Back

Application July 21, 1953, Serial No. 369,440
2 Claims. (Cl. 88—57)



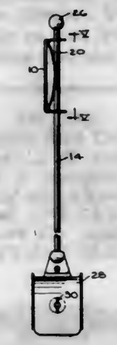
1. In a variable focal lens mount construction for a variable focal lens comprising a plurality of movable lens elements and fixed lens elements movable relative to each other for focal adjustment and zooming and comprising a main lens barrel and an adjusting-rod compartment, substantially parallel and adjacent thereto, said lens barrel provided with lens mounting means for said fixed lens elements and movable mounting means for said movable lens elements, the latter mounting means provided with connecting means adapted to cooperate with adjusting means for focusing and for zooming, said adjusting means consisting of an extensible, for zooming, and rotatable, for focusing, rod slideably arranged in said adjusting-rod compartment, whereby said movable lens elements are moved relative to the fixed lens elements for the purposes of focusing and zooming, by one single, hand-operable adjusting means.

2,732,764

REARVIEW MIRROR

Joseph W. Parks, Altoona, Pa.

Application June 20, 1952, Serial No. 294,590
2 Claims. (Cl. 88—98)



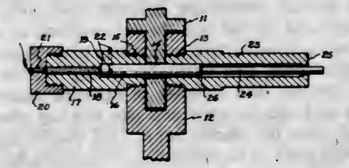
1. A rear-view mirror comprising a clamping element adapted to be secured to a conveyance, a shaft pivoted on said element, a mirror, a backing plate secured to said mirror, a pair of spaced lugs extending from said plate, said lugs having aligned apertures formed therein, a gusset centrally located on each lug, said shaft extending slidably through said apertures, a leaf spring having bifurcated ends and disposed between said shaft and said plate with said ends thereof straddling said gussets, the medial portion of said spring being bowed into frictional engagement with said shaft to bias said backing plate away from said shaft and yieldably resist slidable and rotational movement of the assembly of said mirror and said backing plate relative to said shaft.

2,732,765

SQUIB GUN

William Hunter A. Boyd, Kensington, Md., assignor to the United States of America as represented by the Secretary of the Navy

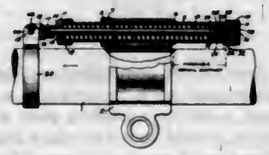
Application March 22, 1951, Serial No. 217,043
1 Claim. (Cl. 89—1.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)



A squib gun for interconnecting a plurality of elements having interleaving portions provided with registering holes, comprising a squib firing chamber for housing an explosive squib, said firing chamber being unitable with an exterior interleaving portion of said elements and being axially aligned with said registering holes, a connecting bolt adapted to be slidably seated in said firing chamber and said holes, a bolt guide tail forming a reduced diameter extension of one end of said bolt, and a bolt receiving chamber being unitable at one end with another exterior interleaving portion of said elements for housing said guide tail, said receiving chamber having a registry hole therethrough at the other end thereof for receiving the end of said tail, said last-named registry hole being just large enough to pass said guide tail, said guide tail being of sufficient length to visibly protrude from its registry hole for any position of said bolt in the firing chamber, the extent of the protrusion of said guide tail thereby providing an indication of the position of said bolt in the firing chamber, the assembly of the foregoing squib gun members to

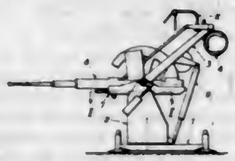
interleaved portions of a plurality of elements securely interconnecting said elements, and the firing of said squib causing a force to be exerted directly on the end of and along the axis of said belt, thereby slidably driving said bolt out of its seat and into said receiving chamber to enable separation of said elements, said guide tail cooperating with said registry hole to minimize biting of said receiving chamber by said bolt while being driven therein.

2,732,766
MOUNT FOR MORTAR
Saul Weiss, Washington, D. C., and Edgar C. Roberts, Cherrydale, Va., assignors to the United States of America as represented by the Secretary of the Army
Application April 27, 1951, Serial No. 223,425
1 Claim. (Cl. 89—44)
(Granted under Title 35, U. S. Code (1952), sec. 266)



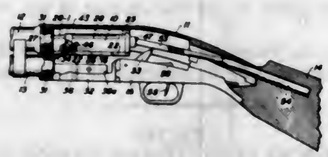
In a recoil mount for a mortar, a unitary yoke having first and second parallel laterally spaced bores therethrough of greater and lesser diameters, respectively, a mortar tube slidably fitting said first bore for guided reciprocation therein in recoil and counterrecoil, a recoil cylinder having a central portion fitting said second bore and an abutment engaging one face of said yoke, a nut threaded on said cylinder and abutting the other face of said yoke whereby said cylinder is removably secured in said yoke, in parallel with said tube, first and second caps screw threaded over the respective ends of said cylinder, a piston slidably fitting said cylinder, a rod secured at one end to said piston and passing rearwardly through a central aperture in said second cap to the exterior of said cylinder, a coil spring about said rod within said cylinder and abutting said piston and second cap at its respective ends to urge said piston into engagement with said first cap, a collar fixed about said tube rearwardly of said yoke, a pivotal connection between said collar and the contiguous end of said rod, the forward end of said cylinder having a counterbore, a circular plate slidably fitting said counterbore and normally resting on the shoulder formed thereby, and a buffer of resilient material fitting between said circular plate and said first cap whereby during final stage of counterrecoil, said piston engages and moves said plate to compress said resilient buffer material.

2,732,767
FRICTION BRAKE FOR A GUN
Heinrich Herlach, Zurich, Switzerland, assignor to Machine Tool Works Oerlikon, Administration Company, Zurich-Oerlikon, Switzerland, a Swiss company
Application May 2, 1952, Serial No. 285,728
2 Claims. (Cl. 89—44)



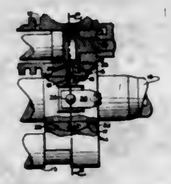
2. In a gun having a reciprocating firearm, a slide member firmly connected with said firearm and having two bores formed therein, two rods extending through said bores in the direction of the reciprocating movement of the firearm a friction brake comprising a tube firmly connected with said slide member and enclosing the second-mentioned rod, a radially expansible braking device movably mounted in said tube and having two end surfaces extending transversely to the axis of said tube, said braking device further having an outer cylindrical surface for frictional engagement with the inner surface of said tube, whereby said braking device expands radially by axially directed pressure, and loading means engaging said end surfaces for axially loading them in opposite directions, said loading means comprising two spring elements of different strengths, the strongest of said spring elements pressing one of said end surfaces in the direction of the return movement of the firearm, a stop located upon the second-mentioned rod between said end surfaces, one of said end surfaces being pressed normally by the strongest of said spring elements against said stop, whereby during the return movement of the firearm the weaker spring element is actuated, and a second stop located upon the second-mentioned rod between said end surfaces, the other one of said end surfaces being pressed by the weaker of said spring elements against said second stop during the forward movement of the firearm, whereby a greater braking effect is exerted during the forward movement of the firearm than during the return movement.

2,732,768
BREECH-BOLT LOCKING MECHANISM FOR AUTOMATIC SHOTGUNS
Walter E. Browning, Salt Lake City, Utah
Application January 21, 1952, Serial No. 267,341
10 Claims. (Cl. 89—182)



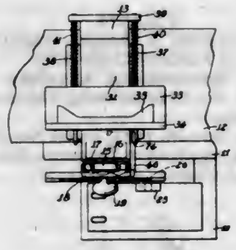
1. In small firearm construction as described, wherein a breech-bolt assembly is slidably positioned within a receiver, for backward and forward longitudinal movement relative thereto, and the barrel is fixed relative to the receiver, the combination of a locking latch block mounted in the breech-bolt assembly for up and down movement relative thereto and across its path of movement; means defining a keeper recess for said latch block, said recess being formed in the underside of the top wall of the receiver in position for locking cooperation with the latch block when the breech-bolt assembly is in forward firing position in the receiver; a longitudinal slideway defined within said breech-bolt assembly; an inertia block slidably mounted in said slideway, so as to substantially retain its position, due to inertia, as the gun recoils upon firing, the forward end of said inertia block being formed with a vertical, double-slot slideway, and the latch block being bifurcated from its bottom upwardly, and slidably fitted within said double-slot slideway; resilient means normally urging said inertia element backwardly within its said slideway; and cam linkage articulatively interconnecting said inertia block and said latch block, for withdrawing the latter from locking coaction with said keeper recess during recoil of the gun, said cam linkage including a pair of registering cam slots of arcuate formation formed in respective opposite legs of said latch block, and a pin fixed in and extending transversely through said inertia block and said cam slots.

2,732,769
SUPPORTING MEANS FOR A FIREARM BARREL
Clarence E. Simpson, Wilbraham, Mass., assignor to the United States of America as represented by the Secretary of the Army
Application February 10, 1953, Serial No. 336,214
5 Claims. (Cl. 89—191)
(Granted under Title 35, U. S. Code (1952), sec. 266)



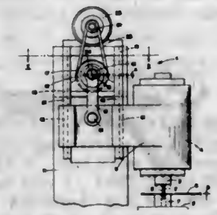
1. Means for releasably securing a barrel to a gas-operated firearm having a gas cylinder and a support member extending forwardly therefrom, said means comprising a bracket secured to the front end of said gas cylinder and support member, said bracket member constructed to pivotally receive a substantially shaped spherical sleeve and having a longitudinal bore therethrough to slidably receive said barrel, said sleeve being provided with a passageway arranged to permit the flow of gases therethrough from a gas port leading from said barrel into a gas port in said gas cylinder, and means permitting rotation of said sleeve when said passageway is in register with said gas ports of said barrel and cylinder and whereby said sleeve may be tilted to permit removal of said barrel therefrom when said barrel is unlocked from said receiver.

2,732,770
TEMPLET FORMERS
Nils Hoglund, Summit, N. J.
Application July 30, 1952, Serial No. 301,655
11 Claims. (Cl. 90—13.1)



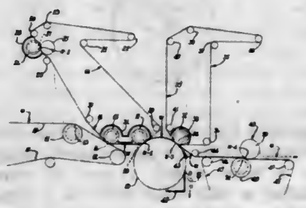
1. Apparatus for automatically forming a working templet from a master templet and including a support, a first slide movable in one direction along said support, a second slide mounted on said first slide for movement transversely of the movement of said first slide, and a third slide on said first slide movable transversely of the movement of said second and first slides, said second slide being adapted to support a working templet blank to be formed, said third slide adapted to support a master templet, a templet follower fixed to said support and adapted to contact the contour of said master templet, and a ratio cam and cam follower connecting said second and third slides for controlling movement of said second slide by said third slide, and a forming tool mounted adjacent said second slide and having relative movement therewith to contact said working templet to form the contour thereon as said second slide and working templet move relative to said forming tool.

2,732,771
METHOD OF ROUTING
Wilson D. Kerns, Los Angeles, Calif., assignor to North American Aviation, Inc.
Application February 29, 1952, Serial No. 274,121
4 Claims. (Cl. 90—14)



1. The method of routing a workpiece comprising the steps of providing an elongated cylindrical member with cutting edges along the surface thereof, rotating said member about its principal axis at a speed in excess of 12,000 revolutions per minute, reciprocating said member along said axis through a stroke at least as great as the thickness of said workpiece, and bringing said workpiece into engagement with said surface of said member for thereby effecting a routing operation.

2,732,772
SUCTION PICK-UP AND TRANSFER PRESS FOR PAPER MACHINES
Lloyd Hornbostel, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a corporation of Wisconsin
Application February 5, 1953, Serial No. 335,341
8 Claims. (Cl. 92—49)



1. In a paper machine, a press section for receiving a wet web from a paper machine forming surface and pressing the wet web, comprising a looped pick-up felt, a suction pick-up roll in the loop of said pick-up felt directing the felt against the web on the forming surface for transferring the web to the under face of said pick-up felt, a first suction press roll within the loop of said pick-up felt, a first bare roll below said first suction press roll and cooperating therewith to define a press nip for transferring the web to the bare roll surface, a second suction press roll above said bare roll and cooperating therewith to define a second press nip, said second suction press roll having a suction gland extending on both sides of said second press nip and completely covered by a press felt so as to effect contact between the web and said press felt at the press nip only and effect drying of the felt on opposite sides of the press nip, a self-dumping doctor cooperating with said bare roll on the descending side thereof, a reverse press for pressing the top side of the web against a bare roll, and a transfer felt run receiving the web exiting from said second press nip and supporting and conveying the web to and through a nip of said reverse press.

2,732,773

DOCTOR ASSEMBLY AND FRONT REMOVABLE BLADE AND HOLDER THEREFOR

Richmond W. Smith, Walpole, Mass., assignor to Bird Machine Co., South Walpole, Mass., a corporation of Massachusetts

Application January 12, 1951, Serial No. 205,704
5 Claims. (Cl. 92—74)



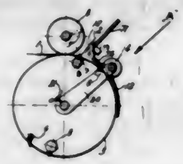
1. In a doctor for use with a calender or the like roll or cylinder, in combination, a blade, a cylindrical holder bar slotted lengthwise to receive the back edge of said blade and having a longitudinal frontal reduced-radius sector, and a carrier rotatably and slidably supporting said bar in a cylindrical recess having a frontal opening whereby said blade and holder are front removable when rotated from the normal roll-facing position.

2,732,774

MANUFACTURE OF PAPER BAGS

Carl Hensel, Bielefeld, Germany

Application July 2, 1951, Serial No. 234,700
Claims priority, application Germany September 26, 1950
5 Claims. (Cl. 93—23)



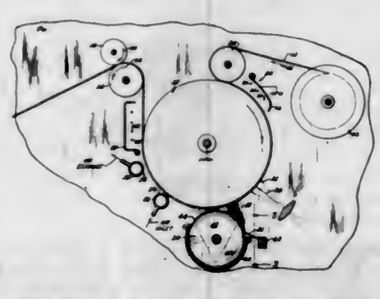
1. An apparatus for the manufacture of cross-bottom paper bags from lengths of paper tubes, comprising in combination: a main roller, a pair of counterrollers arranged parallel to said main roller at a distance from each other and engaging said main roller so as to advance a length of paper tube inserted between said main roller and said counterrollers, an angular nose including a substantially straight part arranged at an angle to the circumference of said main roller and a part curved along a circular arc adjacent to the center line of said circumference of said main roller, said nose being arranged substantially in a continuation of the center line of the advancing tube for penetrating into the open end thereof and spreading same into diamond shape with upwardly extending bottom flaps at both sides of the center line of the tube, a shoe rigidly connected to said curved part of said nose and being arranged at one side of said curved part of said nose, said shoe projecting laterally from the center line for engaging the bottom flap at this side of the center line and causing a laying down thereof during the advancing of the tube, a deflector rigidly connected to said straight part of said nose and being arranged at the opposite side of said nose in a position for preventing temporarily a laying down of the second bottom flap at said opposite side of the center line until the first mentioned flap is laid down so as to assure an overlapping of said bottom flaps, and at least one pressure roller cooperating with one of said rollers for depressing the laid down bottom flaps.

2,732,775

CONTINUOUS DIRECT ELECTROPHOTOGRAPHIC RECORDER

Charles J. Young and Roger G. Olden, Princeton, N. J., assignors to Radio Corporation of America, a corporation of Delaware

Application February 11, 1953, Serial No. 336,342
3 Claims. (Cl. 95—1.7)



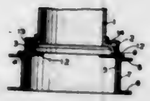
1. A continuous direct electrophotographic recorder comprising, in combination, means for feeding a continuous web of material having a photoconductive surface along a predetermined path, electrostatic charging means for applying an electrostatic charge to said surface, means for exposing said electrostatically charged surface to a light image to produce a latent electrostatic image on said surface, means for developing said latent image and means for fixing said developed image, and said developing means comprising an electroscopic developing powder cloud generating means including, a hollow cylinder mounted for rotation about its longitudinal axis, said cylinder having alternate rows of perforations and of strips of brush-like material, a hopper positioned within said cylinder for carrying and dispensing a quantity of developer powder, said powder being applied through said perforations to said brush-like material, and means for causing said brush-like material to project said powder into space to form a cloud.

2,732,776

PHOTOGRAPHIC CAMERA OBJECTIVE ATTACHING MEANS

Alfred Meixner, Braunschweig, Germany, assignor to Voigtlander, A. G., Braunschweig, Germany, a corporation of Germany

Application June 28, 1952, Serial No. 296,104
Claims priority, application Germany July 17, 1951
13 Claims. (Cl. 95—39)



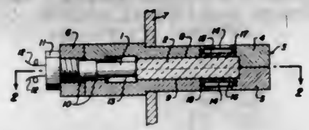
1. A photographic camera comprising in combination a tube carrying the objective, said tube being adapted to be advanced to picture-taking position and to be retracted to rest position from and to the camera casing, respectively; abutment means on the camera casing to limit the axial position of said tube carrying said objective; means for automatically locking the tube in the picture taking position and means for releasing said locking means prior to retraction of the tube toward the rest position, with straight-line axial movement only, and in the absence of any rotary movement of the tube, by the action of a rotary member arranged co-axially with the optical axis of the tube; the tube being thereby locked when it reaches the taking position and being simultaneously pressed by pressure and wedge effect against said abutment fixedly connected with the camera body.

2,732,777

ULTRA HIGH SPEED LIGHT SHUTTER

Berlyn Brixner, Los Alamos, N. Mex., assignor to the United States of America as represented by the United States Atomic Energy Commission

Application January 7, 1953, Serial No. 330,132
3 Claims. (Cl. 95—53)



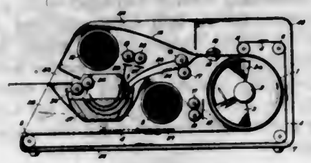
1. A high speed explosively actuated light shutter comprising a metallic housing having light apertures on opposed walls thereof thereby providing a light path therethrough; an optically clear glass plate supported within said housing and firmly positioned in the light path thereof; an explosive detonator supported within said housing in contact with one edge of said glass plate; escape exhaust means for exhausting combustion gases from said housing; and means for detonating said explosive.

2,732,778

DEVICE FOR MAKING PHOTOSTATIC COPIES

Walter Limberger, Hamburg, Germany, assignor to Messrs. Lumoprint Zindler K. G., Hamburg, Germany

Application June 16, 1952, Serial No. 293,790
Claims priority, application Germany June 19, 1951
1 Claim. (Cl. 95—77.5)



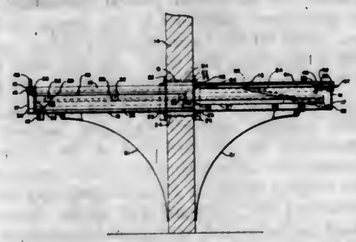
In apparatus for producing photostatic copies from an original sheet with the use of a photostatic negative and transfer paper, support structure, said negative and said transfer paper being in roll form, reels rotatably supporting said rolls on said support structure, electrically driven means for severing a portion of the negative from its roll to a length corresponding to the length of the original sheet, electrically driven means for feeding said original sheet and said severed negative portion in superimposed relation past a light source to produce a latent image of the original upon a light sensitive coating on said negative portion, a transparent cylinder encompassing said light source, said electrically driven means including an endless belt supported on said support structure for movement around a portion of said cylinder to carry said superimposed original sheet and severed negative portion past the light source, electrically driven means for separating the said negative portion from the original after movement past said light source, a developing vessel on said support structure, electrically driven means for severing a portion of the transfer paper from its roll to a length corresponding to the length of said negative portion, electrically driven means for separately inserting said exposed negative portion and said severed transfer paper portion into said vessel, electrically driven means for pressing said exposed negative portion and said severed transfer paper portion against one another as they emerge from the developing vessel and for moving said portions through the vessel, said vessel including means for guiding said portions in separated condition through the vessel, and means for controlling the operation of said electrically driven means in correctly timed relation, said controlling means being electrically driven and being switched on in dependence upon the insertion of the original for feeding to said light source, a movable stop arranged adjacent said means for feeding said original past said light source, resilient means for holding said stop in a position to prevent said original from a feeding movement, electrical contact means combined with said stop, said contact means being closed by moving said stop against the action of said resilient means, said contact means being adapted to switch on said electrical means, and means for holding said contact means closed until the completion of the photostatic copy on said transfer paper portion.

2,732,779

LIGHT TRAP FOR DARKROOM

Donald M. Beard, Spencerville, Md., Frank H. Wildung, Washington, D. C., and Peter P. Bruce, Tyrone, Pa.

Application July 11, 1952, Serial No. 298,488
6 Claims. (Cl. 95—90)
(Granted under Title 35, U. S. Code (1952), sec. 266)



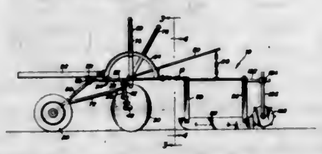
3. Apparatus for preventing entry of light into a darkroom comprising, in combination, a wall for said darkroom having a slot therethrough, a casing mounted in said slot and having a portion extending into said darkroom and a portion extending exteriorly thereof, a tray mounted in said casing for movement from one of said portions to the other of said portions, a lid for said exterior portion, said lid being light-tight when closed, said tray having light excluding means mounted at one end thereof, said light excluding means being rendered effective when said tray is moved into said exterior portion, means for locking said tray in said exterior portion when said lid is raised, and means for locking said lid in the closed position thereof when said tray is moved from the exterior portion to the darkroom portion and to release said lid when said tray is moved fully to the exterior portion.

2,732,780

AGRICULTURAL IMPLEMENT

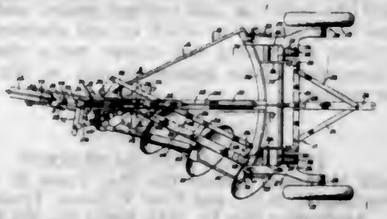
Alex H. Daricek, Maple, Tex.

Application October 27, 1952, Serial No. 317,052
5 Claims. (Cl. 97—8)



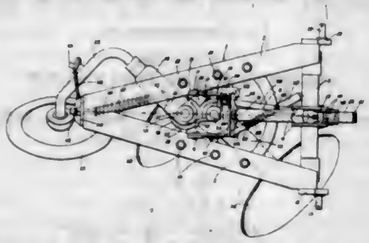
1. A cultivator consisting of first and second cultivator frames, flexible means connecting said frames to one another in trailing relation, gangs of cultivator units spaced across said first frame, means mounting said units of each gang on said first frame for movement toward and away from one another, supporting wheels mounted on said frame, and actuating means for raising and lowering said wheels, supporting runners on said second frame in alignment with said gang units, fingers on said runners for lifting the crust separated by the cultivator units, and toothed disks mounted on said second frame behind said runners for crushing crust lifted by the fingers.

2,732,781
AGRICULTURAL IMPLEMENTS AND SUPPORT VEHICLES THEREFOR
Anthony R. Coviello, Tulare, Calif.
Application July 23, 1951, Serial No. 238,065
16 Claims. (Cl. 97—32)



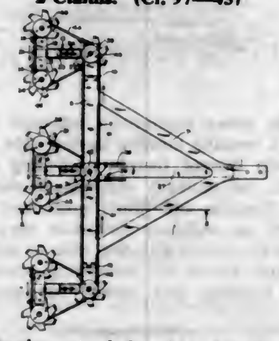
1. An agricultural implement comprising a frame having forward and rearward end portions, a beam mounted in the frame for horizontal pivotal movement between opposite operational positions in the frame, earth working means borne by the beam having a thrust laterally of the frame in one direction when engaged with the earth with the beam in one operational position and an opposite direction of lateral thrust with the beam in its other operational position, ground engaging support means, means mounting the forward end of the frame on the support means for adjustable elevational movement relative to the support means, a ground engaging guide wheel, means mounting the rearward end of the frame on the guide wheel for adjustable elevational movement relative to the guide wheel and for swivel movement of the guide wheel in the frame, and a control linkage interconnecting the beam and the guide wheel for interlocked corresponding pivotal movement in the frame when the frame is in lowered position relative to the guide wheel, said linkage being disconnected to free the guide wheel for swivel movement when the frame is elevated to a raised position relative to the guide wheel.

2,732,782
REVERSIBLE DISC PLOW
Albert G. Gurries and Edward J. Rimple, Gilroy, Calif., assignors to Be-Ge Manufacturing Co., Gilroy, Calif., a corporation of California
Application April 27, 1953, Serial No. 351,434
10 Claims. (Cl. 97—32)



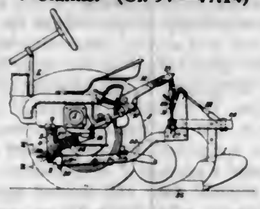
1. A reversible plow for use with a tractor having draft and lift links, said plow comprising a frame arranged for connection to the draft and lift links of the tractor, a plow standard depending from the frame, a plow disc on the lower end of the standard, means pivotally mounting the standard on the frame for rotation through a predetermined arc about a vertical axis whereby the disc may be moved between right and left hand plowing positions, means to so rotate the standard in one direction and then the other alternately through said arc, a furrow wheel, a standard for the furrow wheel having a horizontal upper end element turnable in the back of the plow standard whereby the furrow wheel standard may be swung to dispose the furrow wheel in right and left hand positions alternately, and means between the frame and furrow wheel standard to cause the latter to swing with the rotation of the plow standard so as to dispose the furrow wheel in a position corresponding to that occupied by the disc.

2,732,783
ROTARY CULTIVATOR
Joseph E. Murphy, Minneapolis, Minn.
Application April 13, 1951, Serial No. 220,827
2 Claims. (Cl. 97—43)



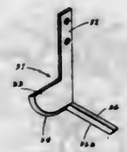
1. In an implement of the class described, an upper frame comprising intermediate and end sections hingedly connected for movements in a vertical plane, the intermediate section of the upper frame having means for attaching the device to tractive power, a sub-frame rearwardly of each section of the upper frame and attached thereto, each sub-frame having a front rotatable soil pulverizing device provided with a long vertical shaft journaled on said sub-frame and one of the sections of the upper frame, power means for turning the long vertical shaft, each sub-frame also having a pair of rear pulverizing devices having short vertical shafts journaled on the sub-frame, and means for turning each pair of rear pulverizing devices from the respective long vertical shaft.

2,732,784
PLOW HITCH
Willard H. Tanke, La Crosse, and Robert S. Reaves, West Salem, Wis., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application November 1, 1951, Serial No. 254,347
7 Claims. (Cl. 97—47.14)



6. A hitch means of the type adapted to be disposed between a pair of laterally aligned draft elements and detachably connected thereto for up and down pivotal movement about a transverse coupling pin, said hitch means comprising a body member having a transverse trunnion yoke and a nose piece merging therewith which, as viewed in plan, projects and converges forwardly from said trunnion yoke, said trunnion yoke presenting an aperture adapted to receive said coupling pin, and a pair of transversely aligned projections extending outwardly in opposite directions from the sides of said trunnion yoke, each of said projections presenting a generally horizontal sliding surface in downwardly spaced relation to said aperture and a forwardly facing stop surface in upwardly extending relation to said sliding surface, said sliding surface inclining upwardly toward said stop surface and the latter being disposed rearwardly of said aperture so that cooperative engagement of said draft elements with said sliding and stop surfaces of said projections will be effective to align said pin receiving aperture of said trunnion yoke with complementary pin receiving apertures of said draft elements.

2,732,785
ROTARY BLADE CULTIVATOR
Ernest J. Kleppe, Reno, Nev.
Application April 17, 1951, Serial No. 221,483
1 Claim. (Cl. 97—212)



A blade unit for a rotary cultivator comprising a shank extending radially of the axis of the cultivator, a vertical cutter plate on the outer end of the shank, said plate extending ahead of the shank in the direction of rotation of the cultivator and being rearwardly rounded and sharpened on its forward and lower soil engaged edge, and a cultivator blade projecting laterally out from the heel of the plate and being sharpened along its leading edge; said blade being of relatively small bar-like form in cross section.

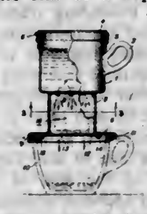
2,732,786
ADJUSTABLE PLOW ASSEMBLY FOR TERRACING MACHINES
Johnnie C. Collins, Dallas, Tex., assignor to Servis Equipment Company, Dallas, Tex., a corporation of Texas
Application January 9, 1953, Serial No. 330,461
3 Claims. (Cl. 97—240)



1. In a terracing machine, an implement hanger including a horizontal frame, an upright beam having a transverse bearing collar at its upper end, a transverse pivotal support connecting the upper end of the beam to the frame in spaced relation to the bearing collar, a cam shaft engaged in the collar, and upright pivotal supports connecting the ends of the cam shaft to said frame for relative rotation of said shaft and pivotal adjustment of said beam about the axis of the transverse support, one of the upright supports having adjustable connection with said frame for pivotal movement with said shaft and beam about the axis of the other upright support.

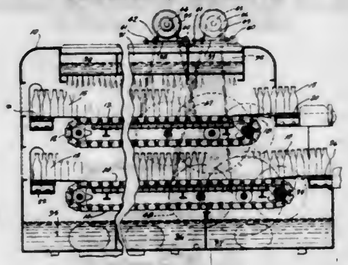
2,732,787
BEVERAGE INFUSER
Fay Herman Osborne, Windsor Locks, Conn.
Application February 26, 1953, Serial No. 339,063
3 Claims. (Cl. 99—306)

1. An infusing apparatus for preparing extracts from small, water-pervious, individual service, rectangular-shaped, substantially flat coffee bags comprising a hot water reservoir of unit beverage cup capacity, an infusing chamber depending from said reservoir and communicating therewith through a multiplicity of fine apertures, said infusing chamber being vertically disposed and generally parallelepiped-shaped to hold a coffee bag of the indicated character snugly suspended on end therein so that water from said reservoir may pass through said apertures and drip by gravity lengthwise through said bag, a base on said infusing chamber adapted to fit over and rest on the rim of a cup, and a perforated,



swinging gate in said base which is normally held closed by spring action during infusion but which may be readily opened and closed to charge a fresh bag into said infusing chamber and to remove a spent bag therefrom.

2,732,788
MULTITIER PASTEURIZER
George L. N. Meyer, Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis., a corporation of Wisconsin
Application January 21, 1953, Serial No. 332,152
5 Claims. (Cl. 99—360)



1. A pasteurizer of the character described comprising, a casing, a spray tank positioned in said casing adjacent the top thereof and adapted to spray hot liquid through the bottom thereof, a first longitudinal conveyor adapted to support and transport material to be pasteurized through said machine, said conveyor being positioned beneath said tank and in the path of the liquid from the spray, a second longitudinal conveyor positioned beneath the first named conveyor and receiving liquid from the spray passing through said first conveyor, said second conveyor being adapted to support and transport material to be pasteurized through the machine, and means beneath the second conveyor to collect the sprayed liquid from said tank.

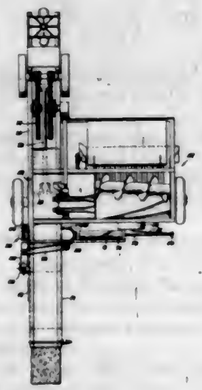
2,732,789
DEEP FAT FRYING MACHINE
Clifton L. Herberg, Hudson, N. Y., assignor to Gifford-Wood Co., Hudson, N. Y., a corporation of New York
Application July 30, 1954, Serial No. 446,778
3 Claims. (Cl. 99—404)



1. A deep fat frying machine comprising an elongated vat adapted to hold said fat; a semi-cylindrical screen suspended in said vat; a helicoidal food conveyer of diameter approximately the same as the inner surface of said screen and having a shaft rotatably mounted substantially coaxial with said screen; means for heating the fat in said vat and maintaining it at a desired temperature;

a motor for rotating said conveyer at a desired rate; a perforated plate forming a cooked food lifter secured to said shaft adjacent the end thereof toward which said food is conveyed; a cooked food discharge chute comprising two sections extending transversely of said vat and normally inclined to drain into said vat; a hinge connecting said sections together in a zone over said vat; the first of said sections extending over said vat above said lifter in a position to be progressively tilted about the axis of said hinge by said lifter as it moves in contact therewith, and the second of said sections extending over and beyond the outer side of said vat and provided with a pivotal mounting at the side of said machine; and means on one of said sections adapted to cooperate with the other section, after said first section has been tilted until it is downwardly inclined towards said hinge for stopping the tilting movement of said first section about the axis of said hinge and, thereafter, causing both of said sections to be tilted by the further movement of said lifter about the axis of said pivotal mounting.

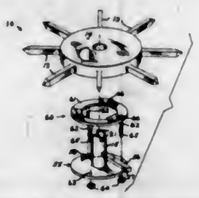
2,732,790
WIRE TIE FOR BALERS
Joseph C. Leary, Greenfield, Ind.
Application November 3, 1950, Serial No. 193,875
13 Claims. (Cl. 100—4)



1. For use with a baler comprising a baling chamber and a plunger reciprocable therein, twister mechanism carried adjacent one wall of said chamber, a needle normally carried outside an opposite wall of said chamber, means associated with said twister mechanism for retaining an end of a wire strand with a portion disposed in said twister mechanism and having a bight disposed in said chamber, a source of supply of wire, means on said needle engaging said wire strand between said source and said bight, means for shifting said needle to traverse said chamber, said needle acting alone, upon such traversal, to lay a section of said strand in said twister mechanism with that end of said section nearer said source and the extremity of said strand portion extending oppositely from said twister mechanism, and means for operating said twister mechanism to twist together said portion and said section of said strand.

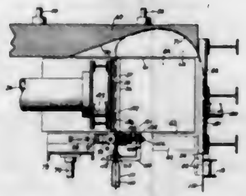
2,732,791
BALE REGULATOR
Robert F. Adkisson, Verden, Okla.
Application December 8, 1954, Serial No. 473,864
9 Claims. (Cl. 100—4)

1. A metering wheel for an automatic tying hay baler, comprising: a horizontally disposed cylinder centrally bored, having a recess in its lower surface defining a central hub and a peripheral wall; a plurality of radial teeth on the inner surface of said wall; a plurality of horizontal spikes projecting radially outwardly, one end of each spike integrally connected to the periphery of said cylinder; a pair of superposed centrally bored adjustably spaced-apart plates centrally disposed axially within the recess of said cylinders; spring means for urging the plates apart and frictionally engaging the



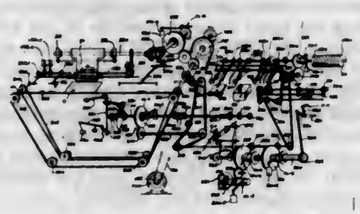
uppermost of said plates within the recess of said cylinder; a pawl pivotally mounted intermediate its ends on the upper surface of the lowermost of said plates; and a pawl spring urging an end of said pawl to engage said teeth, causing said end of said pawl to ratchet against said teeth as said cylinder is rotated in one direction and said end of said pawl to wedge against one of said teeth for rotating said superposed plates with the cylinder, when said cylinder is rotated in a direction opposite to the first said direction.

2,732,792
COMPRESSES
Cecil F. White, Fresno, Calif.
Application August 19, 1952, Serial No. 305,106
23 Claims. (Cl. 100—25)



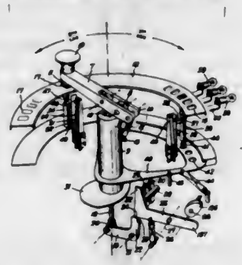
1. The combination in a compress of opposing horizontally grooved substantially erect parallel platens constituting opposite sides of a bale chamber defined therebetween, a substantially erect platen mounted for reciprocal elevational movement laterally adjacent to said opposing platens, guide means constraining the elevational platen to reciprocal movement in a predetermined substantially vertical path between a compression resistant position in bale chamber defining relation with said opposing platens and a retracted position, and a horizontally grooved platen adapted to apply compressive force against a bale in the chamber mounted in substantially parallel relation to the elevationally movable platen for horizontal movement toward and from the elevationally movable platen while maintaining substantially parallel relation thereto at the side of the opposing platens opposite to said elevationally movable platen constituting a fourth side of said bale chamber, the grooves in the platens being aligned cooperatively to provide a continuous band guiding channel along three sides of the bale chamber, said channel having open opposite ends accessible by vertical movement of the elevationally movable platen.

2,732,793
SEQUENTIALLY OPERATING ADDRESS PRINTING MEANS
Walter T. Gollwitzer, Euclid, Ohio, assignor to Addressograph-Multigraph Corporation, Wilmington, Del., a corporation of Delaware
Original application December 16, 1950, Serial No. 201,102. Divided and this application April 20, 1953, Serial No. 349,585
4 Claims. (Cl. 101—47)



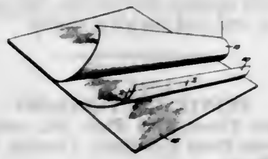
1. In an automatic machine for producing business instruments or the like, a plurality of functioning units operatively related for cooperation in producing business instruments, said units each including at least one operative mechanism and independent one-revolution drive clutches therefor, control means in said machine including control cams operable during operation of said control means to cause engagement of the respective clutches of the units in predetermined sequence to produce automatic operation of the machine, a governing unit having an operated and an unoperated condition and effective when operated to cause operation of said control means and thus cause continuous automatic machine operation, means under control of an operator to cause operation of said governing unit, manual control means for causing engagement of at least one of said clutches, and means operable by said governing unit when in its operated condition to disable said manual control means.

2,732,794
DOUBLES TICKET ISSUER MECHANISM FOR RACE TOTALISATORS
Awdry Francis Julius, Sydney, New South Wales, Australia, assignor to Automatic Totalisators Limited, Meadowbank, near Sydney, New South Wales, a company, of New South Wales
Application May 10, 1954, Serial No. 428,781
Claims priority, application Australia May 21, 1953
5 Claims. (Cl. 101—66)



1. In a doubles ticket issuer machine for a race totalisator, electro-mechanical devices for setting the machine to print a ticket comprising a series of first leg selector switches, depressible plungers for closing said first switches, a return spring associated with each of said plungers, spring loaded latch and locking means associated with said plungers whereby a newly depressed plunger is held in that condition and any previously depressed plunger is thereby released from that condition, a first leg rotatable type drum having printing faces respectively related to said first switches, first leg circuiting and actuating means which in response to closure of one of said first switches turn said first drum and then halt it with its printing face corresponding to the closed first switch in a printing station, a series of second leg selector switches, means for closing any one of said second switches to the exclusion of the entire remainder of said second switches, locking devices which hold a closed second switch in that condition and thereby prevent closure of any unclosed selector switch, a second leg rotatable type drum having printing faces respectively related to said second switches, second leg circuiting and actuating means which in response to closure of one of said second switches turn said second drum and then halt it with its printing face corresponding to the closed second switch in a printing station, means to effect a printing cycle of the machine, and release mechanism responsive thereto whereby said locking devices are unlocked after completion of a printing operation by said corresponding printing faces.

2,732,795
STENCIL SHEET ASSEMBLY AND CUSHION SHEETS FOR USE IN SAME
Carl Ludwig W. Brandt, Chicago, and Robert T. Florence, Park Ridge, Ill., assignors to A. B. Dick Company, Niles, Ill., a corporation of Illinois
Application December 11, 1952, Serial No. 325,367
5 Claims. (Cl. 101—128.2)

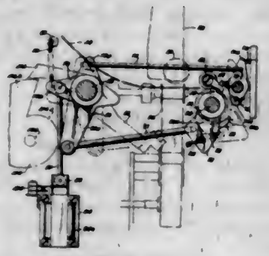


1. In a stencil sheet assembly having a backing sheet and a stencil sheet formed of a base tissue having an ink impervious displaceable coating, a cushion sheet interposed between the stencil sheet and the backing sheet, said cushion sheet comprising a base paper having a wax coating on the surface underlying the coated stencil and dry pigment free of any liquid carrier and vehicle rubbed into the surface adjacent the backing sheet.

2,732,796
PRINTING PLATES
Charles H. Van Dusen, Jr., Timberlake, Ohio, assignor to Addressograph-Multigraph Corporation, Wilmington, Del., a corporation of Delaware
No Drawing. Application May 17, 1951, Serial No. 226,935
2 Claims. (Cl. 101—149.2)

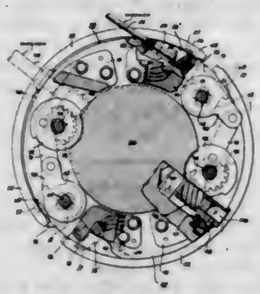
1. In a metallic lithographic printing plate selected from the group consisting of zinc and aluminum having a pitted and grained obverse surface to provide water-retaining reservoirs and image-retaining apices, a thin water-insoluble film united with an overlying completely said surface configuration and which consists of an insoluble silicate that is the reaction product of the metal of the plate and a water soluble alkali silicate selected from the group consisting of sodium and potassium, and which film is afforded by treating the pitted and grained surface of the plate with a water solution of said soluble alkali silicate in which the alkali silicate concentration lies within the range of from 0.1% to 5% by weight and the excess of which is rinsed away with water so as to leave on said surface only said reaction product in film form of molecular dimension preserving the essential pitted and grained surface configuration of the plate.

2,732,797
PAPER FEED
Benjamin Cooper, New York, N. Y., and Albert Hohmann, Teaneck, N. J., assignors, by direct and mesne assignments, to Research Electronics & Devices Co., Inc., Bayonne, N. J., a corporation of New Jersey
Application May 12, 1951, Serial No. 226,048
9 Claims. (Cl. 101—288)



7. In combination, printing means, means to cyclicly actuate said printing means in opposite arcuate directions through a predetermined angle, rotary paper feed means, means to rotate said rotary paper feed means in one direction upon actuating said printing means, control means to predetermine the angle of rotation of said rotary paper feed means in said direction, electrical means to control the control means for varying the angle of rotation of said rotary feed means, means to independently actuate said means for actuating said printing means, and means to concurrently actuate said means for actuating said printing means and said electrical means.

2,732,798
PRINTING CYLINDERS
Corson Walter Chase, Oak Park, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a corporation of Illinois
Application October 11, 1949, Serial No. 120,704
19 Claims. (Cl. 101—378)



1. In a plate cylinder for holding relatively thick printing plates by circumferential tension applied to the plates near their opposite ends, the combination comprising plates, hook means engageable with one end of a plate at a plurality of axially spaced points, means for moving the hook means circumferentially of the cylinder comprising a plurality of individual axially movable members slidable in the cylinder, and respective axially spaced cam means carried by the members engageable with the hook means for skewing the hook means.

16. In a plate cylinder for holding printing plates in circumferential tension, the combination comprising register hook means for engaging a plate near one end at a plurality of axially spaced points, means mounting the hook means on the cylinder for skewing movement with respect thereto, means for skewing the hook means on the cylinder to skew the plate including a plurality of cams spaced axially along said mounting means and a corresponding plurality of independently axially shiftable members connected with said cams and controllable from one end of the cylinder, and means for engaging the plate near its opposite end to lock the plate in tension on the cylinder.

19. In a cylinder for holding printing plates in circumferential tension, the combination comprising a pair of register hooks adapted to engage a plate at spaced points along one edge thereof, means supporting said hooks in axially spaced relation on and with freedom for circumferential movement relative to the cylinder, a plurality of cams active at spaced points along said supporting means for shifting the latter circumferentially of the cylinder, a corresponding plurality of closely spaced bars connected with said cams and independently shiftable axially of the cylinder to actuate respective ones of said cams, said support means thereby being movable circumferentially of the cylinder to tension the plate and movable to a skewed position to skew the plate, and a common scale disposed in proximity to the ends of said bars for indicating the axial positions thereof and the resulting position of said hooks relative to the cylinder.

2,732,799
METHODS FOR INSOLUBILIZING COATING COMPOSITIONS
John Harris Haslam, Newport, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application March 17, 1950, Serial No. 150,350
15 Claims. (Cl. 101—416)

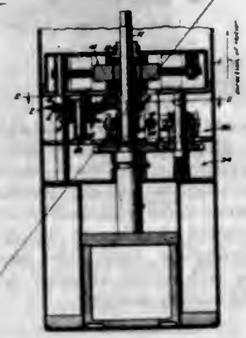
1. A method for insolubilizing and rapidly setting a printing ink coating composition applied to a surface, comprising reacting a polymerizable, polyhydroxy organic compound in said coating while in liquid condition with a stoichiometric amount of an organic ester of an aliphatic monohydric alcohol containing from 1–8 carbon atoms of a metal selected from the group consisting of titanium and zirconium in the presence of said coating.

2,732,800
BLASTING ASSEMBLY
David L. Coursen, Newark, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del.
Application March 11, 1953, Serial No. 341,769
3 Claims. (Cl. 102—25)



1. A blasting cartridge assembly comprising in combination with a pressure-resistant blasting tube and pressure-responsive discharge means, of a substantially cylindrical gas-generating charge having a diameter not exceeding three-quarters of the inside diameter of said tube, said charge containing in linear arrangement at least three compositions, each containing at least 50% by weight of ammonium nitrate, the first of said compositions at one end of said charge containing up to 30% by weight of an oxidizable fuel and being capable of self-sustained deflagration at atmospheric pressure, the second composition at the opposite end of said charge containing up to 50% by weight of an inert cooling salt and being capable of self-sustained deflagration only at approximately the temperature and pressure produced within the tube by the deflagration of all of the other compositions, and at least one composition containing a combustible fuel interposed between said first and second composition capable of self-sustained deflagration only at approximately the temperature and pressure produced within the tube by the deflagration of said first composition.

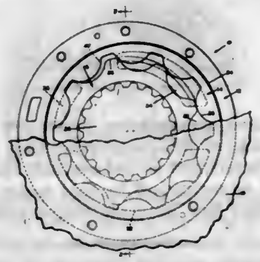
2,732,801
SET-BACK OPERATED SAFETY CLUTCH
Charles J. Hull and Robert S. Tuttle, Eggertsville, N. Y., assignors to the United States of America as represented by the Secretary of War
Application November 4, 1947, Serial No. 783,896
2 Claims. (Cl. 102—78)



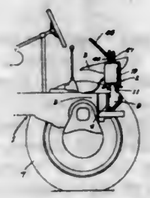
1. In a fuze mechanism comprising a drive shaft adapted for rotation at high speed during normal free-flight operation to drive a low speed arming mechanism through a gear train; the combination of an assembly comprising a friction clutch embracing a spur gear driven by said drive shaft to oppose a predetermined friction load to such motion, said friction clutch and gear slidably mounted on a stub shaft spaced from and parallel to said drive shaft, said spur gear disengaging the drive shaft upon set-back, a safety clutch for operatively transmitting power from said drive shaft to said arming mechanism and biased toward operative position, set-back mechanism operatively connected with said safety clutch, a spring biased pin having one end in releasable engagement with said safety clutch and its opposite end in engagement with said set-back mechanism, said pin biased toward said set-back mechanism to permit functioning of said safety clutch upon set-back, and a latch pivotally mounted intermediate said biased pin and said friction clutch, one end of said latch coupled to said biased pin intermediate the ends thereof and the opposite end positioned to engage said friction clutch upon set-back and thereby maintain disengagement of said spur gear and drive shaft.

2,732,802
INTERNAL GEAR PUMP
Walter R. Eames, Jr., Hazel Park, Mich., assignor to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application March 10, 1950, Serial No. 148,793
9 Claims. (Cl. 103—2)

1. A rotor pump comprising a housing having a pumping chamber, an intake port communicating with the chamber and two independent discharge ports communicating with the chamber, said ports extending arcuately and being spaced a predetermined angular distance from one another about the axis of the pump, and pumping means in said chamber comprising inner and outer eccentrically related rotors having interengaging teeth, one of said discharge ports having one end extremity thereof arcuately spaced an equal distance from one end extremity of the intake port as the one end extremity of the other discharge port is arcuately spaced from the other end extremity of said one discharge port, such that a volumetric pocket of fluid entrapment, for discharge from said one discharge port, is had between two adjacent teeth on one rotor and two corresponding adjacent teeth of the other rotor and another volumetric pocket of fluid entrapment, for discharge from the other discharge port, is had between two adjacent teeth on one rotor and two corresponding adjacent teeth of the other rotor.



2,732,803
HYDRAULIC PUMP AND VALVE UNIT
Lloyd Meeker, San Jose, Calif.
Application January 10, 1951, Serial No. 205,335
1 Claim. (Cl. 103—3)

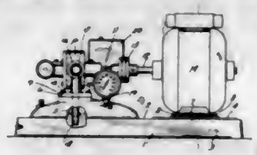


A hydraulic pump and valve unit attachment for a tractor having a power take-off shaft, said unit comprising a valve body having a base, a valve in the body having a stem projecting therefrom for actuation, a case depending from the body and having a head on which the body base is mounted in direct contact therewith, the case being adapted to be secured on the tractor, a housing mounted on the case and enclosing the body in clearance relation to form a reservoir, a pump in the head adapted to be driven by the take-off shaft, and means integral with the body, base, and head forming, when said base and head are mounted together, pressure and relief passages between the pump and the valve and reservoir respectively, and other passages between the valve and the peripheral wall of the head providing outlets arranged for connection to exterior use conduits.

2,732,804
AUTOMATIC PRESSURE LIQUID SUPPLY SYSTEM
Harry J. Sadler and Ernest E. Cook, Minneapolis, Minn., assignors to Hypro Engineering Co., Minneapolis, Minn., a corporation of Minnesota
Application April 24, 1950, Serial No. 157,788
3 Claims. (Cl. 103—25)

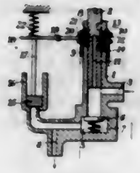
3. An automatic pressure liquid supply system including a mounting base, a pressure chamber in said base, a pressure pump having inlet and outlet sides supported on said base, a motor supported on said base in driving connection with said pump, a conduit connection between said chamber and the outlet side of the pump,

pressure responsive motor control means in communication with said pressure chamber, a by-pass in said pump intermediate the inlet and outlet sides thereof, a variably adjustable pressure responsive valve means in said by-



pass, said valve means being responsive to pressure in said outlet side of the pump preventing rapid build up of pressure therein and in said pressure chamber reducing the speed of motor cut-off by said motor control means under restricted flow from the output side of the pump.

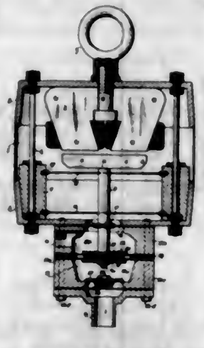
2,732,805
SELF-REGULATING FEED-PUMP
René Lucien, Paris, France, assignor to Societe d'Inventions Aeronautiques et Mecaniques S. I. A. M., Fribourg, Switzerland, a corporation of Switzerland
Application November 14, 1952, Serial No. 320,442
Claims priority, application France August 14, 1952
6 Claims. (Cl. 103—42)



1. A self-regulating constant-stroke piston pump wherein the output of the pump is automatically controlled in inverse ratio to the back-pressure of the pump when said back-pressure exceeds a predetermined value, said pump comprising at least one cylinder, a piston slidable in the cylinder and closing one end thereof, a supply port opening into the cylinder, a check valve closing the other end of the cylinder, at least one passageway extending through the piston and having one end communicating with the supply port during a portion of the working stroke of the piston in the cylinder, the cylinder and piston cooperating to define an annular chamber surrounding the piston in the cylinder and communicating with the passageway during the whole working stroke of the piston, a series of relief ports opening out of the cylinder and spaced axially thereof along the zone occupied by the annular chamber during the working stroke of the piston, a sleeve slidable on the cylinder along said zone, and means responsive to back-pressure of the pump and including a duct connected to receive fluid delivered thereto by said check valve, a member exposed to said fluid and movable upon delivery of fluid to said duct, and a mechanical connection between said member and sleeve for sliding the sleeve along said zone when the back-pressure exceeds a predetermined value.

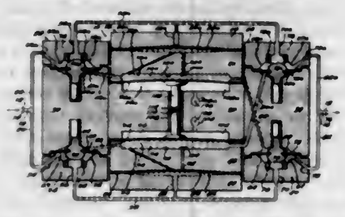
2,732,806
ELECTROMAGNETICALLY OPERATED PUMP FOR RAISING LIQUIDS
Francisco Felez Alvarez and José Felez Alvarez, Banolas, Spain, assignors to Enrique Clapes Massons, Barcelona, Spain
Application February 16, 1950, Serial No. 144,524
Claims priority, application Spain June 20, 1949
3 Claims. (Cl. 103—53)

1. In an electromagnetically operated pump for raising liquids, a pump body having a hollow space therein, a diaphragm extending across the hollow space and forming a suction chamber and a delivery chamber therein, plates on either side of said diaphragm covering a central portion of the surface thereof, a driving shaft secured to said plates and extending out of the pump body, electromagnetically operated means for actuating said shaft in an axial reciprocating vibratory motion to reciprocate the plates and the diaphragm, said diaphragm having a series of orifices disposed around said central portion, one of said plates having orifices in register with said ori-



fices in said diaphragm, another of said plates being solid and adapted to block said orifices in said diaphragm, said plates and said diaphragm and the orifices therein coacting to form a valve effect open in one direction of said reciprocation and closed in the opposite direction to pass liquid in from the suction chamber to the delivery chamber upon said reciprocation, liquid inlet means including a check valve to said suction chamber and liquid outlet means from said delivery chamber.

2,732,807
DIAPHRAGM PUMP
Vozcan L. Parsegian, New York, N. Y., assignor, by mesne assignments, to the United States of America as represented by the United States Atomic Energy Commission
Application July 11, 1951, Serial No. 236,162
7 Claims. (Cl. 103—152)



1. A pump comprising a housing having two pump chambers, a first diaphragm in each chamber, an intake diaphragm valve coupled to each chamber on one side of said diaphragm, an exhaust diaphragm valve coupled to each chamber on the same side of said diaphragm, a passageway and a restricted passage of lesser diameter than the passageway in the housing and connected to each chamber on the opposite side of said diaphragm, a one-way valve in each passageway adapted to admit fluid from the chamber, a compartment connected to each pair of passages and passageways, a second diaphragm in each compartment, a connecting shaft attached to the second diaphragms on the sides opposite the passage and passageway, a first conduit coupling each intake valve to the compartment that is connected to its corresponding chamber, a second conduit coupling each exhaust valve to the compartment that is connected to the opposite chamber, said conduits entering the compartments on the same side of the second diaphragm as the passage and passageway, a hydraulic fluid in each compartment, compressed

air means for reciprocating the second diaphragms alternately, said compressed air means including an air distributing valve attached to the connecting shaft and having an inlet and a first outlet and a second outlet, a third conduit and a fourth conduit connecting the first outlet and a second outlet of the air distributing valve to the compartments on the same side of the second diaphragms as the connecting shaft, said conduits not being connected, and said one-way valves adapted to permit movement of the fluid from the chamber to the compartment.

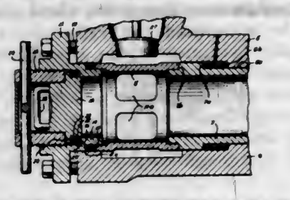
2,732,808
FLUID PUMP AND CONTROL
Ludwig T. Stoyke, Rockford, Ill., assignor to Sundstrand Machine Tool Co., a corporation of Illinois
Application December 13, 1951, Serial No. 261,454
11 Claims. (Cl. 103—173)



1. In a fluid pump having an inlet, an outlet, a cylindrical valve chamber having parallel end faces, a port in one of the end faces connected to the discharge side of the pump, a port in the other end face connected to the pump outlet and a wheel-like valve in the chamber having a valving rim in substantial fluid-tight sliding engagement with the end faces and eccentrically movable in the chamber to connect the discharge port alternately with the inlet and with the outlet port, said valve having a diameter smaller than the diameter of the valving chamber and defining with the valving chamber an annular space around the periphery thereof, means for preventing distortion of the chamber comprising an outlet port plate having one side forming one of said end faces, means defining a pressure balancing chamber including the other side of the outlet port plate, an opening in said annular space in constant communication with the pressure balancing chamber and a plurality of openings in the port plate and positioned in an annular row having a diameter less than the outer diameter of the valving rim and constantly covered by said valving rim with each of said plurality of openings being connected to said pressure balancing chamber to subject said other side of the port plate to the leakage pressure across said valving rim with said leakage pressure substantially equaling the average pressure applied to the first mentioned side of the outlet port plate.

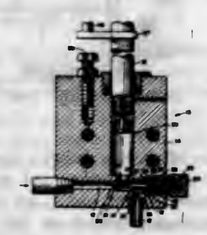
2,732,809
LINER ASSEMBLIES
Virdean R. Mattingly, Houston, Tex., and George C. Mallory, New Iberia, La., assignors to Mattco, Inc., Houston, Tex., a corporation of Texas
Application October 3, 1952, Serial No. 313,004
13 Claims. (Cl. 103—216)

1. A cylinder head cap and liner assembly for high pressure heavy duty reciprocating pumps having a pump body with a cylinder formed therein, comprising a cylinder liner slidable into a cylinder, said liner having an external annular part providing oppositely faced abutment surfaces, one for engagement with a liner packing; a generally cylindrical hold-down and expander cage having a shoulder engageable with the other of said liner surfaces; and a cap with a flange having a series of circumferentially arranged openings for receiving cylinder head studs, a cylindrical extension on the cap, the extension and cage having telescoping parts with confronting shoulders formed on the parts providing a packing receiving space therebetween; an opening in the cap, a closure plug for the opening, means for sealing between



the plug and cap including a hold-down gland removably secured to the cap and abutting the plug to secure it in the opening in sealed relation to the cap, the smallest internal diameters of the cage and cap opening being of at least as great a diameter as the internal diameter of the liner whereby with the gland and plug removed, a piston within the liner is accessible.

2,732,810
DISPENSERS
Warren O. Simpson, Indianapolis, Ind., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application May 28, 1954, Serial No. 433,209
2 Claims. (Cl. 103—230)



1. A dispenser, which comprises a valve body having therein a passage provided with an inlet end and a second end, said body also being provided with an inlet valve seat concentric with the passage facing said second end and an exit valve seat concentric with the passage facing said second end and positioned between the inlet valve seat and said second end of the passage, said body also having a pumping opening connected to the portion of the passage between the valve seats and an exit opening connected to the portion of the passage between the exit valve seat and the second end of the passage, a valve head, a valve rod fixed to the valve head, a spring seat mounted on the rod, a hollow plug mounted in the portion of the passage near the second end thereof, a spring mounted between the plug and the spring seat for urging the valve head toward the inlet valve seat, a second valve head mounted slidably on the rod, a bushing positioned in the passage for closing the passage and guiding the rod, a spring mounted between the bushing and the second valve head for urging the second valve head against the exit valve seat, and reciprocating pump means connected to the pumping opening.

2,732,811
POWER TAKE OFF DRIVE
Henry D. Breen, Chicago, Ill., assignor to Union Asbestos & Rubber Co., Chicago, Ill., a corporation of Illinois
Application August 5, 1953, Serial No. 372,420
7 Claims. (Cl. 105—114)

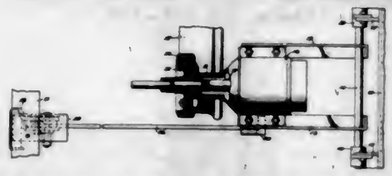
4. A power take off drive for a railway car having an axle transverse to its length and carrying a wheel and swingable about a vertical axis central of the car com-

prising a supporting member pivoted on the car on a pivotal axis above and at an acute angle to the horizontal and to the axle in its normal position, a drive roller, means carried by the supporting member supporting the drive roller for rotation about an axis at an acute angle to the pivotal axis, the drive roller being spaced from the pivotal axis to engage the wheel at a point spaced



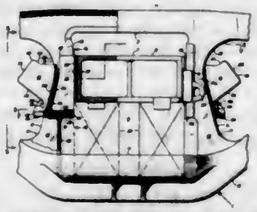
from its vertical center in the same direction as the drive roller is spaced from the pivotal axis whereby the drive roller will remain in contact with the wheel as the axle swings about the vertical axis and latching means to swing the supporting member to a position to raise the drive roller above the wheel and to latch it in that position.

2,732,812
POWER TAKE OFF DRIVE
Henry D. Breen, Chicago, Ill., assignor to Union Asbestos & Rubber Co., Chicago, Ill., a corporation of Illinois
Application August 5, 1953, Serial No. 372,570
10 Claims. (Cl. 105—114)



7. A power take off for a railway car comprising a car body, a truck pivotally connected to the car body adjacent to the center of its width, an axle carried by the truck, a rail engaging wheel on the axle, an elongated frame pivoted on the car body adjacent to the center of its width on an axis extending lengthwise of the car body at an acute angle to horizontal the frame lying above the axle and the wheel, a roller, and means carried by the frame and supporting the power take off roller adjacent to the frame for driving engagement with the upper part of the wheel.

2,732,813
FRICTION CONTROLLED RAILWAY TRUCK
Glenn F. Couch, Buffalo, N. Y., assignor to The Symington-Gould Corporation, Depew, N. Y., a corporation of Maryland
Application July 12, 1950, Serial No. 173,318
19 Claims. (Cl. 105—197)



1. In a railway truck of a type having a relatively movable side frame and bolster, the combination of, a column of said side frame having a horizontal shelf extending longitudinally of said side frame through said column, a pocket in said column in vertically spaced relation with said shelf, a shoe extending through said column, the inner face of said shoe extending vertically and in frictional contact with the vertical side wall of said bolster, means interlocking said shelf and shoe for restraining horizontal angular movement of said shoe relative to said column, and spring means disposed at an oblique angle to said shelf; said spring means extending out of said pocket and urging said shoe along said shelf toward said bolster.

2,732,814
RAILWAY VEHICLE
Frank L. Murphy, Chicago, Ralph W. Haman, Flossmoor, and Stanley W. Kay, Chicago, Ill., assignors to Pullman-Standard Car Manufacturing Company, Chicago, Ill., a corporation of Delaware
Original application September 27, 1945, Serial No. 618,948, now Patent No. 2,621,612, dated December 16, 1952. Divided and this application December 16, 1950, Serial No. 201,104
8 Claims. (Cl. 105—324)



1. A vehicle having a longitudinal aisle, rows of seats upon opposite sides of said aisle, curtain means for dividing said seats into sections, each of said sections being arranged to contain a seat of each said rows of seats, and full windows in the side walls of the vehicle individual to the seats of respectively adjacent sections, said curtain means comprising a rod positioned above the seats and having one end pivotally connected to the respective side wall and curtains mounted on the rod and the curtains being adapted to be moved from their respective section forming positions between the seats to serve as drapes at the respective section window positions.

2,732,815
VAULT DOOR
John P. Paca and John H. Ebner, Canton, Ohio, assignors to Diebold, Incorporated, Canton, Ohio, a corporation of Ohio
Application September 30, 1950, Serial No. 187,756
11 Claims. (Cl. 109—59)



1. In vault door construction including members forming a door frame engirdling an opening, a door, hinge means mounting the door on the frame, the door fitting in the door opening when the door is closed, the door frame including a longitudinally extending member and the door including a longitudinally extending member aligning with the door frame longitudinally extending member when the door is closed, the combination including portions of one of the longitudinally extending members forming a laterally opening longitudinally extending

groove, a longitudinally extending bolt bar, bolt bar mounting and positioning means operatively mounting the bolt bar on the other longitudinally extending member, the bolt bar being alternately laterally movable towards the grooved member to an extended position and away from the grooved member to a retracted position, the bolt bar fitting in the groove when the door is closed and the bolt bar is in the extended position, and the bolt bar being withdrawn from the groove when the bolt bar is in the retracted position, two stop members on the bolt bar, block means for each stop member, each block means being movable between two positions, one of said block means including a reciprocating member and the other of said block means including a swinging member, lock means for each block means, each lock means including a movable member, one of the lock means movable members having a connection with its associated lock means, and each lock means movable member being selectively movable to alternately position its associated block means in one position relative to its associated stop member and stopping the bolt bar in its extended position and in another position relative to its associated stop member and permitting retraction of the bolt bar from the groove.

2,732,816
CONCEALED WALL SAFE
Joseph P. Stein, Los Angeles, Calif.
Original application December 5, 1949, Serial No. 131,196. Divided and this application October 22, 1952, Serial No. 316,160
3 Claims. (Cl. 109—59)



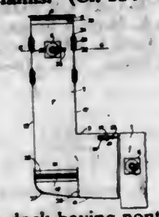
1. A safe adapted to be concealed in a wall or the like and having a smooth exterior throughout, comprising a body portion of knock-down construction, the body portion including a pair of side walls of dished construction, a top and a bottom wall interfitting with said side walls, and upper and lower sets of bolts connecting said side walls and top and bottom walls and extending through the interfitting portions of the side walls and top and bottom walls and from side wall to side wall, a unitary metal casing enclosing the body portion, and fireproof insulating material enclosed between the body walls and the metal casing, and shelves or partitions extending between the side walls provided with prongs extending through the side walls and bent over to assist in holding the side walls together.

2,732,817
BOBBIN HAVING A CONTROLLED UNWINDING
Rowland N. Robinson, Worcester, Mass., assignor to The Robinson Thread Company, Worcester, Mass., a corporation of Massachusetts
Application October 28, 1953, Serial No. 388,807
5 Claims. (Cl. 112—251)



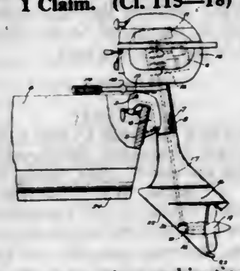
1. A thread bobbin comprising a core, a mass of thread formed of smooth surfaced artificial fibres cross wound thereon in helical convolutions for external delivery, the cross winding of the thread providing radially arranged loops at an end of the thread mass, an adhesive applied to the exposed loop surfaces and impregnating the loops at said end of the mass for only a short distance, the main body of the thread between the ends of the wound mass being non-coated and free for unwinding, disk ends secured on the core which are independent of and solely confine the thread mass on the core, said adhesive being a compatible heat set polymeric resin film independent of the disk ends which tacks radially adjacent thread convolutions together and provides a substantially free unwinding of the thread and which requires a tensile force of not over about four ounces to pull the thread free at the tacked loops.

2,732,818
SECTIONAL FLOATING DRY DOCK AND COUPLING MEANS THEREFOR
Edward J. Quirin, Great Neck, N. Y., assignor to Frederic R. Harris, Inc., New York, N. Y., a corporation of New York
Application September 8, 1953, Serial No. 378,770
2 Claims. (Cl. 114—46)



1. A floating dry dock having pontoon hull, main deck and wing walls, comprising assembled sections extending transversely of the complete dock, each section having a hull, main deck and walls forming parts of the hull, main deck and wing walls of the dock, respectively, and coupling members on the opposing faces of said sections for uniting said sections, some of said members in horizontal rows between the walls of the sections near the tops, some in horizontal rows between the sections near the bottoms, some in vertical rows between said last-named walls, and some in horizontal rows between the hulls of the sections near the decks thereof, said sections also having reinforcing members adjacent the vertical rows of coupling members and additional reinforcing members adjacent the horizontal rows of coupling members near the tops, and further reinforcing members adjacent the horizontal rows of coupling members near the bottoms.

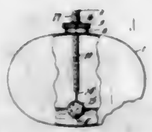
2,732,819
OUTBOARD MOTOR ROTATABLE ON AN INCLINED AXIS FOR REVERSAL AND HAVING AN OBLIQUE PROPELLER SHAFT
Finn T. Irgens, Wauwatosa, Wis., assignor to Outboard, Marine & Manufacturing Company, Waukegan, Ill., a corporation of Delaware
Application November 15, 1951, Serial No. 256,552
1 Claim. (Cl. 115—18)



In an outboard motor, the combination with a bracket support provided with a swivel bearing having a for-

wardly inclined axis, of a propulsion unit comprising a supporting strut and a gear casing connected therewith, the strut extending through the swivel bearing and having bearing surfaces rotatably mounted therein and fully rotatable through at least 180° of oscillation on said axis between forward and rearward propulsion positions, a drive shaft extending through the strut and having driving means, a driving gear disposed in the gear casing and connected with the drive shaft, a propeller shaft having a propeller at its rear end and mounted in the gear casing at an oblique angle to the drive shaft and provided with a driven gear at its forward end meshing with the driving gear, the propeller shaft having its propeller end no higher than its gear carrying end in positions of forward propulsion and having its propeller end very materially lower than its gear carrying end in positions of rearward propulsion, said propeller shaft being rearwardly inclined downwardly in the forward propulsion position of said unit and is more sharply inclined downwardly in the rearward propulsion positions of said unit.

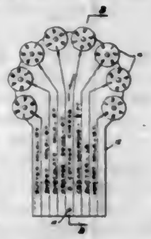
2,732,820
FUEL TANK GAUGE FOR TRACTORS
Leo E. Hoyt, Climax, Mich.
Application April 6, 1953, Serial No. 347,055
5 Claims. (Cl. 116—118)



1. A combination fuel gauge and tank cap for indicating a minimum reserve level near the bottom of a tank, comprising, a cap adapted to be lockingly engaged with a tank filler neck and having a flat top wall, a vertical tube secured adjacent its upper end to and opening through said wall and depending substantially below said wall to extend over half way into a tank, said tube having a vent opening formed through its side near the lower end thereof, a gauge rod extending through and reciprocable in said tube and having a float secured to and disposed below its lower end, said float having a surface sealingly engageable with the lower end of said tube, the lower end of the tube constituting a stop to limit upward reciprocable movement of the float and rod, and a sight element secured to the top of said rod and engageable with the upper end of the tube when said float is spaced below said tube, the distance that the float is spaced from the lower end of the tube when the sight element engages the upper end the tube being relatively small as compared to the distance the tube depends below said wall whereby the sight element is adapted to indicate a minimum reserve level in a tank by movement of the sight element through a distance which is relatively small as compared to the depth of the float and lower end of the tube in a tank.

2,732,821
DAIRY ORDER INDICATOR
Louis Jack Thompson, Shelbyville, Tenn.
Application January 8, 1954, Serial No. 402,999
4 Claims. (Cl. 116—133)

1. In an order indicator, an elongated vertical plate having upper and lower ends, a plurality of vertical laterally spaced lines leading upwardly on one face of said plate from the region of the lower end of the plate, said lines having upper ends terminating in arrowheads, and a rotatable disc mounted on the said one face of the plate in the region of the upper end of the plate in line



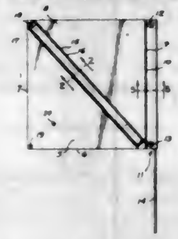
with each of said arrowheads, said discs having circumferentially spaced indicia.

2,732,822
INDEX DEVICE
Walter G. Cassady, Charlottesville, and Theodore O. Perkins, Crozet, Va., assignors to Acme Visible Records, Inc., Chicago, Ill., a corporation of Delaware
Application November 20, 1952, Serial No. 321,624
3 Claims. (Cl. 116—135)



1. Index means comprising an elongated relatively flat tube of transparent flexible material, an elongated index strip embraced therein, and a slidable signal frictionally engaged within said tube and disposed above said strip for signalling relationship therewith, said signal being formed of a medially folded strip of flexible resilient material of contrasting color to said tube to provide a face portion formed with an aperture and an imperforate back portion, said signal portions being frictionally retained in said tube by residual resiliency at their line of fold urging them apart, said tube being formed with a longitudinally extending slot providing access to the aperture in the face portion of the signal whereby it may be engaged by a stylus and moved longitudinally of said tube.

2,732,823
WARNING FLAG
Russell O. Hanson, Portland, Oreg.
Application October 18, 1954, Serial No. 462,930
4 Claims. (Cl. 116—173)



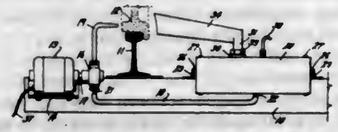
1. A portable warning flag, comprising a flat flexible sheet of heavy gauge plastic sheet material having a rectangular body in the pattern, color and shape of a warning flag, one marginal edge of said body being lapped and secured marginally to bound a hollow staff receiving tunnel, a narrow elongated strip of the same type of plastic sheet material arranged flatwise across one diagonal of said rectangular body, said strip being sealed to said body marginally of the strip to bound intermediate said margins an elongated hollow pocket, an elongated flat reinforcing rib means arranged within said elongated hollow pocket to retain an extended open position of the parts for maximum visibility when the flag is unfurled and to define a core about which the flag can be wound and folded when furled, and at least three of the corners of said rectangular body including the two corners adjacent the ends of said reinforcing rib carrying eyed grommet means for the reception of ties jointly with said rib to retain the flag in an open unfurled position of maximum visibility when displayed vertically.

2,732,824
INKING DEVICE FOR TYPEWRITER RIBBONS
Eugene G. Brown, Detroit, Mich.
Application October 17, 1952, Serial No. 315,383
3 Claims. (Cl. 118—268)



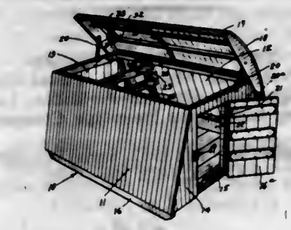
1. An inking device comprising a cylindrical tubular ink container, a cap secured to one end of the container, said cap having a wick carrier tube projecting laterally therefrom and at an upward angle of inclination with respect thereto and communicating with the interior thereof, said carrier tube having an outer end portion of less internal diameter than the internal diameter of its inner end portion, a wick of substantially rectangular cross section having one end disposed within the container and having its opposite end extending outwardly through the carrier tube, said wick being of such cross sectional dimension that it is snugly but shiftably held within the outer end portion of the tube providing breather passageways between the tube wall and the respective sides of the wick, a wick supporting breather plate extending lengthwise through the outer end portion of the carrier tube engaging one side of the wick and supporting the wick spaced from the opposite portion of the side wall of the tube, said plate itself spaced from said portion of the side wall of the tube providing an air passageway between the plate and the side wall of the tube.

2,732,825
RAILWAY CAR WHEEL MARKERS
Marion W. Gieskieng, Denver, Colo.
Application February 17, 1955, Serial No. 488,966
5 Claims. (Cl. 118—326)



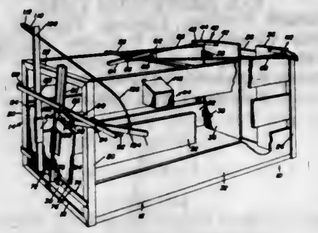
1. Railway wheel marking means adapted to be mounted between railway ties supporting a railway rail and arranged to project a stream of marking fluid across said rail in consequence of an electrical impulse, comprising: an electric motor adapted to receive said impulse; a pump operatively connected to said motor; a nozzle extending from said pump and positioned to direct a stream of marking fluid across and over said rail from one side of the latter; cross members extending between the ties at the opposite side of said rail; a reservoir suspended between said cross members between said ties; a conduit conducting fluid from said reservoir to said pump; and a funnel member mounted on said reservoir and extending toward said nozzle so as to receive fluid projected from the latter.

2,732,826
HOG HOUSE STRUCTURE
Russell P. Dawson, Crawfordsville, Ind.
Application September 20, 1954, Serial No. 456,906
1 Claim. (Cl. 119—20)



A structure for separately housing a sow and her litter of pigs, comprising top, bottom, side and end walls defining a substantially rectangular chamber including a floor, a pair of opposed coplanar support shelves extending longitudinally of said chamber and secured to the side walls of said structure at a predetermined distance above said floor, a partition extending transversely of said chamber and supported upon said shelves, the ends of said partition lying immediately adjacent said side walls, and a plurality of latch and catch means secured to said partition and to said side walls respectively for connecting said partition to said walls at a multiplicity of selective longitudinal positions, the lowermost portion of said element being spaced above the floor a distance sufficient to permit only the pigs to pass thereunder.

2,732,827
ADJUSTABLE GATE TYPE NECK STOCK
La Verne E. Grell, Washta, Iowa
Application June 1, 1954, Serial No. 433,588
1 Claim. (Cl. 119—99)



A cattle chute comprising a neck stock including a rectangular end frame having vertical side members and top and bottom cross members respectively, and animal restraining means comprising a first transverse bar fixed to said side members adjacent the bottom member, a pair of upright stanchions between said side members and in front of said frame and having lower ends pivoted to said first bar for movement of said stanchions toward each other, said stanchions having upper ends extending above said top member, a second transverse bar in front of said frame below and adjacent said top member having one end fixed to one side member and its opposite end free and extending outwardly beyond the other side member, said second bar and said upper member forming guides between which the stanchions are movable, a third horizontal bar extending outwardly from said other side member behind the free end of said second bar, a horizontal operating lever for said stanchions pivoted between its ends between said third bar and said free end of the second bar and vertically swingable, a link pivoted to one stanchion and one end of the lever to operatively connect the lever to said one stanchion, and a curved rod pivoted to the other end of said lever and yieldingly connected to the upper end of the other

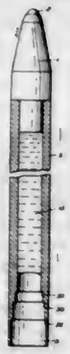
stanchion above said top member to operatively connect said lever to said other stanchion, said rod curving upwardly over the top member and the upper end of said one stanchion to clear the same.

2,732,828
TRANSCRIPTION BOXES
Charles E. Postel and Marion W. Postel, Los Angeles, Calif., assignors to Herman F. Miller, Los Angeles, Calif., doing business as Stenotype Company of California
Application July 25, 1952, Serial No. 300,876
1 Claim. (Cl. 120—29)



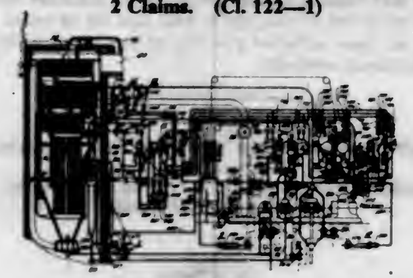
A transcription box including a case having a base, side walls, and end walls, a crank, the pins of which are secured between the side walls of the case and adjacent the top edges thereof, the said crank having its journal portion adjacent one end wall of the case, an elongated leaf adapted to fit within the case and extend substantially the length of said case, one end of said leaf being carried by the journal portion of the crank, and whereby, due to crank action, the said leaf may lie parallel to the base of the case or assume an angularity relative to said case when the said tongue engages the end wall of the case adjacent the journal of the crank.

2,732,829
INK RESERVOIR TUBE
Hans Reinhard Fehling, London, England, assignor to Compania Uruguaya de Fomento Industrial S. A., Montevideo, Uruguay, South America
Application September 22, 1949, Serial No. 117,137
8 Claims. (Cl. 120—42.4)



5. An ink reservoir tube for accommodating a column of ink therein for use in a ball point writing instrument having a vent for the admission of air and means for preventing creep of a film of ink along the interior surface of the tube towards said vent, said means comprising at least one peripherally continuous sharp-edged portion along the interior surface of said tube providing a passage in direct coaxial communication with the inside of said tube and of substantially similar diametric dimension as the inside diameter of said tube, the sharp edge being located on the side of the column of ink to prevent the flow of ink into said passage.

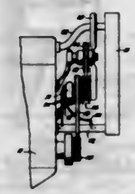
2,732,830
MEANS FOR REGULATING STEAM GENERATORS
Juan Loumiet et Lavigne, Itabo, Cuba; Laura J. Martha Boy y Lafitte, executrix or administratrix of the estate of said Juan Loumiet et Lavigne, deceased
Application February 3, 1948, Serial No. 5,984
2 Claims. (Cl. 122—1)



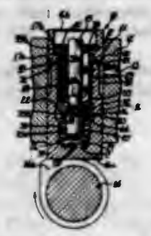
1. A steam generator comprising a cylinder (305 or 325) said generator comprising a distributor adapted to operate in response to load variations which successively augment the departure in an elected direction of said load from a previously existing stable load, to supply to the cylinder 305 or 325 amounts of steam proportional to the value of said successive variations, and to cause the cylinder to apply said amounts to the determination of value of the corrections required to compensate the variation of the thermal potential of the generator corresponding to the successive load variations; the distributor further comprising a moving feeding disk, a shaft upon which the disk is applied and from which it receives steam, said disk being provided with a curved slot that extends from the center through the periphery thereof, a cylinder 305× or 325× surrounding the disk and provided at its top with a vertical conduit which communicates with the bottom of the cylinder 305 or 325 so that the slot and the cylinder 305× or 325× constitute as a whole a valve permitting passage toward the cylinder 305 or 325 of the steam received by the disk only when the peripheral extremity of said slot crosses the lower end of the vertical conduit, a second disk fixed to the shaft exteriorly to the cylinder 305× or 325×, a pawl carried by the second disk at the periphery thereof, a toothed bar engageable with the pawl and movable in opposite directions, respectively, in response to increase and decrease of the load, said pawl being operable by the bar only when the load is varying in the selected direction, in which case the pawl in its movement drives the disk on which it is carried, the shaft, and the feeding disk, until the curved slot of said feeding disk reaches a position in front of the lower end of the vertical conduit, thereby enabling a vapor current to flow through the slot, and to push the feeding disk in the direction of its movement, sufficiently to cause the slot to be passed beyond the lower end of the vertical conduit, and the pawl to be newly engaged between two successive teeth of the bar, in position to be again actuated as described in response to further movement of the bar in the same direction the construction and arrangement being such that the described operation is repeated so long as said load variations continue.

2,732,831
VARIABLE SPEED DRIVES
Adiel Y. Dodge, Rockford, Ill.
Application July 28, 1952, Serial No. 301,234
3 Claims. (Cl. 123—41.12)

1. A variable fan drive for an engine having inlet and outlet ports for cooling liquid, a radiator, connections from the inlet and outlet ports to spaced points in the radiator for circulation of cooling liquid in a closed circuit through the engine and radiator, and a fan adjacent to the radiator to cause flow of air through it, said variable fan drive comprising fixed diameter V-pulleys connected to the engine and the fan, a double V-pulley including relatively fixed conical end members and a double coned intermediate member between and shiftable axially relative to the end members, belts connecting the opposite halves of the double V-pulley to the fixed diameter pulleys respectively, a hollow thermostat housing mounted adjacent to the double pulley, a spring urging the double diameter pulley toward the housing, an expansible thermostat in the housing connected to the intermediate member to shift it against the spring when the thermostat expands, and conduits connected to the housing and to spaced points in the connection between the radiator and the engine inlet port to cause a circulation of cooling liquid through the housing at a rate proportional to but less than the rate of flow through the engine and radiator and at a temperature equal to the temperature at the radiator outlet.



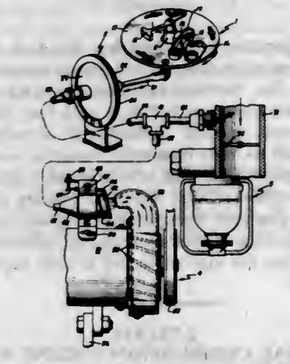
2,732,832
VALVE LIFTER
Herbert H. Engemann, Cleveland Heights, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application April 4, 1952, Serial No. 280,531
5 Claims. (Cl. 123—90)



1. A hydraulic length adjuster which comprises a hollow body having a closed bottom and an open top with an interior groove adjacent the open top, a hollow plunger slidable in said body and having a passage through the central portion of the bottom thereof and an open top inwardly from said groove, a ball member controlling flow through the passage in said plunger, a button member in said body beneath said plunger having a shank adapted to project into said passage for unseating the ball member, a first spring urging said button member toward the plunger, a second spring acting on said plunger to move the plunger toward said groove in the body, a washer in said body slidably mounted on a shoulder provided at the bottom of the groove in said body, a snap ring in said groove in said body urging said washer against said shoulder, valve actuating stem means extending thru said washer and bottomed on said ball member, and means for feeding oil to the interior of the plunger to flow through the plunger passage into the bottom of the body when the shank of the button unseats the ball member and to support the plunger on oil trapped in the bottom of the body when the ball member closes the passage, whereby force applied to the body will be transmitted through the trapped oil, plunger, and ball member to the stem means and said first spring is effective to unseat the ball when load is relieved from the assembly while elongating the assembly to replenish the trapped oil chamber with oil from the plunger while said second spring urges the plunger against the ball when pressures in the plunger chamber and trapped oil chamber are equalized

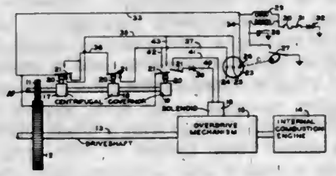
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2,732,833
ENGINE IGNITION CONTROL
Benton A. Hook, Watsonville, Calif.
Application September 15, 1953, Serial No. 380,334
5 Claims. (Cl. 123—117)



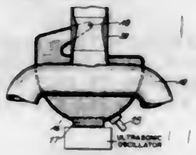
1. In an internal combustion engine having an air fan effecting an air quality variable in relation to engine speed, a fuel ignition inception phase which is variable in point of time with respect to the other phases of engine operation and a fuel ignition device suitable therefor which includes a duct subject to variable pressures functionally related to engine speed, the combination therewith of a vent for said duct, a normally open closure for said vent, and means for positioning said closure in accordance with variations in such air quality from said fan to thereby modify such functional relationship.

2,732,834
AUTOMATIC TRANSMISSION FOR INTERNAL COMBUSTION ENGINES
Thomas D. Morgan, Oak Ridge, Tenn., assignor to Phillips Petroleum Company, a corporation of Delaware
Application August 27, 1951, Serial No. 243,840
20 Claims. (Cl. 123—118)



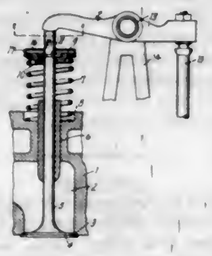
1. A variable transmission device for coupling a drive shaft to an internal combustion engine having a plurality of cylinders, said device normally providing a preselected ratio between engine speed and drive shaft speed, and incorporating overdrive mechanism actuatable to decrease the ratio between engine speed and drive shaft speed, a speed responsive regulator for preventing the firing of certain cylinders of said engine, and means for overriding said regulator to permit firing of all of said cylinders when the overdrive mechanism is actuated.

2,732,835
DEVICE FOR OPERATING INTERNAL COMBUSTION ENGINES
Eberhard Hundt, Stuttgart, Germany, assignor to Daimler-Benz, Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application January 31, 1952, Serial No. 269,154
Claims priority, application Germany January 31, 1951
4 Claims. (Cl. 123—119)



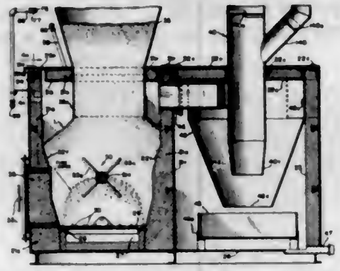
1. The apparatus for subjecting the fuel for internal combustion engine to acoustic vibrations comprising a fuel line, an inlet line between said fuel line and said engine, an intermediate chamber between said fuel line and said inlet line, means in said intermediate chamber for subjecting the fuel to high frequency acoustic waves, and an air suction opening leading into said inlet line from said chamber, a portion of said inlet line passing through said intermediate chamber intermediate said air-suction opening and the internal combustion engine whereby the walls of said inlet line are also subjected to said high frequency acoustic wave.

2,732,836
INTERNAL COMBUSTION ENGINE VALVE ASSEMBLIES HAVING OIL SHIELDS
Harold P. Phillips, Hastings, Mich., assignor to Hastings Manufacturing Company, Hastings, Mich.
Application July 20, 1953, Serial No. 369,023
3 Claims. (Cl. 123—188)



1. An internal combustion engine valve comprising a stem with a central guide bearing engaging portion and a head on one end of said central portion, the other end of said stem having a transverse actuating surface and cylindrical sides merging with said central portion and having a key receiving recess formed in said sides in spaced relation to said actuating surface to receive a key to withstand the thrust of a spring abutment member mounted on the stem, and an oil deflecting shield of circular shape with a down turned annular rim, said shield being formed of thin tempered steel and having a central hole receiving said other end of said stem with the shield frictionally engaged with said stem between said recess and said actuating surface and with the metal in the edge of said hole displaced and expanded within the elastic limits of the metal, said shield having a carbon content of the order of .55 to .65 and a gauge of the order of .015 to .030 and a hardness of the order of .44 to .46 Rockwell C, the size of said hole in the disassembled unstressed condition of the shield being of the order of .001 to .0025 inch smaller than the diameter of said other end of said stem with which it is engaged.

2,732,837
SMOKE GENERATOR
Samuel R. Porwancher and David Weissman, Chicago, Ill., assignors to Drying Systems, Inc., Chicago, Ill., a corporation of Illinois
Application March 3, 1952, Serial No. 274,617
6 Claims. (Cl. 126—59.5)



6. In a smoke producing apparatus, means affording a combustion chamber and having a grate at the bottom thereof and having a supply hopper at the upper portion thereof opening downwardly into said combustion chamber and through which fuel such as sawdust may be gravity fed in said combustion chamber, an agitator located in the combustion chamber above said grate and comprising a horizontally positioned shaft extended through said combustion chamber and mounted for rocking movement, said shaft having arms extending radially therefrom for imparting agitating and downward feeding movements to the fuel above said grate when said shaft is rocked, means for imparting rocking movements to said shaft including an air-driven motor, said motor including an air inlet port and an air outlet port, and means utilizing the air discharged from said air outlet port of said motor for cooling said agitator.

2,732,838
GRATE STRUCTURE FOR GAS RANGES
Henry Honer, Los Angeles, Calif., assignor to Western Stove Company, Inc., Culver City, Calif., a corporation of California
Application January 26, 1952, Serial No. 268,417
4 Claims. (Cl. 126—215)



2. A grate structure for cooking ranges, comprising: a first outer grate plate having a central opening, the margins of which form alternate radially inwardly directed projections and radially outwardly directed recesses; a second inner grate plate conforming to and filling said opening, said grate plates being coplanar; and a set of radiating supporting feet for independent support of each of said grate plates, each of said grate plates being operable independently of the other as well as simultaneously operable.

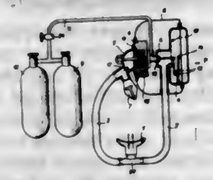
2,732,839
WATER TANK TRAILER HEATING SYSTEM
Edgar Lee Elder, Denver, Colo.; The United States National Bank of Denver, executor of said Edgar Lee Elder, deceased, assignor to Elder Trailer and Body, Inc., Denver, Colo., a corporation of Colorado
Application March 7, 1950, Serial No. 148,118
5 Claims. (Cl. 126—344)

1. A heating system for a water trailer having a tank, comprising the combination of a cabinet at one end of said tank; a heater disposed in said cabinet at one side thereof; a pipe extending from said heater horizontally to a point adjacent the opposite end of said tank, then



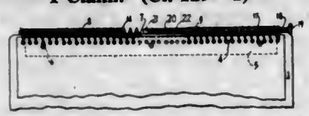
downwardly, then laterally, then upwardly, and then horizontally to said cabinet; and air suction and discharge means at the end of said pipe, within said cabinet.

2,732,840
SUBAQUEOUS BREATHING APPARATUS
Aldo de Sanctis, Turin, Italy
Application June 28, 1954, Serial No. 439,817
Claims priority, application Italy June 27, 1953
4 Claims. (Cl. 128—142)



1. In a subaqueous breathing apparatus a mouth-piece, a source of compressed air-oxygen mixture, a chamber interposed between the mouth-piece and said source of air-oxygen mixture, automatic valve means responsive to the water pressure, for controlling the flow of the mixture within said chamber, an adjustable discharge valve connected to the mouth-piece for discharging part of the air expired through the mouth-piece, a hollow cushion of resilient material for storing part of the expired air connected to the mouth-piece and connected to the chamber provided with said automatic valve means, and at least one filter containing a fixing agent for retaining carbon dioxide in the circuit containing said hollow cushion.

2,732,841
WRITING BOARD FOR COIL WIRE BINDERS
Frank Stanley Schade, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a corporation of Massachusetts
Application April 6, 1953, Serial No. 346,970
1 Claim. (Cl. 129—1)



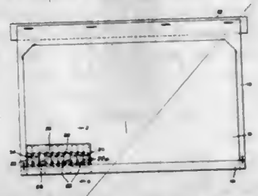
A writing board for use with coil wire bound notebooks comprising a rigid planar supporting panel member and at one of the end edge surfaces of said panel member mechanism for the releasable mounting of the coil wire element of a notebook to be supported thereon and comprising axially aligned hinge pintle supporting members lying in the plane of said rigid panel and fixed along each end portion of said one end edge surface with the inner ends of said members being positioned in spaced relation, retaining rod members having inner pintle rod portions pivotally supported in said supporting members with the inner tip ends thereof diametrically enlarged to prevent withdrawal from the supporting members and outer pintle portions of the rod members extending from adjacent the outer ends of said supporting members in closely spaced relation to the outer surfaces of the inner pintle supporting members, said outer pintle portions being freely movable on the axes of said inner pintle portions and at opposite limits of movement being offset from the panel and in overlying relation to the plane of the adjacent face of said panel for the flat superposed relation against either side of the board of a coil wire notebook pivotally hung on said outer pintle portions, the free ends of said outer pintle portions being adapted for telescopic insertion in opposite end sections of the coil wire element of the notebook to be pivotally mounted thereon, a retaining member at one end portion of the panel edge having its inner pintle portion movable to a limited extent longitudinally of the supporting member and extending inwardly beyond the inner end of said supporting member, a coil spring wound around said inner pintle extension and held between the tip end thereof and said inner supporting member to yieldably urge the outer pintle portion thereof inwardly of said panel end, and a finger tab piece mounted on said movable retaining member at the intersection of said inner and outer pintle portions.

2,732,842
BINDER FOR PAPERS, PAMPHLETS, CATALOGS, AND SIMILAR ARTICLES
Robert C. Loudon, Hilton, N. Y.
Application May 27, 1953, Serial No. 357,656
2 Claims. (Cl. 129—1)



1. A binder comprising, in combination, a pair of covers and a back integrally joined to the covers adjacent two transverse hinge lines whereby the covers may readily be placed in superimposed relation, said covers each having apertures formed therein adjacent one longitudinal edge and having notches cut therein at each of said longitudinal edges, a strap, a pair of plates, means formed in said plates enabling the strap to be threaded with respect to the plates, each of said plates having a flange which lies in one of said notches and an essentially flat part which lies against the outer face of the cover, said plates further having apertures which are in alignment with the apertures in the covers when the binder is assembled, and means extending through the apertures in the plates and the apertures in the covers for removably securing the strap to the covers.

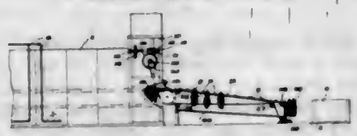
2,732,843
SIGNAL HOLDERS
Donald A. Gunn, Kenmore, N. Y., and Carl F. Wolters, New Canaan, Conn., assignors, by mesne assignments, to Sperry Rand Corporation, New York, N. Y., a corporation of Delaware
Application May 6, 1952, Serial No. 286,368
2 Claims. (Cl. 129—16.7)



1. In a visible index having a card holder formed of a holder sheet hinged along one margin and having a transparent sheath embracing the opposite free marginal por-

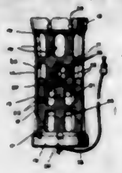
tion, means securing said sheath to said holder sheet, and an index card detachably mounted on said card holder with a visible marginal portion engaged in said sheath, the combination of a signal device formed of an elongated transparent sheet with a strip portion having a rearwardly directed flange on the lower edge engaged in said sheath and extending under the edge of said index card with the lower marginal portion of said strip portion covering the visible margin of said index card, said transparent sheet having a guide and retaining section in spaced parallel relation at the rear side of said strip portion overlying the upper marginal portion thereof and joined by a fold portion to the upper edge of said strip portion, said strip portion having a plurality of pairs of slots formed therein in longitudinally aligned relation on opposite sides of the center portion, a plurality of signal strips each slidably engaged in transversely extending relation to said strip portion in one pair of said slots with opposite ends on the rear side of said strip portion and the central portions overlying the front central section of said strip portion, the upper ends being slidably engaged and retained between said strip portion and said guide and retaining section and limited in movement in one direction thereby in non-signalling position, said rearwardly directed flange limiting movement of said signals in signalling position over the visible portion of said index card margin, and said index card detachably retaining said signal device in said sheath when engaged with said rearwardly directed flange.

2,732,844
PREPARATION OF TOBACCO FOR PACKING
Rufus W. Stark, Greenville, N. C.
Application October 23, 1951, Serial No. 252,669
9 Claims. (Cl. 131—136)



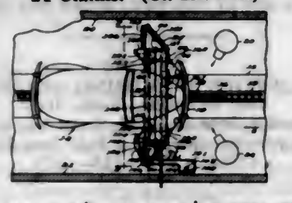
1. A method for redrying and conditioning tobacco for packing in hogsheads and like containers which comprises heating and drying the tobacco, then cooling and steaming the tobacco to increase its moisture content to a predetermined level, and then passing the hot moist tobacco through a cooling zone at room temperatures while regulating its speed of travel in relation to the length of travel in said zone to cool the tobacco to packing temperature of approximately 110° F. as it reaches the end of said zone.

2,732,845
HAIR CURLER
Charles Winkler, New York, N. Y., assignor to Ludwin Corporation, New York, N. Y., a corporation of New York
Application June 10, 1953, Serial No. 360,754
8 Claims. (Cl. 132—42)



1. A hair curler of the character described, comprising a pair of tubular sections each having a plurality of spaced, longtudinally disposed, circularly arranged prongs extending from one end thereof, with the prongs of said two sections slidably interfitting, a cylindrical member fitted into the end of one of said sections underlying the prongs thereof and the spaces between them and extending slidably beyond said prongs into the other of said sections, said cylinder having a longitudinal row of spaced apertures formed therein opposite a space between a pair of prongs of said first named section, a stud on the end of the inside face of the prong of the second of said sections fitting into said space of said first section.

2,732,846
AUTOMATIC CAR SPRAYING APPARATUS
Mischa N. Berezay, Huntington Park, Calif.
Application November 22, 1952, Serial No. 322,069
21 Claims. (Cl. 134—45)



20. In an automatic car spraying apparatus, a trackway for cars to travel along while being washed, upstanding piping bordering each side of said trackway, a plurality of spray nozzles disposed at spaced intervals along said piping and connected therewith, a check valve connected with each of said spray nozzles to prevent drainage of water therefrom, said spray nozzles being positioned to spray water supplied by said piping onto cars advancing along said trackway.

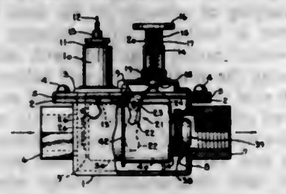
2,732,847
APPARATUS FOR MANUFACTURING REFLECTOR LAMP BULBS
Kenneth W. Reynolds, Mayfield Heights, John A. Billson, Warrensville Heights, and Clifford E. Rausch, Warren, Ohio, assignors to General Electric Company, a corporation of New York
Application July 16, 1952, Serial No. 299,286
4 Claims. (Cl. 134—57)



1. Apparatus for dissolving a metallic reflector coating off the bowl end portion of a lamp bulb comprising a tank containing a supply of a solvent for the said metallic coating, a filling head insertable into the bulb and located at a lower elevation than and connected by a return tube to said tank, means including a charge measuring device having an inlet connected to said tank and an outlet connected to said filling head for receiving solvent by gravity flow from said tank and dispensing a measured charge of said solvent to said filling head and into the associated bulb, and means including bulb seal-off means carried by said filling head and an air inlet in said filling head for hermetically closing off the said bulb and introducing compressed air into the closed off bulb to forcibly expel the solvent therefrom back up through the filling head and the said return tube back into the said tank.

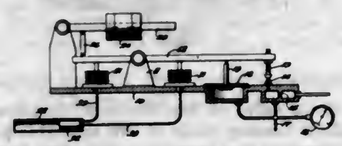
2,732,848
SAFETY CONTROL DEVICE
Stanley Guelson, deceased, late of Milwaukee, Wis., by Ledra C. Guelson, executrix, Whitefish Bay, Wis., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis., a corporation of Wisconsin
Application March 24, 1953, Serial No. 344,397
6 Claims. (Cl. 137—66)

1. A compact safety valve device comprising a body portion having an inlet and an outlet provided with a valve seat, a stationary electromagnet, a movable armature and valve operatively connected, and a spring urging said armature away from said electromagnet and said valve towards closed position, a first cup-shaped housing held in a stationary manner within said body portion and enclosing said electromagnet and armature, a second and movable cup-shaped housing telescopic with respect to said first cup-shaped housing and operatively connected to said valve and housing said spring, said movable cup-shaped housing having a flange projecting outwardly therefrom, and manual means including a de-



pressible member and a bell crank lever operated therefrom and having bifurcated arms arranged to engage said flange and move said telescopic movable cup-shaped housing inwardly with respect to said stationary cup-shaped housing to thereby withdraw said valve from said valve seat and move said armature into contact with the poles of said electromagnet, said crank lever being located entirely between the extreme ends of said housings while said armature is in contact with the poles of said electromagnet to thereby provide a highly compact safety valve device.

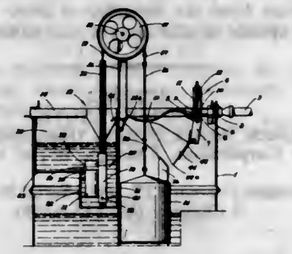
2,732,849
TEMPERATURE COMPENSATED TRANSMITTER
Albert J. Rosenberger and Frederic R. Alex, Chicago, Ill., assignors to Republic Flow Meters Company, Chicago, Ill., a corporation of Illinois
Application April 13, 1953, Serial No. 348,534
7 Claims. (Cl. 137—85)



1. A temperature compensated transmitter comprising a movable balance member, means controlled by movement of the balance member to urge the balance member in one direction, a first pressure responsive element acting on the balance member to urge it in the opposite direction, a second pressure responsive element acting on the balance member to urge it in said one direction, a first temperature responsive bulb in closed fluid communication with the first element, said bulb and first element being filled with a gas which will expand in response to temperature increases and being subject to the temperature to be measured, and a second temperature responsive bulb of smaller size than the first bulb mounted within the first bulb and in fluid communication with the second element, the second bulb and element being filled with a gas which will expand in response to temperature increases.

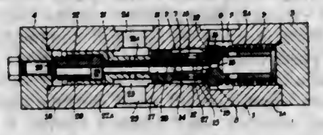
2,732,850
PROPORTIONER
Robert E. Tewksbury, Modesto, Calif.
Application November 23, 1953, Serial No. 393,590
15 Claims. (Cl. 137—87)

12. A proportioner, for producing a mixture of water in predetermined quantity and an initially separate liquid in a measured amount, comprising a water tank, means to introduce water into the tank in said quantity, said means including a valve having a movable control member projecting in the tank for up and down movement, snap-action mechanism associated with said control member to yieldably hold the same in a raised or lowered position, the valve being closed in the raised position and open in the lowered position of said member, means to withdraw said quantity of water from the tank, a reservoir for said separate liquid disposed adjacent the water tank, an elevating bucket device adapted to contain said measured amount of the separate liquid, means suspend-



ing said elevating bucket device for movement between a lowered filling position in the separate liquid in the reservoir and a raised emptying position discharging into the tank, a float in the tank connected with said suspending means and operative to cause movement of the elevating bucket device between said lowered and raised positions thereof, and means arranged with said suspending means operative to cause snap-action of the control member to raised or lowered position upon the float moving to a corresponding position in the tank.

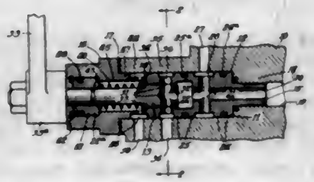
2,732,851
VALVE DEVICES FOR HYDRAULIC MECHANISMS
Allan Ashley and Ronald Fletcher Watson, Westminster, London, England, assignors to Vickers-Armstrongs Limited, London, England, a British company
Application February 10, 1954, Serial No. 409,452
Claims priority, application Great Britain February 11, 1953
6 Claims. (Cl. 137—102)



4. A valve device for a hydraulic system, the device comprising a body member having a bore therethrough, the bore being closed at each end, a plunger slidably located in the bore, an annular shoulder in the bore, the shoulder forming a valve seat and opening, a valve head on the plunger, a first spring urging the valve head against said shoulder, a port in the body member leading from the part of the bore in which the valve head operates, the port serving for communication with said system, a chamber within said plunger, a passageway through said plunger for providing communication between said chamber and port, a needle valve slidably carried in said plunger and co-operating with said passageway, the needle valve extending through the end of the plunger remote from the valve head, a first piston on said end of said plunger slidable along said bore, a second piston located in the bore adjacent the first piston, a first inlet in the body member leading to the portion of the bore between the two pistons, a connection between the second piston and the part of the needle valve extending from the plunger, a second spring urging the needle valve to close said passageway, a second inlet in the body member communicating firstly with the portion of the bore between the valve head and the first piston and secondly

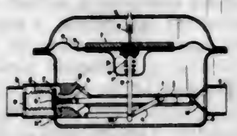
with said chamber in the plunger, and means for lifting the valve head from the shoulder when liquid is fed to second inlet, the first inlet serving for connection to a control pressure source, the strength of the second spring as compared with that of the first spring being such that when the control pressure exceeds a first predetermined value the needle valve is retracted from said passageway to allow liquid to flow from said system and such that when the control pressure exceeds a second predetermined value that is greater than the first, the valve head is lifted from the shoulder to allow liquid to flow from said system in addition via said valve opening.

2,732,852
CONTROL VALVE
John A. Lauck, Shaker Heights, Ohio, assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application February 27, 1951, Serial No. 212,910
3 Claims. (Cl. 137—108)



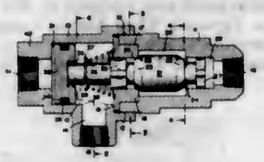
1. A control valve comprising an axially apertured housing having one end adapted to be placed in communication with a hydraulic system and defining an inlet port to said valve, said housing having a discharge port formed therein intermediate the ends thereof, a generally cylindrical valving member disposed in said housing and in one position adapted to prevent communication between said inlet and said discharge port, flow path defining means formed in said valving member, said valving member being manually rotatable to a second position independently of any axial movement to establish communication between said ports through said flow path defining means, and said valving member being axially shiftable in response to application of excessive fluid pressure thereto from said inlet port to a third position to establish communication between said ports whereby said valving member may function both as a control valve and as a relief valve, and resilient means opposing said axial shifting movement of said valving member, said housing having a vent port therein to prevent hydraulic blocking of the axial shifting movement of said valving member remote from said discharge port, and said control valve further having a utilization port formed in said housing in open and constant communication with said inlet port when said valve member is in any position.

2,732,853
PRESSURE RELIEF DEVICE
Karl Hermann Schwarz, Osnabruck, Germany, assignor to G. Kromschroder Aktiengesellschaft, Osnabruck, Germany
Application November 14, 1951, Serial No. 256,213
Claims priority, application Germany November 15, 1950
9 Claims. (Cl. 137—116.5)



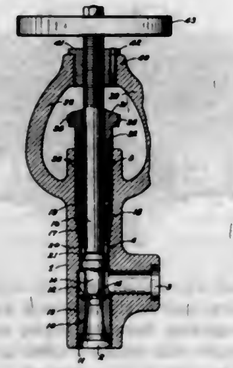
1. A pressure regulating device for controlling the flow of fluid in a system comprising a housing, a pressure operated membrane mounted in said housing and defining an upper chamber and a lower pressure chamber, said housing having an inlet port and an outlet port in said pressure chamber, valve means mounted in said inlet port for controlling the flow of fluid through said device and including a valve seat and a valve disk, a cylindrical bellows connected at one end thereof to said valve means and at the other end thereof to said housing and having one side thereof in communication with the pressure of the inlet fluid, said bellows having a diameter at its ends substantially equal to the diameter of said valve seat whereby varying of pressure of the inlet fluid acting on said bellows is balanced independently of said valve means, a venturi nozzle associated with said valve means, means placing the other side of said bellows in communication with said venturi nozzle, said last mentioned means being moved relative said venturi nozzle upon movement of said valve means, and mechanical linkage means interconnecting said valve means and said pressure operated membrane, said mechanical linkage means being arranged to open said valve means in increasing increments of movement with equal increments of movement of said pressure operated membrane and to close said valve means in decreasing increments of movement with equal increments of movement of said pressure operated membrane and said bellows cooperating with said pressure operated membrane to open and close said valve means.

2,732,854
DRAIN VALVES
Robert H. George, Melrose Park, Pa.
Application January 24, 1952, Serial No. 268,056
2 Claims. (Cl. 137—204)



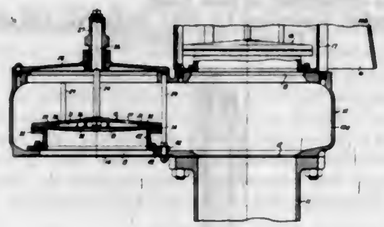
1. A drain valve of the character described comprising a hollow housing made of two separable parts, an internally disposed ring member subdividing the hollow interior of the housing into a valve chamber and a cylinder, said ring member having a portion gripped between portions of the separable parts of the housing and being freely removable upon separation of the housing parts, the valve chamber being located in one of said housing parts and the cylinder being located in the other of said housing parts, means connecting the inlet end of the valve chamber to a unit to be drained of condensate, one end of the cylinder constituting a drainage chamber open to the atmosphere and to which the valve chamber is connected by a passageway in the ring member, the housing part in which the valve chamber is provided having a valve seat at the inlet end and a recess at the outlet end of said valve chamber, and the ring member being mounted in said recess and having a valve seat at the outlet end of said valve chamber, a double faced valve member movably mounted in the valve chamber, a stem extending from said valve member through the passageway in the ring member and having a free end in the cylinder, a piston in the cylinder bearing against the free end of the valve stem acting, when pressure is applied thereto, to move the valve member from the seat provided by the ring member at one end of the valve chamber to the seat provided at the other end thereof, a spring surrounding the valve stem serving to urge the valve member to the seat provided on the ring member, and means connecting the end of the cylinder in which the piston is located to a variable pressure source.

2,732,855
VALVE
James Clarence Hobbs, Coral Gables, Fla.
Application August 25, 1950, Serial No. 181,353
9 Claims. (Cl. 137—338)



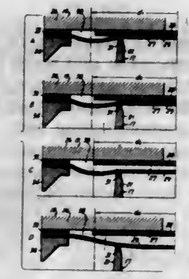
1. A valve comprising a one piece body having an inlet port, an outlet port and a combined valve-receiving opening and stuffing box, a valve seat in one of said ports, a stem having a valve at its inner end to engage said seat with fluid-sealing contact and extending out through said valve-receiving opening and stuffing box, packing in said box around said stem, and means to minimize heat transfer from the body to the packing, said means including a yoke integral at one end with said body adjacent to the inner end of said stuffing box, said yoke being connected at its other end to said stem.

2,732,856
VACUUM VENT VALVE
Peter C. Jurs, Oakland, Calif., and Robert W. Blake, Chicago, Ill., assignors, by mesne assignments, to Shand and Jurs Company, Berkeley, Calif., a corporation of California
Application April 15, 1953, Serial No. 348,894
7 Claims. (Cl. 137—469)



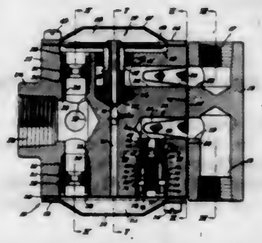
1. In a vacuum vent valve for protecting tanks, a body having a passage for connection with a tank and an opening to the atmosphere, a seat ring within the body, said passage and opening being in communication through said seat ring, the upper end face of the seat ring forming a valve working surface, a vertically movable pallet body adapted to rest upon the seat ring, a flexible diaphragm of resilient material secured to and extending across the lower face of the pallet body, the outer peripheral edge of the diaphragm being secured to the pallet body, the diaphragm being interposed between the lower side of the pallet body and the valve working surface to thereby seal upon the valve working surface, the space above the diaphragm being exposed to the pressure in the body passage whereby under conditions of positive pressure in the passage that portion of the diaphragm extending inwardly from the seat is deflected into tight sealing contact with the inner edge portion of the valve working surface and whereby upon conditions of negative pressure in the passage that portion of the diaphragm extending inwardly from the seat is deflected upwardly against the pallet body and the pallet body is lifted clear of the seat ring to vent the passage to the atmosphere.

2,732,857
FLUID PRESSURE SEALED DIAPHRAGM RELIEF VALVE
Peter C. Jurs, Oakland, Calif., assignor, by mesne assignments, to Shand and Jurs Company, Berkeley, Calif., a corporation of California
Application July 27, 1951, Serial No. 238,839
4 Claims. (Cl. 137—494)



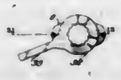
1. In a fluid flow control device, a body having inlet and outlet passages, an annular seat formed within the body and surrounding an opening which connects the inlet and outlet passages, the said seat providing an annular valve working surface located in a horizontal plane, a rigid valve pallet disposed within the body above the seat and movable in a vertical direction between full open and closed positions relative to the same, said valve pallet being yieldably urged by its effective weight downwardly toward the seat, fluid pressure applied to the lower side of the valve pallet serving to displace the pallet upwardly relative to the seat, a flexible diaphragm member of pliable material extending over the lower face of the pallet and interposed between the pallet and the seat, means forming a firm sealed attachment between the outer peripheral portion of the diaphragm and the outer periphery of the valve pallet, the region of attachment being spaced outwardly from the valve working surface of the seat, thereby providing a flexible annular diaphragm portion extending in a general horizontal direction and which is exposed on its lower side to the outlet pressure, the diaphragm member having freedom of flexing movement for a substantial distance toward and away from the lower side of the valve pallet, means connecting the space between the diaphragm member and the pallet with the inlet passage whereby inlet pressure tends to urge the diaphragm member against the valve working surface, said flexible annular diaphragm portion being bulged downwardly by inlet pressure applied to said space, applied inlet pressure for a range below the pressure for which the device is set to open serving to elevate the valve pallet to a position in which the same is free floating with respect to the valve seat, the lower side of the pallet being formed to provide an annular surface which overlies the portion of the diaphragm that contacts the valve working surface of the seat, said annular surface and said diaphragm portion serving as the sole means to support the effective weight of the pallet for inlet pressures below said range whereby for such pressures the diaphragm is pressed into sealing engagement with the seat.

2,732,858
FLOW CONTROLLING APPARATUS
T Cyril Noon, Bainbridge Township, Geauga County, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application May 23, 1950, Serial No. 163,687
4 Claims. (Cl. 137—505.41)



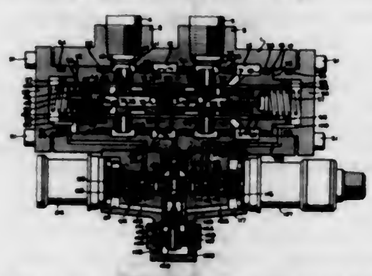
1. In combination in apparatus of the character described, a body, a recess in said body, means closing said recess to define a substantial chamber, a bore in said body communicating with said chamber, and fluid passageway having a portion communicating with said bore and another portion communicating with said chamber and said portions together with said chamber and said bore affording a continuous fluid stream pathway delivering fluid to the chamber in one part of the passageway and discharging fluid from the chamber in the remaining part of the passageway, spaced bearing rings in said bore affording therebetween a chamber into which leads said portion of the passageway communicating with the said bore, a throttle valve plug longitudinally guided by said bearing rings and having grooves cooperating with the outer of said bearing rings in metering relation, and a diaphragm secured across said recess and inside said closing means and secured to said valve plug and being responsive to pressure of fluid thereagainst for varying the throttling relationship of said grooves to said outer bearing ring by moving said valve plug, said valve plug having a pressure passage axially therethrough leading to the side of the diaphragm opposite said recess and said body having a further fluid passage communicating with the inner end portion of the bore and through said pressure passage through the plug with the side of the diaphragm opposite the recess.

2,732,859
FLUID MIXING DEVICE
Thomas B. Chace, Chicago, Ill., assignor to The Dole Valve Company, Chicago, Ill., a corporation of Illinois
Application November 2, 1950, Serial No. 193,731
4 Claims. (Cl. 137—607)



1. A fluid mixing device comprising a casing having a pair of inlets and an outlet, fluid flow control means between each inlet and said outlet, each of said fluid flow control means comprising a resilient member having an edge portion and means defining a surface adjacent to said edge portion to define therewith a fluid flow passageway, said resilient members being displaceable toward said surfaces by fluid under pressure from said inlet to reduce the size of said passageways, the spaced relation of said edge portions with respect to said surfaces being adjustable, and adjustable means for simultaneously decreasing the spacing of one of said surfaces and one edge portion and increasing the spacing of the other of said surfaces and the other edge portion.

2,732,860
FOUR WAY BALANCED SLIDE VALVE
William A. Ray, North Hollywood, Calif., assignor to General Controls Co., a corporation of California
Application November 24, 1950, Serial No. 197,209
10 Claims. (Cl. 137—623)



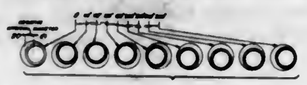
1. In a slide valve structure: an outer housing; an inner valve body; said body and said housing defining an annular passageway between them; means forming an opening through said housing communicating with said passageway; said body also having a chamber therein; a slide guided for longitudinal movement in said chamber, said slide having on opposite sides thereof a pair of flat substantially parallel surfaces spaced from the walls of said chamber; said slide also having a transverse port opening in said surfaces respectively, said slide also having a passageway in communication with said transverse port; a pair of port-forming members guidingly accommodated in said valve body, each of said movable port-forming members communicating with said annular passageway; said movable port-forming members extending into said chamber and having slide contacting edges, said port forming members being adapted to register with said transverse port on opposite sides of said slide respectively; and an arcuate spring member having arms respectively in engagement with said port-forming members and extending in said passageway for resiliently urging said port-forming members against said slide.

2,732,861
FLEXIBLE CONDUITS AND FITTINGS THEREFOR
William J. Gilmore, Manitou Beach, Mich., assignor to American Chain & Cable Company, Inc., Bridgeport, Conn., a corporation of New York
Application September 13, 1951, Serial No. 246,461
4 Claims. (Cl. 138—25)



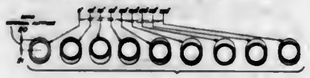
1. An assembly of a flexible conduit and end fitting comprising a conduit having an exterior of hard stranded wires, a close-wound helical spring having a normal internal diameter less than the diameter of the exterior of said conduit, said spring surrounding said conduit and elastically gripping the same, a fitting having a tapered, threaded bore, the pitch of the threads thereof being substantially equal to the pitch of the spring, said threaded bore having a diameter in its inner smaller end constricting the spring to prevent entry of the conduit into the convolutions therein, said threaded bore having an effective taper to a diameter sufficient to permit entry of the conduit into convolutions of the spring therein.

2,732,862
HELICAL FLUID TUBE
George V. Woodling, Cleveland, Ohio
Application December 2, 1950, Serial No. 198,855
1 Claim. (Cl. 138—47)



A helical bendable tube having its wall bent to conform to a helix residing within the following range between minimum and maximum limits of helical amplitude and of longitudinal pitch, said minimum helical amplitude being defined as equal to approximately the same as the wall thickness of the tube and said maximum helical amplitude being defined as approximately equal to one-half the outside diameter of the tube, said minimum longitudinal pitch being equal to 4 times the outside diameter of the tube and said maximum longitudinal pitch being 14 times the outside diameter of the tube, the cross-section of said tube taken at any point therealong and normal to the helical axis being substantially the same as the cross-section taken at any other point therealong and normal to said helical axis.

2,732,863
SINUSOIDAL FLUID TUBE
George V. Woodling, Cleveland, Ohio
Application December 2, 1950, Serial No. 198,856
1 Claim. (Cl. 138—47)



A sinusoidal bendable tube having its wall bent to conform to a sinusoid residing within the following range between minimum and maximum limits of sinusoidal amplitude and of longitudinal pitch, said minimum sinusoidal amplitude being defined as being equal to approximately the same as the wall thickness of the tube and said maximum sinusoidal amplitude being defined as approximately equal to one-half the outside diameter of the tube, said minimum longitudinal pitch being equal to 4 times the outside diameter of the tube and said maximum longitudinal pitch being 14 times the outside diameter of the tube, the cross-section of said tube taken at any point therealong and normal to the sinusoidal axis being substantially the same as the cross-section taken at any other point therealong, and normal to said sinusoidal axis.

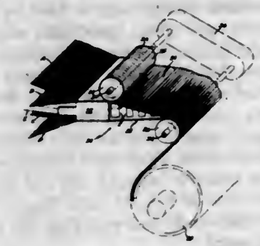
2,732,864
PNEUMATICALLY ACTUATED THREAD PROTECTOR
Melvin H. Stansbury, Bakersfield, Calif.
Application October 9, 1953, Serial No. 385,146
2 Claims. (Cl. 138—96)

2. A pneumatically actuated pipe thread protector for the threaded ends of a pipe, comprising a sleeve, said sleeve extending throughout the entire length of the threaded area of the pipe and formed of a flexible material, said sleeve comprising an outer wall and an inner wall defining an air chamber therebetween, said chamber being substantially equal in length to said sleeve and extending lengthwise thereof, reinforcing means in said outer wall to prevent distortion thereof, said inner wall being deflectable under air pressure to engage the pipe, said inner wall being of lesser thickness than the outer wall, an air valve extending into said air chamber to permit introduction of air under pressure into the air chamber, and a quick acting release valve extending into the



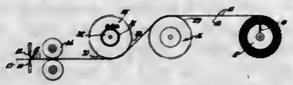
air chamber to permit quick release of air therefrom, and a metallic external shoe on the outer end of said sleeve, said shoe extending over the outer end of the sleeve and also along the side thereof.

2,732,865
METHOD OF AND APPARATUS FOR MAKING INFLATABLE FABRICS
Charles Eugene Neisler, Jr., Kings Mountain, N. C.
Application June 19, 1953, Serial No. 362,755
11 Claims. (Cl. 139—20)



1. The method of making an arcuate fabric material formed of a pair of fabrics interconnected by an intermediate thread, comprising the steps of weaving said pair of fabrics in confronting disposition at the same time, weaving said intermediate thread to said pair of fabrics at spaced intervals with said thread extending transversely of said pair of fabrics and adapted to interconnect the latter, and drawing one of said pair of fabrics at a faster rate than the other of said fabrics whereby said one fabric will be of greater length relative to the other of said pair of fabrics so that the latter will assume an arcuate configuration.

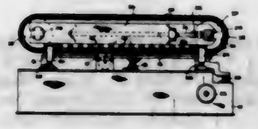
2,732,866
WIRE MESH PULL UP
Rudolph C. Vorderstrasse, Sterling, Ill., assignor to Northwestern Steel and Wire Company, Sterling, Ill., a corporation of Illinois
Application October 5, 1951, Serial No. 249,875
2 Claims. (Cl. 140—112)



1. A wire pull up for wire mesh welding machines for uniformly tensioning and pulling up welded wire mesh from the welding electrodes therefor comprising two aligned drums rotatable about parallel axes, one being spaced in advance of the other, the peripheries of said drums being circumferentially slotted to receive the line wires of the mesh and said drums being transversely slotted to receive the cross wires of the mesh, friction means restraining one of said drums from rotation, power means for intermittently driving the other of said drums in a pull up direction only including an overrunning clutch, a second overrunning clutch holding said drum

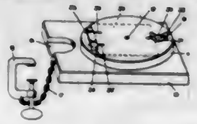
from back slipping movement, and the transverse slots on the faces of said drums being in the form of gear teeth, the teeth on said hold back drum pitching in a direction opposite to its direction of rotation, and the teeth on said pull up drum pitching in the direction of rotation thereof, to maintain the cross wires in positive engagement with the teeth on said pull up drum and allowing said cross wires to freely pass from said pull up drum, for baling.

2,732,867
FACING MACHINE WITH RESILIENT FINGERS BELT FEED
Elliot D. May and Daniel L. Webster, Winchendon, Mass., assignors to Baxter D. Whitney & Son, Inc., Winchendon, Mass., a corporation of Massachusetts
Application June 12, 1953, Serial No. 361,313
1 Claim. (Cl. 144—128)



A facing machine comprising a base, a cutter head thereon, front and rear tables associated with said cutter head, an overhead frame, a conveyor thereon, means supporting said conveyor above the tables and cutter head, and a plurality of rows of elongated soft flexible fingers on said conveyor, said fingers extending across the conveyor, said fingers tapering down in a direction toward the tables and cutter head away from the conveyor, whereby a board being faced is engaged and fed by the smaller ends of the plurality of fingers, said fingers being truncated at said smaller ends and engaging the board at the truncated ends thereof.

2,732,868
ROTATABLE WORK PIECE SUPPORT AND CLAMP
Joseph F. Barta, Milwaukee, Wis.
Application February 9, 1953, Serial No. 335,905
1 Claim. (Cl. 144—288)



A device of the character described comprising a base, a flat surface plate rotatably mounted on the upper face of said base, said base having an area greater than said surface plate, said surface plate being provided with a pair of spaced elongated parallel slots positioned inwardly of one edge of said surface plate, a work support, clamping means extending through said work support and said slots, said work support extending upwardly beyond the face of said surface plate, said surface plate further having a single elongated slot formed therein at an edge opposite said pair of parallel slots and positioned medially between said pair of slots, and a work clamping bolt positioned and secured in said single slot.

2,732,869
DRILL BIT FOR SCREW HOLES
Walter I. Stearns, Arlington, Vt.
Application April 3, 1953, Serial No. 346,730
1 Claim. (Cl. 145—125)

A wood drill construction comprising in combination, an upper head including a flange and an elongated stem extending upwardly therefrom, said flange having a transverse blade receiving slot in the lower side thereof and an axial stem socket extending upwardly from said slot, hub portions depending from the lower sides of said slot for engaging opposite sides of a blade, an elongated relatively thin flat blade having an upper end portion in the slot of the said flange and between said hubs and a stem in said socket, said blade having lower pointed and intermediate and upper portions of relatively increasing transverse widths for the threaded and body and head



portions of a screw, said blades upwardly from said pointed end to said upper end decreasing in thickness by a few thousandths of an inch and the transverse widths of the portions thereof increasing upwardly from said pointed end by a few thousandths of an inch, and opposite side edges of the lower and intermediate and upper portions of the blade being sharpened and out of parallelism only to the extent of the few thousandths of increasing width.

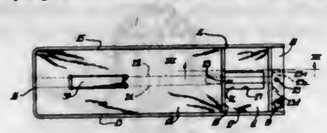
2,732,870
CAP FOR PLASTIC EXTRUSION TUBE CONTAINER
Anthony Nichols, North Plainfield, N. J., assignor to Celluplastic Corporation, a corporation of New Jersey
Application July 23, 1953, Serial No. 369,912
3 Claims. (Cl. 150—.5)



1. A cap adapted to stretch and thereby seal the mouth of an extrusion tube container of plastic material, said cap comprising a thin walled hollow stem of substantially rigid plastic material which substantially conforms to the shape of the interior walls of the tube in the area around its mouth and which is capable of stretching the mouth of the container without distorting the stem, said stem having a top sealing portion with outside diameter greater than the inside diameter of the container in the area around the mouth thereof and said stem having a lower lead in portion offset from the top sealing portion by means of a taper, said lead in portion being of smaller outside diameter than the inside diameter of the container so that it will readily fit therein and said taper having an abrupt slope wherein the length of the taper from top to bottom is not substantially greater than two and one-half times the resulting increase in the diameter of the said lead in portion whereby the mouth of the tube is stretched as it rides up over the taper to form a frictional surface fit with the top sealing portion of the stem when the cap is pushed home into the mouth of the container and said stem having a top covering section which extends outwardly over the rim of the container.

2,732,871
GOLF BAG
Claude R. Drown, Sheridan, Wyo.
Application May 19, 1953, Serial No. 356,063
6 Claims. (Cl. 150—1.5)

1. A golf bag comprising a generally rectangular flat bag having longitudinally extending pockets therein, said bag having means defining an aperture therethrough adjacent one end thereof, a T-shaped handle member on back of the bag, said handle having the cross bar thereof secured adjacent the top edge of said bag and having the staff thereof lying substantially parallel to the longitudinal



axis of the bag and adjacent the back side thereof and extending across and beyond said aperture, whereby said bag may be supported by grasping said staff through said aperture.

2,732,872
COTTON HARVESTING SACK
Joseph H. Hurdle, Holly Springs, Miss., John E. Curl, Collierville, Tenn., and Ralph H. Curl, Holly Springs, Miss.
Application April 3, 1953, Serial No. 346,684
4 Claims. (Cl. 150—2)



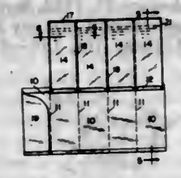
1. A cotton harvesting sack of textile fabric closed at its lower end and open at its upper end or mouth, and which comprises upper and lower walls, the open upper end being of customary flexibility and capable of being folded flat if desired, the sack having two longitudinally spaced suspension elements for use in attaching it to the hook of a weighing scale, one of said elements being the customary shoulder strap secured to the sack at its upper end, and the other being a permanent loop extending transversely of the sack and located between the lower end and the mid-point of the length of the sack.

2,732,873
PRESSURE INDICATING CLOSURE SEAL FOR LIQUID-RECEIVING CONTAINERS
Kenneth L. Treiber, Alexandria, Va.
Original application November 1, 1948, Serial No. 57,798. Divided and this application December 8, 1952, Serial No. 324,859
2 Claims. (Cl. 150—3)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A closure for storage tanks for volatile liquids having an opening into the tank, which comprises an elastic closure diaphragm for the opening in direct contact with vapor contents of the tank and covering the opening in the tank, the said diaphragm being continuously and repeatedly visually elastically deformable responsively to varying vapor pressures in the tank between elastic limits of the diaphragm, thereby enabling a continuous indication of vapor-pressure conditions within the tank, and peripheral mounting means for the diaphragm interconnecting the diaphragm and the tank including a pair of complemental clamping rings in clamping engagement with opposite peripheral sides of the diaphragm, one of which rings is an upper ring, the other of which rings is an annular channel having an upper flange and a lower flange, a third clamping ring peripherally underlying the opening in the tank, clamping means extending through the upper flange of the annular channel and into the upper clamping ring, and additional clamping means extending through the lower flange of the channel and into the third clamping ring and maintaining the periphery of the opening in the tank clamped between the lower flange of the channel and the said third clamping ring.

2,732,874
FOLDING DATA CASE
Louis Carstensen, Portland, Oreg.
Application March 9, 1953, Serial No. 341,175
2 Claims. (Cl. 150—39)



1. A folding data case including a substantially rectangular-shaped cover, said cover divided into rectangular sections of approximately identical size by parallel crease lines, a rectangular-shaped flap normally positioned on the inside of said cover and attached to said cover along the top edge of said cover, said flap having parallel crease lines normally registering with the crease lines in said cover, said crease lines dividing said flap into a series of rectangular sections of approximately the same size as the sections in said cover, the size of said flap not exceeding the size of said cover, and a transparent sheet material covering substantially an entire face of said flap and attached to said flap along the bottom and side portions of each of said flap sections so as to form transparent pockets, each pocket covering substantially a face of one of said flap sections, said transparent sheet material being unattached to said flap for a space along the top of each flap section so as to provide entrances into the respective pockets, the top edge of said sheet material at such pocket entrances being spaced slightly below the top edge of said flap, whereby when sheets containing data are inserted in said pockets respectively the comparative data in said pockets can be read at a glance.

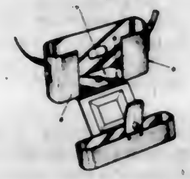
2,732,875
POCKET SECRETARY
Laurence H. Martin, Des Moines, Iowa
Application April 6, 1953, Serial No. 347,005
1 Claim. (Cl. 150—39)



A pocket secretary comprising a flat cover member formed of a plastic material and foldable upon itself along a longitudinally extended central portion thereof, a card carrying attachment for said cover member comprising a first sheet of transparent plastic material of substantially the same size as said cover member, said sheet being foldable upon itself along a longitudinal central portion thereof, said cover member and said sheet being heat welded together at said longitudinally extended central portions, a pair of second sheets of transparent plastic material, with each of said second sheets being heat welded along three of the edge portions thereof to said first sheet at a position to one side of the longitudinal central portion of said first sheet, so that the free edges of said second sheets are substantially

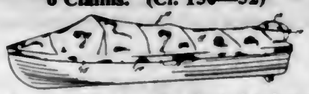
parallel to and closely adjacent said longitudinal central portion, and transversely extended seams formed by heat bonding portions of said second sheets to said first sheet to thereby form a plurality of pockets in said card carrying attachment.

2,732,876
CARRIERS FOR CAMERAS
Carl Hepting, Stuttgart-Feuerbach, Germany, assignor to Firma Carl Hepting & Co. Lederwaren- und Gürtelfabrik G. m. b. H.
Application February 11, 1954, Serial No. 409,612
Claims priority, application Germany February 17, 1953
4 Claims. (Cl. 150—52)



1. Carrying case for cameras and the like comprising side walls, a bottom section secured to the side walls and composed of an insert of formable material with a rim portion provided along the entire periphery of said insert and bent-over outwardly from the case, the side walls extending over said rim portion to overlap its margin, said bottom section having at least one layer of material adjacent the insert and on the outer side thereof, the rim portion with the overlapping side wall portions being bent-over against the layer of material to secure the side walls rigidly to the bottom section to form a pocket to receive the camera.

2,732,877
BOAT COVERS FOR OUTBOARD MOTOR BOATS
Willard H. Taylor, Gloversville, N. Y.
Application December 15, 1954, Serial No. 475,347
6 Claims. (Cl. 150—52)



2. A boat cover for use with a boat having an outboard motor attached to its stern, comprising a flexible sheet of a size and shape to fit over the top of the boat and be fastened at its peripheral edge portion to the upper side edges of the boat, said cover having an elongated inwardly extending slit formed in its stern portion; fastening means for detachably securing the edges of the slit together; and a generally triangular shaped gusset underlying said slit with its outer edge portion free and with its remaining edges secured to said cover, each along one edge of said slit, the construction and arrangement being such that when the boat cover is mounted on the boat with the outboard motor attached thereto, said slit can be opened to permit the gusset to be pulled out to cover the motor and when the outboard motor is removed from the boat said gusset can be tucked under the cover and the edges of the slit secured together to provide complete coverage for the boat.

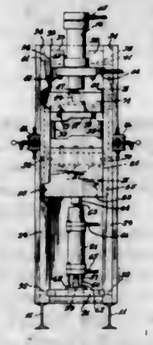
2,732,878
LAMP BASING METHOD
Conrad E. Bechard, Mayfield Heights, and Herman E. Hermanson, East Cleveland, Ohio, assignors to General Electric Company, a corporation of New York
Application October 6, 1952, Serial No. 313,276
3 Claims. (Cl. 153—1)

1. The method of basing an electric lamp including a vitreous bulb having a neck portion and a lead-in wire emerging therefrom with a base including a metal shell adapted to fit tightly on said neck portion which comprises the steps of seating the base on the neck portion



with the lead-in wire drawn out between them and indenting the shell inwardly along a line crossing over the wire.

2,732,879
METAL FORMING PRESS
Arne O. Andresen, Allen Park, Mich., assignor to Kropp Forge Company, Chicago, Ill., a corporation of Illinois
Application February 16, 1953, Serial No. 337,087
3 Claims. (Cl. 153—25)

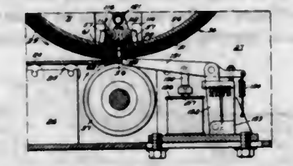


1. A metal forming press comprising a frame having a base, parallel spaced side walls extending upwardly from said base and a back wall connecting said side walls together, a stationary die mounted between and secured to said side walls and spacing the same apart and having an upwardly facing die face formed to conform to and supportingly receive a partially formed article, a movable die slidably guided in said side walls for movement toward and from said stationary die, said movable die having a die face formed to conform to a partially formed article and adapted to engage the article to be formed with said stationary die and hold the same to said stationary die free from deformation, power means engaging said movable die with the article to be formed, a bending die guided between said side walls and vertically movable from beneath said stationary die in a path intersecting a projecting portion of the article to be formed, said movable die having a recessed die face extending in the general plane of movement of said bending die and said bending die having a cooperating die face wiping the projecting portion of the article to be formed upwardly into engagement with said recessed die face.

2,732,880
APPARATUS FOR APPLYING PLASTIC SHEETING TO METAL PLATES
Watson L. Hawk, Richmond, Calif., assignor to Rheem Manufacturing Company, Richmond, Calif., a corporation of California
Application September 22, 1953, Serial No. 381,631
8 Claims. (Cl. 154—1)

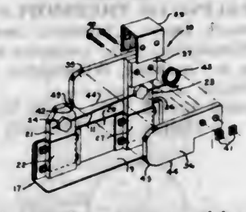
1. Apparatus of the character described including a frame, plate support means mounted on said frame, a plastic sheeting laminating roller disposed in spaced but

adjacent relationship to said support means, means for rotating said roller, said roller being provided with an axially extending slot, a radially movable axially extending cutting element mounted within said slot and normally disposed completely within the peripheral extent of said roller, means for moving said cutting element radially



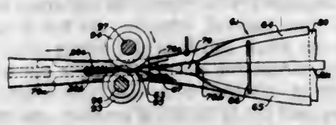
outward of said roller during each revolution of the latter, means for releasably holding plastic sheeting onto the periphery of said roller adjacent both sides of said slot, said means including a plurality of apertures extending on both sides of said slot, and means for creating a suction force in said apertures.

2,732,881
HOT WIRE CUTTER
Joseph A. Anderle, Westerleigh, N. Y., assignor to Lorentzen Hardware Mf'g. Corp., New York, N. Y., a corporation of New York
Application March 18, 1955, Serial No. 495,118
11 Claims. (Cl. 154—1)



1. A hot wire cord cutter comprising: a generally straight resistance wire extending between terminal supports, and a pair of spaced parallel guide members lying one on each side of the wire along a part of the length thereof, one end of the wire lying substantially below the plane of the lower edges of the members and the other end of the wire lying substantially above the lower edges of the members.

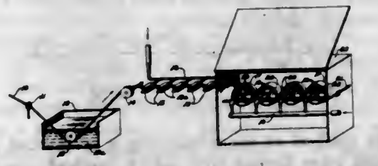
2,732,882
METHOD OF BUILDING CONTINUOUS TUBING AND APPARATUS THEREFOR
Mathew Kuts, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a corporation of New York
Application September 30, 1952, Serial No. 312,243
15 Claims. (Cl. 154—1.6)



10. Apparatus for building continuous tubing from an initially flat strip of flexible self-adherent sheet material, said apparatus comprising guide means for shaping the strip into a longitudinally divided tubular body portion with marginal flange portions projecting radially outwardly along the divide, means for pressing said flange portions together in face-to-face relation one to the other, a cutter element acting in a plane transverse to said flange portions for severing the flange portions from said tubular body portion and joining the cut edges of the tubular body portion in line-contacting relationship, means spaced from said cutter element for advancing the strip, there being a free reach of the tubularly formed strip with the joined cut edges extending from said cutter element toward said advancing means, and tube spreading means disposed within said advancing free reach intermediate said cutter element and said advancing means, said tube spreading means spreading and flattening said tubularly formed strip in said transverse plane to swing the line-contacting cut edges thereof into edge-on self-adhered relationship to provide a continuous butt seam along the flattened tubing.

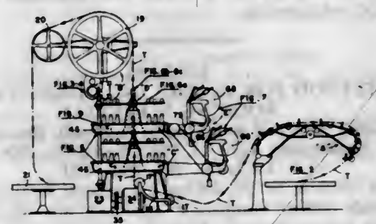
13. The method of building continuous tubing having a longitudinally extending butt seam, which method comprises the steps of continuously advancing and shaping a continuous flat strip of flexible self-adherent sheet material into a longitudinally divided tubular body portion with marginal flange portions projecting radially outwardly along the divide in face-to-face spaced-apart relation, severing the projecting flange portions from the tubular body portion in a plane transverse to said flange portions and pressing together and uniting the cut edges of the tubular body portion in line-contacting relationship at its inner surface, thereafter spreading and flattening the tubularly formed strip in said transverse plane thereby swinging the line-contacting cut edges of the tubularly formed strip into edge-on abutment to produce a continuous butt seam along the flattened tubing.

2,732,883
METHOD OF MAKING TWINE AND APPARATUS THEREFOR
Albert R. Morrison and Harland E. Fargo, Newark, Ohio, assignors to Owens-Corning Fiberglas Corporation, Toledo, Ohio, a corporation of Delaware
Application May 10, 1952, Serial No. 287,222
15 Claims. (Cl. 154—1.7)



11. Apparatus for producing twine comprising means for coating an advancing textile strand with an aqueous mixture of coating materials, means for horizontally suspending said advancing strand, a plurality of side-by-side U-shaped radiant burners adapted for receiving said strand while so suspended, and a plurality of side-by-side, heated rolls adapted for contact heating of said strand.

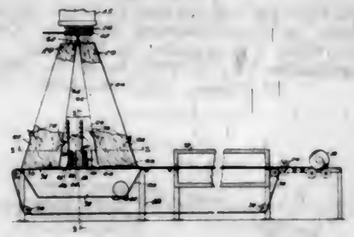
2,732,884
MACHINE FOR MAKING REINFORCED RUBBER TUBING
Marcello Vanzo, Milan, Italy, assignor to Pirelli S. p. A., Milan, Italy
Application May 2, 1950, Serial No. 159,434
Claims priority, application Italy May 10, 1949
8 Claims. (Cl. 154—6)



1. A machine of the air mandrel type for the manufacture of thread reinforced rubber hose, comprising a

feeding mechanism for passing a crude rubber tube upwardly along a generally vertical axis of said machine, upper and lower spaced stationary supports each having a central portion arranged coaxially of the machine, a pair of multiple bobbin-carrying the platforms, drive means to rotate said platforms about the axis of the machine in opposite directions, each of said platforms being mounted for rotation upon the central portion of one of said stationary supports, thread guide mechanisms carried by the bobbin-carrying platforms constructed and arranged to pass thread substantially coaxially of each of the bobbins to be wound on said tube at spaced locations, a crown thread-guide secured to said bobbin-carrying platforms adjacent a central aperture thereof through which said crude rubber tube passes, a guide mechanism secured to said upper stationary support for feeding a thin strip of rubber longitudinally of said tube intermediate said spaced locations of a width sufficient to surround said tube of crude rubber, whereby said crude rubber tube is wound by two sets of helices of threads in opposite directions separated by a thin layer of rubber.

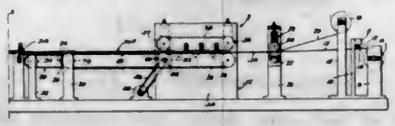
2,732,885
METHOD AND APPARATUS FOR PRODUCING REINFORCED FIBROUS PRODUCTS
Walter G. Van Der Hoven, Newark, Ohio, assignor to Owens-Corning Fiberglas Corporation, a corporation of Delaware
Application November 19, 1949, Serial No. 128,456
5 Claims. (Cl. 154—27)



1. The method of manufacturing a reinforced porous non-woven glass fibrous web, which method consists of, establishing multiple glass fiber forming stations at each of which staple glass fiber is produced, collecting the staple fiber at each forming station separately within separate forming hoods associated with each station, each hood having an open end for discharge of fiber therefrom, passing a collecting belt across the open end of each hood in sequence to collect thereon in sequence layers of glass fiber discharged from the forming hoods thereby forming a non-woven glass fibrous web, delivering into a forming hood a free continuous length glass thread collected in the flow of the staple fiber in random distribution therein in movement to the open end of the hood for collection on the belt simultaneously with the staple fiber in random distribution in staple fiber layer, and depositing in the web between the layers of fiber composing the same continuous length glass threads extending longitudinally of the web and disposed in spaced parallel relationship.

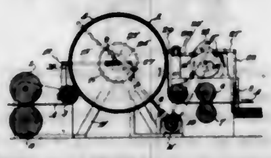
2,732,886
METHOD FOR PRODUCING CORRUGATED ROOFING MATERIAL
Giulio Andreoli and Alberto Andreoli, Rome, Italy
Application April 13, 1953, Serial No. 348,376
1 Claim. (Cl. 154—30)

The method of producing corrugated laminated sheet material, which comprises; applying hot thermoplastic asphalt binder which is hard at room temperature to the upper surface of a flat strip of flexible felt as the felt moves horizontally from a supply roll; applying a substantially flat continuous strip of flexible metal foil on top of the hot applied asphalt while pressing the strips towards one another between smooth cylindrical rolling surfaces, thereby permeating the felt with the hot asphalt and spreading the hot asphalt uniformly between the strips so as to form an impressionable continuous composite strip; transporting the composite strip away from the cylindrical rolling surfaces on the upper run of a corrugated belt-shaped surface, moving lengthwise of the composite strip;



confining the composite strip on the belt-shaped surface adjacent the cylindrical rolling surfaces as it is transported away from the cylindrical rolling surfaces and simultaneously pressing transverse corrugations in the composite strip; exposing the corrugated composite strip to the atmosphere to cool, on the belt-shaped surface remote from the cylindrical rolling surface as it is transported away from the point of confinement and corrugation, until the binder is relatively hard; and then shearing the strip into predetermined lengths.

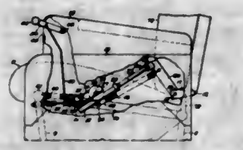
2,732,887
HEAT-SEALING OF THERMOPLASTIC FILM
Donald Ellsworth Drew, Claymont, and Walter Mead Farrelly, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
Application April 2, 1951, Serial No. 218,754
2 Claims. (Cl. 154—42)



1. Apparatus for heat-sealing a traveling continuous tubing of heat-sealable thermoplastic film material comprising in combination a drum provided with a surface adapted to permit cooling of heat-sealed tubing carried thereon, said drum being driven about a substantially horizontal fixed axis, means for guiding the traveling tubing onto said drum, a heated shiftable sealing bar disposed adjacent said drum substantially parallel to the horizontal axis thereof, means for bringing said bar into contact with said tubing on the drum at substantially the point where the tubing first contacts the drum and for maintaining said bar in contact with said tubing and drum and stationary with respect to the drum for a predetermined time interval, whereby the bar is caused to move with the drum and heat the tubing over the area to be sealed, means for shifting said bar out of contact with said tubing and drum after said time interval, means for returning said bar to its initial position, and means for maintaining said tubing on said drum after heating for a time interval sufficient to permit said tubing to cool.

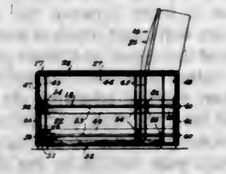
2,732,888
LOCKING MECHANISM FOR RECLINING SEATS
Gordon K. Jones, Burbank, Calif.
Application August 18, 1952, Serial No. 305,008
7 Claims. (Cl. 155—163)

1. In a reclining seat: a seat frame; a seat back frame hinged to said seat frame for reclining movement; a pair of telescoping links comprising a channel member and a bar slidable therein, outer ends of said links being connected respectively to said seat frame and to said back frame for telescoping movement of said links in response to reclining movement of said back frame; and means to lock said links against telescoping movement so as to fix said back frame in a selected position of adjustment, said means comprising rack teeth on said bar, exposed at the open side of said channel, a pair of ears on respective sides



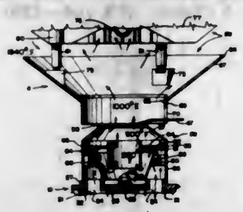
of said channel, projecting above said rack teeth, a shaft journalled in said ears and extending transversely over said rack teeth, a pinion fixed to said shaft between said ears and meshing with said rack teeth, a brake drum fixed to said shaft outside said channel, a brake band extending around said brake drum, and manually releasable means for tightening said brake band.

2,732,889
SEPARABLE CHAIR CONSTRUCTION
Harry G. Healey, San Gabriel, Calif.
Application March 2, 1953, Serial No. 339,634
6 Claims. (Cl. 155—196)



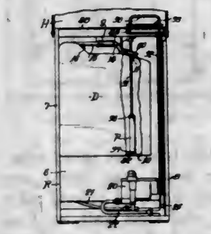
1. A chair comprising a seat, back and arm components, each being an independently constructed and separately upholstered unit, laterally extending apertured means on each seat and back component, and means extending through the arm components and through the apertured means to separably interconnect said components, each arm component having a frame therein and there being apertures in said frames aligned with the apertures of the laterally extending means, and the interconnecting means comprising tie rods extending through the aligned apertures.

2,732,890
OIL GAS GENERATING BURNER STRUCTURE
Leonard Vignere, Sr., New Castle, Pa.
Application September 4, 1952, Serial No. 307,860
10 Claims. (Cl. 158—28)



1. An oil gas generating burner structure including a substantially vertically-disposed casing having open upper and lower ends, a substantially horizontally-disposed disc carried by said wall and having a central opening and a drip hole, an upstanding open-ended cylindrical wall within said casing being spaced inwardly of the wall thereof and carried by said disc at said central opening and a substantially horizontally-disposed plate beneath said wall and beneath and spaced from said disc and provided with a nozzle extending upwardly into said casing axially of said central opening, said plate being formed with a basin surrounding the lower end portion of said nozzle, means to guide drip from said drip hole into said basin, said plate being formed with a channel opening into said basin and extending away from said basin, and said plate being formed with air inlets to the space inwardly of the wall of said casing with their discharge mouths above the bottoms of the basin and channel.

2,732,891
LIQUID FUEL FEED SYSTEM
Kenneth S. Jenson and Willis N. Nelson, Wisconsin Rapids, Wis., assignors to Preway Inc., Wisconsin Rapids, Wis., a corporation of Wisconsin
Application June 15, 1951, Serial No. 231,858
4 Claims. (Cl. 158—36.6)

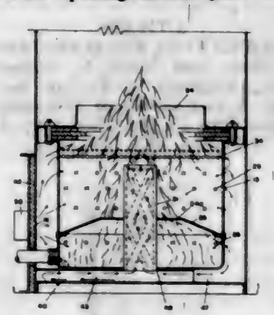


1. In combination with a heater supported on a base, a stand rising fixedly from the base, suspension means carried by the stand for releasable upright support thereon of a portable liquid fuel drum having a top filler opening, a vertical stand-pipe secured in a fixed vertical position to the stand and connected at its lower end with the heater, the upper end of the stand-pipe being open, a siphon tube having a long vertical arm loosely receivable within the stand-pipe for a substantial portion of its length and a short downwardly extending vertical arm loosely receivable within the drum through the filler opening thereof, and a priming pump operable by vertical reciprocation thereof having an inlet opening at its bottom, the lower end of the short arm of said tube being affixed to the upper end of said pump and communicating therewith, said pump being adapted to be positioned thereby within the drum toward its bottom, the siphon tube affording an operating element for reciprocating the priming pump vertically within the drum to force liquid fuel therein to rise and flow through the siphon tube and out through the long arm thereof, thereby establishing a siphonic condition within the tube to assure a constant feed of fuel therethrough into the stand-pipe and to the heater, said stand-pipe acting as a guide for the siphon tube during reciprocation thereof.

2,732,892
OIL BURNER
Henry W. Kelly, Columbus, Ohio
Application October 20, 1952, Serial No. 315,769
9 Claims. (Cl. 158—91)

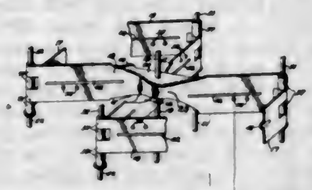
1. A burner for burning oil or similar fuel comprising a pot type body, said body being provided with an imperforate bottom and with an upstanding side wall to provide a large centrally disposed draft opening at the upper end of the body, said side wall being provided with air inlet openings adjacent its upper edge around the periphery thereof, a pilot flange located within the body on the side wall at a level spaced substantially above

the bottom and spaced substantially from the upper end of the body and extending inwardly from the side wall but having its inner edge terminating substantially from the center of the body to provide a centrally located large draft opening in axial alignment with the large draft opening at the upper end of the body, and an upwardly opening air inlet tube having an opening of substantially cross-section extending therethrough located centrally of the bottom of the body and extending upwardly from an air inlet opening in the bottom to a point just below the level of said air inlet openings at the upper edge of said body, said tube being centrally disposed within the draft opening in the pilot ring and being



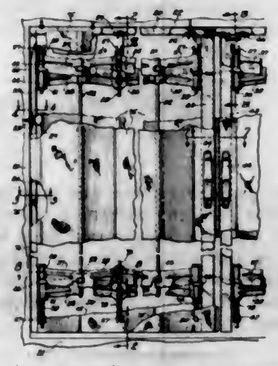
spaced substantially from the inner edge of said ring, said side wall of the body also being provided with pilot air openings below the level of said pilot ring and around the periphery of said side wall, said air tube serving to positively discharge preheated air therefrom at its upper end and to inspirate air from said inlet openings at the upper edge of said side wall and from said pilot openings below the pilot ring to provide for more perfect combustion, and an annular baffle disposed at the center of the upper end of the tube to prevent sweeping of the air upwardly through the core of the tube and to force it to travel in contact with the wall thereof for preheating.

2,732,893
EXTENSIBLE LINK STRUCTURE
Donald S. Harris, New Castle, Ind., assignor to New Castle Products, Inc., New Castle, Ind., a corporation of Indiana
Application July 10, 1952, Serial No. 298,081
9 Claims. (Cl. 160—84)



1. A foldable linkage including a sequentially connected series of full length hinge plates arranged in pairs, the plates of each pair having a common pivotal connection midway between the ends, each plate having an offsetting portion in the region of the pivot with the ends of the plate lying in parallel spaced apart planes, integral upper and lower flat flanges lying in parallel planes normal to the planes of the plates extending laterally in the same direction for the full length of the edges of the offsetting portion of the plate and for a short distance along the edges of the end portions thereof and provided with aligned openings for the pivotal connections, the plates of each pair crossing one another with the lower face of the lower flange of one plate lying against the upper face of the upper flange of the other plate.

2,732,894
FOLDABLE CLOSURE
Donald S. Harris, New Castle, Ind., assignor to New Castle Products, Inc., New Castle, Ind., a corporation of Indiana
Application July 24, 1953, Serial No. 370,062
26 Claims. (Cl. 160—84)



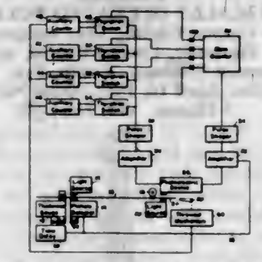
20. In a folding door in combination, a collapsible frame comprising upper and lower sequentially connected plates, pintles for uniting said plates together to form two extensible units, short vertical pintles from which the plates of said units project toward both sides of the folding door, a flexible cover for the door of such proportions that it folds between the projecting plates when the units are collapsed, vertical pintle rods to which the lateral ends of the upper and lower plates are secured to prevent the upper and lower units from moving toward one another, pairs of co-acting pin and slot devices near the top of the door, one part of each pair carried at the inner pivotal positions of the upper unit and the other part of each pair carried by the flexible cover for hooking the pin and slot devices together by the relative downward movement of the flexible cover, pairs of co-acting pin and slot devices near the bottom of the door, one part of each pair carried at the inner pivotal positions of the lower unit and the other pair of each pair carried by the flexible cover for hooking the pin and slot devices together by a relative upward movement of the flexible cover, springs for pressing apart the upper and lower members of each pair which are carried by the upper and lower units whereby the flexible cover is supported and held taut from top to bottom at its inner folds.

2,732,895
FRAMELESS TENSION SCREEN
James S. Steiner, Los Angeles, Calif., assignor to General Aluminum Corporation, Los Angeles, Calif., a corporation of California
Application April 21, 1953, Serial No. 350,156
5 Claims. (Cl. 160—329)



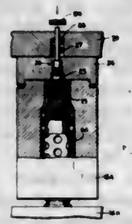
1. A frameless screen comprising: a panel of flexible screen material adapted to be secured along one edge of said panel; a relatively movable molding secured along the opposite edge of said panel and having a downwardly opening trough; a relatively fixed molding fitted in telescoping relationship to said movable molding and slidably supporting the latter for movement in the plane of said panel, said fixed molding having an upwardly opening trough opposed to said downwardly opening trough and an upper track; brackets slidably engageable with said track and releasably securable to a fixed frame member; and a spring mounted between said troughs and yieldably urging said movable molding away from said one edge of said panel to exert a constant tension on said panel.

2,732,896
CLASSIFICATION SYSTEM FOR SHEET SORTING
Walter N. Lundahl, Hopkins, Minn., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application July 22, 1950, Serial No. 175,322
18 Claims. (Cl. 164—68)



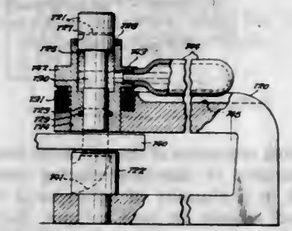
1. In apparatus for classifying sheet material including shear means for cutting said sheet material into finite lengths, the combination comprising a photo-cell mechanism responsive to the movement of said finite lengths, an electronic amplifier connected to said photo-cell mechanism, a main stepping relay connected to said amplifier and responsive to the amplified signal from said photo-cell mechanism, a defect detector connected to control the operation of said amplifier, a throw-out mechanism for ejecting defective material lengths, and an auxiliary stepping relay connected between said main stepping relay and said throwout mechanism for controlling the operation of the latter in response to signals from the main stepping relay.

2,732,897
METHOD OF AND APPARATUS FOR PERFORATING HOLLOW OBJECTS
C Walton Musser, Philadelphia, Pa.
Application June 7, 1951, Serial No. 230,360
6 Claims. (Cl. 164—90)
(Granted under Title 35, U. S. Code (1952), sec. 266)



2. Apparatus for perforating the wall of a hollow, substantially inelastic and non-flexible metallic object comprising a die fixture in snug fitting and relatively unyieldingly supporting relation to one side of the wall of said object and having openings of required size, shape and location, means together with portions of the object providing a closed chamber on the opposite side of the wall of the object adjacent to the area thereof to be perforated, solid explosive means disposed within and substantially filling said chamber for use when ignited instantaneously to exert sufficient gaseous pressure directly and with high velocity on said opposite side thereby to perforate the object in conformity with the openings in said die fixture, and means to ignite said solid explosive means.

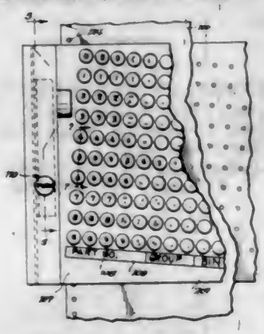
2,732,898
COMPRESSIBLE LIQUID STRIPPING UNIT
Paul H. Taylor, North Tonawanda, N. Y., assignor to Wales-Strippit Corporation, North Tonawanda, N. Y., a corporation of New York
Application September 19, 1950, Serial No. 185,604
8 Claims. (Cl. 164—94)



1. An energy storing and releasing device comprising an housing having a chamber formed therein, a compressible liquid filling the unoccupied space in said chamber, a plunger mounted to reciprocate in said housing, said plunger having an enlarged head reciprocable in said chamber and through an opening in one end wall of said housing and projecting outwardly of said opening, said head being closed against passage of liquid therethrough, said plunger having a shank projecting from one side of said head through said chamber and through a second opening in the end wall of said housing opposite said first named end wall opening, said second opening being in diameter less than said first named opening and being aligned axially with said first named opening, said shank being closed against passage of liquid therethrough and being of smaller diameter than said head, the walls of said first and second openings having bearing surfaces for guiding said head and said shank respectively during reciprocation of said plunger, and sealing means in the walls of said first and second openings for sealing the liquid in said housing to prevent leakage of the liquid both along said shank and along said head, whereby, upon application of an external force to said head, said head is caused to move into said chamber and in so doing to compress said liquid so that upon release of said force, said liquid will expand to restore said piston to its initial position.

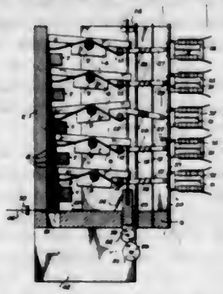
2. In a punching apparatus, a chamber filled with a compressible liquid, a sleeve secured to one end wall of said chamber, a punch having a shearing edge at one end, an enlarged head at its opposite end to which a punching force may be applied, and a shank connecting said head with said shearing edge, said shank being reciprocable through an opening in said one end wall and in said sleeve, said head being reciprocable in an opening in the opposite end wall of said chamber that is axially aligned with the first-named opening, said head normally being closed against passage of liquid therethrough and projecting outwardly beyond the said opposite end wall, the second-named opening having an internal diameter substantially equal to the external diameter of said head to guide said head throughout the stroke of said punch, the bore of said sleeve having an internal diameter equal substantially to the external diameter of said shank to guide said shank throughout the stroke of said punch, and means for sealing the liquid in said chamber against leakage along said shank and head, said liquid being compressible during the punching stroke and operating upon completion of the punching stroke to restore said punch to its original position.

2,732,899
APPARATUS FOR SELECTIVE RECORDING
George F. Wales, Kenmore, N. Y.
Application March 20, 1950, Serial No. 150,668
3 Claims. (Cl. 164—111)



1. Recording apparatus of the character described, comprising a plurality of indicia-producing elements which are arranged in a plurality of equi-spaced columns and in equi-spaced relation in each column, thereby to constitute a plurality of parallel rows of indicia-producing elements in which the indicia-producing elements are equi-spaced, the rows extending normal to the columns, means for actuating said elments, and means for feeding a record from through said apparatus in operative relation to said elements and in a direction inclined both to said columns and to said rows so that indicia produced on said record form by each of said elements will travel along a different path from indicia produced by the other elements.

2,732,900
SELECTIVE MULTIPLE PUNCH FOR CARD PERFORATING
Jacob Rabinow, Takoma Park, Md., assignor to the United States of America as represented by the Secretary of Commerce
Application September 11, 1951, Serial No. 246,144
6 Claims. (Cl. 164—111)
(Granted under Title 35, U. S. Code (1952), sec. 266)



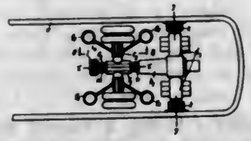
1. A selective multiple punch comprising: a die plate having a plurality of rows of closely spaced perforations; a punch for each perforation positioned at a right angle to said plate and constrained to travel into and out of its perforation with a punching motion, said punches being arranged in rows corresponding to the rows of perforations, the punches of each row being of approximately the same length, the length of the punches of adjacent rows being successively different; a motion-transmitting element for each punch extending at right angles from the top of each punch in the same plane and substantially parallel to the other motion transmitting elements of the same row of punches to provide successively adjacent rows of motion-transmitting elements for the successively adjacent rows of said punches; a common driving member having a plurality of slots, there being one slot for each of said motion-transmitting elements, the end of each of said motion-transmitting elements remote from said punches being inserted in a separate one of said slots, means for periodically moving said common driving member, the dimension of said slots in the direction of said motion being larger than the corresponding dimension of said motion-transmitting elements by an amount greater than the motion of said common driving member, a plurality of interposers, means for selectively moving each of said interposers into a separate one of said slots adjacent to the ends of said motion-transmitting elements, the dimension of the ends of said interposers and said motion-transmitting elements being such as to substantially fill each slot in the direction of motion of the common driving member.

2,732,901
HYDRAULICALLY OPERATED PULLING TOOL
Louis Davis, Corpus Christi, Tex., assignor of one-third to Ray H. Hostutler, Corpus Christi, and one-third to Floyd Alvernest Williams, Austin, Tex.
Application April 16, 1951, Serial No. 221,190
3 Claims. (Cl. 166—98)



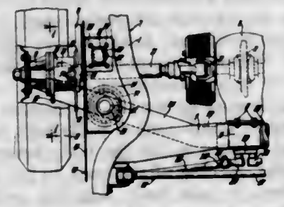
1. With a tubular string rotatable in a cased well bore, the combination of, a housing connected to said string, a tubular member within said housing and connected thereto to extend therebelow and adapted to rotate therewith after limited rotation of said housing with relation thereto and adapted by said housing for fluid communication with said string bore, a mandrel connected to said tubular member and adapted to rotate therewith, and to move downwardly with relation thereto, after limited rotation of said member, a slip assembly including slip members connected to said mandrel to rotate therewith, a tubular ram extending around said member and having a collar thereon adapted to be supported within said assembly and having a lower portion slidably connected to said assembly to rotate therewith and extending therebelow to establish fluid communication between the bore thereof and said well bore and adapted upon rotation to engage an object to be pulled, resilient means around said ram and adapted to bear against said assembly to permit said mandrel to move downwardly relative thereto and against said slip members to extend said slip members outwardly into gripping contact with said well bore, upper valve means operable upon rotation of said housing with relation to said tubular member to control fluid communication between said tubular member bore and said well bore, lower valve means operable upon rotation of said tubular member with relation to said ram to control fluid communication between said tubular member bore and said ram bore, cylinder means in said mandrel, piston means on said ram operable in said cylinder means, seal means between said tubular member and said ram above said lower valve, and port means above said seal means in said tubular member wall and in said ram wall to admit fluid pumped down said string from the top of the well into said cylinder means to exert force beneath said piston means to lift said ram and said engaged object when said valve means are closed.

2,732,902
RIGID AXLE SUSPENSION FOR MOTOR VEHICLES
Béla Barényi, Stuttgart-Rohr, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application November 28, 1950, Serial No. 198,014
Claims priority, application Germany November 28, 1949
4 Claims. (Cl. 180—73)



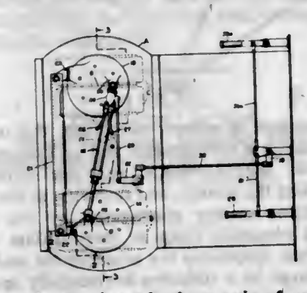
1. An arrangement and drive of an axle for a vehicle having a chassis comprising a rigid axle having a pair of wheels disposed at the opposite ends thereof and driven by said rigid axle, a thrust guider, means for swingably mounting said thrust guider at said vehicle chassis to enable swinging movement thereof about an axis extending transversely of the vehicle, means for mounting said rigid axle on said thrust guider to enable relative swinging movement of said rigid axle about an axis extending at right angle to said first-mentioned axis, and a driving device operatively connected with said rigid axle and including a crankshaft with the axis of rotation thereof extending transversely to the vehicle, said last-mentioned axis of rotation being arranged concentric with said first-mentioned axis of said thrust guider, and said thrust guider being journalled in said chassis at both ends of said crankshaft.

2,732,903
WHEEL SUSPENSION COMPRISING SECTIONAL DEAD AXLE AND CONNECTIONS THEREFROM TO VEHICLE FRAME
Charles A. Chayne, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application February 17, 1951, Serial No. 211,476
4 Claims. (Cl. 180—73)



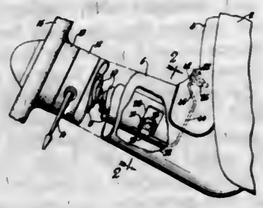
1. In a suspension for motor vehicles, the combination of a frame, including a pair of spaced side rails and a cross member rigidly connected to said side rails, a pair of road wheels disposed outwardly of said side rails, a pair of drive axles, one axle being operatively connected to each of said wheels, flexible driving means operatively connected to said axles for driving said wheels, a housing for each of said axles, a driving arm pivotally connecting each of said housings with said cross member, a sectional supporting axle rigidly connected to each of said wheel housings for holding the latter in properly spaced relation, means providing a pivotal joint between said sections whereby either of said sections may freely turn about its axis relative to the other section when subjected to torsional forces imposed by said wheels and housings, and means connecting said axle to said side rails, said last mentioned means including means for compelling said supporting axle to move in a vertical plane, when tilted vertically in either direction with substantially no axial displacement.

2,732,904
HYDRAULIC TYPE POWER STEERING
Charles S. Schroeder, Philadelphia, Pa., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn., a corporation of Connecticut
Application October 5, 1951, Serial No. 249,824
10 Claims. (Cl. 180—79.2)



9. In a truck, steering wheels, a pair of spaced mounting members, means mounting one of said wheels on each mounting member, bearing means on which each of said mounting members rotates on a steering axis, means connecting said mounting members for rotation together on their bearing means, power means including two parts movable relatively to one another and means for applying power between said parts with each part reacting through the other to produce thrust and pull, means connecting one of said parts to each of said mounting members at a predetermined point whereby the thrust and pull is effective to turn both mounting members simultaneously in the same direction, the said two parts by reacting relatively to one another equalizing at all times the thrust and pull between the mounting members, a steering handle, and means through which said steering handle controls the power applied between the said two parts of the power means to cause both mounting members to follow the movements of said steering handle for steering the truck.

2,732,905
TRANSMISSION CONTROL INDICATOR
Ralph R. Anderson and William T. Gerber, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 31, 1952, Serial No. 318,056
6 Claims. (Cl. 180—90)



6. In a motor vehicle, a steering column, transmission control means disposed within said column, an instrument panel, said instrument panel having a housing attached thereto and partially surrounding said column, vehicle indicator means in said housing including a transmission

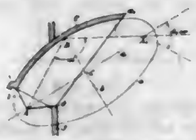
control indicator dial, an indicator needle for said dial, a carrier movable with said control, means formed in said carrier for receiving one end of said needle, and adjusting means on said carrier permitting simultaneous longitudinal and transverse adjustment of said needle relative to said control.

2,732,906
SEISMIC SURVEYING
William Harry Mayne, San Antonio, Tex., assignor to Olive S. Petty, San Antonio, Tex.
Application July 7, 1950, Serial No. 172,592
4 Claims. (Cl. 181—.5)



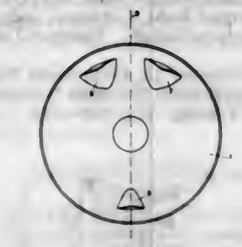
1. In a method of seismic surveying, the steps which comprise locating a seismometer and an explosive charge in horizontally spaced relation near the surface of the earth, exploding the charge, and receiving at the seismometer the seismic energy propagated by the explosion and reflected upwardly from an intermediate area on a sub-surface bed, relocating the seismometer and a second explosive charge in a different horizontally spaced relation at points so located that energy propagated by the second charge will travel a path of different length but will be reflected to the seismometer from the same intermediate area on the said sub-surface bed, firing the second charge, and receiving at the seismometer the seismic energy propagated by the second explosive charge and reflected upwardly from the same intermediate area on the said sub-surface bed, and recording an algebraic combination of the energy received from the two explosions.

2,732,907
SOUND TRANSDUCERS
Joseph Léon, Choisy-le-Roi, France, assignor to Society "Elipson," S. A., Paris, France, a French corporation
Application June 17, 1952, Serial No. 293,969
Claims priority, application France June 21, 1951
4 Claims. (Cl. 181—31)



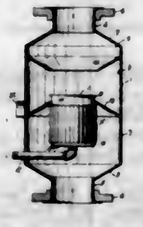
1. A sound transducer which comprises, in combination, a sound generator, a reflecting surface constituted by a portion of an ellipsoid of revolution, this surface being located and arranged with respect to the sound generator in such manner that the point forming the virtual acoustic source of said generator is located at one focus of the ellipsoid, the second focus of said ellipsoid, toward which the reflected sounds converge, being located on the outside of the reflecting surface and downstream of the mouth thereof, the reflecting surface being shaped and the sound generator being positioned with respect to said reflecting surface so that the axis of sound transmission of said generator intersects said reflecting surface and makes with the axis of the sound beam reflected from said surface an angle greater than 90°, and the mouth of the reflecting surface extending to a point in the immediate vicinity of the edge of the sound generator.

2,732,908
LOUDSPEAKER DIAPHRAGM HAVING ASYMMETRIC INDENTATIONS
Francis Hugh Brittain, Pinner, England, assignor to The General Electric Company Limited, London, England, a British company
Application November 29, 1952, Serial No. 323,322
Claims priority, application Great Britain December 5, 1951
5 Claims. (Cl. 181—32)



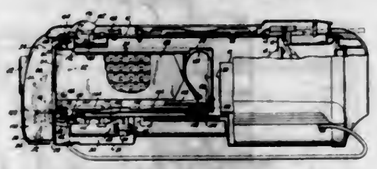
5. A loudspeaker having a conical diaphragm of a single material which is indented at only three places in the outer half of the diaphragm, two of the indentations being disposed close to each other and the third being disposed diametrically opposite the gap between the other two, and the indentations being in the form of louvres the free edges of which are in the form of curves whose curvatures are in opposite directions at different points along their lengths.

2,732,909
SCRUBBER PURIFIER
Charles Langdon Campbell, Painesville, Ohio, assignor to Centrifix Corporation, Cleveland, Ohio, a corporation of Ohio
Application March 23, 1953, Serial No. 344,142
7 Claims. (Cl. 183—21)



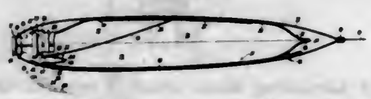
1. A contacting and purifying device comprising a cylindrical body having inlet and outlet openings, a wall within said body having an axial opening and dividing the body into a contacting chamber and a separation chamber, a fixed tuyere in said contacting chamber, means for supplying a shallow water level in the bottom of the tuyere, and an inverted frusto-conical baffle wall having an axial opening and secured within the body between the tuyere and the outlet opening of the body to provide an expansion chamber in said body adjacent said outlet, said tuyere having a bottom wall and comprising a plurality of spaced tangentially arranged blades extending upwardly from a point adjacent the bottom wall, and an imperforate neck portion secured within and extending beyond the opening of said first wall, said neck portion having a peripheral lip extending upwardly and curved outwardly thereof and into said separation chamber, that portion of the tuyere extending from said bottom wall upwardly to the bottom extremities of said blades constituting a shallow liquid reservoir, a liquid supply means for said reservoir, and a transverse member spaced from said blade extremities and spaced above and supported on said bottom wall.

2,732,910
CONTROL FOR AUTOMATIC VACUUM CLEANERS
John T. Ferraris, Stamford, Conn., assignor to Electrolux Corporation, Old Greenwich, Conn., a corporation of Delaware
Application January 29, 1954, Serial No. 407,078
6 Claims. (Cl. 183—37)



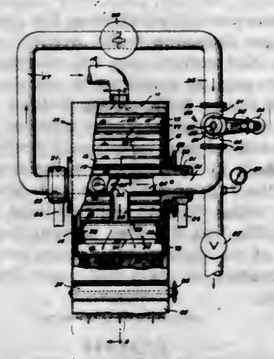
6. In a vacuum cleaner, a casing capable of maintaining air at lower than atmospheric pressure while a suction producing means is operating, a dust bag disposed in a space in said casing, ejector mechanism disposed in said space and releasable for ejecting said bag from said casing, suction producing means having an inlet communicating with said space, a first housing, a control diaphragm dividing said housing into a high suction chamber and a low suction chamber, means for connecting said high suction chamber with said space and for connecting said low suction chamber with a region of said casing which is separated from said space by said dust bag, a second housing enclosing a diaphragm chamber having an opening communicating directly with said space, a power diaphragm associated with said diaphragm chamber, a stem connected to said power diaphragm and extending through said opening and movable by said power diaphragm for releasing said ejector mechanism, valve means in said first housing operable by a predetermined movement of said control diaphragm for establishing communication between said high suction chamber and said diaphragm chamber for causing movement of said power diaphragm and stem, and separate valve means carried by said stem for normally closing said opening and operable by movement of said stem for establishing communication through said opening directly between said space and said diaphragm chamber.

2,732,911
DISPOSABLE DUST BAGS FOR VACUUM CLEANERS
Francis A. Gall, Springfield, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application January 28, 1952, Serial No. 268,595
1 Claim. (Cl. 183—51)



A disposable dust-bag comprising a first pervious rectangular wall-member formed as a single piece of flat material having two parallel longitudinal edges and top and bottom short edges normal to the longitudinal edges; a second pervious wall-member formed from a single piece of material infolded and outfolded on two sides to a size which is the same as and coextensive with said first wall-member, said infolding and outfolding forming two pleats each having two leaf-panels extending parallel to the longitudinal edges of said first wall-member; a shield extending one half the length of said first wall-member and positioned mid-way between the top and bottom edges of said first wall-member; a trap-member coextensive with substantially the lower half of said first wall member and positioned between said wall-members, said trap-member being the same width as said first wall-member and having a lower end, said trap-member also having at its upper end a downwardly pointed V-shaped notch; means securing the longitudinal edges of said wall-members together and at the same time securing said shield and said trap-member between said wall-members, thereby forming an entrance passageway between said trap-member and said first wall-member, a filtering cavity between said first and second wall-members, and a collecting pocket between said trap-member and said second wall-member; an upfolded transverse leaf-panel formed as an integral part of the lower end of said trap-member and joined thereto along a transverse line; a downfolded transverse leaf-panel formed as a continuation of said upfolded transverse leaf-panel and joined thereto along a transverse fold line, said downfolded transverse leaf-panel also being secured to the lower end of said second wall-member; and means for joining the lower end of said longitudinally extending leaf-panels to the edges of said transverse leaf-panels, thereby forming an inturned expansion pleat extending laterally of the dust-bag and closing the lower end of said collecting pocket.

2,732,912
DUST COLLECTOR
Frank W. Young, Medfield, Mass.
Application January 28, 1953, Serial No. 333,639
8 Claims. (Cl. 183—61)



1. A continuous rotary dust collector which comprises, in combination, a container providing a filtration chamber having an inlet for the gaseous mixture to be filtered, a generally cylindrical hollow gas permeable filter base structure mounted in said chamber for rotation about its principal axis, a filter cloth surrounding and carried by said structure, a source of suction, a conduit connecting said source to the interior of said structure, stationary baffles mounted within said structure extending into engagement with the inner surface thereof and defining a discharge sub-chamber isolated from said suction adjacent a narrow discharge area of said cloth, and a source of rapidly pulsating gas under very low pressure in communication with said sub-chamber for rapidly vibrating said cloth in said discharge area thereby to discharge therefrom into said filtration chamber any particles deposited on the outer surface thereof.

2,732,913
MUFFLER, SPARK ARRESTER, AND WATER TRAP FOR INTERNAL COMBUSTION ENGINES HAVING VERTICAL STACKS
Jess C. Higgins, Buckeye, Ariz.
Application October 11, 1954, Serial No. 461,479
2 Claims. (Cl. 183—96)

1. A muffler, spark arrester and water trap for internal combustion engines having vertical exhaust stacks, composed of a cylindrical core having an opening at the bottom adapted to fit onto said exhaust stack, and an exhaust opening at the top, a jacket having end closures enclosing said core, an upwardly domed blocking plate

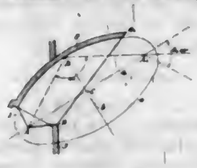
control indicator dial, an indicator needle for said dial, a carrier movable with said control, means formed in said carrier for receiving one end of said needle, and adjusting means on said carrier permitting simultaneous longitudinal and transverse adjustment of said needle relative to said control.

2,732,906
SEISMIC SURVEYING
William Harry Mayne, San Antonio, Tex., assignor to Olive S. Petty, San Antonio, Tex.
Application July 7, 1950, Serial No. 172,592
4 Claims. (Cl. 181—.5)



1. In a method of seismic surveying, the steps which comprise locating a seismometer and an explosive charge in horizontally spaced relation near the surface of the earth, exploding the charge, and receiving at the seismometer the seismic energy propagated by the explosion and reflected upwardly from an intermediate area on a sub-surface bed, relocating the seismometer and a second explosive charge in a different horizontally spaced relation at points so located that energy propagated by the second charge will travel a path of different length but will be reflected to the seismometer from the same intermediate area on the said sub-surface bed, firing the second charge, and receiving at the seismometer the seismic energy propagated by the second explosive charge and reflected upwardly from the same intermediate area on the said sub-surface bed, and recording an algebraic combination of the energy received from the two explosions.

2,732,907
SOUND TRANSDUCERS
Joseph Léon, Choisy-le-Roi, France, assignor to Society "Elipson," S. A., Paris, France, a French corporation
Application June 17, 1952, Serial No. 293,969
Claims priority, application France June 21, 1951
4 Claims. (Cl. 181—31)



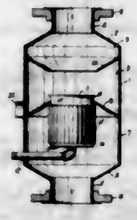
1. A sound transducer which comprises, in combination, a sound generator, a reflecting surface constituted by a portion of an ellipsoid of revolution, this surface being located and arranged with respect to the sound generator in such manner that the point forming the virtual acoustic source of said generator is located at one focus of the ellipsoid, the second focus of said ellipsoid, toward which the reflected sounds converge, being located on the outside of the reflecting surface and downstream of the mouth thereof, the reflecting surface being shaped and the sound generator being positioned with respect to said reflecting surface so that the axis of sound transmission of said generator intersects said reflecting surface and makes with the axis of the sound beam reflected from said surface an angle greater than 90°, and the mouth of the reflecting surface extending to a point in the immediate vicinity of the edge of the sound generator.

2,732,908
LOUDSPEAKER DIAPHRAGM HAVING ASYMMETRIC INDENTATIONS
Francis Hugh Brittain, Pinner, England, assignor to The General Electric Company Limited, London, England, a British company
Application November 29, 1952, Serial No. 323,322
Claims priority, application Great Britain December 5, 1951
5 Claims. (Cl. 181—32)



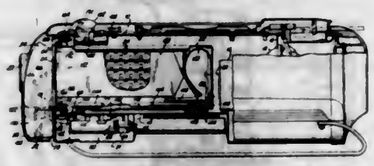
5. A loudspeaker having a conical diaphragm of a single material which is indented at only three places in the outer half of the diaphragm, two of the indentations being disposed close to each other and the third being disposed diametrically opposite the gap between the other two, and the indentations being in the form of louvres the free edges of which are in the form of curves whose curvatures are in opposite directions at different points along their lengths.

2,732,909
SCRUBBER PURIFIER
Charles Langdon Campbell, Painesville, Ohio, assignor to Centrifix Corporation, Cleveland, Ohio, a corporation of Ohio
Application March 23, 1953, Serial No. 344,142
7 Claims. (Cl. 183—21)



1. A contacting and purifying device comprising a cylindrical body having inlet and outlet openings, a wall within said body having an axial opening and dividing the body into a contacting chamber and a separation chamber, a fixed tuyere in said contacting chamber, means for supplying a shallow water level in the bottom of the tuyere, and an inverted frusto-conical baffle wall having an axial opening and secured within the body between the tuyere and the outlet opening of the body to provide an expansion chamber in said body adjacent said outlet, said tuyere having a bottom wall and comprising a plurality of spaced tangentially arranged blades extending upwardly from a point adjacent the bottom wall, and an imperforate neck portion secured within and extending beyond the opening of said first wall, said neck portion having a peripheral lip extending upwardly and curved outwardly thereof and into said separation chamber, that portion of the tuyere extending from said bottom wall upwardly to the bottom extremities of said blades constituting a shallow liquid reservoir, a liquid supply means for said reservoir, and a transverse member spaced from said blade extremities and spaced above and supported on said bottom wall.

2,732,910
CONTROL FOR AUTOMATIC VACUUM CLEANERS
John T. Ferraris, Stamford, Conn., assignor to Electrolux Corporation, Old Greenwich, Conn., a corporation of Delaware
Application January 29, 1954, Serial No. 407,078
6 Claims. (Cl. 183—37)



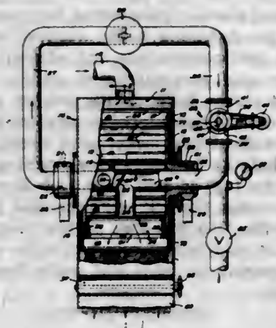
6. In a vacuum cleaner, a casing capable of maintaining air at lower than atmospheric pressure while a suction producing means is operating, a dust bag disposed in a space in said casing, ejector mechanism disposed in said space and releasable for ejecting said bag from said casing, suction producing means having an inlet communicating with said space, a first housing, a control diaphragm dividing said housing into a high suction chamber and a low suction chamber, means for connecting said high suction chamber with said space and for connecting said low suction chamber with a region of said casing which is separated from said space by said dust bag, a second housing enclosing a diaphragm chamber having an opening communicating directly with said space, a power diaphragm associated with said diaphragm chamber, a stem connected to said power diaphragm and extending through said opening and movable by said power diaphragm for releasing said ejector mechanism, valve means in said first housing operable by a predetermined movement of said control diaphragm for establishing communication between said high suction chamber and said diaphragm chamber for causing movement of said power diaphragm and stem, and separate valve means carried by said stem for normally closing said opening and operable by movement of said stem for establishing communication through said opening directly between said space and said diaphragm chamber.

2,732,911
DISPOSABLE DUST BAGS FOR VACUUM CLEANERS
Francis A. Gall, Springfield, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application January 28, 1952, Serial No. 268,595
1 Claim. (Cl. 183—51)



A disposable dust-bag comprising a first pervious rectangular wall-member formed as a single piece of flat material having two parallel longitudinal edges and top and bottom short edges normal to the longitudinal edges; a second pervious wall-member formed from a single piece of material infolded and outfolded on two sides to a size which is the same as and coextensive with said first wall-member, said infolding and outfolding forming two pleats each having two leaf-panels extending parallel to the longitudinal edges of said first wall-member; a shield extending one half the length of said first wall-member and positioned mid-way between the top and bottom edges of said first wall-member; a trap-member coextensive with substantially the lower half of said first wall member and positioned between said wall-members, said trap-member being the same width as said first wall-member and having a lower end, said trap-member also having at its upper end a downwardly pointed V-shaped notch; means securing the longitudinal edges of said wall-members together and at the same time securing said shield and said trap-member between said wall-members, thereby forming an entrance passageway between said trap-member and said first wall-member, a filtering cavity between said first and second wall-members, and a collecting pocket between said trap-member and said second wall-member; an upfolded transverse leaf-panel formed as an integral part of the lower end of said trap-member and joined thereto along a transverse line; a downfolded transverse leaf-panel formed as a continuation of said upfolded transverse leaf-panel and joined thereto along a transverse fold line, said downfolded transverse leaf-panel also being secured to the lower end of said second wall-member; and means for joining the lower end of said longitudinally extending leaf-panels to the edges of said transverse leaf-panels, thereby forming an inturned expansion pleat extending laterally of the dust-bag and closing the lower end of said collecting pocket.

2,732,912
DUST COLLECTOR
Frank W. Young, Medfield, Mass.
Application January 28, 1953, Serial No. 333,639
8 Claims. (Cl. 183—61)

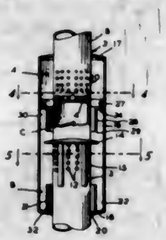


1. A continuous rotary dust collector which comprises, in combination, a container providing a filtration chamber having an inlet for the gaseous mixture to be filtered, a generally cylindrical hollow gas permeable filter base structure mounted in said chamber for rotation about its principal axis, a filter cloth surrounding and carried by said structure, a source of suction, a conduit connecting said source to the interior of said structure, stationary baffles mounted within said structure extending into engagement with the inner surface thereof and defining a discharge sub-chamber isolated from said suction adjacent a narrow discharge area of said cloth, and a source of rapidly pulsating gas under very low pressure in communication with said sub-chamber for rapidly vibrating said cloth in said discharge area thereby to discharge therefrom into said filtration chamber any particles deposited on the outer surface thereof.

2,732,913
MUFFLER, SPARK ARRESTER, AND WATER TRAP FOR INTERNAL COMBUSTION ENGINES HAVING VERTICAL STACKS
Jess C. Higgins, Buckeye, Ariz.
Application October 11, 1954, Serial No. 461,479
2 Claims. (Cl. 183—96)

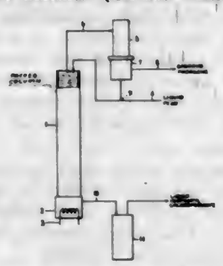
1. A muffler, spark arrester and water trap for internal combustion engines having vertical exhaust stacks, composed of a cylindrical core having an opening at the bottom adapted to fit onto said exhaust stack, and an exhaust opening at the top, a jacket having end closures enclosing said core, an upwardly domed blocking plate

within said core disposed midway of the length enclosed by said jacket closing said core and separating it into an upper part and a lower part, said upper core part having outlet perforations throughout an annular area immediately above said domed plate, and inlet perforations in the lower part of said core disposed in an annular area below said domed plate, a downwardly dished water and gas deflecting baffle attached to said lower core part above said inlet perforations, a spark arresting perforated ring-shaped plate attached to the inner face of said jacket and disposed above the position of said water and gas deflecting baffle, a cylindrical collar baffle attached to the inner edge of said spark arresting plate forming an annular spark arresting trap below said plate



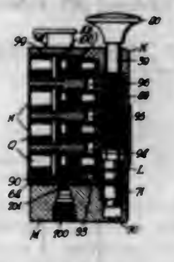
and a tortuous annular passageway for gases around said water and gas deflecting baffle, vertical vanes disposed around said inlet perforations and adapted to give gases issuing from said perforations a circular motion, and a cylindrical sleeve baffle in the bottom of said jacket forming an annular spark pocket adjacent the lower portion of the wall of said jacket; said sleeve baffle having a drainage hole in its bottom for draining water which may enter the top of said core and flow through the outlet perforations therein and over said gas and water deflecting baffle into the area surrounding said core in the bottom of said jacket; said jacket lower end closure having an opening to drain said water from the bottom of said jacket.

2,732,914
PRODUCTION OF ISOPROPYL CHLOROFORMATE
Calvin B. Holden, Doylestown, Ohio, assignor to Columbia-Southern Chemical Corporation, Allegheny County, Pa., a corporation of Delaware
Application February 25, 1953, Serial No. 338,846
20 Claims. (Cl. 183—119)



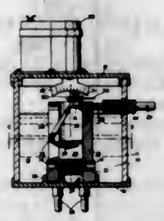
1. A method of treating mixtures of phosgene and isopropyl chloroformate which comprises introducing a mixture of phosgene and isopropyl chloroformate into the upper portion of a defined zone, providing a pool of isopropyl chloroformate, maintaining the pool by adding thereto the liquid present in the lowermost portion of the zone, vaporizing a portion of the contents of said pool and passing the resulting vapors into the lower portion of the zone, removing a portion of the liquid contents of the pool and cooling the removed liquid to at least 40° C., said removal and cooling being performed within 15 minutes of the time such material was introduced into the zone and removing gaseous phosgene from said zone.

2,732,915
LUBRICATION
Thomas R. Thomas, New York, N. Y.
Application July 3, 1951, Serial No. 235,021
10 Claims. (Cl. 184—7)



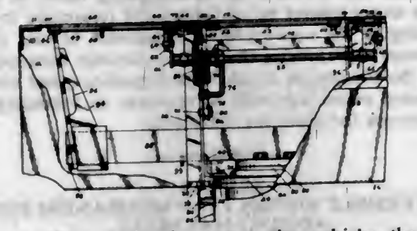
1. A centralized lubrication installation of the high restriction flow metering outlet type for a light manually operated machine comprising a combination piston pump-reservoir-strainer meter unit assembly including in a single rectangular block, a reservoir, a strainer, a ball check, a spring returned piston and a plurality of parallel recesses on said block receiving high restriction flow metering fittings, said block having a recess serving as a cylinder to receive said piston and said block having another recess serving as said reservoir and said block having connecting flow passageways including said ball check and also including said strainer and the side of said block also having a plurality of parallel recesses in communication with said cylinder, said fittings blocking said parallel recesses, said flow passageways conducting the lubricant from the reservoir to the piston and from the piston to the recesses.

2,732,916
LUBRICATING MEANS
Cyril Reginald Deakin, Leicester, England
Application August 20, 1953, Serial No. 375,468
Claims priority, application Great Britain September 27, 1952
3 Claims. (Cl. 184—14)



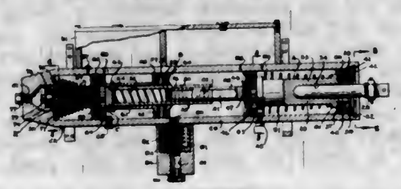
1. A lubricating means which is required to deliver a small, predetermined quantity of lubricant at successive predetermined periods, including a cylinder with a gravity-biased plunger therein, a lever adapted to raise said plunger against its bias, said cylinder having a port for lubricant through its wall which is uncovered when said plunger is raised, and a clockwork mechanism driving a slowly-rotating member, said member adapted to selectively carry angularly-spaced projections which act on the lever and, on passing the latter, allow the plunger to move downwardly to effect a delivery of lubricant from beneath, and comprising, in the cylinder wall, a metering transfer passage consisting of two parallel and adjacent drillings in the cylinder wall which communicate with one another below the upper end of the cylinder, the lower end of one of the drillings communicating with the interior of said cylinder below said plunger, and the lower end of the other drilling forming an outlet for connection to a point to be lubricated.

2,732,917
LIFTING DEVICES
Harvard K. Hecker, Clayton, Mo., assignor to Curtis Manufacturing Company, St. Louis, Mo., a corporation of Missouri
Application March 11, 1949, Serial No. 80,869
10 Claims. (Cl. 187—8.62)



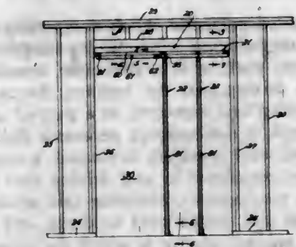
1. A lifting device for automotive vehicles that comprises a plunger which can be elevated and lowered, a support disposed transversely of said plunger, said support being a straight bar, chocks that are carried by said support but are adjustable along the length of said support, said chocks having vehicle-engaging portions that are eccentric of the support-engaging portions of said chocks, and are transverse of said support, said chocks having slots therein adjacent the support-engaging portions thereof, a pit in the floor of the structure in which said lifting device is to be operated, cover plates adjacent said pit, hinges that have portions fixed relative to said pit and have other portions secured to and rotatable with said cover plates, said hinges permitting rotation of said cover plates into and out of closed position, and horizontally-extending slots in said cover plates, said chocks being taller than said cover plates are wide whereby the tops of said chocks can project above the upper edges of said cover plates when said cover plates are open and when said support is at the level of said slots in said cover plates, said slots in said cover plates and said slots in said chocks being registerable to receive a poker, said chocks being dimensioned to engage and lift said cover plates when said lifting device starts to move upwardly from the lowered position.

2,732,918
BRAKE MASTER CYLINDER ASSEMBLY
Virgil Hackworth, Riceville, Ky.
Application November 3, 1950, Serial No. 193,930
4 Claims. (Cl. 188—152)



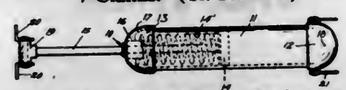
2. In a brake master cylinder, a single elongated tubular cylinder having a continuous and substantially unobstructed bore, said cylinder having a closed end and an open end, a first slidable piston in the cylinder at the open end thereof, a second piston assembly in the cylinder at the inward end of said first piston, a third slidable piston in the cylinder between the closed end of the cylinder and said second piston assembly, said first, second, and third pistons being spaced from each other and the cylinder being devoid of abutments engageable by the pistons in operated positions of the pistons, actuating means associated with said first piston for moving said first piston toward the second piston assembly from a starting position, said first piston having a reduced diameter axial boss on the axial inward end of said first piston, said boss being hollow and having means communicating with the interior of the cylinder while said first piston is in its starting position, said second piston assembly comprising an imperforate tubular housing slidably surrounding said boss, and means securing said housing to said third piston.

2,732,919
SLIDING DOOR FRAME ASSEMBLY
Leonard E. Johnson, Jr., Elkhart, Ind., assignor to Kennatrack Corporation, a corporation of Indiana
Application June 24, 1952, Serial No. 295,298
2 Claims. (Cl. 189—34)



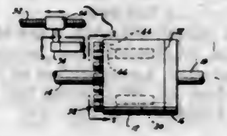
1. A pocket door frame for insertion in a rough opening of a wall defined by a floor and two spaced vertical studs, comprising, a transverse header member comprising a downwardly open channel member and a track member disposed within such channel member, said channel and track members being designed to support the weight of a door, said header member being of such length that when horizontally disposed its ends will engage the opposed faces of said studs, such ends having fastening means adapted to be shifted vertically to adjust the header member into said horizontal position, a split jamb member attached to the said header member at substantially the mid-point of the latter, said jamb member comprising two vertical outwardly facing channel members having a transverse tie between their lower ends provided with a foot plate for supporting the jamb member on the floor, the outwardly facing channel members having means for the attachment of wall covering materials thereto and having means pivotally connecting them to said header member at their upper ends, each of said channel members having a vertical slot at its pivotal connection to said header member such that the lower end of the split jamb member may be swung in the vertical plane of said header member to bring the same into vertical plumb position and thereafter fixed to the floor, whereby the essential requirements of leveling the header member and plumbing the split jamb member may be performed by a workman in installing the device.

2,732,920
FUSIBLE MOTION ARRESTOR
Stanley E. Newton, Spokane, Wash.
Application July 20, 1953, Serial No. 369,002
7 Claims. (Cl. 189—45)



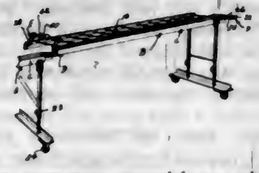
1. In a closure operating device having a reciprocable rod biased to move a closure to the closed position during telescopic movement into a second element of the device, means for deferring said telescopic movement until a predetermined temperature is present comprising a flat ring having a central bore encircling said rod in a barely loose fit; said ring having a distortion maintained by material fusible at said predetermined temperature and disposed to bear against said second element and effect frictional binding of the rod in said bore until said fusing action.

2,732,921
SELF-EXCITED MAGNETIC CLUTCH
Jacob Rabinow, Takoma Park, Md., assignor to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application October 3, 1949, Serial No. 119,247
10 Claims. (Cl. 192—21.5)



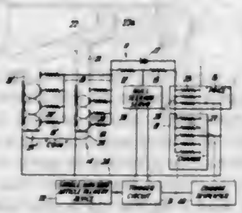
1. A self-excited magnetic clutch comprising a driving part carrying magnetizing windings for magnetizing the clutch, a driven part, a first generator armature connected to said driving part for rotation therewith, conductors connecting said armature to a part of said magnetizing windings, a non-rotating generator field magnet relative to which said armature is rotated, a second generator armature connected to said driving part for rotation therewith, conductors connecting said second armature to a part of said magnetizing windings, and a second generator field magnet relative to which the second armature is rotated, said second field magnet being rotated by the driven part of the clutch.

2,732,922
CONVEYOR
John J. McLaughlin, Philadelphia, Pa., assignor to The Wilkie Company, Philadelphia, Pa.
Application November 13, 1953, Serial No. 391,865
5 Claims. (Cl. 193—35)



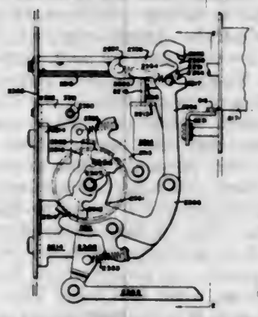
1. A gravity conveyor comprising a plurality of sections, one section having ground engaging legs at each end thereof, a second section having a roller at one end wherein said roller is in rolling engagement with said first section and legs at the other end resting upon the ground, the roller of said second section being in rolling engagement with said first section at any point along said first section whereby said second section may move in a vertical plane and in a horizontal plane with respect to said first section.

2,732,923
VENDING MACHINE
Henry W. Parker, Flushing, N. Y., assignor to Sylvania Electric Products Inc., a corporation of Massachusetts
Application April 17, 1952, Serial No. 282,836
18 Claims. (Cl. 194—7)



1. A coin controlled vending machine, comprising coin receiving means, a circuit network including a first impedance controlled by inserted coins and variable in accordance with the value of coins inserted in said coin receiving means, a second impedance having a value selected in accordance with the price of the article to be delivered, and a third impedance variable to balance said network, a null-seeking electromechanical drive connected to said network and controlled by the unbalance thereof and operatively connected to said third impedance to balance said network, means dispensing values of coin change under control by said drive and responsive to the balancing of the network after adjustment of said third impedance for returning change in an amount corresponding to the adjustment of said third impedance, and article dispensing means operable in response to balancing of said network for delivering said article.

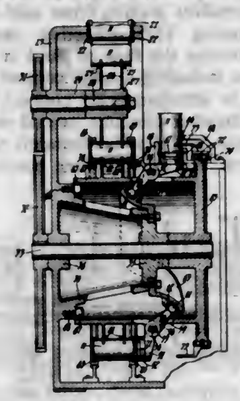
2,732,924
REVERSIBLE RIBBON FEED MECHANISM FOR ADDING MACHINES
Nathaniel F. Hawthorne, Alameda, Calif., assignor to Friden Calculating Machine Co., Inc., a corporation of California
Application July 20, 1953, Serial No. 369,204
4 Claims. (Cl. 197—162)



1. A reversible ribbon feed for an office machine having a printing platen comprising ratchet wheels for mounting ribbon spools one at each end of the platen, a rockable drive arm associated with each ratchet wheel, drive pawls mounted one on each drive arm and engaging the teeth of the corresponding ratchet wheels, a connecting link connecting said drive arms, a power-driven oscillatable member, a drive link directly connecting one of said drive arms to said power-driven member and having means for engaging said power-driven member in either one of two positions spaced apart longitudinally of said link, resilient means between said link and said oscillatable member for biasing said drive link and said oscillatable member into engagement in either of such positions, and throwout ears disposed one adjacent each ratchet wheel and operable in one connecting position of said link with said oscillatable member to disable one of said drive pawls, and in the other position of said link and said oscillatable member to disable the other of said drive pawls.

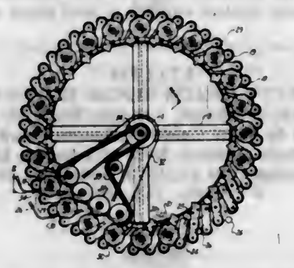
2,732,925
ARTICLE FEEDING AND TURNING MECHANISM
William Pechy, Belmar, N. J., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application October 19, 1951, Serial No. 252,058
11 Claims. (Cl. 198—33)

1. A container feeding mechanism, comprising in combination a carrier member rotatable on an axis, a feeding conveyor disposed adjacent and in axial alignment with said carrier member for feeding containers in a horizontal position, an auxiliary feeding conveyor disposed adjacent and in axial alignment with said carrier member for feeding containers in a vertical position, means for rotating said carrier member and said conveyors on said axis in unison, a tiltable head carried on and moving with said carrier member, gripper means on said head for gripping an end of a container, and means for tilting said head into position adjacent an end of a container on one of said conveyors to remove



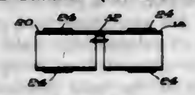
the container therefrom and for tilting said head and the gripped container into alignment with the other of said conveyors for the reception of the container by said other conveyor.

2,732,926
ROTATABLE JIGS
William G. Prion, Carnegie, Pa.
Application October 22, 1952, Serial No. 316,114
4 Claims. (Cl. 198—33)



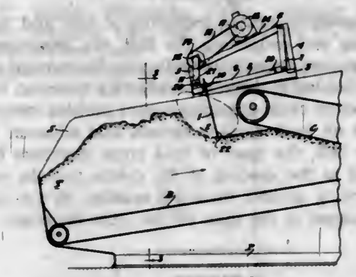
1. In a rotating jig for soldering tubes, rotary table having a plurality of angularly spaced fixed brackets and a plurality of cooperating hinged brackets, pairs of spool shaped rollers on each of said fixed brackets and a roller on said hinged bracket in alignment with the space between the cylindrical surfaces of said spool rollers for holding tubular members against and between the rollers of said fixed brackets, one of said spool-shaped rollers of each pair having means for engaging the tubular members to urge the same in an axially downward direction in response to rotation, and means for rotating said last-named spool roller during a portion of the travel of the rotary table.

2,732,927
SHEETED DOUGH TURNER
Francis Frederick Hansen, Pittsburgh, Pa.
Application March 23, 1953, Serial No. 343,848
2 Claims. (Cl. 198—33)



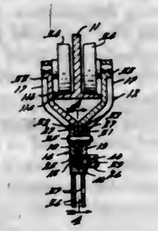
1. Apparatus for turning a sheeted dough piece while transporting it continuously in a forward direction comprising a pair of flat parallel belts arranged in nearly contiguous side-by-side relation and forming by their combined widths a common flat support wider than the dough piece received thereon, and means for driving both belts in the same direction but at relatively different speeds, whereby a sheet of dough supported thereon may be rotated about a vertical axis through a predetermined angle while being continuously carried along in a forward direction.

2,732,928
FEED HOPPER FOR TOBACCO CUTTING MACHINERY
Patrick Q. R. Schreiber, Cobham, England, assignor to Robert Legg Limited, London, England, a British company
Application June 16, 1952, Serial No. 293,717
Claims priority, application Great Britain June 22, 1951
5 Claims. (Cl. 198—59)



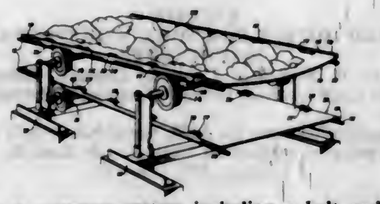
1. In an apparatus for conveying loose materials, in combination with a feed hopper, upper and lower endless conveyors having adjacent runs moving in the same direction to convey material from the hopper and said runs being convergent in said direction of movement, a rake element, having prongs extending downwardly to engage the material in the hopper in advance of the leading end of said upper conveyor, means supporting said rake element for movement of said prongs in an orbital path having a component of movement nearest said lower conveyor in which said prongs move counter to the direction of movement imparted to the material by said conveyors, and means for effecting such movement of said rake.

2,732,929
CONVEYOR BRACKET
John M. Delaney, Detroit, Mich.
Application September 2, 1954, Serial No. 453,738
4 Claims. (Cl. 198—177)



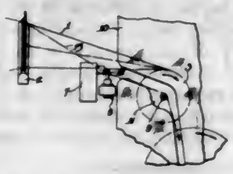
2. In a conveyor system, comprising, in combination, a conveyor bracket having a longitudinally extending body portion, means movably suspending said conveyor bracket from an overhead rail, said body portion having an internal recess extending lengthwise therein and opening through both ends thereof, said recess receiving a portion of a conveyor cable having at least one driving lug secured thereon, said body portion being provided with a slot at right angles to said recess, and a drive member having a plurality of teeth extending from the periphery thereof, any one of said teeth being adapted to enter into said slot and to engage an end wall thereof to propel said bracket along the conveyor system.

2,732,930
CONVEYOR BELT CONSTRUCTION
Charles Thomson, Montreal, Quebec, Canada, assignor to Cable Belt Limited, Inverness, Scotland
Application April 6, 1953, Serial No. 346,910
Claims priority, application Great Britain April 22, 1952
2 Claims. (Cl. 198—201)



2. In a conveyor system including a belt and cables for supporting and propelling the belt, the improvement that comprises transversely extending resilient metal cross members embedded in a belt of rubberlike material, longitudinally grooved cable-engaging means molded integrally with the belt on each surface thereof and adjacent both edges of the belt, the span of said cross members being at least equal to the spacing of the cables and the width of the belt being greater than the spacing of the cables and at least equal to the span of the cross members.

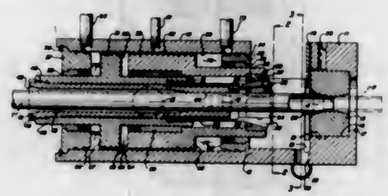
2,732,931
FEED ROLL STRING-UP
Arthur McLean Saum, Waynesboro, Va., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application June 28, 1951, Serial No. 234,022
8 Claims. (Cl. 203—67)



5. In apparatus for advancing a traveling strand comprising a plurality of feed rolls, apparatus for keeping said strand from its intended, normal path and then permitting its placement in its normal path which apparatus comprises a circular protuberance on each of said rolls, said protuberance being mounted on the base of the roll at its strand receiving end and said protuberance being of relatively small diameter; in front of the first of said rolls, a guide for keeping said strand out of its normal path as it passes to said protuberance; a release for said guide, each of said rolls having means for automatically picking up the released strand; and at the exit end of said rolls, a guide for keeping said strand from being picked up by the last roll until the strand is properly presented for pick-up by the preceding roll.

2,732,932
APPARATUS AND METHOD OF POINTING TUBES
Donald V. Strock, Youngstown, Ohio, assignor to The Aetna-Standard Engineering Company, Youngstown, Ohio, a corporation of Ohio
Application March 7, 1951, Serial No. 214,325
1 Claim. (Cl. 205—4)

A push-pointer comprising a cylinder, a pair of pistons therein, work-gripping jaws operatively connected to one of said pistons, cam means operatively connected to the other of said pistons and coacting with said jaws to effect clamping of a workpiece upon movement of said other piston away from said one piston, the two pistons defining between them a clamping chamber, said one piston and one end of the cylinder defining an advancing chamber, said other piston and the other end of said cylinder defining a retracting chamber, a source of fluid under pressure, fluid conduits leading from said source to said clamping, advancing and retracting chambers, valve means for controlling the flow of fluid in said conduits, said valve means including a main control valve adapted in one position to simultaneously connect said clamping and advancing chamber conduits to said source and connecting said retracting chamber conduit to atmosphere, said main control valve in another position connecting



said retracting chamber conduit to said source and connecting said clamping and advancing chamber conduits to atmosphere, a pressure control valve in said clamping and advancing chamber conduits between said main control valve and said cylinder, said pressure control valve being responsive to differential pressures in said clamping chamber and said advancing chamber and maintaining a greater pressure in said clamping chamber than in said advancing chamber when said main control valve is in said one position and maintaining a greater pressure in said advancing chamber than in said clamping chamber when said main control valve is in said other position.

2,732,933
SAFETY RAZOR BLADE HOLDERS
William Lewis, Stockwell, London, England, assignor of one-fourth to John Caldwell Tannock and one-fourth to Plastomatic Limited, both of London, England
Application June 22, 1953, Serial No. 363,307
6 Claims. (Cl. 206—16)



1. A safety razor blade holder for double edged blades, having a substantially rectangular body, a slot in an end wall of said body, a pair of receptacles for protective substance formed in said body near the longitudinal sides thereof, said receptacles affording inwardly facing narrow slots and each being sealed by a pair of circular sectioned wiping strips which have parts in the withdrawal path of a blade adapted to clean the edges thereof on its withdrawal and to retain the protective substance within the receptacles.

2,732,934
PACKAGE OF GLOVES
Samuel S. Hall, Carrollton, Ohio, assignor to The Surety Rubber Company, Carrollton, Ohio, a corporation of Ohio
Application December 6, 1954, Serial No. 473,414
5 Claims. (Cl. 206—46)

1. A packaging device for a pair of gloves located one upon the other in flat condition, said packaging device comprising a sheet of substantially rigid material located between the two gloves, said sheet being of a width substantially the width of the wrist portions of the gloves and of sufficient length to extend from the junction of the hand and wrist portions of the gloves to the lower ends thereof, laterally disposed ears at the upper end of said sheet, and an endless band of flexible material located around and enclosing the wrist portions of said pair of gloves and the substantially rigid sheet therebetween, the



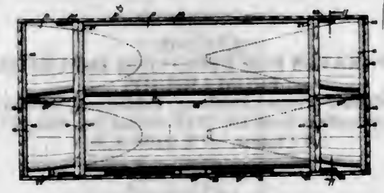
upper edge of said flexible band being located immediately below the laterally disposed ears on said sheets.

2,732,935
COMBINATION TISSUE PACK AND DISPOSAL RECEPTACLE
Elmer G. Gui, San Diego, Calif., assignor of one-half to John M. Wilson, San Diego, Calif.
Application February 25, 1955, Serial No. 490,578
4 Claims. (Cl. 206—57)



1. A combination tissue pack and disposal receptacle comprising: an outer wrapper; a flattened tubular receptacle in said wrapper; a plurality of tissues between the outside of said receptacle and said wrapper; both ends of said wrapper being sealed to enclose said tissues; one end of the wrapper being adapted for opening to expose said tissues; said receptacle having an open end remote from the said one end of the wrapper.

2,732,936
PACKAGED DISASSEMBLED HOUSINGS
Harry G. Lankford, Wichita, Kans.
Application December 30, 1953, Serial No. 401,307
3 Claims. (Cl. 206—65)



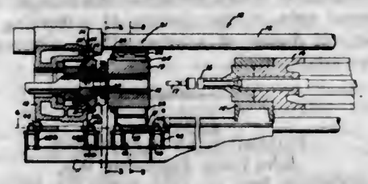
3. A package which comprises, in combination, outer cover means, a plurality of sets of disassembled outer housing members comprising conoidal end members and a hollow center member, said sets nested side by side within and spaced from said outer cover means, each of said sets having an apex end portion of one of its end members projecting into one end portion of its center member and the apex end portion of the other of its end members projecting into the other end portion of its center member, an end member in each end portion of said cover means between the end thereof and said outer housing members and in contact therewith, said end members having portions which support, space and pad said housing members and having mounting means therein for each of said sets of housing members and base end portions of said conoidal end members of said sets mounted in their respective end member, and an inner member mounted in each end portion of said cover means, in contact therewith, and spaced from said end members, said inner members having portions between and in contact with said center members and said conoidal end members projecting thereinto, and said inner members having portions which support, space and pad said housing members and having apertures therethrough through which said conoidal end members project, and said sets of housing members spaced from each other.

2,732,937
BRASSIERE DISPLAY AND MERCHANDISING PACKAGE
Carl C. Braun, Riverside, Conn., assignor to Maiden Form Brassiere Co., Inc., New York, N. Y., a corporation of New York
Application October 30, 1953, Serial No. 389,346
1 Claim. (Cl. 206—78)



A brassiere display and merchandising package, for sale as a unit, consisting of a panel of substantially rigid material of greater heighth than width, the top and bottom of the panel being formed with rearwardly and inwardly directed flanges, the panel near its top being formed with an arcuate slot extending through an edge of the panel and thence curving upwardly to a point spaced from the opposite edge of the panel, and a brassiere with customary cup areas, the brassiere being folded rearwardly of an area constituting one of its cups and exposing that cup from its apex to the opposed side wall thereof, said cup area being passed through the arcuate slot and lying upon the front of the panel with the remaining area of the folded brassiere back of the panel with its top and bottom within said flanges.

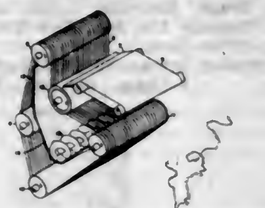
2,732,938
EXTRUSION PRESS
Heinrich B. Albers, Malverne, N. Y., assignor to Hydropress, Incorporated, New York, N. Y., a corporation of Delaware
Application May 15, 1952, Serial No. 287,927
5 Claims. (Cl. 207—3)



1. In an extrusion press; the combination comprising a base, a support, and means for adjustably mounting said support on said base and including rotatable screw means carried by said support and bearing downwardly on said base to provide for vertical adjustment of the support relative to the base, longitudinal guide means on said support, a plate member movable vertically and longitudinally in said guide means and having longitu-

dinal slots opening at the opposite ends thereof, a flat-sided bushing slidable longitudinally in each of said slots, and an eccentric element rotatably carried by said base and engaging rotatably in each of said bushings so that said support may be displaced horizontally and swung in a horizontal plane, as well as vertically adjusted, for alignment relative to said base and other parts of the press.

2,732,939
STICK REMOVER
Leo L. Holzenthal, Esler L. D'Aquin, and Edward A. Gastrock, New Orleans, La., assignors to the United States of America as represented by the Secretary of Agriculture
Application August 21, 1953, Serial No. 375,844
1 Claim. (Cl. 209—102)
(Granted under Title 35, U. S. Code (1952), sec. 266)



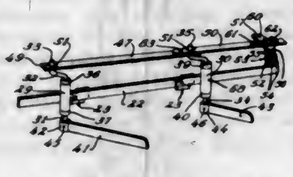
A machine for removing stick-like impurities from contaminated seeds comprising: a row of substantially parallel endless strands; means for supporting and for longitudinally advancing said strands; at least one roller having its axis perpendicular to and a portion of its surface in contact with said strands; means for rotatably supporting said roller so that its surface in contact with the strands moves in the same direction and with the same speed as said strands; means for feeding contaminated seeds into the crevice between the adjacent surfaces of said strands and the surface of said roller as they advance into contact so that the roller forces the seeds through said row of strands and the impurities move along with the row of strands; and means for collecting the purified seeds which pass through said row of strands.

2,732,940
FROTH FLOTATION PROCESS
Reginald Harold Hall, Sutton, David Ian Hutchinson Jacobs, Upper Pine, Woodmansterne, and Maurice Victor Jacquet, Banstead, England, assignors to The Distillers Company Limited, Edinburgh, Scotland, a British company
No Drawing. Application October 6, 1953, Serial No. 384,508
Claims priority, application Great Britain October 14, 1952
3 Claims. (Cl. 209—166)

1. A method of effecting the concentration of minerals by flotation which comprises the step of adding to the mineral pulp, in the capacity of a frothing agent, a phthalic acid diester of a lower alkoxy alkanol of two to three carbon atoms.

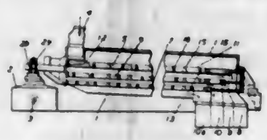
2,732,941
COMBINE ATTACHMENT
John Deiss, Ellsworth, Wis.
Application June 15, 1953, Serial No. 361,456
5 Claims. (Cl. 209—261)

1. An attachment for improving the separating operations and preventing loss of grain from a combine sieve mounted in a frame work positioned on an incline comprising an elongated bar extending along at least one side of the forward inclined end of the sieve, brackets holding said bar in spaced relationship upwardly and inwardly to the side of the sieve frame, bearings mounted upon the said bar, vertically adjustable pivotal rods provided with crank ends secured in pivotal relationship in said bearings, front and rear baffles mounted on the other end of said relatively adjustable rods, arm and



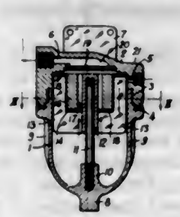
linkage means connecting the crank end of said rods, and adjustable bracket means connected to said linkage means for raising and lowering said rods and varying the angles of said baffles relative to said sieve and with respect to the sides of said frame.

2,732,942
SCREENING
Alexander McLeod McAdie Stephen, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain
Application October 30, 1951, Serial No. 253,767
Claims priority, application Great Britain November 17, 1950
10 Claims. (Cl. 209—323)



1. In vibrating and gyratory screens having at least one deck comprising a screening sheet, carried in a frame, and an auxiliary sheet of coarser mesh, also carried in a frame, situated beneath the first sheet and spaced therefrom, the combination of an open frame, formed with a number of compartments by longitudinal and cross members, resting on the auxiliary sheet and extending close up to the screening sheet, and situated in at least some of the compartments at least one detached metal coil spring shaped in major part so that the imaginary surface in which the outermost extremities of the coils lie is substantially a surface of revolution having double curvature which when viewed from the exterior is convex and therefore adapted for bouncing.

2,732,943
APPARATUS FOR REMOVING IMPURITIES FROM LIQUIDS
Gideon Natanael Hagberg, Eskilstuna, Sweden
Application June 19, 1953, Serial No. 362,721
4 Claims. (Cl. 210—1.5)



1. Apparatus for removing impurities from liquids comprising a vaned rotor, a casing for the rotor having an inlet and an outlet for the liquid, said rotor being rotatably mounted on a central vertical shaft in the casing, said

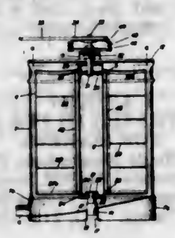
inlet opening into the casing in a tangential direction at the upper part of the vane circle, a sleeve arranged at a distance around the hub of the rotor thereby to establish an annular channel between the hub wall and the confronting inner wall of said sleeve, the outer wall of said sleeve being located adjacent the radially inner edges of the vanes on said rotor, said outlet being arranged above the sleeve, and a cover plate arranged at the top of the vane circle outwardly in the radial direction of the sleeve so that the liquid entering the casing between the outer part of the vanes will be conveyed downwards in the casing under rotation, being subsequently conveyed upwards in the rising channel between the hub of the rotor and the sleeve to the outlet, a fine-meshed filter at the inlet to the channel, one of said walls forming said channel being magnetized for the purpose of attracting magnetic impurities passing through the filter.

2,732,944
SLUDGE REMOVING MEANS
Clyde C. Hays, Waco, Tex.
Application April 9, 1952, Serial No. 281,440
13 Claims. (Cl. 210—55)



1. Sludge removing means for a sewage or other liquid treating chamber having sludge accumulating means in its bottom including, means disposed in the sludge accumulating means for directing gaseous fluid under pressure against the accumulated sludge to agitate the same, means overlying the sludge accumulating means and pressure fluid directing means to confine the agitated sludge against rising in the chamber, the confining means having an inlet and an outlet, and means supplying gaseous fluid under pressure to the inlet to create a current in said confining means from said inlet to the outlet for picking up the agitated and confined sludge.

2,732,945
HONEY EXTRACTING MACHINES
Obren P. Mandrapa, Calexico, Calif.
Application April 1, 1952, Serial No. 279,855
5 Claims. (Cl. 210—65)



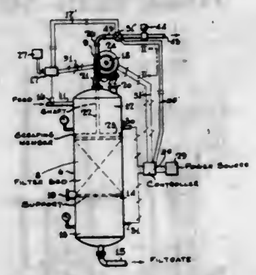
1. In a honey extracting machine, the combination of a can; a hollow shaft of large diameter rotatably mounted within said can; a series of open-work frames which are attached to upper and lower triangular plates having their inner ends connected directly with the wall of said shaft and radiating in spaced flaring relation therefrom whereby the sides of adjacent frames form rectangular comb receiving baskets, and means for rotating said shaft carrying said comb baskets and centrifugally discharging therefrom against the wall of said can the honey of honeycombs when introduced within said baskets.

2,732,946
STRAINER FOR PAINT SPRAYERS OR THE LIKE
Willy O. Schaub, Chicago, Ill.
Application November 22, 1952, Serial No. 322,004
2 Claims. (Cl. 210—94)



1. A strainer for an electro-mechanical paint sprayer provided with a downwardly extending aspirating paint intake pipe adapted to have its lower end immersed in the paint supply, comprising, a single conical screen member open at its larger end and adapted to be inserted into the open lower end of the intake pipe with the member open end substantially flush with the open end of the pipe and the apex of the conical member pointed upwardly in the direction of the flow of the paint, whereby the paint initially enters the open end of the screen member and passes through the screen within the pipe, the screen member being of uniformly decreasing diameter and being relatively long in relation to its greatest diameter, and an integral rolled open edge encircling the open end of the member and axially abutting the end of the pipe for resiliently receiving and gripping the end of the pipe to hold the member and pipe in engagement, one annular wall of the rolled edge being outside the pipe and the other annular wall of the rolled edge being inside the pipe whereby said rolled edge provides a stream-line orifice for entry of the paint into the screen-member.

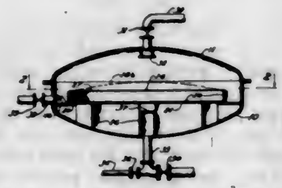
2,732,947
GRAVITY FILTER
Howard W. White, Roselle, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application June 13, 1952, Serial No. 293,319
8 Claims. (Cl. 210—142)



1. In a gravity filter including a filter vessel, a stationary cylindrical filter bed of finely divided solid material, the improvement which comprises in combination a flow rate detector adapted to determine the occurrence of a plugging condition within the filter bed, an inlet conduit leading into said vessel above said filter bed, an outlet conduit leading from said vessel at a region below said filter bed, a scraping member movably disposed within said vessel, a shaft attached to said scraping member and piercing said vessel, sealing means for maintaining said shaft and said vessel in a fluid-tight movable relationship, a driving mechanism, controller means responsive to said flow rate detector, means actuated by said controller means for actuating said driving mechanism, said driving mechanism being connected with said shaft so as to impart a longitudinal and rotational movement to said shaft whereby said scraping member engages and breaks up plugged portions of said filter bed into fine particles and causes said particles to be sus-

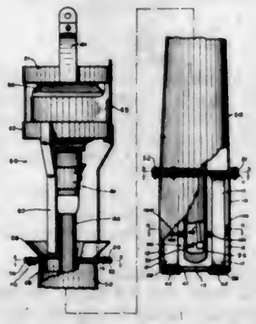
pended in the liquid within said filter vessel and means for withdrawing the resulting liquid suspension from said filter vessel.

2,732,948
FILTERS
Robert J. Koupal and Anton A. Kalinske, Tucson, Ariz., assignors to Infilco Incorporated, Tucson, Ariz., a corporation of Delaware
Application December 28, 1953, Serial No. 400,602
10 Claims. (Cl. 210—144)



1. In a tray filter having inlet means for liquid to be filtered and filter aid material, a waste outlet, and means for withdrawing filtered liquid and for introducing cleaning fluid, a support for a bed of filter aid material comprising a horizontal perforated plate mounted in said filter and a vertical retaining wall surrounding said plate, a layer of discrete particles on said plate, the weight and size of said particles being sufficient to prevent substantial expansion of said layer under cleaning fluid pressure, and a sheet of flexible fabric supported on said particles and affixed to said wall, said sheet during filtering supporting the bed of filter aid material, and flexing upwardly under cleaning fluid pressure to disintegrate said bed.

2,732,949
TREATMENT OF THIXOTROPIC MATERIALS
Carl W. Ziegenbusch, Chillicothe, Ohio, assignor to The Mead Corporation, Dayton, Ohio, a corporation of Ohio
Application March 18, 1952, Serial No. 277,210
2 Claims. (Cl. 210—149)



1. Apparatus of the character described providing increased flow characteristics sufficient to effect screening of highly viscous thixotropic materials comprising a cylindrical casing having inlet means at the upper end thereof, a wall at the lower end thereof, said wall having a plurality of radially spaced openings therein, a disk member having a plurality of radially spaced apertures therein, said disk member being transversely mounted in said casing in vertically spaced relation to said wall, a plurality of cylindrical screen units mounted within the apertures of said disk member and each fitted to one of said openings, said wall having a centrally disposed opening, a resilient ring mounted in said centrally disposed opening, a tubular vibrator element removably mounted within said ring and extending downwardly to a point adjacent to said wall, a rotatable shaft extending downwardly into said vibrator element and having a circular weighted member at the free end thereof, means for rotating said shaft to cause said weighted member to assume a rotary movement and sequentially come into continuous striking contact with the inner wall of said vibrator elements to provide said vibrator element with sufficient vibratory movements to increase the fluidity of said material in said casing, whereby said material gravitates through said screening units.

2,732,950
FILAMENT SPINNING APPARATUS
Albert W. Keight, Gilbert E. Moos, and John R. Shoup, Cumberland, Md., assignors to Celanese Corporation of America, New York, N. Y., a corporation of Delaware
Application April 9, 1952, Serial No. 281,322
6 Claims. (Cl. 210—150.5)



1. A candle filter wherein a spinning dope is heated and filtered before being passed to a spinning jet, said candle filter comprising a cylindrical casing, a cylindrical tube positioned concentrically within said cylindrical casing and forming with said casing an annular jacket through which a heating medium is passed, means for leading a fluid heating medium into and out of said jacket an annular plug of smaller diameter than the inner diameter of said casing positioned at the lower end of said candle filter and having a rim projecting from the lower portion of the periphery thereof into contact with the inner surface of said casing, said annular plug forming with said casing an annular space communicating directly with said annular jacket whereby the heating medium will come into contact with the periphery of said annular plug to heat the same, means for leading a spinning dope into and out of the space within said cylindrical tube and through said plug, and a filtering unit positioned within said cylindrical tube to filter the spinning dope.

2,732,951
ACCORDION PLEATED FILTER AND METHOD FOR MAKING
Roger de Pulffe de Magondeau, Paris, France
Application September 4, 1952, Serial No. 307,831
Claims priority, application France October 12, 1951
13 Claims. (Cl. 210—169)



5. A filter unit comprising a polygonal assembly surrounding an inner prismatic recess and including strips

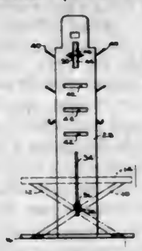
of filtering paper lying in adjacent standing relationship round said recess, folded perpendicularly to the axis of the inner recess and provided along their edges with similar series of uniformly distributed notches registering with one fold out of two, the corresponding folds of the adjacent strips engaging each other and the notched parts of the strips facing the outside of the polygonal assembly to form the corners thereof.

2,732,952
SHELF ATTACHMENT
Kenneth V. Skelton, Oklahoma City, Okla.
Application August 11, 1952, Serial No. 303,746
2 Claims. (Cl. 211—49)



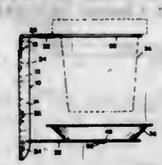
1. A shelf attachment for thrusting packaged goods toward the front edge of a shelf, said shelf rearwardly connected to a vertical wall including: a pair of substantially vertically juxtaposed flat plates facing forwardly and rearwardly on said shelf; a pair of horizontally aligned pivot ears adjacent the uppermost edge of each of said plates, the ears of one of said plates centrally spaced apart and interdigitated with the ears of the other said plate; a hinge-pin extending through said interdigitated ears; a helically wound spring carried by said hinge pin between said spaced apart ears and engaged with said plates for forcing the same from the vertical toward substantially a horizontal plane; a comparatively narrow strip disposed in edge-abutting relationship and in substantially face to face alignment with the lower edge of said rearward plate, said strip rigidly anchored to said vertical wall; a pair of horizontally aligned pivot ears adjacent the abutted edges of each of said rearward plate and said strip, the ears of said strip centrally spaced apart and interdigitated with the ears of said rearward plate; a second hinge-pin extending through said interdigitated ears of said rearward plate and said strip; and a second helically wound spring carried by said second hinge-pin between said spaced apart ears and engaged with said strip and said rearward plate for forcing the upper edge of the plate forwardly, thereby permitting the said forward plate to thrust packaged goods toward the front edge of said shelf.

2,732,953
CLOTHES RACK
Joseph W. Parks, Altoona, Pa.
Application June 19, 1952, Serial No. 294,468
2 Claims. (Cl. 211—86)



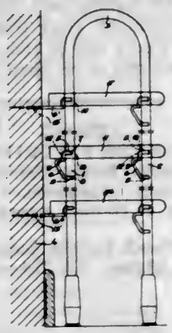
1. A clothes rack comprising a flat elongated base element, a flat elongated member connected to said base element and standing in a plane substantially normal to the plane of said base element, said member having an elongated recess formed therein with a notch formed in the edge of said recess, an arm pivotally mounted in said recess, and means for biasing said arm into said notch when said arm is rotated to register with said notch to thereby position said arm substantially normal to said member, and clamping means on said member for clamping the same to a supporting structure.

2,732,954
SUPPORT
George Janonis, Detroit, and Anton Gotautas, Stevensville, Mich.
Application April 14, 1952, Serial No. 282,126
1 Claim. (Cl. 211—88)



In combination, an elongated vertically disposed wall bracket including means for removably attaching said bracket to a vertical supporting surface, a flower pot supporting ring carried by said bracket adjacent its upper end, a tray support carried by said bracket below said ring, said tray support including a horizontally elongated arm having a slot therein, the slot having an enlarged end portion, a tray having a depending stud provided with a head insertable through the enlarged end portion of said slot to permit ready removal of said tray, said tray being slidable longitudinally of said arm to position said tray beneath said pot said tray support being disposed below said supporting ring at a distance such that said tray is spaced below the bottom of a flower pot carried by said supporting ring to provide for removal of said tray for emptying it without disturbing the flower pot.

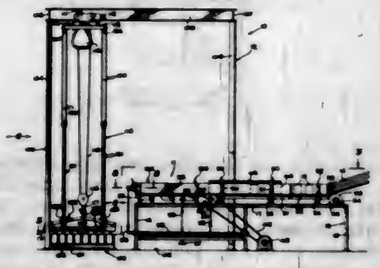
2,732,955
SHELVES
Hjalmar Holmquist, Danderyd, Sweden
Application January 15, 1954, Serial No. 404,185
Claims priority, application Sweden January 24, 1953
1 Claim. (Cl. 211—147)



Shelving comprising a shelf, a vertical supporting frame for the shelf, the frame being provided with transverse spaced equidistant cylindrical holes along its length, a bracket formed of an integral angularly bent piece of round metal wire whose end portions are straight and parallel and extend in the same direction and at such a distance from each other so that both ends can be inserted in spaced holes in the supporting frame, the bracket having an intermediate horizontal portion parallel with the end portions and on which the shelf rests, a vertical

portion between an end portion and the intermediate portion, the shelf being provided with a hole through which the supporting frame is threaded, a vertical recess on the side wall of the hole extending from the bottom of the shelf and terminating short of the upper side of the shelf and conforming to the vertical portion of the bracket which fits in the recess.

2,732,956
APPARATUS FOR HANDLING CANS
Albert Horner and Paul E. Story, Kapaa, Kauai, Territory of Hawaii, assignors to Hawaiian Canneries Company, Limited, Kapaa, Territory of Hawaii, a corporation of the Territory of Hawaii
Application September 8, 1950, Serial No. 183,692
21 Claims. (Cl. 214—1)



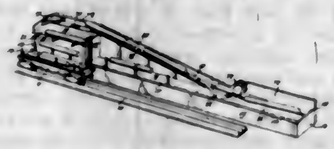
1. In an apparatus for forming a tier of filled and closed cans in a desired pattern, the combination of: a power conveyer for carrying said cans in upright position in a given direction; guide plates supported over said conveyer and extending downwardly into contact with said cans to align the latter in a series of closely spaced parallel rows, said guide plates terminating at the discharge end of said conveyer; an accumulator including a series of parallel guide ways which are aligned respectively with the rows of cans formed by said guide plates, said accumulator being disposed at the discharge end of said conveyer so that the rows of cans formed by said conveyer are delivered to the respective guide ways of said accumulator; an end wall on said accumulator for limiting the distance cans delivered by said conveyer to said accumulator may be pushed along said guide ways for transversely aligning corresponding cans delivered to said guide ways; and coordinately operating means for halting said conveyor and shifting said end wall horizontally away from the cans directly contacting this to free a tier of cans formed in said accumulator to permit this to be lifted upwardly as a unit.

2,732,957
APPARATUS FOR PALLETIZING CANS
Albert Horner, Kapaa, Kauai, Territory of Hawaii, assignor to Hawaiian Canneries Company, Limited, Kapaa, Territory of Hawaii, a corporation of the Territory of Hawaii
Application March 9, 1950, Serial No. 148,630
1 Claim. (Cl. 214—6)



In an apparatus for handling cans, the combination of: an overhead rail; a hoist carried by said rail for travel over said rail; a cable adapted to be lifted and lowered by said hoist; a can layer lifter suspended on said cable said lifter being provided with suction devices properly spaced and located in a horizontal plane so that each of said devices will engage and adhere to one can of a layer of cans when said lifter is lowered onto said layer and said devices placed under vacuum; handles on said lifter for manually manipulating said lifter to propel said hoist along said rail; a pallet jig mounted for positioning a pallet directly beneath and in symmetrical alignment with said rail, said pallet being of a suitable size for receiving said layer of cans from said lifter; and a can layer jig associated with said pallet jig and shiftable vertically so it may be located at any given level for engaging only one end edge face and only one side edge face of any can layer as said lifter carrying said layer is manually maneuvered by a horizontal movement into position over said pallet, with said can layer at the same level as said can layer jig, thereby assuring that each can layer deposited by said lifter on said pallet in the forming of a stack is in precise vertical alignment with each of the other layers in said stack.

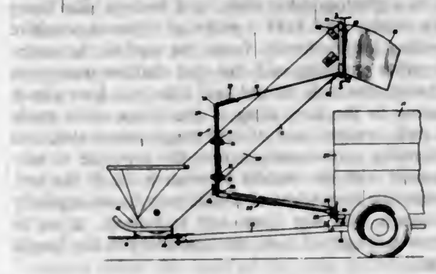
2,732,958
TOY RAILROAD TRACKSIDE ACCESSORIES
Joseph L. Bonanno, Madison, N. J., assignor to The Lionel Corporation, New York, N. Y., a corporation of New York
Application December 8, 1949, Serial No. 131,834
5 Claims. (Cl. 214—38)



1. A toy railroad, trackside accessory for receiving toy, log simulating articles discharged laterally from a toy railroad car and reloading them onto another similar toy car, comprising an elongated body adapted to be placed parallel to toy railroad trackage so that the cars may pass thereby, and having at the receiving end thereof an article storage device including a laterally sloping platform over which the log simulating articles are adapted to roll and at an elevation to accept such articles discharged laterally from a toy car on the track opposite to said storage device and provided with means to further shift the article laterally toward the bottom of the platform, and at the other or reloading end a laterally sloping rollway at a higher elevation to discharge such toy articles onto a toy car on trackage opposite the discharge rollway and provided with means to engage an advancing article to shift the same toward the trackage, and a belt conveyor parallel with the trackage for accepting articles in the storage platform and conveying them to the discharge rollway, a pulley about which the discharge end of the belt passes, a pivotally supported arm for the pulley, a pulley operating motor supported on the arm, and a spring biasing the arm in a direction to tension the belt.

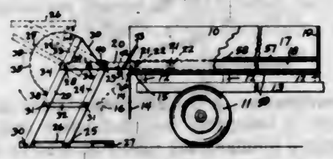
2,732,959
DISCHARGE ELEVATOR FOR A HARVESTING MACHINE
Harold E. De Penning, Reasnor, Iowa
Application July 16, 1952, Serial No. 299,203
1 Claim. (Cl. 214—42)

For use with a harvesting machine having a fixedly mounted upwardly and rearwardly inclined elevator with a horizontally movable discharge hood, and a wagon connected by a draft member to said machine in a trailing relation, means for moving said discharge hood to maintain the same above said wagon during a turning movement of said machine comprising an upright shaft adapted to be rotatably connected to an upright side of said elevator, a bar member attached intermediate its ends to the top end of said shaft, a telescopic unit pivoted at one of its ends to the bottom end of said shaft for up and down swinging movement relative to said shaft, said telescopic unit adapted to have its opposite end pivotally attached to said wagon for horizontal swinging movement relative



thereto, and a pair of flexible members having one of their ends attached to the ends of said bar member and their opposite ends adapted to be connected to opposite sides of said discharge hood.

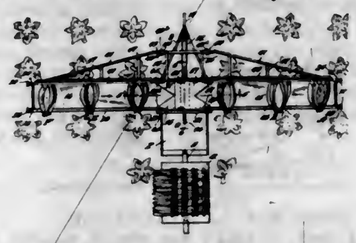
2,732,960
LOADING DEVICE FOR PICK-UP TRUCKS
Elmer N. Nilson, Irene, S. Dak.
Application February 11, 1953, Serial No. 336,221
1 Claim. (Cl. 214—77)



A loading device for pick-up trucks comprising a pair of spaced channel members attached within the pick-up truck body, longitudinally extending members slidably engaged with said channel members, pairs of further members providing parallelograms pivotally secured to said longitudinally extending members, a platform pivotally secured at the lower ends of said further members, means for collapsing said further members to an aligned position with said longitudinally extending members whereby said longitudinally extending members can be directed inwardly within said channels and into the truck body for transporting articles on said platform therein, said collapsing means including arcuate members secured to certain of said further members, cables passing over said arcuate members, a transverse member attached between said longitudinally extending members, a slidable clamp engaged therewith, a threaded cylindrical member attached to said clamp, a rotatable screw member threadably engaged with said cylindrical member, means for rotating said screw member, a plate member attached across said channels and extending to a substantial distance behind the front wall of the truck body, said platform registering flush with said plate member when said parallelogram members are collapsed and said device is positioned within the truck body, said longitudinally extending members including rollers attached thereto for engaging said channels.

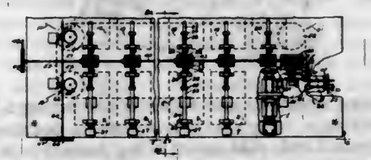
2,732,961
TOBACCO HARVESTING MACHINES
Evander McIver Ervin, Florence, S. C.
Application June 14, 1954, Serial No. 436,350
1 Claim. (Cl. 214—83.36)

A machine for use in the harvesting of crops which must be manually separated from the ground, said machine comprising a wheeled frame adapted to be moved over a field of crops to be harvested, a plurality of conveyors mounted on and extending horizontally outwardly from said frame, means mounted on the frame for operating the conveyors so as to cause them to convey to a single crop receiving station the plant elements placed on the conveyors at harvesting stations located outwardly of the frame, said receiving station comprising a platform having marginal portions arranged to closely overlie the delivery ends of the conveyors for successively receiving such crop elements and supporting the same until a group of desired



size has been accumulated, the marginal portions of said platform being provided with substantially V-shaped recesses, whereby the crops conveyed to and engaged by the said marginal portions of the platform will be gradually removed from the conveyors, and the said platform consisting of two plate sections, the sections being adjustable in the direction of the length of the conveyors, whereby the size of the crop receiving station may be varied.

2,732,962
CONTROLLED MATERIAL-HANDLING AND TRANSFERRING APPARATUS
Edward P. Bullard III, Wethersfield, Conn., assignor to The Bullard Company, a corporation of Connecticut
Original application July 9, 1949, Serial No. 103,823, now Patent No. 2,671,861, dated March 9, 1954. Divided and this application August 26, 1952, Serial No. 306,431
15 Claims. (Cl. 214—89)

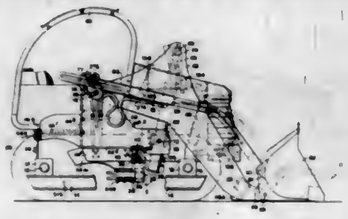


1. Apparatus comprising in combination, a plurality of work stations arranged at spaced intervals in a closed path; independent hoisting mechanism at each of a plurality of said stations; an endless belt conveyor above said stations; master electric control means including a plurality of portions, each having means adapted to cause said hoisting mechanism and conveyor to cooperate in performing functions for transferring work from one or more stations to other stations independently of the work at any remaining station; and means for rendering effective successive functions of said portions.

2,732,963
MATERIAL DIGGING AND HANDLING APPARATUS
Stephan A. Grubich, Lafayette Hill, Pa.
Application January 9, 1951, Serial No. 205,121
9 Claims. (Cl. 214—140)

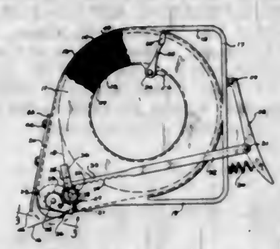
7. A material handling apparatus adapted to dig at one end and dump at the opposite end comprising a tractor, a pair of arms pivotally mounted on said tractor, a bucket secured to the ends of said arms, means to adjust the angular relationship between the bucket and the arms, a hydraulic system including a source of liquid under pressure, a pair of lifting rams pivotally mounted on the tractor at a point between the pivot points of the arms and the digging end of the tractor and below the pivot points of the arms, said lifting rams being respectively pivotally se-

cured to said arms at points substantially above the pivotal connections of the arms to the tractor when the arms are in digging position, the pivot points of each lifting ram and the pivot points of the arms lying in a common plane when the bucket is in the dead center overhead position and said rams having a stroke adapted to raise said bucket



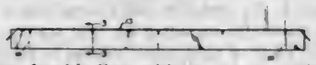
to the dead center overhead position, and valve means for controlling the flow of liquid to and from said rams to effect the lifting of said arms from one end of the tractor to pass the bucket through the overhead position and to effect control of lowering of the arms at the opposite end of the tractor.

2,732,964
TAPE APPLICATOR
Charles A. Neer, East Detroit, Mich.
Application September 25, 1953, Serial No. 382,278
11 Claims. (Cl. 216—21)



1. A tape applicator and dispenser comprising a hollow casing having a roller and tape receiving opening at its lower forward end, said casing being formed with an internal laterally directed annular flange for supportably receiving a roll of tape and defining a central transverse hand-hole for said casing, a roller journaled within said casing and projecting partially through said opening adapted to receive therearound and thereunder the free end of said tape whereby said tape is applied to an object as said roller is drawn thereover, a stationary shear blade on the forward end of said casing in advance of said roller overlapping said opening, and a manually operated rotary shear blade journaled upon said casing coaxially of said roller extending across said opening and adapted on rotary movement for cooperation with said stationary blade for severing the applied strip of tape.

2,732,965
EDGE BINDING DEVICE AND METHOD
Robert Lawrence Altick, Oswego, Oreg.
Application March 17, 1953, Serial No. 342,955
1 Claim. (Cl. 216—61)



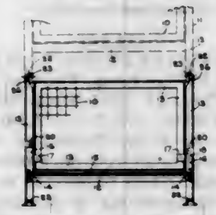
A device for binding with pressure sensitive tape the edges of a rectangular photographic slide comprising an elongated rectangularly shaped member having a top and bottom, a longitudinal slot adapted to accommodate snugly a slide extending through said member from top to bottom and substantially from one end to the other, five shallow transverse tape severing slits in the bottom side of the member normal to the slot and spaced from one another a distance corresponding to the length of each side of a photographic slide, said bottom side being adapted to receive and hold a piece of pressure-sensitive tape extending longitudinally from one end of the member to the other covering said slot and shallow transverse slits and being severable across said slits into four pieces corresponding to the four sides of the slides, slide guide means at each extreme end of said longitudinal slot, and a stop extending transversely across the top side in vertical alignment with the middle transverse slit in the bottom, whereby the four edges of a slide may be successively pushed through said slot from top to bottom so as to apply thereto a length of tape corresponding to the length of the edges.

2,732,966
DOOR OPERATING MECHANISM
Bernard F. Schroeder, Manchester, and Henry E. Karl, Valley Park, Mo.
Application June 24, 1953, Serial No. 363,752
2 Claims. (Cl. 217—60)



1. In combination: a trailer compartment including a bottom wall; a swingably mounted cover door for the compartment; a tubular track rigidly secured to the underside of the swingably mounted cover door along the longitudinal centerline thereof; a longitudinal slot in the lowermost region of said track and coextensive therewith; a roller assembly reciprocably mounted in the track; an abutment element for limiting the reciprocal movements of said assembly in a forward direction; a plate rigidly secured at its upper end to the roller assembly, and having a depending portion extending through and below said slot; a rearward bracket rigidly secured to the bottom wall of said compartment; a link having a pivotal connection at its upper end with the depending portion of said plate, and at its lower end with said bracket; a laterally projecting arm on the link intermediate the upper and lower end pivotal connections thereof; a forward bracket rigidly secured to the bottom wall of said compartment; and a pre-tensioned coil spring anchored at its rear end to the arm on said link, and at its forward end to the forward bracket aforesaid.

2,732,967
STILLAGES
John Herbert Metcalf, Aston, Birmingham, England, assignor to Victrolec Limited, Birmingham, England, a British company
Application January 9, 1953, Serial No. 330,407
Claims priority, application Great Britain March 21, 1952
1 Claim. (Cl. 220—6)



A collapsible stillage having two side walls and two end walls foldable into flat relationship upon a base member

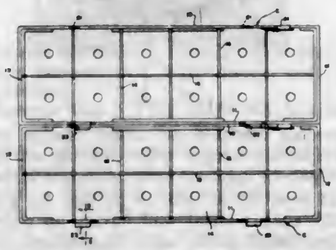
which is permanently connected to all the walls, said side walls and end walls being each bounded by a frame comprising top and bottom frame members and side frame members, the top frame members of the end walls being of inverted V-cross section, disposed above the level of the side wall top frame members, each side wall top frame member having at each end thereof an upstanding lug adapted for engagement within the inverted V-section of its adjacent end wall top frame member, four relatively short corner pillars disposed, one at each corner of the base member, said side and end walls being hinged to the said corner pillars about fixed axes disposed near the lower ends of the side frame members of the walls, the hinge axes of the end walls being disposed a greater height above the base than the hinge axes of the side walls, the side frame members of the end walls being extended below the level of the base member to form legs, and a pair of transverse bearer members connected one between the lower extremities of the legs aforesaid, of each end wall, said transverse bearer members being of inverted V-section adapted to fit over the end wall top frame members of a similar stillage when two stillages are superimposed.

2,732,968
ASH TRAYS
Michael D. Vivolo, New York, N. Y.
Application August 12, 1953, Serial No. 373,713
5 Claims. (Cl. 220—20.5)



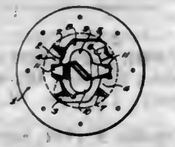
1. An ash receiver having an ash-containing chamber and a centrally-apertured cover therefor, push-buttons operable through the cover, a rocking member pivotal below the cover and within the chamber and caused to rock by depression of one or the other of the push-buttons, a pivoted closure plate adapted to normally close the bottom or the central-aperture in the cover, and means coupled to the closure plate and to the rocking member by which pivotal movement of said closure plate to either open or closed position is attained by depression of one or the other of the push-buttons.

2,732,969
CASE CONSTRUCTION EMBODYING SEPARABLE UNITS
John R. Browne, Colorado Springs, Colo.
Application March 9, 1953, Serial No. 341,214
10 Claims. (Cl. 220—23.4)



1. In a case construction, a pair of independent units having side walls arranged for close parallel attachment to each other and detachment from each other, each of said units carrying on a side wall thereof longitudinally spaced connecting elements, the elements on one wall and those on the other wall constituting spaced sets with the elements of each set being so constructed as to be capable of being interengaged simultaneously by a relative movement between the units, and a single manually operable slidable member carried by one of the walls for movement to a position cooperatively engaging with one of the elements of a set for preventing any such relative movement of the units that a disconnection of the units can take place after the sets of elements are placed in interengaging relation, each of said sets of elements constituting an opening in one wall having an element extending therein and a projection on the other wall having a slot to receive the extending element after the projection is placed in the opening, said manually operable slidable member having a hand gripping part always accessible at the edge of the wall.

2,732,970
ROTATABLE ACCESS DOOR
John Edward Hogan and Lloyd R. Poe, Los Angeles, Calif., assignors to Clark Hartwell and Eleanor M. Hartwell, both of Los Angeles, Calif., copartners, doing business as Hartwell Aviation Supply Company, Los Angeles, Calif.
Application November 24, 1952, Serial No. 322,296
2 Claims. (Cl. 220—40)



1. A rotatable access door, comprising: a frame plate having a door opening of greater length than width, keeper margins disposed along opposite sides of said opening and each notched at one extremity to form lateral clearance spaces at the ends of said opening, said margins being deformed to provide opposed retainer ribs; a door member adapted to cover said opening; a latch plate secured to said door and including oppositely directed yieldable latch arms arranged to pass through said opening when said latch plate is disposed endwise in said opening, said latch arms adapted on rotation of said door and latch plate to engage said keeper margins and ride over said retainer ribs; one of said keeper margins adjacent said notch being shaped to form a cam operable to engage said keeper in a manner to force said door away from said frame to facilitate opening of the door; the other of said keeper margins being provided adjacent its notch with a stop means to limit closing movement of said door and also operable to form a fulcrum point in cooperation with said cam to facilitate opening of said door.

2,732,971
RADIATOR CAPS
John Ralph Holmes and Adolf Schwarz, Lockport, N. Y., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 21, 1951, Serial No. 257,542
12 Claims. (Cl. 220—44)



6. A radiator pressure cap, comprising, a cap retaining member, a valve structure, means connecting said valve

structure to said retaining member for limited relative movement with respect thereto, said valve structure comprising a supporting housing having normally ineffective pressure escape openings therein, valve means provided at one end of said housing, a coil spring disposed between said retaining member and said housing for resiliently urging said housing and said valve means away from said retaining member, a cylindrical member secured in said supporting housing, an inwardly extending annular flange at one end of said cylindrical member, an annular valve seat formed in said flange, a valve element adapted to engage said seat having one or more pressure relief openings therein, a second cylindrical member secured within said first mentioned cylindrical member, an annular flange extending inwardly of one end of said last mentioned cylindrical member, an annular rib on said flange forming a seat for said last mentioned valve element and disposed in spaced relation with said first mentioned seat, resilient means for resiliently retaining said last mentioned valve on said last mentioned seat, a stud slidably mounted on said last mentioned valve element, a valve element secured to said stud, and resilient means for resiliently retaining said last mentioned valve element against said first mentioned valve element to prevent pressure leakage through the openings in the latter.

2,732,972

BENCH CAN FOR INFLAMMABLE LIQUIDS

Rudolph J. Anschicks, Chicago, Ill., assignor to The Protectoseal Company, Chicago, Ill., a corporation of Illinois

Application October 3, 1951, Serial No. 249,573
5 Claims. (Cl. 220—88)



1. As an article of manufacture, a replaceable and separable fusible link means for a safety container including a hinged cover and a bracket mounted thereon, said bracket including a stop and latch means slidably mounted thereon, complementally formed means on said link means and said bracket for restricting longitudinal movement of the link means relative thereto, and said latch means comprising a slide member adapted to be slidably mounted on said bracket and to slidably engage said link means to restrict transverse movement of the link means relative to said bracket for detachably attaching said link means to said bracket.

2,732,973

CIGARETTE DISPENSING CONTAINERS

Jerome J. Spector, St. Louis County, Mo., assignor to Universal Match Corporation, St. Louis, Mo., a corporation of Delaware

Application June 6, 1951, Serial No. 230,101
8 Claims. (Cl. 221—147)

1. A cigarette dispensing container adapted for dispensing a lighted cigarette comprising a receptacle having front, side, rear, and bottom walls and being provided with an elongated dispensing slot, a downwardly swinging flap hinged upon the bottom wall and adapted normally to extend closurewise across the slot, said flap being provided with rock-arms extending rearwardly and upwardly through the dispensing slot, a floor plate rigidly mounted in the receptacle and inclined forwardly and downwardly from the rear wall toward the front wall terminating adjacent to and rearwardly from the upper margin of the dispensing slot in the provision of a cigarette magazine having a downwardly opening discharge slot, a slide-plate shiftably mounted on the underside of the floor plate for forward and rearward movement and being provided on its forward edge and adjacent its opposite ends with laterally spaced coaxial arcuate fingers which, when the slide plate is in rearward position, curve downwardly beneath and across the discharge slot and upwardly toward the upper margin of the dispensing slot to provide a partial closure between the two slots and



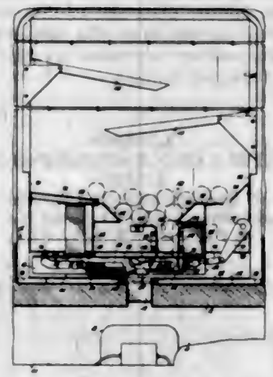
when in such position being adapted for catching and holding a single cigarette, said slide plate being provided intermediate said fingers with a downwardly and rearwardly presented hinge-loop, a forwardly inclined link operatively connecting the rock-arms with the hinge-loop for causing the slide-plate to shift outwardly through the dispensing slot as the flap is swung downwardly, and an electric ignition element carried by the slide-plate in outwardly spaced axial alignment with the arcuate fingers, the finger which is adjacent to the ignition element being enlarged diametrically for a portion of its length around the end which is presented toward the ignition element for providing a concentric ledge which is spaced downwardly and outwardly around its inner surface from the cigarette.

2,732,974

REFRIGERATED VENDING MACHINE

Charles S. Hedges, Kansas City, Mo., assignor to The Vendo Company, Kansas City, Mo., a corporation of Missouri

Application May 24, 1952, Serial No. 289,857
1 Claim. (Cl. 221—184)



In a vending machine, an article storage unit having a pair of spaced, vertical walls defining an article passage and a pair of opposed baffle elements inclined downwardly and inwardly toward the passage for guiding articles thereto, each vertical wall having an outwardly extending, horizontal guide wall; mechanism reciprocable horizontally beneath the passage transversely of the latter for receiving articles singly from the passage and discharging the same from the machine; means mounting said mechanism for vertical movement as it is reciprocated; an upstanding agitator on each side respectively of the passage and secured to the mechanism for shifting

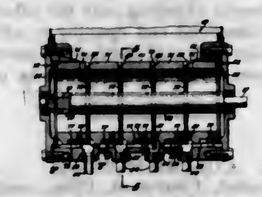
the articles from the baffle elements to the horizontal walls and thence into the passage as the mechanism is reciprocated; and a plurality of inclined, article-supporting baffle plates carried by said unit above the elements, said plates being swingable upwardly for free upward movement of the articles within the unit as the agitators move vertically with the mechanism.

2,732,975

SEED PLANTER

Vernon W. Balzer, Van Nuys, Calif., assignor to Hallett Manufacturing Company, Inglewood, Calif., a corporation of California

Application June 18, 1951, Serial No. 232,225
4 Claims. (Cl. 221—234)



4. Mechanism for dispensing pellets, such as seeds, comprising, in combination: a hopper having a cylindrical chamber in communication therewith, a shaft passing substantially axially through said chamber, a plurality of pellet conveying wheels each having a plurality of notches spaced about the periphery thereof for receiving and conveying pellets, means for keying said wheels to said shaft for causing said wheels to rotate with said shaft and for permitting said wheels to be slid axially of said shaft for ready removal or realignment with respect to said shaft, a plurality of cylindrical spacers each having an outer diameter substantially at least as great as that of said wheels and disposed in said chamber circumjacent said shaft, said spacers being selectively positionable among said wheels so as to effect any desired permutation of wheels and spacers, pintles secured to said spacers for keying said spacers with respect to said chamber for preventing rotation of said spacers by shaft rotation, said pintles mating in corresponding recesses formed in the lower wall of said chamber, a plurality of passageways communicating with the respective wheels at the bottom portions thereof and effective to receive pellets conveyed from said hopper in said notches, and a plurality of toothed ejection wheels journaled to said pintles, the teeth of said ejection wheels mating with the notches of said conveying wheels for ejecting pellets from said notches into said passageways.

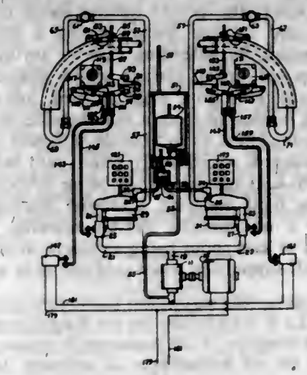
2,732,976

DUAL LIQUID DISPENSER

Walter M. Harks and John J. Delaney, Fort Wayne, Ind., assignors to Bowser, Inc., Fort Wayne, Ind., a corporation of Indiana

Application May 3, 1951, Serial No. 224,384
15 Claims. (Cl. 222—26)

1. In a dual dispensing apparatus comprising a single frame and housing, the combination of a pump having a suction and a branched discharge line, a motor for driving the pump, a dispensing system comprising a valve, a separator, a meter and a discharge hose connected to each branch, a resettable register connected to be driven by each meter, a switch for each system, said switches being connected in parallel to control the motor, a control lever and an interlock mechanism for each system and means for connecting the control lever of each system for operating the switch and valve, said interlock mechanism and connecting means serving to prevent the operation of the control means for opening



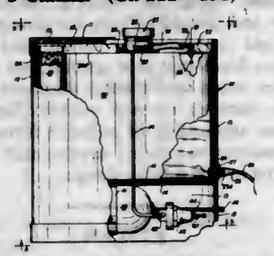
the valve and closing the switch when the register of said system has not been zeroized.

2,732,977

PORTABLE CARBONATED BEVERAGE DISPENSER

Edward B. Charpiat, Denver, Colo., assignor to The Charpiat Corporation, a corporation of Colorado

Application January 19, 1950, Serial No. 139,413
3 Claims. (Cl. 222—131)



1. A back-supported portable dispenser for carbonated beverages and the like, comprising a casing having external means for attaching the dispenser to a flexible harness for supporting said dispenser on the back of a user, said casing also having an upper compartment and a lower compartment, an insulated dividing wall between and separating the compartments, a beverage containing tank disposed within the upper compartment, said tank having a removable flanged threaded neck mounted upon its top wall, means for attaching the neck to said wall and a removable cap for the neck, means also within the upper compartment for chilling the beverage within the tank, a gas pressure tank located within the lower compartment, a conduit connecting the gas pressure tank with the beverage containing tank above the level of the beverage therein for maintaining the beverage at a predetermined pressure, means for dispensing the contents of the beverage containing tank, a charging conduit extending from the gas pressure tank through a wall of the lower compartment and accessible from outside the casing, and a pressure regulator for the gas disposed between the two tanks and accessible through a wall of said casing at a point below the dividing wall.

2,732,978

FLEXIBLE OIL CAN

Einar Oakland, Long Beach, Calif.

Application December 9, 1950, Serial No. 200,003
2 Claims. (Cl. 222—215)

1. An oil can adapted to be disposed in a space-saving position when not in use which includes: a fluid-holding

container having an annular bottom from which a continuous semi-spherical sidewall extends upwardly to terminate in an integrally formed tubular flange of substantial rigidity, said tubular flange having a smooth upwardly and outwardly extending exterior surface and an angularly disposed upper surface which define a sharp circumferentially extending edge at their junction, said sidewall being fabricated from a non-metallic flexible material of such thickness as to provide sufficient rigidity to enable said sidewall to normally retain said semi-spherical shape, with said tubular flange being fabricated from a substantially rigid material; a tubular discharge spout formed from a non-metallic flexible material, with the wall thickness of said spout being sufficient to enable said spout to be self-supporting when said can is in an upright



position, but said spout capable of being bent to fit within an annular recess formed in said sidewall when said neck is moved downwardly to bring the lower portion thereof into a position adjacent said bottom; a resilient downwardly and outwardly inclined annular cover integrally formed with the lower end portion of said spout; and a resilient flange of uniform thickness extending downwardly and inwardly from the circumferential edge portion of said annular cover to grip said tubular flange with sufficient force that said spout is not displaced from said container when said spout is disposed in said recess, the internal diameter of said resilient flange tending to contract upon application of outward force to said spout, with said tendency to contact causing said resilient flange to be anchored to said tubular flange.

2,732,979

WITHDRAWN

2,732,980

DEVICE FOR FEEDING OF GRANULAR MATERIALS

Gustav Valdemar Öholm, Bromma, Sweden, assignor to Aktiebolaget Svenska Flaktfabriken, Stockholm, Sweden

Application November 20, 1952, Serial No. 321,543
Claims priority, application Sweden November 21, 1951
4 Claims. (Cl. 222—427)



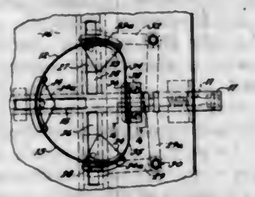
1. In a device for regulating the flow of granular material between a duct and a container, a duct extension having opposed end walls, a pair of inward projections in each end wall, the projections of each pair being equally spaced from the longitudinal centerline of said extension and defining therebetween a central end opening into said extension, the opening in one of said opposed end walls communicating with the duct and the opening in the other of said opposed end walls communicating with the container, partition means disposed along the longitudinal centerline of said extension and defining opposed side chambers therein, said partition means including a sector-shaped damper element at each end pivoted on the longitudinal centerline and having an arcuate surface adapted to confront the opening at said end, the width of said surface being coextensive with the spacing of said inward projections, means to pivotally displace each damper element selectively between three positions, in the first of said positions the arcuate surface of said damper element engaging only one of the projections of its associated end opening to afford between the other of the projections and said damper element open communication between said opening and one of said side chambers, in the second of said positions the arcuate surface of said damper element engaging both of the projections of its associated end opening to close communication between said opening and both of said side chambers, and in the third of said positions the arcuate surface of said damper element engaging only the other of the projections of its associated end opening to afford between the one projection and said damper element open communication between said opening and the other of said side chambers.

2,732,981

COLLAR HOLDER

Edmund N. Neckel, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a corporation of Ohio

Application April 14, 1953, Serial No. 348,693
5 Claims. (Cl. 223—52.1)



1. In shirt folding mechanism of the type wherein the shirt is laid out, button strip downward, with the collar dressed downwardly, collar block means comprising an internally expandable and contractable form, means for contracting said form to permit dressing of the shirt collar thereon and for thereafter expanding said form to conform in contour to and frictionally grip the inside of the collar, said form having vertically disposed side walls adapted to hold the collar in upright position, a stationary member adjacent an outer rear wall portion of said collar block and disposed to stand within and in contact with the rear inner wall of said collar, said stationary member having an outturned lip portion adapted to be dressed within and above the collar to intercept and retain said collar when in dressed position on said form.

2,732,982

GARMENT HANGER

Mayo E. Leonard, Toledo, Ohio

Application July 6, 1953, Serial No. 366,130
5 Claims. (Cl. 223—95)



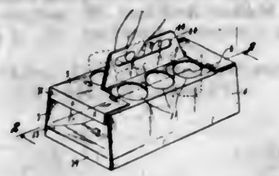
1. In a skirt hanger an elongated tubular hanger bar, a central hanger hook for said bar having a shank extended through the bar, a pair of channel slides fitted over said bar at opposite sides of said hook and slidable longitudinally of said bar toward and from the outer ends of the bar, tension means in said bar acting to slide the slides toward the ends of the bar including coil springs operatively connected to the slides, channel skirt grips fitting over said slides and adjustable longitudinally on the slides in accordance with the size of a skirt band, and coacting interlocking means on said slides and grips for holding the grips in different adjusted positions on the slides for movement by said slides toward the outer ends of the bar into gripping engagement with a skirt band.

2,732,983

HANDLED FOLDABLE CARRIER FOR BOTTLES AND REFRESHMENTS

Stanley G. Siddall, Orangeville, Ontario, Canada

Application June 1, 1953, Serial No. 358,810
5 Claims. (Cl. 224—48)



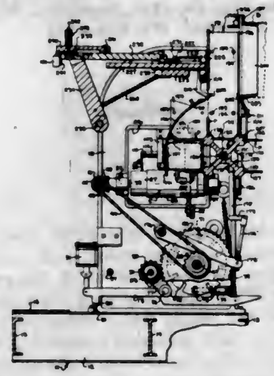
1. An article carrier embodying in combination a container comprising a strip of flexible material creased to provide a container body having a bottom part for supporting articles of food and side members extending oppositely from said bottom part and folded upwardly to form side walls at the lower portions of said side members, the upper portions of said side members folded inwardly to jointly form the top wall structure of the carrier and being apertured to provide openings for seating drinking cups, and said upper portions of said side members having longitudinally extending edge parts transversely of said side members folded downwardly in slightly spaced relation to provide a handle receiving slot reinforced by said edge parts, the terminal parts of said upper portions being continued beyond said slot-forming edge parts at the ends of said handle receiving slot to enable them to be secured together for uniting said side members at their upper portions; securing means fastening said terminal parts in assembled relation, and a flat handle forming element of substantially rigid material lodged in said slot in vertical disposition and having retaining means for precluding displacement.

2,732,984

ARTICLE STACKING AND BOXING APPARATUS

Bernard D. Dans, Brooklyn, N. Y., assignor to Dacam Corporation, Charlotte, N. C., a corporation of North Carolina

Application July 13, 1953, Serial No. 367,586
14 Claims. (Cl. 226—14)



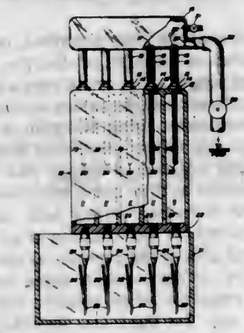
13. Apparatus for boxing articles comprising a turret having a plurality of circularly arranged pockets thereon, means for successively feeding articles into one of said pockets, means operable automatically upon feeding a predetermined number of articles into the latter pocket for imparting a step in rotational movement to said turret to thereby turn said articles in said pocket about the axis of said turret, means operable automatically upon each step in movement by said turret for moving the articles previously positioned in said pocket out of the pocket, means for supporting said articles in spaced relation to each corresponding pocket upon being moved out of said pocket to form a stack of said articles, and stack transfer means operable automatically upon a predetermined number of articles being stacked by transferring the stack.

2,732,985

ELECTROLYTE FILLING DEVICE AND METHOD FOR RESERVE TYPE PRIMARY BATTERIES

Paul L. Howard, Ridgewood, N. J., assignor to the United States of America as represented by the Secretary of the Navy

Application December 15, 1953, Serial No. 398,451
6 Claims. (Cl. 226—19)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. An automatic filling device comprising: a chamber having a first port at the top thereof, and a second port at the bottom; a first tube mounted in said first port and extending partially through said chamber; means for varying the length of said first tube within said chamber; a second tube mounted in said second port and extending from said chamber for immersion into a body of fluid; and means for applying a vacuum to said first tube, whereby said chamber will be filled with said fluid up to the lower level of said first tube.

2,732,986

METHOD AND APPARATUS FOR INFLATING HOLLOW ARTICLES OF ELASTIC MATERIAL

Lloyd R. Whittington, Ashland, Ohio, assignor to The National Latex Products Co., Inc., Ashland, Ohio, a corporation of Ohio

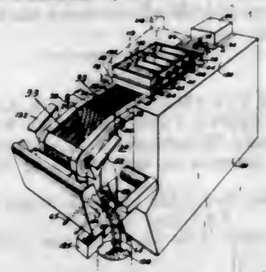
Application September 9, 1954, Serial No. 454,977
8 Claims. (Cl. 226—20)



1. A method of inflating a hollow inflatable article of flexible elastic material, comprising the steps of injecting an inflation needle through the wall of the article long enough to inflate the same with an inflating medium to predetermined pressure, compressing at least the portion of the inflated article surrounding the aperture made by said needle, thereby to hold the inflating medium in the

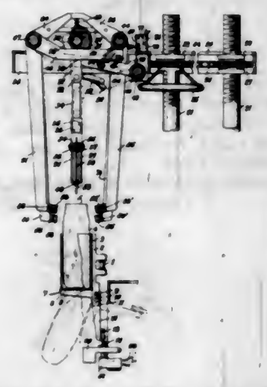
article, and attaching closure means to said wall portion at the entrance of said aperture while so compressed, thereby to seal the aperture against loss of said inflation medium.

2,732,987
CAPSULE CLEANING AND INSPECTING MACHINE
Robert P. Moore, Indianapolis, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a corporation of Indiana
Application February 8, 1951, Serial No. 210,049
5 Claims. (Cl. 226—41)



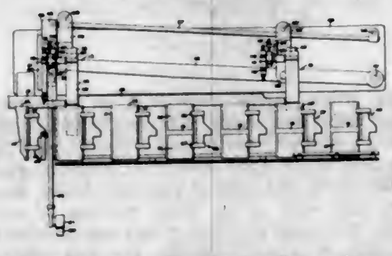
3. In a machine of the class described, means for moving large quantities of capsules in discrete, aligned, horizontally disposed, single layer, array over a predetermined path and for simultaneously imparting axial rotation thereto during such movement along said path, a series of positively driven cleaning rollers associated with said capsule moving means and adapted to engage and clean the surfaces of said capsules as they come into association therewith during their movement along said path, and a resilient roller mounted for free rotation at an angle oblique to the longitudinal axes of the capsules as they travel along said path whereby, as the capsules come into association with said freely rotatable roller, rotative movement is imparted thereto, and the capsules, including their component parts, are bodily biased longitudinally an extent sufficient to insure that the capsules are fully joined.

2,732,988
APPARATUS FOR PACKING AND SEALING BAG-LIKE CONTAINERS
Edward Feinstein, New York, N. Y.
Application March 14, 1952, Serial No. 276,473
5 Claims. (Cl. 226—51)



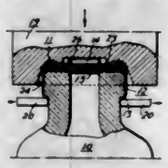
1. In a machine of the character described, a bag-support for holding a bag with its open top directed upwardly, a vertically movable plunger and means for moving the same to and from the top of the bag while the bag rests on said support, bag-distension means carried by the plunger and entering into the bag in company with the plunger and distending the same to form the top of the bag into slit-like formation after the plunger has entered into the top of the bag, the plunger including a suction nozzle and a liquid-supply nozzle, said nozzles entering the bag prior to the distension of the same by the said distension means, gripping means for engaging the bag near its top and flattening said top portion of the bag as the distension means is withdrawn from the bag, and sealing means for sealing the top portion of the bag while the said top portion is held in flattened condition by said gripping means.

2,732,989
DISPENSING APPARATUS FOR DOUBLE BAGS
Charles B. Harker, Rockford, Ill., assignor to Bartelt Engineering Company, Rockford, Ill., a corporation of Illinois
Application September 27, 1952, Serial No. 311,905
3 Claims. (Cl. 226—59)



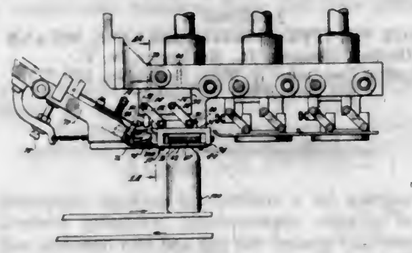
1. In a packaging machine having first and second stations horizontally spaced successively along a path of advance of bags to be filled, the combination of, a frame, a lever disposed above said path and fulcrumed on said frame at a point beyond said second station to swing about a horizontal axis extending transversely of the path, a filling spout disposed above said second station and mounted on said lever for bodily movement therewith, a second filling spout similarly mounted on said lever and disposed above said first station, a camshaft journaled on said frame, a cam carried by said camshaft, and a follower connected to said lever and engaging said cam to swing said lever about said axis thereby to lower said first spout a predetermined distance into a bag dwelling at said second station and said second spout a greater distance into a bag at said first station.

2,732,990
CONTAINER CAPPING DEVICES
William E. Glensky, Phoenixville, Pa., assignor to The West Company, Inc., Phoenixville, Pa., a corporation of Pennsylvania
Application May 28, 1953, Serial No. 358,133
2 Claims. (Cl. 226—84)



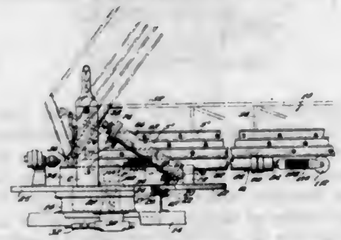
1. Apparatus for applying to a bottle having a head having an outer wall, an inner mouth and a substantially flat annular region of substantial width therebetween, a closure assembly of the type comprising a flat-topped metal cap and a rubber disk snugly fitting within the cap against the flat top thereof, said apparatus comprising a pressure-applying member having an annular rigid projection narrower than said annular region dimensioned and shaped to exert localized pressure on said disk through said cap over a narrow annular area above the said region of the bottle to pinch said disk over said narrow area, and means for crimping the lower edge of the metal cap inwardly below the bottle head while said disk is locally pinched over said narrow area.

2,732,991
CONTAINER CAPPING MACHINE
Emil N. de Bastos and Arthur W. Weller, Brooklyn, N. Y., assignors to Resina Automatic Machinery Co. Inc., Brooklyn, N. Y., a corporation of New York
Application October 31, 1950, Serial No. 193,255
6 Claims. (Cl. 226—88)



1. For use with a container capping machine having means to feed a succession of caps and a succession of containers which meet at a capping location and means for rotating said caps to threadedly engage the same upon said container; a device for aligning the caps with respect to the containers as the caps are threadedly engaged with said containers, said device comprising: a support means fixedly arranged with respect to said capping machine; a leveling element; means movably interconnecting said leveling element with said support means; said leveling element being movable through a plurality of substantially parallel planes, and including an upper guide member and a pair of spaced side guide members between which said caps may pass; at least one of said guide members having an opening therein through which said cap rotating means on said capping machine may project to engage successive caps passing between said side guide members; whereby said caps may be maintained in level position as the same are rotated to be threadedly engaged with said containers.

2,732,992
AERIAL EXTENSION LADDER
Edmund J. Arps, Oshkosh, Wis., assignor to Maxim Motor Company, Middleboro, Mass., a corporation of Massachusetts
Original application September 28, 1946, Serial No. 700,039, now Patent No. 2,614,743, dated October 21, 1952. Divided and this application July 11, 1952, Serial No. 298,396
13 Claims. (Cl. 228—9)



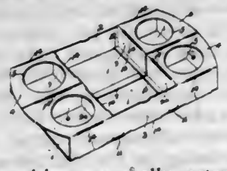
1. An aerial extension ladder comprising a plurality of ladder sections slidably connected together, multiple-sheave pulley blocks fast to the lowermost ladder section at longitudinally spaced points, a power cylinder containing a piston and rod fast to the lowermost ladder section between said spaced multiple-sheave pulley blocks, a multiple-sheave pulley block fast to the protruding end of the piston rod of the power cylinder and cable means having runs extending from the sheaves carried by the multiple-sheave pulley block fast to the piston rod to the sheaves carried by said spaced multiple-sheave pulley blocks, said cable means having ends connected to said lower ladder section with that portion intermediate its ends entrained about and free to run on the sheaves carried by said multiple-sheave pulley blocks, one run of the cable means extending about the sheaves on said spaced multiple-sheave pulley blocks having a portion of it connected to the lower end of the next ladder section, said power cylinder being operable to extend and retract the piston rod, extension of the rod moving the multiple-sheave pulley block carried thereby away from one of said spaced multiple-sheave pulley blocks and toward the other of said multiple-sheave pulley blocks and operating on the entrained cable means so as simultaneously to increase the length of the runs between the sheaves carried by one of said spaced multiple-sheave pulley blocks and the sheaves carried by the multiple-sheave pulley block fast to the piston rod, and to decrease the length of the runs between the sheaves carried by the other of said spaced multiple-sheave pulley blocks and the sheaves carried by the multiple-sheave pulley block fast to the piston rod.

2,732,993
REINFORCED CARRIER RECEPTACLE
Wilbur G. Anderson, Jr., Grand Rapids, Mich., assignor to American Box Board Company, Grand Rapids, Mich., a corporation of Michigan
Application December 17, 1951, Serial No. 262,042
1 Claim. (Cl. 229—23)



A receptacle of semi-rigid paper stock comprising, a rectangular bottom wall, side and end walls integrally connected to the side and end edges of the bottom wall extending upwardly therefrom, an open rectangular frame of wire having sides and ends located within the upper end portions of said sides and ends of the receptacle, each side and end of the frame having a shallow U-shaped wire member connected therewith and extending downwardly between the ends of each of said frame sides and ends, said sides and ends of the receptacle having integral extensions connected therewith, folded downwardly and inwardly over the frame sides and ends, and thence upwardly and outwardly under said U-shaped members and clamped thereby against the side and end walls of said receptacle.

2,732,994
ROADSIDE STAND TRAY
Wilbur G. Anderson, Jr., Grand Rapids, Mich., assignor to American Box Board Company, Grand Rapids, Mich., a corporation of Michigan
Application September 15, 1953, Serial No. 380,237
2 Claims. (Cl. 229—28)



1. A tray comprising a generally rectangular bottom of thin paper stock material, a side integrally connected with

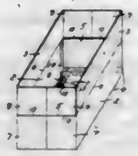
said bottom at each side edge thereof, top sections integrally connected one to the upper edge of each side at each of the end portions thereof, two of said top sections, one at each end of the tray, having an integral vertical section at its inner longitudinal edge extending downwardly to said bottom and permanently secured thereto, said top sections at opposite sides of the tray extending horizontally toward each other, means permanently securing the remaining top sections at their inner longitudinal edge portions to said vertical sections, additional vertical sections integrally connected, one with each top section, at the inner transverse edge thereof, said additional vertical sections extending downwardly toward said bottom, and means for connecting said additional vertical sections with said sides of the tray.

2,732,995

PACKING CASE

William Geisler, Tenafly, N. J., and Woolridge B. Morton, New York, N. Y., assignors, by mesne assignments, to Wilbro Corporation, Hackensack, N. J., a corporation of New Jersey

Application September 12, 1949, Serial No. 115,309
1 Claim. (Cl. 229—33)



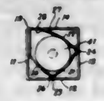
A packing case of paper board having a bottom wall with integral flaps folded at right angles to the bottom wall to form side and end walls, the end wall flaps each having a score line spaced from said fold line and coextensive therewith, the portions of the paper board which extend from said score lines through said fold lines and part way only into said bottom wall being impregnated with a resin, thereby forming portions of angular cross section substantially coextensive in length with said fold line and rigid throughout.

2,732,996

RADIO TUBE CARTONS

Vincent R. Pantalone, Hamden, Conn., assignor, by mesne assignments, to Federal Paper Board Company, Inc., Bogota, N. J., a corporation of New York

Application October 16, 1952, Serial No. 315,138
2 Claims. (Cl. 229—39)



1. A one-piece collapsible radio tube carton comprising panels articulated to one another along side fold lines in this order: four outer wall panels of substantially equal width; a glue panel narrower than said outer wall panels, said glue panel being articulated to the fourth outer wall panel and adhered to the first outer wall panel; an end panel articulated to one end of the fourth outer wall panel; a tuck flap articulated to said end panel; and at least three inner wall panels of which each of the first two are wider than the glue panel, but narrower than the outer wall panels, the third inner panel being wider than each of the first two inner wall panels, the width being sufficiently great to cause the third inner wall panel to converge towards, rather than diverge from, the first inner panel, when, in the fully squared carton the end edge of the third panel rests against the inner surface of the fourth outer panel at a line of contact which lies closer to the line of articulation between the glue panel and the fourth outer panel than one-half the width of the fourth outer panel, the first and second inner wall panels being notched out by removal of a substantially V-shaped piece of stock from the edge of said panels at the line of articulation between the first and second inner wall panels, which line rests against the second outer wall panel in the assembled carton.

2,732,997

WITHDRAWN

2,732,998

PACKAGE WRAPPING WITH OPENING MEANS

Herbert Rumsey, Jr., Rochester, N. Y.

Application December 4, 1951, Serial No. 259,777
2 Claims. (Cl. 229—87)



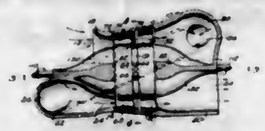
1. A wrapping for a commercial package comprising a sheet of flexible thermoplastic wrapping material wrapped smoothly around the top and two opposite ends of the package and folded over the bottom thereof with the two end portions of the wrapping in overlapping and underlying relationship on the bottom of the package adjacent one end thereof, said overlapping and underlying portions being fused together a spaced distance from the end of the overlapping layer providing a free flap for opening the package in the overlapping layer projecting beyond the fused connection and positioned adjacent said one end of the package, and said wrapping material extending beyond the lateral edges of the package and being folded downwardly over the side edges against the bottom in a straight fold and a flexible protecting and reinforcing sheet of relatively greater strength than the wrapping material secured to and extending over substantially the entire exposed outer surface of the wrapping material and flap at the under portion of the package to provide additional protection and to reinforce the wrapping material in the flap and at the bottom of the package whereby the package may be readily opened by a pulling force applied to the flap.

2,732,999

AXIAL FLOW ELASTIC FLUID TURBINE POWER PLANT, INCLUDING AN AXIAL FLOW RADIAL DIFFUSION COMPRESSOR

Edward A. Stalker, Bay City, Mich.

Application July 31, 1946, Serial No. 687,385
4 Claims. (Cl. 230—122)



1. In combination in an axial flow elastic fluid compressor for increasing the pressure of a fluid flow therethrough, a rotor mounted for rotation about an axis and having a plurality of blades, said rotor having passages therethrough between adjacent blades from front to back, said passages being set peripherally obliquely to said axis and having an exit greater than the inlet in radial depth and cross-sectional area, the radial depth of each said inlet passage at the inlet end thereof being less than the radius from said axis to the radially inward side of each said passage at the inlet end of said passage, said exit facing rearward to discharge fluid rearward in the general direction of said axis, said rotor passages being arranged such that the angle between the forward portion

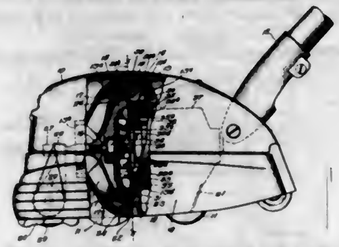
of each blade and said axis is at least as great as that between the aft portion thereof and said axis, the axial length of the diverging portion of said rotor passages being not greater than the maximum radial depth thereof to provide a substantial angle of divergence between the inner and outer walls of said passage, the radii from said axis to the tips of said blades substantially increasing in the downstream direction, and a stator structure positioned adjacent said rotor on the downstream side thereof, said structure having a flow passage therethrough of rearwardly decreasing radial depth and cross sectional area measured normal to said axis, said passage being adapted to receive fluid thereinto from said rotor passage.

2,733,000

CUTTER MECHANISM FOR A VACUUM CLEANER

Charles H. Sparklin, Chicago, Ill., assignor to Birtman Electric Company, a corporation of Illinois

Application November 16, 1951, Serial No. 256,701
2 Claims. (Cl. 230—132)



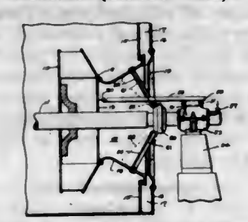
1. In a centrifugal fan structure including a rotatable fluid impeller and means constituting an exhaust passage extending around the impeller periphery and rearwardly thereof in an axial direction, the exhaust passage increasing in depth helically substantially parallel to said axial direction from an area of substantial width adjacent to the periphery to an exhaust port, a fixed cutter blade located at said area and extending laterally across the exhaust passage to catch foreign material that may be lodged at said area, and a second cutter blade on the impeller for cooperation with the fixed blade to sever material lodged thereon, both said cutter blades being located beyond the periphery of the impeller to prevent substantial interference with the operation of the impeller.

2,733,001

APPARATUS FOR COOLING THE BEARINGS OF FANS

John E. McDonald, Newton, Mass., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application October 1, 1952, Serial No. 312,572
1 Claim. (Cl. 230—211)



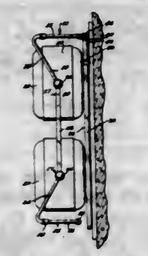
A forced draft fan having a fan wheel on a rotary shaft, and having an axial inlet passage around the shaft, said passage being provided with an end open to atmosphere, a bearing on said shaft outside said passage, said bearing having an air passage therein and having an air inlet and an air outlet connecting with said air passage, adjustable spin vanes pivoted in said axial passage, adjacent ones of said vanes overlapping when adjusted to closed position, and a tube connected at one end to said air outlet and having its other end terminating adjacent said wheel, said tube extending between a pair of said vanes, the adjacent edges of the vanes of said pair having cut-outs for clearing said tube when said vanes are adjusted to closed position.

2,733,002

TWIN WINDOW FANS

Alfred J. Huck, St. Louis, Mo., assignor to Knapp-Monarch Company, St. Louis, Mo., a corporation of Delaware

Application August 16, 1954, Serial No. 449,834
6 Claims. (Cl. 230—259)



1. In combination, a pair of twin window fans for mounting in vertical tandem relation, each fan comprising: a fan housing adapted to be positioned in a window opening, motor and fan means in said housing, pivot pin means on opposite sides of said housing for mounting said housing for pivoting about an axis through the center of gravity thereof, and a single support member pivoted on said pivot pin means, said support member defining a base member disposed in a plane parallel to said pivot axis and spaced from said pivot axis a distance greater than the distance from the pivot axis to any point on said housing furthest therefrom; means including the single support member of the upper one of said tandem fans for supporting said upper fan therefrom; and means for supporting the lower one of said tandem fans from the upper tandem fan including a pair of elongated hanger straps each pivotally connected adjacent its ends to said pivot pin means on said pair of tandem window fans.

2,733,003

LIVESTOCK PROD

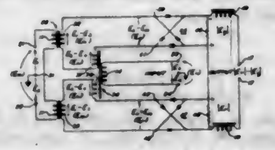
William H. Abildgaard, Santa Maria, and Charles C. Herbert, Watsonville, Calif., assignors to Livestock Sprayer Mfg. Co., San Jose, Calif., a corporation of California

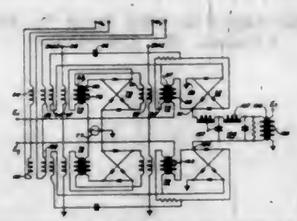
Application January 12, 1953, Serial No. 330,852
4 Claims. (Cl. 231—2)



1. In an electric prod for livestock, a body including a pistol grip handle portion, a tube secured in the body and extending forwardly therefrom, a second tube slidably received by said first tube for adjustable positioning in either retracted or extended position with respect thereto, the retracted position of said second tube including positioning of a portion thereof within said body, contact elements projecting outwardly from said second tube, extensible electric lead means extending from said contact elements through said tubes, and electrical means in said body connected to said lead means for producing an electrical potential.

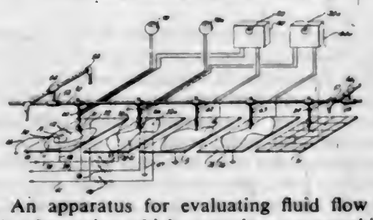
2,733,004
ELECTRICAL COMPUTERS
John E. Richardson, Pasadena, Calif.
Application May 26, 1950, Serial No. 164,583
5 Claims. (Cl. 235—61)
(Granted under Title 35, U. S. Code (1952), sec. 266)





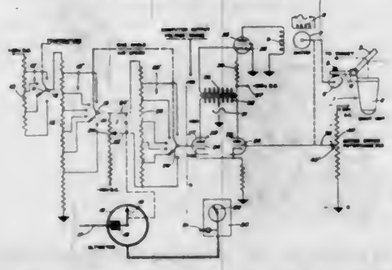
4. A computer for solving the equation $E_1E_2=E_3E_4$ of which E_1, E_2, and E_4 have a predetermined amplitude, comprising A. C. voltage sources E_1, E_2, E_3, and E_4, delivering the respective named voltages, E_1 and E_2 being in phase with each other, E_3 and E_4 being out of phase with each other and in quadrature with E_1 and E_2, first and second transformer primary windings connected in series with said voltage sources E_1 and E_3, a third transformer primary winding connected in series with said voltage sources E_2 and E_4, first and second transformer secondary windings connected in series and inductively coupled to said first and third primary windings respectively, third and fourth transformer secondary windings connected in series and inductively coupled to said second and third primary windings respectively, rectifier means for rectifying the voltage on said first and second secondary windings, rectifier means for rectifying the voltage on said third and fourth secondary windings, means for algebraically adding said rectified voltages, a saturable magnetic core, a first core winding disposed about said core, means for connecting said added rectified voltages across said first core winding, a second core winding disposed about said core, means for connecting A. C. voltage source E_3 across said second core winding, a bias winding disposed about said core and connected to a fixed D. C. voltage effective to partially saturate said core, and means for feeding back the voltage output E_3 on said second core winding into said first and second transformer primary windings.

2,733,005
POTENTIOMETRIC OIL RESERVOIR MODEL
John E. Sherborne, Whittier, and Earle R. Atkins, Jr., Anaheim, Calif., assignors to Union Oil Company of California, Los Angeles, Calif., a corporation of California
Application March 16, 1951, Serial No. 215,986
16 Claims. (Cl. 235—61)



4. An apparatus for evaluating fluid flow in an oil-bearing formation which comprises a permeability model, said permeability model corresponding in areal extent and thickness to the areal extent and thickness of said oil-bearing formation, the conductivity per unit area of said permeability model varying with the permeability of said oil-bearing formation, a porosity model, said porosity model corresponding in areal extent to said oil-bearing formation, the resistance at any point of said porosity model varying with the porosity of said oil-bearing formation, means for establishing a voltage distribution throughout said permeability model which corresponds to the pressure distribution of said oil-bearing formation, means for determining the voltage gradient at any particular point on said permeability model and means for determining the resistance on said porosity model corresponding to said particular point.

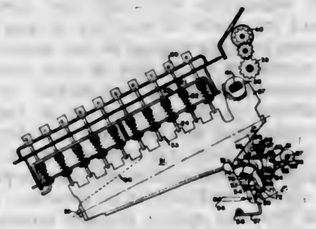
2,733,006
ROCKET SIGHT FOR AIRCRAFT
Horace W. Babcock, Pasadena, Calif., assignor to the United States of America as represented by the Secretary of the Navy
Application August 23, 1949, Serial No. 111,920
3 Claims. (Cl. 235—61.5)



1. In combination in a fire control sight, a movable sighting member, a motor coupled to drive said member, and a computer; said motor being of the two-phase type with a fixed winding and a reversing winding, a power source of alternating current of two quadrature phases, a circuit for applying alternating current of one phase to said fixed winding, and a circuit for applying alternating current of quadrature phase to said reversing winding, circuitry for selectively reversing the phase of the current in said reversing winding, said circuitry including a transformer with a secondary winding and a center-tapped primary winding, two grid control tubes, the anode-cathode paths of said tubes being connected in series with the terminals, respectively, of said primary winding, the quadrature phase of said source being connected in parallel with the two halves of said primary winding through the center tap; a potentiometer, a steady direct current source connected across said potentiometer and said potentiometer having a sliding contact mechanically coupled to said movable sighting member so that incremental movements of said member is followed by corresponding movements of said contact; said computer comprising means for combining a plurality of voltages proportional, respectively, to factors to be mathematically combined and for producing a resultant variable voltage, the variable voltage output of the computer being directly connected to the grid of one of said tubes, and the sliding contact being directly connected with the grid of the other tube so that the potential of the sliding contact may be directly compared with the variable voltage.

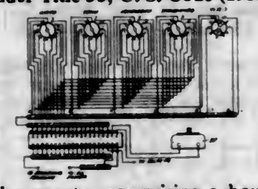
2,733,007
POWER OPERATED SELECTION MECHANISM
Donald L. Rolph, Hayward, Calif., assignor to Friden Calculating Machine Co., Inc., a corporation of California
Application November 17, 1952, Serial No. 320,949
15 Claims. (Cl. 235—79)

1. In a cyclically operable calculating machine having a selection mechanism including ordinally arranged rockable gates and means controlled by the angular position of said gates for determining the value to be entered into said machine, the combination which comprises means



including a cam means in each order operative to position said gates, and means for cyclically positioning said cam means.

2,733,008
DIGITAL CONVERTER
John B. D'Andrea and Herbert M. Heuver, Dayton, Ohio
Application October 28, 1952, Serial No. 317,376
12 Claims. (Cl. 235—92)
(Granted under Title 35, U. S. Code (1952), sec. 266)



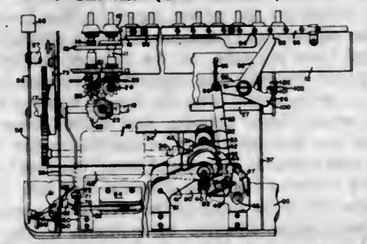
1. A digital converter comprising a housing, an input receiving means mounted therein, a series of input transmitting means operatively connected to said input receiving means and including contact arms connected for rotation therewith and in biased relation thereto, signal transmitting means arranged continuously and respectively parallel to each other and normally spaced from said rotatable contact arms, means interconnecting said signal transmitting means for conjoint movement thereof, control means, a control arm pivotally connected to said housing adjacent one of said signal transmitting means, crank means interconnecting said control means and control arm whereby on actuation of said control means, said crank arm will be pivoted engaging one of said signal transmitting means for simultaneous movement of said signal transmitting means into engagement with said contact arms whereby a direct output signal equal to the input is transmitted, wherein the signal transmitting means includes a plus-minus signal transmitting means whereby the input may be directly transmitted as a whole number whether positive or negative.

2,733,009
ABACUS WITH MONEY INDICIA THEREON
Cecil M. Forbes, Jr., Homewood, Ala.
Application December 9, 1954, Serial No. 474,239
1 Claim. (Cl. 235—123)



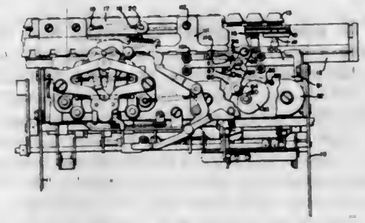
An abacus of the character described comprising, a frame, a cross member positioned in said frame dividing it into two sections, one section being approximately twice the area of the other section, a plurality of flat bars positioned parallel with each and extending from one end of the frame to the other end thereof, one flat bar having a plurality of disks mounted slidable thereon with each disk having marked thereon 1¢; one flat bar having a plurality of disks mounted slidable thereon with each disk having marked thereon 5¢; one flat bar having a plurality of disks mounted slidable thereon with each disk having marked thereon 10¢; one flat bar having a plurality of disks mounted slidable thereon with each disk having marked thereon 50¢; one flat bar having a plurality of square pieces mounted slidable thereon with each square piece having marked thereon $1.00; one flat bar having a plurality of square pieces mounted slidable thereon with each square piece having marked thereon $5.00; one flat bar having a plurality of square pieces mounted slidable thereon with each square piece having marked thereon $10.00; one flat bar having a plurality of square pieces mounted slidable thereon with each square piece having marked thereon $50.00; a back attached to said frame, a plurality of indentures in said back and positioned under said disks and square pieces and in line therewith, each of said disks and square pieces having an integral rounded portion of a size to fit in said indentures when in register therewith, a paper pad holder with a hanger attached to the back of the frame at one end thereof.

2,733,010
CLEARING MECHANISM
Grant C. Ellerbeck, San Leandro, Calif., assignor to Friden Calculating Machine Co., Inc., a corporation of California
Application November 17, 1952, Serial No. 320,993
9 Claims. (Cl. 235—144)



1. In a calculating machine having an accumulator register containing a plurality of ordinally arranged dials, actuating means, digitation control means for connecting said actuating means to said accumulator additively or subtractively, a reciprocatory clearing mechanism for said accumulator, a motor, and a main clutch for driving said actuating means, the improvement which comprises an auxiliary clutch driven by said motor, means for causing engagement of said auxiliary clutch, means operated by said clutch for reciprocating said clearing mechanism, and means operated by said clutch for operating said digitation control means to connect said accumulator register to said actuating means.

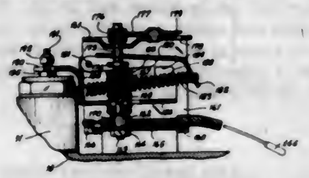
2,733,011
CLEARING MECHANISM
Elwood A. Davis, Hayward, Calif., assignor to Friden Calculating Machine Co., Inc., a corporation of California
Application November 17, 1952, Serial No. 320,994
6 Claims. (Cl. 235—144)



1. In a calculating machine having a frame, a register carriage mounted for transverse shifting on said frame, a

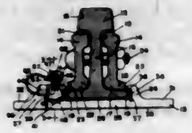
register mounted in said carriage, and means for clearing said register, means for operating said clearing means comprising a drive shaft mounted in said frame, means including a clutch for connecting said means for clearing said register to said drive shaft, and means driven in synchronism with said drive shaft for disengaging said clutch.

2,733,012
INSTANTANEOUS LIMITING SWITCH MECHANISM
Claude M. Garner, Clayton, Mo., assignor to Missouri Automatic Control Corporation, St. Louis, Mo., a corporation of Missouri
Application March 15, 1952, Serial No. 276,783
5 Claims. (Cl. 236—48)



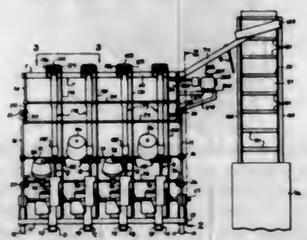
1. In a fluid valve, a valve housing, a valve reciprocable therein between two positions, a valve stem projecting from the housing, an actuating mechanism including a support, power means oppositely movable, abutment means moved by the power means, a first lever pivoted onto the support and engageable by the abutment means, a second lever pivotable on the support, the levers overlapping and extending in opposite directions from their pivots, a spring connecting the levers, it being connected to the second lever between said second lever and the pivot of the first lever, and connected to the first lever on the side adjacent the second lever, the first lever being movable between limits to displace said last connection from one side to the other of the pivot of the second lever, said limits being effective to maintain a line of force exerted by said spring in a direction such that it does not intersect a line between the connection of said spring with the first lever and its pivot, whereby the first lever is always urged in one direction by the spring, and the other lever is moved with a snap action upon movement of the first lever, and an adjustable connection between the second lever and the valve stem to provide a differential between the position of the power means for shifting the valve in one direction and the position for shifting it in the other.

2,733,013
TRACK CONSTRUCTION
Georg Brookman Anthonisen, St. Paul, Minn.
Application June 23, 1952, Serial No. 295,008
25 Claims. (Cl. 238—317)



2. A tie plate for application to the base of a rail comprising a body portion on which the rail rests, two parallel abutments extending upwardly therefrom and between which the base of the rail is disposed, one of said abutments being spaced from the juxtaposed edge of the rail base and being constructed with a beveled face to form a dovetailed groove therebetween, a key having a dovetailed tongue received in said groove, the minimum distance between said face and the juxtaposed edge of the rail base being less than the maximum thickness of said tongue to prevent disengagement of the tongue therefrom upon upward movement of the key, said key and tie plate having engageable parts, a longitudinally extending cam surface on one of said parts inclining in the direction of its length, a cam follower on the other of said parts engageable with said cam surface and causing upward movement of said key to grip the rail base and restrain creeping thereof in one direction upon longitudinal movement of the key in such direction, a second longitudinally extending cam surface on one of said parts inclining in the direction of its length and spaced in a longitudinal direction from said first named cam surface; and a second cam follower on the other of said parts engageable with said second cam surface, said second cam surface inclining in a direction opposite to that of said first cam surface to cause upward movement of said key to grip the rail base and restrain creeping thereof in the other direction upon longitudinal movement of the key in the second named direction.

2,733,014
AUTOMATIC BOBBIN LOADER FOR AUTOMATIC WINDING MACHINES
Little L. Hallman, Aberdeen, N. C., assignor, by mesne assignments, to The Terrell Machine Company, Charlotte, N. C., a corporation of North Carolina
Application June 21, 1952, Serial No. 294,949
15 Claims. (Cl. 242—35.5)

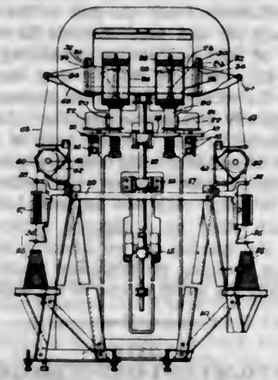


1. Apparatus for directing bobbins to a row of machines comprising a longitudinally slotted trackway adapted to support the heads of a plurality of bobbins having their stems depending through the slot of said trackway, said trackway having a discharge opening coinciding with each of said machines, means for advancing said bobbins along said trackway, means preventing advance of said bobbins along said trackway beyond the discharge opening for the last machine in said row, guide means disposed adjacent each of said discharge openings for guiding bobbins to said machines, restraining means associated with each of said guide means and normally restraining movement of bobbins therethrough, means individually controlled by each machine for releasing the restraining means at predetermined intervals, and means operable automatically upon release of the restraining means for moving the adjacent bobbin from said trackway through said guide means to the corresponding machine.

2,733,015
APPARATUS FOR WINDING TEXTILE YARNS
John K. Cochran, Hazleton, Pa., assignor to The Duplan Corporation, Hazleton, Pa., a corporation of Delaware
Application June 18, 1953, Serial No. 362,602
10 Claims. (Cl. 242—35.5)

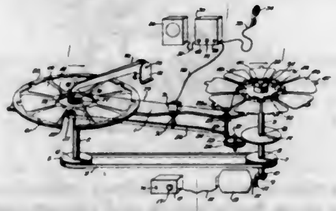
1. In a yarn winding machine of the type having a plurality of yarn-receiving tubes, said tubes being rotatably mounted, and having a traverse bar reciprocable with respect to the yarn-receiving tubes and parallel to the axes thereof, in combination, yarn guiding means mounted on the traverse bar for directing yarn to each of said tubes, said yarn-guiding means comprising a ring rotatably mounted adjacent the corresponding tube with its axis of rotation perpendicular to the tube and to the plane of reciprocation of the bar, the diameter of said

ring being less than the axial length of the yarn receiving tubes, means for guiding the yarn through said ring



at a point removed from its center and drive means for rotating said ring.

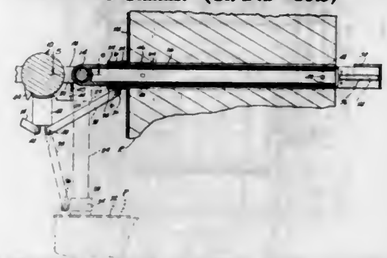
2,733,016
WIRE RECORDER
Ernst Hjalmar Waloddi Weibull, Brosarp, Sweden
Application November 7, 1952, Serial No. 319,265
Claims priority, application Sweden November 7, 1951
16 Claims. (Cl. 242—54)



1. A method of winding recording wire upon and unwinding from a rotatable wire magazine of a wire recorder, comprising the steps of providing a generally planar wire magazine having a plurality of radially disposed and circumferentially spaced wire support means and two rotary drive means, one arranged to receive the radially inner ends of the support means in driving relationship and the other to receive the radially outer ends of the support means in driving relationship, placing the magazine upon said one support means, winding upon said support means, progressing from the radially inner end of the support means toward the radially outer end thereof, at least one plane layer of wire substantially perpendicular to the rotational axis of the magazine in which layer the individual wire turns are guided in a spacial relationship such that each turn of wire crosses the radially next preceding turn and the radially next succeeding turn at an angle and that the said crossings are circumferentially spaced by substantially equal intervals, transferring the loaded magazine to said other driving means, and unwinding the wire, progressing from the radially inner end of the support means toward the outer end thereof.

2. A wire recorder for winding recording wire upon and unwinding from a magazine, said recorder comprising a generally planar wire magazine including a plurality of radially disposed and circumferentially spaced wire support means, two rotary drive means for said magazine to rotate the same in the radial plane of the support means, one of said drive means having mounting means for receiving the radially inner ends of the support means, said drive means constituting the wind-up drive means, and the other having mounting means for receiving the radial outer ends of the support means, said latter drive means constituting the unwinding drive means, and wire guide means for feeding recording wire to the inner ends of the support means when the same are placed upon the wind-up drive means, the said guide means being mounted for reciprocation perpendicularly relative to the radial plane of the support means and operatively coupled with the support means for control of the said perpendicular movements by a rotation of the support means, the said guide means being disposed in a spacial relationship to the support means and the movements of the guide means being timed relative to the rotation of the support means such that the guide means alternately guide the wire through the radial spacings between the support means to the upper side and the lower side of successive support means whereby a layer of wire progressing radially outwardly is formed in which each individual wire turn crosses the radially next preceding and the radially next succeeding turn at an angle.

2,733,017
SWINGING RACK FOR ROLLS OF CARPETING AND THE LIKE
Zbigniew M. Chrzanowski, Amsterdam, N. Y.
Application November 19, 1954, Serial No. 470,098
5 Claims. (Cl. 242—55.3)



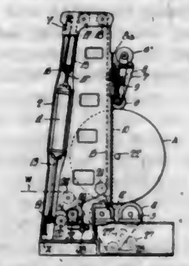
1. A rack for rolls and like articles comprising a main post; an auxiliary post spaced from the main post for disposition of a supported roll therebetween; a horizontally extending spindle hingedly connected at one end to the main post for swinging movement in a horizontal plane; a roll support sleeve mounted on said spindle for rotation and for movement longitudinally of the spindle, said sleeve being constructed to support a roll for rotation and longitudinal movement with the sleeve; means constructed to support the sleeve at that end thereof remote from the hinge connection of the spindle, in one position to which the spindle is swung; and link means pivotally connected between the main post and sleeve for shifting the sleeve longitudinally of the spindle in a direction away from said hinge connection, responsive to swinging of the spindle to an opposite extreme position.

2,733,018
WEB WINDER
Charles D. Nitchie, Haddonfield, N. J., assignor to Samuel M. Langston Co., Camden, N. J., a corporation of New Jersey
Application October 1, 1953, Serial No. 383,657
16 Claims. (Cl. 242—66)

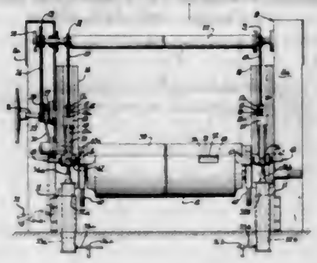
7. A web winder of the type having a pair of roll supporting rollers simultaneously rotated in the same direction and a vertically movable idler pressure roller, bearings for said pressure roller, said winder having a pair of cylinders each having a piston, flexible members connected to said pistons and to the bearings of said pressure roller for raising, lowering and pressing downwardly said pressure roller, and means for delivering a fluid under pressure to both ends of each cylinder.

12. A web winder of the type in which the rewind roll rests on and is rotated by a pair of parallel driven rollers

and a pressure roller rests on the roll and is moved upwardly along the frame members as the rewind roll increases in size, said web winder being characterized by having a motor vertically movable with said pressure roller and operatively connected to the latter for driving it.



2,733,019
WINDER MACHINE
John E. Goodwillie, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a corporation of Wisconsin
Application October 15, 1953, Serial No. 386,171
8 Claims. (Cl. 242—66)



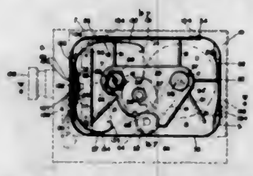
1. A winder machine adapted to produce a wound roll of a controlled uniform degree of hardness irrespective of the weight thereof, which comprises a pair of under winder drums defining a vertical winding nip, upright parallel tracks on said machine adjacent the ends of the winder drums, a winder shaft extending along the length of said winding nip for receiving the roll being wound thereabout and cooperating with the winder drums to support the total weight of the roll, bearing means rotatably mounted on each end of the shaft and accommodating relative tilting of the shaft and slidably retained in the tracks, separate and independent fluid pressure actuated support means engaging the bearing means at opposite ends of the shaft for movement thereof in the tracks, means responsive to a predetermined function of the distance between the shaft and the winding nip connected to each of said support means for supplying actuating fluid pressure thereto and separate and apart independently controlled inlet means connected to each of said support means adapted to supply different amounts of additional actuating fluid pressure thereto.

2,733,020
CARRIER FOR CONDENSER BOBBINS
Johann J. Keyser, Aarau, Switzerland, assignor to Schiess Aktiengesellschaft, Dusseldorf-Oberkassel, Germany
Application April 21, 1952, Serial No. 283,440
Claims priority, application Switzerland April 24, 1951
1 Claim. (Cl. 242—68)



A carrier for condenser bobbins for spinning and preparing machines, particularly for ring spinning machines, which comprises in combination: a plurality of bobbins, two sets of a plurality of tube sections telescopically engaging each other with the tube sections of each set increasing in diameter from one end to the other end of each set, each of said tube sections having connected thereto one of said bobbins, a connecting tube section having an outer diameter smaller than the inner diameter of the tube sections of smallest diameter of each set and telescopically interconnecting the tube sections of smallest diameter of said two sets, each of said tube sections of each of said sets being movable individually away from the adjacent tube section by a predetermined distance so as to space each two adjacent bobbins of each set from each other by a distance substantially corresponding to the spacing of two adjacent spindle axes of the respective spinning or preparing machine decreased by substantially the width of one of the adjacent bobbins.

2,733,021
LOCK FOR FILM CONTAINING MAGAZINES AND FILM HANDLING APPARATUS
Warren Dunham Foster, Eustis, Fla., and Oliver Whitwell Wilson, Arlington County, Va., assignors, by direct and mesne assignments, to Foster and Foster, Ridgewood, N. J., a copartnership
Original application February 12, 1948, Serial No. 7,926, now Patent No. 2,560,564, dated July 17, 1951. Divided and this application July 13, 1951, Serial No. 236,592
20 Claims. (Cl. 242—71)



2. In a film magazine, a delivery support, a take-up support, a drive for revolving said take-up support in a winding-up direction, and means within said magazine and operatively interconnected with said drive for blocking the revolution of said delivery support except when said take-up drive is revolving said take-up support in a winding-up direction.

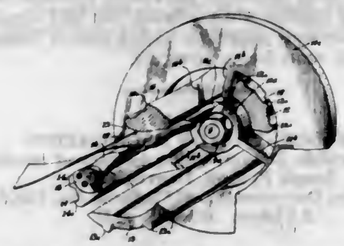
2,733,022
STEEL SHAFT FOR ROLLS OF PAPER AND THE LIKE
Donald R. Grody, Lenox, Mass., assignor to The Clark-Aiken Company, Lee, Mass., a corporation of Massachusetts
Application July 2, 1954, Serial No. 440,938
1 Claim. (Cl. 242—72)



A stub shaft construction for inserting in the tubular core of a roll of paper or the like for rotation thereof, comprising an elongated outer shaft section and an elongated inner shaft section having a bore, the inner end of the outer section secured in the outer end of the bore of the inner section to provide an elongated shaft structure, said outer section provided with a longitudinal bore, an elongated actuator slidable in the bore of the inner section having an inner annular end head spaced inwardly of the inner end of the inner section, means holding said actuator and inner section against relative rotation, an annular resilient expander on said actuator between the head thereof and the inner end of the inner section adapted to be expanded radially by

said actuator, collar means seated in the bore of the outer section adjacent the outer end thereof, an elongated actuating rod journalled in said collar means and extending through the bores of said sections and actuator having an inner threaded end, thread means carried by said actuator operably engaging the threaded end of said rod, a collar fixed to said outer section at the outer end of said inner section for engaging an end of a core in which said shaft is inserted, and journal means for a bearing at the outer portion of said outer section, all adapted and arranged whereby as said actuating rod is rotated in one direction or the other said actuator acts to expand said expander into a core or release the same.

2,733,023
REEL FOR COILING STRIP MATERIAL
Charles J. Lewis, Warren, and David E. Poole, Newton Falls, Ohio, assignors to Republic Steel Corporation, Cleveland, Ohio, a corporation of New Jersey
Application February 20, 1953, Serial No. 337,942
9 Claims. (Cl. 242—78)



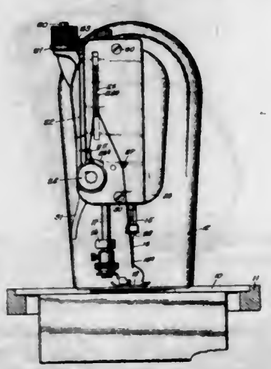
1. A reel for coiling strip material, comprising a reel head including a base rotatable about a central axis and a plurality of circumferentially spaced paddles projecting from the base parallel to the axis and shaped to resemble segments of a thick-walled hollow cylinder, a gripping bar substantially equal in length to said paddles, said bar being pivoted at its respective ends on said base and on one of said paddles for movement about an axis parallel to said paddles between a gripping position adjacent a second one of the paddles and a releasing position spaced from said second paddle, said bar and said second paddle cooperating to grip or release the end of a strip of material to be wound on the reel, and means operable to move said bar between said positions.

2,733,024
COMBINED HOSE CARRIER AND STORAGE TIE
William Paul Eden, Port Arthur, Ontario, Canada
Application November 29, 1951, Serial No. 258,806
1 Claim. (Cl. 242—86)



In a hose laying device, a first U-shaped handle carrying bail having spaced parallel arms and a base handle portion joining the arms together, eyelets formed on said arms and extending in a plane running through the arms and the handle portion, a second U-shaped hose carrying bail of similar size and having spaced parallel arms, said arms having eyelets extending respectively at right angles through eyelets of the arms of the first U-shaped bail to permit the U-shaped bails to be swung approximately 360 degrees with respect to each other, said eyelets of the second bail having raised ridges on the sides thereof to frictionally retain the handle bail in a locked position upon the outer layer of a hose roll and at an angle of approximately 90 degrees with respect to the hose carrying bail, said second U-shaped hose carrying bail further having a cross base arm with an eyelet thereon extending at right angles from one parallel arm, a hose carrying roller journalled upon said cross base arm, the other arm having a hook portion extending at right angles to the eyelet on the cross base arm and releasably engageable therewith, tie cord means anchored to one arm of the second bail and adapted to pass over the outer layer of a hose roll, and a member on the other arm of the second bail to which the tie cord means can be disconnectably attached.

2,733,025
SEWING MACHINE THREAD TENSIONER
George C. Sporney, Chicago, Ill., assignor to Birtman Electric Company, a corporation of Illinois
Application April 26, 1952, Serial No. 284,549
5 Claims. (Cl. 242—150)

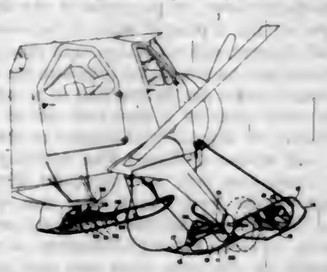


1. A thread tensioner comprising, a support member, a threaded bolt extending through said support member, means on the front head end of the bolt for frictionally engaging a thread, a nut on the rear threaded end of the bolt having a low-friction inner surface, means for preventing rotation of the nut on rotation of the bolt, and spring means urging the nut away from the support member, the spring means having an arcuate projecting portion transverse to the axis of the bolt engaging the inner surface of the nut over a relatively small area to minimize further the frictional drag upon adjusting the spring pressure.

2,733,026
AIRCRAFT SKI
Francis J. Ditter, Minneapolis, Minn.
Application May 17, 1952, Serial No. 288,517
3 Claims. (Cl. 244—108)

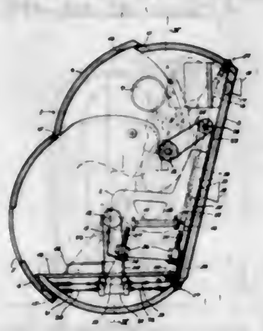
1. An aircraft landing ski adapted to be mounted on the wheel shaft of an airplane comprising a single elongated landing surface, and a lateral landing surface extending outward along the forward portion thereof, means for attaching said ski to the wheel shaft of an airplane at the inner end of said wheel shaft such that the elongated landing surface is inside of the wheel and the lateral portion of said landing surface is in line with said wheel, a lever arm mounted on the ski and on the inner end of said wheel shaft, a second lever arm operable

with said first lever arm, means for operating said second lever arm including a rod having an elongated slot



therein and being attached to said second lever arm by means of a pin passing through said slot.

2,733,027
EJECTABLE AIRCRAFT SEAT CAPSULE
Doane R. Gero, Akron, Ohio, assignor to Goodyear Aircraft Corporation, Akron, Ohio, a corporation of Delaware
Application December 17, 1952, Serial No. 326,473
4 Claims. (Cl. 244—140)



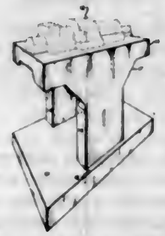
1. For an airplane an ejectable protective capsule containing an adjustable seat for a pilot or crew member, said capsule comprising a one-piece shell completely open at front, launching rails attached to the shell, a lower and an upper door for completely closing the shell, each of said doors being pivotally mounted on the shell and swingable about a transverse axis, gas power means located within said capsule for operating said doors, said power means including a storage cylinder containing high pressure gas, a valve for reducing gas storage pressure to operating pressure, gas-operated hydraulic actuating cylinders for shifting said seat horizontally from normal flying position to ejection position, gas pressure piston operated lock pin mechanism for locking said doors in open position, a separate gas-operated hydraulic cylinder including a piston and piston rod acting upon each door, the piston rod extending beyond both ends of the cylinder, an endless sprocket chain and cable system attached to the ends of each piston rod and in operative engagement with a respective door for pivotal movement thereof, a pressure conduit system, including valves, supplied with gas at reduced pressure from said gas storage cylinder and being connected to all of said actuating cylinders and to said lock mechanisms, one of said valves, manually operated, admitting gas to said seat actuating cylinders, a trigger attached to one of said seat actuating cylinders in association with means for opening one of said valves to admit pressure into said lock pin mechanisms for releasing the lock pins and thereby admitting pressure to both door actuating cylinders, and means for controlling the piston movement in these cylinders.

2,733,028
PARACHUTE CANOPY CONSTRUCTION
Heinrich K. Epple, Lexington, Ky., assignor to Irving Air Chute Company, Inc., Lexington, Ky., a corporation of New York
Application May 17, 1954, Serial No. 430,182
10 Claims. (Cl. 244—145)



1. A canopy construction for parachutes comprising a main inflatable canopy portion having at the outer peripheral portion thereof a downwardly convergent air deflecting skirt, the air opening of said skirt being less in diameter than the outer peripheral diameter of the main canopy portion when inflated, the said canopy at the lower outermost peripheral edging thereof being provided with air vents facing upwardly.

2,733,029
TURBOGENERATOR FOUNDATION
Donald I. Griffith, Denver, Colo., assignor of one-half to Joseph P. Ruth, Denver, Colo.
Application December 15, 1952, Serial No. 326,027
2 Claims. (Cl. 248—13)

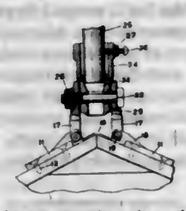


1. A foundation supporting a load having rotating parts disposed on a horizontal axis of rotation, said foundation comprising a base, a generally rectangular horizontal load supporting deck spaced above said base, a pair of vertical pillars extending between said base and said deck and constituting the sole means for supporting said deck, said pillars being of a width of the order of one-third to one-half of the length of said deck and being aligned with adjacent opposite sides thereof and intermediate the length of said deck in such a location that a vertical plane through the center of gravity of said deck and said load coincides with the vertical center line of said pillars whereby the opposite ends of said deck and load carried thereby overhang said pillars with said deck and load balanced about a horizontal axis disposed in said vertical plane and means on said deck spaced inwardly of the inner side surfaces of said pillars for securing said load to said deck.

2,733,030
UNIVERSAL MAST MOUNTING DEVICE
Omer V. Hawthorne, Otsego, Mich., assignor to Harry J. Moll, Kalamazoo, Mich.
Application January 3, 1951, Serial No. 204,163
6 Claims. (Cl. 248—40)

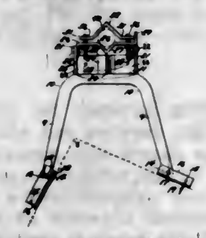
1. In a mast mounting device, the combination including: a pair of separate base plates each adapted to be secured to a surface; a pair of substantially flat socket clamping members each hinged at its base along one edge of the base plates; a generally tubular mast socket adapted at one end to receive an end of a mast and positioned

with its other end between the two clamping members; a clamping bolt extending through the two clamping members and transversely through the mast socket therebetween; and a clamping bolt nut threadably engaging an



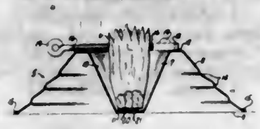
end of the clamping bolt, the clamping members being adapted to frictionally engage the outer surface of the mast socket and prevent its rotation about the clamping bolt when the clamping bolt nut is tightened.

2,733,031
MOUNTING BASES FOR ANTENNA MASTS
Constantine A. Morgillo, Toledo, Ohio
Application April 19, 1951, Serial No. 221,905
2 Claims. (Cl. 248—43)



1. A mast clamp comprising a flat base, a pair of parallel ears perpendicular to said base, a first centrally grooved plate extending between said ears and perpendicular to said base and said ears, a second centrally grooved plate alignable with said first grooved plate and having a pair of parallel spaced flanges, aligned pivot means connecting said flanges with said ears, a third centrally grooved plate having its groove complementary to the grooves of said first and second plates, and means for attaching said third grooved plate to said second grooved plate for clamping the mast between the complemental grooves.

2,733,032
CHRISTMAS TREE STAND
George F. Farley and Arnold Hildebrandt, Milwaukee, Wis., assignors to Spincraft, Inc., Milwaukee, Wis., a corporation of Wisconsin
Application October 9, 1953, Serial No. 385,149
1 Claim. (Cl. 248—44)



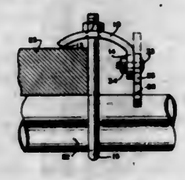
A Christmas tree stand comprising: a unitary spun metal base having an upwardly tapering substantially frusto-conical circular skirt, the free lower edge of which provides a stable footing for the stand, a socket portion concentrically disposed inside the skirt, said socket portion opening upwardly but tapering downwardly to receive the lower end portion of a Christmas tree trunk, the upper open end of the socket portion being considerably larger than the largest diameter tree trunk for which the stand is designed, said base also having a substantially wide annular flat platform at its top integrally joined to the upper large diameter end of the socket portion and the upper small diameter end of the skirt; an upwardly projecting spur on the bottom of the socket portion upon which the bottom of a tree trunk in the socket may rest and which bites into the bottom of the tree trunk to prevent lateral displacement thereof; upright flange means solidly fixed to and projecting from the platform, said flange means lying between the inner and outer edges of the annular platform and having threaded holes therethrough radially of the axis of the circular skirt; and clamping screws threaded in said holes so that the radially inwardly facing ends of the clamping screws may be brought solidly against the side of a tree trunk stepped into the socket of the base and thereby cooperate with the spur in holding the tree firmly upright, said clamping screws being long enough to permit their inwardly facing ends to be brought into close juxtaposition so that the stand accommodates a wide range of tree trunk diameters.

2,733,033
HOSE SUPPORT FOR VEHICLES
Ralph R. Gunderson, Chicago, Ill.
Application April 5, 1951, Serial No. 219,456
7 Claims. (Cl. 248—51)



1. A yielding support for vehicle hose lines comprising: a rigid base post adapted to be secured to a tractor frame; a stiff coil spring secured to said post in upright position; a staff secured to the upper portion of said spring and being tiltable with respect to the base post; supporting means on the upper portion of said staff for holding flexible hose members; and a flexible backlash snubber offset rearwardly from the spring and being connected at one end to said base post and at the other end to said staff so as to limit the forward tilting of the staff.

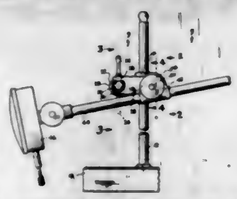
2,733,034
PIPE HANGERS
Mel G. Tormo, Woodside, N. Y.
Application June 17, 1952, Serial No. 293,882
1 Claim. (Cl. 248—72)



A device of the character described comprising an arcuate body, teeth formed at one end of said body, a vertically dependent plate portion formed integrally with the other end of said body, said body having a pair of centrally disposed laterally spaced transverse slots, each adjacent one side thereof, a pipe supporting U-bolt having its legs received in said slots, nuts for each of said legs, said plate portion having a centrally disposed indentation in the lower end thereof, the depending side portions of said indentation having bolt holes, and an adapter plate

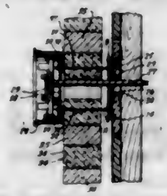
vertically adjustably attached to said dependent plate portion and having an indentation identical with that of said dependent plate, said adapter plate in the depending side portion of said indentation having a plurality of vertically spaced adjusting holes, and bolt means extending through any of the adjusting holes and the bolt holes of the vertically dependent plate portion to hold the adapter plate upon the body, said indentations being adapted to receive therewithin a pipe, said adapter plate indentation being aligned horizontally with said plate portion indentation when said last mentioned bolt means extend through the lowermost of said adjusting holes in said adapter plate whereby to provide a greater gripping surface on the pipe when said adapter plate is not required to space said arcuate body from the pipe.

2,733,035
FINE ADJUSTMENTS FOR DIAL INDICATORS AND THE LIKE
Leopold A. Rocheleau, Leominster, Mass.
Application May 12, 1954, Serial No. 429,330
7 Claims. (Cl. 248—124)



1. A support comprising a base, an upright thereon, a slidable clamping member on the upright, a laterally extending arm on the clamping member, a pair of spaced ears on the arm, said ears being apertured on a single axis, a stud in the apertures, a handle extending laterally of the stud in the space between the ears and having an angular rotation of at least 180°, an eccentric pin on the stud extending laterally on one ear, an adjusting member, spaced legs on the latter closely receiving the pin, a member to be adjusted associated with the adjusting member, a shaft, means to clamp the clamping member to the upright, said shaft passing through said clamping means and the adjusting member in spaced relation to the eccentric pin, and means on the shaft to actuate the clamping means to apply friction between the clamping member and the adjusting member.

2,733,036
MOUNTS FOR ELECTRICAL FIXTURES
James T. Meletio, Dallas, Tex.
Application July 11, 1951, Serial No. 236,198
6 Claims. (Cl. 248—205)



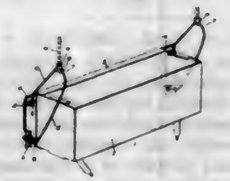
1. In combination: an interior wall having an exterior brick veneer; a meter socket provided with spaced apertures therein; and a mount for mounting said meter socket on said exterior wall, said mount comprising an elongate rectangular plate having longitudinally extending stiffening means disposed adjacent its longitudinal edge portions, said plate having longitudinally spaced apertures therein for receiving fastening means to secure said plate to said interior wall, said plate also having a plurality of longitudinally spaced elongate supporting bolts extending perpendicularly from said plate through joints in the brick veneer, said bolts being of a length substantially greater than the thickness of said brick veneer whereby the outer ends of the bolts project beyond the outer surface of said brick veneer and are adapted to extend through the spaced apertures in said meter socket, and means on the outer ends of said bolts for removably securing the meter socket in place on the outer ends of said bolts exteriorly of the brick veneer, and means extending through the aperture in said rectangular plate and connected to said interior wall for removably holding said plate on said interior wall.

2,733,037
SHELF ATTACHING AND SUPPORTING MEANS
Thomas M. Dunham, Aurora, Ill., assignor to Aurora Equipment Company, Aurora, Ill., a corporation of Illinois
Application September 20, 1952, Serial No. 310,697
1 Claim. (Cl. 248—239)



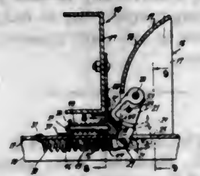
In an attaching structure for joining a shelving member to upright members and which shelving member has openings aligned with camming keyhole shaped openings in the upright member, an attaching stud comprising a one piece elongated hollow sheet metal body having in longitudinal alignment an enlarged head for abutting one of said members around the edge of one of said openings, a reduced tubular neck for disposition in said openings and for wedging engagement in the keyhole shaped opening and an end cap of larger diameter than said neck but of smaller diameter than that of said head so that it can pass through the enlarged end of the keyhole shaped opening when the stud is being inserted in or removed from the openings, said cap being smoothly merged into said neck by an inclined rigid annular radial reinforcing shoulder between the head and the neck and terminating radially inwardly in the neck for reinforcing the frictional engagement of the neck with the edge of the keyhole shaped opening, said hollow head having a rigid shoulder generally at right angles to said neck and confronting and cooperating with said inclined shoulder on said cap to resist endwise collapsing of said hollow body when the stud is under stress in attaching use.

2,733,038
SUSPENSION BRACKET
Elmer Jacob Zelt, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application October 15, 1953, Serial No. 386,353
1 Claim. (Cl. 248—317)



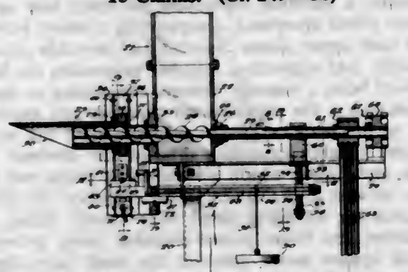
In combination, a transformer having a pair of spaced apart relatively thin mounting portions each having two spaced apart openings formed therein, and a pair of brackets for suspending said article, each of said brackets being formed of a single length of relatively stiff wire and comprising a straight end portion abutting one side of one of said mounting portions, another portion joining one end of said straight end portion, said other portion being disposed at right angles to said straight end portion and extending through one of said openings, a generally U-shaped loop portion adapted to be engaged by suspension means for supporting said transformer, said loop portion having one leg joining the other end of said other portion and forming an obtuse angle with said straight end portion, the other leg of said loop portion being longer than said one leg and forming an obtuse angle with said straight end portion, and another end portion joining said other leg and having a hook formed on the end thereof, said other end portion being disposed at right angles to said straight end portion and extending through said other opening and engaging the other end of said straight end portion thereby securing said transformer to said bracket.

2,733,039
VEHICLE MOUNTED TRANSPORT CLAMPS
Roy O. Balogh, Clayton, Mo., assignor to McCabe-Powers Auto Body Co., St. Louis, Mo., a corporation of Missouri
Application June 19, 1952, Serial No. 294,504
8 Claims. (Cl. 248—361)



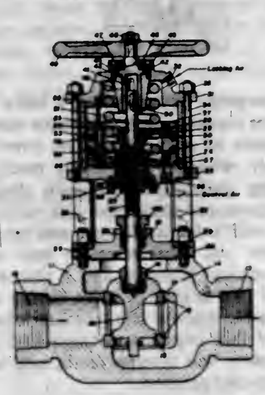
1. A transport clamp for use with an aerial ladder, comprising outwardly and downwardly divergent inclined flanges on opposite sides of the ladder, a substantially horizontal support member extending transversely beneath the ladder, lower abutment members operatively mounted on the support member for respective engagement against the under faces of the flanges, means for resiliently urging said lower abutment means into such engaged position, auxiliary means associated with the support member, upper abutment members operatively supported by said auxiliary means in upwardly spaced relation to the lower abutment members for respective engagement with the upper faces of the flanges, means for resiliently urging the upper abutment members into such engaged position whereby to hold the ladder in transport position and means for moving the upper abutment members out of said engaged position for releasing the ladder.

2,733,040
BAG FILLING MACHINE
Erwin M. Lau, Dolton, Ill., assignor to Black Products Co., Chicago, Ill., a corporation of Illinois
Application February 5, 1953, Serial No. 335,221
15 Claims. (Cl. 249—58)



2. In a bag filling machine having a hopper, an auger for removing material from the hopper, drive means for said auger, and control means for said drive means, the combination of horizontally extending spout means including an internal spout and an external spout assembly, said internal spout being mounted on said hopper and communicating therewith, and said auger being rigidly mounted and extending from said hopper into said internal spout, said external spout assembly comprising an external spout disposed substantially concentrically with said internal spout and surrounding the same in radially spaced relationship, and a floating frame on which said external spout is mounted, means for supporting said floating frame for movement in a substantially vertical direction whereby said external spout will move relatively to said internal spout in a radial direction, and a flexible seal closing off the annular space between said internal spout and said external spout, said control means being actuated by the movement of said floating frame.

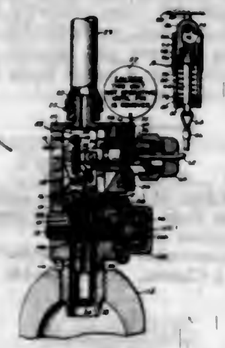
2,733,041
STEAM VALVE
Robert R. Crpokston, Houston, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, a corporation of Delaware
Application September 4, 1952, Serial No. 307,893
4 Claims. (Cl. 251—14)



1. A steam valve which comprises, in combination, a valve housing having an inlet and an outlet and provided with a central passageway communicating the inlet with the outlet, a seating member in said central passageway provided with a first and a second seating surface both facing in a first direction, a piston cylinder attached to said housing provided with first and second inlets at an upper and a lower end of said cylinder, a piston arranged in said piston cylinder having an internally threaded member projecting from said piston cylinder in sliding relationship thereto, a double valve plug provided with third and fourth seating surfaces both facing in a direction opposite the first direction adapted to seat on said first and second seating surfaces on said seating member to close said central passageway, a valve stem attached to said valve plug provided with an externally threaded intermediate portion engaging with the threads of said projecting member for raising and lowering said valve plug from and to seating relationship with said seating member, said valve stem extending into said piston cylinder and projecting into the upper end thereof, biasing means in said piston cylinder normally urging said piston toward the lower end of said cylinder, a sleeve member projecting downwardly into said piston cylinder from the upper end thereof, a valve actuating assembly rotatably arranged in said sleeve member slidably attached to an upper end of said valve stem and projecting from said cylinder, said valve actuating assembly and said valve stem being slidably attached by a key on said valve stem arranged in a keyway in said valve actuating assembly, and means attached to said

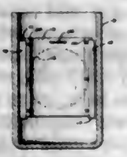
actuating assembly exterior to said piston cylinder for rotating said valve stem and lifting and lowering said valve plug from and to said seating member independent of movement of said piston.

2,733,042
EMERGENCY OXYGEN VALVE
Ralph L. Culbertson, Bryan, Ohio, assignor to Aro Equipment Corporation, Bryan, Ohio, a corporation of Ohio
Application December 13, 1954, Serial No. 474,870
11 Claims. (Cl. 251—75)



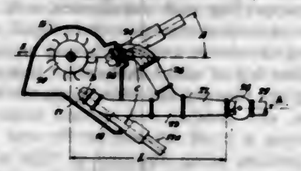
1. In an emergency oxygen valve, a valve body, a valve therein, resilient means to bias said valve normally closed, toggle mechanism to open said valve, over-center spring means normally retaining said toggle mechanism in position permitting said valve to remain closed, a flexible element having one end connected with said toggle mechanism to open said valve and cause said spring means to pass over center and thereby retain said toggle mechanism in valve-opened position, and a releasing device on the free end of said flexible element having means for releasing said flexible element after predetermined pull thereon in excess of that required to cause said spring means to pass over center and thereby retain said toggle mechanism in valve-opened position.

2,733,043
WEDGE TYPE SEAL FOR SUCTION STRAINER
William M. Smith, Maysville, Okla.
Application April 10, 1953, Serial No. 348,034
1 Claim. (Cl. 251—176)



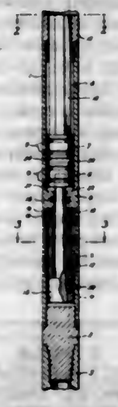
In a liquid distribution line, a conduit, a substantially vertical cylindrical chamber connected in said conduit, said chamber having ports opening to said conduit, and means for at times sealing a port comprising a pair of substantially vertical abutment members secured to the wall of the chamber at the opposite sides of the port, said abutment members comprising respective bar members flaring downwardly in thickness, a cylindrically curved sealing plate having similar curvature to said walls wedgingly engageable between said abutment members, a lining of resilient deformable material on the convex surface of said sealing plate, and respective rigid abutment bars secured to the side margins of said plate and being respectively engageable with said abutment members.

2,733,044
IMPULSE TURBINE
Pierre François Daniel, Grenoble, France, assignor to Etablissements Neyrpic, Grenoble, France, a corporation of France
Application June 26, 1951, Serial No. 233,522
Claims priority, application France July 17, 1950
15 Claims. (Cl. 253—24)



1. A nozzle for supplying water to an impulse turbine, comprising a nozzle tip, a convergent elbow for conveying water to said tip, a plurality of guide vanes extending substantially throughout the length of said elbow, said guide vanes being concentric with the axis of curvature of said elbow and dividing the flow therein into a plurality of concentric channels, a needle valve in said nozzle tip, a stem for said valve extending through said vanes and said elbow to the exterior thereof, and a fairing within said elbow on the downstream side of said stem and extending transversely to said guide vanes, said vanes and said fairing cooperating to reduce the tendency of the water to move in any path transverse to the principal direction of flow.

2,733,045
HYDROSTATIC JAR
Albert L. Burns, Jr., Houston, Tex., assignor to Houston Oil Field Material Company, Inc., Houston, Tex., a corporation of Delaware
Application September 23, 1952, Serial No. 311,056
8 Claims. (Cl. 255—27)



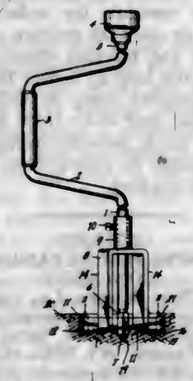
1. A hydrostatic jar for use in a well bore having hydrostatic pressure therein comprising; a generally cylindrical body; a partition separating the body into upper and lower piston chambers; a supporting member extending into such upper piston chamber and movable relative to the body, said supporting member supporting the body in said well bore; a hammer element comprising an upper piston located in the upper piston chamber and movable relative to the body, a piston rod secured to the upper piston and slidably extending downwardly through the partition, and a lower piston secured to the piston rod and movably located in the lower piston chamber; the lower piston chamber having a small bore closely fitting the lower piston, the lower piston chamber being provided with fluid bypass means adjacent the small bore; liquid within the lower piston chamber; a port in the upper piston chamber between the partition and the lower surface of the upper piston adapted to permit entry of hydrostatic pressure in the well bore for urging said hammer element upwardly; an anvil element in the body engageable by the hammer element for imparting a jarring blow to the body; that part of said support located in said upper piston chamber engaging said hammer element to force the lower piston into the small bore portion to cock the jar; and slow leakage of liquid passed said lower piston in the small bore of the lower cylinder delaying for a substantial period the occurrence of the jarring blow by said hammer element until said supporting member disengages said hammer element and may engage and exert a direct upward stress on said body.

2,733,046
STRAIGHT PULL JAR
Walter N. Thompson, Santa Fe Springs, Calif.
Application July 9, 1953, Serial No. 367,071
10 Claims. (Cl. 255—27)



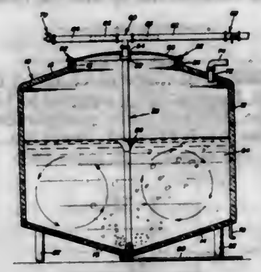
1. A rotary jar comprising an inner mandrel having an enlargement thereon, a sleeve telescopically arranged about the mandrel having an internal shoulder engageable by the mandrel's enlargement, a substantially cylindrical spring within the sleeve vertically divided into inwardly bowed segments, each of which is capable of being flexed outwardly, balls in slots in the mandrel engageable with said segments to flex the segments outwardly when the balls are moved through the cylindrical spring, and a cone on the mandrel for holding the balls in engagement with said segments.

2,733,047
ICE AUGER
Ernest J. Morgan, Hastings, Mich.
Application March 12, 1952, Serial No. 276,125
2 Claims. (Cl. 255—70)



1. In an ice auger, a pair of opposed generally semicircular plates of springable sheet metal, said plates being horizontally spaced apart and with opposed inner edges oppositely inclined at like angles to a horizontal plane such that the outer edges of the plates lie in a cylindrical surface and whereby the lower portion of the inner edge of each plate is below the level of the upper portion of the inner edge of the other plate, each inner edge including a radially extending edge portion at the upper portion thereof and an offset edge portion at the lower portion of the inner edge in chordal relation to the semi-circular plate and generally parallel to the radially extending edge portion extending to the outer semi-circular edge, and with an arcuate central recess, the edge of which joins the offset edge portion to the radially extending edge portion, said offset portion being of greater length than the radially extending portion, each offset portion having downturned teeth formed thereon with the outer edge of the outermost tooth being formed by the semi-circular outer edge of the plate, a U-shaped yoke having its arms extending generally perpendicular to said plates with the ends of the arms secured to the plates at points closer to the teeth than to the radially extending edge portions of the plates, and an operating shaft secured to the base of said yoke and having a pilot point extending in parallel relation between the arms of the yoke from the base of the yoke to below said plates, said pilot point having a pointed lower tip of pyramidal cross section, said pilot point extending between said plates in eccentric relation to said arcuate recesses in the plates, said yoke arms constituting the sole support of said plates.

2,733,048
MILK COOLER
Thomas B. Rowland, Pocatello, Idaho
Application February 10, 1953, Serial No. 336,033
3 Claims. (Cl. 257—76)

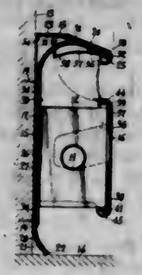


1. A dairy apparatus comprising a sealed tank having a dished bottom wall, means for refrigerating at the least the bottom wall of said tank, a vertical conduit disposed within the tank the lower end of the conduit being positioned closely adjacent the center of said bottom wall and communicating thereat with the interior of the tank, an inverted substantially conical float member slidably received on said conduit, means for connecting said tank to a source of vacuum and means for selectively bleeding air into said tank through said conduit, whereby air bubbles rising from the lower end of the conduit will impinge upon and be deflected by the surface of the float to impart a circular agitating motion to milk within the tank.

2,733,049
CASING AND MOUNTING ASSEMBLY FOR CONVECTOR HEATERS
Robert J. Carter, Kenmore, N. Y., assignor to The Rittling Corp., Hamburg, N. Y.
Application August 14, 1953, Serial No. 374,228
6 Claims. (Cl. 257—133)

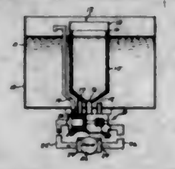
3. A casing assembly for tube type heat exchangers comprising a casing member having a substantially plane

back section, a forwardly bent and upturned flange along one edge of the back section, said back section merging into a forwardly extending top portion spaced from the upturned flange, the outer edge of the top portion being inwardly bent to provide a lip, a plurality of bracket members positioned in said casing member, said bracket members having spaced bottom and top edges respectively engaging in said casing member flange and lip, thereby to firmly retain the bracket members and permit forced sliding movement thereof lengthwise of the casing member, a tube supporting arm secured to each bracket member and formed with means to support a tube element of



a heat exchanger and with supporting means for a front cover plate, a front cover plate on said supporting means, said plate being spaced from said lip to provide an air gap, and a damper member mounted within the casing member, said damper member being formed with a plurality of resilient clips having ends adapted to frictionally engage within said lip and at the junction of the back section and top portion, said damper member including a damper plate and interconnected hinge elements between the damper plate and the clips, said damper plate being adapted to be swung to positions substantially closing and opening the gap between the lip and the front cover plate.

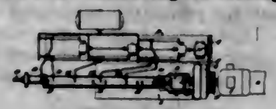
2,733,050
RESERVOIR FOR CONGEALABLE LIQUIDS
Harry T. Booth, Dayton, Ohio, assignor to United Aircraft Products, Inc., Dayton, Ohio, a corporation of Ohio
Application April 22, 1953, Serial No. 350,295
12 Claims. (Cl. 257—195)



1. A storage tank for use in an engine lubricant circulating system, including an outer tank shell holding the main body of stored lubricant, a hopper in said tank shell spaced from side walls of said shell through which a part of the lubricant in the system may be circulated in segregated relation to the main body thereof, separate inlet openings in said tank for flow to the interior of the tank and to said hopper, and conduit means extending from one of said inlet openings to said hopper, including an annulus in surrounding relation to said hopper over substantially the full length thereof.

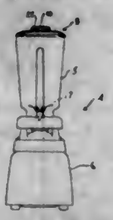
2,733,051
BLENDING PLASTICS AND FLUIDS
Louis F. Street, Norristown, Pa., assignor to Welding Engineers, Inc., Norristown, Pa., a corporation of Delaware
Application August 16, 1952, Serial No. 304,686
23 Claims. (Cl. 259—6)

1. A continuous process for plasticizing a material comprising feeding said plasticizable material continuously to a mixing operation, then subjecting said material to pressure forward feeding it while stirring and mixing it, after a predetermined forward feeding of said plasticizable material supplying to it under pressure a relatively small amount of plasticizer while continuing to stir and mix it under pressure to effect a thorough intermixture and corresponding partial plasticizing of said material, continuously discharging said partially plasticized material from said mixing operation while continuing the feeding of said plas-



ticizable material to said forward feeding and mixing operation, continuously receiving said partially plasticized material into an area of reduced pressure in a following mixing operation, applying a pressure forward feeding said material during said mixing, supplying a second charge of plasticizer to said partially plasticized material in said following mixing operation while developing pressure upon it, continuing the mixing to further the plasticizing of said material, and continuously discharging said further plasticized material from said following mixing operation.

2,733,052
CLOSURE FOR MIXING VESSEL
William P. Luther, Racine, Wis., assignor to John Oster Manufacturing Company, Milwaukee, Wis., a corporation of Wisconsin
Application July 9, 1954, Serial No. 442,277
2 Claims. (Cl. 259—122)

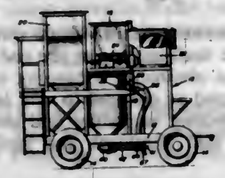


1. In combination: an open topped mixing vessel having an agitator in the bottom thereof, operation of the agitator causing the contents of the vessel to flow upwardly along the sides thereof; a cover member removably fitted to the open top of the vessel, said cover member having a thin side wall portion depending therefrom and telescoped into the vessel; a thin resilient lip encircling and projecting laterally from said side wall portion engageable with the walls of the vessel to provide a liquid tight connection between the sides of the vessel and the cover member; a central boss depending from the underside of the cover member; the underside of the cover member between its side wall position and the boss being concavely shaped and merging smoothly with the side wall portion and the boss to deflect the contents of the vessel flowing upwardly along its walls down into the center of the vessel and away from the bottom of the central boss; the cover member having an access port opening down through its central boss; and a removable plug closing said access port.

2,733,053
MIXING MACHINE FOR EXPANDED CELLULAR CONCRETE
Joseph J. Dugas, New Orleans, La., assignor to Higgins, Inc., New Orleans, La., a corporation of Louisiana
Application January 5, 1954, Serial No. 402,329
8 Claims. (Cl. 259—165)

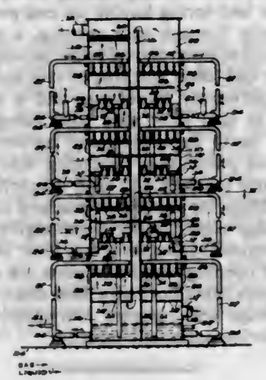
1. A mixing machine for concrete, comprising a mixing tank, means for supplying the same with a predetermined quantity of water, a container for solid substances, and

means for feeding the said solid substances into the mixing tank, a recirculation system, including means withdrawing the mixture made in the mixing tank, raising the mixture above the normal fluid level in the tank and injecting it again under pressure through a jet forming pipe into the tank below the point where the means for feeding the solid substances introduce the latter into the mixing tank, the pressure being sufficient to form a coherent substantially horizontal jet stream projected towards and against the wall of the tank, a premixing chamber closed at one



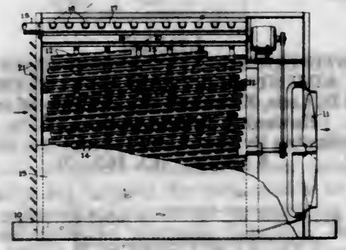
side and provided with an opening through which the jet forming pipe passes, said premixing chamber being open at the opposite side and arranged within the mixing tank near said aforesaid point of introduction of the solid substances, and means arranged near said mixing chamber for imparting to the recirculated substantially horizontal jet stream projected towards the wall of the tank a swirling movement along the wall of the mixing tank following a downwardly directed spiral while moving along the mixing tank walls.

2,733,054
SPRAY TYPE GAS AND LIQUID SCRUBBER
Joseph Van Ackeren, Pittsburgh, Pa., assignor to Koppers Company, Inc., a corporation of Delaware
Application June 13, 1952, Serial No. 293,251
8 Claims. (Cl. 261—21)



7. Apparatus for gas and liquid contact in unpacked stages with counterflow of gas and liquid from stage to stage and counterflow of the gas with the liquid in the form of a fine spray through unobstructed gas space in each stage, comprising: a scrubbing tower having a lower gas inlet and upper gas outlet; a plurality of stages arranged one above the other in the tower for flow of gas serially through the stages from the lower gas inlet to the upper gas outlet with each stage comprising a separate unpacked unobstructed lower spray chamber and separate unpacked unobstructed upper spray de-entrainment chamber; means including spray heads for spraying liquid into each spray chamber countercurrent to the flow of gas therethrough; means for introducing fresh liquid to the tower through the spray heads for the spray chamber of the uppermost stage; means for overflow of liquid from each spray chamber to the spray chamber next below; and means for recirculating liquid from each spray chamber back to the spray heads for the respective spray chambers; wherein each unpacked and unobstructed spray chamber of each stage is provided with an inlet partition having distributing inlet passages for distribution of the entering gas over the entire cross-sectional area of the unobstructed chamber, and an outlet partition having restricted outlet orifices for constraining all gas to flow out through the orifices on its way to the unpacked and unobstructed de-entrainment chamber for the unpacked and unobstructed spray chamber of the same stage; each unpacked spray chamber being devoid of obstructions to gas flow from its inlet partition to its outlet partition, and each unpacked de-entrainment chamber being devoid of obstructions to gas flow from the outlet partition of the spray chamber below of its stage to the inlet partition of the spray chamber of the next stage above, and the said inlet passages and outlet orifices being devoid of solid and continuous phases of liquid; the spray heads for each unpacked unobstructed stage are located downstream of the gas flow through the orifices and disposed closely thereto to discharge the spray into the unpacked unobstructed spray chamber countercurrently through the orifices so as to cover the orifices with the narrower and most intense portion of the spray while the gas is flowing out countercurrently therethrough on its way to the unpacked spray de-entrainment chamber of each stage; whereby all the gas passes with an acceleration in flow through the intense portion of the spray in the outlet orifices.

2,733,055
COOLING TOWERS
Fred Ophuls, New York, N. Y., and Walter E. Bernd, Washington, D. C.
Application July 28, 1950, Serial No. 176,435
2 Claims. (Cl. 261—24)



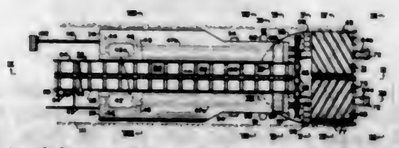
1. In a cooling tower, a plurality of parallel decks substantially filling the tower each deck including a plurality of spaced parallel flat slats with the faces of the slats located in planes parallel to the deck, and the slats of adjacent decks being staggered with the forward and rearward edges of each slat respectively located substantially above two slats of the next lower deck which are adjacent to each other, the said decks being spaced apart distances less than the width of the slats of which they are composed, blower means for effecting air flow through the tower in a direction generally parallel to the planes of the decks, the said decks being inclined with respect to the horizontal with their lower edges at the air inlet end of the tower, and means for distributing the water to be cooled substantially uniformly over the uppermost deck, the said tower being substantially rectangular in a plane perpendicular to the longitudinal axis of the slats, with two of the sides of the rectangle being horizontal and the other two sides vertical, the air pressure of the blower means and the inclination of said decks being so related that approximately as much water gravitates to the lower quarter of the tower at the air inlet end thereof as is carried backward to the lower quarter of the tower at the outlet end thereof by the air draft.

2,733,056
MIXING OF GASES AND LIQUIDS
Herbert Leo Märky, Zurich, Switzerland, assignor to Kerag Kesselschmiede, Apparate- und Maschinenbau, Zurich, Switzerland
Application February 28, 1952, Serial No. 273,971
1 Claim. (Cl. 261—87)



In a device for mixing gases with a liquid, a cylindrical vessel for said liquid having end walls and an elongated open neck portion at the top thereof extending longitudinally of said vessel and of less width than the diameter of said vessel, a cylindrical sieve drum mounted for rotation on a horizontal axis in said vessel and supported by said end walls, said sieve drum being provided with a continuous uninterrupted rigid peripheral surface having perforations for the passage of gas into the liquid contained in said vessel, end walls in said sieve drum arranged in spaced relation from the end walls of said vessel to provide a restricted pathway, a hollow shaft secured to one of said end walls of said drum and extending through one of the end walls of the vessel for introducing gases into the interior of said sieve drum, means for driving said sieve drum at a circumferential velocity such as to create a turbulent layer covering the entire peripheral surface and at least a part of the end walls, and an arcuately curved baffle plate arranged above the sieve drum across said neck portion within the vessel and extending horizontally with a portion thereof directed along a portion of said cylindrical vessel wall in the direction of rotation of said drum in order to direct foam and co-mingled gas in a direction downwardly within the liquid contained in the vessel.

2,733,057
CONTINUOUS MINING MACHINE HAVING ADJUSTABLE TUBULAR CUTTERS
Harold D. Letts, Zelienople, Pa., assignor of one-half to Howard B. Saikeld, Zelienople, Pa.
Application October 8, 1952, Serial No. 315,874
8 Claims. (Cl. 262—7)



1. A mining machine including a movable base, frames supported by the base and having a shaft-driven rotatable tubular cutter extending forwardly of the base, means to move vertically the forward end of each frame individually with respect to the base whereby the tubular cutters may be placed at different vertical elevations causing the direction of boring to proceed in a skewed direction, the tubular cutters having an endless band drivingly connected with the tubular cutters and traveling in an encompassing path around the driving shafts for the tubular cutters preventing separation of the same whereby the cooperable action of the tubular cutters with the endless band cuts substantially an oblong hole.

2,733,058
OVERLOAD SPRING
Terrell J. Reese, Elkhart, Ind.
Application September 17, 1952, Serial No. 309,975
4 Claims. (Cl. 267—16)

1. An overload spring for a vehicle having a body mounting a bumper and supported on springs carried by an axle unit, comprising a bellcrank lever pivoted to said body and having a depending end portion and an end portion adapted to bear on said axle, and an elongated spring unit connected at one end to the depending portion of said bellcrank and at its other end to said bumper, said spring unit urging said lever against said axle to



supplement the action of said vehicle spring, said spring unit comprising a shaft secured at one end to said bumper and mounting an abutment, a housing slidable on said shaft and connected at one end to said lever, and a coil spring in said housing encircling said shaft, said spring bearing against said abutment and against an end of said housing.

2,733,059
SPRING SHACKLE CONSTRUCTION
Harvey B. Van Raden, Portland, Oreg., assignor to Ne Peer Company, Portland, Oreg., a copartnership
Application February 13, 1953, Serial No. 336,777
7 Claims. (Cl. 267—30)



1. A spring assembly for a vehicle comprising a separable housing having complementary upper and lower parts defining a cavity therebetween, bolt means holding said parts together, said housing having an opening thereinto at one end, a leaf spring having an end portion extending into said cavity through said opening, a pair of shallow, polygonal, pad-seating pans fixedly mounted respectively on the upper and lower surfaces of said spring end portion and facing outwardly therefrom, and a pair of resilient pads seated in said pans, said pads being of substantial thickness so as to be compressed between said housing parts and said pans upon tightening said bolt means to draw said parts together and each comprising a base portion snugly filling its associated pan and an outer portion having its edge continuously overhanging and extending outwardly beyond said pans along their lateral edges and adjacent said opening when said parts are drawn together, one of said pads being normally most thick vertically along its forward edge and tapering rearwardly and the other of said pads being oppositely tapered.

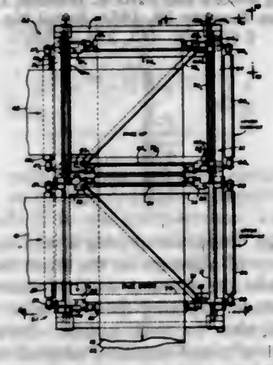
2,733,060
LIQUID SPRING
Paul H. Taylor, Grand Island, N. Y., assignor to Wales-Strippit Corporation, North Tonawanda, N. Y., a corporation of New York
Application March 12, 1952, Serial No. 276,189
9 Claims. (Cl. 267—64)



1. A liquid spring, comprising a vessel filled with liquid to be compressed, said vessel having a tubular body member of substantially uniform thickness, a closure plug

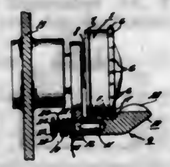
member disposed in an end of said vessel, one of said two members having an annular offset portion, said closure plug member being secured fixedly to said tubular body member by a sealing and adhesive material interposed between said members, and said closure member having, in the region of said annular offset portion, an annular, marginal lip portion that tapers in thickness and that is of less thickness than said tubular body member, and that has contact around its periphery with said tubular body member and that may flex to move progressively against and with said body member under pressures developed in said vessel, and a piston movable in said vessel to place the liquid therein under compression to develop high pressures.

2,733,061
ANGLE BAR ARRANGEMENT
Curtis S. Crafts, Oak Park, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a corporation of Illinois
Application July 9, 1952, Serial No. 297,898
17 Claims. (Cl. 270—52)



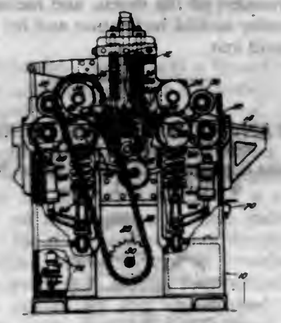
1. For use with a printing press having means for discharging printed webs each slit into a number of sections, an angle bar arrangement comprising a frame, a plurality of flat carriages arranged one above the other in said frame, said carriages each having a width corresponding to the maximum width of a single web section, cross members providing way surfaces for sliding each of said carriages at right angles to the travel of an incoming web into a position of respective alinement with a desired web section, each of said carriages having an angle bar for turning the web section into a folder and having rollers along the four sides thereof for receiving the web section from either of two opposite directions and for discharging it at right angles with either face up.

2,733,062
SPROCKET SHOE FOR FILM HANDLING APPARATUS
Guillermo A. del Valle, Merchantville, and Alan S. Jones, Pitman, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application December 22, 1952, Serial No. 327,316
7 Claims. (Cl. 271—2.3)



1. A film shoe assembly adapted to maintain a film in contact with a sprocket comprising, in combination, a sprocket adapted to advance film thereover, means for mounting said sprocket for rotation, a film shoe having a concave film contacting surface which has a curvature concentric with the film engaging surface of said sprocket, and means connected to said sprocket mounting means for mounting said shoe with its concave surface adjacent the film engaging surface of said sprocket, one end of said shoe extending beyond the end of said sprocket and toward the axis of said sprocket, said shoe mounting means including a pair of pins fixedly mounted in the other end of said shoe, a mounting plate having holes in which said pins are positioned and movable, one of said pins extending through and beyond said plate, means for resiliently mounting said one pin to said plate, and means for adjusting said shoe axially with respect to the end of said sprocket and radially with respect to the axis of said sprocket.

2,733,063
SAFETY DEVICES
Donald W. Corey, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application May 28, 1953, Serial No. 357,949
5 Claims. (Cl. 271—57)

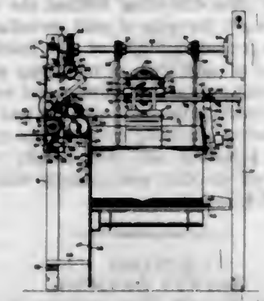


1. A work piece treating machine having a pair of feed rolls, a pair of discharge rolls, work treating elements therebetween and common means for driving said pairs of rolls, a safety bar adjacent said work treating elements which is movable in response to pressure against it of a fouled workpiece, automatic means actuated by said movement for bringing the rolls quickly to a stop, automatic means likewise actuated for reversing the rotation of the feed and discharge rolls and automatic means also actuated by said movement for moving one of said discharge rolls out of its operative position thereby preventing a previously fed workpiece from being reintroduced to the work treating elements as a subsequently fed workpiece is being extricated by reverse rotation of the feed rolls.

2,733,064
SHEET DELIVERING APPARATUS
George A. Martin, Pearl River, N. Y., assignor to Dexter Folder Company, Pearl River, N. Y., a corporation of New York
Original application July 20, 1948, Serial No. 39,764, now Patent No. 2,626,800, dated January 27, 1953. Divided and this application March 25, 1952, Serial No. 278,445
10 Claims. (Cl. 271—89)

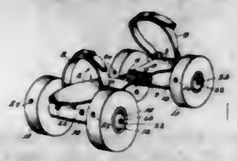
2. In a sheet delivery of the type having a vertically movable support for a pile of metal, cardboard or similar stiff sheets, means disposed above said support at one side thereof for conveying such sheets one after another forwardly into space over said support for flatwise piling thereon, and guide means at said side for locating one vertical edge of the accumulated pile, in combination with said support, said conveying means and said guide means of sheet jogging means arranged at the side of the pile

opposite the guide means for intercepting each successive sheet and directing the same toward the support and into engagement with said guide means, said sheet jogging means comprising a planar abutment member inclined rearwardly from the vertical towards said guide means and pivotal about a horizontal axis located intermediate the



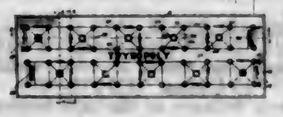
ends thereof, said member being positioned so that the portion thereof below said axis extends below the level of the top of the pile of sheets on said support and the portion thereof above said axis extends into the path of forward movement of the sheets, and means for supporting said member at said inclination and for pivotal movement about said axis.

2,733,065
RESISTANCE THERAPEUTIC EXERCISERS
Eric Berkschat, Chicago, Ill.
Application September 23, 1953, Serial No. 381,857
6 Claims. (Cl. 272—57)



1. A resistance therapeutic exerciser including a support in the form of a tube containing in the wall thereof a plurality of holes near each end and spaced apart lengthwise of the tube, an adapter in each such end comprising a portion that is a sliding fit in the tube and a tubular portion that has the same external diameter as the tube, a spring-pressed pin in the adapter entered in a selected one of said holes in the tube, the tubular portion of each adapter also containing in the wall thereof a hole, a weight mounted on and slidable on and off each adapter, a spring-pressed pin in each weight in position to enter said hole in the corresponding adapter.

2,733,066
GAME BOARD WITH MOVABLE PIECES
William B. Edwards, Tallahassee, Fla.
Application May 7, 1954, Serial No. 428,233
1 Claim. (Cl. 273—131)



A game board comprising a flat playing surface formed into two parallel separate rectangular playing paths, each having a starting and finishing point at opposite ends, the starting and finishing points of one path being opposed to the starting and finishing point of the other path, first playing pieces, each of said playing paths being formed by longitudinal spaced side lines along which said first playing pieces are moved, and transverse lines disposed in spaced fashion between the longitudinal lines and forming cross lines over which said first playing pieces are moved, and resting stations formed at the intersecting points of the side lines and transverse lines, said transverse lines and longitudinal lines forming squares, some of which are provided with diagonal lines, second playing pieces, resting stations for said second playing pieces formed at the intersection of said diagonal lines, and said last-named resting stations being aligned in a straight line centrally between the side lines, and barriers formed on some of the sides of said squares for preventing movement of the game pieces thereon, said board having openings therein at the corner portions of each of said squares, said board having an opening therein at each resting station, said playing pieces each comprising a cylindrical top section and a coaxially reduced peg end, said peg ends being receivable in said openings.

2,733,067
BINGO BOARD WITH NUMBER COVERING SLIDES
James Fielding Moore and Fritz B. Hansen, Denver, Colo.
Application January 18, 1954, Serial No. 404,736
4 Claims. (Cl. 273—135)



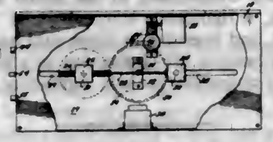
1. In a bingo board, comprising a rear board member having an array of numbers on the front face thereof, a front board member formed with windows in register with said numbers, exposing them to view, and an individual slide member for each number disposed between the front and rear board members adapted to be slid into one position of adjustment to mask its respective number, and to be slid into another position to expose its number to view; the improvement, wherein said slide is formed of flexible resilient material comprising a thin flat body portion of a size sufficient to mask said window, said body portion formed with a tab, forming a finger piece projecting transversely from said body portion and protruding through a slot formed in the front board member adjacent to said window, said tab being formed with a barb-like projection on each side thereof and an interior pocket between said projections, whereby the tab may be pressed through said slot, said projections yielding inwardly into said pocket and snapping out when the tab is fully inserted in the assembling operation, before the rear board member is assembled and attached to the front board member to complete the bingo board.

2,733,068
CHANGEABLE CHECKER PIECES
Burman J. Elander, San Diego, Calif.; Bernice Clark Elander, executrix of said Burman J. Elander, deceased
Application February 27, 1953, Serial No. 339,315
2 Claims. (Cl. 273—137)



1. A movable game piece for the game of checkers comprising a substantially hollow cylindrical member having opposed open and closed ends of which said closed end serves as a base for sliding engagement with the playing surface of said game, a closure member for said open end of said cylindrical member comprising a generally circular body, means for rotatably mounting said body on said cylindrical member adjacent the upper end thereof, said means comprising a pair of diametrically disposed pivot pins of which one of said pins includes a manually manipulated lever arm, detent means carried by said cylindrical member adjacent the upper end thereof and positioned on a diameter at right angles to the axes of said pins, said detent means co-acting with said body to prevent inadvertent rotation thereof, and said body having indicia of different playing significance on the obverse and reverse sides thereof.

2,733,069
POCKET TAPE RECORDER
Loyd T. Frost, Riveredge, and William A. Hamer, Lyndhurst, N. J.; said Hamer assignor to said Frost
Application August 27, 1951, Serial No. 243,894
1 Claim. (Cl. 274—4)



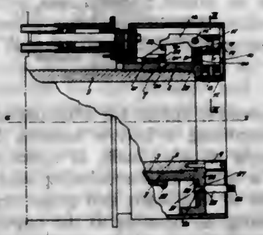
A portable magnetic tape recorder comprising a container having an elongated, narrow compartment, a magnetic tape confined in said compartment, a pair of laterally spaced and laterally movable hubs extending into said compartment for receiving said tape, one side wall of said compartment having elongated, aligned slots cut therein, a second elongated compartment parallel to said first compartment, studs formed on said hubs and extending into said second compartment through said slots, guide blocks attached to said studs and slidably positioned in said second compartment, a wheel interposed between said hubs in direct alignment therewith, the periphery of said wheel engaging the outer peripheral layers of said tape wound on said hubs and embracing the intervening portion of said tape passing between said hubs, means for driving said wheel for winding said tape from one hub to the other, a spring attached to said guide blocks for moving the one of said hubs releasing said tape, in a direct line toward said wheel, the other of said hubs receiving said tape being moved in a direct line away from said wheel by pressure applied by said wheel to the tape being wound on said last named hub, and means in said container for receiving signals on said tape and reproducing signals therefrom, said means including a magnetic head positioned adjacent that side of the periphery of said wheel which embraces the intervening portion of said tape, whereby the periphery of the rotating wheel progressively presents the tape to said head.

2,733,070
PHONOGRAPHIC DEVICE
Ladis H. Ottofy, Chicago, Ill.
Original application September 14, 1944, Serial No. 554,049. Divided and this application March 7, 1950, Serial No. 148,161
2 Claims. (Cl. 274—11)



1. A phonographic sound tape device comprising a sound tape with sound tracks on opposite sides, a sound reproducing device for engaging the sound track of each side, a carrier for each reproducing device through which the tape is relatively movable, the carrier including a roller for engaging one surface of the tape, and means for relatively raising and lowering one sound track of the tape from and into engagement with one sound reproducer as the tape is relatively moved in one direction through the carrier.

2,733,071
CHUCK FOR MACHINE TOOLS
Pierre Edouard Renoux, Argenteuil, France, assignor to Société Anonyme dite: Cri-Dan, Paris, France, a French company
Application May 27, 1953, Serial No. 357,835
Claims priority, application France June 4, 1952
3 Claims. (Cl. 279—4)



1. In a machine-tool, particularly a threading machine, a rotary hollow spindle into which the workpiece is fitted, a chuck mounted around the extremity of said spindle and rotating with it, jaws radially slidable in said chuck, springs uring said jaws to move radially from the axis of said spindle; swingable pivoted levers urging said jaws to move nearer the axis of said spindle, a cam surface on each lever, an annulus free to slide radially in any direction about the chuck and carrying the pivots of said levers, a handling sheath driven in rotation by said spindle and capable of sliding longitudinally on the chuck, rollers carried by said sheath and capable of rolling on the inner face of said pivoted levers, an annular groove formed at the rear of said sheath, rollers rolling in said groove and mounted on a common annular support concentric with the chuck, fixed cylinders distributed around the axis of said spindle, pistons moving in said cylinders to act on said annular support so as to actuate the handling sheath and engage said cam surfaces to swing said pivoted levers to clamp or unclamp the jaws according to the direction of the displacements of said pistons in said cylinders, and pipes for driving the pressure fluid into said cylinders to cause the pistons to move.

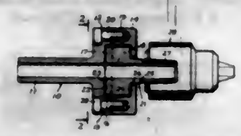
2,733,072
FINGER CHUCK
George Hohwart, Farmington Township, Oakland County, and Ernest F. Hohwart, Detroit, Mich., assignors to N. A. Woodworth Company, Ferndale, Mich., a corporation of Michigan
Application December 2, 1954, Serial No. 472,638
8 Claims. (Cl. 279—4)



1. A chuck comprising a cylinder, a piston mounted for reciprocation in said cylinder, clamping fingers in front of and spaced from said cylinder, actuators carrying said fingers extending rearwardly into said cylinder, said actuators being connected to said piston for mutual reciproca-

tory travel and being rotatable and universally movable relative to said piston, and means coactive with said actuators rendered operative by reciprocatory travel of said actuators in one direction to rotate said fingers inwardly and by reciprocatory travel of said actuators in the opposite direction to rotate said fingers outwardly.

2,733,073
ADJUSTABLE CHUCK
David T. Phillips, Scranton, Pa., assignor to Consolidated Molded Products Corporation, Scranton, Pa., a corporation of Delaware
Application May 23, 1952, Serial No. 289,555
3 Claims. (Cl. 279—9)



1. An adjustable holder for overcoming eccentricity of a chuck comprising a hollow housing having a cavity therein, having parallel walls at opposite ends of said cavity, and a side wall surrounding said cavity, a shaft perpendicular to said walls and projecting from one end of said housing, an opening at the opposite end of said housing communicating with said cavity, a member for supporting a chuck, said member having a head mounted in said cavity for radial movement relative to the axis of said shaft and a shaft thereon extending through said opening to receive said chuck, said head having parallel end walls tightly fitting between and in contact with the parallel walls in said housing to prevent relative tilting of said head and said housing, and radially movable adjusting means mounted in the side wall of said housing and engaging the sides of said head for shifting and positioning said head.

2,733,074
STAIR CLIMBING CART
Elmer A. Fuglie and Carl E. Weinmann, Winona, Minn.; said Fuglie assignor to Winona Tool Manufacturing Company, Winona, Minn., a partnership
Application September 13, 1952, Serial No. 309,412
15 Claims. (Cl. 280—5.2)



4. A stair-climbing cart comprising a frame, an axle carried by said frame, a first gear secured to said axle, a first wheel secured to said axle, a second wheel carried by said axle but whose movement is independent of the movement of said axle, a second gear secured to said second wheel, a pair of pawls each biased to engage one of said gears, means for normally holding said pawls out of engagement with their respective gears, a lever connected to said pawls and having one end attached to said axle for movement between two positions independent of the movement of said axle, said movement of said lever in one direction moves said pawls from their normal position and allows them to move into engagement with said first and second gears and actuates said pawls for rotating said first and second wheels in the proper direction for moving said cart up a flight of stairs, and a brake operative upon said second wheel and upon said axle for controlling the rotation of said first and second wheels in moving said cart down a flight of stairs.

2,733,075
SPRING TIGHTENER OF A SKI BINDING
Alois Rehacek, Vienna, Austria
Application October 20, 1953, Serial No. 387,124
4 Claims. (Cl. 280—11.35)



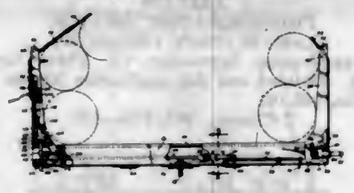
1. In a spring tightener which comprises a tension bolt for connection at one end to a cable of a ski binding to be tightened in front of a shoe, the combination of a tightener base part formed with a rear end wall and a front portion of reduced width, an abutment disposed on the other end of said tension bolt and longitudinally guided in said front portion, two telescoped coaxial compression springs of different length contained in said base part, each of said springs bearing with one end against said rear end wall, the longer of said springs bearing with its other end against said abutment, the shorter of said springs having its other end arranged in the path of said abutment for engagement thereby when the longer spring has been compressed to the initial length of the shorter spring, a tightening lever pivotally connected to said base part, and operable to cover said base part at the top thereof, a bracket for connection to a ski, and a link strap pivotally connected to said tightening lever and to said bracket.

2,733,076
WHEELED LUGGAGE
Fred Burnett, Waukegan, Ill.
Application January 15, 1953, Serial No. 331,519
2 Claims. (Cl. 280—36)
(Granted under Title 35, U. S. Code (1952), sec. 266)



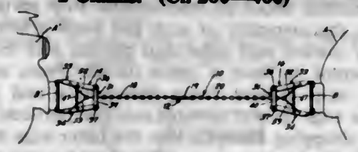
1. The combination with a luggage receptacle having sockets near the opposite sides of one end each with opposite undercut side portions at a converging angle to each other and inwardly from the opening of the socket and upwardly from the bottom of the receptacle and other similar sockets at said end of the receptacle opening downwardly from the top of the receptacle and removable wheels with axles for the receptacle each having a mounting block connected to the wheel axle and spaced laterally at one side of the wheel, the block having opposite converging sides adapted to be received in the undercut portions of the sockets at said end of the receptacle and at the side portions thereof.

2,733,077
BUNK FOR LOGGING VEHICLES
Robert B. Davidson, Vaughn, Wash.
Application February 9, 1952, Serial No. 270,863
11 Claims. (Cl. 280—145)



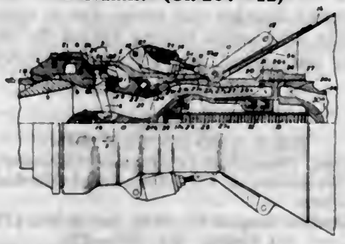
1. A bunk for logging vehicles comprising a bunk frame, a slotted plate on the terminal portion of the frame, a stake, means for pivotally attaching the stake to said terminal portion of the frame for permitting the outward angular movement of the stake relative to the vehicle, a slotted plate on the end of the stake adjacent the bunk frame, the slots in the frame and the plate registering when the stake is in its log retaining position on the bunk, a recessed blade extendable into the slots when they are in registry, thereby releasably locking the stake in its log-retaining position, a bell crank pivotally attached to the bunk frame with one of its ends extending into the recess in the blade and in sliding contact therewith, and lever means attached to the other end of the bell crank for reciprocating the blade from a station remote from the stake.

2,733,078
VEHICLE TOWING DEVICE
John L. Brehm, Timber Lake, S. Dak.
Application May 11, 1953, Serial No. 354,033
2 Claims. (Cl. 280—480)



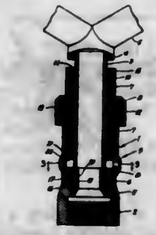
1. A towing device comprising two elongated bars disposed in substantially parallel spaced relation to each other, the central portions of said bars being bowed outwardly away from each other, two substantially L-shaped clamping members each having a long leg and a short leg projecting from one end of said long leg, said short legs projecting from said long legs generally toward each other, each of said long legs having another end portion mounted between said bars at a respectve end thereof, at least one of said long legs being pivotally mounted on said bars to permit relative movement of said short legs toward and away from each other, and means for urging said clamping members into clamping engagement with a portion of a vehicle to be towed, with said short legs disposed on the opposite side of said portion of the vehicle from said bars, when said portion of the vehicle is disposed in operative position between said clamping members, said means comprising a tension coil spring extending between and connected to said long legs between said short legs and said bars, a tow line extending between said central portions of said bars, and link members mounted on said tow line and connected to said long legs between said short legs and said bars.

2,733,079
SELF-ENGAGING AND SELF-SEALING PIPE COUPLINGS, ESPECIALLY APPLICABLE TO FLIGHT REFUELLING PURPOSES
Ronald Frederick Worlidge, Lower Parkstone, England, assignor to Flight Refuelling Limited, London, England, a British company
Application May 19, 1952, Serial No. 288,599
6 Claims. (Cl. 284—12)



4. A pipe-coupling assembly including a socket-like coupling member comprising a shell having a throat, latching means mounted on said shell and adapted to cooperate with corresponding means on a nozzle portion of the assembly, levers fulcrumed intermediate their length in said shell, a poppet valve supported coaxially in the shell and axially displaceable therein and operatively engaged with the radially inner ends of the levers, a sleeve-like seal-carrier mounted for sliding movement coaxially in the shell and disposed axially inwards of the throat thereof and engaged by the radially outer ends of said levers, said poppet valve and said seal carrier having radially overlapping annular mutually engaging seating portions, spring means carried by said shell and operative on said seal-carrier to press the seal-carrier axially outwards and to withdraw the valve axially inwards, thereby normally causing said valve to seat on said seal-carrier; said assembly further including a plug-like coupling member received by said socket-like member and comprising a nozzle having a terminal opening affording an internal annular valve seating, a part complementary to the throat of the shell of the socket-like coupling member and means releasably engaging said latching means on said shell, a valve plunger coaxially disposed in said nozzle and means supporting said plunger for axial displacement with respect to said nozzle, spring means carried by said nozzle, operatively connected to the plunger and urging said plunger towards said annular valve seating, a sealing ring mounted on the plunger and adapted to be seated on said annular seating and also on the marginal part of the outer face of the poppet valve of the socket-like member; and an annular seal mounted on the seal-carrier of said socket-like member and affording a seating for the margin of the terminal opening of the nozzle the poppet valve being abutted and the axial displacement of the poppet valve in the socket-like member opening the valve in the nozzle.

2,733,080
SAND ELIMINATOR BEARING FOR A SPRINKLER HEAD
John B. Gill, San Francisco, Calif.
Application January 13, 1953, Serial No. 331,015
2 Claims. (Cl. 285—97.8)



1. In a bearing for a sprinkler head, an integral tubular housing section having means at its lower end for securing the same upon a riser and having an annular groove cut thereinto from the inside thereof, a sealing ring mounted in said groove and having its upper face projecting inwardly beyond the portion of the housing wall located above the ring to form a bearing surface, and a spindle revolvable in the housing section and having a bottom face revolvable on said bearing surface, the spindle projecting upwardly above the housing section and having a flange bearing on the top of the section, with a washer disposed above the flange, and a second housing section threaded upon the upper end of the first section and bearing on the washer for holding the spindle against upward movement.

2,733,081
SEAL
Lawrence G. Saywell, San Mateo, Calif., assignor to Saywell Associates, a joint venture
Application February 1, 1952, Serial No. 269,530
1 Claim. (Cl. 286—5)

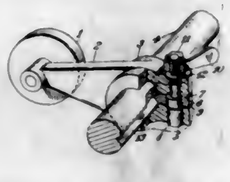
In combination with inner and outer relatively rotatable and concentric annular members, the outer member having its inner periphery interrupted by an inwardly faced

annular groove adjacent one end of the same, the inner member having a cylindrical portion extending for a substantial distance on both sides of the general plane of the groove, a single flat continuous annulus of thin spring metal having its outer peripheral edge portion loosely accommodated within said groove, the radial depth of the groove being greater than the outer diameter of the annulus and the outer diameter of the annulus being greater than the inner diameter of the outer member between said one end and said groove, the inner diameter of the annulus being only slightly greater than



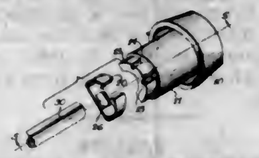
the outer diameter of the cylindrical portion of the inner member, the annulus being distortable within its elastic limit from its normal substantially flat form to a form in which it may be inserted in said groove, the inner peripheral edge of the annulus having a close running fit about a region of the cylindrical portion that is intermediate the ends of the same, the outer peripheral edge of the annulus engaging one wall of said groove to provide a seal, said annulus being free for limited radial motion relative to the outer member to accommodate for slight eccentricity between said inner and outer members.

2,733,082
MEANS FOR LOCKING A COLLAR TO A ROD
Headley Townsend Backhouse, Sunningdale, England
Application August 15, 1951, Serial No. 242,014
Claims priority, application Great Britain August 28, 1950
4 Claims. (Cl. 287—52.02)



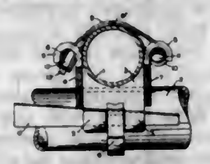
1. In combination, a rod having a single longitudinal groove therein, a collar slidable longitudinally on said rod and having a member carried by the collar and urging the collar to rotate about the rod, and means for preventing such rotation and longitudinal sliding of the collar comprising clamping means for locking said collar to said rod at any position along the length thereof and always in one and the same predetermined angular position about the rod, which clamping means comprise a cam supported in said collar for rotation about an axis which is in a plane outside of said rod and is transverse to the axis thereof, and a flat slide cooperating with said cam and carried within said collar and lying in a plane containing the axis of said rod and guided by said collar for movement in that plane radially with respect to said rod and into and out of engagement with said groove, whereby upon rotation of said cam said slide can be moved in said collar into and out of engagement with said groove in said rod, the groove in the rod being of V-section and the end of the slide being also of V-section, whereby as the slide is moved into engagement with said groove as aforesaid the engagement between the groove and the end of the slide serves to rotate the collar, against the said urge, accurately into the said predetermined angular position, and the engagement of the end of the slide and the groove serves to lock the collar against angular and longitudinal movement on said rod.

2,733,083
FASTENING DEVICES FOR SHAFT KNOBS
John Strange, Cardiff, Wales, assignor to Tinnerman Products Inc., Cleveland, Ohio, a corporation of Ohio
Application January 30, 1952, Serial No. 269,021
7 Claims. (Cl. 287—53)



1. A fastening device for detachably securing a male member within a female member comprising, a strip of semi-rigid material having its ends bent to bow in the same direction about an intermediate strip portion therebetween, the extremity of each end portion being turned inwardly toward said other end portion and terminating short thereof to form a space therebetween, said intermediate strip portion rising transversely and gradually from one edge thereof towards said end portions' extremities and dropping abruptly into the other edge to form a gradually sloping transverse pilot shoulder and an abrupt oppositely facing retaining shoulder thereon.

2,733,084
PIPE-CONNECTION CLIPS
Franciska Francina de Wijn, Bennebroek, Netherlands
Application January 28, 1953, Serial No. 333,780
6 Claims. (Cl. 287—54)



1. A pipe connection clip for interconnecting two pipes crossing each other at right angles which comprises two pairs of sheet metal plates interconnected by welding at their side edges to define a unit of rectangular cross-section, the plates of each pair being oppositely disposed in said unit and being formed along one end edge with a semi-cylindrical cut-out for receiving one of the pipes and being formed at the opposite end edge with two integral retroverted spaced-apart fingers defining a recess therebetween, a hinge bolt welded to the fingers of one plate of each pair and extending across the recess between said fingers, a flexible clamping strap in the form of a loop flattened at its center having an eye at one end extending around each hinge bolt and said strap having a second end extending into the recess between the retroverted fingers of the plate opposite the hinge bolt, said strap defining a wedge eye at said last-named end, and a wedge inserted through said wedge eye to apply tension to said strap, said wedge bearing against the end of said wedge eye and against the adjacent retroverted fingers.

2,733,085
BALL AND SOCKET JOINT
Josef Latzen, Dusseldorf-Oberkassel, Germany, assignor to A. Ehrenreich & Cie., Dusseldorf-Oberkassel, Germany, a firm
Application August 15, 1950, Serial No. 179,537
1 Claim. (Cl. 287—87)

Ball and socket joint for steering gears or the like, comprising a ball headed rod, a housing permitting free angular motion of the rod and bearing means presenting two separate bearing areas, one defining a cup shaped bearing surface around a small section of said ball head adjacent the neck of the rod and the other a cylindrical

bearing surface for engagement with the central section of said ball disposed perpendicularly to the axis of the



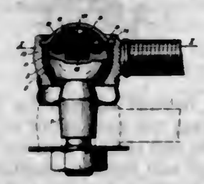
rod, said ball head being provided with circumferential grooves and hardened rings disposed in said grooves.

2,733,086
SOCKET FOR A BALL AND SOCKET JOINT
Josef Hubert Latzen, Oberkassel, Dusseldorf, Germany, assignor to A. Ehrenreich & Cie, Dusseldorf-Oberkassel, Germany, a firm
Application March 5, 1952, Serial No. 274,900
2 Claims. (Cl. 287—87)



1. A housing of tough material for a ball and socket joint having an upper portion presenting a smooth interior cylindrical surface area and a lower portion provided with an aperture within the lower housing end and presenting a smooth interior spherical surface area extending downwardly to said aperture and forming with said cylindrical surface area a continuous, smooth inner surface, wherein a hardened surface zone of substantially annular conformation is provided circumferentially of said housing end having said aperture and a similar hardened surface zone is provided on both sides of the junction of said cylindrical surface area and said spherical surface area while the entire material of said housing except for said hardened zones is retained in its tough state.

2,733,087
BALL AND SOCKET JOINT
Josef Hubert Latzen, Oberkassel, Dusseldorf, Germany assignor to A. Ehrenreich & Cie, Dusseldorf-Ober kassel, Germany, a firm
Application March 5, 1952, Serial No. 274,898
3 Claims. (Cl. 287—90)



1. A ball and socket joint comprising a stud having an enlarged portion constituting a head presenting a segmental spherical surface, a socket presenting a spherical inner surface providing bearing support for said head, a hollow cap disposed over said head with a space therebetween presenting an outer spherical surface defining a substantially continuous and unobstructed spherical surface with said head, a cover on said socket presenting a spherical inner surface providing sliding bearing engagement for said cap, and spring means extending from said head toward said cover, said hollow cap having an inwardly projecting conformation maintaining said spring means substantially in axial alignment with said stud and said head, said head being movable relative to said cap against the action of said spring means, said head having a recess in alignment with said inwardly projecting conformation on said cap wherein one end of said spring means is disposed, and said spring means comprising concentric inner and outer helical springs of cylindrical and conical conformation, respectively, effective to absorb axial and angular thrusts, respectively.

2,733,088
DOOR LATCH OPERATING DEVICE
Leland H. Fisler, New Britain, Nicholas A. Welch, West Hartford, and Frank J. McConnell, New Britain, Conn., assignors to The American Hardware Corporation, New Britain, Conn., a corporation of Connecticut
Application January 31, 1952, Serial No. 269,168
12 Claims. (Cl. 292—1)



7. In a door latch operating device, a casing comprising a separate U-shaped guide having ears extending from the opposite sides of the upper and lower legs thereof, an inner and an outer end plate disposed against the opposite sides of said retractor guide and having slots therein through which said ears extend; the corresponding edges of said ears each being provided with a notch which is disposed in alignment with its respective end plate and is adapted to receive the edge of the respective slot therein upon lateral movement of said end plate relatively to the guide to secure said end plates against axial movement relatively thereto, and means normally retaining said end plates and guide in engagement.

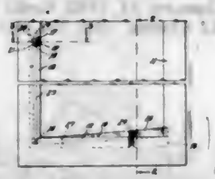
2,733,089
LATCH SPINDLE SPRING DEVICE
Paul H. Grevengoed, Grand Rapids, Mich., assignor to National Brass Company, Grand Rapids, Mich., a corporation of Michigan
Application December 5, 1952, Serial No. 324,237
3 Claims. (Cl. 292—1)



1. In a latch for a door having a bore perpendicular to the plane of said door, said latch having an escutcheon plate assembly secured to the surface of said door, the combination comprising: a spindle rotatably mounted through said escutcheon plate assembly for disposition within said bore; handle means on each end of said spindle; a first spring anchor formed of sheet material disposed within said bore fixed against rotation with respect to said spindle and rotatable therewith, said anchor having a spaced pair of heads embracing said spindle and an integral arm portion interconnecting said heads and extending parallel to said spindle; a second spring anchor fixed with respect to said escutcheon plate assembly and positioned to extend into said bore, and having an arm portion extending opposite said first spring arm portion and disposed radially outward therefrom with respect to said spindle; and a helical spring surrounding said spindle interposed between said heads and having each of its ends angularly displaced from the

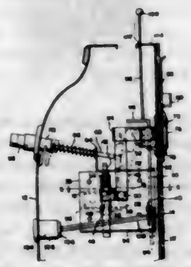
other, said first and second spring arm portions being disposed in the axially-projected sector defined by said spring ends.

2,733,090
SAFETY RELEASE FOR VAULTS, REFRIGERATORS, AND THE LIKE
George Coplea, Cripple Creek, Colo.
Application March 12, 1954, Serial No. 415,798
1 Claim. (Cl. 292—94)



A retractible keeper for latching a latch bolt of a forwardly swinging door in its jamb comprising: a horizontal keeper shaft rotatably mounted in said jamb in horizontal alignment with and spaced from the extremity of said latch bolt and at right angles to the plane of said door; a keeper secured on and normally projecting horizontally from said shaft toward and into the path of said latch bolt to prevent said door from being opened; an actuating lever secured on the rear extremity of said shaft; a depressible floor treadle positioned across the lower edge of said door parallel to and spaced from the rear face of said door, one extremity of said treadle being positioned directly beneath said actuating lever; a connecting rod extending from the latter extremity of said treadle to said actuating lever; and a horizontal pivot pin extending transversely through said treadle adjacent said one extremity to provide a tilting fulcrum for said treadle so that when the other extremity thereof is depressed, said one extremity will force said connecting rod upwardly to cause said actuating lever to rotate said keeper shaft so as to swing said keeper upwardly from the path of said latch bolt.

2,733,091
DOOR LATCH MECHANISM
George Janonis, Detroit, Mich.
Application June 30, 1952, Serial No. 296,355
12 Claims. (Cl. 292—166)



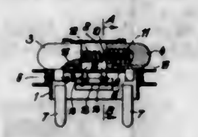
5. A door lock for vehicles comprising a sheet metal mounting plate adapted to be secured to the inner side of the free edge of a vehicle door, said plate having a vertical slot therethrough, the material from said slot being turned inwardly at right angles to the plate to form vertical guide ribs, an elongated bolt carrier movable vertically at the inner side of said plate between said ribs, a bolt on said carrier extending through said slot, resilient means engaging said carrier and urging said carrier in a direction to move said bolt in locking direction, the top and bottom edge portions of said plate being turned inwardly at right angles to said plate to provide flanges, said flanges having guide openings therein, said bolt carrier extending through said openings, a bell crank lever pivoted to said plate and having a horizontal and a vertical arm, a lug on said bolt carrier overlying said horizontal arm, and manually operable means engageable with the vertical arm of said lever for swinging said lever in a direction to raise said bolt carrier and bolt.

2,733,092
MAGNETIC DOOR CATCH
Macy O. Teetor, New Orleans, La.
Application April 12, 1952, Serial No. 282,050
13 Claims. (Cl. 292—251.5)



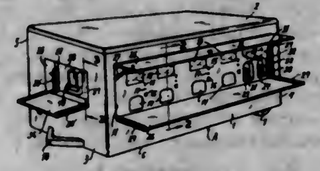
4. In a magnetic catch, a magnet unit comprising a supporting member of molded rubberlike material adapted to be secured adjacent one side thereof to a surface, and a permanent magnet element embedded at the opposite side of said member and having one face thereof exposed for contacting an armature element, said supporting member being provided with a slot intermediate the magnet element and said one side thereof whereby to facilitate flexible resilient outward and angular movement of the magnet and the surrounding portion of said member for permitting contact of the magnet with an armature element.

2,733,093
CLOSURE FASTENER
Georg Reitzel, Altenmittlau, Kreis Gelnhausen, Germany, assignor to the firm Drescher & Kiefer, Inh. Georg Reitzel, Altenmittlau, Kreis Gelnhausen, Germany
Application May 26, 1953, Serial No. 357,481
Claims priority, application Germany November 24, 1952
9 Claims. (Cl. 292—332)



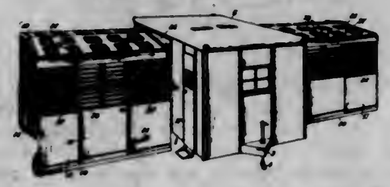
1. A closure fastener adapted for use on a container closable by placing two portions of the container in close juxtaposition, the said closure fastener comprising a catch means on each of said portions adapted to coact one with the other in the juxtaposed position of said container portions for fastening the same together, one of said catch means including two catch members disposed in alignment and slidable relative to each other between a spread apart relative position constituting a catch position and a close relative position constituting a release position, spring means urging the two catch members into the catch position, keeper means coacting with said catch members for retaining the latter in the release position, and release means coacting with the keeper means for releasing the latter, the said release means including a movable actuating member supported on one of said container portions and engageable by the other container portion upon placement of said portions in the juxtaposed position, the said engagement of the actuating member effecting actuation of the release means for the purpose aforesaid thereby fastening the two container portions together.

2,733,094
PORTABLE FOOD-VENDING CRIBS
Paul R. Carlton, Rock Island, Ill.
Application August 4, 1951, Serial No. 240,403
3 Claims. (Cl. 296—22)



1. A mobile automatic food-vending self-service cafeteria comprising a completely enclosed trailer-like vehicle having a side wall provided with an elongated recess having a door-like closure adapted to fold down into a horizontal counter along which customers may slide their trays, an inwardly offset back wall extending closurewise across the recess, and a plurality of heat-insulated food-vending machines operatively mounted in said back wall and arranged in successive order lengthwise along the counter, said food vending machines being substantially concealed by the back wall and having openings through which food can be discharged to the customer.

2,733,095
CONVERTIBLE HORSE TRAILERS
Joseph C. Crivella, Washington, D. C.
Application February 9, 1951, Serial No. 210,241
5 Claims. (Cl. 296—26)



3. A van of the character described, comprising a vehicle body, a plurality of panels at one side of the vehicle body and extending laterally therefrom in spaced side-by-side relation, upright hinge members connected with the body, means mounting the panels on the hinge members for outward swinging movement relative thereto and for upward and downward sliding movement with respect to the vehicle body, said upright hinge members extending downward along the body relative to said means for lowering movement of the panels substantially into engagement with the ground upon said outward swinging movement relative to the body, and a roof covering section connected with the upper edge of each panel and carried thereby, said roof sections extending inwardly in interconnected relation over the space between the side-by-side panels and detachable from each other for inward swinging movement with the panels against the side of the vehicle body.

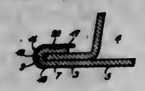
2,733,096
UNIT BODY FRAME FOR AUTOMOTIVE VEHICLE
Charles L. Waterhouse, Inkster, John W. Pyuro, Detroit, and Louis Thoma, Birmingham, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 29, 1949, Serial No. 73,484
14 Claims. (Cl. 296—28)

10. In a self-supporting body for automobiles, a threshold sill along each side of the body between the front and rear wheel locations, a floor panel interconnecting said sills, a cross beam interconnecting and front posts secured to the front end portions of said sills, a cowl and transverse wall structure secured to the front end of said floor panel and to said sills and posts, said transverse wall structure extending from said sill to the top of said cowl, auxiliary sill members inwardly spaced from said sills and terminating at and secured by their rear ends to said cross beam, a wheel housing structure on each side of the body being made separately from



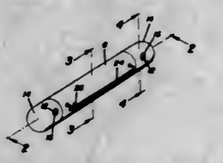
said cowl and transverse wall structure and being secured along its lower margin to the respective auxiliary sill member, said wheel housing structure extending substantially full height to its rear margin, abutting said transverse wall structure, and being secured by said margin over its full height to said transverse structure for bracing the sill extension against the body..

2,733,097
PROTECTIVE TRIM FOR AUTOMOBILE DOORS
William A. Stevens, Athens, Ga.
Application January 15, 1953, Serial No. 331,464
1 Claim. (Cl. 296—44)



An automobile door edge construction comprising a flange projecting from and extending along an end portion of the door body in extension of the exterior surface of the door body, the projecting edge of said flange being a rounded extremity spaced from the door body, a substantially J-shaped metal protective trim strip conforming to and engaging the projecting edge of said flange substantially throughout its length, the straight portion of said J-shaped strip extending along and engaging the back of said flange and the bent portion of said J-srip enveloping and engaging the rounded extremity of said flange, said bent portion terminating in a longitudinal edge positioned closely adjacent to the rounded extremity of said flange whereby the trim strip is not readily noticed from the exterior of the car when the door is closed, and a plurality of metallic fastening means connecting said J-shaped strip to said flange.

2,733,098
PERFUME CONTAINER FOR PERSONAL WEAR
William H. Holt, Los Angeles, Calif.
Application December 7, 1953, Serial No. 396,418
2 Claims. (Cl. 299—20)



1. As a new article of manufacture, a perfume containing and scent liberating device comprising a case which is essentially imperforate and provided with at least one vapor discharge port, and means carried by said case for optionally opening and closing said port, said means being a readily attachable and detachable cap having a port which is conveniently registerable with said first named

port, and clasp means secured to said case, whereby it may be handily atached to one's apparel and worn, much like an ornament, and the combination therewith of core means fitted into said case and characterized by a plurality of open-ended tubes each packed with an absorbent filler which, in turn, is adapted to be charged with a liquid perfume.

2,733,099
PLANT FOR OILING OR MOISTENING TEXTILE FIBRES AND THE LIKE
Roger Schlumberger, Saint-Germain-en-Laye, France
Application December 30, 1952, Serial No. 328,583
Claims priority, application France January 10, 1952
7 Claims. (Cl. 299—58)



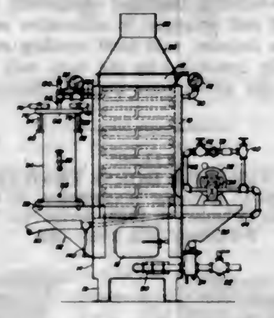
1. An apparatus for oiling textile fibers and the like comprising, in combination, at least one atomizer for producing an atomized jet of the oil to be applied to the fibers, said atomizer having an inlet for oil and an oil reservoir communicating with said inlet, an inlet for compressed air for controlling the flow of oil from said reservoir, an inlet for compressed air for atomizing the oil leaving said reservoir into an atomized jet, and an inlet for compressed air for dispersing the atomized jet, said second-named compressed air inlet communicating with at least one outlet duct and said last-named compressed air inlet communicating with at least one air blast duct for conducting the air admitted thereto to a point adjacent the atomized jet to direct air into said jet to impart to said jet a sheet-like form, a vertically adjustable oil tank communicating directly with said oil inlet for supplying oil thereto to introduce oil into said reservoir, the level of said oil tank being adjustable selectively to varying heights in relation to said oil inlet of said atomizer, an air compressor in fluid communicating relationship with all of said compressed air inlets, and regulating and controlling means for separately controlling the air flowing from said air compressor to each of said compressed air inlets, said controlling means including means for stopping the air flow to said first-named compressed air inlet, said last-named means being adapted to stop the air flow automatically upon cessation of movement of the fibers being oiled.

2,733,100
GRASS CUTTING MEANS FOR STATIONARY LAWN SPRINKLER
Leif Simonsen, Los Angeles, Calif.
Application October 19, 1953, Serial No. 386,735
2 Claims. (Cl. 299—60)



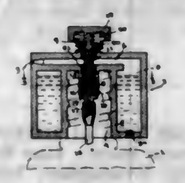
1. For use on an embedded lawn sprinkler head, a cylindrical upwardly opening cup having a centrally apertured bottom wall to accommodate the pipe portion of the stated sprinkler head and permit said cup to be attached to the sprinkler head so that the rim-forming wall of said cup may be positioned substantially flush with the ground surface in a manner to provide a stationary cutter, and a readily applicable and removable manually actuatable cutter complemental to said cup and embodying an open frame structure, the latter comprising a ring the lower edge of which provides a shoulder rotatably contacting the upper edge of said rim-forming wall, the inner peripheral portion of said ring provided with circumferentially spaced depending cutting blades, said cutting blades telescoping into said cup and having movable contact with the inner surface of said rim-forming wall, and handle means operatively connected with said ring.

2,733,101
STEAM CLEANING DEVICE
John E. Hartzler, Colton, and Charlie P. Jeter, San Bernardino, Calif.; said Hartzler assignor to E. H. Buller, Atwater, Calif.
Application October 23, 1952, Serial No. 316,404
3 Claims. (Cl. 299—84)



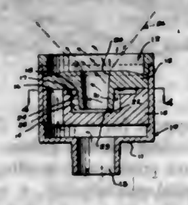
2. A steam cleaner comprising a closed annular water chamber, heating means for the interior of said annular chamber, means for introducing water under pressure into said annular chamber, a soap chamber, a mixing chamber, a passage between said soap chamber and said mixing chamber, a conduit for delivering water under pressure from said annular chamber into said mixing chamber and into said soap chamber with the water delivered under pressure to said soap chamber forcing soap through said passage into said mixing chamber, a coil disposed within said annular chamber, a conduit interconnecting said coil with said mixing chamber, and an outlet condut connected to said coil.

2,733,102
ATOMIZING AND DISPENSING APPARATUS
Santy M. Croce, Hauppauge, N. Y., assignor to Coty, Inc., New York, N. Y., a corporation of Delaware
Application March 29, 1954, Serial No. 419,440
11 Claims. (Cl. 299—86)



1. An atomizer comprising a cap for a bottle having a body containing liquid which is to be dispensed in atomized form, said cap having a chamber formed therein and adapted to house a quantity of propellant gas under pressure, means on said chamber for connecting it to the top end of the bottle so that it rests wholly above the bottle body, a plug on said cap and adapted to be connected to the bottle outlet, said plug having an opening therethrough forming a first passage, said cap being formed with a second passage communicating with said chamber, a manually actuable valve member disposed in one of said passages, said valve member normally blocking said passages from each other and being formed with an opening for establishing communication between said passages when the valve member is moved from a normal position thereof, said first passage extending downwardly and entering the bottle when the cap is connected thereto whereby gas flowing through said second passage will create a decrease of pressure in said first passage and draw fluid upwardly therein so as to dispense it from said second passage by the action of said gas.

2,733,103
FLUID DISPERSER
Edward C. Laster, Sr., and Theodore L. Menge, Sr., Shreveport, La.
Application April 8, 1955, Serial No. 500,065
3 Claims. (Cl. 299—120)



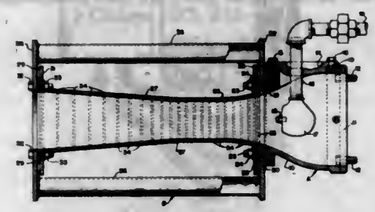
1. A fluid disperser comprising a hollow body having one end open and an inlet in the other end adapted to be connected to a source of fluid under pressure, a plug positioned within said body intermediate said ends thereof having a well in its one end remote from said inlet, said plug having a spiral passage connecting said inlet with said well, and a second plug positioned within said body in end to end confronting relation with respect to said first named plug closing said open end of said body, said second plug having a dispensing orifice extending longitudinally therethrough, said second plug being provided on its confronting end with a tubular extension having its inner wall contiguous with the wall of said orifice, said extension projecting into said well and having its end edge spaced from the wall and bottom of said well and forming with said well bottom a passage connecting said well with said orifice whereby fluid flowing into said well moves in a spiral path and moves outwardly on the wall of said extension and wall of said orifice in a helical path to form a conical spray.

2,733,104
WHEEL STRUCTURE
George Albert Lyon, Detroit, Mich.
Application July 12, 1952, Serial No. 298,490
6 Claims. (Cl. 301—37)



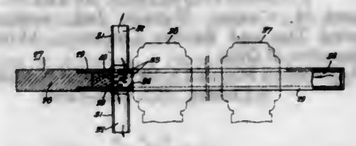
1. In a cover for disposition at the outer side of a multi-flange tire rim having an intermediate flange with a bump pressed inwardly therefrom, a cover body formed from sheet material and having an underturned outer marginal flange extending inwardly and having a plurality of retaining fingers projecting therefrom and provided with short and stiff generally radially and axially outwardly directed cover retaining terminal flanges and engageable in self-retaining gripping relation with the intermediate flange, one of said fingers having a pair of tangs struck generally radially therefrom spaced axially outwardly from the retaining terminal of such finger and engageable at respective opposite sides of the bump on the intermediate flange when the cover is applied to the wheel for holding the cover against turning on the wheel.

2,733,105
FLUID OPERATED AIR EXHAUSTER
Ray W. Williams, Blue Island, Ill., assignor to United Conveyor Corporation, a corporation of Illinois
Application April 7, 1951, Serial No. 219,781
11 Claims. (Cl. 302—25)



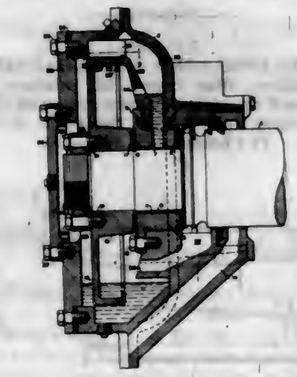
1. In a wet jet air exhauster wherein the combining tube is subjected to substantially constant negative pressure, a combining tube of flexible material which would normally collapse during operation due to the negative pressure, said tube having a portion of minimum diameter intermediate its ends and flaring gradually from said portion toward both ends, and said tube being provided with rigid reinforcing means which are so positioned and arranged as to reinforce said tube against collapse during operation while permitting the tube to retain sufficient of its inherent flexibility to vibrate and prevent material from adhering to its inner surface.

2,733,106
COOLING DEVICE FOR BEARINGS
Arne Kulling, Jonkoping, Sweden, assignor to AB Svenska Flaktfabriken, Stockholm, Sweden
Application October 12, 1951, Serial No. 251,035
Claims priority, application Sweden October 30, 1950
3 Claims. (Cl. 308—77)



1. A construction for cooling bearings, comprising a shaft having a solid portion at one end to mount an impeller and a hollow portion extending from said solid portion entirely to the other end of the shaft and constituting an inlet and passage for cooling gas, at least one bearing rotationally supporting the shaft along the hollow portion thereof, said shaft having radial outlet openings for the gas in the hollow portion thereof intermediate the bearing and the shaft solid portion and spaced from the latter, said radial outlets being arranged in a plurality of series each extending circumferentially of the shaft and the outlets in one of said series being staggered with respect to the outlets in an adjacent series and draft inducing means mounted exteriorly on the shaft at said radial openings therein to induce the flow of cooling gas longitudinally through the shaft from the said other end thereof and exhaust the same outwardly through said radial openings.

2,733,107
BEARING ASSEMBLY
Raymond W. Schuck, Buffalo, and Ward D. Abbott, Orchard Park, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application September 13, 1952, Serial No. 309,446
6 Claims. (Cl. 308—86)



1. A bearing assembly for supporting a rotatable shaft, said bearing assembly comprising a housing, a sleeve bearing supported in the housing, the housing having a reservoir for lubricating oil in the lower part thereof, an impeller mounted on the shaft for rotation therewith, the diameter of the impeller being such that it extends into the oil in said reservoir, said impeller having an axial flange and having generally radial holes in the flange for discharging oil carried from the reservoir by the impeller, an oil chamber in the housing above the bearing for supplying oil to the bearing, a projection in the upper part of the housing closely adjacent the impeller for directing oil discharged from said hole into the oil chamber, and said oil chamber having an opening in one side to drain excess oil back to the reservoir, the opening being positioned to maintain a sufficient amount of oil in the chamber for adequate lubrication of the bearing when the shaft is inclined from the horizontal.

2,733,108
CUSHIONED HINGE BEARING
Raymond H. Cowles, Wabash, Ind., assignor to The General Tire and Rubber Company, Akron, Ohio, a corporation of Ohio
Application March 23, 1953, Serial No. 343,983
6 Claims. (Cl. 308—184)



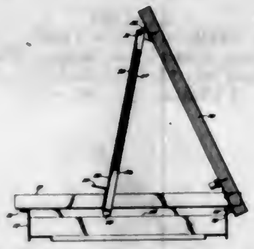
1. A cushioned pivot bearing comprising a rolling bearing having an outer race ring provided with an external transversely convex peripheral face that has a wave-like contour in transverse section providing parallel transverse circumferential ridges and troughs, said wave-like contour in any plane radial to said ring lying between concentric circles in the plane that have their centers near the ring axis and near the median plane of the ring and that are tangent to the tips of the ridges and the bottoms of the troughs, an adapter sleeve surrounding and spaced radially from said ring, said sleeve having an internal transversely concave peripheral face with a wave-like contour providing ridges and troughs of substantially the same width and depth as the ridges and troughs of said external ring face, said sleeve being disposed with its troughs overlying the ridges of the inner ring, and an annular body of elastic rubber confined between said peripheral faces.

2,733,109
UTILITY TRAY MECHANISM FOR AUTOMOBILES OR THE LIKE
Eugene F. Dooley, Peoria, and Edward J. Dooley, East Peoria, Ill.
Application August 14, 1952, Serial No. 304,284
3 Claims. (Cl. 311—21)



1. A slidable support for a tray or the like comprising a fixed frame including tubular guides, a transverse support connecting said guides and holding said guides with their axes in parallel relationship, a movable frame including rods extending into said tubular guides and having substantially parallel axes such that the rods may be reciprocated in the guides, a transverse support connecting said guides and holding said guides in parallel relationship as aforesaid, a third tubular guide secured to the first mentioned transverse support, tray supporting means slidable on said third guide, tray supporting means on the second mentioned transverse support, and pressure differential operated means disposed within the third guide and connected to the movable frame, whereby to move the movable frame relative to the fixed frame and thus to slide the tray on its fixed supporting frame.

2,733,110
TABLE TOP STRUCTURE FOR OVERBED TABLES
Harry M. Berner, Chicago, Ill., and Axel E. F. Johnson, Clarence W. Ensminger, and Kurt George Christian Savke, Cincinnati, Ohio, assignors to American Hospital Supply Corporation, Evanston, Ill., a corporation of Illinois
Application December 17, 1953, Serial No. 398,836
4 Claims. (Cl. 311—38)



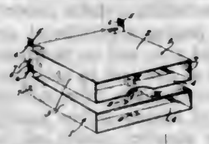
1. A table structure having an intermediate transverse segment removed, a supporting frame below said table and having a pair of side portions connecting the table segments, said side portions of the frame each having a pair of hinge loops, and a detachable cover equipped with contractable hinge rods alternatively and selectively engageable with either pair of hinge loops for pivoting said cover for movement between a vertical and a horizontal position.

2,733,111
EDGE BINDER FOR DESK TOP OR THE LIKE
Walter E. Nordmark, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a corporation of New Jersey
Application February 21, 1955, Serial No. 489,449
10 Claims. (Cl. 311—107)



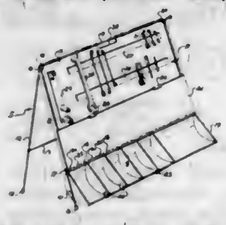
1. A top for a desk or the like, comprising: a flat panel; a supporting frame for the panel comprising an inner rim having an inwardly extending flange at its upper edge in flush engagement with the under surface of said panel along its marginal peripheral edge, and a strut spanning the supporting frame and having its upper surface lying adjacent the underside of said panel; and an outer rim secured to the inner rim and having an inwardly extending flange at its upper edge in flush engagement with the upper surface of said panel along its marginal peripheral edge.

2,733,112
SECTIONAL CABINET CONSTRUCTION
Thomas M. Dunham, Aurora, Ill., assignor to Aurora Equipment Company, Aurora, Ill., a corporation of Illinois
Application April 15, 1953, Serial No. 348,869
2 Claims. (Cl. 312—111)



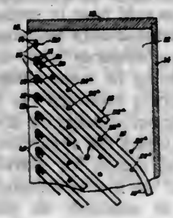
2. In a sectional cabinet construction including superimposed cabinets, each having a top, a bottom, and spaced side walls, connecting means between said cabinets comprising pre-formed tabs and prongs formed from the material of the cabinet and deformable into parallelism with the planes of the side walls for opposed overlapping engagement with the superimposed cabinet side walls, said superimposed cabinet side walls having preformed slots laterally alignable with said prongs and tabs, each of said prongs being pressed over the edge of a slot aligned therewith interiorly into the cabinet for substantially concealed tight fitting engagement therewith to prevent relative lateral displacement of the superimposed cabinet.

2,733,113
HOLDER FOR TOOLS, MECHANICAL PARTS, AND THE LIKE
Solomon M. Humbargar, Minneapolis, Minn.
Application February 28, 1952, Serial No. 274,034
3 Claims. (Cl. 312—251)



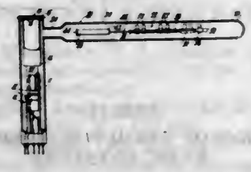
3. A holder for articles such as tools and mechanical parts comprising a supporting structure having lower members for positioning on a supporting surface, a panel for retaining tools and parts secured to said supporting structure in upward upstanding relation thereto, an elongated and generally horizontal tray for also retaining tools and parts swingably mounted on said supporting structure, said tray being movable from an upward and closed position against said panel to an open and forwardly facing position resting upon a supporting surface, whereby an operator in close proximity to said supporting surface will have ready and convenient access to tools and parts.

2,733,114
FILE CABINET
Grover C. Moser, Jr., Berne, Ind.
Application May 12, 1952, Serial No. 287,295
3 Claims. (Cl. 312—351)



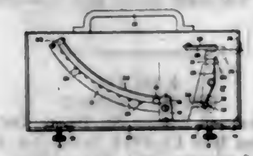
1. A filing cabinet comprising a pair of spaced, substantially parallel side walls, a plurality of substantially parallel pairs of bars arranged substantially in a common, substantially vertical plane and spanning said walls, the bars of each of said pairs of bars lying in longitudinal contiguity, and a plurality of flexible strips, each strip being turned back on itself with one of the ends thereof being inserted between the bars of one of said pairs of bars for frictional retention therebetween, and with the other of the ends thereof being inserted between the bars of an adjacent pair of bars for frictional retention therebetween, said strip thus forming a pocket between such adjacent pairs of bars, the depth of each of said pockets being universally adjustable by varying the degree of projection of either of said strip ends between its associated pair of bars.

2,733,115
APPARATUS FOR EVAPORATING CHEMICALS
Benjamin H. Vine, Lancaster, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Application April 1, 1952, Serial No. 279,883
10 Claims. (Cl. 316—30)



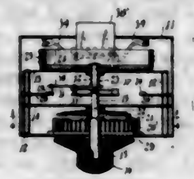
1. Apparatus for evaporating materials onto a predetermined area inside an envelope, said apparatus comprising an elongated container adapted to be attached to and communicate with the interior of said envelope, electrical terminal means positioned in the wall of said container, an evaporator assembly movably positioned within said container, and means carried by said assembly for contacting said electrical terminal means when said assembly is moved to register said means carried by said assembly with said terminal means.

2,733,116
APPARATUS FOR MEASURING AND RECORDING DECELERATION OF A VEHICLE
Harold Fantham and Clarence Henry John Daft, Birmingham, England, assignors to Girling Limited, Tyseley, Birmingham, England, a British company
Application October 26, 1954, Serial No. 464,842
Claims priority, application Great Britain October 29, 1953
5 Claims. (Cl. 346—7)



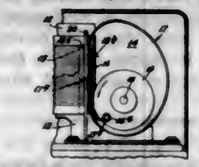
1. Apparatus for measuring and recording deceleration of a vehicle comprising a base, two spaced parallel arcuate bars mounted on said base in vertical planes and with their lower ends substantially horizontal, the remainder of each bar curving upwards from said lower end, the first of said bars being of metal, angularly spaced insulated contact members mounted on the second of said bars, an inertia member slidable on said bars on deceleration of a vehicle in which the apparatus is placed, a record sheet, and electrical means for marking on said record sheet the passage of the inertia member over each of said contact members to establish an electrical connection between said contact member and the arcuate metal bar.

2,733,117
SERVICE TIMER
Albert H. Wright, Kingston, Ontario, Canada
Application September 16, 1954, Serial No. 456,461
2 Claims. (Cl. 346—82)



2. A time recorder comprising a supporting frame; a driving shaft and a driven shaft journalled in axial alinement in said frame; clock mechanism for actuating the driving shaft continuously; a printing band actuated by the driven shaft; and means actuated by the driving shaft for effecting a step by step rotation of said driven shaft as the driving shaft rotates and comprising a ratch having an annular row of abutments arranged about the axes of said shafts, an escape lever on the driven shaft, said driven shaft being movable longtudinally of its axis, resilient means normally tending to hold the driven shaft with the escape lever engaging an abutment on the ratch, and a driving member mounted on and rotatable with the driving shaft, said driving member having a stop thereon engaging the escape lever, and an outwardly inclined cam surface adjacent said stop for moving the escape lever out of contact with the abutment, and resilient means normally tending to hold the escape lever against the stop.

2,733,118
MAGNETICALLY STABILIZED SCANNING RECORDER
Furman H. Stamper, Los Angeles, Calif., assignor to Bendix Aviation Corporation, North Hollywood, Calif., a corporation of Delaware
Application May 25, 1953, Serial No. 357,295
6 Claims. (Cl. 346—139)

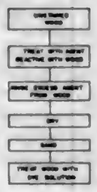


1. Apparatus of the type described comprising: means for supporting and moving a record sheet in transversely flat shape through a record path past a scanning path extending transversely across said record path; a scanning mechanism positioned adjacent the front side of said record path and including a stylus carrier rotatable about a fixed axis and having a peripheral surface concentric with respect to said axis, and an elongated resilient stylus member attached at one end to said carrier and extending substantially tangentially from said peripheral surface of the carrier and having a free scanning end; means including a guide member positioned on the front side of said record path adjacent and parallel to said scanning path and in the plane of rotation of said stylus member and approximately tangent to said surface of the said carrier for contacting said stylus member during the scanning portion of each cycle of revolution thereof, and deflecting said scanning end into said scanning path; said stylus member and said guide member each comprising a ferromagnetic body extending the full length thereof, at least one of which is magnetized, whereby the entire portion of the stylus member from the carrier to said free scanning end is subject to magnetic attraction by said guide member.

CHEMICAL

2,733,119
ACTIVATION OF WOOD FOR DYEING WITH A BASIC DYESTUFF
Herman R. Nack, Troy, Ohio, assignor to Chadeloid Corporation, Dayton, Ohio, a corporation of Delaware
Application November 6, 1951, Serial No. 255,102
1 Claim. (Cl. 8—6.5)

A process of staining walnut wood which comprises the steps of (*a*) applying to the surface of the unstained wood a water solution containing 10% by weight of sodium hypochlorite and retaining said solution in contact with the wood for approximately ten minutes, (*b*) rinsing the wood with methanol, (*c*) lightly sanding the rinsed surface of the wood, and (*d*) applying thereover a dye solu-

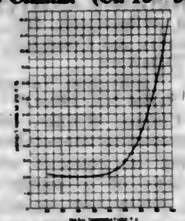


tion containing Brilliant Green Crystals to dye the wood and thereafter drying the same.

2,733,120
PROCESS OF BLEACHING DURING LAUNDERING
Homer L. Robson, Lewiston, N. Y., and William H. Sheltmire, Baltimore, Md., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia
No Drawing. Application October 12, 1953, Serial No. 385,706
3 Claims. (Cl. 8—137)

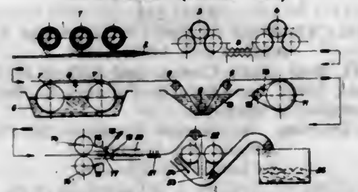
1. In a process of laundering in which the wash load is subjected to a washing cycle with an aqueous solution of soap followed by a rinsing cycle consisting of a plurality of rinsing steps, the method of bleaching the wash load in the presence of soap which comprises adding a dry bleaching composition which essentially comprises a high-test calcium hypochlorite during a rinsing step, other than the first rinse, in which the soap concentration is not more than about 200 p. p. m. prior to the final rinse.

2,733,121
PRESSURE WASHING PROCESS
Andrew Starling Griffith, Jr., and Robert Edwin McDonald, Waynesboro, and Robert Edward Wilfong, Staunton, Va., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
Application June 8, 1951, Serial No. 230,572
5 Claims. (Cl. 18—54)



1. A process for the production of acrylonitrile polymer yarn containing a small amount of water-soluble, organic solvent uniform in amount and distribution which comprises spinning said yarn from a solution of said polymer in said solvent; winding said yarn on a perforated core; forcing through the resultant yarn package an aqueous wash liquor containing from about 2% to about 15% of said solvent, said liquor being under sufficient pressure to cause a flow rate of about 0.2 to about 1.5 gallons per minute to produce thereby a yarn containing uniformly distributed therein a uniform amount of residual solvent being between about 1% and about 2.5%.

2,733,122
PRODUCTION OF STAPLE FIBRES FROM POLYAMIDES
Ludwig Herele, Kurt Jehle, Karl Kunz, Paul Möller, and Paul Schlack, Bobingen, Germany, assignors to Bobingen Aktiengesellschaft fur Textil-Faser, Bobingen, Germany, a corporation of Germany
Application March 5, 1952, Serial No. 274,958
In Switzerland October 5, 1949
Public Law 619, August 23, 1954
Patent expires October 5, 1969
16 Claims. (Cl. 18—54)

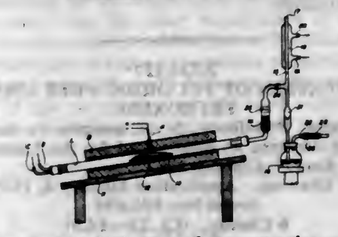


1. A method of producing staple fibres from filaments of polyamides composed substantially of condensation products of the epsilon-aminocaproic acid containing water-soluble compounds of the group consisting of monomeric and lowly polymeric compounds, comprising the steps of combining the filaments into a tow of at least 40,000 deniers, placing a tension on said tow to stretch the filaments to a multiple of their length, washing the tow with a hot aqueous washing agent, substantial drying the tow to a degree of moisture of less than 6%, said washing and drying being performed while tension is maintained on said tow, crimping the filaments in a continuous mechanical crimping process at a temperature above room temperature while maintaining the moisture content at less than 6%, said steps directly succeeding each other in this order, in a continuous process cutting the tow into staple fibres and opening the staple fibres by action of a jet of air blown at the fibre material.

2,733,123
PRODUCTION OF UCl_4
Myron B. Reynolds, Glenville, N. Y., and Harold L. Pickering, Tulsa, Okla., assignors to the United States of America as represented by the United States Atomic Energy Commission
No Drawing. Application April 8, 1948, Serial No. 19,883
5 Claims. (Cl. 23—14.5)

1. The process for producing a highly active form of UO_2 which is characterized by rapid oxidation in ordinary air at room temperature and rapid chlorination with carbon tetrachloride at approximately 400° C., comprising reducing UO_3 with a mixture of ethyl alcohol and an inert gaseous diluent at 200° to 425° C.

2,733,124
MANUFACTURE OF URANIUM TETRACHLORIDE
Sam Rosenfeld, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application January 5, 1944, Serial No. 517,017
7 Claims. (Cl. 23—14.5)



1. The process which comprises contacting a mixture of carbon tetrachloride and chloroform with uranium oxide while maintaining a temperature in the range 400° to 500° C., whereby uranium tetrachloride is produced.

2,733,125
RECOVERY OF URANIUM FROM WASTE METAL PRODUCTS
Louis Spiegler, Woodbury, N. J., assignor to the United States of America as represented by the United States Atomic Energy Commission
No Drawing. Application October 20, 1944, Serial No. 559,666
5 Claims. (Cl. 23—14.5)

2. The method for producing an aqueous uranyl sulfate solution from uranium metal dross, which comprises burning the dross in air to convert uranium metal to oxides of uranium, mixing the oxides of uranium with lime, roasting the mixture in air at a temperature between 600° C. and 1000° C., mixing the product with at least sufficient aqueous 5% to 50% H_2SO_4 solution to supply one sulfate radical for each atom of calcium and uranium in the mixture, adding an oxidizing agent to convert residual less-than-6-valent uranium to hexavalent form, and mechanically separating solid matter from the resulting aqueous uranyl sulfate solution.

2,733,126
URANIUM LIBERATION

Louis Spiegler, Woodbury, N. J., assignor to the United States of America as represented by the United States Atomic Energy Commission

No Drawing. Application October 20, 1944, Serial No. 559,667
1 Claim. (Cl. 23—14.5)

The method of obtaining a uranyl sulfate solution substantially free from fluoride ions from a slag formed in the production of metallic uranium by the reduction of uranium tetrafluoride with metallic magnesium in a retort lined with a material selected from the group consisting of lime and burnt dolomite, which slag contains free alkaline earth metal and uranium and also oxides and fluorides of said metals which comprises crushing said slag, roasting the crushed slag in air at a temperature between 600° C. and 1000° C. to oxidize the free metal in the slag and to convert some of the tetravalent uranium to a hexavalent state, grinding the roasted product, mixing the ground roasted product with a quantity of concentrated sulfuric acid which is at least sufficient to convert all fluorides present therein to hydrogen fluoride and all metallic oxides present therein to the corresponding metallic sulfates, said quantity of sulfuric acid being limited so that it does not dissolve the sulfates produced and form a separate liquid phase, heating said mixture of ground roasted product and concentrated sulfuric acid at a temperature between 200° C. and 300° C. until hydrogen fluoride is no longer evolved and substantially all fluorides in said mixture have been converted to sulfates, digesting the sulfated product in water to dissolve the uranium sulfates contained therein, treating said solution containing uranium sulfates with an oxidizing agent to complete the conversion of tetravalent uranium to the hexavalent state as uranyl sulfate, neutralizing residual sulfuric acid present to adjust the pH of the solution to between 2 and 5, and separating the resulting uranyl sulfate solution from undissolved solids.

2,733,127
PRECIPITATION OF FLUORIDE-FREE URANIUM TETROXIDE

Louis Spiegler, Woodbury, N. J., assignor to the United States of America as represented by the United States Atomic Energy Commission

No Drawing. Application January 6, 1945, Serial No. 571,674
6 Claims. (Cl. 23—14.5)

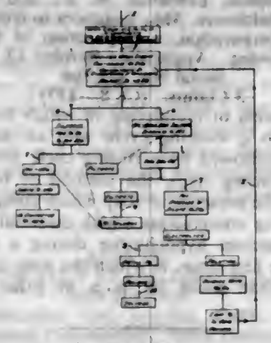
1. In the recovery of uranium peroxide by precipitation from a uranyl salt solution containing magnesium and fluorine, the improvement which comprises effecting the uranium precipitation in the presence of borate ions and separating the precipitated uranium peroxide from the resulting mother liquor.

2,733,128
PROCESS FOR THE RECOVERY OF U IN THE PRESENCE OF IRON

Albert E. Ballard, Oak Ridge, Tenn., assignor, by mesne assignments, to the United States of America as represented by the United States Atomic Energy Commission

Application September 18, 1945, Serial No. 617,126
6 Claims. (Cl. 23—14.5)

1. The process of recovering U from liquids containing U nitrate in the presence of undesired components including at least the iron component of the group consisting of iron, copper, chromium, and nickel compounds which comprises concentrating the liquid, removing at least the greater part of the iron component by treating the liquid with a source of a sulfate ion and under controlled pH conditions of about 3.0 to 3.8 whereby a precipitate of the iron is thrown down, thereafter subjecting the liquid freed from the bulk of the iron to treatment for recovering the U component, dissolving the iron precipitate, subjecting the resulting solution to electrolysis



for plating out the various metallic contaminants therein, away from the U and returning the U from this step to the aforementioned U recovery step.

2,733,129
COPPER HEMICHROMITE AND ITS PREPARATION

Herrick R. Arnold, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 5, 1953, Serial No. 390,429
3 Claims. (Cl. 23—56)

2. Process for preparing copper hemichromite which comprises dissolving in aqueous solution essentially equimolar proportions of a copper carboxylate and chromium trioxide, drying and calcining the precipitated product at a temperature of 400° to 475° C., then reducing in hydrogen said calcined product at a temperature of 425° to 475° C., and obtaining as the resulting product copper hemichromite.

2,733,130
FERROUS GROUP METAL HEMICHROMITES AND THEIR PREPARATION

Herrick R. Arnold, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 5, 1953, Serial No. 390,430
9 Claims. (Cl. 23—56)

4. Process for preparing a ferrous group metal hemichromite which comprises dissolving in aqueous solution essentially equimolar proportions of chromium trioxide and a ferrous group metal carboxylate wherein said ferrous group metal is selected from the class consisting of nickel, cobalt and iron, drying and calcining the precipitated product at a temperature of 400° to 475° C., then reducing in hydrogen said calcined product at a temperature of 400° to 500° C., and obtaining as the resulting product a ferrous group metal hemichromite.

2,733,131
PRODUCTION OF CUPROUS CYANIDE FROM ALKALINE MEDIUMS

Donald H. Rose, Lake Linden, and Gilbert H. Dawson, Calumet, Mich., assignors to Calumet & Hecla, Inc., a corporation of Michigan

No Drawing. Application December 26, 1952, Serial No. 328,146
1 Claim. (Cl. 23—79)

The method of making a substantially pure cuprous cyanide, comprising: leaching a copper-containing material with an aqueous solution of ammonia-ammonium carbonate while bubbling oxygen through said solution to produce an aqueous solution containing copper ions, the aqueous solution initially containing from about 40–100 grams per liter of ammonia and about 25–50 grams per liter of carbon dioxide; continuing said leaching and oxidizing until the copper content of the solution is not greater than about 80 grams per liter; reducing the copper ions in the solution by contacting said copper-containing material with said solution in the substantial absence of oxidizing agents until the copper content of the solution is at least 70% cuprous; adding to the solution a member of the class consisting of alkali metal cyanides and hydrocyanic acid to precipitate cuprous cyanide; separating the cuprous cyanide from the solution; washing the cuprous cyanide with water; mixing the cuprous cyanide with a weak aqueous acid solution having a pH of about 2–5; separating the solid cuprous cyanide from the acid solution; washing said cuprous cyanide; and drying.

2,733,132
PROCESS FOR THE PRODUCTION OF EPSOMITE FROM LANGBEINITE

William E. Burke, Carson City, Nev., assignor to International Minerals & Chemical Corporation, a corporation of New York

No Drawing. Application January 31, 1952, Serial No. 269,351
12 Claims. (Cl. 23—128)

1. A process for the production of epsomite from langbeinite which comprises reacting langbeinite at a temperature below 61° C. with a material selected from the group consisting of water and aqueous solutions of magnesium sulfate, said langbeinite and said material being employed in proportions requisite to produce by said reaction a precipitate of leonite substantially uncontaminated with solid magnesium sulfate and a mother liquor in the form of a solution substantially saturated with respect to magnesium sulfate hexahydrate and containing a minor portion of dissolved potassium sulfate, separating said leonite precipitate from said mother liquor, cooling said mother liquor to a temperature below about 40° C. and above the freezing point of said liquor to precipitate substantially potassium sulfate free epsomite therefrom and recovering said epsomite.

2,733,133
PRODUCTION OF TITANIUM MONOXIDE

William Thompson Cave and Arno H. Herzog, Dayton, Ohio, assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application September 1, 1954, Serial No. 453,703
3 Claims. (Cl. 23—202)

1. The process for producing substantially pure titanium monoxide having a lattice constant, a_0, of at least 4.16 A. but not greater than 4.19 A., which comprises heating intimately admixed finely divided substantially equimolar proportions of solid titanium dioxide and solid carbon to a temperature above 1750° C. but below the melting point of titanium monoxide.

2,733,134
METHOD FOR MAKING TITANIUM CARBIDE FROM PHOSPHATES

Leif Aagaard, Plainfield, and Helmut Espenschied, Metuchen, N. J., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey

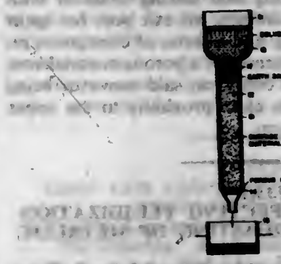
No Drawing. Application July 10, 1953, Serial No. 367,359
7 Claims. (Cl. 23—208)

1. Method for the production of a titanium compound of carbon which comprises forming an intimate mixture of titanium phosphate and carbon, and then heating said mixture at a temperature sufficient to complete the reaction between the materials, and in an inert atmosphere to calcine said mixture and produce finely divided titanium carbide.

2,733,135
METHOD OF ANALYZING EARTH MATERIALS FOR HYDROCARBONS

William B. Hackabay, Dallas, Tex., assignor, by mesne assignments, to Socony Mobil Oil Company, Inc., a corporation of New York

Application April 2, 1949, Serial No. 85,251
15 Claims. (Cl. 23—230)

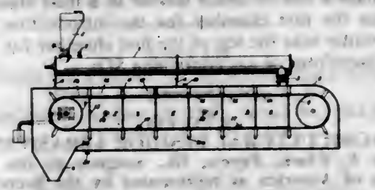


12. In a geochemical exploration method wherein earth samples are collected from an exploration zone and analyzed for a desired paraffin hydrocarbon portion, anomalies of which are significant with respect to the proximity of an underground petroleum hydrocarbon reservoir, the steps which comprise collecting earth samples from an exploration zone, extracting each of said earth samples with carbon tetrachloride, removing said carbon tetrachloride from each of the resulting solutions of extract, dissolving each of the resulting residues in at least ten times their volume of a solvent which is more adsorbable on solid surface active material than a desired paraffin hydrocarbon portion of the constituents of said earth samples but less adsorbable on said surface active material than the other constituents of said earth samples, passing each of the resulting solutions through solid surface active material whereby said desired paraffin hydrocarbon portions of the constituents of said earth samples are separated from the other constituents of said earth samples by adsorption on said surface active material of the other constituents of said earth samples, recovering each of said solutions containing said desired paraffin hydrocarbon portions of the constituents of said earth samples passed through said surface active material, and analyzing each of said solutions for said desired paraffin hydrocarbon portions of the constituents of said earth samples.

2,733,136
APPARATUS FOR THE EXTRACTION OF OILS FROM VEGETABLE MATTER

Thomas Andrews, Driffield, England, assignor to Rose, Downs & Thompson, Kingston-upon-Hull, England, a British company

Original application October 18, 1949, Serial No. 121,934. Divided and this application February 3, 1953, Serial No. 334,847
Claims priority, application Great Britain November 1, 1948
3 Claims. (Cl. 23—270)



1. Apparatus for extracting oils from vegetable matter and comprising in combination, an enclosing casing, a fixed platform mounted below and parallel to the top surface of said casing and consisting of a first section which is solid, a second section adjacent the first section, said second section being perforated and formed integral

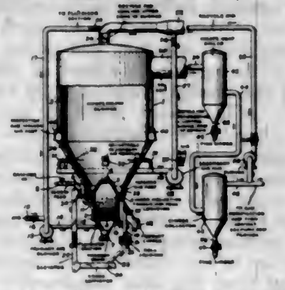
with a chamber mounted below it, a third section adjacent the second section, said third section being perforated and formed integral with a chamber mounted below it, means to produce a vacuum in the chamber below the second section of the platform, means to produce a positive pressure in the chamber below the third section of the platform, a mixing chamber for slurry mounted above said casing, a conduit connecting said mixing chamber with the first section of said platform, an exit port for spent meal located in said casing, and a series of contiguous receptacles having bottoms formed of a porous material constituting a continuous belt conveyor, said conveyor being arranged so as to travel in close proximity to the upper surface of the fixed platform.

2,733,137

APPARATUS FOR EFFECTING FLUIDIZATION AND SUSPENSION ROASTING OF METALLIC SULFIDE ORES

James W. Swaine, Manhasset, N. Y., and John C. Sloan, Jr., Neptune, N. J., assignors to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

Application August 21, 1952, Serial No. 305,642
6 Claims. (Cl. 23—277)



1. Apparatus for effecting fluidization and suspension roasting of metallic sulfide ore which comprises in combination, an enlarged combustion chamber for roasting finely divided iron sulfide ore particles suspended in a gaseous medium, a second smaller fluidization chamber embodied in the bottom of said first chamber with the upper portion of said second chamber extending upwardly into said first chamber and the lower portion of said second chamber extending downwardly from the bottom of said first chamber, the bottom walls of the first chamber being spaced from the upper walls of the second chamber to form an annular trough for the collection of cinder settling in said first chamber, an opening in the upper portion of said second chamber to permit discharge therethrough of gas and finely divided suspended solid particles into the first chamber, a perforated plate in the bottom of the second chamber adapted to support a bed of solids, an ore feed inlet into the second chamber above the perforated plate, an inlet into the second chamber below the perforated plate for the introduction of gas to maintain a bed of solids therein in a fluid state, a gas inlet into the first chamber for the introduction of air, and an outlet near the top of the first chamber for the discharge therefrom of gas containing SO_2.

2,733,138

AGRICULTURAL RESIDUE ABRASIVES

Thomas F. Clark, Peoria, Ill., assignor to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application June 14, 1950, Serial No. 168,141
4 Claims. (Cl. 51—303)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. An abrasive composition essentially comprising an agricultural residue grit material taken from the group consisting of nut shells, fruit pit shells, grain hulls, and corncob material bonded in a resin matrix, said grit material being at least 65% of said composition and being substantially the sole abrasive material in said composition, said grit material being discrete granular particles of essentially angular shape and being chemically unaltered.

2,733,139

CAST EXPLOSIVE COMPOSITION

Clarence Herman Winning, Woodbury, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Continuation of application Serial No. 72,996, January 26, 1949. This application September 8, 1953, Serial No. 379,080
6 Claims. (Cl. 52—7)

1. An explosive charge comprising a cast blend of between 50% and 20% of solid trinitrotoluene, between 50% and 80% of at least one solid granular inorganic nitrate distributed throughout the trinitrotoluene, and a monobasic fatty acid containing at least eight carbon atoms and having a melting point below 100° C., said fatty acid being present in an amount between 0.01% and 2%.

2,733,140

METHOD FOR THE PRODUCTION OF FERROMANGANESE

Gunnar Brundell, Gavle, and Stig H. Tjernström, Vargon, Sweden, assignors to Wargons Aktiebolag, Vargon, Sweden, a Swedish company

No Drawing. Application February 18, 1952, Serial No. 272,250
Claims priority, application Sweden February 28, 1951
7 Claims. (Cl. 75—11)

1. Process for the production of ferromanganese which comprises pre-reducing the MnO_2 content of a manganese ore to MnO by countercurrently contacting the ore with a gas containing substantially more than 20% of CO and less than 80% of CO_2 thereby producing a gas containing not more than 20% of CO and at least 80% of CO_2 and thereafter completing the reduction of the resulting MnO to the metallic state by means of carbon in an electric furnace thereby producing a gas containing substantially more than 20% of CO.

2,733,141

PNEUMATIC PROCESS FOR THE REFINING OF BASIC PIG IRON

Clarence E. Sims, Columbus, Ohio, assignor, by mesne assignments, to United States Steel Corporation, Pittsburgh, Pa., a corporation of New Jersey

Application October 6, 1950, Serial No. 188,792
10 Claims. (Cl. 75—52)



1. The pneumatic method of refining American basic pig iron to low carbon steel containing not more than 0.045 phosphorus and not more than 0.005 nitrogen, comprising charging a quantity of molten American basic pig iron at a temperature of between 2400–2700° F. onto a basic hearth, adding materials for forming a basic slag, applying a blast of air to the surface only of said molten bath at a rate of about 1500 cubic feet per minute per ton of molten metal charged, said blast being applied at an angle of incidence with said surface of between 9 and 18° and at a blast velocity of between 300 and 500 feet per second to maintain said slag in a state of rolling agitation without boring of the blast into said molten metal, adding cold material from the group consisting of ferrous scrap and iron oxide when the temperature of said molten iron approaches about 3000° F. to maintain the temperature below 3100° F., and discontinuing said blast at the carbon end point.

2,733,142

PURIFICATION OF NICKEL POWDER

John W. Gleam, Kenmore, N. Y., assignor to the United States of America as represented by the United States Atomic Energy Commission

No Drawing. Application April 20, 1948, Serial No. 22,259
3 Claims. (Cl. 75—119)

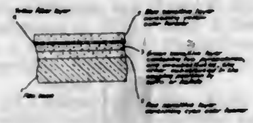
1. A process of removing free iron from nickel powder which comprises washing said nickel powder with a 1 to 20% solution of an organic acid selected from the group consisting of formic acid, acetic acid, lactic acid, and tartaric acid at a temperature in the range from 20 to 100° C., and then removing the wash solution from the nickel powder.

2,733,143

MULTILAYER COLOR FILM FOR INTEGRAL MASKING

Joseph A. Sprung, Binghamton, N. Y., assignor to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

Original application July 16, 1949, Serial No. 105,267, now Patent No. 2,704,709, dated March 22, 1955. Divided and this application June 17, 1953, Serial No. 362,405
8 Claims. (Cl. 95—2)



1. A multilayer photographic material capable of having printing masks formed therein comprising superimposed silver halide emulsion layers, each of which is sensitized for a different primary color, one of which contains as the color former, an acylacetanilide fast to diffusion in the emulsion, another emulsion layer containing as the color former, a color former fast to diffusion in the emulsion, capable of reacting with the oxidation products of a primary amino developing agent to yield a cyan dye image, and the third emulsion layer containing as the color former, a pyrazolone fast to diffusion in the emulsion which is unsubstituted in the coupling position and capable of reacting with the oxidation products of a primary amino developing agent to yield a magenta dye image and capable of reacting with a diazonium salt to yield an azo dye, said third emulsion layer containing another pyrazolone color former fast to diffusion in which the coupling position is substituted by a replaceable substituent selected from the class consisting of sulfonic acid groups and chlorine and bromine atoms which permits coupling with said oxidation products but renders it incapable of reacting with said diazonium salt solution.

2,733,144

METHOD OF PRODUCING PHOTOGRAPHIC IMAGES

Tijs Willem van Rijssel, Harke Jan Houtman, and Hendrik Jonker, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

No Drawing. Application March 6, 1952, Serial No. 275,214
Claims priority, application Netherlands March 28, 1951
14 Claims. (Cl. 95—6)

1. A method of producing photographic contrasts comprising the steps, exposing portions of a light-sensitive system comprising a lyophile support containing a light-sensitive compound selected from the group consisting of o-nitro-mandelonitrile and aromatic diazo compounds to decompose said compound at selected portions of said system, simultaneously contacting said light decomposition product with a water-soluble mercurous salt and a compound selected from the group consisting of lactic acid, acetic acid and citric acid and soluble salts of said acids in the presence of moisture to form a physically intensifiable contrast, and subsequently physically developing said contrast by applying thereto a developing solution containing a reducible salt of a noble metal and a water-soluble reducing agent.

2,733,145

CORN COB ABSORBENT AND METHOD OF PRODUCING THE SAME

William V. Karr and Michael B. Karr, Columbus, Ohio

No Drawing. Application January 15, 1953, Serial No. 331,502
7 Claims. (Cl. 99—6)

1. A livestock feed comprising the outer glume, beeswing and pith constituents only of a corn cob, ground and dried and admixed with a nutritional food product.

2,733,146

METHOD FOR ENSILING VEGETABLE AND ANIMAL PRODUCTS

Torsten Gustaf Holst, Halsingborg, Sweden, assignor to Reymersholms Gamla Industri Aktiebolag, Halsingborg, Sweden, a company of Sweden

No Drawing. Application February 16, 1953, Serial No. 337,251
5 Claims. (Cl. 99—8)

1. A method for ensiling vegetable and animal forage materials, which comprises adding to the material to be ensiled a composition consisting essentially of a salt combination satisfying the general formula

$$MeH_5(PO_4)_2.nMeHSO_4$$

wherein Me is a member of the group Na, K, and NH_4 and n is a numerical value within the range from 1 to 3.

2,733,147

QUICK COOKING RICE AND PROCESS THEREFOR

Ataullah K. Ozai-Durrani, Stuttgart, Ark.

No Drawing. Application September 10, 1953, Serial No. 379,457
32 Claims. (Cl. 99—80)

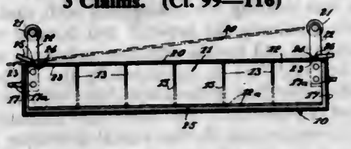
1. A process for preparing quick cooking rice which comprises subjecting whole rice grains having exterior portions of moist, substantially completely gelatinized starch in a completely pliable condition and interior portions ranging from partially gelatinized starch having at least a degree of pliability to substantially completely gelatinized starch in a completely pliable condition to mechanical compression to distort and modify the structures of the grains, said compression being limited to avoid reducing the grains to a flaked condition.

2,733,148

METHOD OF FORMING MOZZARELLA CHEESE

Rocco A. Russo, Astoria, N. Y.

Application August 16, 1952, Serial No. 304,726
3 Claims. (Cl. 99—116)



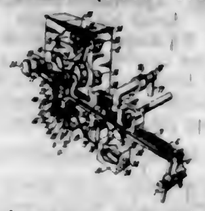
3. In Mozzarella cheese forming, the method which comprises cutting the curd in the presence of hot water,

covering the cut curd with hot water and heating the cut curd to the soft melting stage, mixing the softened curd, paddling the mix until a mass of smooth texture is formed after continuous stretching of the mix, subjecting said mix to a cutting action to form spaced blocks in a slab, holding the blocks by a membrane of cheese, cooling said slab, subjecting said cooled slab to brine for a substantial period of time, partly drying said slab from the temperature resulting from said hot water, cutting said membrane and wrapping said individual and separate blocks.

2,733,149
SHORTENING COMPRISING LARD AND LIPINS
Lucas Kiers, Webster Groves, Mo.
No Drawing. Application July 10, 1950, Serial No. 173,011
4 Claims. (Cl. 99—118)

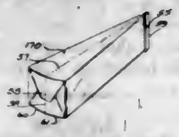
1. A shortening for bakery products, comprising a smooth, creamy, paste-like dispersion consisting essentially of the following ingredients: 200 parts by weight of lard, and from 12 to 20 parts by weight of a mixture consisting of 10 parts by weight of animal lipins, 40 parts by weight of water, 7 parts by weight of stearic acid, 12 parts by weight of glyceryl mono- and distearate, and 11 parts by weight of glyceryl ester of hydrogenated vegetable oil.

2,733,150
PRESERVATION OF EGGS
Harry A. Mulvany, Berkeley, Calif.
Application October 20, 1954, Serial No. 463,398
11 Claims. (Cl. 99—170)



1. An egg treating process comprising subjecting the eggs to a sand-and-water spray which is sterile with respect to organisms which cause spoilage in eggs to effect a complete cleaning of the shells, then rinsing the eggs for a few seconds with a material selected from the group consisting of steam and water and which is at a temperature of about 212° F., and drying the rinsed eggs.

2,733,151
FOOD PACKAGE AND METHOD FOR THE PRODUCTION THEREOF
Robert A. Zuercher, Park Ridge, Ill.
Application January 13, 1951, Serial No. 205,850
21 Claims. (Cl. 99—171)



1. A food product package comprising a body of food enclosed in a form sustaining jacket which comprises a ply of flexible plastic wrapping film, and to which is adherent a wax coating ply compatible with said film and completely enclosing the product and bonded to the ply first mentioned and having sufficient substance to provide support for said film in substantially the shape of said jacket when the film is removed from support-receiving relationship to the body, the composite coating and film plies being readily cut for the partial severance of a portion thereof for hinged movement respecting another portion, and the flexibility of said film ply being sufficient to constitute a hinge upon which a partially severed portion of the composite plies can be moved, the coating ply being sufficiently frangible to permit such movement.

2,733,152
COATING FOR FOOD CONTAINERS
Albert C. Edgar, River Forest, Ill., assignor to Wilson & Co., Inc., a corporation of Delaware
No Drawing. Original application April 9, 1947, Serial No. 740,487, now Patent No. 2,655,451, dated October 13, 1953. Divided and this application January 21, 1953, Serial No. 332,569
9 Claims. (Cl. 99—187)

1. The process of preventing the adhesion during cooking of proteinaceous meaty materials to the interior surfaces of a metal container which comprises the step of applying to said interior surfaces, prior to cooking the proteinaceous meaty materials in said container, a coating consisting essentially of a polyhydroxy alcohol partial ester of a non-hydroxy unsaturated fatty acid having at least 12 carbon atoms.

2,733,153
MEAT-SHAPING METHOD
Chester A. Hammerberg, Des Plaines, Ill., assignor to Armour and Company, Chicago, Ill., a corporation of Illinois
Original application May 12, 1947, Serial No. 747,359. Divided and this application November 24, 1951, Serial No. 258,069
5 Claims. (Cl. 99—194)



1. In a process for shaping meat, the steps of longitudinally pinning a meat body to provide an internal support therefor, compacting the pinned body within a mold and in a direction substantially parallel to said support to shape the body to the mold and thereafter freezing the compacted meat while maintaining the same under pressure.

2,733,154
POLISHING COMPOSITIONS
Edward Roy Taylor, Jr., Springfield, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application August 6, 1953, Serial No. 372,806
13 Claims. (Cl. 106—8)

2. A non-aqueous, liquid polishing composition comprising 0.5 to 15.0% water-insoluble wax, 0.5 to 15.0% hydrocarbon-soluble liquid polysiloxane, 0.4 to 4.0% water-insoluble metallic soap, 65.0 to 98.4% hydrocarbon solvent for the wax, and .02 to 1.0% of an organic amine selected from the group consisting of diethylethanol amine, N-aminopropyl morpholine, 2-ethyl hexyl amine, morpholine and n-butyl amine, said amines having the property of preventing the formation of non-dispersible seeds in said composition at temperatures as low as 0° F.

2,733,155
PRINTING INK VARNISH
Ira Williams and Andries Voet, Borger, Tex., assignors to J. M. Huber Corporation, Locust, N. J., a corporation of New Jersey
No Drawing. Application September 30, 1952, Serial No. 312,404
13 Claims. (Cl. 106—30)

1. An ink varnish consisting essentially of a salt of a water-insoluble resin having an acid number of at least 90 and a base having a basic dissociation constant greater than 1×10^{-5} which base is a member of the group consisting of sodium hydroxide, potassium hydroxide and a nitrogenous base containing no other elements than nitrogen, hydrogen, carbon and oxygen, said salt being dissolved in a concentration of from about 20% to about 75% by weight in a liquid vehicle of the class consisting of an aqueous solution of urea in which the urea is in a concentration of from about 20% to about 60% by weight and mixture of such an aqueous urea solution with up to about 1 part by weight of at least one neutral water-miscible aliphatic organic solvent for each part of the aqueous urea solution, said organic solvent being selected from the group consisting of monohydroxy alcohols and glycols, aliphatic ethers of glycols and aliphatic esters of glycols which glycols, ethers of glycols and esters of glycols contain from 2 to 8 carbon atoms and only carbon, hydrogen and oxygen.

2,733,156
DENTAL IMPRESSION MATERIAL AND METHOD OF MAKING SAME
John A. Cornell, Ardmore, and Harry E. Kemmler, Elkins Park, Pa., assignors to H. D. Justi & Son, Inc., Philadelphia, Pa., a corporation of Pennsylvania
No Drawing. Application April 23, 1952, Serial No. 283,984
12 Claims. (Cl. 106—38.5)

7. An impression material consisting essentially on a dry weight basis of about 4 parts by weight of carboxymethyl cellulose containing a carboxyl group in recurring anhydroglucose units thereof, about 5 parts by weight of an inert filler, about ½ part of a ferrous salt to produce ferrous ions when dissolved in water which is substantially less than the molecular equivalent for reacting with the carboxyl group and about ½ part of an oxidizing agent for said ferrous salt to convert ferrous ions into ferric ions when dissolved in water.

2,733,157
IMPRESSION MATERIAL AND METHOD OF MAKING SAME
John A. Cornell, Upper Merion Township, Montgomery County, and Harry E. Kemmler, Elkins Park, Pa., assignors to H. D. Justi & Son, Inc., Philadelphia, Pa., a corporation of Pennsylvania
No Drawing. Application September 22, 1953, Serial No. 381,736
12 Claims. (Cl. 106—38.5)

7. An impression material consisting essentially on a dry weight basis of about 2 parts of a gel-forming polyhydroxy-polycarboxy material selected from the group consisting of carboxy methyl cellulose, an alginate and a pectate, about 5 parts of a water-soluble multi-valent metal salt of ethylene diamine tetra-acetic acid, the multivalent salt being chelated by said ethylene diamine tetra-acetic acid to prevent gelling of said gel-forming material, about 2 parts of a water-soluble divalent metal salt which releases a divalent metal ion having a higher chelating strength for said ethylene diamine tetra-acetic acid than said multi-valent metal salt of ethylene diamine tetra-acetic acid whereby said multivalent metal salt ion is displaced by said divalent metal ion from the ethylene diamine tetra-acetic acid chelate to precipitate the gel-forming material, and about 18 parts of an inert filler.

2,733,158
GLASS COMPOSITION
Ralph L. Tiede, Newark, Ohio, assignor to Owens-Corning Fiberglas Corporation, a corporation of Delaware
No Drawing. Application November 7, 1952, Serial No. 319,431
4 Claims. (Cl. 106—50)

4. Fibrous glass consisting essentially of the following ingredients expressed in weight per cent:

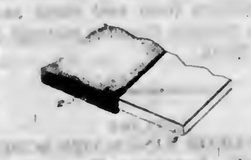
	Percent
SiO_2	55.7
Al_2O_3	5.6
MgO	2.6
CaO	6.0
B_2O_3	4.4
Na_2O	2.5
K_2O	0.2
SrO	11.4
Li_2O	1.9

and containing more than 9% copper oxide to provide abrasion and flex resistance.

2,733,159
BITUMINOUS EMULSION
Baxter I. Scoggin and Homer C. McAninch, Oklahoma City, and Clyde R. Moore, Cyril, Okla., assignors to Anderson-Prichard Oil Corporation, Oklahoma City, Okla., a corporation of Delaware
No Drawing. Application May 11, 1951, Serial No. 225,908
6 Claims. (Cl. 106—277)

1. A composition for air atomizing and spray-depositing on a surface thereby producing a flexible and adhesive and non-tacky coating thereon, the combination of: a slow setting type bituminous emulsion containing not under 50 percent and not over 70 percent by weight of bitumen, and containing not less than 0.1 percent nor over 10 percent by weight of emulsifying chemicals, the balance of said emulsion being water of not under 25 percent nor over 49 percent; an aliphatic water-soluble evaporation acceleration compound boiling below 100° C., and containing no other element than carbon, hydrogen, and oxygen, in quantity not under 1 percent nor over 40 percent of the weight of emulsion; a water dispersible thickening agent in quantity not under 0.15 percent nor over 10 percent of the weight of the emulsion; fiber in quantity not under 5 percent nor over 12 percent of the weight of the emulsion; and a finely ground granular mineral filler in quantity not under 2 percent nor over 6 percent of the weight of the emulsion, said ingredients being mixed within the said ranging proportions to produce a thixotropic slurry adapted to and capable of atomization and spray-gun deposition.

2,733,160
SOLIDS COATED WITH ESTERSIL
Ralph K. Iler, Brandywine Hundred, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application May 21, 1952, Serial No. 289,231
15 Claims. (Cl. 117—16)



1. A solid modified with a surface coating of another solid which is an estersil which is organophilic, being preferentially wetted by butanol in a butanol-water mixture, the estersil comprising a supercolloidal substrate coated with —OR groups, the substrate having a surface of

silica and having a specific surface area of from 1 to 900 square meters per gram, the coating of —OR groups being chemically bound to said silica, R being a hydrocarbon radical of from 2 to 18 carbon atoms wherein the carbon atom attached to oxygen is also attached to hydrogen.

2,733,161

METAL-CERAMIC BODY AND PROCESS OF PRODUCING THE SAME

Frank Andrew Lytton, Sheffield, and Joseph Alfred Cashmore, Stoneleigh, England, assignors to The Morgan Crucible Company Limited, London, England, a British company

No Drawing. Application October 22, 1953, Serial No. 387,788
Claims priority, application Great Britain October 23, 1952
10 Claims. (Cl. 117—22)

1. Process for producing a metal-ceramic body by infiltration of molten silver into a porous alumina body, characterised by producing, on the walls of the interconnecting pores of the alumina body within and throughout said alumina body, a coating of a metal oxide of the group consisting of copper oxide and vanadium pentoxide, and then infiltrating molten silver into said alumina body through the coated pores.

2,733,162

HEAT RESISTANT POLYAMIDE STRUCTURE

William Earl Roseveare, Richmond, Va., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 26, 1953, Serial No. 339,154
9 Claims. (Cl. 117—31)

1. A structure having a polyamide surface and bearing, in intimate contact with the said surface, fine particles of a metal of the class consisting of magnesium, aluminum, strontium and calcium.

2,733,163

PROCESS OF FORMING LUMINESCENT SCREENS

Albert Steadman, Upper Montclair, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Passaic, N. J., a corporation of Delaware

No Drawing. Application June 21, 1949, Serial No. 100,543
10 Claims. (Cl. 117—33.5)

1. The process of forming a luminescent screen on the face of a cathode ray tube blank which comprises the steps of forming a solution of material selected from the group consisting of barium acetate, barium lactate, barium formate, and barium benzoate, introducing said solution into said blank, forming a potassium water glass solution, dispersing a pulverulent luminescent material into said potassium water glass solution, introducing said potassium water glass solution with said dispersed pulverulent luminescent material into said blank to form a colloid adhesive therein, settling said luminescent material through said colloid adhesive and onto the face of said blank, removing excess solution from said blank and thereafter heating to remove moisture from the material deposited on the face of said blank.

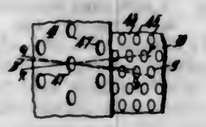
2,733,164

MULTI-COLOR KINESCOPE SCREEN

Arthur L. J. Smith, Lancaster, Pa., assignor to Radio Corporation of America, a corporation of Delaware

Application June 2, 1952, Serial No. 291,212
12 Claims. (Cl. 117—33.5)

1. A viewing screen comprising a base plate having disposed on a surface thereof a multiplicity of groups of discrete phosphor elements, each of said groups consisting of a red-emitting element of which the phosphor is a red-emitting zinc orthophosphate with manganese activator, a blue-emitting element of which the phos-



phor is selected from the class consisting of calcium magnesium silicate with titanium activator and zinc sulfide with about 0.001 to 0.025% by weight silver activator, and a green-emitting element of which the phosphor is zinc silicate with manganese activator.

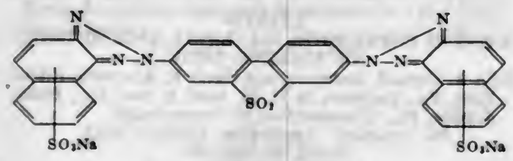
2,733,165

FLUORESCENT WHITENING AGENTS

William Wilson Williams and Harlan Benjamin Freyermuth, Easton, Pa., assignors to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application December 7, 1953, Serial No. 396,726
6 Claims. (Cl. 117—33.5)

1. A compound of the formula:

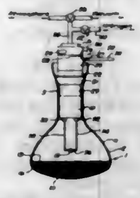


2,733,166

METHOD OF INTERNALLY COATING LAMP BULBS WITH REFLECTIVE MATERIAL

Herman R. Schoenfeldt, South Euclid, and Joe B. Yoder, Mayfield Heights, Ohio, assignors to General Electric Company, a corporation of New York

Application November 24, 1954, Serial No. 470,974
4 Claims. (Cl. 117—35)



1. The method of producing a reflective coating on a selected portion of the inner surface of a hollow glass article having a single open neck end, which method comprises introducing into the article a predetermined quantity of granular masking material comprising fine glass beads heated to a temperature of at least approximately 140° C. but below the softening temperature thereof, agitating the article to distribute the said glass beads so as to form an even masking-off line around the article, exhausting said article to produce a vacuum therein, heating a quantity of a vaporizable metallic coating material within the said article, while the said beads are maintained in their said heated condition, to thereby flash the said coating material onto the exposed portion of the inner surface of the article unmasked by the said glass beads, and thereafter removing the glass beads from the said article.

2,733,167

METHOD OF ADHERING GOLD TO A NON-POROUS CERAMIC SURFACE AND COMPOSITION THEREFOR

Stanley Donald Stookey, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a corporation of New York

No Drawing. Application May 8, 1953, Serial No. 353,919
5 Claims. (Cl. 117—46)

5. The method of improving the alkali resistance of a gold film fired onto the surface of a non-porous ceramic article, which includes providing a liquid gold containing decorating composition containing as essential ingredients an organo compound of gold and a compatible compound of copper in amounts such that the ratio of the respective Au and Cu weight-equivalents thereof is from about 8/1 to about 30/1, applying a thin layer of such composition to predetermined portions of a surface of such article, and firing the coated article to produce an adherent metallic film.

2,733,168

TIN-ZINC BASE ALLOYS

Allen W. Hodge and Robert L. Ballard, Columbus, Ohio, assignors, by mesne assignments, to Reynolds Metals Company, Richmond, Va., a corporation of Delaware

No Drawing. Application September 8, 1952, Serial No. 308,506
7 Claims. (Cl. 117—50)

1. An alloy consisting of from about 5% to 30% zinc, from about 1% to 5% aluminum, from about .005% to .20% beryllium, and the remainder tin.

2,733,169

PRESSURE-SENSITIVE ADHESIVE TAPE

Reynold E. Holmes, White Bear Township, Ramsey County, and William E. Lundquist, Savage, Minn., assignors to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a corporation of Delaware

No Drawing. Application June 19, 1952, Serial No. 294,471
4 Claims. (Cl. 117—76)

1. The method of making a solvent-resistant unified fibrous web suitable for application as a pressure-sensitive adhesive tape backing, comprising: mixing together in solution in a volatile organic solvent a soluble nitrogen-containing polyester polymer as hereinafter defined and a small proportion of an aldehydic curing agent sufficient to produce with said polymer a heat-cured thin film having a modulus at 100% elongation of about 30–160 lbs./sq. in and a tensile strength of at least about 70 lbs./sq. in. at an elongation of at least about 300%; impregnating a thin porous flexible fibrous web therewith; and then drying and heating the impregnated web to cure the polymer and unify the web; said polymer being a low-acid-number soluble condensation product formed by simultaneously heating together substantially equimolar amounts of inter-reactive components consisting essentially of (*a*) dicarboxylic acids including at least about 80% of dicarboxylic acid having at least four carbon atoms in the skeletal chain, having the carboxyl groups attached to separate aliphatic carbon atoms, and having essentially no conjugated unsaturation, and not more than about 20% of dicarboxylic acid selected from the class consisting of maleic, fumaric, itaconic, and citraconic acids, and adducts of maleic anhydride with conjugated dienes; and (*b*) compounds reactive with said acids and selected from the class consisting of phenyldiethanolamine, noncyclizable monoalkanolamines having a single primary amino group, noncyclizable N-monohydrocarbon-substituted monoalkanolamines having a single secondary amino group, glycols, and mixtures thereof, and including phenyldiethanolamine in an amount sufficient to average at least one



group for each 100 atoms in the polymer chain connecting such groups; the relative amounts of said components being subject to the further conditions that (1) where the amount of phenyldiethanolamine is insufficient to average at least one



group for each 50 atoms in the polymer chain connecting such groups, then the (*b*) compounds must include at least a small proportion of said noncyclizable monoalkanolamine having a single primary amino group; and (2) where the dicarboxylic acid components include a considerable proportion of acids capable of readily forming cyclic imides, then said noncyclizable monoalkanolamine having a single primary amino group must be substantially excluded.

2,733,170

COATING COMPOSITION

John B. Welch, Elmwood Park, Ill., assignor to Spring Packing Corporation, a corporation of Illinois

No Drawing. Application March 2, 1953, Serial No. 339,944
10 Claims. (Cl. 117—92)

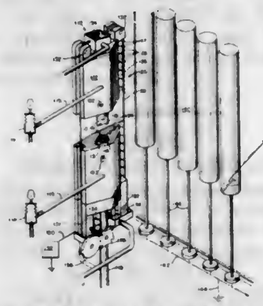
1. An article comprising a structure having thereon a composite coating comprising alternating series of relatively thin layers of a fire-retardant, foam-forming paint and relatively thick layers of plastic bituminous insulating material.

2,733,171

APPARATUS AND METHOD FOR ELECTROSTATIC COATING

Edwin M. Ransburg, Indianapolis, Ind., assignor to Ransburg Electro-Coating Corp., Indianapolis, Ind., a corporation of Indiana

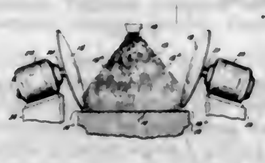
Application March 22, 1952, Serial No. 277,967
3 Claims. (Cl. 117—93)



3. The method of coating an article comprising the steps of: moving an article over a predetermined path; supplying liquid coating material to a site for gravity flow therealong spaced from said path; establishing between the article and the coating material at said site an electrostatic field for forming at said site a plurality of material emission points, said field being of sufficient strength to atomize and disperse finely divided liquid particles from the emission points and to electrostatically deposit the particles so atomized upon the surface of the article for coating the same; and oscillating the emission points by intermittently moving said points in a direction opposed to gravity and

transverse to the path of article movement, the magnitude of such oscillation being substantially less than the distance from said site to the article.

2,733,172
APPARATUS AND METHOD OF PRODUCING METAL SHEETS BY SPRAYING ACTION
Joseph B. Brennan, Cleveland, Ohio
Application February 27, 1952, Serial No. 273,596
9 Claims. (Cl. 117—105)



4. The method of spraying metal onto a base strip comprising the steps of, advancing the base strip longitudinally, spray projecting particles of molten metal to constitute a spray field of a greater impact width than the base strip, directing the spray field against the base strip with portions of the spray field moving in a direction to pass outwardly of the edges of the base strip, and changing the direction and velocity of travel of the particles of such outwardly passing portions to thereby return and deposit said outwardly passing portions on the base strip during the same spray projecting operation, said changing of the travel direction and velocity of the last-mentioned particles being by impingement thereof upon a deflecting surface moving in such manner to impart increased velocity to said last-mentioned particles in a direction toward the base strip.

2,733,173
ACTIVATED CATHODES FOR ELECTRON DISCHARGE DEVICE
Victor James Francis, North Wembley, England, assignor to General Electric Company, a corporation of New York
Application July 6, 1951, Serial No. 235,431
Claims priority, application Great Britain July 13, 1950
3 Claims. (Cl. 117—219)



1. The method of activating a cathode for electron discharge devices which comprises forming on a base metal cathode member a layer of electron emissive material comprising a quantity of alkaline earth metal hydroxide, and then applying over said layer a coating of a suspension of alkaline earth metal carbonates and subsequently heating the cathode in vacuo to decompose the said carbonates to oxides.

2,733,174
COMPOSITIONS CONTAINING MONOSODIUM GLUTAMATE
John Wagner, Cicero, Ill.; Anna Wagner Starosta, administratrix of said John Wagner, deceased, assignor to International Minerals and Chemical Corporation, Chicago, Ill., a corporation of New York
No Drawing. Application July 17, 1950, Serial No. 174,355
6 Claims. (Cl. 131—17)

1. A composition comprising smoking tobacco containing between about 0.01% and about 0.20% by weight of monosodium glutamate.

2,733,175
PROCESS FOR MAKING MAGNETIC RECORDING WIRE
Marvin Camras and Edson S. Bumps, Chicago, Ill., assignors to Armour Research Foundation of Illinois Institute of Technology, Chicago, Ill., a corporation of Illinois
No Drawing. Application March 4, 1952, Serial No. 274,836
4 Claims. (Cl. 148—102)

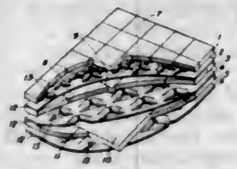
1. The method of making wire for magnetic recording purposes which comprises cold working a copper base alloy consisting essentially of 70 to 85 percent copper, 10 to 20 percent nickel, and 5 to 15 percent iron, the nickel to iron ratio being within the range of 1 to 1 to 3 to 1, down to a diameter on the order of 0.004 inch and aging said wire at a temperature in the range from 450 to 800° C. until the wire has a coercive force value in the range from 200 to 350 oersteds and a residual induction in the range from 1,000 to 3500 gauss.

2,733,176
INSULATING SHIELD
Charles B. Balis, Birmingham, Mich., assignor to Frank D. Saylor & Son, a partnership
Application July 23, 1953, Serial No. 369,855
4 Claims. (Cl. 154—45)



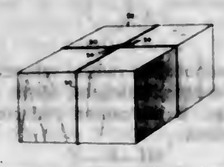
1. An insulating shield for use on surfaces adapted to be heated to a temperature of 1000° F., said shield comprising a plurality of contiguously disposed coils of a hollow, tightly woven pure glass fiber rope, pure glass fiber means interwoven with and securing said plurality of contiguously disposed coils in close contact with each other, and an inorganic coating on the ends of said shield sealing the end of the rope closed, said shield being capable of withstanding temperatures of 1000° F. without burning or smoking.

2,733,177
ELASTIC CASCADING IMPACT ABSORBER
Earl A. Meyer, Madison, Wis., assignor to Bjorksten Research Laboratories, Inc., a corporation of Illinois
Application June 15, 1953, Serial No. 361,729
17 Claims. (Cl. 154—52.5)



2. Armor adapted to restrain penetration of projectiles therethrough comprising layers of rigid plates having laminated thereinbetween elastic layers each of which comprises a plurality of leaf springs, and means for holding said layers together, each of said layers of rigid plates comprising plates having edges abutting, each of the plates in each of said layers of rigid plates having an area greater than the area of each of the plates in the next above layer of rigid plates.

2,733,178
STRING
Allan B. Stevenson, Attleboro, Mass., assignor, by mesne assignments, to American Sisalkraft Corporation, a corporation of Delaware
Application January 26, 1953, Serial No. 333,240
1 Claim. (Cl. 154—53.5)



A string for securing packages by being wrapped thereabout and secured in wrapped position by adhesion, said string consisting of a plurality of fibers bonded together in the form of a single strand by an adhesive, said adhesive being pressure sensitive, the adhesive coating the entire external surface of the strand throughout the length thereof so that the adhesive is available at and adjacent the portions of the string forming the string ends for adhesively securing the string ends against motion in a direction to loosen the string.

2,733,179
METHOD OF PRODUCING FIBROUS COVERING FOR ELASTIC THREAD
Charles C. Smith, Providence, R. I., assignor to Darlington Fabrics Corporation, New York, N. Y., a corporation of Delaware
Application December 12, 1951, Serial No. 261,231
24 Claims. (Cl. 154—91)



1. The method of encasing a rubber elastic core thread in a jacket of fiber which comprises as steps, stretching the thread, attaching fibrous material at intervals spaced longitudinally of the thread, and relaxing the thread.

2,733,180
METHOD OF PRINTING ON PLASTIC FILMS
Silvio Pinto, Long Island City, N. Y.
Application February 28, 1952, Serial No. 273,803
8 Claims. (Cl. 154—95)

1. The method of printing on a polyvinyl resin plastic comprising providing a design printed on paper, said paper so treated to prevent the inks from penetrating into the fiber of the paper, applying a resin solution compatible with said polyvinyl resin plastic over the design,



drying the resulting coating to a dry, non-tacky state, laminating the coated over design on the paper to the polyvinyl resin plastic under heat and pressure, and then separating the paper from the plastic.

2,733,181
SPLICED ABRASIVE BELT AND METHOD OF MAKING SAME
Richard G. Riedesel, Stillwater Township, Washington County, Minn., assignor to Minnesota Mining & Manufacturing Company, St. Paul, Minn., a corporation of Delaware
Application December 11, 1952, Serial No. 325,434
19 Claims. (Cl. 154—116)



1. The method of splicing together abutting edges of flexible sheet material comprising: slotting said sheet material at said edges at an angle to the edge and parallel to the direction of stress to be applied to the splice; holding said edges in abutting relationship and inserting within the slots and across the abutting edges a plurality of flexible, strong, fine filaments; and firmly adherently bonding said filaments within said slots.

9. An article comprising flexible sheet material having two adjacent edges, said edges being spliced together in the plane of the sheet material by a plurality of flexible, strong, fine filaments inserted within open-ended slots previously provided at said edges, said slots being at an angle to the edge and parallel to the direction of stress to be applied to the splice, said filaments lying across the adjacent edges and being firmly adherently bonded within said slots.

2,733,182
PROCESS AND PRODUCT
Richard L. Dalton and Frank B. Hauserman, Wilmington, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application February 6, 1953, Serial No. 335,591
12 Claims. (Cl. 154—128)

5. In a process for producing an improved glass fiber-reinforced resin laminate, the steps comprising adjusting an aqueous solution of methacrylato chromic chloride with a nitrogen-containing base selected from the group consisting of ammonia, and organic amines, in which each organic substituent on the nitrogen atom contains no carbon atom farther removed from the nitrogen than four consecutive carbon atoms and the total number of carbon atoms attached to the nitrogen exclusively through carbon is not more than 12, to a pH in the range of about 4 to about 7, effecting contact of glass fibers with said solution and drying the treated glass fibers.

2,733,183

STORAGE-STABLE DIHYDROSTREPTOMYCIN SULFATE SOLUTION

Herman Sokol, Hasbrouck Heights, N. J., and Robert P. Popino, Brooklyn, N. Y., assignors, by mesne assignments, to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application April 11, 1951, Serial No. 220,524

3 Claims. (Cl. 167—65)

1. A stable pharmaceutical preparation for parenteral use consisting of an aqueous medium having dissolved therein crystalline dihydrostreptomycin sulfate and a minor but effective amount of a preserving agent selected from the group consisting of phenol and ester of para hydroxybenzoic acid, said crystalline dihydrostreptomycin sulfate being the sole therapeutically active substance in said preparation and being substantially entirely free of impurities, whereby the effectiveness and physical properties of said preparation are not materially affected by prolonged storage at room temperature.

2,733,184

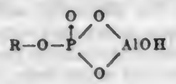
INJECTABLE PENICILLIN REPOSITORY PREPARATION CONTAINING OIL AND GELLED OIL

William M. Ziegler, Clementon, N. J., assignor, by mesne assignments, to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application August 7, 1951, Serial No. 240,796

7 Claims. (Cl. 167—65)

1. An injectable antibiotic preparation capable of maintaining effective therapeutic blood levels over an extended period of time which comprises a therapeutic salt of penicillin, an innocuous non-toxic oil, and a gel of an innocuous non-toxic oil and a quantity of an aluminum salt ranging from 1 to 15% by weight of the total volume of said oil, said aluminum salt being represented by the following formula:



wherein R is a member selected from the class consisting of an alkyl group containing from 6 to 18 carbon atoms, an arylalkyl group containing from 6 to 18 carbon atoms, an alkyloxyalkyl group containing from 6 to 18 carbon atoms and an aryloxyalkyl radical containing from 6 to 18 carbon atoms, the gel being insoluble in the first mentioned innocuous non-toxic oil.

2,733,185

PRODUCTION OF HAZE-FREE AQUEOUS SOLUTIONS OF DIHYDROSTREPTOMYCIN AND ARTICLE THEREFOR

Herman Sokol, Hasbrouck Heights, N. J., assignor, by mesne assignments, to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application January 26, 1953, Serial No. 333,353

7 Claims. (Cl. 167—65)

1. In the process of forming a substantially haze-free, clear, aqueous solution of crystalline dihydrostreptomycin sulphate, placing a dosage quantity of crystalline dihydrostreptomycin sulphate which has been maintained free of contact with glass in a glass container interiorly coated with a silicone lining whereby the addition of water to the glass container produces a substantially haze-free, aqueous solution of dihydrostreptomycin sulphate.

2,733,186

COMPOSITIONS FOR THE DYEING OF HAIR

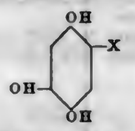
Jacques de Brye, Casablanca, Morocco, assignor to Union Francaise Commerciale et Industrielle, Casablanca, Morocco, a corporation of Morocco

No Drawing. Application October 24, 1951, Serial No. 252,978

Claims priority, application Morocco April 19, 1951

6 Claims. (Cl. 167—88)

1. A hair-dyeing composition comprising an intimate mixture of a compound free from any solubilizing group and represented by the formula



wherein X is a monovalent radical selected from the class consisting of hydrogen, halogens, alkyl, alkoxy and hydroxyalkyl groups, a mercaptan reducing agent represented by the formula

SH—R—Y

wherein R is a bivalent aliphatic residue and Y is selected from the class consisting of hydrogen and a carboxyl group, in combination with a base added immediately prior to the application of said composition to the hair, said base being selected from the class consisting of ammonia, an aliphatic amine and a cycloaliphatic amine.

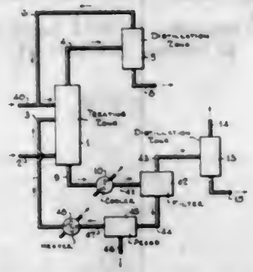
2,733,187

LIQUID-LIQUID TREATING PROCESS

Walter M. Basch, Rumson, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application March 19, 1952, Serial No. 277,508

1 Claim. (Cl. 196—14.42)



Improved process for segregation of more aromatic type constituents from more paraffinic type constituents of a petroleum oil, which comprises introducing said petroleum oil into the bottom of a countercurrent treating zone, introducing substantially pure phenol into the top of said countercurrent treating zone, maintaining conditions in said zone to secure a raffinate phase and a solvent extract phase having an oil content of less than about 8%, separating said solvent extract phase and chilling the same to a temperature below the crystallization temperature of phenol to crystallize a substantial proportion of the phenol content thereof, removing phenol crystals from said solvent extract phase, subjecting the same to pressure in excess of about 50 pounds per square inch and removing oil therefrom, reheating said pressed crystals and recycling said phenol to said treating zone at a point below the point of introduction of said substantially pure phenol, and subjecting said solvent extract phase from which said crystals have been removed to a distillation zone wherein substantially pure phenol is separated from said extract and recycled to the top of said treating zone.

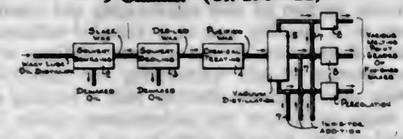
2,733,188

PROCESS FOR DECOLORIZING AND DEODORIZING PETROLEUM WAXES

Randolph M. Bailly, Little Silver, and Harold F. Hitchcox, Cranford, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application December 11, 1951, Serial No. 261,028

9 Claims. (Cl. 196—21)



5. Method of refining a hydrocarbon wax which has been derived from a waxy petroleum crude oil by the conventional steps of dewaxing, deoiling and chemical treating which comprises melting the wax, blending the melted wax with from 0.005 to 0.5 wt. % of a color and odor inhibitor for wax, percolating the resulting blend through a bed of adsorbent thereby removing substantially all of the inhibitor from the wax and obtaining an improved yield of the wax having a satisfactory odor and color.

2,733,189

DESULFURIZATION OF HIGH BOILING HYDROCARBONS

William I. Gilbert, Oakmont, John G. McNulty, Glenshaw, and Charles W. Montgomery, Oakmont, Pa., assignors to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

No Drawing. Application January 7, 1953, Serial No. 330,162

4 Claims. (Cl. 196—28)

1. In a process of desulfurizing a high boiling petroleum oil which comprises contacting the petroleum oil, substantially in vapor phase, with hydrogen in the presence of a hydrogenation catalyst at a pressure between about 250 and 2,000 p. s. i. at a temperature between about 750° and 900° F., continuing such contacting until a substantial amount, but less than about sixteen parts of oil have been contacted with one part of the hydrogenation catalyst, terminating the contacting, regenerating the hydrogenation catalyst, again contacting the oil with the regenerated hydrogenation catalyst under the conditions specified above, the improvement which comprises removing lower boiling components from the desulfurized product so produced, heating the remainder of the desulfurized product at a temperature between about 375° and 500° F. for a period between about 15 minutes and 3 hours, whereby residual sulfurous material in the desulfurized product is converted into hydrogen sulfide and removed therefrom.

2,733,190

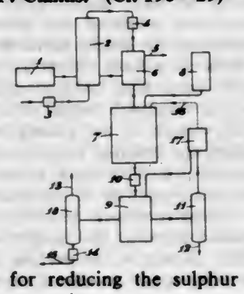
TREATMENT OF SULPHUR-CONTAINING MINERAL OILS

Dennis Alexander John Noble, Sunbury-on-Thames, England, assignor to The British Petroleum Company Limited

Application July 2, 1952, Serial No. 296,806

Claims priority, application Great Britain July 4, 1951

14 Claims. (Cl. 196—29)



1. A process for reducing the sulphur content of a mineral oil, which comprises reacting the mineral oil with an aqueous solution comprising a water-soluble organic peroxy-compound, said solution having been obtained by recovering the aqueous phase of the product obtained by the controlled aerial oxidation of a petroleum distillate fraction, whereby oxidation products of the sulphur compounds are formed, and separating the treated mineral oil from the oxidation products.

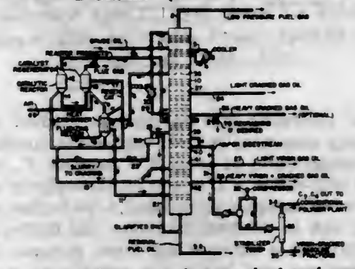
2,733,191

SIMPLIFIED OIL REFINERY

Walter H. Rupp, Mountainside, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application September 18, 1952, Serial No. 310,193

1 Claim. (Cl. 196—48)



Unitary process for preparing cracked and non-cracked products from crude oil which comprises introducing a crude oil into the top of a fractionating zone, wherein both cracked and non-cracked oils are being distilled, passing the oil counter-current to rising vapors of the cracked and non-cracked oils being distilled, withdrawing from the upper part of the fractionating zone a side stream comprising non-cracked fat oil containing absorbed constituents, heating and reintroducing the said withdrawn material into the bottom of said fractionating zone where it is subjected to distillation conditions to produce non-cracked and cracked vapors which pass up the fractionating zone, withdrawing a heavy gas oil fraction comprising a preponderance of uncracked products from near the bottom of the fractionating zone but above the point at which the said withdrawn products are reintroduced, subjecting the heavy gas oil fraction to cracking conditions in the presence of a powdered fluidized catalyst to produce cracked products containing small amounts of entrained catalyst, introducing the cracked products and the entrained catalyst to the fractionating zone at a point above the point at which said heavy gas oil fraction is withdrawn, subjecting the cracked products to fractionating conditions within the fractionating zone to produce vapors and a residue containing the entrained catalyst, withdrawing the residue and entrained catalyst from an intermediate point in the fractionating zone below the point at which the cracked products were introduced, separating the residue into an upper layer of clarified oil and a lower layer of catalyst oil-slurry, combining the lower layer of catalyst oil-slurry with the said heavy gas oil fraction prior to subjecting it to said catalytic cracking, withdrawing unabsorbed gas overhead from said tower, withdrawing residual fuel oil from the bottom of said tower and combining it with the said clarified oil as the fuel oil product.

2,733,192

CONVERSION OF HEAVY HYDROCARBONACEOUS MATERIALS

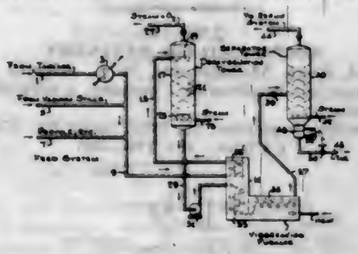
Richard W. Sage, Fanwood, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application July 31, 1951, Serial No. 239,497

2 Claims. (Cl. 196—50)

1. The process of converting heavy hydrocarbon oils into distillate oils and tar, which comprises distilling from

said oils the constituents boiling below 650° F. to produce residual oils, stripping said residual oils so produced in a stripping zone with steam at a temperature of about 220° to 750° F. with about 0.5–2.0 lbs. of steam per gallon of residual oil so as to remove free oxygen substantially completely from said residual oils, recovering overhead from said stripping zone steam, oxygen and a minor amount of oils distilled during the stripping, immediately



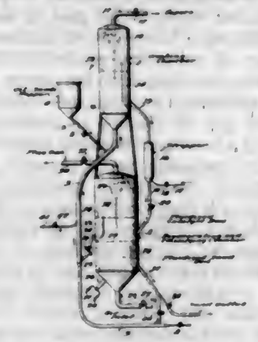
thereafter subjecting said oxygen-free residual oils to a vis-breaking treatment at relatively severe conditions including temperatures of about 850° to 950° F., pressures of about 300–400 p. s. i. g. and oil throughputs of about 2–75 v./v./hr. adapted to produce a vis-broken material relatively rich in distillate fractions, and flash-separating said material at a substantially lower pressure into distillate fractions and heavy tar suitable as a residual fuel oil.

2,733,193

SEPARATING AND CRACKING OF OIL FROM OIL-BEARING SANDS

Vladimir Haensel, Hinsdale, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

Application July 13, 1950, Serial No. 173,498
2 Claims. (Cl. 196—52)



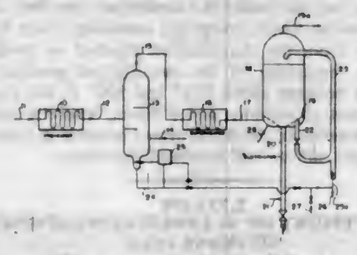
1. A continuous method for simultaneously recovering and catalytically cracking hydrocarbons from subdivided particles of oil-sands, which comprises, introducing oil-sand particles together with a rising stream of hydrocarbon vapors, obtained as hereinafter described, and heated particles of primarily a finely divided light catalyst into the lower portion of an elevated distilling and cracking zone, said catalyst particles being of lower density and smaller size than the sand of said oil-sand particles, passing the vaporous stream and subdivided particles upwardly through said zone and effecting a fluidized contacting between said particles to distill hydrocarbonaceous vapors from said oil-sands and the cracking of said vapors within said zone, discharging resulting contacted hydrocarbon vapors from the upper portion of said cracking zone, withdrawing contacted solid particles comprising both catalyst and spent oil sand from said fluidized bed of material maintained therein and passing it in a descending gravity flow through a stripping zone maintained at a lower elevation than said distilling and cracking zone, countercurrently contacting said particles within said stripping zone with a substantially inert heated stripping medium, subsequently passing the stripped catalyst and sand particles in a continuous gravity flow to an intermediate portion of a confined regenerating and classification zone, introducing a stream containing free oxygen to the lower portion of said regenerating and classification zone in a quantity and at a velocity sufficient to maintain a fluidization of said stripped particles within the lower portion of said regenerating and classification zone while simultaneously effecting both a burning of at least a major portion of the carbonaceous matter from both catalyst and oil-sand particles and an elutriation and classification between catalyst and sand particles, said light finely divided catalyst particles being maintained primarily in an upper bed above a fluidized bed of heavier sand particles, discharging resulting combustion gases from the upper portion of said regenerating and classification zone, withdrawing a stream of primarily sand particles from the lower portion of the fluidized bed of particles maintained within said regenerating zone, continuously withdrawing a heated stream of primarily catalyst particles from the upper portion of the fluidized bed of particles maintained in said regenerating and classification zone and commingling said stream with a hydrocarbon vapor stream comprising at least a portion of the cracked hydrocarbon vaporous stream discharged from the upper portion of the elevated distilling and cracking zone, subsequently commingling said hydrocarbon stream and regenerated catalyst particles with subdivided oil-sands and passing the mixture in a rising stream to the lower portion of said distilling and cracking zone as hereinbefore described.

2,733,194

METHOD OF ADDING LIQUID FEED TO A FLUIDIZED COKER

Rudolph C. Woerner, Homewood, Ill., assignor to Sinclair Refining Company, New York, N. Y., a corporation of Maine

Application April 25, 1950, Serial No. 157,871
3 Claims. (Cl. 202—14)



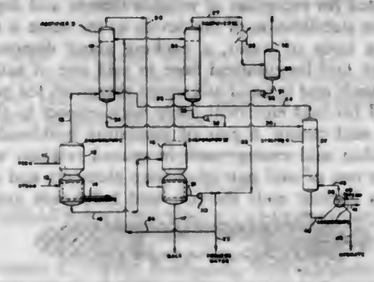
3. In the coking of hydrocarbon oils by contacting the coking stock at a coking temperature with a body of coke particles maintained in a dense fluidized bed in a coking reactor from which net coke make is continuously withdrawn selectively as large particles by elutriation and vapors are recovered overhead, the improvement which comprises preheating the coking stock to about 950° F., flashing the stock in a flash chamber, superheating the overhead vapors to a high coking temperature at low residence time to minimize heater coking, introducing the superheated vapors to the coking reactor so as to assist in fluidizing the body of coke particles maintained therein, separately withdrawing a stream of coke particles from the lower portion of the reactor, rapidly circulating said withdrawn stream of coke particles through a confined conduit, injecting the residuum from the flash chamber into the circulating stream and charging the admixed stream to the upper portion of the reactor.

2,733,195

PROCESS FOR CONCENTRATING AQUEOUS HYDRAZINE SOLUTIONS

Warren Standish Miller, Baltimore, Md., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia

Application September 1, 1954, Serial No. 453,501
10 Claims. (Cl. 202—45)



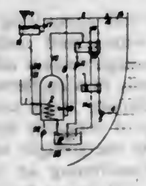
5. In the production of hydrazine hydrate from aqueous hydrazine solutions by concentration, the method which comprises evaporating aqueous hydrazine in a first evaporating zone which is heated by an external source of heat, removing bottoms from the first evaporating zone and charging said bottoms into a second evaporating zone, said evaporating zones being maintained under suitable differential pressure, removing vapor effluent overhead from the first evaporating zone to a first rectifying zone, removing bottoms comprising aqueous hydrazine from the first rectifying zone to a stripping zone, removing vapor effluent from the first rectifying zone to a heating element of the second evaporating zone, removing salt from the second evaporating zone, removing vapor effluent overhead from the second evaporating zone to a second rectifying zone, removing bottoms comprising aqueous hydrazine from the second rectifying zone to the stripping zone, and recovering hydrazine hydrate from the stripping zone.

2,733,196

TREATMENT OF SEA WATER FOR EVAPORATING PLANTS

Harold Hillier and Frank Bruce Ling, Glasgow, Scotland, assignors to G. & J. Weir Limited, Glasgow, Scotland, a company of the United Kingdom of Great Britain and Northern Ireland

Application December 5, 1951, Serial No. 260,054
Claims priority, application Great Britain May 7, 1951
8 Claims. (Cl. 202—57)



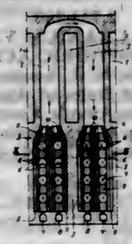
1. In the evaporation of sea water normally containing calcium and magnesium for the production of distilled water, in which the sea water is heated by heating surfaces in an evaporator, the steps of supplying sea water to the evaporator, discharging brine from the evaporator, preventing the deposition of calcium carbonate scale and magnesium hydroxide scale on the heating surfaces of the evaporator during the evaporation of the sea water in the evaporator by introducing into the evaporator a sea water soluble salt of at least one of the metals selected from the group consisting of iron, aluminum and zinc, the metal ion of said salt having the property of combining with hydroxyl ions present in the sea water to form an insoluble hydroxide in the sea water in the evaporator and the function of preventing scale formation in the evaporator from the calcium and magnesium content of the sea water in the evaporator, effecting the evaporation of the sea water in the presence of said salt and the hydroxide formed therefrom, and discharging the hydroxide of the metal of said salt along with the calcium and magnesium content of the sea water in the brine discharged from the evaporator.

2,733,197

FURNACES, AND MORE PARTICULARLY COKE OVENS

Jean Henri François Cassan, Sceaux, France

Application April 23, 1951, Serial No. 222,466
Claims priority, application France April 28, 1950
2 Claims. (Cl. 202—142)



1. A coke oven type furnace comprising a tier of combustion chambers and heating flues about said chambers, a lower tier of heat regenerators, each of said regenerators being associated with a corresponding one of said heating flues and including at least two vertical casings containing gas-pervious stacked, heat-accumulating material, each of said casings terminating, at its upper end, in a tapered portion forming a relatively narrow opening communicating with said corresponding heating flue, a base structure defining a seating for each casing at the bottom of said regenerators, a conduit in said base structure for selectively and alternatively receiving reversed flows of air and fuel and of waste gas, respectively, and a wall structure in said lower tier about the casings of each regenerator conforming with the external configuration of said casings and being spaced from the latter to define spaces around the casings of each regenerator acting as injectors to draw any gases leaking into said spaces from adjacent regenerators into the related flue when air and fuel pass upwardly through said casings from the related conduits and out through said tapered portions of the casings.

2,733,198

ACID COPPER PLATING BATH

Fred I. Nobel, North Valley Stream, and Barnet D. Ostrow, North Bellmore, N. Y., assignors to Elechem Corp., Jersey City, N. J., a corporation of New Jersey

No Drawing. Application July 2, 1954, Serial No. 441,652
10 Claims. (Cl. 204—52)

1. In an acid copper plating bath containing a salt of copper and a free acid as the essential constituents, the improvement which includes the addition to said bath of the resinous reaction product obtained by the heating together up to about 200° F. of a substance taken from the class consisting of amino-thiazole and amino-thiazoline with a substance taken from the class consisting of alkyl aldehydes, aryl dialdehydes and alkyl dialdehydes wherein the alkyl groups have from 1 to 10 carbon atoms, the amount of said addition being sufficient to impart brightness and ductility to deposits of copper from said bath.

2,733,199

ELECTROLYTIC TREATMENT OF METAL SURFACES

Richard M. Wick, Allentown, Pa., assignor to Bethlehem Steel Company, a corporation of Pennsylvania

No Drawing. Application July 20, 1951, Serial No. 237,849

7 Claims. (Cl. 204—56)

1. The process of forming a non-metallic coating on the surface of a metal article which comprises electrolyzing a metal article having a surface material of corrodible base metal in an aqueous solution consisting essentially of chromic acid (100 to 400 grams per liter), a compound of the class consisting of boric acid and salts of boric acid, said compound being present in an amount of from 8 grams per liter to saturation, and chromium chromate in which the trivalent chromium is present in an amount between 2 per cent and 18 per cent of the total chromium in solution, said metal article acting as the cathode.

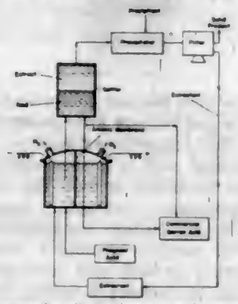
2,733,200

RECOVERY OF URANIUM VALUES FROM PHOSPHORIC ACID

Robert Kunin, Trenton, N. J., assignor, by mesne assignments, to the United States of America as represented by the United States Atomic Energy Commission

Application May 4, 1954, Serial No. 427,413

1 Claim. (Cl. 204—90)



A cyclic process for isolating uranium values which are present in pregnant commercial phosphoric acid which comprises continuously passing a mixture of said pregnant acid and a solution which is capable of extracting uranium values having a valence of plus four and is immiscible with phosphoric acid through the cathode compartment of an electrolysis cell, said cell containing said cathode compartment separated from an anode compartment containing phosphoric acid as the anolyte by means of an anionic permselective membrane comprising an anion exchange resin, electrolyzing the mixture in said cathode compartment while the components of the mixture are maintained in intimate contact with the cathode and with each other whereby said uranium values are electrolytically reduced in valence to a value of plus four and said values of valence plus four are extracted from the phosphoric acid, removing the resultant mixture from said electrolysis cell and separating the immiscible phosphoric acid and extract solution, precipitating the uranium values and separating them from said solution and returning said extractant solution to said cathode compartment together with additional pregnant acid and repeating the electrolysis operation and the distribution of the products of the electrolysis operation.

2,733,201

CONDUCTIVITY CELL FOR DETERMINING THE SALINITY OF SEA WATER

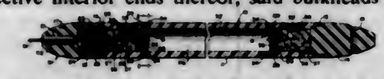
Harry V. Thompson, Rochester, N. Y.

Application July 24, 1952, Serial No. 300,795

1 Claim. (Cl. 204—195)

(Granted under Title 35, U. S. Code (1952), sec. 266)

Apparatus for providing intelligence indicative of the conductivity of solutions having variable salinity comprising, an elongated tubular casing of electrical insulating material having internal threads on both ends thereof, a pair of streamlined closure elements threadedly mounted on opposite ends of said tubular casing, one of said closure elements having a longitudinal bore therethrough for reception of an electrical cable, an electrical cable passing through said longitudinal bore, the other of said closure elements having a transverse bore therethrough and adapted for reception of weights therein and disposed to assist in stabilization of the device as the same is towed through a body of water, a packing gland disposed internally of said longitudinal bore in said one of said closure elements and in axial alignment therewith for providing a seal for said electrical cable with respect to the interior of said casing, a pair of insulating bulkheads disposed within said casing, each in spaced relation with a respective one of said pair of closure elements and at the respective interior ends thereof, said bulkheads and closure elements forming a pair of chambers at the end portions of said casing, a pair of disc shaped depolarizing electrodes of 60 mesh, 6 mil. silver wire and coated with silver chloride fixedly mounted on said bulkheads, said electrodes being mounted on the mutually adjacent side of said bulkheads, said tubular member being provided with a plurality of transverse ports therethrough disposed in immediate adjacency to said electrodes for permitting entry of a saline solution only between said electrodes, said electrical cable including a pair of electrical conductors, one of each of said pair of conductors being connected to a different one of said electrodes, a packing material disposed in each of said chambers for supporting said conductors and maintaining an exclusion of solution from said chambers, thereby preventing electrical leakage therebetween, said casing having openings for access to said chambers, and closure members for said openings.



2,733,202

ELECTROLYTIC CELLS

Robert Q. Boyer, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission

Application September 28, 1944, Serial No. 556,127

11 Claims. (Cl. 204—215)



2. In electrolytic cell comprising a casing, partition structure arranged within said casing and defining an elongated sinuous passage therein adapted to contain an electrolyte continuously moving through said casing, said sinuous passage including loops connected by straight segments, a plurality of rotatably mounted members respectively disposed in the straight segments of said sinuous passage and constituting an electrode in contact with said electrolyte and means for rotating odd ones of said members in one direction and even ones of said members in the opposite direction in order to propel said electrolyte through said sinuous passage.

2,733,203

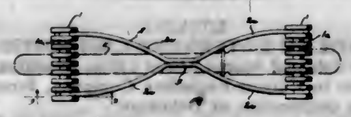
ELECTROLYTIC SILVER CLEANER

Donald E. Mason, Greensboro, N. C., assignor to James David McNairy, Jr., Greensboro, N. C.

Application April 8, 1953, Serial No. 347,524

3 Claims. (Cl. 204—288)

1. A device for electrolytically cleaning silverware comprising two parallel, laterally-spaced elongated metal bars constituting electrodes of a magnesium base alloy each provided with a series of relatively deep and closely spaced circumferential slots and a metal clip extending between said electrodes, said clip comprising a pair of flexible arms connected together intermediate their length with the companion ends of said arms disposed in spaced relation and resiliently and releasably engaging certain of the slots of said electrodes.



2,733,204

TREATMENT OF HEXAVALENT CHROMIUM SOLUTIONS

Raymond L. Costa, Baltimore, Md., assignor, by mesne assignments, to Allied Chemical & Dye Corporation

No Drawing. Application September 6, 1950, Serial No. 183,470

6 Claims. (Cl. 210—24)

1. A process for reclaiming aqueous solutions of hexavalent chromium contaminated with metal cations, comprising bringing said solutions into reacting contact with a cation exchange resin consisting of a sulfonated infusible polymerizate of a polyvinyl aryl compound at a pH of less than 4 but not below 0 to displace the hydrogen of the resin with the metal cations, and separating the hexavalent chromium solution from said resin in which are held the contaminant metal cations, thus reclaiming purified hexavalent chromium solutions.

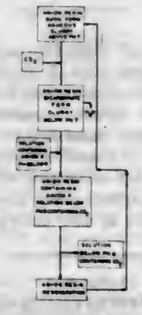
2,733,205

PROCESS FOR ABSTRACTING ANIONS FROM ALUMINA SOL

Richard L. Dalton, Ralph K. Iler, and Guy B. Alexander, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

Application November 30, 1951, Serial No. 259,022

1 Claim. (Cl. 210—24)



In a process for abstracting an anion from an aqueous alumina sol the steps comprising adjusting the pH of an anion-exchanger in basic form to below 7 by adding carbon dioxide thereto, adding said exchanger to said aqueous sol to abstract an anion therefrom and maintaining a pH below 6 while abstracting said anion, separating said exchanger from the aqueous system, and removing carbon dioxide from the aqueous system.

2,733,206

CHEMICAL TREATMENT OF FLOOD WATERS USED IN SECONDARY OIL RECOVERY

Jan Henry Prusick, Austin, Tex., and Vance P. Gregory, Chicago, Ill., assignors to Armour and Company, Chicago, Ill., a corporation of Illinois

No Drawing. Application May 17, 1951, Serial No. 226,953

7 Claims. (Cl. 252—8.55)

1. In the method of secondary oil recovery characterized by the step of injecting flooding water under pressure through subterranean pipes into oil-bearing reservoir rock formations to displace portions of the residual oil therein toward a producing well, the improvement comprising having present in said injected flooding water a minute proportion of dicoco dimethyl ammonium chloride to inhibit the growth of bacteria within said formations, to prevent both acid and alkaline corrosion of said pipes, and to decrease the interfacial tension between the oil and water.

2,733,207

PHOSPHORUS AND SULFUR CONTAINING ANTIOXIDANT

Ferdinand P. Otto, Woodbury, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York

No Drawing. Application January 17, 1952, Serial No. 267,009

15 Claims. (Cl. 252—32.7)

1. As a new composition of matter, an antioxidant selected from the group consisting of (1) the reaction product of an alkyl thiocyanate, having between about 21 and about 34 carbon atoms per alkyl radical, with phosphorus pentasulfide, (2) the reaction product of an alkyl disulfide, having between about 21 and about 34 carbon atoms per alkyl radical, with phosphorus pentasulfide, and (3) an alkaline-earth metal salt of said alkyl disulfide-phosphorus pentasulfide reaction product.

2,733,208

MIXED ALKALINE EARTH METAL SOAP GREASE COMPOSITIONS

Eric O. Forster, Hillside, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application December 15, 1952, Serial No. 326,041

5 Claims. (Cl. 252—39)

1. A lubricating grease composition which consists essentially of a lubricating oil base stock containing combined therein a grease forming amount of a mixture of calcium, barium, and strontium soaps of high molecular weight fatty acids, said mixture containing a molar ratio of calcium to barium to strontium soaps within the range of from 5:1:1 to 1:5:5.

2,733,209

MAGNESIUM-LITHIUM-SODIUM GREASE COMPOSITION

Eric O. Forster, Hillside, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application December 13, 1952, Serial No. 325,837

5 Claims. (Cl. 252—40)

1. A lubricating grease composition which consists essentially of a lubricating oil base stock containing combined therein a grease forming amount of a mixture of magnesium, lithium, and sodium soaps of high molecular weight fatty acids, said mixture containing a molar ratio of magnesium to lithium to sodium soaps of from 5:1:1 to 1:5:5.

2,733,210

LUBRICANT COMPOSITIONS AND METHOD OF MAKING SAME

Edward Roy Taylor, Jr., Springfield, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 10, 1953, Serial No. 336,207
9 Claims. (Cl. 252—49.3)

1. A homogeneous single phase liquid lubricant composition consisting essentially of (1) an aqueous solution of a 1–4 carbon aliphatic monohydric alcohol in which the ratio of alcohol to water is between about 45:55 and about 70:30, (2) 5.0 to 30.0%, based on total weight, of a water-insoluble monohydroxy 1,2-polyoxypropylene monoalkyl ether having an average of at least nine oxy 1,2-propylene groups per molecule and up to 20 carbon atoms in the alkyl group, and (3) 0.1% to 0.80%, based on total weight, of a dibasic borate salt of an oxygen containing amine selected from the group consisting of monoethanol amine, 2 amino 2 methyl propanol-1, morpholine, N-methyl morpholine, N-ethyl morpholine, isopropyl amino ethanol, N-methyl ethanol amine, N-dimethyl ethanol amine, N-ethyl ethanol amine, N-diethyl ethanol amine and isopropanol amine.

2,733,211

IMPREGNATED SCOURING PAD

William J. Maxcy, Easton, Pa., and Herbert L. Sanders, Phillipsburg, N. J., assignors to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application December 30, 1949, Serial No. 136,160
1 Claim. (Cl. 252—91)

An improved scouring pad comprising steel wool impregnated with a soap-free mixture of 150 parts by weight of the sodium salt of oleic isethionate and 850 parts by weight of corn dextrin.

2,733,212

HAIR SHAMPOO

Solomon Epstein, Chicago, Charles F. Fuchs, Evanston, and Martell M. Gladstone, Chicago, Ill., assignors, by mesne assignments, to Emulsol Chemical Corporation, Chicago, Ill., a corporation of Illinois

No Drawing. Application January 2, 1952, Serial No. 264,681
14 Claims. (Cl. 252—117)

1. An improved shampoo, having a liquid to paste consistency, comprising essentially a mixture of at least one detergent selected from the group consisting of: (1) water-soluble salts of sulfuric acid esters of aliphatic alcohols containing from 8 to 18 carbon atoms; (2) water-soluble salts of sulfuric acid esters of aliphatic polyhydric alcohols incompletely esterified with fatty acids containing from 8 to 22 carbon atoms; (3) water-soluble salts of alkylated aromatic sulfonic acids wherein the alkyl group contains a chain of from 8 to 22 carbon atoms; (4) water-soluble salts of higher molecular weight alkylated aromatic hydroxy-alkyl sulfuric acid esters wherein the higher molecular weight alkyl radical contains from 8 to 22 carbon atoms; (5) sulfonated castor oil; (6) condensation products of hydroxy-alkyl amines with fatty acids containing from 8 to 18 carbon atoms and wherein the molal ratio of the hydroxy-alkyl amine to the fatty acid is not substantially less than 2 to 1; (7) polyoxyalkylene glycol ethers of alkylated aromatic compounds in which the nuclear alkyl group contains from 8 to 18 carbon atoms; and (8) liquid water-soluble soaps; said detergent comprising from about 8% to about 30%, by weight, of said shampoo; from about 1% to about 6%, by weight of said shampoo, of an ester-amide of an hydroxy-alkyl primary amine with a normally solid higher molecular weight fatty acid; and water, the water being present in amounts not substantially below 50%, by weight, of said shampoo.

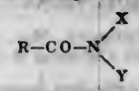
2,733,213

SYNTHETIC DETERGENT COMPOSITIONS

Peter T. Vitale and Muriel Eileen Liftin, Brooklyn, N. Y., assignors to Colgate-Palmolive Company, Jersey City, N. J., a corporation of Delaware

No Drawing. Application October 29, 1949, Serial No. 124,511
11 Claims. (Cl. 252—137)

10. A detergent composition comprising about 10 to 50% of detergent selected from the group consisting of water-soluble sulfated and sulfonated aliphatic acyl-containing detergent salts wherein the acyl radical has about 8 to 22 carbon atoms, in minor proportion to said detergent and from about 1 to about 10% of a higher aliphatic amide compound having the formula:



wherein R—CO is an aliphatic acyl radical of about 10 to 20 carbon atoms, and X is hydrogen and Y is selected from the group consisting of hydrogen and alkylol radicals having up to about 5 carbon atoms, and the balance being primarily water-soluble inorganic builder salts with about 20% to about 50% tripolyphosphate salt selected from the group consisting of alkali metal and ammonium tripolyphosphate, the above amounts being by weight of total solids of said detergent composition.

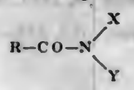
2,733,214

SYNTHETIC DETERGENT COMPOSITIONS

Peter T. Vitale and Muriel Eileen Liftin, Brooklyn, N. Y., assignors to Colgate-Palmolive Company, Jersey City, N. J., a corporation of Delaware

No Drawing. Application October 29, 1949, Serial No. 124,512
9 Claims. (Cl. 252—137)

9. A detergent composition comprising about 10 to about 50% of water-soluble higher alkyl mononuclear aryl sulfonate detergent, in minor proportion to said detergent and from about 1 to about 13% of a higher aliphatic amide compound having the formula:



wherein R—CO— is an aliphatic acyl radical of about 10 to 20 carbon atoms, and X is hydrogen and Y is selected from the group consisting of hydrogen and alkylol radicals having up to about 5 carbon atoms, and the balance being primarily water-soluble inorganic builder salts with about 20% to about 50% tripolyphosphate salt selected from the group consisting of alkali metal and ammonium tripolyphosphate, the above amounts being by weight of total solids of said detergent composition.

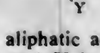
2,733,215

CLEANING COMPOSITIONS CONTAINING TARNISH INHIBITORS

Edgar E. Ruff, Bergenfield, N. J., assignor to Lever Brothers Company, New York, N. Y., a corporation of Maine

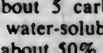
No Drawing. Application March 25, 1953, Serial No. 344,671
20 Claims. (Cl. 252—137)

1. A cleaning composition comprising a water-soluble polyphosphate which in aqueous solution tarnishes copper and copper and nickel alloys and a tarnish inhibitor in an amount to lessen the tarnishing action of the polyphosphate and having the general formula:



where M is selected from the group consisting of hydrogen and a metal, R is an aliphatic hydrocarbon radical having from seven to seventeen carbon atoms, and *n* is the valence of M.

7. A non-soap detergent composition comprising an active detergent selected from the group consisting of anionic and nonionic detergents which in aqueous solution tarnishes copper and copper and nickel alloys and a tarnish inhibitor in an amount to lessen the tarnishing action of the detergent and having the general formula:



where M is selected from the group consisting of hydrogen and a metal, R is an aliphatic hydrocarbon radical having from seven to seventeen carbon atoms, and *n* is the valence of M.

2,733,216

METHOD OF MAKING PLASTIC SCINTILLATION PHOSPHORS

Geoffrey G. Eichholz and John L. Horwood, Ottawa, Ontario, Canada, assignors to Her Majesty the Queen in the right of Canada, as represented by the Minister of Mines and Technical Surveys

No Drawing. Application May 7, 1953, Serial No. 353,668
2 Claims. (Cl. 252—301.2)

1. A method of producing phosphor units for use in the detection and measurement of penetrating radiation, such as gamma rays, which comprises forming a mixture of polystyrene moulding powder, 0.2 to 20% of its weight of a hydrocarbon fluorescence-producing material and 0.002 to 0.05% of its weight of an agent which shifts the fluorescence spectrum into the visible region, placing the mixture in a moulding zone, heating the mixture to a temperature of 85 to 105° C. under a pressure of 1000–2000 p. s. i. to expel air, raising the pressure to 4,000 to 20,000 p. s. i., and heating the mass at a temperature in excess of the melting point of the phosphor material and not lower than the normal curing temperature of the polystyrene to effect uniform distribution of the components in the polystyrene and form a uniformly clear product and cooling the mass to solidify it in the desired structural form.

2,733,217

SMOKE PRODUCING AMMUNITION

Mark M. Woyski and Carlyle E. Shoemaker, Urbana, Ill., assignors to the United States of America as represented by the Secretary of War

No Drawing. Application September 23, 1947, Serial No. 775,738
2 Claims. (Cl. 252—305)

1. The method of making a smoke producing composition that includes the following steps; granulating white phosphorus to provide approximately 75% of the resulting granules with a particle size range from approximately .2 to .6 mm. in diameter; milling synthetic rubber to a particle size of approximately 3/16" to 1/4" in diameter; mixing a plasticizer for said rubber with a solvent for said rubber to provide a solvent mixture; introducing said milled rubber into said solvent mixture; mixing said rubber with said solvent mixture to provide a solution of said rubber in the form of a gel; allowing said gel to stand and thicken, introducing said gel into said granulated phosphorus in the presence of water and carbon dioxide; removing excess water therefrom; mixing until said gel has picked up all of said phosphorus; and subsequently thoroughly kneading said phosphorus into said solution of rubber in the presence of additional water to reduce the temperature during said kneading.

2,733,218

METHOD FOR REMOVING WATER FROM LIQUID ORGANIC COMPOSITIONS

Walter M. Basch, Rumson, and Herman J. Zoeller, Union, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application July 26, 1954, Serial No. 445,916
7 Claims. (Cl. 252—344)

1. A method for removing water from a water-containing liquid organic composition which comprises contacting the water in said composition with urea at an elevated temperature in the range of about 150° to 212° F. to thereby effect a reaction between the urea and the water, at least about one mole of urea being employed per mole of water originally contained in said liquid organic composition.

2,733,219

PREPARATION OF ALUMINA-ALUMINUM HALIDE CATALYSTS

Herman S. Bloch, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application October 17, 1952, Serial No. 315,413
9 Claims. (Cl. 252—442)

1. A process for producing an alumina-aluminum halide composite which comprises reacting aluminum metal with water to form alumina, terminating the reaction before all of the metal has been reacted, separating the resultant mixture of alumina and unreacted aluminum metal from the aqueous medium, drying said mixture and subjecting the same under anhydrous conditions to reaction with a halogenating agent to convert the unreacted metal to aluminum halide.

2,733,220

MANUFACTURE OF SPHERICAL GEL PARTICLES

Charles Wankat, Brookfield, Ill., assignor to Universal Oil Products Company, Des Plaines, Ill., a corporation of Delaware

No Drawing. Application November 17, 1952, Serial No. 321,046
11 Claims. (Cl. 252—448)

1. A process for producing oxide spheres which comprises dispersing droplets of an inorganic oxide sol in a body of hydrocarbon liquid, gelling the sol droplets within said body of hydrocarbon liquid to form hydrogel spheres, and during the setting of the droplets in the hydrocarbon liquid maintaining immediately above said body an atmosphere which is inert to said hydrocarbon liquid whereby to retard lowering of the interfacial tension between the sol and the hydrocarbon liquid.

2,733,221

EXPANDED RESIN AND METHOD FOR MAKING THE SAME

Steven P. Kish, Lansing, and Lester C. Coe, deceased, late of Lansing, Mich., by Milton L. Coe, administrator, Delhi Township, Ingham County, Mich., assignors to Kish Plastic Products, Inc., Lansing, Mich., a corporation of Michigan

No Drawing. Application December 19, 1951, Serial No. 262,478
6 Claims. (Cl. 260—2.5)

1. A method of forming an expanded, cellular, hard, resinous product which comprises admixing 100 parts of a liquid, acid-curable phenol-aldehyde partial reaction product containing about 75% to about 90% resin solids

by weight, about 18 to about 22 parts of an aqueous acidic solution, and a metal above hydrogen in the electromotive series in an amount sufficient to produce an amount of gas when reacted with said aqueous acidic solution equivalent to the amount of gas produced when from about 1.2 to about 12 parts of iron is reacted with about 18 to about 22 parts of sulfuric acid having a concentration between 50% 66° Bé. sulfuric acid and 66° Bé. sulfuric acid, the aqueous acidic solution being equivalent in the rate of formation of gas with iron to said sulfuric acid solution.

2,733,222

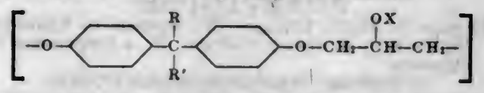
FATTY ACID ESTERS OF EPOXY RESINS AND ALKYL TITANATES

Harry H. Beacham, Plainfield, N. J., assignor to National Lead Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application December 1, 1952, Serial No. 323,523

5 Claims. (Cl. 260—18)

1. A fluid film-forming composition comprising an oil-modified epoxy resin made from bisphenol and epichlorohydrin and having the repeating unit formula:



wherein R and R' are monovalent hydrocarbon radicals, at least half of the X groups in said repeating unit are drying-oil acyl groups, the remainder of said X groups being hydrogen atoms, and an alkyl titanate.

2,733,223

BOOKBINDING MATERIAL COMPRISING A VINYL CHLORIDE POLYMER AND CASTOR OIL MALEATE

Howard A. Van Etten, Monroe, N. Y., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 20, 1952, Serial No. 327,168

9 Claims. (Cl. 260—23)

1. A bookbinding material particularly adapted for printing, comprising a film of a mixture of castor oil maleate and a vinyl resin selected from the group consisting of homopolymer of vinyl chloride, copolymer of vinyl chloride and vinylidene chloride, copolymer of vinyl chloride and vinyl acetate, and mixtures thereof, the vinyl chloride content of said copolymers being at least 80% by weight, and the ratio, on a weight basis, of resin to castor oil maleate being between 40:60 and 80:20.

2,733,224

LIQUID POLISHING COMPOSITION

Thomas B. Smith and Rudolf E. Vetren, Chicago, Ill., assignors to Simoniz Company, a corporation of Delaware

No Drawing. Application March 6, 1951, Serial No. 214,226

6 Claims. (Cl. 260—26)

1. A stable polish, comprising: a freezable liquid carrier including water; about 1.2–7.8% by weight of wax; about 1.7–5.2% by weigth of a member of the class consisting of condensation products of maleic anhydride and rosin and polyhydric alcohols, condensation products of fumaric anhydride and rosin and polyhydric alcohols, condensation products of maleic anhydride and pentaerythritol and condensation products of maleic anhydride and high molecular weight glycols; about 2.8–6.5% by weigth of emulsified polystyrene; and from about 0.25–0.70% by weigth of urea dissolved in the liquid carrier to inhibit precipitation of the solids on freezing and subsequent thawing of the liquid.

2,733,225

MODIFIED PARAFFIN WAX GREASE RESISTANT COATING COMPOSITION AND PAPERBOARD COATED THEREWITH

Monroe F. Smith, Walnut Creek, Calif., assignor to Fibreboard Products Inc., San Francisco, Calif., a corporation of Delaware

No Drawing. Application November 8, 1952, Serial No. 319,610

16 Claims. (Cl. 260—28.5)

1. A modified paraffin wax grease resistant coating composition for paperboard or the like comprising a major proportion of paraffin wax and minor proportions of solid polyethylene and microcrystalline wax having a melting point of at least about 180° F., the total amount of said paraffin wax and said microcrystalline wax in said composition comprising at least about 80% by weight of the total weight of the composition, the paraffin wax being present in an amount constituting at least about 90% by weight of the total amount of said microcrystalline wax and said paraffin wax, the microcrystalline wax being present in an amount sufficient to counteract the scuffing effect of said polyethylene but not exceeding about 10% by weight of the total amount of said microcrystalline wax and said paraffin wax, and the polyethylene being present in an amount sufficient to counteract the frictional drag effect of said microcrystalline wax.

2,733,226

TRIARYL PHOSPHITE STABILIZERS FOR SYNTHETIC RUBBERS

Byron A. Hunter, Seymour, Conn., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application October 12, 1951, Serial No. 251,131

12 Claims. (Cl. 260—29.7)

9. A rubbery butadiene-styrene polymerizate stabilized with a small proportion of a tri(nonyl-phenyl)phosphite.

2,733,227

REACTION PRODUCT OF OLEFIN-DIOLEFIN RESIN WITH A COUMARONE-INDENE RESIN

John F. McKay, Jr., Cranford, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application June 26, 1952, Serial No. 295,835

3 Claims. (Cl. 260—45.5)

1. A process for raising the softening point of a non-aromatic unsaturated hydrocarbon resin prepared by the treatment of a steam cracked hydrocarbon fraction boiling between 20° C. and 280° C. with Friedel-Crafts catalysts at temperatures between −100° C. and +100° C. which comprises mixing 100 parts of the resin with 5 to 50 parts of a coumarone-indene resin and heating the mixture at a temperature above about 240° C.–280° C.

2,733,228

BLENDS OF VINYL CHLORIDE POLYMERS WITH ETHYLENE/VINYLENE CARBONATE COPOLYMERS

Ival O. Salyer and James A. Herbig, Dayton, Ohio, assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application December 11, 1953, Serial No. 397,791

9 Claims. (Cl. 260—45.5)

1. A blend of a vinyl chloride polymer with an ethylene-vinylene carbonate copolymer.

2,733,229

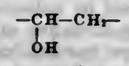
DIALKYL POLYVINYL PHOSPHATE FLAME-RETARDANTS

Neal O. Brace, Woodstown, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

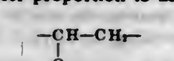
No Drawing. Application May 13, 1952, Serial No. 287,613

9 Claims. (Cl. 260—73)

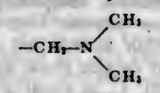
1. A fire-retarding compound being a phosphate ester of a polymer which before esterification consists predominantly to exclusively of vinyl alcohol units of the structure



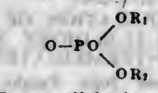
and contains a lesser proportion to zero of vinyl units of the formula



wherein Q is a radical selected from the group consisting of the acetate radical —O—$COCH_3$, the aldehyde radical —CHO, and the dimethylaminomethylene radical



the degree of phosphate esterification involving not less than 43% and not more than 82% of the number of all vinyl units present in the polymer, and the esterifying phosphate radical being a radical of form



wherein R_1 and R_2 are aliphatic radicals of from 1 to 8 C-atoms and containing no elements other than carbon, hydrogen and halogen.

2,733,230

LINEAR FILMFORMING POLYAMIDES INCLUDING 1,4-DIAMINO CYCLOHEXANE AND PROCESS

Hanns Ufer, Ludwigshafen (Rhine), Germany, assignor to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application December 11, 1951, Serial No. 261,147

Claims priority, application Germany December 20, 1950

2 Claims. (Cl. 260—78)

1. A linear film-forming polyamide produced by the condensation of from at least 4.4 percent to at most 25 percent of 1,4-diaminocyclohexane with about an equimolecular amount of adipic acid, ε-caprolactam, and hexamethylene diamine adipate.

2,733,231

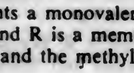
METHOD OF SULFONATING INSOLUBLE AROMATIC MATERIALS

William C. Bauman and Robert M. Wheaton, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application May 1, 1952, Serial No. 285,536

4 Claims. (Cl. 260—79.3)

1. A method which comprises swelling a solid, benzene-swellable copolymer of a major proportion by weight of at least one alkenyl aromatic compound having the general formula:



wherein Ar represents a monovalent aromatic radical of the benzene series and R is a member of the group consisting of hydrogen and the methyl radical, and a minor proportion of at least one polyvinyl aromatic compound of the benzene series, by immersing the copolymer in liquid sulfur dioxide for from 5 to 60 minutes and thereafter reacting the swollen sulfonated copolymer with a sulfonating agent of the group consisting of sulfur trioxide and chlorosulfonic acid at reaction temperatures between −60° and 40° C.

2,733,232

MANUFACTURE OF FREE-FLOWING SOLID SALTS OF ALKENYL AROMATIC RESIN SULFONIC ACIDS

William C. Bauman, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application May 23, 1952, Serial No. 289,659

14 Claims. (Cl. 260—79.3)

1. A method of making a finely divided, free-flowing salt of a water-soluble alkenyl aromatic resin sulfonic acid directly from the finely divided, solid resin sulfonic acid, which method comprises intimately admixing a liquid aqueous solution of a basic metal compound, which solution contains not more than 160 grams of water per gram equivalent weight of the basic compound, with an amount of the solid, finely divided alkenyl aromatic resin sulfonic acid corresponding approximately to the chemical equivalent of the basic compound.

2,733,233

VINYL ESTERS OF N-CARBACYL-ALPHA-MONOAMINOMONOCARBOXYLIC ACIDS, THEIR PREPARATION AND POLYMERS THEREOF

Ralph E. Miegel, Wilmington, Del., Carl G. Niemann, Pasadena, Calif., and John C. Sauer, Wilmington, Del., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application October 18, 1954, Serial No. 463,044

28 Claims. (Cl. 260—89.1)

19. A viny ester of an N-carbacyl-alpha-mono aminomonocarboxylic acid, said acid being free of aliphatic unsaturation and said N-carbacyl radical being that of a monobasic monocarboxylic acid free of aliphatic unsaturation.

2,733,234

PURIFICATION AND RECOVERY OF ZEIN

Leo Morris, Chicago, Lloyd G. Unger, Riverside, and Alexander L. Wilson, Palos Park, Ill., assignors to Corn Products Refining Company, New York, N. Y., a corporation of New Jersey

Application January 11, 1954, Serial No. 403,416

5 Claims. (Cl. 260—123)

1. The process of purifying zein which comprises dissolving the zein in aqueous calcium hydroxide at a temperature below about 10° C., separating impurities and recovering zein from said purified solution, the amount of calcium hydroxide being at least about one per cent by weight of zein.

2,733,235

MINERAL OIL ADDITIVE

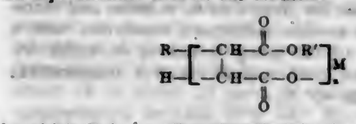
Thomas Cross, Jr., Union, and Jeffrey H. Bartlett, Westfield, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application February 6, 1952, Serial No. 270,293

16 Claims. (Cl. 260—125)

1. As a new composition of matter a reaction product selected from the class consisting of: (A) the reaction products obtained by reacting, at a temperature in the range of about 200° to about 500° F. a reactive sulfur

and phosphorus-containing material with an ester of an alkenyl succinic acid of the formula



in which R is an alkenyl radical having 4 to 24 carbon atoms, R' is selected from the group consisting of alkyl and alkenyl radicals having in the range of 1 to 30 carbon atoms, M is selected from the group consisting of R', a group I and II metal, and hydrogen and n is 1 to 2, and (B) metal salts of said reaction products and a group I and group II metal.

2,733,236

AZO DYESTUFFS DERIVED FROM DEXTRAN

Harry A. Toulmin, Jr., Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio

No Drawing. Application May 12, 1953, Serial No. 354,650

7 Claims. (Cl. 260—152)

1. An azo dyestuff of the general formula

$$[A-(R)_x]-N{=}N-B$$

in which A represents the molecule of a substance selected from the group consisting of dextran, lower acyl esters of dextran, lower alkyl ethers of dextran, benzyl dextran and dextran nitrate, R is selected from the group consisting of the benzoyl and benzyl radicals, x is an integer from zero to three, and B is selected from the group consisting of aniline, B-naphthol, 1-naphthylamino-4-sulfonic acid, 2-amino-8-naphthol sulfonic acid, 4-amino-5-hydroxy-2,7-naphthalene-disulfonic acid and salicylic acid.

2,733,237

HETEROCYCLIC ACID HYDRAZONES OF CARBOHYDRATES

Harry Louis Yale and Jack Bernstein, New Brunswick, N. J., assignors to Olin Mathieson Chemical Corporation, New York, N. Y., a corporation of Virginia

No Drawing. Application May 28, 1952, Serial No. 290,576

7 Claims. (Cl. 260—211)

1. A member of the group consisting of the 2-furoic acid and 2-thiophenecarboxylic acid hydrazones of a hydrazone-forming carbohydrate containing not more than 12 carbon atoms.

2,733,238

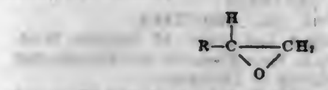
REACTION OF STARCH AND ALKYLENE OXIDES

Ralph W. Kerr, Riverside, Ill., and William A. Faucette, Los Angeles, Calif., assignors to Corn Products Refining Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application February 23, 1951, Serial No. 212,514

16 Claims. (Cl. 260—233.3)

1. The process for the production of starch derivatives comprising etherifying substantially dry starch with an etherifying agent from the group consisting of compounds having the formula:



wherein R may be a radical from the group consisting of hydrogen, alkyl, halogenated alkyl, alkylene, and an alkyl radical to which is attached an alkylene hydrocarbon radical by an ether linkage, and mixtures thereof, in the presence of a catalyst from the group consisting of quaternary ammonium hydroxides, trialkyl amines, tri (hydroxyalkyl) amines, and mixtures thereof.

2,733,239

PROCESS FOR THE SEPARATION OF SULPHUR FROM OXIME-SULPHUR MIXTURES

Aloys Giltges and Harry Welz, Krefeld, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application May 24, 1954, Serial No. 432,032

Claims priority, application Germany May 28, 1953

9 Claims. (Cl. 260—239.3)

1. Process for separating sulphur from solid oxime-sulphur mixtures obtained by reducing salts of material selected from the group consisting of saturated primary and secondary mononitro hydrocarbons of the aliphatic and cycloaliphatic series with hydrogen sulphide in an acid solution, comprising treating the mixture with liquid sulphur dioxide and separating the sulphur from the sulphur dioxide phase.

8. Process for separating sulphur from solid oxime-sulphur mixtures obtained by reducing salts of saturated cycloaliphatic mononitro hydrocarbons with hydrogen sulphide in an acid solution, comprising introducing the oxime-sulphur mixture together with a lactamizing reagent into liquid sulphur dioxide and separating the sulphur from the sulphur dioxide phase working at temperatures from about —40° C. to about +40° C. and under corresponding pressures.

2,733,240

PROCESS FOR PREPARATION OF ALLOPREGNANE-3β,17α-DIOL-11,20-DIONE AND ESTERS THEREOF AND INTERMEDIATES THEREFOR

George Rosenkranz and John Pataki, Mexico City, Mexico, and Carl Djerassi, Detroit, Mich., assignors to American Syntex Incorporated, Mexico City, Mexico, a corporation of Mexico

No Drawing. Application February 27, 1953, Serial No. 339,448

Claims priority, application Mexico February 29, 1952

12 Claims. (Cl. 260—239.55)

1. A process for the production of a compound selected from the class consisting of allopregnan-3β,17α-diol-11,20-dione lower fatty acid esters and benzoic acid esters thereof which comprises treating a compound selected from the class consisting of Δ^{16}-allopregnen-3β-ol-11,20-dione lower fatty acid esters and benzoic acid esters thereof with hydrogen peroxide in alkaline medium to form the corresponding 16α,17α-oxido compound, reacting the oxido compound with hydrogen bromide to form the corresponding 16β-bromo-17α-hydroxy compound and treating the 16-bromo-17α-hydroxy compound with a debrominating agent.

2,733,241

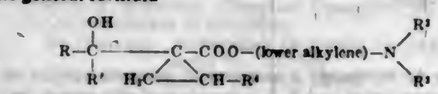
BASIC DERIVATIVES OF SUBSTITUTED CYCLOPROPANECARBOXYLIC ACIDS AND METHODS OF PREPARING SAME

John Krapcho, New Brunswick, and William A. Lott, Maplewood, N. J., assignors to Olin Mathieson Chemical Corporation, New York, N. Y., a corporation of Virginia

No Drawing. Application March 7, 1952, Serial No. 275,468

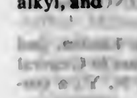
12 Claims. (Cl. 260—247.1)

1. Compounds of the class consisting of: (A) bases of the general formula

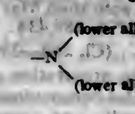


wherein R is a phenyl group, R' is a member of the class consisting of phenyl groups and thienyl groups, R^4 is a

member of the class consisting of hydrogen and lower alkyl, and



is a member of the class consisting of



1-piperidyl, 1-pyrrolidyl, and 4-morpholinyl; (B) acid-addition salts thereof, and (C) quaternary ammonium salts thereof.

2,733,242

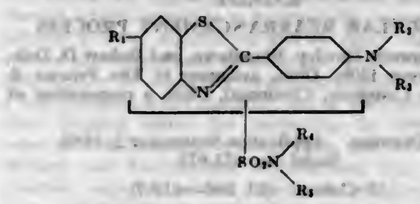
FLUORESCENT AGENTS AND PROCESS OF MAKING THE SAME

James W. Libby, Jr., Dexter B. Pattison, and Frithjof Zwilgmeyer, New Castle County, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application October 31, 1952, Serial No. 318,106

7 Claims. (Cl. 260—247.1)

1. A compound of the general formula



wherein R_1 represents a member of the group consisting of hydrogen and methyl, the grouping



represents a radical of the group consisting of dialkylamino, monoalkyl-mono(hydroxyalkyl)-amino, di(hydroxyalkyl)amino and morpholino, while the grouping



represents a radical of the group consisting of primary amino, monoalkylamino, dialkylamino, mono(hydroxyalkyl)amino, monoalkyl-mono(hydroxyalkyl)amino, di-(hydroxyalkyl)amino and morpholino, all the alkyl radicals being radicals of not more than 4 C-atoms each, and the total number of carbon atoms in R_1, R_2, R_3, R_4 and R_5 being not greater than 10, said compounds being fluorescent agents having affinity for nylon fiber.

2,733,243

5-CARBOALKOXY-4-ALKYL-2-THIAZOLYL-MERCAPTO-S-TRIAZINES

John J. D'Amico, Charleston, W. Va., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application March 19, 1953, Serial No. 343,507

7 Claims. (Cl. 260—248)

1. A 2,4,6 - tris(5 - carboalkoxy - 4 - methyl - 2 - thiazolylmercapto)-s-triazine wherein the alkoxy groups contain less than five carbon atoms.

2,733,244

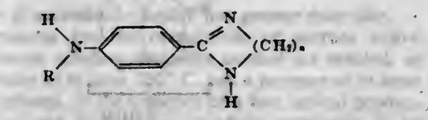
3,4,5,6-TETRAHYDROPYRIMIDINE AND IMIDAZOLINE LOCAL ANESTHETICS

Martin E. Synerholm, John A. Faust, and Melville Sahyun, Santa Barbara, Calif., assignors to Melville Sahyun, doing business as Sahyun Laboratories, Santa Barbara, Calif.

No Drawing. Application May 27, 1954, Serial No. 432,946

8 Claims. (Cl. 260—256.4)

1. A material selected from the group consisting of compounds having the formula:



wherein R is selected from the group consisting of hydrogen and lower-alkyl and n is an integer selected from the group consisting of 2 and 3, and stable, non-toxic acid addition salts and hydrates thereof.

2,733,245

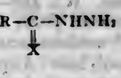
PROCESS FOR PRODUCTION OF HETERODIAZOLES

Cameron Ainsworth, Indianapolis, Ind., assignor to Eli Lilly and Company, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application April 12, 1954, Serial No. 422,682

6 Claims. (Cl. 260—294.8)

1. A process for the preparation of heterodiazoles, which comprises heating an acid hydrazide having the formula



wherein R represents a radical of the group consisting of aryl, substituted aryl, and heterocyclic aromatic which radical is chemically inert to the action of ortho esters, and X represents a member of the group consisting of oxygen and sulfur atoms, with an ortho ester represented by the formula

$$R_1{-}C(OR_2)_3$$

wherein R_1 represents a member of the group consisting of hydrogen and alkyl radicals and R_2 represents an alkyl radical.

2,733,246

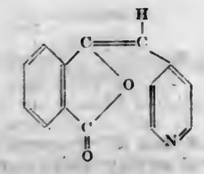
PROCESS OF PRODUCING ISONICOTINIC ACID

Martin Everett Hultquist, Bound Brook, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application June 28, 1952, Serial No. 296,245

10 Claims. (Cl. 260—295)

1. As a method of producing isonicotinic acid from the pyrophthalone of gamma picoline having the formula:



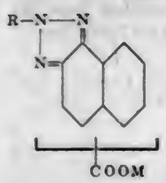
the method which comprises (1) heating said pyrophthalone with a strongly acid oxidizing agent to oxidize said pyrophthalone and produce an acid reaction mixture containing isonicotinic acid and phthalic acid and (2) recovering the isonicotinic acid so produced.

2,733,247
WHITENING AGENTS FOR CELLULOSIC FIBER

Arthur A. Baum and Paul A. Sanders, New Castle County, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 20, 1952, Serial No. 321,736
5 Claims. (Cl. 260—304)

1. A compound of the general formula



wherein R represents the radical of a 2-phenyl-benzothiazole of the group consisting of 2-phenyl-benzothiazole itself, its monomethyl and trimethyl homologs, and the monosulfo derivatives of any of these, and wherein M designates a cation of the group consisting of the alkali-metals, ammonium and hydrogen.

2,733,248
POLYHALO EPOXY METHANE NAPHTHALENE COMPOUNDS

Rex E. Lidov, Denver, Colo., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application February 17, 1953, Serial No. 337,425
8 Claims. (Cl. 260—346.2)

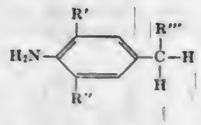
1. A compound selected from the class consisting of polyhalo-1,4-epoxy-5,8-methanooctahydronaphthalene dicarboxylic acid and polyhalo1,4-epoxy-5,8-methanohexahydronaphthalene dicarboxylic acid containing from 2 to 6 middle halogen atoms on carbon atoms of the 5,6,7,8,9-carbon atoms ring and the acid anhydride and lower alkyl ester derivatives thereof.

2,733,249
PRODUCTION OF POLYALKYLSTILBENE QUINONES AND POLYALKOXYSTILBENE QUINONES

Joseph A. Chenicek, Bensenville, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application July 20, 1950, Serial No. 175,027
11 Claims. (Cl. 260—396)

1. A process for producing a poly-substituted stilbene quinone in which the substituents are selected from the members of the group consisting of an alkyl group and an alkoxy group, each containing from one to six carbon atoms, which comprises oxidizing an arylamine with an oxidizing agent at a temperature of from about 20° to about 100° C., said arylamine having the structure:



wherein each of R′ and R″ represents a member of the group consisting of an alkyl group and an alkoxy group each containing from one to six carbon atoms and R‴ represents a member of the group consisting of a hydrogen atom, an alkyl group, and an alkoxy group, each group having from one to six carbon atoms, said oxidizing agent being selected from the group consisting of alkali metal chlorates and alkali metal ferricyanides.

2,733,250
PREPARATION OF 2,5-DIARYLAMINO-3,6-DICHLOROQUINONES

Ben H. Kirby, Westfield, Walter J. Olenick, Linden, and Kenneth P. Smith, Elizabeth, N. J., assignors to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application May 22, 1952, Serial No. 289,438
4 Claims. (Cl. 260—396)

1. In a process for the preparation of 2.5-bis-(monoarylamino)-3.6-dichloro-1.4-benzoquinone by reaction of chloranil with a monocyclic aryl primary amine of the group consisting of aniline and nuclear substituted anilines in which the substituents are non-acidic and unreactive under the reaction conditions, the improvement which comprises slurrying said reagents in an aqueous solution of a nitrogen base of the group consisting of ammonia and water-soluble tertiary alkylamines having an initial concentration from 2 to 12 per cent and in an amount at least sufficient to react with all of the hydrogen chloride liberated by the formation of said diarylamino dichloro benzoquinone, at a temperature not substantially exceeding 50° C.

2,733,251
MOLECULAR REARRANGEMENT PROCESS

Harold Kenneth Hawley, Woodlawn, and Robert D. Dobson, Green Hills, Ohio, assignors to The Procter & Gamble Company, Cincinnati, Ohio, a corporation of Ohio

No Drawing. Application September 2, 1954, Serial No. 453,971
15 Claims. (Cl. 260—410.7)

1. In the process of catalytically effecting rearrangement of fatty acid radicals in a mixture of glycerides, the steps of introducing into said glyceride mixture, for catalysis, a sodium-potassium alloy containing from about 75% to about 3% sodium and from about 25% to about 97% potassium, agitating the mixture of glyceride and alloy at a temperature at which said alloy is liquid, but not substantially higher than 120° F., and thereby dispersing said alloy throughout the glyceride, and effecting molecular rearrangement.

2,733,252
SALTS OF FATTY ACID ESTERS OF LACTYLIC ACIDS

Jerome B. Thompson and Bruce D. Buddemeyer, Kansas City, Mo., assignors to C. J. Patterson Company, a corporation of Missouri

No Drawing. Application February 23, 1954, Serial No. 412,048
17 Claims. (Cl. 260—410.9)

1. A process for the production of compositions of the general formula

$$RCO(OCHCH_3CO)_xOY$$

wherein RCO is the acyl radical of a fatty acid having a boiling point over 250° C., x is a number indicating the average number of lactyl groups, and Y is a cation which comprises heating a mixture of a fatty acid RCOOH, a lactylic acid compound of the formula $H(OCHCH_3CO)_zOH$ wherein z indicates the average number of lactylic groups in such compound which is not greater than x, and a more than catalytic amount of a basically reacting compound selected from the group consisting of alkali metal and alkaline earth metal basicly reacting compounds.

2,733,253
PROCESS OF AND APPARATUS FOR REFINING OILS OR FATS

Arthur Milbers, Bad Homburg vor der Hohe, and Karl Sondermann, Sprendlingen, Kreis Offenbach (Main), Germany, assignors to Metallgesellschaft Aktiengesellschaft, Frankfurt am Main, Germany, a corporation of Germany

Application November 2, 1951, Serial No. 254,468
Claims priority, application Germany March 2, 1950
16 Claims. (Cl. 260—425)

1. Process for refining an oil selected from the group consisting of vegetable fats, vegetable oils, animal fats, animal oils, synthetic fats, synthetic oils and mixtures thereof which comprises establishing a multiple number of series-connected zones including a first zone, at least one intermediate zone, and a last zone, forcing an oil with a neutralizing agent upward in the form of a gas-permeated mixture through a vertical path of flow by injecting a fluid along said path in said first zone, passing said oil and neutralizing agent through said intermediate zones to said last zone in series, forcing said oil with a neutralizing agent through an upward path of flow in the form of a gas-permeated mixture by injecting a fluid along said path in each said zone, and recovering oil from said last zone.

11. Apparatus for refining an oil selected from the group consisting of vegetable fats, vegetable oils, animal fats, animal oils, synthetic fats, synthetic oils and mixtures thereof which comprises a substantially enclosed vessel defining a lower liquid zone and an upper vapor zone. vertical partition means dividing said vessel into a multiple number of adajcently positioned chambers including a first chamber, a last chamber, and at least one intermediate chamber means for connecting the lower liquid zones of said chambers in series from said first chamber through said intermediate chamber and into said last chamber, separate vertical conduit means positioned in each said chamber extending from the lower portion of the liquid zone in each said chamber and terminating in the vapor zone of that chamber, means for injecting a fluid vertically upward into the lower portion of each said vertical conduit means, means for passing liquid into the vertical conduit means in said first chamber, and means for removing liquid from said last chamber.

2,733,254
METHOD OF PRODUCING ORGANIC ISOCYANATES

Tull C. Allen, Oxford, and David H. Chadwick, Anniston, Ala., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application March 2, 1953, Serial No. 339,908
17 Claims. (Cl. 260—453)

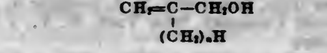
1. The method of producing organic isocyanates, which comprises reacting a carbonyl halide selected from the group consisting of phosgene and carbonyl bromide with a hydrohalide of a primary amine selected from the class consisting of alkyl-, cycloalkyl-, alkaryl-, aralkyl-, aryl- and hydroaryl amines, said reaction being carried out in the presence of an inert organic solvent, a sufficient amount of a boron trifluoride catalyst to substantially increase the rate of reaction over that obtainable without the use of said catalyst and at a temperature substantially in the range of from about 50° C. up to that temperature at which the most tightly bound boron trifluoride complex substantially completely liberates its boron trifluoride content, and said reactants being employed in at least the molar ratio stoichiometrically required to substantially completely convert each amine hydrohalide group of said primary amine hydrohalide into isocyanate groups.

2,733,255
SULFATED TELOMERS

Richard V. Lindsey, Jr., Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 15, 1952, Serial No. 271,861
9 Claims. (Cl. 260—458)

2. A sulfated telomer of ethylene and an alcohol of the formula



wherein n is a cardinal number not greater than one.

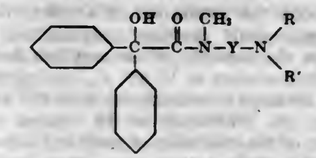
5. A process for the preparation of surface active agents wherein ethylene and allyl alcohol are reacted, at a temperature of at least 200° C. and a pressure of at least 500 atmospheres, in the presence of a free radical producing catalyst and the reaction product containing in its composition the components of a plurality of moles of ethylene and the components of one mole of the alcohol is reacted with a sulfating agent.

2,733,256
SALTS OF BASIC N-METHYL BENZILAMIDES

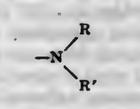
John Krapcho, New Brunswick, Edward J. Pribyl, Metuchen, and Jack Bernstein, New Brunswick, N. J., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia

No Drawing. Application April 9, 1953, Serial No. 347,834
9 Claims. (Cl. 260—459)

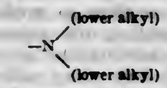
1. Compounds of the group consisting of the free base, its HX acid-addition salts and its R″X quaternary salts, the free base having the formula



wherein Y is a lower alkylene of at least 2 carbon atoms,



is a member of the class consisting of



and N-morpholino, X is the anion of a pharmacologically-acceptable inorganic acid, and R″ is a member of the group consisting of lower alkyl and benzyl.

9. 2-(N-methyl benzilamido) ethyl diethyl methylammonium methosulfate.

2,733,257
PREPARATION OF CHLORPHENOXY ACETONITRILES

Harry James Barber and Maurice Berkeley Green, Dagenham, England, assignors to May & Baker Limited, Dagenham, England, a British company

No Drawing. Application December 3, 1951, Serial No. 259,716
Claims priority, application Great Britain December 6, 1950
8 Claims. (Cl. 260—465)

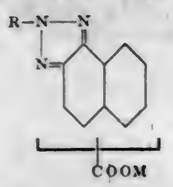
1. A process for the preparation of a chlorphenoxyacetonitrile which comprises reacting a chlorphenoxy-

2,733,247
WHITENING AGENTS FOR CELLULOSIC FIBER

Arthur A. Baum and Paul A. Sanders, New Castle County, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 20, 1952, Serial No. 321,736
5 Claims. (Cl. 260—304)

1. A compound of the general formula



wherein R represents the radical of a 2-phenyl-benzothiazole of the group consisting of 2-phenyl-benzothiazole itself, its monomethyl and trimethyl homologs, and the monosulfo derivatives of any of these, and wherein M designates a cation of the group consisting of the alkali-metals, ammonium and hydrogen.

2,733,248
POLYHALO EPOXY METHANE NAPHTHALENE COMPOUNDS

Rex E. Lidov, Denver, Colo., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application February 17, 1953, Serial No. 337,425
8 Claims. (Cl. 260—346.2)

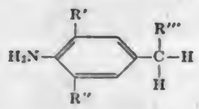
1. A compound selected from the class consisting of polyhalo-1,4-epoxy-5,8-methanooctahydronaphthalene dicarboxylic acid and polyhalo1,4-epoxy-5,8-methanohexahydronaphthalene dicarboxylic acid containing from 2 to 6 middle halogen atoms on carbon atoms of the 5,6,7,8,9-carbon atoms ring and the acid anhydride and lower alkyl ester derivatives thereof.

2,733,249
PRODUCTION OF POLYALKYLSTILBENE QUINONES AND POLYALKOXYSTILBENE QUINONES

Joseph A. Chenicek, Bensenville, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application July 20, 1950, Serial No. 175,027
11 Claims. (Cl. 260—396)

1. A process for producing a poly-substituted stilbene quinone in which the substituents are selected from the members of the group consisting of an alkyl group and an alkoxy group, each containing from one to six carbon atoms, which comprises oxidizing an arylamine with an oxidizing agent at a temperature of from about 20° to about 100° C., said arylamine having the structure:



wherein each of R' and R'' represents a member of the group consisting of an alkyl group and an alkoxy group each containing from one to six carbon atoms and R''' represents a member of the group consisting of a hydrogen atom, an alkyl group, and an alkoxy group, each group having from one to six carbon atoms, said oxidizing agent being selected from the group consisting of alkali metal chlorates and alkali metal ferricyanides.

2,733,250
PREPARATION OF 2,5-DIARYLAMINO-3,6-DICHLOROQUINONES

Ben H. Kirby, Westfield, Walter J. Olenick, Linden, and Kenneth P. Smith, Elizabeth, N. J., assignors to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application May 22, 1952, Serial No. 289,438
4 Claims. (Cl. 260—396)

1. In a process for the preparation of 2.5-bis-(monoarylamino)-3.6-dichloro-1.4-benzoquinone by reaction of chloranil with a monocyclic aryl primary amine of the group consisting of aniline and nuclear substituted anilines in which the substituents are non-acidic and unreactive under the reaction conditions, the improvement which comprises slurrying said reagents in an aqueous solution of a nitrogen base of the group consisting of ammonia and water-soluble tertiary alkylamines having an initial concentration from 2 to 12 per cent and in an amount at least sufficient to react with all of the hydrogen chloride liberated by the formation of said diarylamino dichloro benzoquinone, at a temperature not substantially exceeding 50° C.

2,733,251
MOLECULAR REARRANGEMENT PROCESS

Harold Kenneth Hawley, Woodlawn, and Robert D. Dobson, Green Hills, Ohio, assignors to The Procter & Gamble Company, Cincinnati, Ohio, a corporation of Ohio

No Drawing. Application September 2, 1954, Serial No. 453,971
15 Claims. (Cl. 260—410.7)

1. In the process of catalytically effecting rearrangement of fatty acid radicals in a mixture of glycerides, the steps of introducing into said glyceride mixture, for catalysis, a sodium-potassium alloy containing from about 75% to about 3% sodium and from about 25% to about 97% potassium, agitating the mixture of glyceride and alloy at a temperature at which said alloy is liquid, but not substantially higher than 120° F., and thereby dispersing said alloy throughout the glyceride, and effecting molecular rearrangement.

2,733,252
SALTS OF FATTY ACID ESTERS OF LACTYLIC ACIDS

Jerome B. Thompson and Bruce D. Buddemeyer, Kansas City, Mo., assignors to C. J. Patterson Company, a corporation of Missouri

No Drawing. Application February 23, 1954, Serial No. 412,048
17 Claims. (Cl. 260—410.9)

1. A process for the production of compositions of the general formula

$$RCO(OCHCH_3CO)_xOY$$

wherein RCO is the acyl radical of a fatty acid having a boiling point over 250° C., x is a number indicating the average number of lactyl groups, and Y is a cation which comprises heating a mixture of a fatty acid RCOOH, a lactylic acid compound of the formula $H(OCHCH_3CO)_zOH$ wherein z indicates the average number of lactylic groups in such compound which is not greater than x, and a more than catalytic amount of a basically reacting compound selected from the group consisting of alkali metal and alkaline earth metal basicly reacting compounds.

2,733,253
PROCESS OF AND APPARATUS FOR REFINING OILS OR FATS

Arthur Milbers, Bad Homburg vor der Hohe, and Karl Sondermann, Sprendlingen, Kreis Offenbach (Main), Germany, assignors to Metallgesellschaft Aktiengesellschaft, Frankfurt am Main, Germany, a corporation of Germany

Application November 2, 1951, Serial No. 254,468
Claims priority, application Germany March 2, 1950
16 Claims. (Cl. 260—425)

1. Process for refining an oil selected from the group consisting of vegetable fats, vegetable oils, animal fats, animal oils, synthetic fats, synthetic oils and mixtures thereof which comprises establishing a multiple number of series-connected zones including a first zone, at least one intermediate zone, and a last zone, forcing an oil with a neutralizing agent upward in the form of a gas-permeated mixture through a vertical path of flow by injecting a fluid along said path in said first zone, passing said oil and neutralizing agent through said intermediate zones to said last zone in series, forcing said oil with a neutralizing agent through an upward path of flow in the form of a gas-permeated mixture by injecting a fluid along said path in each said zone, and recovering oil from said last zone.

11. Apparatus for refining an oil selected from the group consisting of vegetable fats, vegetable oils, animal fats, animal oils, synthetic fats, synthetic oils and mixtures thereof which comprises a substantially enclosed vessel defining a lower liquid zone and an upper vapor zone. vertical partition means dividing said vessel into a multiple number of adajcently positioned chambers including a first chamber, a last chamber, and at least one intermediate chamber means for connecting the lower liquid zones of said chambers in series from said first chamber through said intermediate chamber and into said last chamber, separate vertical conduit means positioned in each said chamber extending from the lower portion of the liquid zone in each said chamber and terminating in the vapor zone of that chamber, means for injecting a fluid vertically upward into the lower portion of each said vertical conduit means, means for passing liquid into the vertical conduit means in said first chamber, and means for removing liquid from said last chamber.

2,733,254
METHOD OF PRODUCING ORGANIC ISOCYANATES

Tull C. Allen, Oxford, and David H. Chadwick, Anniston, Ala., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application March 2, 1953, Serial No. 339,908
17 Claims. (Cl. 260—453)

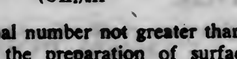
1. The method of producing organic isocyanates, which comprises reacting a carbonyl halide selected from the group consisting of phosgene and carbonyl bromide with a hydrohalide of a primary amine selected from the class consisting of alkyl-, cycloalkyl-, alkaryl-, aralkyl-, aryl- and hydroaryl amines, said reaction being carried out in the presence of an inert organic solvent, a sufficient amount of a boron trifluoride catalyst to substantially increase the rate of reaction over that obtainable without the use of said catalyst and at a temperature substantially in the range of from about 50° C. up to that temperature at which the most tightly bound boron trifluoride complex substantially completely liberates its boron trifluoride content, and said reactants being employed in at least the molar ratio stoichiometrically required to substantially completely convert each amine hydrohalide group of said primary amine hydrohalide into isocyanate groups.

2,733,255
SULFATED TELOMERS

Richard V. Lindsey, Jr., Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application February 15, 1952, Serial No. 271,861
9 Claims. (Cl. 260—458)

2. A sulfated telomer of ethylene and an alcohol of the formula



wherein n is a cardinal number not greater than one.

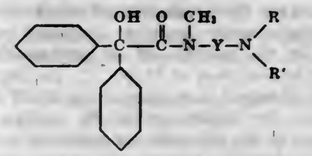
5. A process for the preparation of surface active agents wherein ethylene and allyl alcohol are reacted, at a temperature of at least 200° C. and a pressure of at least 500 atmospheres, in the presence of a free radical producing catalyst and the reaction product containing in its composition the components of a plurality of moles of ethylene and the components of one mole of the alcohol is reacted with a sulfating agent.

2,733,256
SALTS OF BASIC N-METHYL BENZILAMIDES

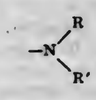
John Krapcho, New Brunswick, Edward J. Pribyl, Metuchen, and Jack Bernstein, New Brunswick, N. J., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia

No Drawing. Application April 9, 1953, Serial No. 347,834
9 Claims. (Cl. 260—459)

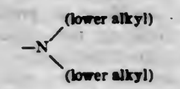
1. Compounds of the group consisting of the free base, its HX acid-addition salts and its R''X quaternary salts, the free base having the formula



wherein Y is a lower alkylene of at least 2 carbon atoms,



is a member of the class consisting of



and N-morpholino, X is the anion of a pharmacologically-acceptable inorganic acid, and R'' is a member of the group consisting of lower alkyl and benzyl.

9. 2-(N-methyl benzilamido) ethyl diethyl methylammonium methosulfate.

2,733,257
PREPARATION OF CHLORPHENOXY ACETONITRILES

Harry James Barber and Maurice Berkeley Green, Dagenham, England, assignors to May & Baker Limited, Dagenham, England, a British company

No Drawing. Application December 3, 1951, Serial No. 259,716
Claims priority, application Great Britain December 6, 1950
8 Claims. (Cl. 260—465)

1. A process for the preparation of a chlorphenoxyacetonitrile which comprises reacting a chlorphenoxy-

methyl mono-chloride with an alkali metal cyanide in a solvent medium consisting of a ketonic solvent and a minor proportion of water.

2,733,258

PREPARATION OF ISOMERIC 1-PHENYL-1,2-DICYANOETHYLENES

Delton William Hein, Somerville, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application August 17, 1953, Serial No. 374,833

6 Claims. (Cl. 260—465)

1. The method of preparing isomeric 1-phenyl-1,2-dicyanoethylenes which comprises reacting 1-phenyl-2-hydroxysuccinonitrile with at least a stoichiometric quantity of an anhydride of a lower alkanoic acid in the presence of an acid catalyst so as to form the corresponding ester, and decomposing the ester with activated alumina so as to produce phenylmaleonitrile and phenylfumaronitrile.

2,733,259

MANUFACTURE OF ACRYLONITRILE FROM ACETYLENE AND HYDROCYANIC ACID

George C. De Croes and George A. Akin, Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application August 22, 1951, Serial No. 243,128

4 Claims. (Cl. 260—465.3)

1. The process for production of acrylonitrile which comprises continuously reacting acetylene and hydrocyanic acid in the presence of an acrylonitrile-forming aqueous catalyst solution at 75–90° C., cooling the gaseous products obtained to a temperature of 20° to 30° C. and returning the condensate to the catalyst solution; absorbing part of the uncondensed gases and substantially all of the acrylonitrile present into water, recycling at least a portion of the unabsorbed gases to the catalyst solution after treating them at —30° to 15° C. with a solvent for the preferential absorption of vinyl acetylene, said solvent being selected from the group consisting of acetone, methanol and ethyl benzene, stripping the acrylonitrile-containing aqueous solution with acetylene to remove impurities consisting substantially entirely of cyanobutadiene and recycling at least a part of the cyanobutadiene-containing acetylene so produced for use as reactant material; distilling the aqueous acrylonitrile solution, freed from cyanobutadiene, to produce acrylonitrile and water as distillate along with by-product impurities and unreacted feed materials, leaving water free from acrylonitrile as still bottoms, and returning these still bottoms to the process for use in absorbing subsequently produced acrylonitrile; removing by-product impurities and unreacted feed materials from the acrylonitrile-water distillate by distillation, separating the acetylene from impurities by scrubbing with water, and reutilizing the acetylene so separated as reactant material; cooling the water-acrylonitrile mixture after removal of the volatile impurities and permitting layering of the mixture, separating the two layers thus formed and returning the lower or aqueous layer to the process to be admixed with aqueous acrylonitrile solution subsequently produced, distilling the upper or organic layer to produce pure acrylonitrile distillate containing a small amount of water and a still bottoms containing some acrylonitrile along with non-volatile impurities, recovering the acrylonitrile from the bottoms by distillation, and returning the acrylonitrile so recovered to the process to be admixed with subsequently produced impure acrylonitrile.

2,733,260

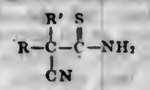
ALPHA-CYANOTHIOAMIDES

Edward G. Howard, Jr., Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application October 16, 1952, Serial No. 315,204

3 Claims. (Cl. 260—465.5)

1. An alpha-cyanothioamide having the structural formula



wherein R and R′ are members selected from the class consisting of hydrogen and lower alkyl radicals and the sum of the carbon atoms in R and R′ is not greater than four.

2,733,261

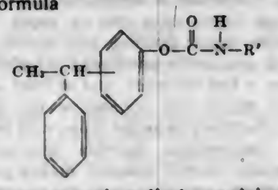
N-ARYL ISOCYANATES OF α-PHENYL ETHYL-PHENOL CARBAMIC ACID ESTER

Nelson V. Seeger, Cuyahoga Falls, and Thomas G. Mastin, Akron, Ohio, assignors, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio

No Drawing. Application November 1, 1950, Serial No. 193,515

4 Claims. (Cl. 260—471)

1. As new compositions of matter the isocyanates defined by the formula



in which R′ is an aromatic radical containing at least one isocyanate group.

2,733,262

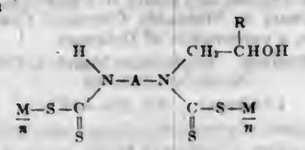
N-(2-HYDROXYALKYL) ALKYLENE BISDITHIOCARBAMATES

Edgar C. Britton, Midland, Mich., and Bruce A. Ashby, Schenectady, N. Y., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application May 6, 1954, Serial No. 428,134

5 Claims. (Cl. 260—500)

1. N-(2-hydroxyalkyl)alkylene bisdithiocarbamates of the formula



wherein M represents a metal ion, *n* is the valency of said ion, A represents an alkylene radical containing 2 to 3 carbon atoms, inclusive, and R represents a member of the group consisting of hydrogen and alkyl radicals containing from 1 to 2 carbon atoms, inclusive.

2,733,263

PREPARATION OF MAHOGANY ACID CONCENTRATES

George Riethof and George P. Brown, Jr., Pittsburgh, Pa., assignors to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

No Drawing. Application December 30, 1950, Serial No. 203,802

8 Claims. (Cl. 260—504)

1. A process for preparing mahogany acid concentrates which comprises extracting mahogany acids from a green acid layer of a sulfonated mineral lubricating oil with a mineral lubricating oil containing a small amount of mahogany acids in solution as indicated by a neutralization number not greater than about 5.

2,733,264

METHOD FOR SEPARATING AROMATIC SULFONIC ACIDS

Herbert C. Wohlers and Loren E. Pauling, St. Louis, and Frank N. Grover, Jr., Alma, Mich., assignors to Michigan Chemical Corporation, St. Louis, Mich., a corporation of Michigan

Application August 21, 1952, Serial No. 305,598

14 Claims. (Cl. 260—505)

1. The method of separating from solution in sulphuric acid, aromatic sulfonic acids which are soluble in the sulphuric acid of high H_2SO_4 concentration and which are precipitated therefrom upon dilution with water, comprising the steps of introducing the sulphuric acid solution of the aromatic sulfonic acid compound into a seed mixture having the aromatic sulfonic acid compound precipitated therein to form crystals and with water sufficient to dilute the sulphuric acid to the point where the amount of aromatic sulfonic acids present are in excess of that which is soluble in the diluted sulphuric acid, and maintaining the mixture at a temperature above 25° C. but below the temperature at which the aromatic sulfonic acid compound is miscible with the sulphuric acid solution until the aromatic sulfonic acid compound crystallizes out to form a slurry of liquid consistency.

2,733,265

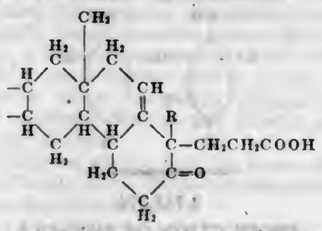
PREPARATION OF CARBOCYCLIC TRICYCLIC KETO-ACIDS

Martin W. Farrar, Webster Groves, and Harold Raffelson, St. Louis, Mo., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

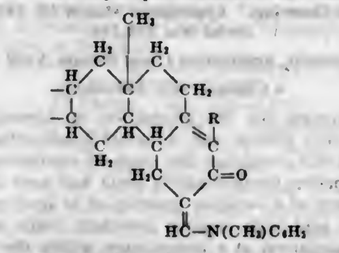
No Drawing. Application May 25, 1953, Serial No. 357,380

9 Claims. (Cl. 260—514)

1. The process of preparing a carbocyclic tricyclic keto-acid having the 1-(beta-carboxyethyl)-8a-methyl-Δ^{10}-decahydrophenanthren-2-one nucleus



where R is selected from the group consisting of hydrogen and the methyl radical, from a carbocyclic tricyclic ketone having the 3-(N-methylanilino) methylene-8a-methyl-$\Delta^{10a(1)}$-decahydrophenanthren-2-one nucleus



where R is selected from the group consisting of hydrogen and the methyl radical, which comprises reacting said carbocyclic tricyclic ketone with at least an equimolecular proportion of beta-propiolactone in the presence of a strong base.

2,733,266

PREPARATION OF ISOPHTHALIC AND TEREPHTHALIC ACIDS

Art C. McKinnis, Long Beach, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California

Application June 16, 1952, Serial No. 293,853

7 Claims. (Cl. 260—525)

1. A process for obtaining terephthalic acid from a mixture comprising terephthalic and isophthalic acids which comprises subjecting said mixture to fractional esterification with a lower aliphatic alcohol in the presence of an inorganic acid esterification catalyst, said acid catalyst constituting between about 0.1% and 10% by weight of the total reaction mixture, continuing said esterification for a period of time sufficient to esterify substantially all of said isophthalic acid but insufficient to esterify more than a minor proportion of said terephthalic acid, said period of time in any case not exceeding about 5 hours, separating substantially pure terephthalic acid and an ester fraction from the esterification mixture, subjecting said ester fraction to fractional hydrolysis by heating with a mixture of water, said aliphatic alcohol and said acid catalyst, the mole ratio of water to alcohol in said hydrolysis being between about 0.5 and 2, continuing said hydrolysis for a period of time sufficient to hydrolyze substantially all of the terephthalic esters contained therein but only a minor proportion of the isophthalic esters, separating said terephthalic and isophthalic acids from the hydrolysis reaction mixture and subjecting them to a second fractional esterification step similar to said first esterification step.

2,733,267

SYNTHETIC DRYING OILS

Donald F. Koenecke, Westfield, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application August 11, 1954, Serial No. 449,277

9 Claims. (Cl. 260—534)

1. A process for improving the hardness of films prepared from polymeric drying oils which comprises first reacting the oil at a temperature between 50 and 250° C. with from 0.01% to an amount which will cause gelation of a reagent selected from the group consisting of maleic acid, fumaric acid, thioglycolic acid, thiosalicylic acid, mercaptophthalic acid, itaconic acid, mesaconic acid, citraconic acid, acrylic acid and the esters and anhydrides thereof, then reacting the resulting product with about 0.1 to about 1 mole per mole of available carboxyl groups of an organic compound containing at least two functional groups one of which is selected from the group consisting of primary and secondary amines and the other is a hydroxyl group, and finally treating the resulting product with an acid compound chosen from the group consisting of mono, di and trichloroacetic acid, trifluoroacetic acid, glacial acetic acid, and soluble sulfonic acids.

2,733,268

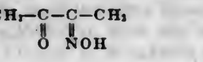
1-CHLORO-2,3-BUTANEDIONE-3-OXIME

Mona Phyllis Doerner, Walnut Creek, Calif., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application July 21, 1953, Serial No. 369,527

2 Claims. (Cl. 260—566)

1. The compound 1-chloro-2,3-butanedione-3-oxime having the structural formula



2,733,269
CHLORINATION
William A. Raimond, North Plainfield, and Leslie L. Perry, Plainfield, N. J., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Application April 23, 1953. Serial No. 350,768
12 Claims. (Cl. 260—578)

1. In a process of chlorinating mononitranilines by reaction with sulfuric acid and a hypochlorite, the improvement which comprises carrying out the reaction in the presence of at least substantially stoichiometric amounts of a chloride of a cation selected from the group consisting of alkali metals, metals of group 2 of the periodic system having an atomic number less than 88 and ammonium.

2,733,270
PREPARATION OF ALDEHYDES
Earl Eugene Fisher, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application September 13, 1951, Serial No. 246,520
3 Claims. (Cl. 260—604)

1. The process for preparing adipaldehyde which comprises hydrogenating in solution in a lower boiling saturated aliphatic monohydric alcohol at a temperature controlled to be below +15° C., using a hydrogen pressure of at least 10 pounds per square inch and in the presence of a platinum group hydrogenation catalyst, the reaction product produced by ozonization at a temperature between −80° C. and +40° C. of cyclohexene dissolved in a lower boiling aliphatic monohydric alcohol, and isolating the adipaldehyde resulting from the hydrogenation.

2,733,271
PREPARATION OF CHLORPHENOXY COMPOUNDS
Harry James Barber and Maurice Berkeley Green, Dagenham, England, assignors to May & Baker Limited, Dagenham, England
No Drawing. Application December 15, 1952, Serial No. 326,136
Claims priority, application Great Britain December 6, 1950
10 Claims. (Cl. 260—612)

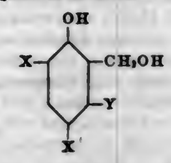
1. Process for the chlorination of the methane residue of a chlorophenoxymethane which comprises subjecting a chlorophenoxymethane in which at most two of the hydrogen atoms of the methane residue are substituted by chlorine atoms, in the liquid phase to the action of chlorine at a temperature of 160–260° C. until the desired quantity of chlorine has been absorbed the reaction where there is but one nuclear chlorine atom in the starting material being necessarily effected in the presence of a catalyst selected from the group consisting of phosphorus pentachloride, phosphorus trichloride and sulphur monochloride.

2,733,272
TRIHYDROXY POLYOXYALKYLENE ETHERS OF GLYCEROL
Lee H. Horsley and Edgar C. Britton, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
No Drawing. Application October 27, 1950, Serial No. 192,603
7 Claims. (Cl. 260—615)

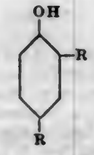
5. A mixture of trihydroxy mixed poly(oxyethyleneoxy-1,2-propylene) ethers of glycerol in which the oxyethylene groups represent from about 20 to about 80 mol per cent of the total oxyalkylene groups, and in which there is an average of at least 15 oxyalkylene groups per glycerol nucleus, said mixture having been prepared by reacting a mixture of ethylene oxide and propylene oxide with glycerol.

2,733,273
PREPARATION OF ASYMMETRICAL BISPHENOLS
Raymond H. Rigterink, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
No Drawing. Application March 24, 1952, Serial No. 278,298
5 Claims. (Cl. 260—619)

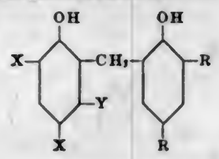
1. Process for preparing asymmetrical halogenated alkyl bisphenols comprising the steps of acetylating a compound of the general formula:



wherein the substituents X are one of the halogens chlorine and bromine and Y is selected from the group consisting of the same halogen and hydrogen, in the presence of a catalytic amount of hydrogen chloride, condensing the α-monoacetate of the halogenated saligenin in the presence of about an equimolar amount of an aluminum halide with an equimolar quantity of a compound of the general formula:



wherein one R is one of the halogens bromine and chlorine, and the other R is an alkyl group of one to four carbon atoms, and subsequently separating the bisphenolic product having the general formula:



2,733,274
PRODUCTION OF PHENOLS
Charles Thomson Young Cowie, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain
No Drawing. Application March 30, 1951, Serial No. 218,544
Claims priority, application Great Britain April 11, 1950
4 Claims. (Cl. 260—624)

1. A process for the production of 3-methyl-4,6-di-tertiary butyl phenol and 4-methyl-2,6-di-tertiary butyl phenol, which comprises the steps of contacting a mixture comprising predominantly meta and para cresols in the presence of a catalytic quantity of at least one cresol sulphonic acid with gaseous isobutene while said mixture is maintained at a temperature within the range of 20° to 50° C. until 2 mols of isobutene have been added for every mol of cresol present, whereby the desired methyl di-tertiary butyl phenols are obtained, and thereafter separating from the reaction mixture the desired phenols.

2,733,275
PREPARATION OF 2,4,6-TRINITROCHLOROBENZENE
Leonardus J. Revallier, Geleen, Netherlands, assignor to Stamicarbon N. V., Heerlen, Netherlands
No Drawing. Application June 8, 1953, Serial No. 360,389
Claims priority, application Netherlands June 13, 1952
3 Claims. (Cl. 260—646)

2. A process for producing 2,4,6-trinitrochlorobenzene which comprises reacting, at a temperature of between 140 and 170° C., 2,4-dinitrochlorobenzene with an excess of a nitrating agent consisting essentially of nitronium hydrogenpyrosulfate, the nitrating agent being used in an amount constituting 100–130% excess on the basis of the HNO_3 content of the nitrating agent, permitting the reaction mixture to settle into two layers, drawing off the underlayer comprising spent nitrating agent, and separating out the desired trinitrochlorobenzene by crystallization from said other layer.

2,733,276
PRODUCTION OF BENZENE HEXACHLORIDE
Paul D. Bartlett, Weston, Mass., assignor, by mesne assignments, to Columbia-Southern Chemical Corporation, Pittsburgh, Pa., a corporation of Delaware
No Drawing. Application August 8, 1952, Serial No. 303,409
2 Claims. (Cl. 260—648)

1. In a process of preparing benzene hexachloride by addition chlorination of benzene at a temperature below the freezing point of benzene, the improvement which comprises carrying out the reaction in the presence of phenylacetyl peroxide.

2,733,277
OLEFIN HALOCARBONS CONTAINING THREE AND FOUR CARBON ATOMS AND METHOD OF MAKING THEM
William T. Miller, Ithaca, N. Y.
No Drawing. Application December 24, 1953, Serial No. 400,381
10 Claims. (Cl. 260—653)

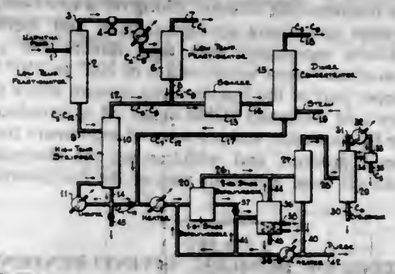
1. A process for preparing a completely halogenated polyfluoroolefin which comprises heating trifluorochloroethylene at a temperature between about 550° C. and about 700° C. for a contact time of about 10 seconds to produce an acyclic completely halogenated olefinic compound containing fluorine and chlorine and having at least 3 carbon atoms.

10. A compound selected from the group consisting of chloropentafluoropropene, dichlorotetrafluoropropene and dichlorohexafluorobutene.

2,733,278
PROCESS FOR PREPARING FLUOROOLEFINS FROM FLUOROCYCLOBUTANES
John Lynde Anderson, Northwood, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application October 29, 1954, Serial No. 465,747
10 Claims. (Cl. 260—653)

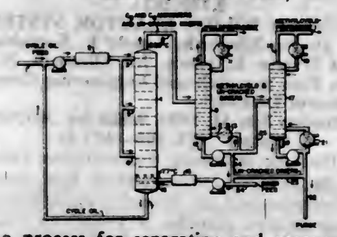
1. The process of obtaining a difluoroolefin which comprises exposing to a temperature within the range 600–1000° C., a tetrafluorocyclobutane of no more than seventeen carbons having two adjacent annular CF_2 groups, and an annular CH_2 group, any substituent on the fourth annular carbon being hydrocarbon of up to eight carbons bonded solely to said fourth annular carbon by from one to two bonds, said hydrocarbon radical being free of non-aromatic unsaturation, i. e., having any unsaturation conjugated in a benzenoid structure, any remaining valence of the fourth annular carbon being satisfied by hydrogen.

2,733,279
PROCESS FOR RECOVERY AND PURIFICATION OF CYCLODIENES FROM CRACKED PETROLEUM
Samuel W. Wilson and Thomas G. Jones, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application January 17, 1952, Serial No. 266,914
4 Claims. (Cl. 260—666)



1. In recovering C_5 and C_6 cyclodienes from cracked petroleum naphtha, the steps which comprise distilling from the naphtha a C_4 to C_9 hydrocarbon cut at temperatures below 175° F., removing C_4 hydrocarbons from the C_4 to C_9 cut at temperatures below 160° F to obtain a remaining C_5 to C_9 hydrocarbon fraction, soaking said C_5 to C_9 hydrocarbon fraction at temperatures of about 150° F. to 240° F. until the cylodienes in said fraction are dimerized, fractionally distilling C_5 to C_9 components from the resulting soaked fraction to obtain the cyclodiene dimers as a concentrate substantially free of C_6 and lower-boiling hydrocarbons, passing a high boiling residual portion of said initial cracked naphtha containing C_5 to C_{12} hydrocarbons into a high temperature stripping zone, stripping said residual naphtha fraction of additional C_5 to C_9 hydrocarbons at temperatures between 240° F. and 410° F., soaking said additional C_5 to C_9 hydrocarbons at about 150° F. to 240° F. to obtain more of the cyclodiene dimers, passing the cyclodiene dimers into a depolymerization zone in which the cyclodiene dimers undergo depolymerization at temperatures ranging from above 350° F. to about 450° F., rapidly removing the resulting cyclodiene monomer vapors with higher boiling C_7–C_9 hydrocarbons present in said concentrates to a fractionation zone, and fractionally separating the cyclodiene monomers.

2,733,280
RECOVERY OF CYCLO AND METHYLCYCLOPENTADIENE BY LIQUID VAPOR PHASE CRACKING
Glen P. Hamner, Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application September 25, 1952, Serial No. 311,457
4 Claims. (Cl. 260—666)



1. In a process for separating and recovering cyclopentadiene and methyl cyclopentadiene from their dimers and codimers in a cracked petroleum concentrate by vapor phase cracking of the dimers and codimers in said concentrate, the improvement which comprises passing said dimers and codimers in the vapor phase up through the cracking reaction zone in a fractionating

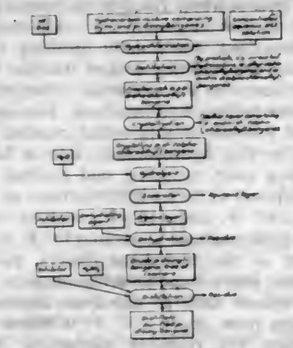
column; simultaneously passing countercurrent to said vapors a thermally stable organic oil which boils above an initial boiling point of 371° C. under atmospheric pressure down through said reaction zone by introducing said oil at an upper part in said column; preheating said thermally stable oil to a temperature in the range of 300° to 500° C. before it is passed into the upper part of the fractionating column; taking off a low boiling vapor fraction containing cyclopentadiene and methyl cyclopentadiene monomers with their dimers and codimers at overhead vapor temperatures of 200° to 230° C. from an upper part of the fractionating column above the point where said thermally stable liquid oil is introduced for further fractionation and recovery of monomers from the overhead product, and withdrawing the thermally stable liquid oil from a bottom part of the fractionating column.

2,733,281

SEPARATING OF ISOMERIC DIVINYLBENZENES AND CHEMICAL INTERMEDIATE OBTAINED IN PROCESS

Robert R. Dreisbach and Robert A. Martin, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

Application July 30, 1952, Serial No. 301,784
5 Claims. (Cl. 260—669)



1. A method which comprises forming a mixture of isomeric di-(alpha-chloroethyl) benzenes by passing hydrogen chloride into a mixture of a concentrated aqueous hydrochloric acid solution and a liquid hydrocarbon material comprising para-divinylbenzene and at least one of its isomers while agitating and maintaining the mixture at temperatures between 0° and 30° C., separating the normally crystalline compound, para-di-(alpha-chloroethyl) benzene, from the reacted mixture, and removing hydrogen chloride from the molecule of the para-di-(alpha-chloroethyl) benzene to regenerate para-divinylbenzene therefrom.

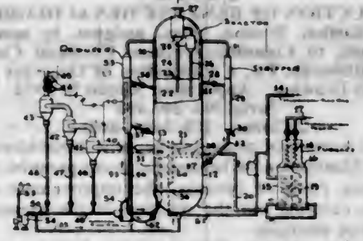
2,733,282

FLUIDIZED SOLIDS REACTOR SYSTEM

William P. Drews, Elizabeth, Arnold F. Kaulakis, Chatham, and Warren K. Lewis, Jr., Elizabeth, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application July 31, 1952, Serial No. 301,915
6 Claims. (Cl. 260—673.5)

1. A method for reforming hydrocarbons which comprises passing preheated hydrocarbon feed vapors and preheated hydrogen-rich gas through a dense fluidized bed of reforming catalyst particles in a reaction zone maintained under reforming conditions of temperature and pressure, removing reaction products, substantially free from catalyst particles overhead from the reaction zone, withdrawing spent catalyst particles from the dense, fluidized bed in the reaction zone into a stripping zone, contacting the withdrawn spent catalyst particles in the stripping zone with a stripping gas to remove hydrocarbons and hydrogen from said catalyst particles, discharging stripped catalyst particles into a separate regeneration zone, passing air through a dense fluidized bed of catalyst particles in the regeneration zone in order to burn carbonaceous deposits from the catalyst particles, withdrawing regenerated catalyst particles from the regeneration zone into a separate reducing-pretreating zone, withdrawing a stream of reactor catalyst particles from the reaction zone and mixing the reactor catalyst particles with the regenerated catalyst particles in the reducing-pretreating zone, passing hydrogen-rich gas through the resultant mixture of regenerated and reactor catalyst and discharging the hydrogen treated mixture of catalyst particles into the reaction zone, withdrawing additional streams of reactor catalyst directly from the dense, fluidized bed in the reaction zone, passing these streams of reactor catalyst in indirect heat exchange relation to the dense, fluidized bed in the regenerator zone in order to raise the temperature of the streams of reactor catalyst and returning the heated streams of reactor catalyst directly to the dense, fluidized bed in the reactor zone.



5. An apparatus for reforming of hydrocarbons comprising a vertical vessel, a reactor zone arranged in the upper part and a regenerator zone arranged in the lower part of said vessel, hairpin tubes having their open ends arranged in the lower part of the reactor zone and extending downward into the regenerator zone, an inlet line connected to one leg of each of said hairpin tubes for the supply of lift gas thereto, an inlet for the supply of regeneration gas to the bottom of the regenerator zone, an outlet line for regeneration gases connected to the upper part of the regenerator zone, means arranged in the outlet line for regeneration gases for separating entrained catalyst particles from the regeneration gases, a transfer line arranged below said separator means extending into the regenerator zone, conduits extending from said separator means for discharging separated catalyst particles into said transfer line, an inlet line for supplying carrying gas to said transfer line for conveying recovered catalyst to the regenerator zone, an outlet well arranged within the regenerator zone for receiving regenerated catalyst, a regenerated catalyst riser line, a U-bend connection between said outlet well and said riser line, an inlet for the supply of lift gas to the bottom of said riser line, a pretreater-reducer surrounding the upper part of said riser line, a connector line for transferring catalyst from the reactor to the pretreater-reducer, an inlet for supplying reducing gas to the bottom of the pretreater-reducer and a connector line between the bottom of the pretreater-reducer and the reactor zone for transferring a mixture of reactor catalyst and pretreated regenerated catalyst to the reactor zone.

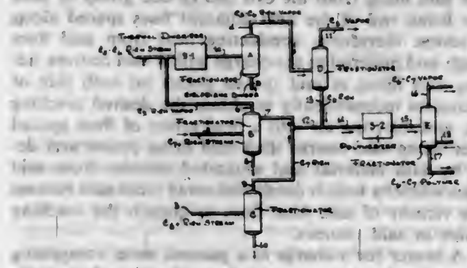
2,733,283

PROCESS FOR RECOVERY OF AROMATICS SEPARATED FROM CYCLIC DIENES

Glen P. Hamner, Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application September 7, 1951, Serial No. 245,563
6 Claims. (Cl. 260—674)

1. In a process of separating C_5 and C_6 cyclic diolefins, C_5 acyclic diolefins, benzene and heat stable polymers of diolefins from vapor-phase cracked naphtha fractions containing C_5 to C_{7+} cyclic and acyclic diolefins with benzene, the steps of thermally soaking a C_5–C_8 rich fraction to dimerize C_5 and C_6 cyclic diolefins therein, distilling remaining unreacted C_5 and C_6 hydrocarbons from the dimerized cyclic diolefins, separating C_5 acyclic diolefins from the resulting C_5–C_6 rich distillate which



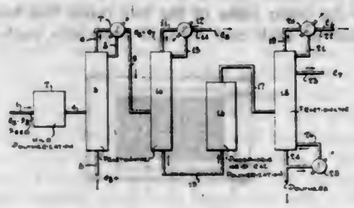
is distilled from the dimerized cyclic diolefins, subjecting the remaining C_5 to C_6 fraction thus freed of cyclic and acyclic C_5 diolefins to more intense second polymerization than said thermal soaking to form stable polymers of remaining cyclic and acyclic diolefins, and distilling benzene from resulting stable polymers of said second polymerization.

2,733,284

PROCESS FOR RECOVERY OF AROMATIC HYDROCARBONS BY DIMERIZING CYCLIC DIOLEFINS, DISTILLING TO OBTAIN A C_6—C_7 CUT, PHOSPHORIC ACID POLYMERIZING THE OLEFINS, AND DISTILLING TO OBTAIN AN AROMATIC RICH FRACTION

Glen P. Hamner, Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application March 19, 1952, Serial No. 277,421
1 Claim. (Cl. 260—674)



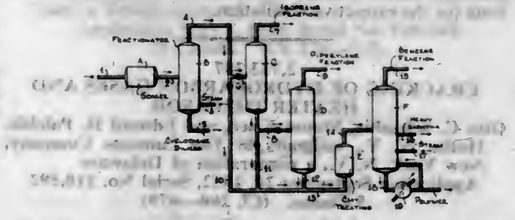
In a process of recovering and concentrating benzene from a C_5—C_8 fraction of vapor-phase cracked petroleum oil, said fraction containing predominantly olefins, diolefins, and aromatics, the steps which comprise heating the fraction in liquid phase at temperatures of 180° F. to 240° F. for a period of 4 to 8 hours to selectively polymerize cyclic diolefin components of the fraction, separating unreacted C_5—C_7 components of the fraction from C_8 and higher components, refractionating the C_5—C_7 components to remove C_5 components and produce a C_6—C_7 bottoms fraction containing less than about 5 volume percent of hydrocarbons boiling below 170° F., passing the resulting C_6—C_7 fraction in liquid phase into contact with a phosphoric acid catalyst at 300°–340° F. under a pressure of about 200 p. s. i. g. to selectively polymerize C_6—C_7 olefins and diolefins among said components, then distilling a benzene fraction from a mixture containing polymers of the C_6—C_7 olefins and diolefins.

2,733,285

RECOVERY OF HYDROCARBONS FROM HIGHLY CRACKED PETROLEUM FRACTIONS BY DIMERIZING THE CYCLIC DIOLEFINS DISTILLING TO OBTAIN A C_6—C_7 CUT, CLAY POLYMERIZING THE OLEFINS AND DISTILLING TO OBTAIN A BENZENE RICH FRACTION

Glen P. Hamner, Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application March 19, 1952, Serial No. 277,423
1 Claim. (Cl. 260—674)



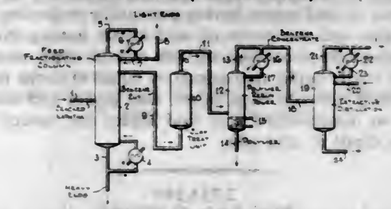
In a process for recovering valuable hydrocarbon fractions from a cracked C_5 to C_7 petroleum naphtha fraction which contains C_5, C_6, and C_7 cyclic diolefins as well as C_5, C_6, and C_7 acyclic diolefins along with other relatively saturated hydrocarbons and benzene, the improvement which comprises heating the naphtha fraction to a temperature in the range of 180° to 240° F. to selectively dimerize said cyclic diolefins present, separating the heated naphtha fraction into a heavy cut containing the resulting cyclic diolefin dimers, a distillate cut containing said C_5 acyclic diolefins and a residual naphtha fraction containing said C_6 and C_7 acyclic diolefins but relatively free of cyclic diolefins and said C_5 acyclic diolefins, subjecting said C_6–C_7 acyclic diolefin-containing naphtha fraction to polymerization in liquid phase at a temperature in the range of 250° to 400° F. with the aid of a clay catalyst, passing remaining naphtha with the resulting polymers into a fractionation zone, distilling a benzene-rich fraction from said naphtha, simultaneously stripping said polymers of naphtha at a temperature below 575° F., and recovering said stripped polymers.

2,733,286

PURIFICATION OF A BENZENE FRACTION BY MILD LIQUID PHASE CLAY TREATMENT AND DISTILLATION TO REMOVE RESULTANT POLYMERS

Daniel S. Maisel, Union, and Brook I. Smith, Elizabeth, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application March 19, 1952, Serial No. 277,485
4 Claims. (Cl. 260—674)



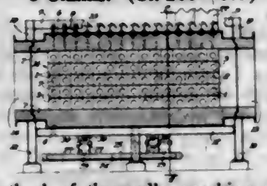
1. In a process for separating substantially pure benzene from a cracked petroleum hydrocarbon naphtha containing mainly unsaturated hydrocarbons with benzene, the steps of preparing a benzene concentrate from said naphtha for extractive distillation which comprise fractionally distilling from said naphtha an intermediate benzene cut boiling in the range from 165° F. to 185° F. to obtain a cut which contains from 35 to 50 volume per cent benzene cut which is substantially freed of dienes having

boiling points below 165° F., contacting said benzene cut in liquid phase with a clay under conditions at 250° F. to 400° F. for polymerizing a portion of diene components in the cut, flowing the clay-contacted benzene cut containing unreacted unsaturated hydrocarbons with polymers thus formed into a second fractional distillation zone, fractionally distilling the benzene with monomeric C_6 to C_7 unsaturated hydrocarbon components away from the polymers under conditions to prevent decomposition of the polymers, and recovering as a distillate from said second fractional distillation zone the benzene concentrate for the extractive distillation.

2,733,287
CRACKING OF HYDROCARBON GASES AND HEATER THEREFOR

Otto C. Schauble, Mount Kisco, and Edward H. Palchik, Hollis, N. Y., assignors to The Lummus Company, New York, N. Y., a corporation of Delaware

Application September 20, 1952, Serial No. 310,592
5 Claims. (Cl. 260—679)



1. The method of thermally cracking a hydrocarbon gas charge, comprising passing said charge along substantially parallel courses confined by refractory material, firing transversely of said courses at points spaced therealong into flues defined by said material and separated thereby from said courses, firing transversely from the opposite side of said courses at points spaced therealong into a second group of flues defined by said material and separated thereby from said courses, passing the combustion gas of said firing from the exit end of one group of flues to the firing end of the next adjacent flues spaced along said course therefrom, conducting heat from said flues through said material to the charge within said courses, adjusting said firing at said spaced points on each side of said courses independently to obtain the desired cracking effect, and injecting air into a final group of flues spaced farther along said course than said firing points and defined by said material and separated thereby from said courses whereby heat is conducted away from said courses in the vicinity of said final flues to quench the cracking reaction in said courses.

2. A heater for a charge in a gaseous state, comprising a mass of refractory material formed with substantially parallel passages for said charge and with substantially parallel transversely spaced flues open at both ends and in heat-conducting relation to said charge passages, through the refractory material of said mass, a plurality of independently controlled burners opposed to one end of some of said flues and the other end of the remainder of said flues respectively and directed to fire thereinto, and conduit means for conducting combustion gas from the opposite end of some of said flues to the fired end of others of said flues.

ELECTRICAL

2,733,288
ELECTRIC CABLES OF THE COAXIAL CONDUCTOR TYPE SUITABLE FOR USE FOR CURRENTS AT HIGH FREQUENCIES

George Harry Webster, Liverpool, England, assignor to British Insulated Callender's Cables Limited, London, England, a British company

Application January 30, 1951, Serial No. 208,512
Claims priority, application Great Britain February 8, 1950
21 Claims. (Cl. 174—28)



2. A tubular conductor for a high frequency cable, comprising two superposed and mutually radially spaced co-axial layers each comprising a transversely bent strip of metal forming an approximately complete cylinder, the inner of said layers having outwardly projecting transverse ribs and the outer of said layers having inwardly projecting transverse ribs, the ribs of both inner and outer of said layers being approximately equal in depth radially and fitting between each other, said layers and said ribs being so dimensioned that said layers are spaced apart by the depth of said ribs.

2,733,289
BUS BAR SUPPORT

Robert E. Warren, Marblehead, Mass., and Wilfred H. Yeamans, Plainville, Conn., assignors to General Electric Company, a corporation of New York

Application August 2, 1951, Serial No. 239,933
2 Claims. (Cl. 174—99)

1. In a bus bar duct system, a housing duct, a plurality of flat bus bars arranged in flatwise parallel spaced relation within said housing duct, supporting means for said bus bars comprising two complementary members formed of elastomeric material extending transversely across the edges of said bus bars and creating longitudinal duct ventilation passages by said members being spaced from the walls of said housing duct, said members being provided with a plurality of transverse grooves in their adjacent sides for the bus bars, said transverse grooves having a depth substantially equal to one-half the width of said bus bars so as to provide spacing portions of elastomeric material on said members between said bus bars and on the outer sides of the two outer bus bars, a movable post at each end of said members each having a



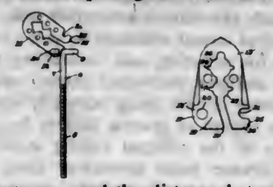
planar surface extending parallel to the sides of said bus bars, means for drawing said posts toward each other causing compression of the members between said bus bars, the compressive force causing said groove surfaces of said members to be compressed into intimate support and heat conducting contact longitudinally with the sides of said bus bars giving support rigidity for said bus bars, and said compression causing means retaining said members' spaced relationship from said housing walls while said members are in the compressed state.

2,733,290
STANDOFF INSULATOR

Stanley J. Valiulis, Rockford, Ill., assignor to General Cement Mfg. Co., Rockford, Ill., a corporation of Illinois

Application December 17, 1953, Serial No. 398,702
7 Claims. (Cl. 174—164)

1. An insulator comprising a supporting bracket including a generally rectangular-shaped support loop and a generally U-shaped insert of flexible resilient insulation material having a pair of closely spaced substantially parallel legs between which a conductor wire is adapted to be clamped, the outer end of one of said legs being provided with a bearing opening, one side of said loop being located in said opening to establish a pivotal con-

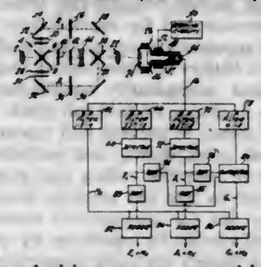


nection therebetween, and the distance between the pivot axis of said pivoted leg and the outer side of the other leg in the unstressed condition of said legs being slightly greater than the distance between said pivot axis and the opposite side of said loop thereby to receive and yieldingly confine said other leg within said loop.

2,733,291
COLOR TELEVISION CAMERA

Ray D. Kell, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application July 29, 1952, Serial No. 301,503
The terminal fifteen years of the term of the patent to be granted has been disclaimed
16 Claims. (Cl. 178—5.4)

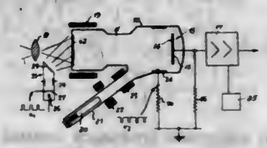


1. A color television camera comprising in combination an image scanning device; means for focusing a discontinuous image of a scene to be televised in a first selected component color upon said device, the discontinuities of said first selected component color image being regularly distributed along a dimension of said focused image with a predetermined period of recurrence; means for focusing a discontinuous image of said scene in a second selected component color upon said device, the discontinuities of said second selected component color image also being regularly distributed along a dimension of said latter focused recurrence; means for deriving electrical output signals from said image but with a different period of recurrence than said predetermined period of image scanning device in response to the scanning by said device of the images focused thereon, said output signals including respective frequency distinctive components representative of said first and second selected component color images, respectively; and frequency selective means coupled to said signal deriving means and respopsive to said output signals for obtaining therefrom a pair of signals respectively representative of said scene in said first and second selected component colors; said first-named discontinuous image focusing means including a first light path for light from said scene, color selective optical means for restricting the light in said first path to light of said first selected component color, and a first optical grating disposed in said first light path and comprising a plurality of regularly distributed elements opaque to said first selected component color; said second-named discontinuous image focusing means comprising a second light path for light from said scene, additional color selective optical means for restricting the light in said second light path to light of said second selected component color, and a second optical grating disposed in said second light path and comprising a plurality of regularly distributed elements opaque to said second selected component color.

2,733,292
SYSTEM FOR CORRECTING THE EQUILIBRIUM POTENTIAL OF STORAGE TUBES

John Edward Cope and Richard Theile, Cambridge, England, assignors to Cathodeon Limited, Cambridge, England, a British company

Application May 8, 1950, Serial No. 160,688
10 Claims. (Cl. 178—7.2)

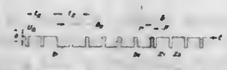


1. Television apparatus comprising a video storage tube having a charge-storage surface associated with a signal-plate electrode and adapted to form a charge pattern in response to an image incident upon said storage surface, means for scanning said surface with a high-velocity electron beam to discharge said surface to an equilibrium potential, a collector electrode for collecting electrons emitted from the said storage surface under the action of the scanning beam and of the incident image, a large-area source of electrons within the tube, an electron optical focussing device on said tube for forming an image of said large-area source on said charge-storage surface to cause the latter to emit electrons, means associated with said large-area source and operable during each frame flyback period of the scanning beam for pulsing said source, means to cause electron emission therefrom at a high velocity so that, as a result, secondary electrons are emitted from the charge-storage surface, the number of secondary electrons emitted exceeding the number of impinging primary electrons from said source, and a source of field-forming potential connected to one of said electrodes and operable simultaneously with said source-pulsing means for applying a field in the neighbourhood of said storage surface to cause the emitted secondary electrons to return to that surface, whereby to charge said storage surface negatively during the flyback period and thereby shift its potential negatively from said equilibrium valve attained by the discharging action of the scanning beam.

2,733,293
DEVICE FOR IMAGE SYNCHRONIZATION IN TELEVISION EQUIPMENT

Egon Neumann, Berlin-Friedenau, Germany, assignor to Loewe Opta A. G., Berlin-Steglitz, Germany, a company of Germany

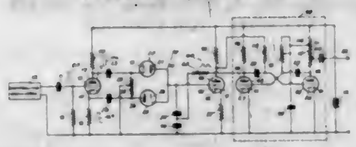
Application August 25, 1952, Serial No. 306,107
2 Claims. (Cl. 178—69.5)



1. A device for image synchronization in television equipment containing a control grid valve, the anode circuit of which being provided with means differentiating the rear edge of the last partial impulse of the series of impulses which form the image synchronizing signal after said rear edge has overcome the negative blocking voltage of a control valve and thereby released the image relaxation voltage, additional means for a second differentiation being provided in the circuit of a succeeding control-grid valve with negative blocking voltage, said further means

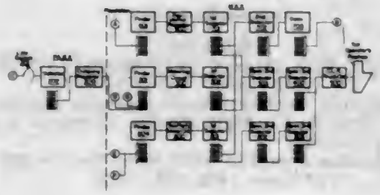
for differentiation being adapted to create a positive impulse which begins one line-impulse width later, and which releases the image relaxation current in the anode circuit belonging thereto.

2,733,294
PHASE DISCRIMINATOR
John D. Morris, Allston, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application November 26, 1952, Serial No. 322,613
6 Claims. (Cl. 178—69.5)



6. In an automatic frequency control circuit, a source of controlling frequency, a voltage-controlled source of sinusoidal oscillations, a phase discriminator comprising an integrating circuit, means to apply the output of the source of controlling oscillations to said integrating circuit, means to apply a portion of the output of the controlled sinusoidal oscillator to said integrating circuit, means to clamp said integrating circuit to a reference potential at a predetermined point in the cycle of the output of the controlling oscillator comprising a phase splitter for the output of the source of the controlling frequency reproducing this output in opposing phases, means to couple each phase to the integrating circuit comprising a rectifier and a capacitor in series with an impedance inserted between the coupling circuits having a center tap connected to a reference potential to develop across the integrating circuit a control voltage that varies as the relative phase of the output of the controlled and controlling oscillators, and means to apply said voltage to the frequency control circuit of said controlled sinusoidal oscillator to maintain the frequency of its output at an integral multiple of the frequency of the controlling oscillator.

2,733,295
TELEPHONE SYSTEM
Clarence E. Lomax, Chicago, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application March 14, 1951, Serial No. 215,561
21 Claims. (Cl. 179—6.3)

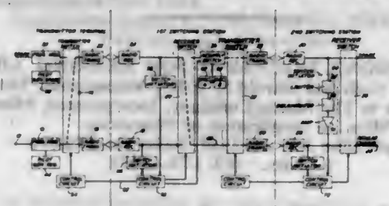


9. In a telephone system, a group of local paystation subscriber lines each having an individual paystation, a paystation repeater common to said group of paystation subscriber lines for controlling collection of deposited coins in a calling paystation, said paystation repeater being normally operative in response to the receipt of reversal of battery for preparing for the collection of coins deposited in the calling paystation on local calls between local subscriber lines, a group of local metered single party subscriber lines, an individual meter for each single party subscriber line, a metering control circuit common to said group of local metered single party subscriber lines for controlling the operation of a calling single party's individual meter, said metering control circuit being normally operative in response to the receipt of reverse battery for preparing for the operation of the calling single party's individual meter on local calls between local subscriber lines, a group of local metered two-station subscriber lines, an individual meter for each station on each two-station subscriber line, a two-station metering control circuit common to said two-station subscriber lines for selecting and controlling the operation of a calling station's individual meter, said two-station metering control circuit being normally operative in response to the receipt of reverse battery for preparing for the operation of the selected calling station's meter on local calls between local subscriber lines, a toll trunk terminating in an operator's position, means for establishing a connection from any one of said local subscriber lines to said toll trunk to extend an incoming toll call to said operator's position; coin refunding current connecting means, battery reversing connecting means, and booster battery connecting means in said toll trunk; means in said toll trunk for operating each of said specified connecting means in response to the operator at said position answering said incoming toll call to said toll trunk; means effective in case the calling line originating said incoming toll call to said toll trunk is a paystation subscriber line for refunding coins deposited in the paystation of the calling line by the operation of said toll trunk coin refunding current connecting means, for completing a talking circuit between the calling paystation line and the operator and for momentarily conditioning said paystation repeater for operation by the operation of said toll trunk battery reversing connecting means, and for disabling said momentarily conditioned paystation repeater by the operation of said toll trunk booster battery connecting means to prevent said repeater from collecting deposited coins during said incoming toll call; means effective in case the calling line originating said incoming toll call to said toll trunk is a metered single party subscriber line for momentarily conditioning said metering control circuit for operation by the operation of said toll trunk battery reversing connecting means, and for disabling said momentarily conditioned metering control circuit by the operation of said toll trunk booster battery connecting means to prevent said metering control circuit from operating the calling single party subscriber meter during said incoming toll call; and means effective in case the calling line originating said incoming toll call to said toll trunk is one of the stations on a metered calling two-station subscriber line for momentarily conditioning said two-station metering control circuit for operation by the operation of said toll trunk battery reversing connecting means, for disabling said momentarily conditioned two-station metering control circuit to prevent the operation of the calling station's individual meter during said incoming toll call by the operation of said toll trunk booster battery connecting means.

2,733,296
AUTOMATIC LINE SWITCHING CIRCUITS
John B. Maggio, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application September 13, 1952, Serial No. 309,447
15 Claims. (Cl. 179—15)

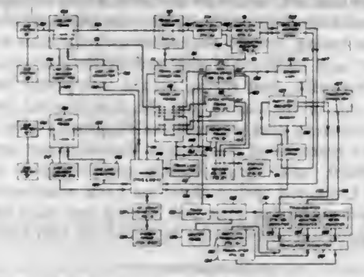
1. In a communication system, transmitting and receiving stations, at least one working channel linking said stations, a spare channel also linking said stations, switches at each station to permit substitution of the spare channel for a failed working channel, means at the transmitting station for applying a first pilot signal to each working channel and for applying a different pilot signal to the spare channel, means at the receiving station for each channel and operative in response to a

specified change in a selected characteristic of the first pilot signal for actuating said switch at the transmitting station to connect the spare channel to the associated working channel and means at the receiving station and



responsive to the first pilot signal transmitted over the spare channel when connected to a working channel for actuating the switch at the receiving station to substitute the output of the spare channel for that of the failed working channel.

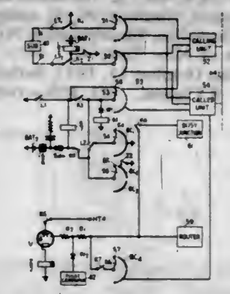
2,733,297
MULTIPARTY SELECTIVE SIGNALING AND IDENTIFICATION SYSTEM
Richard C. Matlack, Summit, and Frederick W. Metzger, Rutherford, N. J., James H. Miller, Denver, Colo., and Edward Vroom, Tarrytown, N. Y., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 3, 1953, Serial No. 372,968
20 Claims. (Cl. 179—17)



1. In a telephone system, a plurality of subscriber lines including a party line having a plurality of stations connected thereto, said stations adapted to originate and receive calls, said lines characterized by class codes representing the class of service for which the subscribers connected thereto have contracted, said party line being characterized by a party line class code of said class codes, selective signaling means at each of said stations adapted to transmit on said party line a different distinctive signal, a class code register representing the class code of said party line and operable in response to a call originated from any of said stations over said party line, energizing means responsive to the operation of said class code register for energizing the selective signaling means at a calling one of said stations, means including the selective signaling means at said calling one of said stations when energized by said energizing means for applying to said party line the different distinctive signal of said calling one of said stations and means for detecting said different distinctive signal of said calling one of said stations on said party line to identify said calling one of said stations.

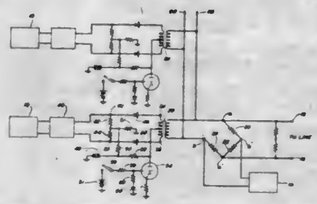
16. In a telephone system having a plurality of lines including a party line having a plurality of party stations thereon, a signaling means for applying a ringing signal to said party line for signaling a called one of said party stations, means controlled by said called one of said party stations for removing said ringing signal from said line when said called one of said party stations answers the call, timing means for removing said ringing signal from said party line after a predetermined interval if said called one of said stations fails to answer the call and further means controlled by said timing means for applying a tone signal to said line to indicate to the calling party station on said line that the called one of said party stations does not answer.

2,733,298
AUTOMATIC TELEPHONE SYSTEMS
Alexander Albert Chubb, Coventry, England, assignor to The General Electric Company Limited, London, England
Application November 28, 1951, Serial No. 258,548
Claims priority, application Great Britain November 29, 1950
10 Claims. (Cl. 179—18)



10. In an automatic telephone exchange; a subscriber's line circuit for connecting a subscriber either to one of a first group of switching units which are utilised during calls originating from the subscriber or to one of a second group of switching units which are utilised during calls made to that subscriber, comprising an electromagnetic step-by-step switch which has a stepping mechanism and which has two groups of adjacent contacts in a bank, first connections between the contacts of one of these groups of contacts and the first group of switching units one to one, second connections between the contacts of the other group of contacts and the second group of switching units one to one, means to operate the stepping mechanism to cause said switch to hunt in the first group of contacts to find a free switching unit of the first group thereof when the subscriber connected to the line circuit applies a calling condition, and means to operate the stepping mechanism to cause the said switch to hunt in the second group of contacts to find a free switching unit of the second group thereof when the subscriber is being called through the exchange.

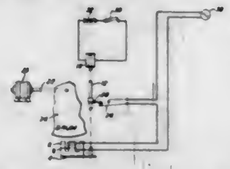
2,733,299
SELECTOR SWITCH CIRCUIT
Elliot M. Staples, Hohokus, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 19, 1953, Serial No. 375,251
5 Claims. (Cl. 179—84)



1. A selective circuit for applying either a first tone signal or any of a plurality of other tone signals to a transmission facility comprising a source of said first tone signals, a plurality of sources of said other tone signals, a plurality of switches for controlling respective signal

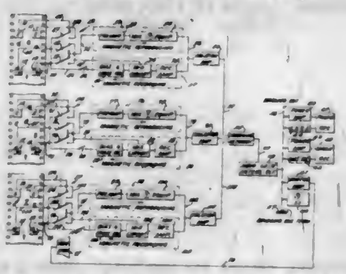
paths between said last-mentioned sources and said facility, each of said plurality of sources having a relatively high output impedance when its signal path to said facility is interrupted by its associated switch and a relatively low impedance at other times, a four-arm bridge including in one arm the paralleled output circuit of said switches and proportioned for balance only when the output impedance of a predetermined number of said other sources are at their relatively low values, means for connecting said one signal source across one diagonal of said bridge and means for connecting the other diagonal of said bridge to said transmission facility.

2,733,300
MEANS FOR BULK DEMAGNETIZATION
James Z. Menard, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application October 11, 1951, Serial No. 250,860
8 Claims. (Cl. 179—100.2)



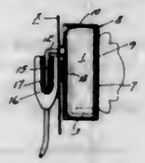
1. In magnetic recording system, a rotating cylinder, a magnetic record medium disposed on the surface of said cylinder, support means adjacent said rotating cylinder, a source of low frequency alternating current, demagnetizing means movably mounted on said support means for movement toward and into erase position for the record bearing portion of said cylinder, and for movement away from the record bearing portion of said cylinder, said demagnetizing means comprising a core of magnetizable material including a plurality of poles, a coil wound on one of said poles, said poles having faces positionable in close relation with and extending across the width of the record bearing portion of said cylinder, means for energizing said coil by current from said source of alternating current prior to erasing the record on said record bearing portion and for deenergizing said coil after erasing said record bearing portion, said demagnetization means being withdrawn a predetermined distance from said record bearing portion after said erasure has been completed and before said coil is deenergized.

2,733,301
SOUND RERECORDING SYSTEM
Hollis D. Bradbury, Bronxville, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application October 14, 1952, Serial No. 314,709
9 Claims. (Cl. 179—100.2)



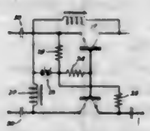
7. A rerecording system for a plurality of magnetic films movable along predetermined paths, said system comprising means for simultaneously reproducing a track from each film and rerecording said track thereon, said means including means for varying the amplitude of each of said rerecorded tracks from that of said first tracks, and means for recording all of said reproduced track as a single track.

2,733,302
MICROPHONE MOUNTING FOR HEARING AIDS
Robert L. Geib and Harold S. Wiley, Minneapolis, Minn., assignor to The Maico Company, Incorporated, Minneapolis, Minn., a corporation of Minnesota
Application July 26, 1950, Serial No. 175,896
1 Claim. (Cl. 179—107)



In a device of the class described, a casing having a forwardly-projected open end and a rear wall, a microphone within said casing, a pair of laterally-spaced anchoring pins extending through the rear wall of said casing and projecting laterally-outwardly therefrom, electrical conduit means connecting the inner ends of said anchoring pins with said microphone, said anchoring pins having downturned outer end portions which are substantially parallel to each other and to the plane of the rear wall of the casing, female connector socket means adapted to receive said anchoring pins and make electrical connection therewith, and spring means interposed between the rear wall of the casing and the downturned portions of said anchoring pins whereby to frictionally grip a portion of the garment of the wearer therebetween and said socket means, said spring means comprising a pair of generally U-shaped spring clips one each associated with one of said anchoring pins and having one each of their opposite ends anchored in the rear wall of said casing.

2,733,303
BIDIRECTIONAL AMPLIFIERS
Walter Koenig, Jr., Clifton, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 2, 1951, Serial No. 239,947
10 Claims. (Cl. 179—170)



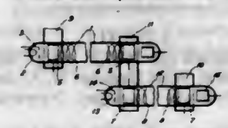
9. A four-terminal network for interconnecting a pair of external networks comprising a pair of transistors each having an emitter electrode, a collector electrode and a base electrode, means connecting together a first pair of electrodes, means connecting one of said external networks in a first circuit including, in series within said first circuit, said first pair of electrodes and a second pair of electrodes other than the electrodes of said first pair, and means connecting the other of said external networks in a second circuit including, in series within said second circuit, said first pair of electrodes and a third pair of electrodes other than the electrodes of said first and said second pairs, each of said pairs of electrodes including an electrode from each of said transistors and at least one of said pairs comprising a pair of unlike electrodes.

2,733,304
BIDIRECTIONAL AMPLIFIERS
Walter Koenig, Jr., Clifton, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 2, 1951, Serial No. 239,948
9 Claims. (Cl. 179—170)



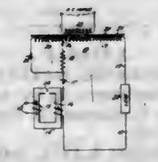
1. A bilateral amplifier for interconnecting a pair of external circuits comprising a pair of transistors each having an emitter electrode, a collector electrode and a base electrode, means connecting together a pair of unlike electrodes, one from each transistor, means connecting one of said external circuits to a pair of electrodes, one from each transistor and other than the electrodes of said pair of unlike electrodes and means connecting the other of said external circuits to the remaining pair of electrodes.

2,733,305
ARRANGEMENT FOR AMPLIFYING CENTIMETRE WAVES
Gesinus Diemer, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application July 23, 1949, Serial No. 106,452
Claims priority, application Netherlands September 30, 1948
2 Claims. (Cl. 179—171)



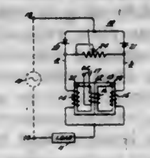
1. Apparatus for amplifying centimetre waves comprising first and second traveling wave tubes each including a helix and means to direct an electron beam along the axis of the helix, the helix in the first tube having a length corresponding to a relatively great number of wavelengths, the helix in the second tube having a length corresponding to a relatively small number of wavelengths, said numbers being at least in a two to one ratio, means coupling the output of the helix in the first tube with the input of the helix in the second tube, means coupled to the input of the helix in the first tube for inserting an input signal thereat, and means coupled to the output of the helix in the second tube for deriving output signals therefrom corresponding to the input signal.

2,733,306
RAPID RESPONSE SELF-SATURATING MAGNETIC AMPLIFIER
Burnice D. Bedford, Scotia, N. Y., assignor to General Electric Company, a corporation of New York
Application July 29, 1952, Serial No. 301,447
14 Claims. (Cl. 179—171)



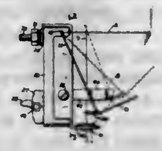
1. A control circuit comprising a saturable reactor having a load winding and a control winding, a pair of conductors for connection to an alternating current source, a series circuit connected between said conductors comprising an impedance element, a rectifier, said load winding, and output terminals for connection to an electric load device whereby rectified current produced in said series circuit through a pulsating interconnected load device is controllable by a signal current supplied to said control winding, and means for supplying an auxiliary current through said impedance element in the same direction as said rectified series circuit current only when current in said circuit is blocked by said rectifier.

2,733,307
STABILIZED FULL WAVE SELF-SATURATING MAGNETIC AMPLIFIER
Hugh M. Ogle, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application April 23, 1953, Serial No. 350,627
8 Claims. (Cl. 179—171)



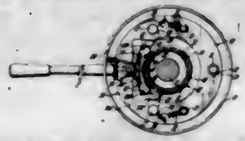
3. A stabilized full wave self-saturating magnetic amplifier comprising saturable reactor apparatus having two load windings, a pair of rectifiers connected together at one end and each connected at the other end to a different one of said load windings thereby to form two conducting circuit branches, said circuit branches being connected for energization by an alternating current source, an electric load connected to be energized by current conducted by both of said circuit branches, said rectifiers being poled in such a manner that said circuit branches conduct on alternate half cycles of the alternating current source and said electric load device is energized by a unidirectional voltage, and a resistor connected between said other ends of said rectifiers.

2,733,308
DETECTOR FOR BROKEN STRANDS OF YARN
Edward Vossen, Lynbrook, N. Y., assignor to Stop-Motion Devices Corp., Brooklyn, N. Y.
Application September 8, 1953, Serial No. 378,715
8 Claims. (Cl. 200—61.13)



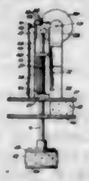
1. A yarn detector comprising a housing, a wire probe carried by the housing and pivotable thereon, a spring connected at one end to an end portion of the probe, an electrical element disposed to contact the said end portion in one position thereof, said probe having a section bent to engage a movable strand of yarn with the probe held under spring tension, and a yarn holder attached to said housing and having a V-shaped section, whereby the said yarn when slack may be caught in said V-shaped section, and said end portion of the probe may contact said electrical element when the probe is free from engagement with the yarn, said yarn holder comprising a pair of spring fingers attached at one end to said housing and bent to contact each other to form a substantially V-shaped section with the free ends of said fingers flaring outwardly.

2,733,309
DIRECTIONAL SIGNAL SWITCH
Harold V. Elliott, Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 17, 1951, Serial No. 262,047
12 Claims. (Cl. 200—61.34)



1. In a directional signal of the manually set automatic cancelling type mountable on the steering column of an automobile comprising a housing fixable on said steering column around the steering shaft therein, a cancelling cam element on said steering shaft turnable therewith, a switch element fixed in said housing, a switch operating assembly comprising a base plate swingably mounted in said housing and means engaging said switch element for operating the same, a cover plate mounted on said base plate including an operating lever extending therefrom through said housing, a trigger element disposed in limited floating relationship between said base plate and said cover plate, and spring means urging said trigger element against said cancelling cam when said switch operating assembly is moved manually from its neutral position to a turn position, said cancelling cam engaging said trigger and returning said switch operating assembly to its neutral position responsive to turning the steering shaft from said turn position toward its straight driving position.

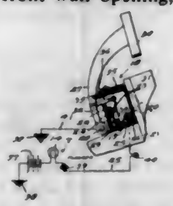
2,733,310
IMPACT SWITCH DEVICE
Walter A. Tratsch, Chicago, Ill.
Application October 26, 1953, Serial No. 388,402
8 Claims. (Cl. 200—61.45)



8. In a signal device responsive to impact, an elongate shaft shiftable between extended and impacted positions of adjustment, means resiliently urging said shaft towards its normal extended position, a disc member mounted for rotational movement in a plane substantially parallel to the elongate shaft between starting and rotated positions, an extension offset from the center of rotation of said member and lying in the path of movement of said shaft when the latter is in starting position, means resiliently urging said member for rotational movement in the direction towards starting position, means for arresting movement of said member when in starting position, a switch operated arm shiftable between normal and operated positions of adjustment, and an operative connection between said switch arm and said member for displacement of the switch arm from normal to operated positions when the member is in other than in starting position.

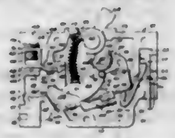
2,733,311
VEHICLE CROSSING SIGNAL
Theodore G. Brown, Placerville, Calif.
Application June 26, 1953, Serial No. 364,298
1 Claim. (Cl. 200—61.89)

An electric signal switch for motor vehicles comprising a housing formed of electrical insulating material and having a rear wall disposed against and secured to the underside of a vehicle foot pedal tread plate, said housing having a front wall provided with an opening, a stationary switch contact disposed in the housing and secured to the front wall, means projecting from said front wall, a curved lever having one end pivotally connected to said means and swingably supported thereby externally of the housing for swinging movement toward and away from said front wall, said lever having a small tread plate at its opposite end, an arm fixed to the lever and extending loosely through the front wall opening, a movable con-



tact supported by said arm within the housing for movement toward and away from the stationary contact, spring means connected to the housing and lever and urging the lever toward the housing and the movable contact away from the stationary contact, and a stop secured to the housing and engaging the lever to limit swinging movement of the lever toward the housing under the biasing action of the spring means for positioning the movable contact out of engagement with the fixed contact and for locating the lever tread plate substantially coplanar to and spaced from an upper edge of the foot pedal tread plate.

2,733,312
CIRCUIT BREAKER WITH ARC BLOW-OUT
Paul M. Christensen, West Orange, N. J., assignor to Federal Electric Products Company, Newark, N. J., a corporation
Application January 7, 1950, Serial No. 137,402
12 Claims. (Cl. 200—87)



1. In an electric device, a casing having portions defining an arcing chamber therein, said casing having an opening extending from said chamber to the exterior of the casing, a stationary contact disposed in said arcing chamber, a companion contact movable into engagement with and disengagement from said stationary contact, and a blow-out member straddling said contacts in the engaged condition thereof for directing arcs generated between said contacts through said arcing chamber to the exterior of said casing, said blow-out member being secured to said casing and extending into said arcing chamber, said blow-out member being a U-shaped member having a bight provided with upwardly extending horn elements which straddle the path of movement of said companion contact.

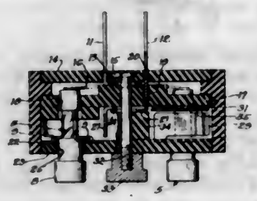
2,733,313
AUTOMATIC SWITCHES
Gaetano Rapizzi, Parabiago, Italy, assignor to Officine Elettromeccaniche F. Rapizzi & Figli, di Gaetano Rapizzi, Parabiago, Italy
Application September 4, 1952, Serial No. 307,771
Claims priority, application Italy September 29, 1951
4 Claims. (Cl. 200—89)

1. A slow manual opening and quick closing switch with automatic opening for excess current, comprising a fixed contact, an oscillating pivoted lever, a movable contact carried by said oscillating lever, spring means acting on said lever for urging the movable contact into closing position, a solenoid traversed by the current to be interrupted upon separation of the contacts and having a vertical axis, an axial cylindrical guide in said solenoid, a core movable axially of said solenoid in said cylindrical guide, a rod slidably mounted in the same guide in alignment with said core and having a wedge-like head, said lever



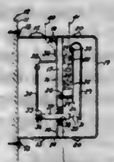
having a portion lying in the path of travel of said wedge-like head, said head being actuated by said core for engaging and controlling said oscillating lever for the automatic opening of the contacts against the action of said spring means and for yieldingly keeping said contacts open, and manually operated means for positively bringing said contacts in position of complete opening permitting the resetting of the rod with wedge-like shaped head for the automatic opening and for leaving them free to the action of said spring means for the closing.

2,733,314
SAFETY ELECTRIC PLUG AND OUTLET
Christian D. Schmidt, Kenosha, Wis.
Application April 8, 1954, Serial No. 421,772
2 Claims. (Cl. 200—115.5)



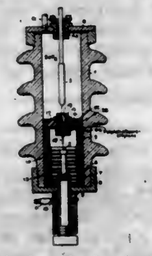
1. A fuse box comprising an insulating housing structure having a plurality of current outlet stations each including a pair of current carrying contacts matching the electrodes of an ordinary extension cord plug, a plurality of fuse nests each of which is defined by aligned spaced openings in said housing structure with the outer ends of said nests including removable fuse retainers protruding from one side of said housing and receiving the outward ends of fuses engaging said fuse box, the inner ends of said nests being established by a spring constructed of flat current carrying material and having a branch across the lines of each of said nests said spring being bowed and tensioned between the adjacent wall structure of the other side of said housing and the respective inner ends of such fuses, a current intake electrode extending integrally from said spring through said adjacent wall structure said electrode being adapted to be inserted into one of the openings of a conventional wall plug socket and carry current from such socket through said spring, fuse and retainer to one of each pair of said current carrying contacts, and a mating intake electrode connected directly with the other one of each pair of said contacts.

2,733,315
COLD WALL THERMOSTAT
Max C. Richardson, Portland, Oreg., assignor to Iron Fireman Manufacturing Company, Portland, Oreg.
Application June 16, 1953, Serial No. 361,893
10 Claims. (Cl. 200—138)



1. An improved thermostat adapted to be mounted on the inside surface of an outside wall of a space to be heated whereby the heat supplied to the space will be controlled by said thermostat as a function of the combination of the air temperature in said space and the temperature of the inside surface of said outside wall, said thermostat comprising an insulating barrier substantially parallel to said inside surface of said outside wall and spaced therefrom, a first temperature responsive element on the side of said barrier away from said wall and exposed to the air in said space, a second temperature responsive element between said barrier and said wall and adapted to exchange radiant energy with the inside surface of said wall, a first control circuit contact adapted to be positioned by said first temperature responsive element and a second control circuit contact adapted to be positioned by said second temperature responsive element, whereby the closure of said contacts one on the other to start a supply of heat to said space will be determined by both the ambient air temperature of the said space and the inside temperature of said outside wall.

2,733,316
ARC-EXTINGUISHING DEVICES
Thomas E. Browne, Jr., and Albert P. Strom, Forest Hills, and Harvey E. Spindle, Wilkins Township, Allegheny County, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application September 14, 1954, Serial No. 455,976
21 Claims. (Cl. 200—148)

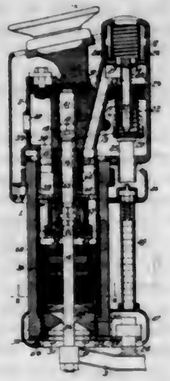


1. An arc extinguishing device including as an arc extinguishing medium a gas comprising selenium hexafluoride, and means for establishing an arc within said medium, the medium being capable of effecting extinction of the arc.

2,733,317
INTERRUPTER EMPLOYING AXIALLY ARRANGED BARRIER PLATES FOR INTERRUPTING SERIES ARCS
Philip L. Taylor, Abington, Mass., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application April 20, 1953, Serial No. 349,688
8 Claims. (Cl. 200—150)

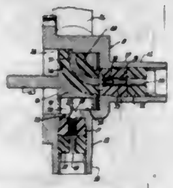
1. In a circuit interrupter immersed in arc extinguishing fluid, a first arcing chamber, a second arcing chamber, a stationary contact arranged to extend within both of

said chambers and comprising a contact engaging surface in each chamber, a first movable contact cooperating with said contact engaging surface in said first chamber to produce a pressure generating arc, a second movable contact cooperable with said contact engaging surface in said second chamber to sequentially produce an interrupting arc, a first arc extinguishing device arranged in said first chamber and comprising a plurality of barrier plates arranged transversely of said pressure generating arc, said first device defining a first passageway extending from said one contact engaging surface through said barrier plates and a second passageway extending through said barrier plates transversely of said first passageway, said second passageway comprising an inlet portion issuing into said first passageway on one side thereof and



aligned with an outlet portion issuing from said first passageway on the other side thereof, means for moving said first movable contact through said first passageway of said first device to ignite and extend said pressure generating arc, a piston operatively connected to said first movable contact and movable therewith for causing a flow of fluid through said second passageway and across said first passageway of said first device to cool and extinguish said pressure generating arc, means for moving said second movable contact to ignite said interrupting arc after ignition of said pressure generating arc and for extending said interrupting arc, and a second arc extinguishing device arranged in said second chamber and comprising a plurality of barrier plates arranged transversely of said interrupting arc to cool and extinguish said interrupting arc.

2,733,318
COAXIAL SWITCH
George E. Jacques, Cleveland, and Richard L. Gates, Eastlake, Ohio, assignors to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application June 21, 1952, Serial No. 294,788
15 Claims. (Cl. 200—153)

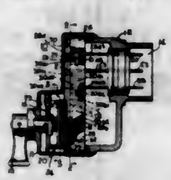


1. A coaxial switch comprising a housing having a chamber therein, terminal members carried by said housing disposed adjacent the periphery of said chamber and spaced apart arcuately thereof by a predetermined angle, a rotor mounted within said chamber for arcuate movement, and a contact member carried by said rotor and adapted for selective engagement with said terminal members of said housing by arcuate movement of the rotor in said chamber, said rotor having a body portion of substantial segmental shape providing a wall arcuately spaced from said rotor contact member by said predetermined angle and substantially spaced from the periphery of said chamber so as to be spaced from unused contacts of said switch housing at any given position of said rotor to isolate such unused contacts.

2,733,319
MATERIAL FOR ELECTRIC CONTACTS
Eric Arvid Ericsson, Stockholm, and Anders Ossian Jörgensen, Bromma, Sweden, assignors to Telefonaktiebolaget L M Ericsson, Stockholm, Sweden, a company of Sweden
No Drawing. Application June 14, 1952, Serial No. 293,686
Claims priority, application Sweden July 14, 1950
6 Claims. (Cl. 200—166)

5. An electric contact material in form of a comparatively porous body composed of coherent rhenium particles at least 70% of which have a diameter of at most 0.004 mm., the porosity of said body being between 5% and 40%.

2,733,320
ELECTRICAL ASSEMBLY
Vincent R. Herterick, Waltham, Mass., assignor, by mesne assignments, to United-Carr Fastener Corporation, Boston, Mass., a corporation of Delaware
Application May 7, 1953, Serial No. 353,616
2 Claims. (Cl. 200—166)

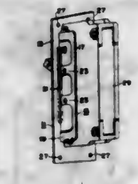


1. An electrical assembly, comprising an insulating support and a series of conductor members assembled therewith so as to provide a series of electrical paths in the support which change position in passing therethrough in such a manner that some of said paths cross each other, said support having a series of transversely extending recesses extending between predetermined positions on one face thereof so that some of the recesses intersect each other, said intersecting recesses having portions adjacent the intersection having different depths, said conductor members having medial portions seated in said recesses and other portions extending therefrom for making electrical contact to an external circuit, and a cover plate disposed on said one face of the support, said cover plate having means projecting therefrom and extending into the recesses to bear against said conductor members to retain them in assembly therein.

2,733,321
MOUNTING MEANS FOR CIRCUIT BREAKERS
Hiller D. Dorfman and Melvin Bingenheimer, Beaver, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application June 14, 1952, Serial No. 293,578
14 Claims. (Cl. 200—168)

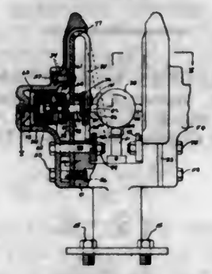
1. A circuit breaker mounting device comprising a flat rigid member having an opening therein smaller than said breaker for receiving a portion of a circuit breaker, a generally U-shaped resilient member secured to said flat rigid member and having spaced resilient side portions for receiving the circuit breaker therebetween, said resilient member being electrically insulated from the

circuit, and said resilient side portions upon the insertion of a circuit breaker therebetween snapping behind



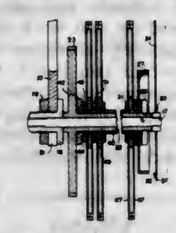
lateral projections on opposite sides of said circuit breaker to firmly hold said circuit breaker in place.

2,733,322
ELECTRIC SWITCH
Thomas E. Curtis, Hampton, Ga., assignor to Southern States Equipment Corporation, a corporation of Georgia
Application August 22, 1952, Serial No. 305,739
3 Claims. (Cl. 200—170)



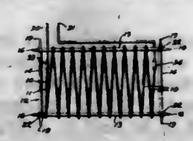
1. In a high voltage twist blade electric switch, a jaw contact comprising a resilient reverse loop with the line connected to the outer fixed end of said loop and a blade rotatable about its longitudinal axis engaging the inner movable side of said loop, a prestressed spring assembly engaging the inner movable side of said loop to exert yielding resistance to outward movement thereof when engaged by the blade, means limiting inward movement of said movable side of the jaw, a relatively fixed abutment for the line side of said jaw on the opposite side of the prestressed spring assembly from the secured end of the line side of the jaw, and means to rotate the blade about its longitudinal axis during opening and closing of the switch.

2,733,323
ROTARY SWITCH
Duncan N. MacDonald, Arcadia, Calif., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application November 5, 1952, Serial No. 318,827
4 Claims. (Cl. 200—171)



1. In an automatic switching apparatus, a plurality of wiper blades, an insulating member, a shaft supporting said insulating member, a phenolic bushing supported on said shaft, three longitudinal grooves in said insulating member, two key lugs on the external circumference of said phenolic bushing, and three lugs projected from the internal circumference of said bushing, a metallic member secured to said shaft, two cut out portions in said metallic member for suitably receiving said key lugs on said bushing to interlock said shaft and bushing, said three lugs cooperating with said grooves of said insulating member to further interlock said bushing to said insulating member, prongs on said wiper blades projecting into said grooves for locking said blades to said insulating member, whereby the wiper blades are locked to said shaft and are insulated from said shaft by said insulating member.

2,733,324
ELECTRICAL HEATING UNIT AND METHOD OF MAKING SAME
Bahidj B. Sabouni, Oakland, Calif.
Application March 16, 1953, Serial No. 342,541
8 Claims. (Cl. 201—64)

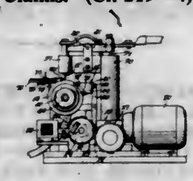


1. An electrical heating unit comprising: a casting of heat conductive material; an electrically insulated resistance wire embedded within said casting and intimately surrounded by said casting material; the insulation on said wire comprising a finely woven flexible braid of electrically insulated high heat conductive strands of material.

2,733,325
ELECTROCONDUCTIVE ARTICLE
Samuel Frank Cox, Arnold, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
No Drawing. Application March 22, 1951, Serial No. 217,080
4 Claims. (Cl. 201—73)

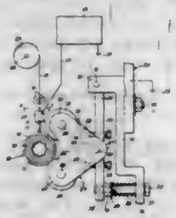
1. A transparent article of manufacture which comprises a transparent glass base having thereon a transparent electroconductive tin oxide film having a coefficient of linear expansion of from 5 to 6×10^{-6} per °C., said glass base having a coefficient of linear expansion which does not differ from the coefficient of linear expansion of the film by more than 30 percent.

2,733,326
MACHINE FOR MAKING CONTACT-CARRYING MEMBER
Clarence E. Tuller, Galion, Ohio, and Franklin J. Hickman, Fort Worth, Tex., assignors to North Electric Company, a corporation of Ohio
Application June 5, 1951, Serial No. 229,906
7 Claims. (Cl. 219—4)



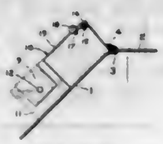
1. In a machine of the class described, a welding electrode comprising a disc mounted for rotation about its central axis, means for rotating said disc through angular increments of a predetermined value with each operation thereof, and electrode forming recesses on the periphery of said disc of a total number other than a multiple of the number of recesses in the space through which said disc moves in each angular increment of its movement.

2,733,327
WELDING APPARATUS
Gustav A. Frojd, Rockford, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application November 9, 1951, Serial No. 255,575
7 Claims. (Cl. 219—8)



1. Electrical contact mechanism for providing means for completing a continuous electrical circuit between the contact mechanism and a work piece comprising a plurality of metallic rollers of electrically conducting material adapted to be held in rolling contact with said work piece, means electrically connecting said rollers to a point of predetermined electrical potential including a retainer of electrically conducting material in electrical connection with said plurality of rollers and constructed and arranged to rotatably carry said rollers, and means associated with said retainer constructed and arranged to effect holding of said rollers in rolling contact with the work piece.

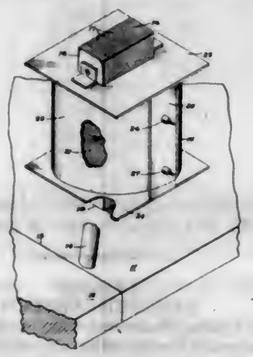
2,733,328
MEANS FOR RETAINING FLUX ON WORK DURING THE PROCESS OF SUBMERGED ARC WELDING
Joseph P. Newbold, Sommerville, N. J., assignor to Worthington Corporation, Harrison, N. J., a corporation of Delaware
Application September 24, 1953, Serial No. 382,175
7 Claims. (Cl. 219—8)



1. Means for retaining flux on work during the welding thereof comprising, a flexible dam including a plurality of elements mounted adjacent each other on a flexible shaft, means for supporting said flexible dam and connected to the dam on both ends thereof, said means including at least one magnet adapted to affix itself to said work.

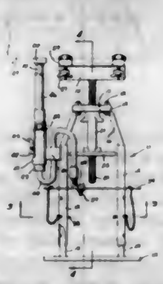
2,733,329
DEMAGNETIZING METHOD
Alfred D. Esposito, New York, N. Y.
Application June 23, 1952, Serial No. 295,133
2 Claims. (Cl. 219—10)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A method of arc welding a steel plate at a portion thereof, said method comprising the steps of generating an electromagnetic field by direct current, said field having a linear axis terminating in point poles controlling the polarity of said field, controlling the intensity of said field, locating said field with the magnetic axis normal to the plate surface and with the north pole touching the plate surface and about four inches from said plate portion to condition the magnetic properties of said steel workpiece and with the south pole remote from said plate surface, and forming an arc at said plate portion



and regulating and moving the arc along the line of desired juncture.

2,733,330
WELDER'S WORK STAND
Kirby A. Blewett, Corpus Christi, Tex.
Application March 12, 1954, Serial No. 415,862
2 Claims. (Cl. 219—17)



1. A welder's work stand comprising a base of conductive material, upstanding elements on said base, a collar member carried by the upper ends of said upstanding elements, a work supporting member positioned above and spaced from said collar member, a stud dependingly carried by said work supporting member and connected to said collar member for vertical up and down movement, means operatively connected to said stud for effecting the up and down movement of the latter, a vertical ground sleeve secured to said base, a conductive contact plunger slidably mounted in said sleeve, flexible cable means electrically connecting said contact plunger to said base, spring means biasing said plunger upwardly toward a position adjacent the upper portion of said work-supporting member, whereby said plunger will engage a work piece positioned on said work-supporting member, and means for releasably clamping said plunger in a fixed position relative to said sleeve, the top portion of said work-supporting member comprising a V-shaped plate element and a plurality of ball bearing members mounted on said plate element, said ball bearing members being spaced on opposite sides of the apex line of said V-shaped plate element.

2,733,331
RADIANT ENERGY CIGARETTE LIGHTER
Bernard J. Call, Los Angeles, Calif.
Application June 5, 1953, Serial No. 359,699
11 Claims. (Cl. 219—32)

1. In ignition apparatus for cigarettes and the like: a support; a generally ellipsoidal member carried by said support and having an inner reflecting surface; an incandescent light bulb separate from said member carried by said support and having a light source disposed substantially at one focus of said member; and means carried by said support for holding a cigarette with the end por-



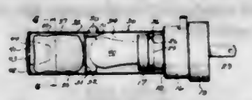
tion of the cigarette located at substantially the other focus of said member, the ellipsoidal portion of said member terminating in a plane adjacent said other focus of said member.

2,733,332
ELECTRIC STOVES
William C. Mason, Slingerlands, N. Y.
Application September 20, 1952, Serial No. 310,669
3 Claims. (Cl. 219—37)



3. In a surface heating unit for electric stoves, having an insulated plane surfaced spiral heating element to support and heat a cooking utensil in surface contact therewith, and a spider to support said heating element, the improvement comprising a rotatable circular frame to underlie said spider; upstanding projections on said frame to extend above said spider to support a cooking utensil; camming bars to overlie said spider and connecting said projections and said frame; and a control lever connected to said frame, having one free end extending centrally thereof pivotally to be secured to said spider, and extending outwardly and upwardly of said frame at its other end to lie in spaced relation from said heating element, to cause said projections to rise and fall between a position flush with said heating element and a position elevated therefrom when said frame is rotated.

2,733,333
INSECTICIDE VAPORIZER
Virgil N. Peters, Stevens Point, Wis., assignor to Miles Henninger, Milwaukee, Wis.
Application June 30, 1952, Serial No. 296,299
11 Claims. (Cl. 219—45)



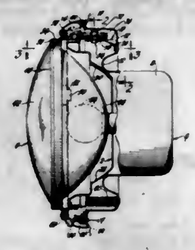
3. In an electrically-heated vaporizer for insecticides, an electric socket of the screw thread type, an electric heating element of the incandescent lamp type adapted to be placed in the socket, a tubular housing mounted on the socket and extending therefrom, the housing being heat conductive material and being divided into an imperforate portion and a perforated portion, the holes in the perforated portion being arranged in two rows longitudinally of the housing and the rows being diametrically opposite, a textile envelope for the insecticide for enclosure in the perforated housing chamber for vaporization of the insecticide upon energization of the heating element, and means for indicating energization of the heating element, the vaporizer being adapted for horizontal extension from an electrical receptacle in a wall and the housing being rotatable relative to the socket whereby the holes may be brought into planes varying in direction from horizontal to vertical for controlling the amount of insecticide discharged upon operation of the vaporizer.

2,733,334
SHIELD FOR FIRE ALARM BOX INDICATING LAMPS
Thomas M. Cosgrove, Bayside, N. Y.
Application February 15, 1952, Serial No. 271,820
5 Claims. (Cl. 240—25)



1. A shield attachment for an annular holder of an incandescent lamp, comprising: a plurality of flat plates connected in crossing relationship and formed with lamp-receiving recesses opening upon one end of the plates; an annular collar fixed to the several plates in the open ends of the recesses; and a tubular screen seated in said recesses and engaged at its ends against movement in the direction of its length in opposite directions by the collar and the inner end edges of the recesses, respectively, said collar including means extending exteriorly of the recesses and spaced from said ends of the plates to define between said plate ends and said means spaces under which the holder is extendable.

2,733,335
HEADLAMP ADJUSTING DEVICE
Robert N. Falge, Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 19, 1949, Serial No. 94,098
3 Claims. (Cl. 240—41)



2. In a device for adjustably securing automobile headlamp units comprising a lens, reflector and light source, said device including universally joined ball and socket members yieldingly urged into engagement by spring means, an adjustable fastener for effecting relative movement of and securing said ball and socket members in various adjusted positions, said fastener consisting of a bracket having an aperture therein and secured to said socket member, an internally threaded element recessed in said aperture and having an arcuately shaped end surface in engagement with said bracket to provide rocking movement therewith in planes parallel with and transverse to the plane of said bracket, means in said element for effecting a frictional engagement between the surfaces of the thread thereof and the thread of an externally threaded element entered in the internally threaded element, said externally threaded element having a turning

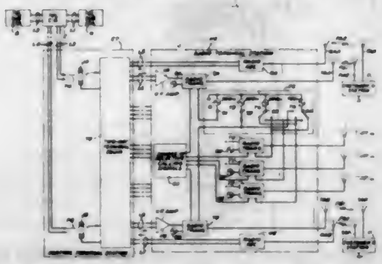
head rotatably secured in the ball member, and means positioned adjacent said internally threaded member for restraining rotary movement of said member about its thread axis.

2,733,336
FASTENING DEVICE
David P. Clayton, Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 22, 1949, Serial No. 123,015
3 Claims. (Cl. 240—41.5)



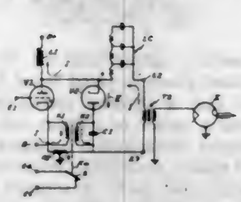
1. In combination, a lamp mounting device door frame having an in-turned edge and an aperture for receiving the lens of a unitary lamp, a unitary lamp including a reflector, lens and light source sealed with an annular flange, said lamp being positioned in said aperture, and a wire spring fastening device for securing said lamp in said door frame comprising a generally U-shaped portion engaging said flange, laterally and inwardly bent semi-circular loops extending from said U-shaped portion forming a yoke for gripping the peripheral edge of said flange, and a pair of legs extending divergently from said loops and in engagement with the in-turned edge of said door frame.

2,733,337
MULTICHANNEL RADIANT ENERGY SIGNALING SYSTEM
Doren Mitchell, Martinsville, N. J., Edward Vroom, Brooklyn, Conn., and William R. Young, Jr., Summit, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application October 18, 1954, Serial No. 462,812
11 Claims. (Cl. 250—6)



1. A radiant energy signaling system having allotted thereto for signaling purposes a plurality of groups of radiant energy signaling channels closely spaced within an assigned portion of the frequency spectrum, said system comprising in combination a first radiant energy signaling station having a plurality of radiant energy transmitters for transmitting carrier waves over any of the channels in any of said groups, a second radiant energy signaling station having receiving means for receiving carrier waves transmitted from said first station over certain of said channels, variable tuning means at said second station for cyclically sweeping the tuning of said receiving means over a section of said assigned portion of the frequency spectrum, said section including all of the channels in a first one of said groups and certain of the channels in the adjacent groups immediately lower and higher in frequency than said first group, a source of low frequency control tone at said first station, means for selectively connecting said control tone source to any one of several of said transmitters transmitting carrier waves over channels in said first group and said adjacent groups, first tuned means at said second station actuated only in response to the reception thereat of said control tone, a first relay at said second station, a circuit for energizing said first relay, said circuit having first and second normally open portions both connected in series, means for closing the first one of said normally open portions only in response to the actuation of said first tuned means, means at said first station for transmitting tone selective calling signals, second tuned means at said second station actuated only in response to the reception thereat of an assigned combination of said tone selective calling signals, a second relay at said second station, means for energizing said second relay only in response to the actuation of said second tuned means, and means for closing the second one of said normally open portions of said circuit only in response to the energization of said second relay.

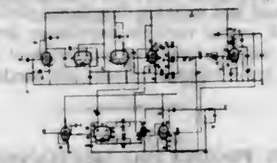
2,733,338
ELECTRONIC PROTECTIVE CIRCUITS
Ralph L. Alsmeyer, West Newton, Mass., assignor to Raytheon Manufacturing Company, Waltham, Mass., a corporation of Delaware
Application November 6, 1953, Serial No. 390,651
6 Claims. (Cl. 250—27)



1. In combination, a pulse forming network for storing electrical energy, a first coil forming with said network a charging circuit wherein the charging current flowing in said first coil will produce a magnetic field, a load circuit, a unidirectional switching means for discharging said network into said load circuit, a second coil connected in series with a unidirectional conducting device wherein said series combination is connected in shunt with said switching means for producing a conducting path in the opposite direction to that produced by said switching means, means for producing a substantially steady current in said second coil, said second coil adapted to be connected to produce a field substantially equal and opposite to the field produced by said first coil when a predetermined current flows therein, and means responsive to the relative field strength produced by said first and second coils for rendering inoperative the charging operation of said network.

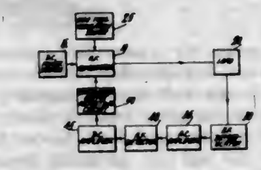
2,733,339
ELECTRICAL OSCILLATION GENERATORS
Ronald Charles Imm, Wembley, England, assignor to The General Electric Company Limited, London, England
Application June 6, 1952, Serial No. 292,021
Claims priority, application Great Britain June 8, 1951
9 Claims. (Cl. 250—36)

1. An electrical oscillation generator comprising a valve amplifier, an input path for supplying an input signal to the valve amplifier, means to derive from the output of the valve amplifier a feed-back signal consisting of unidirectional pulses and to supply these pulses to the input path so as to maintain the valve amplifier in oscillation, a path for supplying a synchronizing pulse signal, and means to derive a unidirectional pulse in dependence upon each predetermined edge of the waveform of the synchronizing signal and to supply this pulse to the said input path, the pulses supplied to the input path that are derived from the synchronizing signal be-



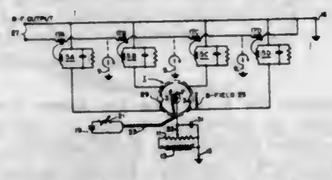
ing of the opposite sense to those derived from the output of the valve amplifier and both being of relatively short duration compared with the pulses of the synchronizing signal.

2,733,340
WAVE AMPLITUDE CONTROL FOR HIGH-Q LOAD
Lloyd Preston Garner and William Nelson Parker, Lancaster, Pa., assignors to Radio Corporation of America, a corporation of Delaware
Application March 20, 1953, Serial No. 343,642
11 Claims. (Cl. 250—36)



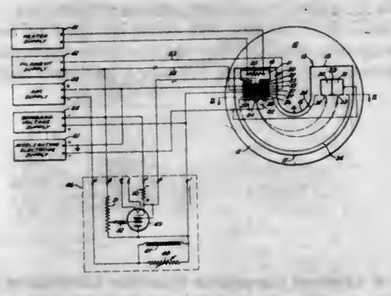
1. A system for producing substantially constant amplitude wave energy in a circuit element of relatively high figure of merit, including a high frequency wave translating device coupled to said circuit element to apply wave energy thereto, means to amplitude modulate said wave translating device by a wave of frequency removed from the frequency of operation of said device, a demodulator coupled to said circuit element to derive a voltage proportional to the amplitude of said wave, a rectifier circuit coupled to said demodulator to produce a potential proportional to the amplitude of said wave, and means to apply said potential to said wave translating device to maintain the output thereof substantially constant.

2,733,341
TRAVELING WAVE MAGNETRON CIRCUITS
Philip H. Peters, Jr., Schenectady, N. Y., assignor to the United States of America as represented by the Secretary of the Army
Application September 16, 1953, Serial No. 380,625
13 Claims. (Cl. 250—36)



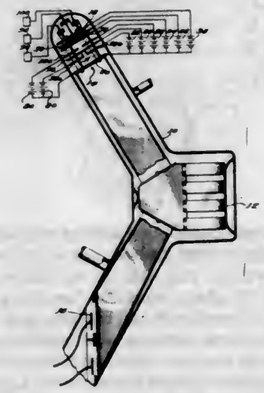
1. In combination, a traveling wave magnetron having a cathode and at least two anode vanes, and at least two resonant means coupled together and respectively connected between each of said vanes and said cathode and means interposed between said resonant means for varying the mutual coupling therebetween to vary the band pass characteristic of said resonant means.

2,733,342
REGULATOR FOR CALUTRON ION SOURCE
Louis F. Wouters, Oakland, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application January 21, 1948, Serial No. 3,587
12 Claims. (Cl. 250—41.9)



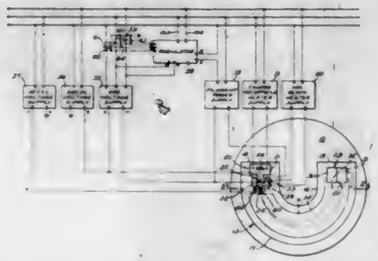
1. A regulator for an electric discharge device comprising in combination an electron-emissive cathode, a bombardment cathode, a control electrode therebetween, means for maintaining said bombardment cathode at a positive potential with respect to said electron-emissive cathode whereby said bombardment cathode is heated to emissive temperature by electron bombardment, an anode, means for maintaining said anode at a positive potential with respect to said bombardment cathode whereby an electric discharge is maintained therebetween, and a variable impedance device connected to said control electrode and having an inductive control member connected in series with said electric discharge and responsive to the current thereof, whereby the potential of said control electrode is controlled in accordance with said discharge current.

2,733,343
IONIZATION SOURCE
Mark G. Inghram, Chicago, Ill., and William A. Chupka, Cambridge, Mass., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application November 24, 1953, Serial No. 394,521
8 Claims. (Cl. 250—41.9)



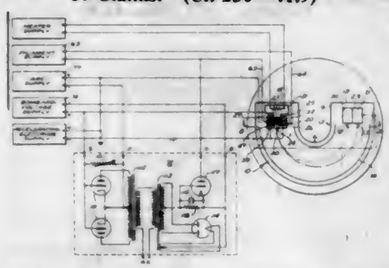
1. A source of ions comprising, in combination, an ionization filament, an evaporation filament adapted to be coated with the material to be ionized, means to mount said filaments in adjacent relationship, said filaments being spaced by an average distance equal to not more than twice the width of the ionization filament confronting the evaporation filament.

2,733,344
ION GENERATOR REGULATOR
Robert De Liban, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application September 18, 1945, Serial No. 617,131
6 Claims. (Cl. 250—41.9)



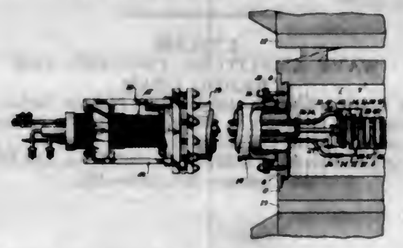
1. A calutron ion source regulator comprising in combination an ion source having a cathode and an anode, an alternating current supply for heating said cathode to electron emissive temperature, an alternating current rectifier power supply for supplying an arc between said cathode and said anode, a gas tube having a cathode, a control electrode and an anode, said cathode and said anode of said gas tube being connected in series with said first mentioned alternating current supply and said ion source cathode, a transformer connected in series with the alternating current input of said rectifier power supply, a rectifier connected to the output of said transformer and a phasing circuit connected between said rectifier and the control electrode of said gas tube for controlling the current through said ion source cathode inversely in accordance with the current drawn by said ion source arc to maintain said arc current substantially constant.

2,733,345
REGULATOR FOR CALUTRON ION SOURCE
Louis F. Wouters, Oakland, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application November 28, 1945, Serial No. 631,416
16 Claims. (Cl. 250—41.9)



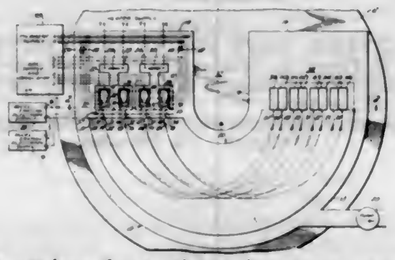
14. A calutron comprising an ion source having a filament, a bombardment cathode, and an anode, suitable sources of voltage and current connected to said ion source for establishing electron flow between said filament and said bombardment cathode and for establishing an arc discharge between said bombardment cathode and said anode, heating means for maintaining said ion source at a desired elevated temperature, a reservoir adapted to contain ionizable material, means for feeding said material into said arc discharge, current sampling means connected to said ion source so as to produce a signal voltage proportional to variations in said arc discharge current, amplifying means having an input and an output and at least one stage of amplification therebetween, said input being connected to said current sampling means for receiving signal voltage therefrom, a first variable impedance device of the saturable reactor type having at least two windings, one of said windings being connected to said output of said amplifying means, and a second variable impedance device connected between one of said sources of voltage and said ion source, and one of said windings of said first variable impedance device being connected to said second variable impedance device whereby variations in said electron flow proportional to said variations in said arc discharge current are produced.

2,733,346
ION PRODUCING MECHANISM
Frank Oppenheimer, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application February 21, 1946, Serial No. 649,401
2 Claims. (Cl. 250—41.9)



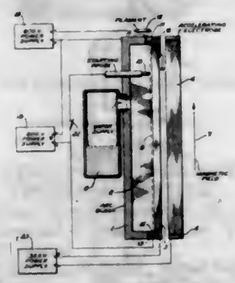
1. An ion generator for a calutron comprising an arc block having an ionizing chamber therein open at both ends and a slot in one wall thereof extending from one end substantially to the other end, an electron emitting surface disposed adjacent said block to overlie one end of said chamber and said slot, an anode disposed at the other end of said chamber, means connected to said surface for rendering the same electron emissive, means connected between said surface and said block for maintaining an arc therebetween along the length of said slot, and means connected between said surface and said anode for maintaining an arc through said chamber.

2,733,347
REGULATOR FOR CALUTRON ION SOURCE
Robert De Liban, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application April 25, 1946, Serial No. 664,735
10 Claims. (Cl. 250—41.9)



1. A regulator for a calutron ion source comprising in combination an ion source having an anode and a cathode, a resistor connected in series with said cathode, a pair of feeders for supplying heating current to said cathode through said resistor, a variable impedance apparatus connected across said resistor, said variable impedance apparatus including gas discharge device means, and means for controlling said gas discharge device means in accordance with the arc current between said anode and said cathode, whereby the current to said cathode is controlled to maintain said arc current substantially constant.

2,733,348
ION SOURCE UNITS
Elliott J. Lawton and James M. Lafferty, Schenectady, N. Y., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application July 11, 1946, Serial No. 682,728
4 Claims. (Cl. 250—41.9)



1. An ion source unit comprising a hollow arc block defining an arc chamber and provided with a wall constituting a principal cathode, means including an auxiliary cathode disposed exteriorly of said arc block and adjacent to said principal cathode for bombarding said principal cathode in order to render the same electron emissive, means including a principal anode disposed in said chamber remote from said principal cathode for sustaining an arc between said principal cathode and said principal anode, means including a starting anode disposed in said chamber adjacent to said principal cathode for striking an arc between said principal cathode and said principal anode, means for supplying a gas to be ionized to said chamber, and means for withdrawing ions from said chamber.

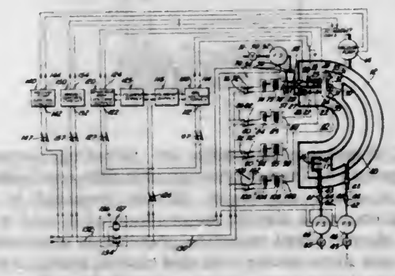
2,733,349
CALUTRON
Ernest O. Lawrence and William M. Brobeck, Berkeley, Calif., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application August 15, 1946, Serial No. 690,802
9 Claims. (Cl. 250—41.9)



1. In a calutron including a tank adapted to be evacuated, means for creating a magnetic field within said tank, and means for projecting an ion beam within said tank along a path determined by said magnetic field; an adjustable element mounted within said tank, and means including an electrically conducting coil disposed within said tank and reacting with said magnetic field for moving said adjustable element.

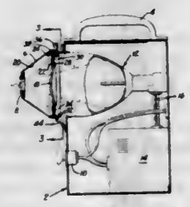
2,733,350
CALUTRON CONTROL CIRCUIT
Kenneth R. MacKenzie, Richmond, and William M. Brobeck, Berkeley, Calif., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application August 15, 1946, Serial No. 690,803
7 Claims. (Cl. 250—41.9)

1. In a calutron having an evacuated tank disposed in a magnetic field, an ion source and associated structure disposed in said tank, an ion receiver disposed in said tank, ion accelerating means including electrode structure disposed adjacent said ion source adapted to transmit selected ions from said ion source through said magnetic field along predetermined paths to said receiver, liner structure connected to said accelerating electrode structure and disposed in said tank along said paths in enveloping relationship thereto whereby said paths are electrostatically shielded from said ion accelerating means, ion source cooling means including a conduit arranged in heat exchange relationship with said structure associated with said ion source, liner structure cooling means including a conduit arranged in heat exchange



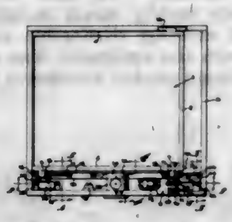
relationship with said liner structure, receiver cooling means including a conduit arranged in heat exchange relationship with said receiver, a voltage supply associated with said ion accelerating means, arc generating means associated with said ion source, and means controlled by flow of a cooling medium through said three conduits at rates in excess of corresponding predetermined rates for preparing said arc generating means and said voltage supply for operation, whereby an arc may be established in said ion source and ions may be withdrawn therefrom and projected along said paths only when the rates of flow of the cooling medium through said conduits exceed said predetermined rates.

2,733,351
DEVICE FOR CANDLING EGGS
Marcel J. Vogel, San Francisco, Calif., assignor to Vogel Luminescence Corp., a corporation of California
Application December 13, 1952, Serial No. 325,786
3 Claims. (Cl. 250—51)



1. A device for candling eggs consisting of a high pressure mercury vapor spot lamp which emits light in both the ultraviolet and visible bands, a light excluding hood over said spot lamp, said hood being in the form of a truncated cone having a mat finish on the inner surface of said cone, a filter interposed between said spot lamp and said cone, said filter passing predominantly ultraviolet light and a small portion of visible blue light, a series of adjustable apertures around the periphery of said filter, means for adjusting the opening of said apertures, and an annular mirror around said filter whereby light is reflected from the spot light by said annular mirror through the apertures and into the apex of the truncated cone, the small end of said truncated cone being adapted to receive an egg for candling.

2,733,352
RECIPROCATING BUCKY ACTUATOR
Arthur G. Bilin, Cincinnati, Ohio, assignor to The Liebel-Flarsheim Company, Cincinnati, Ohio, a corporation of Ohio
Application February 20, 1952, Serial No. 272,658
9 Claims. (Cl. 250—62)



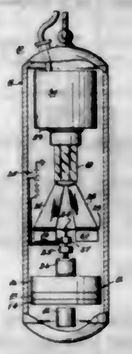
1. A diaphragm assembly for screening secondary X-ray radiations from a photographic film comprising, a frame, a screen diaphragm slidably mounted in said frame, a reversible electric motor mounted in said frame, a drive sheave, speed reduction gear means interconnecting the said drive sheave with said electric motor, a string member in driven engagement with said drive sheave and in driving engagement with said screen member for effecting linear movement thereof in back and forth directions in said frame as determined by the direction of operation of said electric motor, and a control circuit including said electric motor and switch members responsive to the movement of said diaphragm for reversing the direction of operation of said motor at predetermined points in the movement of said screen member, the said string member having limited elasticity effective to absorb the momentum of said screen member in consequence of reversal of direction of its movement.

2,733,353
AUTO-RADIOGRAPHY OF WELLS
Sylvain J. Pirson, Tulsa, Okla., assignor to Stanolind Oil and Gas Company, Tulsa, Okla., a corporation of Delaware
Application July 3, 1951, Serial No. 235,037
5 Claims. (Cl. 250—65)



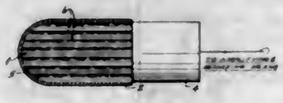
1. The method of radiographing a well formation which comprises first depositing at the formation face exposed in a well bore a radioactive solid material which is capable of lodging in the exposed formation openings, subsequently lowering into said well bore a photographic film and holding said film stationary and in contact with said face for a sufficient time to expose said film by radiations from primarily only the deposits of said material substantially in contact with said film, and finally removing and developing said film, whereby it may be examined for exposure patterns indicative of the character of individual formation openings.

2,733,354
X-RAY FILM PACKET HOLDER WITH POSITION INDICATING MEANS
Mark Vloch, Bronx, N. Y.
Application August 6, 1952, Serial No. 302,884
5 Claims. (Cl. 250—67)



1. A holder for an X-ray film packet including an open ended sheath for receiving the packet therein and having a tab adapted to be gripped between the teeth for retaining the holder in position in the mouth, said sheath having three pairs of fold lines for folding the sheath to dispose the tab at three different positions with reference to the edges of the packet for taking radiographs of three positions of the teeth, said sheath having indicia arranged at different positions on the inner face of the sheath indicating said radiographs respectively, and said sheath having an area in the front wall thereof above said tab through which said indicia are visible respectively when the sheath is folded for taking radiographs corresponding thereto.

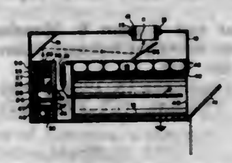
2,733,355
THERMAL NEUTRON MEASURING
Theresa M. McKee, New York, N. Y., assignor to Texaco Development Corporation, New York, N. Y., a corporation of Delaware
Application February 19, 1952, Serial No. 272,477
8 Claims. (Cl. 250—71)



1. A scintillator for the detection of pentrative radiation comprising at least one membranous foil of a material having a large capture cross section for neutrons for converting them into other penetrative radiation and quantities of a transparent luminescent material disposed on both sides of the foil for translating said last mentioned radiation into light.

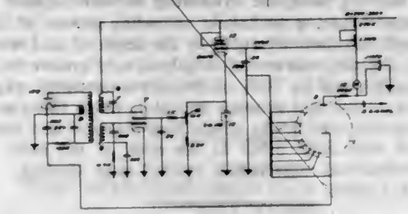
2,733,356
RADIATION MEASURING INSTRUMENT
Victor E. Ragosine, Boston, and Willard C. Hadley, Newburyport, Mass., assignors to Tracerlab, Inc., Boston, Mass., a corporation of Massachusetts
Application April 6, 1953, Serial No. 347,092
7 Claims. (Cl. 250—83.6)

1. A radiation dosage rate meter comprising an ionization chamber, a resistor and a source of potential connected in series, an electroscope having a chamber of a volume very small compared to the said ionization chamber and a quartz fiber, means connecting the junction of said ionization chamber and said resistor to said quartz fiber and means connecting the junction of said ionization chamber and said potential source to said electroscope chamber, whereby a potential is continuously applied to said electroscope and the deflection of said fiber



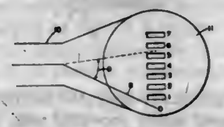
is a measure of the ionization current through said resistor.

2,733,357
CURRENT LIMITING POWER SUPPLY FOR PHOTOMULTIPLIER
Charles W. Warren, North Plainfield, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
Application October 5, 1951, Serial No. 249,863
3 Claims. (Cl. 250—207)



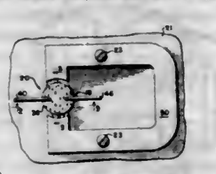
1. A current control circuit for photomultiplier tubes comprising a power supply for the photomultiplier tube at least a portion of which includes a radio frequency electron tube oscillator, at least one D. C. power input to said oscillator, a resistance element in the circuit connecting the power supply to the anode of the photomultiplier tube, filtering means between the anode and the resistance element having a sufficient time constant to eliminate alternating current fluctuations in the resistance element, whereby fluctuations in the average photomultiplier anode current result in variations in potential drop across the resistance element constituting a varying control voltage, a voltage divider in at least one D. C. power supply input to the oscillator, said divider comprising an electronic tube having a control grid and at least one resistance in series therewith, a gas voltage regulator tube having a firing voltage not less than that of the D. C. power input to the oscillator for maximum photomultiplier tube sensitivity shunting at least a portion of the voltage divider resistance, the electronic tube in the voltage divider being capable of a tube current over a predetermined grid bias range which current multiplied by the portion of the voltage divider resistance which is shunted by the voltage regulator tube at least equal to the firing voltage of said tube, a circuit connection from the voltage divider to an electrode of the R. F. oscillator tube, said connection being from a point on the regulator tube shunted portion of the voltage divider resistance whereby D. C. power input to the oscillator flows from this point, connecting means from the control resistance in the anode circuit of the photomultiplier tube to the control grid of the electronic tube in the voltage divider, whereby current fluctuations in the resistance apply voltage to said control grid which voltage decreases with increasing anode current and hence decreases current through the voltage divider electronic tube and therefore voltage on the regulator tube, whereby as the average photomultiplier anode current increases at first no change in D. C. power input to the oscillator and hence photomultiplier power supply results so long as the regulator tube is ignited but when the current increases to a point where the regulator tube extinguishes further increase results in a decrease in D. C. current input to the oscillator and hence a decrease in the voltage applied to the photomultiplier tube anodes.

2,733,358
VOLTAGE AMPLITUDE QUANTIZER AND CODER
Lawrence T. Carapellotti, Philadelphia, Pa., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application April 2, 1953, Serial No. 346,477
12 Claims. (Cl. 250—217)



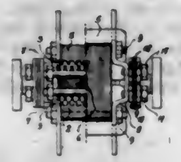
1. Apparatus for measuring the voltage amplitude of an electric signal comprising a cathode ray tube having vertical deflecting plates, an opaque mask having a plurality of horizontal translucent slots mounted on the face of said cathode ray tube, a photocell, said photocell being arranged and adapted to receive light impulses from the beam of said cathode ray tube through the slots of said mask, means for deflecting the beam of said cathode ray tube, and means for driving said beam back to its initial position at a constant rate across said slots to produce a series of light impulses at the photocell output, the number of light impulses being proportional to the amplitude of said electric signal.

2,733,359
MEANS FOR IMPROVING OPERATING CHARACTERISTICS OF TRANSISTORS
Charles B. Brown, Takoma Park, Md.
Application May 12, 1950, Serial No. 161,675
4 Claims. (Cl. 307—88.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)



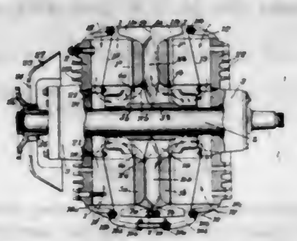
1. Apparatus for improving the operating characteristics of electrical equipment comprising the combination of a supporting means, a magnetic field generating means mounted on said supporting means, a metallic cartridge carried by said supporting means within said field, a wafer composed of semi-conductive material electrically connected to said cartridge and disposed therein and adjacent one end thereof and within said field, a plug composed of insulating material extening into the other end of said cartridge, a first supporting pin composed of conductive material extending longitudinally through said plug with one end of said pin exposed to the interior of said cartridge and spaced from said wafer and the other end of said pin arranged exteriorly of said cartridge, an emitter wire electrically connected to the inner end of said supporting pin and in contact with said wafer, a second supporting pin composed of conductive material extending longitudinally through said plug laterally spaced from said first supporting pin with one end of said second supporting pin arranged interiorly of said cartridge and spaced from said wafer, and the other end of said second pin arranged exteriorly of said cartridge, a collector wire electrically connected to the inner end of said second supporting pin and in contact with said wafer in closely spaced adjacency with said emitter wire.

2,733,360
ELECTROMAGNETICALLY-OPERATED OSCILLATING MOTOR
Enrique List, Buenos Aires, Argentina
Application April 22, 1953, Serial No. 350,317
11 Claims. (Cl. 310—29)



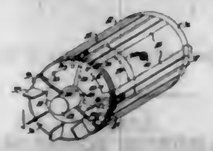
1. Electromagnetically-operated oscillating motor, comprising a U-shaped stator provided with at least one field coil, pole teeth provided on the inner opposite surfaces of the free end portions of the leg of the U-shaped stator projecting beyond said field coil, a toothed armature oscillatorily arranged between said stator legs and in shearing relation to the pole teeth of the latter, and a pair of leaf spring assemblies rigidly secured at one end to said armature and at the other end to the yoke of the stampings composing said stator for permitting said armature to oscillate in a direction perpendicular to the lines of force of said stator.

2,733,361
ELECTRO-DYNAMIC BRAKES
Pierre Etienne Bessière, Paris, France, assignor, by mesne assignments, to Telma, Paris, France, a society of France
Application January 14, 1953, Serial No. 331,160
Claims priority, application France January 17, 1952
13 Claims. (Cl. 310—93)



1. An electro-dynamic brake which comprises in combination a frame, a shaft to be braked journalled in said frame, two sets of pole pieces carried by said frame distributed about the axis of said shaft, a rotor fixed to said shaft including two discs located at a distance from each other, said discs being provided in the vicinity of said shaft with apertures so as to enable an air stream to flow through said apertures and thence radially through the space between said discs, lugs carried by said discs at the peripheries thereof, the lugs of the two discs extending in the direction of said axis toward one another so as to be in contact along a plane located between these two discs, and means for securing the corresponding lugs of said two discs together, said securing means being disposed at a distance from the axis of rotation of the rotor greater than the radius of the geometrical cylinder surrounding the pole pieces by an amount such that these securing means are located outside of at least the main portion of the magnetic field produced by said pole pieces when their windings are energized by an electric current.

2,733,362
SYNCHRONOUS INDUCTION MOTOR HAVING A SEGMENTED ROTOR AND SQUIRREL CAGE WINDING
Phillip F. Bauer and Vernon B. Housinger, Cincinnati, Ohio, assignors to Allis-Chalmers Manufacturing Company, West Allis, Wis.
Application December 13, 1954, Serial No. 474,694
6 Claims. (Cl. 310—162)



1. A synchronous induction motor comprising a stator, a rotor rotatable relatively to said stator, said rotor comprising a cylindrical magnetic core having a plurality of circumferentially spaced segments separated by radial dividing slots, said segments having axially extending winding slots, the cylindrical surface of each of said segments having an axially extending groove of uniform depth substantially equal to the depth of said winding slots, the circumferential length of said groove being substantially equal to 50% of the circumferential length of said segment, said grooves and slots being filled with a nonmagnetic electrically conducting material and interconnected with each other at the ends of the rotor to form a cylindrical rotor with a squirrel cage winding.

2,733,363
ARC TUBE MOUNT
Paul A. Dell, Highland Heights, Ohio, assignor to General Electric Company, a corporation of New York
Application September 12, 1951, Serial No. 246,231
5 Claims. (Cl. 313—27)



1. An electric discharge lamp of the high pressure type comprising in combination, a vitreous arc tube having at each end an external flat press portion carrying an electric terminal, an outer envelope enclosing said arc tube, and a mount supporting said tube in fixed position within said envelope, said mount comprising a U-shaped stiff metal wire support attached to said envelope and narrow, spaced transverse metal members attached to the legs of said support and supporting said arc tube therebetween, each of said narrow transverse members having an elongated central opening accommodating a press portion of said arc tube with the sides of said opening engaging said press portion to limit lateral movement of said arc tube in said envelope, each of said transverse support members comprising also integral spring fingers extending from the ends of said opening into engagement with the said accommodated press portion, the said fingers on said transverse support members resiliently holding said arc tube against longitudinal displacements

in said envelope and with the tubular portion of said arc tube spaced from said transverse support members to minimize heat losses from said arc tube through said mount.

2,733,364
MAGNETIC BEAM-FOCUSING SYSTEMS
Leslie E. Flory, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application March 22, 1951, Serial No. 216,857
14 Claims. (Cl. 313—65)



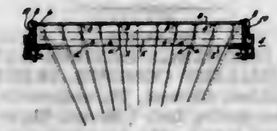
1. The method of controlling an electron beam which comprises: establishing a permanent magnetic field having lines of force extending substantially parallel to and along the entire path to be traversed by said beam, subjecting said beam to the influence of said magnetic field and asymmetrically altering the contour of said lines of force in the region of entry of said beam into said field by shunting said field to correct for any minor departures of said beam from its extended path.

2,733,365
ION TRAP ELECTRON GUN FOR CATHODE RAY TUBES
Kenneth A. Hoagland, Newark, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application October 1, 1951, Serial No. 249,120
14 Claims. (Cl. 313—82)



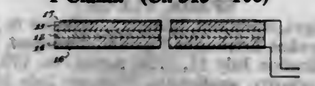
1. In a cathode ray tube, a cathode and a grid aligned on a common axis and an anode aligned on a second axis inclined to said common axis, said anode having a spherical end portion with an aperture therein facing said cathode and grid, said aperture being formed in a plane perpendicular to said common axis said second axis passing through said end portion.

2,733,366
TARGET ASSEMBLIES FOR COLOR-KINESCOPES, ETC.
Albert C. Grimm, Lancaster, and Milton J. Grimes, Ephrata, Pa., assignors to Radio Corporation of America, a corporation of Delaware
Application November 6, 1952, Serial No. 318,984
19 Claims. (Cl. 313—85)



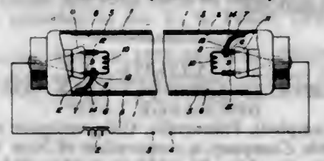
1. A target assembly comprising: a first target-element containing a multiplicity of systematically arranged apertures, a second target-element having a target surface made up, effectively, of a multiplicity of electron-sensitive areas disposed in a systematic pattern which is geometrically related to the pattern of apertures in said first target-element, fixed supporting means for one of said target-elements, and universally adjustable supporting means for bringing the other of said target-elements to a position whereat said apertures are accurately aligned with respective ones of said groups of electron-sensitive areas.

2,733,367
ELECTROLUMINESCENT LAMP STRUCTURES
Joseph L. Gilson, Jr., Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application October 7, 1952, Serial No. 313,526
1 Claim. (Cl. 313—108)



A flexible electroluminescent lamp structure which comprises a flexible bottom layer of biaxially oriented, balanced, heat-set polyethylene terephthalate film having a flexible coating of metal, a flexible intermediate layer of polyethylene terephthalate film containing a phosphor material which is excited to luminescence under the influence of an electrical field, and a flexible top light-transmitting layer of biaxially oriented, balanced, heat-set polyethylene terephthalate film having a coating of metal about 0.0001 of a mil in thickness.

2,733,368
GAS-FILLED ELECTRIC DISCHARGE TUBE
Dirk Kolkman, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application March 5, 1952, Serial No. 274,865
Claims priority, application Netherlands March 29, 1951
4 Claims. (Cl. 313—109)



1. An elongated positive column gas-filled electric discharge tube comprising an elongated envelope, a pair of main activated electrodes disposed at opposite ends of said envelope, conducting leads having portions within the envelope providing external terminal connections to said main electrodes, an auxiliary starting electrode comprising a long thin electrically conducting strip mounted on the inner wall of said envelope and extending substantially throughout the length of the envelope, said conducting strip being uncoated and being completely exposed to the interior of the envelope whereby said strip is accessible to a discharge occurring within the envelope, a conducting lead connecting one end of said conducting strip to the adjacent main electrode, and an electrically insulating coating on all of the portions of said conducting leads within the envelope, whereby said conducting leads are made inaccessible to any discharge occurring within the envelope.

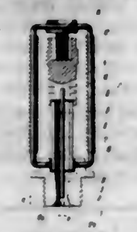
2,733,369
LOW TENSION IGNITION SYSTEM
Wytze Beye Smits, Voorburg, Netherlands, assignor to Smitsvonk N. V., Leidschendam, Netherlands, a research laboratory
Application October 19, 1954, Serial No. 463,249
8 Claims. (Cl. 313—131)



1. In a low-tension surface discharge spark plug for internal combustion engines, an electrode assembly com-

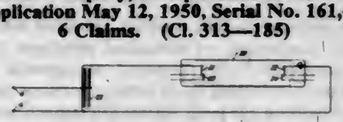
prising, an inner electrode, a coating of insulating material on said inner electrode, and a thin outer electrode disposed on said insulating material.

2,733,370
SPARK PLUGS
István Szilágyi, Budapest, Hungary, assignor to "Licencia" Talalmanyokat Ertekesito Vallalat, Budapest, Hungary
Application July 11, 1950, Serial No. 173,046
Claims priority, application Hungary July 20, 1949
3 Claims. (Cl. 313—132)



1. A spark plug comprising a shell, an insulated center electrode, a grounded electrode formed of two straight parallel rods extending diametrically across the lower end of the shell and spaced transversely of the shell to form a narrow slit between them of a width less than the length of the spark gap between said center and grounded electrodes.

2,733,371
INTERNALLY CONDUCTIVELY COATED DISCHARGE LAMP
John H. Campbell, Painesville, Ohio, assignor to General Electric Company, a corporation of New York
Application May 12, 1950, Serial No. 161,621
6 Claims. (Cl. 313—185)



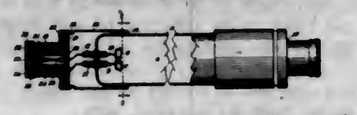
1. An electric discharge device of the low pressure positive column type comprising an elongated vitreous light-transmitting envelope containing an ionizable medium including an inert gas at a pressure of a few millimeters and a small quantity of mercury, a pair of main coiled filamentary thermionic electrodes, activated with electron-emissive materials, sealed into opposite ends of said envelope, lead-in wires connected to one side of said main electrodes to provide current terminals, a pair of auxiliary coiled filamentary activated electrodes of substantially lower thermal capacity than said main electrodes and respectively connected to the other side of said main electrodes and physically displaced therefrom, and a low resistance transparent coating covering substantially the whole inside surface of said envelope.

2,733,372
GLOW DISCHARGE TUBE
Tom Jurriaanse, The Hague, and Jan Horseling, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application July 10, 1951, Serial No. 235,972
Claims priority, application Netherlands July 19, 1950
5 Claims. (Cl. 313—185)



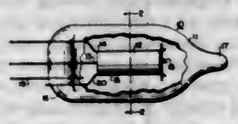
1. A glow discharge indicator tube in which the length of the glow discharge is an indication of the current strength, comprising an elongated tubular transparent envelope containing an ionizable low-pressure gaseous medium at a pressure at which a discharge is sustained in said medium, a pair of straight elongated wire-like electrodes disposed in said envelope parallel to one another and extending longitudinally throughout most of the length of the envelope, one of said electrodes being an anode and the other a cathode, said cathode and anode electrodes each being supported only from a different end of said envelope to prevent interference with the glow discharge therebetween, and an unactivated wire-shaped auxiliary anode disposed inside said envelope adjacent the unsupported end of said cathode electrode.

2,733,373
ELECTRIC DISCHARGE DEVICE
Edmund Germer, Berlin-Wannsee, Germany, assignor to Hanovia Chemical & Mfg. Co., Newark, N. J., a corporation of New Jersey
Application January 25, 1951, Serial No. 207,738
2 Claims. (Cl. 313—188)



1. In an electric discharge lamp having a tubular envelope of vitreous material closed at its ends to provide a chamber, subject to unequal distribution of radiations along the envelope, said chamber containing a rare gas and a vaporizable metal, two main electrodes and a lead-in conductor for each of said electrodes in each end of said chamber, the electrodes in one end being spaced from the electrodes in the other end of said chamber for supporting a discharge arc therebetween, said conductors extending through the nearest of the end walls of said envelope and being sealed therein, a sleeve telescoped over each end of said tubular envelope and extending beyond its respective end of said envelope, a plug of electrical insulation closing the outer end of said sleeve, an axial bore in said plug, a spring in said bore electrically connected to one of said conductors, a second bore through said plug, a metal cap covering the outer end of said plug, the other of said conductors passing through said second bore and being electrically connected to said cap, a hole in said cap aligned with said axial bore, an insulation disc covering said cap, a contact plate covering said disc, and a stem integral with said plate and passing through said disc and the hole in said cap and into said axial bore for contacting said spring, whereby there is provided a means for the non-concurrent operation of the two electrodes at each end of the chamber and the arc discharge between the ends of the chamber may be made to follow any one of at least four paths only one path being obtained for operation at any one time for each of the aforesaid conductor connections.

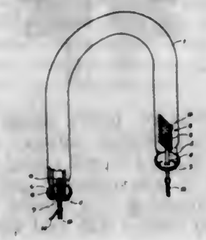
2,733,374
GASEOUS DISCHARGE DEVICES HAVING A FREE AUXILIARY CONTROL ELECTRODE
Alfred H. Faulkner, Chicago, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application January 23, 1951, Serial No. 207,308
2 Claims. (Cl. 313—198)



1. A cold cathode type gaseous discharge tube comprising an envelope enclosing a cathode, an anode, and

a starter-electrode, a pair of rods supporting said cathode and extending through the envelope of said tube, said anode being in the form of a rod and mounted along the longitudinal axis of said cathode and extending through the envelope of said tube, said cathode including a cylindrical shaped portion encompassing a space within itself including the electron gathering portion of said anode said pair of rods flaring outwardly away from the anode at the point of the cathode support, said starter-electrode remotely situated outside of said cathode encompassed space and longitudinally disposed in close proximity to the axially remote portion of one of said supporting rods and forming a starter gap therewith, to effectively confine the discharge path of the emitted electrons during conduction between said plate and said cathode within said cathode cylinder encompassed space for keeping said starter-electrode free of said emitted electrons.

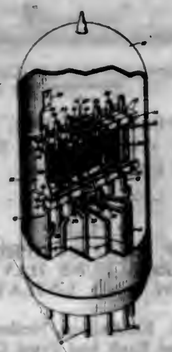
2,733,375
SEAL AND TERMINAL STRUCTURE FOR ELECTRIC DISCHARGE LAMP
Edward B. Noel, Cleveland Heights, Ohio, assignor to General Electric Company, a corporation of New York
Application August 21, 1952, Serial No. 305,646
2 Claims. (Cl. 313—217)



1. A gaseous electric discharge lamp comprising an elongated tubular glass envelope containing an ionizable gaseous atmosphere, a terminal structure closing and sealing each end of said envelope and comprising a disc of metal having a coefficient of expansion closely approximating that of the glass envelope, each of said discs having a surface portion thereof fusion-sealed directly to the associated end of the envelope, a metal terminal conductor extending into said envelope through a central aperture in each disc and being hermetically sealed thereto around the aperture by metallic brazing material, one of said conductors being hollow in order to serve as an exhaust tube and having its walls hermetically closed exteriorly of the envelope, the inner end of said hollow tube conductor within the envelope forming an integral part of a metal anode member, and the inner end of the other terminal conductor carrying a metallic cathode member.

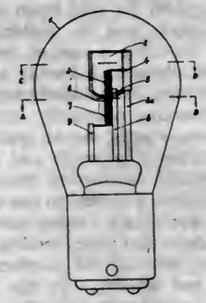
2,733,376
ELECTRODE SUPPORT FOR ELECTRON DISCHARGE DEVICE
George H. Robertson, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application February 27, 1952, Serial No. 273,645
11 Claims. (Cl. 313—261)

1. An electrode structure for an electron discharge device comprising a pair of spaced parallel rods, insulating bars on opposite sides of said rods adjacent the ends thereof and extending between said rods, said bars and said rods defining two parallel planes therebetween, a control electrode mounted by said rods and having major portions lying in said planes, said bars having portions defining two additional parallel planes, each adjacent a respective one of said first planes, and an electron emitting electrode positioned against certain of said portions of said insulating bars having a portion in each of said addi-



tional parallel planes, said bars lying beyond said major portions of said control electrode.

2,733,377
INCANDESCENT LAMP COMPRISING TWO FILAMENT WIRES, MORE PARTICULARLY FOR CAR SEARCH LIGHTS
Karl Böhme, Aachen, Germany, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee, patent dedicated to the public insofar as it relates to lamps and lamp parts to the extent stated in document recorded in the U. S. Patent Office April 13, 1954
Application April 26, 1952, Serial No. 284,501
Claims priority, application Germany October 6, 1951
2 Claims. (Cl. 313—272)

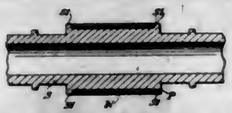


1. An electric incandescent lamp comprising two approximately coaxially-mounted axially-spaced oppositely-wound filaments, a common conductor extending adjacent and parallel to said filaments and supporting the same in their operative position, and terminal means for said filaments including adjacent terminal means to connect each of said filaments to said common conductor, said adjacent terminal means each extending substantially entirely in a plane common to both of said filaments and tangent to said common conductor.

2,733,378
THERMIONIC CATHODES FOR ELECTRONIC DISCHARGE DEVICES
Simon Aisenstein, Longholt, Ingatestone, Frederick Charles Thompson, Danbury, and Maurice Esterson, Great Baddow, England, assignors to English Electric Valve Company Limited, London, England, a company of Great Britain
Application December 6, 1951, Serial No. 260,284
Claims priority, application Great Britain January 8, 1951
2 Claims. (Cl. 313—346)

1. A thermionic cathode comprising a support consisting of a hollow cylindrical tube having a shallow cylindrical recess formed in the external surface thereof terminat-

ing at opposite ends in annular cheeks and a thin layer of electron emissive material confined between said cheeks



on the external surface of said tube, said layer of material being laterally confined within the external diametrical limits of said annular cheeks.

2,733,379

DEVICE OF THE KIND COMPRISING AN ELECTRIC DISCHARGE TUBE HAVING A RIBBON-SHAPED BEAM AND UNILATERAL DEFLECTION

Hendrik Groendijk, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application September 12, 1951, Serial No. 246,238
Claims priority, application Netherlands October 12, 1950
4 Claims. (Cl. 315—18)



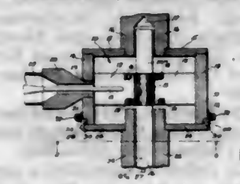
1. A circuit arrangement comprising an electric discharge tube; said tube comprising means for producing a ribbon-shaped electron beam including a cathode and an accelerating anode having an aperture therein through which the ribbon-shaped beam emerges, collecting means for said beam spaced from said beam-producing means, and a deflection system for said beam disposed between the accelerating anode and the collecting means, said deflection system including a pair of substantially alike, opposing deflection plates each having a first portion located near the aperture in said accelerating anode and a second portion diverging outwardly from said aperture toward the collecting means; means applying positive potentials to said accelerating anode and collecting means to produce a potential distribution therebetween, means applying a fixed positive potential to one of said deflection plates, and means applying a varying positive potential to the other of said deflection plates tending to vary the potential distribution between the accelerating anode and collecting means and thereby vary the focussing action on the beam; the portion of said other deflection plate located near the anode being spaced a greater distance from said aperture than the corresponding portion of said one deflection plate to thereby minimize the effect of the varying potential applied to said other deflection plate.

2,733,380

DEMOUNTABLE MAGNETRON WITH METAL-TO-METAL VACUUM TIGHT JOINT

Alexander A. Phillips, Sudbury, and William A. Smith, Jr., Milton, Mass., assignors to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware

Application June 9, 1952, Serial No. 292,562
4 Claims. (Cl. 315—39.53)



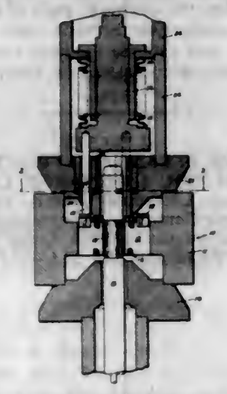
1. An electron discharge device of the magnetron type comprising an anode member formed with an evacuated resonant cavity comprising two parts of oxidizable metal with overlapping edges held together in a vacuum-tight joint by a restricting metallic band having a reduced area in the region of said joint.

2,733,381

MAGNETRON TUNING STRUCTURES

Leonard W. Geier, Natick, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware

Application August 28, 1952, Serial No. 306,873
5 Claims. (Cl. 315—39.61)



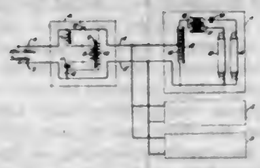
5. A cavity resonator, tuning means for said cavity resonator movably positioned adjacent said resonator, a support member attached to said tuning means and movable with respect to said resonator, and a resilient conducting member consisting of a toroidal spring surrounding and in resilient contact with said support member.

2,733,382

PULSE STARTING SYSTEM FOR FLUORESCENT LAMPS

John H. Campbell, Painesville, Ohio, assignor to General Electric Company, a corporation of New York

Application March 14, 1950, Serial No. 149,535
2 Claims. (Cl. 315—97)



2. A starting and operating system for fluorescent lamps of the positive column type having filamentary thermionic cathodes, comprising a plurality of said lamps, an alternating voltage supply, operating circuits for said lamps each comprising a pair of input terminals and connected in parallel across said supply, each of said operating circuits comprising reactive transforming means having a normal open circuit to operating voltage ratio less than that required to start said lamps but sufficient to provide regulation after starting and including means for supplying preheating current to said electrodes, and a pulsing circuit connected between said operating circuits and said supply, said pulsing circuit comprising a saturable reactor, the primary winding of a transformer and a capacitor serially connected through a first switch across said supply, and a secondary winding of said transformer with a second switch and connections for temporarily substituting said secondary winding for said alternating supply to energize said operating circuits, said saturable reactor and said capacitor being proportioned to produce

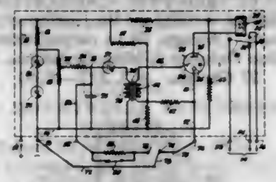
pulses of short time duration and high intensity in said secondary winding when said first switch is closed, said pulses having a time duration short enough to cause said lamps to exhibit a positive resistance characteristic thereto.

2,733,383

ELECTRONIC DELAY TIMER

George C. Wilson, Chatham, N. J.

Application April 1, 1952, Serial No. 279,866
14 Claims. (Cl. 315—183)



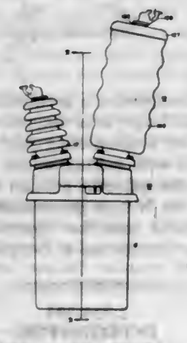
1. Electrical time delay apparatus comprising, in combination, capacitor means, input circuit means including resistance means connected to said capacitor means for charging said capacitor means to a predetermined voltage only upon predetermined delay after inception of an electrical signal in said input means, a two-electrode gas tube connected to said capacitor means and adapted to become conductive only upon attainment of said predetermined voltage, a cold-cathode gas tube having a control electrode and having an anode, a cathode, and an output circuit extending to said anode and cathode and arranged to be normally non-conductive, and transformer means coupling said control electrode with said first tube to render the last-mentioned gas tube conductive upon conduction of the first tube.

2,733,384

AUTOMATIC RECLOSING CIRCUIT BREAKER

Kenneth L. Niebauer, Wilkinsburg, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application October 23, 1951, Serial No. 252,648
17 Claims. (Cl. 317—22)



1. An automatic reclosing circuit breaker comprising, a circuit interrupting device having separable contacts and electroresponsive means operable during an off-current period to effect separation of said contacts only after a plurality of circuit interruptions, and a circuit interrupter mounted on the circuit interrupting device comprising a sealed sulfur hexafluoride-filled casing having contact means therein connected in series circuit with said device operable to repeatedly interrupt an overcurrent and reclose so long as fault current exists.

2,733,385

IGNITER PLUGS

Wilfred A. Bychinsky, Ann Arbor, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application May 21, 1952, Serial No. 289,158
6 Claims. (Cl. 317—83)



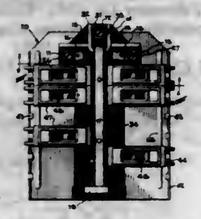
1. An igniter unit comprising a hollow electrode, an upper insulator and a lower insulator surrounding said electrode, a metal shell surrounding and supporting said insulators and means for cooling said unit, said means comprising an opening through said shell adjacent said lower insulator to allow cooling air to circulate past said lower insulator and a second opening through said shell adjacent said upper insulator to allow cooling air to circulate past said upper insulator and through said hollow electrode.

2,733,386

PANELBOARD MOUNTING FOR CIRCUIT BREAKERS

Ralph S. Myers, Covington, Ky., assignor to The Wadsworth Electric Mfg. Company, Covington, Ky., a corporation of Kentucky

Application February 2, 1953, Serial No. 334,547
12 Claims. (Cl. 317—119)



1. The combination of a panelboard mounting and a circuit breaker construction adapted to be received by the panelboard mounting in plug-in fashion, said combination comprising a back plate, a bus bar extending longitudinally of said plate, a flange disposed in spaced parallel relation to said bus bar, a circuit breaker having an insulated housing including a pair of feet which are located respectively adjacent to the opposite ends of said housing, said feet being spaced to be wedged into the space between said bus bar and said flange to hold said housing in fixed position with respect to said bus bar, and contact means engageable when said circuit breaker is thus buttressed to establish electrical connection between said circuit breaker and said bus bar.

2,733,387

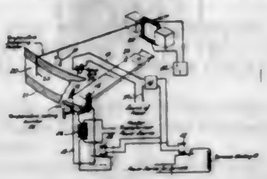
SWITCH CONTROL DEVICE

William E. Engelhard, North Arlington, N. J.

Application January 17, 1951, Serial No. 206,366
2 Claims. (Cl. 317—132)

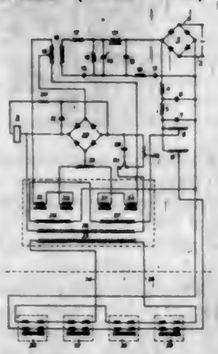
1. A switch for an electrical mechanism comprising a first element adapted to reciprocate in a given plane responsive to operating conditions, an electrical switch part secured to said first element, a second element adapted

to be set at a point in the path of said plane of reciprocation of said first element to indicate a desired setting, a post pivotally connected to said second element and having an electric switch part secured thereto for effecting a switching action on registry of the switch part of the first element therewith, a pair of bi-metallic elements mounted on the second element to which the post is pivoted and straddling opposite sides of the post in line with the plane of pivotal movement thereof, heating means for said bi-metallic elements and means to selectively actuate said heating means so that the heating means for the bi-metallic element on the side of the post remote



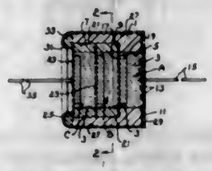
from the first element to pivot the post toward the first element will be actuated prior to registry thereof with the second element, and the heating means for the other bi-metallic element to pivot said post away from the first element will be actuated on registry of the electric switch part of the first element with the electric switch part carried by the post, whereby the directions of movement of said first element will be anticipated to tilt the post toward the first element while the first element is moving in the direction of the second element and to move the second element away from the first element after said switch parts have been so registered.

2,733,388
MAGNETIC AMPLIFIER
Adolf W. Rechten and Brian M. Bellman, Taplow, England, assignors to British Telecommunications Research Limited, Taplow, England, a British company
Application February 18, 1952, Serial No. 272,197
Claims priority, application Great Britain February 20, 1951
5 Claims. (Cl. 317—148)



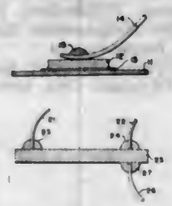
4. A magnetic amplifier for effecting the momentary operation of an electromagnetic relay in response to an impulsive signal, comprising in combination, a centre-tapped source of alternating current, a rectifier bridge, two operating windings for said amplifier connected respectively in series with the two halves of said source to opposite corners of said bridge, a relay connected to the other opposite corners of said bridge, a control winding for said amplifier, means for applying an impulsive signal to said control winding, a feedback winding for said amplifier, a capacitor connected in series with said feedback winding to said other opposite corners of said bridge, and contacts controlled by said relay and arranged in operation to disconnect said capacitor from said feedback winding and discharge it through a low resistance, the various components being so connected and having such values that in response to an impulsive signal exceeding a predetermined threshold value, excessive positive feedback is provided by said feedback winding to cause said amplifier to become temporarily unstable whereby current of value substantially independent of the value of said impulsive signal flows through said relay to cause its reliable operation.

2,733,389
ELECTROLYTIC CAPACITOR
Michael C. Ellison, Arlington, Va., assignor to The Gudeman Company, Chicago, Ill., a corporation of Illinois
Application October 4, 1952, Serial No. 313,186
17 Claims. (Cl. 317—230)



1. A tantalum capacitor comprising means defining an electrolyte chamber, electrolyte disposed in and substantially filling said chamber, a tantalum member disposed in said chamber and having at least a portion thereof disposed in contact with the electrolyte, and expansion means including a diaphragm associated with the chamber and in communication therewith for relieving excessive pressures developed in said chamber.

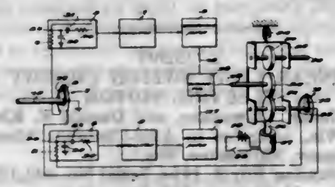
2,733,390
GERMANIUM RECTIFIER FOR LARGE CURRENTS
Wayne W. Scanlon, Silver Spring, Md.
Application June 25, 1952, Serial No. 295,596
7 Claims. (Cl. 317—239)
(Granted under Title 35, U. S. Code (1952), sec. 266)



5. A rectifier comprising a germanium wafer having a conducting plate of larger area secured to one face thereof with tin solder, and a conducting lead secured to the opposite face thereof with indium solder, said tin solder being diffused into the adjacent portion of said germanium wafer to produce an N-type germanium, and said indium solder being diffused into the opposite portion of said germanium wafer to produce a P-type germanium.

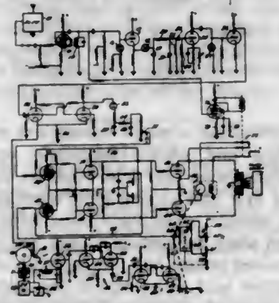
2,733,391
INTEGRATOR
Robert H. Mayer, Middle River, Md., assignor to The Glenn L. Martin Company, Middle River, Md., a corporation of Maryland
Application April 26, 1952, Serial No. 284,660
6 Claims. (Cl. 318—28)

2. An integrator comprising an input shaft, a pair of electronic oscillators having frequency controlling networks including a potentiometer responsive to angular displacement of said shaft from a reference position to oppositely vary the resistance of a portion of said frequency controlling circuits of said oscillators to thereby oppositely vary the frequencies thereof by an amount proportional to the angular displacement of said shaft, a synchronous motor connected to each of said oscillators, and a gear type differential connected to the shafts of



said motors and having an output shaft adapted to rotate at a velocity proportional to the difference in frequency of said generators.

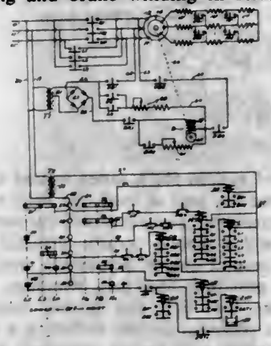
2,733,392
AUTOMATIC ROTATIONAL SYNCHRONIZATION SYSTEM
Harold M. Wright, Troy, Ohio
Application December 15, 1952, Serial No. 326,174
5 Claims. (Cl. 318—85)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. Apparatus for synchronizing a slave rotating element with a constant speed master rotating element at a predetermined angular displacement relative to said master element, said apparatus comprising means for generating a synchronizing pulse at a point in the rotational cycle of said master element that is displaced 180° from a predetermined zero point in said cycle, an adjustable speed motor for driving said slave rotating element, means for generating a timing pulse at a predetermined zero point in the rotational cycle of said slave element, means for comparing said synchronizing and said timing pulses and for generating a first voltage that is a function of the time difference between said synchronizing pulse and said timing pulse, means for producing a second voltage adjustable over the range of values of said first voltage and serving as a reference voltage equal to the value of said first-named voltage when the speed of said master and slave rotating elements are synchronous and the angular displacement of said rotating elements is restored to the said predetermined value, and means operatively connected to the respective means for generating said first and second voltages and responsive to a difference between said first and second voltages for changing the speed of said driving motor in such direction as to reduce said difference.

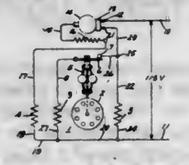
2,733,393
DYNAMIC BRAKING HOIST CONTROL
Benjamin H. Carlisle, South Euclid, Ohio, assignor to The Clark Controller Company, Cleveland, Ohio, a corporation of Ohio
Application May 26, 1953, Serial No. 357,561
3 Claims. (Cl. 318—203)

1. In a motor control for an A. C. induction hoist motor having a stator winding and a rotor; an electromagnetic rotor brake having a winding to release it; a source of A. C.; a source of D. C.; selectively operable hoisting and lowering contactors having main contacts closable thereby to connect the stator to the A. C. supply to effect, selectively, power hoisting or power lowering by the rotor; the lowering and hoisting contactors having respectively auxiliary contacts closed thereby concurrently with the main contacts; a circuit from the D. C. source through the brake winding and through a resistance in series therewith and through closed auxiliary contacts on either selectively operated contactor to release the brake; dynamic braking contactors having contacts closed upon operation thereof and closing a circuit from the D. C. source through the stator winding and brake winding in series to energize



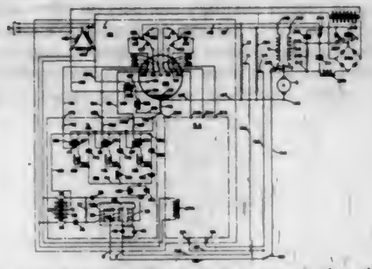
them and release the brake; means interlocking operation of the said hoisting and lowering contactors with operation of the dynamic braking contactors to insure opening of the main and auxiliary contacts of the hoisting and lowering contactors before closing of the dynamic braking contacts; whereby the said resistance is excluded from the D. C. circuit of the stator; the D. C. energization of the stator effecting dynamic braking of the rotor on lowering; the said resistance being adjustable and substantially equal to the resistance of the D. C. energized stator circuit, to canse the brake releasing current to be of the same amperage when released for power operation as when released for dynamic brake operation.

2,733,394
DUAL VOLTAGE MOTOR PROTECTOR CIRCUIT
Richard E. Seely, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application March 31, 1954, Serial No. 420,045
9 Claims. (Cl. 318—221)



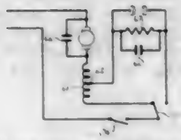
1. In combination with a dual voltage motor having a pair of running windings, said windings being connected in parallel when said motor is operated on one voltage and being connected in series when said motor is operated on a second voltage; means for protecting said windings from excessive heating comprising electrically conductive heat sensitive means operable at a predetermined temperature, contact means in series with said windings and arranged to be controlled by operation of said sensitive means to break the energizing circuits to said windings at said predetermined temperature, said sensitive means being connected in series with one of said windings, and electrical connections arranged so that said sensitive means is connected in parallel with the other of said windings when said motor is operated on said one voltage and is connected in series with the other of said windings when said motor is operated on said second voltage.

2,733,395
VARIABLE SPEED ELECTRIC DRIVE AND CONTROL SYSTEM THEREFOR
Walter J. Brown, Titusville, Fla.
Application April 23, 1951, Serial No. 222,378
Claims priority, application Great Britain April 24, 1950
25 Claims. (Cl. 318—249)



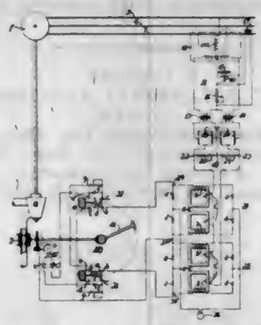
3. A control system for a series wound electric motor having an armature and at least one field winding, comprising; a controllable electric power converter having at least a first and a second control terminal and at least a first and a second output terminal; a motor circuit including said armature and field windings serially connected between said first and second output terminals respectively; a potential divider including a tapping point connected between said output terminals electrically in parallel with said motor circuit; means connecting said tapping point to one of said control terminals; and connection means connecting the other of said control terminals to a given point on said motor circuit where the voltage between said given point and said second output terminal is dependent only on the field voltage.

2,733,396
SPEED CONTROL OF SERIES MOTOR FOR COMMINUTING MACHINE
William P. Luther, Racine, Wis., assignor to John Oster Manufacturing Company, Milwaukee, Wis., a corporation of Wisconsin
Application August 30, 1954, Serial No. 452,929
6 Claims. (Cl. 318—251)



1. Speed and torque control means for a series-wound electric motor of the type used to power food comminuting machines or the like, comprising: adjustable centrifugally responsive switch means for opening a circuit when the motor exceeds any of a range of predetermined speeds; means defining a first energizing circuit for the motor including said switch means and providing for high-torque operation of the motor; means defining a second energizing circuit for the motor including means for limiting current flow to provide for low-speed, low-torque operation of the motor; a manual control actuator mounted in a position fixed with respect to the motor and progressively movable from an "off" position through a low-torque position and a range of high-torque positions; switch means connected with said actuator for actuation thereby to energize said second energizing circuit in the low-torque position of the actuator and to energize said first circuit through the range of high-torque positions of the manual actuator; and a motion transmitting connection between said manual actuator and said centrifugally responsive switch, operative when said manual actuator is moved from one to another of the positions within its said range to effect speed controlling adjustment of said centrifugally responsive switch to thereby set the maximum speed of the motor at a value corresponding to the position of the manual actuator in said range of high-torque positions.

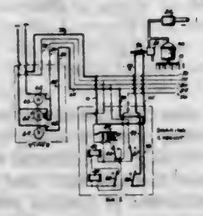
2,733,397
NONLINEAR LIMIT SWITCH CIRCUIT FOR ELECTRIC MOTOR
Allan C. Halter, Milwaukee, and Donald E. King, New Berlin, Wis., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application July 2, 1954, Serial No. 441,126
11 Claims. (Cl. 318—266)



1. In combination, a motor having first and second field windings, first and second oppositely variable voltage sources for energizing said field windings, circuits for connecting said first and second field windings to said first and second sources respectively for driving said motor in one direction when the voltage of said first source is above a predetermined value and the voltage of said second source is below said value and in the opposite direction when the voltage of said second source is above said value and the voltage of said first source is below said value, switching means responsive to said motor being moved in said one direction to a limit position to disconnect said first field winding from said first source and to connect said first field winding to said second source causing the energization of said field windings from said second source to be substantially balanced to stop said motor, and means in the connections between said second source and said field windings responsive to the voltage of said second source rising above said value for materially unbalancing the energization of said field windings from said second source to rotate said motor in said opposite direction for causing said switching means to disconnect said first field winding from said second source and to connect said first field to said first source.

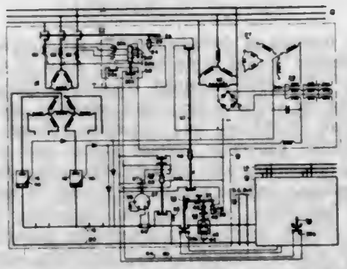
2,733,398
MOTOR CONTROL FOR ACTUATING A DUST COLLECTOR
Walter Bruckner, Garfield Heights, Ohio, assignor to The Northern Blower Company, Cleveland, Ohio, a corporation of Ohio
Original application October 12, 1950, Serial No. 189,755. Divided and this application February 4, 1952, Serial No. 270,225
1 Claim. (Cl. 318—470)

In a dust collecting apparatus having a confined air flow path adapted to develop a differential air pressure between its ends corresponding to a predetermined accumulation of collected dust therein, a pressure responsive device for removing the accumulated dust comprising in combination, a closed casing, a bellows within the casing having one end free and the other end fixed, conduit means for independently coupling one end of the air path to the interior of the bellows and the other end of the air path to the interior of the casing and exterior of the bellows, an electro-magnetic dust removal mechanism adapted to be selectively energized for a predetermined interval of time sufficient to remove accumulated dust from the confined air path, an energizing circuit for said mechanism including a switch, a motor-driven timer cam adapted to selectively engage and hold said switch in position to activate the electromagnetic energizing circuit for the predetermined time interval, an energizing circuit for



the motor-driven timer cam, a second switch for activating the timer cam energizing circuit, means responsive to operation of the timer cam for independently maintaining the timer cam energizing circuit active during said predetermined time interval, said second switch operatively disposed in the casing and having an operating member engaging the free end of the bellows for operative positioning thereby in response to a predetermined differential in air pressure on opposite sides of the bellows.

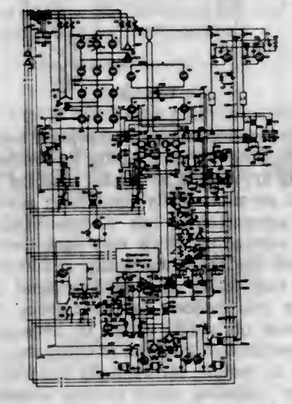
2,733,399
CIRCUIT BREAKER CONTROL SYSTEM
Willard A. Derr, Pittsburgh, and Edward J. Cham, Irwin, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application January 10, 1952, Serial No. 265,805
9 Claims. (Cl. 321—12)



1. In a control system for a rectifier unit, circuit interrupting means for connecting the rectifier unit to an alternating current source, additional circuit interrupting means for connecting the rectifier unit to a direct current circuit, instantaneous trip means responsive to an overcurrent input condition to the rectifier unit, current responsive means connected between the rectifier unit and the direct current bus, and trip means so connected as to be responsive only to substantially simultaneous operation of the instantaneous trip means and a predetermined response of said current responsive means to effect opening of both circuit interrupting means.

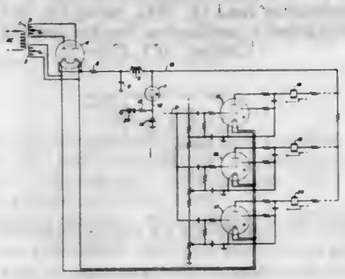
2,733,400
RECTIFIER CONTROL APPARATUS
Charles G. Hagensick, Pittsburgh, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application January 19, 1953, Serial No. 332,035
17 Claims. (Cl. 321—14)

1. A combination including a plurality of alternating-current supply-leads, a power-line, a plurality of power-tubes connected between said supply-leads and said power-line, each power-tube having a control-circuit means, of a type requiring suitable energization before each conducting-period of that power-tube, and a firing-control means for energizing the control-circuit means of the several power-tubes in a manner suitable for producing an operative condition of said power-tubes, the firing-control means for each power-tube including a grid-controlled firing-tube having a grid-circuit including a source of essentially sine-wave firing-control voltage having a fixed predetermined phase-relation with respect to the supply-leads, said phase-relation being so phased, with respect to the supply-voltage of the associated power-



tube, as to provide a wide range of firing-control for the power-tube, a source of bias-voltage for the grid-circuit of each firing-tube, and a means for rapidly changing the bias-voltage in such manner as to rapidly select the points, on the since wave, at which the several firing-tubes fire, the grid-circuit of each firing-tube further including a source including the negative half-waves of a pulsating bucking-voltage having such phase-relation with respect to the firing-control voltage as to become effective at a substantial value of the firing-control voltage.

2,733,401
VOLTAGE REGULATING CIRCUIT
Frank E. Blount, Cedar Grove, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application May 6, 1952, Serial No. 286,397
5 Claims. (Cl. 321—16)

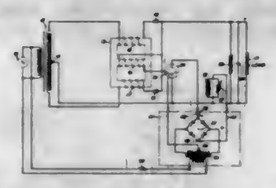


1. In a voltage supply system, including a source of alternating current and a rectifier having an input circuit and an output circuit, said input circuit connected to said source, a gas-filled diode connected across said output circuit, the voltage on said output circuit being less than the breakdown voltage of said diode, an auxiliary source of direct-current voltage connected in series with said diode to enable said diode to break down, and a unidirectional conductive device connected in parallel with said auxiliary source.

2,733,402
REGULATED RECTIFYING APPARATUS

William H. Bixby, Detroit, Mich., assignor to Donald R. Middleton and Stanley M. Hanley, doing business under the name and style of Power Equipment Company, Detroit, Mich., a copartnership

Application January 12, 1953, Serial No. 330,853
20 Claims. (Cl. 321—19)

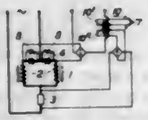


1. In combination, a reactor having a first winding and a second winding for controlling the impedance of said first winding in response to current supplied to said second winding, an asymmetrically conducting device, means for supplying current from an alternating-current supply source the voltage of which may vary through said first winding and said asymmetrically conducting device in series to a load to set up a unidirectional voltage across said load, a cold cathode gas filled space current device the resistance of which varies in response to current changes therethrough at a rate to cause the voltage across said device to remain substantially constant, the voltage required for initiating space current conduction in said device being larger than said load voltage, resistive means, means for deriving from said supply source and impressing across said space current device and said resistive means in series a unidirectional voltage larger than said load voltage for initiating space current conduction through said space current device, means comprising said space current device for connecting one terminal of said second winding to one terminal of said load, a voltage dividing resistance path connected across said load, and means for connecting the other terminal of said second winding to the other terminal of said load through a portion of said path the resistance of which is of the order of one-tenth the total resistance of said path.

2,733,403
SELF-EXCITED TRANSDUCTORS

Algot Arvidsson, Saltsjobaden, Sweden, assignor to Allmänna Svenska Elektriska Aktiebolaget, Vasteras, Sweden, a Swedish corporation

Application June 16, 1952, Serial No. 293,823
Claims priority, application Sweden June 16, 1951
7 Claims. (Cl. 323—7)

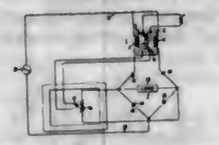


1. Means for controlling an auto-self-excited transductor having at least one iron core, comprising two parallel-connected alternating current windings on said cores, an alternating current source connected to the junction points of said windings, self-excitation half way valves inserted on both sides of at least one of said junction points, a control circuit connected between the associated ends of said windings, an external power source in said control circuit for superimposing a control current E. M. F. over said alternating current windings, and means for protecting said external power source against overload in case the current from said alternating current source fails, said protecting means comprising an automatic current limiting element.

2,733,404
THERMAL TIME-CONSTANT CIRCUIT

Hugh M. Ogle, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York

Application November 27, 1951, Serial No. 258,497
13 Claims. (Cl. 323—70)



12. A thermal time constant circuit comprising a magnetic amplifier having a load winding, a control winding, and a feedback winding, an electrical load energized in response to current through said load winding, electric heating means connected in parallel with said load, and a thermal responsive electric signal device in heat receiving relation with said heating means and connected to energize said feedback winding.

2,733,405
CIRCUIT FOR MEASURING THE PARAMETERS OF PIEZOELECTRIC CRYSTALS

Eduard A. Gerber, Elberon, N. J., assignor to the United States of America as represented by the Secretary of the Army

Application November 27, 1951, Serial No. 258,498
6 Claims. (Cl. 324—56)
(Granted under Title 35, U. S. Code (1952), sec. 266)

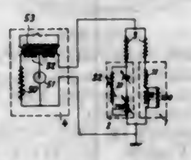


2. The method of determining the series resistance of a piezo-electric crystal comprising the steps of generating a voltage at a predetermined frequency corresponding to the main or spurious frequency mode of operation of said crystal, amplifying said generator voltage, applying said amplified generator voltage across said crystal in parallel arrangement with the amplifier output to develop an antiresonant voltage across the crystal at said predetermined frequency, rectifying and recording said antiresonant voltage, applying said amplifier generated voltage across a pure capacitive load, rectifying and recording the voltage generated across said pure capacitive load, and deriving the series resistance of said crystal from said rectified and recorded voltages.

2,733,406
MEASURING DEVICE

Sune Lambert Overby, Stockholm, Sweden, assignor to Telefonaktiebolaget LM Ericsson, Stockholm, Sweden, a company of Sweden

Application September 19, 1952, Serial No. 310,380
Claims priority, application Sweden October 26, 1951
15 Claims. (Cl. 324—59)



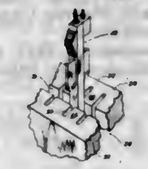
1. In a device for measuring the magnitude of an impedance means, a two-pole network comprising two impedance-reciprocal branches connected in parallel, one of said branches including resistance means and the impedance means to be measured and the other including a resistance means of the same resistance value as the aforesaid resistance means and a variable impedance means having a phase angle the sign of which is opposite to the sign of the phase angle of the impedance means to be measured; and a sensitive measuring circuit means responsive to a variance in the absolute value of the impedance of the two-pole network from the impedance value of each of said equal resistance means.

7. A device according to claim 1, wherein the said measuring circuit means comprises a differential transformer means having a split secondary connected with its outer terminals to the poles of said two-pole network, a comparative resistance means included in the connection between one of said outer terminals and one of said poles, the said resistance means, as converted by the action of said transformer means, having a value equal to each of the resistance means included in said network, and indicating means connected between the inner terminal of said secondary and a connection point between the respective terminal of the comparative resistance means and one of the poles of the network.

2,733,407
GALVANOMETER STRUCTURE

Joseph H. Lancor, Jr., Pasadena, Calif., assignor to Consolidated Engineering Corporation, Pasadena, Calif., a corporation of California

Application May 21, 1954, Serial No. 431,481
4 Claims. (Cl. 324—97)

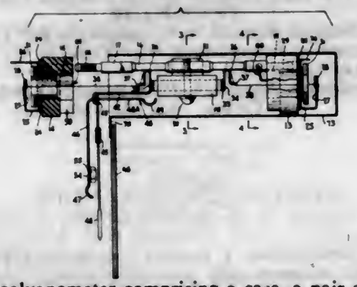


1. In a galvanometer having an elongated case enclosing a suspension assembly including a deflection coil and a magnet pole piece disposed adjacent the coil and projecting from the side of the case, the pole piece being adapted to slide into a slot in a magnet block and hold the galvanometer case in place in the block, the improvement which comprises a non-magnetic member fastened to the end of the pole piece that first enters the block when it is slid into the slot, the non-magnetic member serving as a guide to facilitate the entry of the pole piece into the block and reducing the force with which the pole piece is attracted to the block prior to entry.

2,733,408
GALVANOMETERS

Richard E. B. Wakefield, Aldan, Pa., assignor to Shallcross Manufacturing Company, Collingdale, Pa.

Application August 29, 1951, Serial No. 244,175
3 Claims. (Cl. 324—154)

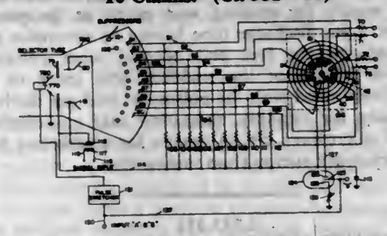


1. A galvanometer comprising a case, a pair of blocks at least one of which is mounted in the case, a pair of suspension rods spacing said blocks apart, a core supported by and positioned below said rods between said blocks, a spider rotatably mounted on each of said blocks, a projecting tab on each spider for manual rotation thereof, an arm on each spider, a coil suspended for free movement about said core, suspension wires connecting opposite ends of said coil to said spider arms, means extending externally of said case adapted to engage one of the spider tabs for adjustment thereof, a pointer mounted to be actuated by said coil, a scale plate fastened into said case and with which said pointer cooperates, a clamp slidably mounted in said case between locking and unlocking positions, and a frame carried by said clamp, said frame being shaped to engage the windings of said coil and adapted to lift said coil into a fixed position.

2,733,409
PULSE CODE MODULATION SYSTEM

Saul Kuchinsky, Philadelphia, Pa., assignor to Burroughs Corporation, Detroit, Mich., a corporation of Michigan

Application August 14, 1952, Serial No. 304,344
10 Claims. (Cl. 332—11)

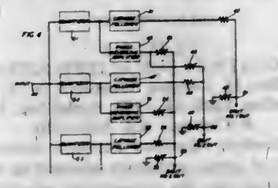


1. Signal sampling apparatus comprising selector means and encoding means, said selector means comprising input means for receiving input signals, a plurality of output means, means to energize individual ones of said plurality of output means at separate times in accordance with the amplitude of the signal received by the input means at such times, said encoding means comprising a plurality of input elements, each of said input elements of the encoding means being individually associated with and energizable by individual ones of said plurality of output means of the selector means, a plurality of coded output elements associated with different ones of said plurality of input elements of the encoding means and adapted to be individually energized in a coded manner in accordance with the energization of the associated ones of said plurality of input elements, and means for momentarily interrupting the energization of said coded output elements during the times any one of the plurality of input elements of the encoding means is being energized by any one of the output means of the selector means.

2,733,410
PULSE CODE MODULATION CODER

William M. Goodall, Oakhurst, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

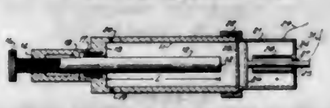
Application March 2, 1953, Serial No. 339,851
7 Claims. (Cl. 332—11)



2. An electrical coding system comprising a first quantizer producing output voltage steps of a given magnitude in response to input signals, a second quantizer producing

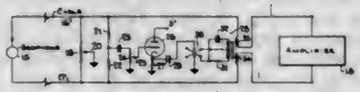
a greater number of voltage steps of a predetermined lesser magnitude in response to input signals, and means for subtractively combining the outputs of said quantizers.

2,733,411
MICROWAVE AMPLITUDE MODULATOR
John F. Zaleski, Valhalla, and Robert Crane, Jr., Chappaqua, N. Y., assignors to General Precision Laboratory Incorporated, a corporation of New York
Application September 12, 1952, Serial No. 309,170
9 Claims. (Cl. 332—57)



1. A microwave amplitude modulator comprising, a microwave coaxial cavity including inner and outer conductors, said inner conductor being positioned coaxially with said outer conductor and terminating in a free end coupling means for exciting said cavity at its resonant frequency, a gas discharge tube having its electrodes positioned adjacent the free end of said inner conductor whereby a portion of the resonant field space of said cavity is interlinked with the plasma of said gas discharge tube, means for variably energizing said gas discharge tube, and microwave circuit means for abstracting modulated microwave energy from said cavity.

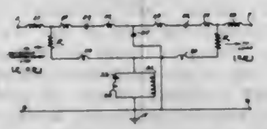
2,733,412
SEISMIC AMPLIFIER INTERFERENCE ELIMINATOR
Warren A. Alexander and John T. Baker, Tulsa, Okla., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application November 19, 1951, Serial No. 257,086
7 Claims. (Cl. 333—12)



7. In a seismic amplifier system, including a geophone electrically connected to an amplifier through two electrical conductors, the improvement which comprises means for equalizing, with respect to a fixed ground potential, the magnitude of interfering voltages generated in each of said conductors, leaving between the two conductors a resultant voltage due to phase differences between the magnitude equalized voltages, means for developing from said resultant voltage, in conjunction with said magnitude equalizing means, a first voltage 90° out of phase with said resultant voltage, fixed phase shifting means for shifting the phase of said first voltage by 90°, to thereby provide a second voltage 180° out of phase with said resultant voltage, means for adjusting the magnitude of said second voltage to make it equal to the magnitude of said resultant voltage and means for injecting said adjusted second voltage into said amplifier whereby to cancel said resultant voltage.

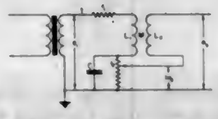
2,733,413
ATTENUATION EQUALIZER NETWORK
Ben H. Tongue, Westfield, N. J.
Application April 13, 1953, Serial No. 348,301
6 Claims. (Cl. 333—28)

5. An attenuation equalizer network having, in combination, a pair of input terminals adapted to be connected to a transmission line the attenuation of which increases with increasing frequency over a predetermined band of radio frequencies fed along the line, a pair of output terminals adapted to be connected to a load presenting substantially a resistive termination of value R_0 corresponding substantially to the characteristic impedance of the line, one input terminal being connected to one output terminal, a series-resonant circuit comprising condenser means the opposite terminals of which are each connected through a pair of inductances to the other input and output terminals of the network, shunt capacitance connected between the series circuit and the said one input and output terminals of the network, a supplemental circuit con-



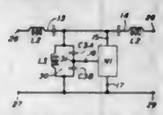
nected across the series-resonant circuit and comprising a pair of resistors of value substantially equal to R_0 in series with further inductance, and a shunt anti-resonant circuit connected from a point of the supplemental circuit intermediate the resistors to the said one input and output terminals of the network and comprising an inductance shunted by capacitance, the resonant and anti-resonant circuits being tuned to a frequency slightly greater than the highest frequency of the said band of frequencies.

2,733,414
FREQUENCY SUPPRESSION FILTER
Clifford E. Lansil, Arlington, Mass., assignor to The Gamewell Company, Newton Upper Falls, Mass., a corporation of Massachusetts
Application November 14, 1951, Serial No. 256,266
5 Claims. (Cl. 333—77)



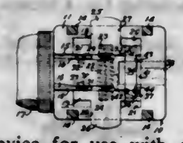
5. A four-terminal coupling network for suppressing a selected frequency while having a minimum attenuating effect upon lower frequencies, including a first circuit connected across two input terminals including, in series, a first self-inductance and a parallel circuit having a capacitance in one branch and a resistance in the other branch, and a second circuit connected across two output terminals including, in series, a second self-inductance and a parallel circuit including an appreciable portion of said resistance in one branch and all of said capacitance in the other branch, said second self-inductance being inductively coupled in series aiding relationship to the first self-inductance and said second circuit being inductive at all frequencies below the suppressed frequency.

2,733,415
WAVE TRANSMISSION NETWORK USING TRANSISTOR
John T. Bangert, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 26, 1952, Serial No. 306,429
19 Claims. (Cl. 333—80)



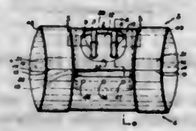
1. In combination, a reactive impedance branch and means for compensating dissipation therein comprising a transistor having a base, a collector, and an emitter, a source of voltage connected between said collector and one end of said branch, a resistor connected between said emitter and said one end, a capacitor connected between said base and the other end of said branch, and a second resistor connected between said emitter and an intermediate point on said branch.

2,733,416
LOCKING DEVICE FOR USE WITH ELECTRICAL PLUGS
George J. Evalt, Philadelphia, Pa.
Application April 5, 1955, Serial No. 499,275
8 Claims. (Cl. 339—37)



1. A locking device for use with an electrical plug having prongs, comprising a casing having openings to receive the prongs, locking means within said casing movable translationally from an outer position to an inner position to lockingly engage one of the inserted prongs, spring means for normally retaining said locking means in the outer position, manual means for moving said locking means to the inner position, and key-releasable detent means for holding said locking means in the inner position.

2,733,417
METAL SLEEVE BASE FOR DOUBLE ENDED TUBULAR LAMP
Donald D. Hinman, Chagrin Falls, and John F. Schmerheim, South Euclid, Ohio, assignors to General Electric Company, a corporation of New York
Application October 30, 1952, Serial No. 317,674
2 Claims. (Cl. 339—50)



1. A base for attachment to an electric lamp having a double ended tubular vitreous envelope shaped with its ends juxtaposed and directed toward one another and having electric terminals extending from its ends, said base comprising a flexible sheet metal sleeve open at its ends for receiving and embracing the envelope ends and having an opening in its side defined by a rolled over edge and a pair of oppositely disposed tongues integral with said edge and extending generally inwardly of said sleeve, said base comprising also an electrically insulating body mounted in said sleeve and having a convex surface fitting the concave inner surface of said sleeve and provided with a flat depressed portion completely covering said opening with the side surfaces thereof engaging the said rolled over edge, and spaced electrical contacts affixed to the said depressed portion of said body for connection with the envelope terminals, said tongues engaging said insulating body to clamp said body to said sleeve with said contacts at said opening and spaced from the sides of the opening.

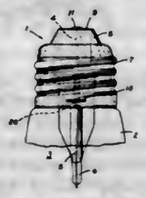
2,733,418
SELF-CLAMPING TEST PRONG
Creighton B. Kimble, Madison, N. J., assignor to Stavid Engineering, Inc., Plainfield, N. J., a corporation of New Jersey
Application September 14, 1953, Serial No. 379,889
1 Claim. (Cl. 339—108)

A current-tester coupling unit for establishing an electrical connection of substantially constant pressure value with a slotted-terminal element of an electric circuit comprising an electrically conductive tubular element open at one end to receive a terminal fitting of a detachable extension cord, said cord comprising an insulated conductor having a compressible non-insulated male end piece adapted to fit within the open end of said tubular element and establish electrical connection therewith, a sheath of insulation enveloping the exterior of said tubular element, said sheath extending slightly beyond the said open end of the tubular element so as to overlay and surround the exposed portion of the non-insulated male end piece of the said extension cord when the said end piece of the cord is in operative position within the said tube, an elongated electrically-conductive blade member secured within said tube at its other end, said blade member having an end portion adapted to fit within the slot of a terminal element whose current characteristics are to be sampled, said end portion of the blade member being wider than the width of the slot in the terminal element so as to be capable of limited angular movement therein, a metallic and relatively rotatable sleeve member telescoping said blade member, said sleeve having slot-engag-



ing lugs at its outer end adapted also to fit within the slot of the terminal element at opposite sides of said blade member, spring means between the sleeve member and blade member tensioned to revolve said sleeve relative to the blade from a position whereat the sleeve lugs occupy a position coplanar with the blade member that permits free insertion of the blade member and lugs into the slot in the terminal element to a position angularly removed therefrom and whereat diagonally opposite corners of the blade member impinge against opposite side walls of the slot in the terminal element and physically and electrically couple the tester unit to the said terminal element, the said spring means being in the form of a helix and connected to the said blade and sleeve members so as normally to effect limited counterclockwise movement of the blade in the sleeve so that a turning of the tubular member and blade in the opposite direction restores the blade to coplanar relation with the lugs on the sleeve and breaks the previously established constant-pressure electrical connection of the tester unit with the terminal element, and guide means between the said sleeve member and the blade member for limiting the relative angular movement.

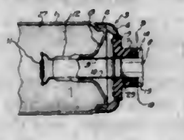
2,733,419
MEANS FOR SECURING A LEAD WIRE TO AN ELECTRIC LAMP BASE
Charles E. Beck, East Cleveland, Ohio, assignor to General Electric Company, a corporation of New York; patent dedicated to the Public insofar as it relates to lamps and lamp parts to the extent stated in document recorded in the United States Patent Office, January 4, 1954, liber U–238, page 394
Application December 26, 1951, Serial No. 263,438
3 Claims. (Cl. 339—144)



1. An electric lamp comprising a vitreous bulb having a main portion and a neck portion of reduced diameter and generally cylindrical section, a lead-in wire sealed into said bulb through said neck portion, a cylindrical base fastened on said neck portion and having a shell

fitting closely thereon, said lead wire being drawn out between said shell and said neck portion, and an inwardly peened furrow in the region of said shell next said lead wire, said furrow being directed transversely to the direction of said lead-in wire and disposed to cross over said wire and consisting of a series of closely spaced minute indentations forming at the inside of the base shell a ridge in which the said lead-in wire is slightly embedded.

2,733,420
LAMP BASE FOR ELONGATED TUBULAR LAMPS
Ray E. Marz, Willowick, Ohio, assignor to General Electric Company, a corporation of New York
Application July 1, 1954, Serial No. 440,777
2 Claims. (Cl. 339—145)



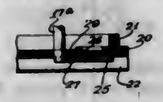
1. A base for attachment to an end of an electric lamp envelope having a pair of spaced wire inleads extending from the said envelope end, said base comprising an outwardly projecting electrically insulating body member provided with a passage for receiving both said spaced inleads and electrical supply contacts of a holder for said lamp, the outer face of said member having inlead receiving recessed portions greater in depth than the inleads for which the base is designed and communicating with said passage for accommodating the end portions of inleads threaded through said passage, said recesses extending completely across the said outer face of said member from said passage whereby the end portions of inleads threaded through said passage and bent over into said recesses extend laterally beyond the said outer face of said member to facilitate cutting said inleads to proper length in the manufacture of a based lamp, each of said recesses having a cavity opening thereinto, extending into said member and spaced from said passage, the walls of said cavity being spaced apart a sufficient distance to accommodate therebetween and anchor in said base a crimped end of a cut inlead, the wall of said passage and the portions of said spaced recesses between said cavities and said passage being shaped to support the portions of the inleads accommodated therein in spaced positions for engagement with insulated electrical supply contacts of a holder for said lamp.

2,733,421
LAMP BASE
Dale A. Grovemiller, Euclid, Ohio, assignor to General Electric Company, a corporation of New York
Application July 1, 1954, Serial No. 440,780
5 Claims. (Cl. 339—145)



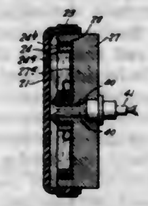
1. A base for attachment to an end of an electric lamp having a pair of spaced wire inleads extending from said end, said base comprising an outwardly projecting electrically insulating body member provided with a passage for receiving both said spaced inleads, the outer face of said member having spaced apart recessed portions communicating with said passage for accommodating the end portions of inleads threaded through said passage, and an elongated guide slot extending across the inner end of said passage with the ends thereof aligned along said passage with the said outer recessed portions, the sides of said slot being convergent toward each of the ends thereof to direct said wire inleads into spaced parallel positions in said passage and in line with said recesses during assembly of said base on said lamp, said recesses being greater in depth than the diameter of the inlead portions to be accommodated thereby to protect said inlead portions from accidental contacts.

2,733,422
TERMINAL LUG AND MOUNTING BLOCK
Theodore J. Obszarny, Chicago, Ill., assignor to Guardian Electric Manufacturing Co., Chicago, Ill., a corporation of Illinois
Application April 9, 1951, Serial No. 219,923
3 Claims. (Cl. 339—220)



1. A terminal mounting block formed of electrical insulating material, having a terminal mounting face provided with one or more outwardly extending ribs defining separate terminal mounting areas, and a plurality of terminal lugs connected to said block in said areas, and each having a tubular sleeve seated in an aperture formed in said area, with the free end of the sleeve extending beyond the undersurface of the block and spun outwardly for firmly securing said lug to the block, said lugs each being formed with an opening, spaced from the sleeve, and registering with an aperture in the block for the reception in the respective aperture and opening of the terminal portion of a conductor wire disposed at the side of said block opposite to said terminal areas, said lugs each having portions disposed in close proximity to said ribs for opposing rotative movement of said lugs.

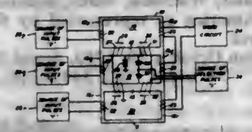
2,733,423
CERAMIC TRANSDUCERS HAVING ANNULAR ELEMENTS
Leon W. Camp, Glendale, Calif., assignor to Bendix Aviation Corporation, North Hollywood, Calif., a corporation of Delaware
Application February 18, 1952, Serial No. 272,207
6 Claims. (Cl. 340—10)



1. In a transducer for translating sound waves in a fluid medium into electrical waves in an electric circuit, and vice versa: a front wall member of sound-transparent material; a solid wall member of sound-reflective material back of said front wall member in generally parallel relation thereto and substantially coextensive therewith, and means joining said wall members together at their edges to form an enclosure; an array of radially vibratile annular transducing elements positioned in said enclosure, each element resting at one end against said solid wall member; means including sound-absorptive material interposed between said elements for supporting them in separated relation and preventing effective acoustic coupling between their outer surfaces and said front wall member; a sound-propagating compressional wave medium filling the free space within said enclosure for propagating sound between said front wall member and

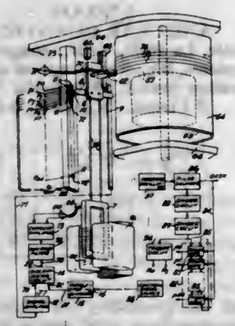
the annular inner surfaces of said elements; and electrical means associating said elements with said electric circuit.

2,733,424
CONNECTOR AND SELECTOR CIRCUITS
Wayne H. Chen, Rego Park, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application September 15, 1954, Serial No. 456,291
8 Claims. (Cl. 340—147)



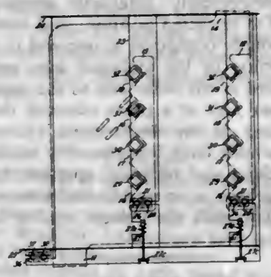
1. An electrical circuit comprising a magnetic core defining three magnetic circuits and having a pair of outer legs and a pair of inner legs, said inner legs being of larger cross section than said outer legs, means generating sufficient flux in said inner legs normally to saturate said outer legs without saturating said inner legs, an input winding and an output winding individually coupled to each of said magnetic circuits, a control winding on each of said inner legs, and means connecting said control windings in parallel so that a selection pulse of one polarity generates flux opposing the saturation flux of said one inner leg and a selection pulse of the other polarity generates a flux opposing the saturation flux of the other of said inner legs.

2,733,425
SERVO CONTROL MEANS FOR DATA STORAGE DEVICE
Frederic Calland Williams, Timperley, England, and Gordon E. Thomas, Port Talbot, Wales, assignors to National Research Development Corporation, London, England, a corporation of Great Britain
Application September 23, 1952, Serial No. 310,988
Claims priority, application Great Britain September 24, 1951
15 Claims. (Cl. 340—174)



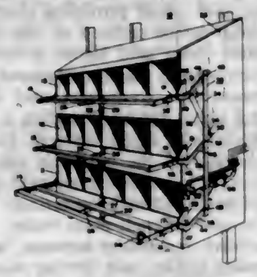
9. Servo control means for controlling the position of a single transducer device movable transversely across a plurality of parallel recording tracks in a data storage device for an electronic digital computing machine, comprising a plurality of continuously operating signal sources providing a plurality of electric pulse train signals, said signals having a common pulse recurrence frequency and having their respective pulses intercalated in timing whereby the pulses of any one train are preceded and succeeded in time by pulses of other trains, the timing of the pulses in any one train, relative to the remaining trains, being different, a plurality of separate signal providing elements mounted in fixed spaced apart positions along the path of movement of said transducer device relative to said tracks whereby each signal providing element is representative of the alignment of said transducer with a different one of said recording tracks, means supplying a different one of said pulse train signals to each of said signal providing elements, an electric signal pick-up device secured to said transducer for selecting a signal from said signal providing elements which is characteristic of the instantaneous positional relationship between said transducer and said recording tracks, a control signal source providing a control signal having a characteristic signal element repeated at the recurrence frequency of the pulses in said pulse trains, the timing of said characteristic element being variable over a range of values related respectively to the timings of the pulses in said different pulse trains, driving means for causing relative movement between said transducer and said recording tracks, said driving means being controlled by an applied error signal and signal comparing means supplied with said selected signal from said signal providing means and with said control signal and providing an error signal to said driving means to effect relative movement of said transducer with respect to said recording tracks until said selected signal is one in which the pulses therein are in time coincidence with the characteristic elements of said control signal.

2,733,426
CAR PARKING SYSTEM
Alexander L. Jablonowski, Waukesha, Wis.
Application February 15, 1955, Serial No. 488,250
14 Claims. (Cl. 340—213)



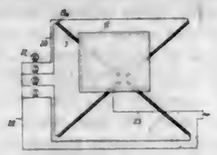
1. A car parking system comprising a determinate number of parking stations, a waiting station, an aisle signal and an entrance signal, said aisle signal including a first circuit and a second circuit, said first circuit having in series a relay, a first aisle lamp and parallel branches of said determinate number, said branches being similar to each other and having in series normally open parking station switches of said determinate number and a normally open waiting station switch in parallel with one of said series switches, said series switches closing in response to a car entering said parking station with one of said series switches of each of said branches being closed in response to a car entering one of said parking stations, each of said waiting station switches being in parallel with a series switch of a different parking station in each of said branches, said waiting station switches being closed in response to a car entering said waiting station, said second circuit including a lamp connected to a source of electrical energy when said system is employed; said entrance signal including a first and a second circuit, said first entrance circuit connected to a source of electrical energy and having in series a first entrance lamp and a normally open contact of said relay, said second entrance circuit including a second entrance lamp connected to a source of electrical energy when said system is employed.

2,733,427
RELEASABLE DOOR FASTENER
Maurice D. Chandler, Philadelphia, Pa.
Application August 8, 1952, Serial No. 303,245
2 Claims. (Cl. 340—275)



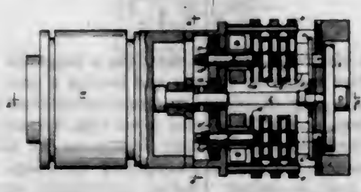
1. For use on a hen's nest or the like having a plurality of vertically spaced doors pivotally mounted to open downwardly and outwardly, the door pivot points being disposed in vertical alignment; linkage interconnecting said doors so that they move in unison, said linkage including a generally vertical bar disposed inward of the door pivot points, an arm extending inwardly from each of said doors and pivotally connected to said vertical bar, one of said arms extending inward somewhat beyond its pivotal connection to the vertical bar, said vertical bar remaining vertically disposed but being displaced downwardly and inwardly when the doors are closed; spring means operatively connected to said linkage and tensioning the vertical bar to downwardly-displaced door-opening position; said spring means comprising a telescopically extensible member normally spring-loaded to retracted position, said extensible member being pivotally connected at one end to the inwardly extending portion of the aforesaid arm and being pivotally connected at the other end to the outer portion of the next higher arm at a point adjacent the door pivot whereby closing of the doors cause extension of said member, a movable latch for releasably holding the doors in closed position and remotely operable means for releasing the latch so as to enable said extensible member to retract and to shift the linkage to door-opening position.

2,733,428
SELECTOR OR MIXER DEVICES FOR POLYCHROMATIC ILLUMINATION
Georges Leblanc, Paris, France, assignor to Compagnie Generale de Travaux d'Eclairage et de Force, Anciens Etablissements Clemancon, Paris, France, a French society
Application March 23, 1953, Serial No. 344,117
Claims priority, application France March 24, 1952
5 Claims. (Cl. 340—335)



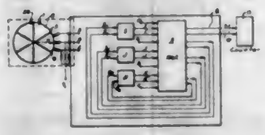
1. In a device of the kind described, in combination with a plurality of electric light sources of different colors and a power supply therefor, a casing, elongated resistors mounted in said casing in angular equispaced relation in the same plane and each having the outer end thereof connected to one terminal of a respective one of said light sources, a conductive rectangular member displaceable in contact with all said resistors and parallel thereto and connected to one side of said power supply, conductor means connecting the other side of said supply to another terminal of each light source, a selector knob operable from outside the casing and operatively connected to said member, and parallel linkage means operably connected with said member to constrain the motion thereof whereby actuation of the knob will impart a parallel displacement to said member for determining the relative amounts of said resistors effectively connected to each light source.

2,733,429
MECHANICAL INDICATOR AND SIGNAL UNIT
Harold D. Adler, Waltham, Mass., assignor to the United States of America as represented by the Secretary of the Air Force
Application October 29, 1953, Serial No. 389,184
7 Claims. (Cl. 340—345)



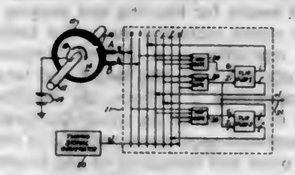
1. A memory device comprising an input signal receiving means operably associated with an input shaft, spaced input transmitting gears on said shaft, an input recording assembly geared to one of said input transmitting gears continuously responsive to the transmission of an input signal, an output means associated in geared relation to another of said input transmitting gears within a predetermined range of input, mutilated gear means operatively associated with said input registering assembly responsive to an input signal extending said predetermined range to disengage said output means from said another of said input transmitting gears and similarly responsive to an input signal indicating a return to said predetermined range to cause reengagement of said output means with said another input transmitting gear whereby an output signal will be given only within a predetermined range of input.

2,733,430
ANGULAR QUANTIZER
Floyd G. Steele, La Jolla, Calif., assignor to Digital Control Systems, Inc., a corporation of California
Application June 3, 1952, Serial No. 291,477
8 Claims. (Cl. 340—347)



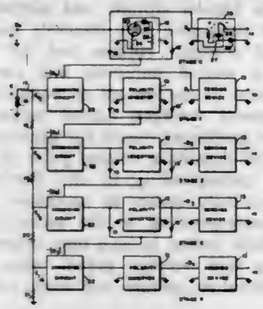
1. A device for quantizing the rotation of a shaft rotatable in two directions, said device comprising: means having 1st, 2nd and 3rd output terminals and responsive to a predetermined amount of angular rotation of the shaft in one direction for producing consecutive signals on said 2nd, 1st and 3rd terminals and responsive to a predetermined amount of angular rotation of the shaft in the other direction for producing consecutive signals on said 2nd, 3rd and 1st output terminals; first means responsive to the appearance of consecutive signals on said 2nd, 1st and 3rd output terminals for producing an output signal representing a count up; and second means responsive to consecutive signals appearing on said 2nd, 3rd and 1st terminals for producing an output signal representing a count down.

2,733,431
QUANTIZER
Floyd G. Steele, La Jolla, Calif., assignor to Digital Control Systems, Inc., a corporation of California
Application November 22, 1952, Serial No. 322,096
9 Claims. (Cl. 340—347)



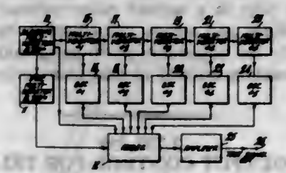
1. In a quantizer wherein each predetermined movement of a movable member produces first and second consecutively appearing signals on first and second conductors, respectively, a device responsive to the consecutive appearance of the first and second signals on the first and second conductors, respectively, for producing an output signal, said device comprising: electronic switching means normally in one conduction state but responsive to the first signal appearing on the first conductor for switching into its other conduction state; and means responsive to the appearance of the second signal on said second conductor when said switching means is in said other conduction state for simultaneously producing an output signal and switching said switching means into its normal conduction state.

2,733,432
ENCODING CIRCUIT
Jack Breckman, Long Branch, N. J., assignor to the United States of America as represented by the Secretary of the Army
Application December 31, 1953, Serial No. 401,738
7 Claims. (Cl. 340—347)
(Granted under Title 35, U. S. Code (1952), sec. 266)



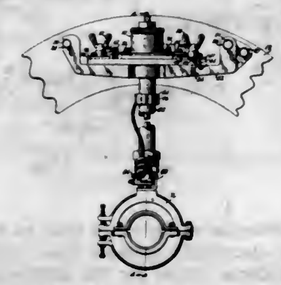
1. A circuit for encoding a signal amplitude as a code group of digit signals in cyclic binary code comprising an initial stage and a plurality of following stages, *1* to *n*, which in order correspond to decreasingly significant digits of the group, each of said stages, except the *n*th stage, comprising an absolute value circuit having means for receiving an input amplitude and producing an output of equal amplitude in a chosen polarity; a source of reference amplitudes; means for applying said signal amplitude to said initial stage, means for applying to each stage, *1* to *n*, the difference between a reference amplitude and the absolute value of the output amplitude of the preceding stage, said reference amplitudes having values such that the reference amplitude for any stage, *r*, is $E/2^r$, where E is the maximum codeable signal amplitude; a sensing circuit for each stage and means for coupling each sensing circuit to its stage to produce a digit signal output in accordance with the polarity of input amplitude to said stage.

2,733,433
TEST EQUIPMENT FOR TELEVISION
Wendell C. Morrison, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application October 16, 1952, Serial No. 315,021
4 Claims. (Cl. 340—351)



3. A signal generator for television signal processing apparatus, which generator comprises: a source of pulses of generally rectangular waveshape; a plurality of oscillators, each capable of producing a wave of a certain frequency different from that of another; a plurality of keying pulse generators, each operatively connected to one of said oscillators for applying a pulse to its associated oscillator to cause said oscillator to produce a discrete burst of oscillations; means for applying pulses from said source to one of said keying pulse generators so as to cause said generator to produce a pulse; means for applying pulses from said one keying pulse generator to another one of said generators for causing the second generator to produce a pulse following the pulse from said first generator, a further pulse generator for producing pulses of shorter duration than pulses from said source, said further pulse generator being responsive to pulses from said source to produce pulses occurring generally in synchronism with pulses from said source; and means associated with said oscillators and said source of pulses for adding such bursts of oscillations of different frequency and pulses from said source and from said further pulse generator to produce a composite waveform.

2,733,434
CATHODE RAY TUBE MOUNTING
Anthon A. Leonard, Hastings, Thomas Allan, Hawthorne, and Willy Borberg, North White Plains, N. Y., assignors to General Precision Laboratory Incorporated, a corporation of New York
Application August 12, 1952, Serial No. 304,044
9 Claims. (Cl. 340—367)



1. A cathode ray tube mounting comprising, an optical barrel provided with an optical system and a frame affixed therein, a removable cathode ray tube assembly supporting a cathode ray tube mounted thereon, means for removably supporting said removable assembly on said frame with said cathode ray tube in cooperative relation with said optical system, means for adjustably positioning said removable assembly in a direction parallel to the axis of said optical system, means carried by said removable assembly for adjustably positioning said removable assembly relative to said frame in a direction transverse to the axis of said optical system, cooperative means car-

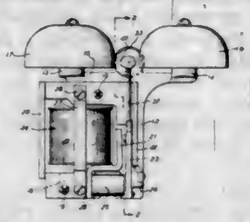
ried by said frame and said removable assembly for insuring reengagement thereof in the relative position determined by said transverse adjusting means, means carried solely by said removable assembly for adjustably rotating said cathode ray tube in one plane, means carried solely by said removable assembly for adjustably rotating said cathode ray tube in a second plane normal to said first mentioned plane, and means carried solely by said removable assembly for adjustably positioning said cathode ray tube in a direction normal to said transverse direction of adjustment.

2,733,435

SOUND OUTPUT CONTROL FOR TELEPHONE RINGERS

Harold A. Bredehoft, Millington, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application October 16, 1952, Serial No. 314,995
7 Claims. (Cl. 340—397)



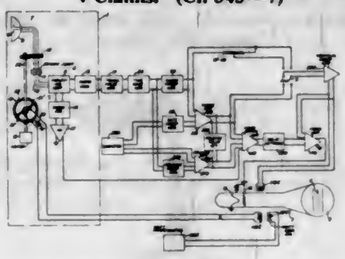
1. The combination in a telephone ringer, of a pair of spaced gongs, a resilient clapper rod, an eccentrically-shaped clapper mounted on said rod and adapted to engage said gongs when said rod is vibrated, and means for rotating said clapper and simultaneously regulating the amplitude of vibration of said clapper rod.

2,733,436

COINCIDENCE CIRCUIT

Stephen Doba, Jr., Long Island City, N. Y., and Laurence W. Morrison, Jr., Florham Park, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application March 21, 1944, Serial No. 527,458
4 Claims. (Cl. 343—7)



1. For bombing an enemy target from an airplane provided with an electrically operable bomb release mechanism, a coincidence circuit for the automatic operation of said mechanism comprising means for repetitively defining a fixed time interval, means for finding the instantaneous range and rate of decrease thereof of said target, means associated with said range and rate finding means for producing a first repetitive voltage pulse at an instant in said interval corresponding to said range and occurring progressively earlier as said range decreases, means for computing a target range appropriate for the operation of said mechanism, means associated with said computing means for producing a second repetitive voltage pulse at a fixed instant in said interval corresponding to said appropriate range and eventually simultaneous with said first voltage pulse and means responsive to said pulses when simultaneous to produce a voltage pulse adapted to operate said mechanism.

3. For an airplane flying at known altitude and airspeed toward a target and equipped with bomb releasing means adapted to be operated by a voltage pulse and with electrical means for locating and ranging the target, said electrical means including means for emitting pulses of radiation repetitive at a desired frequency to be individually reflected from the target and target observing means comprising a cathode ray oscilloscope provided at least with a screen on which the target is represented by a luminous spot corresponding to the reception of a reflected pulse and appearing on the screen in a position vertically corresponding to the range of the target, a system of apparatus for operating said releasing means appropriately to bomb the target comprising means controlled by said electrical means for establishing simultaneously with each emitted pulse a time interval of constant length less than the interval between successive emitted pulses, means controlled by said interval establishing means for producing a first repetitive voltage rising linearly with time throughout said time interval, means for controlling the vertical position of the target spot on the screen in accordance with said first voltage, means for producing a voltage decreasing linearly with time throughout a period overlapping a plurality of said time intervals, means for comparing in successive time intervals said first voltage with said decreasing voltage and for producing on said screen a first horizontal luminous line corresponding in vertical position to the instant of equality of said compared voltages in successive time intervals, means for adjusting the initial magnitude and the rate of decrease of said decreasing voltage to make said first line continuously intersect the target spot, means controlled by said interval establishing means for producing a second repetitive voltage rising linearly with time throughout an initial portion of each time interval, computing means for producing a constant voltage proportional to the target slant range appropriate to bomb release at the known altitude and airspeed, means for comparing in successive time intervals said second voltage and said constant voltage and for producing on said screen a second luminous line corresponding in vertical position to the instant of equality of said last-named compared voltages, circuit means common to both said line producing means for generating at each of said instants of equality a voltage pulse of which voltage pulses that corresponding to the first-named instant occurs progressively earlier in successive time intervals while that corresponding to the second-named instant occurs at a fixed instant in each time interval, and means for summing said voltage pulses when simultaneous in a time interval to operate said bomb releasing means.

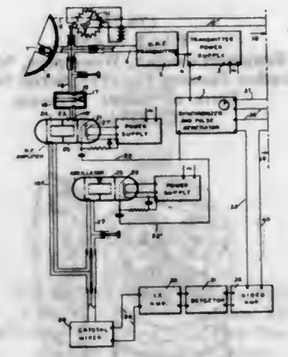
2,733,437

RADIO APPARATUS FOR DETECTING AND LOCATING OBJECTS

Joseph Lyman, Huntington, Joe J. Caldwell, Jr., Merrick, Abbott S. Maeder, East Hempstead, and Robert O. Haxby and Gereld L. Tawney, Hempstead, N. Y., assignors to Sperry Rand Corporation, a corporation of Delaware

Application August 12, 1941, Serial No. 406,494
7 Claims. (Cl. 343—11)

1. Object detector and locating apparatus comprising, means for intermittently producing ultra high frequency electromagnetic energy, antenna means for directionally radiating said electromagnetic energy into space, means for rotating said antenna means to scan a field of view, said antenna means also being adapted to receive energy reflected from remote objects, receiving means coupled to said antenna means, blocking means rendering such receiving means inoperative except during intervals between successive transmission periods, additional means for biasing said receiver off during the intermittent transmission periods of said antenna means, position indicating means, means for supplying scanning and time sweep



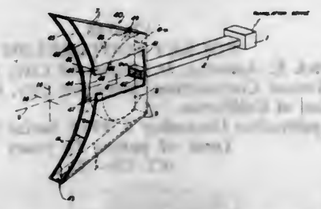
potentials to said indicating means synchronously with the scanning operation of said antenna means, said receiving means being connected to said indicator to show the bearing and distance of objects upon the receipt of reflected electromagnetic energy from such objects.

2,733,438

METALLIC LENS ANTENNA

Winston E. Kock, Middletown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application December 30, 1947, Serial No. 794,529
2 Claims. (Cl. 343—909)

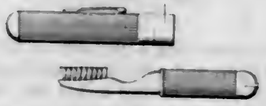


1. A lens comprising a plurality of flat metallic members spaced apart and positioned parallel to said polarization, said members having a first set of corresponding longitudinal edges and a second set of corresponding longitudinal edges, the edges of the first set having the same circular contour and the edges of the second set having the same hyperbolic contour, the centers of the circles corresponding to the circular contours of the back edges being positioned between said back edges and said focal line, the distance between said focal line and the center of each circle being equal to the radius of the circle divided by the ratio of the phase velocity inside the lens to the phase velocity outside said lens.

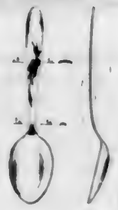
DESIGNS

JANUARY 31, 1956

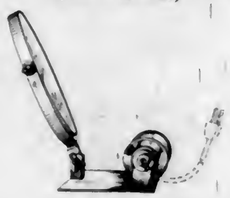
176,748
POCKET TOOTHBRUSH
Roderick E. Asturias, Jr., Redwood City, Calif., assignor to Twisto Corporation, Redwood City, Calif., a corporation of California
Application December 6, 1954, Serial No. 33,404
Term of patent 14 years
(Cl. D9—2)



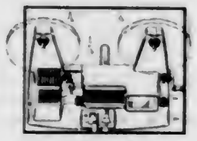
176,749
SPOON OR SIMILAR ARTICLE
John Brokate, Wallingford, Conn., assignor to Utica Cutlery Company, Inc., Utica, N. Y., a corporation of New York
Application January 28, 1955, Serial No. 34,273
Term of patent 14 years
(Cl. D54—12)



176,750
COMBINED MIRROR AND LAMP
Anton Brozyna, Irvington, N. J.
Application November 5, 1954, Serial No. 32,965
Term of patent 14 years
(Cl. D48—20)



176,751
COMBINED MOVING PICTURE PROJECTOR AND FILM EDITOR
William Castedello and Edward K. Kaprelian, Plainville, and Gordon Florian, Bridgeport, Conn., assignors to The Kalart Company Inc., Plainville, Conn.
Application June 6, 1955, Serial No. 36,369
Term of patent 7 years
(Cl. D61—1)



176,752
FACE MASK
Benjamin Cooper, Woodmere, N. Y.
Application January 12, 1955, Serial No. 33,934
Term of patent 14 years
(Cl. D34—2)



176,753
FACE MASK
Benjamin Cooper, Woodmere, N. Y.
Application January 12, 1955, Serial No. 33,935
Term of patent 14 years
(Cl. D34—2)



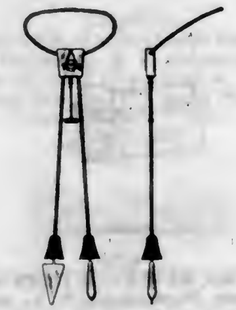
176,754
FACE MASK
Benjamin Cooper, Woodmere, N. Y.
Application January 12, 1955, Serial No. 33,937
Term of patent 14 years
(Cl. D34—2)



176,755
ELECTRIC DECADE RESISTANCE UNIT
Robert J. Couts, Akron, and Charles D. Morrill, Cuyahoga Falls, Ohio, assignors to Goodyear Aircraft Corporation, Akron, Ohio, a corporation of Delaware
Application April 1, 1954, Serial No. 29,802
Term of patent 14 years
(Cl. D26—1)



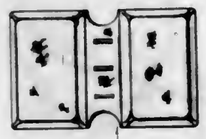
176,756
MASONIC NECK ORNAMENT
Charles S. Cowell, Osborn, Mo.
Application July 11, 1955, Serial No. 36,889
Term of patent 7 years
(Cl. D3—16)



176,757
HAIR VACUUM CLEANER
Wilbur D. Crosby, Orinda, Calif.
Application August 29, 1955, Serial No. 37,685
Term of patent 14 years
(Cl. D86—10)



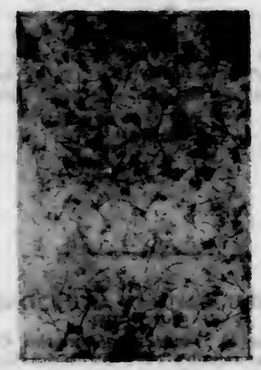
176,758
HEADREST
Sam Jones Edmonson, Burkeville, Va.
Application June 17, 1954, Serial No. 31,056
Term of patent 3½ years
(Cl. D3—9)



176,759
HOOK OR SIMILAR ARTICLE
Joseph Frank, Forest Hills, N. Y., assignor to Trulon Corporation, Elmhurst, N. Y., a corporation of New York
Application May 16, 1955, Serial No. 35,996
Term of patent 7 years
(Cl. D17—12)



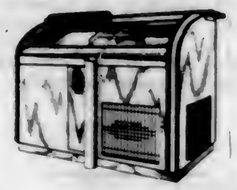
176,760
PLASTIC COATED SHEET MATERIAL
James F. Fulton, Birmingham, Mich., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application June 22, 1955, Serial No. 36,626
Term of patent 14 years
(Cl. D92—1)



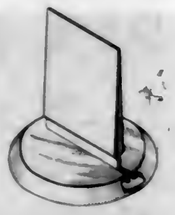
176,761
CLOCK
John L. Hancock, Chicago, Ill., assignor to Mastercrafters Clock & Radio Co., Chicago, Ill., a corporation of Illinois
Application June 1, 1953, Serial No. 25,265
Term of patent 3½ years
(Cl. D42—7)



176,762
COMBINATION BEVERAGE DISPENSER AND COOLER
Edgar C. Harrison, Charles Town, W. Va., assignor to The Victor Products Corporation, Hagerstown, Md., a corporation of Maryland
Application February 18, 1955, Serial No. 34,570
Term of patent 3½ years
(Cl. D2—3)



176,763
ROADWAY MARKER
Horace B. Harshbarger, Corona Del Mar, Calif.
Application September 26, 1955, Serial No. 38,083
Term of patent 14 years
(Cl. D72—1)



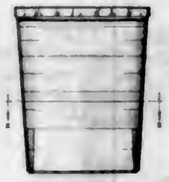
176,764
COMBINED ASHTRAY AND CIGARETTE SNUFFER
Thomas C. Henderson, Compton, Calif.
Application January 17, 1955, Serial No. 34,007
Term of patent 3½ years
(Cl. D85—2)



176,765
GRILLE
Oscar Hernandez, New York, N. Y.
Application September 23, 1955, Serial No. 38,075
Term of patent 14 years
(Cl. D54—2)



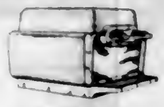
176,766
REFRIGERATOR CONTAINER
Donald W. Hill, St. Louis, Mo.
Application June 4, 1953, Serial No. 25,318
Term of patent 14 years
(Cl. D44—1)



176,767
ELECTRIC BEVERAGE DISPENSER
Clare E. Hodgman, Mamaroneck, N. Y., assignor to The Coca-Cola Company, New York, N. Y., a corporation of Delaware
Application June 21, 1955, Serial No. 36,613
Term of patent 14 years
(Cl. D2—3)



176,768
ELECTRIC BEVERAGE DISPENSER
Clare E. Hodgman, Mamaroneck, N. Y., assignor to The Coca-Cola Company, New York, N. Y., a corporation of Delaware
Application June 21, 1955, Serial No. 36,614
Term of patent 14 years
(Cl. D2—3)



176,769
AIRPLANE
Kenneth F. Holtby and Verne L. Hudson, Wichita, Kans., assignors to Boeing Airplane Company, Wichita, Kans., a corporation of Delaware
Application February 28, 1955, Serial No. 34,761
Term of patent 14 years
(Cl. D71—1)



176,770
HACK SAW OR SIMILAR ARTICLE
Sydney Jacoff, Great Neck, N. Y., assignor to Great Neck Saw Manufacturers Inc., Mineola, N. Y., a corporation of New York
Application July 7, 1955, Serial No. 36,862
Term of patent 14 years
(Cl. D93—4)



176,771
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 7, 1955, Serial No. 36,842
Term of patent 7 years
(Cl. D45—16)



176,772
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,159
Term of patent 7 years
(Cl. D45—16)



176,773
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 28, 1955, Serial No. 37,162
Term of patent 7 years
(Cl. D45—16)



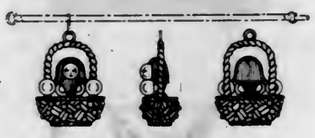
176,774
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 9, 1955, Serial No. 37,381
Term of patent 7 years
(Cl. D45—16)



176,775
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 9, 1955, Serial No. 37,382
Term of patent 7 years
(Cl. D45—9)



176,776
CHARM BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 9, 1955, Serial No. 37,383
Term of patent 7 years
(Cl. D45—17)



176,777
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 9, 1955, Serial No. 37,384
Term of patent 7 years
(Cl. D45—9)



176,778
BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 9, 1955, Serial No. 37,385
Term of patent 7 years
(Cl. D45—4)



176,779
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 9, 1955, Serial No. 37,386
Term of patent 7 years
(Cl. D45—19)



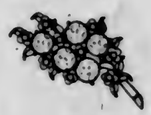
176,780
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 11, 1955, Serial No. 37,419
Term of patent 7 years
(Cl. D45—4)



176,781
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 11, 1955, Serial No. 37,420
Term of patent 7 years
(Cl. D45—16)



176,782
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 11, 1955, Serial No. 37,421
Term of patent 7 years
(Cl. D45—19)



176,783
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 11, 1955, Serial No. 37,422
Term of patent 7 years
(Cl. D45—9)



176,784
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 11, 1955, Serial No. 37,423
Term of patent 7 years
(Cl. D45—4)



176,785
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 11, 1955, Serial No. 37,424
Term of patent 7 years
(Cl. D45—16)



176,786
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 11, 1955, Serial No. 37,425
Term of patent 7 years
(Cl. D45—19)



176,787
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 11, 1955, Serial No. 37,426
Term of patent 7 years
(Cl. D45—9)



176,788
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 11, 1955, Serial No. 37,427
Term of patent 7 years
(Cl. D45—9)



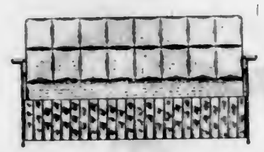
176,789
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 11, 1955, Serial No. 37,428
Term of patent 7 years
(Cl. D45—16)



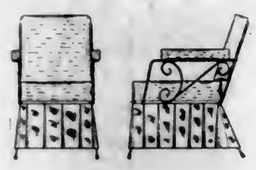
176,790
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application August 11, 1955, Serial No. 37,430
Term of patent 7 years
(Cl. D45—9)



176,791
SOFA
Francis M. Kelly, Gardner, Mass.
Application May 26, 1955, Serial No. 36,229
Term of patent 7 years
(Cl. D15—11)



176,792
CHAIR
Francis M. Kelly, Gardner, Mass.
Application May 26, 1955, Serial No. 36,230
Term of patent 7 years
(Cl. D15—1)



176,793
SHOE RACK OR SIMILAR ARTICLE
Ila Kinzie, Dallas, Tex.
Application July 8, 1954, Serial No. 31,333
Term of patent 3½ years
(Cl. D80—10)



176,794
TEXTILE FABRIC
Elizabeth Klein, Yonkers, N. Y., assignor to Chicopee Mills, Inc., a corporation of New York
Application April 27, 1955, Serial No. 35,706
Term of patent 14 years
(Cl. D92—1)



176,795
FLOWER PLANTER
Arthur F. Klingberg, Chicago, Ill., assignor to Bernard Edward Co., Chicago, Ill., a corporation of Illinois
Application January 24, 1955, Serial No. 34,137
Term of patent 3½ years
(Cl. D35—3)



176,796
FLOWER PLANTER
Arthur F. Klingberg, Chicago, Ill., assignor to Bernard Edward Co., Chicago, Ill., a corporation of Illinois
Application January 24, 1955, Serial No. 34,138
Term of patent 3½ years
(Cl. D35—3)



176,797
FLOWER PLANTER
Arthur F. Klingberg, Chicago, Ill., assignor to Bernard Edward Co., Chicago, Ill., a corporation of Illinois
Application January 24, 1955, Serial No. 34,139
Term of patent 3½ years
(Cl. D35—3)



176,798
FLOWER PLANTER
Arthur F. Klingberg, Chicago, Ill., assignor to Bernard Edward Co., Chicago, Ill., a corporation of Illinois
Application January 24, 1955, Serial No. 34,140
Term of patent 3½ years
(Cl. D35—3)



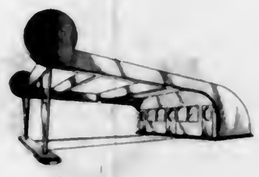
176,799
FLOWER PLANTER
Arthur F. Klingberg, Chicago, Ill., assignor to Bernard Edward Co., Chicago, Ill., a corporation of Illinois
Application January 24, 1955, Serial No. 34,141
Term of patent 3½ years
(Cl. D35—3)



176,800
FLOWER PLANTER
Arthur F. Klingberg, Chicago, Ill., assignor to Bernard Edward Co., Chicago, Ill., a corporation of Illinois
Application January 24, 1955, Serial No. 34,142
Term of patent 3½ years
(Cl. D35—3)



176,801
FILLING STATION OR THE LIKE
Otto A. Kuhler, Park County, Colo.
Application September 13, 1954, Serial No. 32,254
Term of patent 3½ years
(Cl. D13—1)



176,802
GRAPE SHEAR HANDLE
Alexander E. Lewis, Brooklyn, N. Y.
Application May 21, 1954, Serial No. 30,602
Term of patent 3½ years
(Cl. D22—5)



176,803
LIFE BUOY FLOAT
Gerald R. Lindberg, San Francisco, Calif.
Application April 18, 1955, Serial No. 35,552
Term of patent 14 years
(Cl. D71—1)



176,804
ASH TRAY
Leo Lowl, Asbury Park, N. J.
Application May 16, 1955, Serial No. 36,001
Term of patent 14 years
(Cl. D85—2)



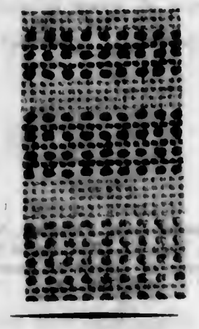
176,805
BOTTLE
Henry A. Markus, Chicago, Ill.
Application November 5, 1954, Serial No. 32,981
Term of patent 14 years
(Cl. D58—8)



176,806
TISSUE ROLL DISPENSER
Hugh E. McCants, Houston, Tex.
Application May 12, 1955, Serial No. 35,953
Term of patent 14 years
(Cl. D4—3)



176,807
CHENILLE FABRIC
Edwin Morgan and Theodore C. Sippel, Laurinburg, N. C., assignors to Scotland Mills, Incorporated, Laurinburg, N. C., a corporation of North Carolina
Application October 4, 1955, Serial No. 38,228
Term of patent 14 years
(Cl. D92—1)



176,808
PULL
John R. Morgan, Northbrook, Ill., assignor to American Cabinet Hardware Corporation, Rockford, Ill., a corporation of Illinois
Application June 9, 1955, Serial No. 36,439
Term of patent 14 years
(Cl. D10—8)



176,809
PAPER NAPKIN
Clarendon B. Nelezen, Oshkosh, Wis., assignor to Marathon Corporation, Menasha, Wis., a corporation of Wisconsin
Application May 19, 1955, Serial No. 36,118
Term of patent 14 years
(Cl. D59—2)



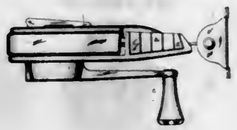
176,810
EAR RADIO
John R. Norris, Phoenix, Ariz.
Application May 19, 1955, Serial No. 36,127
Term of patent 14 years
(Cl. D56—4)



176,811
PULLEY
Ernest J. Ortiz, Jamesburg, N. J.
Application October 11, 1954, Serial No. 32,610
Term of patent 14 years
(Cl. D41—1)



176,812
CAN OPENER
Joseph Palma, Jr., Chicago, Ill., assignor to The Dazey Corporation, St. Louis, Mo., a corporation of Missouri
Application July 5, 1955, Serial No. 36,820
Term of patent 14 years
(Cl. D22—2)



176,813
BARBER CHAIR OR SIMILAR ARTICLE
George E. Parker, Pasadena, Calif.
Application July 23, 1954, Serial No. 31,571
Term of patent 14 years
(Cl. D15—3)



176,814
AIR-VACUUM DRYER UNIT FOR ATTACHMENT TO A STEAM GARMENT PRESSING MACHINE
Joseph D. Pellerin, East Norwalk, Conn., assignor to Rema Corporation, Norwalk, Conn., a corporation of Connecticut
Application May 13, 1955, Serial No. 35,974
Term of patent 14 years
(Cl. D49—1)



176,815
SERVING TRAY
William Bruce Prentice and Jeannette L. Prentice, Great Falls, Mont.
Application October 18, 1954, Serial No. 32,701
Term of patent 3½ years
(Cl. D44—10)



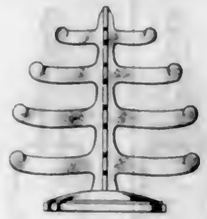
176,816
PULL
Harold H. Ring, Rockford, Ill., assignor to American Cabinet Hardware Corporation, Rockford, Ill., a corporation of Illinois
Application June 9, 1955, Serial No. 36,440
Term of patent 14 years
(Cl. D10—8)



176,817
WRIST WATCH STAND
Saul Ritter, New York, N. Y.
Application June 12, 1953, Serial No. 25,467
Term of patent 3½ years
(Cl. D80—9)



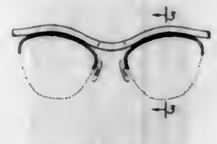
176,818
JEWELRY DISPLAY RACK
Allan Robinson, Boston, Mass.
Application January 19, 1955, Serial No. 34,055
Term of patent 14 years
(Cl. D80—9)



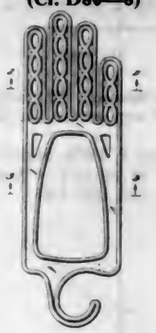
176,819
BLENDER
Frank P. Rodwick, Chicago, Ill., assignor to The Silex Company, Hartford, Conn., a corporation of Connecticut
Application September 10, 1954, Serial No. 32,242
Term of patent 14 years
(Cl. D89—1)



176,820
SPECTACLE FRONT
John J. Rohrbach, Rochester, N. Y., assignor to Shuron Optical Company, Inc., Geneva, N. Y., a corporation of New York
Application June 10, 1953, Serial No. 25,423
Term of patent 14 years
(Cl. D57—1)



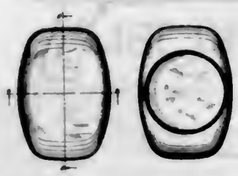
176,821
GLOVE DRIER
Alexander Ross, Flushing, N. Y.
Application May 17, 1954, Serial No. 30,520
Term of patent 14 years
(Cl. D80—8)



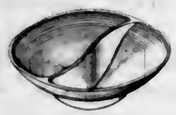
176,822
INSULATED BOWL
Roger R. Sacia and Kenneth B. Welch, West Bend, Wis., assignors to Kenro Corporation, Fredonia, Wis., a corporation of Wisconsin
Application March 2, 1955, Serial No. 34,838
Term of patent 14 years
(Cl. D44—15)



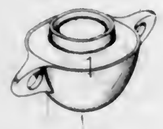
176,823
PLATTER
Roger R. Sacia and Kenneth B. Welch, West Bend, Wis., assignors to Kenro Corporation, Fredonia, Wis., a corporation of Wisconsin
Application March 25, 1955, Serial No. 35,210
Term of patent 14 years
(Cl. D44—15)



176,824
COMPARTMENTED BOWL
Roger R. Sacia and Kenneth B. Welch, West Bend, Wis., assignors to Kenro Corporation, Fredonia, Wis., a corporation of Wisconsin
Application March 25, 1955, Serial No. 35,212
Term of patent 14 years
(Cl. D44—15)



176,825
SUGAR BOWL
Roger R. Sacia and Kenneth B. Welch, West Bend, Wis., assignors to Kenro Corporation, Fredonia, Wis., a corporation of Wisconsin
Application March 25, 1955, Serial No. 35,213
Term of patent 14 years
(Cl. D44—15)



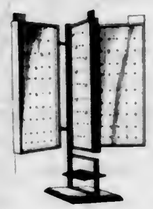
176,826
CREAMER
Roger R. Sacia and Kenneth B. Welch, West Bend, Wis., assignors to Kenro Corporation, Fredonia, Wis., a corporation of Wisconsin
Application March 25, 1955, Serial No. 35,214
Term of patent 14 years
(Cl. D44—21)



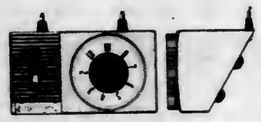
176,827
COMBINED CALENDAR AND PAD HOLDER
Jacob S. Sherman, Chicago, Ill., assignor to Park Sherman Company, Chicago, Ill., a corporation of Illinois
Application March 1, 1955, Serial No. 34,807
Term of patent 14 years
(Cl. D74—1)



176,828
DISPLAY RACK FOR DECORATORS' SAMPLE BOOKLETS OR THE LIKE
Lois Dauntsey Smith, Jackson, Miss.
Application September 8, 1954, Serial No. 32,194
Term of patent 14 years
(Cl. D80—9)



176,829
ELECTRIC BEDCOVERING CONTROL UNIT
Robert L. Smith, Hartsdale, N. Y., assignor to Bobrich Products Corp., New York, N. Y., a corporation of New Jersey
Application November 10, 1954, Serial No. 33,055
Term of patent 7 years
(Cl. D26—13)



176,830
SEWING ACCESSORY
Robert Solomon, New York, N. Y.
Application January 31, 1955, Serial No. 34,307
Term of patent 3½ years
(Cl. D3—19)



176,831
BOW TIE BRACKET
Louis Strauss, Bronx, N. Y.
Application January 2, 1953, Serial No. 22,978
Term of patent 3½ years
(Cl. D17—10)



176,832
GAME APPARATUS OR SIMILAR ARTICLE
Robert D. Sweeny, Toledo, Ohio
Application August 10, 1955, Serial No. 37,409
Term of patent 14 years
(Cl. D34—5)



176,833
GEIGER GUN
Joseph Thomas Wallace, Phoenix, Ariz., assignor, by mesne assignments, to Southern Instruments, Inc., Dallas, Tex., a corporation of Delaware
Application May 16, 1955, Serial No. 36,016
Term of patent 14 years
(Cl. D52—1)



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Fritschi, Walter W., and Lucek. Re. 24,117.
Fritschi, Walter W., and C. W. Lucek, to Bell Telephone Laboratories, Inc. Voice-frequency signaling system. Re. 24,117, 1–31–56, Cl. 179—16.
Hercules Powder Co.: *See*—
Klug, Eugene D. Re. 24,116.
Klug, Eugene D., to Hercules Powder Co. Ethyl oxyethyl cellulose derivative and method of preparation of the same. Re. 24,116, 1–31–56, Cl. 260—231.
Lucek, Charles W.: *See*—
Fritschi Walter W., and Lucek. Re. 24,117.
Miller, Nikoll. Shrimp peeling and veining machine. Re. 24,115, 1–31–56, Cl. 17—2.

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Dering, Eldon P.: *See*—
Von Abrams, Gordon J. 1,455.
Fisher, Esther G., to Arnold-Fisher Co. Rose plant. 1,453, 1–31–56, Cl. 47—61.
Jackson & Perkins Co.: *See*—
Tantau, Mathias. 1,454.
Peterson & Dering: *See*—
Von Abrams, Gordon J. 1,455.
Tantau, Mathias, to Jackson & Perkins Co. Rose plant. 1,454, Cl. 47—61.
Von Abrams, Gordon J., to E. P. Dering, d. b. a. Peterson & Dering. Rose plant. 1,455, 1–31–56, Cl. 47—61.

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Ring, Harold H. 176,816.
Asturias, Roderick E., Jr., to Twisto Corp. Pocket toothbrush. 176,748, 1–31–56, Cl. D9—2.
Bernard Edward Co.: *See*—
Klingberg, Arthur F. 176,795–176,800.
Bobrich Products Corp.: *See*—
Smith, Robert L. 176,829.
Boeing Airplane Co.: *See*—
Holtby, Kenneth F., and Hudson. 176,769.
Brokate, John, to Utica Cutlery Co., Inc. Spoon or similar article. 176,749, 1–31–56, Cl. D54—12.
Brozyna, Anton. Combined mirror and lamp. 176,750, 1–31–56, Cl. D48—20.
Castedello, William, E. K. Kaprelian, and G. Florian, to The Kalart Co. Inc. Combined moving picture projector and film editor. 176,751, 1–31–56, Cl. D61—1.
Chicopee Mills, Inc.: *See*—
Klein, Elizabeth. 176,794.
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Hodgman, Clare E. 176,768.
Cooper, Benjamin. Face mask. 176,752, 1–31–56, Cl. D34—2.
Cooper, Benjamin. Face mask. 176,753, 1–31–56, Cl. D34—2.
Cooper, Benjamin. Face mask. 176,754, 1–31–56, Cl. D34—2.
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Couts, Robert J., and C. D. Morrill, to Goodyear Aircraft Corporation. Electric decade resistance unit. 176,755, 1–31–56, Cl. D26—1.
Cowell, Charles S. Masonic neck ornament. 176,756, 1–31–56, Cl. D3—16.
Crosby, Wilbur D. Hair vacuum cleaner. 176,757, 1–31–56, Cl. D86—10.
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Palma, Joseph, Jr. 176,812.
Edmonson, Sam J. Headrest. 176,758, 1–31–56, Cl. D3—9.
Florian, Gordon: *See*—
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Fulton, James F., to United States Rubber Co. Plastic coated sheet material. 176,760, 1–31–56, Cl. D92—1.
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Harrison, Edgar C., to The Victor Products Corp. Combination beverage dispenser and cooler. 176,762, 1–31–56, Cl. D2—3.
Harshbarger, Horace B. Roadway marker. 176,763, 1–31–56, Cl. D72—1.
Henderson, Thomas C. Combined ash tray and cigarette snuffer. 176,764, 1–31–56, Cl. D85—2.
Hernandez, Oscar. Grille. 176,765, 1–31–56, Cl. D54—2.
Hill, Donald W. Refrigerator container. 176,766, 1–31–56, Cl. D44—1.
Hodgman, Clare E., to The Coca-Cola Co. Electric beverage dispenser. 176,767, 1–31–56, Cl. D2—3.
Hodgman, Clare E., to The Coca-Cola Co. Electric beverage dispenser. 176,768, 1–31–56, Cl. D2—3.
Holtby, Kenneth F., and V. L. Hudson, to Boeing Airplane Co. Airplane. 176,769, 1–31–56, Cl. D71—1.
Hudson, Verne L.: *See*—
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Kaprelian, Edward K.: *See*—
Castedello, William, Kaprelian, and Florian. 176,751.
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Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,772, 1–31–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,773, 1–31–56, Cl. D45—16.
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Katz, Adolph, to Coro, Inc. Charm bracelet or the like. 176,776, 1–31–56, Cl. D45—17.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,777, 1–31–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Bracelet or the like. 176,778, 1–31–56, Cl. D45—4.
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Katz, Adolph, to Coro, Inc. Necklace or the like. 176,781, 1–31–56, Cl. D45—16.
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Katz, Adolph, to Coro, Inc. Brooch or the like. 176,786, 1–31–56, Cl. D45—19.
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Katz, Adolph, to Coro, Inc. Earring or the like. 176,788, 1–31–56, Cl. D45—9.
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Kelly, Francis M. Sofa. 176,791, 1–31–56, Cl. D15—11.
Kelly, Francis M. Chair. 176,792, 1–31–56, Cl. D15—1.
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Sacia, Roger R., and Welch. 176,822–176,826.
Kinzie, Ila. Shoe rack or similar article. 176,793, 1–31–56, Cl. D80—10.
Klein, Elizabeth, to Chicopee Mills, Inc. Textile fabric. 176,794, 1–31–56, Cl. D92—1.
Klingberg, Arthur F., to Bernard Edward Co. Flower planter. 176,795, 1–31–56, Cl. D35—3.

Klingberg, Arthur F., to Bernard Edward Co. Flower planter. 176,796, 1–31–56, Cl. D35—3.
Klingberg, Arthur F., to Bernard Edward Co. Flower planter. 176,797, 1–31–56, Cl. D35—3.
Klingberg, Arthur F., to Bernard Edward Co. Flower planter. 176,798, 1–31–56, Cl. D35—3.
Klingberg, Arthur F., to Bernard Edward Co. Flower planter. 176,799, 1–31–56, Cl. D35—3.
Klingberg, Arthur F., to Bernard Edward Co. Flower planter. 176,800, 1–31–56, Cl. D35—3.
Kuhler, Otto A. Filling station or the like. 176,801, 1–31–56, Cl. D13—1.
Lewis, Alexander E. Grape shear handle. 176,802, 1–31–56, Cl. D22—5.
Lindberg, Gerald R. Life buoy float. 176,803, 1–31–56, Cl. D71—1.
Lowi, Leo A. Ash tray. 176,804, 1–31–56, Cl. D85—2.
Marathon Corp.: *See*—
Nelezen, Clarendon B. 176,809.
Markus, Henry A. Bottle. 176,805, 1–31–56, Cl. D58—8.
Mastercrafters Clock & Radio Co.: *See*—
Hancock, John L. 176,761.
McCants, Hugh E. Tissue roll dispenser. 176,806, 1–31–56, Cl. D4—3.
Morgan, Edwin, and T. C. Sippel, to Scotland Mills, Inc. Chenille fabric. 176,807, 1–31–56, Cl. D92—1.
Morgan, John R., to American Cabinet Hardware Corp. Pull. 176,808, 1–31–56, Cl. D10—8.
Morrill, Charles D.: *See*—
Couts, Robert J., and Morrill. 176,755.
Nelezen, Clarendon B., to Marathon Corp. Paper napkin. 176,809, 1–31–56, Cl. D59—2.
Norris, John R. Ear radio. 176,810, 1–31–56, Cl. D56—4.
Ortiz, Ernest J. Pulley. 176,811, 1–31–56, Cl. D41—1.
Palma, Joseph, Jr., to The Dazey Corp. Can opener. 176,812, 1–31–56, Cl. D22—2.
Park Sherman Co.: *See*—
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Pellerin, Joseph D., to Rema Corp. Air-vacuum dryer unit for attachment to a steam garment pressing machine. 176,814, 1–31–56, Cl. D49—1.
Prentice, Jeannette L.: *See*—
Prentice, William B. and J. L. 176,815.
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Pellerin, Joseph D. 176,814.
Ring, Harold H., to American Cabinet Hardware Corp. Pull. 176,816, 1–31–56, Cl. D10—8.
Ritter, Saul. Wrist watch stand. 176,817, 1–31–56, Cl. D80—9.
Robinson, Allan. Jewelry display rack. 176,818, 1–31–56, Cl. D80—9.
Rodwick, Frank P., to The Silex Co. Blender. 176,819, 1–31–56, Cl. D89—1.
Rohrbach, John J., to Shuron Optical Co., Inc. Spectacle front. 176,820, 1–31–56, Cl. D57—1.
Ross, Alexander. Glove drier. 176,821, 1–31–56, Cl. D80—8.
Sacia, Roger R., and K. B. Welch, to Kenro Corp. Insulated bowl. 176,822, 1–31–56, Cl. D44—15.
Sacia, Roger R., and K. B. Welch, to Kenro Corp. Platter. 176,823, 1–31–56, Cl. D44—15.
Sacia, Roger R., and K. B. Welch, to Kenro Corp. Compartmented bowl. 176,824, 1–31–56, Cl. D44—15.
Sacia, Roger R., and K. B. Welch, to Kenro Corp. Sugar bowl. 176,825, 1–31–56, Cl. D44—15.
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LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 31ST DAY OF JANUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

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Army, United States of America as represented by the Secretary of the: *See*—
Breckman, Jack. 2,733,432.
Gerber, Eduard A. 2,733,405.
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Arps, Edmund J., to Maxim Motor Co. Aerial extension ladder. 2,732,992, 1–31–56, Cl. 228—9.
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Ashby, Bruce A.: *See*—
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Tateishi, Arthur K. 2,732,724.
Augenstein, Karl C., to Speidel Corp. Tubular expansible band with improved stop means. 2,732,684, 1–31–56, Cl. 59—79.
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Babcock, Horace W., to the United States of America as represented by the Secretary of the Navy. Rocket sight for aircraft. 2,733,006, 1–31–56, Cl. 235—61.5.

Back, Frank G., and H. Lowen, said Lowen assor to said Back. Varifocal lens constructions and devices. 2,732,763, 1–31–56, Cl. 88—57.

Backhouse, Headley T. Means for locking a collar to a rod. 2,733,082, 1–31–56, Cl. 287—52.02.

Bade, Alfred G.: *See*—
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Ufer, Hanns. 2,733,230.

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Balla, Charles B., to Frank D. Saylor & Son. Insulating shield. 2,733,176, 1–31–56, Cl. 154—45.

Ballard, Albert E., to the United States of America as represented by the United States Atomic Energy Commission. Process for the recovery of U in the presence of iron. 2,733,128, 1–31–56, Cl. 23—14.5.

Ballard, Robert L.: *See*—
Hodge, Allen W., and Ballard. 2,733,168.

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Balzer, Vernon W., to Hallett Mfg. Co. Seed planter. 2,732,973, 1–31–56, Cl. 221—234.

Bangert, John T., to Bell Telephone Laboratories, Inc. Wave transmission network using transistor. 2,733,415, 1–31–56, Cl. 333—80.

Barber, Harry J., and M. B. Green, to May & Baker Ltd. Preparation of chlorphenoxy acetonitriles. 2,733,257, 1–31–56, Cl. 260—465.

Barber, Harry J., and M. B. Green, to May & Baker Ltd. Preparation of chlorphenoxy compounds. 2,733,271, 1–31–56, Cl. 260—612.

Barényi, Béla, to Daimler-Benz Aktiengesellschaft. Rigid axle suspension for motor vehicles. 2,732,902, 1–31–56, Cl. 180—73.

Barkschat, Eric. Resistance therapeutic exercisers. 2,733,065, 1–31–56, Cl. 272—37.

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Barta, Joseph F. Rotatable work piece support and clamp. 2,732,868, 1–31–56, Cl. 144—288.

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Basch, Walter M., to Esso Research and Engineering Co. Liquid-liquid treating process. 2,733,187, 1–31–56, Cl. 196—14.42.

Basch, Walter M., and H. J. Zoeller, to Esso Research and Engineering Co. Method for removing water from liquid organic compositions. 2,733,218, 1–31–56, Cl. 252—344.

Bauer, Benjamin B. Photometric apparatus. 2,732,757, 1–31–56, Cl. 88—23.

Bauer, Phillip F., and V. B. Honsinger, to Allis-Chalmers Mfg. Co. Synchronous induction motor having a segmented rotor and squirrel cage winding. 2,733,362, 1–31–56, Cl. 310—162.

Baum, Arthur A., and P. A. Sanders, to E. I. du Pont de Nemours & Co. Whitening agents for cellulosic fiber. 2,733,247, 1–31–56, Cl. 260—304.

Bauman, William C., and R. M. Wheaton, to The Dow Chemical Co. Method of sulfonating insoluble aromatic materials. 2,733,231, 1–31–56, Cl. 260—79.3.

Bauman, William C., to The Dow Chemical Co. Manufacture of free-flowing solid salts of alkenyl aromatic resin sulfonic acids. 2,733,232, 1–31–56, Cl. 260—79.3.

Beacham, Harry H., to National Lead Co. Fatty acid esters of epoxy resins and alkyl titanates. 2,733,222, 1–31–56, Cl. 260—18.

Beard, Donald M., F. H. Wildung, and P. P. Bruce. Light trap for darkroom. 2,732,779, 1–31–56, Cl. 95—90.

Bechard, Conrad E., and H. E. Hermanson, to General Electric Co. Lamp basing method. 2,732,878, 1–31–56, Cl. 153—1.

Beck, Charles E., to General Electric Co. Means for securing a lead wire to an electric lamp base. 2,733,419, 1–31–56, Cl. 339—144.

Bedford, Burnice D., to General Electric Co. Rapid response self-saturating magnetic amplifier. 2,733,306, 1–31–56, Cl. 179—171.

Be-Ge Mfg. Co.: *See*—
Gurries, Albert G., and Rimple. 2,732,782.

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Bangert, John T. 2,733,415.
Blount, Frank E. 2,733,401.
Bredehoft, Harold A. 2,733,435.
Chen, Wayne H. 2,733,424.
Doba, Stephen, Jr., and Morrison. 2,733,436.
Goodall, William M. 2,733,410.
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Bender, Werner, and J. Arni, to Tesa S. A. Magnifying glass with a grip. 2,732,761, 1–31–56, Cl. 88—39.

Bendix Aviation Corp.: *See*—
Camp, Leon W. 2,733,423.
Dickey, John W. 2,732,709.
Stamper, Furman H. 2,733,118.

Bennett, Arthur D., to Stanolind Oil and Gas Co. Measurement of annulus volume in wells. 2,732,714, 1–31–56, Cl. 73—152.

Bensemann, Edward H. T., to N. Z. Inventions Development Co. Ltd. Box nailing machines. 2,732,552, 1–31–56, Cl. 1—15.

Bensemann, Edward H. T., to N. Z. Inventions Development Co. Ltd. Selective nail feed mechanism. 2,732,553, 1–31–56, Cl. 1—16.

Berezny, Mischa N. Automatic car spraying apparatus. 2,732,846, 1–31–56, Cl. 134—45.

Bernd, Walter E.: *See*—
Ophuis, Fred, and Bernd. 2,733,055.

Berner, Harry M., A. E. F. Johnson, C. W. Ensminger, and K. G. C. Sarke, to American Hospital Supply Corp. Table top structure for overbed tables. 2,733,110, 1–31–56, Cl. 311—38.

Bernier, Paul E. Combine pickup and conveyor with control means therefor. 2,732,676, 1–31–56, Cl. 56—10.

Bernstein, Jack: *See*—
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Yale, Harry L., and Bernstein. 2,733,237.

Bessière, Pierre E., to Telma. Electro-dynamic brakes. 2,733,361, 1–31–56, Cl. 310—93.

Bethlehem Steel Co.: *See*—
Wick, Richard M. 2,733,199.

Billin, Arthur G., to The Liebel-Flarsheim Co. Reciprocating bucky actuator. 2,733,352, 1–31–56, Cl. 250—62.

Billson, John A.: *See*—
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Bingenheimer, Melvin: *See*—
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Bird Machine Co.: *See*—
Smith, Richmond W. 2,732,773.

Birtman Electric Co.: *See*—
Sparklin, Charles H. 2,733,000.
Sporney, George C. 2,733,025.

Bishop, Leonard J., to Mechanical Handling Systems, Inc. Apparatus for handling articles of manufacture. 2,732,584, 1–31–56, Cl. 18—4.

Bixby, William H., to D. R. Middleton and S. M. Hanley, doing business under the name and style of Power Equipment Co. Regulated rectifying apparatus. 2,733,402, 1–31–56, Cl. 321—19.

Bjorksten Research Laboratories, Inc.: *See*—
Meyer, Earl A. 2,733,177.

Black, Harold G., to Proctor and Schwartz, Inc. Conveyor dryers. 2,732,631, 1–31–56, Cl. 34—219.

Black Products Co.: *See*—
Lau, Erwin M. 2,733,040.

Blake, Robert W.: *See*—
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Blaser, Wilfred A., and R. W. McLain, to Innes Co. Pick-up for seed crops. 2,732,678, 1–31–56, Cl. 56—364.

Blewett, Kirby A. Welder's work stand. 2,733,330, 1–31–56, Cl. 219—17.

Bloch, Herman S., to Universal Oil Products Co. Preparation of alumina-aluminum halide catalysts. 2,733,219, 1–31–56, Cl. 252—442.

Blount, Frank E., to Bell Telephone Laboratories, Inc. Voltage regulating circuit. 2,733,401, 1–31–56, Cl. 321—16.

Bobingen Aktiengesellschaft fur Textil-Faser: *See*—
Hergie, Ludwig, Jehle, Kunz, Möller, and Schlack. 2,733,122.

Böhme, Karl, to Hartford National Bank and Trust Co., trustee. Incandescent lamp comprising two filament wires, more particularly for car search lights. 2,733,377, 1–31–56, Cl. 313—272.

Bonanno, Joseph L., to The Lionel Corp. Toy railroad trackside accessories. 2,732,958, 1–31–56, Cl. 214—38.

Bonnie, Joseph M. Oiler. 2,732,736, 1–31–56, Cl. 222—123.

Booker, Alvah D. Necktie spreader. 2,732,558, 1–31–56, Cl. 2—157.

Booth, Harry T., to United Aircraft Products, Inc. Reservoir for congealable liquids. 2,733,050, 1–31–56, Cl. 257—195.

Borberg, Willy: *See*—
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Borg-Warner Corp.: *See*—
Frojd, Gustav A. 2,733,327.
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Borman, August H., Jr., to General Motors Corp. Transmission control system. 2,732,732, 1–31–56, Cl. 74—732.

Bowser, Inc.: *See*—
Harks, Walter M., and Delaney. 2,732,976.

Boy y Lafitte, Laura J. M.: *See*—
Loumiet et Lavigne, Juan. 2,732,830.

Boyd, William H. A., to the United States of America as represented by the Secretary of the Navy. Squib gun. 2,732,765, 1–31–56, Cl. 89—1.5.

Boyer, Robert Q., to the United States of America as represented by the United States Atomic Energy Commission. Electrolytic cells. 2,733,202, 1–31–56, Cl. 204—215.

Boynton, Orville W.: *See*—
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Brace, Neal O., to E. I. du Pont de Nemours and Co. Dialkyl polyvinyl phosphate flame-retardants. 2,733,229, 1–31–56, Cl. 260—73.

Bradbury, Hollis D., to Radio Corp. of America. Sound re-recording system. 2,733,301, 1–31–56, Cl. 179—100.2.

Bradley Associates, Inc.: *See*—
Heck, Ervin R. 2,732,581.

Bradshaw, William H., and R. O. Denyes, to Celanese Corp. of America. Spinning of filamentary materials. 2,732,586, 1–31–56, Cl. 18—8.

Brandon, Clarence W., 15% to H. B. Jacobson, and 42½% to N. A. Hardin, H. H. Wright, and C. H. Newton. Apparatus for the storage of volatile liquids. 2,732,687, 1–31–56, Cl. 62—1.

Brandt, Carl L. W., and R. T. Florence, to A. B. Dick Co. Stencil sheet assembly and cushion sheets for use in same. 2,732,795, 1–31–56, Cl. 101—128.2.

Braun, Carl C., to Maiden Form Brassiere Co., Inc. Brassiere display and merchandising package. 2,732,937, 1–31–56, Cl. 206—78.

Breckman, Jack, to the United States of America as represented by the Secretary of the Army. Encoding circuit. 2,733,432, 1–31–56, Cl. 340—347.

Bredehoft, Harold A., to Bell Telephone Laboratories, Inc. Sound output control for telephone ringers. 2,733,435, 1–31–56, Cl. 340—397.

Breen, Henry D., to Union Asbestos & Rubber Co. Power take off drive. 2,732,811, 1–31–56, Cl. 105—114.

Breen, Henry D., to Union Asbestos & Rubber Co. Power take off drive. 2,732,812, 1–31–56, Cl. 105—114.

Brehm, John L. Vehicle towing device. 2,733,078, 1–31–56, Cl. 280—480.

Brennan, Joseph B. Apparatus and method of producing metal sheets by spraying action. 2,733,172, 1–31–56, Cl. 117—105.

Bretthauer, Hermann: *See*—
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Bristol Co., The: *See*—
Smith, Lawrence E. 2,732,716.

British Insulated Callender's Cables Ltd.: *See*—
Tunnicliff, Eustace, and Barlow. 2,732,592.
Webster, George H. 2,733,288.

British Petroleum Co. Ltd., The: *See*—
Noble, Dennis A. J. 2,733,190.

British Telecommunications Research Ltd.: *See*—
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Brittain, Francis H., to The General Electric Co. Ltd. Loudspeaker diaphragm having asymmetric indentations. 2,732,908, 1–31–56, Cl. 181—32.

Britton, Edgar C.: *See*—
Horsley, Lee H., and Britton. 2,733,272.

Britton, Edgar C., and B. A. Ashby, to The Dow Chemical Co. N-(2-hydroxyalkyl)alkylene bisdithiocarbamates. 2,733,262, 1–31–56, Cl. 260—500.

Brixner, Berlyn, to the United States of America as represented by the United States Atomic Energy Commission. Ultra high speed light shutter. 2,732,777, 1–31–56, Cl. 95—53.

Brobeck, William M.: *See*—
Lawrence, Ernest O., and Brobeck. 2,733,349.
MacKenzie, Kenneth R., and Brobeck. 2,733,350.

Brown, Charles B. Means for improving operating characteristics of transistors. 2,733,359, 1–31–56, Cl. 307—88.5.

Brown, Eugene G. Inking device for typewriter ribbons. 2,732,824, 1–31–56, Cl. 118—268.

Brown, George P., Jr.: *See*—
Riethof, George, and Brown. 2,733,263.

Brown, Robert L.: *See*—
Pasternak, Theodore. 2,732,749.

Brown, Theodore G. Vehicle crossing signal. 2,733,311, 1–31–56, Cl. 200—61.89.

Brown, Walter J. Variable speed electric drive and control system therefor. 2,733,395, 1–31–56, Cl. 318—249.

Browne, John R. Case construction embodying separable units. 2,732,969, 1–31–56, Cl. 220—23.4.

Browne, Thomas E., Jr., A. P. Strom, and H. E. Spindle, to Westinghouse Electric Corp. Arc-extinguishing devices. 2,733,316, 1–31–56, Cl. 200—148.

Browning, Walter E. Breech-bolt locking mechanism for automatic shotguns. 2,732,768, 1–31–56, Cl. 89—182.

Bruce, Peter P.: *See*—
Beard, Donald M., Wildung, and Bruce. 2,732,779.

Bruckner, Walter, to The Northern Blower Co. Motor control for actuating a dust collector. 2,733,398, 1–31–56, Cl. 318—470.

Brueder, Antoine, to Societe-Anonyme Andre Citroen. Electro-magnetic change-speed gear. 2,732,725, 1–31–56, Cl. 74—330.

Bruelheide, Rudolph E. Auxiliary toilet seat. 2,732,566, 1–31–56, Cl. 4—239.

Brundell, Gunnar, and S. H. Tjernström, to Wargons Aktiebolag. Method for the production of ferromanganese. 2,733,140, 1–31–56, Cl. 75—11.

Bryn, John G. Fishing tackle. 2,732,648, 1–31–56, Cl. 42—16.

Buddemeyer, Bruce D.: *See*—
Thompson, Jerome B., and Buddemeyer. 2,733,252.

Buisson, Pierre. Electronic comparator. 2,732,625, 1–31–56, Cl. 33—148.

Bullard Co., The: *See*—
Bullard, Edward P., III. 2,732,962.

Bullard, Edward P., III., to The Bullard Co. Controlled material-handling and transferring apparatus. 2,732,962, 1–31–56, Cl. 214—89.

Buller, E. H.: *See*—
Hartzler, John E., and Jeter. 2,733,101.

Bumps, Edson S.: *See*—
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Burke, William E., to International Minerals & Chemical Corp. Process for the production of epsomite from langbeinite. 2,733,132, 1–31–56, Cl. 23—128.

Burnett, Fred. Wheeled luggage. 2,733,076, 1–31–56, Cl. 280—36.

Burns, Albert L., Jr., to Houston Oil Field Material Co., Inc. Hydrostatic jar. 2,733,045, 1–31–56, Cl. 255—27.

Burroughs Corp.: *See*—
Kuchinsky, Saul. 2,733,409.

Byars, Edgar W. Net casting apparatus. 2,732,647, 1–31–56, Cl. 43—8.

Bychinsky, Wilfred A., to General Motors Corp. Igniter plugs. 2,733,385, 1–31–56, Cl. 317—83.

Cable Belt Ltd.: *See*—
Thomson, Charles. 2,732,930.

Caldwell, Joe J., Jr.: *See*—
Lyman, Joseph, Caldwell, Maeder, Haxby and Tawney. 2,733,437.

Call, Bernard J. Radiant energy cigarette lighter. 2,733,331, 1–31–56, Cl. 219—32.

Camp, Leon W., to Bendix Aviation Corp. Ceramic transducers having annular elements. 2,733,423, 1–31–56, Cl. 340—10.

Calumet & Hecla, Inc.: *See*—
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Campbell, Charles L. to Centrifix Corp. Scrubber purifier. 2,732,909, 1–31–56, Cl. 183—21.

Campbell, John H., to General Electric Co. Internally conductively coated discharge lamp. 2,733,371, 1–31–56, Cl. 313—185.

Campbell, John H., to General Electric Co. Pulse starting system for fluorescent lamps. 2,733,382, 1–31–56, Cl. 315—97.

Camras, Marvin, and E. S. Bumps, to Armour Research Foundation of Illinois Institute of Technology. Process for making magnetic recording wire. 2,733,175, 1–31–56, Cl. 148—102.

Carapellotti, Lawrence T., to the United States of America as represented by the Secretary of the Navy. Voltage amplitude quantizer and coder. 2,733,358, 1–31–56, Cl. 250—217.

Carlisle, Benjamin H., to The Clark Controller Co. Dynamic braking hoist control. 2,733,393, 1–31–56, Cl. 318—203.

Carlton, Paul R. Portable food-vending cribs. 2,733,094, 1–31–56, Cl. 296—22.

Carnegie Institue of Washington: *See*—
Myers, Jack E., and Phillips. 2,732,662.
Spoehr, Herman A., and Milner. 2,732,661.

Carpenter, Albert J., to The Cleveland Tapping Machine Co. Adjustable pipe fitting clamp construction for tapping machine. 2,732,570, 1–31–56, Cl. 10—107.

Carr, Adams & Collier Co.: *See*—
Adams, Paul L., Norman, and Sitterly. 2,732,594.

Carstensen, Louis. Folding data case. 2,732,874, 1–31–56, Cl. 150—39.

Carter, Robert J., to The Rittling Corp. Casing and mounting assembly for convector heaters. 2,733,049, 1–31–56, Cl. 257—133.

Cashmore, Joseph A.: *See*—
Lytton, Frank A., and Cashmore. 2,733,161.

Cassady, Walter G., and T. O. Perkins, to Acme Visible Records, Inc. Index device. 2,732,822, 1–31–56, Cl. 116—135.

Cassan, Jean H. F. Furnaces, and more particularly coke ovens. 2,733,197, 1–31–56, Cl. 202—142.

Cassell, Robert P., to The Jeannette Glass Co. Apparatus for press-molding glass articles. 2,732,665, 1–31–56, Cl. 49—5.

Cathodeon Ltd.: *See*—
Cope, John E., and Theile. 2,733,292.

Cave, William T., and A. H. Herzog, to Monsanto Chemical Co. Production of titanium monoxide. 2,733,133, 1–31–56, Cl. 23—202.

Celanese Corp. of America: *See*—
Bradshaw, William H., and Denyes. 2,732,586.
Keight, Albert W., Moos, and Shoup. 2,732,950.

Celluplastic Corp.: *See*—
Nichols, Anthony. 2,732,870.

Centrifix Corp.: *See*—
Campbell, Charles L. 2,732,909.

Chace, Thomas B., to The Dole Valve Co. Fluid mixing device. 2,732,859, 1–31–56, Cl. 137—607.

Chadeloid Corp.: *See*—
Nack, Herman R. 2,733,119.

Chadwick, David H.: *See*—
Allen, Tull C., and Chadwick. 2,733,254.

Cham, Edward J.: *See*—
Derr, Willard A., and Cham. 2,733,399.

Chandler, Maurice D. Releasable door fastener. 2,733,427, 1–31–56, Cl. 340—275.

Chapman, Edward L.: *See*—
Statia, Edwin V., Sr. 2,732,557.

Charpiat Corp., The: *See*—
Charpiat, Edward B. 2,732,977.

Charpiat, Edward B., to The Charpiat Corp. Portable carbonated beverage dispenser. 2,732,977, 1–31–56, Cl. 222—131.

Chase, Corson W., to The Goss Printing Press Co. Printing cylinders. 2,732,798, 1–31–56, Cl. 101—378.

Chayne, Charles A., to General Motors Corp. Wheel suspension comprising sectional dead axle and connections therefrom to vehicle frame. 2,732,903, 1–31–56, Cl. 180—73.

Chen, Wayne H., to Bell Telephone Laboratories, Inc. Connector and selector circuits. 2,733,424, 1–31–56, Cl. 340—147.

Chenicek, Joseph A., to Universal Oil Products Co. Production of polyalkylstilbene quinones and polyalkoxystilbene quinones. 2,733,249, 1–31–56, Cl. 260—396.

Christensen, Paul M., to Federal Electric Products Co. Circuit breaker with arc blow-out. 2,733,312, 1–31–56, Cl. 200—87.

Chrzanowski, Zbigniew M. Swinging rack for rolls of carpeting and the like. 2,733,017, 1–31–56, Cl. 242—55.3.

Chubb, Alexander A., to The General Electric Co. Ltd. Automatic telephone systems. 2,733,298, 1–31–56, Cl. 179—18.

Chupka, William A.: *See*—
Ingram, Mark G., and Chupka. 2,733,343.

Clague, Robert E.: *See*—
Hanink, Dean K., and Clague. 2,732,600.

Clark-Aiken Co., The: *See*—
Grody, Donald R. 2,733,022.

Clark Controller Co., The: *See*—
Carlisle, Benjamin H. 2,733,393.

Clark, Thomas F., to the United States of America as represented by the Secretary of Agriculture. Agricultural residue abrasives. 2,733,138, 1–31–56, Cl. 51—303.

Clayton, David P., to General Motors Corp. Fastening device. 2,733,336, 1–31–56, Cl. 240—41.5.

Cleveland Tapping Machine Co., The: *See*—
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Coe, Milton L.: *See*—
Kish, Steven P., and Coe. 2,733,221.

Cohn, Irwin E. Toy helicopter. 2,732,656, 1–31–56, Cl. 46—75.

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Vitale, Peter T., and Liftin. 2,733,214.

Collins, Johnnie C., to Servis Equipment Co. Adjustable plow assembly for terracing machines. 2,732,786, 1–31–56, Cl. 97—240.

Collins, Samuel C., to Joy Mfg. Co. Apparatus for treating gases. 2,732,691, 1–31–56, Cl. 62—123.

Collins, Samuel C., to Joy Mfg. Co. Methods of and means for treating gases. 2,732,692, 1–31–56, Cl. 62—123.

Collins, Samuel C., to Joy Mfg. Co. Methods of treating gases. 2,732,693, 1–31–56, Cl. 62—175.5.

Columbia-Southern Chemical Corp.: *See*—
Bartlett, Paul D. 2,733,276.
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Compania Uruguaya de Fomento Industrial S. A.: *See*—
Fehling, Hans R. 2,732,829.

Conley, Charles C., to Houdaille-Hershey Corp. Apparatus and method of oil polishing. 2,732,669, 1–31–56, Cl. 51—141.

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Consolidated Molded Products Corp.: *See*—
Phillips, David T. 2,733,073.

Conte, Henry. Water closet flush tanks. 2,732,562, 1–31–56, Cl. 4—41.

Contratto, Lorenz. Method of making wooden structural elements, in particular floor-covering slabs and a wooden structural element made according to this method, in particular a floor covering slab. 2,732,597, 1–31–56, Cl. 20—75.

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Cooper, Benjamin, and A. Hohmann, to Research Electronics & Devices Co., Inc. Paper feed. 2,732,797, 1–31–56, Cl. 101—288.

Cope, John E., and R. Theile, to Cathodeon Ltd. System for correcting the equilibrium potential of storage tubes. 2,733,292, 1–31–56, Cl. 178—7.2.

Coplen, George. Safety release for vaults, refrigerators, and the like. 2,733,090, 1–31–56, Cl. 292—94.

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Cornell, John A., and H. E. Kemmler, to H. D. Justi & Son, Inc. Dental impression material and method of making same. 2,733,156, 1–31–56, Cl. 106—38.5.

Cornell, John A., and H. E. Kemmler, to H. D. Justi & Son, Inc. Impression material and method of making same. 2,733,157, 1–31–56, Cl. 106—38.5.

Corning Glass Works: *See*—
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Cosgrove, Thomas M. Shield for file alarm box indicating lamps. 2,733,334, 1–31–56, Cl. 240—25.

Costa, Raymond L., to Allied Chemical & Dye Corp. Treatment of hexavalent chromium solutions. 2,733,204, 1–31–56, Cl. 210—24.

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Couch, S. H., Co., Inc.: *See*—
Johnson, Carl A. P. 2,732,643.

Coursen, David L., to E. I. du Pont de Nemours and Co. Blasting assembly. 2,732,800, 1–31–56, Cl. 102—25.

Coviello, Anthony R. Agricultural implements and support vehicles therefor. 2,732,781, 1–31–56, Cl. 97—32.

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Curl, Ralph H.: *See*—
Hurdle, Joseph H., and J. E. and R. H. Curl. 2,732,872.

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Davis, Arthur M., to General Motors Corp. Thrust balancing. 2,732,695, 1–31–56, Cl. 64—9.

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De Bastos, Emil N., and A. W. Weller, to Resina Automatic Machinery Co. Inc. Container capping machine. 2,732,991, 1–31–56, Cl. 226—88.

De Brye, Jacques, to Union Francaise Commerciale et Industrielle. Compositions for the dyeing of hair. 2,733,186, 1–31–56, Cl. 167—88.

De Croes, George C., and G. A. Akin, to Eastman Kodak Co. Manufacture of acrylonitrile from acetylene and hydrocyanic acid. 2,733,259, 1–31–56, Cl. 260—465.3.

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De Liban, Robert, to the United States of America as represented by the United States Atomic Energy Commission. Regulator for calutron ion source. 2,733,347, 1–31–56, Cl. 250—41.9.

Dell, Paul A., to General Electric Co. Arc tube mount. 2,733,363, 1–31–56, Cl. 313—27.

Del Valle, Guillermo A., and A. S. Jones, to Radio Corp. of America. Sprocket shoe for film handling apparatus. 2,733,062, 1–31–56, Cl. 271—2.3.

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Dooley, Eugene F., and E. J. Utility tray mechanism for automobiles or the like. 2,733,109, 1–31–56, Cl. 311—21.

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Drew, Donald E., and W. M. Farrelly, to E. I. du Pont de Nemours & Co. Heat-sealing of thermoplastic film. 2,732,887, 1–31–56, Cl. 154—42.

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Farnsworth, Lawrence, 50% to M. Seft. Control and feed mechanism for centering and drilling machines. 2,732,737, 1–31–56, Cl. 77—18.

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Federal Paper Board Co., Inc.: *See*—
Pantalone, Vincent R. 2,732,996.

Fehling, Hans R., to Compania Uruguaya de Fomento Industrial S. A. Ink reservoir tube. 2,732,829, 1–31–56, Cl. 120—42.4.

Feinstein, Edward. Apparatus for packing and sealing bag-like containers. 2,732,988, 1–31–56, Cl. 226—51.

Felez Alvarez, Francisco and J., to Enrique Clapes Massons. Electromagnetically operated pump for raising liquids. 2,732,806, 1–31–56, Cl. 103—53.

Felez Alvarez, José: *See*—
Felez Alvarez, Francisco and J. 2,732,806.

Ferguson, Richard, to The Terrell Machine Co. Bobbin stripper and method. 2,732,609, 1–31–56, Cl. 28—20.

Ferraris, John T., to Electrolux Corp. Control for automatic vacuum cleaners. 2,732,910, 1–31–56, Cl. 183—37.

Fibreboard Products Inc.: *See*—
Smith, Monroe F. 2,733,225.

Field, Walter P. Last construction. 2,732,571, 1–31–56, Cl. 12—136.

Firma Carl Hepting & Co., Lederwaren- und Gürtelfabrik G. m. b. H.: *See*—
Hepting, Carl. 2,732,876.

Fisher, Earl E., to E. I. du Pont de Nemours and Co. Preparation of aldehydes. 2,733,270, 1–31–56, Cl. 260—604.

Fisler, Leland H., N. A. Welch, and F. J. McConnell, to The American Hardware Corp. Door latch operating device. 2,733,088, 1–31–56, Cl. 292—1.

FitzGerald, John W.: *See*—
Schmitter, Walter P., Bade, and FitzGerald. 2,732,731.

Fleischman, Joseph I. Rotary stone raking and removing machine. 2,732,672, 1–31–56, Cl. 55—17.

Flight Refuelling Ltd.: *See*—
Worlidge, Ronald F. 2,733,079.

Florence, Robert T.: *See*—
Brandt, Carl L. W., and Florence. 2,732,795.

Flory, Leslie E., to Radio Corp. of America. Magnetic beam-focusing systems. 2,733,364, 1–31–56, Cl. 313—65.

Forbes, Cecil M., Jr. Abacus with money indicia thereon. 2,733,009, 1–31–56, Cl. 235—123.

Forster, Eric O., to Esso Research and Engineering Co. Mixed alkaline earth metal soap grease compositions. 2,733,208, 1–31–56, Cl. 252—39.

Forster, Eric O., to Esso Research and Engineering Co. Magnesium-lithium-sodium grease composition. 2,733,209, 1–31–56, Cl. 252—40.

Foster Engineering Corp.: *See*—
Foster, Shubel A. 2,732,670.

Foster and Foster: *See*—
Foster, Warren D., and Wilson. 2,733,021.

Foster, Shubel A., to Foster Engineering Corp. Size-determining gages for honing and grinding apparatus. 2,732,670, 1–31–56, Cl. 51—165.

Foster, Warren D., and O. W. Wilson. Film containing magazines and film handling apparatus. 2,732,754, 1–31–56, Cl. 88—17.

Foster, Warren D., and O. W. Wilson, to Foster and Foster. Lock for film containing magazines and film handling apparatus. 2,733,021, 1–31–56, Cl. 242—71.

Foquet, Eugène. Apparatus for cutting broaches by grinding. 2,732,667, 1–31–56, Cl. 51—100.

Francis, Victor J., to General Electric Co. Activated cathodes for electron discharge device. 2,733,173, 1–31–56, Cl. 117—219.

Franke & Heidecke, Fabrik Photographischer Praxisions-Apparate: *See*—
Heidecke, Reinhold, and Bretthauer. 2,732,751.

Frederiksen, Jordan W., Sr. Trousers pockets. 2,732,560, 1–31–56, Cl. 2—254.

Freyermuth, Harlan B.: *See*—
Williams, William, Wilson, and Freyermuth. 2,733,165.

Friden Calculating Machine Co., Inc.: *See*—
Davis, Elwood A. 2,733,011.
Ellerbeck, Grant C. 2,733,010.
Hawthorne, Nathaniel F. 2,732,924.
Renholts, Roy J. 2,732,613.
Rolph, Donald L. 2,733,007.

Friedman, Herman. Interlocking pre-cast building blocks. 2,732,706, 1–31–56, Cl. 72—38.

Frojd, Gustav A., to Borg-Warner Corp. Welding apparatus. 2,733,327, 1–31–56, Cl. 219—8.

Frost, Gustave, to Andrew Geller, Inc. Open-back shoe construction. 2,732,635, 1–31–56, Cl. 36—24.5.

Frost, Loyd T., and W. A. Hamer, said Hamer assignor to said Frost. Pocket tape recorder. 2,733,069, 1–31–56, Cl. 274—4.

Fuchs, Charles F.: *See*—
Epstein, Solomon, Fuchs, and Gladstone. 2,733,212.

Fuglie, Elmer A., and C. E. Weinmann, said Fuglie assignor to Winona Tool Mfg. Co. Stair climbing cart. 2,733,074, 1–31–56, Cl. 280—5.2.

Gall, Francis A., to The Singer Mfg. Co. Disposable dust bags for vacuum cleaners. 2,732,911, 1–31–56, Cl. 183—51.

Gamewell Co., The: *See*—
Lansil, Clifford E. 2,733,414.

Garfinkle, Joseph S. Drying apparatus for photographic prints. 2,732,629, 1–31–56, Cl. 34—123.

Garner, Claude M., to Missouri Automatic Control Corp. Instantaneous limiting switch mechanism. 2,733,012, 1–31–56, Cl. 236—48.

Garner, Lloyd P., and W. N. Parker, to Radio Corp. of America. Wave amplitude control for high-q load. 2,733,340, 1–31–56, Cl. 250—36.

Gastrock, Edward A.: *See*—
Holzenthal, Leo L., D'Aquin, and Gastrock. 2,732,939.

Gates, Richard L.: *See*—
Jacques, George E., and Gates. 2,733,318.

Gelb, Robert L., and H. S. Wiley, to The Maico Co., Inc. Microphone mounting for hearing aids. 2,733,302, 1–31–56, Cl. 179—107.

Geler, Leonard W., to Raytheon Mfg. Co. Magnetron tuning structures. 2,733,381, 1–31–56, Cl. 315—39.61.

Geisler, William, and W. B. Morton, to Wilbro Corp. Packing case. 2,732,995, 1–31–56, Cl. 229—33.

Geller, Andrew, Inc.: *See*—
Frost, Gustave. 2,732,635.

General Aluminum Corp.: *See*—
Steiner, James S. 2,732,895.

General Aniline & Film Corp.: *See*—
Kirby, Ben H., Olenick, and Smith. 2,733,250.
Maxey, William J., and Sanders. 2,733,211.
Sprung, Joseph A. 2,733,143.
Williams, William, Wilson, and Freyermuth. 2,733,165.

General Cement Mfg. Co.: *See*—
Valiulis, Stanley J. 2,733,290.

General Controls Co.: *See*—
Ray, William A. 2,732,860.

General Electric Co.: *See*—
Bechard, Conrad E., and Hermanson. 2,732,878.
Beck, Charles E. 2,733,419.
Bedford, Burnice D. 2,733,306.
Campbell, John H. 2,733,371.
Campbell, John H. 2,733,382.
Dell, Paul A. 2,733,363.
Francis, Victor J. 2,733,173.
Grovenmiller, Dale A. 2,733,421.
Hinman, Donald D., and Schmerheim. 2,733,417.
Marx, Ray E. 2,733,420.
Noel, Edward B. 2,733,375.
Ogle, Hugh M. 2,733,307.
Ogle, Hugh M. 2,733,404.
Reynolds, Kenneth W., Billson, and Rausch. 2,732,847.
Schoenfeldt, Herman R., and Yoder. 2,733,166.
Seely, Richard R. 2,733,394.
Warren, Robert B., and Yeamans. 2,733,289.
Zelf, Elmer J. 2,733,038.

General Electric Co. Ltd., The: *See*—
Brittain, Francis H. 2,732,908.
Clubb, Alexander A. 2,733,298.
Ibm, Ronald C. 2,733,339.

General Mills, Inc.: *See*—
Gesell, Frank A., and Wolstmann. 2,732,574.

General Motors Corp.: *See*—
Anderson, Ralph R., and Gerber. 2,732,905.
Borman, August H., Jr. 2,732,732.
Bychinsky, Wilfred A. 2,733,385.
Chayne, Charles A. 2,732,903.
Clayton, David P. 2,733,336.
Davis, Arthur M. 2,732,695.
Elliott, Harold V. 2,733,309.
Falge, Robert N. 2,733,335.
Hanink, Dean K., and Clague. 2,732,600.
Holmes, John R., and Schwarz. 2,732,971.
Waterhouse, Charles L., Pyuro, and Thoms. 2,733,096.
Willits, Samuel P. 2,732,713.

General Precision Laboratory Inc.: *See*—
Leonard, Anthon A., Hawthorne, and Borberg. 2,733,434.
Zaleski, John F., and Crane. 2,733,411.

General Tire and Rubber Co., The: *See*—
Cowles, Raymond H. 2,733,108.

George, Robert H. Drain valves. 2,732,854, 1–31–56, Cl. 137—204.

Gerber, Eduard A., to the United States of America as represented by the Secretary of the Army. Circuit for measuring the parameters of piezoelectric crystals. 2,733,405, 1–31–56, Cl. 324—56.

Gerber, William T.: *See*—
Anderson, Ralph R., and Gerber. 2,732,905.

Germer, Edmund, to Hanovia Chemical & Mfg. Co. Electric discharge device. 2,733,373, 1–31–56, Cl. 313—188.

Gero, Doane R., to Goodyear Aircraft Corp. Ejectable aircraft seat capsule. 2,733,027, 1–31–56, Cl. 244—140.

Gesell, Frank A., and E. N. Wolstmann, to General Mills, Inc. Combined brush and mop. 2,732,574, 1–31–56, Cl. 15—115.

Gibbs, Roy J. Multiple bladed roofing and pruning knives. 2,732,620, 1–31–56, Cl. 30—320.

Gieskieng, Marion W. Railway car wheel markers. 2,732,825, 1–31–56, Cl. 118—326.

Gifford-Wood Co.: *See*—
Herberg, Clifton L. 2,732,789.

Gilbert, William I., J. G. McNulty, and C. W. Montgomery, to Gulf Research & Development Co. Desulfurization of high boiling hydrocarbons. 2,733,189, 1–31–56, Cl. 196—28.

Gill, John R. Sand eliminator bearing for a sprinkler head. 2,733,080, 1–31–56, Cl. 285—97.8.

Gillson, Joseph L., Jr., to E. I. du Pont de Nemours and Co. Electroluminescent lamp structures. 2,733,367, 1–31–56, Cl. 313—108.

Gilmore, William J., to American Chain & Cable Co., Inc. Flexible conduits and fittings therefor. 2,732,861, 1–31–56, Cl. 138—25.

Giltges, Aloys, and H. Welz, to Farbenfabriken Bayer Aktiengesellschaft. Process for the separation of sulphur from oxime-sulphur mixtures. 2,733,239, 1–31–56, Cl. 260—239.3.

Girling Ltd.: *See*—
Fantham, Harold, and Daft. 2,733,116.

Gluffre, Anthony A. Hair dryers. 2,732,628, Cl. 34—50.

Gladding, McBean & Co.: *See*—
Le Clercq, Leon J. 2,732,590.

Gladstone, Martell M.: *See*—
Epstein, Solomon, Fuchs, and Gladstone. 2,733,212.

Glass, Marvin I.: *See*—
Goldfarb, Adolph. 2,732,658.

Glenn, John W., to the United States of America as represented by the United States Atomic Energy Commission. Purification of nickel powder. 2,733,142, Cl. 75—119.

Glensky, William E., to The West Co., Inc. Container capping devices. 2,732,990, 1–31–56, Cl. 226—84.

Godon, Yvan A. Combined fishhook and gaff. 2,732,651, 1–31–56, Cl. 43—37.

Goldfarb, Adolph, to M. I. Glass. Doll head. 2,732,658, 1–31–56, Cl. 46—116.

Gollwitzer, Walter T., to Addressograph-Multigraph Corp. Sequentially operating address printing means. 2,732,793, 1–31–56, Cl. 101—47.

Goodall, William M., to Bell Telephone Laboratories, Inc. Pulse code modulation coder. 2,733,410, 1–31–56, Cl. 332—11.

Goodrich, B. F., Co., The: *See*—
Kuts, Mathew. 2,732,882.

Goodwillie, John E., to Beloit Iron Works. Winder machine. 2,733,019, 1–31–56, Cl. 242—66.

Goodyear Aircraft Corp.: *See*—
Gero, Doane R. 2,733,027.

Goodyear Tire & Rubber Co., The: *See*—
Seeger, Nelson V., and Mastin. 2,733,261.

Goss Printing Press Co., The: *See*—
Chase, Corson W. 2,732,798.
Crafts, Curtis S. 2,733,061.

Gotautas, Anton: *See*—
Janonis, George, and Gotautas. 2,732,954.

Graf, Robert. Identification devices. 2,732,644, 1–31–56, Cl. 40—142.

Gray, Ernest F. Earring with spring actuated clamp. 2,732,694, 1–31–56, Cl. 63—14.

Green, Maurice B.: *See*—
Barber, Harry J., and Green. 2,733,257.
Barber, Harry J., and Green. 2,733,271.

Greene, Edward S. Masticating head for an extrusion machine. 2,732,587, 1–31–56, Cl. 18—12.

Gregory, Vance P.: *See*—
Prusick, Jan H., and Gregory. 2,733,206.

Grell, La Verne E. Adjustable gate type neck stock. 2,732,827, 1–31–56, Cl. 119—99.

Grevengoed, Paul H., to National Brass Co. Latch spindle spring device. 2,733,089, 1–31–56, Cl. 292—1.

Grib, Boris F., to Philamon Laboratories, Inc. Temperature compensation for tuning forks. 2,732,748, 1–31–56, Cl. 84—457.

Griffith, Andrew S., Jr., R. E. McDonald, and R. E. Wilfong, to E. I. du Pont de Nemours & Co. Pressure washing process. 2,733,121, 1–31–56, Cl. 18—54.

Griffith, Donald L., ½ to J. P. Ruth. Turbogenerator foundation. 2,733,029, 1–31–56, Cl. 248—13.

Grimes, Milton J.: *See*—
Grimm, Albert C., and Grimes. 2,733,366.

Grimm, Albert C., and M. J. Grimes, to Radio Corp. of America. Target assemblies for color-kinescopes, etc. 2,733,366, 1–31–56, Cl. 313—85.

Grody, Donald R., to The Clark-Aiken Co. Steel shaft for rolls of paper and the like. 2,733,022, 1–31–56, Cl. 242—72.

Groendijk, Hendrik, to Hartford National Bank and Trust Co., trustee. Device of the kind comprising an electric discharge tube having a ribbon-shaped beam and unilateral deflection. 2,733,379, 1–31–56, Cl. 315—18.

Grovemiller, Dale A., to General Electric Co. Lamp base. 2,733,421, 1–31–56, Cl. 339—145.

Grover, Frank N., Jr.: *See*—
Wohlers, Herbert C., Pauling, and Grover. 2,733,264.

Grubich, Stephan A. Material digging and handling apparatus. 2,732,963, 1–31–56, Cl. 214—140.

Guardian Electric Mfg. Co.: *See*—
Obzarny, Theodore J. 2,733,422.

Gudeman Co., The: *See*—
Ellison, Michael C. 2,733,389.

Guelson, Ledra C.: *See*—
Guelson, Stanley. 2,732,848.

Guelson, Stanley, deceased, by L. C. Guelson, executrix, to Milwaukee Gas Specialty Co. Safety control device. 2,732,848, 1–31–56, Cl. 137—66.

Gui, Elmer G., ½ to J. M. Wilson. Combination tissue pack and disposal receptacle. 2,732,935, 1–31–56, Cl. 206—57.

Gulf Research & Development Co.: *See*—
Gilbert, William I., McNulty, and Montgomery. 2,733,189.
Riethof, George, and Brown. 2,733,263.

Gunderson, Ralph R. Hose support for vehicles. 2,733,033, 1–31–56, Cl. 248—51.

Gunn, Donald A., and C. F. Wolters, to Sperry Rand Corp. Signal holders. 2,732,843, 1–31–56, Cl. 129—16.7.

Gurries, Albert G., and E. J. Rimple, to Be-Ge Mfg. Co. Reversible disc plow. 2,732,782, 1–31–56, Cl. 97—32.

Hackworth, Virgil. Brake master cylinder assembly. 2,732,918, 1–31–56, Cl. 188—152.

Hadley, Willard C.: *See*—
Ragosine, Victor E., and Hadley. 2,733,356.

Haensel, Vladimir, to Universal Oil Products Co. Separating and cracking of oil from oil-bearing sands. 2,733,193, 1–31–56, Cl. 196—52.

Hagberg, Gideon N. Apparatus for removing impurities from liquids. 2,732,943, 1–31–56, Cl. 210—1.5.

Hagensick, Charles G., to Westinghouse Electric Corp. Rectifier control apparatus. 2,733,400, 1–31–56, Cl. 321—14.

Haknnson, Alfred. Gearing. 2,732,726, 1–31–56, Cl. 74—425.

Hall, Reginald H., D. I. H. Jacobs, and M. V. Jacquet, to The Distillers Co. Ltd. Froth flotation process. 2,732,940, 1–31–56, Cl. 209—166.

Hall, Samuel S., to The Surety Rubber Co. Package of gloves. 2,732,934, 1–31–56, Cl. 206—46.

Hallett Mfg. Co.: *See*—
Balzer, Vernon W. 2,732,975.

Hallman, Little L., to The Terrell Machine Co. Automatic bobbin loader for automatic winding machines. 2,733,014, 1–31–56, Cl. 242—35.5.

Hallock, Clair L., to The Glenn L. Martin Co. Deburring tool. 2,732,612, 1–31–56, Cl. 29—90.

Halter, Allan C., and D. E. King, to Allis-Chalmers Mfg. Co. Nonlinear limit switch circuit for electric motor. 2,733,397, 1–31–56, Cl. 318—266.

Haman, Ralph W.: *See*—
Murphy, Frank L., Haman, and Kay. 2,732,814.

Hamer, William A.: *See*—
Frost, Loyd T., and Hamer. 2,733,069.

Hammerberg, Chester A., to Armour and Co. Meat-shaping method. 2,733,153, 1–31–56, Cl. 99—194.

Hamner, Glen P., to Esso Research and Engineering Co. Recovery of cyclo and methylcyclopentadiene by liquid vapor phase cracking. 2,733,280, 1–31–56, Cl. 260—666.

Hamner, Glen P., to Esso Research and Engineering Co. Process for recovery of aromatics separated from cyclic dienes. 2,733,283, 1–31–56, Cl. 260—674.

Hamner, Glen P., to Esso Research and Engineering Co. Process for recovery of aromatic hydrocarbons by dimerizing cyclic diolefins, distilling to obtain a C_6-C_7 cut, phosphoric acid polymerizing the olefins, and distilling to obtain an aromatic rich fraction. 2,733,284, 1–31–56, Cl. 260—674.

Hamner, Glen P., to Esso Research and Engineering Co. Recovery of hydrocarbons from highly cracked petroleum fractions by dimerizing the cyclic diolefins distilling to obtain a C_6-C_7 cut, clay polymerizing the olefins and distilling to obtain a benzene rich fraction. 2,733,285, 1–31–56, Cl. 260—674.

Hanink, Dean K., and R. E. Clague, to General Motors Corp. Sand cores having high-temperature strength and method of producing same. 2,732,600, 1–31–56, Cl. 22—165.

Hanley, Stanley M.: *See*—
Bixby, William H. 2,733,402.

Hanovia Chemical & Mfg. Co.: *See*—
Germer, Edmund. 2,733,373.

Hansen, Francis F. Sheeted dough turner. 2,732,927, 1–31–56, Cl. 198—33.

Hansen, Fritz B.: *See*—
Moore, James F., and Hansen. 2,733,067.

Hanson, Russell O. Warning flag. 2,732,823, 1–31–56, Cl. 116—173.

Hardin, N. A.: *See*—
Brandon, Clarence W. 2,732,687.

Harker, Charles B., to Bartelt Engineering Co. Dispensing apparatus for double bags. 2,732,989, 1–31–56, Cl. 226—59.

Harks, Walter M., and J. J. Delaney, to Bowser, Inc. Dual liquid dispenser. 2,732,976, 1–31–56, Cl. 222—26.

Harris, Donald S., to New Castle Products, Inc. Extensible link structure. 2,732,893, 1–31–56, Cl. 160—84.

Harris, Donald S., to New Castle Products, Inc. Foldable closure. 2,732,894, 1–31–56, Cl. 160—84.

Harris, Frederic R., Inc.: *See*—
Quirin, Edward J. 2,732,818.

Hart, Frank A. Ratchet actuated pipe bending tool. 2,732,743, 1–31–56, Cl. 81—15.

Hartford National Bank and Trust Co.: *See*—
Böhme, Karl. 2,733,377.
Diemer, Gesinus. 2,733,305.
Groendijk, Hendrik. 2,733,379.
Jurriaanse, Tom, and Horseling. 2,733,372.
Kolkman, Dirk. 2,733,368.
Van Rijssel, Tijs W., Houtman, and Jonker. 2,733,144.

Hartwell Aviation Supply Co.: *See*—
Hogan, John E., and Poe. 2,732,970.
Poe, Lloyd R. 2,732,582.

Hartwell, Clark: *See*—
Hogan, John E., and Poe. 2,732,970.
Poe, Lloyd R. 2,732,582.

Hartwell, Daniel H. Louver construction. 2,732,595, 1–31–56, Cl. 20—62.

Hartwell, Eleanor M.: *See*—
Hogan, John E., and Poe. 2,732,970.
Poe, Lloyd R. 2,732,582.

Hartzler, John E., and C. P. Jeter: said Hartzler assor. to E. H. Buller. Steam cleaning device. 2,733,101, 1–31–56, Cl. 299—84.

Haslam, John H., to E. I. du Pont de Nemours and Co. Methods for insolubilizing coating compositions. 2,732,799, 1–31–56, Cl. 101—416.

Hastings Mfg. Co.: *See*—
Phillips, Harold P. 2,732,836.

Hauserman, Frank B.: *See*—
Dalton, Richard L., and Hauserman. 2,733,182.

Hawaiian Canneries Co., Ltd.: *See*—
Horner, Albert. 2,732,957.
Horner, Albert, and Story. 2,732,956.

Hawk, Watson L., to Rheem Mfg. Co. Apparatus for applying plastic sheeting to metal plates. 2,732,880, 1–31–56, Cl. 154—1.

Hawkins, Ernest L. Separable paint brush. 2,732,578, 1–31–56 Cl. 15—202.

Hawkins, Robert E. Liquid level gauge. 2,732,715, 1–31–56, Cl. 73—323.

Hawley, Harold K., and R. D. Dobson, to The Procter & Gamble Co. Molecular rearrangement process. 2,733,251, 1–31–56, Cl. 260—410.7.

Hawthorne, Nathaniel F., to Friden Calculating Machine Co., Inc. Reversible ribbon feed mechanism for adding machines. 2,732,924, 1–31–56, Cl. 197—162.

Hawthorne, Omer V., to H. J. Moll. Universal mast mounting device. 2,733,030, 1–31–56, Cl. 248—40.

Hawthorne, Thomas A.: *See*—
Leonard, Anthon A., Hawthorne, and Borberg. 2,733,434.

Haxby, Robert O.: *See*—
Lyman, Joseph, Caldwell, Maeder, Haxby, and Tawney. 2,733,437.

Hays, Clyde C. Sludge removing means. 2,732,944, 1–31–56, Cl. 210—55.

Healey, Harry G. Separable chair construction. 2,732,889, 1–31–56, Cl. 155—196.

Heck, Ervin R., to Bradley Associates, Inc. Hinge structure for molded plastic boxes. 2,732,581, 1–31–56, Cl. 16—171.

Hecker, Harvard K., to Curtis Mfg. Co. Lifting devices. 2,732,917, 1–31–56, Cl. 187—8.62.

Hedges, Charles S., to The Vendo Co. Refrigerated vending machine. 2,732,974, 1–31–56, Cl. 221—184.

Heidecke, Reinhold, and H. Bretthauer, to Franke & Heidecke, Fabrik Photographischer Prazisions-Apparate. Mounting ring for camera accessories. 2,732,751, 1–31–56, Cl. 88—1.

Hein, Delton W., to American Cyanamid Co. Preparation of isomeric 1-phenyl-1,2-dicyanoethylenes. 2,733,258, 1–31–56, Cl. 260—465.

Henderson, Ray M. Ice bars and machine for and method of making same. 2,732,690, 1–31–56, Cl. 62—106.

Henne, John E. Rock collecting apparatus having a reciprocable gathering blade. 2,732,673, 1–31–56, Cl. 55—17.

Henninger, Miles: *See*—
Peters, Virgil N. 2,733,333.

Henting, Carl, to Firma Carl Hepting & Co., Lederwaren- und Gürtelfabrik G. m. b. H. Carriers for cameras. 2,732,876, 1–31–56, Cl. 150—52.

Herberg, Clifton L., to Gifford-Wood Co. Deep fat frying machine. 2,732,789, 1–31–56, Cl. 99—404.

Herbert, Charles C.: *See*—
Ahldgaard, William H., and Herbert. 2,733,003.

Herbig, James A.: *See*—
Salyer, Ival O., and Herbig. 2,733,228.

Hercle, Ludwig, K. Jehle, K. Kunz, P. Möller, and P. Schlack, to Bobingen Aktiengesellschaft fur Textil-Faser. Production of staple fibres from polyamides. 2,733,122, 1–31–56, Cl. 18—54.

Herlach, Heinrich, to Machine Tool Works Oerlikon, Administration Co. Friction brake for a gun. 2,732,767, 1–31–56, Cl. 89—44.

Hermanson, Herman E.: *See*—
Bechard, Conrad E., and Hermanson. 2,732,878.

Herterick, Vincent R., to United-Carr Fastener Corp. Electrical assembly. 2,733,320, 1–31–56, Cl. 200—166.

Herzog, Arno H.: *See*—
Cave, William T., and Herzog. 2,733,133.

Heuver, Herbert W.: *See*—
D'Andrea, John B., and Heuver. 2,733,008.

Hickman, Franklin J.: *See*—
Tuller, Clarence E., and Hickman. 2,733,326.

Higgins, Inc.: *See*—
Dugas, Joseph J. 2,733,053.

Higgins, Jess C. Muffler, spark arrester, and water trap for internal combustion engines having vertical stacks. 2,732,913, 1–31–56, Cl. 183—96.

Hildebrandt, Arnold: *See*—
Farley, George F., and Hildebrandt. 2,733,032.

Hillier, Harold, and F. B. Ling, to G. & J. Weir Ltd. Treatment of sea water for evaporating plants. 2,733,190, 1–31–56, Cl. 202—57.

Hills, Jay B.: *See*—
Wilshusen, Arthur. 2,732,722.

Hills, Madonna L.: *See*—
Wilshusen, Arthur. 2,732,722.

Hines Flask Co.: *See*—
Hines, Russell J. 2,732,599.

Hines, Russell J., to Hines Flask Co. Molder's flask. 2,732,599, 1–31–56, Cl. 22—116.

Hinman, Donald D., and J. F. Schmerbeim, to General Electric Co. Metal sleeve base for double ended tubular lamp. 2,733,417, 1–31–56, Cl. 339—50.

Hitchcox, Harold F.: *See*—
Bailly, Randolph M., and Hitchcox. 2,733,188.

Hoagland, Kenneth A., to Allen B. Du Mont Laboratories, Inc. Ion trap electron gun for cathode ray tubes. 2,733,365, 1–31–56, Cl. 313—82.

Hobbs, James C. Valve. 2,732,855, 1–31–56, Cl. 137—338.

Hodge, Allen W., and R. L. Ballard, to Reynolds Metals Co. Tin-zinc base alloys. 2,733,168, 1–31–56, Cl. 117—50.

Hoffmann, Walter, to Actiengesellschaft Joh. Jacob Rieter & Cie. Method and device for winding cops in ring-spinning and ring-doubling machines having a vertically movable spindle rail. 2,732,683, 1–31–56, Cl. 57—95.

Hogan, John E., and L. R. Poe, to C. and E. M. Hartwell, copartners, d. b. a. Hartwell Aviation Supply Co. Rotatable access door. 2,732,970, 1–31–56, Cl. 220—40.

Hoglund, Nils. Templet formers. 2,732,770, 1–31–56, Cl. 90—13.1.

Hohmann, Albert: *See*—
Cooper, Benjamin, and Hohmann. 2,732,797.

Hohwart, Ernest F.: *See*—
Hohwart, George and E. F. 2,733,072.

Hohwart, George and E. F., to N. A. Woolworth Co. Finger chuck. 2,733,072, 1–31–56, Cl. 279—4.

Holden, Calvin B., to Columbia-Southern Chemical Corp. Production of isopropyl chloroformate. 2,732,914, 1–31–56, Cl. 183—119.

Holmen, Reynold E., and W. E. Lundquist, to Minnesota Mining & Mfg. Co. Pressure-sensitive adhesive tape. 2,733,169, 1–31–56, Cl. 117—76.

Holmen, Vernon E. Jar vise. 2,732,740, 1–31–56, Cl. 81—3.32.

Holmes, John R., and A. Schwarz, to General Motors Corp. Radiator cans. 2,732,971, 1–31–56, Cl. 220—44.

Holmquist, Hjalmar. Shelves. 2,732,955, 1–31–56, Cl. 211—147.

Holst, Torsten G., to Reymersholms Gamla Industri Aktiebolag. Method for ensiling vegetable and animal products. 2,733,146, 1–31–56, Cl. 99—8.

Holt, William H. Perfume container for personal wear. 2,733,098, 1–31–56, Cl. 299—20.

Holzenthal, Leo L., to E. L. D'Aquin, and E. A. Gastrock, to the United States of America as represented by the Secretary of Agriculture. Stick remover. 2,732,939, 1–31–56, Cl. 209—102.

Honer, Henry, to Western Stove Co., Inc. Grate structure for gas ranges. 2,732,838, 1–31–56, Cl. 126—215.

Honsel, Carl. Manufacture of paper bags. 2,732,774, 1–31–56, Cl. 93—23.

Honsinger, Vernon B.: *See*—
Bauer, Phillip F., and Honsinger. 2,733,362.

Hook, Benton A. Engine ignition control. 2,732,833, 1–31–56, Cl. 123—117.

Hoover Co., The: *See*—
Dunn, Harold G. 2,732,700.

Hornbostel, Lloyd, to Beloit Iron Works. Suction pick-up and transfer press for paper machines. 2,732,772, 1–31–56, Cl. 92—49.

Horner, Albert, and P. E. Story, to Hawaiian Canneries Co., Ltd. Apparatus for handling cans. 2,732,956, 1–31–56, Cl. 214—1.

Horner, Albert, to Hawaiian Canneries Co., Ltd. Apparatus for palletizing cans. 2,732,957, 1–31–56, Cl. 214—6.

Horseling, Jan: *See*—
Jurriaanse, Tom, and Horseling. 2,733,372.

Horsley, Lee H., and E. C. Britton, to The Dow Chemical Co. Trihydroxy polyoxyalkylene ethers of glycerol. 2,733,272, 1–31–56, Cl. 260—615.

Horwood, John L.: *See*—
Eichholz, Geoffrey G., and Horwood. 2,733,216.

Hostutler, Ray H.: *See*—
Davis, Louis. 2,732,901.

Houdaille-Hershey Corp.: *See*—
Conley, Charles C. 2,732,669.
Sandberg, Ray A. 2,732,615.

Houston Oil Field Material Co., Inc.: *See*—
Burns, Albert L., Jr. 2,733,045.

Houtman, Harke J.: *See*—
Van Rijssel, Tijs W., Houtman, and Jonker. 2,733,144.

Howard, Edward G., Jr., to E. I. du Pont de Nemours and Co. Alpha-cyanothioamides. 2,733,260, 1–31–56, Cl. 260—465.5.

Howard, Paul L., to the United States of America as represented by the Secretary of the Navy. Electrolyte filling device and method for reserve type primary batteries. 2,732,985, 1–31–56, Cl. 226—19.

Howard, Tulane B. Toy dump trucks. 2,732,659, 1–31–56, Cl. 46—210.

Hoyt, Leo E. Fuel tank gauge for tractors. 2,732,820, 1–31–56, Cl. 116—118.

Huber, J. M., Corp.: *See*—
Williams, Ira, and Voet. 2,733,155.

Huck, Alfred J., to Knapp-Monarch Co. Twin window fans. 2,733,002, 1–31–56, Cl. 230—259.

Huckabay, William B., to Socony Mobil Oil Co., Inc. Method for analyzing earth materials for hydrocarbons. 2,733,135, 1–31–56, Cl. 23—230.

Hull, Charles J., and R. S. Tuttle, to the United States of America as represented by the Secretary of War. Set-back operated safety clutch. 2,732,801, 1–31–56, Cl. 102—78.

Hultquist, Martin E., to American Cyanamid Co. Process of producing isonicotinic acid. 2,733,246, 1–31–56, Cl. 260—295.

Humbargar, Solomon M. Holder for tools, mechanical parts, and the like. 2,733,113, 1–31–56, Cl. 312—251.

Hundt, Eberhard, to Daimler-Benz Aktiengesellschaft. Device for operating internal combustion engines. 2,732,835, 1–31–56, Cl. 123—119.

Hunter, Byron A., to United States Rubber Co. Triaryl phosphite stabilizers for synthetic rubbers. 2,733,226, 1–31–56, Cl. 260—29.7.

Hurdle, Joseph H., and J. E. and R. H. Curl. Cotton harvesting sack. 2,732,872, 1–31–56, Cl. 150—2.

Hydropress, Inc.: *See*—
Albers, Heinrich B. 2,732,938.
Krause, Gerhard P. 2,732,738.

Hyland, John E. Snow and ice remover. 2,732,573, 1–31–56, Cl. 15—82.

Hypro Engineering Co.: *See*—
Sadler, Harry J., and Cook. 2,732,804.

Iler, Ralph K.: *See*—
Dalton, Richard L., Iler, and Alexander. 2,733,205.

Iler, Ralph K., to E. I. du Pont de Nemours and Co. Solids coated with estersil. 2,733,160, 1–31–56, Cl. 117—16.

Imm, Ronald C., to The General Electric Co. Ltd. Electrical oscillation generators. 2,733,339, 1–31–56, Cl. 250—36.

Imperial Chemical Industries Ltd.: *See*—
Cowie, Charles T. Y. 2,733,274.
Stephen, Alexander McL. McA. 2,732,942.

Infilco Inc.: *See*—
Koupal, Robert J., and Kalinske. 2,732,948.

Ingram, Mark G., and W. A. Chupka, to the United States of America as represented by the United States Atomic Energy Commission. Ionization source. 2,733,343, 1–31–56, Cl. 250—41.9.

Innes Co.: *See*—
Blaser, Wilfred A., and McLain. 2,732,678.

International Minerals & Chemical Corp.: *See*—
Burke, William E. 2,733,132.
Wagner, John. 2,733,174.

Irgens, Finn T., to Outboard, Marine & Mfg. Co. Outboard motor rotatable on an inclined axis for reversal and having an oblique propeller shaft. 2,732,819, 1–31–56, Cl. 115—18.

Iron Fireman Mfg. Co.: *See*—
Richardson, Max C. 2,733,315.

Irving Air Chute Co., Inc.: *See*—
Epple, Heinrich K. 2,633,028.

Jablonowski, Alexander L. Car parking system. 2,733,426, 1–31–56, Cl. 340—213.

Jacobs, David I. H.: *See*—
Hall, Reginald H., Jacobs, and Jacquet. 2,732,940.

Jacobson, Harvey B.: *See*—
Brandon, Clarence W. 2,732,687.

Jacques, George E., and R. L. Gates, to Thompson Products, Inc. Coaxial switch. 2,733,318, 1–31–56, Cl. 200—153.

Jacquet, Maurice V.: *See*—
Hall, Reginald H., Jacobs, and Jacquet. 2,732,940.

James, Bill Y. Ornament in the nature of a tree. 2,732,645, 1–31–56, Cl. 41—15.

James, Bill Y. Knock-down type ornamental tree structure. 2,732,646, 1–31–56, Cl. 41—15.

Janonis, George, and A. Gotautas. Support. 2,732,954, 1–31–56, Cl. 211—88.

Janonis, George. Door latch mechanism. 2,733,091, 1–31–56, Cl. 292—166.

Jarl Products, Inc.: *See*—
Leufvenius, Karl J. G. 2,732,638.

Jeannette Glass Co., The: *See*—
Cassell, Robert P. 2,732,665.

Jehle, Kurt: *See*—
Hercle, Ludwig, Jehle, Kunz, Möller, and Schlack. 2,733,122.

Jenson, Kenneth S., and W. N. Nelson, to Preway Inc. Liquid fuel feed system. 2,732,891, 1–31–56, Cl. 158—36.6.

Jespersen, Jens, to The United Electric Coal Companies. Supporting structure for excavating wheel. 2,732,641, 1–31–56, Cl. 37—180.

Jeter, Charlie P.: *See*—
Hartzler, John E., and Jeter. 2,733,101.

Johnson, Axel E. F.: *See*—
Berner, Harry M., Johnson, Ensminger, and Savke. 2,733,110.

Johnson, Carl A. P., to S. H. Couch Co., Inc. Name panel board. 2,732,643, 1–31–56, Cl. 40—125.

Johnson, Leonard E., Jr., to Kennatrack Corp. Sliding door frame assembly. 2,732,919, 1–31–56, Cl. 189—34.

Johnson, William D. Apparatus for forming stone building slabs. 2,732,605, 1–31–56, Cl. 25—121.

Jones, Alan S.: *See*—
Del Valle, Guillermo A., and Jones. 2,733,062.

Jones, Gordon K. Locking mechanism for reclining seats. 2,732,888, 1–31–56, Cl. 155—163.

Jones, Thomas G.: *See*—
Wilson, Samuel W., and Jones. 2,733,279.

Jonker, Hendrik: *See*—
Van Rijssel, Tijs W., Houtman, and Jonker. 2,733,144.

Jonsson, Johan M. Spring device provided between the cheeks of a pair of pliers or a similar tool. 2,732,733, 1–31–56, Cl. 76—64.

Jörgensen, Anders O.: *See*—
Ericsson, Eric A., and Jörgensen. 2,733,319.

Joy Mfg. Co.: *See*—
Collins, Samuel C. 2,732,691.
Collins, Samuel C. 2,732,692.
Collins, Samuel C. 2,732,693.

Joyce, Don R. Throttle controller for automotive vehicles. 2,732,729, 1–31–56, Cl. 74—526.

Judson, Paul. Window construction. 2,732,593, 1–31–56, Cl. 20—40.

Julius, Awdry F., to Automatic Totalisators Ltd. Doubles ticket issuer mechanism for race totalisators. 2,732,794, 1–31–56, Cl. 101—66.

Junghans, Siegfried. Method of continuous casting. 2,732,601, 1–31–56, Cl. 22—200.1.

Jurriaanse, Tom, and J. Horseling, to Hartford National Bank and Trust Co. Glow discharge tube. 2,733,372, 1–31–56, Cl. 313—185.

Jurs, Peter C., and R. W. Blake, to Shand and Jurs Co. Vacuum vent valve. 2,732,856, 1–31–56, Cl. 137—469.

Jurs, Peter C., to Shand and Jurs Co. Fluid pressure sealed diaphragm relief valve. 2,732,857, 1–31–56, Cl. 137—494.

Justi, H. D., & Son, Inc.: *See*—
Cornell, John A., and Kemmler. 2,733,156.
Cornell, John A., and Kemmler. 2,733,157.

Kalinske, Anton A.: *See*—
Koupal, Robert J., and Kalinske. 2,732,948.

Karl, Henry E.: *See*—
Schroeder, Bernard F., and Karl. 2,732,966.

Karr, Michael B.: *See*—
Karr, William V. and M. B. 2,733,145.

Karr, William V. and M. B. Corn cob absorbent and method of producing the same. 2,733,145, 1–31–56, Cl. 99—6.

Kaulakis, Arnold F.: *See*—
Drews, William P., Kaulakis, and Lewis. 2,733,282.

Kay, Stanley W.: *See*—
Murphy, Frank L., Haman, and Kay. 2,732,814.

Kegan, Daniel: *See*—
Pelzmann, Alfred. 2,732,621.

Kegan, Franklin: *See*—
Pelzmann, Alfred. 2,732,621.

Kegan, Judith: *See*—
Pelzmann, Alfred. 2,732,621.

Keight, Albert W., G. E. Moos, and J. R. Shoup, to Celanese Corp. of America. Filament spinning apparatus. 2,732,950, 1–31–56, Cl. 210—130.5.

Kell, Ray D., to Radio Corp. of America. Color television camera. 2,732,291, 1–31–56, Cl. 178—5.4.

Kellner, Heinrich. Draught preventers for windows, doors and the like. 2,732,596, 1–31–56, Cl. 20—69.

Kelly, Henry W. Oil burner. 2,732,892, 1–31–56, Cl. 158—91.

Keltie, George R., to American Wringer Co., Inc. Girdle garter fastener. 2,732,604, 1–31–56, Cl. 24—245.

Kemmler, Harry E.: *See*—
Cornell, John A., and Kemmler. 2,733,156.
Cornell, John A., and Kemmler. 2,733,157.

Kennatrack Corp.: *See*—
Johnson, Leonard E., Jr. 2,732,919.

Kerag Kesselschmiede, Apparate- und Maschinenbau: *See*—
Märky, Herbert L. 2,733,056.

Kerns, Wilson D., to North American Aviation, Inc. Method of routing. 2,732,771, 1–31–56, Cl. 90—14.

Kerr, Ralph W., and W. A. Faucette, to Corn Products Refining Co. Reaction of starch and alkylene oxides. 2,733,238, 1–31–56, Cl. 260—233.3.

Keyser, Johann J., to Schiess Aktiengesellschaft. Carrier for condenser bobbins. 2,733,020, 1–31–56, Cl. 242—68.

Kiers, Lucas. Shortening comprising lard and lipins. 2,733,149, 1–31–56, Cl. 99—118.

Kimble, Creighton B., to Stavid Engineering, Inc. Self-clamping test prong. 2,733,418, 1–31–56, Cl. 339—108.

King, Donald E.: *See*—
Halter, Allan C., and King. 2,733,397.

Kipnis, Samuel W.: *See*—
Pelzmann, Alfred. 2,732,621.

Kirby, Ben H., W. J. Olenick, and K. P. Smith, to General Aniline & Film Corp. Preparation of 2,5-diarylamino-3,6-dichloroquinones. 2,733,250, 1–31–56, Cl. 260—396.

Kirchner, Harold A. Land levelling machine. 2,732,640, 1–31–56, Cl. 37—169.

Kirkwood, James, Jr., to American Hospital Supply Corp. Bed flower and utility stand. 2,732,568, 1–31–56, Cl. 5—317.

Kish Plastic Products, Inc.: *See*—
Kish, Steven P., and Coe. 2,733,221.

Kish, Steven P., and L. C. Coe, deceased, by M. L. Coe, administrator, to Kish Plastic Products, Inc. Expanded resin and method for making the same. 2,733,221, 1–31–56, Cl. 260—2.5.

Klein, Norman E., to Deering Milliken Research Corp. Textile plying or twisting device. 2,732,681, 1–31–56, Cl. 57—58.65.

Kleppe, Ernest J. Rotary blade cultivator. 2,732,785, 1–31–56, Cl. 97—212.

Knapp-Monarch Co.: *See*—
Huck, Alfred J. 2,733,002.

Knight, Harry L. Device for checking wheel alignment. 2,732,626, 1–31–56, Cl. 33—203.2.

Knott, Clyde L., to United Shoe Machinery Corp. Automatic fastener driving devices. 2,732,554, 1–31–56, Cl. 1—18.

Kock, Winston E., to Bell Telephone Laboratories, Inc. Metallic lens antenna. 2,733,438, 1–31–56, Cl. 343—909.

Koenecke, Donald F., to Esso Research and Engineering Co. Synthetic drying oils. 2,733,267, 1–31–56, Cl. 260—534.

Koenig, Walter, Jr., to Bell Telephone Laboratories, Inc. Bidirectional amplifiers. 2,733,303, 1–31–56, Cl. 179—170.

Koenig, Walter, Jr., to Bell Telephone Laboratories, Inc. Bidirectional amplifiers. 2,733,304, 1–31–56, Cl. 179—170.

Kolkman, Dirk, to Hartford National Bank and Trust Co. Gas-filled electric discharge tube. 2,733,368, 1–31–56, Cl. 313—109.

Koppers Co., Inc.: *See*—
Van Ackeren, Joseph. 2,733,054.

Koster, Edward C., to The Vichek Tool Co. Apparatus for use in determining moisture content. 2,732,632, 1–31–56, Cl. 34—233.

Koupal, Robert J., and A. A. Kalinske, to Infilco Inc. Filters. 2,732,948, 1–31–56, Cl. 210—144.

Krapcho, John, and W. A. Lott, to Olin Mathieson Chemical Corp. Basic derivatives of substituted cyclopropanecarboxylic acids and methods of preparing same. 2,733,241, 1–31–56, Cl. 260—247.1.

Krapcho, John, E. J. Pribyl, and J. Bernstein, to Olin Mathieson Chemical Corp. Salts of basic N-methyl benziiamides. 2,733,256, 1–31–56, Cl. 260—459.

Krause, Gerhard P., to Hydropress, Inc. Hydraulic press. 2,732,738, 1–31–56, Cl. 78—9.

Krautkrämer, Adam. Jet driven aerial toy. 2,732,657, 1–31–56, Cl. 46—76.

Kromschroder, G. Aktiengesellschaft: *See*—
Schwarz, Karl H. 2,732,853.

Kropp Forge Co.: *See*—
Andresen, Arne O. 2,732,879.

Kuchinsky, Saul, to Burroughs Corp. Pulse code modulation system. 2,733,409, 1–31–56, Cl. 332—11.

Kuchman, Herbert, and A. Deeg. Pivoted work holding and bending tool. 2,732,744, 1–31–56, Cl. 81—15.

Kulling, Arne, to AB Svenska Flaktfabriken. Cooling device for bearings. 2,733,106, 1–31–56, Cl. 308—77.

Kunin, Robert, to the United States of America as represented by the United States Atomic Energy Commission. Recovery of uranium values from phosphoric acid. 2,733,200, 1–31–56, Cl. 204—90.

Kunz, Karl: *See*—
Herele, Ludwig, Jehle, Kunz, Möller, and Schlack. 2,733,122.

Kuts, Mathew, to The B. F. Goodrich Co. Method of building continuous tubing and apparatus therefor. 2,732,882, 1–31–56, Cl. 154—1.6.

Kyame, George J., to the United States of America as represented by the Secretary of Agriculture. Method for spinning yarn from staple fiber. 2,732,682, 1–31–56, Cl. 57—58.91.

Labine, Roland A., to Package Machinery Co. Apparatus for opening wrapped bundles. 2,732,619, 1–31–56, Cl. 30—2.

Lafferty, James M.: *See*—
Lawton, Elliott J., and Lafferty. 2,733,348.

La Hirt, Paul. Change speed attachment. 2,732,622. 1–31–56, Cl. 32—23.

Lancaster, Roger S.: *See*—
Peterson, Robert E., and Lancaster. 2,732,697.

Lancor, Joseph H., Jr., to Consolidated Engineering Corp. Galvanometer structure. 2,733,407, 1–31–56, Cl. 324—97.

Lange, Günther, and R. Richter, to Carl Zeiss. Wide aperture photographic objective comprising three air spaced components. 2,732,762, 1–31–56, Cl. 88—57.

Langston, Samuel M., Co.: *See*—
Nitchie, Charles D. 2,733,018.

Lankford, Harry G. Packaged disassembled housings. 2,732,936, 1–31–56, Cl. 206—65.

Lansil, Clifford E., to The Gamewell Co. Frequency suppression filter. 2,733,414, 1–31–56, Cl. 333—77.

Laster, Edwin C., Sr., and T. L. Menge, Sr. Fluid disperser. 2,733,103, 1–31–56, Cl. 299—120.

Latzen, Josef, to A. Ehrenreich & Cie. Ball and socket joint. 2,733,085, 1–31–56, Cl. 287—87.

Latzen, Josef H., to A. Ehrenreich & Cie. Socket for a ball and socket joint. 2,733,086, 1–31–56, Cl. 287—87.

Latzen, Josef H., to A. Ehrenreich & Cie. Ball and socket joint. 2,733,087, 1–31–56, Cl. 287—90.

Lau, Erwin M., to Black Products Co. Bag filling machine. 2,733,040, 1–31–56, Cl. 249—58.

Lauck, John A., to Borg-Warner Corp. Control valve. 2,732,852, 1–31–56, Cl. 137—108.

Lawrence, Ernest O., and W. M. Brobeck, to the United States of America as represented by the United States Atomic Energy Commission. Calutron. 2,733,349, 1–31–56, Cl. 250—41.9.

Lawton, Elliott J., and J. M. Lafferty, to the United States of America as represented by the United States Atomic Energy Commission. Ion source units. 2,733,348, 1–31–56, Cl. 250—41.9.

Leary, Joseph C. Wire tie for balers. 2,732,790, 1–31–56, Cl. 100—4.

Leblanc, Georges, to Compagnie Generale de Travaux d'Eclairage et de Force, Anciens Etablissements Clemancon. Selector or mixer devices for polychromatic illumination. 2 733,428, 1–31–56, Cl. 340—335.

Le Clercq, Leon J., to Gladding, McBean & Co. Method of and apparatus for producing micro-dimensioned ceramic tile. 2,732,590, 1–31–56, Cl. 18—47.5.

Legg, Robert, Ltd.: *See*—
Schreiber, Patrick Q. R. 2,732,928.

Léon, Joseph, to Society "Elipson," S. A. Sound transducers. 2,732,907, 1–31–56, Cl. 181—31.

Leonard, Anthon A., T. A. Hawthorne, and W. Borberg, to General Precision Laboratory Inc. Cathode ray tube mounting. 2,733,434, 1–31–56, Cl. 340—367.

Leonard Mayo E. Garment hanger. 2,732,982, 1–31–56, Cl. 223—95.

Letts, Harold D., ½ to H. B. Salkeld. Continuous mining machine having adjustable tubular cutters. 2,733,057, 1–31–56, Cl. 262—7.

Leufvenius, Karl J. G., to Jari Products, Inc. Rotary snow plow. 2,732,638, 1–31–56, Cl. 37—43.

Lever Brothers Co.: *See*—
Ruff, Edgar E. 2,733,215.

Lewin, Jacob W., deceased: L. E. Lewin, administratrix. Automatic gripping pipe bender. 2,732,742, 1–31–56, Cl. 81—15.

Lewin, Lillie E.: *See*—
Lewin, Jacob W. 2,732,742.

Lewis, Charles J., and D. E. Poole, to Republic Steel Corp. Reel for coiling strip material. 2,733,023, 1–31–56, Cl. 242—78.

Lewis, Warren K., Jr.: *See*—
Drews, William P., Kaulakis, and Lewis. 2,733,282.

Lewis, William, ¼ to J. C. Tannock, and ¾ to Plastomatic Ltd. Safety razor blade holders. 2,732,933, 1–31–56, Cl. 206—16.

Libby, James W., Jr., D. B. Pattison, and F. Zwilgmeyer, to E. I. du Pont de Nemours & Co. Fluorescent agents and process of making the same. 2,733,242, 1–31–56, Cl. 260—247.1.

"Licencia" Talalmanyokat Ertekesito Vallalat: *See*—
Szilágyi, István. 2,733,370.

Lidov, Rex E., to Shell Development Co. Polybalo epoxy methane naphthalene compounds. 2,733,248, 1–31–56, Cl. 260—346.2.

Liebel-Flarshiem Co., The: *See*—
Billin, Arthur G. 2,733,352.

Liftin, Muriel E.: *See*—
Vitale, Peter T., and Liftin. 2,733,213.
Vitale, Peter T., and Liftin. 2,733,214.

Lillengreen, Manford R. Replaceable corner portion for the cutting edge of bulldozer blades. 2,732,639, 1–31–56, Cl. 37—143.

Lilly, Eli, and Co.: *See*—
Ainsworth, Cameron. 2,733,245.
Moore, Robert P. 2,732,987.

Limberger, Walter, to Messrs. Lumoprint Zindler K. G. Device for making photostatic copies. 2,732,778, 1–31–56, Cl. 95—77.5.

Lindsey, Richard V., Jr., to E. I. du Pont de Nemours and Co. Sulfated telomers. 2,733,255, 1–31–56, Cl. 260—458.

Linen Thread Co., The: *See*—
Sonnberger, Rudolph. 2,732,750.

Ling, Frank B.: *See*—
Hillier, Harold, and Ling. 2,733,196.

Linhorst, Erwin F., to United States Rubber Co. Plastometer and method. 2,732,708, 1–31–56, Cl. 73—15.6.

Lionel Corp., The: *See*—
Bonanno, Joseph L. 2,732,958.

Lipton, Henry. Wedge-heel sandal construction. 2,732,634, 1–31–56, Cl. 36—11.5.

Liss, Jack G. Automobile entry tool. 2,732,739, 1–31–56, Cl. 81—3.

List, Enrique. Electromagnetically-operated oscillating motor. 2,733,360, 1–31–56, Cl. 310—29.

Livermont, Frank W. Torque limiting screwdriver. 2,732,746, 1–31–56, Cl. 81—52.4.

Livermont, Frank W. Predetermined torque release wrench and spring adjusting means therefor. 2,732,747, 1–31–56, Cl. 81—52.5.

Livermore, William T. Automatic fluid pressure transmission. 2,732,727, 1–31–56, Cl. 74—472.

Livestock Sprayer Mfg. Co.: *See*—
Abildgaard, William H., and Herbert. 2,733,003.

Loewe Opta A. G.: *See*—
Neumann, Egon. 2,733,293.

Lomax, Clarence E., to Automatic Electric Laboratories, Inc. Telephone system. 2,733,295, 1–31–56, Cl. 179—6.3.

Lorentzen Hardware Mf'g. Corp.: *See*—
Anderle, Joseph A. 2,732,881.

Lott, William A.: *See*—
Krapcho, John, and Lott. 2,733,241.

Loudon, Robert C. Binder for papers, pamphlets, catalogs and similar articles. 2,732,842, 1–31–56, Cl. 129—1.

Loumlet et Lavigne, Juan, deceased: L. J. M. Boy y Lafitte, executrix or administratrix. Means for regulating steam generators. 2,732,830, 1–31–56, Cl. 122—1.

Lowen, Herbert: *See*—
Back, Frank G., and Lowen. 2,732,763.

Lucien, René, to Societe d'Inventions Aeronautiques et Mecaniques S. I. A. M. Self-regulating feed-pump. 2,732,805, 1–31–56, Cl. 103—42.

Ludwin Corp.: *See*—
Winkler, Charles. 2,732,845.

Lummus Co., The: *See*—
Schauble, Otto C., and Palchik. 2,733,287.

Lundahl, Walter N., to Westinghouse Electric Corp. Classification system for sheet sorting. 2,732,896, 1–31–56, Cl. 164—68.

Lundquist, William E.: *See*—
Holmen, Reynold E., and Lundquist. 2,733,169.

Luther, William P., to John Oster Mfg. Co. Closure for mixing vessel. 2,733,052, 1–31–56, Cl. 259—122.

Luther, William P., to John Oster Mfg. Co. Speed control of series motor for comminuting machine. 2,733,396, 1–31–56, Cl. 318—251.

Lyman Joseph, J. J. Caldwell, Jr., A. S. Maeder, R. O. Haxby, and G. L. Tawney, to Sperry Rand Corp. Radio apparatus for detecting and locating objects. 2,733,437, 1–31–56, Cl. 343—11.

Lyon, George A. Wheel structure. 2,733,104, 1–31–56, Cl. 301—37.

Lytton, Frank A., and J. A. Cashmore, to The Morgan Crucible Co. Ltd. Metal-ceramic body and process of producing the same. 2,733,161, 1–31–56, Cl. 117—22.

MacDonald, Duncan N., to Automatic Electric Laboratories, Inc. Rotary switch. 2,733,323, 1–31–56 Cl. 200—171.

Machine Tool Works Oerlikon, Administration Co.: *See*—
Herlach, Heinrich. 2,732,767.

Machinefabriek Reineveld N. V.: *See*—
Zwaard, Henricus C. A. 2,732,702.

MacKenzie, Kenneth R., and W. M. Brobeck, to the United States of America as represented by the United States Atomic Energy Commission. Calutron control circuit. 2,733,350, 1–31–56, Cl. 250—41.9.

Maeder, Abbott S.: *See*—
Lyman, Joseph, Caldwell, Maeder, Haxby, and Tawney. 2,733,437.

Maggio, John B., to Bell Telephone Laboratories, Inc. Automatic line switching circuits. 2,733,296, 1–31–56, Cl. 179—15.

Maico Co., Inc., The: *See*—
Gelb, Robert L., and Wiley. 2,733,302.

Malden Form Brassiere Co., Inc.: *See*—
Braun, Carl C. 2,732,937.

Maisel, Daniel S., and B. I. Smith, to Esso Research and Engineering Co. Purification of a benzene fraction by mild liquid phase clay treatment and distillation to remove resultant polymers. 2,733,286, 1–31–56, Cl. 260—674.

Mallory, George C.: *See*—
Mattingly, Virdean R., and Mallory. 2,732,809.

Mandrapa, Obren P. Honey extracting machines. 2,732,945, 1–31–56, Cl. 210—65.

Markowich, Andrew. Grain dryer. 2,732,630, 1–31–56, Cl. 34—174.

Märky, Herbert L., to Kerag Kesselschmiede, Apparate- und Maschinenbau. Mixing of gases and liquids. 2,733,056, 1–31–56, Cl. 261—87.

Martin, George A., to Dexter Folder Co. Sheet delivering apparatus. 2,733,064, 1–31–56, Cl. 271—89.

Martin, Glenn L., Co., The: *See*—
Hallock, Clair L. 2,732,612.
Mayer, Robert H. 2,733,391.

Martin, Laurence H. Pocket secretary. 2,732,875, 1–31–56, Cl. 150—39.

Martin, Robert A.: *See*—
Driesbach, Robert R., and Martin. 2,733,281.

Marz, Ray E., to General Electric Co. Lamp base for elongated tubular lamps. 2,733,420, 1–31–56, Cl. 339—145.

Mason, Donald E., to J. D. McNairy, Jr. Electrolytic silver cleaner. 2,733,203, 1–31–56, Cl. 204—288.

Mason, William C. Electric stoves. 2,733,332, 1–31–56, Cl. 219—37.

Masson, Enrique C.: *See*—
Felez Alvarez, Francisco, and J. Felz Alvarez. 2,732,806.

Mastin, Thomas G.: *See*—
Seeger, Nelson V., and Mastin. 2,733,261.

Matlack, Richard C., F. W. Metzger, J. H. Miller, and E. Vroom, to Bell Telephone Laboratories, Inc. Multiparty selective signaling and identification system. 2,733,297, 1–31–56, Cl 179—17.

Mattco, Inc.: *See*—
Mattingly, Virdean R., and Mallory. 2,732,809.

Matthews, Robert L.: *See*—
Smith, Cloyd D., and Matthews. 2,732,701.

Mattingly, Virdean R., and G. C. Mallory, to Mattco, Inc. Liner assemblies. 2,732,809, 1–31–56, Cl. 103—216.

Maxcy, William J., and H. L. Sanders, to General Aniline & Film Corp. Impregnated scouring pad. 2,733,211, 1–31–56, Cl. 252—91.

Maxim Motor Co.: *See*—
Arps, Edmund J. 2,732,992.

May & Baker Ltd.: *See*—
Harber, Harry J., and Green. 2,733,257.
Barber, Harry J., and Green. 2,733,271.

May, Elliot D., and D. L. Webster, to Baxter D. Whitney & Son, Inc. Facing machine with resilient fingers belt feed. 2,732,867, 1–31–56, Cl. 144—128.

Mayer, Robert H., to The Glenn L. Martin Co. Integrator. 2,733,391, 1–31–56, Cl. 318—28.

Mayne, William H., to O. S. Petty. Seismic surveying. 2,732,906, 1–31–56, Cl. 181—0.5.

McAninch, Homer C.: *See*—
Scoggin, Baxter I., McAninch, and Moore. 2,733,159.

McCabe-Powers Auto Body Co.: *See*—
Balogh, Roy O. 2,733,039.

McCombs, Chesetr V. Bale dropper. 2,732,679, 1–31–56, Cl. 56—473.5.

McConnell, Frank J.: *See*—
Fisler, Leland H., Welch, and McConnell. 2,733,088.

McDonald, John E., to Westinghouse Electric Corp. Apparatus for cooling the bearings of fans. 2,733,001, 1–31–56, Cl. 230—211.

McDonald, Robert E.: *See*—
Griffith, Andrew S., Jr., McDonald, and Wilfong. 2,733,121.

McFadden, Fred. Fluid actuated rotary tool. 2,732,671, 1–31–56, Cl. 51—170.

McGee, Hugh C. N. Live-bait container. 2,732,653, 1–31–56, Cl. 43—55.

McKay, John F., Jr., to Esso Research and Engineering Co. Reaction product of olefin-diolefin resin with a coumarone-indene resin. 2,733,227, 1–31–56, Cl. 260—45.5.

McKee, Theresa M., to Texaco Development Corp. Thermal neutron measuring. 2,733,355, 1–31–56, Cl. 250—71.

McKinnis, Art C., to Union Oil Co. of California. Preparation of isophthalic and terephthalic acids. 2,733,266, 1–31–56, Cl. 260—525.

McLain, Roy W.: *See*—
Blaser, Wilfred A., and McLain. 2,732,678.

McLaughlin, John J., to The Wilkie Co. Conveyor. 2,732,922, 1–31–56, Cl. 193—35.

McNairy, James D., Jr.: *See*—
Mason, Donald E. 2,733,203.

McNulty, John G.: *See*—
Gilbert, William I., McNulty, and Montgomery. 2,733,189.

Mead Corp., The: *See*—
Ziegenbusch, Carl W. 2,732,949.

Mechanical Handling Systems, Inc.: *See*—
Bishop, Leonard J. 2,732,584.

Meeker, Lloyd. Hydraulic pump and valve unit. 2,732,803, 1–31–56, Cl. 103—3.

Meixner, Alfred, to Voigtlander, A. G. Photographic camera objective attaching means. 2,732,776, 1–31–56, Cl. 95—39.

Meletio, James T. Mounts for electrical fixtures. 2,733,036, 1–31–56, Cl. 248—205.

Melin, John E., ½ to A. O'Hair. Portable automatically released dam. 2,732,886, 1–31–56, Cl. 61—29.

Menard, James Z., to Bell Telephone Laboratories, Inc. Means for bulk demagnetization. 2,733,300, 1–31–56, Cl. 179—100.2.

Menge, Theodore L., Sr.: *See*—
Laster, Edward C., Sr., and Menge. 2,733,103.

Messrs. Lumoprint Zindler K. G.: *See*—
Limberger, Walter. 2,732,778.

Metallgesellschaft Aktiengesellschaft: *See*—
Milbers, Arthur, and Sondermann. 2,733,253.

Metcalf, John H., to Victrolec Ltd. Stillages. 2,732,967, 1–31–56, Cl. 220—6.

Metzger, Frederick W.: *See*—
Matlack, Richard C., Metzger, Miller, and Vroom. 2,733,297.

Meyer, Earl A., to Bjorksten Research Laboratories, Inc. Elastic cascading impact absorber. 2,733,177, 1–31–56, Cl. 154—52.5.

Meyer, Geo. J., Mfg. Co.: *See*—
Meyer, George L. N. 2,732,788.

Meyer, George L. N., to Geo. J. Meyer Mfg. Co. Multitier pasteurizer. 2,732,788, 1–31–56, Cl. 99—360.

Michigan Chemical Corp.: *See*—
Wohlers, Herbert C., Pauling, and Grover. 2,733,264.

Middleton, Donald R.: *See*—
Bixby, William R. 2,733,402.

Miegel, Ralph E., C. G. Niemann, and J. C. Sauer, to E. I. du Pont de Nemours and Co. Vinyl esters of N-carbacyl-alpha-monoamino-monocarboxylic acids, their preparation and polymers thereof. 2,733,233, 1–31–56, Cl. 260—89.1.

Milbers, Arthur, and K. Sondermann, to Metallgesellschaft Aktiengesellschaft. Process of and apparatus for refining oils or fats. 2,733,253, 1–31–56, Cl. 260—425.

Miller, Herman F.: *See*—
Postel, Charles E. and M. W. 2,732,828.

Miller, James H.: *See*—
Matlack, Richard C., Metzger, Miller, and Vroom. 2,733,297.

Miller, Warren S., to Olin Mathieson Chemical Corp. Process for concentrating aqueous hydrazine solutions. 2,733,195, 1–31–56, Cl. 202—45.

Miller, William T. Olefin halocarbons containing three and four carbon atoms and method of making them. 2,733,277, 1–31–56, Cl. 260—653.

Milner, Harold W.: *See*—
Spoehr, Herman A., and Milner. 2,732,661.

Milwaukee Gas Specialty Co.: *See*—
Guelson, Stanley. 2,732,848.

Minister of Mines and Technical Surveys, Her Majesty the Queen in the right of Canada, as represenetd by the: *See*—
Eichholz, Geoffrey G., and Horwood. 2,733,216.

Minneapolis-Honeywell Regulator Co.: *See*—
Taylor, Daniel G. 2,732,720.

Minnesota Mining & Mfg. Co.: *See*—
Holmen, Reynold E., and Lundquist. 2,733,169.
Riedesel, Richard G. 2,733,181.

Missouri Automatic Control Corp.: *See*—
Garner, Claude M. 2,733,012.

Mitchell, Doren, E. Vroom, and W. R. Young, Jr., to Bell Telephone Laboratories, Inc. Multichannel radiant energy signaling system. 2,733,337, 1–31–56, Cl. 250—6.

Moll, Harry J.: *See*—
Hawthorne, Omer V. 2,733,030.

Möller, Paul: *See*—
Herele, Ludwig, Jehle, Kunz, Möller, and Schlack. 2,733,122.

Monsanto Chemical Co.: *See*—
Allen, Tull C., and Chadwick. 2,733,254.
Cave, William T., and Herzog. 2,733,133.
D'Amico, John J. 2,733,243.
Farrar, Martin W., and Raffelson. 2,733,265.
Salyer, Ival O., and Herbig. 2,733,228.

Montgomery, Charles W.: *See*—
Gilbert, William I., McNulty, and Montgomery. 2,733,189.

Moore, Clyde R.: *See*—
Scoggin, Baxetr I., McAninch, and Moore. 2,733,159.

Moore, James F., and F. B. Hansen. Bingo board with number covering slides. 2,733,067, 1–31–56, Cl. 273—135.

Moore, Robert P., to Eli Lilly and Co. Capsule cleaning and inspecting machine. 2,732,987, 1–31–56, Cl. 226—41.

Moos, Gilbert E.: *See*—
Keight, Albert W., Moos, and Shoup. 2,732,950.

Morehouse, Eugene, to B. A. Ballou & Co., Inc. Securing device. 2,732,603, 1–31–56, Cl. 24—108.

Morgan Crucible Co. Ltd., The: *See*—
Lytton, Frank A., and Cashmore. 2,733,161.

Morgan, Ernest J. Ice auger. 2,733,047, 1–31–56, Cl. 255—70.

Morgan, Thomas D., to Phillips Petroleum Co. Automatic transmission for internal combustion engines. 2,732,834, 1–31–56, Cl. 123—118.

Morgillo, Constantine A. Mounting bases for antenna masts. 2,733,031, 1–31–56, Cl. 248—43.

Morris, John D., to Raytheon Mfg. Co. Phase discriminator. 2,733,294, 1–31–56, Cl. 178—69.5.

Morris, Leo, L. G. Unger, and A. L. Wilson, to Corn Products Refining Co. Purification and recovery of zein. 2,733,234, 1–31–56, Cl. 260—123.

Morris, Martin F. Plant trellis. 2,732,660, 1–31–56, Cl. 47—47.

Morrison, Albert R., and H. E. Fargo, to Owens-Corning Fiberglas Corp. Method of making twine and apparatus therefor. 2,732,883, 1–31–56, Cl. 154—1.7.

Morrison, Laurence W., Jr.: *See*—
Doba, Stephen, Jr., and Morrison. 2,733,436.

Morrison, Wendell C., to Radio Corporation of America. Test equipment for television. 2,733,433, 1–31–56, Cl. 340—351.

Morton, Woolridge B.: *See*—
Geisler, William, and Morton. 2,732,995.

Moser, Grover C., Jr. File cabinet. 2,733,114, 1–31–56, Cl. 312—351.

Müller-Strobel, Josef, to The West Co., Inc. Closure remover with plunger actuated side grippers. 2,732,741, 1–31–56, Cl. 81—3.41.

Mulvany, Harry A. Preservation of eggs. 2,733,150, 1–31–56, Cl. 99—170.

Murphy, Frank L., R. W. Haman, and S. W. Kay, to Pullman-Standard Car Mfg. Co. Railway vehicle. 2,732,814, 1–31–56, Cl. 105—324.

Murphy, Joseph E. Rotary cultivator. 2,732,783, 1–31–56, Cl. 97—43.

Murray, James J. Push button combination lock. 2,732,704, 1–31–56, Cl. 70—313.

Murray Ohio Mfg. Co., The: *See*—
Douglas, Alvin P. 2,732,728.

Musser, C Walton. Method of and apparatus for perforating hollow objects. 2,732,897, 1–31–56, Cl. 164—90.

Myers, Hubert A., to Western Electric Co., Inc. Extruders. 2,732,588, 1–31–56, Cl. 18—13.

Myers, Jack E., and J. N. Phillips, Jr., to Carnegie Institution of Washington. Mass culture of algae. 2,732,662, 1–31–56, Cl. 47—58.

Myers, Ralph S., to The Wadsworth Electric Mfg. Co. Panelboard mounting for circuit breakers. 2,733,386, 1–31–56, Cl. 317—119.

N. Z. Inventions Development Co. Ltd.: *See*—
Bensemann, Edward H. T. 2,732,552.
Bensemann, Edward H. T. 2,732,553.

Nack, Herman R., to Chadeloid Corp. Activation of wood for dyeing with a basic dyestuff. 2,733,119, 1–31–56, Cl. 8—6.5.

National Blank Book Co.: *See*—
Schade, Frank S. 2,732,841.

National Brass Co.: *See*—
Grevengoed, Paul H. 2,733,089.

National Latex Products Co., Inc., The: *See*—
Whittington, Lloyd R. 2,732,986.

National Lead Co.: *See*—
Aagaard, Leif, and Espenschied. 2,733,134.
Beacham, Harry H. 2,733,222.

National Research Development Corp.: *See*—
Williams, Frederic C., and Thomas. 2,733,425.

National Theatres, Inc.: *See*—
Dickson, Alpheus E. 2,732,688.

Navy, United States of America as represented by the Secretary of the: *See*—
Babcock, Horace W. 2,733,006.
Boyd, William H. A. 2,732,765.
Carapellotti, Lawrence T. 2,733,358.
Howard, Paul L. 2,732,985.

Neckel, Edmund N., to The American Laundry Machinery Co. Collar holder. 2,732,981, 1–31–56, Cl. 223—52.1.

Neer, Charles A. Tape applicator. 2,732,964, 1–31–56, Cl. 216—21.

Neisler, Charles E., Jr. Method of and apparatus for making inflatable fabrics. 2,732,865, 1–31–56, Cl. 139—20.

Nelson, Willis N.: *See*—
Jenson, Kenneth S., and Nelson. 2,732,891.

Ne Peer Co.: *See*—
Van Raden, Harvey B. 2,733,059.

Neumann, Egon, to Loewe Opta A. G. Device for image synchronization in television equipment. 2,733,293, 1–31–56, Cl. 178—69.5.

Newbold, Joseph P., to Worthington Corp. Means for retaining flux on work during the process of submerged arc welding. 2,733,328, 1–31–56, Cl. 219—8.

New Castle Products, Inc.: *See*—
Harris, Donald S. 2,732,893.
Harris, Donald S. 2,732,894.

Newton, Catherine H.: *See*—
Brandon, Clarence W. 2,732,687.

Newton, Stanley E. Fusible motion arrestor. 2,732,920, 1–31–56, Cl. 189—45.

Nichols, Anthony, to Celluplastic Corp. Cap for plastic extrusion tube container. 2,732,870, 1–31–56, Cl. 150—0.5.

Niebauer, Kenneth L., to Westinghouse Electric Corp. Automatic reclosing circuit breaker. 2,733,384, 1–31–56, Cl. 317—22.

Nielsen, Elner. Cranberry stripping machine. 2,732,677, 1–31–56, Cl. 56—330.

Niemann, Carl G.: *See*—
Miegel, Ralph E., Niemann, and Sauer. 2,733,233.

Nilson, Elmer N. Loading device for pick-up trucks. 2,732,960, 1–31–56, Cl. 214—77.

Nitchie, Charles D., to S. M. Langston Co. Web winder. 2,733,018, 1–31–56, Cl. 242—66.

Nobel, Fred L., and B. D. Ostrow, to Elechem Corp. Acid copper plating bath. 2,733,198, 1–31–56, Cl. 204—52.

Noble, Dennis A. J., to The British Petroleum Co. Ltd. Treatment of sulphur-containing mineral oils. 2,733,190, 1–31–56, Cl. 196—29.

Noel, Edward B., to General Electric Co. Seal and terminal structure for electric discharge lamp. 2,733,375, 1–31–56, Cl. 313—217.

Noon, T Cyril, to Thompson Products, Inc. Flow controlling apparatus. 2,732,858, 1–31–56, Cl. 137—505.41.

Nordmark, Walter E., to American Seating Co. Edge binder for desk top or the like. 2,733,111, 1–31–56, Cl. 311—107.

Noregaard, Maurice J. Door lock. 2,732,703, 1–31–56, Cl. 70—211.

Norman, Wayne A.: *See*—
Adams, Paul L., Norman, and Sitterly. 2,732,594.

North American Aviation, Inc.: *See*—
Kerns, Wilson D. 2,732,771.

North Electric Co.: *See*—
Tuller, Clarence E., and Hickman. 2,733,326.

Northern Blower Co., The: *See*—
Bruckner, Walter. 2,733,398.

Northrop Aircraft, Inc.: *See*—
Pollard, Thomas C. 2,732,734.

Northwestern Steel and Wire Co.: *See*—
Vorderstrasse, Rudolph C. 2,732,866.

Oakland, Einar. Flexible oil can. 2,732,978, 1–31–56, Cl. 222—215.

Obszarny, Theodore J., to Guardian Electric Mfg. Co. Terminal lug and mounting block. 2,733,422, 1–31–56, Cl. 339—220.

O'Connell, John J.: *See*—
Sullivan, Roger M. 2,732,654.

Officine Elettromeccaniche F. Rapizzi & Figli, di Gaetano Rapizzi: *See*—
Rapizzi, Gaetano. 2,733,313.

Ogle, Hugh M., to General Electric Co. Stabilized full wave self-saturating magnetic amplifier. 2,733,307, 1–31–56, Cl. 179—171.

Ogle, Hugh M., to General Electric Co. Thermal time-constant circuit. 2,733,404, 1–31–56, Cl. 323—70.

O'Hair, Allyn: *See*—
Mellin, John E. 2,732,686.

Öholm, Gustav V., to Aktiebolaget Svenska Flaktfabriken. Device for feeding of granular materials. 2,732,980, 1–31–56, Cl. 222—427.

Olshel, John R., to Trico Products Corp. Vehicle brake and accessory system. 2,732,685, 1–31–56, Cl. 60—60.

O'Konski, Chester T. Means for circulating a particle carrying stream through an illumination zone. 2,732,753, 1–31–56, Cl. 88—14.

Olden, Roger G.: *See*—
Young, Charles J., and Olden. 2,732,775.

Olenick, Walter J.: *See*—
Kirby, Ben H., Olenick, and Smith. 2,733,250.

Olin Mathieson Chemical Corp.: *See*—
Krapcho, John, and Lott. 2,733,241.
Krapcho, John, Pribyl, and Bernstein. 2,733,256.
Miller, Warren S. 2,733,195.
Robson, Homer L., and Sheltmire. 2,733,120.
Yale, Harry L., and Bernstein. 2,733,237.

Olsson, Olov J. E., to Storm-Vulcan, Inc. Method and means for grinding cams. 2,732,668, 1–31–56, Cl. 51—101.

Ophuis, Fred, and W. E. Bernd. Cooling towers. 2,733,055, 1–31–56, Cl. 261—24.

Oppenheimer, Frank, to the United States of America as represented by the United States Atomic Energy Commission. Ion producing mechanism. 2,733,346, 1–31–56, Cl. 250—41.9.

Osborne, Fay H. Beverage infuser. 2,732,787, 1–31–56, Cl. 99—306.

Oster, John, Mfg. Co.: *See*—
Luther, William P. 2,733,052.
Luther, William P. 2,733,396.

Osterberg, Harold, to American Optical Co. Microscope with variable means for gradually altering the contrast in optical images. 2,732,759, 1–31–56, Cl. 88—39.

Ostrow, Barnet D.: *See*—
Nobel, Fred L., and Ostrow. 2,733,198.

Otto, Ferdinand P., to Socony Mobil Oil Co., Inc. Phosphorus and sulfur containing antioxidant. 2,733,207, 1–31–56, Cl. 252—32.7.

Ottofy, Ladis H. Phonographic device. 2,733,070, 1–31–56, Cl. 274—11.

Outboard, Marine & Mfg. Co.: *See*—
Irgens, Finn T. 2,732,819.

Overby, Sune L., to Telefonaktiebolaget L M Ericsson. Measuring device. 2,733,406, 1–31–56, Cl. 324—59.

Owens-Corning Fiberglas Corp.: *See*—
Morrison, Albert R., and Fargo. 2,7 83.
Tiede, Ralph L. 2,733,158.
Van Der Hoven, Walter G. 2,732,885.

Ozal-Durrani, Ataullah K. Quick cooking rice and process therefor. 2,733,147, 1–31–56, Cl. 99—80.

Paca, John P., and J. H. Ebner, to Diebold, Inc. Vault door. 2,732,815, 1–31–56, Cl. 109—59.

Package Machinery Co.: *See*—
Labine, Roland A. 2,732,619.

Paisley, Taylor. Finger support for bowling. 2,732,555, 1–31–56, Cl. 2—21.

Palchik, Edward H.: *See*—
Schauble, Otto C., and Palchik. 2,733,287.

Pangborn Corp.: *See*—
Powell, George W. 2,732,666.

Pentalone, Vincent R., to Federal Paper Board Co., Inc. Radio tube cartons. 2,732,996, 1–31–56, Cl. 229—39.

Panter, Irwin: *See*—
Behr, Martin E. 2,732,745.

Parker, Henry W., to Sylvania Electric Products Inc. Vending machine. 2,732,923, 1–31–56, Cl. 194—7.

Parker, William N.: *See*—
Garner, Lloyd P., and Parker. 2,733,340.

Parks, Joseph W. Fishing leader. 2,732,652, 1–31–56, Cl. 43—44.83.

Parks, Joseph W. Rearview mirror. 2,732,764, 1–31–56, Cl. 88—98.

Parks, Joseph W. Clothes rack. 2,732,953, 1–31–56, Cl. 211—86.

Parks & Woolson Machine Co.: *See*—
Richardson, Charles G. 2,732,608.

Parseglan, Vozcan L., to the United States of America as represented by the United States Atomic Energy Commission. Diaphragm pump. 2,732,807, 1–31–56, Cl. 103—152.

Passmore, Carl B., Jr., and H. C. Peterson. Fishing lure retriever. 2,732,650, 1–31–56, Cl. 43—17.2.

Pasternak, Theodore, to R. L. Brown. Malleable sheet metal fastener. 2,732,749, 1–31–56, Cl. 85—38.

Pataki, John: *See*—
Rosenkranz, George, Pataki, and Djerassi. 2,733,240.

Patterson, C. J., Co.: *See*—
Thompson, Jerome B., and Buddemeyer. 2,733,252.

Pattison, Dexter B.: *See*—
Libby, James W., Jr., Pattison, and Zwilgmeyer. 2,733,242.

Pauling, Loren E.: *See*—
Wohlers, Herbert C., Pauling, and Grover. 2,733,264

Pechy, William, to American Can Co. Article feeding and turning mechanism. 2,732,925, 1–31–56, Cl. 198—83.

Pelzmann, Alfred, to S. W. Kipnis, trustee for J., D., and F. Kegan. Artificial dentures and method of manufacture. 2,732,621, 1–31–56, Cl. 32—2.

Perkins, Theodore O.: *See*—
Cassady, Walter G., and Perkins. 2,732,822.

Perry, Leslie L.: *See*—
Raimond, William A., and Perry. 2,733,269.

Perry, Winthrop L., to Abbott Worsted Mills, Inc. Slub catcher. 2,732,610, 1–31–56, Cl. 28—64.

Peters, Philip H., Jr., to the United States of America as represented by the Secretary of the Army. Traveling wave magnetron circuits. 2,733,341, 1–31–56, Cl. 250—36.

Peters, Virgil N., to M. Henninger. Insecticide vaporizer. 2,733,333, 1–31–56, Cl. 219—45.

Peterson, Hubert C., Sr.: *See*—
Passmore, Carl B., Jr., and Peterson. 2,732,650.

Peterson, Robert E., and R. S. Lancaster, to Repeter Products, Inc. Smoker's lighter. 2,732,697, 1–31–56, Cl. 67—7.1.

Peterson, Robert E. Portable lighters. 2,732,698, 1–31–56, Cl. 67—7.1.

Petty, Olive S.: *See*—
Mayne, William H. 2,732,906.

Philamon Laboratories, Inc.: *See*—
Grib, Boris E. 2,732,748.

Phillips, Alexander A., and W. A. Smith, Jr., to Raytheon Mfg. Co. Demountable magnetron with metal-to-metal vacuum tight joint. 2,733,380, 1–31–56, Cl. 315—39.53.

Phillips, David T., to Consolidated Molded Products Corp. Adjustable chuck. 2,733,073, 1–31–56, Cl. 279—9.

Phillips, Harold P., to Hastings Mfg. Co. Internal combustion engine valve assemblies having oil shields. 2,732,836, 1–31–56, Cl. 123—188.

Phillips, Jesse N., Jr.: *See*—
Myers, Jack E., and Phillips. 2,732,662.

Phillips Petroleum Co.: *See*—
Morgan, Thomas D. 2,732,834.

Pickering, Harold L.: *See*—
Reynolds, Myron B., and Pickering. 2,733,123.

Pinto, Silvio. Method of printing on plastic films. 2,733,180, 1–31–56, Cl. 154—95.

Pirelli S. p. A.: *See*—
Vanzo, Marcello. 2,732,884.

Pirson, Sylvain J., to Stanolind Oil and Gas Co. Auto-radiography of wells. 2,733,353, 1–31–56, Cl. 250—65.

Pittsburgh Plate Glass Co.: *See*—
Cox, Samuel F. 2,733,325.

Planer, Samuel R. Vacuum slub catchers. 2,732,611, 1–31–56, Cl. 28—64.

Plastomatic Ltd.: *See*—
Lewis, William. 2,732,933.

Poe, Lloyd R.: *See*—
Hogan, John E., and Poe. 2,732,970.

Poe, Lloyd R., to C. and E. M. Hartwell, copartners d. b. a Hartwell Aviation Supply Co. Flush hinge. 2,732,582, 1–31–56, Cl. 16—179.

Pollard, Thomas C., to Northrop Aircraft, Inc. Hole bore angle duplicator. 2,732,734, 1–31–56, Cl. 77—5.

Poole, David E.: *See*—
Lewis, Charles J., and Poole. 2,733,023.

Pope, Lyman B., and J. W. Sjostrom, to Pope Machinery Corp. Method of making an interchangeable extension arbor. 2,732,617, 1–31–56, Cl. 29—406.

Pope Machinery Corp.: *See*—
Pope, Lyman B., and Sjostrom. 2,732,617.

Popino, Robert P.: *See*—
Skol, Herman, and Popino. 2,733,183.

Porwancher, Samuel R., and D. Weissman, to Drying Systems, Inc. Smoke generator. 2,732,837, 1–31–56, Cl. 126—59.5.

Postel, Charles E. and M. W., to H. F. Miller, d. b. a. Stenotype Co. of California. Transcription boxes. 2,732,828, 1–31–56, Cl. 120—29.

Postel, Marion W.: *See*—
Postel, Charles E. and M. W. 2,732,828.

Potts, Robert W., 25% to T. Weiner and J. H. Snowden. Sanitary closet. 2,732,564, 1–31–56, Cl. 4—131.

Powell, George W., to Pangborn Corp. Centrifugal blasting apparatus. 2,732,666, 1–31–56, Cl. 51—9.

Power Equipment Co.: *See*—
Bixby, William H. 2,733,402.

Preway Inc.: *See*—
Jenson, Kenneth S., and Nelson. 2,732,891.

Pribyl, Edward J.: *See*—
Krapcho, John, Pribyl, and Bernstein. 2,733,256.

Prion, William G. Rotatable jigs. 2,732,926, 1–31–56, Cl. 108—33.

Procter & Gamble Co., The: *See*—
Hawley, Harold K., and Dobson. 2,733,251.

Proctor and Schwartz, Inc.: *See*—
Black, Harold G. 2,732,631.

Protectoseal Co., The: *See*—
Anschicks, Rudolph J. 2,732,972.

Prusick, Jan H., and V. P. Gregory, to Armour and Co. Chemical treatment of flood waters used in secondary oil recovery. 2,733,206, 1–31–56, Cl. 252—8.55.

Pullman-Standard Car Mfg. Co.: *See*—
Murphy, Frank L., Haman, and Kay. 2,732,814.

Pyuro, John W.: *See*—
Waterhouse, Charles L., Pyuro, and Thoms. 2,733,096.

Quimby, Harvey. Cravat clasp. 2,732,602, 1–31–56, Cl. 24—49.

Quirin, Edward J., to Frederic R. Harris, Inc. Sectional floating dry dock and coupling means therefor. 2,732,818, 1–31–56, Cl. 114—46.

Rabinow, Jacob, to the United States of America as represented by the Secretary of Commerce. Selective multiple punch for card perforating. 2,732,900, 1–31–56, Cl. 164—111.

Rabinow, Jacob, to Eaton Mfg. Co. Self-excited magnetic clutch. 2,732,921, 1–31–56, Cl. 192—21.5.

Radio Corp. of America: *See*—
Bradbury, Hollis D. 2,733,301.
Del Valle, Guillermo A., and Jones. 2,733,062.
Flory, Leslie E. 2,733,364.
Garner, Lloyd P., and Parker. 2,733,340.
Grimm, Albert C., and Grimes. 2,733,366.
Kell, Ray D. 2,733,291.
Morrison, Wendell C. 2,733,433.
Smith, Arthur L. J. 2,733,164.
Vine, Benjamin H. 2,733,115.
Young, Charles J., and Olden. 2,732,775.

Raffelson, Harold: *See*—
Farrar, Martin W., and Raffelson. 2,733,265.

Ragosine, Victor E., and W. C. Hadley, to Tracerlab, Inc. Radiation measuring instrument. 2,733,356, 1–31–56, Cl. 250—83.6.

Raimond, William A., and L. L. Perry, to American Cyanamid Co. Chlorination. 2,733,269, 1–31–56, Cl. 260—578.

Ransburg, Edwin M., to Ransburg Electro-Coating Corp. Apparatus and method for electrostatic coating. 2,733,171, 1–31–56, Cl. 117—93.

Ransburg Electro-Coating Corp.: *See*—
Ransburg, Edwin M. 2,733,171.

Rätsch, Kurt, to Carl Zeiss. Interference microscope for examination of the surface quality of solid bodies. 2,732,700, 1–31–56, Cl. 88—39.

Rapizzi, Gaetano, to Officine Elettromeccaniche F. Rapizzi & Figli, di Gaetano Rapizzi. Automatic switches. 2,733,313. 1–31–56, Cl. 200—89.

Rausch, Clifford E.: *See*—
Reynolds, Kenneth W., Billson, and Rausch. 2,732,847.

Ray, Robert T. Wall structure for buildings. 2,732,705. 1–31–56, Cl. 72—24.

Ray, William A., to General Controls Co. Four way balanced slide valve. 2,732,860, 1–31–56, Cl. 137—623.

Raytheon Mfg. Co.: *See*—
Alsmeyer, Ralph L. 2,733,338.
Geier, Leonard W. 2,733,381.
Morris, John D. 2,733,294.
Phillips, Alexander A., and Smith. 2,733,380.

Reaves, Robert S.: *See*—
Tanke, Willard H., and Reaves. 2,732,784.

Rechten, Adolf W., and B. M. Bellman, to British Telecommunications Research Ltd. Magnetic amplifier. 2,733,388, 1–31–56, Cl. 317—148.

Reed, Robert B., to Western Electric Co., Inc. Methods of and apparatus for testing welded strips. 2,732,712, 1–31–56, Cl. 73—100.

Reese, Terrell J. Overload spring. 2,733,058, 1–31–56, Cl. 267—16.

Rehacek, Alois. Spring tightener of a ski binding. 2,733,075, 1–31–56, Cl. 280—11.35.

Reitzel, Georg, to Drescher & Kiefer, Inh. Georg Reitzel. Closure fastener. 2,733,093, 1–31–56, Cl. 292—332.

Renholts, Roy J., to Friden Calculating Machine Co., Inc. Method of making a bearing structure. 2,732,613, 1–31–56, Cl. 29—149.5.

Renoux, Pierre E., to Société Anonyme dite: Cri-Dan. Chuck for machine tools. 2,733,071, 1–31–56, Cl. 279—4.

Repeter Products, Inc.: *See*—
Peterson, Robert E., and Lancaster. 2,732,697.

Republic Flow Meters Co.: *See*—
Rosenberger, Albert J., and Alex. 2,732,849.

Republic Steel Corp.: *See*—
Lewis, Charles J., and Poole. 2,733,023.

Research Electronics & Devices Co., Inc.: *See*—
Cooper, Benjamin, and Holtmann. 2,732,797.

Resina Automatic Machinery Co. Inc.: *See*—
De Bastos, Emil N., and Weller. 2,732,991.

Revallier, Leonardus J., to Stamicarbon N. V. Preparation of 2,4,6-trinitrochlorobenzene. 2,733,275, 1–31–56, Cl. 260—646.

Reymersholms Gamla Industri Aktiebolag: *See*—
Holst, Torsten G. 2,733,146.

Reynolds, Kenneth W., J. A. Billson, and C. E. Rausch, to General Electric Co. Apparatus for manufacturing reflector lamp bulbs. 2,732,847, 1–31–56, Cl. 134—57.

Reynolds Metals Co.: *See*—
Hodge, Allen W., and Ballard. 2,733,168.

Reynolds, Myron B., and H. L. Pickering, to the United States of America as represented by the United States Atomic Energy Commission. Production of UCl4. 2,733,123, 1–31–56, Cl. 23—14.5.

Rheem Mfg. Co.: *See*—
Hawk, Watson L. 2,732,880.

Richardson, Charles G., to Parks & Woolson Machine Co. Cloth shearing mechanism. 2,732,608, 1–31–56. Cl. 26—15.

Richardson, Edwin A., to Columbia-Southern Chemical Corp. Thermistor bridge for moisture determination. 2,732,710, 1–31–56, Cl. 73—29.

Richardson, John E. Electrical computers. 2,733,004, 1–31–56, Cl. 235—61.

Richardson, Max C., to Iron Fireman Mfg. Co. Cold wall thermostat. 2,733,315, 1–31–56, Cl. 200—138.

Richter, Robert: *See*—
Lange, Günther, and Richter. 2,732,762.

Riedesel, Richard G., to Minnesota Mining & Mfg. Co. Spliced abrasive belt and method of making same. 2,733,181, 1–21–56, Cl. 154—116.

Ries, William M., to Wheeling Steel Corp. Corner metal lath. 2,732,707, 1–31–56, Cl. 72—121.

Riethof, George, and G. P. Brown, Jr., to Gulf Research & Development Co. Preparation of mahogany acid concentrates. 2,733,263, 1–31–56, Cl. 260—504.

Rigterink, Raymond H., to The Dow Chemical Co. Preparation of asymmetrical bisphenols. 2,733,273, 1–31–56, Cl. 260—619.

Rimple, Edward J.: *See*—
Gurries, Albert G., and Rimple. 2,732,782.

Rittling Corp., The: *See*—
Carter, Robert J. 2,733,049.

Roberts, Edgar C.: *See*—
Weiss, Saul, and Roberts. 2,732,766.

Robertson, George H., to Bell Telephone Laboratories, Inc. Electrode support for electron discharge device. 2,733,376, 1–31–56, Cl. 313—261.

Robinson, Rowland N., to The Robinson Thread Co. Bobbin having a controlled unwinding. 2,732,817, 1–31–56, Cl. 112—251.

Robinson Thread Co., The: *See*—
Robinson, Rowland N. 2,732,817.

Robson, Homer L., and W. H. Sheltmire, to Olin Mathieson Chemical Corp. Process of bleaching during laundering. 2,733,120, 1–31–56, Cl. 8—137.

Rocheleau, Leopold A. Fine adjustments for dial indicators and the like. 2,733,035, 1–31–56, Cl. 248—124.

Rolph, Donald L., to Friden Calculating Machine Co., Inc. Power operated selection mechanism. 2,733,007, 1–31–56, Cl. 235—79.

Rose, Donald H., and G. H. Dawson, to Calumet & Hecla, Inc. Production of cuprous cyanide from alkaline mediums. 2,733,131, 1–31–56, Cl. 23—79.

Rose, Downs & Thompson: *See*—
Andrews, Thomas. 2,733,136.

Rosen, Bernard A. Safety guards for cribs or play pens. 2,732,569, 1–31–56, Cl. 5—331.

Rosen, Bernard A. Disposable tooth brush. 2,732,576, 1–31–56, Cl. 15—137.

Rosenberger, Albert J., and F. R. Alex, to Republic Flow Meters Co. Temperature compensated transmitter. 2,732,849, 1–31–56, Cl. 137—85.

Rosenfeld, Sam, to the United States of America as represented by the United States Atomic Energy Commission. Manufacture of uranium tetrachloride. 2,733,124, 1–31–56, Cl. 23—14.5.

Rosenkranz, George, J. Pataki, and C. Djerassi, to American Syntex Inc. Process for preparation of allopregnane-3β, 17α-diol-11,20-dione and esters thereof and intermediates therefor. 2,733,240, 1–31–56, Cl. 260—239.55.

Roseveare, William E., to E. I. du Pont de Nemours and Co. Heat resistant polyamide structure. 2,733,162, 1–31–56, Cl. 117—31.

Rothacker, Francis N. Gravity meter. 2,732,717, 1–31–56, Cl. 73—382.

Rowland, Thomas B. Milk cooler. 2,733,048, 1–31–56, Cl. 257—76.

Ruff, Edgar E., to Lever Brothers Co. Cleaning compositions containing tarnish inhibitors. 2,733,215, 1–31–56, Cl. 252—137.

Ruhnau, Richard. Cinematograph film projectors. 2,732,755, 1–31–56, Cl. 88—17.

Ruhnau, Richard, E. Weides, and G. Engelage. Arrangement for the support of the film guiding components of a cinema projector. 2,732,756, 1–31–56, Cl. 88—17.

Rumsey, Herbert, Jr. Package wrapping with opening means. 2,732,998, 1–31–56, Cl. 229—87.

Rupp, Walter H., to Esso Research and Engineering Co. Simplified oil refinery. 2,733,191, 1–31–56, Cl. 196—48.

Russo, Rocco A. Method of forming Mozzarella cheese. 2,733,148, 1–31–56, Cl. 99—116.

Ruth, Joseph P.: *See*—
Griffith, Donald I. 2,733,029.

Sabin Co. Gloves: *See*—
Sabin, Irene E. 2,732,559.

Sabin, Irene E., to Sabin Co. Gloves. Glove. 2,732,559, 1–31–56, Cl. 2—169.

Sabouni, Bahidj B. Electrical heating unit and method of making same. 2,733,324, 1–31–56, Cl. 201—64.

Sadler, Harry J., and E. E. Cook, to Hypro Engineering Co. Automatic pressure liquid supply system. 2,732,804, 1–31–56, Cl. 103—25.

Sage, Richard W., to Esso Research and Engineering Co. Conversion of heavy hydrocarbonaceous materials. 2,733,192, 1–31–56, Cl. 196—50.

Sahyun Laboratories: *See*—
Synerholm, Martin E., Faust, and Sahyun. 2,733,244.

Sahyun, Melville: *See*—
Synerholm, Martin E., Faust, and Sahyun. 2,733,244.

Salkeld, Howard B.: *See*—
Letts, Harold D. 2,733,057.

Salyer, Ival O., and J. A. Herbig, to Monsanto Chemical Co. Blends of vinyl chloride polymers with ethylene/vinylene carbonate copolymers. 2,733,228, 1–31–56, Cl. 260—45.5.

Sandberg, Ray A., to Hondaille-Hershey Corp. Method of securing a tube to a sheet metal member. 2,732,615, 1–31–56, Cl. 29—157.3.

Sanders, Herbert L.: *See*—
Maxcy, William J., and Sanders. 2,733,211.

Sanders, Paul A.: *See*—
Baum, Arthur A., and Sanders. 2,733,247.

Sauer, John C.: *See*—
Miegel, Ralph E., Niemann, and Sauer. 2,733,233.

Saum, Arthur M., to E. I. du Pont de Nemours and Co. Feed roll string-up. 2,732,931, 1–31–56, Cl. 203—67.

Savage Arms Corp.: *See*—
Dunham, George W. 2,732,572.

Savke, Kurt G. C.: *See*—
Berner, Harry M., Johnson, Ensminger, and Savke. 2,733,110.

Saylor, Frank D., & Son: *See*—
Balis, Charles B. 2,733,176.

Saywell Associates: *See*—
Saywell, Lawrence G. 2,733,081.

Saywell, Lawrence G., to Saywell Associates. 2,733,081, 1–31–56, Cl. 286—5.

Scanlon, Wayne W. Germanium rectifier for large currents. 2,733,390, 1–31–56, Cl. 317—239.

Schade, Frank S., to National Blank Book Co. Writing board for coil wire binders. 2,732,841, 1–31–56, Cl. 129—1.

Schaub, Willy O. Strainer for paint sprayers or the like. 2,732,946, 1–31–56, Cl. 210—94.

Schauble, Otto C., and E. H. Palchik, to The Lummus Co. Cracking of hydrocarbon gases and heater therefor. 2,733,287, 1–31–56, Cl. 260—679.

Schiess Aktiengesellschaft: *See*—
Keyser, Johann J. 2,733,020.

Schlack, Paul: *See*—
Herele, Ludwig, Jehle, Kunz, Möller, and Schlack. 2,733,122.

Schlumberger, Roger. Plant for oiling or moistening textile fibres and the like. 2,733,099, 1–31–56, Cl. 299—58.

Schmerheim, John F.: *See*—
Himman, Donald D., and Schmerheim. 2,733,417.

Schmidt, Christian D. Safety electric plug and outlet. 2,733,314, 1–31–56, Cl. 200—115.5.

Schmitter, Walter P., A. G. Bade, and J. W. Fitzgerald, to The Falk Corp. Cotton card engine drives. 2,732,731, 1–31–56, Cl. 74—665.

Schoenfeldt, Herman R., and J. B. Yoder, to General Electric Co. Method of internally coating lamp bulbs with reflective material. 2,733,166, 1–31–56, Cl. 117—35.

Schreiber, Patrick Q. R., to Robert Legg Ltd. Feed hopper for tobacco cutting machinery. 2,732,928, 1–31–56, Cl. 198—59.

Schroeder, Bernard F., and H. E. Karl. Door operating mechanism. 2,732,966, 1–31–56, Cl. 217—60.

Schroeder, Charles S., to The Yale & Towne Mfg. Co. Hydraulic type power steering. 2,732,904, 1–31–56, Cl. 180—79.2.

Schuck, Raymond W., and W. D. Abbott, to Westinghouse Electric Corp. Bearing assembly. 2,733,107, 1–31–56, Cl. 308—86.

Schwaneke, Fred C., to Dormeyer Corp. Hinge for cooking device. 2,732,580, 1–31–56, Cl. 16—166.

Schwarz, Adolf: *See*—
Holmes, John R., and Schwarz. 2,732,071.

Schwarz, Karl H., to G. Kromschroder Aktiengesellschaft. Pressure relief device. 2,732,853, 1–31–56, Cl. 137—116.5.

Schwinn, Frank W. Method of making tube joints. 2,732,618, 1–31–56, Cl. 29—482.

Scoggin, Baxter L., H. C. McAninch, and C. R. Moore, to Anderson-Prichard Oil Corp. Bituminous emulsion. 2,733,159, 1–31–56, Cl. 106—277.

Seeger, Nelson V., and T. G. Mastin, to The Goodyear Tire & Rubber Co. N-aryl isocyanates of α-phenyl ethylphenol carbamic acid ester. 2,733,261, 1–31–56, Cl. 260—471.

Seely, Richard E., to General Electric Co. Dual voltage motor protector circuit. 2,733,394, 1–31–56, Cl. 318—221.

Seft, Max: *See*—
Farnsworth, Lawrence. 2,732,735.
Farnsworth, Lawernce. 2,732,737.

Sernaker, Charles. Pawl and ratchet wheel. 2,732,730, 1–31–56, Cl. 74—577.

Servis Equipment Co.: *See*—
Collins, Johnnie C. 2,732,786.

Shadden, Tom C. Ground-clearing attachment for tractors. 2,732,637, 1–31–56, Cl. 37—2.

Shalleross Mfg. Co.: *See*—
Wakefield, Richard E. B. 2,733,408.

Shand and Jurs Co.: *See*—
Jurs, Peter C. 2,732,857.
Jurs, Peter C., and Blake. 2,732,856.

Shell Development Co.: *See*—
Lidov, Rex E. 2,733,248.

Sheltmire, William H.: *See*—
Robson, Homer L., and Sheltmire. 2,733,120.

Sherborne, John E., and E. R. Atkins, Jr., to Union Oil Co. of California. Potentiometric oil reservoir model. 2,733,005, 1–31–56, Cl. 235—61.

Shively, Franklin L. Locking mechanism for folding back rests. 2,732,563, 1–31–56, Cl. 4—112.

Shoemaker, Carlyle E.: *See*—
Woyski, Mark M., and Shoemaker. 2,733,217.

Shoup, John R.: *See*—
Keight, Albert W., Moos, and Shoup. 2,732,950.

Shower, Edmund G., to Bell Telephone Laboratories, Inc. Method of making contact points. 2,732,614, 1–31–56, Cl. 29—155.55.

Shreve, Clifford B., to Tyler Refrigeration Corp. Refrigerated display cabinet. 2,732,689, 1–31–56, Cl. 62—89.5.

Siddall, Stanley G. Handled foldable carrier for bottles and refreshments. 2,732,983, 1–31–56, Cl. 224—48.

Simoniz Co.: *See*—
Smith, Thomas B., and Vetren. 2,733,224.

Simonsen, Leif. Grass cutting means for stationary lawn sprinkler. 2,733,100, 1–31–56, Cl. 299—60.

Simpson, Clarence E., to the United States of America as represented by the Secretary of the Army. Supporting means for a firearm barrel. 2,732,769, 1–31–56, Cl. 89—191.

Simpson, Warren O., to Western Electric Co., Inc. Dispensers. 2,732,810, 1–31–56, Cl. 103—230.

Sims, Clarence E., to United States Steel Corp. Pneumatic process for the refining of basic pig iron. 2,733,141, 1–31–56, Cl. 75—52.

Sinclair Refining Co.: *See*—
Woerner, Rudolph C. 2,733,194.

Singer Mfg. Co., The: *See*—
Gall, Francis A. 2,732,911.

Sitterly, Charles K.: *See*—
Adams, Paul L., Norman, and Sitterly. 2,732,594.

Sjostrom, John W.: *See*—
Pope, Lyman B., and Sjostrom. 2,732,617.

Skelton, Kenneth V. Shelf attachment. 2,732,952, 1–31–56, Cl. 211—49.

Sloan, John C., Jr.: *See*—
Swaine, James W., and Sloan. 2,733,137.

Smith, Alexander, and B. D. Baggs. Adjustable horizontally rotated multiblade mowing attachment. 2,732,675, 1–31–56, Cl. 56—6.

Smith, Arthur L. J., to Radio Corp. of America. Multi-color kinescope screen. 2,733,164, 1–31–56, Cl. 117—33.5.

Smith, Brook I.: *See*—
Maisel, Daniel S., and Smith. 2,733,286.

Smith, Charles C., to Darlington Fabrics Corp. Method of producing fibrous covering for elastic thread. 2,733,179, 1–31–56, Cl. 154—91.

Smith, Cloyd D., and R. L. Matthews, to H. Stroh. Apparatus for spraying and drying operations. 2,732,701, 1–31–56, Cl. 68—20.

Smith, Harold E. Drafting equipment. 2,732,624, 1–31–56, Cl. 33—80.

Smith, Kenneth P.: *See*—
Kirby, Ben H., Olenick, and Smith. 2,733,250.

Smith, Lawrence E., to The Bristol Co. Vapour pressure thermometer. 2,732,716, 1–31–56, Cl. 73—369.

Smith, Monroe F., to Fibreboard Products Inc. Modified paraffin wax grease resistant coating composition and paperboard coated therewith. 2,733,225, 1–31–56, Cl. 260—28.5.

Smith, Richmond W., to Bird Machine Co. Doctor assembly and front removable blade and holder therefor. 2,732,773, 1–31–56, Cl. 92—74.

Smith, Thomas B., and R. E. Vetren, to Simoniz Co. Liquid polishing composition. 2,733,224, 1–31–56, Cl. 260—26.

Smith, William A., Jr.: *See*—
Phillips, Alexander A., and Smith. 2,733,380.

Smith, William M. Wedge type seal for suction strainer. 2,733,043, 1–31–56, Cl. 251—176.

Smits, Wytze B., to Smitsvonk N. V. Low tension ignition system. 2,733,369, 1–31–56, Cl. 313—131.

Smitsvonk N. V.: *See*—
Smits, Wytze B. 2,733,369.

Snowden, J. H.: *See*—
Potts, Robert W. 2,732,564.

Societe Anonyme Andre Citroen: *See*—
Brueder, Antoine. 2,732,725.

Société Anonyme dite: Cri-Dan: *See*—
Renoux, Pierre E. 2,733,071.

Societe d'Inventions Aeronautiques et Mecahiques S. I. A. M.: *See*—
Lucien, René. 2,732,805.

Society "Elipson," S. A.: *See*—
Léon, Joseph. 2,732,907.

Socony Mobil Oil Co., Inc.: *See*—
Huckabay, William B. 2,733,135.
Otto, Ferdinand P. 2,733,207.

Sokol, Herman, and R. P. Popino, to American Cyanamid Co. Storage-stable dihydrostreptomycin sulfate solution. 2,733,183, 1–31–56, Cl. 167—65.

Sokol, Herman, to American Cyanamid Co. Production of haze-free aqueous solutions of dihydrostreptomycin and article therefor. 2,733,185, 1–31–56, Cl. 167—65.

Sondermann, Karl: *See*—
Milbers, Arthur, and Sondermann. 2,733,253.

Sonnberger, Rudolph, to The Linen Thread Co., Inc. Knot and one half. 2,732,750, 1–31–56, Cl. 87—12.

Southern States Equipment Corp.: *See*—
Curtis, Thomas E. 2,733,322.

Sparklin, Charles H., to Birtman Electric Co. Cutter mechanism for a vacuum cleaner. 2,733,000, 1–31–56, Cl. 230,132.

Spector, Jerome J., to Universal Match Corp. Cigarette dispensing containers. 2,732,973, 1–31–56, Cl. 221—147.

Speidel Corp.: *See*—
Augenstein, Karl C. 2,732,684.

Sperry Rand Corp.: *See*—
Gunn, Donald A., and Wolters. 2,732,843.
Lyman, Joseph, Caldwell, Maeder, Haxby, and Tawney. 2,733,437.

Spiegler, Louis, to the United States of America as represented by the United States Atomic Energy Commission. Recovery of uranium from waste metal products. 2,733,125, 1–31–56, Cl. 23—14.5.

Spiegler, Louis, to the United States of America as represented by the United States Atomic Energy Commission. Uranium liberation. 2,733,126, 1–31–56, Cl. 23—14.5.

Spiegler, Louis, to the United States of America as represented by the United States Atomic Energy Commission. Precipitation of fluoride-free uranium tetroxide. 2,733,127. 1–31–56, Cl. 23—14.5.

Spincraft, Inc.: *See*—
Farley, George F., and Hildebrandt. 2,733,032.

Spindle, Harvey E.: *See*—
Browne, Thomas E., Jr., Strom, and Spindle. 2,733,316.

Spoehr, Herman A., and H. W. Milner, to Carnegie Institution of Washington. Production of protein, lipides, and carbohydrates by culture of algae. 2,732,661, 1–31–56, Cl. 47—58.

Sporney, George C., to Birtman Electric Co. Sewing machine thread tensioner. 2,733,025, 1–31–56, Cl. 242—150.

Spring Packing Corp.: *See*—
Welch, John B. 2,733,170.

Sprung, Joseph A., to General Aniline & Film Corp. Multilayer color film for integral masking. 2,733,143, 1–31–56, Cl. 95—2.

Stalker, Edward A. Axial flow elastic fluid turbine power plant, including an axial flow radial diffusion compressor. 2,732,999, 1–31–56, Cl. 230—122.

Stamicarbon N. V.: *See*—
Revallier, Leonardus J. 2,733,275.

Stamper, Furman H., to Bendix Aviation Corp. Magnetically stabilized scanning recorder. 2,733,118, 1–31–56, Cl. 346—139.

Stanolind Oil and Gas Co.: *See*—
Bennett, Arthur D. 2,732,714.
Pirson, Sylvain J. 2,733,353.

Stansbury, Melvin H. Pneumatically actuated thread protector. 2,732,864, 1–31–56, Cl. 138—96.

Staples, Elliot M., to Bell Telephone Laboratories, Inc. Selector switch circuit. 2,733,299, 1–31–56, Cl. 179—84.

Stark, Rufus W. Preparation of tobacco for packing. 2,732,844, 1–31–56, Cl. 131—136.

Starosta, Anna W.: *See*—
Wagner, John. 2,733,174.

Starr, Joseph W. Hip boot holdup harness. 2,732,561, 1–31–56, Cl. 2—305.

Statia, Edwin V., Sr., 50% to E. L. Chapman. Shirt with collar hold-down arrangement. 2,732,557, 1–31–56, Cl. 2—132.

Stavid Engineering, Inc.: *See*—
Kimble, Creighton B. 2,733,418.

Steadman, Albert, to Allen B. Du Mont Laboratories, Inc. Process of forming luminescent screens. 2,733,163, 1–31–56, Cl. 117—33.5.

Steadman, Audrey H., to United States Rubber Co. Method and apparatus for molding rubber. 2,732,589, 1–31–56, Cl. 18—44.

Stearns, Walter I. Drill bit for screw holes. 2,732,869, 1–31–56, Cl. 145—125.

Steele, Floyd G., to Digital Control Systems, Inc. Angular quantizer. 2,733,430, 1–31–56, Cl. 340—347.

Steele, Floyd G., to Digital Control Systems, Inc. Quantizer. 2,733,431, 1–31–56, Cl. 340—347.

Stein, Joseph P. Concealed wall safe. 2,732,816, 1–31–56, Cl. 109—59.

Steiner, James S., to General Aluminum Corp. Frameless tension screen. 2,732,895, 1–31–56, Cl. 160—329.

Stenotype Co. of California: *See*—
Postel, Charles E. and M. W. 2,732,828.

Stephen, Alexander M. M., to Imperial Chemical Industries Ltd. Screening. 2,732,942, 1–31–56, Cl. 209—323.

Stevens, William A. Protective trim for automobile doors. 2,733,097, 1–31–56, Cl. 296—44.

Stevenson, Allan B., to American Sisalkraft Corp. String. 2,733,178, 1–31–56, Cl. 154—53.5.

Stookey, Stanley D., to Corning Glass Works. Method of adhering gold to a non-porous ceramic surface and composition therefor. 2,733,167, 1–31–56, Cl. 117—46.

Stop-Motion Devices Corp.: *See*—
Vossen, Edward. 2,733,308.

Storm-Vulcan, Inc.: *See*—
Olsson, Olov J. E. 2,732,668.

Story, Paul E.: *See*—
Horner, Albert, and Story. 2,732,956.

Stoyke, Ludwig T., to Sundstrand Machine Tool Co. Fluid pump and control. 2,732,808, 1–31–56, Cl. 103—173.

Strange, John, to Tinnerman Products Inc. Fastening devices for shaft knobs. 2,733,083, 1–31–56, Cl. 287—53.

Street, Louis F., to Welding Engineers, Inc. Blending plastics and fluids. 2,733,051, 1–31–56, Cl. 259—6.

Strock, Donald V., to The Aetna-Standard Engineering Co. Apparatus and method of pointing tubes. 2,732,932, 1–31–56, Cl. 205—4.

Stroh, Henry: *See*—
Smith, Cloyd D., and Matthews. 2,732,701.

Strom, Albert P.: *See*—
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Sullivan, Roger M., ½ to J. J. O'Connell. Structural toy outfit. 2,732,654, 1–31–56, Cl. 46—16.

Summers, Thomas O., Jr. Spring-driven gyroscopes. 2,732,721, 1–31–56, Cl. 74—5.41.

Sundstrand Machine Tool Co.: *See*—
Stoyke, Ludwig T. 2,732,808.

Surety Rubber Co., The: *See*—
Hall, Samuel S. 2,732,934.

Swaine, James W., and J. C. Sloan, Jr., to Allied Chemical & Dye Corp. Apparatus for effecting fluidization and suspension roasting of metallic sulfide ores. 2,733,137, 1–31–56, Cl. 23—277.

Swift & Co.: *See*—
Faust, Ralph M. 2,732,575.
Van Doinh, Delos B. 2,732,583.

Sylvania Electric Products Inc.: *See*—
Parker, Henry W. 2,732,923.

Symington-Gould Corp., The: *See*—
Couch, Glenn F. 2,732,813.

Synerholm, Martin E., J. A. Faust, and M. Sahyun, to Melville Sahyun, d. b. a. Sahyun Laboratories. 3,4,5,6-tetrahydropyrimidine and imidazoline local anesthetics. 2,733,244, 1–31–56, 260—256.4.

Szilágyi, István, to "Licencia" Talalmanyokat Ertekesito Vallalat. Spark plugs. 2,733,370, 1–31–56, Cl. 313—132.

Tanke, Willard H., and R. S. Reaves, to Allis-Chalmers Mfg. Co. Plow hitch. 2,732,784, 1–31–56, Cl. 97—47.14.

Tannock, John C.: *See*—
Lewis, William. 2,732,933.

Tateishi, Arthur K., to Audio Tool and Engineering Ltd. Phonograph with resilient mount for turntable driving electric motor. 2,732,724, 1–31–56, Cl. 74—200.

Tawney, Gerald L.: *See*—
Lyman, Joseph, Caldwell, Maeder, Haxby, and Tawney. 2,733,437.

Taylor, Daniel G., to Minneapolis-Honeywell Regulator Co. Two axes stabilized platform. 2,732,720, 1–31–56, Cl. 74—5.34.

Taylor, Edward R., Jr., to E. I. du Pont de Nemours and Co. Polishing compositions. 2,733,154, 1–31–56, Cl. 106—8.

Taylor, Edward R., Jr., to E. I. du Pont de Nemours and Co. Lubricant compositions and method of making same. 2,733,210, 1–31–56, Cl. 252—49.3.

Taylor, Paul H., to Wales Strippit Corp. Compressible liquid stripping unit. 2,732,898, 1–31–56, Cl. 164—94.

Taylor, Paul H., to Wales-Strippit Corp. Liquid spring. 2,733,060, 1–31–56, Cl. 267—64.

Taylor, Philip L., to Allis-Chalmers Mfg. Co. Interrupter employing axially arranged barrier plates for interrupting series arcs. 2,733,317, 1–31–56, Cl. 200—150.

Taylor, Willard H. Boat covers for outboard motor boats. 2,732,877, 1–31–56, Cl. 150—52.

Teetor, Macy O. Magnetic door catch. 2,733,092, 1–31–56, Cl. 292—251.5.

Telefonaktiebolaget L M Ericsson: *See*—
Ericsson, Eric A., and Jorgensen. 2,733,319.
Overby, Sune L. 2,733,406.

Telma: *See*—
Bessière, Pierre E. 2,733,361.

Terrell Machine Co., The: *See*—
Ferguson, Richard. 2,732,609.
Hallman, Little L. 2,733,014.

Tesa S. A.: *See*—
Bender, Werner, and Arni. 2,732,761.

Tewksbury, Robert E. Proportioner. 2,732,850, 1–31–56, Cl. 137—87.

Texaco Development Corp.: *See*—
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Texas Instruments, Inc.: *See*—
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Thelle, Richard: *See*—
Cope, John E., and Thelle. 2,733,292.

Thomas, Gordon E.: *See*—
Williams, Frederic C., and Thomas. 2,733,425.

Thomas, Thomas R. Lubrication. 2,732,915, 1–31–56, Cl. 184—7.

Thompson, Frederick C.: *See*—
Aisenstein, Simon, Thompson, and Esterson. 2,733,378.

Thompson, Harry V. Conductivity cell for determining the salinity of sea water. 2,733,201, 1–31–56, Cl. 204—195.

Thompson, Jerome B., and B. D. Buddemeyer, to C. J. Patterson Co. Salts of fatty acid esters of lactylic acids. 2,733,252, 1–31–56, Cl. 260—410.9.

Thompson, Louis J. Dairy order indicator. 2,732,821, 1–31–56, Cl. 116—133.

Thompson Products, Inc.: *See*—
Engemann, Herbert H. 2,732,832.
Jacques, George E., and Gates. 2,733,318.
Noon, T. Cyril. 2,732,858.

Thompson, Richard W. Map holder. 2,732,642, 1–31–56, Cl. 40—13.

Thompson, Walter N. Straight pull jar. 2,733,046, 1–31–56, Cl. 255—27.

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Waterhouse, Charles L., Pyuro, and Thoms. 2,733,096.

Thomson, Charles, to Cable Belt Ltd. Conveyor belt construction. 2,732,930, 1–31–56, Cl. 198—201.

Thwaites, Leslie B. Machine for picking up cut fodder lying on the ground, chopping it, and delivering it to a trailer. 2,732,674, 1–31–56, Cl. 55—118.

Tiede, Ralph L., to Owens-Corning Fiberglas Corp. Glass composition. 2,733,158, 1–31–56, Cl. 106—50.

Tinnerman Products Inc.: *See*—
Strange, John. 2,733,083.

Tjerström, Stig H.: *See*—
Brundell, Gunnar, and Tjernström. 2,733,140.

Tongue, Ben H. Attentuation equalizer network. 2,733,413, 1–31–56, Cl. 333—28.

Tormo, Mel G. Pipe hangers. 2,733,034, 1–31–56, Cl. 248—72.

Toulmin, Harry A., Jr., to The Commonwealth Engineering Co. of Ohio. Azo dyestuffs derived from dextran. 2,733,236, 1–31–56, Cl. 260—152.

Tracerlab, Inc.: *See*—
Ragosine, Victor E., and Hadley. 2,733,356.

Tratsch, Walter A. Impact switch device. 2,733,310, 1–31–56, Cl. 200—61.45.

Treiber, Kenneth L. Pressure indicating closure seal for liquid-receiving containers. 2,732,873, 1–31–56, Cl. 150—3.

Trico Products Corp.: *See*—
Oishei, John R. 2,732,685.

Tuller, Clarence E., and F. J. Hickman, to North Electric Co. Machine for making contact-carrying member. 2,733,326, 1–31–56, Cl. 219—4.

Tunnicliff, Eustace, and R. Barlow, to British Insulated Callender's Cables Ltd. Extrusion of thermoplastic material. 2,732,592, 1–31–56, Cl. 18—55.

Tuttle, Earl. Ice fishing rig. 2,732,649, 1–31–56, Cl. 43—17.

Tuttle, Robert S.: *See*—
Hull, Charles J., and Tuttle. 2,732,801.

Tyler Refrigeration Corp.: *See*—
Shreve, Clifford B. 2,732,689.

Ufer, Hanns, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Linear filmforming polyamides including 1,4-diamino cyclohexane and process. 2,733,230, 1–31–56, Cl. 260—78.

Unger, Lloyd G.: *See*—
Morris, Leo, Unger, and Wilson. 2,733,234.

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Breen, Henry D. 2,732,812.

Union Francaise Commerciale et Industrielle: *See*—
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Union Oil Co. of California: *See*—
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Sherborne, John E., and Atkins. 2,733,005.

United Aircraft Products, Inc.: *See*—
Booth, Harry T. 2,733,050.

United-Carr Fastener Corp.: *See*—
Herterick, Vincent R. 2,733,320.

United Conveyor Corp.: *See*—
Williams, Ray W. 2,733,105.

United Electric Coal Companies, The: *See*—
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United Shoe Machinery Corp.: *See*—
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Ballard, Albert E. 2,733,128.
Boyer, Robert Q. 2,733,202.
Brixner, Berlyn. 2,732,777.
De Liban, Robert. 2,733,344.
De Liban, Robert. 2,733,347.
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Kunin, Robert. 2,733,200.
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Lawton, Elliott J., and Lafferty. 2,733,348.
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United States Steel Corp.: *See*—
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Valiulis, Stanley J., to General Cement Mfg. Co. Standoff insulator. 2,733,290, 1–31–56, Cl. 174—164.

Van Ackeren, Joseph, to Koppers Co., Inc. Spray type gas and liquid scrubber. 2,733,054, 1–31–56, Cl. 261—21.

Van Der Hoven, Walter G., to Owens-Corning Fiberglas Corp. Method and apparatus for producing reinforced fibrous products. 2,732,885, 1–31–56, Cl. 154—27.

Van Dolah, Delos B., to Swift & Co. Poultry processing apparatus. 2,732,583, 1–31–56, Cl. 17—11.2.

Van Dusen, Charles H., Jr., to Addressograph-Multigraph Corp. Printing plates. 2,732,796, 1–31–56, Cl. 101—149.2.

Van Etten, Howard A., to E. I. du Pont de Nemours and Co. Bookbinding material comprising a vinyl chloride polymer and castor oil maleate. 2,733,223, 1–31–56, Cl. 260—23.

Van Raden, Harvey B., to Ne Peer Co. Spring shackle construction. 2,733,059, 1–31–56, Cl. 267—30.

Van Rijssel, Tijs W., H. J. Houtman and H. Jonker, to Hartford National Bank and Trust Co., as trustee. Method of producing photographic images. 2,733,144, 1–31–56, Cl. 95—6.

Vanzo, Marcello, to Pirelli S. p. A. Machine for making reinforced rubber tubing. 2,732,884, 1–31–56, Cl. 154—6.

Vaughan, William, to American Optical Co. Glass cutting machine. 2,732,623, 1–31–56, Cl. 33—28.

Vegors, Lester S. and S. H., and O. W. Boynton. Resleeving tool. 2,732,616, 1–31–56, Cl. 29—252.

Vegors, Stanley H.: *See*—
Vegors, Lester S. and S. H., and Boynton. 2,732,616.

Vendo Co., The: *See*—
Hedges, Charles S. 2,732,974.

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Victrolec Ltd.: *See*—
Metcalf, John H. 2,732,967.

Vignere, Leonard, Sr. Oil gas generating burner structure. 2,732,890, 1–31–56, Cl. 158—28.

Vine, Benjamin H., to Radio Corp. of America. Apparatus for evaporating chemicals. 2,733,115, 1–31–56, Cl. 316—30.

Vitale, Peter T., and M. E. Liftin, to Colgate-Palmolive Co. Synthetic detergent compositions. 2,733,213, 1–31–56, Cl. 252—137.

Vitale, Peter, and M. E. Liftin, to Colgate-Palmolive Co. Synthetic detergent compositions. 2,733,214, 1–31–56, Cl. 252—137.

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Vloch, Mark. X-ray film packet holder with position indicating means. 2,733,354, 1–31–56, Cl. 250—67.

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Vogel Luminescence Corp.: *See*—
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Vogel, Marcel J., to Vogel Luminescence Corp. Device for candling eggs. 2,733,351, 1–31–56, Cl. 250—51.

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Wagner, John, deceased; A. W. Starosta, administratrix, to International Minerals and Chemical Corp. Compositions containing monosodium glutamate. 2,733,174, 1–31–56, Cl. 131—17.

Wakefield, Richard E. B., to Shallcross Mfg. Co. Galvanometers. 2,733,408, 1–31–56, Cl. 324—154.

Wales, George F. Apparatus for selective recording. 2,732,899, 1–31–56, Cl. 164—111.

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Taylor, Paul H. 2,733,060.

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Hull, Charles J., and Tuttle. 2,732,801.
Woyski, Mark M., and Shoemaker. 2,733,217.

Ward, Lawrence T. Cigarette lighter and valve. 2,732,699, 1–31–56, Cl. 67—7.1.

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Warren, Charles W., to American Cyanamid Co. Current limiting power supply for photomultiplier. 2,733,357, 1–31–56, Cl. 250—207.

Warren, Robert E., and W. H. Yeamans, to General Electric Co. Bus bar support. 2,733,289, 1–31–56, Cl. 174—99.

Waterhouse, Charles L., J. W. Pyuro, and L. Thoms, to General Motors Corp. Unit body frame for automotive vehicle. 2,733,096, 1–31–56, Cl. 296—28.

Watson, James P. Gyroscope. 2,732,719, 1–31–56, Cl. 74—5.1.

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Webster, George H., to British Insulated Callender's Cables Ltd. Electric cables of the coaxial conductor type suitable for use for currents at high frequencies. 2,733,288, 1–31–56, Cl. 174—28.

Weibull, Ernst H. W. Wire recorder. 2,733,016, 1–31–56, Cl. 242—54.

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Ruhmau, Richard, Weides, and Engelage. 2,732,756.

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Fuglie, Elmer A., and Weinmann. 2,733,074.

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Western Electric Co., Inc.: *See*—
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Wouters, Louis F., to the United States of America as represented by the United States Atomic Energy Commission. Regulator for calutron ion source. 2,733,345, 1–31–56, Cl. 250—41.9.

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CLASSIFICATION OF PATENTS

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228— 9: 2,732,992
229— 23: 2,732,993
28: 2,732,994
33: 2,732,995
39: 2,732,996
87: 2,732,998
230— 122: 2,732,999
132: 2,733,000
211: 2,733,001
259: 2,733,002
231— 2: 2,733,003
235— 61: 2,733,004
2,733,005
61.5: 2,733,006
79: 2,733,007
92: 2,733,008
123: 2,733,009
144: 2,733,010
2,733,011
236— 48: 2,733,012
238— 317: 2,733,013
240— 25: 2,733,334
41: 2,733,335
41.5: 2,733,336
242— 35.5: 2,733,014
2,733,015
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242— 55.3: 2,733,017
66: 2,733,018
2,733,019
68: 2,733,020
71: 2,733,021
72: 2,733,022
78: 2,733,023
86: 2,733,024
150: 2,733,025
244— 108: 2,733,026
140: 2,733,027
145: 2,733,028
248— 13: 2,733,029
40: 2,733,030
43: 2,733,031
44: 2,733,032
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124: 2,733,035
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51: 2,733,351
62: 2,733,352
65: 2,733,353
67: 2,733,354
71: 2,733,355
83.6: 2,733,356
207: 2,733,357
217: 2,733,358
251— 14: 2,733,041
75: 2,733,042
176: 2,733,043
252— 8.55: 2,733,206
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49.3: 2,733,210
91: 2,733,211
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2,733,214

253— 137: 2,733,215
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448: 2,733,220
253— 24: 2,733,044
255— 27: 2,733,045
2,733,046
70: 2,733,047
257— 76: 2,733,048
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195: 2,733,050
259— 6: 2,733,051
122: 2,733,052
165: 2,733,053
260— 2.5: 2,733,221
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79.3: 2,733,231
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295: 2,733,246
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410.9: 2,733,252
425: 2,733,253
453: 2,733,254
458: 2,733,255
459: 2,733,256
465: 2,733,257
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465.5: 2,733,260
471: 2,733,261

260— 500: 2,733,262
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666: 2,733,279
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669: 2,733,281
673.5: 2,733,282
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679: 2,733,287
261— 21: 2,733,054
24: 2,733,055
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262— 7: 2,733,057
267— 16: 2,733,058
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64: 2,733,060
270— 52: 2,733,061
271— 2.3: 2,733,062
57: 2,733,063
89: 2,733,064
272— 57: 2,733,065
273— 131: 2,733,066
135: 2,733,067
137: 2,733,068
274— 4: 2,733,069
11: 2,733,070
279— 4: 2,733,071
2,733,072
9: 2,733,073
280— 5.2: 2,733,074
11.35: 2,733,075
36: 2,733,076
145: 2,733,077
480: 2,733,078
284— 12: 2,733,079
285— 97.8: 2,733,080
286— 5: 2,733,081
287—52.02: 2,733,082
53: 2,733,083
54: 2,733,084

287— 87: 2,733,085
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90: 2,733,087
292— 1: 2,733,088
2,733,089
94: 2,733,090
166: 2,733,091
251.5: 2,733,092
332: 2,733,093
296— 22: 2,733,094
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84: 2,733,101
86: 2,733,102
120: 2,733,103
301— 37: 2,733,104
302— 25: 2,733,105
307— 88.5: 2,733,359
308— 77: 2,733,106
86: 2,733,107
184: 2,733,108
310— 29: 2,733,360
93: 2,733,361
162: 2,733,362
311— 21: 2,733,109
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107: 2,733,111
312— 111: 2,733,112
251: 2,733,113
351: 2,733,114
313— 27: 2,733,363
65: 2,733,364
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109: 2,733,368
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188: 2,733,373
198: 2,733,374
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261: 2,733,376
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346: 2,733,378
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39.53: 2,733,380
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183: 2,733,383
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317— 22: 2,733,384

317— 83: 2,733,385
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318— 28: 2,733,391
85: 2,733,392
203: 2,733,393
221: 2,733,394
249: 2,733,395
251: 2,733,396
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321— 12: 2,733,399
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19: 2,733,402
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324— 56: 2,733,405
59: 2,733,406
97: 2,733,407
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2,733,410
57: 2,733,411
333— 12: 2,733,412
28: 2,733,413
77: 2,733,414
80: 2,733,415
339— 37: 2,733,416
50: 2,733,417
108: 2,733,418
144: 2,733,419
145: 2,733,420
2,733,421
220: 2,733,422
340— 10: 2,733,423
147: 2,733,424
174: 2,733,425
213: 2,733,426
275: 2,733,427
335: 2,733,428
345: 2,733,429
347: 2,733,430
2,733,431
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351: 2,733,433
367: 2,733,434
397: 2,733,435
343— 7: 2,733,436
11: 2,733,437
909: 2,733,438
346— 7: 2,733,116
82: 2,733,117
139: 2,733,118

CLASSIFICATION OF DESIGNS

D 2— 3: Des. 176,762
Des. 176,767
Des. 176,768
D 3— 9: Des. 176,758
16: Des. 176,756
19: Des. 176,830
D 4— 3: Des. 176,806
D 9— 2: Des. 176,748
D10— 8: Des. 176,808
Des. 176,816
D13— 1: Des. 176,801
D15— 1: Des. 176,792
3: Des. 176,813
11: Des. 176,791
D17—10: Des. 176,831

D17—12: Des. 176,759
D22— 2: Des. 176,812
5: Des. 176,802
D26— 1: Des. 176,755
13: Des. 176,829
D34— 2: Des. 176,752
Des. 176,753
Des. 176,754
5: Des. 176,832
D35— 3: Des. 176,795
Des. 176,796
Des. 176,797
Des. 176,798
Des. 176,799
Des. 176,800

D41— 1: Des. 176,811
D42— 7: Des. 176,761
D44— 1: Des. 176,766
10: Des. 176,815
15: Des. 176,822
Des. 176,823
Des. 176,824
Des. 176,825
21: Des. 176,826
D45— 4: Des. 176,778
Des. 176,780
Des. 176,784
9: Des. 176,775
Des. 176,777

D45— 9: Des. 176,783
Des. 176,787
Des. 176,788
Des. 176,790
16: Des. 176,771
Des. 176,772
Des. 176,773
Des. 176,774
Des. 176,781
Des. 176,785
Des. 176,789
17: Des. 176,776
19: Des. 176,779
Des. 176,782

D45—19: Des. 176,786
D48—20: Des. 176,750
D49— 1: Des. 176,814
D52— 1: Des. 176,833
D54— 2: Des. 176,765
12: Des. 176,749
D56— 4: Des. 176,810
D57— 1: Des. 176,820
D58— 8: Des. 176,805
D59— 2: Des. 176,809
D61— 1: Des. 176,751
D71— 1: Des. 176,769
Des. 176,803
D72— 1: Des. 176,763

D74— 1: Des. 176,827
D80— 8: Des. 176,821
9: Des. 176,817
Des. 176,818
Des. 176,828
10: Des. 176,793
D85— 2: Des. 176,764
Des. 176,804
D86—10: Des. 176,757
D89— 1: Des. 176,819
D92— 1: Des. 176,760
Des. 176,794
Des. 176,807
D93— 4: Des. 176,770

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
January 31, 1956 Volume 702 Number 5

TRADEMARKS

NOTICES

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 20,065 ("The Singer Manufacturing Company," and design), The Singer Manufacturing Company, Sewing machines, attachments, and parts thereof; **TM 49,604** (Singer Manufacturing Co.), same, Sewing-machines and their parts and attachments; **TM 583,337** (Singer), same, Thermoplastic material in the form of sheets and strips, etc., **filed** Jan. 8, 1954, D. C., S. D. N. Y., Doc. 90/253, *The Singer Mfg. Co. et al. v. Singer Mfg. Co. et al.* Consent judgment; trademarks and trade names held valid; defendants enjoined Dec. 7, 1955.

TM 30,942 (Odol), Dresdener Chemisches Laboratorium Lingner, Certain named articles and preparations for the teeth, hair, and skin; **TM 70,021**, same, K. A. Lingner, Mouthwashes, powders, and paste, used as dentifrices, **filed** Nov. 14, 1951, D. C., S. D. N. Y., Doc. 71/79, *Odol Chemical Corp. v. Revlon Products Corp.* Order of discontinuance Dec. 7, 1955.

TM 49,604. (See TM 20,065.)

TM 70,021. (See TM 30,942.)

TM 103,050 (The letter "D" within a square design), Square D Company, Fuses, switches, cut-outs, clips, etc., **filed** May 29, 1953, D. C., N. D. Ill. (Chicago), Doc. 53c1285, *Square D Co. v. Dormeyer Industries.* Order and judgment on mandate Dec. 5, 1955.

TM 145,335. (See TM 588,807.)

TM 181,584 (Elbee Vitalis), **TM 271,624, TM 333,125** (Vitalis), Bristol-Myers Co., Hair tonic, **filed** Dec. 9, 1955, D. C., W. D. Pa. (Pittsburgh), Doc. 14078, *Bristol-Myers Co. v. Nu-Vita Products Co.*

TM 267,557. (See TM 588,807.)

TM 271,624. (See TM 181,584.)

TM 280,756. (See TM 588,807.)

TM 281,291. (See TM 588,807.)

TM 297,079. (See TM 588,807.)

TM 318,056. (See TM 588,807.)

TM 328,171. (See TM 588,807.)

TM 333,125. (See TM 181,584.)

TM 339,993. (See TM 588,807.)

TM 370,742. (See TM 588,807.)

TM 372,767 ("Librascope" and design), Lewis W. Imm, Balance computers, etc.; **TM 587,287**, same, Librascope, Inc., same; **TM 584,648**, same, Boring machines, etc.; **TM 612,471**, same, Magnetic amplifiers, etc., **filed** Dec. 7, 1955, D. C. N. J. (Newark), Doc. 1134/55, *Librascope, Inc. v. Labscope, Inc.*

TM 387,010 (Permatoned), B. White, Ladies' and children's handbags, purses and pocketbooks of processed leathers; **TM 611,971** (Permatone), B. B. White, same, **filed** Dec. 1, 1955, D. C., S. D. N. Y., Doc. 105/199, *Morris White Fashions, Inc. v. The Henry Co. et al.*

TM 390,181. (See TM 588,807.)

TM 394,192 ("Movado" and design), Movado Watch Agency, Inc., Watches, **suit** for Declaratory Judgment filed July 10, 1953, D. C., S. D. N. Y., Doc. 86/261, *Croton Watch Co. v. Frank B. Laughlin, Acting Com'r of Int. Rev.—NY.* Order of discontinuance Dec. 7, 1955.

TM 397,637, TM 523,578 ("One A Day" and representation of the figure 1 design), Miles Laboratories, Inc., Vitamin tablets, **filed** Dec. 5, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c2256, *Miles Laboratories, Inc. v. Austin Drug & Truss Co.*

TM 427,863 ("Things and Stuff" and design), Associated Card and Stationery Company, Scrap books, **filed** July 22, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c1099, *Associated Card & Stationery Co. v. The S. K. Smith Co.* Cause dismissed for lack of prosecution Nov. 7, 1955.

TM 433,548. (See TM 588,807.)

TM 439,886. (See TM 588,807.)

CONDITION OF TRADEMARK APPLICATIONS AS OF JANUARY 6, 1956

Total number of applications awaiting action (excluding renewals and republications)	8,813
Date of oldest new application	May 4, 1955
Date of oldest amended application	Oct. 3, 1955

MERCHANT, JOHN, Executive Examiner

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application: New	Oldest Application: Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	7-11-55	10-5-55
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	5-4-55	11-1-55
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	6-20-55	10-17-55
Renewals (All Classes)	11-16-55	12-22-55
Sec. 12 (c) Publications (All Classes)	11-21-55	12-20-55

Applications Filed During Week Ending January 6, 1956—376

Registrations Issued 431—No. 620,164 to No. 620,594
Renewals Issued 67

TM 523,578. (See TM 397,637.)

TM 528,407 (Shox-Stok), Guaranteed Products, Electric fence controllers, **filed** Dec. 14, 1955, D. C. Minn. (Minneapolis), Doc. 5328, *Shox-Stok Inc.* v. *Electric Service Systems Inc. et al.*

TM 537,859. (See TM 588,807.)

TM 538,938 (Timsen), Theo. Ross, doing business as Theo. Ross Associates, Preparation for use as a germicide, disinfectant, deodorant, and sterilizing agent, **filed** Dec. 7, 1955, D. C., N. D. Ill. (Chicago), Doc. 55c2270, *Theo. Ross Associates* v. *Packaging Service Corp. et al.*

539,425. (See TM 588,807.)

565,110 (Dr. West's), **TM 565,112** (Miracle-Tuft), Weco Products Company, Toothbrushes and denture brushes, **filed** Mar. 18, 1953, D. C., S. D. N. Y., Doc. 83/292, *Weco Products Co.* v. *L. S. Amster Co. Inc. and Louis S. Amster.* (Order including as additional party defendant, Louis S. Amster on May 18, 1954.) Order of discontinuance (notice Dec. 5, 1955).

TM 565,112. (See TM 565,110.)

TM 582,839 (Reclu), Reclu Sales Company, Pharmaceutical preparation used for relief of hyperacidity of the stomach, etc., **filed** Dec. 1, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 19111–WM, *Reclu Drug Co., Ltd.* v. *The Reclu Co. et al.*

TM 583,337. (See TM 20,065.)

TM 584,648. (See TM 372,767.)

TM 586,970. (See TM 591,085.)

TM 587,287. (See TM 372,767.)

TM 588,806. (See TM 588,807.)

TM 588,807 (Mixmaster Junior), Sunbeam Corp., Electric food mixers; **TM 281,291** (Mixmaster), Chicago Flexible Shaft Co., Republished by Sunbeam Corp., same; **TM 286,756** (Sunbeam), same, Electrical food mixers, electric waffle irons, and electric clocks; **TM 370,742**, same, Electric dry shavers and parts thereof; **TM 339,993** (Shavemaster), same, Safety shaving devices of the nature of safety razors and blades therefor; **TM 328,171** (Coffeemaster), same, Electrical coffee makers and parts thereof; **TM 267,557** (Sunbeam), same, Electric percolators and for electric lighters for pipes, cigars, and cigarettes; **TM 297,079** (Ironmaster), same, Electric sadirons; **TM 145,335** (Sunbeam), same, Electric flatirons; **TM 300,181**, same, Electrical appliances comprising electric flatirons, electric toaster grills, etc.; **TM 318,956**, same, Electrically operated devices consisting of room and space heaters, desk fans, etc.; **TM 433,548**, same, Lawn mowers; **TM 439,886**, same, Sunbeam Corp., Electric hedge trimmers and parts thereof; **TM 537,859**, same, Electric egg cookers; **TM 539,425**, same, Electric toasters; **TM 566,806**, same, Electric bottle warmers; **TM 588,809**, same, Electric cookers and deep fryers; **TM 594,171**, same, Electric blankets; **TM 606,316**, same, Electric frying pans, **filed** Nov. 17, 1955, D. C., S. D. Iowa (Des Moines), Doc. 3/662, *Sunbeam Corp.* v. *Robinson Wholesale Co. et al.*

TM 588,809. (See TM 588,807.)

TM 591,085 (Cinerama), Cinerama, Inc., Electrical apparatus, supplies and accessories used in the production and presentation of motion pictures, etc.; **TM 586,970**, same, Mar-Tan Inc., Men's and boys' jackets, pajamas, outer shirts, and snowsuits, **filed** July 7, 1954, D. C., S. D. N. Y., Doc. 94/164, *Cinerama, Inc.* v. *Mar-Tan Inc.* Consent judgment for injunction; counterclaim dismissed (notice Dec. 1, 1955).

TM 594,171. (See TM 588,807.)

TM 606,657 (Myzon), Arthur Meyerhoff, doing business under the name Meyerhoff Farms, Mineral and vitamin compound used as a supplementary dietary preparation in animal feeds, **filed** May 23, 1955, D. C. N. J. (Camden), Doc. 459/55, *Arthur Meyerhoff et al.* v. *Wene Poultry Laboratories, Inc. et al.* Consent decree for injunction; counterclaim dismissed Dec. 5, 1955.

TM 606,316. (See TM 588,807.)

TM 611,971. (See TM 387,010.)

TM 612,471. (See TM 372,767.)

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.
As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 680,790. Pennsylvania Glass Sand Corporation, Lewistown, Pa. Filed Jan. 31, 1955.

Snow White

For Sand.
Use since Mar. 20, 1954.

SN 680,791. Pennsylvania Glass Sand Corporation, Lewistown, Pa. Filed Jan. 31, 1955.

Supersil

For Crystalline Silica.
Use since Oct. 20, 1954.

SN 682,587. Pennsylvania Glass Sand Corporation, Lewistown, Pa. Filed Mar. 1, 1955.

Q-ROK

The drawing is lined for the color red, but color is not claimed as an essential feature of the mark.
For Silica.
Use since Feb. 8, 1955.

SN 688,188. Reuland Electric Co., Alhambra, Calif. Filed May 24, 1955.

little scout

For Wooden Fuel Chips for Use in the Smoking and Barbecuing of Foods.
Use since Sept. 27, 1954.

SN 688,579. The Reliable Textile Company, Chicago, Ill. Filed May 31, 1955.

Shreddies

For Shredded Foam Rubber for Stuffing Pillows, Seat Cushions, Hassocks, Toys, and the Like.
Use since Sept. 27, 1954.

CLASS 2

SN 676,742. Meese, Inc., Madison, Ind. Filed Nov. 16, 1954.



For Insulated Shipping and Storage Containers, Canvas Baskets and Hampers.
Use since Oct. 20, 1954.

SN 679,315. Oswego Falls Corporation, Fulton, N. Y. Filed Jan. 3, 1955.



For Paper Drinking Cups.
Use since Nov. 19, 1954.

SN 686,684. Parke, Davis & Company, Detroit, Mich. Filed May 2, 1955.

APLICAPS

For Dispensing Capsules.
Use since May 1, 1954.

SN 687,364. Earl A. Erickson Inc., Hazel Park, Mich. Filed May 12, 1955.

Leone

For Solvent-container Device for Facilitating Removing of Polish from Finger Nails.
Use since Mar. 26, 1955.

SN 694,189. D. W. Becklin, d. b. a. Crate-Rite Manufacturing Company, Oakland, Calif. Filed Sept. 6, 1955.

Crate - Rite

For Shipping Containers.
Use since June 16, 1955.

CLASS 3

SN 686,796. Aceline Products Corporation, Rochester, N. Y. Filed May 4, 1955.

FLEACOLLAR

Applicant claims ownership of Reg. No. 602,864.
For Dog Collars.
Use since about August 1951.

SN 697,891. The American Automobile Association (Incorporated), Washington, D. C. Filed Nov. 23, 1955.



Applicant claims ownership of Reg. No. 341,530.
For Port. ios, Pocketbooks, and Card Cases.
Use since 1922.

CLASS 4

SN 671,347. Ideal Industries, Inc., Sycamore, Ill. Filed Aug. 9, 1954.

SAWCO

For Rubber Bonded Abrasive Wheels and Grinding Wheels.
Use since June 1, 1948.

SN 689,472. Dul-Ta-Brite Products Co. Inc., Denver, Colo. Filed June 14, 1955.

Dul-ta-Brite

For Metal Polishes.
Use since on or about Apr. 13, 1955.

SN 689,566. Kenneth H. Goodman, d. b. a. Waxomatic Co., Los Angeles, Calif. Filed June 15, 1955.

WAXOMATIC

For Polishing Wax for Furniture and Automobiles.
Use since June 18, 1950.

SN 690,887. Thomas E. Kee, d. b. a. Teb Research & Development Co., Chattanooga, Tenn. Filed July 7, 1955.

teb

For Preparation for Polishing and Preserving Leather and Leather Products.
Use since Jan. 27, 1955.

CLASS 6

SN 651,684. American Aerovap, Inc., New York, N. Y. Filed Aug. 12, 1953.

VAPO-AID

For Stabilizer for Organic Insecticide.
Use since May 8, 1953.

SN 669,067. Whitmire Research Laboratories, Inc., St. Louis, Mo. Filed June 28, 1954.

D.A.I.

For Insecticides in Aerosol Bombs.
Use since October 1953.

SN 669,594. Herbert J. Atkinson, d. b. a. Sudbury Laboratory, South Sudbury, Mass. Filed July 8, 1954.

AQUA-CLEAR

For Chemical Preparation Used as a Rust Inhibitor.
Use since on or about Jan. 10, 1941.

SN 674,153. Glyco Products Co., Inc., Brooklyn, N. Y. Filed Oct. 1, 1954.

BRITE-N LIQUID

For Sequestering Agent for Preventing Precipitation of Metallic Soaps.
Use since Aug. 13, 1954.

SN 678,430. Barada & Page, Incorporated, Kansas City, Mo. Filed Dec. 16, 1954.



For Preparations for Treating Water for Industrial Uses, Fire Extinguishing Preparations, Wood Preservatives, Fungicides, Insecticides, Fumigants, Disinfectants, Solvents for Various Chemicals and Chemical Preparations, Acetone, Glacial Acetic Acid, Carbolic Acid, Muriatic Acid, Phosphoric Acid, Sulfuric Acid, Aqua Ammonia, Benzol, Methanol, Toluol, Xylol, Carbon Tetrachloride, Stoddard Solvent, Industrial Alcohol, Caustic Soda, Zinc Chloride, Formaldehyde, Chlorine Gas, and Anhydrous Ammonia Gas.
Use since May 24, 1935, on preparations for treating water for industrial uses.

SN 679,295. Kenrich Corporation, Maspeth, N. Y. Filed Jan. 3, 1955.

Kenflex

For Synthetic Hydrocarbon Resins for Incorporation in Elastomers and Thermoplastic Resins for Imparting Predetermined Properties Thereto.
Use since Oct. 7, 1947.

SN 680,035. Reslabs, Inc., Chicago, Ill. Filed Jan. 17, 1955.

Ammophyll

For Photograph Developing Solution.
Use since Sept. 15, 1953.

SN 680,231. Sindar Corporation, New York, N. Y. Filed Jan. 20, 1955.

SINDAROMA

Applicant claims ownership of Reg. No. 541,312.
For Liquid Aromatic Material Used as General Purpose Odorants, Reodorants, or Deodorants.
Use since Nov. 5, 1954.

SN 681,185. May & Baker Limited, Essex, England. Filed Feb. 7, 1955.

TROPOTOX

Claims priority under Sec. 44(d) on British Reg. No. 734,580, dated Sept. 30, 1954.
For Weedkillers.

SN 682,745. Marlyn Chemical Company, Incorporated, Calumet City, Ill. Filed Mar. 3, 1955.

DOWNY DIPE

For Chemical in Liquid Form to be Added to Wash Water to Make Baby Clothes and Diapers Sterile and Soft.
Use since Jan. 6, 1953.

SN 683,014. W. H. & L. D. Betz, Philadelphia, Pa. Filed Mar. 8, 1955.

OCTAMEEN

For Chemical for Prevention of Corrosion in Return Lines of Steam Systems and the Like.
Use since Nov. 29, 1954.

SN 684,916. Allied Home Products Corporation, Beloit, Wis. Filed Apr. 5, 1955.

Auto Mist

For Sprayable Liquid Sanitizing and Deodorizing Chemical and a Pressure-Generating Component, Especially for Use in Automobiles.
Use since Nov. 30, 1954.

SN 685,891. E. I. du Pont de Nemours and Company, Wilmington, Del. Filed Apr. 20, 1955.

THYLATE

For Agricultural Fungicide.
Use since Mar. 18, 1955.

SN 688,508. Cromit Products Corporation, Roslindale, Mass. Filed May 31, 1955.

CROMIT

For Chemical Preparation for Use in Spray Coating Chromium Plated Metals.
Use since Apr. 19, 1955.

SN 688,561. Nopco Chemical Company, Harrison, N. J. Filed May 31, 1955.

NOPCO MF

Applicant claims ownership of Reg. Nos. 121,927, 539,973, and others.
For Wetting and Dispersing Agent.
Use since Sept. 1, 1953.

SN 688,562. Nopco Chemical Company, Harrison, N. J. Filed May 31, 1955.

NOPCOCHEX

Applicant claims ownership of Reg. Nos. 121,927, 349,176, and 539,973.
For Chemical Composition for Use as a Rust Inhibitor.
Use since Aug. 12, 1953.

SN 688,563. Nopco Chemical Company, Harrison, N. J. Filed May 31, 1955.

NOPCO KCT

Applicant claims ownership of Reg. Nos. 121,927, 539,973, and others.
For Chemical Composition for Use as a Defoamer.
Use since Dec. 9, 1953.

CLASS 8

SN 686,704. Norman D. Waters, New York, N. Y. Filed May 2, 1955.

Tobac-a-chief

For Tobacco Pouches.
Use since Apr. 25, 1953.

SN 688,430. Larus & Brother Company, Richmond, Va. Filed May 27, 1955.

WINCHESTER

For Smokers' Pipes.
Use since May 19, 1955.

SN 688,431. Larus & Brother Company, Richmond, Va. Filed May 27, 1955.

GOLD BOND

For Smokers' Pipes.
Use since May 19, 1955.

SN 688,432. Larus & Brother Company, Richmond, Va. Filed May 27, 1955.

DORSET

For Smokers' Pipes.
Use since May 19, 1955.

SN 688,433. Larus & Brother Company, Richmond, Va. Filed May 27, 1955.

CREST

Applicant claims ownership of Reg. No. 582,705.
For Smokers' Pipes.
Use since May 19, 1955.

SN 688,434. Larus & Brother Company, Richmond, Va. Filed May 27, 1955.

COLONY

Applicant claims ownership of Reg. No. 609,029.
For Smokers' Pipes.
Use since May 19, 1955.

SN 688,435. Larus & Brother Company, Richmond, Va. Filed May 27, 1955.

NOB HILL

Applicant claims ownership of Reg. No. 509,436.
For Smokers' Pipes.
Use since May 19, 1955.

SN 695,115. Saks & Company, New York, N. Y. Filed Sept. 21, 1955. Sec. 2(f).

SAKS-Fifth Avenue

For Pyrophoric Cigarette Lighters, Ash Trays, Receivers and Stands, Cigarette and Cigar Receptacles, Cases and Humidors, Cigar and Cigarette Holders and Tubes, Tobacco Pipes and Racks Therefor, Smokers' Sets, and Tobacco Pouches.
Use since Sept. 15, 1924.

CLASS 10

SN 689,291. Sid O. Leavell, d. b. a. Hi-12 Distributing Co., Seattle, Wash. Filed June 10, 1955.

HI-12

For Chemical Fertilizer Composition.
Use since Jan. 1, 1955.

SN 692,731. Midwestern Phosphate Corporation, d. b. a. Kickapoo Fertilizers and as Midwestern Fertilizers, Madison, Wis. Filed Aug. 9, 1955.

KICKAPOO

For Fertilizer.
Use since December 1952.

CLASS 15

SN 687,879. Robert S. Norris, Larchmont, N. Y. Filed May 19, 1955.

BARSAD

For Fuel Oil Additive for Preventing Wear in Diesel Engines and Gas Turbines and Other Benefits to Their Improved Operation.
Use since Oct. 1, 1954.

SN 688,529. Harry Hampton, Jr., d. b. a. The Hampton-Cross Co., Louisville, Ky. Filed May 31, 1955.

SKY RIDE

For Liquefied Graphite Concentrate.
Use since on or about June 13, 1936.

SN 688,702. Behnke Lubricants, Inc., Appleton, Wis. Filed June 2, 1955.

JAX

For Oils and Greases.
Use since Apr. 5, 1955.

CLASS 16

SN 650,988. Glasurit-Werke, M. Winkelmann, Aktien-Gesellschaft, Hamburg, Germany. Filed July 28, 1953.



Applicant claims ownership of German Reg. No. 328,013, dated Feb. 3, 1925.
For Ready-mix Oil Lacquers, Ready-mix Alcohol Lacquers, and Paints.

CLASS 17

SN 686,963. J. W. Fitzpatrick & Son, Incorporated, Louisville, Ky. Filed May 6, 1955.



BALL

The drawing is lined for the colors red and blue.
For Leaf Tobacco.
Use since Sept. 1, 1910.

SN 695,292. H. Fendrich, Inc., Evansville, Ind. Filed Sept. 26, 1955.

CASA-NOVA

Applicant claims ownership of Reg. No. 72,274.
For Cigars.
Use since Sept. 19, 1889.

SN 695,351. Saks & Company, New York, N. Y. Filed Sept. 26, 1955. Sec. 2(f).

SAKS-Fifth Avenue

For Cigars, Cigarettes and Smoking Tobacco.
Use since Sept. 15, 1924.

SN 695,373. The American Tobacco Company, New York, N. Y. Filed Sept. 27, 1955.

TAREYTON

Applicant claims ownership of Reg. No. 155,959.
For Cigarettes.
Use since Sept. 6, 1955.

CLASS 18

SN 676,623. Geigy Chemical Corporation, New York, N. Y. Filed Nov. 15, 1954.

COUMAREXAN

For Anti-coagulants.
Use since Oct. 22, 1954.

SN 679,894. Frank C. Cook Co., d. b. a. Ko-Ep Laboratories, Denver, Colo. Filed Jan. 14, 1955.

EUCASAL

For Medical Preparation, an Analgesic Balm.
Use since Nov. 22, 1932.

SN 686,316. Kraco Products Corporation, Chicago, Ill. Filed Apr. 26, 1955.

Chew-Aways

For Medicated Chewing Gum for Use in Curbing the Smoking Habit.
Use since Apr. 11, 1955.

SN 688,489. Neo-Chemical Corporation of America, New York, N. Y. Filed June 13, 1955.

NEOVITAPLEX

For Vitamin B Complex Medicinal Preparation in Sphere Form.
Use since Sept. 23, 1953.

SN 688,493. Neo-Chemical Corporation of America, New York, N. Y. Filed June 13, 1955.

NEOVITAL

For Dietary Supplement Medicinal Preparation in Capsule Form.
Use since Apr. 16, 1953.

CLASS 19

SN 681,149. Fletcher Aviation Corporation, Rosemead, Calif. Filed Feb. 7, 1955. Sec. 2(f) as to "Fletcher" and "Putting Wings on the World."

FLETCHER PUTTING WINGS ON THE WORLD AVIATION

The word "Aviation" and the individual words in the notation "Putting Wings on the World," apart from the mark as shown are hereby disclaimed.
For Aircraft Fuel Tanks and Airplanes.
Use since Oct. 30, 1948.

SN 682,388. Bavan Incorporated, Marinette, Wis. Filed Feb. 28, 1955.



For Automotive Safety Belts.
Use since Jan. 26, 1955.

SN 689,534. Lloyd Motoren Werke, G. m. b. H., Bremen, Germany. Filed June 14, 1955.

LLOYD

The drawing is lined for red. Applicant claims ownership of German Reg. No. 617,254, dated Feb. 26, 1952.
For Passenger Automotive Vehicles and Structural Parts Thereof, Land, Sea, and Air Vehicles for Passengers and Freight—Namely, Airplanes, Motor Busses, and Motor Boats.

SN 695,943. St. Louis Products Company, Overland, Mo. Filed Oct. 5, 1955.

BUMPEREX

For Automobile Bumper Exhaust Extension.
Use since May 15, 1955.

CLASS 20

SN 694,589. New London Mills, Inc., New London, Conn. Filed Sept. 13, 1955.

THAMES

For Felt Base Floor Coverings.
Use since on or about May 1, 1955.

CLASS 21

SN 653,433. Borg-Warner Corporation, Chicago, Ill. Filed Sept. 21, 1953. Sec. 2(f).

Pesco

For Electric Switches Actuated by Motor Driven Pressure Switches at Predetermined Pressures for Aircraft, Agricultural, and Industrial Uses, and Parts of the Aforesaid Goods for Replacement and Repair.
Use since 1945 on pressure switches.

SN 680,816. Speedway Manufacturing Company, Cicero, Ill. Filed Jan. 31, 1955. Sec. 2(f).

SPEEDDRILL

Applicant makes no claim to the exclusive use of the word "Drill" alone.
For Electrically Operated Portable Drills and Kits Containing Electrically Operated Portable Drills and Attachments Therefor.
Use since May 16, 1949.
Subj. to Intf. with SN 662,456.

SN 681,328. Advanced Vacuum Products, Inc., Stamford, Conn. Filed Feb. 9, 1955.

ADVAC

For Ceramic-to-Metal Seals Comprising Electrical Terminals and Feed Through Insulators.
Use since July 13, 1954.

SN 681,665. Modern Telephones (Great Britain) Ltd., London, England. Filed Feb. 15, 1955.

MODERNCOM

For Telephone Intercommunicating Equipment.
Use since Apr. 13, 1954.

SN 690,778. Transitron Electronic Corporation, Melrose, Mass. Filed July 5, 1955.

T
TRELCO

For Diodes, Transistors, and Rectifiers.
Use since Apr. 18, 1953.

SN 690,814. G & W Electric Specialty Company, Chicago, Ill. Filed July 6, 1955.

G&W

The drawing is lined for orange.
For Potheads.
Use since June 20, 1955.

SN 691,969. Sunbeam Corporation, Chicago, Ill. Filed July 26, 1955.

Sunbeam

Applicant claims ownership of Reg. No. 534,785.
For Electric Sheets.
Use since Aug. 4, 1954.

SN 691,974. Welduction Corporation, Oak Park, Mich. Filed July 26, 1955.

Welduction

For High Frequency Electrical Generators of the Rotating and Electron Tube Types, Inductive Heating Work Circuits for Use With Generators of the Above Types, Work Fixtures for Supporting and Transferring Work Relative to Inductive Heating Work Circuits, Automatic Arc Welding Machines, and Individual Components of the Above.
Use since May 3, 1955.

SN 692,432. Sleetex Company, Inc., New York, N. Y. Filed Aug. 3, 1955.

BUZZ-A-LARM

For Signaling Device Which Operates Automatically When Reverse Gear Shift Lever Is Used so That Alarm Is Given When Vehicle Is in Reverse Motion.
Use since June 13, 1955.

SN 693,078. Northern Electric Company, Chicago, Ill. Filed Aug. 15, 1955.

RED LINE

For Electric Bed Coverings and Electric Heating Pads.
Use since 1935.

SN 693,081. Northern Electric Company, Chicago, Ill. Filed Aug. 15, 1955.

Century

For Electric Bed Coverings and Electric Heating Pads.
Use since 1932.

SN 695,433. National Rubber Machinery Company, Akron, Ohio. Filed Sept. 27, 1955.

POWER SURGE

For Electrically-Driven Garbage Grinders.
Use since Feb. 3, 1955.
Subj. to Intf. with SN 694,031.

CLASS 22

SN 685,242. Clifford W. Bomberger, d. b. a. Sno-Boat Toy Company, Lexington, Nebr. Filed Apr. 11, 1955.

SNO-BOAT

For Sled.
Use since Mar. 18, 1955.

SN 685,591. Keyston Bros., San Francisco, Calif. Filed Apr. 15, 1955.

COWBOY JOE

For Juvenile or Toy Holsters, Toy Guns, Juvenile Playsuit Outfits of the Type Generally Designated as Western in Simulation of Dress of Indians, Cowboys, and the Like.
Use since Mar. 4, 1954.

SN 685,722. Richard G. Krueger, Inc., New York, N. Y., to Krueger Products Company, Dover, Del. Filed Apr. 18, 1955.

IGLOO

For Toy Bank.
Use since Feb. 21, 1955.

SN 685,723. Richard G. Krueger, Inc., New York, N. Y., to Krueger Products Company, Dover, Del. Filed Apr. 18, 1955.

GUYS AND DOLLS

For Dolls.
Use since Mar. 8, 1955.

SN 685,974. Eli Bridge Company, Jacksonville, Ill. Filed Apr. 21, 1955.

Scrambler

For Device in the Form of an Amusement Ride Constructure in the Nature of a Merry-Go-Round.
Use since Nov. 9, 1953.

SN 686,167. Alexander Doll Company, Inc., d. b. a. Madame Alexander, New York, N. Y. Filed Apr. 25, 1955.

"Nickey"

For Dolls.
Use since Mar. 30, 1955.

SN 686,168. Alexander Doll Company, Inc., d. b. a. Madame Alexander, New York, N. Y. Filed Apr. 25, 1955.

"Cissy"

For Dolls.
Use since Mar. 30, 1955.

SN 687,918. Carnell Manufacturing Co., Inc., Brooklyn, N. Y. Filed May 20, 1955.

Applicant claims ownership of Reg. No. 520,201.
For Toy Pistol and Holster Sets.
Use since Mar. 4, 1955.

CLASS 23

SN 636,873. Automatic Scale Company, Inc., New York, N. Y. Filed Oct. 20, 1952.

515

For Machines for Clamping Bags After They Are Filled With Pulverized, Powdered, or Granular Materials.
Use since 1901.

SN 657,590. National Implement Company, Inc., Princeton, N. J. Filed Dec. 1, 1953.

NATIONAL POWER HORSE

The representation of the tractor is disclaimed.
For Tractors and Attachments.
Use since Jan. 1, 1949, on tractors.

SN 676,993. Kurt Orban Company, Inc., New York, N. Y. Filed Nov. 19, 1954.

AUTOPOSITIONER

For Jig Borers and Replacement Parts Therefor.
Use since Dec. 8, 1953.

SN 679,096. Georgia Iron Works Co., Augusta, Ga. Filed Dec. 29, 1954. Sec. 2(f).

COTTRELL

For Separators for Separating Fine Sand From Water and Slime.
Use since 1950.

SN 679,433. U. S. Industries, Inc., Chicago, Ill. Filed Jan. 4, 1955.



The drawing is lined for red.
For Presses—Namely, Mechanical Power Presses and Parts, Hydraulic Power Presses and Parts, Open Back Inclinable Presses and Parts Thereof Including Die Cushions, and Counterbalance Cylinders.
Use since Nov. 1, 1954.

SN 683,907. Orton Crane and Shovel Company, Chicago, Ill. Filed Mar. 21, 1955. Sec. 2(f).

ORTON

For Cranes, Power Operated Shovels, and Material Handling Buckets.
Use since December 1928.

SN 686,880. Brother International Corp., New York, N. Y. Filed May 5, 1955.

WONDERKNIT

For Knitting Machines and Parts Thereof.
Use since Mar. 1, 1955.

SN 687,087. Miraplas Tile Company, Columbus, Ohio. Filed May 9, 1955.

Kost Kutter

For Tile Cutters.
Use since May 3, 1955.

SN 688,443. The Moto-Mower Company, Detroit, Mich. Filed May 27, 1955.

Dial-A-Matic

For Lawnmowers Embodying a Cutting Height Adjuster.
Use since on or about Apr. 1, 1955.

SN 688,497. The Aluminum Cooking Utensil Company, Inc., New Kensington, Pa. Filed May 31, 1955.

NANCY PRENTISS STAINLESS

The Word "Stainless" is disclaimed apart from the mark.
For Stainless Steel Flatware.
Use since Aug. 24, 1954.

SN 688,931. Ideal Roller and Manufacturing Company, Chicago, Ill. Filed June 6, 1955.

FLEXOCRAFT

For Printing Press Rollers.
Use since December 1954.

SN 689,344. Continental Stainless Corp., New York, N. Y. Filed June 13, 1955.

DANUBE

For Silverware, Flatware, and Cutlery.
Use since Apr. 25, 1955.

SN 689,700. Colma Inc., Worcester, Mass. Filed June 17, 1955.



For Coin-operated Spray Dispensers.
Use since July 1953.

SN 689,893. United Aircraft Products, Inc., Dayton, Ohio. Filed June 20, 1955.



Applicant claims ownership of Reg. Nos. 339,886, 595,323, and others.
For Packaged Heat Transfer System Comprising in Part a Heat Exchanger and Means for Circulating Fluids in Heat Exchange Relation Therein, for Shipboard, Ground Equipment, and Air Frame Installations.
Use since Sept. 18, 1954.

SN 691,477. Jet Combustion, Inc., Chicago, Ill. Filed July 18, 1955.

JET UMBRELLA

For Overhead Revolving Bucket Conveyors.
Use since June 29, 1955.

SN 691,554. Dap Incorporated, Chicago, Ill. Filed July 19, 1955.

Home Guild

For Lawn Sweepers and Power Driven Lawn Mowers.
Use since July 8, 1955, on power driven lawn mowers.

SN 691,624. Hemphill Company, Pawtucket, R. I. Filed July 20, 1955.

"ANKLES AWAY"

For Hosiery Knitting Machines.
Use since June 6, 1955.

SN 691,758. Ferguson Machine and Tool Company, Incorporated, Ferguson, Mo. Filed July 22, 1955.

Trans-o-Mator

For Straight-line Feed Indexing Machines.
Use since July 1, 1955.

SN 691,911. Van Dusen & Co., Inc., Wayzata, Minn. Filed July 25, 1955.

Silo-Matic

For Silo Unloaders.
Use since May 1, 1955.

SN 692,292. Acco Products, Inc., Ogdensburg, N. Y. Filed Aug. 2, 1955.

EZYPUNCH

For Punches.
Use since on or about April 1933.

SN 692,293. Acco Products, Inc., Ogdensburg, N. Y. Filed Aug. 2, 1955.

ACCO

Applicant claims ownership of Reg. No. 155,996.
For Punches and Clamps.
Use since on or about April 1919.

SN 692,445. ACF Industries, Incorporated, New York, N. Y. Filed Aug. 4, 1955.

acf

Applicant claims ownership of Reg. No. 546,508.
For Valve Operating Wrenches, Floor Stands for Extension Valve Operating Mechanism, and Valve Operating Mechanism and Parts Thereof Including Rotatable Transmission With Chain or Hand-Wheel Actuators.
Use since January 1931 on valve operating wrenches and valve operating mechanism.

SN 692,497. Universal Lubricating Systems, Inc., Oakmont, Pa. Filed Aug. 4, 1955.

LITTLE LUBE

For Grease Guns.
Use since May 20, 1955.

SN 693,208. Simmons Industries, Inc., Albany, N. Y. Filed Aug. 16, 1955.

SKY PARK

For Automobile Parking Machine.
Use since Oct. 13, 1954.

SN 693,533. William H. Drake, d. b. a. Drayco Products Co., Santa Barbara, Calif. Filed Aug. 23, 1955.

COCKEE LOCKEE

For Device for Storing and Unlocking Safety Pins.
Use since June 24, 1955.

SN 693,534. William H. Drake, d. b. a. Drayco Products Co., Santa Barbara, Calif. Filed Aug. 23, 1955.

PIN KADDY

For Device for Storing and Unlocking Safety Pins.
Use since June 24, 1955.

SN 693,535. William H. Drake, d. b. a. Drayco Products Co., Santa Barbara, Calif. Filed Aug. 23, 1955.

MIGHTY ANDY

For Device for Storing and Unlocking Safety Pins.
Use since June 24, 1955.

SN 693,918. The May Department Stores Company, St. Louis, Mo. Filed Aug. 30, 1955.

ARCROSS

For Razor Blades.
Use since Feb. 1, 1954.

CLASS 24

SN 694,031. Avco Manufacturing Corporation, Cincinnati, Ohio. Filed Aug. 19, 1955.

POWER-SURGE

For Laundry Apparatus.
Use since July 29, 1955.
Subj. to Intf. with SN 695,433.

SN 694,962. California Metropolitan Industries, Inc., Redwood City, Calif. Filed Sept. 20, 1955.



For Portable Clothes Dryers.
Use since July 1955.

SN 696,233. General Motors Corporation, Detroit, Mich. Filed Oct. 11, 1955.

Mult-A-Pliance

For Clothes Washers and Clothes Driers.
Use since Aug. 17, 1955.

SN 696,820. Polymark Limited, London, England. Filed Oct. 20, 1955.

Polymark

Applicant claims ownership of British Reg. Nos. 688,636, dated Apr. 28, 1950, and 722,455, dated Aug. 11, 1954.
For Laundry Marking Machines.
Use since Sept. 1, 1950.

CLASS 25

SN 695,170. Metallon Products, Inc., Los Angeles, Calif. Filed Sept. 22, 1955. Sec. 2(f).

ShurLok

Applicant claims ownership of Reg. No. 564,518.
For Door Locks and Hardware Therefor Sold as Units.
Use since May 2, 1950.

SN 695,407. Ford Motor Company, Dearborn, Mich. Filed Sept. 27, 1955.

LIFEGUARD

For Vehicle Door Locks.
Use since Sept. 23, 1955.

SN 695,581. Star, Bonifacio Echeverria, S. A., Eibar, Spain. Filed Sept. 29, 1955.

"STAR"

For Handcuffs.
Use since Sept. 1, 1950.

SN 696,445. Kwikset Locks, Inc., Anaheim, Calif. Filed Oct. 14, 1955.

kwikset

Applicant claims ownership of Reg. Nos. 518,394, 612,007, and others.
For Safes.
Use since Jan. 17, 1955.

CLASS 26

SN 676,918. Thermometer Corporation of America, Springfield, Ohio. Filed Nov. 18, 1954.

TCA

For Instruments for Indicating and Controlling Temperature and/or Humidity.
Use since Sept. 30, 1954, on thermometers.

SN 676,981. Kurt Orban Company, Inc., New York, N. Y. Filed Nov. 19, 1954.

TREBEL

For Static and Dynamic Balancing Machines to Determine the Necessary Correction with Regard to Magnitude and Direction to Remove Unbalance from a Work-Piece Intended for Rotary Use, Such as, Wheels, Armatures, Turbine Rotors, Crank Shafts, Propeller Shafts, Separator Bowls, and the Like; Universal Testing Machines; Pulsator Units for Attachment to Universal Testing Machines to Render Them Suitable for Fatigue Tests; Impact Testing Machines; Electronic Contact Gauges for Precision Strain Tests; Hardness Testers for Determining Rockwell, Brinell, and Vickers Hardness; and Replacement Parts Therefor.
Use since Apr. 27, 1951.

SN 676,986. Firma Marabuwerke A. G., Wurttemberg, Germany. Filed Nov. 19, 1954.

MARABU

For Set Squares, Triangles, Drawing Boards, Draftsmans' Curves, Drawing Scales and Rulers of Wood, Steel and Plastic Protractors, Clinographs, Pantographs, Perspective Lineands, T-Squares, Rulers, Protractors and Compasses for Blackboards, Apparatus for Exposing Blue Prints to Light, Drawing Tables, and Parallel Ruler Attachments.
Use since 1920.

SN 681,387. Danfoss Ved Mads Clausen, Nordborg, Als, Denmark. Filed Jan. 6, 1955.

Danfoss

Applicant claims ownership of Danish Reg. No. 1429/52, dated Oct. 11, 1952.
For Evaporator Thermostats, Room and Brine Thermostats, Thermostats for Low Pressure Cabinets, Dial Thermometers, Liquid Indicators for Refrigerators, Pressure Measuring Gauges, Boiler Thermometers and Thermostats, Safety Thermostats, Thermostats for Temperatures Above 100° C., Air-duct Thermostats.

SN 685,756. Frank Ray, Detroit, Mich. Filed Apr. 18, 1955.

SAFETY DOME CONTACT LENSES

The words "Trade Mark" and "Contact Lenses" are disclaimed apart from the mark as shown.
For Fluidless Contact Lenses With Size Ranges of the Human Cornea.
Use since Dec. 15, 1954.

SN 689,808. Cities Service Research and Development Company, New York, N. Y., to Bailey Meter Company, Cleveland, Ohio. Filed June 20, 1955. Sec. 2(f).

HEAT PROVER

Applicant claims ownership of Reg. No. 351,021.
For Gas Analyzing Apparatus.
Use since on or about July 6, 1934.

SN 689,906. Claire R. Wainwright, d. b. a. Telonic Industries, Indianapolis, Ind. Filed June 20, 1955.

Telonic

For Sweep Generators, Marker Oscillators, Color Television Test Instruments, Color Bar Generators, and White Dot Generators.
Use since Mar. 20, 1953.

SN 693,235. De Jur-Amsco Corporation, Long Island City, N. Y. Filed Aug. 17, 1955.

Spectator

For Motion Picture Cameras and Projectors.
Use since Aug. 1, 1955.

SN 693,261. Richard E. Nash, d. b. a. Hsan Manufacturing, Noroton, Conn. Filed Aug. 17, 1955.

Tel-Cam

For Camera Adapters.
Use since May 16, 1955.

SN 693,299. American Optical Company, Southbridge, Mass. Filed Aug. 18, 1955.

COLMASCOPE

Applicant claims ownership of Reg. No. 86,567.
For Instruments for Detecting Strain in Lenses.
Use since on or about Dec. 4, 1911.

SN 693,701. Reynolds Electrical and Engineering Co., Inc., Santa Fe, N. Mex. Filed Aug. 25, 1955.

"FOLDED SCALE"

For Aerial Survey Scintillation Counters.
Use since June 3, 1955.

SN 693,756. The Lufkin Rule Company, Saginaw, Mich. Filed Aug. 26, 1955.

Scriber-Matic

For Scribers.
Use since July 29, 1955.

SN 693,841. Nuclear Consultants, Inc., d. b. a. NRD Instrument Company, St. Louis, Mo. Filed Aug. 29, 1955.

NRD

For Scintillation Counting Equipment Including Detector Units, Crystal Attachments, Shields, Sample Mounts, Sample Changers, Detector Mounts and Shields; Integrated Scintillation Counter Units Including Arm-Mounted Detectors and Circuitry Cabinets: Scalers and Count Rate Meters for Electrical Pulses; and Accessories for Storing, Handling and Evaluating Radioactive Isotopes Including Radioactive Reference Sources, Holders for Standard Sources, Therapy Cups, Container Opening Tools, Remote Pipettes and Timers.
Use since Dec. 1, 1954.

SN 693,933. Porto-Clinic Instruments, Inc., New York, N. Y. Filed Aug. 30, 1955.

SAF-T-RATER

For Driver Reaction and Safety Evaluation Equipment.
Use since Apr. 19, 1954.

SN 694,000. Newport Optical Manufacturing Co., Inc., Brooklyn, N. Y. Filed Aug. 31, 1955. Sec. 2(f).

NEWPORT

For Spectacle Frames.
Use since 1925.

SN 694,462. M. Wiseman & Co., Ltd., London, England. Filed Sept. 9, 1955.

mantor

Applicant claims ownership of British Reg. No. 556,868, dated Jan. 4, 1935.
For Spectacle Frames.

CLASS 27

SN 685,615. Schild et Cie, Societe Anonyme, La Chaux-de-Fonds, Switzerland. Filed Apr. 15, 1955.

SCHILD

Applicant claims ownership of Swiss Reg. No. 153,668, dated Nov. 9, 1954.
For Watches, Watch Movements, Cases of Watches, Dials, Parts of Watches, Containers of Watches, Packings for Watches, Electrical Watches, Alarm Clocks, Clocks, Pendulum Clocks, and Pendulums.

SN 688,930. Hunsperger et Cie, Montres Teriam, La Chaux-de-Fonds, Switzerland. Filed June 6, 1955.

TERIAM

Applicant claims ownership of Swiss Reg. No. 118,072, dated Nov. 14, 1946.
For Watches, Watch Movements, Parts of Watches.

SN 692,920. General Time Corporation, New York, N. Y. Filed Aug. 12, 1955.

ZOBO

For Watches.
Use since in the year 1938.

SN 692,921. General Time Corporation, New York, N. Y. Filed Aug. 12, 1955.

JUDGE

For Watches.
Use since Dec. 22, 1938.

SN 692,922. General Time Corporation, New York, N. Y. Filed Aug. 12, 1955.

SCOTTY

For Watches.
Use since Oct. 22, 1945.

SN 692,924. General Time Corporation, New York, N. Y. Filed Aug. 12, 1955.

KIM

For Watches.
Use since Aug. 6, 1953.

SN 692,925. General Time Corporation, New York, N. Y. Filed Aug. 12, 1955.

MASCOT

For Clocks.
Use since June 23, 1954.

SN 692,926. General Time Corporation, New York, N. Y. Filed Aug. 12, 1955.

PRIM

For Clocks.
Use since Aug. 27, 1954.

SN 692,927. General Time Corporation, New York, N. Y. Filed Aug. 12, 1955.

ZEST

For Clocks.
Use since Jan. 12, 1955.

SN 692,928. General Time Corporation, New York, N. Y. Filed Aug. 12, 1955.

SPICE

For Clocks.
Use since Jan. 12, 1955.

SN 692,929. General Time Corporation, New York, N. Y. Filed Aug. 12, 1955.

PIPER

For Clocks.
Use since Jan. 12, 1955.

SN 692,930. General Time Corporation, New York, N. Y. Filed Aug. 12, 1955.

DASH

For Clocks.
Use since June 20, 1955.

SN 692,932. General Time Corporation, New York, N. Y. Filed Aug. 12, 1955.

TOWN CRIER

For Clocks.
Use since June 20, 1955.

CLASS 28

SN 679,151. Goldstein-Gerson Co., Inc., New York, N. Y. Filed Dec. 30, 1954.

Fiancée

For Finger Rings, Earrings, Pendants, Brooches, Bracelets, and Watch Bracelets.
Use since Nov. 1, 1954.

SN 680,063. A. Blumstein, Inc., New York, N. Y. Filed Jan. 18, 1955.

LUCIEN PICCARD ORIGINAL

No claim is made to the word "Original" apart from the mark as shown. Applicant claims ownership of Reg. Nos. 512,049 and 553,011.
For Jewelry Including Costume Jewelry—Namely, Cuff Links, Buckles, Pins, Earrings, Rings, Chains, Pendants, Bracelets, Tie Bars or Clasps, Neck Chains of Precious Metal With or Without Precious or Semi Precious Stones.
Use since January 1947.

SN 680,460. Flex-Let Corporation, East Providence, R. I. Filed Jan. 25, 1955.

Vogue

For Expansion Type Watch Bracelets.
Use since Jan. 4, 1954.

SN 683,079. Alpha Omega Fraternity, Baltimore, Md. Filed Feb. 28, 1955. Sec. 2(f).

ΑΩ

Applicant claims ownership of Reg. No. 236,712.
For Fraternity Pins, Lapel Buttons, Tie Clasps, Charms, Finger Rings and Belt Buckles, All Made of or Plated With Precious Metals and for Jewelry and Precious Metal Wear.
Use since December 1908.

SN 686,366. Henkel & Grosse K. G., Pforzheim, Germany. Filed Apr. 27, 1955.



For Bracelets, Necklets, Pins, Brooches, Earclips, and Cufflinks.
Use since January 1953.

SN 689,135. Hakusui Ivory Company Incorporated, Naka-ku, Yokohama, Japan. Filed June 8, 1955.



Applicant claims ownership of Japanese Reg. Nos. 440,922 and 446,277, dated Feb. 25, 1954, and June 12, 1954, respectively.
For Ivory Products—Namely, Brooches, Earrings, Cuff Links, Bracelets, Necklaces, and Necktie Clips.

SN 692,222. Hy Frackman, d. b. a. Alsan Manufacturing Company, New York, N. Y. Filed Aug. 1, 1955.

LIFEMATES

For Finger Rings.
Use since May 1955.

SN 692,361. Supreme Council, Mystic Order Veiled Prophets of the Enchanted Realm, Chicago, Ill. Filed Aug. 2, 1955.



For Lapel Buttons and Lapel Pins, All Made Wholly or Partly of or Plated With Precious Metal.
Use since Feb. 12, 1955.

SN 693,317. Francet-Paisseau, Inc., New York, N. Y. Filed Aug. 18, 1955.

MYRICA

For Simulated Pearl Costume Jewelry—Namely, Necklaces, Bracelets, Earrings, Pins, Broaches, Pendants and Hair Ornaments.
Use since Apr. 28, 1955.

SN 693,782. The Stieff Company, Baltimore, Md. Filed Aug. 26, 1955.

SILVER SURF

For Hollow Ware and Flat-Ware, All Made of Sterling Silver or Solid Gold.
Use since July 21, 1955.

SN 693,912. The International Silver Company, Meriden, Conn. Filed Aug. 30, 1955.

Silver Rhythm

For Sterling Silver Flatware—Namely, Knives, Forks, and Spoons for Table Use.
Use since in or about March 1953.

SN 694,142. Lasko Strap Company, New York, N. Y. Filed Sept. 2, 1955.

Turn'n'Edge

For Wrist-Watch Straps.
Use since on or about Aug. 16, 1955.

SN 694,158. Rogers, Lunt & Bowlen Company, Greenfield, Mass. Filed Sept. 2, 1955.

STARFIRE

For Sterling Silver Flatware—Namely, Knives, Forks, Spoons, Butter Spreaders, Butter Picks, Cake Separators, Ladles, Sugar Tongs, Servers, and Carving Sets.
Use since June 29, 1955.

SN 694,334. Rogers, Lunt & Bowlen Company, Greenfield, Mass. Filed Sept. 7, 1955.



Applicant claims ownership of Reg. No. 167,680.
For Sterling Silver Tableware—Namely, Knives, Forks, Spoons, Ladles, Cups, and Bowls.
Use since September 1939.

SN 694,361. Hy Frackman, d. b. a. Alsan Manufacturing Company, New York, N. Y. Filed Sept. 8, 1955.

HEAVENLY ZODIAC

For Wedding Rings.
Use since Aug. 5, 1955.

SN 694,482. Feature Ring Co., Inc., New York, N. Y. Filed Sept. 12, 1955.

FOREVER DARLING

Applicant claims ownership of Reg. No. 586,133.
For Finger Rings and Finger Ring Mountings.
Use since on or about Sept. 8, 1955.

SN 694,653. Lyles-Van-De Grazier Company, Inc., Dallas, Tex. Filed Sept. 14, 1955.

BLUE BONNET

For Diamonds, Diamond Rings, and 14K Wedding Rings.
Use since on or about Mar. 15, 1955.

SN 694,697. Seraphina Taylor Cohen, Atlanta, Ga. Filed Sept. 15, 1955.

choo-zee

For Costume Jewelry, Consisting of Assorted Types and Colors of Earrings, Broaches, Bracelets, Necklaces, Beads, Etc.
Use since Aug. 30, 1953.

SN 695,343. Phylchris Corporation, Providence, R. I. Filed Sept. 26, 1955.

Catamore

For Religious Jewelry—Namely, Rosaries, Crucifixes, and Religious Medals.
Use since Sept. 20, 1955.

SN 695,646. Esteban Rodriguez, New York, N. Y. Filed Sept. 30, 1955.

Freda

For Gold Neck Chains, Medallions, Ladies' and Men's Rings, Earrings, Neck Chains, Charms, and Bracelets.
Use since on or about Apr. 1, 1955.

CLASS 29

SN 686,752. The Leshner Corporation, Hamilton, Ohio. Filed May 3, 1955.

Si-o-mahc

For Soft, Pliant, Leather-Like Wash, Dust, Cleaning and Polishing Cloths.
Use since on or about Sept. 14, 1954.

SN 687,974. Nursmatic Corporation, Chicago, Ill. Filed May 20, 1955.

Nursmatic

Applicant claims ownership of Reg. No. 551,744.
For Baby Bottle Brushes.
Use since Apr. 29, 1955.

SN 690,511. The Visking Corporation, Richmond, Va. Filed June 29, 1955.

miracloth

Applicant claims ownership of Reg. No. 527,249.
For Nonwoven Cloth in Cut-to-Size Sheets, Flat and Folded, for Cleaning, Polishing, Wiping, and Like Purposes.
Use since Oct. 25, 1950.

SN 694,951. W. A. Ballinger & Co., San Francisco, Calif. Filed Sept. 20, 1955.

MADRONA

For Mops and Mop Heads.
Use since Aug. 3, 1954, on mop heads.

SN 695,203. Androl Industries, Inc., New York, N. Y. Filed Sept. 23, 1955.

BETTY RELAXO-RUB

For Bathing Sponge With Hand Straps.
Use since June 28, 1955.

SN 695,251. Star Brush Manufacturing Co., Inc., Boston, Mass. Filed Sept. 23, 1955.

Moulin Rouge

For Paint Brushes and Applicators, and Artists' Brushes.
Use since Aug. 15, 1955.

SN 695,644. John Ritzenthaler, New York, N. Y. Filed Sept. 30, 1955.

VEL-CHAMEE

For Polishing and Cleaning Cloths.
Use since Dec. 31, 1915.

CLASS 30

SN 693,382. The Hope Chest Company, Inc., Minneapolis, Minn. Filed Aug. 19, 1955.

Hope Chest

For China Dishes.
Use since Aug. 1, 1955.

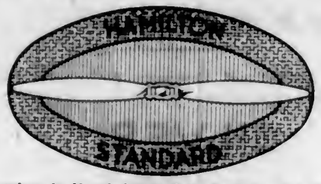
CLASS 31

SN 677,961. Keller Tool Company, Grand Haven, Mich., to Gardner-Denver Company. Filed Dec. 8, 1954. Sec. 2(f).

KELLER

Applicant claims ownership of Reg. No. 420,677.
For Airline Filters.
Use since Dec. 9, 1940.

SN 680,557. United Aircraft Corporation, Windsor Locks, Conn. Filed Jan. 26, 1955.



The drawing is lined for red and gold. No claim is made to the words "Hamilton" and "Standard" apart from the mark as shown. Applicant claims ownership of Reg. Nos. 225,307, 542,404, and others.
For Air-Cycle Refrigeration Units for Aircraft Cabins or Other Compartments, and Parts Thereof.
Use since about July 21, 1950.

SN 682,141. Gibson Refrigerator Company, Greenville, Mich. Filed Feb. 23, 1955.

MARKET-MASTER

For Refrigerators and Freezers.
Use since Mar. 1, 1954.

SN 684,014. Bell & Gossett Company, Morton Grove, Ill. Filed Mar. 23, 1955.



For Refrigerating Apparatus—Namely, Condensers, Evaporators or Chillers, Compressors and Controls, Liquid Receivers, Combination Heat Exchangers and Liquid Receivers, and Water Coolers.
Use since Oct. 26, 1948.

SN 684,018. Ben-Hur Mfg. Company, Milwaukee, Wis. Filed Mar. 23, 1955.

Supreme

For Home and Farm Freezers and Refrigerators.
Use since Jan. 17, 1955.

SN 684,087. Advanced Engineering Corporation, Milwaukee, Wis. Filed Mar. 24, 1955. Sec. 2(f).

GEBHARDT'S

For Forced Air Cooling Apparatus Utilized in Chill Rooms and the Like for Meat.
Use since Oct. 17, 1944.

SN 685,784. Uniflow Manufacturing Company, Erie, Pa. Filed Apr. 18, 1955.

KOLD-BRAET

Applicant claims ownership of Reg. Nos. 364,647 and 560,346.
For Bottle Coolers, Walk-In Cooling Cabinets, Electric and Other Refrigerating Apparatus, Combined Cooling and Beverage Dispensing Cabinets, Air Filters for Use in Conjunction With Beverage Dispensing Apparatus and Ice Cube Making Cabinets.
Use since Sept. 9, 1953.

CLASS 32

SN 675,781. GMC Sleeper Products, Inc., New York, N. Y. Filed Nov. 1, 1954.

GMC

The drawing is lined for red.
For Bedsprings, Mattresses, and Bedsteads.
Use since on or about Feb. 1, 1951.

SN 676,766. Suttle Equipment Company, Chicago, Ill. Filed Nov. 16, 1954.

HANDI-BOOTH

For Phone Booths.
Use since Oct. 8, 1954.

SN 677,240. Peg-Pals Creations, Chicago, Ill. Filed Nov. 24, 1954.

PEG-PALS

For Fanciful Wall Storage Racks of the Removable Hook Type, Designed for Children.
Use since Sept. 25, 1954.

SN 683,480. Burgess-Manning Company, Libertyville, Ill. Filed Mar. 15, 1955.

ACOUSTI-ROOM

Applicant claims ownership of Reg. Nos. 411,791 and 548,900.
For Acoustically Treated Rooms for the Isolation of Noise.
Use since Feb. 23, 1955.

SN 684,096. Anker-Werke A. G., Bielefeld, Germany. Filed Mar. 24, 1955.

Anker

Priority is claimed under Sec. 44(d). German application filed Nov. 22, 1954; Reg. No. 668,981, dated Dec. 30, 1954.
For Sewing Machine Furniture Including Cabinets Sold Separately.

SN 688,500. Breneman-Hartshorn, Inc., Cincinnati, Ohio. Filed May 31, 1955. Sec. 2(f).

Fyrban

For Cloth Window Shades Affixed to Rollers.
Use since Sept. 16, 1947.

SN 691,966. Max E. Shore, New York, N. Y. Filed July 26, 1955.

Shorewood

For Furniture—Namely, Sofas, Beds, and Bedroom and Living Room Tables.
Use since June 1952.

SN 692,165. Joseph Schwartz, d. b. a. Schwartz Mattress Co., Brooklyn, N. Y. Filed July 29, 1955.

AIRFLOW

For Mattresses.
Use since June 1929.

SN 692,376. Braquette, Inc., Lenox, Mass. Filed Aug. 3, 1955.

Quick FRAME

Exclusive rights to the word "Frame" are disclaimed apart from the mark as shown.
For Picture Frames.
Use since July 5, 1955.

SN 692,379. The Campro Sales Company, Canton, Ohio. Filed Aug. 3, 1955.

JIFFY Secretary

For Cabinets With Drawers for Holding Small Articles.
Use since July 1, 1955.

SN 692,522. J & J Tool and Machine Co., Chicago, Ill. Filed Aug. 5, 1955.

BÉLA

Applicant claims ownership of Reg. Nos. 526,550, 526,551, and 529,256.
For Folding Chairs; Public Seating and School Furniture.
Use since December 1954.

SN 692,744. The Sherwin-Williams Company, Cleveland, Ohio. Filed Aug. 9, 1955.

CASCADE OF COLOR

For Display Rack for Paint Color Chips.
Use since Nov. 1, 1954.

SN 692,904. Columbia Steel Equipment Company, Philadelphia, Pa. Filed Aug. 12, 1955.

CUSTOM-AIRE

For Steel Office Furniture.
Use since July 15, 1955.

SN 692,912. L. A. Darling Company, Bronson, Mich. Filed Aug. 12, 1955.

viz-u-bilt

For Merchandise Display Fixtures.
Use since July 8, 1955.

SN 692,940. Hunter Douglas Corporation, New York, N. Y. Filed Aug. 12, 1955.

Audio-Visual

For Venetian Blinds.
Use since June 28, 1955.

CLASS 34

SN 689,433. Surface Combustion Corporation, Toledo, Ohio. Filed June 13, 1955.

FORC-AIRE

For Furnaces.
Use since Nov. 15, 1951.

SN 689,435. Surface Combustion Corporation, Toledo, Ohio. Filed June 13, 1955.

MAX

For Gas Generators.
Use since July 31, 1951.

CLASS 36

SN 686,161. Decca Records, Inc., New York, N. Y. Filed Apr. 25, 1955.

a New World of Sound... DECCA Records

The term "Records" is disclaimed apart from the mark as shown.
For Mechanically Grooved Phonograph Record.
Use since January 1955.

CLASS 37

SN 685,568. Driseal Company, Boston, Mass. Filed Apr. 15, 1955. Sec. 2(f).

DRISEAL

For Partially Gummed Paper Bands, Strips, or Tapes for Use as Wrappers for Shirts, Stacks of Bills, Envelopes, or Other Merchandise.
Use since Apr. 16, 1934.

SN 688,473. The Spencer Rubber Products Company, Manchester, Conn. Filed May 27, 1955.

"O" BANDS

For Rubber Bands.
Use since on or about Jan. 19, 1955.

SN 688,669. The Reynolds & Reynolds Company, Dayton, Ohio. Filed June 1, 1955.

Post-Rite

For Accounting Forms.
Use since Apr. 29, 1955.

CLASS 38

SN 684,309. Charlotte B. Howell, d. b. a. The Falcon's Wing Press, Indian Hills, Colo. Filed Mar. 28, 1955.



For Books.
Use since Dec. 1, 1954.

SN 685,481. The Reuben H. Donnelley Corporation, Chicago, Ill. Filed Apr. 14, 1955. Sec. 2(f).

Sports Age

For Periodical Publication, Published Monthly.
Use since September 1938.

SN 685,631. American Medical Association, Chicago, Ill. Filed Apr. 18, 1955. Sec. 2(f).

today's health

Applicant claims ownership of Reg. No. 549,349.
For Monthly Magazine.
Use since Feb. 23, 1950.

SN 685,757. The Register and Tribune Company, Des Moines, Iowa. Filed Apr. 18, 1955.

THE COUNTRY PARSON

For Newspaper and Magazine Cartoon Feature.
Use since Apr. 4, 1955.

SN 685,894. Emery Industries, Inc., Cincinnati, Ohio. Filed Apr. 20, 1955.

SANITONE SLANTS

For Publication Issued Periodically.
Use since Sept. 25, 1943.

SN 685,936. Vital Publications, Inc., New York, N. Y. Filed Apr. 20, 1955.



The lining in the drawing indicates the color red, but color is not an essential feature of the mark.
For Booklets of Cartoons Published in a Series at Irregular Intervals.
Use since Mar. 24, 1955.

SN 686,034. H. S. Crocker Company, Inc., d. b. a. Mirart, San Bruno, Calif. Filed Apr. 22, 1955.

Vacationland USA

No claim is made to the letters USA apart from the mark as shown.
For Calendars Published Annually.
Use since August 1954.

SN 686,370. The Institute of Radio Engineers, Inc., New York, N. Y. Filed Apr. 27, 1955.

IRE Transactions

Applicant claims ownership of Reg. No. 575,590.
For Publications Issued From Time to Time.
Use since Mar. 10, 1955.

SN 686,772. Permacel Tape Corporation, North Brunswick Township, N. J. Filed May 3, 1955.

PERMACEL

Applicant claims ownership of Reg. No. 597,932.
For Publications Issued at Irregular Intervals.
Use since Sept. 30, 1953.

SN 687,142. Tribune Company, Chicago, Ill. Filed May 9, 1955.

Little Fooler

For Title for a Newspaper Word Game.
Use since Jan. 23, 1955.

SN 688,018. The Catholic Press Union, Inc., Cleveland, Ohio. Filed May 23, 1955. Sec. 2(f).

CATHOLIC CHRONICLE

For Newspaper.
Use since Nov. 23, 1934.

SN 688,019. The Catholic Press Union, Inc., Cleveland, Ohio. Filed May 23, 1955. Sec. 2(f).

THE CATHOLIC UNIVERSE BULLETIN

For Newspaper.
Use since May 28, 1926.

SN 688,020. The Catholic Press Union, Inc., Cleveland, Ohio. Filed May 23, 1955. Sec. 2(f).

CATHOLIC EXPONENT

For Newspaper.
Use since Jan. 7, 1944.

SN 688,089. Southern Livestock Journal Co., Macon, Ga. Filed May 23, 1955. Sec. 2(f).

SOUTHERN LIVESTOCK Journal

For Magazine Published Monthly.
Use since June 1946.

SN 688,247. Klekhaefer Corporation, Cedarburg, Wis. Filed May 25, 1955.

the MERCURY manager

For Periodical Published Monthly.
Use since Apr. 1, 1948.

SN 688,542. Klekhaefer Corporation, Cedarburg, Wis. Filed May 31, 1955.

BOAT HOUSE BULLETIN

Applicant disclaims the word "Bulletin."
For Publications Issued at Irregular Intervals of Boat Test Data.
Use since May 25, 1954.

SN 691,788. The Scranton Times, Scranton, Pa. Filed July 22, 1955.

NEXT WEEK

For Weekly Newspaper Supplement.
Use since June 25, 1955.

SN 693,718. The Evangelical Lutheran Church, Minneapolis, Minn. Filed Aug. 15, 1955.

LUTHERAN HERALD

For Periodical Publication.
Use since Jan. 6, 1931.

CLASS 39

SN 637,494. Francis H. Montmarquet, d. b. a. The O-C Manufacturing Co., Little Falls, N. J. Filed Nov. 1, 1952.

OLYMPIC

Applicant claims ownership of Reg. Nos. 91,588, 287,322, and 289,935.
For Bathing Suit Belts, Combined Flannel and Elastic Sweatbands, Bathing Girdles, Polo Shirts, Sweat Pants, Sweat Shirts and Athletic Shirts and Running Pants for Men, Women and Children.
Use since March 1912 on running pants.

SN 685,696. Louis Goldsmith, Inc., Philadelphia, Pa. Filed Apr. 18, 1955.

STYLED BY KEITH CARLETON

No claim is made to the exclusive right to the words "Styled by" apart from the mark as shown.
For Men's Clothing—Namely, Coats, Trousers, and Vests.
Use since Jan. 15, 1954.

SN 685,729. Mavest, Inc., New York, N. Y. Filed Apr. 18, 1955.

Tweedvale

For Men's Sport Coats.
Use since Jan. 27, 1955.

SN 686,076. Marguerite C. Ohman, New York, N. Y. Filed Apr. 22, 1955.



Applicant disclaims the representation of the goods apart from the mark as shown.
For Gloves.
Use since Mar. 17, 1955.

SN 686,102. Jerome I. Schackne, d. b. a. Varsity House, Brooklyn, N. Y. Filed Apr. 22, 1955.



For Athletic and Club Uniforms, Sweaters, Jackets, Hats, T-Shirts and Sweat Shirts.
Use since Jan. 2, 1955.

SN 686,944. The Associated Merchandising Corporation, New York, N. Y. Filed May 6, 1955.

Fashion Flex

For Women's Hosiery.
Use since Feb. 4, 1955.

SN 686,990. Montgomery Knitting Mill, Summerville, Ga. Filed May 6, 1955.

MERSHEEN

For Hosiery.
Use since Mar. 23, 1955.

SN 687,136. Smart Maid Coat & Suit Corp., New York, N. Y. Filed May 9, 1955. Sec. 2(f).

Lady Barrington

Applicant claims ownership of Reg. No. 412,484.
For Girls' Coats.
Use since December 1943.

SN 687,180. The Camp Shop, Inc., New York, N. Y. Filed May 10, 1955.



For School and Camp Clothing for Boys and Girls, Young Men and Young Women—Namely, Shirts, Shorts, Slacks, Jackets, Sweaters, Sweat Pants, Sweatshirts, Raincoats, Johdpurs, Riding Shirts, Leotards, Jumpers, Gym Suits, Dance Sandals, Swim Suits, Swimming Caps, Swim Trunks, Beachrobes, Bathing Shoes, Shoes, Sneakers, Moccasins, Saddle Shoes, Rubber Shoes, Socks, Briefs, Panties, Vests, Bathrobes, Pajamas, Hats, Caps, Belts, Handkerchiefs, Ponchos, Suits, Skirts, Dresses, and Gloves.
Use since Mar. 11, 1955.

SN 687,319. Paris Handkerchief Co. Inc., New York, N. Y. Filed May 11, 1955.



For Handkerchiefs.
Use since February 1950.

SN 687,391. Joseph Mann, Boston, Mass. Filed May 12, 1955.

Lady Fashion

Applicant claims ownership of Reg. No. 321,164.
For Ladies' Hosiery.
Use since January 1933.

SN 687,594. Haggar Company, Dallas, Tex. Filed May 16, 1955.

LUXURY-SHEEN

For Men's and Boys' Trousers.
Use since November 1953.

SN 687,832. Tee-Tops Ltd., New York, N. Y. Filed May 18, 1955.

TEE-TOPS LTD.

For Women's and Girls' Sweaters, Polo Shirts, Scarves, Blouses, Jackets, Shorts, Bathing Suits, Dresses, Halters, and Hosiery.
Use since Dec. 20, 1951.

SN 687,932. J. Freezer & Son, Inc., New York, N. Y. Filed May 20, 1955.

Traymore

For Shirts for Men and Boys.
Use since August 1932. Subj. to Intf. with SN 688,027.

SN 687,935. Gaylene's, Inc., Boston, Mass. Filed May 20, 1955.



For Women's, Misses', and Juniors' Dresses.
Use since Dec. 1, 1954.

SN 688,027. The Enro Shirt Company, Inc., Louisville, Ky. Filed May 23, 1955.

TRAYMORE

For Men's Dress, Negligee, and Sport Shirts and Pajamas.
Use since 1933. Subj. to Intf. with SN 687,932.

SN 688,083. J. Schoeneman, Inc., Baltimore, Md. Filed May 23, 1955. Sec. 2(f).

Stanton

Applicant claims ownership of Reg. No. 325,576.
For Coats, Vests, Trousers, Knickerbockers, Top Coats, and Overcoats for Men, Youths, and Boys.
Use since July 1929.

SN 688,183. Popular Merchandise Company, Inc., Fairlawn, N. J. Filed May 24, 1955.

Popular Club

For Men's Shirts.
Use since October 1953.

SN 688,211. Blue Bell, Inc., Greensboro, N. C. Filed May 25, 1955.

FRONTIER MARSHAL

For Boys' Western Style Dungarees and Jackets.
Use since Apr. 27, 1955.

SN 688,268. Savatex Facing Company, Philadelphia, Pa. Filed May 25, 1955.

Prom Plaid

For Men's Dinner Jackets.
Use since Mar. 1, 1955.

SN 688,290. L. Abelson & Son, Inc., New York, N. Y. Filed May 26, 1955.

Lambuddy

For Boys' Outer Garments, Including Overcoats, Legging Sets, Snow Suits, and Surcoats.
Use since Mar. 30, 1955.

SN 688,922. Fox River Valley Knitting Company, Appleton, Wis. Filed June 6, 1955.

Bowl Brand

The word "Brand" is disclaimed apart from the mark as shown.
For Men's, Women's, Children's, and Misses' Knitted Socks, Stockings, and Mittens.
Use since Apr. 19, 1955.

SN 689,303. Pogrelis-Meyer, Inc., St. Louis, Mo. Filed June 10, 1955.

PM Pretty Maid

For Women's Outer Garments—Namely, Skirts, Dresses, Pants, and Blouses.
Use since Aug. 1, 1945.
Subj. to Intf. with SN 681,479.

SN 691,789. Selberling Latex Products, Inc., New Bremen, Ohio. Filed July 22, 1955. Sec. 2(f).

FIRMGRIP GLOVES

Applicant claims ownership of Reg. No. 327,594.
For Rubber Gloves.
Use since Aug. 6, 1935.

SN 692,720. S. H. Kress and Company, New York, N. Y. Filed Aug. 9, 1955.

Nancy

Applicant claims ownership of Reg. No. 106,774.
For Hosiery.
Use since June 12, 1915.

SN 693,110. Acme Boot Manufacturing Company, Inc., Clarksville, Tenn. Filed Aug. 16, 1955. Sec. 2(f).

Dodge City

Applicant claims ownership of Reg. No. 524,013.
For Cowboy Boots.
Use since May 1, 1946.

SN 693,157. A. J. Leff Co., Chicago, Ill. Filed Aug. 16, 1955.

Lady Linda

For Hosiery.
Use since Aug. 15, 1950.

SN 693,473. The May Department Stores Company, New York, N. Y. Filed Aug. 22, 1955.

Polly Pepper

Applicant claims ownership of Reg. No. 375,292.
For Ladies' Coats, Suits, Blouses, Hosiery, Slips, Panties, Briefs, Undershirts, Brassieres, and Shoes Made of Leather and Fabrics and Combinations Thereof.
Use since Sept. 9, 1939.

SN 693,508. Vanity Fair Mills, Inc., Reading, Pa. Filed Aug. 22, 1955.

VANOPAQUE

For Underwear, Lingerie, and Sleeping Garments for Women and Misses—Namely, Vests, Panties, Briefs, Chemises, Bandeaux or Brassieres, Slips, Petticoats, Lounging Robes, Lounging Pajamas, Negligees, Bed Jackets, Nightgowns, and Sleeping Pajamas.
Use since July 26, 1955.

SN 697,518. Wilkes Hosiery Mills Company, North Wilkesboro, N. C. Filed Nov. 17, 1955.

SIR BRUCE

For Men's and Boys' Hosiery.
Use since Sept. 16, 1947.

CLASS 40

SN 687,229. Style-Fuse Corp., New York, N. Y. Filed May 10, 1955.

Style-Fuse

For Fabrics Motifs, That Is Designs of Various Shapes and Colors Made of Fabric Consisting of Synthetic and/or Natural Fibers and Adapted To Be Secured to Garments, Fabrics and the Like.
Use since Sept. 17, 1954.

SN 688,118. American Hard Rubber Company, New York, N. Y. Filed May 24, 1955.

ACE STYLIST

Applicant claims ownership of Reg. Nos. 131,017 and 186,379.
For Combs for Dressing, Ornamenting, and Cleaning the Hair.
Use since October 1948.

SN 693,086. William Prym, Inc., Dayville, Conn. Filed Aug. 15, 1955.

SLIM

For Buckle Parts To Be Covered With Some Suitable Material and Assembled Without the Use of Tools.
Use since July 21, 1955.

SN 694,097. Lawrence Schiff Silk Mills, New York, N. Y. Filed Sept. 1, 1955. Sec. 2(f).

"Ever-Bound"

Applicant claims ownership of Reg. No. 515,833.
For Ribbons Used for Seam Binding of Wearing Apparel.
Use since Jan. 8, 1948.

CLASS 42

SN 687,843. Artel Textile Co., Inc., New York, N. Y. Filed May 19, 1955.

Permalife

For Window Curtains and Textile Fabrics Made of Cotton, Synthetic Fibers, and Mixtures Thereof.
Use since May 2, 1955.

SN 687,844. Artel Textile Co., Inc., New York, N. Y. Filed May 19, 1955.

Fibreglaze

For Window Curtains and Textile Fabrics Made of Cotton, Synthetic Fibers and Mixtures Thereof.
Use since May 2, 1955.

SN 687,914. Bates Manufacturing Company, Lewiston, Maine. Filed May 20, 1955.

BATES LABORATORY TESTED BLT

The words "Laboratory Tested" are disclaimed by applicant apart from the mark as shown. Applicant claims ownership of Reg. Nos. 86,025, 243,510, and others.
For Fabric Piece Goods of Cotton, Synthetic and Mixtures of Cotton and Synthetic Fibres.
Use since Sept. 21, 1945.

SN 688,501. Breneman-Hartshorn, Inc., Cincinnati, Ohio. Filed May 31, 1955. Sec. 2(f).

Fyrban

For Shade Cloth.
Use since Sept. 16, 1947.

SN 688,583. Saks & Company, New York, N. Y. Filed May 31, 1955.

PESANTE

Applicant claims ownership of Reg. No. 560,959.
For Silk Piece Goods.
Use since Aug. 2, 1951.

SN 688,633. Fablok Mills, Inc., Irvington, N. J. Filed June 1, 1955.



The drawing is not lined to indicate color but is lined to reproduce lines in the mark.
For Textile Fabrics in Netted Form Made of Natural or Synthetic Fibers.
Use since Aug. 3, 1953.

SN 688,649. Lubbock Floor Covering Company, Lubbock, Tex. Filed June 1, 1955.



For Textile Rugs and Carpets.
Use since Jan. 31, 1953.

SN 688,759. Abe Sandhaus, New York, N. Y. Filed June 2, 1955.



No claim is made to the representation of the goods except as shown. Applicant claims ownership of Reg. No. 506,534.
For Woven Fabrics of Cotton Yarn, or Synthetic Fibers and/or Mixtures Thereof, and Are Known as Piques, Voiles, Chambrays, Broadcloths, and Corduroys Adapted for Underwear, Dresses, Blouses, Skirts, Sportswear, and Housecoats.
Use since Aug. 26, 1943.

SN 688,813. J. P. Frank & Co., Inc., New York, N. Y. Filed June 3, 1955.



For Plastic Film, Sold as Piece Goods, for Making Into Shower Curtains, Raincoats, and the Like.
Use since Oct. 21, 1953.

SN 689,396. M. Lowenstein & Sons, Inc., New York, N. Y. Filed June 13, 1955.

Designer's Corner

For Cotton and/or Rayon Piece Goods and/or Combinations Thereof.
Use since May 25, 1955.

SN 690,360. Bartmann & Bixer, Inc., New York, N. Y. Filed June 28, 1955.

"HANLOOM"

For Window Curtains.
Use since June 1, 1955.

SN 690,436. Dan River Mills, Incorporated, Danville, Va. Filed June 29, 1955.

BOXWOOD

For Cotton Fabric in the Piece.
Use since May 17, 1955.

SN 690,503. J. P. Stevens & Co., Inc., New York, N. Y. Filed June 29, 1955.

Canby

For Cotton Piece Goods.
Use since Sept. 9, 1954.

SN 690,504. J. P. Stevens & Co., Inc., New York, N. Y. Filed June 29, 1955.

Katya

For Cotton Piece Goods.
Use since Sept. 9, 1954.

SN 690,505. J. P. Stevens & Co., Inc., New York, N. Y. Filed June 29, 1955.

Maggiore

For Cotton Piece Goods.
Use since Sept. 1, 1954.

SN 690,507. J. P. Stevens & Co., Inc., New York, N. Y. Filed June 29, 1955.

SNUG'-N-DRY

For Cotton Piece Goods.
Use since May 9, 1955.

SN 691,501. Munsingwear, Inc., Minneapolis, Minn. Filed July 18, 1955.

PowAire

For Knitted Fabric Made by Applicant of Natural and Synthetic Yarns With Added Elastic Yarns.
Use since June 21, 1954.

SN 691,553. Dan River Mills, Incorporated, Danville, Va. Filed July 19, 1955.

TICKER

For Cotton Fabric in the Piece.
Use since June 13, 1955.

SN 692,048. D. B. Fuller & Co., Inc., New York, N. Y. Filed July 28, 1955.

TOWNTONE

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since June 14, 1954.

SN 692,049. D. B. Fuller & Co., Inc., New York, N. Y. Filed July 28, 1955.

DRYNAFLASH

For Textile Fabrics in the Piece of Cotton, Rayon, Synthetic Fibres, and Mixtures Thereof.
Use since May 19, 1954.

CLASS 43

SN 688,399. The Dobeckmun Company, Cleveland, Ohio. Filed May 27, 1955.

LUREX-MM

Applicant claims ownership of Reg. No. 418,535.
For Yarn and Thread Comprised in Whole or in Part of a Film Coated With a Metal Deposit Imparting a Metallic Appearance To Said Film Which Has Been Slit to a Narrow Width.
Use since May 13, 1955.

SN 688,901. Brunswick Worsted Mills, Inc., Moosup, Conn. Filed June 6, 1955.

Nylamb

For Knitting Yarns.
Use since July 16, 1954.

SN 697,202. Universal Winding Company, Cranston, R. I. Filed Oct. 26, 1955.

SUPERLOFT

For Stretch Yarn Manufactured From Thermoplastic Yarn.
Use since Sept. 2, 1955.

SN 697,304. Madison Throwing Company, Inc., Madison, N. C. Filed Oct. 28, 1955.

MADILON

For Nylon Yarns.
Use since May 28, 1955.

SN 697,410. Max Pollack & Company, Inc., New York, N. Y. Filed Oct. 31, 1955.

COUPRAY

Applicant claims ownership of Reg. Nos. 507,448 and 361,356.
For Sewing Threads.
Use since Aug. 6, 1937.

CLASS 44

SN 674,020. Tracerlab, Inc., Boston, Mass. Filed Sept. 29, 1954.

Tracer-Scanner

Applicant claims ownership of Reg. No. 430,970.
For Diagnostic Apparatus—Namely, an Automatic Electro-Mechanical Device for Scanning Body Areas in Which an Administered Radioactive Isotope Has Localized and Producing a Chart Showing the Distribution of the Isotope in the Scanned Area.
Use since on or about Apr. 15, 1954.

SN 674,130. Beavers Dental Products Limited, Morrisburg, Ontario, Canada. Filed Oct. 1, 1954.

JET

For Dental Burs.
Use since on or about Mar. 26, 1954.

SN 677,510. M. C. D. Manufacturing Co., Bronx, N. Y. Filed Nov. 30, 1954.

Giraffe

For Bottle Holders Including Infant's Bottle Holders.
Use since June 24, 1954.

SN 678,851. Meryl J. Edwards, Shreveport, La. Filed Dec. 23, 1954.

MYO-FLEX

For Electronic Neurotherapy Apparatus Used To Produce a Pattern and Frequency of Electronic Waves To Be Received by the Nervous System.
Use since Jan. 1, 1952.

SN 681,913. Fa. Bengen & Co. GmbH., Hannover, Germany. Filed Feb. 18, 1955.

MEDIFIL BENGEN

For Surgical Sutures.
Use since June 1953.

SN 681,914. Fa. Bengen & Co. GmbH., Hannover, Germany. Filed Feb. 18, 1955.

VETAFIL BENGEN

For Surgical Sutures.
Use since June 1953.

SN 682,925. Hychex Products, Chicago, Ill. Filed Mar. 7, 1955.

VERTEX

For Pessaries.
Use since on or about Nov. 28, 1951.

SN 690,807. Richard W. Craig, Albuquerque, N. Mex. Filed July 6, 1955.

"SAVE-A-LIFE"

For Emergency First-Aid Kit Designed To Prevent Death From Bleeding, Shock, and Exposure After an Automobile Accident.
Use since Dec. 16, 1954.

SN 691,042. Isofoam Corporation, New York, N. Y. Filed July 11, 1955.

"ISOFOAM"

For Radiolucent X-Ray Positioning Blocks.
Use since Feb. 7, 1955.

SN 694,495. The May Department Stores Company, St. Louis, Mo. Filed Sept. 12, 1955.

ARCROSS

For Hot Water Bottles, Fountain Syringes, and Douche Bags, Feminine Hygienic Syringes, Ice Bags, Clinical Thermometers (Oral and Rectal), Sanitary Belts, Nylon Elastic Hosiery, Electric Hair Dryers, and Electric Heating Pads.
Use since Jan. 1, 1953.

CLASS 45

SN 688,408. Giroux Company, Inc., Brooklyn, N. Y. Filed May 27, 1955.

QUIN-TESSENCE

For Concentrate for Making Quinine Water, and for Use as a Mixer.
Use since May 12, 1955.

SN 689,139. Edward S. Kellogg, d. b. a. Edward S. Kellogg Company, Los Angeles, Calif. Filed June 8, 1955.

Lucky·Pop

For Preparation in Tablet Form for Making Soft Drinks.
Use since Jan. 3, 1955.

CLASS 46

SN 631,842. American Syrup & Preserving Co., Nashville, Tenn. Filed June 27, 1952.

Delicious Delited

The drawing is lined for red and green.
For Jams, Jellies, and Fruit Preserves.
Use since November 1948; and since prior to Jan. 1, 1912, as to "Delited."

SN 647,996. Cargill, Incorporated, Minneapolis, Minn. Filed June 1, 1953. Sec. 2(f) as to "Cargill."

Cargill CREATIVE PROCESSING

The drawing is lined to simulate a metal surface, but no claim is made to color. Applicant claims ownership of Reg. Nos. 592,086, 592,334, and 592,942.
For Meal Remaining From Oil Bearing Seeds for Use in Livestock and Poultry Feeds, and Prepared Feeds for Livestock, Poultry, Pets and Fur Bearing Animals Including Rabbits and Foxes.
Use since Sept. 10, 1952, on prepared feeds; and since May 2, 1941, as to "Cargill" on feeds.

SN 659,640. Mississippi Valley Grain & Feed Company, Muscatine, Iowa. Filed Jan. 18, 1954. Sec. 2(f).

KENT

For Animal and Poultry Feeds and Feed Supplements—Namely, Cattle Feeds, Baby Beef Supplements, Hog Feeds, Poultry Feeds, Rabbit Feeds.
Use since in about 1927.

SN 662,547. Lay Packing Co., Inc., Knoxville, Tenn. Filed Mar. 12, 1954. Sec. 2(f).

Lay's

Applicant claims ownership of Reg. Nos. 205,916 and 315,061.
For Smoked Hams, Bacon, Pork Shoulders, Bolognas, Wieners, and Fresh Eggs.
Use since 1934.

SN 662,550. Lay Packing Co., Inc., Knoxville, Tenn. Filed Mar. 12, 1954.

Sunset

For Sliced Bacon.
Use since 1929.

SN 669,596. Ray H. Bast, d. b. a. Ray H. Bast Food Co., Richfield, Wash. Filed July 8, 1954.

Braves

For Candy Bars
Use since June 1, 1954.

SN 670,131. Super Valu Stores, Inc., Hopkins, Minn. Filed July 16, 1954.

SUPER VALU

Applicant claims ownership of Reg. No. 340,502.
For Fresh Fruits and Vegetables, Cheese, Fresh Eggs, Unshelled Nuts, Salted and Unsalted Nutmeats, Bulk Baked Beans, Potato Salads, Coleslaw, and Fresh Poultry.
Use since August 1942.

SN 674,275. Old Rock Distilling Company, Joplin, Mo. Filed Oct. 4, 1954.

HI·MO·LASS

For Stock Feed.
Use since July 29, 1954.

SN 676,122. MacAndrews & Forbes Company, Camden, N. J. Filed Nov. 5, 1954.

BVB

For Pure Licorice Root Extract in Mass Form, Used Primarily as a Confection Component.
Use since January 1926.

SN 676,496. Grobben Bros., Inc., Milwaukee, Wis. Filed Nov. 12, 1954. Sec. 2(f) as to "Moore's."

MOORE'S

For Tartar Sauce and Fresh and Frozen Fish and Shell Fish.
Use since on or about Oct. 14, 1954; and on or about Aug. 15, 1948, as to "Moore's."

SN 677,567. Ida May Chocolates, Inc., Hewlett, N. Y. Filed Dec. 1, 1954.

Sta-Trim

For Low Calorie, Low Salt Content Candies.
Use since on or about May 4, 1954.

SN 677,698. Colonial Provision Co., Inc., Boston, Mass. Filed Dec. 3, 1954.

MASTER SMOKED

No registration rights are claimed for the word "Smoked" apart from the mark shown on the drawing. Applicant claims ownership of Reg. Nos. 307,830, 545,134, and 597,188.
For Smoked Meats—Namely, Hams, Boneless Hams, Pork Shoulder Picnics, Pork Shoulder Butts, Bacon, and Skinless Frankfurts.
Use since Sept. 16, 1929.

SN 678,438. D'Arrigo Bros. Co. of California, San Jose, Calif. Filed Dec. 16, 1954.

ANDY BOY

The portrait shown is that of Andrew D'Arrigo, whose consent is of record. Applicant claims ownership of Reg. Nos. 271,918, 378,786, and others.
For Fresh Fruits, Fresh Vegetables, and Frozen Vegetables.
Use since October 1929 on fresh vegetables.

SN 680,192. Givaudan Flavors Inc., New York, N. Y. Filed Jan. 20, 1955.

PERMASEAL

For Flavor Crystals Suitable for Use in Food Products.
Use since Dec. 1, 1954.

SN 680,272. The Hekman-Meeter Company, Grand Rapids, Mich. Filed Jan. 21, 1955.

H HOLLAND

No claim is made for the word "Holland" except in the combination shown.
For Canned Fish.
Use since Nov. 29, 1954.

SN 680,644. Ringers' Cacao- en Chocoladefabrieken N. V., Rotterdam, Netherlands. Filed Dec. 6, 1954.

SORBICHOC

Applicant claims ownership of Dutch Reg. No. 119,564, dated Sept. 15, 1954.
For Baking Chocolate, Sweet Chocolate, and Candy, Chocolate-Powder.

SN 681,082. Fromageries Bel la Vache Qui Rit, Paris, Seine, France. Filed Feb. 4, 1955.

BONBEL

Applicant claims ownership of French Reg. No. 425,022, dated Jan. 12, 1953.
For Dairy Products—Namely, Milk, Fluid or Evaporated in Cans, Cheeses, and Butter.

SN 681,953. Thornton Canning Company, Lodi, Calif. Filed Feb. 18, 1955.

Lido

For Canned Tomato Paste and Canned Concentrated Apricot Pulp.
Use since October 1936.

SN 682,013. R. H. Hardin, d. b. a. Hardin & Co., Gadsden, Ala. Filed Feb. 21, 1955. Sec. 2(f).

BAMA BISCUIT

For Flour.
Use since July 1, 1949.

SN 682,222. A. B. C. Packing Company, Homestead, Fla. Filed Feb. 24, 1955.

BAC

For Potatoes in Their Natural State.
Use since Mar. 1, 1954.

SN 682,635. General Mills, Inc., Wilmington, Del. Filed Mar. 2, 1955.

SUREMASH

Applicant claims ownership of Reg. Nos. 402,060, 596,055, and others.
For Concentrate Feed for Mixing With Grain for Poultry.
Use since Jan. 6, 1953.

SN 682,636. General Mills, Inc., Wilmington, Del. Filed Mar. 2, 1955.

SURECREEP

Applicant claims ownership of Reg. Nos. 402,060, 596,055, and others.
For Feed for Calves.
Use since Jan. 6, 1953.

SN 682,763. Steinfeld's Products Company, Portland, Oreg. Filed Mar. 3, 1955.



For Pickles.
Use since Dec. 30, 1954.

SN 683,093. Best Feeds and Farms Supplies, Inc., Washington, Pa. Filed Mar. 9, 1955.

....TRY MY OWN!

MUGGS

For Dog Food.
Use since Feb. 18, 1955.

SN 683,465. R. B. Davis Company, Hoboken, N. J. Filed Mar. 18, 1955. Sec. 2(f).

Swel

Applicant claims ownership of Reg. No. 544,664.
For Frosting and Fudge Mixes.
Use since Mar. 2, 1948.

SN 683,508. The John Hilberg & Sons Co., Cincinnati, Ohio. Filed Mar. 15, 1955.



For Wieners.
Use since Feb. 14, 1955.

SN 683,640. Winn & Lovett Grocery Company, Jacksonville, Fla. Filed Mar. 16, 1955.

DIXIE DARLING

Applicant claims ownership of Reg. No. 519,172.
For Bakery Products—Namely, Buns and Rolls.
Use since Oct. 29, 1949.

SN 683,641. Winn & Lovett Grocery Company, Jacksonville, Fla. Filed Mar. 16, 1955.



For Rice.
Use since January 1950.

SN 683,642. Winn & Lovett Grocery Company, Jacksonville, Fla. Filed Mar. 16, 1955.

Dixie Darling

For Mayonnaise, Salad Dressing, Peanut Butter, and Sandwich Spread.
Use since Sept. 27, 1954.

SN 683,643. Winn & Lovett Grocery Company, Jacksonville, Fla. Filed Mar. 16, 1955.

DIXIE DARLING

Applicant claims ownership of Reg. No. 519,172.
For Cooking Oil, Ready to Bake Biscuits, and Bread.
Use since Dec. 20, 1948, on rye bread.

SN 683,654. Avoset Company, San Francisco, Calif. Filed Mar. 17, 1955.



Applicant claims ownership of Reg. No. 565,493.
For Sterilized Cream Packed Under Pressure.
Use since Dec. 29, 1949.

SN 683,667. Felix Costa and Sons, Stockton, Calif. Filed Mar. 17, 1955.

TOP-PAK

For Fresh Grapes.
Use since Sept. 15, 1954.

SN 683,870. Foremost Dairies, Inc., d. b. a. Golden State Company, Ltd., San Francisco, Calif. Filed Mar. 21, 1955.



Applicant claims ownership of Reg. Nos. 113,861, 275,086, and 573,240.
For Market Fluid Milk.
Use since Feb. 16, 1953.

SN 683,952. A. B. C. Packing Company, Homestead, Fla. Filed Mar. 22, 1955.



For Potatoes in Their Natural State.
Use since Feb. 17, 1955.

SN 684,133. International Milling Company, Minneapolis, Minn. Filed Mar. 24, 1955.

GOLDEN PRANCER

Applicant claims ownership of Reg. No. 392,639.
For Wheat Flour.
Use since at least as early as July 26, 1941.

SN 684,134. International Milling Company, Minneapolis, Minn. Filed Mar. 24, 1955.

ROYAL PRANCER

Applicant claims ownership of Reg. No. 392,639.
For Wheat Flour.
Use since at least as early as Apr. 30, 1941.

SN 684,169. Swift & Company, Chicago, Ill. Filed Mar. 24, 1955.

Vintage

For Cheese.
Use since in about 1937.

SN 684,326. The J. Chas. McCullough Seed Company, d. b. a. Cincinnati Horticultural Products Co., Cincinnati, Ohio. Filed Mar. 28, 1955.

SONGSTER

For Wild Bird Seed.
Use since Feb. 2, 1955.

SN 684,390. Bison Canning Company, Inc., Angola, N. Y. Filed Mar. 29, 1955.

PINEHURST

For Canned Berries, Canned Vegetables, Canned Tomato Juice.
Use since in the year 1928.

SN 684,409. Harold C. Emerson, d. b. a. West Jersey Farm Products Co., Bridgeton, N. J. Filed Mar. 29, 1955.

VALLEY STREAM

For Frozen Vegetables and Canned Vegetables.
Use since June 1952.

SN 684,410. Harold C. Emerson, d. b. a. West Jersey Farm Products Co., Bridgeton, N. J. Filed Mar. 29, 1955.

SONGSTRESS

Applicant claims ownership of Reg. No. 405,530.
For Frozen Vegetables and Canned Vegetables.
Use since July 1, 1943.

SN 684,478. Sevilla Olive Packing Co. Inc., Tampa, Fla. Filed Mar. 29, 1955.

Marti

For Bottled and Canned Olives, Bottled Maraschino Cherries, Bottled and Canned Edible Olive Oil.
Use since in the year 1937.

SN 685,030. Knouse Foods Cooperative, Inc., Peach Glen, Pa. Filed Apr. 6, 1955.

Lucky Leaf

Applicant claims ownership of Reg. Nos. 314,224 and 429,605.
For Canned Fruits, Apple Butter, Apple Sauce, Tomato Juice, Fruit Pie Filling, Jelly, Apple Juice, Apple Cider, and Apple Vinegar.
Use since July 1, 1949, on canned cherries.

SN 685,040. The Nestlé Company, Inc., White Plains, N. Y. Filed Apr. 6, 1955.

TOLL HOUSE

Applicant claims ownership of Reg. Nos. 378,301 and 380,734.
For Cookie Mix.
Use since Mar. 4, 1955.

SN 685,779. Swift & Company, d. b. a. Arnold Bros. Division of Swift & Company, Chicago, Ill. Filed Apr. 18, 1955. Sec. 2(f).

Arnold's

For Meat—Namely, Bacon, Beef Tongue, Ham, Head Cheese, Smoked Daisy, Lunch Meat, Luncheon Specialty, Wieners, Hog Casing Links and Sausage Products, Specifically Pork Sausage, Link Sausage, Liver Sausage, Dry Smoked Sausage, Braunschweiger, Peperoni and Bologna Sausage, and Meat Loaf Products Specifically Veal Loaf, P & P Loaf, Olive Loaf, Pepper Loaf, Old Fashioned Loaf, Beef Loaf, Salad Loaf, Savory Loaf, and Jellied Pork Tongue Loaf; and for Lard.
Use since at least about 1926 on bacon, ham, sausage products, and lard; and since at least about 1912 as to "Arnold" on the same products.

SN 685,780. Swift & Company, Chicago, Ill. Filed Apr. 18, 1955.

Southern Belle

For Butter.
Use since about 1924.

SN 686,049. D. Ghirardelli Co., San Francisco, Calif. Filed Apr. 22, 1955.

FLICK-ETTES

Applicant claims ownership of Reg. No. 106,424.
For Small Chocolate Pellets Suitable for Use as Candy or as a Cooking Ingredient.
Use since Mar. 16, 1955.

SN 686,234. Swift & Company, Chicago, Ill. Filed Apr. 25, 1955.

Olex

For Shortening Made of Vegetable Oils or Animal Fats or Combinations Thereof.
Use since in about 1934.

SN 686,462. K. D. Kosher Food Products, Inc., Bronx, N. Y. Filed Apr. 28, 1955.

KING DAVID

For Sausages.
Use since Mar. 14, 1955.

SN 686,516. The South Coast Corporation, New Orleans, La. Filed May 5, 1955.

WHITE GOLD

Applicant claims ownership of Reg. Nos. 323,849 and 515,985.
For Pure Cane Sugar.
Use since Oct. 1, 1954.

SN 686,543. The Grand Union Company, East Paterson, N. J. Filed Apr. 29, 1955. Sec. 2(f).

Freshpak

Applicant claims ownership of Reg. No. 547,372.
For Bottled Grape Juice.
Use since 1941.

SN 686,658. Kellogg Company, Battle Creek, Mich. Filed May 2, 1955.

SPECIAL K

The letter "K" is a facsimile of the initial letter of the surname of W. K. Kellogg, applicant's founder, in his handwriting.
For Ready-to-Eat Cereal Food.
Use since Mar. 7, 1955.

SN 686,834. The Larsen Company, Green Bay, Wis. Filed May 4, 1955. Sec. 2(f).

freshtaste

Applicant claims ownership of Reg. Nos. 371,910 and 583,802.
For Canned Vegetables.
Use since Apr. 17, 1938.

SN 686,911. International Foodcraft Corporation, Brooklyn, N. Y. Filed May 5, 1955.

PANOSPRAY

For Film De-Panning Compound Containing a Vegetable Oleaginous Base for Coating Receptacles and Pans in Which Food Products Are Prepared—Namely, Bakery Goods, Bread, Cake, Cookies, or the Like, Not an Ingredient of the Baked Goods.
Use since January 1953.

SN 687,050. Challenge Cream & Butter Association, Los Angeles, Calif. Filed May 9, 1955.

Family Freeze

For Ice Milk.
Use since Apr. 21, 1955.

SN 687,216. Ore-Ida Potato Products, Inc., Ontario, Oreg. Filed May 10, 1955.

"GOLDEN FRIES"

For French Fried Potatoes.
Use since Feb. 15, 1955.

SN 687,370. Garden of the Setting Sun, Inc., d. b. a. Garden of the Setting Sun, Mecca, Calif. Filed May 12, 1955.

Edna Cast's

The mark consists of the facsimile signature of Edna Cast, whose consent to register is of record.
For Fresh Dates and Date Products—Namely, Diced; Pitted; Stuffed; Crushed; Concentrate; Puree; Topping; Date Nut Pralines; Date Chutney; Date Nut Spread; Date Butter; Date Loaf; Date Plum Pudding; Brandy Sauce; Brandied Date Nuts; Pitted Dates in Brandy and Date Nibs, a Product Consisting of Dates, Nuts, Candied Fruit, and Coconut.
Use since in the year 1939 on fresh dates.

SN 687,445. William Battaglia, d. b. a. Battaglia Packing Co., San Jose, Calif. Filed May 13, 1955. Sec. 2(f).

BATT

Applicant claims ownership of Reg. No. 535,112.
For Canned Prunes.
Use since Dec. 20, 1948.

SN 687,548. Di Giorgio Fruit Corporation, San Francisco, Calif. Filed May 16, 1955.

YUBA ORCHARD

For Fresh Fruits—Namely, Pears.
Use since about 1901.

SN 687,628. Redi-Food Co., Inc., New York, N. Y. Filed May 16, 1955.

"21-4-99"

For Frozen, Uncooked Shrimps.
Use since Jan. 12, 1954.

SN 688,832. Martin Produce, Inc., Salinas, Calif. Filed June 3, 1955.

ALL ABOARD

For Fresh Vegetables.
Use since April 1949.

SN 688,833. Martin Produce, Inc., Salinas, Calif. Filed June 3, 1955.

SAFE ARRIVAL

For Fresh Vegetables.
Use since April 1949.

SN 688,834. Martin Produce, Inc., Salinas, Calif. Filed June 3, 1955.

MAXIM

The drawing is lined for red.
For Fresh Vegetables.
Use since April 1949.

CLASS 47

SN 682,847. American Wine Growers, d. b. a. National Wine Company, Seattle, Wash. Filed Mar. 7, 1955.



The lining on the drawing represents lining on the specimens, and does not represent color. Applicant claims ownership of Reg. No. 545,809.
For Still Wines.
Use since on or about Sept. 1, 1953.

CLASS 49

SN 679,203. Booth's Distilleries Limited, London, England. Filed Dec. 31, 1954.



The drawing is lined for gold and red but color is not claimed as an essential feature of the mark. Applicant claims ownership of Reg. Nos. 103,413, 310,967, and others; and the mark shown in Reg. No. 98,245.
For Gin.
Use since 1934.

SN 679,204. Booth's Distilleries Limited, London, England. Filed Dec. 31, 1954.



The drawing is lined for blue, gold, and red, but color is not claimed as an essential feature of the mark. No exclusive claim is made to the words "Old Tom" and "London" apart

from the mark as shown. Applicant claims ownership of Reg. Nos. 103,413, 310,967, and others; and the mark shown in Reg. No. 98,245; and of British Reg. No. 723,190, dated Oct. 28, 1953.
For Old Tom Gin.

SN 688,951. Melrose Distillers, Inc., New York, N. Y. Filed June 6, 1955. Sec. 2(f).

WINCHESTER

Applicant claims ownership of Reg. No. 325,006.
For Whiskey.
Use since Dec. 1, 1933.

SN 689,338. Bohemian Distributing Company, d. b. a. International Products Company, Los Angeles, Calif. Filed June 13, 1955.

MOUNTAIN SPRINGS

For Whiskey.
Use since Apr. 2, 1934.

CLASS 50

SN 684,708. Robert J. Wingfield and Merle A. Oleson, d. b. a. Project-A Mural Co., Seattle, Wash. Filed Mar. 31, 1955.

"PROJECT-A" MURAL

For Artists' Kit, Comprising Materials and Instructions for Painting a Mural.
Use since Jan. 31, 1955.

SN 685,635. Carolina Industrial Plastics Corporation, Mount Airy, N. C. Filed Apr. 18, 1955.



The mark comprises the letters "CIP."
For Plastic Welting.
Use since Jan. 1, 1954.

SN 687,423. F. L. Tarantino & Sons, Quakertown, Pa. Filed May 12, 1955.



For Granite Tombstones and Memorials.
Use since Dec. 1, 1954.

SN 687,494. Polymid Plastic Products Co., Linwood, Mich. Filed May 13, 1955.

Ty Pak

For Decorative Bells Used for Christmas Tree Decorations, Cake Decoration, and Corsages.
Use since August 1952.

SN 688,343. Mission Industries, National City, Calif. Filed May 26, 1955.

Tie Valet

For Hangers for Neckwear.
Use since Sept. 24, 1953.

SN 688,344. Mission Industries, National City, Calif. Filed May 26, 1955.

Tie Traveler

For Hangers for Neckwear.
Use since Jan. 21, 1955.

SN 689,179. Standard Packaging Corporation, Chicago, Ill. Filed June 8, 1955.

STANSEAL-G

Applicant claims ownership of Reg. Nos. 423,747 and 426,552.
For Liners for Receptacle Closures.
Use since Jan. 5, 1955.

SN 692,075. The Paine & Williams Company, Cleveland, Ohio. Filed July 28, 1955.

Crestmat

For Flexible Rubber Mats.
Use since Mar. 19, 1955.

SN 692,754. Whitin Machine Works, Whitinsville, Mass. Filed Aug. 9, 1955.



For Direct Image Paper Plates Used in Offset Duplicating.
Use since June 9, 1955.

SN 697,890. The American Automobile Association (Incorporated), Washington, D. C. Filed Nov. 23, 1955.



Applicant claims ownership of Reg. Nos. 303,862 and 344,376.
For Signs, Mechanical or Structural, Non-Electric Traffic and Street Signs, Theft Plate Signs, Badges, Medals, Pins, and Buttons Made of Base Metal, Membership Emblems, Automobile Door Initial Emblems and Flags.
Use since 1910.

CLASS 51

SN 657,587. Woll-Waescherei und Kammerei in Dohren bei Hannover, Hannover, Germany. Filed Dec. 7, 1953.

GOLDEN FLEECE

Applicant claims ownership of German Reg. No. 445,643, dated May 30, 1932, and U. S. Reg. No. 300,171.
For Wool Fat for Use in Making Cosmetics and Toilet Preparations; Cosmetic Face Creams, Face-Powders, Pomades, and Hair Rinses.

SN 658,429. Woll-Waescherei und Kammerei in Dohren bei Hannover, Hannover, Germany. Filed Dec. 22, 1953.



Applicant claims ownership of German Reg. No. 31,364, dated June 11, 1898.
For Wool Fat for Use in Making Cosmetics and Toilet Preparations; Cosmetic Face Creams, Face-Powders, Pomades, and Hair Rinses.

SN 665,823. Richard Hudnut, New York, N. Y. Filed May 6, 1954.

"Young Folks"

For Cologne.
Use since Apr. 28, 1954.

SN 673,810. Clairol Incorporated, New York, N. Y. Filed Sept. 27, 1954. Sec. 2(f).

remov-zit

For Hair Tint and/or Hair Dye Remover.
Use since Jan. 1, 1933.

SN 677,045. Max Factor & Co., Los Angeles, Calif. Filed Nov. 22, 1954.

HI-FI

For Hand Lotion, Cologne, Perfume, Deodorant Cologne, Face Powder, Cake Make-Up, Liquid Make-Up, After-Shave Lotion, Lipstick, Rouge, Creme Make-Up, Cleansing Cream, Make-Up Foundation, Hair Lotion, Nail Polish, and Liquid Nail Polish Remover.
Use since Nov. 10, 1954.

SN 684,151. Pro-Capa Products, Inc., Brooklyn, N. Y. Filed Mar. 24, 1955.

PRO-SHAVE

For Brushless Shaving Cream.
Use since Nov. 15, 1953.

SN 686,404. Valmor Products Co., Chicago, Ill. Filed Apr. 27, 1955.

MAGIC BROWN

For Complexion Cream.
Use since Jan. 3, 1933.

SN 686,405. Valmor Products Co., Chicago, Ill. Filed Apr. 27, 1955.

MAGIC PINK

For Complexion Cream.
Use since Dec. 18, 1930.

SN 690,116. Approved Products, Inc., d. b. a. Windsor Chemical Laboratories, Philadelphia, Pa. Filed June 24, 1955.

Medex

For Skin Cream Having Multiple Uses as a Shaving Cream; for Chapped Skin, Sunburn, Windburn, Prickly Heat, Perspiring and Aching Feet, and Also as an Antiseptic for Minor Cuts, Scratches, and Skin Irritations of External Origin.
Use since 1931.

CLASS 52

SN 668,891. Candy & Company, Inc., Chicago, Ill. Filed June 25, 1954.

BRIGHT BEAUTY

For Liquid Floor Cleaner and Heavy Duty Paste Cleaner.
Use since Mar. 29, 1929.

SN 669,673. The Cudahy Packing Company, Omaha, Nebr., to Purex Corporation, Ltd., Los Angeles, Calif. Filed July 9, 1954. Sec. 2(f).

DUTCH

Applicant claims ownership of Reg. Nos. 50,697, 512,555, and others.
For Powdered Household Cleanser.
Use since on or about Jan. 5, 1953; and since on or about Jan. 1, 1905, in the form "Old Dutch."

SN 673,269. The Dow Chemical Company, Midland, Mich.

CHLOROTHENE

Filed Sept. 16, 1954.
For Chlorohydrocarbon Solvent Used Mainly for Cleaning Metals.
Use since Aug. 25, 1954.

SN 673,341. Clairol Incorporated, Stamford, Conn. Filed Sept. 17, 1954.



Applicant claims ownership of Reg. Nos. 351,053, 582,677, and others.
For Shampoos and Shampoo Tinting Preparations for the Hair.
Use since on or about August 1932.

SN 677,924. Associated Brands, Inc., Brooklyn, N. Y. Filed Dec. 8, 1954.



Applicant claims ownership of Reg. No. 503,466.
For Shampoo.
Use since Oct. 1, 1939.

SN 679,163. Indianapolis Paint and Color Company, Indianapolis, Ind. Filed Dec. 30, 1954.

NU-DA

Applicant claims ownership of Reg. No. 335,134.
For Paint Cleaners, Cleaning Polish, Paint Remover, and Wax Base Floor Cleaner.
Use since on or about Jan. 15, 1931, on paint cleaner.

SN 684,784. Saint Cornelius the Centurion Chapel of Valley Forge Military Academy, Wayne, Pa. Filed Apr. 20, 1955.

La Plus

Applicant claims ownership of Reg. Nos. 319,539, 566,524, and others.
For Shampoo and Toilet Soap.
Use since Feb. 10, 1955.

SN 687,322. Reliable Rust Remover Co., Chicago, Ill. Filed May 11, 1955.

3 R's

For Liquid Rust Remover and Metal Cleaner.
Use since Mar. 14, 1955.

SN 687,614. Monsanto Chemical Company, St. Louis, Mo. Filed May 16, 1955.

all

Applicant claims ownership of Reg. Nos. 506,398 and 528,159.
For Detergents for Use in Automatic Washing Machines and for General Washing and Cleaning Purposes.
Use since Sept. 30, 1946.

SN 687,986. Floyd L. Reneau, d. b. a. Zedo Compound Co., Riverbank, Calif. Filed May 20, 1955.

ZEDO

For Printing Press Wash-Up Compound.
Use since Apr. 30, 1955.

SN 690,767. Tesco Chemicals, Inc., Atlanta, Ga. Filed July 5, 1955.

HAND-AID

For Hand Dishwashing Detergent.
Use since on or about 1945.

SERVICE MARKS

CLASS 100

SN 673,509. Robert B. Denton, d. b. a. Bob Denton, Los Angeles, Calif. Filed Sept. 21, 1954.

Bob Denton

"Bob Denton" is the name by which applicant is commonly known.
For General Public Relation Services and Consultation, Planning and Counselling Services Rendered in Connection With Advertising and Sales Promotion of Goods and Services of Others.
Use since Nov. 1, 1946.

CLASS 101

SN 657,938. Local Trademarks, Inc., New York, N. Y. Filed Dec. 14, 1953.



For Advertising Services—Namely, the Formulation and Preparation of Advertising Copy and Literature.
Use since Dec. 4, 1953.

SN 657,942. Local Trademarks, Inc., New York, N. Y. Filed Dec. 14, 1953.



For Advertising Services—Namely, the Formulation and Preparation of Advertising Copy and Literature.
Use since Dec. 4, 1953.

SN 657,943. Local Trademarks, Inc., New York, N. Y. Filed Dec. 14, 1953.



For Advertising Services—Namely, the Formulation and Preparation of Advertising Copy and Literature.
Use since Dec. 4, 1953.

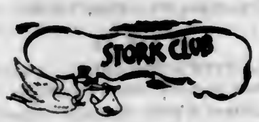
SN 675,047. The Antique Automobile Club of America, Inc., Philadelphia, Pa. Filed Oct. 19, 1954. Sec. 2(f).



For Advertising, and Collecting and Disseminating Information Concerning Rare Old and Classical Automobiles, Their Parts and Accessories, Through Publications and Other Means Principally to Its Members and Other Interested Parties.
Use since July 15, 1939.

CLASS 102

SN 673,423. Seymour L. Blow, New York, N. Y. Filed Sept. 20, 1954.



For Promoting Special Type Savings Accounts in Financial Institutions by Means of Establishing, Developing, and Maintaining a Plan in the Banks or Other Financial Institutions for Regular Deposits.
Use since August 1954.

SN 683,872. The Franklin Life Insurance Company, Springfield, Ill. Filed Mar. 21, 1955.



The Friendly FRANKLIN LIFE INSURANCE COMPANY

"The Franklin Life Insurance Company" constitutes applicant's tradename and no registration rights are claimed for said name.
For Underwriting of Life Insurance.
Use since Feb. 2, 1942.

CLASS 103

SN 680,864. Cameron Iron Works, Inc., Houston, Tex. Filed Feb. 1, 1955.

CAMAIR

For Repair and Overhaul Service for Aircraft.
Use since October 1953.

CLASS 105

SN 668,596. Skipsaktieselskapet Nordheim, Skipsaktieselskapet Vito, Skipsaktieselskapet Kirkoy, and Skipsaktieselskapet Skagerak, Oslo, Norway, and Trans-Atlantic Steamship Company, Ltd., Gothenburg, Sweden. Filed June 21, 1954.



For Transportation of Cargo and Passengers by Steamship.
Use since on and after Sept. 7, 1947.

SN 679,671. Matson Navigation Company, San Francisco, Calif. Filed Jan. 10, 1955. Sec. 2(f).

Matson Lines

The word "Lines" is disclaimed apart from the mark.
For Water Transportation of Cargo and Passengers.
Use since December 1945.

SN 687,941. The Herts Corporation, Philadelphia, Pa. Filed May 20, 1955. Sec. 2(f).

ROBINSON AUTO RENTAL

Applicant disclaims any exclusive right to the words "Auto Rental" apart from the mark as shown.
For Leasing of Automobiles.
Use since 1934.

SN 697,804. Lakewood Storage, Inc., Lakewood, Ohio. Filed Nov. 7, 1955. Sec. 2(f).

"Across the Hall-Across the Continent"

Applicant claims ownership of Reg. No. 223,693.
For Moving and Shipping of Household and Industrial Goods by Motor Vehicle.
Use since June 1, 1923.

CLASS 106

SN 660,678. Arthur Tickle Engineering Works, Inc., Brooklyn, N. Y. Filed Feb. 5, 1954.

Alumibond

For Coating Iron, Steel and the Like With Aluminum and for Bonding Aluminum and Its Alloys to Iron and Steel and Their Alloys in Accordance With the Customer's Specifications, and Furnishing Engineering and Consultation Services in Connection Therewith.
Use since September 1950.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

620,164. GARDEN SPOT AND DESIGN. The Lenoir-Quinn Corporation. SN 662,936. Pub. 11–8–55. Filed 3–19–54.

620,165. KALIGRAIN. United States Plywood Corporation. SN 670,444. Pub. 11–8–55. Filed 7–22–54.

620,166. NYLOPLEX AND DESIGN. Fillauer Surgical Supplies, Inc. SN 671,562. Pub. 11–8–55. Filed 8–12–54.

620,167. PARADISE. N. V. Bloembollenkwekerij en -Handel G. C. van Meeuwen & Zonen. SN 679,028. Pub. 11–8–55. Filed 12–27–54.

620,168. MEAT PACKER. Frank Elias, d. b. a. Rosamar Farm and as Rosamar Breeding Farm. SN 680,376. Pub. 11–8–55. Filed 1–24–55.

620,169. NOMEN. John R. Evans & Co. SN 680,741. Pub. 11–8–55. Filed 1–31–55.

620,170. GEORGETOWN. Pittsburgh Consolidation Coal Company. SN 681,294. Pub. 11–8–55. Filed 2–8–55.

620,171. SAN LUIS. Barzen Company. SN 681,402. Pub. 11–8–55. Filed 2–10–55.

620,172. CHINOOK. Barzen Company. SN 681,403. Pub. 11–8–55. Filed 2–10–55.

620,173. PRODUCERS. Producers Seed Company. SN 681,544. Pub. 11–8–55. Filed 2–11–55.

620,174. BRUSHIE. Allied Kid Company. SN 681,734. Pub. 11–8–55. Filed 2–16–55.

620,175. FANTOM. Aktiebolaget Wallco. SN 683,012. Pub. 11–8–55. Filed 3–8–55.

CLASS 2

620,176. D. E. "DOC" OLSEN'S SE-LECT-A-FLY AND DESIGN. Eugene De Loy Olsen, d. b. a. Doc Olsen Fishing Tackle Co. SN 670,967. Pub. 11–8–55. Filed 8–2–54.

620,177. POLYVIAL. Olympic Plastics Company, Inc. SN 676,523. Pub. 11–8–55. Filed 11–12–54.

620,178. LITTLE BROWN CHEST. Hemp and Company, Incorporated. SN 677,220. Pub. 11–8–55. Filed 11–24–54.

620,179. ROLL-O-TUBE. Calumet & Hecla, Inc. SN 683,845. Pub. 11–8–55. Filed 3–21–55.

CLASS 4

620,180. BRIGHT BEAUTY. Candy & Company, Inc. SN 668,890. Pub. 8–23–55. Filed 6–25–54.

CLASS 6

620,181. SOLVAY S AND DESIGN. Allied Chemical & Dye Corporation. SN 668,294. Pub. 10–18–55. Filed 6–16–54.

CLASS 10

620,182. NU-IRON. Tennessee Corporation. SN 683,819. Pub. 11–1–55. Filed 3–18–55.

620,183. "TREN." Bruce-Ellen Company, Inc. SN 684,022. Pub. 11–1–55. Filed 3–23–55.

620,184. BASF 1865 AND DESIGN. Badische Anilin- & Soda-Fabrik Aktiengesellschaft. SN 684,386. Pub. 11–1–55. Filed 3–29–55.

CLASS 11

620,185. DRI-RITE. Standard Manifold Company. SN 683,633. Pub. 11–1–55. Filed 3–16–55.

620,186. ECON O MIST. Braznell Company. SN 683,841. Pub. 11–1–55. Filed 3–21–55.

620,187. SKY-TONE. Old Town Corporation. SN 683,986. Pub. 11–1–55. Filed 3–22–55.

CLASS 12

620,188. KAISER AND DESIGN (9 POLKA DOTS). Kaiser Gypsum Company, Inc. SN 657,400. Pub. 11–1–55. Filed 11–23–53.

620,189. ELASTICRETE. Elastizell Corporation of America. SN 672,064. Pub. 11–1–55. Filed 8–23–54.

620,190. ELASTIMULSE. Elastizell Corporation of America. SN 672,065. Pub. 11–1–55. Filed 8–23–54.

620,191. ANCORETTE. Flash-Stone Company, Inc. SN 681,122. Pub. 11–1–55. Filed 1–26–55.

620,192. G-S GRAVEL STOP GUTTER. Drez Ager, d. b. a. Agar Mfg. Company. SN 681,127. Pub. 11–1–55. Filed 2–7–55.

620,193. CELO-ROK. The Celotex Corporation. SN 683,661. Pub. 11–1–55. Filed 3–17–55.

620,194. CELOTEX. The Celotex Corporation. SN 683,752. Pub. 11–1–55. Filed 3–18–55.

620,195. HOLL-E-WOOD AND DESIGN. The Holl-E-Wood Co. SN 684,561. Pub. 11–1–55. Filed 3–30–55.

620,196. MICUM. Alfred E. Kowall. SN 684,667. Pub. 11–1–55. Filed 3–31–55.

620,197. ROKIDE. Norton Company. SN 685,456. Pub. 11–1–55. Filed 4–13–55.

620,198. GUSTIN BACON GB AND DESIGN. Gustin-Bacon Manufacturing Company. SN 686,181. Pub. 11–1–55. Filed 4–25–55.

620,199. CO-PLY. North Pacific Plywood, Inc. SN 686,213. Pub. 11–1–55. Filed 4–25–55.

620,200. ARM-A-PANE AND DESIGN. Judson G. Squires. SN 687,904. Pub. 11–1–55. Filed 5–19–55.

620,201. NH NATIONAL HOMES AND DESIGN. National Homes Corporation. SN 688,173. Pub. 11–1–55. Filed 5–24–55.

620,202. VIBRA-STOP. Grant Wilson, Incorporated. SN 688,200. Pub. 11–1–55. Filed 5–24–55.

620,203. SILENT-KNIGHT. B. A. Babb. SN 688,619. Pub. 11–1–55. Filed 6–1–55.

620,204. WINDO-RAMA AND DESIGN. Sunshade Corp. SN 690,345. Pub. 11–1–55. Filed 6–27–55.

620,205. STARKY AND DESIGN. Stark Ceramics, Inc. SN 690,414. Pub. 11–1–55. Filed 6–28–55.

620,206. SHADOWVENT. Masonite Corporation. SN 690,723. Pub. 11–1–55. Filed 7–5–55.

620,207. JAYHAWKER AND DESIGN. Modern Products, Inc. SN 690,737. Pub. 11–1–55. Filed 7–5–55.

620,208. MONOLITH. Monolith Portland Cement Company. SN 690,739. Pub. 11–1–55. Filed 7–5–55.

CLASS 13

620,209. NOZZLE-TITE AND DESIGN. Albert T. Scheiwer. SN 637,333. Pub. 11–1–55. Filed 10–29–52.

620,210. SNAP-NOZZLE AND DESIGN. Albert T. Scheiwer. SN 637,334. Pub. 11–1–55. Filed 10–29–52.

620,211. RAINGER. The Rieger Manufacturing Company SN 659,738. Pub. 11–1–55. Filed 1–19–54.

620,212. ANO-LITE. Anolite Corporation. SN 663,762. Pub. 11–1–55. Filed 4–2–54.

620,213. NUTANK. The Nustone Septic Tank Company. SN 670,002. Pub. 11–1–55. Filed 7–14–54.

620,214. TED "Y" BAR AND DESIGN (DIAMOND). Harold R. Robbins. SN 670,507. Pub. 11–1–55. Filed 7–23–54.

620,215. SNAPLOCK. Ideal Corporation. SN 672,667. Pub. 11–1–55. Filed 9–2–54.

620,216. ELJER MURRAY. Eljer Company, to The Murray Corporation of America. SN 674,573. Pub. 11–1–55. Filed 10–11–54.

620,217. SLOAN. Sloan Valve Company. SN 676,545. Pub. 11–1–55. Filed 11–12–54.

620,218. RF MR. CONTROLS AND DESIGN. Robertshaw-Fulton Controls Company. SN 677,356. Pub. 11–1–55. Filed 11–26–54.

620,219. NUTRI-SEAL. National Stainless Kitchens, Inc. SN 686,384. Pub. 11–1–55. Filed 4–27–55.

620,220. SEA-LUME AND DESIGN. North and Judd Manufacturing Company. SN 687,615. Pub. 11–1–55. Filed 5–16–55.

620,221. RECIPROTROL. Galland-Henning Manufacturing Company. SN 687,690. Pub. 11–1–55. Filed 5–17–55.

620,222. STEP-STOP. Step-Stop, Inc. SN 688,193. Pub. 11–1–55. Filed 5–24–55.

620,223. SOAP SENTRY. The Firestone Tire & Rubber Company. SN 688,231. Pub. 11–1–55. Filed 5–25–55.

620,224. DEPTH BOMB. N & N Sales Co. SN 688,253. Pub. 11–1–55. Filed 5–25–55.

620,225. OLANDERLOCK. N. J. Olander & Son. SN 688,659. Pub. 11–1–55. Filed 6–1–55.

620,226. PITTSBURGH SPECIAL. Pittsburgh Steel Company. SN 688,749. Pub. 11–1–55. Filed 6–2–55.

620,227. VAN SEAL AND DESIGN. Vance Industries, Inc. SN 688,875. Pub. 11–1–55. Filed 6–3–55.

CLASS 14

620,228. COPPERWELD. Copperweld Steel Company. SN 671,632. Pub. 11–1–55. Filed 8–13–54.

620,229. MF. American Brake Shoe Company. SN 683,741. Pub. 11–1–55. Filed 3–18–55.

620,230. LEE. Lee Brothers Foundry Company, Inc. SN 684,053. Pub. 11–1–55. Filed 3–23–55.

620,231. CHIEF SENECA AND DESIGN. The Seneca Wire & Manufacturing Company. SN 684,243. Pub. 11–1–55. Filed 3–25–55.

620,232. MERCASTING. Mercast Corporation. SN 684,450. Pub. 11–1–55. Filed 3–29–55.

620,233. KAE. Kaiser Aluminum & Chemical Corporation. SN 685,026. Pub. 11–1–55. Filed 4–6–55.

620,234. BAKEKOTE. American-Nickeloid Company. SN 685,087. Pub. 11–1–55. Filed 4–7–55.

620,235. DUAL AND DESIGN. Calumet Steel Castings Corporation. SN 685,956. Pub. 11–1–55. Filed 4–21–55.

620,236. EASTERN STAINLESS STEEL CORPORATION ES AND DESIGN. Eastern Stainless Steel Corporation. SN 686,360. Pub. 11–1–55. Filed 4–27–55.

620,237. TOMBASIL. H. Kramer & Co. SN 689,194. Pub. 11–1–55. Filed 6–29–55.

CLASS 15

620,238. SEMAPHORE DESIGN. Standard Oil Company of California, d. b. a. Signal Oil Company. SN 664,098. Pub. 11–1–55. Filed 4–7–54.

620,239. JET-LUBE AND DESIGN. Jet-Lube, Inc. SN 669,885. Pub. 11–1–55. Filed 7–13–54.

620,240. FINA AND DESIGN. Canadian Petrofina Limited. SN 670,900. Pub. 11–1–55. Filed 8–2–54.

CLASS 16

620,241. MULTITEX. Seidlitz Paint & Varnish Company. SN 684,888. Pub. 11–1–55. Filed 4–4–55.

620,242. SCHENECTADY ISONEL AND DESIGN. Schenectady Varnish Company, Inc. SN 685,763. Pub. 11–1–55. Filed 4–18–55.

620,243. R. W. K. The Reardon Company. SN 687,415. Pub. 11–1–55. Filed 5–12–55.

620,244. DURMOTHERM. Seidlitz Paint & Varnish Company. SN 688,586. Pub. 11–1–55. Filed 5–31–55.

620,245. DURMOTIVE. Seidlitz Paint & Varnish Company. SN 688,587. Pub. 11–1–55. Filed 5–31–55.

610,246. PARA-HUE. Sapolin Paints Inc. SN 688,860. Pub. 11–1–55. Filed 6–3–55.

620,247. GALVINOLEUM. Rust-Oleum Corporation. SN 690,039. Pub. 11–1–55. Filed 6–22–55.

CLASS 18

620,248. ONE DAY. Pay Way Feed Mills, Inc. SN 660,689. Pub. 9–27–55. Filed 2–5–54.

620,249. AN-O-LENE. Anna G. Kocher, d. b. a. Anolene Company. SN 671,257. Pub. 11–1–55. Filed 8–6–54.

620,250. MYRO-PAC AND DESIGN. Herman M. Shapiro, d. b. a. Myron Druga. SN 673,250. Pub. 11–1–55. Filed 9–15–54.

620,251. VISTABOLIC. Organon Inc. SN 676,402. Pub. 11–1–55. Filed 11–10–54.

620,252. BONAVET. Chas. Pfizer & Co., Inc. SN 677,730. Pub. 11–1–55. Filed 12–3–54.

620,253. DYNOLEN. The Wm. S. Merrell Company. SN 683,217. Pub. 11–1–55. Filed 3–10–55.

620,254. ONCOSTIMULINE. U. S. Vitamin Corporation. SN 686,504. Pub. 11–1–55. Filed 4–28–55.

620,255. ONCOTINE. U. S. Vitamin Corporation. SN 686,505. Pub. 11–1–55. Filed 4–28–55.

620,256. DR. LE GEAR'S ETC. AND DESIGN. Dr. L. D. Le Gear Medicine Company. SN 686,550. Pub. 11–1–55. Filed 4–29–55.

620,257. PANASOLE. R. Shirley Parker, d. b. a. R. S. Parker Chemical Company. SN 686,562. Pub. 11–1–55. Filed 4–29–55.

620,258. LAXIUM. Wernet Dental Mfg. Co., Inc., d. b. a. Hudson Products. SN 686,594. Pub. 11–1–55. Filed 4–29–55.

620,259. MENTENS. The Bowman Brothers Drug Co. SN 686,952. Pub. 11–1–55. Filed 5–6–55.

620,260. BOVITRIN. Merck & Co., Inc. SN 687,084. Pub. 11–1–55. Filed 5–9–55.

620,261. SHARSTREP. Merck & Co., Inc. SN 687,085. Pub. 11–1–55. Filed 5–9–55.

CLASS 19

620,262. HYDRA-STEER. Attwood Brass Works. SN 671,802. Pub. 11–1–55. Filed 8–17–54.

620,263. MICROLETTE. Ateliers de la Motobecane. SN 674,044. Pub. 11–1–55. Filed 9–30–54.

620,264. WELMAC. Welin-MacLachlan Davits, Limited. SN 679,124. Pub. 11–1–55. Filed 12–29–54.

CLASS 21

620,265. LINE MATERIAL. McGraw Electric Company. SN 619,946. Pub. 5–10–55. Filed 10–12–51.

620,266. HOGAN FAXPAPER AND DESIGN. Hogan Laboratories, Inc. SN 648,857. Pub. 11–1–55. Filed 6–16–53.

620,267. THE MIRACLE BATTERY. Electro-Acid Corporation. SN 654,957. Pub. 11–1–55. Filed 10–19–53.

620,268. ASC AND DESIGN. ASC Cable Division of Radio Apparatus Corporation. SN 661,929. Pub. 11–1–55. Filed 3–3–54.

620,269. RX. The General Tire & Rubber Company. SN 663,654. Pub. 11–1–55. Filed 3–31–54.

620,270. HOTABLE AND DESIGN. Salton Mfg. Co., Inc. SN 665,956. Pub. 11–1–55. Filed 5–7–54.

620,271. HOTRAY AND DESIGN. Salton Mfg. Co., Inc. SN 665,957. Pub. 11–1–55. Filed 5–7–54.

620,272. PLANIA. Siemens-Planiawerke A. G. für Kohlefabrikate. SN 667,843. Pub. 7–19–55. Filed 6–7–54.

620,273. PERSPECTA STEREOPHONIC SOUND AND DESIGN. Perspecta Sound Inc. SN 670,374. Pub. 11–1–55. Filed 7–21–54.

620,274. MINI-GRILL. Lifegard Sign Corporation. SN 674,403. Pub. 11–1–55. Filed 10–6–54.

620,275. GUARDALOY. F. A. Hughes & Company Limited. SN 676,577. Pub. 11–1–55. Filed 10–29–54.

620,276. LARK AND DESIGN. Webster-Chicago Corporation. SN 677,835. Pub. 11–1–55. Filed 12–6–54.

620,277. PHOTOBELL. Photobell Company. SN 680,626. Pub. 11–1–55. Filed 1–27–55.

620,278. PROVINCIAL. The Magnavox Company. SN 681,775. Pub. 11–1–55. Filed 2–16–55.

620,279. VIBRA-SWEEP BRUSH. Royal Appliance Mfg. Co. SN 683,713. Pub. 11–1–55. Filed 3–17–55.

620,280. FLEX-SEAL. Columbia Cable & Electric Corporation. SN 684,114. Pub. 11–1–55. Filed 3–24–55.

620,281. MINI-OHM. Sprague Electric Company. SN 684,165. Pub. 11–1–55. Filed 3–24–55.

620,282. RAY-GUN. Electronic Heating Corp. SN 684,296. Pub. 11–1–55. Filed 3–28–55.

620,283. RAYTHERM. Electronic Heating Corp. SN 684,297. Pub. 11–1–55. Filed 3–28–55.

620,284. MALL AND DESIGN. Mall Tool Company. SN 684,571. Pub. 11–1–55. Filed 3–30–55.

CLASS 22

620,285. STRIKE. Callaway Products, Inc. SN 646,837. Pub. 11–1–55. Filed 5–8–53.

620,286. STRIPRIG. Lester M. Davis, d. b. a Davis Fishing Tackle Co. SN 658,893. Pub. 11–1–55. Filed 1–4–54.

620,287. SPIN-A-FLY. Sunset Line & Twine Co. SN 665,069 Pub. 11–1–55. Filed 4–22–54.

620,288. PK PRE-KUT AND DESIGN. Dallas Iron Wire Works, Inc. SN 665,480. Pub. 11–1–55. Filed 4–30–54.

620,289. PRESIDENT. Samuel Weinstein, d. b. a. Universal Bowling & Billiard Supply and Universal Bowling Supply. SN 668,288. Pub. 11–1–55. Filed 6–15–54.

620,290. SURF CHUM. Arlan E. Strausser. SN 668,478. Pub. 11–1–55. Filed 6–18–54.

620,291. NUMBRILLE AND DESIGN. Barnett Rich. SN 677,528. Pub. 11–1–55. Filed 11–30–54.

620,292. RELATO. Relato Educational Games. SN 678,262. Pub. 11–1–55. Filed 12–13–54.

CLASS 23

620,293. SCREWTITE AND DESIGN. The Independent Nail and Packing Company, Inc. SN 638,584. Pub. 11–1–55. Filed 11–25–52.

620,294. CUMMINS DIESEL AND DESIGN. Cummins Engine Company, Inc. SN 641,764. Pub. 11–1–55. Filed 2–5–53.

620,295. CENTRI-SPRAY. Centri-Spray Corporation. SN 647,831. Pub. 11–1–55. Filed 5–28–53.

620,296. ROTO. Roto-Werke A. G. SN 652,328. Pub. 11–1–55. Filed 9–17–53.

620,297. KELLER. Keller Tool Company, to Gardner-Denver Company. SN 660,210. Pub. 11–1–55. Filed 1–27–54.

620,298. BORG & BECK. Borg-Warner Corporation. SN 663,157. Pub. 11–1–55. Filed 3–24–54.

620,299. FLIESS-SCHNITT AND DESIGN (THREE SPADE SHAPES). Friedr. Herder Abr. Sohn. SN 665,039. Pub. 11–1–55. Filed 4–22–54.

620,300. HI-LO MOTOR MOUNT, ETC. AND DESIGN. Branstrator Truck Engineering Corporation, to E. F. Vilter Sales, Inc. SN 668,232. Pub. 11–1–55. Filed 6–15–54.

620,301. NUAX CHAIN SAW AND DESIGN (CIRCLE). Clinton Machine Company. SN 669,744. Pub. 11–1–55. Filed 7–12–54.

620,302. DESIGN OF MAN AND WOMAN. Toro Manufacturing Corporation of Minnesota. SN 670,255. Pub. 11–1–55. Filed 7–19–54.

620,303. MOBIL JUMBO. Gardner-Denver Company. SN 671,936. Pub. 11–1–55. Filed 8–19–54.

620,304. BIG SIX. Markwell Manufacturing Co., Inc. SN 672,675. Pub. 11–1–55. Filed 9–2–54.

620,305. DONALDSON. Donaldson Company, Inc. SN 677,398. Pub. 11–1–55. Filed 11–29–54.

620,306. HYDRIL. Hydril Corporation of California. SN 678,535. Pub. 11–1–55. Filed 12–17–54.

620,307. PORTABELL. Bell Distributors, Inc. SN 680,176. Pub. 11–1–55. Filed 1–20–55.

620,308. MOPURM. Sonoflux Corporation. SN 681,885. Pub. 11–1–55. Filed 2–17–55.

620,309. REO SPIN-TRIM AND DESIGN. Motor Wheel Corporation. SN 682,282. Pub. 11–1–55. Filed 2–24–55.

620,310. REO SCOTTY AND DESIGN. Motor Wheel Corporation. SN 682,283. Pub. 11–1–55. Filed 2–24–55.

620,311. REO RIDE-A-LAWN AND DESIGN. Motor Wheel Corporation. SN 682,284. Pub. 11–1–55. Filed 2–24–55.

620,312. REO SNOW THROW AND DESIGN. Motor Wheel Corporation. SN 682,285. Pub. 11–1–55. Filed 2–24–55.

620,313. DUO-THERM. Motor Wheel Corporation. SN 682,286. Pub. 11–1–55. Filed 2–24–55.

620,314. JHBC. Besser Company. SN 682,616. Pub. 11–1–55. Filed 3–2–55.

620,315. HYQUIP. Hydraulic Power Equipment Company. SN 682,644. Pub. 11–1–55. Filed 3–2–55.

620,316. MODE. R. Wallace & Sons Manufacturing Company. SN 682,771. Pub. 11–1–55. Filed 3–3–55.

620,317. REDHEAD. The Cincinnati Ventilating Co., Inc. SN 682,869. Pub. 11–1–55. Filed 3–7–55.

620,318. LIBRASCOPE. Librascope, Incorporated. SN 682,941. Pub. 11–1–55. Filed 3–7–55.

620,319. PACILITE. Pacific Pumps, Inc. SN 682,969. Pub. 11–1–55. Filed 3–7–55.

620,320. CHAINVEYOR. Chainveyor Corp. SN 683,017. Pub. 11–1–55. Filed 3–8–55.

620,321. NOSETTE. Fampet Manufacturing, Inc. SN 683,036. Pub. 11–1–55. Filed 3–8–55.

620,322. MIDAS. International Parts Corp. SN 683,396. Pub. 11–1–55. Filed 3–14–55.

620,323. DESIGN OF CHIPMUNK. Strunk Equipment Company. SN 683,724. Pub. 11–1–55. Filed 3–17–55.

620,324. WOSECO INC. Wash Overshot & Spear Engineers, Inc. SN 683,734. Pub. 11–1–55. Filed 3–17–55.

620,325. MITY 7 VISE. Float-Lock Corp. SN 683,768. Pub. 11–1–55. Filed 3–18–55.

620,326. CUSTOMAKER. Levolor Lorentzen, Inc. SN 683,788. Pub. 11–1–55. Filed 3–18–55.

620,327. HARD EDGE AND DESIGN. Charles L. Cook, d. b. a. Southwestern Saw Company. SN 683,853. Pub. 11–1–55. Filed 3–21–55.

620,328. PRIME PROCESS. Prime Manufacturing Company. SN 683,914. Pub. 11–1–55. Filed 3–21–55.

620,329. FERT-O-JECT. Lewis D. Funk. SN 684,038. Pub. 11–1–55. Filed 3–23–55.

620,330. PIGLOADER. The Long Company. SN 684,055. Pub. 11–1–55. Filed 3–23–55.

620,331. COPPER TOUCH. Rival Manufacturing Company. SN 684,154. Pub. 11–1–55. Filed 3–24–55.

620,332. W-30. A. R. Wilfley and Sons, Inc. SN 684,176. Pub. 11–1–55. Filed 3–24–55.

620,333. W-50. A. R. Wilfley and Sons, Inc. SN 684,177. Pub. 11–1–55. Filed 3–24–55.

620,334. ECONO-LUBER. Lincoln Engineering Company. SN 684,318. Pub. 11–1–55. Filed 3–28–55.

620,335. FIRE FIEND. Nu-Swift Limited. SN 684,331. Pub. 11–1–55. Filed 3–28–55.

620,336. S & L AND DESIGN. Smith & Loveless, Inc. SN 684,349. Pub. 11–1–55. Filed 3–28–55.

620,337. ERECTO MILL. Turchan Follower Machine Co. SN 684,984. Pub. 11–1–55. Filed 4–5–55.

620,338. GOLDEN-TONE. Southern California Muffler Corporation. SN 685,050. Pub. 11–1–55. Filed 4–6–55.

620,339. HH WITHIN CIRCLE. Walter E. Hammock, d. b. a. H & H Bit Company. SN 685,273. Pub. 11–1–55. Filed 4–11–55.

620,340. TRI-D. Kearney & Trecker Corporation. SN 685,278. Pub. 11–1–55. Filed 4–11–55.

620,341. DESIGN OF MAN AND SHIELD. Wrap-King Corporation. SN 685,329. Pub. 11–1–55. Filed 4–11–55.

CLASS 24

620,342. MICANIZED. Gordon-Lacye Chemical Products Co. Inc. SN 688,037. Pub. 11–1–55. Filed 5–23–55.

CLASS 26

620,343. MILLERS FALLS. Millers Falls Company. SN 647,306. Pub. 11–1–55. Filed 5–19–53.

620,344. ALDIS. Aldis Brothers Limited. SN 650,027. Pub. 11–1–55. Filed 7–9–53.

620,345. VISTA VISION. Paramount Pictures Corporation. SN 665,135. Pub. 12–14–54. Filed 4–23–54.

620,346. MAGNASTEP AND DESIGN (REPRESENTATION OF A CIRCLE). Jay D. Padgett. SN 670,004. Pub. 11–1–55. Filed 7–14–54.

620,347. SUPER PANATAR. Panavision, Inc. SN 670,063. Pub. 11–1–55. Filed 7–15–54.

620,348. ANSUL DRI-EYE. Ansul Chemical Company. SN 672,997. Pub. 11–1–55. Filed 9–10–54.

620,349. EVERBRITE. A. Cohen & Sons Corp. SN 673,010. Pub. 11–1–55. Filed 9–10–54.

620,350. ADAC. Kearfott Company, Inc. SN 674,824. Pub. 11–1–55. Filed 10–14–54.

620,351. JIFFY SLIDE AND DESIGN. Hurley Smith. SN 677,455. Pub. 11–1–55. Filed 11–29–54.

620,352. HALL-A-LOY. Hall Gage & Mfg. Inc. SN 678,783. Pub. 11–1–55. Filed 12–22–54.

620,353. SQUALE (FANCIFUL). Paul Robert Dubois. SN 679,038. Pub. 11–1–55. Filed 12–28–54.

620,354. CURPAX PERCIVAL LENS. Curry & Paxton Limited. SN 680,368. Pub. 11–1–55. Filed 1–24–55.

620,355. LIETZ B-B-M BOARD. The A. Lietz Company. SN 684,735. Pub. 11–1–55. Filed 4–1–55.

620,356. HD AND DESIGN. Reinhold Koch. SN 685,029. Pub. 11–1–55. Filed 4–6–55.

620,357. ROTO-CELL. Arthur H. Thomas Company. SN 685,466. Pub. 11–1–55. Filed 4–13–55.

620,358. ON-A-CAR. Bear Manufacturing Company. SN 686,137. Pub. 11–1–55. Filed 4–25–55.

620,359. TRI-CHEK THE UNSEEN HAND AND DESIGN. Rudolph Brunner, d. b. a. Allied Engineering & Sales Company. SN 686,608. Pub. 11–1–55. Filed 5–2–55.

620,360. ORACLE. Nuclear Instrument and Chemical Corporation. SN 686,771. Pub. 11–1–55. Filed 5–3–55.

620,361. HARLEQUIN AND DESIGN. The Harlequin Corporation. SN 687,200. Pub. 11–1–55. Filed 5–10–55.

620,362. RAYCONTER AND DESIGN. Raycon Corporation. SN 687,411. Pub. 11–1–55. Filed 5–12–55.

620,363. MARION. Marion Electrical Instrument Co. SN 687,478. Pub. 11–1–55. Filed 5–13–55.

620,364. DYNOGRAPH. Offner Electronics, Inc. SN 687,616. Pub. 11–1–55. Filed 5–16–55.

620,365. REPRESENTATION OF A BIRD. Peerless Photo Products, Inc. SN 687,619. Pub. 11–1–55. Filed 5–16–55.

620,366. ROLLAWEIGH AND DESIGN. The Exact Weight Scale Company. SN 687,775. Pub. 11–1–55. Filed 5–18–55.

620,367. HERMES. Keuffel & Esser Company. SN 688,423. Pub. 11–1–55. Filed 5–27–55.

620,368. APOLLO. Keuffel & Esser Company. SN 688,424. Pub. 11–1–55. Filed 5–27–55.

620,369. JUPITER. Keuffel & Esser Company. SN 688,425. Pub. 11–1–55. Filed 5–27–55.

620,370. IVORITE. Keuffel & Esser Company. SN 688,426. Pub. 11–1–55. Filed 5–27–55.

620,371. RIGITAPE. Keuffel & Esser Company. SN 688,427. Pub. 11–1–55. Filed 5–27–55.

620,372. RAYTHEON IN AN OVAL. Raytheon Manufacturing Company. SN 688,460. Pub. 11–1–55. Filed 5–27–55.

620,373. ECLIPSE AND DESIGN. Eclipse Fuel Engineering Co. SN 689,272. Pub. 11–1–55. Filed 6–10–55.

620,374. AIRMASTER. Dearborn Gage Company. SN 690,943. Pub. 11–1–55. Filed 7–8–55.

620,375. PYRAMID. R. J. Pagliuso, d. b. a. Pagliuso Engineering Company. SN 691,077. Pub. 11–1–55. Filed 7–11–55.

620,376. SERVIS FUELOMETER. The Service Recorder Company. SN 691,094. Pub. 11–1–55. Filed 7–11–55.

CLASS 28

620,377. KINGSWAY. Speidel Corporation. SN 685,052. Pub. 11–1–55. Filed 4–6–55.

CLASS 29

620,378. SPOTLESS. Spotless Plastics Corporation, to Textron American, Inc. SN 681,809. Pub. 10–18–55. Filed 2–16–55.

CLASS 31

620,379. KING ZEERO. King Zeero Company. SN 648,762. Pub. 11–1–55. Filed 6–15–53.

620,380. JIFFY. Plastray Corporation. SN 669,029. Pub. 11–1–55. Filed 6–28–54.

CLASS 32

620,381. FAMILY CIRCLE. Standard Chair Company, to Erwin-Lambeth, Inc. SN 673,787. Pub. 11–1–55. Filed 9–24–54.

CLASS 34

620,382. BREIDERT AIR-X-HAUSTER. The G. C. Breidert Co. SN 632,503. Pub. 11–1–55. Filed 7–14–52.

620,383. THRIFTMIZER. Preway Inc. SN 670,307. Pub. 11–1–55. Filed 7–20–54.

620,384. AB ARISTOCRAT. Detroit-Michigan Stove Company, now by change of name to Welbilt Corporation. SN 674,230. Pub. 11–1–55. Filed 10–4–54.

620,385. BRAZIT. Roberton Manufacturing Co. SN 678,419. Pub. 11–1–55. Filed 12–15–54.

620,386. INSUL-PIPE. The Coleman Company, Inc. SN 678,516. Pub. 11–1–55. Filed 12–17–54.

620,387. BROTHER. Nihon Mishin Seizo Kabushiki Kaisha. SN 686,075. Pub. 11–1–55. Filed 4–22–55.

CLASS 35

620,388. FLEX-SET. Couse & Bolten Co. SN 674,728. Pub. 11–1–55. Filed 10–13–54.

CLASS 36

620,389. HOOSIER BOY. Herbert A. Schriner, also known as Herb Shriner. SN 667,054. Pub. 11–1–55. Filed 5–25–54.

620,390. CASPARI. Karl Caspari. SN 673,898. Pub. 11–1–55. Filed 9–28–54.

620,391. AURAL AND DESIGN. William F. Johnston, d. b. a. Aural Record and Recording Service. SN 682,561. Pub. 11–1–55. Filed 3–1–55.

620,392. SUMMIT AND DESIGN. The Summit Sound Systems Company. SN 683,727. Pub. 11–1–55. Filed 3–17–55.

CLASS 37

620,393. PERFO-ROLL. Continental Can Company, Inc. SN 666,736. Pub. 11–1–55. Filed 5–20–54.

620,394. LINTON'S BRISTOLS AND DESIGN. Norman Harrower, d. b. a. Linton Brothers & Company. SN 674,036. Pub. 11–1–55. Filed 9–9–54.

620,395. REPRESENTATION OF A CROWN. The Wall Paper Manufacturers Limited. SN 675,038. Pub. 11–1–55. Filed 10–18–54.

620,396. CROWN. The Wall Paper Manufacturers Limited. SN 675,039. Pub. 11–1–55. Filed 10–18–54.

620,397. BESSEMER. American Writing Paper Corporation. SN 675,748. Pub. 11–1–55. Filed 11–1–54.

620,398. WIN-DO-WAVE. The Ajax Box Company. SN 681,971. Pub. 11–1–55. Filed 2–21–55.

620,399. GALAXY. Butler Paper Corporations. SN 682,120. Pub. 11–1–55. Filed 2–23–55.

CLASS 38

620,400. OIL JOHNNY AND REPRESENTATION OF OIL FIELD. J. J. Altrogge. SN 674,788. Pub. 11–1–55. Filed 10–14–54.

620,401. DESIGN OF COAT OF ARMS. Alpha Xi Delta Fraternity. SN 675,194. Pub. 11–1–55. Filed 10–21–54.

620,402. SITA GRAM. Sita-Adventure Trails Inc. SN 682,299. Pub. 11–1–55. Filed 2–24–55.

620,403. COUNTRY & WESTERN JAMBOREE. Country & Western Jamboree, Inc. SN 682,540. Pub. 11–1–55. Filed 3–1–55.

620,404. THE PATGRAPH AND CHEMGRAPH REVIEW. Fred C. Philpitt. SN 682,666. Pub. 11–1–55. Filed 3–2–55.

620,405. TV EYE. Post Publishing Company. SN 682,754. Pub. 11–1–55. Filed 3–3–55.

CLASS 39

620,406. LAS VEGAS SKIRT. Morris Leo Goldstein, d. b. a. Mayfair Garment Mfg. Co. SN 673,914. Pub. 11–1–55. Filed 9–28–54.

620,407. HAND-MOOR ORIGINAL H AND DESIGN. Handmacher Brothers. SN 674,245. Pub. 11–1–55. Filed 10–4–54.

620,408. NEALS OF CALIFORNIA. Gladys & Cele, Inc. SN 674,966. Pub. 11–1–55. Filed 10–18–54.

620,409. ST. LAWRENCE. North Shore Manufacturing Company. SN 674,994. Pub. 11–1–55. Filed 10–18–54.

620,410. CALPRETA CAREFREE. The Calico Printers' Association Limited. SN 675,258. Pub. 11–1–55. Filed 10–22–54.

620,411. AUTOTONES. M. & B. Headwear Company, Incorporated. SN 682,030. Pub. 11–1–55. Filed 2–21–55.

620,412. RITE-FIT PAT-A-CREPE. Max Wiesen & Sons Co., Inc. SN 682,217. Pub. 11–1–55. Filed 2–23–55.

620,413. RITE-FIT PAT-A-SHEER. Max Wiesen & Sons Co., Inc. SN 682,218. Pub. 11–1–55. Filed 2–23–55.

620,414. RITE-FIT PAT-A-LIN. Max Wiesen & Sons Co., Inc. SN 682,219. Pub. 11–1–55. Filed 2–23–55.

620,415. BERRY PAK. Berry Brothers Corporation. SN 682,232. Pub. 11–1–55. Filed 2–24–55.

620,416. BALI-"HI." Bali Brassiere Co., Inc. SN 682,319. Pub. 11–1–55. Filed 2–25–55.

620,417. INSURED. George L. Kreider. SN 682,438. Pub. 11–1–55. Filed 2–28–55.

620,418. ROYAL HARRISON. Columbia Coat Company. SN 683,019. Pub. 11–8–55. Filed 3–8–55.

620,419. FASHION MOLDED 4 U. The Roxborough Company. SN 683,063. Pub. 11–1–55. Filed 3–8–55.

620,420. BLACK FOREST. Hat Corporation of America. SN 683,200. Pub. 11–8–55. Filed 3–10–55.

620,421. WESTERN STAR AND DESIGN. Seattle Cap Mfg. Co., Inc., d. b. a. Seattle Cap & Apparel Mfg. Co. SN 683,239. Pub. 11–8–55. Filed 3–10–55.

620,422. MAYO SPRUCE AND DESIGN. Washington Mills Company. SN 683,248. Pub. 11–8–55. Filed 3–10–55.

620,423. ANNETTA. Annetta Dresses, Inc. SN 683,264. Pub. 11–1–55. Filed 3–11–55.

620,424. BYFLEX. D. Byford & Company Limited. SN 683,352. Pub. 11–1–55. Filed 3–14–55.

620,425. BENCHLEY. The Gano-Downs Clothing Company. SN 683,463. Pub. 11–1–55. Filed 2–28–55.

620,426. LORENZO. J. W. Robinson Co., to Robinson Building Company. SN 683,558. Pub. 11–1–55. Filed 3–15–55.

620,427. JACK AND JILL. Adams Brothers, Inc. SN 683,572. Pub. 11–1–55. Filed 3–16–55.

620,428. WUNDA. The House of Perfection, Inc. SN 683,683. Pub. 11–1–55. Filed 3–17–55.

620,429. GLORIOUS. Youthcraft Creations, Inc. SN 683,739. Pub. 11–1–55. Filed 3–17–55.

620,430. SAVOY. Hickok Manufacturing Co. Inc. SN 683,774. Pub. 11–1–55. Filed 3–18–55.

620,431. CUFF'EMS. Crown Hosiery Mills, Inc. SN 683,856. Pub. 11–1–55. Filed 3–21–55.

620,432. DUROKNIT. Silver Knit Hosiery Mills, Inc. SN 683,924. Pub. 11–8–55. Filed 3–21–55.

620,433. MODECRAFT. Jack Kreiss Hosiery, Inc. SN 683,978. Pub. 11–8–55. Filed 3–22–55.

620,434. SINGING NEEDLES AND DESIGN. Singing Needles, Inc. SN 684,161. Pub. 11–1–55. Filed 3–24–55.

620,435. HONEYKURL. Steinberg of London Ltd. SN 684,604. Pub. 11–1–55. Filed 3–30–55.

620,436. PIETRO. Neiman-Marcus Company. SN 684,864. Pub. 11–1–55. Filed 4–4–55.

620,437. BROGUE. Neiman-Marcus Company. SN 684,865. Pub. 11–1–55. Filed 4–4–55.

620,438. PETTI-HOOP AND DESIGN. Ru-Nell Manufacturing Company. SN 684,970. Pub. 11–1–55. Filed 4–5–55.

620,439. DYNORLLA. Major Fashions Corp. SN 685,452. Pub. 11–1–55. Filed 4–13–55.

620,440. FAMOUSETTE. Famous-Maid Brassiere Corp. SN 685,686. Pub. 11–1–55. Filed 4–18–55.

620,441. THE SWEATER GLOVE. Hansen Glove Corporation. SN 685,706. Pub. 11–8–55. Filed 4–18–55.

620,442. THE SWEATERED HAND. Hansen Glove Corporation. SN 685,707. Pub. 11–8–55. Filed 4–18–55.

620,443. ENGLISH BOXIES. Irwill Knitwear Corp. SN 685,714. Pub. 11–8–55. Filed 4–18–55.

620 444. FRENCH SECRET. Olga Company. SN 685,737. Pub. 11–8–55. Filed 4–18–55.

620,445. TRIK. Midge Grant, Inc. SN 686,050. Pub. 11–1–55. Filed 4–22–55.

620,446. SIX-WAY. Maiden Form Brassiere Company, Inc. SN 686,069. Pub. 11–1–55. Filed 4–22–55.

620,447. BABE-IN-BUNDLE. North Shore Manufacturing Company. SN 686,214. Pub. 11–1–55. Filed 4–25–55.

620,448. FOLIES. Eleanor M. Cockrell. SN 686,355. Pub. 11–1–55. Filed 4–27–55.

CLASS 40

620,449. DARLON. Meyer Jacoby Corporation. SN 667,804. Pub. 11–8–55. Filed 6–7–54.

CLASS 42

620,450. MARTINWEB. J. B. Martin Company, formerly Martin Fabrics Corporation. SN 647,860. Pub. 11–1–55. Filed 5–28–53.

620,451. TERRY-FIX. Perfect Jersey Company, Inc., from Marian Kalman, d. b. a. Perfect Jersey Co. SN 658,789. Pub. 11–1–55. Filed 12–30–53.

620,452. FOTOSILK IN OVAL DESIGN. Züricher Beteltuchfabrik A.-G. SN 673,960. Pub. 11–1–55. Filed 9–28–54.

620,453. CORTILLION. Mook Bros. Inc. SN 674,176. Pub. 11–1–55. Filed 10–1–54.

620,454. BUCOL. Silca. SN 675,680. Pub. 11–8–55. Filed 10–28–54.

620,455. COTAN RAYA AND DESIGN. Hans Wellamann. SN 678,493. Pub. 11–8–55. Filed 12–16–54.

CLASS 43

620,456. TYCO. Textured Yarn Company. SN 667,177. Pub. 11–8–55. Filed 5–26–54.

620,457. CRYLBENE. Societe Rhodiaceta, to Societe Crylor. SN 682,678. Pub. 11–8–55. Filed 3–2–55.

CLASS 44

620,458. OLYMPIC. Francis H. Montmarquet, d. b. a. The O-C Manufacturing Co. SN 637,495. Pub. 11–8–55. Filed 11–1–52.

620,459. PAYNEZE. Robert H. Hahn, d. b. a. Payneze. SN 667,031. Pub. 11–8–55. Filed 5–25–54.

620,460. HYDRA-CADENCE. J. Stewart Company. SN 678,055. Pub. 11–8–55. Filed 12–9–54.

620,461. "KAPS." Lorica, Inc. SN 679,470. Pub. 11–8–55. Filed 1–5–55.

620,462. MICROLON. The Hygienic Dental Manufacturing Company. SN 683,777. Pub. 11–8–55. Filed 3–18–55.

620,463. EVEREST AND JENNINGS. Everest & Jennings, Inc. SN 685,484. Pub. 11–8–55. Filed 4–14–55.

620,464. B-L-B. Air Reduction Company, Incorporated. SN 686,018. Pub. 11–8–55. Filed 4–22–55.

620,465. CLIP-SHARPS. American Safety Razor Corporation. SN 686,413. Pub. 11–8–55. Filed 4–28–55.

620,466. PREPTIC. Johnson & Johnson. SN 686,749. Pub. 11–8–55. Filed 5–3–55.

CLASS 45

620,467. TASTI-DIET TILLIE LEWIS COFFEE DELIGHT AND DESIGN. Flotill Products, Inc. SN 671,892. Pub. 11–8–55. Filed 8–18–54.

CLASS 46

620,468. TROJAN CHEMICALS AND DESIGN. Trojan Powder Company. SN 647,667. Pub. 11–8–55. Filed 5–25–53.

620,469. SALISBURY HOUSE BRAND. Salisbury House, Ltd. SN 648,569. Pub. 11–8–55. Filed 6–10–53.

620,470. MAUD'S MINUTE MARKET. Maud O. Barnes, d. b. a. Maud's Minute Market. SN 650,345. Pub. 11–8–55. Filed 7–16–53.

620,471. PROGRESSO AND DESIGN. Uddo & Taormina Company. SN 650,947. Pub. 11–8–55. Filed 7–27–53.

620,472. GOOD RICH. Fred M. Drew Company, to United States Products Corporation, Ltd. SN 653,358. Pub. 11–8–55. Filed 9–18–53.

620,473. FRE-FLO, ETC., AND DESIGN. Morton Salt Company. SN 657,288. Pub. 11–8–55. Filed 12–2–53.

620,474. EETS. General Products Corporation, also d. b. a. General Products. SN 658,607. Pub. 11–8–55. Filed 12–28–53.

620,475. KORECT. Albers Milling Company. SN 661,389. Pub. 11–8–55. Filed 2–23–54.

620,476. CIRCLE H AND DESIGN. J. S. Hoffman Company. SN 661,566. Pub. 11–8–55. Filed 2–24–54.

620,477. LA. NUTHOUSE, ETC., AND DESIGN. Los Angeles Nut House. SN 662,457. Pub. 11–8–55. Filed 3–11–54.

620,478. KAY-LAC. Knudsen Creamery Co. of California. SN 663,476. Pub. 11–8–55. Filed 3–29–54.

620,479. LITTLE KING. Rogers Canning Company. SN 663,512. Pub. 11–8–55. Filed 3–29–54.

620,480. LITTLE QUEEN. Rogers Canning Company. SN 663,513. Pub. 11–8–55. Filed 3–29–54.

620,481. MELTING SWEET. Rogers Canning Company. SN 663,514. Pub. 11–8–55. Filed 3–29–54.

620,482. STAR BLUE CHEESE. L. D. Schreiber & Co. Inc., d. b. a. Stella Cheese Company. SN 663,523. Pub. 11–8–55. Filed 3–29–54.

620,483. REPRESENTATION OF RED OWL. Red Owl Stores, Inc. SN 665,782. Pub. 11–8–55. Filed 5–5–54.

620,484. DIAMOND H AND LETTER H WITHIN DIAMOND. The J. D. Hamilton Fruit Co. SN 666,754. Pub. 11–8–55. Filed 5–20–54.

620,485. SABRETT. Sabrett Food Products Corp. SN 666,871. Pub. 11–8–55. Filed 5–21–54.

620,486. LITE DIET. Bakers Equipment Bureau. SN 667,078. Pub. 11–8–55. Filed 5–26–54.

620,487. QUEEN QUALITY AND DESIGN. Daleo Poultry & Egg Co. SN 667,617. Pub. 1–11–55. Filed 6–3–54.

620,488. ARABIAN BARS. United Biscuit Company of America. SN 669,508. Pub. 11–8–55. Filed 7–6–54.

620,489. LORD JEFF AND DESIGN. Stanley Lampert, d. b. a. Lord Jeff Food Products Co. SN 669,690. Pub. 11–8–55. Filed 7–9–54.

620,490. YUM YUM SOUTHERN 2 IN 1 AND DESIGN. Magnolia Baking Co. SN 670,430. Pub. 11–8–55. Filed 7–22–54.

620,491. CHERRI-ANZA. Fruit Products Corporation. SN 670,556. Pub. 11–8–55. Filed 7–26–54.

620,492. TRICY TREAT. Fruit Products Corporation. SN 670,557. Pub. 11–8–55. Filed 7–26–54.

620,493. EL GOZO. José Segui. SN 671,258. Pub. 11–8–55. Filed 8–6–54.

620,494. EURBY'S SPECIAL DRESSING. Hill's Restaurant. SN 671,342. Pub. 11–8–55. Filed 8–9–54.

620,495. ARCHWAY. Swanson's Cookie Co. SN 672,852. Pub. 11–8–55. Filed 9–7–54.

620,496. "PARTRIDGE." The H. H. Meyer Packing Company. SN 674,408. Pub. 11–8–55. Filed 10–6–54.

620,497. "PARTRIDGE" AND DESIGN (BIRDS). The H. H. Meyer Packing Company. SN 674,409. Pub. 11–8–55. Filed 10–6–54.

620,498. ELM FARM. Elm Farm Foods Co. SN 674,455. Pub. 11–8–55. Filed 10–7–54.

620,499. VEVCO. Viviano Foods, Inc., now by change of name Vevco Foods, Inc. SN 674,858. Pub. 11–8–55. Filed 10–14–54.

620,500. HANFORDS. Frank Pilley & Sons, Inc. SN 674,920. Pub. 11–8–55. Filed 10–8–54.

620,501. ROLLRITE. Rollrite Pie Crust Corporation. SN 675,919. Pub. 11–8–55. Filed 11–2–54.

620,502. REDCHAIN UNIVERSAL EGG AND DESIGN. Universal Mills. SN 675,928. Pub. 11–8–55. Filed 11–2–54.

620,503. LYNBROOK. Omaha Cold Storage Company, d. b. a. Phelps County Creamery & Produce Co. SN 676,070. Pub. 7–5–55. Filed 11–4–54.

620,504. CORINA. Bank of America National Trust and Savings Association, a national banking association, trustee of the testamentary trust of Aron Hershel, deceased, d. b. a. The Aron Canning Co. SN 678,572. Pub. 11–8–55. Filed 11–30–54.

620,505. GOLDEN MALLARD. Karl W. Effers, d. b. a. Chain O'Lakes Game Fields. SN 678,852. Pub. 11–8–55. Filed 12–23–54.

620,506. TRINIDAD. Hardie's, Inc. SN 679,289. Pub. 11–8–55. Filed 1–3–55.

620,307. SHORESAVE AND DESIGN. Shore's Market, Inc. SN 679,413. Pub. 11–8–55. Filed 1–4–55.

620,508. SHOREPRIDE AND DESIGN. Shore's Market, Inc. SN 679,415. Pub. 11–8–55. Filed 1–4–55.

620,509. FREDCO. Kansas Packing Co., Inc. SN 679,851. Pub. 11–8–55. Filed 1–13–55.

620,510. PAN AMERICAN. Emma Boehm. SN 679,888. Pub. 11–8–55. Filed 1–14–55.

620,511. VITA-CURAID. First Spice Mixing Co., Inc. SN 680,379. Pub. 11–8–55. Filed 1–24–55.

620,512. DIABLO VALLEY. Walnut Creek Canning Co. SN 682,091. Pub. 11–8–55. Filed 2–21–55.

620,513. HIPPODROME. Salerno-Megowen Biscuit Company. SN 682,193. Pub. 11–8–55. Filed 2–23–55.

620,514. PAN SPRING. Bay State Milling Co., d. b. a. Bay State Milling Co. SN 682,230. Pub. 11–8–55. Filed 2–24–55.

620,515. RODDY. J. M. Rodriguez & Co., Inc. SN 682,294. Pub. 11–8–55. Filed 2–24–55.

620,516. RODSON. Rodson, Inc. SN 682,295. Pub. 11–8–55. Filed 2–24–55.

620,517. PORTUGALETE. M. Golodetz & Co. SN 683,974. Pub. 11–8–55. Filed 3–22–55.

CLASS 49

620,518. JACK DANIEL AND DESIGN (STATUETTE). Jack Daniel Distillery, Lem Motlow, Prop., Inc. SN 669,315. Pub. 11–8–55. Filed 7–2–54.

CLASS 50

620,519. PHOTOTILE. National Tile & Manufacturing Co. SN 670,001. Pub. 11–8–55. Filed 7–14–54.

620,520. DIMENSION UNLIMITED AND DESIGN. Hanna R. Teichert, d. b. a. Dimension Unlimited. SN 673,310. Pub. 11–8–55. Filed 9–16–54.

620,521. SKY-HOOK. Clayton Mark & Company. SN 674,002. Pub. 11–8–55. Filed 9–29–54.

620,522. SPEKLBORD AND DESIGN. Colotyle Tyle-Bord, Inc. SN 680,259. Pub. 11–8–55. Filed 1–21–55.

620,523. CROROTO. Croname, Incorporated. SN 680,588. Pub. 11–8–55. Filed 1–27–55.

620,524. MIDGET. William J. Crosby. SN 681,579. Pub. 11–8–55. Filed 2–14–55.

CLASS 51

620,525. ZERO 7. Orezco Inc. SN 653,290. Pub. 11–8–55. Filed 9–17–53.

620,526. LANOGEL. Robinson-Wagner Co., Inc. SN 657,966. Pub. 11–8–55. Filed 12–14–53.

620 527. BUCKINGHAM LAVENDER AND DESIGN. J. C. & J. Field Limited. SN 662,091. Pub. 11–8–55. Filed 3–5–54.

620,528. VAN VAN. Valmor Products Co., also d. b. a. Famous Products Co. SN 664,900. Pub. 11–8–55. Filed 4–20–54.

620,529. MARCELLE AND DESIGN. Marcelle Cosmetics, Inc. SN 680,479. Pub. 11–8–55. Filed 1–25–55.

620,530. AEROTAN. La Publicite Scientifique, S. A. SN 680,840. Pub. 11–8–55. Filed 1–19–55.

CLASS 52

620,531. MAID-AID. John B. Rosefeld, d. b. a. An-Fo Manufacturing Co. SN 650,460. Pub. 11–8–55. Filed 7–17–53.

620,532. MOTH GON. Hosid Products Inc. SN 660,209. Pub. 11–8–55. Filed 1–27–54.

620,533. SOFTY. Empire Oil Co. SN 669,678. Pub. 11–1–55. Filed 7–9–54.

620,534. SKY. Harry Manion, d. b. a. Blue Flash Chemical Company. SN 670,293. Pub. 11–1–55. Filed 7–20–54.

620,535. SOL-DOR. The Sol-Dor Company. SN 670,387. Pub. 11–1–55. Filed 7–21–54.

620,536. MELS. J. Strickland & Co. SN 670,519. Pub. 11–1–55. Filed 7–23–54.

620,537. DAISY. Fitzpatrick Brothers, Inc. SN 671,029. Pub. 11–1–55. Filed 8–3–54.

620,538. THE PATRICIAN HOUSE ETC. AND DESIGN. Jünger & Gebhardt A. G. SN 671,835. Pub. 11–8–55. Filed 8–17–54.

620,539. GEN–TU. Finger Lakes Chemical Company, Inc. SN 672,393. Pub. 11–1–55. Filed 8–30–54.

620,540. CLEARASIL. Clearasil, Incorporated. SN 674,227. Pub. 11–1–55. Filed 10–4–54.

620,541. FUR-NU. Olde Tyme Products Co. SN 680,404. Pub. 11–1–55. Filed 1–24–55.

620,542. HOOD. Hood Chemical Co., Inc. SN 681,015. Pub. 11–1–55. Filed 2–3–55.

620,543. MONTE-CRISTO. Hermes Distributing Co. SN 681,323. Pub. 11–1–55. Filed 2–8–55.

620,544. NEW SOUTH'S WILD CAT CLEANER. New South Manufacturing Company. SN 682,045. Pub. 11–1–55. Filed 2–21–55.

620,545. MOUSSE FACIALE. Richard Hudnut. SN 683,202. Pub. 11–8–55. Filed 3–10–55.

620,546. THREE-WAY BLEACH, ETC., AND DESIGN. Joseph Falzone. SN 683,380. Pub. 11–1–55. Filed 3–14–55.

620,547. DESIGN OF 4 TRIANGLES. Dalil-Werke Maurer & Wirtz. SN 685,226. Pub. 11–1–55. Filed 4–8–55.

620,548. LEOPARD. Carbona Products Company. SN 686,149. Pub. 11–8–55. Filed 4–25–55.

Service Marks

CLASS 100

620,549. M-R-C STROM, SRB GURNEY, ETC., AND DESIGN. Marlin-Rockwell Corporation. SN 638,039. Pub. 11–1–55. Filed 11–28–52.

620,550. LITTLE FRIENDS PET MORTUARY, PET CEMETERY AND DESIGN. D. A. Lienemann, d. b. a. Little Friends Pet Mortuary and Pet Cemetery. SN 660,740. Pub. 11–1–55. Filed 2–8–54.

620,551. MASTER HOST. Master Host Motor Hotels, Inc. SN 664,774. COLLECTIVE MARK. Pub. 11–1–55. Filed 4–19–54.

620,552. MASTER HOST, ETC. AND DESIGN. Master Host Motor Hotels, Inc. SN 664,773. COLLECTIVE MARK. Pub. 11–1–55. Filed 4–19–54.

620,553. THE TOPS IN STOPS. Master Host Motor Hotels, Inc. SN 664,775. COLLECTIVE MARK. Pub. 11–1–55. Filed 4–19–54.

620,554. MHMH AND DESIGN. Master Host Motor Hotels, Inc. SN 664,776. COLLECTIVE MARK. Pub. 11–1–55. Filed 4–19–54.

620,555. AUTO PHOTO. Auto-Photo Company. SN 674,650. Pub. 11–8–55. Filed 10–12–54.

620,556. NSF AND DESIGN. National Sanitation Foundation. SN 680,401. Pub. 11–1–55. Filed 1–24–55.

CLASS 101

620,557. "MISS UNIVERSE." Miss Universe Beauty Pageant, Inc. SN 632,789. Pub. 11–1–55. Filed 7–19–52.

620,558. MR. TWISTER. James Allen Clark, d. b. a. Allen Clark. SN 682,399. Pub. 11–1–55. Filed 2–28–55.

CLASS 103

620,559. REPRESENTATION OF A TANDEM ROLLER AND OPERATOR. Skrainka Construction Company. SN 628,782. Pub. 11–1–55. Filed 4–26–52.

620,560. (THE MAN WITH THE WROUGHT IRON LEGS). Dixon R. Wagner, d. b. a. Dixon Iron Works. SN 654,702. Pub. 11–8–55. Filed 10–13–53.

620,561. IMPREX. Ideal Industries, Inc. SN 659,149. Pub. 11–1–55. Filed 1–7–54.

620,562. NEWBERY, ETC. AND DESIGN. Newbery Electric Corporation. SN 679,405. Pub. 11–1–55. Filed 1–4–55.

CLASS 107

620,563. PRETZEL BOWL GAME. Rajah Temple, A. A. O. N. M. S. SN 621,528. Pub. 11–8–55. Filed 11–21–51.

Certification Marks

CLASS A

620,564. AN. United States Department of the Navy. SN 678,060. Pub. 11–1–55. Filed 12–9–54.

620,565. THE NATIONAL TURKEY IMPROVEMENT PLAN, ETC. AND DESIGN. United States Department of Agriculture, Agricultural Research Service. SN 684,373. Pub. 11–8–55. Filed 3–9–55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 1

620,566. Chester W. Pilch, Hazardville, Conn. SN 670,006. Filed P. R. 7–14–54. Am. S. R. 11–17–55.



For Poultry Products for Breeding Stock—Namely, Eggs for Hatching Purposes, Baby Chicks, Cockerels, and Pullets and Mature Stock.
Use since January 1954.

CLASS 2

620,567. United States Envelope Company, Springfield, Mass. SN 663,234. Filed P. R. 3–24–54. Am. S. R. 10–26–55.

RE-USE-A SEAL

The word "Seal" is disclaimed, apart from the mark as shown.
For Merchandise Envelopes and Bags.
Use since Jan. 26, 1953.

CLASS 18

620,568. Sidney Beskind, d. b. a. The Tanophene Co., Miami Beach, Fla. SN 673,801. Filed P. R. 9–27–54. Am. S. R. 9–15–55.

THE BEST KIND

For Medicinal Preparations in the Nature of Ointments and Lotions for the Treatment of Skin Irritations.
Use since June 22, 1954.

CLASS 26

620,569. U-Test-M Mfg. Co., Inc., Milwaukee, Wis. SN 683,941. Filed 3–21–55.

u-test-m

For Electronic Tube Testing Cabinets.
Use since Dec. 18, 1953.

CLASS 29

620,570. Easy Day Manufacturing Company, Brookline, Mass. SN 678,439. Filed P. R. 12–16–54. Am. S. R. 8–18–55.

Fluffie

For Manually Operated Liquid Wax Applicator and Pads Therefor.
Use since January 1954.

CLASS 34

620,571. The Williamson Heater Company, Cincinnati, Ohio. SN 647,898. Filed P. R. 5–28–53. Am. S. R. 4–5–54.

GASAVER

For Gas Burners.
Use since April 1950.

620,572. Horace M. Baker, Lumberton, N. C. SN 672,042. Filed P. R. 8–23–54. Am. S. R. 8–12–55.

STOV-GARD

For Protective Guard To Prevent Bodily Contact With the Edge of the Stove and Protect Against Spattering Grease or the Like for Use on a Cook Stove.
Use since July 27, 1953.

CLASS 35

620,573. Cherry-Burrell Corporation, Chicago, Ill. SN 668,526. Filed P. R. 6–21–54. Am. S. R. 11–2–55.

RUBBERSEAL

For Neoprene Gaskets for Sanitary Valves, Fittings, and Equipment Connections.
Use since 1946.

CLASS 37

620,574. Hoffmaster Company, Inc., Oshkosh, Wis. SN 673,988. Filed P. R. 9–29–54. Am. S. R. 2–15–55.

Hoffmaster

For Paper Professional Towels, Paper Industrial Wipes, Paper Place Mats and Paper Napkins.
Use since Sept. 28, 1951, on paper place mats.

CLASS 38

620,575. Inplant Publishing Corp., Chicago, Ill. SN 676,376. Filed P. R. 11–10–54. Am. S. R. 10–3–55.

Inplant FOOD MANAGEMENT

For Magazine Published Monthly.
Use since Feb. 1, 1954.

620,576. Norcross, Inc., New York, N. Y. SN 677,265. Filed 11–15–54.

Norcross Kittens

For Greeting Cards and Printed Greeting Folders.
Use since on or about Jan. 10, 1949.

620,577. Arthur J. Benson, d. b. a. Twin-B Publishing Co., Kansas City, Mo. SN 677,761. Filed P. R. 12–6–54. Am. S. R. 10–10–55.

Cowman's Guide

For Newspapers Containing Advertising and Articles of General Interest to the Stock Raising Industry.
Use since Sept. 10, 1954.

620,578. Jerome S. Gross, d. b. a. The Horticultural Guide, Huntington, N. Y. SN 685,186. Filed P. R. 4–8–55. Am. S. R. 10–20–55.

The HORTICULTURAL GUIDE

For Periodic Publication.
Use since Apr. 17, 1951.

620,579. Service Publishing Corporation, New York, N. Y. SN 685,617. Filed 4–15–55.

PRODUCTS-IN-PRINT

For Section in a Periodical Publication Dealing With Food Served at Counter and Fountain Restaurants.
Use since January 1954.

620,580. A. H. Wirz, Inc., Chester, Pa. SN 697,065. Filed 10–24–55.

READY-PEEL

For Lithographed Labels on Collapsible Tubes.
Use since May 10, 1954.

CLASS 39

620,581. Kernstown Hosiery Mill, to W. P. Claus, Winchester, Va. SN 641,845. Filed P. R. 2–6–53. Am. S. R. 8–31–55.



For Ladies' Hosiery.
Use since Jan. 21, 1953.

620,582. Rockland Sportswear, Inc., Rockland, Mass. SN 672,315. Filed P. R. 8–26–54. Am. S. R. 11–3–55.



The drawing is lined for red.
For Skirt Liners in Skirts.
Use since Apr. 15, 1954.

620,583. Bruce T. Adams, West Barnstable, Mass. SN 686,713. Filed 5–3–55.

THONG-TI

For Tagging Ties Made of a Leather Thong Fastened With A Metal Button or a Concho and Having Metal Tips on the Ends of the Thong.
Use since June 30, 1953.

CLASS 40

620,584. William Prym, Inc., Dayville, Conn. SN 674,842. Filed P. R. 10–14–54. Am. S. R. 10–17–55.

Twist

For Pins Forming a Single Stitch for Fastening Fabrics Together or to Other Objects, Particularly Buttons.
Use since Oct. 4, 1954.

CLASS 42

620,585. Cisco, Inc., New York, N. Y. SN 665,889. Filed P. R. 5–7–54. Am. S. R. 11–1–55.

KELLY KLOTH

No exclusive claim is made to the word "Kloth" apart from the mark as shown.
For Piece Goods for Making Shirts, Swim Shorts and Walking Shorts for Men.
Use since Mar. 25, 1954.

620,586. H. M. Prince Textiles, Inc., New York, N. Y. SN 688,261. Filed P. R. 5–25–55. Am. S. R. 10–31–55.

KASHMIRLAINE

For Textile Fabrics in the Piece Comprised of a Mixture of Cashmere, Fur Fibres, and Wool.
Use since Feb. 15, 1954.

CLASS 45

620,587. The Miller-Becker Company, also known and d. b. a. Cotton Club Bottling Co., Cleveland, Ohio. SN 658,069. Filed P. R. 12–16–53. Am. S. R. 11–2–54.

COTTON CLUB
Qui-9

For Maltless Soft Drinks and Carbonated Waters.
Use since Oct. 27, 1953.

620,588. The Miller-Becker Company, d. b. a. The Miller-Becker Co. and as Cotton Club Bottling Co., Cleveland, Ohio. SN 674,832. Filed P. R. 10–14–54. Am. S. R. 8–25–55.

STAY SLIM

For Maltless Soft Drinks and Carbonated Waters.
Use since Aug. 16, 1954.

CLASS 46

620,589. Redi-Foods, Inc., Columbus, Ohio. SN 657,799. Filed 12–10–53.

Redi Peeled

For Fresh Potatoes and Fresh Carrots.
Use since on or about Sept. 1, 1950.

CLASS 49

620,590. Bruce & Company (Leith) Limited, Leith, Edinburgh, Scotland. SN 654,790. Filed P. R. 10–15–53. Am. S. R. 4–26–55.



For Scotch Whisky.
Use since Nov. 17, 1951.

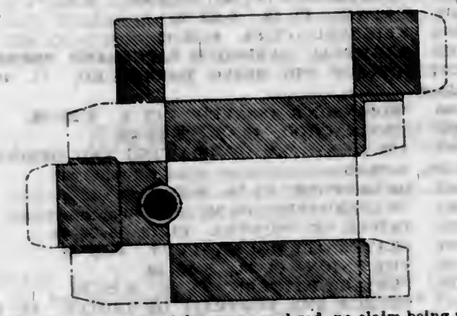
CLASS 51

620,591. Harold Smith, New York, N. Y. SN 661,237. Filed P. R. 2–17–54. Am. S. R. 2–9–55.

"For Hands You're Proud To Show"

For Cosmetics—Namely, Lotions and Creams.
Use since Oct. 22, 1953.

620,592. Karlsruher Parfumerie- und Toiletteseifenfabrik F. Wolff & Sohn, Gesellschaft mit beschrankter Haftung, Karlsruhe, Baden, Germany. SN 682,565. Filed P. R. 3–1–55. Am. S. R. 10–17–55.



The drawing is lined for green and red, no claim being made to the outline of a carton.
For Skin Creams, a Toilet Preparation in Jelly Form for the Care of the Skin, and Shaving Cream.
Use since Aug. 1, 1952.

Service Marks

CLASS 100

620,593. Edward E. Garlits, Jr., d. b. a. Allied Rentool Service, Yardley, Pa. SN 651,654. Filed P. R. 8–11–53. Am. S. R. 8–1–55.

RENTOOL

For Rental Service, Household and Garden Tools and Appliances.
Use since May 20, 1953.

620,594. Edward E. Garlits, Jr., d. b. a. Allied Rentool Service, Yardley, Pa. SN 651,655. Filed P. R. 8–11–53. Am. S. R. 8–1–55.



For Rental Service, Household and Garden Tools and Appliances.
Use since May 20, 1953.

TRADEMARK REGISTRATIONS RENEWED

107,020. 43 IN OVAL DESIGN. Cl. 17. 11–9–15.
107,032. CLUB CLOTHES. Cl. 39. 11–9–15.
107,783. CHERRY BLOSSOM. Cl. 52. 12–28–15.
108,180. LAUNDERITE. Cl. 42. 1–18–16.
108,877. DESIGN OF INDIAN. Cl. 37. 2–29–16.
109,178. EBONY. Cl. 1. 3–28–16.
109,179. MANDARIN. Cl. 1. 3–28–16.
109,332. ARISTO. Cl. 15. 3–28–16.
109,479. POLLYANNA. Cl. 22. 4–11–16.
109,714. CALSO IN TRIANGLE DESIGN. Cl. 45. 4–18–16.
109,864. BOND BREAD. Cl. 46. 4–18–16.
109,925. A. A. HYDE. Cl. 18. 4–25–16.
327,440. SLIK. Cl. 4. 8–27–35.
327,446. DOROTHEA DOCTOR. Cl. 39. 8–27–35.
329,179. MAP. Cl. 18. 10–22–35.
329,220. TRIUMPH. Cl. 26. 10–22–35.
329,354. THE CHIEF AND REPRESENTATION OF INDIAN RIDING HORSE. Cl. 23. 10–29–35.
329,355. OVEN ACE. Cl. 46. 10–29–35.
329,356. GOLDEN BAKE. Cl. 46. 10–29–35.
329,392. DOC. STEELSTRAP AND DESIGN. Cl. 23. 10–29–35.
329,399. KLISTER. Cl. 5. 10–29–35.
329,415. SHELL DIESEL. Cl. 15. 10–29–35.
329,522. THUM. Cl. 18. 11–5–35.
329,598. SPECO AND DESIGN. Cl. 23. 11–5–35.
329,651. THE NATIONAL POLICE GAZETTE. Cl. 38. 11–5–35.
329,684. BICKMORE GALL SALVE—BE SURE AND WORK THE HORSE ETC. Cl. 18. 11–5–35.
329,714. MAZZINI. Cl. 49. 11–5–35.
329,922. GREEN BAND ETC. AND DESIGN. Cl. 47. 11–19–35.
329,923. RED BAND ETC. AND DESIGN. Cl. 47. 11–19–35.
329,938. THOR. Cl. 23. 11–19–35.
329,998. BOWL OF ROSES. Cl. 17. 11–19–35.
330,091. POPLAR. Cl. 42. 11–19–35.
330,098. NO-WRINKLE. Cl. 42. 11–19–35.
330,147. AQUA-SEC. Cl. 6. 11–19–35.
330,408. CORONET AND DESIGN. Cl. 44. 12–3–35.
330,552. PERFOR AND CO., ETC. Cl. 47. 12–3–35.
330,674. REPRESENTATION OF MAN ASTRIDE A HORSE EDWARD CLOTHES. Cl. 39. 12–10–35.
330,779. ARTJAY AND SOFA DESIGN. Cl. 52. 12–17–35.
331,059. WEATHERMASTER. Cl. 34. 12–24–35.
331,642. BIG SHOT. Cl. 46. 1–14–36.
331,814. LUMPS-O'GOLD. Cl. 46. 1–21–36.
332,099. CELLOLIN. Cl. 38. 2–4–36.
332,116. MASTERPIECE. Cl. 37. 2–4–36.
332,206. ANACAPA. Cl. 46. 2–4–36.
332,208. WONDER. Cl. 45. 2–4–36.
332,518. MUSETTE. Cl. 36. 2–18–36.
333,166. NORBIDE. Cl. 23. 3–10–36.
333,350. J & F MARTELL COGNAC AND DESIGN. Cl. 49. 3–17–36.
333,400. REGIMENTAL. Cl. 3. 3–17–36.
333,402. TRIPROBE. Cl. 3. 3–17–36.
333,476. V AND REPRESENTATION OF FISH CROSSING THE V. Cl. 46. 3–24–36.
333,535. DRIONIZING. Cl. 52. 3–24–36.
333,553. KLOR-LENE. Cl. 52. 3–24–36.
333,629. SMOOTH SAILIN. Cl. 46. 3–31–36.
333,697. SENODIN. Cl. 18. 3–31–36.
333,893. PETALSKIN. Cl. 51. 4–14–36.
333,929. WESTWARD. Cl. 46. 4–14–36.
333,958. DEW DAB. Cl. 2. 4–14–36.
333,988. BRIMFULL. Cl. 46. 4–14–36.
334,018. APEX. Cl. 9. 4–14–36.
334,050. CHOAMA. Cl. 42. 4–21–36.
334,061. CRAIG-MARTIN. Cl. 51. 4–21–36.
334,163. COACH ROYALE AND REPRESENTATION OF HORSE DRAWING COACH. Cl. 39. 4–21–36.
334,179. SOCIAL REGISTER GLOVE. Cl. 39. 4–21–36.
334,190. BAY AND DESIGN. Cl. 46. 4–21–36.
334,308. NATUR-KOLD AND DESIGN. Cl. 31. 4–28–36.
334,471. DIAMOND BRAND XX IN DIAMOND DESIGN. Cl. 14. 5–5–36.

TRADEMARK REGISTRATIONS CANCELED

Section 7

95,723. LIBERTY. Cl. 46. 3–3–14.
200,566. CELLUPACKING. Cl. 37. 7–7–25.
345,363. LIBERTY BELL. Cl. 46. 4–27–37.
443,694. KIKKOMAN AND DESIGN. Cl. 46. 1–17–50.
600,129. FLOWER ROOT. Cl. 51. 12–28–54.
612,154. ROCKET. Cl. 27. 9–13–55.

Section 8

23,242. AMERICAN LADY. Cl. 39. 6–27–93.
80,636. BULL'S EYE. Cl. 46. 1–17–11.
112,405. AMERICAN LADY. Cl. 39. 9–5–16.
125,287. DORY-MATE. Cl. 46. 5–6–19.
168,139. RAT-SCENT. Cl. 6. 5–15–23.
205,941. CACTUS. Cl. 46. 11–17–25.
229,987. OPAL DENTALLINA. Cl. 6. 7–12–27.
245,521. TRADE WINNER. Cl. 12. 8–14–28.
251,217. NUNAMEL. Cl. 2. 1–1–29.
254,994. BIANCOL WITHIN DIAMOND DESIGN. Cl. 15. 4–2–29.
256,025. HOMERIC AND PORTRAIT DESIGN. Cl. 46. 5–7–29.
256,329. HI-SPEED. Cl. 15. 5–14–29.
259,740. B WITHIN CIRCULAR DESIGN. Cl. 13. 8–6–29.
261,953. E-K WITHIN CIRCULAR DESIGN. Cl. 3. 9–24–29.
287,967. CO-CO-NUT CUPLETS AND LANDSCAPE DESIGN. Cl. 46. 10–20–31.
296,481. CHEER LEADER AND REPRESENTATION OF CHEER LEADER. Cl. 39. 8–9–32.
310,399. CLUB AND DESIGN. Cl. 23. 2–27–34.
311,159. NADEAU N-P AND DESIGN. Cl. 23. 3–13–34.
337,687. BALAROO. Cl. 22. 8-18-36.
340,669. THE SQUIRREL CAGE. Cl. 38. 11–17–36.
341,392. "249". Cl. 4. 12–8–36.
344,560. LE MASQUE PORCELAINE. Cl. 6. 3–30–37.
344,576. SPEEDTAGS. Cl. 50. 3–30–37.
351,447. STARLIT. Cl. 43. 11–2–37
354,935. FAN. Cl. 23. 3–1–38.
358,319. JUDY. Cl. 43. 7–5–38.
362,564. SYNTHETONE. Cl. 4. 11–22–38.
369,126. KOSMETEX. Cl. 4. 7–18–39.
383,486. STIXONAL. Cl. 37. 12–10–40.
400,646. PINE CREST. Cl. 46. 3–23–43.
420,995. PARALAC. Cl. 5. 5–14–46.
420,996. PARATOL. Cl. 5. 5–14–46.
440,362. PLASTENE. Cl. 2. 8–24–48.
441,611. PACAMA. Cl. 46. 12–14–48.
442,151. PORTRAIT OF PIRATE. Cl. 39. 3–1–49.
513,944. OLDPARIS. Cl. 6. 8–23–49.
513,945. ALUMA-WAY AND DESIGN. Cl. 36. 8–23–49.
513,946. NELSON AND DESIGN. Cl. 23. 8–23–49.
513,947. LINCOLN ARMOR-EDGE BLADES. Cl. 23. 8–23–49.
513,950. GYROCAST. Cl. 23. 8–23–49.
513,956. CHASUBLE. Cl. 6. 8–23–49.
513,957. ALLSPORT. Cl. 26. 8–23–49.
513,961. KOVER-ALL. Cl. 26. 8–23–49.
513,962. PARFUMS VOLNAY. Cl. 6. 8–23–49.
513,964. BORDEAUX. Cl. 1. 8–23–49.
513,967. COROCO CONTACT WHEEL WITHIN CIRCULAR DESIGN. Cl. 23. 8–23–49.
513,972. HOLLYWOOD. Cl. 23. 8–23–49.
513,974. PARA-SCALECIDE. Cl. 6. 8–23–49.
513,976. COLONIAL ENAMEL WARE AND REPRESENTATION OF CANDLE WITHIN CIRCULAR DESIGN. Cl. 13. 8–23–49.
513,978. POWER LINE AND REPRESENTATION OF FOOTBALL LINE. Cl. 46. 8–23–49.
513,979. GROVER SOFT SHOES FOR TENDER FEET WITHIN OVAL DESIGN. Cl. 39. 8–23–49.
513,984. KEEPOCKET AND DESIGN. Cl. 40. 8–23–49.
513,986. HANDIE CREME AND DESIGN. Cl. 4. 8–23–49.
514,001. GEOMETRIC DESIGN. Cl. 1. 8–23–49.
514,002. GONE. Cl. 6. 8–23–49.
514,005. THERMO-SALT. Cl. 6. 8–23–49.
514,013. GEOMETRIC DESIGN. Cl. 6. 8–23–49.
514,018. PENO-BAR. Cl. 6. 8–23–49.
514,023. LAYMON'S. Cl. 23. 8–23–49.
514,024. BRITE-IZE. Cl. 4. 8–23–49.
514,032. CH'INTANG. Cl. 42. 8–23–49.
514,034. JIFFY DOG AND REPRESENTATION OF FRANKFURTER. Cl. 23. 8–23–49.
514,038. REMEMBRANCE ROSE AND REPRESENTATION OF ELEPHANT. Cl. 1. 8–23–49.
514,039. GLASTONBURY. Cl. 33. 8–23–49.
514,040. SUNOCO. Cl. 23. 8–23–49.
514,050. KOOLTEX. Cl. 39. 8–23–49.
514,051. LOC-LURE. Cl. 6. 8–23–49.
514,062. GLO-PAKE. Cl. 16. 8–23–49.
514,064. NEEDLETONE. Cl. 42. 8–23–49.
514,075. PATWIN. Cl. 13. 8–23–49.
514,076. KLIKSEAL. Cl. 13. 8–23–49.
514,078. BARMESAU BARBEQUE SAUCE AND REPRESENTATION OF PIG BEING BARBEQUED. Cl. 46. 8–23–49.
514,080. "ROBINSON'S ASSAYED". Cl. 6. 8–23–49.
514,085. CHOOKACHOO. Cl. 42. 8–23–49.
514,086. AIR-VU SYSTEM OF DRAWING AND DESIGN. Cl. 26. 8–23–49.
514,087. DETRO-TONE. Cl. 16. 8–23–49.
514,091. "WATERWITE". Cl. 33. 8–23–49.
514,095. TRIPLE "E" POINTER. Cl. 23. 8–23–49.
514,097. FRATERNITY HOUSE. Cl. 17. 8–23–49.
514,106. THE UNION. Cl. 23. 8–23–49.
514,108. PREMIER PATTERN. Cl. 26. 8–23–49.
514,111. SENECA AND PORTRAIT OF INDIAN. Cl. 1. 8–23–49.
514,114. ALADDIN'S TOOL AND REPRESENTATION OF LAMP AND WOMAN. Cl. 23. 8–23–49.
514,122. R AND DESIGN. Cl. 23. 8–23–49.
514,126. HOLLI-WARE. Cl. 34. 8–23–49.
514,133. KIDDENET. Cl. 42. 8–23–49.
514,135. ETIMOLOS AND DESIGN. Cl. 6. 8–23–49.
514,136. PINE TREE. Cl. 46. 8–23–49.
514,138. OPTIMUS. Cl. 23. 8–23–49.
514,143. SYNTRON. Cl. 15. 8–23–49.
514,147. CAPITOL AND REPRESENTATION OF BUILDING DOME. Cl. 13. 8–23–49.
514,155. TRIP-L-CRETE. Cl. 12. 8–23–49.
514,156. RU-CLE-PIC. Cl. 6. 8–23–49.
514,159. BUDAPEST. Cl. 6. 8–23–49.
514,160. ARABUCK. Cl. 9. 8–23–49.
514,173. BASEKOTE. Cl. 15. 8–23–49.
514,174. EN-AR-CO. Cl. 15. 8–23–49.
514,176. REPRESENTATION OF RABBIT. Cl. 42. 8–23–49.
514,177. MRS. LANE'S. Cl. 29. 8–23–49.
514,178. AROSIL. Cl. 42. 8–23–49.
514,191. WITMALLA. Cl. 42. 8–23–49.
514,200. SUNVIEW. Cl. 42. 8–23–49.
514,206. CHEMS. Cl. 6. 8–23–49.
514,208. PLOVA. Cl. 6. 8–23–49.
514,213. BROIDERETTE. Cl. 42. 8–23–49.
514,215. RESTORATION. Cl. 6. 8–23–49.
514,219. ATOM-CEPTIC. Cl. 6. 8–23–49.
514,221. LOMA-LOOM. Cl. 42. 8–23–49.
514,224. PENCLOR. Cl. 6. 8–23–49.
514,225. VICAR DEE. Cl. 4. 8–23–49.
514,226. VICAR SAN. Cl. 4. 8–23–49.
514,228. TRUDI. Cl. 6. 8–23–49.
514,229. VELVA PINE. Cl. 4. 8–23–49.
514,234. CAL-OAH. Cl. 3. 8–23–49.
514,236. PORO-CEL. Cl. 42. 8–23–49.
514,240. VERAMBERSIN. Cl. 6. 8–23–49.
514,243. BAYLITE. Cl. 12. 8–23–49.
514,246. BIG JEFF. Cl. 23. 8–23–49.
514,247. BINGO. Cl. 23. 8–23–49.
514,248. BLACK JACK. Cl. 23. 8–23–49.
514,249. BRONCHO. Cl. 23. 8–23–49.
514,250. RUFUS. Cl. 23. 8–23–49.
514,252. DES AND DESIGN. Cl. 6. 8–23–49.
514,257. CHILDSCO. Cl. 4. 8–23–49.
514,261. DREAM HAVEN. Cl. 6. 8–23–49.
514,262. NATWET. Cl. 6. 8–23–49.

514,266. TROMETE. Cl. 4. 8–23–49.
514,269. BRUNSCO. Cl. 4. 8–23–49.
514,270. PRIVATE EDITION. Cl. 42. 8–23–49.
514,271. NUVOLA. Cl. 42. 8–23–49.
514,272. GRANDSTAND. Cl. 42. 8–23–49.
514,276. RACEWAY. Cl. 42. 8–23–49.
514,277. REVERSO. Cl. 42. 8–23–49.
514,278. TENAX. Cl. 42. 8–23–49.
514,282. TIME TESTED SINCE 1850 AND REPRESENTATION OF HOUR GLASS. Cl. 55. 8–23–49.
514,287. YANKEE TRAILS. Cl. 55. 8–23–49.
514,295. FLAGSHIP. Cl. 55. 8–23–49.
514,296. MINUTE LINER AND REPRESENTATION OF DIAL. Cl. 55. 8–23–49.
514,297. SILVER MINUTE AND REPRESENTATION OF DIAL. Cl. 55. 8–23–49.
514,298. ARTIS. Cl. 28. 8–23–49.
514,299. SAMON FLY. Cl. 22. 8–23–49.
514,301. THE EATON PERMANENT MOLD MACHINE IS A SYMBOL OF THE QUALITY OF GRAY IRON CASTINGS PRODUCED BY THE PERMANENT MOLD PROCESS AND DESIGN. Cl. 23. 8–23–49.
514,302. LORRAINE. Cl. 28. 8–23–49.
514,303. FLOOR-X. Cl. 4. 8–23–49.
514,304. NEW GUINEA AND LANDSCAPE DESIGN. Cl. 42. 8–23–49.
514,306. ANTUCIDE. Cl. 6. 8–23–49.
514,307. "LOCK-IT". Cl. 23. 8–23–49.
514,308. SAFTI-SHEAR. Cl. 23. 8–23–49.
514,310. HAIRSET. Cl. 29. 8–23–49.
514,314. TOURNEAU GOLFER AND REPRESENTATION OF WATCH DIAL. Cl. 27. 8–23–49.
514,315. AUTO–8. Cl. 26. 8–23–49.
514,316. HART'S 77. Cl. 15. 8–23–49.
514,318. KANT-LIV AND DESIGN. Cl. 6. 8–23–49.
514,321. PAN-L. Cl. 34. 8–23–49.
514,325. BEST EVER. Cl. 4. 8–23–49.
514,326. MIRA YOUNG. Cl. 6. 8–23–49.

Section 18

355,608. FORE & AFT. Cl. 39. 3–22–38. Canc. 6522.
380,311. JOYA. Cl. 6. 8–20–40. Canc. 6490.
389,758. MINICOTE. Cl. 16. 8–19–41. Canc. 6516.
416,229. HELICUPTER. Cl. 39. 9–4–45. Canc. 6487.
549,478. POP-O-MATIC. Cl. 21. 10–16–51. Intf. 5073.
588,772. CAPRI. Cl. 21. 4–20–54. Canc. 6536.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 6

119,773. Dec. 11, 1917. William Harrison Plunkett, Chicago, Ill. Pub. by Plunkett Chemical Company, Chicago, Ill.

SANOFORM

For Odorless Deodorizing Fluid for Toilets.

140,937. Mar. 29, 1921. William H. Plunkett, Chicago, Ill. Pub. by Plunkett Chemical Company, Chicago, Ill.

MOTH-NO

For Insecticides.

395,666. June 2, 1942. W. H. Plunkett, d. b. a. Plunkett Chemical Company, Chicago, Ill. Pub. by Plunkett Chemical Company, Chicago, Ill.



For Disinfectant, Insecticide, Solvent for Removing Discolorations and Scale From Pipes, Plumbing Fixtures, or Other Surfaces; Disinfectant With Cleansing Properties, and Skin Conditioner for Animals.

395,919. June 16, 1942. W. H. Plunkett, d. b. a. Plunkett Chemical Company, Chicago, Ill. Pub. by Plunkett Chemical Company, Chicago, Ill.

BUG-NO

The word "Bug" is disclaimed apart from the mark as shown on the drawing.
For Insecticide.

401,125. Apr. 27, 1943. W. H. Plunkett, d. b. a. Plunkett Chemical Company, Chicago, Ill. Pub. by Plunkett Chemical Company, Chicago, Ill.

RAT-NO

The word "Rat" is disclaimed apart from the mark as shown on the drawing.
For Rodenticide.

409,291. Oct. 3, 1944. W. H. Plunkett, d. b. a. Plunkett Chemical Company, Chicago, Ill., to Plunkett Trust. Pub. by Plunkett Chemical Company, Chicago, Ill.

ROCH-NO

The word "Roch" (Roach) is disclaimed apart from the mark as shown on the drawing.
For Insecticide.

CLASS 12

350,447. Sept. 28, 1937. Lloyd A. Fry Roofing Co., Summit, Ill. Pub. by registrant.

Resinalt

For Roofing Material—Namely, Composition and Asphalt Coated Roofing and Shingles.

359,345. Aug. 16, 1938. Lloyd A. Fry Roofing Co., Summit, Ill. Pub. by registrant.



The word "Roofing" is disclaimed apart from the mark as shown on the drawing.
For Roofing Material.

435,678. Jan. 6, 1948. Isador S. Turover, Bethesda, Md. Pub. by registrant.



For Construction Materials—Namely, Rough Lumber, Dressed Lumber; Millwork—Namely, Mouldings and Ornamental Woodwork for Interior and Exterior Use; Wood and Metal Sash; Wood and Metal Doors; Wood Flooring in Strip and Parquet Forms; Composition Flooring in Blocks and Tiles; Wood and Metal Siding; Wood Partition; Gypsum and Composition Type Partition; Wood Paneling; Wood and Metal Ceiling; Plywood; Wallboard of the Cellular and Non-Cellular Types From Wood Fibers, Gypsum and Composition Materials; Acoustical and Thermal Insulation of Vegetable and Mineral Origin in Sheet, Plank, Blanket, Roll, Tile or Comminuted Form, and Including Metal Foil, Metal Pellets, and Glass Compositions, and Wooden Shingles.

CLASS 13

191,976. Nov. 25, 1924. C. K. Scofield, d. b. a. Rudman & Scofield, New York, N. Y. Pub. by Rudman & Scofield, Inc., New York, N. Y.

RUDSCO

For Tin Coffee Boilers and Coffee Urns.

443,333. Sept. 6, 1949. Rudman & Scofield, Inc., New York, N. Y. Pub. by registrant.

Rudsco

For Sinks, Coffee Urns, Coffee Boilers, Hot-Water Urns, Slop Sinks, Funnels, Inset Pans for Steam Tables, and Base-Metal Chocolate Pots for Holding Chocolate.

CLASS 14

259,969. Aug. 13, 1929. Oklahoma Steel Castings Company, Tulsa, Okla. Pub. by American Steel and Pump Corporation, d. b. a. Oklahoma Steel Castings Company, New York, N. Y., and Tulsa, Okla.

TUF-WEAR

For Steel Castings.

CLASS 21

292,119. Mar. 1, 1932. Atlas Supply Company, Newark, N. J. Pub. by registrant.

ATLAS

For Spark Plugs.

CLASS 23

240,974. Apr. 10, 1928. Gardner-Denver Company, Denver, Colo. Pub. by registrant.



For Drill Bits; Drill Sharpeners, Pneumatic and Manual Operated; Drill Retainers and Other Named Cutlery, Machinery, and Tools, and Parts Thereof.

CLASS 31

292,092. Mar. 1, 1932. Atlas Supply Company, Newark, N. J. Pub. by registrant.

ATLAS

For Oil Filters for Use as an Accessory to a Combustion Engine.

CLASS 35

291,995. Mar. 1, 1932. Atlas Supply Company, Newark, N. J. Pub. by registrant.

ATLAS

For Automobile Fan Belts and Automobile Radiator Hose.

CLASS 39

396,061. June 30, 1942. Oberman & Company, Jefferson City, Mo. Pub. by Oberman Mfg. Co., Jefferson City, Mo.



For Outer Shirts and Jackets.

CLASS 42

427,801. Feb. 25, 1947. The Harvey Co., Nashville, Tenn. Pub. by The Harvey Co. Inc., Nashville, Tenn.

Harvest

For Household Linens, Domestics, Such as Towels, Bedspreads, Blankets, Bath Mats, and Floor Coverings and Rugs.

CLASS 46

167,137. Apr. 24, 1923. The Seymour Packing Company, Topeka, Kans. Pub. by Seymour Foods, Inc., Topeka, Kans.



For Dressed Poultry and Eggs.

171,113. July 31, 1923. The Seymour Packing Company, Topeka, Kans. Pub. by Seymour Foods, Inc., Topeka, Kans.



VICTOR

For Dressed Poultry.

CLASS 52

272,461. July 8, 1930. Apothecaries Hall Company, Waterbury, Conn. Pub. by registrant.

MONT BLANC

For Laundry Blue, Soda Used as a Laundry Detergent, and Stripper Used for Stripping Colors From Clothes.

395,664. June 2, 1942. W. H. Plunkett, d. b. a. Plunkett Chemical Company, Chicago, Ill. Pub. by Plunkett Chemical Company, Chicago, Ill.

HYDROCLEAN

For Solvent for Removing Discolorations and Scale From Pipes, Plumbing Fixtures, or Other Surfaces.

395,665. June 2, 1942. W. H. Plunkett, d. b. a. Plunkett Chemical Company, Chicago, Ill. Pub. by Plunkett Chemical Company, Chicago, Ill.

KLENZINE

For Drain Pipe Cleaner.

396,320. July 7, 1942. W. H. Plunkett, d. b. a. Plunkett Chemical Company, Chicago, Ill. Pub. by Plunkett Chemical Company, Chicago, Ill.



For Cleaning Compound for Porcelain and Metal Surfaces, Cleanser With Disinfecting Properties and Liquid Soap.

396,321. July 7, 1942. W. H. Plunkett, d. b. a. Plunkett Chemical Company, Chicago, Ill. Pub. by Plunkett Chemical Company, Chicago, Ill.

RENOVENE

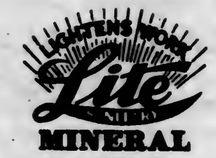
For Cleaning Compound for Porcelain and Metal Surfaces.

406,747. Apr. 25, 1944. W. H. Plunkett, d. b. a. Plunkett Chemical Company, Chicago, Ill., to Plunkett Trust, Chicago, Ill. Pub. by Plunkett Chemical Company, Chicago, Ill.

KRE-O-DOR

The word "O-dor" is disclaimed apart from the mark as shown on the drawing.
For Disinfectant With Cleansing Properties.

408,861. Aug. 29, 1944. Guy E. Brignall, d. b. a. Lite Soap Company, Aurora, Ill. Pub. by registrant.



The words "Lightens Work" and "Sanitary Mineral" are disclaimed apart from the mark shown on the drawing.
For Household Soap.

LIST OF REGISTRANTS OF TRADEMARKS

ASC Cable Division of Radio Apparatus Corp., Indianapolis, Ind. 620,268, pub. 11–1–55. Cl. 21.
Acme Steel Co., Chicago, Ill. 329,392, ren. 10–29–55. Cl. 23.
Adams Bag Co., The, Chagrin Falls, Ohio. 251,217, canc. Cl. 2.
Adams Brothers, Inc., Pittsfield, N. H. 620,427, pub. 11–1–55. Cl. 39.
Adams, Bruce T., West Barnstable, Mass. 620,583. Cl. 39.
Aetna Life Insurance Co., Hartford, Conn. 514,282, canc. Cl. 35.
Agar Mfg. Co.: *See*—
Ager, Drez.
Ager, Drez, d. b. a. Agar Mfg. Co., Miami, Fla. 620,192, pub. 11–1–55. Cl. 12.
Air Reduction Co., Inc., New York, N. Y. 620,464, pub. 11–8–55. Cl. 44.
Air-Vu Co.: *See*—
McQuaid, Dan J.
Ajax Box Co., The, Chicago, Ill. 620,398, pub. 11–1–55. Cl. 37.
Aktiebolaget Wallco, Hasslehoim, Sweden. 620,175, pub. 11–8–55. Cl. 1.
Akwell Corp., The: *See*—
Manley Rubber Products Co., Inc.
Aladdin Mfg. Co., Inc., Kansas City, Mo. 514,114, canc. Cl. 23.
Albers Milling Co., Los Angeles, Calif. 620,475, pub. 11–8–55. Cl. 46.
Aldis Brothers Ltd., Birmingham, England. 620,344, pub. 11–1–55. Cl. 26.
Allied Chemical & Dye Corp., New York, N. Y. 620,181, pub. 10–18–55. Cl. 6.
Allied Engineering & Sales Co.: *See*—
Brunner, Rudolph.
Allied Kid Co., Boston, Mass. 620,174, pub. 11–8–55. Cl. 1.
Allied Rentool Service: *See*—
Garlits, Edward E., Jr.
Allied Stores Corp.: *See*—
Pelser Mfg. Co.
Alpha Xi Delta Fraternity, Evanston, Ill. 620,401, pub. 11–1–55. Cl. 38.
Altrogge, J. J., Tulsa, Okla. 620,400, pub. 11–1–55. Cl. 38.
American Airlines, Inc., New York, N. Y. 514,295, canc. Cl. 55.
American Beverage Corp.: *See*—
Calso Co., The.
American Brake Shoe Co., New York, N. Y. 620,229, pub. 11–1–55. Cl. 14.
American Lady Corset Co., Detroit, Mich. 112,405, canc. Cl. 39.
American Nickeloid Co., Peru, Ill. 620,234, pub. 11–1–55. Cl. 14.
American Safety Razor Corp., New York, N. Y. 620,465, pub. 11–8–55. Cl. 44.
American Steel and Pump Corp.: *See*—
Oklahoma Steel Castings Co.
American Writing Paper Corp., Holyoke, Mass. 620,397, pub. 11–1–55. Cl. 37.
Anatox Mineral Products Corp., Franklin, Mass. 514,215, canc. Cl. 6.
An-Fo Mfg. Co.: *See*—
Rosefield, John B.
Annetta Dresses, Inc., New York, N. Y. 620,423, pub. 11–1–55. Cl. 39.
Anolene Co.: *See*—
Kocher, Anna G.
Anolite Corp., New York, N. Y. 620,212, pub. 11–1–55. Cl. 13.
Ansul Chemical Co., Marinette, Wis. 620,348, pub. 11–1–55. Cl. 26.
Apothecaries Hall Co., Waterbury, Conn. 272,461, 12(c) pub. 1–31–56. Cl. 52.
Aqua-Sec Corp., New York, N. Y., to Aqua-Sec Corp., Jersey City, N. J. 330,147, ren. 11–19–55. Cl. 6.
Arnel Co., Inc., The, New York, N. Y. 440,362, canc. Cl. 2.
Aron Canning Co., The: *See*—
Bank of America National Trust and Savings Association.
Artjay Products Co.: *See*—
Jaffe, A. Arthur.
Ateliers de la Motobecane, Pantin, France. 620,263, pub. 11–1–55. Cl. 19.
Atkins, E. C., and Co., Indianapolis, Ind., to Borg-Warner Corp., Chicago, Ill. 329,354, ren. 10–29–55. Cl. 23.
Atlas Powder Co., Wilmington, Del. 334,018, ren. 4–14–56. Cl. 9.
Atlas Supply Co., Newark, N. J. 291,995, 12(c) pub. 1–31–56. Cl. 35.
Atlas Supply Co., Newark, N. J. 292,092, 12(c) pub. 1–31–56. Cl. 31.
Atlas Supply Co., Newark, N. J. 292,119, 12(c) pub. 1–31–56. Cl. 21.
Attwood Brass Works, Grand Rapids, Mich. 620,262, pub. 11–1–55. Cl. 19.
Atwood Mfg. Co., Wilmington, Del. 514,325, canc. Cl. 4.
Aural Record and Recording Service: *See*—
Johnston, William F.
Automatic Industries, Inc., Kansas City, Mo. 514,308, canc. Cl. 23.
Auto-Photo Co., Los Angeles, Calif. 620,555, pub. 11–1–55. Cl. 100.
Babb, B. A., New York, N. Y. 620,203, pub. 11–1–55. Cl. 12.
Badger Glove and Slipper Co., Milwaukee, Wis. 442,151, canc. Cl. 39.
Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany. 620,184, pub. 11–1–55. Cl. 10.
Baker, Horace M., Lumberton, N. C. 620,572. Cl. 34.
Bakers Equipment Bureau, New York, N. Y. 620,486, pub. 11–8–55. Cl. 46.
Bali Brassiere Co., Inc., New York, N. Y. 620,416, pub. 11–1–55. Cl. 39.
Bank of America National Trust and Savings Association, trustee of the testamentary trust of Aron Hershel, deceased, d. b. a. The Aron Canning Co., near Stockton, Calif. 620,504, pub. 11–8–55. Cl. 46.
Barnes, Maud O., d. b. a. Maud's Minute Market, Winnetka, Ill. 620,470, pub. 11–8–55. Cl. 46.
Barsen Co., Minneapolis, Minn. 620,171–2, pub. 11–8–55. Cl. 1.
Bay State Milling Co., d. b. a. Bay State Milling Co., Leavenworth, Kans. 620,514, pub. 11–8–55. Cl. 46.
Bear Mfg. Co., Rock Island, Ill. 620,358, pub. 11–1–55. Cl. 26.
Beautymasters of Beverly Hills, Inc., Milwaukee, Wis. 514,159, canc. Cl. 6.
Bechard Mfg. Co., Chicago, Ill. 259,740, canc. Cl. 13.
Belknap Hardware & Mfg. Co., The, Louisville, Ky. 245,521, canc. Cl. 12.
Bell Distributors, Inc., New York, N. Y. 620,307, pub. 11–1–55. Cl. 23.
Bell & Howell Co., Chicago, Ill. 514,315, canc. Cl. 26.
Bengal Co., New York, N. Y. 514,303, canc. Cl. 4.
Benson, Arthur J., d. b. a. Twin-B Publishing Co., Kansas City, Mo. 620,577. Cl. 38.
Bercut-Richards Packing Co., Sacramento, Calif. 333,929, ren. 4–14–56. Cl. 46.
Berry Brothers Corp., Greensboro, N. C. 620,415, pub. 11–1–55. Cl. 39.
Beskind, Sidney, d. b. a. The Tanophene Co., Miami Beach, Fla. 620,568. Cl. 18.
Besser Co., Alpena, Mich. 620,314, pub. 11–1–55. Cl. 23.
Bianchini, Ferier, Inc., New York, N. Y. 514,270, canc. Cl. 42.
Bickmore Co., The, Old Town, Maine. 329,684, ren. 11–5–55. Cl. 18.
Blaisdell Pencil Co., Philadelphia, Pa. 332,116, ren. 2–4–56. Cl. 37.
Blish Milling Co., The, Seymour, Ind. 80,636, canc. Cl. 46.
Blue Flash Chemical Co.: *See*—
Manion, Harry.
Blue Ribbon Paint Co., d. b. a. Everlast Paint Co., Wheeling, W. Va. 514,062, canc. Cl. 16.
Boehm, Emma, New York, N. Y. 620,510, pub. 11–8–55. Cl. 46.
Bolidens Gruvaktiebolag, Skelleftehamn, Sweden. 514,013, canc. Cl. 6.
Bollinger, Jacques, d. b. a. Perfor & Co., to Elizabeth Marie Law de Lauriston de Boubers, Ay, France. 330,552, ren. 12–3–55. Cl. 47.
Borg-Warner Corp.: *See*—
Atkins, E. C., and Co.
Borg-Warner Corp., Chicago, Ill. 620,298, pub. 11–1–55. Cl. 23.
Bowman Brothers Drug Co., The, Canton, Ohio. 620,259, pub. 11–1–55. Cl. 18.
Bradley, Milton, Co., Springfield, Mass. 337,687, canc. Cl. 22.
Bradley, Milton, Co., Springfield, Mass. 383,486, canc. Cl. 37.
Branstrator Truck Engineering Corp., Fort Wayne, Ind., to E. F. Vilter Sales, Inc., Milwaukee, Wis. 620,300, pub. 11–1–55. Cl. 23.
Braznell Co., St. Louis, Mo. 620,186, pub. 11–1–55. Cl. 11.
Breidert, G. C., Co., The, Los Angeles, Calif. 620,382, pub. 11–1–55. Cl. 34.
Brignall, Guy, E., d. b. a. Lite Soap Co., Aurora, Ill. 408,861, 12(c) pub. 1–31–56. Cl. 52.
Brinly-Hardy Co., Louisville, Ky. 514,246–50, canc. Cl. 23.
Brite-Ize Co.: *See*—
Copeland, Barnett.
Bruce & Co., (Leith) Ltd., Leith, Edinburgh, Scotland. 620,590. Cl. 49.
Bruce-Ellen Co., Inc., Marion, Ohio. 620,183, pub. 11–1–55. Cl. 10.
Brunner, Rudolph, d. b. a. Allied Engineering & Sales Co., Dallas, Tex. 620,359, pub. 11–1–55. Cl. 26.
Brunswick-Balke-Collender Co., The, Chicago, Ill. 514,269, canc. Cl. 4.
Bulova Watch Co., Inc., Bulova Park, Flushing, N. Y. 612,154, canc. Cl. 27.
Buscarlet Glove Co., Inc., New York, N. Y. 334,179, ren. 4–21–56. Cl. 39.
Butler Paper Corp., Chicago, Ill. 620,399, pub. 11–1–55. Cl. 37.
Byford, D., & Co. Ltd., Leicester, England. 620,424, pub. 11–1–55. Cl. 39.
Calico Printers' Association Ltd., The, Manchester, England. 620,410, pub. 11–1–55. Cl. 39.
Callaway Products, Inc., New York, N. Y. 620,285, pub. 11–1–55. Cl. 22.
Calso Co., The, Vallejo, to American Beverage Corp., San Francisco, Calif. 109,714, ren. 4–18–56. Cl. 45.
Calumet & Hecla, Inc., Calumet, Mich. 620,179, pub. 11–8–55. Cl. 2.
Calumet Steel Castings Corp., Hammond, Ind. 620,235, pub. 11–1–55. Cl. 14.
Cambridge Tailoring Co., The: *See*—
Edward Custom Clothes, Inc.

Camp, Fred V., Stayton, Oreg. 514,299, canc. Cl. 22.
Canadian Petrofina Ltd., Montreal, Quebec, Canada. 620,240, pub. 11–1–55. Cl. 15.
Candy & Co., Inc., Chicago, Ill. 620,180, pub. 8–23–55. Cl. 4.
Carbona Products Co., Long Island City, N. Y. 620,548, pub. 11–8–55. Cl. 52.
Caron Corp., New York, N. Y. 344,560, canc. Cl. 6.
Carrier Corp.: *See*—
Carrier Engineering Corp.
Carrier Engineering Corp., Newark, N. J., to Carrier Corp., Syracuse, N. Y. 331,059, ren. 12–24–55. Cl. 34.
Caspari, Karl, Gottingen, Germany. 620,390, pub. 11–1–55. Cl. 36.
Cedarburg Mfg. Co., to Klekhaefer Corp., Cedarburg, Wis. 329,938, ren. 11–19–55. Cl. 23.
Celotex Corp., The, Chicago, Ill. 620,193–4, pub. 11–1–55. Cl. 12.
Centri-Spray Corp., Detroit, Mich. 620,295, pub. 11–1–55. Cl. 23.
Chain O'Lakes Game Fields: *See*—
Effers, Karl W.
Chainveyor Corp., Los Angeles, Calif. 620,320, pub. 11–1–55. Cl. 23.
Chemical Specialties Inc., Oakland, Calif. 514,316, canc. Cl. 15.
Chems: *See*—
Mumford, Kenneth O.
Cherry-Burrell Corp., Chicago, Ill. 620,573. Cl. 35.
Childs, Elizabeth M., d. b. a. Childsco Products Co., Macon, Ga. 514,257, canc. Cl. 4.
Childsco Products Co.: *See*—
Childs, Elizabeth M.
Cincinnati Ventilating Co., Inc., The, Covington, Ky. 620,317, pub. 11–1–55. Cl. 23.
Cisco, Inc., New York, N. Y. 620,585. Cl. 42.
Clark, Allen: *See*—
Clark, James A.
Clark, James A., d. b. a. A. Clark, Birmingham, Ala. 620,558, pub. 11–1–55. Cl. 101.
Claus, Walter P.: *See*—
Kernstown Hosiery Mill.
Clayton, Mark & Co., Evanston, Ill. 620,521, pub. 11–8–55. Cl. 50.
Clearasil, Inc., White Plains, N. Y. 620,540, pub. 11–1–55. Cl. 52.
Clinton Machine Co., Clinton, Mich. 620,301, pub. 11–1–55. Cl. 23.
Clover Farm Stores Corp., Cleveland, Ohio. 614,177, canc. Cl. 29.
Club Razor and Blade Mfg. Corp., Newark, N. J. 310,399, canc. Cl. 23.
Club Razor and Blade Mfg. Corp., Newark, N. J. 311,159, canc. Cl. 23.
Club Razor & Blade Mfg. Corp., Newark, N. J. 354,935, canc. Cl. 23.
Cluett, Peabody & Co., Inc., Troy, N. Y. 514,178, canc. Cl. 42.
Cockrell, Eleanor M., Madison, N. J. 620,448, pub. 11–1–55. Cl. 39.
Cohen, A., & Sons Corp., New York, N. Y. 620,349, pub. 11–1–55. Cl. 26.
Cohn-Hall-Marx Co., to United Merchants and Manufacturers, Inc., New York, N. Y. 334,050, ren. 4–21–56. Cl. 42.
Coleman Co., Inc., The, Wichita, Kans. 620,386, pub. 11–1–55. Cl. 34.
Colotyle Tyle-Bord, Inc., Seattle, Wash. 620,522, pub. 11–8–55. Cl. 50.
Columbia Cable & Electric Corp., Brooklyn, N. Y. 620,280, pub. 11–1–55. Cl. 21.
Columbia Coat Co., Boston, Mass. 620,418, pub. 11–8–55. Cl. 39.
Columbia Razor Blade Co.: *See*—
Isenberg, William.
Columbian Enameling & Stamping Co., Inc., Terre Haute, Ind. 513,976, canc. Cl. 13.
Columbian Rope Co., Auburn, N. Y. 513,967, canc. Cl. 23.
Comfort Mfg. Co., Chicago, Ill. 334,061, ren. 4–21–56. Cl. 51.
Continental Can Co., Inc., New York, N. Y. 620,393, pub. 11–1–55. Cl. 37.
Cook, Charles L., d. b. a. Southwestern Saw Co., Houston, Tex. 620,327, pub. 11–1–55. Cl. 23.
Copeland, Barnett, d. b. a. Brite-Ize Co., Chicago, Ill. 514,024, canc. Cl. 4.
Copperweld Steel Co., Glassport, Pa. 620,228, pub. 11–1–55. Cl. 14.
Cortley Curtain Corp., New York, N. Y. 514,213, canc. Cl. 42.
Cotton Club Bottling Co.: *See*—
Miller-Becker Co., The.
Country & Western Jamboree, Inc., Chicago, Ill. 620,403, pub. 11–1–55. Cl. 38.
Couse & Bolten Co., Newark, N. J. 620,388, pub. 11–1–55. Cl. 35.
Croname, Inc., Chicago, Ill. 620,523, pub. 11–8–55. Cl. 50.
Crosby, William J., Waterbury, Conn. 620,524, pub. 11–8–55. Cl. 50.
Crown Fabrics Corp., New York, N. Y. 330,098, ren. 11–19–55. Cl. 42.
Crown Hosiery Mills, Inc., High Point, N. C. 620,431, pub. 11–1–55. Cl. 39.
Cummins Engine Co., Inc., Columbus, Ind. 620,294, pub. 11–1–55. Cl. 23.
Curry & Paxton Ltd., London, England. 620,354, pub. 11–1–55. Cl. 26.
Daleo Poultry & Egg Co., Beaumont, Tex. 620,487, pub. 11–1–55. Cl. 46.
Dallas Iron & Wire Works, Inc., Dallas, Tex. 620,288, pub. 11–1–55. Cl. 22.
Dalli-Werke Mäurer & Wirtz, Stolberg, Rhineland, Germany. 620,547, pub. 11–1–55. Cl. 52.
Daniel, Jack, Distillery, Lem Motlow, Prop., Inc., Lynchburg, Tenn. 620,518, pub. 11–8–55. Cl. 49.
Daniels, Claude H., Stamford, Conn. 416,229, canc. Cl. 39.
Davies-Young Soap Co., The, Dayton, Ohio. 333,553, ren. 3–24–56. Cl. 52.
Davis Bros. Fisheries, Inc., Gloucester, Mass. 125,287, canc. Cl. 46.
Davis Fishing Tackle Co.: *See*—
Davis, Lester M.
Davis, Lester M., d. b. a. Davis Fishing Tackle Co., Tacoma, Wash. 620,286, pub. 11–1–55. Cl. 22.
Dearborn Gage Co., Dearborn, Mich. 620,374, pub. 11–1–55. Cl. 26.
De Lauriston de Boubers, Elizabeth Marie Law: *See*—
Bollinger, Jacques.
Densten Felt & Hair Co., Philadelphia, Pa. 514,064, canc. Cl. 42.
Detroit-Michigan Stove Co., Detroit, Mich., now by change of name to Welbilt Corp. 620,384, pub. 11–1–55. Cl. 34.
Dimension Unlimited: *See*—
Teichert, Hanns R.
Di Santo & Co.: *See*—
Di Santo, Joseph.
Di Santo, Joseph, d. b. a. Di Santo & Co., Duluth, Minn. 329,714, ren. 11–5–55. Cl. 49.
Dixon Iron Works: *See*—
Wagner, Dixon R.
Doce, Brunner & Rashti, Buenos Aires, Argentina. 514,298, canc. Cl. 28.
Doctors, Dorothea, Inc., to Dorothea Doctors Fox, New York, N. Y. 327,446, ren. 8–27–55. Cl. 39.
Dolcin Corp., New York, N. Y. 514,240, canc. Cl. 6.
Donaldson Co., Inc., St. Paul, Minn. 620,305, pub. 11–1–55. Cl. 23.
Drew, Fred M., Co., Santa Clara, to United States Products Corp., Ltd., San Jose, Calif. 620,472, pub. 11–8–55. Cl. 46.
Dubois, Paul R., Sanary-sur-Mer, Var, France. 620,353, pub. 11–1–55. Cl. 26.
Duval, Germaine R., Suresnes, France. 513,962, canc. Cl. 6.
Dykas, John, Central Falls, R. I. 600,129, canc. Cl. 51.
Eastern Stainless Steel Corp., Baltimore, Md. 620,236, pub. 11–1–55. Cl. 14.
Eastyarn, Inc., Brooklyn, N. Y. 351,447, canc. Cl. 43.
Eastyarn, Inc., Brooklyn, N. Y. 358,319, canc. Cl. 43.
Easy Day Mfg. Co., Brookline, Mass. 620,570. Cl. 29.
Eaton Mfg. Co., Cleveland, Ohio. 514,301, canc. Cl. 23.
Eclipse Fuel Engineering Co., Rockford, Ill. 620,373, pub. 11–1–55. Cl. 26.
Edwal Laboratories, Inc., The, Chicago, Ill. 514,005, canc. Cl. 6.
Edward Custom Clothes, Inc., Philadelphia, Pa., to The Cambridge Tailoring Co., Baltimore, Md. 330,674, ren. 12–10–55. Cl. 39.
Effers, Karl W., d. b. a. Chain O'Lakes Game Fields, McHenry, Ill. 620,505, pub. 11–8–55. Cl. 46.
Elastizell Corp. of America, Alpena, Mich. 620,189–90, pub. 11–1–55. Cl. 12.
Electro-Acid Corp., Houston, Tex. 620,267, pub. 11–1–55. Cl. 21.
Electronic Heating Corp., Newton, Mass. 620,282–3, pub. 11–1–55. Cl. 21.
Elias, Frank, d. b. a. Rosamar Farm and as Rosamar Breeding Farm, San Martin, Calif. 620,168, pub. 11–8–55. Cl. 1.
Eljer Co., Ford City, Pa., to The Murray Corp. of America, Detroit, Mich. 620,216, pub. 11–1–55. Cl. 13.
Elliott Bay Mill Co., Seattle, Wash. 514,243, canc. Cl. 12.
Elm Farm Foods Co., Dorchester, Boston, Mass. 620,498, pub. 11–8–55. Cl. 46.
Empire Oil Co., Chicago, Ill. 620,533, pub. 11–1–55. Cl. 52.
Enger-Kress Co., West Bend, Wis. 261,953, canc. Cl. 3.
Erwin-Lambeth, Inc.: *See*—
Standard Chair Co.
Esmond Mills, Inc., The, Smithfield and Esmond, R. I., to Esmond Virginia, Inc., Waynesboro, Va. 514,176, canc. Cl. 42.
Esmond Virginia, Inc.: *See*—
Esmond Mills, Inc., The.
Esso Standard Oil Co., Wilmington, Del., and New York, N. Y. 514,173, canc. Cl. 15.
Evans, John R., & Co., Camden, N. J. 620,169, pub. 11–8–55. Cl. 1.
Everest & Jennings, Inc., Los Angeles, Calif. 620,463, pub. 11–8–55. Cl. 44.
Everlast Paint Co.: *See*—
Blue Ribbon Paint Co.
Exact Weight Scale Co., The, Columbus, Ohio. 620,366, pub. 11–1–55. Cl. 26.
Facho, Limitada, Portimao, Portugal. 256,025, canc. Cl. 46.
Facial Products, Inc., Chicago, Ill. 514,051, canc. Cl. 6.
Falzone, Joseph, Rockford, Ill. 620,546, pub. 11–1–55. Cl. 52.
Famous-Maid Brassiere Corp., New York, N. Y. 620,440, pub. 11–1–55. Cl. 39.
Famous Products Co.: *See*—
Valmor Products Co.
Fampet Mfg. Inc., Irvington, N. J. 620,321, pub. 11–1–55. Cl. 23.
Feldman, Louis J., New York, N. Y. 514,085, canc. Cl. 42.
Fidalgo Island Packing Co., Seattle, Wash. 333,476, ren. 3–24–56. Cl. 46.
Field, J. C. & J., Ltd., Amersham, England. 620,527, pub. 11–8–55. Cl. 51.
Filiauer Surgical Supplies, Inc., Chattanooga, Tenn. 620,166, pub. 11–8–55. Cl. 1.
Finger Lakes Chemical Co., Inc., Etna, N. Y. 620,539, pub. 11–1–55. Cl. 52.
Firestone Tire & Rubber Co., The, Akron, Ohio. 620,223, pub. 11–1–55. Cl. 13.

First Spice Mixing Co., Inc., New York, N. Y. 620,511, pub. 11–8–55. Cl. 46.
Fitzpatrick Brothers, Inc., Chicago, Ill. 620,537, pub. 11–1–55. Cl. 52.
Flash-Stone Co., Inc., Philadelphia, Pa. 620,191, pub. 11–1–55. Cl. 12.
Float-Lock Corp., New York, N. Y. 620,325, pub. 11–1–55. Cl. 23.
Flotill Products, Inc., Stockton, Calif. 620,467, pub. 11–8–55. Cl. 45.
Food Machinery and Chemical Corp.: *See*—
Westvaco Chemical Corp.
Forrester-Dorman Co., Flushing, N. Y. 514,076, canc. Cl. 13.
Fox, Dorothea D.: *See*—
Doctors, Dorothea, Inc.
Frawley, R. D., d. b. a. Num Specialty Co., Pittsburgh, Pa. 329,522, ren. 11–5–55. Cl. 18.
French Sardine Co., Inc., to Star-Kist Foods, Inc., Terminal Island, Calif. 334,190, ren. 4–21–56. Cl. 46.
Fruit Products Corp., New York, N. Y. 620,491–2, pub. 11–8–55. Cl. 46.
Fry, Lloyd A., Roofing Co., Summit, Ill. 350,447, 12(c) pub. 1–31–56. Cl. 12.
Fry, Lloyd A., Roofing Co., Summit, Ill. 359,345, 12(c) pub. 1–31–56. Cl. 12.
Funk, Lewis D., Whittier, Calif. 620,329, pub. 11–1–55. Cl. 23.
Galland-Henning Mfg. Co., Milwaukee, Wis. 620,221, pub. 11–1–55. Cl. 13.
Gallun, A. F., & Sons, to A. F. Gallun & Sons Corp., Milwaukee, Wis. 109,178–9, ren. 3–28–56. Cl. 1.
Gallun, A. F., & Sons Corp.: *See*—
Gallun, A. F., & Sons.
Gano-Downs Clothing Co., The, Denver, Colo. 620,425, pub. 11–1–55. Cl. 39.
Gantner & Mattern Co., San Francisco, Calif. 355,608, canc. Cl. 39.
Gardner-Denver Co., Denver, Colo. 240,974, 12(c) pub. 1–31–56. Cl. 23.
Gardner-Denver Co.: *See*—
Keller Tool Co.
Gardner-Denver Co., Denver, Colo. 620,303, pub. 11–1–55. Cl. 23.
Garlits, Edward E., Jr., d. b. a. Allied Rentool Service, Yardley, Pa. 620,593–4. Cl. 100.
General Baking Co., New York, N. Y. 109,864, ren. 4–18–56. Cl. 46.
General Products: *See*—
General Products Corp.
General Products Corp., d. b. a. General Products, Los Angeles, Calif. 620,474, pub. 11–8–55. Cl. 46.
General Tire & Rubber Co., The, Akron, Ohio. 620,269, pub. 11–1–55. Cl. 21.
Gerts, Mitchell, d. b. a. Hollywood Pipe Tobacco Co., Los Angeles, Calif. 514,097, canc. Cl. 17.
Gettler-Montanye, Inc., Glyndon, Md. 332,099, ren. 2–4–56. Cl. 38.
Gladys & Cele, Inc., Boston, Mass. 620,408, pub. 11–1–55. Cl. 39.
Glamour Cosmetics, Chicago, Ill. 380,311, canc. Cl. 6.
Glastonbury, Inc., Chicago, Ill. 514,039, canc. Cl. 33.
Goldstein, Morris L., d. b. a. Mayfair Garment Mfg. Co., Los Angeles, Calif. 620,406, pub. 11–1–55. Cl. 39.
Golodetz, M., & Co., New York, N. Y. 620,517, pub. 11–8–55. Cl. 46.
Gordon-Lacye Chemical Products Co. Inc., Maspeth, N. Y. 620,342, pub. 11–1–55. Cl. 24.
Gosnell, John, & Co. Ltd., Lewes, England. 107,783, ren. 12–28–55. Cl. 52.
Grant Chemical Co., Inc., New York, N. Y. 514,252, canc. Cl. 6.
Grant, Midge, Inc., New York, N. Y. 620,445, pub. 11–1–55. Cl. 39.
Gregg Co., Inc., The, East Riverton, N. J. 333,535, ren. 3–24–56. Cl. 52.
Gross, Jerome S., d. b. a. The Horticultural Guide, Huntington, N. Y. 620,578. Cl. 38.
Grover, J. J., Shoe Co., Inc., Haverhill, Mass. 531,979, canc. Cl. 39.
Guardswell Paint Mfg. Co., Des Moines, Iowa. 389,758, canc. Cl. 16.
Gumpert, S., Co. Inc., Brooklyn, N. Y. 287,967, canc. Cl. 46.
Gums, Arthur P., North Judson, Ind. 513,978, canc. Cl. 46.
Gustin-Bacon Mfg. Co., Kansas City, Mo. 620,198, pub. 11–1–55. Cl. 12.
H & H Bit Co.: *See*—
Hammock, Walter E.
Hahn, Robert H., d. b. a. Payneze, Chicago, Ill. 620,459, pub. 11–8–55. Cl. 44.
Hale-Halsell Co., McAlester, Okla. 331,814, ren. 1–21–56. Cl. 46.
Hall Gage & Mfg. Inc., East Detroit, Mich. 620,352, pub. 11–1–55. Cl. 26.
Hamilton, J. D., Fruit Co., The, Wenatchee, Wash. 620,484, pub. 11–8–55. Cl. 46.
Hamilton Ross Industries, Inc., Chicago, Ill. 549,478, canc. Cl. 21.
Hammerman & Finn, Inc., New York, N. Y. 514,277, canc. Cl. 42.
Hammock, Walter E., d. b. a. H & H Bit Co., Garland, Tex. 620,339, pub. 11–1–55. Cl. 23.
Handmacher Brothers, Chicago, Ill. 620,407, pub. 11–1–55. Cl. 39.
Hansen Glove Corp., Milwaukee, Wis. 620,441–2, pub. 11–8–55. Cl. 39.
Hanson-Van Winkle-Munning Co., to Optimus Equipment Co., Matawan, N. J. 514,138, canc. Cl. 23.
Hardie's Inc., Butler, Pa. 620,506, pub. 11–8–55. Cl. 46.
Harlequin Corp., The, New York, N. Y. 620,361, pub. 11–1–55. Cl. 26.
Harrower, Norman, d. b. a. Linton Brothers & Co., Fitchburg, Mass. 620,394, pub. 11–1–55. Cl. 37.
Hartmann Luggage Co.: *See*—
Hartmann Trunk Co.
Hartmann Trunk Co., to Hartmann Luggage Co., Racine, Wis. 333,400, ren. 3–17–56. Cl. 3.
Hartmann Trunk Co., to Hartmann Luggage Co., Racine, Wis. 333,402, ren. 3–17–56. Cl. 3.
Harvey Co. Inc., The: *See*—
Harvey Co., The.
Harvey Co., The, by The Harvey Co., Inc., Nashville, Tenn. 427,801, 12(c) pub. 1–31–56. Cl. 42.
Hastings & Co., to Hastings & Co., Inc., Philadelphia, Pa. 334,471, ren. 5–5–56. Cl. 14.
Hastings & Co., Inc.: *See*—
Hastings & Co.
Hat Corp. of America, Norwalk, Conn. 334,163, ren. 4–21–56. Cl. 39.
Hat Corp. of America, Norwalk, Conn. 620,420, pub. 11–8–55. Cl. 39.
Heim, Moses L., Brooklyn, N. Y. 513,944, canc. Cl. 6.
Hemp and Co., Inc., Macomb, Ill. 620,178, pub. 11–8–55. Cl. 2.
Hemphill, E. J., d. b. a. E. J. Hemphill Co., Long Beach, Calif. 513,986, canc. Cl. 4.
Hemphill, E. J., Co.: *See*—
Hemphill, E. J.
Henning, Dr. G., Chemisch Pharmazeutisches Werk: *See*—
Henning, Dr. Georg, Chemisch Pharmazeutisches Werk Gesellschaft mit beschrankter Haftung.
Henning, Dr. Georg, Chemisch Pharmazeutisches Werk Gesellschaft mit beschrankter Haftung, Berlin and Berlin-Tempelhof, to Dr. G. Henning Chemisch Pharmazeutisches Werk, Berlin-Tempelhof, Germany. 329,179, ren. 10–22–55. Cl. 18.
Herder, Friedr., Abr. Sohn, Constantwerk, Solingen, Germany. 620,299, pub. 11–1–55. Cl. 23.
Hermes Distributing Co., San Francisco, Calif. 620,543, pub. 11–1–55. Cl. 52.
Hero Mfg. Co., Inc., Middleboro, Mass. 514,307, canc. Cl. 23.
Hershel, Aron: *See*—
Bank of America National Trust and Savings Association.
Hickok Mfg. Co. Inc., Rochester, N. Y. 620,430, pub. 11–1–55. Cl. 39.
Hickok Oil Corp., The: *See*—
Hickok Producing Co., The.
Hickok Producing Co., The, to The Hickok Oil Corp., Toledo, Ohio. 256,329, canc. Cl. 15.
Highland Fruit Growers Association, Highland, Calif. 205,941, canc. Cl. 46.
Hill's Restaurant, De Queen, Ark. 620,494, pub. 11–8–55. Cl. 46.
Hoffman, J. S., Co., Chicago, Ill. 620,476, pub. 11–8–55. Cl. 46.
Hoffmaster Co., Inc., Oshkosh, Wis. 620,574. Cl. 37.
Hogan Laboratories, Inc., New York, N. Y. 620,266, pub. 11–1–55. Cl. 21.
Holl-E-Wood Co., The, Onamia, Minn. 620,195, pub. 11–1–55. Cl. 12.
Holli-Ware Co., Chicago, Ill. 514,126, canc. Cl. 34.
Hollywood Brands, Inc.: *See*—
Martoccio, F. A., Co.
Hollywood Candy Co.: *See*—
Martoccio, F. A., Co.
Hollywood Pipe Tobacco Co.: *See*—
Gertz, Mitchell.
Holtzman Mills Corp., New York, N. Y. 514,133, canc. Cl. 42.
Hood Chemical Co., Inc., Ardmore, Pa. 620,542, pub. 11–1–55. Cl. 52.
Hopkins Distributing Co.: *See*—
Hopkins, John T.
Hopkins, John T., d. b. a. Hopkins Distributing Co., Longview, Tex. 514,219, canc. Cl. 6.
Horticultural Guide, The: *See*—
Gross, Jerome S.
Hosid Products Inc., Syracuse, N. Y. 620,532, pub. 11–8–55. Cl. 52.
House of Perfection, Inc., The, New York, N. Y. 620,428, pub. 11–1–55. Cl. 39.
Howel, Clayton J., to Wonder-Orange Co., Chicago, Ill. 332,208, ren. 2–4–56. Cl. 45.
Hudnut, Richard, New York, N. Y. 620,545, pub. 11–8–55. Cl. 52.
Hudson Products: *See*—
Wernet Dental Mfg. Co., Inc.
Hughes, F. A., & Co. Ltd., London, England. 620,275, pub. 11–1–55. Cl. 21.
Hydraulic Power Equipment Co., North Lima, Ohio. 620,315, pub. 11–1–55. Cl. 23.
Hydril Corp. of California, Los Angeles, Calif. 620,306, pub. 11–1–55. Cl. 23.
Hydrox Corp., Chicago, Ill. 331,642, ren. 1–14–56. Cl. 46.
Hygienic Dental Mfg. Co., The, Akron, Ohio. 620,462, pub. 11–8–55. Cl. 44.
Ideal Corp., Brooklyn, N. Y. 620,215, pub. 11–1–55. Cl. 13.
Ideal Industries, Inc., Sycamore, Ill. 620,561, pub. 11–1–55. Cl. 103.
Ideal Products, Inc., Waxahachie, Tex. 514,228, canc. Cl. 6.
Independent Nail and Packing Co., Inc., The, Bridgewater, Mass. 620,293, pub. 11–1–55. Cl. 23.
Inplant Publishing Corp., Chicago, Ill. 620,575. Cl. 38.
International Parts Corp., Chicago, Ill. 620,322, pub. 11–1–55. Cl. 23.
Interstate Sales Co., Waco, Tex. 514,261, canc. Cl. 6.
Irwill Knitwear Corp., New York, N. Y. 620,443, pub. 11–8–55. Cl. 39.

Isenberg, William, d. b. a. Columbia Razor Blade Co., Los Angeles, Calif. 513,972, canc. Cl. 23.
Jaffe, A. Arthur, d. b. a. Artjay Products Co., Scranton, Pa. 330,779, ren. 12–17–55. Cl. 52.
Jamieson Pharmacal Co., Detroit, Mich. 514,018, canc. Cl. 6.
Jared Holt Co., The, Albany, N. Y. 327,440, ren. 8–27–55. Cl. 4.
Jet-Lube, Inc., Los Angeles, Calif. 620,239, pub. 11–1–55. Cl. 15.
Jiffy Dog Co., Pasadena, Calif. 514,034, canc. Cl. 23.
Johnson Co., The, Marshfield, Wis. 514,160, canc. Cl. 9.
Johnson & Johnson, New Brunswick, N. J. 620,466, pub. 11–8–55. Cl. 44.
Johnston, William F., d. b. a. Aural Record and Recording Service, Long Island City, N. Y. 620,391, pub. 11–1–55. Cl. 36.
Jünger & Gebhardt A. G., Koln-Ehrenfeld, Germany. 620,538, pub. 11–8–55. Cl. 52.
Kachkine, Nathalie: *See*— Von Dezen, Nathalie.
Kaiser Aluminum & Chemical Corp., Oakland, Calif. 620,233, pub. 11–1–55. Cl. 14.
Kaiser Gypsum Co., Inc., Oakland, Calif. 620,188, pub. 11–1–55. Cl. 12.
Kalman, Marian: *See*— Perfect Jersey Co., Inc.
Kansas Packing Co., Inc., New York City, N. Y. 620,509, pub. 11–8–55. Cl. 46.
Karlson's Klister Co.: *See*— Karlson's Klister Mfg. Co.
Karlson's Klister Mfg. Co., to Karlson's Klister Co., Rockford, Ill. 329,399, ren. 10–29–55. Cl. 5.
Karlsruher Parfumerie- und Toilettenseifenfabrik F. Wolff & Sohn, Gesellschaft mit beschrankter Haftung, Karlsruhe, Baden, Germany. 620,592. Cl. 51.
Karstens, Robert H., Pasadena, Calif. 514,038, canc. Cl. 1.
Kearfott Co., Inc., Clifton, N. J. 620,350, pub. 11–1–55. Cl. 26.
Kearney & Trecker Corp., West Allis, Wis. 620,340, pub. 11–1–55. Cl. 23.
Keller Tool Co., Grand Haven, Mich., to Gardner-Denver Co. 620,297, pub. 11–1–55. Cl. 23.
Kernstown Hosiery Mill, to W. P. Claus, Winchester, Va. 620,581. Cl. 39.
Kerr Dental Mfg. Co.: *See*— Kerr Mfg. Co.
Kerr Mfg. Co., by change of name from Kerr Dental Mfg. Co., Detroit, Mich. 513,950, canc. Cl. 23.
Keuffel & Esser Co., Hoboken, N. J. 620,367–71, pub. 11–1–55. Cl. 26.
Kiekhaefer Corp.: *See*— Cedarburg Mfg. Co.
Kimberly-Clark Co., Neenah, Wis. 200,566, canc. Cl. 37.
King Features Syndicate, Inc., New York, N. Y. 340,669, canc. Cl. 38.
King Zeero Co., Chicago, Ill. 620,379, pub. 11–1–55. Cl. 31.
Knudsen Creamery Co. of California, Los Angeles, Calif. 620,478, pub. 11–8–55. Cl. 46.
Koch, Reinhold, York, Pa. 620,356, pub. 11–1–55. Cl. 26.
Kocher, Anna G., d. b. a. Anolene Co., Maywood, Calif. 620,249, pub. 11–1–55. Cl. 18.
Kooltex Knitting Mills, Inc., Millinburg, Pa. 514,050, canc. Cl. 39.
Kowall, Alfred E., Berwyn, Ill. 620,196, pub. 11–1–55. Cl. 12.
Kramer, H., & Co., Chicago, Ill. 620,237, pub. 11–1–55. Cl. 14.
Kreider, George L., Palmyra, Pa. 620,417, pub. 11–1–55. Cl. 39.
Kreiss, Jack, Hosiery, Inc., New York, N. Y. 620,433, pub. 11–8–55. Cl. 39.
Lactona Inc., St. Paul, Minn. 514,310, canc. Cl. 29.
Lampert, Stanley, d. b. a. Lord Jeff Food Products Co., Boston, Mass. 620,489, pub. 11–8–55. Cl. 46.
Landau, Charles P., to United States Tobacco Co., New York, N. Y. 329,998, ren. 11–19–55. Cl. 17.
La Publicite Scientifique, S. A., Geneva, Switzerland. 620,530, pub. 11–8–55. Cl. 51.
Laymon, Herman R., d. b. a. World's Products Co., Spencer, Ind. 514,023, canc. Cl. 23.
Lee Brothers Foundry Co., Inc., Anniston, Ala. 620,230, pub. 11–1–55. Cl. 14.
Le Gear, Dr. L. D., Medicine Co., St. Louis, Mo. 620,256, pub. 11–1–55. Cl. 18.
Lenoir-Quinn Corp., The, Baltimore, Md. 620,164, pub. 11–8–55. Cl. 1.
Lentheric, Inc., to Lentheric, Inc., New York, N. Y. 333,958, ren. 4–14–56. Cl. 2.
Levolor, Lortentzen, Inc., New York, N. Y. 620,326, pub. 11–1–55. Cl. 23.
Librascope, Inc., Glendale, Calif. 620,318, pub. 11–1–55. Cl. 23.
Lienemann, D. A., d. b. a. Little Friends Pet Mortuary and Pet Cemetery, Lincoln, Nebr. 620,550, pub. 11–1–55. Cl. 100.
Lietz, A., Co., The, San Francisco, Calif. 620,355, pub. 11–1–55. Cl. 26.
Lifegard Sign Corp., Chicago, Ill. 620,274, pub. 11–1–55. Cl. 21.
Lincoln Engineering Co., St. Louis, Mo. 620,334, pub. 11–1–55. Cl. 23.
Lincoln Steel Works, Lincoln, Nebr. 513,947, canc. Cl. 23.
Linton Brothers & Co.: *See*— Harrower, Norman.
Lisner, Leonard E.: *See*— O'Connor, Susan V.
Lite Soap Co.: *See*— Brignall, Guy E.
Little Friends Pet Mortuary and Pet Cemetery: *See*— Lienemann, D. A.
Lockport Felt Co., Newfane, N. Y. 514,278, canc. Cl. 42.
Long Co., The, Oak Hill, W. Va. 620,330, pub. 11–1–55. Cl. 23.
Lord Jeff Food Products Co.: *See*— Lampert, Stanley.
Lorica, Inc., Hoboken, N. J. 620,461, pub. 11–8–55. Cl. 44.
Los Angeles Nut House, Los Angeles, Calif. 620,477, pub. 11–8–55. Cl. 46.
M. & B. Headwear Co., Inc., Richmond, Va. 620,411, pub. 11–1–55. Cl. 39.
MacGruder, W. W., Inc., Denver, Colo. 514,296–7, canc. Cl. 55.
Magnavox Co., The, Fort Wayne, Ind. 620,278, pub. 11–1–55. Cl. 21.
Magnolia Baking Co., Omaha, Nebr. 620,490, pub. 11–8–55. Cl. 46.
Maiden Form Brassiere Co., Inc., New York, N. Y. 620,446, pub. 11–1–55. Cl. 39.
Major Fashions Corp., New York, N. Y. 620,439, pub. 11–1–55. Cl. 39.
Mall Tool Co., Chicago, Ill. 620,284, pub. 11–1–55. Cl. 21.
Maltex Fabrics Inc., Dallas, Tex. 514,304, canc. Cl. 42.
Manion, Harry, d. b. a. Blue Flash Chemical Co., Highland Park, Mich. 620,534, pub. 11–1–55. Cl. 52.
Manley Rubber Products Co., Inc., New York, N. Y., to The Akwell Corp., Akron, Ohio. 330,408, ren. 12–3–55. Cl. 44.
Marcelle Cosmetics, Inc., Chicago, Ill. 620,529, pub. 11–8–55. Cl. 51.
Marion Electrical Instrument Co., Manchester, N. H. 620,363, pub. 11–1–55. Cl. 26.
Markwell Mfg. Co., Inc., New York, N. Y. 620,304, pub. 11–1–55. Cl. 23.
Martin-Rockwell Corp., Jamestown, N. Y. 620,549, pub. 11–1–55. Cl. 100.
Martell & Co., Cognac, France, to J. & F. Martell, Inc., New York, N. Y. 333,350, ren. 3–17–56. Cl. 49.
Martell, J. & F., Inc.: *See*— Martell & Co.
Martin Fabrics Corp.: *See*— Martin, J. B., Co.
Martin, J. B., Co., formerly Martin Fabrics Corp., New York, N. Y. 620,450, pub. 11–1–55. Cl. 42.
Martoccio, F. A., Co., d. b. a. Hollywood Candy Co., Minneapolis, Minn., to Hollywood Brands, Inc., Centralia, Ill. 333,629, ren. 3–31–56. Cl. 46.
Masonite Corp., Chicago, Ill. 620,206, pub. 11–1–55. Cl. 12.
Master Host Motor Hotels, Inc., Fort Worth, Tex. 620,551–4, pub. 11–1–55. Cl. 100.
Maud's Minute Market: *See*— Barnes, Maud O.
Mayfair Garment Mfg. Co.: *See*— Goldstein, Morris L.
McCarthy, James J., d. b. a. Triumph Mfg. Co., to Triumph Mfg. Co., Chicago, Ill. 329,220, ren. 10–22–55. Cl. 26.
McGraw Electric Co., Chicago, Ill. 620,265, pub. 5–10–55. Cl. 21.
McQuaid, Dan J., d. b. a. Air-Vu Co., Denver, Colo. 514,086, canc. Cl. 26.
Mentholatum Co., The, Wichita, Kans., and Buffalo, N. Y., to The Mentholatum Co., Buffalo, N. Y. 109,925, ren. 4–25–56. Cl. 18.
Mercast Corp., New York, N. Y. 620,232, pub. 11–1–55. Cl. 14.
Merck & Co., Inc., Rahway, N. J. 620,260–1, pub. 11–1–55. Cl. 18.
Merrell, Wm. S., Co., The, Reading, Cincinnati, Ohio. 620,253, pub. 11–1–55. Cl. 18.
Meyer, H. H., Packing Co., The, Cincinnati, Ohio. 620,496–7, pub. 11–8–55. Cl. 46.
Meyer Jacoby, Corp., New York, N. Y. 620,449, pub. 11–8–55. Cl. 40.
Miller-Becker Co., The, also known and d. b. a. Cotton Club Bottling Co., Cleveland, Ohio. 620,587. Cl. 45.
Miller-Becker Co., The, d. b. a. The Miller-Becker Co., and as Cotton Club Bottling Co., Cleveland, Ohio. 620,588. Cl. 45.
Millers Falls Co., Greenfield, Mass. 620,343, pub. 11–1–55. Cl. 26.
Minnesota Mining & Mfg. Co., St. Paul, Minn. 514,236, canc. Cl. 42.
Miss Universe Beauty Pageant, Inc., Long Beach, Calif. 620,557, pub. 11–1–55. Cl. 101.
Modern Products, Inc., McPherson, Kans. 620,207, pub. 11–1–55. Cl. 12.
Monarch Leather Co., Chicago, Ill. 513,964, canc. Cl. 1.
Monolith Portland Cement Co., Los Angeles, Calif. 620,208, pub. 11–1–55. Cl. 12.
Montmarquet, Francis H., d. b. a. The O-C Mfg. Co., Little Falls, N. J. 620,458, pub. 11–8–55. Cl. 44.
Mook Bros. Inc., New York, N. Y. 620,453, pub. 11–1–55. Cl. 42.
Morrison-Atlas Products, Chicago, Ill. 513,961, canc. Cl. 26.
Morton Salt Co., Chicago, Ill. 620,473, pub. 11–8–55. Cl. 46.
Mosinee Paper Mills Co.: *See*— Wausau Sulphate Fibre Co.
Motor Wheel Corp., Lansing, Mich. 620,309–13, pub. 11–1–55. Cl. 23.
Mumford, Kenneth O., d. b. a. Chems, Gardena, Calif. 514,206, canc. Cl. 6.
Mumm, G. H., & Cie. (Societe Vinicole de Champagne Successeurs) of New York, Inc.: *See*— Societe Vinicole de Champagne.
Murray Corp. of America, The: *See*— Eljer Co.
Myron Drugs: *See*— Shapiro, Herman M.
N & N Sales Co., Bell Gardens, Calif. 620,224, pub. 11–1–55. Cl. 13.

N. V. Bloembollenkwekerij en Handel G. C. van Meeuwen & Zonen, Heemstede, Netherlands. 620,167, pub. 11–8–55. Cl. 1.
National Foam System, Inc., Philadelphia, Pa. 514,262, canc. Cl. 6.
National Homes Corp., Lafayette, Ind. 620,201, pub. 11–1–55. Cl. 12.
National Police Gazette Corp., The, to The National Police Gazette Corp., New York, N. Y. 329,651, ren. 11–5–55. Cl. 38.
National Refining Co., The, Cleveland, Ohio. 514,174, canc. Cl. 15.
National Sanitation Foundation, Ann Arbor, Mich. 620,556, pub. 11–1–55. Cl. 100.
National Stainless Kitchens, Inc., St. Louis Park, Minn. 620,219, pub. 11–1–55. Cl. 13.
National Tile & Mfg. Co., Anderson, Ind. 620,519, pub. 11–8–55. Cl. 50.
Neiman-Marcus Co., Dallas, Tex. 620,436–7, pub. 11–1–55. Cl. 39.
Neisner Brothers, Inc., Rochester, N. Y. 296,481, canc. Cl. 39.
Nelson, N. P., Iron Works, Inc., Clifton, N. J. 513,946, canc. Cl. 23.
Newbery Electric Corp., Los Angeles, Calif. 620,562, pub. 11–1–55. Cl. 103.
New South Mfg. Co., Atlanta, Ga. 620,544, pub. 11–1–55. Cl. 52.
New York Eye Protection Co. Inc., Brooklyn, N. Y. 513,957, canc. Cl. 26.
Nihon Mishin Seizo Kabushiki Kaisha, Mizuho-ku, Nagoya, Japan. 620,387, pub. 11–1–55. Cl. 34.
Norcross, Inc., New York, N. Y. 620,576. Cl. 38.
North and Judd Mfg. Co., New Britain, Conn. 620,220, pub. 11–1–55. Cl. 13.
North Pacific Plywood, Inc., Tacoma, Wash. 620,199, pub. 11–1–55. Cl. 12.
North Shore Mfg. Co., Duluth, Minn. 620,409, pub. 11–1–55. Cl. 39.
North Shore Mfg. Co., Duluth, Minn. 620,447, pub. 11–1–55. Cl. 39.
Norton Co., Worcester, Mass. 333,166, ren. 3–10–56. Cl. 23.
Norton Co., Worcester, Mass. 620,197, pub. 11–1–55. Cl. 12.
Nuclear Instrument and Chemical Corp., Chicago, Ill. 620,360, pub. 11–1–55. Cl. 26.
Num Specialty Co.: *See*— Frawley, R. D.
Nustone Septic Tank Co., The, New Haven, Conn. 620,213, pub. 11–1–55. Cl. 13.
Nu-Swift Ltd., Elland, England. 620,335, pub. 11–1–55. Cl. 23.
O-C Mfg. Co., The: *See*— Montmarquet, Francis H.
Oberman & Co., by Oberman Mfg. Co., Jefferson City, Mo. 396,061, 12(c) pub. 1–31–56. Cl. 39.
Oberman Mfg. Co.: *See*— Oberman & Co.
O'Connor, Susan V., d. b. a. Petalskin Toiletries, to L. E. Lisner, New York, N. Y. 333,893, ren. 4–14–56. Cl. 51.
Offner Electronics, Inc., Chicago, Ill. 620,364, pub. 11–1–55. Cl. 26.
Oklahoma Steel Castings Co., Tulsa, Okla., by American Steel and Pump Corp., d. b. a. Oklahoma Steel Castings Co., New York, N. Y., and Tulsa, Okla. 259,969, 12(c) pub. 1–31–56. Cl. 14.
Olander, N. J., & Son, Boston, Mass. 620,225, pub. 11–1–55. Cl. 13.
Old Town Corp., Brooklyn, N. Y. 620,187, pub. 11–1–55. Cl. 11.
Olde Tyme Products Co., Los Angeles, Calif. 620,541, pub. 11–1–55. Cl. 52.
Olga Co., Los Angeles, Calif. 620,444, pub. 11–8–55. Cl. 39.
Olin Mathieson Chemical Corp.: *See*— Squibb, E. R., & Sons.
Olsen, Doc, Fishing Tackle Co.: *See*— Olsen, Eugene De Loy.
Olsen, Eugene De Loy, d. b. a. Doc Olsen Fishing Tackle Co., Salt Lake City, Utah. 620,176, pub. 11–8–55. Cl. 2.
Olympic Plastics Co., Inc., Los Angeles, Calif. 620,177, pub. 11–8–55. Cl. 2.
Omaha Cold Storage Co., d. b. a. Phelps County Creamery & Produce Co., Omaha, Nebr. 620,503, pub. 7–5–55. Cl. 46.
Optimus Equipment Co.: *See*— Hanson-Van Winkle-Munning Co.
Orefraction Inc., Pittsburgh, Pa. 514,001, canc. Cl. 1.
Orezco Inc., Tangiers, Morocco. 620,525, pub. 11–8–55. Cl. 51.
Organon Inc., Orange, N. J. 620,251, pub. 11–1–55. Cl. 18.
P. M. C. Co., Inc., Swedesboro, N. J. 441,611, canc. Cl. 46.
Pacific Pumps, Inc., Huntington Park, Calif. 620,319, pub. 1–1–55. Cl. 23.
Padgett, Jay D., Dallas, Tex. 620,346, pub. 11–1–55. Cl. 26.
Pagliuso Engineering Co.: *See*— Pagliuso, R. J.
Pagliuso, R. J., d. b. a. Pagliuso Engineering Co., Glendale, Calif. 620,375, pub. 11–1–55. Cl. 26.
Panavision, Inc., Los Angeles, Calif. 620,347, pub. 11–1–55. Cl. 26.
Pan-L-Heat Corp., Portland, Oreg. 514,321, canc. Cl. 34.
Paramount Pictures Corp., New York, N. Y. 620,345, pub. 12–14–54. Cl. 26.
Parker Brothers, Portland, Maine, and Salem, Mass., to Parker Brothers, Inc., Salem, Mass. 109,479, ren. 4–11–56. Cl. 22.
Parker Brothers, Inc.: *See*— Parker Brothers.
Parker, R. S., Chemical Co.: *See*— Parker, R. Shirley.
Parker, R. Shirley, d. b. a. R. S. Parker Chemical Co., Greer, S. C. 620,257, pub. 11–1–55. Cl. 18.
Parsons, F. Burton, d. b. a. The Plova Co., Washington, D. C. 514,208, canc. Cl. 6.
Patek & Co., San Francisco, Calif. 341,392, canc. Cl. 4.
Patek & Co., San Francisco, Calif. 344,576, canc. Cl. 50.
Patek & Co., San Francisco, Calif. 362,564, canc. Cl. 4.
Patek & Co., San Francisco, Calif. 369,126, canc. Cl. 4.
Patent Button Co., The, Waterbury, Conn. 514,075, canc. Cl. 13.
Pay Way Feed Mills, Inc., Kansas City, Mo. 620,248, pub. 9–27–55. Cl. 18.
Payneze: *See*— Hahn, Robert H.
Peerless Photo Products, Inc., Shoreham, N. Y. 620,365, pub. 11–1–55. Cl. 26.
Peerless Sal-O-Weil Co., Inc., Buffalo, N. Y. 514,229, canc. Cl. 4.
Pelzer Mfg. Co., Boston, Mass., to Allied Stores Corp., New York, N. Y. 330,091, ren. 11–19–55. Cl. 42.
Pennsylvania Salt Mfg. Co., The, Philadelphia, Pa. 514,224, canc. Cl. 6.
Perfect Jersey Co.: *See*— Perfect Jersey Co., Inc.
Perfect Jersey Co., Inc., New York, N. Y., from M. Kalman, d. b. a. Perfect Jersey Co. 620,451, pub. 11–1–55. Cl. 42.
Perfor & Co.: *See*— Bollinger, Jacques.
Perspecta Sound Inc., New York, N. Y. 620,273, pub. 11–1–55. Cl. 21.
Petalskin Toiletries: *See*— O'Connor, Susan V.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 620,252, pub. 11–1–55. Cl. 18.
Phelps County Creamery & Produce Co.: *See*— Omaha Cold Storage Co.
Philpitt, Fred C., Washington, D. C. 620,404, pub. 11–1–55. Cl. 38.
Photobell Co., New York, N. Y. 620,277, pub. 11–1–55. Cl. 21.
Pickel, Rufus C., d. b. a. R. C. Pickell Distributing Co., Lenoir City, Tenn. 514,156, canc. Cl. 6.
Pickell, R. C., Distributing Co.: *See*— Pickel, Rufus C.
Piggly Wiggly Corp., Jacksonville, Fla. 334,308, ren. 4–28–56. Cl. 31.
Plich, Chester W., Hazardville, Conn. 620,566. Cl. 1.
Pilley, Frank, & Sons, Inc., Sioux City, Iowa. 620,500, pub. 11–8–55. Cl. 46.
Pillsbury Flour Mills Co., to Pillsbury Mills, Inc., Minneapolis, Minn. 329,355–6, ren. 10–29–55. Cl. 46.
Pillsbury Mills, Inc.: *See*— Pillsbury Flour Mills Co.
Pittsburgh Consolidation Coal Co., Pittsburgh, Pa. 620,170, pub. 11–8–55. Cl. 1.
Pittsburgh Steel Co., Pittsburgh, Pa. 620,226, pub. 11–1–55. Cl. 13.
Plastray Corp., Detroit, Mich. 620,380, pub. 11–1–55. Cl. 31.
Plova Co., The: *See*— Parsons, F. Burton.
Plunkett Chemical Co.: *See*— Plunkett, W. H.
Plunkett, William H.
Plunkett, William Harrison.
Plunkett Trust: *See*— Plunkett, W. H.
Plunkett, W. H., d. b. a. Plunkett Chemical Co., by Plunkett Chemical Co., Chicago, Ill. 395,664–5, 12(c) pub. 1–31–56. Cl. 52.
Plunkett, W. H., d. b. a. Plunkett Chemical Co., by Plunkett Chemical Co., Chicago, Ill. 395,66, 12(c) pub. 1–31–56. Cl. 6.
Plunkett, W. H., d. b. a. Plunkett Chemical Co., by Plunkett Chemical Co., Chicago, Ill. 395,919, 12(c) pub. 1–31–56. Cl. 6.
Plunkett, W. H., d. b. a. Plunkett Chemical Co., by Plunkett Chemical Co., Chicago, Ill. 396,320–1, 12(c) pub. 1–31–56. Cl. 52.
Plunkett, W. H., d. b. a. Plunkett Chemical Co., by Plunkett Chemical Co., Chicago, Ill. 401,125, 12(c) pub. 1–31–56. Cl. 6.
Plunkett, W. H., d. b. a. Plunkett Chemical Co., to Plunkett Trust, by Plunkett Chemical Co., Chicago, Ill. 406,747, 12(c) pub. 1–31–56. Cl. 52.
Plunkett, W. H., d. b. a. Plunkett Chemical Co., to Plunkett Trust, by Plunkett Chemical Co., Chicago, Ill. 409,291, 12(c) pub. 1–31–56. Cl. 6.
Plunkett, William H., by Plunkett Chemical Co., Chicago, Ill. 140,937, 12(c) pub. 1–31–56. Cl. 6.
Plunkett, William H., by Plunkett Chemical Co., Chicago, Ill. 119,773, 12(c) pub. 1–31–56. Cl. 6.
Portland Packing Co., Portland, Maine. 514,136, canc. Cl. 46.
Post Publishing Co., Boston, Mass. 620,405, pub. 11–1–55. Cl. 38.
Pratt, B. G., Co., Hackensack, N. J. 513,974, canc. Cl. 6.
Premier Pattern Co. Inc., Cincinnati, Ohio. 514,108, canc. Cl. 26.
Preway Inc., Wisconsin Rapids, Wis. 620,383, pub. 11–1–55. Cl. 34.
Prime Mfg. Co., Lynn, Mass. 620,328, pub. 11–1–55. Cl. 23.
Prince, H. M., Textiles Inc., New York, N. Y. 620,586. Cl. 42.
Producers Seed Co., Piper City, Ill. 620,173, pub. 11–8–55. Cl. 1.
Prym, William, Inc., Dayville, Conn. 620,584. Cl. 40.
Queen Valley Fabrics, Inc., Cumberland, R. I. 514,200, canc. Cl. 42.
Rajah Temple, A. A. O. N. M. S., Reading, Pa. 620,563, pub. 11–8–55. Cl. 107.
Raycon Corp., Belmont, Calif. 620,362, pub. 11–1–55. Cl. 26.

Raytheon Mfg. Co., Waltham, Mass. 620,372, pub. 11–1–55. Cl. 26.
Real Silk Hosiery Mills, Inc., Indianapolis, Ind. 514,002, canc. Cl. 6.
Reardon Co., The, St. Louis, Mo. 620,243, pub. 11–1–55. Cl. 16.
Red Owl Stores, Inc., Hopkins, Minn. 620,483, pub. 11–8–55. Cl. 46.
Redi-Foods, Inc., Columbus, Ohio. 620,589. Cl. 46.
Reed Roller Bit Co., Houston, Tex. 514,122, canc. Cl. 23.
Relato Educational Games, Philadelphia, Pa. 620,292, pub. 11–1–55. Cl. 22.
Rich, Barnett, New York, N. Y. 620,291, pub. 11–1–55. Cl. 22.
Rieger Mfg. Co., The, Miamisburg, Ohio. 620,211, pub. 11–1–55. Cl. 13.
Rival Mfg. Co., Kansas City, Mo. 620,331, pub. 11–1–55. Cl. 23.
Robbins, Harold R., Des Moines, Iowa. 620,214, pub. 11–1–55. Cl. 13.
Roberton Mfg. Co., Chicago, Ill. 620,385, pub. 11–1–55. Cl. 34.
Robertshaw-Fulton Controls Co., Greensburg, Pa. 620,218, pub. 11–1–55. Cl. 13.
Robie, R. S., Inc., Cambridge, Mass. 514,287, canc. Cl. 55.
Robinson, A., & Son: *See*—
Robinson, Benjamin.
Robinson, Benjamin, d. b. a. A. Robinson & Son, New York, N. Y. 514,080, canc. Cl. 6.
Robinson Building Co.: *See*—
Robinson, J. W., Co.
Robinson, J. W., Co., to Robinson Building Co., Los Angeles, Calif. 620,426, pub. 11–1–55. Cl. 39.
Robinson-Wagner Co., Inc., New York, N. Y. 620,526, pub. 11–8–55. Cl. 51.
Rockland Sportswear, Inc., Rockland, Mass. 620,582. Cl. 39.
Rodriguez, J. M., & Co., Inc., New York, N. Y. 620,515, pub. 11–8–55. Cl. 46.
Rodson, Inc., New York, N. Y. 620,516, pub. 11–8–55. Cl. 46.
Rogers Canning Co., Milton, Oreg. 620,479–81, pub. 11–8–55. Cl. 46.
Rogers, Herman C., Woodville, Tex. 514,078, canc. Cl. 46.
Rogers Paint Products, Inc., Detroit, Mich. 514,087, canc. Cl. 16.
Rollrite Pie Crust Corp., Minneapolis, Minn. 620,501, pub. 11–8–55. Cl. 46.
Rosamar Breeding Farm: *See*—
Elias, Frank.
Rosamar Farm: *See*—
Elias, Frank.
Rosefield, John B., d. b. a. An-Fo Mfg. Co., Oakland, Calif. 620,531, pub. 11–8–55. Cl. 52.
Roto-Werke A. G., Konigslutter, Germany. 620,296, pub. 11–1–55. Cl. 23.
Roxborough Co., The, Philadelphia, Pa. 620,419, pub. 11–1–55. Cl. 39.
Royal Appliance Mfg. Co., Cleveland, Ohio. 620,279, pub. 11–1–55. Cl. 21.
Rudman & Scofield: *See*—
Scofield, C. K.
Rudman & Scofield, Inc.: *See*—
Scofield, C. K.
Rudman & Scofield, Inc., New York, N. Y. 443,333, 12(c) pub. 1–31–56. Cl. 13.
Ru-Nell Mfg. Co., Rockmart, Ga. 620,438, pub. 11–1–55. Cl. 39.
Rust-Oleum Corp., Evanston, Ill. 620,247, pub. 11–1–55. Cl. 16.
Sabrett Food Products Corp., Jersey City, N. J. 620,485, pub. 11–8–55. Cl. 46.
Salerno-Megowen Biscuit Co., Chicago, Ill. 620,513, pub. 11–8–55. Cl. 46.
Salisbury House, Ltd., Winnipeg, Manitoba, Canada. 620,469, pub. 11–8–55. Cl. 46.
Salton Mfg. Co., Inc., New York, N. Y. 620,270–1, pub. 11–1–55. Cl. 21.
Sapolin Paints Inc., New York, N. Y. 620,246, pub. 11–1–55. Cl. 16.
Saticoy Lemon Association, Saticoy, Calif. 332,206, ren. 2–4–56. Cl. 46.
Saticoy Lemon Association, Saticoy, Calif. 333,988, ren. 4–14–56. Cl. 46.
Scheiwer, Albert T., Erie, Pa. 620,209–10, pub. 11–1–55. Cl. 13.
Schenectady Varnish Co., Inc., Schenectady, N. Y. 620,242, pub. 11–1–55. Cl. 16.
Schilling Corset Co., Detroit, Mich. 23,242, canc. Cl. 39.
Schreiber, L. D., & Co. Inc., d. b. a. Stella Cheese Co., Chicago, Ill. 620,482, pub. 11–8–55. Cl. 46.
Schriner, Herb: *See*—
Schriner, Herbert A.
Schriner, Herbert A., also known as Herb Schriner, New York, N. Y. 620,389, pub. 11–1–55. Cl. 36.
Scofield, C. K., d. b. a. Rudman & Scofield, by Rudman & Scofield, Inc., New York, N. Y. 191,976, 12(c) pub. 1–31–56. Cl. 13.
Sears, Roebuck and Co., Chicago, Ill. 108,180, ren. 1–18–56. Cl. 42.
Seattle Cap & Apparel Mfg. Co.: *See*—
Seattle Cap Mfg. Co., Inc.
Seattle Cap Mfg. Co., Inc., d. b. a. Seattle Cap & Apparel Mfg. Co., Seattle, Wash. 620,421, pub. 11–8–55. Cl. 39.
Segui, José, Quiebra-Hacha, Pinar del Rio, Cuba. 620,493, pub. 11–8–55. Cl. 46.
Seidlitz Paint & Varnish Co., Kansas City, Mo. 620,241, pub. 11–1–55. Cl. 16.
Seidlitz Paint & Varnish Co., Kansas City, Mo. 620,244–5, pub. 11–1–55. Cl. 16.
Semon, Bache, & Co., New York, N. Y. 514,091, canc. Cl. 33.
Seneca, Coal & Iron Corp., New York, N. Y. 514,111, canc Cl. 1.
Seneca Wire & Mfg. Co., The, Fostoria, Ohio. 620,231, pub 11–1–55. Cl. 14.
Service Publishing Corp., New York, N. Y. 620,579. Cl. 38
Service Recorder Co., The, Cleveland, Ohio. 620,376, pub. 11–1–55. Cl. 26.
Seymour Foods, Inc.: *See*—
Seymour Packing Co., The.
Seymour Packing Co., The, by Seymour Foods, Inc., Topeka, Kans. 167,137, 12(c) pub. 1–31–56. Cl. 46.
Seymour Packing Co., The, by Seymour Foods, Inc., Topeka, Kans. 171,113, 12(c) pub. 1–31–56. Cl. 46.
Shapiro, Herman M., d. b. a. Myron Drugs, Baltimore, Md. 620,250, pub. 11–1–55. Cl. 18.
Shapoff Bros., Brooklyn, N. Y. 514,302, canc. Cl. 28.
Shell Oil Co., San Francisco, Calif., to Shell Oil Co., New York, N. Y. 329,415, ren. 10–29–55. Cl. 15.
Sherwood Petroleum Co., Inc., Brooklyn, N. Y. 254,994, canc. Cl. 15.
Shore's Market, Inc., Providence, R. I. 620,507–8, pub. 11–8–55. Cl. 46.
Siemens-Planiawerke A. G. für Kohlefabrikate, Meitingen, Germany. 620,272, pub. 7–19–55. Cl. 21.
Signal Oil Co.: *See*—
Standard Oil Co. of California.
Silca, Geneva, Switzerland. 620,454, pub. 11–8–55. Cl. 42.
Silver Knit Hosiery Mills, Inc., High Point, N. C. 620,432, pub. 11–8–55. Cl. 39.
Singing Needles, Inc., Millersville, Pa. 620,434, pub. 11–1–55. Cl. 39.
Sita-Adventure Trails Inc., New York, N. Y. 620,402, pub. 11–1–55. Cl. 38.
Skrainka Construction Co., St. Louis, Mo. 620,559, pub. 11–1–55. Cl. 103.
Sloan Valve Co., Chicago, Ill. 620,217, pub. 11–1–55. Cl. 13.
Smith, Harold, New York, N. Y. 620,591. Cl. 51.
Smith, Hurley, Lansing, Mich. 620,351, pub. 11–1–55. Cl. 26.
Smith & Loveless, Inc., Merriam, Kans. 620,336, pub. 11–1–55. Cl. 23.
Sociedad Anonima Manufactura de Tabacos Piccardo y Compania Limitada, Buenos Aires, Argentina. 107,020, ren. 11–9–55. Cl. 17.
Societe Crylor: *See*—
Societe Rhodiaceta.
Societe Jacques F. Fath, Paris, France. 513,956, canc. Cl. 6.
Societe Rhodiaceta, to Societe Crylor, Paris, France. 620,457, pub. 11–8–55. Cl. 43.
Societe Vinicole de Champagne, Paris, France, to G. H. Mumm & Cie. (Societe Vinicole de Champagne Successeurs) of New York, Inc., New York, N. Y. 329,922–3, ren. 11–19–55. Cl. 47.
Sol-Dor Co., The, Athens, Ohio. 620,535, pub. 11–1–55. Cl. 52.
Sonoflux Corp., Houston, Tex. 620,308, pub. 11–1–55. Cl. 23.
Southern California Muffler Corp., Culver City, Calif. 620,338, pub. 11–1–55. Cl. 23.
Southwestern Saw Co.: *See*—
Cook, Charles L.
Special Equipment Co., Park Ridge, Ill. 329,598, ren. 11–5–55. Cl. 23.
Speidel Corp., Providence, R. I. 620,377, pub. 11–1–55. Cl. 28.
Spotless Plastics Corp., Rochester, N. Y., to Textron American, Inc., Providence, R. I. 620,378, pub. 10–18–55. Cl. 29.
Sprague Electric Co., North Adams, Mass. 620,281, pub. 11–1–55. Cl. 21.
Squibb, E. R., & Sons, to Olin Mathieson Chemical Corp., New York, N. Y. 333,697, ren. 3–31–56. Cl. 18.
Squires, Judson G., Omaha, Nebr. 620,200, pub. 11–1–55. Cl. 12.
Standard Chair Co., to Erwin-Lambeth, Inc., Thomasville, N. C. 620,381, pub. 11–1–55. Cl. 32.
Standard Manifold Co., Chicago, Ill. 620,185, pub. 11–1–55. Cl. 11.
Standard Oil Co. of California, d. b. a. Signal Oil Co., Los Angeles, Calif. 620,238, pub. 11–1–55. Cl. 15.
Star-Kist Foods, Inc.: *See*—
French Sardine Co., Inc.
Stark Ceramics, Inc., East Canton, Ohio. 620,205, pub. 11–1–55. Cl. 12.
State Line Service Inc., Unionville, N. Y. 513,984, canc. Cl. 40.
Steinberg of London Ltd., New York, N. Y. 620,435, pub. 11–1–55. Cl. 39.
Stella Cheese Co.: *See*—
Schreiber, L. D., & Co. Inc.
Step-Stop, Inc., Dayton, Ohio. 620,222, pub. 11–1–55. Cl. 13.
Stewart, J., Co., San Clemente, Calif. 620,460, pub. 11–8–55. Cl. 44.
Stewart-Warner Corp., Chicago, Ill. 588,772, canc. Cl. 21.
Strausser, Arlan E., Reading, Pa. 620,290, pub. 11–1–55. Cl. 22.
Strickland, J., & Co., Memphis, Tenn. 60,536, pub. 11–1–55. Cl. 52.
Strunk Equipment Co., Coatesville, Pa. 620,323, pub. 11–1–55. Cl. 23.
Summit Sound Systems Co., The, Akron, Ohio. 620,392, pub. 11–1–55. Cl. 36.
Sun Oil Co., Philadelphia, Pa. 514,040, canc. Cl. 23.
Sunset Line & Twine Co., Petaluma, Calif. 620,287, pub. 11–1–55. Cl. 22.
Sunshade Corp., Buffalo, N. Y. 620,204, pub. 11–1–55. Cl. 12.
Swanson's Cookie Co., Battle Creek, Mich. 621,495, pub. 11–8–55. Cl. 46.

Syntron Co., Homer City, Pa. 514,143, canc. Cl. 15.
Takaki, Ralph N., d. b. a. Takaki Sanyo-Do, Honolulu, Hawaii. 443,694, canc. Cl. 46.
Takaki Sanyo-Do: *See*—
Takaki, Ralph N.
Tanbro Fabrics Corp., New York, N. Y. 514,272, canc. Cl. 42.
Tanbro Fabrics Corp., New York, N. Y. 514,276, canc. Cl. 42.
Tanophene Co., The: *See*—
Beskind, Sidney.
Teichert, Hanns R., d. b. a. Dimension Unlimited, Chicago, Ill. 620,520, pub. 11–8–55. Cl. 50.
Ten Eyck Chemical Co.: *See*—
Ten Eyck Chemical Co., Inc., The.
Ten Eyck Chemical Co., Inc., The, d. b. a. Ten Eyck Chemical Co., South Easton, Mass. 514,306, canc. Cl. 6.
Tennessee Corp., New York, N. Y. 620,182, pub. 11–1–55. Cl. 10.
Testworth Laboratories, Inc., Chicago, Ill. 420,995–6, canc. Cl. 5.
Textron American, Inc.: *See*—
Spotless Plastics Corp.
Textured Yarn Co., Philadelphia, Pa. 620,456, pub. 11–8–55. Cl. 43.
Thomas, Arthur H., Co., Philadelphia, Pa. 620,357, pub. 11–1–55. Cl. 26.
Tingey, George, & Co., Ltd., Manchester, England. 514,271, canc. Cl. 42.
Toro Mfg. Corp. of Minnesota, Minneapolis, Minn. 620,302, pub. 11–1–55. Cl. 23.
Tourneau, Inc., New York, N. Y. 514,314, canc. Cl. 27.
Trip-L-Seal, Inc., Washington, D. C. 514,155, canc. Cl. 12.
Triple "E" Products Co., St. Louis, Mo. 514,095, canc. Cl. 23.
Triumph Mfg. Co.: *See*—
McCarthy, James J.
Trojan Powder Co., Allentown, Pa. 620,468, pub 11–8–55. Cl. 46.
Turchan Follower Machine Co., Detroit, Mich. 620,337, pub. 11–1–55. Cl. 23.
Turover, Isador S., Bethesda, Md. 435,678, 12(c) pub. 1–31–56. Cl. 12.
Twin-B Publishing Co.: *See*—
Benson, Arthur J.
Tyree, J. S., Chemist, Inc., Washington, D. C. 229,987, canc. Cl. 6.
Uddo & Taormina Co., Brooklyn, N. Y. 620,471, pub. 11–8–55. Cl. 46.
Union Cutlery Co., Inc., Olean, N. Y. 514,106, canc. Cl. 23.
Union Oil Co. of California, Los Angeles, Calif. 109,332, ren. 3–28–56. Cl. 15.
United Biscuit Co. of America, Melrose Park, Ill. 620,488, pub. 11–8–55. Cl. 46.
United Merchants and Manufacturers, Inc.: *See*—
Cohn-Hall-Marx Co.
United States Department of Agriculture, Agricultural Research Service, Washington, D. C. 620,565, pub. 11–8–55. Cl. A.
United States Department of the Navy, Washington, D. C. 620,564, pub. 11–1–55. Cl. A.
United States Envelope Co., Springfield, Mass. 620,567. Cl. 2.
United States Plywood Corp., New York, N. Y. 620,165, pub. 11–8–55. Cl. 1.
United States Products Corp.: *See*—
Drew, Fred M., Co.
United States Tobacco Co.: *See*—
Landau, Charles P.
U. S. Vitamin Corp., New York, N. Y. 620,254–5, pub. 11–1–55. Cl. 18.
Universal Bowling & Billiard Supply: *See*—
Weinstein, Samuel.
Universal Bowling Supply: *See*—
Weinstein, Samuel.
Universal Mills, Fort Worth, Tex. 620,502, pub. 11–8–55. Cl. 46.
U-Test-M Mfg. Co., Inc., Milwaukee, Wis. 620,569. Cl. 26.
Valmor Products Co., also d. b. a. Famous Products Co., Chicago, Ill. 620,528, pub. 11–8–55. Cl. 51.
Vance Industries, Inc., Evanston, Ill. 620,227, pub. 11–1–55. Cl. 13.
Velodent Products Mfg. Co., Inc., New York, N. Y. 514,318, canc. Cl. 6.
Verney Corp.: *See*—
Verney Fabrics Corp.
Verney Fabrics Corp., New York, N. Y., to Verney Corp., Boston, Mass. 514,032, canc. Cl. 42.
Vevco Foods, Inc.: *See*—
Viviano Foods, Inc.
Vilter, E. F., Sales, Inc.: *See*—
Branstrator Truck Engineering Corp.
Virginia-Carolina Chemical Corp., Richmond, Va. 514,225–6, canc. Cl. 4.
Viviano Foods, Inc., Belleville, Ill., now by change of name Vevco Foods, Inc. 620,499, pub. 11–8–55. Cl. 46.
Vogt, F. G., & Sons, Inc., Philadelphia, Pa. 95,723, canc. Cl. 46.
Vogt, F. G., & Sons, Inc., Philadelphia, Pa. 345,363, canc. Cl. 46.
Von Dezen, Nathalie, née Kachkine, Paris, France. 514,135, canc. Cl. 6.
Wagher, Dixon R., d. b. a. Dixon Iron Works, Evanston, Ill. 620,560, pub. 11–8–55. Cl. 103.
Wall Paper Manufacturers Ltd., The, Manchester, England. 620,395–6, pub. 11–1–55. Cl. 37.
Wallace, R., & Sons Mfg. Co., Wallingford, Conn. 620,316, pub. 11–1–55. Cl. 23.
Walnut Creek Canning Co., Walnut Creek, Calif. 620,512, pub. 11–8–55. Cl. 46.
Wash Overshot & Spear Engineers, Inc., Longview, Tex. 620,324, pub. 11–1–55. Cl. 23.
Washington Mills Co., Winston-Salem, N. C. 620,422, pub. 11–8–55. Cl. 39.
Washington Woodcraft Corp., Washington, N. J. 514,147, canc. Cl. 13.
Wausau Sulphate Fibre Co., Wausau and Mosinee, to Mosinee Paper Mills Co., Mosinee, Wis. 108,877, ren. 2–29–56. Cl. 37.
Webster-Chicago Corp., Chicago, Ill. 620,276, pub. 11–1–55. Cl. 21.
Weil Bros. Textiles Inc., New York, N. Y. 514,221, canc. Cl. 42.
Wellamann, Hans, New York, N. Y. 620,455, pub. 11–8–55. Cl. 42.
Weinstein, Samuel, d. b. a. Universal Bowling & Billiard Supply and Universal Bowling Supply, Chicago, Ill. 620,289, pub. 11–1–55. Cl. 22.
Welbilt Corp.: *See*—
Detroit-Michigan Stove Co.
Welln-MacLachlan Davits, Ltd., London, England. 620,264, pub. 11–1–55. Cl. 19.
Wernet Dental Mfg. Co., Inc., d. b. a. Hudson Products, Jersey City, N. J. 620,258, pub. 11–1–55. Cl. 18.
Westvaco Chemical Corp., now by merger to Food Machinery and Chemical Corp., New York, N. Y. 514,266, canc. Cl. 4.
Wiesen, Max, & Sons Co., Inc., New York, N. Y. 620,412–14, pub. 11–1–55. Cl. 39.
Wile, M., & Co., to M. Wile & Co., Inc., Buffalo, N. Y. 107,032, ren. 11–9–55. Cl. 39.
Wile, M., & Co., Inc.: *See*—
Wile, M., & Co.
Wilfley, A. R., and Sons, Inc., Denver, Colo. 620,332–3, pub. 11–1–55. Cl. 23.
Wilkins, E. J., Co., Gloversville, N. Y. 514,234, canc. Cl. 3.
Williamson Heater Co., The, Cincinnati, Ohio. 620,571. Cl. 34.
Wilson, Grant, Inc., Chicago, Ill. 620,202, pub. 11–1–55. Cl. 12.
Winter & Co.: *See*—
Winter & Co., Inc.
Winter & Co., to Winter & Co., Inc., New York, N. Y. 332,518, ren. 2–18–56. Cl. 36.
Winter & Co., Inc.: *See*—
Winter & Co.
Winter & Co., Inc., by merger with Winter & Co., New York, N. Y. 513,945, canc. Cl. 36.
Wirz, A. H., Inc., Chester, Pa. 620,580. Cl. 38.
Witney, M. A., Ltd., Watford, England. 514,191, canc. Cl. 42.
Wonder-Orange Co.: *See*—
Howel, Clayton J.
Woods, C. G., Chemical Co.: *See*—
Woods, Charles G., Jr.
Woods, Charles G., Jr., d. b. a. C. G. Woods Chemical Co., Glendale, Calif. 618,139, canc. Cl. 6.
World's Products Co.: *See*—
Laymon, Herman B.
Wrap-King Corp., Holyoke, Mass. 620,341, pub. 11–1–55. Cl. 23.
Young, Mira, Inc., New York, N. Y. 514,326, canc. Cl. 6.
Youthcraft Creations, Inc., New York, N. Y. 620,429, pub. 11–1–55. Cl. 39.
Zaninovich, Antone, & Sons: *See*—
Zaninovich, Minnie.
Zaninovich, Minnie, d. b. a. Antone Zaninovich & Sons, Orange Cove, Calif. 400,646, canc. Cl. 46.
Züricher Beuteltuchfabrik A.-G., Zurich, Switzerland. 620,452, pub. 11–1–55. Cl. 42.

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PATENTS

NOTICES

Disposal of Copies of Articles of Incorporation

In a notice dated October 9, 1953, published in 676 O. G. 8 (November 3, 1953), it was announced by the Commissioner of Patents that the practice of recording, or receiving and filing articles of incorporation by the Patent Office was discontinued and Order No. 3181 relating to that practice was rescinded.

Articles of incorporation or photoprints thereof filed in accordance with that practice are no longer used by the Patent Office for any purpose and will therefore be destroyed.

DAPHNE LEEDS,
Assistant Commissioner of Patents.

Jan. 24, 1956.

Consular Fee Stamps

The Department of State has notified the Patent Office that the use of consular fee stamps was discontinued by statute effective June 28, 1955. Hence, all papers in patent applications executed on or after that date, that formerly required the consular fee stamp, are acceptable without such stamp. Those papers executed before June 28, 1955, however, still require the stamp, and the practice with relation to such papers is not changed.

FOR THE SUPERVISORY EXAMINERS,
By THOMAS F. MURPHY,
Supervisory Examiner.

Jan. 25, 1956.

Adjudicated Patents

(D. C. La.) Honore Patent No. 2,148,267 (343—105), for a method of an apparatus for radiogoniometric indicator. Claims 2 and 4 *Held* valid. *Seismograph Service Corporation et al. v. Offshore Raydist, Inc., et al.*, 135 F. Supp. 342; 107 USPQ 104.

(D. C. La.) Hawkins Patent No. 2,513,316 (106—163), for a radio survey system. Claims 2 and 14 *Held* invalid. *Id.*

(D. C. La.) Hastings Patent No. 2,528,140 (343—105), for a navigation aid. Claim 1 *Held* not infringed. *Id.*

Disclaimers

2,123,803.—*Walter F. Regenhardt*, Cleveland, Ohio. CABINET CONSTRUCTION. Patent dated July 12, 1938. Disclaimer filed Jan. 16, 1956, by the inventor.

Hereby enters this disclaimer to claim 2 of said patent.

2,344,168.—*Walter F. Regenhardt*, Wooster, Ohio. FILING CABINET. Patent dated Mar. 14, 1944. Disclaimer filed Jan. 16, 1956, by the inventor.

Hereby enters this disclaimer to claim 1 of said patent.

2,169,769.—*Walter F. Regenhardt*, Cleveland, Ohio. CABINET CONSTRUCTION. Patent dated Aug. 15, 1939. Disclaimer filed Jan. 16, 1956, by the inventor.

Hereby enters this disclaimer to claims 3 and 7 of said patent.

2,256,352.—*Hans W. Regenhardt*, Cleveland, Ohio. DRAWER FOLLOWER. Patent dated Sept. 16, 1941. Disclaimer filed Jan. 16, 1956, by the assignee, *The Steel Storage File Company*.

Hereby enters this disclaimer to claims 8 and 16 of said patent.

2,304,020.—*Walter F. Regenhardt*, Cleveland, Ohio. INTERLOCK FOR STEEL FILES. Patent dated Dec. 1, 1942. Disclaimer filed Jan. 16, 1956, by the inventor.

Hereby enters this disclaimer to claim 16 of said patent.

2,386,343.—*Walter F. Regenhardt*, Wooster, Ohio. INTERLOCK. Patent dated Oct. 9, 1945. Disclaimer filed Jan. 16, 1956, by the inventor.

Hereby enters this disclaimer to claim 1 of said patent.

Patents Available for Licensing or Sale

2,552,963. Motor Winding Barrel for Watches. Ernest Hall, Route No. 4, Doniphan, Mo.

2,715,953. House (Prefabricated, Metal-Framed, Semi-Circular Ends). George M. Marrow, 44–A High St., Brattleboro, Vt.

2,722,686. Toy Helmets. John J. Wojnar, 3251 Lockwood, Detroit 10, Mich.

2,724,462. Automatic Brakes for Conveyor Belts. Dan L. Henley, Otsego, W. Va.

2,725,141. Combination Waste Receptacle and Bag Dispenser. (Disposable Wastebasket With Supply of Bags.) Waino K. Latvala (and Tuure Jalkanen), P. O. Box 423, Ojai, Calif.

2,725,807. Rotor Harrow. Mrs. Worth A. Sibert, 1380 Royal St., Beaumont, Tex.

2,725,979. Cigarette Package Match Holder. Paul L. Smith, Paul L. Smith Agency, Inc., 270 Union St., New Bedford, Mass.

Removed From Register

Pat. No. 2,644,256, Retractable Stand for Flatirons, listed in the OFFICIAL GAZETTE of Feb. 8, 1955, by General Electric Company, is hereby withdrawn from the Register of Patents Available for Licensing or Sale.

New Applications Received During December 1955

Patents	6,501
Designs	429
Plants	11
Reissues	10
Total	6,951

Issue

Patents	751	No. 2,733,439 to No. 2,734,189, incl.
Designs	59	No. 176,834 to No. 176,892, incl.
Plants	1	No. 1,456
Reissues	1	No. 24,118
Total	812	

Adverse Decisions in Interferences

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed.

Pat. 2,602,611, A. P. Glenny, Automatic pilot for aircraft, decided Oct. 20, 1955, claim 24.

Pat. 2,623,146, E. G. Anger, Welder control system, decided Oct. 24, 1955, claim 2.

Pat. 2,648,353, L. Haworth, Duct structure for gas-turbine engines, decided Oct. 20, 1955, claims 1, 2, 3, 5, 6, 7, 8, 10, 11, 12, 15, and 17.

Pat. 2,654,080, F. A. Browne, Jr., Magnetic memory storage circuits and apparatus, decided Dec. 22, 1955, claims 6 and 9.

Pat. 2,655,616, B. V. Rollin, Magnetrons, decided Dec. 13, 1955, claims 1 and 2.

Pat. 2,688,110, J. V. Domaleski, E. L. Gartland, and J. J. Kleimack, Semiconductor translating device, decided Dec. 14, 1955, claims 1, 3, 4, 6, 8, 12, and 13.

Pat. 2,693,460, D. D. Gagliardi, Materials for finishing textiles and processes for producing and using the same, decided Jan. 11, 1956, claims 2 and 7.

CONDITION OF PATENT APPLICATIONS AS OF NOVEMBER 30, 1955

Total number of pending applications (excluding Designs)	220,996
Total number of pending Design applications	7,046
Total number of applications awaiting action (excluding Designs)	135,527
Total number of Design applications awaiting action	3,108
Date of oldest new application	July 20, 1954
Date of oldest amended application	Sept. 28, 1953

ROSA, M. C., Executive Examiner

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 36, 43, 50, 56, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 48, 51, 54, 60, 70.
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 30, 33, 38, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 16, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 29, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	12-14-54	1-28-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	5-2-55	11-15-54
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	3-2-55	12-14-53
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	3-3-55	2-11-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	2-2-55	5-20-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic, Amides, Amines, General Organic Processes	1-12-55	4-2-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	3-7-55	12-14-53
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	11-26-54	4-14-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	2-24-55	3-22-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	3-17-55	6-4-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	2-14-55	11-6-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	2-14-55	2-10-54
14. (III) MANIAN, J. O., (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire, Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	1-27-55	3-8-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	3-1-55	3-30-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	12-23-54	1-5-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	3-4-55	6-4-54
18. (VI) KURZ, J. A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	12-7-54	1-7-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	3-8-55	4-16-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	3-21-55	4-22-54
21. (III) MADER, R. C., Textiles	3-8-55	3-22-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	3-2-55	3-11-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	8-17-54	9-30-53
24. (III) DRACOPOULOS, P. T., (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	2-2-55	10-4-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	3-3-55	3-1-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	4-12-55	10-11-54
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	2-24-55	7-21-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	2-15-55	5-14-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	2-4-55	7-15-54
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	4-28-55	7-2-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application	
	New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	1-12-55	6-1-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	3-18-55	9-13-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	3-1-55	1-29-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	2-21-55	2-18-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	3-1-55	5-20-54
36. (V) McFADYEN, A. D., Measuring and Testing	1-24-55	11-10-54
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	1-25-55	5-24-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g. Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	2-17-55	6-6-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	3-9-55	4-2-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	2-22-55	5-3-54
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	9-13-54	11-20-53
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	12-1-54	5-19-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilising and Disinfecting (except Wood Treatment Apparatus)	3-8-55	1-25-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	2-10-55	11-3-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	3-14-55	8-17-54
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	11-19-54	1-7-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	1-25-55	8-2-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	3-17-55	4-7-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	2-21-55	2-17-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	2-25-55	4-21-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	3-11-55	3-5-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	1-6-55	2-8-54
55. (VII) KLINE, J. R., Surgery; Dentistry: Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	11-1-54	2-10-54
56. (I) KEELY, J. E., (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	2-14-55	5-5-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	4-29-55	6-18-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	3-9-55	2-4-54
59. (I) HENKIN, B., (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	3-2-55	3-5-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	2-15-55	8-9-54
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	2-14-55	7-30-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	1-31-55	1-15-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	3-14-55	2-23-54
66. (V) LISANN, I., Geometric Instruments; Automatic Weighing Scales; Acoustics	2-11-55	3-15-54
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	1-26-55	10-4-54
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	2-2-55	11-19-53
70. (II) BREWRINK, J. L., Explosive Weapons, Ammunition, Charges and Composition; Explosive Charge Manufacturing; Jet Motor Processes; Torpedoes; Radar; Sonar; Automatic Pilots; Antennas; Actinide Series (e. g. Fissionable) Compounds; Irradiation Chemistry; Mass Spectrometers	7-20-54	9-28-53
CLASS. DIVS — I (VII) LANHAM, B. E., Paper Making	3-7-55	11-1-54
II (II) LADY, J. E., Oscillators; Amplifiers	3-3-55	2-10-54
III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	5-5-55	8-2-54
IV (VI) SMITH, (Mrs.) M. P., Harrows; Plows; Earth Rollers	3-25-55	7-26-54
V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	3-1-55	12-6-54
DESIGNS (III) — A—BREHM, G. I., Industrial Arts	5-6-55	5-23-55
B—GRAY, M. A., Household, Personal and Fine Arts	4-14-55	4-15-55

The following divisions have been abolished: 10, 44, 46, 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during February 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1953*.

Patents ..... Numbers 2,145,844 to 2,149,249, inclusive
Plant Patents ..... Numbers 313 to 316, inclusive

DECISIONS IN PATENT CASES

United States Court of Appeals
District of Columbia Circuit

BENJAMIN F. MIESSNER *v.* UNITED STATES OF AMERICA

No. 12,674. Decided December 22, 1955

[— F. 2d —; 108 USPQ 6]

1. FEES—REFUND UNDER 35 U. S. C. 42.
Held, with respect to the provision in 35 U. S. C. 42 that ". . . the Commissioner may refund any sum paid by mistake or in excess of the fee required by law," that it is the function of the Commissioner to decide whether the sum sought to be recovered was paid by mistake, and that where the Commissioner decided an appeal fee was not paid by mistake, he was not obliged to make the refund.

2. SAME—SAME.
Held that the District court properly dismissed applicant's suit against the United States to recover the amount of the fee for an appeal to the Board of Appeals which was filed on the same day that the Examiner allowed the appealed claim.

APPEAL from the United States District Court for the District of Columbia.

AFFIRMED.

Conder C. Henry for Miessner.

Carl W. Belcher, Assistant United States Attorney, with whom *Leo A. Rover*, United States Attorney, *Lewis Carroll* and *Miss Catherine B. Kelly*, Assistant United States Attorneys, were on the brief for United States of America.

Before WILBUR K. MILLER, FAHY, and BASTIAN, *Circuit Judges*

PER CURIAM:

May 27, 1954, Benjamin F. Miessner filed an appeal to the Patent Office Board of Appeals from an Examiner's rejection of a claim in his patent application, and paid the required appeal fee of $25.00. He later learned that on the same day—whether before or after he took the appeal does not appear—the Examiner withdrew the final rejection by allowing the appealed claim. This action gave him the relief sought by the appeal.

On the theory that he had paid the fee of $25.00 by mistake because the appeal became unnecessary on the day he filed it, Miessner requested the Commissioner of Patents to refund the money. The Comissioner refused, whereupon Miessner brought this suit against the United States to recover the amount of the fee. He appeals from the District Court's order of dismissal entered pursuant to the Government's motion.

It is provided in 35 U. S. C. § 42 that ". . . the Commissioner may refund any sum paid by mistake or in excess of the fee required by law." Appellant argues that this statute mandatorily requires the repayment of money paid by mistake; that the fee here involved was paid by mistake; that therefore he is entitled to judgment against the United States. [1] If the quoted statutory provision is mandatory—which we do not decide—it is still the function of the Commissioner to decide whether the sum sought to be recovered was paid by mistake. Here the Commissioner decided—correctly, we think—the appeal fee was not paid by mistake. That being true, he was not obliged to make the refund, and [2] the United States cannot be held liable.

AFFIRMED.

FAHY, *Circuit Judge*, concurs on the ground the District Court lacked jurisdiction.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

1,911,600, Bobertz and LaFontaine, Automobile hood, appeal filed C. C. A., 6th Cir., Doc. 12379, *Gustav H. Bobertz, Jr. v. General Motors Corp.* Judgment of the District Court affirmed Dec. 14, 1955.

1,949,822, O'Hara and Herring, Switch, filed Feb. 23, 1951, D. C. Del. (Wilmington), Doc. 1352, *Bernard O'Hara et al. v. Ford Motor Co.* Stipulation and order dismissing cause with prejudice Dec. 30, 1955.

2,078,946, E. J. Houdry, Conversion of hydrocarbons; **2,161,677**, same, Catalysis; **2,275,757**, J. R. Bates, Regulation of catalytic activity; **2,550,727**, H. G. Shimp, Method of catalytic cracking of hydrocarbons utilising a moving catalyst bed; **2,560,604**, H. A. Shabaker, Manipulation of fluent solids; **2,561,321**, J. W. Barker, Catalyst regeneration; **2,561,466**, C. C. Peavy, same; **2,574,480**, Lassiat and Savage, Process of converting hydrocarbon material; **2,579,234**, R. Kollgaard, Moving catalyst conversion system; **2,624,695**, Ivey and Delaplaine, Transfer of granular materials, filed Feb. 27, 1953, D. C., E. D. Pa. (Philadelphia), Doc. 14893, *Houdry Process Corp. v. Socony Vacuum Oil Co. Inc.* Stipulation and decree dismissing action with prejudice Dec. 30, 1955.

2,151,033, M. L. Jones, Folding partition; **2,186,112**, same, Partition door, filed Dec. 12, 1955, D. C., E. D. Pa. (Philadelphia), Doc. 19970, *Richards-Wilcox Mfg. Co. v. Wayne Iron Works.*

2,161,677. (See 2,078,946.)

2,176,728, C. D. Montague, Automatic draft regulator, filed May 20, 1955, D. C., W. D. Wash. (Seattle), Doc. 3947, *Automatic Draft and Stove Co. Inc. et al. v. Coselman Distributors et al.* Consent decree; patent held valid and infringed; injunction granted Dec. 27, 1955.

2,186,112. (See 2,151,033.)

2,250,442, A. V. Galli, Lubricator for rotary loop-takers in sewing machines, filed Dec. 17, 1954, D. C., S. D. N. Y., Doc. 73/295, *Aiuto V. Galli v. Jolsen Sewing Machine Co., Inc.* Order of discontinuance Dec. 29, 1955.

2,298,644, C. Hummel, Method of and device for the production of food paste articles, filed Nov. 15, 1954, D. C., E. D. N. Y. (Brooklyn), Doc. 14925, *Gebrüder Bühler v. Ambrette Machinery Corp.* Order of dismissal Dec. 19, 1955. Same, Doc. 14926, *Gebrüder Bühler v. De Francisci Machine Corp.* Decree as above.

2,226,997, L. Hochman, Bandage, filed Jan. 5, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16161, *Surgitube Products Corp. v. Eagle Beef Cloth Co. Inc.*

2,232,329, Parsons and Vawter, Process of making casein plastic products and apparatus therefor, filed Feb. 1, 1954, D. C. N. J. (Newark), Doc. 101/54, *American Plastics Corp. v. Button Corporation of America.* Judgment for plaintiff Dec. 30, 1955.

2,237,276. (See Re. 22,837.)

2,366,603. (See 2,494,508.)

2,367,302, Moore and Kirchmeyer, Bisulphite derivatives of 2-methyl-1,4-naphthoquinone and the like, **filed** Dec. 16, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16120, *Abbott Laboratories v. Ortho Chemical Corp.*

2,375,757. (See 2,078,946.)

2,460,863, M. Gelfand, Algaecide, **filed** Jan. 4, 1956, D. C., S. D. Fla. (Miami), Doc. 6669–M, *Marine Studios, Inc. v. Marine Exhibition Corp.*

2,416,196, A. E. Arlington, Art of preserving cut flowers, **filed** May 18, 1953, D. C., N. D. Ohio (Cleveland), Doc. 30245, *The Colton Chemical Co. et al. v. V. L. Smithers.*

2,417,964, J. F. Kingsley, Retractile marking implement, **filed** Dec. 29, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 19272–WM, *Nadejda V. Andrews v. Alfred N. Dahlstrom.*

2,419,613. (See Re. 23,131.)

2,434,925. (See Re. 23,131.)

2,438,912. (See Re. 23,131.)

2,448,145, A. Holterhoff, Producing moiré design; **2,513,646**, same, Art of producing moiré pattern effects in fabrics, **filed** July 2, 1951, D. C. N. J. (Newark), Doc. 626/51, *Newburgh Moire Co., Inc. v. Superior Moire Co., Inc.* Patents held invalid (notice Dec. 21, 1955).

2,461,464, R. Aronstein, Filter for fluorescent screens, **filed** Feb. 27, 1953, D. C., S. D. N. Y., Doc. 83/76, *Transmirra Products Corp. et al. v. Sears Roebuck & Co.* Order of discontinuance (notice Dec. 29, 1955).

2,468,798. (See Re. 23,131.)

2,473,686, R. G. Montero, Holder, **filed** July 1, 1949, D. C., S. D. N. Y., Doc. 50/691, *E. M. Davis & Co. et al. v. Montvel Corp.* Dismissed for lack of prosecution Dec. 7, 1955.

2,475,314. (See 2,494,508.)

2,476,900, G. W. Daugherty, Spraying and dusting machine, **filed** Jan. 3, 1956, D. C., W. D. Mich. (Grand Rapids), Doc. 2879, *Food Machinery & Chemical Corp. v. Michigan Orchard Supply Co. et al.*

2,494,508, R. C. Dehmel, Means for aircraft flight training; 2,475,314, same, Navigation apparatus for aircraft and training devices; **2,366,603**, same, Aircraft training apparatus, **filed** Dec. 16, 1955, D. C., N. D. N. Y. (Utica), Doc 5917, *Curtis-Wright Corp. et al. v. Link Aviation, Inc.*

2,496,969, W. Wentworth, Spectacle sweat bar, **appeal** filed Dec. 19, 1955, C. C. A., 2nd Cir., Doc. 23924, *Welsh Mfg. Co. v. Sunvare Products, Inc.*

2,513,646. (See 2,448,145.)

2,515,817, K. C. Augenstein, Expansion bracelet; **Des. 165,856**, same, Expansible chain for a bracelet or similar article, **filed** Dec. 28, 1955, D. C., S. D. N. Y., Doc. 106/25, *Speidel Corp. v. M. F. G. Watch Band Co. Inc.*

2,532,457, Morgan and Lawrenz, Method and apparatus for removing grit, **filed** Dec. 20, 1955, D. C., S. D. Tex. (Houston), Doc. 9380, *Chicago Pump Co. v. City of Baytown, Texas.*

2,543,157, A. Ellis, Basket; **Des. 159,799**, same, Collapsible basket, **filed** Aug. 10, 1954, D. C., S. D. N. Y., Doc. 95/43, *Nadya, Inc. v. Majestic Metal Specialties, Inc.* Stipulation and order of discontinuance Dec. 19, 1955.

2,550,727. (See 2,078,946.)

2,560,604. (See 2,078,946.)

2,561,331. (See 2,078,946.)

2,561,466. (See 2,078,946.)

2,563,119, W. M. Kelly, Recorder chart for oil or gas well recording instruments, **filed** Sept. 8, 1954, D. C., S. D. Tex. (Houston), Doc. 8477, *Otis Pressure Control, Inc., et al. v. Tublar Service & Engineering Co. et al.* Order of dismissal without prejudice Dec. 19, 1955.

2,574,489. (See 2,078,946.)

2,579,834. (See 2,078,946.)

2,580,686, Efromson and Lewis, Electrodynamic reciprocation apparatus, **filed** Jan. 3, 1956, Ct. Cls., Doc. 2/56, *The Calidyne Co. v. The United States.*

2,602,859. (See Re. 23,131.)

2,624,805. (See 2,078,946.)

2,625,679, M. B. Singer, Eyeglass frame construction, **filed** Aug. 5, 1954, D. C., S. D. N. Y., Doc. 95/9, *Soft-Lite Bay State Optical Co. Inc. v. The Kurz Optical Co.* Stipulation and order of discontinuance Dec. 20, 1955.

2,650,875, Dvorkovitz and Swihart, Method of etching aluminum and aluminum base alloys, **filed** July 23, 1954, D. C. N. J. (Newark), Doc. 585/54, *The Diversey Corp. v. Frederick Gumm Chemical Co., Inc.* Consent decree; patent held infringed Dec. 15, 1955.

2,657,478, W. J. Paul, Heel construction for flimsy foot coverings, **filed** Dec. 28, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16138, *Richard Paul, Inc. v. Charles Wersba Hosiery Corp.*

2,657,500, H. W. Samolewitz, Transparent doll eye; **2,666,664**, Wolfe and Samolewitz, Eye assembly for use in dolls' heads, **filed** Dec. 6, 1955, D. C., S. D. N. Y., Doc. 105/240, *Maryon Corp. v. Commonwealth Plastics Corp. et al.*

2,657,618, W. Eisbein, Developing apparatus, **filed** June 28, 1954, D. C., S. D. N. Y., Doc. 94/99, *Leonard M. Todd v. Walter Eisbein.* Order dismissing cause for lack of prosecution Dec. 7, 1955.

2,661,236, E. A. Schonrock, Winch and spring suspension construction for dump trailers, **filed** Aug. 18, 1954, D. C., S. D. Tex. (Houston), Doc. 8435, *Edwin A. Schronrock et al. v. South Texas Truck Equipment Co.* Consent decree; patent held valid and infringed; defendant enjoined Dec. 22, 1955.

2,663,242, D. I. Reiter, Handle end holder and installation, **filed** May 5, 1954, D. C., S. D. N. Y., Doc. 93/52, *Daniel I. Reiter v. Po-Gem Inc. et al.* Order of discontinuance (notice Dec. 29, 1955).

2,668,913, E. R. Goldfield et al., X-ray apparatus; **Des. 153,789**, Goldfield and Schiring, Housing for X-ray tube and blower, **filed** Dec. 22, 1955, D. C., N. D. Ohio (Cleveland), Doc. 32369, *Picker X-Ray Corp. et al. v. General Electric Co.*

2,672,805, R. M. Ingham, Jr., Filling grate for looms, **filed** Dec. 19, 1955, D. C., E. D. Tenn. (Chattanooga), Doc. 2700, *Deering Milliken Research Corp. v. Electric Furnace Corp.* Same, D. C., N. D. Ga. (Atlanta), Doc. 5462, *Deering Milliken Research Corp. v. Piedmont Cotton Mills, Inc.*

2,666,664. (See 2,657,500.)

2,711,940, J. C. Hochman, Drop head machine and booster, **filed** Aug. 30, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 15844, *Julius C. Hochman et al. v. Zenith American Inc. et al.* Consent decree Jan. 4, 1956.

2,714,031, T. Friedman, Inlay of handbag frame, **suit** for Declaratory Judgment filed Dec. 14, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16114, *John Deluca v. Ideal Handbag Frame Mfg. Co.*

2,720,617, P. N. Youtz, Method of erecting buildings, **filed** Dec. 27, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 19264–C, *Philip N. Youtz v. Western Concrete Structures Co. et al.*

2,727,650, Moynihan and Gau, Magnetic seal for leaks in oil tanks, **filed** Jan. 3, 1956, D. C. N. J. (Newark), Doc. 2/56, *Thomas F. Moynihan et al. v. Alfred Yordin et al.*

Re. 22,837 (of **2,337,276**), J. Sanchis, Filling device with receptacle operated outlet valve, **filed** Dec. 30, 1955, D. C., E. D. Pa. (Philadelphia), Doc. 20066, *Liquidmatic Corporation of America v. Boring Products, Inc., et al.*

Re. 23,131 (of **2,419,613**), H. E. Webber, Tuned microwave wattmeter; **2,468,798**, same, High-frequency resistor; **2,434,925**, R. O. Haxby, Coupling means for relatively movable wave guides; **2,438,912**, W. W. Hansen et al., Impedance transformer; **2,602,859**, T. Moreno, Ultrahigh-frequency directional coupling apparatus, **filed** Dec. 30, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16151, *Sperry Rand Corp. v. Nassau Research & Development Assoc. Inc. et al.*

Des. 153,789. (See 2,668,913.)

Des. 159,799. (See 2,543,157.)

Des. 162,867, H. Sado, Electric broiler, **filed** Oct. 20, 1952, D. C., S. D. N. Y., Doc. 79/273, *Marlun Mfg. Co. Inc. v. Crown Broilers Co.* Order of discontinuance Dec. 29, 1955. Same, **filed** June 9, 1953, D. C., S. D. N. Y., Doc. 85/316, *Marlun Mfg. Co. Inc. v. Edwards Merchandising Corp.* Decree as above (notice Dec. 29, 1955).

Des. 162,976, G. W. Nelson, Clock, **filed** Dec. 2, 1955, D. C., S. D. N. Y., Doc. 105/226, *Howard Miller Clock Co. v. Lamp Futures Inc. et al.*

Des. 162,953, J. Hayward, Knitted allpover adjustable neckline blouse, **filed** Dec. 29, 1955, D. C., S. D. N. Y., Doc. 106/31, *Miami Beach Novelties, Inc. v. Jeffy Fashions, Inc., et al.*

Des. 165,856. (See 2,515,817.)

Des. 168,160, A. Koff, Lipstick case or similar article, **filed** Apr. 15, 1954, D. C., S. D. N. Y., Doc. 92/295, *Arthur Koff v. Hollywood Novelty Co. Inc.* Dismissed for lack of prosecution Dec. 7, 1955.



Des. 169,174. (See Des. 169,185.)

Des. 169,185, A. Philippe, Brooch; **Des. 169,174**, same, Necklace, **filed** Dec. 4, 1953, D. C., S. D. N. Y., Doc. 89/387, *Trifari, Krussman & Fishel, Inc. v. Rite Grade Corp.* Order of discontinuance Dec. 29, 1955.

Des. 176,270, I. Klein, Candy bar or similar article, **filed** Dec. 19, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16124, *Barton Inc. v. Victoria Sweets Inc. et al.*

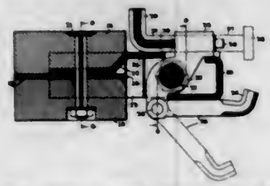
REISSUES

FEBRUARY 7, 1956

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,118
CROSS BAR SUPPORT FOR VEHICLES
Frank Fahland, Omaha, Nebr., assignor to Evans Products Company, Plymouth, Mich., a corporation of Delaware
Original No. 2,476,362, dated July 19, 1949, Serial No. 589,729, April 23, 1945. Application for reissue July 13, 1950, Serial No. 173,640
26 Claims. (Cl. 105—369)

1. A locking unit for connecting a beam releasably with an apertured support, comprising a hooked member hinged to the beam on a transverse axis, so as to swing into sustaining engagement with the beam as its hooked end enters an aperture in the support; and a bolt movable in a path approximately parallel with the hooked member when the latter is in such sustaining engagement, said bolt being adapted to enter, when projected, another



aperture in the support and thereby inhibit disengaging motion of the beam and hooked member.

PLANT PATENTS

GRANTED FEBRUARY 7, 1956

Owing to the fact that almost all of the illustrations of the plant patents are in colors, it is not practicable to print a cut of the drawing.

1,456
ROSE PLANT
Carl S. Shamburger, Tyler, Tex., assignor to C. W. Stuart & Co., Newark, N. Y., a corporation of New York
Application March 24, 1955, Serial No. 496,627
1 Claim. (Cl. 47—61)

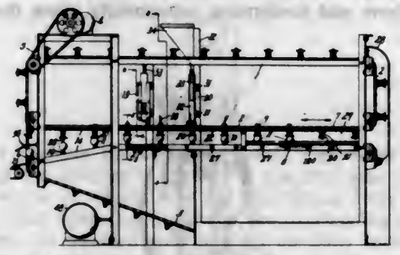
A new and distinct variety of rose plant of the hybrid polyantha class, substantially as herein shown and described, characterized particularly as to novelty by its general similarity to the variety "Cavalcade" (Plant Patent No. 911), except for its unique and distinctive 2-toned flowers, the color effect of which is pink diffused with light yellow in the bud stage thereof, said bud color changing to deep pink with silvery reverse diffused with light yellow, and then to light silvery pink with silvery white reverse as the flower opens and matures, and the strong, clear sweet fragrance of the flowers which is quite pronounced even at a substantial distance from the flowers.

PATENTS

GRANTED FEBRUARY 7, 1956

GENERAL AND MECHANICAL

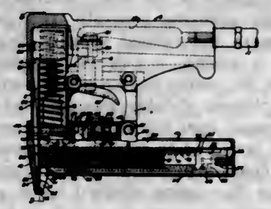
2,733,439
MACHINE FOR EMBEDDING STICKS IN APPLES
Harry Pikal, Bangor, Mich.
Application December 6, 1954, Serial No. 473,161
20 Claims. (Cl. 1—1)



1. A machine for inserting sticks in apples comprising, a pair of conveyors driven at equal speeds in vertical loops with a reach of each conveyor extending in spaced parallel relation to a reach of the other and running in the same direction, tubular chucks mounted in radially extending relation at spaced points on the upper one of said conveyors and having annular collars spaced between the conveyor and the outer ends of the chucks, springs compressible between said collars and the conveyor and biasing the chucks radially outwardly of the conveyor, supports having deformable conical points mounted on the other lower conveyor in spaced registering relation with the ends of said chucks, a stick feed chute positioned with its discharge end adjacent the path of the inner ends of said chucks and swingably mounted to advance with the chucks, coacting stops on said chucks and chute to advance said chute with each chuck, a spring connected to retract said chute, a stick magazine mounted adjacent the upper inlet end of said chute, a plunger disposed to eject a stick from said magazine into said chute, power means connected to actuate said plunger, a control switch carried by said chute and positioned to be actuated by each chuck, said switch being connected to actuate said power means, a frame swingably supported alongside said one conveyor beyond said chute, a hammer slidable on said frame and swingable therewith over said chucks, a second power means on said frame connected to reciprocate said hammer toward and away from said chucks, a stop on said frame coacting with each chuck to advance said frame with each chuck, a second control switch carried by said frame and positioned to be actuated by each chuck, said second switch being connected to actuate said second power means, and a downwardly facing reach in the conveyor carrying the supports unopposed by said chucks beyond the hammer whereby the apples with the sticks therein may be discharged by gravity from the supports and from said chucks, the stroke of said hammer being of such a length as to drive a stick into the core of an apple engaged with each chuck.

2,733,440
STAPLING IMPLEMENT
Robert W. Jenny, Westerly, R. I., assignor to Bostitch, Inc., Stonington, Conn., a corporation of Rhode Island
Application April 5, 1954, Serial No. 420,942
9 Claims. (Cl. 1—49)

1. In a stapling implement having a staple-driver for driving crowned staples into the work and a magazine for progressively feeding the staples to said driver, a member having a slot-like recess forming a throat through which the staples may be driven, said recess provided with a central vertical longitudinally-extending rib having a convex face projecting into said throat for engagement with the crossbar of a staple at the center of its crown, and



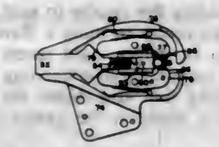
resiliently-operated means for engaging said crossbar of the staple at points spaced laterally from its center and slightly below its apex whereby said means tends to cant the staple to displace its legs forwardly for preventing their ends from encountering any obstruction at the rear liable to impede the passage of the staple through the throat.

2,733,441
WOUND CLIP APPLICATOR
John W. White, North Hollywood, Calif., assignor to Technical Oil Tool Corporation, Los Angeles, Calif., a corporation of California
Application March 24, 1952, Serial No. 278,221
10 Claims. (Cl. 1—49.1)



1. A wound clip applicator comprising: an elongated housing for receiving a plurality of wound clips in stacked relationship, said housing having an enlarged front opening for discharging said clips; plunger means within said housing for urging said clip stack forwardly; means mounted on the head of said housing for limiting the forward movement of said clip stack, said means including holding lugs adapted to override the front face of the leading clip and spaced a substantial lateral distance apart; a pair of spring urged forcep arms swingably mounted to the sides of said housing; and inturned forcep jaws formed on the forward ends of said arms and normally positioned to bracket the ends of said leading clips, said jaws being movable inwardly upon compression of said arms to drive said clip ends inwardly, and being of a lateral width less than the lateral spacing of said holding lugs whereby to pass freely therebetween.

2,733,442
PACKAGE SEALING MACHINE
Arthur Gilbert Russell and Frank Alfred Clary, Jr., Bristol, Conn., and Francis Bernard Casey, Concord, and Robert Eldon Dallon, Lawrence, Mass., assignors to W. R. Grace & Co., a corporation of Connecticut
Original application November 30, 1951, Serial No. 259,084. Divided and this application February 19, 1954, Serial No. 412,924
4 Claims. (Cl. 1—187)



1. In a machine of the class described, clip crimping apparatus for applying generally U-shaped deformable sealing clips to the twisted neck of flexible containers comprising a casing, a pair of opposed sealing jaws journaled in the casing having a jaw portion and a lever portion, a plunger slidably mounted between said jaws bearing opposed cam faces adapted to engage the lever end of said jaws and to control the opening and closing thereof, a floating punch slidably mounted for limited travel within the casing adapted to be engaged by the plunger, a spring to urge the punch to its forward position which defines the rear wall of a clip receiving nest, the terminal portions of the jaws extending rearwardly and adapted to engage the open arms of said clips whereby said jaws close along inwardly directed curved paths first bending the arms of the clip about the twisted neck of a container placed within the clip and then forming a buttress against which the punch may compress the clip.

2,733,443
LEG, KNEE, AND FOOT GUARD AND SUPPORT
David A. Holder, Goldsboro, N. C.
Application September 28, 1953, Serial No. 382,596
4 Claims. (Cl. 2—22)



1. In a device for supporting the leg and foot of a wearer while in kneeling position the combination of a rigid elongated frame having means for attachment to the lower leg of the wearer for extension along the front of the shin bone of the wearer above the ankle, and a foot supporting ground engaging member connected to the lower portion of said frame and extending therebelow at an angle thereto and having means thereon for directly receiving and supporting the upper front portion of the foot of the wearer thereon, said ground engaging member at its extreme end remote from the frame constituting a ground engaging skid.

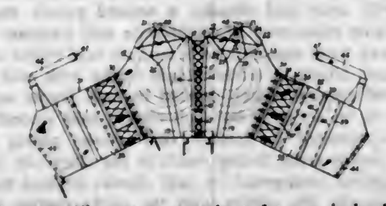
2,733,444
FOUNDATION GARMENT
Arthur Goldstein, New York, N. Y., assignor to Tru Balance Corsets, Inc., New York, N. Y., a corporation of New York
Application August 6, 1953, Serial No. 372,792
5 Claims. (Cl. 2—37)

1. A foundation garment comprising an inelastic front member adapted to cover substantially the front central portion of the body of a wearer from the waistline and confined at its sides and its lower edge portions to closely adjacent the crests of the pubis and upwardly between the crests of the ilium, thereby substantially to limit the covering of the front member to the groin area, two elastic-fabric side members and two elastic-fabric hip members, each set of said members being fabricated from mixed elastic and inelastic threads, said hip members each being attached to the bottom edge of a side member and with the inner edge thereof to each side of the front member at the lower side and bottom edges thereof and having elastic threads providing the primary elasticity arranged in a direction diverging downward from the sides, the inner edges of each of said side members being attached at one edge thereof to each side of the front member adjacent the upper side portion of said front member, and an another lower edge to a hip member, and the outer edge of each of said side members having its upper terminal edge adapted to extend at the upper end from a line above and conforming substantially along the crest



line of the hip bone line of the wearer upwardly and to extend rearwardly to the waistline of the wearer cooperating with the uppermost corner of the hip member to form a hip bone crest yieldable pocket to constrain the garment substantially immovable downwardly immediately above the hip bone line, and having elastic threads providing elasticity to the front member anchored above the hip bone line and extending from the front member upwardly and rearwardly to the waistline in opposition to the downward pull of the hip members and transversely across the abdomen line of the wearer, the contiguous edge portions of the hip member and side member providing an anchorage area for the downward pull of the hip members, locating the upward pull and transverse elasticity above the line of the apex of the hip bone line.

2,733,445
CONTROLLING GARMENT
Emory C. Champagne, Woodbridge, Conn., assignor to The Berger Brothers Company, New Haven, Conn., a corporation of Connecticut
Application December 9, 1952, Serial No. 324,957
4 Claims. (Cl. 2—42)



1. A controlling garment adapted to encircle the body of the wearer, said garment comprising a front section having a gusset of inelastic material at each side thereof, each gusset forming, with the body of the section, a breast pocket, each gusset extending from substantially the lower edge to the upper edge of the garment, being of relatively light weight material compared to that of the body of the section and of relatively narrow width below the approximate center of the breast pocket, and each gusset flaring outwardly above the approximate center of the breast pocket toward the upper edge of the garment, and a single drawstring for each gusset, said string being slidably connected to the garment at the lower and side edges of the flaring portion of the gusset and also slidably connected to the gusset adjacent the central portion of the upper edge thereof whereby tensioning of the drawstring effects both lateral and vertical adjustment of the breast pocket.

2,733,446
GARMENT CLOSURE
Philip C. Macrides, Troy, N. Y., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y., a corporation of New York
Application November 4, 1952, Serial No. 318,608
5 Claims. (Cl. 2—128)



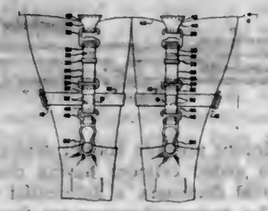
1. A garment having fabric panels with edges overlapping and forming a closure, a marginal area of the panel which is outermost at the overlapping areas being folded back upon itself between the overlapping panels to define an infolded strip beneath an outer layer and along a line of fold forming a free edge of said one panel, a reinforcing fabric strip disposed within the fold, running lengthwise of and in approximate alignment with the strip, and having a width approximately co-extensive with the width of said infolded strip, the free edge portion of the infolded strip being turned inwardly between the strips, the reinforcing strip being provided with a fold disposed in approximate alignment with the fold of said inwardly turned, free edge portion of the infolded strip, said fold of said reinforcing strip being disposed against the said folded edge portion of the infolded strip and united thereto by a line of stitching, the reinforcing strip being also united by a line of stitching to the infolded strip near the said line of fold and parallel to said first line of stitching, and button hole stitching formed in and uniting said outer layer, said reinforcing strip, and said infolded strip, and disposed between said lines of stitching.

2,733,447
SUPPORT FOR FOUR-IN-HAND TIE
Fred Y. Kuriyama, Honolulu, Territory of Hawaii
Application December 21, 1954, Serial No. 476,779
3 Claims. (Cl. 2—153)



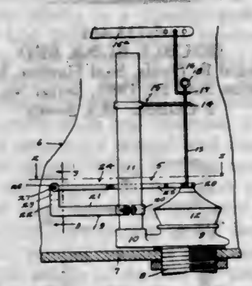
1. A support for four-in-hand ties comprising a body, a pair of wings extending laterally therefrom, transverse holders on the ends of said wings, said holders having the lower ends thereof folded inwardly for retaining tie ends, a central U-shaped mount forming said body and having one leg thereof folded upwardly between said legs, a clasp pivoted at the top of said mount and extending laterally and having a bight around which a tie may be folded, an intermediate portion of said clasp having an offset, said offset being in the space defined by said one leg and its upwardly folded part and engaged thereby, the free end of said clasp adapted to be rotated about said pivot, whereby a necktie may be knotted around said body with said bight extending laterally from said knot, said clasp adapted to be held in inoperative position while the tie is being adjusted to the collar of a shirt and rotated into clasping position on the shirt after said adjustment.

2,733,448
GARTER CONSTRUCTION
Edna L. Stogoski, Bristol, Pa.
Application July 19, 1954, Serial No. 444,165
1 Claim. (Cl. 2—313)



A garter including a band formed partly of elastic and partly of non-elastic material for encircling the leg of the wearer, a buckle at one end of said band for adjustably engaging the other end thereof, a tab formed of elastic material and secured to said band transversely thereof with the upper end of said tab formed into a closed loop which extends above said band and with the lower end thereof formed into a loop which extends below said band, when said band is in leg encircling position, a ring permanently engaged by the upper looped end of said tab, a clip having a lower closed eye and an upper open hook and an adjustable strap having a lower closed loop permanently engaging said ring and an upper closed loop permanently engaging said eye of said clip, the open hook of said clip being constructed for detachable engagement with a closed loop carried by the lower portion of a blouse, or the like, and the lower loop extending below the edge of said band being adapted detachably to engage a stocking supporting garter or the like.

2,733,449
VALVE GUIDE FOR FLUSH TANKS
Ennis Ware, Seagraves, Tex.
Application September 28, 1953, Serial No. 382,611
5 Claims. (Cl. 4—57)



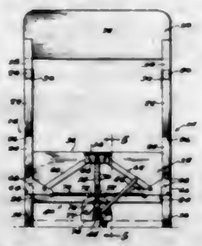
1. A flush valve guide of the character described comprising a lever having a free end adapted to rest on a flush valve, means adapted to be supported on a flush tank overflow pipe and to which the opposite end of said lever is pivotally connected for vertical swinging movement of the lever, said lever having an elongated loop portion spaced from the ends thereof and disposed around said overflow pipe, and the free end of said lever having an eye adapted to engage loosely around a valve stem which rises from the valve and by which the valve is raised from a closed position, the weight of said lever urging the valve downwardly to a closed position from a raised open position and said eye cooperating with the valve stem to restrict horizontal movement of the valve while in an open position and for causing the valve to be guided by the lever back to a properly seated closed position.

2,733,450
APPARATUS FOR OPENING CLOGGED DRAINS
Robert E. Wallace, Sr., Smithfield, Ohio
Application August 27, 1952, Serial No. 306,633
4 Claims. (Cl. 4—256)



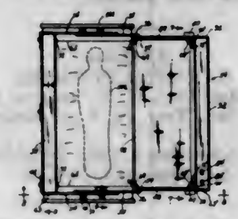
1. In a hydraulic pressure booster device, in combination, an open ended cylinder having connecting portions of different diameters, a differential piston within the cylinder for reciprocal movement therein having a short continuous head portion disposed within the larger cylinder portion and a longer stem portion for movement within the smaller cylinder portion, an open ended continuation of said smaller cylinder portion extending a substantial distance outward beyond the limit of the path of movement of the piston stem portion, a sealing member mounted on the exterior of said cylinder continuation adjacent the outer end thereof for engagement within an opening in a receptacle which receives hydraulic pressure from the smaller cylinder portion through the continuation thereof, a water inlet on the periphery of said smaller cylinder continuation beyond the path of movement of the piston stem admitting water to the smaller cylinder portion and the continuation thereof, a conduit connecting the water inlet to a water supply line, a check valve in said conduit preventing water flow from the cylinder and its continuation to the water supply line, a closure for the open end of the larger cylinder portion, a water inlet in said closure member, a conduit connecting the latter water inlet to the water supply line, a manually operable valve in said latter conduit for selectively admitting water to the larger cylinder portion and draining water therefrom providing reciprocation of the piston under water pressure from the water supply line.

2,733,451
DOUBLE BUNK BED
Howard B. Davis, Seal Harbor, Maine
Application July 28, 1950, Serial No. 176,291
2 Claims. (Cl. 5—8)



1. In a double bunk bed having an upper and a lower bunk, a double-hinged structure operatively supporting the upper and lower bunks in vertically spaced relation. and operating linkage carried at each end of the lower bunk including an operating handle carried by said lower bunk and toggle links connected to said double-hinged structure for effecting lowering and raising of the upper bunk relative to the lower bunk, and means for detachably retaining said operating handle in its bunk-elevated position and its bunk-lowered position, said last-named means including a spring-pressed pin carried by said operating handle, and openings in the lower bunk arranged to receive said pin in either position of operation.

2,733,452
HOSPITAL PATIENT TRANSFER DEVICE
Bertha G. Tanney, Bethesda, Md.
Application December 27, 1954, Serial No. 477,742
10 Claims. (Cl. 5—81)



4. In a patient transfer device, a stretcher adapted to receive a transfer sheet, support means pivoted to opposite end portions of said stretcher for rotation in vertical planes transverse to the stretcher, a longitudinal reel shaft journalled to said support means and being spaced a substantial distance from the pivotal connection thereof, cable reel means mounted on said reel shaft, a pair of cables wound on said cable reel means, said cables being arranged for connection to the transfer sheet, whereby rotation of said reel shaft will cause the transfer sheet to be moved transverse to the stretcher toward said reel shaft, a second reel shaft journalled to the stretcher parallel to said first-named reel shaft, second cable reel means mounted on said second reel shaft, and a pair of cables on said second reel means arranged for connection at times to the transfer sheet.

2,733,453
PLAYPEN
Victor Cifarelli, West Hartford, Conn., assignor to Mary C. Cifarelli, West Hartford, Conn.
Application October 13, 1952, Serial No. 314,503
3 Claims. (Cl. 5—99)

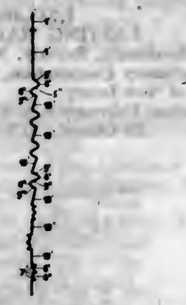


1. A foldable play-pen comprising vertical side walls hinged together in pairs, the free ends of one pair being detachably attached respectively to the free ends of the other pair to form an enclosure, floor sections hinged together along a line through the center of the pen and hingedly attached to opposite side walls, whereby said floor sections and side walls may be folded into compact parallel carrying position, and floor section supporting members pivoted at one of their ends respectively to opposite side walls, and arms attached to side walls perpendicular to the said opposite side walls to which the floor section supporting members are pivoted at one of their ends and to the free ends of said floor supporting members at their other ends to actuate said floor supporting members into their folded and unfolded positions as said side walls are folded and unfolded.

2,733,454
MEANS FOR SECURING THE WINDINGS OF SPRINGS IN MATTRESSES OR THE LIKE AND METHOD OF MAKING THE SAME
Hugo Büttner, Wuppertal-Vohwinkel, Germany
Application February 12, 1953, Serial No. 336,612
Claims priority, application Germany March 1, 1952
4 Claims. (Cl. 5—273)

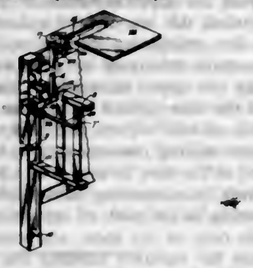
1. In a spring assembly, the combination of a plurality of rows of cylindrical coil springs with the springs

of adjacent coils in staggered relation, and connecting wires alternately connected to corresponding coils of said springs of adjacent rows in sequence, each of said connecting wires forming a plurality of double clamps spaced apart at a distance equivalent with that of each



spring of one row from the staggered spring of the adjacent row, and one clamp of said double clamps being turned in opposite direction than the other clamp of said double clamps, thereby bringing about an interlocking of said connecting wire alternately with corresponding coils of said springs of two adjacent rows.

2,733,455
ADJUSTABLY POSITIONABLE SHELF FOR CRIBS
Charles N. Stuart and Norma E. Stuart, Chicago, Ill.
Application January 12, 1953, Serial No. 330,776
9 Claims. (Cl. 5—317)



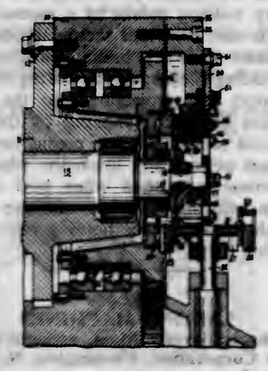
7. In combination, a conventional crib provided with a gate slidably mounted on guide rods, and a crib shelf attachment secured slidably and adjustably to the said guide rods, the said crib attachment being positioned substantially entirely within the confines of the said crib.

2,733,456
VALVE CAP REMOVING AND REPLACING TOOL
Ira V. Howell, Provo, Utah
Application December 5, 1952, Serial No. 324,231
1 Claim. (Cl. 7—14.1)



A tool for removing and replacing caps on pneumatic tire valve stems comprising a shank having a driving bit at one end thereof, and a socket having a bore extending coaxially therethrough and a counterbore of larger diameter coaxial with said bore and in communication with said bore at one end, said one end of said shank received in said bore to secure said socket to said shank and the driving bit contained entirely within said bore and extending transversely thereof, said counterbore having its other end opening to one end of said socket remote from said shank and dimensioned to receive a valve cap stem therein, said bore being dimensioned to receive the reduced outer end portion of the valve cap received in said counterbore with said driving bit engaging a driving slot in the reduced end of the valve stem cap, said socket having slots angularly disposed therearound and extending longitudinally of said socket from the open end thereof to define cutters to remove mud and ice from the valve cap to facilitate removal of the cap.

2,733,457
ADJUSTABLE PRESSURE PAD FOR HOLDING SCREW SHANKS IN A ROTARY CARRIER
Joseph Pizzuto, Waterbury, Conn., assignor to The Waterbury Farrel Foundry & Machine Company, Waterbury, Conn., a corporation of Connecticut
Application January 23, 1952, Serial No. 267,720
3 Claims. (Cl. 10—6)

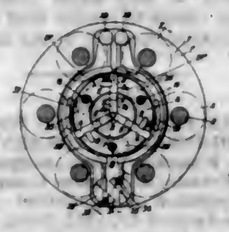


1. In a screw-slotting machine having a carrier dial for carrying the blanks in a circular path, a stationary head in which said dial is rotatably mounted, a substantially rigid cover plate secured to the head and presenting an opening substantially in registration with said dial, a substantially rigid pressure pad of arcuate shape supported by the cover plate and mounted in said opening for free sliding movement toward and from the face of the dial, means for preventing rotating movement of the pressure pad with respect to the cover plate, a spring plate of arcuate shape carried by the cover plate and having radially inwardly projecting spring fingers extending beyond the inner edge of the cover plate, and independent means adjustable axially of the dial for transmitting pressure from each of said spring fingers to said pad.

2,733,458
MACHINE FOR FORMING THREADS BY RECIPROCATING HAMMER DIES
Walter Trurnit, Waldshut, Germany
Application February 18, 1953, Serial No. 337,594
Claims priority, application Germany February 21, 1952
21 Claims. (Cl. 10—153)

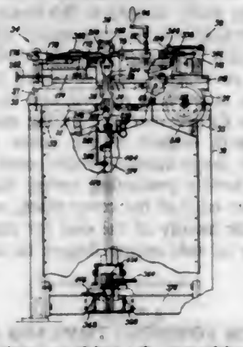
1. In a thread forming machine, in combination, a stationary support; a first rotary holding means rotatably supported by said stationary support and formed with a plurality of angularly spaced radially extending first guiding means arranged in a transversal plane; a second rotary holding means arranged coaxially with said first rotary holding means and formed with a plurality of radially extending second guiding means located in the same transversal plane as said first guiding means and at the same

angular distance from each other as said first guiding means; a plurality of jaw means movably mounted in said second guiding means; a plurality of hammer means movably mounted in said first guiding means; means for rotating said first rotary holding means; brake means for braking said second rotary holding means, whenever desired; motion transmitting means including a yieldable resilient means and connecting said rotary holding means for rotation, said yieldable resilient means holding during rotation said holding means in a first relative position in which said first and second guiding means are aligned when said brake means are disengaged, said



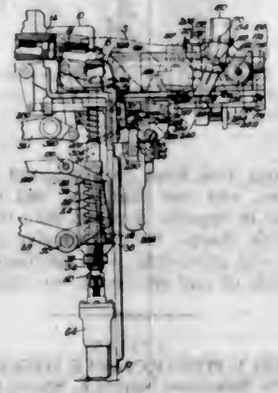
yieldable resilient means permitting a relative rotation of said rotary holding means to a second relative position in which said first and second guiding means are angularly spaced when said brake means engage said second rotary holding means; and actuating means mounted on said support and projecting into the path of said hammer means and being engaged by the same during rotation of said second holding means for pushing said hammer means periodically inwardly, whereby said jaw means are inwardly pushed when said rotary holding means are in said first position, and are free to move outwardly when said rotary holding means are in said second position.

2,733,459
LASTING MACHINES
René E. Duplessis, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application January 15, 1952, Serial No. 266,545
51 Claims. (Cl. 12—7.3)



27. In a lasting machine, the combination with toe wipers and heel wipers of a resiliently flexible side wiper at each side of a shoe in the machine, a carrier at each side of the shoe constructed and arranged to mount the central portion of the side wiper, a member at each side of the shoe in which the side wiper carrier is mounted for angular adjustment on an axis extending widthwise of the shoe, a toe wiper carrier provided with ways in which the toe end portions of the side wipers are slidably mounted, a heel wiper carrier having ways in which the heel end portions of the side wipers are slidably mounted, means mounting the heel wiper carrier for movement lengthwise of the shoe while holding said carrier against angular movement, a toe wiper head in which the toe wiper carrier is mounted for rectilinear movement, and means mounting the toe wiper head for angular movement on an axis extending widthwise of the shoe.

2,733,460
LASTING MACHINES
Lester S. Macdonald, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application February 4, 1953, Serial No. 335,079
20 Claims. (Cl. 12—8.7)

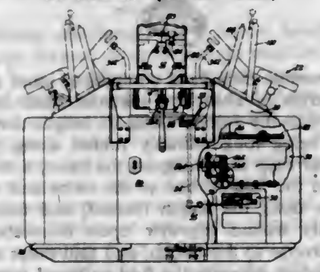


3. In a lasting machine having toe-embracing wipers for wiping the upper materials of a shoe into lasted position around the toe end of a last, the combination of means for positioning the toe end of a last lengthwise and laterally relatively to said wipers, a heel rest for engaging the upper materials at the heel end of the last to hold the shoe against lengthwise movement during the operation of said wipers, said heel rest being mounted for rectilinear sliding movement toward and away from the heel end of the shoe by means of a carrier member, means for pivotally supporting said carrier member in offset relationship to the path of movement of the heel rest on one side only of the shoe, and manually adjustable stop members for variably limiting the pivotal movement of the carrier, said stop members being so arranged that the path of movement of the heel rest, as it slides on the carrier member, intersects the longitudinal center line of the machine at the same angle in each of the two extreme positions of the carrier member as determined by said stop members.

11. In a lasting machine having toe-embracing wipers for wiping the upper materials of a shoe upwardly around the toe end of a last and inwardly into lasted position over the toe end of an insole on the last, the combination of a relatively fixed shoe-bottom rest for engaging the bottom of the shoe, a movable toe rest for clamping the toe end of a shoe against said shoe-bottom rest and adapted to support the shoe against heightwise movement in one direction during the operation of the wipers, means including a yieldable connection for effecting movement of the toe rest initially into clamping engagement with the toe end of the shoe, a piston connected to the toe rest, a cylinder in which said piston is fitted, a compound valve including a main valve and a bleed valve for controlling the flow of fluid to and from said cylinder, spring means for holding said valves in closed position to trap fluid in said cylinder, during the operation of said wipers, thereby to lock said piston against movement and to hold the toe rest in position to support the shoe rigidly, and means for thereafter opening said valves to release the piston and toe rest.

15. In a lasting machine having toe-embracing wipers for wiping the upper materials of a shoe upwardly around the toe end of a last and inwardly into lasted position over the toe end of an insole on the last, the combination of means for rigidly supporting a shoe, a wiper carrier, means for supporting the wiper carrier including a pair of links and connections between the links and said carrier so constructed and arranged that the carrier may yield in a direction extending heightwise of the last during the operation of said wipers to wipe the upper materials inwardly over the insole of the shoe.

2,733,461
MACHINES FOR PRESSING SOLES ON SHOE BOTTOMS
Charles J. Gross, Melrose, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application March 17, 1952, Serial No. 276,952
36 Claims. (Cl. 12—36.8)



17. In a machine for applying pressure to shoe bottoms, the combination of a turret arranged for rotation about a vertical axis, a plurality of inflatable pads on the turret, means for rotating the turret to present the pads in turn at a loading station, a pair of abuments above each pad on the turret, a nut connected to each abutment, a screw associated with each nut, rotation of the screws applying pressure to the shoe, a shaft at the loading station associated with each screw, operator-controlled means for connecting the shafts and screws, means for automatically disconnecting the shafts and screws when the pressure applied reaches a predetermined amount, and means responsive to such disconnection for causing inflation of the pad.

2,733,462
DIAPHRAGMS FOR FLUID-FILLED PAD BOXES
John William Pratt, Leicester, England, assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application November 10, 1954, Serial No. 468,115
Claims priority, application Great Britain November 14, 1953
2 Claims. (Cl. 12—38)



1. A pad box diaphragm comprising two separate layers of nylon mesh embedded in rubber, each layer having an opening therein in the region which is to engage the shank portion of a shoe, the opening in one layer being larger than the opening in the other layer.

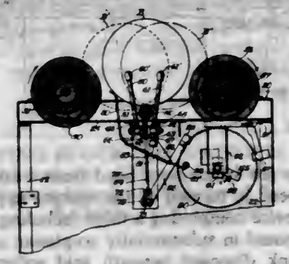
2,733,463
LAST CONSTRUCTION
Anthony Mascioli, New York, N. Y.
Application June 3, 1955, Serial No. 513,067
3 Claims. (Cl. 12—133)

1. A shoe last having a foreshortened toe portion and an extended shank portion extending to the heel portion thereof as compared to a usual last of the same size and width whereby the angle of incidence of the shank portion relative to the heel portion of the last will be less than that of the usual last, said last having a sharply inclined relatively straight break line, said last having a deep concavity along the inner longitudinal edge of the shank portion extending from the break line to a position in



front of the breast line whereby a reduced cross-sectional area is provided in the shank portion as compared to a usual last and the mass of the last is disposed toward the outer longitudinal edge of the last, said foreshortened toe portion and said concavity causing a foot received in a shoe made from the last to be disposed forward in the shoe, said last having the same cubic volume as the usual last of the same size and width.

2,733,464
BALL CLEANING AND POLISHING APPARATUS
Robert W. Le Mieux, Fruitport, Mich., assignor to The Brunswick-Balke-Collender Company, a corporation of Delaware
Application December 18, 1950, Serial No. 201,295
15 Claims. (Cl. 15—21)

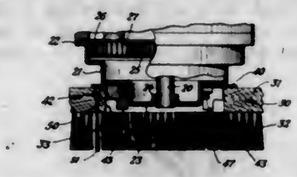


12. In a ball cleaning and polishing apparatus, in combination, a frame, a continuously rotating ball supporting member mounted in said frame, a pair of rotatable buffers mounted in said frame, said buffers being arranged on axes parrallel to the axis of and on opposite sides of said supporting member and at distances therefrom permitting a ball to be supported jointly by the supporting member and the buffer with which it is in contact, means for rotating the buffers, and means mounted on said frame independently of said ball supporting member and buffers for shifting a ball from one buffer to the other including a member movable between the ball supporting member and a buffer to engage and shift a ball from engagement with the last mentioned buffer and into engagement with the other buffer.

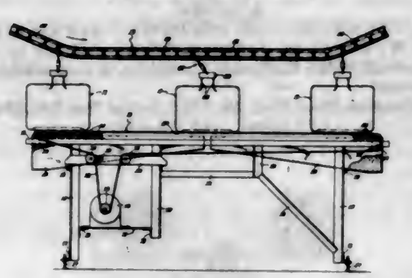
2,733,465
FLOOR MAINTENANCE MACHINE HAVING ELECTRICAL GROUND CONNECTION
William E. Holt, Oakland, Calif.
Application July 10, 1951, Serial No. 236,007
3 Claims. (Cl. 15—49)

1. A floor maintenance machine comprising an electric motor, a rotary brush rotatable in a horizontal plane about a vertical axis and comprising a base of non-metallic material and a multiplicity of vertically arranged tufts of non-metallic bristles carried thereby, means forming a drive connection between said motor and said rotary brush including a rotary metallic member driven by said motor, a plurality of peripheral metallic lugs projecting

from said rotary member, a metallic bracket mounted on said rotary brush and having recesses therein adapted to receive said lugs, and a wire of metal capable of conducting electricity electrically connected to said bracket and extending through said rotary brush parallel to said tufts and forming an electrical ground connection for the metal parts of said machine.

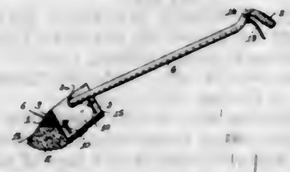


2,733,466
COATING REMOVAL APPARATUS
Charles A. Fleming, Park Forest, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application February 18, 1952, Serial No. 272,137
8 Claims. (Cl. 15—97)



1. A device for removing a bead from a coated object wherein the bead is formed of the coating applied to the object, said device comprising a table including a plurality of rollers disposed in substantially co-planar and parallel relation, a tank disposed beneath said rollers for containing a solvent capable of dissolving the coating applied to the object and capable of wetting the rollers, said rollers extending into said tank and being partially immersed in the solvent contained in said tank, and conveyor belt means for advancing the object across said table with the bead in frictional contact with said rollers whereby the bead is stripped off by the rollers and dissolved by the solvent in the tank.

2,733,467
COMBINED MOP HOLDER AND WRINGER
Henri Pierre Garro, Pantin, France, assignor to Etablissements Sable Freres, Pantin, France, a society of France
Application March 31, 1950, Serial No. 153,035
Claims priority, application France April 6, 1949
3 Claims. (Cl. 15—119)



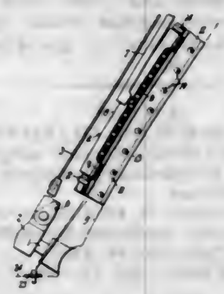
1. A combined mop holder and wringer comprising two plates hingedly connected together along their upper edges and adapted to form a variable acute angle between them, projecting members slidingly mounted on the internal face of at least one of said plates and adapted to slide towards and away from the hinged edges of the plates, a sponge inserted between said plates and retained in position by said projecting members, a handle secured by one of its ends to one of said plates, and means carried by said handle for swinging the other plate toward the first plate so as to compress the sponge when in operation and to wring the water from said sponge.

2,733,468
DISPOSABLE MOP HEADS
Elizabeth D. Haber, New York, N. Y.
Application September 11, 1952, Serial No. 309,042
2 Claims. (Cl. 15—225)



1. A disposable mop head comprising inner and outer elongated strips of absorbent material, said inner strip being longitudinally folded along its length thereof, said outer strip being longitudinally folded along its length over the inner strip to encompass the same, a deformable wire lying in the fold of one of the strips and extending substantially along the length thereof, said folded strips being spirally wound together upon themselves about an axis transverse to the length, and said outer strip having its free edges opposite the fold gathered together and secured in a mass.

2,733,469
WINDSHIELD WIPER BLADE
John R. Oishei, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y.
Application April 21, 1951, Serial No. 222,228
4 Claims. (Cl. 15—245)



1. In a windshield wiper assembly, a squeegee unit including a wiping portion and a relatively heavier supporting body portion, the wiping portion being flexible and including a bottom edge and sidewalls, said sidewalls joining with the sidewalls of the relatively heavy body portion, friction members in the form of longitudinally arranged spaced knobs carried on each side of the body portion adjacent the junction of the wiping portion and said body portion, said spaced knobs extending laterally beyond the sidewalls of said wiping portion and being normally out of contact with the surface to be wiped, means supporting the said body portion to permit a partial rotation of said body portion on a longitudinal axis due to excessive drag caused by engagement of increased areas of the sidewalls of the wiping portion with the surface to be wiped, said knobs upon such rotational movement of the body on said longitudinal axis moving into contact with the surface to be wiped and forming on said surface fulcrums on which the body portion may rock for lifting said dragging wiping portion.

2,733,470
DUSTER ATTACHMENT FOR A BROOM HEAD
Edith E. Wilder, Cedar Lake, Ind.
Application February 11, 1955, Serial No. 487,582
2 Claims. (Cl. 15—247)



1. A duster attachment for a broom head comprising an envelope formed of dusting cloth material, detachably disposed in a position on a broom head, including a closed end engaging over the inner end of the broom head and having an opening to accommodate a broom handle and an opposite open end disposed beyond the outer end of said broom head, said envelope including side walls disposed on opposite sides of the broom head and secured together along complementary edges thereof, at least one of said walls having an externally disposed dusting ply extending upwardly from the open end of said envelope and secured to said side wall along the side edges of said ply and along portions of the side edges of said side wall, said duster ply comprising an integral outwardly turned back extension of said side wall, and a plurality of additional duster plies disposed between said side wall and the outwardly turned back extension thereof and secured to said side wall and the outwardly turned back extension along the open end of the envelope and along the side edges of said side wall and the outwardly turned back extension thereof, said dusting ply being reversible to assume a position overlying a portion of the other side wall for closing the open end of the envelope, and said additional plies being successively movable into a position overlying said last mentioned side wall.

2,733,471
PAINTBRUSH APRON
James I. Connor, Texarkana, Tex.
Application October 28, 1952, Serial No. 317,196
1 Claim. (Cl. 15—248)



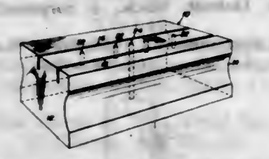
A paint brush shield comprising a band positioned around the bristle holding end of a paint brush and having an outwardly flared section extended toward *the* bristles of the brush, said outwardly flared section of the shield having an inwardly extended flange on the outwardly flared edge thereof and said flange being inclined inwardly of the shield toward the bristles of the brush and having a bevelled inner edge that is slightly elevated with relation to the plane of the flange, and said shield having inclined ribs on the inner surface, said ribs being positioned so that they are located adjacent the ends and side portions of the bristle holding portion of the paint brush and the ends of the ribs are inclined downwardly and inwardly toward the center of the band forming a mounting element for the shield.

2,733,472
HEATED WINDSHIELD WIPER BLADE
Walter F. Karstens and Thomas J. Vidrick, Arlington Heights, Ill.
Application November 12, 1952, Serial No. 319,808
4 Claims. (Cl. 15—250.5)



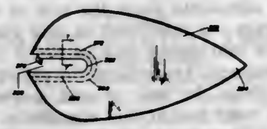
2. The combination with a windshield wiper having a shaft, a spring arm carried thereby, a bridge member, an ear on said bridge member for attachment to said spring arm, a wiper blade holder carried by said bridge member, of a wiper blade of flexible material mounted in said holder, said wiper blade having a heating element embedded therein throughout the length of the same, said heating element consisting of an insulated conductor wire, an exposed resistance wire connected to one end of said insulated conductor and wrapped around said insulated conductor wire and grounded to said blade holder.

2,733,473
POLISHING BLOCK FOR UNIFORM INSIGNIA
Malcolm W. Courser, La Grange, Ill.
Application March 1, 1954, Serial No. 412,981
8 Claims. (Cl. 15—268)



1. A polishing jig for uniform insignia comprising a block having flat top and bottom surfaces, a pair of longitudinal grooves in one flat surface of said block, a plurality of selectively usable sockets in said one flat surface, and a recessed portion in the opposite flat surface of said block, said grooves, sockets, and recess adapted to receive and position uniform insignia for polishing.

2,733,474
PAINT PROTECTIVE DEVICE FOR MOTOR VEHICLES
Arnold P. Capitani, Detroit, Mich.
Application December 27, 1950, Serial No. 202,903
1 Claim. (Cl. 16—1)



A shield for protecting paint in the area of a door handle of the oscillating type for a vehicle door comprising a thin decorative longitudinally tapered plate extend-

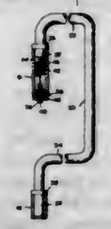
ing longitudinally of the body and being contoured transversely and longitudinally to conform generally with the contour of the vehicle door adjacent the door handle, said shield having an axially extending slot adjacent its larger end for the reception of the handle of the door and being adapted to be clamped between the sealing means associated with the handle and the associated surface of the door, the shield having a plurality of adjacently disposed substantially parallel score lines extending in substantial parallelism with said slot whereby the width of the slot may be increased to accommodate handles of varying dimensions.

2,733,475
CARPET-SECURING MEANS
Sidney A. McMeans, Redding, Calif., assignor of forty-nine per cent to R. P. Stimmel, Redding, Calif.
Application April 1, 1954, Serial No. 420,341
1 Claim. (Cl. 16—16)



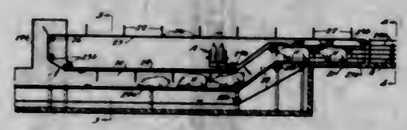
A carpet-securing means comprising a metal strip having a floor-engaging portion, an upstanding portion and an overhanging portion, said overhanging portion extending in an opposite direction from the floor-engaging portion, said overhanging portion having downwardly extending prongs formed therein, whereby when the edge of a carpet is positioned therebeneath, said prongs will engage said carpet when said overhanging edge is bent downwardly into substantial alignment with said floor-engaging portion, and a pad secured to the top of said overhanging portion and adapted to be engaged by said carpet when said carpet is folded over said device.

2,733,476
TORSION HINGE
Floyd R. Eck, Des Plaines, Ill., assignor to Motor Products Corporation, Detroit, Mich., a corporation of New York
Application September 24, 1951, Serial No. 248,045
5 Claims. (Cl. 16—180)



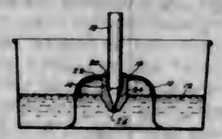
4. A torsion hinge comprising a tubular journal, a hinge pin having an end portion extending into one end of said journal, the end portion of said pin having a transverse slot at the end thereof, a bushing fixed to the other end of said journal, a torsion spring within said journal having an end received in the slot at the end of said hinge pin within said journal, a spring adjusting element extending axially through said bushing into said journal and angularly adjustable about the axis of said journal, means connecting the inner end of said element to the adjacent end of said spring, and frictional means acting between said element and bushing to permit rotation of said element about the axis of said journal by forces applied to the outer end of said element to vary the effectiveness of said spring but to oppose rotation of said element with forces sufficient to prevent rotation thereof by the action of said spring.

2,733,477
APPARATUS FOR FACILITATING SLAUGHTERING OF DOMESTIC ANIMALS
Laurence W. Murphy, Austin, Minn., assignor to Geo. A. Hormel & Co., Austin, Minn., a corporation of Delaware
Application September 29, 1952, Serial No. 312,094
4 Claims. (Cl. 17—1)



1. Apparatus for anesthetizing slaughter animals preparatory to slaughtering comprising means defining an elongate narrow passageway, said passageway having a runway, an entering platform and an anesthetizing section, a quick action gate between said runway and said entering platform, movable separation barriers extending throughout said entering platform and said anesthetizing section, and a deck conveyor in said anesthetizing section.

2,733,478
CRAYON MOLDS
Orin James Schwieger, Denver, Colo.
Application December 27, 1954, Serial No. 477,737
3 Claims. (Cl. 18—34)



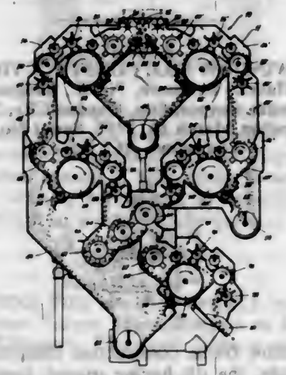
1. A mold for use in hot water to reshape blunt heat softenable crayon points comprising: an inverted cup-shaped base formed of a heat conducting material and adapted to rest on a supporting surface in a hot water bath; and, die means extending downwardly into said base for reshaping the points of a blunt heat softenable crayon inserted therein, said die means having an upwardly flaring conical depression accessible from the top of the base to receive the end of a crayon, and said base having an air vent in the top to permit hot water to rise therein and surround the die means when said base is immersed in a hot water bath whereby, a heat softenable crayon positioned within said conical depression will be softened by the heat transferred from the hot water and reshaped by the die means.

2,733,479
INJECTION MOLDING EQUIPMENT
John A. English, Yardley, Pa.
Application November 1, 1952, Serial No. 318,215
7 Claims. (Cl. 18—42)



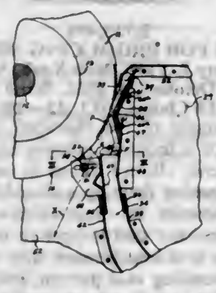
6. Injection molding equipment for simultaneously forming a plurality of differently shaped articles, said equipment comprising a die carrier having a sprue passage, a plurality of gate channels radiating from said sprue passage and communicating therewith, a plurality of identical die receiving recesses located adjacent each of said gate channels and communicating therewith, said recesses extending completely through said die carrier, and die inserts removably secured within said recesses, said die inserts being interchangeable and each having a portion defining a portion of a mold cavity for forming an article, ejection means carried by said die inserts and projecting beyond the rear of said die carrier.

2,733,480
EXTRACTOR-FEEDER FOR ROUGHLY PICKED COTTON
Orville Mitchell, Dallas, Tex., assignor to John E. Mitchell Company, Dallas, Tex., a corporation of Missouri
Application August 23, 1951, Serial No. 243,217
6 Claims. (Cl. 19—37)



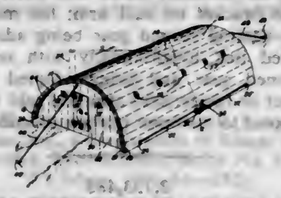
1. The combination of a pair of laterally spaced vertically extending roughing extractor-cleaner units; a feeding mechanism for receiving a stream of mixed cotton and hulls and separating it into two separate streams of substantially equal volume and feeding each separate stream into one of the roughing units; each roughing unit including an upper hull-extracting section and a lower hull-extracting section so arranged that the two streams of cotton flow outwardly in diverging paths in the upper sections and inwardly in converging paths in the lower section and the streams of hulls flow inwardly in converging paths to a common hull conveyer situated between said upper sections and outwardly in diverging paths in the lower section.

2,733,481
COTTON GIN EMBODYING IMPROVED PNEUMATIC DOFFING MECHANISM
Arvel L. Vandergriff, Columbus, Ga., assignor to Lummus Cotton Gin Company, a corporation of Georgia
Application June 9, 1950, Serial No. 167,209
3 Claims. (Cl. 19—59)



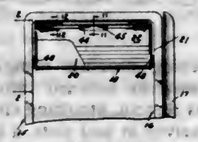
2. In a cotton gin embodying a saw cylinder having a plurality of axially spaced rotating saws, air doffing means disposed closely adjacent a side of the saw cylinder to direct doffing air tangentially of the saws downwardly and in a substantially straight path toward the bottom of the saw cylinder, thereby to doff lint and trash from the saws, a lint duct having an open upper end located below the point where the lint and trash are doffed from the saws and entirely outwardly from the line of tangency to the saw cylinder at said point and means to induce into the open end of the lint duct a stream of air moving transversely of the doffing stream and effective to draw into the duct substantially only the lint.

2,733,482
KNOCKDOWN BUILDING
John J. Doman, Camarillo, and Jess R. Mooney, Jr., Ventura, Calif.
Application May 12, 1954, Serial No. 429,408
2 Claims. (Cl. 20—2)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A collapsible hut comprising, in the erected condition, a roof section having an approximately semicylindrical form, a floor section, and two approximately semicircular end sections disposed within and under and in supporting relation to the roof section, each of said sections being formed of planks, flexible fabric securing the planks of each section together in edge-to-edge relation to permit limited hinging action therebetween, a flexible cable passing beneath said floor section and having its ends secured to the lower edges of the roof section, and a tightener exerting tension in said cable.

2,733,483
EVAPORATOR DOOR AND HINGE ASSEMBLY
Florence B. Anderson, Winnetka, Ill., assignor to Motor Products Corporation, Detroit, Mich., a corporation of New York
Application March 31, 1952, Serial No. 279,640
15 Claims. (Cl. 20—35)

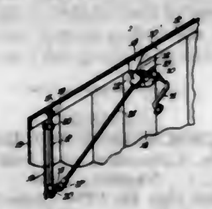


3. A hollow insulating door construction comprising front and rear rectangular panels, abutting inwardly extending flanges along all four corresponding edges of said panels, interlocking hook constructions on said panels in the space defined by said flanges and retained in hooked interlocked relation by said flanges, and fastening elements securing said flanges to each other.

2,733,484
ADJUSTABLE AUXILIARY AWNING CONSTRUCTION
Vladimir Jedlicka, Chicago, Ill.
Application December 31, 1952, Serial No. 328,929
2 Claims. (Cl. 20—57.5)

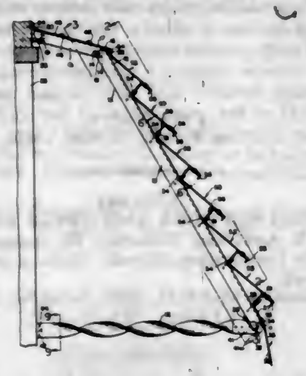
1. In an awning construction, a main frame attachable to a stationary support; a plurality of depending apertured extensions; a pair of arms pivoted at one end to said extensions; an auxiliary panel-like awning mounted

on said arms; a bracket slidably mounted on one of said arms; an apertured ear mounted on the normally inner portion of said main frame; a gear housing pivotally mounted on said ear; a first ear mounted on said housing and having internal and external teeth rotatably mounted on said housing and a second gear having a hub and socket portion journalled in said housing, said second gear meshing with said first mentioned gear; a threaded



link threadingly engaging said first mentioned gear, said link having tis normally outer end portion pivoted to said slidable bracket on said arm; the manual rotation of said hub-bearing second gear being adapted to move said threaded link longitudinally with respect to said first mentioned gear and being adapted to selectively pivot, project or retract said arm and said auxiliary awning with respect to the outer portion of said main awning.

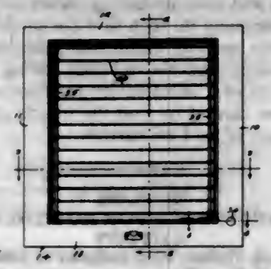
2,733,485
NON-ADJUSTABLE SHUTTER AWNING
John D. Knight, Mantua, Ohio, assignor to The Astrup Company, Cleveland, Ohio, a corporation of Ohio
Application December 3, 1954, Serial No. 472,946
14 Claims. (Cl. 20—57.5)



1. A metal awning structure comprising spaced forwardly and downwardly inclined rafters having spaced key-hole type slots therein, attaching clips having notched lower portions received in said slots, a spaced ear on each clip, sheet metal louvers located laterally across said rafters in overlapped relation, an upturned flange at the rear edge of each louver engaged under the ear of the adjacent clip, and means connecting the forward portion of each louver to the top of the next adjacent clip.

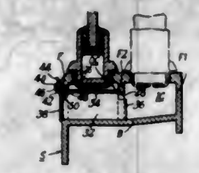
2,733,486
COMBINED WINDOW SASH AND BLIND STRUCTURE
Maurice Elmo Peeples, Kingsland, Ga.
Application January 22, 1953, Serial No. 332,707
3 Claims. (Cl. 20—62)

1. In a pivotal slat construction, a plurality of spaced parallel slats, a pair of connecting bars disposed at one edge of said slats, a pair of T-shaped wire clips for each slat, the head of the T being offset relative to the plane of the stem thereof, each slat having a pair of openings through which the offset ends of each head of a clip are projected, a pair of outwardly struck tongues formed adjacent said openings and engaging the stem portion of



a clip, and a pair of right angular studs carried by the stem of each clip pivotally engaging a connecting bar.

2,733,487
WINDOW SILL CONSTRUCTION
Theodore Hauck, Bellmore, N. Y., assignor to General Bronze Corporation, Garden City, N. Y.
Application March 16, 1953, Serial No. 342,472
12 Claims. (Cl. 20—70)

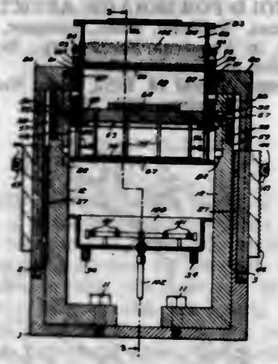


1. A window frame construction comprising a header, sill and jambs, the sill having spaced, longitudinally extending inner, outer and intermediate flanges extending substantially vertically upwardly in spaced relation to each other and forming inner and outer upwardly opening, substantially parallel channels for the reception of the lower rails of a pair of sashes, said intermediate flange having an opening therethrough and said outer flange having an outer face exposed to the weather and an opening extending therethrough, a fluid conveying conduit extending through said outer channel and closed in respect thereto so that moisture in said outer channel is excluded therefrom, said conduit having open inner and outer ends, the inner open end registering with said opening in the intermediate flange and the outer open end registering with said opening in the outer flange to convey moisture from said inner channel through said outer channel and through said outer flange, a closure flap for said outer open end of said conduit freely pivoted adjacent said outer open end to swing freely into a substantially vertical position downwardly from its pivot to normally close said open outer end of said conduit and to swing freely outwardly on its pivot to uncover said outer open end of said conduit.

2,733,488
APPARATUS FOR PRODUCING SHELL MOLDS
Emery I. Valyi, New York, N. Y.
Application October 24, 1952, Serial No. 316,627
10 Claims. (Cl. 22—20)

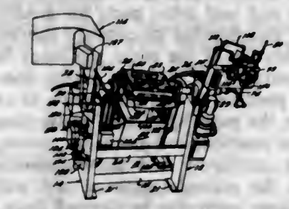
1. In an apparatus of the character described, a pattern, a hopper for a molding mixture having a discharge opening at one end, closure means in said hopper above said discharge opening forming a closed hopper compartment, means operative to cause relative movement between said pattern and said hopper to bring said hopper and said pattern into engagement with the open end of the hopper surrounding said pattern, means opening said closure means with said hopper in upright position above said pattern to supply molding mixture from said hopper

to said pattern by gravity, means operative to rotate said pattern and said hopper in unison to inverted position while maintaining said hopper in contact with said pattern for returning excess molding mixture by gravity to said hopper, means closing said closure means to confine



said mixture to said hopper compartment, means rotating said pattern and hopper in unison to upright position, and means to decelerate the rotation of said hopper abruptly as it approaches one of its limit positions so as to cause the molding mixture to flow and to redistribute itself in said compartment to a substantially uniform depth.

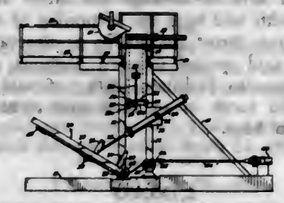
2,733,489
MACHINE FOR MAKING SHELL MOLDS
Roy S. Dahmer, Vassar, Mich., assignor to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application May 9, 1952, Serial No. 286,909
9 Claims. (Cl. 22—33)



1. In a machine for making shell molds, a base, a pair of spaced frames extending upwardly therefrom, a horizontally disposed shaft journaled for rotation in bearings carried by said spaced frames, means for reversibly revolving said shaft, a pattern cradle rigidly mounted on said shaft between said frames, a pattern removably mounted on said pattern cradle, a container having an open top portion, means attaching said container to said shaft, means for moving said container relative to said pattern for sealing said pattern and said container into an integral unit rotatable with said shaft, and heating means positionable over said pattern.

2,733,490
APPARATUS FOR REMOVING CASTINGS FROM MOLDS
Charles E. Yates, Staten Island, N. Y., and Calvin D. Pearce, Matawan, N. J., assignors to International Smelting and Refining Company, a corporation of Montana
Application January 5, 1952, Serial No. 265,126
11 Claims. (Cl. 22—94)

2. Apparatus of the character described comprising a mold having a vertical mold cavity extending through it, a baseplate pivoted to swing in an arcuate path between a sealing position against the bottom of said mold cavity and a position to one side of and below said mold cavity, an elevator arm disposed beneath said mold and pivoted at its base to swing in an arcuate path between a vertical position and a horizontal position, said elevator arm in its vertical position extending at least up to and adjacent the bottom of the mold opposite the pivot of said baseplate, means to move said elevator arm in its arcuate path, an



elevator platform mounted upon and movable along the length of said elevator arm, said platform being movable to a position adjacent and beneath said mold cavity when said elevator arm is in a vertical position, and means to move said platform up and down the length of said elevator arm.

2,733,491
CLASP FINDING
Anthony R. Saccoccio, Cranston, R. I., assignor to Aro-Sac, Inc., a corporation of Rhode Island
Application April 4, 1955, Serial No. 498,930
3 Claims. (Cl. 24—252)



1. A finding for a clasp comprising a sheet metal mounting member having spaced end walls and a bottom wall between said end walls with an opening through the bottom wall so located as to be spaced from one marginal edge of the bottom wall in its extent between said end walls to provide a strap, said opening providing an abutment along the edge opposite said strap, a jaw pivotally mounted in said end walls, a spring tongue carried by said jaw and engaging said strap to urge the jaw when in certain positions about its pivotal axis away from said strap, said strap being offset from the plane of the stock of the bottom wall along an extent at least equal to the width of the spring tongue with the amount of offset being substantially the thickness of the spring tongue, said tongue being so shaped that as it slides along the strap it will be guided by the strap into engagement with said abutment to limit its opening swinging movement.

2,733,492
CLASP FOR HOLDING ARTICLES
Daniel K. Copell, New York, N. Y.
Application August 1, 1951, Serial No. 239,785
7 Claims. (Cl. 24—255)



2. A resilient one piece clasp adapted to be secured to a support, comprising; a base, an arm integral and normally out of alinement with and depending from the front part of said base and unstressed relative thereto, said arm and base at the confluence thereof constituting hinge means to allow said arm to be swung upwardly and rearwardly in a direction towards said base,

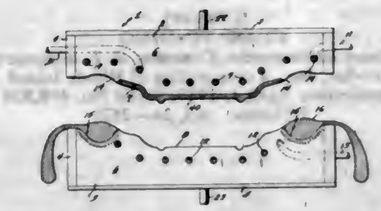
said arm having lip means at its front end and tooth means spaced from said lip means and extending from the inside face of said arm intermediate said lip means and base, said arm including spaced reduced portions leading away from said tooth means, and means to secure said base to said support and simultaneously spreading said arm to arrange the latter substantially in alinement with said base for tensioning of said arm to apply a reactive thrust therein in a direction towards said support, said spaced reduced portions constituting weakened means to facilitate lifting of said lip means relative to said tooth means and said tooth means in respect to said base.

2,733,493

METHOD AND APPARATUS FOR REMOVING SCRAP FROM DIES FOR THE PRESSING OF CLAY BODIES

John F. Bryer, Wellsville, Ohio, assignor to Ram Incorporated, Columbus, Ohio, a corporation of Michigan

Application July 14, 1952, Serial No. 298,698
15 Claims. (Cl. 25—129)



1. A method of pressing a moldable ceramic body in a mold comprising porous cooperable die members to form shaped ware comprising placing a batt of plastic body on the shaped ware forming surface of one of the cooperable die members, moving the die members together whereby the body is compressed to the desired shape and flows radially in the mold to form a flash surrounding the shaped ware, introducing fluid into the die members to separate the shaped ware from one die member and the flash from the other die member while the die mold is in the closed position, and separating the die members whereby the shaped ware adheres to one die member and the flash to a different die member to separate the flash from the shaped ware.

2,733,494

MOLD AND METHOD FOR MANUFACTURE THEREOF

John F. Bryer, Wellsville, Richard E. Steele, Worthington, and Andrew R. Blackburn, Westerville, Ohio, assignors to Ram Incorporated, Columbus, Ohio, a corporation of Michigan

Application June 22, 1954, Serial No. 438,373
7 Claims. (Cl. 25—129)



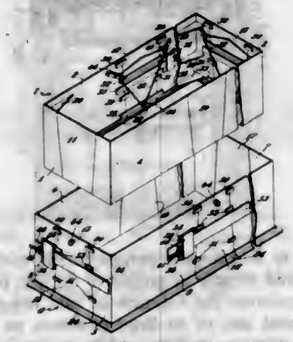
1. A die member for shaping plastic material by pressing comprising a fluid permeable die body having an exposed contoured ware-shaping surface, a fluid permeable conduit in said die member for discharge of fluid under pressure through said ware-shaping surface, a scrap receiving area surrounding said surface, a projection separating said surface from said scrap receiving area and a substantially impermeable, water-insoluble and wear-resistant insert forming at least a portion of the top of said projection for prolonging the useful life of the die member and preventing discharge of fluid through said wear-resistant member.

2,733,495

MOLD FOR HOLLOW ARTICLES

Cecil A. Lucas, Waltham, Mass., assignor, by mesne assignments, to American Vault Corp., Belmont, Mass., a corporation of Massachusetts

Application August 14, 1952, Serial No. 304,395
2 Claims. (Cl. 25—130)



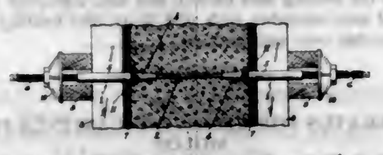
1. A mold of a character described comprising inner and outer non-collapsible sections having spaced walls defining the mold cavity, the inner section having a plurality of walls defining a polygon, the adjoining corners of which are rigidly connected, at least one of said walls having a wedge-shaped part between its ends extending from one edge to the other, said wedge-shaped part being movable outwardly relative to said cavity and the other parts of said wall so that the normal length thereof may be varied, interengaging means carried by said wedge-shaped part and said other parts for guiding the wedge-shaped part and limiting its outward movement so as to prevent separation of the parts, the inner face of one of said walls carrying an adjusting means operative to vary the relative position of said other parts so as to close any gap between the parts when said wedge-shaped part is in its lowermost position, and means for moving said wedge-shaped part outwardly and simultaneously effecting a variation in the normal length of said wall, thereby to permit the inner section to be stripped from a cast article within said cavity.

2,733,496

SPACING NUT FOR USE WITH FORM CLAMPS

George O. Gaetke, San Francisco, Calif., assignor to W. J. Burke & Co., a corporation of California

Application January 15, 1953, Serial No. 331,471
2 Claims. (Cl. 25—131)



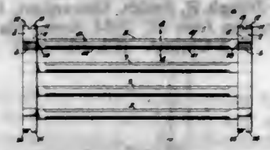
1. In a form clamp of the type adapted for use in combination with waler rods to hold form walls in spaced relation, an internally threaded spacing nut engageable with the inner face of one of such form walls and having an inwardly converging annular serrated periphery and an inwardly protruding circular flange on its smaller end, the said circular flange being located directly adjacent the end threads at the smaller end of the nut and the said flange having a smaller diameter than the inside diameter of the spacing nut.

2,733,497

TILE SETTER

Cleon S. Criswell, Lansdale, Pa., assignor to American Encaustic Tiling Company, Inc., New York, N. Y., a corporation of New York

Application April 15, 1954, Serial No. 423,266
2 Claims. (Cl. 25—153)



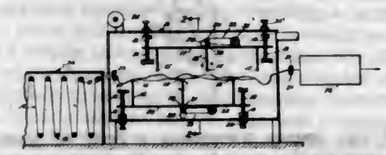
1. A tile setter unit comprising a pair of upright end members and a plurality of tile-supporting plates supported on and between said members in vertically spaced series, said unit being adapted for assembly in vertically stacked relation with other like units with the end members of each unit aligned with and seating on the end members of the adjoining lower unit, said end members having flat body portions of I-form face profile and having a vertical series of horizontal slotted openings, and tongues of lesser width than and projecting from the ends of said plates into said openings and cemented in the latter to secure the plates to the end members, the confronting surfaces of the tongues and openings being relatively formed to provide cement retaining voids between said surfaces, and the end surfaces of the plates at the sides of the tongues being recessed so as to confine the contact of said surfaces with the inner faces of the end members to limited areas at the outer ends of said surfaces.

2,733,498

METHOD OF FABRIC FINISHING TO REDUCE SHRINKAGE AND IMPROVE THE FEEL AND HAND OF CLOTH

Charles G. Hatay, Manchester, Mass.

Application March 7, 1955, Serial No. 492,436
18 Claims. (Cl. 26—18.5)



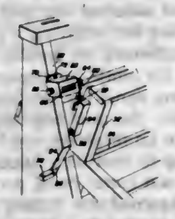
1. A method of treating a web of fabric comprising giving to the web, while it is freely floating in space in a substantially lax condition, sharp, localized impacts at a plurality of points along the surface thereof.

2,733,499

LOOM WARP REEL

Axel R. Granberg, Amarillo, Tex.

Application October 15, 1954, Serial No. 462,589
1 Claim. (Cl. 28—32)



A warp reel comprising a base, an upstanding member on each end of said base, a connecting beam across the top of said upstanding members, a reel rotatably mounted between said upstanding members, and means for frictionally resisting rotational movement of said reel, said means being adjustable, and a counter mounted on said upstanding member and including an actuating arm, a bumper on said reel for engaging said arm for each revolution of the reel, said bumper being pivotally mounted on said reel for selective engagement with the arm.

2,733,500

METHOD OF MAKING A PLOWSHARE BLANK

Norman C. Rendleman, Pittsburgh, Pa., assignor to Jones & Laughlin Steel Corporation, Pittsburgh, Pa., a corporation of Pennsylvania

Original application October 17, 1945, Serial No. 622,777. Divided and this application April 18, 1950, Serial No. 156,621
7 Claims. (Cl. 29—14)



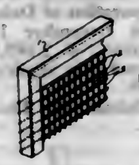
1. In a method of making a plowshare blank, the steps including rolling a bar having a landside portion, a blade portion and a longitudinal rib therebetween, said blade portion being thicker in a region spaced from said rib than in the immediate neighborhood of the rib, cutting a blank from said bar including landside and blade portions, and working the blank in a path generally parallel to the rib to elongate the blade portion, reduce its thickness in said region substantially to that of the blade portion adjacent the rib and cause a convex bowing of the rib toward the worked portion.

2,733,501

ELECTROSTATIC SHUTTER MOSAIC AND METHOD OF MANUFACTURE

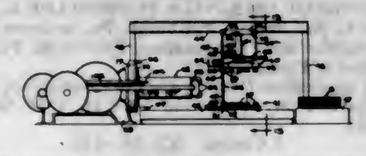
Richard K. Orthuber, Fort Wayne, Ind., and John E. Clemens, Xenia, and Ben B. Johnstone, Dayton, Ohio

Application February 1, 1952, Serial No. 269,571
1 Claim. (Cl. 29—25.17)
(Granted under Title 35, U. S. Code (1952), sec. 266)



A method of manufacturing an electrostatic shutter mosaic consisting of a frame having a rectangular opening across which are stretched a plurality of fine closely spaced parallel supporting wires each carrying a plurality of minute juxtaposed metallic flaps; said method comprising the steps of placing a thin sheet of dissolvable material over and in contact with said supporting wires; placing a second set of fine closely spaced parallel wires over and at right angles to said parallel supporting wires and on the opposite side thereof from said sheet; depositing small substantially rectangular areas of flap material on said sheet, with one edge of each of said areas in contact with one of said supporting wires, by condensation from a vapor beam of the flap material directed toward and at an acute angle to said sheet through the mask formed by said wires; supporting said frame, supporting wires, sheet and deposited areas of flap material in a saturated vapor of a solvent for said sheet with said supporting wires horizontal, said sheet substantially vertical, and the edges of said areas of flap material that contact said supporting wires downward; reducing the temperature of said sheet whereby solvent condenses thereon and dissolves said sheet and droplets of the resulting solution flow downward to said supporting wires; and evaporating said solution to leave a residue of the sheet material to reinforce the bonds between edges of the flaps and said supporting wires.

2,733,502
METHOD OF AND APPARATUS FOR MAKING STEEL DRUMS
Oscar J. van Loer, Chicago, and Carl C. Grotnes, Park Ridge, Ill., assignors to Grotnes Machine Works, Inc., Chicago, Ill., a corporation of Illinois
Application May 15, 1951, Serial No. 226,394
2 Claims. (Cl. 29—458)



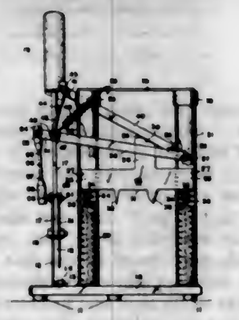
1. The manufacture of steel drums in successive stages of which the first comprises making a cylindrical body, spraying the interior of the cylindrical body with a coating of lining material, then reducing the body to a flattened form by compressing the body transversely until opposite side portions are spaced a short distance apart, and thereupon passing the flattened body through an oven to bake and harden the coating; and the second of which stages comprises partially expanding the flattened body by the application of outwardly directed pulling forces to opposite side portions thereof so as to produce an elliptical form having opposed curving side portions, then converting the body from such elliptical form to cylindrical form by applying outwardly directed pressures through the medium of rollers to the interior of the body so as to permit free peripheral movement of the coated metal, and finally applying heads to the opposite ends of the body.

2,733,503
METHOD OF MAKING A SHOCK STRUT
George E. Beringer and Wilbur E. Sanders, South Bend, Ind., assignors to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Original application December 18, 1946, Serial No. 717,026, now Patent No. 2,605,985, dated August 3, 1954. Divided and this application April 16, 1952, Serial No. 282,669
5 Claims. (Cl. 29—553)



1. That method of making the lower member of a telescoping shock strut which comprises: working a piece of tubular seamless stock to provide an upper portion reduced in diameter and thickened in wall section, an intermediate portion which retains its original diameter, a reduced diameter thickened portion at one end of the stock and tapered center portion joining the latter portion to the intermediate portion, machining the inner wall of the upper portion to provide a shoulder portion, machining the inner wall of the upper portion to provide a shoulder portion, machining the exterior of the intermediate and tapered portions to remove excess material, flattening the tapered center portion, upsetting the end of the reduced diameter thickened portion to provide a laterally extending axle socket boss, punching a socket in said boss, and lastly bending the structure adjacent the juncture of the intermediate portion at the flattened portion.

2,733,504
CAN OPENING
Joseph R. Smith, Shreveport, La.
Application June 28, 1954, Serial No. 439,627
6 Claims. (Cl. 30—6.1)



1. A can opening device comprising a base, a pair of tubes and a bracket on said base, a strap secured to the top of said tubes to hold said tubes in spaced relation, slots in said tubes, a bar interposed between said tubes and having its end portions extending into said slots and tubes, actuating means connected to one of said tubes, means on said bar responsive to said actuating means, and means on said bar for opening a can.

2,733,505
CAN AND BOTTLE OPENER
John Kensington and Cloyd Kensington, Suttle, Ala.
Application June 2, 1953, Serial No. 359,028
6 Claims. (Cl. 30—22)



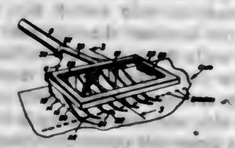
1. A can opener comprising a body of sheet metal folded upon itself to provide a handle of superposed panels, a cutter having an aperture therethrough and an integral pintle, a hinge strap of resilient material extending from the said edge of one of the panels pivotally embracing the pintle of said cutter, the other of said panels being provided with a recess for receiving the cutter in inoperative position, the interior of said hinge strap and the pintle being of non-circular outline and constructed to maintain the cutter in fixed position sheathed within the recess in the body or in the operative position, the said one panel being provided with an elongated indentation on the face thereof adjacent the said other panel and a rib on the other face for receiving a portion of the hinge strap and for strengthening the handle, stops on said cutter projecting beyond the pintle for engagement with the said edge of the said one panel for limiting the pivotal movement of said cutter, the said edge of said handle being provided with a can lip receiving notch between said hook and said hinge strap to provide a fulcrum about which the opener is rocked, said cutter being provided with a recess for receiving a fingernail for raising the same and said other panel being provided with a cooperating recess to facilitate the insertion of a fingernail or sharp element between the cutter and the said one panel for raising the said cutter, said body being provided with an aperture at one end for attachment to a key chain.

2,733,506
POWER SHEARS
John J. Wild, Minneapolis, Minn.
Application July 30, 1953, Serial No. 371,198
6 Claims. (Cl. 30—228)



1. In a power shears a stationary cutting member having a blade at its forward end portion and an elongated handle at its rear end portion, a movable cutting member having a blade at its forward end portion and a relatively short extension at its rear end portion, the movable cutting member being pivoted to the stationary cutting member intermediate the end portions of the members for cutting action between the blades, means for moving the movable member about said pivot comprising a piston and cylinder device having its forward end pivoted to the extension and its rear end pivotally associated with the handle, means for selectively extending and retracting said device, said forward end pivot of the device operating between the handle and a straight line between the cutting member pivot and rear end pivot of the device.

2,733,507
STITCH CUTTING TOOL
Joseph J. Dangelo, South Bend, Ind.
Application December 21, 1954, Serial No. 476,673
1 Claim. (Cl. 30—287)



For use in simultaneously cutting a plurality of stitches and thus opening a seam, removing a patch or the like; a hand tool comprising a head provided on one side with a handle and provided on the other side with a plurality of duplicate spaced parallel cutter blades which are substantially triangular in side elevation, each blade having a linearly straight bottom edge and a sharpened upper edge, the latter being inclined forwardly and downwardly to said bottom edge, all of said bottom edges being in a common plane and all of said sharpened upper edges being in the same common plane, and a tine fixed on the leading apical end of each blade and serving as a piloting finger for the complemental blade, said tine being longitudinally bowed and having an upturned blunt-ended free end portion.

2,733,508
APPARATUS FOR BOXING-IN IMPRESSIONS
Andrew L. Carter, Nashville, Tenn.
Application March 29, 1954, Serial No. 419,451
4 Claims. (Cl. 32—17)



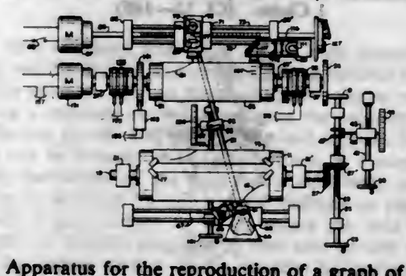
1. Apparatus for boxing-in impressions, comprising a boxing plate having a flange toward the front end thereof and substantially normal thereto, said plate having impression securing means remote from said flange, said plate also having an opening therethrough between said flange and said securing means, a deformable member, and means for holding said member seated on said boxing plate and in contact with the front of said flange.

2,733,509
DENTAL SPATULAS
Janis Indrikis Ikse, Goteborg, Sweden
Application May 17, 1954, Serial No. 430,317
3 Claims. (Cl. 32—70)



1. A dental spatula comprising a spatula blade, a handle connected to said blade, an electric heating element for heating said blade, at least one of the two opposite operative faces of said blade having parallel ridges and grooves therebetween, and said ridges having triangular cross-section with the apex directed outwards.

2,733,510
CALIBRATION GRAPH PLOTTER
Frank J. Darago, Highland Park, N. J., assignor to Applied Science Corporation of Princeton, Princeton, N. J., a corporation of New Jersey
Application July 21, 1954, Serial No. 444,700
11 Claims. (Cl. 33—1)



1. Apparatus for the reproduction of a graph of a variable quantity comprising first support means for mounting a sheet displaying a graph to be reproduced, second support means for mounting a sheet of photo-sensitive material designed to receive a reproduction of said graph, a relatively displaceable index readable on a sheet mounted by said first support means, optical means for continuously projecting a luminous point image on a sheet mounted by said second support means, means for simultaneously displacing said index relative to a sheet mounted by said first support means and said image relative to a sheet mounted by said second support means at constant rates in the respective directions of one pair of corresponding axes of original and reproduced graphs including means for adjusting the ratio of said rates, and manually controlled means for effecting simultaneous displacements of said index and image relative to said sheets in selected ratio in the respective directions of another pair of corresponding axes of original and reproduced graphs including means for adjusting said last ratio, said two ratio adjusting means being operable independently one of the other.

2,733,511
MEASURING WHEEL
James D. Staples, Bell, and John J. McCrory, South Pasadena, Calif., assignors to Rolatape, Inc., Santa Monica, Calif., a corporation of California
Application September 6, 1951, Serial No. 245,376
5 Claims. (Cl. 33—141)

2. In a measuring wheel, a hollow wheel unit having means for effecting a sequence of audible signals when the wheel is rolled over a surface to be measured, said wheel unit including spaced-apart side plates, one of

said plates having an axle rotatably secured thereto and the other of said plates rotatably supporting a bearing in which the axle is supported, comprising, a ratchet disc fixed to said bearing and rotatable with and relative to said wheel unit, a pawl on the unit by which the ratchet disc is rotated and a projection on the unit against which the pawl is forcibly struck for making an audible signal



when the wheel unit has traversed one complete revolution, said unit having a spring actuated hammer and a bell, and the ratchet disc of said unit carrying a projection, said projection engaging the hammer spring and releasing the hammer forcibly against the bell for making an audible signal when the wheel unit has traversed a distance greater than the distance of a single revolution.

2,733,512
PIPE GAUGE
Nicholas A. Confalone, Chicago, Ill., assignor to LNL Products Co., Evanston, Ill.
Application February 2, 1953, Serial No. 334,571
1 Claim. (Cl. 33—148)



In a gauge, a rigid plate generally in the form of a sector of a circular disc, a flat L-shaped lever having a pivot connection to said sector plate adjacent the circular center thereof and having a pair of lever arms extending generally radially from said pivot connection and generally at right angles to each other, one of said lever arms constituting an elongate pointer swingable through an arc along the front face of said sector plate, the other of said lever arms constituting a first jaw arm extending laterally relative to said pointer beyond one radial edge of said sector plate, said pointer being several times longer than said jaw arm, said sector plate being formed with a second jaw arm projecting laterally therefrom generally at right angles to said radial edge thereof at a point on said plate on the opposite side of said pivot connection from the portion of said plate traversed by said pointer, said jaw arms having respective first and second interengageable jaws with said first jaw projecting from said first jaw arm toward said second jaw arm and generally at right angles to said first jaw arm, said jaws having interengageable faces generally at right angles thereto, said second jaw arm on said plate having a forwardly offset inner portion to bring said jaw thereon to the level of said jaw on said lever, said jaw arm on said plate being narrow relative to its length for insertion into small diameter tubing, said pointer extending adjacent said radial edge of said plate with said jaws engaged and being movable along said plate away from said edge to open said jaws, and calibrations in the face of said plate along the arc traversed by said pointer and having a zero marking adjacent said radial edge.

2,733,513
TEMPLATES
Raymond D. Gatineau, Southbridge, Mass.
Application June 24, 1953, Serial No. 363,836
2 Claims. (Cl. 33—174)



1. A template for use in cutting switch box outlet openings in walls or the like comprising a body portion having an outer rectangularly shaped contour dimensioned to lie within the confines of the opening to be subsequently formed in the wall or the like and having an inner substantially rectangularly shaped open area offset with respect to the outer contour, said body portion having one relatively wide side wall and a normally related wide end wall, and further having a relatively narrow side wall and a substantially normally related relatively narrow end wall, the thickness of said body portion being substantially similar in dimension to the width of said wide side wall, semi-circularly contoured protrusions extending outwardly of the opposed upper and lower end walls substantially centrally thereof and said side walls each having a semi-circularly contoured protrusion extending outwardly thereof, one adjacent the upper end of one side wall and the other adjacent the lower end of the opposed side wall, said outward extensions being in locations controlled according to the position of means on said switch box which protrude outwardly of the contour thereof, said relatively wide side and end walls having inner surfaces substantially parallel with the outer edges of said respective walls and in substantially normal relation with each other, said relatively wide side and end walls each having a recessed portion with an open side communicating with said inner open area, leveling means in each of said recesses disposed in a direction longitudinally of said respective side and end walls with the major portion thereof lying inwardly of the planes of said inner surfaces, and spaced gauge lines on the upper and lower sides of said body portion disposed substantially parallel with the plane of the adjacent opposed outer side surfaces of said side walls and spaced inwardly thereof a distance substantially equal to the thickness of a side wall of the switch box and spaced relative to each other a controlled amount to provide aligning means for determining the proper location and size of openings which are to be cut to receive a given plurality of adjacently related switch boxes.

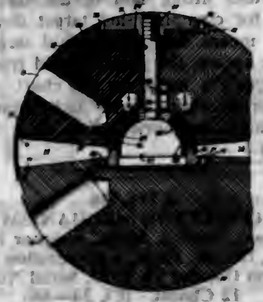
2,733,514
SIDE BAR LOCK DECODER
William O. Pennington, Paris, Ky.
Application September 8, 1953, Serial No. 378,821
4 Claims. (Cl. 33—174)



1. A decoder for side bar locks comprising a housing, a lock receiving cylinder carried by said housing for movement transversely thereof, a single indicator arm pivotally carried by said housing pivoting about an axis

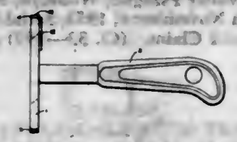
parallel to the axis of said cylinder, one end of said arm being aligned with said cylinder, indicia on said housing aligned with the other end of said arm.

2,733,515
BOWLING BALL GRIP MEASURING DEVICE
Albert J. Lorenz, Clifton, N. J., assignor to American Hard Rubber Company, New York, N. Y., a corporation of New York
Application December 2, 1954, Serial No. 472,710
1 Claim. (Cl. 33—174)



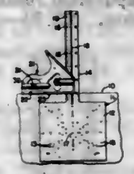
In a substantially spherical bowling ball grip measuring device for determining the characteristics of holes for bowling balls for different persons respectively, said device having two ball portions, each of which is a part of a sphere of the same radius, said radius being substantially that of a standard bowling ball, said portions being sufficiently less than complementary to each other so that when they are arranged with a common center, one of said portions may be moved about said common center with respect to the other of said portions, at least one thumb hole arranged in one of said portions, at least one set of finger holes arranged in the other of said portions; connecting and adjustment-securing means between said portions, comprising a substantially annular member having concentric inner and outer substantially spherical surfaces and being rigidly connected to one of said portions in such manner that said surfaces will be concentric with the center of said one portion, the other of said portions having an annular interior surface portion formed as a part of a sphere concentric with the outer surface of this other portion and having an inner radius substantially equal to the radius to the outer surface of said substantially annular member, gripping means adjustably securable to said other portion and having a part formed as a part of a sphere having a radius substantially equal to the radius of the inner spherical surface of said annular member, means for forcing said gripping means to grip the inside surface of said annular member and thereby to hold the outer surface thereof against the inner spherical surface portion of said other portion of said device; said annular member being built with a core portion of rigid metal, which is threadedly secured to one of said portions of said device with said substantially spherical surfaces thereof concentric with both said portions of said device at the operative position of the parts, each of said substantially spherical surfaces of said annular member being formed as a coating of a rubber-like composition which is relatively softer than the material of which said portions of said device are formed, said coatings being rigidly secured to the core portion of said annular member; said other portion of said device having its inner spherical surface for contact with the outer spherical surface of said annular member formed with a plurality of grooves for engagement with the relatively soft rubber-like composition forming the outer coating of said annular member; and said gripping means, which is adjustably secured to said other portion of said device, having its outer substantially spherical surface, which is arranged for contact with the inner spherical surface of said annular member, formed as a knurled surface, so as to give a tight gripping engagement with the relatively soft coating forming the inner spherical surface of said annular member; said gripping means having a stem portion extending through an aperture in said other portion of said device and provided with means for preventing relative rotation between said stem portion of said gripping means and said other portion of said device, and means cooperating with said stem portion for relatively moving said gripping means in a direction in alignment with said stem portion, so as to grip said annular member between the spherical part of said gripping means and the inside of said other portion of said device.

2,733,516
TOLERANCE LIMIT GAGE
Hilding Valdemar Törnebohm, Goteborg, Sweden, assignor, by mesne assignments, to SKF Industries, Inc., Philadelphia, Pa., a corporation of Delaware
Application January 21, 1952, Serial No. 267,325
Claims priority, application Sweden January 26, 1951
6 Claims. (Cl. 33—178)



5. In a tolerance limit gage, a gage body comprising a body member having one or more gaging surfaces for gaging the tolerance limit on the go-side and a gaging member having a separate surface for gaging the tolerance limit on the not go-side and wherein the said surfaces for both sides can be brought into gaging position by a continuous tilting movement of the gage body, said body member having in one face thereof a recess defining an edge of a go-side gaging surface in which recess the said gaging member is slidably mounted so that said go-side surface and the gaging surface of the member lie in contiguous relation, resilient means for normally maintaining the gaging surface of said member in a normal operative position extended with respect to the contiguous go-side gaging surface and for affording retractive movements of said member by pressure engagement of the gaging surface thereof with the work when the gage body is tilted in the gaging operation, said gage member and the contiguous portion of the body member being each relatively thin and with the said recessed mounting of said member affording a gage body of minimum thickness.

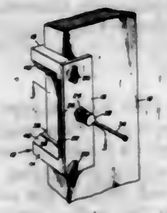
2,733,517
TEMPLATE
Erling H. Gjersoe, Takoma Park, Md.
Application February 13, 1953, Serial No. 336,894
1 Claim. (Cl. 33—189)
(Granted under Title 35, U. S. Code (1952), sec. 266)



A position indicating device comprising a thin rectilinear template member having a shank member formed integrally therewith and extending from one edge thereof, said shank member being coplaner with said template, said template having a plurality of circular holes therein to locate the marking of desired positions on a sur-

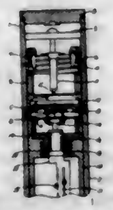
face, said shank having a groove cut longitudinally into one side thereof, said shank having a series of equally spaced indicia along its length, a reference member having a slot therein for engaging opposite sides of the shank in the plane of said template, means in said reference member for engaging in said groove and clamping said member to the shank, said member having a surface forming a straight edge extending at right angles to the plane of said shank when the member is clamped on said shank, said straight edge surface extending beyond the plane of said shank on both sides of said plane, said straight edge being adapted to engage the edge of a member to be marked thereby to position the template member with respect to the edge, at least one of said marking locating holes in said template being formed on the center line of said shank and disposed at a predetermined distance from the first of said series of indicia whereby said markings may be located at predetermined distances from the edge of a surface to be marked.

2,733,518
GAUGE
Walter Pszegon, Woodlyn, Pa.
Application November 6, 1952, Serial No. 319,115
1 Claim. (Cl. 33—197)



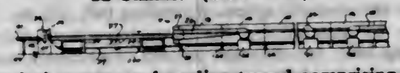
For use in setting hinges of a door, a door gauge forming an element of a gauge set, said door gauge having a generally channel shaped cross-section including a web and flanges, said web and one of said flanges having openings therein outlining both a face and an edge of a hinge strap, a second opening in said web adjustably receiving a plate, said plate being adapted to clamp a door between the same and said one flange, said second opening being between the first mentioned opening in said web and the other of said flanges, and means operatively connected to said other of said flanges and said plate for urging said plate toward said one of said flanges, said plate being provided with means thereon for retaining the same in position with respect to said gauge, said means comprising a notch at each end of said plate adjacent one side thereof, said notch receiving the edges of the opening in said web.

2,733,519
DEEP WELL SURVEYING INSTRUMENT
Ichiro Murata, Higashi Tamachi, Seginami-ku, Tokyo, Japan
Application October 9, 1952, Serial No. 313,963
Claims priority, application Japan October 27, 1951
3 Claims. (Cl. 33—205.5)



1. An instrument for surveying dip and orientation of a deep well, which comprises a freely suspended pointed weight, means for normally clamping said weight in a stationary position, a recording target disc provided with a permanent magnet and adapted to have a chart paper placed thereon, a needle device including a needle for freely supporting said target disc and being provided with spring actuated means for normally clamping said target disc in a stationary position, means for unlocking said clamped weight, means for gradually lifting up said needle support to release said target disc clamping means thereby to support said target disc freely on said needle and enable said target disc to come to rest oriented with respect to the north-south direction, means for thereafter further lifting said needle support and target disc and for clamping said target disc in said rest position, and means for moving said target disc in its clamped state against the point of said freely suspended weight to impress a point on the chart paper on said target disc for providing direct indication and recording of inclination and orientation at a desired depth of a deep well.

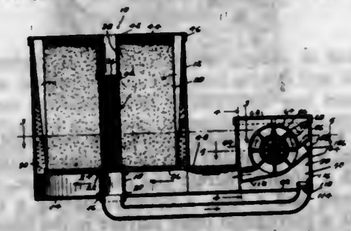
2,733,520
CONVEYOR MECHANISM
Frank V. Jensen, Detroit, Mich., assignor to Jensen Specialties, Inc., Detroit, Mich., a corporation of Michigan
Application October 19, 1953, Serial No. 386,975
12 Claims. (Cl. 34—66)



1. A drying oven and cooling tunnel comprising a plurality of upright longitudinally spaced frame elements, a plurality of longitudinally aligned elongated hollow segments interposed between and mounted upon adjacent pairs of some of said frame elements defining a hollow oven body, a plurality of longitudinally aligned elongated hollow segments interposed between and mounted upon other adjacent pairs of said frame elements defining a hollow cooling tunnel longitudinally spaced from said oven body, a heating element projecting from the inner surface of said hollow segments of said oven body, upright end plates at the outer ends of the outer oven segments with longitudinally aligned central apertures, upright end plates at the outer ends of the outer tunnel segments, with aligned central apertures in alignment with said first apertures, a pair of elongated rails extending longitudinally through said oven body and tunnel supported upon said frame elements, one of said rails being laterally adjustable, a pair of endless conveyors including sprocket chains respectively mounted over and supported on said rails and longitudinally and continuously movable throughout the interior length of said oven and tunnel, and longitudinally spaced opposed work support rods joined to and projected angularly inward and downward from inner portions of said conveyors for supportably receiving at spaced points the lower longitudinal edges of a workpiece whereby a painted or enameled workpiece may be continuously transmitted through a drying oven and thence directly through the cooling tunnel.

2,733,521
GRAIN DRYING APPARATUS
Charles William Zollman, Walton, Ind.
Application February 10, 1955, Serial No. 487,332
4 Claims. (Cl. 34—224)

1. A grain drier comprising an elongated substantially hollow cylindrical member having a closure wall at one end thereof, a grain receiving elongated substantially hollow cylindrical wire mesh member having a closure member at one end thereof, said wire mesh member being disposed within said first cylindrical member in concentric relationship and with said closure members disposed in spaced confronting juxtaposition, a removable closure member extending across and supported on the other ends of said cylindrical members, said closure members each having a centrally positioned aperture extending therethrough and aligned with each other, an elongated pipe having a radial flange adjacent each end thereof, said pipe having an end thereof extending through said aperture formed in the closure member of said first cylindrical member with said flange adjacent the marginal edge of said aperture, the other end of said pipe engaging through said aperture formed in said closure member of said grain receiving cylindrical member with said flange adjacent thereto engaging the marginal edge



of said last-named aperture, an elongated cylindrical member formed of wire mesh disposed within said grain receiving cylindrical member and having an end thereof secured to said other end of said pipe, the other end of said cylindrical member being fixedly secured to one end of a conduit having its other end secured within said aperture formed in said removable closure member, and means connected with said figrst cylindrical member for circulating air within said first, second and third cylindrical members.

2,733,522
PROCESS OF MANUFACTURING SHOES AND PRODUCTS THEREOF
Alan E. Murray, New York, N. Y.
Application July 2, 1952, Serial No. 296,826
5 Claims. (Cl. 36—8.5)



4. A shoe made of plastic materials that have set, including an upper comprising a woven fabric and latex and including a platform of felt containing absorbed liquid latex, and a sole below the said platform, the upper and platform having the shape and contours of an entire human foot maintained by the latex in the interior of the woven fabric and platform.

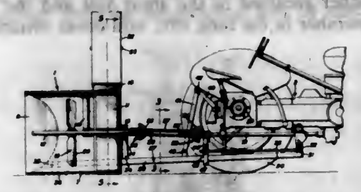
2,733,523
SHOE SOLE
Alan E. Murray, New York, N. Y.
Application October 30, 1952, Serial No. 317,627
4 Claims. (Cl. 36—8.5)



1. A wet shoe sole comprising a latex-impregnated fabric envelope completely enclosing while wet a wet sheet of felted fibres so as to seal said sheet which has been completely impregnated with latex and contains air pockets.

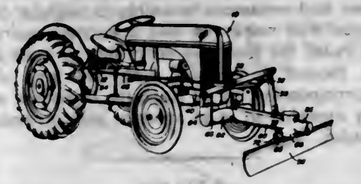
2,733,524
SNOW PLOW
Oscar Ingbritson, Windom, Minn.
Application July 18, 1952, Serial No. 299,561
1 Claim. (Cl. 37—43)

A snow plow attachable to the rear power lift arms and rear power take-off of a tractor to be pushed forwardly by travel of the tractor rearwardly, said snow plow comprising a scoop having a circular vertical and open rear end, sides flaring forwardly from said rear end and of concavo-convex vertical cross section, a flat V-shaped top connecting said sides, and flat inturned bottom cutting portions on said sides converging rearwardly to the bottom of said rear end and coplanar and horizontal, a circular fan casing on the rear end of the



scoop of the same diameter as said rear end with an open front of like diameter concentric to said rear end and opening directly thereinto, a snow discharge flue on said casing, a rotary blower fan in said casing, a rotary snow propeller in said scoop forwardly of and smaller in diameter than said fan, and a common supporting shaft for said fan and propeller journaled in said scoop and casing coaxially with the casing and attachable to said power take-off.

2,733,525
BLADE ATTACHMENT FOR TRACTORS
Clark McMahon, Red Cloud, Nebr.
Application April 7, 1952, Serial No. 280,900
1 Claim. (Cl. 37—144)

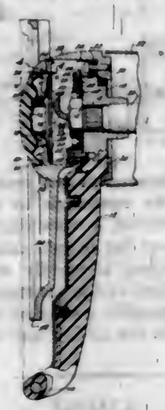


A blade attachment for a tractor having a pair of side power operated levers and a front frame member, said attachment comprising a lift frame having side members, a pair of brackets attachable to said front frame member, pivots connecting said side members to said brackets for vertical swinging of said lift frame on said brackets, a lifter comprising a stem and a rear cross arm, hanger plates fixed on the ends of said cross arm and pivoted on said pivots so that said lifter is vertically swingable in underslung position relative to said pivots, a ground scraping blade on said stem, connecting rods pivoted to said side members and pivotally attachable to said levers for swinging said lift frame vertically by operation of said levers, and a link operatively connecting said lift frame to said stem for vertical swinging of said lifter by said lift frame.

2,733,526
HORN RING STRUCTURE
Harold P. Blay, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application January 3, 1952, Serial No. 264,780
4 Claims. (Cl. 40—8)

1. In a horn ring adapted to be carried by a steering wheel so as to have limited tilting movement with respect to the plane of the latter, a hub having a central recess, inwardly extending flange means at the bottom of the recess and defining a central opening within said central recess, and a plurality of sets of long and short slots in said flange means penetrating therethrough and being in circumferential alignment, an element seated

on said flange means having spring finger means extending generally radially inwardly within said central recess, an annulus of a yieldable non-metallic member supported by said spring finger means, and a transparent hub cover ornament assembly including an ornament having a bezel provided with a plurality of parallel J-shaped depending members each arranged for lockably interfitting with one of said sets of long and short slots with the short leg of the member received in the short slot and the long leg of the member in the long slot, said cover ornament having a coated intaglio design in the underside thereof and being disengageably engageable with said yieldable annulus in locked position of the bezel in a manner such that when said ornament assembly is slightly depressed and rotated with respect to said horn ring central recess so as to cause the long and short legs of each J-shaped member thereof to register with the long slot only of the corresponding set of slots, the ornament assembly is axially movable so as to separate said ornament from said annulus.



2,733,527
STRAND-LOOP FASTENER
Carl A. Flood, Framingham, Mass., assignor to Dennison Manufacturing Company, Framingham, Mass., a corporation of Massachusetts
Application January 15, 1953, Serial No. 331,421
3 Claims. (Cl. 40—20)



1. For attachment to an article, an adjustable strand loop adapted to be disposed about the article, and a fastener, the fastener comprising a resilient wafer having, wholly inside its boundary, a slit narrower than the strand throughout substantially its entire length and shaped to form a tongue which extends in a direction away from the loop and which can be flexed out of the plane of the wafer, both sides of the loop slidably extending through the slit in the direction in which the tongue extends and having portions projecting beyond the slit, the ends of the slit diverging from each other so that, when the projecting portions of the opposite sides of the loop are pulled transversely of the tongue in opposite directions edgewise of the wafer, the sides of the loop slide down the sides of the slit toward the respective ends of the slit and wedge therein.

2,733,528
SLEEP INDUCING MACHINE
Joseph Hinton Miller and Samuel Archie Wilson, Baltimore, Md.
Application April 22, 1953, Serial No. 350,433
4 Claims. (Cl. 40—33)



3. In a sleep inducing machine, the combination which comprises a substantially box-like housing having a front wall with a window therein and having a base, end walls, a rear wall and a stop, a cylinder having a cylindrical wall with a corrugated inner surface in the housing, right angular positioned baffles having recesses in their intermediate portions extended longitudinally through the cylinder, the outer surface of said cylinder having a design repeated at equally spaced intervals on the surface thereof, a shaft extended through the cylinder, upon which the cylinder is mounted, means journaling the shaft in the housing with the cylinder positioned to be visible through the window in the front wall of the housing seed freely mounted in said cylinder and adapted to drop over the spaced longitudinally disposed baffles with the recesses in intermediate parts thereof to accentuate the sound of the rotating cylinder, a clock motor positioned in the housing, means operatively connecting the clock motor to the cylinder for rotating the cylinder, and timing means adapted to be set to stop the clock motor after a predetermined period of time.

2,733,529
CYLINDER STOP FOR A REVOLVER
William B. Ruger, Greens Farms, Conn., assignor to Sturm, Ruger and Company, Inc., Southport, Conn., a corporation of Connecticut
Application July 28, 1953, Serial No. 370,732
3 Claims. (Cl. 42—67)



1. The improvement in revolvers having a hammer, a cylinder and a latch for the cylinder in operative connection with the hammer which comprises a resiliently operated plunger mounted in the hammer having means for limiting the movement thereof, said latch having a pivotal connection between its ends with the revolver frame and having one end portion for effecting a locking engagement with a notch in the cylinder and a spring for pressing said end portion into locking engagement and another end portion positioned to engage the plunger, the operative position of the plunger end portion being such that when the hammer is turned to an intermediate cocking position the plunger presses the latch out of the locking engagement leaving the cylinder freely rotatable and when said hammer is fully cocked said plunger assumes an out-of-the-way position permitting the spring to press the latch into locking engagement with the notch to hold the cylinder in firing position.

2,733,530
METHOD OF OPERATING A PURSE SEINE WITH A POWER BLOCK UNIT
Mario J. Puretic, Torrance, Calif.
Application August 16, 1954, Serial No. 450,094
4 Claims. (Cl. 43—8)



1. A method of utilizing power means to haul a set purse seine having a cork line and a lead line aboard a purse seiner provided with a turntable and boom that may be disposed thereover comprising: manually drawing said lead line aboard said purse seiner and stacking same adjacent said turntable; providing a rigid rotatable surface that defines a V-shaped space through which a portion of said seine, cork line and lead line may concurrently move when said seine is in functional engagement with said surface; placing the most inwardly disposed portion of said seine and cork line in said V-shaped space together with a part of said lead line; maintaining said rotatable surface due to use of said boom at an elevated position over said turntable; causing said surface to rotate by power means when so disposed over said turntable to draw said lead line upwardly from said position on said vessel and said seine and cork line upwardly from the sea, and concurrently lower said lead line, cork line and seine onto said turntable in positions where said purse seine may be set.

2,733,531
NET HANDLING APPARATUS
Mario J. Puretic, Torrance, Calif.
Application July 1, 1955, Serial No. 519,567
8 Claims. (Cl. 43—8)



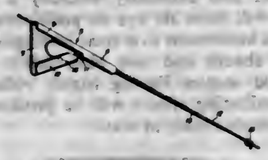
1. An apparatus for use in raising a fish net from an expanded fish-catching position to an elevated position above the deck of a boat from where it is subsequently lowered as a moving column that can be stacked in a desired configuration on said deck, including: a shaft; two vertical, laterally spaced, side members that support said shaft in a horizontal position therebetween; a spool rotatably supported on said shaft and having two opposite outwardly tapering annular flanges, said taper of said flanges being such that said net is compacted when passing therebetween to a degree that said net frictionally engages the surface of said flanges and can be raised to said elevated position; power means that rotate said pool; guide means mounted on said side members that initiate said net compaction; and support means affixed to at least one of said side members that permits said apparatus to be maintained at said elevated position.

2,733,532
ICE FISH POLE AND TIP OVER
Clarence J. Siegel, Grand Rapids, Mich.
Application July 26, 1954, Serial No. 445,725
4 Claims. (Cl. 43—17)

2. An ice fish pole of the tip over type comprising a handle portion, at least two outwardly extending feet at one end of said handle portion, an ice engaging and anchoring spur fixed on one of said feet, an outstanding curved projection on the opposite end of said handle portion, said projection being in alignment with said spur carrying foot, a pole portion joined with and projecting from said handle portion on the side thereof opposite to said projection, a tip on said pole portion, said pole portion being curved whereby said tip is substantially in vertical alignment with the longitudinal axis of said handle portion, a line guide mounted on said tip, a second line guide mounted on said projection, said pole portion having a transverse aperture arranged substantially in alignment with said spur carrying foot and said projection, and a second ice engaging spur detachably mounted in said aperture, said first named spur serving to permit said handle portion and pole portion, as an entity to be vertically erected and anchored on the ice so that the projection, line guide thereon and said ice engaging spur will be located and held directly over the hole in the ice.



2,733,533
FISHHOOK GUARD
John W. Standard, Sedalia, Mo., assignor of twenty-five per cent to Leo A. Hare, Lincoln, Mo.
Application November 22, 1954, Serial No. 470,319
2 Claims. (Cl. 43—27.4)



1. A fish hook guard comprising a tubular member adapted to be slidably mounted on a fishing line and complemental leader, a plate member integrally formed with the tubular member, and diverging opposed channel members at the side edges of the plate member and adapted for receiving the fish hook in a protected position therein.

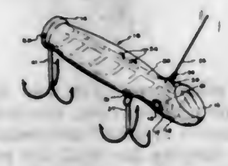
2,733,534
FISHING LURE
Lester A. Mallory, San Francisco, Calif.
Application December 13, 1954, Serial No. 474,817
2 Claims. (Cl. 43—42.5)



1. A fishing lure comprising a substantially imperforate plate ovate in plan and V-shaped in cross-section and providing convex and concave sides, a fishing line accommodating swivel operatively attached to the leading apical end of said plate, and an elongate tang appreciably narrower than said plate and overlying the concave side of the plate, said tang being of a length less than the length of the plate, rectangular in plan and having its forward transverse end cut obliquely and spaced rearwardly of the leading end of the plate, the rearward end of the said tang having a complemental bend joined to

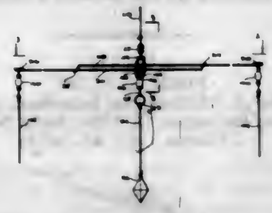
the central portion of the rearward trailing end of said plate, said bend having an off-center hole to accommodate a fastener for a fishhook, said tang being in close proximity to the cooperating surface of the plate from end to end and being twisted axially whereby the shorter lengthwise edge cants toward the concave side and is therefore closer to said side than the longer lengthwise edge.

2,733,535
PLUG TYPE FISHING LURE
Louis Rosen, Daytona Beach, Fla.
Application November 17, 1952, Serial No. 320,868
1 Claim. (Cl. 43—42.33)



A fishing lure, comprising a sheath having a weight within one end thereof and a plug in the opposite end thereof, said plug being spaced from the weight a distance substantially equal to the length of the weight, said sheath being of reflective material, a second sheath surrounding said first sheath and enclosing one end thereof, staples extending through the weight and sheaths, each staple having parallel legs and defining a loop at one end thereof of sufficient size to receive a fishing member therethrough for securement therewith and a correspondingly shaped staple extending through the plug providing a loop extending outwardly of the extremity of the last named sheath, said plug having its outer end recessed a distance from said extremity whereby a hook attached to the loop will have its eye so positioned in the recess as to limit its movement in a zone hemispherical in shape, said second sheath and said plug being of transparent material, said staples having highly reflective surfaces whereby scintillating effects will be produced as the lure is moved through a body of water.

2,733,536
SPREADER FOR FISHING LINES
George T. Terazono, Kealakekua, Territory of Hawaii
Application February 6, 1953, Serial No. 335,465
2 Claims. (Cl. 43—42.74)



1. A spreader for fishing lines comprising: a pair of telescopically related rods adapted for attachment of depending hook support lines thereto; a first support member in which said rods are slidably mounted for relative telescopic adjustment, said first support member being adapted for attachment of a fishing line thereto; a second support member supported by said rods; a third rod also adapted for attachment of a hook support line thereto and having a reversely bent end engaged with the second support member, said third rod extending laterally from the first-named rods; and a third support member depending from said reversely bent end and adapted for connection of a sinker support line thereto.

2,733,537
SINKER RELEASER FOR FISHING LINES
John Ekeberg, New York, N. Y.
Application July 6, 1953, Serial No. 366,334
1 Claim. (Cl. 43—43.12)



A sinker releaser for fishing lines comprising an elongated hollow member having one end portion flattened, a tension spring within said hollow member and having one end secured within said flattened end portion, means for securing said flattened end portion to a fishing line, a flat member having a straight portion adapted to slide within the other end of said hollow member and connected to the other end of said spring, said flat member being integrally formed at its outer end with a curved portion pivotally connected to an oppositely curved member having a straight portion adapted to overlap the straight portion of said flat member and to slide within said hollow member whereby to provide a closed loop adapted to receive a sinker, a sleeve provided at the unflattened end of said hollow member and extending beyond the unflattened end thereof, and set screw means for locking said sleeve to said hollow member in a plurality of adjustable positions whereby to vary the tension of said spring necessary to release the straight portion of said oppositely curved member from said hollow member, said flat member being provided with markings adapted to be read in connection with the end of said sleeve to indicate the tension in the fishing line.

2,733,538
FISHING LINE NONTWIST LEADING PLATE
Paul Alimas, Toronto, Ontario, Canada
Application May 21, 1952, Serial No. 289,168
1 Claim. (Cl. 43—43.13)



A twist-resisting attachment for a leader of a fishing line, comprising a thin flat plate of a general oval configuration having a longitudinal axis bisecting the plate into two substantially semi-oval portions having front and rear ends, one semi-oval portion of the oval being advanced ahead of the other whereby said plate defines at the front of the advanced semi-oval portion a forward terminus, and similarly defines on the rear of the other semi-oval portion a rearward terminus, a clamping tongue integral with said forward terminus with its base at the longitudinal axis, a clamping tongue integral with rearward terminus with its base at the longitudinal axis, and a plurality of clamping tongues struck from said plate at a side face thereof to extend transversely and disposed in two opposite series, the tongues of one series

being disposed alternately to those of the other and each tongue of both series having its base at the longitudinal axis, and all of the aforesaid tongues being alternately bent to form a substantially V-shaped seat adapted to receive a leader, and all of the aforesaid tongues adapted to be further bent over the leader and flattened against the plate whereby said tongues serve to clamp the leader to the plate in a zig-zag manner along its length.

2,733,539
SELF-SETTING FISHHOOK
Joseph M. Kelly, Felton, Calif.
Application June 16, 1952, Serial No. 293,756
1 Claim. (Cl. 43—44.82)



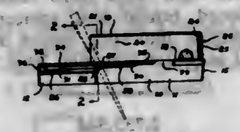
A self-setting fish hook comprising two fish hooks of different sizes having a common eye and each having a return bend, a point and a barb, and a shank with the shanks disposed parallel and spaced apart, said shanks having a short spacer having a width substantially equal to the thickness of the shank and welded therebetween at the lower end of the eye for rigidity at the eye and to form a complete eye while maintaining resiliency in the spaced shanks, said spacer having thickness equal to the thickness of the shank to maintain the shanks free of projection and entirely smooth within the vicinity of the eye, the smaller one of said fish hooks having a total length not in excess of 60% of that of the larger hook as measured from the center of the eye to the lowest points of the return bends of the respective hooks, and said shanks and said return bends to said lowest portion being formed in opposition and co-planar with the transverse axis of the eye, with said points projecting upwardly, and outwardly in opposite directions substantially at right angles to said co-planar portions, for efficient setting when struck by a fish.

2,733,540
FISHHOOK
Paul L. Harding, St. Louis, Mo.
Application December 29, 1952, Serial No. 328,385
1 Claim. (Cl. 43—44.82)



A fishhook comprising a rigid linearly straight shank having a fishing line attaching eye at one end and having a relatively short stubby extension at the other end, said extension tapering and being reduced in cross-section in a direction toward its outer terminal end and being provided on one side with a complemental barb, said extension being straight and in axial alignment with said shank, and at least one longitudinally elongated linearly straight prong of a length less than that of said shank and having a pointed barb-equipped free forward end and a rearward end integrated with said shank inwardly and forwardly of said first named barb and at its point of junctural connection with said extension, the axis of said prong being oblique to the axis of said shank and said prong branching outwardly relative to said shank defining a substantially V-shaped crotch between the complemental integrated portions of the prong and shank respectively.

2,733,541
RODENT TRAPS
Walter E. McKim, Vancouver, British Columbia, Canada
Application August 13, 1953, Serial No. 373,997
2 Claims. (Cl. 43—70)



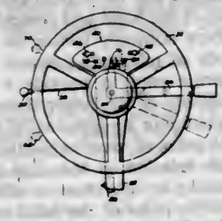
1. A rodent trap comprising a horizontal apertured base, a transverse pin supported upon an upper portion of said base, a plate member mounted upon said transverse pin, a runway surmounting said plate member and being pivotally connected thereto adjacent its inner end beyond said transverse pin, said runway being adapted to be rocked by the weight of a rodent upon its inner end, a lever supported upon said base and adapted for rocking movement in a vertical plane, and a latch bolt operatively connected to said lever, said runway, when in normally substantially horizontal position, being adapted to engage the lever and project the latch bolt into latching engagement with an outer end portion of the plate member.

2,733,542
TRAP DEVICE FOR RODENTS AND THE LIKE
Gustavus A. Ostermeyer, Boston, Mass.
Application January 26, 1954, Serial No. 406,106
5 Claims. (Cl. 43—83.5)



1. An animal trap device comprising a base, a mounting member attached to said base embodying two sides, and a back between said sides having a slot therein extending from the top downwardly, a sring actuated jaw embodying a front cross bar outside of said mounting member, means movably attaching said spring actuated jaw to said base, a supporting catch, extending into said slot, adapted to hold said front cross bar in set position, means movably mounting said supporting catch on and between said sides of said mounting member, means movably connecting said catch to said base rearwardly of said slot, a separate bait holder, and means movably mounting said bait holder on said catch, said bait holder being so positioned that movement in one direction tends to cause it to free said front cross bar from said supporting catch when the latter is in set position.

2,733,543
TOY STEERING WHEEL
George C. Knight, Detroit, Mich., assignor to George C. Knight Company, Detroit, Mich., a corporation of Michigan
Application October 19, 1953, Serial No. 386,751
5 Claims. (Cl. 46—1)



1. A toy steering wheel and simulated controls which comprises a supporting column adapted to be secured

to a seat, a steering wheel on said column, a direction signal associated with the steering wheel, a signal actuating lever associated with the steering wheel and movable in opposite directions from a neutral position to indicate left and right hand turns respectively, a dial segment positioned behind and adjacent the steering wheel, and direction indicating means actuated by the direction signal indicator actuating lever.

2,733,544
TOY BUILDINGS
Joseph L. Bonanno, Madison, N. J., assignor to The Lionel Corporation, New York, N. Y., a corporation of New York
Application August 1, 1951, Serial No. 239,682
6 Claims. (Cl. 46—12)



1. A toy building comprising a first part in the form of a supporting base, a second part in the form of an inverter, box-like house body in the form of a plastic molding and having wall-forming portions resting on the base, the house body and base having cooperative elements locating the body in a predetermined position on the base, the wall having a doorway, the body and base having vertically aligned holes, means to secure the body and base together comprising rods extending through the holes and having exposed heads bearing against one of said parts and fastening devices bearing against the other part and each frictionally engaging the other end of the rod, and a door in the doorway, the door having pintles entering recesses in the base and the house body.

2,733,545
MECHANICAL DOLL HANDS
Clement T. Guadagna, Oakland, Calif.
Application July 19, 1951, Serial No. 237,570
7 Claims. (Cl. 46—126)



1. In a mechanical hand, an elastic and normally extended jointless digit structure of similar cross-section therealong arranged for its impermanent flexed curving toward the palm of the hand and comprising an expanded helical spring core normally having its turns solely connected by a body of relatively inelastic rubber along the back of the spring core to provide a lesser degree of longitudinal elasticity of the finger thereat, and a flexible pull member extending longitudinally through the digit from a terminal point of attachment thereof adjacent the digit tip in such relation to the digit that its rearward longitudinal pulling is operative to effect a curving of the digit toward the palm of the hand and its subsequent release permits a return of the digit to its normally extended position solely by reason of the digit structure.

2,733,546
FIGURE TOY WITH MOVABLE EYES
Alfonso Sabias Ruiz, Barcelona, Spain
Application April 9, 1951, Serial No. 220,054
Claims priority, application Spain June 6, 1950
4 Claims. (Cl. 46—135)



1. In a toy, the combination of a body, a head movably mounted on said body, eyes movably mounted within said head, at least one operating cord having one end thereof operatively connected to said eyes, the other end of said cord connected to a part of the toy other than the head to prevent the said other end of the cord from moving during movement of the head relative to the body, guide means conducting said cord between the thus connected ends of the cord, said guide means including one guide means fixed to the head and one guide means secured to the body, both of said guide means being in close proximity to the zone of union of said head and body, whereby the distance between said guide means changes to lengthen the section of cord between said guide means when said head is moved relative to said body.

2,733,547
DOLL HEAD MOUNTING
David Cohn, Brooklyn, N. Y., assignor to Model Plastics Corporation, White Plains, N. Y., a corporation of New York
Application January 8, 1953, Serial No. 330,257
10 Claims. (Cl. 46—149)



1. In combination, a doll head, a doll body on which said head is to be mounted, a shell in said head, said shell having a top opening and a bottom wall with a bottom opening smaller than said top opening, a member of deformable material within said shell and resting on said bottom wall, said member being of a size such as to be insertable into said shell via said top opening and to snugly engage the inner surface of said shell, said member having an aperture smaller than and communicating with said bottom shell opening, means for securing said shell to said head, said means at least partially closing said top opening and thus preventing said member from escaping from the top of said shell, and a shaft extending up from said body into and being slidable into, through and out from the aperture in said member via the bottom opening in said shell, a portion of said shaft received within said aperture being greater in width than said aperture but smaller than the bottom opening in said shell, thereby to deform said member into frictional engagement with said shaft and said shell.

2,733,548
SOUND EMITTING DOLL SUPPORTING TOY
David Sebel, London, England, assignor to D. Sebel and Company Limited, Erith, England, a British company
Application June 5, 1951, Serial No. 229,909
Claims priority, application Great Britain January 31, 1951
6 Claims. (Cl. 46—175)



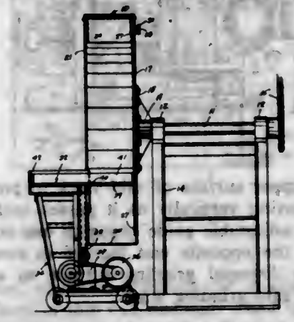
1. In a toy push chair comprising a back rest and a handle mounted on a framework supported on wheels, the combination with said back rest, of a sound emitting device capable of emitting sound upon a predetermined movement of said device, said device being supported on said back rest for said predetermined movement thereof relative to said back rest, a manually operable member mounted on said handle for movement thereof relative to said handle, and means operatively connecting said member to said sound emitting device to produce said predetermined movement of said device upon said movement of said manually operable member relative to said handle.

2,733,549
COMBINATION TABLE TYPE AND CEMETERY VASE
Clarence M. Moore, Jr., Kansas City, Mo.
Application January 16, 1953, Serial No. 331,581
1 Claim. (Cl. 47—41)



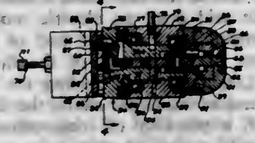
In combination, a pair of receptacles each adapted to contain water, one of said receptacles comprising an open top flower vase provided with a frusto-conical side wall and an imperforate, normally horizontal bottom wall having a greater thickness than the side wall, there being an open bottom, centrally disposed hollow member extending upwardly into the vase entirely above the lowermost face of the bottom wall, the outside diameter of said member being appreciably less than the diameter of said side wall adjacent the bottom wall, said member having a side wall integral with the bottom wall and provided with a frusto-conical interior face, and a flat top wall integral with said side wall of the member and parallel with said bottom wall, presenting a downwardly facing socket, permanently closed by said top wall and progressively decreasing in diameter as the top wall is approached, the other of said receptacles comprising an elongated, open top element, tubular throughout its length and provided with a frusto-conical, ground-piercing pin having a pointed, lowermost, closed end, there being a cylindrical portion integral with the uppermost end of said pin wedged tightly into the socket in frictional engagement with said interior face, said cylindrical portion having a flat, annular uppermost edge, the outside diameter of said cylindrical portion being substantially the same as the maximum diameter of said socket, said top wall resting on said flat edge, said lowermost outer face of the bottom wall being flat, adapting the same for resting flatly upon the ground when said pin is forced into the ground and for resting flatly on supporting surfaces when the vase is removed from said element, leaving the latter inserted in the ground to receive flowers and water.

2,733,550
GRAVITY ABRASION APPARATUS
Alfred V. Hollingsworth, Indianapolis, Ind.
Application January 5, 1953, Serial No. 329,662
4 Claims. (Cl. 51—15)



4. A polishing and deburring apparatus comprising an open-sided drum rotatable about a horizontal axis, abrasive conveying means adjacent the periphery of said drum for dropping abrasive material through a well defined free-falling path, and a horizontal table mounted adjacent to and extending partially within and partially without the open side of said drum for rotation into and out of the path of free-falling abrasive materials falling from said conveying means.

2,733,551
INTERNAL GRINDER
Joseph Baldyga, Roseville, Mich.
Application September 17, 1954, Serial No. 456,688
2 Claims. (Cl. 51—90)

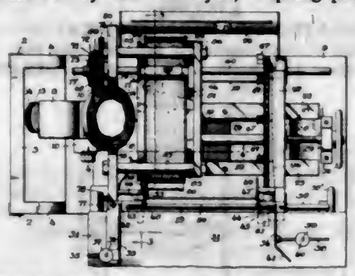


1. A grinding device including a stationary housing, a rotor disposed therein, said rotor having an axial bore and a diametrical slot opening outwardly toward one end face, a two-arm lever mounted pivotally within said slot, a bracket mounted on said face for a diametrical movement thereon, the bracket including means for operative engagement with one of said arms, axially-movable means within the bore and bearing against the other arm of the lever, a calibrated knob mounted upon the housing at one end thereof and forming a closure therefor, the knob being operatively connected with the axially-movable means to cause said means to bear against the last-named arm to cause a diametrical shift of the bracket, a spindle-carrying mechanism mounted on the bracket, an abrading element axially mounted on the spindle, motor means to drive the rotor about its axis, and compressed air means to actuate said mechanism to rotate the spindle about its axis.

2,733,552
GRINDING MACHINE
George J. Rundblad, Wheaton, and Eremeldo Cairelli, Chicago, Ill., assignors to Wilson-Jones Company, Chicago, Ill., a corporation of Massachusetts
Application October 9, 1953, Serial No. 385,256
3 Claims. (Cl. 51—110)

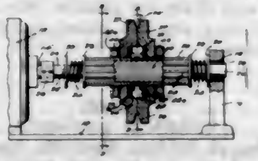
1. A grinding machine for rounding off an end of a piece of transversely cut cylindrical stock comprising a

grinding wheel having an angularly disposed flat grinding surface, a motor for rotating said grinding wheel, a conveyor for moving said stock past said grinding wheel, a fixed plate supporting said stock in a horizontal plane as it is moved by said conveyor, a spring pressed plate



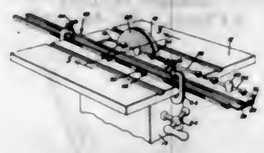
engaging the upper surface of said stock to prevent said stock from moving vertically as it passes said grinding wheel, and an adjustable guide engaging one end of said stock to hold the opposite end thereof in contact with said angularly disposed grinding surface as said stock is moved past said grinding wheel.

2,733,553
CUTTING TOOL GRINDER
Paul M. Newsom, Allison, Tex.
Application September 18, 1952, Serial No. 310,252
1 Claim. (Cl. 51—111)



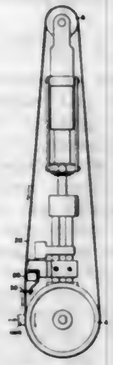
In a tool grinding device, a flat, elongated base, a post rising from one end of the said base, a shaft having one end journaled in said post, an electric motor having a rotor shaft mounted on the other end of said base, a coupling between the other end of the first shaft and said rotor shaft, said motor providing the sole support for said other end of said first shaft, the first shaft being formed with a plurality of longitudinal splines intermediate its ends, a pair of sleeves on said shaft and having their inner surfaces formed with spline grooves engaged with said splines, a pair of grinding disks on the inner ends of said sleeves and having their adjacent peripheral edges oppositely beveled to form a circumferential groove of V-shaped cross section, means for securing said disks for rotation with said sleeves and the shaft comprising annular grooves in said sleeves adjacent the inner end thereof, lock rings received in said grooves, metallic washers received on said sleeves and engaging said lock rings, fiber washers received on said sleeves and engaged on said metallic washers, circular recesses in the opposed surfaces of said disks receiving said washers with said fiber washers engaging the opposed faces of said recesses and nut threadedly received on said sleeves engaging the outer radial faces of said disks to hold said disks in engagement with said fiber washers and prevent rotation of said disks relative to said sleeves, and spring-tensioned means comprising a washer on said shaft engaging the outer end of each sleeve, a compression spring on said shaft engaging said last named washer, a second washer on said shaft engaging said spring and the inner surface of said post, a second compression spring engaging the other washer and a further washer engaging said second spring and a pin extending through said shaft, whereby said sleeve are urged toward each other to hold the inner opposed surfaces of said disks in yielding abutting relationship.

2,733,554
JOINTER BLADE SHARPENER
Ray E. Starnes, Mitchell, S. Dak.
Application January 19, 1954, Serial No. 404,857
1 Claim. (Cl. 51—122)



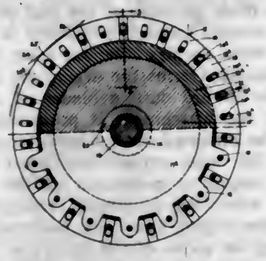
A jointer blade sharpener for attachment to a table top having a rotatable abrasive member with a flat side surface associated therewith, said sharpener comprising an elongated flat bar slidably positioned on the upper surface of the table for movement in parallel relation to the flat side surface of the abrasive member, a groove extending throughout the length of one side edge of the elongated bar for receiving a plurality of jointer blades, clamp means for securing said blades in said groove, handle means on said bar for movement thereof, a flange along the other side edge of the bar slidably engaging the table top, a guide rail movably mounted on the table top and engaging the flange for restraining vertical movement of said bar, and means for adjusting the position of said guide rail thereby adjusting the path of movement of the bar and blades across the side of the abrasive member.

2,733,555
SERVO TRACKING DEVICE FOR ENDLESS MEMBERS
Thomas E. Dugle, Cincinnati, Carl E. Clutter, Mason, and Alvin F. Alt, Deer Park, Ohio, assignors to Planet Products Corporation, Cincinnati, Ohio, a corporation of Ohio
Application March 2, 1954, Serial No. 413,643
11 Claims. (Cl. 51—135)



1. A tracking device for endless members, said device comprising a tiltable tracking shoe adapted to support and guide an endless member passing thereover, an oscillatable finger adapted to bear against the side edge of said endless member, a reciprocable motor, driving means connecting the motor to the shoe, said driving means adapted to convert the lineal motion of the motor into turning motion of the shoe, motor control means adapted to control the operating characteristics of the motor, and means connecting the finger to the motor control means for translating movement of the finger induced by sidewise movement of the belt relative to the shoe into movement of the motor control, whereby the motor is actuated for tilting the shoe to shift the endless member sidewise thereof.

2,733,556
GRINDING AND POLISHING AND THE LIKE
Harry Whitesell, Chicago, Ill.
Application November 3, 1953, Serial No. 389,990
23 Claims. (Cl. 51—141)



1. An abrasion producing unit including a wheel element, means to journal said wheel element for rotation about an axis, said wheel element including a plurality of axially extending body supporting rods lying substantially within a circular cylindrical surface coaxial with the axis of wheel rotation, and including means to support said rods in said cylindrical surface, a plurality of bodies strung on each of said rods at regularly spaced axial locations, each body being provided with a through opening to receive the corresponding supporting rod and of size greater than such rod measured in direction radially of the wheel to permit movement of such body on such rod in radial direction with respect to the wheel and to limit outward radial movement of such body, elastic means in the wheel urging said bodies outwardly radially with respect to the axis of wheel rotation, the supporting rods and the through openings in the bodies being constituted to limit the outward radial movements of the bodies at locations with those portions of their surfaces which are at greatest radial distance from the axis of wheel rotation lying substantially within the surface of a cylinder which is co-axial with the axis of wheel rotation, and abrasive surface material lying substantially at said greatest wheel radial distance portion of each body and travelling angularly with such body.

2,733,557
MULTISTONE HONES
Harry R. Canfield, Cleveland Heights, Ohio, assignor to Lempco Products, Inc., Bedford, Ohio, a corporation of Ohio
Application September 17, 1954, Serial No. 456,647
6 Claims. (Cl. 51—184.3)



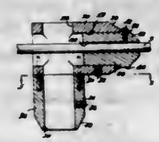
1. An expansible hone comprising an elongated spindle body; a plurality of longitudinal parallel keyways in the outer surface of the spindle body, spaced apart circumferentially; a key in each keyway seated on the keyway bottom; a longitudinal series of cam followers projecting laterally from each key; means on the spindle body operable to draw the said keys tightly upon the keyway bottoms to mount them on the spindle body; an elongated stone carrying shoe for each key, having a longitudinal series of cam surfaces respectively engaging the projecting cam followers of the key; spring actuated means yieldably holding the shoes toward the spindle body and holding the cam surfaces in engagement with the cam followers; longitudinally reciprocable means carried by the spindle body engaged with the ends of the shoes and operable to reciprocate the shoes longitudinally in unison to cause them to reciprocate radially by camming action of the cam surfaces and cam followers; the shoes formed to be guided radially and longitudinally by the keys.

2,733,558
TOOL FOR CLEANING SURFACES OF THIN WALL ELEMENTS
Melvin R. Kent, Roslindale, Mass.
Application March 5, 1954, Serial No. 414,436
3 Claims. (Cl. 51—186)



1. A tool useful in abrading the generally cylindrical inner surfaces of thin wall elements which comprises a first elongated member, having a handle end and a working extremity, a cylindrical abrasive member mounted on said working extremity of said first elongated member, in general axial alignment therewith, and to permit free introduction of said abrasive member into holes having a least diameter greater than the diameter of said abrasive member, a cylindrical backing roller mounted for rotation about the axis thereof, and a second elongated member having a handle end and a working extremity and having said backing roller mounted therein near said working extremity thereof and in general axial alignment therewith and cooperating with said first elongated member to permit movement of said abrasive member and said backing member toward and away from each other, whereby said abrasive member may be introduced into generally tubular thin wall elements for abrading curved inner surfaces thereof.

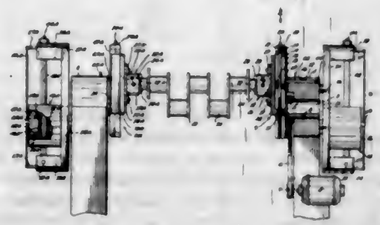
2,733,559
WORK HOLDING JIG
Max W. Staudt, Sr., Orange, Tex.
Application July 31, 1953, Serial No. 371,483
1 Claim. (Cl. 51—217)



In a work holding jig, a rectangular cross section block having a first end and a second end and flat parallel sides, a bore extending through said block and opening through said ends, said bore being parallel with said sides, said first end of the block having a circular scale thereon, a collet having a cylindrical body portion rotatably engaged in said bore and said first end of the block and an enlarged annular portion engaged with said first end of the block, a pointer on said enlarged portion of the collet related to said scale, first means acting between said block and said collet for holding said collet in a selected position of rotation of its pointer relative to said scale, said collet having an axial bore extending therethrough for accommodating a workpiece, and second means on said collet for engaging and holding a workpiece therein, said block having a transverse bore extending therethrough and intersecting the first mentioned bore, another rectangular cross section block of the same cross section as the first mentioned block,

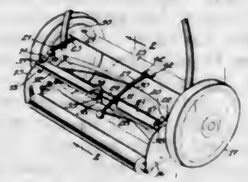
said other block having flat parallel sides, said other block having a longitudinal bore and an end, and means securing said other block to the first mentioned block with said end engaged with a side of the first mentioned block with the longitudinal bore aligned with said transverse bore, sides of the blocks being in the same planes.

2,733,560
COUNTERBALANCING MEANS FOR WORK ROTATING MACHINE TOOLS
James J. Strnad, Shaker Heights, Ohio, assignor to Lempco Products, Inc., Bedford, Ohio, a corporation of Ohio
Continuation of application Serial No. 216,037, March 16, 1951. This application September 19, 1952, Serial No. 310,415
5 Claims. (Cl. 51—237)



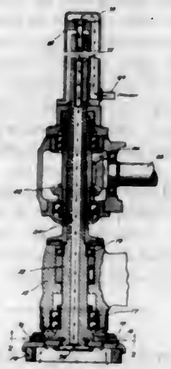
1. In a work rotating machine tool, a spindle rotatably supported intermediate its ends, a work gripping chuck having a work gripping axis, supported on chuck supporting parts on one end of the spindle; counterweight frame parts on the other end of the spindle supporting a counterweight; the chuck supporting parts comprising a guideway on which the chuck and some of the chuck supporting parts are movable radially rectilinearly to different radial positions; and some of the chuck supporting parts being fixed on the spindle against radial movement with the chuck; the counterweight frame parts comprising a guideway on which the counterweight is rectilinearly movable parallel with the movement of the chuck to different radial positions; the chuck and chuck supporting parts and the frame parts being out of balance around the spindle axis when the chuck is in a position coaxial with the spindle; a scale on the frame parts indicating positions of the counterweight and having a zero mark indicating a position for the counterweight at which it counterbalances the chuck and chuck supporting parts and the frame parts, when the chuck is in said coaxial position.

2,733,561
LAWN MOWER SHARPENER
Alfred A. Korby, Duluth, Minn.
Application March 15, 1954, Serial No. 416,036
5 Claims. (Cl. 51—250)



4. In a lawn mower sharpener, the combination which comprises a substantially U-shaped frame having a longitudinally disposed base with a flange at one side and with depending arms at the ends, the lower ends of the depending arms having bolts therein adapted to mount the frame between end plates of a lawn mower, a sharpening stone having a beveled outer surface mounted on said base, a cover plate positioned on said sharpening stone, forwardly extended arms mounted on said cover plate, adjusting screws carried by extended ends of the forwardly extended arms and positioned to engage lugs on the inner surfaces of the end plates of a lawn mower for limiting forward movement of the frame and sharpening stone, springs extended from the ends of the forwardly extended arms for urging the frame with the stone therein toward cutting blades of a lawn mower upon which the attachment is positioned, a latch bar adapted to be mounted on the lawn mower and having a tooth on the under surface positioned with the tooth adapted to engage a projection of the flange of the frame upon which the sharpening stone is mounted, and resilient means urging said latch bar toward said frame for retaining the tooth of the latch bar in engagement with the projection of the flange of the frame.

2,733,562
WHEEL SPINDLE FOR GRINDING MACHINES
Arthur P. Drummond, West Hartford, Conn., assignor, by mesne assignments, to Pratt & Whitney Company, Incorporated, West Hartford, Conn., a corporation of Delaware
Application July 6, 1953, Serial No. 366,352
4 Claims. (Cl. 51—267)

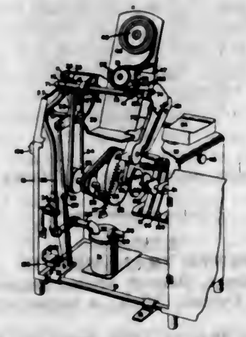


1. A wheel head for grinding machines having a spindle rotatably mounted therein, means to supply coolant through said spindle, a flange formed on the lower end of said spindle, an annular wheel attached to said flange for rotation with said spindle, said flange having passages extending therein, one end of said passages depending downward and entering the space within said wheel, and said passages extending radially to the outer surface of said flange.

2,733,563
METHOD OF CLEANING SCALED AND SOILED WIRES OR BANDS
Rudolf Kaiser, Dusseldorf, Germany, assignor to Langbein-Pfanhauser Werke A. G., Dusseldorf, Germany
No Drawing. Application March 29, 1954, Serial No. 425,753
Claims priority, application Germany March 31, 1953
5 Claims. (Cl. 51—281)

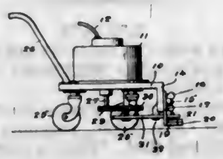
1. A method of cleaning scaled and soiled wires or bands which comprises first, electrolytically treating the wires or bands, and thereafter, pulling them through a granular scouring substance composed of particles free to move relative to one another in any direction while simultaneously subjecting said substance to violent agitation in a manner that will cause an irregular continuously changing distribution of particles about said wire or band.

2,733,564
PACKAGE SEALING MACHINE
Arthur Gilbert Russell and Frank Alfred Clary, Jr., Bristol, Conn., and Francis Bernard Casey, Concord, and Robert Eldon Dallon, Lawrence, Mass., assignors to W. R. Grace & Co., a corporation of Connecticut
Application November 30, 1951, Serial No. 259,084
7 Claims. (Cl. 53—48)



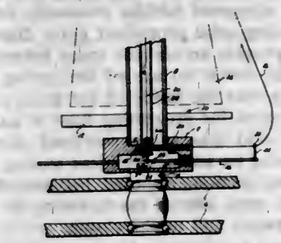
1. A machine for evacuating flexible food containers, twisting the neck of said container and applying a seal-retaining clip thereto comprising in combination a horizontal nozzle, means for withdrawing air through the nozzle, means to retain the neck in close contact with the nozzle, power means to rotate the nozzle and thereby twist the neck of the container, means to apply a clip to the twisted neck including a clip applying head, means to feed clips to the head, means to reciprocate the clip applying head into and out of engagement with the twisted neck and means including opposed clip crimping jaws in said clip applying head to crimp the clip.

2,733,565
LAWN MOWER
William F. Kearney, New Orleans, La.
Application May 19, 1953, Serial No. 355,930
1 Claim. (Cl. 56—26.5)



In a lawn mower, a horizontally disposed platform, a motor mounted on said platform and secured thereto, a vertically disposed plate depending from the front end of said platform, a pair of securing elements extending forwardly from said platform, a pair of vertically disposed arms each provided with a slot for adjustably receiving said securing elements, a sickle bar including a stationary horizontally disposed blade arranged forwardly of said arms and secured to the lower ends thereof and said blade being provided with a plurality of inclined teeth, a pair of pins extending upwardly from said blade, a movable cutter bar having a plurality of inclined teeth thereon slidably mounted on said blade and provided with a pair of spaced apart slots for receiving said pins, said blade and bar having their ends extending beyond said platform, a pair of handles extending rearwardly and upwardly from said platform, caster wheels for supporting said platform, and means connecting said cutter bar to said motor, said means comprising a vertically disposed drive shaft extending downwardly from said motor, a first gear mounted on the lower end of said drive shaft, a vertically disposed driven shaft arranged in spaced parallel relation with respect to said drive shaft, a second gear connected to said driven shaft and meshing with said first gear, a lever pivotally connected to said platform, said lever having a slot in each end thereof, an eccentric pin extending through the slot in the rear of said lever and connected to said second gear, a pin member extending through the slot in the front of said lever and connected to said movable bar, the inclined teeth on said blade and bar being slanted in the same direction at an acute angle with respect to the longitudinal axis of said blade and bar.

2,733,566
TWISTING SPINDLE BALLOON CONTROL
Alfred W. Vibber, Ridgewood, N. J.
Application April 10, 1953, Serial No. 347,943
12 Claims. (Cl. 57—58.86)



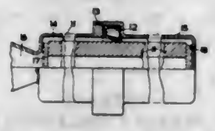
1. A supply twisting spindle comprising a flyer for creating and maintaining a free-flying rotating loop of the material, means for rotating the flyer, means for supporting a package of material on the spindle, a variable tension-applying means engaging the material between the package and the outer end of the flyer, guide means on the flyer adjacent the outer end thereof for engaging the material as it passes along the flyer, means mounting the guide means for movement with respect to the flyer in an arc about an axis radial of the flyer whereby the guide means may align itself with the end of the loop passing therethrough, and means operative in response to swinging of the guide to adjust the tension-applying means.

2,733,567
FLUIDTIGHT WATCH CROWN CONSTRUCTION
Conrad Zellweger, Pregny, Geneva, Switzerland, assignor to La Nationale S. A., Geneva, Switzerland, a company of Switzerland
Application March 12, 1953, Serial No. 341,884
Claims priority, application Switzerland December 26, 1952
4 Claims. (Cl. 58—90)



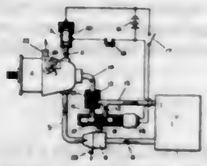
1. In a watch construction the combination with a watchcase having a radial stem opening comprising a control crown, a tube rigid with the crown and extending axially thereof through the case opening and displaceable with the crown between two limiting positions, the crown having on its side facing the case an annular recess and containing annular seating means, sealing washer means of resilient material with an opening of smaller cross-section than the cross-section of the seating means and when separated from the seating means having a flat shape and when assembled on the seating means distorted thereby to frustoconical shape and in the two limiting positions sealingly engaging with its outer peripheral zone the case in fluidtight relation.

2,733,568
SOLID PROPELLANT JET REACTION MOTOR
Lionel Arthur Dickinson, Southcourt, Aylesbury, England, assignor to the Minister of Supply in Her Majesty's Government of the United Kingdom of Great Britain and Northern Ireland, London, England
Application January 5, 1955, Serial No. 480,028
3 Claims. (Cl. 60—35.6)



1. In a jet reaction motor of the type having an elongated generally cylindrical tubular casing with an exhaust nozzle at its rear end, the casing being closed at its forward end, an elongated tubular externally inhibited and internally burning solid propellant grain disposed within the casing to provide an annular space between its outer surface and the inside surface of the casing, said space communicating with the inside of the grain at both ends thereof, and means for preventing flow of gas longitudinally through said space in a rearward direction, said means comprising an annular resilient sealing washer, U-shaped in cross section, disposed between the ends of said space, the open side of the U facing in a direction toward the forward end of the casing.

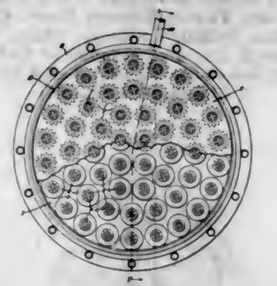
2,733,569
SYSTEM FOR SUPPLYING LIQUID FUEL TO A COMBUSTION CHAMBER
David Roy Trowbridge, Elm Grove, Hornchurch, England, assignor to The Plessey Company Limited, Ilford, England, a British company
Application February 9, 1953, Serial No. 335,636
3 Claims. (Cl. 60—39.14)



1. In a liquid fuel supply system, a cartridge firing device, a combustion chamber adapted to be initially supplied with pressurized exhaust gases from said cartridge firing device, a turbine downstream from said combustion chamber and adapted to receive combustion products therefrom to drive said turbine for actuation of an element operatively connected thereto, a turbo-pump, supplementary pressurized gas conducting means connecting said turbo-pump with said combustion chamber, a low pressure liquid fuel supply connected to said pump, and means including a flow regulating valve for conducting fuel from said pump to said combustion chamber.

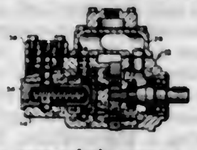
2,733,570
INJECTION HEAD FOR JET PROPULSION SYSTEM
George L. Macpherson, Scotia, N. Y., assignor to General Electric Company, a corporation of New York
Application May 25, 1951, Serial No. 228,156
2 Claims. (Cl. 60—39.46)

1. A reactant injection head for a jet propulsion system, said injection head having inlet and outlet means for oxidizer and fuel reactants, said outlet means comprising a sheet metal member having a plurality of truncated, hollow, cone-like protrusions each terminating in a face, a flat sheet metal faceplate having holes therein mating with the faces of said protrusions and fixed thereto, said faces having perforations, and the faceplate also



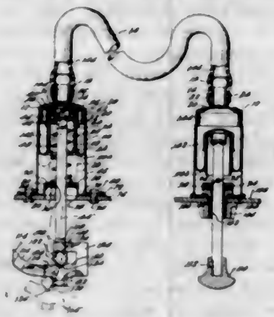
having perforations surrounding said faces for the issue of reactant.

2,733,571
POWER TRANSMISSION
Duncan B. Gardiner, Detroit, Mich., assignor to Vickers Incorporated, Detroit, Mich., a corporation of Michigan
Application May 14, 1954, Serial No. 429,746
4 Claims. (Cl. 60—52)



2. In a power transmission system of the positive displacement, hydraulic type the combination of a fixed displacement pump, a fluid motor, a control valve for directing fluid to the motor in one position and for unloading the pump and blocking the motor in another position, follow-up means for actuating the valve in response to a changing position of the motor, manual means for actuating the valve, an intensifier connected to receive the entire pump delivery and to discharge only a portion thereof to the control valve, and means for by-passing the pump delivery around the intensifier.

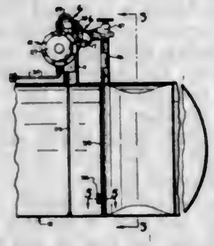
2,733,572
COMPONENTS FOR CLOSED HYDRAULIC SYSTEM AND THE LIKE AND METHOD OF MANUFACTURING SAME
John P. Butterfield, Grosse Pointe Woods, and Alan L. Higbie, Walled Lake, Mich., assignors to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application July 20, 1950, Serial No. 174,976
16 Claims. (Cl. 60—54.5)



1. In a multi-part hydraulic cylinder having a pressure actuated multi-part piston loosely movable therewithin along curved as well as rectilinear paths, a section of flexible tubing received in the cylinder and folded longitudinally on itself to form spaced inner and outer walls substantially concentric with one another and with the cylinder, said cylinder and said piston each having a bipartite end portion, each of the respective end portions retainably securing one of the wall-ends of the tubing section in simple radial compression, a piston rod for the piston, and means mounted to an end of the cylinder slidably receiving the piston rod in a manner to permit rod travel obliquely through the plane thereof facilitating piston movement in curvilinear paths in the cylinder, the flexible tubing section being adapted to flex and accommodate corresponding curvilinear path movement with the piston, of the inner wall out of concentricity with the outer wall and cylinder

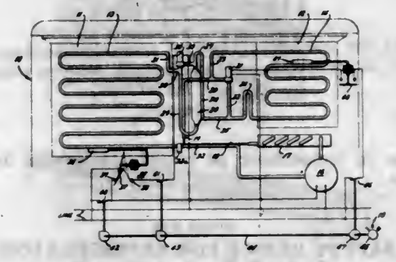
15. In the method of making a capsule for an hydraulic system, the steps which include providing an air escape opening in the head of a headed piston member having a skirt comprised of cylindrical depending walls, providing a section of thin rubber-like tubing and at least partially advancing the same over the head and cylindrical depending walls of the piston member, providing a cover member having a complementary cylindrical depending flange which is circumferentially expansible, fitting the members in a proximate relation for the depending flange of the cover member to oppose the tubing section adjacent the head of the piston member, rapidly relatively moving the members in a direction so as to produce overlap and expand the cover member under the impact causing the thin tubing section to stretch and move with the cover member into a more advanced position and forcing the members into telescoped relation causing the trapped air therebetween to be expelled from the air escape opening.

2,733,573
FUEL TANK WITH RESERVE COMPARTMENT
Marvin L. Trotter, Columbia, S. C.
Application December 1, 1954, Serial No. 472,407
4 Claims. (Cl. 62—1)



1. In a fuel supplying apparatus for pressurized fuel having a main fuel container and fuel supply, a valving system and a fuel feed line extending from said valving system adapted to be connected to a gas appliance, said valving system including a first valve communicatively connected with the interior of the main tank, a second pressure reducing valve to which the fuel line is communicatively connected and a first conduit means connecting the first valve with the pressure reducing valve; the combination of an auxiliary tank disposed within the main tank, first check valve means in the lower portion of the anxiliary tank and being adapted to permit fuel under pressure to enter the auxiliary tank from the main tank but to prevent the fuel from escaping from the auxiliary tank into the main tank, second check valve means interposed in the first conduit means, a second conduit means communicatively connected to the auxiliary tank and to the first conduit means at a point between the second pressure reducing valve and the second check valve means, a manually operable valve interposed in the second conduit means, said second check valve permitting the flow of fuel from the first valve to the second pressure reducing valve and preventing the flow of fuel from the auxiliary tank to the first valve, whereby, upon the fuel in the main tank being exhausted, the manually operable valve may be opened to permit fuel to flow from the auxiliary tank through the second conduit means into the pressure reducing valve and into the fuel feed line.

2,733,574
REFRIGERATING SYSTEM
Carroll J. Reber, Jr., Havertown, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application February 1, 1954, Serial No. 407,510
9 Claims. (Cl. 62—3)

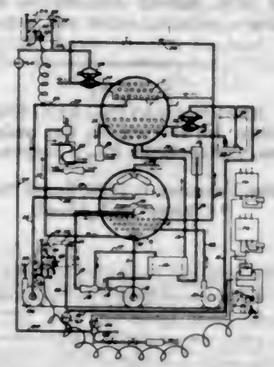


1. A refrigeration system comprising: refrigerant circulating and condensing means; expansion means; evaporator means including first and second evaporator portions; accumulator means including a liquid collecting portion, a gas collecting portion, an inlet port, and an outlet port, the latter being in the said liquid collecting portion; conduit means connecting all of said previously mentioned means in closed refrigerant flow circuit, said conduit means including a first portion connecting said condensing and expansion means to the inlet of said first portion of said evaporator means, a second portion connecting the outlet of said first evaporator portion to the inlet of said accumulator means, a third portion connecting the outlet of said accumulator means to the inlet of said second evaporator portion, and a fourth portion for returning the refrigerant from the outlet of second evaporator portion to said circulating means; a by-pass conduit connecting said gas collecting portion of said accumulator means to said third conduit portion; and flow control means for controlling the flow of refrigerant through said by-pass conduit; said by-pass conduit being so associated with said accumulator and said third conduit that said flow control means may cause liquid refrigerant to flow into said second evaporator portion or be trapped in said accumulator means.

2,733,575
CONTROL ARRANGEMENT FOR ABSORPTION REFRIGERATION SYSTEMS
Louis Howell Leonard, Jr., East Syracuse, N. Y., assignor to Carrier Corporation, Syracuse, N. Y., a corporation of Delaware
Application April 16, 1953, Serial No. 349,184
8 Claims. (Cl. 62—5)

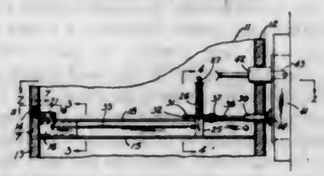
1. In an absorption refrigeration system, the combination of a generator, a condenser, an evaporator and an absorber placed in a closed circuit, the circuit containing a saline solution as an absorbent and water as a refrigerant, means for maintaining substantially constant flow of solution through the system, a line for supplying a heating medium to the generator in heat exchange relation with solution therein, a pneumatic valve placed in said line, means for imposing air pressure against said valve, a control for regulating the air pressure imposed against said valve responsive to temperature of chilled water leaving the evaporator, a second pneumatic valve for regulating passage of condensing water through the condenser, means for imposing air pressure against said

valve, and a second control for regulating the air pressure imposed against said second valve responsive to



change in temperature of condensate leaving the condenser.

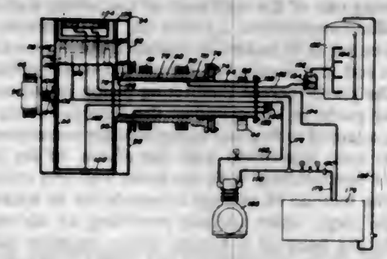
2,733,576
SAFETY DEVICE FOR REFRIGERATORS
Corbin B. Knock, Ashland, Pa.
Application February 23, 1955, Serial No. 490,001
3 Claims. (Cl. 62—89)



1. In a refrigerator of the type having a rear wall and a front wall element parallel to said rear wall provided with a door latch element slidable horizontally in said front wall element and adapted to lockingly engage with a refrigerator door hinged to the refrigerator adjacent said front wall element, a safety latch device comprising a support mounted transversely in the refrigerator between said rear wall and said front wall element, a detent member slidably mounted on said support and being interengageable with said door latch element to hold said door latch element in latching position, spring means urging said detent member away from said door latch element, a horizontal abutment member slidably mounted in and extending outwardly from said rear wall and being engageable with the end of said detent member, and a plug mounted in said rear wall and being connected to the refrigerator operating circuit, said plug being engageable in a wall mounted receptacle to complete the operating circuit, said abutment member being located adjacent said plug in a position to engage an abutment surface provided on said wall mounted receptacle, whereby to hold said detent member in engagement with said door latch element when the plug is engaged in the receptacle and to allow the detent member to be retracted from engagement with the door latch element when the plug is disconnected from the receptacle.

2,733,577
ICE CUBE MACHINE
William L. Rothe, New Lisbon, Wis.
Application February 2, 1953, Serial No. 334,524
11 Claims. (Cl. 62—107)

1. An ice cube machine comprising a substantially cylindrical drum, means for rotating said drum, connections for introducing liquid refrigerant into said drum, a compressor connected to remove gaseous refrigerant from said drum, means for spraying water on the outer surface of said drum, an auxiliary container mounted in said drum, said auxiliary container being in thermo-conducting relation with the upper portion of said drum, thermal insulation between said auxiliary container and



the refrigerant in said drum, connections between said compressor and said auxiliary container for introducing compressed gaseous refrigerant into said auxiliary container.

2,733,578
COSTUME JEWELRY AND THE LIKE
George R. Tucker, Sr., Rock Springs, Wyo.
Application April 7, 1953, Serial No. 347,273
1 Claim. (Cl. 63—29)



An article of jewelry comprising an ornament member with front and rear faces, a portion of the rear face being enlarged to provide a boss having a recess therein, and a detachable clasp assembly engaged with said boss, said assembly including a U-shaped member, a disc connected to one terminal of said member, a pair of normally parallel spring rods mounted on the base of said U-shaped member and extending substantially parallel to the terminal carrying the disc, the disc and the spring rods being so distanced as to frictionally engage the boss, the spring rods being spaced apart a distance approximately equal to the width of the boss recess and adapted to pass through the recess to flex said rods towards each other upon frictional engagement with the side walls of the recess, the free ends of the rods being bowed into engagement with the rear face of said ornament member to force said rods against an end wall of the recess, the assembly also including a connector joining said spring rods to said U-shaped member.

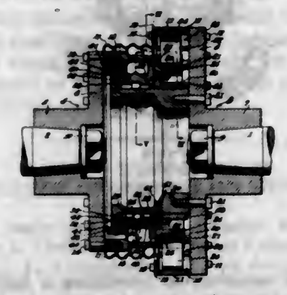
2,733,579
INTERCHANGEABLE SETTING
David Pfeffer, Bronx, and Max Pfeffer, West Hempstead, N. Y.
Application February 1, 1954, Serial No. 407,213
1 Claim. (Cl. 63—29)



A mounting and setting for an ornament in a finger ring or other article of jewelry, comprising a mounting frame having inwardly extending flange means constituting a bezel member, an ornament fitting in the mounting frame introducible from below the frame and having

portions positioned against the underside of said bezel member, said frame having inwardly and upwardly extending internally threaded openings in opposite walls thereof and screw threaded rods in said openings and having their upper ends engaging the underside of said ornament and being entirely concealed within said mounting for lock-tight fixing of said ornament against the underside of said bezel member and for replacement of the ornament in the said mounting frame.

2,733,580
FLEXIBLE THRUST COUPLING
Fred L. B. Miller, Portland, Oreg.
Application October 5, 1953, Serial No. 384,357
5 Claims. (Cl. 64—15)
(Granted under Title 35, U. S. Code (1952), sec. 266)



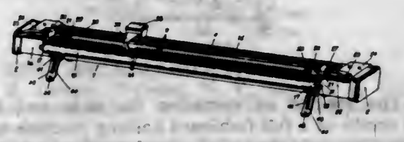
1. A flexible coupling for the interconnection of elements of a drive train, as for example a driving shaft and a driven shaft, comprising two opposed flanged elements each of which is attached to one of the shafts, the said flanged elements being in spaced relationship and having their flanges substantially parallel, one of the flanged elements being a torque element and the other flanged element being an alignment element, said torque element including a disc-shaped member having a series of externally directed semi-cylindrical recesses spaced about the periphery thereof, an overrunning ring member surrounding said disc-shaped member and being provided with inwardly directed semi-cylindrical recesses spaced about the interior thereof to correspond with the semi-cylindrical recesses of the disc-shaped member, and a plurality of resilient cylindrical members each located partially within a semi-cylindrical recess of the disc-shaped member and partially within a semi-cylindrical recess of the ring member to resiliently interconnect said latter members for torque transmission; said alignment element including overlapping cylindrical supporting members and a plurality of alignment rings between said cylindrical supporting members in frictional contact with one another and with said supporting members, said alignment rings having frictional contact among themselves on a plurality of spherical segmental surfaces, whereby axial misalignment of the supporting members will be absorbed by angular movements and displacements among the alignment rings and the cylindrical supporting members.

2,733,581
BABY FEEDING PLATE
Edward F. Olsen, Hillman, Mich.
Application July 31, 1953, Serial No. 371,676
2 Claims. (Cl. 65—15)



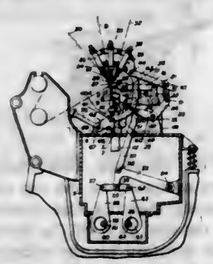
2. A baby feeding plate comprising a compartmented dish of flexible material having an annular side wall and a bottom wall, both walls being of uniform thickness throughout, said side wall converging downwardly and inwardly, the lower annular portion of minimum diameter of said side wall terminating in a downwardly and outwardly directed curved annular flange thicker than said side wall at its point of connection with the bottom wall and which extends below said bottom wall tapering towards its rim forming a depending suction cup, and an inwardly directed upwardly extending annular flange at the top of said side wall, said latter flange being tapered towards its periphery and extending inwardly to substantially overlap and vertically register with the interior base of said side wall.

2,733,582
KNITTING MACHINE
Jacques Hennique, White Plains, N. Y.
Application August 19, 1952, Serial No. 305,145
Claims priority, application France October 24, 1951
10 Claims. (Cl. 66—4)



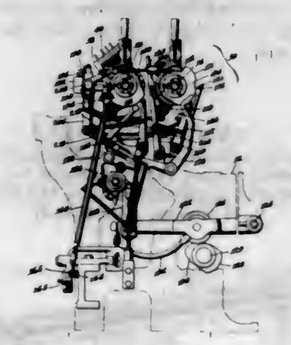
1. A knitting machine comprising a frame, a series of aligned thread-engaging hooks, controlling means for urging said hooks in succession into a transverse reciprocatory movement, a rectilinear comb located in front of the aligned hooks and adapted to cooperate therewith for the formation of the knitted fabric, a carrier for each end of the comb, a pivoting arm of substantial length rigid with each carrier, pivots rigid with the frame on the outside of the comb and to which said arms are revolubly secured to allow a substantially rectilinear transverse shifting of the comb carriers with reference to the series of hooks and means adapted to lay a thread between the shifted hooks and the teeth of the comb.

2,733,583
KNITTING MACHINE
Allan William Henry Porter, Burton-on-Trent, England, assignor to F. N. F. Limited, Burton-on-Trent, England, a British company
Application August 4, 1953, Serial No. 372,245
Claims priority, application Great Britain August 5, 1952
6 Claims. (Cl. 66—86)



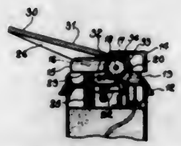
1. A flat warp knitting machine comprising a plurality of hooked needles arranged side-by-side in a common plane, driving mechanism to impart to and fro longitudinal movement to said needles simultaneously, a plurality of warp guides arranged side-by-side in a line parallel to the plane of said needles and pivoted about an axis parallel to the plane of said needles and lying in a plane perpendicular to said plane and which intersects said plane in a line parallel to and displaced from said needles in a sense opposite to the direction in which the hooked ends of said needles point, and means to impart to and fro arcuate movement to said warp guides.

2,733,584
METHOD OF KNITTING FULL-FASHIONED HOSIERY
Christian F. Schlemmer, Philadelphia, Pa., assignor to Textile Machine Works, Wyomissing, Pa., a corporation of Pennsylvania
Application November 7, 1951, Serial No. 255,199
8 Claims. (Cl. 66—89)



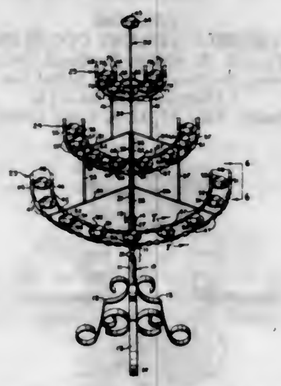
1. The method of operating the wide and narrow point combs of a full-fashioned knitting machine to form diamond points in the toe of a stocking blank which comprises starting a cycle when the narrow point combs are spaced inwardly single needle distances from the wide point combs, lifting loops by points of said wide and narrow point combs while preventing certain of the inner points of said narrow combs from lifting loops, moving said wide combs two needle distances and thereby moving the narrow combs single needle distances, redepositing the loops on the points onto the needles, moving both the wide and narrow combs while in contact single needle distances inwardly, withdrawing the wide combs single needle distances outwardly from the narrow combs and repeating the said cycle of movement to form diamond points.

2,733,585
CIGAR LIGHTER ACTUATING MECHANISM
Harold F. Sitterle, Somers, N. Y., assignor to Ronson Corporation, Newark, N. J., a corporation of New Jersey
Application August 10, 1954, Serial No. 448,811
2 Claims. (Cl. 67—4.1)



1. A lighter of the character described, having a fuel receptacle, a burner mounted on the top of the receptacle, a depressible actuating member also mounted on the top of this receptacle on one side of the burner, a sparking wheel mounted for rotation on the receptacle and interposed between the burner and the actuating member, a closure cap overlying the burner and pivoted concentrically with the wheel, means interconnecting said actuating member, closure cap and wheel to rotate the latter to project sparks toward the burner and move said cap to expose the burner upon depression of the actuating member, and a manually depressible operating lever having one end portion which is pivotally mounted on the receptacle to swing about an axis spaced, in the direction of the burner, from the path of travel of the depressible actuating member and adjacent the wheel, said lever having an intermediate portion overlying and engageable with said actuating member to depress the latter upon depression of the lever and also having a free end portion extending out laterally beyond said actuating member on the opposite side thereof with respect to said burner and wheel.

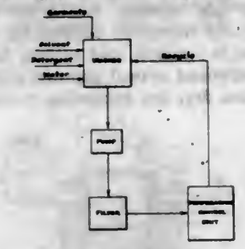
2,733,586
CANDELABRUM
Lucius A. Grooms, Lincolnton, N. C.
Application May 14, 1952, Serial No. 287,792
1 Claim. (Cl. 67—25)



A segmental candelabrum simulating a half tree and adapted to be adjustably mounted in a tubular base, comprising a vertically disposed standard, a plurality of horizontal superposed tiers secured to a first side of said standard, all of said tiers terminating approximately in a vertical plane passing through the axis of the standard so as to leave the side of said standard opposed from said tiers free of tiers or other projections to permit its placement adjacent a flat surface, each of said tiers being formed from a plurality of radially extending arms spaced vertically on said standard, the inner end of said arms being secured to spaced points on said first side of said standard, the outer ends of said arms in the lowermost tier terminating at points spaced arcuately about the standard, the outer ends of the arms in the other tiers also terminating at points spaced arcuately about the standard, the arms in said other tiers being of progressively shorter length from the lowermost tier to the uppermost tier, each of said tiers including inner and outer arcuate strap members, the outer strap member of each tier being secured to the outermost ends of the respective tier arms, the inner strap member of each tier being spaced from the outer strap member and secured to the respective arms inwardly of the outer strap member, said strap members being of such length as to transcribe substantially half a circle, opposite ends of the strap members in each tier being in substantial alinement with each other and with said standard, drip pans secured to and disposed between said strap members, candle holding cups secured to said drip pans, and all of said tiers being fixedly related and adjustable as a unit relative to said base.

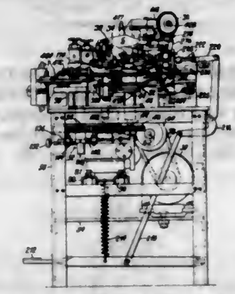
2,733,587
DRY CLEANING SYSTEMS
Samuel M. McKendree, Danville, Ill.
Application February 17, 1953, Serial No. 337,267
4 Claims. (Cl. 68—18)

1. In a dry cleaning system utilizing dry cleaning solution and comprising a washer and a filter, an automatic control unit between the washer and the filter for maintaining the dry cleaning solution at a pre-selected temperature comprising, a heat exchanger through which said solution is adapted to pass from the filter to the washer, a container arranged adjacent said heat exchanger for containing a fluid control agent, means to conduct said control agent through said exchanger to thereby control the temperature of said dry cleaning solution, temperature control means including a first final control unit for cooling said control agent, and a second final control unit for heating said control agent in said container



therefor, and thermostats each connected to a respective one of said final control units and synchronizable to said preselected temperature value whereby the control agent may be cooled or heated to control the temperature of said dry cleaning solution.

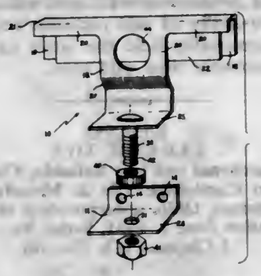
2,733,588
MACHINES FOR OPERATING ON SHOE BOTTOMS OR THE LIKE
Ernest W. Stacey and Walter E. Naugler, Beverly, Mass., assignors to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application December 11, 1952, Serial No. 325,284
14 Claims. (Cl. 69—6.5)



8. A machine for roughing the margins of shoe bottoms comprising a shoe support having relatively movable heel and toe clamping members, a roughing tool mounted for movement about an axis extending heightwise of a shoe on said support and for movements heightwise of said shoe, means for moving the support through one revolution to carry successive portions of the shoe bottom margin into position for engagement by the operative portion of said tool, grading means for controlling the operative path of the tool with respect to said axis and according to the lengthwise separation of said heel and toe clamping members, power means connected to said tool for changing the pressure of its engagements with marginal portions of the shoe bottom, and spaced controls arranged to operate said power means at predetermined times in the revolution, the times of actuation of said power means being dependent on the relative spacing of said controls and the extent of lengthwise separation of said heel and toe clamping members.

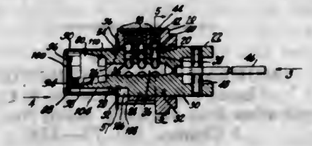
2,733,589
LOCKING DEVICE FOR OUTBOARD MOTORS
Joseph C. Mutty, West Monroe, N. Y.
Application October 7, 1954, Serial No. 460,924
5 Claims. (Cl. 70—58)

1. A locking device for the clamps of an outboard motor comprising a bracket adapted to be rigidly secured to the transom of a boat, a retaining member having a channel adjacent its upper end one side of which is adapted to be engaged by the clamping pads of the motor clamps and the bottom and other side of



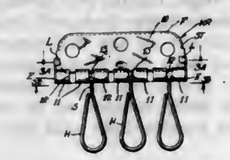
which is adapted to overlie said pads when so engaged, and means adjacent the lower end of said member to detachably secure it to said bracket.

2,733,590
KEY CONTROLLED CYLINDER LOCK
Duane R. Crumb, Webster, N. Y., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application February 4, 1953, Serial No. 335,027
5 Claims. (Cl. 70—367)



4. In a key operated lock, the combination of a mounting sleeve having a central bore, a lock cylinder having a tumbler portion rotatable in the sleeve, a head portion and a tail portion at opposite ends of the tumbler portion, peripheral grooves at opposite ends of the tumbler portion separating it from the head portion and the tail portion, a cap for the head portion having tongues received by a notch and groove of the tumbler portion preventing relative movement between the cylinder and cap, said cap having flanged portions abutting one end of said sleeve, and a cross pin secured in said sleeve and having an intermediate portion disposed in the annular groove of the cylinder between the tumbler portion and tail portion to prevent removal of the cylinder from the sleeve.

2,733,591
KEY RETAINER
Louis Schumer, Brooklyn, N. Y.
Application March 17, 1953, Serial No. 342,913
5 Claims. (Cl. 70—456)



1. A key retainer adapted to removably support key hangers, comprising; a plate embodying spaced beaded portions defining spaced slots to removably receive said hangers and defining rearwardly extending free terminals for sustaining said hangers, said terminals being spaced apart from the body of said plate to define spaced gaps in communication with said slots, a bar movable towards or away from said terminals and disposed at the rear of said plate for removably closing said gaps and for

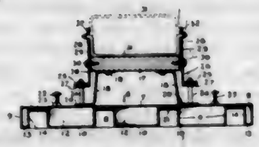
removably bridging said slots, said bar having guide means cooperating with said plate to permit linear movement of said bar towards or away from said gaps and terminals, and detent means integral with and extending from and rearwardly of said plate for cooperating with said bar to removably hold the latter against said terminals to removably close said gaps.

2,733,592
CERAMIC TILE
Charles H. Burchenal and Issy Balinkin, Cincinnati, Ohio, assignors to Cambridge Tile & Manufacturing Company, Cincinnati, Ohio, a corporation of Ohio
Application June 9, 1951, Serial No. 230,748
2 Claims. (Cl. 72—18)



1. A building tile comprising a porous body having a plurality of faces, the body comprising a semi-vitreous ceramic composition containing voids and capillary openings, at least one of said faces having a glazed surface, said tile body being initially capable of absorbing more than about 3% of its weight of water, said tile body having a water-repellent silicone oil distributed upon the surface of the voids and capillary openings, the amount of said silicone oil being insufficient to plug the voids and capillary openings but sufficient to render the tile body incapable of absorbing more than about 3% by its weight of water.

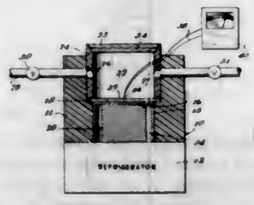
2,733,593
MORTAR APPLYING DEVICE
Clarence B. Hay, Sumter, S. C.
Application June 26, 1952, Serial No. 295,717
3 Claims. (Cl. 72—128)



1. A device for applying mortar to a building block comprising an elongated pan including a top wall and having its botton open, partition means within the pan for forming passages within the pan which passages receive the mortar, an ejector plate arranged within the passages, straps arranged above the top wall and extending transversely of the pan and arranged inwardly of the ends of said pan, operating connecting means between the straps and the ejector plate, a single handle arranged above and spaced from the top wall and extending longitudinally of said pan and rigidly connected with the top wall and arranged substantially between such straps, upstanding reciprocatory elements mounted upon the ends of the single handle and connected with the straps, and a substantially U-shaped auxiliary handle extending longitudinally of the first-named handle and pivotally connected with said reciprocatory elements at points above said first-named single handle, said auxiliary single handle being adapted to be swung to positions close to and remote from said first-named single handle.

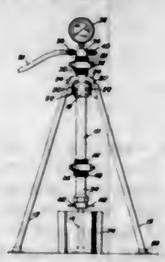
2,733,594
DEW-POINT DETECTING DEVICE
I. Irving Silverman, Chicago, Ill., assignor to Illinois Testing Laboratories, Inc., Chicago, Ill., a corporation of Illinois
Application December 16, 1953, Serial No. 398,521
4 Claims. (Cl. 73—17)

1. A dew-point detecting device which operates by providing an optical change in a surface area, which comprises a housing having a chamber therein, means for leading a gas sample into said chamber, a moisture collector in said chamber having a surface exposed to said gas sample in the chamber, means cooling substantially all of said surface whereby to lower the temperature of the gas at the said surface, means for measuring the temperature of the deposited condensate when the dew point of the gas is reached, said surface having two portions of predetermined optical contrast relationship when both portions are dry, but producing a visible change in



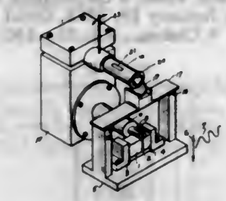
said optical contrast relationship when one of said portions is wetted at the dew-point, said one portion having means rendering the same light-scattering in character when dry and non-light-scattering in character when wet, the second portion being non-light-scattering in character when dry, said one portion of said surface having a rough texture provided with interstices and peaks whereby to provide an encouragement of moisture deposition on said one portion, and said second portion is of texture substantially smoother than that of said one portion and inhibiting the deposition of moisture thereon.

2,733,595
PORTABLE TESTING APPARATUS FOR DRILLING-MUD ADDITIVES
Homer L. Twining, San Antonio, Tex.
Application March 5, 1953, Serial No. 340,641
14 Claims. (Cl. 73—38)



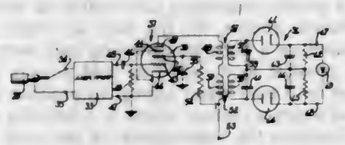
1. In a testing device, in combination, an elongated testing tube of metal adapted to withstand high pressures and to hold a fluid whose sealing characteristics are to be determined, a plurality of standards pivoted to the tube intermediate its ends for supporting the tube in a vertical position when the standards are expanded, a cap member for closing the top end of the tube, a coupling for releasably securing the cap member to the tube to provide a liquid-tight joint, a cylinder adapted to be releasably secured to the lower end of the testing tube, a second coupling for releasably securing the cylinder to the tube to provide a liquid-tight joint, a container having a perforated bottom wall, said containter being adapted for insertion within the cylinder to close the lower end of the tube, said container being adapted to receive material forming a filter bed for the fluid to be tested, a retaining plug having threaded connection with the cylinder to releasably lock the container within the cylinder, a pressure supply line in communicating relation with the upper portion of the testing tube, and means for venting the tube having location adjacent the upper portion thereof.

2,733,596
MEASUREMENT OF DYNAMIC MODULUS OF ELASTOMERS
Giles W. Painter, Erie, Pa., assignor to Lord Manufacturing Company, Erie, Pa., a corporation of Pennsylvania
Application July 24, 1952, Serial No. 300,623
6 Claims. (Cl. 73—67)



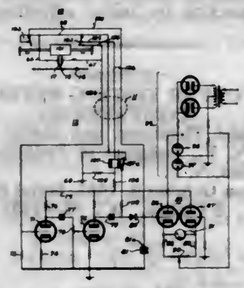
1. Apparatus for measuring the dynamic modulus of elastomers and the like comprising a vibratory driver, a test standard of a material of negligible damping, means for coupling the test standard directly to the driver, a resilient member coupled to the test standard to resist movement of the test standard by the driver and to be strained in phase with the deflection of the test standard, a resistance type strain gage on the member measuring the strain therein caused by the deflection of the test standard, another resilient member equipped with another resistance type strain gage for measuring the strain therein, a test specimen arranged between said other member and the driver so as to strain said other member with a component of strain in phase with the driver proportional to the elastic modulus of the test specimen and with a component of strain out of phase with the driver proportional to the damping modulus of the test specimen, and a strain measuring circuit for balancing out the in phase resistance of the strain gages whereby the indication of said measuring circuit is that due to the out of phase strain component proportional to the damping modulus of the test specimen.

2,733,597
APPARATUS FOR MEASURING VIBRATIONS
Howard C. Hardy, Northlake, Ill., assignor to Armour Research Foundation of the Illinois Institute of Technology, Chicago, Ill., a corporation of Illinois
Application July 12, 1952, Serial No. 298,649
2 Claims. (Cl. 73—69)



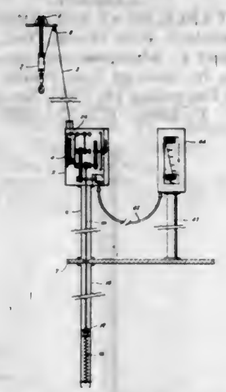
1. Apparatus for measuring vibrations of a surface, comprising: acoustical energy transmitting and receiving means for transmitting energy toward a vibrating surface and receiving energy reflected therefrom with the frequency of the reflected energy deviating in both directions from the frequency of the transmitted energy in response to vibratory movement of the surface toward and away from said transmitting and receiving means, discriminator means coupled to said receiving means for responding to the varying frequency of the reflected energy and producing an alternating current electrical signal of amplitude and frequency corresponding to the amplitude and frequency of vibration of the vibrating surface, and means for coupling said alternating current electrical signal to alternating current indicating means.

2,733,598
MEASUREMENT OF SURFACE FINISH
Philip T. Miner, Dallas, Tex., assignor to Kota-Meters, Inc., Dallas, Tex., a corporation of Texas
Application July 2, 1951, Serial No. 234,877
3 Claims. (Cl. 73—105)



1. A system for sensing variations in surface finish which comprises a tracer point positionable with its axis perpendicular to a test surface, supporting means rotatable about a first axis, means carried by said supporting means for coupling said tracer point to said supporting means and rotatable thereon about a second axis, means on said supporting means for maintaining substantially constant the pressure between said tracer point and said surface, means for bodily moving said supporting means over said surface in a direction perpendicular to said second axis to develop a frictional force on said tracer point proportional to the roughness of said surface thereby to tend to rotate said tracer point about said second axis, and electro-mechanical transducer means coupled to said tracer point to oppose and sense the rotational forces on said tracer point relative to said second axis for producing an output indication proportional to the roughness of said surface.

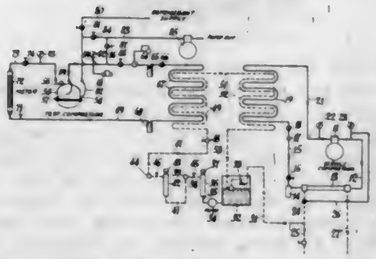
2,733,599
TRAVELING BLOCK POSITION AND VELOCITY RECORDER
Lynn W. Storm, Austin, Tex., assignor, by mesne assignments, to Warren Automatic Tool Company, Houston, Tex., a corporation of Texas
Application April 13, 1953, Serial No. 348,356
1 Claim. (Cl. 73—151.5)



In a recorder of the working operation through successive cycles of a well rig traveling block, a self retracting winding drum, recording mechanism responsive to drum rotation to indicate rate and range of drum rotation in both winding and unwinding directions, a block connected line of such length and width in relation to the drum diameter and width as to be receivable on the drum peripheral surface in single layer side by side uniform diameter winds when the drum is fully retracted,

a line guide movable across the face of the drum to compel side by side line windings and whose range of travel is in proportion to the total length of line windings in following the travel range of said block, and a drive connection between the line guide and said drum including a spring engaged clutch which releasably establishes the drive connection for initial adjustment.

2,733,600
APPARATUS FOR TESTING REFRIGERATION COMPRESSORS
Leonard J. Sahs, Hamburg, and Harry W. Mould, Jr., Kenmore, N. Y., assignors to Fedders-Quigan Corporation, Buffalo, N. Y.
Application October 4, 1952, Serial No. 313,118
5 Claims. (Cl. 73—168)



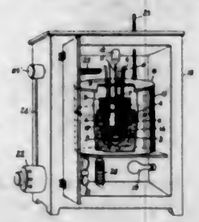
1. Apparatus for testing the capacity of a gas compressor comprising a test circuit adapted to include a compressor to be tested, a discharge line for said compressor, a pressure regulating valve in said discharge line whereby the discharge pressure may be governed, a pressure reducing valve in said line and a heat interchanger connected to the reducing valve to receive the compressor discharge, a suction line from said heat interchanger adapted to be connected to the suction port of said compressor, a flow meter in the suction line, instruments in said discharge and suction lines for ascertaining discharge and suction pressures and suction temperature, a separate circuit including a part in heat exchange relation with said heat interchanger of the test circuit, and means for circulating a cooling medium through said separate circuit.

2,733,601
PORTABLE BOAT SPEEDOMETER
Reginald P. Mitchell, Fort Worth, Tex., assignor of one-third to Robert C. Matteson and one-third to Sylvester D. Matteson, Jr., both of Fort Worth, Tex.
Application December 14, 1953, Serial No. 397,810
1 Claim. (Cl. 73—182)



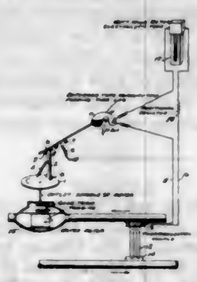
A portable speedometer adapted to have its lower end submerged in a body of water, said speedometer comprising a closed transparent tube having a lateral opening in one side of the lower end thereof communicating with the interior of said tube, and a check valve within the lower end of said tube arranged to close the referred to communication between said tube and said lateral opening.

2,733,602
ISOTHERMAL CALORIMETER
Warren Jackson, Jr., Lyndhurst, and Ralph A. Gardner, Cleveland, Ohio, assignors to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio
Application January 19, 1953, Serial No. 331,982
6 Claims. (Cl. 73—190)



6. In a calorimeter, the combination of an insulated container, a cover therefor, temperature-measuring means in the container, and temperature-controlling means in the container including a tube supporting a resistance wire heater and connections for circulating a coolant through the tube.

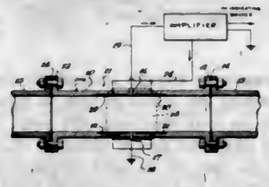
2,733,603
CALORIE METER
Guy Marie Joseph Cornet, Paris, France
Application July 2, 1951, Serial No. 234,695
Claims priority, application France July 4, 1950
3 Claims. (Cl. 73—193)



1. A calorie meter, in particular for warm water comprising, in combination, a water meter comprising a rotary spindle, a watt-hour meter, a thermoelectric couple, a circuit connecting said watt-hour meter to said thermoelectric couple, the hot pole of which is adapted to be placed on a hot piping feeding said water meter as close as possible to it, while its cold pole is adapted to be placed on a cold water piping, to produce in the said watt-hour meter a current which is a function of the difference between the temperature of the cold water and the temperature of the hot water flowing through the water meter, a switch in said circuit, said switch being a mercury switch of the time lag type constituted by a member having two cavities in one of which are located electrodes electrically connected to said circuit, said member being formed to provide a restricted passage for communication between the cavities adapted to control the speed of the mercury flowing in said restricted passage, said restricted passage constituting a time switch adapted to control the passage of the current for a constant time interval, a pivotally mounted rocking rod carrying said switch and provided with a retracting device and a controlling device actuated by said water meter and adapted to rock said time switch, said controlling device comprising in combination the spindle driven by the water meter and an eccentric member cooperating with

said rocking rod and rotating eccentrically with respect to said spindle and mounted on the latter in such a manner that a complete revolution of the spindle corresponds to a definite volume of water flowing through said water meter, said eccentric member rocking said rocking rod to close the circuit during a constant time controlled by said time switch, so that the said watt-hour meter registers a current which is a function both of the water flow and of its temperature.

2,733,604
ELECTROMAGNETIC FLOWMETER
Wallace H. Coulter, Chicago, Ill.
Application November 27, 1951, Serial No. 258,377
30 Claims. (Cl. 73—194)



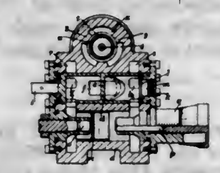
1. In a flow meter of the magnetic type which includes a fluid-carrying conduit, means establishing a magnetic field transverse of the line of flow of said fluid and the conduit, at least a pair of conducting probes across a portion of the fluid at a position of high field density providing a voltage measuring path therebetween transverse of the line of flow and the field, the herein invention which comprises means for applying electrical energy to parasitic paths shunting the measuring path to prevent loss of induced voltage to said parasitic paths and comprising auxiliary conducting probes spaced from said first conducting probes along the line of flow and in the vicinity of said parasitic paths and having an external source of voltage connected thereto and driving same.

2,733,605
FREQUENCY SENSITIVE SYSTEM FOR MEASURING THE RATE OF FLUID FLOW IN A WELL BORE
Julian R. Buck, Dallas, Tex., assignor, by mesne assignments, to Socony Mobil Oil Company, Inc., a corporation of New York
Application January 26, 1951, Serial No. 207,866
11 Claims. (Cl. 73—204)



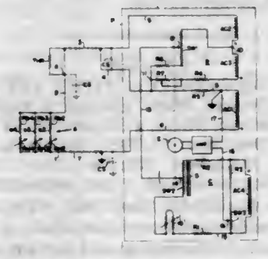
4. A system for measuring flow of fluid in a well bore which comprises means for producing an oscillatory output voltage having a temperature sensitive element mounted in a path of fluid flow in said well bore for controlling the frequency of said output voltage in dependence upon the temperature of fluids adjacent thereto, heating means mounted in said path above said element, heating means mounted in said path below said element, and circuit means extending from said output voltage means and said heating means outside said well bore and including control means for energizing first one and then the other of said heating means alternately to produce by heat transfer from said heating means to said element output voltages at frequencies which are proportional to the heat transferred thereto and means coupled to said circuit means for measuring said frequencies.

2,733,606
LIQUID FLOW RATE METERS
Richard Joseph Ifield, Dural, New South Wales, Australia, assignor to Joseph Lucas (Industries) Limited, Birmingham, England
Application December 21, 1954, Serial No. 476,735
Claims priority, application Great Britain
December 24, 1953
1 Claim. (Cl. 73—239)



A liquid-flow rate meter comprising in combination a body part having therein an inlet and an outlet and also three cylindrical bores, a reciprocatory piston freely movable in one of said bores, an adjustable stop for varying the range of movement of said piston and provided with an adjusting micrometer graduated in terms of liquid flow, a valve rotatable at a constant rate in another of said bores, ports and cavities being provided in said valve and the body part of connecting said inlet and outlet to opposite ends of the piston-containing bore during a part of each revolution of said valve, and for reversing such connections during another part of each revolution of said valve, a spring-loaded piston movable in the third bore by liquid pressure, said third bore being in communication at one end with said inlet and at a position between its ends with said outlet so that direct communication is established between said inlet and outlet when said spring-loaded piston assumes a predetermined position under the pressure of liquid admitted to said third bore from said inlet, and an indicator operable by said spring-loaded piston.

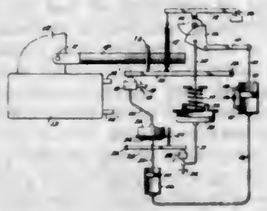
2,733,607
RELATIVE HUMIDITY MEASURING APPARATUS
Robert L. Miller, Philadelphia, Pa., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application September 12, 1951, Serial No. 246,254
19 Claims. (Cl. 73—335)



1. In combination, relative humidity sensing apparatus responsive both to the relative humidity and to the temperature to which it is exposed, a sensing circuit including said apparatus and having a pair of conductors between which there is developed a first electrical effect including

a relative humidity component varying with said relative humidity and a temperature component varying with said temperature, a thermometric resistor responsive to said temperature, a compensating circuit including said resistor and having a pair of conductors between which there is developed a compensating electrical effect including a variable component varying with said temperature and tending to include a constant component, means connected to said compensating circuit and arranged to apply thereto a neutralizing electrical effect in opposition to said constant component to effect substantially complete neutralization of the latter in said compensating circuit, electrical measuring apparatus having an input, and connecting means to oppose said variable component of said compensating electrical effect to said first electrical effect in said input of said measuring apparatus for the substantially complete cancellation of said temperature component of said first electrical effect by said variable component of said compensating electrical effect, said measuring apparatus thereby responding solely to said relative humidity component of said first electrical effect.

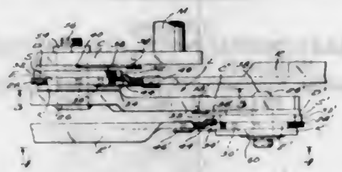
2,733,608
FORCE RESPONSIVE CONTROL MECHANISM
Charles H. Smoot and Nicholas A. Philips, Chicago, Ill., assignors to Republic Flow Meters Company, Chicago, Ill., a corporation of Illinois
Application January 26, 1952, Serial No. 268,378
14 Claims. (Cl. 74—1)



1. A force responsive control mechanism comprising a balance member, means responsive to a condition to be measured to exert a force in one direction on the balance member, adjustable means to exert a force in the opposite direction on the balance member, a device responsive to unbalance of the balance member to produce a regulated force proportional to the unbalance, a second device responsive to the regulated force to produce an output force larger than but proportional to the regulated force, means responsive to the output force to adjust the adjustable means thereby to balance the balance member, a device operably connected to the last named means to produce a force proportional to the rate of adjustment of the adjusting means, and a device responsive to the last named force and connected to one of the first two named devices.

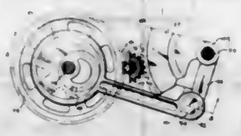
2,733,609
ELECTRIC WINDSHIELD WIPER APPARATUS
Edward Latta, Owosso, Mich., assignor to Redmond Company, Inc., Owosso, Mich., a corporation of Michigan
Application December 14, 1953, Serial No. 397,999
5 Claims. (Cl. 74—75)

1. An electric windshield wiper apparatus for connection with an oscillatable windshield wiper device comprising a reversible motor-operated shaft, a crank arm fixed to the shaft, a connecting rod for linking the free end of the crank arm and the oscillatable windshield wiper device, the connecting rod being connected to the free end of the crank arm by means comprising an eccentric rotatable in the connecting rod between two positions, stop means on the eccentric and the connecting rod for holding the eccentric in either one or the other of said positions, movement of the eccentric from one to the other of its said positions having the effect of shifting the operating stroke of the connecting rod, a detent element and a cam element fixed to the eccentric, a spring-urged element carried by the connecting rod and acting on the cam element, a spring-urged pawl carried by the crank arm and acting on the detent element, rotation of the crank arm in either direction causing the pawl



and detent element to engage and effect the rotation of the eccentric, when the latter is free to move, from one to the other of its said positions, the pawl being free to ride about and over the detent element when the eccentric is located in one of its said stopped positions, the spring-urged element and cam acting to hold the eccentric upon reversal of the motor-operated shaft from its normal running condition until engagement of the pawl and detent element takes place.

2,733,610
DRIVE FOR DOMESTIC LAUNDERING MACHINES
Alvin Lodge, Erie, Pa., assignor to Blackstone Corporation, Jamestown, N. Y., a corporation of New York
Substituted for application Serial No. 285,509, May 1, 1952. This application January 26, 1954, Serial No. 406,123
4 Claims. (Cl. 74—81)



2. A mechanism for selectively oscillating a fixed pivot segment comprising a gear mounted for rotation about a fixed pivot, said gear being engaged with a reversible drive pinion, a hub on said gear eccentric to the axis of rotation of said gear, a member interfitting said hub and being rotatable with respect thereto, said member, in one position, cooperating with said hub to form a bearing concentric with the axis of rotation of said gear and in another position cooperating with said hub to form a bearing of corresponding diameter eccentric to said gear axis, a rod pivotally connected at one end with a swingable portion of said segment, a bearing ring at the other end of said rod operatively fitting said bearing, and means forming a part of said member and said hub cooperating to effect relative rotation of said member and said hub in a direction determined by the direction of rotation of said drive pinion.

2,733,611
TURBINE VALVE ACTUATING GEAR
Stephen Jacobs, Lunenburg, and Wayne E. Gleason, Winchendon, Mass., assignors to General Electric Company, a corporation of New York
Application December 26, 1951, Serial No. 263,352
6 Claims. (Cl. 74—110)

1. In actuating linkage for transmitting force from an actuating motor with a linearly reciprocating member to

at least two spaced actuated members linearly reciprocable in the same plane as the motor actuating member, the combination of a frame plate member disposed in a plane normal to the reciprocable members, bushing members secured relative to said frame plate member and adapted to constrain at least two of said three reciprocable members to move in a plane normal to the frame plate member, a pair of separate axially elongated torque members disposed parallel to the frame plate member at opposite sides of the free ends of said three reciprocable members, pivot means connecting said free



ends of the three reciprocable members to the respective adjacent side portions of the torque members, and at least two support link means connected to each of said torque member, each link means having one end portion pivotally secured to the frame plate member and the other end portion pivotally connected to the respective torque members at the sides thereof remote from said first mentioned pivot means, whereby linear motion of the actuating motor member effects rotational displacement of the torque members to cause the actuated members to move linearly relative to the support bushings.

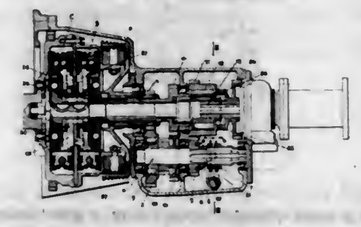
2,733,612
V-BELT SHEAVE
Jacob Sterkel, El Cajon, Calif.
Application August 31, 1953, Serial No. 377,438
1 Claim. (Cl. 74—230.5)



A V-belt sheave for use in providing a V-belt transmission for driving normally idle wheels of a vehicle from driving wheels thereof, said wheels being of the demountable type held in place by an annular series of threaded studs, comprising: a flat, circular disc portion having an axially-positioned hub opening adapted to be passed over a hub of one of said wheels; an annular V-belt-receiving portion surrounding said disc and projecting equally from both faces of said disc; a concentric series of stud holes in said disc positioned to receive the threaded studs of one of said wheels; a plurality of discharge openings extending transversely through said disc about the periphery thereof adjacent said V-belt-receiving portion; and a passage extending radially through said belt-receiving portion from each of said discharge openings.

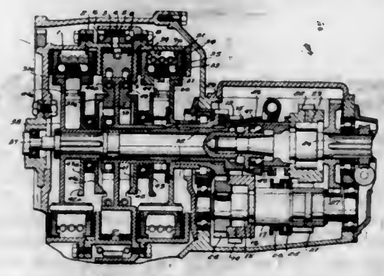
2,733,613
CHANGE SPEED GEAR FOR MOTOR VEHICLES
Fritz Kreis, Wurzburg, Germany
Application November 30, 1950, Serial No. 198,315
6 Claims. (Cl. 74—336)

1. An automatic gear speed change arrangement comprising, in combination, a drive shaft; a driven shaft; at least two centrifugal clutch means driven by said drive shaft; a countershaft; first gear means including override clutch means connecting one of said centrifugal clutch means with said counter shaft and other gear means connecting the other centrifugal clutch means with said counter shaft, said other centrifugal clutch means engag- means; second gear means including override clutch means connected to said driven shaft; a group shifting shaft; third gear means connecting said counter shaft with said group shifting shaft; fourth gear means connect-



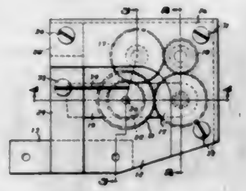
ed to said driven shaft; and manually operated coupling ing at a higher speed than said one centrifugal clutch means movable between at least two coupling positions and coupling in one of said two positions said counter shaft with said second gear means, and in the other of said two positions said group shifting shaft with said fourth gear means.

2,733,614
AUTOMATICALLY OPERATING CHANGE SPEED GEAR
Fritz Kreis, Wurzburg, Germany
Application March 2, 1951, Serial No. 213,542
6 Claims. (Cl. 74—336)



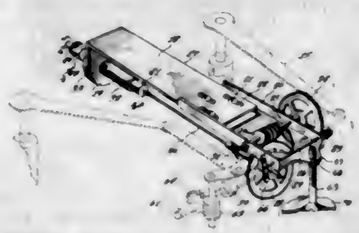
4. In an automatic transmission mechanism, in combination, drive means including a drive shaft; driven means; a main shaft consisting of two coaxial separate main shaft portions, one of said main shaft portions having a hollow end portion formed with radially extending bores and surrounding the end portion of the other of said main shaft portions, said latter end portion being formed with recesses located under said bores; a plurality of change speed gears for rotating said driven means at different speeds, said change speed gears being mounted on said main shaft; centrifugal clutch means for effecting connection between said drive means and each of said change speed gear means; a plurality of free wheel clutches, each of said free wheel clutches operatively connected with one of said change speed gear means so as to permit an overrunning action when the next higher change speed gear is operating; and coupling means for connecting said coaxial separate main shaft portions to each other, said coupling means including balls located in said radially extending bores in said one of said main shaft portions and in coupling position engaging said recesses in said end portion of said other main shaft portion, and further including sleeve means axially movably mounted on said end portion of said one main shaft portion and adapted to engage said balls and to move the same into coupling position.

2,733,615
RATIO CHANGER
Clinton L. Cummings, Natick, Mass., assignor to Barry Controls Incorporated, Watertown, Mass., a corporation of Massachusetts
Application August 22, 1951, Serial No. 243,030
6 Claims. (Cl. 74—354)



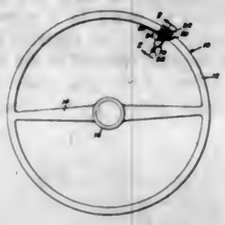
1. In a ratio changer comprising a gear train including first and second gears, one of which is a driving gear, an arm swingable about the axis of said first gear towards and away from said second gear and including a stud, first and second interconnected coaxial gears of different diameters slidably and rotatably supported by said stud with said first coaxial gear in mesh with said first gear as said arm is swung to enable said second coaxial gear to be positioned in mesh with said second gear, thereby to enable ratio changes to be effected by substituting for said coaxial gear a gear of different diameter, and means to lock said arm against movement when it has been positioned to mesh said second coaxial gear with said second gear, said means including a handle positioned to retain said coaxial gears on said stud when said locking means is operative.

2,733,616
GEARING
George Dewey Zimmerman, Pelham Manor, N. Y.
Application May 24, 1954, Serial No. 431,875
4 Claims. (Cl. 74—412)



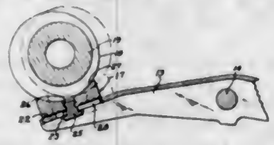
1. A mechanism for driving a remote register comprising a bracket support fitted to the inside of a meter casing, said bracket support having a depending end projection, a bushing carried by the said projection and extending through the meter casing, a first shaft connection within said bushing for connection with a remote mechanism shaft, said bracket support having a second depending projection spaced from the first mentioned projection, a drive shaft inside of the meter casing, a driving mechanism for said first shaft connection in the bracket support and adjacent said second projection, transverse shafts connected to the bracket support for rotation therein, a pair of gears on and interconnecting said transverse shafts, a driven shaft journalled in the second mentioned projection and connected at one end with said bushing first shaft connection, a gear on said driven shaft, a worm on one of said transverse shafts meshing with last mentioned gear for driving the driven shaft and the bushing first shaft connection, and a flexible shaft connected to the other end of the bushing first shaft connection to drive the remote register.

2,733,617
STEERING ATTACHMENT FOR AUTOMOBILE STEERING WHEELS
Hugo Eugene Schmidt, Tuckahoe, N. Y.
Application November 17, 1954, Serial No. 469,405
1 Claim. (Cl. 74—557)



A steering aid for attachment to the rim of a steering wheel for gripping by persons with prosthetic hook substitutes for natural hands, said steering aid comprising a pair of complemental plates disposed in face to face relation and having a first pair of adjoining ends hingedly connected together and a second pair of adjoining free ends, said plates being swingable about their hinged ends into face to face confronting relationship and having confronting concave center sections adapted to receive a wheel rim to mount the plates on the rim, a tubular bearing sleeve fixed transversely on the free end of one of the plates, a pin rotatably journalled in the sleeve, said sleeve having a cut-out, a bolt having a transverse opening receiving the pin, said bolt being movable in the cut-out and bodily swingable relative to the other plate, the free end of said other plate having an axial slot extending through the end edge for receiving the bolt, a wing nut threaded on the bolt to clamp the free ends of the plates together, a stud outstanding from the center section of one of the plates, a block member having an axial bore receiving the stud, a bushing press-fitted in the bore and rotatably circumposed on the stud, said stud having an outer end formed with a threaded bore, a screw threaded in the bore to lock the block member on the stud and an integral eye on the outer end of the block member.

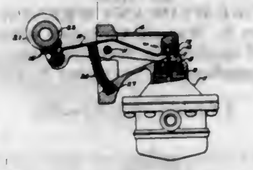
2,733,618
WEAR SHOE FOR CAM FOLLOWER
Eldon A. Johnson, St. Louis, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a corporation of Delaware
Application March 3, 1952, Serial No. 274,592
7 Claims. (Cl. 74—569)



3. A cam follower assembly comprising an oscillating lever member and a cam engaging shoe member longitudinally slidable thereon, the bearing surfaces of said members being medially relieved from end to end and engaging along longitudinal bearing portions at opposite sides of the longitudinal center line thereof to minimize relative vibration of said members.

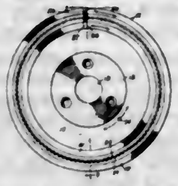
2,733,619
CAM AND FOLLOWER MECHANISM
Russell F. Smith, St. Louis, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a corporation of Delaware
Application August 11, 1952, Serial No. 303,789
4 Claims. (Cl. 74—569)

4. In a cam and follower mechanism, the combination of a pivoted pump operating lever actuated by said cam, and a shoe for transmitting the motion of said cam to said pivoted lever, comprising parallel, axially spaced, concave and convex bearing members for engaging said cam and said lever, respectively, means interconnecting said members including a slender neck integral therewith, a means for movably retaining said shoe in said arm for



oscillation on said convex bearing member, said means including a recess in said arm with a substantially half-round socket receiving said convex bearing member, a deformable lip providing an extension of said recess, and spaced, dependent flanges cooperating with said recess and said convex bearing member to retain said shoe in said socket.

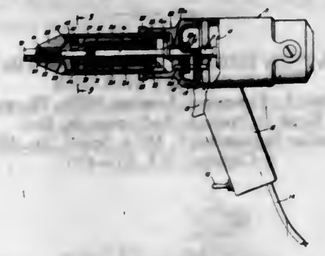
2,733,620
INDEX PLATE
Americo V. Nanni, Woodcliff Lake, N. J.
Application August 13, 1951, Serial No. 241,601
4 Claims. (Cl. 74—813)



1. A dividing head index plate comprising an index disk having an index ring rotatably seated therein, and a pair of sector rings carried by and rotatably seated in the index ring and index disk respectively, the index ring and index disk each having co-extensive circular edge portions, each edge portion being provided with a circular series of notches and being accessible to view, the number of notches in each series differing by one and any notch in one of said series being adapted to register with any other notch in the other series; and indicator means on said sector rings, cooperable with a pin receivable in a registering pair of notches, to enable the sector rings to be initially located in predetermined indicating positions, either of said sector rings being shiftable to enable said indicator means thereof to designate a notch removed by a given number from the registering notches, and retaining its shifted position with respect to its carrier during relative movement of the index disk and index ring, thereby to facilitate readjustment of the same without the necessity of repeatedly counting notches for said readjustment.

2,733,621
ROTARY IMPACT WRENCH WITH OVERLOAD RELEASE MEANS
John P. Newman, Alhambra, Calif.
Application October 31, 1952, Serial No. 317,985
10 Claims. (Cl. 81—52.3)

1. In an impact wrench, the combination of a drive shaft, a driver member mounted coaxially of the drive shaft, power means for rotating the drive shaft, a hammer member rotatably mounted coaxially of the drive shaft, a cylindrical resilient driving member adapted to rotate the hammer member and driven from the drive shaft, cooperating means on said hammer member and said driver member for releasable engagement therebetween, means for connecting to the hammer member the end of the resilient driving member most remote from the cooperating means, and other means for connecting the other end of the resilient driving member to the drive shaft so that



upon relative rotational movement between the hammer member and the drive shaft the resilient driving member is twisted and thereby elongated to move the hammer member out of engagement with the driver member.

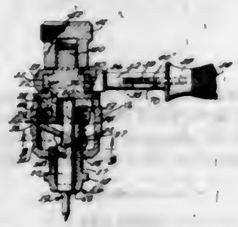
2,733,622
PREDETERMINED TORQUE RELEASE SOCKET WRENCH
Jacques P. Evans, San Antonio, Tex.
Application March 19, 1954, Serial No. 417,245
2 Claims. (Cl. 81—52.4)



1. A torque wrench comprising a hollow cylindrical body having a bottom wall closing one end thereof, a boss on the inner surface of said bottom wall extending into said body in concentrical relation about the longitudinal axis of said body to define a fixed clutch member, a cap closing the other end of said body, said bottom wall having an opening transversely therethrough concentric about the longitudinal length of said body, a plug thereadedly engaged in said cap in axial alignment with said opening and for advance through said plug toward said fixed clutch member, said plug having a socket therein opening through the end thereof adjacent said bottom wall and in axial alignment with said opening to define along with said opening in said bottom wall spaced axial aligned bearings, a drive member mounted in said bearings for rotation about its longitudinal axis, a rotatable clutch member mounted on said drive for rotation therewith and movement longitudinally thereof into frictional engagement with said fixed clutch member, a disc mounted on said drive for movement longitudinally thereof and engageable by said one end of said plug for movement longitudinally of said drive as said plug is advanced through said cap, a compression coil spring wrench concentrically about said drive member and engaging said rotatable clutch member into said disc at its opposite ends, a knob carried by said plug at its other end remote from said socket whereby rotation imparted to said knob will cause said plug to be advanced through said cap toward said fixed clutch member, spring loaded plungers carried by said knob and engaging said plug for maintaining said knob in a selected position of rotation and maintaining said spring under a selected tension imparted thereto by the advance of said plug and movement of said disc longitudinally of said drive member to place said rotatable clutch member into frictional engagement with said fixed member under the selected tension, and a

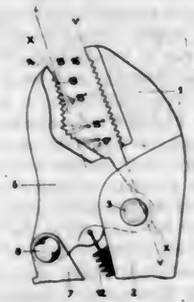
handle connected to said body for imparting rotation thereto to cause rotation of said drive through said frictionally engaged clutch members until a torque applied to said drive equals the preset tension of said spring.

2,733,623
COMBINATION IMPACT AND ROTATABLE TOOL AND SOCKET HOLDER
Melvin L. Timmons, London Mills, Ill., and Emil O. Nelson, Indianapolis, Ind.
Application September 7, 1954, Serial No. 454,476
4 Claims. (Cl. 81—60)



4. In a tool, a base, an impact head integrally or detachable connected to said base, a ratchetable head capable of being immobilized, a handle extending outwardly from said head and secured thereto, a body member detachably connected to said base, a bushing for receiving and supporting a work engaging member, a locking device for chucking said work engaging member, said impact head suitable for striking as a hammer, or being struck by a conventional hammer.

2,733,624
CLAMPING TONGS
Otto Dowidat, Remscheid-Luttringhausen, Germany, assignor to Firma Gedore Werkzeugfabrik Otto Dowidat, Remscheid-Luttringhausen, Germany, a corporation of Germany
Application March 9, 1954, Serial No. 415,095
Claims priority, application Germany April 2, 1953
2 Claims. (Cl. 81—84)



1. In wrench-type pliers including relatively movable jaws, each of said jaws being connected with a handle, and a beyond dead center locking unit connected diagonally between said handles, one of said jaws having pivot means and being immovable and the other of said jaws being movable relative to said immovable jaw, the inner face of said immovable jaw being flat and carrying crosswise disposed teeth, and the inner face of said movable jaw having a convex-shaped portion leading to a concave-shaped, hollow and bow-shaped portion and terminating into a flat portion rising toward the inner end of the face of said movable jaw, so that an imaginary plane disposed parallel to the plane of the gripping surface of said immovable jaw intersects said flat rising portion of the inner face of said movable jaw, to operate as abutment means for the rear end of a workpiece, said convex-shaped portion and said concave-shaped portion of said movable jaw carrying crosswise disposed teeth, and flat untoothed portions at the mouth end of both said jaws.

2,733,625
FIRE-HYDRANT WRENCH
Roy R. Warren, Conneaut, Ohio
Continuation of application Serial No. 221,068, April 14, 1951. This application November 9, 1954, Serial No. 467,700
1 Claim. (Cl. 81—98)



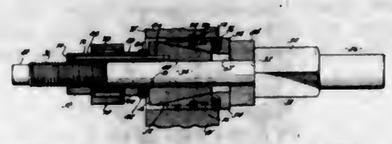
A wrench comprising an elongated handle comprising a flat bar widened at one end and bifurcated to form two spaced legs defining a pentagonal shaped aperture, a head comprising two spaced but rigidly connected members, each of said members having an arm formed integrally therewith, said arms being pivotally attached to said handle whereby said handle is swingably attached to said head, and a pentagonal shaped opening in each of said members, said openings being coaxial with respect to each other and registrable with said pentagonal shaped aperture between said legs of said handle to receive a pentagonal nut, whereby a pentagonal nut, when positioned within said registering openings and aperture, can be gripped and rotated by swinging said handle.

2,733,626
PIVOTED HEAD SLIDING JAW RATCHET-TYPE END WRENCH
John Mesojedec, Geneva, Ohio
Application December 21, 1954, Serial No. 476,639
5 Claims. (Cl. 81—165)



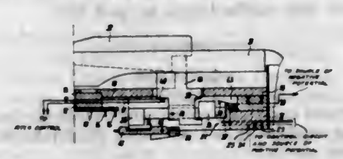
1. An end wrench comprising a handle, a head having a body portion provided with furcations, said furcations straddling an end portion of said handle, one furcation having a non-threaded hole, the other furcation having a complemental non-threaded hole, said handle having a third hole cooperable therewith and in alignment therewith, a connecting pin having an eccentric turnable in the hole in said handle, a head turnable in one hole in one furcation and a flanged end rotatable in the hole in the other furcation, the body portion of said head having a lateral fixed jaw and a passage at right angles to the lengthwise axis of the handle, a relatively movable jaw having a shank slidable in said passage, said shank having rack teeth, a spindle mounted for rotation and sliding in bores provided therefor in the body portion of said head, a worm carried by said spindle and operatively engaged with the teeth of said rack.

2,733,627
WORK HOLDING TOOL
Mark B. Layne and Lawrence L. Held, Higginsville, Mo., assignors to Layne-Held Corporation, Higginsville, Mo., a corporation of Missouri
Application June 5, 1950, Serial No. 166,098
6 Claims. (Cl. 82—44)



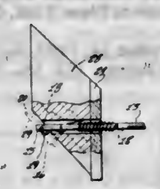
1. A work holding tool comprising a mandrel having an abutment adjacent its one end, a screw threaded section adjacent its other end, and a relatively long, smooth central section, a body member mounted on said central section, a series of wedges mounted for radial movement in said body member and extending longitudinally therefrom and being in engagement with said abutment at their extended ends, means interconnecting said mandrel and body member to prevent relative rotation and to permit relative longitudinal movement of said parts, a threaded member mounted on the threaded portion of said mandrel operable to force said body member along said wedges whereby the wedges are forced radially apart to engage work mounted thereon, and recesses formed in said wedges adapted to receive detents therein which extend inwardly from the inner wall of the work as said wedges are moved radially to engage the work.

2,733,628
KEY CONTROL OF ATTACK AND DECAY IN ELECTRONIC MUSICAL INSTRUMENT
Richard Bierl, Trossingen, Germany, assignor to Matthias Hohner, Aktiengesellschaft, Trossingen, Germany, a corporation under German law
Application June 6, 1952, Serial No. 292,048
Claims priority, application Germany June 8, 1951
7 Claims. (Cl. 84—1.26)



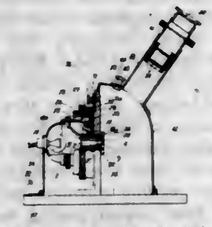
1. In an electronically and mechanically operated musical instrument having oscillator means including circuit means therefor, condenser means, amplifier means and pitch control means operatively connected to said circuit means; a keyboard frame, key means supported by said frame and for movement by impulse from an initial position to respective operative positions, first contact spring means for operating said pitch control means, carrier means operatively connected with said key means and movable with the latter, said carrier means being provided with a projection for actuating said first contact spring means, respective block means provided with sets of guide slots and mounted in superposed position to each other on said keyboard frame, a two-arm lever pivotally disposed on said carrier means and provided at one lever end with a contact plate, second contact spring means extending through said guide slots of one of said block means and into the path of said contact plate, third contact spring means extending in guide slots of another of said block means and in transverse direction to said second contact spring means, said second contact spring means being adapted upon co-action with said contact plate to impart to said lever a pivotal rotary movement in the direction toward said first contact spring means and away from said third contact spring means, abutment means for said third contact spring means when the latter are disengaged from said contact plate, said second contact spring means being adapted to act upon said condenser means for increasing amplification through said amplifier means, and biased means for returning said key means with said carrier means to said initial position.

2,733,629
SPRING URGED PIVOTED TOGGLE BOLT
William Vogt, Jersey City, N. J.
Application August 18, 1952, Serial No. 304,931
1 Claim. (Cl. 85—3)



A toggle bolt comprising an elongated shaft externally threaded at one end and having an inwardly extending longitudinal slot at the other end, a toggle pivotally mounted within said slot, a compressive spring sleeving said shaft adjacent said toggle and connected to said shaft at the end remote from said toggle, the free end of said spring bearing against the central portion of said toggle when the latter is in open position, a pin connecting the slides of said shaft at the outer end of said slot and said toggle having a cut-out at the outer face of one corner for abutting said pin when said toggle is in closed position, said toggle having a lip at the inner face of the other corner for preventing said spring from interlocking when said toggle is in closed position, and a plurality of teeth at the inner face of said toggle adapted to be embedded into material bearing against said toggle.

2,733,630
APPARATUS FOR INSPECTING MACHINED WORK, MORE PARTICULARLY APPLICABLE TO FUEL INJECTORS FOR INTERNAL-COMBUSTION ENGINES
Leon Saives, Billancourt, France, assignor to Regie Nationale des Usines Renault, Billancourt, France, a French corporation
Application June 14, 1952, Serial No. 293,628
Claims priority, application France June 22, 1951
4 Claims. (Cl. 88—14)



1. In apparatus for inspecting fuel injectors for internal combustion engines, a dark chamber having one wall with a bore opening into the chamber and an inwardly concave facing wall with an aperture, a socket for receiving and centering said injector, said socket being rotatable and axially adjustable in said bore and the injector being received in said socket with the tip end of the injector in said chamber, a tube having a flange with a curvature corresponding to that of said concave wall, said flange being adjustably mounted on said concave wall with an inner end of said tube communicating with said aperture, an eyepiece at the outer end of said tube,

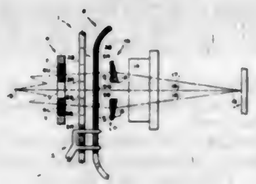
a cross ruled screen in said tube and a light arranged to shine inside said injector and out through the injection holes of said injector, a lens for forming an image on said screen, said socket, tube, lens and screen being so positioned that an image of at least one injection hole of the injector is projected onto said screen where it can be viewed through said eyepiece.

2,733,631
OPTICAL ANALOG COMPUTER USING PROJECTED LIGHT PATTERNS
Dan McLachlan, Jr., Salt Lake City, Utah, assignor to Research Corporation, New York, N. Y., a corporation of New York
Application October 14, 1952, Serial No. 314,728
8 Claims. (Cl. 88—14)



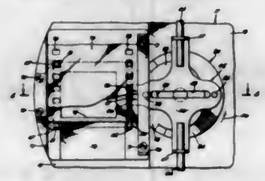
1. An optical analog computer for summing optically the effect of a number of individual factors, each having two parameters, which comprises a common light source, means for simultaneously projecting from said source on the same area a number of independent light patterns representing respectively said factors, means for independently adjusting the intensity of each light pattern, each pattern having a light distribution over said area corresponding to one of said parameters, and a relative intensity corresponding to the other of said parameters.

2,733,632
COLOR PHOTOGRAPHY AND PROJECTION
Francis A. Pall, San Diego, Calif., assignor of one-half to Isabelle M. Pall, San Diego, Calif.
Application December 24, 1951, Serial No. 263,040
2 Claims. (Cl. 88—16.4)



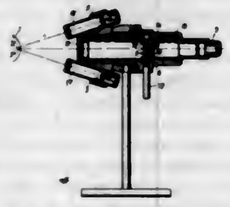
1. A system of motion picture color projection wherein three consecutively exposed color separation images of substantially equal exposure are simultaneously projected through respective color filters into one composite color image, comprising groups of three frames of color separation images, groups of three movable color filters, a light source, a light gate for passing the light from said source simultaneously through a group of three frames, the groups of color filters being so positioned and arranged that light passing through each frame passes through a color filter corresponding to a color filter through which the frame was taken, means to diffuse the picture images after their passage through two only of the three frames leaving one image in sharp focus, prisms to project the picture images passing through the outer frames and the filters onto a screen and in superposed relationship, and means to synchronize the movement of the color filters with the movement of the frames, whereby the three individually recorded images are alternately diffused and simultaneously projected through their respective color filters onto the screen, eliminating color fringes and producing fringeless natural color motion pictures.

2,733,633
MOTION PICTURE FILM FEEDING AND REGISTERING MECHANISM
Lee R. Wottring, Altadena, Calif.
Application October 7, 1953, Serial No. 384,690
8 Claims. (Cl. 88—18.4)



1. In a mechanism for intermittently advancing a motion picture film across a light aperture in a camera, projector or the like, the combination of: means for guiding said film to facilitate travel of the latter along a straight path across said aperture; a shuttle having film-perforation-engaging fingers and a rocking lug; means for reciprocating said shuttle along a path parallel with the direction of travel of said film; means for shifting said shuttle at one terminal of its path to extend said fingers into perforations in said film and maintain said fingers so extended during a film feeding movement of said shuttle which follows, and for then shifting said shuttle to withdraw said fingers from said perforations and withhold said fingers from said perforations during the return movement of said shuttle; a frame pivotally mounted on an axis parallel with the direction of film travel, said frame having a slot parallel with said axis and receiving said shuttle lug whereby said lug remains at all times in said slot while traveling back and forth relative to said frame with said shuttle; and a registration pin mounted on said frame, the latter being rocked by said lug to extend said pin into a perforation in said film upon the shifting of said shuttle to withdraw said fingers from certain film perforations, said pin being withdrawn from said film by said lug reversely rocking said frame when said shuttle is shifted to extend said fingers into perforations in said film.

2,733,634
OPHTHALMOMETER
Hans Littmann and Hermann Slevogt, Heidenheim (Brenz), Germany, assignors to Carl Zeiss, Heidenheim (Brenz), Germany
Application November 28, 1950, Serial No. 197,865
In Germany November 14, 1949
Public Law 619, August 23, 1954
Patent expires November 14, 1969
2 Claims. (Cl. 88—20)



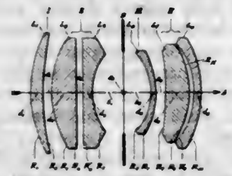
1. An instrument for measuring the curvature of the cornea comprising in a housing a microscope with an objective lens system and axially aligned therewith an eyepiece and an aperture diaphragm, said objective lens system comprising a front component and a rear component, two collimator lens systems fitted symmetrically to said housing each with its optical axis inclined at a fixed angle to the optical axis of said microscope lens system, all said optical axes lying in one plane, two mires each associated with and arranged in the focal plane of one of said collimator lens systems for optically shifting the said mires to an infinitely great distance, an image doubling coincidence system located exactly in the rear focal plane of said front lens component of said microscope lens system in a telecentric path of imaging rays, said rear lens component and said diaphragm located in close proximity to said image doubling coincidence system, and means for adjusting said image doubling coincidence system for displacement of the images of said mires formed by the cornea relative to each other.

2,733,635
STEREOSCOPES
Roland Dimon Crandall, Old Greenwich, Conn.
Application May 29, 1953, Serial No. 358,275
4 Claims. (Cl. 88—29)



1. A binocular viewer comprising a pair of optic systems, a holder for said systems formed of a rectangular container of cardboard-like material, said container having a substantially central, torn, perforated line of separation through three walls providing a pair of similar opposite supporting sections on opposite sides of said line, within which said systems are carried in spaced relation to each other, said container having a fourth, remaining continuous flexible front wall whereby said supporting sections are swingable relative to each other about an axis contained in said front wall, the said front wall and the rear walls of the container having pairs of punched-out aligned openings through which the optic systems respectively extend, thereby to enable said systems to be angularly adjusted with respect to each other.

2,733,636
FOUR COMPONENT OPTICAL OBJECTIVE SYSTEM OF THE MODIFIED GAUSS TYPE
Albrecht Wilhelm Tronnier, Gottingen, Germany, assignor to Voigtländer, A. G., Braunschweig, Germany, a corporation of Germany
Application May 19, 1952, Serial No. 288,688
Claims priority, application Germany February 4, 1952
6 Claims. (Cl. 88—57)



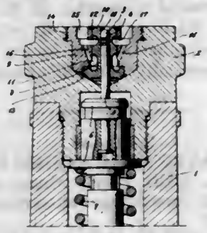
1. An optical objective system of the modified Gauss-type, of high light-transmitting capacity and anastigmatic image flatness, comprising a diaphragm enclosed by two groups of lenses in such manner that in the front half of the objective on the side of the major conjugate, as well as in the rear half of the objective on the side of the minor conjugate, a simple, uncemented meniscus-shaped individual lens is followed, in the direction of light from object to image, by a composite lens group of opposite power; the rear half of the optical system, following the diaphragm in the direction of light, comprising an inner and an outer meniscus-shaped diverging lens which are concave toward the diaphragm and enclose a collecting lens of unequal curvature, said collecting lens and the meniscus-shaped diverging lens following it in the direction of light, having a pair of adjacent surfaces, which is likewise concave toward the diaphragm and is of collecting equivalent refractive power; said meniscus-shaped diverging lenses of the rear half of the objective, which are concave toward the diaphragm and enclose said collecting lens of unequal curvature, having refractive indices, the arithmetical mean of which is higher than 1.5750, based on yellow light of the *d*-line of the helium spectrum; the outer surface of said collecting lens of unequal curvature, forming part of said pair of adjacent surfaces and having a surface refracting power, when exposed to the surrounding air and for an index of refraction corresponding to yellow light of the *d*-line of helium, in the range of 1.5 to 4.5 times the equivalent refractive power of the total objective the arithmetical mean of the refractive index values of the three lens elements forming the rear half of the objective being higher than 1.610, based on the yellow light of the helium spectrum.

2,733,637
FLEXED PLASTIC MIRROR
Irwin S. Joseph, New York, N. Y.
Application April 24, 1953, Serial No. 351,140
2 Claims. (Cl. 88—96)



1. A circular mirror comprising in combination a flexible round disc having lateral thinness and a relatively great breadth, a circumferential edge around said disc, a reflecting surface on one side of said disc, a circular frame encompassing the circumference of said disc, an annular groove in the inner side of said circular frame having a substantially greater thickness than said thin disc, said groove receiving said circumferential edge, a surface in said groove at an acute angle to the breadth of said disc, said circumferential edge merely resting against said surface; and means for constricting said frame on said disc to reduce the plane area enclosed by said frame and shorten the circumference of said annular groove whereby said disc is flexed and bears against said surface.

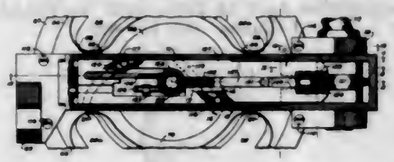
2,733,638
STRIKER DEVICE FOR MORTAR
Hans Otto Donner, Tampere, Finland, assignor to Soltam Ltd., Haifa, Israel
Application June 9, 1953, Serial No. 360,560
4 Claims. (Cl. 89—1)



1. A striker device for use in the barrel of a field mortar or similar firearm, comprising a cap adapted to be mounted within the breech end of a barrel and having an axial bore extending therethrough and a recess coaxial with said bore and opening at the side of said cap facing toward the mouth of the barrel, a spring-urged

firing pin slidable in said axial bore, and a member secured in said recess and extending around the related portion of said firing pin, said member having internal spaces separated from the firing pin by resilient walls and opening at said side of the cap facing toward the mouth end of the barrel so that the explosion gases resulting from the discharge of a projectile from the barrel can enter said spaces to urge said resilient walls radially inward against said firing pin for preventing the travel of the explosion gases through the annular clearance between said firing pin and said member and into said bore.

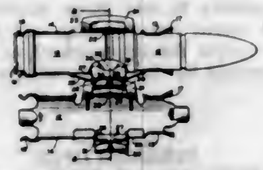
2,733,639
BREECH MECHANISM FOR HEAVY CALIBER RECOILLESS GUN
Clarence Walton Musser, Philadelphia, Pa., assignor to the United States of America as represented by the Secretary of War
Application July 1, 1948, Serial No. 36,507
7 Claims. (Cl. 89—1.7)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In a gun, the combination of a chamber, a breech block movable into and out of the rearward portion of said chamber and being secured therein when rotated to a locked position and freed from withdrawal therefrom when rotated to an unlocked position, a support on one side of the rear chamber wall, a hinge bar extending radially from the center of said breech block to said support and permitting rotative movement of the block within the chamber plus complete withdrawal therefrom, an operating handle pivoting said hinge bar to said support and usable under proper conditions to swing the bar and breech block toward and away from said chamber's rearward end, a cam plate carried by said hinge bar and disposed for slidable movement by said handle lengthwise of said hinge bar when that bar and said breech block are closed against the chamber end and carrying inclined cam slots which align with diametrically opposed parts of said breech block, supporting means positioned between said cam plate and breech block, and diametrically opposed pins protruding from said supporting means into engagement with said cam slots whereby lengthwise movement of said cam plate one way rotates said supporting means thereby rotating the breech block to said locked position by use of turning forces applied through said pins at diametrically opposed places on the breech block while lengthwise movement of the cam plate the other way rotates the breech block to said unlocked position also by use of other turning forces applied through said pins at diametrically opposed places on the breech block.

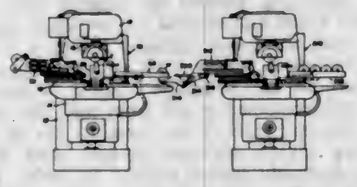
2,733,640
DISINTEGRATING CARTRIDGE BELT LINK
Carl W. Gilligan, Swift River, Mass., assignor to the United States of America as represented by the Secretary of the Army
Application April 28, 1953, Serial No. 351,763
5 Claims. (Cl. 89—35)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A cartridge holding link of the push-through type adapted to cooperate with other similar links to form a disintegrating cartridge belt, each of said links having a hook portion projecting laterally from one side thereof, a similarly projecting slotted flange portion on the opposite side of said link for loosely engaging said hook portion of an adjacent link, a retainer engageable with said hook portion to block uncoupling between said hook and flange portions of adjacent links, said retainer cooperating with



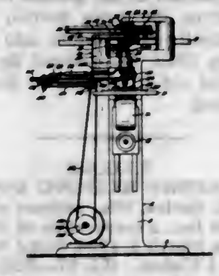
the cartridge in said link to maintain engagement between said retainer and said hook portion, and spring means operative on said retainer for ensuring disengagement thereof from said hook portion immediately following the removal of the cartridge from said link.

2,733,641
GEAR FINISHING
Walter S. Praeg, Detroit, Mich., assignor to National Broach & Machine Company, Detroit, Mich., a corporation of Michigan
Application June 4, 1951, Serial No. 229,841
16 Claims. (Cl. 90—1)



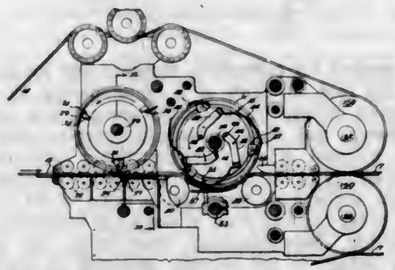
1. Transfer mechanism for use with a gear shaving machine of the type comprising a gear-like finishing tool, work gear supporting means movable to engage and release a work gear previously positioned in working position in meshed engagement with said tool, and supporting structure for said tool and gear supporting means arranged to provide space for movement of the work gear in the same direction in substantially straight line relationship from a preliminary position spaced laterally from said tool to a working position in mesh with said tool, in which movement of the gear into mesh with the tool is tangential with respect thereto, and then to an unloaded position beyond said tool, said mechanism comprising means for supporting a gear in said preliminary position with its axis perpendicular to said direction of movement, a receiver at said unloaded position for receiving a finished work gear, and loading mechanism movable in the said direction comprising a first carrier to advance a gear from preliminary to working position and a second carrier to advance a gear from working position to unloaded position, said loading mechanism comprising a slide mounted for back and forth reciprocation in said direction, said first carrier comprising a yieldable support positioned to advance the work gear tangentially of said tool to cause the teeth of the gear and tool to mesh, said yieldable support comprising an arm pivoted to said carrier, a lever pivoted to said arm, said arm and lever including surfaces shaped to engage the periphery of the work gear, resilient means biasing said lever relative to said arm to cause said arm and lever to frictionally grip the periphery of the work gear, and resilient means yieldingly opposing the movement of said arm which results if the gear and tool fail to mesh on initial contact.

2,733,642
PANTOGRAPH ENGRAVING MACHINE
David L. Beatty, Kansas City, Mo., and Lawrence G. Sturtz, Roeland Park, Kans.
Application August 6, 1952, Serial No. 302,936
1 Claim. (Cl. 90—13.1)



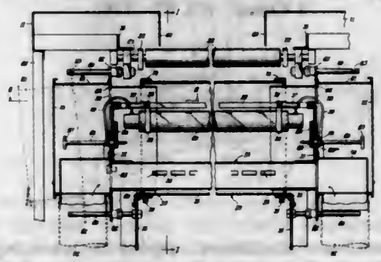
In a pantograph engraving machine of the class described, the combination of a work bed adapted to hold a work piece, a holder adapted to hold a pattern plate having a pattern formed therein by depressed grooves, a cutting tool support, a cutting tool carried by said support for movement over said work piece and for movement into and out of engagement with said work piece, a movable stylus arm, a stylus fixed in said arm and movable over said pattern plate and into and out of engagement with the grooves therein, mechanism associated with said tool support and stylus arm whereby said cutting tool is moved over said work piece as said stylus is moved over said pattern plate, resilient means urging said cutting tool into engagement with said work piece, an electromagnet carried by said tool support and adapted when energized to move said tool out of engagement with said work piece against said resilient means, the electrical circuit of said electromagnet including a normally closed electric switch mounted on said stylus arm adjacent said stylus, said switch having a mechanical operating button, a feeler arm pivoted to said stylus arm, one end of said feeler arm resting in sliding contact with a high portion of said pattern plate adjacent said stylus, and a switch operating member carried adjustably at the other end of said feeler arm and engaging said switch button, whereby as said stylus is moved into a pattern groove said feeler arm will open said switch to de-energize said magnet to allow said tool to be moved into engagement with said work piece, and whereby said feeler arm will allow said switch to close to energize said magnet to move said tool out of engagement with said work piece when said stylus is raised out of said pattern groove.

2,733,643
BOX BLANK FOLDING MACHINE
Walter P. Fergnani, Beverly, Mass., assignor to Post Machinery Company, Beverly, Mass., a corporation of Massachusetts
Application March 15, 1952, Serial No. 276,819
18 Claims. (Cl. 93—49)



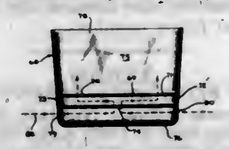
1. A box blank folding machine comprising a pair of carrier belts having opposed reaches for engaging a blank therebetween and feeding it along a predetermined path, a shaft extending across said path, means for rotating the shaft synchronously with the feeding speed of the blank, said path including a portion disposed arcuately and concentrically about said shaft, and means including a blade carried by said shaft for folding about a score line during said rotation of the shaft and passage of the blank through said arcuate portion of the path a foldable flap projecting from the blank longitudinally of said path.

2,733,644
PHOTOGRAPHIC PRINTING MACHINE
John Taini, Chicago, Ill., assignor to The C. F. Pease Company, Chicago, Ill., a corporation of Delaware
Application May 7, 1953, Serial No. 353,629
18 Claims. (Cl. 95—77.5)



1. A photographic printing machine comprising a frame, a cylinder assembly removably mounted in said frame and comprising a rotatable transparent printing cylinder and a lamp supporting assembly disposed within said cylinder and projecting beyond both ends thereof, means for supporting said cylinder and said lamp supporting assembly independently of each other comprising two pairs of rollers mounted on said frame, each pair engaging an end portion of said cylinder, and a pair of supporting plates mounted on said frame detachably engaging said lamp supporting assembly and means for mounting said supporting plates on said frame for transverse displacement away from the ends of said lamp supporting assembly whereby said lamp supporting assembly may be completely disengaged from said supporting plates to permit removal of said cylinder assembly.

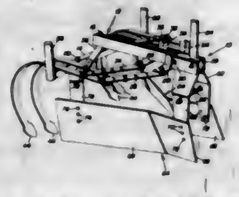
2,733,645
LIGHTPROOF TANK FOR FILM REELING APPARATUS
Benjamin Rose and Samuel Rose, New York, N. Y.
Application April 18, 1952, Serial No. 282,932
1 Claim. (Cl. 95—96)



Film treating apparatus comprising in combination a tank, a plate adapted to fit on top of the tank and form a light-tight cover therefor, means for supporting film to be processed carried by said cover plate at the underside thereof disposed within the tank in spaced relation with the walls thereof when said cover plate is in place on the tank, said tank having an imperforate bottom wall, and side walls of the tank being provided in the lower part thereof above the bottom wall with openings providing passages for liquid, said tank having means in the lower part thereof providing a light-tight path for the entrance of liquid and preventing the entrance of light along said path, said means comprising vertically spaced

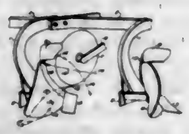
horizontal partitions in the tank above said openings in side walls of the tank, said partitions having openings therein each facing a solid part of one of the partitions, said cover plate with the film supporting means carried thereby being bodily movable as a unit in place on the tank and removable therefrom while said means forming the light-tight path for liquid, remains within the tank, and a tray adapted to hold liquid and receive said tank whereby the tank may be immersed in liqquid in the tray while light is prevented from reaching film on said film supporting means.

2,733,646
STRADDLE ROW SCRAPER AND CULTIVATOR ATTACHMENT FOR TRACTORS
Marvin J. Sheffield, Carrollton, Ga.
Application June 12, 1953, Serial No. 361,273
1 Claim. (Cl. 97—170)



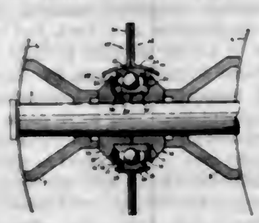
In a cultivator attachment adapted for mounting to a tractor, a main frame comprising a pair of parallel members spaced apart and extending along either side of the longitudinal center line of the cultivator, a rearward transverse frame member secured to the rear ends of the longitudinally extending frame members, a pair of substantially parallel cross members secured beneath the longitudinal frame members adjacent the forward ends of the longitudinal frame members, a pair of cultivator shovels having forwardly extending arms overlying said rearward member and supported thereby, pairs of generally parallel links pivotally connected to the ends of the cross members and to the forwardly extending arms of the cultivator shovels, stabilizing links pivotally connected adjacent their rear ends to the main frame adjacent the point where said rearward member is connected to the longitudinaly extending frame members, means connecting the opposite ends of said stabilizing links to one of the pivotal connections of said forwardly extending arms and said parallel links, a pair of scraper blades having generally parallel forward end sections and diverging rear end sections, means connecting said scraper blades in generally vertical working position to the forward and rear ends of said main frame, and posts for attaching the cultivator to a tractor located adjacent the outer ends of said rearward member and adjacent the forward ends of said longitudinal frame members.

2,733,647
PLOW ATTACHMENT
Donald J. Bauer, Norwalk, Ohio
Application June 5, 1953, Serial No. 359,862
1 Claim. (Cl. 97—211)



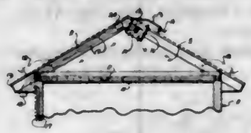
A jointer attachment for a plow moldboard for promoting complete coverage of stubble of previous crops, the attachment comprising a curved blade having a first end straight section, said first end section being positionable immediately above and co-planar with the upper forward part of the moldboard of the plow and the remainder of the blade curving across the furrow being plowed on a level with the top of the moldboard, the trailing end of said blade being at substantially right angles to the furrow being plowed and horizontal to the ground, said blade being twisted at its outer trailing tip end to divert a portion of the ground being turned to a path leading across the main portion of the turning ground and generally downwardly into the far side of the furrow being filled, said twisted tip end serving to divert stubble and old crop stalks to the bottom of the furrow being filled.

2,733,648
DISK HARROW BEARING ASSEMBLY
Everett W. Todd, Racine, Wis., assignor to Massey-Harris-Ferguson Inc., a corporation of Maryland
Application March 5, 1954, Serial No. 414,457
3 Claims. (Cl. 97—220)



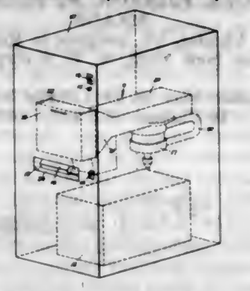
1. In a disc harrow having spaced discs and a supporting shaft therefor: a spool adapted to be positioned on the shaft for spacing adjacent discs apart, said spool being made in two sections; an inner support structure on said shaft between said spool sections having a bearing surface on its periphery and a normally extending annular flange at either side thereof; a bearing comprising inner and outer races, said inner race mounted on said bearing surface, and said outer race having a convex periphery; an outer support having an internal concave surface against which bears the convex periphery for adjustment therein and having an axially extending flange portion, said flange portion being of such width in an axial direction for substantially the upper half thereof so as to overhang the normal flanges of said inner support structure, the lower half of said flange portion being of narrower width in an axial direction, said outer structure having a portion adapted to be secured to an implement frame.

2,733,649
APPARATUS AND METHOD FOR PREVENTING ICE FORMATION UPON BUILDING ROOFS
Ralph L. Le Barron, Minneapolis, Minn.
Application April 25, 1952, Serial No. 284,409
4 Claims. (Cl. 98—1)



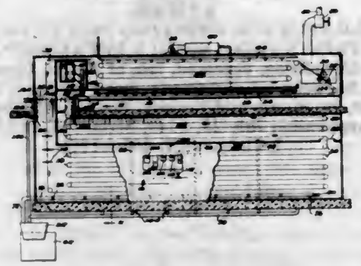
4. A method for controlling moisture and ice in and around the roof structure of a house having an attic space, which consists in electrically energizing a motor-driven blower and thereby forcibly sweeping attic air out and external air in, thermostatically interrupting electrical energy in the blowing operation in response to an outside atmospheric temperature when in the neighborhood of the freezing point of water and upwardly, and independently thermostatically interrupting the same electrical energy in the blowing operation in response to an inside air temperature when in the neighborhood of the freezing point of water and downwardly.

2,733,650
MICROWAVE COOKER CONTROLS
Louis A. Williams, Belmont, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application March 20, 1953, Serial No. 343,661
5 Claims. (Cl. 99—327)



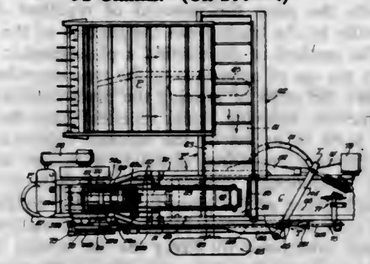
4. In combination, a heating compartment adapted to contain food to be heated, means for inserting food into the heating compartment, a pivoted support forming the floor of the heating compartment formed with a finger, a radio frequency oscillator for producing radio frequency energy and means for applying said energy to heat food in the compartment, switch means for starting the oscillator, an operating arm for said switch arranged to be moved by said finger, timing means for controlling the operating time of the oscillator, means under control of said switching means to initiate operation of said timing means, solenoid means under control of the timing means for releasing the pivoted support permitting said support to swing downward releasing the food, and counterweights on said support to return said support to the initial position when the food is removed.

2,733,651
STERILIZATION OF CANNED FOODS
Robert H. Stimpson, Pittsburgh, and James B. Anderson, Mount Lebanon Township, Allegheny County, Pa., assignors to H. J. Heinz Company, Pittsburgh, Pa., a corporation of Pennsylvania
Original application June 27, 1951, Serial No. 233,766. Divided and this application August 30, 1952, Serial No. 307,352
7 Claims. (Cl. 99—362)



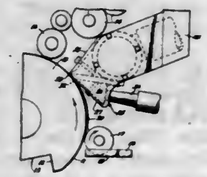
1. Apparatus for the controlled sterilization of canned foods comprising, substantially closed separate heating, sterilization and cooling chambers, separate passageways connecting said chambers, continuous conveyor means successively conveying said foods through the heating, sterilization and cooling chambers, means for supplying a controlled mixture of trichloroethylene and perchloroethylene vapors to the sterilization chamber maintaining a substantially uniform preselected temperature in said chamber, an opening between said sterilization and heating chambers intermediate the ends thereof passing the vapor mixture from the sterilization chamber to the heating chamber and filling same, means associated with said opening diverting condensate in said heating chamber away from said opening, water-cooled means in said sterilization chamber outlet and heating chamber inlet passageways maintaining controlled vapor levels therein, and separate means in the heating and sterilization chambers convey condensate away from these chambers.

2,733,652
BALER
William J. Dwyer, Battle Creek, Mich., assignor to J. I. Case Company, Racine, Wis., a corporation of Wisconsin
Application January 13, 1950, Serial No. 138,507
31 Claims. (Cl. 100—4)



1. In combination in a baler, means defining an elongated chamber, a piston reciprocably supported in said chamber for compressing crop materials and for moving the compressed materials therethrough, means for reciprocating said piston including a continuously rotating shaft, means for carrying a strand of wire across said chamber, a gate at the side of said chamber positioned to block the path of said wire carrying means at selected periods in the operation of the baler, means for holding and cutting said wire after it has been carried across said chamber, wire twisting means positioned adjacent said wire holding and cutting means for forming a bale tie, wire retaining means spaced from said holding and cutting means, a bale gauge positioned to engage the crop material being moved through said chamber, a timing means including a gear member and a cam member, a clutch for interengaging said timing means with said shaft to rotate said gear member and said cam member, means operatively connecting said clutch and said gate with said bale gauge to simultaneously effect engagement of said timing means and said shaft and to withdraw said gate from the path of said wire carrying means in response to the passage of a predetermined amount of crop materials through said chamber, means operatively connecting said timing gear to said twisting means and said holding and cutting means, means connecting said timing cam with said wire carrying means, and means interconnecting said wire retaining means and said wire carrying means.

2,733,653
DAMPENING SYSTEM AND METHOD OF USING SAME
William G. Mullen, Winchester, Mass., assignor to A. B. Dick Company, Niles, Ill., a corporation of Illinois
Application January 14, 1953, Serial No. 331,292
8 Claims. (Cl. 101—147)

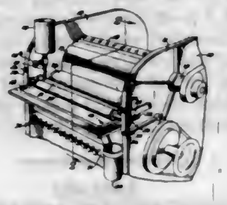


1. A dampening system for planographic printing plates mounted for movement in one direction on a support,

comprising means for applying an excess of liquid repellent over the entire surface of the plate, means closely adjacent the surface of the plate for directing a stream of air extending continuously as a blade cross wise of the plate onto the plate surface beyond the repellent applying means and at an angle with the normal from the plate which is less than zero but greater than —30° whereby repellent from the imaged portions of the plate and the excess repellent from the non-printing portions of the plate is displaced rearwardly onto the plate, and suction means having an inlet opening in parallel relation with the blade of air engaging the plate and located immediately rearwardly thereof and extending crosswise in parallel relation with the plate for removal of repellent displaced rearwardly by the blade from the surface of the plate.

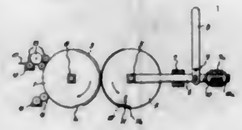
7. The method of dampening a planographic printing plate by the use of apparatus of the type described which comprises the steps of moving the plate continuously in one direction, applying liquid repellent onto the surface of the plate in excess of the amount required for use in the printing operation, directing a stream of air extending continuously crosswise of the plate as a blade onto the surface of the plate from an air nozzle having its exit opening extending continuously crosswise of the plate and positioned to direct the air stream onto the blade at an angle less than zero but greater than —30° to the normal of the plate whereby the excess repellent on the non-printing portions of the plate and repellent on the imaged portions is displaced rearwardly from the point of contact, and removing repellent displaced rearwardly onto the plate by suction means through a housing having its inlet opening co-extensive with an aligned with the exit opening of the nozzle and spaced immediately rearwardly thereof, introducing air into the nozzle for issuance under pressure from the exit opening as a continuous blade, and withdrawing air from the housing to such the excess repellent displaced rearwardly by the blade through the inlet opening into the housing for removal.

2,733,654
INKING AND REPELLENT SYSTEM FOR PLANOGRAPHIC PRINTING MACHINES
Lee R. Rogers, Chicago, Ill., assignor to A. B. Dick Company, Niles, Ill., a corporation of Illinois
Application August 14, 1952, Serial No. 304,337
6 Claims. (Cl. 101—148)



1. Apparatus for applying ink and repellent to a planographic printing plate mounted on the periphery of a horizontal rotating drum comprising a form roller mounted for rotational movement about a horizontal axis and in surface contact with the plate, means for supplying ink in uniform distribution to the form roller, means for feeding repellent to said form roller for transfer with the ink to the plate comprising a pair of repellent rollers mounted in side by side relation to form a crotch therebetween, means mounting one end of the repellent rollers at a higher level than the other to provide a gradual tilt of said repellent rollers relative to the horizontal axis of said form roller, means for feeding repellent in drops into the crotch at the higher end in excess of the amount to be transferred to the form roller whereby drops travel down the crotch during rotation of the repellent rollers, and a contacting relation between one of the repellent rollers and the form roller to transfer repellent passing through the crotch to the plate.

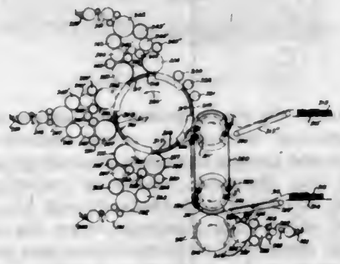
2,733,655
MICROSCOPIC PRINTING BY PLANOGRAPHIC MEANS
Albert Boni, Chester, Vt., assignor to Readex Microprint Corporation, New York, N. Y., a corporation of New York
Application May 15, 1951, Serial No. 226,505
10 Claims. (Cl. 101—149)



1. A planographic printing process for producing fine print on a sheet with the use of a rotary planographic printing plate, a parallel rotary cylinder and a resilient blanket, which comprises moistening and applying a light coating of ink repeatedly to the plate before impressing the plate against the sheet, the thickness of each ink coating being generally $1/n$ of the ultimate thickness of the composite superimposed ink layers applied to the plate, where n is the number of said ink coating applications, and then passing the sheet between the cylinder and plate, to make the printing impression on the sheet, while maintaining between the cylinder and plate a heavy pressure equal to the pressure obtained by displacing the axis of the plate toward the parallel axis of the cylinder through a distance of at least about 18 thousandths of an inch, after initial contact of the printing plate and cylinder.

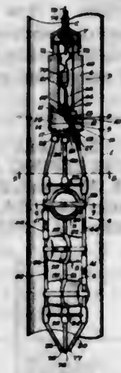
10. A microscopic reproduction of printed matter which comprises a sheet, and microscopic inked characters each applied to the sheet as a pre-formed layer of ink by coating a moistened planographic printing plate with a layer of ink and then pressing the plate against the sheet on a resilient blanket under a heavy pressure equal to the pressure obtained by displacing the plate against the blanket through a distance of at least .018", after initial contact of the plate and the blanket.

2,733,656
APPARATUS FOR PRINTING MULTICOLORED PRINTS FROM SINGLE IMPRESSIONS
Arthur Gottsching, deceased, late of Berlin, Germany, by Lois A. Hicks, administratrix, San Francisco, Calif., assignor, by mesne assignments, to Lois A. Hicks
Application July 29, 1949, Serial No. 107,546
1 Claim. (Cl. 101—175)



Apparatus for producing multi-colored prints in indeterminate quantities from not more than two impressions per print, said apparatus comprising; a revolvable printing roller having a recess in the periphery thereof, a collecting relief plate fixedly secured in the recess of the periphery of said printing roller, said collecting plate being adapted to receive impressions of a plurality of additional designs in differently colored inks, means for producing a main design for a finished product, means for producing said plurality of additional designs, an elastic offset printing roller, said offset printing roller being adapted to receive impressions of said main design for said finished print, a first pressing roller, a second pressing roller; said first and second pressing rollers being in the same printing plane as said elastic offset printing roller, an endless conveyor trained around said first and second printing rollers, a plurality of gripping attachments pivotally mounted at intervals along the runs of said conveyor; said gripping attachments being adapted to grip and retain on said conveyor a plurality of printing sheets, means for feeding successively a plurality of sheets between said pressing roller and said elastic offset printing roller and for taking off finished printing sheets from said second pressing roller, a plurality of gripping attachments on said first printing roller and on said second printing roller; each of said last mentioned attachments being pivotally mounted.

2,733,657
APPARATUS FOR FORMING PERFORATIONS IN WELLS
Charles M. Bryant and Wilbur N. Helberg, Tulsa, and Leo A. Courter and Clyde J. Cecil, Oklahoma City, Okla., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
Application June 13, 1951, Serial No. 231,364
4 Claims. (Cl. 102—20)



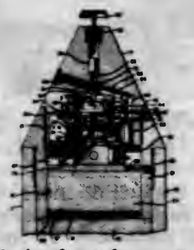
1. An apparatus for forming perforations in a well by means of a shaped detonable explosive charge comprising a housing having a cylindrical body portion adapted to contain a detonator; a removable upper closure for the upper end of the housing; a removable lower closure for the lower end of the housing, said lower closure having downwardly extending passages therethrough communicating with the interior of the housing; tubular members having their upper ends secured to the lower closure with their bores communicating with the said passages, said tubular members and passages being adapted to contain a detonating explosive fuse extending from the detonator through the passages and bores of the tubular members; a frangible container adapted to enclose a shaped detonable explosive charge having a hollowed portion on one side so as to produce a piercing explosion in a direction out of the hollowed portion, said container consisting of a receptacle for the detonable explosive charge and a cover therefor, said receptacle having a groove in the outside of the bottom thereof, said cover having a pair of similar grooves in bosses on opposite sides of the cover, said grooves being adapted to engage the tubular members; and binding means for securing in each groove one of the said tubular members.

2,733,658
EXPLOSIVE ASSEMBLY
Harry L. Moat, Wilmington, Del., assignor to Atlas Powder Company, Wilmington, Del., a corporation of Delaware
Application September 8, 1950, Serial No. 183,780
8 Claims. (Cl. 102—24)



1. An explosive assembly comprising a shell having an end wall, an explosive material in said shell, said end wall including a portion of said shell folded over so as to provide an inwardly extending tray-shaped depression in the end of said shell, a washer member overlying said folded portion exteriorly of the shell end wall, a tie member secured against displacement longitudinally of the shell and extending from inside said shell through said folded portion and said washer member, an enlarged portion on said tie member disposed exteriorly of said shell and overlying said washer member so as to prevent passage of said washer member over the end of said tie member, and a seal cast into said tray shaped depression and over said washer.

2,733,659
DELAYED ARMING FUZE FOR A PROJECTILE
Seth W. Booth, University Park, Md.
Application August 5, 1949, Serial No. 108,833
12 Claims. (Cl. 102—79)
(Granted under Title 35, U. S. Code (1952), sec. 266)

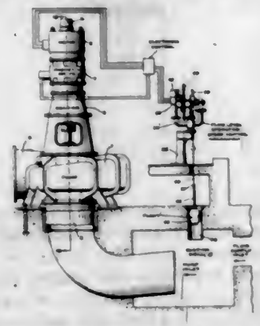


1. An arming device for a fuze comprising a rotatable casing, an arming member slideably arranged within the casing, means including a plurality of inertial balls in frictional engagement with said member for actuating the member to an armed position as the speed of rotation of the balls about the axis of rotation of the casing approaches the speed of rotation of the member, and means including a bell-crank lever pivotally mounted on said casing, and operated by said member, for maintaining the fuze in a safe condition until the member is actuated to said armed position.

2,733,660
AUTOMATIC VARIABLE SPEED CONTROL MECHANISM FOR FLUID PUMPS
Elton L. Towle, Glen Rock, and Oscar H. Dorer, East Orange, N. J., assignors to Worthington Corporation, Harrison, N. J., a corporation of Delaware
Application August 30, 1952, Serial No. 307,202
23 Claims. (Cl. 103—23)

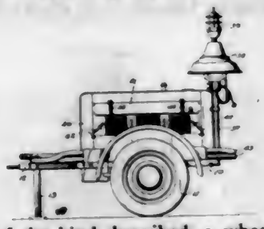
1. In an automatic variable speed control for pumping units, the combination with a centrifugal pump, a constant speed driving motor therefor, and a magnetic drive operatively connecting the motor and pump whereby ex-

citation of said magnetic drive will cause said pump to be driven at various speeds while the motor operates at constant speed, of means for controlling the speed of operation of the pump including, means for regulating the excitation of said magnetic drive, a cam for controlling operation of said regulating means, said cam having eccentric and concentric operating surfaces where-



by during predetermined periods of rotation of the cam said regulating means will be ineffective for varying the excitation of said magnetic drive and during other predetermined periods of rotation of the cam the regulating means will be effective for varying the excitation of said magnetic drive, and means for actuating said cam operated by variances in the level of the liquid to be pumped.

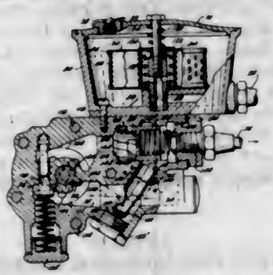
2,733,661
MOBILE POWER UNIT
William Francis Surgi, New Orleans, La.
Application March 12, 1953, Serial No. 342,004
1 Claim. (Cl. 103—23)



In a device of the kind described, a wheel supported platform and an engine base supported from said platform and spaced thereabove, an internal combustion engine mounted on said base, a generator including a casing on said internal casing engine and having a generator tail shaft extending rearwardly from the casing above the platform, a second shaft in alignment with said generator tail shaft, a pump supported on said platform and having a driving shaft extending forwardly beneath the first mentioned shaft, belt pulleys mounted on said second shaft and said driving shaft, a belt connecting said belt pulleys, an electric clutch connecting said generator tail shaft and said second shaft, said clutch being provided with a circuit connection to said generator, and a frame extending from the pump forwardly towards the generator and supporting said driving shaft.

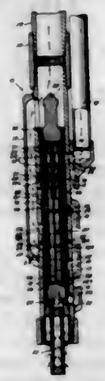
2,733,662
FLUID CIRCULATION SOURCE FOR POWER STEERING
William A. Hunter, Highland Park, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application February 12, 1952, Serial No. 271,187
14 Claims. (Cl. 103—42)

1. In a pressure fluid system including a fluid actuated device and a pump and reservoir unit, a first passage and a second fluid-filled passage in spaced relation to said first passage, rotors eccentric to one another having teeth establishing cooperation to transfer flowing through the second passage and into the first passage, a valve-controlled cross passage leading from the first passage and intersectingly crossing the second passage so as to have a portion in common with the latter, said cross passage having a control valve therefor disposed in the first passage and effective to bypass through the cross passage the flow of all fluid in the first passage in excess of a predetermined rate of flow, and a sleeve having a smaller transverse dimension than said second passage and disposed in the



cross passage so as to cross the second passage, said sleeve being open at one end to receive the stream of flow of said excess fluid and having a discharge opening in the side thereof facing said rotors and being within the confines of said second passage, said side opening having an axis forming an angle with respect to the longitudinal axis of the sleeve crossing said second passage and in a manner such that said stream of flow of excess fluid effects an acute-angled change of direction in traveling through and leaving the sleeve as incident to being discharged therefrom into the fluid of the second passage and toward the rotors.

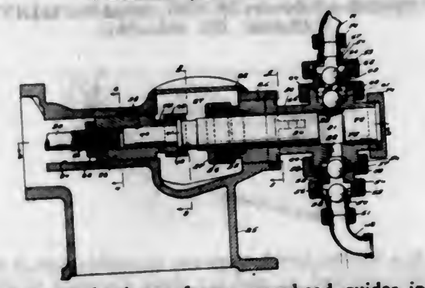
2,733,663
DEEP WELL PUMPING APPARATUS
Samuel J. E. Marshall, Dallas, Tex.
Application September 20, 1954, Serial No. 457,121
12 Claims. (Cl. 103—118)



1. In a hydraulic deep well pump, a manifold casing adapted for suspension on a string of tubing in a well and comprising a landing nipple having a power fluid inlet manifold, a well suction manifold and a discharge manifold, each having ports in communication with said landing nipple, a tubular shell slidably mounted in said landing nipple and having ports in communication with the ports of said landing nipple, annular, longitudinally spaced packing means carried by said shell in sealing engagement with the walls of said landing nipple on opposite sides of said ports, an elongate rotor rotatable in said shell, longitudinally spaced fluid actuated vane

motors carried by said rotor, longitudinally spaced fluid pumps carried by said rotor, means for introducing power fluid from the surface to said motors through said inlet manifold to actuate the same and to propel said rotor and pumps to influence upward travel of well fluid into and through the ports of said landing nipple, said pumps and into said discharge manifold to commingle with power fluid discharged by said motors in its upward course through said tubing string, means for introducing power fluid into said shell at each end of said rotor at equal pressures to suspend the same in said shell and means for injecting power fluid into said motors to extend the vanes thereof.

2,733,664
PUMP WITH FACILITIES FOR CLEANING
Royall Bartlett Saalfrank, Gulfport, Fla., assignor to Milton Roy Company, Philadelphia, Pa., a corporation of Pennsylvania
Application January 20, 1950, Serial No. 139,625
4 Claims. (Cl. 103—153)



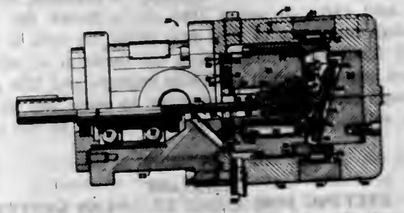
1. A pump having a frame, crosshead guides in the frame and a crosshead, reciprocal back and forth in the crosshead guides, the frame having a clear opening in one direction in line with the crosshead, in combination with a cylinder in line with the crosshead extending through the clear opening, a quick removable connection between the cylinder and the frame, a piston in the cylinder in line with the crosshead, a quick removable connection between the piston and the crosshead, the piston and cylinder being removable bodily as a unit in the direction away from the frame and the crosshead when the quick removable connection between the cylinder and the frame and the quick removable connection between the piston and the crosshead are separated.

2,733,665
HYDRAULIC TRANSMISSION WITH INWARDLY AND OUTWARDLY MOVING AND ROTATING PISTONS
Friedrich Klopp, Solingen-Wald, Germany
Application September 5, 1951, Serial No. 245,222
Claims priority, application Germany September 9, 1950
2 Claims. (Cl. 103—162)



1. In a wobbler-type fluid power device, the combination of a stationary housing having a hollow interior, said housing containing passages for the flow of the operating fluid, a rotatable drive shaft, means mounting said shaft for rotation upon said housing with an end portion of said shaft extending into said hollow interior and having a first diametral bore therethrough, a cylinder block detachably mounted upon said extended shaft portion for rotation therewith, said cylinder block having a plurality of cylinder bores in circular spaced assembly opening through one end of said block and including pistons reciprocable in said cylinder bores, said cylinder block also having a first central cavity in axial alignment with said shaft, said cylinder bores encircling said cavity, said extended shaft portion being disposed in said cavity, the peripheral side walls of said cavity closing the ends of said first diametral bore and having a close fit with said extended shaft portion, a wobbler frame, means mounting said wobbler frame for adjustable tilting motion relative to said housing, said wobbler frame carrying rotatable structure including a detachable axially disposed insert having a second diametral bore therethrough, said rotatable structure having a second central cavity opening toward said cylinder block, said insert being disposed in said second cavity, the peripheral side walls of said second cavity closing the ends of said second diametral bore and having a close fit with said insert, two plunger members, one of said plunger members being detachably mounted in each of said first and second diametral bores and being substantially longitudinally coextensive therewith, each said plunger member having a slot defining rotation drive surfaces, Cardan joint links interconnecting said pistons and said rotatable structure, and a main torque transmitting shaft having flattened end portions engaging with said drive surfaces within each said plunger member slot.

2,733,666
AXIAL PISTON PUMPS
Harry Poulos, Columbus, Ohio, assignor to The Denison Engineering Company, Columbus, Ohio, a corporation of Ohio
Application February 20, 1953, Serial No. 337,904
5 Claims. (Cl. 103—162)

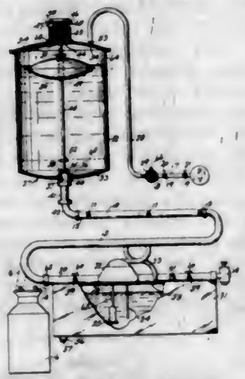


1. A fluid energy translating device comprising a casing having a chamber and a drain extending therefrom; a head with inlet and outlet ports at one end of said chamber; a valve plate disposed in engagement with said head; a cylinder barrel disposed for rotary movement within said chamber and normally in sliding engagement with said valve plate; pistons disposed for reciprocatory movement within said cylinder barrel; a cam means at the opposite end of said chamber from said head for controlling the movement of said pistons; a seal means surrounding said valve plate and yieldably engaging the valve end of said cylinder barrel; a passage to direct fluid from the region enclosed by said seal means to the cam end of said chamber; and a restricted orifice between said drain and the cam end of said chamber to resist fluid flow from the cam end of said chamber to said drain and create a back pressure, said back pressure being applied to the cam end of said cylinder barrel to urge said cylinder barrel toward said valve plate.

2,733,667
BREATHER PUMP FOR CLEANSING AND STERILIZING MILKING LINES
Henry Horace Hill, Yreka, Calif.
Application January 4, 1952, Serial No. 265,006
2 Claims. (Cl. 103—236)

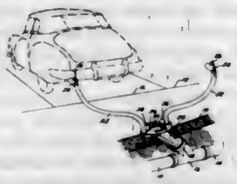
1. A breather pump comprising a tank having a head and a bottom, a passage provided in said bottom and a

pipe connection therefor, a vacuum connection and a source of sub-atmospheric pressure for said head, and an air admission valve for said head comprising a valve housing terminating at its upper end in a valve seat, and a valve head cooperative with said valve seat and having a valve rod extending substantially to the bottom of said tank, said valve rod having an upper stop member and a lower stop member, and a spring within said valve housing and cooperative with said valve head for normally maintaining said air admission valve in open position, a float slidable on said valve rod and cooperative selectively



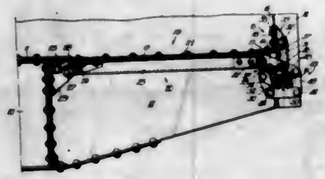
with said upper and lower stop members for seating said valve when the weight of said float is applied to the lower stop member through discharge of the contents of the tank with said valve maintained closed through the medium of the existent sub-atmospheric pressure, and opening said valve to admit free air to break the vacuum through buoyancy of said float when the tank is substantially filled with fluid through the medium of sub-atmospheric pressure when said float engages and lifts said rod through said upper stop member to open said air admission valve, for discharge of the contents of the tank.

2,733,668
FITTING FOR A GAS EXHAUST SYSTEM
Henry V. Pfetzing, Detroit, Mich., assignor to Kent-Moore Organization, Inc., Detroit, Mich., a corporation of Michigan
Application August 2, 1951, Serial No. 239,985
2 Claims. (Cl. 104—52)



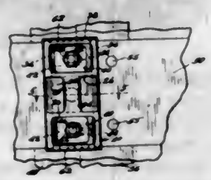
1. A floor fitting for an underground gas exhaust system for a building, said system having a branch extending from an underground conduit through an opening in the building floor, said floor fitting comprising, in combination, a funnel-shaped conduit, a floor plate having opposite ends projecting laterally oppositely away from the large end of the conduit, said plate provided with a central opening registering with the large end of said funnel-shaped conduit, a closure for said opening, said funnel-shaped conduit provided with two side branches communicating therewith and extending angularly upwardly therefrom on opposite sides thereof, said two side branches terminating in side branch openings through the floor plate which openings are disposed on opposite sides of the central opening therethrough, a closure for each side branch opening through the floor plate, a flexible hose receivable through said central opening and through said funnel-shaped conduit and the branch of the underground conduit with which it communicates for storage therein, said hose provided with a funnel-shaped intake at one end receivable through said central opening and within the funnel-shaped conduit for storage therein, that end of said flexible hose opposite to the end provided with the funnel-shaped intake being provided with an end portion receivable through either side branch opening in the floor plate and into the side branch of the funnel-shaped conduit.

2,733,669
DUMP DOOR WINDING AND LOCKING MECHANISM
George B. Dorey, Montreal, Quebec, Canada, assignor to Enterprise Railway Equipment Company, Chicago, Ill., a corporation of Illinois
Application February 15, 1951, Serial No. 211,137
2 Claims. (Cl. 105—301)



1. In a railway drop bottom car, in combination, a door pivotally mounted on said car along one edge to swing downwardly to open position, a shaft extending along the swinging edge of said door in its closed position, means on said car swingingly and rotatably mounting said shaft to move into supporting position beneath the door when the latter is closed and movable outwardly beyond the door to release the latter; a bracket having a projecting beam extension extending in the plane of the shaft when the door is in closed position; a hub on the shaft; a linkage connection between the door and hub and winding on the latter to raise the door, said connection having a terminal link structure including a pair of links straddling the beam extension and pivoted thereto; and co-operating arcuately shaped seats on the extension and shaft hub, said arcuately shaped seats being formed concentrically with respect to the axis of the pivotal connection between the terminal link and beam extension, said seat on the hub being extended to lie between the pair of terminal links and operate as a cog to maintain the linkage in fixed radial relation to the hub.

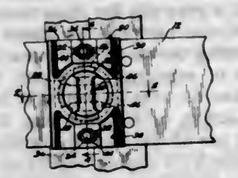
2,733,670
STRAP ANCHOR FOR FREIGHT CARS
Jay R. Sheesley, Winnetka, and John Paul Morris, Western Springs, Ill.
Application June 26, 1951, Serial No. 233,543
3 Claims. (Cl. 105—369)



3. A load securement anchor for lined railroad freight cars adapted to be permanently secured to a Z-beam vertical support and for mounting flush with the interior lining of said freight car, comprising an integral unitary

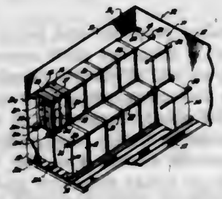
member having an overall depth substantially equal to the thickness of the car-lining material, said anchor being formed in a generally rectangular configuration for vertical mounting, and being divided longitudinally by a pair of spaced transverse rib sections into flanking panels recessed from the faced surface and an intermediate panel, said flanking panels having openings in their recessed face portion for the reception of fastening means to permanently secure said anchor to said Z-beam, and said intermediate panel having a longitudinal lash bar connected to said transverse rib sections and a shallow receding wall formation spaced around said lash bar for guiding and securing lash strips around said bar, the outer walls of said anchor being wedge-shaped to form with the car lining a sealed dust-proof fit.

2,733,671
ROTATABLE STRAP ANCHOR FOR FREIGHT CARS
Jay R. Sheesley, Winnetka, and John Paul Morris, Western Springs, Ill.
Application June 26, 1951, Serial No. 233,544
3 Claims. (Cl. 105—369)



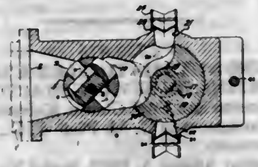
2. A mount fixture for securing lash strips to vehicle walls comprising an integral base structure having a central cylindrical bore, a ring flange portion defining the forward limit of said bore and having a reduced diameter with respect thereto, means for mounting said base structure in substantially full mortise position with respect to the wall lining in a freight car or similar vehicle, and a lashing rib having rearwardly offset arcuate segments adapted to ride rotatably within said cylindrical bore, said segments being narrower than the width of said bore so that said rib member may be extended and receded to occupy respectively utility and non-utility positions.

2,733,672
BOXED PRODUCE LOADS AND SPACING UNITS
Harold C. Pierce, Pomona, Calif.
Application December 15, 1951, Serial No. 261,816
21 Claims. (Cl. 105—369)



1. A box car load comprising boxes arranged in stacked rows extending longitudinally and transversely in a car, and horizontally elongated spacer members extending across the load between adjacent transverse box rows and engaging and spacing apart opposed upper and lower edge portions of corresponding boxes in said rows, the individual members extending along substantially the entire transverse extents of said transverse rows and having spacing thicknesses longitudinally of the car which are small as compared with the box dimensions to space the box edge portions apart correspondingly small distances.

2,733,673
PRODUCTION OF FORMED MASSES OF PLASTIC MATERIAL
Clarence W. Vogt, Norwalk, Conn.
Application August 16, 1949, Serial No. 110,635
11 Claims. (Cl. 107—54)



5. In the method of producing a formed mass of plastic material from a stream of confined plastic material fed continuously under relatively low pressure, said method comprising measuring successive quantities of material from said stream while confining the same and maintaining the continuous advancement thereof under pressure, subjecting said successive quantities of material to increased pressure, and directing said successive quantities into separate paths.

2,733,674
BUTTONHOLE ATTACHMENT FOR SEWING MACHINES
Nils T. Almquist, New Britain, Conn., assignor of fifty per cent to Raymond Engineering Laboratory, Inc., Middletown, Conn., a corporation of Connecticut
Application June 25, 1954, Serial No. 439,421
19 Claims. (Cl. 112—77)



1. In a buttonhole attachment for sewing machines having a support, a feed blade, means mounting said blade on said support for longitudinal and oscillating movement, and a rotatable drive member on the support for moving the feed blade, a first guide member adjustably carried by the blade and having a plurality of first tracks of different shapes selectively engageable with said drive member to determine one end of a buttonhole to be formed, and a second guide member adjustably carried by the first guide member and having a plurality of second tracks of different lengths selectively registrable with said first tracks to determined the other end of the buttonhole.

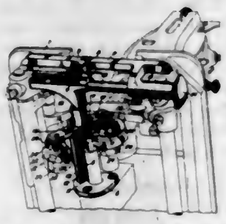
2,733,675
LOOPER AND CARRIER THEREFOR
Bernard N. Pierce, West Hartford, Conn., assignor to The Merrow Machine Company, Hartford, Conn., a corporation of Connecticut
Application June 23, 1952, Serial No. 295,036
15 Claims. (Cl. 112—162)



5. In a sewing machine, the combination of a looper carrier having a bore forming a socket, said bore having

an inwardly tapered rim, a looper having a shank for insertion in said socket, an annular tapered shoulder on said shank for engaging said rim of said bore, and means on said carrier for clamping the shank of the looper in said socket and simultaneously drawing the shank inwardly of said bore to seat said shoulder on said rim.

2,733,676
DEVICE FOR AUTOMATICALLY EXCHANGING BOBBINS ON SEWING MACHINES
Herbert Schumann and Emil Clauss, Kaiserslautern (Pfalz), Germany, assignors to G. M. Pfaff A. G., Kaiserslautern (Pfalz), Germany
Application August 6, 1952, Serial No. 302,895
8 Claims. (Cl. 112—180)



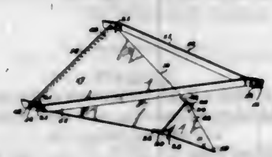
1. A sewing machine comprising a loop-taker, a first shuttle having a bobbin mounted therein arranged adjacent said loop-taker, a second shuttle having a bobbin mounted therein, and means for automatically removing said first shuttle from said loop-taker and replacing it with said second shuttle, said automatic removing means comprising a shaft rotatably mounted on the machine, a carrier arm mounted on said shaft for rotation therewith and arranged for longitudinal movement thereof, gripping claws mounted on each end of said arm, and dual purpose means for rotating said shaft and said arm and for actuating said arm longitudinally of said shaft, said claws upon movement of said arm longitudinally of said shaft gripping said first and second shuttles and upon rotation with said shaft removing said first shuttle from said loop-taker and placing said second shuttle in said loop-taker.

2,733,677
SEWING MACHINES
Ivan Thorinius Sjögren, Uddevalla, Sweden
Application February 13, 1953, Serial No. 336,789
7 Claims. (Cl. 112—220)



1. An improvement in sewing machines comprising a substantially V-shaped frame, a rod slidably and rotatably extending along one branch of said frame, driven means mounted in the free end of said frame branch connected to and imparting a combined reciprocating axial and a rotationally rocking movement to said rod, a second rod slidably and rotatably extending along the other branch of said frame, means connecting the ends of said rods at the apex of said frame and capable of imparting a combined reciprocating axial and a rotationally rocking movement to said second rod upon and corresponding to the movement of said first rod, a plurality of thread pickers mounted on and extending laterally of the free end of said second rod, a cloth feeding element reciprocally mounted in the free end of said second mentioned branch, means connecting said second mentioned rod to said cloth feeding element for reciprocating the same, a needle rod reciprocally mounted through the free end of said first mentioned branch, a cloth feeder pivotally mounted through the free end of said first mentioned branch for cooperating with said cloth feeding element and means for operating said needle rod and cloth feeder being operatively connected to said driven means.

2,733,678
PIVOTED FLUKE ANCHOR
John M. Childs, Dade City, Fla.
Application November 30, 1953, Serial No. 395,143
3 Claims. (Cl. 114—208)



2. An anchor of the class described including a supporting frame, a generally flat fluke having a rear section and a front section pivotally connected to the rear section and extending outwardly from one end thereof, said sections being of substantial area and the front section of less area than the rear section, said front section constituting the leading or forward edge of the fluke, and stop means on one of said sections for limiting the pivotal movement of the front section relative to the rear section, said stop means including vertically spaced members positioned on opposite sides of the fluke and extending into the path of movement of one of the sections, said front section and said stop means thereby coacting to provide an additional digging angle for said front section.

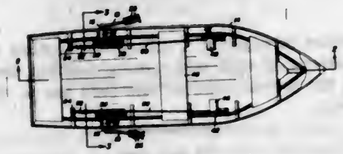
2,733,679
PROPELLER AND PUMP ASSEMBLY
Harvey E. Winkelman, Cleveland Heights, and Harvey E. Winkelman, Jr., Cincinnati, Ohio; said Harvey E. Winkelman, Jr., assignor to said Harvey E. Winkelman
Application July 29, 1952, Serial No. 301,566
14 Claims. (Cl. 115—.5)



1. A submersible propeller and pump assembly comprising a support, a propeller shaft mounted in said support and having an end projecting therefrom, a propeller mounted on the projecting end of said shaft, and a pump supported on said shaft rearwardly of and downstream with respect to said propeller, said pump having a rotor detachablly connected to said propeller shaft rearwardly of said propeller to rotate therewith and a pump casing in which said rotor is journaled, said casing and rotor being supported solely by said propeller shaft and being detachable as a unit from said shaft.

2,733,680
BOAT PROPULSION MEANS
James E. Wagner, Shawnee, Okla.
Application March 12, 1952, Serial No. 276,119
2 Claims. (Cl. 115—25)

1. In a boat propelling device, the combination of a bearing block adapted to be attached to the gunwale of a boat, an angulated arm journaled for forward and rearward oscillatory movement in said block and extending downwardly therefrom, a hinge pin provided on the lower portion of said arm in parallel rearwardly offset relation thereto, a pair of paddles mounted on said hinge pin and swingable from a substantially juxtaposed position rearwardly of the arm to a substantially co-planar position at the opposite sides of the arm, a stop member on said arm curving downwardly and rearwardly between said paddles



and limiting swinging of said paddles into juxtaposed position, transverse stop pins on the rear of said arm for limiting the swinging movement of said paddles and establishing their coplanar relation, and means for oscillating said arm operatively connected to said arm, said hinge pin including an elongated rod having angulated end portions, said end portions being secured directly to said arm and confining said paddles on said hinge pin.

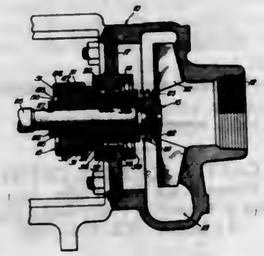
2,733,681
CAP ALARM DEVICE
Paul J. Showstack, Mattapan, Mass.
Application February 15, 1954, Serial No. 410,212
2 Claims. (Cl. 116—105)



1. A fire alarm signal comprising a pair of arms, spring means pivoting said arms about a common axis transverse to the lengthwise position of the arms in a position to urge the arms at one end toward one another, the other end of one of the arms extending beyond the adjacent end of the other arm, providing means for mounting the fire alarm signal, a fusible wire maintaining said arms apart at said one end and an explosive cap mounted on the arm at said one end whereby when the fusible wire melts the arms will be impelled to contact one another to explode said cap.

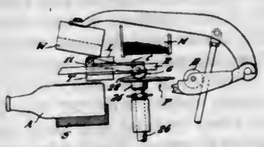
2,733,682
PUMP SHAFT INDEXING MEANS
Richard Russell Langteau, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a corporation of Illinois
Application March 20, 1952, Serial No. 277,674
1 Claim. (Cl. 116—124)

In a fluid seal for a rotary shaft member of a fluid pump or the like providing a casing having an opening through which the shaft member projects into the casing, and wherein the shaft member has an abutment at its end in the casing and the casing includes a threaded tubular member projecting externally of the casing co-axially of the casing opening, the shaft seal including a pair of laterally abutting seal ring elements about the shaft member, a compression spring encircling the shaft member between said abutment of the shaft member and one seal ring element, the spring biasing said one seal ring element to lateral abutment with the other seal ring element, and adjustable means including a cap element threadedly engaged on said threaded tubular member, for retaining said other seal ring element in lateral abutment with said one seal ring element and serving through threading up of the cap element on the tubular member to a determined position thereon, to position the laterally abutting seal ring elements longitudinally of the shaft member such that said compression spring then is compressed to the extent required for maximum sealing



effectiveness of said laterally abutting seal ring elements, that improvement therein which comprises spring-compression indexing means comprising a reference surface on the cap element, and in index groove in a peripheral surface portion of the shaft member and so located therein that said cap reference surface will be in registry with said index groove upon threading up of the cap element to said determined position on the tubular member, thereby to provide visual indication of the attainment of said required extent of compression of said spring.

2,733,683
TRANSFER ROLLER AND PICKING UNIT FOR LABELING MACHINE
Carl Holm, Worcester, Mass., assignor to Geo. J. Meyer Manufacturing Co., Cudahy, Wis., a corporation of Wisconsin
Application May 20, 1952, Serial No. 288,876
11 Claims. (Cl. 118—236)

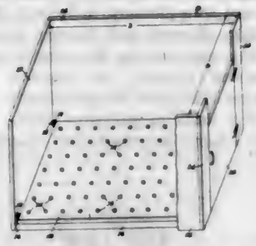


1. A labeling machine having a picker provided with a label-receiving surface, means for moving the picker in a path perpendicular to said label-receiving surface, a gum-applying roll for applying gum to said surface, means for moving the roll along said surface of the picker, and means, including a part rigidly connected to the movable picker and a part which moves with the gum-applying roll, so constructed and arranged as to keep the axis of the roll at the same accurately predetermined distance from the label-receiving surface of the picker during the spreading of the gum.

2,733,684
URINE TEST SAMPLE COLLECTING MEANS
Sidney C. Trenchard, Audubon, N. J.
Application August 12, 1953, Serial No. 373,842
5 Claims. (Cl. 119—28)

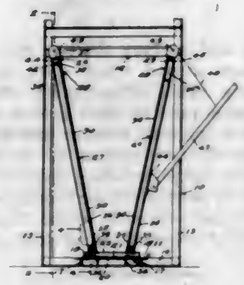
1. In a stall having a floor and side walls, a relatively thin sheet formed from fluid-resistant, flexible resilient material having wells for accumulating liquid substan-

tially completely overlying said floor, said sheet having approximately the dimensions of the area enclosed by the



walls of the stall, and means for securing said sheet in said stall.

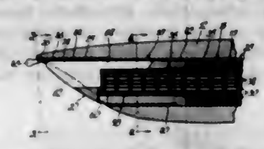
2,733,685
CATTLE SQUEEZE CHUTE
James P. La Rue, Parks, Ariz.
Application February 6, 1953, Serial No. 335,496
3 Claims. (Cl. 119—98)



1. In a cattle squeeze chute, an elongated upright frame structure having open sides and ends and including a floor extending from end-to-end thereof, a pair of laterally spaced frame sides each extending substantially from end-to-end of the frame structure, said frame sides being mounted to fulcrum on the floor about substantially parallel axes disposed longitudinally of the frame structure for lateral swinging movement of said frame sides toward and away from one another, at least one of said frame sides including a substantially arch shaped frame and a plurality of longitudinally spaced drop bars extending substantially in the plane of said arch shaped frame, longitudinally extending means adjacent the floor swingably mounting the lower ends of said drop bars in the arch shaped frame, and means detachably latching the upper ends of the drop bars of said frame side individually to the upper portion of said arch shaped frame whereby the drop bars may be individually unlatched and swung outwardly and downwardly to open positions for partially or fully opening the arch shaped frame substantially from top to bottom thereof.

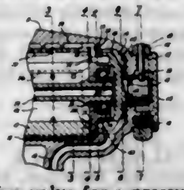
2,733,686
FOUNTAIN PEN
Ray Alfred Lawton, Milton Junction, Wis., assignor to The Parker Pen Company, Janesville, Wis., a corporation of Wisconsin
Application February 28, 1952, Serial No. 273,855
7 Claims. (Cl. 120—50)

1. A fountain pen comprising a pen body having a reservoir section and a feed section forwardly of the reservoir section, a reservoir element in said reservoir section with a reduced feed portion extending into said feed section having forwardly opening capillary passages therein, a writing element in said feed section, and a feed bar in said feed section having a rearwardly opening recess, said feed portion extending into said recess and abutting the forward end wall thereof, said feed bar having a capillary filling and feed passage therein in capillary ink feeding relation with the forwardly opening passages in



said portion throughout a substantial portion of the end of the latter and with said writing element, and opening through the forward end of said feed bar to the exterior of the pen.

2,733,687
REVERSING VALVE
Paul E. Schmid, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a corporation of Texas
Application October 27, 1954, Serial No. 464,927
5 Claims. (Cl. 121—34)

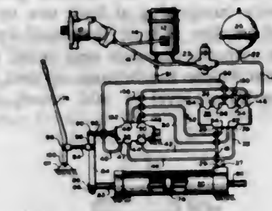


1. In a reversing valve for a pressure fluid actuated rotary tool including a rotor and a rotor end plate within said casing, two angularly spaced passages through said end plate and an exhaust passageway opening through the rear face of said plate, an inlet chamber within said casing adjacent said plate, means for admitting pressure fluid into said chamber, a dome like valve rotatable in said chamber to two positions, a front annular surface on said valve seated against the rear face of said plate to normally seal said passages and passageway from each other, an inlet port through said valve leading from said chamber to said front surface capable of individual registry with said passages upon rotation of said valve to said two positions, means within said valve affording a path of communication between said exhaust passageway and one of said passages out of registry with said inlet port in either position of said valve, a pressure surface on said valve subjected to fluid pressure within said chamber for seating its annular front surface against the rear face of said plate, a shank extending from said valve through one end of said casing, a cover plate over one end of said shank fixed to said casing, a cylindrical bearing on said casing adjacent said shank, and a ring-like handle rotatable on said bearing fixed to said shank for rotating said valve to said positions.

2,733,688
CONSTANT GAIN HYDRAULIC POWER CONTROL SYSTEM
Benjamin W. Badenoch, Los Angeles, Calif., assignor to Vickers Incorporated, Detroit, Mich., a corporation of Michigan
Application January 18, 1954, Serial No. 404,535
10 Claims. (Cl. 121—41)

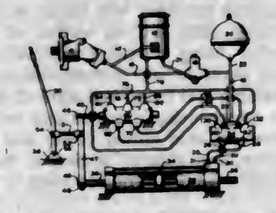
1. A hydraulic servo control system comprising a reversible fluid motor for driving a load device, means forming a substantially constant pressure fluid source connected to said motor for driving the same, a servo valve for controlling the direction of operation of the motor and linked thereto to provide a follow-up action, said servo valve having a range of operation providing a variable throttle through which flow from the motor must pass, a second variable throttle through which flow

to the motor must pass, and operating means for the second throttle responsive to the pressures ahead of and beyond the servo throttle to maintain a substantially



constant pressure drop across the servo valve throttle for every opening thereof and thereby maintaining the gain of said servo valve constant.

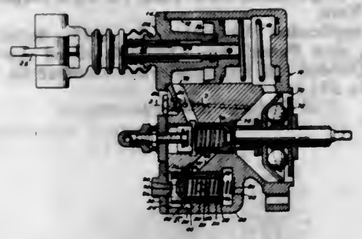
2,733,689
CONSTANT GAIN HYDRAULIC POWER CONTROL SYSTEM
Benjamin W. Badenoch, Los Angeles, Calif., assignor to Vickers Incorporated, Detroit, Mich., a corporation of Michigan
Application January 18, 1954, Serial No. 404,536
8 Claims. (Cl. 121—41)



1. A hydraulic servo control system comprising a fluid motor for driving a load device, means forming a substantially constant pressure fluid source for driving the motor, a servo valve for controlling the directional operation of the motor and linked thereto to provide a follow-up action, said servo valve having ranges of operation providing a variable throttle through which all motor return flow must pass, a second variable throttle through which all motor return flow must pass ahead of the servo valve controlled throttle, said second throttle being responsive to the pressures ahead of and beyond the servo valve controlled throttle to maintain a constant pressure drop thereacross for every opening of the latter throttle, and operating means for the second throttle responsive to the pressure ahead of and beyond the servo valve throttle to cause the second throttle to maintain a constant pressure drop across the servo valve throttle for every opening thereof independently of load pressure variations and thereby maintain the gain of the servo valve constant.

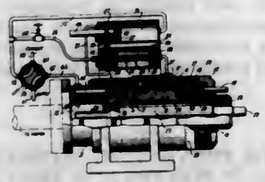
2,733,690
HYDRAULIC GOVERNOR AND PRESSURE REGULATING VALVE STRUCTURE
Herman G. Adler, Detroit, Mich., assignor to Novi Equipment Company, Novi, Mich., a corporation of Michigan
Application October 30, 1952, Serial No. 317,707
4 Claims. (Cl. 121—43)

1. A hydraulic motor adapted to be connected to the throttle of an engine, a source of hydraulic fluid under variable pressure, passage means connecting said source to said motor, a speed responsive device adapted to be operatively connected to the engine including a valve for controlling the flow of hydraulic fluid between said source and said motor, a pressure regulating valve intermediate said source and the valve of said speed responsive device effective to open said passage means, when said source is inoperative, to regulate the pressure of hydraulic fluid supplied to the valve of said speed responsive device during operation of the engine at a predetermined substantially uniform regulated pressure and to provide for substantially unrestricted flow of hydraulic fluid to the valve of said speed responsive device upon initial supply of hydraulic fluid under pressure until pressure between said source and said pressure regulating valve exceeds said predetermined regulated pressure by a substantial amount, said pressure regulating valve comprising a cylinder, a piston valve slidable longitudinally in said cylinder, means closing one end of said cylinder, an abutment at the closed end of said cylinder engageable by said piston valve, a spring urging said valve toward the closed end of said cylinder, said cylinder and piston valve comprising a pressure regulating valve port adapted to be substantially fully open when said piston valve is in engage-



ment with said abutment, said abutment and the adjacent end of said piston valve having accurately fitted engaging surfaces of substantial area but substantially less area than the entire projected end area of said piston valve, a passage connecting the space between the closed end of said cylinder and the adjacent end of said piston valve to the passage means intermediate said pressure regulating valve and the valve of said speed responsive device to initiate closing movement of said piston valve following starting said engine only after fluid applied to the valve of said speed regulating device has exceeded the predetermined regulated pressure by a definite substantial amount, the accurately fitted abutment engaging surface at the end of said piston valve adjacent the closed end of said cylinder being located centrally thereof, and the surrounding area thereof being exposed to hydraulic fluid when said piston valve is engaged with said abutment.

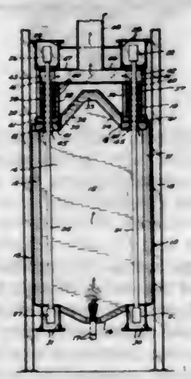
2,733,691
FEED CONTROL MECHANISM
Clarence Johnson, South Euclid, Ohio, assignor, by mesne assignments, to The Hartford Special Machinery Company, Hartford, Conn., a corporation of Connecticut
Application May 12, 1950, Serial No. 161,711
17 Claims. (Cl. 121—45)



1. A power feed mechanism comprising, in combination, a power cylinder, a power piston reciprocably received within said cylinder, means for feeding said power piston comprising a feed cylinder, means connecting one end of said feed cylinder in free communication with the forward face of said power piston, a restricted passage

means opening into the other end of said feed cylinder, two pistons received in said feed cylinder and adapted to reciprocate relative to each other, means connecting the space between said two pistons and the space at the rear end of said power piston selectively to pressure fluid supply and to exhaust, one of said spaces being connected to exhaust while the other space is connected to fluid supply, a liquid filling the space between the forward end of said power piston and one of said two pistons, a liquid filling the space between the other of said two pistons and the adjacent end of said feed cylinder, and means supplying liquid through said restricted passage means to said feed cylinder when the space between said two pistons is connected to pressure fluid supply.

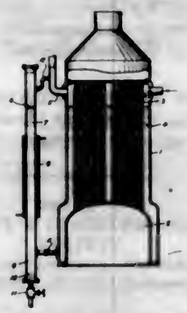
2,733,692
OIL HEATER
Tracy H. Sherman, South Nyack, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a corporation of New York
Original application December 1, 1945, Serial No. 632,159, now Patent No. 2,592,608, dated April 15, 1952. Divided and this application October 12, 1951, Serial No. 251,046
12 Claims. (Cl. 122—356)



1. In a furnace for heating fluids, a furnace chamber having a gas outlet opening, a plurality of generally vertically extending tubular members disposed in said chamber, means forming around the members of said plurality of tubular members, gas passages equal in number to said members, one passage for each member and each passage extending axially around a portion of said member, each said gas passage being in communication with the furnace chamber through a gas inlet and with the chamber gas outlet opening, through a gas outlet, said passage gas inlet and outlet being at opposite ends of the passage, the passage being contiguous to said tubular member and providing a confined flow path through which gases pass from the furnace chamber to the chamber gas outlet, and means for producing a stream of products of combustion which flows mainly in radiant heat exchange relationship with the portion of a tubular member outside said gas passage prior to entering said passage.

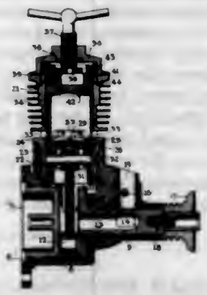
2,733,693
METHOD FOR PREVENTING SEDIMENT FORMATION IN BOILERS AND THE LIKE
Carl John Fredrik Johnsson, Molndal, Sweden, assignor to Svenska Oljeslageri Aktiebolaget, Goteborg, Sweden
Application January 29, 1952, Serial No. 268,753
Claims priority, application Sweden February 1, 1951
2 Claims. (Cl. 122—397)

1. In an apparatus comprising at least one closed vessel partly filled with a liquid provided with means for heating said liquid to and maintaining it in a state of violent boiling and also provided with a vapor outlet therein above the level of said liquid, a device for removing from said liquid undesirable suspended matter having a specific gravity higher than the specific gravity of the liquid, said device comprising at least one straight vertical chamber of smaller volume than said vessel and in communication with the liquid in said vessel and extending from a point below the bottom of said vessel to a point above the liquid level in said vessel, the bottom



portion of said straight vertical chamber forming a heavy matter settling trap provided with heavy matter discharge means, an intermediate settling section of said straight vertical chamber being provided with auxiliary means for heating the liquid in said intermediate settling section to, and maintaining said liquid in a state of, gentle boiling, said auxiliary means being disposed just below the common liquid level in said closed vessel and said straight vertical chamber, and a vapor section at the top of said straight vertical chamber provided with a vapor outlet therefor.

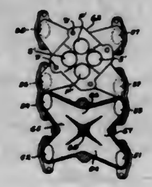
2,733,694
MINIATURE COMBUSTION-IGNITION ENGINE HAVING MEANS FOR VARYING THE COMPRESSION RATIO
Charles Brebeck, Herkimer, N. Y.
Application September 8, 1953, Serial No. 378,736
1 Claim. (Cl. 123—48)



The combination of a miniature internal combustion engine having an open ended cylinder; a contra-piston making a close working fit in the bore of said cylinder and closing said open end, said contra-piston being recessed in its outer face and having marginal stop means which engage the outer end of the cylinder to limit inward motion of the contra-piston; supporting means carried by said cylinder and including a thrust member adjustable in the direction of the cylinder axis toward and from the contra-piston; and a spider-shaped spring overlying said recess, engaged at its center by said thrust

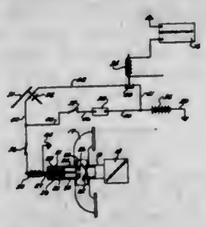
member and having at least three substantially radial spring-arms which engage said contra-piston at points approximately uniformly spaced around the periphery thereof.

2,733,695
TWO-STAGE MANIFOLD AND CARBURETOR
Lawrence M. Goodridge, Clayton, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a corporation of Delaware
Application February 21, 1955, Serial No. 489,711
7 Claims. (Cl. 123—52)



1. The combination of an internal combustion piston engine of the type having cylinder intake ports arranged in parallel rows and a fuel induction system for said engine comprising star-shaped manifolds each having a plurality of outlets for connection with a group of adjacent engine intake ports located at the outer periphery of said star, and inlets for said manifolds centrally arranged with, and corresponding in number to, said outlets, each of said inlets being so disposed radially with respect to said outlets that each outlet is directly opposite two adjacent inlets.

2,733,696
INTERNAL-COMBUSTION ENGINES AND INDUCTION SYSTEMS THEREFOR
Albert P. Schneider, Milwaukee, Wis.
Application August 6, 1951, Serial No. 243,845
15 Claims. (Cl. 123—97)



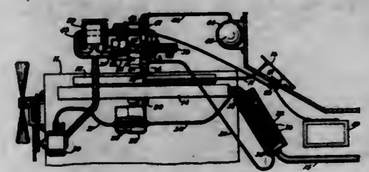
1. In an internal combustion engine a carburetor having a predetermined volumetric capacity and having an inlet passageway formed with a valve seat; an intake manifold with which said inlet passageway normally communicates, said manifold being provided with an atmospheric vent having a volumetric capacity substantially as great as that of said carburetor; a valve seal for said vent; a valve stem carrying a valve head reciprocatably mounted relative to said carburetor inlet passageway and to said vent in a manner to normally close said vent, said valve stem being movable to an alternative position wherein the head closes said inlet passageway and opens said vent; a normally released accelerator connected to said carburetor; and valve actuating mechanism connected to said accelerator and to said valve means and automatically responsive to a predetermined speed of the engine when the accelerator is in normal released position for moving said valve means to said alternative position.

2,733,697
CARBURETOR AIR DRYER
George F. Downs, Jr., Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application December 30, 1954, Serial No. 478,681
13 Claims. (Cl. 123—119)



1. In combination, a gas engine having a carburetor provided with an air-intake, and means in said air-intake for dehydrating the incoming air.

2,733,698
CARBURATION SYSTEM FOR INTERNAL-COMBUSTION ENGINES
Robert H. Voigt, Milford, Mich.
Application September 24, 1954, Serial No. 458,077
3 Claims. (Cl. 123—127)

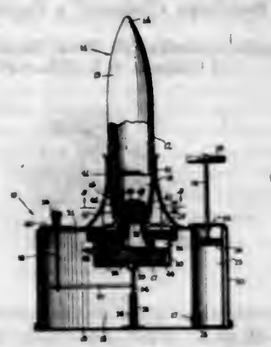


1. In an internal combustion engine, a fuel intake manifold, an exhaust conduit, an air intake conduit, a heat exchanger in heat-receiving relation to said exhaust conduit, a first carburetor connected between said fuel intake manifold and air intake conduit, a second carburetor connected between said air intake conduit and said heat exchanger, a fuel supply conduit connected between said heat exchanger and said fuel intake manifold, heat-responsive valve means in said fuel intake manifold arranged to disconnect said first carburetor from said fuel intake manifold responsive to a predetermined rise in temperature of the fuel in said fuel supply conduit, an auxiliary source of readily combustible fuel, conduit means connecting said auxiliary source to said fuel intake manifold, throttle means operatively connected to said fuel intake manifold, and normally closed valve means in said last-named conduit means controlled by said throttle means, said last-named valve means being opened when said throttle means is operated to a substantially fully open position.

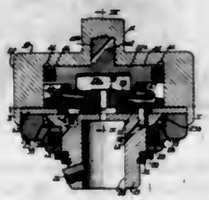
2,733,699
ROCKET TOY
Benjamin Krinsky, Waterbury, Conn.
Application November 6, 1952, Serial No. 319,010
11 Claims. (Cl. 124—13)

1. In a rocket toy, a launching device comprising an air-pressure chamber having an orifice; a toy rocket comprising an elongate body; means removably mounting said rocket body on the exterior of the launching device with a substantial portion projecting therefrom, said body having an end portion communicating with the pressure chamber in a position for compressed air from the orifice to impinge on the body; manually operable means for introducing compressed air into said pressure chamber;

and manually operable valve means for closing and opening said orifice at will whereby compressed air from the chamber may be discharged against the said rocket body to cause flight thereof through the air.



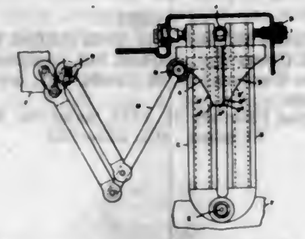
2,733,700
DRESSING MECHANISM
Stanford P. Bruce, Detroit, Mich., assignor to Wheel Trueing Tool Company, Detroit, Mich., a corporation of Michigan
Application July 17, 1951, Serial No. 237,143
12 Claims. (Cl. 125—11)



1. A dressing mechanism comprising a casing, a tool holder rotatably supported within said casing, said tool holder having a recess therein for receiving a dressing tool, means in said casing for admitting fluid under pressure into said casing, a piston disposed within said casing and reciprocable in response to the pressure of the fluid introduced therein, pivotal means operatively disposed within said casing to engage said piston during movement of said piston in one direction and mounted to pivot first in one angular direction and then in the opposite angular direction, means interconnecting said pivotal means and said tool holder to rotate incrementally said tool holder upon continued movement of said piston in said one direction and during pivotal movement of said pivotal means in said opposite angular direction, and means in said casing for limiting the rotation of said tool holder to a predetermined arc in said opposite angular direction.

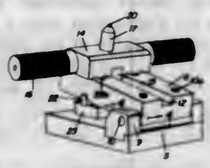
2,733,701
ADJUSTABLE PATTERN FOR TRIMMING MECHANISMS
Samuel G. Brady, Royal Oak, Mich., assignor to The Gear Grinding Machine Company, Detroit, Mich., a corporation of Michigan
Application January 16, 1953, Serial No. 331,537
2 Claims. (Cl. 125—11)

1. In a trimming mechanism for form grinders designed to fashion the contour of repetitive peripheral projecting portions of a rotary work member and including a pantograph, a cutter actuated thereby, a pattern for guiding said pantograph and a common frame on which said pantograph and pattern are mounted; a pair of separate members forming complementary opposite side portions of said pattern and a pair of members pivotally attached to each other and to said frame in a plane centrally between and at a point spaced from said



complementary members and on which the latter are directly mounted to be adjustable therewith towards or from each other while each maintains a constant distance from an angular relation to the axis of the pivot.

2,733,702
ANGLE WHEEL DRESSER
John H. Barrett, Hudson, Mass.
Application June 1, 1953, Serial No. 358,681
2 Claims. (Cl. 125—11)



1. An angle grinding wheel dressing tool comprising a flat base, a pair of bearing blocks on the base, a sine plate positioned above the base, a pivot fixed to the sine plate adjacent the rear end of the latter and rockably supported in said bearing blocks, said sine plate, being swingable vertically and resting at its front end on a gauge block placed on the base, a tool mounting slidably mounted on the sine plate, a locking pin slidably carried by at least one of the bearing blocks and peripherally engaging the pivot, and pressure means engaging and binding the locking pin with the pivot to lock the sine plate in angularly adjusted position.

2,733,703
HAND TOOLS FOR SCORING AND BREAKING TILE AND THE LIKE
John V. Fitzgerald, Metuchen, N. J.
Application November 29, 1954, Serial No. 471,747
7 Claims. (Cl. 125—23)



1. A hand tool for scoring and breaking tile and the like comprising, means for scoring said tile, a rigid C clamp having an opening slightly greater than the thickness of the tile to be broken, a first side of the opening having two tapered grooves to provide lines of contact with the tile, said two grooves symmetrically spaced on each side of the plane of said C clamp and in a line perpendicular to the plane of said C clamp, said two grooves extending inward from the extremities

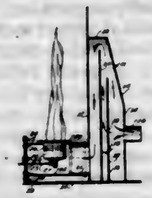
of an arch whose concave surface is inward with respect to the C clamp, a second side of the opening of the C clamp having a single point of contact with the tile, and means on said C clamp for rotating said C clamp with respect to the tile to be broken in the plane of said C clamp whereby when said C clamp engages a scored tile so that said two points of contact engage the scored tile symmetrically about the scoring and said C clamp is rotated by said rotating means the tile is broken at the location of the scoring on the tile.

2,733,704
FORCED AIR FLOW COMBUSTION HEATER FOR SPACE HEATING
Harry L. Giwosky, Wichita, Kans., assignor to The Coleman Company, Inc., Wichita, Kans., a corporation of Kansas
Application May 1, 1952, Serial No. 285,470
3 Claims. (Cl. 126—110)



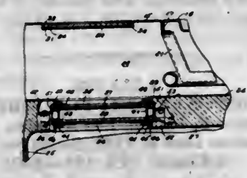
1. In combination with a wall heater having a stack adapted to extend upwardly between the panels of a room wall, said heater having a casing providing a heated air discharge outlet adjacent the upper end thereof, a blower unit having a motor-driven impeller spaced from said heater and being equipped with a discharge nozzle adjacent said outlet and directed downwardly and outwardly relative thereto for discharging a curtain of air thereacross, said blower unit being provided with an inlet spaced from said impeller and being adapted to communicate directly with a room interior, said inlet and said impeller being arranged with respect to each other so that air drawn through the inlet by the impeller flows through the space between the impeller and said heater.

2,733,705
OPEN FLAME HEATING UNIT WITH COMBUSTION AIR PREHEATING MEANS
Charles E. Goulding, Sr., Tampa, Fla.
Application May 15, 1953, Serial No. 355,335
1 Claim. (Cl. 126—127)



An open flame heating unit comprising a horizontally disposed base, a hollow housing mounted on said base and including an air inlet pipe spaced above said base, said housing further including a top wall arranged in spaced parallel relation above said base, a first and second end wall arranged in spaced parallel relation with respect to each other, a vertically disposed plate positioned in said housing and provided with a plurality of spaced openings, a baffle arranged in spaced parallel relation with respect to said plate and being of greater height than said plate, the tops of said baffle and plate being spaced below the top wall of said housing, said air inlet pipe extending from said first end wall at a level below the top of said plate, an air outlet pipe extending from the lower end of said second end wall and being of greater diameter than said air inlet pipe, a casing snugly engaging said outlet pipe, and a burner positioned in said casing and adapted to receive pre-heated air from said outlet pipe, said burner having its upper end open whereby an open flame may be produced above the burner and contiguous to the second end wall to heat said wall whereby the air passing through the housing to the burner is preheated, said burner being arranged contiguous to the end of said outlet pipe.

2,733,706
COOKING RANGE
Arthur G. Feder, Detroit, Mich., assignor to Welbilt Corporation, a corporation of Michigan
Application February 11, 1952, Serial No. 270,915
1 Claim. (Cl. 126—200)

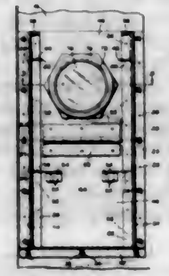


A stove having a flat, elongated horizontal top stove wall providing a working surface, said wall having burner openings at opposite ends, a second flat horizontal wall spaced substantially beneath said top wall and defining a burner compartment therewith, burners in the ends of said compartment beneath said burner openings, an oven in said stove extending from one end thereof beneath the burners thereat to a point intermediate said burner openings, said oven having a top wall spaced downwardly from said second wall, insulation between said top oven wall and said second wall, said top oven wall and said second wall having elongated registering openings therein extending substantially from front to rear of said stove and located between said burners, a double glazed horizontal insulating window in the space provided by said two openings including sealing means engaging said top oven wall and said second wall, said top stove wall having an elongated opening in registration with the window in the top of the oven, and a horizontal window in said last mentioned opening constituting a part of the working surface of the stove and completely separated from the window in said oven to leave said burner compartment completely unobstructed.

2,733,707
VIEWING DEVICE FOR COMBUSTION CHAMBERS
Joseph Skibiski, Alton, Ill.
Application January 11, 1955, Serial No. 481,163
2 Claims. (Cl. 126—200)

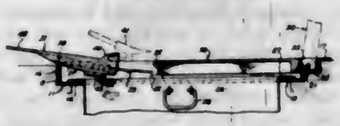
1. A viewing attachment for combustion chambers comprising a vertical guide means adapted to be connected to the exterior of a combustion chamber adjacent an opening in said chamber, a slide movably positioned within said guide means, said slide having an observation means hingedly connected to the upper edge thereof, said observation means being movable from a position coinciding with the opening in said chamber to an extended position remote therefrom, said observation means being pivotally movable to an angular position relative to said

slide when it is in extended position remote from said opening, said slide being positioned in the former position of said observation means to cover said opening when said observation means is in its extended position, a first stop on said guide means, a second stop on said slide, said first stop being positioned to contact said second stop upon



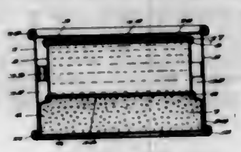
predetermined movement of said slide within said guide means, said observation means, due to its hinged connection with the upper edge of said slide plate, being automatically pivotable into said angular position when it is in said extended position, and means to support said observation means in said angular position.

2,733,708
ASH DISPOSAL UNIT FOR FIREPLACE
Bernice E. Hagen, Los Angeles, Calif.
Application June 4, 1952, Serial No. 291,682
1 Claim. (Cl. 126—242)



An ash disposal unit for use in connection with a fireplace having a firebox floor, comprising: an open frame adapted to be fitted within an opening the floor and having a shelf and lugs at its sides; a box-like receptacle fitting within the frame and having a perimetrical rim adapted to rest upon said shelf so as to suspend the receptacle from the frame; a first cover member pivotally mounted on the frame and adapted to be pivoted to one position to rest upon said lugs so as to overlie a first portion of the open top of the receptacle to close the same and to a second position to open said portion; and a second cover member slidably mounted on the frame and adapted to be slid to a first position to overlie a second portion of the open top of the receptacle to close the same with said first and second cover members in coplanar relation across the open top of the receptacle, and to a second position to open said second portion for the purpose of adapting said receptacle to receive ashes from the firebox floor through said second portion of the receptacle top, said first and second members being selectively removable from said frame, said first cover member having an outer transverse edge, said second cover member having an inner transverse edge engageable with said outer transverse edge of said first cover member to limit inward sliding movement of said second cover member, said frame having inclined tracks at its sides, said second cover member having side flanges provided with arcuate lower edges adapted to ride upwardly along an edge of said frame, said flanges having inclined grooves in their sides receiving said tracks to slidably mount the second cover member on said frame for sliding movement toward and away from said first cover member.

2,733,709
SELF-HEATING CONTAINERS
Lev Sukacev, New York, N. Y.
Application December 9, 1952, Serial No. 324,945
8 Claims. (Cl. 126—262)



8. A self-heating container comprising a completely closed outer container, a closed food container within the outer container, material for generating heat in a layer positioned within the outer container for transferring heat to the food container, and a spacing element movable with the food container while maintaining the latter container in spaced relationship within the outer container when the food container is moved through an opening upon providing same in the outer container, and said spacing element providing passages for directing a reagent to the heat-generating material in the said layer to react therewith for liberation of heat.

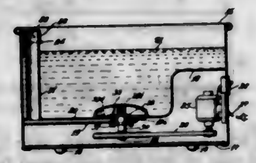
2,733,710
PORTABLE RECEPTACLE
Jules Scott Zibell, Decatur, Ga.
Application November 21, 1949, Serial No. 128,635
1 Claim. (Cl. 126—263)



A portable receptacle comprising an elongated generally cylindrical outer wall of flexible heat insulating material, said outer wall having an opening at each end thereof, each of said openings extending from one side of said outer wall around the end thereof and to the opposite side of said outer wall, a zipper fastener associated with each opening whereby said openings may be opened or closed as desired, each of said openings lying in a plane which includes the axis of said generally cylindrical outer wall, the respective planes of the openings being substantially at right angles to each other, an inner wall extending inwardly from throughout the inner circumference of said outer wall, the plane of said inner wall being substantially at right angles to the longitudinal axis of said cylindrical outer wall and lying approximately midway between the ends of the outer wall, said inner wall having a generally cylindrical pocket-shaped wall portion of heat conducting material extending from said inwardly extending wall portion and opening adjacent said inwardly extending wall portion and toward one end of the outer wall, said pocket-shaped wall portion defining together with said outer wall an annular space located therebetween and extending lengthwise of said outer wall, said annular space communicating around substantially its entire circumference with the end of said outer wall opposite said one end and a substantially cylindrical heat exchange member located in said annular space, said heat exchange member surrounding said

pocket-shaped wall member and being removable therefrom through said opposite end of said outer wall member.

2,733,711
HYDROTHERAPY MASSAGE APPARATUS
George M. Gibson, Bellevue, Iowa
Application July 7, 1949, Serial No. 103,458
12 Claims. (Cl. 128—56)



1. An apparatus for hydro-therapy comprising a liquid tank, a hollow impeller rotatably supported within the liquid in said tank, means to drive said impeller at relatively high speeds, said impeller having a portion thereof arranged and positioned to directly massage a contacting body part, and air conduit means arranged to communicate with the interior of said impeller, said impeller having internal means arranged to draw air into the interior thereof, and having openings in certain portions thereof to expel said air into said tank liquid during rotation of the impeller.

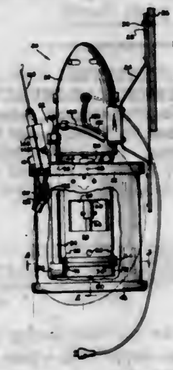
2,733,712
ORTHOPEDIC BELT
Frederick J. Wuesthoff, Berkeley, Calif.
Application March 19, 1953, Serial No. 343,351
2 Claims. (Cl. 128—78)



1. An orthopedic appliance comprising a belt having ends, tensioning means on said ends, a plurality of vertically spaced longitudinally extending pockets on the inner side of said belt between said ends, leaf springs in said pockets extending longitudinally of the belt and longitudinally curved in a direction opposite the normal curvature of the belt, and a plurality of laterally spaced vertically extending stiffeners of rigid material secured to said pockets at the inner side of the belt transversely of said springs and extending beyond both edges of the belt for transferring pressure from the springs to the body of a wearer of the belt.

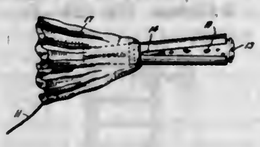
2,733,713
ORAL IRRIGATOR
Herbert H. Kabuick, New York, N. Y.
Application October 10, 1952, Serial No. 314,104
6 Claims. (Cl. 128—230)

1. An irrigator comprising a receptacle for a treating fluid; a selectively actuated and non-actuated driving means mounted on said receptacle; circulating means on said receptacle drivingly connected to said driving means to be driven thereby; inlet means connecting said circulating means to said receptacle whereby fluid passes to said circulating means; a selectively opened and closed outlet conduit operatively connected to said circulating means for receiving fluid forced from said circulating means; and control means operatively connected to said driving means and conduit for selectively simultaneously actuating said driving means and opening said conduit to fluid flow and for simultaneously stopping said driving means and closing said conduit to fluid flow; said control means being a composite control comprising a body having a fluid passage therethrough connected to said conduit, a closure member in said body alternately selectively movable to passage opening and closing position



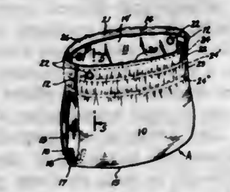
to alternately permit and prevent fluid flow in said conduit, an actuator on said body for selectively moving said closure member, and means in said body connected to said driving means alternately selectively engageable with said closure member for actuation and non-actuation of said driving means.

2,733,714
TAMPON APPLICATORS
Earle C. Haas, Denver, Colo.
Application April 21, 1954, Serial No. 424,549
4 Claims. (Cl. 128—263)



1. An applicator for the insertion of vaginal tampons of the compressed, absorbent core type comprising: an elongated, cylindrical tube adapted to receive a tampon in its inner extremity; and a flaring, flexible skirt secured about said tube intermediate the extremities of the tube and adapted to be folded toward either desired extremity of said tube to provide a protective hood for either extremity.

2,733,715
COMPOSITE TRAINING PANTS AND DIAPER
Yvette L. Folk, San Jose, Calif.
Application December 21, 1954, Serial No. 476,629
3 Claims. (Cl. 128—284)



1. An infant's garment comprising in combination, a pants sheath of waterproof sheet material, said pants sheath having a crotch and a waist portion, a rectangular diaper pad of a size to line substantially the entire interior of said pants sheath, means attaching the diaper

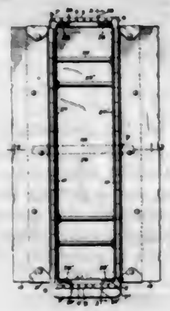
pad at its medial lateral edge portions for a limited length thereof to the lateral edge portions of the crotch of said pants sheath, elastic means gathering the attached medial edge and crotch portions, a pair of end flaps of said diaper pad extending forwardly and rearwardly, respectively, from said medial attaching means, and means releasably fastening each of said flaps to the waist portion of said pants sheath.

2,733,716
FORCEPS FOR EAR-PIERCING
Kenneth L. Roberts, Fair Haven, Alexandria, Va.
Application October 17, 1952, Serial No. 315,347
5 Claims. (Cl. 128—321)



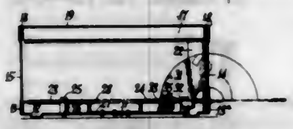
5. Forceps to hold an ear lobe during piercing for ear ornaments, the forceps comprising a pair of tips each bifurcated from the front to form an open recess, the upper tip comprising guide means rising therefrom and terminating in guide points in open view from the front of the recess to direct a piercing needle through a given point of an ear lobe, the recesses permitting withdrawal of the forceps from the lobe while a piercing needle is left in the lobe.

2,733,717
BINDER
Walter Easter Haskin, New York, N. Y., assignor to Pressed and Welded Steel Products Company, Inc., Long Island City, N. Y., a corporation of New York
Application November 21, 1951, Serial No. 257,569
3 Claims. (Cl. 129—1)



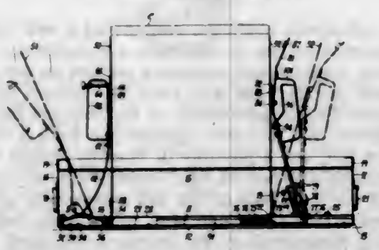
1. In a loose leaf binder the combination of a back plate formed with perpendicular end walls terminating in slotted cylindrical coupling means adapted to receive a loose leaf element, and side walls having side covers hingedly attached thereto and aligned apertures therein intermediate the ends, an inner platform channel plate nested inside the back plate and having similarly aligned side wall apertures, a removable rod passing through the respective apertures to lock the said plates in operative engagement to form a rigid rectangular hollow structure with the rod also acting as an integral support for the binder and a loose leaf binding post element having binding parts positioned on said platform plate and secured at each end by the said coupling means of the back plate, a plurality of marginally perforated loose leaves transfixed by the said binding posts whereby when the binder is supported by the said rod the loose leaves are securely coupled thereto for movement without dislodgment.

2,733,718
POSTING TRAY
Joseph D. Lear, Silver Creek, N. Y., assignor to Posting Equipment Corporation, Buffalo, N. Y.
Original application April 10, 1951, Serial No. 220,156, now Patent No. 2,664,898, dated January 5, 1954. Divided and this application June 1, 1953, Serial No. 358,708
2 Claims. (Cl. 129—16)



1. A posting tray having a bottom, side and end walls, a hinge between one of the side walls and the bottom for pivotally mounting said side wall, spaced inverted channels mounted on the bottom and along the side walls, a shiftable latch bar mounted beneath the channel adjacent the pivoted side wall, a movable control button extending through one of the end walls and provided with means within the tray engaging the latch bar to shift the same when the button is actuated, latch plates connected to the pivotally mounted side wall adjacent the ends thereof, latch fingers formed on the latch plates and depending to adjacent said bottom and in latching engagement with the latch bar when the pivoted side wall is in an upright position, and resilient means connected to the latch bar and the bottom for normally positioning the latch bar in a position to interengage with the latch fingers when the pivoted side wall is moved to an upright position.

2,733,719
POSTING TRAY
Joseph D. Lear, Silver Creek, N. Y., assignor to Posting Equipment Corporation, Buffalo, N. Y.
Original application April 10, 1951, Serial No. 220,156, now Patent No. 2,664,898, dated January 5, 1954. Divided and this application June 1, 1953, Serial No. 358,709
2 Claims. (Cl. 129—28)



2. A posting tray comprising a bottom, a carriage positioned on said bottom and movable longitudinally with respect thereto, a follower plate hingedly mounted on the carriage, a latch bar hingedly mounted on the carriage and having a lower portion inclined upwardly toward the follower plate and an upper portion diverging outwardly therefrom, a latch struck out from the upper portion of the latch bar adjacent the junction of the upper and lower portions thereof, said latch projecting toward the follower plate, a strike plate on the follower plate adjacent the upper portion of the latch bar, said strike plate having a portion projecting from the follower plate toward the latch bar adapted to engage and overlie the latch when the follower plate is in an upright position, a pin projecting from the follower plate and a slot formed in the latch bar below said latch to receive said pin, a rack bar on the tray bottom beneath the carriage, a pawl slidably connected to the latch bar and having a lower end yieldingly engaged with the rack bar, said pawl having an operating handle projecting rearwardly from the follower plate and latch bar and thereby being accessible to disengage the pawl irrespective of the position of the follower plate.

2,733,720
CIGARETTE PAPER WRAPPER
Milton O. Schur, Asheville, and Robert M. Levy, Brevard, N. C., assignors to Ecusta Paper Corporation, a corporation of Delaware
No Drawing. Application June 9, 1950, Serial No. 167,256
11 Claims. (Cl. 131—15)

1. A highly combustible cellulosic paper cigarette wrapper that produces upon burning of the cigarette a whitish, solid, tube-like ash, said paper consisting of a predominant proportion of cellulosic fibers selected from the group consisting of bast fibers and wood fibers, a carbonate filler, approximately 1% to 5% asbestos fibers, and approximately 0.1% to 1½% of a non-explosive combustion supporting alkali metal salt, said asbestos and alkali metal salt coacting to provide the aforesaid ashing characteristics of the cigarette paper wrapper.

2,733,721
CIGARETTE EXTINGUISHING AND DISPOSING ASH TRAY
Charles A. Kitchens, Anaheim, Calif., and Robert E. Kruse, Portland, Oreg., assignors, by direct and mesne assignments, to said Kruse
Application March 11, 1953, Serial No. 341,766
2 Claims. (Cl. 131—235)



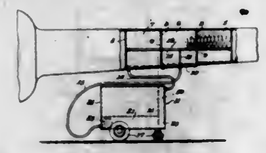
1. A cigarette and ash receiving tray for a motor vehicle comprising an elongated substantially horizontal tube interposed between an instrument panel and a fire wall of the vehicle said ash tray being adapted to receive ashes and partially consumed cigarettes, said tube having a cigarette and ash receiving end and a discharging end, a tray slidably mounted relative to the tube and having a front wall, the tray being contoured to provide a sleeve telescopingly mounted on the cigarette and ash receiving end of the tube, a plunger carried by the front wall of the tray having an end adapted to project into the tube in telescoping relation to project ashes and partially consumed cigarettes into the tube, a shield having a horizontal wall carried by the front wall of the tray and having a downturned flange approximately aligned with the projecting end of the plunger to protect the plunger and maintain its effectiveness by preventing it from becoming covered by debris.

2,733,722
TOOTHBRUSH AND PASTE DISPENSER ASSEMBLY
John T. Rodd, Montreal, Quebec, Canada
Application March 12, 1954, Serial No. 415,887
2 Claims. (Cl. 132—84)



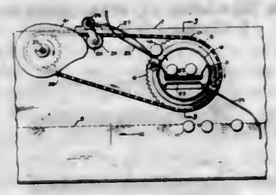
1. A toothbrush and paste dispenser assembly comprising a hollow thimble open at one end and closed at the other end, a toothbrush including a brush head and a handle connected to said head arranged so that the brush head is insertable through and withdrawable from the open end of said thimble, the handle having a portion provided with external threads in threaded engagement with internal threads formed on the portion of said thimble inwardly of the open end thereof for holding the brush head of the toothbrush within said thimble, a resilient tube adapted to contain toothpaste and having a discharge orifice in one end and having the other end open arranged so that the open end of said tube is exteriorly of and threadably engages the portion of said thimble adjacent the closed end of said thimble.

2,733,723
APPARATUS FOR REMOVING SEALANT FROM FUEL TANKS
Keith R. Whitcomb, Los Angeles, Calif., assignor to Cee-Bee Chemical Co., Inc., Los Angeles, Calif., a corporation of California
Application January 29, 1951, Serial No. 208,299
3 Claims. (Cl. 134—111)



3. Apparatus for removing sealant from the interior of an integral fuel tank for aircraft, comprising a receptacle outside of and spaced from the aircraft fuel tank for solvent capable, when impinging thereon, of removing said sealant from the tank, a spray head adapted to be disposed within the tank and to be arranged to impinge solvent upon sealant therein, a pump connected between the receptacle and the spray head for supplying solvent under pressure from the receptacle to the spray head, a drain connection adapted to be connected to the tank and discharging into the receptacle for solvent and removed sealant in a closed circuit, and movably mounted screen means in the circuit between the drain connection and the pump, arranged to receive solvent and removed sealant from the drain connection and to carry the sealant thereon and to permit the free solvent to pass therethrough to the pump, the screen means being movable to a point of discharge removed from the path of the flow of subsequent solvent and removed sealant, and means at said point of discharge to receive removed sealant from the screen.

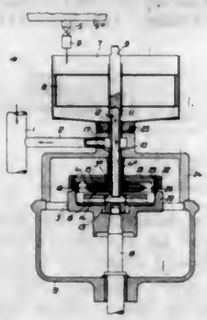
2,733,724
FRUIT LIFTING DEVICE
Ray C. Warren, Woodland, Calif., assignor to Hershel California Fruit Products Co., Inc., a corporation of Illinois
Application May 17, 1955, Serial No. 508,973
3 Claims. (Cl. 134—134)



1. In a device of the character described for picking soft vegetables from a tank of water, comprising a first set of pivotally mounted rotating tines having turned terminal ends, the turn being in the direction of rotation, which dip into the water, pick up the vegetables and permit the vegetables to roll off the tines when the tines are raised above a horizontal position, the improvement comprising a second set of pivotally mounted tines which intermesh with the first set of tines and travel upwardly through the first set of tines whereby vegetables lodged

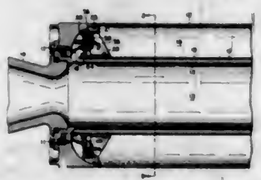
between the tines of the first set of tines will be dislodged, said second set of tines moving upwardly at a faster rate than said first set of tines during the period when the two sets of tines are intermeshed, the pivotal mounting of the second set of tines being at a higher level than the pivotal mounting of the first set of tines.

2,733,725
DOSING METHOD AND DEVICE
Stig H. Bjarne Zachariassen, Stockholm, Sweden, assignor to Aktiebolaget Separator, Stockholm, Sweden, a corporation of Sweden
Application February 10, 1950, Serial No. 143,379
7 Claims. (Cl. 137—12)



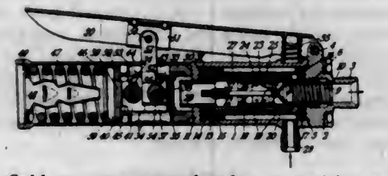
7. In the dosing of one liquid with a second liquid by merging separate streams of the respective liquids in a merging zone, the method which comprises feeding said second liquid at a controlled rate to a locus of centrifugal force, maintaining a variable annulus of the second liquid in said locus by centrifugal force, paring liquid from a fixed point of said locus at an inner portion of said annulus, flowing the pared liquid from said fixed point through a first confined path to said zone under pressure generated by the action of the centrifugal force on said annulus, and flowing said first liquid in a second confined path through said merging zone at a substantially constant rate independent of the liquid flow through said first confined path and against a varying pressure, whereby an increase in said last pressure automatically increases the pared liquid pressure in said first path by increasing the level of said inner portion of the annulus relative to said fixed point.

2,733,726
ACCELERATION ACTUATED OUTLET VALVE
Warren F. Kaufman, Garden Grove, and Mark I. Hoffman, Whittier, Calif., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application September 24, 1954, Serial No. 458,296
5 Claims. (Cl. 137—38)



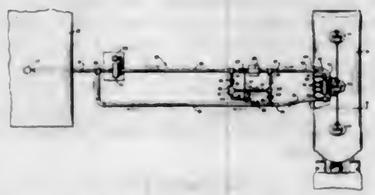
1. An acceleration actuated outlet valve which comprises annular plate means having a plurality of circumferentially spaced openings formed therethrough, annular retainer means secured to said plate means and having a portion spaced therefrom, a plurality of baffle means secured to said retainer means, annular valve ring means slidably disposed adjacent said openings and disposed between said plate means and said retainer means, and resilient means disposed between said plate means and said ring means for normally urging said ring means into a centered position.

2,733,727
FLUID PRESSURE VALVE
Henry William Trevaskis, Solihull, England, assignor to Dunlop Rubber Company Limited, London County, England, a British company
Application February 15, 1952, Serial No. 271,779
Claims priority, application Great Britain February 24, 1951
10 Claims. (Cl. 137—102)



6. A fluid pressure control valve comprising a valve housing having a pressure fluid inlet, a supply outlet and an exhaust outlet, an axially movable exhaust valve, an axially movable exhaust valve seat, an axially movable inlet valve, means connecting the exhaust valve seat with the inlet valve, an inlet valve closing spring pressing said inlet valve to closing position, a cam member movable transversely across the housing, slidable means associated with the cam member for moving the exhaust valve first to close said valve and then open the inlet valve and a return spring supporting said cam member and deflectable when a predetermined operating pressure has been attained to allow the inlet valve to close and further deflectable when said predetermined operating pressure has been exceeded to allow the exhaust valve to open.

2,733,728
TANK TRUCKS AND LOADING SYSTEM THEREFOR
Willis W. Sampselle, Kenton, Ohio
Application October 29, 1952, Serial No. 317,560
7 Claims. (Cl. 137—235)



7. A liquid loading system for tank bodies, a liquid delivery line, means for connecting said delivery line to a tank body, a return line, eduction means interposed in said lines, said eduction means including valve means for establishing flow from said delivery line through said eduction means to withdraw liquid from said connecting means for delivery into said return line.

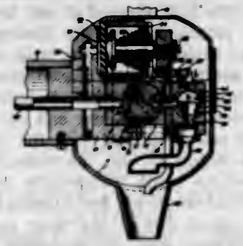
2,733,729
PRESSURE-RESPONSIVE, SELF-CLOSING SAFETY VALVE
Ralph W. Wolfe, New Lexington, Ohio
Application June 10, 1954, Serial No. 435,819
4 Claims. (Cl. 137—458)

3. An automatic, safety, shut-off valve for fuel gas lines comprising casing means provided with a fluid-receiving inlet, a fluid-discharging outlet, a valve seat between said inlet and outlet, and a diaphragm chamber remote from said inlet and outlet; a valve member movable in said casing means into and out of engagement with said valve seat to control the flow of fluid between said inlet and outlet; spring means engaging said valve member and urging the same toward engagement with said valve seat; a manually operable rod extending through said casing means and engaged at one end with said valve member for moving the latter out of engagement with said valve seat and in opposition to said spring means, said rod being formed with a passage communicating at one end thereof with said inlet and at its opposite end with said diaphragm chamber; movable diaphragm means positioned in the diaphragm chamber of said casing means and having one side thereof in fluid communication with said opposite end of the passage of



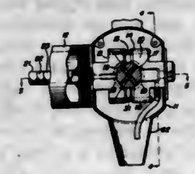
said rod; second spring means engaging said diaphragm means on the side thereof opposite the side in communication with said opposite end of the passage of said rod and urging said diaphragm means to move in one direction within said diaphragm chamber, said diaphragm means being arranged to move in said one direction in response to an abnormal decrease of fluid pressure at said inlet and to move in the opposite direction in opposition to said second spring means in response to an abnormal increase of fluid pressure at said inlet; and means engaged with said diaphragm means and with said valve member for normally holding the latter out of engagement with said valve seat, but operable in response to movement of said diaphragm means in either of said directions for releasing said valve member for seating engagement with said valve seat.

2,733,730
DOUBLE VALVE FLOW CONTROL
Anthony Turak, Cleveland, Ohio
Application August 29, 1951, Serial No. 244,155
7 Claims. (Cl. 137—505.13)



1. In a three-way mixing and dispensing valve having, a valve body, three passageways through said valve body, selector shut-off valve means having a first position closing said three passageways, having a second position opening a first combination of two of said passageways, and having a third position opening a second combination of two of said passageways, one of said passageways thereby being common to each of said combinations, said valve body having an outlet conduit for each passageway opening therefrom to the outer surface of said valve body, the provision of a flow rate governor valve in the conduit of said common passageway, said governor valve having a range of fluid conductiveness, said range having a minimum greater than zero, fluid pressure responsive means operatively connected to said common passageway ahead of said shut-off valve means, control transmission means from said fluid pressure responsive means to said governor valve to thereby operate said governor valve responsively to the pressure in said common passageway ahead of said shut-off valve means, and resilient means urging said governor valve and fluid pressure responsive means toward a fully open flow condition.

2,733,731
FLOW-RATE CONTROL DISPENSING VALVE
Anthony Turak, Cleveland, Ohio
Application June 16, 1950, Serial No. 168,628
2 Claims. (Cl. 137—597)



1. A dispensing valve comprising, a first valve body having a concave surface defining a first portion of a valve socket, a second valve body having a concave surface defining a second portion of a valve socket, means holding said first and second valve bodies with the concave surfaces thereof relatively positioned to define portions of a valve plug guideway, a plurality of fluid conduits leading from the exterior of said first valve body to the concave surface thereof, a valve plug rotatably mounted in said valve plug guideway with the concave surfaces fitting fluid-tight therewith and adapted for sealing off said fluid conduits, said first and second valve bodies spaced apart and the concave surfaces defining less than a closed encompassing structure when fitted over said valve plug, said holding means urging said first and second valve bodies toward each other to hold the concave surfaces tight against the valve plug, a plurality of passageways extending laterally through said valve plug, said passageways having entrance ends angularly spaced along the surface of said valve plug in a predetermined pattern for registering a selected number of said passageway entrance ends with a selected number of said conduits in any one predetermined rotative position of said valve plug, said second valve body having a plurality of receiving chambers each positioned to register with one passageway which registers with a conduit, each chamber having an orifice exhaust passageway having an entrance opening from the side wall of the chamber and extending to the exterior of the second valve body, a cup-shaped sleeve fitting closely in each chamber, a valve opening in the side wall of each sleeve alignable with said entrance opening of the orifice exhaust passageway, and adjustment control means for each sleeve for moving said sleeve in its chamber to bring the opening thereof into a selected degree of registration with said orifice including a position fully out of registration to close said orifice.

2,733,732
VALVE CONTROL MECHANISM
Charles H. Baker, Jr., Muncie, Ind., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application March 29, 1951, Serial No. 218,203
3 Claims. (Cl. 137—620)

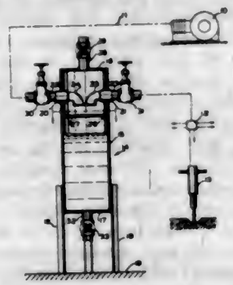
1. In combination with a valve for use in a control system of an automotive vehicle transmission wherein

the valve is primarily controlled by the accelerator of the vehicle, a casing having the valve movably disposed therein, resilient means interposed between the valve and the accelerator and effective upon movement of the accelerator toward an open throttle position to move the valve towards a corresponding position, a source of fluid under pressure for supplying pressure fluid to said valve, said valve including a metering means normally blocking the fluid when the accelerator is in a closed throttle position and effective to supply a fluid pressure proportional to the degree of opening of the throttle, means for applying said last-mentioned fluid pressure to



a portion of the valve in opposition to said resilient means whereby the valve is differentially positioned by said resilient means and said last-mentioned fluid pressure, and means acting in concert with said last-mentioned fluid pressure for at all times insuring the differential positioning of said valve, said last named means including a spring having a portion resiliently engaging said valve for urging the valve toward said retracted position and with the spring being secured to said casing externally thereof in position for installation and replacement when the device is completely assembled and otherwise in operative condition.

2,733,733
APPARATUS FOR DISPENSING ANTIFREEZE VAPOR AND THE LIKE TO MOVING VOLUMES OF COMPRESSED AIR
Karl S. Ghormley, Canfield, Ohio
Application January 19, 1953, Serial No. 332,048
2 Claims. (Cl. 138—34)



1. Apparatus for dispensing anti-freeze vapors and the like to moving volumes of compressed air wherein the vapor is derived from volatilization of a liquid comprising a vertically disposed closed tank adapted to receive a supply of said liquid in the lower portion thereof and having a transversely disposed baffle therein disposed above the normal level of the liquid in said tank and having a multiplicity of transversely spaced openings therethrough to provide an upper chamber in said tank generally separated from the lower chamber in the tank containing liquid while yet providing for the transference of the vapor arising from said liquid into said upper chamber, and conduit means for directing the flow of said compressed air transversely through said upper chamber and in contact with the upper surface of said baffle, the arrangement being such that the air in said lower chamber above said liquid remains relatively quiescent and substantially independent of the rate and volume of compressed air flow through said upper chamber to thereby control the rate of evaporation of said liquid.

2,733,734
FLEXIBLE AND EXTENSIBLE HOSE
James H. Woodward and Leonard Myles, Manchester, England, assignors to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a corporation of New York
Application June 23, 1953, Serial No. 363,466
9 Claims. (Cl. 138—56)



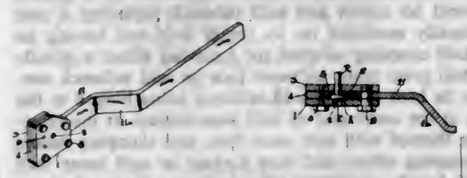
1. Reinforced flexible and extensible hose which comprises a wire helix and an impermeable tube of fabric reinforced rubber formed about the turns of the helix and inwardly between said turns in a spiral fold and spreading within said helix so that contiguous turns of said spiral fold form a substantially smooth cylindrical inner surface of said hose entirely within the inner periphery of said helix.

2,733,735
FORK GRIDS FOR LOOMS
Sam L. Huffman and Richard J. Irwin, Greenville, S. C.
Application December 11, 1953, Serial No. 397,730
1 Claim. (Cl. 139—379)



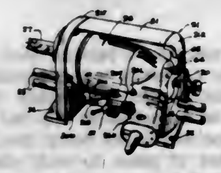
A fork grid for looms formed from a single section of wire which is bendable and will hold its shape when bent, said grid comprising a pair of intermediate U-shaped portions, each intermediate U-shaped portion including a substantially vertical side and substantially horizontal ends carried by the side, the end of one U-shaped portion leading to and connected with the corresponding end of the companion U-shaped portion, said sides and ends being opposed and horizontally spaced, end portions, each end portion comprising a substantially vertical side and a substantially horizontal end, the end of each end portion leading to and connected with the end of the next intermediate U-shaped portion, the vertical sides and ends of the end portions being horizontally spaced from the vertical sides and ends of the intermediate U-shaped portions, the vertical side of one outer end portion having its end bent upon itself for providing a substantially vertical extension extending longitudinally of such side and having a generally horizontal arm provided at its free end with an eye for receiving a bolt or the like for attachment to the lay of the loom, the other outer end portion being free from attachment with the lay, said sides having exterior recesses to receive the weft, the arrangement being such that all sides may be adjusted horizontally as a unit from said eye by bending and inclining the substantially vertical extension or a selected side may be horizontally adjusted from the next side by bending the connections between the ends of such sides, the side or sides remaining in the adjusted position.

2,733,736
WRENCH FOR BREAKING TIE RODS
James A. McLaughlin, San Francisco, Calif., assignor to W. J. Burke & Co., San Francisco, Calif., a corporation of California
Application June 20, 1955, Serial No. 516,401
3 Claims. (Cl. 140—149)



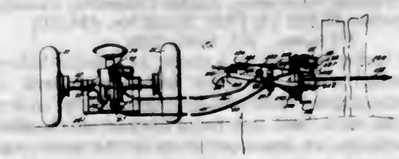
1. A wrench for the purpose described, comprising a head having a backing plate, a side plate and an intermediate plate, said side plate having an open slot adapted to receive a tie rod, a fixed gripping jaw on the intermediate plate, said fixed jaw being located at one side of the slot, a lever pivotally mounted between the backing plate and the side plate and carrying a movable jaw located at the other side of the slot, such movable jaw being adapted to be actuated into gripping relationship with the fixed jaw upon the pivotal movement of the lever in a certain direction.

2,733,737
LATHE HEADSTOCK
Carl F. Lindee, Jr., Chicago, Ill., assignor to Portable Electric Tools, Inc., Chicago, Ill., a corporation of Illinois
Application November 10, 1953, Serial No. 391,268
12 Claims. (Cl. 142—1)



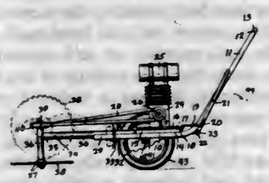
1. In a headstock, a mounting structure having front and rear upstanding end plates each having a bottom mounting surface and means rigidly connecting said respective end plates, means on said mounting structure for fixedly securing the mounting structure to longitudinal tie rods, means on said front end plate for receiving and centering the bearing hub of a portable electric drill, means on said rear end plate for receiving and clamping the rear end of such a drill, and means on said rear end plate affording a reaction surface against which the handle of such a drill may bear to hold the drill against rotation.

2,733,738
TRACTOR DRIVEN FLUID TRANSMISSION CHAIN SAW
Richard F. Block, Morley, Mich.
Application August 6, 1954, Serial No. 448,243
1 Claim. (Cl. 143—32)



In a device of the character described, a tractor, a hydraulic pump secured to said tractor and including a hollow housing, a driven shaft projecting into said housing, driving means connected to said driven shaft, said pump including a plate rotatably mounted in said housing and loosely mounted on said shaft, a plurality of blades extending from the outer periphery of said plate, a return conduit connected to the lower end of said housing, a supply conduit extending from the upper end of said housing, a gauge and safety valve connected to said supply conduit, a bypass line connecting said safety valve to said return conduit, a friction disc secured to one side of said plate, a clutch member positioned in said housing and including a ring member mounted for movement into and out of engagement with said friction disc, a collar keyed to said shaft and secured to said clutch member, a lever pivotally mounted in said housing and having its inner end engaging said collar, a clutch control mechanism arranged exteriorly of said housing and including a hollow cylinder, a piston slidably mounted in said cylinder, a rod extending from said piston and connected to said lever, a coil spring circumposed on said rod, an L-shaped latch connected to said rod and provided with an opening therein, a spring pressed keeper connected to an end of said cylinder and adapted to engage the opening in said latch, a pair of spaced apart pins extending upwardly from said latch, a control valve interposed in said bypass line and including a casing having a rotatable core therein, a stem extending upwardly from said core and having teeth thereon, a handle adapted to be engaged by said pins and having teeth engaging the teeth on said stem, manually operable gate valves interposed in said return and supply conduits, a frame including a pair of spaced apart arms, braces interconnecting said arms together, a hydraulic motor connected to said frame and including a housing, a stub shaft extending into said housing, a plate loosely mounted on said stub shaft and having a plurality of blades extending from its periphery, a clutch for selectively causing said last named plate to rotate with said stub shaft, a clutch control mechanism for actuating said clutch, a lever mounted on one of said arms for actuating said last named clutch control mechanism, a sleeve extending from said housing, a gear box having a flange rotatably positioned in said sleeve, a shaft member supported in said gear box, gear means connecting said shaft member to said stub shaft, a sprocket connected to said shaft member, a saw chain engaging said sprocket, a throttle valve assembly connected to said return and supply conduits and including a casing, a valve rotatably arranged in said casing and including upper and lower chambers, a partition interposed between said pair of chambers, there being openings communicating with said chambers, a bypass line for interconnecting said chambers together, a shank extending upwardly from said last named valve, and a manually operable lever on one of said arms for rotating said shank to control said throttle valve assembly, said motor being connected to said pump by said supply and return conduits.

2,733,739
PUSHCART-TYPE ADJUSTABLE ROTARY SAW FOR TIMBER MOWING
Isadore J. Rocklin, Sioux City, Iowa
Application August 24, 1953, Serial No. 376,018
1 Claim. (Cl. 143—43)



An adjustable rotary saw comprising a channel member, a pipe member secured substantially within said chan-

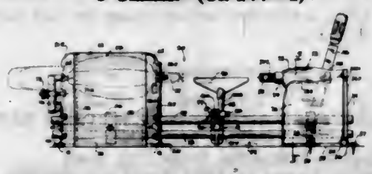
nel member, said channel member being of substantial length to provide a substantially long frictional engagement with said pipe member, a shaft rotatably mounted at the termination of said pipe member, a circular saw blade attached to said shaft, means for driving said saw blade shaft, means for rigidly securing said pipe member within said channel member, including a U-bolt straddling said pipe and channel member, a plate member through which the terminals of said U-bolt extend, rotation of said pipe member permitting said saw blade to be selectively operated in any desired plane.

2,733,740
SAW BUCKS
James A. Little, Silver Spring, Md.
Application March 16, 1954, Serial No. 416,581
1 Claim. (Cl. 143—91)



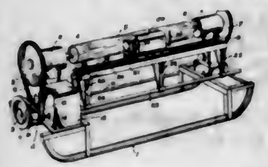
A folding saw buck comprising pairs of legs mounted to rotate about a common axis from an inoperative collapsed position in which they lie parallel to one another to an operative extended position in which one pair of legs crosses the other pair of legs to define spaced V-shaped work supports, a pivot bar carried by the legs and extending therebetween along the common axis, a cross bar carried by one pair of legs in spaced parallel relation to the pivot bar, hook rails carried by the other pair of legs for movement about an axis spaced from and parallel with the common axis, and said hook rails having a pair of notches opening thereinto for receiving the cross bar and holding the saw buck in operative position, said hook rails having a second pair of notches opening thereinto for receiving the pivot bar, when in inoperative position, and turn buttons carried by one pair of legs for extension over the other pair of legs and the hook rails to hold the saw buck folded.

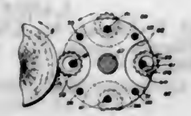
2,733,741
COMBINATION LATHE AND DRILL PRESS
Carl F. Lindee, Jr., Chicago, Ill., assignor to Portable Electric Tools, Inc., Chicago, Ill., a corporation of Illinois
Application November 10, 1953, Serial No. 391,336
5 Claims. (Cl. 144—1)



1. In a multiple purpose machine tool of the character described, a headstock and a tailstock each having a mounting base surface for mounting the same directly on a bench or the like, means on said headstock defining a headstock spindle axis parallel to and spaced a predetermined distance from the base surface of the headstock, means on said tailstock defining a tailstock center axis parallel to and spaced in the same predetermined distance from the base surface of said tailstock, a pair of laterally spaced parallel spacing rods extending through said headstock and said tailstock parallel to and equally spaced from both of said axes and in a plane that is perpendicular to said base surface and passes through said axes, said headstock and tailstock each having positioning surfaces thereon for engagement with such rods to locate the rods with respect to said headstock and tailstock, and releasable clamping means for clamping said rods against such positioning surfaces, said headsotck including a power motor having a shaft coupling on said spindle axis adaptable for receiving selectively a spindle or a drill bit clutch and said tailstock including a ram reciprocally mounted on its center axis and having an end shaft coupling adapted for receiving either a spindle or a drill press table, an outer face on said tailstock normal to its base surface, said tailstock being hinged to the bench at the outer end of said base surface at the intersection thereof with said outer face, and clamping means for clamping either said base surface or said outer face to said bench selectively after swinging the tool about said hinge to the corresponding position on the bench, whereby the tool is adapted for a multiplicity of uses without sacrificing rigidity and simplicity.

2,733,742
BARKING MACHINE HAVING AN AXIALLY MOVABLE ROTATING DRUM CARRYING RINGLIKE HAMMERS
Paul Henri Bedard, Quebec, Quebec, Canada
Application November 24, 1954, Serial No. 471,050
5 Claims. (Cl. 144—208)



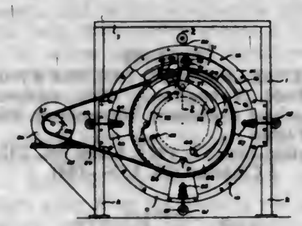


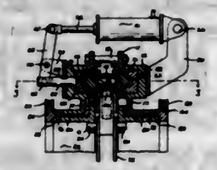
1. In a barking machine, a barking head comprising a drumlike structure consisting of a plurality of disks mounted in adjacent parallel relationship and each provided with a pair of diametrically opposed recesses, the recesses in the successive disks being disposed substantially 90 degrees out of phase to each other so that a recess of one disk will be opposite a nonrecessed portion of two adjacent disks, circular end plates at the ends of the disk assembly, connecting rods passing through said disks and said end plates to secure said disks and end plates one against the other, and barking hammers mounted in said recesses, consisting of ringlike members provided with external scraping teeth, the central holes of said ringlike members being substantially larger than the diameter of said rods, said ringlike members surrounding some of said rods and being free to move in said recesses relative to said disks in planar paths parallel to said disks from a retracted position within the interior of said drumlike structure to a position projecting outwardly from the periphery of said drumlike structure, and means to rotate said barking head.

2,733,743
BARK-REMOVING ROTOR HAVING BRAKE-ADVANCED PIVOTALLY MOUNTED TOOLS
Ernest S. Warner, Vancouver, British Columbia, Canada
Application March 14, 1955, Serial No. 493,933
5 Claims. (Cl. 144—208)

1. A log barker comprising a stator, an annular hollow rotor journalled within the stator and through both of which a log is adapted to be moved longitudinally, an arm pivoted to the rotor, said arm being pivoted intermediate its length adjacent an inner periphery of the rotor, said arm having a log-engaging element on its inner end and being operatively connected to a brake element, said stator having an annular nonrotary brake element movable

in a direction parallel to an axis of rotation of the rotor and coacting with the first-named brake element to re-





strain the rotational movement of the arm about the stator, and means for urging the brake elements together.

2,733,744
METHOD OF MAKING A POWER TABLE TOP FOR A SEWING MACHINE
Edward W. Stanton, Roselle Park, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application April 26, 1950, Serial No. 158,241
2 Claims. (Cl. 144—309)



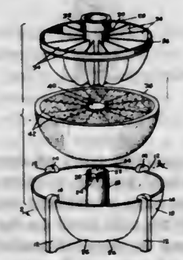
1. The method of producing a power table top for a sewing machine which comprises cutting an opening in the top and thereby severing therefrom a machine-supporting insert, such cutting operation including a first step of forming a relatively wide channel in the bottom surface of the top in a pattern generally corresponding to the outline of the desired opening, and secondly completely severing the insert from the top by forming in the upper surface of the top a relatively narrow channel which meets the wide channel at the outer peripheral wall of the latter, thereby to form a rabbet ledge about the peripheral wall of the insert, and securing a shelf strip element on each wall of a pair of the oppositely disposed walls of the opening so that such element will project into the opening and mate with the rabbeted side wall of the insert thereby to support the latter within the opening.

2,733,745
CABLE-DRIVEN RATCHET TOOL HAVING OFFSET PISTOL-GRIP
Lavern Norwood, Birmingham, Ala.
Application January 18, 1954, Serial No. 404,528
1 Claim. (Cl. 145—70)



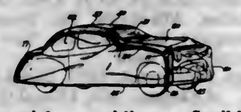
An extension offset screw driver comprising a substantially U-shaped handle having a hollow sleeve at one end an operating member pivoted upon the other end of said handle, said sleeve having an elongated opening therethrough receiving the free end of said operating member therewithin, an extension portion connected to said hollow sleeve, the central portion of said handle and said operating member being adapted to be drawn together within the hand of the user, said sleeve extension having its ends split open to provide spaced sides, a sleeve extending between the spaced sides, a shaft extending through the sleeve and adapted to be journalled in the sides of the sleeve extension, a ratchet gear secured to the sleeve and to the shaft, a complementary ratchet gear journalled upon the sleeve and having a groove therein, a cable connected to said groove and operable therein to effect rotation of the complementary ratchet gear, a helical spring connected to the complementary ratchet gear and to one side of the sleeve extension, said cable extending through said extension and being connected to the operating member at the free end thereof extending into the slot and said hollow sleeve, said ratchet gear and complementary ratchet gear having complementary teeth on the adjacent faces thereof, and set screw means for releasably retaining said drive shaft in said sleeve.

2,733,746
SERVING DISH FOR FRUITS
Aron Rauner, New York, N. Y.
Application June 23, 1953, Serial No. 363,444
7 Claims. (Cl. 146—3)



1. A serving dish for fruits, comprising in combination: a bowl of rigid material having an inner surface substantially defining a hemispherical cavity, a tubular coring element coaxial with the center axis of said bowl, the lower end of said coring element being rigid with the bottom portion of said bowl, said coring element extending upwardly within said bowl, and cutting means arranged at the upper end of said coring element.

2,733,747
FLEXIBLE AUTOMOBILE BODY COVER
Louis T. Altschul, Chicago, Ill.
Application July 14, 1951, Serial No. 236,739
5 Claims. (Cl. 150—52)



1. A fabric article providing a flexible cover applicable to a variety of automobile bodies of different shapes and sizes having assumed maximum dimensions of fender height between lowermost margins and uppermost fender surfaces, width between outermost lateral surfaces of opposite fenders, and length between foremost and rearmost fender surfaces; said cover comprising a pair of end wall portions of a width less than said assumed maximum width dimension by a preselected length, a pair of side panels each having a free edge corresponding to the lower margin of an automobile body and of a length exceeding said assumed maximum length dimension by at least said preselected length, and each panel end having a pair of pocket-forming edges cut on lines diverging angularly from a common point spaced

from said free edge a distance corresponding substantially to said assumed maximum fender height dimension, and said common points of each panel being spaced apart a distance corresponding substantially to said assumed maximum length dimension, one of each pair of pocket-forming edges extending from the common point to the adjacent end, and the other to the edge opposite said free edge of said panel, and said pairs of pocket-forming edges being secured together, thereby forming pockets for hanging support on the fender tops of an automobile body, the end edges of said side panels being secured to the edges of said end wall portions, and between said pockets, said cover including top wall and side panel structure for enclosing the top and side surfaces of an automobile body on the fender tops of which said pockets are supported.

2,733,748

CROSS CHAIN ATTACHING DEVICE

Walter C. Cranston, Sr., Worcester, Mass.

Application March 17, 1954, Serial No. 416,764
2 Claims. (Cl. 152—231)



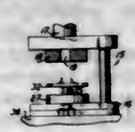
1. Means for attaching pairs of cross chains to a tire supported on a wheel having a substantially cylindrical brake drum, comprising a resilient band encircling said drum, means securing said band to the drum, a plurality of brackets disposed in circumferentially spaced relation about the drum and secured thereto, said brackets projecting axially inwardly and radially and outwardly from said drum, said brackets being provided with key-hole slots in their outer ends, an annular ring secured to said outer ends and closing said slots, each of said pairs of cross chains having corresponding opposite ends thereof secured to an inner plate and an outer plate, said inner plates having headed studs receivable within said slots and engageable with said ring, said outer plates being provided with hook means, and circumferential tension means disposable within said hook means for retaining said cross chains in engagement with the tread portion of the tire.

2,733,749

ROLLER PUNCH AND DIE

Edward B. Zeller, Allentown, Pa., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York

Application February 2, 1953, Serial No. 334,402
4 Claims. (Cl. 153—21)



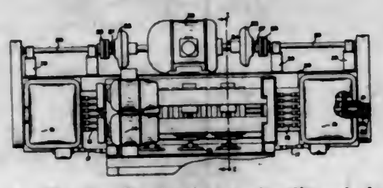
1. An apparatus to sharpen a corner of an article comprising a punch adapted to enter an article having a corner to be sharpened, the punch having a recess in a portion thereof disposed for registration with the corner, a roller, having a peripherial cross-sectional contour of a sharp angle, rotatably mounted in the recess of the punch, and a die having a cavity to receive the article and a groove adjacent the corner to free the material of the article adjacent the corner to be formed into a sharp angle by the roller during relative movement of the punch and die.

2,733,750

ROLLER LEVELLER WITH DOUBLE END DRIVE

Russell T. Todd, Youngstown, Ohio, assignor to The McKay Machine Company, Youngstown, Ohio, a corporation of Ohio

Application June 19, 1951, Serial No. 232,269
3 Claims. (Cl. 153—104)



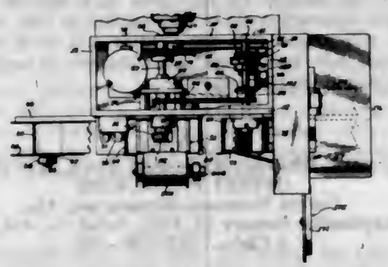
1. In a roller leveller having a plurality of elongated small-diametered working rolls arranged in spaced off-set relations to define a sinuous path for sheet or strip stock therebetween the combination of a base rotatably supporting said rolls and extending outwardly from each end thereof, said driving shafts constituting the primary driving means for said rolls, a gear train assembly at each end of said base and mounted thereon and having a plurality of inwardly directed driving shafts, flexible couplings interconnecting said driving shafts and the adjacent ends of said rolls whereby the latter may be driven from both ends, each of said gear train assemblies having a power input shaft, a single driving motor mounted on said base and having its armature shaft extending outwardly from both ends thereof, a pair of longitudinally spaced but axially aligned drive shafts journaled on said base outwardly of said motor and each coupled with an adjacent one of said power input shafts, said armature shaft being axially aligned with the last mentioned drive shafts, and a pair of fluid couplings interconnecting the ends of said armature shaft with said last mentioned drive shafts.

2,733,751

MACHINE FOR MAKING FIBROUS BADGES HAVING AN ADHESIVE SECURING PORTION

Roland G. Schmitt and Vernon E. Swedberg, Chicago, Ill., assignors to Walgreen Co., Chicago, Ill., a corporation of Illinois

Application February 19, 1954, Serial No. 411,497
1 Claim. (Cl. 154—1)



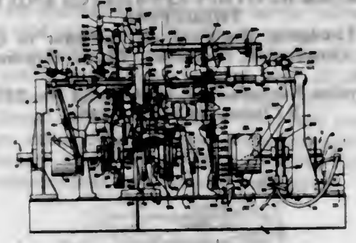
A machine for manufacturing from a strip of material badges having at least one dimension equal to the width of the strip and a separate, adhesively secured element for securing the badge to the wearer's clothing, the element extending continuously across the badge in the direction of said dimension and having a width in the perpendicular direction substantially less than said first direction which comprises means for advancing said strip intermittently past a severing station, means at said station for severing the strip across its width to provide individual badges, means for intermittently advancing a strip of adhesive material perpendicularly to the direction of advance of the first strip in a path adjacent said severing means, and closely adjacent the path of the advancing first strip, a presser foot carried on said severing means for action substantially simultaneously therewith, said presser foot having a working face coextensive with the area of intersection of the two strips, whereby said presser foot presses the severed badge into adhesive contact with the second strip substantially simultaneously with the severing operation and said second strip is thereafter effective to convey its thereto-attached badges away from the severing station as a completed product, and means for synchronizing the intermittent advance of said two strips and severing and presser foot means for simultaneous dwell thereof during the cutting and pressing operations.

2,733,752

MACHINE FOR MANUFACTURING POWDER PUFFS

Roger Bihler, Brentwood, N. Y., and Sidney R. Bell, Stamford, Conn., assignors to Victoria Vogue, Inc., New York, N. Y., a corporation of New York

Application August 8, 1950, Serial No. 178,234
31 Claims. (Cl. 154—1.8)



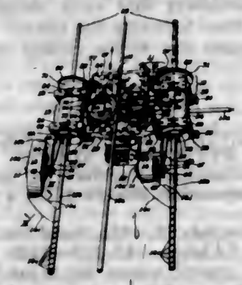
1. In a machine for manufacturing powder puffs, a die element having a bottom wall and a side wall, said die element having a diameter less than that of a powder puff casing blank which is placeable over the mouth of the said die element, said powder puff blank being movable into the die element to take the contour of the same, means for holding the thus shaped casing in the die element, an air inlet means adjacent the top of said die element oriented substantially at right angles to said side wall against the periphery of the blank which extends at the top of said die element, and means for causing air to flow into said die element via said air inlet, said blank periphery being adapted to be in-bent by the flow of air into the said die element through said air inlet means.

2,733,753

AUTOMATIC WIRE TAPING APPARATUS

John H. Schleaselman, Norwood, and Desiderius David Blaskovitz, Upper Darby, Pa.

Application November 23, 1951, Serial No. 257,755
5 Claims. (Cl. 154—1.8)



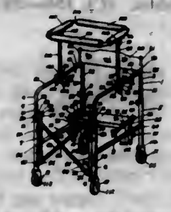
5. Apparatus for covering an elongate body which is held against rotation, comprising a rotatable member having capacity to revolve around and relative to said body, drive means for revolving said rotatable member and for concurrently moving it longitudinally along said body, and dispensing means carried by said rotatable member, said dispensing means carrying an elastic tape and having capacity for applying it in stretched helical form around said body with one of the lateral edges of said tape under greater tension than the other.

2,733,754

INVALID WALKER

John G. Leslie and Lawrence N. Robinson, Erie, Pa., assignors to Erie City Manufacturing Company, Erie, Pa., a corporation of Pennsylvania

Application May 4, 1953, Serial No. 352,616
6 Claims. (Cl. 155—22)



6. An invalid walker comprising two spaced pairs of spaced tubular members disposed in parallel relation to each other, two lower frame members, one said lower frame member connecting the tubes of one said pair together and the other said lower frame member connecting the other said pair together, a U-shaped member having the legs thereof telescopically received in the open upper ends of each said pair of tubular members, floor engaging means received in the lower ends of said tubular members, means to lock said U-shaped member legs to said tubular members for vertical adjustment thereon, a sleeve member disposed in side by side relation to and attached to one said tubular leg of each said pair, a pin member teleacopically received in each said sleeve, two cross brace members pivotally connected together midway between their ends, one end of one said brace being pivotally connected to the lower end of one said sleeve, the other end of said brace being pivotally connected to one said pin in the other said sleeve, one end of the other said brace being pivotally connected to the lower end of the other said sleeve, the other end of said other brace being pivotally connected to said other pin, and a seat swingably attached to the lower frame member of one said pair of tubular members and detachably secured to said other lower frame member of one said pair of tubular members.

2,733,755

COLLAPSIBLE FURNITURE

Raymond W. Boucher, Dothan, Ala., assignor to Hedstrom Union Company, Fitchburg, Mass., a corporation of Massachusetts

Application January 4, 1955, Serial No. 479,712
4 Claims. (Cl. 155—148)



3. A folding chair comprising a relatively large circular ring element of rigid material, flexible sheet material

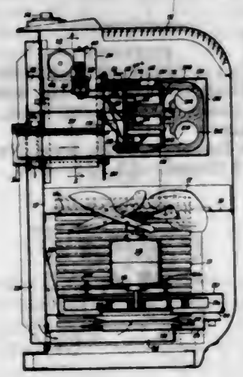
suspended from said ring element with substantial portions loosely disposed within the ring element for constituting a chair seat, a pair of leg members pivotally connected to said ring element and swingable between positions in which they are in spaced parallel planes which are perpendicular to the plane of said ring element and positions in which they are substantially in the plane of said ring element, and linkage means for releasably maintaining said leg members in their said spaced parallel planes perpendicular to the plane of said ring element.

2,733,756
CONTROL DEVICE FOR MANUALLY OPERATED OIL BURNERS
John R. Day, Guelph, Ontario, Canada
Application June 22, 1953, Serial No. 363,232
8 Claims. (Cl. 158—28)



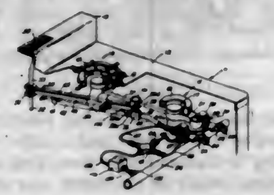
1. A control system for the supply of fuel and air to a combustion chamber, comprising a metering valve for regulating the rate of flow of fuel to the combustion chamber; a motor and a fan driven thereby for producing flow of air to the chamber; and a control device comprising adjustable valve control means operatively associated with the valve for increasing and decreasing the rate of flow of fuel through a predetermined range of rates of flow, motor speed control means including a member positionable by the adjustable valve control means to increase and decrease the speed of the motor and thus of the fan between low and high values as the rate of flow of fuel is increased and decreased respectively through said range, said member also having a position to which it is movable by the adjustable valve control means when the latter is moved to the low end of said range, and means operatively associated with said member in said last named position for setting the speed of the motor at a high value.

2,733,757
BURNER ASSEMBLY FOR SPACE HEATER
Erwin D. Cado, Chicago, Oliver B. Buskirk, La Grange, and Herschel A. Setser, Chicago, Ill., assignors to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application August 19, 1952, Serial No. 305,176
7 Claims. (Cl. 158—53)



1. A burner assembly for use in a fuel burning air heater including in combination: a heat conductive block having at least one main fuel vaporizing passage extending therethrough terminating at the front of said block in a main burner port, and having a pilot fuel vaporizing passage extending therethrough and terminating at the front of said block in a pilot burner port adjacent said main burner port; means to supply fuel and air to said main fuel vaporizing passage and to said pilot fuel vaporizing passage; and a separate body engaging the front of said block having at least one combustion passage extending therethrough spaced from the front of said block and along a transverse axis with respect to the front of said block, and further having an inner wall between the combustion passage and the front of said block facing said pilot burner port and spaced from the front of said block to define with the front of said block and with the sides of said body a baffle chamber, and said wall having an opening therein facing said main burner port and communicating with said combustion passage whereby fuel and air conducted through said pilot burner port are burned in said baffle chamber and fuel and air conducetd through said main burner port are burned in said combustion passage.

2,733,758
GAS BURNER IGNITION APPARATUS AND VALVE THEREFOR
John L. Lundgren, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a corporation of Illinois
Application November 19, 1951, Serial No. 257,013
8 Claims. (Cl. 158—115)

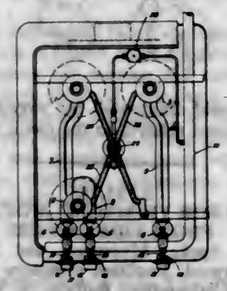


1. A gas burner control system comprising a gas supply line, a main gas burner, a conduit for supplying gas from said supply line to said main burner, a shut-off valve in said conduit for controlling the flow of gas to the main burner, a pilot burner in igniting relation to said main burner, a pilot burner conduit by-passing said shut-off valve for supplying gas from said supply line to said pilot burner, valve means controlling the flow of gas through said pilot burner conduit, pressure responsive means for controlling operation of said valve means, conduit means connecting said pressure responsive means to said shut-off valve for supplying gas from said supply line to said pressure responsive means under the control of said shut-off valve, said pressure responsive means being operative to open said valve means and maintain said valve means open while gas under pressure is applied thereto through said conduit means, and time delay means for maintaining said valve means open for a predetermined time following the release of pressure in said conduit means due to the closing of said shut-off valve.

2,733,759
BURNER CONTROL AND ELECTRIC IGNITION SYSTEM FOR STOVES
Leonard H. McCammant, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a corporation of Illinois
Application July 18, 1951, Serial No. 237,412
7 Claims. (Cl. 158—124)

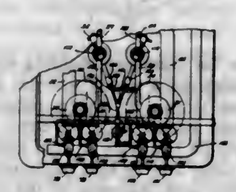
1. A burner control system for a gas burning appliance, said system comprising a main burner, a main shut-off valve controlling the supply of gas to said main gas

burner, a pilot burner in igniting relation to said main burner, a pilot burner valve controlling the supply of gas to the pilot burner and connected to receive a gas supply independent of the main shut-off valve, means responsive to the opening of said main shut-off valve for opening said pilot burner valve substantially simultaneous with the opening of said main shut-off valve to supply gas to the pilot burner, means responsive to said opening of said main shut-off valve for igniting the pilot burner,



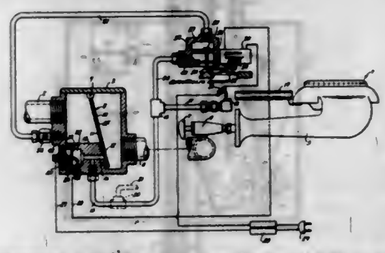
means for maintaining said pilot burner valve open, as long as said main shut-off valve is open and time delay means preventing the closing of the pilot burner valve for a predetermined time interval after closing of said main shut-off valve to provide a time delay for the extinguishment of the pilot burner after said main burner has been extinguished and permitting the closing of said pilot burner valve to extinguish the pilot burner after said predetermined time interval has elapsed.

2,733,760
GAS BURNER IGNITION SYSTEM
John L. Lundgren and Leonard H. McCammant, Rockford, Ill., assignors to Geo. D. Roper Corporation, Rockford, Ill., a corporation of Illinois
Application November 19, 1951, Serial No. 257,012
9 Claims. (Cl. 158—126)



1. A gas burner ignition system comprising a gas supply line, a main gas burner, conduit means supplying gas from said supply line to said main burner, a pilot burner in igniting relation to said main burner, a first pilot burner conduit means supplying gas to said pilot burner, a shut-off valve in both said conduit means operative to control the flow of gas to said main burner and to said pilot burner, an electrically energized igniter for igniting said pilot burner, a switch controlling the energization of said igniter, diaphragm means controlling the opening and closing of said switch communicating with said conduit means to the pilot burner after said shut-off valve, said diaphragm means being operative in response to gas pressure resulting from the opening of said shut-off valve to close said switch to energize said igniter for igniting the pilot burner, a second pilot burner conduit means for supplying gas to said pilot burner from said supply line, and valve means in said second pilot burner conduit means controlled by said diaphragm means operative to supply gas to said pilot burner independent of said shut-off valve following the ignition of the pilot burner.

2,733,761
TOP BURNER IGNITION SYSTEM
John L. Lundgren, Rockford, Ill., assignor to Geo. D. Roper Corporation, Rockford, Ill., a corporation of Illinois
Application April 5, 1952, Serial No. 280,729
7 Claims. (Cl. 158—126)

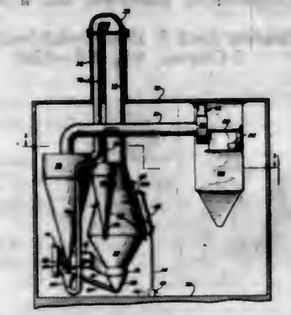


1. A gas burner ignition system comprising a gas supply line, a main gas burner, conduit means for supplying gas from said supply line to said main burner, a shut-off valve in said conduit means controlling the flow of gas to the main burner, a pilot burner in igniting relation to the main burner, pilot burner conduit means providing a predetermined gas supply from the supply line to said pilot burner to maintain a predetermined pilot flame level, a pressure responsive valve in said pilot burner conduit means operative in response to the opening of said shut-off valve to open to supply gas to the pilot burner, a pilot burner ignition means for igniting said pilot burner in response to opening of said shutoff valve, an auxiliary pilot burner conduit leading to the pilot burner and connected to receive a gas supply from said supply line for providing an auxiliary gas supply to the pilot burner which is independent of the pressure responsive valve, a normally closed valve in said auxiliary pilot burner conduit controlling the flow of gas therethrough, thermal responsive means positioned adjacent said pilot burner arranged to be actuated initial position to a displaced position in response to the heat produced by said predetermined flame level at the pilot burner and to return to said initial position when the pilot flame is below said predetermined level, said thermal responsive means operative upon actuation from said initial position to said displaced position to render said ignition means inoperative and operatively connected to said normally closed valve to open the latter and maintain a gas supply through said auxiliary pilot burner conduit so long as said ignition means is rendered inoperative by said thermal responsive means, and flow restriction means in said auxiliary pilot burner conduit for maintaining the pilot burner flame produced by the flow of gas through said auxiliary conduit below said predetermined pilot flame level whereby said thermal responsive means is returned to said initial position at a time interval after said pressure responsive valve is closed.

2,733,762
SPRAY DRIER
Samuel T. Coulter, St. Paul, Minn., William E. Hoyt, Colfax, Wis., and Samuel Van Deest, Chicago, Ill., assignors to Regents of The University of Minnesota, Minneapolis, Minn.
Application April 19, 1950, Serial No. 156,772
13 Claims. (Cl. 159—4)

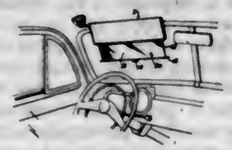
12. Apparatus for spray drying a liquid comprising in combination an inlet for a gaseous drying medium, means for heating said gaseous drying medium, an erect velocity unifying member comprising a divergent frusto-conical inlet portion and a convergent frusto-conical outlet portion, duct means for conveying said heated drying medium to the inlet of the divergent portion of the velocity unifying member, a spray nozzle in the outlet of the divergent-con-

vergent velocity unifying member, an erect tubular member extending from the outlet of the divergent-convergent



velocity unifying member and a solid-gas separator connected to the discharge end of said erect tubular member.

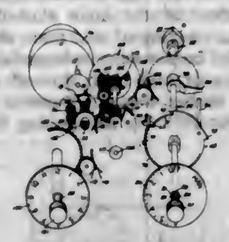
2,733,763
SUN VISOR FOR VEHICLES
Edmund O. Nygaard, Granite Falls, Minn.
Application September 22, 1952, Serial No. 310,824
1 Claim. (Cl. 160—32)



A sun visor for vehicles comprising a main hollow shield composed of a pair of rectangular shaped rigid members, transverse fasteners securing said members to each other in confronting relation a chamber at the opposing faces of said members and said chamber being open at one longitudinal edge of the shield, pairs of undulated resilient straps positioned in spaced parallel relation to each other within the chamber adjacent each end of the shield, said fastening means extending transversely of the pairs of straps to close the ends thereof and also anchoring the straps in the chamber, an antiglare shield slidable inwardly and outwardly at the open edge of the main shield, and members projecting outwardly at the rear side edges of the slidable shield and frictionally engaged between said pairs of straps to hold the slidable shield in extensibly adjusted position in the main shield, and said last named members being limited in their sliding movement by the closed ends of the straps.

2,733,764
TIMER
Harvey N. Bliss, Windsor, Conn., assignor to Veeder-Root, Incorporated, Hartford, Conn., a corporation of Connecticut
Application May 1, 1952, Serial No. 285,360
24 Claims. (Cl. 161—1)

24. In a timer, a rotatable driven element, a driving element rotatable relative to said driven element and having means for engaging the driven element in relatively rotated positions of the elements and for driving the driven element to a predetermined initial rotated position therewith when the driving element is rotated in one direction, first setting means for setting the driven element independently of the driving element in selected rotated positions away from said predetermined initial rotated position, a differential having a pair of inputs and having an output connected to said driving element for rotating the driving element in said one direction, a clock mechanism continuously connected to one input of the differential, and second setting means connected to the



other input of said differential for varying the setting of the driving element relative to the clock mechanism.

2,733,765
APPARATUS FOR TRIMMING MOULDING SPEW FROM TIRE COVERS
Eric Holroyd, Speke, Liverpool, and Leslie Malcolm Pearce, Liverpool, England, assignors to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a corporation of New York
Application June 3, 1952, Serial No. 291,422
Claims priority, application Great Britain June 16, 1951
9 Claims. (Cl. 164—10.2)



1. Apparatus for trimming molding spew from a tire cover which comprises a pulley to enter a tire cover and support it from within, a driven rotatable disc knife spaced from said pulley and tire cover, a support for said pulley movable relatively to said knife to a position to support the outer face of said tire cover tangent to the face of said knife with the spew of the tire cover at the cutting edge of the knife, a second knife having a cutting edge intersecting and overlapping the driven cutting knife at said spew and in spring pressed contact with the intersecting and overlapping area of said first rotatable knife.

2,733,766
BIAS CUTTER
George F. Wikle, Detroit, Mich., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application November 1, 1950, Serial No. 193,323
6 Claims. (Cl. 164—34)

1. A cutting mechanism comprising in combination a beam, a curved blade on the working surface of said beam, said blade having a flat cutting surface, a cooperating anvil disposed below said beam for backing up a material to be cut, separate actuating means at each end of said anvil interconnected with each end of said beam, the actuating means at one end of the beam acting to raise said one end while the actuating means at the other end simultaneously acts to lower said other end to bring

the flat cutting surface of the blade against the anvil with uniform pressure progressively from one end of the anvil to the other with a rolling stroke.



3. A cutter for rubberized fabric including in combination a cutting blade, a round anvil cooperating with said cutting blade, means for moving the cutting blade towards and away from the anvil to make a cut, a supporting beam engageable with said anvil for backing up said anvil during the cut, means for lifting said anvil out of engagement with said supporting beam when said blade moves away from said anvil subsequent to a cut, and means for rotating said anvil.

2,733,767
APPARATUS FOR REMOVING PARAFFIN FROM OIL WELLS
Ransom H. Sappington, West Branch, Mich.
Application November 23, 1951, Serial No. 257,726
1 Claim. (Cl. 166—176)



The combination with the cylindrical pump tubing of an oil well and an oil well sucker rod disposed therein, of a relatively thin walled cylindrical shell concentric with said rod, the rod extending entirely through the shell and the peripheral wall of said shell being of substantially the diameter of the inner diameter of said pump tubing so as to be in engagement therewith, said shell being formed with an outwardly beveled annular end blade thereon in engagement with the wall of the tubing over its entire extent to scrape a paraffin deposit entirely from the inner peripheral wall of the tubing as the rod is actuated longitudinally therein, and a plurality of radial scoring vanes of a thickness substantially no greater than the thickness of the wall of said shell extending the length thereof and rigidly connecting said shell and said rod along the entire length of said vanes, the ends of said vanes extending beyond both ends of said shell and curving inwardly to said rod, and being at all times disposed inwardly of the cutting edges on said shell, the outer curved portions of said vanes having sharp blades thereon for scoring said paraffin deposit ahead of said shell.

2,733,768
SPIRAL PARAFFIN SCRAPERS
David R. Trippleborn, Fort Worth, Tex., assignor to James C. Trippleborn, Pampa, Tex.
Application June 1, 1953, Serial No. 358,849
5 Claims. (Cl. 166—176)

1. A removable spiral paraffin scraper adapted to frictionally engage a sucker rod within the tubing of a well, said scraper comprising a blade of spring material having opposed narrow edges and being wound in the form of a helix, said blade frictionally engaging said rod along one narrow edge and standing normal to said rod along the full length of the scraper, the said narrow



edges being tapered at the ends of said scraper to partially approach each other.

2,733,769
FLOW CONTROL APPARATUS
Cicero C. Brown, Houston, Tex.
Application May 16, 1951, Serial No. 226,675
10 Claims. (Cl. 166—226)

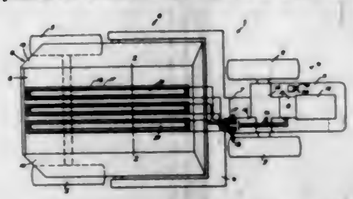


1. A flow control apparatus including, an outer non-rotatable housing, an inner mandrel rotatable within said housing, choke means movable within limits within the housing for controlling the flow therethrough, an operating connection between the rotatable mandrel and said choke means whereby said choke means is controlled by rotation of the mandrel, an annular abutment within the housing through which the choke means is movable, and a projection secured to the end of the choke means beyond the annular abutment for engagement with that side of the abutment remote from the choke means for limiting the movement of said choke means in one direction.

2,733,770
VEHICLE BODY INDUCTIVELY HEATED BY DYNAMIC BRAKING
Robert G. Le Tourneau, Longview, Tex., assignor to R. G. Le Tourneau, Inc., Peoria, Ill., a corporation of California
Application January 25, 1950, Serial No. 140,524
6 Claims. (Cl. 180—1)

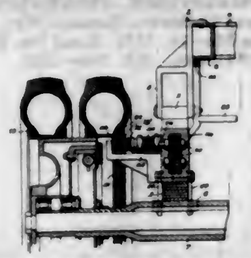
5. In a vehicle including an engine and a body, drive wheels supporting the vehicle and powered by the engine, a generator directly attached to said engine and driven thereby; an electric heating system for heating said body, first means connected to said generator and supplying current

to said system at a relatively low rate to supply heat to the body without noticeably retarding the engine speed, other means connected to said generator and supplying current to said system at a relatively high rate to both heat said



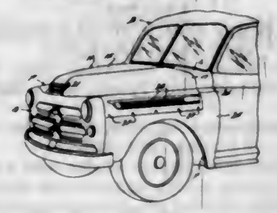
body and to retard the engine speed, and switching means connecting said generator and said first and other means effective to alternatively render either one of the two last-mentioned means effective.

2,733,771
HYDRAULIC BOOSTER DRIVE FOR MOTOR VEHICLES
Clifford E. Sullivan, Baltimore County, Md.
Application July 15, 1952, Serial No. 298,921
2 Claims. (Cl. 180—66)



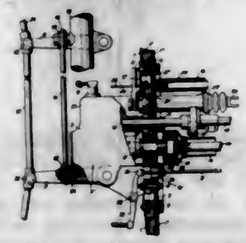
1. A vehicle of the class described comprising a chassis mounted upon traction wheels, an engine on the chassis, a hydraulic pump operatively connected to the engine, a fluid driven motor connected to said pump, a drive shaft extended from the motor, said shaft having a threaded portion at its outer end, a pinion gear on the shaft, the pinion gear having internal threads engaging the threaded end of the shaft providing longitudinal movement of the pinion gear along the threaded shaft when the threaded shaft is rotated, a ring gear secured to the traction wheel, the ring gear and the pinion gear having interengaging elements thereon, whereby driving connection is established between the ring gear and the pinion gear upon longitudinal movement of the pinion gear on the drive shaft, when said shaft is rotated.

2,733,772
VENTILATED ENGINE COMPARTMENT
Ernest P. Lamb, Grosse Pointe, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application May 2, 1952, Serial No. 285,753
2 Claims. (Cl. 180—69)



1. A motor vehicle body having an engine compartment at the front end thereof defined by a radiator grille providing the compartment front wall, a hood providing the compartment top wall, a cowl wall providing the compartment rear wall, wheel fenders providing the compartment side walls, and a pair of splash shields each of which is supported on the interior side of a fender and arranged to extend inwardly and downwardly towards the bottom of the engine compartment, said radiator grille being slotted to provide for the forced draft admission of air to the forward end of said compartment during forward movement of the vehicle, said vehicle fenders comprising upper and lower detachably connected sections with the upper fender sections slotted to provide exhaust ports for the air passed into said compartment, the upper sections of said fenders that include the slotted formations being shaped to extend upwardly and inwardly towards the center of the engine compartment so as to overhang the associated splash shield and provide a longitudinally extending trough for gathering and discharging the air that is passed through the engine compartment, said hood comprising a longitudinally extending, centrally located, fixedly mounted section and a pair of movably mounted side sections that are movable into and out of engagement with the fender upper sections to provide service openings to the compartment.

2,733,773
ARRANGEMENT OF STEERING GEAR AND CONTROLS IN MOTOR VEHICLES
Joseph Dauben, Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application March 8, 1950, Serial No. 148,484
Claims priority, application Germany March 10, 1949
7 Claims. (Cl. 180—90)



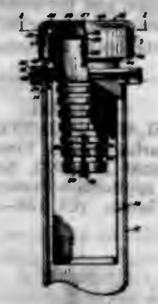
1. In a motor vehicle, the combination comprising a steering gear, a housing encasing the same and having a flange, a steering column having a flange, a steering shaft extending within said column and into said housing, a sound-absorbing cushion interposed between and connected with both of said flanges, and a sound-absorbing coupling inserted in said steering shaft near said cushion.

2,733,774
UNDERWATER ACOUSTIC DIAPHRAGM
Leopold Pessel, Whitemarsh, Pa., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application February 28, 1950, Serial No. 146,651
3 Claims. (Cl. 181—32)



1. In underwater sound equipment, an acoustic diaphragm capable of resisting the shock of nearby underwater explosions, said diaphragm comprising a molded web of porous, flexible fabric impregnated with a water-insoluble, hydrophobic, thermosetting resin and having an exposed hydrophilic coating comprising a partially hydrolized, insolubilized polyvinyl acetate.

2,733,775
FILLER PIPE CLOSURE APPARATUS
Ford J. Dupare, Dearborn, Mich.
Application October 23, 1952, Serial No. 316,490
15 Claims. (Cl. 183—34)



1. Apparatus for providing a closure in a filler pipe, including, a filter screen adapted to fit within the pipe so as to receive all of the oil introduced into the pipe, an adapter positioned within the filter screen, said adapter constituting a combined screen protector and cap securing means, there being a plurality of perforations in the adapter to provide for the passage of oil through the adapter into the filter screen, means for securing the adapter and filter screen to the pipe, a cap removably secured to said adapter and having top and lip portions, there being at least one port extending through the lip and top portions of the cap to provide for the passage of air through the cap into the adapter, and a filter pad positioned within the cap adjacent the ports in the cap and made from a suitable material to insure the passage of clean air into the adapter.

2,733,776
FILTERS FOR RESPIRATORS
Judith J. Garelick, Brooklyn, N. Y., assignor to Pulmosan Safety Equipment Corp., Brooklyn, N. Y., a corporation of New York
Application August 28, 1952, Serial No. 306,790
6 Claims. (Cl. 183—45)



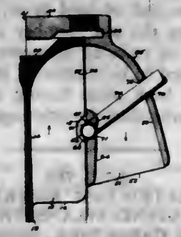
1. A filter for gases which comprises a fibrous wool fabric, the fibres of said fabric having a coating of a solid chlorinated paraffin, equal in amount to from about 10% to about 100% of the weight of said fabric.

2,733,777
FRONT LIFT SUPERSTRUCTURE OF A TWO POST LIFT
Ion V. K. Hott and Kenneth E. Berk, Dayton, Ohio, assignors to The Joyce-Cridland Company, Dayton, Ohio, a corporation of Ohio
Application March 3, 1950, Serial No. 147,456
3 Claims. (Cl. 187—8.74)



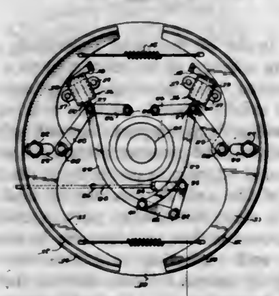
1. A superstructure for a lifting mechanism comprising a base having means whereby it may be mounted on the upper end of the movable element of said lifting mechanism, tiltable load supporting members mounted on said base adjacent the respective ends thereof on substantially parallel pivotal axes, each load supporting member having a part extending below the pivotal axis thereof, a connecting member mounted on said base for movement about a vertical axis between the ends thereof, elongate rigid members pivotally connected with said connecting member on the respective sides of said vertical axis and pivotally connected with the downwardly extending parts of the respective load supporting members.

2,733,778
HYDRODYNAMIC BRAKE WITH VENT
Robert Griffin De La Mater and Edgar F. Speiden, Parkersburg, W. Va., assignors to The Parkersburg Rig & Reel Company, Parkersburg, W. Va., a corporation of West Virginia
Application April 2, 1952, Serial No. 280,144
21 Claims. (Cl. 188—90)



1. A hydrodynamic brake comprising a rotor and a stator having adjacent faces and provided with coacting fluid pockets, and wholly stationary means substantially concentric with said rotor and extending at least partially around said pockets for relieving air or vapor pressure accumulations or partial vacuum in the brake, said means being of hollow closed cross-section.

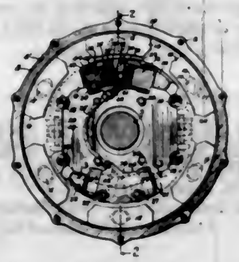
2,733,779
SAFETY BRAKE FOR CARS AND TRUCKS
Evia L. Wishon, Rolla, Mo.; Mary A. Kamper, administratrix of Evia L. Wishon, deceased, assignor of one-half to M. E. Sooter, Rolla, Mo.
Application December 19, 1952, Serial No. 326,867
1 Claim. (Cl. 188—106)



In a brake assembly, a back plate, a pair of spaced parallel anchor pins extending from said back plate, a pair of movable brake shoes each provided with a slot for receiving said anchor pins, each of said brake shoes including an enlarged portion intermediate its ends, said enlarged portion being arranged contiguous to said slots, a lining carried by each of said shoes for movement into and out of engagement with a brake drum, a pair of spaced, parallel coil springs interconnecting said brake shoes together for normally urging the linings out of engagement with the brake drum, said coil springs being arranged on opposite sides of the enlarged portions of said brake shoes, a pair of hydraulic cylinders interposed between said brake shoes and secured to said back plate

and adapted to be connected to a source of hydraulic fluid under pressure, said cylinders being arranged angularly with respect to each other, apertured ears extending outwardly from each of said cylinders, securing elements extending through said ears and into engagement with said back plate, a rod extending from each of said cylinders, a pair of body pins connected to said back plate, a pair of links each having an end pivotally connected to said rod, the links of each pair being arranged angularly with respect to each other, one of said links being pivotally connected to a body pin and the other of said links being pivotally connected to the enlarged portion of a brake shoe, a curved arm pivotally connected to the outer end of each of said rods, said arms being pivotally connected to each other, an L-shaped lever pivotally connected to said arms at the junction of said arms, an anchor pin pivotally connecting the intermediate portion of said lever to said back plate, a pin member connected to the free end of said lever, a bushing having a slot for receiving the pin member on the end of said lever, and a stem of reduced diameter connected to said bushing and adapted to be connected to the vehicle emergency brake, said back plate having an opening therein for the slidable projection therethrough of said stem.

2,733,780
FLUID-OPERATED DISC BRAKE AND NOISE ELIMINATING MEANS THEREFOR
Claude R. Myers, Galien, Mich., assignor, by mesne assignments, to Lambert Brake Corporation, St. Joseph, Mich., a corporation of Michigan
Application October 8, 1952, Serial No. 313,643
13 Claims. (Cl. 188—152)



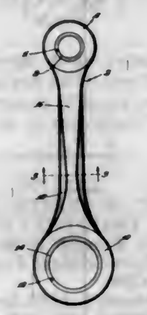
1. A disc brake of the class described, comprising a rotary housing adapted to be connected to a rotary member to be braked, said housing having opposed radially extended and axially spaced, annular braking surfaces interiorly thereof, a fixed support disposed adjacent to said housing, a pair of fluid pressure responsive actuator cylinders fixed to said support in positions at diametrically opposite sides of the axis of rotation of said housing and each having a fluid inlet-outlet port, a double-disc friction unit disposed within said housing in concentric relation thereto and encircling said actuator cylinders in normally slightly spaced relation thereto, the discs of said friction unit being free for limited rotation relative to each other and for axial movement towards and away from each other and consequently into and out of frictional engagement with the braking surfaces aforesaid in said housing, said friction unit including meanes between the discs for producing said axial movement of the discs responsive to relative rotation thereof, resilient means connecting said discs together, a pair of axially shiftable pistons mounted in each of said actuator cylinders, means supporting said discs on said pistons for effecting relative rotation of said discs responsive to axial shifting of said pistions, the pistons in said actuator cylinders each having its axis disposed at an angle to a horizontal plane and said pistons being selectively anchorable on said actuator cylinders upon braking engagement of the discs with the housing, depending upon the direction of rotation of said housing, and a partition in each of said actuator cylinders intermediate said pistons, said partition having a restricted pressure fluid orifice therethrough for cushioning anchoring movements of either of said pistons during brake operation and for cushioning inward movements of said pistons responsive to movements of said friction unit when the brake is released.

2,733,781
AUTOMATIC SLACK ADJUSTER FOR BRAKES
Louis Charles Brisson, Vincuil, France
Application August 13, 1952, Serial No. 304,178
Claims priority, application France August 18, 1951
2 Claims. (Cl. 188—196)



1. In a device for taking-up the wear of brake shoes, a controlling member for said brake shoes, a fixed support for said controlling member in which said controlling member is movable, an internally threaded socket rotatively mounted on said controlling member, a threaded member cooperating with said internally threaded socket, one end of said threaded member being engaged in said socket and the other end being arranged so as to be connected to one of said shoes in a fixed angular relationship with respect thereto, a disc member rotatively mounted on said socket, a crown of teeth on said disc member, means for causing said disc member to advance one tooth of said toothed crown at every application of the brake beyond a predetermined travel of said controlling member and means for locking said disc member to said socket once in every revolution of said disc member.

2,733,782
BRAKE HANGER
Fred E. Bachman, St. Louis, Mo., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application June 1, 1950, Serial No. 165,531
2 Claims. (Cl. 188—207)



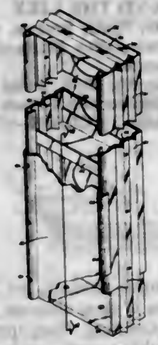
1. A brake hanger comprising spaced bosses having parallel bores therethrough, a body integrally connected at opposite ends to the respective bosses, said body comprising mutually perpendicular intersecting ribs intermediate the points of connection to the associated bosses, each of said ribs having tapering sides converging toward one of said bosses to a portion of said body having the smallest cross sectional area, said portion being disposed between the connection to one of said bosses and the medial portion of the body.

2,733,783
BRAKE DRUM
Henry James Butler, Sutton Coldfield, England, assignor to Dunlop Rubber Company Limited, London, England
Application January 19, 1950, Serial No. 139,340
Claims priority, application Great Britain February 1, 1949
2 Claims. (Cl. 188—218)



1. A brake drum comprising an axially extending wall and a radially extending web, a plurality of slots extending axially across said wall and a metal friction element wound around said wall and in and out of adjacent slots, wherein the friction element is springy and is spaced away from the wall of the drum between said slots to provide an air space therebetween.

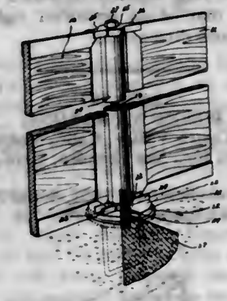
2,733,784
BUILDING CONSTRUCTION
John E. Berry, Minneapolis, Minn.
Application December 28, 1951, Serial No. 263,842
4 Claims. (Cl. 189—2)



1. In a building construction, a vertical panel comprising a first elongated plate having longitudinally extending flanges upon its opposite side edges, transversely extending flanges at the opposite ends of and between said longitudinally extending flanges, a second elongated plate having longitudinally extending flanges upon its opposite side edges, an interior surface of said second elongated plate being in engaged relation with an exterior surface of said first elongated plate and interior surfaces of the longitudinally extending flanges upon the second elongated plate being in engaged relation with exterior surfaces of the longitudinally extending flanges upon the first elongated plate, and a cover plate in spaced relation to said first and second elongated plates and rigid with portions of said longitudinally extending flanges, exterior bounding surfaces at the opposite sides and top of the vertical panel including tongues and grooves in the plane thereof and facing outwardly therefrom.

2,733,785
STALL POST ANCHOR
William George Beatty, Fergus, Ontario, Canada, assignor to Beatty Bros. Limited, Fergus, Ontario, Canada, a corporation of Canada
Application January 19, 1951, Serial No. 206,846
5 Claims. (Cl. 189—34)

1. A sectional device removably connecting adjacent panel sections of a demountable stall structure together and maintaining the sections in a predetermined fixed position comprising a base member having means permanently anchoring it to a floor and having a bearing surface substantially flush with the floor in which it is anchored, a threaded orifice positioned centrally in the bearing surface of said base member, a collar rotatably supported on said bearing surface, said collar having a central opening therethrough surrounded by an upstanding post-supporting flange, a post having its lower end removably entered in said central opening of said collar



permitting said collar to be rotated thereon, a lower section supporting and clamping member formed integrally with said collar removably supporting adjacent ends of adjoining panel sections, an upper clamping member receiving the upper edges of adjoining panel sections, said clamping member being rotatably and removably mounted on the upper end of said post, and a tie rod extending centrally through the upper clamping member, the post and support member and having its lower end threaded into said orifice thereby securing the sectional device in assembled position.

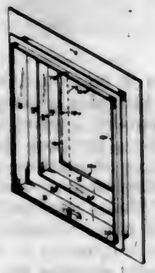
2,733,786
BUILDING ELEMENT
Peter Drake, Coogee, New South Wales, Australia
Application December 10, 1952, Serial No. 325,053
Claims priority, application Australia December 21, 1951
3 Claims. (Cl. 189—34)



1. A building element comprising a right-angle-section member having a wide flange and a narrow flange, a row of inclined slots disposed substantially centrally in the wide flange, the inclined slots being inclined alternately in opposite directions at an angle between 60° and 68° to the longitudinal axis of the element, an inner row of longitudinal slots in the wide flange disposed between the row of inclined slots and the junction of the wide flange and narrow flange, an outer row of longitudinal slots in the wide flange disposed between the row of inclined slots and the free edge of the wide flange, the ends of the inclined slots being in substantial longitudinal alignment and being spaced inwardly of the inner and outer rows of longitudinal slots, and the length of each longitudinal slot in each of the inner and outer rows being less than the distance between adjacent longitudinal slots in the said row, a row of alternate longitudinal slots and holes in the narrow flange, a series of holes each of which is disposed substantially centrally of the wide flange and between adjacent inclined slots and which is also disposed substantially centrally within the triangle formed by the continuation of the said inclined slots and of a longitudinal slot of one of said inner and outer rows, a longi-

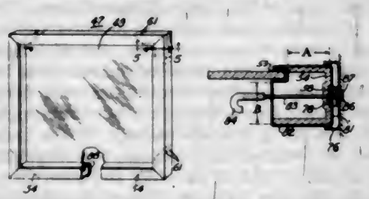
tudinal member being defined by that portion of the wide flange located between the inner row of longitudinal slots and the said junction, a second longitudinal member being defined by that portion of the wide flange between the outer row of longitudinal slots and the free edge of the wide flange, and diagonal members being defined by those portions of the wide flange located between the inclined slots and extending between the inner row and outer row of longitudinal slots, said longitudinal members and diagonal members forming between them a lattice structure the load-carrying capacity of which is not substantially less than that of an unslotted right-angle-section member of the same dimensions.

2,733,787
WINDOW FRAMING
Peter J. Morra, Castro Valley, Calif., assignor to Western Metal Sash Co., Inc., San Leandro, Calif., a corporation of California
Application November 19, 1951, Serial No. 257,074
2 Claims. (Cl. 189—75)



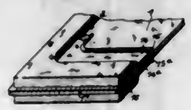
2. A bar formed to provide integral section forming portions extending along the bar perpendicular to the section and comprising; a section portion of L shape comprising a foot part and a straight L part; a second L section portion comprising a foot part joined perpendicularly to the straight L part and extending oppositely from the foot part of the first L portion; a rigid flat plate portion secured to the heel of the second L portion extending therefrom coplanarly with the foot part thereof in a direction oppositely to the foot parts of both L portions; said second L portion comprising a leg part extending perpendicularly to its foot part and to the plate portion of lesser extent than the plate portion; and a key portion secured to the leg part of the second L portion spaced from and extending in the direction of the plate portion.

2,733,788
FRAME CORNER CONSTRUCTION
George L. Farmer, Louisville, Ky.
Application December 27, 1951, Serial No. 263,625
1 Claim. (Cl. 189—76)



A frame corner construction which comprises a pair of hollow tubular sheet metal members of substantially rectangular cross section, meeting ends of said members being mitred, one wall of each member having a trough offset inwardly into the hollow thereof along an edge of said wall, the other three walls of each of said members being substantially flat, the troughs of the members being in communication, a corner piece having an arm disposed inside each of the adjoining ends, each arm of the corner piece being of channel shape in section, one flange of each arm being narrower than the other flange, the edge of the narrow flange of each arm engaging the trough of its associated member, the edge of the other flange of each arm engaging one of the walls of its associated member, the web and each of the flanges of each arm of the corner piece engaging flatwise one of the flat walls of the member associated therewith, whereby the arms of the corner member firmly engage the tubular members to hold the tubular members in assembled relation, the web of one of the arms of the corner piece having a lengthwise groove therein to form a space between said one of the arms and the one of the flat walls associated with the web thereof, a spring member of U-shape having one arm received in said space and another arm overlying said one of the walls, said web of said one of the arms of the corner piece and said one of the flat walls of the member associated therewith having aligned openings therethrough, and a pull rod attached to the other spring arm and extending through said opening in said one of the arms of the corner piece and through said opening in said one of the flat walls of the member associated therewith for drawing the other spring arm toward said one of the members.

2,733,789
WATERTIGHT JOINTS FOR GLAZING AND THE LIKE
Hubert Fernand Tolle, Paris, France, assignor to Societe Anonyme des Automobiles Peugeot, Paris, France, a French body corporate
Application May 16, 1950, Serial No. 162,230
Claims priority, application France May 20, 1949
9 Claims. (Cl. 189—78)



1. As a new industrial product, an integral unit comprising in combination a glass element, an adhering marginal metal coating extending along the periphery of said glass element and a rubber girdle vulcanized to said metal coating to form a watertight joint.

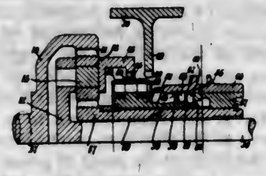
2,733,790
CLUTCH MECHANISM FOR RAILWAY HAND BRAKES
Herbert Jeffrey Dyke, Weston, Ontario, Canada
Application June 9, 1951, Serial No. 230,759
6 Claims. (Cl. 192—16)



1. A clutch structure for a hand brake of the kind described, comprising a driving element supported to rotate about an axis for exerting a winding stress when turned in a brake applying direction, said driving element having an annular section supplied with an axial passage and provided with a plurality of radial slots equidistantly spaced, locking elements movably contained in said slots, a driven element having a bore by which it is sleeved on said driving element and having its bore provided with a circular succession of notches, the angular spacing of said notches being such as to render the notches receptive to

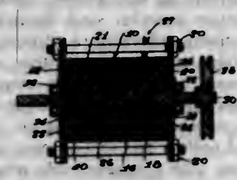
portions of said locking elements when the locking elements are moved outwardly to establish a driving connection, means for preventing retrograde movement of said driven element with respect to the direction in which said driving element turns in exerting a winding stress in a brake applying direction, co-axially supported shaft having a section disposed in said axial passage and provided with flats corresponding in number and angular spacing to said slots, said flats functioning to allow said locking elements to recede from engagement with notches when said shaft is reversely turned to bring the flats into register with said slots, manual means for turning said shaft and keying means empowering said shaft to turn said driving element in the brake applying direction, said keying means including a lost motion connection permitting said shaft to turn counterclockwise when said locking elements are engaged with said notches and the driven element is held against retrograde movement, said lost motion connection having such an angular magnitude as to cause said locking element to engage in adjacent notches when they recede from the engaged notches.

2,733,791
SYNCHRONIZING COUPLING DEVICES
Philip John Short, Isleworth, England, assignor to S. S. S. Gears Limited, Isleworth, England, a British company
Application October 23, 1951, Serial No. 252,743
Claims priority, application Great Britain October 27, 1950
11 Claims. (Cl. 192—18)



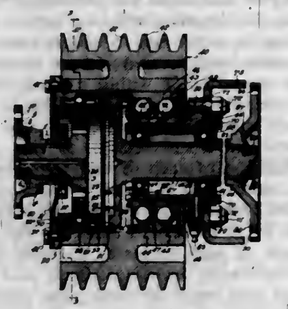
5. A coupling device having first, second and third coaxial and relatively rotatable members, the first and third of which have teeth, a toothed intermediate member so mounted on said second member as to be constrained to move helically thereon from a first position in which said first and intermediate members are in mesh with one another, through a second position in which said first and intermediate members are disengaged, to a third position in which said third and intermediate members are in mesh with one another, means for automatically shifting said intermediate member from said second position to said first position when said intermediate member tends to rotate in one direction relatively to said first member, and further means for automatically shifting said intermediate member from said second position to said third position when said intermediate member tends to rotate in the other direction relatively to said third member, at least one locking plunger carried by a part permanently fast with the second member for movement between an inoperative position and an operative position in which it cooperates with an abutment surface on said intermediate member to form an axial stop which prevents movement of said intermediate member from said first to said second position, at least one further locking plunger carried by said part for movement between an inoperative position and an operative position in which it cooperates with an abutment surface on said intermediate member to form a stop which prevents movement of said intermediate member from said third to said second position, and a locking member slidable on said part axially of said coupling and serving as it enters two alternative locations to lock said first-mentioned and further locking plungers alternatively in their operative positions.

2,733,792
CLUTCH WITH MAGNETIC FLUID MIXTURE
Erwin J. Saxl, Harvard, Mass.
Application June 22, 1950, Serial No. 169,711
2 Claims. (Cl. 192—21.5)



1. In an electromagnetic apparatus for controlling the relative rotation of two members, in combination, one member comprising an electromagnet having its windings in the form of a hollow elongated coil, and means for supporting the electromagnet including a hollow spool-like fluid-tight metal housing forming a central chamber of relatively small diameter extending through the hollow portion of the coil and communicating end chambers of substantially larger diameter disposed adjacent the ends of the coil and forming the rims of said spool-like housing, said coil being disposed between said rims and being of substantially the same outside diameter as said rims, said spool-like chamber enclosing a fluid vehicle and a mass of small magnetizable members in the vehicle, said coil being entirely outside said housing to facilitate cooling, a second member provided with two relatively widely spaced metal disks each being disposed to rotate relatively to and within one of said large diameter end chambers with the vehicle surrounding the disks, and about the axis of the coil and across the magnetic flux at each end thereof, sealed bearing members for rotatably supporting the second member with relation to the first member and for preventing leakage of the vehicle from the housing, and means for enabling relative rotation to be imparted to said two members whereby when said magnet is deenergized said small magnetizable members are permitted to be moved freely with relation to one another upon said relative rotation with minimum friction, and when said magnet is energized the magnetic field causes orientation of said members and operates to restrain the same from being freely moved with relation to one another, and thereby causing some of them to frictionally engage said members.

2,733,793
CLUTCH MECHANISM FOR A POWER TAKE-OFF APPARATUS
Kibbey W. Couse, Newark, N. J.
Application April 21, 1952, Serial No. 283,471
3 Claims. (Cl. 192—48)



1. Power take-off apparatus comprising the combination of a driving member, a power transmitting member and a driven member, said power transmitting and said driven member having hollow end sections coaxial with

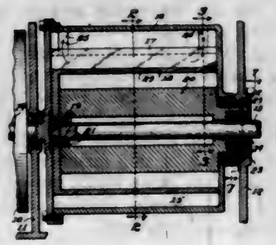
each other and with said driving member, each hollow end section having one end coaxially and closely juxtaposed to one end of the other hollow end section, said driving member being axially movable in said hollow end sections relatively to said power transmitting member and said driven member and having an opening, means for selectively effecting a driving engagement between said driving member and either of said power transmitting element and said driven element, a spring fitted into said opening, said power transmitting member and said driven member each having an interior recess formed in its said hollow end section near said end of the hollow end section with a beveled side whose outer edge is in close proximity to the corresponding edge of the other recess and also having a shoulder spaced from said side inwardly of the corresponding hollow end section to limit movement of said driving member inwardly of the corresponding hollow end section, and a detent member in said opening of the driving member urged by said spring so that said detent member is compelled to snap into one or the other of said recesses upon slight axial movement of said driving member and is pressed into engagement with one or the other of said sides depending upon the position of said driving member to lock the driving member between said side and said shoulder of the corresponding power transmitting member or driven member in a position of driving engagement with one or the other of said power transmitting member and said driven member.

2,733,794

HYDRAULIC COUPLING FOR USE BETWEEN A DRIVING AND A DRIVEN ELEMENT

Willie A. Reid, San Francisco, Calif.

Application January 11, 1955, Serial No. 481,112
3 Claims. (Cl. 192—58)



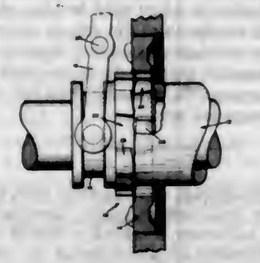
2. A hydraulic coupling comprising a rotatable housing containing a hydraulic fluid and having a drive shaft projecting exteriorly therefrom, an irregularly shaped rotor disposed within said housing, a driven shaft disposed within and connected to said rotor, radially extending extendible and retractable blades within said housing exteriorly of said rotor and connected by one end to said housing for rotation with the latter, each of said blades having the other end in sliding contact with said rotor, said rotor being formed with an irregularly shaped chamber, a second rotor within said chamber, radially extending extendible and retractable blades within said chamber each connected by one end to said second rotor for reciprocal movement relative to said second rotor with the other end of each of said second-named blades in sliding contact with the wall of said chamber, said housing being formed with a by-pass for fluid from one side of each of its associated blades to the other side, a valve in each of said by-passes operable to close said by-pass in response to centrifugal force, said second rotor being formed with bores connecting the space within said housing exteriorly of said rotor with said chamber, a valve in each of said bores operable to close the latter in response to centrifugal force greater than that required to move said first-named valves to the position closing said by-passes whereby fluid pumped by the blades connected to said housing rotates said rotor at one speed when said first-named valves are closed and at a greater speed when said first-named valves and said second-named valves are closed, and means preventing rotation of said second rotor in a direction opposite to the rotation of said first rotor.

2,733,795

POWER TRANSMITTING CLUTCH MECHANISM

Chester D. Christie, Beachwood Village, Ohio, assignor to Eaton Manufacturing Company, Cleveland, Ohio, a corporation of Ohio

Application November 18, 1950, Serial No. 196,491
4 Claims. (Cl. 192—67)



1. A clutching mechanism comprising a pair of engageable cylindrical clutching elements, each having a plurality of equi-spaced gear teeth, said teeth each having front faces inclined to a plane perpendicular to the axis of the mechanism providing for mating relation between the front faces of the teeth of the respective clutching elements along common planes, a side face lying substantially in a plane passing through the axis of the clutching mechanism, and a side face inclined to a plane passing through the axis of the clutching mechanism adjoining the front face of the tooth at the point of greatest axial length thereof providing for a greater width of the tooth at its front face than at its base, said teeth being provided of such width at the front faces thereof and the spaces between the teeth at the front face positions thereof being provided of such width that the teeth on one clutching element cannot enter into the spaces between the teeth on the other clutching element upon a relative direct axial movement of the clutching element toward one another with no relative rotation existing between the clutching elements and also that the teeth on one clutching element cannot enter into the spaces between the teeth on the other clutching element for one direction of relative rotation between the cooperative clutching elements while permitting movement of the teeth of the cooperative clutching elements to enter the spaces between the teeth of the cooperative clutching elements for a reverse direction of relative rotation therebetween, said teeth of both clutching elements being identical in size and shape and the spaces between the teeth on both clutching elements being identical in size and shape.

2,733,796

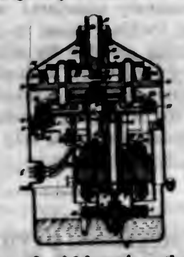
CENTRIFUGAL FORCE RESPONSIVE CLUTCH FOR A CLOTHES WASHING MACHINE

Stephen L. McMillan and Milton S. Williams, Louisville, Ky., assignors to General Electric Company, a corporation of New York

Application April 12, 1952, Serial No. 282,056
5 Claims. (Cl. 192—105)

1. A fluid operated clutch comprising a substantially cylindrical housing rotatable on a generally vertical axis, drive means connected to said housing, a clutch driven member within said housing and freely movable along the axis of said housing, a shaft connected to said clutch driven member, a liquid reservoir, means supplying liquid

at low pressure from said reservoir to said housing by centrifugal force during rotation of said housing, said means comprising an inverted frusto-conical device fixed to the lower portion of said housing and extending downwardly into said reservoir, said device having an outwardly sloping passageway communicating from said res-



ervoir to the interior of said housing, the liquid conducted into said housing during rotation thereof exerting a pressure responsive to the centrifugal force acting thereon to move said clutch driven member into engagement with the upper portion of said housing to frictionally couple said member and said housing for transmitting torque to said shaft.

2,733,797

CLUTCH WITH POROUS COMPRESSIBLE FRICTION LININGS

John O. Almen, Sierra Madre, and William L. Carnegie, Romeo, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Continuation of application Serial No. 717,512, December 20, 1942. This application November 17, 1953, Serial No. 392,596
21 Claims. (Cl. 192—107)



1. A composite circular friction clutch member for use in conjunction with a quantity of circulating lubricant, said member comprising a metal disc with a compressible wear-face adhering thereto consisting of a body of fibrous structure stiffened by a plastic coating which sheathes the fibers thereof and having connecting interstitial voids between the said fibers, said voids affording flow space for said lubricant, and said body being attached to said disc by a thermo-setting bonding layer composed of the same plastic coating as that which provides the stiffening of the said fibers of the said body of fibrous structure.

2,733,798

COMPOSITE WET CLUTCH

John O. Almen, Royal Oak, and William L. Carnegie, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Original application December 20, 1946, Serial No. 717,512. Divided and this application April 8, 1950, Serial No. 170,752
6 Claims. (Cl. 192—113)



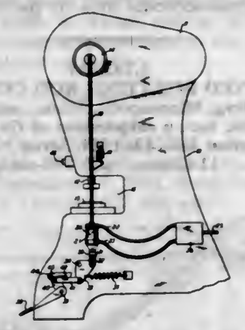
1. In a power transmission providing plural paths of torque between an engine and a load shaft, the combination comprising; a plurality of clutches for coupling or releasing the torque of said paths, at least one of said clutches consisting of mating multiple discs adapted to couple driving and driven members, said discs of one member being of plain metal and of the other member being of composite form, a clutch lubricant circulation system, a pump caused to rotate with one of said members for supplying said system with a constantly circulating oil body, lubricant feed passages connecting said system with said multiple disc clutch, and the said composite clutch discs including fibrous wear-surfaces of spongy nature arranged to absorb and release oil flow supplied by said passages from said body during the operating cycles of said multiple disc clutch when said discs are subjected to alternate compression and loading relief.

2,733,799

TRIP MECHANISM FOR PRESSES

Alfred A. Williams, Plainfield, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York

Application January 4, 1952, Serial No. 265,015
4 Claims. (Cl. 192—131)



1. A trip mechanism for a press having a driving means, a normally open clutch therefor and a ram reciprocated by the driving means through the clutch when closed, the trip mechanism comprising a rod actuable to trip the clutch into closed position, a pedal movable between a normal position and an operated position, a fluid operable unit operatively connected to the rod and actuable between a normal and an operated position, a fluid supply line, a normally closed valve to control a fluid from the supply line to the unit, elements connected respectively to the pedal and unit and having a lost motion connection of a given distance therebetween whereby actuation of the pedal into its operated position will cause its element to remove the lost motion between the elements and render the unit effective when actuated to actuate the rod, means to latch the pedal in its operated position, and spaced safety control means operable jointly only to actuate the valve into open position to cause operation of the unit.

2,733,800

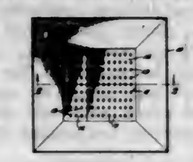
NONCLOGGING DEVICE FOR DISTRIBUTING GRANULAR MATERIAL

Douglas H. Fenske, Lakeland, Fla., assignor to International Minerals & Chemical Corporation, a corporation of New York

Application March 29, 1951, Serial No. 218,227
1 Claim. (Cl. 193—27)

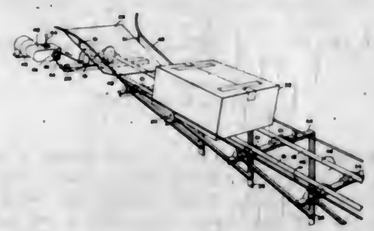
A nonclogging apparatus for continuous dispersing of closely packed particles into free moving spaced particles over a limited cross-sectional area, which comprises a tubular member having the longitudinal axis thereof substantially vertical, a plurality of plates mounted within said tubular member and having perforations of substan-

tially the same size in each plate such that a substantial portion of the particles ultimately will pass through said perforations, said plates being vertically and alternately spaced, and secured to opposite walls as a base and downwardly inclined from the juncture of said base with the wall so that there is a portion of unobstructed tubular member between the end of each plate and the opposite tube wall; the ends of the plates being positioned in over-



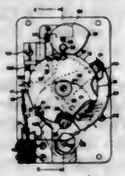
lapping arrangement so as to eliminate any straight vertical path downward for particles which are not passed by the perforations of the plate above, while the space between plates forms a continuous circuitous unobstructed path for material not passing through perforations in the plates, discharge from the circuitous path being in the same direction as the dispersed particles and within the limited cross-sectional area of the tubular member.

2,733,801
INCLINED ROTATING ROD CONVEYOR
Donald W. Dryg, Minneapolis, Minn., assignor to General Mills, Inc., a corporation of Delaware
Application June 13, 1951, Serial No. 231,348
12 Claims. (Cl. 193—40)



1. A device for conveying flat surfaced objects comprising a pair of conveying elements spaced from each other and having smooth cylindrical areas contacting the flat surface of the object and inclined downwardly, and means causing said contacting areas to have movement toward each other causing them to slide against the object to reduce the friction between the object and conveying elements so that the object will slide downwardly along said elements, the space between the conveying elements being less than the width of the flat surface of said objects.

2,733,802
METERING DEVICE
Leonard C. Truesdell, Winnetka, Ill.
Application October 24, 1950, Serial No. 191,868
14 Claims. (Cl. 194—9)



1. An electric-power metering device comprising: an electrical switch adapted to be connected in the power supply circuit to an associated electrical apparatus; a switch-operating member operatively associated with said switch; an integrator; clutch means releasably coupling said integrator to said switch-operating member; means for releasably locking said switch-operating member in a home position in which said switch is operated; a tripping device operatively associated with said integrator for releasing said locking means to permit actuation of said switch-operating member by said integrator; timing mechanism for continuously actuating said integrator along a predetermined path in a first direction; and coin-operated means for selectively actuating said integrator along an incremental portion of said path in a direction opposite to said first direction.

2,733,803
METERING DEVICE
Leonard C. Truesdell, Winnetka, Ill.
Original application October 24, 1950, Serial No. 191,868. Divided and this application October 22, 1952, Serial No. 316,236
6 Claims. (Cl. 194—9)



1. A coin-controlled electric-power metering device comprising: a casing; a coin receptacle removably supported in said casing and provided with a coin chute; a movable coin-receiving member having a coin-receiving recess; means for moving said coin-receiving member in one direction along a path including a position in which said recess is in register wth said chute to deposit a coin inserted in said recess into said receptacle; means for restraining said coin-receiving member against movement in a direction opposite to said one direction; and means responsive to removal of said receptacle for restraining said coin-receiving member against movement in said one direction.

2,733,804
RUBBER KEYS FOR BUSINESS AND OFFICE MACHINES SUCH AS TYPEWRITERS
Paul P. Wesson, East Orange, N. J.
Application August 19, 1952, Serial No. 305,204
9 Claims. (Cl. 197—103)



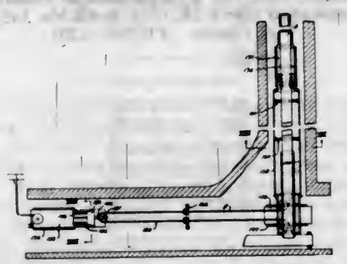
1. As an article of manufacture a fatigue resisting, shock absorbing and sound deadening cap for keys of typewriters and the like comprising a flexible casing structure having a chamber therein and a flexible transparent top wall, a yieldable character bearing disc disposed in the chamber immediately beneath the transparent top wall and with the character immediately facing and visible through said top wall, a shock absorbing pad in the chamber beneath said disc, and means to connect the casing structure upon the key of a typewriter so that the pad contacts the top of the key.

2,733,805
DISHWASHING MACHINE RACK CONVEYING APPARATUS
Homer F. Lyman, Nutley, N. J.
Application June 22, 1953, Serial No. 363,167
13 Claims. (Cl. 198—19)



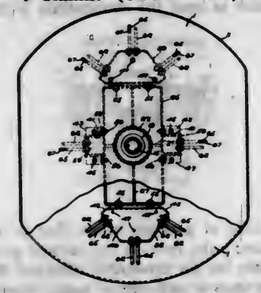
1. Conveying apparatus for a dishwashing machine comprising a casing having a chamber therein, said casing having an inlet through which a rack containing dishes is passed into the chamber and an outlet through which the rack is passed from the chamber, the conveying apparatus comprising actuating means and other actuating means, said actuating means being adapted to operatively act upon a dish rack and advance said rack from the casing inlet to a dwell position in the chamber and in the dwell position to become inoperative in respect to the rack, said other actuating means being out of operative relationship with said rack when the rack is in the dwell position and positioned to operatively act upon said rack beyond the dwell position when the rack is moved from the dwell position toward said outlet, and a dish rack actuator operable from outside said casing into and out of operative relationship with said dish rack in the dwell position, the actuator comprising a rotatably mounted shaft extending from outwardly of the casing into the chamber, rack engaging means mounted on and rotatable with the shaft, a handle on said shaft outwardly of the casing to turn the shaft, said rack engaging means being adapted to engage the rack and move it toward the casing outlet and into operative relationship with said other actuating means of the conveying apparatus when turned in one direction and out of engagement with said rack when turned in the opposite direction.

2,733,806
EXTENSIBLE CONVEYER
Sterling S. Lanier, Jr., Nortonville, Ky.
Application January 15, 1951, Serial No. 206,036
14 Claims. (Cl. 198—139)



1. In an extensible belt conveyor including a conveying section, a take up section and means to discharge material from the conveyor intermediate the conveying and the take up section, propulsion power means at the outer end of the conveying section, means to drive the conveyor belt from the propulsion power means, means at the outer end of the take up section for maintaining tension in the belt, troughing idlers at intervals for the upper reach of the belt in the conveying section, means to turn the reaches of the belt in the take up section to travel in vertical planes and vertical idlers for both reaches of the belt in the take up section.

2,733,807
CLOTH REEL
Frank B. Morrill, North Adams, Mass., assignor to The James Hunter Machine Company, North Adams, Mass., a corporation of Massachusetts
Application October 12, 1951, Serial No. 251,043
9 Claims. (Cl. 203—300)



6. A reel for propelling cloth having in combination spaced heads, slats joining the heads, and humps at spaced intervals staggered as to other humps on the same slat and acting therewith to wedge and to bend the cloth axially between them in proportion to the resistance of the cloth to being fed onward.

2,733,808
LUMBER SORTER
Kemper N. Moseley, Tifton, Ga.
Application September 17, 1954, Serial No. 456,767
5 Claims. (Cl. 209—88)

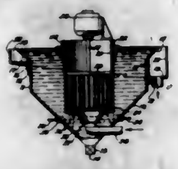


3. A lumber separator system comprising an elongated trough, conveyor means in the trough, and a plurality of separator units along the trough, each separator unit comprising a trip extending adjacent to the trough and an ejector spaced from the trip and extending adjacent to the trough and transversely thereof, means interconnecting the trip and the ejector whereby actuation of the trip moves the ejector sufficiently for lumber of a width sufficient to actuate the trip to pass the ejector, means for returning the trip and ejector to unactuated position, said separator units being ararnged in groups, all the units in a group having their respective trips and ejectors spaced apart varying distances for separating lumber of various lengths, the separator units within each group having their trips and ejectors spaced the same height above the conveyor in the trough, the spacing between the trip and the chain of succeeding groups being smaller than that of the next preceding group, the uppermost occurring first, the next highest occurring second, etc., whereby the widest lumber will be ejected at the first group, the next widest at the next group, etc.

2,733,809
PROCESS FOR THE CONCENTRATION OF POTASH ORE
Edgar E. Wrege, Lakeland, Fla., and Albert Adams, Carlsbad, N. Mex., assignors to International Minerals & Chemical Corporation, a corporation of New York
Application November 19, 1953, Serial No. 393,118
14 Claims. (Cl. 209—166)

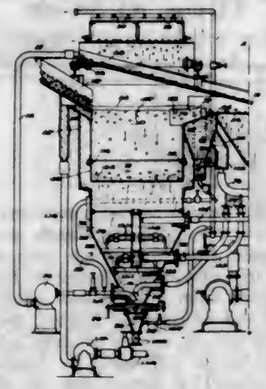
1. In a process of preparing a concentrate from a coarse granular ore feed material of an average particle

size larger than that normally used for froth flotation wherein a pulp is prepared comprising coarse reagentized granular ore and a liquid medium in which at least the concentrate is insoluble, the steps comprising introducing a stream of reagentized pulp directly into an aeration and agitation zone, separately introducing solids-free liquid medium in which at least the concentrate is insoluble into



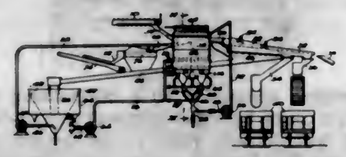
the agitation zone at a point below that of introduction of the reagentized pulp, moving the aerated portion of said pulp in response to an upwardly directed flow of said liquid medium into a separation zone, removing liquid medium and the aerated portion of the pulp from the top of said separation zone, removing the settling portion of said pulp from the bottom of said agitation zone, and separating the concentrate portion from said fluid medium.

2,733,810
COAL CLASSIFICATION
James W. Murry, Fairmont, W. Va.
Application July 2, 1952, Serial No. 296,843
9 Claims. (Cl. 209—172.5)



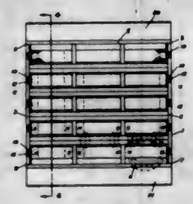
1. A method of classifying coal comprising introducing sand in the top of a coal classifying compartment, passing a body of water upwardly and across the top of the compartment then over an outlet weir, regulating the volume of sand and the upward velocity and volume of water being circulated to keep the sand suspended in the water and to maintain a sand-water float mixture zone in the top of the compartment having a specific gravity adapted to float the desired coal, introducing granular coal to be classified into the sand-water float medium at the top of the compartment, maintaining a sand-water mixture of downwardly decreasing specific gravity below the coal floating zone of the compartment to facilitate the separation of heavy sink material, permitting heavy refuse to sink through the compartment, screening the sinking refuse to catch the coarse material and carrying it out of a mid-portion of the compartment while allowing fine heavy sinking refuse to pass through the screen, withdrawing fine refuse from the bottom of the compartment, carrying the float coal with the float mixture in a confined stream up an inclined perforated base with increased velocity to and over the outlet weir by introducing water at the bottom of the stream through the base to keep the water, sand and coal mixture mobile and prevent sand from settling on the base.

2,733,811
HEAVY SOLID MIXTURE CLASSIFICATION
James W. Murry, Fairmont, W. Va.
Application February 10, 1953, Serial No. 336,134
18 Claims. (Cl. 209—172.5)



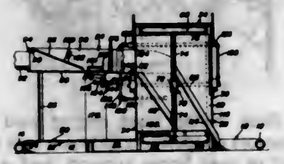
1. A method of classifying coal containing bone, slate, and heavy residue comprising, introducing the mixture of coal and residue into a classifying compartment containing a relatively deep confined body of sand generally coarser than 80 mesh suspended in an active body of water flowing upwardly therein to maintain a density between 1.30 and 1.70 throughout the compartment, continuously adding sand to the top of the compartment and continuously introducing water into the bottom of the compartment with a velocity to maintain a media of desired density in the compartment, arresting and holding the downward sink of heavy coarse residue in the media at the bottom of the compartment while permitting fine residue to pass downwardly and water to pass upwardly through the coarser residue, maintaining the float media in hydraulic equilibrium with a body of comparatively quiescent water surrounding the compartment, continuously conveying the coarse residue away from the bottom of the compartment and through the surrounding body of water, passing the desired float coal transversely to the top of the body of float media together with a stream of float media, skimming off the float coal with its surrounding float media, and washing sand away from the separated float coal.

2,733,812
GRATE MAGNET
Ronald C. Hoff, Erie, Pa., assignor to Eriez Manufacturing Company, Erie, Pa., a corporation of Pennsylvania
Application March 30, 1953, Serial No. 345,526
11 Claims. (Cl. 209—223)



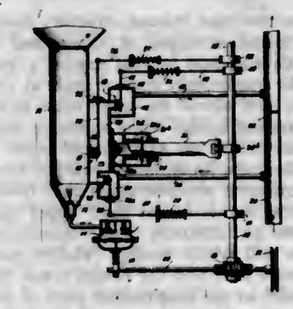
11. A magnetic separator comprising a frame having two end members, spaced tubes made of non-magnetic material disposed in proximate relation and extending between said ends, permanent magnets disposed in said tubes, said magnets being disposed with like poles adjacent each other, said magnets having magnetic fields having a portion thereof parallel to said tubes, said parallel portion of said fields in one row being substantially distorted by the field in the adjacent row, the space between said tubes being clear of obstructions wherein non-magnetic material may freely fall therebetween, and a grate disposed over the top of said magnetic separator.

2,733,813
SHALE SEPARATOR
Ernest E. Bartlett, George West, Tex., assignor to Joe H. Bartlett, Live Oak, Tex.
Application February 26, 1954, Serial No. 412,885
8 Claims. (Cl. 209—270)



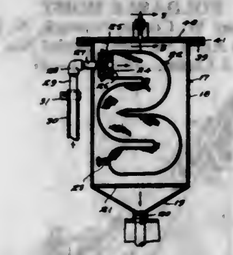
1. A shale separator comprising a skid, an upright housing rigidly secured to said skid with said skid forming the bottom of said housing, a drilling mud discharge passage formed in said skid and projecting exteriorly thereof, a shale removing screen wheel mounted in said housing, a drilling mud inlet pipe supported by said skid for directing drilling mud on said screen wheel, a by-pass pipe communicated with said inlet pipe intermediate its ends, said by-pass pipe having a portion thereof integral with said skid and communicating with said discharge passage within said skid.

2,733,814
SLURRY FEEDER
George M. Booth, Westfield, N. J., assignor to Wallace & Tiernan Incorporated, a corporation of Delaware
Application April 4, 1952, Serial No. 280,686
11 Claims. (Cl. 210—1)



1. In a slurry feeder, in combination, a slurry reservoir, a receiving chamber having a common wall with the reservoir and having an opening through said wall into the reservoir, a valve member adapted to close against and open away from said opening, means including a diaphragm having a face in communication with the chamber, for varying the volume of the chamber to draw slurry from the reservoir through the passage, said chamber having inlet and outlet means for liquid to receive slurry, valve means controlling the flow through said inlet and outlet means and means for actuating said first-mentioned valve member, said second-mentioned valve means and said diaphragm positively and independently of the pressures acting thereon, said last-mentioned means including means timing said diaphragm relative to said valve member and valve means to withdraw slurry from the reservoir when said valve member is open and said valve means are closed, and means timing said valve member relative to said diaphragm and valve means to close against said opening when said diaphragm is at rest and said valve means are closed.

2,733,815
FILTER
Michael Kwochka, Mountain Top, and Charles B. Gage, Wilkes-Barre, Pa.
Application April 14, 1952, Serial No. 282,198
1 Claim. (Cl. 210—164)



A filter unit comprising a cylindrical casing having an open upper end, a closure member loosely extending across said upper end of said casing, means pivotally securing said closure member on said casing, said means comprising a substantially inverted U-shaped bar having an arm thereof pivotally connected on said casing adjacent said upper end and the bight portion of said bar extending diametrically across said closure member in vertically spaced relation, means releasably locking the other end of said bar to said casing, said closure member having an opening extending transversely therethrough and positioned below said bight portion, a bolt extending through said opening and secured to said closure member with the head of said bolt engaging the lowermost side of said closure member, means securing said bolt to said bight portion of said bar, a conical bottom formed integrally with said casing, an outlet member extending from the lower end of said conical bottom for connection with the suction side of a pump, said suction created by said pump serving to hold said closure member on said open end of said casing, a disc-shaped scraper member seated on the upper large end of said conical bottom, an intake nipple extending through the side of the upper end of said casing, said nipple being externally threaded at each end, a nut threaded on the inner end of said nipple, a pair of spaced apart annular shoulders formed on the outer surface of said nut, an expansible flexible open ended tubular frabric filter member in said casing, means engaging over one end of said filter member and between said annular shoulders on said nut for securing one end of said filter member to said nut, and removable means closing the other end of said filter member, said filter member being convoluted within said casing.

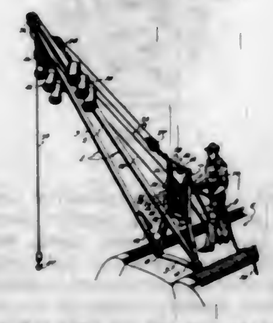
2,733,816
SELECTIVE SOLIDS REMOVAL
Llewellyn B. Griffith, Arlington, Va.
Application August 4, 1954, Serial No. 447,806
6 Claims. (Cl. 210—172)



1. In a sewage treating system in which the sewage in liquid form carrying various types of solids flows through a sewage channel having parallel sides, means for removing objects of greater length than 12" while passing rags and similar objects of lengths shorter than 12", said means including a single pier having an up-stream curved face, a transverse width of approximately 6", and a distance from its up-stream point to its greatest width of less than 6", the width of the two sewage paths, one on

each side of the pier, being equal and not exceeding 3", all sewage in the channel passing through said two paths and below the top of the pier.

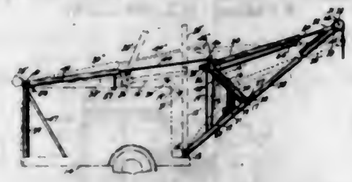
2,733,817
FOLDABLE HOIST
Kibbey W. Conse, Newark, N. J.
Application April 30, 1952, Serial No. 285,262
1 Claim. (Cl. 212—8)



In a foldable hoist, the combination of a base, a boom comprising spaced members, a supporting frame for the boom pivotally mounted at one end on the base between said spaced members of the boom, means separably connected to the supporting frame for securing the supporting frame in a normal vertical operating position, the boom members being pivotally mounted at one end on said base and the boom being swingable about its pivotal axis from a hoisting position at one side of the supporting frame about and over the supporting frame to a horizontal position on the opposite side of the frame, the supporting frame being swingable about its pivotal axis from its vertical normal operating position to a horizontal position opposite to the boom when the latter is horizontal, a windlass mounted on said supporting frame, and gear including a cable and pulleys connecting the windlass to the boom for raising and lowering the boom while the boom is at either side of the vertical supporting frame and for lowering the supporting frame to its horizontal position with the boom in its horizontal position, said gear including a cable guide mounted on said supporting frame between said windlass and the free end of said supporting frame to guide said cable around the end of said supporting frame when the boom is in the second-mentioned position, there being included in said gear a pulley connected to said boom, a second pulley connected to said supporting frame between said windlass and the free end of said supporting frame, said cable having one end connected to said boom and its other end connected to said windlass with the intermediate portions of the cable passing from said windlass around the first-mentioned pulley and thence around the second mentioned pulley to said boom when the boom is in the first-mentioned position, and said cable also passing around said cable guide when the boom is in the second-mentioned position.

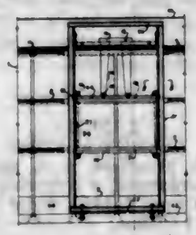
2,733,818
TRANSMISSION LINE MAINTENANCE DERRICK
Hermann Gregersen, San Francisco, Calif.
Application February 14, 1955, Serial No. 487,875
10 Claims. (Cl. 212—8)

1. A vehicle having a bed and a top, a front end and a rear end, laterally spaced legs having their lower ends hingedly connected to the rear end of said bed, a boom support having one end connected to the upper ends of said legs with the other end projecting forwardly over said top and having a boom strut cross member at said other end, a boom support cross member connecting the upper ends of said legs and a boom having its lower end hingedly connected to said boom support cross member and having a cable sheave at its other end and a shaft therefor, a boom strut fluid motor cooperating between said boom strut cross member and said shaft, motor



anchors fixed at the front end of said top, and boom control motors cooperating between said anchors and said other end of said boom support, and a supply of fluid under pressure and control means therefor for said motors.

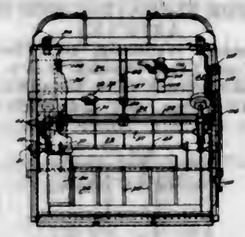
2,733,819
CAR PARKING SYSTEM AND STRUCTURE
William Mack Eliot, Houston, Tex.
Original application June 18, 1948, Serial No. 33,903, now Patent No. 2,663,435, dated December 22, 1953. Divided and this application March 16, 1953, Serial No. 342,671
2 Claims. (Cl. 214—16.1)



1. In a multistoried storage structure having a group of storage spaces arranged in superposed longitudinal rows, an aisle common to said spaces, a pair of longitudinal tracks transversely spaced apart at opposite sides of said aisle and above the uppermost row of storage spaces, a traveling bridge crane spanning said aisle with opposite ends riding on said spaced apart side tracks for travel along the longitudinal rows of storage spaces, a pair of dependent elevator guide rails having trunnion pin suspension connection at their upper ends with the bridging crane and centrally of the transverse dimension of said aisle and which confine relative movement between the guide rails and the bridge crane to that about an axis parallel to the longitudinal path of travel of said bridge crane, an elevator having guide connections with said vertical guide rails and being operatively suspended from the bridge crane for vertical travel between the superposed rows of storage spaces and longitudinally extending way means below the lowermost row of storage spaces and extending parallel to said path of travel of the bridge crane as a guide bearing for the lower ends of said vertical guide rails for accommodating relative longitudinal and vertical motion of said lower ends while restraining free oscillation of the guide rails about their upper trunnion pin suspension means.

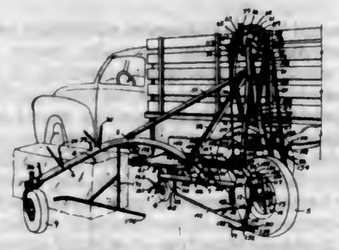
2,733,820
REFUSE TRUCK
Norbert T. Starr, Detroit, Mich., assignor to Gar Wood Industries, Inc., Wayne, Mich., a corporation of Michigan
Application September 7, 1951, Serial No. 245,469
31 Claims. (Cl. 214—83.3)

1. In a device for loading and compressing material into a compartment, a panel pivotally mounted for reciprocating swinging movement from an intermediate position to a compressing position to compress material into the compartment, a retaining panel pivoted adjacent said compressing panel, said retaining panel being engaged and actuated by said compressing panel during each recipro-



cating compressing movement thereof, and means for moving said compressing panel from said intermediate position into a retracted position, said compressing panel when in its retracted position allowing clear access for loading of said device.

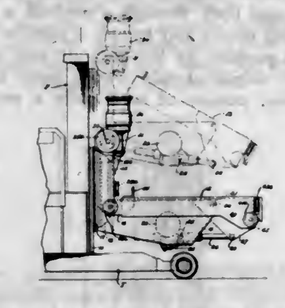
2,733,821
BALE LOADER
Fred L. Willrodt, Omaha, Nebr.
Application January 14, 1953, Serial No. 331,173
15 Claims. (Cl. 214—359)



1. A loader including a mobile frame having a traction wheel, an up-right carried by the mobile frame, a rocker, means mounting the rocker for oscillatory movement on the up-right in both longitudinal and transverse directions relative to travel of the loader, an arm movably with and depending from the rocker and having forwardly and rearwardly extending portions, grippers having pivotal support on said portions with the rear gripper in position to engage the rear end of a bale and the front member in position to clear the bale, means connecting the forward gripper with the rocker to effect engagement of said forward gripper with the bale upon movement of the rocker in a transverse directions, a reel, means supporting the reel in coaxial alignment with the traction wheel, a cable connecting the rocker with the reel, clutch means on the reel and traction wheel for effecting a driving connection between the reel and the traction wheel to wind the said cable on the reel for swinging said arm to carry the bale to a position above the bed of a vehicle with which the loader is adapted to be associated, and means responsive to movement of the rocker in said longitudinal direction to actuate said clutch means.

2,733,822
DIE HANDLING INDUSTRIAL TRUCK
Walter M. Woodard, Grafton, Ohio, assignor to Elwell-Parker Electric Company, Cleveland, Ohio, a corporation of Ohio
Application December 23, 1952, Serial No. 327,595
3 Claims. (Cl. 214—502)

1. An industrial truck comprising a vehicle chassis; an elevator mounted on the chassis including a vertically movable carriage; an assembly including a load carrying platform and platform supporting frame; power actuated assembly rotating means mounting said assembly to said carriage for rotation about a horizontal axis; said assembly having means mounting said load carrying platform to said frame to tilt away from said carriage about an axis transverse to said horizontal axis;



platform tilting power means interposed between said frame and platform; cable and winch means on said assembly; and a plurality of cable reeving pulleys disposed on said assembly to permit application of force through said cable means to a load being moved relative to said platform.

2,733,823
EASY LAUNCH BOAT TRAILER
Edward L. Evans, Eugene, Oreg.
Application November 9, 1954, Serial No. 467,669
2 Claims. (Cl. 214—505)

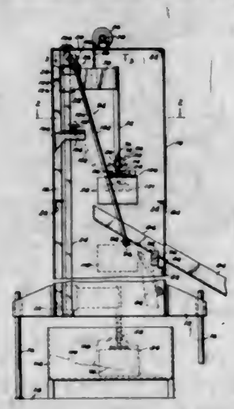


1. In a boat trailer, a frame, hitch means on the forward end of the frame for connecting the frame to a vehicle, a transversely extending axle member secured to the intermediate portion of said frame, bracket means on the ends of said axle member, respective wheel yokes pivotally connected to the respective ends of the axle member, respective wheels journaled in said wheel yokes at locations spaced from the pivotal connections of said yokes to the frame, respective upstanding stem elements pivotally connected to said yokes at locations spaced from the pivotal connections of the yokes to said frame, respective upstanding stem elements on said yokes slidably engaged with said bracket means, spring means yieldably connecting said stem elements to the yokes at locations spaced from the pivotal connections of the yokes to the frame, respective retractible locking means extending through and releasably connecting said stem elements to said bracket means, whereby said frame may be lowered when said locking means are retracted, a plurality of pairs of support elements mounted at longitudinally spaced locations on said frame on opposite sides of the longitudinal center line of said frame and being arranged to support a boat longitudinally on said frame, and means for at times elevating one of said pairs of support elements relative to said frame.

2,733,824
MAGNETIC ELEVATING CONVEYOR
Peter P. Ruppe, St. Clair Shores, Mich.
Application June 1, 1954, Serial No. 433,689
7 Claims. (Cl. 214—623)

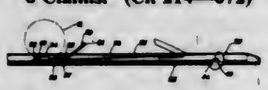
1. A conveyor of the type having a permanent magnet unit for carrying magnetic articles with a stripper contiguous to the magnet and movable away from the magnet to release such articles from the field of the magnet, said conveyor comprising, a body having receiving means for articles to be conveyed, means on said body forming

a movable carrier for said magnet unit, means associated with said body and carrier selectively operable to move said carrier to a point adjacent said receiving means to permit said magnet to engage such articles and to a release point, means on said body engaging said stripper to release articles adjacent said release point, a chute mounted on said body through a pivot at a location intermediate said points and having a portion shiftable to on operative position in the path of said magnet unit and generally subjacent said release point and to a retracted position outside of such path, a parallel frame



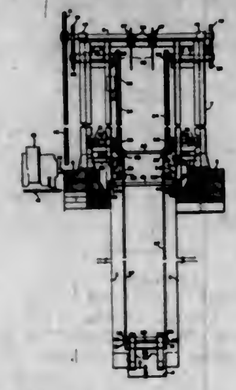
having one member pivoted on said chute at a location spaced from the first mentioned pivot, having two members adjacent said one member straddling the path of said magnet unit and having a fourth member on said two members, and a lost motion connection between said fourth member and said carrier operable to shift said portion of said chute to said operative position and retracted position, respectively, when said magnet unit, moving between the first mentioned pivot and said release point, approaches and recedes from said release point.

2,733,825
VEHICLE PARKING APPARATUS
Frederick H. Evans, Massillon, Ohio, assignor to Evans Enterprises, Inc., Massillon, Ohio, a corporation of Ohio
Application November 5, 1951, Serial No. 254,879
8 Claims. (Cl. 214—672)



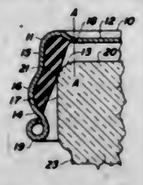
1. In vehicle storing means having storage compartments, a common carrier for selectively transporting vehicles to and from the compartments, said common carrier comprising a lift truck having an upright mast, a scoop vertically movable upon the mast, the scoop extending forwardly from the mast and being of sufficient size to receive an automobile thereon, an angular stop plate pivotally mounted upon the scoop and adapted to be tilted to operative position by a wheel of the vehicle passing thereover, a spring loaded latch bolt mounted upon the scoop and adapted to normally engage over the rear end of the stop plate when the stop plate is in operative position, an operating lever fulcrumed intermediate its ends upon the scoop, the lower end of said operating lever normally projecting below the bottom of the scoop, and a link connecting said latch bolt to the upper end of said operating lever for automatically releasing the latch bolt when the bottom of the scoop is moved into contact with a horizontal surface, means for moving the scoop vertically upon the mast and means for tilting the scoop to forwardly and rearwardly inclined positions.

2,733,826
APPARATUS FOR ELEVATING AND DELIVERING ARTICLES
Charles H. Manion, Wellsburg, and Thomas J. Boyd, Cross Creek District, W. Va.
Application August 2, 1952, Serial No. 307,136
19 Claims. (Cl. 214—715)



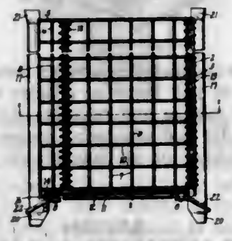
1. Material handling apparatus comprising an elongated carrier oriented generally vertically, means connected with the carrier for raising and lowering it, a material holder carried by the carrier at the lower portion thereof and comprising generally horizontally spaced apart material holding members and a cross member rigidly connecting the material holding members together, means for guiding the carrier in its raising and lowering movements and means cooperating with the material holder at a predetermined point in its movement moving the same to cause discharge therefrom of material carried thereby.

2,733,827
SIDE SEAL CONTAINER CLOSURE
Allen B. Foye, West Bridgewater, Mass., assignor to W. R. Grace & Co., Cambridge, Mass., a corporation of Connecticut
Application December 22, 1951, Serial No. 262,929
4 Claims. (Cl. 215—40)



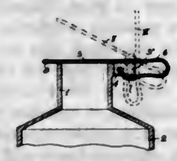
1. A closure having a top, an integral depending skirt of substantially greater diameter than the cap receiving finish of a container to which it is to be applied, and a sealing material to provide a seal between said closure and such container finish, said cap at its top having a central panel defined by an upstanding circumferential channel, the inner wall of which is integral with said panel and the outer wall of which is continuous with said depending skirt and extends downwardly and within fifteen degrees of a right angle to the said top panel, this said downwardly extending portion of the skirt merging into a circumferential outwardly extending channel in the skirt and said skirt below said channel terminating in a finished edge, the said sealing material filling the area of the inner surface of the cap defined by the inner wall surface of said upstanding channel and the inner wall surface of said channel in the skirt and covering the area of the inner wall surface of the skirt between the channels, and presenting a generally outwardly inclined surface extending continuously from substantially the inner edge of the top channel to substantially the lower edge of the channel in said skirt.

2,733,828
COLLAPSIBLE STACKING RECEPTACLE
Charles C. Averill, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich., a corporation of Michigan
Application October 13, 1952, Serial No. 314,552
14 Claims. (Cl. 220—6)



1. In a collapsible stacking receptacle the combination of side walls comprising vertical and horizontal slats fixedly connected at their crossing points, the horizontal slats of the side walls having laterally turned end extensions at diagonally opposite ends thereof connected by a plurality of the vertical slats and constituting end wall members integral with the side walls, the lower ends of the vertical slats of the side walls having inturned extensions connected by horizontal slats and constituting bottom support members, end walls comprising vertical and horizontal slats fixedly connected at their crossing points, one vertical edge of each end wall being swingably connected to the adjacent vertical edge of said end wall members of said side walls and the other vertical edge of each end wall being swingably connected to the adjacent vertical edge of the side walls by helically coiled hinge members spirally embracing adjacent vertical slats, a bottom comprising crossed longitudinal and transverse slats fixedly connected at their crossing points and adapted when erected to supportedly overlap said bottom support members, said bottom being connected to one longitudinal slat of one bottom support member by a helically coiled hinge member spirally embracing said slat and one of the longitudinal slats of the adjacent bottom support member, said bottom being foldable upwardly against the inner side of the side wall to which it is so connected.

2,733,829
CLOSURE FOR NARROW NECKED SMALL CONTAINERS
Ephraim Lewit, Tel Aviv, Israel
Application April 9, 1953, Serial No. 347,658
2 Claims. (Cl. 220—31)



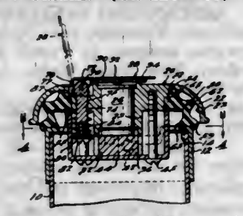
1. In containers having hinged to their neck a tiltable lid, a lateral extension of the neck forming a horizontal quadrangular bolt or pivot of the hinge, a springy tail piece on the lid bent around the bolt and constituting two arms clamping the bolt, and a depression at least in one of these arms, the bolt being partly seated in that depression, the bend of the tail piece being shaped as a wide loop the bow of which comes to lie beyond and away from the bolt thus constituting a lever for tilting the lid.

2,733,830
PLASTIC BOX HINGE
Henry Ruskin, Bayside, N. Y., assignor to Swingline Inc., New York, N. Y., a corporation of New York
Application April 22, 1953, Serial No. 350,333
2 Claims. (Cl. 220—31)



1. In a box, a plastic receptacle having a ledge, a fulcrum bar upwardly spaced from said ledge and defining in cross section a bottom substantially horizontal rectilinear face and a vertical rectilinear face substantially normal to said bottom horizontal face, said faces defining an apex portion at the lower inner corner of said bar, said bar having an outside convex cam face opposite said apex portion and merging with said faces to define therewith corner portions spaced from said apex portion, spaced braces interconnecting said bar and ledge and defining therewith spaced openings, a plastic cover having an interrupted outside depending wall defining spaced resilient ears each having a laterally extending lip projecting in a direction towards said vertical face, means integrally depending from a part of said cover and spaced forwardly of said outside depending wall and embodying resilient spaced webs staggered in respect to said spaced ears and defining with said cover spaced recesses for reception of said braces and comprising resilient bridge means interconnecting the lower portions of said spaced webs and having spaced lips spaced from, in alinement with and opposing said first mentioned lips and normally defining therewith gaps having a width less than the thickness of said fulcrum bar, said convex cam face cooperating to slightly spread said lips upon shifting of said cover downwardly towards and against said fulcrum bar to permit said lips to snap over and under said vertical face and cam face to provide for automatic retraction of said lips into said openings below said bottom horizontal face and apex portion and under said bar to movably interlock therewith and provide a hinge connection between said cover and receptacle, said web and ears cooperating with said corner portions to hold said cover partially pivotally raised from said receptacle.

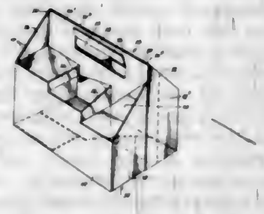
2,733,831
CLOSURE CONSTRUCTION
Charles H. Nehls, Detroit, Mich.
Application September 24, 1949, Serial No. 117,659
7 Claims. (Cl. 220—46)



1. In a cap construction for filler necks and the like in combination with a body and means carried by the body and adapted to extend into a filler neck and to releasably holdingly underengage an abutment portion carried by such a filler neck, a generally tubular, rubberlike

gasket-spring element carried by the body and having a free end engageable with the filler neck, said gasket-spring element being relatively thick and having an upper portion secured to said body and extending outwardly substantially radially therefrom and then downwardly to define a substantially cylindrical flange adapted to align with and engage the filler neck, whereby when said element is urged against the neck said upper portion of the element is flexed laterally of itself and the cylindrical flange is compressed axially, said body having a belled cover section overhanging and extending downwardly around said element, and a plurality of longitudinally spaced abutment portions carried by said element and engageable with said cover section to limit axial movement and radial bulging of said element, including an annular rib extending angularly outwardly and upwardly substantially at the juncture of said outwardly extending upper portion of said gasket-spring element and the cylindrical flange thereof, and a radial flange extending outwardly from the free end of said cylindrical flange.

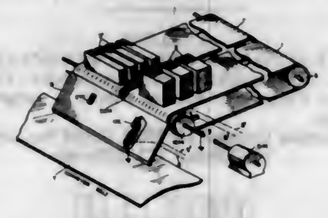
2,733,832
BOTTLE CARRIER
Robert Newton, Bronx, N. Y., assignor to Universal Folding Box Co., Inc., Hoboken, N. J., a corporation of New York
Application December 19, 1952, Serial No. 326,960
4 Claims. (Cl. 220—113)



1. A bottle carrier made from a blank of sheet material and comprising in set-up condition an upwardly extending multi-ply central suspending panel, side walls parallel to and spaced on opposite sides of the central suspending panel, partition straps integrally connecting the bottom of the central suspending panel to the tops of the oppositely spaced side walls, end walls continuous with and perpendicular to the side walls, and a bottom wall, each of said end walls extending upwardly on both sides of the central suspending panel to substantially the top of said central suspending panel and being attached thereto by the following means: a flap continuous with one ply of said suspending panel adhesively attached to an end wall and a part on said end wall continuous with the other ply of said suspending panel.

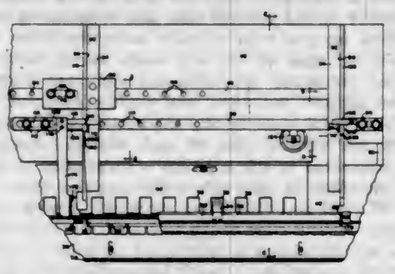
2,733,833
CONTROL ARRANGEMENT FOR ARTICLE DISPENSING SYSTEMS
Thomas S. Skillman, Mosman, near Sydney, New South Wales, Australia, assignor to Punch Engineering Pty. Limited, Sydney, New South Wales, Australia, a company of New South Wales
Application November 1, 1951, Serial No. 254,280
Claims priority, application Australia November 6, 1950
6 Claims. (Cl. 221—7)

5. In a system for dispensing articles of varied character from a plurality of storage and releasing devices: a selecting mechanism; registering means and electrical connections therefrom to said selecting mechanism and to each of said storage and releasing devices; said selecting mechanism including successively operable contact means to select one after the other articles of varied character forming a batch of articles and to transmit over said electrical connections to said registering means indications representing the successive selections of said articles forming said batch; said registering means including relay means to store electrically each of said indications and to condition the selected storage and releasing devices for operation; and control means common to said reg-



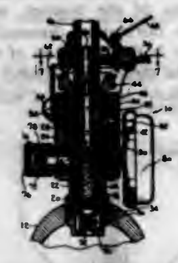
istering means and including contact means operable after the selection of said batch of articles to actuate simultaneously the storage and releasing devices conditioned for operation by said registering means to effect the simultaneous release of all successively selected articles of said batch.

2,733,834
MEANS FOR AUTOMATICALLY ALIGNING AND FEEDING ELONGATE ELEMENTS
William R. Stuebing, Cincinnati, Ohio
Application October 25, 1950, Serial No. 192,054
12 Claims. (Cl. 221—212)



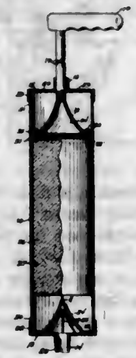
6. A feeding device for elongate elements comprising, in combination, a pair of laterally spaced guides for supporting and aligning the opposite ends of a plurality of similar elongate elements with their longitudinal axes in substantial parallelism, axially aligned stops in interfering relationship with each of said guide means for engaging the opposite ends of the lowermost of said elements, a selector member secured relative to one of said guide means and in axial alignment with said stops, said member dimensioned to receive an end of an elongate element, an ejector associated with that stop remote from said selector member engageable with the other end of an element for shifting it endwise relative to said guide means, stops and the other elongate elements for inserting its opposite end into said selector member and for disengaging that end of said element remote from the selector member from its stop, magnetic means operable on said element for pivoting it relative to and about said selector member for disposing that end remote from the selector member below its stop, an ejector engaging the other end of said element for ejecting it from said selector member by shifting it endwise by an amount sufficient to clear the stop adjacent said selector member for discharging the element onto said guides below said stops, means for correlating the action of said ejectors whereby one is fully retracted while the other is extended, and means for rendering said magnetic means inoperative on said element incident to actuation of the second ejector for ejection of said element from said selector member.

2,733,835
DISPENSING VALVE FOR EMERGENCY OXYGEN CYLINDERS
Henry F. Alfery, Hales Corners, and Richard K. Engholdt, Milwaukee, Wis., assignors to Erie Manufacturing Co., Milwaukee, Wis., a corporation of Wisconsin
Application October 30, 1952, Serial No. 317,702
8 Claims. (Cl. 222—5)



1. A valve assembly for emergency oxygen cylinders comprising, a valve body adapted for connection to the cylinder and having a bore therethrough, a centrally bored sleeve mounted within said body bore and spaced therefrom, a seat on said sleeve, a break-off nipple mounted in said body and adapted to contact one end of said sleeve to effect a seal therebetween, means for sealing said nipple with respect to the body, a seat on the body, a nut threaded in the body and acting on said nipple and said sleeve to urge the sleeve seat into contact with the body seat and operable to permit movement of the nipple and the sleeve away from the body seat, and an inlet nipple connected to the interior of the valve body in the space between said sealing means and the point of contact between the sleeve seat and the body seat, said break-off nipple having a bore extending through a portion of its length for general alignment with the sleeve bore and having a portion of the nipple adapted for fracture from the major portion of the nipple to open the bore of the nipple to the exterior of the valve assembly.

2,733,836
PERFORATOR AND CONTAINER FOR PACKAGED GREASE
George F. Switzer, Ponce, Puerto Rico
Application October 7, 1952, Serial No. 313,427
1 Claim. (Cl. 222—82)



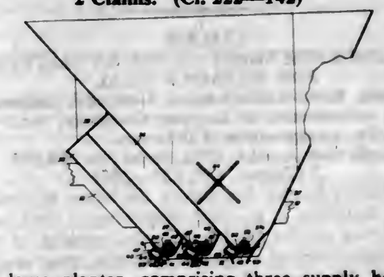
In a grease dispenser, the combination which comprises an elongated cylindrical casing, the outer surfaces of the ends of which are threaded, a hollow conical-shaped section having a piercing point on the vertex and an annular band at the base thereof for centering the section in the casing extended into the casing from one end thereof with the peripheral edge of the band in engagement with the wall of the casing, said conical-shaped section having openings therethrough, a first cap having an outlet nipple extended therefrom threaded on the end of the casing in which the conical-shaped section is positioned, a second cap having a sleeve providing a bearing extended therefrom threaded on the end of the casing opposite to the end in which the conical-shaped section is positioned, a rod extended through the sleeve of the second cap, a plunger carried by the end of the rod positioned in the casing, a handle on the outer end of the rod, said plunger having a cavity therein with the cavity congruently shaped to receive said conical-shaped section, and a grease cartridge positioned in the casing, said cartridge including grease adapted to be dispensed through said openings and said nipple, when the wrapper of the cartridge is pierced by coaction of said plunger and said conical shaped section.

2,733,837
AUTOMATICALLY SEALABLE PASTE TUBE OF PLASTIC OR SIMILAR MATERIAL
Vilhelm T. Öhrström, Stockholm, Sweden, assignor to A. B. Svenska Kapsylfabriken, Stockholm, Sweden
Application November 18, 1952, Serial No. 321,090
Claims priority, application Sweden August 21, 1952
2 Claims. (Cl. 222—107)



1. Automatically sealable tube for holding and dispensing pastes formed of plastic material and closed at one end, in which the other end of the tube is shaped so as to form a shoulder and a flattened neck portion of a smaller size than the body of the tube and is hermetically closed to the outer air, said neck portion having the upper end thereof wider than the portion near the body, a spring snugly surrounding said neck portion at a position next to the shoulder of the body and resting on said shoulder, said spring being held in position by its own resiliency and by the wider upper end of the neck portion, and being arranged in such a manner that, said spring, upon pressure on the body of the tube is forced resiliently outwards by the contents of the tube and lets through a suitable quantity of the contents, whereafter, when said pressure ceases, said spring automatically compresses the mouth of the neck portion and closes the tube.

2,733,838
DISPENSING APPARATUS
William H. Neff, Salt Lake City, Utah
Application July 25, 1951, Serial No. 238,419
2 Claims. (Cl. 222—142)



1. A lawn planter, comprising three supply hoppers juxtaposed from front to back of the planter and having

respective elongate and transversely extending discharge openings; running gear mounting said hoppers for forward travel; single distributing cylinders extending longitudinally of the respective discharge openings to distribute materials from the respective hoppers onto the ground, the forward two cylinders being covered with pile material for the distribution of fertilizer and seed, respectively, and the rear cylinder being configurated for the distribution of compost; reaction plates extending longitudinally with and disposed against the respective cylinders for controlling discharge from the respective hoppers, the two forward reaction plates being covered with pile material; resilient means constantly urging the reaction plates against their respective cylinders; and drive means for rotating the said cylinders as the planter travels.

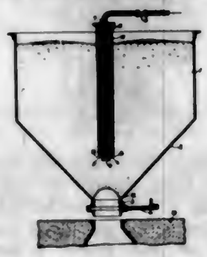
2,733,839
DISPENSER FOR GRANULAR MATERIAL OR THE LIKE
George H. Blum, San Francisco, Calif.
Application September 25, 1951, Serial No. 248,255
2 Claims. (Cl. 222—174)



1. In a dispenser for granular material or the like, a tapered material container having downwardly converging sides, the said container having a filling opening at its larger upper end and a discharge opening at its smaller lower end, a hinged closure member pivotally mounted on the lower end of the container and arranged normally to close the discharge opening, the said closure member having a rigid rearward extension, an elongated upwardly extending handle bar secured at its lower end portion to the rear side of the container and having its upper end portion extending well above the container, a rod guiding member extending rearwardly from the upper end portion of the handle bar, an elongated upwardly extending operating rod mounted for up and down movement connected at its lower end to the rigid extension of the closure member and positioned rearwardly of the container and the handle bar, the operating rod slidably extending through the rod guiding member of the handle bar, the upper portion of the operating rod carrying a rigid spring engaging member arranged in spaced relation below the rod guiding member and having a finger engaging member on its upper end, arranged adjacent the upper portion of the handle bar, and a yieldable compression spring encircling the operating rod and arranged in pressure engaging relationship with the rod guiding member and the spring engaging member.

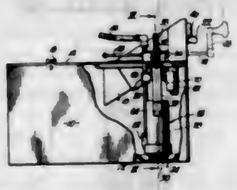
2,733,840
CONTAINER FOR MOIST OR STICKY MATERIALS, FOR EXAMPLE COAL
Karl Kolks, Essen-Rellinghausen, Germany, assignor, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware
Application April 4, 1952, Serial No. 280,582
3 Claims. (Cl. 222—195)

1. A supply hopper for gravity discharge of moist or adherent materials, e. g., coal, comprising: a feed hopper with a lower gravity discharge outlet opening of small cross-sectional area as compared with the upper reservoir portion of the hopper, and a stationary pneumatic inlet conduit for the supply of gaseous pressure medium having an open ended lower discharge outlet disposed at a fixed region at a spaced distance, and axially, above the lower discharge outlet opening of the hopper, combined with a deflector member in said hopper, said deflector member being disposed below the lower open discharge outlet of the pneumatic inlet conduit with a continuous free space therebetween which opens unrestrictedly into the surrounding area of the hopper, and said deflector having a maximum horizontal dimension that is but a minor portion of the horizontal area of the portion of the hopper in which the deflector member is disposed, and being arranged in such close spaced relation beneath the



pressure medium discharge outlet of the conduit that fluid on issuing from the discharge outlet opening of the conduit must first strike the deflector and be spread laterally outwardly by the deflector over a wider area of the container interior than the cross-sectional area of the lower hopper outlet opening, before contacting material in the container, and said deflector and the lower discharge outlet of the pneumatic inlet conduit being disposed above the lower outlet from the hopper at an elevation relative thereto at which the fluid from said conduit is forcibly deflected by the deflector against the lower hopper forming surfaces of the hopper higher up above the lower outlet opening.

2,733,841
LIQUID SEASONING PUMP SYSTEM FOR POPCORN MACHINES
Samuel M. Waas, Kansas City, Mo., assignor to Manley, Inc., Kansas City, Mo., a corporation of Missouri
Application January 15, 1951, Serial No. 205,984
1 Claim. (Cl. 222—355)



In fluid handling apparatus, a fluid tank having a lid; releasable means mounting the lid on the tank; a pump including a cylinder mounted on the lid within the tank in depending relationship to the lid, said pump being provided with an inlet, an outlet tube extending beyond the tank, and a piston reciprocably mounted in the cylinder and provided with a vertical stem extending upwardly through said lid, there being teeth formed on the stem presenting a rack; a pair of spaced bearings mounted upon the lid; a pinion between the bearings above the lid and in mesh with the rack; an elongated, horizontal shaft extending through the pinion and the bearings for reciprocation relative to both the pinion and the bearings on the longitudinal axis of the shaft, said shaft having a longitudinal slot extending substantially the full length thereof and being rotatable in the bearings; a key secured to the pinion and extending into the slot; a handle rigidly mounted on one end of the shaft for rotating the shaft

and pinion to reciprocate the stem and piston, said bearings being adjacent the pinion for holding the same in mesh with the rack during reciprocation of the shaft; and a dish-shaped wall on the lid for housing said handle when the shaft is shifted in the pinion to one end of its reciprocable path of travel, said wall being provided with means clearing the shaft for reciprocation and rotation.

2,733,842
AEROSOL DISPENSER
Robert H. Abplanalp, Bronx, N. Y., assignor of one-third to Frederick G. Lodes and one-third to John J. Baessler, both of Yonkers, N. Y.
Application January 14, 1950, Serial No. 138,578
2 Claims. (Cl. 222—394)



1. An aerosol dispenser comprising: a one piece container body provided at its top with an integral protuberant hollow boss open at its bottom to the interior of the body and having an integral perforated top wall, in combination with a valve body secured in snugly interfitting telescoped relation to and within said hollow boss and seated against the perforated top wall of the latter to form therewith a hermetic seal, said hollow boss having an internal rib engaging with an abutment on the valve body to lock the valve body within the boss, a dispensing valve having a relatively movable tubular valve stem projecting from the valve body through said perforation, and means hermetically sealing the bottom of said container body.

2,733,843
DISPENSING CONTAINERS
Andrew Seroko, Montreal, Quebec, Canada
Application January 21, 1952, Serial No. 267,326
4 Claims. (Cl. 222—490)



4. An automatic closure for a dispening container comprising a hollow nipple composed of readily flexible, resilient material and formed near its base with a frusto-conical portion tapering away from the tip of the nipple, to be seated on a frusto-conical seat of a container to support the nipple against movement toward the container; a skirt integral with and extending radially outward of the nipple at its base to engage the inner surface of a container to hold the nipple against movement away from the container; said nipple being formed with a slit extending through the nipple wall and defining at least one lip separated at three edges from the nipple wall, said lip decreasing in thickness away from its attachment to the nipple body, and the nipple walls flanking the ends of said lip being less flexible than the lip; said frusto-conical portion being larger than the container seat for which it is adapted whereby it will be compressed when fully seated with setting up of forces in the nipple opposing outward flexion of the lip.

2,733,844
DEVICE FOR TURNING STOCKINGS
Charles G. Gustavison, Chicago, Ill.
Application November 18, 1953, Serial No. 392,874
1 Claim. (Cl. 223—42)



A device for turning a stocking, consisting of a handle adapted to be inserted into the stocking and having resilient gripping members affixed to one end of the handle with said handle and gripping members being of a combined length whereby the other end of the handle projects beyond the open end of the stocking, said gripping members each comprising a leaf spring provided with an enlarged, rounded part affixed to the free end of each said leaf spring for insertion into the toe end of the stocking and tensionally forced together for gripping the interior toe end of the stocking when this toe end is inserted between said rounded parts and tensionally retained thereby while the other end of the stocking is turned back and withdrawn over the handle.

2,733,845
RECEPTACLE SUPPORTS
George G. Biro, Long Island City, N. Y.
Application October 19, 1953, Serial No. 386,808
1 Claim. (Cl. 224—5)



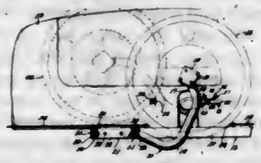
A portable receptacle support comprising an elongated frame made of single length rod of resilient material folded upon itself to form a circular portion and an upper elongated oval portion, said resilient rod terminating freely on top of said upper oval portion and facing in each other's direction, said upper oval portion being arcuate shaped to fit the contours of the back of the neck and extending downwardly in front of the chest of the person using said receptacle support, said lower circular portion being bent upwards so as to be in a substantially horizontal plane when the device is attached to the person using same, two rings slidably mounted on said frame between said lower circular portion and upper oval portion encircling said resilient rod folded upon itself to form a pair of closely spaced arcuate rod portions, whereby said upper oval portion may be adjusted to the size of the individual wearer and the lower circular portion may be adjusted to support a receptacle.

2,733,846
ARTICLE SUPPORT
Albert A. Leebow, East Rockaway, N. Y., assignor to Berkeley Industries, Jersey City, N. J., a corporation of New Jersey
Application March 31, 1953, Serial No. 345,838
8 Claims. (Cl. 224—42.1)



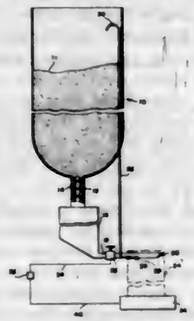
1. In combination with an automobile body having side walls and a ceiling and opposing hook elements mounted on the confronting faces of said side walls, an article supporting device comprising a pair of longitudinally extending elongated members slidably interfitted at their inner ends and having means at their outer ends releasably engaging said hook elements, and a transversely extending bracing member mounted on said elongated members and spaced inwardly of the outer ends thereof and bearing against said ceiling.

2,733,847
REAR TIRE CARRIER
Richard S. Pyes, Los Angeles, Calif.
Application September 22, 1952, Serial No. 310,878
8 Claims. (Cl. 224—42.21)



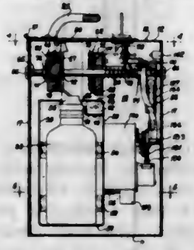
1. In an automobile having a body; a support for a spare wheel comprising an arm having an upper portion adapted to engage and support a spare wheel closely adjacent said body at the rear end thereof, said arm having a lower portion located laterally of and below said upper portion, means pivotally mounting said lower portion on said automobile laterally of the fore-and-aft center line thereof for pivotal movement about a generally horizontal axis diverging forwardly from said fore-and-aft center line whereby pivotal movement of said arm about and over said axis swings said upper portion thereof and a spare wheel laterally of and rearwardly away from said body.

2,733,848
BAG-FILLING APPARATUS
Willem A. N. Bos Houwers, Philadelphia, Pa., assignor to Woodward & Dickerson, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application February 20, 1953, Serial No. 338,117
5 Claims. (Cl. 226—48)



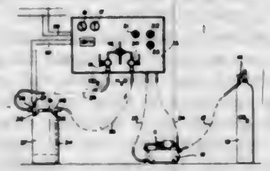
1. An apparatus for filling a bag with pulverulent material including a storage bin for said pulverulent material, a hopper disposed beneath said storage bin and in solids communication therewith adapted to contain said pulverulent material, a transfer conduit intermediate said storage bin and said hopper for transferring said pulverulent materials from said storage bin to said hopper, a horizontal spout leading from said hopper, said horizontal spout having a discharge opening for discharging said pulverulent material from said hopper into a bag having an opening operatively engaged with said spout, a vent tube disposed adjacent the portion of said horizontal spout most remote from said hopper and terminating in an escape opening positioned at a spaced distance subsequent the discharge opening for permitting the escape of trapped air from said bag, said vent tube extending upwardly from said horizontal spout to said storage bin.

2,733,849
SEALING APPARATUS
Sidney C. Trenchard, Audubon, N. J.
Application March 29, 1955, Serial No. 497,598
3 Claims. (Cl. 226—80)



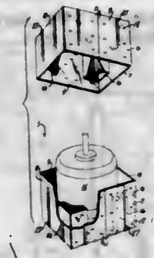
1. A sealing apparatus for sealingly closing the elongated necks of containers formed from a thermoplastic material comprising, in combination, a casing formed with a chamber for reception of the container, an anvil plate positioned to be overlain by the container neck, a member movable toward the anvil plate to press the container neck thereagainst, means for heating the anvil plate and means for heating the movable member, means for holding the movable member away from said anvil plate and automatic means for releasing said movable member for movement toward said anvil plate, said last-named means comprising a timer mechanism for releasing said movable member a predetermined time after energization of said heating means, said timer mechanism also serving to de-energize said heating means following release of said movable member.

2,733,850
METHOD AND APPARATUS FOR DISTRIBUTING AND DISPENSING CARBONATED BEVERAGES
Frank Welty and Raymond D. Welty, Youngstown, Ohio, assignors to Carbonic Dispenser, Inc., Canfield, Ohio, a corporation of Ohio
Original application January 26, 1950, Serial No. 140,598. Divided and this application April 17, 1952, Serial No. 282,751
14 Claims. (Cl. 226—115)



1. In apparatus for filling a closed container having an outlet and an inlet at its upper end with a carbonated beverage the combination of a conduit having quick-detachable interconnection with said inlet and a second conduit having quick-detachable interconnection with said outlet, said second conduit including a normally open valve and an exhaust port, valved conduit means to supply a back-pressuring gas to said first conduit to dispel the air originally contained in said container through said second conduit and said exhaust port, a second valved conduit to supply carbonated liquid to said first conduit to fill said container while the back-pressuring gas contained therein is expelled through said second conduit and exhaust port, and means to close said valve upon said container being filled with liquid.

2,733,851
SHIPPING CONTAINER
Bruce Van Ness, Avenel, N. J., assignor to The Louis Allis Company, Milwaukee, Wis., a corporation of Wisconsin
Application July 9, 1954, Serial No. 442,250
2 Claims. (Cl. 229—14)



2. A shipping container comprising: a box having a plurality of flat side walls; and a combination spacer and supporting member in each of a plurality of corners of the box, each of said members comprising a plurality of connected paper-board side walls, an adjacent pair of which flatwise overlie the inner faces of a pair of adjacent flat side walls of the box and another adjacent pair of which extended into the interior of the box at angles to the first designated pair, said second designated pair of flat side walls of each member having folds extending diagonally upwardly from a point on the corner defined by their adjacent edges, by which folds portions of said second designated pair of flat side walls are displaced obliquely toward said first designated pair thereof and disposed at an angle to the corner defined by said adjacent side walls of the box to provide an inclined supporting surface.

2,733,852
CONTAINERS
Marshall I. Williamson, New Haven, Conn., assignor to National Folding Box Company, Incorporated, New Haven, Conn., a corporation of New York
Application May 14, 1953, Serial No. 354,965
5 Claims. (Cl. 229—41)



1. A collapsible container comprising a body having a plurality of side walls connected together to form a polygonal tube, a plurality of said side walls each having an edge terminating in a flap folded inwardly of said tube to form a hollow ledge for supporting an end-closure member, said hollow ledge together with the section of the side wall adjacent thereto being triangular in cross section, said flap containing fold lines defining an inner marginal panel, an intermediate panel against which the end-closure member is adapted to rest, and an outer marginal panel, each outer marginal panel being rigidly secured to its side wall in substantially coplanar relationship therewith, said flap also containing a collapsing fold line extending parallel to and spaced from said edge of its side wall and adapted to permit said hollow ledge to collapse so that the latter may lie flat against its side wall.

2,733,853
MOVABLE GUIDE VANES FOR CENTRIFUGAL COMPRESSORS
William E. Trumpler, Olean, N. Y., assignor, by mesne assignments, to Dresser Operations, Inc., Whittier, Calif., a corporation of California
Application May 28, 1952, Serial No. 290,391
10 Claims. (Cl. 230—114)

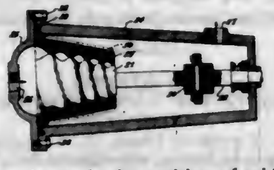


1. In a centrifugal compressor having a casing provided with a fluid inlet port and a communicating annular channel leading to an impeller, the improvement of a movable guide vane assembly disposed in said annular channel, which comprises a disk with a central aperture and a plurality of circular openings spaced from one another along a circle around said central aperture, a guide vane with a rotatable shaft extending from a lateral edge thereof positioned at each of said openings so that said guide vane projects outwardly from the face of said disk and its shaft is disposed in one of said openings, a pinion attached to the end of each of said shafts at the back of said disk, an internal ring gear at the back of said disk in driving engagement with each such pinion, said internal ring gear being provided with gear teeth on its outer periphery, a rim section provided with a plurality of spaced, fixed guide vanes and abutting the outer peripheries of said disk and said internal ring gear, a groove in said rim section contiguous the outer periphery of said internal ring gear, a fluid passage extending through said rim section for supplying lubricant from an exterior source to said groove, a cut-out in the back of said rim section, a close fitting control pinion set in said cut-out, said control pinion being in driving engagement with said gear teeth on the outer periphery of said internal ring gear and having an arm projecting from said cut-out beyond the outer periphery of said rim section, and a sealing plate attached to the backs of said disk and said rim section, thereby completely enclosing said internal ring gear and the pinions in driving engagement therewith.

2,733,854
CONE TYPE COMPRESSOR
Sheldon S. L. Chang, Springfield, Ohio, assignor to Robbins & Myers, Inc., Springfield, Ohio, a corporation of Ohio
Application March 22, 1952, Serial No. 278,029
4 Claims. (Cl. 230—148)

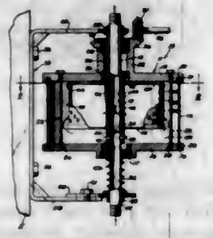
1. A pumping member for a rotary compressor comprising a conical member having a spiral thread, the surface of said member being approximately that generated

by a circle about an element of a cone in a plane perpendicular to said element, as said element is moved in increments (A_1) around the surface of said cone, accompanied



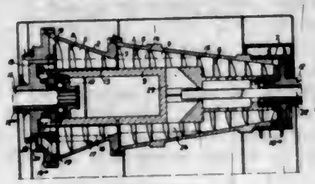
by a continuous change in the position of said circle along said element (l) and a continuous change in the diameter of said circle (D) such that $D=k_1 l$ and $A_1=k_2 \log_e l$, k_1 and k_2 being constants.

2,733,855
MULTISTAGE FILTER
Marion M. McCoy, New Market, N. J., assignor to Purolator Products, Inc., Rahway, N. J., a corporation of Delaware
Application November 20, 1953, Serial No. 393,369
4 Claims. (Cl. 233—2)



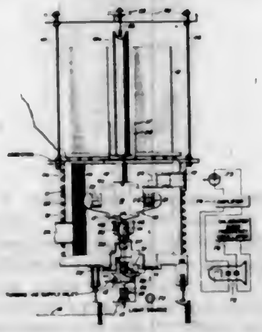
1. A filtering apparatus for fluid comprising a rotatable filter housing, means for rotating said housing, a hollow, perforated center tube mounted to extend along the axis through said housing, a filter element mounted on said center tube in said housing, said element and said center tube remaining stationary during rotation of said housing, and means for directing passage of said fluid into said housing and then through said element and thereafter outwardly via said center tube for contaminant removal, and including a partition within said center tube.

2,733,856
SLUDGE CENTRIFUGE
Ove Allan Valentin Kjellgren, Stockholm, Sweden, assignor to Aktiebolaget Separator, Stockholm, Sweden, a corporation of Sweden
Application November 16, 1953, Serial No. 392,409
Claims priority, application Sweden December 4, 1952
8 Claims. (Cl. 233—7)



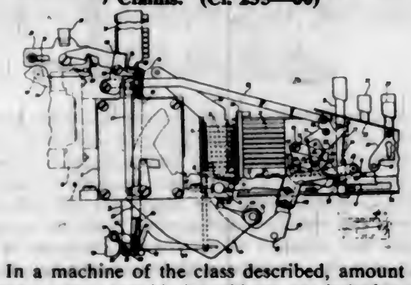
1. In a centrifuge for separating sludge-containing liquids of the type having a centrifugal bowl forming a chamber provided with a generally conical portion and a sludge outlet located in the conical portion at a relatively small radius from the rotation axis of the bowl as compared with the free liquid level in the bowl chamber, and a conveyor screw in the bowl mounted for rotation relative thereto for conveying separated sludge inward through the liquid and along a drying zone of the conical wall of said portion to the sludge outlet, the improvement which comprises a discharge passage for a heavier liquid component leading from the outer part of said chamber and terminating in a discharge opening located nearer said axis than is said outer part, means forming a lighter liquid outlet leading from the inner part of said chamber, and a wall in the bowl dividing the chamber into two sub-chambers extending from each other in the axial direction of the bowl, said dividing wall extending inward from the bowl periphery and forming a liquid overflow between the sub-chambers, the sludge outlet leading from one sub-chamber, and said discharge passage and outlet for the liquids leading from the other sub-chamber.

2,733,857
MAGNETICALLY SUPPORTED ULTRACENTRIFUGE
Jesse W. Beams, Charlottesville, Va., assignor to the United States of America as represented by the Secretary of the Navy
Application January 30, 1952, Serial No. 269,097
7 Claims. (Cl. 233—24)



1. An ultracentrifuge comprising a rotor containing magnetic material, means positioned above said rotor for producing a unidirectional magnetic field for freely suspending said rotor, means responsive to a change of position of said rotor for varying said magnetic field to maintain the rotor freely suspended beneath the field producing means, means connected to the rotor for accelerating said rotor to operating speed, and means for disconnecting said accelerating means when the rotor attains operating speed.

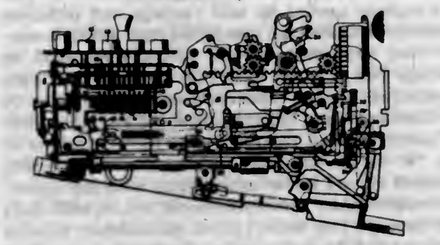
2,733,858
ENTRY CORRECTION MECHANISM FOR PRINTING OR COMPUTING MACHINES
Walter A. Anderson, Trumbull, Conn., assignor to Underwood Corporation, New York, N. Y., a corporation of Delaware
Application June 26, 1953, Serial No. 364,334
7 Claims. (Cl. 235—60)



1. In a machine of the class described, amount indexing means, stops settable by said amount indexing means, type bars each movable from a non-printing to printing positions controlled by said stops, machine cycling means,

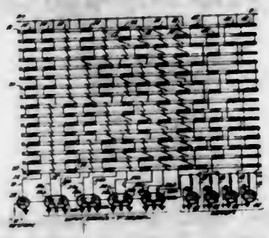
means for moving said type bars from non-printing to printing positions during each cycle of the machine, means operated by said cycling means to restore said indexing means and said stops, a correction key, means operated upon the depression of said correction key to prevent movement of said type bars to effective printing positions during a subsequent cycling of the machine in which said indexing means and said stops are restored.

2,733,859
PRINT SUPPRESSION MECHANISM FOR CALCULATING MACHINES
Walter W. Landsiedel, deceased, late of Elmira, N. Y., by Florence E. Landsiedel, executrix, Cincinnati, Ohio, assignor, by mesne assignments, to Sperry Rand Corporation, New York, N. Y., a corporation of Delaware
Original application May 12, 1949, Serial No. 92,814. Divided and this application September 2, 1953, Serial No. 378,151
4 Claims. (Cl. 235—60)



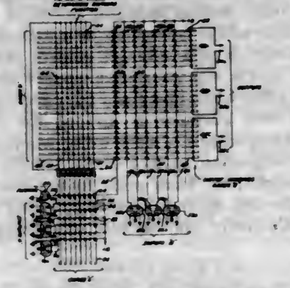
1. In a machine of the class described, a print hammer released to print in the cycle of operations, a blocking element for the print hammer, a spring to urge said blocking element to blocking or unblocking position to prevent or permit the effective firing of the hammer, an adding rack unit, means associated with said unit as it is moved rearward in the machine to control the rearward movement of the blocking element, and a stop carriage having key operated stop pins to regulate the degree of movement of the rack unit, one of said stop pins permitting the rack so to move that the blocking element moves to blocking position, and another of said stop pins permitting the rack so to move that the blocking element moves to unblocking position.

2,733,860
MAGNETIC SWITCHING SYSTEM
Jan A. Rajchman, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application May 24, 1952, Serial No. 289,913
17 Claims. (Cl. 235—61)



1. A magnetic switch comprising a plurality of magnetic cores, a plurality of windings on each of said magnetic cores, said plurality of windings being divided into a set of input windings and a set of output windings. means connecting one winding on each core in said input sets of windings in series with one winding on the others of said cores in accordance with a first desired combinatorial code to form a plurality of input coils, means connecting one winding on each core in the output sets of windings in series with one winding on others of said cores in accordance with a second desired combinatorial code having a desired relation to said first code, and means to apply currents to selected ones of said plurality of input coils to cause a change in the magnetic condition of a desired one of said elements whereby a voltage is induced in the windings of said output set which are on said desired core.

2,733,861
MAGNETIC SWITCHING SYSTEM
Jan A. Rajchman, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application August 1, 1952, Serial No. 302,161
19 Claims. (Cl. 235—61)

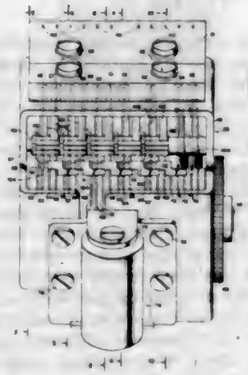


1. A magnetic switching system comprising a first plurality of magnetic cores, a plurality of groups of magnetic cores, said cores having substantially rectangular hysteresis loops, transfer coil means inductively coupling each of said first plurality of cores to cores in said groups of cores in accordance with a first desired code, means to apply magnetomotive driving forces to said first plurality of magnetic cores in accordance with a second code related to said desired code to drive one of said first plurality of cores from a given polarity, whereby the ones of said cores in said groups of cores which are inductively coupled to said one core receive magnetomotive driving forces, coil means to apply magnetomotive driving forces which are opposite to the magnetomotive forces applied by said transfer coil means to different cores in each of said groups of cores in accordance with a third code related to said desired code, whereby the only cores in said groups of cores which are driven from said given polarity are the ones receiving only one of said driving magnetomotive forces, and means to restore all said cores to said given polarity.

2,733,862
BINARY DECADE COUNTER
Hans P. Luhn, Armonk, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application December 26, 1952, Serial No. 328,015
22 Claims. (Cl. 235—61.6)

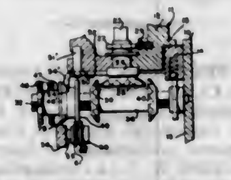
8. A plural order, cyclically operable, decimal accumulator comprising, in combination, a series of counting wheels for each said orders, each said wheels being separately advanceable in steps to alternate binary one and binary zero manifestation positions and representative of the number 2 raised to a predetermined power when manifesting a binary one, the different patterns of said two types of manifestations of all but the last wheel of said series being representative of any digit from 1 to 15 in binary form, the alternate binary one and binary zero positions of said last wheel of said series being representative, respectively, of an exceeding or non-exceeding of the capacity of fifteen of the remaining wheels of that series; binary transfer mechanism connecting each of said wheels to the succeeding wheel whereby the advance of a wheel from its binary one manifestation position to the

binary zero position effects a simultaneous advance of the succeeding wheel, means controlled by the last of said wheels of each series if advanced to its binary one position during a predetermined portion of the accumulator cycle for effecting a decimal carry operation to the succeeding order counting mechanism, means for sensing a succession of records for amounts recorded therein in binary form, means for sensing said records for designations representing the algebraic signs of the related amounts prior to sensing of said amounts, an addend sign relay controlled by said second sensing means and energized if said record amount is negative, means for determining the algebraic sign of the accumulator setting prior to the sensing of the record amount, an augend relay controlled by said accumulator sign means and energized when said accumulator amount is negative, a subtract control relay, means including points of said addend and augend sign relays connected in a logical circuit and adapted to energize said subtract control relay if either of said sign relays are energized, means controlled by said subtract relay when energized for effecting a simultaneous single step advance of all but the last of said series of counting wheels of each order wherein the previous digit manifestation pattern of each order is inverted on a 15's complement basis prior to the entry of a record amount therein, means controlled by said first sensing means for selectively and serially advancing each said



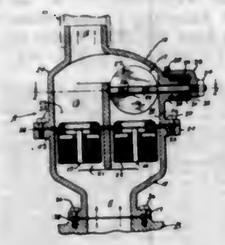
wheels of an order but the last of said series, one step, to enter the record amount therein additively regardless of the algebraic sign of said record amount; means controlled by said last wheel of the series of the highest order of said accumulator if advanced to a binary one position during a predetermined portion of said accumulator cycle for entering a fugitive one into the units order counting mechanism of said accumulator, means controlled by said subtract control relay if not energized during the cycle for entering a +6 supplement value into the related order counter, after the record entry operation, means controlled by said last wheel of each said counters if still indicating a binary zero after said +6 supplement entry for effecting a +10 correction entry into said counter, means controlled by said substract control relay if energized during the cycle and by the last wheel of each said counters if indicating a binary one after said record entry operation for entering a +6 correction value in said counter, and means controlled jointly by said subtract control relay if energized during said cycle, by the last wheel of said highest order counter of the accumulator if positioned to indicate a binary one during a predetermined portion of said cycle, and by the last of each said series of wheels of the remaining orders of the accumulator if indicating a binary zero during a predetermined period of said accumulator cycle, for entering a +10 correction in each said remaining order counting mechanisms.

2,733,863
TENS-TRANSFER MECHANISM
Grant C. Ellerbeck, San Leandro, Calif., assignor to Friden Calculating Machine Co., Inc., a corporation of California
Application June 29, 1954, Serial No. 440,079
4 Claims. (Cl. 235—138)



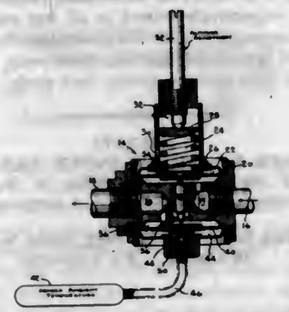
1. In a calculating machine having a frame, a carriage mounted on and longitudinally movable relative to said frame, a register carried by said carriage and including independently rotatable dial assemblies each having a tens-transfer cam, tens-transfer levers pivotally mounted on said carriage one adjacent each dial assembly and each rocked about its pivotal connection with the carriage by the tens-transfer cam of the associated dial assembly when the dial assembly turns from its "0" to its "9" position or from its "9" to its "0" position, dial assembly turning shafts carried by said frame one adjacent each dial assembly, tens-transfer gears slidably mounted one on each shaft and each having a hub and a pair of spaced-apart annular flanges on the hub thereof receiving therebetween an offset end portion of the tens-transfer lever actuated by the dial assembly of the next lower order, the improvement wherein each tens-transfer lever is freely pivoted on said carriage and one of the flanges of each tens-transfer gear is provided on the side thereof adjacent the associated flange with an annular cam surface adapted to engage the offset end portion of tens-transfer levers and restore said levers to their home or full-cycle position as said carriage moves relative to said shafts.

2,733,864
TEMPERATURE CONTROLLING MEANS FOR INTERNAL-COMBUSTION ENGINES
Bernard C. Rivers, Milwaukee, Wis.
Application December 21, 1954, Serial No. 476,669
2 Claims. (Cl. 236—34)



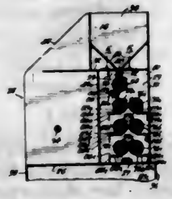
1. In an engine cooling system, means for controlling the flow of a coolant through a conduit leading from the engine to a radiator, comprising an outer casing section in the conduit having two separate channels therein connected with a common inlet and a common outlet, each channel being of a size and configuration to support a thermostatic valve, a high temperature thermostat in one channel, a low temperature thermostat in the other channel, and a manually operated independent valve adapted in one position to close off the flow of a coolant in the channel having the low temperature thermostat.

2,733,865
TEMPERATURE COMPENSATED BY-PASS VALVE
Edward C. Ehlke, Milwaukee, Wis., assignor to A P Controls Corporation, Milwaukee, Wis., a corporation of Wisconsin
Application February 18, 1952, Serial No. 272,179
5 Claims. (Cl. 236—92)



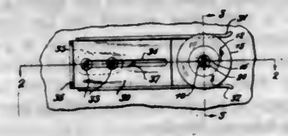
1. A valve adapted for use in a fuel by-pass line to vary the gage pressure at a burner to maintain a desired air-fuel ratio as the air-density varies with ambient temperature, comprising, a casing having an inlet and an outlet with a valve seat therebetween, a valve adapted to cooperate with said seat to regulate flow between the inlet and the outlet, a pressure regulating diaphragm mounted in the casing with one side exposed to inlet pressure and its other side exposed to atmospheric pressure, the effective area of said diaphragm exposed to inlet pressure being appreciably greater than the area of said valve seat thereby to render said diaphragm responsive to inlet gauge pressure, a spring exerting a preselected force on said other side of said diaphragm in the valve closing direction, an air density regulating diaphragm mounted in said casing with one side exposed to outlet pressure and the other side exposed to pressure in a chamber, temperature responsive means connected to said chamber and operative to vary the chamber pressure in accordance with ambient temperature, both of said diaphragms being operatively connected to said valve so that said spring opposes movement of said air density diaphragm in the valve opening direction.

2,733,866
ROLL CRUSHER FOR SUCH METALS AS ALUMINUM AND ZIRCONIUM, WITH MEANS TO REDUCE THE STATIC CHARGES IN THE CRUSHER OUTPUT
Arthur A. Bernard, Chicago, Ill., assignor to National Cylinder Gas Company, Chicago, Ill., a corporation of Delaware
Application March 18, 1953, Serial No. 343,099
5 Claims. (Cl. 241—159)



1. In a crushing apparatus for producing particles of predetermined uniform size from bulk material having elements of varying size without electrostatically charging the particles produced, the combination of a housing, a container having an opening through which particles of varying size flow, a plurality of aligned cooperating pairs of rollers positioned within the housing and below the opening, each pair of rollers having a spacing therebetween corresponding to the size of particles to be crushed, a distributing roller positioned adjacent the opening in said container for feeding the particles of varying size to a first pair of the cooperating rollers, a flow regulating plate rigidly mounted upon said housing and having a bottom edge positioned adjacent said distributing roller near the opening, the bottom edge of said plate being provided with a plurality of spaced apertures in order to feed the particles to said first pair of rollers at a preselected rate, the spacing between said first pair of rollers being much larger than the predetermined size particles to be produced so that only the largest of the varying size particles are comminuted by the first pair of rollers whereas all the particles except the large ones pass through the space without comminution successively to the other pairs of rollers, each of the spacings between the pairs of rollers being successively smaller than the spacing between the first pair of rollers so that each pair of rollers comminutes only those particles larger than the spacing therebetween, the last pair of rollers through which the particles pass being spaced apart a distance equal to the predetermined sized particles whereby all the particles below the predetermined size pass without comminution and all the particles above the predetermined size are reduced to the predetermined size, and a collecting means into which all of the particles flow after passing through the final pair of rollers, the spacing between each of the pairs of rollers permitting the passage of all particles in the container below the predetermined size to pass directly from the container through the rollers to the collector without comminution.

2,733,867
BOBBIN WINDER
Waldemar A. Ayres, Lakewood, Ohio, assignor to White Sewing Machine Corporation, Lakewood, Ohio, a corporation of Delaware
Application May 12, 1954, Serial No. 429,317
10 Claims. (Cl. 242—22)



1. A bobbin winder for a sewing machine structure comprising, a spindle mounted by said structure and adapted to be rotated by the sewing machine mechanism and to support a bobbin; means for establishing frictional driving engagement between said spindle and a bobbin mounted thereon; and means supported by said structure establishing braking frictional engagement with the material wound upon said bobbin whereby sufficient braking torque is developed to offset and exceed the driving torque and thereby stop the bobbin's rotation.

2,733,868
BOBBIN WINDER FOR SEWING MACHINE
Sidney J. Hamlett, Parma, Ohio, assignor to White Sewing Machine Corporation, Lakewood, Ohio, a corporation of Delaware
Application June 30, 1954, Serial No. 440,400
4 Claims. (Cl. 242—22)

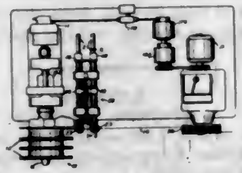
1. A bobbin winder for a sewing machine comprising a lever pivotably mounted at one end to the head of a sewing machine and provided at its other end with a rotatable spindle adapted to mount a bobbin, a friction wheel attached to said spindle and adapted to be moved by said lever arm between an inactive position away from a driving member mounted on the head of the sewing machine and an operating position wherein said wheel engages the driving member, and spring means connected to the sewing machine head and to the lever arm and functioning

on one side of a predetermined position of said lever arm to move the latter to and maintain the latter in a position wherein the friction wheel engages the driving member



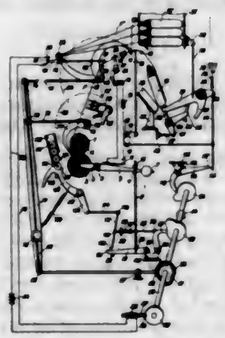
and functioning on the other side of said predetermined position to move the same to and maintain it in the inactive position of the friction wheel away from the driving member.

2,733,869
APPARATUS FOR COILING FILAMENTARY MATERIALS
Tillman T. Bunch, near Ashland, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application October 18, 1951, Serial No. 251,968
14 Claims. (Cl. 242—25)



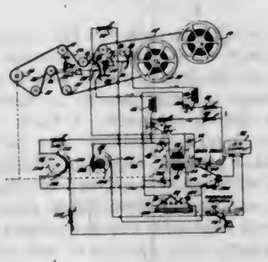
1. An apparatus for distributing filamentary articles upon a multisection coiling head, which comprises means for driving the head, guide means for guiding a filamentary article to a particular section on the coiling head, means for indexing the guide means to a position for guiding the article to another section, and means actuated simultaneously with the indexing operation of the last-mentioned means to accelerate the coiling head to maintain a positive take-up tension.

2,733,870
THREAD WINDING APPARATUS
Stefan Fürst, Munchen-Gladbach, Rhineland, Germany, assignor to Walter Reiners, Waldniel, Lower Rhine, Germany
Application January 2, 1952, Serial No. 264,382
Claims priority, application Germany January 9, 1951
12 Claims. (Cl. 242—35.6)



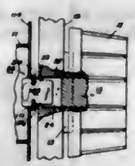
1. Thread winding apparatus having a supply spool and take-up spool and comprising in combination, an automatic supply spool changing device, an automatic take-up spool changing device, and an automatic knot tieing device, said devices being independent of each other; control means engaging said devices for respectively operating the same in a predetermined sequence during different portions of one cycle of said control means; and a plurality of automatic, releasable connecting means respectively joined to all but one of said devices for connecting and disconnecting the same from said control means so that the latter may operate only said one of said devices during said cycle.

2,733,871
TAPE RECORDER INPUT DEVICE
Leonhard F. Reinhold, Great Kills, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application September 27, 1952, Serial No. 311,841
18 Claims. (Cl. 242—55)



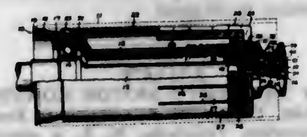
1. In a magnetic tape recorder having a supply reel and a take-up reel, reeling mechanism therefor comprising tape drive means for advancing tape towards said take-up reel and for advancing tape towards said supply reel, and means for intermittently apply a motive force to said tape drive means including a torque transmitting indexing device having an operating and a dwelling period, and an intermittently operable bidirectional torque transmitting device coupled to said indexing device.

2,733,872
DRIVING MEANS FOR ROLLS, SPOOLS, AND THE LIKE
Hugo Wurzel, Bronx, N. Y., assignor to Waldes Kohinoor, Inc., Long Island City, N. Y., a corporation of New York
Application January 6, 1954, Serial No. 402,519
5 Claims. (Cl. 242—71)



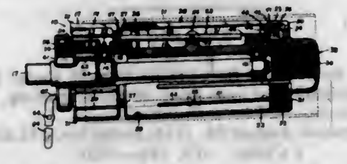
1. Means for driving a camera film roll from a film wind knob mounted externally of the camera comprising, in combination, a key shaft extending through an opening in the frame and being affixed at its outer end to said knob, the key shaft being provided adjacent its inner end with a circular groove and having a diametrical through slot intersecting said groove, a web-form driving key received in said slot, and an open-ended spring retaining ring seated in said groove and coacting with said key to secure it against both axial and radial displacement.

2,733,873
MANDREL
Svend A. Petersen, Brooklyn, N. Y., assignor to Celanese Corporation of America, New York, N. Y., a corporation of Delaware
Application February 4, 1953, Serial No. 335,012
4 Claims. (Cl. 242—72)



1. In a mandrel for a tubular yarn package support, a barrel mounted for rotation about the axis of an arbor, an expansible sleeve around said barrel and having one end fixed to said barrel, a cap coaxial with said barrel and slidably mounted thereon, said cap having a cam surface for expanding the other end of said sleeve into engagement with an inner surface of said support, spring means urging said cap axially in a direction to expand said sleeve, a detent having a locking position in which it holds said cap in a position inoperative to expand said sleeve, means for holding said detent in said locking position, said holding means being movable axially to a position permitting said detent to move out of said locking position and thereby permitting said cap to move in a direction to expand said sleeve, and axially movable means carried by said cap for movement therewith and operatively engaging said detent for restoring said detent to said locking position on movement of said cap in a direction opposite to the urging of said spring means.

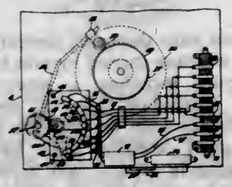
2,733,874
TEXTILE DEVICE
Svend A. Petersen, Brooklyn, and Ho Chow, New York, N. Y., assignors to Celanese Corporation of America, New York, N. Y., a corporation of Delaware
Application February 4, 1953, Serial No. 335,013
20 Claims. (Cl. 242—72)



1. In a textile device, a mandrel for receiving a yarn package support, said mandrel including a rotatable member, gripping means mounted on said rotatable member, means for moving said gripping means into contact with said yarn package support, means for releasably holding said gripping means in inoperative position, and means, operated by movement of the yarn package support as it is placed on said mandrel, for releasing said holding means so as to cause said gripping means to move into contact with said yarn tube.

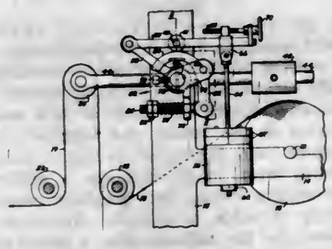
2,733,875
FILM REEL TENSIONING SYSTEM
Carl E. Hittle, North Hollywood, Calif., assignor to Radio Corporation of America, a corporation of Delaware
Application October 15, 1951, Serial No. 251,370
5 Claims. (Cl. 242—75)

1. A system for maintaining a substantially constant tension in film from a supply reel and to a take-up reel comprising a supply reel, a motor connected thereto, a take-up reel, a second motor connected to said take-up reel, a power supply for said motors, a film sprocket for advancing film from said supply reel to said take-up reel, a resistor between said power supply and each of said motors, circuits connecting said power supply over different portions of each of said resistors to each of said motors, means varying in position with the diameter of the roll of film on each of said reels, said means including pivoted arms, one end of each of said arms being moved by film on said respective reels, a shaft for each of said arms, a gear on each of said shafts, means connected to said last mentioned means for varying the connection of said circuits to said resistors to vary the amounts of said resistors connected between said power supply and each respective motor, said circuits including a plurality of conducting segments connected to different points on each of said resistors, and said last mentioned position varying means including a wiper arm for each plurality of segments and movable over said segments with changes



in the diameter of the film rolls on said reels, a shaft for each of said wiper arms, a gear on each of said wiper arm shafts in mesh with one of said first mentioned gears, said wiper arm gears being smaller than said first mentioned gears to obtain mechanical amplification of the movement of said first mentioned arms, a relay for each of said resistors, each of said relays having contacts, certain of said contacts being connected to certain of said segments, and a switch for controlling the energization of each of said relays, said switches being closed when its respective reel is functioning as a supply reel, energization of said relay of the resistor for said supply reel and motor disconnecting said power supply from said motor when said wiper arms are in contact with said certain segments.

2,733,876
WEB TENSION MECHANISM
Kenneth G. Laycock, Shavertown, Pa.
Application February 25, 1953, Serial No. 338,696
11 Claims. (Cl. 242—75)



10. A spring mechanism for a web tensioning device comprising a rotatable shaft, an arm mounted on the shaft and rotatable in one direction to increase the tension on the web and in the opposite direction to decrease the tension on the web, a lever pivotally secured at one end to the arm, said lever having a load applied thereto in a direction tending to rotate the arm in a web tension-increasing direction, a cam follower on the lever, a second pivoted lever mounted to engage the cam follower on the first-mentioned lever, said second lever having an adjustable pivot whereby the distance between the cam follower of the first-mentioned lever and said pivot may be varied to change the leverage ratio of the load bearing on the second-mentioned lever through the cam follower,

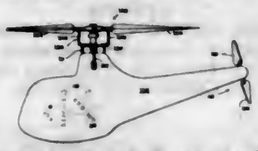
and a spring secured to one end of the second lever to oppose movement of said second lever in a web tension-decreasing direction.

2,733,877
THREAD AND YARN DISPENSER
Albert B. Cunningham, Camas, Wash.
Application May 29, 1952, Serial No. 290,622
2 Claims. (Cl. 242—139)



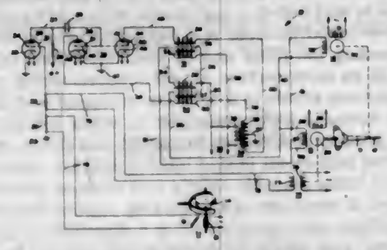
1. A thread and yarn dispenser comprising a base, a shaft supporting structure carried by said base, said shaft supporting structure including a generally U-shaped portion having upstanding legs, a spool receiving shaft extending horizontally between the upper ends of said legs, said spool receiving shaft having mounted thereon spool engaging arbors, said arbors being normally spaced from said legs by spacers carried by said shaft, said legs being removably secured to a transverse part of the U-shaped portion by vertical extending pins, said legs being detachable from said shaft, one of said arbors being provided with a plurality of concentric flanges for selective engagement within a spool, a second of said arbors being spaced relative to said one arbor, said second arbor having a generally conical flange portion for engagement within a second end of a spool.

2,733,878
STEERING APPARATUS FOR ROTATING WING AIRCRAFT
Benjamin H. Ciscel, Golden Valley, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application June 11, 1952, Serial No. 292,878
19 Claims. (Cl. 244—17.13)



1. Control apparatus for a helicopter having a sustaining rotor with articulated rotor blades rotating about a substantially vertical axis and movable means for selectively cyclically varying the pitch of said rotor blades with reference to the lateral and longitudinal axes of said helicopter, said helicopter having a manually operable control lever, in combination, a differential hydraulic servomotor having two integrally connected cylinders jointly movable in opposite directions and two power pistons one for each cylinder, a piston rod of one piston being secured to a fixed part of said helicopter and the piston rod of the other piston being connected to the movable means for operation thereof to cyclically vary the pitch of said rotor blades with reference to one of said axes, a control valve for the one cylinder; a lever having one end connected to the manual control lever and the other end connected to the cylinders with an intermediate point connected to the control valve whereby the valve is positioned from the control lever in the direction of the operating path of the cylinders and is reversely positioned by the movement of the cylinders; a position responsive device operated upon change in craft lateral position, a signal generating means, operating connections from said responsive device to said generating means, follow-up means responsive to relative movement of the cylinders and the other piston and connected to said generating means, and means controlled by said signal generating means for positioning the control valve of the other cylinder whereby differential operation of the movable means in accordance with the operation of said manually operable lever and said position responsive means is obtained.

2,733,879
TRIM TAB SERVO MOTOR CONTROL
Paul A. Noxon, Tenafly, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application December 31, 1947, Serial No. 795,065
9 Claims. (Cl. 244—77)



1. In an automatic pilot for aircraft having a primary control surface and a secondary control surface, the combination comprising a single source of error signal voltage responsive to craft deviation from a desired attitude, a servomotor connected for operation in accordance with said error signals to position said primary control surface to return the craft to the desired attitude, and a second servomotor connected for operation in accordance with said error signals in a manner reversely of the operation of said first servomotor to position said secondary control surface oppositely to the positioning of said primary control surface thereby reducing the loading of said primary surface.

2,733,880
KITE
George G. Burrell and Beryl Dean Burrell, Cedar Rapids, Iowa, assignors of one-third to Robert Kelp, Cedar Rapids, Iowa
Application August 24, 1954, Serial No. 451,886
1 Claim. (Cl. 244—153)



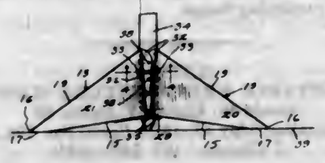
A kite comprising a single thin sheet of impervious material cut to the general outline of the kite to be formed and having edges thereof rolled to form a continuous tube about the periphery of said sheet, said tube being adapted to be inflated to stiffen said sheet, means carried by intermediate portions of said sheet for attaching a bridle string, one end of said tube being closed, the opposite ends of said tube being provided with an extension for filling said tube, said extension being flexible for forming a tail for said kite and folding upon itself and being compressible to seal said opposite end against the escape of air from the tube, and a tie member for compressing said extension when folded and maintaining the same folded.

2,733,881
COLLAPSIBLE STAND
Mary Jane Threlfall, Robert Threlfall, Mike Hawaeczak, and Steve J. Sveda, Akron, Ohio
Application July 7, 1951, Serial No. 235,622
4 Claims. (Cl. 248—27.5)



1. A collapsing mechanism of the character described, comprising: a plate member having a plurality of apertures therethrough; a shaft having one end thereof affixed to said plate; a plurality of leg members slidingly receivable through said apertures and having ground engaging means on one end thereof, the opposite free ends of said leg members being provided with apertures therethrough; a ring member receivable through said apertures in said legs and being positioned in encircling relationship to said shaft, whereby the ringed ends of said legs may be uniformly moved with respect to said shaft; and rotatable spacer members mounted on said ring member between said leg members whereby said ring is spaced from said shaft.

2,733,882
CHRISTMAS TREE HOLDER
Philander C. Knox III, De Land, Fla.
Application December 7, 1953, Serial No. 396,380
3 Claims. (Cl. 248—46)



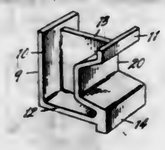
1. A holder or stand of the character described comprising at least three elongated holder sections each comprising a pair of corresponding elongated walls, said walls converging upwardly relative to one another from bottom edges thereof and merging at their upper edges in a ridge portion which extends from end-to-end of the section, said walls tapering in width from inner ends thereof to their outer ends and the botttom edges thereof merging with one another and with an end of the ridge portion at said outer ends of the walls, said bottom edges having outer end portions disposed at an angle to the remainder of the bottom edges and resting flush on a supporting surface for positioning the section with the ridge portion and the remainder of the bottom edges inclined inwardly and upwardly, said inner ends of the walls being disposed in upwardly converging relation to one another and at an angle relative to said outer end portions such as to abut substantially flush against a tree trunk or the like which is disposed with it axis normal to the plane of said supporting surface; said holder sections being disposed in spaced relation to one another around the tree trunk. said walls having outturned flaps forming extensions of the inner ends thereof, said flaps engaging the tree trunk between said sections, said walls having openings adjacent the inner ends thereof, and securing means comprising a strand member extending through said openings and adapted to engage around the tree trunk and the flaps for securing the holder sections rigidly to the tree trunk.

2,733,883
NURSING BOTTLE HOLDER
Fred Gourley, El Paso, Tex.
Application October 2, 1953, Serial No. 383,789
2 Claims. (Cl. 248—105)



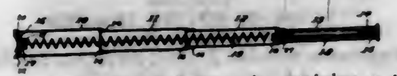
2. A nursing bottle holder adapted to be supported upon a surface, said holder being formed of rubber as a single unit comprising a vertical plate defining a body having an aperture therein offset longitudinally and transversely of the center of said body, a bottle-receiving cup molded integrally with said body along the periphery of said aperture and extending laterally from one face of said body, said cup having a plurality of spaced parallel rings extending transversely of its interior, each of said rings having an opening centrally therethrough, the opening in the ring most closely adjacent said body being of larger diameter than the openings in the others of said rings and the openings in successive rings being gradually diminished in diameter toward the end of said cup remote from said body to define a tapering guide in said cup so that the bottle received in said cup will be resiliently and securely retained in said cup, and insulated from impact caused by dropping the holder, and a pair of spaced supports extending laterally from and perpendicular to opposite faces of said body at the peripheral edge of each side of said body to provide feet to retain the holder and bottle in the desired position with regard to the level of the bottle above the surface upon which the holder is supported, and an aperture in the end of said cup remote from said body to facilitate cleaning of said cup, and to facilitate insertion and removal of the bottle inserted in said cup.

2,733,884
MATERIAL HANDLING PALLETS OR SKIDS
Charles C. Averill, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich.
Application March 15, 1951, Serial No. 215,667
2 Claims. (Cl. 248—120)



2. A leg for a material handling pallet formed as an integral casting and comprising a base member, inner and outer laterally spaced leg members of substantial width, the outer leg member having an outwardly facing hanger receiving recess below its upper end, and a web integrally connecting the base and leg members, the upper end of the web constituting a load supporting seat, the lower end of the front leg member and the front end of the base member merging into a relatively thickened nose portion, the lower edge of which projects below the base member and constitutes a guard for a base element secured to the underside of the base member.

2,733,885
THERMOMETER HOLDER
Charles Otis Brown and Edith M. Brown, Fresno, Calif.
Application July 18, 1952, Serial No. 299,696
1 Claim. (Cl. 248—161)



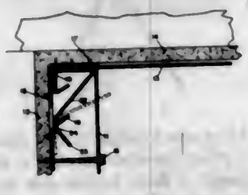
In a holder adapted for use in retaining a tubular thermometer against the inner surface of a wall of a refrigerator, the combination which comprises a tubular section having a disc with a threaded bore providing a closure in one end with the end surface of the disc having an arcuate recess extended transversely thereof and with the opposite face of the disc provided with stepped annular shoulders, the opposite end of said tubular section having an annular flange extended therefrom, the inside diameter of said annular flange being less than the inside diameter of the tubular section, an intermediate tubular section the outside diameter of which corresponds with the inside diameter of the annular flange of the former tubular section whereby the intermediate tubular section is adapted to slide in said flange, the end of the intermediate tubular section extended into the former tubular section having a rim thereon preventing accidental separation of the sections, said intermediate tubular section also having an annular flange extended from one end and the diameter of the annular flange of the intermediate tubular section being less than the inside diameter of said intermediate tubular section, a small tubular end section, the outside diameter of which corresponds to the inside diameter of the flange extended from the intermediate tubular section whereby the small end section is adapted to slide through said flange, the end of said small end section having a rim for preventing accidental separation of said section from the intermediate tubular section, a plug having a threaded bore secured in the extended end of said small end section, a bolt having threaded ends threaded into the bore of said plug and adapted to be threaded into the disc at the end of the large tubular section for retaining said sections in collapsed relation with adjacent ends of the tubular sections positioned on the shoulders of the disc, and a spring extended continuously through said tubular sections for urging the sections to extended positions.

2,733,886
REARVIEW MIRROR FOR A MOTOR VEHICLE
Alfred H. Haberstump, Detroit, Mich., assignor to George C. Knight Company, Detroit, Mich., a corporation of Michigan
Application December 4, 1951, Serial No. 259,812
2 Claims. (Cl. 248—203)



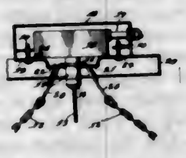
1. In a rear view mirror, a supporting arm having radially extended serrations and a projection positioned circumferentially within and extending beyond the serrations, an attaching clip positioned on said projection and having a plurality of outwardly flared tabs, yielding means urging the attaching clip toward the serrations of the supporting arm, the combination therewith of a head assembly connected to the supporting arm and including a body portion having radially extended serrations adapted to engage the radially extended serrations of the supporting arm, the body portion having a cylindrical recess extending axially within the serrations and having a channel in the walls of the cylindrical recess adjacent the serrations for the reception of the outwardly flared tabs of the attaching clip to provide a theft proof attachment to retain the supporting arm and head assembly in angularly adjustable relation.

2,733,887
METAL CABINET HANGER
Frederick A. Schmidt, Olympia, Wash.
Application February 9, 1953, Serial No. 335,760
2 Claims. (Cl. 248—223)



2. A hanger construction for a sheet metal cabinet having flanges projecting rearwardly from its rear wall, comprising a metal hanger strip adapted to be fastened horizontally to a building wall, a tongue struck from said hanger strip with its root parallel to a longitudinal edge of the strip and extending upwardly and forwardly from the strip, and a hook member loosely mounted on said tongue, said hook member comprising an L-shaped strip of sheet metal having a slot near and parallel to the apex of the dihedral angle defined by the legs of the hook member and adapted to receive said tongue, said strip having a forwardly projecting flange along its upper edge, and at least one leg of said hook member being of greater length than the width of said strip between the root of said tongue and the base of the forwardly projecting flange and of lesser length than the distance between the root of said tongue and the outer edge of said forwardly projecting flange.

2,733,888
ADJUSTABLE LIGHT FIXTURE HANGER
Harold W. Kinander, Itasca, Ill.
Application May 11, 1953, Serial No. 354,288
2 Claims. (Cl. 248—343)



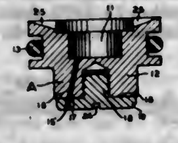
1. A device for supporting an elongated lamp fixture from an outlet box mounted in a ceiling or the like, comprising a plate adapted to be fixed to said box to form a cover for the same, said plate having a depressed central portion provided with an opening, the margin surrounding said opening being provided with spaced apart corrugations, and a swivel member comprising a pair of spaced apart legs connected by a head so as to be insertable through said opening in the cover, said head being larger than the opening whereby it rests on said margin of the opening so as to suspend said legs beneath said plate, the head being rotatable in said opening and being provided with spaced corrugations adapted to cooperate with the corrugations in the plate whereby rotative movement of the swivel member is normally prevented but is enabled to take place upon elevation of said member so as to disengage said corrugations.

2,733,889
VALVE AND FLUID CONTROL CONDUIT
Charles D. Mattingly, Wichita, Kans., assignor to The Coleman Company, Inc., Wichita, Kans., a corporation of Kansas
Application June 9, 1951, Serial No. 230,727
6 Claims. (Cl. 251—95)



1. In combination with an air conduit, an elongated tapered valve of arcuate cross-section, a spring member secured to the conduit wall and to said valve and urging the narrow end of said tapered valve into engagement with the opposite wall portion, and means for locking the valve against the force of said spring in partially opened positions.

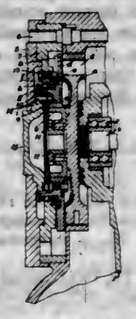
2,733,890
ADJUSTABLE VALVE FOR LIQUIFIED PETROLEUM GAS LIGHTERS
John A. Vierling, St. Paul, Minn., assignor to Brown & Bigelow, St. Paul, Minn., a corporation of Minnesota
Application June 7, 1950, Serial No. 166,749
2 Claims. (Cl. 251—215)



1. An adjustable valve for liquified petroleum gas lighters, including a sleeve, a cap screw threaded into the bottom of said sleeve, a sealing O-ring recess formed in the wall of said sleeve, a small gas passageway formed through said sleeve to a point of contact with the inner surface of the head of said cap screw, an annular upstanding ridge formed about the lower end of said passageway in said sleeve on the bottom surface thereof, a passageway formed through the head of said cap screw while the cap screw is attached to said sleeve, said cap screw and sleeve being adjusted in relation to each other to flatten said annular ridge around said hole to conform with the inner surface of said cap screw adjacent the hole formed through said cap screw to permit said sleeve and cap screw to be adjusted in relation to each other to regulate the flow of gas from a storage chamber through the passageways formed in said sleeve and the head of said cap screw.

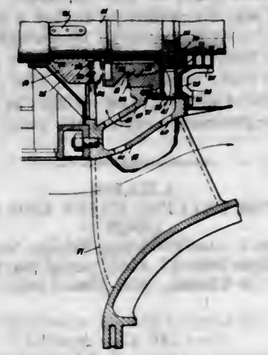
2,733,891
GAS TURBINES
Terence William Millns, Shepherds Bush, London, and Kenneth Theodore Guy, Eastcote, Pinner, England, assignors to Rotax Limited, London, England
Application June 19, 1951, Serial No. 232,374
Claims priority, application Great Britain June 28, 1950
3 Claims. (Cl. 253—59)

1. A gas turbine comprising in combination a housing, a rotor mounted for rotation in the housing and provided with peripheral blading, a fixed nozzle member which is situated at one side of the rotor blading, and through which motive fluid can be supplied to the rotor blading, an annular shutter situated between the fixed nozzle member and the rotor blading and having spaced orifices therein, bearing means supporting the shutter so that the latter is capable of angular displacement between a normal position in which the motive fluid can flow therethrough to the rotor blading, and another position in which the motive fluid is deflected by the shutter away from the rotor blading, clutch means driven by the rotor and situated within the annular shutter, the clutch means having a radially expansible part capable of engaging the shutter under the action of centrifugal force, so that the shutter is angularly displaced by the said part of the clutch means into the position for deflecting the motive fluid away from the



rotor blading when the speed of the rotor exceeds a predetermined limit, spring means arranged adjacent to the clutch means and interconnecting the housing and the shutter for urging the latter into its normal position, a stationary annular part situated at the side of the shutter remote from the rotor, and an annular sealing member supported by the said stationary annular part and the shutter between and in close contact therewith to isolate the region between the stationary nozzle member and the shutter from the shutter bearing means and the spring means.

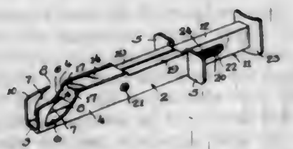
2,733,892
THRUST BEARINGS, ESPECIALLY FOR TURBINE AND GENERATOR UNITS
Henri Peyrin and Severin Xavier Casseci, Grenoble, France, assignors to Etablissements Neyrpic, Grenoble, France, a corporation of France
Application July 10, 1951, Serial No. 236,002
Claims priority, application France July 11, 1950
2 Claims. (Cl. 253—148)



1. A hydraulic turbine assembly comprising a turbine having a rotor, a shaft supporting said turbine rotor for rotation therewith on the axis of said shaft, a thrust bearing member carried by said shaft for rotation therewith, a stationary thrust bearing member cooperating with said rotating thrust bearing member to oppose the axial thrust of said shaft and said rotor, a casing extending about the axis of said shaft and enclosing said bearing members, means for supporting said stationary thrust

bearing member on said casing interiorly thereof, said casing providing a wall of a passage for water flowing through said turbine for driving said turbine and cooled by the water flowing through said passage, means including said casing for confining a lubricant within said casing, means for circulating said lubricant alternately over said bearing members and into contact with said cooled wall, and hollow frame members supported in said turbine assembly and extending generally radially with respect to the axis of said shaft across said passage and connected to said casing for supporting said casing and said thrust bearing members supported thereby, said wall of said casing having openings therein communicating with the space within said hollow frame members for circulation of said lubricant from within said casing through the space of said hollow frame members for cooling said lubricant by the water flowing through said passage past said frame members.

2,733,893
STAPLE EXTRACTOR
Samuel Segal, New York, N. Y., assignor to Wilson-Jones Company, Chicago, Ill., a corporation of Massachusetts
Application May 29, 1951, Serial No. 228,869
4 Claims. (Cl. 254—28)



1. In a staple extractor, a pusher member and a channel member having three walls juxtaposed against corresponding walls of said pusher member, said members being slidable longitudinally relative to each other, said channel member having portions extending inwardly to fit under the bottom of said pusher member to limit relative sliding movement of said pusher and channel members in one direction and to prevent separation thereof, and oppositely disposed cam surfaces on each of said members, said cam surfaces extending upwardly in contiguous vertical planes and being normally separated longitudinally from each other and meeting initially in a plane coincident with one edge of said members upon longitudinal movement of said members, whereby said cam surfaces may cooperatively engage a clinched staple and extract it from the material into which it is secured by forcing its body portion upwardly in a plane perpendicular to the plane of said material, said staple remaining in engagement with the cam surfaces as said members are moved longitudinally beyond the point of initial engagement.

2,733,894
WEDGE FOR FALLING TREES AND BUCKING LOGS
John T. Don Overman, Sturgis, Mich.
Application May 17, 1952, Serial No. 288,368
9 Claims. (Cl. 254—104)



1. A wedge comprising a generally rectangular body of magnesium having a slightly narrower butt end than tip end, the side edges of said wedge being inclined inwardly and upwardly to the top surface in a compound angle exceeding three degrees, the tip end of the wedge being of reduced thickness intermediate of its sides by having a semi-circular recess formed in the upper surface thereof and extending to the tip of the wedge, the top surface of the wedge further having a central inclined portion extending downwardly to the tip below the level of the upper surface of the wedge and below the level of said semi-circular recess, the bottom side of the wedge being flat.

2,733,895
TIMBER JACK
Jacob I. Trenkle, Portville, N. Y.
Application August 15, 1952, Serial No. 304,508
9 Claims. (Cl. 254—131)



9. A timber jack comprising a peavey having a pick member at a forward end thereof, a support secured to a forward portion of said peavey, said support including a forward ground engaging front member, a rearwardly extending socket carried by said front member and clampingly engaging said peavey forward portion, said peavey socket including a base and adjustable peavey clamping straps, an opening in said front member aligned with said socket receiving said pick member.

2,733,896
PORTABLE DRILLING RIG
Samuel D. Gunning, Cleveland Heights, Ohio, assignor, by mesne assignments, to Westinghouse Air Brake Company, a corporation of Pennsylvania
Application December 12, 1950, Serial No. 200,430
5 Claims. (Cl. 255—51)



1. In a portable drilling rig, the combination of a wheel supported frame, a boom having a supporting leg extending longitudinally of said frame and a drilling apparatus carrying arm extending at right angles from said leg, a pivotal connection between the free end of said leg and said frame, a motive fluid chamber in the inner end of said arm, motive fluid conveying means including a swivel connection in the free end of said arm and a conduit leading therefrom to said chamber, lubricant supplying means to said conduit including a lubricant reservoir in said arm surrounding said conduit, a pivotal movement effecting mechanism carried by said frame in operative engagement with said leg including a fluid actuated motor, and at least one motive fluid conveying conduit between said chamber and motor carried by said boom.

2,733,897
GUARD RAIL
Harry Diamond, Elizabeth, N. J.
Application December 23, 1953, Serial No. 399,903
3 Claims. (Cl. 256—13.1)



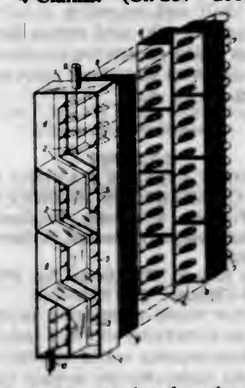
1. A guard rail comprising a plurality of rectangular posts having front, side and back faces, a plurality of slots in each of said posts extending through the front and partially through the side faces, said slots being at an angle to the base of said posts, a plurality of flat rails positioned in said slots, a portion of said rails extending beyond the front face of said posts.

2,733,898
HOLLOW SCREW CONVEYOR FLIGHT
Joseph Dennis Christian, San Francisco, Calif.
Application December 2, 1952, Serial No. 323,571
1 Claim. (Cl. 257—101)



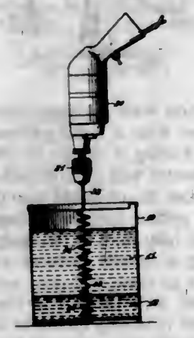
A screw conveyor flight comprising a standard having a longitudinal axis and providing a central support for the flight, a first helix member having an exposed face and an inner face defining one wall of a fluid conduit and having an inner helical portion flared to extend away from the exposed face of said member and along and in engagement with the standard and terminating with an edge extending substantially normal to the longitudinal axis of said standard, welding joining the terminal edge of said first helix member to said standard, said welding smoothly continuing the flare of said first helix member to a junction with the surface of the standard, a second helix member having an exposed face and an inner face defining one wall of a fluid conduit and having its inner helical portion flared to extend away from the exposed face of said second member and along the standard in spaced longitudinal axial alignment with the terminal edge of the first, said second helix member terminating with an edge extending substantially normal to the longitudinal axis of said standard, said helix members extending outwardly from the standard in a spaced relation to one another and into abutment adjacent their outer peripheral edges and being joined together to provide a helical fluid conduit, and other welding joining the terminal edge of said second helix member to the standard, said other welding smoothly continuing the flare of said second helix member to a junction with the surface of the standard.

2,733,899
AIR HEATER
Ernst Lehmann, St. Gallen, Switzerland
Application September 20, 1954, Serial No. 457,240
Claims priority, application Switzerland September 21, 1953
4 Claims. (Cl. 257—255)



1. In an air heater, a closed casing having a longitudinal wall provided with two spaced rows of longitudinally alined openings, a fluid inlet connection at one end of said casing, a fluid outlet connection at the opposite end of said casing, a series of partitions in said casing dividing its interior into a series of compartments one of which communicates with said inlet connection and with a number of said openings in one row, another of which communicates with said outlet connection and with a number of said openings in the other row, and the remaining ones of which communicate each with a number of said openings in one row and with a number of said openings in the other row, a series of pipe members each having a pair of legs connected by a U-shaped bend, said pipe members conforming in cross-section to said openings and each member having one of its legs connected to said wall at one of said openings in one row communicating with one of said compartments and having the other of its legs connected to said wall at one of said openings in the other row communicating with another of said compartments, and a series of vertical fins extending in parallel between like legs of the pipe members and connecting said like legs in groups each constituted by a plurality of such legs.

2,733,900
PAINT MIXER
James C. Wobensmith, Philadelphia, Pa.
Application December 23, 1953, Serial No. 399,901
9 Claims. (Cl. 259—135)

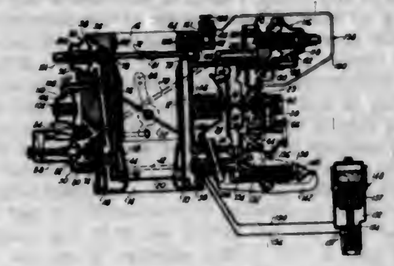


1. A device for mixing and stirring paint within a container comprising a single integral rod having a lower end portion coiled in a right-hand thread formation, a portion above the same coiled in a left-hand thread formation, said coiled portions being of a relatively small and uniform diameter from end to end thereof, and a straight shank extending upwardly therefrom and adapted to be gripped in the chuck of a power operated tool for rapid rotation of the coiled portions in the paint.

2,733,901
CARBURETOR
Robert W. Sutton, Elmira, N. Y., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application September 29, 1951, Serial No. 248,960
3 Claims. (Cl. 261—41)

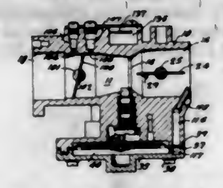
2. In a fuel metering device, an air induction passage, a venturi in said passage, a throttle in said passage downstream of said venturi, a main fuel conduit adapted to supply fuel from a source under super-atmospheric pressure to said passage, a metering jet in said conduit, a valve in said conduit upstream of said jet, a first means responsive to air flow through said passage for controlling said valve, a valve in said conduit downstream of said jet, a second means responsive to air flow through

said passage for controlling said second mentioned valve, and a passageway connecting said conduit upstream of



said jet with said induction passage on the engine side of said throttle.

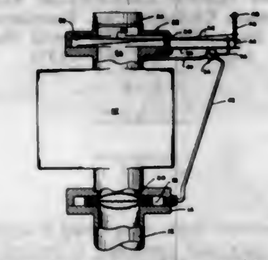
2,733,902
CHARGE FORMING DEVICE
Bernard C. Phillips, Toledo, Ohio, assignor to The Tillotson Manufacturing Company, Toledo, Ohio, a corporation of Ohio
Application July 22, 1952, Serial No. 300,288
6 Claims. (Cl. 261—41)



1. In combination with a charge forming device having a body formed with a mixing passage and a fuel receiving chamber having a single flexible diaphragm defining one wall thereof and a main orifice arranged to deliver liquid fuel from the chamber into the mixing passage and a secondary orifice formed in the wall of the mixing passage, a fuel inlet duct in the body, a fuel inlet control valve having a needle portion extending into the duct and operative to close said duct against fuel pressure in the duct, a fuel well formed in the body, a passage connecting the fuel receiving chamber with the fuel well, means for metering the flow of liquid fuel from said chamber through said passage into the fuel well, a member movably supported in said chamber in constant engagement with the diaphragm, said member having a portion engaging the fuel inlet control valve, a spring engaging said member and normally biasing the member in a direction to close said fuel inlet control valve, said diaphragm being actuated solely by subatmospheric pressure in the mixing passage to move the member in a direction to change the position of the fuel inlet control valve to admit fuel through the duct into the fuel receiving chamber, a channel for supplying fuel from the fuel receiving chamber to the secondary orifice, and valve means arranged to interrupt air flow through the main orifice from the mixing passage into said channel when said secondary orifice is delivering fuel into the mixing passage.

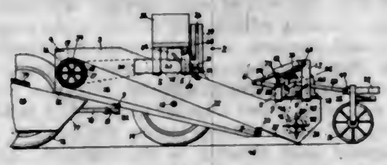
2,733,903
GAS SAVER
Samuel J. Harmon, Pontiac, Mich.
Application April 15, 1953, Serial No. 349,039
2 Claims. (Cl. 261—63)

1. In an internal combustion engine having a carburetor, an intake manifold, a supplemental air inlet in said intake manifold and a valve for controlling the flow of air through said supplemental air inlet, the provision of a housing mounted on said carburetor adjacent the main air inlet thereof, said housing having a central passage aligned with the air inlet passage of said carburetor, a flipper pivotally mounted on the sidewall of said housing and extending into the central passage in said housing the cross sectional area of said central passage being sufficient to provide air flow area around said flipper at least equal to the air flow area through said carburetor, an arm extending from said flipper and outwardly from said housing, a bracket mounted on said housing and



extending adjacent to and below said flipper arm, a threaded stem extending upwardly from said bracket and through a clearance hole provided in said flipper arm, a nut on the end of said threaded stem, a coil spring positioned around said stem between said nut and the upper face of said flipper arm, and linking means connecting said flipper arm with said supplemental air control valve.

2,733,904
BEACH CLEANING APPARATUS
Guy Gauthier, Richmond Hill, and Robert Donaldson, Baldwin, N. Y.
Application October 7, 1952, Serial No. 313,506
2 Claims. (Cl. 262—2)

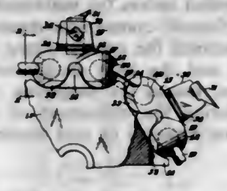


1. In a beach cleaning vehicle, a sand conveying device comprising two side walls; a movable sieving device including an endless sieving net extending between said walls from a lower front end to a higher rear end; means for moving said sieving device; a shoveling ramp extending from an edge positioned in front of and lower than said net's front end to an edge positioned in rear of and higher than said net's front end, a horizontal shaft rotatably supported and extending over said ramp across the moving direction of said sieving net, transport plates affixed to said shaft and extending axially and radially thereto between said walls, and means for rotating said shaft, said means being geared for rotation of said shaft in the direction in which said plates move rearward when they are higher than said shaft.

2,733,905
TOOL-CARRYING CHAINS HAVING BALL AND SOCKET CONNECTIONS BETWEEN LINKS
Sidney Ernest Proctor, Aylesbury, England, assignor to Austin Hoy and Company Limited, Aylesbury, England, a British company
Application June 9, 1952, Serial No. 292,549
15 Claims. (Cl. 262—33)

1. A coal cutter chain comprising in combination a series of cutter pick carrying socketed links having apertures to the sockets opening out of the links so as to pass ball-stems but not large enough to pass balls fitting the sockets, balls in the sockets with stems projecting through the apertures, additional apertures in the socketed links

large enough to pass a ball and opening into each of the sockets from different faces of the links from those through which the stems pass so that the balls can be



entered into the sockets therethrough, and plugs closing said additional apertures said plugs being shaped to engage the balls and retain them free from backlash in the sockets.

2,733,906
UNIVERSAL CUTTER CHAIN FOR MINING MACHINES
Joseph F. Joy, Pittsburgh, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application July 15, 1953, Serial No. 368,084
8 Claims. (Cl. 262—33)



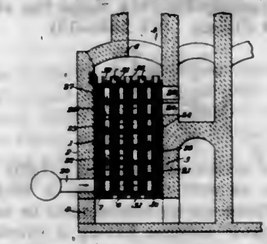
1. In a mining chain, a series of chain blocks having projecting lugs for supporting teeth for disintegrating the mineral of a mine vein, said blocks having transverse outer platelike portions, said teeth supporting lugs projecting outwardly from said platelike portions, and bridge link members of elongated U-shape arranged at right angles to said platelike portions and extending lengthwise of said blocks midway between the sides of the latter, said bridge link members having legs rigidly secured to the end portions of said platelike portions respectively rearwardly and in advance of said lugs, open-centered cable links having their open centers receiving said legs of said bridge link members, for loosely connecting said blocks together whereby the chain may flex in angularly related planes, each of said platelike portions having bottom projections extending within the open centers of the adjacent pair of said cable links with said projections provided with curved surfaces shaped substantially to conform to and lying against the adjacent curved surfaces of said pair of cable links.

2,733,907
TOBACCO CURING SYSTEM
Joseph F. Phillips, Springfield, Ohio, assignor to The Buckeye Incubator Company, Springfield, Ohio, a corporation of Delaware
Application April 15, 1950, Serial No. 156,135
4 Claims. (Cl. 263—19)



3. A gas burner unit of the character described for heating the interior of a tobacco barn to cure tobacco, comprising a gas burner body adapted at the lower end thereof for connection to a gas supply and having a series of outlets around the upper end thereof for radially discharging gaseous fuel for combustion, a deflector plate secured to said burner body above said outlets, said deflector plate being of substantially greater diameter than said burner body to deflect outwardly the rising hot gases impinging thereon from said outlets, a generally flat top plate overlying said deflector plate, spacer means connecting said plates and proportioned to support said top plate spaced vertically above said deflector plate by a substantial distance establishing an air space of corresponding vertical extent between said plates and to minimize direct transfer of heat between said plates, said top plate being free from depending flange portions capable of trapping said hot gases within said space to promote outward flow of said hot gases and free circulation through said space in order to maintain said top plate at a materially lower temperature than said deflector plate minimizing fire hazards from tobacco leaves dropping on said top plate, said top plate being of materially greater diameter than said deflector plate to shield dropping leaves from said deflector plate and to effect further radial deflection of the hot gases flowing upwardly thereto from the periphery of said deflector plate, and a plurality of supporting legs depending from one of said plates for supporting said burner unit in elevated position above the floor level.

2,733,908
RECUPERATOR TUBE TILE STRUCTURE
Frank H. Graham, Edgewood, Pa., assignor to Amsler Morton Corporation, Pittsburgh, Pa., a corporation of Delaware
Application October 8, 1952, Serial No. 313,719
5 Claims. (Cl. 263—20)



1. Heat transfer tile structures for the construction of recuperators comprising a refractory member having an annular wall with an opening therethrough, a plurality of spaced ribs integral with the wall of the refractory member and projecting inwardly into said opening, said ribs extending longitudinally of the wall forming said opening to aid in guiding gases passing therethrough, the cross-sectional area of the ribs providing additional load carrying support to enable reduction of the thickness of the annular wall to increase the heat exchange through the refractory member.

2,733,909
METHOD AND APPARATUS FOR PREHEATING KILN FEEDS
George K. Engelhart, Catasauqua, Pa., assignor to Fuller Company
Application February 14, 1955, Serial No. 487,809
4 Claims. (Cl. 263—32)

1. The method of preheating kiln feed material which comprises passing the feed material serially through a plurality of heat exchangers, bringing the feed material in said heat exchangers in direct contact with the hot exit gases from the kiln while said gases are passing counter-current to the general direction of flow of the feed material, separating the feed material from the hot gases in the several heat exchangers of the series, introducing the feed material separated from the hot gases in the last of the series of heat exchangers into the kiln, separating finely-divided dust material from the discharge gases of the first heat exchanger of the series, adding the

separated dust material to pre-heated feed material being discharged from one of the heat exchangers and on its way to a succeeding heat exchanger of the series, completing the mixing of the dust and feed material in said succeeding heat exchanger while subjecting the materials



to direct heat exchange with the gases while suspended therein, separating the mixed dust and feed materials from the gases in said succeeding heat exchanger, discharging the mixed dust and feed materials from said succeeding heat exchanger, and conducting into the kiln said discharged mixed dust and feed materials.

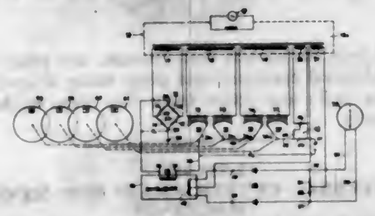
2,733,910
CENTRIFUGAL ACTUATOR
Arlo L. Steele, New Carlisle, Ohio, assignor to Robbins & Myers Inc., Springfield, Ohio, a corporation of Ohio
Application January 13, 1954, Serial No. 403,758
9 Claims. (Cl. 264—15)



1. A centrifugal actuator comprising a frame adapted to be rotated about an axis of rotation, a weighted arm pivoted to said frame on an axis normal to said axis of rotation, an actuator element having a pivotal bearing on said weighted arm about an axis parallel to said first named axis but eccentric thereto, a spring secured at one end to said weighted arm substantially on its pivot axis, and at the other end to said actuator element beyond said pivotal bearing, an abutment for said arm disposed on said frame adjacent said arm to hold said arm and actuator element, when at rest, with said eccentric axis to one side of the axis of said spring, and an abutment for said actuator element on said frame adjacent said actuator element preventing substantial movement thereof with said weighted arm, whereby when said device is rotating and said weighted arm pivots as a result of centrifugal force, said eccentric axis crosses the axis of said spring, whereby said actuator element is given a snap actuating movement.

2,733,911
WEIGHING DEVICE
Arthur L. Thurston, Wantagh, N. Y., assignor, by mesne assignments, to Revere Corporation of America, a corporation of New Jersey
Application May 24, 1952, Serial No. 289,839
13 Claims. (Cl. 265—27)

1. In apparatus of the class described, means including an electro-responsive element for controlling electrical energy in response to physical change in such element; a plurality of stepped incremental means each being so constructed and arranged for varying electrical energy by a preselected increment in response to the movement of a movable member comprising a part thereof; means for automatically moving said movable members in sequence, the increment of each incremental means being of a higher order than that of the incremental means next lower in order of succession; a like plurality of indicia means, each connected to the movable member of a corresponding incremental means for movement in response to the movement thereof; comparator means for sensing the relationship between the energy output of said first-mentioned means and the joint energy output of said incremental means; means for supplying to said comparator means during the movement of the movable member of the first actuated of said incremental means,



and of such means sequentially actuated thereafter, electrical energy corresponding in amount to a preselected percentage of but not greater than the maximum value of energy controllable by the next succeeding incremental means; and means for arresting the movement of the movable member of the incremental means undergoing actuation in response to the sum of such supplied electrical energy plus the energy of the actuated incremental means reaching a value greater than the energy of said first-mentioned means.

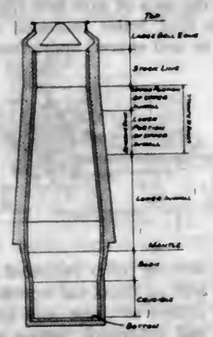
2,733,912
VACUUM FURNACE BATCH FEEDING METHOD AND APPARATUS
Charles E. Newcomb, Industry, Pa., John R. Porter, Chester, W. Va., and Paul F. Darby, Beaver, Pa., assignors to Rem-Cru Titanium, Inc., Midland, Pa., a corporation of Pennsylvania
Application August 30, 1954, Serial No. 452,965
8 Claims. (Cl. 266—27)



8. Apparatus for feeding batches of charge of highly reactive metals and their alloying ingredients to a melting furnace comprising a substantially gas-tight feed system, having feed receiving means and an enclosure connecting said feed receiving means with the furnace, vibratory charge feeding means mounted in said enclosure and adapted to receive the charge from the feed receiving means and convey it to the furnace, and an activating magnet assembly positioned externally of said feed system and having a pulsating shaft extending into the feed system through a gas-tight seal provided in a wall of the enclosure of said system, said shaft being connected to the feed trough for imparting reciprocatory movement thereto.

2,733,913
BLAST FURNACE LININGS
George E. Mercer, Mount Lebanon Township, Allegheny County, Pa.
Application October 8, 1951, Serial No. 250,383
5 Claims. (Cl. 266—43)

1. A blast furnace lining comprising a high fusion alumina brick of low porosity covering the bottom of the furnace, a high fusion hard burned mullite brick lining the crucible and the bosh above said bottom, a high fusion alumina brick of low porosity lining the lower



inwall above the bosh and mantle, and a high fusion silicon carbide brick lining the upper inwall and the stock line of the furnace.

2,733,914
SPIRAL SPRINGS AND VIBRATION-DAMPING MEANS THEREFOR
Friedrich Allendorff, Stuttgart, and Ottmar Baur, Wendlingen, Germany, assignors to Robert Bosch GMBH, Stuttgart, Germany
Application February 24, 1953, Serial No. 338,312
Claims priority, application Germany February 23, 1952
9 Claims. (Cl. 267—1)



1. A spiral spring arrangement comprising, in combination, two spaced spring supports arranged facing each other and each having a center, said centers lying in the supporting axis of said supports, each of said supports having a central projection extending toward the other support; an elongated spiral spring secured on said projections between said supports supported at its opposite ends by the same, said elongated spiral spring having between said supports at least a portion of its length permanently curved and deviating in transverse direction from said supporting axis; and a damping member in the form of a housing extending around said spiral spring and mounted at a fixed distance from said supporting axis at least in the region where said elongated spiral spring is curved and being in permanent contact with the same so as to prevent during working compression further transverse bending of said spiral spring, whereby vibrations of the spring are damped.

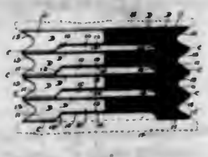
2,733,915
SHOCK ABSORBING MECHANISMS FOR RAILWAY CAR TRUCKS
Arnold E. Dentler, Western Springs, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a corporation of Delaware
Application November 3, 1952, Serial No. 318,408
3 Claims. (Cl. 267—9)

1. In a friction shock absorbing mechanism, the combination with a pair of friction casings closed at their outer ends and having interior friction surfaces at their inner ends; of a plurality of lengthwise extending friction shoes having their opposite ends telescoped within said casings, respectively, in sliding engagement with the friction surfaces of the latter; and a lengthwise compressible resilient column between said shoes, bearing at opposite ends on the closed ends of said casings, said column in-



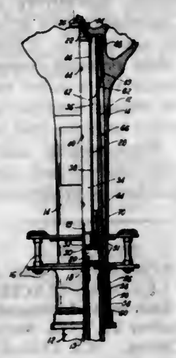
cluding a series of rubber blocks and spacing plates alternated with said blocks, the central block of said series having its sides buttressed against the inner sides of said shoes.

2,733,916
RUBBER SHOCK ABSORBING MEANS
Arnold E. Dentler, Western Springs, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a corporation of Delaware
Application May 4, 1953, Serial No. 352,693
7 Claims. (Cl. 267—63)



1. A shock absorbing mechanism comprising a plurality of units arranged in series, each unit comprising a pair of flat metal plates and a flat rubber pad interposed between said plates, said pad being recessed at one side, said recess having a flat back wall, and a flat liner plate overlying said back wall.

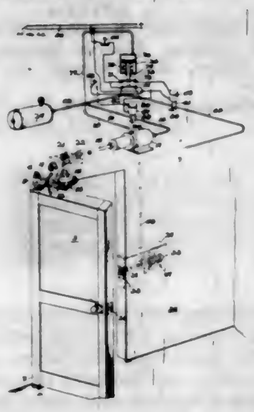
2,733,917
SHOCK STRUT
Thomas Clifford Delker and Arnold William Nordgren, South Bend, Ind., assignors to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application February 4, 1952, Serial No. 269,774
4 Claims. (Cl. 267—64)



1. For use in aircraft landing gear, a shock strut comprising two telescoping members, one of which is adapted to be connected to the aircraft body and the other of which is adapted to carry the ground contacting element, said other telescoping member having an orifice at one end thereof, a tubular member secured to one of the telescoping members and extending within said telescop-

ing members, a liquid housed within the strut and confined within chambers outlined by the aforementioned three members, orifice-restricting means on said tubular member providing a restricted passage extending in the direction of strut movement and located between said orifice-restricting means and the movable telescoping member to restrict the flow of liquid through said orifice as said telescoping members approach maximum extension in a manner controlling the flow of liquid from the chamber outlined in large part by the inner wall of the outer telescoping member and the outer wall of the inner telescoping member.

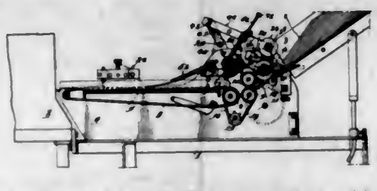
2,733,918
FIRE DOOR CONTROL
Harold P. Fischer, Glendola, N. J., assignor to National Pneumatic Co., Inc., Boston, Mass., a corporation of Delaware
Application December 27, 1950, Serial No. 202,900
21 Claims. (Cl. 268—66)



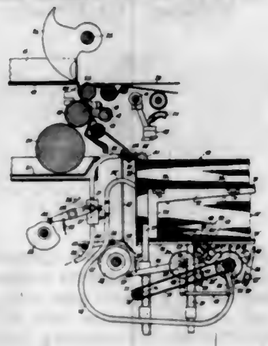
1. In means for controlling passage between two adjoining compartments comprising: a door mounted on the wall common to the two compartments, said door having a latching element mounted thereon, and a keeper assembly mounted in said wall and including a keeper element positioned in alignment with said latching element for cooperation therewith to retain the door in closed position; the improvement which comprises means biasing said keeper element into said cooperating position, fluid pressure-operated means operatively connected to said keeper element for maintaining the latter away from said cooperating position against the action of said biasing means, a source of fluid pressure connected to said fluid pressure-operated means via a valve means, and control means for said valve means sensitive to the pressure of said source and effective to move said valve means to inoperative position disconnecting said fluid pressure-operated means from said source when the pressure of said source falls below a predetermined value.

2,733,919
FEEDING ATTACHMENT FOR AUTOMATIC SHEET FEEDING MACHINES
Alfred Anderson, Elmhurst, Ill.
Application September 29, 1954, Serial No. 459,050
12 Claims. (Cl. 271—10)

1. The combination with a sheet feeding machine including a magazine for holding a group of sheets, conveyor means in front of the magazine including rotary pull-out rollers arranged one above the other a short distance from the magazine, a stationary retard roller and a cooperating first rotary friction feed roller above said retard roller positioned between the pull-out rollers and the magazine to receive individual sheets moving forwardly out of the magazine and move them to the pull-out rollers, and means to drive the first friction feed roller: of a support member mounted to project upwardly from and swing about the axis of said first friction feed roller, a second friction feed roller mounted on said support member parallel to and spaced apart from said first friction feed roller, a driving roller mounted on said support member between and in frictional contact with both of said friction feed rollers to cause said first one to drive said second one, and automatic means to oscillate said support to carry the said second friction feed roller from and toward the magazine.



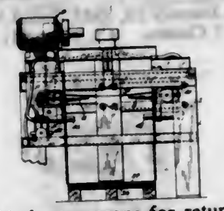
2,733,920
STACK ELEVATOR AND CONTROL THEREFOR
George W. von Hofe, Bound Brook, and Edwin K. Wolff, Palisades Park, N. J., assignors to New Jersey Machine Corporation, Hoboken, N. J., a corporation of New Jersey
Application August 15, 1951, Serial No. 241,902
15 Claims. (Cl. 271—31)



1. The combination of a support for a stack of sheets, means for removing one sheet at a time from the top of the stack, means for elevating said support to maintain the top of the stack at a predetermined level, means including a movable suction device for periodically determining the level of the top of the stack, means including a second suction device controlled by the suction in the first mentioned suction device of said determining means to control the operation of said elevating means, and means located between said suction devices for periodically and simultaneously connecting the suction devices of said determining means and said control means to a source of suction.

2,733,921
MACHINE FOR STACKING FLAT SHEETS OF MATERIAL
John E. Downs, Tippecanoe, Ind., assignor to The Union Tool Corp., Warsaw, Ind., a corporation of Indiana
Application August 26, 1952, Serial No. 306,402
11 Claims. (Cl. 271—68)

1. A machine for stacking sheets of flat material which comprises a frame, two sets of horizontally disposed tapered rollers located opposite each other with the rollers of one set being offset relative to the rollers of the opposite set, said rollers being pivotally supported at one end and tapered toward their free ends, means for positively driving said rollers to advance sheets while supported thereon along their edge portions, means for quickly changing the position of said sets of rollers from horizontal to steeply downwardly inclined to effect release and consequent



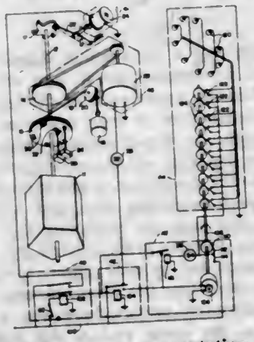
dropping of said sheets, means for returning said sets of rollers to their original horizontal position and actuated by contact of the roller-tipping mechanism with said means when the rollers are in their lowest position, and means for laterally guiding dropped sheets to a supporting means.

2,733,922
EXERCISING APPARATUS
Ramón González Diego, Havana, Cuba
Application September 17, 1952, Serial No. 310,071
5 Claims. (Cl. 272—58)



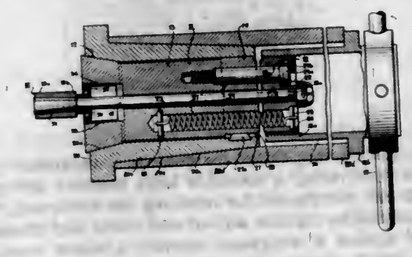
1. A leg exercising apparatus for persons afflicted by polio, comprising a main support, individual foot supports on said main support, a body supporting carriage movably mounted on said main support for reciprocation relative to said foot supports, each foot support comprising a foot rest and a foot board; each foot rest being pivotally mounted on a cylindrical stem for adjustment about an axis perpendicular to the stem, and each foot board having a plurality of bores in spaced relation, said stem being inserted in a selected bore of the corresponding foot board, whereby said foot supports are individually and independently adjustably mounted to accommodate angular and lateral adjustment relative to said carriage.

2,733,923
SEQUENCE PRESENTATION DEVICE
Frank W. Sterner, Littleton, William J. Wollenhaupt, Jr., Revere, and Louis C. Wollenhaupt, Winthrop, Mass., said William J. Wollenhaupt, Jr., and said Louis C. Wollenhaupt, assignors to said Sterner.
Application November 24, 1951, Serial No. 258,078
5 Claims. (Cl. 273—102.2)



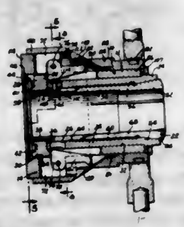
1. A controlled sequence presentation device comprising a plurality of indicia arranged in sequence for separate presentation, changing mechanism adapted to advance the indicia one at a time upon each actuation thereof to present the next one of the sequence, normally inactivated return mechanism adapted to return the indicia to their sequential origin, timer controlled means for actuating said return mechanism a predetermined period of time after the timer is started, operating means to actuate said changing mechanism and start said timer whereby on the first operation thereof said timer is started and the next indicia is presented and on each subsequent operation the next succeeding indicia is presented until termination of the period of the timer, and means inactivating said return mechanism upon return of the indicia to their sequential origin.

2,733,924
ARBOR WITH COLLET-SHAPED BODY
Abraham Allen Lipton, Rock Ridge, N. Y.
Application April 26, 1954, Serial No. 425,685
3 Claims. (Cl. 279—2)



1. In apparatus of the class described, a collet body having secured thereto a split portion coaxial therewith and at the outer extremity thereof; a separate threaded end piece for said body; said body and split portion having a central longitudinal passage therethrough; a draw-pin extending through said passage and secured to said threaded end piece, said pin having a tapered head for expanding said split portion in response to axial movement of said pin in said passage; resilient means for urging said end piece towards said body and guide means for holding said body and end piece against relative angular movement.

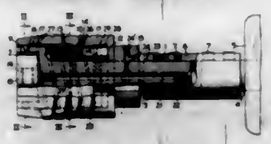
2,733,925
COLLET CHUCK
Berthold Denzler, Chicago, Ill., assignor to Davos Products Company, Chicago, Ill., a copartnership consisting of Berthold Denzler and Filip Brandhandler
Application February 14, 1952, Serial No. 271,581
12 Claims. (Cl. 279—43)



1. In a collet chuck assembly, a housing providing a cylindrical bore, an adapter sleeve removably but fixedly secured within said bore, a collet slidably disposed within and projecting through said sleeve, said collet having a plurality of normally expanded, yieldable and contractible jaws, cooperating cam means on said adapter sleeve and collet for contracting said jaws upon movement of the

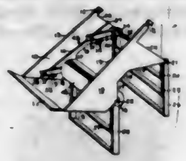
collet axially and rearwardly within said sleeve, a draw ring slidably disposed within said bore rearwardly of the sleeve, means for preventing turning movement of said draw ring in said bore, the rear end of said collet being threaded into said draw ring whereby rotational turning movement of the collet relative to said adapter sleeve will effect axial movement of the collet relative to the draw ring, cam means carried by said housing for engaging said draw ring and moving the latter rearwardly in said sleeve to contract the jaws of said collet, and means for locking said collet against rotational turning movement relative to the draw ring in any desired position of adjustment with respect thereto.

2,733,926
CHUCK
Wilbert G. Colton, Buffalo, N. Y.
Application April 26, 1952, Serial No. 284,570
14 Claims. (Cl. 279—75)



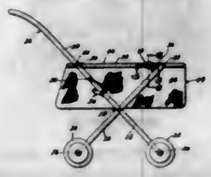
1. A quick-acting chuck for holding a workpiece such as a die comprising, a rotatable body member having a recess at one end thereof for receiving the workpiece, ball means carried by the side wall of said recess and arranged to bear against a workpiece therein, a sleeve member fitting around and movable on said body member, said sleeve member being spring biased for movement in one direction axially along said body member, stop means limiting the movement of said sleeve member in said one direction, and means movable with said sleeve member exerting pressure inwardly against said ball means for engaging said ball means against a workpiece in said recess in a first axial direction upon movement of said sleeve member in said one direction and inwardly against said ball means in a second axial direction for engaging said ball means against a workpiece in said recess upon movement of said sleeve member in the opposite direction.

2,733,927
HAND TRUCKS FOR CLIMBING STAIRS
Percival M. Sox, Jr., Elkins Park, Pa.
Application October 20, 1953, Serial No. 387,226
8 Claims. (Cl. 280—5.32)



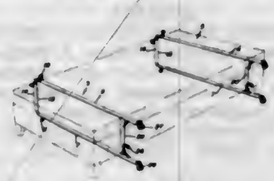
1. A hand truck for climbing steps comprising a frame having handle portions extending therefrom, axles carried by said frame, at longitudinally spaced locations, a rotatable frame supporting member mounted on one of said axles, a group of frame supporting legs of different heights pivotally mounted on one of said axles for successive engagement with one of the steps, a second group of frame supporting legs of different heights pivotally mounted on another of said axles for successive engagement with another of the steps, one of said axles being disposed rearwardly of said rotatable member, and stop members for limiting the movement of said legs to positions inclined with respect to said frame.

2,733,928
BABY CARRIAGE LIFT-OUT BODY AND CHASSIS SUPPORT AND INTERLOCK
Alban M. Boudreau, Gardner, Mass., assignor to Hedstrom Union Company, Fitchburg, Mass., a corporation of Massachusetts
Application January 13, 1953, Serial No. 331,037
5 Claims. (Cl. 280—31)



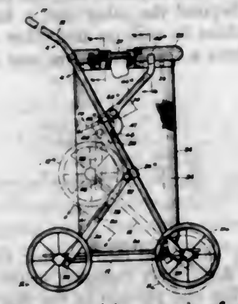
1. In a baby vehicle having a chassis and a body removably mounted on the chassis, the combination of a pair of generally parallel chassis side bars supported in spaced relation to provide free space for entrance of said body endwise between them with substantial portions of the body extending substantially below said side bars, a pair of pivotal projections on said side bars aligned transversely of the chassis adjacent corresponding ends of the side bars, a pair of open-sided elements fixed at the top margin of said body in transverse alignment at opposite sides of the body adjacent one end portion thereof, whereby said body in slightly tilted condition may be inserted endwise between and thrust along said side bars to pivotally engage said open-sided elements on the body over said pivotal projections on said chassis side bars thereby to provide a pivotal support for the inserted end of the body about which the other end of the tilted body may be lowered to bring the top of the body substantially into the plane of the chassis side bars, and manually operable interengaging means on said chassis side bars and said body for releasably locking the body to the side bars only when the top of the body and the side bars are substantially in a common plane.

2,733,929
TELESCOPICALLY EXPANSIBLE AND CONTRACTIBLE DOLLY
Joe J. Edixon, Palm Desert, Calif.
Application June 22, 1954, Serial No. 438,474
1 Claim. (Cl. 280—35)



A dolly comprising a rectangular shaped frame composed of a pair of tubular metal legs, extensions telescopically fitted in the upper ends of the legs and having right angled tubular arms at their upper ends, a tubular connector in which one of said arms is slidably adjustable toward and from the other, means securing the arms in adjusted position to the connector, a coil spring internally of the connector and extending into said arms with terminals fixed in said arms for retracting the arms toward each other, lower tubular arms carried by the legs and telescopically connected to each other, spring means in the lower arms retracting the same, means securing the lower arms in adjustable retracted position, and load supporting rollers at the lower end of the legs, said right angled arms and said tubular connector enclosing and concealing said coil spring.

2,733,930
COLLAPSIBLE UTILITY CART WITH REMOVABLE CONTAINER
Lucy Putterman, Forest Hills, N. Y.
Application October 3, 1952, Serial No. 312,991
7 Claims. (Cl. 280—41)



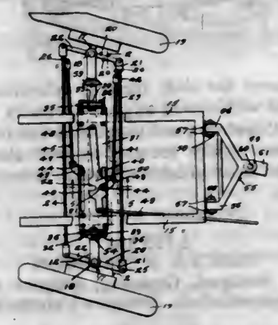
1. A utility cart comprising a pair of elongated handle members, pivot means on said handle members, a base member swingably attached to said handle members with the aid of said pivot means, a front wheel assembly on said base member comprising an axle located forwardly of said pivot means, a rear wheel assembly on said base member comprising an axle located rearwardly of said pivot means, bracing means selectively operable to maintain said base member rigid with respect to said handle members at a relatively large angle thereto and to enable swinging of said base member toward a position of substantial alignment with said handle members, a bracket attached to each of said handle members, a cross-bar located between said handle members removably supported by said handle member brackets, a tubular U-shaped container support bracket fitted between the handle members pivotally supported by the cross-bar, and swingable braces attached to the handle members operative to receive the front portion of the tubular container support bracket when the swingable braces are located in an angular position relative to the handle members, means integral with the swingable braces engaging the handle members to retain the swingable braces in the operative position, said swingable braces being retractable into a position substantially parallel to and adjacent said handle members.

2,733,931
FIFTH WHEEL SUSPENSION FOR TRAILERS AND THE LIKE
Frederick M. Reid, Grosse Pointe, and Hans Locker, Utica, Mich., assignors to Fruehauf Company, Detroit, Mich., a corporation of Michigan
Application January 8, 1953, Serial No. 330,258
7 Claims. (Cl. 280—44)



1. In an attachment for trailers, a main frame, means for attaching road wheels to said main frame, a fifth wheel spaced above said main frame, a bellows type spring interposed between said fifth wheel and said main frame, said spring serving to support said fifth wheel for movement with respect to said main frame, means for supplying said spring with compressed air, control means for said air supply, means interconnecting said control means with said main frame and said fifth wheel, said interconnecting means being actuatable by relative movement between said main frame and said fifth wheel whereby the amount of air in said spring is determined by the load on said fifth wheel, and vent means for said spring whereby said fifth wheel may be lowered with respect to said main frame independently of said control means.

2,733,932
TRAILER STEERING APPARATUS
Albert D. Stidham, Chandler, Ariz.
Application May 26, 1952, Serial No. 289,956
5 Claims. (Cl. 280—103)



4. A steering unit for a trailer having steering ground wheels journaled on spindles pivoted on the ends of an axle and a chassis portion disposed above the axle, comprising a crossarm secured to each spindle adjacent the pivot thereof and disposed at a right angle thereto, a front connecting rod pivotally connected to forward ends of the crossarms remote from the spindle pivots, a rear connecting rod pivotally connected to the rear ends of said crossarms remote from the spindle pivots for causing the wheel spindles to swing in unison, a slide unit interposed between said chassis portion and the axle and reciprocably mounted on the axle, front and rear drag links having corresponding ends slidably connected to said slide unit for sliding movement longitudinally thereof and of the axle, said front and rear drag links having opposite ends pivotally connected to corresponding portions of said front and rear connecting rods, said slide unit being secured to said chassis portion for movement therewith toward either end of the axle, a latch bar having one end swingably connected to a portion of the slide unit and having notches adjacent its opposite end and on opposite sides thereof for receiving and engaging the slidable end of either of said drag links for latching either drag link to the slide unit for movement therewith relative to the axle whereby a lateral pull or thrust on an end of the chassis located adjacent said slide unit causes movement of the slide unit and said chassis portion toward either end of the axle for swingably moving said steerable wheels, said steerable wheels being swung in one direction by movement of the slide unit toward one end of the axle when the slidable end of the front drag link is latched to the slide unit and in the opposite direction when the slidable end of the rear drag link is latched to the slide unit by said latch bar.

2,733,933
VEHICLE FRAME CROSS MEMBER
Floyd F. Kishline, Ross H. Phelps, and Johnston Stuart Voigt, Kenosha, Wis., assignors to American Motors Corporation, a corporation of Maryland
Original application April 24, 1946, Serial No. 664,632, now Patent No. 2,611,625, dated September 23, 1952. Divided and this application August 18, 1952, Serial No. 304,956
2 Claims. (Cl. 280—106)

1. In an independent wheel suspension for a vehicle, a frame cross member comprising a flanged channel member having continuous walls extending around the ends

thereof, a strengthening member rigidly secured within said channel member extending substantially along the length thereof, closure means rigidly secured to the flanged portions of said channel member, aligned apertures formed in said channel member and said closure



member adjacent the ends thereof, cylindrical members rigidly secured within said aligned apertures and extending upwardly therefrom, and support means for said cylindrical members rigidly secured to said closure means and secured to said cylindrical means remote from said closure means.

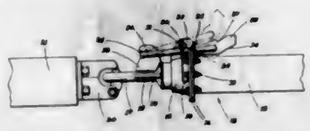
2,733,934
VEHICLE SUSPENSION
Josef Müller, Stuttgart, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application February 17, 1950, Serial No. 144,820
Claims priority, application Germany February 22, 1949
27 Claims. (Cl. 280—124)



1. Means for suspending a vehicle body relative to road wheels located opposite to each other comprising wheel carrier means, spring means for the wheels adapted to resist unidirectional strokes of the two wheels from an intermediate spring position, additional spring means comprising a torsion rod stabilizer journaled to the vehicle body and having a crank at each end connected to the respective wheel carrier means, said rod being, in an intermediate position, free to rotate during unidirectional strokes of the wheels with respect to the vehicle body in a first range of stroke and to resist substantially only oppositely directed strokes of the wheels, and stop means for the torsion rod stabilizer adapted to stop rotation of said rod after a predetermined stroke of the first spring means, thereby causing a springing action of said torsion rod by deformation also in the case of unidirectional strokes of the wheels, said stop means comprising a two-armed lever carried by said torsion rod near its center and four abutments carried by the body, two cooperating with one arm of said lever and two cooperating with the other arm of said lever to serve as stops for arresting rotation of the center part of said torsion rod after a certain degree of rotation of said rod is exceeded in either direction.

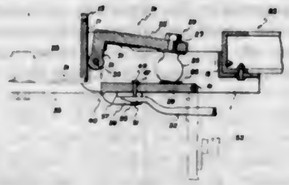
2,733,935
RELEASABLE LOCK FOR A COMPENSATING TONGUE UNIT OF A LOGGING TRUCK AND TRAILER COMBINATION
Ralph V. Whiteley, Clipper Mills, Calif.
Application August 18, 1953, Serial No. 374,952
2 Claims. (Cl. 280—477)

1. A releasable lock for a compensating tongue unit, coupled between a truck and trailer, which includes a tongue and a guide member in initially relatively slidable relation, one being attached to the truck and the other to the trailer; said lock comprising a pair of separate ears corresponding to said tongue and member and fixed in connection therewith, said ears projecting in the same direction from the tongue unit and being adjacent each other when said unit is contracted, the ears each having a notch formed therein and said notches opening longitudinally away from each other, a link at one end releasably engaging in the notch of the adjacent ear, the other end of the link extending beyond the other ear, a longitudinal dog pivoted intermediate its ends on said other end of the link for swinging about a transverse axis, one end portion of



the dog normally extending into the link from said other end thereof and detachably engaging in the notch of said other ear, the other end portion of the dog forming a lever whose movement in a predetermined direction swings said dog to release it from said other ear, and releasable means adapted to prevent disengagement of the dog from said other ear; said releasable means comprising a cross pin adapted to be removably projected through a bore provided in the other ear above the link when the latter is in a locked position.

2,733,936
RETRACTIBLE TRAILER HITCH
John R. Tate, Whittier, Calif.
Application April 12, 1954, Serial No. 422,351
9 Claims. (Cl. 280—491)



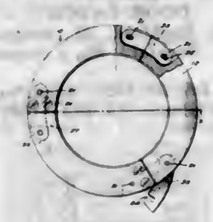
5. A trailer hitch including a carriage assembly adapted to be mounted on and beneath a towing vehicle, said carriage assembly including a pair of elongated plates longitudinally mounted with respect to the towing vehicle and transversely spaced, a forward transverse plate and a rearward transverse plate extending between and fixed to said elongated plates, a coupling assembly pivotally supported from said elongated plates and swingable to inoperative position between said elongated plates and said transverse plates and to operative position in engagement with said rearward transverse plate and with a portion thereof extended rearwardly beyond the towing vehicle in accessible position for coupling the tow bar of a trailer thereto, and a coupling assembly positioning member pivotally mounted on said plates at points forwardly thereof relative to the points of support of said coupling assembly and said positioning member when in operative position extending rearwardly from its points of support and between said elongated plates and in supporting engagement with said coupling assembly when it is in inoperative position, said positioning member being swingable to inoperative position to release said coupling assembly for movement to operative position in engagement with said rearward transverse plate, and the rearward end of said positioning member when in operative position being in supporting engagement with said coupling assembly when in operative position, and means for releasably locking said positioning member in operative position.

2,733,937
CAPTIVE WRENCH FOR COUPLING-NUT SWIVELED ON A TUBE
Howard Jenkins Mowrer, Jr., Philadelphia, Pa.
Application January 14, 1955, Serial No. 481,881
1 Claim. (Cl. 285—1)



In a wrench of the box-type and including a socket having a nut-receiving opening defined by angularly related nut-engaging walls, said walls defining forward and rear end faces of said socket a handle disposed normal to a nut-engaging axis of said socket, a neck extending from the rear face of said socket at the junction of two angularly related walls thereof, so that a longitudinal axis of said neck lies parallel to said nut-engaging axis, said handle being spaced from the rear face of said socket by said neck, said neck being provided with an aperture having its longitudinal axis extending normal to said nut-engaging axis, and a pin frictionally engaged within said aperture, said pin having a free end portion disposed between said nut-engaging axis and a vertex axis of said two junction-forming walls, whereby said pin projects into a prolongation of said nut-receiving opening, so as to hold the wrench captive on a tube which swivelly mounts a coupling-nut to be actuated by said wrench.

2,733,938
PIPE HOLDING AND PACKING SLIP
Melvin C. Davis, Denver, Colo.
Application September 17, 1953, Serial No. 380,723
5 Claims. (Cl. 285—22)



1. In a pipe holding and packing slip structure, a plurality of arcuate, exteriorly downwardly tapered, slip elements, means for coupling said slip elements in end-to-end relation, said elements having channels in the inner and outer sides thereof adjacent the top ends of the same, and a packing element encircled about each of said elements with the inner and outer portions seated in said channels and end portions extending across the adjacent ends of the elements engaging with each other, said slip elements having the inner surfaces provided with downwardly inclined teeth above and upwardly inclined teeth below said packing elements.

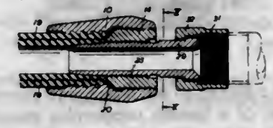
2,733,939
COMPRESSED PACKING FOR CABLE THROUGH WALL
Robert C. Scherer, Baltimore, Md.
Application September 4, 1952, Serial No. 307,780
2 Claims. (Cl. 285—30)

1. In a packing assembly, a stuffing tube being internally threaded at both ends thereof, a stationary cable positioned in said tube, a pair of gland nuts each of which threadedly engages said tube at one end thereof and surrounds said cable, a pair of metal rings, the outer edge of each metal ring engaging a gland nut and the inner edge thereof having a bevelled inner face, a pair of rubber rings positioned in said stuffing tube adjacent said metal rings, each of said rubber rings having a bevelled face engaging the bevelled face of a metal ring, a pair of packing sets positioned around said cable, one edge of each of said packing sets abutting against a rubber ring, a



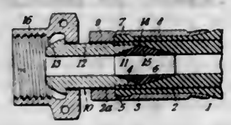
second pair of metal rings positioned in said stuffing tube around said stationary cable, each of said last-named metal rings engaging a packing set at the inner end thereof, and a spring positioned around said cable and abutting against said last-named metal rings, said spring cooperating with said gland nuts for forcing said packing sets and rubber rings against said cable to compress said cable in said stuffing tube and thereby seal said cable therein.

2,733,940
END FITTING FOR FLEXIBLE HOSE HAVING A REINFORCING LAYER
John Humphrey Millar, Newport, R. I.
Application April 13, 1951, Serial No. 220,803
Claims priority, application Great Britain April 28, 1950
3 Claims. (Cl. 285—72)



1. The combination with a smooth bore flexible rubber or synthetic rubber hose having at least one metallic reinforcing layer consisting of a plurality of wires braided or laid in such a way as to contain the internal pressure in the hose and to absorb the end loads when said wires are attached mechanically to a suitable hose fitting, said reinforcing metallic layer encircling at least a portion of the rubber, said reinforcing wires projecting beyond the end of the synthetic rubber hose, and of a detachable and reusable hose coupling comprising a ferrule having one end portion surrounding the exterior of the hose end and a shoulder adjacent the inner end of said one end portion, an internally threaded tubular gripper releasably secured coaxially in the other end of said ferrule and gripping said reinforcing wires against said shoulder, and a tubular insert releasably threaded into the gripper with its forward end portion projecting beyond said gripper into said hose to clamp said hose end against said one end portion of said ferrule and make a fluid tight seal with said hose.

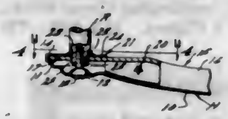
2,733,941
FLEXIBLE HOSE COUPLINGS
Henry William Trevaskis, Solihull, England, assignor to Dunlop Rubber Company Limited, London County, England, a British company
Application December 8, 1951, Serial No. 260,749
4 Claims. (Cl. 285—84)



1. An end connection for flexible hose comprising a hose having a recess at the inner periphery at one end,

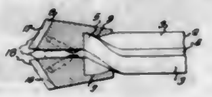
said recess comprising a cylindrical surface extending inwardly from said end and then tapering in a gradual slope to the inner surface of the hose, a non resilient insert fitted within said recess, said insert having a cylindrical outer surface closely fitting the cylindrical surface of said recess, the inner surface of said insert being tapered to a thin edge at the end of said insert so that when said insert is inserted into said recess it forms with the tapered surface of said recess a circular groove of triangular section having a gradual slope for each side, a sleeve fitting around the outer periphery of the hose and clamping the hose between the sleeve and the insert and an annular resilient fillet of triangular section fitted within the groove, the inner surface of the fillet being of the same diameter as the bore of the hose and being in alignment with said bore, one side of the tapered end of the fillet fitting the taper of the insert fluid tightly and the other tapered side of the fillet fitting the tapered part of the hose fluid tightly to form a fluid tight joint, wherein the annular fillet is preformed to resiliently grip the tapered end of the recess in the hose and is bonded to the insert.

2,733,942
HANDLE ATTACHMENT MEANS
Kenneth S. Palmer, Detroit, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application April 29, 1953, Serial No. 351,901
5 Claims. (Cl. 287—53)



1. A handle adapted to be detachably connected to the stepped portion of a handle supporting member that includes a non-circular portion adjacent said stepped portion, said handle comprising a hub portion with an aperture extending axially therethrough, a torque transmitting member carried by the handle hub portion having a non-circular opening therein aligned with the hub portion aperture, said non-circular opening being shaped to receive and to non-rotatably engage the non-circular portion of the handle supporting member adjacent the step thereon, deformable means carried by the torque transmitting member comprising angularly deflected, opposed, spaced prongs adapted to be wedgingly engaged with the step in the handle supporting member during axial movement of the handle along its supporting member in one direction, and connector means adapted to extend axially through the aperture in the handle hub portion and through the non-circular opening in the torque transmitting member and to positively engage the handle supporting member and urge said handle axially of said handle supporting member in said one direction to cause said deformable means to engage the stepped portion of the handle supporting member and to rigidly connect the handle to the handle supporting member.

2,733,943
ROCK DRILL BITS AND RODS
Rudolph Charles Nater, Hamilton, Ontario, Canada
Application November 5, 1951, Serial No. 254,830
2 Claims. (Cl. 287—125)



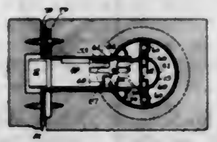
1. A rock drill bit and rod assembly comprising a rectangular rod twisted less than a complete turn about its longitudinal axis at its bit receiving and whereby the corner edges of the rod are in the form of spiral flutes and the faces of the rod between the flutes are slightly concave, the bit being formed with a drill rod end receiving socket of substantially the same shape and size as the drill rod end.

2,733,944
SPRING CATCH FOR CABINET DOORS AND THE LIKE
Jerry F. Chvosta, Cleveland, Ohio, assignor to Tinnerman Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application April 9, 1953, Serial No. 347,675
12 Claims. (Cl. 292—17)



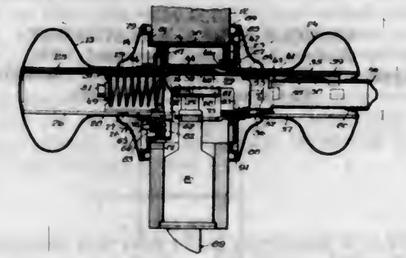
1. A spring catch comprising a piece of sheet metal bent to define a pair of spaced body portions provided with attaching means for attaching said body portions in a work opening, means on said spaced body portions for interengagement by a cooperating strike, and means comprising an element on one body portion having a free end extending toward the other body portion and adapted to prevent movement of said body portions in the attached position of said attaching means in said work opening, thereby retaining said attaching means against removal or displacement from attached position in said work opening.

2,733,945
DOOR LATCH
Edwin W. North, Rockford, Ill., assignor to National Lock Company, Rockford, Ill., a corporation of Delaware
Application July 25, 1951, Serial No. 238,465
6 Claims. (Cl. 292—169)



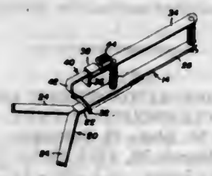
1. In a door latch assembly adapted to be mounted in a door opening for retracting a latch bolt, a latch-operating unit comprising a cylindrical housing having an opening in its forward wall and spaced projections in the housing, a single continuous tube rotatably mounted in the opposite ends of the housing and extending through the housing and door opening, a knob secured to each of the opposite ends of the tube, said tube being notched intermediate its ends and adjacent the opening in the housing to provide an arcuate section having longitudinally extending and laterally spaced camming edges located within the housing, a pusher plate conformably received in the notched portion of the tube and free to pivot within said housing about one of said projections when one side of the plate is engaged and rocked by a camming edge upon rotation of the tube in either direction, spring means carrying the pusher plate and controlling its movement, and a slide member abutting the other side of the pusher plate for retracting the latch bolt upon the application of pressure to the slide member by rocking of the pusher plate.

2,733,946
TURN BUTTON LOCK
Edwin W. North, Rockford, Ill., and William B. Wilson, La Habra, Calif., assignors to National Lock Company, Rockford, Ill., a corporation of Delaware
Application August 7, 1952, Serial No. 303,093
9 Claims. (Cl. 292—169)



1. Mechanism adapted to operate a retractable latch bolt, comprising a cam unit assembly including an inner and an outer longitudinally slotted tubular member having inner camming ends one of which is enlarged and arranged in overlapping relation with the other for retracting the latch bolt, a knob attached to each of the outwardly projecting ends of said members at the opposite sides of the closure for retracting the latch bolt upon turning of a knob, a reinforcing sleeve in and connecting the adjoining camming ends, a locking member longitudinally movable in and carried by said sleeve and provided with a locking projection slidable in the longitudinal slot of the outer tubular member and in an aligned slot of said sleeve, means exterior of said outer tubular member for receiving said locking projection to lock the outer knob and member against rotation, and a turn button on the inner knob for controlling operation of the locking member.

2,733,947
PAN HANDLE
Lavinia Elizabeth Platt, Akron, Ohio
Application March 24, 1952, Serial No. 278,172
3 Claims. (Cl. 294—34)



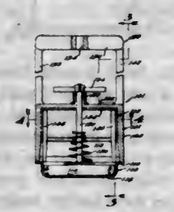
1. A detachable handle for handling a hot pan, said handle comprising a first portion adapted for insertion under a pan, a second portion for insertion over the rim of a pan, said first and second portions having grip portions connected together in vertically spaced parallel relation, means carried by said grip portions retaining said grip portions in parallel relation, said second pan engaging portion having a downturned flange in spaced parallel relation to a downturned flange integral with the grip portion associated with said second pan engaging portion, said second pan engaging portion being slidably carried by its associated grip portion for longitudinal movement whereby the rim of a pan may be gripped between said downturned flanges, said first pan engaging portion being slidably carried by its associated grip portion whereby pans of various sizes may be accommodated.

2,733,948
MAGNETIC DEVICES
George L. Russell, Fair Haven, Mich.; Emily Louise Russell, executrix of said George L. Russell, deceased
Original application August 3, 1950, Serial No. 177,541, now Patent No. 2,693,979, dated November 9, 1954. Divided and this application December 19, 1951, Serial No. 262,461
10 Claims. (Cl. 294—65.5)



1. In a magnetic tool, a hollow elongated nonmagnetic shell, one end of said shell being closed, a magnet within said shell and movable to a position adjacent said closed end, a force exerting member extending outwardly through an end of said shell opposite to said one end, and an armature of magnetic material connected to said member within said shell and attractable by said magnet, said member and armature being movable to move said magnet within said shell.

2,733,949
MAGNETIC DEVICES
George Lewis Russell, Fair Haven, Mich.; Emily Louise Russell, executrix of said George Lewis Russell, deceased
Application January 25, 1952, Serial No. 268,239
33 Claims. (Cl. 294—65.5)

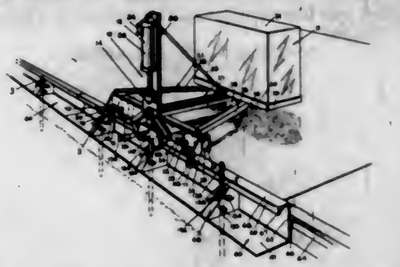


1. In a magnetically energized tool, a structure having an end wall and peripheral side walls, said side walls being fabricated of nonmagnetic material, a magnetic keeper adjacent a portion of said side walls spaced from said end wall, a permanent magnet within said structure and movable from a first position adjacent said end wall to a second position adjacent said keeper, the axis of said magnet being transverse to its path of movement, and means for holding said magnet from contact with said keeper, said magnet holding means comprising nonmagnetic material.

2,733,950
STAKE GRAPPLING AND PULLING MACHINE
Lorin H. Janzer and Loyd R. Harriman, Bowling Green, Ohio, assignors to Urschel Engineering Company, Bowling Green, Ohio, a corporation of Ohio
Application September 10, 1953, Serial No. 379,402
9 Claims. (Cl. 294—88)

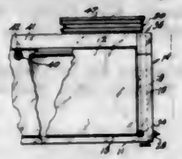
1. In a stake grappling and pulling machine, a stake engaging chuck having a head and a pair of jaw cranks, said head having a pair of bearing journals in spaced relation; each jaw crank having a working arm and a power arm and a fulcrum bearing therebetween; a pair of pivot pins; each pivot pin being in engagement with a fulcrum bearing of one of said jaw cranks and with one of said bearing journals on said head whereby each jaw crank is supported for rocking movement on said

head; the working arm of each jaw crank having a beak near its outer end; the power arm of each jaw crank having a bearing near its outer end; said beak and fulcrum and power bearings being in a spacial relation as are vertex points on a triangle; and movable



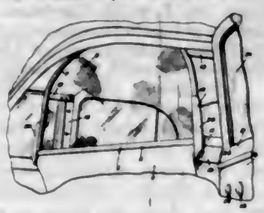
means in engagement with said power bearing of each crank and operable on movement to rock one crank clockwise and the other crank counter-clockwise with the respective jaw beak of each jaw crank leading in the particular direction of rocking of its related jaw crank.

2,733,951
CONVERTIBLE UTILITY TRAILER AND CAMP TENT
Theodore Heil, Lodi, Calif.
Application July 3, 1953, Serial No. 365,971
4 Claims. (Cl. 296—23)



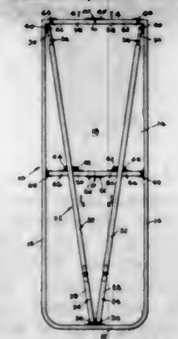
4. A utility trailer body having hinged drop sides, end walls, and a floor, a tent and bed unit mountable on said trailer body and supported solely on said end walls and having a bottom, selective locking means for locking said tent and bed unit at each corner to said trailer body, and locking said drop sides in closed position comprising a drawbolt mounted in said trailer body adjacent each corner, an eye depending from each corner of said bottom and mounted in cooperative relation to one end of said drawbolt, and a second eye projecting inwardly from each end of each hinged drop side and cooperative with the other end of the drawbolt, and individual key operated locking means cooperative between said tent and bed unit and each of said hinged drop sides.

2,733,952
CELL CONSTRUCTION FOR TRANSPORTING PRISONERS IN AUTOMOBILES
Kenneth H. Wright and Chester C. Baudoin, Franklin, La.
Application September 22, 1953, Serial No. 381,638
1 Claim. (Cl. 296—24)



In combination with an automobile having a front seat for the driver and a rear passenger compartment provided with doors having door lock actuating buttons, a partition on top of the front seat and enclosing the rear compartment, an attaching member at each end of the partition, and a shield at each end of the partition enclosing the door buttons, said shield including a downwardly projecting flange abutting the door below an adjacent door button and an outwardly projecting wing positioned behind the button to enclose the latter.

2,733,953
VEHICLE TARPAULIN SUPPORT
Andrew J. Nemadi, Cleveland, Ohio
Application December 24, 1951, Serial No. 263,082
11 Claims. (Cl. 296—100)



1. A tarpaulin supporting mechanism comprising a pair of linkage means, each including one link having one end pivotally supported adjacent one end of a like link of the other linkage means, a second link means having one end pivoted to the free end of the first link, and with its other end pivotally supported in spaced relation to one end of a like link means of the other linkage means, each of said second link means including longitudinally slidable members, a pair of cross bars having one end of each pivoted at spaced points lying in a line intermediate the adjacent and spaced pivots of the linkage means and with the opposite ends of each cross bar adapted to pivot toward one another into lineal alignment, and means, interconnecting said second link means respectively with the cross bars, including an element on each second link means slidably received in a slot in its associated cross bar such that movement of the cross bars to lineal alignment moves the links of the respective linkage means to lineal alignment and movement of the cross bars to positions parallel to one another moves the linkage means to U-shape form.

2,733,954
CONVERTIBLE AUTOMOBILE TOP OF THE TELESCOPING TYPE
James M. Blake II, Baltimore, Md.
Application March 20, 1953, Serial No. 343,654
12 Claims. (Cl. 296—117)



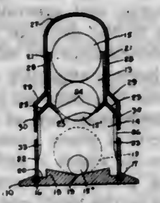
11. In combination, an automobile body having a passenger compartment including a seat, a storage compartment located rearwardly of said seat; the combination with said body of a top comprising a plurality of sections comprising a forward, an intermediate, a rear and a back section, means to cause said sections to move forwardly from said storage compartment to an extended position and separate means for retracting said sections within said storage compartment, both of said means including a pair of channels on opposite sides of said storage compartment, a pair of studs movable in each of said pair of channels, one of said studs of each pair being mounted on said back section, said back section having a recess for engagement with and disengagement from the other of said studs of each pair during the movement of said back section into and out of said storage compartment, the latter studs being rigidly connected to said rear section, said first-named means further including a pair of air cylinder means connected to the other of said studs of each pair for lifting the sections out of said storage compartment, and a pair of other air cylinder means connected to and located beneath said forward, intermediate and rear sections and each comprising a plurality of cylinders and pistons adapted to telescope with each other, said means for retracting said sections comprising a plurality of electric motors and cables connecting said motors to said forward section.

2,733,955
CONVERSION TOP FOR FUEL CONTROL VALVES
Roy W. Johnson and Ferdinand F. Heiser, Milwaukee, Wis., assignors to AP Controls Corporation, a corporation of Wisconsin
Application October 20, 1950, Serial No. 191,282
3 Claims. (Cl. 297—8)

1. An automatic control for fuel control valves comprising a housing, a lever fulcrumed within said housing, thermally-responsive means for actuating the lever, means for adjustably mounting said thermally-responsive means in respect to said lever, said adjustable mounting means including a threaded member carried by the housing, a nipple threadedly engaged with said threaded member, and means for securing the thermally-responsive means to said nipple, said thermally-responsive means including a bulb member, and a bellows within said bulb member and defining therewith an expansible chamber, temperature-responsive material within said chamber and a lever-actuating pin operatively connected to the bellows and operatively engaging said lever, spring means operative upon the lever in opposition to said pin, said nipple being provided with an annular shoulder, and friction means for holding the nipple in adjusted position including an inverted cup-shaped member surrounding the nipple, and a coil spring interposed between the housing and said cup-shaped member and pressing the latter into frictional engagement with the annular shoulder on said nipple, said inverted cup-shaped member and the housing being provided with cooperative stop means for holding the inverted cup-shaped member against rotation as the nipple is adjusted on said threaded member.

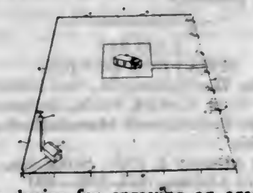
2,733,956
VAPORIZING DISPENSER FOR AIR TREATING GELS
Charles B. Wenner, Darien, Conn., assignor to Airkem, Inc., New York, N. Y., a corporation of New York
Application March 18, 1955, Serial No. 495,220
10 Claims. (Cl. 299—24)

1. A vapor diffusing device for air treating gel in cylindrical slug form, said device comprising a storage chamber having a length and width closely conforming to the length and diameter of a predetermined sized cylindrical gel slug when disposed with its axis horizontally of said chamber, supporting means for said chamber providing a volatilization zone below said chamber, and means at the base of said chamber forming a restricted passage between the volatilization zone and said chamber, the



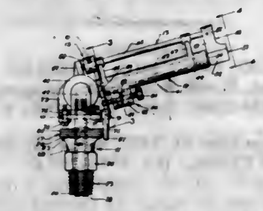
opening provided by said restricted passage being substantially less than the diameter of a fresh gel slug to thereby support the gel slug within said chamber while exposing a portion of the cylindrical surface of said gel slug for evaporation of volatilizable material therefrom.

2,733,957
HUMIDIFIED AIR SPRAY SYSTEM
Edmund Van Buren, Miami, Fla.
Application May 5, 1954, Serial No. 427,713
3 Claims. (Cl. 299—58)



1. A spray device for spraying an area comprising a tank containing water, a pump mounted on said tank, a tube connecting said pump and said tank adjacent a bottom portion whereby air under pressure is pumped into the body of water to create a mist, an outlet mounted in said tank above said water, baffle plates mounted about said outlet, openings in said baffle plates to provide a tortuous path to said outgoing mist for removing excess moisture therefrom, a spray pipe mounted along each side of said area at the perimeter thereof, pipe means connecting said outlet with each of said spray pipes, a solenoid operated valve mounted in each of said connecting means, a vane, a plurality of contact plate members mounted about said vane, each of said contact plate members being connected to a solenoid operated valve, and a contact finger mounted on said vane in contact relation with said contact plate member for operating said solenoid operated valve and thereby causing the mist to be discharged continuously by the up-wind spray pipe.

2,733,958
WATER SPRINKLER
Harry Glenn Warren, Glendora, Calif.
Application June 8, 1953, Serial No. 360,222
5 Claims. (Cl. 299—71)



1. An automatic sprinkler head, which comprises a stationary base having an upwardly extending journal

boss, an axis tube journaled in said boss, a nozzle mounted on the upper portion of said axis tube and extending in a generally horizontal direction, said nozzle having a water passage communicating at its inner end with said axis tube and terminating at its outer end in a relatively large discharge opening, a deflector shaft journaled on said nozzle and generally parallel thereto, a deflector mounted to the deflector shaft at the outer end thereof and disposed adjacent said discharge opening, said deflector having angularly disposed deflector faces adapted to divide the water jet from said discharge opening into two components one of which is deflected to one side of a vertical plane containing the axis of said jet and the other of which is deflected to the other side of said vertical plane, a reversing arm mounted to the deflector shaft at the inner end thereof and movable to shift the position of said deflector, adjustable speed control means to limit the movement of said reversing arm to between first and second positions at which the volume of water in said one jet component is alternately greater and lesser than the volume in said other jet component, said speed control means comprising a screw threadedly mounted for movement with said nozzle and having a tapered end loosely inserted in a hole in said reversing arm, and a pair of stop arms mounted on said journal boss and operably associated with said reversing arm to shift the same between said first and second positions.

2,733,959

SPRAYING DEVICE

William Dickison, Des Plaines, Ill., and John Lewis Winks and Victor S. Tidd, Lowell, Mich., assignors, by mesne assignments, to Root-Lowell Manufacturing Co., a corporation of Ohio

Application January 3, 1951, Serial No. 204,252
13 Claims. (Cl. 299—88)



1. A hand-operated insecticide sprayer comprising a pair of telescoping tubular members one of which forms an insecticide chamber containing a spray solution to be dispensed and the other a pump chamber for supplying air under pressure, means for supplying air to the pump chamber by drawing air from the exterior and between the telescoping members when said members are pulled apart, an air tube extending longitudinally of the insecticide chamber and opening into the pump chamber, means for compressing the air in the pump chamber and supplying the air under pressure forwardly through the air tube, a hollow member mounted in the insecticide chamber and communicating with the air tube, a siphon tube at the forward end of the hollow member and discharging the spray solution through the forward end of the insecticide chamber, means for supplying the spray solution to said hollow member for discharge through the siphon tube, means connecting with the air tube for discharging the compressed air from the air tube about the siphon tube, and means for sealing off the flow through the siphon tube when the sprayer is not in use.

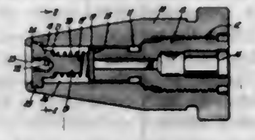
2,733,960

FUEL INJECTION NOZZLES

Frederik Barfod, South Bend, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware

Application June 11, 1952, Serial No. 292,879
2 Claims. (Cl. 299—107.6)

1. A fluid spray nozzle comprising a hollow body having an inlet and an outlet; an internal annular recess in said body adjacent the outlet, a nozzle insert formed with an annular projection for engagement with said recess, an inwardly extending annular shoulder on said insert spaced from said body; an inwardly projecting portion on said insert spaced farther from said body than said shoulder; a helical spring of smaller diameter than said shoulder encircling said portion; a seat member secured in said body adjacent the inlet; a longitudinal passage through said member; a chamber defined by said insert, seat member and body; a valve in said



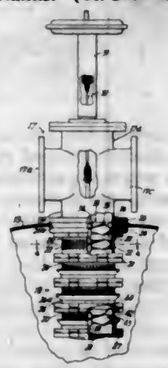
chamber formed to seat on said member and to regulate communication between said passage and chamber; said valve urged in a seating direction by said spring and limited in movement in the opposite direction by said projecting portion; a cylindrical discharge orifice centrally located in said insert unrestrictedly in communication with said outlet; a plurality of passages in said shoulder tangentially intersecting said orifice and opening directly into said chamber.

2,733,961

ATOMIZER

John R. Rhinehart, Ridgewood, and Charles H. Eshrich, Hasbrouck Heights, N. J., assignors to Bogue Electric Manufacturing Co., a corporation of New Jersey

Application April 25, 1952, Serial No. 284,224
3 Claims. (Cl. 299—118)



3. Atomizing means comprising a plurality of axially aligned outer, tubular sleeve members, each of said members being formed with a plurality of circumferentially spaced, axially extending orifices, means for interconnecting said members, an axially movable shaft disposed axially of said outer members, a plurality of axially spaced, inner tubular sleeve members mounted on said shaft, each inner member having a circumferential outer imperforate surface portion in contact with the inner surface of an associated outer member for regulating the effective size of said orifices upon axial movement of said shaft, and radially extending deflector means extending from the inner surface of each of said inner members to said shaft.

2,733,962

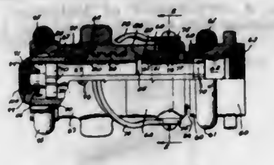
FIRE HOSE NOZZLE

Peter Caird, Santa Rosa, Calif., assignor to Clarissa E. Caird, Santa Rosa, Calif.

Original application July 16, 1952, Serial No. 299,212, now Patent No. 2,678,847, dated May 18, 1954. Divided and this application May 11, 1953, Serial No. 353,952
4 Claims. (Cl. 299—130)

1. An improved fire hose nozzle comprising in combination, a base member having an internally threaded

end portion for receiving threaded end portions of standard fire hose, a longitudinally slidable valve seat portion having a shouldered end portion slidably engaged over shouldered portions located on the forward end of said base portion, said valve seat portion having a stepped-down forward portion over which is located a longitudinally movable water spray sleeve portion the forward end of which is undercut providing an annular recess spaced away from the forward end of said valve seat portion, means located between the said sleeve portion and said valve seat portion for advancing said sleeve por-



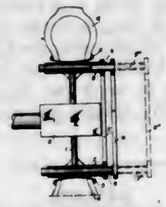
tion on said valve seat portion in an uninterrupted progressive movement, diametrically uniform bores located in said base portion and said valve seat portions, said bores having the same longitudinal axis, said bores being horizontally movable to and from each other and separated by a diametrically enlarged hydraulic pressure chamber, a poppet valve stem anchored in the said base portions and centrally and longitudinally located in said bores, the said poppet valve engaging with the forward end of said valve seat portion when said nozzle is closed, a lever and cam means pivoted on said valve stem for controlling said nozzle operation.

2,733,963

DEVICE FOR AIDING THE DISPLACEMENT OF VEHICLES OVER LOOSE GROUND

Pierre Jean Marie Theodore Allard, Esubonne, France

Application April 14, 1953, Serial No. 348,716
Claims priority, application France April 19, 1952
8 Claims. (Cl. 301—41)



1. A vehicle wheel suitable for loose ground comprising: a wheel rim on which is mounted a tyre, a series of tubes arranged in an annulus coaxial with the axis of rotation of said wheel and rigidly secured to said rim, a sliding member slidably mounted in each of said tubes, a ring rigidly connecting said sliding members, said sliding members being adapted to slide in said tubes between a pushed-in position where said sliding members are contained inside said tubes over substantially their whole length and a pulled-out position where said sliding members are substantially withdrawn from said tubes, whereby when said sliding members are in their pulled-out position they constitute an additional bearing surface for said wheel when said tyre has sunk into loose ground.

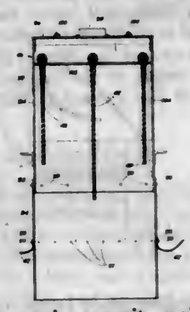
2,733,964

BAFFLE BOX FOR PNEUMATIC MATERIAL HANDLING APPARATUS

John H. Kauffman, Elkhart, Ind., and Raymond H. Moore, Birmingham, Mich., assignors, by mesne assignments, to Studebaker-Packard Corporation, a corporation of Michigan

Original application May 6, 1952, Serial No. 286,314. Divided and this application September 23, 1953, Serial No. 381,894
7 Claims. (Cl. 302—59)

3. A baffle box for pneumatic conveying systems comprising a box-like body member, said body member hav-



ing aligned apertures in opposite walls thereof, a plurality of elongate resilient baffles disposed within said body member, each of said baffles having an enlarged head and means in said body member adjacent the top thereof adapted to be engaged by the enlarged heads of said baffles to support said baffles in said body member in a loosely hanging manner, said baffles extending across said aligned apertures and blocking direct communication therebetween.

2,733,965

VEHICLE TRACK

John N. Gladden, Glendale, Calif., assignor to Gladden Products Corporation, Glendale, Calif., a corporation of California

Application April 12, 1952, Serial No. 281,982
8 Claims. (Cl. 305—10)



1. In a vehicle track, the combination of: a pair of parallel, flexible, endless cables; a plurality of cylindrical grouser-mounting elements carried by each of said cables and secured thereto, the grouser-mounting elements carried by one of said cables being aligned with the respective grouser-mounting elements carried by the other of said cables; a grouser connected to each pair of aligned grouser-mounting elements, each grouser having therein a pair of aligned cylindrical recesses respectively receiving ends of said grouser-mounting elements; and means for detachably securing said grousers to the respective pairs of grouser-mounting elements.

2,733,966

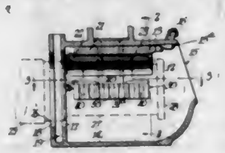
JOURNAL BOX CONSTRUCTION FOR RAILWAY CARS

James L. Ryan, Springfield, Mo.

Application March 19, 1952, Serial No. 277,446
5 Claims. (Cl. 308—40)

1. The combination with a railway car journal box including a crown, vertical side walls each having inner and outer faces, and a bottom, of a horizontal railway car axle having an end part positioned in the journal box,

said end part terminating in an annular collar and having a journal portion of reduced diameter, said annular collar providing a shoulder defining the outer end of the journal portion, means providing a solid bearing between said crown and said journal portion, a journal stop extending from the inner face of each journal box side wall toward said journal portion, and means directly and detachably connecting in rigid manner each said journal stop to a respective side wall of the journal box, each journal stop having an impact face located closely adjacent said journal portion in a position to be contacted by that adjacent part of said journal portion which lies substantially in a horizontal plane passing through the axis of the journal portion, said impact face also extending parallel to the axis of the journal portion for a major part of the axial length of the journal portion whereby, upon a shifting of the journal portion laterally of the



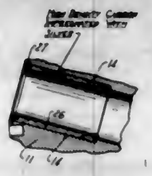
journal box to a predetermined extent, the journal portion will come into contact with an impact face throughout a major part of the axial length of the journal portion to prevent further lateral shifting, each impact face being formed by the ends of a plurality of projecting portions of said journal stop spaced apart in a horizontal direction by a plurality of upwardly extending channels, the ends of said projecting portions being located in a common substantially vertical plane parallel to the axis of the journal portion whereby, when the journal portion shifts laterally into contact with an impact face, said impact face contacts the journal portion substantially tangentially and the channels located between projecting portions of the journal stop permit oil to be carried by said journal portion to the solid bearing between the crown and the journal portion despite contact between the journal portion and an impact face.

2,733,967
MULTISTAGE ANTIFRICTION THRUST BEARING
Arthur Burton Jones, Jr., Newington, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a corporation of Connecticut
Application May 6, 1954, Serial No. 428,047
22 Claims. (Cl. 308—174)



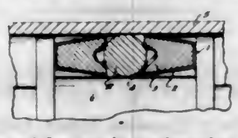
1. In a bearing, outer-ring means, inner-ring means, a plurality of corresponding races in each of said ring means and antifriction elements in corresponding races of both said ring means, the walls of one pair of corresponding races being inclined to sustain a predominantly unidirectional combined axial and radial load, the walls of a second pair of corresponding races being similarly inclined to sustain thrust in the same axial direction, whereby the bearing sections comprising said first and second pairs may be said to have first and second characteristic contact angles, one of said contact angles being greater than the other so that the bearing section with the lesser conact angle may have a greater axial-deflection characteristic than the bearing section with the greater contact angle, and axially rigid means spacing the races of one of said ring means axially with respect to the races of the other said ring means by an amount permitting a predetermined excess of axial deflection of said low contact-angle bearing section over the axial deflection of said high contact-angle bearing section for a given unidirectional thrust load on said bearing.

2,733,968
WEAR RESISTANT BUSHING OR LINER FOR THE PLUNGER CYLINDER OR BORES OR PUMPS HANDLING WATER-CONTAMINATED FUEL
Samuel J. Pelz, Jr., and Ferdinand J. Cigal, South Bend, Ind., assignors to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application July 5, 1952, Serial No. 297,334
5 Claims. (Cl. 309—3)



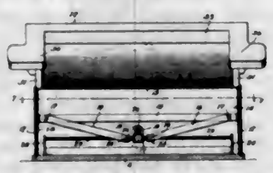
1. In a pump of the reciprocating plunger type having a plunger bore or cylinder, a sleeve or bushing in said cylinder comprised predominantly of carbon impregnated with silver.

2,733,969
PACKING SEAL
Ellsworth M. Polk, Dayton, Ohio
Application April 23, 1953, Serial No. 350,785
5 Claims. (Cl. 309—23)
(Granted under Title 35, U. S. Code (1952), sec. 266)



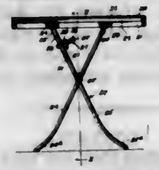
1. A packing seal for use in conjunction with an O ring in an annular space between relatively moving parts comprising a cup element substantially U-shaped in cross-section and diverging towards the open end of the U, said cup element being flexible and formed of moderately hard nonextruding bearing material, an insert within said cup element substantially filling said cup element adapted to cooperate with the O ring, whereby on pressure application to the O ring being transmitted to said insert, said insert will act as a buffer to absorb and uniformally distribute the pressure to cause the cup element to flex to provide a substantially straight line seal between the relatively moving parts.

2,733,970
VERTICALLY ADJUSTABLE LECTERN
Waddie M. Toney and Paul A. Eckolls, El Dorado, Ark.
Application March 11, 1954, Serial No. 415,552
1 Claim. (Cl. 311—39)



In a vertically adjustable lectern, a box-like base having an open top, a vertically movable inclined desk top including depending side and end walls, fitted within said base for vertical sliding movement with respect thereto, an upstanding wall formed along one end of said desk top, vertical supporting posts secured to the other end of said desk top, parallel arm rests secured to said upstanding end wall and being connected to the upper ends of said posts supporting said arm rests in inclined positions parallel with said desk top, in spaced relation therewith, said arm rests being horizontally spaced apart exposing said desk top and material supported thereon, and manually controlled means for raising and lowering said top and bottom rests simultaneously.

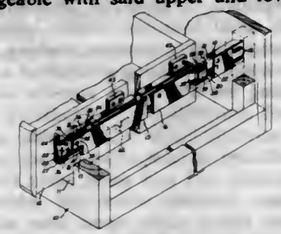
2,733,971
FOLDING TABLE HAVING HEIGHT ADJUSTING MEANS
Harry F. House, Gardena, Calif.
Application January 15, 1954, Serial No. 404,240
1 Claim. (Cl. 311—83)



A folding table construction comprising a table top, pairs of pivotally connected legs, each pair of legs consisting of a long leg and a short leg, a link interconnecting each of the short legs with the table top, latch means between the link members and the short legs, said latch means being operative to hold the link members and the short legs in alignment and movable to serve as abutments against the underside of the table when the legs are partially folded and the table top depressed, said latch means comprising a pair of right angular bodies each having a rounded head at the outer end of one arm thereof, said heads each being pivoted to an upper portion of a short leg, said head having a portion of its perimeter cut away to define a pair of shoulders, and a pin affixed to each of said short legs and disposed in the path of movement of the shoulders of its respective head.

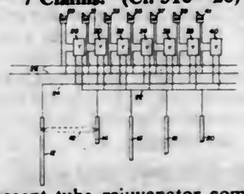
2,733,972
DRAWER SLIDE
Arthur G. Diack, Inglewood, Calif.
Application December 5, 1952, Serial No. 324,351
8 Claims. (Cl. 312—339)

1. In a drawer slide, the combination of: a frame; vertically offset guide and slide members of C-shaped cross section nested together in face-to-face and overlapping relation, each of said members having an upper, downwardly facing, channel-shaped track extending longitudinally thereof to provide an upper, downwardly facing track surface, and each of said members having a lower, upwardly facing, channel-shaped track extending longitudinally thereof to provide a lower, upwardly facing track surface; vertically offset front and rear glide elements respectively mounted on the front end of said guide member and the rear end of said slide member at the ends of said trackways, said front glide element extending into said upper and lower channel-shaped tracks on said slide member and being engageable with said upper and lower track surfaces on said slide member, and said rear glide element extending into said upper and lower channel-shaped tracks on said guide member and being engageable with said upper and lower track sur-



faces on said guide member, whereby said front and rear glide elements key said slide member to said guide member against lateral movement of said slide member relative to said guide member, said guide member being mounted on said frame; and a drawer having glide elements thereon which rest on and movably engage said slide member to render said slide member floating, whereby relative movement is obtainable between said drawer and said slide member as well as between said slide member and said guide member.

2,733,973
FLUORESCENT TUBE REJUVENATOR
Bernard J. Patton, Los Angeles, Calif., assignor of fifteen per cent to Wallace Shaffer, Los Angeles, Calif.
Application November 19, 1951, Serial No. 257,051
7 Claims. (Cl. 316—28)



1. A fluorescent tube rejuvenator comprising an elongated contact block, a plurality of elongated contact blocks arranged in progressively spaced relation to said first mentioned contact block, a conductor connecting said second mentioned blocks in parallel, a plurality of transformers, secondary terminals on each of said transformers, said secondary terminals being connected in parallel between said first block and said plurality of contact blocks, a supply circuit, primary terminals on each of said transformers, switch means operative to selectively connect said primary terminals in parallel to said supply circuit.

CHEMICAL

2,733,974
METHOD OF MAKING STRIPED TEXTILE FABRIC
Herbert R. Mathewson, Walter M. Housch, and William F. Covin, Lancaster, S. C., assignors to The Springs Cotton Mills, Inc., a corporation of South Carolina
No Drawing. Application September 4, 1952, Serial No. 307,926
1 Claim. (Cl. 8—14)

A method of producing a striped cotton broadcloth fabric comprising moving a web of said fabric across the periphery of a plurality of spaced rotating disks, applying a striping liquid of a thin free-flowing liquid dyestuff to the peripheral surfaces of the disks, rotating said disks at a different peripheral speed with respect to the rate of web travel across said disks, said movement of the fabric web across said disks producing a wiping action and forming stripes running longitudinally of the fabric web and corresponding to the width and spacing of the disks, and immediately thereafter saturating the fabric web with a dyestuff solution that dyes the web a desired color over the entire area thereof except for the striped areas, said dyestuff solution preventing bleeding or migrating of the striping liquid into other areas of the fabric.

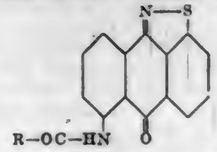
2,733,975
PROCESS OF COATING AND DYEING TEXTILE FIBERS AND RESULTANT ARTICLE
Thomas C. Whitner, Elizabeth, N. J.
No Drawing. Application July 19, 1950, Serial No. 174,777
17 Claims. (Cl. 8—18)

1. The process for treating textile fibers impregnated with a water-soluble alkali-copper complex selected from the group consisting of alkylamine containing no alkylol groups-, alkylolamine-, tetra-alkylol ammonium hydroxide-, and alkali-metal hydroxide-copper complexes, and sericeous material which comprises washing said fibers with aqueous alcohol containing a dissolved acidic agent, and then washing the fibers with aqueous alcohol, said aqueous alcohol consisting of an admixture of a saturated acyclic normally-liquid water-soluble alcohol and water and containing at least about 60 per cent by volume of said alcohol, and said acidic agent forming salts with said copper complex which are soluble in said aqueous alcohol which acidic agent does not interfere in any undesirable way with the aqueous alcohol and is present in amount insufficient to exert any deleterious action on the fibers and sericeous material.

13. The process according to claim 1 which includes the further step of dyeing the washed textile fibers.

2,733,976
SULFONATED 5-ACYLAMINO-1,9-ISOTHIAZOL-ANTHRONES
Paul Bücheler and Albin Peter, Binningen, Switzerland, assignors to Sandoz A. G., Basel, Switzerland
No Drawing. Application September 15, 1955, Serial No. 534,606
Claims priority, application Switzerland September 17, 1954
8 Claims. (Cl. 8—55)

1. An isothiazolanthrone dyestuff of the formula



wherein R is a sulfonated lower alkyl group.

2,733,977
PROCESS OF TANNING WITH SALT OF AMPHOTERIC CONDENSATION PRODUCT
Martin Meister, Leverkusen-Wiesdorf, and Gustav Mauthe, Opladen, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany
No Drawing. Application June 25, 1952, Serial No. 295,558
Claims priority, application Germany June 30, 1951
4 Claims. (Cl. 8—94.24)

1. A tanning process which comprises treating at least one member of the group consisting of animal hides, skins and pre-tanned leather with an aqueous solution of a water-soluble, acid-reacting salt of an amphoteric condensation product obtained by treating at temperatures up to about 100° C., mixtures containing polyhydric phenols having at least one active nuclear hydrogen, nitrogen-containing compounds of the general formula

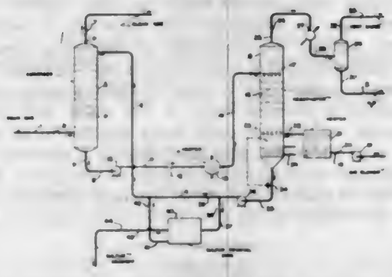


wherein R_1 stands for a radical selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl and aralkyl, and R_2 and R_3 stand for radicals selected from the group consisting of hydrogen and alkyl, and saturated lower aliphatic aldehydes, and towards the end of the tanning neutralizing, the amine salt groups of the tanning solution by adding an acid binding compound selected from the group consisting of alkali metal hydroxides, alkali metal carbonates and ammonia.

2,733,978
SOLUTIONS OF ACRYLONITRILE POLYMERS IN MIXTURES OF PROPYLENE CARBONATE AND WATER
Evan Islwyn Jones and Stanley Minor Todd, Blackley, England, assignors to Imperial Chemical Industries Limited, London, England, a corporation of Great Britain
No Drawing. Application July 30, 1954, Serial No. 446,950
Claims priority, application Great Britain August 24, 1953
9 Claims. (Cl. 18—54)

1. A composition comprising an acrylonitrile polymer containing a major amount of acrylonitrile, propylene carbonate and water, wherein the weight of propylene carbonate is greater than that of the water and the amount of water is between about 14% and 40 % by weight of the total amount of propylene carbonate and water.

2,733,979
METHOD FOR REMOVING HYDROGEN SULFIDE FROM GASEOUS STREAMS
Vladimir Haensel, Hinsdale, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware
Application October 18, 1951, Serial No. 251,862
3 Claims. (Cl. 23—2)



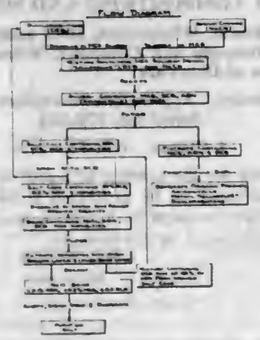
1. A process for removing hydrogen sulfide from a gaseous stream containing the same which comprises contacting said stream in an absorption zone with a finely divided iron oxide carried in suspension in polyhydric alcohol, thereby forming iron sulfide and water and absorbing the water in said polyhydric alcohol, removing the resultant mixture of polyhydric alcohol, iron sulfide and water from said zone, heating and contacting said mixture with oxygen to remove the water and oxidize said iron sulfide to the oxide, and returning the thus regenerated oxide-containing polyhydric alcohol to the absorption zone for reuse in the process.

2,733,980
PRECIPITATION OF SODIUM HEXAVANADATE
Adolph Q. Lundquist, Grand Junction, Colo., assignor to Union Carbide and Carbon Corporation, a corporation of New York
No Drawing. Application November 19, 1952, Serial No. 321,519
2 Claims. (Cl. 23—19)

1. In the method of treating a vanadium ore material which comprises roasting such ore material with salt, washing the roasted ore material with water to dissolve water-soluble vanadium compounds and precipitating a vanadate from the wash liquor by the addition of sulfuric acid thereto, the improvement which comprises recirculating said wash liquor through said roasted ore material

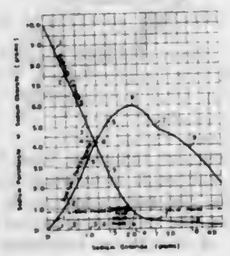
until the aggregate concentration of sodium chloride and sodium sulfate in said liquor is 5% to 20% by weight; heating said liquor to an elevated temperature not above its boiling point; and adding sulfuric acid to the entire hot solution until its pH is about 2 to 3, thereby precipitating sodium hexavanadate from such liquor.

2,733,981
SALT RECOVERY PROCESS
Arthur I. Mendolia, Lewiston, N. Y., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application January 16, 1953, Serial No. 331,604
7 Claims. (Cl. 23—25)



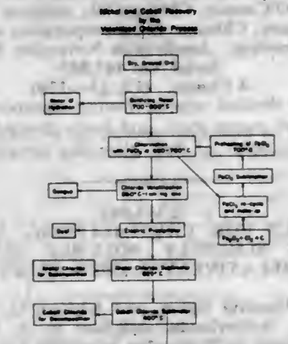
1. A process for purifying a crude, sodium chloride salt cake containing a substantial proportion of dichlorobutane which comprises dissolving the salt cake in water to form a stable emulsion, adjusting the specific gravity of said emulsion to a value between about 1.16 and 1.19 at 25° C., filtering the emulsion, allowing the filtered emulsion to stand until separate aqueous and organic layers form, decanting the separate layers from each other and crystallizing salt from the aqueous layer.

2,733,982
PROCESS FOR MAKING SODIUM PERCHLORATE FROM MOLTEN SODIUM CHLORATE
Joseph C. Schumacher, Los Angeles, Calif., assignor to Western Electrochemical Company, Culver City, Calif., a corporation of California
Application September 29, 1952, Serial No. 312,137
7 Claims. (Cl. 23—85)



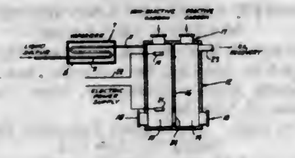
1. In the thermal process for making sodium perchlorate the steps comprising melting sodium chlorate; maintaining the melted sodium chlorate at a temperature in the range from 400 to 600° C. until a mixture containing unreacted sodium chlorate, a minor amount of sodium chloride, and a predominant amount of sodium perchlorate is formed during said heating, and the mixture is in a flowable state; cooling the mixture to a solidified mixed salt containing predominantly sodium perchlorate and minor proportions of sodium chloride and undecomposed sodium chlorate; leaching said cooled mixture with an aqueous liquid; and fractionally crystallizing out said sodium perchlorate.

2,733,983
METHOD OF RECOVERING NICKEL AND COBALT FROM NICKELIFEROUS ORES
John M. Daubenspeck, Westfield, N. J., assignor to National Lead Company, New York, N. Y., a corporation of New Jersey
Application December 7, 1953, Serial No. 396,688
5 Claims. (Cl. 23—183)



3. A process for recovering nickel and cobalt values from nickeliferous ores containing cobalt and a gangue fraction comprising the steps of: heating the ore under conditions favorable for the removal of substantially all of the water of hydration from the ore, oxidizing the dehydrated ore including the nickel and cobalt values and the gangue fraction, chlorinating the oxidized nickel and cobalt values by passing volatile ferric chloride over said oxidized ore at a temperature of from about 600° C. to about 700° C. for effecting substantially complete conversion of the nickel and cobalt values to solid nickel chloride and solid cobalt chloride with substantially no alteration of the gangue fraction, thereafter heating the solid nickel chloride and solid cobalt chloride at a temperature of from about 700° C. to about 1000° C. and at sub-atmospheric pressure such as to volatilize and separate the respective chlorides from the gangue fraction, sublimating the volatile nickel chloride and cobalt chloride by selectively cooling the chlorides under sub-atmospheric pressures such as to form and selectively precipitate solid nickel chloride and solid cobalt chloride substantially free of iron oxide, and then oxidizing the respective solid chlorides of nickel and cobalt to form nickel oxide and cobalt oxide.

2,733,984
MANUFACTURE OF CARBON BISULFIDE
Iver C. Macdougall, Old Hickory, Tenn., assignor to Stauffer Chemical Company, a corporation of California
Application December 4, 1952, Serial No. 324,066
2 Claims. (Cl. 23—206)



1. A process for manufacture of carbon bisulfide comprising vaporizing liquid sulfur in a first zone; super-

heating the vaporized sulfur to a temperature of at least 550° C. in a second zone by passing electricity through a porous resistance mass in said second zone which is substantially non-reactive with sulfur while continuously passing the vaporized sulfur vapor in contact with said porous resistance mass to raise the temperature of the sulfur vapor to at least 550° C.; and subsequently and continuously passing the superheated sulfur into contact with a mass of reactive carbon in a third zone to form carbon bisulfide without the addition of extraneous heat.

2,733,985

NON-AGGLOMERATING SULPHUR AND METHOD OF PREPARING THE SAME

Maurice J. O'Connor, Chicago, Ill., assignor to O'Connor and Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application November 9, 1954, Serial No. 467,889

4 Claims. (Cl. 23—224)

1. Finely divided sulphur having incorporated therein finely divided oyster shell, said finely divided oyster shell being in the form of flat, plate-like lamellar particles.

2,733,986

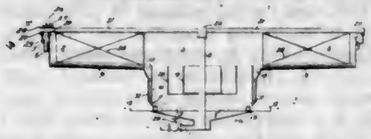
APPARATUS FOR CRYSTALLIZING AND SEPARATING SLIGHTLY SOLUBLE SUBSTANCES FROM RELATIVELY LARGE QUANTITIES OF LIQUID

Jan Pluim, Hendrik Sipkes, and Adriaan G. van Steeden, Ijmuiden, Netherlands, assignors to A. S. Norduco, Oslo, Norway, a Norwegian company

Application March 31, 1950, Serial No. 153,036

Claims priority, application Netherlands March 31, 1949

2 Claims. (Cl. 23—273)



1. In an apparatus for crystallizing and separating a slightly soluble crystalline substance from a relatively large amount of liquid from which said substance is to be crystallized, a circular tank in which the crystallization is carried out having a central depending bottom portion approximating a cylinder of lesser diameter than the tank and having a cross-sectional area at least one-third of the area of the tank, said cylinder of lesser diameter having positioned axially therein a series of concentric baffles which are open at both ends, liquor introducing inlets positioned with respect to said central depending bottom portion to produce an upward flow substantially entirely in said central bottom portion, said series including an outermost concentric baffle forming in conjunction with the wall of the depending bottom portion an annular conduit which is spaced above and more remote from the axis of the depending bottom portion than the liquor inlet means positioned to discharge adjacent the bottom of the depending portion for flow upwardly through the interior of the circular baffles.

2,733,987

ABRASIVE ARTICLES AND METHOD OF MAKING THE SAME

Robert D. Gartrell, Ridgewood, N. J., and Harry A. Meyer and Ronald R. McVay, Fort Wayne, Ind., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application February 26, 1953, Serial No. 339,164

6 Claims. (Cl. 51—298)

3. An abrasive article comprising abrasive grains in intimate association with a cured mixture of liquid depolymerized rubber, vulcanizing ingredients therefor, a thermosetting phenolaldehyde resin, and ground corn cob, said depolymerized rubber being employed in amount equal to from 4 to 15%, said ground corn cob being employed in amount equal to from 1 to 50%, said resin being employed in amount up to 40%, said percentages being by volume based upon the volume of the entire formulation before molding, the volume ratio of said ground corn cob and said resin to said depolymerized rubber being equal to from 3:1 to 4:1.

2,733,988

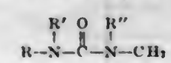
ALIPHATIC SUBSTITUTED METHYL UREA HERBICIDAL COMPOSITIONS AND METHODS

Norman E. Searle, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application November 19, 1954, Serial No. 470,121

5 Claims. (Cl. 71—2.7)

1. A method for the control of weeds which comprises applying to a locus to be protected from the weeds, in amount sufficient to exert herbicidal action, a poly-substituted urea represented by the formula



where R is an acyclic aliphatic radical containing from 2 to 6 carbon atoms inclusive, R′ is selected from the group consisting of hydrogen and methyl, and R″ is selected from the group consisting of hydrogen and aliphatic hydrocarbon radical of 1 to 4 carbon atoms inclusive, with the proviso that at least one of R′ and R″ is hydrogen.

2,733,989

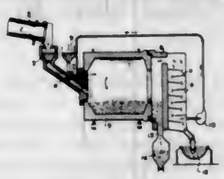
PROCESS FOR REMOVING LEAD FROM ORES

André Greffe, Annecy (Haute-Savoie), France, assignor to Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine, Paris, France

Application July 22, 1952, Serial No. 300,257

Claims priority, application France August 10, 1951

2 Claims. (Cl. 75—77)



1. In a process for removing lead from manganese ores containing lead oxide as an impurity, the steps comprising preheating the pulverized ore in a separate furnace, introducing the preheated pulverized ore and a reducing agent of the group consisting of manganese, iron and ferro-manganese into a reaction chamber having a non-oxidizing atmosphere, excluding oxidizing gas from all parts of the interior of the reaction chamber, reacting the lead oxide and reducing agent in the absence of carbonaceous fuel at a temperature which reduces the lead oxide to metallic lead and vaporizes the metallic lead but retains the ore in a solid state, withdrawing metallic lead in vapor form from the reaction chamber, condensing it in a non-oxidizing atmosphere and withdrawing the purified ore in the solid state from the reaction chamber.

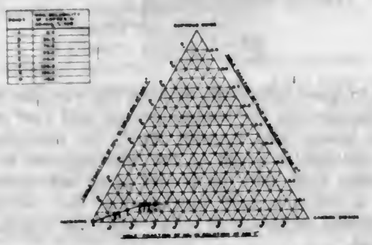
2,733,990

METHOD OF PRECIPITATING METALS IN METALLIC FORM FROM AMMONICAL AMMONIUM SALT SOLUTIONS

George Van Hare, Brooklyn, and Richard Montgomery, New York, N. Y., assignors to Chemical Construction Corporation, New York, N. Y., a corporation of Delaware

Application October 17, 1952, Serial No. 315,341

13 Claims. (Cl. 75—108)



1. In precipitating in metallic form a metal lying between silver and cadmium in an electromotive series of elements, from an aqueous ammoniacal ammonium salt solution, said solution containing at ambient temperatures at least one such metal as a gas-reducible water-soluble complex with NH_3, by treating said solution with a reducing gas under super-atmospheric pressure and at an elevated reduction temperature above the normal boiling point of the solution at atmospheric pressure, said solution also containing at least one contaminant material in amount exceeding its maximum solubility at said reduction temperature, the improved procedure for stabilizing the solution and improving the product metal yield and purity which comprises: adjusting the ammonia and the ammonium salt content of said solution to produce maximum retention of said metal at said reduction temperature; preheating so-adjusted solution to an elevated temperature of from about 250° F. to about 500° F. in the absence of reducing gas and under a total pressure at least equal to the autogenous pressure at the temperature; separating therefrom resultant precipitate and only then subjecting so-treated solution to the action of said reducing gas.

2,733,991

ALUMINUM-MAGNESIUM CASTING ALLOYS

Charles B. Willmore, Newark, Ohio, assignor to William F. Jobbins, Incorporated, Aurora, Ill., a corporation of Illinois

No Drawing. Application December 12, 1950, Serial No. 200,496

2 Claims. (Cl. 75—147)

1. An aluminum base casting alloy consisting of 3 to 9 percent by weight magnesium, 0.0005 to 0.07 percent by weight beryllium, 0.1 to 0.25 percent by weight titanium and 0.05 to 0.60 percent by weight manganese, the balance being aluminum, said alloy containing not over 0.45 percent by weight impurities including a maximum of 0.25 percent by weight of an element selected from the group consisting of copper, silicon and iron and not over 0.001 percent by weight of an alkali metal.

2,733,992

PULPING WOOD WITH NITROGEN OXIDES

Lloyd H. Reyerson, St. Paul, Minn., assignor to Regents of the University of Minnesota, Minneapolis, Minn., a corporation of Minnesota

Application July 12, 1952, Serial No. 298,556

8 Claims. (Cl. 92—9)

1. In the process of producing wood pulp the improvement which consists essentially of introducing wood in divided form into a treating zone along with sufficient moisture so as thoroughly to wet the wood, introducing into and passing through said treating zone a mixture of furnace gases comprising oxides of nitrogen in an amount ranging from .8% to 2% by volume of the furnace gases and calculated on the basis of nitric oxide, said furnace gases being introduced progressively during the course



of the treatment in an amount sufficient to provide 350 to 500 pounds of oxides of nitrogen, calculated on the basis of nitric oxide, for each ton of wood, dry basis, that is treated, digesting the mixture of wet wood and furnace gases for a period of 5 to 25 hours at a temperature of about 140° to 210° F., and thereafter removing and draining the so treated wood.

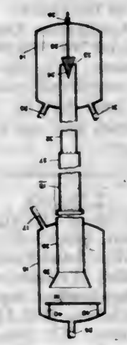
2,733,993

ELEVATION OF GRANULAR SOLIDS

Herbert C. Thober and William L. McClure, Toledo, Ohio, assignors to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

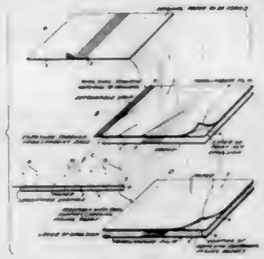
Application November 9, 1951, Serial No. 255,640

3 Claims. (Cl. 302—53)



1. Method for elevating a mixture of granular solids, a major proportion of which are coarse particles too large to pass a 20 mesh U. S. Sieve Series screen which comprises: passing such a mixture and lifting gas upwardly through a feeding zone as an annular mass having gradually upwardly increasing cross-sectional area and thence into a confined lifting zone and therethrough as a non-annular mass, the cross-sectional area of the solids mass at any level in the feeding zone and lifting zone being at least approximately as great as the cross-sectional area at any lower level in the feeding zone and lifting zone; maintaining in the lifting zone a dense mass having average bulk density greater than one-half the static bulk density of the mixture of solids; gradually laterally expanding said dense mass as it rises through said lifting zone; introducing lifting gas into the feeding zone only at the lower end thereof; and discharging solids and gas from the lifting zone into a relatively expanded collection zone.

2,733,994
METHOD OF PHOTOGRAPHIC DUPLICATING USING PRINT-OUT EMULSIONS
Harold C. Purdy, Friendship, N. Y., assignor to Harold C. Purdy, Akron, Ohio, and Ellis H. Phillips, Bradford, Pa., copartners
Application March 7, 1947, Serial No. 733,067
10 Claims. (Cl. 95—5)



1. The process of making a duplicate of an original which comprises placing on the surface of the original a transparent film carrying a light-sensitive printing-out emulsion with the emulsion in contact with the original, exposing the thus covered original to light through the transparent film and the printing-out emulsion carried thereby until the film acquires an image of the original of the desired intensity, removing the film from the original, and bonding to the film a layer of sheet material carrying an adhesive having incorporated therein chemical fixing agents for fixing said emulsion to stabilize the image, said adhesive contacting said emulsion.

2,733,995
POLYVINYL ACETATE CEMENT COMPOSITIONS
William D. Robinson, Niagara Falls, N. Y., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application December 6, 1952, Serial No. 324,599
7 Claims. (Cl. 106—90)

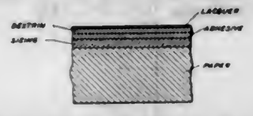
1. A substantially anhydrous coating composition consisting essentially of one part by weight of water dispersible polyvinyl acetate and one to ten parts by weight of a hydraulic cement.

2,733,996
PROCESS OF MAKING BRICKS
August Leht, Hagersten, Stockholm, Sweden, assignor of twenty per cent to Mrs. Anna Ennok, New York, N. Y., and Magnus Bjorndal, Weehawken, N. J.
No Drawing. Application September 5, 1952, Serial No. 308,149
5 Claims. (Cl. 106—97)

1. A process of the character described for producing bricks, comprising the following steps—taking 75 parts by weight of finely ground, dried clay, adding 15 parts by weight of a 10% solution of sodium chloride, and 10 parts by weight of a 5% solution of $MgSiF_6.6H_2O$; agitating this mixture until intimately mixed, then adding 10 parts by weight of Portland cement and 5 parts by weight of quicklime, mixing and stirring until homogeneous, placing in a form, subjecting material in the form to a pressure of at least 100 kg./cm.², removing formed article and air drying for 24 hours.

2,733,997
NON-CURLING TRANSFER MATERIAL
Benjamin Asnes, Framingham, Mass., assignor to Dennison Manufacturing Company, Framingham, Mass., a Massachusetts corporation
Application August 27, 1953, Serial No. 376,797
5 Claims. (Cl. 117—3.5)

1. Transfer material comprising a backing of porous water-leaf paper, a transfer layer of remoistenable adhesive of the quick-release decalcomania type and a curl-resistant layer interposed between and adhesively joined to said backing and transfer layer which resists the tendency of the transfer material to curl when subjected to ambient humidity changes, said curl-resistant layer comprising fine solid particles which are substantially non-hygroscopic and are bonded together with a binder in

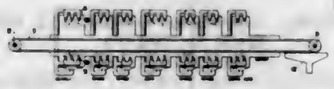


amount to leave interstices between the particles so as to leave passageways for water through said curl resistant layer to loosen said transfer layer, the particles being rapidly wettable to speed up the time required to loosen the transfer layer and the binder being substantially insoluble in water in said time so that the curl-resistant layer remains substantially intact when the transfer layer is released.

2,733,998
METHOD OF MAKING GLAZED PATTERN FABRIC
William W. Russell, East Providence, and Herman C. Allen, Saylesville, R. I., assignors to Sayles Finishing Plants, Inc., Saylesville, R. I., a corporation of Rhode Island
No Drawing. Application June 8, 1953, Serial No. 360,358
14 Claims. (Cl. 117—11)

1. The method of making pattern-calendered cellulosic textile fabric which comprises calendering said fabric, impregnating selected areas of the calendered fabric in the desired pattern at least once with a low molecular weight thermosetting resin and a catalyst from a liquid medium which has substantially no swelling effect upon cellulosic materials, curing said resin to form a permanent resist in the selected areas, and treating the fabric with an aqueous medium to remove at least part of the calendered finish in areas outside said selected areas.

2,733,999
PICKLING
Clarence J. Rodman, Alliance, Ohio, assignor, by mesne assignments, to Alliance Ware, Inc., a corporation of Delaware
Application November 27, 1951, Serial No. 258,383
2 Claims. (Cl. 117—50)



1. The process of pickling iron objects supported on a conveyor of highly acid-resistant metal electropositive to the iron and composed essentially of copper and nickel, which comprises continually moving the objects while supported upon the conveyor through a series of sprays each of which continuously sprays the conveyor and the entire surface of each of the objects in succession as it is moved through the spray, said sprays including (1) a spray which removes oil and grease from the objects, (2) pickling spray of dilute acid heated to a temperature at which the conveyor is attacked, but only slightly, to produce a solution of low concentration of electropositive metal in the liquid resulting from the spraying operation, using said liquid for spraying additional objects whereby metal dissolved from the conveyor is deposited on the objects, and (3) spray to remove the acid, each of said sprays being heated whereby the objects after final spraying are heated sufficiently to dry substantially more rapidly than if unheated, and moving the conveyor at such a rate that only a very thin deposit of the metal is formed on the objects.

2,734,000
METHOD OF REMOVAL OF THERMO-PLASTIC RESINS FROM CONDUCTORS AND TINNING THEREOF
Leopold Pessel, Whitemarsh, Pa., assignor to Radio Corporation of America, a corporation of Delaware
No Drawing. Application February 29, 1952, Serial No. 274,303
8 Claims. (Cl. 117—51)

1. A method of removing from metallic electric conductors coatings of thermoplastic resins of the type which are completely fluid at elevated temperatures, and simultaneously tinning said conductors comprising treating the coated conductor with an accelerating agent and then applying molten solder to the treated conductor thereby simultaneously to remove said coating and to tin said conductor, said accelerating agent consisting essentially of at least one of the group consisting of: benzoic acid, benzoic acid ethers, methylene disalicylic acid, beta resorcylic acid, salicylic acid, acetyl-salicylic acid, para-amino salicylic acid, o-chlorobenzoic acid, para-chlorobenzoic acid, meta-chlorobenzoic acid, ortho-, meta-, and para-amino benzoic acids, 2,4-dichlorobenzoic acid, 4 chloro-3 nitrobenzoic acid, para-amoxy benzoic acid, meta (para-tertiary amylphenoxy) benzoic acid, ortho-benzoyl benzoic acid, methoxy-benzoic acid, and ethoxy-benzoic acid.

2,734,001
SETTING AND STIFFENING FABRICS
George Kevin Mecklenburgh, Abergavenny, Harry Wade Peters, Llantarnam, and Stanley Shaw, Griffithstown, England, assignors to British Nylon Spinners Limited, Pontypool, England, a corporation of Great Britain
No Drawing. Application February 12, 1952, Serial No. 271,288
Claims priority, application Great Britain April 24, 1951
13 Claims. (Cl. 117—66)

1. A process for setting and stiffening fabric comprising at least 50% by weight of synthetic, high molecular weight linear polymer fibers, said process comprising the steps of treating said fabric with an aqueous solution of a salt, the cationic part of which consists of metal having an oxide which is both colorless, and amphoteric and the anionic part of which is derived from a volatile inorganic acid boiling below 100° C., so that said fabric carries sufficient of said aqueous solution to leave from ⅛% to 10% by weight of said salt on the fabric after drying and thereafter submitting said fabric to a heating treatment in a dry hot zone at a temperature lying 10° C. to 170° C. below the melting point of said polymer while maintaining the desired shape of the fabric, said heating at said temperature being sufficient to substantially increase the stiffness of the fabric.

2,734,002
RESIN-COATED POTASSIUM SALTS AND METHOD OF MAKING THE SAME
Edmund A. Schoeld and Clarence W. Egbom, Carlsbad, N. Mex., assignors to Potash Company of America, Carlsbad, N. Mex., a corporation of Colorado
No Drawing. Application August 31, 1953, Serial No. 377,680
10 Claims. (Cl. 117—100)

8. A treatment of crystalline or granular hygroscopic potassium salts to reduce caking tendencies thereof, comprising substantially coating the surface of the individual particles with a thin coating of a resin selected from one of the class consisting of urea-formaldehyde and phenol-formaldehyde.

2,734,003
METHOD FOR TREATING METALS
Marshall B. Alpert, New Dorp, N. Y., assignor to National Lead Company, New York, N. Y., a corporation of New Jersey
No Drawing. Application June 1, 1953, Serial No. 358,973
5 Claims. (Cl. 117—130)

1. A method for coating the surface of a base metal which lies below titanium in the Electrochemical Series which comprises placing the base metal in a bath containing reduced titanium halide selected from the group consisting of titanium dihalide and titanium trihalide and a fused salt selected from the group consisting of alkali metal halide and alkaline earth metal halide at a temperature of at least about 800° C. to below the temperature at which the physical properties of the base metal are adversely affected and the fused salt volatilizes, maintaining a high molality of reduced halides in said bath and maintaining a high ratio of titanium dihalide to titanium trihalide during said process until said base metal is coated with titanium metal.

2,734,004
WATER SOLUBLE N-METHYLOL POLYPYRROLIDONES, AND TEXTILES TREATED THEREWITH
Charles A. Robinson, Providence, R. I., assignor to Arnold, Hoffman & Co., Inc., Providence, R. I., a corporation of Rhode Island
No Drawing. Application August 25, 1952, Serial No. 306,297
12 Claims. (Cl. 117—139.5)

1. Water-soluble N-methylol derivatives of polypyrrolidone.

11. A process for imparting a substantially permanent finish to textile fabric which comprises impregnating said fabric with an aqueous solution of an N-methylol derivative of polypyrrolidone and thereafter drying the impregnated fabric to insolubilize said N-methylol derivative.

2,734,005
WATER-RESISTANT TEXTILES AND METHOD OF MAKING THE SAME
Leo J. Novak and Joseph T. Tyree, Dayton, Ohio, assignors to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
No Drawing. Application May 14, 1953, Serial No. 355,163
24 Claims. (Cl. 117—139.5)

5. A fibrous textile article having adhered thereto a protective water-resistant coating consisting essentially of an ester of dextran with a saturated fatty acid containing from 8 to 18 carbon atoms.

2,734,006
METHOD OF SETTING THE TWIST IN TWISTED YARNS
Leo J. Novak, Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
No Drawing. Application June 18, 1953, Serial No. 362,666
6 Claims. (Cl. 117—139.5)

1. A method of setting the twist in twisted yarns which comprises treating the twisted yarns with a liquid medium containing 1% to 10% by weight of a twist-setting agent consisting of an ester of dextran, containing initially at least some free hydroxyl groups, with a saturated fatty acid containing from 8 to 18 carbon atoms, and drying the treated yarns to thereby set the twist therein as a result of the presence of the twist-setting agent thereon.

2,734,007

ANTISTATIC TILE AND METHOD OF MAKING

Harry A. Toulmin, Jr., Dayton, Ohio, assignor to The Commonwealth Engineering Company, Dayton, Ohio, a corporation of Ohio

Application October 1, 1952, Serial No. 312,446
11 Claims. (Cl. 117—217)



11. An antistatic wall tiling comprising a reinforced ceramic sheet having an outer tile-like wall surface design and comprising projections and depressions, said projections and depressions having a thin metal coating integral with said ceramic sheet, said metal coating extending over the wall tile surface as a continuous thin layer whereby static electrical charges are conducted over and away from the wall tile surface.

2,734,008

METHOD OF MAKING HEAT TREATING AND HARDENING VALVES

Leland W. Kirkpatrick and Robert J. Gibson, Battle Creek, Mich., and George R. Rich, deceased, late of Battle Creek, Mich., by Dora M. Rich, executrix, Battle Creek, Mich., assignors to Rich Manufacturing Corporation, Battle Creek, Mich., a corporation of Michigan

Original application February 28, 1949, Serial No. 78,814. Divided and this application July 14, 1952, Serial No. 298,784

5 Claims. (Cl. 148—11.5)

1. The method of forming a poppet valve having a forgeable corrosion resistant seat, which comprises forming a valve blank having a head of suitable alloy steel, said valve head having at its lower edge a relatively uniform diameter undercut edge portion, fusing a suitable somewhat lower melting point forgeable and corrosion resistant molten metal to said edge portion of the valve, said fused metal being a nickel-chromium alloy wherein the chromium is present in an amount approximating 19 to 21 per cent and the balance of said alloy is substantially nickel, machining the face of said fused metal to a surface size, heating said valve to a relatively high temperature substantially below the fusing temperature of said nickel-chromium alloy, and coining the head portion of said valve to predetermined size and shape while simultaneously cooling same, whereby, in finished form, said fused metal portion becomes the valve seat and is refined and hardened.

2,734,009

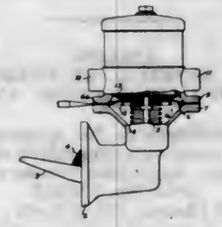
DIAPHRAGM AND MATERIAL FOR MAKING SAME

Irven E. Coffey, Clayton, Mo., assignor to Carter Carburetor Corporation, St. Louis, Mo., a corporation of Delaware

Original application December 9, 1946, Serial No. 715,040, now Patent No. 2,595,127, dated April 29, 1952. Divided and this application September 28, 1951, Serial No. 248,680

6 Claims. (Cl. 154—50)

3. A diaphragm material comprising a chafer duck base having a weave of approximately twenty threads per inch, the individual threads being coated but not impregnated or bonded together with synthetic rubber, and imperforate surface layers of synthetic rubber superposed upon and conforming to but not bonded to the threads of the fabric, said layers being mechanically bonded together and to said threads by integral projections extending through the interstices of the cloth and, with said surface layers, embedding said threads, said



projections each having a transverse dimension at least equal to the thickness of the surface layer of rubber.

2,734,010

LAMINATED FLASHING MATERIALS

William T. Mullen, Philadelphia, Pa.

Application June 29, 1953, Serial No. 364,645
6 Claims. (Cl. 154—51)



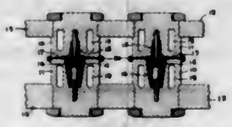
5. Sheet material comprising a first lamina of asphalt impregnated and creped kraft paper, a first asphaltic coating adherent to said first lamina and having glass fibers incorporated therein, a second lamina of paper adherent to said first coating, a second asphaltic coating adherent to said second paper lamina, a third lamina of lead foil adherent to said second coating, a third asphaltic coating adherent to said third lamina, a fourth lamina of electrolytic sheet copper, a fourth asphaltic coating adherent to said fourth lamina, a fifth lamina of paper adherent to said fourth coating, a fifth asphaltic coating adherent to said fifth lamina and a sixth lamina of asphalt impregnated and creped kraft paper adherent to said fifth coatnig, said sheet material being readily bendable and retaining the shape to which it is bent.

2,734,011

METHOD OF MAKING A VALVED INFLATABLE ARTICLE

Eli A. Robinson, Amsterdam, N. Y.

Application April 7, 1948, Serial No. 19,494
15 Claims. (Cl. 154—85)



5. A method of making a valved inflatable article using a mold comprising molding a separate valve of vulcanizable material having a surrounding molded flange, utilizing an excess of material so that the excess material flows outside of the mold and remains connected with and substantially uncured as a ring around the periphery of the valve flange, forming a sheet of vulcanizable material, pressing the molded valve flange and its peripheral ring against the sheet to flatten out the ring, and heating the valve flange and the sheet in contact with the valve flange to secure adhesion between the sheet and valve flange and its peripheral ring, and thereafter completing the inflatable article.

2,734,012

WEFTLESS RIBBONS AND PROCESS FOR FORMING SAME

John Downing, Spondon, near Derby, England, assignor to British Celanese Limited, a corporation of Great Britain

No Drawing. Application June 22, 1953, Serial No. 363,404
Claims priority, application Great Britain July 15, 1952
6 Claims. (Cl. 154—92)

1. An unwoven fabric consisting of a web of parallel yarns all of which are composed of materials selected from the class consisting of cellulose and cellulose acetate and at least some of which are composed of cellulose acetate, bonded together by means of polyvinyl alcohol plasticized with diethylene glycol diacetate.

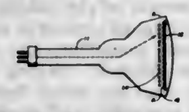
4. Process for forming a weftless ribbon which comprises bonding together the yarns of a warp consisting of parallel yarns of materials selected from the class consisting of cellulose and cellulose acetate and at least some of which are composed of cellulose acetate, to form a self-supporting web, by means of an aqueous solution of polyvinyl alcohol plasticized with 50 to 100 percent of its weight of diethylene glycol diacetate, and evaporating the water at a temperature below 100° C.

2,734,013

DECALCOMANIA PROCESS FOR MAKING CATHODE-RAY TUBE SCREEN

William H. Myers, Cincinnati, Ohio, assignor to Avco Manufacturing Corporation, Cincinnati, Ohio, a corporation of Delaware

Application March 11, 1954, Serial No. 415,645
5 Claims. (Cl. 154—95)



1. A method of manufacturing a luminescent screen assembly for a cathode-ray tube which comprises covering a transparent base with a transparent binding agent suitable for bonding phosphors thereto; covering the binding agent surface with the phosphor side of a decalcomania, having a phosphor-bearing transfer film and a removable backing layer; removing the backing layer; coating the backing layer side of the transfer film with a light-reflecting electron-permeable metallic film and applying heat to substantially remove gases from the completed assembly.

2,734,014

GLUCOSIDE COLCHICOSIDE AND A METHOD OF MAKING SAME

Paul Bellet, Paris, and Gaston Amiard, Noisy-le-Sec, France, assignors to UCLAF, a French body corporate

No Drawing. Application January 19, 1953, Serial No. 332,115
Claims priority, application France January 22, 1952
20 Claims. (Cl. 167—65)

16. A new crystalline colchicum glucoside compound selected from the group consisting of colchicoside and its tetraacylated derivatives.

2,734,015

PROCESS FOR THE MANUFACTURE OF HYDROLYZED ADRENOCORTICOTROPHIN

Albert Wettstein, Basel, and Fritz Benz, Binningen, Switzerland, assignors to Ciba Pharmaceutical Products, Inc., Summit, N. J.

Application June 25, 1951, Serial No. 233,304
Claims priority, application Switzerland June 30, 1950
7 Claims. (Cl. 167—74)

1. A process for the in vitro manufacture of biologically active preparations of hydrolyzed adrenocorticotropic hormone complex, comprising the steps of subjecting a liquid containing the protein adrenocorticotropic hormone to the action of a proteolytic enzyme in a hydrolyzing zone circumscribed by an external liquid, with interposition between said zone and said external



liquid of a dialytic membrane, whereby the liquid in said hydrolyzing zone constitutes the internal liquid, and simultaneously dialyzing said internal liquid through said dialytic membrane into the external liquid, and then isolating the obtained hydrolyzed products from the dialysate.

2,734,016

PROTAMINE ZINC ADRENOCORTICOTROPHIN WITH PROLONGED ACTION AND METHOD OF PREPARATION

Hugo Holtermann, Oslo, Norway, assignor to Nyegaard & Co. A/S, Oslo, Norway

No Drawing. Application March 20, 1952, Serial No. 277,732
Claims priority, application Norway March 31, 1951
9 Claims. (Cl. 167—74)

1. A process of making an adrenocorticotrophin preparation with prolonged action by converting adrenocorticotrophin to a stable suspension, which comprises incorporating protamine and a water-soluble zinc salt selected from the group consisting of zinc chloride and zinc sulphate into an aqueous adrenocorticotrophin solution and adjusting the pH of the liquid to between 6 and 8 by the addition of a buffer salt mixture.

2,734,017

PROCESS FOR THE PRODUCTION OF HYDROLYZED CHORIONIC GONADOTROPHIN

Albert Wettstein, Basel, and Fritz Benz, Binningen, Switzerland, assignors to Ciba Pharmaceutical Products, Inc., Summit, N. J.

No Drawing. Application July 23, 1951, Serial No. 242,980
Claims priority, application Switzerland July 27, 1950
3 Claims. (Cl. 167—74.5)

1. A process for the production of biologically active hydrolyzed products of comparatively low molecular weight from the chorionic gonadotropin hormone, comprising the steps of subjecting a liquid containing said hormone to the action of a proteolytic enzyme in a hydrolyzing zone circumscribed by an external liquid, with interposition between said zone and said external liquid of a dialytic membrane, whereby the liquid in said hydrolyzing zone constitutes the internal liquid, and simultaneously dialyzing the hydrolyzed products from said internal liquid through said dialytic membrane into the external liquid, and then isolating the obtained hydrolyzed products from the dialysate.

2,734,018

PROCESS FOR THE PREPARATION OF TETRACYCLINE AND CHLORTETRACYCLINE

Pasquale Paul Minieri, Brooklyn, N. Y., and Herman Sokol, Hasbrouck Heights, and Melvin C. Firman, West Windsor Township, N. J., assignors, by mesne assignments, to American Cyanamid Company, New York, N. Y., a corporation of Maine

Application September 28, 1953, Serial No. 382,637
14 Claims. (Cl. 195—80)

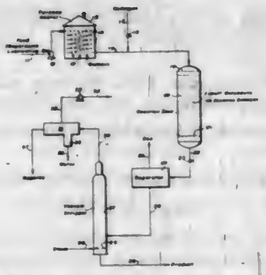
1. The process of producing tetracycline which comprises cultivating in a fermentation broth an organism chosen from the group consisting of organisms of the species *Streptomyces aureofaciens* together with natural and artificially induced mutants thereof, while inhibiting the formation of chlortetracycline by selecting nutrient elements making up the fermentation broth which are substantially free of soluble chlorides, and recovering therefrom a product containing tetracycline as the major antibiotic substance present in the product.

2,734,019

HYDROFINING NAPHTHENIC LUBRICATING OIL

James R. Miller and Edward F. Wadley, Baytown, Tex., assignors, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware

Application April 22, 1953, Serial No. 350,437
6 Claims. (Cl. 196—24)



1. A method for treating a naphthenic lubricating oil fraction containing aromatic hydrocarbons and sulfur, naphthenic acids, and nitrogen which comprises contacting said fraction with a cobalt molybdate on silica-free alumina catalyst at a temperature in the range from 650° to 750° F., at a pressure in the range from 500 to 800 pounds per square inch gauge in the presence of hydrogen in an amount in the range from 200 to 2000 standard cubic feet per barrel of said fraction with a hydrogen consumption in the range from about 50 to about 400 standard cubic feet per barrel of said fraction, and at a liquid space velocity in the range from 0.25 to 6.0 volumes of said fraction per volume of catalyst per hour such that only a portion of said aromatic hydrocarbons is converted and the sulfur, naphthenic acids, and nitrogen content of said fraction is substantially reduced, the paraffins and naphthenes in said fraction being substantially unconverted.

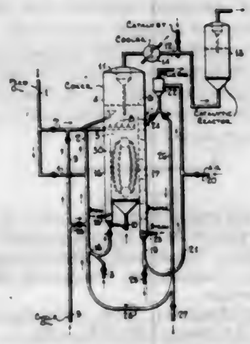
2,734,020

CONVERSION OF HEAVY HYDROCARBONS

James W. Brown, Elizabeth, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application September 4, 1951, Serial No. 244,884
3 Claims. (Cl. 196—49)

1. A process for converting a heavy hydrocarbon feed stock into lighter products which comprises mixing finely divided coke heated to about 1200 to 1300° F. with the feed stock preheated to about 600 to 800° F. to form a dilute suspension having a relatively high temperature between about 1075° and 1150° F., passing the hot suspension through a narrowly confined, elongated vaporizing zone so as partially to vaporize the feed during a residence time not in excess of 1 second at the aforesaid relatively high temperature, thereafter passing the hot suspension of feed vapors, unvaporized feed and coke directly into a dense bed of finely subdivided coke at a point near the upper level thereof and within about 3 feet below the upper level of said bed maintained in the lower part of a coking zone, passing an inert gas upwardly through said bed at a velocity controlled to maintain said bed in dense fluidized condition, also introducing a relatively cool hydrocarbon stream into said bed so as to maintain the coking zone at a relatively low temperature between about 925° and 975° F. whereby the dilute suspension from the vaporizing zone is rapidly quenched without substantial condensation to minimize thermal cracking thereof, withdrawing disengaged vapors



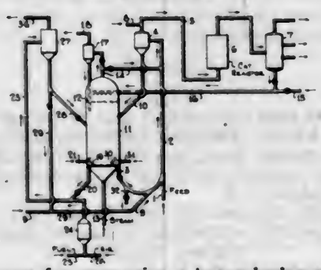
from an upper portion of the coking zone, passing the withdrawn vapors through a catalytic cracking zone under catalytic conversion conditions, and recovering desired products from the catalytic cracking zone; withdrawing oil-carrying coke from the dense fluidized bed after an average residence time therein of about 5 minutes, reheating a portion of the withdrawn oil-carrying coke to about 1050–1100° F. in a drying zone by mixing it with hot dry solids heated to at least 1250 to 1500° F. and thus drying the withdrawn coke, removing a stream of dry coke mixture from the drying zone and partially burning the removed coke in a heating zone to obtain hot dry solids having a temperature between about 1250 and 1500° F. for mixing with the aforesaid wet coke to be dried, and recycling a stream of hot dry solids from the heating zone for mixing with fresh feed in the vaporizing zone.

2,734,021

PREPARATION OF CATALYTIC FEED STOCKS FROM HEAVY HYDROCARBONS

Homer Z. Martin, Cranford, James W. Brown, Elizabeth, and Harvey E. W. Burnside, Locust, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application September 4, 1951, Serial No. 244,968
3 Claims. (Cl. 196—49)



1. A process for converting a heavy hydrocarbon feed stock into lighter products which comprises passing the

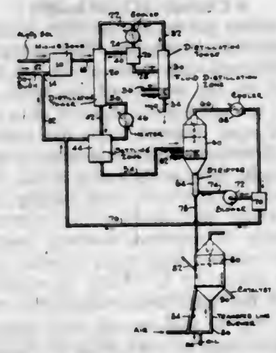
feed stock through a heating and vaporizing zone at a temperature in the range of 750° F. to 1150° F., whereby a portion of the feed stock is vaporized, separating the vapors from the unvaporized portion of the feed stock, immediately injecting finely divided cracking catalyst into the separated vapors and immediately passing the mixture of vapors and cracking catalyst through a catalytic cracking zone maintained under cracking conditions, recovering cracked products including gas and gasoline from the cracking zone, introducing the unvaporized portion of the feed to a coking zone containing a dense, turbulent bed of inert solids maintained at a temperature in the range of about 850° F. to 1150° F. whereby the unvaporized feed undergoes thermal cracking in the coking zone during an average residence time of at least ½ minute, withdrawing thermally cracked vapors from the coking zone, passing the withdrawn thermally cracked vapors through a second catalytic cracking zone and recovering valuable distillate fractions therefrom, withdrawing solids containing coke deposited thereon from the coking zone, burning the withdrawn solids in a free oxygen-containing gas thereby raising the temperature of said solids to a temperature above 1150° F. and returning the heated solids to the coking zone.

2,734,022

HYDROFORMING PROCESS

Charles N. Kimberlin, Jr., and Elroy M. Gladrow, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application March 4, 1952, Serial No. 274,756
6 Claims. (Cl. 196—50)



1. The method of hydroforming hydrocarbons which comprises subjecting the hydrocarbons at temperatures of 850–950° F., at pressures of from 50 to 500 lbs. per sq. inch and in the presence of hydrogen-rich gas to the action of a hydroforming catalyst consisting essentially of a group VI metal oxide supported upon a member of the group consisting of zinc aluminate and alumina gel that has been dried in the presence of a partially water-miscible alcohol to give a product with a high percentage of pores having diameters above 50 Angstrom units.

2,734,023

COMPRESSION DISTILLATION METHOD AND APPARATUS

Kenneth C. D. Hickman, Rochester, N. Y., assignor of one-twentieth to Edward Harris, Jr., and nineteen-fiftieths to Gray D. Dickason, both of Rochester, N. Y.

Application May 26, 1953, Serial No. 357,493
26 Claims. (Cl. 202—64)

26. That method pertaining to the transfer of heat through a heat exchange and phase separation barrier to a flowing film of distilland on one side of said exchanger, from the heat liberated upon the condensation of vapor therefrom raised in temperature by compression and condensed on the opposite side of said exchanger, which comprises rotating said exchanger at such a speed as to apply centrifugal force of at least ten times gravity to said liquids so as to maintain each of the same in a



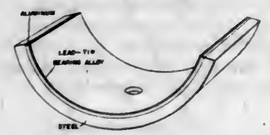
film on said barrier substantially thinner than a film of the same liquid of the same throughput flowing on the same surface under the influence of gravity alone.

2,734,024

METHOD OF MAKING BEARINGS

Harold W. Schultz, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Original application August 11, 1951, Serial No. 241,410. Divided and this application February 5, 1952, Serial No. 269,929
3 Claims. (Cl. 204—23)



1. In a method for making bearings comprising a bearing member including aluminum as its major constituent and having an overlay of a lead-base alloy, the steps comprising: chemically etching a surface of said bearing member in a caustic solution for cleaning the same, superimposing an acidic etch upon said cleaned and etched surface, plating said doubly etched surface with successive layers of zinc and then copper wherein the copper layer is not less than .00001" and not in excess of .00005" thick, and finally coplating this layer of bearing alloy onto the surface of said copper layer, said bearing alloy consisting of a lead-base alloy having lead in quantities of at least 82% thereof and being in a thickness not in excess of .001.

2,734,025

LEAD-TIN ALLOY PLATING

Edward Judson Roehl, Warren, Ohio, assignor to Pittsburgh Steel Company, Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application February 4, 1954, Serial No. 408,296
29 Claims. (Cl. 204—43)

15. An electrolyte for the electrodeposition of lead-tin alloys comprising an aqueous solution of lead fluoborate, tin fluoborate, fluoboric acid and approximately one to two grams of addition agent per liter of electrolyte, said addition agent consisting of a condensation product of ethylene oxide with a material from the group consisting of beta-naphthol and diphenyl ether.

2,734,026

ELECTRODEPOSITION OF COPPER-ZINC ALLOYS

Allan E. Chester, Highland Park, Ill., assignor to Poor & Company, Chicago, Ill., a corporation of Delaware

No Drawing. Application September 12, 1951, Serial No. 246,335
16 Claims. (Cl. 204—44)

1. A plating bath comprising an alkaline zinc copper cyanide bath containing in solution a quantity of the prod-

uct of the reaction of a cyclic oxy-aldehyde and a water soluble aliphatic amine containing amino groups from the group consisting of primary and secondary amino groups, said amine further containing a water solubilizing radical from the group consisting of hydroxy, carboxy and sulfonic radicals and salts thereof, said reaction product being soluble in alkaline aqueous solutions having a pH of about 12 and characterized by the fact that said product does not form deep blue complex copper ions in cyanide solutions containing sodium cuprous cyanide, said quantity being sufficient to enhance the brightness of the zinc-copper plate electrodeposited from said bath.

2,734,027

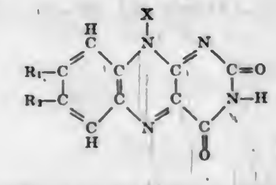
PHOTOREDUCTION OF REDUCIBLE MATERIALS

Walter J. Nickerson, New Brunswick, and Joseph R. Merkel, Princeton, N. J., assignors to Rutgers Research and Endowment Foundation, New Brunswick, N. J., a nonprofit corporation of New Jersey

No Drawing. Application September 17, 1954, Serial No. 456,882

9 Claims. (Cl. 204—157)

1. The method of effecting the photoreduction of a reducible chemical material, comprising the steps of preparing an aqueous solution of an isoalloxazine having the formula:



wherein X is selected from the group consisting of ribitol ($—CH_2(CHOH)_3 \cdot CH_2OH$), phosphate derivatives of ribitol, tetraacetylated ribitol

$$(—CH_2(CH \cdot OOC \cdot CH_3)_3 \cdot CH_2OOC \cdot CH_3)$$

succinate ($—OOC \cdot (CH_2)_2 \cdot COOH$), and water-soluble salts of succinate, and in which R_1 and R_2 are each selected from the group consisting of hydrogen and lower alkyl groups, said isoalloxazine being present in a concentration from about 10^{-6} molar up to the maximum water-soluble concentration thereof, also establishing in said solution as a solute therein a metal-complexing agent in a concentration at least stoichiometrically equivalent to the total of the metals present in the solution which are capable of combining with said metal-complexing agent to form metal-organic complexes, also establishing in said solution as a solute therein a reducible chemical material to be reduced by photoreduction in the solution and in which said reducible chemical material has a redox potential substantially more positive than that of said isoalloxazine which is present in said solution, and exposing the solution made up as aforesaid and including said reducible material to visible light to effect photoreduction of said reducible material.

2,734,028

KILLING ALGAE IN WATER WITH COPPER ALKANOLAMINE SALTS

Bernard Domogalla, Milwaukee, Wis.

No Drawing. Application February 8, 1952, Serial No. 270,733

8 Claims. (Cl. 210—23)

1. A method of killing algae in waters containing the same, comprising bringing into contact with the algae an aqueous solution of a complex constituting the reaction product of a copper salt of an acid from the group consisting of acetic, nitric, sulphuric and hydrochloric acids and a lower molecular weight alkanolamine.

2,734,029

CORROSION PREVENTION METHOD

Richard S. Treseder, Oakland, and Philip J. Raifsnider, Richmond, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application February 2, 1953, Serial No. 334,726

9 Claims. (Cl. 252—8.55)

1. The method of treating a hydrocarbon-containing system in its natural state in a well for the purpose of inhibiting corrosion by aqueous carbonic acid of well metal parts, said system comprising a non-oxidizing gas phase, a liquefied normally gaseous hydrocarbon phase and a minor amount of aqueous carbonic acid, which system in a state of agitated flow at a temperature of between about 45° C. and about 125° C. and under a pressure of between about fifteen and seven thousand pounds per square inch absolute, comes in contact with corrodible well parts, which method includes the step of mixing with said system an amount of below approximately one weight per cent and above approximately 0.0001 weight per cent of the liquid hydrocarbon phase contacted, of water soluble ammonium salts of organic sulfuric acids isolated from petroleum refinery acid sludge.

2,734,030

MIXED SOAP-COMPLEX GREASE COMPOSITIONS

Eric O. Forster, Hillside, and Joseph P. Hamer, Somerville, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application February 20, 1953, Serial No. 338,148

6 Claims. (Cl. 252—39)

1. A lubricating grease composition having outstanding high temperature properties which comprises a lubricating oil thickened with from about 5.0 to 30.0% by weight, based on the weight of the total composition, of a complex formed from a mixture of a calcium soap and a second soap selected from the group consisting of barium, strontium and magnesium soaps of high molecular weight fatty acids and a metal salt of a low molecular weight carboxylic acid having from one to six carbon atoms, said metal being selected from the group consisting of calcium, barium, magnesium and strontium, the calcium soap being present in an amount ranging from about 2.5 to 15.0% by weight, based on the weight of the total composition, the mol ratio of said calcium soap to said second soap being about 8:1 to 1:8, the mol ratio of said mixture of soaps to said metal salt being within the range of about 0.70 to 1.2, said complex being formed by first dispersing the calcium soap in the lubricating oil, then dispersing the second soap and said metal salt, and heating the resulting mixture to a transition temperature from about 350° to 480° F.

2,734,031

LUBRICANTS CONTAINING POLYMERS OF CYCLOPENTADIENE

Thomas J. McNaughtan, Clarence, N. Y., assignor, by mesne assignments, to Hooker Electrochemical Company, Niagara Falls, N. Y., a corporation of New York

No Drawing. Application November 19, 1952, Serial No. 321,520

6 Claims. (Cl. 252—49.6)

1. A lubricating composition comprising an organic lubricating liquid of oily nature and a polymer of cyclopentadiene having the empirical formula of $(C_5H_6)_n$ in which n is a figure of at least 3 and wherein there are two double bonds, the per cent by weight of polymer present based on the weight of the organic lubricating liquid of oily nature in the composition being sufficient to increase and stabilize the viscosity of the organic liquid but not more than 25% by weight thereof.

2,734,032

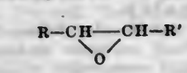
LUBRICANTS

Walter J. Coppock, Wallingford, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

No Drawing. Application December 21, 1953, Serial No. 399,587

10 Claims. (Cl. 252—52)

1. A lubricating composition comprising a major proportion of mineral lubricating oil as the essential lubricating component, a minor proportion of an alkylated phenol oxidation inhibitor as antioxidant, and a minor proportion of a compound having the formula:



where R is selected from the group consisting of aryloxyalkyl radicals and alkoxyalkyl radicals, and where R′ is selected from the group consisting of hydrogen and alkyl radicals, neither R nor R′ containing more than 10 carbon atoms, said compound acting to enhance the antioxidant action of said alkylated phenol oxidation inhibitor.

2,734,033

MAGNETIC RECORDING MEDIUM

James Z. Menard, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application October 8, 1949, Serial No. 120,396

1 Claim. (Cl. 252—62.5)

A sound record medium molded and cured into a flexible, collapsible, radially extensible endless band of substantially uniform thickness, consisting of 100 parts of neoprene intimately mixed with 100 parts of finely divided magnetic iron oxide, 3 parts of paraffin wax, 4 parts of magnesium oxide and 5 parts of zinc oxide, said record medium being mountable under radial tension and operable in intimate, continuous, yielding contact with an electromagnetic transducer.

2,734,034

MAGNETIC COMPOSITIONS

Henry L. Crowley, South Orange, N. J., assignor, by mesne assignments, to Henry L. Crowley & Company, Inc., West Orange, N. J., a corporation of New Jersey

No Drawing. Application May 15, 1951, Serial No. 226,545

4 Claims. (Cl. 252—62.5)

1. The method of preparing magnetic articles having useful magnetic and electrical properties which comprises heat-treating at a temperature of 800° to 1200° C. an initial oxide mixture containing by weight from 50 to 90% ferric oxide, 12 to 22% zinc oxide, 1 to 10% magnesium oxide and 1 to 6% lithium carbonate under non-oxidizing conditions, grinding the resulting product to a fine particle size, compacting the resulting ground product into a shaped article of the shape and size predetermined by the shape and side of the final article, heat-treating the shaped article at a higher temperature within the range of 1100° to 1450° C. under non-oxidizing conditions, the non-oxidizing conditions of at least one of said heat-treatments being reducing to insure the presence of ferrous oxide in the shaped article at the conclusion of the second heat-treatment, and gradually cooling the heat-treated article through at least the greater part of the temperature range of 1000° to 300° C. in order to effect spontaneous dissociation of the ferrous oxide to form crypto-crystalline metallic iron.

2,734,035

DIELECTRIC COMPOSITIONS

Sidney D. Ross, Williamstown, and Irving Kuntz, North Adams, Mass., assignors to Sprague Electric Company, North Adams, Mass., a corporation of Massachusetts

No Drawing. Application March 31, 1953, Serial No. 346,018

4 Claims. (Cl. 252—63.7)

4. A dielectric composition consisting essentially of a chlorinated aromatic hydrocarbon having admixed therewith from about .1% to about 5% of a stabilizer selected from the class consisting of benzo-(c)-cinnoline, benzo-(c)-cinnoline oxide, benzo-(c)-cinnoline dioxide, and trifluoromethyl substituted derivatives thereof.

2,734,036

PREVENTING THE FORMATION OF CARBON SLUDGE IN FUSED BATHS

Giles F. Carter, Niagara Falls, N. Y., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 10, 1954, Serial No. 428,851

1 Claim. (Cl. 252—156)

In a process for descaling steel in a molten bath of sodium hydroxide containing about 1–20% by weight of sodium hydride, the step comprising supplying to said bath a cover of sized comminuted charcoal, the particles of which are about 8–20 mesh in size, said cover being ¼ to 2 in. thick.

2,734,037

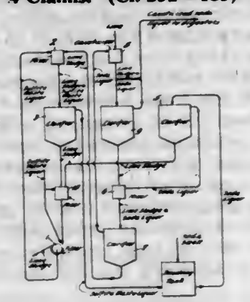
METHOD OF INTRODUCING SULFITE WASTE LIQUOR INTO THE ALKALI RECOVERY PROCESS IN THE MANUFACTURE OF ALKALINE CELLULOSE

Nils Viktor Mannbro, Fredriksberg, Sweden

Application July 11, 1951, Serial No. 236,287

Claims priority, application Sweden August 17, 1950

4 Claims. (Cl. 252—183)



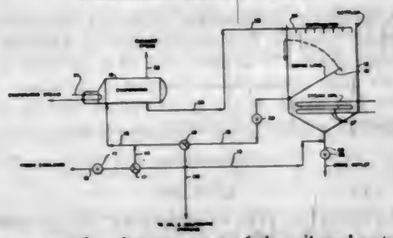
1. In a process of preparing causticized, sulfide-containing soda liquors for alkaline cellulose digestion, which includes dissolving soda smelt obtained from the alkali regeneration process of the alkaline cellulose system in sulfite waste liquor, causticizing the resulting solution of soda smelt in sulfite waste liquor with lime and separating the resulting causticized soda liquor from lime-sludge formed by the causticization, the steps of treating said separated lime-sludge with a quantity of the uncausticized solution of soda smelt in sulfite waste liquor, washing the lime-sludge treated in this manner with fresh sulfite waste liquor and dissolving a new amount of smelt soda in the sulfite waste liquor, which has been used for washing said lime-sludge.

2,734,038

PROCESS FOR BREAKING EMULSIONS FORMED IN THE NEUTRALIZATION OF ACID TREATED PETROLEUM FRACTIONS BY PARTIAL DEHYDRATION AND SETTLING

Everett N. Case, Homewood, Ill., assignor to Sinclair Refining Company, New York, N. Y., a corporation of Maine

Application July 21, 1951, Serial No. 237,907
5 Claims. (Cl. 252—346)



1. A process for the recovery of the oil and petroleum sulfonate content from petroleum emulsions produced in the neutralization of acid treated petroleum fractions which comprises removing an amount of the contained water of the emulsion by evaporation to concentrate the contained salt of the emulsion into a brine solution of sufficient concentration to be incompatible with the oil and petroleum sulfonate content of the emulsion, said amount being at least about 30% of the water of the emulsion with sufficient water being retained so that solid salt will not be precipitated, settling the partially dehydrated emulsion, and recovering the upper oil and petroleum sulfonate layer.

2,734,039

VULCANIZATION OF BUTYL RUBBER WITH A DIMETHYLOL PHENOL, CHLOROSULFONATED POLYTHENE AND A ZINC COMPOUND, AND PRODUCT OBTAINED THEREBY

Lester C. Peterson and Harvey J. Batts, Indianapolis, Ind., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application December 30, 1952, Serial No. 328,788
17 Claims. (Cl. 260—19)

1. In the method of chemically modifying a synthetic rubbery copolymer of an isoolefin having from 4 to 7 carbon atoms with from 0.5 to 10% of an aliphatic conjugated diolefin having from 4 to 6 carbon atoms by heating 100 parts of the said rubber at a temperature of from 200° to 400° F. for from 5 minutes to 4 hours in admixture with from 0.2 to 20 parts of a 2,6-dymethylol-4-hydrocarbon substituted phenol and from 1 to 10 parts of chlorosulfonated polythene, the improvement which comprises the step of carrying out the said chemical modification in the presence of 1 to 15 parts of a zinc compound selected from the group consisting of zinc oxide and zinc salts of fatty acids, the said zinc compound serving to accelerate the said chemical modification.

2,734,040

POLYMERIC COMPOSITIONS COMPRISING A GRAFT ACRYLONITRILE COPOLYMER DISSOLVED IN A MIXTURE OF ETHYLENE CARBONATE AND WATER

Evan Islwyn Jones, Stanley Minor Todd, and Leonard Wood, Manchester, England, assignors to Imperial Chemical Industries Limited, London, England, a corporation of Great Britain

No Drawing. Application March 9, 1953, Serial No. 341,336
Claims priority, application Great Britain March 19, 1952
10 Claims. (Cl. 260—29.6)

1. A composition comprising a grafted acrylonitrile polymer, ethylene carbonate and water, wherein the ethylene carbonate is in excess of the water on a weight basis, said grafted acrylonitrile polymer being obtained by polymerizing from about 85 to 100 parts by weight of acrylonitrile with from 0 to 15 parts by weight of at least one other monomeric vinyl compound in the presence of a polymer which is water soluble, has a molecular weight greater than 1000, and is present in an amount between 5 and 40% by weight of the grated polymer.

2,734,041

COMPOSITIONS OF MATTER COMPRISING ACRYLONITRILE POLYMERS DISSOLVED IN MIXTURES OF ETHYLENE CARBONATE AND WATER

Evan Islwyn Jones and Stanley Minor Todd, Blackley, Manchester, England, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application March 1, 1954, Serial No. 413,366
Claims priority, application Great Britain March 13, 1953
4 Claims. (Cl. 260—29.6)

1. A composition for spinning filaments and yarns of acrylonitrile polymer, said composition comprising a solution of an acrylonitrile polymer dissolved in a mixture of ethylene carbonate and water containing more than 60% by weight of ethylene carbonate, said polymer being selected from the group consisting of polyacrylonitrile and copolymers and interpolymers of acrylonitrile and a minor amount of at least one other vinyl compound said interpolymers being prepared solely from monomeric compounds.

2,734,042

PROTECTIVE COATING COMPOSITION COMPRISING A POLYMER OF CHLOROPRENE AND AN ALKALINE EARTH METAL FLUORIDE

Allan J. Carter, Roy C. Hansen, and Charles M. Heinen, Detroit, Mich., assignors to the United States of America as represented by the United States Atomic Energy Commission

No Drawing. Application November 13, 1944, Serial No. 563,296
5 Claims. (Cl. 260—30.6)

1. A synthetic rubber composition which is resistant to the action of gaseous fluorine and suitable for application to a fabric which comprises a polymer of 2-chlor 1:3 butadiene as the sole elastomer therein admixed with about 32 per cent of its weight of an alkaline earth metal fluoride.

2,734,043

SOLUTIONS OF POLYPYRROLIDONE

Milton Crowther, Valley Falls, R. I., assignor to Arnold, Hoffman & Co., Incorporated, Providence, R. I., a corporation of Rhode Island

No Drawing. Application February 24, 1953, Serial No. 338,558
8 Claims. (Cl. 260—31.2)

1. A composition of matter comprising polypyrrolidone dissolved in at least substantially anhydrous formic acid, said composition containing, by weight, not more than three parts of formic acid per part of polypyrrolidone and being diluted with a non-solvent for the polypyrrolidone selected from the group consisting of aliphatic acids having 2 to 4 carbon atoms and chloroaliphatic acids having from 2 to 4 carbon atoms.

2,734,044

OPTICAL CEMENT

Irving I. Bezman, Pittsburgh, Pa., and Francis J. Honn, Bloomfield, N. J., assignors to the United States of America as represented by the Secretary of the Army

No Drawing. Application November 5, 1951, Serial No. 254,982
6 Claims. (Cl. 260—45.5)

1. The method of cementing optical elements which comprises: mixing with about 1 per cent by volume of tertiary butyl perbenzoate a liquid cement consisting of between 60 to 80 parts by weight of a styrene fraction made up of about 12 parts by weight of polystyrene and about 48 parts by weight of styrene, between 40 to 20 parts by weight of alpha-methyl styrene, and from 1 to 5 parts by weight of divinyl benzene; applying this mixture to the optical elements; and baking this assembly for between 16 to 40 hours at a temperature of between 110° to 150° C.

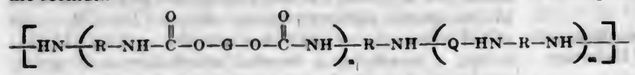
2,734,045

CURING OF CHAIN EXTENDED POLYALKYLENE ETHER-POLYURETHANE POLYMER WITH HALOGEN COMPOUNDS

Jerry A. Nelson, Newark, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application March 30, 1954, Serial No. 419,935
9 Claims. (Cl. 260—77.5)

1. The process of curing a polymeric product, said product being comprised essentially of structural units having the formula



wherein O—G—O is a bivalent radical resulting from removal of the terminal hydrogen atoms from a polyalkylene ether glycol having a molecular weight of at least 750; R is a bivalent organic radical, said radical being inert to isocyanate groups; Q is a radical selected from the group consisting of a carbonyl radical and a non-polymeric diacyl radical, said diacyl radical being free from any intralinear unsaturation other than carbon to carbon unsaturation; *n* is an integer greater than zero; and *m* is an integer including zero; each of the said structural units being connected to the next by a radical Q, having the significance defined above; the overall ratio of the number of R to O—G—O radicals in the polymer being between 1.1:1 and 12:1; and at least 35% of the total weight of the polymer being the bivalent radicals O—G—O; which comprises milling the said polymer with (*a*) from 1 to 10 parts per 100 parts of polymer of an active halogen compound containing at least two active halogen atoms and having no other reactive groups, said active halogen compound being selected from the group consisting of (1) halogen substituted benzoquinones, (2) diacyl halides and (3) compounds containing two di(chloromethyl) groups, said di(chloromethyl) groups being attached to doubly bonded carbon atoms of an organic residue, said organic residue being selected from the group consisting of divalent unsaturated aliphatic hydrocarbon radicals, divalent aromatic hydrocarbon radicals and methoxy substituted divalent aromatic hydrocarbon radicals, and (*b*) from 1 to 10 parts per 100 parts of polymer of an acid acceptor selected from the group consisting of oxides and hydroxides of magnesium, calcium, strontium and barium and the oxides of zinc, lead and antimony, the amount by weight of acid acceptor being at least about one-half the weight of the active halogen compound; and subsequently curing the mixture by heating the same to a temperature of about 80 to 150° C.

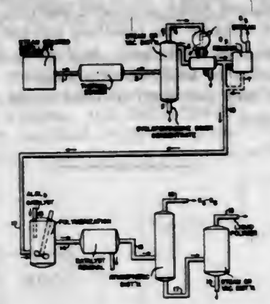
2,734,046

PROCESS FOR PREPARING PETROLEUM RESINS

Joseph F. Nelson, Rahway, Robert F. Leary, Cranford, and Fred W. Banes, Westfield, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application October 1, 1952, Serial No. 312,466
6 Claims. (Cl. 260—82)

1. In a process for the preparation of improved petroleum resins the combination which comprises isolating a steamed cracked hydrocarbon petroleum fraction boiling between about more than 20° C. to less than 140° C., said fraction being substantially below C_9, heating the steam cracked fraction to a temperature sufficient to



dimerize substantially all cyclodienes, stripping the resulting admixture to a temperature sufficient to separate an overhead product from the dimerized cyclodienes, recovering as the overhead product a stream boiling between about more than 20° C. to less than 140° C. and having the following composition:

	Weight percent
Benzene	15–30
Toluene	3–10
C_8 aromatics	<1
Diolefins	11–25
Olefins	70–29
Paraffins	0– 5

said composition being substantially free of cyclodienes, and polymerizing the stream in the presence of an aluminum halide catalyst at a temperature of about −40° C. to +70° C. and recovering the resin formed thereby.

2,734,047

OLEFIN POLYMERIZATION WITH SbS_5 CATALYST

Winthrope C. Smith and Robert M. Thomas, Westfield, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application August 31, 1951, Serial No. 244,726
11 Claims. (Cl. 260—85.3)

1. The process of preparing a solid, plastic hydrocarbon interpolymer which is reactive with vulcanization agents which comprises reacting together a mixture of isobutylene and a conjugated diolefin having from 4 to 6 carbon atoms per molecule in the presence of an inert, non-complexing solvent by the application thereto of a catalyst solution consisting of SbF_5 dissolved in an inert, non-complexing solvent, said polymerization being conducted at a temperature of from 0° to −165° C.

2,734,048

PRODUCTION OF POLYVINYL ALCOHOL

John E. Bristol, Niagara Falls, and Walton B. Tanner, Grand Island, N. Y., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application April 30, 1953, Serial No. 352,277
18 Claims. (Cl. 260—91.3)

1. A process which comprises reacting the polymerized vinyl ester of a saturated carboxylic acid containing 1 to 4 carbon atoms with a hydrolytic alcohol containing 1 to 4 carbon atoms in the presence of an alkali metal alcoholate catalyst under substantially anhydrous conditions, maintaining said alcoholate concentration between about 0.05 to 5% by weight of the reaction mixture, maintaining the concentration of said polyvinyl

ester between about 0.1 and 1% by weight of said reaction mixture, said polyvinyl ester present in said reaction mixture being soluble therein, and the polyvinyl alcohol produced being insoluble therein, removing from said reaction mixture the resulting solvent insoluble polyvinyl alcohol and carboxylic acid ester and adding hydrolytic alcohol to said reaction mixture at a rate so as to maintain said polyvinyl alcohol in an easily manageable suspension.

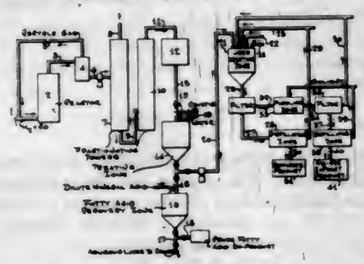
2,734,049

UREA EXTRACTION PROCESS FOLLOWING REMOVAL OF OXYGENATED ORGANIC COMPOUNDS

Egi V. Fasce, Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application October 12, 1951, Serial No. 251,119

2 Claims. (Cl. 260—96.5)



1. Process for concentrating straight-chain olefins in the hydrocarbon product boiling between 350° and 650° F. obtained by the Fischer-Tropsch Synthesis which comprises treating the hydrocarbon product at 210°–220° F. with 0.1–0.5 vol. of 5–30% alkali metal hydroxide/vol. of hydrocarbon product and then agitating the treated product with urea to form a complex of the urea with the straight-chain olefins, filtering the complex, and recovering the straight chain olefins from the complex.

2,734,050

SULFURIZED CONDENSATION PRODUCTS AND PROCESS OF MAKING SAME

Emil Schwamberger, Frankfurt am Main-Fechenheim, Germany, assignor to Cassella Farbwerke Mainkur Aktiengesellschaft, Frankfurt am Main-Fechenheim, Germany, a German company

No Drawing. Application June 30, 1950, Serial No. 171,542

Claims priority, application Germany July 13, 1949

6 Claims. (Cl. 260—131)

1. A process of preparing sulfur-containing vat dyestuffs, which comprises heating a nitrogen-free compound of the group consisting of quinones having six condensed benzene nuclei and such quinones also having 2 five-membered carbon rings with aluminum chloride and a sulfurizing agent of the group consisting of sulfur dioxide and alkali bisulfites.

2,734,051

ASYMMETRICAL CUPRIFEROUS POLYAZO DYESTUFFS

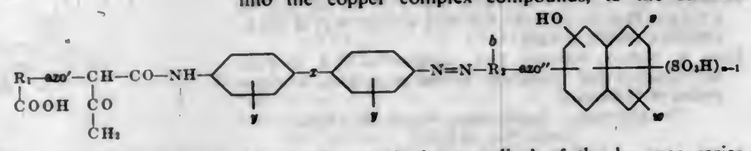
Ernst Iselin, Dornach, near Basel, Switzerland, assignor to Sandoz, A. G., Basel, Switzerland

No Drawing. Application December 10, 1952, Serial No. 325,209

Claims priority, application Switzerland December 18, 1951

6 Claims. (Cl. 260—145)

1. An asymmetrical copper complex compound of a polyazo dyestuff which corresponds before conversion into the copper complex compounds, to the formula



wherein R_1 stands for a radical of the benzene series, R_2 stands for a radical selected from the group consisting of radicals of the benzene and naphthalene series, *x* stands for a member selected from the group consisting of the simple diphenyl linkage, the —CH=CH—, the —NH.CO—, the —CO.NH— and the —NH.CO.NH— bridge, *y* stands for a member selected from the group consisting of the hydrogen atom, the carboxy and the sulfonic acid group, *v* stands for a member selected from the group consisting of hydrogen, hydroxy, amino, lower alkyl amino, cycloalkylamino, mononuclear carbocyclic arylamino and acylamino groups, *w* stands for a member in ortho-position to *v* selected from the group consisting of —N—N— carbocyclic aryls and —N=N— pyrazolones, *b* stands for a member in ortho-position to —azo″— selected from the group consisting of the methoxy and the ethoxy group, *n* is one of the integers 1, 2 and 3, *m* is one of the integers 1 and 2, and wherein —OH stands in ortho-position and —N=N— in para-position to azo″—, and —COOH stands in ortho-position to —azo′—.

2,734,052

METAL COMPLEX FORMING AZO DYESTUFFS

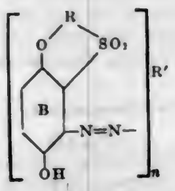
Gerhard Dittmar, Leverkusen, Rolf Pütter, Dusseldorf, and Fritz Suckfüll, Leverkusen, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application November 25, 1953, Serial No. 394,498

Claims priority, application Germany December 3, 1952

7 Claims. (Cl. 260—146)

1. Dyestuffs selected from the group consisting of azo dyestuffs corresponding to the general formula



wherein R stands for a radical selected from the group consisting of ring forming lower alkylene and o-arylene radicals, R′ stands for an aromatic radical bearing in o-position to the —N=N— bridge a heavy metal complex forming group, B stands for a carbocyclic nucleus selected from the group consisting of benzene and naphthalene nuclei, and *n* stands for the integers 1 and 2, and the heavy metal complexes of said azo dyestuffs.

2,734,053

DIS- AND POLYAZO DYESTUFFS AND PROCESS OF PREPARATION

Philippe Grandjean and Willy Steinemann, Basel, and Walter Wehrli, Riehen, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss confederation

No Drawing. Application November 16, 1953, Serial No. 392,488

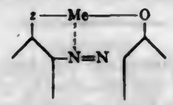
Claims priority, application Switzerland November 21, 1952

12 Claims. (Cl. 260—147)

1. A water-soluble azo dyestuff which corresponds to the formula

$$R_1—NH—CO—Cx=Cy—CH=Cx—CO—NH—R_2$$

wherein each of R_1—NH— and R_2—NH— is the radical of an aminoazo compound selected from the group consisting of aminoazo compounds of the benzene, naphthalene, pyrene, pyrazolone and acetoacetylamide series, containing from one to three azo groups, one to four water-solubilizing groups, and zero to two metal atoms selected from the group consisting of copper and nickel atoms, each said metal atom being present in the dyestuff molecule in the form of a complex



linkage, —z— being a member selected from the group consisting of



and Me representing the aforesaid metal atom, and wherein *x* is a member selected from the class consisting of hydrogen and chlorine, and *y* is a member selected from the class consisting of hydrogen and lower alkyl.

2,734,054

PRODUCTION OF L-LYXOFLAVIN AND INTERMEDIATES THEREFOR

Edward Wenis, Leonia, N. J., assignor to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application February 23, 1952, Serial No. 273,161

7 Claims. (Cl. 260—193)

1. A process which comprises reductively condensing L-lyxose with 4,5-dimethylaniline so as to produce N-(L-lyxityl)-4,5-dimethylaniline, coupling the latter compound with diazotized aniline at a pH of about 3.5 so as to produce 2′-L-lyxitylamino-4′,5′-dimethylazobenzene, and treating the last named compound with a member of the group consisting of (1) barbituric acid and (2) hydrogen and alloxantin so as to produce L-lyxoflavin.

7. 2′-L-lyxitylamino-4′,5′-dimethylazobenzene.

2,734,055

GLUCOSIDES OF CHLORAMPHENICOL

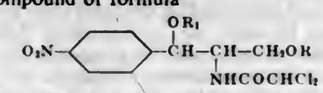
Gino Carrara and Emilio Testa, Milan, Italy, assignors to Lepetit S. p. A., Milan, Italy

No Drawing. Application May 21, 1954, Serial No. 431,577

Claims priority, application Great Britain May 26, 1953

3 Claims. (Cl. 260—210)

1. A compound of formula



wherein R is a d-glucose radical and R_1 is a member of the group consisting of hydrogen and a d-glucose radical.

2,734,056

FURANE-2-CARBOXYLIC ACID ESTERS OF 20:21-KETOLS OF THE PREGNANE SERIES

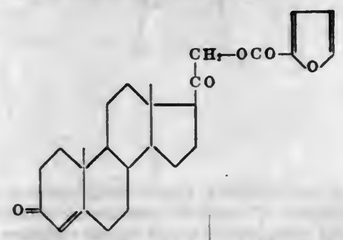
Karl Miescher, Riehen, and Peter Wieland, Basel, Switzerland, assignors to Ciba Pharmaceutical Products, Inc., Summit, N. J.

No Drawing. Application October 13, 1952, Serial No. 314,562

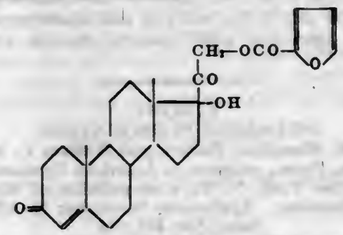
Claims priority, application Switzerland October 18, 1951

4 Claims. (Cl. 260—239.55)

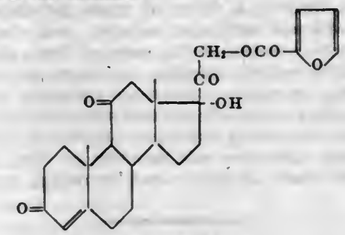
1. A member selected from the group consisting of Δ^4-3:20-diketo-21-furoyl-(2)-oxy-pregnene of the formula



Δ^4 - 3:20 - diketo - 17α - hydroxy - 21 - furoyl - (2) - oxy-pregnene of the formula



and Δ^4-3:11:20-triketo-17α-hydroxy-21-furoyl-(2)-oxy-pregnene of the formula



2,734,057

CHLORTHEOPHYLLINE SALT OF DIMETHYL-AMINOPROPYLCHLOR-PHENTHIAZINE

Paul Galliiot, Paris, and Jacques Gaudechon, Thiais, France, assignors to Societe des Usines Chimiques, Rhone-Poulenc, Paris, France, a French body corporate

No Drawing. Application December 26, 1952, Serial No. 328,136

Claims priority, application France January 5, 1952

1 Claim. (Cl. 260—243)

The 8-chloro-theophyllinate of the 10-(3′-dimethylamino-propyl)-3-chlorophenthiazine of which the hydrochloride melts at about 179–180° C. and the picrate melts at about 172–173° C.

2,734,058

PROCESS FOR THE PRODUCTION OF SOLID FINELY DIVIDED, FLUFFY CYANURIC CHLORIDE FROM THE VAPOR PHASE

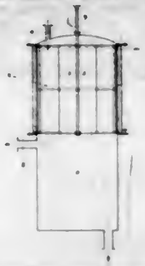
Hermann Schulz and Hans Huemer, Frankfurt am Main, Germany, assignors, by mesne assignments, to American Cyanamid Company, New York, N. Y.

Application December 19, 1952, Serial No. 326,898

4 Claims. (Cl. 260—248)

1. Process for the recovery of cyanuric chloride from the vapor phase in a finely divided fluffy state which com-

prises: continuously passing cyanuric chloride vapor into a condensation chamber; controlling the rate of flow of said cyanuric chloride vapor into said chamber so that said flow is substantially completely converted to the solid phase before contact with the walls of said chamber; maintaining the average temperature of said chamber at a temperature of not more than about 110° C. by cooling



the walls of said chamber; continuously cleaning the walls of said chamber of cyanuric chloride by scraper means; continuously agitating the vapor in said chamber by slowly revolving stirrer means, said stirrer means extending no more than about two thirds of the distance from the longitudinal axis to the walls of said chamber; and continuously recovering solid cyanuric chloride from said chamber.

2,734,059
MELAMINE PURIFICATION
Richard W. Hamilton, Darien, and William C. Mallison, Noroton, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Application November 26, 1954, Serial No. 471,522
3 Claims. (Cl. 260—249.7)

1. The method for purifying crude melamine which comprises: forming a slurry of crude melamine in an aqueous saturated melamine solution, said slurry containing crude melamine in the range of from about 1% to about 15% solids, subjecting said slurry to a cyclone classification operation, separately collecting overflow fines containing essentially purified melamine and underflow coarse containing essentially impurities from said classification, subjecting said resultant overflow fines to an alkaline wash, air-drying and recovering pure melamine.

2,734,060
3'-BENZOYL-4-AMINO-1,9-ANTHRAPYRIDONE-2-SULFONIC ACID
Jacques Günthard, Basel, and Albin Peter, Binningen, near Basel, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm
No Drawing. Application July 1, 1955, Serial No. 519,656
Claims priority, application Switzerland October 8, 1954
1 Claim. (Cl. 260—278)

3'-benzoyl-4-amino-1,9-anthrapyridone-2-sulfonic acid.

2,734,061
PRODUCTION OF COMPOUNDS OF THE PYRIDINE SERIES
Walter Reppe, Heinrich Pasedach, and Matthias Seefelder, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany
No Drawing. Application May 18, 1953, Serial No. 355,847
Claims priority, application Germany May 31, 1952
7 Claims. (Cl. 260—290)

1. Process for the production of pyridine and its homologues which comprises heating a member of the group consisting of the mono- and dioximes of glutaric dialdehyde, of methyl glutaric dialdehyde and of 1,5-dioxohexane with an excess of a strong aqueous acid selected from the group consisting of hydrochloric, phosphoric, sulphuric and organic sulphonic acids as quickly as possible to temperatures between about 90 and 220° C.

2,734,062
QUATERNARY SALTS OF BELLADONNINE AND METHOD OF MAKING THEM
Rudolf Hotovy and Ernst Jacobi, Darmstadt, and Willi Kuessner, Darmstadt-Eberstadt, Germany, assignors to E. Merck Chemical Works, Darmstadt, Germany, a corporation of Germany
No Drawing. Application January 29, 1953, Serial No. 334,074
7 Claims. (Cl. 260—292)

1. Quaternary salts of belladonnine having the formula $C_{34}H_{42}O_4N_2.x$ halogenalkyl.yH_2O, wherein x is equal to 1 or 2, halogenalkyl is a radical selected from the group consisting of bromo- and iodo substituted hydrocarbon radicals in which the alkyl chain contains one to five carbon atoms and y is equal to 0 to 8, generally soluble in water, methanol or ethanol, difficultly soluble to insoluble in acetic ester, benzene, petrolether and diethylether, the main undisturbed maxima of their ultraviolet absorption spectra being at about 258 to 259 and 261 to 262 mμ, and said salts showing the known color reactions of belladonnine.

2,734,063
SYNTHESIS OF PYRIDOXINE
Philip G. Stevens, Old Greenwich, Conn., assignor to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application December 22, 1950, Serial No. 202,404
12 Claims. (Cl. 260—295.5)

1. In a process for the preparation of a member of the group consisting of pyridoxine and intermediates therefor, the step which comprises condensing an alkyl formate with an ether of 1,4-dihydroxybutanone-2 of the class consisting of lower alkyl ethers and the cyclic inner ether thereof in which both hydroxyl groups are etherified, in a reaction medium containing an alkali metal alcoholate, to form the corresponding ether of 1,4-dihydroxy-3-formylbutanone-2.

2. In a process for the preparation of a member of the group consisting of pyridoxine and intermediates therefor, the step which comprises condensing, in a reaction mixture containing an alkali metal alcoholate, an ether of 1,4-dihydroxy-3-formylbutanone-2 of the class consisting of lower alkyl ethers and the cyclic inner ether thereof in which both hydroxyl groups are etherified, with a compound having the general formula:

$$CH_2{-}CH{-}CH_2{-}COOR$$
$$\quad\quad|$$
$$\quad\quad NH_2$$

wherein R is an alkyl group, to form a 2-methyl-dihydropyridine-4,5-dimethylol ether of the class consisting of lower alkyl ethers and the cyclic inner ether thereof in which both methylol groups are etherified, and containing the COOR group as a substituent in the 3-position.

6. In a process for the preparation of a member of the group consisting of pyridoxine and intermediates therefor, the steps which comprise condensing an alkyl formate with 3-ketotetrahydrofurane in the presence of an alkali metal alcoholate, condensing the resulting enolate of 4-formyl-3-ketotetrahydrofurane with a β-aminobutyric acid ester to form a 2-methyl-4,5-epoxydimethyl tetrahydropyridine-3-carboxylic acid ester, treating the latter ester with an oxidizing agent to form the corresponding 2-methyl-4,5-epoxydimethyl nicotinic acid ester, saponifying the latter ester to form the corresponding carboxylic acid, reacting said carboxylic acid with hydrazoic acid whereby decomposition of the resulting carboxy azide group occurs to form 2-methyl-3-amino-4,5-epoxydimethyl pyridine, and heating the latter compound with nitrous acid to convert the product to 2-methyl-3-hydroxy-4,5-epoxydimethyl pyridine.

11. A 2-methyl pyridine-4,5-dimethylol ether of the class consisting of lower alkyl ethers and the cyclic inner ether thereof in which both methylol radicals are etherified, and having in 3- position a COOR substituent wherein R is an alkyl group.

2,734,064
METHOD OF TREATING 2,2'-DITHIOBISBENZOTHIAZOLE
Cecil R. Howey, Elmira, Ontario, Canada, assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
No Drawing. Application April 13, 1953, Serial No. 348,587
3 Claims. (Cl. 260—306.5)

1. In a method of manufacturing 2,2'-dithiobisbenzothiazole wherein the said 2,2'-dithiobisbenzothiazole is obtained as a slurry in a liquid reaction medium and is removed therefrom by filtration in the form of a damp filter cake, the improvement which comprises the steps of subjecting the said filter cake of 2,2'-dithiobisbenzothiazole, containing from 15% to 80% moisture, to a mixing action for a period of at least five minutes at room temperature, whereby its bulk is substantially reduced, and subsequently drying the material.

2,734,065
11-KETO-21-IODOPROGESTERONE
John A. Hogg and Alan H. Nathan, Kalamazoo Township, Kalamazoo County, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan
No Drawing. Application February 25, 1953, Serial No. 338,882
1 Claim. (Cl. 260—397.3)

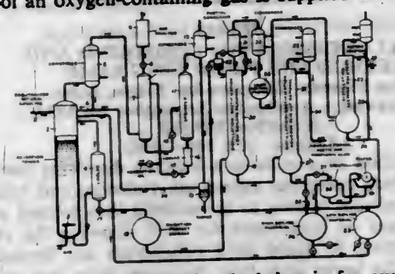
11-keto-21-iodoprogesterone.

2,734,066
METHOD FOR THE PREPARATION OF DIHYDROTESTOSTERONE AND ITS ESTERS
Alberto Ercoli and Pietro de Ruggieri, Milan, Italy, assignors to Francesco Vismara Societa per Azioni, Como, Italy, a corporation of Italy, and Alberto Ercoli, Milan, Italy
No Drawing. Application January 15, 1954, Serial No. 404,377
10 Claims. (Cl. 260—397.4)

1. A process for the preparation of 4-dihydrotestosterone which comprises oxidizing with chromic acid the cyanohydrin of androstan-3-ol-17-one to form androstan-17-cyan-17-ol-3-one; treating this intermediate in the presence of an acid catalyst with an acetalysing agent, selected from the group consisting of orthoformic acid esters, aryl alcohols and aliphatic glycols, thereby obtaining as a second intermediate a 3-ketal derivative of the androstan-17-cyan-17-ol-3-one; subjecting the second intermediate compound to the concomitant action of a boiling aliphatic alcohol of the series containing 2 to 5 carbon atoms and an alkali metal to eliminate the CN group in 17-position and to form in the alkaline alcoholic solution a 3-ketal derivative of 4-dihydrotestosterone, acidifying the said boiling alkaline alcoholic solution with a mineral acid and diluting the same with boiling water to obtain 4-dihydrotestosterone.

2,734,067
HYDROCARBON OXIDATION
Wilbur F. Chapman and John N. Cosby, Morristown, N. J., assignors to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York
Application April 8, 1953, Serial No. 347,444
8 Claims. (Cl. 260—451)

1. The process which comprises oxidizing liquid hydrocarbon material in the liquid phase by gaseous oxygen at temperatures in the range 150° to 200° C. under pressures maintaining the hydrocarbon in the liquid state, said liquid hydrocarbon material having an initial distillation temperature above 0° C. and at least 80% distilling over at temperatures below 100° C. and being principally composed of saturated aliphatic hydrocarbons having boiling points in the range 27° to 100° C., said oxidation being carried out in a pool of reaction mixture containing oxidation products of the hydrocarbon material, to which pool an oxygen-containing gas is supplied and 0.7 to 1.8



lbs. of the oxygen are absorbed therein for every 1 lb. of fresh hydrocarbon supplied to the pool, recovering from the gas-vapor mixture leaving contact with said pool substantially all the accompanying vapors of hydrocarbons and hydrocarbon partial oxidation products and returning them to said pool, withdrawing as exit gas the gases from which the hydrocarbon and hydrocarbon partial oxidation products have been separated, maintaining the carbon dioxide content of said exit gas in the range above

$$3.5\%\times\frac{x}{20} \text{ to } 8.5\%\times\frac{x}{20}$$

and its oxygen content no higher than about

$$3\%\times\frac{x}{20}$$

(where x=the percent oxygen in said oxygen-containing gas), treating aqueous phase of the resulting reaction product to remove therefrom water and formic and acetic acids separated from lower boiling materials and from higher boiling material present therein and which distills from said aqueous phase at temperatures above a temperature in the range 120° C. to about 150° C., and subjecting to further liquid phase oxidation substantially all the non-acidic, liquid constituents of said higher boiling material in a pool of reaction mixture to which said non-acidic, liquid constituents together with fresh afore-described liquid hydrocarbon material are supplied and in which the oxidation is carried out under the aforedescribed conditions.

2,734,068
SULFONYLOXY ESTERS OF β-AMINOALCOHOLS
Theodore A. Geissman, Los Angeles, Calif., assignor to Smith, Kline & French Laboratories, Philadelphia, Pa., a corporation of Pennsylvania
No Drawing. Application September 22, 1950, Serial No. 186,317
9 Claims. (Cl. 260—456)

1. Sulfonyloxy esters of β-aminoalcohols having the structure:

$$R^1{-}N(R^3){-}CH_2CH_2{-}OSO_2R.HOSO_2R$$

in which R^1 is selected from the group consisting of aralkyl, the alkyl portion of which contains not more than 3 carbon atoms; aralkyl having not more than 3 carbon atoms in the alkyl portion and substituted in the aryl nucleus with a methyl group; aralkyl having not more than 3 carbon atoms in the alkyl portion and substituted in the aryl nucleus with a methoxy group; aralkyl having not more than 3 carbon atoms in the alkyl portion and substituted in the aryl nucleus with a halogen atom;

R^2 is selected from the group consisting of lower alkyl, benzyl, benzyl substituted in the phenyl nucleus with a methyl group; benzyl substituted in the phenyl nucleus with a methoxy group; benzyl substituted in the phenyl nucleus with a halogen atom; and R is selected from the group consisting of lower alkyl, naphthyl, phenyl, methyl substituted phenyl, methoxy substituted phenyl and halogen substituted phenyl.

2,734,069

BACILLUS DISSOLVING COMPOUND AND METHOD FOR PRODUCING SAME

Sakae Masuda, Edogawa-ku, Tokyo, Japan

No Drawing. Application September 13, 1952, Serial No. 309,568
2 Claims. (Cl. 260—456)

1. A method of producing a bacillus dissolving composition which comprises mixing ethyl alcohol and xylol in equal amounts, adding to the mixture thus formed an equal amount of sulpho-salicylic acid, allowing the resultant mixture to stand until two layers are formed, separating the lower layer from the upper layer and subjecting the separated lower layer to distillation.

2,734,070

BIS(DIHALOCYANOVINYL) TEREPHTHALATES

Etcyl H. Blair, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Michigan

No Drawing. Application May 19, 1954, Serial No. 430,991
3 Claims. (Cl. 260—465)

1. A bis(dihalocyanovinyl) terephthalate of the formula



wherein X represents a member of the group consisting of bromine and chlorine.

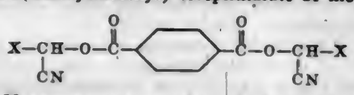
2,734,071

BIS(HALOCYANOETHYL) TEREPHTHALATES

Etcyl H. Blair, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Michigan

No Drawing. Application May 19, 1954, Serial No. 430,992
4 Claims. (Cl. 260—465)

1. A bis(halocyanoethyl) terephthalate of the formula



wherein X represents a member of the group consisting of chloromethyl and bromomethyl radicals.

2,734,072

ACRYLONITRILE PROCESS AND CATALYST

Charles R. Harris, Lockport, N. Y., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 28, 1952, Serial No. 290,564
16 Claims. (Cl. 260—465.3)

1. In the process for the production of acrylonitrile by the reaction of acetylene with hydrogen cyanide, the step which comprises passing a gaseous mixture of said reactants at a reaction temperature through a catalyst bed consisting of inactive support impregnated with a compound selected from the group consisting of alkali metal carbonates, hydroxides, borates and cyanides, said catalyst containing upwards of about 0.2% of bismuth as Bi_2O_3.

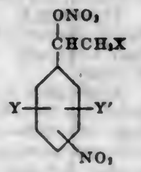
2,734,073

ALPHA-(HALOMETHYL) NITROBENZYL NITRATES

Ludo K. Frevel and John W. Hedelund, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

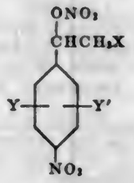
No Drawing. Application June 2, 1952, Serial No. 291,303
9 Claims. (Cl. 260—466)

1. Alpha-(halomethyl)nitrobenzyl nitrate compounds with the general formula:

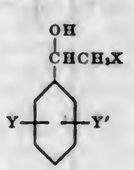


wherein X is a member of the group consisting of bromine and chlorine, and Y and Y′ are independently selected from the group consisting of hydrogen, halogen, lower alkyl, and lower alkoxy, each of said lower alkyl and lower alkoxy groups containing no more than 5 carbon atoms.

6. In a method of preparing alpha-(halomethyl)nitrobenzyl nitrate compounds with the general formula:



wherein X is a member of the group consisting of bromine and chlorine, and Y and Y′ are independently selected from the group consisting of hydrogen, halogen, lower alkyl, and lower alkoxy, each of said lower alkyl and lower alkoxy groups containing no more than 5 carbon atoms, the step which comprises reacting at a temperature below 50° C., an organic compound corresponding to the general formula:



wherein X, Y, and Y′ are as defined above and the para position of the ring is unsubstituted, with a nitrating agent containing at least two molecular proportions of nitric acid for each mole of the organic compound to be nitrated, said nitrating agent containing less than 10 weight per cent water.

2,734,074

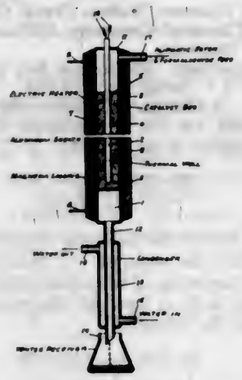
ACRYLIC ESTERS BY FORMALDEHYDE CONDENSATION

Byran C. Redmon, Baltimore, Md., assignor to National Distillers Products Corporation, New York, N. Y., a corporation of Virginia

Application December 3, 1952, Serial No. 323,882
6 Claims. (Cl. 260—486)

1. Process for the synthesis of acrylic esters which comprises passing a substantially anhydrous mixture of vapors of formaldehyde and an alkyl ester of the formula $R—CH_2—COOR'$, in which R is selected from the group consisting of hydrogen and lower alkyl radicals and R′ is

a lower alkyl radical, in which the proportion of formaldehyde to ester is within the range of 0.01 to 0.1 mol of



formaldehyde per mol of the ester, in contact with a dehydration catalyst heated to the reaction temperature.

2,734,075

α,α-DICHLOROPROPIONIC ACID ESTERS OF THE POLYHYDRIC ALCOHOLS

Harry F. Brust and Herman O. Senkbeil, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application April 6, 1953, Serial No. 347,183
6 Claims. (Cl. 260—487)

1. A fully esterified reaction product of α,α-dichloropropionic acid with an aliphatic polyhydric alcohol.

2,734,076

PARTIAL ESTERS OF THE ALIPHATIC POLYHYDRIC ALCOHOLS WITH α,α-DICHLOROPROPIONIC ACID

Charles T. Pumpelly, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application April 22, 1954, Serial No. 425,021
6 Claims. (Cl. 260—487)

1. A partially esterified reaction product of α,α-dichloropropionic acid with a polyhydric alcohol selected from the group consisting of glycerol, ethylene glycol, propylene glycol, trimethylene glycol, butylene glycol and the di- and tri-alkylene glycols of the ethylene, propylene and trimethylene series.

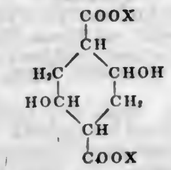
2,734,077

PRODUCTION OF CYCLO-HEXA-1,4-DIENE-1,4-DICARBOXYLIC ACID

Peter Smith, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain.

No Drawing. Application April 2, 1954, Serial No. 420,750
Claims priority, application Great Britain May 1, 1953
7 Claims. (Cl. 260—514)

1. A process for the production of cyclohexa-1,4-diene-1,4-dicarboxylic acid which comprises the steps of contacting a compound having a structure:



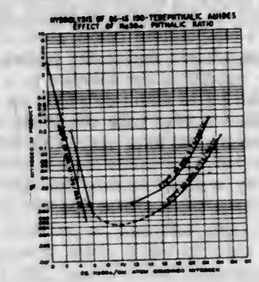
where X is selected from the group consisting of hydrogen and alkyl with a dehydrating agent selected from the group consisting of hydroxides and alkoxides of alkali metals and alkaline earth metals at a temperature of 100 to 150° C. and subsequently neutralising the product.

2,734,078

HYDROLYSIS OF AMIDES

John B. Wilkes, Albany, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware

Application May 7, 1953, Serial No. 353,552
6 Claims. (Cl. 260—515)



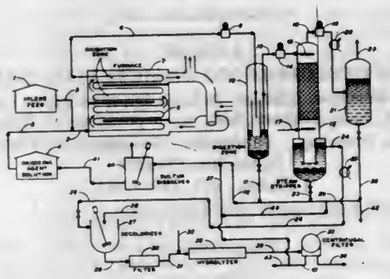
1. A process for hydrolyzing amides of phthalic acids to produce a phthalic acid product having a nitrogen content below about 0.03% by weight which comprises heating the amide with water and a quantity of strong mineral acid in excess of two equivalents per gram atom of combined nitrogen contained in the amide feed, to a temperature above about 300° F.

2,734,079

PROCESS OF PRODUCING PHTHALIC ACIDS

Harry J. Aroyan, El Cerrito, and John B. Wilkes, Albany, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware

Application December 30, 1953, Serial No. 401,352
6 Claims. (Cl. 260—515)



6. In a process for decolorizing a mixture of phthalic acid amides, ammonium phthalates and water produced by oxidation of xylenes, wherein the mixture is decolorized by intimately contacting it at elevated temperature with a solid adsorbent and then separating the adsorbent from the decolorized product, the method of reducing losses of phthalic acid values from the filtrate which comprises digesting the mixture at a temperature in the range from about 450° F. to 630° F. under an elevated pressure at least equal to that of steam in equilibrium of liquid water at digestion temperature for at least two minutes prior to the decolorization step.

2,734,080

RECOVERY OF PHTHALIC ACIDS

Harry J. Aroyan, El Cerrito, and John B. Wilkes, Albany, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware

Application July 12, 1954, Serial No. 442,694
19 Claims. (Cl. 260—525)

1. A process for recovering phthalic acids from mixtures of ammonium salts and amides of these acids which comprises acidifying an aqueous solution of said mixture with sulfuric acid to a pH in the range from about 2.5 to about 3.5, heating the acidified mixture to a temperature in the range from 300 to about 500° F. under superatmospheric pressure sufficient to maintain a substantial part of the water in liquid phase, cooling the mixture to a temperature below about 250° F., adding a quantity of sulfuric acid to the cooled mixture sufficient to lower the pH of the mixture to a value in the range from about 2.5 to about 3.5, filtering the resultant mixture to separate a filter cake consisting essentially of phthalic acid, mixing the filter cake with sufficient water to form a slurry having a solids content from about 2% to about 50% by weight, heating the slurry to a temperature in the range from 430 to 500° F. under a superatmospheric pressure sufficient to maintain a substantial part of the water in liquid phase, cooling the heated slurry to a temperature below about 250° F. and filtering the cooled slurry to recover a filter cake consisting essentially of phthalic acids.

2,734,081

PREPARATION OF β-ALANINE

Leslie G. Boatright, Stamford, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application May 18, 1954, Serial No. 430,728
4 Claims. (Cl. 260—534)

1. The process of producing a beta-alanine which comprises heating ethylene cyanohydrin at a temperature of at least about 70° C. in the presence of a catalytic amount of ammonia equivalent to that in the range of about 0.5–3.0% of 28% aqueous ammonia based on the weight of said ethylene cyanohydrin, and recovering a beta-alanine from the reaction mass.

2,734,082

N-2-ETHYLCROTONYL-N'-METHYLOL UREA

Otis E. Fancher, Elkhart, Ind., assignor to Miles Laboratories, Inc., Elkhart, Ind., a corporation of Indiana

No Drawing. Application November 27, 1953, Serial No. 394,890
1 Claim. (Cl. 260—553)

N-2-ethylcrotonyl-N'-methylolurea.

2,734,083

PREPARATION OF N,N-DIALLYL UREA

Jerry Peter Millonig, Stamford, and Pierrepont Adams, Darien, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application February 17, 1955, Serial No. 488,998
2 Claims. (Cl. 260—553)

1. The method for the preparation of N,N-diallylurea which comprises the steps of: subjecting diallylcyanamide to mineral acid hydrolysis at temperatures between about 50° C. and 100° C. for a period not exceeding one hour; and recovering the thus-formed N,N-diallylurea.

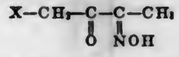
2,734,084

SYNTHESIS OF 1-HALO-2,3-BUTANEDIONE-3-OXIMES

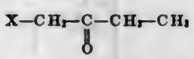
Mona Phyllis Doerner, Walnut Creek, Calif., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application July 21, 1953, Serial No. 369,528
5 Claims. (Cl. 260—566)

1. A method for the preparation of 1-halo-2,3-butanedione-3-oximes of the formula



wherein X is one of the halogens chlorine and bromine, which comprises the steps of (1) reacting a compound of the group consisting of nitrogenoxychloride and nitrogenoxybromide with at least an equi-molar amount of a halo-ketone of the formula



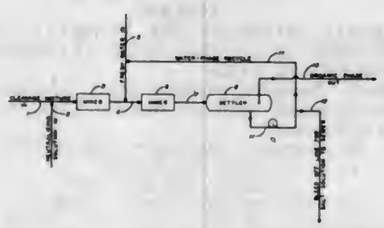
wherein X is one of the halogens chlorine and bromine, and (2) separating the desired 1-halo-2,3-butanedione-3-oxime product of reaction from the hydroxamyl halide by-product.

2,734,085

REMOVAL OF SALTS FROM ACETONE-PHENOL MIXTURES

Robert T. Adams, Walnut Creek, Judson C. Butler, El Sobrante, and Charles D. Heaton, El Cerrito, Calif., assignors to California Research Corporation, San Francisco, Calif., a corporation of Delaware

Application April 8, 1952, Serial No. 281,212
16 Claims. (Cl. 260—593)



1. A process for the production of phenol and acetone which comprises decomposing a cumene hydroperoxide concentrate containing about 90% by weight of cumene hydroperoxide and substantially free of cumene by heating said concentrate in the presence of an acid catalyst, neutralizing the decomposition mixture, mixing water with the neutralized decomposition mixture in an amount sufficient to form upon settling an organic upper phase containing substantially all of the phenol and acetone and some water, and an aqueous lower phase having a volume equal to at least 5% of the volume of said organic phase and containing in solution substantially all of the salts formed in the aforesaid neutralization, and separating said organic upper phase from said aqueous lower phase.

2,734,086

PRODUCTION OF AROMATIC HYDROPEROXIDES

Johan Michael Goppel and Simon Hendrik Zonneveld, Amsterdam, Netherlands, assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application April 10, 1952, Serial No. 281,682
Claims priority, application Netherlands July 3, 1951
7 Claims. (Cl. 260—610)

1. In a process for the production of an alpha,alpha-dialkyl arylmethyl hydroperoxide-containing reaction mixture by the interaction of an alpha,alpha-dialkyl arylmethane with an oxygen-containing gas, the improvement which comprises effecting said reaction in the presence of added pyridine.

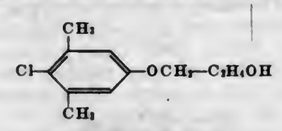
2,734,087

DIMETHYL-CHLORO-PHENOXY PROPANOLS

Frank M. Berger, Metuchen, Clarence V. Hubbard, New Brunswick, and Bernard J. Ludwig, Milltown, N. J., assignors, by mesne assignments, to Carter Products, Inc., New York, N. Y., a corporation of Maryland

No Drawing. Application January 3, 1951, Serial No. 204,268
3 Claims. (Cl. 260—613)

1. The organic compounds represented by the general formula



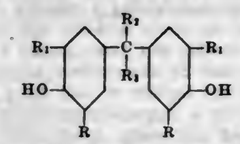
2,734,088

MONOMERIC CONDENSATION PRODUCTS OF ALKYLATED PHENOLS WITH CARBONYL-CONTAINING COMPOUNDS AND COMPOSITIONS CONTAINING SAID PRODUCTS

Edwin C. Knowles, Glenham, John A. Patterson, Newburgh, and Herman D. Kluge, Wappingers Falls, N. Y., assignors to The Texas Company, New York, N. Y., a corporation of Delaware

No Drawing. Application August 8, 1950, Serial No. 178,348
7 Claims. (Cl. 260—619)

2. A compound having the formula



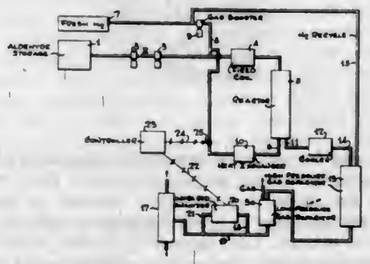
wherein R is an alkyl radical containing from 1 to 12 carbon atoms, R_1 is a tertiary alkyl radical containing from 4 to 12 carbon atoms, R_2 is chosen from the group consisting of hydrogen, alkyl radicals and substituted alkyl radicals, and R_3 is chosen from the group consisting of alkyl, aryl, and substituted alkyl and aryl radicals.

2,734,089

INFRARED CONTROL METHOD FOR ALCOHOL SYNTHESIS PROCESS

Charles E. Starr, Jr., and Elphege M. Charlet, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application May 8, 1951, Serial No. 225,134
4 Claims. (Cl. 260—638)



1. A method of controlling an alcohol synthesis process in which an aldehyde feed stream is hydrogenated under variable conditions of hydrogenation severity to form an alcohol product stream consisting of the steps of withdrawing at least a portion of the total crude alcohol product stream and passing this portion through an infra-red transparent sample cell, passing infra-red energy of 5.8 microns wave length through the said sample cell, impinging transmitted infra-red energy on an infra-red detector operative to provide an electrical signal proportional to the infra-red absorption of the alcohol product, and thereafter adjusting the hydrogenation severity in accordance with changes in the said electrical signal.

2,734,090

PREPARATION OF VINYLIDENE FLUORIDE

John D. Calfee, Dayton, Ohio, and Charles B. Miller, Lynbrook, N. Y., assignors to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

No Drawing. Application November 17, 1950, Serial No. 196,346
2 Claims. (Cl. 260—653)

1. In a process for preparing 1,1-difluoroethene, the step which comprises subjecting a mixture of hydrogen and 1,1-difluoro-1,2-dichloroethane in the vapor phase to a temperature between about 450° C. and about 600° C. in the presence of a metallic nickel catalyst.

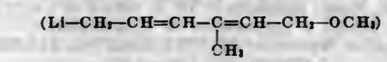
2,734,091

β-IONONE CONDENSATION REACTIONS

Thomas E. Londergan, Niagara Falls, N. Y., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application August 9, 1954, Serial No. 448,783
6 Claims. (Cl. 260—665)

6. 1-methoxy-3-methyl-2,4-hexadienyl-6-lithium



2,734,092

ISOMERIZATION OF CIS-DECALIN

Abraham Schneider, Philadelphia, and William K. Conn, Springfield, Pa., assignors to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

No Drawing. Application October 1, 1952, Serial No. 312,656
7 Claims. (Cl. 260—666)

1. Process for producing trans-decalin which comprises forming a liquid phase reaction mixture consisting essentially of cis-decalin, an isoparaffin, an olefin and hydrogen fluoride, subjecting said mixture to a temperature of from 0° C. to 120° C. for from one minute to two hours to convert a portion of said cis-decalin to trans-decalin without the formation of any sludge, and separating trans-decalin from the reaction mixture.

2,734,093

ISOMERIZATION OF DECALIN

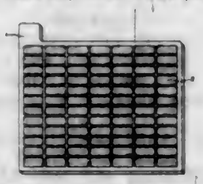
Abraham Schneider, Philadelphia, and William K. Conn, Springfield, Pa., assignors to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

No Drawing. Application October 1, 1952, Serial No. 312,657
6 Claims. (Cl. 260—666)

1. Process of producing isodecalins which comprises forming a liquid phase reaction mixture consisting essentially of decalin, an isoparaffin, hydrogen fluoride and boron trifluoride, heating said reaction mixture to a temperature of from 125° C. to 250° C. to convert a substantial portion of said decalin to isodecalins having a boiling range below that of said decalin, separating said isodecalins from the reaction mixture and substantially quantitatively recovering said isoparaffin from the reaction mixture.

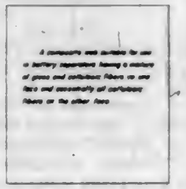
ELECTRICAL

2,734,094
METHOD FOR WELDING LEAD TO LEAD
Albert C. Simon, Arlington, Va., assignor to the United States of America as represented by the Secretary of the Navy
Application March 16, 1953, Serial No. 342,767
6 Claims. (Cl. 136—67)
(Granted under Title 35, U. S. Code (1952), sec. 266)



6. A method of producing a highly porous lead battery plate of large surface area which comprises flowing over lead particles filled into a mold for forming the battery plate a solution of between about 2 and 5.5% hydrogen peroxide by weight in aqueous acetic acid containing between about 40 and 85% acetic acid by weight and subjecting the formed battery plate while still in the mold and wet with the solution to a light compression of a magnitude sufficient to increase the tensile strength of the battery plate but insufficient to substantially reduce the porosity thereof.

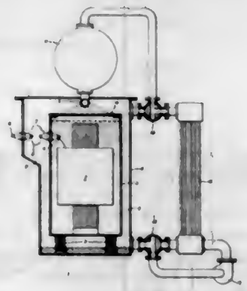
2,734,095
PLATE SEPARATOR FOR STORAGE BATTERIES
Edward L. Mears, Lexington, and Charles B. Moore, Scituate, Mass., assignors to W. R. Grace & Co., Cambridge, Mass., a corporation of Connecticut
Application September 20, 1952, Serial No. 310,728
1 Claim. (Cl. 136—145)



A substantially pinhole free, composite web suitable for use in battery separators having one face composed of from 10 to 50% glass fibers and correspondingly 90 to 50% of cellulosic fibers, the glass fibers having diameters lying between 0.00013 and 0.00030 inch and being of paper making length, the rear face of said composite web being composed essentially of cellulosic fibers, said cellulosic fibers forming at least one-half the thickness of the web, the glass fiber containing face of the web being substantially free of nibs and compacted glass particles.

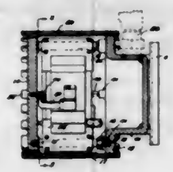
2,734,096
ELECTRIC TRANSFORMERS AND LIKE APPARATUS
Arthur Samuel Ennis, Sale, England, assignor to General Electric Company, a corporation of New York
Application November 9, 1951, Serial No. 255,605
1 Claim. (Cl. 174—15)

An electric transformer or like apparatus comprising an inner tank, a transformer proper immersed in a liquid and mounted within said inner tank, an outer tank enclosing an air space which substantially completely surrounds said inner tank, means for resiliently mounting said inner tank within said outer tank, a cooling liquid within said outer tank, means for maintaining a flow of said cooling liquid over the outer surfaces of said inner tank, said flow maintaining means comprising a reservoir mounted above said outer tank, spray means within said outer tank and connected to said reservoir, a cooler, and pump means connected to circulate said cooling liquid from the bottom of said outer tank upwardly through said cooler to said reservoir, and thence onto the top of said inner tank by way of said spray means, said pump means having sufficient capacity to maintain the level of said liquid in said outer tank below the bottom of said inner



tank while allowing a copious flow of said cooling liquid over the top and sides of said inner tank from said reservoir, said reservoir having a capacity at least equal to the volume of the space between said tanks plus the volume of said cooler, and valve means arranged such that said cooler may be alternatively connected directly between the top and bottom of said outer tank to cool said transformer by a thermosyphon action or between said reservoir and said pump means, said transformer containing a sufficient quantity of said cooling liquid to flood the space between said inner and outer tanks upon stoppage of said pump means.

2,734,097
HOUSING FOR ELECTRICAL APPARATUS
Leon M. Avery, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a corporation of New York
Application September 18, 1951, Serial No. 247,160
5 Claims. (Cl. 174—52)



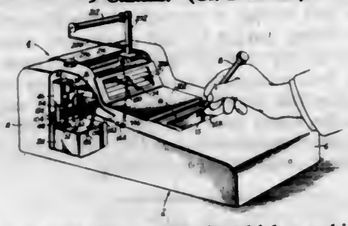
1. A housing for electrical apparatus comprising a base member having a circular portion, a circular plate member, means for supporting said plate member in spaced relation to the base and in axial registration with the circular portion thereof, said supporting means permitting limited axial movement of the plate relative to the base, and a tubular member encircling said plate member and the circular portion of the base member and having threaded connection with said members.

2,734,098
TRANSPOSITION INSULATORS
Elmer Johannes Bonnesen, West Orange, N. J., assignor to American Telephone and Telegraph Company, a corporation of New York
Application November 30, 1950, Serial No. 198,421
4 Claims. (Cl. 174—194)



1. A transposition insulator for electrical circuits comprising a body member of insulating material having its lower portion outwardly flared, said body member having therein a pin receiving recess which extends from said lower portion only partially into the body member to provide an unbroken upper surface at the top of said body member, said body member having on its outer surface, a pair of spaced apart circumferential wire receiving grooves, a third groove intermediate said wire receiving grooves, and a downwardly depending skirt of elastic insulating material positioned in said third groove and extending beyond the periphery of the outwardly flared lower portion of the body member.

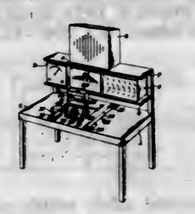
2,734,099
TELESCRIBER
Edward F. Cahoon, West Nyack, and Walter A. MacDonald, New York, N. Y., assignors to Telautograph Corporation, New York, N. Y.
Original application September 20, 1950, Serial No. 185,872, now Patent No. 2,711,442, dated June 21, 1955. Divided and this application November 13, 1952, Serial No. 330,232
9 Claims. (Cl. 178—19)



1. In a telescriber system in which graphic characters traced by a stylus at a transmitter are simultaneously reproduced at a receiver, apparatus comprising a transmission channel to transmit writing signals between said transmitter and said receiver, a recording pen, driving means responsive to said writing signals for moving said pen, recording paper, means for moving said paper in predetermined increments through said receiver, an ink reservoir, an ink-supply tank having a capacity substantially less than said reservoir and located above said reservoir; means connected with said supply tank for feeding ink to said pen, overflow vent means connected between said ink supply tank and said reservoir for controlling the level of ink in said tank, an ink pump arranged to pump ink from said reservoir to said supply tank, cyclic means for operating said pump, and circuit means for actuating said cyclic means as a function of the movement of said paper through said receiver.

2,734,100
METHOD AND APPARATUS FOR PRODUCING SOUNDS
Osmond Kendall, Ottawa, Ontario, Canada
Application May 7, 1951, Serial No. 224,927
Claims priority, application Great Britain May 16, 1950
32 Claims. (Cl. 179—1)

1. A method of producing sounds comprising the following steps, producing an audio frequency current, making an envelope contour according to a progression of instant amplitudes of sound, variably controlling said audio



frequency current until the residue of said audio frequency current conforms to the said envelope contour, and reproducing said residue.

2,734,101
AUTOMATIC TELEPHONE SYSTEM
Walter R. Villmann, Munich, Germany, assignor to Siemens & Halske Aktiengesellschaft, Munich, Germany, a corporation of Germany
Application April 6, 1953, Serial No. 346,829
Claims priority, application Germany April 8, 1952
28 Claims. (Cl. 179—16)



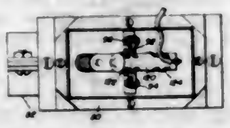
1. In an automatic telephone system having switches for building up connections, a device for governing the operation of said switches, means in said device for receiving signal impulses, a circuit arrangement for evaluating said impulses to determine the duration of said impulses and the duration of pauses therebetween, and control switching means for starting of the operation of said circuit arrangement to control the operation of said device only responsive to the determination of an impulse of a duration which is at least equal to the duration of the shortest impulse to be evaluated.

2,734,102
SEMICONDUCTOR DEVICES
Jacques I. Pantchechnikoff, now by change of name Jacques Isaac Pankove, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application March 31, 1949, Serial No. 84,672
11 Claims. (Cl. 179—171)



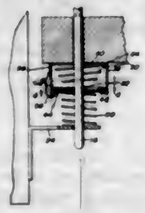
1. A semi-conductor device comprising a body of semiconducting material having a substantially flat face, a first electrode having a relatively large contact area with said body, at least four further electrodes consisting each of a metallic wire, each consisting of a wire-like metallic conductor, means for connecting alternate conductors together, and means for pressing said conductors substantially parallel to each other and relatively closely from each other against said flat face to provide substantially a line contact between each of said conductors and said face, the area of said line contacts being small compared to the contact area of said first electrode.

2,734,103
EMERGENCY SWITCH
Charlie J. Raynor, Rocky Mount, N. C.
Application March 9, 1953, Serial No. 340,991
3 Claims. (Cl. 200—61.5)



2. A inertia operated safety switch comprising a housing, a mounting post in said housing, a switch base journaled on said post, a position switch mounted on said base, an inertia member mounted on said base, a stud on said base, said stud being arranged at a point perpendicular to said base at said journal, a tension spring mounted on said stud and secured to said housing at a point transverse to said mounting post, a distributed weight member mounted on said base.

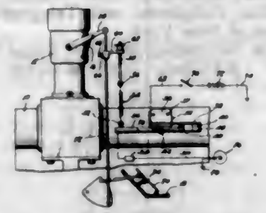
2,734,104
CRIB ANNUNCIATOR
Paul J. Gollhofer, Babylon, N. Y.
Application March 10, 1954, Serial No. 415,383
5 Claims. (Cl. 200—61.75)



1. A crib annunciator for use in combination with a crib having a crib leaf vertically slidably mounted on a pair of opposed vertically extending support rods carried by brackets attached to said crib comprising switch means concentrically disposed about one of said support rods, and conductor means for operatively connecting said switch means to an alarm device and a source of electrical power, said switch means including an electrically conductive casing, said casing having an insulative floating bottom plate slidably mounted on said one of said support rods, said bottom plate being vertically movable with respect to said casing, an electrical contact ring attached to said bottom plate and spaced from said one of said support rods, and an electrically conductive conically shaped coil spring having end portions engaging said bottom plate and said casing, the end portion of said coil spring engaging said bottom plate being inwardly spaced from said contact ring.

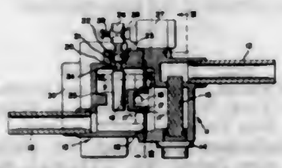
2,734,105
SIGNAL FOR AUTOMATICALLY WARNING THE DRIVER OF A TRAILING VEHICLE THAT THE SPEED OF A LEADING VEHICLE IS BEING RETARDED
Thomas G. Perry, Fair Haven, Vt.
Application February 20, 1952, Serial No. 272,616
1 Claim. (Cl. 200—61.89)

In a vehicle having an accelerator pedal and a linkage between said pedal and the carburetor butterfly valve and with a signal circuit and a lamp and flasher in the circuit; a warning signal operating means comprising a switch formed of a fixed contact, a rock lever pivoted between the ends thereof, a contact on one end of said lever confronting said fixed contact, a bracket arm formed with a boss through which said linkage extends, means adjusting said arm on said linkage, a bolt extending loosely through said arm, an eye on one end of said bolt, a lever tensioning spring connected between



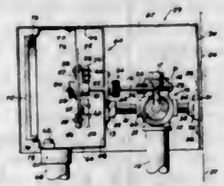
said eye and the other end of said lever, a spring tensioning nut threaded on said bolt and bearing against said bracket.

2,734,106
APPARATUS FOR MONITORING THE FLOW OF A COOLING FLUID
Joseph J. Riley and Russell L. Andrews, Warren, Ohio, assignors to The Taylor Winfield Corporation, Warren, Ohio, a corporation of Ohio
Application February 28, 1952, Serial No. 274,028
4 Claims. (Cl. 200—81.9)



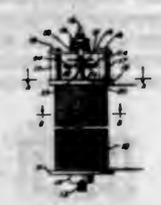
1. A flow responsive switch comprising a fluid impervious casing having an inlet port and an outlet port, a diaphragm within said casing intermediate said inlet and outlet ports and having a centrally disposed aperture, a thimble-like fitting carried by said diaphragm within said aperture and having an axial opening therein open in the direction of said inlet port, said fittings having an aperture in its side wall for discharging fluid from said axial opening on the outlet port side of said diaphragm, and a movable switch operator engaged by said fitting and extending through a side wall of said casing.

2,734,107
FLOW ACTUATED DEVICES
Arthur N. Reichel, Tenafly, N. J.
Application July 16, 1953, Serial No. 368,433
10 Claims. (Cl. 200—81.9)



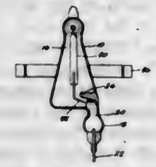
1. An automatic flow control device comprising flapper means disposed in the path of flow of a fluid, a shaft secured to said flapper means, a rotating dial secured to said shaft, electric switch means carried by said dial and adapted to be opened and closed upon rotation thereof, and means for mounting said electric switch means on said dial in a plurality of positions, said means including an elongated strip disposed across one face of said dial, the inner end of said strip surrounding said shaft, the outer end of said strip being bent back across the outer face of said dial, and means for tightening said bent back portion and strip against the dial whereby to fix the position of said strip angularly on said dial.

2,734,108
IRON VANE ELECTRICAL INSTRUMENT
Alfred J. Huber, Elizabeth, N. J.
Application February 11, 1954, Serial No. 409,700
6 Claims. (Cl. 200—103)



1. An electrical instrument comprising an insulator spool having an upper and a lower flange joined by a hollow tube; a field coil encircling the tube; a fixed iron vane system including four substantially-rectangular, soft-iron vanes longitudinally disposed within the tube and extending substantially the full axial extent of the field coil, each vane extending inwardly of the tube and having a long side disposed within a longitudinal groove formed in the inner wall of the tube; a movable system comprising two flat sheets of soft iron secured together so as to form four substantially-rectangular, soft-iron vanes disposed in mutually perpendicular planes, said vanes having an axial length substantially equal to that of the fixed vanes; alined pivot posts secured at opposite ends of the movable system vanes, each post carrying a pivot; a bearing carried by the lower spool flange and cooperating with one of the pivots; a bearing carried by a bridge member supported by the upper spool flange and cooperating with the other pivot; and spring means secured to the movable system and normally biasing same in a direction to bring the movable vanes proximate to the fixed vanes.

2,734,109
PHASE-SENSITIVE SWITCH
William F. Ertzman, Redondo, and Frederick J. Baumgarten, Beverly Hills, Calif., assignors to Delta Nuclear Instrument Company, Los Angeles, Calif., a corporation of Nevada
Application April 12, 1954, Serial No. 422,482
11 Claims. (Cl. 200—112)



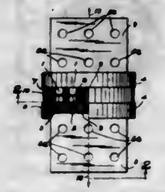
1. A phase-sensitive relay comprising a U-shaped hollow envelope housing made of nonmagnetic, nonconductive material, a U-shaped armature enclosed in said envelope said armature having a crosspiece supported from said envelope and a pair of arms pivotally attached to said crosspiece, a pair of electrodes positioned in the path of motion of said pair of arms said electrodes including a mercury pool and a contact communicating through said envelope with said mercury pool, each of said arms includes a pin contact having one end joined to said arm and the other end pointed toward said mercury pool, means to magnetize said armature from its crosspiece with a reference magnetic field, and means to apply a second magnetic field to said armature arms to urge them in contact with said electrodes when said second magnetic field is out of phase with said reference magnetic field.

2,734,110
MAGNETIC BLAST FUSES
Philip C. Jacobs, Jr., Newtonville, Mass., assignor to The Chase Shawmut Company, a corporation of Massachusetts
Application October 2, 1953, Serial No. 383,746
5 Claims. (Cl. 200—120)



1. A fuse comprising an insulating barrier, a fuse link having a current limiting restricted cross-section portion situated between a pair of relatively wide cross-section portions arranged at angles of substantially 90 degrees with respect to said restricted cross-section portion, said restricted cross-section portion being substantially in registry with one edge of said insulating barrier and said pair of relatively wide cross-section portions sandwiching said barrier, and an insulating hood mounted on said link and having a venting port adjacent said restricted cross-section portion of said link.

2,734,111
LOW-VOLTAGE HIGH-CAPACITY CURRENT-LIMITING FUSES
Frederick J. Kozacka, Amesbury, Mass., assignor to The Chase-Shawmut Company, Essex County, Mass., a corporation of Massachusetts
Application October 21, 1953, Serial No. 387,447
14 Claims. (Cl. 200—120)

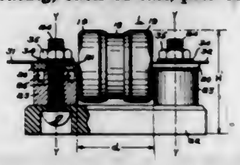


1. In combination an electric circuit having a circuit voltage of less than 300 volts and a predetermined available short-circuit current, and a current-limiting fuse inserted into said circuit to limit the flow of current therein below said available short-circuit current, said fuse comprising casing means, pulverulent filler means within said casing means, and a plurality of ribbon type fuse links arranged in parallel relation in said circuit and embedded in said filler means, each of said plurality of fuse links having one single neck portion spaced substantially equidistantly apart from the axially outer ends thereof and formed by a pair of lateral substantially V-shaped incisions, the dimensions of said neck portion of each of said plurality of links being sufficiently close to a point heat source to limit the heat losses in said fuse to less than .05 watt per amp. at rated current.

2,734,112
FUSE AND FUSE HOLDER COMBINATIONS
Frederick J. Kozacka, South Hampton, N. H., assignor to The Chase-Shawmut Company, a corporation of Massachusetts
Application August 30, 1954, Serial No. 453,044
8 Claims. (Cl. 200—133)

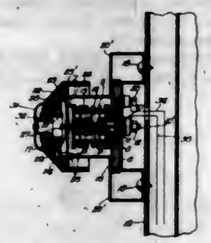
1. In combination ribbon-type fuse link means of the current-limiting type made of a metal having a relatively low total current-time integral, a pair of spaced blade contacts conductively interconnected by said link means, a pulverulent arc-quenching substance having a relatively high heat absorbing capacity closely surrounding said link means, a casing of insulating material accommodating said

link means and said substance, an insulating fuse base arranged substantially parallel to the plane defined by the wide sides of said pair of blade contacts, a pair of metallic supports for said pair of blade contacts supported by said base spaced a distance only slightly exceeding the length of said casing, each of said pair of supports being



approximately equal in height to the radius of said casing and having a flat surface engaging in butt-contact-fashion one of the wide sides of one of said pair of blade contacts, and tightening screw means projecting transversely across said wide sides clamping each of said pair of blade contacts against said flat surface of one of said pair of supports.

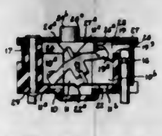
2,734,113
THERMOSTAT
Adolph J. Hilgert, Milwaukee, Wis., assignor to Wilwaukee Gas Specialty Company, Milwaukee, Wis., a corporation of Wisconsin
Application April 22, 1953, Serial No. 350,365
10 Claims. (Cl. 200—138)



3. In a thermostat, the combination of: an expansible and contractible enclosure having a pair of opposite end walls one of which is movable today and away from the other, said enclosure having a gaseous fill which is stable under arcing conditions and has a pressure substantially equal to atmospheric pressure, said movable wall being biased away from the other wall; a pair of cooperating contacts within said enclosure fixed respectively to said opposite end walls, one of said contacts being made of magnetic material; a permanent magnet within said enclosure cooperating with said magnetic contact to provide quick-make and quick-break of the circuit between said contacts; and temperature responsive mechanism including a bimetal biasing arm coacting with said movable wall, said mechanism being responsive to a predetermined temperature to effect movement of said movable wall toward said other wall against said bias to thereby effect circuit-making engagement of said contacts, said mechanism also being responsive to a temperature below said predetermined temperature to permit movement of said movable wall in the reverse direction under said bias to thereby interrupt the circuit between said contacts with a snap action.

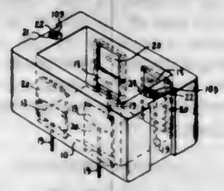
2,734,114
ELECTRIC SWITCHES
Alvin W. Krieger, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application December 12, 1952, Serial No. 325,648
12 Claims. (Cl. 200—154)

1. In a double-throw electric snap switch having an intermediate "off" position, in combination, a molded base composed of arc-resisting insulating material and having a recess formed therein, a plurality of pairs of stationary contacts respectively adapted to be connected to electric circuits to be controlled, said contacts being positioned within said recess so that a surface of each of said contacts is in substantially the same plane as the wall of said recess, a bridging contactor having portions movable into and out of engagement with said stationary contacts, a reciprocatable actuating member operable to effect sliding movement of said movable contact portions into and out



of engagement with said stationary contacts and said side walls of the recess selectively, said arc-resisting side walls serving to effect cooling and rapid extinguishment of any electric arc incident to movement of said contact portions to circuit interrupting position, and a substantially flat leaf spring member supported at its ends within said recess and operable with respect to said contactor to effect snap movement of the latter in opposite directions selectively in response to operation of said actuating member.

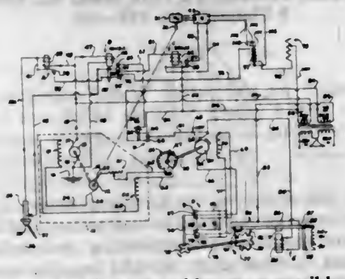
2,734,115
ELECTRICAL SWITCHES
Roland E. Dupre, Fiskdale, Mass.
Application May 12, 1953, Serial No. 354,470
8 Claims. (Cl. 200—168)



1. A device of the character described comprising an outer housing having solid continuous side walls with inwardly disposed recesses communicating with slots extending inwardly of said side walls through an end edge surface thereof, said slots being disposed in a plane parallel with said side walls within the limit of the thickness of said side walls and said recesses having areas of a width less than the width of the slots and an inner housing having recesses in the side walls thereof with slots in the side edges of said recesses, said inner housing being shaped to slidingly fit within said outer housing, each of said housings having contact members formed with edge portions slidably mounted in the slots in the walls thereof and each having a relatively flat intermediate portion lying in said recesses and extending outwardly thereof an amount sufficient to assume a frictional and an electrical engagement with each other when said inner housing is placed in said outer housing and means for securing said inner housing in said outer housing, the contact members of said outer housing being adapted to have electrical connection with the leads of a main line circuit, and the contact members of said inner housing being adapted to have electrical connection with switch mechanism supported in said inner housing, whereby the switch mechanism will be energized by engagement of said contact members of the outer housing with the contact members of the inner housing and will permit said switch mechanism to be deenergized by movement of the inner housing outwardly of the outer housing without disconnection of the contact members of said outer housing from the leads of the main line circuit, said contact members in the recesses of said outer housing and the exposed portions of the leads connected thereto being located within and

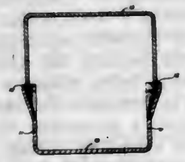
shielded by the solid continuous walls of said outer housing and from electrical contact with means externally of said solid walls.

2,734,116
CONTROL SYSTEM FOR ELECTRIC WELDER
Ora M. Rybolt, Lapeer, Mich.
Application March 23, 1954, Serial No. 418,038
9 Claims. (Cl. 219—8)



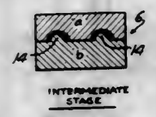
9. In an electric arc welder, a reversible motor for driving a rotatable field rheostat for a generator, a transformer having a low and high voltage output, a double pole double throw impulse relay switch, an electric circuit inter-connecting said relay switch, said motor and said high voltage output whereby in one position of said relay switch said motor rotates in one direction and in another position of said relay switch rotates in the opposite direction, longitudinal reciprocal means joined to said impulse relay switch for alternately switching its polarity, ratchet operated means engaging said reciprocal means for moving the same in opposite directions, a pawl intermittently engageable with said ratchet, a magnetic coil associated with said pawl for intermittently actuating the same and connected in the circuit of said motor and said high voltage output, a normally opened switch in circuit with said motor and high voltage output and having a magnetic coil in circuit with said low voltage output, a welding electrode holder, and a normally open manual switch on said holder in circuit with the coil of said latter normally open relay switch, whereby alternate actuations of said manual switch causes current to flow through said latter coil closing said latter normally open relay switch, energizing said motor and said pawl operating coil, successive actuations of said manual switch effecting automatic polarity reversals of said double pole relay switch.

2,734,117
BEAM MEMBER
John F. Randall, Detroit, Mich., assignor to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application January 23, 1953, Serial No. 332,871
3 Claims. (Cl. 219—10)



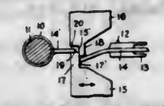
1. The process of manufacturing hollow steel structural members comprising forming sheet steel into two separate complementary U-shaped members, scalloping the edges of one of said complementary U-shaped members, the metal at the said scalloped edges being displaced at the peaks of the scallops so formed a distance substantially greater than the thickness of the metal whereby upon assembly of the separate complementary U-shaped members a series of spaced disconnected welding areas of limited extent are formed, assembling said complementary members with the open sides together and with their edges abutting to form a box-like structure and projection welding said members together by passing a large electrical current through said disconnected welding areas.

2,734,118
METHOD OF ELECTRIC WELDING
Alexander S. Patten, Toledo, Ohio, assignor to The Prestole Corporation, Toledo, Ohio, a corporation of Michigan
Application March 5, 1953, Serial No. 340,463
7 Claims. (Cl. 219—10)



1. The method of welding together two metal members having different electrical resistance characteristics with the member of greater resistance having at least one integral protuberance on the face thereof opposing the other member, which method comprises concurrently applying a clamping pressure and a gradient electric welding heat to the members to successively cause a softening of the metal of the lesser resistant member in the zone of contact of the protuberance therewith, a predetermined depth of penetration under applied pressure of the protuberance into the metal at said zone, and a surface softening of the protuberance metal whereby a welding of the protuberance metal to the penetrated metal of the other member is effected.

2,734,119
METHOD OF FORMING AND WELDING PINS TO METAL PARTS
Albert F. Pityo, Cedar Grove, N. J.
Application April 6, 1954, Serial No. 421,262
6 Claims. (Cl. 219—10)

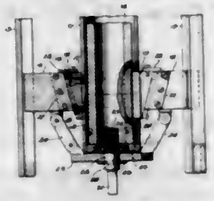


2. A method of forming and welding a pin to a metal part, comprising supporting the metal part at a selected position, feeding a wire longitudinally in a substantially horizontal path toward the metal part and causing the free end of the wire to contact with the metal part, welding the free end of the wire to the metal part, arranging blades having cutting edges and opposed parts above and below the wire and spacing the cutting edges a selected distance from the metal part so that the blades sever at an ascertained severing point, effecting a relative inward movement between the blades and causing the blades to sever the wire at said severing point, then bodily spacing the cutting edges of the blades from the free end of the severed wire and continuing the relative inward movement of the blades to bring said opposed parts together for applying pressure to the opposite sides of the end of the wire to spread the same and form a relatively thin outer end.

2,734,120
EXPANSIBLE AND CONTRACTIBLE WELDING JIG
Miles L. Sensenig, Lancaster, Pa., assignor, by mesne assignments, to Sperry Rand Corporation, New Holland, Pa., a corporation of Delaware
Application October 5, 1953, Serial No. 384,001
1 Claim. (Cl. 219—17)

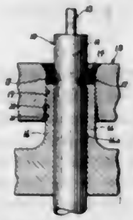
An assembling and welding jig for articles of polygonal cross-section comprising a stand, a free ended dead shaft

mounted on said stand, a tubular hub element rotatable on said shaft, a plurality of sets of similarly axially inclined trackways fixed on said hub element, all of said track-ways being similarly radially and axially inclined to the rotational axis of the hub element and the trackways of each said set being relatively axially spaced apart, a similar plurality of radially retractible and expansible axially extending jig elements, each said element including sets of relatively axially spaced slides fixed thereto and respectively guided for axial movement in the trackways of one of said sets of trackways, whereby



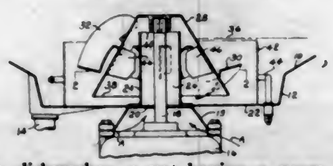
axial movement of said jig elements will also cause radial movement thereof relative to the rotational axis of said hub element, and means for causing simultaneous axial movement of said elements comprising, a cross-head axially aligned with said hub element, means guiding said cross-head for axial movement relative to said hub element, links connecting said cross-head to the respective jig elements, and threaded means connecting said cross-head to said hub element and operative to cause axial movement of the cross-head relative to the hub element.

2,734,121
METHOD AND MEANS FOR ASSEMBLING ARTICLES
Herman C. Dicome, Pittsburgh, Pa., assignor to Edwin L. Wiegand Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application May 11, 1953, Serial No. 354,152
3 Claims. (Cl. 219—38)



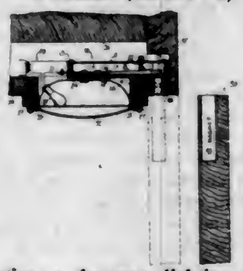
2. The method of forming a shoulder a predetermined distance inwardly of an end of a sheathed embedded resistor electric heater of the type wherein a resistance conductor is disposed in a tubular metal sheath and has a terminal end accessible through said sheath end, and wherein the resistance conductor is surrounded by and embedded within an electric-insulating heat-conducting refractory material which substantially fills the sheath, said method comprising clamping a holding member about the outer side of said sheath and inwardly from the sheath end to firmly hold said sheath and provide a ledge surface extending peripherally about said outer side at a predetermined distance inwardly of said sheath end, disposing a washer-like member about said sheath in position resting against said ledge surface, and moving a recessed die member in encompassing relation with said sheath in a direction axially thereof to move a progressively constricting die surface in a direction toward said ledge surface and in radial pressing relation against the outer peripheral edge of said washer-like member with sufficient force to indent the inner peripheral edge surface of said washer-like member into the adjacent wall portion of said sheath in opposition to the sheath backing provided by said refractory material.

2,734,122
DISHWASHERS
John P. Flannery, Syracuse, N. Y., assignor to Union Chemical & Materials Corp.
Application February 12, 1954, Serial No. 409,877
9 Claims. (Cl. 219—39)



5. In a dishwasher, a vat having a sump, a vertical axis rotary impeller mounted in said sump, said impeller being hollow and having a depending outwardly flared annular skirt, a drive shaft for said impeller projecting upwardly through the bottom of said sump, an air inlet conduit in the bottom of said sump extending upwardly within said hollow impeller, air circulating means disposed internally of said skirt and driven by said impeller for drawing air upwardly through said conduit, and an annular electric heating unit positioned in said sump and surrounding said impeller and adapted to heat air entering said conduit and emitted beneath the impeller skirt into the vat.

2,734,123
DOORWAY LIGHTING APPARATUS
Donald H. Gerber, Milwaukee, Wis.
Application October 13, 1952, Serial No. 314,521
1 Claim. (Cl. 240—2)



In combination a doorway lighting fixture mounted within a doorframe between an access door and a protective door, said fixture including as a unitary assembly a reflector and an elongated switch housing carried by said reflector, said switch housing extending laterally beyond said reflector, an electrical illuminating bulb mounted within said reflector, said housing enclosing a switch having contacts controlling the energization of said bulb, said switch comprising a fixed contact and a moveable contact cooperating therewith, an elongated flexible blade mounted within said housing and having one free end, said moveable contact being mounted on said blade adjacent its free end, an armature also carried by said blade adjacent its free end, a permeable member cooperable with said armature extending outside said housing adjacent the end of said housing furthest laterally from said reflector, said switch housing extending normal to the plane of movement of the doors mounted within the door frame when the doors are in closed position, and said permeable member being thereby positioned adjacent the protective door when said door is closed, a permanent magnet imbedded in said protective door adjacent said permeable member to cooperate with said permeable member and armature to open said contacts thereby deenergizing said bulb when said protective door is closed.

2,734,124
ILLUMINATED UMBRELLA HANDLE
Marlow J. Funk, New York, N. Y.
Application October 11, 1952, Serial No. 314,330
1 Claim. (Cl. 240—6.42)



An umbrella handle comprising an elongated body made of translucent material, having a bore crossing the longitudinal direction of said body and having another bore extending from a median portion of said first bore in said longitudinal direction; an electric bulb inserted in said first bore having a lateral pole with a portion facing said other bore and having a central portion forming the rear end of said bulb; a battery inserted in said other bore having a central pole contacting said lateral pole of said bulb and having a lateral pole; switching means electrically connecting said central pole of said bulb with said lateral pole of said battery; a mirror positioned across an end of said body and having a reflecting surface facing the same, and a screw passing through said mirror and through a threaded bore of said body and pressingly contacting said bulb whereby said screw fixes the positions both of said mirror and of said bulb.

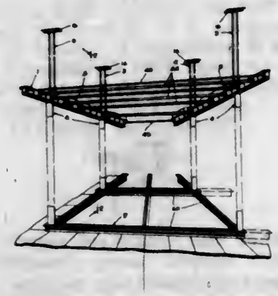
2,734,125
CLEARANCE LAMP
Harold C. Morris, Watsonville, Calif.
Application February 11, 1954, Serial No. 409,550
1 Claim. (Cl. 240—8.3)



A clearance lamp adapted to be secured to a vehicle comprising an electrically insulative body of hollow cylindrical shape, a lamp socket secured in said body and having an upper conductive contact plate positioned outwardly of said body, a coil spring attached to said contact plate and adapted to be affixed to the vehicle to resiliently mount said clearance lamp, said coil spring being connected to ground, a lamp in said lamp socket electrically connected to ground through said lamp socket, said contact plate and said coil spring, and a conductor connected to said lamp connecting said lamp with a source of electrical power, said conductor extending upwardly within the confines of said coil spring, an insulative plate in said lamp socket, a contact member on said insulative plate, a resilient spring engaging said insulative plate urging said plate to engage said contact member with said lamp, said conductor being connected to said contact member, said body having an open threaded side, and a lens threadedly detachably secured to said threaded side of said body.

2,734,126
COMBINATION CEILING AND LIGHTING FIXTURE
Michael Henry Kruger, Chestnut Hill, Mass., assignor to A. L. Smith Iron Company, Chelsea, Mass., a corporation of Massachusetts
Application March 6, 1953, Serial No. 340,689
20 Claims. (Cl. 240—9)

1. The combination of a pair of parallel horizontally extending chambered first frames disposed in one horizontal plane, independent depending means connecting each of said first frames to, but spaced from, the unfinished ceiling of a building construction to accommodate the required building equipment, a plurality of lamp sockets in excess of two in each of said first frames, the number of lamp sockets in each frame being equal to the number of lamp sockets in the other frame, each lamp socket of one frame being in alinement with a lamp socket of the other frame of said pair, wiring in said first frames connected to said lamp sockets, horizontally extending elongated fluorescent lamps connected in alined



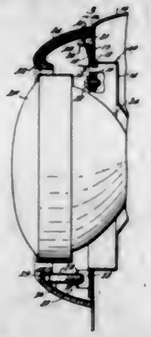
sockets of said first frames to extend at right angles from one of said frames to the other, rods at the ends of said first frames to anchor each of said first frames to the other in spaced relation to one another to correspond to the lengths of said lamps, depending supports connected to said first frames and extending downwardly from said first frames, horizontally extending light distributors, and horizontally extending rectangular second frames in a second horizontal plane supporting said light distributors and connected to the lower ends of said depending supports spaced from, and positioned below, said lamps the distance required to obtain the lighting effect desired.

2,734,127
CEILING
Shirley R. Naysmith, Meriden, Conn., assignor to The Miller Company, Meriden, Conn., a corporation of Connecticut
Application March 11, 1947, Serial No. 733,821
4 Claims. (Cl. 240—9)



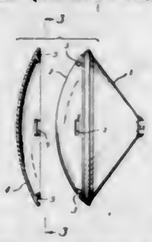
2. An over-all ceiling surfacing treatment for installation below a structural ceiling to completely conceal the same, and comprising, in combination, a plurality of wiring channels parallel with one another and supported below the structural ceiling at a common level, inverted, channel-carried reflecting troughs having downwardly extending side walls, said side walls carrying along the lower edges thereof parallel, outwardly extending, generally horizontal stiffening flanges all at a common lower level to provide side ledges extending toward similar ledges of adjacent reflecting troughs, channel-carried means to support fluorescent lamps to thereby form a direct lighting system with spaced units parallel with one another separated by elongated spaces between the ledges provided by adjacent troughs, and rectangular ceiling surfacing units disposed edge to edge and supported at their opposite ends solely by the adjacent stiffening flanges of two parallel adjacent reflecting troughs so as to close the spaces therebetween.

2,734,128
TRIM RING FOR LAMPS
John B. Dickson, Highland Park, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a corporation of Delaware
Application October 4, 1952, Serial No. 313,141
1 Claim. (Cl. 240—41.55)



In combination with a lamp and support, a trim ring of clear plastic material having circumferential inner and outer faces and terminal edge portions, a coating on said inner face producing a mirrored back, and means securing the ring to the support including a fastener extending over said outer face and having a hooked end in embracing engagement with the ring adjacent one of said terminal edge portions, the fastener defining a channel in cross section receiving the other of said terminal edge portions and including a projection extending outwardly of said channel and underlying said coated surface engaged in an opening of the support.

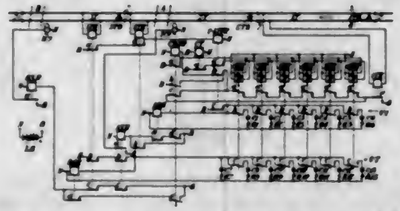
2,734,129
VEHICLE HEADLIGHT ATTACHMENT
Earl B. Kahla, Huntsville, Tex.
Application June 2, 1952, Serial No. 291,107
3 Claims. (Cl. 240—46.59)



2. In a headlight lens, a concavo convex transparent member, a plurality of inwardly directed depressions in said member adjacent the periphery of said member, a concavo convex elastic filter adapted to be stretched to conform to the shape of said member and having inwardly projecting studs to be mounted in said depressions.

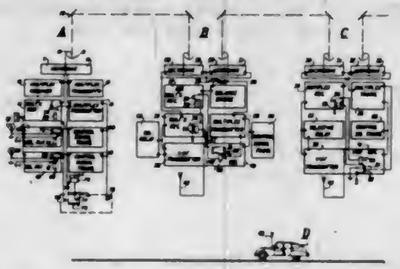
2,734,130
GRADUATED TIME CONTROL SYSTEM FOR HIGHWAY CROSSING SIGNALS
Arthur E. Dodd, Edgewood, and James E. McMahon, Penn Township, Allegheny County, Pa., assignors to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application October 30, 1952, Serial No. 317,758
5 Claims. (Cl. 246—130)

1. A graduated time control system for protecting a highway crossing comprising a stretch of railway track divided into a first and a second track section, a highway crossing signal adjacent said highway crossing, a control relay for controlling said highway crossing signal, a plurality of normally deenergized time element relays having different operating times and arranged to pick up sequentially, a plurality of capacitors one associated with each of said time element relays, means actuated by the presence of a train in said first track section for energizing all of said time element relays in multiple, and means controlled by the picking up of each time element relay



for connecting the associated capacitor in multiple with said control relay for delaying the operation of said highway crossing signal after the train enters said second section an amount of time dependent upon the speed of said train.

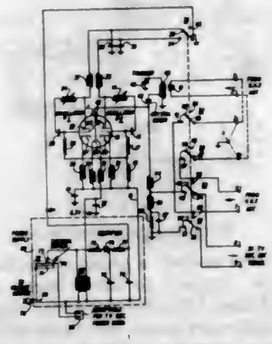
2,734,131
COMMUNICATION SYSTEM WITH CARRIER STRENGTH CONTROL
Henry Magnuski, Chicago, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application December 4, 1952, Serial No. 323,967
10 Claims. (Cl. 250—15)



1. A communication system including in combination, a terminal station, a plurality of fixed stations spaced along a course, at least one mobile station movable generally along said course, each of said fixed and mobile stations including radio transmitting and receiving equipment for providing radio communication between said mobile station and said fixed stations, said receiving equipment at each of said fixed stations including control means constructed to operate after a time delay when a signal is received thereat from said mobile station, with the time required for said control means to operate varying inversely with the strength of the signal received, a single communication channel connecting said terminal station and said fixed stations, transmitting means at each fixed station controlled by said control means of said receiving equipment thereat for transmitting to said terminal station signals received from said mobile station, means at said terminal station operative when a signal is received thereat to transmit a signal to said fixed stations, and means at said fixed stations responsive to said signal from said terminal station for disabling said transmitting means of all said fixed stations except said fixed station at which said control means first operates.

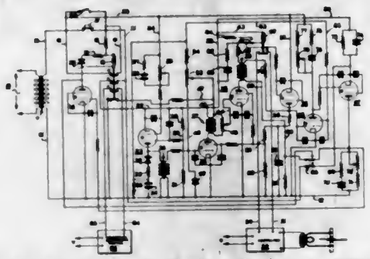
2,734,132
HETERODYNE RECEIVER
Henry Neil Frihart, Brookfield, and George F. Baroch, Lombard, Ill., assignors to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application February 3, 1953, Serial No. 334,878
2 Claims. (Cl. 250—20)

1. An ultra-high frequency tuner unit for use with a television receiver for enabling such receiver to utilize at least one television signal outside the normal frequency range of the receiver, said receiver having an input circuit capable of being rendered selective to a predetermined signal frequency and further having a power cord for supplying electrical energy to the receiver, said tuner including in combination, an antenna circuit for receiving television signals in a high frequency range outside the normal frequency range of the television receiver, at least one oscillator section for producing a heterodyne signal of a selected frequency, a mixer circuit coupled to said oscillator and to said antenna circuit for heterodyning a selected television signal within the aforesaid frequency range to the predetermined signal frequency at which the input cir-



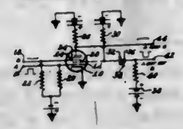
cuit of the receiver is rendered selective, a power supply for supplying energy to said oscillator, a pair of conductors for connecting said power supply to an energizing source, a thermal switch having an energizing element and further having a pair of normally open contacts in circuit with one of said conductors, and an electrical receptacle connected directly to one of said conductors and through said energizing element to the other of said conductors for receiving the aforesaid power cord of the television receiver effectively to connect such cord to the energizing source, whereby current flow through said cord causes said energizing element to close the aforesaid contacts of said thermal switch thereby energizing said power supply.

2,734,133
ELECTRONIC CONTROL CIRCUIT
Joseph J. Riley, Warren, Ohio, assignor to The Taylor-Winfield Corporation, Warren, Ohio, a corporation of Ohio
Application September 6, 1951, Serial No. 245,393
10 Claims. (Cl. 250—27)



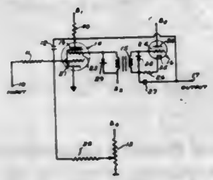
1. In an electronic timing device, a source of alternating current, a timing capacitor and a circuit for charging the same from said source comprising a rectifier, means to initiate operation of said rectifier, a control circuit connected across said source and including a discharge device having an anode, a cathode, and a control grid, means to initiate conduction in said discharge device comprising a second discharge device having an anode and cathode connected across said source and a connection between the anode-cathode circuit of said second discharge device and said control grid, means to initiate and continue conduction in said second discharge device subject to initiation and continuance of operation of said rectifier, and a circuit connection between a terminal of said timing capacitor and said control grid in bypassing relation to said second discharge device whereby initiation of conduction in said second discharge device initiates conduction in said first mentioned discharge device while conduction in said first mentioned discharge device is interrupted upon the charging of said timing capacitor to a predetermined voltage.

2,734,134
SIGNAL RESPONSIVE CIRCUIT
Arthur D. Beard, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 29, 1952, Serial No. 323,320
The terminal 15 years of the term of the patent to be granted has been disclaimed
12 Claims. (Cl. 250—27)



12. A signal response circuit utilizing an electron discharge tube having anode, cathode, screen grid and first and second control electrodes, wherein said screen grid electrode draws substantially zero current with a tube-cutoff voltage applied to said first control electrode, current of intermediate magnitude with a tube-conductive voltage applied to both of said control electrodes, and current of high magnitude with a tube-conductive voltage applied to said first control electrode and a tube-cutoff voltage applied to said second control, said circuit comprising said electron discharge tube, a first and second input terminal respectively connected to said first and second control electrodes, current discriminating means responsive to a current of magnitude greater than said intermediate magnitude and of magnitude equal to or less than said intermediate magnitude for respectively producing a signal of one type and another type, an output terminal, and means for coupling said current discriminating means between said screen grid electrode and said output terminal, said circuit being direct coupled throughout.

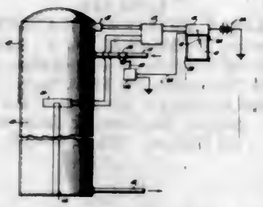
2,734,135
FREQUENCY MODULATED OSCILLATOR FOR HIGH CARRIER FREQUENCIES
Thomas C. G. Wagner, Brookdale, Md., assignor to The Davies Laboratories, Incorporated, Riverdale, Md., a corporation of Maryland
Application October 15, 1953, Serial No. 386,183
4 Claims. (Cl. 250—36)



1. A frequency modulated oscillator comprising a first tube of the type including a plate, a suppressor grid, a screen grid, a control grid and a cathode, a capacitor having one side connected to the control grid of said tube and the other side connected to the plate thereof, an input terminal connected through an impedance to said control grid and said capacitor, a second tube of the type having a plate, a grid and a cathode, having the cathode connected to the plate of said first tube, a transformer connected between the screen grid of said first tube and the grid of said second tube, means for retaining said

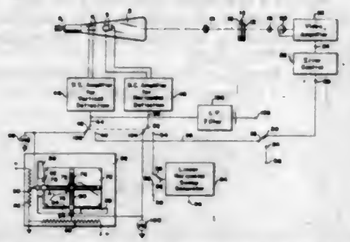
second tube biased below cut-off during discharge of said capacitor and means for suddenly rendering said second tube conducting upon completion of said discharge to recharge rapidly said capacitor.

2,734,136
LEVEL INDICATOR
Robert L. Atchison, Tulsa, Okla., assignor to Instruments, Inc., Tulsa, Okla., a corporation of Oklahoma
Application September 18, 1951, Serial No. 247,101
1 Claim. (Cl. 250—43.5)



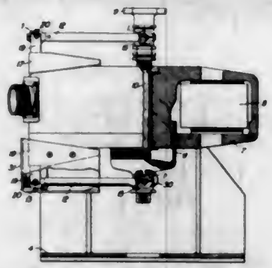
In an apparatus for indicating the level of a material in a container that includes a source of radioactivity mounted at one side of a container and a detector of radioactivity mounted at the other side of said container and means for amplifying the output of the detector and indicating the amplified output, in which the source of radioactivity is distributed vertically along the side of the container opposite the detector from a point horizontally opposite said detector to a point substantially below said detector, the distribution of the radioactive material being such that the most intense radiation occurs at the lower end and the radiation becomes less intense toward the top end, so as to cause the detector to respond in a generally linear way to changes in the level of material within the container, a plurality of sources of radioactive material and a plurality of detectors of radiation, each of said sources of radiation being vertically contiguous with the next and horizontally offset in stepwise fashion around the container, the corresponding detectors being similarly offset.

2,734,137
CATHODE RAY TUBE FUNCTION GENERATOR
Omar L. Patterson, Media, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Application October 4, 1950, Serial No. 188,291
10 Claims. (Cl. 250—201)



1. The method of function generation utilizing cathode ray oscilloscope apparatus providing an illuminated dot deflected in accordance with electrical signals introduced to said apparatus, which method comprises mounting a sensitized photographic element in the path of said dot, electrically producing deflection of said dot to record on said element a latent line image, providing from said element a member providing a visible line having the shape and size of said latent line image, mounting said member with said visible line occupying relative to said apparatus the position which was occupied by said latent line image at the time of recording, and electrically producing deflection of the dot provided by said apparatus under control of photoelectric means arranged, in response to illumination from said member due to said dot, to cause said dot to follow a path related in predetermined fashion to said visible line.

2,734,138
ELECTROMAGNETIC VIBRATION EXCITER
Emil G. Oravec, New Haven, Conn., assignor, by mesne assignments, to Textron American, Inc., Providence, R. I., a corporation of Rhode Island
Application February 9, 1953, Serial No. 335,945
9 Claims. (Cl. 310—27)



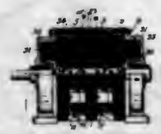
1. In a vibration exciter, a group of stationary parts, a moving element adapted to have linear reciprocatory movement, and means mounting said moving element on the group of stationary parts; the mounting means comprising arms each extending from the group of stationary parts to the moving element in combination with rubber cylindrical bushings at at least one end of each arm, each arm being attached at one end to one surface of a bushing and the moving element to the other surface of that bushing, whereby torsion of the rubber cylindrical bushings provides a hinged mounting of the moving element for linear reciprocations of the latter but prevent rotational modes in any direction other than in a plane normal to the axis of the bushings.

2,734,139
ELECTRICALLY OPERATED ERASER AND SIMILAR DEVICES
Thomas J. Murphy, Stamford, Conn.; Mary Louise Murphy, Stamford, Conn., executrix of said Thomas J. Murphy, deceased
Application April 27, 1951, Serial No. 223,194
10 Claims. (Cl. 310—29)



1. In a device of the character described, an activator comprising a core including spaced magnetic poles, an armature closely adjacent the poles and movable transversely thereof, means for magnetizing the poles to reciprocate the armature comprising a capacitative winding of two coils wound together so that the corresponding turns of the coils are side by side, means connecting one end of one coil to the opposite end of the other coil, a switch in said connection including cooperating contacts one of which is movable to and from the other, a potential absorbing winding between each coil and the switch, a drive pin connected with the armature, a fulcrum member for the pin mounted for lateral shifting movement by manual pressure on the pin, said movable switch contact being connected with said member for movement therewith toward and from the other contact to control operation of the armature, and means for connecting the other ends of the coils respectively to the opposite sides of a current supply.

2,734,140
AXIAL AIRGAP MOTORS AND GENERATORS
Louis W. Parker, Great Neck, N. Y.
Application February 1, 1952, Serial No. 269,463
12 Claims. (Cl. 310—268)



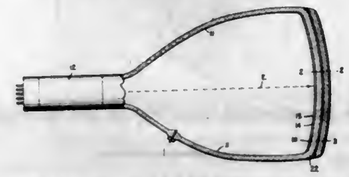
1. An electric motor comprising a rotor with a wheel which includes non-magnetic electric conductor material and having a hub and radially disposed spokes, a rim of non-magnetic material on the wheel secured to the said spokes, laminated cores in the space between the spokes of high permeability magnetic material with the direction of the highest permeability parallel to the axis of rotation of the rotor, a stator which includes a hub and rim, laminated cores in the space between the hub and rim of high permeability magnetic material with the direction of highest permeability parallel to the axis of the rotor, electrically conductive material around the said cores of the stator, an outside end member of the stator including a laminated magnetic member whose direction of highest magnetic permeability is substantially perpendicular to the axis of rotation of the said rotor; the laminations of said outside end member being in close magnetic contact with the laminations of the stator.

2,734,141
SECOND ANODE FOCUSING ELECTRODE
Richard H. Hughes, Lancaster, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Continuation of application Serial No. 96,017, May 28, 1949. This application June 12, 1952, Serial No. 293,175
15 Claims. (Cl. 313—82)



1. A focusing electrode for the final anode of a kinescope comprising a unitary metallic structure including an annular rim-portion formed on one side as an element of an electrostatic lens, a diaphragm portion having a relatively small orifice at the center thereof, a plurality of relatively compliant conductive supporting members each attached at one of its ends to the opposite side of the focusing electrode, and a glass bead at the other end of each supporting member for attachment of the electrode to a portion of the envelope of the kinescope by fusing the bead thereto.

2,734,142
CATHODE RAY TUBES
Robert Bowling Barnes, Stamford, Conn., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Application September 7, 1950, Serial No. 183,548
9 Claims. (Cl. 313—92)



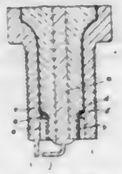
1. A cathode ray tube embodying a transparent face portion having a fluorescent screen adjacent its inner surface, electron discharge means for directing a beam of electrons onto said fluorescent screen to produce a luminous spot thereon, and a transparent cover element disposed over said face portion and having an outer surface which would normally reflect light rays from said luminous spot back to the screen so as to re-illuminate portions thereof, and a transparent reflection-reduction and light-transmission increasing coating on said surface for reducing surface reflections from an external source of illumination and for simultaneously increasing transmission of said light rays emitting from said luminous spot through the outer surface of said element whereby undesirable illumination of said fluorescent screen by said light rays which would otherwise be reflected back by said surface to the screen is substantially reduced and the contrast discrimination of an image produced on said tube surface by said luminous spot is greatly improved, said transparent coating comprising a thin layer of sub-microscopic, discrete, micro-granular, transparent solid particles forming minute irregularities on said outer surface, the concentration of said particles in the irregularities decreasing from said outer surface outwardly and the material of said particles being such that the effective index of refraction of said coating varies substantially from unity at the coating-air interface to an index value which progressively increases in a direction inwardly of said coating and approaches the index of refraction of the material of the cover element.

6. An article for use with a device of the type for producing illuminated images, said article being adapted to be positioned for viewing said images therethrough and comprising a relatively thin sheet of glass resulting from the heat joining of from 60% to 72% of silica, 14% to 20% of alkali, 9% to 11% of lime and lead, 0% to 7% of boric acid, 0.5% to 2% of a fining agent, 0.4% to 1.4% of manganese oxide, and 0.05% to 0.15% of vanadium oxide that is ultra-violet and X-ray absorbing, transparent and neutral gray in color.

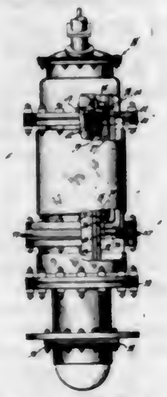
2,734,143
SPARKING PLUGS FOR INTERNAL COMBUSTION ENGINES
John Andrew Laird, Coventry, England, assignor to Joseph Lucas (Industries) Limited, Birmingham, England
Application February 17, 1953, Serial No. 337,327
Claims priority, application Great Britain February 18, 1952
2 Claims. (Cl. 313—131)

1. A sparking plug comprising in combination a body part, a pair of main electrodes one of which is of annular form and surrounds a part of the other, a sleeve of insulating material separating the main electrodes, and having an exposed end surface forming between the main electrodes a semi-conductive path across which sparking normally occurs, and a pair of additional electrodes forming between them an air gap across which sparking can temporarily

occur, at a higher voltage than that required to produce normal sparking, in the event of failure of normal sparking due to an abnormal condition of the semi-conductive path.

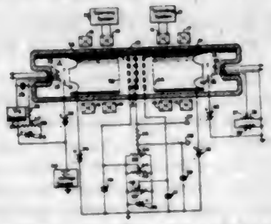


2,734,144
ELECTRODE POSITIONING MECHANISM
Merle V. Hoover, Mountville, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Application April 9, 1952, Serial No. 281,298
4 Claims. (Cl. 313—273)



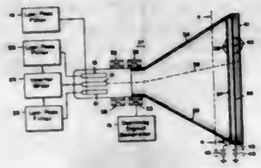
1. An electron discharge device comprising at least two co-acting electrodes, support means for each of said electrodes, at least one of said electrodes being elongated and having a mounting head adjacent to each of its ends, each of said mounting heads having a curved bearing surface which intersects the longitudinal axis of said elongated electrode, the support means associated with said elongated electrode including means axially tensioning said elongated electrode and means having spaced V grooves formed therein adapted to receive said curved bearing surfaces, each of said curved bearing surfaces being quick detachably seated in contact with portions of one of said V grooves, and said portions of each of said grooves being removed from the apex of each of said grooves.

2,734,145
STORAGE ELECTRODE FOR A SIGNAL STORAGE DEVICE
William O. Reed, Chicago, Ill., assignor to The Rauland Corporation, a corporation of Illinois
Application October 27, 1949, Serial No. 123,805
9 Claims. (Cl. 313—283)



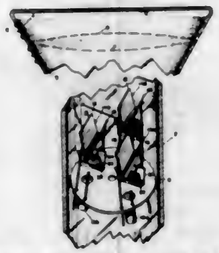
1. A storage electrode for a signal-storage device, consisting essentially of an electron-permeable, imperforate sheet of conductive material having a thickness less than the planar dimensions thereof and a plurality of secondary-electron-emissive dielectric islands uniformly distributed on one surface of said sheet and extending therefrom for a distance of the order of magnitude of the thickness of said sheet.

2,734,146
IMAGE-REPRODUCING DEVICES
Theodore S. Noskowicz, Wood Dale, Ill., assignor to Rauland Corporation, a corporation of Illinois
Application July 21, 1953, Serial No. 369,295
1 Claim. (Cl. 315—15)



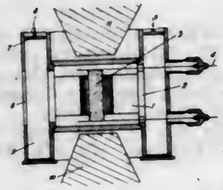
An image-reproducing device for use in a color television receiver comprising: a target assembly of the type comprising a luminescent screen having interspersed similar groups each consisting of a predetermined plurality of similar elemental target areas, each of said groups of target areas exhibiting a distinctive color-response characteristic to electron bombardment, and a parallax mask spaced from said luminescent screen and provided with a corresponding plurality of electron-permeable areas individually associated with one of said elemental target areas of each of said groups; means including at least one electron gun for projecting space electrons toward said target assembly with different angles of approach to selectively energize said groups of target areas; and an auxiliary blocking mask interposed between said electron-projecting means and said target assembly and provided with a plurality of electron-permeable areas individually larger than said electron-permeable areas of said parallax mask and in registration therewith; means for establishing a potential difference between said parallax mask and said luminescent screen; and means for maintaining said auxiliary blocking mask at a positive potential with respect to said parallax mask.

2,734,147
CATHODE RAY TUBE
Albert E. Beckers, West Paterson, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application January 26, 1953, Serial No. 333,026
16 Claims. (Cl. 315—23)



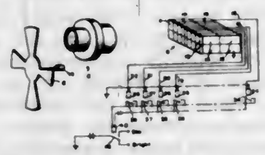
1. In a cathode ray tube having a fluorescent coating and an electron gun for directing a beam of electrons onto said coating; an electrostatic deflection system disposed between said gun and said coating; said system comprising: a first pair of deflection plates located between said gun and said coating and spaced apart on diametrically opposite sides of said beam; a second pair of deflection plates located between said pair of first deflection plates and said coating and spaced apart on diametrically opposite sides of said beam, said second pair of plates being substantially perpendicular to said first pair of plates; and an astigmatic electron lens comprising a pair of compensating electrodes co-acting with said first pair of deflection plates, said compensating electrodes being located on diametrically opposite sides of said electron beam and at an angle to said first pair of plates, one of said compensating electrodes being connected to each plate respectively of said first pair of plates.

2,734,148
MAGNETRON TUBE
Charles Azema, Paris, France, assignor to Compagnie Generale de Telegraphe Sans Fil, a corporation of France
Application March 20, 1951, Serial No. 216,540
Claims priority, application France April 3, 1950
4 Claims. (Cl. 315—39.61)



1. In a magnetron tube of the type comprising a cathode having an axis, an anode including a plurality of main cavity resonators, an auxiliary tunable cavity resonator, and means for coupling said auxiliary cavity resonator with said main cavity resonators: said coupling means being positioned in alternate main cavity resonators and symmetrically located with respect to the axis of said cathode.

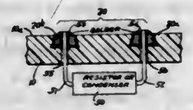
2,734,149
BRIGHT-SPOT SENSITIVE HEADLIGHT DIMMER
Jacob Rabinow, Takoma Park, Md.
Application March 16, 1953, Serial No. 342,508
4 Claims. (Cl. 315—83)



1. Automatic headlight dimming means comprising means for producing an image of a selected field of view, a plurality of separate means independently and simultaneously responsive to light on different portions of said image to produce output signals which are a function of the light intensity on the respective different portions, and dimming means controlled by said output signals for actuation whenever any of said output signals attains a predetermined level.

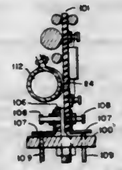
2,734,150
CIRCUIT COMPONENT AND METHOD OF MAKING SAME
John T. Beck, White Bear Lake, Minn., assignor to Beck's Inc., St. Paul, Minn., a corporation of Minnesota
Application January 12, 1950, Serial No. 138,245
2 Claims. (Cl. 317—101)

1. A circuit component comprising a hardened and set thermosetting resinous sheet having embedded therein areas of electrically conductive metal, said areas having datum peripheral dimensions at the surface of said resinous sheet and similar but slightly enlarged peripheral dimensions at the embedded opposite surface of said metal, the sides of said areas between each surface peripheral



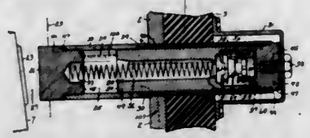
edge and its corresponding peripheral edge being outwardly concave, a layer of hard cured resinous material substantially surrounding said embedded areas of metal, and said resinous sheet being firmly bonded thereto.

2,734,151
MOUNTING FOR ELECTRONIC CIRCUIT
Donald H. Jacobs, Brookdale, Md.
Application May 16, 1952, Serial No. 288,257
9 Claims. (Cl. 317—101)



1. In a device of the kind described, a plate, elements forming an electronic circuit mounted on said plate, substantially parallel studs carried by said plate and projecting from an edge thereof in a direction substantially parallel to a surface of said plate, means mounted on said studs for securing them to a supporting panel, and resilient contact elements projecting laterally of said plate at both sides thereof and in a direction inclined toward that in which said studs extend.

2,734,152
ELECTROMAGNETIC TIMING DEVICES
Lloyd Russell Ranson, Charlotte, N. C., assignor to The Clark Controller Company, Cleveland, Ohio, a corporation of Ohio
Original application November 9, 1945, Serial No. 627,735. Divided and this application July 17, 1952, Serial No. 299,470
6 Claims. (Cl. 317—178)



4. An electromagnetic structure comprising a winding and ferrous pole material, for operatively moving a biased armature load by flux produced by the winding in a work air gap between an external pole face on the pole material and a corresponding load face on the load; means effective upon energizing the winding to cause magnetic flux and pulling force to develop in the work gap and to increase during a predetermined time interval from values incapable of moving the load, to values which move the load, and to cause the increase to go on at substantially one rate during a first part of the interval and at a rapidly accelerating rate during the latter part of the interval, said means comprising a support for the winding to position it with its axis intersecting the load

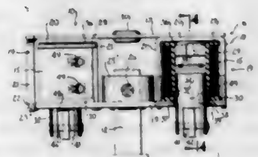
face, and supporting the pole material coaxially of the winding; the pole material having its said external pole face, transverse to the axis and forwardly of the forward termination of the winding; and the pole material formed to provide an inner pole face transverse to the axis and within the winding and between the ends of the winding; a normally rearwardly spring-biased forwardly movable plunger of magnetic material, and means on the support for guiding its movement axially of the winding; the plunger formed to provide a plunger face transverse to the axis and normally spaced from said inner pole face to provide a plunger flux gap; the winding when energized producing flux serially in the plunger, the plunger gap, the pole material and axially through the latter; the plunger being movable forwardly against its bias by flux in the plunger gap; means to retard forward movement of the plunger; the ferrous pole material forwardly of the winding being without lateral ferrous flux conducting portions whereby the flux therein is caused to flow through the pole material and directly across the work air gap and into the face on the load in concentrated condition without any reduction of the flux concentration by lateral ferrous conduction of flux.

2,734,153

SOLENOID WITH PLUNGER

Edgar M. Soreng, Skokie, and Hardin Y. Fisher, Hillside, Ill., assignors, by mesne assignments, to Soreng Products Corporation, a corporation of Delaware

Application February 19, 1952, Serial No. 272,404
3 Claims. (Cl. 317—191)



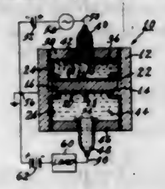
1. In a solenoid: a tubular non-magnetic coil support; a coil encircling and seated upon said tubular support; magnetically permeable frame means including opposite side members extending lengthwise along the exterior of the coil, and end portions connected to said side members and overlying the opposite ends of the coil support and confining the coil support against axial shifting relative to the frame means, one of said end portions of the frame means having a plunger opening therein coaxial with the tubular support; a magnetically permeable plunger received in and slidably guided by said tubular support and projecting therefrom through said opening in the frame means; a plunger stop on the opposite end portion of the frame means projecting into the coil support to hold the same against sidewise shifting on the frame, said stop being engageable by the plunger to define the attracted position thereof; a sleeve-like bushing received in a counterbore in the coil support at the end thereof remote from the plunger stop and projecting axially from the coil support to have its outer end portion snugly received in the plunger opening of the frame means so that the bushing cooperates with the plunger stop to hold the coil support against lateral shifting on the frame means, said bushing having an inside diameter substantially equal to that of said tubular support and cooperating with the coil support to guide the sliding motion of the plunger therein, and to transmit side thrust imposed on the plunger directly into the frame means to protect the coil support against damage; and an abutment on the frame means adjacent to the plunger opening engaged by the bushing and cooperating with the bottom of the counterbore in the coil support to hold the bushing against axial displacement out of the plunger opening.

2,734,154

SEMICONDUCTOR DEVICES

Jacques I. Pankove, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application July 27, 1953, Serial No. 370,267
14 Claims. (Cl. 317—235)



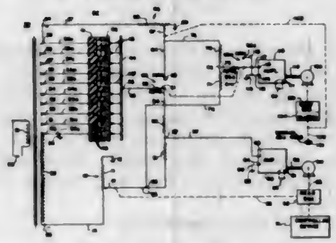
1. A semiconductor device comprising a body of semiconductor material and at least one electrode in rectifying contact with said body, said electrode comprising a conductive fluid.

2,734,155

MOTOR CONTROL APPARATUS ADAPTED FOR AUTOMATIC TO MANUAL CHANGE-OVER

Oscar Hugo Schuck, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware

Application May 29, 1953, Serial No. 358,293
13 Claims. (Cl. 318—19)



1. Control apparatus comprising in combination: a device to be adjusted; first motor means connected to adjust said device; automatic signal means for controlling adjustment of said device; manually adjusted signal means for controlling adjustment of said device; second motor means energizable to adjust said manually adjusted means; means connected to said motor means and said automatic signal means for normally causing energization of both said motor means in accordance with the signal from said automatic signal means; and switching means connected to said signal means for disabling said second motor means and said automatic signal means and causing energization of said first motor means in accordance with the signal from said manually adjusted signal means.

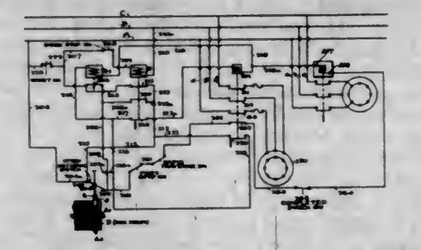
2,734,156

INDEXING MECHANISM AND INDEXING CONTROL FOR MOTOR DRIVEN TURRET LATHES

Harold B. Soule, Barrington, and Gordon W. Smithson, Pawtucket, R. I., assignors, by mesne assignments, to Pratt & Whitney Company, Incorporated, West Hartford, Conn., a corporation of Delaware

Original application January 4, 1949, Serial No. 69,184, now Patent No. 2,669,006, dated February 16, 1954. Divided and this application March 26, 1952, Serial No. 278,824
11 Claims. (Cl. 318—39)

1. A control for an automatic power-driven machine having an indexing member cyclically driven by an indexing motor and having a tool carriage cyclically driven by a traverse motor, said control comprising a traverse-motor relay in control of the power to the traverse motor; an indexing-motor relay in control of the power to said indexing motor, the traverse-motor relay being interlocked through the indexing-motor relay to permit energizing of the former only when the latter is deenergized; an indexing-initiating switch operated by the traverse motor to momentarily close the indexing-motor relay at the end of each tool-carriage cycle; a hold-circuit in said indexing-motor relay for maintaining the latter closed; a control relay in said circuit for opening said hold-circuit;



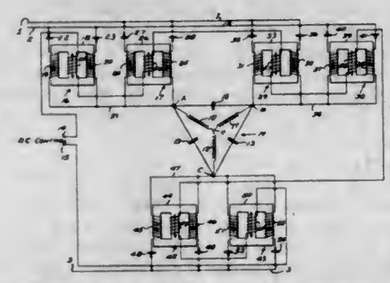
an index-stop switch for actuating said control relay, said stop switch being operated by the indexing motor to break the hold-circuit when the indexing cycle is completed, the opening of the indexing-motor relay reenergizing the traverse-motor relay; and relay means in series with said last mentioned switch for preventing the control relay from reenergizing the indexing-motor relay while the indexing-initiating switch is operative.

2,734,157

THREE PHASE MOTOR SYSTEM

Henry F. McKenney, Valley Stream, and Lothair H. Rowley, Bellerose, N. Y., assignors to The Sperry Corporation, a corporation of Delaware

Application January 15, 1953, Serial No. 331,458
3 Claims. (Cl. 318—207)



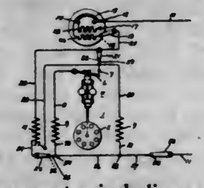
1. A control system for three phase motors comprising, in combination with a three phase motor having a terminal for each phase, a lead connected to each terminal, a source of three phase current and a conductor for each phase, three pairs of saturable core reactors, each reactor having two closed magnetic circuits and a reactor winding inductively disposed upon each magnetic circuit, the four reactor windings of each pair of reactors having separate connections to the lead for one motor phase winding with those of each pair connected to a different lead and two of the pairs of reactors having the reactor windings of one reactor of each pair connected in parallel to one phase conductor and those of the other reactor of each pair connected in parallel to another phase conductor and the third pair of reactors having their four reactor windings connected in parallel to the third phase conductor, a unidirectional conducting device in series with each reactor winding in said connections, the said devices for the two reactor windings of each reactor being oppositely poled, and a control circuit including a control winding on each magnetic circuit, the control windings being arranged in the same relation to the two reactor windings on each reactor and in push-pull relation to the two reactors of each pair.

2,734,158

PROTECTIVE ARRANGEMENT FOR DUAL-VOLTAGE MOTOR

Richard E. Seely, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York

Application December 29, 1954, Serial No. 478,396
4 Claims. (Cl. 318—221)



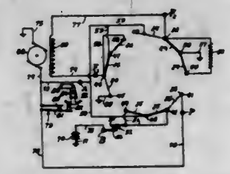
1. A dual-voltage motor including a pair of windings, means for connecting said windings in parallel when said motor is operated at a first lower voltage and in series when said motor is operated at a second higher voltage, and means for protecting said windings from excessive heating comprising a bimetallic element adapted to be connected in series with the source of power for said motor, a pair of heating elements adjacent said bimetallic element, and means for connecting one of said heating elements and said bimetallic element in series with said windings when said windings are connected in parallel and for connecting the other of said heating elements and said bimetallic element in series with said windings when said windings are connected in series.

2,734,159

ELECTRIC CONTROL SYSTEM AND OPERATING SWITCH FOR WINDSHIELD WIPER MOTORS

Homer F. Malone, Millburn, N. J., assignor to The Wilcolator Company, Elizabeth, N. J., a corporation of Delaware

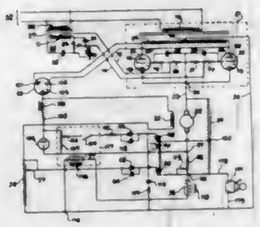
Application May 25, 1953, Serial No. 357,195
9 Claims. (Cl. 318—257)



4. In a rotary electric switch including a plurality of operative circuits for controlling the operation of a reversible electric windshield wiper motor having an armature and a field winding and a wiper blade parking switch one side of which is connected into the armature of the motor, the rotary switch having an "off" position and first and second "on" positions in series and comprising a base plate of insulating material, a plurality of terminal connectors mounted on the back of the base plate for connection respectively to the armature of the motor, the two terminals of the field winding of the motor and to the other side of the parking switch, a terminal connector mounted on the back of said base plate for connection to a source of electric energy, a bimetal snap acting blade circuit breaker mounted on the front of said base plate in fixed position having a movable contact and electrically connected to said last-mentioned terminal connector, a circular series of twelve electric contacts regularly spaced angularly with respect to each other and mounted at the front of the base plate around said bimetal blade, a rotor including a driving disc of insulating material axially arranged with respect to and facing said circular series of contacts, three metal contact bridges carried by said driving disc regularly spaced angularly with respect to each other and each engaging and connecting two adjacent contacts of said series in

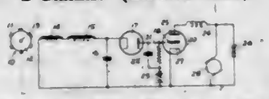
each position of the rotor, said three contact bridges being respectively operable over three separate groups of four contacts in series of said series of twelve contacts, each contact bridge respectively interconnecting the first and second, the second and third and third and fourth contacts of its group of four contacts when the rotor is respectively in its "off" position, its first "on" position and its second "on" position, a resistor mounted on said base plate and having terminals respectively connected into the first and third contacts of one group of four contacts, a ground connection from the second of said one group of four contacts, a connection from the first contact of said one group of four contacts to one terminal connector for the field winding, the fourth contact of said one group of four contacts being connected to the terminal connector for the parking switch, a ground connection from the fourth contact of the second group of four contacts, the first and third contacts of the second group of four contacts being interconnected and connected to the bimetal blade, the second contact of the second group of four contacts being interconnected with the second and fourth contacts of the third group of four contacts and all three connected to the terminal connector for the armature of the motor, and the first and third contacts of the third group of four contacts being interconnected with each other and connected to the other terminal connector for the field winding of the motor.

2,734,160
ELECTRICAL CONTROL SYSTEMS
Clifford V. Franks, Cleveland, Ohio, and Walter J. Brown, Titusville, Fla.; said Franks assignor to said Brown
Application July 31, 1951, Serial No. 239,504
Claims priority, application Great Britain August 2, 1950
18 Claims. (Cl. 318—308)



1. In an electrical system having a controllable converter supplying power to a load, a current-limiting control circuit for the converter including an impedance which increases as the current through it increases connected to carry a current dependent on the load, a reference voltage source, means for deriving a control voltage representing the difference between the voltage across said impedance and the voltage of said reference voltage source and applying the control voltage to the converter to regulate the output thereof, said impedance having a high positive coefficient of resistance.

2,734,161
MOTOR SPEED CONTROL SYSTEM
Robert A. Fryklund, Dedham, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application April 11, 1952, Serial No. 281,867
2 Claims. (Cl. 318—328)



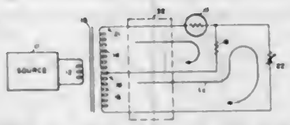
1. In a motor control circuit, a motor to be controlled, a phonic wheel mechanically connected to and driven by said motor, a pickup coil carried in close spaced adjacency to said wheel for generating voltage impulses at a repetition rate which is a function of the motor speed, a resonant circuit connected to the output side of said coil and having a resonant frequency corresponding to a motor speed less than the desired operating speed, a control triode tube, a rectifier serially connected between the grid of said control tube and the output side of said resonant circuit, a filter circuit connected between said rectifier and said control tube, a source of fixed negative potential connected via said filter circuit to the grid of said control tube for negatively biasing the grid, a source of positive potential, the field winding of said motor, the plate and cathode of said control tube and the source of positive potential being serially connected with one another, and the armature winding of said motor being connected across the source of positive potential whereby the control tube and field winding will conduct more current when the motor speed exceeds a predetermined value to decrease the motor speed and will conduct less current when the motor speed is less than the predetermined value to increase the motor speed.

2,734,162
VOLTAGE REGULATING CIRCUIT
Gordon C. Blanke, Sierre Madre, Calif., assignor to Beckman Instruments Inc., South Pasadena, Calif., a corporation of California
Application January 18, 1954, Serial No. 404,510
4 Claims. (Cl. 321—15)



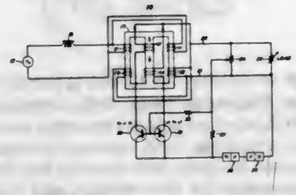
1. A rectifying and voltage regulating circuit producing a voltage-controlled direct current output from a source of alternating current, said circuit including: a thermionic tube amplifier providing a first element comprising an amplifier output anode, a second element comprising a grid and a third element comprising a cathode; an input circuit for said tube including an input capacitor connected serially with said source of alternating current, said anode and said cathode; feedback means for establishing a feedback voltage which is at least a portion of said direct current output voltage and which varies as a function of such output voltage, said feedback means including a voltage divider and means connecting at least a portion of said direct current output voltage across said divider, at least one of the elements of said divider having a nonlinear current-voltage characteristic; means for supplying such feedback voltage to said grid of said tube; and means for applying to said grid a potential biasing said grid near the potential of said cathode, said means including a source of substantially constant reference voltage connected to said cathode.

2,734,163
REGULATING CIRCUIT
Cyrus Frank Ault, Clifton, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application December 31, 1954, Serial No. 479,026
5 Claims. (Cl. 321—18)



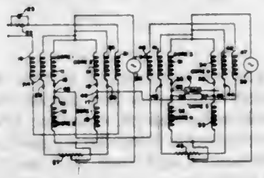
1. A current regulating circuit comprising a first series circuit and a second series circuit, said first series circuit comprising a first source of voltage, a load impedance, and a current regulating element; said second series circuit comprising a second source of voltage, a correcting impedance, and said load impedance, said first source of voltage being polarized to cause current to flow through said load impedance in one direction and said second source of voltage being polarized to cause current to flow through said load impedance in the opposite direction.

2,734,164
CURRENT SUPPLY REGULATING APPARATUS
Clarence Stuart Knowlton, Springfield, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application September 22, 1953, Serial No. 381,669
10 Claims. (Cl. 323—56)



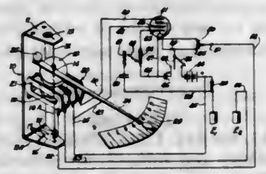
1. Apparatus for supplying alternating current from a supply source to a load circuit including a load comprising a saturable transformer having a first and a second saturating winding, a first transistor of the n-p-n type, a second transistor of the p-n-p type, each of said transistors having a collector, an emitter and a base, means for deriving from said load circuit and impressing between the base and emitter of each of said transistors an alternating voltage the amplitude of which varies in response to amplitude changes of the alternating load voltage, means for supplying current from said supply source through said first saturating winding and into the collector and out of the emitter of said first transistor during half-cycle periods of one polarity of said supply source and means for supplying current from said supply source into the emitter and out of the collector of said second transistor and through said second saturating winding during half-cycle periods of opposite polarity of said supply source.

2,734,165
MAGNETIC AMPLIFIER WITH HALF-WAVE PHASE REVERSAL TYPE OUTPUT
Carroll W. Lufcy, Silver Spring, and Albert E. Schmid, Jr., Greenbelt, Md., assignors to the United States of America as represented by the Secretary of the Navy
Application June 30, 1952, Serial No. 296,527
3 Claims. (Cl. 323—89)
(Granted under Title 35, U. S. Code (1952), sec. 266)



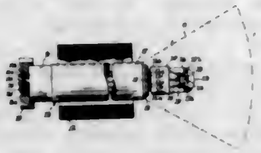
1. A multi-stage half-wave magnetic amplifier including first and second amplifier stages, each of said stages including four impedance elements connected in a closed circuit to form a bridge circuit, two of said impedance elements in each stage including power windings wound on separate reactor elements, asymmetrical conducting elements in each of the bridge circuits arranged so that each of the power windings in the first stage are energized during one-half cycle of a supply potential applied across opposite corners of the first-stage bridge circuit and the power windings in the second stage are energized in phase opposition to the first-stage during one-half cycle of a supply potential applied across opposite corners of the second-stage bridge circuit, means including input stage control windings for differentially varying the impedances of the power windings in said first stage bridge circuit in response to a contact signal, first stage and second stage reference windings on said reactor elements, first circuit means including asymmetrical conducting elements connected in series with said first stage reference windings for energizing said first stage reference windings during the other half cycle of the supply potential applied to opposite corners of said first stage bridge circuit, second circuit means including asymmetrical conducting elements connected in series with said second stage reference windings for energizing said second stage reference windings during the other half cycle of the supply potential applied to opposite corners of said second stage bridge circuit, variable impedance elements in said first and second circuit means for equalizing the flux levels set in the reactor elements of said first and second stages in the absence of a control signal to said input stage control windings, means including second stage control windings directly connected across the remaining corners of said first stage bridge circuit for differentially varying the impedances of the power windings in said second stage bridge circuit, and a load connected across the remaining corners of said second stage bridge circuit, the asymmetrical conducting elements in said second stage being connected to present the same polarity to said load as the first stage asymmetrical conducting elements present to said second stage control windings.

2,734,166
GALVANOMETRIC DEVICE AND CIRCUIT
Donald E. Hooker, Skokie, Ill., assignor to Raymond T. Moloney, Chicago, Ill.
Application November 8, 1952, Serial No. 319,471
9 Claims. (Cl. 324—62)



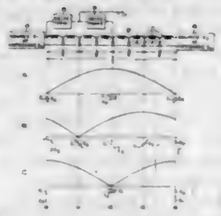
1. A galvanometer and circuit for detection and indication of resistance changes in a test connection across a pair of test electrodes, said circuit comprising a vacuum tube having at least a control grid, a plate, and a cathode, and a galvanometer having a polarized indicating movement, a deflection coil for setting up a deflecting field for said movement, and a balancing coil for setting up a balancing field to oppose the deflecting action of said deflecting coil upon said movement; a deflecting circuit including said plate and deflection coil in series with a source of plate voltage and said cathode; a balancing circuit including a source of balancing voltage and adjustable voltage-dividing means connected with said balancing coil to provide a balancing field of selective intensity, and a sensing grid circuit including a pair of electrodes connected with a source of test potential, one of said electrodes also having connection with said cathode, and the other of said electrodes having connection with said control grid to apply a plate-current modifying potential thereto responsive to alteration of the value of a tested resistance connected across said test electrodes to unbalance the balanced fields of said deflecting and balancing coils and produce an indicating action of said galvanometer movement.

2,734,167
TESTING DEVICE FOR CATHODE RAY TUBES
Sam Bimonte and Joseph F. Valenti, New York, N. Y.
Application March 14, 1952, Serial No. 276,716
3 Claims. (Cl. 324—72)



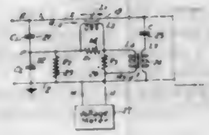
1. A testing device for the testing of circuits of a cathode ray tube having certain of its electrodes connectable to respective ones of said circuits by way of contact pins receivable by corresponding terminals in a socket, said tube having a stem passing through a focusing coil on being attached to said socket; said device comprising an elongated body of a length at least substantially equal to that of said focusing coil, a base on one side of said body provided with a plurality of connector pins including a first pin, a second pin, a third pin and a fourth pin insertable into said socket, a head on the other side of said body, said head having a transparent envelope, a filament in said envelope visible therethrough, an electron-emissive cathode in said envelope adapted to be heated by said filament, a fluorescent target electrode in said envelope excitable by electrons from said cathode, a deflecting electrode in said envelope intermediate said cathode and said target electrode, a plurality of leads passing through said body and connecting, respectively, said target electrode to said first pin, said deflecting electrode to said second pin, one extremity of said filament to said third pin, and the other extremity of said filament as well as said cathode to said fourth pin, and key means on said base for so aligning said connector pins with said terminals as to connect said filament to a source of heater current, said target electrode to a source of potential more positive than that applied to said cathode by said source of heater current, and said deflecting electrode to a source of variable biasing voltage.

2,734,168
ELECTRICAL PHASE DISCRIMINATOR CIRCUITS
Robert A. Zachary and John G. Schermerhorn, Syracuse, N. Y., assignors to General Electric Company, a corporation of New York
Application April 17, 1950, Serial No. 156,298
13 Claims. (Cl. 324—83)



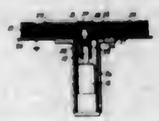
1. A phase detector circuit responsive to the phase difference between two alternating voltages of the same frequency, comprising an electrical transmission path, two means for respectively impressing said voltages on said path for transmission therethrough in opposite directions, each of said means substantially terminating said path in its characteristic impedance, and means for detecting the difference in voltage between two points spaced apart along said path.

2,734,169
DIRECTIONAL APPARATUS FOR USE WITH HIGH FREQUENCY TRANSMISSION LINES
Tjiske Douma, Haddonfield, N. J., assignor to Sierra Electronic Corporation, San Carlos, Calif., a corporation of California
Application January 12, 1953, Serial No. 330,810
4 Claims. (Cl. 324—95)



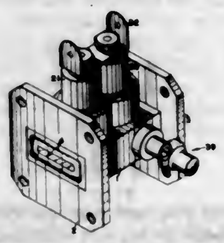
1. In high frequency directional apparatus for use over a substantial frequency range with transmission lines of the type which serve to supply frequency energy to a complex energy absorbing load, means forming a relatively high impedance in shunt with the line for deriving a voltage proportional to the line voltage, said means comprising first and second capacitances in series and arranged to form a voltage divider, a winding associated with one conductor of the transmission line and functioning as a current transformer, means for deriving voltages proportional to the frequency of the energy, said last means including a second transformer connected across the line in series with a condenser, and means serving to connect said winding in series with said second capacitance and also in series with the secondary of said second transformer, and voltage indicating means connected to indicate the resultant voltage across the terminals of said last named series connections.

2,734,170
CRYSTAL HOLDER
Herbert F. Engelmann, Mountain Lakes, N. J., and John A. Kostriza, New Dorp, N. Y., assignors to International Telephone and Telegraph Corporation, a corporation of Maryland
Application June 22, 1951, Serial No. 233,052
2 Claims. (Cl. 333—6)



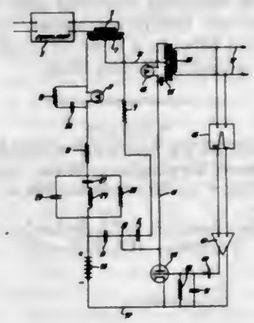
1. In a microwave transmission system, a planar sheet of solid dielectric material, a first planar conductor lying flat against and supported on one face of said sheet, a second planar conductor lying flat against and supported on the opposite face of said sheet, said conductors extending parallel to each other, said sheet spacing said conductors a small fraction of a wavelength apart, said second conductor being at least twice as wide as said first conductor, a conductive cylinder disposed at right angles to said second conductor in conductive relation thereto, said second conductor and said dielectric sheet each having an opening therethrough coaxially of said cylinder, an inner conductor disposed axially of said cylinder and extending through said openings into conductive relation with respect to said first conductor, the distance between said second conductor and the inner conductor at the opening of said second conductor being less than the distance between the cylinder and said inner conductor.

2,734,171
MICROWAVE SWITCHING AND ATTENUATOR DEVICE
Harold Heins, Marblehead, Mass., assignor to Bomac Laboratories Inc., Beverly, Mass., a corporation of Massachusetts
Application February 2, 1954, Serial No. 407,707
8 Claims. (Cl. 333—13)



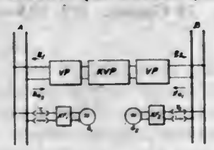
1. A microwave switching and attenuator device comprising a hermetically sealed envelope containing a gaseous atmosphere under reduced pressure, resonant discharge gap electrode structure mounted within said envelope, an attenuating element of a conductive metal operatively associated with said discharge gap electrode structure to present a short circuit across said discharge gap, electromechanical means mounted on said envelope for moving said attenuating element relative to said gap for removing the short circuit thereacross and an ignitor electrode extending into said envelope with its inner tip in close proximity to said discharge gap.

2,734,172
PILOT REGULATOR FOR COMMUNICATION CIRCUITS
Kurt E. Appert, Atherton Heights, Calif., assignor to Lenkurt Electric Co., Inc., San Carlos, Calif., a corporation of Delaware
Application February 4, 1952, Serial No. 269,806
7 Claims. (Cl. 333—16)



1. A pilot regulator for communication transmission lines comprising an input transformer having a tapped secondary winding, a substantially constant impedance element and an element the impedance whereof varies as a function of the current carried thereby connected respectively to the ends of said secondary winding to form a bridge circuit therewith, an inductive winding connected from the tap on said secondary winding to a point intermediate said impedance elements to form the output diagonal of said bridge circuit, a second element the impedance whereof varies with the current carried thereby connected to load said inductive winding, the connections between said windings being so arranged as to provide a single D. C. path through at least a part of each of said windings and said elements of varying impedance in series, and means for passing through said path a current varying as a function of the intensity of a signal in said inductive winding in such sense as to simultaneously increase the load on said inductive winding and bring said bridge circuit closer to balance with increase of said signal.

2,734,173
FILTER CIRCUIT FOR REMOTE CONTROL INSTALLATION
Georges Ogurkowski, Zug, Switzerland, assignor to Landis & Gyr, A. G., a body corporate of Switzerland
Application November 19, 1952, Serial No. 321,367
Claims priority, application Switzerland June 23, 1945
1 Claim. (Cl. 333—70)

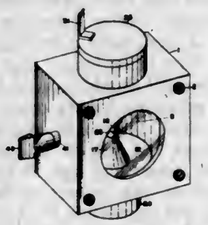


In combination, two alternating current power circuits which must be maintained separate for reasons of frequency or phase difference or differences of potential but which must be coupled together for an audio-frequency in connection with control or communication systems, each power circuit constituting an audio-frequency channel, three four-pole passive filter sections connected in series between said power circuits to form an audio-frequency cross-channel between said power circuit channels, said end filter sections having the same matrices, said end filter sections suppressing substantially completely the power frequencies of the power circuits to which they are respectively connected, said intermediate filter section between the end filter sections being a compensating section and having matrix elements of which b_{11}, b_{12}, b_{21} and b_{22} are determined from a_{11}, a_{12}, a_{21} and a_{22} of the end filter sections by the relations

$$b_{11} = a_{22}^2 + a_{12} \cdot a_{21}$$
$$b_{12} = -a_{12} \cdot (a_{11} + a_{22})$$
$$b_{21} = -a_{21} \cdot (a_{22} + a_{11})$$
$$b_{22} = a_{11}^2 + a_{12} \cdot a_{21}$$

cooperating with such end filter sections that the cross channel passes the audio-frequency with minimum attenuation in either direction while maintaining the electrical separation of the power circuits for power frequencies.

2,734,174
RESONANT CAVITY ATTENUATOR
Harold Heins, Marblehead, Mass., assignor to Bomac Laboratories Inc., Beverly, Mass., a corporation of Massachusetts
Application May 14, 1953, Serial No. 355,128
4 Claims. (Cl. 333—81)



1. A resonant cavity attenuator adapted for mounting in waveguide structure comprising an envelope of a conductive metal having a resonant cavity formed therein, plural electrode structure forming a discharge gap mounted within said resonant cavity, electrically conductive means for attenuation of high frequency radio signals operatively associated with said electrode structure to

provide a continuous short circuit across said discharge gap and electromechanical means operable on said attenuating means to selectively move said electrical conductive means relative to said gap whereby the short circuit is removed.

2,734,175
TUNABLE UNIT FOR RADIO APPARATUS
Carlton Wasmansdorff, Los Angeles, Calif., assignor, by mesne assignments, to Standard Coil Products Co. Inc., a corporation of Illinois
Application January 13, 1949, Serial No. 70,747
20 Claims. (Cl. 333—82)



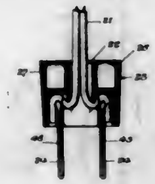
8. A tuning unit comprising a system of parallel conductors, a portion of said parallel conductors consisting of a distributed parameter line, a second portion of said conductors comprising sections of a distributed parameter line, lumped inductances interposed between said sections and an element movable continuously over said distributed line portions and sections and short circuiting said conductors at various distances along said system.

2,734,176
MAGNETIC CORE
Herbert R. Gould and Andrew Schevtchuk, Fort Wayne, Ind., assignors to General Electric Company, a corporation of New York
Application July 30, 1951, Serial No. 239,229
3 Claims. (Cl. 336—165)



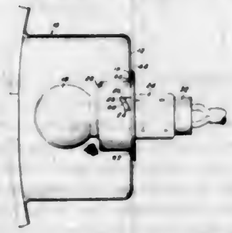
1. A magnetic core for a shell type transformer comprising a plurality of congruent lamination layers of flat magnetic material with each layer comprising a generally I-shaped rectangular center punching and two similar multi-legged E-shaped outer punchings, one end leg of each outer punching being longer than the other end leg and having an integral shoulder on its inner side, one end of each center punching having open ended notches on opposite sides which receive in interfitting relation the ends of the shorter end legs of the outer punchings, the shoulders on the longer end legs of the outer punchings being in engagement with corners on the other end of the center punching and supporting the center punching with said other end in closely spaced relation to the inner sides of the extremities of the longer-end legs of the outer punchings thereby to provide non-magnetic gaps therebetween, the depth of said open ended notches and the location of said shoulders being such as to provide non-magnetic gaps between the ends of the center legs of said outer punchings and the sides of said center punchings.

2,734,177
ELECTRIC CONNECTOR APPARATUS
Charles E. Gilbert, New York, N. Y.; Margaret Doris Gilbert, Norman Coates, and The Chase National Bank of the City of New York, executors of said Charles E. Gilbert, deceased
Application October 16, 1951, Serial No. 251,523
8 Claims. (Cl. 339—97)



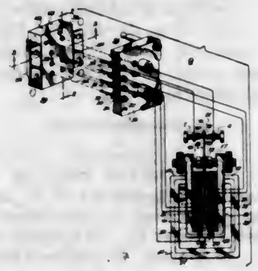
1. An electric plug and cord combination comprising a hollow plug body having side walls and end walls, a pair of identical contact blades therein, and a two-conductor cord having its two conductors respectively in electrical contact with said blades, said body being formed of rigid insulating material, and having two hollow sections, one of said sections having means defining a cord-receiving bore extending centrally therethrough and the other of said sections having blade receiving means, said two sections being separated by a pair of transverse partitions connecting said bore-defining means with the walls of said body, said blade receiving means comprising means defining two pairs of blade-receiving grooves in the side walls of said body on each side of said bore and extending substantially parallel therewith, the pair of said grooves closer to the body end walls being spaced therefrom by a distance adapted to receive one conductor of said cord; each of said contact blades being formed of a folded planar strip of conductive material forming two parallel planar legs, each leg being adapted to engage a respective pair of said grooves and having sharp tongues cut and bent outwardly from the plane thereof and engaging the side walls of said grooves for preventing withdrawal of said blade from said grooves after insertion thereof said conductor cord extending into said cord-receiving bore and having its two conductors spread, with each conductor positioned between a body end wall and the adjacent leg of its respective contact blade.

2,734,178
LIGHT BULB SOCKET ASSEMBLY
Earl W. Dolamore, Birmingham, Mich., assignor to Watts Electric & Mfg. Co., Birmingham, Mich., a corporation of Michigan
Application June 23, 1951, Serial No. 233,230
3 Claims. (Cl. 339—127)



1. A light bulb socket assembly comprising a tubular sleeve having a contact carrying core mounted therein, a casing carried by the rear end of said sleeve, said casing at its forward end having a radially outwardly extending flange, a radially enlarged collar surrounding the forward end of said sleeve, said collar having a cylindrical side wall provided at its forward end with a radially inwardly extending flange consitituting a spring seat, the rear end of said collar having means rigidly securing it to the radially outwardly extending flange of said casing, a retainer ring movable axially on the forward end of said sleeve between the radially outwardly extending flange of said casing and the radially inwardly extending flange at the forward end of said collar, a coil compression spring surrounding said sleeve within said collar and seated at its forward end against said radially inwardly extending flange and at its rear end engaging the forward face of said retainer ring, said collar having openings through its side walls, tongues on the outer edges of said retainer ring extending radially outwardly through said openings, said collar being rotatable by said casing, and said tongues being engageable by the sides of said openings to effect positive rotation of said retainer ring when said collar is rotated.

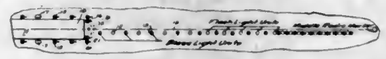
2,734,179
CONNECTION BLOCK FOR AN ELECTROMAGNETIC POLAR RELAY
Robert S. Levenson, New York, N. Y., assignor, by mesne assignments, to Metropolitan Telephone Supply Corp., Brooklyn, N. Y., a corporation of New York
Application February 24, 1953, Serial No. 338,532
2 Claims. (Cl. 339—217)



1. A connection block for an electromagnetic polar relay device comprising a one piece block of dielectric material having front and rear surfaces separated by a predetermined thickness, said block having two straight rows of cylindrically shaped and aligned openings extending inwardly from said front surface to an inner bottom wall, said block having a pair of right-angled slots of predetermined width less than the diameter of said openings, each of said slots being aligned with the common center line of a correlated row of openings, said slots extending into said block from said rear surface a distance greater than the distance of said inner bottom wall to said rear surface, and a three-fingered contact for each of said openings, said contact having a center finger and a pair of astriding side fingers within the correlated opening with each finger lying in a plane making an angle less than ninety degrees with respect to the plane of the adjacent finger, whereby a three-sided sliding electrical connection is achieved upon mating of said fingers with a pin terminal, said side fingers having rear edges pressed against said inner bottom wall of a correlated opening, said center finger extending past said inner wall and through a correlated slot and having portions thereof contiguous with a wall of said slot and with said rear surface, said center finger having a cutout at the contiguous portions thereof, an edge of said cutout being juxtaposed to and pressed against said rear surface whereby said contact is locked in position.

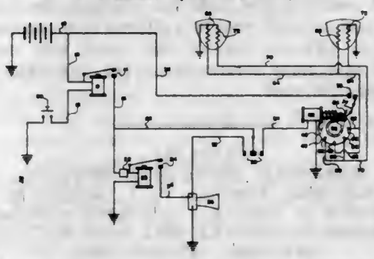
2,734,180
APPROACH LIGHT SYSTEM
Willis A. Pennow, Cleveland, Ohio, assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application August 7, 1947, Serial No. 767,137
20 Claims. (Cl. 340—26)

1. A landing approach light system for use at airports to facilitate landing operations under varying weather conditions comprising, a plurality of light units of at least two different types alternately disposed in line in the direction of a runway and extending outwardly from the end thereof, one type of unit each including a lamp which emits substantially white light, means for energizing said one type at different energy levels solely intermittently so that they are operable to produce a flashing beam of white light of different intensities, the other type of units including a lamp which emits a colored light,



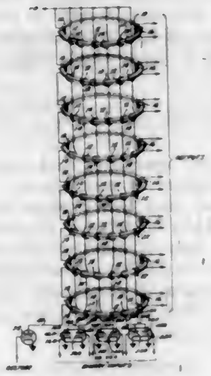
means for selectively energizing said other type either in an intermittent fashion or continuously at different energy levels so that they will produce either a flashing beam of colored light of different intensities or a steady beam of colored light of different intensities, said light units being aimed at a predetermined common area in the sky to define an approach portal, and control means operable at will for selectively energizing various combinations of said light units.

2,734,181
COMBINED HORN SOUNDING AND HEADLIGHT BEAM SELECTOR AND WIRING SYSTEM THEREFOR
Leo J. Warneck, Philadelphia, Pa.
Application April 14, 1954, Serial No. 423,026
3 Claims. (Cl. 340—75)



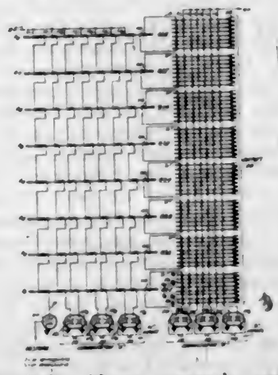
1. For use in connection with a vehicle having a horn, headlights of the type which have a high beam filament, and a low beam filament, and a battery for energizing said horn and said lights, actuating means for selectively sounding said horn only, for selectively changing the beam of the headlights only, and for both sounding the horn and changing said beam simultaneously, said means comprising a first circuit, a second circuit, a selective contact mechanism movable to a first position in which it connects said first circuit to the low beam filament of said headlights, and to a second position in which it connects to said second circuit to the high beam filament of said headlights, a ratchet mechanism for moving said selective contact mechanism to its first or to its second position, a first electrically operated device for intermittently actuating said ratchet to move said selective contact mechanism to either of its positions, a third circuit for connecting said selective contact mechanism directly to said battery, a first control switch for opening or closing said third circuit, a fourth circuit adapted to connect the horn to said battery, a time relay interposed in said fourth circuit between said horn and said battery, a second, a normally open control switch in said fourth circuit, a second electrically operated device for closing said switch, a fifth circuit, a selector switch in said fifth circuit movable to a first position in which it connects the horn, through said second normally open control switch, to said battery, and to a second position in which it connects said first electrically operated device, through said second normally open control switch, to said battery, and a third normally open control switch for connecting said second electrically operated device to said battery.

2,734,182
MAGNETIC MATRIX AND COMPUTING DEVICES
Jan A. Rajchman, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application March 8, 1952, Serial No. 275,622
33 Claims. (Cl. 340—166)



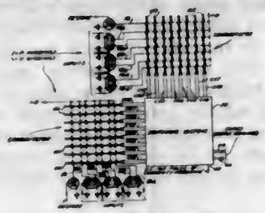
32. A magnetic switch comprising a plurality of saturable magnetic cores, a plurality of pairs of selecting coils inductively coupled each in a different way to said cores, means to apply current simultaneously to a selected one only of each of said pairs of said coils to select only a desired one of said cores in accordance with a predetermined combinatorial code for changing the magnetic state of said selected core to a desired state, output coils coupled to different ones of said cores, and means to drive all said cores simultaneously to saturation in the other magnetic state.

2,734,183
MAGNETIC SWITCHING DEVICES
Jan A. Rajchman, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application December 22, 1952, Serial No. 327,234
26 Claims. (Cl. 340—166)



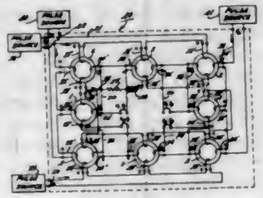
10. A cumulative binary magnetic commutator arrangement comprising at least two groups of paired input coils, a single-section driving commutator addressed by one of said groups and having magnetic cores in number not exceeding 2 raised to a power equal to the number of pairs of coils in said one of said groups, and at least one driven commutator, each of said driven commutators being addressed by another of said groups of input coils and having sections in number corresponding with the number of cores per section of the preceding commutator and having magnetic cores, the number of cores per section of the driven commutator not exceeding 2 raised to a power equal to the number of input pairs addressing the driven commutator.

2,734,184
MAGNETIC SWITCHING DEVICES
Jan A. Rajchman, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application February 20, 1953, Serial No. 337,902
29 Claims. (Cl. 340—166)



10. The improvement in a magnetic switch of the type including (1) a plurality of magnetic cores which are in one polarity of magnetic saturation, (2) means to selectively drive a desired one of said magnetic cores towards magnetic saturation in the opposite polarity, and (3) an output coil on each of said cores, said improvement comprising means to maintain in said one polarity of magnetic saturation all of said cores except a desired one of said cores being driven, said last named means including at least one inhibiting coil inductively coupled to each of said cores, and means to apply an inhibiting current to said inhibiting coil.

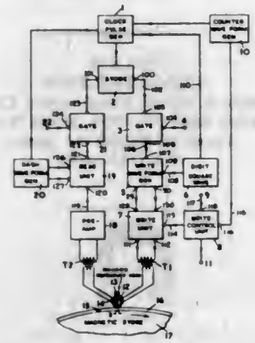
2,734,185
MAGNETIC SWITCH
Charles S. Warren, Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application October 28, 1954, Serial No. 465,347
10 Claims. (Cl. 340—166)



1. A magnetic device comprising a main magnetic element and two dummy magnetic elements, first input coil means linking said main and one of said dummy elements, second input coil means linking said main and the other of said dummy elements, bias coil means linking each of said elements, output coil means linking each of said elements, separate means respectively connecting said first input coil means, said second input coil means, and said bias coils each in series aiding relationship, and means connecting said output coil means of said main element in series opposition with each of said output coil means of said dummy elements.

2,734,186
MAGNETIC STORAGE SYSTEMS
Frederic C. Williams, Timperley, England, assignor to National Research Development Corporation, London, England, a corporation of Great Britain
Application February 27, 1950, Serial No. 146,446
Claims priority, application Great Britain March 1, 1949
8 Claims. (Cl. 340—174)

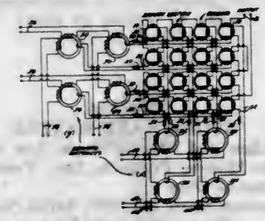
8. A magnetic recording system for an electronic binary digital computing machine operating with serial mode pulse train signals wherein one binary value is signalled by the presence of a digit pulse within any digit interval and the other binary value by the absence of such a digit pulse within any digit interval and which comprises a rotating drum having a peripheral magnetic recording surface therearound, at least one stationary electromagnetic recording head disposed adjacent said recording surface, at least one stationary electromagnetic reproducing head disposed adjacent said recording surface in a position in advance of said recording head relative to the direction of motion of said drum, a two-stable-state trigger circuit having a first triggering input for altering its state from a first state to a second state, a second triggering input for altering its state from said second state to said first state and a common triggering input for reversing its state from one state to the opposite state at any time, current supply means controlled by output potentials from said trigger circuit for energising said recording head in a first direction when said trigger circuit is in its first state to effect magnetization of said surface polarized in a first direction parallel to the direction of movement of such surface and in the second opposite direction when said trigger circuit is in its second state to effect magnetization of said surface polarized in a second opposite direction, a source of timing signals occurring in synchronised relation to the digit-intervals of the signal pulse trains of said computing machine, a second source of triggering signals also synchro-



nised to said computing machine and delayed with respect to said first source of signals, gate circuit means controlled by each digit signal from said computing machine for passing said first trigger signals to one or the other of said first or second triggering input terminals of said trigger circuit in dependence upon the presence or absence of a digit pulse in each digit-interval of such digit signal, means for supplying said second source of trigger signals directly to said reversing input of said trigger circuit to reverse the polarization of the magnetization of such recording surface during the recording of each digit of the machine signal, a source of control signals resembling and in synchronism with the digit pulses of said machine pulse signals, means for deriving output signals from said reproducing head, signal examining means for examining said output signals from said reproducing head to determine their polarity at instants coincident with the reproduction of the regions of magnetization reversals by said second source of trigger signals and gate circuit means controlled by said signal examining means for passing a pulse of said control signal to said machine when said examined signal is of one polarity and suppressing said pulse when said examined signal is of opposite polarity.

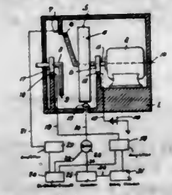
2,734,187
STATIC MAGNETIC MATRIX MEMORY
Jan A. Rajchman, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application December 29, 1951, Serial No. 264,217
32 Claims. (Cl. 340—174)

28. A system for selectively driving to a desired magnetic condition one or more of a plurality of driven magnetic elements individually identifiable as corresponding to the elements of a matrix arranged in rows and columns, said system comprising two driver means, at least one of which includes a plurality of magnetic driver elements, and means to couple inductively each of the said driver elements to all said driven magnetic elements which



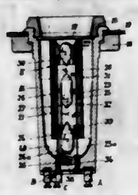
correspond to the elements of a different column of said matrix, the magnetic elements of said one driver means each having a greater volume than any single said driven magnetic element.

2,734,188
MEASURING BY A SERIES OF SIGNALS
Donald H. Jacobs, Brookdale, Md.
Application July 30, 1951, Serial No. 239,259
2 Claims. (Cl. 340—206)



1. Means for determining the instantaneous position of a rotatable member comprising a rotating element coaxial with said member, means for generating a continuous series of equally spaced signals during the entire rotation of said element, a reference point, a counter, said instantaneous position of said member and said reference point constituting two control points for said counter, means cooperating with said element for generating a control pulse as said element passes each of said control points, means actuated by one of said pulses for starting transmission of said signals to said counter, means actuated by the other of said pulses for stopping said transmission of signals and means also actuated by said other of said pulses for delayingly resetting said counter to zero once in each rotation of said element.

2,734,189
MULTIPLE LUMINOUS INDICATOR
Friedrich Josef Trözmüller, Vienna, Austria, assignor to Radio Patents Company of New York State
Application September 11, 1952, Serial No. 308,982
4 Claims. (Cl. 340—380)

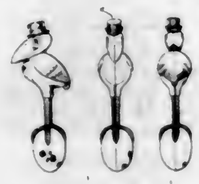


1. An indicator comprising a viewing screen, a hollow member of light conducting material arranged with one end adjoining said screen, a first light source within said member to irradiate said screen directly and to produce a first central luminous indicating field thereon defined by the inside area enclosed by said member, and a further light source arranged to conduct light through said member to produce a second luminous indicating field defined by the cross-section of said member and encircling said first indicating field upon said screen.

DESIGNS

FEBRUARY 7, 1956

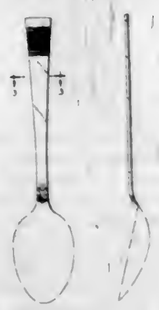
176,834
STORK BABY RATTLE
Robert Y. Allen and Melvin Shaw, Los Angeles, Calif., assignors to Hoover Products, Inc., Youngstown, Ohio, a corporation of Ohio
Application April 29, 1955, Serial No. 35,753
Term of patent 7 years
(Cl. D34—15)



176,835
COLOR SLIDE VIEWER
Arthur R. Bentsen, Providence, R. I., assignor to General Electric Company, a corporation of New York
Application April 29, 1955, Serial No. 35,750
Term of patent 14 years
(Cl. D61—1)



176,836
SPOON OR SIMILAR ARTICLE OF FLATWARE
Harry S. Berk, New York, N. Y., assignor to National Silver Company, New York, N. Y., a corporation of New York
Application May 5, 1955, Serial No. 35,815
Term of patent 14 years
(Cl. D54—12)



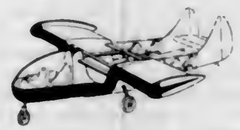
176,837
PIN HOLDER OR SIMILAR ARTICLE
Eldon P. Brautigam, Anchorage, Territory of Alaska
Application September 28, 1955, Serial No. 38,141
Term of patent 7 years
(Cl. D86—10)



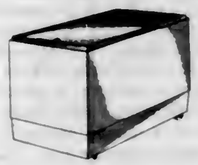
176,838
COMB HOLDER
James A. Coon, Sacramento, Calif.
Application June 30, 1955, Serial No. 36,764
Term of patent 14 years
(Cl. D86—10)



176,839
AIRPLANE
Willard R. Custer, Hagerstown, Md.
Application August 2, 1955, Serial No. 37,284
Term of patent 14 years
(Cl. D71—1)



176,840
PORTABLE REFRIGERATOR
Donald E. Dailey, Center Township, Vanderburgh County, Ind., assignor to Servel, Inc., New York, N. Y., a corporation of Delaware
Application November 12, 1954, Serial No. 33,084
Term of patent 14 years
(Cl. D67—3)



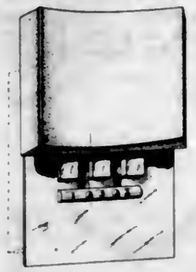
176,841
MUSIC BOX
James H. Dardenelle and Bernita A. Dardenelle, Lindsay, Calif.
Application March 28, 1955, Serial No. 35,223
Term of patent 7 years
(Cl. D34—2)



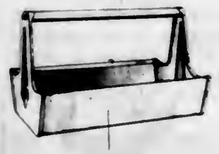
176,842
RESERVE TOILET TISSUE CONTAINER
Philip O. D'Ath, Lakewood, Calif.
Application January 3, 1955, Serial No. 33,805
Term of patent 14 years
(Cl. D4—3)



176,843
ANNUNCIATOR PANEL
Henry Dreyfuss, South Pasadena, Calif., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application March 23, 1955, Serial No. 35,164
Term of patent 14 years
(Cl. D26—5)



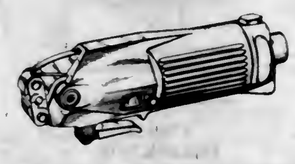
176,844
TOTE TRAY
Jack Evans, Des Plaines, Ill., assignor to Century Display Manufacturing Company, Inc., Chicago, Ill., a corporation of Illinois
Application June 3, 1955, Serial No. 36,346
Term of patent 14 years
(Cl. D58—12)



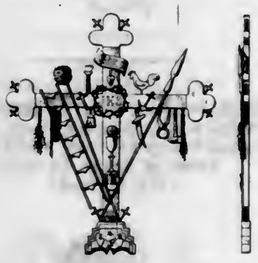
176,845
MACHINE FOR APPLYING PATCHES TO FABRICS
Theodore Finke, Euclid, Ohio
Application May 5, 1955, Serial No. 35,822
Term of patent 14 years
(Cl. D55—1)



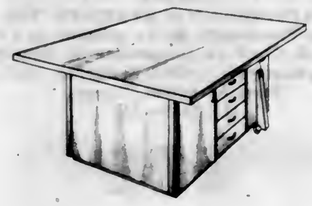
176,846
PNEUMATIC HAND TOOL FOR CRIMPING AND BENDING SPLICE WIRE OR THE LIKE
Howard R. Fischer and Marcel P. D'Haem, Utica, N. Y.
Application June 16, 1954, Serial No. 31,021
Term of patent 14 years
(Cl. D54—14)



176,847
WALL PLAQUE OR SIMILAR ARTICLE
John M. Gloudeman, deceased, late of Inglewood, Calif., by Theodore John Gloudeman, administrator, Kaukauna, Wis.
Application June 20, 1955, Serial No. 36,579
Term of patent 14 years
(Cl. D29—23)



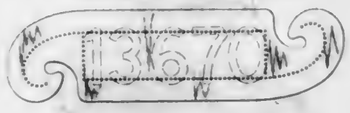
176,848
UTILITY TABLE FOR SEWING
Anthony D. Glover, Austin, Tex.
Application June 24, 1954, Serial No. 31,141
Term of patent 14 years
(Cl. D33—14)



176,849
BOTTLE
Jean-Jacques Guerlain, Paris, France, assignor to Guerlain, Inc., New York, N. Y., a corporation of New York
Application June 28, 1955, Serial No. 36,719
Term of patent 14 years
(Cl. D58—8)



176,850
HOUSE NUMBER PLATE
William E. Hellyar, Detroit, Mich.
Application July 22, 1954, Serial No. 31,547
Term of patent 7 years
(Cl. D1—7)



176,851
DOORKNOB
Glen Holland, Valley Forge, Pa.
Application June 7, 1954, Serial No. 30,843
Term of patent 14 years
(Cl. D50—3)



176,852
COMBINED HANDBAG AND UMBRELLA HOLDER
Phillip Kates, Queens County, N. Y.
Application March 31, 1955, Serial No. 35,297
Term of patent 14 years
(Cl. D87—3)



176,853
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application July 1, 1955, Serial No. 36,789
Term of patent 7 years
(Cl. D45—16)



176,854
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 6, 1955, Serial No. 37,803
Term of patent 7 years
(Cl. D45—16)



176,855
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 6, 1955, Serial No. 37,805
Term of patent 7 years
(Cl. D45—19)



176,856
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 6, 1955, Serial No. 37,807
Term of patent 7 years
(Cl. D45—16)



176,857
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 6, 1955, Serial No. 37,810
Term of patent 7 years
(Cl. D45—16)



176,858
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 6, 1955, Serial No. 37,811
Term of patent 7 years
(Cl. D45—19)



176,859
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 6, 1955, Serial No. 37,812
Term of patent 7 years
(Cl. D45—16)



176,860
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 6, 1955, Serial No. 37,813
Term of patent 7 years
(Cl. D45—19)



176,861
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 6, 1955, Serial No. 37,817
Term of patent 7 years
(Cl. D45—9)



176,862
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 6, 1955, Serial No. 37,820
Term of patent 7 years
(Cl. D45—16)



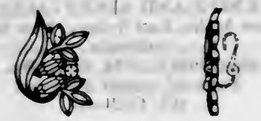
176,863
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 6, 1955, Serial No. 37,821
Term of patent 7 years
(Cl. D45—19)



176,864
BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 9, 1955, Serial No. 37,861
Term of patent 7 years
(Cl. D45—7)



176,865
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 9, 1955, Serial No. 37,852
Term of patent 7 years
(Cl. D45—9)



176,866
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 9, 1955, Serial No. 37,856
Term of patent 7 years
(Cl. D45—19)



176,867
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 9, 1955, Serial No. 37,858
Term of patent 7 years
(Cl. D45—16)



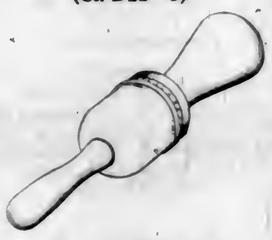
176,868
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 9, 1955, Serial No. 37,860
Term of patent 7 years
(Cl. D45—9)



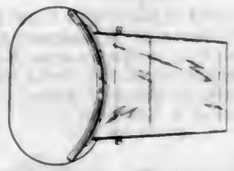
176,869
GARGOYLE
Michael Ksenak, Gary, Ind.
Application August 8, 1955, Serial No. 37,355
Term of patent 14 years
(Cl. D13—1)



176,870
COMBINED KNIFE AND RECEPTACLE THEREFOR
David Turner Mairs, East Sydney, New South Wales, Australia
Application July 8, 1954, Serial No. 31,348
Term of patent 14 years
(Cl. D22—3)



176,871
PAIR OF RAIN GOGGLES OR SIMILAR ARTICLE
Walter Mantel, Floral Park, N. Y.
Application May 17, 1955, Serial No. 36,051
Term of patent 7 years
(Cl. D57—1)



176,872
SHOE DISPLAY STAND OR SIMILAR ARTICLE
Louis Marcus, Newton, Mass., assignor to Marcus Window Display Service, Inc., Boston, Mass., a corporation
Application August 4, 1954, Serial No. 31,731
Term of patent 14 years
(Cl. D80—10)



176,873
AUTOMOBILE
Joseph J. Mascuch, Maplewood, N. J.
Application May 5, 1955, Serial No. 35,842
Term of patent 14 years
(Cl. D14—3)



176,874
ROTARY VENTILATOR
Edward P. Mattke, Milwaukee, Wis., assignor to Loeffelholz Company, Milwaukee, Wis., a corporation of Wisconsin
Application July 14, 1954, Serial No. 31,423
Term of patent 14 years
(Cl. D62—3)



176,875
GOLF TEE
Paul J. Miller, Rochester, N. Y.
Application September 9, 1954, Serial No. 32,216
Term of patent 14 years
(Cl. D34—5)



176,876
COSMETIC CONTAINER
Willie Mae Sutton Miller, Chicago, Ill.
Application September 12, 1955, Serial No. 37,886
Term of patent 14 years
(Cl. D86—10)



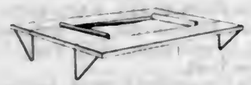
176,877
CHILD'S TEETHER TOY OR SIMILAR ARTICLE
Marshall F. Newmark, La Mesa, Calif., assignor to Progressive Products, Inc., La Mesa, Calif., a corporation of California
Application September 7, 1955, Serial No. 37,833
Term of patent 14 years
(Cl. D83—1)



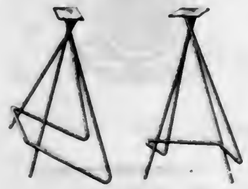
176,878
CLOCK
Paul Irenee Nicolas, Paris, France, assignor to Jaz. S. A., Paris, France, a corporation of France
Application January 27, 1955, Serial No. 34,271
Claims priority, application France November 18, 1954
Term of patent 7 years
(Cl. D42—7)



176,879
COCKTAIL TABLE
William B. Petzold, Coshocton, Ohio, assignor to General Electric Company, a corporation of New York
Application July 14, 1954, Serial No. 31,420
Term of patent 14 years
(Cl. D33—14)



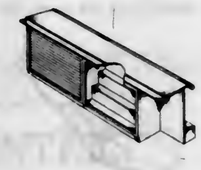
176,880
STOOL FRAME
Richard M. Phillips, East Peoria, Ill.
Application September 2, 1954, Serial No. 32,150
Term of patent 14 years
(Cl. D15—8)



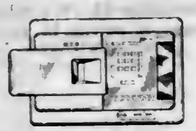
176,881
COMBINATION TABLE AND SEAT FRAME
Richard M. Phillips, East Peoria, Ill.
Application September 2, 1954, Serial No. 32,151
Term of patent 14 years
(Cl. D33—14)



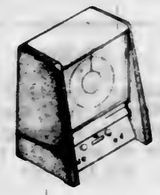
176,882
BAR
Burton D. Quint and Rocco J. George, Pittsburgh, Pa.
Application May 16, 1955, Serial No. 36,019
Term of patent 14 years
(Cl. D33—19)



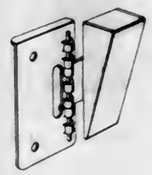
176,883
CASH REGISTER
Merle F. Rath, Granada Hills, and Otis O. Highfill, North Hollywood, Calif., assignors to Telecomputing Corporation, a corporation of California
Application December 21, 1954, Serial No. 33,642
Term of patent 3½ years
(Cl. D64—11)



176,884
WEIGHT INDICATOR
Seldon Spencer Ridenour, Rock Island, Ill., assignor to Fairbanks, Morse & Co., Chicago, Ill., a corporation of Illinois
Application July 9, 1954, Serial No. 31,364
Term of patent 14 years
(Cl. D52—10)



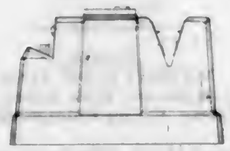
176,885
WINDOW SASH CATCH
Arthur Ringzelli, Chicago, Ill.
Application September 29, 1953, Serial No. 27,007
Term of patent 7 years
(Cl. D10—10)



176,886
SANDAL
Thyra A. Russell, Woodland Hills, Calif.
Application May 19, 1955, Serial No. 36,120
Term of patent 7 years
(Cl. D7—7)



176,887
ELECTRIC KNIFE SHARPENER
Fred C. Schwaneke and Jack Morgan, Chicago, Ill., assignors to Dormeyer Corporation, Chicago, Ill., a corporation of Illinois
Application November 12, 1954, Serial No. 33,078
Term of patent 14 years
(Cl. D37—1)



176,888
BOTTLE
Oskar Seeming, Dusseldorf, Germany
Application May 20, 1954, Serial No. 30,570
Claims priority, application Germany November 26, 1953
Term of patent 14 years
(Cl. D58—6)



176,889
ASH TRAY OR SIMILAR ARTICLE
Abraham Shanok, Victor Shanok, and Jesse Shanok, Brooklyn, N. Y.
Application June 25, 1954, Serial No. 31,168
Term of patent 14 years
(Cl. D85—2)



176,890
CHILD'S CRAWLER
Joel G. Silverman, New York, N. Y.
Application November 12, 1954, Serial No. 33,062
Term of patent 7 years
(Cl. D3—17)



176,891
COMBINATION WALL FAN AND HEATER
John P. Theisen, Jacksonville, Ill., assignor to New York Shipbuilding Corporation, New York, N. Y., a corporation of New York
Application November 3, 1954, Serial No. 32,956
Term of patent 14 years
(Cl. D81—10)



176,892
MOTOR-SCOOTER
Pier Luigi Torre, Milan, Italy
Application June 18, 1952, Serial No. 20,252
Term of patent 7 years
(Cl. D90—8)



LIST OF REISSUE PATENTEES

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PATENTS WERE ISSUED ON THE 7TH DAY OF FEBRUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Evans Products Co.: *See*—
Fahland, Frank. Re. 24,118.

Fahland, Frank, to Evans Products Co. Cross bar support for vehicles. Re. 24,118, 2–7–56, Cl. 105—369.

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Shamburger, Carl S., to C. W. Stuart & Co. Rose plant. 1,456, 2–7–56, Cl. 47—61.

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Shamburger, Carl S. 1,456.

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Allen, Robert Y., and M. Shaw, to Hoover Products, Inc. Stork baby rattle. 176,834, 2–7–56, Cl. D34—15.
Bentsen, Arthur R., to General Electric Co. Color slide viewer. 176,835, 2–7–56, Cl. D61—1.
Berk, Harry S., to National Silver Co. Spoon or similar article of flatware. 176,836, 2–7–56, Cl. D54—12.
Brautigam, Eldon P. Pin holder or similar article. 176,837, 2–7–56, Cl. D86—10.
Century Display Mfg. Co., Inc.: *See*—
Evans, Jack. 176,844.
Coon, James A. Comb holder. 176,838, 2–7–56, Cl. D86—10.
Coro, Inc.: *See*—
Katz, Adolph. 176,853–176,868.
Custer, Willard R. Airplane. 176,839, 2–7–56, Cl. D71—1.
D'Haem, Marcel P.: *See*—
Fischer, Howard R., and D'Haem. 176,846.
Dailey, Donald E., to Servel, Inc. Portable refrigerator. 176,840, 2–7–56, C. D67—3.
Dardenelle, Bernita A.: *See*—
Dardenelle, James H. and B. A. 176,841.
Dardenelle, James H. and B. A. Music box. 176,841, 2–7–56, Cl. D34—2.
D'Ath, Philip O. Reserve toilet tissue container. 176,842, 2–7–56, Cl. D4—3.
Dormeyer Corp.: *See*—
Schwaneke, Fred C., and Morgan. 176,887.
Dreyfuss, Henry, to Minneapolis-Honeywell Regulator Co. Annunciator panel. 176,843, 2–7–56, Cl. D26—5.
Evans, Jack, to Century Display Mfg. Co., Inc. Tote tray. 176,844, 2–7–56, Cl. D38—12.
Fairbanks, Morse & Co.: *See*—
Ridenour, Seldon S. 176,884.
Finke, Theodore. Machine for applying patches to fabrics. 176,845, 2–7–56, Cl. D55—1.
Fischer, Howard R., and M. P. D'Haem. Pneumatic hand tool for crimping and bending splice wire or the like. 176,846, 2–7–56, Cl. D54—14.
General Electric Co.: *See*—
Bentsen, Arthur R. 176,835.
Petzold, William B. 176,879.
George, Rocco J.: *See*—
Quint, Burton D., and George. 176,882.
Gloudeman, John M., deceased, by T. J. Gloudeman, administrator. Wall plaque or similar article. 176,847, 2–7–56, Cl. D29—23.
Gloudeman, Theodore J.: *See*—
Gloudeman, John M. 176,847.
Glover, Anthony D. Utility table for sewing. 176,848, 2–7–56, Cl. D33—14.
Guerlain, Inc.: *See*—
Guerlain, Jean-Jacques. 176,849.
Guerlain, Jean-Jacques, to Guerlain, Inc. Bottle. 176,849, 2–7–56, Cl. D58—8.
Hellyar, William E. House number plate. 176,850, 2–7–56, Cl. D1—7.
Highfill, Otis O.: *See*—
Rath, Merle F., and Highfill. 176,883.
Holland, Glen. Doorknob. 176,851, 2–7–56, Cl. D50—3.
Hoover Products, Inc.: *See*—
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Jaz. S. A.: *See*—
Nicolas, Paul I. 176,878.
Kates, Phillip. Combined handbag and umbrella holder. 176,852, 2–7–56, Cl. D87—3.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,853, 2–7–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Necklace or the like. 176,854, 2–7–56, Cl. D45—16.
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Katz, Adolph, to Coro, Inc. Necklace or the like. 176,857, 2–7–56, Cl. D45—16.
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Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,862, 2–7–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,863, 2–7–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Bracelet or the like. 176,864, 2–7–56, Cl. D45—7.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,865, 2–7–56, Cl. D45—9.
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Katz, Adolph, to Coro, Inc. Link chain for a bracelet or the like. 176,867, 2–7–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,868, 2–7–56, Cl. D45—9.
Ksenak, Michael. Gargoyle. 176,869, 2–7–56, Cl. D13—1.
Loeffelholz Co.: *See*—
Mattke, Edward P. 176,874.
Mairs, David T. Combined knife and receptacle therefor. 176,870, 2–7–56, Cl. D22—3.
Mantel, Walter. Pair of rain goggles or similar article. 176,871, 2–7–56, Cl. D57—1.
Marcus, Louis, to Marcus Window Display Service, Inc. Shoe display stand or similar article. 176,872, 2–7–56, Cl. D80—10.
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Mascuch, Joseph J. Automobile. 176,873, 2–7–56, Cl. D14—3.
Mattke, Edward P., to Loeffelholz Co. Rotary ventilator. 176,874, 2–7–56, Cl. D62—3.
Miller, Paul J. Golf tee. 176,875, 2–7–56, Cl. D34—5.
Miller, Willie M. S. Cosmetic container. 176,876, 2–7–56, Cl. D86—10.
Minneapolis-Honeywell Regulator Co.: *See*—
Dreyfuss, Henry. 176,843.
Morgan, Jack: *See*—
Schwaneke, Fred C., and Morgan. 176,887.
National Silver Co.: *See*—
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Theisen, John P. 176,891.
Nicolas, Paul I., to Jaz. S. A. Clock. 176,878, 2–7–56, Cl. D42—7.
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Phillips, Richard M. Stool frame. 176,880, 2–7–56, Cl. D15—8.
Phillips, Richard M. Combination table and seat frame. 176,881, 2–7–56, Cl. D33—14.
Progressive Products, Inc.: *See*—
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Rath, Merle F., and O. O. Highfill, to Telecomputing Corp. Cash register. 176,883, 2–7–56, Cl. D64—11.
Ridenour, Seldon S., to Fairbanks, Morse & Co. Weight indicator. 176,884, 2–7–56, Cl. D52—10.
Ringzelli, Arthur. Window sash catch. 176,885, 2–7–56, Cl. D10—10.
Russell, Thyra A. Sandal. 176,886, 2–7–56, Cl. D7—7.
Schwaneke, Fred C., and J. Morgan, to Dormeyer Corp. Electric knife sharpener. 176,887, 2–7–56, Cl. D37—1.
Seeming, Oskar. Bottle. 176,888, 2–7–56, Cl. D58—6.

Servel, Inc.: *See*—
Dailey, Donald E. 176,840.
Shanok, Abraham, V., and J. Ash tray or similar article. 176,889, 2–7–56, Cl. D85—2.
Shanok, Jesse: *See*—
Shanok, Abraham, V., and J. 176,889.
Shanok, Victor: *See*—
Shanok, Abraham, V., and J. 176,889.
Shaw, Melvin: *See*—
Allen, Robert Y., and Shaw. 176,834.
Silverman, Joel G. Child's crawler. 176,890, 2–7–56, Cl. D3—17.
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Rath, Merle F., and Highfill. 176,883.
Theisen, John P., to New York Shipbuilding Corp. Combination wall fan and heater. 176,891, 2–7–56, Cl. D81—10.
Torre, Pier L. Motor-scooter. 176,892, 2–7–56, Cl. D90—8.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 7TH DAY OF FEBRUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

A. B. Svenska Kapsylfabriken: *See*—
Ohrström, Vilhelm T. 2,733,865.
A P Controls Corp.: *See*—
Ehlke, Edward C. 2,733,865.
Johnson, Roy W., and Heiser. 2,733,955.
A. S. Norduco: *See*—
Pluim, Jan, Sipkes, and van Steeden. 2,733,986.
Abplanalp, Robert H., ⅛ to F. G. Lodes and ⅛ to J. J. Baessler. Aerosol dispenser. 2,733,842, 2–7–56, Cl. 222—394.
Adams, Albert: *See*—
Wrege, Edgar E., and Adams. 2,733,809.
Adams, Pierrepont: *See*—
Millonis, Jerry P., and Adams. 2,734,083.
Adams, Robert T., J. C. Butler, and C. D. Heaton, to California Research Corp. Removal of salts from acetonephenol. 2,734,085, 2–7–56, Cl. 260—593.
Adler, Herman G., to Novi Equipment Co. Hydraulic governor and pressure regulating valve structure. 2,733,690, 2–7–56, Cl. 121—43.
Airkem, Inc.: *See*—
Wenner, Charles B. 2,733,956.
Aktiebolaget Separator: *See*—
Kjellgren, Ove A. V. 2,733,856.
Zachariassen, Stig H. B. 2,733,725.
Alfery, Henry F., and R. K. Engholdt, to Erie Mfg. Co. Dispensing valve for emergency oxygen cylinders. 2,733,835, 2–7–56, Cl. 222—5.
Alimas, Paul. Fishing line nontwist leading plate. 2,733,538, 2–7–56, Cl. 43—43.13.
Allard, Pierre J. M. T. Device for aiding the displacement of vehicles over loose ground. 2,733,963, 2–7–56, Cl. 301—41.
Allen, Herman C.: *See*—
Russell, William W., and Allen. 2,733,998.
Allendorff, Friedrich, and O. Baur, to Robert Bosch GMBH. Spiral springs and vibration-damping means therefor. 2,733,914, 2–7–56, Cl. 267—1.
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Rodman, Clarence J. 2,733,999.
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Calfee, John D., and Miller. 2,734,090.
Chapman, Wilbur F., and Cosby. 2,734,067.
Allis, Louis, Co., The: *See*—
Van Ness, Bruce. 2,733,851.
Almen, John O., and W. L. Carnegie, to General Motors Corp. Clutch with porous compressible friction linings. 2,733,797, 2–7–56, Cl. 192—107.
Almen, John O., and W. L. Carnegie, to General Motors Corp. Composite wet clutch. 2,733,798, 2–7–56, Cl. 192—113.
Almquist, Nils T., 50% to Raymond Engineering Laboratory, Inc. Buttonhole attachment for sewing machines. 2,733,674, 2–7–56, Cl. 112—77.
Alpert, Marshall B., to National Lead Co. Method for treating metals. 2,734,003, 2–7–56, Cl. 117—130.
Alt, Alvin F.: *See*—
Dugle, Thomas E., Clutter, and Alt. 2,733,555.
Altschul, Louis T. Flexible automobile body cover. 2,733,747, 2–7–56, Cl. 150—52.
American Cyanamid Co.: *See*—
Boatright, Leslie G. 2,734,081.
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Millonis, Jerry P., and Adams. 2,734,083.
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Criswell, Cleon S. 2,733,497.
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Bonnesen, Elmer J. 2,734,098.
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Lucas, Cecil A. 2,733,495.
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Bellet, Paul, and Amiard. 2,734,014.
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Graham, Frank H. 2,733,908.
Anderson, Alfred. Feeding attachment for automatic sheet feeding machines. 2,733,919, 2–7–56, Cl. 271—10.
Anderson, Florence B., to Motor Products Corp. Evaporator door and hinge assembly. 2,733,483, 2–7–56, Cl. 20—35.
Anderson, James B.: *See*—
Stimpson, Robert H., and Anderson. 2,733,651.
Anderson, Walter A., to Underwood Corp. Entry correction mechanism for printing or computing machines. 2,733,858. 2–7–56, Cl. 235—60.
Andrews, Russell L.: *See*—
Riley, Joseph J., and Andrews. 2,734,106.
Appert, Kurt E., to Lenkurt Electric Co., Inc. Pilot regulator for communication circuits. 2,734,172, 2–7–56, Cl. 333—16.
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Aroyan, Harry J., and J. B. Wilkes, to California Research Corp. Recovery of phthalic acids. 2,734,080, 2–7–56, Cl. 260—525.
Asnes, Benjamin, to Dennison Mfg. Co. Non-curling transfer material. 2,733,997, 2–7–56, Cl. 117—3.5.
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Avery, Leon M., to Crouse-Hinds Co. Housing for electrical apparatus. 2,734,097, 2–7–56, Cl. 174—52.
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Badenoch, Benjamin W., to Vickers Inc. Constant gain hydraulic power control system. 2,733,689, 2–7–56, Cl. 121—41.
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Banes, Fred W.: *See*—
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Barnes, Robert B., to American Optical Co. Cathode ray tubes. 2,734,142, 2–7–56, Cl. 313—92.
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Cummings, Clinton L. 2,733,615.
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Beams, Jesse W., to the United States of America as represented by the Secretary of the Navy. Magnetically supported ultracentrifuge. 2,733,857, 2–7–56, Cl. 233—24.

Beard, Arthur D., to Radio Corp. of America. Signal responsive circuit. 2,734,134, 2–7–56, Cl. 250—27.
Beatty Bros. Ltd.: *See*—
Beatty, William G. 2,733,785.
Beatty, David L., and L. G. Sturtz. Pantograph engraving machine. 2,733,642, 2–7–56, Cl. 90—13.1.
Beatty, William G., to Beatty Bros. Ltd. Stall post anchor. 2,733,785, 2–7–56, Cl. 189—34.
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Beckers, Albert E., to Allen B. Du Mont Laboratories, Inc. Cathode ray tube. 2,734,147, 2–7–56, Cl. 315—23.
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Bedard, Paul H. Barking machine having an axially movable rotating drum carrying ringlike hammers. 2,733,742, 2–7–56, Cl. 144—208.
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Benz, Fritz: *See*—
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Wettstein, Albert, and Benz. 2,734,017.
Berger Brothers Co., The: *See*—
Champagne, Emory C. 2,733,445.
Berger, Frank M., C. V. Hubbard, and B. J. Ludwig, to Carter Products, Inc. Dimethyl-chloro-phenoxy propanols. 2,734,087, 2–7–56, Cl. 260—613.
Beringer, George E., and W. E. Sanders, to Bendix Aviation Corp. Method of making a shock strut. 2,733,503, 2–7–56, Cl. 29—553.
Berk, Kenneth E.: *See*—
Hott, Ion V. K., and Berk. 2,733,777.
Berkeley Industries: *See*—
Leebow, Albert A. 2,733,846.
Bernard, Arthur A., to National Cylinder Gas Co. Roll crusher for such metals as aluminum and zirconium, with means to reduce the static charges in the crusher output. 2,733,866, 2–7–56, Cl. 241—159.
Berry, John E. Building construction. 2,733,784, 2–7–56, Cl. 189—2.
Bezman, Irving I., and F. J. Honn, to the United States of America as represented by the Secretary of the Army. Optical cement. 2,734,044, 2–7–56, Cl. 260—45.5.
Bierl, Richard, to Matthias Hohner, Aktiengesellschaft. Key control of attack and decay in electronic musical instrument. 2,733,628, 2–7–56, Cl. 84—1.26.
Bihler, Roger, and S. R. Bell, to Victoria Vogue, Inc. Machine for manufacturing powder puffs. 2,733,752, 2–7–56, Cl. 154—1.8.
Bimonte, Sam, and J. F. Valenti. Testing device for cathode ray tubes. 2,734,167, 2–7–56, Cl. 324—72.
Biro, George G. Receptacle supports. 2,733,845, 2–7–56, Cl. 224—5.
Bjorndal, Magnus: *See*—
Leht, August. 2,733,996.
Blackburn, Andrew R.: *See*—
Bryer, John F., Steele, and Blackburn. 2,733,494.
Blackstone Corp.: *See*—
Lodge, Alvin. 2,733,610.
Blair, Etcyl H., to The Dow Chemical Co. Bis(dihalocyanovinyl terephthalates. 2,734,070, 2–7–56, Cl. 260—465.
Blair, Etcyl H., to The Dow Chemical Co. Bis (halocyanoethyl) terephthalates. 2,734,071, 2–7–56, Cl. 260—465.
Blake, James M., II. Convertible automobile top of the telescoping type. 2,733,954, 2–7–56, Cl. 296—117.
Blanke, Gordon C., to Beckman Instruments Inc. Voltage regulating circuit. 2,734,162, 2–7–56, Cl. 321—15.
Blaskovitz, Desiderius D.: *See*—
Schlesselman, John H., and Blaskovitz. 2,733,753.
Blay, Harold P., to Chrysler Corp. Horn ring structure. 2,733,526, 2–7–56, Cl. 40—8.
Bliss, Harvey N., to Veeder-Root, Inc. Timer. 2,733,764, 2–7–56, Cl. 161—1.
Block, Richard F. Tractor driven fluid transmission chain saw. 2,733,738, 2–7–56, Cl. 143—32.
Blum, George H. Dispenser for granular material or the like. 2,733,839, 2–7–56, Cl. 222—174.
Boatright, Leslie G., to American Cyanamid Co. Preparation of β-alanine. 2,734,081, 2–7–56, Cl. 260—534.
Bogue Electric Mfg. Co.: *See*—
Rhinehart, John R., and Esbrich. 2,733,961.
Bomac Laboratories Inc.: *See*—
Heins, Harold. 2,734,171.
Heins, Harold. 2,734,174.
Bonanno Joseph L., to The Lionel Corp. Toy buildings. 2,733,544, 2–7–56, Cl. 46—12.
Boni, Albert, to Readex Microprint Corp. Microscopic printing by planographic means. 2,733,655, 2–7–56, Cl. 101—149.
Bonnesen, Elmer J., to American Telephone and Telegraph Co. Transposition insulators. 2,734,098, 2–7–56, Cl. 174—194.
Booth, George M., to Wallace Tiernan Inc. Slurry feeder. 2,733,814, 2–7–56, Cl. 210—1.
Booth, Seth W. Delayed arming fuze for a projectile. 2,733,659, 2–7–56, Cl. 102—79.
Borg-Warner Corp.: *See*—
Baker, Charles H., Jr. 2,733,732.
Fleming, Charles A. 2,733,466.
Bos Houwers, Willem A. N., to Woodward & Dickerson, Inc. Bag-filling apparatus. 2,733,848, 2–7–56, Cl. 226—48.
Bosch, Robert, GMBH.: *See*—
Allendorff, Friedrich, and Baur. 2,733,914.
Bostitch, Inc.: *See*—
Jenny, Robert W. 2,733,440.
Boucher, Raymond W., to Hedstrom Union Co. Collapsible furniture. 2,733,755, 2–7–56, Cl. 155—148.
Boudreau, Alban M., to Hedstrom Union Co. Baby carriage lift-out body and chassis support and interlock. 2,733,928, 2–7–56, Cl. 280—31.
Boyd, Thomas J.: *See*—
Manion, Charles H., and Boyd. 2,733,826.
Brady, Samuel G., to The Gear Grinding Machine Co. Adjustable pattern for trimming mechanisms. 2,733,701, 2–7–56, Cl. 125—11.
Brebeck, Charles. Miniature combustion-ignition engine having means for varying the compression ratio. 2,733,694, 2–7–56, Cl. 123—48.
Brisson, Louis C. Automatic slack adjuster for brakes. 2,733,781, 2–7–56, Cl. 188—196.
Bristol, John E., and W. B. Tanner, to E. I. du Pont de Nemours and Co. Production of polyvinyl alcohol. 2,734,048, 2–7–56, Cl. 260—91.3.
British Celanese Ltd.: *See*—
Downing, John. 2,734,012.
British Nylon Spinners, Ltd.: *See*—
Mecklenburgh, George K., Peters, and Shaw. 2,734,001.
Brown & Bigelow: *See*—
Vierling, John A. 2,733,890.
Brown, Charles O. and E. M. Thermometer holder. 2,733,885, 2–7–56, Cl. 248—161.
Brown, Cicero C. Flow control apparatus. 2,733,769, 2–7–56, Cl. 166—226.
Brown, Edith M.: *See*—
Brown, Charles O. and E. M. 2,733,885.
Brown, James W.: *See*—
Martin, Homer Z., Brown, and Burnside. 2,734,021.
Brown, James W., to Esso Research and Engineering Co. Conversion of heavy hydrocarbons. 2,734,020, 2–7–56, Cl. 196—49.
Brown, Walter J.: *See*—
Franks, Clifford V., and Brown. 2,734,160.
Bruce, Stanford P., to Wheel Trueing Tool Co. Dressing mechanism. 2,733,700, 2–7–56, Cl. 125—11.
Brunswick-Balke-Collender Co., The: *See*—
Le Mieux, Robert W. 2,733,464.
Brust, Harry F., and H. O. Senkbeil, to The Dow Chemical Co. α,α-dichloropropionic acid esters of the polyhydric alcohols. 2,734,075, 2–7–56, Cl. 260—487.
Bryant, Charles M., W. N. Helberg, L. A. Courter, and C. J. Cecil, to The Dow Chemical Co. Apparatus for forming perforations in wells. 2,733,657, 2–7–56, Cl. 102—20.
Bryer, John F., to Ram Inc. Method and apparatus for removing scrap from dies for the pressing of clay bodies. 2,733,493, 2–7–56, Cl. 25—129.
Bryer, John F., R. E. Steele, and A. R. Blackburn, to Ram Inc. Mold and method for manufacture thereof. 2,733,494, 2–7–56, Cl. 25—129.
Bücheler, Paul, and A. Peter, to Sandoz A. G. Sulfonated 5-acylamino-1,9-isothiazolanthrones. 2,733,976, 2–7–56, Cl. 8—55.
Buck, Julian R., to Socony Mobil Oil Co., Inc. Frequency sensitive system for measuring the rate of fluid flow in a well bore. 2,733,605, 2–7–56, Cl. 73—204.
Buckeye Incubator Co., The: *See*—
Phillips, Joseph F. 2,733,907.
Bunch, Tillman T., to Western Electric Co., Inc. Apparatus for coiling filamentary materials. 2,733,869, 2–7–56, Cl. 242—25.
Burchenal, Charles H., and I. Halinkin, to Cambridge Tile & Mfg. Co. Ceramic tile. 2,733,592, 2–7–56, Cl. 72—18.
Burke, W. J., & Co.: *See*—
Gaetke, George O. 2,733,496.
McLaughlin, James A. 2,733,736.
Burnside, Harvey E. W.: *See*—
Martin, Homer A., Brown, and Burnside. 2,734,021.
Burrell, Buryl D.: *See*—
Burrell, George G. and B. D. 2,733,880.
Burrell, George G. and B. D., ⅓ to R. Kelp. Kite. 2,733,880, 2–7–56, Cl. 244—153.
Buskirk, Oliver B.: *See*—
Cado, Erwin D., Buskirk, and Setser. 2,733,757.
Butler, Henry J., to Dunlop Rubber Co. Ltd. 2,733,783, 2–7–56, Cl. 188—218.
Butler, Judson C.: *See*—
Adams, Robert T., Butler, and Heaton. 2,734,085.
Butterfield, John P., and A. L. Higbie, to Chrysler Corp. Components for closed hydraulic system and the like and method of manufacturing same. 2,733,572, 2–7–56, Cl. 60—54.5.
Büttner, Hugo. Means for securing the windings of springs in mattresses or the like and method of making the same. 2,733,454, 2–7–56, Cl. 5—273.
Cado, Erwin D., O. B. Buskirk, and H. A. Setser, to Motorola, Inc. Burner assembly for space heater. 2,733,757, 2–7–56, Cl. 158—53.
Cahoon, Edward F., and W. A. MacDonald, to Telautograph Corp. Telescriber. 2,734,099, 2–7–56, Cl. 178—19.
Caird, Clarissa E.: *See*—
Caird, Peter. 2,733,962.
Caird, Peter, to C. E. Caird. Fire hose nozzle. 2,733,962, 2–7–56, Cl. 299—130.
Cairelli, Eremelido: *See*—
Rundbald, George J., and Cairelli. 2,733,552.

Calfee, John D., and C. B. Miller, to Allied Chemical & Dye Corp. Preparation of vinylidene fluoride. 2,734,090, 2–7–56, Cl. 260—653.
California Research Corp.: *See*—
Adams, Robert T., Butler, and Heaton. 2,734,085.
Aroyan, Harry J., and Wilkes. 2,734,079.
Aroyan, Harry J., and Wilkes. 2,734,080.
Wilkes, John B. 2,734,078.
Cambridge Tile & Mfg. Co.: *See*—
Burchenal, Charles H., and Balinkin. 2,733,592.
Canfield, Harry R., to Lempco Products, Inc. Multistone hones. 2,733,557, 2–7–56, Cl. 51—184.3.
Capitani, Arnold P. Paint protective device for motor vehicles. 2,733,474, 2–7–56, Cl. 16—1.
Carbonic Dispenser, Inc.: *See*—
Welty, Frank and R. D. 2,733,850.
Carnegie, William L.: *See*—
Almen, John O., and Carnegie. 2,733,797.
Almen, John O., and Carnegie. 2,733,798.
Carrara, Gino, and E. Testa, to Lepetit S. p. A. Glucosides of chloramphenicol. 2,734,055, 2–7–56, Cl. 260—210.
Carrier Corp.: *See*—
Leonard, Louis H., Jr. 2,733,575.
Carter, Allan J., R. C. Hansen, and C. M. Heinen, to the United States of America as represented by the United States Atomic Energy Commission. Protective coating composition comprising a polymer of chloroprene and an alkaline earth metal fluoride. 2,734,042, 2–7–56, Cl. 260—30.6.
Carter, Andrew L. Apparatus for boxing-in impressions. 2,733,508, 2–7–56, Cl. 32—17.
Carter Carburetor Corp.: *See*—
Coffey, Irven E. 2,734,009.
Goodridge, Laurence M. 2,733,695.
Johnson, Eldon A. 2,733,618.
Smith, Russell F. 2,733,619.
Carter, Giles F., to E. I. du Pont de Nemours and Co. Preventing the formation of carbon sludge in fused baths. 2,734,036, 2–7–56, Cl. 252—156.
Carter Products, Inc.: *See*—
Berger, Frank M., Hubbard, and Ludwig. 2,734,087.
Casacci, Severin X.: *See*—
Peyrin, Henri, and Casacci. 2,733,892.
Case, Everett N., to Sinclair Refining Co. Process for breaking emulsions formed in the neutralization of acid treated petroleum fractions by partial dehydration and settling. 2,734,038, 2–7–56, Cl. 252—346.
Case, J. I., Co.: *See*—
Dwyer, William J. 2,733,652.
Casey, Francis B.: *See*—
Russell, Arthur G., Clary, Casey, and Dallon. 2,733,442.
Russell, Arthur G., Clary, Casey, and Dallon. 2,733,564.
Cassella Farbwerke Mainkur Aktiengesellschaft: *See*—
Schwamberger, Emil. 2,734,050.
Cecil, Clyde J.: *See*—
Bryant, Charles M., Helberg, Courter, and Cecil. 2,733,657.
Cee-Bee Chemical Co., Inc.: *See*—
Whitcomb, Keith R. 2,733,723.
Celanese Corp. of America: *See*—
Petersen, Svend A. 2,733,873.
Petersen, Svend A., and Chow. 2,733,874.
Champagne, Emory C., to The Berger Brothers Co. Controlling garment. 2,733,445, 2–7–56, Cl. 2—42.
Chang, Sheldon S. L., to Robbins & Myers, Inc. Cone type compressor. 2,733,854, 2–7–56, Cl. 230—148.
Chapman, Wilbur F., and J. N. Cosby, to Allied Chemical & Dye Corp. Hydrocarbon oxidation. 2,734,067, 2–7–56, Cl. 260—451.
Charlet, Elphege M.: *See*—
Starr, Charles E., Jr., and Charlet. 2,734,089.
Chase National Bank of the City of New York, The: *See*—
Gilbert, Charles E. 2,734,177.
Chase-Shawmut Co., The: *See*—
Jacobs, Philip C., Jr. 2,734,110.
Kozacka, Frederick J. 2,734,111.
Kozacka, Frederick J. 2,734,112.
Chemical Construction Corp.: *See*—
Van Hare, George, and Montgomery. 2,733,990.
Chester, Allan E., to Poor & Co. Electrodeposition of copper-zinc alloys. 2,734,026, 2–7–56, Cl. 204—44.
Childs, John M. Pivoted fluke anchor. 2,733,678, 2–7–56, Cl. 114—208.
Chow, Ho: *See*—
Petersen, Svend A., and Chow. 2,733,874.
Christian, Joseph D. Hollow screw conveyor flight. 2,733,898, 2–7–56, Cl. 257—101.
Christie, Chester D., to Eaton Mfg. Co. Power transmitting clutch mechanism. 2,733,795, 2–7–56, Cl. 192—67.
Chrysler Corp.: *See*—
Blay, Harold P. 2,733,526.
Butterfield, John P., and Higbie. 2,733,572.
Dickson, John B. 2,734,128.
Hunter, William A. 2,733,662.
Lamb, Ernest P. 2,733,772.
Palmer, Kenneth S. 2,733,942.
Chrosta, Jerry F., to Tinnerman Products, Inc. Spring catch for cabinet doors and the like. 2,733,944, 2–7–56, Cl. 292—17.
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Miescher, Karl, and Wieland. 2,734,056.
Wettstein, Albert, and Benz. 2,734,015.
Wettstein, Albert, and Benz. 2,734,017.
Cifarelli, Mary C.: *See*—
Cifarelli, Victor. 2,733,458.
Cifarelli, Victor, to M. C. Cifarelli. Playpen. 2,733,453, 2–7–56, Cl. 5—99.
Cigal, Ferdinand J.: *See*—
Pelz, Samuel J., Jr., and Cigal. 2,733,968.
Ciacel, Benjamin H., to Minneapolis-Honeywell Regulator Co. Steering apparatus for rotating wing aircraft. 2,733,878, 2–7–56, Cl. 244—17.13.
Clark Controller Co., The: *See*—
Ranson, Lloyd R. 2,734,152.
Clary, Frank A., Jr.: *See*—
Russell, Arthur G., Clary, Casey, and Dallon. 2,733,442.
Russell, Arthur G., Clary, Casey, and Dallon. 2,733,564.
Clauss, Emil: *See*—
Schumann, Herbert, and Clauss. 2,733,676.
Clemens, John E.: *See*—
Orthuber, Richard K., Clemens, and Johnstone. 2,733,501.
Cluett, Peabody & Co., Inc.: *See*—
Macrides, Philip C. 2,733,446.
Clutter, Carl E.: *See*—
Dugle, Thomas E., Clutter, and Alt. 2,733,555.
Coates, Norman: *See*—
Gilbert, Charles E. 2,734,177.
Coffey, Irven E., to Carter Carburetor Corp. Diaphragm and material for making same. 2,734,009, 2–7–56, Cl. 154—50.
Cohn, David, to Model Plastics Corp. Doll head mounting. 2,733,547, 2–7–56, Cl. 46—149.
Coleman Co., Inc., The: *See*—
Glwosky, Harry L. 2,733,704.
Mattingly, Charles D. 2,733,889.
Colton, Wilbert G. Chuck. 2,733,926, 2–7–56, Cl. 279—75.
Commonwealth Engineering Co. of Ohio, The: *See*—
Novak, Leo J. 2,734,006.
Novak, Leo J., and Tyree. 2,734,005.
Toulmin, Harry A., Jr. 2,734,007.
Compagnie Generale de Telegraphie Sans Fil: *See*—
Azema, Charles. 2,734,148.
Confalone, Nicholas A., to LNL Products Co. Pipe gauge. 2,733,512, 2–7–56, Cl. 33—148.
Conn, William K.: *See*—
Schneider, Abrahim, and Conn. 2,734,092.
Schneider, Abraham, and Conn. 2,734,093.
Connor, James I. Paintbrush apron. 2,733,471, 2–7–56, Cl. 15—248.
Copell, Daniel K. Clasp for holding articles. 2,733,492, 2–7–56, Cl. 24—255.
Coppock, Walter J., to Sun Oil Co. Lubricants. 2,734,032, 2–7–56, Cl. 252—52.
Cornet, Guy M. J. Calorie meter. 2,733,603, 2–7–56, Cl. 73—193.
Cosby, John N.: *See*—
Chapman, Wilbur F., and Cosby. 2,734,067.
Coulter, Samuel T., W. E. Hoyt, and S. Van Deest, to the Regents of The University of Minnesota. Spray drier. 2,733,762, 2–7–56, Cl. 159—4.
Coulter, Wallace H. Electromagnetic flowmeter. 2,733,604, 2–7–56, Cl. 73—194.
Courser, Malcolm W. Polishing block for uniform insignia. 2,733,473, 2–7–56, Cl. 15—268.
Courter, Leo A.: *See*—
Bryant, Charles M., Helberg, Courter, and Cecil. 2,733,657.
Couse, Kibbey W. Clutch mechanism for a power take-off. 2,733,793, 2–7–56, Cl. 192—48.
Couse, Kibbey W. Foldable hoist. 2,733,817, 2–7–56, Cl. 212—8.
Covin, William F.: *See*—
Mathewson, Herbert R., Housch, and Covin. 2,733,974.
Crandall, Roland D. Stereoscopes. 2,733,635, 2–7–56, Cl. 88—29.
Cranston, Walter C., Sr. Cross chain attaching device. 2,733,748, 2–7–56, Cl. 152—231.
Criswell, Cleon S., to American Encaustic Tiling Co., Inc. Tile setter. 2,733,497, 2–7–56, Cl. 25—153.
Crouse-Hinds Co.: *See*—
Avery, Leon M. 2,734,097.
Crowley, Henry L., to Henry L. Crowley & Co., Inc. Magnetic compositions. 2,734,034, 2–7–56, Cl. 252—62.5.
Crowley, Henry L., & Co., Inc.: *See*—
Crowley, Henry L. 2,734,034.
Crowther, Milton, to Arnold, Hoffman & Co., Inc. Solutions of polypyrrolidone. 2,734,043, 2–7–56, Cl. 260—31.2.
Crumb, Duane R., to General Motors Corp. Key controlled cylinder lock. 2,733,590, 2–7–56, Cl. 70—367.
Cummings, Clinton L., to Barry Controls Inc. Ratio changer. 2,733,615, 2–7–56, Cl. 74—354.
Cunningham, Albert B. Thread and yarn dispenser. 2,733,877, 2–7–56, Cl. 242—139.
Cutler-Hammer, Inc.: *See*—
Krieger, Alvin W. 2,734,114.
Dahmer, Roy S., to Eaton Mfg. Co. Machine for making shell molds. 2,733,489, 2–7–56, Cl. 22—33.
Daimler-Benz Aktiengesellschaft: *See*—
Dauben, Joseph. 2,733,773.
Müller, Josef. 2,733,934.
Dallon, Robert E.: *See*—
Russell, Arthur G., Clary, Casey, and Dallon. 2,733,442.
Russell, Arthur G., Clary, Casey, and Dallon. 2,733,564.
Dangelo, Joseph J. Stitch cutting tool. 2,733,507, 2–7–56, Cl. 30—287.
Darago, Frank J., to Applied Science Corp. of Princeton. Calibration graph plotter. 2,733,510, 2–7–56, Cl. 33—1.
Darby, Paul F.: *See*—
Newcomb, Charles E., Porter, and Darby. 2,733,912.
Dauben, Joseph, to Daimler-Benz Aktiengellschaft. Arrangement of steering gear and controls in motor vehicles. 2,733,773, 2–7–56, Cl. 180—90.
Daubenspeck, John M., to National Lead Co. Method of recovering nickel and cobalt from nickeliferous ores. 2,733,983, 2–7–56, Cl. 23—183.
Davies Laboratories, Inc., The: *See*—
Wagner, Thomas C. G. 2,734,135.
Davis, Howard B. Double bunk bed. 2,733,451, 2–7–56, Cl. 5—8.

Davis, Melvin C. Pipe holding and packing slip. 2,733,938, 2–7–56, Cl. 285—22.
Davos Products Co.: *See*—
Denzler, Berthold. 2,733,925.
Day, John R. Control device for manually operated oil burners. 2,733,756, 2–7–56, Cl. 158—28.
De La Mater, Robert G., and E. F. Speiden, to The Parkersburg Rig & Reel Co. Hydrodynamic brake with vent. 2,733,778, 2–7–56, Cl. 188—90.
Delker, Thomas C., and A. W. Nordgren, to Bendix Aviation Corp. Shock strut. 2,733,917, 2–7–56, Cl. 267—64.
Delta Nuclear Instrument Co.: *See*—
Ertzman, William F., and Baumgarten. 2,734,109.
Denison Engineering Co., The: *See*—
Poulos, Harry. 2,733,666.
Dennison Mfg. Co.: *See*—
Asnes, Benjamin. 2,733,997.
Flood, Carl A. 2,733,527.
Dentler, Arnold E., to W. H. Miner, Inc. Shock absorbing mechanisms for railway car trucks. 2,733,915, 2–7–56, Cl. 267—9.
Dentler, Arnold E., to W. H. Miner, Inc. Rubber shock absorbing means. 2,733,916, 2–7–56, Cl. 267—63.
Denzler, Berthold, to Davos Products Co. Collet chuck. 2,733,925, 2–7–56, Cl. 279—43.
De Ruggieri, Pietro: *See*—
Ercoli, Alberto, and De Ruggieri. 2,734,066.
Diack, Arthur G. Drawer slide. 2,733,972, 2–7–56, Cl. 312—339.
Diamond, Harry. Guard rail. 2,733,897, 2–7–56, Cl. 256—13.1.
Dick, A. B., Co.: *See*—
Mullen, William G. 2,733,653.
Rogers, Lee R. 2,733,654.
Dickason, Gray D.: *See*—
Hickman, Kenneth C. D. 2,734,023.
Dickinson, Lionel A., to the Minister of Supply in Her Majesty's Government of the United Kingdom of Great Britain and Northern Ireland. Solid propellant jet reaction motor. 2,733,568, 2–7–56, Cl. 60—35.6.
Dickison, William, J. L. Winks, and V. S. Tidd, to Root-Lowell Mfg. Co. Spraying device. 2,733,959, 2–7–56, Cl. 299—88.
Dickson, John B., to Chrysler Corp. Trim ring for lamps. 2,734,128, 2–7–56, Cl. 240—41.55.
Dicome, Herman C., to Edwin L. Wiegand Co. Method and means for assembling articles. 2,734,121, 2–7–56, Cl. 219—38.
Diego, Ramón G. Exercising apparatus. 2,733,922, 2–7–56, Cl. 272—58.
Dittmar, Gerhard, R. Putter, and F. Suckfüll, to Farbenfabriken Bayer Aktiengesellschaft. Metal complex forming azo dyestuffs. 2,734,052, 2–7–56, Cl. 260—146.
Dodd, Arthur E., and J. E. McMahon, to Westinghouse Air Brake Co. Graduated time control system for highway crossing signals. 2,734,130, 2–7–56, Cl. 246—130.
Doerner, Mona P., to The Dow Chemical Co. Synthesis of 1-halo-2,3-butanedione-3-oximes. 2,734,084, 2–7–56, Cl. 260—566.
Dolamore, Earl W., to Watts Electric & Mfg. Co. Light bulb socket assembly. 2,734,178, 2–7–56, Cl. 339—127.
Doman, John J., and J. R. Mooney, Jr. Knockdown building. 2,733,482, 2–7–56, Cl. 20—2.
Domogalla, Bernard. Killing algae in water with copper alkanolamine salts. 2,734,028, 2–7–56, Cl. 210—23.
Donaldson, Robert: *See*—
Gauthier, Guy, and Donaldson. 2,733,904.
Donner, Hans O., to Soltam Ltd. Striker device for mortar. 2,733,638, 2–7–56, Cl. 89—1.
Dorer, Oscar H.: *See*—
Towle, Elton L., and Dorer. 2,733,660.
Dorey, George B., to Enterprise Railway Equipment Co. Dump door winding and locking mechanism. 2,733,669, 2–7–56, Cl. 105—301.
Douma, Tjiske, to Sierra Electronic Corp. Directional apparatus for use with high frequency transmission lines. 2,734,169, 2–7–56, Cl. 324—95.
Dow Chemical Co., The: *See*—
Blair, Etcyl H. 2,734,070.
Blair, Etcyl H. 2,734,071.
Brust, Harry F., and Senkbeil. 2,734,075.
Bryant, Charles M., Helberg, Courter, and Cecil. 2,733,657.
Doerner, Mona P. 2,734,084.
Frevel, Ludo K., and Hedelund. 2,734,073.
Pumpelly, Charles T. 2,734,076.
Dowidat, Otto, to Firma Gedore Werkzeugfabrik Otto Dowidat. Clamping tongs. 2,733,624, 2–7–56, Cl. 81—84.
Downing, John, to British Celanese, Ltd. Weftless ribbons and process for forming same. 2,734,012, 2–7–56, Cl. 154—92.
Downs, George F., Jr., to Phillips Petroleum Co. Carburetor air dryer. 2,733,697, 2–7–56, Cl. 123—119.
Downs, John E., to The Union Tool Corp. Machine for stacking flat sheets of material. 2,733,921, 2–7–56, Cl. 271—68.
Drake, Peter. Building element. 2,733,786, 2–7–56, Cl. 189—34.
Dresser Operations, Inc.: *See*—
Trumpler, William E. 2,733,853.
Drummond, Arthur P., to Pratt & Whitney Co., Inc. Wheel spindle for grinding machines. 2,733,562, 2–7–56, Cl. 51—267.
Dryg, Donald W., to General Mills, Inc. Inclined rotating rod conveyor. 2,733,801, 2–7–56, Cl. 193—40.
Dugle, Thomas E., C. E. Clutter, and A. F. Alt, to Planet Products Corp. Servo tracking device for endless members. 2,733,555, 2–7–56, Cl. 51—135.
Du Mont, Allen B., Laboratories, Inc.: *See*—
Ault, Cyrus F. 2,734,163.
Beckers, Albert E. 2,734,147.
Dunlop Rubber Co. Ltd.: *See*—
Butler, Henry J. 2,733,783.
Trevaskis, Henry W. 2,733,727.
Trevaskis, Henry W. 2,733,941.
Dunlop Tire and Rubber Corp.: *See*—
Holroyd, Eric, and Pearce. 2,733,765.
Woodward, James H., and Myles. 2,733,734.
Duplessis, René E., to United Shoe Machinery Corp. Lasting machines. 2,733,459, 2–7–56, Cl. 12—7.3.
Du Pont, E. I., de Nemours and Co.: *See*—
Bristol, John E., and Tanner. 2,734,048.
Carter, Giles F. 2,734,036.
Harris, Charles R. 2,734,072.
Londergan, Thomas E. 2,734,091.
Mendolia, Arthur I. 2,733,981.
Nelson, Jerry A. 2,734,045.
Robinson, William D. 2,733,995.
Searle, Norman E. 2,733,988.
Dupre, Roland E. Electrical switches. 2,734,115, 2–7–56, Cl. 200—168.
Dupure, Ford J. Filler pipe closure apparatus. 2,733,775, 2–7–56, Cl. 183—34.
Dwyer, William J., to J. I. Case Co. Baler. 2,733,652, 2–7–56, Cl. 100—4.
Dyke, Herbert J. Clutch mechanism for railway hand brakes. 2,733,790, 2–7–56, Cl. 192—16.
Eaton Mfg. Co.: *See*—
Christie, Chester D. 2,733,795.
Dahmer, Roy S. 2,733,489.
Eck, Floyd R., to Motor Products Corp. Torsion hinge. 2,733,476, 2–7–56, Cl. 16—180.
Eckolls, Paul A.: *See*—
Toney, Waddie M., and Eckolls. 2,733,970.
Ecusta Paper Corp.: *See*—
Schur, Milton O., and Levy. 2,733,720.
Edixon, Joe J. Telescopically expansible and contractible dolly. 2,733,929, 2–7–56, Cl. 280—35.
Egbom, Clarence W.: *See*—
Schoeld, Edmund A., and Egbom. 2,734,002.
Ehlke, Edward C., to A P Controls Corp. Temperature compensated by-pass valve. 2,733,865, 2–7–56, Cl. 236—92.
Eliot, William M. Car parking system and structure. 2,733,819, 2–7–56, Cl. 214—16.1.
Ellerbeck, Grant C., to Friden Calculating Machine Co., Inc. Tens-transfer mechanism. 2,733,863, 2–7–56, Cl. 235—138.
Elsberg, John. Sinker releaser for fishing lines. 2,733,537, 2–7–56, Cl. 43—43.12.
Elwell-Parker Electric Co.: *See*—
Woodard, Walter M. 2,733,822.
Engelhart, George K., to Fuller Co. Method and apparatus for preheating kiln feeds. 2,733,909, 2–7–56, Cl. 263—32.
Engelmann, Herbert F., and J. A. Kostriza, to International Telephone and Telegraph Corp. Crystal holder. 2,734,170, 2–7–56, Cl. 333—6.
Engholdt, Richard K.: *See*—
Alfer, Henry F., and Engholdt. 2,733,835.
English, John A. Injection molding equipment. 2,733,479, 2–7–56, Cl. 18—42.
Ennis, Arthur S., to General Electric Co. Electric transformers and like apparatus. 2,734,096, 2–7–56, Cl. 174—15.
Ennok, Mrs. Anna: *See*—
Leht, August. 2,733,996.
Enterprise Railway Equipment Co.: *See*—
Dorey, George B. 2,733,669.
Ercoli, Alberto, and P. de Ruggieri, to Francesco Vismara Societe per Azioni, and Alberto Ercoli. Method for the preparation of dihydrotestosterone and its esters. 2,734,066, 2–7–56, Cl. 260—397.4.
Erie City Mfg. Co.: *See*—
Leslie, John G., and Robinson. 2,733,754.
Erie Mfg. Co.: *See*—
Alfery, Henry F., and Engholdt. 2,733,835.
Erlez Mfg. Co.: *See*—
Hoff, Ronald C. 2,733,812.
Ertzman, William F., and F. J. Baumgarten, to Delta Nuclear Instrument Co. Phase-sensitive switch. 2,734,109, 2–7–56, Cl. 200—112.
Eshrich, Charles H.: *See*—
Rhinehart, John R., and Eshrich. 2,733,961.
Esso Research and Engineering Co.: *See*—
Brown, James W. 2,734,020.
Fasce, Egi V. 2,734,049.
Forster, Eric O., and Hamer. 2,734,030.
Kimberlin, Charles N., Jr., and Gladrow. 2,734,022.
Martin, Homer A., Brown, and Burnside. 2,734,021.
Miller, James R., and Wadley. 2,734,019.
Nelson, Joseph F., Leary, and Hanes. 2,734,046.
Smith, Winthrope C., and Thomas. 2,734,047.
Starr, Charles E., Jr., and Charlet. 2,734,089.
Etablissements Neyrpic: *See*—
Peyrin, Henri, and Casacci. 2,733,892.
Etablissements Sable Freres: *See*—
Garro, Henri P. 2,733,467.
Evans, Edward L. Easy launch boat trailer. 2,733,823, 2–7–56, Cl. 214—505.
Evans Enterprises, Inc.: *See*—
Evans, Frederick H. 2,733,825.
Evans, Frederick H., to Evans Enterprises, Inc. Vehicle parking apparatus. 2,733,825, 2–7–56, Cl. 214—672.
Evans, Jacques P. Predetermined torque release socket wrench. 2,733,622, 2–7–56, Cl. 81—52.4.
F. N. F. Ltd.: *See*—
Porter, Allan W. H. 2,733,583.
Fafnir Bearing Co., The: *See*—
Jones, Arthur B., Jr. 2,733,967.
Fairbanks, Morse & Co.: *See*—
Langteau, Richard R. 2,733,682.

Fancher, Otis E., to Miles Laboratories, Inc. N-2-ethylcrotonyl-N'-methylol urea. 2,734,082, 2–7–56, Cl. 260—553.
Farbenfabriken Bayer Aktiengesellschaft: *See*—
Dittmar, Gerhard, Putter, and Suckfüll. 2,734,052.
Meister, Martin, and Mauthe. 2,733,977.
Farmer, George L. Frame corner construction. 2,733,788, 2–7–56, Cl. 189—76.
Fasce, Egi V., to Esso Research and Engineering Co. Urea extraction process following removal of oxygenated organic compounds. 2,734,049, 2–7–56, Cl. 260—96.5.
Fedders-Quigan Corp.: *See*—
Saha, Leonard J., and Mould. 2,733,600.
Feder, Arthur G., to Welbilt Corp. Cooking range. 2,733,706, 2–7–56, Cl. 126—200.
Federal Paper Board Co., Inc.: *See*—
Williamson, Marshall L. 2,733,852.
Fenske, Douglas H., to International Minerals & Chemical Corp. Nonclogging device for distributing granular material. 2,733,800, 2–7–56, Cl. 193—27.
Fergnani, Walter P., to Post Machinery Co. Box blank folding machine. 2,733,643, 2–7–56, Cl. 93—49.
Firma Gedore Werkzeugfabrik Otto Dowidat: *See*—
Dowidat, Otto. 2,733,624.
Firman, Melvin C.: *See*—
Minieri, Pasquale P., Sokol, and Firman. 2,734,018.
Fischer, Harold P., to National Pneumatic Co., Inc. Fire door control. 2,733,918, 2–7–56, Cl. 268—66.
Fisher, Hardin Y.: *See*—
Soreng, Edgar M., and Fisher. 2,734,153.
Fitzgerald, John V. Hand tools for scoring and breaking tile and the like. 2,733,703, 2–7–56, Cl. 125—23.
Flannery, John P., to Union Chemical & Materials Corp. Dishwashers. 2,734,122, 2–7–56, Cl. 219—39.
Fleming, Charles A., to Borg-Warner Corp. Coating removal apparatus. 2,733,466, 2–7–56, Cl. 15—97.
Flood, Carl A., to Dennison Mfg. Co. Strand-loop fastener. 2,733,527, 2–7–56, Cl. 40—20.
Folk, Yvette L. Composite training pants and diaper. 2,733,715, 2–7–56, Cl. 128—284.
Ford Motor Co.: *See*—
Randall, John F. 2,734,117.
Forster, Eric O., and J. P. Hamer, to Esso Research and Engineering Co. Mixed soap-complex grease compositions. 2,734,030, 2–7–56, Cl. 252—39.
Foster Wheeler Corp.: *See*—
Sherman, Tracy H. 2,733,692.
Foye, Allen B., to W. R. Grace & Co. Side seal container closure. 2,733,827, 2–7–56, Cl. 215—40.
Francesco Vismara Societa per Azioni: *See*—
Ercoli, Alberto, and de Ruggieri. 2,734,066.
Franks, Clifford V., and W. J. Brown, said Franks assignor to said Brown. Electrical control systems. 2,734,160, 2–7–56, Cl. 318—308.
Frevel, Ludo K., and J. W. Hedelund, to The Dow Chemical Co. Alpha-(halomethyl) nitrobenzyl nitrates. 2,734,073, 2–7–56, Cl. 260—466.
Friden Calculating Machine Co., Inc.: *See*—
Ellerbeck, Grant C. 2,733,863.
Fribart, Henry N., and G. F. Baroch, to Motorola, Inc. Heterodyne receiver. 2,734,132, 2–7–56, Cl. 250—20.
Fruehauf Co.: *See*—
Reid, Frederick M., and Locker. 2,733,931.
Fryklund, Robert A., to the United States of America as represented by the Secretary of the Navy. Motor speed control system. 2,734,161, 2–7–56, Cl. 318—328.
Fuller Co.: *See*—
Engelhart, George K. 2,733,909.
Funk, Marlow J. Illuminated umbrella handle. 2,734,124, 2–7–56, Cl. 240—6.42.
Fürst, Stefan, to W. Reiners. Thread winding apparatus. 2,733,870, 2–7–56, Cl. 242—35.6.
G. M. Pfaff A. G.: *See*—
Schumann, Herbert, and Clauss. 2,733,676.
Gaetke, George O., to W. J. Burke & Co. Spacing nut for use with form clamps. 2,733,496, 2–7–56, Cl. 25—131.
Gailliot, Paul, and J. Gaudechon, to Societe des Usines Chimiques Rhone-Poulenc. Chlortheophylline salt of dimethylaminopropylchlorphenthiazine. 2,734,057, 2–7–56, Cl. 260—243.
Gage, Charles B.: *See*—
Kwochka, Michael, and Gage. 2,733,815.
Gardiner, Duncan B., to Vickers Inc. Power transmission. 2,733,571, 2–7–56, Cl. 60—52.
Gardner, Ralph A.: *See*—
Jackson, Warren, Jr., and Gardner. 2,733,602.
Garelick, Judith J., to Pulmosan Safety Equipment Corp. Filters for respirators. 2,733,776, 2–7–56, Cl. 183—45.
Garro, Henri P., to Etablissements Sable Freres. Combined mop holder and wringer. 2,733,467, 2–7–56, Cl. 15—119.
Gartrell, Robert D., H. A. Meyer, and R. R. McVay, to United States Rubber Co. Abrasive articles and method of making the same. 2,733,987, 2–7–56, Cl. 51—298.
Gatineau, Raymond D. Templates. 2,733,513, 2–7–56, Cl. 33—174.
Gaudechon, Jacques: *See*—
Gailliot, Paul, and Gaudechon. 2,734,057.
Gauthier, Guy, and R. Donaldson. Beach cleaning apparatus. 2,733,904, 2–7–56, Cl. 262—2.
Gear Grinding Machine Co.: *See*—
Brady, Samuel G. 2,733,701.
Geissman, Theodore A., to Smith, Kline & French Laboratories. Sulfonyloxy esters of β-aminoalcohols. 2,734,068, 2–7–56, Cl. 260—456.
General Aniline & Film Corp.: *See*—
Stevens, Philip G. 2,734,063.
General Bronze Corp.: *See*—
Hauck, Theodore. 2,733,487.
General Electric Co.: *See*—
Ennis, Arthur S. 2,734,096.
Gould, Herbert R., and Schevtchuk. 2,734,176.
Jacobs, Stephen, and Gleason. 2,733,611.
Macpherson, George L. 2,733,570.
McMillan, Stephen L., and Williams. 2,733,796.
Seely, Richard E. 2,734,158.
Zachary, Robert A., and Schermerhorn. 2,734,168.
General Mills, Inc.: *See*—
Dryg, Donald W. 2,733,801.
General Motors Corp.: *See*—
Almen, John O., and Carnegie. 2,733,797.
Almen, John O., and Carnegie. 2,733,798.
Crumb, Duane R. 2,733,590.
Schultz, Harold W. 2,734,024.
Gerber, Donald H. Doorway lighting apparatus. 2,734,123, 2–7–56, Cl. 240—2.
Ghormley, Karl S. Apparatus for dispensing antifreeze vapor and the like to moving volumes of compressed air. 2,733,733, 2–7–56, Cl. 138—34.
Gibson, George M. Hydrotherapy massage apparatus. 2,733,711, 2–7–56, Cl. 128—56.
Gibson, Robert J.: *See*—
Kirkpatrick, Leland W., Gibson, and Rich. 2,734,008.
Gilbert, Charles E., deceased; M. D. Gilbert, N. Coates, and The Chase National Bank of the City of New York, executors. Electric connector apparatus. 2,734,177, 2–7–56, Cl. 339—97.
Gilbert, Margaret D.: *See*—
Gilbert, Charles E. 2,734,177.
Gilligan, Carl W., to the United States of America as represented by the Secretary of the Army. Disintegrating cartridge belt link. 2,733,640, 2–7–56, Cl. 89—35.
Giwosky, Harry L., to The Coleman Co., Inc. Forced air flow combustion heater for space heating. 2,733,704, 2–7–56, Cl. 126—110.
Gjersoe, Erling H. Template. 2,733,517, 2–7–56, Cl. 33—189.
Gladden, John N., to Gladden Products Corp. Vehicle track. 2,733,965, 2–7–56, Cl. 305—10.
Gladden Products Corp.: *See*—
Gladden, John N. 2,733,965.
Gladrow, Elroy M.: *See*—
Kimberlin, Charles N., Jr., and Gladrow. 2,734,022.
Gleason, Wayne E.: *See*—
Jacobs, Stephen, and Gleason. 2,733,611.
Goldstein, Arthur, to Tru Balance Corsets, Inc. Foundation garment. 2,733,444, 2–7–56, Cl. 2—37.
Gollhofer, Paul J. Crib annunciator. 2,734,104, 2–7–56, Cl. 200—61.75.
Goodridge, Laurence M., to Carter Carburetor Corp. Two-stage manifold and carburetor. 2,733,695, 2–7–56, Cl. 123—52.
Goppel, Johan M., and S. H. Zonneveld, to Shell Development Co. Production of aromatic hydroperoxides. 2,734,086, 2–7–56, Cl. 260—610.
Gottsching, Arthur, deceased, by L. A. Hicks, administratrix, to L. A. Hicks. Apparatus for printing multicolored prints from single impressions. 2,733,656, 2–7–56, Cl. 101—175.
Gould, Herbert R., and A. Schevtchuk, to General Electric Co. Magnetic core. 2,734,176, 2–7–56, Cl. 336—165.
Goulding, Charles E., Sr. Open flame heating unit with combustion air preheating means. 2,733,705, 2–7–56, Cl. 126—127.
Gourley, Fred. Nursing bottle holder. 2,733,883, 2–7–56, Cl. 248—105.
Grace, W. R., & Co.: *See*—
Foye, Allen B. 2,733,827.
Mears, Edward L., and Moore. 2,734,095.
Russell, Arthur G., Clary, Casey, and Dallon. 2,733,442.
Russell, Arthur G., Clary, Casey, and Dallon. 2,733,564.
Graham, Frank H., to Amsler Morton Corp. Recuperator tube tile structure. 2,733,908, 2–7–56, Cl. 263—20.
Granberg, Axel R. Loom warp reel. 2,733,499, 2–7–56, Cl. 28—32.
Grandjean, Philippe, W. Steinemann, and W. Wehrli, to Sandoz A. G. Dis- and polyazo dyestuffs and process of preparation. 2,734,053, 2–7–56, Cl. 260—147.
Greffe, André, to Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine. Process for removing lead from ores. 2,733,989, Cl. 75—77.
Gregersen, Hermann. Transmission line maintenance derrick. 2,733,818, 2–7–56, Cl. 212—8.
Griffith, Llewellyn B. Selective solids removal. 2,733,816, 2–7–56, Cl. 210—172.
Grooms, Lucius A. Candelabrum. 2,733,586, 2–7–56, Cl. 67—25.
Gross, Charles J., to United Shoe Machinery Corp. Machines for pressing soles on shoe bottoms. 2,733,461, 2–7–56, Cl. 12—36.8.
Grotnes, Carl C.: *See*—
Van Leer, Oscar J., and Grotnes. 2,733,502.
Grotnes Machine Works, Inc.: *See*—
Van Leer, Oscar J., and Grotnes. 2,733,502.
Guadagna, Clement T. Mechanical doll hands. 2,733,545, 2–7–56, Cl. 46—126.
Gunning, Samuel D., to Westinghouse Air Brake Co. Portable drilling rig. 2,733,896, 2–7–56, Cl. 255—51.
Günthard, Jacques, and A. Peter, to Sandoz A. G. 3'-benzoyl-4-amino-1,9-anthrapyridone-2-sulfonic acid. 2,734,060, 2–7–56, Cl. 260—278.
Gustavison, Charles G. Device for turning stockings. 2,733,844, 2–7–56, Cl. 223—42.
Guy, Kenneth T.: *See*—
Milins, Terence W., and Guy. 2,733,891.
Haas, Earle C. Tampon applicators. 2,733,714, 2–7–56, Cl. 128—263.
Haber, Elizabeth D. Disposable mop heads. 2,733,468, 2–7–56, Cl. 15—225.

Haberstump, Alfred H., to George C. Knight Co. Rearview mirror for a motor vehicle. 2,733,886, 2–7–56, Cl. 248—203.

Haensel, Vladimir, to Universal Oil Products Co. Method for removing hydrogen sulfide from gaseous streams. 2,733,979, 2–7–56, Cl. 23—2.

Hagen, Bernice E. Ash disposal unit for fireplace. 2,733,708, 2–7–56, Cl. 126—242.

Hamer, Joseph P.: *See*—
Forster, Eric O., and Hamer. 2,734,030.

Hamilton, Richard W., and W. C. Mallison, to American Cyanamid Co. Melamine purification. 2,734,059, 2–7–56, Cl. 260—249.7.

Hamlett, Sidney J., to White Sewing Machine Corp. Bobbin winder for sewing machine. 2,733,868, 2–7–56, Cl. 242—22.

Hansen, Roy C.: *See*—
Carter, Allan J., Hansen, and Heinen. 2,734,042.

Harding, Paul L. Fishhook. 2,733,540, 2–7–56, Cl. 43—44.82.

Hardy, Howard C., to Armour Research Foundation of the Illinois Institute of Technology. Apparatus for measuring vibrations. 2,733,597, 2–7–56, Cl. 73—69.

Hare, Leo A.: *See*—
Standard, John W. 2,733,533.

Harmon, Samuel J. Gas saver. 2,733,903, 2–7–56, Cl. 261—63.

Harriman, Loyd R.: *See*—
Janzer, Lorin H., and Harriman. 2,733,950.

Harris, Charles R., to E. I. du Pont de Nemours and Co. Acrylonitrile process and catalyst. 2,734,072, Cl. 260—465.3.

Harris, Edward, Jr.: *See*—
Hickman, Kenneth C. D. 2,734,023.

Hartford Special Machinery Co., The: *See*—
Johnson, Clarence. 2,733,691.

Haskin, Walter E., to Pressed and Welded Steel Products Co., Inc. Binder. 2,733,717, 2–7–56, Cl. 129—1.

Hatay, Charles G. Method of fabric finishing to reduce shrinkage and improve the feel and hand of cloth. 2,733,498, 2–7–56, Cl. 26—18.5.

Hauck, Theodore, to General Bronze Corp. Window sill construction. 2,733,487, 2–7–56, Cl. 20—70.

Hawanczak, Mike: *See*—
Threlfall, Mary J. and R., Threlfall, Hawanczak, and Sveda. 2,733,881.

Hay, Clarence B. Mortar applying device. 2,733,593, 2–7–56, Cl. 72—128.

Heaton, Charles D.: *See*—
Adams, Robert T., Butler, and Heaton. 2,734,085.

Hedelund, John W.: *See*—
Frevel, Ludo K., and Hedelund. 2,734,073.

Hedstrom Union Co.: *See*—
Boucher, Raymond W. 2,733,755.
Boudreau, Alban M. 2,733,928.

Hell, Theodore. Convertible utility trailer and camp tent. 2,733,951, 2–7–56, Cl. 296—23.

Heinen, Charles M.: *See*—
Carter, Allan J., Hansen, and Heinen. 2,734,042.

Heins, Harold, to Bomac Laboratories Inc. Microwave switching and attenuator device. 2,734,171, 2–7–56, Cl. 333—13.

Heins, Harold, to Bomac Laboratories, Inc. Resonant cavity attenuator. 2,734,174, 2–7–56, Cl. 333—81.

Heinz, H. J. Co.: *See*—
Stimpson, Robert H., and Anderson. 2,733,651.

Heiser, Ferdinand F.: *See*—
Johnson, Roy W., and Heiser. 2,733,955.

Helberg, Wilbur N.: *See*—
Bryant, Charles M., Helberg, Courter, and Cecil. 2,733,657.

Held, Lawrence L.: *See*—
Layne, Mark B., and Held. 2,733,627.

Hennique, Jacques. Knitting machine. 2,733,582, 2–7–56, Cl. 66—4.

Hershel California Fruit Products Co., Inc.: *See*—
Warren, Ray C. 2,733,724.

Hickman, Kenneth C. D., 1/20 to E. Harris, Jr., and 19/20 to G. D. Dickason. Compression distillation method and apparatus. 2,734,023, 2–7–56, Cl. 202—64.

Hicks, Lois A.: *See*—
Gottsching, Arthur. 2,733,656.

Higbie, Alan L.: *See*—
Butterfield, John P., and Higbie. 2,733,572.

Hilgert, Adolph J., to Milwaukee Gas Specialty Co. Thermostat. 2,734,113, 2–7–56, Cl. 200—138.

Hill, Henry H. Breather pump for cleansing and sterilizing milking lines. 2,733,667, 2–7–56, Cl. 103—236.

Hittle, Carl E., to Radio Corp. of America. Film reel tensioning system. 2,733,875, 2–7–56, Cl. 242—75.

Hoff, Ronald C., to Erlez Mfg. Co. Grate magnet. 2,733,812, 2–7–56, Cl. 209—223.

Hoffman, Arnold, & Co., Inc.: *See*—
Robinson, Charles A. 2,734,004.

Hoffman, Mark I.: *See*—
Kaufman, Warren F., and Hoffman. 2,733,726.

Hoffmann-La Roche Inc.: *See*—
Wenis, Edward. 2,734,054.

Hogg, John A., and A. H. Nathan, to The Upjohn Co. 11-keto-21-iodoprogesterone. 2,734,065, 2–7–56, Cl. 260—397.3.

Hohner, Matthias, Aktiengesellschaft: *See*—
Bierl, Richard. 2,733,628.

Holder, David A. Leg, knee, and foot guard and support. 2,733,443, 2–7–56, Cl. 2—22.

Hollingsworth, Alfred V. Gravity abrasion apparatus. 2,733,550, 2–7–56, Cl. 51—15.

Holm, Carl, to Geo. J. Meyer Mfg. Co. Transfer roller and picking unit for labeling machine. 2,733,683, 2–7–56, Cl. 118—236.

Holroyd, Eric, and L. M. Pearce, to Dunlop Tire and Rubber Corp. Apparatus for trimming moulding spew from tire covers. 2,733,765, 2–7–56, Cl. 164—10.2.

Holt, William E. Floor maintenance machine having electrical ground connection. 2,733,465, 2–7–56, Cl. 15—49.

Holtermann, Hugo, to Nyegaard & Co. A/S. Protamine zinc adrenocorticotrophin with prolonged action and method of preparation. 2,734,016, 2–7–56, Cl. 167—74.

Honn, Francis J.: *See*—
Bezman, Irving I., and Honn. 2,734,044.

Hooker, Donald E., to R. T. Moloney. Galvanometric device and circuit. 2,734,166, 2–7–56, Cl. 324—62.

Hooker Electrochemical Co.: *See*—
McNaughtan, Thomas J. 2,734,031.

Hoover, Merle V., to Radio Corp. of America. Electrode positioning mechanism. 2,734,144, 2–7–56, Cl. 313—273.

Hormel, Geo. A., & Co.: *See*—
Murphy, Laurence W. 2,733,477.

Hotovy, Rudolf, E. Jacobi, and W. Kuessner, to E. Merck Chemical Works. Quaternary salts of belladonnine and method of making them. 2,734,062, 2–7–56, Cl. 260—292.

Hott, Ion V. K., and K. E. Berk, to The Joyce-Cridland Co. Front lift superstructure of a two post lift. 2,733,777, 2–7–56, Cl. 187—8.74.

Housch, Walter M.: *See*—
Mathewson, Herbert R., Housch, and Covin. 2,733,974.

House, Harry F. Folding table having height adjusting means. 2,733,971, 2–7–56, Cl. 311—83.

Howell, Ira V. Valve cap removing and replacing tool. 2,733,456, 2–7–56, Cl. 7—14.1.

Howey, Cecil R., to United States Rubber Co. Method of treating 2,2'-dithiobisbenzothiazole. 2,734,064, 2–7–56, Cl. 260—306.5.

Hoyt, William E.: *See*—
Coulter, Samuel T., Hoyt, and Van Deest. 2,733,762.

Hubbard, Clarence V.: *See*—
Berger, Frank M., Hubbard, and Ludwig. 2,734,087.

Huber, Alfred J. Iron vane electrical instrument. 2,734,108, 2–7–56, Cl. 200—103.

Huemer, Hans: *See*—
Schulz, Hermann, and Huemer. 2,734,058.

Huffman, Sam L., and R. J. Irwin. Fork grids for looms. 2,733,735, 2–7–56, Cl. 139—379.

Hughes, Richard H., to Radio Corp. of America. Second anode focusing electrode. 2,734,141, 2–7–56, Cl. 313—82.

Hunter, James, Machine Co., The: *See*—
Morrill, Frank B. 2,733,807.

Hunter, William A., to Chrysler Corp. Fluid circulation source for power steering. 2,733,662, 2–7–56, Cl. 103—42.

Ifield, Richard J., to Joseph Lucas (Industries) Ltd. Liquid flow rate meters. 2,733,606, 2–7–56, Cl. 73—239.

Ikse, Janis I. Dental spatulas. 2,733,509, 2–7–56, Cl. 32—70.

Illinois Testing Laboratories, Inc.: *See*—
Silverman, I. Irving. 2,733,594.

Imperial Chemical Industries Ltd.: *See*—
Jones, Evan L., and Todd. 2,733,978.
Jones, Evan L., and Todd. 2,734,041.
Jones, Evan L., Todd, and Wood. 2,734,040.
Smith, Peter. 2,734,077.

Ingbritson, Oscar. Snow plow. 2,733,524, 2–7–56, Cl. 37—43.

Instruments, Inc.: *See*—
Atchison, Robert L. 2,734,136.

International Business Machines Corp.: *See*—
Luhn, Hans P. 2,733,862.

International Minerals & Chemical Corp.: *See*—
Fenske, Douglas H. 2,733,800.
Wrege, Edgar E., and Adams. 2,733,809.

International Smelting and Refining Co.: *See*—
Yates, Charles E., and Pearce. 2,733,490.

International Telephone and Telegraph Corp.: *See*—
Engelmann, Herbert F., and Kostriza. 2,734,170.

Irwin, Richard J.: *See*—
Huffman, Sam L., and Irwin. 2,733,735.

Iselin, Ernst, to Sandoz, A. G. Asymmetrical cuprifierous polyazo dyestuffs. 2,734,051, 2–7–56, Cl. 260—145.

Jackson, Warren, Jr., and R. A. Gardner, to The Standard Oil Co. Isothermal calorimeter. 2,733,602, 2–7–56, Cl. 73—190.

Jacobi, Ernst: *See*—
Hotovy, Rudolf, Jacobi, and Kuessner. 2,734,062.

Jacobs, Donald H. Mounting for electronic circuit. 2,734,151, 2–7–56, Cl. 317—101.

Jacobs, Donald H. Measuring by a series of signals. 2,734,188, 2–7–56, Cl. 340—206.

Jacobs, Philip C., Jr., to The Chase Shawmut Co. Magnetic blast fuses. 2,734,110, 2–7–56, Cl. 200—120.

Jacobs, Stephen, and W. E. Gleason, to General Electric Co. Turbine valve actuating gear. 2,733,611, 2–7–56, Cl. 74—110.

Janzer, Lorin H., and L. R. Harriman, to Urschel Engineering Co. Stake grappling and pulling machine. 2,733,950, 2–7–56, Cl. 294—88.

Jedlicka, Vladimir. Adjustable auxiliary awning construction. 2,733,484, 2–7–56, Cl. 20—57.5.

Jenny, Robert W., to Bostitch, Inc. Stapling implement. 2,733,440, 2–7–56, Cl. 1—49.

Jensen, Frank V., to Jensen Specialties, Inc. Conveyor mechanism. 2,733,520, Cl. 34—66.

Jensen Specialties, Inc.: *See*—
Jensen, Frank V. 2,733,520.

Jobbins, William F., Inc.: *See*—
Willmore, Charles B. 2,733,991.

Johnson, Clarence, to The Hartford Special Machinery Co. Feed control mechanism. 2,733,691, 2–7–56, Cl. 121—45.

Johnson, Eldon A., to Carter Carburetor Corp. Wear shoe for cam follower. 2,733,618, 2–7–56, Cl. 74—569.

Johnson, Roy W., and F. F. Heiser, to A P Controls Corp. Conversion top for fuel control valves. 2,733,955, 2–7–56, Cl. 297—8.

Johnsson, Carl J. F., to Svenska Oljeslageri Aktiebolaget. Method for preventing sediment formation in boilers and the like. 2,733,693, 2–7–56, Cl. 122—397.

Johnstone, Ben B.: *See*—
Orthuber, Richard K., Clemens, and Johnstone. 2,733,501.

Jones, Arthur B., Jr., to The Fafnir Bearing Co. Multistage antifriction thrust bearing. 2,733,967, 2–7–56, Cl. 308—174.

Jones, Evan L., and S. M. Todd, to Imperial Chemical Industries Ltd. Solutions of acrylonitrile polymers in mixtures of propylene carbonate and water. 2,733,978, 2–7–56, Cl. 18—54.

Jones, Evan L., S. M. Todd, and L. Wood, to Imperial Chemical Industries Ltd. Polymeric compositions comprising a graft acrylonitrile copolymer dissolved in a mixture of ethylene carbonate and water. 2,734,040, 2–7–56, Cl. 260—29.6.

Jones, Evan L., and S. M. Todd, to Imperial Chemical Industries Ltd. Compositions of matter comprising acrylonitrile polymers dissolved in mixtures of ethylene carbonate and water. 2,734,041, 2–7–56, Cl. 260—29.6.

Jones & Laughlin Steel Corp.: *See*—
Rendleman, Norman C. 2,733,500.

Joseph, Irwin S. Flexed plastic mirror. 2,733,637, 2–7–56, Cl. 88—96.

Joy, Joseph F., to Joy Mfg. Co. Universal cutter chain for mining machines. 2,733,906, 2–7–56, Cl. 262—33.

Joy Mfg. Co.: *See*—
Joy, Joseph F. 2,733,906.

Joyce-Cridland Co., The: *See*—
Hott, Ion V. K., and Berk. 2,733,777.

Kabuick, Herbert H. Oral irrigator. 2,733,713, 2–7–56, Cl. 128—230.

Kahla, Earl B. Vehicle headlight attachment. 2,734,129, 2–7–56, Cl. 240—46.59.

Kaiser, Rudolf, to Langbein-Pfanhauser Werke A. G. Method of cleaning scaled and soiled wires or bands. 2,733,563, 2–7–56, Cl. 51—281.

Kamper, Mary A.: *See*—
Wishon, Evia L. 2,733,779.

Karstens, Walter F., and T. J. Vidrick. Heated windshield wiper blade. 2,733,472, 2–7–56, Cl. 15—250.5.

Kauffman, John H., and R. H. Moore, to Studebaker-Packard Corp. Baffle box for pneumatic material handling apparatus. 2,733,964, 2–7–56, Cl. 302—59.

Kaufman, Warren F., and M. I. Hoffman, to the United States of America as represented by the Secretary of the Navy. Acceleration actuated outlet valve. 2,733,726, 2–7–56, Cl. 137—38.

Kearney, William F. Lawn mower. 2,733,565, 2–7–56, Cl. 56—26.5.

Kelly, Joseph M. Self-setting fishhook. 2,733,539, 2–7–56, Cl. 43—44.82.

Kelp, Robert: *See*—
Burrell, George G. and B. D. 2,733,880.

Kendall, Osmond. Method and apparatus for producing sounds. 2,734,100, 2–7–56, Cl. 179—1.

Kenington, Cloyd: *See*—
Kenington, John and C. 2,733,505.

Kenington, John and C. Can and bottle opener. 2,733,505, 2–7–56, Cl. 30—22.

Kent, Melvin R. Tool for cleaning surfaces of thin wall elements. 2,733,558, 2–7–56, Cl. 51—186.

Kent-Moore Organization, Inc.: *See*—
Pfetzing, Henry V. 2,733,668.

Kimberlin, Charles N., Jr., and E. M. Gladrow, to Esso Research and Engineering Co. Hydroforming process. 2,734,022, 2–7–56, Cl. 196—50.

Kinander, Harold W. Adjustable light fixture hanger. 2,733,886, 2–7–56, Cl. 248—343.

Kirkpatrick, Leland W., and R. J. Gibson, and G. R. Rich, deceased (by D. M. Rich, executrix), to Rich Mfg. Corp. Method of making heat treating and hardening valves. 2,734,008, 2–7–56, Cl. 148—11.5.

Kishline, Floyd F., R. H. Phelps, and J. S. Voigt, to American Motors Corp. Vehicle frame cross member. 2,733,933, 2–7–56, Cl. 280—106.

Kitchens, Charles A., and R. E. Kruse, assors to said Kruse. Cigarette extinguishing and disposing ash tray. 2,733,721, 2–7–56, Cl. 131—235.

Kjellgren, Ove A. V., to Aktiebolaget Separator. Sludge centrifuge. 2,733,856, 2–7–56, Cl. 233—7.

Klopp, Friedrich. Hydraulic transmission with inwardly and outwardly moving and rotating pistons. 2,733,665, 2–7–56, Cl. 103—162.

Kluge, Herman D.: *See*—
Knowles, Edwin C., Patterson, and Kluge. 2,734,088.

Knight, George C., to George C. Knight Co. Toy steering wheel. 2,733,543, 2–7–56, Cl. 46—1.

Knight, George C., Co.: *See*—
Haberstump, Alfred H. 2,733,886.
Knight, George C. 2,733,543.

Knight, John D., to The Astrup Co. Non-adjustable shutter awning. 2,733,485, 2–7–56, Cl. 20—57.5.

Knock, Corbin B. Safety device for refrigerators. 2,733,576, 2–7–56, Cl. 62—89.

Knowles, Edwin C., J. A. Patterson, and H. D. Kluge, to The Texas Co. Monomeric condensation products of alkylated phenols with carbonyl-containing compounds and compositions containing said products. 2,734,088, 2–7–56, Cl. 260—619.

Knowlton, Clarence S., to Bell Telephone Laboratories, Inc. Current supply regulating apparatus. 2,734,164, 2–7–56, Cl. 323—56.

Knox, Philander C., III Christmas tree holder. 2,733,882, 2–7–56, Cl. 248—46.

Kolks, Karl, to Koppers Co., Inc. Container for moist or sticky materials, for example coal. 2,733,840, 2–7–56, Cl. 222—195.

Koppers Co., Inc.: *See*—
Kolks, Karl. 2,733,840.

Korby, Alfred A. Lawn mower sharpener. 2,733,561, 2–7–56, Cl. 51—250.

Kostriza, John A.: *See*—
Engelmann, Herbert F., and Kostriza. 2,734,170.

Kota-Meters, Inc.: *See*—
Miner, Philip T. 2,733,598.

Kozacka, Frederick J., to The Chase-Shawmut Co. Low-voltage high-capacity current-limiting fuses. 2,734,111, 2–7–56, Cl. 200—120.

Kozacka, Frederick J., to The Chase-Shawmut Co. Fuse and fuse holder combinations. 2,734,112, 2–7–56, Cl. 200—133.

Krels, Fritz. Change speed gear for motor vehicles. 2,733,613, 2–7–56, Cl. 74—336.

Krels, Fritz. Automatically operating change speed gear. 2,733,614, 2–7–56, Cl. 74—336.

Kreiger, Alvin W., to Cutler-Hammer, Inc. Electric switches. 2,734,114, 2–7–56, Cl. 200—154.

Krinsky, Benjamin. Rocket toy. 2,733,699, 2–7–56, Cl. 124—13.

Kruger, Michael H., to A. L. Smith Iron Co. Combination ceiling and lighting fixture. 2,734,126, 2–7–56, Cl. 240—9.

Kruse, Robert E.: *See*—
Kitchens, Charles A., and Kruse. 2,733,721.

Kuessner, Willi: *See*—
Hotovy, Rudolf, Jacobi, and Kuessner. 2,734,062.

Kuntz, Irving: *See*—
Ross, Sidney D., and Kuntz. 2,734,035.

Kuriyama, Fred Y. Support for hour-in-hand tie. 2,733,447, 2–7–56, Cl. 2—153.

Kwochka, Michael, and C. B. Gage. Filter. 2,733,815, 2–7–56, Cl. 210—164.

LNL Products Co.: *See*—
Confalone, Nicholas A. 2,733,512.

La Nationale S. A.: *See*—
Zellweger, Conrad. 2,733,567.

Laird, John A., to Joseph Lucas (Industries) Ltd. Sparking plugs for internal combustion engines. 2,734,143, 2–7–56, Cl. 313—131.

Lamb, Ernest P., to Chrysler Corp. Ventilated engine compartment. 2,733,772, 2–7–56, Cl. 180—69.

Lambert Brake Corp.: *See*—
Myers, Clande R. 2,733,780.

Landis & Gyr. A. G.: *See*—
Ogurkowski, Georges. 2,734,173.

Landsiedel, Florence E.: *See*—
Landsiedel, Walter W. 2,733,859.

Landsiedel, Walter W., deceased, by F. E. Landsiedel, executrix, to Sperry Rand Corp. Print suppression mechanism for calculating machines. 2,733,859, 2–7–56, Cl. 235—60.

Langbein-Pfanhauser Werke A. G.: *See*—
Kaiser, Rudolf. 2,733,563.

Langteau, Richard R., to Fairbanks, Morse & Co. Pump shaft indexing means. 2,733,682, 2–7–56, Cl. 116—124.

Lanier, Sterling S., Jr. Extensible conveyer. 2,733,806, 2–7–56, Cl. 198—139.

La Rue, James P. Cattle squeeze chute. 2,733,685, 2–7–56, Cl. 119—98.

Latta, Edward, to Redmond Co., Inc. Electric windshield wiper apparatus. 2,733,609, 2–7–56, Cl. 74—75.

Lawton, Ray A., to The Parker Pen Co. Fountain pen. 2,733,686, 2–7–56, Cl. 120—50.

Laycock, Kenneth G. Web tension mechanism. 2,733,876, 2–7–56, Cl. 242—75.

Layne-Held Corp.: *See*—
Layne, Mark B., and Held. 2,733,627.

Layne, Mark B., and L. L. Held, to Layne-Held Corp. Work holding tool. 2,733,627, 2–7–56, Cl. 82—44.

Lear, Joseph D., to Posting Equipment Corp. Posting tray. 2,733,718, 2–7–56, Cl. 129—16.

Lear, Joseph D., to Posting Equipment Corp. Posting tray. 2,733,719, 2–7–56, Cl. 129—28.

Leary, Robert F.: *See*—
Nelson, Joseph F., Leary, and Banes. 2,734,046.

Le Barron, Ralph L. Apparatus and method for preventing ice formation upon building roofs. 2,733,649, 2–7–56, Cl. 98—1.

Leebow, Albert A., to Berkeley Industries. Article support. 2,733,846, 2–7–56, Cl. 224—42.1.

Lehmann, Ernst. Air heater. 2,733,899, 2–7–56, Cl. 257—255.

Leht, August, 20% to Mrs. A. Ennok, and M. Bjorndal. Process of making bricks. 2,733,996, 2–7–56, Cl. 106—97.

Le Mieux, Robert W., to The Brunswick-Balke-Collender Co. Ball cleaning and polishing apparatus. 2,733,464, 2–7–56, Cl. 15—21.

Lempco Products, Inc.: *See*—
Canfield, Harry R. 2,733,557.
Strnad, James J. 2,733,560.

Lenkurt Electric Co., Inc.: *See*—
Appert, Kurt E. 2,734,172.

Leonard, Louis H., Jr., to Carrier Corp. Control arrangement for absorption refrigeration systems. 2,733,575, 2–7–56, Cl. 62—5.

Lepetit S. p. A.: *See*—
Carrara, Gino, and Testa. 2,734,055.

Leslie, John G., and L. N. Robinson, to Erie City Mfg. Co. Invalid walker. 2,733,754, 2–7–56, Cl. 155—22.

Le Tourneau, R. G., Inc.: *See*—
Le Tourneau, Robert G. 2,733,770.

Le Tourneau, Robert G., to R. G. Le Tourneau, Inc. Vehicle body inductively heated by dynamic braking. 2,733,770, 2–7–56, Cl. 180—1.

Levenson, Robert S., to Metropolitan Telephone Supply Corp. Connection block for an electromagnetic polar relay. 2,734,179, 2–7–56, Cl. 339—217.

Levy, Robert M.: *See*—
Schur, Milton O., and Levy. 2,733,720.

Lewit, Ephriam. Closure for narrow necked small containers. 2,733,829, 2–7–56, Cl. 220—31.

Lindee, Carl F., Jr., to Portable Electric Tools, Inc. Lathe headstock. 2,733,737, 2–7–56, Cl. 142—1.

Lindee, Carl F., Jr., to Portable Electric Tools, Inc. Combination lathe and drill press. 2,733,741, 2–7–56, Cl. 144—1.
Lionel Corp., The: *See*—
Bonanno, Joseph L. 2,733,544.
Lipton, Abraham A. Arbor with collet-shaped body. 2,733,924, 2–7–56, Cl. 279—2.
Little, James A. Saw bucks. 2,733,740, 2–7–56, Cl. 143—91.
Littmann, Hans, and H. Sievogt, to Carl Zeiss. Ophthalmometer. 2,733,634, 2–7–56, Cl. 88—20.
Locker, Hans: *See*—
Reid, Frederick M., and Locker. 2,733,931.
Lodes, Frederick G.: *See*—
Abplanalp, Robert H. 2,733,842.
Lodge, Alvin, to Blackstone Corp. Drive for domestic laundering machines. 2,733,610, 2–7–56, Cl. 74—81.
Londergan, Thomas E., to E. I. du Pont de Nemours and Co. β-ionone condensation reactions. 2,734,091, 2–7–56, Cl. 260—665.
Lord Mfg. Co.: *See*—
Painter, Giles W. 2,733,596.
Lorenz, Albert J., to American Hard Rubber Co. Bowling ball grip measuring device. 2,733,515, 2–7–56, Cl. 33—174.
Lucas, Cecil A., to American Vault Corp. Mold for hollow articles. 2,733,495, 2–7–56, Cl. 25—130.
Lucas, Joseph, (Industries) Ltd.: *See*—
Ifield, Richard J. 2,733,606.
Laird, John A. 2,734,143.
Ludwig, Bernard J.: *See*—
Berger, Frank M., Hubbard, and Ludwig. 2,734,087.
Lufcy, Carroll W., and A. E. Schmid, Jr., to the United States of America as represented by the Secretary of the Navy. Magnetic amplifier with half-wave phase reversal type output. 2,734,165, 2–7–56, Cl. 323—89.
Luhn, Hans P., to International Business Machines Corp. Binary decade counter. 2,733,862, 2–7–56, Cl. 235—61.6.
Lummus Cotton Gin Co.: *See*—
Vandergriff, Arvel L. 2,733,481.
Lundgren, John L., to Geo. D. Roper Corp. Gas burner ignition apparatus and valve therefor. 2,733,758, 2–7–56, Cl. 158—115.
Lundgren, John L., and L. H. McCammant, to Geo. D. Roper Corp. Gas burner ignition system. 2,733,760, 2–7–56, Cl. 158—126.
Lundgren, John L., to Geo. D. Roper Corp. Top burner ignition system. 2,733,761, 2–7–56, Cl. 158—126.
Lundquist, Adolph Q., to Union Carbide and Carbon Corp. Precipitation of sodium hexavanadate. 2,733,980, 2–7–56, Cl. 23—19.
Lyman, Homer F. Dishwashing machine rack conveying apparatus. 2,733,805, 2–7–56, Cl. 198—19.
MacDonald, Lester S., to United Shoe Machinery Corp. Lasting machines. 2,733,460, 2–7–56, Cl. 12—8.7.
MacDonald, Walter A.: *See*—
Cahoon, Edward F., and MacDonald. 2,734,099.
Macdougall, Iver C., to Stauffer Chemical Co. Manufacture of carbon bisulfide. 2,733,984, 2–7–56, Cl. 23—206.
Macpherson, George L., to General Electric Co. Injection head for jet propulsion system. 2,733,570, 2–7–56, Cl. 60—39.46.
Macrides, Philip C., to Cluett, Peabody & Co., Inc. Garment closure. 2,733,446, 2–7–56, Cl. 2—128.
Magnuski, Henry, to Motorola, Inc. Communication system with carrier strength control. 2,734,131, 2–7–56, Cl. 250—15.
Mallison, William C.: *See*—
Hamilton, Richard W., and Mallison. 2,734,059.
Mallory, Lester A. Fishing lure. 2,733,534, 2–7–56, Cl. 43—42.5.
Malone, Homer F., to The Wilcolator Co. Electric control system and operating switch for windshield wiper motors. 2,734,159, 2–7–56, Cl. 318—257.
Manion, Charles H., and T. J. Boyd. Apparatus for elevating and delivering articles. 2,733,826, 2–7–56, Cl. 214—715.
Manley, Inc.: *See*—
Waas, Samuel M. 2,733,841.
Mannbro, Nils V. Method of introducing sulfite waste liquor into the alkali recovery process in the manufacture of alkaline cellulose. 2,734,037, 2–7–56, Cl. 252—183.
Marshall, Samuel J. E. Deep well pumping apparatus. 2,733,663, 2–7–56, Cl. 103—118.
Martin, Homer Z., J. W. Brown, and H. E. W. Burnside, to Esso Research and Engineering Co. Preparation of catalytic feed stocks from heavy hydrocarbons. 2,734,021, 2–7–56, Cl. 196—49.
Mascioli, Anthony. Last construction. 2,733,463, 2–7–56, Cl. 12—133.
Massey-Harris-Ferguson Inc.: *See*—
Todd, Everett W. 2,733,648.
Masuda, Sakae. Bacillus dissolving compound and method for producing same. 2,734,069, 2–7–56, Cl. 260—456.
Mathewson, Herbert R., W. M. Housch, and W. F. Covin, to The Springs Cotton Mills, Inc. Method of making striped textile fabric. 2,733,974, 2–7–56, Cl. 8—14.
Matteson, Robert C.: *See*—
Mitchell, Reginald P. 2,733,601.
Matteson, Sylvester D., Jr.: *See*—
Mitchell, Reginald P. 2,733,601.
Mattingly, Charles D., to The Coleman Co., Inc. Valve and fluid control conduit. 2,733,889, 2–7–56, Cl. 251—95.
Mauthe, Gustav: *See*—
Meister, Martin, and Mauthe. 2,733,977.
McCammant, Leonard H.: *See*—
Lundgren, John L., and McCammant. 2,733,760.
McCammant, Leonard H., to Geo. D. Roper Corp. Burner control and electric ignition system for stoves. 2,733,759, 2–7–56, Cl. 158—124.
McClure, William L.: *See*—
Thober, Herbert C., and McClure. 2,733,993.
McCoy, Marion M., to Purolator Products, Inc. Multistage filter. 2,733,855, 2–7–56, Cl. 233—2.
McCrory, John J.: *See*—
Staples, James D., and McCrory. 2,733,511.
McKay Machine Co., The: *See*—
Todd, Russell T. 2,733,750.
McKendree, Samuel M. Dry cleaning systems. 2,733,587, 2–7–56, Cl. 68—18.
McKenney, Henry F., and L. H. Rowley, to The Sperry Corp. Three phase motor system. 2,734,157, 2–7–56, Cl. 318—207.
McKim, Walter E. Rodent traps. 2,733,541, 2–7–56, Cl. 43—70.
McLachlan, Dan, Jr., to Research Corp. Optical analog computer using projected light patterns. 2,733,631, 2–7–56, Cl. 88—14.
McLaughlin, James A., to W. J. Burke & Co. Wrench for breaking tie rods. 2,733,736, 2–7–56, Cl. 140—149.
McMahon, Clark. Blade attachment for tractors. 2,733,525, 2–7–56, Cl. 37—144.
McMahon, James E.: *See*—
Dodd, Arthur E., and McMahon. 2,734,130.
McMeans, Sidney A., 49% to R. P. Stimmel. Carpet-securing means. 2,733,475, 2–7–56, Cl. 16—16.
McMillan, Stephen L., and M. S. Williams, to General Electric Co. Centrifugal force responsive clutch for a clothes washing machine. 2,733,796, 2–7–56, Cl. 192—105.
McNaughtan, Thomas J., to Hooker Electrochemical Co. Lubricants containing polymers of cyclopentadiene. 2,734,031, 2–7–56, Cl. 252—49.6.
McVay, Ronald R.: *See*—
Gartrell, Robert D., Meyer, and McVay. 2,733,987.
Mears, Edward L., and C. B. Moore, to W. R. Grace & Co. Plate separator for storage batteries. 2,734,095, 2–7–56, Cl. 136—145.
Mecklenburgh, George K., H. W. Peters, and S. Shaw, to British Nylon Spinners Ltd. Setting and stiffening fabrics. 2,734,001, 2–7–56, Cl. 117—66.
Meister, Martin, and G. Mauthe, to Farbenfabriken Bayer Aktiengesellschaft. Process of tanning with salt of amphoteric condensation product. 2,733,977, 2–7–56, Cl. 8—94.24.
Menard, James Z., to Bell Telephone Laboratories, Inc. Magnetic recording medium. 2,734,033, 2–7–56, Cl. 252—62.5.
Mendolia, Arthur I., to E. I. du Pont de Nemours and Co. Salt recovery process. 2,733,981, 2–7–56, Cl. 23—25.
Mercer, George E. Blast furnace linings. 2,733,913, 2–7–56, Cl. 266—43.
Merck, E., Chemical Works: *See*—
Hotovy, Rudolf, Jacobi, and Kuessner. 2,734,062.
Merkel, Joseph R.: *See*—
Nickerson, Walter J., and Merkel. 2,734,027.
Merrow Machine Co., The: *See*—
Pierce, Bernard N. 2,733,675.
Mesojedec, John. Pivoted head sliding jaw ratchet-type end wrench. 2,733,626, 2–7–56, Cl. 81—165.
Metropolitan Telephone Supply Corp.: *See*—
Levenson, Robert S. 2,734,179.
Meyer, Geo. J., Mfg. Co.: *See*—
Holm, Carl. 2,733,683.
Meyer, Harry A.: *See*—
Gartrell, Robert D., Meyer, and McVay. 2,733,987.
Miescher, Karl, and P. Wieland, to Ciba Pharmaceutical Products, Inc. Furane-2-carboxylic acid esters of 20:21-ketols of the pregnane series. 2,734,056, 2–7–56, Cl. 260—239.55.
Miles Laboratories, Inc.: *See*—
Fancher, Otis E. 2,734,082.
Millonig, Jerry P., and P. Adams, to American Cyanamid Co. Preparation of N,N-diallyl urea. 2,734,083, 2–7–56, Cl. 260—553.
Millar, John H. End fitting for flexible hose having a reinforcing layer. 2,733,940, 2–7–56, Cl. 285—72.
Miller, Charles B.: *See*—
Calfee, John D., and Miller. 2,734,090.
Miller, Co., The: *See*—
Naysmith, Shirley R. 2,734,127.
Miller, Fred L. B. Flexible thrust coupling. 2,733,580, 2–7–56, Cl. 64—15.
Miller, James R., and E. F. Wadley, to Esso Research and Engineering Co. Hydrofining naphthenic lubricating oil. 2,734,019, 2–7–56, Cl. 196—24.
Miller, Joseph H., and S. A. Wilson. Sleep inducing machine. 2,733,528, 2–7–56, Cl. 40—33.
Miller, Robert L., to Minneapolis-Honeywell Regulator Co. Relative humidity measuring apparatus. 2,733,607, 2–7–56, Cl. 73—335.
Milins, Terence W., and K. T. Guy, to Rotax Ltd. Gas turbines. 2,733,891, 2–7–56, Cl. 253—59.
Milwaukee Gas Specialty Co.: *See*—
Hilgert, Adolph J. 2,734,113.
Miner, Philip T., to Kota-Meters, Inc. Measurement of surface finish. 2,733,598, 2–7–56, Cl. 73—105.
Miner, W. H., Inc.: *See*—
Dentler, Arnold E. 2,733,915.
Dentler, Arnold E. 2,733,916.
Minieri, Pasquale P., H. Sokol, and M. C. Firman, to American Cyanamid Co. Process for the preparation of tetracycline and chlortetracycline. 2,734,018, 2–7–56, Cl. 195—80.
Minister of Supply in Her Majesty's Government of the United Kingdom of Great Britain and Northern Ireland: *See*—
Dickinson, Lionel A. 2,733,568.
Minneapolis-Honeywell Regulator Co.: *See*—
Ciscel, Benjamin H. 2,733,878.
Miller, Robert L. 2,733,607.
Schuck, Oscar H. 2,734,155.
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Mitchell, Orville. 2,733,480.
Mitchell, Orville, to John E. Mitchell Co. Extractor-feeder for roughly picked cotton. 2,733,480, 2–7–56, Cl. 19—37.
Mitchell, Reginald P., ½ to R. C. Matteson, and ½ to S. D. Matteson, Jr. Portable boat speedometer. 2,733,601, 2–7–56, Cl. 73—182.
Moat, Harry L., to Atlas Powder Co. Explosive assembly. 2,733,658, 2–7–56, Cl. 102—24.

Model Plastics Corp.: *See*—
Cohn, David. 2,733,547.
Moloney, Raymond T.: *See*—
Hooker, Donald E. 2,734,166.
Montgomery, Richard: *See*—
Van Hare, George, and Montgomery. 2,733,990.
Mooney, Jess R., Jr.: *See*—
Doman, John J., and Mooney. 2,733,482.
Moore, Charles B.: *See*—
Mears, Edward L., and Moore. 2,734,095.
Moore, Clarence M., Jr. Combination table type and cemetery vase. 2,733,549, 2–7–56, Cl. 47—41.
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Morrill, Frank B., to The James Hunter Machine Co. Cloth reel. 2,733,807, 2–7–56, Cl. 203—300.
Morris, Harold C. Clearance lamp. 2,734,125, 2–7–56, Cl. 240—8.3.
Morris, John P.: *See*—
Sheesley, Jay R., and Morris. 2,733,670.
Sheesley, Jay R., and Morris. 2,733,671.
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Motor Products Corp.: *See*—
Anderson, Florence B. 2,733,483.
Eck, Floyd R. 2,733,476.
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Cado, Erwin D., Buskirk, and Setser. 2,733,757.
Frihart, Henry N., and Baroch. 2,734,132.
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Mowrer, Howard J., Jr. Captive wrench for coupling-nut swiveled on a tube. 2,733,937, 2–7–56, Cl. 285—1.
Mullen, William G., to A. B. Dick Co. Dampening system and method of using same. 2,733,653, 2–7–56, Cl. 101—147.
Mullen, William T. Laminated flashing materials. 2,734,010, 2–7–56, Cl. 154—51.
Müller, Josef, to Daimler-Benz Aktiengellschaft. Vehicle suspension. 2,733,934, 2–7–56, Cl. 280—124.
Murata, Ichiro. Deep well surveying instrument. 2,733,519, 2–7–56, Cl. 33—205.5.
Murphy, Laurence W., to Geo. A. Hormel & Co. Apparatus for facilitating slaughtering of domestic animals. 2,733,477, 2–7–56, Cl. 17—1.
Murphy, Mary L.: *See*—
Murphy, Thomas J. 2,734,139.
Murphy, Thomas J., deceased, M. L. Murphy, executrix. Electrically operated eraser and similar devices. 2,734,139, 2–7–56, Cl. 310—29.
Murray, Alan E. Process of manufacturing shoes and products thereof. 2,733,522, 2–7–56, Cl. 36—8.5.
Murray, Alan E. Shoe sole. 2,733,523, 2–7–56, Cl. 36—8.5.
Murry, James W. Coal classification. 2,733,810, 2–7–56, Cl. 209—172.5.
Murry, James W. Heavy solid mixture classification. 2,733,811, 2–7–56, Cl. 209—172.5.
Musser, Clarence W., to the United States of America as represented by the Secretary of War. Breech mechanism for heavy caliber recoilless gun. 2,733,639, 2–7–56, Cl. 89—1.7.
Mutty, Joseph C. Locking device for outboard motors. 2,733,589, 2–7–56, Cl. 70—58.
Myers, Claude R., to Lambert Brake Corp. Fluid-operated disc brake and noise eliminating means therefor. 2,733,780, 2–7–56, Cl. 188—152.
Myers, William H., to Avco Mfg. Corp. Decalcomania process for making cathode-ray tube screen. 2,734,013, 2–7–56, Cl. 154—95.
Myles, Leonard: *See*—
Woodward, James H., and Myles. 2,733,734.
Nanni, Americo V. Index plate. 2,733,620, 2–7–56, Cl. 74—813.
Nater, Rudolph C. Rock drill bits and rods. 2,733,943, 2–7–56, Cl. 287—125.
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National Cylinder Gas Co.: *See*—
Bernard, Arthur A. 2,733,866.
National Distillers Products Corp.: *See*—
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National Lead Co.: *See*—
Alpert, Marshall B. 2,734,003.
Daubenspeck, John M. 2,733,983.
National Lock Co.: *See*—
North, Edwin W. 2,733,945.
North, Edwin W., and Wilson. 2,733,946.
National Pneumatic Co., Inc.: *See*—
Fischer, Harold P. 2,733,918.
National Research Development Corp.: *See*—
Williams, Frederic C. 2,734,186.
Naugler, Walter E.: *See*—
Stacey, Ernest W., and Naugler. 2,733,588.
Navy, United States of America as represented by the Secretary of the: *See*—
Beams, Jesse W. 2,733,857.
Fryklund, Robert A. 2,734,161.
Kaufman, Warren F., and Hoffman. 2,733,726.
Lufcy, Carroll W., and Schmid. 2,734,165.
Pessel, Leopold. 2,733,774.
Simon, Albert C. 2,734,094.
Naysmith, Shirley R., to The Miller Co. Ceiling. 2,734,127, 2–7–56, Cl. 240—9.
Neff, William H. Dispensing apparatus. 2,733,838, 2–7–56, Cl. 222—142.
Nehls, Charles H. Closure construction. 2,733,831, 2–7–56, Cl. 220—46.
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Timmons, Melvin L., and Nelson. 2,733,623.
Nelson, Jerry A., to E. I. du Pont de Nemours and Co. Curing of chain extended polyalkylene etherpolyurethane polymer with halogen compounds. 2,734,045, 2–7–56, Cl. 260—77.5.
Nelson, Joseph F., R. F. Leary, and F. W. Banes, to Esso Research and Engineering Co. Process for preparing petroleum resins. 2,734,046, 2–7–56, Cl. 260—82.
Nenadal, Andrew J. Vehicle tarpaulin support. 2,733,953, 2–7–56, Cl. 296—100.
Newcomb, Charles E., J. R. Porter, and P. F. Darby, to Rem-Cru Titanium, Inc. Vacuum furnace batch feeding method and apparatus. 2,733,912, 2–7–56, Cl. 266—27.
New Jersey Machine Corp.: *See*—
Von Hofe, George W., and Wolff. 2,733,920.
Newman, John P. Rotary impact wrench with overload release means. 2,733,621, 2–7–56, Cl. 81—52.3.
Newsom, Paul M. Cutting tool grinder. 2,733,553, 2–7–56, Cl. 51—111.
Newton, Robert, to Universal Folding Box Co., Inc. Bottle carrier. 2,733,832, 2–7–56, Cl. 220—113.
Nickerson, Walter J., and J. R. Merkel, to Rutgers Research and Endowment Foundation. Photoreduction of reducible materials. 2,734,027, 2–7–56, Cl. 204—157.
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Delker, Thomas C., and Nordgren. 2,733,917.
North, Edwin W., to National Lock Co. Door latch. 2,733,945, 2–7–56, Cl. 292—169.
North, Edwin W., and W. B. Wilson, to National Lock Co. Turn button lock. 2,733,946, 2–7–56, Cl. 292—169.
Norwood, Lavern. Cable-driven ratchet tool having offset pistol-grip. 2,733,745, 2–7–56, Cl. 145—70.
Noskowicz, Theodore S., to Rauland Corp. Image-reproducing devices. 2,734,146, 2–7–56, Cl. 315—15.
Novak, Leo J., and J. T. Tyree, to The Commonwealth Engineering Co. of Ohio. Water-resistant textiles and method of making the same. 2,734,005, 2–7–56, Cl. 117—139.5.
Novak, Leo J., to The Commonwealth Engineering Co. of Ohio. Method of setting the twist in twisted yarns. 2,734,006, 2–7–56, Cl. 117—139.5.
Novi Equipment Co.: *See*—
Adler, Herman G. 2,733,690.
Noxon, Paul A., to Bendix Aviation Corp. Trim tab servo motor control. 2,733,879, 2–7–56, Cl. 244—77.
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Holtermann, Hugo. 2,734,016.
Nygaard, Edmund O. Sun visor for vehicles. 2,733,763, 2–7–56, Cl. 160—32.
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O'Connor, Maurice J. 2,733,985.
O'Connor, Maurice J., to O'Connor and Co. Non-agglomerating sulphur and method of preparing the same. 2,733,985, 2–7–56, Cl. 23—224.
Ogurkowski, Georges, to Landis & Gyr, A. G. Filter circuit for remote control installation. 2,734,173, 2–7–56, Cl. 333—70.
Öhrström, Vilhelm T., to A. B. Svenska Kapsylfabriken. Automatically sealable paste tube of plastic or similar material. 2,733,837, 2–7–56, Cl. 222—107.
Olshei, John R., to Trico Products Corp. Windshield wiper blade. 2,733,469, 2–7–56, Cl. 15—245.
Olsen, Edward F. Baby feeding plate. 2,733,581, 2–7–56, Cl. 65—15.
Oravec, Emil G., to Textron American, Inc. Electromagnetic vibration exciter. 2,734,138, 2–7–56, Cl. 310—27.
Orthuber, Richard K., J. E. Clemens, and B. B. Johnstone. Electrostatic shutter mosaic and method of manufacture. 2,733,501, 2–7–56, Cl. 29—25.17.
Ostermeyer, Gustavus A. Trap device for rodents and the like. 2,733,542, 2–7–56, Cl. 43—83.5.
Overman, John T. D. Wedge for falling trees and bucking logs. 2,733,894, 2–7–56, Cl. 254—104.
Painter, Giles W., to Lord Mfg. Co. Measurement of dynamic modulus of elastomers. 2,733,596, 2–7–56, Cl. 73—67.
Pall, Francis A., ½ to I. M. Pall. Color photography and projection. 2,733,632, 2–7–56, Cl. 88—16.4.
Pall, Isabelle M.: *See*—
Pall, Francis A. 2,733,632.
Palmer, Kenneth S., to Chrysler Corp. Handle attachment means. 2,733,942, 2–7–56, Cl. 287—53.
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Pankove, Jacques I.: *See*—
Pantchechnikoff, Jacques I. 2,734,102.
Pantchechnikoff, Jacques I., now by change of name Jacques I. Pankove, to Radio Corp. of America. Semiconductor devices. 2,734,102, 2–7–56, Cl. 179—171.
Parker, Louis W. Axial airgap motors and generators. 2,734,140, 2–7–56, Cl. 310—268.
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Lawton, Ray A. 2,733,686.
Parkersburg Rig & Reel Co., The: *See*—
De La Mater, Robert G., and Speiden. 2,733,778.
Pasedach, Heinrich: *See*—
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Patten, Alexander S., to The Prestole Corp. Method of electric welding. 2,734,118, 2–7–56, Cl. 219—10.
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Patterson, Omar L., to Sun Oil Co. Cathode ray tube function generator. 2,734,137, 2–7–56, Cl. 250—201.
Patton, Bernard J. 15% to W. Shaffer. Fluorescent tube rejuvenator. 2,733,973, 2–7–56, Cl. 316—28.
Pearce, Calvin D.: *See*—
Yates, Charles E., and Pearce. 2,733,490.
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Holroyd, Eric, and Pearce. 2,733,765.

Pease, C. F., Co., The: *See*—
Taini, John. 2,733,644.
Peeples, Maurice E. Combined window sash and blind structure. 2,733,486, 2–7–56, Cl. 20—62.
Pels, Samuel J., Jr., and F. J. Cigal, to Bendix Aviation Corp. Wear resistant bushing or liner for the plunger cylinder or bores or pumps handling water-contaminated fuel. 2,733,968, 2–7–56, Cl. 309—3.
Pennington, William O. Side bar lock decoder. 2,733,514, 2–7–56, Cl. 33—174.
Pennow, Willis A., to Westinghouse Electric Corp. Approach light system. 2,734,180, 2–7–56, Cl. 340—26.
Perry, Thomas G. Signal for automatically warning the driver of a trailing vehicle that the speed of a leading vehicle is being retarded. 2,734,105, 2–7–56, Cl. 200—61.89.
Pessel, Leopold, to the United States of America as represented by the Secretary of the Navy. Underwater acoustic diaphragm. 2,733,774, 2–7–56, Cl. 181—32.
Pessel, Leopold, to Radio Corp. of America. Method of removal of thermo-plastic resins from conductors and tinning thereof. 2,734,000, 2–7–56, Cl. 117—51.
Peter, Albin: *See*—
Bücheler, Paul, and Peter. 2,733,976.
Günthard, Jacques, and Peter. 2,734,060.
Peters, Harry W.: *See*—
Mecklenburgh, George K., Peters, and Shaw. 2,734,001.
Petersen, Svend A., to Celanese Corp. of America. Mandrel. 2,733,873, 2–7–56, Cl. 242—72.
Petersen, Svend A., and H. Chow, to Celanese Corp. of America. Textile device. 2,733,874, 2–7–56, Cl. 242—72.
Peterson, Lester C., and H. J. Batts, to United States Rubber Co. Vulcanization of butyl rubber with a dimethylol phenol, chlorosulfonated polythene and a zinc compound, and product obtained thereby. 2,734,039, 2–7–56, Cl. 260—19.
Peyrin, Henri, and S. X. Casacci, to Etablissements Neyrpic. Thrust bearings, especially for turbine and generator units. 2,733,892, 2–7–56, Cl. 253—148.
Pfeffer, David and M. Interchangeable setting. 2,733,579, 2–7–56, Cl. 63—29.
Pfeffer, Max.: *See*—
Pfeffer, David and M. 2,733,579.
Pfetzing, Henry V., to Kent-Moore Organization, Inc. Fitting for a gas exhaust system. 2,733,668, 2–7–56, Cl. 104—52.
Phelps, Ross H.: *See*—
Kishline, Floyd F., Phelps, and Voigt. 2,733,933.
Philco Corp.: *See*—
Reber, Carroll J., Jr. 2,733,574.
Phillips, Nicholas A.: *See*—
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Phillips, Bernard C., to The Tillotson Mfg. Co. Charge forming device. 2,733,902, 2–7–56, Cl. 261—41.
Phillips, Ellis H.: *See*—
Purdy, Harold C. 2,733,994.
Phillips, Joseph F., to The Buckeye Incubator Co. Tobacco curing system. 2,733,907, 2–7–56, Cl. 263—19.
Phillips Petroleum Co.: *See*—
Downs, George F., Jr. 2,733,697.
Pierce, Bernard N., to The Merrow Machine Co. Looper and carrier therefor. 2,733,675, 2–7–56, Cl. 112—162.
Pierce, Harold C. Boxed produce loads and spacing units. 2,733,672, 2–7–56, Cl. 105—369.
Pikal, Harry. Machine for embedding sticks in apples. 2,733,439, 2–7–56, Cl. 1—1.
Pittsburgh Steel Co.: *See*—
Roehl, Edward J. 2,734,025.
Pityo, Albert F. Method of forming and welding pins to metal parts. 2,734,119, 2–7–56, Cl. 219—10.
Pizzuto, Joseph, to The Waterbury Farrel Foundry & Machine Co. Adjustable pressure pad for holding screw shanks in a rotary carrier. 2,733,457, 2–7–56, Cl. 10—6.
Planet Products Corp.: *See*—
Dugle, Thomas E., Clutter, and Alt. 2,733,555.
Platt, Lavinia E. Pan handle. 2,733,947, 2–7–56, Cl. 294—34.
Plessey Co. Ltd., The: *See*—
Trowbridge, David R. 2,733,569.
Pinim, Jan, H. Sipkes, and A. G. van Steeden, to A. S. Norduco. Apparatus for crystallizing and separating slightly soluble substances from relatively large quantities of liquid. 2,733,986, 2–7–56, Cl. 23—273.
Polk, Ellsworth M. Packing seal. 2,733,969, 2–7–56, Cl. 309—23.
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Chester, Allan E. 2,734,026.
Portable Electric Tools, Inc.: *See*—
Lindee, Carl F., Jr. 2,733,737.
Lindee, Carl F., Jr. 2,733,741.
Porter, Allan W. H., to F. N. F. Ltd. Knitting machine. 2,733,583, 2–7–56, Cl. 66—86.
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Posting Equipment Corp.: *See*—
Lear, Joseph D. 2,733,718.
Lear, Joseph D. 2,733,719.
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Poulos, Harry, to The Denison Engineering Co. Axial piston pumps. 2,733,666, 2–7–56, Cl. 103—162.
Praeg, Walter S., to National Broach & Machine Co. Gear finishing. 2,733,641, 2–7–56, Cl. 90—1.
Pratt, John W., to United Shoe Machinery Corp. Diaphragms for fluid-filled pad boxes. 2,733,462, 2–7–56, Cl. 12—38.
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Drummond, Arthur P. 2,733,562.
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Haskin, Walter E. 2,733,717.
Prestole Corp., The: *See*—
Patten, Alexander S. 2,734,118.
Proctor, Sidney E., to Austin Hoy and Co. Ltd. Tool-carrying chains having ball and socket connections between links. 2,733,905, 2–7–56, Cl. 262—33.
Pszegon, Walter. Gauge. 2,733,518, 2–7–56, Cl. 33—197.
Pulmosan Safety Equipment Corp.: *See*—
Garelick, Judith J. 2,733,776.
Pumpelly, Charles T., to The Dow Chemical Co. Partial esters of the aliphatic polyhydric alcohols with α,α-dichloropropionic acid. 2,734,076, 2–7–56, Cl. 260—487.
Punch Engineering Pty. Ltd.: *See*—
Skillman, Thomas S. 2,733,833.
Purdy, Harold C., to H. C. Purdy and E. H. Phillips. Method of photographic duplicating using print-out emulsions. 2,733,994, 2–7–56, Cl. 95—5.
Puretic, Mario J. Method of operating a purse seine with a power block unit. 2,733,530, 2–7–56, Cl. 43—8.
Puretic, Mario J. Net handling apparatus. 2,733,531, 2–7–56, Cl. 43—8.
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McCoy, Marion M. 2,733,855.
Putter, Rolf: *See*—
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Putterman, Lucy. Collapsible utility cart with removable container. 2,733,930, 2–7–56, Cl. 280—41.
Pyes, Richard S. Rear tire carrier. 2,733,847, 2–7–56, Cl. 224—42.21.
Rabinow, Jacob. Bright-spot sensitive headlight dimmer. 2,734,149, 2–7–56, Cl. 315—83.
Radio Corp. of America: *See*—
Beard, Arthur D. 2,734,134.
Hittle, Carl E. 2,733,875.
Hoover, Merle V. 2,734,144.
Hughes, Richard H. 2,734,141.
Pankove, Jacques I. 2,734,154.
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Rajchman, Jan A. 2,733,860.
Rajchman, Jan A. 2,733,861.
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Trözmüller, Friedrich J. 2,734,189.
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Rajchman, Jan A., to Radio Corp. of America. Magnetic switching system. 2,733,860, 2–7–56, Cl. 235—61.
Rajchman, Jan A., to Radio Corp. of America. Magnetic switching system. 2,733,861, 2–7–56, Cl. 235—61.
Rajchman, Jan A., to Radio Corp. of America. Magnetic matrix and computing devices. 2,734,182, 2–7–56, Cl. 340—166.
Rajchman, Jan A., to Radio Corp. of America. Magnetic switching devices. 2,734,183, 2–7–56, Cl. 340—166.
Rajchman, Jan A., to Radio Corp. of America. Magnetic switching devices. 2,734,184, 2–7–56, Cl. 340—166.
Rajchman, Jan A., to Radio Corp. of America. Static magnetic matrix memory. 2,734,187, 2–7–56, Cl. 340—174.
Ram Inc.: *See*—
Bryer, John F. 2,733,493.
Bryer, John F., Steele, and Blackburn. 2,733,494.
Randall, John F., to Ford Motor Co. Beam member. 2,734,117, 2–7–56, Cl. 219—10.
Ranson, Lloyd R., to The Clark Controller Co. Electromagnetic timing devices. 2,734,152, 2–7–56, Cl. 317—178.
Rauland Corp.: *See*—
Noskowicz, Theodore S. 2,734,146.
Reed, William O. 2,734,145.
Rauner, Aron. Serving dish for fruits. 2,733,746, 2–7–56, Cl. 146—3.
Raymond Engineering Laboratory, Inc.: *See*—
Almquist, Nils T. 2,733,674.
Raynor, Charlie J. Emergency switch. 2,734,103, 2–7–56, Cl. 200—61.5.
Raytheon Mfg. Co.: *See*—
Williams, Louis A. 2,733,650.
Readex Microprint Corp.: *See*—
Boni, Albert. 2,733,655.
Reber, Carroll J., Jr., to Philco Corp. Refrigerating system. 2,733,574, 2–7–56, Cl. 62—3.
Redmon, Byran C., to National Distillers Products Corp. Acrylic esters by formaldehyde condensation. 2,734,074, 2–7–56, Cl. 260—486.
Redmond Co., Inc.: *See*—
Latta, Edward. 2,733,609.
Reed Roller Bit Co.: *See*—
Schmid, Paul E. 2,733,687.
Reed, William O., to The Rauland Corp. Storage electrode for a signal storage device. 2,734,145, 2–7–56, Cl. 313—283.
Regie Nationale des Usines Renault: *See*—
Salves, Leon. 2,733,630.
Reichel, Arthur N. Flow actuated devices. 2,734,107, 2–7–55. Cl. 200—81.9.
Reid, Frederick M., and H. Locker, to Fruehauf Co. Fifth wheel suspension for trailers and the like. 2,733,931, 2–7–56, Cl. 280—44.
Reid, Willie A. Hydraulic coupling for use between a driving and a driven element. 2,733,794, 2–7–56, Cl. 192—58.
Reiners, Walter: *See*—
Fürst, Stefan. 2,733,870.
Reinhold, Leonhard F., to Radio Corp. of America. Tape recorder input device. 2,733,871, 2–7–56, Cl. 242—55.
Rem-Cru Titanium, Inc.: *See*—
Newcomb, Charles E., Porter, and Darby. 2,733,912.

Rendleman, Norman C., to Jones & Laughlin Steel Corp. Method of making a plowshare blank. 2,733,500, 2–7–56, Cl. 29—14.
Reppe, Walter, H. Pasedach, and M. Seefelder, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Production of compounds of the pyridine series. 2,734,061, 2–7–56, Cl. 260—290.
Republic Flow Meters Co.: *See*—
Smoot, Charles H., and Phillips. 2,733,608.
Research Corp.: *See*—
McLachlan, Dan, Jr. 2,733,631.
Revere Corp. of America: *See*—
Thurston, Arthur L. 2,733,911.
Reyerson, Lloyd H., to Regents of the University of Minnesota. Pulping wood with nitrogen oxides. 2,733,992, 2–7–56, Cl. 92—9.
Rhinehart, John R., and C. H. Eshrich, to Bogue Electric Mfg. Co. Atomizer. 2,733,961, 2–7–56, Cl. 299—118.
Rich, Dora M.: *See*—
Kirkpatrick, Leland W., Gibson, and Rich. 2,734,008.
Rich, George R.: *See*—
Kirkpatrick, Leland W., Gibson, and Rich. 2,734,008.
Rich Mfg. Corp.: *See*—
Kirkpatrick, Leland W., Gibson, and Rich. 2,734,008.
Riley, Joseph J., to The Taylor-Winfield Corp. Electronic control circuit. 2,734,133, 2–7–56, Cl. 250—27.
Riley, Joseph J., and R. L. Andrews, to The Taylor-Winfield Corp. Apparatus for monitoring the flow of a cooling fluid. 2,734,106, 2–7–56, Cl. 200—81.9.
Rivers, Bernard C. Temperature controlling means for internal-combustion engines. 2,733,864, 2–7–56, Cl. 236—34.
Robbins & Myers, Inc.: *See*—
Chang, Sheldon S. L. 2,733,854.
Steele, Arlo L. 2,733,910.
Roberts, Kenneth L. Forceps for ear-piercing. 2,733,716, 2–7–56, Cl. 128—321.
Robinson, Charles A., to Arnold Hoffman & Co., Inc. Water soluble N-methylol polypyrrolidones, and textiles treated therewith. 2,734,004, 2–7–56, Cl. 117—139.5.
Robinson, Eli A. Method of making a valved inflatable article. 2,734,011, 2–7–56, Cl. 154—85.
Robinson, Lawrence N.: *See*—
Leslie, John G., and Robinson. 2,733,754.
Robinson, William D., to E. I. du Pont de Nemours and Co. Polyvinyl acetate cement compositions. 2,733,995, 2–7–56, Cl. 106—90.
Rocklin, Isadore J. Pushcart-type adjustable rotary saw for timber mowing. 2,733,739, 2–7–56, Cl. 143—43.
Rodd, John T. Toothbrush and paste dispenser assembly. 2,733,722, 2–7–56, Cl. 132—84.
Rodman, Clarence J., to Alliance Ware, Inc. Pickling. 2,733,999, 2–7–56, Cl. 117—50.
Roehl, Edward J., to Pittsburgh Steel Co. Lead-tin alloy plating. 2,734,025, 2–7–56, Cl. 204—43.
Rogers, Lee R., to A. B. Dick Co. Inking and repellent system for planographic printing machines. 2,733,654, 2–7–56, Cl. 101—148.
Rolatape, Inc.: *See*—
Staples, James D., and McCrory. 2,733,511.
Ronson Corp.: *See*—
Sitterle, Harold F. 2,733,585.
Root-Lowell Mfg. Co.: *See*—
Dickison, William, Winks, and Tidd. 2,733,959.
Roper, Geo. D., Corp.: *See*—
Lundgren, John L. 2,733,758.
Lundgren, John L. 2,733,761.
Lundgren, John L., and McCammant. 2,733,760.
McCammant, Leonard H. 2,733,759.
Rose, Benjamin and S. Lightproof tank for film reeling apparatus. 2,733,645, 2–7–56, Cl. 95—96.
Rose, Samuel: *See*—
Rose, Benjamin and S. 2,733,645.
Rosen, Louis. Plug type fishing lure. 2,733,535, 2–7–56, Cl. 43—42.33.
Ross, Sidney D., and I. Kunts, to Sprague Electric Co. Dielectric compositions. 2,734,035, 2–7–56, Cl. 252—63.7.
Rotax Ltd.: *See*—
Milins, Terence W., and Guy. 2,733,891.
Rothe, William L. Ice cube machine. 2,733,577, 2–7–56, Cl. 62—107.
Rowley, Lothair H.: *See*—
McKenney, Henry F., and Rowley. 2,734,157.
Roy, Milton, Co.: *See*—
Saalfrank, Royall B. 2,733,664.
Ruger, William B., to Sturm, Ruger and Co., Inc. Cylinder stop for a revolver. 2,733,529, 2–7–56, Cl. 42—67.
Rundblad, George J., and E. Cairelli, to Wilson-Jones Co. Grinding machine. 2,733,552, 2–7–56, Cl. 51—110.
Ruppe, Peter P. Magnetic elevating conveyor. 2,733,824, 2–7–56, Cl. 214—623.
Ruskin, Henry, to Swingline Inc. Plastic box hinge. 2,733,830, 2–7–56, Cl. 220—31.
Russell, Arthur G., F. A. Clary, Jr., F. B. Casey, and R. E. Dallon, to W. R. Grace & Co. Package sealing machine. 2,733,442, 2–7–56, Cl. 1—187.
Russell, Arthur G., F. A. Clary, Jr., F. B. Casey, and R. E. Dallon, to W. R. Grace & Co. Package sealing machine. 2,733,564, 2–7–56, Cl. 53—48.
Russell, Emily L.: *See*—
Russell, George L. 2,733,948.
Russell, George L. 2,733,949.
Russell, George L., deceased (E. L. Russell, executrix). Magnetic devices. 2,733,948, 2–7–56, Cl. 294—65.5.
Russell, George L., deceased (E. L. Russell, executrix). Magnetic devices. 2,733,949, 2–7–56, Cl. 294—65.5.
Russell, William W., and H. C. Allen, to Sayles Finishing Plants, Inc. Method of making glazed pattern fabric. 2,733,998, 2–7–56, Cl. 117—11.
Rutgers Research and Endowment Foundation: *See*—
Nickerson, Walter J., and Merkel. 2,734,027.
Ryan, James L. Journal box construction for railway cars. 2,733,966, 2–7–56, Cl. 308—40.
Rybolt, Ora M. Control system for electric welder. 2,734,116, 2–7–56, Cl. 219—8.
SKF Industries, Inc.: *See*—
Törnebohm, Hilding V. 2,733,516.
S. S. S. Gears Ltd.: *See*—
Short, Philip J. 2,733,791.
Saalfrank, Royall B., to Milton Roy Co. Pump with facilities for cleaning. 2,733,664, 2–7–56, Cl. 103—153.
Saccoccio, Anthony R., to Aro-Sac, Inc. Clasp finding. 2,733,491, 2–7–56, Cl. 24—252.
Sahs, Leonard J., and H. W. Mould, Jr., to Fedders-Quigan Corp. Apparatus for testing refrigeration compressors. 2,733,600, 2–7–56, Cl. 73—168.
Salves, Leon, to Regie Nationale des Usines Renault. Apparatus for inspecting machined work, more particularly applicable to fuel injectors for internal-combustion engines. 2,733,630, 2–7–56, Cl. 88—14.
Sampselle, Willis W. Tank trucks and loading system therefor. 2,733,728, 2–7–56, Cl. 137—235.
Sanders, Wilbur E.: *See*—
Beringer, George E., and Sanders. 2,733,503.
Sandoz A. G.: *See*—
Bücheler, Paul, and Peter. 2,733,976.
Grandjean, Philippe, Steinemann, and Wehrli. 2,734,053.
Günthard, Jacques, and Peter. 2,734,060.
Iselin, Ernst. 2,734,051.
Sappington, Ransom H. Apparatus for removing paraffin from oil wells. 2,733,767, 2–7–56, Cl. 166—176.
Sax, Percival M., Jr. Hand trucks for climbing stairs. 2,733,927, 2–7–56, Cl. 280—5.32.
Saxl, Erwin J. Clutch with magnetic fluid mixture. 2,733,792, 2–7–56, Cl. 192—21.5.
Sayles Finishing Plants, Inc.: *See*—
Russell, William W., and Allen. 2,733,998.
Scherer, Robert C. Compressed packing for cable through wall. 2,733,939, 2–7–56, Cl. 285—30.
Schermerhorn, John C.: *See*—
Zachary, Robert A., and Schermerhorn. 2,734,168.
Schevtchuk, Andrew: *See*—
Gould, Herbert R., and Schevtchuk. 2,734,176.
Schlemmer, Christian F., to Textile Machine Works. Method of knitting full-fashioned hosiery. 2,733,584, 2–7–56, Cl. 66—89.
Schlesselman, John H., and D. D. Blaskovitz. Automatic wire taping apparatus. 2,733,753, 2–7–56, Cl. 154—1.8.
Schmid, Albert E., Jr.: *See*—
Lufcy, Carroll W., and Schmid. 2,734,165.
Schmid, Paul E., to Reed Roller Bit Co. Reversing valve. 2,733,687, 2–7–56, Cl. 121—34.
Schmidt, Frederick A. Metal cabinet hanger. 2,733,887, 2–7–56, Cl. 248—223.
Schmidt, Hugo E. Steering attachment for automobile steering wheels. 2,733,617, 2–7–56, Cl. 74—557.
Schmitt, Roland G., and V. E. Swedberg, to Walgreen Co. Machine for making fibrous badges having an adhesive securing portion. 2,733,751, 2–7–56, Cl. 154—1.
Schneider, Abraham, and W. K. Conn, to Sun Oil Co. Isomerization of cis-decalin. 2,734,092, 2–7–56, Cl. 260—666.
Schneider, Abraham, and W. K. Conn, to Sun Oil Co. Isomerization of decalin. 2,734,093, 2–7–56, Cl. 260—666.
Schneider, Albert P. Internal-combustion engines and induction systems therefor. 2,733,696, 2–7–56, Cl. 123—97.
Schoeld, Edmund A., and C. W. Egbom, to Potash Co. of America. Resin-coated potassium salts and method of making the same. 2,734,002, 2–7–56, Cl. 117—100.
Schuck, Oscar H., to Minneapolis-Honeywell Regulator Co. Motor control apparatus adapted for automatic to manual change-over. 2,734,155, 2–7–56, Cl. 318—19.
Schultz, Harold W., to General Motors Corp. Method of making bearings. 2,734,024, 2–7–56, Cl. 204—23.
Schulz, Hermann, and H. Huemer, to American Cyanamid Co. Process for the production of solid finely divided, fluffy cyanuric chloride from the vapor phase. 2,734,058, 2–7–56, Cl. 260—248.
Schumacher, Joseph C., to Western Electrochemical Co. Process for making sodium perchlorate from molten sodium chlorate. 2,733,982, 2–7–56, Cl. 23—85.
Schumann, Herbert, and E. Clauss, to G. M. Pfaff A. G. Device for automatically exchanging bobbins on sewing machines. 2,733,676, 2–7–56, Cl. 112—180.
Schumer, Louis. Key retainer. 2,733,591, 2–7–56, Cl. 70—456.
Schur, Milton O., and R. M. Levy, to Ecusta Paper Corp. Cigarette paper wrapper. 2,733,720, 2–7–56, Cl. 131—15.
Schwamberger, Emil, to Cassella Farbwerke Mainkur Aktiengesellschaft. Sulfurized condensation products and process of making same. 2,734,050, 2–7–56, Cl. 260—131.
Schwieger, Orin J. Crayon molds. 2,733,478, 2–7–56, Cl. 18—34.
Searle, Norman E., to E. I. du Pont de Nemours and Co. Aliphatic substituted methyl urea herbicidal compositions and methods. 2,733,988, 2–7–56, Cl. 71—2.7.
Sebel, D., and Co. Ltd.: *See*—
Sebel, David. 2,733,548.
Sebel, David, to D. Sebel and Co. Ltd. Sound emitting doll supporting toy. 2,733,548, 2–7–56, Cl. 46—175.
Seefelder, Matthias: *See*—
Reppe, Walter, Pasedach, and Seefelder. 2,734,061.
Seely, Richard E., to General Electric Co. Protective arrangement for dual-voltage motor. 2,734,158, 2–7–56, Cl. 318—221.
Segal, Samuel, to Wilson-Jones Co. Staple extractor. 2,733,893, 2–7–56, Cl. 254—28.
Senkbeil, Herman O.: *See*—
Brust, Harry F., and Senkbeil. 2,734,075.

Sensenig, Miles L., to Sperry Rand Corp. Expansible and contractible welding jig. 2,734,120, 2–7–56, Cl. 219—17.

Seroko, Andrew. Dispensing containers. 2,733,843, 2–7–56, Cl. 222—490.

Setser, Herschel A.: *See*—
Cado, Erwin D., Buskirk, and Setser. 2,733,757.

Shaffer, Wallace: *See*—
Patton, Bernard J. 2,733,973.

Shaw, Stanley: *See*—
Mecklenburgh, George K., Peters, and Shaw. 2,734,001.

Sheesley, Jay R., and J. P. Morris. Strap anchor for freight cars. 2,733,670, 2–7–56, Cl. 105—369.

Sheesley, Jay R., and J. P. Morris. Rotatable strap anchor for freight cars. 2,733,671, 2–7–56, Cl. 105—369.

Sheffield, Marvin J. Straddle row scraper and cultivator attachment for tractors. 2,733,646, 2–7–56, Cl. 97—170.

Shell Development Co.: *See*—
Goppel, Johan M., and Zonneveld. 2,734,086.
Treseder, Richard S., and Raifsnider. 2,734,029.

Sherman, Tracy H., to Foster Wheeler Corp. Oil heater. 2,733,692, 2–7–56, Cl. 122—356.

Short, Philip J., to S. S. S. Gears Ltd. Synchronizing coupling devices. 2,733,791, 2–7–56, Cl. 192—18.

Showstack, Paul J. Cap alarm device. 2,733,681, 2–7–56, Cl. 116—105.

Siegel, Clarence J. Ice fish pole and tip over. 2,733,532, 2–7–56, Cl. 43—17.

Siemens & Halske Aktiengesellschaft: *See*—
Villmann, Walter R. 2,734,101.

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Douma, Tjiske. 2,734,169.

Silverman, I. Irving, to Illinois Testing Laboratories, Inc. Dew-point detecting device. 2,733,594, 2–7–56, Cl. 73—17.

Simon, Albert C., to the United States of America as represented by the Secretary of the Navy. Method for welding lead to lead. 2,734,094, 2–7–56, Cl. 136—67.

Sinclair Refining Co.: *See*—
Case, Everett N. 2,734,038.

Singer Mfg. Co., The: *See*—
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Sipkes, Hendrik: *See*—
Pluim, Jan, Sipkes, and Van Steeden. 2,733,986.

Sitterle, Harold F., to Ronson Corp. Cigar lighter actuating mechanism. 2,733,585, 2–7–56, Cl. 67—4.1.

Sjögren, Ivan T. Sewing machines. 2,733,677, 2–7–56, Cl. 112—200.

Skibiski, Joseph. Viewing device for combustion chambers. 2,733,707, 2–7–56, Cl. 126—200.

Skillman, Thomas S., to Punch Engineering Pty. Ltd. Control arrangement for article dispensing systems. 2,733,833, 2–7–56, Cl. 221—7.

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Littmann, Hans, and Sievogt. 2,733,634.

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Smith, Joseph R. Can opening. 2,733,504, 2–7–56, Cl. 30—6.1.

Smith, Kline & French Laboratories: *See*—
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Smith, Peter, to Imperial Chemical Industries Ltd. Production of cyclo-hexa-1,4-diene-1,4-dicarboxylic acid. 2,734,077, 2–7–56, Cl. 260—514.

Smith, Russell F., to Carter Carburetor Corp. Cam and follower mechanism. 2,733,619, 2–7–56, Cl. 74—569.

Smith, Winthrope C., and R. M. Thomas, to Esso Research and Engineering Co. Olefin polymerization with SbS, catalyst. 2,734,047, 2–7–56, Cl. 260—85.3.

Smithson, Gordon W.: *See*—
Soule, Harold B., and Smithson. 2,734,156.

Smoot, Charles H., and N. A. Phillips, to Republic Flow Meters Co. Force responsive control mechanism. 2,733,608, 2–7–56, Cl. 74—1.

Societe Anonyme des Automobiles Peugeot: *See*—
Tolle, Hubert F. 2,733,789.

Societe d'Electro-Chimie d'Electro-Metallurgie et des Acieries Electriques d'Ugine: *See*—
Greffe, André. 2,733,989.

Societe des Usines Chimiques Rhone-Poulenc: *See*—
Gailliot, Paul, and Gaudechon. 2,734,057.

Socony Mobil Oil Co., Inc.: *See*—
Buck, Julian R. 2,733,605.

Sokol, Herman: *See*—
Minieri, Pasquale P., Sokol, and Firman. 2,734,018.

Soltam Ltd.: *See*—
Donner, Hans O. 2,733,638.

Sooter, M. E.: *See*—
Wishon, Evia L. 2,733,779.

Soreng, Edgar M., and H. Y. Fisher, to Soreng Products Corp. Solenoid with plunger. 2,734,153, 2–7–56, Cl. 317—191.

Soreng Products Corp.: *See*—
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Soule, Harold B., and G. W. Smithson, to Pratt & Whitney Co., Inc. Indexing mechanism and indexing control for motor driven turret lathes. 2,734,156, 2–7–56, Cl. 318—39.

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De La Mater, Robert G., and Speiden. 2,733,778.

Sperry Corp., The: *See*—
McKenney, Henry F., and Rowley. 2,734,157.

Sperry Rand Corp.: *See*—
Landsiedel, Walter W. 2,733,859.
Sensenig, Miles L. 2,734,120.

Sprague Electric Co.: *See*—
Ross, Sidney D., and Kuntz. 2,734,035.

Springs Cotton Mills, Inc., The: *See*—
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Stacey, Ernest W., and W. E. Naugler, to United Shoe Machinery Corp. Machines for operating on shoe bottoms or the like. 2,733,588, 2–7–56, Cl. 69—6.5.

Standard Coil Products Co., Inc.: *See*—
Wasmansdorff, Carlton. 2,734,175.

Standard, John W., 25% to L. A. Hare. Fish hook guard. 2,733,533, 2–7–56, Cl. 43—27.4.

Standard Oil Co., The: *See*—
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Stanton, Edward W., to The Singer Mfg. Co. Method of making a power table top for a sewing machine. 2,733,744, 2–7–56, Cl. 144—309.

Staples, James D., and J. J. McCrory, to Rolatape, Inc. Measuring wheel. 2,733,511, 2–7–56, Cl. 33—141.

Starnes, Ray E. Jointer blade sharpener. 2,733,554, 2–7–56, Cl. 51—122.

Starr, Charles E., Jr., and E. M. Charlet, to Esso Research and Engineering Co. Infrared control method for alcohol synthesis process. 2,734,089, 2–7–56, Cl. 260—638.

Starr, Norbert T., to Gar Wood Industries, Inc. Refuse truck. 2,733,820, 2–7–56, Cl. 214—83.3.

Staudt, Max W., Sr. Work holding jig. 2,733,559, 2–7–56, Cl. 51—217.

Stauffer Chemical Co.: *See*—
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Steele, Arlo L., to Robbins & Myers Inc. Centrifugal actuator. 2,733,910, 2–7–56, Cl. 264—15.

Steinemann, Willy: *See*—
Grandjean, Philippe, Steinemann, and Wehrli. 2,734,053.

Stelle, Richard E.: *See*—
Bryer, John F., Steele, and Blackburn. 2,733,494.

Sterkel, Jacob. V-belt sheave. 2,733,612, 2–7–56, Cl. 74—230.5.

Sterner, Frank W., W. J., Jr., and L. C. Wollenhaupt; said W. J., Jr., and L. C. Woolenhaupt, assnrs. to said Sterner. Sequence presentation device. 2,733,923, 2–7–56, Cl. 273—102.2.

Stevens, Philip G., to General Aniline & Film Corp. Synthesis of pyridoxine. 2,734,063, 2–7–56, Cl. 260—295.5.

Stidman, Albert D. Trailer steering apparatus. 2,733,932, 2–7–56, Cl. 280—103.

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Stimpson, Robert H., and J. B. Anderson, to H. J. Heinz Co. Sterilization of canned foods. 2,733,651, 2–7–56, Cl. 99—362.

Stogoski, Edna L. Garter construction. 2,733,448, 2–7–56, Cl. 2—313.

Storm, Lynn W., to Warren Automatic Tool Co. Traveling block position and velocity recorder. 2,733,599, 2–7–56, Cl. 73—151.5.

Strnad, James J., to Lempco Products, Inc. Counterbalancing means for work rotating machine tools. 2,733,560, 2–7–56, Cl. 51—237.

Stuart, Charles N. and N. E. Adjustably positionable shelf for cribs. 2,733,455, 2–7–56, Cl. 5—317.

Stuart, Norma E.: *See*—
Stuart, Charles N. and N. E. 2,733,455.

Studebaker-Packard Corp.: *See*—
Kauffman, John H., and Moore. 2,733,964.

Stuebing, William R. Means for automatically aligning and feeding elongate elements. 2,733,834, 2–7–56, Cl. 221—212.

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Ruger, William B. 2,733,529.

Sturtz, Lawrence G.: *See*—
Beatty, David L., and Sturtz. 2,733,642.

Subias, Ruiz. Figure toy with movable eyes. 2,733,546, 2–7–56, Cl. 46—135.

Suckfüll, Fritz: *See*—
Dittmar, Gerhard, Putter, and Suckfüll. 2,734,052.

Sukacev, Lev. Self-heating containers. 2,733,709, 2–7–56, Cl. 126—262.

Sullivan, Clifford E. Hydraulic booster drive for motor vehicles. 2,733,771, 2–7–56, Cl. 180—66.

Sun Oil Co.: *See*—
Coppock, Walter J. 2,734,032.
Patterson, Omar L. 2,734,137.
Schneider, Abraham, and Conn. 2,734,092.
Schneider, Abraham, and Conn. 2,734,093.
Thober, Herbert C., and McClure. 2,733,993.

Surgi, William F. Mobile power unit. 2,733,661, 2–7–56, Cl. 103—23.

Sutton, Robert W., to Bendix Aviation Corp. Carburetor. 2,733,901, 2–7–56, Cl. 261—41.

Sveda, Steve J.: *See*—
Threlfall, Mary J. and R., Hawanczak, and Sveda. 2,733,881.

Svenska Oljeslageri Aktiebolaget: *See*—
Johnsson, Carl J. F. 2,733,693.

Swedberg, Vernon E.: *See*—
Schmitt, Roland G., and Swedberg. 2,733,751.

Swingline Inc.: *See*—
Roskin, Henry. 2,733,830.

Switzer, George F. Perforator and container for packaged grease. 2,733,836, 2–7–56, Cl. 222—82.

Taini, John, to The C. F. Pease Co. Photographic printing machine. 2,733,644, 2–7–56, Cl. 95—77.5.

Tanner, Walton B.: *See*—
Bristol, John E., and Tanner. 2,734,048.

Tanney, Bertha G. Hospital patient transfer device. 2,733,452, 2–7–56, Cl. 5—81.

Tate, John R. Retractible trailer hitch. 2,733,936, 2–7–56, Cl. 280—491.

Taylor-Winfield Corp., The: *See*—
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Technical Oil Tool Corp.: *See*—
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Telautograph Corp.: *See*—
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Terazono, George T. Spreader for fishing lines. 2,733,536, 2–7–56, Cl. 43—42.74.

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Thober, Herbert C., and W. L. McClure, to Sun Oil Co. Elevation of granular solids. 2,733,993, 2–7–56, Cl. 302—53.

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Threlfall, Mary J. and R., M. Hawanczak, and S. J. Sveda. Collapsible stand. 2,733,881, 2–7–56, Cl. 248—27.8.

Threlfall, Robert: *See*—
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Thurston, Arthur L., to Revere Corp of America. Weighing device. 2,733,911, 2–7–56, Cl. 265—27.

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Tillotson Mfg. Co., The: *See*—
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Timmons, Melvin L., and E. O. Nelson. Combination impact and rotatable tool and socket holder. 2,733,623, 2–7–56, Cl. 81—60.

Tinnerman Products, Inc.: *See*—
Chvosta, Jerry F. 2,733,944.

Todd, Everett W., to Massey-Harris-Ferguson, Inc. Disk harrow bearing assembly. 2,733,648, 2–7–56, Cl. 97—220.

Todd, Russell T., to The McKay Machine Co. Roller leveller with double end drive. 2,733,750, 2–7–56, Cl. 153—104.

Todd, Stanley M.: *See*—
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Jones, Evan I., and Todd. 2,734,041.
Jones, Evan I., Todd, and Wood. 2,734,040.

Tolle, Hubert F., to Societe Anonyme des Automobiles Peugeot. Watertight joints for glazing and the like. 2,733,789, 2–7–56, Cl. 189—78.

Toney, Waddie M., and P. A. Eckolls. Vertically adjustable lectern. 2,733,970, 2–7–56, Cl. 311—39.

Törnebohm, Hilding V., to SKF Industries, Inc. Tolerance limit gage. 2,733,516, 2–7–56, Cl. 33—178.

Toulmin, Harry A., Jr., to The Commonwealth Engineering Co. Antistatic tile and method of making. 2,734,007, 2–7–56, Cl. 117—217.

Towle, Elton L., and O. H. Dorer, to Worthing Corp. Automatic variable speed control mechanism for fluid pumps. 2,733,660, 2–7–56, Cl. 103—23.

Trenchard, Sidney C. Urine test sample collecting means. 2,733,684, 2–7–56, Cl. 119—28.

Trenchard, Sidney C. Sealing apparatus. 2,733,849, 2–7–56, Cl. 226—80.

Trenkle, Jacob I. Timber jack. 2,733,895, 2–7–56, Cl. 254—131.

Treseder, Richard S., and P. J. Reifsnider, to Shell Development Company. Corrosion prevention method. 2,734,029, 2–7–56, Cl. 252—8.55.

Trevaskis, Henry W., to Dunlop Rubber Co. Ltd. Fluid pressure valve. 2,733,727, 2–7–56, Cl. 137—102.

Trevaskis, Henry W., to Dunlop Rubber Co. Ltd. Flexible hose couplings. 2,733,941, 2–7–56, Cl. 285—84.

Trico Products Corp.: *See*—
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Tripplehorn, David R., to J. C. Tripplehorn. Spiral paraffin scrapers. 2,733,768, 2–7–56, Cl. 166—176.

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Tripplehorn, David R. 2,733,768.

Tronnier, Albrecht W., to Voigtländer, A. G. Four component optical objective system of the modified Gauss type. 2,733,636, 2–7–56, Cl. 88—57.

Trotter, Marvin L. Fuel tank with reserve compartment. 2,733,573, 2–7–56, Cl. 62—1.

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Truesdell, Leonard C. Metering device. 2,733,803, 2–7–56, Cl. 194—9.

Trumpler, William E., to Dresser Operations, Inc. Movable guide vanes for centrifugal compressors. 2,733,853, 2–7–56, Cl. 230—114.

Trurnit, Walter. Machine for forming threads by reciprocating hammer dies. 2,733,458, 2–7–56, Cl. 10—153.

Tucker, George R., Sr. Costume jewelry and the like. 2,733,578, 2–7–56, Cl. 63—29.

Turak, Anthony. Double valve flow control. 2,733,730, 2–7–56, Cl. 137—505.13.

Turak, Anthony. Flow-rate control dispensing valve. 2,733,731, 2–7–56, Cl. 137—597.

Twining, Homer L. Portable testing apparatus for drilling-mud additives. 2,733,595, 2–7–56, Cl. 73—38.

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United States Atomic Energy Commission, United States of America as represented by the: *See*—
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University of Minnesota, Regents of The: *See*—
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Urschel Engineering Co.: *See*—
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Valyi, Emery I. Apparatus for producing shell molds. 2,733,488, 2–7–56, Cl. 22—20.

Van Buren, Edmund. Humidified air spray system. 2,733,957, 2–7–56, Cl. 299—58.

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Coulter, Samuel T., Hoyt, and Van Deest. 2,733,762.

Vandergriff, Arvel L., to Lummus Cotton Gin Co. Cotton gin embodying improved pneumatic doffing mechanism. 2,733,481, 2–7–56, Cl. 19—59.

Van Hare, George, and R. Montgomery, to Chemical Construction Corp. Method of precipitating metals in metallic form from ammonical ammonium salt solutions. 2,733,990, 2–7–56, Cl. 75—108.

Van Leer, Oscar J., and C. C. Grotnes, to Grotnes Machine Works, Inc. Method of and apparatus for making steel drums. 2,733,502, 2–7–56, Cl. 29—458.

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Badenoch, Benjamin W. 2,733,689.
Gardiner, Duncan B. 2,733,571.

Victoria Vogue, Inc.: *See*—
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Vidrick, Thomas J.: *See*—
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Vierling, John A., to Brown & Bigelow. Adjustable valve for liquified petroleum gas lighters. 2,733,890, 2–7–56, Cl. 251—215.

Villmann, Walter R., to Siemens & Halske Aktiengesellschaft. Automatic telephone system. 2,734,101, 2–7–56, Cl. 179—16.

Vogt, Clarence W. Production of formed masses of plastic material. 2,733,673, 2–7–56, Cl. 107—54.

Vogt, William. Spring urged pivoted toggle bolt. 2,733,629, 2–7–56, Cl. 85—3.

Voigt, Johnston S.: *See*—
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Voigt, Robert H. Carburation system for internal-combustion engines. 2,733,698, 2–7–56, Cl. 123—127.

Voigtländer, A. G.: *See*—
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Von Hofe, George W., and E. K. Wolff, to New Jersey Machine Corp. Stack elevator and control therefor. 2,733,920, 2–7–56, Cl. 271—31.

Waas, Samuel M., to Manley, Inc. Liquid seasoning pump system for popcorn machines. 2,733,841, 2–7–56, Cl. 222—385.

Wadley, Edward F.: *See*—
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Wagner, James E. Boat propulsion means. 2,733,680, 2–7–56, Cl. 115—25.

Wagner, Thomas C. G., to The Davies Laboratories, Inc. Frequency modulated oscillator for high carrier frequencies. 2,734,135, 2–7–56, Cl. 250—36.

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Walgreen Co.: *See*—
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Wallace, Robert E., Sr. Apparatus for opening clogged drains. 2,733,450, 2–7–56, Cl. 4—256.

Wallace Tiernan Inc.: *See*—
Booth, George M. 2,733,814.

War, United States of America as represented by the Secretary of: *See*—
Musser, Clarence W. 2,733,639.

Ware, Ennis. Valve guide for flush tanks. 2,733,449, 2–7–56, Cl. 4—57.

Warneck, Leo J. Combined horn sounding and headlight beam selector and wiring system therefor. 2,734,181, 2–7–56, Cl. 340—75.

Warner, Ernest S. Bark-removing rotor having brake-advanced pivotally mounted tools. 2,733,743, 2–7–56, Cl. 144—208.

Warren Automatic Tool Co.: *See*—
Storm, Lynn W. 2,733,599.

Warren, Charles S., to Radio Corp. of America. Magnetic switch. 2,734,185, 2-7-56, Cl. 340—166.

Warren, Henry G. Water sprinkler. 2,733,958, 2-7-56, Cl. 299—71.

Warren, Ray C., to Hershel California Fruit Products Co., Inc. Fruit lifting device. 2,733,724, 2-7-56, Cl. 134—134.

Warren, Roy R. Fire-hydrant wrench. 2,733,625, 2-7-56, Cl. 81—98.

Wasmansdorff, Carlton, to Standard Coil Products Co. Inc. Tunable unit for radio apparatus. 2,734,175, 2-7-56, Cl. 333—82.

Waterbury Farrel Foundry & Machine Co., The: *See*— Pizzuto, Joseph. 2,733,457.

Watts Electric & Mfg. Co.: *See*— Dolamore, Earl W. 2,734,178.

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Welbilt Corp.: *See*— Feder, Arthur G. 2,733,706.

Welty, Frank and R. D., to Carbonic Dispenser, Inc. Method and apparatus for distributing and dispensing carbonated beverages. 2,733,850, 2-7-56, Cl. 226—115.

Welty, Raymond D.: *See*— Welty, Frank and R. D. 2,733,850.

Wenis, Edward, to Hoffmann-La Roche Inc. Production of 6-lyxoflavin and intermediates therefor. 2,734,054, 2-7-56, Cl. 260—193.

Wenner, Charles B., to Airkem, Inc. Vaporizing dispenser for air treating gels. 2,733,956, 2-7-56, Cl. 299—24.

Wesson, Paul P. Rubber keys for business and office machines such as typewriters. 2,733,804, 2-7-56, Cl. 197—103.

Western Electric Co., Inc.: *See*— Bunch, Tillman T. 2,733,869. Williams, Alfred A. 2,733,799. Zeller, Edward B. 2,733,749.

Western Electrochemical Co.: *See*— Schumacher, Joseph C. 2,733,982.

Western Metal Sash Co., Inc.: *See*— Morra, Peter J. 2,733,787.

Westinghouse Air Brake Co.: *See*— Dodd, Arthur E., and McMahon. 2,734,130. Gunning, Samuel D. 2,733,896.

Westinghouse Electric Corp.: *See*— Pennow, Willis A. 2,734,180.

Wettstein, Albert, and F. Benz, to Ciba Pharmaceutical Products, Inc. Process for the manufacture of hydrolyzed adrenocorticotrophin. 2,734,015, 2-7-56, Cl. 167—74.

Wettstein, Albert, and F. Benz, to Ciba Pharmaceutical Products, Inc. Process for the production of hydrolyzed chorionic gonadotrophin. 2,734,017, 2-7-56, Cl. 167—74.5.

Wheel Trueing Tool Co.: *See*— Bruce, Stanford P. 2,733,700.

Whitcomb, Keith R., to Cee-Bee Chemical Co., Inc. Apparatus for removing sealant from fuel tanks. 2,733,723, 2-7-56, Cl. 134—111.

White, John W., to Technical Oil Tool Corp. Wound clip applicator. 2,733,441, 2-7-56, Cl. 1—49.1.

White Sewing Machine Corp.: *See*— Ayres, Waldemar A. 2,733,867. Hamlett, Sidney J. 2,733,868.

Whiteley, Ralph V. Releasable lock for a compensating tongue unit of a logging truck and trailer combination. 2,733,935, 2-7-56, Cl. 280—477.

Whitesell, Harry. Grinding and polishing and the like. 2,733,556, 2-7-56, Cl. 51—141.

Whitmer, Thomas C. Process of coating and dyeing textile fibers and resultant article. 2,733,975, 2-7-56, Cl. 8—18.

Wiegand, Edwin L., Co.: *See*— Dicome, Herman C. 2,734,121.

Wieland, Peter: *See*— Miescher, Karl, and Wieland. 2,734,056.

Wikle, George F., to United States Rubber Co. Bias cutter. 2,733,766, 2-7-56, Cl. 164—34.

Wilcolator Co., The: *See*— Malone, Homer F. 2,734,159.

Wild, John J. Power shears. 2,733,506, 2-7-56, Cl. 30—228.

Wilder, Edith E. Duster attachment for a broom head. 2,733,470, 2-7-56, Cl. 15—247.

Wilkes, John B.: *See*— Aroyan, Harry J., and Wilkes. 2,734,079. Aroyan, Harry J., and Wilkes. 2,734,080.

Wilkes, John B., to California Research Corp. Hydrolysis of amides. 2,734,078, 2-7-56, Cl. 260—515.

Williams, Alfred A., to Western Electric Co., Inc. Trip mechanism for presses. 2,733,799, 2-7-56, Cl. 192—131.

Williams, Frederic C., to National Research Development Corp. Magnetic storage systems. 2,734,186, 2-7-56, Cl. 340—174.

Williams, Louis A., to Raytheon Mfg. Co. Microwave cooker controls. 2,733,650, 2-7-56, Cl. 99—327.

Williams, Milton S.: *See*— McMillan, Stephen L., and Williams. 2,733,796.

Williamson, Marshall I., to Federal Paper Board Co., Inc. Containers. 2,733,852, 2-7-56, Cl. 229—41.

Willmore, Charles B., to William F. Jobbins, Inc. Aluminum-magnesium casting alloys. 2,733,991, 2-7-56, Cl. 75—147.

Willrodt, Fred L. Bale loader. 2,733,821, 2-7-56, Cl. 214—359.

Wilson-Jones Co.: *See*— Rundblad, George J., and Cairelli. 2,733,552. Segal, Samuel. 2,733,893.

Wilson, Samuel A.: *See*— Miller, Joseph H., and Wilson. 2,733,528.

Wilson, William B.: *See*— North, Edwin W., and Wilson. 2,733,946.

Winkelman, Harvey E., and H. E., Jr.; said H. E. Winkelman, Jr., assor. to said H. E. Winkelman. Propeller and pump assembly. 2,733,679, 2-7-56, Cl. 115—.5.

Winkelman, Harvey E., Jr.: *See*— Winkelman, Harvey E. and H. E., Jr. 2,733,679.

Winks, John L.: *See*— Dickison, William, Winks, and Tidd. 2,733,959.

Wishon, Evia L., deceased; M. A. Kamper, administratrix, ½ to M. E. Sooter. Safety brake for cars and trucks. 2,733,779, 2-7-56, Cl. 188—106.

Wobensmith, James C. Paint mixer. 2,733,900, 2-7-56, Cl. 259—135.

Wolfe, Ralph W. Pressure-responsive, self-closing safety valve. 2,733,729, 2-7-56, Cl. 137—458.

Wolff, Edwin K.: *See*— Von Hofe, George W., and Wolff. 2,733,920.

Wollenhaupt, Louis C.: *See*— Sterner, Frank W., and W. J. and L. C. Wollenhaupt. 2,733,923.

Wollenhaupt, William J., Jr.: *See*— Sterner, Frank W., and W. J. and L. C. Wollenhaupt. 2,733,923.

Wood, Gar, Industries, Inc.: *See*— Starr, Norbert T. 2,733,820.

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Woodard, Walter M., to Elwell-Parker Electric Co. Die handling industrial truck. 2,733,822, 2-7-56, Cl. 214—502.

Woodward & Dickerson, Inc.: *See*— Bos Houwers, Willem A. N. 2,733,848.

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Worthington Corp.: *See*— Towle, Elton L., and Dorer. 2,733,660.

Wottring, Lee R. Motion picture film feeding and registering mechanism. 2,733,633, 2-7-56, Cl. 88—18.4.

Wrege, Edgar E., and A. Adams, to International Minerals & Chemical Corp. Process for the concentration of potash ore. 2,733,809, 2-7-56, Cl. 209—166.

Wright, Kenneth H., and C. C. Baudoin. Cell construction for transporting prisoners in automobiles. 2,733,952, 2-7-56, Cl. 296—24.

Wuesthoff, Frederick J. Orthopedic belt. 2,733,712, 2-7-56, Cl. 128—78.

Wurzel, Hugo, to Waldes Kohinoor, Inc. Driving means for rolls, spools, and the like. 2,733,872, 2-7-56, Cl. 242—71.

Yates, Charles E., and C. D. Pearce, to International Smelting and Refining Co. Apparatus for removing castings from molds. 2,733,490, 2-7-56, Cl. 22—94.

Zachariassen, Stig H. B., to Aktiebolaget Separator. Dosing method and device. 2,733,725, Cl. 137—12.

Zachary, Robert A., and J. G. Schermerhorn, to General Electric Co. Electrical phase discriminator circuits. 2,734,168, 2-7-56, Cl. 324—83.

Zeiss, Carl: *See*— Littmann, Hans, and Sievogt. 2,733,634.

Zeller, Edward B., to Western Electric Co., Inc. Roller punch and die. 2,733,749, 2-7-56, Cl. 153—21.

Zellweger, Conrad, to La Nationale S. A. Fluidtight watch crown construction. 2,733,567, 2-7-56, Cl. 58—90.

Zibell, Jules S. Portable receptacle. 2,733,710, 2-7-56, Cl. 126—263.

Zimmerman, George D. Gearing. 2,733,616, 2-7-56, Cl. 74—412.

Zollman, Charles W. Grain drying apparatus. 2,733,521, 2-7-56, Cl. 34—224.

Zonneveld, Simon H.: *See*— Goppel, Johan M., and Zonneveld. 2,734,086.

CLASSIFICATION OF PATENTS

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NOTE.—First number = class, second number = subclass, third number = patent number

1— 1: 2,733,439
49: 2,733,440
49.1: 2,733,441
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CLASSIFICATION OF DESIGNS

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TRADEMARKS

NOTICES

Disposal of Copies of Articles of Incorporation

In a notice dated October 9, 1953, published in 676 O. G. 8 (November 3, 1953), it was announced by the Commissioner of Patents that the practice of recording, or receiving and filing articles of incorporation by the Patent Office was discontinued and Order No. 3181 relating to that practice was rescinded.

Articles of incorporation or photoprints thereof filed in accordance with that practice are no longer used by the Patent Office for any purpose and will therefore be destroyed.

DAPHNE LEEDS,
Assistant Commissioner of Patents.

Jan. 24, 1956.

Consular Fee Stamps

The Department of State has notified the Patent Office that the use of consular fee stamps was discontinued by statute effective June 28, 1955. Hence, all papers in patent applications executed on or after that date, that formerly required the consular fee stamp, are acceptable without such stamp. Those papers executed before June 28, 1955, however, still require the stamp, and the practice with relation to such papers is not changed.

FOR THE SUPERVISORY EXAMINERS,
By THOMAS F. MURPHY,
Supervisory Examiner.

Jan. 25, 1956.

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 90,992 (a diamond design), Hood River Apple Growers' Union, Fresh apples; **TM 321,880** ("Blue Diamond Brand" and design), Apple Growers Association, same; **TM 525,598**, same, Fresh deciduous fruits; **TM 525,599** ("Diamond" and design), same, Fresh deciduous fruits—namely, fresh apples, fresh pears; **TM 525,600** (a diamond design), same, Fresh deciduous fruits—namely, fresh apples, fresh pears, and fresh cherries, **filed** Nov. 29, 1955, D. C., N. D. Calif. (Sacramento), Doc. 7322, *Apple Growers Assn.* v. *Pelletti Fruit Co.*

TM 97,192 (Chicken Of The Sea), White Star Canning Company (Renewed by Van Camp Sea Food Co., Inc.), Tuna fish and pure olive oil, etc., **filed** Dec. 1, 1953, D. C., S. D. N. Y., Doc. 89/335, *Van Camp Sea Food Co., Inc.* v. *Gencomex Trading Co., Inc.* (Title of defendant amended Jan. 3, 1956.) Consent judgment; defendant enjoined Jan. 3, 1956.

TM 112,291, TM 132,013 (Libby's), Libby, McNeill & Libby, Certain named food products; **TM 176,503** ("Libby" and design), **TM 186,522** ("Libby's" and design), same; **TM 233,742** ("Libby's" and rectangular outline design), same, Canned fruits and berries, **filed** Dec. 29, 1955, D. C., S. D. N. Y., Doc. 106/41, *Libby, McNeill & Libby* v. *Products Import & Export Co. et al.*

TM 132,013. (See TM 112,291.)

TM 176,503. (See TM 112,291.)

TM 186,522. (See TM 112,291.)

TM 233,742. (See TM 112,291.)

TM 267,288 (Technicolor), Technicolor Motion Picture Corporation, Motion picture films, **filed** July 7, 1954, D. C., S. D. N. Y., Doc. 94/152, *Pathe Laboratories Inc.* v. *Technicolor Motion Picture Corp. et al.* "Order granting plaintiff's motion to dismiss action voluntarily" (notice Dec. 27, 1955).

TM 305,694 (Scamp), Kops Brothers, Inc., Renewed by Henry C. Fein, Bust confining garments; **TM 343,509** (Winter Scamp), Arthur Adelman, doing business as Continental Undergarment Co.. Republished by Continental Undergarment Co., Inc., Ladies' panties; **TM 503,586** ("Scamp" and a star design), Ladies' nightgowns, slips, etc., **filed** Sept. 7, 1954, D. C., S. D.

CONDITION OF TRADEMARK APPLICATIONS AS OF JANUARY 13, 1956

Total number of applications awaiting action (excluding renewals and republications)	8,802
Date of oldest new application	May 16, 1955
Date of oldest amended application	Oct. 3, 1955

MERCHANT, JOHN, Executive Examiner TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application	
	New	Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	8-1-55	10-13-55
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	5-16-55	10-3-55
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	7-1-55	10-21-55
Renewals (All Classes)	11-24-55	----------
Sec. 12 (c) Publications (All Classes)	11-28-55	----------

Applications Filed During The Week Ending January 13, 1956—454

Registrations Issued---------- 448—No. 620,595 to No. 621,042
Renewals Issued---------- 49

N. Y., Doc. 95/277, *The Skamperette Co., Inc.* v. *Henry C. Fein Co. et al.* Dismissed for lack of prosecution Dec. 7, 1955.

TM 316,913. (See TM 530,481.)

TM 321,880. (See TM 90,092.)

TM 337,799 (Fram), Fram Oil Filter Company, Republished by Fram Corporation. Oil filters for automotive engines, **filed** Aug. 10, 1955, D. C., S. D..N. Y., Doc. 102/326, *Fram Corp. v. Hamon Industries, Inc., et al.* Stipulation and order of discontinuance (notice Dec. 23, 1955).

TM 343,509. (See TM 305,694.)

TM 361,448 ("Bantamac" and design), Adirondack Sportswear Inc., Sportswear and wearing apparel—namely, golf jackets, rain coats, ski jackets, etc.: **TM 400,630** (a trademark design), **TM 407,965** ("Umbrella" and design), Marcus Breier's Sons, same; **TM 557,483** ("Weather-Perfect Bantamac" and design), Marcus Breier Sons, Inc., Sports jackets and coats for men and women; **TM 569,714** ("Bantamac Bantamates" and design), same, Men's and women's jackets and trousers, **filed** Nov. 9, 1955, D. C., S. D. N. Y., Doc. 104/379, *Marcus Breier Sons, Inc.* v. *Schindler & Co. Inc.* Stipulation and order of discontinuance Dec. 16, 1955.

TM 380,600 (Continental), Continental Foods, Inc., Packaged soups, **filed** Dec. 6, 1955, D. C., S. D. N. Y., Doc. 105/243, *Thomas J. Lipton, Inc.* v. *Continental Coffee Co.*

TM 385,566 ("Star Lite" and design), Cuyahoga Furniture and Lamp Co., Electric floor lamps; **TM 584,605** ("Star Light" and design), Moe Light, Inc., Electric lighting fixtures and parts thereof, **filed** May 28, 1954, D. C., S. D. Calif. (Los Angeles), Doc. 16806–WB, *Thomas Industries, Inc.* v. *Starlite, Ltd.* Consent decree; trademark registrations "Starlite" and "Star Light" held valid; injunction issued restraining defendant from use of words "Lights by Starlite, Ltd" and "Starr" (notice Dec. 13, 1955).

TM 387,010 (Permatoned), B. White, Ladies' and children's handbags, purses, and pocketbooks of processed leathers; **TM 611,971** (Permatone), B. B. White, same, **filed** Dec. 1, 1955, D. C., S. D. N. Y., Doc. 105/199, *Morris White Fashions, Inc.* v. *The Henry Co. et al.* Stipulation and order of discontinuance Dec. 21, 1955.

TM 400,630. (See TM 361,448.)

TM 407,965. (See TM 361,448.)

TM 413,488 (Riggs), Soren Shirt Company. Men's dress shirts and men's and boys' sport shirts, **filed** Dec. 29, 1955, D. C., M. D. Tenn. (Nashville), Doc. 2127, *Soren Shirt Co., Inc.* v. *Gallatin Mfg. Co., Inc.*

TM 503,586. (See TM 305,694.)

TM 506,398 (All), Detergents, Inc., Detergents for use as a laundry powder, **filed** Feb. 1, 1955, D. C., E. D. Mo. (St. Louis), Doc. 10150(2), *Monsanto Chemical Co.* v. *W. V. Beauchamp, Mrs. W. V. Beauchamp, W. V. Beauchamp, Inc., Hill Furniture & Appliance Co., Abraham Davis, John S. Brennan, John Herrin, Wilbert Williams, and Daniel Lorenzen.* Pursuant to stipulation: cause dismissed as to defendants Abraham Davis and John S. Brennan; remaining defendants enjoined from infringing plaintiff's trademark Dec. 30, 1955.

TM 524,505 (Scrabble), The Production and Marketing Corporation, Game including board and playing pieces, **filed** July 19, 1954, D. C., S. D. N. Y., Doc. 94/267, *Production and Marketing Co.* v. *Peerless Playthings, Inc., et al.* Dismissed for lack of prosecution Dec. 7, 1955.

TM 525,598. (See TM 90,092.)

TM 525,599. (See TM 90,092.)

TM 525,600. (See TM 90,092.)

TM 530,336 ("International Minerals Chemicals" within a circle design), International Minerals & Chemical Corporation, Fertilizers; **TM 530,342**, same, Double sulfate of potash and magnesia, etc.; **TM 548,595**, same, Potassium chloride; **TM 592,102**, same, Phosphate rock concentrate for use as a fertilizer, in the manufacture of mixed fertilizers, etc.; **TM 597,793**, same, Potassium carbonate, hydrated and calcined, etc.; **TM 604,082**, same, Mixtures of clay, silica sand, and gravel, a flux and a binder for use as refractory lining in foundry cupolas, **filed** Dec. 27, 1955, D. C. Del. (Wilmington), Doc. 1777, *International Minerals & Chemical Corp.* v. *Texas International Minerals Corp.*

TM 530,342. (See TM 530,336.)

TM 530,481, TM 316,913 (Yale), Becton, Dickinson and Co., Clinical thermometers, hypodermic syringes, and needles, **filed** Nov. 17, 1955, D. C., S. D. N. Y., Doc. 105/65, *Becton, Dickinson and Co.* v. *Schultz Surgical Instrument Co.* Notice of voluntary dismissal Dec. 15, 1955.

TM 547,321 ("AAA" within a design), American Automobile Association, Services rendered to motor vehicle owners, motorists and travelers generally, etc., **filed** Dec. 27, 1955, D. C., E. D. Tenn. (Chattanooga), Doc. 2703, *American Automobile Association* v. *Ed McCabe.*

TM 548,595. (See TM 530,336.)

TM 557,483. (See TM 361,448.)

TM 569,714. (See TM 361,448.)

TM 570,248 (Saucy Walker), Ideal Toy Corporation, Dolls, **filed** Sept. 24, 1954, D. C. N. J. (Newark), Doc. 735/54, *Ideal Toy Corp.* v. *P. J. Hill Co.* Plaintiff adjudged owner of trademark registration Dec. 30, 1955.

TM 572,328 ("Gi Gi Young" and design), Lombardy Dresses, Inc., Ladies' and misses' dresses, **filed** Dec. 8, 1955, D. C., S. D. N. Y., Doc. 105/280, *Lombardy Dresses, Inc.* v. *Gigi Fashions, Inc.*

TM 576,163 ("Hard Gloss" and design), S. C. Johnson & Son, Inc., Liquid polish for floors, **filed** July 26, 1954, D. C., District of Columbia, Doc. 3185/54, *S. C. Johnson & Son, Inc.* v. *Peoples Drug Stores, Inc., et al.* Stipulation dismissing action and counterclaim Dec. 16, 1955.

TM 579,847 (Star), Mid-States Corp., House trailers, **filed** Dec. 29, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 19273–BH, *Mid-States Corp.* v. *Kurmann Trailer Mfg. Co.*

TM 584,605. (See TM 385,566.)

TM 592,102. (See TM 530,336.)

TM 597,793. (See TM 530,336.)

TM 602,529 (Milky), Helene Curtis Industries, Inc., Shampoo, **filed** Dec. 28, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 19267–PH, *Helene Curtis Industries, Inc.* v. *General Beauty & Barber Supply.*

TM 604,082. (See TM 530,336.)

TM 610,922 (Kwik-Change), Milton Manufacturing Co., Inc., Hose couplers for air-operated devices, **filed** Dec. 27, 1955, D. C., E. D. N. Y. (Brooklyn), Doc. 16136, *Milton Mfg. Co., Inc.* v. *Coronet Parts Mfg. Co. Inc. et al.*

TM 611,971. (See TM 387,010.)

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.
As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 665,980. Harris Granite Quarries Company, Salisbury, N. C. Filed May 6, 1954.

COLLINS DURAX
Salisbury

The word "Salisbury" is disclaimed apart from the mark as shown.
For Granite.
Use since Feb. 5, 1928.

SN 671,856. Northrup, King & Co., Minneapolis, Minn. Filed Aug. 17, 1954.

GARDEN WINNER

For Flower Seeds.
Use since August 1953.

SN 681,101. Pennsylvania Glass Sand Corporation, Lewistown, Pa. Filed Feb. 4, 1955.

PENN SAND

The drawing is lined for red, but color is not claimed. Applicant claims ownership of Reg. Nos. 190,925 and 412,971.
For Silica.
Use since Jan. 18, 1955.

SN 684,628. Bodger Seeds, Ltd., El Monte, Calif. Filed Mar. 31, 1955.

Cracker Jack

For Horticultural Product Consisting of Flower Seeds, and Particularly Marigold Seeds.
Use since Feb. 25, 1955.

SN 684,732. J. M. Huber Corporation, New York, N. Y. Filed Apr. 1, 1955.

HYDRAFINE

For Kaolin Clay.
Use since on or about Mar. 2, 1955.

SN 693,791. A. H. Ross & Sons Co., Chicago, Ill. Filed July 5, 1955.

Kleenette

For Leather, More Specifically Snuffed or Corrected Sides, in Elk, Smooth or Embossed Leather.
Use since Nov. 25, 1939.

SN 693,792. A. H. Ross & Sons Co., Chicago, Ill. Filed July 5, 1955.

Klenzette

For Leather.
Use since Mar. 28, 1940.

CLASS 2

SN 660,116. Constellation Cup Corporation, Long Island City, N. Y. Filed Jan. 26, 1954.

For Paper Cups and Covers Therefor.
Use since Sept. 1, 1953.

SN 695,311. Kerk Guild, Incorporated, Whitesboro, N. Y. Filed Sept. 26, 1955.

THREAD MASTER

For Sewing Boxes.
Use since Sept. 8, 1955.

SN 696,053. Mealpack Corporation, Evanston, Ill. Filed Oct. 7, 1955.

SEALOCK

For Containers for Serving and Transporting Prepared Foods.
Use since Feb. 18, 1943.

SN 697,946. River Raisin Paper Company, Monroe, Mich. Filed Oct. 28, 1955.

RR PAPER COMPANY

The words "Paper Company" are disclaimed apart from the mark as shown.
For Corrugated and Solid Fibre Shipping Cases and Cartons.
Use since June 1, 1945.

CLASS 3

SN 680,399. Ed Muhs Co., Berkeley, Calif. Filed Jan. 24, 1955.

SMARTY PAK

For Combination Container and General Utility Carrying Case.
Use since Sept. 7, 1954.

SN 690,215. R. Appel, Inc., New York, N. Y. Filed June 27, 1955.

Ribbon-Flex

For Ladies' Handbags.
Use since Sept. 15, 1954.

SN 693,399. St. Thomas Inc., Gloversville, N. Y. Filed Aug. 19, 1955.

FUTURA

For Men's Unfitted Traveling Cases.
Use since Apr. 8, 1955.

CLASS 5

SN 675,466. Ray C. Campbell, d. b. a. R. C. Campbell Co., Sacramento, Calif. Filed Oct. 26, 1954.

JIFFYTEX

For Latex Base Adhesive.
Use since Feb. 6, 1954.

CLASS 6

SN 664,708. Stewart Taylor, Camargo, Ill. Filed Apr. 16, 1954.



For Bee Smoker.
Use since Feb. 25, 1954.

SN 672,602. The Standard Oil Company, Cleveland, Ohio. Filed Sept. 1, 1954.

FROSTEX

For Fuel System Anti-Freeze and Conditioner.
Use since Aug. 13, 1954.

SN 672,854. Turco Products, Inc., Los Angeles, Calif. Filed Sept. 7, 1954.

TURCOFORM

Applicant claims ownership of Reg. Nos. 270,966, 281,541, and 283,313.
For Metal Surface Treating Compositions Used as Metal Etching Materials.
Use since July 23, 1954.

SN 673,001. Armour and Company, Chicago, Ill. Filed Sept. 10, 1954.

ETHO-CHEMICALS

Applicant claims ownership of Reg. Nos. 513,155, 535,555, and 535,556.
For Industrial Aliphatic Chemicals—Namely, Fatty Acid, Fatty Amine, and Fatty Amide Derivatives Used as Emulsifiers, Wetting Agents, and Intermediates.
Use since Apr. 15, 1954.

SN 673,002. Armour and Company, Chicago, Ill. Filed Sept. 10, 1954.

ETHODUOMEEN

Applicant claims ownership of Reg. Nos. 535,555 and 544,628.
For Industrial Aliphatic Chemicals Used as Emulsifiers and Corrosion Inhibitors.
Use since Apr. 22, 1954.

SN 676,621. Farbwerke Hoechst Aktiengesellschaft, vormals Meister Lucius und Brüning, Frankfurt am Main Hoechst, Germany. Filed Nov. 15, 1954.

Nirosit

Applicant claims ownership of German Reg. No. 533,592, dated June 6, 1941.
For Spraying Agents for Combatting Plant Diseases and Pests in Fruit Culture.

SN 676,834. Puritan Chemical Company, Atlanta, Ga. Filed Nov. 17, 1954.



Applicant claims ownership of Reg. No. 232,706.
For Cleaning, Sanitation and Maintenance Products Which Are Generally Distributed to Customers for Industrial Housekeeping Jobs and/or for Repackaging Under Their Own Brand Names—Namely, Household Deodorants, Disinfectants, Fumigants, Insecticides, Rodenticides, Weed Killers, Wood Preservatives, Germicides, Compounds for Treatment of Wood and Composition Flooring, Chemical Preparations for Cleaning Clogged Drain and Sewer Pipe, and Moisture Absorbing Chemical Preparations.
Use since on or about Jan. 21, 1942, on deodorants and moisture absorbing chemical preparations.

SN 676,835. Puritan Chemical Company, Atlanta, Ga. Filed Nov. 17, 1954.

Puritan

Applicant claims ownership of Reg. No. 232,706.
For Cleaning, Sanitation and Maintenance Products Which Are Generally Distributed to Customers for Industrial Housekeeping Jobs and/or for Repackaging Under Their Own Brand Names—Namely, Household Deodorants, Disinfectants, Fumigants, Insecticides, Rodenticides, Weed Killers, Wood Preservatives, Germicides, Compounds for Treatment of Wood and Composition Flooring, Chemical Preparations for Cleaning Clogged Drain and Sewer Pipe, and Moisture Absorbing Chemical Preparations.
Use since on or about June 1, 1925, on chemical preparations for cleaning clogged drain and sewer pipe.

SN 677,351. Phillips Petroleum Company, Bartlesville, Okla. Filed Nov. 26, 1954.

BUTAREZ

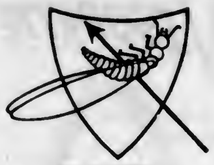
For Synthetic Liquid Polymers.
Use since Oct. 4, 1954.

SN 680,156. Haas Miller Corporation, Philadelphia, Pa., now by change of name to Harry Miller Corp. Filed Jan. 19, 1955.

IMMUCOTE

For Water Phase Cleaning and Rustproofing Agent, Also Metal Surface Preparation for Subsequent Adhesion of Coatings.
Use since Dec. 3, 1954.

SN 680,654. American Termicide Company, Inc., Atlanta, Ga. Filed Jan. 28, 1955.



For Wood Preservative.
Use since Feb. 25, 1954.

SN 682,253. Economics Laboratory, Inc., St. Paul, Minn. Filed Feb. 24, 1955.

RINSE-DRY

For Additive to Rinse Water, To Speed Drying and To Eliminate Water Spotting.
Use since July 8, 1953.

SN 683,379. William D. Ellwyn, Seattle, Wash., to Berylex Corporation, Seattle, Wash. Filed Mar. 14, 1955.

BERYLEX

For Dispersing and Surface Active Agent for Use in Portland Cement Mixtures.
Use since July 10, 1952.

SN 684,145. Olin Mathieson Chemical Corporation, New York, N. Y. Filed Mar. 24, 1955.

OMAZENE

For Fungicide.
Use since Jan. 19, 1955.

SN 684,867. Olin Mathieson Chemical Corporation, New York, N. Y. Filed Apr. 4, 1955.

TERRACLOR

For Fungicide.
Use since Nov. 11, 1954.

SN 685,317. Standard Solutions Company, Inc., Menasha, Wis. Filed Apr. 11, 1955.

STANSOL

For Measured Quantities of Chemically Pure Chemicals, Sold in Crystalline; Partially Solute; and Solute Forms, for Use as a Standard for Determining the Concentration of and Analysis of Solutions of Undetermined Characteristics in Analytical Chemistry—Namely, Acetic Acid, Nitric Acid, Oxalic Acid, Potassium Bichromate, Potassium Iodate, Silver Nitrate, Sodium Hydroxide, and Starch Indicator for Idometric Titrations.
Use since Jan. 26, 1955.

SN 688,564. Nopco Chemical Company, Harrison, N. J. Filed May 31, 1955.

NOPCO JMK

Applicant claims ownership of Reg. Nos. 121,927, 539,973, and others.
For Chemical Composition for Use as a Defoamer.
Use since Oct. 1, 1953.

SN 688,565. Nopco Chemical Company, Harrison, N. J. Filed May 31, 1955.

NOPCO JMY

Applicant claims ownership of Reg. Nos. 121,927, 539,973, and others.
For Chemical Composition for Use as a Defoamer.
Use since Dec. 9, 1952.

SN 688,566. Nopco Chemical Company, Harrison, N. J. Filed May 31, 1955.

NOPCO JMU

Applicant claims ownership of Reg. Nos. 121,927, 539,973, and others.
For Chemical Composition for Use as a Defoamer.
Use since Sept. 30, 1954.

SN 688,584. Sandox Chemical Works, Inc., New York, N. Y. Filed May 31, 1955.

ULTRASPERSE

For Dyestuffs.
Use since January 1955.

SN 688,585. Sandoz Chemical Works, Inc., New York, N. Y. Filed May 31, 1955.

SANDOTHRENE

Applicant claims ownership of Reg. Nos. 300,570, 596,187 and others.
For Dyestuffs.
Use since 1939.

SN 688,594. Strohmeyer & Arpe Company, New York, N. Y. Filed May 31, 1955.

BONAUBA

For Wax, Basically Carnauba Wax.
Use since Apr. 27, 1955.

SN 688,595. Strohmeyer & Arpe Company, New York, N. Y. Filed May 31, 1955.

CARBACOTE

For Wax, Basically Carnauba Wax.
Use since Apr. 27, 1955.

SN 688,730. Hardman & Holden Limited, Manchester, England. Filed June 2, 1955.

MANOX

Applicant disclaims the words "British" and "Brand." Applicant claims ownership of British Reg. No. 665,116, dated Dec. 18, 1947.
For Prussian Blue, Sodium Hydrosulphite, Sodium Ferrocyanide (Yellow Prussiate of soda), Potassium Ferrocyanide (Yellow Prussiate of Potash), Potassium Ferricyanide (Red Prussiate of Potash), Oxide of Iron, Sulphocyanides, Ethyl Palmitate, Thio Urea, Carbon Bisulphide, Naphthenates (Various Metallic), Sulphuric Acid, Thiourea Dioxide, Sodium Dioctyl Sulphosuccinate, Insoluble Sulphur.

SN 693,726. Shell Chemical Corporation, New York, N. Y. Filed Aug. 23, 1955.

IONOL

For Chemical Preparation for Inhibiting Oxidation.
Use since Nov. 15, 1944.

SN 693,727. Shell Chemical Corporation, New York, N. Y. Filed Aug. 23, 1955.

EPON

For Synthetic Resins.
Use since Sept. 1, 1947.

SN 694,098. Shell Chemical Corporation, New York, N. Y. Filed Sept. 1, 1955.

D-D

For Soil Fumigant.
Use since Nov. 15, 1946.

CLASS 8

SN 670,340. Lew Eastman, Detroit, Mich. Filed July 21, 1954.

THE MARSHAL

For Ash Tray.
Use since June 1, 1954.

SN 689,149. Murphy Reier, Inc., Chicago, Ill. Filed June 8, 1955.

airfoam

For Pyrophoric Lighters for Cigars, Cigarettes, and Pipes.
Use since Nov. 18, 1954.

SN 690,528. Leon D. Bush, Chicago, Ill. Filed June 30, 1955.

VISORETTE

For Cigarette and Match Pack.
Use since June 23, 1955.

CLASS 10

SN 672,183. Ruhrchemie Aktiengesellschaft, Oberhausen-Holten, North Rhine-Westphalia, Germany. Filed Aug. 24, 1954.

Ruhrchemie

Applicant claims ownership of German Reg. No. 658,706, dated June 11, 1954.
For Fertilizers.

SN 680,784. Earl E. Nichols, d. b. a. Garden Club Company, Oklahoma City, Okla. Filed Jan. 31, 1955.

Garden Club

For Soil Enrichers and Conditioners.
Use since Nov. 13, 1954.

SN 689,505. Carl P. Mies, d. b. a. The Miespray Company, Skokie, Ill. Filed June 14, 1955.

GREEN MAGIC

For Liquid Fertilizers for Lawns and Growing Plants of All Kinds.
Use since May 6, 1955.

SN 689,827. Farm Belt Fertilizer and Chemical Company, Kansas City, Kans. Filed June 20, 1955.

Mr. Pellet

For Prepared Chemical Fertilizer.
Use since Jan. 5, 1955.

CLASS 12

SN 654,735. Institut International Financier, Eschen, Liechtenstein. Filed Oct. 14, 1953.

PRESSOLIT

Applicant claims ownership of Liechtenstein Reg. No. 309, dated Apr. 23, 1953.
For Extruded Molded Products of Concrete and Similar Masses—Namely, Structural Parts, Pipes, Masts, Poles, Rods, Bricks, Tiles, and Stones for the Covering or Enclosing of Cables.

SN 654,736. Institut International Financier, Eschen, Liechtenstein. Filed Oct. 14, 1953.

I F PRESSOLIT

Applicant claims ownership of Liechtenstein Reg. No. 308, dated Apr. 23, 1953.
For Extruded Molded Products of Concrete and Similar Masses—Namely, Structural Parts, Pipes, Masts, Poles, Rods, Bricks, Tiles, and Stones for the Covering or Enclosing of Cables.

SN 680,926. Artcrest Plastics Co., Inc., Chicago, Ill. Filed Feb. 2, 1955.

GLO-SHEEN

For Plastic Tile.
Use since Dec. 23, 1954.

SN 680,927. Artcrest Plastics Co., Inc., Chicago, Ill. Filed Feb. 2, 1955.

ARTCREST
GLO-SHEEN

Applicant claims ownership of Reg. No. 554,457.
For Plastic Tile.
Use since Dec. 23, 1954; and since Feb. 19, 1951, as to "Artcrest" and the design associated therewith.

SN 683,736. Welsh Plywood Corp., Memphis, Tenn. Filed Mar. 17, 1955.

For Plywood, Veneer Plywood Edging, Plywood Panels, Hardwood Moldings, Wall and Building Boards.
Use since Dec. 1, 1954.

SN 683,802. Peerless Balance Co., Mansfield, Ohio. Filed Mar. 18, 1955.

PAR BAL

For Window Components—Namely, Metal Weatherstripping Components, Jamb Facings, Parting Stops and Parts Thereof.
Use since Oct. 18, 1954.

SN 684,769. United States Gypsum Company, Chicago, Ill. Filed Apr. 1, 1955. Sec. 2(f).

SHINGL-ROL

Applicant claims ownership of Reg. No. 562,657.
For Mineral Surfaced Roll Asphalt Roofing and Asphalt Composition Cement.
Use since Mar. 10, 1949, for roofing.

SN 684,770. United States Gypsum Company, Chicago, Ill. Filed Apr. 1, 1955. Sec. 2(f).

BRACE-TITE

Applicant claims ownership of Reg. No. 578,107.
For Metallic Clips for Attaching Building Boards Used in Walls and Ceilings.
Use since Apr. 12, 1948.

SN 686,020. The Arborite Company Limited, La Salle, Quebec, Canada, to Consoweld Corporation, Wisconsin Rapids, Wis. Filed Apr. 22, 1955.

CURVATOP

Priority under Sec. 44(d). Canadian application filed Oct. 26, 1954, Reg. No. 100,583, dated May 6, 1955.

For Decorative Surfacing Material in the Form of Shaped Panels or Sheets, Subject to Further Cutting for Purposes of Size.
Subj. to Intf. with SN 681,686.

SN 686,939. The Youngstown Sheet and Tube Company, Youngstown, Ohio. Filed May 5, 1955. Sec. 2(f).

YOUNGSTOWN

Applicant claims ownership of Reg. No. 332,644.
For Reinforcing Bars, Bolts, and Structural Shapes.
Use since Apr. 7, 1947.

SN 688,023. Continental Chemical Company, Los Angeles, Calif. Filed May 23, 1955. Sec. 2(f).

SNOWITE

Applicant claims ownership of Reg. No. 422,901.
For Tile Grout Cement.
Use since Oct. 17, 1938.

SN 690,395. New Castle Products, Inc., New Castle, Ind. Filed June 28, 1955.

tub-master
modernfold

Applicant claims ownership of Reg. Nos. 380,764, 523,340, and 571,511.
For Doors for Enclosing Bath Tubs or Showers.
Use since May 23, 1955.

SN 690,801. Capilano Timber Co. Ltd., Vancouver, British Columbia, Canada. Filed July 6, 1955.

CEDARWALLS

For Machine-Grooved Cedar Sidewall Shakes for Home Construction.
Use since Sept. 30, 1947.

SN 692,027. Vermont Marble Company, Proctor, Vt. Filed July 27, 1955.

VERMARCO

Applicant claims ownership of Reg. Nos. 115,561 and 391,372.
For Marble, Other Stone, and Tile Used for Both Exterior and Interior Building Purposes, and for Church Work, Mausoleums, and Burial Vaults.
Use since on or about Mar. 1, 1955.

SN 692,057. Globe Roofing Products Co., Inc., Whiting, Ind. Filed July 28, 1955.

FIRE-FOE

For Asphalt Roofing, in Roll Form.
Use since June 22, 1955.

SN 692,058. Globe Roofing Products Co., Inc., Whiting, Ind. Filed July 28, 1955.

EXCELOK

For Asphalt Shingles.
Use since June 29, 1955.

SN 692,059. Globe Roofing Products Co., Inc., Whiting, Ind. Filed July 28, 1955.

Kolor-Band

Applicant claims ownership of Reg. No. 336,079.
For Mineral Surfaced Asphalt Shingles.
Use since July 6, 1955.

SN 692,060. Globe Roofing Products Co., Inc., Whiting, Ind. Filed July 28, 1955.

FIREMASTER

For Asphalt Roofing, in Roll Form.
Use since June 29, 1955.

SN 692,061. Globe Roofing Products Co., Inc., Whiting, Ind. Filed July 28, 1955.

VERTEX

Applicant claims ownership of Reg. No. 570,109.
For Mineral Surfaced Asphalt Shingles and Mineral Surfaced Asphalt Roll Roofing.
Use since July 5, 1955, on mineral surfaced asphalt shingles.

SN 692,341. Miracle Adhesives Corporation, New York, N. Y. Filed Aug. 2, 1955.

PROTEKTO-FLEX

For Conduit Cover in the Form of an Insulation and Vapor Barrier.
Use since March 1955.

SN 692,590. Floral Combination Storm Window Corp., Mineola, N. Y. Filed Aug. 8, 1955.

Seasonmaster

For Aluminum Storm Windows and Doors, Aluminum Screens, and Aluminum Jalousie Doors and Jalousie Units.
Use since May 5, 1955, on aluminum combination (storm and screen) windows and aluminum combination (storm and screen) doors.

SN 692,831. Croft Steel Products, Inc., Jamestown, N. Y. Filed Aug. 11, 1955.

Twin-loK

For Metal Window Frames.
Use since Aug. 1, 1955.

SN 693,519. Aluminum Company of America, Pittsburgh, Pa. Filed Aug. 23, 1955.

ANOCLAD

For Aluminum and Aluminum Alloy Architectural Building Products—Namely, Sheet and Extrusions.
Use since Aug. 9, 1955.

SN 693,861. Servicised Products Corporation, Chicago, Ill. Filed Aug. 29, 1955. Sec. 2(f).

KORK-PAK

Applicant claims ownership of Reg. No. 523,632.
For Composition Strips or Slabs of Bituminous and Fibrous Compositions for Thermal Insulation and Sound Deadening.
Use since June 17, 1946.

SN 693,970. The Celotex Corporation, Chicago, Ill. Filed Aug. 31, 1955.

Q-T

For Sound Absorbing Pads Particularly Adaptable for Duct Lining.
Use since June 3, 1938.

SN 694,188. Basic Chemical Corporation, Glenwood Springs, Colo. Filed Sept. 6, 1955.

CrystaLime

For Crushed, Ground and Screened Calcitic Marble of Various Sizes of White Marble Particles, To Be Used as Roofing Chips for Surfacing of Built-Up Roofs as White Particles for Use in Pre-Cast Building Stone and Terrazzo, as Building Sands for Use in Plaster and Stucco, and Calcined Material Manufactured From Such Stone as Quick-Lime and Lime Hydrate.
Use since Apr. 25, 1955, on crushed calcitic marble used as roofing chips.

SN 694,330. Pennotex Oil Corporation, New York, N. Y. Filed Sept. 7, 1955.

COLSEAL

For Joint, Cold Sealing, and Caulking Compound.
Use since Dec. 7, 1953.

SN 694,333. Raymond Concrete Pile Company, New York, N. Y. Filed Sept. 7, 1955.

RAYSTEP

For Piles and Pile Shells.
Use since June 27, 1955.

SN 697,018. Persianas Manufacturing Co., S. A., Havana, Cuba. Filed Oct. 24, 1955.

P. M.

For Door and Window Blinds, Made of Wood.
Use since Aug. 2, 1955.

SN 697,036. Stran-Steel Corporation, Ecorse, Mich. Filed Oct. 24, 1955.

N-S-F

For Metallic Structural Members and Panels for Conveyance Floors.
Use since Aug. 25, 1955.

SN 697,091. Hercules Products Company, Silver Hill, Md. Filed Oct. 25, 1955.

HERCULES FENCE

For Wood and Metal Fences and Fence Posts.
Use since July 1, 1950.

SN 697,181. New Jersey Foundry & Machine Company, Garwood, N. J. Filed Oct. 26, 1955.

"SLIKWAY"

For Steel Manhole Forms.
Use since May 4, 1955.

CLASS 13

SN 682,785. E. C. Bull, Inc., Durham, N. C. Filed Mar. 4, 1955.

SANIGARD

For Automatic Fluid Chemical Dispenser for Flush Tanks.
Use since October 1954.

SN 689,322. Margaret E. Welsh, d. b. a. Maggi-Shelf Company, San Francisco, Calif. Filed June 10, 1955.

maggi-shelf

For Wire Shelf Structures To Be Attached to Closet Doors and Like Supporting Surfaces.
Use since Mar. 6, 1955.

SN 690,933. The Carpenter Steel Company, Reading, Pa. Filed July 8, 1955.

PRX

For Tubing for General Application Including Condenser Tubing and Tubing for Heat Exchangers.
Use since June 10, 1955.

SN 692,191. Aluminum Housewares Corporation, St. Louis, Mo. Filed Aug. 1, 1955.

Saucy-Melter

For Cooking Vessels.
Use since July 12, 1955.

SN 692,664. W. and L. Manufacturing Co., Mount Vernon, N. Y. Filed Aug. 8, 1955.

LOXIN

For Faucet Sprays.
Use since Aug. 1, 1955.

SN 693,343. Stic-Klip Manufacturing Co., Inc., Cambridge, Mass. Filed Aug. 18, 1955.

Stic-Klip

Applicant claims ownership of Reg. No. 402,922.
For Metallic Washers, Holding Plates, Insert Bases and Locking Plates for Construction Clips That Hold Insulation in Place and Tubing Spring Clips To Hold Piping in Place in Air Conditioning and Refrigeration Installations.
Use since on or about Jan. 10, 1943.

SN 693,747. The Gould-Mersereau Co., Inc., New York, N. Y. Filed Aug. 26, 1955.

AVONA

For Drapery or Curtain Rods, Brackets, Rings, and Clips.
Use since October 1952.

SN 694,935. Trans-Atlantic Company, Philadelphia, Pa. Filed Sept. 19, 1955.

TACO

For Hydraulic Door Closers.
Use since August 1954.

SN 695,409. Frenchtown Porcelain Company, Trenton, N. J. Filed Sept. 27, 1955.

MOLCOTE

For Nozzles for Sand Blasting.
Use since Aug. 23, 1955.

SN 697,889. The American Automobile Association (Incorporated), Washington, D. C. Filed Nov. 23, 1955.

AAA

Applicant claims ownership of Reg. No. 341,577.
For Key Chains.
Use since 1922.

CLASS 14

SN 687,010. Sintercast Corporation of America, Yonkers, N. Y. Filed May 6, 1955.

FERROTIC

For Hardenable Titanium Carbide Steel Alloys.
Use since Apr. 22, 1955.

SN 692,471. The International Nickel Company, Inc., New York, N. Y. Filed Aug. 4, 1955.

INCONEL "700"

Applicant claims ownership of Reg. Nos. 308,200 and 589,474.
For Nickel Alloys, Including Alloys of Nickel and Chromium.
Use since June 24, 1955.

CLASS 15

SN 679,110. Perfect Power Corporation, Chicago, Ill. Filed Dec. 29, 1954.

ICE CHASER

For Gasoline, Containing an Additive.
Use since on or about Nov. 22, 1954.

SN 689,777. The Wiesner-Rapp Co., Inc., Buffalo, N. Y. Filed June 17, 1955.

Hydra-Fluid

For Combined Hydraulic Fluid and Gear Lubricant.
Use since Jan. 21, 1955.

SN 689,844. Inter-State Oil Company, Kansas City, Kans. Filed June 20, 1955.

Vansoil

For Gasoline and Oil Additive.
Use since Oct. 10, 1954.

SN 690,674. Battenfeld Grease & Oil Corp., Kansas City, Mo. Filed July 5, 1955.

CARTRI LUBE

The drawing is lined for red, but no claim is made to any particular color. Applicant claims ownership of Reg. No. 346,074.
For Greases Contained in Cartridges for Use With Grease Guns.
Use since June 8, 1955.

SN 692,395. Gulf Oil Corporation, Pittsburgh, Pa. Filed Aug. 3, 1955.

HARMONY

For Lubricating Oils.
Use since on or about Nov. 11, 1920.

SN 692,809. Socony Mobil Oil Company, New York, N. Y. Filed Aug. 10, 1955.

GREASREX

For Industrial Lubricating Greases.
Use since May 18, 1955.

CLASS 16

SN 684,993. The American Resinous Chemicals Corporation, Peabody, Mass. Filed Apr. 6, 1955.

RESWAX

For Waxes and Compounded Waxes, Including Such as Are Useful for Making Protective Wax Coatings and Self-Sealing Wax Coatings for Wax Paper, Food Products and the Like.
Use since Mar. 25, 1955.

SN 694,283. The Valspar Corporation, Ardmore, Pa. Filed Sept. 6, 1955.

new Valspar

VALASTIC

Applicant claims ownership of Reg. Nos. 62,492, 592,943, and 606,034.
For Paints.
Use since Mar. 1, 1955.

SN 695,124. C. A. Woolsey Paint & Color Co. Inc., New York, N. Y. Filed Sept. 21, 1955.

NAUTICOLOR

For Tinting Colors.
Use since July 26, 1955.

SN 696,306. Kem-I-Kal Engineering Laboratories, Inc., Centralia, Ill. Filed Oct. 12, 1955.

KEM-I-KAL

For Paints and Enamels.
Use since 1938.

CLASS 18

SN 654,400. Guardian Chemical Corporation, Long Island City, N. Y. Filed Oct. 8, 1953.

CLORPACTIN

Applicant claims ownership of Reg. No. 570,671.
For Remedy for Athlete's Foot and Other Skin Infections.
Use since Feb. 10, 1953.

SN 668,560. C. B. Kendall Co., Inc., Indianapolis, Ind. Filed June 21, 1954. Sec. 2(f).

KENDALL

For Analgesic Muscular Relaxant, Hypnotic Sedative, Hematinic, Vitamin, Analgesic Anti-Pyretic, Laxative, Obesity Control, Anti-Acid, Hypotensive, Hypertensive, Lipotropic, Anti-Rheumatic and a Throat Lozenge—All in Tablet Form; a Spasmolytic in Tablet and Liquid Form; Diarrhea Control, Syrup-Antitussive, Fungicide Antiseptic, Laxative and Sedative—All in Liquid Form; Anti-Acid and a Douche—in Powder Form; Astringent-Antiseptic, Analgesic Decongestant, Scalicide and Dermatosis in Ointment Form; Vitamin B Complex and Vitamin B in Injectible Form; and Vaginal Jelly.
Use since Feb. 15, 1933.

SN 677,152. The Harrower Laboratory, Inc., Jersey City, N. J. Filed Nov. 23, 1954. Sec. 2(f).

HARROWER

For Preparations in Tablet, Capsule, or Liquid Form Containing Thyroid Extracts, Anti-Emetics, Relaxants With Sedatives, Estrogen-Progesterones, Antacid, Anti-Cholinergics, Thyroglobulins, Vitamines, Vitamin Complexes, Antigens, Estrogens, Pancreatic Amylotrypsins, Enzymes, Laxatives, and Antispasmodics.
Use since Mar. 29, 1918.

SN 679,809. Schulte Herbrüggen & Co. G. m. b. H., Herdecke (Ruhr), Germany. Filed Nov. 24, 1954.

CIRCULIN

Applicant claims ownership of German Reg. No. 652,798, dated May 20, 1954.
For Medicinal Preparation Used in the Treatment of High Blood Pressure, To Aid Digestion and as a General Tonic.

SN 688,521. Charles E. Frosst & Co., Montreal, Quebec, Canada. Filed May 31, 1955.

Dulsana

Applicant claims ownership of Canadian Reg. No. N. S. 185/47016, dated Nov. 26, 1953.
For Cough Syrup.

SN 689,053. Roy S. Lodolyn, d. b. a. Lodolyn Drug Products Co., Lakewood, Ohio. Filed June 7, 1955.

LODOLOID TABLETS

The word "Tablets" is disclaimed apart from the mark as shown.
For Medicinal Preparation in Tablet Form for the Symptomatic Treatment of Muscular Aches, Headaches, Arthritis, and Rheumatism.
Use since May 9, 1955.

CLASS 19

SN 656,989. H. von Wichmann K. G., Hamburg, Germany. Filed Nov. 25, 1953.

AUTOREX

Applicant claims ownership of German Reg. No. 559,666, dated Jan. 9, 1941.
For Automobiles, Bicycles, and Motorcycles, and Parts Thereof.

SN 658,139. Prior Products, Inc., Dallas, Tex. Filed Dec. 17, 1953.

TOW-EZ

For Material Handling Carts for Industrial Use.
Use since October 1951.

SN 691,622. Richard Gottschalk, Gevelsberg, Germany. Filed July 20, 1955.

Centrix

Applicant claims ownership of German Reg. No. 443,406, dated Mar. 18, 1932.
For Bicycle Hubs Including Free Wheeling Hubs.

SN 695,352. Saks & Company, New York, N. Y. Filed Sept. 26, 1955. Sec. 2(f).

Saks Fifth Avenue

For Baby Carriages and Bicycles.
Use since Sept. 15, 1924.

CLASS 21

SN 660,263. Newhall Douglas, Ho-Ho-Kus, N. J. Filed Jan. 28, 1954.

TECHNIMOTION

Applicant claims ownership of Reg. No. 599,042.
For Electrical Apparatus for Remote Control of Movable Carriage Suitable for Change of Position of Photographic Apparatus.
Use since Aug. 20, 1952.

SN 664,887. Walter Spiegel, New York, N. Y. Filed Apr. 20, 1954.

ORCHESTROLA

For Electric Phonographs, Amplifiers, Television Sets, Radio Sets, Public Address System Equipment—Namely, Microphones, Loud Speakers, and Amplifiers.
Use since September 1952.

SN 672,641. Cornell-Dubilier Electric Corporation, South Plainfield, N. J. Filed Sept. 2, 1954.

SUPER MICADON

For Electrical Capacitors.
Use since Apr. 24, 1954.

SN 677,966. Magnet Sales Company, Los Angeles, Calif. Filed Dec. 8, 1954.

MAGIC MAGNETS

For Permanent Magnets.
Use since July 27, 1954.

SN 688,082. Schauer Manufacturing Corporation, Cincinnati, Ohio. Filed May 23, 1955.

Norko

For Battery Chargers of Various Types for Home, Farm, and Resort Uses; Heavy Duty Battery Chargers for Garages and Automotive Service Centers; Battery Charger Accessories Including Charger Plugs and Charge Time Switch Apparatus; Automatic Momentary Spark Booster Devices; Neon Timing Light Devices; Growlers With Test Lamp; Utility Growlers Without Meters.
Use since December 1954.

SN 689,241. Sanders Associates Incorporated, Nashua, N. H. Filed June 9, 1955.

PANAR

For Radio Receivers and Transmitters Including Amplifiers.
Use since May 17, 1955.

SN 690,588. Aladdin Industries, Incorporated, Nashville, Tenn. Filed July 1, 1955.

Magic Touch

For Electric Lamps and Switches.
Use since on or about June 1, 1954.

SN 690,628. King-Seeley Corporation, Ann Arbor, Mich. Filed July 1, 1955.

Stout Heart

For Electric Motors.
Use since October 1953.

SN 692,134. Glar-Ban Corporation, Buffalo, N. Y. Filed July 29, 1955.

bolt-lite

For Electrical Lighting Fixture.
Use since June 1, 1955.

SN 692,819. Sylvania Electric Products Inc., Salem, Mass. Filed Aug. 10, 1955.

CCC LOSE CRYSTAL CONTROL

For Fluorescent Sign Tubing.
Use since June 14, 1955.

SN 692,870. Roto-Mation Motors Inc., St. Clair, Mich. Filed Aug. 11, 1955.

ROTOMATION

For Motors and Oscillating Motors.
Use since June 17, 1955.
Subj. to Intf. with SN 690,646.

SN 693,080. Northern Electric Company, Chicago, Ill. Filed Aug. 15, 1955.

Crestwood

For Electric Bed Coverings.
Use since March 1955.

SN 693,328. Motorola, Inc., Chicago, Ill. Filed Aug. 18, 1955.

VIBRASENDER

For Self Contained Electromechanical Reed Units for Controlling the Frequency of Electrical Signals.
Use since in or about September 1947.

SN 693,329. Motorola, Inc., Chicago, Ill. Filed Aug. 18, 1955.

VIBRASPONDER

For Self Contained Electromechanical Reed Units Operative in Electric Circuits Only by Signals of Given Frequency.
Use since in or about September 1947.

SN 693,330. Natvar Corporation, Woodbridge, N. J. Filed Aug. 18, 1955.

ISOGLAS

For Electrical Insulating Materials in Sheet, Web, and Tape Forms.
Use since Aug. 3, 1955.

SN 693,698. Parmiter, Hope & Sugden Limited, Longsight, Manchester, England. Filed Aug. 25, 1955.

Aeroflex

Applicant claims ownership of British Reg. No. 725,289, dated Dec. 30, 1953.
For Electric Fuses, Electric Fuse Carriers, Electric Switches and Switchgear, Electric Cut-Outs and Parts of All These Goods.

SN 693,767. Ray-O-Vac Company, Madison, Wis. Filed Aug. 26, 1955.

WORKMAN

For Flashlights.
Use since July 29, 1955.

SN 693,780. Sprague Electric Company, North Adams, Mass. Filed Aug. 26, 1955.

STACKOHM

For Electrical Resistors.
Use since Aug. 22, 1955.

SN 693,987. The A. C. Gilbert Company, New Haven, Conn. Filed Aug. 31, 1955.

HALL OF SCIENCE

Applicant claims ownership of Reg. Nos. 606,658, 607,934, and 609,469.
For Electric Household Food Mixers.
Use since May 17, 1937.

SN 694,075. The Microtone Company, Inc., Minneapolis, Minn. Filed Sept. 1, 1955.

darb

For Portable Radios.
Use since May 10, 1955.

SN 694,171. Ulrich Bros., Corpus Christi, Tex. Filed Sept. 2, 1955.

ROTASELLER R·E·O·

For Rotating Electrical Display Turntable With a Rotating Electrical Outlet.
Use since June 1, 1954.

SN 695,165. Kip Electronics Corporation, Stamford, Conn. Filed Sept. 22, 1955.

KIP

For Electron Tubes.
Use since Oct. 21, 1954.

SN 697,884. The American Automobile Association (Incorporated), Washington, D. C. Filed Nov. 23, 1955.

AAA

Applicant claims ownership of Reg. No. 342,145.
For Electrical Advertising Signs and Electric Flashlights.
Use since 1910.

CLASS 22

SN 632,747. W. H. Schaper Mfg. Co. Inc., Minneapolis, Minn. Filed July 18, 1952.

ScareCrow

For Toy Plastic Construction Game in Which the Competitive Assembling of the Pieces Is Determined by the Throwing of Dice.
Use since June 15, 1952.

SN 661,335. Healthways, Los Angeles, Calif. Filed Feb. 19, 1954.

Glamour Belles

For Exercising Weights.
Use since May 15, 1953.

SN 673,312. Thomas Textile Co., Inc., New York, N. Y. Filed Sept. 16, 1954.

Thomas

For Dolls and Doll Clothing.
Use since Aug. 11, 1954.

SN 676,254. True Temper Corporation, Cleveland, Ohio. Filed Nov. 8, 1954.

ARISTOCRAT

For Fishing Rods.
Use since Aug. 1, 1939.
Subj. to Intf. with SN 657,867.

SN 676,263. True Temper Corporation, Cleveland, Ohio. Filed Nov. 8, 1954.

Lakeland

For Fishing Reels.
Use since August 1954.

SN 676,382. Hannes Marker, Garmisch-Partenkirchen, Germany. Filed Nov. 10, 1954.

MARKER AUTOMATIC

Priority under Sec. 44(d). German application filed June 14, 1954, Reg. No. 660,063, dated July 14, 1954. The word "Automatic" is disclaimed apart from the mark.
For Ski Fastenings.

SN 677,401. Ed-U-Cards Mfg. Corp., New York, N. Y. Filed Nov. 29, 1954.

POKEY DOODLES

For Building Games or Sets Comprising Blocks and Other Structural Forms Adapted To Be Joined Together in an Infinite Variety of Combinations for Creative and Recreational Purposes for Children and Others.
Use since Nov. 15, 1954.

SN 677,851. Ament-Douglass Manufacturing Company, San Bruno, Calif. Filed Dec. 7, 1954.

METLFLY

For Artificial Fishing Lures.
Use since June 2, 1952.

SN 678,728. The George C. Knight Company, Detroit, Mich. Filed Dec. 21, 1954.

GIANT LIFTER

For Toys Consisting of a Lifting Device Having a Boom Hingedly Mounted on a Bracket Adapted To Be Secured to a Velocipede or Other Device and Having a Grappling Line To Engage and Lift Articles.
Use since on or about Sept. 28, 1953.

SN 678,729. The George C. Knight Company, Detroit, Mich. Filed Dec. 21, 1954.

Majestic

For Card Shuffler and Canasta Tray.
Use since on or about Feb. 22, 1954.

SN 681,212. Vernon J. Schneider, d. b. a. Float-Hi Balsa Float Co., Cold Spring, Ky. Filed Feb. 7, 1955.

FLOAT-HI

For Balsa Fishing Floats.
Use since about July 1954.

SN 681,911. Donald F. Duncan, Incorporated, Chicago, Ill. Filed Feb. 18, 1955.

PONY BOY

For Bandalore Toy Spinning Tops.
Use since Sept. 3, 1954.

SN 682,063. Virgilio Raviol, d. b. a. Spinolino Company, San Francisco, Calif. Filed Feb. 21, 1955.

SPINOLINO

For Double Spinning Tops.
Use since Jan. 20, 1955.

SN 684,193. Chesapeake Bay Trading Company, Princess Anne, Md. Filed Mar. 25, 1955.

PAX

For Game Comprising Chips, Cards, and Playing Surface.
Use since Mar. 3, 1955.

SN 684,337. Lyle M. Palmer, Richland, Wash. Filed Mar. 28, 1955.

TOY OF THE AGES — THE THINGA-MA-JIG

For Dis-Assembled, Self-Propelled Wheeled Vehicle Toy.
Use since Sept. 4, 1954.

SN 684,749. Parker Brothers, Inc., Salem, Mass. Filed Apr. 1, 1955.

GOING TO JERUSALEM

For Board Game.
Use since Mar. 24, 1955.

CLASS 23

SN 644,604. The Duriron Company, Inc., Dayton, Ohio. Filed Apr. 2, 1953.

DURICHLOR

Applicant claims ownership of Reg. No. 307,715.
For Machinery, Particularly for Handling Corrosive Materials—Namely, Mechanical Agitators, Centrifugal Pumps, conveyors, Dechlorinating Machinery, Dehydrating Apparatus, Denistrating Towers, Steam and Hydraulic Ejectors, Kessler Stills, Scrapers, Mechanical Stirrers, Stirrer-Shoes, and Parts Thereof.
Use since 1933 on centrifugal pumps.

SN 651,876. J. M. Voith, G. m. b. H., Heidenheim/Brenz, Germany. Filed Aug. 4, 1953. Sec. 2(f)

VOITH

For Hydraulic Motors—Namely, Turbines; Hydraulic Motors, in Particular Turbines; Sluice Weirs; Falling Sluices; Sluice Shuttles; Sliding Sluice Valves and the Like for Use With Sluice Weirs, Flood Gates, Lock Gates and the Like; Trash-Rakes for Use With Sluice Weirs, Flood Gates, Lock Gates and the Like; Trash-Rake Cleaners; Pipes; Pipe Closing Devices Such as Stop Cocks, Valves, Sealing Covers, Closing Flaps and the Like; Regulator Valves and Governors, All of Which Are To Be Used in Hydraulic Structures, Hydraulic Motors and the Like; Machines for Manufacturing Paper, Card Board, Cellulose and Wood Pulp, Radiators for Tractors; Transmissions and Couplings—Namely, Fluid Transmissions and Fluid Couplings and Hydraulic-Mechanical Compound Transmissions.
Use since 1867.

SN 653,665. Bergwerksverband Zur Verwertung Von Schutzrechten Der Kohlentechnik, G. m. b. H., Dortmund-Eving, Germany. Filed Sept. 24, 1953.

Convertol

Applicant claims ownership of German Reg. No. 637,348, dated Apr. 24, 1953.
For Coal and Ore Dressing Plants, Coal and Ore Washeries, Apparatus and Machinery for Coal and Ore Dressing and Washing.

SN 656,112. Rohde & Dörrenberg, Dusseldorf-Oberkassel, Germany. Filed Nov. 9, 1953.

May

Applicant claims ownership of German Reg. No. 612,017, dated May 25, 1949.
For Tools—Namely, Borers, Drills, Cutters, Reamers.

SN 657,789. Gaston Matheys, Brussels, Belgium. Filed Dec. 10, 1953.

HYDROGEM

Applicant claims ownership of Belgian Reg. No. 74,613, dated Oct. 15, 1953.
For Automatic Hydraulic Regulators for Reciprocating Speed of Tool Machines.

SN 665,663. Victor Vending Corporation, Chicago, Ill. Filed May 3, 1954.

5¢ SUPER

Applicant disclaims the right to the exclusive use of the representation "5¢" except in the relation and association shown.
For Merchandise Vending Machines.
Use since Apr. 23, 1954.

SN 668,966. E. J. Brooks Company, Newark, N. J. Filed June 28, 1954.

Brooks CUT-R Press

Applicant claims ownership of Reg. No. 407,528.
For Combination Sealing Tool and Cutter.
Use since Aug. 15, 1951.

SN 672,071. Gebr. Weyersberg, Solingen-Ohligs, Germany. Filed Aug. 23, 1954.



Applicant claims ownership of German Reg. No. 10,846, dated Nov. 7, 1895.

For Mechanic's Hand Tools, Kitchen, Household, Agricultural, and Garden Tools, Table Flatware Made of Base Metal, Knives, Scissors, Razors, Pocket Knives, and Sewing Machine Needles.

SN 672,253. D. B. Smith & Company, Inc., Utica, N. Y. Filed Aug. 25, 1954. Sec. 2(f) as to "Smith."

SMITH

CHIEF

For Hand and Power Operated Fire Pumps and Fire Extinguishing Tank Type Pumps Adapted for Body Mounting by User.

Use since July 12, 1954; and since Oct. 1, 1888, as to "Smith."

SN 673,386. S. I. R. A. Società Italiana Roano Alessandro Società per Azioni, Genoa, Italy. Filed Sept. 17, 1954.



Priority under Sec. 44(d). Italian application S. N. Reg. 25 Verb. 166 filed May 28, 1954, Reg. No. 118,852, dated July 29, 1954.

For Toothed Wheels.

SN 675,356. Bedford Foundry & Machine Co., Bedford, Ind. Filed Oct. 25, 1954. Sec. 2(f).



For Electric Traveling Cranes.
Use since 1926.

SN 675,357. Bedford Foundry & Machine Co., Bedford, Ind. Filed Oct. 25, 1954.

Bedford Loadmaster

For Electric Traveling Cranes.
Use since 1949.

SN 675,358. Bedford Foundry & Machine Co., Bedford, Ind. Filed Oct. 25, 1954. Sec. 2(f).

Bedford

For Electric Traveling Cranes.
Use since 1902.

SN 676,484. Elgin National Watch Company, Elgin, Ill. Filed Nov. 12, 1954.



The trademark is a yellow circular band painted around the shank of the bur. The drawing is lined for yellow.

For Rotary Cutting Burs.
Use since Jan. 18, 1954.

SN 677,659. Joseph A. Johnson, Forest Hills, N. Y. Filed Dec. 2, 1954.



For Apparatus for Dismounting Heavy Wheels From Motor Vehicles.
Use since on or about Nov. 10, 1954.

SN 677,854. Ansan Tool and Manufacturing Company, Inc., Chicago, Ill. Filed Dec. 7, 1954.

GARDEVATOR

For Manually Operated Soil Working, Cultivating, and Mulching Tools.
Use since Oct. 11, 1954.

SN 678,879. D. Napier & Son Limited, London, England. Filed Dec. 23, 1954.

DELTIC

Applicant claims ownership of British Reg. Nos. 730,554, dated May 25, 1954, and 730,555, dated May 25, 1954.

For Internal Combustion Engines and Parts Thereof.
Use since Apr. 18, 1952.

SN 678,940. Hydro-Chemie, Aktiengesellschaft für Chemie und Wasserveredlung, Zurich, Switzerland. Filed Dec. 1, 1954.

FORMVAC

Applicant claims ownership of Swiss Reg. No. 148,327, dated Sept. 26, 1953.

For Machines for Moulding Plastic Foils and Sheets.

SN 679,718. Dansk Designs, Inc., Great Neck, N. Y. Filed Jan. 11, 1955.



No claim is made to the word "Dansk" or to the word "Designs" apart from the mark shown.

For Stainless Steel Flatware.
Use since Oct. 15, 1954.

SN 680,350. Arrow Needle Company, Manchester, N. H. Filed Jan. 24, 1955.



Applicant claims ownership of Reg. No. 511,635.

For Knitting Machine Needles.
Use since Apr. 22, 1954.

SN 681,755. Drei-S-Werk Schwabacher Spinnereinadel- und Stahlspitzen-Werk Fr. Reingruber, Schwabach, Germany. Filed Feb. 16, 1955.



The word "Pins" is disclaimed apart from the mark as shown.

For Steel-Punches, Ejector Pins for Presses, Stamping Machines and Other Metal Working Machines, Pins for Textile Machinery, Wrist Pins for Pistons, Metal Pins for Securing Parts of Machinery Together, and Axles for Precision Machinery.
Use since Aug. 18, 1953.

SN 682,312. Winston-Shillings Tool Co., Newark, N. J. Filed Feb. 24, 1955.

HANDI-HED

For Tool Sets Comprising a Tool Handle and One or More of the Following Tools To Be Releasably Held in Said Handle—Namely, Hammers, Soldering Irons, Scrapers, Files, Chisels, Wrenches, Screw Drivers, Drills, Bits, Reamers, Tack Lifters, Ice Picks, Saw Blades, Tool Adapters and Gimlet Drills and on Said Tool Handles and Said Tools Separately and in Combinations Thereof.
Use since August 1954.

SN 683,851. The Commercial Shearing and Stamping Company, Youngstown, Ohio. Filed Mar. 21, 1955.

HYDRA-JET

For Descalers in the Form of Machines Adapted To Jet High Pressure Water Against a Piece Being Descaled.
Use since Feb. 5, 1955.

SN 684,094. Anker-Werke A. G., Bielefeld, Germany. Filed Mar. 24, 1955.

Anker

Priority under Sec. 44(d). German application, filed Nov. 22, 1954, Reg. No. 668,981, dated Dec. 30, 1954. Applicant claims ownership of U. S. Reg. No. 600,996.

For Prepaid-Postage Marking Machines, Ticket and Tag Marking Machines, Sewing Machines, and Parts Thereof.

SN 686,156. Cooper Manufacturing Company, Marshalltown, Iowa. Filed Apr. 25, 1955. Sec. 2(f).

Cooper

Applicant claims ownership of Reg. Nos. 553,303 and 610,343.

For Lawn Mowers, Trimmers, and Edgers.
Use since Mar. 11, 1953.

SN 687,361. Dorr-Oliver Incorporated, Stamford, Conn. Filed May 12, 1955.

Oliver Webwelder

For Paper-Splicing Machine.
Use since on or about Sept. 24, 1954.

SN 687,443. Arter Grinding Machine Company, Worcester, Mass. Filed May 13, 1955.

ARTER JIGMATIC

For Machinery for Positioning Workpieces With Relation to a Cutting or Other Kind of Tool.
Use since Apr. 8, 1955.

SN 687,476. Machinery Parts Sales Corporation, Dallas, Tex. Filed May 13, 1955.

hydradjuster

For Hydraulic Pressure Operated Devices for Adjusting and Holding Fixed Tension on the Crawler Tracks of Track Type Vehicles.
Use since on or about Nov. 1, 1951.

SN 687,662. Worthington Corporation, Harrison, N. J. Filed May 16, 1955. Sec. 2(f).

MONOBLOC

Applicant claims ownership of Reg. No. 532,947.

For Centrifugal Pumps.
Use since April 1931.

SN 688,140. Adolph Gottscho, Inc., Hillside, N. J. Filed May 24, 1955.

ROLAPRINTER

For Automatic Marking Machines for Making an Impression on the Surface of Articles.
Use since on or about Aug. 3, 1948.

SN 688,141. Adolph Gottscho, Inc., Hillside, N. J. Filed May 24, 1955.

CARTONCODA

For Automatic Marking Machines for Making an Impression on the Surface of Articles.
Use since on or about Nov. 3, 1947.

SN 688,142. Adolph Gottscho, Inc., Hillside, N. J. Filed May 24, 1955.

CYLINDAPRINTER

For Automatic and Manual Marking Machines for Making an Impression on the Surface of Articles.
Use since on or about Apr. 29, 1940.

SN 688,143. Adolph Gottscho, Inc., Hillside, N. J. Filed May 24, 1955. Sec. 2(f).

Gottscho

For Manual, Automatic and Semi-Automatic Marking Machines for Making an Impression in or on the Surface of Articles, and Parts for Such Machines; Conveyors and Parts Thereof; Packaging Machines and Parts Thereof; Printing Dies, and Rubber Type.
Use since on or about Dec. 1, 1947.

SN 688,144. Adolph Gottscho, Inc., Hillside, N. J. Filed May 24, 1955.

MARKOPRINTER

Applicant claims ownership of Reg. No. 414,996.
For Automatic Marking Machines for Making an Impression on the Surface of Articles.
Use since on or about Jan. 10, 1951.

SN 688,146. Adolph Gottscho, Inc., Hillside, N. J. Filed May 24, 1955.

MARKOCODER

Applicant claims ownership of Reg. No. 414,996.
For Automatic Marking Machines for Making an Impression on the Surface of Articles.
Use since on or about Aug. 17, 1948.

SN 688,707. Cattaraugus Cutlery Company, Little Valley, N. Y. Filed June 2, 1955. Sec. 2(f).

Wilson Line

Applicant claims ownership of Reg. No. 17,700.
For Household and Professional Cutlery of All Kinds, Such as Carving and Steak Knives and Forks, Cleavers, Trimming Knives, Cook Knives, Boning Knives, and Cook Forks.
Use since on or about Jan. 1, 1947.

SN 689,243. Schacht Rubber Mfg. Co., Huntington, Ind. Filed June 9, 1955.

Spatulette

For Dish Scrapers or Spatulas.
Use since on or about Apr. 7, 1955.

SN 689,266. Henry Brockel, Java, S. Dak. Filed June 10, 1955.

TUGGER 2in1

For Hitch Used for Connecting a Tractor to a Farm Implement for Towing the Latter.
Use since on or about Apr. 30, 1955.

SN 689,283. The International Silver Company, Meriden, Conn. Filed June 10, 1955.

NAUTILUS

For Stainless Steel Flatware—Namely, Knives, Forks, and Spoons for Table Use.
Use since in or about May 1955.

SN 689,339. Bridgeport Brass Company, Bridgeport, Conn. Filed June 13, 1955.

SPOT

For Devices for Applying Chemical Preparation to Weeds, Such as Dandelions, Plantain, Rag-Weed, and Other Broad Leaf Leaves.
Use since Feb. 16, 1955.

SN 689,408. Oberdorfer Foundries, Inc., Syracuse, N. Y. Filed June 13, 1955.

RoCam

For Liquid Handling Rotary Pumps.
Use since May 19, 1955.

SN 690,824. Rodney Hunt Machine Co., Orange, Mass. Filed July 6, 1955.

HY-Q

For Sluice Gates.
Use since June 10, 1955.

SN 691,297. Lucile M. Hursh, d. b. a. Octa-Gane, San Gabriel, Calif. Filed July 14, 1955.

GANE-MASTER

Applicant claims ownership of Reg. No. 605,761.
For Fuel Pressure Regulators for Automotive Vehicles.
Use since Oct. 22, 1952.

SN 691,818. U. S. Industries, Inc., d. b. a. Axelson Manufacturing Company, division of U. S. Industries, Inc., Los Angeles, Calif. Filed July 25, 1955.

TRACE-(A)-MATIC

For Hydraulic Tracing Attachments.
Use since July 16, 1954.

SN 691,849. Fount-Wip, Inc., Los Angeles, Calif. Filed July 25, 1955.

Fount-kit

For Cream-Whipping Apparatus—Namely, Rechargeable Stainless Steel Gas-Pressure Whippers, Gas Cartridges, and Cartridge Release Mechanisms.
Use since on or before June 25, 1954.

SN 692,320. Ekco Products Company, Chicago, Ill. Filed Aug. 2, 1955.

DS

Applicant claims ownership of Reg. No. 287,234.
For Tableware—Namely, Knives, Forks, and Spoons of Non-Precious Metal.
Use since on or about Feb. 2, 1931.

SN 693,961. American Hoist & Derrick Company, St. Paul, Minn. Filed Aug. 31, 1955. Sec. 2(f).

LAUGHLIN

For Load Binders.
Use since on or before Jan. 1, 1905.

CLASS 24

SN 691,931. The Cal-Dak Company, San Marino, Calif. Filed July 26, 1955.

CAL-DAK

Applicant claims ownership of Reg. No. 541,437.
For Laundry Cart.
Use since June 1, 1954.

CLASS 26

SN 683,707. Peerless Photo Products, Inc., Shoreham, N. Y. Filed Mar. 17, 1955.

Tru-Stat

Applicant claims ownership of Reg. Nos. 523,161, 541,229, and 597,350.
For Sensitized Photographic Paper.
Use since Feb. 28, 1955.

SN 684,684. Robertshaw-Fulton Controls Company, Greensburg, Pa. Filed Mar. 31, 1955.

Incinitrol

For Thermostats, Thermostatic Valves, Thermostatic Pilot Controls for Preventing the Escape of Unburned Fuel From Fluid Fuel Burners, Combined Manually Operable and Timer Controlled Valves.
Use since Jan. 25, 1955.

SN 685,262. Eastman Kodak Company, Rochester, N. Y. Filed Apr. 11, 1955.

BANTAM

Applicant claims ownership of Reg. No. 330,100.
For Photographic Cameras and Photographic Copying Apparatus.
Use since May 31, 1935, on photographic cameras.

SN 686,336. Andrew F. Schott, Milwaukee, Wis. Filed Apr. 26, 1955.

Calculaid

For Abaci.
Use since Feb. 15, 1955.
Subj. to Intf. with SN 689,462.

SN 686,337. Andrew F. Schott, Milwaukee, Wis. Filed Apr. 26, 1955.

Numberfun

For Abaci.
Use since Apr. 11, 1955.

SN 689,399. Mamiya Koki Kabushiki-Kaisha (in English style Mamiya Camera Co., Ltd.), Bunkyo-ku, Tokyo-to, Japan. Filed June 13, 1955.

S M

Applicant claims ownership of Japanese Reg. No. 391,361, dated Sept. 13, 1950.
For Camera; Lenses for Cameras; Film for Camera; Photographic Accessories for Developing Negatives, Printing and Enlarging Comprising Roll Film Developing Tanks, Dark Room Timers, Film Dryers, Safe-Light and Filters, Print Boxes,

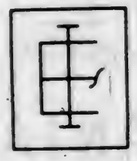
Print Washers, Print Rollers, Print Dryers, Gum Roller Print Presses, Enlargers, Metal Negative Carriers for Enlargers, Enlarging Easels, Easel Viewers, Trays Printing Masks; Lens Brushes and Cleaning Cloths; Lens Hood; Flash Gun, Three-Legged; Triangles.
Use since June 20, 1950.

SN 689,462. Julian Calhoun, Spartanburg, S. C. Filed June 14, 1955.

CALCULEX
THE AMERICAN ABACUS
+ − × ÷

Applicant disclaims "The American Abacus" apart from the mark shown.
For Abaci.
Use since July 10, 1954.
Subj. to Intf. with SN 686,336.

SN 691,388. Reynolds Electrical and Engineering Co. Inc., Santa Fe, N. Mex. Filed July 15, 1955.



For Geiger Counters, Uranium Ore Analyzers, Mine Evaluation Instruments and Deep Hole Probes.
Use since Jan. 1, 1955.

SN 694,087. Adial C. Peth, d. b. a. Peth Manufacturing Company, Phoenix, Ariz. Filed Sept. 1, 1955.

QUICK

For Battery Testing and Condition Indicating Apparatus.
Use since May 1, 1954.

SN 694,276. Tura, Inc., Great Neck, N. Y. Filed Sept. 6, 1955.

"MAKE UP"
by Tura

For Ornamented Spectacle Frames.
Use since Sept. 1, 1955.

CLASS 27

SN 685,371. The Gruen Watch Company, Cincinnati, Ohio. Filed Apr. 12, 1955.

NEDLAND

For Watches, Watch Cases, and Watch Movements.
Use since Mar. 30, 1955.

SN 695,422. Jefferson Electric Company, Bellwood, Ill. Filed Sept. 27, 1955.

GOLDEN SECRET

Applicant claims ownership of Reg. Nos. 528,341 and 551,009.
For Electric Clocks.
Use since Aug. 18, 1953.

CLASS 28

SN 675,674. United Pearl Corp., New York, N. Y. Filed Oct. 28, 1954.



For Cultured Pearl Necklaces, Bracelets, Chokers, Earrings, Pins, and Cultured Loose Pearls.
Use since June 15, 1954.

SN 686,402. Teena Trinket Jewelry, Providence, R. I. Filed Apr. 27, 1955.



For Women's and Children's Jewelry for Personal Adornment Not Including Watches.
Use since Feb. 28, 1955.

SN 691,464. Goldstein-Gerson Co., Inc., New York, N. Y. Filed July 18, 1955.

HEART O' DIAMONDS

For Jewelry—Namely, Finger Rings, Earrings, Necklaces, Bracelets, Pins, Tie Pins, and Lockets.
Use since May 1, 1955.

SN 695,711. Eternalight Diamond Co., New York, N. Y. Filed Oct. 3, 1955.

Lady LL Lynne

For Diamond Rings and Diamond Jewelry.
Use since June 24, 1955.

SN 695,951. Max Silverman, d. b. a. Maximillian Jewelry Co., New York, N. Y. Filed Oct. 5, 1955.

KIDDLEY LINX

For Jewelry—Namely, Bracelets, Necklaces, Charms, and Brooch Pins.
Use since June 1, 1954.

CLASS 29

SN 691,526. Tu-Way Products Company, Detroit, Mich. Filed July 18, 1955.

"SOFTIE"

For Dust Mops, Dust Mop Heads, Dust Mop Frames, and Parts Thereof.
Use since Sept. 1, 1954.

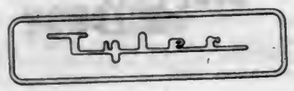
CLASS 31

SN 672,279. General Motors Corporation, Detroit, Mich. Filed Aug. 26, 1954.

GM

Applicant claims ownership of Reg. Nos. 271,167, 314,825, and others.
For Refrigeration Apparatus Including Domestic and Commercial Refrigerators of All Types, Water Coolers, and Air Conditioners.
Use since in or before November 1931 on refrigerators.

SN 676,147. Tyler Refrigeration Corporation, Niles, Mich. Filed Nov. 5, 1954. Sec. 2(f) as to "Tyler."



Applicant claims ownership of Reg. Nos. 510,184 and 560,387.
For Refrigerated Display Cases and Walk-In Coolers.
Use since Jan. 4, 1954; and since 1938 as to "Tyler."

SN 679,039. Electrified Appliances Co., Newark, N. J. Filed Dec. 28, 1954.

LectrOmatic

For Refrigerating Systems—Namely, Beer Cooling Apparatus, Ice-Making Machines, and Refrigerating Equipment.
Use since May 1, 1934.

SN 684,833. Adam D. Goettl, d. b. a. Metal Air Products Company, Phoenix, Ariz. Filed Apr. 4, 1955.

TravelAire

For Evaporative Air Filters and Coolers.
Use since Mar. 2, 1955.

SN 684,854. Marquette Appliances, Inc., Minneapolis, Minn. Filed Apr. 4, 1955.

MagicMatic

For Combination Refrigerator-Freezers.
Use since Jan. 13, 1955.

SN 684,949. David Kutliroff, d. b. a. The Kutlir Laboratories, Monmouth Junction, N. J. Filed Apr. 5, 1955.

CHEMI-FILTER

For Water Treating Apparatus for the Demineralization and/or Softening of Water and the Like.
Use since on or about May 7, 1953.

SN 685,001. Carrier Corporation, Syracuse, N. Y. Filed Apr. 6, 1955.

FLAKEMASTER

For Ice Making Machines for Forming Ice in Small Pieces.
Use since Dec. 30, 1954.

CLASS 32

SN 676,566. Williamson-Dickie Manufacturing Company, Fort Worth, Tex. Filed Nov. 12, 1954.

Dickies

For Clothing Display Racks.
Use since Sept. 22, 1954.

SN 677,574. Joanna Western Mills Company, Chicago, Ill. Filed Dec. 1, 1954.

EXLITE

For Window Shades.
Use since Nov. 15, 1949.

SN 680,078. Hough Shade Corporation, Janesville, Wis. Filed Jan. 18, 1955.

hufcor

For Wood Splint Shades and Flexible Floor Screens for Domestic Divisional Purposes.
Use since Jan. 12, 1955.

SN 685,077. City Stores Company, Philadelphia, Pa. Filed Apr. 6, 1955.

THOROREST

For Mattresses.
Use since on or about Jan. 26, 1933.

SN 685,769. Sleep-A-Tune Co., New York, N. Y. Filed Apr. 18, 1955.

SLEEP-A-TUNE

For Musical Pillows.
Use since on or about Feb. 1, 1955.

SN 686,228. Saginaw Furniture Shops, Inc., Chicago, Ill. Filed Apr. 25, 1955.

Expand-o-matic

Applicant claims ownership of Reg. No. 540,136.
For Furniture of the Type Comprising a Main Body and Having an Extensible Table Top Supported in Part by Extension Slides or Arms, the Top Being Retractable Into a Suitably Formed Compartment.
Use since Feb. 16, 1954.
Subj. to Intf. with SN 681,969.

SN 686,267. Automatic Bedding Corporation, Brooklyn, N. Y. Filed Apr. 26, 1955.

Posture Sleep

For Mattresses and Pillows.
Use since Jan. 1, 1954.

SN 686,268. Automatic Bedding Corporation, Brooklyn, N. Y. Filed Apr. 26, 1955.

MEDICREST

For Mattresses and Pillows.
Use since Dec. 15, 1954.

SN 686,344. Vogel-Peterson Co., Chicago, Ill. Filed Apr. 26, 1955.

Schooline

For Wardrobe Equipment—Namely, Hat and Coat Racks and Shelves Comprising Both Portable Equipment and Equipment for Permanent Installation.
Use since Feb. 24, 1955.

SN 686,464. The Leonard Company, Newark, N. J. Filed Apr. 28, 1955.

StratoLoft

For Molded Tufted Units of Synthetic Plastic Material on or for Headboards of Beds.
Use since Nov. 8, 1954.

SN 687,987. Rose-Derry Company, Newton, Mass. Filed May 20, 1955.

Tot-N-Teen

For Beds.
Use since Feb. 15, 1952.

SN 688,643. F. S. Harmon Manufacturing Company, d. b. a. Harmon Manufacturing Company, Tacoma, Wash. Filed June 1, 1955.

BUBBLE AIR

For Mattresses.
Use since Mar. 10, 1955.

SN 693,182. Patt Manufacturing Co., Chicago, Ill. Filed Aug. 16, 1955.

FLIP-UP

For Collapsible Utility Tables.
Use since Oct. 1, 1953.

SN 696,627. Archie Lewy, d. b. a. The Display House, Philadelphia, Pa. Filed Oct. 24, 1955.

DISPLAY HOUSE

For Display Stands.
Use since in the year 1936.

CLASS 34

SN 654,484. Remington Corporation, Auburn, N. Y. Filed Oct. 9, 1953. Sec. 2(f).

Remington

Applicant claims ownership of Reg. Nos. 146,852, 401,851, and 439,847.
For Air Conditioning Units, Particularly Self-Contained Units Enclosed in Cabinets.
Use since July 31, 1937.

SN 672,181. Ruhrchemie Aktiengesellschaft, Oberhausen-Holten, North Rhine-Westphalia, Germany. Filed Aug. 24, 1954.

Ruhrchemie

Priority under Sec. 44(d). German application filed Feb. 27, 1954, Reg. No. 658,706, dated June 6, 1954.
For Cooling and Drying Devices for Cooling and Drying Granular Materials; Heat Exchangers; Reaction Furnaces for Chemical Reactions and Carbon Monoxide Hydrogenation Synthesis.

SN 679,655. Albert Dean, Jr., d. b. a. Deansteel Products, San Antonio, Tex. Filed Jan. 10, 1955.

Deansteel

For Air Handling Units, Evaporative Condensers, Air-Cooled Condensers, Cooling Towers and Water Coolers (Storage Type) for Comfort Purposes, Ducts, Dampers, Louvers, and Grills for Ventilation Purposes.
Use since Mar. 21, 1950.

CLASS 35

SN 685,506. Lubrikup Company, Inc., Williamsport, Pa. Filed Apr. 14, 1955.

Jerker Kup

Applicant claims ownership of Reg. No. 156,471.
For Pump Cups, Composition Pump Cups, Molded Composition Cups for Pumps, and Pressure Seals for Pistons.
Use since 1937.

SN 695,194. Vanderbilt Tire & Rubber Corp., New York, N. Y. Filed Sept. 22, 1955.

V-120 PREMIUM

For Automobile Tires and Tubes.
Use since July 20, 1955.

CLASS 36

SN 690,183. Arthur Murray Enterprises, Inc., New York, N. Y. Filed June 24, 1955.

Arthur Murray

For Musical Kit Comprising: Percussion Instruments—Namely, Bongo Drums, Maracas, Claves and Knockers; and Grooved Phonograph Record or Records.
Use since May 16, 1955.

CLASS 37

SN 612,964. Jean Rodolphe Dere, San Francisco, Calif. Filed Apr. 21, 1951.

UN-I-CA

For Business Forms.
Use since July 27, 1950.

SN 665,285. Groveton Papers Co., Groveton, N. H. Filed Apr. 27, 1954.



For Toilet Tissue.
Use since January 1951.

SN 668,540. E. I. du Pont de Nemours and Company, Wilmington, Del. Filed June 21, 1954.

MYLAR

Applicant claims ownership of Reg. No. 559,948.
For Flexible Film for Packaging Purposes.
Use since June 21, 1951.

SN 670,793. Lee Paper Company, Vicksburg, Mich. Filed July 29, 1954. Sec. 2(f) as to "Lee's."

Lee's ASSET

Applicant claims ownership of Reg. Nos. 160,563, 522,683, and 522,299.
For Paper—Namely, Vellum, Bond, and Ledger.
Use since 1928; and since 1922 as to "Asset."

SN 674,462. Gulf States Paper Corporation, Tuscaloosa, Ala. Filed Oct. 7, 1954.

E-Z PAK

For Paper Bags.
Use since on or about May 3, 1954.

SN 675,385. Griffin Specialty Company, Denver, Colo. Filed Oct. 25, 1954.

PATBOARD

For Writing Boards.
Use since Jan. 9, 1951.

SN 676,039. Charmin Paper Mills, Inc., Green Bay, Wis. Filed Nov. 4, 1954.



The words "New 2 Ply," "Facial Quality," and "Tissue" are disclaimed apart from the mark as shown. Applicant claims ownership of Reg. No. 248,549.
For Toilet Tissue.
Use since February 1954.

SN 677,684. United States Envelope Company, Springfield, Mass. Filed Dec. 2, 1954.

VIX SEAL

For Correspondence and Mailing Envelopes.
Use since Sept. 7, 1954.

SN 689,178. Standard Packaging Corporation, Chicago, Ill. Filed June 8, 1955.

STANSEAL-G

For Coated Pulpboard Which Is Sold in Sheet Form When Marketed in the Trade.
Use since Jan. 5, 1955.

SN 689,347. Crocker, Burbank Papers Inc., Fitchburg, Mass. Filed June 13, 1955.

POLAP

For Protective Packaging Paper.
Use since March 1954.

SN 689,348. Crocker, Burbank Papers Inc., Fitchburg, Mass. Filed June 13, 1955.

GLEAMCOAT

For Printing Paper.
Use since July 1947.

SN 689,377. Fort Howard Paper Company, Green Bay, Wis. Filed June 13, 1955.

ADMATS

Applicant claims ownership of Reg. Nos. 510,959 and 594,497.
For Paper Doilies and Paper Place Mats.
Use since May 26, 1955.

SN 689,395. Max Levinson, d. b. a. Newburgh Tissue Company, Newburgh, N. Y. Filed June 13, 1955.

KLENZ-AID

For Facial Tissues.
Use since Jan. 23, 1951.

CLASS 38

SN 640,193. Commerce Clearing House, Inc., Chicago, Ill. Filed Dec. 31, 1952. Sec. 2(f).



Applicant claims ownership of Reg. No. 428,904.
For Publication Issued Periodically and Devoted to State and Local Taxes in the United States.
Use since Jan. 20, 1941.

SN 667,047. The Pontiac Press, Pontiac, Mich. Filed May 25, 1954. Sec. 2(f).

THE PONTIAC PRESS

Applicant claims ownership of Reg. No. 506,076.
For Newspaper.
Use since July 1, 1919, as to "The Pontiac Daily Press"; and since Aug. 4, 1953, on the mark as shown.

SN 669,747. Crown International, Inc., Long Beach, Calif. Filed July 12, 1954.



For Merchandise Stamps.
Use since June 18, 1951.

SN 670,536. Brown & Bigelow, St. Paul, Minn. Filed July 26, 1954.

Chrome Sheen

For Greeting Cards, Wall Calendars, Wall Mailing Cards, and Watercolor Prints.
Use since on or about May 6, 1954.

SN 675,147. Gladys Lois Henry, d. b. a. Henry Publishing Company, New York, N. Y. Filed Oct. 20, 1954.

Skyways
airport
service
directory

No registration rights are made to the words "Airport Service Directory" apart from the mark shown. Applicant claims ownership of Reg. No. 398,638.
For Magazine Published Quarterly.
Use since Oct. 10, 1954.

SN 676,435. Meredith Publishing Company, Des Moines, Iowa. Filed Oct. 18, 1954. Sec. 2(f).

Have you heard?

Latest
Garden News

For Section in a Periodic Publication.
Use since March 1949.

SN 681,270. Hearst Publishing Company, Inc., San Francisco, Calif. Filed Feb. 8, 1955.



For Columns of Writings and Drawings Published in a Daily Newspaper.
Use since Jan. 30, 1955.

SN 682,600. Stry-Lenkoff Co., Louisville, Ky. Filed Mar. 1, 1955.

NOWASTE

For Printed Marking Tags Used in the Dry Cleaning and Laundry Industries.
Use since Apr. 1, 1954.

SN 682,667. Fred C. Philpitt, Washington, D. C. Filed Mar. 2, 1955.

THE
CHEMGRAM
AND
CHEMPAT
REVIEW

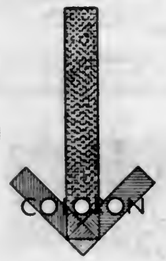
For Periodicals.
Use since Mar. 1, 1955.

SN 682,884. Evans Color Laboratory, Inc., Long Island City, N. Y. Filed Mar. 7, 1955.

IMBI-CARBRO

For Natural Color Photographic Prints.
Use since Apr. 21, 1954.

SN 683,588. Eckstein-Stone, Inc., Brooklyn, N. Y. Filed Mar. 16, 1955.



The drawing is lined for yellow, blue, pink, violet, green, orange, and brown.
For Set of Printed Color Analyzer Screens.
Use since Mar. 1, 1955; and since Jan. 27, 1955, as to "Coloron."

SN 684,276. Career Publications, Inc., New York, N. Y. Filed Mar. 28, 1955.

CAREER
CHOICE

Applicant claims ownership of Reg. No. 562,994.
For Annual Publication in the Nature of a Guide to Employment Opportunities Open to High School and Junior College Men and Women.
Use since Mar. 1, 1955.

SN 689,687. Whaley-Eaton Corporation, Washington, D. C. Filed June 16, 1955.

Atoms for Peace

For Publication Issued From Time to Time.
Use since May 13, 1955.

SN 691,434. Citation Cards, Inc., New York, N. Y. Filed July 18, 1955.

CITATION

For Greeting Cards.
Use since Feb. 20, 1954.

SN 691,856. Hallmark Cards, Inc., Kansas City, Mo. Filed July 25, 1955.

Pantomimes

For Greeting Cards.
Use since July 5, 1955.

SN 691,859. Hearst Publishing Company, Inc., San Francisco, Calif. Filed July 25, 1955.

Horse-O-Scope

For Newspaper Columns.
Use since Aug. 4, 1933.

SN 692,132. General Features Corporation, New York, N. Y. Filed July 29, 1955.

Business Daze

For Newspaper Comic Feature.
Use since July 7, 1955.

SN 692,566. Borax Consolidated, Limited, d. b. a. Pacific Coast Borax Co., division of Borax Consolidated, Limited, Los Angeles, Calif. Filed Aug. 8, 1955.

Boron-o-gram

For Periodical Publication in the Nature of a News Brochure Relating to Agricultural Subjects.
Use since Sept. 30, 1939.

SN 693,347. S. C. Johnson & Son, Inc., Racine, Wis. Filed July 28, 1955.

JONWAX

For Periodical Publication.
Use since February 1926.

SN 694,401. Hewlett-Packard Company, Palo Alto, Calif. Filed Aug. 1, 1955.



Applicant claims ownership of Reg. No. 560,762.
For Periodicals Relating to Electrical Equipment and Published From Time to Time.
Use since May 1941.

CLASS 39

SN 656,280. Louis Walter & Co., Inc., Kansas City, Mo. Filed Nov. 12, 1953.

Dovana
by Betty Jean

For Ladies' Suits and Coats.
Use since Sept. 18, 1953.

SN 663,616. Advance Glove Manufacturing Co., Detroit, Mich. Filed Mar. 31, 1954.



The trademark consists of a gold stripe extending substantially lengthwise down the back of the thumb of the glove.
For Asbestos and Other Flame Resistant Gloves.
Use since Jan. 25, 1954.

SN 665,613. Lemonde Corset Company, Saginaw, Mich. Filed May 3, 1954.

MODART
Maternity Sash

Applicant disclaims "Maternity Sash" apart from the mark as shown.
For Corsets.
Use since Mar. 1, 1943.

SN 667,768. B. Altman & Co., New York, N. Y. Filed June 7, 1954. Sec. 2(f).

PIMAWEVE

For Men's Negligee Shirts.
Use since Mar. 1, 1949.

SN 673,518. Robert Hall Clothes, Inc., New York, N. Y. Filed Sept. 21, 1954.

Westerfield

For Men's Suits.
Use since on or about Sept. 3, 1954.

SN 675,484. Jaffe Bros., Inc., Philadelphia, Pa. Filed Oct. 26, 1954.

PLEAT-SET
BY JAFFE

For Men's and Boys' Suits and Trousers.
Use since Oct. 8, 1954.

SN 676,316. L. Greif & Bro., Inc., Baltimore, Md. Filed Nov. 9, 1954.

VARI-SLAX

For Suits, Top Coats, Overcoats, Slacks, Sport Coats, and Jackets for Men, Boys, and Youths.
Use since Sept. 10, 1954.

SN 677,882. Kordell Sportswear, Inc., New York, N. Y. Filed Dec. 7, 1954.



All of the wording, with the exception of the word "Korkies," is disclaimed apart from the mark as shown.
For Outer Shorts, Bermuda Shorts, Middies, Coveralls, Vests, and Skirts for Children, Girls, and Misses.
Use since Nov. 26, 1954.

SN 678,289. Universal Overall Company, Chicago, Ill. Filed Dec. 13, 1954.

TOUGH
Hombre

For Dungarees for Men, Women, Boys, and Girls.
Use since in the year 1935.

SN 679,221. Pam Foster, Inc., Seattle, Wash. Filed Dec. 31, 1954.

Pam Foster

For Children's Sportswear—Namely, Girls' Dresses, Jackets, Blouses, Shorts, and Skirts.
Use since on or about Oct. 25, 1954.

SN 679,593. Lady Lynne Lingerie, Inc., New York, N. Y. Filed Jan. 7, 1955.

Lady Lynne

For Intimate Garments for Women—Namely, Slips, Nightgowns, Brassieres, and Girdles.
Use since June 21, 1939.

SN 682,158. Liberty Umbrella Co., New York, N. Y. Filed Feb. 23, 1955.

SUNBRELLA HAT

The word "Hat" is disclaimed apart from the mark as shown.
For Sun Hats.
Use since June 1, 1954.

SN 683,822. Max Udell Sons & Co. Inc., New York, N. Y. Filed Mar. 18, 1955.

Dynelamb

For Men's Clothing—Namely, Suits.
Use since Mar. 4, 1955.

SN 684,278. Chadbourn Hosiery Mills, Incorporated, Charlotte, N. C., now Chadbourn Gotham, Inc. Filed Mar. 28, 1955.

Larkwood Stocking X-90

Applicant claims ownership of Reg. Nos. 249,750, 517,435, and 576,413.
For Ladies' Hosiery.
Use since February 1955.

SN 685,942. Walter Wolowick, d. b. a. Wolowick Shoe Company, Milwaukee, Wis. Filed Apr. 20, 1955.

Fire-Sides

For Shoes.
Use since Dec. 5, 1922.

SN 689,444. Wembley, Inc., New Orleans, La. Filed June 13, 1955.

GOLDEN HOUSE
WOOLCROFTERS

For Men's Neckties.
Use since Apr. 4, 1955.

SN 689,498. Lustberg, Nast & Co., Inc., New York, N. Y. Filed June 14, 1955.

INSEPARABLES

For Men's and Boys' Jackets and Slacks.
Use since June 1, 1955.

SN 689,584. Modella Manufacturing Company, Inc., Port Chester, N. Y. Filed June 15, 1955.

PAJA-RAMA

For Children's Sleeping Garments.
Use since Apr. 5, 1955.

SN 689,707. Crown Handkerchief Inc., New York, N. Y. Filed June 17, 1955.



For Handkerchiefs and Scarves.
Use since May 31, 1955.

SN 690,213. Alba Hosiery Mills, Inc., New York, N. Y. Filed June 27, 1955.

Alba

Applicant claims ownership of Reg. Nos. 267,755 and 517,454.
For Women's Sweaters.
Use since June 8, 1955.

SN 690,327. Reliance Manufacturing Company, New York, N. Y. Filed June 27, 1955.

Yankette

For Women's and Girls' Dungarees, Shorts, Pedal Pushers, Slacks, and Slack Suits.
Use since June 2, 1955.

SN 690,493. I. Schneierson & Sons, Inc., New York, N. Y. Filed June 29, 1955.

Craft-o-Loom

Applicant claims ownership of Reg. No. 368,716.
For Ladies' and Children's Slips, Nightgowns, and Petticoats of a Textile Fabric.
Use since Jan. 6, 1939.

SN 692,638. Pollak Bros. Inc., Fort Wayne, Ind. Filed Aug. 8, 1955.

Wayne Maid

Applicant claims ownership of Reg. No. 406,646.
For Women's House Dresses and Brunch Coats and Women's, Misses', and Girls' Dresses, Waists, Playsuits, Blouses, Underskirts, Combinations—Namely, Corselets and Panties, Brassieres and Slips, Brassieres and Petticoats, Slips and Nightgowns.
Use since Dec. 5, 1922.

SN 692,683. Laura Lee Frocks, Inc., St. Louis, Mo. Filed July 8, 1955.

Laura Lee

Applicant claims ownership of Reg. No. 383,691.
For Women's Dresses.
Use since Mar. 1, 1938.

SN 693,383. Paul Hughes, d. b. a. Hughes Affiliated Mills, Hickory, N. C. Filed Aug. 19, 1955.

Travelers

For Hosiery for Men, Women, and Children.
Use since June 13, 1955.

SN 693,486. Pioneer Suspender Company, Darby, Pa. Filed Aug. 22, 1955.

ELDORADO

For Trouser Belts.
Use since June 22, 1955.

SN 693,543. Goodman-Kava, Inc., New York, N. Y. Filed Aug. 23, 1955.

Goodcraft

For Ladies' Coats, Suits, and Jackets.
Use since May 9, 1955.

SN 693,556. Leybro Mfg. Co., Inc., New York, N. Y. Filed Aug. 23, 1955.

Mi Favorite

For Girls' and Children's Slips.
Use since Feb. 3, 1947.

SN 693,573. Selberling Rubber Company, Barberton, Ohio. Filed Aug. 23, 1955. Sec. 2(f).

TUFSOL

Applicant claims ownership of Reg. No. 527,052.
For Rubber Shoe Soles.
Use since Mar. 7, 1949.

CLASS 40

SN 675,304. Dana E. Morrison, Jr., d. b. a. Dana E. Morrison, Jr. Co., Chicago, Ill. Filed Oct. 22, 1954.

DEMCO

For Emblems of Felt To Be Attached to Wearing Apparel.
Use since Aug. 26, 1953.

CLASS 42

SN 678,018. L. E. Carpenter & Company, Wharton, N. J. Filed Dec. 9, 1954.

METAFLEX

For Coated Textile Fabrics Having a Polished Metal Appearance Used for Upholstery Purposes and Decorative Purposes and the Like.
Use since on or about Oct. 22, 1954.

SN 678,158. M. Serman & Co., Inc., New York, N. Y. Filed Dec. 10, 1954.

LINSU

For Cotton Piece Goods.
Use since Oct. 28, 1954.

SN 681,173. Jay-Gee Fabrics, Inc., New York, N. Y. Filed Feb. 7, 1955.

Guanella

For Textile Piece Goods Especially for Suits and Coats.
Use since Sept. 15, 1949.

SN 688,847. Nylonet Corporation, Miami, Fla. Filed June 3, 1955.

Tenolyn

For Textile Fabrics of Synthetic Fibres.
Use since Apr. 14, 1955.

SN 689,891. Tilbury Fabrics, Inc., New York, N. Y. Filed June 20, 1955.

Tilbury Fabrics

Applicant disclaims the word "Fabrics" apart from the mark as shown. Applicant claims ownership of Reg. No. 426,603.
For Draperies, Curtains, Piece Goods Made of Silk, Cotton, Rayon, and Combinations Thereof.
Use since Oct. 1, 1945.

SN 689,895. United Merchants and Manufacturers, Inc., New York, N. Y. Filed June 20, 1955.

FORT DURA

Applicant claims ownership of Reg. Nos. 505,467, 586,789, and others.
For Piece Goods of Cotton, Wool, Silk, Synthetic Fibers, and/or Combinations Thereof.
Use since on or about May 31, 1955.

SN 689,981. Milton C. Blum, Inc., New York, N. Y. Filed June 22, 1955.

Magicotton

For Cotton Piece Goods.
Use since January 1954.

SN 690,096. Norman D. Ramoi, New York, N. Y. Filed June 23, 1955.

KWIK-SLIP

For Pillow Cases.
Use since June 1, 1955.

SN 690,270. Hayward-Schuster Woolen Mills, Inc., East Douglas, Mass. Filed June 27, 1955.

Cashmorocco

For Wool Outer-Wear Fabrics.
Use since Dec. 9, 1953.

SN 690,497. Scranton Lace Company, Scranton, Pa. Filed June 29, 1955.

FAB-TROL

For Lace Fabrics Having a Chemical Finish for Table Cloths and Curtains.
Use since June 8, 1955.

SN 691,010. A. Cover & Company Limited, Manchester, England. Filed July 11, 1955.



Applicant disclaims the expression "Sold the World Over" except as shown. Applicant claims ownership of British Reg. No. 723,239, dated Oct. 28, 1953.
For Antimacassars, Bed Coverlets, Bed Sheets, Bedspreads, Bed Ticks, Counterpanes, Crumb Cloths, Window Curtains, Cushion Covers, Dish Cloths, d'Oyleys, Duchesse Sets, Face Towels, Bath Towels, Tea Towels, Dish Towels, Face Cloths, Bunting, Glass Cloths, Mattress Covers, Pillow Cases, Quilts, Serviettes, Table Cloths, Table Covers, Table Runners, Tea Cloths, and Toilet Covers.

SN 693,260. The Millville Manufacturing Company, Philadelphia, Pa. Filed Aug. 17, 1955.

DRINEET

For Cotton Piece Goods.
Use since July 18, 1955.

SN 693,307. Collins & Aikman Corporation, New York, N. Y. Filed Aug. 18, 1955.

Cloud no. 9

For Pile Fabrics Used in the Manufacture of Wearing Apparel.
Use since Mar. 23, 1955.

SN 693,582. Aldon Rug Mills, Inc., Lenni Mills, Pa. Filed Aug. 24, 1955.

Magic Weave

For Textile Tufted Rugs and Carpets,
Use since June 18, 1955.

SN 693,667. Davis & Catterall, New York, N. Y. Filed Aug. 25, 1955.

NIMBLE THIMBLE COTTONS

For Cotton Piece Goods.
Use since January 1950.

SN 693,688. Mercantile Stores Company, Inc., Wilmington, Del. Filed Aug. 25, 1955.

FOUR SEASONS

For Blankets.
Use since Feb. 17, 1954.

CLASS 43

SN 689,992. Julius Cohen & Son, Inc., New York, N. Y. Filed June 22, 1955.

CONANSON

Applicant claims ownership of Reg. No. 391,657.
For Cotton, Silk, and Mercerized Linen Threads and Rayon Thread and Cotton Yarn.
Use since 1903.

SN 698,724. Max Pollack & Company, Inc., New York, N. Y. Filed Nov. 22, 1955.

FALCON

For Thread.
Use since Jan. 15, 1935.
Subj. to Intf. with SN 655,971.

CLASS 44

SN 675,576. Hans Nemec, Feldkirch (Vorarlberg), Austria. Filed Oct. 27, 1954.

NEMECTRODYN

Applicant claims ownership of Austrian Reg. No. 24,724, dated Nov. 17, 1951.
For Apparatus for Electro-Therapy by Nerve Stimulating Electric Currents.

SN 689,795. Alda Mfg. Co., New York, N. Y. Filed June 20, 1955.

KUMFEE-PROTECT

For Sanitary Panties.
Use since Apr. 13, 1955.

SN 691,023. Ethicon, Inc., New Brunswick, N. J. Filed July 11, 1955.

MICRO-POINT

For Sutures and Ligatures and Needles Therefor Sold as a Unit and for Surgical Needles.
Use since May 31, 1955.

SN 694,436. The May Department Stores Company, St. Louis, Mo. Filed Sept. 9, 1955.

ARCROSS ARNAPS

Applicant claims ownership of Reg. No. 424,010.
For Sanitary Napkins.
Use since Sept. 1, 1953.

CLASS 45

SN 690,175. William F. McHenry, d. b. a. W. F. McHenry Co., Springfield, Ill. Filed June 24, 1955.

ILLINI

For Carbonated Soft Drinks.
Use since May 31, 1955.

SN 691,523. Toast of the Town, Inc., Cleveland, Ohio. Filed July 18, 1955.



For Ginger Ale.
Use since June 25, 1955.

CLASS 46

SN 644,796. Schutter Candy Company, Chicago, Ill. Filed Apr. 6, 1953.

OLD NICK *Juniors*

Applicant claims ownership of Reg. Nos. 341,816, 364,472, and others.
For Candy Bars.
Use since Mar. 1, 1952.

SN 649,272. Angostura Bitters (Dr. J. G. B. Siegert & Sons) Limited, Port of Spain, Trinidad. Filed June 24, 1953.



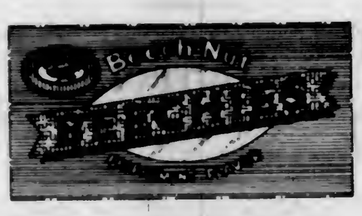
Applicant claims ownership of Reg. Nos. 63,312, 587,114, and others.
For Aromatic Bitters Used for Food Flavoring Purposes.
Use since Mar. 20, 1953.

SN 655,725. Valentine Company, Incorporated, Richmond, Va., to Valentine's Meat Juice Company, Richmond, Va. Filed Nov. 2, 1953. Sec. 2(f) as to "Valentine."



Applicant claims ownership of Reg. Nos. 186,911, 276,004, and others.
For Extracts of Meat and Compounds Thereof.
Use since Dec. 15, 1948.

SN 671,088. Beech-Nut Packing Company, Canajoharie, N. Y. Filed Aug. 4, 1954.



The drawing is lined for the colors red, blue, and yellow. The words "Peppermint Flavor" and the blue background are disclaimed apart from the mark as shown in the drawing. Applicant claims ownership of Reg. Nos. 89,613, 397,153, and others.
For Chewing Gum.
Use since Nov. 26, 1951.

SN 678,905. O. P. Cohn Company, Dallas, Tex. Filed Dec. 24, 1954.

ALFA-KAPS

For Cereal Food Made From Alfalfa Seeds.
Use since August 1954.

SN 681,696. Jack C. King, d. b. a. Showtime Products Co., Amarillo, Tex. Filed Feb. 15, 1955.

SHOWTIME TREAT

For Ice Cream and Mellorine.
Use since Nov. 1, 1954.

SN 682,598. Slenderella Systems, Inc., Darien, Conn. Filed Mar. 1, 1955.

slenderella

Applicant claims ownership of Reg. Nos. 386,714 and 598,021.
For Preparation for Foods for Health Purposes—Specifically Candies.
Use since September 1940.

SN 682,777. Barton, Inc., Brooklyn, N. Y. Filed Mar. 4, 1955.

lollycones

For Candy on a Stick.
Use since Mar. 30, 1951.

SN 683,041. The Griffith Laboratories, Inc., Chicago, Ill. Filed Mar. 8, 1955.

"KRUSTO"

For Dry Breading Mix and a Dry Batter Mix for Use in Breading Foods To Be Fried.
Use since Jan. 11, 1955, on breading mix.

SN 683,696. Mid-Central Fish Company, Kansas City, Mo. Filed Mar. 17, 1955.

Fansepakt

Applicant claims ownership of Reg. No. 327,311.
For Oysters, Shrimp, Fresh Fish, Smoked Fish, Canned Fish, Salt Fish, and Fish Cakes.
Use since January 1925.

SN 683,977. The Illinois Canning Co., Hoopeston, Ill. Filed Mar. 22, 1955.



OUR DARLING

Applicant claims ownership of Reg. Nos. 177,163 and 520,435.
For Canned Vegetables and Tomato Juice.
Use since 1912 on canned vegetables.

SN 684,467. Pride of India Pepper Estates, New York, N. Y. Filed Mar. 29, 1955.



For Ground Pepper.
Use since Apr. 27, 1954.

SN 684,475. Sasson-King, Inc., Lakeland, Fla. Filed Mar. 29, 1955.

JUICE BOWL

For Canned Citrus Fruits and Canned Citrus Juices.
Use since Nov. 1, 1954.

SN 687,708. Martori Bros., Distributors, Phoenix, Ariz. Filed May 17, 1955.

Mista JOE

For Fresh Vegetables, Fresh Melons.
Use since July 8, 1953, on melons.

SN 687,829. Standard Brands Incorporated, New York, N. Y. Filed May 18, 1955.

HOSPITALITY HOUSE

For Salad Dressing.
Use since Nov. 30, 1950.

CLASS 47

SN 628,784. Societe Vinicole de Pauillac (Societe Anonyme), Pauillac (Gironde), France. Filed Apr. 26, 1952.

MOUTON CADET

"Mouton Cadet" is translated as "Junior Mutton" or "Younger Lamb." Applicant claims ownership of French Reg. No. 921, dated June 14, 1951 (Lesparre); Natl. Inst. No. 496,230; and U. S. Reg. No. 328,384.
For Wines.

SN 628,785. Societe Vinicole de Pauillac (Societe Anonyme), Pauillac (Gironde), France. Filed Apr. 26, 1952.

Mouton Cadet

"Mouton Cadet" is translated as "Junior Mutton" or "Younger Lamb." Applicant claims ownership of French Reg. No. 920, dated June 14, 1951 (Lesparre); Natl. Inst. No. 496,229; and U. S. Reg. No. 328,384.
For Wines.

SN 678,070. Real Companhia Vinicola do Norte de Portugal, S. A. R. L., Porto, Portugal. Filed Dec. 3, 1954.

EVEL

Applicant claims ownership of Portugese Reg. No. 15,832, dated Aug. 26, 1913.
For Wines.

SN 678,071. Real Companhia Vinicola do Norte de Portugal, S. A. R. L., Porto, Portugal. Filed Dec. 3, 1954.

GRANDJÓ

Applicant claims ownership of Portugese Reg. No. 14,659, dated July 3, 1912.
For Wines.

SN 678,150. Real Companhia Vinicola do Norte de Portugal S. A. R. L., Porto, Portugal. Filed Dec. 10, 1954.

Royal Vinicola

"Vinicola" means "Wine-Growing." Applicant claims ownership of Portugese Reg. No. 72,892, dated Nov. 24, 1950.
For Wines.

SN 690,808. Deinhard & Co., Coblenz (Rhine), Germany. Filed July 6, 1955. Sec. 2(f).



For Rhine, Moselle, and Franconia Wines.
Use since 1794.

SN 690,810. Deinhard & Co., Coblenz (Rhine), Germany. Filed July 6, 1955.

RHEINRITTER

The translation of the mark is "Knight of the Rhine."
For Rhine Wine.
Use since 1948.

SN 691,043. Italian Swiss Colony, San Francisco, Calif. Filed July 11, 1955.

FIOR DI VINO

The mark is translated as "Flower of Wine." Applicant claims ownership of Reg. No. 354,218.
For Wines.
Use since May 17, 1955.

CLASS 48

SN 667,185. Unanue & Sons, Inc., New York, N. Y. Filed May 26, 1954. Sec. 2(f).

GOYA

For Malt Cereal Beverage.
Use since in the year 1943.

SN 675,614. American Brewers Products, Jersey City, N. J. Filed Oct. 28, 1954.



No registration rights are claimed herein for the trade-name, American Brewers Products, but no common law or other rights thereto are otherwise waived.
For Syrups Used Principally in the Process of Brewing Beer.
Use since June 1951.

SN 691,365. Flowers Breweries Limited, Luton, England. Filed July 15, 1955.



The wording "The Famous Old English Ale" is disclaimed apart from the mark as shown. Applicant claims ownership of British Reg. No. 731,353, dated June 18, 1954.
For Ale.

CLASS 49

SN 675,895. Leroux and Company, Inc., Philadelphia, Pa. Filed Nov. 2, 1954. Sec. 2(f) as to "Leroux."



Apart from the mark as shown applicant disclaims any exclusive rights in the descriptive wording "Sloe Gin." Applicant claims ownership of Reg. Nos. 361,694, 547,557, and others.
For Sloe Gin.
Use since June 1, 1950; and since Apr. 18, 1938, as to "Leroux."

SN 675,896. Leroux and Company, Inc., Philadelphia, Pa. Filed Nov. 2, 1954. Sec. 2(f) as to "Leroux."



Apart from the mark as shown applicant disclaims any exclusive rights in the wording "Ginger Flavored Brandy."

Applicant claims ownership of Reg. Nos. 354,949, 547,557, and others.
For Ginger Flavored Brandy.
Use since Oct. 6, 1954; and since Dec. 10, 1936, as to "Leroux."

SN 689,484. John Gross and Company, Baltimore, Md. Filed June 14, 1955.

The Whitehall

For Scotch Whiskey.
Use since Dec. 30, 1954.

SN 693,452. Esbeco Distilling Corporation, Stamford, Conn. Filed Aug. 22, 1955.



The drawing is lined for green.
For Whiskey.
Use since May 1, 1935.

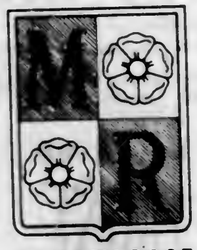
CLASS 50

SN 669,397. R. A. Brand & Co. Limited, Salford, England. Filed July 6, 1954.

"TEXIKOON"

Applicant claims ownership of British Reg. No. 707,428, dated May 19, 1952.
For Plastics With a Textile Base, Being Material in Sheet Form for Use in Manufactures, and Covers Made Therefrom for Hermetically Preserving Objects for Future Use.

SN 671,133. Beck & Beck, Inc., Barre, Vt. Filed Aug. 5, 1954.



MEMORY ROSE GRANITE

The drawing is lined for black and green. The word "Granite" is disclaimed apart from the mark as shown.
For Granite Memorials.
Use since Nov. 3, 1953.

SN 672,134. American Seal-Kap Corporation of Delaware, Long Island City, N. Y. Filed Aug. 24, 1954.

AMERICAN Seal-Hood

The word "Seal" and the word "Hood" are disclaimed apart from the mark as shown.
For Milk Bottle Caps.
Use since May 1944.

SN 672,135. American Seal-Kap Corporation of Delaware, Long Island City, N. Y. Filed Aug. 24, 1954.



The words "Seal" and "Hood" and the representation of the goods are disclaimed apart from the mark as shown.
For Milk Bottle Caps.
Use since May 1944.

SN 676,286. H. Wenzel Tent & Duck Co., St. Louis, Mo. Filed Nov. 8, 1954.

ELASTISEAL

For Tarpaulins Made of Canvas and Cotton Duck and Treated for Rot and Water Resistance.
Use since Sept. 24, 1954.

SN 677,321. Jarke Manufacturing Company, Chicago, Ill. Filed Nov. 26, 1954.

MINI-MODULE

For Materials Handling Equipment Including Racks, Pallets, and Portable Stacking Framework and Parts Therefor.
Use since July 2, 1954.

SN 684,586. Ohio Displays, Inc., Cleveland, Ohio. Filed Mar. 30, 1955.

SELF-PAK

For Portable and Foldable Display and Exhibit Units for Advertising, Educational or Other Purposes.
Use since Feb. 18, 1955.

SN 690,050. The Ullman Company, Inc., Brooklyn, N. Y. Filed June 22, 1955.

STICK omatic

For Decorative Plastic Shelf Edgings.
Use since May 13, 1955.

SN 691,511. Schlage Lock Company, San Francisco, Calif. Filed July 18, 1955.



For Key Tags and Instruction Plates.
Use since June 7, 1955.

CLASS 51

SN 677,921. Associated Brands, Inc., Brooklyn, N. Y. Filed Dec. 8, 1954.



For Hair Tonic.
Use since Oct. 1, 1939.

SN 677,922. Associated Brands, Inc., Brooklyn, N. Y. Filed Dec. 8, 1954.



For Cologne.
Use since Oct. 1, 1939.

SN 677,923. Associated Brands, Inc., Brooklyn, N. Y. Filed Dec. 8, 1954.



For Hand and Body Lotion.
Use since Oct. 1, 1939.

SN 682,401. Colgate-Palmolive Company, Jersey City, N. J. Filed Feb. 28, 1955.

Skin Mist

For Hand Lotion.
Use since June 4, 1954.

SN 683,038. The Gillette Company, d. b. a. The Toni Company, Boston, Mass. Filed Mar. 8, 1955.

Bright Promise

Applicant claims ownership of Reg. No. 576,780.
For Lipstick.
Use since Feb. 9, 1955.

SN 684,187. Bergdorf & Goodman Company, New York, N. Y. Filed Mar. 25, 1955.

NANDI

For Perfume, Cologne, Bath Oil, and Sachet.
Use since Mar. 11, 1955.

SN 684,266. Warren E. Billingsley, d. b. a. Betty Beale Products Company, Memphis, Tenn. Filed Mar. 28, 1955.

BETTY BEALE

For Cosmetic Skin and Body Lotion, Hair Dressing and Pomade, and Hair Softener for Grooming.
Use since Jan. 1, 1937.

SN 684,655. Golden Glint Company, d. b. a. Wittwer-Lome Company, Seattle, Wash. Filed Mar. 31, 1955.

Lomé

For Hair Tinting Wave Setting Preparation for Application to Human Hair.
Use since Jan. 24, 1955.

SN 685,925. Pond's Extract Company, New York, N. Y., to Chesebrough-Pond's Inc., New York, N. Y. Filed Apr. 20, 1955.

MAKE-UP
MIST

For Liquid Cosmetic Preparation Which Is Applied to the Face With the Finger Tips To Form a Make-Up Base or Foundation.
Use since in or about April 1954.

SN 686,105. Fred D. Seroyer, d. b. a. Alice of Dalice Beauty Products Company, Fort Worth, Tex. Filed Apr. 22, 1955.

alice
of
dalice

For Lip Stick and Rouge.
Use since Jan. 1, 1955.

SN 686,556. Mohawk Brush Co., Albany, N. Y. Filed Apr. 29, 1955.

Press

For Hand Lotion.
Use since Mar. 24, 1955.

CLASS 52

SN 664,289. The Cobb Manufacturing Co., Inc., Richmond, Va. Filed Apr. 12, 1954.

NYLO-WASH

For Bleach-Detergent for Fabrics and Clothing.
Use since at least as early as Feb. 15, 1953.

SN 669,974. Deb Chemical Proprietaries Limited, Belper, Derbyshire, England. Filed July 14, 1954.

Deb

Applicant claims ownership of British Reg. No. 673,329, dated Oct. 5, 1948.
For Cleaning Preparation for Upholstery and Furniture Including the Interior and Exterior of Automobiles.

SN 671,379. James H. Rhodes & Company, Chicago, Ill. Filed Aug. 9, 1954.

DRI-SORB

For Absorbent Floor Cleaning Compound in Granular Form for Use on All Types of Industrial Floors for Absorbing Oil, Grease, and Water.
Use since January 1952.

SN 673,235. Lloyd E. Jackson, d. b. a. Spix Products Company, Pittsburgh, Pa. Filed Sept. 15, 1954.

Spix

For Cleaning Preparations for Upholstery, Leathers, Fabrics, Painted Surfaces, and the Like, Which Cleaning Preparations May Also Be Used as Hand Brushing Soaps.
Use since Apr. 17, 1934.

SN 673,854. Old Empire, Inc., Newark, N. J. Filed Sept. 27, 1954.

Foam-King

For Soaps, Shampoos, and a Saponaceous Preparation Which Foams and Bubbles.
Use since Jan. 1, 1939.

SN 675,691. Crown Chemical Co., Redwood City, Calif. Filed Oct. 29, 1954.

Tilex

For Liquid Detergent for Cleaning Ceramic Tile and Mortar.
Use since June 1, 1954.

SN 677,520. Nopco Chemical Company, Harrison, N. J. Filed Nov. 30, 1954. Sec. 2(f).

KOKOBACE

Applicant claims ownership of Reg. No. 408,963.
For Soap and Detergent Compositions for Use as a Base for Soap Shampoos and Liquid Soaps and for General Industrial Use, Particularly in the Rubber and Tanning Industries.
Use since on or about July 1918.

SN 679,605. Radiator Specialty Company, Charlotte, N. C. Filed Jan. 7, 1955.

RUST-RAIDER

For Cleaning Compound for Boilers and Heating Systems and a Combined Cleaning Compound, Rust Inhibitor and Lubricant for Water Pumps.
Use since June 10, 1946.

SN 688,751. Purex Corporation, Ltd., South Gate, Calif. Filed June 2, 1955.

trend



The drawing is lined for red. Applicant claims ownership of Reg. Nos. 430,422, 614,082, and others.
For Liquid Detergents.
Use since Mar. 21, 1955.

SN 688,752. Purex Corporation, Ltd., South Gate, Calif. Filed June 2, 1955.

trend

Applicant claims ownership of Reg. Nos. 430,422, 614,082, and others.
For Detergents in Dry and Liquid Form.
Use since Oct. 18, 1946, on dry detergents.

SN 691,558. E. F. Drew & Co., Inc., New York, N. Y. Filed July 19, 1955.

DREW LITE

For Dry Cleaning Composition.
Use since June 30, 1955.

SN 691,607. Church Industries, Inc., Chicago, Ill. Filed July 20, 1955.

EVR-FOAM

For Detergent Impregnated Sponges.
Use since June 1, 1955.

SN 692,014. Puritan Company, Incorporated, Rochester, N. Y. Filed July 27, 1955.

PURA-PHEN

For Surgical Detergent.
Use since July 1, 1955.

SERVICE MARKS

CLASS 100

SN 652,047. Association of Desk and Derrick Clubs of North America, Jackson, Miss. Filed Aug. 20, 1953. COLLECTIVE MARK.



For Establishing and Maintaining Membership in a National Association Composed of Women Actively Engaged in All Branches of the Petroleum Industry and in Companies and Organizations Who Directly Supply and Serve the Petroleum Industry and for Furthering the Economic and Social Interests Thereof.
Use since June 1, 1951.

SN 659,950. Robert E. Rahauser, York, Pa., to Tropical Treat, Inc., York, Pa. Filed Jan. 22, 1954.



For Serving and Dispensing Foods and Beverages.
Use since Jan. 15, 1951.

CLASS 101

SN 657,940. Local Trademarks, Inc., New York, N. Y. Filed Dec. 14, 1953.



For Advertising Services—Namely, the Formulation and Preparation of Advertising Copy and Literature.
Use since Dec. 4, 1953.

SN 657,941. Local Trademarks, Inc., New York, N. Y. Filed Dec. 14, 1953.



For Advertising Services—Namely, the Formulation and Preparation of Advertising Copy and Literature.
Use since Dec. 4, 1953.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

620,595. GARDEN FESTIVAL. Springtime Bulb Farms, Inc. SN 667,265. Pub. 11–15–55. Filed 5–27–54.

CLASS 2

620,596. THERMO BAG AND DESIGN. Kleinzway, Inc., d. b. a. Waltco Products. SN 620,675. Pub. 11–15–55. Filed 10–30–51.

620,597. FEEDRITE. Feedrite Limited. SN 656,306. Pub. 11–15–55. Filed 11–13–53.

620,598. "EASY-GRAB." Standard Furnace Supply Co., Ltd. SN 671,914. Pub. 11–15–55. Filed 8–18–54.

620,599. CONSECO. Consolidated Cover Co. SN 672,053. Pub. 11–15–55. Filed 8–23–54.

620,600. MPP AND DESIGN. Michigan Plastic Products, Inc. SN 675,994. Pub. 11–15–55. Filed 11–3–54.

620,601. JOLLY BAG. The Hamilton Metal Products Company. SN 685,272. Pub. 11–15–55. Filed 4–11–55.

620,602. HARVEST FRESH. Kordite Corporation, to Textron American, Inc. SN 685,379. Pub. 11–8–55. Filed 4–12–55.

620,603. HI-KOOL. Gits Molding Corporation. SN 685,980. Pub. 11–15–55. Filed 4–21–55.

620,604. PPC. Plastic Products Corporation. SN 687,103. Pub. 11–15–55. Filed 5–9–55.

620,605. PANTRY PAL. R. Wallace & Sons Manufacturing Company. SN 687,148. Pub. 11–8–55. Filed 5–9–55.

CLASS 3

620,606. THE WESTERNER AND DESIGN. Embassy Plastic Products, Inc., d. b. a. Embassy P. P. Inc. SN 685,102. Pub. 11–15–55. Filed 4–7–55.

CLASS 4

620,607. KIDNEY DESIGN. Dow Corning Corporation. SN 640,921. Pub. 11–8–55. Filed 1–19–53.

620,608. PACIFIC ETC. AND DESIGN (REPRESENTATION OF WINGS). Pacific Grinding Wheel Co. SN 661,357. Pub. 11–8–55. Filed 2–19–54.

620,609. WETORDRY FABRICUT. Minnesota Mining & Manufacturing Company. SN 664,085. Pub. 11–8–55. Filed 4–7–54.

620,610. NAVAJO. James H. Rhodes & Company. SN 671,381. Pub. 11–8–55. Filed 8–9–54.

620,611. NO. 314 TI-COR. Consolidated Metal Products Corp. SN 677,485. Pub. 11–8–55. Filed 11–30–54.

620,612. NO. 340 TI-GLOSS. Consolidated Metal Products Corp. SN 677,486. Pub. 11–8–55. Filed 11–30–54.

620,613. NO. 322 TI-HI. Consolidated Metal Products Corp. SN 677,488. Pub. 11–8–55. Filed 11–30–54.

620,614. CHARM HOUSE ETC. AND DESIGN. Arkwright Merchandising Corporation. SN 680,056. Pub. 11–8–55. Filed 1–18–55.

620,615. HH AND DESIGN. Armour and Company. SN 680,121. Pub. 11–8–55. Filed 1–19–55.

620,616. SPRAYOLA. Laird K. Rhodes. SN 683,813. Pub. 11–15–55. Filed 3–18–55.

620,617. "KANITE." Robert P. Kane, d. b. a. Maplewood Products. SN 684,226. Pub. 11–15–55. Filed 3–25–55.

620,618. NO-NUBBIN. Schaffner Manufacturing Company, Inc. SN 684,348. Pub. 11–15–55. Filed 3–28–55.

620,619. EZE-TRU. Super-Cut, Inc. SN 684,605. Pub. 11–15–55. Filed 3–30–55.

CLASS 5

620,620. DELKOTE BOOK-SAVER. Delkote, Inc. SN 607,621. Pub. 11–8–55. Filed 12–13–50.

620,621. GLYSO. The Fordath Engineering Company Limited. SN 671,499. Pub. 11–8–55. Filed 8–11–54.

620,622. REARDON'S. The Reardon Company. SN 673,128. Pub. 11–8–55. Filed 9–13–54.

620,623. A. W. FABER-CASTELL. A. W. Faber-Castell Pencil Co., Inc. SN 673,169. Pub. 11–8–55. Filed 9–14–54.

620,624. RECOMMENDED BY PETER PUTTER AND DESIGN. Schalk Chemical Company. SN 679,340. Pub. 11–8–55. Filed 1–3–55.

CLASS 6

620,625. GEOMETRIC DESIGN. Chemische Fabriek L. van der Grinten N. V. SN 648,233. Pub. 11–15–55. Filed 6–4–53.

620,626. KEYSTONE AND DESIGN. Keystone Lubricating Company. SN 673,597. Pub. 11–15–55. Filed 9–22–54.

620,627. DIPTEREX. Farbenfabriken Bayer Aktiengesellschaft. SN 676,487. Pub. 11–15–55. Filed 11–12–54.

620,628. Z. A. C. The B. F. Goodrich Company, d. b. a. B. F. Goodrich Chemical Company. SN 679,287. Pub. 11–15–55. Filed 1–3–55.

620,629. PENNOLOX. The Pennsylvania Salt Manufacturing Company. SN 685,460. Pub. 11–8–55. Filed 4–13–55.

620,630. SERCO. Service Supply Company. SN 685,523. Pub. 11–8–55. Filed 4–14–55.

CLASS 8

620,631. GEORG JENSEN INC. AND DESIGN. Georg Jensen Inc. SN 680,608. Pub. 11–15–55. Filed 1–27–55.

620,632. SMOKE-SCREEN. Lano Corporation. SN 682,026. Pub. 11–15–55. Filed 2–21–55.

CLASS 10

620,633. FERAN. Allied Chemical & Dye Corporation. SN 662,044. Pub. 9–28–54. Filed 3–5–54.

620,634. TUNGRO AND DESIGN. Julian Saphier. SN 670,761. Pub. 11–8–55. Filed 7–28–54.

620,635. SOIL X-PEDITER AND DESIGN. Premier Peat Moss Corporation. SN 679,332. Pub. 11–15–55. Filed 1–3–55.

620,636. SGM AND DESIGN. Sherritt Gordon Mines Limited. SN 681,643. Pub. 11–8–55. Filed 2–14–55.

620,637. AMANOL. American Cyanamid Company. SN 685,155. Pub. 11–15–55. Filed 4–8–55.

620,638. NICALPO. Midwest Soil Builders. SN 686,201. Pub. 11–15–55. Filed 4–25–55.

CLASS 11

620,639. HMS COMPETENT. H. M. Storms Company. SN 685,318. Pub. 11–15–55. Filed 4–11–55.

620,640. INKT-RITE RECORDS ETERNAL. H. M. Storms Company. SN 685,619. Pub. 11–15–55. Filed 4–15–55.

CLASS 12

620,641. AZTEC. Aztec Corporation. SN 639,007. Pub. 11–16–54. Filed 12–5–52.

620,642. M–52. Carroll Development Co. SN 665,093. Pub. 11–8–55. Filed 4–23–54.

620,643. PENNCOAT. The Pennsylvania Salt Manufacturing Company. SN 669,285. Pub. 7–12–55. Filed 7–1–54.

620,644. WONDER BUILDING. M. P. H. Manufacturing Corp., Inc. SN 671,845. Pub. 11–8–55. Filed 8–17–54.

620,645. SLIP-IN. Herbert S. Jones, d. b. a. Jones Shutter Products. SN 673,282. Pub. 11–8–55. Filed 9–16–54.

620,646. APPROVED ADOA PRODUCTS. Adoa Corporation. SN 675,744. Pub. 11–8–55. Filed 11–1–54.

620,647. FIXALL AND DESIGN. Dowman Water Paints, Inc. SN 677,041. Pub. 11–8–55. Filed 11–22–54.

620,648. TUNNEL AND TRACK DESIGN. Robert S. Mayo, d. b. a. Mayo Tunnel and Mine Equipment. SN 677,261. Pub. 11–8–55. Filed 11–8–54.

620,649. TRAFFIC TOP. The Celotex Corporation. SN 683,660. Pub. 11–8–55. Filed 3–17–55.

620,650. CORKATILE. Hachmeister-Inc. SN 683,878. Pub. 11–8–55. Filed 3–21–55.

620,651. VACU-CORE. The Weisberg-Baer Company. SN 684,084. Pub. 11–8–55. Filed 3–23–55.

620,652. CORU-RIB. Coru-Ply Corporation. SN 684,282. Pub. 11–8–55. Filed 3–28–55.

620,653. LAGZ. West Chester Chemical Co. SN 685,062. Pub. 11–8–55. Filed 4–6–55.

620,654. ATCO AND OVAL DESIGN. Anderson-Tully Company. SN 687,023. Pub. 11–8–55. Filed 5–26–55.

620,655. WEATHERCAP. Graham Paper Company. SN 687,466. Pub. 11–8–55. Filed 5–13–55.

620,656. HYDRO BAR. Munro Dampproofings, Inc. SN 687,483. Pub. 11–8–55. Filed 5–13–55.

620,657. B-J. Jessie J. Bolte, d. b. a. Bolte Products Co. SN 687,529. Pub. 11–8–55. Filed 5–16–55.

620,658. "PREEM-AGG." American Aggregates Corporation. SN 687,749. Pub. 11–8–55. Filed 5–18–55.

620,659. FEATHER GLIDE. Fabricraft of California. SN 690,140. Pub. 11–8–55. Filed 6–24–55.

620,660. AMBRIDGE. United States Steel Corporation. SN 690,916. Pub. 11–8–55. Filed 7–7–55.

620,661. UNI-VIEW. Rock Island Millwork Company. SN 690,971. Pub. 11–8–55. Filed 7–8–55.

620,662. MOULCORK. Moultile, Incorporated. SN 691,067. Pub. 11–8–55. Filed 7–11–55.

CLASS 13

620,663. ERNEST SOHN CREATIONS AND DESIGN. Ernest Sohn Creations, Incorporated. SN 669,418. Pub. 11–8–55. Filed 7–6–54.

620,664. EQUIFLEX. United-Carr Fastener Corporation. SN 670,393. Pub. 11–8–55. Filed 7–21–54.

620,665. TWIN TEX. The Zimmerman Company. SN 670,972. Pub. 11–8–55. Filed 8–2–54.

620,666. COPPERWELD. Copperweld Steel Company. SN 671,634. Pub. 11–8–55. Filed 8–13–54.

620,667. THE ACTION LINE. Julian Holland. SN 673,743. Pub. 11–8–55. Filed 9–24–54.

620,668. I IN A CIRCLE. Isaacson Iron Works. SN 675,481. Pub. 11–8–55. Filed 10–26–54.

620,669. HEXAGON DESIGN (RED CIRCLE INSIDE). Elastic Stop Nut Corporation of America. SN 675,977. Pub. 11–8–55. Filed 11–3–54.

620,670. DOORNAMENT. Barber-Colman Company. SN 676,167. Pub. 11–8–55. Filed 11–8–54.

620,671. OCRATE. Ocrietfabriek, N. V. SN 676,329. Pub. 11–8–55. Filed 11–9–54.

620,672. MOTOROLA. Motorola, Inc. SN 676,518. Pub. 11–8–55. Filed 11–12–54.

620,673. SPRINKL-AIR. Hayes Spray Gun Company. SN 678,530. Pub. 11–8–55. Filed 12–17–54.

620,674. EASY-DEW. Prem Products Corporation. SN 687,409. Pub. 11–8–55. Filed 5–12–55.

620,675. PLAZA. Alfred E. Arnett, d. b. a. Arnett's Plaza Supply Company. SN 687,758. Pub. 11–8–55. Filed 5–18–55.

620,676. PERM-A-TOP. Cleveland Tank Ball Co., Inc. SN 687,851. Pub. 11–8–55. Filed 5–19–55.

620,677. SERV-IT-ALL ETC. The Everedy Company. SN 687,857. Pub. 11–8–55. Filed 5–19–55.

620,678. EVEREDY BARBECUE HAND-OUTS. The Everedy Company. SN 687,858. Pub. 11–8–55. Filed 5–19–55.

620,679. DRH. Don R. Hinderliter, Inc. SN 687,862. Pub. 11–8–55. Filed 5–19–55.

620,680. D. W. AND DESIGN. D. W. Price Corporation. SN 688,576. Pub. 11–8–55. Filed 5–31–55.

620,681. GIANT. Grant Pulley & Hardware Corporation. SN 690,380. Pub. 11–8–55. Filed 6–28–55.

620,682. QUIN-PAC. Markwell Manufacturing Co., Inc. SN 690,476. Pub. 11–8–55. Filed 6–29–55.

620,683. OWL EYE. Scovill Manufacturing Company. SN 690,496. Pub. 11–8–55. Filed 6–29–55.

620,684. CLUB HOLIDAY AND DESIGN. Club Aluminum Products Company. SN 690,542. Pub. 11–8–55. Filed 6–30–55.

620,685. NO-O DOR AND DESIGN. Sylvanus C. Ring, d. b. a. No O Seat Mfg. Co. SN 690,578. Pub. 11–8–55. Filed 6–30–55.

620,686. FOLDAFENCE AND DESIGN. Robert C. Gay, d. b. a. Ohio Wire Products Co. SN 690,617. Pub. 11–8–55. Filed 7–1–55.

620,687. CARTROL. The Cartrol Corporation. SN 690,677. Pub. 11–8–55. Filed 7–5–55.

CLASS 14

620,688. RF ROLL FORMED PRODUCTS CO. AND DESIGN. Roll Formed Products Company. SN 665,064. Pub. 11–8–55. Filed 4–22–54.

620,689. VAMPCO AND DESIGN. Valley Metal Products Company. SN 668,360. Pub. 11–8–55. Filed 6–16–54.

620,690. T1. United States Steel Corporation. SN 680,170. Pub. 11–8–55. Filed 1–19–55.

620,691. SI. Sorensen Industries. SN 686,782. Pub. 11–8–55. Filed 5–3–55.

CLASS 15

620,692. TWITCHELL. Emery Industries, Inc. SN 681,430. Pub. 11–8–55. Filed 2–10–55.

CLASS 16

620,693. AMERICAN SEAL ETC. AND DESIGN. American Seal Paint Mfg. Co., Inc. SN 651,491. Pub. 11–8–55. Filed 8–7–53.

620,694. "PENNCOTE." Pennsylvania Saw Corporation. SN 660,890. Pub. 7–12–55. Filed 2–10–54.

620,695. COMAGLO. Coating Materials Laboratories, Inc. SN 673,727. Pub. 11–8–55. Filed 9–24–54.

620,696. ALDAIR. Aldan Rubber Co. SN 678,581. Pub. 11–8–55. Filed 12–20–54.

620,697. JAPTOL. The Modene Paint Company, Inc. SN 683,980. Pub. 11–8–55. Filed 3–22–55.

620,698. CONOSIL. Western Waterproofing Company, Inc. SN 684,085. Pub. 11–8–55. Filed 3–23–55.

620,699. VALDURA. American-Marietta Company. SN 690,113. Pub. 11–8–55. Filed 6–24–55.

620,700. COROFLEK. Cook Paint & Varnish Company. SN 690,866. Pub. 11–8–55. Filed 7–7–55.

620,701. VAL-CHEM. American-Marietta Company. SN 690,929. Pub. 11–8–55. Filed 7–8–55.

620,702. KULWITE AND DESIGN. Miami Merchandise Mart Association, Inc. SN 691,223. Pub. 11–8–55. Filed 7–13–55.

620,703. MIRACLE-BLONDE. Pierre P. Pastoret, d. b. a. Pierre's Enterprises. SN 691,320. Pub. 11–8–55. Filed 7–14–55.

620,704. MERGE-COAT. Pierre P. Pastoret, d. b. a. Pierre's Enterprises. SN 691,322. Pub. 11–8–55. Filed 7–14–55.

CLASS 18

620,705. SUSTASED. Intermedico Corporation. SN 663,915. Pub. 5–31–55. Filed 4–5–54.

620,706. PROXICAL. Physicians and Hospitals Supply Company, Inc., d. b. a. Ulmer Pharmacal Company. SN 679,327. Pub. 6–28–55. Filed 1–3–55.

620,707. BARRY AND DESIGN. Barry Laboratories, Inc. SN 683,838. Pub. 11–8–55. Filed 3–21–55.

620,708. VI-TRINS. U. S. Vitamin Corporation. SN 684,172. Pub. 10–18–55. Filed 3–24–55.

620,709. ROERDERM. Chas. Pfizer & Co., Inc. SN 684,964. Pub. 11–8–55. Filed 4–5–55.

620,710. THRAXOL. Cutter Laboratories. SN 685,436. Pub. 11–8–55. Filed 4–13–55.

620,711. IGOMOL. The Drug Products Co., Inc. SN 685,675. Pub. 11–8–55. Filed 4–18–55.

620,712. BELGLYN. Brayten Pharmaceutical Company. SN 686,145. Pub. 11–8–55. Filed 4–25–55.

620,713. EVA. Norden Laboratories. SN 687,315. Pub. 11–8–55. Filed 5–11–55.

620,714. NEUTRIUM. Vick Chemical Company. SN 687,515. Pub. 11–8–55. Filed 5–13–55.

620,715. PEPSYL. Vick Chemical Company. SN 687,516. Pub. 11–8–55. Filed 5–13–55.

620,716. MORCAL. Schenley Laboratories, Inc. SN 687,735. Pub. 11–8–55. Filed 5–17–55.

CLASS 19

620,717. SAVURHAT. The Savurhat Co. SN 664,625. Pub. 11–8–55. Filed 4–15–54.

620,718. RUB-R-RIDE. Radiator Specialty Company. SN 669,142. Pub. 11–8–55. Filed 6–29–54.

620,719. CUSTOM CROWN. Custom Crown Mat Co., Inc. SN 676,942. Pub. 11–8–55. Filed 11–19–54.

620,720. CW AND DESIGN. Curtiss-Wright Corporation. SN 679,273. Pub. 11–8–55. Filed 1–3–55.

620,721. STRIKER. Herbert R. Phillips, d. b. a. Sport Fishing Boats Company. SN 680,692. Pub. 11–8–55. Filed 1–28–55.

620,722. GIRLING. Girling Limited. SN 687,694. Pub. 11–8–55. Filed 5–17–55.

620,723. WORKSAVER. Worksaver Body Company. SN 689,914. Pub. 11–8–55. Filed 6–20–55.

620,724. SEA-ES-TA. Albert O. Jensen. SN 691,045. Pub. 11–8–55. Filed 7–11–55.

CLASS 21

620,725. WHIRL-A-WAY (FANCIFUL). W. T. Hedlund Co. SN 645,415. Pub. 2–22–55. Filed 4–16–53.

620,726. SHAFTLITE. Colonial-Premier Company. SN 656,211. Pub. 11–8–55. Filed 11–12–53.

620,727. TRANSAMP. Electronic Research Associates, Inc. SN 657,268. Pub. 6–21–55. Filed 12–2–53.

620,728. COLORCASTER. Hoffman Radio Corporation, now by change of name to Hoffman Electronics Corporation. SN 658,907. Pub. 11–8–55. Filed 1–4–54.

620,729. TURNPIKE. The General Tire & Rubber Company. SN 663,655. Pub. 11–8–55. Filed 3–31–54.

620,730. DRIVER-HARRIS. Driver-Harris Company. SN 665,809. Pub. 11–8–55. Filed 5–6–54.

620,731. PL (A CIRCLE MONOGRAM). Philamon Laboratories, Inc. SN 667,153. Pub. 4–12–55. Filed 5–26–54.

620,732. RONETTE. "Ronette" Pïezo-Electrische Industrie (Ronette P. E. I.) N. V. SN 669,702. Pub. 11–8–55. Filed 7–9–54.

620,733. FONOFLUID. "Ronette" Pïezo-Electrische Industrie (Ronette P. E. I.) N. V. SN 669,703. Pub. 11–8–55. Filed 7–9–54.

620,734. FEEDUCT. Columbia Metal Box Co. SN 670,093. Pub. 11–8–55. Filed 7–16–54.

620,735. COPPERWELD. Copperweld Steel Company. SN 671,633. Pub. 11–8–55. Filed 8–13–54.

620,736. NIGHT WATCHMAN. Richland Manufacturing Company. SN 671,777. Pub. 11–8–55. Filed 8–16–54.

620,737. DRIMAC. Elliott Brothers (London) Limited. SN 672,386. Pub. 11–8–55. Filed 8–30–54.

620,738. TURBO-ACTION. Champion Spark Plug Company. SN 674,445. Pub. 11–8–55. Filed 10–7–54.

620,739. SMALL CASE "B" WITH BOGART IN RECTANGLE. Bogart Manufacturing Corporation. SN 674,554. Pub. 11–8–55. Filed 10–11–54.

620,740. KEARFOTT AND DESIGN. Kearfott Company, Inc. SN 674,826. Pub. 11–8–55. Filed 10–14–54.

620,741. DOBAR-M. The Dobeckmun Company. SN 675,972. Pub. 11–8–55. Filed 11–3–54.

620,742. KYBERNETES. The Kybernetes Corporation. SN 676,811. Pub. 11–8–55. Filed 11–17–54.

620,743. MIDGE. Webster-Chicago Corporation. SN 677,836. Pub. 11–8–55. Filed 12–6–54.

620,744. RAVINIA. Webster-Chicago Corporation. SN 677,839. Pub. 11–8–55. Filed 12–6–54.

620,745. VYSTIPE. General Electric Company. SN 677,875. Pub. 11–8–55. Filed 12–7–54.

620,746. FLUOREMIC. Duro-Test Corporation. SN 680,665. Pub. 11–8–55. Filed 1–28–55.

620,747. FLUOMERIC. Duro-Test Corporation. SN 680,666. Pub. 11–8–55. Filed 1–28–55.

620,748. MEDALLION. C. N. Burman Co. SN 681,000. Pub. 11–8–55. Filed 2–3–55.

620,749. QUIK-VAC. Clements Mfg. Co. SN 682,400. Pub. 11–8–55. Filed 2–28–55.

620,750. MATCHED-CRAFT. Dormeyer Corporation. SN 685,260. Pub. 11–8–55. Filed 4–11–55.

620,751. STERILAIRE. Mawin Stores, Inc. SN 686,467. Pub. 11–8–55. Filed 4–28–55.

620,752. VACMOBILE AND DESIGN. Pullman Vacuum Cleaner Corporation. SN 686,476. Pub. 11–8–55. Filed 4–28–55.

620,753. LODESTAR. Columbus McKinnon Chain Corporation. SN 686,887. Pub. 11–8–55. Filed 5–5–55.

620,754. ELECTRA GATE AND DESIGN. Small Enterprises, Inc. SN 687,327. Pub. 11–8–55. Filed 5–11–55.

620,755. CAROL. The Crescent Company, Inc. SN 687,682. Pub. 11–8–55. Filed 5–17–55.

620,756. SAF-T-ARC. Russell & Stoll Company, Inc. SN 687,897. Pub. 11–8–55. Filed 5–19–55.

CLASS 22

620,757. BIDDY AND DESIGN. John D. Archer. SN 656,763. Pub. 11–8–55. Filed 11–23–53.

620,758. LUCKY LADY. Karl V. Denny, d. b. a. Lucky Lady. SN 661,556. Pub. 11–8–55. Filed 2–24–54.

620,759. TINY TOT. Jaymar Specialty Company. SN 667,535. Pub. 11–8–55. Filed 6–2–54.

620,760. CANDY STICK TRAILER. Sifo Company. SN 669,364. Pub. 11–8–55. Filed 7–2–54.

620,761. CLATTER WELL. Sifo Company. SN 669,365. Pub. 11–8–55. Filed 7–2–54.

620,762. HAPPINESS PILLS. The Manck Company. SN 670,689. Pub. 11–8–55. Filed 7–27–54.

620,763. "TAG." Thomas B. R. Peters. SN 673,471. Pub. 11–8–55. Filed 9–20–54.

620,764. ACCENT. Stephen P. Martin, d. b. a. Marco Products. SN 677,425. Pub. 11–8–55. Filed 11–29–54.

620,765. DAN-MAC PARLAR PUTT. Daniel H. McNulty, d. b. a. Dan & Dot McNulty. SN 678,131. Pub. 11–8–55. Filed 12–10–54.

620,766. RADOP. Del Mar Engineering Laboratories, Inc. SN 685,816. Pub. 11–8–55. Filed 4–19–55.

CLASS 23

620,767. CENTRI SPRAY AND DESIGN. Centri-Spray Corporation. SN 649,570. Pub. 11–8–55. Filed 6–30–53.

620,768. DESIGN ONE. H. E. Lauffer Co., Inc. SN 657,841. Pub. 11–8–55. Filed 12–11–53.

620,769. PANOGEN. Panogen, Inc. SN 660,667. Pub. 11–8–55. Filed 2–5–54.

620,770. DIXIE AND DESIGN. Dixie Tool Industries, Inc. SN 662,615. Pub. 11–8–55. Filed 3–15–54.

620,771. DENISON. The Denison Engineering Company. SN 662,781. Pub. 11–8–55. Filed 3–17–54.

620,772. CLAFLIN. Hermann Manufacturing Company, to John Wc Bolton & Sons, Inc. SN 667,398. Pub. 11–8–55. Filed 6–1–54.

620,773. SPEED-O-KNIT. A. C. Weber & Co., Inc. SN 667,599. Pub. 11–8–55. Filed 6–2–54.

620,774. BROYHILL. The Broyhill Company. SN 667,669. Pub. 11–8–55. Filed 6–4–54.

620,775. CARTABOND. Mill Devices Company. SN 667,071. Pub. 11–8–55. Filed 6–9–54.

620,776. AIR PLUS ROTO JAEGER AND DESIGN. The Jaeger Machine Company. SN 668,255. Pub. 11–8–55. Filed 6–15–54.

620,777. IMPAX. New Plastic Corporation. SN 668,459. Pub. 11–8–55. Filed 6–18–54.

620,778. SPECTRE. The De Havilland Engine Company Limited. SN 668,973. Pub. 11–8–55. Filed 6–28–54.

620,779. OAKES AND DESIGN. The E. T. Oakes Corporation. SN 669,281. Pub. 11–8–55. Filed 7–1–54.

620,780. JUPITER. Solar Aircraft Company. SN 669,372. Pub. 11-8-55. Filed 7-2-54.

620,781. WHALE AND DESIGN (REPRESENTATION OF A WHALE). Vereinigte Stahlwarenfabriken Gebr. Richartz & Sohne A. G. SN 670,014. Pub. 11-8-55. Filed 7-14-54.

620,782. WORTH. The Peck, Stow & Wilcox Company. SN 670,228. Pub. 11-8-55. Filed 7-19-54.

620,783. BOTTLEMATIC AND DESIGN. Specialty Engineering Co. SN 670,815. Pub. 11-8-55. Filed 7-29-54.

620,784. LEE END LIFT ETC. AND DESIGN (GLOBE). Automotive Equipment Mfg. Co. SN 671,297. Pub. 11-8-55. Filed 8-9-54.

620,785. P AND DESIGN. F. Perkins Limited. SN 671,462. Pub. 11-8-55. Filed 8-10-54.

620,786. NJM CORP. AND DESIGN. New Jersey Machine Corporation. SN 671,518. Pub. 11-8-55. Filed 8-11-54.

620,787. PSI AND DESIGN (REPRESENTATION OF A TRIANGLE). Pressure Services, Inc. SN 673,765. Pub. 11-8-55. Filed 9-24-54.

620,788. ROYAL MASTER AND DESIGN (CROWN). Royal Master, Inc. SN 675,167. Pub. 11-8-55. Filed 10-20-54.

620,789. BRINALLOY. The Lunkenheimer Company. SN 675,643. Pub. 11-8-55. Filed 10-28-54.

620,790. T-5-T. Harry C. Stockfleth, d. b. a. The Sabre Archery Company. SN 676,242. Pub. 11-8-55. Filed 11-8-54.

620,791. FORPLAST. The Forgrove Machinery Company Limited. SN 678,100. Pub. 11-8-55. Filed 12-10-54.

620,792. PLASWRAP. The Forgrove Machinery Company Limited. SN 678,101. Pub. 11-8-55. Filed 12-10-54.

620,793. HYDRO-KING. Fred Schoene, d. b. a. F. Schoene Brass Manufacturing Co. SN 679,012. Pub. 11-8-55. Filed 12-27-54.

620,794. SPALDING. Thomas P. Spalding. SN 679,686. Pub. 11-8-55. Filed 1-10-55.

620,795. SIOUX AND DESIGN. Albertson & Company, Inc. SN 679,703. Pub. 11-8-55. Filed 1-11-55.

620,796. AUTO.HITCH. Bendtsen Bros. Mfg., Inc., d. b. a. Bendtsen Bros., Inc. SN 680,446. Pub. 11-8-55. Filed 1-25-55.

620,797. ARCTIC NIGHT. National Silver Company. SN 680,622. Pub. 11-8-55. Filed 1-27-55.

620,798. HYDRO-LINE. Hydro-Line Manufacturing Co. SN 680,759. Pub. 11-8-55. Filed 1-31-55.

620,799. PASSMASTER. Studebaker-Packard Corporation. SN 681,373. Pub. 11-8-55. Filed 2-9-55.

620,800. VICTORY SIX. Studebaker-Packard Corporation. SN 681,374. Pub. 11-8-55. Filed 2-9-55.

620,801. SPHEREFLEX. Philadelphia Gear Works, Inc. SN 681,539. Pub. 11-8-55. Filed 2-11-55.

620,802. DUO-TRIM. Motor Wheel Corporation. SN 682,279. Pub. 11-8-55. Filed 2-24-55.

620,803. REO REVO-TRIM AND DESIGN. Motor Wheel Corporation. SN 682,280. Pub. 11-8-55. Filed 2-24-55.

620,804. REO ELECTRA-TRIM AND DESIGN. Motor Wheel Corporation. SN 682,281. Pub. 11-8-55. Filed 2-24-55.

620,805. AGET. Aget Manufacturing Company. SN 682,378. Pub. 11-8-55. Filed 2-28-55.

620,806. DUO WHIRL AND DESIGN. The Turner & Seymour Manufacturing Co. SN 682,836. Pub. 11-8-55. Filed 3-4-55.

620,807. HOLIDAY. George A. Pigott, d. b. a. Midland Distributing Co. SN 683,059. Pub. 11-8-55. Filed 3-8-55.

620,808. RECORD. George A. Pigott, d. b. a. Midland Distributing Co. SN 683,060. Pub. 11-8-55. Filed 3-8-55.

620,809. TURBO-MIST. Okanagan Turbo Sprayers Ltd. SN 683,306. Pub. 11-8-55. Filed 3-11-55.

620,810. RELIABLE AND DESIGN. Philip C. Lucido, d. b. a. Reliable Utilities Company. SN 683,409. Pub. 11-8-55. Filed 3-14-55.

620,811. PEELER. Stowe-Woodward. Inc. SN 683,450. Pub. 11-8-55. Filed 3-14-55.

620,812. VERSAFLOW. Package Machinery Company. SN 683,533. Pub. 11-8-55. Filed 3-15-55.

620,813. SNO-SKIDU. Seth M. Evenson. SN 683,867. Pub. 11-8-55. Filed 3-21-55.

620,814. CHLORO-FLASH. Nu-Swift Limited. SN 684,332. Pub. 11-8-55. Filed 3-28-55.

620,815. WEBB AND DESIGN. Jervis B. Webb Company. SN 684,367. Pub. 11-8-55. Filed 3-28-55.

620,816. KORIUM. Marie Thoresen, d. b. a. Thoresen Direct Sales. SN 684,500. Pub. 11-8-55. Filed 3-29-55.

620,817. SHUR ROLL. Food Machinery and Chemical Corporation. SN 685,013. Pub. 11-8-55. Filed 4-6-55.

620,818. MISTIC MIST AND DESIGN. Aetna Manufacturing Company. SN 685,079. Pub. 11-8-55. Filed 4-7-55.

620,819. TOWNER. Towner Manufacturing Co. SN 685,534. Pub. 11-8-55. Filed 4-14-55.

620,820. CRUST MASTER. Johnson Manufacturing Company. SN 685,587. Pub. 11-8-55. Filed 4-15-55.

620,821. CHAMPION. Nelson Parks Corporation. SN 685,607. Pub. 11-8-55. Filed 4-15-55.

620,822. LANHYROL AND DESIGN. Landis Machine Company. SN 685,724. Pub. 11-8-55. Filed 4-18-55.

620,823. LIFE-SAVER AND DESIGN. Rugg Manufacturing Company. SN 685,853. Pub. 11-8-55. Filed 4-19-55.

620,824. MAXI-FLEX. American Machine and Metals, Inc. SN 685,880. Pub. 11-8-55. Filed 4-20-55.

620,825. SANTO. Tempo Products Corp. SN 686,005. Pub. 11-8-55. Filed 4-21-55.

620,826. CHRISTENSEN. The Christensen Machine Company. SN 686,152. Pub. 11-8-55. Filed 4-25-55.

620,827. TURNER UNI-DRIVE AND DESIGN. Turner Uni-Drive Company. SN 690,915. Pub. 11-8-55. Filed 7-7-55.

620,828. BOWFLEX. The H. Edwin Schade Co. SN 691,235. Pub. 11-8-55. Filed 7-13-55.

620,829. FIRE JINX. Ferris Products Company, Inc. SN 691,285. Pub. 11-8-55. Filed 7-14-55.

620,830. LINKLOK. Race & Race, Inc. SN 691,779. Pub. 11-8-55. Filed 7-22-55.

620,831. GOLDBLATT AND DESIGN. Goldblatt Tool Company. SN 691,853. Pub. 11-8-55. Filed 7-25-55.

620,832. OD BAB AND DESIGN. Oliver D. Babineau. SN 691,979. Pub. 11-8-55. Filed 7-27-55.

CLASS 26

620,833. CIRCUITRACER. Delta Electrical Specialty Company. SN 637,429. Pub. 11-8-55. Filed 10-31-52.

620,834. DUBL-CHEK SYSTEM AND DESIGN. Dubl-Chek System, Inc. SN 666,655. Pub. 11-8-55. Filed 5-19-54.

620,835. REPRESENTATION OF MAN WITH TOOLS. Keuffel & Esser Company. SN 671,255. Pub. 11-8-55. Filed 8-6-54.

620,836. HOWE AND DESIGN. The Howe Scale Company, Inc. SN 671,436. Pub. 11-8-55. Filed 8-10-54.

620,837. II AND DESIGN. International Instruments, Inc. SN 671,753. Pub. 11-8-55. Filed 8-16-54.

620,838. VIEWMAILER. Halladay Studios, Inc., to Viewmailer Company. SN 681,160. Pub. 10-25-55. Filed 2-7-55.

620,839. SUPER MEMETTE. General Aniline & Film Corporation. SN 684,213. Pub. 11-8-55. Filed 3-25-55.

620,840. WOLLENSAK. Wollensak Optical Company. SN 684,613. Pub. 11-8-55. Filed 3-30-55.

620,841. FASTAX. Wollensak Optical Company. SN 686,253. Pub. 11-8-55. Filed 4-25-55.

620,842. SAFE LOCK. Araco American, Inc. SN 687,665. Pub. 11-8-55. Filed 5-17-55.

620,843. THERMAL EYE AND DESIGN. Robertshaw-Fulton Controls Company. SN 690,099. Pub. 11-8-55. Filed 6-23-55.

620,844. WEATHERITE. Stephen E. Laszlo. SN 690,280. Pub. 11-8-55. Filed 6-27-55.

CLASS 27

620,845. AUDÈNE. Schuyler Auction. SN 670,011. Pub. 11-8-55. Filed 7-14-54.

620,846. FIANCEE. Goldstein-Gerson Co., Inc. SN 686,128. Pub. 11-8-55. Filed 3-21-55.

620,847. FIANCE. Goldstein-Gerson Co., Inc. SN 686,130. Pub. 11-8-55. Filed 3-21-55.

CLASS 28

620,848. SUNBURST. I. Lachman & Sons Company. SN 663,477. Pub. 11-8-55. Filed 3-29-54.

620,849. TOT-AGE. Stern & Stern, Inc. SN 686,493. Pub. 11-8-55. Filed 4-28-55.

620,850. JEWELCRAFT. Coro, Inc. SN 686,813. Pub. 11-8-55. Filed 5-4-55.

620,851. ALOHA. Gorham Manufacturing Company. SN 686,825. Pub. 11-8-55. Filed 5-4-55.

620,852. PATHFINDER. Luro Products Company Inc. SN 686,835. Pub. 11-8-55. Filed 5-4-55.

620,853. GRAND VICTORIAN. R. Wallace & Sons Manufacturing Company. SN 687,149. Pub. 11-8-55. Filed 5-9-55.

620,854. CONTESSA. National Silver Company. SN 689,643. Pub. 11-8-55. Filed 6-16-55.

CLASS 29

620,855. PAD-A-DAY. Myron E. Schwartz, Inc. SN 672,445. Pub. 11-8-55. Filed 8-30-54.

CLASS 30

620,856. DEGAS. Berndae, Inc. SN 652,597. Pub. 11-8-55. Filed 9-1-53.

CLASS 31

620,857. ALASKA. Borg-Warner Corporation. SN 671,715. Pub. 11-8-55. Filed 8-16-54.

620,858. CURVALL AND DESIGN. Jarrow Products, Inc. SN 681,172. Pub. 11-8-55. Filed 2-7-55.

620,859. PURE CEL AND DESIGN. Proportioneers, Inc. SN 681,298. Pub. 11-8-55. Filed 2-8-55.

620,860. GLENDALE. King Refrigerator Corporation. SN 681,860. Pub. 11-8-55. Filed 2-17-55.

CLASS 32

620,861. HI-TENSILE LINE. Crescent Metal Products, Inc. SN 681,750. Pub. 11-8-55. Filed 2-16-55.

620,862. PRIMADOWN AND DESIGN. Hauptman Feather Company, Inc. SN 681,920. Pub. 11-8-55. Filed 2-18-55.

620,863. STAGETTE. Display Guild. SN 682,716. Pub. 11-8-55. Filed 3-3-55.

CLASS 33

620,864. OI. Owens-Illinois Glass Company. SN 685,923. Pub. 11-8-55. Filed 4-20-55.

CLASS 34

620,865. SUNNYDAY. Crane Co. SN 668,308. Pub. 11-8-55. Filed 6-16-54.

620,866. PARAKOOL. Paragon Oil Burner Corporation. SN 671,052. Pub. 11-8-55. Filed 8-3-54.

CLASS 35

620,867. SUNBEAM. Sunbeam Corporation. SN 664,187. Pub. 11-8-55. Filed 4-8-54.

620,868. RAIN KING. Sunbeam Corporation. SN 664,188. Pub. 11-8-55. Filed 4-8-54.

620,869. SUPER CUSHION AND DESIGN. The Goodyear Tire & Rubber Company. SN 691,689. Pub. 11-8-55. Filed 7-21-55.

CLASS 37

620,870. S. E. I. WARRANTIES. Clifton H. La Fleur, d. b. a. Sales Engineering Institute. SN 630,714. Pub. 11-8-55. Filed 6-4-52.

620,871. BETTY BRITE AND DESIGN. American Lace Paper Company. SN 670,399. Pub. 11-8-55. Filed 7-22-54.

620,872. REPRESENTATION OF MAN WITH TOOLS. Keuffel & Esser Company. SN 671,256. Pub. 11-8-55. Filed 8-6-54.

CLASS 38

620,873. REPRESENTATION OF BELL. Telecourses, Incorporated. SN 664,100. Pub. 11-15-55. Filed 4-7-54.

620,874. "HOW-TOO-DOO-IT." Harold C. Southard. SN 665,380. Pub. 11-15-55. Filed 4-28-54.

620,875. HOUSEWARES FOR HOMEMAKERS. Whipple & Kelley, Inc. SN 667,593. Pub. 11-8-55. Filed 6-2-54.

620,876. TOYTIME. Whipple & Kelley, Inc. SN 667,594. Pub. 11-8-55. Filed 6-2-54.

620,877. FELTUK. W. L. Stensgaard and Associates, Inc. SN 668,938. Pub. 11-15-55. Filed 6-25-54.

620,878. DENTAL SURVEY. Dental Survey Publications, Inc. SN 670,180. Pub. 11-8-55. Filed 7-19-54.

620,879. ENVELOPE ECONOMIES. Tension Envelope Corporation. SN 670,995. Pub. 11-8-55. Filed 8-2-54.

620,880. COMBINATION. National Publishing Company. SN 674,611. Pub. 11-15-55. Filed 10-11-54.

620,881. IT'S ABOUT TIME ON A SCROLL DESIGN. The Joseph Bulova School of Watchmaking. SN 674,933. Pub. 11-15-55. Filed 10-18-54.

620,882. HANDI-CASH. New England Trading Corporation. SN 677,165. Pub. 11-15-55. Filed 11-23-54.

620,883. WINGED HEAD. Pittsburgh Athletic Association. SN 678,667. Pub. 11-8-55. Filed 12-20-54.

620,884. REAL DETECTIVE. Sensation Magazine, Inc. SN 679,495. Pub. 11-15-55. Filed 1-5-55.

620,885. PDQ PHOTO-PLANS. The Parco Company, Incorporated. SN 679,601. Pub. 11-15-55. Filed 1-7-55.

620,886. MANTEL PIECE. Karl Koehler. SN 680,567. Pub. 11-15-55. Filed 12-27-54.

620,887. WEBFOOT RIPPLES. The American Waterfowl Association, Inc. SN 680,576. Pub. 11-8-55. Filed 1-27-55.

620,888. TIMELY EVENTS ETC. Bernard Fomund, d. b. a. Timely Events. SN 681,505. Pub. 11-15-55. Filed 2-11-55.

620,889. CABARET. Publishers' Development Corporation. SN 681,634. Pub. 11-15-55. Filed 2-14-55.

620,890. PHARMACY INTERNATIONAL. Johnston Export Publishing Co. SN 681,695. Pub. 11-15-55. Filed 2-15-55.

620,891. REMOV-A-LEX. Banks-Baldwin Law Publishing Company. SN 681,740. Pub. 11-15-55. Filed 2-16-55.

620,892. WINGED CAMERA SERVICE AND DESIGN. Reed Development Corporation. SN 681,880. Pub. 11-15-55. Filed 2-17-55.

620,893. "MISS QUOTE. Mississippi Publishers Corporation. SN 681,932. Pub. 11-15-55. Filed 2-18-55.

620,894. ROADS AND STREETS. Gillette Publishing Company. SN 683,496. Pub. 11-8-55. Filed 3-15-55.

620,895. TUCK-UP. Schneidereith & Sons. SN 683,559. Pub. 11-8-55. Filed 3-15-55.

620,896. MERCHANTS PRIDE MP AND DESIGN. Hudson W. Davis. SN 683,585. Pub. 11-15-55. Filed 3-16-55.

620,897. F AND DESIGN. Focal Press, Inc. SN 683,869. Pub. 11-15-55. Filed 3-21-55.

CLASS 39

620,898. KENYA. Norwich Knitting Company. SN 656,972. Pub. 11-15-55. Filed 11-25-53.

620,899. KNOX-KNIT AND DESIGN. Appalachian Mills Company. SN 660,694. Pub. 11-15-55. Filed 2-8-54.

620,900. KNOX KNIT AND DESIGN. Appalachian Mills Company. SN 660,695. Pub. 11-15-55. Filed 2-8-54.

620,901. GEORGES HENRI STYLIST IN FUR. Manos and Block Furs Inc. SN 665,830. Pub. 11-15-55. Filed 5-6-54.

620,902. SWIRL YOUR WRAP 'N' TIE FASHION AND DESIGN. L. Nachman & Son, Inc., to Swirl, Inc. SN 668,576. Pub. 11-8-55. Filed 6-21-54.

620,903. THE HINGED ARMHOLE. Lebow Bros., Inc. SN 671,442. Pub. 11-8-55. Filed 8-10-54.

620,904. VULCAN. J. Compton Sons & Webb Ltd. SN 672,050. Pub. 11-15-55. Filed 8-23-54.

620,905. CILLA OF ITALY. Robert Reis & Co. SN 674,694. Pub. 11-15-55. Filed 10-12-54.

620,906. PIMATISTE. Tornberg Shirtmakers, Inc. SN 675,334. Pub. 11-15-55. Filed 10-22-54.

620,907. TONI LEE HI' N' ROUND. Toni Lee, Ltd. SN 675,601. Pub. 11-15-55. Filed 10-27-54.

620,908. SUMMIT. Hart Schaffner & Marx. SN 675,987. Pub. 11-15-55. Filed 11-3-54.

620,909. GLIDING ACTION. Bonzette Foundations, Inc. SN 676,934. Pub. 11–15–55. Filed 11–19–54.

620,910. HOWDY HANKY AND DESIGN. Doru Studios. SN 678,096. Pub. 11–8–55. Filed 12–10–54.

620,911. BATALDI. Baitch & Castaldi, Inc. SN 678,187. Pub. 11–15–55. Filed 12–13–54.

620,912. FAMOUS SWEETHEART LAST-EEZ AND DESIGN. Robert D. Cole. SN 679,034. Pub. 11–15–55. Filed 12–28–54.

620,913. ANIMÉE. Triumph Hosiery Mills, Inc. SN 679,065. Pub. 11–8–55. Filed 12–28–54.

620,914. DANSOLES. Triumph Hosiery Mills, Inc. SN 679,067. Pub. 11–8–55. Filed 12–28–54.

620,915. LET'S PLAY. Clifford C. Rosser, d. b. a. Kip-Craft Enterprises. SN 679,180. Pub. 11–15–55. Filed 12–30–54.

620,916. HUMMING BIRD CLING-FIT AND DESIGN. Davenport Hosiery Mills, Inc. SN 679,274. Pub. 11–8–55. Filed 1–3–55.

620,917. SAKS FIFTH AVENUE. Saks & Company. SN 679,410. Pub. 11–15–55. Filed 1–4–55.

620,918. SNUGGINS. Nohel Manufacturing Corp. SN 679,857. Pub. 11–8–55. Filed 1–13–55.

620,919. HIGH "C" V-ETTE. Hollywood-Maxwell Co. SN 680,273. Pub. 11–15–55. Filed 1–21–55.

620,920. M-D. Beautee-Fit Company. SN 680,842. Pub. 11–8–55. Filed 2–1–55.

620,921. TECHNO= =WEAR. Techno Efficiency Council, Inc. SN 681,048. Pub. 11–8–55. Filed 2–3–55.

620,922. ACTION-KNIT. Manchester Hosiery Mills. SN 681,093. Pub. 11–8–55. Filed 2–4–55.

620,923. INSURED 60'S. Sidney J. Kreiss, Inc. SN 681,276. Pub. 11–8–55. Filed 2–8–55.

620,924. KASHMIL. Miller-Schulman Corp. SN 681,610. Pub. 11–15–55. Filed 2–14–55.

620,925. STATE-O-MAINE. Van Baalen Heilbrun & Co., Inc. SN 681,729. Pub. 11–15–55. Filed 2–15–55.

620,926. WONDERALLS AND DESIGN. Wonderalls. SN 682,368. Pub. 11–15–55. Filed 2–25–55.

620,927. ANTIRAIN. P. Frankenstein & Sons (Manchester) Limited. SN 682,632. Pub. 11–8–55. Filed 3–2–55.

620,928. GOBBIES. Gobshops of America, Inc. SN 682,917. Pub. 11–15–55. Filed 3–7–55.

620,929. TOP-AIRE. Maureen Manufacturing Co., Inc. SN 682,953. Pub. 11–8–55. Filed 3–7–55.

620,930. SUBURBAN HEIGHTS. The Florsheim Shoe Company. SN 684,032. Pub. 11–15–55. Filed 3–23–55.

620,931. STYLE-STEP. Best Made Silk Hosiery Company. SN 684,106. Pub. 11–15–55. Filed 3–24–55.

620,932. WALK-AID. Gardiner Shoe Company, Inc. SN 685,183. Pub. 11–15–55. Filed 4–8–55.

620,933. WONDERFUR. Hecht & Biern, Inc. SN 685,188. Pub. 11–15–55. Filed 4–8–55.

620,934. TWO DIREXIONAL TWIST. Chadbourn Hosiery Mills, Incorporated. SN 685,476. Pub. 11–15–55. Filed 4–14–55.

620,935. DURA-CLING. Davenport Hosiery Mills, Inc. SN 685,480. Pub. 11–15–55. Filed 4–14–55.

620,936. EPIC. Sheffield Hosiery Mills, Inc. SN 685,524. Pub. 11–15–55. Filed 4–14–55.

CLASS 40

620,937. GEORG JENSEN INC. AND DESIGN. Georg Jensen Inc. SN 680,612. Pub. 11–15–55. Filed 1–27–55.

CLASS 42

620,938. PLIOGLAS. Flexfirm Products. SN 649,580. Pub. 11–15–55. Filed 6–30–53.

620,939. GLASS-GLO. Marlboro Fabrics, Inc. SN 666,765. Pub. 11–15–55. Filed 5–20–54.

620,940. PERFORMANCE. Burlington Mills Corporation. SN 680,723. Pub. 11–15–55. Filed 1–31–55.

620,941. "STARTIME." North Star Woolen Mill Company. SN 681,030. Pub. 11–15–55. Filed 2–3–55.

620,942. AVION. A. D. Juilliard & Co., Inc. SN 681,174. Pub. 11–15–55. Filed 2–7–55.

620,943. BROOKBURN. Monarch Rug Mills. SN 682,278. Pub. 11–15–55. Filed 2–24–55.

620,944. FLAMINGO PRINT. Annetta Dresses, Inc. SN 683,265. Pub. 11–15–55. Filed 3–11–55.

CLASS 43

620,945. SILENE. Novaceta Nuova Filatura Acetato S. P. A. SN 680,238. Pub. 11–15–55. Filed 12–13–54.

620,946. N SILENE NOVACETA ETC. AND DESIGN. Novaceta Nuova Filatura Acetato S. P. A. SN 680,291. Pub. 11–15–55. Filed 1–21–55.

620,947. ALANA. Templon Spinning Mills, Inc. SN 680,635. Pub. 11–15–55. Filed 1–27–55.

620,948. FYCRILAN. Fitchburg Spinners Sales Corporation. SN 685,362. Pub. 11–15–55. Filed 4–12–55.

620,949. VERIL. Eastman Kodak Company. SN 686,626. Pub. 11–15–55. Filed 5–2–55.

CLASS 44

620,950. MOBI-TRAC. Ollie Norton Donnahoe, d. b. a. The Spinalator Company. SN 687,360. Pub. 11–15–55. Filed 5–12–55.

620,951. J & J. Johnson & Johnson. SN 687,598. Pub. 11–15–55. Filed 5–16–55.

620,952. IDM. Alexander J. Berndt. SN 687,671. Pub. 11–15–55. Filed 5–17–55.

CLASS 45

620,953. CARLSBAD MÜHLBRUNN. Centrokomise, Podnik Zahraničního Obchodu pro Dovoz a Vývoz Potravin. SN 669,237. Pub. 11–15–55. Filed 7–1–54.

620,954. AMERICA DRY. America Dry Corporation. SN 686,519. Pub. 11–15–55. Filed 4–29–55.

CLASS 46

620,955. CROWN AND DESIGN. William Richheimer, d. b. a. Crown Coffee Co. SN 632,797. Pub. 11–24–53. Filed 7–19–52.

620,956. PFIZER AND DESIGN. Chas. Pfizer & Co., Inc. SN 645,663. Pub. 11–8–55. Filed 4–21–53.

620,957. HARVEST QUEEN. Red Owl Stores, Inc. SN 659,010. Pub. 11–15–55. Filed 1–5–54.

620,958. LISL. Atalanta Trading Corporation. SN 660,993. Pub. 11–15–55. Filed 2–12–54.

620,959. TRISTAN. Atalanta Trading Corporation. SN 660,994. Pub. 11–15–55. Filed 2–12–54.

620,960. ALPHORN, RUPP AND DESIGN. Josef Rupp, d. b. a. Josef Rupp Kasewerk. SN 661,734. Pub. 11–15–55. Filed 2–26–54.

620,961. LEMON MAID. Herbert S. Hazeltine Trust, d. b. a. Hazeltine Packing Company. SN 665,108. Pub. 11–15–55. Filed 4–23–54.

620,962. DAIRY-ETTES. Phoenix Candy Co. Inc. SN 666,302. Pub. 11–15–55. Filed 5–13–54.

620,963. PEEBLES\ CALF-KIT. Western Condensing Company. SN 672,129. Pub. 11–15–55. Filed 8–23–54.

620,964. ARCHWAY (DESIGN OF ARCH). Swanson's Cookie Co. SN 672,853. Pub. 11–15–55. Filed 9–7–54.

620,965. EPHOLEX. American Lecithin Company Inc. SN 672,995. Pub. 11–15–55. Filed 9–10–54.

620,966. WINGER. Winger Dairy Products Processing and Manufacturing Corporation. SN 674,115. Pub. 11–15–55. Filed 9–30–54.

620,967. CARA AND DESIGN (REPRESENTATION OF A FISH). Sol Lenzner Corporation. SN 675,292. Pub. 11–15–55. Filed 10–22–54.

620,968. BUTTERNUT AND OVAL DOILY DESIGN. Interstate Bakeries Corporation. SN 675,701. Pub. 6–21–55. Filed 10–29–54.

620,969. FAIRYLAND. Brock Candy Company. SN 677,547. Pub. 11–15–55. Filed 12–1–54.

620,970. ROTO SAUCE AND DESIGN. Harold M. Ross, d. b. a. Allied Food Products Sales Co. SN 678,265. Pub. 11–15–55. Filed 12–13–54.

620,971. CLARITA. Allied Canners and Packers, Inc. SN 681,242. Pub. 11–15–55. Filed 2–8–55.

620,972. EL CHARRO. Associated Growers of Brownsville. SN 681,978. Pub. 11–15–55. Filed 2–21–55.

620,973. KITCHEN GARDEN. The Grand Union Company. SN 682,914. Pub. 11–15–55. Filed 3–7–55.

620,974. TWINS. J. D. Jewell, Inc. SN 682,932. Pub. 11–15–55. Filed 3–7–55.

620,975. DESIGN OF CHEF. J. D. Jewell, Inc. SN 682,933. Pub. 11–15–55. Filed 3–7–55.

620,976. VANILEO. Davis & Lawrence Company. SN 683,026. Pub. 11–15–55. Filed 3–8–55.

620,977. WHITE RIVER. Dulcich Brothers, d. b. a. Dulcich Bros. SN 683,028. Pub. 11–15–55. Filed 3–8–55.

620,978. TREASURE ISLE. Ocean Products, Inc. SN 683,423. Pub. 11–15–55. Filed 3–14–55.

620,979. C-NUT. Newark Packing Company, Inc. SN 683,616. Pub. 11–15–55. Filed 3–16–55.

620,980. MEADOW MAID DONUTS. Whitney's Donut Company. SN 683,829. Pub. 11–15–55. Filed 3–18–55.

620,981. PARKY PARKS AND DESIGN. H. G. Parks, Inc. SN 683,831. Pub. 11–15–55. Filed 7–6–54.

620,982. -B- SQUARE. Paul F. Beich Company. SN 684,104. Pub. 11–15–55. Filed 3–24–55.

620,983. GREEN MOUNTAIN. Green Mountain Packing Co., Inc. SN 684,130. Pub. 11–15–55. Filed 3–24–55.

620,984. MY GARDEN. Strazzulla Bros. Co. SN 684,251. Pub. 11–15–55. Filed 3–25–55.

CLASS 47

620,985. GRAN-PAW. St. Julian Wine Company, Incorporated, d. b. a. Gran-Paw Wine Company. SN 682,072. Pub. 11–15–55. Filed 2–21–55.

CLASS 48

620,986. HALS. The Globe Brewing Co., d. b. a. Hals Brewing Co. SN 630,326. Pub. 11–15–55. Filed 5–27–52.

CLASS 49

620,987. REPRESENTATION OF A CREST. Guy Gautier & Co. SN 659,058. Pub. 11–15–55. Filed 1–6–54.

620,988. ST RÉMY & CIE. St. Remy & Cie. SN 680,111. Pub. 11–15–55. Filed 1–18–55.

620,989. PROVINCE HOUSE. L. J. McGuinness & Company, Limited. SN 680,774. Pub. 11–15–55. Filed 1–31–55.

620,990. GORDON'S AND DESIGN. Gordon's Dry Gin Company Limited. SN 686,540. Pub. 11–15–55. Filed 4–29–55.

CLASS 50

620,991. RUBBERLIKE. Bird & Son, Inc. SN 656,765. Pub. 11–15–55. Filed 11–23–53.

620,992. UNIVERSAL ETC. AND DESIGN. Samuel Weinstein, d. b. a. Universal Bowling & Billiard Supply. SN 663,982. Pub. 11–15–55. Filed 4–5–54.

620,993. 52 HOBBIES FOR THE WOUNDED AND DESIGN. The 52 Association of New York, Inc. SN 668,239. Pub. 11–15–55. Filed 6–15–54.

620,994. CRAWL-IN. The Hettrick Manufacturing Company. SN 674,586. Pub. 11–15–55. Filed 10–11–54.

620,995. SPORTSMAN. The Hettrick Manufacturing Company. SN 674,589. Pub. 11–15–55. Filed 10–11–54.

620,996. LITE-KOTE AND DESIGN. Stern & Stern Textiles, Inc. SN 681,811. Pub. 11–15–55. Filed 2–16–55.

620,997. STAR AL CALS. Star Dial Company. SN 683,153. Pub. 11–15–55. Filed 3–9–55.

620,998. PLY-DEK. Liftruck & Equipment Co. SN 685,592. Pub. 11–15–55. Filed 4–15–55.

CLASS 51

620,999. TUXEDO-CLUB. Newbro Manufacturing Company. SN 649,603. Pub. 4–20–54. Filed 6–30–53.

621,000. COMPLEXION GLOW! Product Enterprises Corporation. SN 656,260. Pub. 5–10–55. Filed 11–12–53.

621,001. ALOMA. J. Strickland & Co. SN 657,739. Pub. 9–14–54. Filed 12–9–53.

621,002. BRIGHT NIGHT. Avon Products, Inc. SN 669,392. Pub. 3–1–55. Filed 7–6–54.

621,003. GLISN NET. The Realistic Company. SN 683,554. Pub. 11–15–55. Filed 3–15–55.

621,004. SOFTLY PINK. Lehn & Fink Products Corporation. SN 683,688. Pub. 11–15–55. Filed 3–17–55.

621,005. PINK TOUCH. Lehn & Fink Products Corporation. SN 683,689. Pub. 11–15–55. Filed 3–17–55.

CLASS 52

621,006. U-DET 90–95 AND DESIGN. Universal Detergents, Inc. SN 653,601. Pub. 11–15–55. Filed 9–22–53.

621,007. RUSTPROOFING CLENZOIL FOR BRIGHT METALS AND DESIGN. Ellis Christian Lenz, d. b. a. Clenzoil Company. SN 664,234. Pub. 11–15–55. Filed 4–9–54.

621,008. RANDU. Rose Kusiel, d. b. a. Kusiel Chemical Company. SN 664,675. Pub. 11–15–55. Filed 4–16–54.

621,009. D'WIGOS. Albert I. Wigler. SN 679,196. Pub. 11–15–55. Filed 12–30–54.

621,010. VI-LAN. Dameron Enterprises, Inc. SN 685,566. Pub. 11–15–55. Filed 4–15–55.

621,011. CHLOR-TERGENT. Oakite Products, Inc. SN 685,608. Pub. 11–15–55. Filed 4–15–55.

621,012. DE-OXIN. E. F. Drew & Co., Inc. SN 687,059. Pub. 11–15–55. Filed 5–9–55.

Service Marks

CLASS 100

621,013. AROUND-THE-WORLD SHOPPERS CLUB AND DESIGN. Around-the-World Shoppers Club. SN 654,508. Pub. 11–15–55. Filed 10–12–53.

CLASS 101

621,014. BOOKKEEPING TAX SERVICE N E S W AND DESIGN. John C. Holt, also d. b. a. Holt & Birch Tax Service. SN 672,420. Pub. 11–15–55. Filed 8–30–54.

CLASS 103

621,015. AMERICAN BOSCH. American Bosch Corporation, now by merger and change of name American Bosch Arma Corporation. SN 630,567. Pub. 11–15–55. Filed 6–2–52.

621,016. FREEDOM HOMES AND DESIGN (REPRESENTATION OF A HOUSE AND TORCH HELD BY HUMAN HAND). Herbert Kronish. SN 664,453. Pub. 11–15–55. Filed 4–13–54.

621,017. DESIGN OF BARN. Doane Agricultural Service, Inc. SN 672,810. Pub. 11–15–55. Filed 9–7–54.

621,018. SOS. Dowell Incorporated. SN 674,056. Pub. 11–15–55. Filed 9–30–54.

621,019. CHICAGO METROPOLITAN HOME BUILDERS ASSN. ETC. AND DESIGN. Chicago Metropolitan Home Builders Association. SN 674,447. COLLECTIVE MARK. Pub. 11–15–55. Filed 10–7–54.

CLASS 107

621,020. JOE LOCO MAMBO, U. S. A. Joseph Esteves. SN 674,734. Pub. 11–15–55. Filed 10–13–54.

621,021. CAROL AND CORKIE. Carol M. Popp. SN 678,669. Pub. 11–15–55. Filed 12–20–54.

Certification Mark

CLASS A

621,022. A PRODUCT OF AVERY ISLAND LA AND DESIGN. Avery Island, Inc. SN 638,826. Pub. 11–15–55. Filed 12–2–52.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 1

621,023. George Teufel, d. b. a. George Teufel's Holly Farm, Portland, Oreg. SN 673,311. Filed P. R. 9–16–54. Am. S. R. 10–17–55.



The drawing is lined for red and green.
For Natural Holly Sprays.
Use since Aug. 1, 1947.

CLASS 6

621,024. Isabella B. Romans, d. b. a. Chloramine Company, New York, N. Y. SN 677,098. Filed P. R. 11–22–54. Am. S. R. 11–15–55.

Fresher Flowers!

For Oligodynamic Silver Preparations To Keep Flowers Fresh.
Use since May 19, 1954.

CLASS 13

621,025. Thermo Pin Corporation of America, Williston Park, N. Y. SN 692,283. Filed P. R. 8–1–55. Am. S. R. 11–2–55.

THERMO PIN

For Hollow Pins for Insertion Into a Body Mass Such as Meats, Fowl, and the Like To Accelerate Heating or Refrigerating the Body Mass.
Use since Feb. 15, 1953.

CLASS 21

621,026. Heat Timer Corporation, New York, N. Y. SN 679,225. Filed 12–31–54.



For Reversing Control Motors.
Use since Jan. 1, 1953.

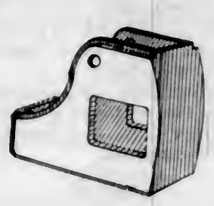
CLASS 23

621,027. Barcalo Manufacturing Company, Buffalo, N. Y. SN 659,386. Filed P. R. 1–13–54. Am. S. R. 11–25–55.

POCKET - PACK

For Wrench Sets.
Use since Feb. 10, 1953.

621,028. The Ridge Tool Company, Elyria, Ohio. SN 669,483. Filed 7–6–54.



The drawing is lined for the color red.
For Pipe Wrenches.
Use since Aug. 22, 1947.

621,029. Kurt Orban Company, Inc., Jersey City, N. J. SN 676,980. Filed P. R. 11–19–54. Am. S. R. 11–15–55.

LINDNER

For Jig Borers and Thread Grinding Machines and Replacement Parts Therefor.
Use since Feb. 29, 1952.

621,030. Needham Manufacturing Company Inc., Needham Heights, Mass. SN 679,055. Filed P. R. 12–28–54. Am. S. R. 11–21–55.

Needham

For Machines—Namely, Hamburg Patty Machines, Hamburg Molding Machines, and Larding Machines.
Use since May 1954.

CLASS 26

621,031. Baird Associates, Inc., Cambridge, Mass. SN 667,370. Filed P. R. 6–1–54. Am. S. R. 1–7–55.

Baird Associates LETTER NALYSIS

For Instruments for Spectrochemical Analysis and Control.
Use since at least as early as 1937.

621,032. Shuron Optical Company, Inc., Geneva, N. Y. SN 673,550. Filed P. R. 9–21–54. Am. S. R. 9–30–55.

LENS PAK

For Spectacle Lenses Sold in Bulk.
Use since Aug. 16, 1954.

621,033. General Aniline & Film Corporation, New York, N. Y. SN 675,558. Filed P. R. 10–27–54. Am. S. R. 11–3–55.

TWIN-PAK

For Light-Sensitive Photographic Materials—Namely, Photographic Film and Paper.
Use since Oct. 6, 1954.

621,034. Electrothermal Engineering Limited, London, England. SN 679,720. Filed 1–11–55.

Electrothermal

For Electrical Heating Equipment and Apparatus for Laboratory and Scientific Use—Namely, Heating Mantles, Heating Tapes, Armoured Heaters, Water, Air, and Histological Baths, Apparatus for Soxhlet, Kjeldahl and Other Tests, Test Tube Heaters, Heating Panels and Pads, Pyrometers, and Energy Regulators for Control of Such Apparatus and Equipment.
Use since 1941.

621,035. Ross Chidester, Watkins Glen, N. Y. SN 687,538. Filed 5–16–55.

YARDSTICKER

For Adhesive Measuring Tape.
Use since Mar. 1, 1950.

CLASS 32

621,036. The Kent Corporation, Covington, Ky. SN 650,187. Filed P. R. 7–13–53. Am. S. R. 4–25–55.

KENT

For Bathroom Cabinets.
Use since Apr. 9, 1953.

621,037. Hauptman Feather Company Inc., New York, N. Y. SN 654,732. Filed P. R. 10–14–53. Am. S. R. 12–2–55.

A *QUASI* DOWN PILLOW

For Fabric Covered Pillows.
Use since September 1953.

621,038. Diamond Bros. Company, Trenton, N. J. SN 677,944. Filed P. R. 12–8–54. Am. S. R. 11–17–55.

Diamond

For Living Room Furniture—Namely, Upholstered Chairs, Chair Beds, Bed Davenports, Sofas, Sofa Beds, and Ottomans.
Use since July 1952.

CLASS 46

621,039. Gould Novelties, Inc., New York, N. Y. SN 660,869, Filed P. R. 2–10–54. Am. S. R. 11–1–54.

GOULD'S
VITA-RICH

For Foods for Parakeets, Canaries, Other Love-Birds, Turtles, Gold Fish, and Tropical Fish.
Use since Oct. 1, 1952.

621,040. Rauth Farms, Delray Beach, Fla. SN 680,695. Filed P. R. 1–28–55. Am. S. R. 9–19–55.

Mr. Sun Vine Ripened

For Fresh Fruits and Vegetables.
Use since Jan. 30, 1954.

CLASS 51

621,041. Lee Limited, Beverly Hills, Calif. SN 667,315. Filed P. R. 5–28–54. Am. S. R. 10–5–55.

NO-LAC

For Spray for the Hair.
Use since Apr. 26, 1954.

Service Mark

CLASS 102

621,042. The Ohio National Bank of Columbus, Columbus, Ohio. SN 682,968. Filed 3–7–55.

BANCPLAN

For Banking Services—Namely, Financing Credit and Personal Loan Services.
Use since Oct. 6, 1938.

TRADEMARK REGISTRATIONS RENEWED

106,937. BLUE RIBBON. Cl. 34. 11–9–15.
106,938. BLUE RIBBON. Cl. 21. 11–9–15.
106,939. BNCO ON MEDALLION WITH STREAMERS PRINTED BLUE. Cl. 21. 11–9–15.
107,151. ELASTITE. Cl. 12. 11–16–15.
107,487. BLUE RIBBON. Cl. 32. 12–7–15.
107,488. BLUE RIBBON. Cl. 24. 12–7–15.
107,571. CARHARTT'S AND DESIGN. Cl. 39. 12–14–15.
108,378. PREFERRED STOCK. Cl. 46. 2–8–16.
108,613. OXWELD. Cl. 14. 2–15–16.
108,809. COHASSET. Cl. 42. 2–29–16.
109,306. AMSCO. Cl. 14. 3–28–16.
109,888. GOLDEN GLOW AND DESIGN. Cl. 46. 4–25–16.
326,953. HYD-SPD. Cl. 23. 8–13–35.
327,386. ALL-AMERICA BOARD OF SPORTS. Cl. 38. 8–27–35.
328,458. RED RIBBON. Cl. 49. 10–1–35.
329,225. TECHNIGRAM. Cl. 38. 10–22–35.
329,664. STREAMLITE. Cl. 16. 11–5–35.
329,825. DICTATOR AND DESIGN. Cl. 1. 11–12–35.
329,845. GANTNER CLIPPER. Cl. 39. 11–12–35.
329,912. VALIDE. Cl. 39. 11–19–35.
330,237. RON MACHETE. Cl. 49. 11–26–35.
330,323. BANKING. Cl. 38. 11–26–35.
330,367. VAN CAMP'S. Cl. 48. 12–3–35.
330,490. LIGO AND DESIGN. Cl. 46. 12–3–35.
330,505. RON MACHETE ETC. AND DESIGN. Cl. 49. 12–3–35.
331,094. TOM COLLINS SENIOR. Cl. 49. 12–24–35.
331,474. MARCRAFT. Cl. 3. 1–7–36.
332,125. DI-HARD IN DIAMOND DESIGN. Cl. 23. 2–4–36.
332,835. GRIPLOCK. Cl. 13. 2–25–36.
332,925. RUFFLETTE. Cl. 13. 3–3–36.

332,926. RUFFLETTE. Cl. 40. 3–3–36.
333,305. PLAY BOY. Cl. 46. 3–17–36.
333,337. "COPIFIXT". Cl. 37. 3–17–36.
333,338. "DUOFIXT". Cl. 37. 3–17–36.
333,339. "MULTIFIXT". Cl. 37. 3–17–36.
333,340. DOUBLEQUICK AND DESIGN. Cl. 16. 3–17–36.
333,904. NO-ODOROL. Cl. 6. 4–14–36.
333,916. KORN KRACKEL. Cl. 46. 4–14–36.
333,962. SUREBROILER. Cl. 46. 4–14–36.
333,971. LERNER STOCKINGS AND DESIGN. Cl. 39. 4–14–36.
334,098. JEWEL DOUBLEQUICK AND DESIGN. Cl. 52. 4–21–36.
334,111. REBECCA. Cl. 46. 4–21–36.
334,112. QUEEN ESTHER. Cl. 46. 4–21–36.
334,113. KING DAVID. Cl. 46. 4–21–36.
334,217. MOUNTAIN RIDGE. Cl. 49. 4–21–36.
334,225. OLD SOUTH. Cl. 49. 4–21–36.
334,302. CAMIROL. Cl. 18. 4–28–36.
334,340. PENTOTHAL. Cl. 18. 4–28–36.
334,367. GLUCOPHYLLINE. Cl. 18. 4–28–36.

TRADEMARK REGISTRATIONS CANCELED

Section 7

52,177. MILK WEED. Cl. 6. 5–1–06.
60,851. ZODENTA. Cl. 6. 2–19–07.
136,478. INGRAM'S. Cl. 6. 11–2–20.
216,514. MILKWEED AND DESIGN. Cl. 6. 8–10–26.
253,540. INGRAM'S SHAVING CREAM AND DESIGN. Cl. 4. 2–26–29.
253,700. INGRAM'S. Cl. 4. 3–5–29.
419,106. INGRAM. Cl. 4. 2–5–46.
539,622. INGRAM. Cl. 51. 3–20–51.
576,225. INGRAM. Cl. 51. 6–23–53.

Section 8

60,916. OCEAN. Cl. 1. 2–26–07.
64,381. THE BEACONSFIELD DERBY ETC. AND DESIGN. Cl. 39. 8–6–07.
72,042. KAR-A-VAN. Cl. 46. 12–29–08.
122,100. FOREST PARK. Cl. 46. 6–25–18.
126,982. MERITORIA. Cl. 46. 10–21–19.
126,983. SONIA. Cl. 46. 10–21–19.
127,262. DELICIA. Cl. 46. 11–4–19.
139,475. REPRESENTATION OF GLOBE. Cl. 2. 2–8–21.
161,579. SPORTSTER. Cl. 39. 11–14–22.
167,224. TELEDEP. Cl. 26. 4–24–23.
198,558. KASAWBA. Cl. 45. 5–19–25.
206,137. FAVORITA. Cl. 46. 11–24–25.
215,288. YANKEE DOODLE. Cl. 46. 7–13–26.
226,003. TIGER. Cl. 46. 3–29–27.
228,584. COLTON TERRACE. Cl. 46. 6–7–27.
231,954. SANITARIUM AND REPRESENTATION OF SANITARIUM. Cl. 46. 8–30–27.
235,545. EVANGELINE. Cl. 46. 11–22–27.
235,587. PLACENTIA GIRL. Cl. 46. 11–22–27.
238,268. DELIGHT OF SERENA. Cl. 46. 1–31–28.
242,218. EL CAMINO. Cl. 46. 5–15–28.
242,609. "REAL". Cl. 46. 5–29–28.
256,169. SUPERFOLD. Cl. 28. 5–7–29.
259,803. HOLLY VOGUE AND DESIGN. Cl. 39. 8–6–29.
281,078. SUPER-TEX. Cl. 37. 3–10–31.
295,927. DIXI-ARC. Cl. 14. 7–19–32.
302,027. EXPAN-TEX. Cl. 37. 3–21–33.
304,387. ADVANCE GUARD. Cl. 39. 7–4–33.
336,368. CAVENCRAFT PRISCILLA ALDEN AND DESIGN. Cl. 42. 7–7–36.
341,824. AJI-NO-MOTO ETC. AND DESIGN. Cl. 46. 12–22–36.
372,819. SCHOOL OF FASHION. Cl. 38. 11–14–39.
385,041. PHONOCORD. Cl. 36. 2–11–41.
385,465. EL TORO. Cl. 17. 3–4–41.
387,856. CARGOCAIRE AND DESIGN. Cl. 34. 6–3–41.
388,534. DIXI-PEER. Cl. 14. 7–1–41.
396,575. BRITISH STYLED EXCLUSIVELY BY ACECRAFT. Cl. 39. 7–28–42.
426,031. LOOK AT AMERICA AND DESIGN. Cl. 38. 12–10–46.
426,934. SILHOUETTE OF MAN ON HORSEBACK. Cl. 6. 1–21–47.
435,110. MOONSTRUCK. Cl. 6. 12–9–47.
438,505. LOVERS-KNOT. Cl. 6. 4–27–48.
442,341. DANOLITE. Cl. 39. 3–29–49.
514,334. -"ALUMA-WEIGHT" AND DESIGN. Cl. 36. 8–30–49.
514,335. SCALACS. Cl. 38. 8–30–49.
514,337. PARKER. Cl. 34. 8–30–49.
514,341. WARREN McARTHUR. Cl. 19. 8–30–49.
514,343. EVANSTEEL. Cl. 14. 8–30–49.
514,360. GEOMETRIC DESIGN. Cl. 6. 8–30–49.
514,368. FLORENCE GARDNER. Cl. 34. 8–30–49.
514,381. SPORT-BRIEFS. Cl. 39. 8–30–49.
514,382. FJORDINE. Cl. 46. 8–30–49.
514,389. LITTLE STUDENT. Cl. 39. 8–30–49.
514,404. TIRES. Cl. 38. 8–30–49.
514,408. CALIFORNIA MANOR. Cl. 32. 8–30–49.
514,412. BB CO. Cl. 28. 8–30–49.
514,425. CIRC-TAGONAL. Cl. 39. 8–30–49.
514,426. AN ORIGINAL BY MANAY AND DESIGN. Cl. 39. 8–30–49.
514,427. CASE CLOTHES. Cl. 39. 8–30–49.
514,429. AMERICAN BEAUTY AND DESIGN. Cl. 32. 8–30–49.
514,430. MARYEM. Cl. 39. 8–30–49.
514,435. BLUE DIAMOND FLOOR AND WALL SAFES WITHIN DIAMOND DESIGN. Cl. 25. 8–30–49.
514,445. TOWERTOWN. Cl. 39. 8–30–49.
514,446. VARSITY. Cl. 39. 8–30–49.
514,447. MARVEL. Cl. 2. 8–30–49.
514,451. CONDOR. Cl. 46. 8–30–49.
514,452. FLEET OWNER. Cl. 38. 8–30–49.
514,454. KELSTREE. Cl. 39. 8–30–49.
514,457. SNUG HARBOR. Cl. 32. 8–30–49.
514,459. 8–N–2. Cl. 14. 8–30–49.
514,464. ARTISAN. Cl. 46. 8–30–49.
514,466. ARIZONIAN. Cl. 39. 8–30–49.
514,467. MLLE MERIT AWARDS. Cl. 38. 8–30–49.
514,472. CALCROME. Cl. 16. 8–30–49.
514,473. YOUNG ROMANCE. Cl. 38. 8–30–49.
514,480. STAR BRAND. Cl. 46. 8–30–49.
514,481. PRISCILLA. Cl. 2. 8–30–49.
514,483. MORNING GLORY. Cl. 46. 8–30–49.
514,488. REPRESENTATION OF BULL DOG. Cl. 39. 8–30–49.
514,491. BOROUGH. Cl. 34. 8–30–49.
514,493. TEENA LITTLE. Cl. 28. 8–30–49.
514,496. VIVACITY BRAND. Cl. 32. 8–30–49.
514,499. TINY TEPS. Cl. 32. 8–30–49.
514,500. HEART OF AMERICAN VENETIAN BLIND SERVICE AND DESIGN. Cl. 32. 8–30–49.
514,502. NO. 7. Cl. 14. 8–30–49.
514,506. MARQUIS RECORDINGS AND DESIGN. Cl. 36. 8–30–49.
514,507. BO PEEP. Cl. 32. 8–30–49.
514,509. PLAYINET. Cl. 32. 8–30–49.
514,510. TRANELLA RAYON. Cl. 39. 8–30–49.
514,513. QUEENS CREWEL ENGLISH MADE NEEDLES ETC. AND DESIGN. Cl. 40. 8–30–49.
514,523. DELA-ANN. Cl. 39. 8–30–49.
514,524. BE-MINE. Cl. 39. 8–30–49.
514,525. INEZ. Cl. 38. 8–30–49.
514,528. CLOVER FARM. Cl. 2. 8–30–49.
514,530. ROTAVUE AND DESIGN. Cl. 19. 8–30–49.
514,538. MONARCH. Cl. 19. 8–30–49.
514,539. ANTHONY. Cl. 34. 8–30–49.
514,540. HEM MASTER. Cl. 26. 8–30–49.
514,542. ROBBINS & MYERS. Cl. 34. 8–30–49.
514,545. SECO. Cl. 34. 8–30–49.
514,547. CHARLES FOSTER. Cl. 26. 8–30–49.
514,548. 49ER. Cl. 19. 8–30–49.
514,549. FORTY NINER. Cl. 19. 8–30–49.
514,551. JAYDETTE. Cl. 39. 8–30–49.
514,553. PI AND DESIGN. Cl. 19. 8–30–49.
514,556. RIVAL. Cl. 26. 8–30–49.
514,557. PAL. Cl. 26. 8–30–49.
514,558. MOVIE ALBUM. Cl. 38. 8–30–49.

514,559. COMICS JUKE BOX AND DESIGN. Cl. 38. 8–30–49.
514,564. CRESTLIFT. Cl. 39. 8–30–49.
514,565. FAY-MUSSETTE. Cl. 39. 8–30–49.
514,567. GALLANT. Cl. 26. 8–30–49.
514,569. NATURE GIRL. Cl. 39. 8–30–49.
514,570. SKYSHIELD. Cl. 19. 8–30–49.
514,572. THE PENNY WISE SHOP AND DESIGN. Cl. 38. 8–30–49.
514,574. ABD. Cl. 26. 8–30–49.
514,575. JEMCO WITHIN DIAMOND DESIGN. Cl. 26. 8–30–49.
514,576. JEM JR. Cl. 26. 8–30–49.
514,580. RIVIERA. Cl. 26. 8–30–49.
514,583. WHAT LIES AHEAD? Cl. 38. 8–30–49.
514,585. TOSCA. Cl. 27. 8–30–49.
514,594. SANAR. Cl. 6. 8–30–49.
514,595. STARLOOMS. Cl. 28. 8–30–49.
514,597. TOUR-AID. Cl. 6. 8–30–49.
514,599. GARON AND REPRESENTATION OF STAR. Cl. 27. 8–30–49.
514,601. CH. F. TISSOT & FILS LOCLE. Cl. 27. 8–30–49.
514,603. TISSOT LOCLE. Cl. 27. 8–30–49.
514,607. FOMOCO WITHIN OVAL DESIGN. Cl. 2. 8–30–49.
514,608. EVERYTHING IN ONE PACKAGE . . . AT ONE PLACE . . . AT ONE TIME . . . AT ONE LOW COST! AND REPRESENTATION OF PACKAGE. Cl. 55. 8–30–49.
514,614. WEATHER MASTER AND REPRESENTATION OF WEATHER VANE AND ARROW. Cl. 55. 8–30–49.
514,616. FETHER-LITE AND REPRESENTATION OF FEATHER. Cl. 32. 8–30–49.
514,618. PIN-ON PETALS. Cl. 40. 8–30–49.
514,619. RITIE. Cl. 23. 8–30–49.
514,623. PEOPLES PACKING CORP. SAN DIEGO CALIF. AND REPRESENTATION OF FISH ON CIRCULAR DESIGN. Cl. 46. 8–30–49.
514,624. KLEARCITE WITHIN CIRCULAR DESIGN. Cl. 26. 8–30–49.
514,627. LADY SLENDERIZER. Cl. 39. 8–30–49.
514,628. SHEARER GROUP. Cl. 32. 8–30–49.
514,629. "THE NU-GRIP". Cl. 39. 8–30–49.
514,630. FASHION HOUSE FURNITURE. Cl. 32. 8–30–49.
514,633. GRIP MITT. Cl. 42. 8–30–49.
514,635. PEERLESS. Cl. 39. 8–30–49.
514,637. FEDER. Cl. 12. 8–30–49.
514,638. TROY DEBS. Cl. 39. 8–30–49.
514,641. SIN Z E NUS AND DESIGN. Cl. 6. 8–30–49.
514,642. RUIZ. Cl. 46. 8–30–49.
514,643. RUSTIC PLAID. Cl. 42. 8–30–49.
514,645. IF IT'S "CHAFLESS" IT'S BY LOVALON. Cl. 39. 8–30–49.
514,647. STA-GREEN PROCESS AND DESIGN. Cl. 46. 8–30–49.

Section 18

344,773. OREGON-WASHINGTON PEAR BUREAU, ETC. AND DESIGN. Cl. 46. 4–6–37. Canc. 6529.
549,841. ZONOLAC. Cl. 16. 10–23–51. Intf. 5234.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

278,507. MELROSE AND DESIGN. Cl. 39. 12–23–30. Le Rae Hat Co. Baer, Sternberg & Cohen, St. Louis, Mo. Amended to appear:

MELROSE

279,517. PEEK FREAN'S. Cl. 46. 1–20–31. Peek, Frean & Co., Ltd. Peek, Frean & Company Limited, London, England. Amended: The third paragraph of the statement is deleted and *The said trademark was registered in the United Kingdom of Great Britain and Northern Ireland under date of March 18, 1930, No. 511,252.* is inserted in lieu thereof, and the drawing is amended to appear:

Peek Frean's

281,775. PEEK FREAN. Cl. 46. 3–31–31. Peek, Frean & Co., Ltd. Peek, Frean & Company, Limited, London, England. Amended: The fourth paragraph of the statement is deleted and *The said trademark was registered in the United Kingdom of Great Britain and Northern Ireland under date of March 18, 1930, No. 511,253.* is inserted in lieu thereof, and the drawing is amended to appear:

Peek Frean

301,247. FORTUNE AND DESIGN. Cl. 39. 2–21–33. Jarman Shoe Company. General Shoe Corporation, Nashville, Tenn. Amended to appear:

FORTUNE

510,641. FAIRWAY. Cl. 46. 6–7–49. Twin City Wholesale Grocer Co., now by change of name Fairway Foods, Inc., St. Paul, Minn. Corrected: In the statement, line 19, after "flour," *grape juice, prune juice, grapefruit juice, pineapple juice, orange juice, and tomato juice,* should be inserted.

510,641. FAIRWAY. Cl. 46. 6–7–49. Twin City Wholesale Grocer Co., now by change of name Fairway Foods, Inc., St. Paul, Minn. Amended: In the certificate, lines 3 and 13; in the heading and signature to the registration; in line 1 of the statement and line 3 of the declaration, after "Co.," *now by change of name Fairway Foods, Inc.,* is inserted; in line 4 of the statement "2285 University" is deleted and *1930 Como* is inserted in lieu thereof; and the drawing is amended to appear:

FAIRWAY

614,353. A. B. T. MFG. CORP. ETC. AND DESIGN. Cl. 23. 10–18–55. A. B. T. Manufacturing Corp., Chicago, Ill. Corrected: In the statement, column 2, lines 3 and 4, for "in commerce Oct. 15, 1956" read *in commerce Oct. 15, 1926.*

614,857. NOVEL CRAFT. Cl. 37. 10–25–55. Warner-Grafmueller Industries, New York, N. Y. Corrected: In the certificate, lines 2 and 3, and 13, and in the statement, column 1, line 1, name of registrant, for "Warner-Graf Mueller Industries", each occurrence, read *Warner-Grafmueller Industries.*

616,127. OCELIT. Cl. 21. 11–15–55. C. Conradty, Nurnberg, Germany. Corrected: In the statement, column 1, line 6, after "PROCESSES" insert , *FOR THE PRODUCTION OF IRON, STEEL, ALUMINUM, ZINC, CARBIDE, NITROGEN AND FOR OTHER METALLURGICAL PROCESSES*: column 2, line 7, after "RODS", first occurrence, insert *AND OTHER MOLDED ARTICLES MADE FROM ARTIFICIAL GRAPHITE.*

616,486. CONDUCTO-LUBE AND DESIGN. Cl. 21. 11–22–55. Conducto-Lube Company, Portland, Oreg. Corrected: In the certificate, lines 2 and 14, and in the statement, column 1, line 1, name of registrant, for "Conductor-Lube Company", each occurrence, read *Conducto-Lube Company.*

616,975. B-CLEEN. Cl. 52. 11–29–55. Wilferd W. Beaty, doing business as Beaty Products Company, Keokuk, Iowa. Corrected: In the certificate, lines 2 and 13, and in the statement, column 1, line 1, for "Wilfred W. Beaty", each occurrence, read *Wilferd W. Beaty.*

616,976. BEATY'S IN AN OVAL DESIGN. Cl. 52. 11-29-55. Wilferd W. Beaty, doing business as Beaty Products Company, Keokuk, Iowa. Corrected: In the certificate, lines 2 and 13, and in the statement, column 1, line 1, for "Wilfred W. Beaty", each occurrence, read *Wilferd W. Beaty*.

617,552. BETASTRAL. Cl. 44. 12-13-55. Dr. E. Uhlhorn & Co., Wiesbaden-Biebrich, Germany. Corrected: In the certificate, lines 2 and 13, and in the statement, column 1, line 1, name of registrant, for "Dr. E. Ulhorn & Co.", each occurrence, read *Dr. E. Uhlhorn & Co.*

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 6

322,048. Feb. 26, 1935. W-B Chemical Company, Inc., Mount Vernon, N. Y. Pub. by registrant.

CUREX

For Composition Adapted for Use as an Insecticide and Fungicide, and Particularly Suitable for Disinfecting Plants, Seeds, Soil, Grass, and the Like.

CLASS 16

268,281. Mar. 11, 1930. Capitol Paint & Varnish Works, Inc., Chicago, Ill. Pub. by registrant.

CAPCO

For Ready-Mixed Paints, Paint Enamels, Varnishes, Lacquers, Wood Stains, Prepared Shellacs, Colors in Oil, and Paints in Paste Form With Thinning Liquids Designed for Use Therewith.

317,952. Oct. 9, 1934. Capitol Paint & Varnish Works, Inc., Chicago, Ill. Pub. by registrant.

HOM-O-NER

For Ready Mixed Paints, Varnishes, Stains, and Paint Enamels.

CLASS 18

333,027. Mar. 10, 1936. Harvey W. Vosbell, Baltimore, Md. Pub. by registrant.

SINAJEL

For Medicines for Colds, Coryza, Catarrh, and Sinus Conditions.

CLASS 21

438,682. May 11, 1948. Waterman Products Company, Incorporated, Philadelphia, Pa. Pub. by registrant.



The words "Waterman Products" are disclaimed apart from the mark as shown on the drawing.

For Radio and Electronic Sound, Recording, Transcribing, and Transmitting Apparatus, as Follows: Phonograph Units, Radio Receiving Sets, Television Receiving Sets, Radio Transmitters, Television Transmitters, Public Address Systems, Electronic Facsimile Apparatus, and Vacuum Tubes for Electronic Application.

CLASS 23

385,091. Feb. 18, 1941. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

SPEEDAK

For Electric Dry Shavers.

401,190. Apr. 27, 1943. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

The Duchess

For Dry Shavers and Parts Thereof.

CLASS 25

159,567. Sept. 26, 1922. The Victor Safe and Lock Company, Cincinnati, Ohio. Pub. by Sperry Rand Corporation, New York, N. Y.

VICTOR

For Safes and Locks.

319,105. Nov. 13, 1934. The Victor Safe & Equipment Company, Inc., North Tonawanda, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.



VICTOR

For Safes, Burglar and Fire Proof Cabinets, Files, Boxes, Chests, Drawers, and Parts Thereof, and Vault Doors.

CLASS 26

430,638. June 17, 1947. Waterman Products Company, Incorporated, Philadelphia, Pa. Pub. by registrant.

POCKETSCOPE

The word "Pocket" is disclaimed apart from the mark as shown on the drawing.

For Oscilloscopes.

438,795. May 11, 1948. Waterman Products Company, Incorporated, Philadelphia, Pa. Pub. by registrant.



The words "Waterman Products" are disclaimed apart from the mark as shown on the drawing.

For Oscilloscopes (Electronic Testing and Control Apparatus for the Measurement of Electric and Electronic Circuit Balance, Phase, Resonance and Reaction), Intermittent Testers for Testing Stability and Continuous Action of Electronic Devices and Radio Receivers; 16 mm. Sound Motion Picture Projectors.

CLASS 32

288,168. Oct. 20, 1931. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.



For Cabinets, Lockers, Cupboards, Shelving Constituting Office and Factory Furniture and Equipment; Filing Cabinets or Safes Scientifically Constructed To Protect the Contents Thereof Against the Effects of Excessive Temperature, File Cabinets, Drawers, Trays, Panels and Holders for Index Cards, Sheets, Folders, Binders, Envelopes and Similar Articles, Card Record Desks, Tables, Stands, Chairs, Bookcases and Apparel Racks Constituting Furniture for Office and Household Use; Indexing, Recording and Filing Systems Comprising Cabinets, Cases and Trays or Parts Thereof, and Record and Card Holding Boards and Frames and Record, Index and Cardholding Racks, All Constituting Office Furniture; File Boxes for Cards, Sheets and Folders.

347,109. June 15, 1937. The Victor Safe & Equipment Company, Inc., North Tonawanda, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

FIRE MASTER

For File Cabinets, Drawers, and Parts Thereof.

CLASS 37

110,356. May 16, 1916. The Rand Company, North Tonawanda, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

RAND

For Ledgers, Paper for Printing and Writing Purposes and Indexes for Books, Accounts, and Records.

116,458. May 1, 1917. The Rand Company, North Tonawanda, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

Rand

For Indicators and Index Devices for Listing Names of Persons, Things or Other Data and for Listing or Filing Papers; Card Indexes, Separate Index and Balance Books, Guides for Indexes and Files, Indexed Check Sorters, and Indexed Files.

288,154. Oct. 20, 1931. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.



For Bound Books for Accounts and Records; Loose Leaf Binders for Accounts and Records and Blank, Partially Printed, and/or Ruled Sheets and Guides and Other Index Devices Therefor; Indexed Cards, Files, Guides, Sheets, and Folders; Cards, Sheets, Guides, and Folders for Indexed Files; Card Holders, Hangers, Clips and Signals; Blank, Partially Printed, and/or Ruled Cards; Paper, Cloth, or Metal Guides and Guide Cards, Folders, Tabs, and Labels; Transparent and Other Holders for Index Tabs and Labels and Strips for Making Tabs, Labels, and Holders; Paper for Printing, Typewriting, and Writing Purposes; Paper and/or Liber Envelopes, Document Files, and Containers for Carrying, Mailing, and Filing Purposes; Index Strips and Sheets; Copyholders for Typewriters, Parts Thereof, and Indexed Check Sorters.

371,824. Oct. 10, 1939. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

VARIADEX

For Card and Correspondence File Guides.

373,202. Nov. 28, 1939. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

SALEMASTER

For Visible Indexes, Loose Leaf Binders, Index Cards and Sheets, and Index Card Holders.

389,269. July 29, 1941. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

REMCRAFT

For File Folders.

389,271. July 29, 1941. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

REMKOTE

For Blank and Partially Printed Index Cards.

392,906. Jan. 20, 1942. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

REMBRAND

For File Folders.

CLASS 38

329,552. Nov. 5, 1935. Esquire, Inc., New York, N. Y. Pub. by registrant.

Avenues of Fashion

For Column in a Newspaper.

CLASS 40

327,702. Sept. 3, 1935. Automatic Pearl Button Co., Muscatine, Iowa. Pub. by registrant.

PEARLITE

For Buttons, Not Made of Precious Metals.

CLASS 46

326,780. Aug. 6, 1935. Bay City Milling Company, Bay City, Mich. Pub. by Bay City Milling & Grocery Co., Bay City, Mich.

TRUEWORTH

For Canned Pork and Beans, Canned Corn, Canned Tomatoes, Canned Sauer Kraut, Canned Spaghetti, Canned Peas, Canned Milk, Canned Noodles, Canned Vegetable Soup, and Canned Chocolate Syrup (for Food Purposes).

330,747. Dec. 17, 1935. Gravymaster Company, Inc., Long Island City, N. Y. Pub. by registrant.

GRAVY MASTER

The word "Gravy" is disclaimed apart from the mark as shown.

For Flavoring Extract for Soups, Sauces, Gravies, and Stews.

CLASS 48

317,542. Sept. 25, 1934. Dortmunder Hansa-Brauerei Aktiengesellschaft, Dortmund, Germany. Pub. by registrant.

D H B

For Beer.

CLASS 51

336,823. July 21, 1936. Castilian Products Corp., Los Angeles, Calif. Pub. by Lee Limited, Beverly Hills, Calif.

COURTLEY

For After Shaving Lotion.

LIST OF REGISTRANTS OF TRADEMARKS

A. B. T. Mfg. Corp., Chicago, Ill. 614,353, cor. Class 23.
A. & Z. Chain Co., Providence, R. I. 256,169, canc. Cl. 28.
Aarons Mfg. Co.: *See*—
Tenenbaum, Aaron.
Abbott Laboratories, North Chicago, Ill. 334,340, ren. 4–28–56. Cl. 18.
Abbott Laboratories, North Chicago, Ill. 334,367, ren. 4–28–56. Cl. 18.
Adea Corp., Asheville, N. C. 620,646, pub. 11–8–55. Cl. 12.
Aetna Mfg. Co., Bensenville, Ill. 620,818, pub. 11–8–55. Cl. 23.
Aget Mfg. Co., Adrian, Mich. 620,805, pub. 11–8–55. Cl. 23.
Ajinomoto Honpo Kabushiki Kaisha Suzuki Shoten, Takara Machi, Kyobashi Ku, Tokyo, Japan, to S. Suzuki & Co. of New York, Ltd., New York, N. Y. 341,824, canc. Cl. 46.
Albertson & Co., Inc., Sioux City, Iowa. 620,795, pub. 11–8–55. Cl. 23.
Aldan Rubber Co., Philadelphia, Pa. 620,696, pub. 11–8–55. Cl. 16.
Allen & Lewis, to General Grocery Co., Inc., Portland, Oreg. 108,378, ren. 2–8–56. Cl. 46.
Allied Canners and Packers, Inc., San Francisco, Calif. 620,971, pub. 11–15–55. Cl. 46.
Allied Chemical & Dye Corp., New York, N. Y. 620,633, pub. 9–28–54. Cl. 10.
Allied Food Products Sales Co.: *See*—
Ross, Harold M.
Allied Sleep Products, Inc., Providence, R. I. 514,496, canc. Cl. 32.
America Dry Corp., New York, N. Y. 620,954, pub. 11–15–55. Cl. 45.
American Aggregates Corp., Greenville, Ohio. 620,658, pub. 11–8–55. Cl. 12.
American Bankers Association, The, New York, N. Y. 330,323, ren. 11–26–55. Cl. 38.
American Bosch Arma Corp.: *See*—
American Bosch Corp.
American Bosch Corp., Springfield, Mass., now by merger and change of name American Bosch Arma Corp. 621,015, pub. 11–15–55. Cl. 103.
American Brake Shoe Co.: *See*—
American Manganese Steel Co.
American Cyanamid & Chemical Corp., to American Cyanamid Co., New York, N. Y. 333,904, ren. 4–14–56. Cl. 6.
American Cyanamid Co.: *See*—
American Cyanamid & Chemical Corp.
American Cyanamid Co., New York, N. Y. 620,637, pub. 11–15–55. Cl. 10.
American Lace Paper Co., Milwaukee, Wis. 620,871, pub. 11–8–55. Cl. 37.
American Lecithin Co. Inc., Woodside, N. Y. 620,965, pub. 11–15–55. Cl. 46.
American Machine and Metals, Inc., East Moline, Ill. 620,824, pub. 11–8–55. Cl. 23.
American Manganese Steel Co., Chicago, Ill., to American Brake Shoe Co., New York, N. Y. 109,306, ren. 3–28–56. Cl. 14.
American-Marietta Co., Chicago, Ill. 620,699, pub. 11–8–55. Cl. 16.
American-Marietta Co., Chicago, Ill. 620,701, pub. 11–8–55. Cl. 16.
American Seal Paint Mfg. Co., Inc., Troy, N. Y. 620,693, pub. 11–8–55. Cl. 16.
American Waterfowl Association, Inc., The, Milwaukee, Wis. 620,887, pub. 11–8–55. Cl. 38.
American Zyloptic Co., Inc., New York, N. Y. 514,567, canc. Cl. 26.
Amphac Laboratories, Inc., Everett, Wash. 514,597, canc. Cl. 6.
Anaheim Orange & Lemon Association, Anaheim, Calif. 126,982–3, canc. Cl. 46.
Anaheim Orange & Lemon Association, Anaheim, Calif. 127,262, canc. Cl. 46.
Anaheim Orange & Lemon Association, Anaheim, Calif. 206,137, canc. Cl. 46.
Anderson-Tully Co., Memphis, Tenn. 620,654, pub. 11–8–55. Cl. 12.
Annetta Dresses, Inc., New York, N. Y. 620,944, pub. 11–15–55. Cl. 42.
Anthony Co., The, Long Island City, N. Y. 514,539, canc. Cl. 34.
Apex Venetian Blind Co., Philadelphia, Pa. 514,429, canc. Cl. 32.
Appalachian Mills Co., Knoxville, Tenn. 620,899–900, pub. 11–15–55. Cl. 39.
Archer, John D., Scranton, Pa. 620,757, pub. 11–8–55. Cl. 22.
Arkwright Merchandising Corp., New York, N. Y. 620,614, pub. 11–8–55. Cl. 4.
Armour and Co., Chicago, Ill. 620,615, pub. 11–8–55. Cl. 4.
Arnett, Alfred E., d. b. a. Arnett's Plaza Supply Co., Wichita, Kans. 620,675, pub. 11–8–55. Cl. 13.
Arnett's Plaza Supply Co.: *See*—
Arnett, Alfred E.
Around-The-World Shoppers Club, Newark, N. J. 621,013, pub. 11–15–55. Cl. 100.
Arsco American, Inc., New York, N. Y. 620,842, pub. 11–8–55. Cl. 26.
Associated Anaheim Growers, to Yorba Orange Growers Association, Anaheim, Calif. 334,111–13, ren. 4–21–56. Cl. 46.
Associated Growers of Brownsville, Brownsville, Tex. 620,972, pub. 11–15–55. Cl. 46.
Associated Lerner Shops of America, Inc.: *See*—
Lerner Stores Corp.
Atalanta Trading Corp., New York, N. Y. 620,958–9, pub. 11–15–55. Cl. 46.
Atlantic Steel Co., Atlanta, Ga. 295,927, canc. Cl. 14.
Atlantic Steel Co., Atlanta, Ga. 388,534, canc. Cl. 14.
Atlas Box Co., Chicago, Ill. 139,475, canc. Cl. 2.
Auto-Bye Co.: *See*—
Hubert, William J.
Automatic Pearl Button Co., Muscatine, Iowa. 327,702, 12(c) pub. 2–7–56. Cl. 40.
Automotive Equipment Mfg. Co., Lynwood, Calif. 620,784, pub. 11–8–55. Cl. 23.
Avery Island, Inc., New Iberia, La. 621,022, pub. 11–15–55. Cl. A.
Avon Products, Inc., New York, N. Y. 621,002, pub. 3–1–55. Cl. 51.
Aztec Corp., Philadelphia, Pa. 620,641, pub. 11–16–54. Cl. 12.
Babineau, Oliver D., Colorado Springs, Colo. 620,832, pub. 11–8–55. Cl. 23.
Baer, Sternberg & Cohen: *See*—
Le Rae Hat Co.
Baird Associates, Inc., Cambridge, Mass. 621,031. Cl. 26.
Baitch & Castaldi, Inc., New York, N. Y. 620,911, pub. 11–15–55. Cl. 39.
Ball & Tweedy: *See*—
Ball & Tweedy Association.
Ball & Tweedy Association, d. b. a. Ball & Tweedy, Downey, Calif. 514,451, canc. Cl. 46.
Banks-Baldwin Law Publishing Co., Cleveland, Ohio. 620,891, pub. 11–15–55. Cl. 38.
Barber-Colman Co., Rockford, Ill. 620,670, pub. 11–8–55. Cl. 13.
Barcalo Mfg. Co., Buffalo, N. Y. 621,027. Cl. 23.
Barry Laboratories, Inc., Detroit, Mich. 620,707, pub. 11–8–55. Cl. 18.
Battle Creek Food Co., Battle Creek, Mich. 231,954, canc. Cl. 46.
Bay City Milling Co., by Bay City Milling & Grocery Co., Bay City, Mich. 326,780, 12(c) pub. 2–7–56. Cl. 46.
Bay City Milling & Grocery Co.: *See*—
Bay City Milling Co.
Beaty Products Co.: *See*—
Beaty, Wilferd W.
Beaty, Wilferd W., d. b. a. Beaty Products Co., Keokuk, Iowa. 616,975–6, cor. Cl. 52.
Beautee-Fit Co., Los Angeles, Calif. 620,920, pub. 11–8–55. Cl. 39.
Beck, Albert F. A., d. b. a. Beck Products Co., Pittsburgh, Pa. 426,934, canc. Cl. 6.
Beck Products Co.: *See*—
Beck, Albert F. A.
Beh and Co., Inc., New York, N. Y. 514,481, canc. Cl. 2.
Beich, Paul F., Co., Bloomington, Ill. 109,888, ren. 4–25–56. Cl. 46.
Beich, Paul F., Co., Bloomington, Ill. 620,982, pub. 11–15–55. Cl. 46.
Bell, H. A., Los Angeles, Calif. 385,041, canc. Cl. 36.
Bendtsen Bros., Inc.: *See*—
Bendtsen Bros. Mfg., Inc.
Bendtsen Bros. Mfg., Inc., d. b. a. Bendtsen Bros., Inc., Rose Creek, Minn. 620,796, pub. 11–8–55. Cl. 23.
Berndae, Inc., New York, N. Y. 620,856, pub. 11–8–55. Cl. 30.
Berndt, Alexander J., Dumont, N. J. 620,952, pub. 11–15–55. Cl. 44.
Berwind White Coal Mining Co., Philadelpha, Pa. 60,916, canc. Cl. 1.
Best Made Silk Hosiery Co., Quakertown, Pa. 620,931, pub. 11–15–55. Cl. 39.
Bill Brothers Publishing Corp., New York, N. Y. 514,404, canc. Cl. 38.
Bird & Son, Inc., East Walpole, Mass. 620,991, pub. 11–15–55. Cl. 50.
Bliss Brothers Co., Attleboro, Mass. 514,412, canc. Cl. 28.
Blue Diamond Safe Co., Wichita, Kans. 514,435, canc. Cl. 25.
Bogart Mfg. Corp., New York, N. Y. 620,739, pub. 11–8–55. Cl. 21.
Bolte, Jessie J., d. b. a. Bolte Products Co., Wabash, Ind. 620,657, pub. 11–8–55. Cl. 12.
Bolte Products Co.: *See*—
Bolte, Jessie J.
Bolton, John W., & Sons, Inc.: *See*—
Hermann Mfg. Co.
Bonzette Foundations, Inc., New York, N. Y. 620,909, pub. 11–15–55. Cl. 39.
Borg-Warner Corp., Chicago, Ill. 620,857, pub. 11–8–55. Cl. 31.
Borough Gas, Inc., Mentor, Ohio. 514,491, canc. Cl. 34.
Brayten Pharmaceutical Co., Chattanooga, Tenn. 620,712, pub. 11–8–55. Cl. 18.
Bristol-Myers Co., New York, N. Y. 419,106, canc. Cl. 4.
Bristol-Myers Co., New York, N. Y. 539,622, canc. Cl. 51.
Bristol-Myers Co., New York, N. Y. 576,225, canc. Cl. 51.
Brock Candy Co., Chattanooga, Tenn. 620,969, pub. 11–15–55. Cl. 46.
Broyhill Co., The, Dakota City, Nebr. 620,774, pub. 11–8–55. Cl. 23.

Buckley-Newhall Co., The, New York and Brooklyn, to John Mullins & Sons, Inc., Brooklyn, N. Y. 106,937, ren. 11–9–55. Cl. 34.
Buckley-Newhall Co., The, New York and Brooklyn, to John Mullins & Sons, Inc., Brooklyn, N. Y. 106,938–9, ren. 11–9–55. Cl. 21.
Buckley-Newhall Co., The, New York, to John Mullins & Sons, Inc., Brooklyn, N. Y. 107,487, ren. 12–7–55. Cl. 32.
Buckley-Newhall Co., The, New York, to John Mullins & Sons, Inc., Brooklyn, N. Y. 107,488, ren. 12–7–55. Cl. 24.
Burlington Mills Corp., Greensboro, N. C. 620,940, pub. 11–15–55. Cl. 42.
Burman, C. N., Co., Paterson, N. J. 620,748, pub. 11–8–55. Cl. 21.
California Bronze Powder Corp., Los Angeles, Calif. 514,472, canc. Cl. 16.
Callaway Mills Co., La Grange, Ga. 514,643, canc. Cl. 42.
Capitol Paint & Varnish Works, Inc., Chicago, Ill. 268,281, 12(c) pub. 2–7–56. Cl. 16.
Capitol Paint & Varnish Works, Inc., Chicago, Ill. 317,952, 12(c) pub. 2–7–56. Cl. 16.
Carey, Philip, Mfg. Co., The, Lockland, Ohio. 107,151, ren. 11–16–55. Cl. 12.
Cargocaire Engineering Corp., New York, N. Y. 387,856, canc. Cl. 34.
Carhartt, Hamilton, Manufacturer, to Hamilton Carhartt Overall Co., Inc., Detroit, Mich. 107,571, ren. 12–14–55. Cl. 39.
Carhartt, Hamilton, Overall Co., Inc.: *See*—
Carhartt, Hamilton, Manufacturer.
Carroll Development Co., Baltimore, Md. 620,642, pub. 11–8–55. Cl. 12.
Cartrol Corp., The, Kansas City, Mo. 620,687, pub. 11–8–55. Cl. 13.
Case Clothes, Inc., New York, N. Y. 514,427, canc. Cl. 39.
Castilian Products Corp., Los Angeles, by Lee Ltd., Beverly Hills, Calif. 336,823, 12(c) pub. 2–7–56. Cl. 51.
Cavendish Trading Corp., New York, N. Y. 336,368, canc. Cl. 42.
Celotex Corp., The, Chicago, Ill. 620,649, pub. 11–8–55. Cl. 12.
Centri-Spray Corp., Detroit, Mich. 620,767, pub. 11–8–55. Cl. 23.
Centrokomise, Podnik Zahranicního Obchodu pro Dovoz a Vývoz Potravin, Prague, Czechoslovakia. 620,953, pub. 11–15–55. Cl. 45.
Chadbourn Hosiery Mills, Inc., Charlotte, N. C. 620,934, pub. 11–15–55. Cl. 39.
Chamberlain, Frank H., Boston, Mass. 64,381, canc. Cl. 39.
Champion Spark Plug Co., Toledo, Ohio. 620,738, pub. 11–8–55. Cl. 21.
Champion Textile Finishing Co., Chicago, Ill. 514,614, canc. Cl. 55.
Chemische Fabriek L. van der Grinten N. V., Venlo, Netherlands. 620,625, pub. 11–15–55. Cl. 6.
Chicago Metropolitan Home Builders Association, Chicago, Ill. 621,019, pub. 11–15–55. Cl. 103.
Chicago Steel Foundry Co., Chicago, Ill. 514,343, canc. Cl. 14.
Chidester, Ross, Watkins Glen, N. Y. 621,035. Cl. 26.
Chloramine Co.: *See*—
Romans, Isabella B.
Chocolats Fjord S. A., Geneva, Switzerland. 514,382, canc. Cl. 46.
Christensen Machine Co., The, Racine, Wis. 620,826, pub. 11–8–55. Cl. 23.
Clements Mfg. Co., Chicago, Ill. 620,749, pub. 11–8–55. Cl. 21.
Clenzoil Co.: *See*—
Lenz, Ellis C.
Clover Farm Stores Corp., Cleveland, Ohio. 514,528, canc. Cl. 2.
Cleveland Tank Ball Co., Inc., Cleveland, Ohio. 620,676, pub. 11–8–55. Cl. 13.
Club Aluminum Products Co., Chicago, Ill. 620,684, pub. 11–8–55. Cl. 13.
Coating Materials Laboratories, Inc., Belleville, N. J. 620,695, pub. 11–8–55. Cl. 16.
Cole, Robert D., New York, N. Y. 620,912, pub. 11–15–55. Cl. 39.
Colonial-Premier Co., Chicago, Ill. 620,726, pub. 11–8–55. Cl. 21.
Colton Fruit Exchange, Colton, Calif. 226,003, canc. Cl. 46.
Colton Fruit Exchange, Colton, Calif. 228,584, canc. Cl. 46.
Columbia Metal Box Co., New York, N. Y. 620,734, pub. 11–8–55. Cl. 21.
Columbus McKinnon Chain Corp., Tonawanda, N. Y. 620,753, pub. 11–8–55. Cl. 21.
Compton, J., Sons & Webb Ltd., London, England. 620,904, pub. 11–15–55. Cl. 39.
Conducto-Lube Co., Portland, Oreg. 616,486, cor. Cl. 21.
Conradty, C., Nurnberg, Germany. 616,127, cor. Cl. 21.
Consolidated Cigar Corp., New York, N. Y. 385,465, canc. Cl. 17.
Consolidated Cover Co., San Francisco, Calif. 620,599, pub. 11–15–55. Cl. 2.
Consolidated Metal Products Corp., Albany, N. Y. 620,611–13, pub. 11–8–55. Cl. 4.
Cook Paint & Varnish Co., Kansas City, Mo. 620,700, pub. 11–8–55. Cl. 16.
Cooke & Cobb Co., The, New York, N. Y. 281,078, canc. Cl. 37.
Cooke & Cobb Co., The, New York, N. Y. 302,027, canc. Cl. 37.
Copperweld Steel Co., Glassport, Pa. 620,666, pub. 11–8–55. Cl. 13.
Copperweld Steel Co., Glassport, Pa. 620,735, pub. 11–8–55. Cl. 21.
Coro, Inc., New York, N. Y. 620,850, pub. 11–8–55, Cl. 28.
Coru-Ply Corp., Murfreesboro, N. C. 620,652, pub. 11–8–55. Cl. 12.
Cowles Magazines, Inc., New York, N. Y. 426,031, canc. Cl. 38.
Crane Co., Chicago, Ill. 620,865, pub. 11–8–55. Cl. 34.
Crescent Co., Inc., The, Pawtucket, R. I. 620,755, pub. 11–8–55. Cl. 21.
Crescent Metal Products, Inc., Cleveland, Ohio. 620,861, pub. 11–8–55. Cl. 32.
Crown Coffee Co.: *See*—
Richheimer, William.
Curtiss-Wright Corp., Caldwell, N. J. 620,720, pub. 11–8–55. Cl. 19.
Custom Crown Mat Co., Inc., Los Angeles, Calif. 620,719, pub. 11–8–55. Cl. 19.
Cutter Laboratories, Berkeley, Calif. 620,710, pub. 11–8–55. Cl. 18.
Dameron Enterprises, Inc., Louisville, Ky. 621,010, pub. 11–15–55. Cl. 52.
Damon Creations, Inc., New York, N. Y. 514,426, canc. Cl. 39.
Danbury Rubber Co., Inc., Danbury, Conn. 442,341, canc. Cl. 39.
Daumit, Kay, Inc., to Barbara Gould, Inc., Chicago, Ill. 438,505, canc. Cl. 6.
Davenport Hosiery Mills, Inc., Chattanooga, Tenn. 620,916, pub. 11–8–55. Cl. 39.
Davenport Hosiery Mills, Inc., Chattanooga, Tenn. 620,935, pub. 11–15–55. Cl. 39.
Davis, Hudson W., Borger, Tex. 620,896, pub. 11–15–55. Cl. 38.
Davis & Lawrence Co., Dobbs Ferry, N. Y. 620,976, pub. 11–15–55. Cl. 46.
De Havilland Engine Co. Ltd., The, Edgware, Middlesex, England. 620,778, pub. 11–8–55. Cl. 23.
Delkote, Inc., Wilmington, Del. 620,620, pub. 11–8–55. Cl. 5.
Dell Products: *See*—
Holtz, Irene L.
Del Mar Engineering Laboratories, Inc., Los Angeles, Calif. 620,766, pub. 11–8–55, Cl. 22.
Delta Electrical Specialty Co., Pasadena, Calif. 620,833, pub. 11–8–55. Cl. 26.
Denison Engineering Co., The, Columbus, Ohio. 620,771, pub. 11–8–55. Cl. 23.
Denny, Karl V., d. b. a. Lucky Lady, Los Angeles, Calif. 620,758, pub. 11–8–55. Cl. 22.
Dental Survey Publications, Inc., Minneapolis, Minn. 620,878, pub. 11–8–55. Cl. 38.
Desiré Foundations, Ltd., New York, N. Y. 514,569, canc. Cl. 39.
Diamond Bros. Co., Trenton, N. J. 621,038. Cl. 32.
Dick, A. B., Co., Chicago, Ill. 514,574, canc. Cl. 26.
Display Guild, Elmhurst, Queens, N. Y. 620,863, pub. 11–8–55. Cl. 32.
Dixie Tool Industries, Inc., Bridgeport, Mich. 620,770, pub. 11–8–55. Cl. 23.
Doane Agricultural Service, Inc., St. Louis, Mo. 621,017, pub. 11–15–55. Cl. 103.
Dobbie McInnes and Clyde Ltd., Glasgow, Scotland. 167,224, canc. Cl. 26.
Dobeckmun Co., The, Cleveland, Ohio. 620,741, pub. 11–8–55. Cl. 21.
Dodge-Culp, Inc., Ridley Park, Pa. 514,509, canc. Cl. 32.
Donnahoe, Ollie N., d. b. a. The Spinalator Co., Asheville, N. C. 620,950, pub. 11–15–55. Cl. 44.
Dormeyer Corp., Chicago, Ill. 620,750, pub. 11–8–55. Cl. 21.
Dortmunder Hansa-Brauerei Aktiengesellschaft, Dortmund, Germany. 317,542, 12(c) pub. 2–7–55. Cl. 48.
Doru Studios, Minneapolis, Minn. 620,910, pub. 11–8–55. Cl. 39.
Dow Corning Corp., Midland, Mich. 514,633, canc. Cl. 42.
Dow Corning Corp., Midland, Mich. 620,607, pub. 11–8–55. Cl. 4.
Dowell Inc., Tulsa, Okla. 621,018, pub. 11–15–55. Cl. 103.
Dowman Water Paints, Inc., Long Beach, Calif. 620,647, pub. 11–8–55. Cl. 12.
Drew, E. F., & Co., Inc., New York, N. Y. 621,012, pub. 11–15–55. Cl. 52.
Drexel Furniture Co., Drexel, N. C. 514,628, canc. Cl. 32.
Driver-Harris Co., Harrison, N. J. 620,730, pub. 11–8–55. Cl. 21.
Drug Products Co., Inc., The, Brooklyn, N. Y. 620,711, pub. 11–8–55. Cl. 18.
Dubl-Chek System, Inc., Sun Valley, Calif. 620,834, pub. 11–8–55. Cl. 26.
Duck, T. S., & Co.: *See*—
Duck, Thomas S.
Duck, Thomas S., d. b. a. T. S. Duck & Co., Ontario, Calif. 514,499, canc. Cl. 32.
Dulcich Bros.: *See*—
Dulcich Brothers.
Dulcich Brothers, d. b. a. Dulcich Bros., Earlimart, Calif. 620,977, pub. 11–15–55. Cl. 46.
Duro-Test Corp., North Bergen, N. J. 620,746–7, pub. 11–8–55. Cl. 21.
Eastman Kodak Co., Rochester, N. Y. 620,949, pub. 11–15–55. Cl. 43.
Elastic Stop Nut Corp. of America, Union, N. J. 620,669, pub. 11–8–55. Cl. 13.
El Camino Citrus Association, Claremont, Calif. 242,218, canc. Cl. 46.
El Camino Citrus Association, Claremont, Calif. 242,609, canc. Cl. 46.
Electronic Research Associates, Inc., North Caldwell, N. J. 620,727, pub. 6–21–55. Cl. 21.
Electrothermal Engineering Ltd., London, England. 621,034. Cl. 26.
Elliott Brothers (London) Ltd., London, England. 620,737, pub. 11–8–55. Cl. 21.

Embassy P. P. Inc.: *See*—
Embassy Plastic Products, Inc.
Embassy Plastic Products, Inc., d. b. a. Embassy P. P. Inc., New York, N. Y. 620,606, pub. 11–15–55. Cl. 3.
Emery Industries, Inc., Cincinnati, Ohio. 620,692, pub. 11–8–55. Cl. 15.
Ernest Sohn Creations, Inc., New York, N. Y. 620,663, pub. 11–8–55. Cl. 13.
Esquire, Inc., New York, N. Y. 329,552, 12(c) pub. 2–7–56. Cl. 38.
Esso Standard Oil Co.: *See*—
Standard Oil Co. of New Jersey.
Esteves, Joseph, New York, N. Y. 621,020, pub. 11–15–55. Cl. 107.
Evenson, Seth M., Minneapolis, Minn. 620,813, pub. 11–8–55. Cl. 23.
Everedy Co., The, Frederick, Md. 620,677–8, pub. 11–8–55. Cl. 13.
Faber-Castell, A. W., Pencil Co., Inc., Newark, N. J. 620,623, pub. 11–8–55. Cl. 5.
Fabricraft of California, Los Angeles, Calif. 602,659, pub. 11–8–55. Cl. 12.
Fabrique d'Horlogerie Chs. Tissot & Fils Societe Anonoyme, Le Locle, Switzerland. 514,601, canc. Cl. 27.
Fabrique d'Horlogerie Chs. Tissot & Fils Societe Anonyme, Le Locle, Switzerland. 514,603, canc. Cl. 27.
Fairway Foods, Inc.: *See*—
Twin City Wholesale Grocer Co.
Famous Funnies, Inc., Waterbury, Conn. 514,559, canc. Cl. 38.
Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. 620,627, pub. 11–15–55. Cl. 6.
Fawcett Publications, Inc., Greenwich, Conn. 514,558, canc. Cl. 38.
Feature Publications, Inc., New York, N. Y. 514,473, canc. Cl. 38.
Feder, R.: *See*—
Feder, Ruby.
Feder, Ruby, d. b. a. R. Feder, Los Angeles, Calif. 514,637, canc. Cl. 12.
Feedrite Ltd., Merton Park, London, England. 620,597, pub. 11–15–55. Cl. 2.
Ferguson Publishing Co., New York, N. Y. 514,452, canc. Cl. 38.
Ferris Products Co., Inc., Eau Claire, Wis. 620,829, pub. 11–8–55. Cl. 23.
52 Association of New York, Inc., The, New York, N. Y. 620,993, pub. 11–15–55. Cl. 50.
Fitchburg Spinners Sales Corp., Fitchburg, Mass. 620,948, pub. 11–15–55. Cl. 43.
Flexfirm Products, El Monte, Calif. 620,938, pub. 11–15–55. Cl. 42.
Florence Stove Co., Gardner, Mass. 514,368, canc. Cl. 34.
Florsheim Shoe Co., The, Chicago, Ill. 620,930, pub. 11–15–55. Cl. 39.
Focal Press, Inc., New York, N. Y. 620,897, pub. 11–15–55. Cl. 38.
Fomund, Bernard, d. b. a. Timely Events, Chicago, Ill. 620,888, pub. 11–15–55. Cl. 38.
Food Machinery and Chemical Corp., San Jose, Calif. 620,817, pub. 11–8–55. Cl. 23.
Ford Motor Co., Dearborn, Mich. 514,607, canc. Cl. 2.
Fordath Engineering Co. Ltd., The, West Bromwich, England. 620,621, pub. 11–8–55. Cl. 5.
Forgrove Machinery Co. Ltd., The, Leeds, England. 620,791–2, pub. 11–8–55. Cl. 23.
Foster, Charles, New York, N. Y. 514,547, canc. Cl. 26.
Fowler Co.: *See*—
Fowler, Herman J.
Fowler, Herman J., d. b. a. Fowler Co., Chicago, Ill. 514,624, canc. Cl. 26.
Frankenstein, P., & Sons (Manchester) Ltd., Manchester, England. 620,927, pub. 11–8–55. Cl. 39.
French, Thomas, & Sons Ltd., Manchester, England. 332,925, ren. 3–3–56. Cl. 13.
French, Thomas, & Sons Ltd., Manchester, England. 332,926, ren. 3–3–56. Cl. 40.
Gantner & Mattern Co., San Francisco, Calif. 329,845, ren. 11–12–55. Cl. 39.
Gardiner Shoe Co., Inc., Gardiner, Maine. 620,932, pub. 11–15–55. Cl. 39.
Gasser Coffee Co., The, Toledo, Ohio. 72,042, canc. Cl. 46.
Gay, Robert C., d. b. a. Ohio Wire Products Co., Columbus, Ohio. 620,686, pub. 11–8–55. Cl. 13.
General Aniline & Film Corp., New York, N. Y. 620,839, pub. 11–8–55. Cl. 26.
General Aniline & Film Corp., New York, N. Y. 621,033. Cl. 26.
General Electric Co., Schenectady, N. Y. 620,745, pub. 11–8–55. Cl. 21.
General Finance Corp., Chicago, Ill. 514,608, canc. Cl. 55.
General Grocery Co., Inc.: *See*—
Allen & Lewis.
General Mills, Inc.: *See*—
Sperry Flour Co.
General Mills, Inc., Minneapolis, Minn. 333,305, ren. 3–17–56. Cl. 46.
General Shoe Corp.: *See*—
Jarman Shoe Co.
General Tire & Rubber Co., The, Akron, Ohio. 620,729, pub. 11–8–55. Cl. 21.
Gillette Publishing Co., Chicago, Ill. 620,894, pub. 11–8–55. Cl. 38.
Girling Ltd., Birmingham, England. 620,722, pub. 11–8–55. Cl. 19.
Gits Molding Corp., Chicago, Ill. 620,603, pub. 11–15–55. Cl. 2.
Glendinning, McLeish & Co. Inc., New York, N. Y. 514,635, canc. Cl. 39.
Globe Brewing Co., The, d. b. a. Hals Brewing Co., Baltimore, Md. 620,986, pub. 11–15–55. Cl. 48.
Gobshops of America, Inc., Pawtucket, R. I. 620,928, pub. 11–15–55. Cl. 39.
Goldblatt Tool Co., Kansas City, Mo. 620,831, pub. 11–8–55. Cl. 23.
Goldman, Simmons & Co., Los Angeles, Calif. 259,803, canc. Cl. 39.
Goldstein-Gerson Co., Inc., New York, N. Y. 620,846–7, pub. 11–8–55. Cl. 27.
Gooderham & Worts Ltd., Peoria, Ill. 334,217, ren. 4–21–56. Cl. 49.
Goodrich, B. F., Chemical Co.: *See*—
Goodrich, B. F., Co., The.
Goodrich, B. F., Co., The, d. b. a. B. F. Goodrich Chemical Co., New York, N. Y. 620,628, pub. 11–15–55. Cl. 6.
Goodyear Tire & Rubber Co., The, Akron, Ohio. 620,869, pub. 11–8–55. Cl. 35.
Gordon's Dry Gin Co. Ltd., Linden, N. J. 620,990, pub. 11–15–55. Cl. 49.
Gorham Mfg. Co., Providence, R. I. 620,851, pub. 11–8–55. Cl. 28.
Gould, Barbara, Inc.: *See*—
Daumit, Kay, Inc.
Gould, Barbara, Inc., New York, N. Y. 435,110, canc. Cl. 6.
Gould Novelties, Inc., New York, N. Y. 621,039. Cl. 46.
Grad, David, Co., New York, N. Y. 514,595, canc. Cl. 28.
Graham Paper Co., St. Louis, Mo. 620,655, pub. 11–8–55. Cl. 12.
Grand Union Co., The, East Paterson, N. J. 620,973, pub. 11–15–55. Cl. 46.
Gran-Paw Wine Co.: *See*—
St. Julian Wine Co., Inc.
Grant Pulley & Hardware Corp., Flushing, N. Y. 620,681, pub. 11–8–55. Cl. 13.
Gravymaster Co., Inc., Long Island City, N. Y. 330,747, 12(c) pub. 2–7–56. Cl. 46.
Great Lakes Varnish Works, Inc., Chicago, Ill. 549,841, canc. Cl. 16.
Green Mountain Packing Co. Inc., St. Albans, Vt. 620,983, pub. 11–15–55. Cl. 46.
Guy Gautier & Co., Cognac (Charente), France. 620,987, pub. 11–15–55. Cl. 49.
Haan, R. M., Candy Co., Inc., Long Island City, N. Y. 514,464, canc. Cl. 46.
Hachmeister-Inc., Stove Township, Pittsburgh, Pa. 620,650, pub. 11–8–55. Cl. 12.
Hage & Azrak Co., Brooklyn, N. Y. 514,523, canc. Cl. 39.
Halladay Studios, Inc., Minneapolis, Minn., to Viewmaller Co., Chicago, Ill. 620,838, pub. 10–25–55. Cl. 26.
Hals Brewing Co.: *See*—
Globe Brewing Co., The.
Hamilton Metal Products Co., The, Hamilton, Ohio. 620,601, pub. 11–15–55. Cl. 2.
Harman, H. E., Coal Corp., to Harman Mining Corp., Harman, Va. 329,825, ren. 11–12–55. Cl. 1.
Harman Mining Corp.: *See*—
Harman, H. E., Coal Corp.
Hart Schaffner & Marx, Chicago, Ill. 514,445–6, canc. Cl. 39.
Hart Schaffner & Marx, Chicago, Ill. 620,908, pub. 11–15–55. Cl. 39.
Hauptman Feather Co., Inc., New York, N. Y. 620,862, pub. 11–8–55. Cl. 32.
Hauptman Feather Co., Inc., New York, N. Y. 621,037. Cl. 32.
Hayes Spray Gun Co., Pasadena, Calif. 620,673, pub. 11–8–55. Cl. 13.
Hazeltine, Herbert S., Trust, d. b. a. Hazeltine Packing Co., Los Angeles, Calif. 620,961, pub. 11–15–55. Cl. 46.
Hazeltine Packing Co.: *See*—
Hazeltine, Herbert S., Trust.
Heart of America Venetian Blind Service: *See*—
Richardson, Tolbert E.
Heat Timer Corp., New York, N. Y. 621,026. Cl. 21.
Hecht & Biern, Inc., New York, N. Y. 620,933, pub. 11–15–55, Cl. 39.
Hedlund, W. T., Co., Los Angeles, Calif. 620,725, pub. 2–22–55. Cl. 21.
Hermann Mfg. Co., Lancaster, Ohio, to John W. Bolton & Sons, Inc., Lawrence, Mass. 620,772, pub. 11–8–55. Cl. 23.
Herrin, Inez L., Los Angeles, Calif. 514,525, canc. Cl. 38.
Hettrick Mfg. Co., The, Toledo, Ohio. 620,994–5, pub. 11–15–55. Cl. 50.
Hewes & Potter, Inc., Boston, Mass. 514,488, canc. Cl. 39.
Highgrove Fruit Association, Highgrove, Calif. 215,288, canc. Cl. 46.
Highway Truck Equipment Co.: *See*—
Wilkinson, Richard G.
Hinderliter, Don R., Inc., Tulsa, Okla. 620,679, pub. 11–8–55. Cl. 13.
Hoffman Electronics Corp.: *See*—
Hoffman Radio Corp.
Hoffman Radio Corp., Los Angeles, Calif., now by change of name Hoffman Electronics Corp. 620,728, pub. 11–8–55. Cl. 21.
Holt & Birch Tax Service: *See*—
Holt, John C.
Holt, John C., also d. b. a. Holt & Birch Tax Service, Mount Vernon, Ill. 621,014, pub. 11–15–55. Cl. 101.
Holeproof Hosiery Co., Milwauke, Wis. 514,381, canc. Cl. 39.
Holland, Julian, Providence, R. I. 620,667, pub. 11–8–55. Cl. 13.
Hollywood-Maxwell Co., Los Angeles, Calif. 620,919, pub. 11–15–55. Cl. 39.
Holtz, Irene L., d. b. a. Dell Products, Plainfield, N. J. 514,594, canc. Cl. 6.

Horn, A. C., Co., to Sun Chemical Corp., Long Island City, N. Y. 329,664, ren. 11–5–55. Cl. 16.
Horne, M. & N., Ltd., Clerkenwell, London, England. 514,629, canc. Cl. 39.
Howe Scale Co., Inc., The, Rutland, Vt. 620,836, pub. 11–8–55. Cl. 26.
Hubbard, C. D., Fruit Co., Carpinteria, Calif. 238,268, canc. Cl. 46.
Hubert, William J., d. b. a. Auto-Bye Co., Los Angeles, Calif. 514,616, canc. Cl. 32.
Hyde Mfg. Co., Southbridge, Mass. 326,953, ren. 8–13–55. Cl. 23.
Hydro-Line Mfg. Co., Rockford, Ill. 620,798, pub. 11–8–55. Cl. 23.
Indian Head Mills, Inc.: *See*—
Naumkeag Steam Cotton Co.
Ingram, Frederick F., Detroit, Mich. 52,177, canc. Cl. 6.
Ingram, Frederick F., Detroit, Mich. 60,851, canc. Cl. 6.
Ingram, Frederick F., Co., Detroit, Mich. 136,478, canc. Cl. 6.
Ingram, Frederick F., Co., Detroit, Mich. 216,514, canc. Cl. 6.
Ingram, Frederick F., Co., Detroit, Mich. 253,540, canc. Cl. 4.
Ingram, Frederick F., Co., Detroit, Mich. 253,700, canc. Cl. 4.
Intermedico Corp., Floral Park, N. Y. 620,705, pub. 5–31–55. Cl. 18.
International Instruments, Inc., New Haven, Conn. 620,837, pub. 11–8–55. Cl. 26.
Interstate Bakeries Corp., Kansas City, Mo. 620,968, pub. 6–21–55. Cl. 46.
Isaacson Iron Works, Seattle, Wash. 620,668, pub. 11–8–55. Cl. 13.
Jaeger Machine Co., The, Columbus, Ohio. 620,776, pub. 11–8–55. Cl. 23.
Jarman Shoe Co. General Shoe Corp., Nashville, Tenn. 301,247. Am. 7(d). Cl. 39.
Jarrow Products, Inc., Chicago, Ill. 620,858, pub. 11–8–55. Cl. 31.
Jaymar Specialty Co., Brooklyn, N. Y. 620,759, pub. 11–8–55. Cl. 22.
Jem Camera Co., The, Newark, N. J. 514,575–6, canc. Cl. 26.
Jensen, Albert O., Omaha, Nebr. 620,724, pub. 11–8–55. Cl. 19.
Jensen, Georg, Inc., New York, N. Y. 620,631, pub. 11–15–55. Cl. 8.
Jensen, Georg, Inc., New York, N. Y. 620,937, pub. 11–15–55. Cl. 40.
Jewel Paint and Varnish Co., Chicago, Ill. 333,340, ren. 3–17–56. Cl. 16.
Jewel Paint & Varnish Co., Chicago, Ill. 334,098, ren. 4–21–56. Cl. 52.
Jewell, J. D., Inc., Gainesville, Ga. 620,974–5, pub. 11–15–55. Cl. 46.
Johnson & Johnson, New Brunswick, N. J. 620,951, pub. 11–15–55. Cl. 44.
Johnson Mfg. Co., Lubbock, Tex. 620,820, pub. 11–8–55. Cl. 23.
Johnston Export Publishing Co., New York, N. Y. 620,890, pub. 11–15–55. Cl. 38.
Johnston, Lewis E., Winter Garden, Fla. 514,619, canc. Cl. 23.
Jones, Herbert S., d. b. a. Jones Shutter Products, Miami, Fla. 620,645, pub. 11–8–55. Cl. 12.
Jones Shutter Products: *See*—
Jones, Herbert S.
Joseph Bulova School of Watchmaking, The, Woodside, N. Y. 620,881, pub. 11–15–55. Cl. 38.
Juilliard, A. D., & Co., Inc., New York, N. Y. 620,942, pub. 11–15–55. Cl. 42.
Kaiser-Frazer Corp., Willow Run, Mich. 514,548–9, canc. Cl. 19.
Kane, Robert P., d. b. a. Maplewood Products, Malden, Mass. 620,617, pub. 11–15–55. Cl. 4.
Karpen, S., & Bros., Huntington Park, Calif. 514,408, canc. Cl. 32.
Karpen, S., & Bros., Chicago, Ill. 514,457, canc. Cl. 32.
Kays (Manchester) Ltd., Manchester, England. 514,454, canc. Cl. 39.
Kearfott Co., Inc., Clifton, N. J. 620,740, pub. 11–8–55. Cl. 21.
Kellogg Co., Battle Creek, Mich. 333,916, ren. 4–14–56. Cl. 46.
Kemp, E. F., Inc., Somerville, Mass. 514,483, canc. Cl. 46.
Kent Corp., The, Covington, Ky. 621,036. Cl. 32.
Keuffel & Esser Co., Hoboken, N. J. 620,835, pub. 11–8–55. Cl. 26.
Keuffel & Esser Co., Hoboken, N. J. 620,872, pub. 11–8–55. Cl. 37.
Keystone Lubricating Co., Philadelphia, Pa. 620,626, pub. 11–15–55. Cl. 6.
King Refrigerator Corp., Glendale, N. Y. 620,860, pub. 11–8–55. Cl. 31.
Kip-Craft Enterprises: *See*—
Rosser, Clifford C.
Kirby, Block & Co., New York, N. Y. 372,819, canc. Cl. 38.
Kleinzway, Inc., d. b. a. Waltco Products, Chicago, Ill. 620,596, pub. 11–15–55. Cl. 2.
Koehler, Karl, Coopersburg, Pa. 620,886, pub. 11–15–55. Cl. 38.
Kordite Corp., Macedon, N. Y., to Textron American, Inc., Providence, R. I. 620,602, pub. 11–8–55. Cl. 2.
Kreiss, Sidney J., Inc., New York, N. Y. 620,923, pub. 11–8–55. Cl. 39.
Kronish, Herbert, Beverly Hills, Calif. 621,016, pub. 11–15–55. Cl. 103.
Kusiel Chemical Co.: *See*—
Kusiel, Rose.
Kusiel, Rose, d. b. a. Kusiel Chemical Co., New York, N. Y. 621,008, pub. 11–15–55. Cl. 52.
Kybernetes Corp., The, Newark, N. J. 620,742, pub. 11–8–55. Cl. 21.
Lachman, I., & Sons Co., Seattle, Wash. 620,848, pub. 11–8–55. Cl. 28.
La Fleur, Clifton H., d. b. a. Sales Engineering Institute, Detroit Lakes, Minn. 620,870, pub. 11–8–55. Cl. 37.
Landis Machine Co., Waynesboro, Pa. 620,822, pub. 11–8–55. Cl. 23.
Lane Brothers Co., Boston, Mass. 514,389, canc. Cl. 39.
Lano Corp., New York, N. Y. 620,632, pub. 11–15–55. Cl. 8.
Lassio, Stephen E., Brooklyn, N. Y. 620,844, pub. 11–8–55. Cl. 26.
Lauffer, H. E., Co., Inc., New York, N. Y. 620,768, pub. 11–8–55. Cl. 23.
Lebow Bros., Inc., Baltimore, Md. 620,903, pub. 11–8–55. Cl. 39.
Lee Ltd.: *See*—
Castillian Products Corp.
Lee Ltd., Beverly Hills, Calif. 621,041. Cl. 51.
Lee, Toni, Ltd., New York, N. Y. 620,907, pub. 11–15–55. Cl. 39.
Lehn & Fink Products Corp., Bloomfield, N. J. 621,004–5, pub. 11–15–55. Cl. 51.
Lenz, Ellis C., d. b. a. Clenzoil Co., Canton, Ohio. 621,007, pub. 11–15–55. Cl. 52.
Lenzner, Sol, Corp., Buffalo, N. Y. 620,967, pub. 11–15–55. Cl. 46.
Le Rae Hat Co, Baer, Sternberg & Cohen, St. Louis, Mo. 278,507. Am. 7(d). Cl. 39.
Lerner Stores Corp., to Associated Lerner Shops of America, Inc., New York, N. Y. 333,971, ren. 4–14–56. Cl. 39.
Levy Brothers' Clothing Co., Tucson, Ariz. 514,466, canc. Cl. 39.
Liberty Gold Co., Inc.: *See*—
Liberty Gold Fruit Co.
Liberty Gold Fruit Co., to Liberty Gold Co., Inc., San Francisco, Calif. 330,490, ren. 12–3–55. Cl. 46.
Liftruck & Equipment Co., Seattle, Wash. 620,998, pub. 11–15–55. Cl. 50.
Liquor Dealers Supply Co., Chicago, Ill., to Schenley Distillers, Inc., Wilmington, Del. 328,458, ren. 10–1–55. Cl. 49.
Lovalon Foundations, Inc., New York, N. Y. 514,645, canc. Cl. 39.
Lucido, Philip C., d. b. a. Reliable Utilities Co., St. Louis, Mo. 620,810, pub. 11–8–55. Cl. 23.
Lucky Lady: *See*—
Denny, Karl V.
Lugene Inc.: *See*—
Silson, Victor.
Lunkenheimer Co., The, Cincinnati, Ohio. 620,789, pub. 11–8–55. Cl. 23.
Luro Products Co. Inc., New York, N. Y. 620,852, pub. 11–8–55. Cl. 28.
M. P. H. Mfg. Corp., Inc., Chicago, Ill. 620,644, pub. 11–8–55. Cl. 12.
Manchester Hosiery Mills, Manchester, N. H. 620,922, pub. 11–8–55. Cl. 39.
Mann, Harry, Chicago, Ill. 514,540, canc. Cl. 26.
Manos and Block Furs Inc., New York, N. Y. 620,901, pub. 1–15–55. Cl. 39.
Maplewood Products: *See*—
Kane, Robert P.
Marco Products: *See*—
Martin, Stephen P.
Margolin, H., & Co., Inc., New York, N. Y. 331,474, ren. 1–7–56. Cl. 3.
Markwell Mfg. Co., Inc., New York, N. Y. 620,682, pub. 11–8–55. Cl. 13.
Marlboro Fabrics, Inc., New York, N. Y. 620,939, pub. 11–15–55. Cl. 42.
Marquis Recordings, Inc., Princeton, N. J. 514,506, canc. Cl. 36.
Martin, Stephen P., d. b. a. Marco Products, Bridgeport, Conn. 620,764, pub. 11–8–55. Cl. 22.
Maryem, Harrodsburg, Ky. 514,430, canc. Cl. 39.
Mauck Co., The, Minneapolis, Minn. 620,762, pub. 11–8–55. Cl. 22.
Maureen Mfg. Co., Inc., Chicago, Ill. 620,929, pub. 11–8–55. Cl. 39.
Mawin Stores, Inc., Trenton, N. J. 620,751, pub. 11–8–55. Cl. 21.
Mayo, Robert S., d. b. a. Mayo Tunnel and Mine Equipment, Lancaster, Pa. 620,648, pub. 11–8–55. Cl. 12.
Mayo Tunnel and Mine Equipment: *See*—
Mayo, Robert S.
McArthur, Warren, Corp., Bantam, Conn. 514,341, canc. Cl. 19.
McGuinness, L. J., & Co., Ltd., Mimico, Ontario, Canada. 620,989, pub. 11–15–55. Cl. 49.
McNulty, Dan & Dot: *See*—
McNulty, Daniel H.
McNulty, Daniel H., d. b. a. Dan & Dot McNulty, Evanston, Ill. 620,765, pub. 11–8–55. Cl. 22.
Metropolitan Industries, Inc., Chicago, Ill. 514,556–7, canc. Cl. 26.
Miami Merchandise Mart Association, Inc., Miami, Fla. 620,702, pub. 11–8–55. Cl. 16.
Michigan Plastic Products, Inc., Grand Haven, Mich. 620,600, pub. 11–15–55. Cl. 2.
Midland Distributing Co.: *See*—
Pigott, George A.
Midwest Soil Builders, Stitzer, Wis. 620,638, pub. 11–15–55. Cl. 10.
Milady Brassiere & Corset Co., New York, N. Y. 514,627, canc. Cl. 39.

Mill Devices Co., Gastonia, N. C. 620,775, pub. 11–8–55. Cl. 23.
Miller, E. S., Laboratories, Inc., Los Angeles, Calif. 514,360, canc. Cl. 6.
Miller-Schulman Corp., New York, N. Y. 620,924, pub. 11–15–55. Cl. 39.
Minnesota Mining & Mfg. Co., St. Paul, Minn. 620,609, pub. 11–8–55. Cl. 4.
Mississippi Publishers Corp., Jackson, Miss. 620,893, pub. 11–15–55. Cl. 38.
Modene Paint Co., Inc., The, Chelsea, Mass. 620,697, pub. 11–8–55. Cl. 16.
Monarch Rug Mills, Dalton, Ga. 620,943, pub. 11–15–55. Cl. 42.
Motor Wheel Corp., Lansing, Mich. 620,802–4, pub. 11–8–55. Cl. 23.
Motorola, Inc., Chicago, Ill. 620,672, pub. 11–8–55. Cl. 13.
Mouttle, Inc., Newburgh, N. Y. 620,662, pub. 11–8–55. Cl. 12.
Mullins, John, & Sons, Inc.: *See*—
Buckley-Newhall Co., The.
Munising Paper Co., The, Chicago, Ill., and Munising, Mich. 514,618, canc. Cl. 40.
Munro Damproofings, Inc., New York, N. Y. 620,656, pub. 11–8–55. Cl. 12.
Nachman, L., & Son, Inc., Philadelphia, Pa., to Swirl, Inc., Easley, S. C. 620,902, pub. 11–8–55. Cl. 39.
Namm, A. I., & Son, d. b. a. The Namm Store, to Namm-Loeser's Inc., Brooklyn, N. Y. 329,912, ren. 11–19–55. Cl. 39.
Namm-Loeser's Inc.: *See*—
Namm, A. I., & Son.
Namm Store, The: *See*—
Namm, A. I., & Son.
National Publishing Co., Philadelphia, Pa. 620,880, pub. 11–15–55. Cl. 38.
National Silver Co., New York, N. Y. 620,797, pub. 11–8–55. Cl. 23.
National Silver Co., New York, N. Y. 620,854, pub. 11–8–55. Cl. 28.
Naumkeag Steam Cotton Co., Salem, Mass., to Indian Head Mills, Inc., New York, N. Y. 108,809, ren. 2–29–56. Cl. 42.
Needham Mfg. Co., Inc., Needham Heights, Mass. 621,030. Cl. 23.
Needle Industries Ltd., Birmingham, England. 514,513, canc. Cl. 40.
Nelson Parks Corp., Seattle, Wash. 620,821, pub. 11–8–55. Cl. 23.
Newark Packing Co., Inc., Newark, N. J. 620,979, pub. 11–15–55. Cl. 46.
Newbro Mfg. Co., Atlanta, Ga. 620,999, pub. 4–20–54. Cl. 51.
New England Trading Corp., Boston, Mass. 620,882, pub. 11–15–55. Cl. 38.
New Jersey Machine Corp., Hoboken, N. J. 620,786, pub. 11–8–55. Cl. 23.
New Plastic Corp., Los Angeles, Calif. 620,777, pub. 11–8–55. Cl. 23.
Ninon Brassiere Mfg. Co., New York, N. Y. 514,564–5, canc. Cl. 39.
Nohel Mfg. Corp., Providence, R. I. 620,918, pub. 11–8–55. Cl. 39.
No O Seat Mfg. Co.: *See*—
Ring, Sylvanus C.
Norden Laboratories, Lincoln, Nebr. 620,713, pub. 11–8–55. Cl. 18.
North Star Woolen Mill Co., Lima, Ohio. 620,941, pub. 11–15–55. Cl. 42.
Norwich Knitting Co., Norwich, N. Y. 620,898, pub. 11–15–55. Cl. 39.
Novaceta Nuova Filatura Acetato S. P. A., Milan, Italy. 620,945–6, pub. 11–15–55. Cl. 43.
Nu-Swift Ltd., Elland, England. 620,814, pub. 11–8–55. Cl. 23.
Oakes, E. T., Corp., The, Islip, N. Y. 620,779, pub. 11–8–55. Cl. 23.
Oakite Products, Inc., New York, N. Y. 621,011, pub. 11–15–55. Cl. 52.
Ocean Products, Inc., Tampa, Fla. 620,978, pub. 11–15–55. Cl. 46.
Ocrietfabriek, N. V., Baarn, Netherlands. 620,671, pub. 11–8–55. Cl. 13.
Ohio National Bank of Columbus, The, Columbus, Ohio. 621,042. Cl. 102.
Ohio Wire Products Co.: *See*—
Gay, Robert C.
Oil Well Supply Co., Dallas, Tex., to United States Steel Corp., Pittsburgh, Pa. 332,125, ren. 2–4–56. Cl. 23.
Okanagan Turbo Sprayers Ltd., Penticton, British Columbia, Canada. 620,809, pub. 11–8–55. Cl. 23.
Orban, Kurt, Co., Inc., Jersey City, N. J. 621,029. Cl. 23.
Oregon-Washington Pear Bureau, Seattle, Wash. 344,773, canc. Cl. 46.
Ottawa Condensing Co., Ottawa, Kans. 122,100, Canc. Cl. 46.
Owens-Illinois Glass Co., Toledo, Ohio. 620,864, pub. 11–8–55. Cl. 33.
Oxweld Acetylene Co., Chicago, Ill., to Union Carbide and Carbon Corp., New York, N. Y. 108,613, ren. 2–15–56. Cl. 14.
Pacific Grinding Wheel Co., Everett, Wash. 620,608, pub. 11–8–55. Cl. 4.
Pacific Knitting Mills, Inc., Los Angeles, Calif. 161,579, canc. Cl. 39.
Package Machinery Co., East Longmeadow, Mass. 620,812, pub. 11–8–55. Cl. 23.
Panogen, Inc., Ringwood, Ill. 620,769, pub. 11–8–55. Cl. 23.
Par Beverage Corp.: *See*—
Tom Collins Corp., The.
Paragon Oil Burner Corp., Long Island City, N. Y. 620,866, pub. 11–8–55. Cl. 34.
Parco Co., Inc., The, New York, N. Y. 620,885, pub. 11–15–55. Cl. 38.
Parker, Royce L., Inc., Bellwood, Ill. 514,337, canc. Cl. 34.
Parks, H. G., Inc., Baltimore, Md. 620,981, pub. 11–15–55. Cl. 46.
Parsons Corp.: *See*—
Parsons Industries, Inc.
Parsons Industries, Inc., Traverse City, to Parsons Corp., Detroit, Mich. 514,553, canc. Cl. 19.
Pastoret, Pierre P., d. b. a. Pierre's Enterprises, St. Paul, Minn. 620,703–4, pub. 11–8–55. Cl. 16.
Paul Laboratory: *See*—
Sirlin, Paul.
Peck, Stow & Wilcox Co., The, Southington, Conn. 620,782, pub. 11–8–55. Cl. 23.
Peckat, Charles, Mfg. Co., Maywood, Ill. 514,570, canc. Cl. 19.
Peek, Frean & Co., Ltd. Peek, Frean & Co., Ltd., London, England. 279,517. Am. 7(d). Cl. 46.
Peek, Frean & Co., Ltd. Peek, Frean & Co., Ltd., London, England. 281,775. Am. 7(d). Cl. 46.
Pennsylvania Salt Mfg. Co., The, Philadelphia, Pa. 620,629, pub. 11–8–55. Cl. 6.
Pennsylvania Salt Mfg. Co., The, Philadelphia, Pa. 620,643, pub. 7–12–55. Cl. 12.
Pennsylvania Saw Corp., York, Pa. 620,694, pub. 7–12–55. Cl. 16.
People's Packing Corp., San Diego, Calif. 514,623, canc. Cl. 46.
Perkins, F., Ltd., Peterborough, England. 620,785, pub. 11–8–55. Cl. 23.
Peter Pan Foundations, Inc., New York, N. Y. 514,524, canc. Cl. 39.
Peters, Thomas B. R., Kansas City, Mo. 620,763, pub. 11–8–55. Cl. 22.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 620,709, pub. 11–8–55. Cl. 18.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 620,956, pub. 11–8–55. Cl. 46.
Philadelphia Gear Works, Inc., Philadelphia, Pa. 620,801, pub. 11–8–55. Cl. 23.
Philamon Laboratories, Inc., Brooklyn, N. Y. 620,731, pub. 4–12–55. Cl. 21.
Phillips, Herbert R., d. b. a. Sport Fishing Boats Co., Massapequa, N. Y. 620,721, pub. 11–8–55. Cl. 19.
Phoenix Candy Co. Inc., Brooklyn, N. Y. 620,962, pub. 11–15–55. Cl. 46.
Physicians and Hospitals Supply Co., Inc., d. b. a. Ulmer Pharmacal Co., Minneapolis, Minn. 620,706, pub. 6–28–55. Cl. 18.
Pierre's Enterprises: *See*—
Pastoret, Pierre P.
Pigott, George A., d. b. a. Midland Distributing Co., Minneapolis, Minn. 620,807–8, pub. 11–8–55. Cl. 23.
Pittsburgh Athletic Association, Pittsburgh, Pa. 620,883, pub. 11–8–55. Cl. 38.
Placentia Co-Operative Orange Association, Placentia, Calif. 235,545, canc. Cl. 46.
Placentia Co-Operative Orange Association, Placentia, Calif. 235,587, canc. Cl. 46.
Plastic Products Corp., Bedford Heights, Ohio. 620,604, pub. 11–15–55. Cl. 2.
Polyscope Equipment & Appliance Co. Inc., Brooklyn, N. Y. 514,530, canc. Cl. 19.
Popp, Carol M., Fort Wayne, Ind. 621,021, pub. 11–15–55. Cl. 107.
Portland Packing Co., Portland, Maine. 514,480, canc. Cl. 46.
Prem Products Corp., New York, N. Y. 620,674, pub. 11–8–55. Cl. 13.
Premier Peat Moss Corp., New York, N. Y. 620,635, pub. 11–15–55. Cl. 10.
Pressure Services, Inc., Dallas, Tex. 620,787, pub. 11–8–55. Cl. 23.
Price, D. W., Corp., Los Angeles, Calif. 620,680, pub. 11–8–55. Cl. 13.
Product Advancement Corp., Benton Harbor, Mich. 514,647, canc. Cl. 46.
Product Enterprises Corp., New York, N. Y. 621,000, pub. 5–10–55. Cl. 51.
Proportioneers, Inc., Providence, R. I. 620,859, pub. 11–8–55. Cl. 31.
Publishers' Development Corp., Chicago, Ill. 620,889, pub. 11–15–55. Cl. 38.
Puerto Rico Distilling Co., Arecibo, to Puerto Rico Distilling Co., Arecibo and San Juan, Puerto Rico. 330,237, ren. 11–26–55. Cl. 49.
Puerto Rico Distilling Co., Arecibo and Barrio Miramar, Arecibo, to Puerto Rico Distilling Co., Arecibo and San Jan, Puerto Rico. 330,505, ren. 12–3–55. Cl. 49.
Pullman Vacuum Cleaner Corp., Boston, Mass. 620,752, pub. 11–8–55. Cl. 21.
Race & Race, Inc., Winter Haven, Fla. 620,830, pub. 11–8–55. Cl. 23.
Radiator Specialty Co., Charlotte, N. C. 620,718, pub. 11–8–55. Cl. 19.
Rand Co., The, North Tonawanda, by Sperry Rand Corp., New York, N. Y. 110,356, 12(c) pub. 2–7–56. Cl. 37.
Rand Co., The, North Tonawanda, by Sperry Rand Corp., New York, N. Y. 116,458, 12(c) pub. 2–7–56. Cl. 37.
Rauth Farms, Delray Beach, Fla. 621,040. Cl. 46.
Realistic Co., The, Cincinnati, Ohio. 621,003, pub. 11–15–55. Cl. 51.
Reardon Co., The, St. Louis County, Mo. 620,622, pub. 11–8–55. Cl. 5.
Red Owl Stores, Inc., Hopkins, Minn. 620,957, pub. 11–15–55. Cl. 46.
Reed Development Corp., McLean, Va. 620,892, pub. 11–15–55. Cl. 38.

Reis, Robert, & Co., New York, N. Y. 620,905, pub. 11–15–55. Cl. 39.
Reliable Utilities Co.: *See*—
Lucido, Philip C.
Remington Rand Inc., Buffalo, by Sperry Rand Corp., New York, N. Y. 288,154, 12(c) pub. 2–7–56. Cl. 37.
Remington Rand Inc., Buffalo, by Sperry Rand Corp., New York, N. Y. 288,168, 12(c) pub. 2–7–56. Cl. 32.
Remington Rand Inc., Buffalo, by Sperry Rand Corp., New York, N. Y. 371,824, 12(c) pub. 2–7–56. Cl. 37.
Remington Rand Inc., Buffalo, by Sperry Rand Corp., New York, N. Y. 373,202, 12(c) pub. 2–7–56. Cl. 37.
Remington Rand Inc., Buffalo, by Sperry Rand Corp., New York, N. Y. 385,091, 12(c) pub. 2–7–56. Cl. 23.
Remington Rand Inc., Buffalo, by Sperry Rand Corp., New York, N. Y. 389,269, 12(c) pub. 2–7–56. Cl. 37.
Remington Rand Inc., Buffalo, by Sperry Rand Corp., New York, N. Y. 389,271, 12(c) pub. 2–7–56. Cl. 37.
Remington Rand Inc., Buffalo, by Sperry Rand Corp., New York, N. Y. 392,906, 12(c) pub. 2–7–56. Cl. 37.
Remington Rand Inc., Buffalo, by Sperry Rand Corp., New York, N. Y. 401,190, 12(c) pub. 2–7–56. Cl. 23.
Rhodes, James H., & Co., Chicago, Ill. 620,610, pub. 11–8–55. Cl. 4.
Rhodes, Laird K., Shawnee-on-the-Delaware, Pa. 620,616, pub. 11–15–55. Cl. 4.
Richardson, Tolbert E., d. b. a. Heart of America Venetian Blind Service, Kansas City, Mo. 514,500, canc. Cl. 32.
Richheimer, William, d. b. a. Crown Coffee Co., Flushing, N. Y. 620,955, pub. 11–24–53. Cl. 46.
Richland Mfg. Co., Richland, Mo. 620,736, pub. 11–8–55. Cl. 21.
Ridge Tool Co., The, Elyria, Ohio. 621,028. Cl. 23.
Ring, Sylvanus C., d. b. a. No O Seat Mfg. Co., Olney, Ill. 620,685, pub. 11–8–55. Cl. 13.
Ring Watch Co. of America, Inc., New York, N. Y. 514,585, canc. Cl. 27.
Rite-Form Corset Co., Inc., New York, N. Y. 514,425, canc. Cl. 39.
Robbins & Myers, Inc., Springfield, Ohio. 514,542, canc. Cl. 34.
Robertshaw-Fulton Controls Co., Greensburg, Pa. 620,843, pub. 11–8–55. Cl. 26.
Rock Island Millwork Co., Rock Island, Ill. 620,661, pub. 11–8–55. Cl. 12.
Roll Formed Products Co., Youngstown, Ohio. 620,688, pub. 11–8–55. Cl. 14.
Romans, Isabella B., d. b. a. Chloramine Co., New York, N. Y. 621,024. Cl. 6.
"Ronette" Piëzo-Electrische Industrie (Ronette P. E. I.), N. V., Amsterdam, Netherlands. 620,732, pub. 11–8–55. Cl. 21.
Rose-Derry Co., Newton, Mass. 514,507, canc. Cl. 32.
Ross, Harold M., d. b. a. Allied Food Products Sales Co., New York, N. Y. 620,970, pub. 11–15–55. Cl. 46.
Rosser, Clifford C., d. b. a. Kip-Craft Enterprises, Cleveland Heights, Ohio. 620,915, pub. 11–15–55. Cl. 39.
Royal Master, Inc., Riverdale, N. J. 620,788, pub. 11–8–55. Cl. 23.
Rugg Mfg. Co., Greenfield, Mass. 620,823, pub. 11–8–55. Cl. 23.
Ruiz Bros.: *See*—
United Farms Co.
Rupp, Josef, d. b. a. Josef Rupp Kasewerk, Lochau, Austria. 620,960, pub. 11–15–55. Cl. 46.
Rupp, Josef, Kasewerk: *See*—
Rupp, Josef.
Russell & Stoll Co., Inc., New York, N. Y. 620,756, pub. 11–8–55. Cl. 21.
Sabre Archery Co., The: *See*—
Stockfleth, Harry C.
St. Julian Wine Co., Inc., d. b. a. Gran-Paw Wine Co., Paw Paw, Mich. 620,985, pub. 11–15–55. Cl. 47.
St. Remy & Cie, Newark, N. J. 620,988, pub. 11–15–55. Cl. 49.
Saks & Co., New York, N. Y. 620,917, pub. 11–15–55. Cl. 39.
Sales Engineering Institute: *See*—
La Fleur, Clifton H.
Saphier, Julian, Gulfport, Miss. 620,634, pub. 11–8–55. Cl. 10.
Savurbat Co., The, Mankato, Minn. 620,717, pub. 11–8–55. Cl. 19.
Schade, H. Edwin Co., The, Camden, N. J. 620,828, pub. 11–8–55. Cl. 23.
Schafer-Nicholson Inc., Utica, N. Y. 514,493, canc. Cl. 28.
Schaffner Mfg. Co., Inc., Pittsburgh, Pa. 620,618, pub. 11–15–55. Cl. 4.
Schalk Chemical Co., Los Angeles, Calif. 620,624, pub. 11–8–55. Cl. 5.
Schenley Distillers, Inc.: *See*—
Liquor Dealers Supply Co.
Schenley Laboratories, Inc., New York, N. Y. 620,716, pub. 11–8–55. Cl. 18.
Schneidereith & Sons, Baltimore, Md. 620,895, pub. 11–8–55. Cl. 38.
Schoene, F., Brass Mfg. Co.: *See*—
Schoene, Fred.
Schoene, Fred, d. b. a. F. Schoene Brass Mfg. Co., Irvington, N. J. 620,793, pub. 11–8–55. Cl. 23.
Schuyler Auction, Albany, N. Y. 620,845, pub. 11–8–55. Cl. 27.
Schwartz, Myron E., Inc., Milwaukee, Wis. 620,855, pub. 11–8–55. Cl. 29.
Scovill Mfg. Co., Waterbury, Conn. 620,683, pub. 11–8–55. Cl. 13.
Seco-Lite Mfg. Co., St. Louis, Mo. 514,545, canc. Cl. 34.
Sensation Magazine, Inc., New York, N. Y. 620,884, pub. 11–15–55. Cl. 38.
Service Supply Co., Denver, Colo. 620,630, pub. 11–8–55. Cl. 6.
Sheffield Hosiery Mills, Inc., Gilbertsville, Pa. 620,936, pub. 11–15–55. Cl. 39.
Sherritt Gordon Mines Ltd., Toronto, Ontario, Canada. 620,636, pub. 11–8–55. Cl. 10.
Shuron Optical Co., Inc., Geneva, N. Y. 621,032. Cl. 26.
Sifo Co., St. Paul, Minn. 620,760–1, pub. 11–8–55. Cl. 22.
Silson, Victor, d. b. a. Victor Silson Co., to Lugene Inc., New York, N. Y. 514,580, canc. Cl. 26.
Silson, Victor, Co.: *See*—
Silson, Victor.
Sirlin, Paul, d. b. a. Paul Laboratory, Milford, Conn. 514,641, canc. Cl. 6.
Sloane, W. & J., New York, N. Y. 514,572, canc. Cl. 38.
Small Enterprises, Inc., Moravia, N. Y. 620,754, pub. 11–8–55. Cl. 21.
Smith, Carroll Dunham, Pharmacal Co., New Brunswick, N. J. 334,302, ren. 4–28–56. Cl. 18.
Snapout Forms Co., The, Chardon, Ohio. 333,337–9, ren. 3–17–56. Cl. 37.
Solar Aircraft Co., San Diego, Calif. 620,780, pub. 11–8–55. Cl. 23.
Sorensen Industries, Darby, Pa. 620,691, pub. 11–8–55. Cl. 14.
Southard, Harold C., St. Clair Shores, Mich. 620,874, pub. 11–15–55. Cl. 38.
Southern California Section of The American Chemical Society, Los Angeles, Calif. 514,335, canc. Cl. 38.
Spalding, Thomas P., Monrovia, Calif. 620,794, pub. 11–8–55. Cl. 23.
Specialty Engineering Co., Philadelphia, Pa. 620,783, pub. 11–8–55. Cl. 23.
Sperry Flour Co., San Francisco, Calif., to General Mills, Inc., Minneapolis, Minn. 333,962, ren. 4–14–56. Cl. 46.
Sperry Rand Corp.: *See*—
Rand Co., The.
Remington Rand Inc.
Victor Safe & Equipment Co., Inc., The.
Victor Safe and Lock Co., The.
Spinalator Co., The: *See*—
Donnahoe, Ollie N.
Sport Fishing Boats Co.: *See*—
Phillips, Herbert R.
Springtime Bulb Farms, Inc., Lebanon, Ohio. 620,595, pub. 11–15–55. Cl. 1.
Standard Furnace Supply Co., Ltd., Omaha, Nebr. 620,598, pub. 11–15–55. Cl. 2.
Standard Oil Co. of New Jersey, Wilmington, Del., to Esso Standard Oil Co., New York, N. Y. 329,225, ren. 10–22–55. Cl. 38.
Star Dial Co., Los Angeles, Calif. 620,997, pub. 11–15–55. Cl. 50.
State Wholesale Furniture Co., Omaha, Nebr. 514,630, canc. Cl. 32.
Stenagaard, W. L., and Associates, Inc., Chicago, Ill. 620,877, pub. 11–15–55. Cl. 38.
Stephen Jay Co., Inc., New York, N. Y. 514,551, canc. Cl. 39.
Stern, Aaron, New York, N. Y. 514,599, canc. Cl. 27.
Stern & Stern, Inc., New York, N. Y. 620,849, pub. 11–8–55. Cl. 28.
Stern & Stern Textiles, Inc., New York, N. Y. 620,996, pub. 11–15–55. Cl. 50.
Stockfleth, Harry C., d. b. a. The Sabre Archery Co., Chatham, N. J. 620,790, pub. 11–8–55. Cl. 23.
Stokely-Van Camp, Inc.: *See*—
Van Camp's, Inc.
Storms, H. M., Co., Brooklyn, N. Y. 620,639–40, pub. 11–15–55. Cl. 11.
Stowe-Woodward, Inc., Newton Upper Falls, Mass. 620,811, pub. 11–8–55. Cl. 23.
Strazzulla Bros. Co., Palm Beach, Fla. 620,984, pub. 11–15–55. Cl. 46.
Street & Smith Publications, Inc., New York, N. Y. 514,467, canc. Cl. 38.
Strickland, J., & Co., Memphis, Tenn. 621,001, pub. 9–14–54. Cl. 51.
Studebaker-Packard Corp., Detroit, Mich. 620,799–800, pub. 11–8–55. Cl. 23.
Sun Chemical Corp.: *See*—
Horn, A. C., Co.
Sunbeam Corp., Chicago, Ill. 620,867–8, pub. 11–8–55. Cl. 35.
Super-Cut, Inc., Chicago, Ill. 620,619, pub. 11–15–55. Cl. 4.
Suzuki, S., & Co. of New York, Ltd.: *See*—
Ajinomoto Honpo Kabushiki Kaisha Suzuki Shoten.
Swanson's Cookie Co., Battle Creek, Mich. 620,964, pub. 11–15–55. Cl. 46.
Swirl, Inc.: *See*—
Nachman, L., & Son, Inc.
Techno Efficiency Council, Inc., Brooklyn, N. Y. 620,921, pub. 11–8–55. Cl. 39.
Telecourses, Inc., Richmond, Va. 620,873, pub. 11–15–55. Cl. 38.
Templon Spinning Mills, Inc., Mooresville, N. C. 620,947, pub. 11–15–55. Cl. 43.
Tempo Products Corp., New York, N. Y. 620,825, pub. 11–8–55. Cl. 23.
Tenenbaum, Aaron, d. b. a. Aarons Mfg. Co., New York, N. Y. 396,575, canc. Cl. 39.
Tennant, C., Sons & Co., of New York, New York, N. Y. 332,835, ren. 2–25–56. Cl. 13.
Tension Envelope Corp., Kansas City, Mo. 620,879, pub. 11–8–55. Cl. 38.
Teufel, George, d. b. a. George Teufel's Holly Farm, Portland, Oreg. 621,023. Cl. 1.
Teufel's, George, Holly Farm: *See*—
Teufel, George.

Textron American, Inc.: *See*—
Kordite Corp.
Theonett & Co., Chicago, Ill. 198,558, canc. Cl. 45.
Therme Pin Corp. of America, Williston Park, N. Y. 621,025. Cl. 13.
Thoresen Direct Sales: *See*—
Thoresen, Marie.
Thoresen, Marie, d. b. a. Thoresen Direct Sales, New York, N. Y. 620,816, pub. 11–8–55. Cl. 23.
Timely Events: *See*—
Fomund, Bernard.
Tom Collins Corp., The, to Par Beverage Corp., Cincinnati, Ohio. 331,094, ren. 12–24–55. Cl. 49.
Tom Collins Corp. The, to Par Beverage Corp., Cincinnati, Ohio. 334,225, ren. 4–21–56. Cl. 49.
Tornberg Shirtmakers, Inc., Los Angeles, Calif. 620,906, pub. 11–15–55. Cl. 39.
Towner Mfg. Co., Santa Ana, Calif. 620,819, pub. 11–8–55. Cl. 23.
Train-Ellis, Inc., New York, N. Y. 514,510, canc. Cl. 39.
Triumph Hosiery Mills, Inc., New York, N. Y. 620,913–14, pub. 11–8–55. Cl. 39.
Troy, Seymour, New York, N. Y. 514,638, canc. Cl. 39.
Turner & Seymour Mfg. Co., The, Torrington, Conn. 620,806, pub. 11–8–55. Cl. 23.
Turner Uni-Drive Co., Kansas City, Mo. 620,827, pub. 11–8–55. Cl. 23.
Twin City Wholesale Grocer Co., now by change of name Fairway Foods, Inc., St. Paul, Minn. 510,641. Am. 7(d). Cl. 46.
Twin City Wholesale Grocer Co., now by change of name Fairway Foods, Inc., St. Paul, Minn. 510,641, cor. Cl. 46.
Uhlhorn, Dr. E., & Co., Wiesbaden-Biebrich, Germany. 617,552, Cor. Cl. 44.
Ulmer Pharmacal Co.: *See*—
Physicians and Hospitals Supply Co., Inc.
Union Carbide and Carbon Corp.: *See*—
Oxweld Acetylene Co.
United-Carr Fastener Corp., Cambridge, Mass. 620,664, pub. 11–8–55. Cl. 13.
United Farms Co., d. b. a. Ruiz Bros., Guadalupe, Calif. 514,642, canc. Cl. 46.
United States Steel Corp.: *See*—
Oil Well Supply Co.
United States Steel Corp., Pittsburgh, Pa. 620,660, pub. 11–8–55. Cl. 12.
United States Steel Corp., Pittsburgh, Pa. 620,690, pub. 11–8–55. Cl. 14.
U. S. Vitamin Corp., New York, N. Y. 620,708, pub. 10–18–55. Cl. 18.
Universal Bowling & Billiard Supply: *See*—
Weinstein, Samuel.
Universal Detergents, Inc., Long Beach, Calif. 621,006, pub. 11–15–55. Cl. 52.
Universal Producing Co., Fairfield, Iowa. 514,447, canc. Cl. 2.
Valley Metal Products Co., Plainwell, Mich. 620,689, pub. 11–8–55. Cl. 14.
Vanadium-Alloys Steel Co., Latrobe, Pa. 514,459, canc. Cl. 14.
Vanadium-Alloys Steel Co., Latrobe, Pa. 514,502, canc. Cl. 14.
Van Baalen Heilbrun & Co., Inc., New York, N. Y. 620,925, pub. 11–15–55. Cl. 39.
Van Camp's, Inc., to Stokely-Van Camp, Inc., Indianapolis, Ind. 330,367, ren. 12–3–55. Cl. 46.
Vereinigte Stahlwarenfabriken Gebr. Richartz & Sohne A. G., Solingen-Ohligs, Germany. 620,781, pub. 11–8–55. Cl. 23.
Vick Chemical Co., New York, N. Y. 620,714–15, pub. 11–8–55. Cl. 18.
Victor Safe & Equipment Co., Inc., The, North Tonawanda, by Sperry Rand Corp., New York, N. Y. 319,105, 12(c) pub. 2–7–56. Cl. 25.
Victor Safe & Equipment Co., Inc., The, North Tonawanda, by Sperry Rand Corp., New York, N. Y. 347,109, 12(c) pub. 2–7–56. Cl. 32.
Victor Safe and Lock Co., The, Cincinnati, Ohio, by Sperry Rand Corp., New York, N. Y. 159,567, 12(c) pub. 2–7–56. Cl. 25.
Viewmaster Co.: *See*—
Halladay Studies, Inc.
Voshell, Harvey W., Baltimore, Md. 333,027, 12(c) pub. 2–7–56. Cl. 18.
W-B Chemical Co., Inc., Mount Vernon, N. Y. 322,048, 12(c) pub. 2–7–56. Cl. 6.
Wallace, R., & Sons Mfg. Co., Wallingford, Conn. 620,605, pub. 11–8–55. Cl. 2.
Wallace, R., & Sons Mfg. Co., Wallingford, Conn. 620,853, pub. 11–8–55. Cl. 28.
Walsh, Christy, North Hollywood, Calif. 327,386, ren. 8–27–55. Cl. 38.
Waltco Products: *See*—
Kleingway, Inc.
Warner-Grafmueller Industries, New York, N. Y. 614,857, cor. Cl. 37.
Waterman Products Co., Inc., Philadelphia, Pa. 430,638, 12(c) pub. 2–7–56. Cl. 26.
Waterman Products Co., Inc., Philadelphia, Pa. 438,682, 12(c) pub. 2–7–56. Cl. 21.
Waterman Products Co., Inc., Philadelphia, Pa. 438,795, 12(c) pub. 2–7–56. Cl. 26.
Webb, Jervis B., Co., Detroit, Mich. 620,815, pub. 11–8–55. Cl. 23.
Weber, A. C., & Co., Inc., Chicago, Ill. 620,773, pub. 11–8–55. Cl. 23.
Webster-Chicago Corp., Chicago, Ill. 620,743–4, pub. 11–8–55. Cl. 21.
Weinstein, Samuel, d. b. a. Universal Bowling & Billiard Supply, Chicago, Ill. 620,992, pub. 11–15–55. Cl. 50.
Welsberg-Baer Co., The, Long Island City, N. Y. 620,651, pub. 11–8–55. Cl. 12.
West Chester Chemical Co., West Chester, Pa. 620,653, pub. 11–8–55. Cl. 12.
Western Condensing Co., Petaluma, Calif. 620,963, pub. 11–15–55. Cl. 46.
Western Waterproofing Co., Inc., St. Louis, Mo. 620,698, pub. 11–8–55. Cl. 16.
Whipple & Kelley, Inc., Chicago, Ill. 620,875–6, pub. 11–8–55. Cl. 38.
Whitney's Donut Co., Chicago, Ill. 620,980, pub. 11–15–55. Cl. 46.
Wigler, Albert I., Newark, N. J. 621,009, pub. 11–15–55. Cl. 52.
Wilkinson, Richard G., d. b. a. Highway Truck Equipment Co., Buffalo, N. Y. 514,538, canc. Cl. 19.
Wilson Brothers, Chicago, Ill. 304,387, canc. Cl. 39.
Winger Dairy Products Processing and Mfg. Corp., Denver, Colo. 620,966, pub. 11–15–55. Cl. 46.
Winkelmann, Walter K., Sparta, N. J. 514,583, canc. Cl. 38.
Winter & Co.: *See*—
Winter & Co., Inc.
Winter & Co., Inc., by merger with Winter & Co., New York, N. Y. 514,334, canc. Cl. 36.
Wollensak Optical Co., Rochester, N. Y. 620,840–1, pub. 11–8–55. Cl. 26.
Wonderalls, Minneapolis, Minn. 620,926, pub. 11–15–55. Cl. 39.
Worksaver Body Co., Cleveland, Ohio. 620,723, pub. 11–8–55. Cl. 19.
Yorba Orange Growers Association: *See*—
Associated Anaheim Growers.
Zimmerman Co., The, Columbus, Ohio. 620,665, pub. 11–8–55. Cl. 13.

U. S. GOVERNMENT PRINTING OFFICE: 0—1956

PATENTS

NOTICES

Adverse Decisions in Interferences

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed.

Pat. 2,544,636, D. C. Peck, High density, free-flowing pigment bases, decided Apr. 26, 1954, claims 1, 2, 3, 4, 5, 6, and 7.

Pat. 2,611,541, W. T. Gray, Radiation pyrometer with illuminator, decided Dec. 30, 1955, claim 11.

Pat. 2,566,353, G. A. Mills, Purification of oils, decided Sept. 30, 1955, claim 1.

Pat. 2,666,466, J. Sharat, Pouch with sliderless fastener closure, decided Jan. 19, 1956, claim 2.

Disclaimer

2,512,539.—*Jack Russell Belsinger*, Atlanta, Ga. EASY PACKING CONTAINER. Patent dated June 20, 1950. Disclaimer filed Jan. 23, 1956, by the assignee, *Belsinger, Inc.*

Hereby makes and enters this disclaimer to the terminal part of the term of said patent extending beyond Nov. 9, 1965.

Patents Available for Licensing or Sale

2,732,109. (Pouring) Spout for Container. Milburn Siddons, P. O. Box 11, Flint 1, Mich.

2,721,616. Automotive Vehicle With Cushion Mounted Body. Crespin O. Rocha, 810 A St., P. O. Box 1119, Greeley, Colo.

2,508,785. Clothespin (Stainless Steel, All-Purpose, for Outdoor and Indoor Use). Frank A. Gorny, 4730 W. Superior St., Chicago 44, Ill.

2,723,607. Pavement. Societe Anonyme des Betons Duroc, Ixelles-Brussels, Belgium.

2,629,097. Corset Construction. (Owner, Miriam Hurwitz). Contact Sales Representatives: Jack Delaney Associates, 141 East 44th St., New York 17, N. Y.

The following two patents, for use on automobiles, are offered by Leroy S. Bittner, 42 South Hickory St., Mt. Carmel, Pa.

2,168,950. Brake Shoe Adjuster.

2,185,535. Hydraulic Brake System.

General Electric Company is prepared to grant non-exclusive licenses under the following nine patents upon reasonable terms to domestic manufacturers.

Applications for licenses may be addressed to the General Electric Company, Housewares and Radio Receiver Division, 1285 Boston Ave., Bridgeport 2, Conn.

2,158,850. Temperature Control Device.

2,288,384. Temperature Responsive Control Device.

2,299,569. Flatiron.

2,299,570. Flatiron.

2,325,377. Flatiron.

2,339,744. Flatiron.

2,561,189. Block Soleplate and Cover for Electric Flatiron.

2,602,873. Thermostat Switch for Automatic Flatirons.

2,608,773. Steam Iron Having Improved Water Reservoir and Steam Generator.

Patents Removed From Register

General Electric Company hereby withdraws from the Register of Patents Available for Licensing or Sale the following two patents:

2,682,168. Measurement of Moisture in Electric Transformers. Listed in the Notices Section of the OFFICIAL GAZETTE, Jan. 17, 1956.

2,717,326. Electric Arc Furnace Control Systems. Listed in the Notices Section of the OFFICIAL GAZETTE, Jan. 3, 1956.

New Applications Received During December 1955

Patents	6,501
Designs	429
Plants	11
Reissues	10
Total	6,951

Issue

Patents	904	No. 2,734,190 to No. 2,735,093, incl.
Designs	46	No. 176,893 to No. 176,938, incl.
Reissues	1	No. 24,119
Total	951	

CONDITION OF PATENT APPLICATIONS AS OF DECEMBER 30, 1955

Total number of pending applications (excluding Designs)	221,231
Total number of pending Design applications	7,028
Total number of applications awaiting action (excluding Designs)	134,473
Total number of Design applications awaiting action	2,993
Date of oldest new application	Aug. 2, 1954
Date of oldest amended application	Oct. 13, 1953

ROSA, M. C., Executive Examiner

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 48, 51, 54, 69, 70.
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 18, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application	
	New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	12-30-54	1-28-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	5-2-55	11-16-54
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	4-5-55	1-25-54
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	3-31-55	3-26-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	2-23-55	5-28-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic, Amides, Amines, General Organic Processes	2-9-55	4-2-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	4-7-55	12-14-53
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	12-8-54	4-14-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	4-4-55	3-22-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	5-2-55	6-21-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	3-2-55	11-6-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	2-14-55	2-10-54
14. (III) MANIAN, J. C., (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire, Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	2-4-55	3-9-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	4-1-55	3-30-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	2-4-55	1-11-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	3-24-55	6-21-54
18. (VI) BLUM, A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	12-8-54	1-7-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	3-8-55	5-20-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	4-22-55	4-22-54
21. (III) MADER, R. C., Textiles	3-21-55	3-22-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	3-7-55	3-31-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	9-16-54	10-15-53
24. (III) DRACOPOULOS, P. T., (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	2-9-55	10-13-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	3-3-55	3-3-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	4-25-55	11-8-54
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	3-23-55	8-12-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	3-2-55	5-14-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	3-2-55	8-3-54
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	6-23-55	7-6-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application	
	New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	1-17-55	7-26-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	4-4-55	9-13-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	3-17-55	1-29-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock, Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Implements	3-3-55	3-2-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	3-10-55	6-1-54
36. (V) McFADYEN, A. D., Measuring and Testing	2-14-55	11-10-54
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	1-31-55	7-6-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g. Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	3-10-55	5-26-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	4-1-55	4-2-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	4-1-55	5-10-54
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	10-8-54	12-13-53
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	12-17-54	6-4-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilising and Disinfecting (except Wood Treatment Apparatus)	3-15-55	3-22-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	2-25-55	11-16-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	4-4-55	9-9-54
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	1-3-55	2-4-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	2-28-55	8-19-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	4-5-55	4-7-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	3-23-55	4-2-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	3-10-55	6-3-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	4-27-55	3-22-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	2-1-55	2-8-54
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	12-10-54	3-3-54
56. (I) KEELY, J. E., (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	3-17-55	7-8-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	7-1-55	7-2-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	3-17-55	2-11-54
59. (I) HENKIN, B., (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	2-24-55	3-5-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	4-1-55	10-11-54
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	3-1-55	8-23-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	3-17-55	1-15-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	3-15-55	3-1-54
66. (V) LISANN, I., Geometric Instruments; Automatic Weighing Scales; Acoustics	2-25-55	12-30-53
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	2-17-55	10-12-54
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	3-1-55	11-19-53
70. (II) BREWRINK, J. L., Explosive Weapons, Ammunition, Charges and Composition; Explosive Charge Manufacturing; Jet Motor Processes; Torpedoes; Radar; Sonar; Automatic Pilots; Antennas; Actinide Series (e. g. Fissionable) Compounds; Irradiation Chemistry; Mass Spectrometers	8-2-54	10-13-53
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making	5-2-55	11-1-54
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers	4-5-55	6-11-54
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	5-31-55	8-11-54
CLASS. DIVS. IV (VI) SMITH, (Mrs.) M. P., Harrows; Plows; Earth Rollers	4-14-55	8-23-54
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	4-7-55	12-8-54
DESIGNS (III) A—BREHM, G. I., Industrial Arts	6-17-55	7-5-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts	6-1-55	8-2-55

The following divisions have been abolished: 10, 44, 46, 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during February 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1955*.

Patents	Numbers 2,145,844 to 2,149,249, inclusive
Plant Patents	Numbers 313 to 316, inclusive

DECISIONS IN PATENT CASES

Commissioner's Decision

LANDAUER W. KNOL and VAN DER ZIEL *v.* LINDENBLAD

Interference No. 86,108. Decided May 9, 1955

1. INTERFERENCE—BELATED SUPPLEMENTAL MOTION TO AMEND.
Where an interferant, after the denal of his motion to add counts corresponding to claims of an opponent's patent, brought a "supplemental" motion to add as counts modified forms of the same claims *Held* that dismissal by the Examiner of Interferences of the supplemental motion to amend as belated was proper.

2. SAME—CONTINGENT MOTIONS TO AMEND.
"It is, of course, true • • • that no interference between a patent and an application can 'include more than one count based on the same patent claim.' Nothing, however, in that rule precludes the proposal of contingent counts."

ON PETITION.

DENIED.

A. L. B. Richardson for Landauer.

Fred M. Vogel and *Michael Ebert* for Knol and Van der Ziel.

William A. Zalesak for Lindenblad.

CROCKER, *Assistant Commissioner.*

Lindenblad petitions from the dismissal by the Examiner of Interferences of his "supplemental motion to amend" as belated.

That motion includes proposed counts A^1 and E^1. According to the motion, these proposed new counts respectively are identical with claims 1 and 8 of the Landauer patent and with proposed counts A and E of a timely motion by Lindenblad under Rule 233, except that the term "gain" has been substituted for the term "coupling factor." In passing upon said timely motion, the Primary Examiner held that the application of Lindenblad fails to satisfy the requirements of proposed counts A and E, and he accordingly refused Lindenblad an interference with Landauer on proposed counts A and E.

[1] The dismissal by the Examiner of Interferences of Lindenblad's supplemental motion to amend was proper. Interference practice does not contemplate any such piecemeal prosecution of proposed counts. [2] It is, of course, true, as Lindenblad emphasized in his supplemental motion, that no interference between a patent and an application can "include more than one count based on the same patent claim." Nothing, however, in that rule precludes the proposal of contingent counts. Proposed counts A^1 and E^1 of the supplemental and belated motion could have been presented by Lindenblad as alternatives to proposed counts A and E in his original and timely motion.

Lindenblad suggests that in view of the concurrent filing by him and Knol and Van der Ziel of requests to the Primary Examiner for reconsideration, determination of his supplemental motion to amend "would not prolong the prosecution of the interference." Such proceedings subsequent to decisions on motions cannot, however, excuse failure to act during the motion period.

The petition is denied.

DENIED.

Commissioner's Decision

IN RE APPLICATION[1] OF FRANK G. HOUGH, RALPH L. BEYERSTEDT and MARCUS L. CONRAD

Decided November 18, 1955. Request for reconsideration denied December 9, 1955

1. APPLICATIONS—PRACTICE UNDER RULE 47.
Inter partes proceedings are not instituted respecting an application filed under Rule 47, to review charges of unpatentability brought by a hostile joint applicant designee.

2. SAME—SAME—DELETION OF JOINT APPLICANT DESIGNEE'S NAME.
"Rule 45(b) which describes the procedure for removing one applicant's name from a patent application makes no specific provision for dropping the 'omitted' inventor's name from an application filed under Rule 47 but the fact that any such an application was filed without the omitted inventor's knowledge or without his consent is a circumstance of which the Primary Examiner may take cognisance in evaluating the showing that that application was made through error and without any deceptive intention."

3. SAME—SAME—EXPUNGING OF ALLEGEDLY SCANDALOUS REFERENCE TO BREACH OF CONTRACT.
Held that an allegedly scandalous reference, in an application filed under Rule 47, to a joint applicant designee's alleged breach of a contract to assign should not be expunged from the record "since it is a part of the 'proof of the pertinent facts' required by Rule 47 and, as such, is necessary to show on the record why the papers were accepted as an application under that rule."

ON PETITION.

DENIED.

John A. Dienner and *Kenneth C. Witt* for Conrad.

Paul O. Pippel, attorney of record in the application.

WATSON, *Commissioner:*

Kenneth C. Witt, who terms himself associate attorney for the joint applicant designee Conrad in the above-identified application, petitions the Commissioner to exercise his supervisory authority in this case "in order to prevent issuance of an invalid patent." There is nothing to indicate that this petition has been served upon the attorney of record in this application. The attorney's attention has, however, been called to this petition.

The application was filed under Rule 47 by Frank G. Hough and Ralph L. Beyerstedt on behalf of themselves and of Marcus L. Conrad. This application was accepted under Rule 47(a) upon the basis of a "proof of the pertinent facts" including a statement under oath, made by Hough and Beyerstedt, that Hough, Beyerstedt and Conrad are the joint inventors of the invention claimed and that Conrad refuses to sign the application papers. Conrad was notified of the acceptance of the application papers and, after examination of the application, he was notified that the application was in condition for allowance and given an opportunity to make his position of record. In response Conrad filed a voluminous protest against the allowance of this application. In this protest Conrad alleged that the application was unpatentable for various reasons, including unpatentability of the subject matter and prior public use and sale more than one year

[1] Application S. N. 471,828, issued December 13, 1955 as Patent No. 2,726,778.

prior to the application, and asked that proceedings be instituted to determine the accuracy of his various allegations. The Law Examiner denied Conrad's request for institution of proceedings but notified Conrad that his charges of unpatentability could be considered by the Primary Examiner and made the basis for official action to the extent they were supported by evidence of which the Examiner could properly take notice. Conrad was informed by the Law Examiner that if he wished to have his allegations of public use and sale considered he should present them as a separate petition under Rule 292. After the Law Examiner's decision the application was passed to issue by the Primary Examiner.

The petition makes five different contentions:

(1) that an inter partes proceeding is made necessary by Section 118 of the statute;

(2) that the Office must, if inter partes proceedings are not essential, give careful consideration ex parte to the various matters called to the attention of the Patent Office;

(3) that Conrad's name, in any event, should be removed from this application since the joint inventors Hough and Beyerstedt agree that Conrad should not be joined as a joint inventor;

(4) that the allegedly scandalous statements made by Hough and Beyerstedt of an alleged dereliction of duty by Conrad should be expunged from the record; and

(5) that the application should be withdrawn from issue.

Taking up these contentions in the order that they are presented in the petition, [1] neither the rules nor the statutes provide for inter partes proceedings in applications of the kind here under consideration. Rule 47 and Sections 116 and 118 of Title 35 of the United States Code supply a procedure for safeguarding the rights of a joint inventor or a person with a proprietary interest. Applications under Rule 47, however, must await subsequent court action for an adjudication of the rights of the parties since the Patent Office is not authorized by statute to make this judicial determination. It would seem that the rights of the omitted inventor are adequately protected by the fact that in an application filed under Rule 47(b) and 35 U. S. C. 118 the patent must issue to the omitted inventor and in an application filed under Rule 47(a) and 35 U. S. C. 116 the omitted joint inventor has the rights of a joint applicant. The omitted inventor, moreover, is informed of the application filed in his name and given the opportunity of making his position of record.

The record shows no need for the request that the Office give careful consideration ex parte to the matters called to its attention by the applicant designee Conrad. In the absence of evidence of an abuse of discretion it will not be presumed that the Primary Examiner in charge of the application has failed to consider all evidence presented which is competent under Patent Office practice.

Petitioner's request that Conrad's name be removed from the application is based upon an alleged mutuality of opinion among the designated joint applicants. [2] Rule 45(b) which describes the procedure for removing one applicant's name from a patent application makes no specific provision for dropping the "omitted" inventor's name from an application filed under Rule 47 but the fact that any such an application was filed without the omitted inventor's knowledge or without his consent is a circumstance of which the Primary Examiner may take cognizance in evaluating the showing that that application was made through error and without any deceptive intention. In the present application, however, Hough and Beyerstedt, in a paper filed November 15, 1955, state that they are unable to make a verified statement that Conrad is not a joint inventor with them of the subject matter of the application. Accordingly, no basis is seen for the deletion of the name of Conrad as a joint inventor.

[3] The allegedly scandalous reference to Conrad's alleged breach of a contract to assign should not be expunged from the record since it is a part of the "proof of the pertinent facts" required by Rule 47 and, as such, is necessary to show on the record why the papers were accepted as an application under that rule.

This application will not be withdrawn from issue, as requested by petitioner, since the application has been accepted as an application under Rule 47(a), examined, and found allowable.

The petition is accordingly denied.

DENIED.

December 9, 1955

Kenneth C. Witt requests reconsideration of the Commissioner's decision of November 18, 1955, in the above identified application.

The case has again been reviewed and the arguments advanced by the petitioner have received painstaking consideration.

These arguments do not, however, carry conviction that the original decision is in error in any particular. The previous decision is adhered to.

U. S. Court of Customs and Patent Appeals

IN RE FREDERICK LOBL

No. 6163. Decided December 21, 1955

[— F.2d —; — USPQ —]

1. COMBINED REFERENCES—SUGGESTIONS FROM NON-ANALOGOUS ARTS.
Held unlikely that "one seeking to produce an improved closure for containers would look to the door buffer art for suggestions," and strongly doubted that the proposed modification of the structure of the reference buffer and its use as a closure for a container could be accomplished without the exercise of invention.

2. INVENTION—CHANGE OF SHAPE OF CONTAINER OPENING.
Held that it would be obvious to round the edge of a container opening to facilitate removal of the sealing plug.

3. PATENTABILITY—PARTICULAR SUBJECT MATTER—CONTAINER.
Certain claims to a container *Held* patentable over the cited prior art and a certain other claim *Held* properly rejected as non-inventive over the cited prior art.

APPEAL from the Patent Office. Serial No. 169,228.

MODIFIED.

John H. McKenna (*Eugene H. Purdy* of Counsel) for Frederick Lobl.

Clarence W. Moore (*Howard S. Miller* of Counsel) for the Commissioner of Patents.

Before O'CONNELL, *Acting Chief Judge*, and JOHNSON, WORLEY, COLE, and JACKSON (retired), *Associate Judges*

WORLEY, *J.*, delivered the opinion of the court.

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the rejection by the Primary Examiner of claims 1, 2, 3, 4, and 7, the only claims remaining in appellant's application, No. 169,228, for a patent on a container and closure therefor. Claims 1, 2, and 4 are typical of the appealed claims and read:

1. A container comprising a wall portion having a fill opening therein, a removable and replaceable closure for said opening, comprising a suction cup made of resilient flexible material having a convex side and a concave side, a relatively short projection extending axially at the concave side of the cup and adapted to be pressed into said opening with simultaneous suction engagement of the concave side of said cup with the exterior surface of said wall portion around said opening, resilient means at the inner end of said projection having diameter appreciably greater than the diameter of said opening and adapted to yield radially to permit the said projection to enter said opening and to be withdrawn from said opening, said resilient means engaging yieldingly back of said wall portion when the projection is pressed into said opening enough to effect the said suction engagement of the cup with the wall portion and being adapted to yield radially to free itself from said wall portion, and means on the edge of said wall portion, at said fill opening therein, providing a rounded surface for camming said resilient means radially in response to force applied to the closure in direction to remove the closure from said fill opening.

2. A container comprising a substantially rigid wall portion having a fill opening therein, a removable and replaceable closure for said opening, comprising a suction cup made of resilient material having a concave side pressed into suction engagement with the exterior surface of the wall portion around said opening, a plug projecting axially from the said concave side of the cup and pressed into said opening, resilient means at the end of the plug annularly engaged back of said wall portion, said resilient means being adapted to yield radially under constricting pressure when said resilient means is being moved in either direction through said opening, and means on the edge of said wall portion, at said fill opening therein, providing a rounded surface for camming said resilient means radially in response to force applied to the closure in direction to remove the closure from said fill opening.

4. A container comprising a wall portion having a fill opening therein, a removable and replaceable closure for said opening, comprising a suction cup made of resilient flexible material having a convex side and a concave side, a relatively short projection extending axially at the concave side of the cup and adapted to be pressed into said opening with simultaneous suction engagement of the concave side of said cup with the exterior surface of said wall portion around said opening, resilient means at the inner end of said projection having diameter appreciably greater than the diameter of said opening and adapted to yield to permit the said projection to enter said opening, said resilient means engaging back of said wall portion when the projection is pressed into said opening enough to effect the said suction engagement of the cup with the wall portion and being adapted to yield radially to free itself from said wall portion, means on the edge of said wall portion, at said fill opening therein, providing a rounded surface for camming said resilient means radially in response to force applied to the closure in direction to remove the closure from said fill opening, and an annular upstanding flange on said wall portion confining the onter edge of said suction cup substantially all around the edge of the cup.

The references relied on are:

Jorgensen, 1,915,249, June 20, 1913.
Duffy, 2,061,145, November 17, 1936.
Wynings, 2,212,804, August 27, 1940.
Hoffman, 2,224,296, December 10, 1940.

The application relates to a removable resilient closure member designed to form an airtight seal for an opening in a wall of a container. The closure member may be made of rubber and comprises a suction cup having convex and concave sides with a relatively short projection extending axially from the concave side, terminating in an annular resilient flange. The container to which the closure is to be applied is provided with a circular opening somewhat smaller than the normal diameter of the projection, and having rounded edges. The container, as shown, is circular and has an upstanding flange surrounding the wall to which the closure is to be applied and of such size as to confine the outer edge of the suction cup when the closure member is in place.

In use, the projection of the closure member is forced through the opening in the container wall until the annular flange at the end of the projection enters the container. The flange then expands and lies against the inner wall of the container, thus serving to hold the suction cup portion of the closure member spread against the outer wall of the container to provide outer and inner seals. When it is desired to remove the closure, the outer seal is broken by lifting an edge of the suction cup.

The Hoffman patent shows a container having a wall provided with an opening which is adapted to be closed by a resilient member comprising a concavo-convex suction cup portion and a stem extending axially from the concave side of the suction cup portion and provided with radial projections or ears. The end of the stem adjacent the cup is flared to a frusto-conical shape. The ears of the stem extend outwardly to a diameter greater than that of the opening in the container wall and, when the stem is pressed into the opening the ears enter the container and engage its inner wall, thus preventing removal of the stem. In that position, the suction cup lies against the outer wall of the container, but the stem fits loosely in the opening, so that air or gas may pass from the interior of the container into contact with the inside of the suction cup. Accordingly, if pressure develops in the container the gas or air may escape by passing around the stem and lifting the edge of the cup. On the other hand, if a vacuum develops in the container the suction cup is flattened out until the frusto-conical upper portion of the stem closes the mouth of the opening. No inner seal is provided in the Hoffman device and its operation depends upon a constantly open communication between the container and the inside of the suction cup.

The patent to Jorgensen discloses a resilient buffer member for a door or the like, comprising a circular plug having a head portion and a stem portion of smaller diameter extending axially therefrom. The surface of the head surrounding the stem is concave, thus forming an annular groove or cup. The outer end of the stem is provided with a circular enlargement, smaller than the head, and a groove is also provided where the enlargement joins the stem. The buffer thus consists of two grooved enlargements joined by a shank portion.

Jorgensen's buffer may be applied by forcing its smaller end and shank portion into an opening in a piece of material until the enlargement at the end passes out of the opening and engages the opposite side of the material, where it expands and serves to lock the buffer in place.

The Duffy patent shows a closure member having an axial stem provided with a resilient flange at its end which expands against the inner wall of a container when the stem is forced through an opening therein. The flange and the edge of the wall opening are so shaped that the closure may be removed by lifting it at one side.

The Wynings patent shows a resilient closure member consisting of a circular disk having a suction cup portion. The container to which the closure is to be applied is provided with an annular rim which engages the outer edge of the closure when it is applied to the container.

Claims 1, 2, 3, and 7 were rejected on either Jorgensen or Hoffman in view of Duffy, on the ground that it would not require invention to round the edges of the opening through which the sealing means passes in the Jorgensen or Hoffman device in the manner suggested by Duffy.

The Jorgensen patent, as above indicated, does not relate to a *container closure* but to a *buffer plug*. While the physical structure of Jorgensen's plug is generally similar to that of the appellant's closure member, their functions are quite different since Jorgensen is not concerned with effecting a tight closure of the opening in which his plug is inserted, and any sealing of that opening which may take place is, in our opinion, entirely incidental.

Notwithstanding the difference in function, the Jorgensen patent would be a proper reference if it disclosed all the structure set forth in the appealed claims. *In re Joseph Dawe*, 19 CCPA (Patents) 728, 53 F.2d 543, 11 USPQ 181; *In re Wolfe*, 21 CCPA (Patents) 974, 69 F.2d 550, 21 USPQ 105; *In re Waldron*, 28 CCPA (Patents) 862, 117 F.2d 381, 48 USPQ 381; and *In re Stacy*, 30 CCPA (Patents) 972, 135 F.2d 232, 57 USPQ 307. However, the rejection here involved is not based upon the Jorgensen patent alone, but upon a proposed modification of Jorgensen's structure in view of the Duffy patent which relates to the art of sealing containers.

In our opinion, the Jorgensen and Duffy patents relate to non-analogous arts and may not properly be combined to form a basis for rejection of appellant's claims. [1] It does not seem likely to us that one seeking to produce an improved closure for containers would look to the door buffer art for suggestions. Accordingly, we strongly doubt that the proposed modification of the structure of Jorgensen's buffer and its use as a closure for a container could be accomplished without the exercise of invention. It follows that the rejection of claims 1, 2, 3, and 7, so far as it is based on Jorgensen, should not be sustained.

With respect to the rejection on Hoffman in view of Duffy, the situation is different, since both the Hoffman and Duffy patents relate to sealing closures for containers. [2] We are in agreement with the Board that merely rounding the edge of the container opening of Hoffman to facilitate removal of the sealing plug would not involve anything more than the exercise of mechanical skill, in view of the showing of such a rounded edge in the Duffy patent. It is a matter of common knowledge that sharp edges or projections may interfere with the disengagement of parts, and should be eliminated where ready removal is desired. Therefore, if Hoffman desired to make his sealing plug more readily removable, it would be obvious to round the edges of the opening which receives the plug.

It appears that the proposed modification of the Hoffman device would produce a structure corresponding to that of appealed claim 1. Hoffman states that the ears or abutments of his device which extend into the container opening have a somewhat greater diameter than that of the opening, and it is clear from both his specification and drawing that such ears or abutments engage the flange which surrounds the opening after a sealing engagement of the suction cup has been effected. Figure 1 of Hoffman shows the suction cup deformed from its normal shape into a sealing engagement with the container wall, while the abutments are in engagement with the inner wall of the container opening. The fact that the abutments may be drawn inwardly and disengaged from the opening when the container is placed under suction is immaterial so far as claim 1 is concerned.

Claim 1 fails to define anything inventive over what is shown by Hoffman, in view of Duffy, and its rejection on those references should be affirmed.

Claims 2 and 7 call for an annular engagement between the inner portion of the closure means and the inner wall of the container, while claim 3 states that the inner end of the closure means comprises a flange which engages the inner wall. Those claims, therefore, require a continuous engagement between the closure means and the inner container wall. Such continuous engagement not only is not shown by Hoffman, but would render his device inoperative for its intended purpose, since a continuous inner sealing means would prevent the venting of the container if a pressure develops in it and venting seems to be the primary purpose of Hoffman's closure.

Since claims 2, 3, and 7 are limited to a type of double seal which is not shown by Hoffman and not suggested by the other cited references, those claims should be allowable over the art relied on.

Claim 4 distinguishes over Hoffman by reciting an annular upstanding flange surrounding and confining the outer edge of the suction cup of the closure member. Such a flange is old, as shown by the Wynings patent. However, it is essential to Hoffman's intended operation that the outer edge of the suction cup be unimpeded, since the air in the container must be able to lift that edge and escape if pressure develops in the container. The proposed addition of the Wynings flange, therefore, would prevent proper operation of the Hoffman device. Under those circumstances we do not believe the combination of references relied on in the rejection of claim 4 is proper.

For the reasons hereinbefore set forth, the decision of the Board of Appeals is modified, being affirmed as to claim 1, and reversed as to claims 2, 3, 4, and 7.

MODIFIED.

JACKSON, *J.*, retired, recalled to participate.

U. S. Court of Customs and Patent Appeals

IN RE ALFRED S. BROWN AND WILLIAM KERNAN

No. 6164. Decided December 21, 1955

[— F.2d —; — USPQ —]

1. INVENTION—ELIMINATION OF METHOD STEP AND ITS FUNCTION.

"The omission of a step of a method with a corresponding omission of function, is not a matter of invention."

2. PATENTABILITY—PARTICULAR SUBJECT MATTER—METHOD FOR TREATING THREAD.

A claim to a method for treating thread *Held* properly rejected as unpatentable over the cited prior art.

APPEAL from the Patent Office. Serial No. 133,407.

AFFIRMED.

Rudolph S. Bley (*Benjamin J. Chromy, Richard K. Stevens*, and *Ellsworth H. Mosher* of counsel) for Brown and Kernan.

Clarence W. Moore (*Howard S. Miller* of counsel) for the Commissioner of Patents.

Before O'CONNELL, *Acting Chief Judge*, and JOHNSON, WORLEY, COLE, and JACKSON (retired), *Associate Judges*

COLE, *J.*, delivered the opinion of the court.

This is an appeal from the decision of the Board of Appeals of the United States Patent Office, affirming the rejection by the Primary Examiner of claims 17, 18, and 19 of appellants' application, Serial No. 133,407, for a patent on a method and apparatus for treating thread. At the hearing, counsel for the appellants moved to withdraw the appeal as to claims 17 and 18. No objection to such withdrawal was made on behalf of the Patent Office and the motion is accordingly granted. This leaves for consideration only claim 19, which is a method claim. The apparatus claims of appellants' application were allowed by the Examiner.

The appealed claim is as follows:

> 19. A method for treating hollow, unsupported substantially flat-ended yarn packages or cakes with treating fluid under pressure, whereby an automatic substantially fluid tight seal is maintained on each end of said cakes while being subjected to the action of a treating fluid without interfering with the free axial expansion and contraction of said cakes, which comprises the steps of delivering a plurality of said cakes horizontally disposed to a succession of treating zones, applying a common pneumatic sealing force to one end of said cakes and maintaining said force constant after the initial adjustments required for the type and size of cake while passing a treating fluid through said cakes, discontinuing the supply of said treating fluid, releasing said sealing force and moving said cakes collectively to further treating zones.

The references relied on are:

Herrmann, 1,943,072, January 9, 1934.

Laird et al., 2,092,126, September 7, 1937.

The appelants' application relates to the washing and treating of rayon yarn cakes which, as illustrated, are in the form of hollow conical frustums, each cake consisting of a number of layers of rayon yarn. In the treatment of these cakes, a plurality of them are placed upon a movable table having a receiving position for each cake, provided with a tube through which treating fluid may be fed into the hollow central portion of the cake. In order to seal the tops of the cakes to prevent the treating fluid from escaping without passing through the rayon yarn, there is provided a resilient and flexible plate which is supported by a flexible bag. When this bag is inflated, it causes the plate to press down upon and seal the upper ends of the yarn cakes. By this arrangement, and by a suitable adjustment of the pressure in the bag, a seal under uniform pressure may be maintained despite the swelling or de-swelling of the cakes.

The patent to Herrmann shows an apparatus for treating silk thread which is wound on hollow perforated spools. A number of such spools are supported on a base plate which is provided with openings for supplying treating fluid to the bottom of the hollow portion of each spool. A flexible plate is placed on top of the spools, and is provided with an opening registering with the top of the hollow portion of each of them. A second layer of spools is placed upon this plate and additional supporting plates and layers of spools are added so that the complete apparatus includes a number of superimposed layers of spools and plates with the openings of the spools of each layer registering with those of the plates and of the spools in adjacent layers. The treating fluid passes upwardly from each spool of the bottom layer to the corresponding spools in the other layers. An imperforate cover of rigid material rests on the spools of the top layer and a weight is placed on this cover, thus pressing the ends of the spools of each layer against the adjacent plates. It is stated in the patent specification that the flexible plates may be hollow so that they will be inflated by the pressure of the treating fluid, "thereby effecting a positive packing of the spools."

The patent to Laird et al. discloses an apparatus for treating rayon yarn cakes similar in shape to those illustrated in appellants' application. The patent shows a base plate provided with a number of hollow, perforated frusto-conical supporting members corresponding approximately in size to the central openings in the yarn cakes. Means are provided for supplying treating fluid under pressure to the interior of each of these members. The yarn cakes are placed over these supporting members and the treating fluid passes through openings in the members and into the yarn cakes. Individual sealing plates are provided, which include sponge rubber disks mounted at the ends of hydraulic pistons, which press them down against the tops of the cakes. The pressure exerted by the pistons may be intermittently varied, resulting in alternate elongation and compression of the cakes which will cause them to soften.

The appealed claim was rejected as unpatentable over the Laird et al. and Herrmann patents and also on the ground that it is not supported by a disclosure of the type required by Patent Office Rule 71(b) which provides that the specification of an application must describe completely a specific embodiment of the process invented and must set forth the best mode of carrying it out contemplated by the inventor.

Claim 19 calls for a method for treating hollow, unsupported yarn cakes in which a fluid tight seal is maintained at each end of the cakes without interfering with their free axial expansion and contraction. In the Laird et al. patent the cakes are placed over members which provide them with some lateral support, but these members do not extend to the upper portions of the cakes and do not affect the freedom of the cakes to expand or contract axially.

In the specification of appellants' application it is stated that:

> • • • While primarily intended for cakes devoid of flexible supporting inserts, sleeves, and the like, the method is applicable for treating certain types of supported cakes providing that the flexible inserts or sleeves used do not interfere with the method used for sealing the ends as hereinabove described.

Since the inserts shown by Laird are shorter than the cakes, they do not interfere with the method of sealing the ends. We are of the opinion that the statement in claim 19 that the cakes are unsupported during treatment does not present any material distinction over the disclosure of Laird et al. patent.

Claim 19 further calls for delivering the cakes to a succession of treating zones, whereas the Laird et al. patent discloses only one such zone. However, it is old, as stated in the specification of appellants' application, to subject yarn cakes to a series of treatments involving the forcing of fluids through them, and consequently it would involve no invention to provide several stations of the kind shown by Laird et al. and to transfer the cakes from one to another for treatment. The step of transferring the cakes has no coaction with the particular type of sealing employed. Whether the cakes are transferred singly or collectively is merely a matter of choice.

The appealed claim further states that a common pneumatic sealing force is applied to one end of the cakes and maintained constant, after initial adjustments, while the treating fluid is passed through them. In the Laird et al. patent, a separate piston is provided for sealing each cake but the pistons are actuated from a common source of hydraulic pressure and we do not consider that the reference in the claim to a common sealing force presents a patentable distinction from that arrangement so far as the method of operation is concerned. It is not material, from the standpoint of patentability, whether hydraulic or pneumatic pressure is employed for effecting the seal. The appellants' specification refers to the use of "a fluid, such as air under pressure" for that purpose, thus indicating that the particular fluid used is not critical.

Finally, claim 19 states that the sealing pressure is maintained constant after its initial adjustments, whereas the Laird method varies the pressure periodically to soften the cakes. However, it would be obvious to eliminate this periodic variation in the Laird et al. process if softening of the cakes was not desired. [1] The omission of a step of a method with a corresponding omission of function, is not a matter of invention. *In re Porter*, 21 CCPA (Patents) 927, 68 F.2d 97, 20 USPQ 298.

While the appended claim, as above noted, presents certain distinctions over the Laird et al. patent, we are of the opinion that such distinctions are not sufficient, singly or collectively, to render the claim patentable over that reference. It is accordingly unnecessary to consider the further rejections of the claim as unpatentable over the Herrmann patent and as being based on a specification containing an insufficient disclosure.

[2] The decision of the Board of Appeals is affirmed.

AFFIRMED.

JACKSON, *J.*, retired, recalled to participate.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

2,646,312. (See Re. 21,566.)

2,149,048, H. Freedman, Artificial dental structure, filed July 6, 1953, D. C., S. D. N. Y., Doc. 86/194, *Hyman Freedman* v. *Cornell University Medical College et al.* Stipulation and order of dismissal (notice Jan. 18, 1956).

2,176,622, R. W. Davis, Carpet golf course, filed July 13, 1954, D. C., E. D. S. C. (Charleston), Doc. 4369, *Richard W. Davis et al.* v. *The Buck-Jackson Corp. et al.* Patent held invalid and not infringed, even if said patent is valid; complaint dismissed Oct. 21, 1955. Same, appeal filed Dec. 1, 1955, C. C. A., 4th Cir., Doc. 7124, *Richard W. Davis et al.* v. *The Buck-Jackson Corp. et al.*

2,209,210, W. M. Scholl, Mounting card for medical pads, filed Jan. 3, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c20, *The Scholl Mfg. Co., Inc.* v. *Johnson & Johnson.*

2,264,737, H. Bertsch, Wetting, detergent, and emulsifying agents, filed Jan. 10, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16168, *American Hyalsol Corp.* v. *Sun Chemical Co.*

2,267,373. (See 2,365,625.)

2,284,113, G. Watson, Dispatching and control system for elevators; **2,634,828**, Bruns and Davis, Closure operator control mechanism; **2,589,242**, Glaser and Hornung, Elevator dispatching and control system; **2,682,318**, Glaser and Lusti, same, filed Dec. 31, 1954, D. C., S. D. N. Y., Doc. 98/18, *Otis Elevator Co.* v. *Elevator Maintenance Co. Ltd.* Stipulation and order of dismissal (notice Jan. 16, 1956).

2,347,544, DeCosta and Obermaier, Flood control means, filed Jan. 11, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c69, *Transmission Machinery Co.* v. *John Sarno et al.*

2,365,625, V. R. Carlisle, Safety device for vehicle passengers; **2,365,626**, same, Safety holding device for vehicles; **2,267,373**, same, Safety device for vehicles, filed Apr. 30, 1951, D. C., W. D. Tex. (Austin), Doc. 580, *Vernon R. Carlisle* v. *Aerocrafts, Inc.* Judgment of dismissal with prejudice June 9, 1952.

2,365,626. (See 2,365,625.)

2,372,716, G. T. Evans, Locating key, filed Mar. 8, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 17933–Y, *Vlier Engineering, Inc.* v. *Techni-Tool Products, Inc., et al.* Consent judgment; patent held infringed; injunction issued (notice Jan. 6, 1956).

2,390,636, 2,397,229, 2,416,896, L. J. Biro, Writing instrument; **2,400,679**, same, Fountain pen, filed Jan. 12, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c77, *Eversharp, Inc.* v. *Fisher Pen Co., Inc., et al.*

2,397,229. (See 2,390,636.)

2,396,382, D. A. Lyon, Method for coating optical elements, filed May 6, 1949, D. C., W. D. N. Y. (Buffalo), Doc. 4168, *Dean A. Lyon* v. *Bausch & Lomb Optical Co.* Judgment for plaintiff; injunction issued (notice Jan. 4, 1954). Same, appeal filed Nov. 24, 1954, C. C. A., 2nd Cir., Doc. 23345, *Dean A. Lyon* v. *Bausch & Lomb Optical Co.* Judgment of District Court affirmed June 20, 1955.

2,400,679. (See 2,390,636.)

2,412,566, O. W. Greene et al., Means for blending fibers, appeal filed May 9, 1955, C. C. A., 4th Cir., Doc. 7017, *W. D. Dodenhoff Co., Inc.* v. *Gastonia Textile Machinery Co. et al.* Judgment of District Court affirmed Dec. 27, 1955. Same, appeal filed May 18, 1955, C. C. A., 4th Cir., Doc. 7025, *W. D. Dodenhoff Co., Inc.* v. *Proctor & Schwartz, Inc.* Decree as above.

2,416,896. (See 2,390,636.)

2,427,950, M. Horowitz, Poultry blinder clip, filed Dec. 4, 1953, D. C. N. J. (Camden), Doc. 1014/53, *Milton Gene Harwood et al.* v. *Maurice L. Rudolph et al.* Stipulation of dismissal with prejudice Dec. 15, 1955.

2,473,652, S. J. Klapman, Thermionic vacuum tube circuit for intercommunication systems, filed Jan. 12, 1956, D. C., S. D. N. Y., Doc. 106/166, *Sol J. Klapman* v. *David Bogen Co. Inc.*

2,517,694, Merion and Sisson, Crimped artificial filament, filed Apr. 20, 1955, D. C., S. D. N. Y., Doc. 100/122, *Bigelow-Sanford Carpet Co.* v. *American Viscose Corp.* Consent judgment dismissing complaint and counterclaim without prejudice (notice Jan. 4, 1956).

2,519,449, H. J. Findley, Magnetic drive filed Nov. 17, 1952, D. C., W. D. Mich. (Grand Rapids), Doc. 2151, *Eaton Mfg. Co., and Dynamatic Corp.* v. *Lear, Inc.* (Dynamatic Corp. included as plaintiff Aug. 15, 1953). Stipulation and order of dismissal without prejudice Jan. 4, 1956.

2,585,551, R. Hofstadter, Means for detecting ionizing radiations, filed Aug. 12, 1953, D. C., S. D. N. Y., Doc. 87/159, *Robert Hofstadter* v. *Irving W. Ruderman.* Consent judgment; defendant enjoined; counterclaim dismissed Jan. 6, 1956.

2,586,294, M. H. Briscoe, Yarn twist distributing machine, filed Mar. 3, 1955, D. C., M. D. Ga. (Athens), Doc. 302, *Superior Bands* v. *Circular Banding Co.* Claims 1 and 2 held invalid; claim 3 held valid and infringed; defendants granted injunctive relief against further infringement of claim 3 Jan. 4, 1956.

2,589,242. (See 2,284,113.)

2,629,376, P. Gallice et al., Injection syringe, filed Jan. 17, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19338, *Societe d'Etudes et d'Applications Techniques* v. *Larry Ashe et al.*

2,634,828. (See 2,284,113.)

2,637,132, L. C. Helms et al., Transparency viewer, filed Dec. 18, 1953, D. C., N. D. Ill. (Chicago), Doc. 53c2425, *Helms Products, Inc.* v. *Robert Gordon et al.* Mandate of C. C. A.; judgment of District Court reversed as to that part which

decrees infringement and provides remedies therefor; affirmed as to that part which decrees that plaintiffs' patent is valid; cause remanded to District Court Dec. 30, 1955.

2,667,522, J. F. McElroy, Nitrogen derivatives of tetraacetic acids as rubber stabilizers; **2,726,967**, Eger and Engel, Paper backed adhesive tape, **filed** Jan. 18, 1956, D. C., E. D. Mich. (Detroit), Doc. 15097, *Permacel Tape Corp.* v. *Fancorp Sales Co.* **Same**, Doc. 15098, *Permacel Tape Corp.* v. *American Tape Co., Inc.*

2,672,895, R. M. Ingham, Jr., Filling grate for looms, **filed** Dec. 19, 1955, D. C., W. D. S. C. (Greenville), Doc. 1895, *Deering Milliken Research Corp.* v. *The Henrietta Mills, Inc.*

2,674,963, A. Guide, Spiral seam producing mechanism for sewing machines, **filed** June 21, 1954, D. C., S. D. N. Y., Doc. 94/42, *Anthony Guide* v. *Abe Gellman Co., Inc., et al.* Order of discontinuance (notice Jan. 9, 1956).

2,679,281, J. F. Paulucci, Method and means for securing cans together, **filed** Feb. 16, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 17882–Y, *Chun King Sales, Inc., et al.* v. *Oriental Foods, Inc.* Patent held valid; claim 1 held infringed; injunction issued (notice Jan. 11, 1956).

2,682,318. (See 2,284,113.)

2,684,556, H. G. Molinari, Machine and method for forming syringe barrels, **filed** Jan. 10, 1956, D. C. N. J. (Newark), Doc. 14/56, *Becton, Dickinson and Co.* v. *New Jersey Production Engineering Co. et al.*

2,699,736, M. A. Sticelber, Dough sheeting roller; **2,699,737**, same, Dough sheeting apparatus, **filed** Jan. 20, 1955, D. C., W. D. Mo. (Kansas City), Doc. 9563, *Read Standard Corp.* v. *Sticelber & Sons, Inc.* Stipulation of dismissal without prejudice Jan. 10, 1956.

2,699,737. (See 2,699,736.)

2,707,419, C. Schron, Means for locating fixture plates with respect to the beds or platens of machine tools, **filed** Jan. 5, 1956, D. C., N. D. Ohio (Cleveland), Doc. 32399, *Jergens Tool Specialty Co.* v. *Standard Parts Co.*

2,707,741, **2,708,227**, F. Collura, Electric switch assembly; **2,719,238**, same, Electric motor for hand tools, **filed** Jan. 19, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c136, *The Winsted Hardware Mfg. Co.* v. *Scorill Mfg. Co.*

2,708,227. (See 2,707,741.)

2,714,269, G. R. S. Charles, Ornamental beaded necklace, **filed** Dec. 12, 1955, D. C., W. D. Wis. (Madison), Doc. 2735, *The Richelieu Corp.* v. *The Emporium Co.*

2,719,238. (See 2,707,741.)

2,726,967. (See 2,667,522.)

2,728,580, Preisler and Shone, Collapsible baby stroller, **filed** Jan. 12, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19324–HW, *Strolee of California, Inc.* v. *A. E. Peterson Mfg. Co.*

2,729,845, Miller and Becker, Apparatus for automatically removing lint from above and below the warp of textile looms, **filed** Jan. 16, 1956, D. C., W. D. N. C. (Charlotte), Doc. 1140, *The American Monorail Co.* v. *Parks-Cramer Co.*

Re. 21,566 (of **2,646,312**), L. D. Anderson, Process of concentrating ores, **filed** July 13, 1953, D. C. N. Mex. (Albuquerque), Doc. 2393, *Potash Company of America* v. *Duval Sulphur & Potash Co.* Judgment for plaintiff Dec. 29, 1955.

Re. 23,346, M. D. Ercolino, High-frequency antenna, **filed** Jan. 19, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16190, *Telrex, Inc.* v. *Q-Line Mfg. Corp.*

Re. 24,027, Bourne and Croome, Window frame assembly, **filed** Jan. 14, 1956, D. C., N. D. Calif. (Sacramento), Doc. 7342, *Bourne Products, Inc., et al.* v. *The Aluminum Metal Co. et al.*

Re. 24,037, G. W. Willits, Holder, **filed** Jan. 6, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c42, *Johnson & Johnson* v. *Union Wadding Co.*

Des. 170,180, Ziskin and Billig, Condiment container; **Des. 170,295**, same, Canister or similar article, **filed** Jan. 17, 1956, D. C., S. D. N. Y., Doc. 106/222, *The Kromex Corp.* v. *L. Batlin & Son, Inc.*

Des. 170,295. (See Des. 170,180.)

Des. 173,760, R. N. Lesnick, Toy power lawn mower, **filed** Jan. 6, 1956, D. C., S. D. N. Y., Doc. 106/113, *Roberts Mfg. Co.* v. *All Metal Products Co.*

REISSUES

FEBRUARY 14, 1956

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

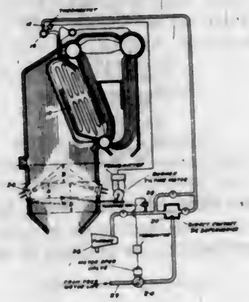
24,119

METHOD OF SUPERHEAT CONTROL

Wilbur H. Armacost, Scarsdale, N. Y., assignor to Combustion Engineering Inc., New York, N. Y., a corporation of Delaware

Original No. 2,640,468, dated June 2, 1953, Serial No. 609,956, August 9, 1945. Application for reissue March 22, 1955, Serial No. 496,091

2 Claims. (Cl. 122—479)



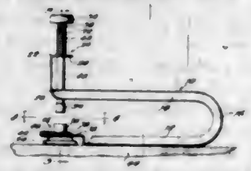
1. The method of maintaining superheated steam temperature in a steam generator in which the major portion of the steam is produced in a vertical furnace lined with steam generating elements exposed to radiant heat from burning fuel and which generators have superheaters of relatively large heat storage capacity, due to the metallic mass thereof, sufficient to cause a substantial time lag in the change of steam temperature when the volume and temperature of heating gases passing over the superheater decrease with the fuel burning rate upon a fall in steam demand, which comprises: introducing fuel and air into the furnace in such directions so as to create a turbulent gas mass in a zone remote from the furnace outlet; burning said fuel at a rate in accordance with steam demand and absorbing the radiant heat therefrom in the steam generating elements to produce steam to be superheated; passing the steam so generated through the superheater to increase its temperature; controllably altering the angle of introduction of fuel and air to the furnace to lower the zone of combustion with respect to the steam generating elements that absorb radiant heat so as to increase said absorption and reduce the temperature of gases passing over the superheater to compensate for only the major part of increases above a predetermined value of steam temperature leaving the superheater; and simultaneously subjecting all or part of the superheated steam to a desuperheating action so as to promptly offset the overheating of all of the steam, during said lag, due to said heat storage in the superheater metal to effect minor adjustments of steam temperature during a change in load thereby maintaining a substantially constant final steam temperature.

PATENTS

GRANTED FEBRUARY 14, 1956

GENERAL AND MECHANICAL

2,734,190
JEWEL-SETTING TOOL
Robert D. Deutsch, Glencoe, and Otto E. Langos, Chicago, Ill., assignors to Dorothy Flicek Industries, Inc., Chicago, Ill., a corporation of Illinois
Application July 8, 1954, Serial No. 441,974
9 Claims. (Cl. 1—4)



1. A jewel-setting tool comprising an anvil having a base portion and a stem portion having at the end thereof an upwardly facing sloping-wall recess, a U-frame having at the end of the lower arm thereof an upwardly offset portion having an aperture slidingly receiving the stem portion of the anvil, the magnitude of the offset corresponding to the thickness of the base portion of the anvil so that the base portion of the anvil and the inner portion of the arm define a substantially continuous plane of support, an annular groove on the stem portion of the anvil and a spring latch on the upper surface of the offset portion of the arm engaging the groove to retain the anvil in position on the arm, an elongated jewel-setting head assembly, aligned apertured portions at the end of the upper arm of the frame to position and guide the head assembly for movement longitudinally toward and away from the anvil, a spring between a portion of the head assembly and the frame member urging the head assembly upwardly away from the anvil, and an elastic ring on the head assembly abutting against the frame to limit the upward motion of the head assembly, whereby the anvil and the head assembly may be removed from the frame by unlatching of the anvil and removal of the elastic ring.

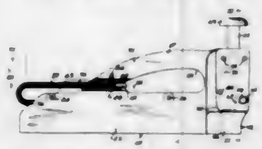
2,734,191
NAIL DISTRIBUTORS
Robert Charles Quarmby, Leicester, England, assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application November 21, 1952, Serial No. 321,771
Claims priority, application Great Britain December 8, 1951
11 Claims. (Cl. 1—39.1)

1. In a nail distributor, a raceway down which nails slide, a separator, a nail inverting member having a plurality of pockets into which the nails in the raceway are successively forced by the separator, a distributor block having a plurality of passages, means associated with said member for retaining the nails in the pockets of said member as said pockets move successively from the raceway to a discharge position above and into alinement with the passages respectively of the distributor block, an ejector for successively striking the ends of the nails in the pockets of the nail inverting member, as said pockets arrive at their discharge position, to transfer said nails lengthwise into the passages respectively of the distributor block, counting mechanism which may be set in different adjusted positions, and means for operating the separator through cycles and for moving the nail inverting member and the distributor block step by step, the number of cycles of the separator and the number of the steps of the



member and the distributor block being determined by the setting of the counting mechanism to cause the nails to be delivered successively to the passages of the distributor.

2,734,192
MAGAZINE AND FEED MEANS FOR FASTENER DRIVING MACHINES
Charles H. True, Jr., Kenilworth, and Harold W. King, Arlington Heights, Ill., assignors to Spotnails, Inc., Evanston, Ill., a corporation of Illinois
Application September 2, 1950, Serial No. 183,012
11 Claims. (Cl. 1—46)



1. In combination in a sash pin driving machine, a body structure, said body structure having an elongated sash pin magazine therein, a guide rail of angular cross section having a portion projecting laterally into an upper section of the magazine for engagement within aligned guide grooves in a series of sash pins in the magazine, a vertical depending leg on said rail member attached to one wall defining said magazine chamber and offset into positive clearance relation to the path of movement of the sash pins depending from the rail, and means for pushing the sash pins along said rail toward one end of the magazine chamber.

2,734,193
BRASSIERE
Robert W. Croxall, Arcadia, Calif., assignor to Elaine of Hollywood Brassiere Co., a corporation of California
Application December 7, 1953, Serial No. 396,521
4 Claims. (Cl. 2—42)

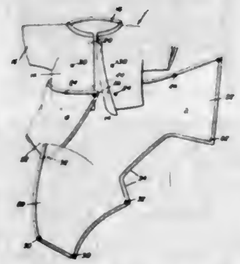
1. In a brassiere-type garment having fabric means forming a central portion with a pair of breast pockets, a pair of body-encircling side members extending laterally of the central portion, and a pair of shoulder straps, each

strap being attached at one end to the upper margin of a breast pocket and at the other end to a side member, breast-supporting means for each pocket, comprising a flexible band attached along the lower margin of the inner end portion thereof to the lower marginal portion of the breast pocket from a point about midway between the top and bottom of the pocket at the inner margin thereof to about the medial portion of the pocket, the outer end portion of said band extending around the outer lower portion of the



pocket outwardly of the medial portion thereof, elastic means securing a portion of the lower margin of the outer end portion of said band to the lower margial portion of the pocket, and suspension means between each said shoulder strap and each of said flexible bands, respectively, said suspension means comprising a strap supported intermediate its ends by a said shoulder strap and attached at one end to the outer end of said flexible band and at its other end to the central portion of the brassiere at the upper inner margin of the breast pocket.

2,734,194
INFANT'S GARMENT
Lutishie Colvin, Fresno, Calif.
Application May 1, 1953, Serial No. 352,466
1 Claim. (Cl. 2—80)



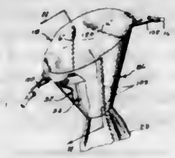
An integrally formed infant's garment comprising a main body portion of unitary construction having top and side edges and constituting the back of the garment, a pair of upper front portions extending from the top and side edges of the upper portion of the main body portion, said front portions terminating in generally parallel free edges and extending inwardly a distance for overlapping said free edges, means detachably securing the free edges of the upper front portions in overlapping relation thereby forming a jacket, said front portions having elongated horizontally disposed lower edges, said upper front portions and body portion being formed with complemental recesses forming neck and arm openings to facilitate donning of the garment, each lower side edge of said main body portion having lateral extensions, said extensions being of a length to encircle the lower portion of the torso of the wearer and each extension having an elongated horizontally disposed upper edge overlapping the lower edges of the upper front portions, said lateral extensions having free edges disposed in upwardly converging relation and forming an acute angled corner at the intersection with the upper horizontal edges thereof, said corners being disposed in overlapping relation, means for detachably connecting the upper edges of the lateral extensions in overlapping relation to the lower edges of the respective upper front portions, each of said lateral extensions having a generally horizontally disposed lower edge forming a lower angled corner at the intersection with the free edge of the lateral extension, an elongated flat depending from the main body portion and constituting a lower front portion extending upwardly therefrom for forming a crotch in the garment, said elongated flap terminating in an upper edge and being of a length to extend above the lower edges of the upper front portions and the upper edges of the lateral extensions, said elongated flap having its greatest width at it lower end and its smallest width at its upper edge, and being of a size to overlap the free edges of the lateral extensions, means detachably connecting the upper edge of the elongated flap to the upper front portions, said elongated flap having upwardly converging side edges intersecting the upper edge and lower end thereof for forming corners for overlapping the converging edges of said lateral extensions, means detachably connecting the lower corner of the elongated flap in overlapping relation to the lower end of the converging edges of the lateral extensions, said main body portion being recessed between the lateral extensions and the flap to form with the lower end of the flap and the lower edges of the lateral extensions leg openings.

2,734,195
HOOD-FORMING RAIN CLOAK
Lois E. Moss, Detroit, Mich.
Application May 20, 1953, Serial No. 356,225
2 Claims. (Cl. 2—84)



1. A rain cloak comprising a sheet of waterproof material forming a body portion having downwardly divergent lateral edges, and an approximately arcuate bottom edge, and including a hood-forming portion consisting of a pair of adjoined duplicate approximately triangular projections having a material upward divergency and such projections being subsequently similarly bent approximately transversely to the sheet to establish said margins in a substantially parallel adjoined relation, means interconnecting said margins and thus maintaining the specified relation of said projections to each other and to the sheet, and a pair of companion tie members oppositely and integrally extending from the sheet and interposed between said lateral edges and duplicate projections.

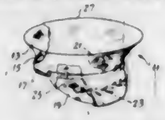
2,734,196
NECKTIE
Edwin C. Parker, Cranston, R. I.
Application May 14, 1954, Serial No. 429,753
3 Claims. (Cl. 2—150)



1. In a necktie, a preformed knot comprising an outer knot form, an inner knot pad form disposed within said outer knot form and secured thereto and a cover of textile material wrapped about said outer knot form, said outer knot form including a back panel and a pair of side panels disposed in diverging relation to said back panel along opposite side edges thereof, said side panels having their outer edges remote from said back panel side edges se-

cured together to be located at the front of the knot, and said side panels being disposed in angular relation with respect to said back panel, said inner pad form including a central panel disposed in underlying relation and contacting said secured together side panels of said outer knot form, a pair of wings extending from opposite sides of said central panel with their outer edges remote from said central panel in spaced relation thereto and spaced from each other, and contacting the inner face of said back panel.

2,734,197
PLASTIC RAIN CAP COVER, MOLDED
Jerry Kreinik, Brooklyn, N. Y., assignor to the United States of America as represented by the Secretary of the Navy
Application June 26, 1953, Serial No. 364,526
2 Claims. (Cl. 2—187)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A protective cap cover for visored caps comprising a transparent, elastic plastic material having a crown portion, an inwardly sloping side portion, a head-band portion and a visor portion of the general shape of a visored cap, and a double bead of plastic material coextensive with one edge of said head-band and visor portions, and forming a juncture therebetween, said crown, side, head-band and visor portions and said double bead molded together to form a seamless one-piece unit, whereby said visor portion can be severed from the cover along the lower edge of said double bead without destroying the crown portion of said cover.

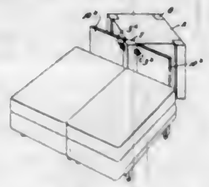
2,734,198
URINAL
August A. Kutsche, Avondale Estates, Ga.
Application September 16, 1952, Serial No. 309,808
1 Claim. (Cl. 4—110)



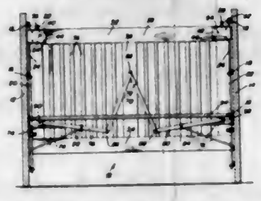
A female urinal comprising an oval cross-sectional container including an open end and side walls having rolled edges at said open end, said open end being contoured to fit the female crotch, said container being conical in longitudinal section, an oval stiffening hoop element hinged in said container to a portion of one of said side walls and swingable in said container into a transverse position within the container, and a fixed abutment tab on one of the side walls opposite the hinge of said element opposing swinging of said element toward said open end from its transverse position.

2,734,199
UTILITY PIECE OF FURNITURE
Nathan E. Blanke, Cleveland, Ohio, assignor to The Harvard Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application February 15, 1949, Serial No. 76,565
1 Claim. (Cl. 5—2)

An article comprising a furniture member having at least one protruding corner post, a pair of bed headboards, means on said bed headboards to facilitate securing bed side rails thereto, and means pivotally securing said headboards to opposed corners of a corner post of said member along a vertically extending edge of each headboard, said furniture member having angularly related side walls providing corners thereon, said headboards being adapted to be swung into alignment to extend in opposite directions from said corner post and being adapted to be swung in to abut against the outside surfaces of the adjacent edges of said furniture member extending from said protruding corner post.

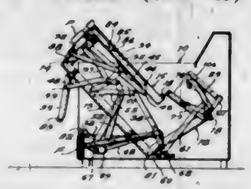


2,734,200
BABY CRIB STRUCTURE
John J. Kedrowski, Stevens Point, Wis.
Application September 7, 1954, Serial No. 454,515
2 Claims. (Cl. 5—11)



1. A baby crib comprising a pair of spaced opposed end members having vertical guides attached thereto, a pair of spaced side members slidably mounted on said guides between said end members, means attached to said side members engaging said guides to hold said side members in a raised position, and a bottom member vertically adjustable relative to said end members, and means attached to said side members and said end members for raising said bottom member when said one of said side members is lowered, said last recited means including connecting links pivotally attached to said side members substantially centrally thereof, brackets attached to said end members, cranks pivotally attached to said connecting links and said brackets, and rollers mounted on said cranks, said rollers engaging said bottom member.

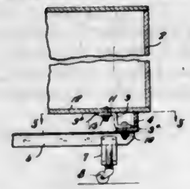
2,734,201
SOFA BED CONSTRUCTION
Peter P. Bebry, Bayonne, N. J., assignor to Bebry Bedding Corporation
Application August 12, 1953, Serial No. 373,872
1 Claim. (Cl. 5—13)



In an article of furniture of the character described, a furniture frame, a foldable frame composed of pivotally connected sections consisting of an inner section, two intermediate sections and an outer end section, means pivotally connecting the inner section with the furniture

frame for swinging movement thereof to dispose the same in upright relation when the foldable frame is moved to folded relation within the furniture frame, two pairs of legs pivotally connected with the intermediate section adjacent said inner section, cross members secured to the legs of each pair for preventing spreading or inward flexing of the sides of said last mentioned intermediate section, and a linkage structure at each side of said foldable frame each consisting of a pair of links pivotally connected together in end to end relation, one of said links being pivotally connected with the inner section and the other link being pivotally connected with the last mentioned intermediate section, a link pivotally connected with the furniture frame and with said last mentioned link and links pivotally connected with said legs and with said last mentioned link for swinging said legs from supporting relation with said foldable frame to collapsed relation with said last mentioned intermediate section with the movement of the foldable frame into collapsed relation within the furniture frame.

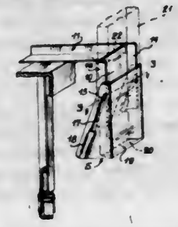
2,734,202
BEDFRAME HAVING MOBILE BOOKCASE HEADBOARDS
John E. Entwistle, Lakewood, Ohio, assignor to Harvard Mfg. Company, Cuyahoga County, Ohio, a corporation of Ohio
Application July 6, 1953, Serial No. 366,331
6 Claims. (Cl. 5—53)



1. In combination, a bedframe comprising cross-rail means at the head and foot of the bedframe, side rails and support means, said support means being aligned transversely of the bedframe with said cross-rail means at the head end of the bedframe, said side rails being angular in section with a laterally horizontally directed inner leg and a vertically upwardly directed outer leg; the inner legs of said side rails being adapted to receive resilient support means thereon, an elongate bracket plate secured to the horizontal leg of each of said side rails and extending laterally inwardly of the bedframe in transverse alignment with said cross-rail means at the head end of the bedframe, said bracket plates having upper support surfaces terminating in horizontal alignment with the upper edges of the outer legs of said side rails; headboard means on the upper portions of said bracket plates and of said side legs; and means securing said bracket plates to said headboard means.

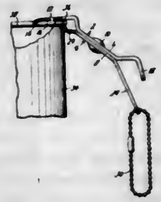
2,734,203
HEAD BOARD BRACKET
Marvin R. Rosen, Cleveland, Ohio, assignor to Argo Metal Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application February 8, 1954, Serial No. 408,874
5 Claims. (Cl. 5—285)

1. In a bed embodying frame side rails, a headboard and wooden posts of rectangular cross section depending therefrom, a clamp for connecting the posts to the side rails comprising a pair of channel irons affixed to the end portion of the frame side rails in depending relation thereto, pintles protruding from the outer frame of the opposed flanges of said channels, channeled shoes having slots in the flanged portions thereof mounted in telescopic relation with said channel irons, said slots being inclined downwardly and outwardly from the web of channeled shoes and engaged with said pintles and stops in the lower ends of said shoes engageable with the ends



of the posts on the headboard when inserted between the channel irons and channeled shoes.

2,734,204
COMBINATION CAN OPENER AND BOTTLE OPENER
Herman Epstein, Kansas City, Mo.
Application September 11, 1953, Serial No. 379,639
2 Claims. (Cl. 7—14.25)



1. A combination can opener and bottle opener comprising an elongated body member having one end thereof tapered to a point to form a can opener blade and the other end thereof forming the lever arm of a bottle opener, and an elongated handle member pivotally secured intermediate its ends to an intermediate portion of said body member, one end of said handle member forming a longitudinally projecting claw adapted by pivotal movement of said handle member to be positioned selectively adjacent said blade or said lever arm, whereby to serve either as a fulcrum member for said blade or as a lifter for use in connection with said lever arm, said handle member being extended from the pivotal axis thereof in a direction opposite from said claw, whereby to be positioned for convenient use in connection either with said blade or said lever arm, said handle extension being of sufficient length to overlap and pass in substantially wiping contact with the point of said blade as said handle member is rotated, whereby said blade is shielded when the device is adjusted to serve as a bottle opener.

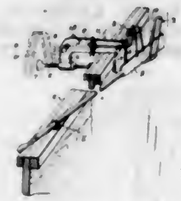
2,734,205
OAR HOLDER
Richard E. Preiss, Chicago, Ill.
Application April 10, 1952, Serial No. 281,515
1 Claim. (Cl. 9—1)



An oar holder for application to and removal from the gunwale of a boat at will, said holder being formed from a length of resilient metal stock provided with spaced bends to provide two substantially U-shaped portions with their legs extending in diametrically opposite directions, the adjacent legs of the two said U-shaped por-

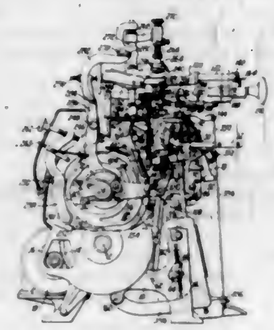
tions providing channel means for supporting an object suspended therefrom, the legs of one of said portions being joined by a lateral connecting member of a length sufficient to span the upper surface of a boat gunwale, and said last-named legs being resilient and of substantially equal length and having their ends converging remote from said connecting member and provided with reverse terminal bends which furnish contacting means whereby to embrace with line contact and frictionally grip the opposite lateral surfaces of the gunwale, the legs of the other U-shaped member providing between them an open socket-like rest for a portion of an oar and serving as a bumper.

2,734,206
OAR REST
Albert J. John, Brookfield, Ill.
Application October 30, 1953, Serial No. 389,283
2 Claims. (Cl. 9—1)



1. An oar rest attachment for a boat, comprising a clamp adapted to be secured athwart the gunwale of the boat, a rest member having a stem formed of two legs disposed on opposite sides of the clamp and each hinged at one end to the clamp at the middle of the latter, a hook on the other end of the stem, and pins extending transversely through the clamp near the two ends of the latter and projecting far enough on each side to support the stem both when the hook is on the outside of the boat and when on the inside.

2,734,207
MACHINES FOR SHAPING SHOE UPPERS
Benjamin F. Parrelli, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application October 2, 1952, Serial No. 312,818
17 Claims. (Cl. 12—97)



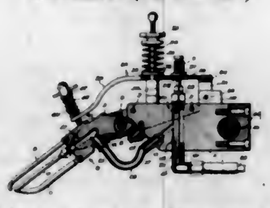
1. In a machine for shaping the toe portion of a vamp over a form, the combination of end-embracing wipers, a form support relatively movable with respect to the wipers for presenting a vamp on the form to the wipers, means for gripping portions of the vamp at opposite sides thereof against the wipers, and manually operated means including an equalizing lever for applying the same pressure to the gripping means at each side of the vamp.

2,734,208
TUBE CLEANER
Cecil M. Griffin, Pittsburgh, Pa.
Application March 31, 1955, Serial No. 498,195
7 Claims. (Cl. 15—104.06)



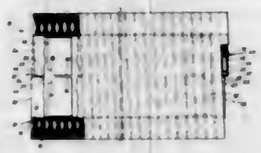
1. A tube cleaner comprising a cylindrical head part, a substantially U-shaped clevis part, a connecting part connecting the head and clevis parts and holding them in fixed spaced relation to each other, with the legs of the clevis extending axially away from the head part and straddling the axis of the head part, a scraper part comprising thin resilient material bent flatwise to form a substantially U-shaped body and having integral portions at the free ends of the U turned outward and rounded to fit the inside of the tubes in which they are to be used, the outwardly turned end portions of the scraper each having an opening therethrough, the scraper part being turned with the legs of the U pointing toward the head being telescoped into the clevis, the clevis legs passing respectively through said openings in the scraper and extending along the legs of the scraper, and interlocking means on the scraper and clevis for holding them in telescoped relation.

2,734,209
STRIPING DEVICE
Arthur L. Wells, Des Plaines, Ill.
Original application July 7, 1948, Serial No. 37,446. Divided and this application February 27, 1951, Serial No. 212,941
6 Claims. (Cl. 15—127)



1. A striping device of the class described comprising relatively movable body members, each said body member having fluid passages therethrough, said body members being resiliently mounted one with respect to the other for both vertical and lateral movement means connecting the passages of one body member with the passages of the other body member, fluid dispensing means on one of the bodies, and valve means to control the flow of fluid through said passages.

2,734,210
CYLINDRICAL BRUSH
Roger P. Crevier, Hartford, Conn., assignor to The Fuller Brush Company, Hartford, Conn., a corporation of Connecticut
Application July 30, 1954, Serial No. 446,791
8 Claims. (Cl. 15—182)



1. A cylindrical brush comprising a substantially cylindrical core having similarly formed end faces respectively defining longitudinally extending offsets which face in

opposite circumferential directions, and an elongated brush strip including a row of brush fibers and which is spirally wound upon the core and secured to the said core with one end of the strip located on one offset and with the other end of the strip located on the other offset, the said brush being constructed and arranged for end-to-end connection to a similar brush with the adjacent offsets of the two brushes engaged to provide a composite brush structure having a substantially continuous spiral row of brush fibers.

2,734,211
BRUSH MOUNTING FOR SUCTION CLEANERS
John E. Vance, North Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application April 7, 1950, Serial No. 154,627
2 Claims. (Cl. 15—183)



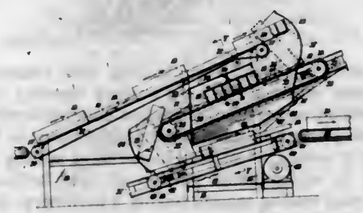
1. A rotary brush structure comprising a cylindrical shell having a slot therein extending through one end thereof, a brush seating and re-enforcing structure within said shell comprising a channel member having its side legs secured to said shell on opposite sides of said slot and in spaced relation to the margins thereof and a base portion underlying said slot, said channel member terminating short of said one end of said shell, a bearing mounting and re-enforcing structure comprising a cylindrical member telescoped into said one end of said shell, a bearing retaining cup carried by said mounting and re-enforcing structure within said shell, said cylindrical member and bearing cup having portions shaped to conform to the base portion of said channel and forming an extension thereof to the end of said shell, a flange on said bearing mounting structure closing said one end of said slot, a brush mounted on said shell having a back extending the full length of said slot, said back resting on the base of said channel and the extensions thereof and having laterally projecting side wings engaging under those portions of said shell defining the margins of said slot and within the legs of said channel member.

2,734,212
BRUSH STRUCTURE
Roy F. Koch, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application April 7, 1950, Serial No. 154,708
2 Claims. (Cl. 15—183)



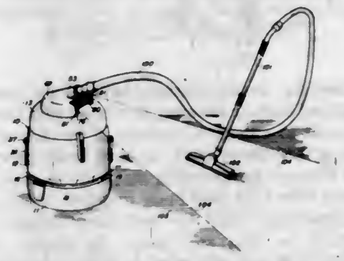
1. A brush strip comprising an elongated flexible plastic back provided with channels in opposite faces thereof having a common separating wall, a plurality of spaced cavities in said separating wall opening into one of said channels and closed at their bottoms by thin plastic webs, a bristle tuft in each of said cavities, a staple securing each of said bristle tufts to said plastic back, each of said staples having a bight portion looped over a bristle tuft in a cavity and leg portions piercing the plastic web forming the bottom of said cavity in spaced relation to each other and bent to lie in said other channel against said base between adjacent cavities, said staples being positioned with their bight portions and the bent ends of their leg portions lying parallel to the length of said channels.

2,734,213
MACHINE FOR CLEANING RECEPTACLES
Leonard F. Ashford, Philadelphia, Pa.
Application August 15, 1950, Serial No. 179,526
3 Claims. (Cl. 15—304)



1. Case cleaning apparatus comprising an endless upper case conveyor having a discharge end, an endless lower case conveyor disposed below the discharge end of the upper case conveyor with uninterrupted free space therebetween, said lower conveyor being arranged to receive successive cases falling by gravity only from the end of the upper conveyor, the lower conveyor being substantially directly beneath the upper conveyor, guide means disposed beyond the end of said upper conveyor including retainer means effective to deflect the falling cases abruptly, said guide means being spaced from the end of the upper conveyor and shaped to deposit the falling cases upside down on the lower conveyor, power means for moving the upper case conveyor continuously in one direction, power means for moving the lower conveyor continuously in the opposite direction, and jet means constructed and arranged to project fluid against the inside portion of the advancing cases on said lower conveyor.

2,734,214
LIGHT ARRANGEMENT FOR SUCTION CLEANERS
Dale C. Gerber, North Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application January 29, 1953, Serial No. 333,999
5 Claims. (Cl. 15—324)



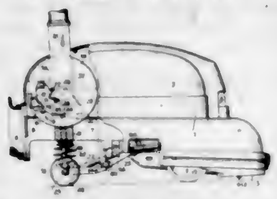
1. In a suction cleaner, a casing, suction-creating means in said casing, means forming a conduit communicating with said suction creating means and having an inlet at the top of said casing for a dirt-laden air stream directed laterally of said casing, means mounting a light bulb beneath said inlet to project light rays forwardly of said inlet, and means mounting said conduit and light bulb on the top of said casing for rotation as a unit about a vertical axis to at all times direct said light rays forwardly of said inlet during rotation of conduit.

2,734,215
SUCTION CLEANER NOZZLE ASSEMBLY
Herbert W. Wilson, Fort Worth, Tex., assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application March 21, 1950, Serial No. 151,019
9 Claims. (Cl. 15—325)



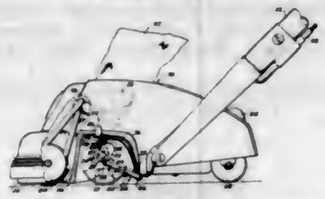
1. A suction air surface cleaning tool comprising a hollow body member having a surface cleaning air inlet nozzle portion and a tubular portion communicating with said nozzle portion, a tubular member adapted to be connected to a source of suction including a seating section swivelled in said tubular portion of said hollow body member, said seating section having a peripheral shoulder facing away from the end of said section which is received in said tubular portion of said nozzle member, a securing element extending through said tubular portion of said nozzle member and engaging said shoulder to retain said tubular member and nozzle member in assembled relation, a boot of flexible material encasing the said body member above said air inlet nozzle portion thereof and retaining said securing member against removal, a surface contacting base plate detachably secured to said body portion and having a nozzle opening registering with the nozzle portion of said body member and securing portions on said base plate anchoring said boot to said body member.

2,734,216
SUCTION CLEANER HAVING WHEEL ADJUSTMENT AND HANDLE LOCK
George A. Brace, Highland Park, Ill., assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application October 19, 1950, Serial No. 190,965
8 Claims. (Cl. 15—333)



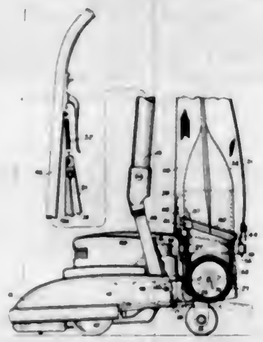
1. A cleaning device comprising a body member, a power operated surface cleaning device on said body member positioned to engage a surface to be cleaned, and a manipulating handle pivoted to said body member for movement through an operating range, the combination of a supporting wheel for said body member, means mounting said supporting wheel for movement relative to said body member to raise and lower the surface cleaning device out of and into engagement with a supporing surface, means biasing said wheel in one direction, a member movable with said handle, a stop carried by said member, a link connected to said wheel mounting means and biased into engagement with said stop to limit movement of said wheel by said biasing means, a catch having a part shaped to engage said link, means including a pivot mounting said catch for pivotal and bodily movement relative to said member, means normally positioning said catch to engage said link and to swing about said pivot shifting said link in a manner to shift said wheel against said biasing means as said handle is moved to a predetermined position, and said catch mounting means including means for shifting said pivot as said catch pivots thereon toward said link to minimize the angular movement of said handle required to actuate said catch.

2,734,217
SUCTION CLEANER WHEEL ADJUSTMENTS
George A. Brace, Highland Park, Ill., assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application October 17, 1952, Serial No. 315,320
11 Claims. (Cl. 15—339)



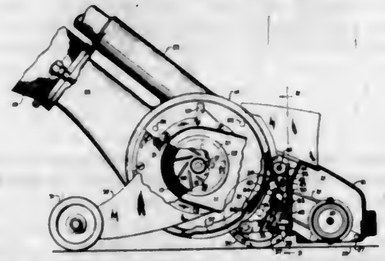
7. A suction nozzle comprising a body member having a downwardly opening mouth for cleaning a floor, means including an adjustable support member movable toward and away from the underside of said body for supporting said mouth at different elevations with respect to a floor, and means for adjusting the positions of said body and support members relative to one another comprising a control means pivotally mounted on one of said members having indentations at different radial distances from said pivot and being selectively engageable with the other of said members for determining the relative positions of said members with respect to one another, and manually operable means for moving said control means progressively from one to another of said indentations, said manually operable means including spring actuated means engageable with said control means when manually stressed and operable when the pressure thereon is released to move said control means to a new position in opposition to the weight of said nozzle member.

2,734,218
SUCTION CLEANERS
John E. Vance, North Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application December 12, 1950, Serial No. 200,443
16 Claims. (Cl. 15—351)



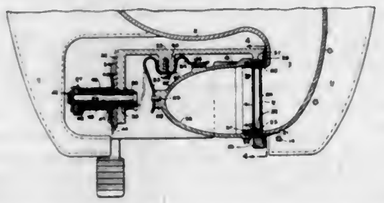
1. The combination with a suction cleaner having a wheel supported main body provided with an exhaust air conduit, a propelling handle pivoted to said cleaner, of a filter assembly for said cleaner comprising a filter adapter flexibly connected to the discharge end of said exhaust air conduit for movement about an axis substantially parallel to the handle pivot, clamping means on said adapter for detachably connecting the inlet of a filter bag thereto in an air-tight manner, an appearance bag for enclosing said filter bag, clamping means in the lower edge of said appearance bag having separable ends for normally holding the lower end of said bag closed about said filter adapter, means for flexibly attaching the lower end of said appearance bag to said adapter, and tension spring means connecting the upper end of said appearance bag to an upper portion of said propelling handle whereby said appearance bag and said filter adapter pivot with said handle so long as said clamping means on said appearance bag is closed about said filter adapter.

2,734,219
HANDLE AND NOZZLE CONTROLS FOR SUCTION CLEANERS
George E. Kaufman, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application September 29, 1950, Serial No. 187,455
4 Claims. (Cl. 15—361)



1. In a suction cleaner, a body having a nozzle for cleaning a surface, a handle mounted on said body for movement through different operating ranges, handle control means on said body and handle for controlling the range of movement of the latter, nozzle height adjusting means on said body and handle and actuated upon movement of the latter to one position to adjust said nozzle with respect to the surface, and single resilient means so arranged with respect to said handle control means and said nozzle adjusting means to exert a greater resisting force against said handle control means during movement of said handle into different ranges and a lesser resisting force against said nozzle adjusting means during adjustment of said nozzle by said handle movement.

2,734,220
HANDLE AND EXHAUST MOUNTING STRUCTURES FOR SUCTION CLEANERS
Donald B. Tschudy, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application May 14, 1951, Serial No. 226,227
15 Claims. (Cl. 15—410)



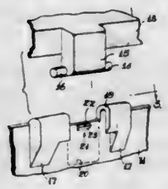
1. In a suction cleaning apparatus comprising an ambulatory body having a suction nozzle at the front thereof and an exhaust duct terminating in an exhaust port opening transversely of said body at the rear thereof and having an axis extending transversely of the body; a propelling handle for said body, a handle bail supporting said handle and having a pair of spaced supporting legs, bearing means fixed to one of said legs and mounted on said dust for rotational movement about the axis of said duct, means rotatably mounting the other of said legs on said body about the axis of said duct, and an exhaust conduit pivotally mounted on said bearing means in communication with said duct for pivotal movement about the axis of said duct with respect to said handle legs.

2,734,221
DETACHABLE HANDLE
Frank Di Trapani, Boston, Mass.
Application June 10, 1954, Serial No. 435,701
1 Claim. (Cl. 16—114)



In a detachable handle for a cooking utensil having a U-shaped clip embodying an inner wall and an outer wall provided with a vertically disposed notch therein, there being openings in said outer wall, an arcuate section interconnecting said walls and provided with a slot, said handle embodying a sleeve, a bolt extending longitudinally through said sleeve and having a threaded stem on one end thereof, a securing element arranged in threaded engagement with said stem, a shank extending from the other end of said bolt and projecting through said notch, an arcuate plate extended from said shank and defining a pair of laterally disposed arms arranged in engagement with said clip, and said arms being interposed between the walls of said clip, a projection on the upper edge of said plate whereby said projection extends into said slot, said sleeve being provided with a section of reduced diameter and an enlarged gripping section, there being a shoulder on said bolt, said sleeve having a bead abutting said shoulder, there being recesses in said sleeve adjacent said bead, and keys extended from said bolt and seated in said recesses for preventing relative rotation between said bolt and sleeve.

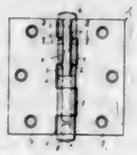
2,734,222
HINGE STRUCTURE FOR MOLDED BOXES
Yoneo Kiba, Chicago, Ill., assignor to Continental Plastics Corp., a corporation of Illinois
Application May 28, 1954, Serial No. 433,014
8 Claims. (Cl. 16—128)



8. A hinge structure for molded plastic boxes including a receptacle and a cover therefor, the receptacle and cover having side walls in substantially the same plane; comprising, pintle means carried by the side wall of the cover, said pintle means having a bearing support extending substantially parallel to the side wall of said cover, said bearing support including a bearing surface, hook means carried by the side wall of the receptacle, said hook means having an inner wall portion spaced laterally from the side walls and a bight portion connected to the side wall of the receptacle, a stop member on the side wall of the receptacle adjacent said hook

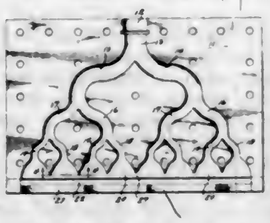
means and adjacent the upper edge of the side wall of the receptacle, said stop member having a flat upper bearing edge substantially in the plane of the upper edge of the side wall of the receptacle, a tapered surface on said stop member extending from the outermost edge of the bearing surface in tapering relation downwardly toward the side wall of the receptacle, the diameter of said pintle means being less than the distance between the wall of the hook means and the side wall of the receptacle, said pintle means being movable into an assembled position between the stop and the bight whereupon during said movement toward said position the pintle means engages the inner wall of the hook means and said stop and flexes a portion of the molded plastic box to permit entry of said pintle means into assembled position whereupon the bearing surface of the bearing support engages the bearing edge of said stop in bearing relation and said cover and receptacle are maintained in substantially permanent hinging relation.

2,734,223
LOOSE-PIN BUTT-HINGE
Harry Park, St. Louis, Mo., assignor to C. Hager & Sons Hinge Mfg. Co., St. Louis, Mo., a corporation of Missouri
Application November 24, 1952, Serial No. 322,226
3 Claims. (Cl. 16—169)



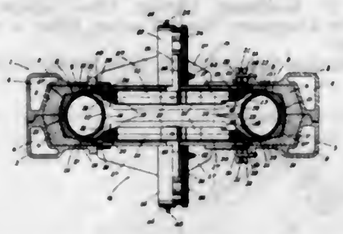
2. A loose-pin butt-hinge comprising complementarily shaped leaves having a plurality of tubular knuckles arranged in endwise abutting co-axial alignment, each of said knuckles having an internal bore which is smaller in diametral size midway between its ends and is of gradually increasing diametral size outwardly in opposite directions from such mid portion toward its outer ends in the provision of a convexly curved surface forming the inner face of said bore, and a pin disposed in and extending axially through the bores of the aligned knuckles, said pin being provided with an axially extending convexly projecting leaf-spring having an outwardly projecting face and straight parallel side edges adapted for bearing against the convexly curved portions of adjacent knuckles which are respectively located on opposite sides of the region of endwise abutment between said knuckles.

2,734,224
EXTRUSION APPARATUS
Thomas W. Winstead, Baltimore, Md., assignor to Hedwin Corporation, Baltimore, Md., a corporation of Maryland
Application April 6, 1953, Serial No. 347,117
13 Claims. (Cl. 18—12)



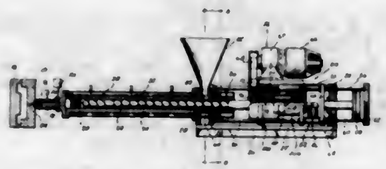
1. An extrusion die for plastics comprising a body having a plastic inlet opening therein, flow channels through said body from said inlet opening, an extrusion outlet, said flow channels being closed and continuous and emanating from said inlet opening in a plurality of pairs of unbroken smoothly contoured branch channels leading to said outlet, the number of pairs uniformly increasing in number from the inlet to the outlet and each succeeding pair being a multiple of the preceding one whereby the flow distance from any point in a said channel to the outlet is substantially equal.

2,734,225
TREAD CENTERING DEVICE FOR TIRE MOLDS
Edwin A. Glynn, Lodi, Calif., assignor to Super Mold Corporation of California, Lodi, Calif., a corporation of California
Application August 16, 1952, Serial No. 304,694
4 Claims. (Cl. 18—18)



4. A tread centering device for a tire mold which includes a matrix for the reception of a tire with the beads exposed, said device comprising a pair of spaced opposed power cylinders, means mounting the power cylinders in connection with the mold in axial alinement with the matrix supported tire but clear of the beads, circular pressure members engaging the tire beads from the outside, means securing the circular pressure members in connection and axially alined with the corresponding power cylinders, and a fluid pressure supply conduit system coupled to said power cylinders to cause simultaneous operation thereof in a manner whereby to yieldably urge the circular pressure members and engaged tire beads toward each other.

2,734,226
INJECTION MOLDING APPARATUS
William H. Willert, Clifton, N. J.
Application March 5, 1952, Serial No. 274,897
10 Claims. (Cl. 18—30)



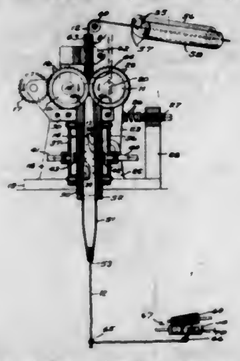
1. A plastic material plasticizing and delivering mechanism comprising a barrel having a passage extending longitudinally therein, a rotatable and reciprocable screw for feeding plastic material toward the forward end of the screw, means for feeding plastic material between the screw and the wall of the passage at a point spaced from the forward end of the screw, means selectively opening and closing the forward end of the passage, means for rotating the screw, means for selectively forcibly but yieldingly opposing reciprocation of the screw in the passage in a rearward direction, and means responsive to a predetermined length of travel of the screw in a rearward direction for positively thrusting the screw in the passage in a forward direction to feed the plasticized material out the forward end of the barrel.

2,734,227
MOLD STRUCTURE
Andrew J. Costick, Atwater, and Walter A. Jones, Akron, Ohio, assignors, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio
Application June 9, 1951, Serial No. 230,766
7 Claims. (Cl. 18—39)



1. A mold for molding articles of porous plastic material comprising a mold body having cavities formed therein to receive the material to be molded and a contacting surface adjacent the peripherial edge of said cavities, a cover to enclose said cavities, said cover having a deformable resilient strip secured thereto coextensive with the contacting surface of the mold, said strip having a contacting surface which engages the contacting surface of the mold, a portion of the contacting surface of the strip and a portion of the contacting surface of the mold being substantially inclined in transverse cross section relative to each other at the time of initial contact so that initial pressure of the cover when placed on the mold causes the contacting surface of said strip to slide transversely across the contacting surface of the mold and thus wipe plastic material from the mold contacting surface, whereby rinds are prevented from forming on the molded article.

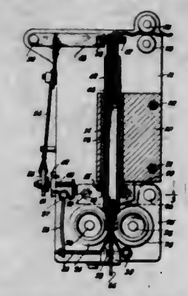
2,734,228
CRIMPING APPARATUS
William D. Hay, Peekskill, N. Y., assignor to Alexander Smith, Incorporated, White Plains, N. Y., a corporation of New York
Application October 28, 1952, Serial No. 317,238
10 Claims. (Cl. 19—66)



1. An apparatus for crimping tow or yarn, comprising a pair of feed rolls adapted to feed said tow or yarn therebetween, a member having a bore forming a crimping chamber, said member having at one end a saddle conforming to the bight of said rolls and having at the other end a tube having a bore tapering to a small opening at its discharge end.

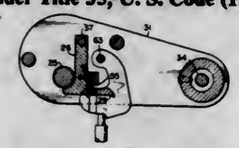
2,734,229
CRIMPING APPARATUS
Ewart H. Shattuck, Wilmington, Del., assignor to Joseph Bancroft & Sons Company, Wilmington, Del., a corporation of Delaware
Application November 22, 1954, Serial No. 470,297
6 Claims. (Cl. 19—66)

1. Apparatus for crimping yarn or the like comprising a member having a bore forming a crimping chamber, a pair of feed rolls to feed said yarn into one end of said chamber for crimping, take-up means to withdraw crimped yarn from the other end of said chamber, a member bearing against the mass of crimped yarn at said other end of said chamber and movable in accordance with changes in the quantity of said yarn therein, and feed



control means responsive to movement of said member to vary the pressure of said feed rolls on said yarn to control the yarn slippage in a sense to maintain a constant quantity of yarn in said chamber.

2,734,230
COTTON FIBER BLENDER
William J. Martin, Arlington, Va., and John E. Larrison, Leland, Miss.
Application July 30, 1952, Serial No. 301,811
1 Claim. (Cl. 19—96)
(Granted under Title 35, U. S. Code (1952), sec. 266)

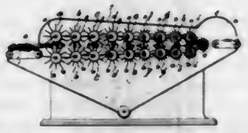


A fiber blender comprising a frame, a rotatable blending cylinder mounted on said frame and carrying spines on its periphery for collecting and holding fibers thereon, a feed mechanism adjacent to the cylinder for feeding fibers onto the said spines of the cylinder at a constant rate, said feed mechanism being pivotally supported on the frame and being adjustable vertically with respect to the cylinder, said feed mechanism comprising a rotatable feed roll, a feed plate held against the said roll by spring pressure, a feed plate extension hinged to the bottom of the said feed plate, a pin mounted on each side of the feed plate extension, a cam-shaped plate having cam steps on its periphery, being pivotally mounted on each side of the feed mechanism, and arranged for slidable engagement with the said pins respectively so that when the feed plate extension is swung on its hinge from one position to another the cam plates will be correspondingly shifted, height-adjustable posts mounted on the frame for engaging said cam steps to support the feed mechanism so that when the feed plate extension is swung the cam steps will engage the posts to correspondingly raise or lower the feed mechanism, tension means mounted on the feed mechanism for restraining movement of the feed plate extension and for retaining the said feed plate extension in its position, and means for rotating the cylinder at such a rate of speed relative to the feed mechanism that the fibers are collected and held in layers on the said spines of the cylinder in a more uniform blend than that of the fibers fed thereto.

2,734,231
COMBING MACHINE
Arpad Boer, Buenos Aires, Argentina, assignor to Brillotex Argentina S. A., Buenos Aires, Argentina, a corporation of Argentina
Application November 24, 1954, Serial No. 470,911
4 Claims. (Cl. 19—128)

1. A combing machine comprising a series of pairs of rollers provided with outwardly extending prongs, the

rollers of each pair having like prongs and the prongs of successive pairs decreasing in length from one end of the machine to the other, the prongs of the rollers of each pair overlapping so that the orbits of the points of the prongs of one roller are secants with relation to the orbits of the points of the prongs of the other roller of the pair,



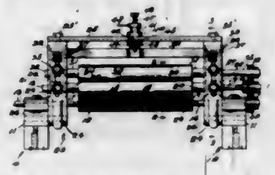
and the points of the prongs of each roller also having orbits intersecting the points of the prongs of the corresponding roller of each adjacent pair, all rollers being driven by a transmission with differential speed means for driving each succeeding pair at a higher speed than the preceding pair, forming in the series a speed gradient from low to high in the direction of decreasing prong lengths.

2,734,232
APPARATUS FOR DRAFTING TEXTILE FIBERS
Philip T. Bodell, Bristol, R. I., assignor to Collins & Aikman Corporation, Philadelphia, Pa., a corporation of Delaware
Application July 10, 1952, Serial No. 298,157
3 Claims. (Cl. 19—131)



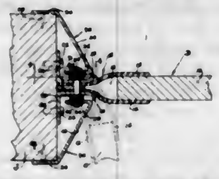
1. In textile fiber drafting apparatus having spaced pairs of draft rolls, a driven roll and a nose bar arranged between the pairs of draft rolls; an endless apron overtravelling the driven roll and the nose bar; a weight roll suspended within the apron below the driven roll; a floating press roll bearing upon the apron from the outside in the interval between the driven roll and the weight roll so as to be urged upwardly through tensioning of the belt by the weight roll; and fixedly-positioned wedge means adjacent the press roll providing inclined surfaces for cooperation with gudgeons on the press roll to urge said press roll into effective nip relation to said driven roll.

2,734,233
DRAWING ROLLS
Ralph C. Berker, Hoxsie, R. I.
Application January 7, 1953, Serial No. 330,058
2 Claims. (Cl. 19—135)



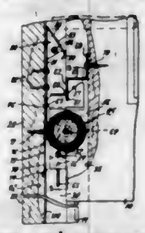
1. In a textile drafting machine, a set of textile drafting rollers comprising a lower fluted roller, an intermediate pressure roller having a yieldable surface, and a pressure applying upper roller of a character to substantially prevent bending under applied textile drafting pressure, said rollers being substantially the same diameter and arranged one above the other and having surface contact one with the other along the entire effective length thereof, said pressure roller and pressure applying roller being movable toward and from the fluted roller, and spring means for applying a yielding pressure on the pressure applying roller to be transmitted thereby on the said pressure roller along the entire effective length thereof, said rollers extending one above the other with the axes thereof in line with each other, a drive gear secured to said fluted roller for rotation therewith, a second gear rotatably mounted on said pressure roller and engaging the first said gear, and a third gear secured to said pressure applying roller for rotation therewith and engaging with the said second gear, said first and third gear being equal in pitch diameter, whereby said rollers will be rotated at equal surface speeds.

2,734,234
DOOR CONSTRUCTION
Oliver C. Eckel, Boxborough, Mass.
Application September 12, 1952, Serial No. 309,329
11 Claims. (Cl. 20—16)



1. Door construction comprising a main body, a flexible attaching member connected to said main body embodying an extension extending beyond said body, a pair of mounting members adapted to lie at opposite outer sides of and adjacent said extension each embodying a curved deflector at an end extremity adapted to lie adjacent said extension, and means to attach said extension to said mounting members.

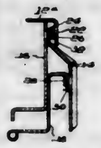
2,734,235
SASH AND SASH-BALANCE ASSEMBLIES
Earl M. Trammell, Jr., St. Louis, Mo.
Application August 15, 1951, Serial No. 241,965
18 Claims. (Cl. 20—52.2)



1. A counterbalance and connector structure for use in a sliding sash assembly including a sash and elements providing a sashway therefor, comprised of a counterbalance spring serving the sash, means anchoring a free end of the spring at a fixed position along the sashway, a fixture by which the spring is carried for extensible and retractible spring movement, and abutment means coacting with the fixture to provide a detachable connection between the fixture and the sash.

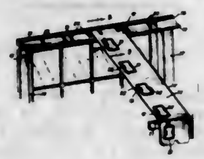
2,734,236
AWNING LOUVRE FASTENER
Roland Harrison, Pittsburgh, and Paul Kepple, Youngwood, Pa., assignors to Kool Vent Metal Awning Corporation of America, Pittsburgh, Pa., a corporation of Pennsylvania
Application September 28, 1951, Serial No. 248,831
2 Claims. (Cl. 20—57.5)

1. In a metal awning having an inclined rafter member extending along the width of the awning, an upwardly extending flange on the rafter member providing a bearing support for the awning louvers, a side plate member secured to the lower end of the rafter member and extending rearwardly therefrom for substantially the width of the awning and outwardly extending louver spacing flanges formed on the side plate, the combination of a side wall louver member extending between and overlappingly engaging the rafter member and side plate member flanges, outwardly extending eye members



spaced along the rafter member flange, a depending hook member on each side plate flange, a hook member at the upper end of the louver member registering with the adjacent rafter eye member, an eye member extending inwardly of the louver intermediate the ends thereof registering with the adjacent side plate flange hook member, at least one of said hook members having a portion thereof extending through its registering eye and offset relative thereto retaining the louver member in assembled relation with the rafter and side plate members.

2,734,237
VENTILATED AWNING
Redding Sims, New Orleans, La.
Application February 9, 1953, Serial No. 335,688
2 Claims. (Cl. 20—57.5)



1. An awning comprising a plurality of base strips each having one edge portion projecting upwardly, ventilating openings formed in each of said base strips through the portion of said base strip adjacent the other edge thereof, each of said openings having a tongue portion at each side, each of said base strips being substantially a duplicate of each other, a plurality of such base strips adapted to be positioned in side by side substantially abutting relation, a plurality of inverted channel shaped cover strips having flange portions extending upwardly at an angle corresponding to the angle of the edge portions of the base strips, said channel shaped cover strips being of a size to cover the ventilating openings of one of said base strips and a flange portion of an adjacent base strip, said cover strips being held in position on said base strips and said base strips being held in abutting relation by the tabs at the side edges of said openings whereby a unitary structure of great width may be assembled from base strips and cover channel strips of small widths.

2,734,238
WEATHERPROOF DOOR STOP
George H. Clapp, Central Square, N. Y.
Application August 1, 1952, Serial No. 302,187
4 Claims. (Cl. 20—69)

1. A weather-strip construction comprising an extruded all-rubber elongated non-flexible but yieldable body embodying a stop which is rectangular in cross-section, said stop having a flat side for retentive attachment to a door frame and being provided along one lengthwise edge with a reduced attaching flange, and being provided along its other lengthwise side with an oblique-angled weather-proofing and sealing flange, the latter being flexibly resilient and wedge-shaped in cross-



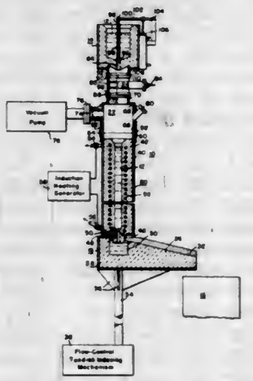
section and providing a free feather-edge which normally projects to a position beyond the plane of the adjacent lengthwise edge of said stop.

2,734,239
HOLLOW RESILIENT STRIP FOR SEALING CLOSURE JOINTS
Michael W. Lombardi, Derby, Conn., assignor, by mesne assignments, to The B. F. Goodrich Company, Akron, Ohio, a corporation of Ohio
Application March 17, 1953, Serial No. 342,909
8 Claims. (Cl. 20—69)



1. A strip for sealing a joint between jamb and closure structures, comprising, an elongate body composed of resilient unstretched minutely cellular material having a cross sectional shape delineating a mounting portion of the strip having an extent of mounting surface adapted to be secured to one of said structures and containing a channel extending lengthwise of the strip, said channel having a portion of relatively spacious cross section affording a strip hollowing hole and a relatively narrow portion affording a crevice aligned with a reference plane intersecting said hole and opening outward from said hole through said mounting surface, said hole being flanked on each of opposite sides thereof by limber tubular walls of said material of less minimum thickness than the extent of said hole along said plane mutually joined at a side of said hole most remote from said crevice.

2,734,240
VACUUM POURING APPARATUS
Raymond L. Southern, New Kensington, Pa., assignor to Allegheny Ludlum Steel Corporation, Brackenridge, Pa., a corporation of Pennsylvania
Application November 22, 1954, Serial No. 470,478
5 Claims. (Cl. 22—73)



1. In a vacuum pouring apparatus for degassing molten metal as it is poured from a ladle into a mold, the com-

bination comprising, a tundish having a teeming well and a runner disposed to receive and direct the flow of molten metal into the mold under atmospheric conditions, an elongated pouring chamber disposed between the ladle and the tundish and having an end thereof extending into the teeming well, a storage well in the chamber in communication with the teeming well, means for sealing the other end of the chamber to the ladle for receiving molten metal therefrom, means for evacuating the chamber when metal is poured therethrough into the teeming well, the metal in the teeming well under atmospheric conditions cooperating to maintain a supply of the molten metal in the storage well to effectively seal the chamber whereby molten metal passing through the evacuated chamber is degassed.

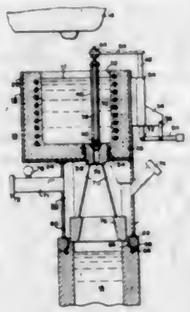
2,734,241

VACUUM POURING APPARATUS

Raymond L. Southern, New Kensington, and James K. Ely, Pittsburgh, Pa., assignors to Allegheny Ludlum Steel Corporation, Brackenridge, Pa., a corporation of Pennsylvania

Application November 22, 1954, Serial No. 470,479

1 Claim. (Cl. 22—73)



In a vacuum pouring apparatus for degassing molten metal as it is poured into a mold, the combination comprising, a tundish for holding a supply of the molten metal, a pouring nozzle for the tundish, a stopper disposed for movement to open and close the nozzle, a wall member forming a downwardly extending chamber secured at the upper end thereof to the tundish in a sealed relation therewith about the nozzle, the wall member having a rim member at the lower end thereof having a configuration and size to seat on the mold to effect a tight joint therewith, a plurality of spaced rib members connected between the wall member and the tundish within the confines of the chamber to support the tundish and metal contained therein, communicating means connected through the wall member of the chamber for evacuating the mold and chamber when the rim member is seated on the mold, means disposed to be operated to move the stopper to an open position to permit the flow of molten metal through the evacuated chamber into the evacuated mold while continuing the evacuation thereof to degas the molten metal, said operating means also being disposed to be operated to move the stopper to close the nozzle when the mold is filled to stop the flow of molten metal thereto while permitting continued evacuation of the chamber as the metal solidifies in the mold, and means disposed about the nozzle and tundish for maintaining the metal in the tundish in a molten condition.

2,734,242

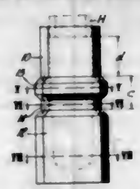
INGOT MOLDS

Edgar Marburg, Pittsburgh, Pa., assignor to United States Steel Corporation, a corporation of New Jersey

Application June 30, 1954, Serial No. 440,353

4 Claims. (Cl. 22—139)

1. An ingot mold comprising solid side walls which define a cavity adapted to receive molten metal for casting



an ingot body and which extend a relatively short distance above the normal height of the ingot body, said walls below this height being of greater thickness in their lower portion than in their upper portion to accelerate solidification of the lower portion of an ingot body both transversely and vertically and to retard transverse solidification of the upper portion, the trace of the inside surfaces of said walls in any vertical plane away from the lower end being a straight line, and means on the exterior of said walls between their thick and thin portions spaced below the normal height of an ingot body by a distance which is 10 to 70 percent of the height of the ingot body for disrupting vertical heat flow in these walls, said means including a thickened section and a thinner section immediately therebelow, both of said sections being of relatively short vertical dimensions.

2,734,243

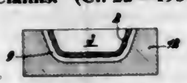
METHOD OF SECURING A METAL SKIN IN A MATRIX BLOCK

Eduard Maria Henricus Lips and Sies Wiegersma, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application November 19, 1952, Serial No. 321,308

Claims priority, application Netherlands December 21, 1951

16 Claims. (Cl. 22—193)



1. A method of securing a metal skin in a matrix block, comprising the steps of depositing a metal skin on an object by electro-deposition, placing a layer of material of sufficient thickness over the surface of the metal skin remote from the cavity of the object, removing said object, arranging the resultant body comprising said metal skin and layer of material on a substratum and depositing moulding sand thereon to form a sand mould, pouring metal into said sand mould to cast a metal block, removing said metal block from said sand mould, said metal block having a cavity corresponding in size to the body comprising said skin and layer of material, removing said layer of material from said body and placing said body in the cavity of said metal block, and filling the space between said skin and said metal block with a material which joins said skin and said metal block.

2,734,244

PROCESS OF REFINING AND MELTING TITANIUM

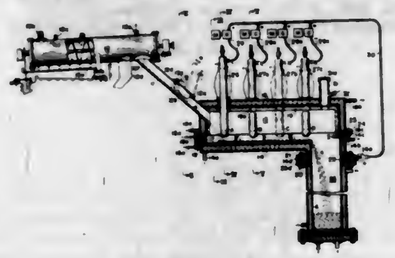
Schuyler A. Herres, Albany, N. Y., assignor to Allegheny Ludlum Steel Corporation, Brackenridge, Pa., a corporation of Pennsylvania

Application February 8, 1951, Serial No. 209,994

7 Claims. (Cl. 22—214)

1. In removing impurities from unrefined titanium metal which is subject to carbon and air contamination, and in

melting and directly building up a pure high quality metal ingot therefrom in an enclosed arc-melting furnace having a longitudinally-extending hearth terminating at its front end in an ingot mold and having a feed chute open to the opposite end of the hearth above a melting level therein, the method which comprises, introducing unrefined metal in solid form through and along the feed chute into the furnace at the opposite end of the hearth, maintaining an atmosphere within the furnace that is non-contaminating of the metal, preliminarily heating the thus-introduced metal at such opposite end of the hearth to a temperature well above the volatilizing point of impurities therein and to about the melting point of the metal and refining the metal thereat by releasing the volatilized impurities therein; melting the thus-purified metal and, after the metal has been melted into a molten condition, increasing and maintaining the temperature of the molten metal from such opposite end of the hearth



well above its melting point and below its boiling point, while flowing it along the hearth from such opposite end thereof into the ingot mold, solidifying the molten metal within the mold and progressively building up an ingot therein; establishing and maintaining a confined positive flow of inert gas from the front end of the hearth along and above the molten metal therein towards the opposite end thereof, flowing the volatilized impurities with the positive flow of inert gas out of the furnace from such opposite end of the hearth through the chute, along the unrefined metal being introduced along the chute, and out of the chute adjacent an opposite end thereof; maintaining a positive flow of such volatilized impurities in a volatilized state during their movement from the furnace and along and out of the chute, while volatilizing and carrying away impurities of higher volatility from the unrefined metal of solid form in the chute with the previously-mentioned positive flow of inert gas and volatilized impurities.

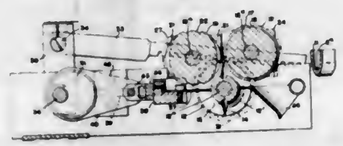
2,734,245

METHOD AND APPARATUS FOR SHAPING ARTICLES OF PLASTIC MATERIAL

John J. Chamberlain, Akron, Ohio, assignor to The United States Stoneware Company, a corporation of Ohio

Application December 17, 1951, Serial No. 262,050

6 Claims. (Cl. 25—21)



6. A method of making a succession of articles of plastic material which comprises providing a continuous strip of wholly plastic stock of deep channel form, longitudinally feeding and thus progressively bending said strip to longitudinally curved form with the base of the channel at the inner side of the curve while preserving substantially its original channel form, further feeding said strip in said arcuate path past a shaping position and then past a severing position, at said shaping position shaping said strip as a succession of repeat-pattern units by molding the strip both internally and externally while maintaining it in generally concavo-convex shape both longitudinally and transversely, and at said severing position severing the molded strip to separate the said repeat-pattern units in succession from the continuous strip.

2,734,246

PRODUCTION OF PERFORATE CERAMIC WARE

Ray H. Sayre, Pittsburgh, Pa.

Application November 26, 1952, Serial No. 322,689

3 Claims. (Cl. 25—24)



3. Apparatus for the manufacture of a perforate plate comprising a profile, a potter's wheel having a mold with a matrix to receive a charge of plastic ceramic material, said matrix having a rim portion for cooperation with said profile in the formation of the periphery of the finished plate and a plurality of outwardly drafted protuberances rising in said mold matrix to a height equal to the thickness of the plate and being spaced inwardly from said rim portion and from each other, said profile being movable relatively to the potter's wheel in rotation for distributing and shaping the ceramic material over and between said protuberances and to the form of said matrix, and effecting the penetration of the protuberances through said ceramic material, said profile including a shearing edge-portion for cooperation with the outer ends of said protuberances.

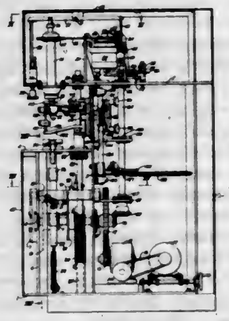
2,734,247

CUP FINISHING MACHINE

George E. Ryckman, East Liverpool, Ohio, assignor to Miller Pottery Engineering Company, Pittsburgh, Pa., a corporation of Pennsylvania

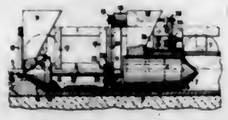
Application June 1, 1953, Serial No. 358,820

10 Claims. (Cl. 25—24)



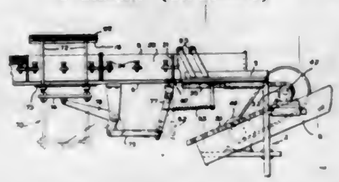
2. A cup finishing machine comprising a cup-receiving chuck rotatable on a vertical axis, a turning tool disposed beside the chuck, actuating means for reciprocating the turning tool vertically, a template, means connected to the turning tool and engaging the template for holding the turning tool in a position to rough turn the outside of a cup on the chuck as the tool moves vertically in one direction, and means for moving the template bodily to swing the turning tool horizontally inward toward said axis when the tool moves in the opposite vertical direction, whereby to finish the outside of the cup.

2,734,248
MACHINE FOR CONSTRUCTING ELONGATED TUBULAR CONCRETE STRUCTURES
Louis Gaudin, Asnieres, France, assignor to Invester S. A., Tanger (International Zone), a company of Tanger
Application December 28, 1951, Serial No. 263,797
Claims priority, application Switzerland April 25, 1951
4 Claims. (Cl. 25—32)



1. A machine for molding concrete pipelines at least partly embedded in the ground over a trench formed in said ground having a cross-section corresponding to the shape of the lower part of the structure, said machine comprising a wheeled frame adapted to move over the trench with its wheels to either side thereof, a rotary spindle extending longitudinally of the frame in parallelism with the longitudinal direction of the trench, means carried by the frame for causing the rotation of said spindle, an elongated member rigid with said spindle and having a cross-section corresponding to the shape of the inner surface of the concrete structure, a nose-piece secured to the front end of the rotary spindle, a smoothing member rigid with the frame, means for pouring concrete over said nose-piece, said concrete being distributed by the nose-piece over the inner surface of the trench and being smoothed by the smoothing member, and means for pouring concrete over the elongated member to form the upper part of the pipeline.

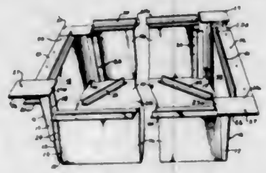
2,734,249
ROOFING TILE MAKING MACHINES
Marlen C. Willis, Phoenix, Ariz.
Application April 26, 1951, Serial No. 223,088
3 Claims. (Cl. 25—43)



3. Pallet removing means for tile making machines of the type having a frame, a pallet box slideway on said frame and pallet boxes sliding along said slideway, said pallet removing means comprising lifting fingers slidably mounted beneath said slideway and disposed on said frame to push directly upward and engage the bottom of a pallet, a plate attached to the bottom ends of said fingers, a lever supported on said frame and communicating lifting movement to said plate, an operating lever pivoted to said frame beneath said slideway having a roller at its upper end adapted to engage transverse portions of said pallet boxes to attain movement therefrom, and a link connecting the lower end of said operating lever to said plate lifting lever.

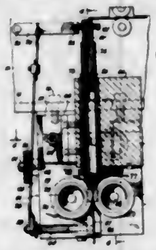
2,734,250
FORMING APPARATUS FOR CONCRETE AND THE LIKE
Harold D. Thompson, Houston, Tex., assignor, by mesne assignments, to J & B Building Products, Houston, Tex., a partnership
Application January 29, 1952, Serial No. 268,852
17 Claims. (Cl. 25—131.5)

1. A forming apparatus for concrete and the like which comprises, in combination, an inverted pan having a top panel and side panels integral with and depending from the top panel, said side panels being spaced apart at adjacent ends thereof, and a section fitted between said adja-



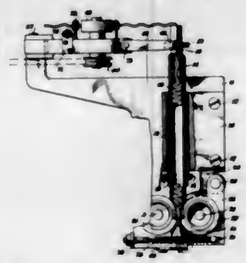
cent ends to complete the side of the pan, said section being removable by movement in a direction away from said top panel.

2,734,251
CRIMPING APPARATUS
Leo W. Rainard and Ewart H. Shattuck, Wilmington, Del., assignors to Joseph Bancroft & Sons Company, Wilmington, Del., a corporation of Delaware
Application October 8, 1954, Serial No. 461,134
7 Claims. (Cl. 28—1)



1. Apparatus for crimping yarn or the like, comprising a member having a bore forming a crimping chamber, a pair of feed rollers to feed said yarn into one end of said chamber for crimping, take-up means to withdraw crimped yarn from the other end of said chamber, a member bearing against the mass of crimped yarn at said other end of said chamber and movable in accordance with changes in the quantity of said yarn therein, and feed control means responsive to movement of said member to vary the spacing between said feed rollers to control the yarn slippage in a sense to maintain a constant quantity of yarn in said chamber.

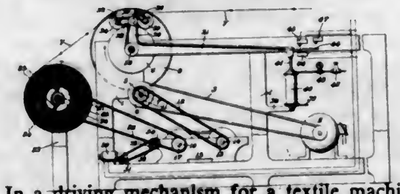
2,734,252
CRIMPING APPARATUS
Ewart H. Shattuck, Wilmington, Del., assignor to Joseph Bancroft & Sons Company, Wilmington, Del., a corporation of Delaware
Application February 11, 1955, Serial No. 487,589
8 Claims. (Cl. 28—1)



1. Apparatus for crimping yarn or the like comprising a member having a bore forming a crimping chamber, a pair of feed rolls to feed said yarn into one end of said chamber for crimping, a pair of take-up rolls to withdraw crimped yarn under tension from the other end of said chamber, a member bearing against the mass

of crimped yarn at said other end of said chamber and movable in accordance with changes in the quantity of said yarn therein, and control means responsive to movement of said member and acting on said take-up rolls to vary the yarn slippage in a sense to maintain a constant quantity of yarn in said chamber.

2,734,253
VARIABLE SPEED DRIVE APPARATUS
Thomas F. Suggs, Gastonia, N. C., assignor to Cocker Machine & Foundry Company, Gastonia, N. C., a corporation of North Carolina
Application April 25, 1952, Serial No. 284,378
6 Claims. (Cl. 28—36)



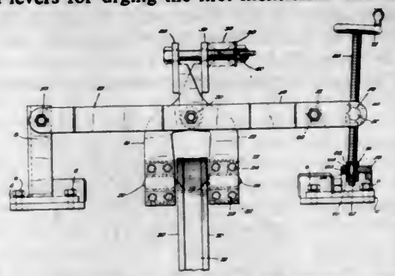
1. In a driving mechanism for a textile machine, the combination comprising a motor, variable speed drive means driven by said motor, a yarn collecting beam, connecting means for driving said yarn collecting beam from said variable speed drive means, and compensative control means including a balancing means responsive to yarn tension and a fluid pressure means connected to the balancing means in opposition to said yarn tension, said control means being operative to regulate the output speed of said variable speed drive means in response to the tension of yarn as it approaches said collecting beam, said connecting means including normally interconnected driving and driven elements wherein the driven element has capacity to move faster than and independently of the driving element when the rotary speed of the yarn collecting beam is increased beyond its normal driven speed corresponding to the output speed of the drive means, whereby an empty yarn collecting beam can be started by rotating the yarn collecting beam at a speed in excess of its normal driven speed to build up yarn tension thereby actuating said compensative control means and causing said variable speed drive means to speed up and automatically establish normal drive connection with said yarn collecting beam.

2,734,254
WARP CONDITIONING PROCESS FOR TYING-IN MACHINES
Stoney Drake, Norfolk, Va., assignor to Drake Corporation, Norfolk, Va.
No Drawing. Application October 29, 1954, Serial No. 465,741
9 Claims. (Cl. 28—72.6)

1. A method of warp preparation for high-twist warp yarns which comprises applying a twist-setting liquid to only a portion of each end of a sized and dried warp sheet during slashing as it is being prepared for weaving, to prevent kinking and snarling of the ends of the warp yarns during threading up of a loom and during tying-in of a new warp.

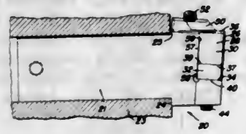
2,734,255
MEANS FOR RESURFACING BRAKE ROTORS
Carl E. Tack, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a corporation of New Jersey
Application January 22, 1952, Serial No. 267,562
4 Claims. (Cl. 29—90)

1. Apparatus of the class described comprising an actuator lever member having a pivotal axis, a pair of levers pivoted thereto, rollers mounted on corresponding ends of said levers for rotation relative thereto on approximately parallel axes extending lengthwise thereof and approximately perpendicular to the pivotal axis of said member, a spring connected to opposite corresponding ends of said levers for urging the first mentioned ends thereof



together under equalized pressure, and means connected to said actuator member for pivoting the same on its axis to move the rollers in a path approximately parallel to said roller axes.

2,734,256
CUTTING TOOL
Worthy J. F. Forward, Rochester, and William R. Miller, Jr., Brighton, N. Y., assignors, by mesne assignments, to Farrel-Birmingham Company, Incorporated, Ansonia, Conn., a corporation of Connecticut
Application February 9, 1953, Serial No. 335,862
8 Claims. (Cl. 29—96)

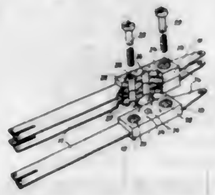


1. A cutting tool comprising a tool holder having a pocket formed therein which is bounded by an inside wall, a rear wall and a bottom wall that extend at right angles to one another, a solid cutting bit of hard cutting material which is generally prismatic in shape and which has a bottom surface, an inside surface, a top surface, and a rear surface, said inside surface, said rear surface and said bottom surface being plane and extending at right angles to one another, a seating plate that is generally prismatic in shape and that has a top surface, a rear surface, a bottom surface, and an inside surface that are plane and that extend at right angles to one another, the inside surfaces of said cutting bit and of said seating plate seating against the inside surface of said pocket and the rear surface of said cutting bit seating against the rear surface of said pocket, said pocket being open at its outside to expose the top outside edge of said cutting bit, the inside wall of said pocket being inclined inwardly from top to bottom so that cutting clearance is provided back of said top outside edge, a clamping member engaging said tool holder and the top face of said cutting bit, and a headed screw passing through said clamping member and threaded into said tool holder to cause said clamping member to clamp said cutting bit against said seating plate and to clamp said cutting bit and said seating plate in said pocket.

2,734,257
METHOD OF PRODUCING CONTACT SPRING SETS
Johan Edvin Jonsson, Hagersten, Sweden, assignor to Telefonaktiebolaget L M Ericsson, Stockholm, Sweden, a company of Sweden
Application April 24, 1951, Serial No. 222,541
Claims priority, application Sweden May 5, 1950
3 Claims. (Cl. 29—155.55)

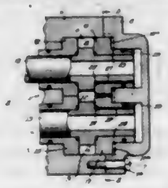
1. The method of making flat contact springs for relay pile-ups and the like, and of the type having a flexible

contact end, a terminal connector end and an intermediate portion for mounting of the spring in a pile-up, said method being characterized by control of the spring tension in the intermediate portion, comprising: providing a contact spring of flat sheet metal having at least one aperture in its intermediate portion, supporting said spring with its intermediate portion in a moulding die recessed about the intermediate portion, contacting spaced points



on opposite faces of the intermediate portion by fixed guide pins to define the plane occupied by the said intermediate portion, the guide pins contacting different areas of the intermediate portion on its opposite faces, moulding insulation material in said die entirely about said intermediate portion including the wall surface of said aperture, and about said guide pins, and removing said contact spring from said die after said insulation material has hardened.

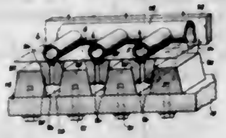
2,734,258
METHOD OF ASSEMBLING PRESSURE LOADED TYPE, INTERMESHING GEAR PUMPS
Emmett E. Shultz, Bedford, Ohio, assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application October 7, 1950, Serial No. 188,946
3 Claims. (Cl. 29—156.4)



1. In the assembly of a pressure loaded type, intermeshing gear pump having at least one set of pressure loadable bushings adapted to move axially to engage the gear side faces in sealing relation, the steps of loosening the bolts holding the cover section of the pump housing against the body section sufficiently to permit relative movement therebetween and to permit movement of the bushings towards the inlet side of the pump, operating the pump under sufficient load to develop pressure in the discharge side thereof whereby the bushings are shifted toward the inlet side of the pump and cause consequent relative movenent between the housing and the cover section thus defining a seal between the pump housing and the bushings to prevent leakage back to inlet, and thereafter locking the cover section in position on the housing by tightening the supporting bolts.

2,734,259
METHOD OF MAKING HEAT EXCHANGER
József Beck, Budapest, Hungary; Mrs. Jozsef Beck, née Ilona Szanto, Budapest, Hungary, sole heir of said Jozsef Beck, deceased, assignor to the firm "Licencia" Talalmanyokat Ertekesito Vallalat, Budapest, Hungary
Application September 6, 1951, Serial No. 245,362
Claims priority, application Hungary September 11, 1950
1 Claim. (Cl. 29—157.3)

A method of assembling fin plates on the tubes of a heat exchange device, including a plurality of substantially parallel tubes each provided with at least one external longitudinal rib and each secured at its ends to headers, comprising, after the ends of the tubes have been secured to the headers with the ribs on the tubes all extending in the same direction outwardly from the tubes and header assembly, positioning a plurality of clamps, of U-shaped cross-section having spaced side walls in parallel relation and spaced apart to register with and receive the ribs on the tubes, positioning fin plates of a width to extend between the adjacent sides of the ribs of an adjacent pair of tubes and having edge flanges to lie against the sides of the ribs and of a height substantially



equal to the height of the ribs with the edge flanges of a pair of adjacent plates loosely seated between the side walls of a clamp, inserting the rib of each tube into its corresponding clamp between the edge flanges of the adjacent pair of plates seated in the clamp, and simultaneously forcibly gripping the side walls of all the clamps with a pressure of sufficient intensity to squeeze the side walls of each clamp, the edge flanges of the plates therein and the respective rib and crush them into full metal-to-metal contact with each other.

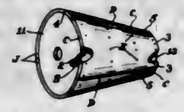
2,734,260
TOOL
Oliver A. Wyckoff, Bellmore, N. Y.
Application June 23, 1952, Serial No. 295,139
1 Claim. (Cl. 29—203)
(Granted under Title 35, U. S. Code (1952), sec. 266)



A tool comprising a body member, said member including a hub and an elongated stem integral with said hub and extending away therefrom, external threads formed on said stem, said hub and said stem being formed with a first bore extending axially therethrough, said hub being formed with a second bore substantially perpendicular to the first bore and extending from the first bore to the outer surface of said hub; a thumb screw member threaded into the second bore and adapted for projection into and retraction from the first bore; and a traveler member mounted on said body member, said traveler member including a barrel, said barrel being internally threaded at one end thereof and threadedly engaging said stem for traveling movement axially along said stem, and an annular cap secured to the other end of said barrel axially thereof, the inside diameter of said cap being equal to that of the first bore of said body member, the end of said cap directed outwardly of said barrel being formed with an axial cylindrical recess to define an axial antifriction seat, the axis of the first bore of said body member, the axis of said cap, and the axis of the cylindrical recess in said cap being in alignment.

2,734,261
PROCESS OF REPAIRING JORDAN PLUGS
Harold D. Stuck, Andover, Mass., assignor to John W. Bolton & Sons, Inc., Lawrence, Mass., a corporation of Massachusetts
Application July 28, 1952, Serial No. 301,275
1 Claim. (Cl. 29—401)

The process of repairing a truncated conical Jordan engine plug of the type having means formed integrally with the curved metal surface portion thereof, for retaining the plug bars which process comprises the steps of first removing the existing plug bars; then removing the existing plug bar retaining means of said plug by cutting away the metal surface portion thereof to a predetermined substantial depth in a radial direction to form a completely new smooth unobstructed curved surface thereon of substantially reduced radius; then forming a truncated conical sleeve of stainless steel, of



uniform thickness, equal in depth to the depth of the above mentioned cut on, and in intimate covering contact with, the new surface of said plug while simultaneously welding said stainless steel sleeve sections to each other and to portions of said surface; then milling longitudinally extending, spaced, wedge shaped grooves in the exterior of said stainless steel sleeve and then inserting, and wedging, new plug bars in the grooves of said stainless steel sleeve.

2,734,262
METHOD AND APPARATUS FOR CASTING HOLLOW BUILDING UNITS
Denzil L. Briegel, Detroit, Mich.
Application April 15, 1952, Serial No. 282,423
10 Claims. (Cl. 29—423)



1. In the forming of concrete into a body with an elongated hollow formation, the method which comprises, winding an elongated helical spring in a direction to reduce the diameter of its convolutions, placing a covering of material of paper or the like over the spring, releasing the winding forces for the normal expansion of the spring to make the covering material taut to constitute a core, pouring concrete around the core and allowing the concrete to set, again winding the elongated spring in a direction to reduce the diameter of its convolutions to an extent that all convolutions are free from the inner surface of the covering material, and then removing the helical spring from the hollow of the formed concrete by simultaneous axial movement of all convolutions thereof with the covering material remaining in the hollow of the formed concrete.

2,734,263
METHOD OF FORMING DEAD END CONNECTORS
Martin D. Bergan, Westfield, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a corporation of New Jersey
Original application July 20, 1948, Serial No. 39,676, now Patent No. 2,669,600, dated February 17, 1954. Divided and this application April 9, 1952, Serial No. 281,341
3 Claims. (Cl. 29—433)



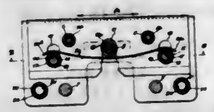
1. In the art of forming a dead end connector on the end of a cable, the method which consists in bending a metal tube into an elbow form having a crotch portion and two straight end portions, casting a one-piece suspension about the elbow with the crotch of the tube as a mandrell, with the casting contoured to form a body portion enclosing and bonded to the crotch portion of the tube and with a stop shoulder exposed at one end of the body portion, with the ends of the tube projecting beyond the body portion, simultaneously forming as part of said casting a pair of parallel and spaced-apart ears projecting outwardly from the stop shoulder, drilling the body portion to form a straight passageway extending therethrough with one end opening into the bore of one of the straight ends of the tube and said passageway extending through a side of the tube at its elbow portion and opening at its other end through the stop shoulder, threading an end of a cable through the passageway thus formed and through the space formed between the ears, to locate said cable and in exposed position therebeyond, securing a stop to the end of the cable so exposed, re-threading the cable with the stop so attached thereto reversedly back through the passageway until the stop contacts the shoulder, and then crimping the first-mentioned end of the tube onto the cable to secure the cable permanently to the bent metal tube with the stop engaging the shoulder.

2,734,264
SHAVING IMPLEMENTS
Jacob L. Kleinman, Arverne, N. Y.
Application July 29, 1953, Serial No. 371,065
19 Claims. (Cl. 30—40)



13. An injector razor structure having a stationary member and a movable member, one of said members having means forming a seat for a double-edged razor blade and the other of said members having means forming a cap over said seat, said seat having oppositely disposed guard portions for supporting the cutting edges of said blade, a spring element carried by said structure, said stationary member and said movable member each provided with means for facing and engaging the end portions of such cutting edges to prevent lateral movements of such razor blade, said spring element urging said means to engage said end portions and simultaneously therewith urging the said seat towards said cap for holding such blade clamped in its position upon said seat for shaving purposes.

2,734,265
REMOVABLE WORKING HEAD, PARTICULARLY FOR ELECTRIC SHAVERS
Ezechiel Akerib, Casablanca, Morocco, assignor to Societe Bureau de Recherches et d'Exploitation de Procedes et Brevets, Casablanca, Morocco, a company of Morocco
Application November 14, 1952, Serial No. 320,363
Claims priority, application French Morocco November 20, 1951
5 Claims. (Cl. 30—43)



1. A removable head, particularly for an electric shaver, comprising two fixed combs rigidly connected in spaced relation, two movable blades slidably connected together in spaced relation and located between the two fixed

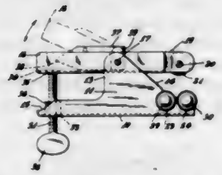
combs with respect to which they can be reciprocated, said blades offering parts bearing against the top of said combs, abutment members carried by the blades, said blades having lateral notches of large area, a part connecting the fixed combs and going freely through the notches in allowing the displacement of said blades with respect to the combs, a resilient element located between the blades so that it bears underneath said connecting part of the combs and on the abutment members carried by the blades and means for latching said removable head upon the body of the shaver.

2,734,266
ELECTRIC SHAVER
Edward P. Schreyer, Ridgefield, Conn.
Application February 17, 1955, Serial No. 488,755
11 Claims. (Cl. 30—43)



1. In an electric shaver, a casing and a cutter protruding from the end of the casing, said casing having positioning conformations asymmetrically arranged laterally of the protruding cutting structure, a removable guard to encompass the cutting means, having protruding asymmetrical positioning conformations complementary to those on the casing, and latch means releasably to retain the guard in one position relative to said cutter in position thereof in which said complementary positioning conformations coact for one degree of cut and in position in which the protruding conformations are spaced from the complementary conformation to determine another setting of the guard for a different closeness of cut.

2,734,267
HAND TUBE CUTTING APPARATUS
Charles D. Palmer, Brooklyn, N. Y., assignor to C. D. Palmer Brass & Copper Co. Inc., Brooklyn, N. Y., a corporation of New York
Application March 17, 1954, Serial No. 416,847
1 Claim. (Cl. 30—102)



In a tube cutter, the combination of a base frame having a pair of side arms within which is pivotally mounted a channel member having a beveled cutting wheel at the forward end thereof, said base frame being provided with three pairs of aligned rollers, the central pair of said rollers being located beneath said cutting wheel, the other pairs of said rollers being located one on each side of said base frame for supporting the tube being cut at three points so as to provide a strong foundation therefor and insure more accurate cutting of the tube.

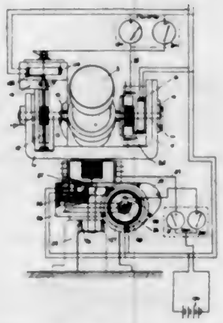
2,734,268
SECATEURS
Patrick Henry Grinling, Coneyhurst, Ewhurst, England
Application December 4, 1952, Serial No. 323,957
2 Claims. (Cl. 30—193)

1. In spring opened secateurs of the type described having cooperative cutter elements carried by overlapping flattened cheeks on mutually pivoted operative members and locking means retaining the secateurs in closed position, said locking means comprising a locking pin having a shank with an enlarged head at one end, said shank having on one of its sides a recess which extends longitudinally of the shank between its ends and is provided with a flat bottom and with a stop shoulder spaced from the other end of the pin, the shank of said locking pin being slidable in a bored aperture extending through the companion cheeks of one of the operative members, one of the cheeks of the other of said operative members having in its edge a recess to receive said head when the cutter elements are in closed



position, the length of said shank being such that when said head is received in said cheek recess, the said other end of the pin will project beyond the outer face of one of said companion cheeks and may be pushed to disengage the head from the cheek recess, and a spring loaded retaining pin slidable longitudinally between said companion cheeks in a plane radial to said bored aperture, said retaining pin having an end projected by its spring into said longitudinal recess in the shank of said locking pin and frictionally engaged with the bottom of the said recess to hold the locking pin in an adjusted position, said shoulder in the recess of the locking pin being engageable with the retaining pin to prevent accidental removal of the locking pin from its aperture.

2,734,269
ANGULAR POSITION DATA APPARATUS
Rene Claret, Sceaux, France, assignor to Office National d'Etudes et de Recherches Aeronautiques, Chatillon sous Bagneux, France, a company of France
Application August 11, 1952, Serial No. 303,778
Claims priority, application France August 11, 1951
2 Claims. (Cl. 33—1)



1. An instrument for determining the azimuth and elevation angles of a light source with reference to an azimuth plane and a prime direction therein, said instrument comprising a base, an objective lens, an image iconoscope, said lens and iconoscope being mounted coaxially in fixed relative position with the lens at its focal distance from the photocathode of the iconoscope, a fork supporting said lens and iconoscope for rotation about an axis perpendicular to the axis of said lens, a bearing in said base supporting said fork for rotation about an axis perpendicular to the axis of rotation of said lens in said fork, first and second motors coupled respectively between the lens and iconoscope and the fork and between the fork and the base, separate means to measure the angular positions of the lens and iconoscope with respect to the fork and of the fork with respect to the base, a deflection generator and associated deflection circuits adapted to scan the mosaic target of said iconoscope in frames of horizontal and vertical lines, means to shift the line deflection output of said generator successively between the horizontal and vertical deflection circuits at frame frequency, a video amplifier coupled to the signal output terminal of the iconoscope, a mixing circuit receiving the line scanning voltages from said generator and the output of said amplifier, a clipper receiving the output of said mixing circuit, two peak-reading voltmeters, and electronic switch operating at frame frequency connected between the output of said clipper and said voltmeters, and means to couple said voltmeters to said motors whereby the voltmeter receiving the output of said clipper during scanning of said target in horizontal lines is coupled to the motor between said fork and base and the voltmeter receiving the output of said clipper during scanning of said mosaic target in vertical lines is coupled to the motor between said lens and fork.

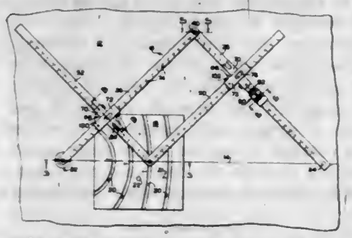
2,734,270
MEANS FOR MEASURING TROUSER LENGTHS
Edward P. Finnegan, Mason City, Iowa
Application October 30, 1952, Serial No. 317,712
1 Claim. (Cl. 33—8)



In a trouser length measuring device, a base, a column secured to said base and having a channel therein; a single slide with a single graduated scale mounted in said channel; and an L-shaped break measuring device secured to the top of said column complementing said slide and scale so that the outside seam of trousers may be measured permitting varied degrees of break; said base comprising a thin plate at the side of the column where the person to be measured stands, and a relatively thick portion at the side of the column opposite from the side where the person to be measured stands.

2,734,271
ARC PANTOGRAPH
William J. Moriarty, Springfield, Mass.
Application September 28, 1954, Serial No. 458,995
1 Claim. (Cl. 33—25)
(Granted under Title 35, U. S. Code (1952), sec. 266)

A device for accurately generating arcs of enlarged radii including a base provided with a reference line, a template, a plurality of grooved arcs of various radii formed on said template, said arcs being parts of circles the centers of which lie on a straight line, dowel means for replaceably mounting said template on said base so that said straight line aligns with said reference line, and a pantograph device cooperable with said arcs for accurately enlarging said arcs to desired arcs of greater radii and for adjustably positioning said enlarged arcs on said base, said pantograph including a first arm pivotally mounted at one end to a fulcrum fixed to said base and at the other end pivoted to one end of a second arm by means of a vertical spacer member rolling on said base, a chuck for holding scribe means mounted on the free end of said second arm so that the center of said scribe is the same distance from the center of said spacer member as said fulcrum is, a third arm pivotally mounted at one end on one end of a fourth arm by means of a leader selectively and slidably cooperable with said grooved arcs, a pair of pivotal slides, said slides being comprised of a first boxlike member adapted to slidably receive either said first arm or third arm, and a second boxlike member adapted to slidably receive either said second or fourth arm, means for pivotally mounting said first member intermediately on said second member

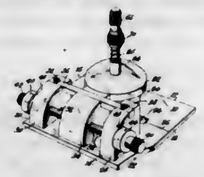


whereby said arm members are arranged in adjustable parallelogram relationship, an oval window in each of said first members, an elongated opening extending from one end of each of said second members, calibrated scales extending progressively from the center of said fulcrum in said first arm, from the center of said spacer member in said second arm, from the center of said follower in said fourth arm and decreasingly from the center of said follower in said third arm, a first indexing mark extending from said windows in said first members in alignment with the centers of said pivotal means, and a second indexing mark extending from said openings in said second members a predetermined distance from the center of said pivotal means with the calibrations on said second and fourth arms being compensated for said predetermined distance, whereby said arms may be adjusted relative to one another and indexed in accordance with the formula

$$\frac{Pr}{R}=\frac{S}{L}$$

where Pr is the radius of the selected one of said grooved arcs, L is the total effective length of said arms, S is the setting to which said first and second indexing marks are to be related to said calibrated scales on said arms and R is the radius of the desired arc of an enlarged radius.

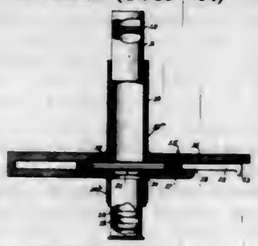
2,734,272
SCRIBING OR ENGRAVING INSTRUMENT
Harry C. Brown, San Antonio, Tex.
Application August 27, 1954, Serial No. 452,739
7 Claims. (Cl. 33—27)



1. An engraving instrument comprising in combination, a base plate having a front surface, a rear surface and opposite side surfaces, spaced lateral bearing brackets upstanding from the base plate rearwardly thereof and adjacent to the side surfaces, a micrometer screw extending through the lateral bearing brackets and rotatably mounted

therein, an adjustable carriage threadedly mounted on the screw intermediate the bearing brackets and movable along the screw longitudinally thereof responsively to rotation of the screw, a mounting bracket extending horizontally from the carriage and movable therewith, a substantially horizontal magnifying lens carried by the mounting bracket, an outer tubular sleeve member extending vertically through the lens substantially centrally thereof and permanently mounted therein, and an engraving assembly mounted in the said outer tubular sleeve member and including a stylus-holding member for receiving an engraving stylus, an inner tubular sleeve receiving and enclosing the stylus-holding member, the said inner sleeve and stylus holder being received in the outer tubular sleeve member mounted in the lens, an enlarged collar on the inner sleeve, an engraving stylus mounted in the holder, and a coil spring compressionally mounted between the outer tubular sleeve and the enlarged collar on the inner sleeve for normally holding the engraved stylus elevated out of engagement with the base and underlying work, the said base being provided with an elongated slot beneath the stylus and at least coextensive in length with length of movement of the adjustable carriage along the micrometer screw, the said slot extending through the base and providing access of the stylus through the base to work underlying the base.

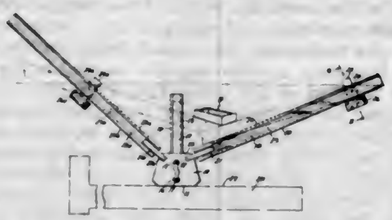
2,734,273
MEASUREMENT INDICATING MEANS FOR OPTICAL INSTRUMENTS
Kenneth F. Blindenbacher, Merchantville, and Harry W. Fatkin, Westville, N. J.
Application June 1, 1954, Serial No. 433,383
2 Claims. (Cl. 33—64)



1. In an instrument for determining the distance to an object of known height, the combination comprising a housing, an eyepiece in said housing having a focal plane forwardly disposed with respect to said eyepiece, a slide housing intersecting said first housing and having a slide receiving chamber with a portion disposed at said focal plane, said chamber portion having a vertical alignment line therein, said slide housing having an index portion spaced from said vertical alignment line, and a slide member movable in said slide housing in said focal plane, said slide member having a base line portion and a diverging sighting line portion at a fixed angular relation and with a viewing opening therebetween for movement across said alignment line, and said member having calibrated distance scale markings thereon for alignment with said index portion.

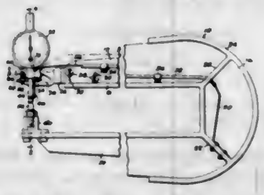
2,734,274
PERSPECTIVE DRAWING INSTRUMENT
Arthur Miller Sams, Kearns, Utah
Application June 19, 1952, Serial No. 294,347
1 Claim. (Cl. 33—77)

A drafting instrument for making perspective-like drawings comprising a base element having substantially trapezoidal shape and including a pair of parallel edges, a handle secured to said base element for moving the latter over a drawing surface, an arm secured directly to said base element in fixed relationship thereto and extending perpendicularly from one of said pair of parallel edges, a pair of arms supported pivotally from said base element and adjustable independently to different angular positions relative to said first-named arm on opposite side edges thereof, each of said pivotally supported arms having a longitudinally extending guide groove located in its under face and extending only partially through each such arm, all under faces of said arms and said base elements being substantially co-



planar, and a pair of plate-like anchor members each independently and removably attachable to a drawing surface, each anchor member including a vertically upstanding pin for slidable engagement in the groove of respective onces of said pair of arms, whereby the respective pins provide selectively positionable pivot points for the arms to facilitate the preparation of perspective-like drawings, and tape means for temporarily securing each of said plate-like anchor members to said drawing surface.

2,734,275
THICKNESS GAGE
Elliot Ring, Schenectady, and Charles E. Lorman, Saratoga Springs, N. Y., assignors to the United States of America as represented by the Secretary of the Army
Application June 6, 1952, Serial No. 292,147
12 Claims. (Cl. 33—147)

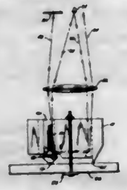


1. A thickness gage comprising an elongated U-shaped frame having substantially coextensive arms, there being an arcuate slot formed adjacent the end of one arm, a shoe slidably mounted in said slot, a dial indicator carried by said shoe and having a work-contacting plunger extending toward the other arm, an anvil on said other arm in opposing relation to said plunger, a plunger retracting means comprising a cable secured at one end to said plunger, and a spring mounted on said frame and operably connected to the other end of said cable to tension said cable, said shoe comprising a guide for an intermediate portion of the cable.

2,734,276
DEVELOPMENT OF TECHNIQUE FOR HIGH TEMPERATURE STRESS-STRAIN MEASUREMENTS
Preston R. Weaver, Rockville, Md.
Application July 6, 1950, Serial No. 172,371
2 Claims. (Cl. 33—148)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. For use in a strain gage system, a gage comprising a gage block composed of ceramic material and having at least two sides and an end connecting said sides together in fixed relation to each other, said end having an integral work piece contacting knife edge of said

ceramic material, a light reflector carried by said block, said sides having a pair of horizontally aligned downwardly opening notches therein, a member having an upper edge and a lower work piece contacting knife edge intermediate the ends of said member, said upper edge being pivotally located in said notches, means located at the outer surface of said sides and connected thereto



and displaced out of the high temperature zone of said work piece contacting knife edge for yieldingly retaining said member in such position that its upper edge is held yieldingly and pivotally movable in said notches, said member being provided with a reflection surface arranged to reflect light to and from said light reflector, and said block having a vision opening between said sides in which said reflection surface and said reflector are located.

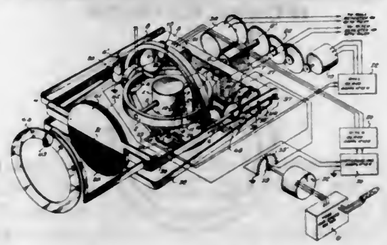
2,734,277
GAUGES
Lowell R. Dixon and Patrick H. Conklin, Bremerton, Wash.
Application February 9, 1953, Serial No. 336,024
3 Claims. (Cl. 33—172)
(Granted under Title 35, U. S. Code (1952), sec. 266)



3. Arrangement for indicating inaccuracies in machined surfaces of the described type comprising a pivotally-mounted block, a pair of surface-contact members supported by said block on opposite sides of a plane passing through the pivotal axis thereof and perpendicular to the longitudinal dimension of said block, an indicator having a pointer operatively connected to said block so as to provide a visual indication of pivotal movement of said block, said pointer being arranged to resist motion in one direction, and spring means connected to said block to urge the same in a direction such that the resistance, occasioned by the linkage interposed between said pointer and said block, of the pointer to motion in said one direction initiated in response to force applied to said surface-contact members is substantially counterbalanced.

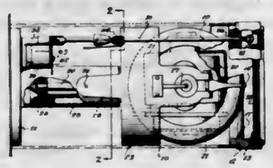
2,734,278
COMPENSATED GYROSCOPIC HORIZON
Edmund B. Hammond, Jr., Merrick, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application November 17, 1950, Serial No. 196,315
9 Claims. (Cl. 33—204)

1. A gyroscopic artificial horizon indicator for aircraft, including a follow-up gimbal ring pivoted about a roll axis on the craft, and a follow-up inner ring pivoted about a pitch axis within said gimbal ring, means for maintaining the former stabilized about said roll axis and for maintaining the latter stabilized about said pitch axis, a pair of complementary semi-circular discs pivoted on said gimbal ring whereby said discs are stabilized against rolling, the upper disc being of a light color and the lower disc of a darker color, a third circular disc mounted behind said semi-circular discs on said gimbal ring and having its upper half dark and its lower half light, means for moving the lower semi-circular disc downwardly upon climbing of the craft and means for moving the upper disc upwardly upon diving of the craft.



5. In a gyro-horizon for craft, a universally mounted gyroscope, a gravitationally responsive device for erecting the gyroscope, a pivoted follow-up member on which said device is mounted, means for imparting a relative tilt between said member and gyroscope, whereby the position in which the device erects the gyroscope may be varied to cause a predetermined slight inclination thereof to the vertical, means for measuring, and producing a signal proportional to, the air speed of the craft, a cosine resolver positioned by the gyro about its pitch axis for modifying said signal to produce a modified signal proportional to the horizontal component but rejecting the vertical component thereof, and means for proportioning the relative tilt so imparted to the gyroscope by said modified signal.

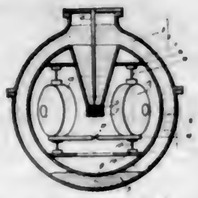
2,734,279
GYROSCOPIC INSTRUMENTS
Thomas A. Early, Jr., Sea Cliff, and Ernest A. Fitter, Glen Head, N. Y., assignors to Sperry Rand Corporation, a corporation of Delaware
Application August 2, 1952, Serial No. 302,376
3 Claims. (Cl. 33—204)



1. A gyroscopic instrument having a housing, a rotor, a rotor case, a gimbal ring therefor pivotally supported in said housing for full angular freedom about its support axis, and a motor for spinning said rotor, apparatus for opposing rotation of said gimbal about said support axis when said rotor spinning motor is deenergized comprising a pin on said gimbal extending radially outwardly from said axis, a rotatable shaft mounted in said housing substantially parallel to said gimbal axis and radially displaced therefrom to an extent such that said pin clears said shaft upon rotation of the gimbal about its support axis, a spring having one end thereof fixed to said shaft and the other end thereof free, the one end of said spring being so positioned on said shaft that upon rotation of said shaft to one limited position the free end of said spring clears said pin and upon rotation of said shaft to

another limited position the free end of said spring will lie in the path of movement of said pin whereby the free end of said spring will resiliently oppose rotation of said gimbal ring about said support axis, and means responsive to the energization of said rotor spinning motor and coupled with said shaft for rotating said shaft from one of said limited positions to the other.

2,734,280
GYRO-COMPASSES
Peter Christoph, Hamburg, Germany, assignor to C. Plath, Hamburg, Germany
Application July 1, 1952, Serial No. 296,659
10 Claims. (Cl. 33—226)



8. In a direction indicating apparatus, in combination, an outer container; a first liquid located in a lower portion of said container; a second liquid, immiscible with said first liquid and of a lower specific gravity than the same, located on the top surface of the first liquid; a gyro-compass system having an outer spherical housing smaller than said container located within the latter and floating on the separating surface between said first and second liquids, said housing having an indented portion extending into the same from the top of said housing, and said indented portion having a closed bottom; an elongated rigid member fixed to said container and extending downwardly and with clearance along the interior of said indented portion to a point adjacent said bottom thereof, whereby said spherical housing has its location in said container determined by said rigid member while at the same time said housing is free to turn and float in said liquids and is free to tilt to some degree with respect to said rigid member; and a plate fixed to and extending across the interior of said indented portion of said housing adjacent said bottom thereof, said plate being formed with a substantially central aperture through which said rigid member extends with clearance so that said plate and rigid member cooperate to determine the location of said housing in said container within the limits of said clearance of said rigid member in said aperture.

2,734,281
DRYERS
Walter L. Kauffman II, Erie, Pa., assignor to Lovell Manufacturing Company, Erie, Pa., a corporation of Pennsylvania
Application March 9, 1953, Serial No. 341,323
2 Claims. (Cl. 34—87)



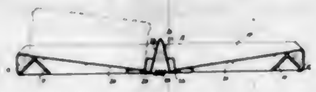
1. In a tumbler type clothes dryer having a door through which clothes are loaded and unloaded and cycle control means for stopping the dryer at the end of the drying cycle, a latch for holding the dryer in the operating position, door actuated means for releasing the latch when the door is opened, a manual reset operable to return the dryer to said operating position when the door is closed, and means moved into blocking position by opening of the door for blocking the reset while the door is open, said means being moved from the blocking position by closing the door.

2,734,282
FINGER NAIL POLISH DRIER
Otto R. Nemeth, Los Angeles, Calif.
Application July 23, 1954, Serial No. 445,439
3 Claims. (Cl. 34—202)



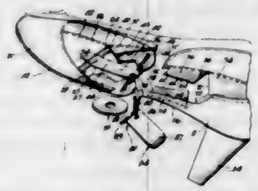
1. An improvement in finger nail driers, comprising a platform adapted to support a hand and including a palm-supporting portion and a finger-supporting portion, a generally arcuate hood over the finger-supporting portion, a generally arcuate infrared electric heating means disposed around said finger-supporting portion in an upper portion of the hood above said finger-supporting portion in a position to direct heat immediately to the surfaces of the finger nails, and means supporting said heating means in said hood.

2,734,283
CONVEYOR TRAYS
Fred W. Greer, Belmont, Mass., assignor to J. W. Greer Company, Cambridge, Mass., a corporation of Massachusetts
Original application April 13, 1951, Serial No. 220,927. Divided and this application July 26, 1952, Serial No. 301,065
3 Claims. (Cl. 34—238)



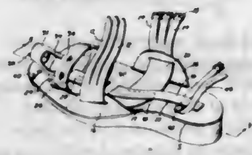
1. A conveyor tray comprising a longitudinally extending central supporting member, edge members substantially parallel to said central member and spaced therefrom, a grid spanning the space between each edge member and said central member and a series of spring clips extending beneath said central member and detachably connected to at least one of said grids for yieldingly retaining said grids against said central member.

2,734,284
ADJUSTABLE SHOE
Anton Seurbom, Chicago, Ill.
Application April 23, 1953, Serial No. 350,660
11 Claims. (Cl. 36—2.5)



2. A shoe construction comprising separate quarter and toe portions, the quarter portion having inwardly projecting tabs at the forward end thereof with the inner edges of the tabs spaced apart, the toe portion having inwardly projecting arms adapted to lap with one another and also with the tabs on the quarter portion to provide a shank portion relatively shiftable in a longitudinal direction to vary the length of the shoe, each tab and each arm being relatively shiftable transversely with respect to the opposite arm and tab to vary the width of the shank and thereby the instep portion of the shoe, and means for securing said arms and tabs in predetermined adjusted position to thus secure the quarter and toe portions against relative displacement.

2,734,285
FOOT CORRECTING AND SUPPORTING ATTACHMENT
Joshua Levitt, Philadelphia, Pa.
Application November 22, 1952, Serial No. 322,097
4 Claims. (Cl. 36—8.5)



1. A foot correcting and supporting attachment comprising an insole having a relatively large opening formed substantially in the central portion thereof, a flexible strip abutting the underside of said insole below said opening, a strap adapted to embrace the instep portion of the foot, and means passing through said opening and securing the central portion of said strap to said flexible strip.

2,734,286
CHIROPODIC SANDAL
Arthur H. Anson, Allentown, Pa.
Application April 14, 1953, Serial No. 348,610
3 Claims. (Cl. 36—8.5)



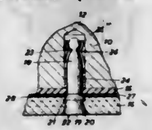
1. In an article of footwear, in combination, a sole member, a series of members fixedly anchored to said sole member and extending upwardly thereabove in spaced relation to one another, said series of members being distributed over the upper surface of said sole member for direct engagement with the sole of the wearer's foot and for maintaining the latter in superposed spaced relation to said sole member, said foot engaging members being pliant for movement thereof with a rolling motion within limits determined by their fixed anchorage and the degree of pliability, and means for securing said article to the foot while permitting the foot to shift fore and aft in said article for having the sole thereof massaged by said foot engaging members.

2,734,287
CUSHION INSOLE
Fred Maccarone, Brooklyn, N. Y.
Application February 15, 1955, Serial No. 488,214
4 Claims. (Cl. 36—28)



1. A cushion insole comprising an insole blank having its forepart formed with opposed rand sections extending along opposite side margins and a complementary center plug section joined at its rear end to the rand sections and permanently retained in the insole, and a cushion pad overlying the center plug section and engaged at its edge between the edges of the plug section and rand sections.

2,734,288
HEELS FOR FOOTWEAR
Violet Phillips, Fairhaven, St. Annes-on-Sea, and Iris Fayne Green, St. Annes-on-Sea, England
Application May 12, 1954, Serial No. 429,336
Claims priority, application Great Britain September 21, 1953
3 Claims. (Cl. 36—36)



1. A heel assembly for footwear comprising a renewable heel including a top lift, a plurality of pins of nylon, each of said pins having a pair of frusto-conical portions forming a head, both of said frusto-conical portions being embedded in said top lift with the lower surface of said head flush with the lower surface of said top lift to present a greater effective area of said nylon against abrasion, said pin being cylindrical and uniform in diameter, at least one reduced diameter portion on said pin forming an annular recess with a concave surface, said heel having a cylindrical socket, a cylindrical member fixed in said socket, the upper end of said member being longitudinally slotted and having a concave portion coinciding with the concave surface of said pin, the part of said cylindrical member above said concave portion flaring outwardly, whereby the removal of said top lift and pins from said heel is facilitated.

2,734,289
SHOE STIFFENER, INCLUDING A LAMINA OF POLYETHYLENE
Walter H. Heaton, Franklin, and Ronald W. Morse, Newton, Mass., assignors to Beckwith Manufacturing Company, Dover, N. H., a corporation of New Hampshire
Application December 22, 1952, Serial No. 327,384
1 Claim. (Cl. 36—68)

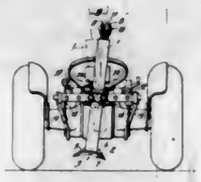


A new and improved stiffener for shoes comprising surface sheets of cotton fabric permanently bonded to both sides of an intermediate ply of tough and flexible polyethylene of the type which is extrudable in sheet form at 400°–600° F. and having their fabric partially embedded in the polyethylene ply thus forming therewith a composite laminated sheet, the said composite sheet having a body of three dimensional curvature and a skived margin exposing the polyethylene ply in a feather edged zone of tapering thickness and graduated increasing flexibility as compared to that of its unskived relatively stiff resilient body, the fabric surface sheets of the stiffener adapting it to be readily and securely cemented into a shoe upper as a complete preformed stiffener.

2,734,290
TREE AND STONE GRUBBER
James C. Tuttle, Cambridge, N. Y.
Application March 16, 1954, Serial No. 416,655
2 Claims. (Cl. 37—2)

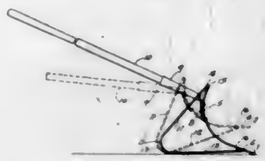
2. The combination with a tractor having a drawbar and a top link, of means for uprooting small trees com-

prising an upright beam; means pendulously securing said beam to said drawbar to swing transversely of said tractor; means projecting from the top of said beam and rigidly connected thereto at one end and connected at the other end thereof to said top link; a foot secured to the bottom of said beam having a bifurcated portion projecting substantially beyond said beam towards said tractor and adapted to engage the trunk of a small tree be-



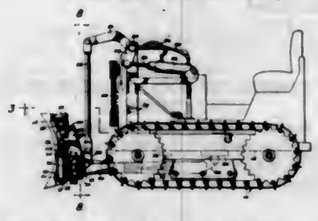
tween the branches thereof, and a smoothly rounded portion projecting rearwardly beyond said beam; whereby, when said tractor backs said foot into contact with the side of a tree to be uprooted said rounded portion will cause said beam to swing sidewise until said foot passes said tree, whereupon, said beam will swing back and bring said bifurcated portion behind said tree in a position to engage the trunk thereof when said tractor advances.

2,734,291
MANUALLY OPERATED SNOW REMOVAL TOOL
Charles C. Lasker, Kansas City, Mo.
Application September 12, 1949, Serial No. 115,270
5 Claims. (Cl. 37—53)



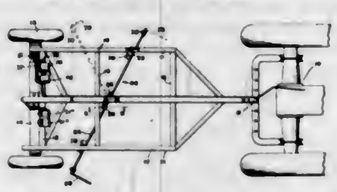
1. A removal tool having substantially cylindrically curved open ended body portion having a straight transverse forward scraping edge extending parallel to the axis of curvature of said body portion, said body portion being concavely curved on its forward side throughout the major portion thereof about said axis to the top edge thereof, and having substantially parallel side edges of approximately the same length, combination rockers and skids at the opposite open ends of said body portion, each comprising a rocker portion curved about an axis parallel to the axis of curvature of said body portion, an upper straight leg extending forwardly and upwardly from the upper end of said curved rocker portion to said body portion, said upper leg extending at an oblique angle to and being rigidly secured at its forward end to said body portion adjacent said top edge thereof, and a lower straight leg of substantially the same length as said upper leg extending forwardly from the lower end of said curved portion and being rigidly secured at its forward end to said body portion adjacent said scraping edge, said straight legs extending at an acute angle to each other and said entire body portion being located in forwardly spaced relation to said curved rocker portions, and a handle mounted in fixed position on said body portion near said top edge at a point spaced a substantial distance forwardly of said curved rocker portions and extending at an oblique angle to said lower legs.

2,734,292
DOZER-BLADE MOUNTING
Lloyd Thurman Graves, North Vancouver, British Columbia, Canada, assignor of one-half to William Blaylock Steele, Vancouver, British Columbia, Canada
Application December 27, 1950, Serial No. 202,839
8 Claims. (Cl. 37—144)



1. In combination with a tractor, and a dozer blade therefor, a longitudinally disposed cylinder member firmly supported by the tractor to occupy a laterally centered position at the front end thereof, a stud journaled for endwise sliding movement in the bore of the cylinder and provided upon its front end with an exposed knuckle, a king-pin connecting said knuckle with the blade, a pair of individually releasable connecting couples between the blade and means carried by the tractor oppositely laterally removed from the knuckle and functioning as selective fulcrums about which the blade swings as the knuckle is advanced or retracted longitudinally of the tractor by endwise movement given to the stud, and means for setting said stud at selected points within the limits of its slide movement, each of said connecting couples including a clevis, a connecting member providing a pad at one end having a pair of yoke arms extending from its inner end and located at opposite sides of the clevis, a removable shackle bolt extending through said yoke arms and between the legs of the clevis, and king pins connecting the free ends of the legs of the clevis and the outer end of the connecting member to the dozer blade and the means carried by the tractor, respectively.

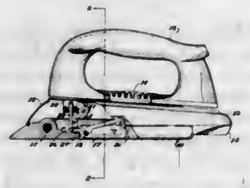
2,734,293
EARTHWORKING MACHINE WITH AUTOMATIC LEVELING MEANS
Preston D. Barnes, Hartman, Colo.
Application June 29, 1950, Serial No. 170,986
4 Claims. (Cl. 37—168)



1. In an earth working machine of the type having a pair of ground wheels, an axle connecting the wheels, a supporting frame, a leveling blade extending transversely of and attached to the frame, a pivotal connection between the said frame and the axle whereby the frame may have limited pivotal movement about a horizontal axis relative to the axle, and means moving said frame about the pivotal connection, said means comprising a power unit at the rear of and adjacent one end of the frame operatively connected to the frame and to the axle, an electric motor carried by said frame, a drive connection between the motor and the power unit, and electric switch means on the frame controlling the motor operation so that the power unit is automatically operated during the travel of the machine to maintain the position of the frame parallel to the terrain being traversed, further power means connected to the frame and axle at the midpoint of the frame

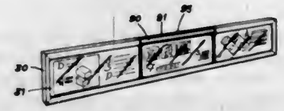
and axle to raise and lower the frame relative to the axle, and an electric motor on the frame operatively connected with said further power means to operate the same.

2,734,294
AUTOMATIC IRON REST
George A. Brace, Highland Park, Ill., assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application May 21, 1952, Serial No. 289,157
8 Claims. (Cl. 38—79)



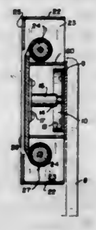
1. In a flat iron, a sole plate having a heel and a toe, an elongated support, pivot means for attaching said support to said soleplate forwardly of the center of gravity of the iron and adjacent one end of said support for movement of said support in a plane normal to said soleplate, latching means engageable with said support for normally holding the latter retracted to a position above the lower surface of said soleplate, and means for mounting said latching means for lateral gravity movement across the top of said soleplate transversely of the center line joining said heel and toe so as to move out of engagement with said support when the iron is tilted to one side, said pivot means being attached to said support in such a manner that the latter will move by gravity to an extended position below said soleplate for supporting the same in an inclined rest position upon the release of said support by said latching means.

2,734,295
DISPLAY DEVICE
James F. Fewster, Dayton, Ohio, and John Wesley Noble, Fincastle, Va., assignors, by mesne assignments, to Motion, Inc., Dayton, Ohio, a corporation of Ohio
Application June 14, 1951, Serial No. 231,572
24 Claims. (Cl. 40—32)



1. A display device of the character described for continuously displaying successive cards from a plurality of such cards, comprising a casing having a viewing window in the side thereof, a plurality of carriers within said casing each including means to receive and support one of said cards, said casing being of sufficient length to receive a plurality of said carriers in end to end relation therein, a plurality of couplers each connecting an adjacent pair of said carriers to form therewith a continuous linkage, a drive within said casing including means for engaging successive carriers at opposite sides of said casing to move said carriers edgewise in opposite directions within said casing while drawing the next following said carriers into position for said engagement with said engaging means, said carriers and said couplers including interfitting portions proportioned for relative shifting movement lengthwise of said carriers to provide for alternate back and forth movement of said carriers within said casing while retaining said carriers in said connected relation, and means for guiding said carriers in a continuous path past said window without rotation of said carriers.

2,734,296
ADJUSTABLE CHART OR MAP HOLDER
Roy C. Bible, Cheyenne, Wyo.
Application July 30, 1952, Serial No. 301,774
1 Claim. (Cl. 40—86)



A device for supporting and shifting a strip chart or the like, and for permitting the chart to be turned about an axis perpendicular to its plane and for latching it in any desired rotary position, comprising in combination a chart box having two sides and two ends assembled to form an elongated rectangle, a bottom member attached to the edges of the sides and ends on one side, and provided with a central opening, a chart backing board of a size substantially equal to the opening in the bottom, having two edges attached to the sides of the box and so positioned relative to the bottom member that its outer surface is substantially coplanar with the inner surface of the bottom, and of an area substantially equal to the opening in the bottom, the length of the opening being less than the length of the box leaving a space at each end for a chart roller, a roller positioned in each of said spaces and journaled for rotation in the sides, a strip type chart having its ends attached to said rollers, means comprising a crank operatively attached to each roller for turning it to shift the chart, a spring pressed friction device operatively associated with each roller resisting rotation thereof, means supporting said box for rotation in its plane, comprising, a pivot attached to the rear surface of the chart backing board, and an elongated bearing attached to a stationary support, and means for latching the box in any of several rotary positions.

2,734,297
DECORATIVE PINE CONE
Harold L. Dunklee, Munising, Mich.
Application April 2, 1954, Serial No. 420,476
1 Claim. (Cl. 41—13)

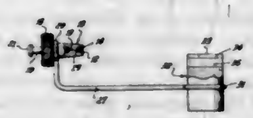


A decorative article including a cone of a coniferous plant having a decorative coating thereon and an initially solid core and petals extending from said core, said core having a preformed axially extending bore therein, and a manually bendable wire stem having one end cementitiously anchored securely in said bore with the remainder of the stem projecting from said core, said stem remainder being bendable into engaging relationship with an object to mount the cone on the object in a manner simulating the natural growth of the cone.

2,734,298
MECHANICAL NEGATIVE PROCESS AND RESIST
Harold A. Molz, Arlington, Va., and James Edward Peake, Bladensburg, Md.
No Drawing. Application June 21, 1952, Serial No. 294,934
8 Claims. (Cl. 41—46)

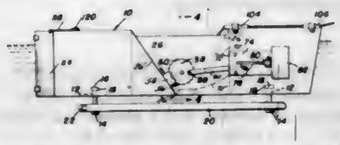
1. A protective resist for use in the preparation of a film for making lithographic plates comprising approximately 30% Rhodamine B pigment and approximately 60% of a carrier therefor comprising approximately equal parts of varnish and blanc fixe and approximately 10% inorganic salt extenders.

2,734,299
INSTRUMENT FOR ATTACHING FISHHOOKS TO LEADERS
Rudolph F. Masson, Burbank, Calif.
Application January 9, 1953, Serial No. 330,487
2 Claims. (Cl. 43—1)



1. In apparatus for facilitating tying of leaders upon fish hooks: a body having an exterior conical portion at one end converging in a direction toward said one end, said body having a peripheral annular groove formed therein intermediate its length adjoining said conical portion, a releasable hook gripper member carried by the body and located substantially at the axis of said groove; and a wire frame having a loop at one end received in said annular groove for rotatably mounting said body.

2,734,300
FISHING APPARATUS
Jacob J. Mandel, Bynum, Mont.
Application August 29, 1952, Serial No. 307,073
5 Claims. (Cl. 43—26.1)



5. A fishing device comprising an elongated float member having front and rear ends, a spring tensioned shaft rotatably supported by the member, a pulley secured to the shaft for rotation therewith, a pulling line attached to and wound about said pulley adapted to rotate the shaft and tension the spring of the shaft, a disc journaled on the shaft, means connecting the disc to the shaft whereby the shaft and disc may rotate as a unit in one direction, means engaging the disc to hold the same against rotation during rotation of the shaft in an opposite direction, and hook-supporting lines attached to the pulling line, said pulling line being adapted to be pulled to tension the shaft and then slackened to permit the pulley and disc to rotate together to unwind the pulling line from the pulley, said float member having the rear end thereof provided with an opening therein, guide plates secured to the float member and having longitudinal slots in registry with each other, a slide received in said slots, a pair of horizontally swingable flaps pivoted to the slide, a pin secured eccentrically to the disc, an angularly oscillating arm having a longitudinal slot adapted to receive the pin, and a pitman pivotally attached to the arm and to the slide.

2,734,301
ARTIFICIAL FISH BAIT
Robert N. Fuqua, Jacksonville, Fla.
Application August 5, 1952, Serial No. 302,663
3 Claims. (Cl. 43—42.05)



3. The combination of a fishing lure, a leader, a line attachment and hooks, wherein the fishing lure comprises a body greater in length than in cross section and having a front face extending across the forward end of said body, a downwardly and rearwardly inclined passageway extending from the upper portion of the front face to substantially the central portion of the bottom surface of the lure, hook securing means on the rear end of the lure and on the bottom of the lure adjacent the bottom edge of the front face thereof, said hooks pivotally mounted on said securing means, said leader having a stop at one end thereof adjacent the line attachment and a second stop at the other end thereof, a portion of the leader between said stops extending entirely through said passageway for free movement therein and a weighted combined fish hook and lure means pivotally secured to the rear end of the leader at the rear of the second stop, whereby when in operating position in the water a portion of the leader will assume a position in substantial parallel relation to the shanks of the hooks on said securing means and when the leader is drawn taut during trolling the shanks of all hooks will lie in substantially parallel planes, thereby reducing to a minimum the possibility of entanglement of the leader and its fish hook with the other hooks.

2,734,302
FISHING LURE OF THE FLOATING TYPE
Leonard M. Wright, Jr., New York, N. Y.
Application February 1, 1954, Serial No. 407,479
1 Claim. (Cl. 43—42.05)



A fishing lure of the floating type comprising, in combination, a lure body and a hook, the body being provided on its under portion with an indentation shaped to provide a flat extending forwardly of the lure body from the rear end thereof, said flat terminating intermediate the ends of the body, the material of the body at the termination of said flat extending outwardly of the under portion of the body to the surface of the same to provide a shoulder in the lure body, said lure body having a bore extending lengthwise thereof from said shoulder to the head end of the body, said bore receiving the hook shank with a sufficiently loose fit to enable the body to be moved forwardly of the hook shank until completely free of the same; and a crossbar carried by the hook shank forwardly of the bend of the hook, said bar cooperating with said shoulder to limit rearward movement of the lure body along the hook shank and with said flat to prevent relative rotation between the lure body and hook shank.

2,734,303
FISHING BOBBER
Guy C. Peck and William G. Milligan, Akron, Ohio
Application May 4, 1953, Serial No. 352,776
6 Claims. (Cl. 43—43.11)

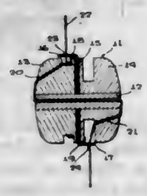
1. A fishing bobber assembly comprising a buoyant body of greater length than diameter and having a bore

extending longitudinally therethrough, a liner in said bore, a resilient wire element of a length substantially equal to that of the body, a connection on one end of said element for attachment of a fishing line, a second connection on the other end of said element for attachment of a leader, means near the first mentioned end of said element to releasably hold a leader in a doubled up position adjacent said element, the element and doubled



up leader adjacent thereto adapted to be slidably inserted in the bore of said body, and a weight having a periphery of a size larger than that of said bore adjacent the second mentioned end of said element and having portions adapted to abut the lower peripheral edge of said bore to limit the movement in one direction of the element into the bore, said means releasing the leader from the doubled up position when the element is withdrawn from the bore by the weight when the bobber strikes the water.

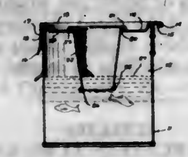
2,734,304
DIFFERENTIAL FLOAT
George M. Yulich, Kansas City, Kans.
Application September 22, 1953, Serial No. 381,535
3 Claims. (Cl. 43—43.11)



1. In combination with a fishing line having a sinker secured to the free end thereof, a fishing float comprising a hollow shaft, a pair of grooved pulleys fixedly secured on said shaft, the line extending through said shaft and through the end portions of said pulleys to the grooves thereof, whereby the line may be wound in said grooves, a guide bar rotatably mounted on the shaft between the pulleys, and respective apertured end flanges on said guide bar overlying the respective grooves, the line passing through the apertures in said flanges, whereby the line is guided for winding in said grooves responsive to rotation of said float.

2,734,305
LIVE BAIT BUCKET
Ottis B. Hannah, Lakeland, Fla.
Application January 8, 1954, Serial No. 402,998
2 Claims. (Cl. 43—56)

1. In a live bait bucket, an imperforate rigid container having an open upper end, a cover closing said upper end, said cover having a central opening, and a flexible and porous sleeve having an open upper end secured to the cover around said opening and depending into the container, said cover being engaged with the upper



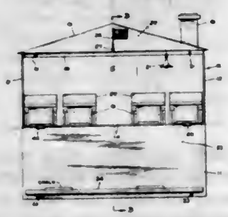
end of the container and being hinged to one side of the container.

2,734,306
CONTAINER FOR FLY AND SIMILAR LURES
Charles L. Holdeman, Grandview, Mo.
Application June 29, 1953, Serial No. 364,875
7 Claims. (Cl. 43—57.5)



7. A container for fishing lures of the type having a body with hook portions on one end and a line attaching portion on the other, said container including a case having compartment provided with a circular series of radial recesses for containing the body portions of the lures thereon, a cover for the compartment and having an opening through which the lures are removed from the recesses, means rotatably mounting the cover on the case at the axis of said radial recesses and spaced above said ridge portions to accommodate the hook portions of the lures therebetween, said cover at the inner side of said opening extending over the hook attaching portions of the lures, and means depending from the cover and having a portion extending toward said axis and having a laterally inclined edge portion adapted to engage between the ridged portions and the hook portion of a lure to lift the hook portion through the opening in said cover when the cover is rotated in one direction to facilitate removal of the lure and to pass over said hook portions of the lure when the cover is rotated in the opposite direction.

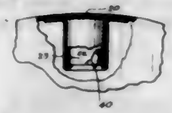
2,734,307
TOY SCHOOL
Elizabeth E. Oravets, Smithfield, Pa.
Application November 16, 1954, Serial No. 469,211
1 Claim. (Cl. 46—12)



In a toy school, a simulated building having a front wall, a floor, side walls, a rear wall and a roof, furniture in simulation of school desks and chairs in said building, means, comprising fabric adhesive hinges, foldingly connecting said front wall to said floor for folding outwardly and downwardly with respect thereto, the inner surface of said front wall comprising a blackboard, a chalk rack secured to one edge of said wall, snap means for holding said wall in closed position, said snap means being positioned at the upper edge of said front wall, a strip de-

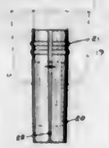
pending from said roof having corresponding snap means thereon, an interiorly positioned bell secured to said strip, means in simulation of doors and windows in said front, side and rear walls, a simulated chimney ascending from said roof, and adhesive flexible means securing all said walls said roof and said floor in related assembly.

2,734,308
REENTRANT INFLATION TUBE AND CONTROL VALVE FOR INFLATABLE ARTICLES
Benjamin F. Gassaway, Milwaukie, Oreg., assignor, by mesne assignments, of one-half to Joseph A. Hull, Portland, Oreg.
Application May 19, 1952, Serial No. 288,661
1 Claim. (Cl. 46—90)



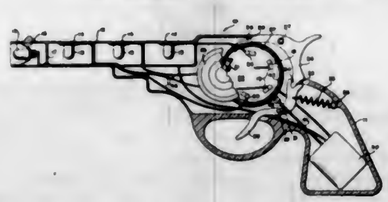
In an inflatable article having an elongated and elastic self-closing slit, an elastic inflation tube secured to the interior of said article and extensible through said slit for inflation purposes, said inflation tube bounding a hollow bore with outer and inner end portions, a tube member secured within said outer end portion in concentric relationship with said inflation tube, manually manipulatable, self-contained valve means carried within said tube member selectively to seal or to open the same to communication with the interior of said article, said tube member and outer end portion together being more rigid and stiff than said inner end portion to accommodate flexing and bending of the inner relative to the outer end portion, said outer end portion being insertable inwardly through said elastic slit and within said inner end portion to the interior of said article to define a stretched position in which the two end portions are concentric one another with the elastic slit closed thereover, and separated therefrom.

2,734,309
SOUND MAKER
Donald A. Seaver, West Cheshire, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a corporation of Connecticut
Application December 12, 1952, Serial No. 325,677
3 Claims. (Cl. 46—180)



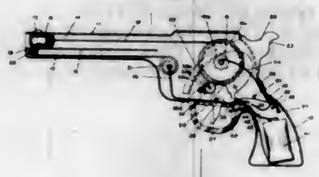
1. A sound maker consisting of a one-piece tubular shell closed at one end and open at the other end, a portion of the shell near the open end being of substantially larger diameter than the remainder of the shell, a lengthwise extending tongue slitted out of the smaller diameter portion and integrally joined to the cylindrical wall adjacent to the closed end and having its free end extending into the hollow interior of the shell a sufficient distance so that the tongue serves as a reed to make noise when air is forced through the open end over the tongue, and a mounting device for said tubular shell consisting of a separate shell-like member surrounding the closed end shell, said mounting device being open at both ends and fitting tightly around said large diameter portion but being spaced from the small diameter portion of said tubular shell to provide a chamber to permit air to flow past said reed through said mounting device.

2,734,310
TOY GUN
John W. Christopher, Columbus, Ohio
Application April 2, 1952, Serial No. 280,037
11 Claims. (Cl. 46—228)



10. A self-contained portable toy gun comprising a hollow body, said body including a rectilinear barrel terminating in a muzzle and formed to permit the passage of light both transversely through the walls and longitudinally through the muzzle of said barrel, a series of electric light bulbs housed within said barrel at intervals along the length thereof, and means within said body for flashing said bulbs successively and progressively toward said muzzle to create the illusion of motion of a projectile through and out of said barrel, the last in succession of said bulbs being disposed to emit light longitudinally through said muzzle.

2,734,311
TOY GUN
John W. Christopher, Lexington, Ky.
Application January 27, 1954, Serial No. 406,470
9 Claims. (Cl. 46—228)

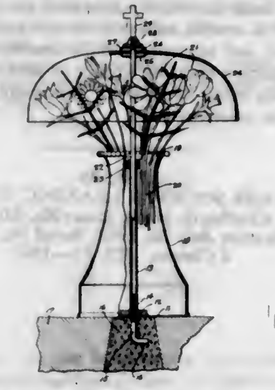


7. A toy gun comprising a barrel through which light is visible, an electric lamp mounted for longitudinal movement in the barrel, a source of current for the lamp, means for moving the electric lamp quickly forwardly in the barrel while simultaneously connecting it to the source of current to simulate the movement in and discharge of a projectile from the barrel, said means comprising a trigger, means for connecting the trigger to the lamp so that upon pulling the trigger it is first moved rearwardly of the barrel and is then projected forwardly of the barrel, contact means for connecting the source of current to the lamp, said contact means being operated by pulling the trigger to light the lamp during its forward movement.

2,734,312
FLOWER HOLDER AND PROTECTOR
Joseph Vaghi, Bethel, Conn.
Application January 26, 1954, Serial No. 406,178
5 Claims. (Cl. 47—41)

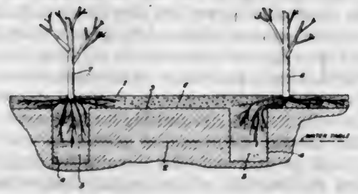
1. A flower holder and protector of the character described comprising a hollow upright vase member closed at the bottom and open at the top to receive the stems of a bouquet of flowers, a mounting for the vase comprising a foundation block adapted to be set in the ground at a grave, means anchoring the base of the vase to the

block, a hollow transparent dome, and supporting means secured to the said anchoring means and extending above



the upper end of the vase to support the dome over and enclosing flowers in the vase.

2,734,313
METHOD OF AGRICULTURAL CULTIVATION
Willard L. Morrison, Lake Forest, Ill., assignor to Union Stock Yards & Transit Company of Chicago, Chicago, Ill., a corporation of Illinois
Application May 16, 1952, Serial No. 288,215
2 Claims. (Cl. 47—58)

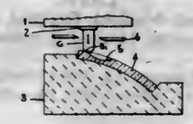


1. The method of agricultural cultivation which consists in pulverizing the upper portion of a generally solid rock-like soil layer to a depth substantially less than the normal water table, mixing the pulverized material with a hygroscopic growth supporting fertilizer mass to form a vegetable growth supporting layer superimposed on the rock-like layer, sinking a plurality of spaced separate wells through the growth supporting and rock-like layers to the water table, the wells being spaced from each other at a distance relative to the root length of the vegetable growth, filling the wells with a hygroscopic growth supporting fertilizer mass to form a wick in intimate contact with the growth supporting layer and the water table, planting vegetation in the growth layer spaced from each other relatively to the well spacing so that the root growth of the vegetation may spread laterally through the growth layer and also penetrate downwardly through the wicks into the wells.

2,734,314
TREATMENT OF PSOROSIS, COMMONLY CALLED "SCALY BARK DISEASE"
Grace A. MacKay, Upland, Calif.
No Drawing. Application December 11, 1952, Serial No. 325,452
8 Claims. (Cl. 47—58)

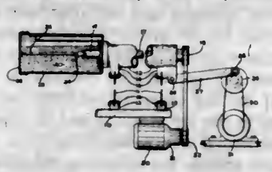
1. In the treatment of citrus trees afflicted with psorosis, the process which comprises giving the scaly bark areas of such a tree a direct but light application of an aqueous preparation containing from about 0.1 to 1% of iodine dispersed in a nontoxic aqueous vehicle, the quantity applied being sufficient to penetrate the outer bark of the tree only without reaching the cambium layer of the tree.

2,734,315
METHOD OF FORMING FUSED BIFOCAL LENS BLANKS
William W. Poundstone, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
Application February 11, 1954, Serial No. 409,698
5 Claims. (Cl. 49—82.1)



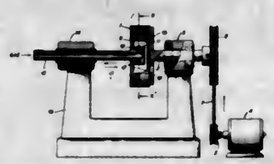
4. A method of forming and fusing a minor element into a ground and polished countersink within a major element of a multifocal lens blank comprising the steps of establishing a continuous flowing stream of molten glass, shearing the stream, directing the sheared face of the stream upon the major element in such a manner as to impinge thereon at one edge of the countersink, directing the continuing flow across the countersink toward an opposite edge thereof until the flow is in excess of the volume required to fill the countersink and again shearing the stream.

2,734,316
RECIPROCATING AND ROTATING BLADE POLISHER
Edward William Dawson, Toronto, Ontario, Canada, assignor to A. V. Roe Canada Limited, Malton, Ontario, Canada, a corporation
Application November 22, 1954, Serial No. 470,397
6 Claims. (Cl. 51—7)



1. A polishing device for small parts comprising a base, a sleeve resiliently mounted on the base, a shaft journalled in the sleeve for rotation relative thereto but fixed against axial movement relative to the sleeve, a part holder fixed to one end of the shaft, a can adapted to contain a polishing compound surrounding the part holder and fixed to the shaft, means to rotate the shaft and means to reciprocate the sleeve.

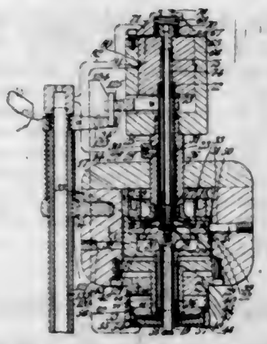
2,734,317
TECHNIQUE AND APPARATUS FOR MAKING CRYSTAL SPHERES
Walter L. Bond, New Providence, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application December 22, 1953, Serial No. 399,719
10 Claims. (Cl. 51—73)



1. A device for grinding odd-shaped particles into spheres approximating a millimeter or less in diameter which comprises in combination an abrasive wheel including a substantially cylindrical inner chamber having an annular abrasive surface for abrading a mass of said particles, means including a plurality of nozzles having outlets angularly spaced in the circumferential direction

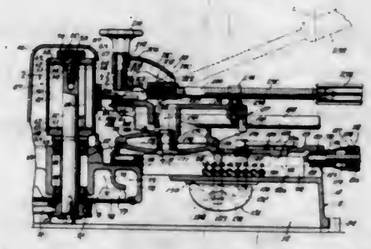
of said wheel for shooting high velocity jets of gas into said chamber at an acute angle to said surface, and means for driving said wheel to rotate relative to the positions of said nozzles in opposition to the direction of said jets.

2,734,318
LAPS
Arthur Offen, South Nutfield, England, assignor to Arthur Offen Developments Limited, London, England, a British company
Application January 13, 1953, Serial No. 331,040
6 Claims. (Cl. 51—92)



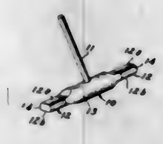
1. A lapping machine comprising a lap element, which lap element comprises at least one helically-coiled, resilient wire and end members at the ends of the element connected together by the wire, said wire constituting the only connection between said end members and providing a lapping surface for the element, support devices gripping said end members, reciprocating means for effecting relative movement of the support devices in the direction of the axis of the lap element, whereby an axial tension can be applied to the lap element and its diameter thereby adjusted, supporting means for holding a work-piece to be lapped, and means for effecting relative rotation between the lamp element and the supporting means.

2,734,319
GRINDING DEVICE
Henry Robert Billeter, Highland Park, Ill., assignor to Ammco Tools, Inc., North Chicago, Ill., a corporation of Illinois
Application January 21, 1953, Serial No. 332,310
7 Claims. (Cl. 51—96)



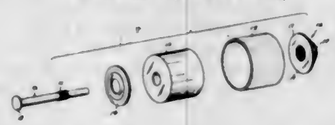
6. A grinding device comprising a base, a grinding element mounted on said base, a carriage mounted on said base for sliding movement toward and from said grinding element, an indexing bar mounted in said base for sliding movement relative to said base and to said carriage, means mounted in said base for releasably locking said indexing bar in any of a number of predetermined positions, means normally retaining said carriage in engagement with said indexing bar for movement therewith, and means for adjustably moving said carriage relatively to said indexing bar, said last means comprising an element on said carriage having an axially extending zero indicia mark and axially spaced graduated indicia marks, a screw threadedly mounted in said carriage in engagement with said indexing bar, a knob threadedly mounted on said screw and having indicia means with a circumferentially extending indicia mark and circumferentially spaced indicia marks, said knob being adjustable axially of said screw, and said indicia means being adjustable rotationally of the knob in fixed position axially thereof.

2,734,320
FUSE SOCKET CLEANING TOOL
Charles G. Hoye, Roseville, Mich.
Application July 26, 1954, Serial No. 445,637
4 Claims. (Cl. 51—186)



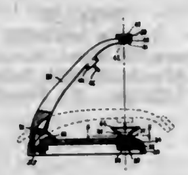
1. A cleaning tool for a fuse socket of the paired spring-clip type having a narrow expandable opening for receiving a fuse therethrough comprising a handle, a head on said handle at a right angle thereto, substantially rectangular ends on said head on either side of said handle having a narrow cross-sectional radial dimension less than the width of the opening of the clip to be entered so as to be readily receivable within the clip and a wide cross-sectional radial dimension substantially greater than the width of the clip opening and substantially equal to the diameter of the fuse normally receivable in the socket and abrasive material on said end at least at the faces of the long radial dimension; said handle constituting a safety extension and a lever for turning said head so as to cam said long dimension faces of said end into forceful frictional engagement with the interior of the socket against the spring torsion of the sockets.

2,734,321
ABRADING IMPLEMENT
Albert Field, Dayton, Ohio
Application May 10, 1955, Serial No. 507,396
6 Claims. (Cl. 51—190)



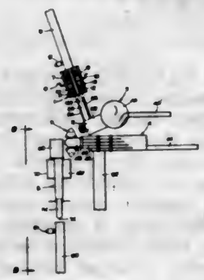
1. An abrading implement, including a mandrel having a head on one end and a threaded portion intermediate its ends, a disc on said mandrel abutting said head and relatively larger in diameter than said head, a sleeve made of a material radially expansible under axial compression mounted on said mandrel between said disc and said screw threaded portion, one end of said sleeve abutting said disc, a nut received on said mandrel in threaded relation to said threaded portion, a cylindrical concentric projection on said nut extending toward the other end of said sleeve, and a disc relatively rotatably mounted on said projection abutting said sleeve, said last named disc being approximately equal in diameter to the first said disc, means for limiting axial motion of said nut relatively to said last named disc, and an abrasive coated band on said sleeve tightened and loosened thereon by axial adjustment of said nut on said mandrel.

2,734,322
DEVICE FOR ATTACHING A LENS BLANK OR THE LIKE WITH ITS HOLDER
William Vaughan, Rochester, N. Y., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Original application December 30, 1950, Serial No. 203,603. Divided and this application July 2, 1952, Serial No. 296,866
3 Claims. (Cl. 51—277)



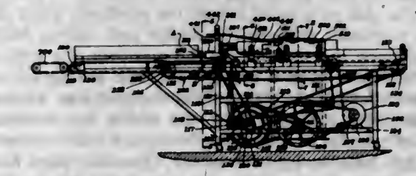
1. A device for use in attaching an article such as a lens to a suction-cup type holder so that it will be held thereby in a predetermined axial and centered relation therewith, said device comprising a base having retaining means for receiving the holder, axis indicating means on said base with which an article such as a lens may be aligned when positioned on the suction-cup type holder, an arm pivotally connected to said base at a predetermined spaced location from said retaining means, means maintaining the free end of said arm normally in a fixed spaced position over said retaining means, sighting means carried by said free end of the arm and vertically aligned with said retaining means when said free end of the arm is in its normally spaced position over the retaining means, and an engagement portion on said arm at a distance from the location of said pivotal connection equal to the distance between the retaining means and said location, said engagement portion being adapted to engage the article when the arm is forcibly moved about its pivotal connection toward the article and holder supported by the retaining means so as to collapse or flatten the suction-cup type holder sufficiently to cause the article to adhere to the holder.

2,734,323
CONTAINER UNCASER AND CASER
Herman Laub III, Alhambra, Calif., assignor of fifteen per cent to Robert E. Geauque, Van Nuys, Calif.
Application January 8, 1952, Serial No. 265,474
9 Claims. (Cl. 53—21)



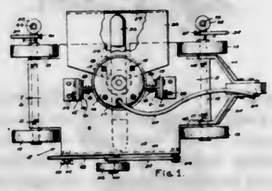
7. A method of casing filled containers which comprises placing the open bottom of an empty case over a case load of filled containers on a conveyor with the outside bottom flaps lying on said conveyor, turning under the inside bottom flaps during movement on said conveyor, moving said case and containers on a second conveyor placed at right angles to said first conveyor, applying glue to the bottom outside flaps and thereafter turning under said outside flaps during movement on said second conveyor.

2,734,324
COVER CLOSING MACHINE
Austin S. Chandler, Fitchburg, Mass., assignor to International Paper Box Machine Company, Nashua, N. H., a corporation of New Hampshire
Application April 17, 1952, Serial No. 282,885
13 Claims. (Cl. 53—147)



1. Apparatus for use in closing the upstanding articulated cover and infolding the articulated side dust flaps, of a filled box continuous advancing in a direction parallel to said upstanding cover on box conveyor means, said apparatus comprising the combination of a folding unit advancing parallel to the path of said box; a pair of side dust flap folding arms each mounted on said unit, behind a side dust flap, to pivot toward the other in an horizontal plane, a cover closing head positioned between said arms and mounted on said unit behind said cover to pivot downwardly therewith in a vertical plane and cam means for pivoting the arms and head of said folding unit while said unit and said box are continuously advancing.

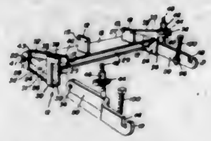
2,734,325
ROTARY LAWN MOWER AND EDGER
George T. La Bonte, Miami, Fla.
Application December 8, 1951, Serial No. 260,728
1 Claim. (Cl. 56—25.4)



A combined lawn mower and edging device of the rotary cutting blade type, comprising a generally square flat platform having front and rear extensions, axles bolted to the underside of each extension adjacent its outer end, ground wheels rotatably supported upon the axles at the right and left side of the platform, the ground wheels upon the right side being flush with the right marginal edge of the platform, the platform at its left side provided with a depending flange, the axles at the right side of the device being extended beyond the ground wheels, guide rollers rotatably supported at the outer ends of the extended axles, to rotate in a horizontal plane, the rollers being of identical diameter and positioned at an identical distance from the right edge of the platform, a handle for the mower that is carried by a pair of divergent bracket arms, the bracket arms being pivotally supported on the rear axle, the rear platform extension being notched at either side to a depth corresponding to the thickness of the bracket arms, the bracket arms pivotally supported on the axle to engage within the notches with their terminal ends underlying the platform extension and contacting therewith to limit the downward angularity of the handle, a pair of spaced apart and parallel upstanding brackets rigidly bolted to the platform intermediate its length, an electric motor that is embraced by a pair of identical clamping bands having out turned parallel legs at diametrically opposite sides of the motor, one leg at each side of the motor being pivotally supported on the brackets through the medium of which the motor may be swung in a vertical plane from a vertical to a horizontal

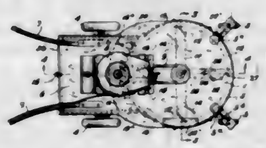
position, each of the brackets being provided with an arcuate slot, a bolt carried by the other legs at each side of the motor for sliding engagement in the slots, a wing nut threaded upon each of the bolts for clamping the motor in each position of adjustment, the platform provided with a transverse slot opening through the right side of the platform, a drive shaft projecting from the motor to extend through the slot to a point below the platform when the motor is vertically arranged, a double end cutting blade supported upon the shaft below the platform, the cutting blade when rotating in a horizontal plane having an arc that extends beyond the right side of the platform, a cover plate detachably connected with the motor for overlying the path of rotation of the cutting blade and with the cover plate being shiftable with the motor, the cover plate having an overlying engagement with the surface of the platform when the motor is vertically arranged, the motor when horizontally arranged serving to position the cutting blade outwardly of the right side of the platform to rotate in a vertical arc, the said rollers serving to guide the platform in parallel relation to a wall area when the cutting blade is positioned in a horizontal cutting plane and whereby to maintain the cutting blade free from contacting engagement with the wall area.

2,734,326
TRACTOR MOUNTABLE SUPPORT FRAME AND CUTTING ASSEMBLY
Dave F. Gebhart, Auburn, Calif.
Application September 28, 1953, Serial No. 382,616
5 Claims. (Cl. 56—25.4)



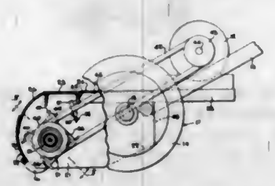
1. A support for mounting implements on tractors comprising a longitudinal member having ends and adapted to be secured to the front end of a tractor in transverse relationship thereto, a pair of horizontal guides on the ends of said member having a forward end and a rear end and a closed side secured to the end of said member, said guides flaring forwardly vertically, a forwardly extending arm pivotally secured in each guide to the rear end of each of said guides, and adjusting means connected between each of the forwardly extending arms and the front ends of the guides for adjusting the angular position of the arms with respect to said guides.

2,734,327
LAWN MOWER
Byrl A. Whitney, Lakewood, Ohio
Application August 23, 1954, Serial No. 451,615
15 Claims. (Cl. 56—25.4)



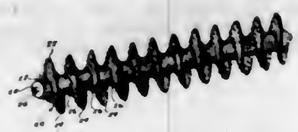
1. In a mowing machine, the combination of a wheeled vehicular body having closed top, side and front walls and being open at the rear and bottom thereof, the lower part of said side and front walls extending inwardly to form a race-way thereabove with open rear ends, an angularly disposed cutting means occupying a substantially horizontal plane below and adjacent to said race-way and rotatably mounted about a vertical axis and having its shaft of rotation extending through said body top, motive means mounted upon said body top and having operative drive connection with said shaft, and said cutting means having an upwardly, inwardly turned and outwardly-opening inclined fin located rearwardly in the path of rotation thereof so as to propel the cut grass etc. upwardly into and circumferentially about said race-way for discharge therefrom at the rear end thereof.

2,734,328
LAWN MOWER
Chauncey O. Wood, Mason, Ohio
Application March 10, 1953, Serial No. 341,465
7 Claims. (Cl. 56—26)



1. In a lawn mowing and weed cutting machine, a substantially flat sided rotor, means to mount said rotor for rotation about a horizontal axis, means to drive said rotor at a substantially high rate of speed, a cutter blade overhanging each of the sides of said rotor in the direction of rotation thereof the respective cutter blades being disposed symmetrically around the axis of rotation of said rotor and being immovably fixed on the rotor, and a member having a cutting edge thereon disposed above said axis and just outside of the path of said cutter blades, said member disposed so as to present said cutting edge toward oncoming cutter blades.

2,734,329
BRUSH PICKER FOR A COTTON PICKING MACHINE
John A. Fogle, Neeses, S. C.
Application March 2, 1954, Serial No. 413,626
1 Claim. (Cl. 56—33)



A brush picker for a cotton picking machine comprising a roll core having a continuous brush bristle covering on the periphery thereof, said covering having the constituent bristles therein arranged to form a spiral ridge and intervening valley lengthwise of said core, the form of said ridge and intervening valley being such as to internest at a uniform surface spacing with a like brush picker synchronized in opposed relation thereto, and said roll core being cylindrical in form and having a spiral rib member arranged thereon centrally with respect to said ridge for supporting laterally the adjacent brush bristles of said covering.

2,734,330
LAWN EDGER ATTACHMENT FOR A LAWN MOWER
Richard Pilkington, Burbank, Calif.
Application December 28, 1953, Serial No. 400,693
5 Claims. (Cl. 56—251)

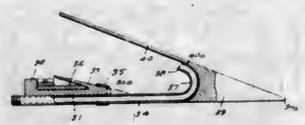
1. A lawn edger attachment for a lawn mower comprising: attachment yoke means including a base portion

and two laterally spaced, virtually parallel side arms; rotatable disc-like cutting blade means, and laterally directed pivotal connection means effectively rotatably mounting said cutting blade means in symmetrical virtually parallel virtually equi-distant relationship between said side arms of said attachment yoke means, said base portion of said attachment yoke means being provided with an extension virtually perpendicular with respect to said pivotal connection means and to an imaginary extended radius of said cutting blade means and virtually centrally symmetrical with respect to an imaginary plane in which said cutting blade means lies, said extension being provided with selectively engageable clamping means at the end thereof remote from said base portion of said attachment yoke means and cooperable to be selectively clamped around the customary horizontal tie rod of a conventional lawn mower; longitudinal linkage means rotatably connected at one end, about an axis virtually parallel to said pivotal connection means, with respect to said base portion of said attachment yoke means and provided at the other



end with clamp means size-adjustable along the length of said linkage means and pivotally position-adjustable around an axis virtually parallel to said pivotal connection means and around an axis virtually perpendicular thereto, said clamp means being selectively engageable with one of the customary flat curved arms comprising the yoke of a lawn mower, whereby to firmly attach the rotatable disc-like cutting blade means in an upstanding position virtually parallel to the lawn mower's wheels in a manner such that swinging the lawn mower on its wheels into normally inoperative position for lawn mowing purposes will move the rotatable cutting blade means into operative relationship for effectively edging a lawn; said extension, and clamping means carried thereby and said linkage means and clamp means carried thereby being so connected with respect to the base portion in centered alignment with the cutting blade means that force applied therethrough to the cutting blade means during operation of the device will lie in the plane of the cutting blade means.

2,734,331
ATTACHMENT FOR GRAIN HARVESTING MACHINE
Curt M. Phillips, Rudyard, Mont.
Application July 6, 1953, Serial No. 366,171
4 Claims. (Cl. 56—296)



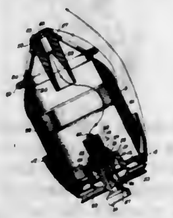
1. In a grain harvesting machine having a cutter bar formed of a stationary cutter bar, a cutter bar mounted for reciprocation above said stationary bar, forwardly projecting guard members carried by said stationary bar, a pipe fixed beneath said stationary bar and projecting forwardly of each guard member, and upwardly and rearwardly directed air nozzle carried by the forward end of said pipe, a tapered guard fixed to and extending from the forward end of said pipe, and an upwardly and rearwardly directed bar fixed to and extending rearwardly from said tapered guard.

2,734,332
GRAIN PICK UP ATTACHMENT FOR HARVESTERS
Anton Edward Fisher, Calgary, Alberta, Canada
Application January 5, 1953, Serial No. 329,575
2 Claims. (Cl. 56—312)



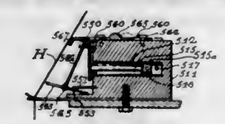
1. A grain lifter providing a runner for travel over the ground and a rearwardly extending finger carried on the forward end of the runner and further including an upwardly curved forward portion, in which said runner has a part thereof considerably wider than the body of the runner forming a shoe, said part starting at a point rearwardly of the upward curve of the runner and extending to the forward end of the runner to the point of attachment of the finger with the greatest width intermediate thereof and graduated to the ends, a shaft for pivotal suspension of the runner, means for mounting the shaft free to turn transversely on the rear end portion of the runner, threaded bolts having eyes engaging the shaft and including nuts for the bolts, a tail piece having one end integral with the under side of the runner and extending rearwardly parallel therewith, and a cap on the other end of the tail piece, said cap having its upper side inclined forwardly downward.

2,734,333
ABRADING YARN
Ernest J. Griset, Jr., Asheville, and David L. Hart, Enka, N. C., assignors to American Enka Corporation, Enka, N. C., a corporation of Delaware
Application April 17, 1952, Serial No. 282,806
4 Claims. (Cl. 57—2)



1. A double twister for simultaneously twisting and abrading yarn comprising in combination, a bobbin, a cap thereon, a spindle, a wheel below the bobbin and spindle, each of said elements having a thread passageway therethrough, and an abrading annulus mounted in the thread passageway in one of said elements below the cap and at a point where the twist has commenced, said annulus constituting an integral part of one of the twist forming elements.

2,734,334
STRAND BREAK DETECTING APPARATUS
Erie F. Saunders, Montreal West, Quebec, Canada, and Donald Drysdale, Philadelphia, Pa.
Application December 27, 1950, Serial No. 202,929
7 Claims. (Cl. 57—81)



1. A device of the type described comprising a body, a sensing member pivotally mounted to a forward end of the said body by a horizontal pivot for rotational movement in a forward direction, said sensing member

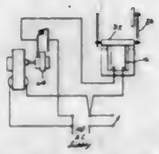
including a rearwardly and downwardly extending rear plate and a forwardly and downwardly extending front plate, a sensing element horizontally pivoted to said bottom end of the front plate and having a forwardly extending portion adapted to contact a strand and a rearwardly extending portion, a hook member extending outwardly from the body adjacent to the lower end of the front plate and having a downwardly extending finger, a body including a horizontally extending cylinder, a piston operative in said cylinder, an air entrance port normally behind said piston, an exhaust normally covered by said piston, an air supply to the entrance port, and means for establishing an intermittent air supply whereby the piston is moved forward against said rear plate whereby the sensing element is adapted to contact the strand when the strand is intact, whereby the strand depresses the end of the sensing element causing the rear portion to be raised whereby it engages said finger preventing a further forward movement of the piston, but when the strand is not intact the front end of the sensing element is not depressed and the rear end does not engage said finger and the piston is allowed to move forward to uncover said exhaust port.

2,734,335
STRAND INTERRUPTING AND FEEDING APPARATUS
Erle F. Saunders, Montreal West, Quebec, Canada, and Donald Drysdale, Philadelphia, Pa.
Application December 27, 1950, Serial No. 202,928
13 Claims. (Cl. 57—86)



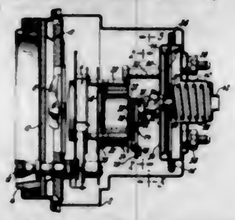
3. A device for use in a textile apparatus having drawing rolls, a housing having a relatively movable front end adapted to be placed near the drawing rolls and a passage for the roving extending therethrough, said passage having a surface close to which the roving is adapted to pass, a plunger for entering the passage at a localized area to pinch the roving against said surface, the housing being mounted for movement toward and away from the front end, means normally urging the housing away from the front end, means normally urging the plunger away from the roving passage, means for causing the plunger to enter the roving passage when an end break occurs, and means for withdrawing the plunger from the roving passage when feeding is completed including a slidable member having a finger contact.

2,734,336
CLOCK SYSTEM
Lawrence T. McRae, New York, N. Y.
Application May 22, 1953, Serial No. 356,917
6 Claims. (Cl. 58—24)
(Granted under Title 35, U. S. Code (1952), sec. 266)



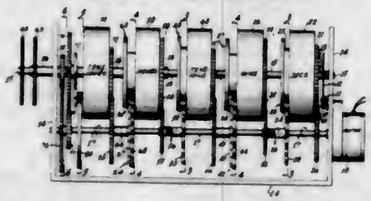
1. In combination with a time clock of the type having an armature, a solenoid for actuating said armature, an electric circuit for energizing said solenoid and a periodic switch in said circuit, said periodic switch including a pair of contacts for opening said circuit to deenergize said solenoid and for closing said circuit to energize said solenoid, the improvement comprising; means in said periodic switch for positively closing said contacts for a time extending from the beginning of a predetermined period to just prior to the end of the period and for positively opening said contacts for the remainder of the period whereby said armature is actuated for substantially all of the predetermined period.

2,734,337
VACUUM WOUND VEHICLE CLOCK
Jesse E. Eshbaugh, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 21, 1952, Serial No. 289,060
2 Claims. (Cl. 58—46)



1. In a device of the class described, a substantially cylindrical housing, clock means mounted in said housing and having a main spring and gearing for winding the same whose axes are parallel to that of the housing, a substantially circular hollow chamber within which pressure variations occur mounted within the housing in a plane transverse to the axis, a diaphragm mounted in the chamber movable by pressure variations, spring biasing means in the chamber to bias the diaphragm to a position opposite to that to which it is moved by the pressure change, rotatable ratchet means connected to said gearing to drive the same in one direction, and a bell crank pivotally mounted on the chamber and operatively connected to said rotatable ratchet means and said diaphragm to translate reciprocal motion of said diaphragm into rotary motion of said ratchet means to wind the main spring of the clock.

2,734,338
24-HOUR DIRECT-READING CLOCK
Eric J. Uhlig, Haddon Heights, and Dzidris Pilsetnieks, Westville, N. J., assignors to Wickes Engineering and Construction Company, Camden, N. J., a corporation of New Jersey
Application January 12, 1953, Serial No. 330,704
4 Claims. (Cl. 58—125)



1. A 24-hour direct-reading clock or the like comprising individual indicating drums for tens of hours, hours, tens of minutes, minutes and seconds, a driving motor geared to the seconds drum, Geneva mechanisms coupling the drums so that they rotate in time-indicating fashion, a mutilated gear wheel, a gear train operative to drive said mutilated gear wheel from the hours drum at one-third the speed thereof, and a mutilated gear driver driven at a constant rate from said motor, said driver being positioned to engage said mutilated gear wheel at a predetermined one of its positions and rotate it substantially 72 degrees, whereby said hours drum is driven by said mutilated gear wheel thru said gear train.

2,734,339
EXPANSIBLE SELF-RETRACTING LINKAGE
Karl C. Augenstein, Cranston, R. I., assignor to Speidel Corporation, Providence, R. I., a corporation of Rhode Island
Application May 11, 1955, Serial No. 507,608
22 Claims. (Cl. 59—79)

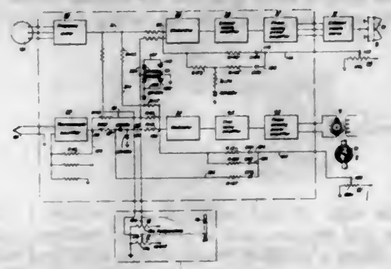


1. An extensible, self-retracting linkage comprising at least two adjacent top links, at least one intermediate link extending longitudinally of the linkage below said two adjacent top links when the linkage is retracted and viewed from the top, means for pivotally connecting one end of said intermediate link to the first of said top links, means for pivotally connecting the other end of said intermediate link to the second of said top links, each of said means for pivotally connecting said intermediate link ends and said top links together comprising a bottom link extending from adjacent to a longitudinal side of the linkage toward the longitudinal center line thereof, at least one end portion of said intermediate link being located between the adjacent top portion of said bottom link and the adjacent bottom portion of said one of said top links when said linkage is retracted, said bottom link having one end pivotally connected to one end of said intermediate link for relative movement with respect thereto about an axis which is generally perpendicular to the top of the bottom link and having the other end pivotally connected to one of said top links for relative movement with respect thereto about an axis which is generally perpendicular to the top of the bottom link, spring means associated with said bottom links for urging said top links toward each other longitudinally of the linkage while permitting them to be extended relative to each other longitudinally of the linkage, said intermediate link including at least two portions and means for connecting said two portions for movement of the opposite ends of said portions relative to an intermediate portion of the intermediate link at least about a line which is generally perpendicular to the longitudinal center line of the linkage and is generally parallel to the transverse plane of said top links.

2,734,340
JET ENGINE POWER REGULATOR
Cyrus F. Wood, Swarthmore, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application October 13, 1949, Serial No. 121,171
21 Claims. (Cl. 60—35.6)

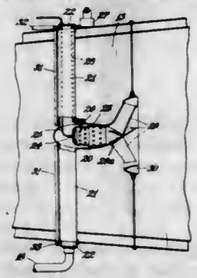
1. In a jet engine provided with a fuel valve having a member movable to vary the fuel input and a propulsion jet nozzle having a component movable to vary the nozzle area, means operated in response to engine speed and temperature for moving the movable component of the jet nozzle and for moving the movable member of the fuel valve, a manually-movable member for adjusting said means for movement of the jet nozzle movable component and the fuel valve member to vary the thrust, and means responsive to movements of the movable valve member and of the jet nozzle movable component to regulate the response of said operated means.

12. In propulsion apparatus, the combination of, a prime mover, means for supplying fuel for operation of the prime mover, a normally-balanced electrical network, means providing electrical outputs dependent on prime mover speed and temperature and for supplying said outputs to said network, electrical means operative in response to unbalancing of said network pursuant to changes



in speed and temperature to vary the input of fuel by said supply means, means responsive to operation of the last-named electrical means to regulate the rebalancing of the network, and settings adjustable to vary the speed and temperature values for network balance.

2,734,341
GAS TURBINE ENGINE WITH MEANS FOR REHEATING TURBINE EXHAUST GASES
Alfred Cyril Lovesey, Littleover, Derby, England, assignor to Rolls-Royce Limited, Derby, England, a British company
Application April 22, 1952, Serial No. 283,708
Claims priority, application Great Britain April 25, 1951
12 Claims. (Cl. 60—35.6)

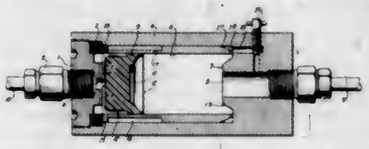


1. In a gas-turbine engine having a compressor, main combustion equipment, a turbine driving said compressor, and an exhaust duct connected to receive the gases exhausing from the turbine; additional combustion equipment for reheating the gases within the exhaust duct and comprising closed casing structure supported within the exhaust duct and affording a combustion chamber, a fuel nozzle to deliver fuel into the combustion chamber, means connected to supply said combustion chamber with air compressed by said compressor and at a pressure substantially equal to that in the main combustion equipment, igniter means in said combustion chamber to produce combustion of said fuel and air supplied thereto, and means affording a restricted outlet for hot combustion products from said closed casing structure in said exhaust duct whereof the restriction is such as to maintain the pressure within the combustion chamber approximately at that within the main combustion equipment.

2,734,342
SAFETY DEVICE FOR HYDRAULIC BRAKE SYSTEMS
William R. Mallory, Phillipsburg, N. J.
Application May 11, 1951, Serial No. 225,870
4 Claims. (Cl. 60—54.5)

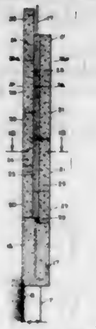
1. A safety device for hydraulic brake systems which comprises a closed cylinder having an inlet at one end

and an outlet at the opposite end, said safety device having a passage from the inlet end of said cylinder and a restricted opening from said passage to the interior of said cylinder between the inlet and outlet ends thereof, the end of said cylinder about said outlet projecting inwardly to form a valve seat and an annular recess about said valve seat, said safety device having a by-pass from



the outer edge of said recess to said outlet, a closure valve in said by-pass, and a piston of resilient material slidable from a position between said inlet and said restricted opening to seat on said valve seat, said piston having an annular flange projecting into the annular recess about said valve seat to close against said by-pass when said piston seats on said valve seat.

2,734,343
UNDERGROUND SHAFTS
Jordan Socrates Asketh, Jackson Heights, N. Y.
Application June 24, 1949, Serial No. 101,034
3 Claims. (Cl. 61—40)



1. A substantially vertical double wall segmental shaft, sunk into earth as a unit of uniform wall thickness, comprising two concentrically arranged and spaced sets of precast concrete tubular members, one set within the other, cementing means filling the annular space between the concentric sets of said tubular members to integrate said sets so as to form a monolithic hollow shaft sinkable underground, the members of each set being aligned and in end contact with each adjacent member with the lines of contact between the tubular members of the outer set being in staggered relation to the lines of contact of the tubular members of the inner set, said shaft having at the bottom termination a cast-in-place reinforced concrete tubular section of the same thickness and being connected, continuous and flush with said shaft.

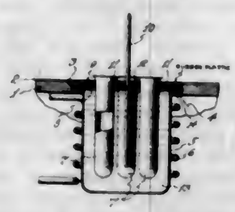
2,734,344
ELECTRIC COOLING APPARATUS
Nils E. Lindenblad, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application May 1, 1953, Serial No. 352,473
4 Claims. (Cl. 62—1)

1. A cascaded thermo-electric pile for cooling by means of the Peltier effect comprising a plurality of concentric cylindrical annular members, each of said members being thermally conductive and electrically insulating, a plurality of thermo-couples, each of said thermo-couples having a hot end and a cold end, said thermo-couples being disposed in concentric banks within said members, said thermo-couples being disposed in thermal contact with said members radially in alternately hot and cold end arrangement, said banks comprising progressively increas-



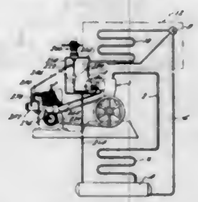
ing numbers of said thermo-couples, and means to energize said thermo-couples whereby to produce cooling in response to energization of said cascaded thermopile.

2,734,345
SAMPLE SUPPORT FOR REFRIGERATING CABINETS
Paul Lawler, Jr., Bayonne, N. J.
Application June 5, 1953, Serial No. 359,719
1 Claim. (Cl. 62—1)



In a cabinet for refrigerating test samples and having at least one opening in the top in which is suspended a container holding the refrigerating bath in which the samples are immersed for cooling, the improvement comprising a thin, removable rigid sheet of hard plastic covering said container, a thicker, removable sheet of flexible, liquid absorbent sponge plastic superimposed over the first sheet, and means forming holes disposed in register through both sheets, into which the samples are inserted for refrigeration in the bath.

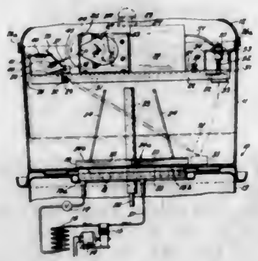
2,734,346
APPARATUS FOR CONTROLLING REFRIGERATING SYSTEMS
Edward F. Dickieson, Jr., Detroit, Mich.; Nathalie L. Dickieson, executrix of said Edward F. Dickieson, Jr., deceased, assignor to Nathalie L. Dickieson
Application February 4, 1949, Serial No. 74,585
7 Claims. (Cl. 62—4)



1. In a refrigerating system, a compressor having an inlet and an outlet, an evaporator connected to receive refrigerant from said compressor and having an outlet, a suction vapor passageway connecting said evaporator outlet to said compressor inlet, a valve in said suction passageway for controlling fluid flow therethrough and a pair of valve actuators operatively inter-connected to said valve to actuate said valve toward a closed position as a result of the interaction of the effects of said actuators, a

first of said actuators being responsive to an operating condition of said evaporator to urge said valve toward a closed position in response to a first magnitude of said evaporator condition, a second of said pair of actuators being responsive to an operating condition of said compressor to urge said valve toward a closed position in response to a first magnitude of said compressor condition, a means for driving said compressor at a reduced speed, and means operatively connecting said first actuator to said driving means rendering said first actuator effective to control said driving means to reduce the speed at which said compressor is driven in response to a second magnitude of said evaporator condition.

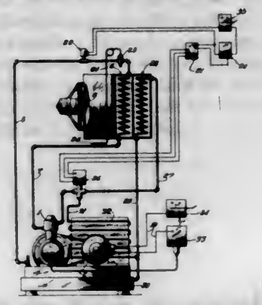
2,734,347
APPARATUS FOR PRODUCING AND DISPENSING BEVERAGES HAVING FROZEN PARTICLES THEREIN
Harry C. Fischer, Columbus, and Louis P. Benua, Gahanna, Ohio, assignors to The Ebco Manufacturing Company, Columbus, Ohio, a corporation of Ohio
Application October 18, 1952, Serial No. 315,567
11 Claims. (Cl. 62—4)



2. In an electrically-actuated refrigerated dispenser for partially frozen beverages including a receptacle for the beverage, means for circulating the beverage within the receptacle to maintain homogeneity between frozen and unfrozen parts thereof, and a refrigeration system comprising a heat exchange member for cooling the beverage within the receptacle, a compressor for circulating a refrigerant through said heat exchange member and an electric motor energizable to drive said compressor; means for controlling the proportion of frozen to unfrozen parts within the beverage comprising means in said receptacle for segregating a portion of the beverage from the main body thereof, and switch means connected with said motor and responsive to the amount of frozen parts within said segregated portion of the beverage for controlling the energization of said motor.

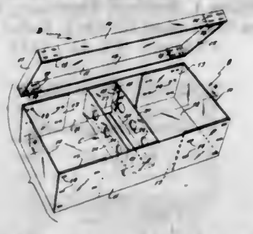
2,734,348
AIR CONDITIONING SYSTEM
Owen C. Wright, Millburn, N. J.
Original application November 3, 1951, Serial No. 254,667, now Patent No. 2,715,320, dated August 16, 1955. Divided and this application June 1, 1955, Serial No. 515,049
1 Claim. (Cl. 62—6)

An air conditioning system comprising in combination, a refrigerant; a compressor; an evaporator about which air to be conditioned is circulated; an air cooled condenser; a solenoid valve adapted to admit the refrigerant to the evaporator; a thermostat and a humidistat operably connected with the solenoid valve and adapted to keep the same open until each is satisfied; a heating coil positioned in the path of the air passed over the evaporator; a conduit incorporating a modulating three way mixing valve connecting the discharge outlet of the compressor with the inlet of the heating coil and with the air cooled condenser, the said valve being responsive to the thermostat and adapted to admit the compressed re-



frigerant directly from the compressor to the heating coil until the thermostat is satisfied.

2,734,349
REFRIGERATED CONTAINER
Edward F. Repking, Webster Groves, and Walter C. George and Clifford D. Fallert, St. Louis, Mo., assignors to Gaylord Container Corporation, St. Louis, Mo., a corporation of Maryland
Application April 21, 1952, Serial No. 283,456
5 Claims. (Cl. 62—83)



1. An insert for use in a container for carrying articles at a reduced temperature, said insert comprising a pair of opposing walls secured to the inner faces of opposing sides of the container and a pair of opposing side walls foldably and right angularly connected thereto, said side walls being provided with spaced vertical slits in their lower margins, said slits being graduated in length, forming the sides of flaps, said flaps being inwardly and foldably connected to said side wall along the ends of said graduated slits, said flaps firmly contacting and retaining the contents of said container to prevent movement thereof, said insert being adapted for receiving a heat absorbing substance therein, one of said side walls being provided with an opening to permit circulation of the cooled air, the upper edges of the said side walls being in substantial flatwise relation with the upper margins of said container.

2,734,350
ICE TRAYS AND GRIDS
Sydney Daniel Budd, Wood Green, London, England, assignor to The Stowaca Fibre & Can Company Limited, Manchester, England, a body corporate of Great Britain
Application February 14, 1955, Serial No. 487,847
Claims priority, application Great Britain February 23, 1954
3 Claims. (Cl. 62—108.5)

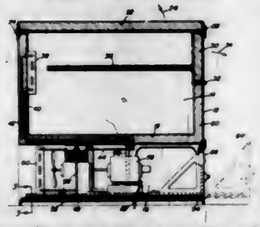
1. An ice tray for a domestic refrigerator comprising the combination with the tray of a centrally arranged longitudinal partition, the said partition having a plurality of slots extending downwards from its top edge and spaced at equal distances apart, each succeeding slot being more inclined to the vertical than the preceding slot, a plurality of transverse members equal in number to the slots in the longitudinal partition each transverse mem-

ber having a slot midway between its ends extending upwards from its lower edge whereby the transverse partitions can be assembled with the longitudinal partition, each transverse member also having a second slot above the first slot, a bar slidably mounted on the top of the longitudinal partition, the said bar having a plurality of recesses on its upper edge, the said recesses being equal in number to and at the same distances apart as the slots in the



longitudinal partition, one end of each recess being inclined, and the inclined end of each recess being progressively further from the other end thereof, the said bar passing through the upper slots in the transverse partition whereby as the bar is moved the transverse partition will be progressively raised from the floor of the tray and means for moving the bar longitudinally along the top of the longitudinal partition.

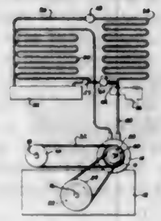
2,734,351
PORTABLE REFRIGERATOR
William L. Stewart, Fitchburg, Mass.
Application September 26, 1952, Serial No. 311,610
1 Claim. (Cl. 62—116)



A refrigerator unit comprising a cooling chamber, said chamber including an insulated bottom, insulated back and end walls fixed to said bottom, a lower insulated front wall section secured to said bottom and said end walls, an upper insulated front wall section hingedly mounted on said lower front wall section, an insulated lid hingedly mounted on said back wall, latching means attaching said lid to said upper front wall section to retain said upper front wall section in closed relation, an evaporating element mounted in said chamber, a combination compressing condensing unit outside of said chamber, said compressing and condensing unit being movable with respect to said chamber, flexible conduits connecting said compressing and condensing unit to said evaporating element, a drawer compartment disposed under said cooling chamber, a drawer slidably received in said compartment, said compressing and condensing unit being mounted in said drawer.

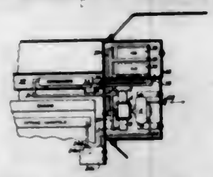
2,734,352
VEHICLE REFRIGERATING APPARATUS
John Dolza, Davisburg, Mich., assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application January 18, 1952, Serial No. 267,170
6 Claims. (Cl. 62—117.1)

5. In combination, an engine having a first relatively high speed drive shaft and a second relatively low speed drive shaft operated simultaneously with said high speed drive shaft at all times, a driven device, first power transmitting means between said first drive shaft and said driven device including a speed responsive clutch constructed and arranged to declutch said first power transmitting means at relatively high engine speeds, and second power transmitting means between said second drive shaft and said driven device including an overrunning clutch



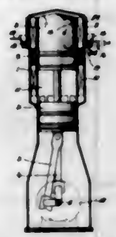
arranged to allow said driven device to be operated by said first power transmitting means at relatively low engine speeds.

2,734,353
REFRIGERATING DEVICE FOR AUTOMOBILES
Francis A. Hill 2nd, Westport, Conn.
Application April 28, 1953, Serial No. 351,580
12 Claims. (Cl. 62—117.1)



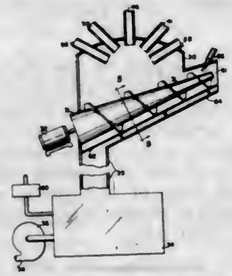
1. A cooling and refrigeration apparatus comprising a casing, a pair of compressors mounted one on each side of said casing and having intake and discharge ports, a piston and piston rod interconnecting the said compressors, teeth on each side of said rod, gears on each side of said rod engaging said teeth, a shaft for each of said gears and rigidly attached thereto, bearings and stuffing boxes for each of said shafts, two vacuum motors one driving one shaft and the other driving the other shaft, said motors having their intake ports connected to the atmosphere and their discharge ports connected to an intake side of an internal combustion engine, and control means to stop and start said motors.

2,734,354
REFRIGERATOR GAS LIQUIFICATION DEVICE
Jacob Willem Laurens Köhler, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application May 1, 1952, Serial No. 285,439
Claims priority, application Netherlands May 25, 1951
5 Claims. (Cl. 62—122)



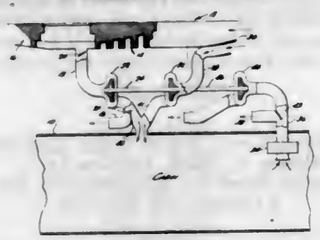
1. A refrigerator comprising a freezer; a regenerator; a cooler; and two spaces containing a working medium of invariable chemical composition which traverses a closed thermodynamic cycle while being in the same physical state through said freezer, regenerator and cooler; one space having a relatively lower temperature than the other space; the working medium in each of said spaces varying continuously in volume with a substantially constant relative phase difference; a gaseous medium surrounding said freezer being adapted to condense at least at −150° C. on the outside wall of said freezer; the gas pressure of the medium to be condensed being substantially equal to atmospheric pressure; an annular collector positioned at the end of said freezer adjacent to said regenerator so that condensed medium may be collected in said collector; said collector being so constructed that the vertical height of the liquid level in said collector does not exceed one third of the height of the wall of said freezer.

2,734,355
SUCTION APPARATUS FOR THE SEPARATION OF FLUID AND SOLIDS
Elwood P. Wenzelberger, Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
Application March 13, 1952, Serial No. 276,347
9 Claims. (Cl. 62—124)



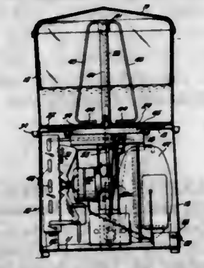
1. In apparatus for the concentration of a liquid bearing solids and solvent useful in combination with refrigerant means for forming within the said liquid a mass of small solvent crystals, the structure comprising a collecting chamber for said liquid and crystals, said chamber having lateral wall portions tapering and upwardly extending from the base thereof, said tapering lateral wall portion defining an opening in said chamber, an auger extending from said base upwardly through said lateral walls and terminating at its upper end in said tapering lateral wall portions, a screen member secured below said auger in closely spaced relation therewith, and means to apply suction pressure to said screen when said crystals and liquid cover said auger and screen to draw said liquid therethrough.

2,734,356
CABIN SUPERCHARGING SYSTEM WITH COOLING MEANS
Schuyler Kleinhans, Santa Monica, Calif., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif.
Application May 23, 1952, Serial No. 289,695
5 Claims. (Cl. 62—136)



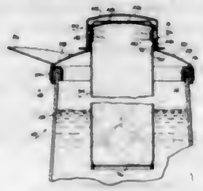
1. Apparatus for pressurizing the interior of a turbo-compressor powered aircraft, comprising: a turbo-compressor power unit; expansion turbine means; duct means for directing high pressure air from the compressor of said power unit to said expansion turbine means; compressor means; second duct means for directing air from a source other than said turbo-compressor power unit to said compressor means; third duct means for directing the cooled, expanded air from said turbine means and the compressed air from said last mentioned compressor means to the interior of said aircraft; power transmitting means connecting said turbine means to said last mentioned compressor means to enable the latter to be operated by the work energy developed during the expansion of said high pressure air; and regulating means for limiting the amount of high pressure air bled from said power unit for pressurization purposes to an amount not substantially greater than that necessary to release sufficient work energy to enable the combined output of said turbine means and said last mentioned compressor means to meet the compressed air requirements of the interior of said aircraft.

2,734,357
BEVERAGE COOLER AND DISPENSER
Harry C. Fischer, Columbus, and Louis P. Benua, Gahanna, Ohio, assignors to The Ebco Manufacturing Company, Columbus, Ohio, a corporation of Ohio
Application April 10, 1952, Serial No. 281,636
2 Claims. (Cl. 62—141)



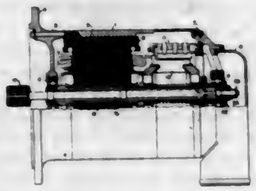
1. In a refrigerated beverage dispenser; a base housing having a partial top wall; refrigeration apparatus carried in said base housing and including a flat disk-shaped cold plate having a flat annular upper surface exposed at the top wall of said base housing and a centrally disposed opening extending through said cold plate, said refrigeration apparatus being operable to circulate a refrigerant through said cold plate to chill the latter; a bearing sleeve extending axially through and carried in the opening of said cold plate; a rotary socket member journaled in said bearing sleeve; motor and drive means in said base housing connected to rotate said socket member; a separate receptacle body to receive a beverage to be dispensed and having a partial bottom wall; a flat annular corrosion-resistant heat exchanger plate carried by the partial bottom wall of said receptacle body and forming a flat continuation thereof, said heat exchanger plate being arranged for direct contact with a beverage contained in said receptacle body; an annular disk-shaped contact plate of high heat conductivity metal connected directly with said heat exchanger plate and having a flat annular bottom surface arranged for direct surface-to-surface contact with the flat annular upper surface of said cold plate when said receptacle body is positioned on said base housing; a vertically arranged tube having a lower end portion extending axially through and carried by said heat exchanger plate and said contact plate and terminating in an opening adapted to receive an end of said bearing sleeve, said tube extending vertically upwardly in said receptacle body and terminating at its upper end above the normal level of a beverage within said receptacle body; shaft means journalled in said tube and having a lower end portion arranged to fit within said socket member when said receptacle body is positioned upon said base housing; and a rotary agitator extending downwardly within said receptacle body from the upper end of said tube and connected with said shaft means; said receptacle body, heat exchanger plate, contact plate, tube, shaft means and agitator being removable as a unit from said base housing.

2,734,358
CHILLED BEVERAGE CONTAINER WITH ICE SEGREGATING TUBE
Max Himmelfarb, Brooklyn, N. Y.
Application October 22, 1953, Serial No. 387,688
4 Claims. (Cl. 62—142)



1. For use with an open-topped container, a container cover having an opening, an upstanding collar surrounding said opening, an open-topped tube extending through said opening, the section of said tube matching the section of said collar and the external diameter of said tube from end to end being slightly less than the internal diameter of the collar so that the tube is slidable into and through the collar from either end thereof and said tube slidably engaging said collar, a cap for the top of the tube, and cooperating means on said cap and tube for detachably interengaging said cap and tube, said cap having a lower skirt portion frictionally engaging the external surface of the collar.

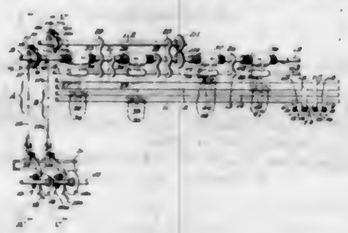
2,734,359
FLEXIBLE DRIVE MEANS
Joseph E. Mulheim and Scott B. Barnhardt, Lima, Ohio, assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application July 14, 1951, Serial No. 236,822
2 Claims. (Cl. 64—1)



1. In combination, a hollow driven shaft, a torsionally resilient spindle extending axially through said shaft, one end of the spindle extending out of the shaft and having means for effecting a driving connection to the spindle, spline teeth on the spindle adjacent the other end thereof within the shaft, internal spline teeth on the shaft engaging the teeth of the spindle to effect a driving connection, the engaging teeth having a relatively large angular clearance therebetween, the spindle having a conical shoulder adjacent said teeth, a plurality of friction shoes engaging the shoulder, and spring means urging said shoes axially against the shoulder to force them outward against the shaft to move with the shaft and to hold them in frictional engagement with the shoulder to oppose relative angular motion between the spindle and the shaft.

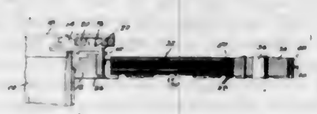
2,734,360
STRAIGHT KNITTING MACHINE
Eugene Max Zesch, Shillington, Pa., assignor to Karl Lieberknecht, Inc., Reading, Pa., a corporation of Pennsylvania
Application February 3, 1955, Serial No. 485,856
14 Claims. (Cl. 66—89)

1. In a straight knitting machine, a row of needles for formation of looped fabric; a dipping frame movable up and down relative to the needles; a comb with a series of regular loop transfer points carried by the dipping frame and shiftable laterally relative to the needles; a normally-retracted slide for at least one special loop spreader point disposed alongside one of the endmost regular transfer points of the comb and constrained to vertical movement relative to the comb in the plane of the latter; and control means, operative during widening phases of the knitting, to depress the slide so as to bring the spreader point to the level of the regular points whereby, upon a first dip of the frame, the spreader



point is entered into a loop on one of the needles concurrently with entry of the regular points of the comb into individual loops of the same course of the fabric on others of the needles so that, upon subsequent lateral shifting of the comb and a second dip of the frame, a loop is spread from said one needle over an adjacent needle while full loops of said course are transferred by the regular points to needles adjacent those from which the latter loops were taken.

2,734,361
KNITTING MACHINE
Lionel Blais, New Ipswich, N. H., assignor to Tricnit Hosiery Mills, Inc., New Ipswich, N. H., a corporation of New Hampshire
Application January 10, 1951, Serial No. 205,283
9 Claims. (Cl. 66—108)



1. In a knitting machine of the type employed in plating and having knitting instrumentalities including sinkers which when advanced effect a reverse knitting operation, jacks engaging said sinkers for moving said sinkers into their advanced position, selecting butts of varying lengths on each jack, means adjacent said butts and operating in unison with the knitting instrumentalities for engaging said butts and advancing said sinkers into reverse knitting position while knitting the body of a product, and means carried by the machine and connected to the last named means for yieldingly disengaging said means from said butts while knitting a design in the product.

2,734,362
DROP-WIRE AND DROP WIRE ASSEMBLY
Eugene A. Schiek, Andover, Mass.
Application March 19, 1953, Serial No. 343,325
7 Claims. (Cl. 66—163)



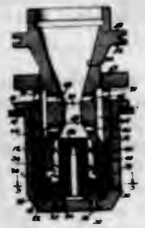
1. A substantially planar drop wire provided near its upper end with an intermediate opening for receiving a thread and the like, and a reversely curving slot extending from a point along one edge of the drop wire disposed below the opening inwardly and upwardly of the drop wire and communicating with the opening.

2,734,363
HOSIERY
William De Mond, Los Angeles, Calif.
Application June 23, 1952, Serial No. 294,965
1 Claim. (Cl. 66—173)



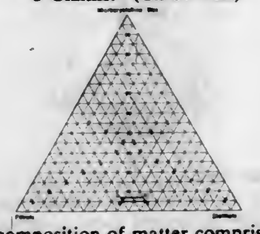
A knitted stocking comprising a folded, two ply welt portion, a leg portion, a foot portion, a heel portion and a toe portion; said leg and foot portions comprising knitted courses of uniform tightness and said welt, heel and toe portions being formed of tight and loose courses; each of said plies of said welt portion comprising identical transversely disposed zones and each of said zones comprising a plurality of courses of uniformly tighter stitches connected by single courses of looser stitches and each of said zones having a lesser proportion of loose courses to tighter courses as they approach the juncture of said welt and leg portions; said heel portion comprising a plurality of zones each composed of a plurality of courses of uniform tightness arranged in groups connected by single courses of looser stitches and the proportion of said tighter courses to said looser courses in each zone decreasing as said zones are disposed farther away from the back of said heel portion, and said toe portion comprising a plurality of transverse zones comprising the top of said toe portion and another plurality of transverse zones comprising the bottom of said toe portion; each of said zones comprising a plurality of groups of courses of uniform tightness with single courses of looser stitches interposed between and connecting adjacent groups in the same or in adjacent zones; the proportion of said tight to loose courses in any one zone being increasingly greater as the zones comprising the top of said toe portion are located nearer to the end of the said toe portion and said proportion of tight to loose stitches being increasingly greater as the zones comprising the bottom of said toe portion are more remote from said end of said toe portion.

2,734,364
PORTABLE LIGHTERS
Robert E. Peterson, New York, N. Y.
Application June 24, 1952, Serial No. 295,154
8 Claims. (Cl. 67—7.1)



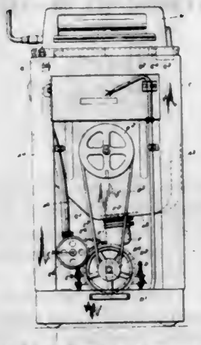
4. A portable lighter of the gaseous fuel type comprising, in combination, a lighter casing, and a valve and burner unit assembly within said casing and extending to the casing exterior; said unit assembly being provided with an inlet port and an outlet port, a valve for the inlet port, the projecting end of the unit assembly being attached to said valve, this end of the unit assembly being rotatably adjustable from the casing exterior to vary the velocity and volume of the gas passing through the unit assembly, a member pivoted on the casing exterior, the free end of said member overlying the projecting adjustable end of the unit assembly, a valve-actuating member frictionally connected to the said pivoted member and to the adjustable end of the unit assembly and operative to open said valve upon the beginning of the opening movement of the pivoted member and to close the valve at the start of the closing movement of the pivoted member, said frictional connection of the valve-actuating member to the unit assembly remaining intact during the said adjustment of the end of the unit assembly.

2,734,365
WAX COMPOSITION
Seymour W. Ferris, Mount Holly, N. J., and John D. Tench, Prospect Park, and Irl N. Duling, Jr., Media, Pa., assignors to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Application April 22, 1953, Serial No. 350,451
3 Claims. (Cl. 67—22)



1. A new composition of matter comprising from 43 to 55 parts of a slack wax distillate boiling within the range of from about 360° F. to 500° F. at 2 mm. Hg pressure absolute and having a melting point of from about 110° F. to 120° F.; from 40 to 50 parts of a slack wax distillate fraction filtrate boiling within the range of from about 360° F. to 580° F. at 2 mm. Hg pressure absolute and having a pour point of from about 70° F. to 80° F. and a Saybolt Universal viscosity at 210° F. of about 42 to 48; and from 5 to 7 parts of a microcrystalline wax having a melting point of from about 140° F. to about 155° F. and having a Saybolt Universal viscosity at 210° F. of from about 70 to 90.

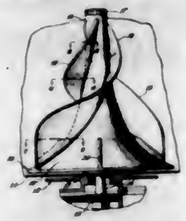
2,734,366
WASHING MACHINES
Harold George Dunn, Frederick Roy Sibbald, and Edward Kershaw Haydon, Perivale, Greenford, England, assignors, by mesne assignments, to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application October 23, 1951, Serial No. 252,632
1 Claim. (Cl. 68—131)



In a washing machine having a container for washing liquid, an impeller in the container and a drive motor for

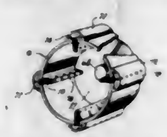
the impeller, the combination of a fluid pump having a liquid inlet connected to drain said container and a discharge outlet, said pump having relatively movable fluid pumping members separated by clearances sufficient to allow operation of said pump when said outlet is closed, means forming a permanent driving connection between said motor and said pump, a bung fixed to the machine, and a flexible conduit connected at one end to the outlet of said pump and having a storage position in which its free end is closed by said bung to prevent delivery of liquid from said pump.

2,734,367
AGITATOR
Peter Eduard Geldhof, St. Joseph, Mich., assignor, by mesne assignments, to Whirlpool-Seeger Corporation, St. Joseph, Mich., a corporation of Delaware
Application November 8, 1950, Serial No. 194,714
2 Claims. (Cl. 68—133)



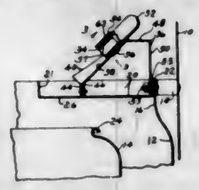
1. In a clothes washing machine, a tub for clothes and washing fluid, a clothes washing agitator mounted in said tub for oscillatable movement about a vertical axis, means oscillatably driving said agitator, said agitator having an upstanding generally conical outer wall concave in cross section and converging in a uniform curve from a relatively wide circular base to a relatively small diameter cylindrical column adjacent the upper end of said agitator, and having a plurality of equally spaced agitator vanes diverging from said column at their upper ends and extending downwardly therealong in spiral path from the upper end of said column along said conical outer wall, for a greater portion of the length thereof, and increasing in height from the upper to the lower end of said column and extending normally to the surface of said cone in straight line paths for the balance of the length thereof, toward the base of said cone, and a radial rubbing vane projecting from the lower surface of said cone intermediate the normal projecting portions of each of said vanes.

2,734,368
CYLINDER AND FLUID DISPERSING RIB
Elmer L. Richardson, Houston, Tex.
Application August 18, 1950, Serial No. 180,211
3 Claims. (Cl. 68—142)



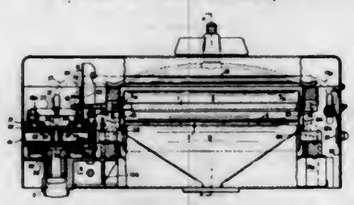
1. The combination in a fabric washing and cleaning machine of a substantially cylindrical rotatable cylinder, sides of said cylinder having perforations therein, said cylinder adapted to contain fabrics, inwardly bowed ends on said cylinder extending inwardly a substantial distance and defining a restricted passageway, and tumbling means secured to said cylinder, said tumbling means comprising a hollow fabric tumbling rib extending inwardly from the periphery of the cylinder and a hollow body member integral with said rib extending outwardly from said periphery, said inwardly extending rib and body member containing apertures whereby washing or cleaning fluid may flow into the body member and be dispersed by said rib onto said fabric.

2,734,369
WASHING MACHINE WATER INLET
Beanie J. Simonaitis, Syracuse, N. Y., assignor, by mesne assignments, to The Murray Corporation of America, Detroit, Mich., a corporation of Delaware
Application October 28, 1953, Serial No. 388,827
3 Claims. (Cl. 68—207)



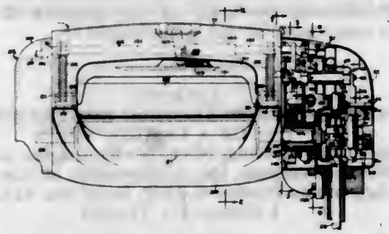
1. A vacuum breaker water supply for washing machines comprising an outer stationary tub, an inner tub for containing laundry rotatable on a vertical axis, a segmental deck secured to the rim of the outer tub and overhanging the rim of the inner tub, an aperture in said deck located radially inward with respect to the rim of the inner tub, a radially disposed water chute having side flanges mounted on said deck, and so disposed as to discharge through said aperture and in a radially inward direction and within the rim of the inner tub, an inlet water discharge hose having an end terminating at a point adjacent the upper end of the chute on the top side thereof, a transverse hose clamp secured to said chute near the upper end thereof embracing the end of said water discharge hose and securing said hose end with its axis extending downwardly and parallel with the chute, and centrally thereof, and lying in a radial plane with respect to the axis of the inner tub.

2,734,370
SAFETY DEVICE OF AND FOR POWER-DRIVEN WRINGERS
Joseph Alexander Cleiff, Birmingham, England, assignor to Aluminum Bronze Company Limited, Walsall, England
Application November 15, 1951, Serial No. 256,433
Claims priority, application Great Britain April 5, 1951
6 Claims. (Cl. 68—249)



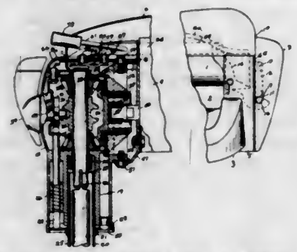
1. A power-driven wringer comprising a pair of rollers journalled in close juxtaposition and forming a nip therebetween, a driving gear rotatable about one axis and two co-axial driven gears rotatable about an axis at right angles to the axis of the driving gear and axially displaceable independently of one another for transmitting forward or reverse drive to the shaft of one of said rollers, means for selectively engaging either of the driven gears with the driving gear including for each driven gear a member angularly movable about the axis thereof and another member static relative to said axis, slidable elements which, when the corresponding driving gear is disengaged from the driving gear, are housed partly in and are angularly displaceable by the said movable member and partly in the static member, said element when angularly displaced by angular movement of the movable member relatively to the static member having also an axial movement which is transmitted to the corresponding driven gear, a guide on each side of the rollers in proximity to the roller nip for directing materials thereto, a shutter on each side of the rollers movable between an open position and a closed position wherein it co-operates with the materials guide to allow passage of materials to but prevent access of fingers to the roller nip, operating members for transmitting movement both to the slidable elements and to the shutters, and a manually operable control member for actuating said operating members.

2,734,371
POWER RESET WRINGER
Berthold R. Thiele, Ripon, Wis., assignor to Speed Queen Corporation, Ripon, Wis., a corporation of Delaware
Application April 3, 1951, Serial No. 219,062
11 Claims. (Cl. 68—253)



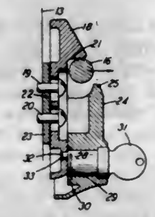
1. A wringer comprising, in combination, a frame, wringer rolls associated with said frame for movement into and out of mutually engaged position, a power drive for said rolls, a reversing clutch interconnecting said rolls with said power drive, a single control operable to release said rolls from mutual engagement and to shift said clutch to neutral to disconnect said power drive from said rolls, a second single control operatively connected to said clutch to select a direction of rotation for said rolls and to re-establish driving connection between the wringer rolls and said power drive, a power reset linkage having a releasable driving connection to said power drive intermediate said clutch and said rolls for energizing said reset linkage, and means for engaging said releasable driving connection upon release of said rolls for automatically restoring the wringer rolls into mutual engagement upon re-establishment of driving connection between said rolls and said power drive.

2,734,372
WRINGERS
Walter L. Kauffman II, Erie, Pa., assignor to Lovell Manufacturing Company, Erie, Pa., a corporation of Pennsylvania
Application November 21, 1951, Serial No. 257,580
4 Claims. (Cl. 68—255)



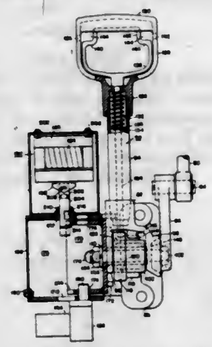
1. In a wringer, a wringer head, a frame overhanging one end of the head, a mounting articulating the frame to the head, means centering the frame relative to the head, said mounting including a bracket fixed to the frame and having an extension overlying the top of the head, a top frame hinged to the bracket extension, means holding the top frame against upward swinging, a safety release for said holding means, an actuator for the safety release responsive to articulation of the frame from the centered position relative to the head, a wringer drive control having a handle on the head movable to driving and neutral positions, an interlock between the drive control and the frame blocking articulation of the frame in the neutral but not in the driving positions, and a manual actuator for the safety release having a part on the top frame adjacent the head accessible for manual actuation for releasing the safety release whenever the drive control is in neutral position and articulation is blocked.

2,734,373
LOCK MECHANISM FOR A LATCH
Floyd P. Scherbinski, Grand Rapids, Mich., assignor to Crampton Manufacturing Company, a corporation of Michigan
Application January 28, 1953, Serial No. 333,745
2 Claims. (Cl. 70—13)



1. A lock, comprising a keeper for receiving a bolt; a locking member having a bolt-engaging portion, said member being mounted for movement with respect to said keeper to and from a position preventing withdrawal of said bolt from said keeper; and means for positioning said member, said positioning means including an actuator rotatably mounted in said member and eccentric means mounted on said actuator, said eccentric means having cooperating engagement with spaced abutment means fixed with respect to said keeper and disposed transversely to the direction of movement of said locking member.

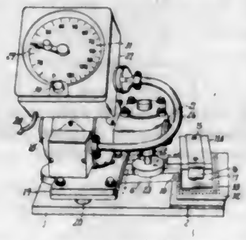
2,734,374
SWITCH LEVER LOCKING MEANS
Herbert J. Crabbs, Wilkinsburg, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application October 13, 1951, Serial No. 251,172
9 Claims. (Cl. 70—201)



1. A lock mechanism for an operating handle rotatably mounted on a bracket, comprising a substantially cylindrical lock plate secured to the handle, a generally rectan-

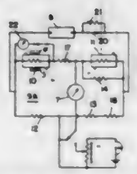
gular housing supported by said bracket and surrounding the lock plate, and electro-magnetic lock means mounted on said housing and operable to engage the lock plate to lock the handle.

2,734,375
APPARATUS FOR TESTING ABRASION RESISTANCE OF PRINTED SURFACES
Martin Galbraith, Kalamazoo, and Wendell T. Burbank, Three Rivers, Mich., assignors to Sutherland Paper Company, Kalamazoo, Mich.
Application April 22, 1952, Serial No. 283,684
7 Claims. (Cl. 73—7)



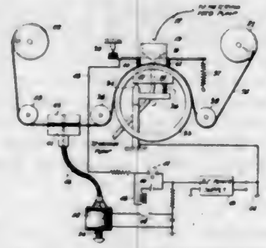
1. Apparatus for testing printed surfaces comprising, a flat base plate having a flat pad of deformable non-slippery material secured to its upper surface and at one end of the plate, an arm extending along the top of said plate and having a pivot connection thereto at the opposite end thereof from said pad, a bearing on said plate slidably supporting said arm intermediate of its ends, the swinging end of said arm being vertically and longitudinally slotted and terminating adjacent said pad, a pin horizontally bridging said slot in said arm in the outer end thereof, a motor support carried by said plate and overlying an intermediate portion of said arm, a motor mounted on said support and having a gear box projecting over the swinging end of said arm, a crank shaft driven from said motor and said gear box and projecting downwardly toward said arm, a crank pin on said shaft drivingly engaged in said slot in said arm to oscillate the arm, an adjustable time switching device mounted on said motor, electrical connections between said device and said motor operative to energize said motor for predetermined intervals, a weight block having a hooked ear on one side removably engageable within the end of the slot of said arm and over said pin whereby said block may be freely oscillated across the surface of said pad, flat shoe elements of deformable material mounted on the underside of said block and at opposite ends thereof, and a clip on said block and extending over the ends thereof and adapted to retain the ends of paper test strips positioned along the bottom of said shoe and folded upwardly along the ends of the block.

2,734,376
COMPENSATED GAS-ANALYSIS BRIDGES
Robert H. Cherry, Ambler, and Gerard M. Foley, North Hills, Pa., assignors to Leeds and Northrup Company, Philadelphia, Pa., a corporation of Pennsylvania
Application December 14, 1950, Serial No. 200,828
18 Claims. (Cl. 73—27)



1. A gas-analysis bridge including a reference cell and an analytical cell traversed by the gas mixture to be analyzed and having temperature-sensitive resistors respectively in adjacent bridge arms and heated from a common source of current, said cells and their resistors being similar within practical tolerances of manufacture and assembly, sensitizing means cooperative with said analytical cell to render said analytical cell resistor responsive to a characteristic of a selected component of said gas mixture, and means for insuring accurate measurement of small changes in concentration of said selected component despite the difference within said tolerances of manufacture and assembly between the sensitivities of said similar reference and analytical cells to background characteristics of the gas mixture comprising a compensating resistor in circuit with and in the same bridge arm as one of said cells and having such value of resistance that the ratio of one factor of the volt/ampere characteristic of the arm including said compensating resistor to the same factor of the same characteristic of said adjacent arm remains constant for varying background composition of the gas mixture traversing both cells, the variation in ratio of the other factor of said characteristics then being representative solely of the variation of said selected component of the gas mixture.

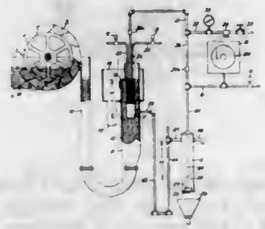
2,734,377
APPARATUS FOR DETECTING CONTAMINATION OF A LIQUID
Alfred E. Traver, Great Neck, N. Y., assignor to Socony Mobil Oil Company, Inc., a corporation of New York
Application October 6, 1952, Serial No. 313,341
1 Claim. (Cl. 73—53)



An apparatus for continuously indicating the quantity of impurities in the form of sediment and water in a hydrocarbon liquid that comprises a first chamber; means defining an outlet port in the bottom thereof; a second chamber; means defining an inlet port in the top of said second chamber; means to support the two chambers in spaced apart relationship with their respective ports in alignment with each other; means to supply a metered, continuous stream of hydrocarbon liquid to said first chamber; common means to withdraw hydrocarbon liquid from the second chamber and to maintain a partial vacuum therein to produce a flow of hydrocarbon liquid from the first chamber to the second chamber; means for passing a filter strip, upon which separate indications of the quantity of sediment and water in the hydrocarbon liquid can be placed, continuously at a controlled rate between the aligned ports of the two chambers; a supporting drum for said filter strip arranged to support said filter strip above the second chamber; means for rotatably mounting said drum so that on rotation the peripheral surface of the drum will travel with said filter strip at the same linear speed; means defining at least one circumferential line of equally spaced circular perforations in the surface of said drum, said perforations being so disposed that on rotation of the drum they will pass between the outlet and inlet ports of the upper and lower chambers respectively, whereby filtration of the hydrocarbon liquid occurs only when at least one drum perforation is in alignment with the outlet and inlet ports; an electrical circuit having a source of electrical power, an electrical energy storage

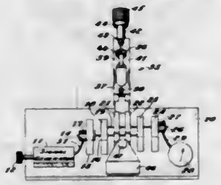
device, a relay, and means for applying a potential across the filter strip at the point where filtration occurs, connected in series; whereby water taken up by the filter strip will produce conduction of electrical energy to the energy storage device in discrete quantities depending upon the amount of water in the filtrate; means connected across the energy storage device and the relay through which the energy storage device can discharge on reaching a pre-determined charged potential; means actuable by the discharge current through said relay to perforate the filter strip; whereby perforations will occur at irregular intervals on the strip dependent upon the amount of water and, hence, the conductivity of the filtrate.

2,734,378
FILTERABILITY TESTING OF SUSPENSIONS OF SOLIDS IN A LIQUID
Sidney E. Meyers, Rochester, N. Y., assignor, by mesne assignments, to Wood Conversion Company, St. Paul, Minn., a corporation of Delaware
Application September 29, 1951, Serial No. 248,948
12 Claims. (Cl. 73—63)



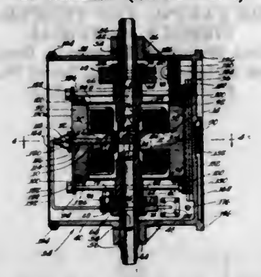
1. In a filterability tester, a filtration chamber having an open lower end and containing a mat forming screen, a filtrate outlet communicating with said chamber above said screen, and means for continuously moving a suspension of solids in a liquid upwardly toward and around said filtration chamber at a rate sufficient to prevent change in the uniformity of the suspension, said chamber being submerged in said liquid.

2,734,379
DISC HOLDING AND FREQUENCY MEASURING APPARATUS
Melvin L. Doelz, Glendale, and Frank Charles Wallace, North Hollywood, Calif., assignors to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application April 24, 1952, Serial No. 284,082
3 Claims. (Cl. 73—67)



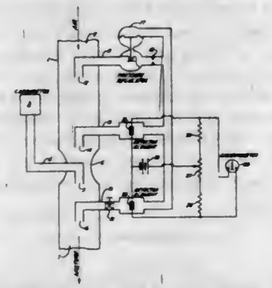
1. Apparatus for measuring the frequency of a disc comprising, a base plate, a disc holding assembly pivotally supported on said base plate and movable from an up to a down position, a releasable disc holding means on said disc holding assembly, a pair of stand-offs mounted on said base plate and positioned such that they are on opposite sides of said disc holding assembly when in its down position, a first magnetostrictive driving means connected to the first stand-off and comprising a driving coil, a first polarizing magnet, and a driving wire extending from said first stand-off parallel to the base plate toward the second stand-off, a magnetostrictive output means mounted on the second stand-off and comprising a second polarizing magnet, an output coil and an output wire extending parallel to said base plate and towards said first stand-off, said output and input wires spaced equidistant from each other and being in substantially the same horizontal plane, and actuating means mounted on said disc holding assembly for operating said releasable disc holding means, so that when said disc holding assembly is in said down position, a disc may be released to rest freely on said input and output wires, and the resonant frequency of said disc may be determined.

2,734,380
MAGNETIC FLOWMETER
Eugene Mittelmann, Chicago, Ill., assignor, by mesne assignments, to Erdco Engineering Corporation, Addison, Ill., a corporation of Delaware
Application May 12, 1951, Serial No. 225,944
10 Claims. (Cl. 73—194)



1. An electromagnetic flow meter comprising a tube adapted to conduct a flowing fluid, a pair of diametrically spaced electrodes carried by said tube and fixed relative thereto, a support fixed relative to said tube, a magnet carried by said support and having poles spaced about said tube, a bell crank lever carried by said support, means linking one arm of said bell crank lever to said magnet, and means for shifting the other arm of said bell crank lever to shift said magnet longitudinally of said tube.

2,734,381
APPARATUS FOR MEASURING COMPONENT RATIOS OF FLUID MIXTURE STREAMS
Moses G. Jacobson, Penn Township, Allegheny County, Pa., assignor to Mine Safety Appliances Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application April 9, 1953, Serial No. 347,809
7 Claims. (Cl. 73—196)



1. Apparatus for continuously measuring the mass ratio of two fluid streams of different mass that are combined to form a mixture stream, that apparatus comprising a conduit having a first inlet at one end for receiving the first fluid stream and having a second inlet at an intermediate point for receiving the second fluid stream and having an outlet at the other end for discharging the mixture stream, three flow tubes each provided with a stream terminal at one end and each mounted to have that terminal within the conduit at points of successively diminishing static

pressure, the terminals of the first and second tubes being positioned in the first fluid stream between the first and second inlets with the terminal of the second tube spaced downstream from the terminal of the first tube, the terminal of the third tube being positioned in the mixture stream between the second inlet and the outlet, the other end of the first tube being connected to the other end of the second tube and also to the other end of the third tube, a separate detector means positioned in each of the second and third flow tubes and responsive to the flow of fluid therein, valve means positioned in the third flow tube for manually equalizing the flow of fluid therein with the flow of fluid in the second flow tube when the first fluid stream alone is flowing in the conduit, and indicating means for comparing the responses of the detector means.

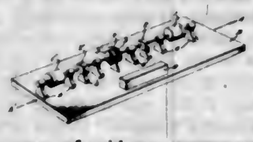
2,734,382
DEVICE FOR TAKING THE TEMPERATURE OF FIBROUS MATERIAL
Fred Wassmer, Tillamook, Oreg.
Application October 14, 1952, Serial No. 314,697
1 Claim. (Cl. 73—352)



A device for forming bores in and testing the temperature of fibrous material comprising a hollow shaft having a tubular body portion and a tapered point removably connected thereto at one end thereof, openings in said tubular body portion adjacent said point, a thermometer removably mounted in said tubular body portion near the openings thereof, a flexible support connected to said thermometer and extending outwardly of said hollow shaft for lowering said thermometer into said shaft adjacent said openings after the shaft has been forced into the mass of fibrous material, an elongated tubular handle portion removably connected to said body portion, and two pairs of blades integral with said tapered point disposed at right angles to each other and longitudinally displaced in relation to each other, said blades being arcuate and sharpened along the length of their arcuate edges to cut the fibrous material both while penetrating and removing so as to form an open bore.

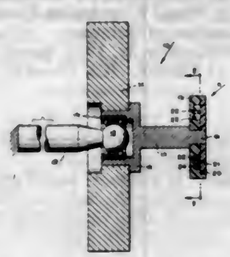
2,734,383
METHOD OF AND APPARATUS FOR CONTROLLING THE ANGULAR MOVEMENT OF A BODY
Joseph P. Paine, Baltimore, Md., assignor to Aircraft Armaments, Inc., Baltimore, Md., a corporation of Maryland
Application November 20, 1952, Serial No. 321,709
8 Claims. (Cl. 74—1)

1. The method of controlling an unrestrained body in roll which comprises affixing to the body a pair of sources of rotary kinetic energy rotating in opposite directions and on axes parallel to the axis of roll of said body, and selectively coupling only one of said sources of energy to said body at a time in response to a predetermined roll of said body to expand at least part of



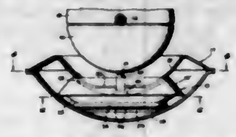
the kinetic energy of said one source on said body and thereby to exert a corrective roll control thereon.

2,734,384
NUTATION DAMPER
Donald J. Stewart, China Lake, Calif.
Application August 24, 1954, Serial No. 451,990
8 Claims. (Cl. 74—5.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A gyroscopic device comprising a fixed supporting structure, a shaft having one end rotatably and universally connected to said supporting structure, a gyro rotor fixed to the last mentioned shaft, a nutation damper comprising a disc-like element fixed to the free end of said last mentioned shaft and including at least one sealed annular raceway concentric to the rotor axis, and a predetermined quantity of a relatively dense liquid partially filling said raceway.

2,734,385
GRAVITY ERECTION FOR GYROVERTICALS
Roman J. Dolude, Los Angeles, Calif., assignor to Summers Gyroscope Company, Santa Monica, Calif., a corporation of California
Application April 1, 1953, Serial No. 346,151
15 Claims. (Cl. 74—5.45)

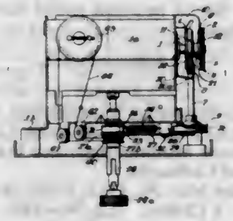


1. In a gyrovertical instrument for a movable craft, a universally mounted gyroscope having a spherical dome attached thereto for rotation thereby, a gravity-sensitive mass supported for movement about a spherical surface concentric with said spherical dome, and erecting means carried by said mass for exerting a force upon said spherical dome to continually precess said gyroscope to true gravity vertical.

2,734,386
RADIO TUNER
Leslie R. Schroeder, Chicago, Ill., assignor to Warwick Manufacturing Corporation, a corporation of Delaware
Application January 27, 1955, Serial No. 484,337
11 Claims. (Cl. 74—10.7)

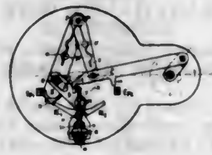
1. In a radio tuner of the push-button type and having mechanism for manual tuning, in combination, a chassis adapted to support tuning mechanism, an operating shaft extending outwardly from one side of said

chassis, a spool-like member loosely mounted near the outer end of said operating shaft and carrying a pinion gear, a friction clutch having one element fixed to the end of said operating shaft and another element fixed to said member and adapted to be disengaged upon push button operation, and means for manually rotating said operating shaft including a control shaft extending outwardly of said chassis in a direction generally normal to said operating shaft, a driven shaft spaced from and extending parallel to said control shaft, a gear at the driving end of said driven shaft in engagement with said pinion gear, means supporting the driving end of the driven shaft for movement with the pinion gear in a direction parallel to the operating shaft and also for movement along its length relative to the pinion gear, a driving pulley on said control shaft and a driven pulley on the driven end of said driven shaft, an endless belt rotatably interconnecting said



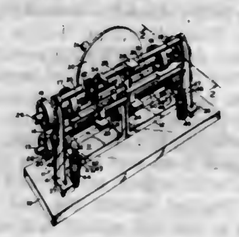
pulleys, and means supporting said driven shaft for angular movement in response to shifting of the pinion gear upon release of the clutch and for supporting the driven end of the drive shaft for linear movement to maintain belt tension including an elongated bar lying along the line between the axes of the control and driven shafts and having a first end bifurcated and mounted for sliding movement on said control shaft and its other end provided with socket means, the driven end of the drive shaft having a ball located on the center line of the driven pulley which is received in said socket, a headed bolt on the chassis along said line between axes, means defining a slot in said bar intermediate its ends extending lengthwise of the bar and slidably confined on the bolt, and a coil spring having its axis disposed along said line between the axes of the control and driven shafts and connected between the bar and chassis for urging the bar in a direction to maintain the belt tension.

2,734,387
SPRING ACTION DRIVING GEAR WITH VARIABLE TORQUE FOR LOAD CHANGEOVER SWITCHES OF REGULATING TRANSFORMERS
Bernhard Jansen, Regensburg, Germany
Application March 7, 1951, Serial No. 214,281
2 Claims. (Cl. 74—99)



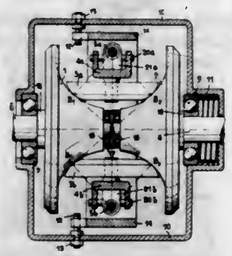
1. Spring-pressed driving mechanism with variable torque for load changeover switches including, in combination, a crank, a fixed shaft member, a lever arm having one end pivotally mounted on said shaft member, another lever arm having one end pivotally mounted on said shaft member and spaced from said first-named lever arm, a spring member supported on the shaft member and operatively connected to said lever arms for continually pressing said lever arms into alignment with each other, another lever arm flexibly connected to one end of the first-named lever arm and to a changeover switch, an actuating arm connected at one end to said crank and at its other end to one end of said second-named lever arm, latching devices for holding said first-named lever arm in moved position when moved by said spring, and tripping means operatively connected to said actuating arm and means for releasing the latter.

2,734,388
VARIABLE SPEED DEVICE
Allan A. Coster, Lewisboro, N. Y., assignor to The Reflectone Corporation, a corporation of Connecticut
Application November 14, 1951, Serial No. 256,294
7 Claims. (Cl. 74—198)



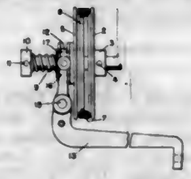
1. A variable speed device comprising a rotatable disk, a plurality of rollers spaced from and substantially parallel to said disk, a ball housing disposed between each of said rollers and said disk, a spherical transmitting member confined in each of said ball housings, resilient means acting on said rollers causing contact pressure between each roller and spherical transmitting member and said disk respectively, and means to vary the radial position of each ball housing with respect to said disk.

2,734,389
CHANGE SPEED GEAR OF THE ADJUSTABLE ROTARY ROLLER TYPE
Gerald Strecker, Darmstadt-Eberstadt, Germany
Application December 29, 1949, Serial No. 135,553
Claims priority, application Switzerland January 3, 1949
3 Claims. (Cl. 74—200)



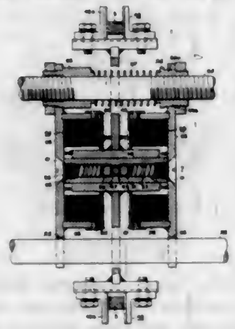
1. In a variable speed frictional gearing, two cone shaped drums mounted on aligned axes and having their smaller ends adjacent and their working faces non-circularly concaved, a disk with a convex working face contacting both said drums, the axis of said disk being tiltable in an axial plane of said drums, said drums and said disk consisting of relatively hard material and the radius of curvature of the disk face being smaller than that of the drum face to provide a substantially point contact therebetween, and the drum face being of such a shape to ensure that tangents in the points of contact to the faces of said disk and drums intersect at the intersection of the axes of said disk and drum for any position of the disk.

2,734,390
CLUTCH-PULLEY ASSEMBLY
Clement C. J. Thelander, Sterling, Ill., assignor to The Eclipse Lawn Mower Co., Division of Buffalo-Eclipse Corporation, Prophetstown, Ill.
Substituted for abandoned application Serial No. 208,185, January 27, 1951. This application April 29, 1954, Serial No. 426,604
2 Claims. (Cl. 74—230.24)



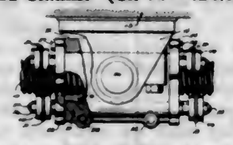
1. A clutch-pulley assembly comprising a power shaft to be driven, a fixed plate fixed thereto, a movable plate rotatable on the driven shaft and movable axially relative to said fixed plate, said plates having beveled belt-receiving faces, said movable plate having a cylindrical collar adapted to receive a belt when the plates are separated, said movable plate having a hub, a second collar at a fixed distance from said first plate in axially spaced-apart relation with respect to the end of said hub, a thrust-washer bearing against the end of said hub, a spring bearing at one end against said second collar and at the other end against said washer, a grooved sleeve slidable axially on and rotatable relative to said hub, said sleeve being adapted to bear against said washer for compressing said spring and moving said other end of said spring away from said end of said hub, thereby relieving said movable plate of said spring pressure and freeing said movable plate for idle rotation relative to said fixed plate when the separation of said plates permits said belt to rest on the cylindrical portion of said movable plate, and means for moving said grooved sleeve.

2,734,391
VARIABLE SPEED DRIVE BELT SHIFTER
Walter Schaelchlin and Clarence E. Gary, Buffalo, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application June 18, 1952, Serial No. 294,149
16 Claims. (Cl. 74—242.3)



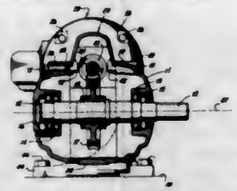
1. A mechanical variable speed drive comprising, a pair of cone pulleys, a belt interconnecting said pulleys, a belt shifter carriage, means mounting said carriage between said cone pulleys for movement parallel to the axes of said pulleys, a belt shifter engaging said belt, spring means resiliently mounting said belt shifter on said carriage for movement relative to said carriage substantially paralleling the path of movement of the carriage and biasing said belt shifter to a given position on said carriage, and means for effecting movement of said belt shifter with respect to said carriage.

2,734,392
FEED SCREW MECHANISM
Louis W. Falk, Milwaukee, Wis., assignor to The Falk Corporation, Milwaukee, Wis., a corporation of Wisconsin
Application August 17, 1951, Serial No. 242,239
11 Claims. (Cl. 74—424.8)



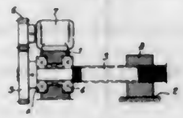
1. In a screw feed mechanism for a machine to be advanced and retracted, a feed screw subject to lateral deflection, a nut threadedly engaged with the feed screw and connected with the machine, the nut being movable axially of the screw, and roller means connected with the nut for rotation relative thereto in rolling engagement with the screw thread to avoid radial thrust between the screw and the nut.

2,734,393
MOUNTING FOR TRANSMISSION AND DRIVE
Frederick O. Luenberger, Los Angeles, Calif., assignor to U. S. Electrical Motors, Inc., Los Angeles, Calif., a corporation of California
Application May 31, 1952, Serial No. 291,025
2 Claims. (Cl. 74—425)



1. In apparatus of the character described: an electric motor having a driving shaft, the shaft having an extension projecting beyond the motor; a housing member into which said driving shaft extension extends, said housing member forming a mounting end bracket for one end of the motor; said housing member having openings aligned on opposite sides thereof; the common axis of the openings extending in a direction at right angles to the axis of rotation of said driving shaft, and spaced laterally on one side of said driving shaft extension; the driving shaft extension bordering the openings; a worm carried by the driving shaft extension. a pair of brackets for supporting the housing member, and having parts cooperable respectively with said opposite openings; a driven shaft carried by the brackets and extending axially of said openings and in said housing member; and a worm wheel carried by said driven shaft engaging said worm.

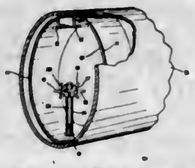
2,734,394
FEED DRIVE MECHANISM WITH BACKLASH ELIMINATOR
Raymond G. Chauvel, Velizy, France, assignor to Societe a responsabilite limitee dite: Gambin & Cie., Billancourt, France
Application August 19, 1954, Serial No. 450,941
Claims priority, application France August 21, 1953
14 Claims. (Cl. 74—441)



1. Feed drive mechanism for traversing a machine member on another machine member comprising in

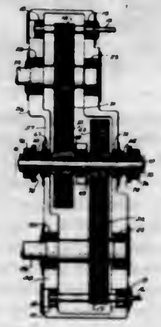
combination two cooperating traversing elements namely a traversing screw and a traversing nut threadedly engaged with each other, one of said two traversing elements being rigid with one of said machine members while the other of said traversing elements is rotatably mounted in said other machine member and longitudinally positioned with respect thereto, said traversing nut being split into two parts which are arranged one behind the other on said traversing screw and which are longitudinally splined in a part mounted in said machine member that carries said traversing nut, said two parts of said traversing nut being formed with outer screw threads of different pitches, the combination further comprising a backlash eliminating nut formed with two inner screw threads adapted to cooperate simultaneously with said two outer screw threads of said traversing nut, and clamping means adapted to firmly hold said both parts of said traversing nut with respect to said traversing nut carrying part.

2,734,395
DEVICE FOR DYNAMICALLY BALANCING A TUBULAR ROTARY MEMBER
Thomas L. Fawick, Cleveland, Ohio
Application July 5, 1952, Serial No. 297,376
3 Claims. (Cl. 74—573)



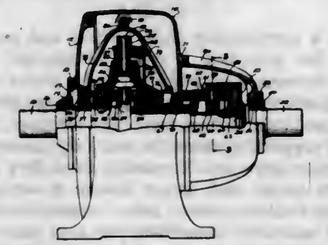
1. A device for dynamically balancing a tubular rotary member, said device comprising an anchoring structure shaped to lie wholly within the vicinity of the inner surface of the tubular member and to engage said surface frictionally as the only support of said structure, a weight-supporting member freely and isolatedly projecting inwardly from and wholly supported by a local part of said structure, a weight mounted upon and wholly supported by said weight-supporting member, and adjusting means for securing said weight at different distances from the axis of rotation of the said rotary member.

2,734,396
TWIN DRIVE AND DRIVEN POWER TRANSMISSIONS
Louis W. Falk and Walter P. Schmitter, Milwaukee, Wis., assignors to The Falk Corporation, Milwaukee, Wis., a corporation of Wisconsin
Application June 10, 1950, Serial No. 167,414
4 Claims. (Cl. 74—665)



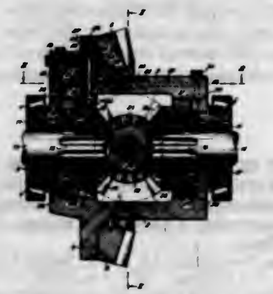
1. A power transmission comprising a casing, two power input shafts rotatably mounted in the casing in transverse spaced relation to each other and severally free to move axially, double helical pinions severally fixed to the input shafts, two power output shafts rotatably mounted in the casing in transverse relation from the pinions and from each other, at least one of the output shafts being held against axial movement, double helical driven gears severally fixed on the output shafts and severally in mesh with the pinions, and gear means connecting the driven gears in power transmitting relation with each other, said means including double helical gearing meshing with the driven gears and free to adjust axially relative thereto.

2,734,397
MECHANICAL TYPE INFINITELY VARIABLE SPEED-CHANGING TRANSMISSION
Alfred G. Bade, Milwaukee, Wis., assignor to The Falk Corporation, Milwaukee, Wis., a corporation of Wisconsin
Application May 14, 1951, Serial No. 226,162
15 Claims. (Cl. 74—691)



1. In a device for transmitting power at an infinitely variable speed ratio between input and output shafts, a first shaft, a plurality of adhesion elements in mutual contact and rotatably driven by the first shaft, means for varying the point of contact of one element against another, means for sustaining the reaction torque between the elements, means for reaeting on the adhesion elements and providing a path for a portion of the power transmitted, a second shaft, and planetary gearing for joining the first and second shafts for transmitting a portion of the power therebetween and for receiving the portion of the power transmitted by the reacting means, the speed ratio of the shafts varying as the point of contact of the adhesion elements is varied.

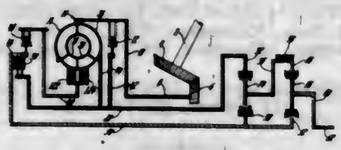
2,734,398
DIFFERENTIAL GEARING
Paul Böttcher, Hamburg-Grossflottbek, Germany
Application February 21, 1955, Serial No. 489,610
5 Claims. (Cl. 74—711)



1. A differential gearing for vehicles comprising a rotatable shell, axles rotatably extending into said shell, driven gears fast at the end of said axles, planetary gears rotatable in said shell and meshing with said driven gears, annular piston chambers in said shell coaxially of said axles, an annular piston in each of said chambers, means connected with said driven gears and with said pistons for

axially moving the latter in their chambers upon relative rotation of said driven gears and said shell, means for forcing a fluid into said chambers, conduits in said shell for receiving fluid forced by said pistons out of said cylinders, and fluid flow control means in said conduits.

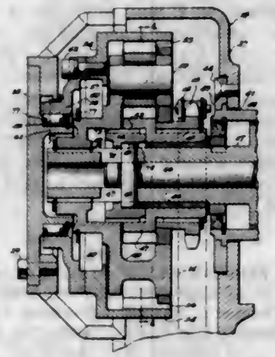
2,734,399
TORQUE CONVERTER DRIVE
Howard W. Christenson, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 10, 1949, Serial No. 132,388
16 Claims. (Cl. 74—732)



1. In a combination fluid turbine and gear drive assembly for providing a range of selected speed ratio changes between a driving shaft and a driven shaft, a fluid torque converter unit of the turbine type having an impeller constantly driven from said driving shaft, torque reaction supporting elements, and a driven rotor member, a planetary gear unit consisting of a first and second planetary group each group having a sun gear, a ring gear and meshing planet gears supported on a carrier, shafting constantly connecting the ring gear of said first group to said rotor member, a clutch having one element connected to said driving shaft and a mating element fixed to said shafting, said clutch when engaged providing driving shaft rotation of said ring gear, a second clutch having one element fixed to rotate with the sun gears of both gear groups and a mating element fixed to said shafting, said latter clutch when engaged providing a driving shaft couple between said first group ring gear and the corresponding sun gear for effecting one-to-one rotation of said ring and sun gears, a fixed connection between the first group carrier and the second group ring gear, a fixed connection between said second group carrier and said driven shaft, a brake operative to stop the rotation of said sun gears and said second clutch element and thereby establish forward reduction drive between said first group annulus gear and said second group carrier, actuation mechanisms for said clutches and said brake, a selective control effective to apply the actuator mechanism for said brake to provide converter and low gear reduction drive of said output shaft, and effective to apply the actuator mechanism for said brake and said first clutch to provide intermediate gear reduction drive, and further effective to apply the actuator mechanisms of both said clutches to provide overall one-to-one drive between said shafts, while releasing the actuator mechanism for said brake.

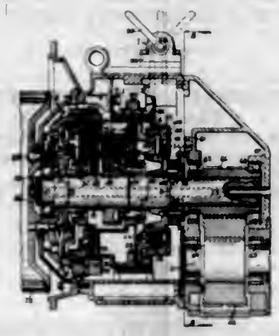
2,734,400
CHANGE SPEED MECHANISM FOR A SELF-PROPELLED MINING MACHINE
Chester E. Andershock, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application November 16, 1951, Serial No. 256,725
3 Claims. (Cl. 74—785)

1. In a change speed mechanism having axially aligned concentrically disposed hollow driving and driven shafts with said hollow driving shaft supported on said hollow driven shaft, a sun gear, means driving said sun gear with said driving shaft, a planet gear carrier having at least one planet gear meshing with said sun gear, means mounting said planet gear carrier fast on said hollow driven shaft, a stationary support, an orbit gear meshing with said planet gear, an overrunning connection between said orbit gear and said stationary support; the improvement comprising a change speed means disposed within the planet gear carrier and sun gear, said change speed means including internal splines formed on said sun gear and said planet gear carrier, an actuator carried by said driven shaft and axially movable in relation thereto, said actuator having external splines mating



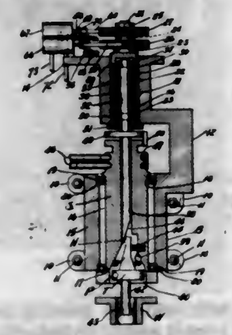
with the internal splines on said sun gear and said planet gear carrier in one position, said splines on said actuator mating only with the splines on said planet gear carrier in a second position, said orbit gear overrunning said support and being locked with said planet gear carrier for rotation therewith in said first position, said orbit gear being held in fixed position by said overrunning connection in said second position.

2,734,401
REVERSE GEARS
John O. Berndtson, Hotchkiss Grove, Conn., assignor to The Snow-Nabstedt Gear Corporation, New Haven, Conn., a corporation of Connecticut
Application June 9, 1950, Serial No. 167,088
12 Claims. (Cl. 74—792)



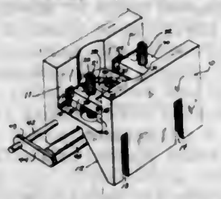
1. In reversing mechanism, the combination of a shaft, a power-driven member adjacent said shaft, means including a hub fixed to said shaft adjacent said power-driven member and a friction member projecting outwardly from said hub and shiftable in an axial direction but angularly rigid with said hub so as to rotate therewith for drivingly connecting said power-driven member to said shaft, and means for imparting reverse rotation to said shaft including an axially movable gear set member which on its axial movement in one direction drivingly connects the power-driven member to said shaft, said gear set member carrying a friction member which engages said first friction member with said power-driven member.

2,734,402
REMOTE CONTROL MECHANISM FOR ADJUSTING ROTARY CUTTING TOOLS
Joseph H. Hoern, Saginaw, Mich.
Application March 3, 1952, Serial No. 274,549
13 Claims. (Cl. 77—4)



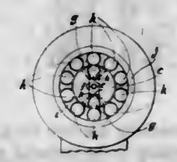
1. A control mechanism for adjusting rotating cutting tools comprising a support, a bored spindle revolvably mounted therein, a tool holder adjustably mounted in said spindle, an adjustable member in said support in axial alignment with said bored spindle, a shaft journaled in said adjustable member with its lower end extending into the spindle bore for relative movement along the axis thereof and for adjusting engagement with said tool holder, a pair of axially spaced ratchet wheels on said adjustable member, a pair of bell crank levers pivotally mounted on said support on opposite sides of said wheels, each of said bell crank levers being co-planarly arranged with a wheel and being formed with an inwardly projecting ratchet on the end thereof, and a pressure fluid system for actuating said adjustable member and shaft to adjust said tool including individual cylinders having plungers therein connected to said bell crank levers.

2,734,403
WORK SET-UP DEVICE
Henry Timpner, Milwaukee, Wis.
Application June 4, 1952, Serial No. 291,747
2 Claims. (Cl. 77—62)



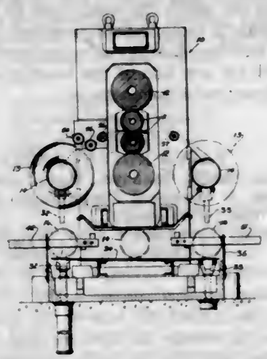
1. A work set-up device comprising a V-block adapted to receive a workpiece in the crotch thereof, a pair of jaws disposed in corresponding slots on opposite sides of the crotch and adapted to engage opposite sides of the workpiece to clamp the same in said crotch, a supporting arm for each jaw extending on the corresponding side of the workpiece in the crotch and in a direction generally parallel to a geometric line bisecting the crotch, a cross-head pivoted at its opposite ends to the corresponding arms of the jaws at the bottom of the crotch, means to move said cross-head in a direction generally parallel to said geometric line, the walls of said crotch adjacent said slots being recessed to provide a groove of tapered depth with the greater depth thereof at the apex of the crotch, and pins on the opposite sides of each jaw disposed to ride in the corresponding tapered grooves and to support the jaws for clamping purposes whereby when said cross-head is moved to effect clamping of a workpiece the jaws move inwardly toward each other and toward the apex of the crotch to engage the workpiece, the tapered depth of the grooves receiving the supporting pins for the jaws compensating for different diameter workpieces to locate the point of engagement of each jaw with the workpiece near to and on the approach side of the transverse centerplane of the workpiece.

2,734,404
SWAGING MACHINE
Granville Batty, Walkden, near Manchester, England, assignor to Sir James Farmer Norton & Company Limited, Salford, England, a British company
Application December 5, 1952, Serial No. 324,285
Claims priority, application Great Britain
December 17, 1951
6 Claims. (Cl. 78—21)



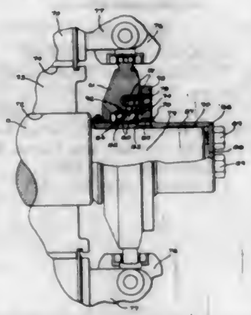
1. In a swaging machine having hammer blocks and swaging dies mounted in a housing, each block having short reciprocatory movements imparted thereto by operating parts, to cause the dies to effect swaging operation, the combination of at least one piston for each block, slidably mounted partly in the housing and partly in its block; and means to supply fluid under pressure, to slide each block in order that each pison shall move its block clear of said block's operating parts.

2,734,405
ROLLING MILL
Giuseppe Cozzo, Yonkers, N. Y., assignor to Hydropress, Incorporated, New York, N. Y., a corporation of Delaware
Application October 28, 1954, Serial No. 465,320
6 Claims. (Cl. 80—32)



1. In a rolling mill strip material feed arrangement, the combination comprising a roll stand having an unwinding spindle on one end thereof and a winding spindle on the other end, each of said spindles being adapted to rotatably support a drum for holding coiled strip material, unwinding spindle elevator means for lowering an emptied drum away from the unwinding spindle, winding spindle elevator means for lifting a drum to said winding spindle, and means extending under said roll stand for receiving an empty drum from the unwinding spindle and moving it to a position under said winding spindle, said winding spindle elevator means being operable to move said empty drum into alignment with said winding spindle.

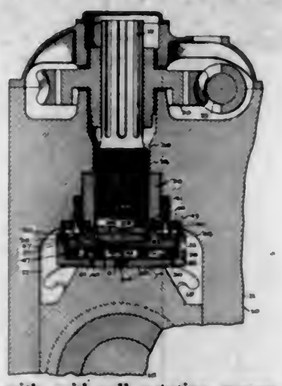
2,734,406
BEARING ASSEMBLY FOR ROLLING MILL
Joseph M. O'Malley, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a corporation of Massachusetts
Application September 19, 1952, Serial No. 310,472
5 Claims. (Cl. 80—55)



1. A bearing assembly for use on a rolling mill having a housing, comprising a horizontal roll, a plain radial bearing in which the roll is supported mounted in the housing, an anti-friction thrust bearing having inner and outer races, the anti-friction thrust bearing normally surrounding a reduced portion of the roll exterior of the housing, a bearing housing surrounding the anti-friction thrust bearing and fixed to the outer race thereof, means for holding the bearing housing in a selected position relative to the mill housing, a cap member enveloping the outboard end of the roll and having an elongated tubular portion coextensive with the outer part of the reduced portion of the roll, means for fastening the cap member to the end of the roll, the said fastening means serving to force the cap member along the roll to clamp the inner race of the bearing against movement relative to the roll, the outer surface of the cap member being formed to permit engagement by a socket-type crane for removal of the roll and bearing assembly, a sleeve-like mounting member which overlies a part of the reduced portion of the roll and on which the inner race of the anti-friction thrust bearing is mounted, the bearing housing and the mounting member having adjacent surfaces which are in proximity on one side of the bearing and having sealing means interposed therebetween.

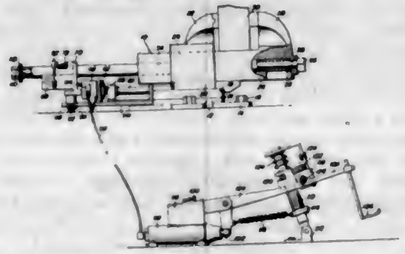
2,734,407
TAPER ROLLING MILL
Arthur Dean Smith, Spokane, Wash., assignor to Kaiser Aluminum & Chemical Corporation, Oakland, Calif., a corporation of Delaware
Application November 8, 1951, Serial No. 255,368
11 Claims. (Cl. 80—56)

1. In a rolling mill having a pair of cooperating rolls and a housing for the said rolls, the combination of an adjustable chock block for one of the said rolls mounted in the housing, means for rotating said rolls, an adjusting screw for applying an initial pressure to the chock block and in turn to one of the rolls to obtain a predetermined roll setting, a hydraulically operated expandable diaphragm unit interposed directly between the said adjusting screw and the said chock block in linearly aligned relationship with said screw and said block and means including a master cylinder for selectively expanding and then contracting said diaphragm unit by alternately pumping fluid into and then bleeding fluid out of the said diaphragm unit in a continuous, gradual and uniform manner, whereby additional pressure may be alternately applied to the said chock block and in turn to the said roll by the said diaphragm unit and then this increment in pressure removed in a constant, gradual and uniform manner so that unit lengths of sheet material passing through said rolling mill will have a continuous, gradual tapered thickness from one longitudinal edge thereof to another and pump means connected to and



synchronized with said roll rotating means for causing the actuation of said master cylinder and the expansion and contraction of said diaphragm unit.

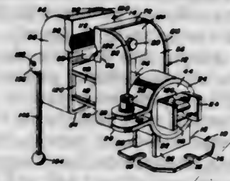
2,734,408
FLUID-PRESSURE-ACTUATED VISE
James L. Smith, St. Joseph, Mo.
Application February 28, 1955, Serial No. 491,047
5 Claims. (Cl. 81—17.2)



1. A fluid-pressure-actuated vise comprising a base having a jaw fixed thereon, a movable jaw mounted on said fixed jaw for movement in relation to said fixed jaw for selectively clamping and releasing a workpiece between said jaws, and means for moving said movable jaw, said means comprising an elongated cylindrical arm attached to said movable jaw, a pair of spaced collars surrounding said arm, a supporting member for said collars, means on said base for guiding said supporting member said supporting member having a cylinder formed therein, a piston in said cylinder, means on said base for supporting said piston against relative movement with respect to said fixed jaw, means to force fluid under pressure into said cylinder for moving said supporting member, spaced collars, arm and movable jaw as a unit in workpiece-clamping direction, and means for selectively locking said arm to said collars and unlocking said arm from said collars whereby the arm and movable jaw may be manually moved toward the stationary jaw and into contact with a workpiece, and then moved by fluid pressure for tightly clamping a workpiece between the jaws.

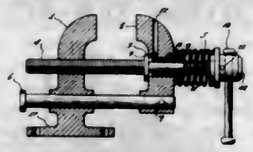
2,734,409
BAR-STOCK VISE
Robert H. Schum and Joseph W. Schum, Ralston, Nebr.
Application May 2, 1952, Serial No. 285,632
4 Claims. (Cl. 81—33)

1. A vise comprising first and second clamp members, said first and second clamp members having, respectively, telescoped slide and guide members, a threaded shaft carried by the slide member of the first clamp member, said threaded shaft being engaged in a threaded bore of a spindle nut mounted on the guide member of the second clamp member, means for mounting said clamp members, said means engaging a rearwardly extending cylindrical portion of the second clamp guide member, the guide member of the second clamp member being in the form of a pair of spaced normally horizontal flat bars



secured at their rear ends to said cylindrical portion, said normally horizontal bars being spaced apart a distance equal to the depth of the slide member of the first clamp member.

2,734,410
VISE ACTUATED BY DIFFERENTIAL SCREW
Helmut Gipperich, Kirchhundem, Kreis Olpe, Germany
Application December 6, 1954, Serial No. 473,361
Claims priority, application Germany December 7, 1953
5 Claims. (Cl. 81—33)



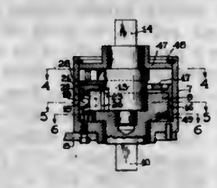
1. A quick-acting vise comprising a pair of relatively movable jaws, a threaded aperture in one of said jaws, an internally threaded bush axially displaceable to a limited extent in the other of said jaws, means for preventing rotation of said bush in said other jaw, spring means opposing axial movement of said bush towards said one jaw, a rotatable spindle, said spindle having a threaded portion threaded into said threaded aperture, an unthreaded portion passing through said bush and a second threaded portion normally disposed outside said bush but engageable with the internal thread thereof, spring means urging said other jaw towards said one jaw, a stop on said spindle by which movement of said other jaw by said spring means is limited, and means for rotating said spindle, the pitches of the threads of said threaded portions of the spindle being different.

2,734,411
PREDETERMINED TORQUE RELEASE SOCKET WRENCH
Robert Glen Woods, Huntington Park, Calif., assignor to Jo-Line Tools Inc., South Gate, Calif., a corporation of California
Application February 15, 1954, Serial No. 410,113
6 Claims. (Cl. 81—52.4)



1. An adjustable torque wrench, comprising: a head; a load-engaging member pivotally mounted at the front portion of said head; a lever extending away from the rear of said head; a rigid arm member rigidly secured to said load-engaging member and extending generally rearwardly therefrom; a tripping finger pivotally mounted on said head and formed with a pointed projection at its intermediate portion; a set screw mounted on said tripping finger between its free end and said projection that normally engages the free end of said arm member so as to control the wedging angle between said projection and the free end of said arm member; and tension spring means interposed between the free end of said finger and said head for constantly biasing said projection forwardly into contact with the free end of said arm member.

2,734,412
SCREW-TENSIONING DEVICE
Harry Orner, Altadena, Calif.
Application April 19, 1954, Serial No. 424,127
10 Claims. (Cl. 81—52.4)



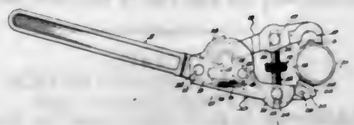
1. A wrench unit for applying a predetermined tension to a threaded member, which comprises a driven member adapted to effect relative turning between said threaded member and the correspondingly threaded member with which it is threadedly associated, a rotating drive member, first clutch means to operatively associate said drive and driven members to effect turning of the latter until a predetermined initial tightening of said threaded members has been achieved, and second clutch means to operatively associate said drive and driven members after said initial tightening has been achieved, said second clutch means being adapted to effect turning of said driven member only until said threaded members have been turned relative to each other through an angle calculated to result in said predetermined threaded member tension.

2,734,413
CHUCK AND RATCHET MECHANISM
Milton S. Dunkelberger, Dayton, Ohio
Application April 18, 1950, Serial No. 156,681
1 Claim. (Cl. 81—63.2)



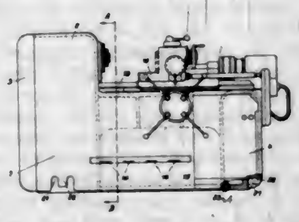
In an operator for tools comprising a shank, a chuck supported by the shank, a handle including two complementary hollow half sections each having upstanding marginal flanged edges defining a chamber within the handle, a ratchet wheel secured to the shank and rotatably journalled in one end of the handle, the chuck being adapted for interchangeable engagement with tools, the shank being attached to the ratchet wheel at the center portion thereof and concentric therewith, the ratchet wheel being provided with straight sided teeth, a pawl for engaging said teeth slidably and rotatably supported within the hollow handle and normal to the longitudinal axis of the shank, a plurality of floating bearing elements carried by the handle and supporting the pawl, a spring biasing said pawl into engagement with the ratchet wheel, one end of the pawl being provided with a circular recess formed therein, a ball bearing partially disposed within the circular recess and engaged by one end of the spring, the other end of the spring engaging one of the hollow half sections, the pawl having one side thereof bevelled to slidably engage the teeth, the pawl also having a straight side, and a knurled knob attached to the pawl for adjusting the pawl.

2,734,414
PIVOTED-JAW PIPE WRENCH HAVING A JAW-ACTUATING SPRING
Benjamin L. Lurie, Chicago, Ill.
Application July 15, 1953, Serial No. 368,025
2 Claims. (Cl. 81—91)



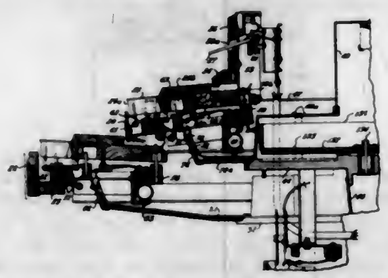
1. A pipe wrench comprising an elongated housing-like body with open ends, a handle having one end thereof extending into one end of the body and pivotally connected thereto at a point inwards of its extremity so that it is capable of swinging back and forth to a limited extent relatively to said body, a first arm having its inner end connected fixedly to the other end of the body and embodying at its outer end a pipe-engaging jaw, a second arm disposed in opposed relation with the first arm and having its outer end provided with a pipe-engaging jaw and its inner end projecting into said other end of the body, an adjusting screw adapted to move the second arm to and from the first arm and having its ends pivotally connected respectively to central portions of the arms, a T-shaped lever disposed in the body, having one leg thereof connected pivotally to the body at a point adjacent the inner end of the first arm, another leg operatively connected to the extremity of said one end of the handle and its third leg in pivotally connected relation with the inner end of said second arm, operative in response to swinging of the handle relatively to the body in a direction away from the second arm to move said inner end of the second arm outwards or in a direction away from the body and also to tilt said second arm in such direction as to cause its jaw to move towards the jaw on the first arm, and also operative in response to swinging of the handle relatively to the body in a direction towards the second arm to move said second arm in a direction towards the body and also to tilt it so that its jaw moves away from the jaw on said first arm, and a compression spring disposed in the body and applied to the lever so that it is operative through the medium of said lever to urge the handle in said direction towards the second arm.

2,734,415
FRAME FOR LATHES AND TURRET LATHES
Walter Möbius, Bielefeld, Germany, assignor to Gildemeister & Co. A.-G., Bielefeld, Germany, a corporation of Germany
Application May 1, 1951, Serial No. 227,362
Claims priority, application Germany May 2, 1950
1 Claim. (Cl. 82—32)



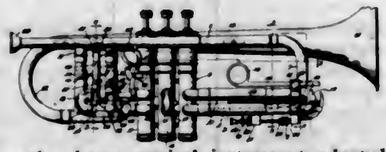
In a bed structure for turret lathes having at least one support for the operating tools, in combination, a housing for a headstock located in the one end portion of said bed structure, the front walls of the said housing being bowl-shaped and the operative parts of the lathe being invisibly from the outside located in said bowl-shaped housing, guide tracks for said support located upon said bed structure, a hollow body located rectangularly to said guide tracks on the opposite end of said bed structure, inner wall and outer walls forming the longitudinal sides of said bed structure, said outer walls being bowl-shaped in conformity with the bowl-shaped walls of said housing, said inner walls and said outer walls being united below said guide tracks and said guide tracks being located directly above said inner walls to form a smooth passage for chips to be charged into the lathe, the bottom portion of said bed structure being shaped as a collector for chips and for cooling liquid, the lower part of said outer walls adjacent to its largest protrusion being inwardly bent to form rounded edges with said bottom, the backward located walls being arranged to form beams supported by said housing at one end of said bed and being supported at the opposite end by said hollow body to provide a connection below said beams between the space inside of said inner walls with said collector, an inwardly bent trough in the outer face of said front wall and channels connecting said trough with said chip collector.

2,734,416
CONSTRUCTION OF PHOTOELECTRIC ORGANS
Merton D. Corwin, Cincinnati, Ohio, assignor to The Baldwin Piano Company, a corporation of Ohio
Application August 26, 1950, Serial No. 181,630
15 Claims. (Cl. 84—1.17)



1. In a keyboard instrument having a console, a substantially horizontal frame removably mounted in the console; a keyboard mounted to said frame; a generator mounted on said frame; connections between said generator and the keys of said keyboard; said frame, keyboard, generator and connections being removable as a unit from said console; a guide rail and key rail supported on brackets on said frame; the keys of said key board being pivoted on said key rail and guided by pins on said guide rail; first leaf springs attached to said key rail, underlying said keys and bearing against adjusting means on the under sides of said keys to urge said keys upwardly; second leaf springs associated with said first leaf springs so as to be actuated thereby; and the said connections between said generator and said keys comprising Bowden transmissions each having a wire and a sheath, the wires of said transmission being connected respectively to free ends of said second leaf springs.

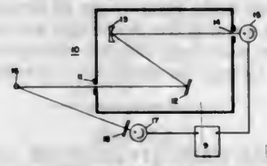
2,734,417
VALVE BRASS MUSICAL INSTRUMENT
Mark H. Hindsley, Urbana, Ill.
Application February 5, 1951, Serial No. 209,493
3 Claims. (Cl. 84—394)



1. A valve brass musical instrument adapted to be supported by the player's left hand and played with the

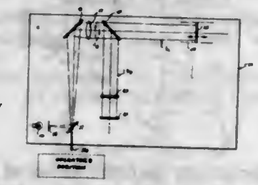
right hand and comprising: a sectional tube curved back and forth to form an elongated normally horizontal unit, having a mouthpiece at the rear end thereof and a bell at its front end, and embodying a horizontal series of side by side upstanding valves adjacent to the central portion of the unit, a pair of spaced apart parallel tube sections between the rearmost valve and the mouthpiece, and a main U-shaped tuning slide having the ends thereof mounted slidably in certain adjacent ends of the tube sections so that it is capable of being slid towards and away from said tube sections for pitch varying purposes; a spring arrangement associated with the tuning element, operative yieldingly to hold the slide in a neutral position, and consisting of a plate extending between and connected to said certain adjacent ends of the tube sections and having a hole in its central portion, a rod disposed between and in parallel relation with the tube sections, having its central portion extending slidably through the hole in the plate, provided at its ends with abutment-forming members, and having the end thereof that is nearer to the slide connected to the curved intermediate portion of the slide, and a pair of oppositely disposed coaxial spiral compression springs mounted on the end portions of the rods respectively and having the outer ends thereof in abutment with said members and their inner ends disposed adjacent to the central portion of the plate; an element positioned rearwards of the upper portion of said rearmost valve, adapted to be engaged and manipulated by the thumb of the player's left hand and mounted to move back and forth; and a lever variety linkage extending between, and connected to, the element and the slide and so arranged that when the element is moved in one direction it operates to slide the tuning slide in one direction from its neutral position and when the element is moved in the opposite direction it operates to slide the tuning slide in the opposite direction from its said neutral position.

2,734,418
SPECTROMETER SYSTEM WITH RECEIVER FOR REFERENCE BAND ILLUMINATION
John H. Enns, Ann Arbor, Mich., assignor to Leeds and Northrup Company, Philadelphia, Pa., a corporation of Pennsylvania
Application April 19, 1950, Serial No. 156,763
11 Claims. (Cl. 88—14)



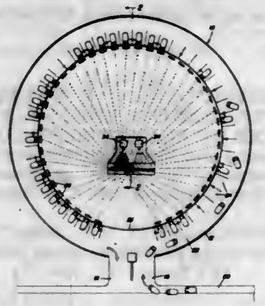
1. A system for spectrochemical determination of the percentage concentration of an element in a specimen which comprises means for exciting the specimen to emit radiation from all elements of the specimen and from any ambient atmosphere components incidentally present and excited concurrently with the specimen, a spectrometer upon which said radiation is impressed, dispersion means in said spectrometer for dispersing the impressed radiation to produce a spectrum, means including a radiation receiver for producing an output corresponding with the intensity of a spectrum line of said element of the specimen, means including a second radiation receiver and associated wavelength-selective means for producing an output corresponding with the intensity of the undispersed radiation within a band of wavelengths selected to include the principal radiation from elements of the specimen and to exclude radiation from said ambient atmosphere components and from constituents having excitation energies and resultant radiation wavelength patterns substantially different from those of the element producing said spectrum line, and measuring means in circuit with said radiation receivers responsive to the ratio of said outputs, which ratio affords high accuracy in quantitative determination of said element despite substantial varition of any of the constituent elements of the specimen matrix.

2,734,419
INTERFEROMETER
Don O. Hendrix, Pasadena, Calif., assignor to Davidson Manufacturing Company, Los Angeles, Calif., a firm
Application July 11, 1952, Serial No. 298,331
4 Claims. (Cl. 88—14)



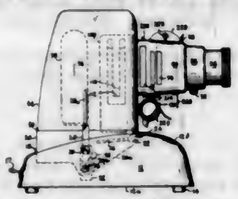
4. In an interferometer, the combination of: a single combined collimator and telescope lens, a beam splitter between said lens and its focal point, so arranged as to provide an additional focal point for said lens, a point source of light at one of said focal points, the other furnishing a position for the eye of an observer, a dividing mirror with a semi-reflective surface on its first surface angularly positioned in front of said lens in the parallel beam of the lens, and fully reflective mirrors in the paths of the portions of said parallel beam transmitted through and reflected by said dividing mirror.

2,734,420
DRIVE-IN THEATRE WITH INDIVIDUAL CAR SCREENS
Tom F. Smith, Urbana, Mo., assignor to Autoscope, Inc., Urbana, Mo., a corporation of Missouri
Application November 17, 1952, Serial No. 321,005
8 Claims. (Cl. 88—24)



1. A theatre comprising a plurality of circumferentially arranged viewing screens, a projector centrally positioned between said screens and emitting a beam of light in a single direction, means interposed between said projector and said screens for simultaneously producing visible images upon said plurality of screens from said projector, some of said screens being disposed in positions directly behind said projector, said means comprising a plurality of light directing elements disposed between said projector and said screens for directing the beam of light from said projector to said screens, the beam of light striking each of said screens being acted on by a single one of said directing elements, said means further including a lens assembly disposed between said projector and said light directing elements, said lens assembly comprising a panel having a plurality of lenses mounted thereon, each of said lenses directing a beam of light to a single one of said light deflecting elements.

2,734,421
FILM PROJECTOR
David I. Critoph, Snyder, and John F. Herrmann, Cheektowaga, N. Y., and Fred H. Wolford, Albuquerque, N. Mex., assignors to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Original application October 23, 1948, Serial No. 56,222, now Patent No. 2,614,458, dated October 21, 1952. Divided and this application March 7, 1952, Serial No. 276,102
12 Claims. (Cl. 88—28)



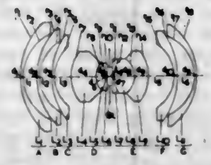
1. In a film projector, the combination of a main housing having a projection aperture therein, a hollow auxiliary housing carried by said main housing and surrounding said projection aperture, said auxiliary housing having means supporting a projection objective in spaced relation to said aperture and in substantial alignment therewith, a pair of opposed openings in opposite side wall portions of said auxiliary housing, a strip film supporting device carried by said auxiliary housing, said supporting device comprising a hollow magazine portion and a strip film guiding portion having a projection opening therein, said film guiding portion communicating with said magazine portion so as to receive strip film therefrom, said supporting device fitting within said opposed openings in said auxiliary housing so as to position strip film at said projection opening in alignment with the projection aperture in said main housing for projection purposes, said magazine portion being exposed adjacent one side wall of said auxiliary housing so as to receive coiled strip film, and said strip film guiding portion extending outwardly through the opening in the opposite side wall of said auxiliary housing so as to direct film outwardly thereof.

2,734,422
PHOTOGRAPHIC OBJECTIVE COMPRISING TWO OUTER CONVERGENT SINGLE ELEMENTS AND TWO INNER DIVERGENT MENISCUS DOUBLETS
Theodor Brendel and Hans Lautenbacher, Munich, Germany, assignors, by mesne assignments, to Agfa Camera-Werk Aktiengesellschaft, a corporation of Germany
Application February 27, 1952, Serial No. 273,695
Claims priority, application Germany March 15, 1951
11 Claims. (Cl. 88—57)



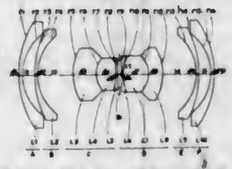
1. A photographic objective corrected for spherical and chromatic aberrations, astigmatism, coma, field-curvature and distortion, having disturbed symmetry in construction, being especially designed for cine cameras, comprising four components made of customary optical glasses and separated from each other by air spaces, of which components the two outer are convergent single elements, and the two inner components comprise cemented menisci of negative power, their concave surfaces facing each other, and having cemented surfaces, the radius of which is numerically greater than three times the total focal length, the positive parts of the cemented components having a refractive index for the D-line of the spectrum ranging between 1.65 and 1.75, the absolute value of the sum of the individual focal lengths of the negative parts of the two cemented components being greater than 90% and less than 120% of the focal length of the objective.

2,734,423
WIDE ANGLE OBJECTIVES HAVING A PLURALITY OF AXIALLY AIR SPACED COMPONENTS
Ludwig Jakob Bertele, Heerbrugg, Sankt Gallen, Switzerland
Application October 16, 1952, Serial No. 315,178
Claims priority, application Switzerland October 20, 1951
9 Claims. (Cl. 88—57)



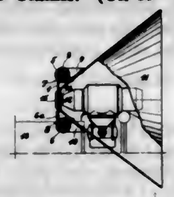
1. A wide angle objective made up of at least seven components separated from each other by air spaces and located at least three on each side of the diaphragm position, there being two components each of converging power located respectively adjacent to and on opposite sides of the diaphragm position and having their extreme surfaces remote from the diaphragm position convex and separated from each other on the axis by a distance within the range 0.4 f to 1.6 f where f is the focal length of the complete objective, there being at least two diverging components on one side of the diaphragm position and spaced therefrom on the axis with one of said converging power components intervening between said two diverging components and the diaphragm position, and there being at least three diverging components on the other side of the diaphragm position and spaced therefrom on the axis with the other of said converging power components intervening between said three diverging components and said diaphragm position, said diverging components being respectively of diverging meniscus form concave towards the diaphragm position, and there being between each two adjacent diverging components an air space having the shape of a converging lens.

2,734,424
WIDE ANGLE OBJECTIVES OF SIX AIR SPACED COMPONENTS
Ludwig Jakob Bertele, Heerbrugg, Switzerland
Application December 7, 1953, Serial No. 396,513
Claims priority, application Switzerland February 13, 1950
15 Claims. (Cl. 88—57)



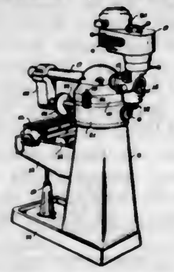
1. A wide angle objective made up of six components separated from each other by air spaces and located three on each side of the diaphragm position, the first and sixth components taken in consecutive order being of diverging power and of meniscus form concave towards the diaphragm position, the second and fifth components being of meniscus form concave towards the diaphragm position, the third and fourth components each being of converging power and having their extreme surfaces remote from the diaphragm position convex and separated from each other on the axis by a distance within the range 0.1 f to 1.6 f where f is the focal length of the complete objective, and the air spaces between the first and second components and between the fifth and sixth components having each the shape of a converging lens.

2,734,425
PROTECTOR SCREEN DEVICE FOR ROCKET LAUNCHERS
Edgar William Brandt, Geneva, Switzerland, assignor to Anstalt fur die Entwicklung von Erfindungen und Gewerblichen Anwendungen Energa, Vaduz, Liechtenstein, a corporation of Liechtenstein
Application November 4, 1952, Serial No. 318,557
Claims priority, application Switzerland December 21, 1951
3 Claims. (Cl. 89—36)



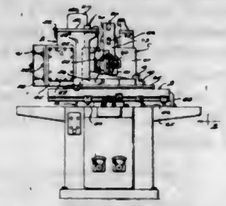
1. In combination with the sighting device of a rocket launcher, a shield mounted on said sighting device and having a window at its front end opposite the sighting device, a protector for said window, said protector comprising a casing mounted on one side of said window and containing a storage spool, a casing mounted on the opposite side of said window and containing a receiving spool and a movable transparent band extending across the window and having its ends wound on said spools.

2,734,426
MILLING MACHINE
Sydney Dix, Los Angeles, Calif.
Application February 8, 1954, Serial No. 408,700
2 Claims. (Cl. 90—11)



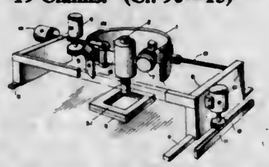
1. In a milling machine, a base having an upstanding column, a work table on said base at one side of said column, a horizontal spindle journaled in said base column on a horizontal axis extending over said work table, a turret mounted on the upper end of said column for rotation thereon about a vertical axis, an overarm extending horizontally from said turret, a vertical spindle journaled on said overarm on a vertical axis laterally offset from said column on the side thereof opposite said work table, drive means mounted on said overarm for rotating said vertical spindle, means for drivingly connecting the end of said horizontal spindle adjacent the work table coaxially to one end of a milling tool arbor, transmission means drivingly connecting the lower end of said vertical spindle to the end of said horizontal spindle remote from said work table for horizontal milling, said transmission means comprising members at least one of which is fixed to said horizontal spindle and another one of which is carried on the lower end of said vertical spindle, and means removably securing said other member to the vertical spindle whereby said other member may be removed from said vertical spindle, said turret may be rotated through 180 degrees to position said vertical spindle over said work table, and a milling tool may be secured to the lower end of said vertical spindle, in place of said member, for vertical milling.

2,734,427
MILLING MACHINE FOR OPERATING UPON METAL BLANKS
John S. Goodwin, Whittier, Calif., assignor to Globe Oil Tools Company, Los Nietos, Calif., a corporation of California
Application November 23, 1951, Serial No. 257,781
27 Claims. (Cl. 90—11.62)



1. In combination, a bed, a power driven cutter on the bed, a carriage mounted on said bed for reciprocation relative to the cutter, a drive adapted to operate the carriage, a spindle rotatably mounted on the carriage and adapted to rotatably carry a work piece, means adapted to apply torque to the spindle to yieldingly rotate it, and a governor connection between the bed and spindle adapted to coordinate rotation of the spindle with movement of the carriage and thereby limiting rotation of the spindle.

2,734,428
UNIVERSAL ROUTER
Rudolph F. Onsrud, Chicago, Ill., assignor to Onsrud Machine Works, Inc., Chicago, Ill., a corporation of Illinois
Application January 31, 1952, Serial No. 269,170
19 Claims. (Cl. 90—15)

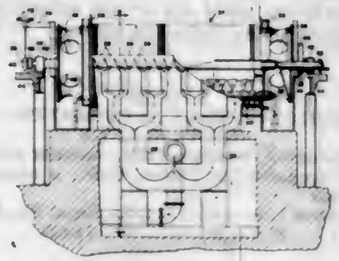


1. A routing machine comprising a rotatable support, a rotatable cutter spindle mounted on said support for shifting movement laterally with respect to the rotation axis of said support, motor means for driving said spindle, resiliently yieldable means on said support for continuously urging said spindle laterally relative to the support axis, and means for turning said support on its axis independently of the operation of said resiliently yieldable means.

2,734,429
DEWATERING APPARATUS
Ernest P. Cook, deceased, late of Berlin, N. H., by Fern Boudinot Cook, executrix, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a corporation of Maine
Application July 15, 1954, Serial No. 443,567
9 Claims. (Cl. 92—43)

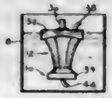
1. Apparatus for separating the solid and liquid components of a slurry comprising a receptacle for the slurry,

a cylindrical strainer mounted within said receptacle for rotation about a generally horizontal axis while at least partially immersed in said slurry, a hollow generally cylindrical weir member having a longitudinal aperture in its wall, said weir member being mounted coaxially within said strainer and being adjustably rotatable about



said axis independently of the rotation of said strainer, said aperture providing the sole outlet for liquid passing through said strainer, means for draining said liquid from within said weir member, means for rotating said strainer, and means for removing accumulated solid material from the face of said strainer.

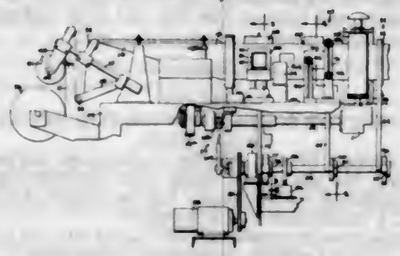
2,734,430
METHOD OF MAKING MOLDED FIBROUS PRODUCTS
Hobart H. Kletzien, Milwaukee, Wis., assignor to Jardier, Inc., Milwaukee, Wis., a corporation of Wisconsin
Application September 2, 1952, Serial No. 307,448
4 Claims. (Cl. 92—54)



1. The method of manufacturing hollow molded fibrous products comprising the steps of placing two hollow forms each having porous side walls and a porous end wall, in proximity to each other, with the end walls thereof in opposed relation and spaced apart a distance defining the thickness of a wall of fibers to be formed therebetween, immersing the forms in a fiber bath while maintaining said spaced relationship, reducing the pressure on the interior of said forms to cause fibers from the bath to be deposited simultaneously on the exterior surfaces of said porous side and end walls, and maintaining the reduced pressure within said forms while so immersed and while so spaced until a layer of fibers of desired thickness has been deposited on each of said forms connected by a common wall of fibers formed within the space between the spaced end walls of the forms.

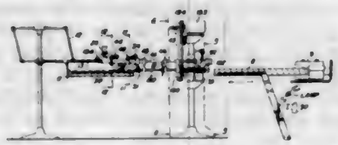
2,734,431
MACHINE FOR MAKING WINDOW BAGS
Harold L. Bartelt, Rockford, Ill., assignor of forty-five per cent to Donald E. Bartelt
Application April 14, 1952, Serial No. 282,119
10 Claims. (Cl. 93—8)

1. A bag making machine comprising, means for supporting a first strip of material and guiding the same endwise along a predetermined path, mechanism for supporting a transparent strip alongside said first strip, means disposed along said path and operable to fold said first strip longitudinally around said transparent strip, rollers disposed in said path beyond said folding means and engageable with opposite sides of said folding strip, an actuating mechanism for turning said rollers periodically to advance said folded strip in successive steps through distances corresponding to the width of the bags to be formed, sealing elements disposed along said path and engageable during dwelling of said strips with the opposite sides of said folded strip to seal the same to said transparent strip transversely of the strips, means including a cutter disposed along said path and operable



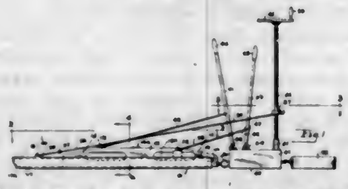
during a dwell of the strips to cut a window in one side of said folded strip, and sealing members beyond said cutter and engageable with said one side and said transparent strip to seal the same together around the window.

2,734,432
MACHINE FOR THE PRODUCTION OF HELICALLY WOUND TUBES
Ernest Bradbury Robinson, Ashgate, Chesterfield, and Francis Goff Glasby, Chesterfield, England; said Glasby assignor to said Robinson
Application December 29, 1952, Serial No. 328,304
8 Claims. (Cl. 93—80)



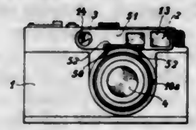
1. A machine for the production of helically wound tubes, comprising a mandrel, means for winding helically on the mandrel strip material having control features thereon, and for simultaneously moving the tubing axially, cutting mechanism for severing lengths from the tubing, motive power means constituted by the moving tubing and a carrier adapted to be moved thereby for traversing the cutter mechanism with the moving tubing in the severing operation, in combination with a releasable slip connection between the carrier and cutter mechanism for initially obtaining a slip between the carrier and the cutter mechanism axially of the tubing and subsequently connecting the carrier and the cutter mechanism for the severing operation, and control means for the slip connection for determining the time of connecting same by reference to the control features on the strip material.

2,734,433
TROWEL DEVICE
William T. Brown, Detroit, Mich.
Application December 1, 1952, Serial No. 323,398
2 Claims. (Cl. 94—45)



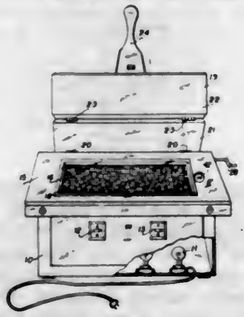
1. A device serving to impart a smooth finish to a pavement while in a plastic condition, the device comprising a trowel composed of a solid oblong core and a sheet metal casing fitting over the core in a sliding telescopic engagement therewith, the casing including a flat bottom plate adapted for operative contact with the surface of the pavement, a platform disposed rearwardly of the core, the platform adapted to rest on the pavement and being connected by a swivel joint to the rear end of the core, means to impart to the casing a reciprocal back and forth movement, the means including a lever on said platform, and rod means extending from the lever to said casing and connected thereto, means to cause the trowel to swing sideways, the means including a vertical shaft mounted on the platform and adapted to be rotated about its axis, and two horizontal arms extending laterally from the shaft in opposite directions, and cable means connecting the respective arms with the respective sides of the casing, the arms being adapted to be swung back and forth in an arc by means of said shaft, means to swing the trowel upwardly from the swivel joint, the means including a lever on the platform and a cable extending therefrom and connected to the front end of the core, a vehicle rearwardly of the platform, rigid brace means to keep the platform and the vehicle in a fixed, spaced relation to each other, and power means within said vehicle for the operation of said levers and said vertical shaft.

2,734,434
APPARATUS FOR COUPLING AN EXCHANGEABLE OBJECTIVE WITH A RANGE FINDER OF A PHOTOGRAPHIC CAMERA
Ludwig Leitz and Kurt Gissel, Wetzlar (Lahn), Germany, assignors to Ernst Leitz, G. m. b. H., Wetzlar (Lahn), Germany, a corporation of Germany
Application March 21, 1955, Serial No. 495,613
Claims priority, application Germany April 2, 1954
8 Claims. (Cl. 95—44)



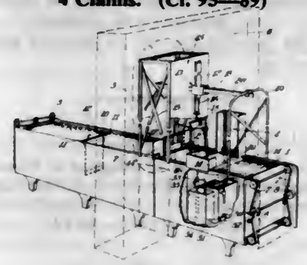
1. A photographic camera having an objective having an adjustment mounting, a range finder on said camera having an adjustment means coupled with the adjustment mounting of the objective, an optical attachment for said range finder mountable and demountable on said camera, said adjustable mounting for said objective having a stop means for limiting the range of adjustment of said objective, and means actuated by the demounting and mounting of said optical attachment for varying the range of adjustment of said adjustable mounting.

2,734,435
FILTER
Benedict R. Leonardi, Brooklyn, N. Y.
Application November 3, 1951, Serial No. 254,700
1 Claim. (Cl. 95—73)



A filter for photographic printers comprising a casing, a source of printing illumination and a safelight within said casing, a printing frame supported by said casing, said printing frame being provided with an exposure aperture, a pair of spools positioned at the sides of said aperture, a band of filter material having a series of areas of varying filter characteristics supported on said spools underneath said printing frame whereby one of said filter areas is exposed in operative position across said exposure aperture, an endless spring belt connecting said spools for simultaneous rotation thereof, whereby the rotation of said spools effects a change of the exposed filter area, indicia carried by each of said areas indicating the filter characteristics thereof whereby the characteristics of the filter area in operative position may be identified by means of the light of said safelight transmitted therethrough.

2,734,436
DEVELOPING APPARATUS FOR PHOTOGRAPHIC FILMS, PLATES, AND PAPERS
Thomas H. Hills, Merstham, England
Application April 14, 1952, Serial No. 282,187
4 Claims. (Cl. 95—89)

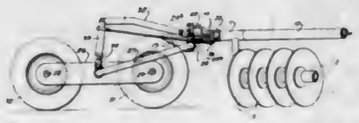


1. Apparatus for developing photographic films, plates, papers and the like comprising a line of open topped tanks for holding liquids, a pair of parallel continuously movable endless conveyor belts one along the top edge of each side of the line of tanks, frame means each adapted for carrying photographic material and to be supported on opposite sides upon the conveyor belts with the photographic material submerged in the liquid in a tank, pneumatically operated lifting, traversing and lowering means positioned above and adjacent the ends of adjacent tanks comprising a pair of cylinders, the one mounted vertically and the other horizontally for carrying out a cycle of operations whereby in transferring a frame means from one tank to the next, a frame means engaging hook associated with the vertically mounted cylinder describes an uninterrupted cycle of movements along a closed path including at least three different sides of a rectangle, and in which cycle the frame means is engaged at an initial position at the end of one tank, is lifted from the conveyor belts and clear of the tank, is carried forward to a position over the next tank and is lowered on to the conveyor belts, and in which the hook returns to the initial position to complete the cycle preparatory to the engagement of the following frame, the commencement of the cycle of operations is initiated by the engagement of a frame with the trigger of an electric switch mounted one side of the tanks adjacent a conveyor belt, said switch being one of a pair of like switches positioned on a line at right angles to the belts and connected in series.

2,734,437
CARRIAGE LIFT FOR DISC PLOWS
Herman C. Erling, Bismarck, N. Dak.
Application February 14, 1950, Serial No. 144,137
1 Claim. (Cl. 97—46.59)

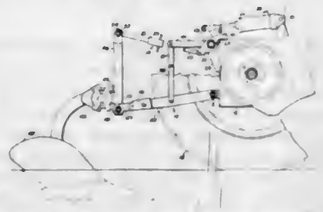
In an earth working implement of the type comprising a frame lying oblique to the direction of advance of the implement, and a row of spaced earth working blades carried by the frame and extending parallel therewith,

means for gauging the depth to which the blades enter the ground during the advance of the implement when working and for elevating the blades clear of the ground when transporting the implement, said means comprising a weighted carriage adapted to move in the direction of advance of the implement behind the trailing end of the frame, a link carried by the carriage for movement in a vertical arcuate path adjacent one side thereof, a lift



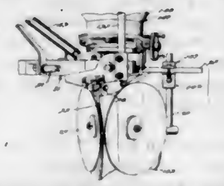
carried by the link for movement therewith adjacent the forward end of the carriage, said lift being operatively connected to the frame for raising or lowering it and moving the blades to a selected height relative to the ground, an arm carried by the lift and extending rearwardly therefrom above the link, and an extensible element carried by the carriage and operatively connected to the arm for moving the lift to selected heights relative to the carriage.

2,734,438
HITCH LINK
Everett W. Todd, Racine, Wis., assignor to Massey-Harris-Ferguson Inc., a corporation of Maryland
Application December 17, 1952, Serial No. 326,422
7 Claims. (Cl. 97—47.14)



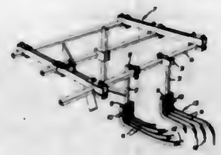
7. In a hitch for coupling an implement to a prime mover comprising; two laterally spaced, lower hitch links pivotally connecting the implement to the tractor, power lift means for vertically positioning said links, the improvement comprising a collapsible joint in each of said lower links and resiliently urged means for automatically releasably locking said joint in a rigid position when the latter is aligned.

2,734,439
EARTHWORKING AND PLANTING IMPLEMENT
John R. Padrick, Roberta, Ga.
Application June 9, 1949, Serial No. 98,107
3 Claims. (Cl. 97—78)



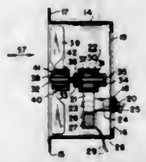
1. An earth-working implement comprising an upright plate-like stock of substantial vertical extent mounted for movement through the ground to produce a slit not substantially wider than the thickness of the plate, said stock having a forward cutting edge concave in form and having its rearmost portion intersecting the ground surface line during movement, angularly and vertically adjustable bearing means mounted on each side of said stock and spaced rearwardly from said rearmost portion of said cutting edge, and an outwardly concave cutting disk journaled on each of said bearing means with said disks converging forwardly and with the forwardmost portions of the edges of said disks substantially tangent to the cutting edge of said stock at said rearmost portion, the adjustability of said bearing means providing for adjustment of said disks to positions with said forwardmost portions of the edges of the disks substantially tangent to said cutting edge at points along said rearmost portion; whereby during movement said stock will form a slit in the ground and the disks will form furrows on each side of said slit and field trash engaged by said stock will gather in front of said rearmost portion and be cut by the forward edges of said disks.

2,734,440
CULTIVATOR TOOL
Loyd C. Davis, Grandview, Wash.
Application December 10, 1951, Serial No. 260,898
1 Claim. (Cl. 97—168)



The combination with a row crop cultivator including a transverse tool bar, of a pair of vertical, depending shanks mounted on said tool bar, one forwardly and the other rearwardly thereof, clamping means for mounting and adjusting the lateral positions of said shanks on said bar relative to a crop row, said shanks being spaced from each other for the passage of a row of plants therebetween, transverse T-heads on the lower ends of said shanks, and a plurality of flat, parallel blades fixed on said T-heads and extending downwardly and then rearwardly therefrom in spaced, face opposing relation for pulverizing the soil and channeling said soil therebetween, said blades being of increasing length outwardly and including inwardly curved free end portions terminating at spaced longitudinal points along two rearwardly diverging lines in a horizontal plane for the passage of the plants therebetween and for directing the soil inwardly around said plants from opposite sides of the row.

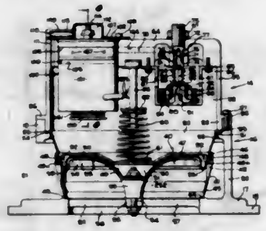
2,734,441
VENTILATING FAN FOR TELEVISION SETS
Emmett C. Williams, Pittsburgh, Pa.
Application November 5, 1952, Serial No. 318,787
5 Claims. (Cl. 98—1)



1. In a television set including a cabinet containing electronic equipment, ventilating apparatus characterized by automatic, synchronized operation with the set, simple construction, ease of installation, neat appearance, and inexpensiveness, comprising a cylindrical housing having a radially outwardly turned flange at one end and a radially inwardly turned flange at the other, the first-mentioned flange having openings to accommodate fasteners whereby the housing is readily fixed over an

opening to a wall of the set, a cross bar secured to the second-mentioned flange and extending across that end of the housing, a screen laid against the inner side of the second-mentioned flange, a motor stationed within the housing, bolt members passing through the cross bar and screen and having their ends fixed to a stationary part of the motor, concentric rigid sleeves on the bolt members to space the screen from the motor and hold it against the flange, non-conducting washers on the bolt members to insulate the members from the cross bar and screen, a drive shaft concentric with the housing extending from the motor, a fan on the shaft, and conductors connecting the motor to a circuit of the set.

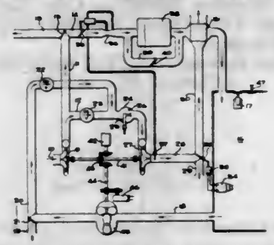
2,734,442
DUAL DIFFERENTIAL AND RATIO LOCKOUT MECHANISM
Raymond W. Jensen, Los Angeles, Calif., assignor to The Garrett Corporation, Los Angeles, Calif., a corporation of California
Application June 28, 1950, Serial No. 170,930
25 Claims. (Cl. 98—1.5)



1. In mechanism for controlling the pressure within an enclosure having an opening therein for the flow of fluid relative to said enclosure: valve means for controlling said opening including a pressure sensitive part subjected on one side to enclosure pressure; means defining a control pressure chamber, the other side of said part being subjected to the pressure in said chamber; means for controlling the pressure in said control chamber including a pair of movable aligned pressure sensitive elements, the sides facing each other being subjected to ambient atmospheric pressure and the opposite sides being subjected to control chamber pressure, one of said elements being of larger effective area than the other of said elements; valve means for controlling the flow of air between said control chamber and ambient atmosphere, said valve means being movably carried by the smaller of said pressure sensitive elements, said elements being movable in substantial unison with each other and movable independently of each other; spaced stop means for limiting the movement of the larger of said pressure sensitive elements; yielding means urging said elements apart; an aligned absolute pressure responsive device cooperable with the smaller of said pressure responsive elements when the pressure in the control chamber has dropped to a predetermined value; and electrical means for rendering said absolute pressure responsive device inoperative, the valve means carried by the smaller pressure responsive element being opened when said pressure responsive elements are in a predetermined relationship with respect to each other.

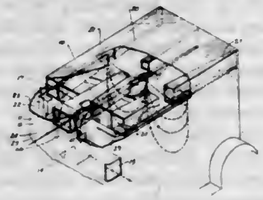
2,734,443
ENCLOSURE AIR SUPPLY SYSTEM
Homer J. Wood, Sherman Oaks, Calif., assignor to The Garrett Corporation, Los Angeles, Calif., a corporation of California
Application October 18, 1951, Serial No. 251,918
11 Claims. (Cl. 98—1.5)

1. In an air supply system for an enclosure, the combination of: a compressor having an inlet from ambient air; a positive displacement pump having an inlet connected with an air outlet from said enclosure; combustion power means having a driving connection with said compressor and said pump; a divided path discharge connection from said compressor; a divided path discharge connection from said pump, one path of said compressor and one path of said pump each being connected to an



air inlet to said power means, the other path from said compressor being connected with an air inlet to said enclosure, and the other path from said pump being connected with ambient atmosphere; reverse flow check valves in said power means connected paths; and valve means for selectively controlling flow from said pump into its respective paths.

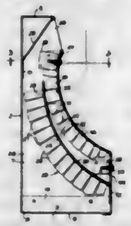
2,734,444
CONVEYANCES FOR THE TRANSPORTATION OF BABY CHICKS
Alfred G. Lunn, Jr., Halifax, and Harry L. Armstrong, Middleboro, Mass.; said Armstrong assignor to Dorothy E. Lunn, Halifax, Mass.
Application June 29, 1951, Serial No. 234,334
2 Claims. (Cl. 98—10)



1. In a conveyance for the safe transportation of baby chicks: a storage chamber having a blower compartment extending across the front end of said chamber; an air blower mounted in the lower portion of said compartment, said blower having an air inlet communicating with said compartment; a supply conduit mounted adjacent the center of the ceiling of said chamber and extending longitudinally of said chamber; return conduits mounted at the outer edges of the ceiling and extending in parallel spaced relation with respect to said supply conduit, said conduits being provided with openings communicating with said chamber; a first duct extending from the outlet of said blower, along the lower portion of said compartment and through the side wall of said conveyance; a second duct extending vertically in said compartment and connected to said first duct near the outlet of said blower, the upper end of said second duct being connected to said supply conduit; a third duct connected at one end to the upper end of said second duct and having its other end extending through the front wall of said conveyance, the forward ends of said return conduits communicating with the upper portion of said blower compartment for conducting the return air to the inlet of said blower; and dampers mounted at the junction of said first and second duct and at the junction of said second and third duct, whereby fresh air can enter said third duct, thence into said supply conduit and exhaust air from the return conduits can be discharged through said first duct to the exterior of said conveyance when the

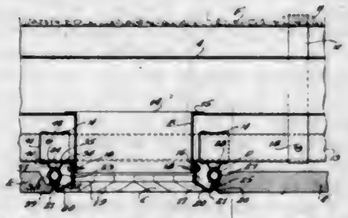
dampers are in one extreme position, and all the air can be in constant recirculation when the dampers are in the other extreme position.

2,734,445
RECIRCULATING REGISTER
Nicholas E. Whitney, Michigan City, Ind., assignor to Radiant-Aire Corporation, Michigan City, Ind., a corporation of Indiana
Application February 27, 1953, Serial No. 339,296
3 Claims. (Cl. 98—38)



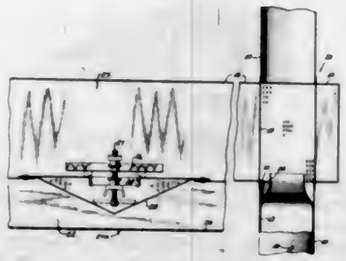
3. A baseboard register designed to be mounted near the baseboard of a wall comprising a housing having an exposed front wall, and rear, side and top walls, the bottom portion of the front wall having an induced air inlet opening for receiving air from the room, said housing having a forced air inlet opening for receiving heated air, said housing having a discharge opening therein at its upper front portion for discharging a mixture of heated air from said forced air inlet opening and room air from said induced air opening, baffle means in said housing extending from a point beneath said induced air inlet opening and between the latter opening and the forced air inlet opening and terminating below said air discharge opening to provide a front induced air passageway extending between said induced air inlet opening and said discharge opening and a rear forced air passageway extending between said forced air inlet opening and said discharge opening, the spacing between the said baffle means and the front and rear walls, respectively, of the housing gradually decreasing to the top of the baffle means to provide the forced air passageway and the induced air passageway with tapering cross sections reaching a minimum cross section at their juncture.

2,734,446
CEILING INSTALLATION
Cortland N. O'Day, Port Washington, N. Y., assignor to Air Devices, Inc., New York, N. Y., a corporation of New York
Application July 25, 1949, Serial No. 106,533
2 Claims. (Cl. 98—40)



1. In an acoustical tile ceiling construction having an upper structural interior celing and a lower suspended ceiling spaced substantially therebelow, said suspended ceiling being composed of a plurality of acoustical tiles arranged in flush relationship, a beam structure extending parallelly to and between said upper and lower ceilings and closely adjacent to said lower ceiling and suspension means for suspending the beam structure from the upper ceiling and the lower ceiling from the beam structure; an air conditioning distribution system having a main conduit extending parallelly to and between said upper ceiling and said beam structure, a transverse branch conduit extending from said main conduit into said lower ceiling and a flush diffuser outlet mounted in said lower ceiling, said outlet comprising a frame mounted flush with the lower ceiling and flush with the faces of the acoustical tiles, said frame having upwardly extending peripheral side flanges at the periphery thereof parallel to the axis of the transverse conduit and transverse to the axis of the main conduit and said flanges having semicircular suspension means at their upper end, said frame being also provided with an interior flange connected to the lower end of said branch conduit.

2,734,447
HIGH PRESSURE CONVERTER
Edwin J. Kurek, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a corporation of New Jersey
Application June 20, 1951, Serial No. 232,554
11 Claims. (Cl. 98—40)

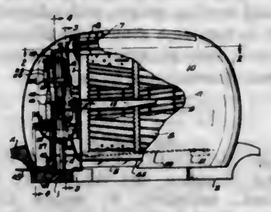


3. In a ventilating apparatus, a supply duct carrying an air stream at an appreciable velocity from an upstream source exhibiting a total pressure appreciably above atmospheric pressure to a downstream zone exhibiting a lesser total pressure, said duct having upstream and downstream duct portions of substantially equal cross-sectional area, convergent means in said duct between said upstream and downstream portions and having a throat of lesser cross-sectional area than the cross-sectional area of said duct, whereby the static pressure and the velocity pressure components of the total pressure of the air stream are mutually converted at said throat and are re-converted in a discrete zone in said duct extending downstream from said throat, and means forming an opening in said duct at said discrete zone, the relationship of the cross-sectional areas of said throat and said duct and the relationship of the spacing dimension between said throat and said opening being such that the static pressure inside of said duct at said opening is maintained in excess of the pressure outside of said duct at said opening, thereby to bleed a quantity of air from said duct outwardly through said opening.

2,734,448
BREAD TOASTER
Paul J. McCullough, St. Louis, Mo., assignor to The Toastswell Company, Inc., St. Louis, Mo., a corporation of Missouri
Application August 6, 1951, Serial No. 240,495
8 Claims. (Cl. 99—328)

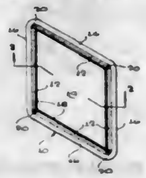
2. In a bread toaster, an upright, a bread carrier slidable vertically thereon and having a section which may be tilted relative to the remainder of the carrier by the weight of a bread slice placed on the section, a vertically disposed disc journaled in the frame, a link supporting the carrier from a point on the disc spaced radially of its journal, a heating element, an electric motor operatively connected to the disc, a switch for the motor circuit

controlled by the disc, a stop member on the disc, a stop member pivoted on the carrier having stop elements at different levels, said disc stop member cooperating with either of said carrier stop elements to limit the rotation of the disc, the stop member on the carrier being shiftable



by the tilting section to position the lower carrier stop element in the path of movement of the disc stop member when the section is unloaded and to position the higher carrier stop element in the path of the disc stop member when said carrier section is tilted downwardly by a bread slice placed thereon.

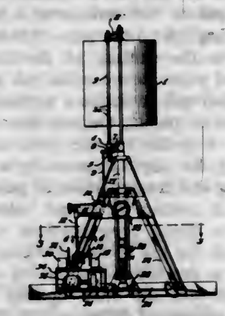
2,734,449
PIE DISH
Arthur C. Erickson, Denver, Colo.
Application October 10, 1952, Serial No. 314,168
1 Claim. (Cl. 99—428)



A pie dish formed as a four-sided receptacle of diamond shape, said receptacle having vertically disposed, fixedly connected, flat sides and a flat horizontal bottom rigid at its periphery with the respective sides, two of the several corners of the receptacle being of obtuse angular formation and the other two corners being of acute angular formation, for disposition of a plurality of crackers within the receptacle with each cracker overlying a side of the receptacle and with the ends of the crackers supporting one another at the several corners of the receptacle, said bottom having a peripheral depression at the juncture of the bottom and the sides for engaging the bottom edges of said crackers, each of said corners being interiorly rounded to provide means for preventing movement of the crackers longitudinally of their associated sides.

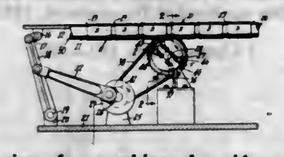
2,734,450
COMPACTING PRESS
Harry Guthrie Bell, Paris, and Jacob Douglas Gay, Jr., Lexington, Ky., assignors to Gay-Bell Corporation, Paris, Ky., a corporation of Kentucky
Application August 18, 1951, Serial No. 242,552
9 Claims. (Cl. 100—99)

1. In a compacting press, a ram, means to hydraulically reciprocate said ram in a vertical direction a control valve for said hydraulic means, a manual lever for said valve with an operative up and stop position, means for stopping the upward movement of the ram comprising a depending rod attached to the ram and reciprocating therewith, a dog mounted on the rod at selective positions along its length, a first abutment in the path of said dog, a second abutment, actuating linkage connected to said manual lever and said first abutment so that upon contact by said dog said linkage will move said manual lever from up to stop position, said first abutment comprising a bifurcated elemention a lever embracing said rod and said linkage operatively attached to said lever with the terminal of said linkage operating said second abutment which contacts and moves said manual lever when said dog contacts and moves



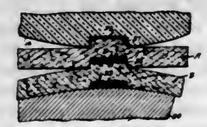
said first abutment, said second abutment having a toggle mechanism which insures the complete movement of said manual lever upon contact therewith.

2,734,451
MARKING DEVICE FOR CAN BODIES
Harold R. Vitense, Berwyn, Ill., assignor to American Can Company, New York, N. Y., a corporation of New Jersey
Application December 12, 1952, Serial No. 325,537
5 Claims. (Cl. 101—5)



1. Mechanism for marking the side seams of can bodies, comprising a longitudinally extending horn for internally supporting tubular can bodies, means for intermittently advancing the can bodies in end to end spaced relation along said horn with the side seams disposed beneath the horn, a die holder rotatable on a horizontal axis beneath said horn at a marking station, said holder being disposed in substantial parallel and tangential relation to said can body side seams and carrying a plurality of peripherally spaced radially projecting die elements for marking the can body side seams at said station, and means for actuating said advancing means and for continuously rotating said die holder in timed relation, whereby on a forward feeding stroke of said advancing means to feed a can body through said marking station a said die element is engaged in rolling contact with such body to mark the side seam thereof, and thereafter on an idle movement of said feeding means through a return stroke said can bodies are momentarily at rest on said horn while the rotation of said die holder is continued to position another die element for similarly marking the side seam of the succeeding can body on the next forward feeding stroke of said advancing means.

2,734,452
METHOD OF RELIEF OR EMBOSSED PRINTING
Burdette L. Rausch, Elgin, Ill.
Application October 2, 1952, Serial No. 312,687
1 Claim. (Cl. 101—32)



A process of printing and embossing with offset printing equipment which consists of attaching a transfer sheet

containing the desired copy to a plate roll, applying ink thereto to transfer the copy to a resilient blanket cylinder transferring the ink to the surface of a hard impression roll, again applying ink to the plate roll and transferring the ink design to the surface of the blanket cylinder, passing a sheet of paper between the ink blanket cylinder and the impression roll to make a printed copy on both sides of the sheet of paper, the one side being a reverse print in register with the transfer print on the opposite side, and raising the copy thereon by a thermography process, fastening this treated sheet of paper on the solid impression roll in contact with and below said blanket cylinder with the raised copy portions on the sheet in exact register with the ink design portions of the resilient blanket cylinder as determined by the ink deposited thereon from the plate roll and then running blank sheets to be printed and embossed between the blanket cylinder and the impression roll with the raised printing on the treated sheet in register with the copy on the transfer sheet.

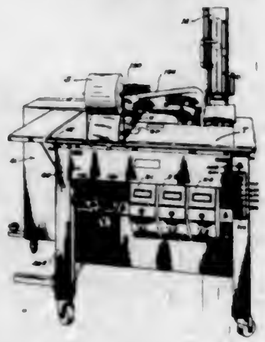
2,734,453

SKIP-PRINT CONTROL IN ADDRESS PRINTING MACHINES

Walter T. Gollwitzer and Robert H. Lease, Euclid, Ohio, assignors to Addressograph-Multigraph Corporation, Cleveland, Ohio, a corporation of Delaware

Original application May 3, 1949, Serial No. 96,288, now Patent No. 2,697,396, dated December 21, 1954. Divided and this application December 4, 1951, Serial No. 259,850

2 Claims. (Cl. 101—58)



1. In a printing machine through which different groups of printing and control devices, each adapted to bear identifying means, including a group identification on at least one such device in each group, at one or more selected identifying positions thereon, are adapted to be passed, one by one into and through a series of positions in the machine, including a sensing position, an impression position and a discharge position, impression means at said impression position, sensing means at said sensing position for sensing such identifying means including group identifications, print-skip control means for said impression means governed by said sensing means, at least two stations in the machine arranged in spaced relation one with the other and the discharge position and to which the devices may be passed after movement thereof into said discharge position, track means along which the devices may advance from the discharge position to pass to said stations, advancing means for advancing the devices along said track means from said discharge position and into said stations, first and second gates in said track means and on which said devices come to rest in succession after advancing movement thereof by said advancing means, means operable after each advancing movement of such a device for withdrawing said second gate and said first gate yieldingly, a rock shaft having effective and ineffective positions, a blocking member on said shaft arranged when said shaft is in said effective position to block said first gate and prevent withdrawal thereof, a cam operable in successive indexing movements to alternately dispose said shaft in effective and ineffective positions, storage means operatively associated with said sensing means and adapted to be set up as an incident to sensing a group identification, and means actuated by said storage means in set up condition to impart an indexing movement to said cam.

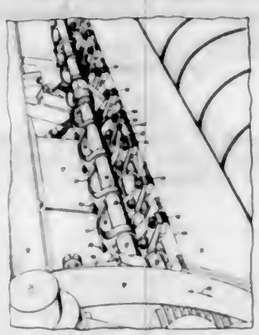
2,734,454

SHEET EDGE TRIMMER FOR PRINTING PRESSES

Philip F. Pabst, Hamden, and William H. Conway, New Haven, Conn., assignors, by mesne assignments, to Federal Paper Board Company, Inc., Bogota, N. J., a corporation of New York

Application October 15, 1954, Serial No. 462,594

8 Claims. (Cl. 101—246)



1. In a cylinder printing press for printing sheets of paper, paperboard and box board, the press including a cylinder, and a counter-member for the cylinder adapted to support a printing plate, said cylinder having a longitudinal trough in its cylindrical surface, the combination of said cylinder; a gripper shaft mounted in said trough for oscillation; a plurality of gripper fingers on said gripper shaft; a plurality of gripper pads less in number than said fingers, said pads being mounted in said trough adjacent the cylinder surface opposite certain of said fingers, said fingers and pads constituting pairs of gripping points; a pair of clamping plates mounted in said trough, at least one of the plates of the pair having friction surfaces opposite other fingers to form two further pairs of gripping points with said other fingers, a knife blade of substantially U-shape mounted between said plates, the bigt of the U being open towards said trough; and a striking plate opposite said blade on said counter-member.

2,734,455

TWO-COLOR RIBBON CONTROL FOR LISTING CALCULATORS

Robert E. Phinney, Livingston, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a corporation of Delaware

Application November 1, 1952, Serial No. 318,162

5 Claims. (Cl. 101—336)



1. In a calculating listing machine or the like having printing devices including type members and related printing hammers, supplemental printing devices contiguous to said first named type members to form a wider printing area for optional simultaneous imprinting action from both of said group of type or from one said group of type members solely, a bi-color printing ribbon extending across both of said printing devices, means for tensioning said ribbon including an adjustable mounting for permitting displacement thereof, ribbon adjusting means for displacing one section of said ribbon to bring a different color to printing position relative to the first said printing devices, auxiliary ribbon adjusting means including a bell crank member operable by said ribbon adjusting means and co-operable therewith to simultaneously displace a second section of the ribbon to bring the correspondingly colored portion of said second section to printing line position relative to said supplemental printing devices and wherein the auxiliary ribbon adjusting means concurrently displaces said tensioning means so that no added tension is imparted to the ribbon due to said displacement of the ribbon by said auxiliary adjusting means.

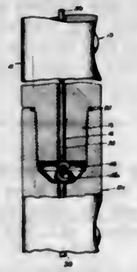
2,734,456

GUN PERFORATOR

William G. Sweetman, Houston, Tex.

Application April 21, 1949, Serial No. 88,740

4 Claims. (Cl. 102—21.6)



1. A perforating gun comprising, a plurality of elongated gun body units adapted to be connected together in end-to-end relation, each unit carrying one or more explosive charges, a separate length of a cord-type detonating fuse extending longitudinally through each of said gun units in detonating relation to the charges carried thereby, and means for transmitting the detonating wave from the fuse in one of said gun units to the fuse in the next gun unit, said means comprising knots formed in the adjacent ends of said fuses and arranged in the adjacent ends of their respective gun units for axial compression when said units are connected together.

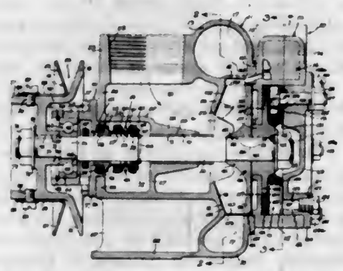
2,734,457

DUAL IMPELLER PUMP

Robert W. Fernstrum, Menominee, Mich., assignor to Marine Products Company, Detroit, Mich., a corporation of Michigan

Application October 6, 1952, Serial No. 313,307

4 Claims. (Cl. 103—4)



1. A dual impeller pump comprising a housing structure including a centrifugal pump housing having a centrifugal impeller chamber therein and a positive displacement rotary pump housing having a rotary impeller chamber therein, a centrifugal pump impeller rotatably mounted in said centrifugal impeller chamber, and a positive displacement rotary pump impeller rotatably mounted in said rotary impeller chamber, said positive displacement rotary pump impeller having resilient vanes of elastic deformable material yieldingly engaging said positive displacement rotary pump housing, each of said housings having liquid inlet and outlet passageways communicating with their respective impeller chambers, said housing structure having a priming passageway therein leading from the outlet passageway of said rotary pump to the impeller chamber of said centrifugal pump whereby to supply priming liquid from said rotary pump to said centrifugal pump.

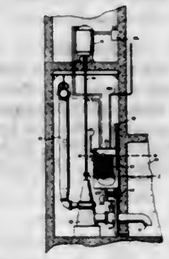
2,734,458

PUMP SPEED CONTROL ARRANGEMENT

Thomas B. Hayes, Corvallis, Oreg.

Application February 5, 1952, Serial No. 270,086

9 Claims. (Cl. 103—35)



1. In a system for handling a liquid containing refuse wherein said liquid flows at varying rates into a liquid sump in which it is desired that the liquid be maintained at a given level and from which the liquid is to be exhausted by a pump having its inlet extending into said sump, the invention comprising a wound rotor induction type electric motor connected to said pump for driving the same, a liquid rheostat including a plurality of spaced-apart, vertical electrodes, electrical conductors connecting the terminals of said rotor to different ones of said electrodes, a casing having a vertical height at least equal to the distance between said given level and a maximum predetermined liquid level and located so that said given and maximum liquid levels fall within the vertical limits of said casing, a liquid connection between said casing and said sump whereby the level of liquid in said sump will be maintained in said casing, said electrodes being fixedly suspended in said casing and extending between said given and maximum levels, said electrodes being so shaped that the resistance of said rheostat at any selected liquid level between said given and maximum levels is such that the speed of said motor is regulated to drive said pump at a relative discharge rate proportional between predetermined minimum and maximum rates to the relative height of liquid in such sump between said given and maximum levels, and means for constantly supplying a flow of water to said casing to maintain a general flow of liquid from said casing to said sump through said liquid connection whereby refuse is prevented from entering said casing.

2,734,459

MOTOR-PUMP UNIT

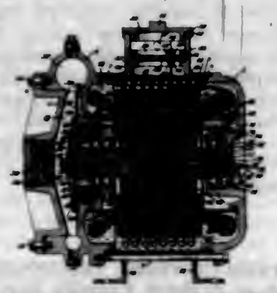
John J. Zimsky, Canonsburg, Pa., assignor, by mesne assignments, to McGraw Electric Company, a corporation of Delaware

Application March 22, 1952, Serial No. 277,933

10 Claims. (Cl. 103—87)

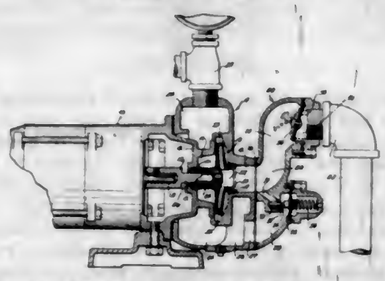
1. A motor-pump unit comprising a motor having a shaft carrying a rotor, a stator comprising laminations disposed about the rotor, a centrifugal pumping element carried by the shaft at one end of the motor, a fluid coolant in thermoconductive relationship with the motor and

disposed thereabout radially outwardly from the stator in direct contact with the laminations of the stator, a con-



duit immersed in the fluid coolant and fluid coolant separate from the first mentioned fluid coolant passing through the conduit.

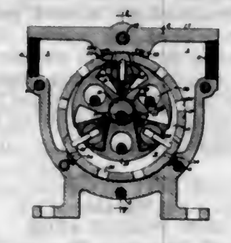
2,734,460
PRIMER FOR CENTRIFUGAL PUMP
Elmer M. Deters and Glenn A. Patterson, Davenport, Iowa, assignors to Red Jacket Manufacturing Company, Davenport, Iowa, a corporation of Iowa
Application November 1, 1951, Serial No. 254,312
4 Claims. (Cl. 103—113)



1. In combination with a centrifugal pump having a suction inlet and a recirculating passage communicating with the discharge chamber in the pump and a ported face at which said suction inlet and recirculation passage terminate, a priming attachment having a ported face attached to the pump with the ported face of the attachment confronting the ported face of the pump, said attachment being formed with an inlet passage terminating at the ported face of the attachment and positioned thereat in communication with said suction inlet for the pump, a recirculation passage leading from said ported face of the attachment and positioned thereat in communication with said recirculation passage in the pump, a primer passage communicating between said inlet and said recirculation passages in the attachment, and a normally open valve in said primer passage movable in response to the pressure in said recirculation passage in the attachment to close when the fluid pressure in the recirculation passage in the attachment exceeds a predetermined value and to recirculate fluid from the recirculation passage in the attachment to said inlet passage in the attachment when the pressure in the recirculation passage in the attachment drops below a predetermined value.

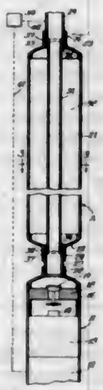
2,734,461
VOLUMETRIC ROTARY MACHINE OPERATING IN A CONTINUOUS STREAM OF FLUID
Eugène Frédéric Porte, Neuilly-sur-Seine, France
Application December 11, 1952, Serial No. 325,350
Claims priority, application France April 18, 1952
6 Claims. (Cl. 103—121)

1. In a rotary volumetric machine operating in a continuous stream of fluid of the type comprising a fluid-tight casing, a barrel-shaped cylindrical rotor having internal radial blades secured thereto, a cylindrical core internally tangent to the rotor, the core having oscillatable slides each cooperating with one of the rotor blades, a shaft supporting the core, and means establishing a mechanical connection between the rotor and the core whereby the former drives the latter at the same angular velocity: a longitudinally grooved rock shaft constituting



each of said slides, a rocking member having a cylindrical recess in which said rock shaft is positioned, a pivotal connection between said rocking member and core adjacent said core shaft, and said core having recesses in each of which one of said rocking members is positioned with sufficient clearance to allow rocking movement thereof about said pivotal connection.

2,734,462
SUBMERSIBLE WATER PUMPING SYSTEM
Edward J. Schaefer, Fort Wayne, Ind.
Application April 23, 1954, Serial No. 425,151
2 Claims. (Cl. 103—223)



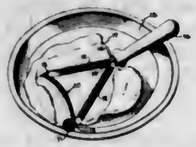
1. A submersible unitary water pumping and pressure storage apparatus adapted to be lowered into a well comprising elongated motor-pump means disposed at the lower end of the apparatus and having a water outlet at its upper end, and pressure storage means disposed above said motor-pump means at the upper end of the apparatus, said pressure storage means including an elongated rigid tubular casing connected at its lower end to said motor-pump means at said outlet, connector means providing a fluid flow connection at the upper end of said casing for connecting the same to a discharge line, an elongated resilient expansible tube disposed axially in said casing in annularly spaced relation therefrom, said tube being disposed in the path of flow from said outlet to said connector means for passage of pumped water therethrough, and means at the opposite ends of said tube providing a seal with said casing whereby to define an annular air compression chamber between the tube and said casing, the size of said pressure storage means being sufficient relative to the fluid capacity of the motor-pump means so that the internal volume of said expansible tube is adequate to provide a pressurized water storage chamber under the pressure of said expansible tube and the air in said compression chamber when the tube is expanded.

2,734,463
RAILWAY TRACK BALLAST TAMPING APPARATUS
Samuel R. Hursh, Bala Cynwyd, and James B. McWilliams, Pittsburgh, Pa.
Application October 5, 1950, Serial No. 188,494
41 Claims. (Cl. 104—12)



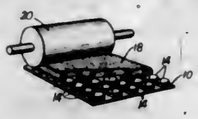
1. In railway track ballast tamping apparatus, a car having wheels for mobility on the track; a plurality of pneumatically-actuated percussion tampers for compacting ballast beneath the ties; a normally-raised support guided for up and down movement on the car; means connecting the tampers individually to the support; means for lowering the support to bring the tampers into operative position relative to the track bed; and spring cushioning means embodied in the connecting means aforesaid, permitting the tampers to yield individually in the event of abnormal resistance of the ballast stones to being compacted beneath the ties by the hammering and compressing action of the tampers, whereby the pressure exerted by the individual tampers is equalized to effect uniform tamping.

2,734,464
METHOD AND MEANS FOR ROLLING PIE DOUGH
Ruth G. Hallock and John H. Hallock, Glendale, Ohio
Application April 15, 1953, Serial No. 348,899
4 Claims. (Cl. 107—50)



1. The method of forming the lower crust of a pie comprising the steps of preparing a lump of pie dough of an appropriate size to form said lower crust, placing said lump in the center of the bottom of a pie pan providing a roller, spreading said lump of pie dough progressively radially outwardly from the center of said pan by means of said roller, said spreading continuing up the side wall of the pan to the rim thereof.

2,734,465
CUTTING AND HANDLING DOUGH
Carl T. Head, Marysville, Ind., assignor, by mesne assignments, to Pillsbury Mills, Inc., a corporation of Delaware
Application April 6, 1950, Serial No. 154,404
1 Claim. (Cl. 107—54)



The method of forming and supporting bodies of bread dough which comprises forming said dough into a sheet, cutting said sheet along a plurality of peripheral lines each outlining one of said bodies, said lines being spaced from one another to leave a sheet of scrap dough extending continuously around and between said bodies and each of said lines having one or more discontinuities therein to leave said bodies connected to said sheet of scrap dough by one or more uncut ligaments of dough, supporting said sheet of scrap dough from beneath while leaving said dough bodies unsupported except by said ligaments, and pressing said dough bodies downwardly to sever said ligaments and separate said dough bodies from said sheet of scrap dough.

2,734,466
ROOFING MATERIALS AND ROOF CONSTRUCTION
Le Roy L. Hammial and Virgil C. Benoit, Houston, Tex.
Application October 17, 1950, Serial No. 190,627
1 Claim. (Cl. 108—12)



For use on a roof structure, a pair of roofing members each having a layer of substantially constantly moist asphaltic substance hermetically sealed a predetermined distance within the marginal bounding edges of the same, and said members laid with their opposed marginal portions spaced apart to provide a longitudinally extending slot therebetween, and an I-shaped filler member having a layer of substantially constantly moist asphaltic substance hermetically sealed a predetermined distance within the marginal edges of the same, said filler member positioned between said pair of members with its web portion filling said slot and with its flanges straddling the top and bottom faces of each of the opposed portions of said pair of members, whereby fastening means may be driven through superimposed portions of said filler and roofing members into the roof and sufficiently beyond said hermetically sealed substances without piercing the latter.

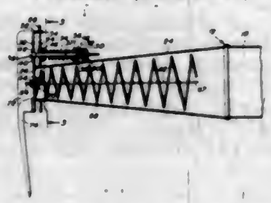
2,734,467
GUTTER SCREEN
Homer M. Steele, Ashland, Ky.
Application November 21, 1950, Serial No. 196,846
1 Claim. (Cl. 108—30)



In combination, an eaves trough having a generally upstanding outer wall terminating in an inwardly extending generally horizontal flange, said trough supported immediately below the edge of a roof, an elongated coarse mesh gutter screen covering the trough and forming a continuation of the roof, a channel-shaped reinforcing bead on the longitudinal inner and outer edges of the screen with the inner bead being disposed against the upper surface of the roof adjacent the edge thereof and the outer bead overlying the trough adjacent the upper surface of the flange, and a plurality of clips attached to the outer bead on the screen, each of said clips including a longitudinally split bracket forming a pair of bendable legs, a reversely bent, U-shaped connecting portion integral with the bracket, said reversely bent portion terminating in a flat leg portion inserted between the lower leg of the outer channel-shaped bead and the screen, said lower leg of the outer bead having indentations therein for retaining the flat leg portion between the lower leg of the outer bead and the screen, one of said bendable legs extending outwardly beyond the outer bead and being disposed against the undersurface of the lower leg of the outer bead and against the upper surface of the

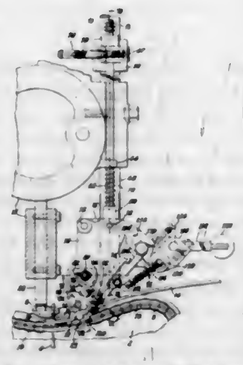
inwardly extending flange on the trough, said one bendable leg terminating in a downwardly extending free end disposed against the outer surface of the upstanding wall of the trough adjacent the upper edge thereof, the other bendable leg extending downwardly and outwardly in diverging relation to said one leg and engaging the undersurface of the horizontal flange on the trough at the inner edge thereof thereby retaining the clip on the trough and holding the inner bead on the screen against the surface of the roof, said bendable leg clampingly engaging the horizontal flange on the trough immediately below the outer edge of the outer bead, thereby preventing upward pivotal movement of the screen in relation to the trough.

2,734,468
FERTILIZER TOOL
George F. Jones, Rome, N. Y.
Application May 2, 1952, Serial No. 285,725
3 Claims. (Cl. 111—95)



3. For use in a fertilizer tool of the type including an open end container and a tine plate resiliently closing the open end, the improvement comprising agitator means, said agitator means including a spiral spring having one end thereof secured to the tine plate, and an elongated agitator rod secured to the tine plate and extending through the center of said sprial spring.

2,734,469
WELT GUIDING AND CUTTING
Heinrich Richard Ruhr, Frankfurt am Main, Germany, assignor, by mesne assignments, to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application March 23, 1954, Serial No. 418,190
Claims priority, application Germany April 27, 1953
21 Claims. (Cl. 112—44)



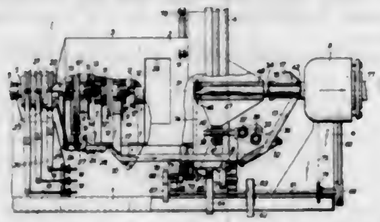
1. A shoe machine having a main frame, feeding and fastening devices in the frame, a main shaft for operating the feeding and fastening devices and a main welt guide mounted in the frame for engagement with a shoe being operated upon close to the point of operation of the fastening devices to direct a welt into said point of operation, in combination with a supplemental welt guide mounted in approximate alinement with the main welt guide for yielding movement toward and from the shoe, independent of the position of the main welt guide to enable the supplemental guide to follow the contour of the shoe as it is fed past the main welt guide.

2,734,470
DEVICE FOR USE IN THE MAKING OF PIPED BUTTON HOLES
Abraham Mosberg, Bronx, N. Y.
Application August 12, 1953, Serial No. 373,798
8 Claims. (Cl. 112—77)



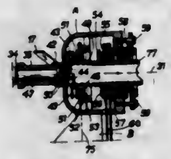
1. In combination with a sewing machine having a needle bar carrying a needle, a presser foot bar which can be raised and lowered, carrying a presser foot, a table for supporting work to be sewn, under said bars and means for feeding the work in a predetermined straight line to the needle, of a member having an elongated channel, positioned on the table parallel to said line lengthwise and below said bars with the longitudinal opening of said channel to one side of the needle and facing said needle, a track means and a track-engaging means positioned to one side of the needle; one of such means being on said member and the other of such means being on the presser foot; said track means and track-engaging means being in disengagement when the presser foot bar is raised and in engagement when the presser foot bar is lowered; upon engagement of such means, the member is afforded movement parallel to said line; said member being adapted to receive within its channel, a piece of fabric folded on itself to form two plies, so that said fabric piece may be positioned with its fold line within and along said channel and with portions of both its plies extending out of the lengthwise opening of said channel beyond the needle, an elongated element adapted to be set between the plies along their fold line; said elongated element fitting within and along said channel and means for releasably holding said elongated element within said channel, whereby on operation of the machine, said needle will engage both said plies and enclose said elongated element between said fold line and the line of stitching effected; said member affording unhindered needle operation along a predetermined length of its channel.

2,734,471
MACHINE FOR PRODUCING FLEXIBLE TUBING
René Bornand, Zurich, Switzerland
Application July 25, 1951, Serial No. 238,539
Claims priority, application Switzerland July 27, 1950
9 Claims. (Cl. 113—35)



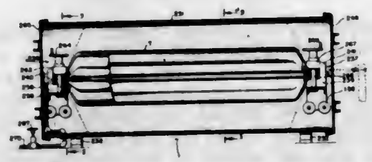
1. In a machine for producing flexible tubing from band material wound in form of rolls on rotary reels mounted in coaxial relation in a rotary cage structure rotatably supported at both ends and of which the axis coincides with the machine axis, separate bearing means for each of said rotary reels in which said reels are detachably mounted, a tool carrying mandrel rotatably and coaxially mounted in said cage structure in front of said rotary reels, means to drive said mandrel separately from said cage structure, an axially extending lap bushing freely rotatable on said mandrel, and adjustable braking means for each band material roll engaging the periphery of said reels for independently braking the rotary movement of each reel and thus the movement of the bands.

2,734,472
APPARATUS FOR PRODUCING FLEXIBLE TUBING
René Bornand, Zurich, Switzerland
Application July 25, 1951, Serial No. 238,540
Claims priority, application Switzerland July 27, 1950
1 Claim. (Cl. 113—35)



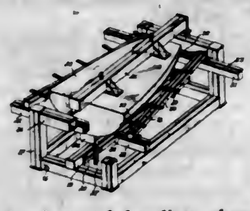
In an apparatus for producing endless, flexible corrugated tubing from helically wound, overlapping bands of material, means for reducing twisting stresses on the finished tubing caused by the tendency of the tubing to rotate due to the action of the corrugating means, said means comprising a driven shaft, a sleeve mandrel freely rotatably journaled on said shaft and on which the tube forming bands are helically wound into tube shape, cooperating interior and exterior freely rotatable deforming rollers for continuously corrugating the tubing through rolling engagement therewith as the tubing is stripped from said mandrel, said interior rollers being carried by said shaft beyond the end of said mandrel for circumferential movement about the shaft axis in response to rotation of said shaft, said exterior rollers being mounted for concentric movement about said shaft axis, means for rotating said exterior rollers about said shaft axis in synchronization with said interior rollers, said exterior and interior deforming rollers having radially projecting axially spaced, circumferentially extending, interdigitated ribs on the opposing surfaces thereof for corrugating the tubing as it is stripped from the mandrel, and means for crowding the corrugations comprising outer, freely rotatable, upsetting rollers spaced axially from said deforming rollers and seating in the corrugation grooves of the tubing, means driving said upsetting rollers to cause said crowding of the corrugations, all of said rollers having their axes disposed radially outwardly from said shaft axis.

2,734,473
APPARATUS FOR SHAPING TUBES BY FLUID PRESSURE
Julian L. Reynolds, Richmond, Va.
Application November 14, 1950, Serial No. 195,567
2 Claims. (Cl. 113—44)



1. A device for forming cylindrical tubes from corrugated tubes comprising a cylindrical tubular die, a pair of spaced apart movable carriages adapted to suspend a corrugated tube therebetween, mounting means adapted to roll said carriages into said die and engaging said die surface, means retaining said carriages within said die, core members adapted to be disposed in each end of said corrugated tube, at least one of which is apertured, clamping means disposed on each of said carriages adapted to clamp the ends of said tube about said core members to effect a seal pressure tight juncture, and means for introducing high pressure fluid through said apertured core member and into said corrugated tube.

2,734,474
METHOD OF STRETCH-BENDING SHEET METAL
Serge Golbert, Paris, France, assignor to Societe Nationale de Constructions Aeronautiques du Sud-Est, Paris, France
Application May 4, 1951, Serial No. 224,545
Claims priority, application France May 15, 1950
2 Claims. (Cl. 113—51)

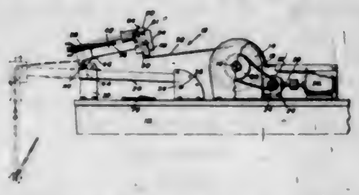


1. A method of stretch-bending plane sheet metal blanks, more particularly to obtain double-curved stampings from thin sheet metal, which comprises laying freely the plane sheet metal blank on a contour which reproduces the contour of the longitudinal trim lines of the stamping to be obtained, flexing said sheet metal blank lying on said contour by the application along a substantially longitudinal line thereof of a uniformly distributed stress less than the elastic limit of the material forming the blank so as to attain end heights with respect to said contour at the most equal to those of the transverse trim lines of the stamping, drawing on said sheet metal blank maintained in flexed state clamping lines exactly reproducing the curves forming said contour, determining the angle of said blank maintained in flexed state with a horizontal transverse line at each point of said drawn clamping lines, removing said stress whereby said sheet metal blank springs back to planar shape by its own elasticity, forming along the developed clamping lines drawn on the plane metal sheet blank flanged edges usable for clamping said blank during the stretch-bending step whereby the inner edges of said flanged edges coincide with the developed drawn clamping lines, the angle of said flanged edges with the remaining planar part of the developed blank being equal at each point of their inner edges to the angle determined at the corresponding point of said clamping lines when the blank was flexed, clamping the flanged edges of the thus pre-formed blank so that their inner edges coincide with the contour of the longitudinal trim lines of the stamping to be obtained whereby the blank part comprised between said clamped flanged edges is flexed, stretch-bending said part around a shaping die the shape of which reproduces that of the stamping to be obtained, and cutting out the flanged edges alone.

2,734,475
ANCHOR HANDLING APPARATUS
Roy L. Fyock, Roanoke, Va.
Application May 12, 1954, Serial No. 429,253
7 Claims. (Cl. 114—210)

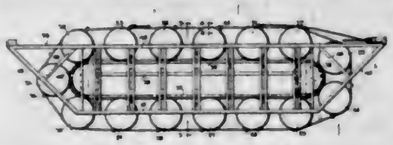
1. An anchor handling apparatus for boats comprising a support standard adapted to be attached on a boat, an arm assembly pivotally secured to said standard, an anchor stock receiving guide pivotally secured to said arm

assembly, and resilient means interposed between said standard and said arm assembly engaging said arm as-



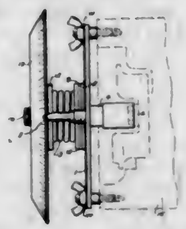
sembly urging said arm assembly to an outwardly extending position.

2,734,476
BELT CONNECTED ROLLER ARRANGEMENTS FOR FORMING VEHICLE TRACKS AND OTHER PURPOSES
Richard O. Marsh, Jr., Baltimore, Md.
Application April 14, 1952, Serial No. 282,238
11 Claims. (Cl. 115—1)



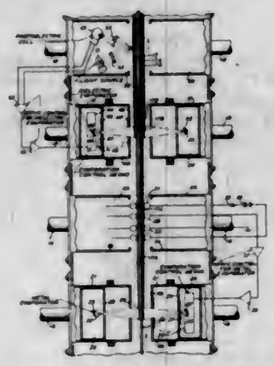
5. An amphibious vehicle having a frame structure surrounded by a continuous track means, said track means comprising a series of spaced liquid-tight drums free to roll upon and about said structure and belts for transmitting rolling motion of each drum to or from a preceding drum and separately to or from a succeeding drum of the series, such belts also providing tread means for the vehicle.

2,734,477
CRANKSHAFT POSITION INDICATOR
John J. Rose and Melvin F. Kollmann, Dayton, Ohio
Application December 23, 1953, Serial No. 400,154
4 Claims. (Cl. 116—124)
(Granted under Title 35, U. S. Code (1952), sec. 266)



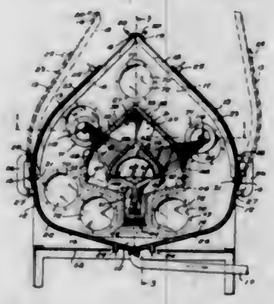
1. Engine timing apparatus for timing an engine through a magneto including a shaft where direct access to a crankshaft is not possible comprising support means constituting a magneto cover plate for mounting on the magneto a shaft journalled in said support means having coupling means at one end thereof for engagement with the magneto shaft, a timing disc fixed to the other end of the shaft, a reference pointer connected to the support means and fixed relative to the timing disc, a clutch element fixed to the support means, a second clutch element fixed to the shaft, a resilient clutching element free between the first and second clutching means, and means mounted on said shaft and associated with said clutch elements for applying a predetermined braking load to the shaft to eliminate backlash effects whereby a highly accurate timing of the engine may obtain.

2,734,478
APPARATUS FOR FABRICATING A COMPOSITE ELECTRICAL CONDUCTOR
Frederick W. Reynolds, Ridgewood, and George R. Stilwell, Plainfield, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application December 29, 1951, Serial No. 264,074
7 Claims. (Cl. 118—8)



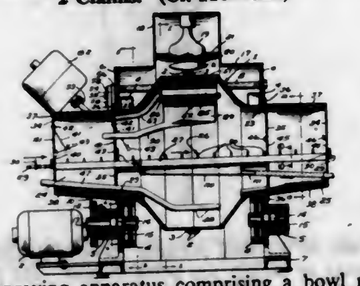
1. Apparatus for fabricating a relatively long composite conductor comprising alternate thin layers of metal and dielectric material, which comprises a multiplicity of evacuated thermal evaporating chambers for rapid application of thin metal layers to dielectric material, a multiplicity of evacuated thermal evaporating chambers for rapid application of dielectric layers to conducting material, a multiplicity of control chambers for determining the thickness of applied metal and insulating layers, control means associated with each of said control chambers for controlling the thickness of applied metal and insulating layers, and means for conducting a core member successively through a metal evaporating chamber, a metal thickness control chamber, a dielectric evaporating chamber, and a dielectric thickness control chamber.

2,734,479
CENTRIFUGAL SPRAYING COATING APPARATUS
Edward O. Norris, Westport, Conn.
Application May 14, 1952, Serial No. 287,789
5 Claims. (Cl. 118—326)



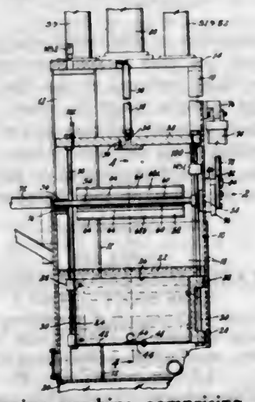
1. Apparatus for spraying articles, comprising stationary walls including end and top walls forming a housing enclosing a spray zone which is closed except for an opening to pass the articles to be sprayed, conveyor means conveying articles through said opening into said spray zone, spray means in said housing discharging a spray of material onto said articles as they advance through said spray zone, all exposed stationary surfaces above the path of said articles, including said top walls, sloping at an angle of at least 45 degrees with their entire lower edges disposed beyond the path of said articles so that spray material which is intercepted thereby flows along the sloping surface and is discharged beyond the path of said articles.

2,734,480
CENTRIFUGAL SPRAY COATING APPARATUS
Edward O. Norris, Westport, Conn.
Application May 14, 1952, Serial No. 287,790
2 Claims. (Cl. 118—326)



2. A spraying apparatus comprising a bowl mounted to rotate, said bowl having an opening in at least one end and having an inner surface forming an annulus to retain a spray-forming material, means for rotating said bowl to cause said material to form centrifugally a peripheral film in said bowl, means including fixed top walls mounted outside of said bowl end forming a chamber communicating through said open end with the interior of said bowl, means to convey articles to be sprayed into and out of said bowl through said chamber, all stationary surfaces above the path of said articles including said top walls sloping at an angle of at least 45 degrees and having their entire lower edges disposed beyond the path of said articles to cause collected spray material to flow along the under surface of said walls away from the articles being sprayed, a sprayer positioned to project spray-forming material as a spray to form a spray zone within said bowl adapted to spray articles while in said zone.

2,734,481
SAND CORE DIPPING MACHINE
Bertil Johnson and Willard C. Shaw, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 27, 1952, Serial No. 317,004
7 Claims. (Cl. 118—421)



1. A core dipping machine comprising, in combination, a tank of dipping material, an invertible core supporting rack rotatably supported over said tank, a bucket immersed in the tank beneath the said rack adapted to be lifted for raising a quantity of dipping material, power means for inverting the rack when the bucket is in the bottom of the tank, said means for inverting the rack including a cam plate and a crank arm having interengaging means for accelerating the rotating motion of the rack from a slow start of the said inversion and for decelerating the stop of said inversion, and means preventing any inversion of the rack while the bucket is being lifted.

2,734,482
THE METHOD OF CONTROLLING THE SEX OF AVIAN EMBRYO, IMPROVING EMBRYO HATCHABILITY AND IMPROVING VIABILITY OF THE HATCHED CHICK
William Seltzer, Vineland, N. J., assignor to Vineland Poultry Laboratories, Vineland, N. J., a partnership
No Drawing. Application June 19, 1953, Serial No. 362,947
33 Claims. (Cl. 119—1)

1. The steps in a method of hatching avian eggs which comprise placing fertile eggs in the removable open-work tray of an incubator which is provided with heating means to maintain incubating temperature and with means for supplying the incubator atmosphere with moisture in suitable humidifying form; effecting distribution substantially uniformly throughout the thin interiorly-contained egg membrane and shell membrane of each egg carried by the tray, for attenuated storage therein in peripherally enveloping relation to the albumen and in remote relation to the albumen-enveloped other content of the egg, of a liquid-carried sex-hormone substance selected from one of the sub-classes, namely, (*a*) estrogens and (*b*) androgens, of the class of sex hormones and a liquid-carried substance that biologically improves embryological development and hatchability and a liquid-carried bactericide, by wetting exteriorly the shells of the tray-carried eggs with the liquid-carried substances and their liquid carriers; subjecting the eggs to incubating conditions provided by said heating means and moisture-bearing atmosphere for developing the physiological processes of the embroyos of embryonating eggs in the tray to effect transmission in each, from the peripheral attenuated storage thereof in said membranes, of the sex-hormone substance to the embryonic sex-differentiating gonads to influence the latter, and of said second-mentioned substance to the embryo for assimilation, and of said bactericide to seats of infection; and, upon hatching, removing the hatched birds.

2,734,483
FLEA REPELLING ANIMAL COLLAR
Howard J. Peo, Irondequoit, N. Y.
Application March 11, 1953, Serial No. 341,759
2 Claims. (Cl. 119—160)

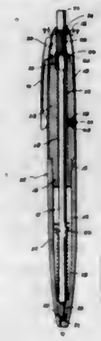


1. A disposable flea repellant animal collar comprising a flexible one-piece loosely woven fabric tube having both ends closed and containing a flea repelling powder, a ring on one end of said tube and tying string elements on the other end of said tube, whereby said tube may be placed about an animal's neck, the string end extended through said ring and the string end securely fastened to said tube by said string elements.

2,734,484
BALL POINT PEN
John F. O'Sullivan, Los Angeles, Calif., assignor to Frawley Corporation, Culver City, Calif., a corporation of California
Application July 11, 1952, Serial No. 298,377
5 Claims. (Cl. 120—42.03)

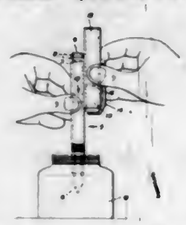
1. A ball point writing instrument comprising: a barrel having an open front end and an inner axially extending

chamber formed with an internal side projection at the rear end thereof; a tubular writing cartridge having an ink reservoir and a ball point assembly, said cartridge being loosely mounted in said barrel for sliding movement from an enclosed carrying position to an exposed writing position extended through said open end, the rear end of said cartridge being rockable away from the axis of said barrel; spring means urging said cartridge toward said carrying position; operating means including an operating plunger mounted at the rear end of said barrel and constrained for axial sliding movement, said plunger



having a foot formed with laterally spaced inclined teeth, one of said teeth engaging the rim of said cartridge adjacent said projection to shift said cartridge away from the axis of said barrel and beneath said projection, and the other of said teeth thereafter engaging the opposite side of the rim of said cartridge for continuing the lateral shifting movement to securely position said cartridge under said projection whereby upon the rearward retraction of said plunger said cartridge is held in writing position; and means for releasing said cartridge from beneath said shoulder for retraction to said carrying position.

2,734,485
FOUNTAIN PEN
José Carlos Millás, Tarara, Cuba
Application September 3, 1954, Serial No. 454,096
2 Claims. (Cl. 120—47)



1. A fountain pen comprising, in combination, an ink barrel, a magnetic piston armature operable in the barrel for filling the same, a cap removably mounted on one end portion of the barrel, and a magnet in the cap, said cap being manipulable alongside the exterior surface of the barrel for bringing the magnet close enough to the magnetic piston armature to attract and actuate same.

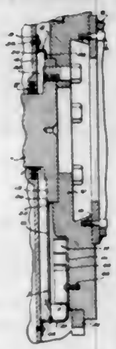
2,734,486
FOUNTAIN PEN
Harry Aramian, Bronx, N. Y.
Application December 6, 1954, Serial No. 473,233
4 Claims. (Cl. 120—51)

2. A fountain pen comprising a barrel having means providing an ink reservoir; a writing tip comprising a cone-like shell divided longitudinally to form two separate portions converging at a point arranged to constitute a writing tip; means providing a passage from the reservoir to the interior of said shell; and means for



shifting one of the shell portions forwardly with respect to the other to project the point thereof, said projected portion being arranged to constitute a writing quill.

2,734,487
CONSTRUCTION FOR MACHINES SUCH AS ENGINES OR THE LIKE
Maurice W. Brainard, Los Angeles, Calif., assignor of one-half to O'Keefe & Merritt Company, Los Angeles, Calif., a corporation of California
Application November 29, 1951, Serial No. 258,895
15 Claims. (Cl. 121—194)

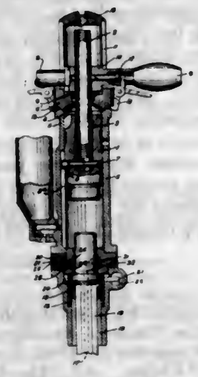


1. In combination, a machine having a case, a shaft projecting from the case to the exterior thereof, and a wheel on the shaft external of the case, blades on the wheel adapted to move air as the wheel rotates, a shield around the shaft between the case and wheel establishing a chamber surrounding the shaft where the shaft issues from the case, and a duct adapted to pass air moved by the blades on the wheel to the chamber.

2,734,488
PORTABLE INTERNAL-COMBUSTION PERCUSSIVE TOOLS
Aloyse Nicolas Wampach, Luxemburg, Luxemburg
Application October 7, 1952, Serial No. 313,420
Claims priority, application Luxemburg October 12, 1951
1 Claim. (Cl. 123—7)

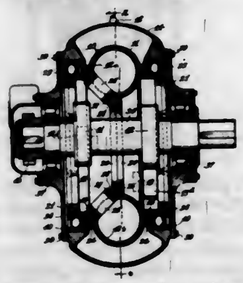
In a portable internal combustion percussive device having an operating tool, in combination, an elongated housing member defining a lower cylinder chamber and an upper combustion chamber; piston means arranged reciprocably in said housing member with said lower cylinder chamber located under and said upper combustion chamber located above said piston means, said piston means serving for actuating the operating tool; tubular

means located above and secured to said piston means; and resilient means in said tubular means and connected



to said piston means permanently urging said piston means toward said combustion chamber.

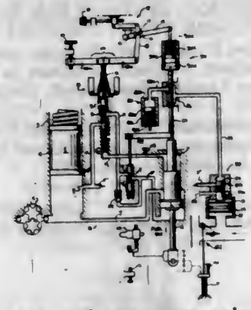
2,734,489
ROTARY INTERNAL COMBUSTION ENGINE
Traugott Tschudi, Flushing, N. Y.
Application December 3, 1953, Serial No. 395,948
5 Claims. (Cl. 123—11)



1. In a rotary four cycle internal combustion engine, a toroidal cylinder comprising annular sections consisting of an outer stator semi-circular in cross-section and inner rotors quarter-circular in cross-section, a drive shaft extending across said cylinder and whose axis of rotation is eccentric with respect to the center of the cylinder, pairs of arcuate pistons fixed to said rotors respectively and operable within said cylinder, the pistons of each pair being disposed diametrically opposite each other, said pistons capable of subdividing the cylinder circumferentially into four chambers, said stator having a gaseous fuel intake port, an exhaust port, and an ignition device, said intake port, exhaust port and ignition device communicating with the interior of said cylinder, pairs of rollers respectively on said rotors, the rollers of each pair being disposed diametrically opposite each other and angularly spaced ninety degrees from the transverse centers of the related pistons, and means on said drive shaft which cooperate with the rollers in timed accord causing two power impulses by said pistons on said drive shaft during each revolution of the drive shaft through the intervention of said rotors.

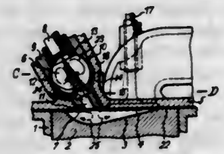
2,734,490
DUAL FUEL ENGINE CONTROL SYSTEM
Lloyd J. Moulton, Mentor, Ohio, assignor to The Marquette Metal Products Company, Cleveland, Ohio, a corporation of Ohio
Application February 26, 1952, Serial No. 273,438
17 Claims. (Cl. 123—27)

1. In a dual fuel engine speed governor having a governor power output motor member and engine speed responsive means for controlling it, mechanism connected to the motor member for operation thereby and having an output element which is movable relative to the motor member, in the direction of operation of the motor member, into and out of two separate motor-member-imparted ranges of movement for enabling successive operation by said element on metering means for



two different fuels, and means responsive to fluctuations in a variable engine-operating condition of one of the fuels and operatingly connected to said mechanism to effect movement of its output element out of one range and into the other range distances generally proportional to the amount of fuel condition fluctuation.

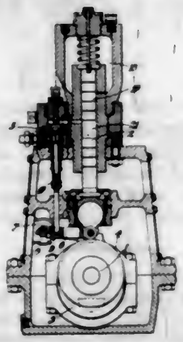
2,734,491
PRECHAMBER COMPRESSION IGNITION ENGINE
Heinrich Hoffmann, Stuttgart-Bad Cannstatt, Germany, assignor to Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim, Germany
Application November 29, 1950, Serial No. 198,196
Claims priority, application Germany December 28, 1949
5 Claims. (Cl. 123—32)



1. A prechamber compression ignition engine comprising a cylinder space, a piston reciprocating space, a main combustion chamber defined by a recess in the head of the piston and by a non-recessed marginal portion of the piston, a cylinder head including a cooling water jacket and a bottom wall closing the cylinder space and cooperating with the marginal portion of the piston in the upper dead center position thereof to direct toward said first-mentioned recess any gases normally positioned peripherally of the cylinder space, a recess in the cylinder head, an insert in the second-mentioned recess defining a substantially spherical prechamber, an injection nozzle opening into said prechamber having its longitudinal axis directed substantially through the center of the prechamber, a substantially cylindrical communicating passageway coaxial with the axis of said nozzle and of greater length than diameter positioned between said prechamber and said main combustion chamber, said passageway opening into said first-mentioned recess defining said main combustion chamber in the direction of the piston head and terminating substantially in the plane of the cylinder head bottom wall to thereby leave unobstructed the full depth of said main combustion chamber, and an abruptly stepped substantially cylindrical enlargement coaxial with said passageway and directly communicating with said prechamber, said enlargement defining a sharp edge by the intersection of essentially 90 degrees of the bottom surface thereof and the walls forming said communicating passageway, the diameter of said enlargement being greater than the axial length

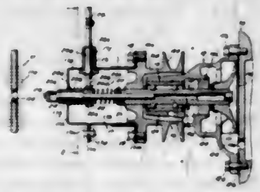
thereof, and the cross section of said passageway being of sufficient size to permit direct injection of a substantial portion of the injected fuel from the nozzle into said main combustion chamber.

2,734,492
FUEL INJECTION SYSTEMS FOR INTERNAL-COMBUSTION ENGINES
William Hamilton Purdie, Percy Jackson, and John George Gunn, Sunderland, England, assignors to William Doxford and Sons Limited, Sunderland, England, a British company
Application February 26, 1952, Serial No. 273,503
Claims priority, application Great Britain February 26, 1951
9 Claims. (Cl. 123—41)



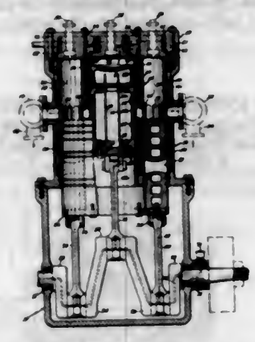
1. A fuel injection system for a reversible internal combustion engine comprising a pump chamber with inlet and outlet connections, a reciprocable pump piston in said chamber, engine-driven means for operating said pump piston in timed relation with the engine so that the end of the pump operating stroke substantially coincides with the end of the engine compression stroke, an accumulator piston in said chamber, resilient means urging said accumulator piston inwardly of the pump chamber whereby fuel displaced by the pump is stored in said chamber under pressure, a discharge valve controlling delivery through said outlet connection, and engine-driven means for operating said discharge valve in timed relation with the engine arranged so that the valve is opened shortly before the end of the engine compression stroke for each direction of rotation of the engine and so that the valve will remain open at least as long as is required for injection of the fuel.

2,734,493
VARIABLE AND REVERSIBLE PITCH FAN FOR INTERNAL-COMBUSTION ENGINE
George W. Findley, Birmingham, Mich., assignor, by mesne assignments, to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application December 22, 1952, Serial No. 327,329
3 Claims. (Cl. 123—41.12)



1. A variable pitch fan for an internal combustion engine comprising a rotatable fan hub, a plurality of fan blades radially mounted on said hub and journaled for movement about their radial axes, an hydraulically actuated piston operatively connected to said fan blades to effect pitch adjustment thereof, resilient means opposing displacement of said piston in either direction from a neutral position corresponding to a substantially zero pitch position of said fan blades, means defining an enclosed cylinder chamber cooperable with said piston, a portion of said chamber being disposed in heat transfer relationship to said engine, and a charge of temperature responsive, variable pressure fluid in said cylinder chamber, whereby said piston is actuated by said fluid in the one direction to increase the engine cooling properties of said fan blades as engine temperature increases, and manually operable means for displacing said piston in the opposite direction to reverse the pitch of said fan blades.

2,734,494
MULTICYLINDER ENGINE
William Waterval, Brooklyn, N. Y.
Application September 28, 1954, Serial No. 458,894
5 Claims. (Cl. 123—52)



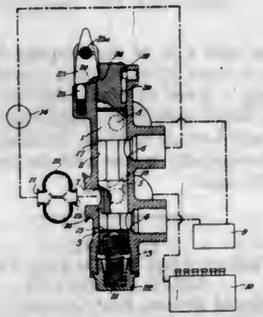
1. A multi-piston engine comprising inner and outer coaxial chamber members forming inner and outer round gas chambers; inner and outer pistons in said chambers respectively, said members being provided with gas inlet and exhaust ports in their longitudinal mid portions and said outer piston being provided with substantially radial crossing ducts in the mid portion thereof to selectively establish communication between the inner chamber and the exterior of the outer chamber member by registry with said ports.

2,734,495
YIELDING SPACER
Daniel H. Pierce, Birmingham, Mich.
Application February 16, 1952, Serial No. 271,897
8 Claims. (Cl. 123—90)



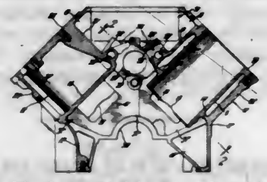
1. In a valve tappet for use in an internal combustion engine, the combination of a body having a bore therein which is closed at one end and open at its opposite end, a valve within said bore having oppositely disposed side walls and having a diameter less than the diameter of the bore to permit a restricted flow of viscous material between said valve and the wall of the bore, a movable end wall sealing the open end of the bore, resilient means urging said end wall inwardly, a valve rod connected to said valve and extending through said movable end wall, a choke ring co-operating with said valve on the side of said valve adjacent the closed end of the bore, said choke ring having an outer diameter greater than the diameter of said valve and only slightly less than the diameter of the bore, resilient means for urging said choke ring into sealing relation with said valve, and a mass of soft, solid but flowable viscous material in the bore on opposite sides of said valve.

2,734,496
INTERNAL COMBUSTION ENGINES
Arthur Charles Edward Hammond, Brightlingsea, Essex, England, assignor to Davey, Paxman & Company Limited, Colchester, England
Application July 8, 1953, Serial No. 366,779
Claims priority, application Great Britain July 11, 1952
14 Claims. (Cl. 123—139)



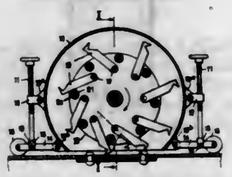
1. In combination with an internal combustion engine of the compression ignition type having fuel connections including therein a fuel feed pump with a suction inlet and a discharge outlet arranged to pump the fuel from a fuel supply to the fuel injection pump, of means for automatically stopping the engine in the event of an abnormal operating condition, said means comprising valve mechanism interposed in said fuel connections between said fuel feed pump and said fuel supply and between said fuel feed pump and said fuel injection pump, and means responsive to an abnormal operating condition of said engine and operatively connected to said valve mechanism to reverse the suction and delivery of said fuel feed pump so that said fuel in said injection pump is withdrawn therefrom.

2,734,497
CYLINDER BLOCK
Charles A. Chayne, Bloomfield Township, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application November 19, 1952, Serial No. 321,408
11 Claims. (Cl. 123—195)



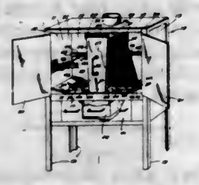
1. An engine block comprising a pair of banks of cylinders disposed obliquely with respect to an intermediate plane, said banks of cylinders being formed to provide cooling fluid jackets around the outer parts of said cylinders and terminating in spaced relation to the inner ends of said cylinders, transversely disposed reenforcing walls extending across said block between the end walls thereof and between the ends of said cylinders extending inwardly from said jackets, aligned bearing supports formed in the edges of said transversely disposed walls opposite said cylinders for rigidly supporting the engine crankshaft with respect to said jackets, and openings formed in said transversely disposed walls and between said cylinders and terminating immediately adjacent the lower ends of said cylinders and in spaced relation to said bearing supports for receiving said inner ends of said cylinders.

2,734,498
ARRANGEMENT FOR CLEANING METAL AND STONE SURFACES THROUGH IMPACT
Paul von Arx, Sissach, Switzerland, assignor to P. von Arx & Co., A. G., Sissach, Switzerland, a Swiss company
Application August 7, 1953, Serial No. 372,931
Claims priority, application Switzerland August 11, 1952
1 Claim. (Cl. 125—3)



In an apparatus for cleaning metal and stone surfaces and having a casing with an opening directed downwardly and a plurality of adjacent impact tools pivotally secured to a plurality of spindles mounted between two rotatable plates within said casing, said tools extending beyond the periphery of said plates a length such that said tools may pivot around their spindles without impinging against the inner periphery of said casing and are adapted, as they pass in register with the downwardly directed opening in the casing to impinge on the surface to be cleaned, that improvement comprising a threaded upright at the front and at the rear of said casing, a wheeled frame at the front and at the rear of said casing, each upright being pivotally mounted at its lower end on one of said frames to revolve freely around the vertical axis of said upright, each of said wheeled frames being pivotally secured to said casing, and a nut threadedly engaging each upright and pivotally secured to caid casing, whereby the angle of the casing relative to the surface to be cleaned may be varied and the height of the casing above the surface may be varied.

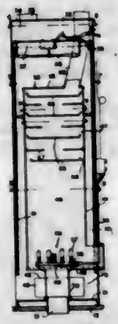
2,734,499
CHARCOAL BROILER
Giuseppe Lombardi, West Warwick, R. I.
Application June 9, 1954, Serial No. 435,423
5 Claims. (Cl. 126—25)



1. A broiler construction comprising an upper oven chamber having sides, a back, and a top, and a lower chamber below the oven chamber, front and rear support bars between said chambers, two parallel spaced upper runners depending from the oven chamber top and two parallel spaced lower runners upstanding from the support bars, said runners extending from the front to the back, a fire box having a front, a rear, grate sides, and a grate bottom slidably mounted between the upper and lower runners and providing two spaced broiling compartments

between the fire box and the housing sides, floor sections on the sides of the fire box spaced from the fire box and supported on the support bars, and spaced cross bars on each side extending from the lower runners to the floor sections.

2,734,500
SPACE HEATER
Bruce V. Myers, Marshall, Mich.
Application July 28, 1951, Serial No. 239,141
7 Claims. (Cl. 126—110)



1. A space heater comprising an elongated upright casing having an air inlet at the top end and one or more air outlets adjacent the bottom end, a heat insulated liner supported about the internal wall surface of said casing and extending to a point adjacent the bottom end and terminating at a point approximately on a level with the top extremity of said air outlets, top and bottom plates carried by said casing, said top plate spaced inwardly from the top end of said casing, a cover for the top end of said casing, said top plate and top cover defining an air chamber, said top and bottom plates each having an opening, an axial flow blower mounted on said top plate moving air from said air chamber downwardly through said casing towards said air outlets, an elongated upright combustion unit, comprising an upper portion of larger cross sectional area, the side walls of which portion are substantially uniformly spaced from the side walls of the casing, and a lower portion of reduced cross-sectional area, said combustion unit being supported by said plates centrally of said casing and provided with an exhaust gas outlet at the top thereof, a burner mounted in said combustion unit and a plurality of baffles mounted in the upper half portion only of said combustion unit to provide a tortuous path for flow of hot gases to disperse said heat to the side walls of said unit and to heat the air flowing downwardly through the casing, said combustion unit lower portion of reduced cross sestional area being disposed in registration with the opening in said bottom plate to provide an air inlet for the burner, the bottom of said combustion unit section portion of larger cross sectional area being disposed approximately on the level with the said horizontal plane extending flush with the top of the air outlets.

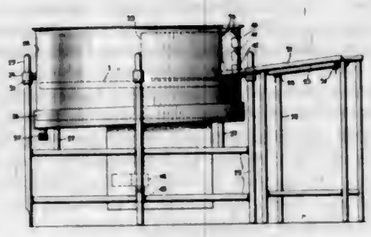
2,734,501
EXHAUST VENT AND DOWNDRAFT DIVERTER
Oscar Fauser, Jr., Rock Island, Ill., assignor to Oscar Martin Manufacturing Co., Davenport, Iowa, a corporation of Iowa
Application February 9, 1953, Serial No. 335,889
3 Claims. (Cl. 126—307)

1. An exhaust vent for heaters and the like comprising, in combination, a vertically disposed housing, a duct connected in communication with a vertical side of said housing and adapted to conduct hot gases of combustion thereto, a stack connected in communication with the top of said housing for conducting said gases out of said housing, the bottom of said housing having an opening therein, a damper pivotally mounted interiorly of said housing in position to restrict said opening and to swing open in a direction outwardly of said housing, means for counterbalancing said damper whereby a slight down draft through said stack will open the damper, and a baffle ex-



tending from said side of the housing above said duct, downwardly in front of the latter in spaced relation thereto and having a lower terminal edge near the bottom of said duct to direct such down draft away from said duct and toward said bottom opening, the sides of said housing extending downwardly below said damper to shield the latter from the wind.

2,734,502
CENTRIFUGAL LIQUEFIER FOR FROZEN AND SOLID PRODUCTS
Forrest Le Grand Bryant, East Orange, N. J., assignor to Bryant Machinery Corporation, Jersey City, N. J., a corporation of New Jersey
Application October 18, 1950, Serial No. 190,720
12 Claims. (Cl. 126—343.5)

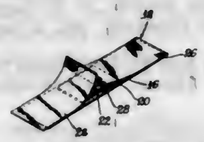


1. Apparatus for melting a substantially solid mass, comprising a frame, an upright annular wall supported on said frame and fixed against rotation, a rotatable table disposed horizontally within the wall intermediate its upper and lower edges and in spaced relationship thereto for receiving a mass to be melted, motive means for rotating said table, means for heating said table, and means disposed above and fixed against rotation with said table and cooperating with an adjacent portion of said fixed wall to jointly restrict said mass against rotation with said table and against outward movement from said table while said mass is supported thereon in position for melting.

2,734,503
HEAT-STERILIZABLE ELASTIC FILM BACKED BANDAGE
John T. Doyle, Deerfield, Ill., assignor to The Kendall Company, Boston, Mass., a corporation of Massachusetts
Application August 9, 1952, Serial No. 303,527
12 Claims. (Cl. 128—156)

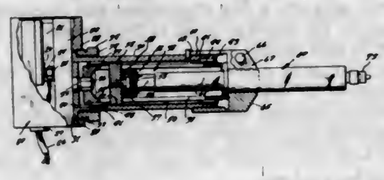
1. A stable heat-resistant ready-to-apply bandage comprising a substantially unstretched, relaxed, polymeric film backing having a low modulus at 100% elongation, a

layer of pressure-sensitive adhesive and an adherent pad dressing, said backing and adhesive together containing



a total of not more than the order of 3% by weight of non-polymeric plasticizer for said backing.

2,734,504
HYPODERMIC INJECTION DEVICES
Charles Crescas, Brooklyn, and Bernard P. Elkin, Forest Hills, N. Y.
Application April 29, 1952, Serial No. 284,976
7 Claims. (Cl. 128—218)



1. In a device for the timed injection of hypodermically administered fluid, a housing, a timing motor in said housing, an exterior screw barrel, a drive barrel positioned interiorly of said screw barrel, a linearly displaceable threaded member movable within said drive barrel and engageable with said screw barrel, means for rotating said interior barrel to linearly displace said threaded member to inject the fluid in said injector.

2,734,505
COATED TAMPON
Frank P. Parish, Taneytown, Md., assignor to Sanitary Products Corporation, Chicago, Ill., a corporation of Illinois
Application May 7, 1954, Serial No. 428,263
8 Claims. (Cl. 128—285)



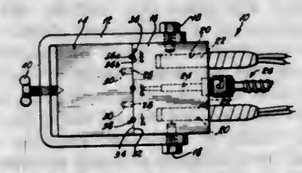
1. An improved catamenial tampon comprising a body of compressed absorbent material having, at least on its entrant end, a dried initially liquid film containing a water-dispersible, surface active agent capable of lowering the surface tension of menstrual fluid, and beneath said film a covering layer of material blocking the passage of moisture to the subjacent body of the tampon.

2,734,506
SILK SUTURES AND LIGATURES
Joseph Nichols, Princeton, and Thomas L. Reissmann and Warren E. Collins, Bound Brook, N. J., assignors to Ethicon, Inc., a corporation of New Jersey
Application December 14, 1953, Serial No. 397,928
13 Claims. (Cl. 128—335.5)

1. A substantially noncapillary silk suture comprising a silk suture strand coated with a polymeric substance selected from the class consisting of polymers and copolymers of methacrylic acid esters of the general formula

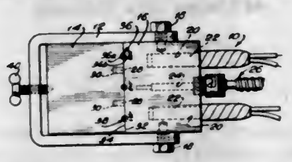
$$CH_2=C(CH_3)-COOR$$

in which, when the polymeric substance is a polymer, R is an alkyl radical having three to six carbon atoms and, when the polymeric substance is a copolymer, R is an



alkyl radical having not more than twelve carbon atoms and an average number of carbon atoms within the range of three to six.

2,734,507
COTTON SUTURES AND LIGATURES
Joseph Nichols, Princeton, Thomas L. Reissmann, Bound Brook, and Warren E. Collins, Martinsville, N. J., assignors to Ethicon, Inc., a corporation of New Jersey
Application April 7, 1954, Serial No. 421,468
13 Claims. (Cl. 128—335.5)

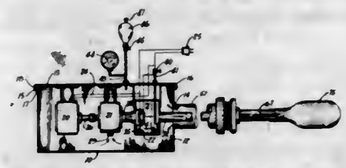


1. A substantially noncapillary cotton suture comprising a cotton suture strand coated with polymeric substance selected from the class consisting of polymers and copolymers of methacrylic acid esters of the general formula

$$CH_2=C(CH_3)-COOR$$

in which, when the polymeric substance is a polymer, R is an alkyl radical having three to six carbon atoms and, when the polymeric substance is a copolymer, R is an alkyl radical having not more than twelve carbon atoms and an average number of carbon atoms within the range of three to six.

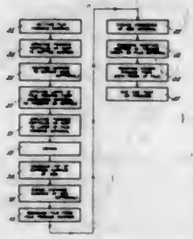
2,734,508
THERAPEUTIC APPARATUS FOR APPLYING DRY HEAT TO BODY CAVITIES
Joseph Kozinski, Chicago, Ill., assignor to H. G. Fischer and Company, Inc., Franklin Park, Ill., a corporation of Illinois
Application March 29, 1954, Serial No. 419,261
1 Claim. (Cl. 128—401)



Therapeutic apparatus comprising a casing having an air inlet sleeve and a coaxial but smaller air outlet sleeve within said air inlet sleeve, an electric motor and blower in said casing, said blower having an air inlet to the inside of the casing, said blower having an air outlet, a chamber within said casing connected to the blower outlet to receive air therefrom, said chamber having a connection to the smaller outlet sleeve, an electric heating element within said chamber for heating air from the blower, a

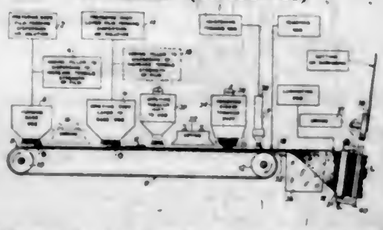
rubber hose fitted over said casing air outlet pipe, a second and larger rubber hose disposed over said first named rubber hose and fitted over the casing air inlet sleeve, an applicator comprising inner and outer pipe portions, means maintaining said pipe portions in predetermined coaxial relation, said inner hose being attached to the inner pipe portion and said outer hose being attached to the outer pipe portion, an inflatable rubber bag fitted over the free end of said outer pipe portion, said outer pipe portion consisting of a transparent plastic material, a thermometer attached to the inner pipe portion in proximity to the region where the mouth of the bag occurs, said entire system including the casing being substantially air tight, and means carried by said casing for introducing air into said casing to a desired pressure, said motor driven blower being adapted to pump air from the inside of the casing through the heating chamber to the inner hose and the applicator and thence back through the outer hose into the casing.

2,734,509
TOBACCO SHEET MATERIAL AND METHOD OF MAKING THE SAME
Delbert F. Jurgensen, Jr., Tuckahoe, N. Y., assignor to American Machine & Foundry Company, a corporation of New Jersey
Application December 20, 1951, Serial No. 262,575
44 Claims. (Cl. 131—15)



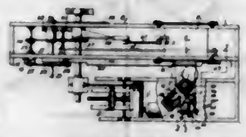
1. The method of forming self-supporting continuous reconstituted tobacco strip material comprising applying a liquid wetting material to a film forming surface, depositing a layer of fine tobacco particles upon said wetted film forming surface, coating said layer of tobacco particles with an adhesive film forming material containing admixed fibres, and depositing a layer of fine tobacco particles upon the exposed wet adhesive surface of said film forming material to form said strip material.

2,734,510
TOBACCO SHEET MATERIAL AND METHOD OF FORMING
Gordon P. Hungerford, Westport, Conn., and Delbert F. Jurgensen, Jr., Short Hills, N. J., assignors to American Machine & Foundry Company, a corporation of New Jersey
Application August 25, 1955, Serial No. 530,561
49 Claims. (Cl. 131—15)



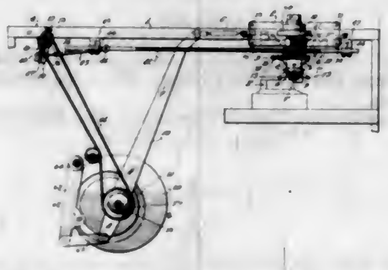
1. Tobacco sheet material comprising an initially water insoluble water dispersed adhesive material and finely divided tobacco the principal portion of which is dry ground when associated with said adhesive material.

2,734,511
WRAPPER FLAG APPLYING MECHANISM FOR CIGAR WRAPPING MACHINES
Benjamin H. Long, Roselle, N. J., assignor to Tobacco Machine Supply Company, Inc., a corporation of New Jersey
Application June 10, 1953, Serial No. 361,908
6 Claims. (Cl. 131—29)



1. A cigar wrapping machine comprising a flat wrapper support, a rolling mechanism including a carriage having a frame linearly movable over said wrapper support, and mechanism on said carriage frame for rotating a bunch to be wrapped so that a wrapper is wound onto a bunch from said support, a flag controlling and directing roller mounted on the carriage so as to be adjacent the head of a bunch in said rolling mechanism, to provide for contact with the surface of said roller of a wrapper flag when said flag is blown off said wrapper support, and means other than contact between said roller and said bunch for positively moving said roller to convey said wrapper flag in contact with the surface of said roller in a spiral path onto said bunch head.

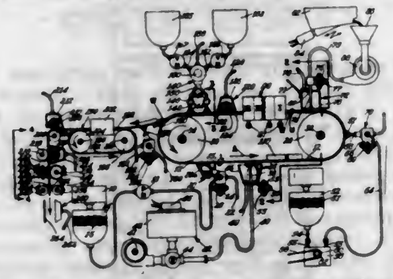
2,734,512
LEAF STRETCH ADJUSTING MECHANISM FOR CIGAR WRAPPING MACHINES
Benjamin H. Long, Roselle, N. J., assignor to Tobacco Machine Supply Company, Inc., a corporation of New Jersey
Application December 2, 1952, Serial No. 323,594
4 Claims. (Cl. 131—33)



1. In a cigar wrapping machine, a frame, a die to support a wrapper, a reciprocatory carriage, a rack bar slidably mounted on said frame, rolls mounted on said carriage and revolved by said rack bar to roll a bunch over said die and apply said wrapper to the bunch, means to reciprocate said rack bar to rotate said rolls comprising a driving element and a driving connection between said driving element and said rack bar including a crank arm and linkage pivotally connected at its opposite ends to said crank arm and said rack bar respectively, and means for adjusting the point of connection of said crank arm and said linkage to vary the tension on the wrapper.

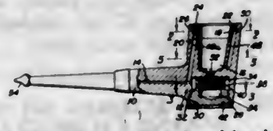
2,734,513
METHOD AND APPARATUS FOR MAKING TOBACCO SHEET MATERIAL
Gordon P. Hungerford and John T. Williamson, Brooklyn, N. Y., assignors to American Machine & Foundry Company, a corporation of New Jersey
Application April 10, 1951, Serial No. 220,174
28 Claims. (Cl. 131—140)

1. Apparatus for forming self-supporting continuous tobacco films and sheets comprising a substantially impermeable moving film forming member having a film supporting surface, means for applying a liquid wetting material upon successive portions of said moving surface, a device for applying finely divided tobacco particles in a continuous layer upon said wetted portions of said moving surface, means for applying a spray of an adhesive film forming material upon said layer of tobacco



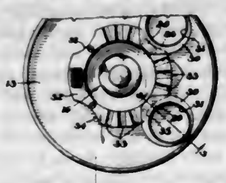
particles adhering to said moving wetted surface, a device for applying a layer of fine tobacco particles upon the exposed wet surface of said layer film forming material on said moving surface, and a dryer located in the path of travel of said moving surface for evaporating said liquid wetting material and drying the composite layer thus produced to form a composite continuous self-supporting tobacco film or sheet.

2,734,514
SMOKING PIPE
Aaron D. Tucker, Glasgow, Mo.
Application October 20, 1952, Serial No. 315,655
3 Claims. (Cl. 131—198)



1. A smoking pipe comprising a bowl having a tobacco receiving cup and a stem, a hollow internally threaded filter cavity in said bowl, a filter holder threadedly secured to said bowl in said filter cavity, an apertured bushing threadedly secured in said bowl in communication with said filter cavity and said tobacco receiving cup, an inner annular recess in said bowl opening into and forming an enlargement of said tobacco receiving cup, a ring secured in said recess, a plurality of spaced passageways in said bowl in communication with said recess, a smoke duct in said stem, said duct opening into said filter cavity and one of said passageways, and an air duct extending transversely through said bowl in communication with said recess.

2,734,515
SMOKING STAND WITH ACCESSORY SUPPORTS
William J. Campbell, Indianapolis, Ind., assignor to Frank C. Wolff, doing business as Campbell Products Company, Chicago, Ill.
Application May 28, 1954, Serial No. 433,144
1 Claim. (Cl. 131—238)



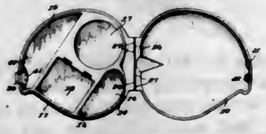
A smoking stand of the type described comprising a bowl having a mouth, a narrow, annular, beverage-supporting tray supported on said bowl surrounding the bowl mouth, an ash tray supported from said first-named tray and having an upper opening registering with said bowl mouth, said ash tray being provided with a horizontally disposed ledge having cigar rests arranged in angularly separated groups, said ledge further having means to support thereon beverage glass supporting ring members, said last-named means being located between adjacent groups of said rests, and said ledge having a recessed portion in its external periphery adjacent each such supporting means whereby a beverage glass may be passed downwardly through any one of said ring members with its bottom resting on said first-named tray, a downward extension of the external periphery of each ring member lying wholly within the external boundary of said first-named tray, and a similar extension of the internal periphery of each ring member intersecting the external periphery of said ledge within one of the recessed portions of said ledge.

2,734,516
BOBBY PIN RECEPTACLE AND SPREADER
Joel Levin, Brooklyn, N. Y.
Application March 20, 1953, Serial No. 343,644
3 Claims. (Cl. 132—1)



1. In a bobby pin receptacle of the character described, a rectangular compartmented body portion constructed to hold bobby pins, an inverted substantially V-shaped opener and guide attached to the front of said body portion, an indentation in said body portion providing a second opener on the front of said body portion, a pointed opener attached to the rear of said body portion having a retaining guide superimposed over and attached to said pointed opener and a suction cup and stem attached to said retaining guide whereby said receptacle may be detachably secured to a smooth vertical surface.

2,734,517
VANITY CASE
Frank Ferraro, Baltimore, Md.
Application August 6, 1952, Serial No. 302,902
5 Claims. (Cl. 132—83)

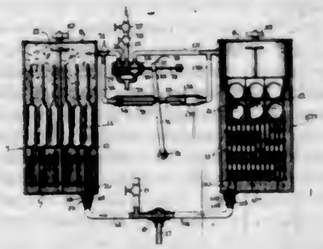


1. A vanity case comprising a base formed with an upstanding peripheral wall, a cover pivotally connected to said upstanding peripheral wall, a mirror supporting frame receivable in said cover and pivotally connected to said peripheral wall, and a flexible retainer member having one end pivotally connected to said upstanding peripheral wall and having its opposite end cooperating with a catch on the cover to retain a comb in the cover member.

2,734,518
MACHINE FOR CLEANING PIPETTES, PETRI DISHES, AND OTHER ARTICLES
James A. Harrison, Philadelphia, Pa.
Application January 27, 1950, Serial No. 140,824
3 Claims. (Cl. 134—56)

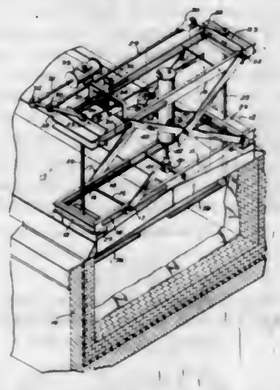
1. Machine for liquid-cleaning laboratory and other utensils such as pipettes, petri dishes and beakers, com-

prising: two vessels, at least one of which is provided with fluid tight fitting, removable cover and adapted for the reception of the utensils to be cleaned; a passage inter-connecting the bottom regions of the two vessels; a pair of fluid conduits connected respectively with the



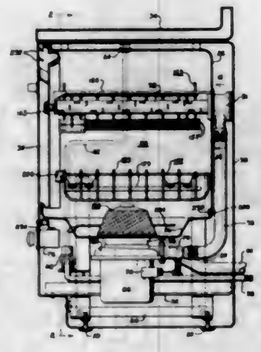
upper regions of said vessels; valve means for connecting alternately the one conduit with an admission pipe for a gaseous pressure medium and the other conduit with a vent; and operating means for said valve means, comprising a fluid pressure motor responsive to increase in fluid pressure in one of said vessels.

2,734,519
STRIP LIFT MECHANISM
Carl A. Widdowson, Vermilion, Ohio, assignor to McDowell Company, Inc., Cleveland, Ohio, a corporation of Ohio
Application May 23, 1955, Serial No. 510,181
7 Claims. (Cl. 134—133)



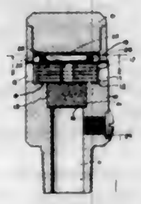
1. Apparatus for lifting sheet steel strip stock from a pickling tank comprising spaced channel irons mounted transversely of said tank having slots in the webs of one end thereof, end members under said channels, shafts protruding through said slots, rollers on said shafts engaged with the flanged portions of said channels, lazy straps pivoted on said shafts and to said channel irons, a frame carried by the other ends of said lazy straps embodying second channel irons having slots therein, shafts therein, rollers on said shafts engaged with the flanged portions of said frame channels, pivotal connection between said straps and said second named channels, end members uniting said second channels, hooked lift rods in said end members, a piston pivotally connected to the first named channels, a cylinder operatively connected therewith, pintles on said cylinder connected with the central portions of said lazy straps for elevating said frame, a second piston cylinder assembly carried by said frame channels parallel thereto and linkage intermediate the pistons of said last named cylinder and said lift rods for the rotation thereof.

2,734,520
DISHWASHING MACHINE
Carel F. Abresch, Dayton, and Francis H. McCormick, Oakwood, Ohio, assignors to General Motors Corporation, Dayton, Ohio, a corporation of Delaware
Application December 18, 1951, Serial No. 262,226
12 Claims. (Cl. 134—174)



1. A dishwashing machine including generally rectangular side rear and top walls enclosing a dishwashing chamber, a door forming substantially the entire front wall enclosing the dishwashing chamber, a substantially horizontal rotatable spray tube rotatable about a horizontal axis and extending forwardly from and substantially perpendicular to the rear wall, means for supplying cleansing fluid to the spray tube, a dish supporting rack extending above the spray tube and on opposite sides of the spray tube, and means for slidably supporting said rack for movement out of the dishwashing chamber parallel to the axis of the spray tube.

2,734,521
VENT VALVE
Harold G. Hencken, Greenwich, Conn., assignor to Taco Heaters, Incorporated, Providence, R. I., a corporation of New York
Application June 14, 1952, Serial No. 293,585
3 Claims. (Cl. 137—197)



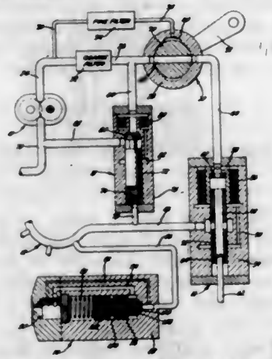
1. An automatic air vent valve comprising a valve body, an outlet passage in said body having a cavity therein with end walls and main outlet aperture, an inlet passage connected to said cavity, a water swellable fibrous body in said cavity, said body comprising a plurality of fibrous wafers having substantially central air passages therethrough, said water swellable body being in abutting relationship with one end wall means of said cavity, and a resilient means between said water swellable fibrous body and the opposite end wall means of said cavity, at least one of said means having groove means therein leading to the exterior of said valve, the swellable body and resilient means cooperating when the water swellable body becomes wet so that the swell rate of the swellable body is such as will close off passage of water through said groove means.

2,734,522
VALVE
Robert M. Waltman, Towson, Md., assignor to Bendix Aviation Corporation, Baltimore, Md., a corporation of Delaware
Application June 24, 1952, Serial No. 295,238
5 Claims. (Cl. 137—197)



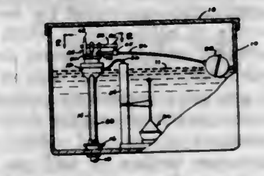
1. A snap-acting valve assembly adapted to be interposed between a body of liquid and a pump for pressurizing the liquid, said assembly functioning to avoid loss of liquid from the body and/or damage to the pump through contact with the liquid, comprising: a valve body provided with a valve chamber, said body having a first opening for communicating said chamber with said liquid and a second opening, spaced from said first opening, for communicating said pump with said chamber, a valve seat coacting with said second opening, a valve closure member coacting with said seat, a holding device positioned in said valve body between said first opening and said valve closure member and functioning to normally releasably hold said member off its seat, a piston interposed between said holding device and said first opening, means providing a driving connection between said piston and valve closure member, and orifice means of a nature such as to permit relatively free flow of air from said first opening to said second opening across said piston but interposing resistance to the passage of liquid, said piston when subjected to the pressure of liquid passing through said first opening freeing said valve closure member from said holding device and driving it to its seat.

2,734,523
PROTECTIVE FILTERING SYSTEM
John M. Wiggans, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application July 24, 1952, Serial No. 300,630
2 Claims. (Cl. 137—238)



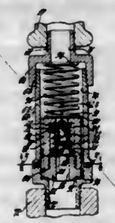
1. A valve mechanism comprising a casing having a valve chamber therein including an annular groove, a first passage for conducting a fluid to said chamber, a second passage for transferring said fluid from said chamber, a throttle valve movable in said chamber for controlling fluid flow through said chamber, said valve having rubbing surfaces coacting with said chamber on the outlet side of said valve, a third passage in said valve casing connecting with said first passage upstream of said valve and terminating at said annular groove adjacent said rubbing surfaces for conducting a portion of said fluid continuously and directly onto said rubbing surfaces and a filtering means in said third passage upstream of said rubbing surfaces, means biasing said valve against the inlet pressure to create a substantial pressure drop when said valve is open whereby there is at all times a pressure drop that will cause the fluid pressure in said chamber and in said second passage to be less than the fluid pressure in said third passage and said first passage so that the filtered portion of said fluid in said third passage will exclude the other portion of said fluid in said chamber from between said rubbing surfaces.

2,734,524
LIQUID TANK FILLING MECHANISM
Nokomis O. Burriss, Beeville, Tex.
Application July 31, 1953, Serial No. 371,473
5 Claims. (Cl. 137—426)



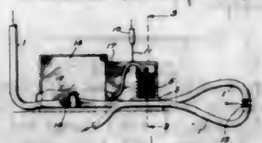
1. A filling mechanism for a tank containing liquid, comprising a liquid inlet pipe disposed within the tank and having an outlet through which liquid can be introduced into the tank, a valve body mounted on said pipe, a valve arranged in said body for movement into and out of closing relation with the pipe outlet to control the flow of liquid from said pipe into the tank, a pair of superimposed levers mounted on said body to move about vertically aligned parallel pivots in intersecting arcuate paths, one lever of said pair being biased into intersecting relation with the other lever of said pair and being operatively connected to said valve to move the valve into and out of its closing relation with said outlet, a float carried by said other lever responsive to the level of liquid in said tank to move said other lever in its arcuate path and impart movement to said one lever to thereby cause said valve to move into and out of its closing relation with said outlet as the level of liquid rises and falls in said tank.

2,734,525
AIR FLOW CONTROL MEANS
John T. Rausch, Berkley, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 29, 1954, Serial No. 478,434
8 Claims. (Cl. 137—480)



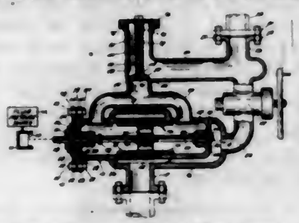
1. A fluid flow control means for regulating fluid flow through a conduit and including means for providing proportionate flow restriction within prescribed limits and relief thereafter dependent upon fluid flow pressure, said control means including a housing having valve means disposed therein, calibrated means for holding one of said valve means normally open and another of said valve means normally closed, said first-mentioned calibrated means being overcome proportionately to said fluid flow pressure until said one valve means is closed, and said second-mentioned valve means being overcome proportionately to said fluid flow pressure thereafter for opening said other valve means.

2,734,526
FLUID PRESSURE CONTROL
Fridtjof Aagaard, Rahway, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
Application September 16, 1950, Serial No. 185,315
2 Claims. (Cl. 137—486)



1. A device for controlling the rate of flow of a fluid comprising in combination a conduit for said fluid provided with an orifice on either side of which is a section of resilient deformable tubing; an element contacting the resilient deformable tubing on either side of said orifice a flapper nozzle gas valve operatively connected to said element and movable to actuate said gas valve in response to differential pressure across said orifice; a separate source of gas pressure leading to said gas valve; said flapper nozzle valve producing changes in the gas pressure, and means responsive to said changing gas pressure for deforming said tubing to control said rate of flow.

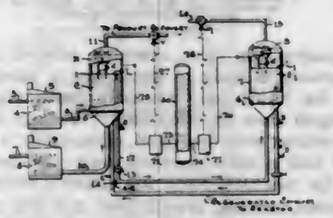
2,734,527
CONSTANT PRESSURE CONTROL VALVE
Walter S. Baer, Sr., Yeadon, Pa.
Application May 22, 1952, Serial No. 289,419
8 Claims. (Cl. 137—506)
(Granted under Title 35, U. S. Code (1952), sec. 266)



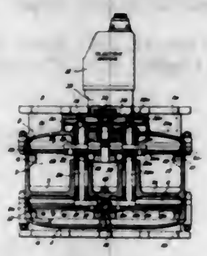
1. A valve means comprising a housing, a wall in said housing dividing said housing into a communication chamber and a valve chamber, means in said housing opening into said communication chamber to provide access to a source of fluid pressure, said wall having an aperture provided therein opening into said communication chamber, a hollow, open-ended sleeve mounted in said valve chamber for reciprocatory movement, the means mounting said sleeve for said movement including a valve stem passing through the center thereof and integral therewith, one end of said valve stem projecting through said aperture into said communication chamber, a plurality of orifices formed in said wall, said sleeve being positioned on said stem to overlie the wall orifices at all times, a plurality of orifices formed in the periphery of said sleeve and positioned to coincide with said wall orifices in some positions of its reciprocatory movement, a force applying means acting on one end of said valve stem and opposing the force of the fluid pressure from said fluid pressure source, fluid passage means communicating with said valve chamber.

2,734,528
PRESSURE CONTROL IN FLUID SOLIDS SYSTEM
John F. Moser, Jr., Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application July 23, 1952, Serial No. 300,399
9 Claims. (Cl. 137—571)

1. A pressure control arrangement for maintaining a fixed differential pressure in two vessels comprising in combination: conduit means providing open communication between said vessels, a source of constant pressure, a first and second differential pressure metering device adapted to provide a control signal proportional to differential pressures impressed on each metering device, fluid connections between one of said vessels and the said constant pressure source to the first differential pressure metering device, fluid connections between the other of said vessels and the said constant pressure source to the second differential pressure metering device, control valves associated with each of said vessels adapted to affect the pressure in the vessels, and means connecting each of said differential pressure metering devices to the respective control valves of each vessel whereby said control signals can actuate said valves.

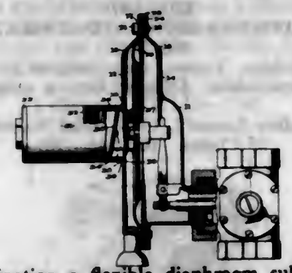


2,734,529
FLUID FLOW CONTROL VALVES
Walter Mostyn Harrison, Cefn Coed, near Merthyr Tydfil, South Wales, assignor to Teddington Aircraft Controls Limited, Cefn Coed, near Merthyr Tydfil, South Wales
Application April 3, 1952, Serial No. 280,425
Claims priority, application Great Britain April 12, 1951
10 Claims. (Cl. 137—628)



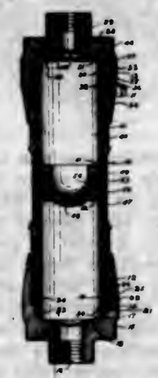
1. In a fluid flow control valve, a housing structure defining two inlet ports and two outlet ports and including a manifold chamber common to said ports, means regulating the flow of fluid between said ports and manifold chamber, said regulating means including a fixed grid structure for each said port and an associated gate structure, means mounting each gate structure for movement relatively to its grid structure for opening and closing openings through its said grid structure, common actuator means connected with said gate structures for producing movement thereof into the open and closed position, said common actuator means including means inter-connecting said actuator means with each of said gate structures, so that the gate structures at the inlet and outlet ports are moved by said common actuator means in unison but in opposite sense, said inter-connecting means including lost motion means providing that for an initial range of movement of said common actuator means, the gate structures of one pair of said ports are progressively moved in unison and opposite sense while the gate structures of the other pair of ports remain stationary.

2,734,530
DIAPHRAGM HOUSING
Charles D. Peterson, Dallas, Tex., assignor to Universal Controls Corporation, Dallas, Tex., a corporation of Texas
Original application March 27, 1947, Serial No. 737,656, now Patent No. 2,577,480, dated December 4, 1951. Divided and this application June 25, 1951, Serial No. 233,389
1 Claim. (Cl. 137—788)



In combination a flexible diaphragm subject to fluid pressure on one side and to resistant spring pressure on the other, a case for said diaphragm comprising complementary case parts formed of relatively thin sheet metal stampings dished to provide clearance for diaphragm movement between them and the said parts having narrow borders confronting each other, bolts passing through holes in said borders and the diaphragm and receiving nuts to clamp the borders tightly against the periphery of the diaphragm, one of said borders having a flange centering the diaphragm and the other part, the border of said other part having a tubular flange telescoping with the first, said flanges providing stiffness for said borders to reduce deflection thereof between bolts and one of said parts having an axially disposed tube for enclosing a spring in said tube biasing said diaphragm, said tube being of thicker metal than its case part and provided with threads, tube closure means engaging said threads, said case part having a short integral sput of the same outer diameter as that of the tube, the inner end of the tube being reduced in outer diameter to telescope into the sput, a shoulder at the junction of the reduced portion with the remainder of the tube abutting the end of the sput and the reduced portion extending through the sput and flared into the fillet at the junction of the sput and case part.

2,734,531
HYDRAULIC ACCUMULATORS
Louis D. Bizak, Wickliffe, Ohio, assignor to The Parker Appliance Company, Cleveland, Ohio, a corporation of Ohio
Application September 25, 1952, Serial No. 311,460
7 Claims. (Cl. 138—31)



7. In a piston type accumulator, a cylindrical casing including a transverse wall at each end thereof, each wall providing an abutment face, an inner shell within said casing and having its ends opposite said faces, a spring washer between one end of the inner shell for yieldably urging the other end of the inner shell against the other of said faces, said washer including circumferentially spaced fingers projecting between the casing and the outer diameter of the inner shell, a movable piston within the inner shell, and a port leading to one end of said inner shell.

2,734,532
LAMINATED PAPER YARNS AND FABRICS INCLUDING THE SAME
Donald W. Light, Wayland, Mass.
Application July 31, 1951, Serial No. 239,518
2 Claims. (Cl. 139—420)



1. A woven fabric comprising a warp of conventional fibre yarn, a weft including untwisted yarn of quadrilateral cross-section having sharp corner edges and flat sides, said untwisted yarn being composed exclusively of several superposed layers of paper secured to each other solely by a flexible adhesive and said warp being drawn across the said sharp corner edges of the weft.

2,734,533
BAND SAW BLADES
Leonard C. Roberts, Atlanta, Ga.
Application July 6, 1951, Serial No. 235,423
1 Claim. (Cl. 143—133)



A band saw for cutting meat and the like, comprising a blade having angular teeth with all of the teeth in the plane of the blade, the tip portion of each of said teeth being beveled on opposite sides to provide a splitting point with the beveled portions forming small plane triangular facets extending from the tip portion of the leading edge of each tooth downwardly along the trailing edge for about one third of the length of the trailing edge and making an angle of about 10° with a plane at right angles to the plane of the blade.

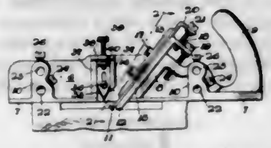
2,734,534
INSERTED SAW TOOTH WITH CHIP DEFLECTING LIP
Stanley Standal, Spokane, Wash.
Application August 8, 1952, Serial No. 303,279
3 Claims. (Cl. 143—151)



1. An insert type chisel tooth for circular saws having a chisel portion, and a narrowed locking portion ex-

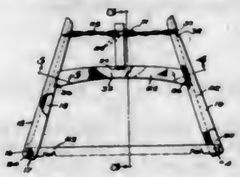
tending inwardly therefrom to receive a locking shank, an inwardly protruding lip at the base of the chisel portion of the tooth, the side faces of which align with and form extensions of the side faces of the chisel portion, said side faces of the chisel portion tapering rearwardly to provide cutting clearance, said lip having its front face extended inwardly and forwardly substantially perpendicularly to the outer face of the chisel portion from the chisel portion beyond the adjacent edge of the locking portion that receives the shank the lip having its inner end terminating in front of the said adjacent edge of said locking portion whereby to overhang the shank and divert the incoming chips forwardly with respect to the shank before they contact the shank.

2,734,535
PLANE
Charles A. Neubauer, Baltimore, Md.
Application June 7, 1950, Serial No. 166,610
2 Claims. (Cl. 145—14)



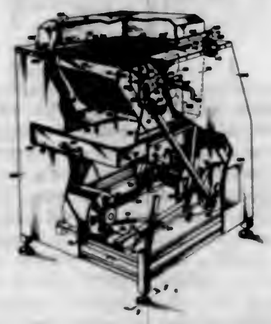
1. In a plane of the character described comprising a stock having a sole with an opening formed therein, a restraining member having a bearing face at the lower end, a support at the rear of said opening for holding the restraining member at an inclined position, said restraining member being movably arranged to project below the sole through said opening, a plane-iron having a beveled cutting edge arranged immediately forward of the bearing face, and means for holding the bearing face and the cutting edge in adjusted position relatively to each other and the sole, whereby the cutting edge may variably project below the bearing face.

2,734,536
COLLAPSIBLE BUCK SAW
George Gale Harper, Waban, Mass.
Application April 29, 1953, Serial No. 351,782
5 Claims. (Cl. 145—32)



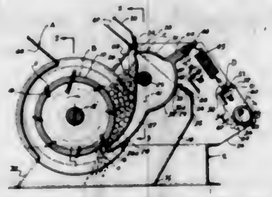
1. A buck saw frame for a saw blade of a predetermined length, first and second handles, said first handle having a slot dividing one of its ends and continuing along its inner edge to the other end thereof, said second handle having a slot dividing one of its ends and continuing along its outer edge to the other end thereof, the width of said slots being such as to accommodate said blade, means to pivotally connect the ends of said blade between the divided ends of said handles, a cross brace having a slot extending vertically through the central part thereof and detachably connected to said handles between their ends, and adjustable blade tensioning means comprising a flexible loop extending through the other end of one of said handles and removably disposed around the other end of the other handle, and a twister slidably supported by said loop and including a part entrant of said brace slot to hold said blade tensioning means operative but releasable therefrom to enable the blade tension to be eased and the loop removed from one handle thus to enable said brace to be removed and said handles to be swung both in the same direction to receive opposite edges of an attached blade in their slots in such a manner as to shield its teeth, and the free end of the loop to be passed through said brace and used to work together the collapsed saw frame and attached blade.

2,734,537
APPARATUS FOR SEPARATING MEAT FROM BONES
Harold F. Geisler, Tucker, Ga., assignor to Meat Separator Corporation, Atlanta, Ga., a corporation of Georgia
Application August 2, 1954, Serial No. 448,213
15 Claims. (Cl. 146—76)



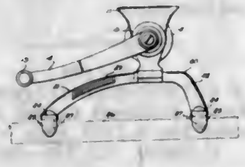
13. Apparatus for treating material having portions of different degrees of hardness for removing part of the material from other of the material of greater hardness comprising a containing for the material to be separated having an impact portion, and supporting bearings for mounting said container so that it may have limited movement, and actuating means operatively connected to said container for producing rapid movement and change of direction of said container and of sufficient velocity to produce violent impact between the container and the material contained in order to loosen and produce separation of one part of the material from another.

2,734,538
FRUIT GRATING MACHINE HAVING A RESILIENTLY URGED CONCAVE
Otto H. Wallingford, Auburn, Maine
Application September 27, 1954, Serial No. 458,486
9 Claims. (Cl. 146—123)



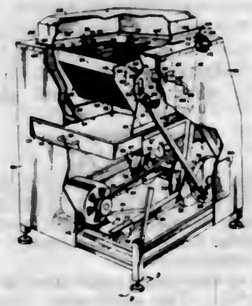
5. In a fruit grating machine and in combination, a hopper, a rotatable cutter within the hopper, a member pivotally mounted on an axis which is parallel to the axis of the cutter, said member having a downwardly depending concave element in proximity to the cutter and forming therewith a throat, said hopper having an opening including edges which are parallel to the axis of said member, said member having a part which extends out of the hopper through said opening, said part having arcuate surfaces which are concentric with the pivotal axis of the member, said arcuate surfaces being adjacent opposite edges of said opening and in slidable contact with said edges and being movable relative thereto to allow pivotal movement of the member while forming substantially liquid tight seals therewith, and tension means connected to said part of said member outside said hopper pivotally urging the said member in a direction to cause said concave element to approach the cutter and to confine the throat.

2,734,539
FOOD CHOPPER AND BASE THEREFOR
William J. Russell, New Britain, Conn., assignor to Landers, Frary and Clark, New Britain, Conn., a corporation of Connecticut
Application August 18, 1950, Serial No. 180,166
3 Claims. (Cl. 146—182)



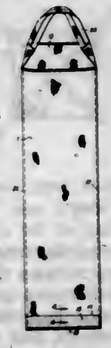
1. A base for a food chopper comprising a pair of parallel elongated supporting plates for disposition on the top of a supporting member, each of said plates being provided with a depending flange at one end for engaging the edge of the supporting member, resilient members having a high coefficient of friction disposed on the bottom surfaces of the plates and on the inner faces of the flanges, a convexly curved, generally tubular support fixed to the plates and extending in an arch transversely between the plates, said tubular support forming a pair of legs for the food chopper and having one of said legs more gradually curved than the other to form an upwardly facing handle portion.

2,734,540
METHOD OF SEPARATING MEAT
Harold F. Geisler, Tucker, Ga., assignor to Meat Separator Corporation, Atlanta, Ga., a corporation of Georgia
Application September 16, 1955, Serial No. 538,649
4 Claims. (Cl. 146—222)



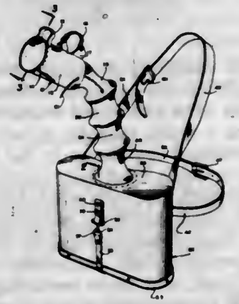
1. The method of separating meat from the bones of cooked chicken necks and for separating other materials having relatively hard and relatively soft separable portions, comprising projecting material to be separated at high velocity, suddenly stopping the movement thereof to permit the harder and softer portions to be separated by the change due to difference in weight of said harder and softer portions, projecting the material at high velocity in another direction, and stopping such motion in like manner suddenly, and repeating the operation until the material is separated.

2,734,541
HARVESTING SACKS
August F. Ottinger, St. Louis, Mo., assignor to Bemis Bro. Bag Company, St. Louis, Mo., a corporation of Missouri
Application April 30, 1953, Serial No. 352,238
4 Claims. (Cl. 150—2)



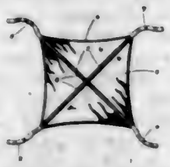
1. A cloth pick sack having a drag section constituted by an individual piece of cloth seamed at edges thereof to the remainder of the sack, said section having on its entire outer surface a skin consisting of a cured plastisol comprising polyvinyl chloride type resin, a filler, a plasticizer and a stabilizer, said skin being abrasion-resistant, tough, flexible, having inherent adherence to the cloth and being stable under atmospheric changes.

2,734,542
FRUIT PICKING BUCKET
Opal E. Galland, Wapato, Wash.
Application October 6, 1954, Serial No. 460,581
2 Claims. (Cl. 150—2)



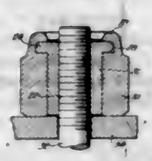
1. In a device of the class described, a picking spout comprising a hollow member open at both ends, means for securing said picking spout to the arm of an operator so that the upper end thereof is in position to receive articles released from the fingers and hand, a flexible conduit member in open communication with the lower end of said picking spout and secured thereto, a receptacle in open communication with the lower end of said conduit member, and means for mounting said receptacle across the body, said conduit member being adjustable, said receptacle having a hinged bottom lid, means for retaining said lid in a closed position, and a flexible pouring spout secured to the open bottom of said receptacle and to said lid adapted to empty the contents of said receptacle without bruising the fruit, said conduit member comprising a plurality of longitudinally spaced rigid ring members connected by a flexible fabric covering, said means for adjusting the length of said conduit member comprising a draw string connected at one end to said fabric covering and extending through longitudinally spaced openings provided therein and outwardly through said picking spout.

2,734,543
TIE FOR SURGICAL PACKS
Maude F. Hunter, Modesto, Calif.
Application November 16, 1953, Serial No. 392,270
3 Claims. (Cl. 150—52)



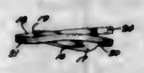
1. A tie for a surgical pack comprising a section of cloth of quadrilateral shape, and tapes secured on and extending across one face of the cloth in overlying relation and projecting outwardly from the corners thereof is substantially bisecting relation thereto for a predetermined distance to provide free end portions for tying engagement with each other over the pack when the cloth section is engaged therewith, and stitching securing the tapes on the cloth for substantially the full length of the overlying extent of the tapes.

2,734,544
TWO PIECE NUT HAVING TENSIONING AND CAMMING LOCKING FEATURES
Jerome W. Stevens, Brookfield, Ill.
Application April 2, 1952, Serial No. 280,075
2 Claims. (Cl. 151—19)



1. A lock nut consisting of an integral circumferentially continuous shell having an axial cylindrical bore therethrough and an axial cylindrical counterbore in one end thereof defining a radial shoulder in said shell, said shell having a longitudinal cam recess in the wall of the bore therethrough extending from said shoulder to the opposite end of said shell, said cam recess being of substantial circumferential extent and being parti-cylindrical and substantially less than semi-cylindrical in cross section, and an integral circumferentially continuous insert of a length less than said shell, said insert consisting of a generally cylindrical body portion conformably received within said bore and a radial flange of a thickness less than the length of said counterbore conformably received within said counterbore, said flange resting on its inner surface on said shoulder, wall portions of said shell at said one end thereof overlying the outer surface of said flange and retaining said insert and said shell against axial disassociation, said body portion of said insert being of a length less than said bore in said shell to accommodate axial extension of said insert, said insert including on said body portion thereof a longitudinal radially projecting cam extending the length of said body portion, said cam being of substantial circumferential extent and being parti-cylindrical and substantially less than semi-cylindrical in cross section, said cam being of a size smaller by a predetermined amount than said cam recess and being received within said cam recess, said cam recess and said cam accommodating slight rotational movement of said insert in said shell, said wall portions of said shell accommodating slight axial movement and rotation of said insert in said shell, said cam and said cam recess having complementary complete working surfaces normally engaged but rotatably movable with respect to one another, the working surfaces of said cam and said cam recess being relatively rotatable into a cam-locked position to lock said insert in said shell, said shell having an irregular exterior surface for reception of a wrench, said insert having an axial threaded bore therethrough for reception of a bolt, the lock nut being applied to a bolt with said body portion of said insert first engaging the bolt and being threaded to the bolt by application of force to said shell, application of rotational force to said shell after said shell engages an abutment stressing said insert in tension and said shell in compression due to the engagement of said flange with said shoulder, and finally rotating said shell relative to said insert to cam said cam into locking engagement in said cam recess, whereby the nut is locked to the bolt by virtue of the tension load on said insert, the compression load on said shell, and the locked engagement of said cam in said cam recess.

2,734,545
DOUBLE ACTING SPRING LOCK WASHER
Karl F. Nothdurft, Detroit, Mich.
Application May 9, 1955, Serial No. 507,019
3 Claims. (Cl. 151—38)

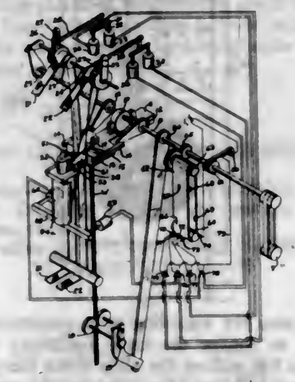


1. A lock washer comprising an outer annulus and an inner annulus, said inner annulus defining a hole having a longitudinal axis, a minor portion of the inner annulus being integral with and substantially coplanar with a portion of the outer annulus to provide a substantially coplanar bridging connection for the annuli, one of the annuli having the form of a closed annulus, the other of the annuli having the form of a substantially helical annulus of substantially 360 degrees emanating from and having a fixed end at a first side of said bridging connection and terminating in a free end adjacent to and spaced axially in one direction from the second side of said bridging connection, the major portion of said closed annulus being substantially coplanar and consisting of a first portion and a second portion, said major portion of said closed annulus being positioned in a plane at a predetermined angle to said bridging connection such that said first portion thereof emanates from said first side of said bridging connection and extends axially outwardly in said one direction from said bridging connection and said second portion thereof emanates from said second side of said bridging connection and extends axially outwardly in the other direction from said bridging connection.

2,734,546
PROCESS AND APPARATUS FOR MAKING ZIPPER FASTENER STRINGERS
Osborne Firing, Woodbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a corporation of Connecticut
Continuation of abandoned application Serial No. 176,423, July 28, 1950. This application November 9, 1954, Serial No. 467,827
13 Claims. (Cl. 153—1)

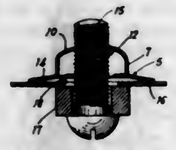
1. In apparatus for attaching zipper fastener elements in spaced groups to a plurality of tapes, the combination of a single continuously operating mechanism for continuously attaching elements at a single station, a tape feeding device for each of said tapes operable to advance the tape in steps equal to the desired spacing of the elements within a group, a tape holder for each tape for holding its tape either at the attaching station or in a position away from said station, and means for simultaneously moving said tape holders to withdraw one tape from the attaching station and to place the other at the same attaching station between two consecutive operations of the attaching mechanism.

7. In the art of making zipper fastener stringers the method of applying zipper fastener elements to a plurality of tapes which includes applying by a single continuous operating attaching mechanism a group of elements to a first tape while stepwise feeding the tape, withdrawing the



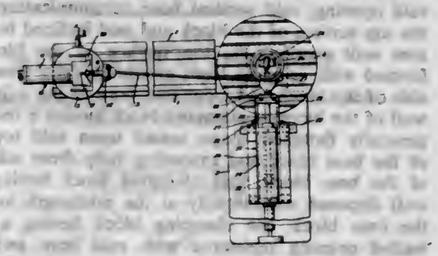
first tape from said attaching mechanism and simultaneously placing a second tape in position to receive fastener elements from said attaching mechanism, applying a group of elements to the second tape by said attaching mechanism while feeding the second tape stepwise, feeding each tape stepwise while in its withdrawn position for a part of the interval while the other tape is receiving fastener members to provide the gap space between groups.

2,734,547
SHEET METAL LOCK NUT WITH RESILIENT CONICAL FLANGE
James Rowland Hotchkin, Short Hills, N. J., assignor to The Palnut Company, Irvington, N. J., a corporation of New Jersey
Application June 19, 1948, Serial No. 33,995
1 Claim. (Cl. 151—38)



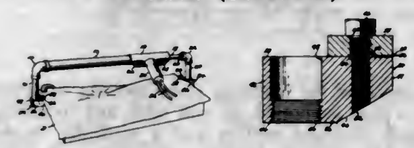
A one-piece lock nut of springy sheet steel, hardened and tempered; said nut comprising: an upstanding annular body portion of hexagonal form providing six wrench faces; an upwardly-domed web extending inwardly from the top of the body portion, the web being provided with a centrally-located bolt-receiving hole and the sheet metal around the hole being formed as a self-locking thread engager; and a circumferentially-continuous conical rim extending outwardly and downwardly from the bottom of the body portion, the rim being homogeneous with the body portion and having a smooth unbroken bottom surface and a circular outer edge, the rim extending outwardly from the wrench faces for a distance equal to about seven times the thickness of the sheet steel of which the nut is made and the downward inclination of the rim being about 10°, and the rim being sufficiently yieldable in an axial direction to spread out flat when the nut is screwed home against a work piece by torque which is less than that which would cause overloading of the sheet metal thread engager, and the rim being sufficiently springy to exert resilient holding pressure opposing loosening of the nut.

2,734,548
APPARATUS FOR FORMING ANNULAR BODIES
Joseph A. Fredericks, Parma, Ohio, assignor to Cyril Bath Company, Cleveland, Ohio, a corporation of Ohio
Application February 28, 1952, Serial No. 273,838
2 Claims. (Cl. 153—2)



1. An apparatus for forming curvilinear members to be formed into annular members, and comprising a turntable, a side face die mounted thereon for rotation therewith and having an elongated spiral forming face, means for clamping one end of a length of stock to be formed for rotation in fixed position with the die, a stretch forming piston and cylinder assemblage adapted for connection at the other end of the length of stock and operable to apply tension endwise of the stock from the end to which connected during laying of the stock onto the forming face of the die progressively from the anchored end toward the other end of the stock during rotation of the turntable, a pair of shoulder forming tools rotatable with the die, one of said tools being at a different distance from the plane of the table than the other of said tools, said tools being positioned beyond opposite ends of the forming face portion, respectively, so that the portion of the forming face therebetween extends at least about 360° about the axis of the die, each of said tools, on its forming stroke, being movable laterally of the die, power means for operating said assemblage so as to maintain tension on the stock endwise during laying of the stock onto the side face of the die and after completion of the laying on operation, and means for operating said tools while the said power means is active for maintaining said tension, on the layed on stock.

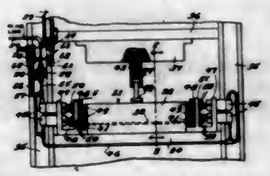
2,734,549
AUTOMOTIVE BODY REPAIR TOOL
Cecil Howard Thorley, Croswell, Mich.
Application April 22, 1952, Serial No. 283,642
1 Claim. (Cl. 153—35)



In an automotive vehicle body repair tool, a clamp for engaging a work piece to be straightened comprising: a relatively elongated, generally rectangular, solidly constituted base block having a flat top surface extending through the full length thereto, flat side walls disposed perpendicularly to the flat top surface, flat, vertical end walls, and a bottom wall formed with a flat outer bottom wall portion at one end of the block parallel to the top surface of the black, said bottom wall portion terminating at a location adjacent the midlength point of the block and merging at said location into an inclined inner bottom wall portion extending fully to the other end of the block, said block having a large diameter opening extending vertically therethrough and communicating at its opposite ends with the top wall surface and said outer bottom wall portion respectively, said opening being threaded, to receive the complementarily threaded sup-

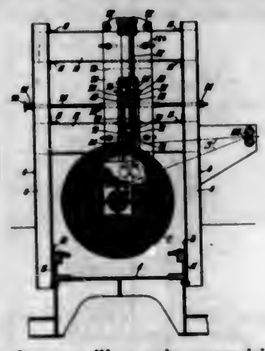
port element on which the base block is mounted at a selected location longitudinally of said element and in a selective position of rotatable adjustment relative to said support element, the base block having a vertical bore threaded from end to end thereof in parallelism with said opening, said vertical bore communicating between the top surface of the block and said inclined innner bottom wall portion, the top surface of the block being formed with gripping teeth extending fully from side to side of the block and from said bore to the adjacent end wall of the block; a clamping block having a rectangular, generally flattened shape seated upon said top surface of the base block and extending fully from side to side of the base block, said clamping block having a back wall disposed substantially at the midlength location of the base block, the clamping block having a smooth-walled opening registered with said bore and formed to a diameter substantially greater than the diameter of said bore, said opening of the clamping block extending fully from the top to the bottom surfaces of the clamping block, the clamping block having a bottom surface engaged against the top surface of the base block and formed with downwardly facing teeth complementing the teeth of the base block and extending over an area corresponding to that over which the base block teeth extend; and a connecting bolt threaded in said bore and extending through the clamping block opening, said connecting bolt when threaded in one direction within the bore being adapted to free the clamping block for rockable movement upon the base block, said bolt when threaded in an opposite direction having its head engaged against the top surface of the clamping block, to force the same into engagement with a work piece interposed between the toothed surface of the clamping and base blocks.

2,734,550
FLATTENING HAMMER FOR STOVE TOP
Carl Glenn, Dayton, Ohio
Application January 6, 1953, Serial No. 329,873
2 Claims. (Cl. 153—48)



1. A machine for handling stove sections comprising a table, a base supported on said table and including a horizontally disposed portion and a vertically disposed portion, said base adapted to support a stove section thereon, said stove section including side sections having wrinkles therein, a movable body member mounted for movement towards and away from said base, a block connected to said body member, a casing extending from said block, a plunger reciprocably arranged in said casing and adapted to hold the stove section immobile while the stove section is being worked on, a coil spring positioned in said casing and abutting said plunger, a pair of cylinders arranged on each side of said base, a hammer extending outwardly from each of said cylinders and actuated thereby, conduits for connecting said cylinders to a source of air under pressure, a valve arranged in said conduits for controlling the flow of air to said cylinders, a solenoid adapted to be connected to a source of electrical energy for controlling said valve, and an arm connected to said body member for selectively energizing said solenoid.

2,734,551
APPARATUS FOR PREVENTION OF COIL BREAKS
Albert J. Berdis, Apollo, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Application July 13, 1950, Serial No. 173,558
9 Claims. (Cl. 153—54)



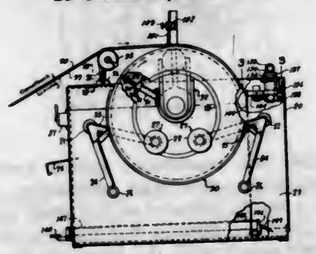
1. Apparatus for uncoiling strip comprising an arbor constructed to engage the inner periphery of a coil of strip, means for pulling the strip from the coil, a work roll arranged with its axis substantially parallel to the axis of the arbor and arranged to bear against the strip a short distance from where it leaves the coil, said strip being unsupported between the coil and work roll, a support for said work roll, means for moving said support in the direction of movement of the strip, and means on said support for moving said work roll from a point adjacent the outer periphery of a full coil toward said arbor during the uncoiling of the strip.

2,734,552
METAL CORRUGATING MACHINE
Robert F. Yonash, Dallas, Tex., assignor to The Joggler Corporation, Garland, Tex., a corporation of Texas
Application November 1, 1952, Serial No. 318,176
12 Claims. (Cl. 153—75)



1. An apparatus for forming bends in a sheet of deformable material comprising a lower clamping member, an upper clamping member, a lower clamping shoe on the upper edge of said lower clamping member, an upper clamping shoe on the lower edge of said upper clamping member and having its forward edge in substantially vertical alignment with the forward edge of said lower clamping shoe, said clamping shoes being parallel with each other and forming therebetween a clamping space adapted to receive said sheet of deformable material, means for selectively moving one of said shoes and its associated clamping member away from the other of said shoes whereby said sheet of material may be moved freely through said clamping space, and toward the other of said shoes whereby to clamp said sheet in said clamping space, a first forming platen reciprocably mounted on said lower clamping member and normally positioned below and forwardly of said clamping space, a second forming platen reciprocably mounted on said upper clamping member and normally positioned above and forwardly of said clamping space, means for selectively raising said first forming platen sufficiently to move the upper edge thereof above the level of said clamping space and for lowering said second forming platen sufficiently to move its lower edge below the level of said clamping space, whereby a projecting portion of said sheet overhanging the forward edges of said clamping shoes may be selectively bent upwardly about the forward edge of said upper clamping shoe by said first platen or downwardly about the forward edge of said lower clamping shoe by said second platen, and means for returning said forming platens to their respective normal positions.

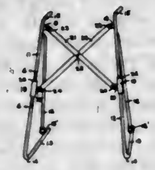
2,734,553
METHOD OF AND APPARATUS FOR REBUILDING PNEUMATIC TIRES
Vaughn Rawls, Lima, Ohio, assignor of thirty per cent to Robert W. LaWarre and ten per cent to Wesley O. Lones, Lima, Ohio
Application April 5, 1954, Serial No. 420,775
23 Claims. (Cl. 154—9)



1. A method for stitching tread material to the exterior of a pneumatic tire casing comprising the steps of preparing the peripheral surface of the carcass of the tire for adhering tread building material thereto, stretching the material of the surface of the carcass and pressing tread building material tightly against the stretched surface of the carcass.

11. Apparatus for rebuilding tires comprising roller means for mounting and rotating said tire on its major axis including a power driven member over which said tire is placed and contacting at least an area of the inside of the peripheral portion of said tire, at least one auxiliary roller mounted for contacting the rim bead of said tire and for movement generally radially of said tire for stretching the peripheral surfaces of said tire over said member and a stitching wheel movably generally radially of said tire for pressing tread building material against the outside peripheral surface of said tire and the inside of said tire against said member at the stretched area of the surface of said tire.

2,734,554
WALKING AIDS
Elmer F. Ries, Cincinnati, Ohio
Application July 16, 1952, Serial No. 299,077
3 Claims. (Cl. 155—22)



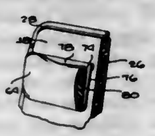
1. A walking aid comprising a pair of side members consisting of tubular members formed with horizontal bases extending with a forward curve upwardly and rearwardly terminating in horizontal handles, braces extending downwardly from said upwardly extending portions and terminating short of said horizontal bases, cross-arms pivoted to the upper ends of said tubular members and connected to sleeves slidable on said members, and a pivot at the intersection of said cross-arms to permit extending said side members in spaced relation or converging said side members together.

2,734,555
SEATS FOR USE BY FISHERMEN
Victor F. Kroner, Chicago, Ill.
Application May 22, 1952, Serial No. 289,240
2 Claims. (Cl. 155—131)



1. A light, foldable seat for the purposes set forth, formed of three boards or sections which are hingedly connected together by means of hinges so that the several boards may be folded together for convenience in carrying, catches for holding said boards in folded position, one of said boards being wider than the others, and a handle on said wider board for carrying the seat a fish pole holder positioned on the extended portion of the wider board and a fish pole holder secured to the outer end of the oppositely disposed board and arranged so that they will project upwardly on either side of the occupant when sitting on the seat, said boards being hinged so that they will be in substantially co-planar position when in use the three boards coacting to form a seat of sufficient width for a person sitting crosswise of the seat.

2,734,556
COMBINATION SEAT AND FATIGUE-RELIEVING BACK REST
Charles R. Hebrank, Santa Fe, N. Mex.
Application December 18, 1953, Serial No. 399,056
2 Claims. (Cl. 155—131)



1. A combination seat and fatigue-relieving back rest comprising a padded back rest, a padded seat detachably secured to said back rest at the lower end thereof, a fatigue-relieving rest pad detachably carried by said back rest transversely thereacross, said pad having a block of resilient padding therein and having flaps extending outwardly from opposite sides thereof, a plurality of fastener elements carried by each of said flaps, a row of spaced complementary fastener elements carried longitudinally along opposite sides of said back rest, the fastener elements on said rest pad adapted to interengage with selected ones of the fastener elements along respective sides of said back rest intermediate the ends thereof, said rest pad having a shim pocket formed therein to receive additional padding.

2,734,557
KNEELING BENCH FOR FOLDING CHAIRS
Glenn G. Hickok, Ionia, Mich., assignor to Ionia Manufacturing Company, Inc., Ionia, Mich., a corporation of Michigan
Application July 16, 1952, Serial No. 299,266
6 Claims. (Cl. 155—166)

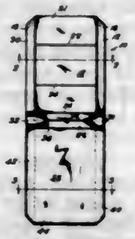
6. In combination with a folding chair having a seat and front and rear legs pivotally connected to said seat, a folding kneeling bench, comprising: means forming a

kneeling platform, said platform being pivotally mounted on said rear legs for rotation on an axis substantially parallel to the axes of the pivotal connections of said front and rear legs to said seat; and link means pivotally connected at one end to said seat in front of said front legs, and at the opposite end to said platform means behind



the rearmost position of the axis of the pivotal mounting of said platform means on said rear legs, considered with said chair in erected condition, the length of said link means and the points of pivotal connection at the ends thereof being selected to induce rotation of said platform toward the plane of said rear legs during the folding of said chair.

2,734,558
SLIP COVER
Theodore M. Waranch, Baltimore, Md.
Application November 25, 1952, Serial No. 322,377
2 Claims. (Cl. 155—182)



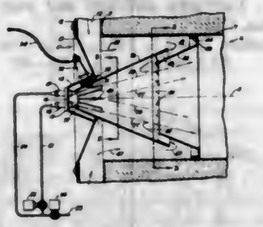
1. In a slip cover for a cushion, a top panel, elastic strips having the ends thereof secured to the edges of said top panel, the portion of said elastic strips intermediate the ends thereof being unattached, a front panel joined to said top panel, an elastic member having the ends thereof secured to the edges of said front panel and a bottom panel joined to said front panel and adapted to fit around said cushion and overlap said top panel along the sides of said cushion, the unattached portion of said top panel elastic strips extending over the outer surface of said bottom panel and spaced between the ends thereof, and said elastic member extending around the sides and rear of said cushion and overlapping said top panel thereby firmly securing said panels in position on said cushion.

2,734,559
ARTICLE OF FURNITURE
Claude L. Vaughn, Yankton, S. Dak.
Application March 3, 1952, Serial No. 274,574
8 Claims. (Cl. 155—188)



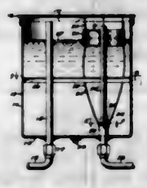
1. An article of furniture such as an upholstered arm chair, sofa and the like, comprising a bottom body portion having secured thereto an end arm portion in the form of a box-like structure open at the outer side thereof, a closure member pivoted adjacent the base of said box-like structure and having limited pivotal movement to open and close the open side thereof, a shelf structure pivotally supported at its outer end to said closure member and movable therewith into and out of the said box-like structure, and means slidably and pivotally supporting the shelf from an inner stored position in the box-like arms for horizontal movement into an outer extended position when the closure member is opened outwardly.

2,734,560
BURNER AND COMBUSTION SYSTEM
Robert L. Harris and Marcus Lothrop, Berkeley, Calif., assignors to Yuba Manufacturing Company, San Francisco, Calif., a corporation of California
Application October 9, 1951, Serial No. 250,452
4 Claims. (Cl. 158—4)



1. A burner and combustion system comprising a smooth substantially imperforate combustion cone having an axis, a nozzle disposed at the small end of said combustion cone and directed in a predetermined direction along said axis toward the large end of said combustion cone, means for directing an air stream into the large end of said combustion cone in an opposite direction and toward the small end of said combustion cone, means adjacent the large end of said combustion cone for imparting to said air stream a vortical swirl about said axis and along the inner surface of said cone, and means only adjacent the small end of said combustion cone and axially between said nozzles and the large end said cone for arresting said vortical swirl only in the vicinity of the small end of said combustion cone.

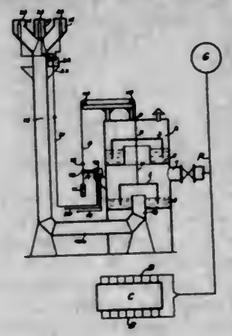
2,734,561
RESERVE FUEL SUPPLY DEVICE
Hayes W. Funkhouser, Pipersville, Pa.
Application April 4, 1952, Serial No. 280,605
8 Claims. (Cl. 158—36.3)



6. In a fuel supply system for internal combustion engines, a fuel pump, means for supplying fuel to said pump, a carburetor for the engine, a tank, a pipe leading from said pump to the interior of said tank and forming a supply means from said pump to said tank, an outlet pipe connected between said tank and the carburetor, said outlet pipe projecting upwardly into said tank to a point substantially above the bottom thereof, the upper end of said outlet pipe being open for the free flow of fuel thereinto as long as the level of the fuel is above the upper end of said outlet pipe, said outlet pipe having an outlet opening therein spaced a substantial distance below the upper end of said outlet pipe, and control means restricting the flow of fuel from said tank into said outlet pipe through said opening when the level of the fuel in said tank is at least as high as the upper end of said outlet pipe, said control

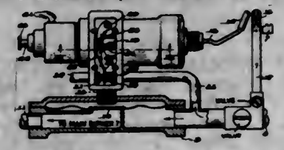
means being operative for uncovering said outlet opening by a drop in the level of the fuel below the upper end of said outlet pipe.

2,734,562
IGNITION SYSTEM FOR THE FLARE PIPE OF GAS PRODUCERS
Albert Häberle, Essen-Werden, and Eugen Kemper, Bochum, Germany, assignors, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware
Application October 5, 1951, Serial No. 249,848
3 Claims. (Cl. 158—125)



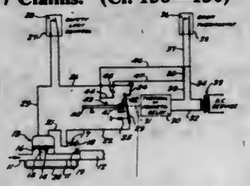
1. Apparatus for automatic ignition of excess gas in a flare pipe for a main gas pipe feeding gas from a gas producer to a coke oven battery to underfire the same, comprising: a main gas pipe for off-flow of gas from a gas producer to a coke oven; a flare pipe extending upwardly to a high level above the main gas pipe and open to the atmosphere at its upper part for discharge of excess gas from the main gas pipe into the atmosphere; two immersion bells fixedly connected together for movement in unison, with one bell operatively associated with said main gas pipe and being operable by the gas pressure in the main gas pipe to raise and lower the two bells in unison in response to changes in pressure of the gas in the main gas pipe, and the other bell operatively associated with said main gas pipe and opening and closing a communication between the lower part of the flare pipe and the main gas pipe in correspondence with the movement of the first bell in response to changes of gas pressure in the main gas pipe; an electrical resistance ignition device at the upper part of the flare pipe where it is open for discharge of excess gas to the atmosphere; electrical circuit means including switching means for impairing heat to said ignition device for effecting ignition thereby; and mechanical actuating means operatively associated with the switching means and with the two bells for operation thereby for closing the switching means and energizing the circuit means in response to a predetermined gas pressure in said main gas pipe, to set the electrical circuit means into operation to ignite the flare pipe during passage of gas therethrough from the main gas pipe by way of said other bell; characterized by said flare pipe being free of obstruction to gas flow from the upper part of the flare pipe, where it is open to discharge to the atmosphere, down to the region at which the other bell opens and closes the aforesaid communication between the flare pipe and the main gas pipe, and by said circuit means including a time delay means for delaying the time that the circuit means is set into operation after the initial actuating of the actuating means, for delaying the operation of the ignition device until a time after the entry of the gas into the flare pipe, for scavenging the same to prevent explosions therein, and said circuit means also including a separate electrical circuit including electrical time delay means for automatically interrupting the operation of the circuit means after it has imparted igniting heat to the ignition device for interruption of the ignition, after the ignition of the flare pipe has taken place.

2,734,563
ELECTRICALLY CONTROLLED VALVE FOR GAS LINES AND THE LIKE
Robert E. Newell, Irwin, Pa.
Application April 26, 1952, Serial No. 284,629
8 Claims. (Cl. 158—129)



1. Valve-controlling apparatus for gas lines, comprising a control valve casing having an inlet port, an outlet port and a third port, a valve movable to close either the inlet port or the outlet port, an electromagnet having an armature that is engageable with the valve to close it at the outlet port, a spring for moving the armature away from the magnet and against the valve when the magnet becomes de-energized, a manually-operable member for moving the valve closed at the outlet port and moving the armature into engagement with the magnet, to be held thereby against the spring presssure when the magnet becomes energized, a spring for holding the valve closed at the outlet port while the armature is energized, and a manually-tensionable spring of relatively weaker expansive force than the first-named spring and of greater force than the second-named spring, for moving the valve away from the outlet port and to close the inlet port, when the manually-operable member has returned to its neutral position and while the armature is held by the magnet.

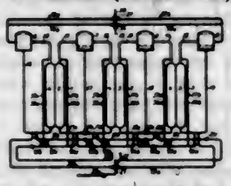
2,734,564
GAS-BURNER CONTROL SYSTEM
William A. Ray, North Hollywood, Calif., assignor to General Controls Co., Glendale, Calif., a corporation of California
Application June 29, 1953, Serial No. 364,805
7 Claims. (Cl. 158—130)



1. In a gas-burner control system: a main burner; a conduit for supplying gas to said main burner; an electrically-controlled normally-closed valve in said conduit for controlling said supply of gas to the main burner; a pilot burner for igniting the main burner and connected to the conduit ahead of said valve; a thermo-electric generating device activated by the flame of said pilot burner and capable of energizing said valve to effect opening of the same; a switch for normally controlling said energization of the valve; a first electrical circuit including said valve, said generating device and said switch; a safety device, responsive to a condition resulting from the operation of said main burner, also controlling said first circuit and acting to effect deenergization, and resultant closing, of said valve upon establishment of an abnormal degree of said condition; electrical relay means for actuating said switch so as normally to effect opening of said valve; a conventional source of electric power for energizing said relay means; an automatic primary circuit control device; and a second electrical circuit interconnecting said relay means, said source and said pri-

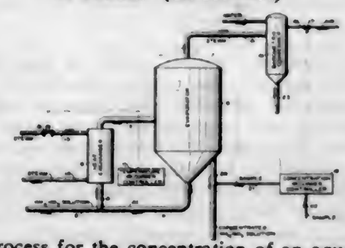
mary control device in series; all whereby, if said electric source is active the closing of said second circuit by said primary control device effects actuation of said first-circuit switch and resultant energization of said valve so that it opens, provided that said pilot burner is alight and said condition is normal; means for manually actuating said switch in the event of failure of the electric power source; and means rendered operable upon manually actuating said switch and adapted to return the switch to unactuated position upon restoration of power.

2,734,565
HEAT TREATING A FLUID SUBSTANCE
Carl Johan Lockman, Stockholm, Sweden, assignor, by mesne assignments, to Rosenblad Corporation, New York, N. Y., a corporation of New York
Application January 19, 1951, Serial No. 206,752
6 Claims. (Cl. 159—20)



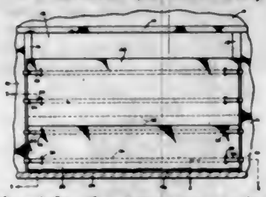
1. A method of heat treating a fluid substance tending to deposit scale in a multiple stage system including a plurality of heat exchangers, each heat exchanger having passages for conducting said substance and a heating medium in heat exchange relation, said method comprising the steps of passing said substance through said system from stage to stage, passing a vaporized heating medium through the first stage of said system, utilizing flash vapor from said substance in each stage as a heating medium for the succeeding stage, periodically changing the flow of the substance to be treated and the flow of the heating medium so as to cause them to pass through the series of said heat exchangers in the opposite order as compared with the order of flow during an immediately preceding cycle, and interchanging the paths of flow of said substance and heating medium through the individual heat exchangers.

2,734,566
CONCENTRATION OF AMMONIUM NITRATE SOLUTIONS
Russell K. Simms, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application August 20, 1951, Serial No. 242,765
11 Claims. (Cl. 159—44)



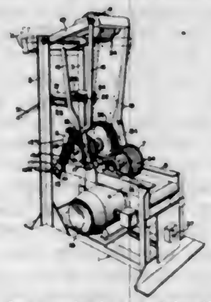
2. A process for the concentration of an aqueous salt solution, which comprises, continuously introducing an aqueous salt solution into an evaporation zone, regulating the heat supplied to said evaporation zone to provide a substantially constant temperature therein, evaporating water from said aqueous salt solution in said evaporation zone so as to produce a concentrated salt solution, withdrawing effluent steam from said evaporation zone and condensing same so as to produce a subatmospheric pressure in said evaporation zone, continuously withdrawing said concentrated salt solution from said evaporation zone, producing an output impulse representative of the concentration of said withdrawn concentrated salt solution, and automatically controlling the absolute pressure in said evaporation zone by admitting air into the evaporation system to increase the pressure in response to variations in said output impulse so as to produce a salt solution of predetermined concentration.

2,734,567
GRAIN CAR DOORWAY BULKHEAD
Barton H. Ford and Michael J. Ford, Omaha, Nebr.
Application April 30, 1953, Serial No. 352,232
4 Claims. (Cl. 160—368)



1. A bulkhead for the doorway opening of a grain car having a jamb at each side of said doorway comprising an upper section and a lower section, said sections each being formed of a single sheet of cardboard provided with a plurality of apertures adjacent each of their ends; metallic bands having end portions disposed through said apertures, said bands each being provided with a nail hole adjacent each of their ends; a flap portion for each section, the flap of the lower section being arranged to be disposed at a right angle with respect to the main body portion of said lower section and upon the floor of said car for anchoring said flap and its section with respect to said floor at times when the weight of a mass of grain is disposed upon said flap, the flap of the upper section being arranged to overlap the upper portion of the lower section at the inwardly disposed surface of said lower section for preventing a leakage of grain through said sections adjacent said overlap at times when said car is loaded with said grain; and nails adapted to be driven through the apertures of said bands and adjacent portions of said sections into said jambs for maintaining said bulkhead in an operative position prior to said loading, said bands being spaced apart and having the major portion of their length disposed at the outer sides of said sections toward said doorway for preventing the pressure of a mass of loose grain disposed against the inner sides of said sections from rupturing the latter.

2,734,568
METHOD AND APPARATUS FOR PRODUCING LACERATIONS IN THE ROAD-CONTACTING SURFACE OF A TIRE
Malcolm G. Anderson, Hudson, Ohio, assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio
Application April 22, 1952, Serial No. 283,714
7 Claims. (Cl. 164—10.2)



1. Apparatus for producing multitudinous pin-hole lacerations in closely spaced relation in the road-contacting

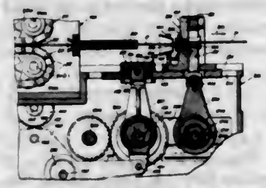
surface of a tire to increase the traction and skid resistance thereof, said apparatus comprising a pair of rolls rotatably mounted in spaced relation and adapted to engage and support the road-contacting surface of an inflated tire for circumferential rotation, a rotatable third roll adjustably mounted in spaced relation and substantially diametrically opposed to said pair of rolls and adapted to engage the road-contacting surface of said tire, the distance between said third roll and either of said pair of rolls being substantially greater than the distance between said pair of rolls, lacerating pins projecting from and distributed over the peripheral surface of said third roll and at least one roll of said pair of rolls, means to urge said third roll against the road-contacting surface to embed the pins in the road-contacting surface of said tire and means to rotate at least one of said rolls, whereby the road-contacting surface of the tire is rotated simultaneously in rolling contact with each of said rolls.

2,734,569
HAND RULE PUNCH FOR PRINTERS
Albert E. Neudauer, Oklahoma City, Okla.
Application September 23, 1952, Serial No. 311,136
4 Claims. (Cl. 164—10.5)



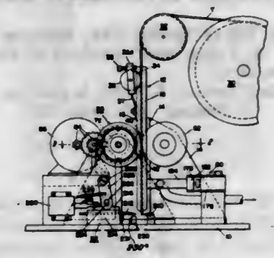
1. A hand rule punch for printers, said punch comprising an elongated base strip having graduations thereon, a lever having a jaw end secured to and under the strip, a second lever pivoted to the first lever and having a jaw portion overlying the jaw end, a male punch element secured to the jaw portion, a female punch element secured to the jaw end and extending upwardly through said strip, and a stop member slidably adjustably mounted on said strip to limit sliding movement of a rule relative to the punch elements.

2,734,570
FLYING SHEARS HAVING PRESELECTED MISS-CUT ACTION
Karl William Hallden, Thomaston, Conn., assignor to The Hallden Machine Company, Thomaston, Conn., a corporation of Connecticut
Application April 4, 1952, Serial No. 280,615
12 Claims. (Cl. 164—48)



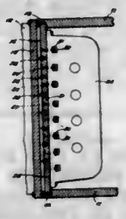
1. A rod-cutting device of the miss-cut type, comprising a frame carrying companion shear members of which one member is movable into and from a shearing position in which the same is in rod-cutting relation with the other member; two independently rotatable eccentrics arranged in stroke-supplemental relation with each other and drivingly connected with said one member for moving the same into said shearing position only when said eccentrics are in stroke-supplemental relation with each other in the shearing direction of said one member; means for driving one of said eccentrics; a cylinder; a movable piston therein having a driving connection with the other eccentric for turning the latter into and from stroke-supplemental relation with said one eccentric in said shearing direction on movement of said piston in opposite directions, respectively; presettable mechanism operative only during each recurring revolution of said one eccentric following a variable number of revolutions of the latter for admitting fluid under pressure into said cylinder to move said piston in one said opposite directions for cutting action of said members; and means for moving said piston in the other of said opposite directions.

2,734,571
APPARATUS FOR CUTTING FLEXIBLE STRIP MATERIAL INTO MEASURED LENGTHS
George E. Martell, Bellmawr, N. J., assignor, by mesne assignments, to Geo. J. Meyer Manufacturing Co., a corporation of Wisconsin
Application March 9, 1953, Serial No. 341,129
3 Claims. (Cl. 164—49)



1. In combination, in apparatus for cutting off pieces of uniform length from a strip of elastic material provided with openings so spaced apart lengthwise of the strip that the distance between each pair of successive opening equals the length of the piece to be cut off, wall means forming a substantially vertical guide passage for the strip, strip advancing means passing through openings in said wall means and adapted to engage the strip in said guide passage, strip severing means adjacent the discharge end of said guide passage, said wall means having a pair of opposed ports between said strip advancing means and said strip severing means, one of said ports communicating with the atmosphere, pneumatic detector means connected to the other port and operative in response to the arrival of one of said openings in the strip opposite said ports to terminate the operation of the strip advancing means and actuate the strip severing means.

2,734,572
CAMBER ADJUSTER FOR SQUARING SHEAR SLIDES
Paul G. Pater, Hamilton, Ohio, assignor to Columbia Machinery and Engineering Corporation, Hamilton, Ohio
Application September 16, 1952, Serial No. 309,764
3 Claims. (Cl. 164—58)



1. In a camber adjusting device for a squaring shear slide, the combination with a cutting blade attached to the lower end portion of the slide and a slide back brace disposed substantially normal to the slide and having its forward edge adjacent the lower cutter blade attachment portion of the slide of a row of spaced pull up connections between the said portion of the slide and the

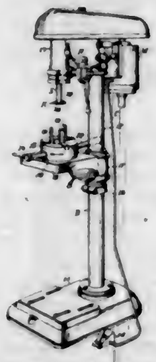
edge of the back brace, expansible means interposed in each pull up connection acting to continuously pull the cutter blade attachment portion of the slide toward the edge of the back brace, the combined capacities of the said means being sufficient to flex the slide in a direction normal to the longitudinal extent of the said cutter blade attachment portion, a series of spaced adjustment devices interposed in the row of pull up connections and each acting to urge the said cutter blade attachment portion of the slide away from the edge of said back brace to space the slide away from the brace in counteraction to the adjacent pull up devices, and means for locking the adjustment devices in operative positions.

2,734,573

MACHINE FOR CUTTING OFF THE END TURNS OF THE COILS OF ELECTRICAL MACHINE ELEMENTS

Walter Bailey, Silver Spring, Md., assignor of one-third to Edward A. Camp and one-third to Henry J. Dorr, Washington, D. C.

Application October 5, 1951, Serial No. 250,002
5 Claims. (Cl. 164—60)



2. A machine for cutting off the end turns of the coils of electrical machine elements such as stators and armatures to enable ready removal of the remaining portions of the coils from the usual slots in the elements in which they are disposed, said machine comprising a chuck for holding an electrical machine element containing coils the end turns of which are to be cut off, a rotary cutter, power means connected to said cutter for rotating the same about its own axis, the axes of said chuck and said cutter extending in like directions, said chuck and said cutter being spaced apart axially, means mounting said chuck and said cutter for axial movements of variable amounts relative to each other and for lateral movement relative to each other to enable positioning of the cutter in a plane intersecting the end turns of the coils of electrical machine elements of different lengths held by the chuck and substantially radial cutting of said end turns, and other means mounting said chuck and said cutter for planetary movements relative to each other to enable the cutter to traverse and cut the end turns of the coils annularly.

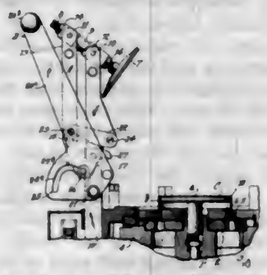
2,734,574

WORK-HOLDING CLAMP FOR TRIMMING MACHINES

Henry Reid, West Orange, N. J.

Application May 29, 1953, Serial No. 358,310
6 Claims. (Cl. 164—79)

1. Work-clamping mechanism including a work support, a pair of parallel links, a fixed support, a bell crank pivotally connected to said fixed support at one side of said work support, one end of one of said parallel links being pivotally connected on said fixed support coaxially with said bell crank, one end of the other parallel link being pivotally connected to one arm of said bell crank, a work-engaging head pivotally connected to the other ends of said parallel links, an operating arm pivotally mounted on said fixed support and having an articulated connection to one of said parallel links to swing said



work-engaging head to and from said work support, and cooperating portions on said operating arm and said bell crank to tilt said bell crank toward and from said work support upon movement of said work-engaging head toward and from the work support, respectively.

2,734,575

TAPE ROLL HOLDER AND TEAR STRIP

Barbara F. Gilbreth, Nantucket City, Mass., and Benny J. Williams, Pompton Plains, N. J.

Application January 18, 1952, Serial No. 267,174
4 Claims. (Cl. 164—84.5)



1. A tape dispenser for use with a roll of tape comprising a substantially rectangular body portion, one edge thereof being serrated for use in tearing the tape, the end of the body portion carrying said serrated edge being outwardly and forwardly curved, said body portion having integral tongues extending from opposite sides of the body portion and bent inwardly substantially at right angles from the body portion at the junction of said body portion and tongues along the sides of the tape roll, said tongues being parallel and of a width less than the length of said body portion to enable easy bending thereof, the rear end of said body portion extending rearwardly beyond said tongues, and said dispenser being comprised in its entirety by a single piece of bendable sheet metal, said tongues lying on opposite sides of said body portion and being offset by the width of the tongues, to enable bending of said tongues toward each other at right angles into the operating of the tape roll without interference with one another at points between the ends of the tongues.

2,734,576

TAPE DISPENSING DEVICE

Vincent F. Siezak, Berwyn, Ill.

Application July 13, 1953, Serial No. 367,440
1 Claim. (Cl. 164—84.5)



A tape dispensing device comprising a frame having members frictionally gripping the opposite side portions of a tape roll and movable about the periphery of the roll by a pull on the tape for stripping the tape from the

roll, a rod carried by said frame and extending across the roll over which the tape is inverted and drawn, said frame having a supporting member extending along the tape roll over which the inverted stripped end portion of the tape is laid, a plate pivoted to said frame and a cutting blade at the free end of said plate extending at an angle thereto and having a serrated edge, said plate terminating short of the supporting member whereby the tape may be clamped against the outer face of said supporting member and the tape severed by a pull on the tape lengthwise of the blade.

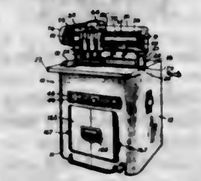
2,734,577

MULTIPLE SPINDLE PAPER DRILL

William R. Spiller, Cleveland, and Lloyd L. West, Dayton, Ohio, assignors to Harris-Seybold Company, Cleveland, Ohio, a corporation of Delaware

Original application December 26, 1946, Serial No. 718,380, now Patent No. 2,637,396, dated May 5, 1953. Divided and this application June 30, 1952, Serial No. 296,282

6 Claims. (Cl. 164—90)



1. A multiple spindle paper drill comprising a work table, a plurality of drill heads, a rail assembly for receiving and supporting said plurality of drill heads in aligned working relation with respect to each other and said table, a drive shaft adapted to be engaged in driving relation with all of said aligned drill heads by axial movement thereof lengthwise of said rail assembly, releasable retaining means for said shaft defining the operative position thereof in said driving relation with said drill heads and providing for axial withdrawal of said shaft from said aligned drill heads, drive means on said rail assembly, said shaft and said drive means including portions effective upon said axial movement of said shaft to and from said operative position thereof to couple and uncouple respectively said shaft with relation to said drive means, complementary interfitting means on said rail assembly and each said drill head constructed to interfit upon movement of said drill head substantially transversely of said rail assembly and to establish a working position of said drill head with respect to said rail assembly, and releasable means cooperating with said interfitting means to secure each said drill head on said rail assembly in said working position and providing upon release thereof for separate and removable mounting of each said drill head independently of the others thereof following axial withdrawal of said shaft.

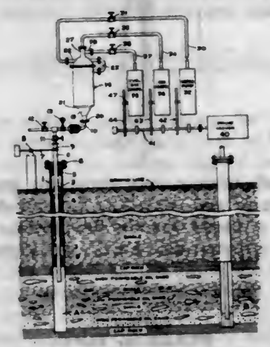
2,734,578

METHOD AND APPARATUS FOR OIL RECOVERY

Hellmuth Walter, Upper Montclair, N. J., assignor to Worthington Corporation, Harrison, N. J., a corporation of Delaware

Application February 14, 1952, Serial No. 271,512
20 Claims. (Cl. 166—11)

15. The method of recovering oil from an oil bearing formation having at least one input well and a producing well therein in spaced relation to each other which consists in delivering air and fuel at a pressure limited by the depth of the oil bearing formation to a combustion chamber positioned at the surface, combusting the air and fuel in said combustion chamber to form high temperature combustion products including nitrogen and carbon dioxide at substantially the limiting pressure, forcing the combustion products to an absorbing tower, pumping water into said absorbing tower at pressures slightly less than the pressures of the incoming combustion products, passing the water and combustion products in counterflow relationship by pressure differential and action of gravity to form carbonated water by selective absorption of the carbon dioxide during such countercurrent flow, expanding the unabsorbed portion of the combustion products including nitrogen to atmosphere, passing the



carbonated water in heat exchange relation with the wall of said combustion chamber to control the temperature of said combustion products and to simultaneously heat said carbonated water above the critical temperature thereof to form a gas and superheated steam mixture substantially free of nitrogen, continuously passing the said gas and superheated steam mixture down at least one input well to contact the oil in the oil bearing formation, and operating the producing well for recovery of oil moved therein under action of the gas superheated steam mixture substantially free of nitrogen.

2,734,579

PRODUCTION FROM BITUMINOUS SANDS

Lloyd E. Elkins, Tulsa, Okla., assignor to Stanolind Oil and Gas Company, Tulsa, Okla., a corporation of Delaware

No Drawing. Application June 28, 1952, Serial No. 296,250
1 Claim. (Cl. 166—11)

In a method for recovering oil from a solid deposit of bitumen in which at least two wells have been driven into said deposit and in which combustion of said bitumen heats said deposit and drives oil therefrom to production wells, said deposit being separated from an adjacent zone by an impervious barrier, the improvement involving maintaining the temperature in the region of combustion in said deposit within a predetermined range lying between approximately 400° F. and 1200° F. by measuring a physical characteristic of the fluids driven to said production wells indicative of said temperature, injecting water into said adjacent zone when said measurement indicates said temperature exceeds said range, and increasing the flow rate of said injected air when said measurement indicates said temperature is nearing the low end of said range.

2,734,580

METHOD AND APPARATUS FOR REPAIRING BROKEN CASING IN WELL BORES

Leslie A. Layne, Houston, Tex.

Application March 2, 1953, Serial No. 339,797
4 Claims. (Cl. 166—14)

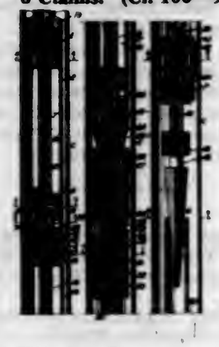
1. In a method of repairing broken casing, in well bores, the combination of steps comprising lowering into the casing a hydraulically expansible tool comprising a vertically disposed cylinder of smaller diameter than the

inside diameter of the casing and having a cylindrical wall section which is capable of being deformed outwardly by the application of fluid pressure, disposing the tool within the casing at such elevation that the cylindrical wall



section extends from a point above the break to a point below the break, and expanding the cylindrical wall section by fluid pressure whereby the portions of the casing immediately adjacent the break are aligned with each other.

2,734,581
PULLING TOOL
James W. Bonner, Houston, Tex., assignor to Lowrey Oil Tools, Inc., Houston, Tex., a corporation of Texas
Application February 4, 1952, Serial No. 269,885
8 Claims. (Cl. 166—98)



1. A pulling tool, for use in a cased well, comprising an operating string, a cylinder mounted on the lower end of said operating string, a piston slidably mounted in said cylinder, a port in said cylinder located below said piston, a piston rod secured to said piston and extending above and below said cylinder, a mandrel secured to the lower end of said cylinder and slidable on said piston rod, a packer assembly slidably supported on said mandrel below said port, means on the lower end of said piston rod to attach said rod to a fish, means to set said packer assembly so as to seal off the space between the well casing and said cylinder whereby upon admission of fluid under pressure from said space through said port into said cylinder said position, piston rod, and fish receive an upward thrust.

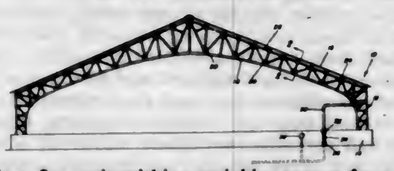
2,734,582
PACKER CONSTRUCTION
Edgar W. Bagnell, Glendale, Calif., assignor to Johnston Testers, Inc., Houston, Tex., a corporation of Delaware
Original application May 3, 1952, Serial No. 285,981. Divided and this application May 3, 1952, Serial No. 285,982
4 Claims. (Cl. 166—187)

3. A device of the class described comprising a mandrel, an expansible packer sleeve on the mandrel, a plurality of nesting concave elastomer impregnated fabric expansible shells on the mandrel external of and in engagement with one end of the sleeve, a plurality of nesting concave elastomer impregnated fabric expansible shells on the mandrel external of and in engagement with the other end of the sleeve, expansible upon and by expansion of said sleeve to engage the walls of a well bore and limit end expansion of said sleeve, there being a pair of rigid enlargements on the mandrel, one of said enlargements at the side of one set of the shells remote from



said sleeve and the other at the side of the other set of shells remote from said sleeve for limiting expansion of the shells, said enlargements having opposed frustoconical faces, a rigid annular core mounted on the mandrel within the sleeve, and means for conducting fluid pressure through and around the ends of said core to the interior of the sleeve to expand the sleeve into engagement with the walls of a well bore.

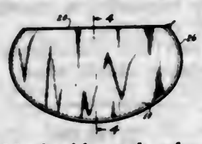
2,734,583
SPRINKLING SYSTEM
Daniel A. Milan, New Orleans, La.
Application August 7, 1953, Serial No. 372,832
4 Claims. (Cl. 169—5)



1. In a fire extinguishing sprinkler system for a building, a structural member having a tubular passage therein, means to supply fire extinguishing fluid to said passage, and means attached to said structural member in communication with said passage to discharge the fire extinguishing fluid into a building wherein said structural member is an arch truss with one chord of said truss being a tubular pipe and the struts of said truss being a tubular pipe in communication with said first pipe and supporting the other chord and a sprinkler in communication with each of said struts to discharge fire extinguishing fluid into a building.

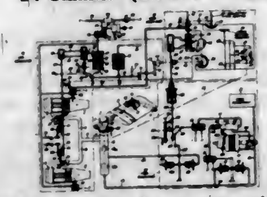
2,734,584
TOBACCO POUCH
Bernard Spooner, New York, N. Y., assignor of one-half to Samuel Lawrence Atkins, New York County, N. Y.
Application July 15, 1952, Serial No. 298,949
1 Claim. (Cl. 150—1)

A tobacco pouch having the general shape of an hour-glass when completely opened, said pouch being foldable at the narrow waist of said pouch, said waist constituting the foldable center of the pouch which symmetrically divides the pouch into two equal halves, comprising an outer covering made of foldable material, an inner sheet of moisture-proof material of the same size as said outer covering and sewed thereto at its edges, another inner sheet of moisture-proof material having a size larger than one-half the size of said other sheet and attached thereto solely at those edges adjacent the edges of the outer covering, thereby forming a deep pocket between said two inner sheets of a size larger than one-half the size of the hour-glass with a transverse opening across the sheets



above the center fold of said pouch, whereby said center fold forms an inner seal for the contents of said pocket when said pouch is closed, and a slide fastener around the periphery of said pouch forming an outer seal for said pouch when closed, thereby affording double protection for the contents of said pouch.

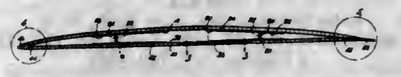
2,734,585
JET-DRIVEN HELICOPTER ROTOR POWER PLANT CONTROL SYSTEM
Richard H. Ball, Schenectady, Thomas B. Murdock, Scotia, and Hugh M. Ogle, Schenectady, N. Y., assignors to General Electric Company, a corporation of New York
Application November 28, 1950, Serial No. 198,015
14 Claims. (Cl. 170—135.4)



1. In a control system for a rotor tip jet propelled helicopter having a plurality of gas turbines driving compressors connected to supply tip jet combustion air, a main regulator continuously positionable responsive to rotor speed, an air regulator positionable responsive to the main regulator position, said main regulator including means momentarily responsive to change in the collective pitch of said helicopter rotor and stabilizing means responsive to movements of said main and air regulators, said stabilizing means having greater momentary stabilization response for respective movements of said main and air regulators in one direction than for movements in the other direction, ambient temperature measuring means connected and arranged for modifying the positioning of said air regulator, maximum temperature limiting means for controlling the position of said air regulator independently of other regulating means for limiting the operating temperature of said gas turbines, pressure responsive means connected to said gas turbine compressors for measuring the air flow to said tip jets in terms of air pressure, a fuel regulator connected to said pressure responsive means for regulating the flow of fuel proportionally to the measured air flow, said fuel regulator including a control lever having a fulcrum variably positioned by said main regulator to control the ratio of fuel to air supplied to the tip jets in response to movement of said main regulator.

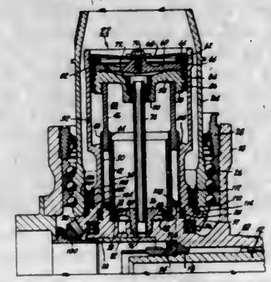
2,734,586
LOW-DENSITY PROPELLER BLADE
Clifford B. Wright and John F. Haines, Dayton, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 14, 1951, Serial No. 221,006
1 Claim. (Cl. 170—159)

A propeller blade including in combination, an airfoil section, a root section, a pair of spars extending substantially the full length of said airfoil section, each of said spars comprising a pair of channel members, the bridge portions of which are secured together and the flange portions of which extend laterally and conform to the contour of said airfoil section, means joining the flange portions of one channel member of each spar to the root section, said airfoil section including a leading edge, a trailing edge, a thrust surface and a camber surface, each surface being constituted by a low density skin comprising inner and outer impervious sheets with a layer of low density core material disposed between and bonded to



the impervious sheets, means joining the trailing edge portions of the impervious sheets to form said trailing edge of the airfoil section, the leading edge of the airfoil section comprising a high density strip having a laterally extending web, means joining the leading edge portions of the inner impervious sheets to opposite sides of said web and means joining the leading edge portions of the outer impervious sheets to the outer surfaces of said strip, and means joining the flange portions of said channel members to the inner impervious sheets of the thrust and camber surfaces whereby the airfoil section is rigidly supported by said spars.

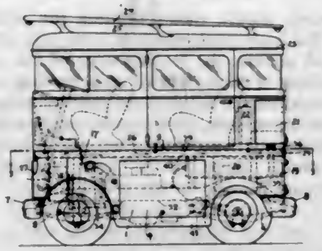
2,734,587
PROPELLER TORQUE UNIT CONSTRUCTION
Richard A. Hirsch, West Milton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 2, 1953, Serial No. 359,104
2 Claims. (Cl. 170—160.33)



1. In a blade pitch changing device for aircraft, a support providing a socket, a blade rotatably supported in said socket for angular movement to and from a definite position critical to the operation of the aircraft, means providing a cup-like boss concentric with said socket, reversible fluid pressure motor means reacting against said boss for rotating the blade relative to the socket, said motor means comprising a sleeve mounted within the cup-like boss, a cylinder of stepped bore mounted for rotation about said boss and thereby concentrically spaced from said sleeve, a fluid pressure operated piston movable within said stepped cylinder and having a skirt portion telescopically movable in said concentric spacing, helical spline connections coupling said piston skirt with said sleeve and said cylinder whereby lineal movement of the piston effects rotary motion of said stepped cylinder, a removable cylinder head within the open end of said cylinder, a snap ring and spacer cooperating with the stepped cylinder for maintaining the cylinder head in position, inboard stop means provided by the stepped cylinder and piston head for marking one end of the range of blade movement, an outboard stop provided by said cylinder head and piston head for marking the definite position of said blade, and means for adjusting the definite position to the critical value including shims disposed

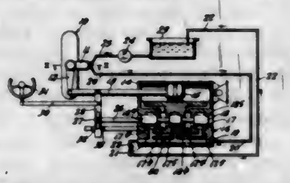
between the cylinder head and spacer ring, said stepped cylinder having a set of locating splines exterior thereof, and means coupling said stepped cylinder in driving relation with the blade including a split ring having interior and exterior splines selectively engageable with the exterior splines of said stepped cylinder and interior splines provided by said blade.

2,734,588
AUTOMOBILE WITH HEAT DISSIPATING AIR DUCT
Peter Schlumbohm, New York, N. Y.
Application June 24, 1950, Serial No. 170,192
2 Claims. (Cl. 180—58)



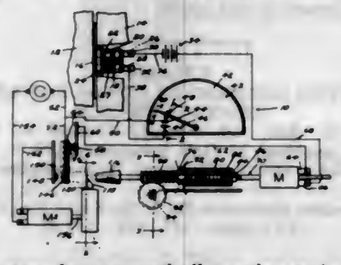
1. An automobile of the family car type, said automobile comprising two separate structural sections, both of an overall length substantially equal to the wheelbase length and of an overall width substantially equal to the width of the automobile and being superposed one above the other, the lower section comprising the axles, the wheels and the motor, said motor being located between the axles, and the upper section comprising the passenger compartment, a horizontal air duct having vertical side walls and extending over a length corresponding to the length of said two structural sections and over a substantial part of their width, said two sections being vertically spaced from each other by and to the extent of the vertical side walls of said horizontal air duct, and means communicating with said air duct for directing air through said airduct, whereby heat emanating from the motor in the lower section and passing upwardly toward the passenger compartment of the upper section will be dissipated by the air directed through said air duct.

2,734,589
SPEED-RESPONSIVE CONTROL SYSTEM FOR VEHICLE STEERING MECHANISMS
William Groen, Northridge, Calif., assignor to Bendix Aviation Corporation, North Hollywood, Calif., a corporation of Delaware
Application May 18, 1953, Serial No. 355,786
11 Claims. (Cl. 180—79.2)



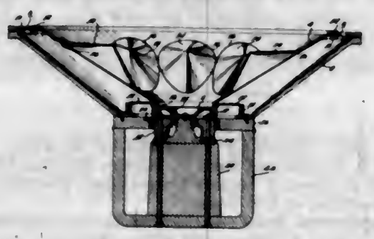
1. In combination with a vehicle having a controlled member and a wheel assembly including a wheel rotatable at a rate proportional to the speed of the vehicle: a hydraulic motor mechanically connected to said controlled member for moving it; a selector valve having a pair of line passages and selectively actuatable for selectively connecting said motor between said lines passages to energize the motor and apply a moving force to said controlled member in response to a pressure differential between said line passages; a manual control member and means coupling it to said selector valve; a source of pressure fluid; a variable-flow control valve; means connecting said source, said line passages and said control valve in series relation to each other in a single hydraulic circuit; and valve actuating means actuated by said wheel and continuously responsive to variation in the rate of rotation thereof connected to said control valve for actuating it to vary flow therethrough in inverse ratio to the rate of rotation of said wheel.

2,734,590
APPARATUS FOR AUTOMATICALLY SETTING AND RELEASING VEHICLE BRAKES
Robert A. Hays, Jr., Atlanta, Ga.
Application February 7, 1955, Serial No. 486,666
4 Claims. (Cl. 180—82)



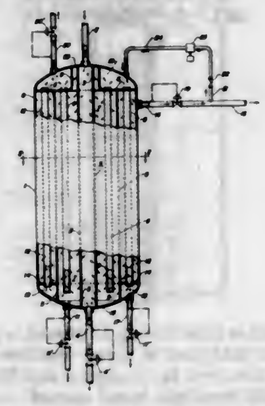
1. Apparatus for automatically setting and releasing the brakes of an automotive vehicle having an internal combustion engine and an ignition circuit therefor, said apparatus comprising an electrical motor and a series circuit, therefor, said series circuit including a door operated switch, a source of energy, a speedometer controlled switch, said motor having an axially movable drive shaft, means on said drive shaft for applying a braking force to said brakes, means operable upon extension of said drive shaft in one direction to effect deenergization of said series circuit, means for maintaining said shaft in its extended position during the deenergization of said series circuit to maintain said braking force on said brakes, a second electric motor and a series electric circuit therefor including the generator of said ignition circuit, a normally open control switch for said second circuit, said control switch being moved to its closed position upon movement of said drive shaft to its extended position, means mounted on the drive shaft of said second motor for effecting release of said drive shaft of said first motor, and resilient means for returning said drive shaft to its original position and consequently relieving said braking force.

2,734,591
LOUDSPEAKER STRUCTURE
Harry F. Olson, Princeton, and John Preston, Metedeconk, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application March 2, 1953, Serial No. 339,810
3 Claims. (Cl. 181—31)



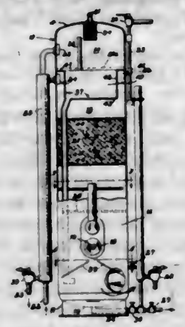
3. A loudspeaker comprising a sound radiating cone, a supporting member, a compliant member having a plurality of concentric corrugations integral with said cone connected between the periphery of said cone and said supporting member, and a rubber annulus mounted in one of said corrugations in bridging relation thereto whereby an air space between the bottom of the corrugation and the surface of said annulus is provided.

2,734,592
SEPARATION OF GASES
Evan A. Jones, Chicago, Ill., assignor to Universal Oil Products Company, Des Plaines, Ill., a corporation of Delaware
Application February 26, 1953, Serial No. 339,058
5 Claims. (Cl. 183—2)



1. A gas separating apparatus comprising a chamber, a permeable wall tubular member extending centrally through the chamber, gas inlet and outlet means at opposite ends of said member, a plurality of smaller permeable wall tubular members within the chamber around the first-mentioned tubular member, a gas collecting header at an end portion of the chamber and communicating with said smaller members but closed from communication with the first-mentioned tubular member, means for removing permeated gas from said header, and separate gas withdrawal means from the space surrounding said first-mentioned tubular member for removing from the chamber the gases that have not permeated said smaller tubular members.

2,734,593
DEMULSIFIER
Lawrence N. McKelvey, Jr., and Allmon Franklin Segrest, Tulsa, Okla., assignors to Graver Tank & Mfg. Co., Inc., East Chicago, Ind., a corporation of Delaware
Application July 23, 1954, Serial No. 445,279
1 Claim. (Cl. 183—2.7)



In a demulsifying apparatus, a generally cylindrical tank having its long axis vertically arranged, a gas separator compartment at the upper end of the tank, a gas outlet at the uppermost part of the tank and communicating with the compartment, a mist extractor screen surrounding the gas outlet, a clarifier compartment immediately below the gas compartment, metalic partition means separating the compartments and comprising an inwardly directed horizontal flange secured to the inner periphery of the tank, and upwardly open ended cylinder secured to the inner edge of the flange and extending downwardly and partially telescoped into the clarifier compartment, a horizontal plate sealing the lower end of the cylinder, the horizontal cross sectional area of said cylinder being less than fifty percent of the cross sectional area of the clarifier compartment, a product inlet port above the horizontal flange communicating with the gas compartment, an outlet port below the flange and above the horizontal plate communicating with the clarifier compartment, an upstanding pipe in the flange establishing communication between the compartments and extending above the inlet port, a filter in the clarifier compartment and extending completely across the tank, a pair of vertically spaced baffles below the filter and in spaced relation thereto, said baffles being composed of non-metallic heat insulating material and connected to the inner periphery of the tank, one of said baffles providing a passageway therethrough adjacent one side of the tank and the other baffle providing a passageway therethrough on the side of the tank opposite the first mentioned side thereby providing an irregular flow of product from below the baffles to above the baffles, a heating compartment below the baffles and having relatively narrow elongated tubes extending diametrically and horizontally across the tank and intersecting said long axis, another pair of baffles below the tubes and secured to the inner periphery of the tank and in angular relation to each other, said other baffles each defining an opening between itself and the inner periphery of the tank, said other baffles defining an elongated opening therebetween extending across the tank immediately below and generally paralleling the tubes, a water compartment below said other baffles at the lower end of the tank, an outlet pipe communicating with the water compartment, and a downwardly extending pipe having its upper end connected to the horizontal plate and communicating with said cylinder, said downwardly extending pipe passing through the filter, the first mentioned baffles and one of said other baffles, and a horizontally directed lower opening on said last mentioned pipe extending into said water compartment below said baffles.

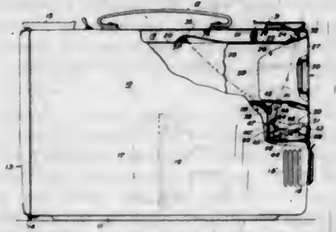
2,734,594
AIR FILTERING CLEANERS
Paul C. Meeker, Toledo, Ohio, assignor to National Super Service Co. Inc., Toledo, Ohio, a corporation of Ohio
Application May 11, 1953, Serial No. 354,110
2 Claims. (Cl. 183—37)



1. A pneumatic type of cleaner unit comprising a tank having a substantially cylindrical side wall, a partition dividing the tank into upper and lower chambers, a motor fan unit mounted in said partition so said motor extends upwardly from said partition in the upper chamber in spaced relation to said cylindrical tank wall so as to define with said wall an annular space and said fan is in the lower chamber, an air passage communicating

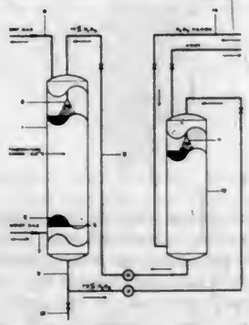
between said chambers through said motor and said fan, said fan being connected to and actuated by said motor, an air intake to the upper chamber, a first filter bag removably mounted over said air intake, a second filter bag in said lower chamber, and means for removably securing said second bag over and surrounding said fan so that all air passing through said cleaner unit passes through both said bags.

2,734,595
SUCTION CLEANER
Claud C. Hurd, North Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a corporation of Ohio
Application September 28, 1953, Serial No. 382,714
12 Claims. (Cl. 183—51)



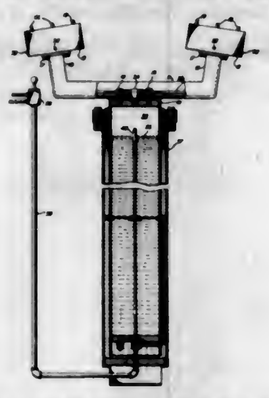
1. The combination with a suction cleaner of the type having a filter chamber for housing a large mouthed filter bag, said chamber having a large area inlet opening through which a filter bag can be inserted and withdrawn, annular filter seating means adjacent said inlet opening against which the mouth of a filter bag may be clamped in an air tight manner; of means for closing the mouth of a filter bag located in said filter chamber comprising, a filter bag closure arm extending crosswise of said filter chamber adjacent said inlet opening, resilient means supporting said arm on said cleaner for movement between an open bag position adjacent one side of said filter chamber and a bag closing position adjacent an opposite wall of said filter chamber, a removable closure for the inlet opening of said filter chamber, and means for holding said filter bag closure arm adjacent the open bag position until an operator removes the closure for said filter chamber from the inlet opening thereof and for thereafter allowing said arm to move to the bag closing position thereof.

2,734,596
DRYING GASES
Marcus M. Striplin, Jr., Florence, Ala., assignor to the Tennessee Valley Authority, a corporation of the United States
Application September 4, 1951, Serial No. 245,066
3 Claims. (Cl. 183—115)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A process for drying a gas which comprises maintaining a liquid phosphoric acid within the range of concentration corresponding to 75 to 77 weight per cent P_2O_5; and intimately contacting said gas with such phosphoric acid at a temperature above −60° C. and below 254° C.

2,734,597
VEHICLE HOIST SAFETY STRUCTURE
James J. Pelouch, Cleveland, Ohio, assignor to Harold C. Schott
Application May 29, 1951, Serial No. 228,870
2 Claims. (Cl. 187—8.74)

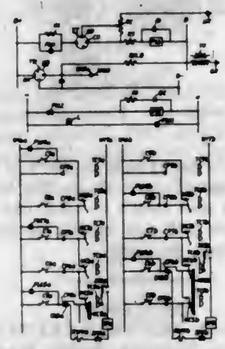


1. In a vehicle hoist having a lift post, a pressure chamber by which said post is raised and lowered, a vehicle engagement structure for engaging and lifting a part of a vehicle, said structure being carried by said lift post and comprising a body member having a laterally disposed upper surface, said body member having a plurality of pin chambers laterally spaced from each other, a pin having its lower end slidably mounted in each said chambers and having an upper end extendable to a position above said top surface of said body member beside a part of a vehicle resting upon said engagement structure to prevent shifting of said vehicle while hoisted, control means to control elevation and lowering of said lift post and vehicle engagement structure, fluid pressure means responsive to the operation of said control means and communicating said pressure chamber and said pin chambers for applying a lifting force to each pin with a force of low intensity insufficient to lift said vehicle, and said last-named means including means communicating said control means and each of said pin chambers for individually and collectively applying a lifting force to said pins.

2,734,598
ELEVATOR CONTROL SYSTEM TESTING APPARATUS
Stephen Anthony Hornung, New York, N. Y., assignor to Otis Elevator Company, New York, N. Y., a corporation of New Jersey
Application November 16, 1954, Serial No. 469,087
5 Claims. (Cl. 187—29)

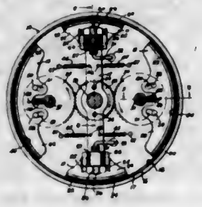
5. In an elevator system in which up landing calls and down landing calls for each of a plurality of landings are registered on cold cathode gas tubes to set up stops for the landings, each of said tubes having an anode-cathode circuit and a firing circuit, and in which a source of direct current is provided for the anode-cathode circuits and a source of alternating current is provided for the firing circuits, characterized in that there are provided means for testing the voltage of said direct current source and said alternating current source comprising a testing cold cathode gas tube having an anode, a cathode and a control electrode, having characteristics comparable to those of the call registering tubes, and having its anode and cathode connected across said direct current source

and its control electrode and cathode across said alternating current source, a resistance in the anode-cathode circuit of said testing tube of an ohmic value sufficient to reduce the current in that circuit to below conduction value, a relay response to firing of said testing tube to insert said resistance in said anode-cathode circuit of said testing tube and responsive to said breaking of said anode-cathode circuit of said testing tube to short-circuit that resistance so as to cause repeated firing and extinguishing of said testing tube, said relay having means for delaying the short-circuiting of said resistance to cause the tube to be extinguished for a longer period than it



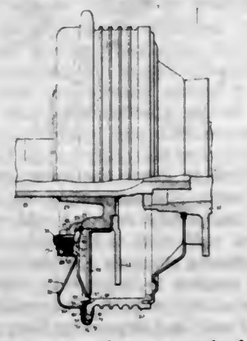
is fired, and a second relay having an operating circuit adapted to be completed by the first named relay when it is operated and broken by said first named relay when it is dropped out, said second relay having means for delaying its dropping out when its operating circuit is broken and having means operable when dropped out to set up regular stops at certain selected landings, whereby upon failure of said testing tube to refire upon short circuiting of said resistance by said first relay due to insufficient voltage from said direct current source or from said alternating current source, said regular stops are set up at said certain selected landings.

2,734,599
TORQUE ENGAGED BRAKE
Robert H. Merritt, Los Angeles, Calif.
Application October 20, 1952, Serial No. 315,679
10 Claims. (Cl. 188—141)



1. A braking mechanism comprising, in combination: a rotatable brake drum; a backing plate fixed against rotation; a pair of actuating shoes positioned for engagement with the interior surface of said drum; a pair of braking shoes positioned circumferentially intermediate said actuating shoes; an actuating member connecting said actuating shoes, said actuating shoes being radially movable thereon; toothed gear means associated with said actuating member for moving said braking shoes into contact with said drum upon engagement with said drum and slight circumferential rotation of said actuating shoes; and means to move said actuating shoes into contact with said drum.

2,734,600
SEALED BRAKE DRUM CLOSURE
Harold A. Strickland, Jr., Glen Ellyn, Ill., assignor to The Budd Company, Philadelphia, Pa., a corporation of Pennsylvania
Application March 9, 1951, Serial No. 214,764
6 Claims. (Cl. 188—218)



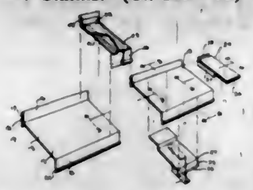
1. A sealed closure for the open end of a brake drum mounted to rotate concentrically relative to an annular fixed seat, comprising in combination with the brake drum having a radial end face, an annular closure member carried with and by the brake drum and having a sealed rotary joint with said annular fixed seat, said annular closure member having a radial end face opposed to the radial end face of the brake drum, annular sealing means between said opposed radial end faces of the drum and annular closure member, and means binding the end of the brake drum and annular closure member together and providing radial movement therebetween, the outer assembly thus provided forming a non-rotary but radially yieldable joint between the end of the brake drum and said annular closure member, said brake drum and annular closure member also being provided with other annular interengaging surfaces which form a radially adjustable annular seal supplemental to said annular sealing means.

2,734,601
INSULATED WINDOW
Ernest L. Anderson, Seattle, Wash.
Application April 3, 1950, Serial No. 153,697
4 Claims. (Cl. 189—75)



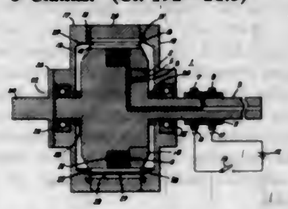
1. An insulated window comprising two overlapping frames, one said frame presenting a continuous coplanar flange defining an opening, a continuous nonplanar flange circumscribing said opening, and a length of T-bar bridging the opening and having the ends of its leg flange secured to the said nonplanar flange and the ends of its arm flange rabbeted back and abutting the inner edges of the said planar flange, the other said frame providing a continuous flange concentric to and spaced inwardly from the said nonplanar flange and provided with notches receiving the leg of the said T-bar, and providing a length of U-bar surrounding the said leg and secured at its end to the notched flange, insulation separating said frames, and means holding said frames together.

2,734,602
METAL SILLS
Axel G. Dawson, Jamestown, N. Y.
Application March 16, 1953, Serial No. 342,661
7 Claims. (Cl. 189—75)



1. A metal sill to cover the lower masonry wall of a window or other opening comprising a plate extending over and completely covering said wall, end members secured to said wall at the ends of said opening, said members having channels opening toward said opening and being adapted to frictionally engage the ends of said plate, an anchor having a depending portion embedded in said wall and depending flanges on said plate engageable with said anchor in a manner to permit endwise movement of said plate with respect to said anchor.

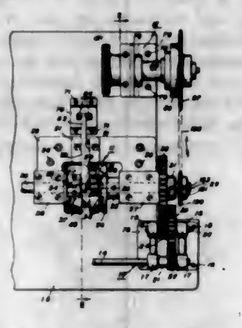
2,734,603
MAGNETIC FLUID CLUTCHES
Kenneth E. Wakefield, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application September 29, 1950, Serial No. 187,577
3 Claims. (Cl. 192—21.5)



1. In combination, a pair of members spaced with their faces in juxtaposition and relatively rotatable on a common axis, one member comprising a magnetic material having embedded therein an electromagnet, means to energize said electromagnet, said one member having a shaft connected thereto, the other member comprising a magnetic material and having a shaft connected thereto, and a magnetic fluid comprising a mixture of a magnetic powder and a lubricant in the space between the faces of said spaced members, whereby when said electromagnet is energized, flux passes between said members through said fluid tending to bind said members for transmission of torque between said shafts, the faces of said members having ribs affixed thereto in mutually spaced relation, said ribs being positioned at an angle to the direction of fluid flow during relative rotation of said members to create turbulence in the flow of said magnetic fluid, and said ribs being non-magnetic to prevent cyclic variations in said flux passing between said members whereby cyclic variations in torque produced in one shaft by rotation of the other is prevented.

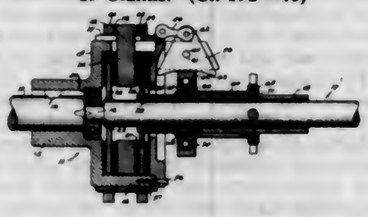
2,734,604
AUTOMATIC CONTROL MECHANISMS FOR MACHINES WITH INTERDEPENDENTLY OPERATING PARTS
John G. Soave, Long Island City, N. Y., assignor to Waldes Kohinoor, Inc., Long Island City, N. Y., a corporation of New York
Application December 31, 1954, Serial No. 479,169
13 Claims. (Cl. 192—31)

1. Automatic control mechanism for performing a number of operations at repeated intervals within a selected number of revolutions of a driven shaft, comprising in combination clutch means for connecting the driven shaft to a machine part to be operated, a circuitous pathway, a series of freely rolling balls of differ-



ent diameter movable along said pathway, a lever mechanism actuated in spaced intervals by the balls of larger diameter to actuate said clutch to cause the driven shaft to drive said machine part, and means for circulating said balls in said circuitous pathway.

2,734,605
TWO-WAY FRICTION CLUTCH
William G. Sherman, Seattle, Wash.
Application April 28, 1950, Serial No. 158,676
19 Claims. (Cl. 192—48)



3. In a clutch mechanism the combination of a driving member, a driven shaft and a concentric driven sleeve surrounding said shaft, a clutch disc, fixed to each of said shaft and driven sleeve, a drive shell connected to said driving member and having an annular flange encircling said discs, said flange having slots therein, a drive spider within said flange and having legs passing through said slots, said spider being positioned between said clutch discs, a back plate connected to one end of said annular flange, an externally threaded sleeve slidably mounted on the periphery of said drive shell and having slots therein adapted to receive the legs of said drive spider, spaced adjusting nuts threaded on said last mentioned sleeve, a plurality of cam members pivotally attached to said back plate, a link connecting each of said cams to said threaded sleeve, and means for pivoting said cams to reciprocate said threaded sleeve whereby the drive spider is selectively moved against one of the clutch discs.

2,734,606
CAPSTAN CLUTCH
John C. Bellamy, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a corporation of Illinois
Application April 28, 1951, Serial No. 223,537
17 Claims. (Cl. 192—81)

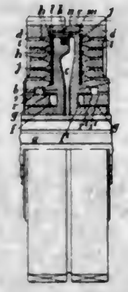
1. An externally controllable capstan clutch comprising, a driving member including drum means having an axis, cord means spirally wrapped around said drum means, a driven member axially mounted with respect to said driving member, said cord having two ends one of which is attached to said driven member, and externally controllable actuating means having one extremity mount-

ed on said driven member and the other of said cord ends secured to the free extremity of said actuating means so that circumferential movement of the free extremity



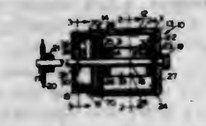
of said actuating means will cause engagement of said driving member and said cord means, said actuating means being urged to a position effecting engagement of said driving means and said cord means.

2,734,607
FLUID COOLED AND OPERATED CLUTCHES
Thomas Hindmarch, Chesham, England
Application August 7, 1951, Serial No. 240,717
Claims priority, application Great Britain February 26, 1951
4 Claims. (Cl. 192—86)



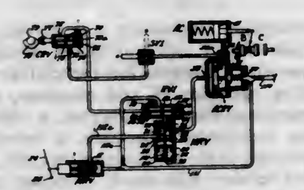
1. Pressure liquid operated friction clutch comprising a rotatably hollow first clutch member having inner and outer faces, a rotatable second clutch member in the form of a disc having inner and outer faces mounted within and concentric of the first clutch member and adapted to be moved axially to engage with its outer face the inner face of the first clutch member to engage the clutch, means to introduce pressure liquid to the inner face of the disc to move the disc's outer face against the inner face of the first clutch member, the interengaging faces of the clutch members having V-shaped groove-like depressions with annular cavities in the form of annular grooves in the bottom of the same, channel means in the second clutch member by which the pressure liquid flows to the engaging faces of the clutch members while the clutch is in operation, the annular grooves in the first clutch member being connected by narrow axial bores with the exterior of the same, while the annular grooves in the second clutch member are interconnected by radial bores connected with an annular space around the second clutch member, said space being connected with the exterior of the first clutch member by bleed holes.

2,734,608
FLUID ACTUATED SPEED CONTROL DEVICE
Joseph J. Longo, Racine, Wis., assignor to Belle City Malleable Iron Company, a corporation of Wisconsin
Application March 20, 1953, Serial No. 343,619
9 Claims. (Cl. 192—116.5)



1. In a speed control device, a casing having a fluid chamber including an inner cylindrical wall, a drive shaft mounted for rotation on said casing, said shaft having a shaft extension within said chamber, means connected to said drive shaft for rotating the same, a first impeller assembly within said chamber, said first impeller assembly including a first disc connected to said shaft extension for rotation therewith, a plurality of first vanes connected in circumferentially spaced relation to said first disc for rotation therewith, said vanes extending axially within said chamber and having outer edge portions in substantially contiguous relation to said cylindrical wall and inner edge portions substantially spaced in radial relation from said shaft extension, a second disc axially spaced with respect to said first disc, means connecting said vanes to said second disc, said second disc having a central bore of larger diameter than said shaft extension and encircling said shaft extension, a second impeller assembly within said chamber, said second impeller assembly comprising a sleeve journalled on said shaft extension, first and second rotatable members connected to said sleeve in axially spaced relation for rotation therewith, a plurality of second circumferentially spaced vanes connected to said rotatable members, said second vanes having their outer edges radially spaced with respect to the inner edges of said first vanes, an extension of said sleeve extending outwardly through said bore and from said chamber, and a switch control element connected to said extension on said sleeve, said control element being operable to actuate an electrical switch during a predetermined torque on said second impeller assembly in response to the rotation of said first impeller assembly.

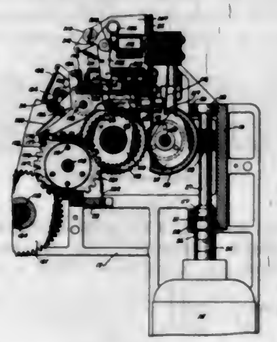
2,734,609
PNEUMATIC CLUTCH CONTROL
Ralph C. Fritzsch, Cincinnati, Ohio, assignor to The Cincinnati Shaper Co., Cincinnati, Ohio, a corporation of Ohio
Application April 9, 1953, Serial No. 347,798
13 Claims. (Cl. 192—129)



1. An operating mechanism for operating the friction clutch controlling the movement of the ram of a press brake and the like, comprising an air cylinder having a piston for operating said clutch, an air controlled regulating valve connected to a source of air under pressure and connected also to said cylinder to supply regulated air thereto for actuating said piston, a mechanical regulating valve connected to a source of air under pressure and connected also to said air controlled regulating valve to provide control air for said air controlled regulating valve, a non-repeat valve in said last named connection having a first inlet connected to said mechanical regulating valve, and a second inlet, and an outlet connected to said air controlled regulating valve, and spring means normally holding it in a position connecting said first inlet with said outlet, a relay valve having an outlet connected to said second inlet and having an inlet connected to a source of air under pressure and having spring means to keep it normally closed, a ram valve, means for operating said ram valve in timed relation to the movement of said ram to occupy a closed position during the downstroke of the ram and an open position during the upstroke of the ram, said ram valve being connected to said regulated air, and being also connected to said relay valve to operate the same; whereby, said ram valve opens

at the end of the down-stroke of the ram, thus operating said relay valve to supply air under pressure to said air controlled regulating valve regardless of the position of said mechanical regulating valve, to cause said clutch to remain engaged during the entire up-stroke of said ram, said ram being then stopped by disengagement of said clutch when said ram valve moves to closed position at the end of the up-stroke of said ram, causing said relay valve to shift and exhaust the air from said air controlled regulating valve.

2,734,610
DRIVE MECHANISM FOR PAPER FEEDING DEVICE
Albert W. Mills, Point Pleasant, N. J., and Frank J. Furman, Endicott, and Edward J. Rabenda, Poughkeepsie, N. Y., assignors to International Business Machines Corporation, New York, N. Y., a corporation of New York
Original application August 9, 1945, Serial No. 609,854, now Patent No. 2,531,885. Divided and this application March 11, 1950, Serial No. 149,162
4 Claims. (Cl. 192—145)



1. In a clutching mechanism with driving and driven devices, a pair of low and high speed clutches therefor, separate operating members for the clutches, a magnet for controlling operation of said members, an armature frame cooperating with said magnet, a second magnet for selecting high speed operation, a second armature frame cooperating with said second magnet, interposing means placed between said clutch operating members and the first mentioned armature frame to control selective mechanical connection between the frame and either one of the members, said interposing means being selectively positioned by said second frame to effect such selective connection and being operated by said first mentioned armature frame to operate the selected one of said members and thus selectively operate one of said clutches, and means for energizing either the first mentioned magnet or both magnets, whereby operation of the first mentioned magnet causes operation of one clutch for low speed operation and operation of both magnets causes selection and operation of the other clutch for high speed operation.

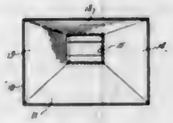
2,734,611
FRUIT RECEIVING CONVEYOR
Jewell Marvin Gordon, Fort Meade, Fla.
Application January 6, 1954, Serial No. 402,501
10 Claims. (Cl. 193—7)

1. Fruit picking equipment for attachment to a ladder for supporting a workman in elevated position, a tubular chute mounted on one side of the ladder extending substantially to the top of the ladder, hooks on the free ends of the chute for engaging an upper portion of the ladder for suspending the chute on the ladder, means for fastening the lower end of the chute to a lower portion of the ladder, said chute being made of a strip of flexible material having free edges, slide fastener means for connecting the free edges from the bottom to the top progressively whereby the fabric makes a tube for a portion of its length and forms a trough for the remaining portion of its length, the lower end of the chute being formed into an article discharge opening for directing fruit into receptacles located at the base of the ladder, said slide fastener means including hookless fasteners on the free edges of the fabric and a slide mounted on the edges for separating



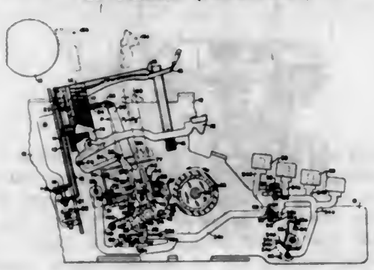
and bringing the edges together, an apron having means for attachment to the body of the workman, means for securing the lower end of the apron to the said slide whereby when the workman climbs up and down the ladder a tubular chute is provided below the slide and a trough is formed above the slide whereby fruit may be placed directly into the trough and dropped into the tube where the apron joins the slide whereby the fruit will be conveyed without damage to the bottom of the chute and discharged into a receptacle.

2,734,612
TREMIE
Harold E. Milligan and John E. Muehring, Creston, Iowa
Application July 3, 1952, Serial No. 296,998
2 Claims. (Cl. 193—30)



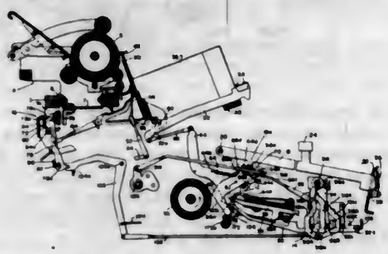
1. A portable tremie comprising a hopper of pyramidal shape having its larger end open and an opening at its apical end and a sleeve surrounding said opening disposed at an angle to the plane of said larger end and extending outwardly of said hopper, a first tubular stem section receiving said sleeve in one end and tapering from said one to the other end thereof, a second tubular stem section of substantially uniform cross sectional area receiving said other end of said first section in one end thereof and extending longitudinally from said first section, and means releasably connecting said first and second stem sections together against longitudinal movement relative to each other and said first section to said hopper.

2,734,613
POWER MECHANISM FOR TYPEWRITING MACHINES
Charles H. Kennedy, Jr., North Syracuse, and Willard H. Wade, Syracuse, N. Y., assignors to Smith-Corona Inc., a corporation of New York
Application October 23, 1952, Serial No. 316,486
19 Claims. (Cl. 197—17)



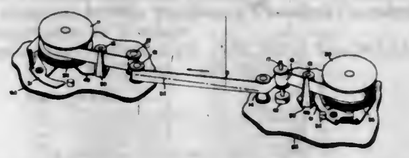
1. A power mechanism for typewriting machines comprising a power driven roller, a part impellable from a rest position to which it is biased to return, a cam having means to vary its pitch and which cam is carried by said part for movement relatively thereto in the rest position of the part into run-out drivable engagements with the roller at the conclusion of which both the extent and the speed of movement of the impelled part varies in accordance with the adjusted pitch of said cam, spring means coactive with said part and cam to bias the cam when disengaged from the roller to assume a rest relation to said part in which the part is returnable to its rest position without engaging the cam with the roller, and stop means on said part and said cam engageable to prevent movements of said cam away from its rest relation to said part which substantially exceed those required for run-out drivable engagements of the cam with the roller.

2,734,614
PROPORTIONAL RIBBON FEED MECHANISM
Ralph E. Page, Lagrangeville, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application June 18, 1952, Serial No. 294,160
13 Claims. (Cl. 197—151)



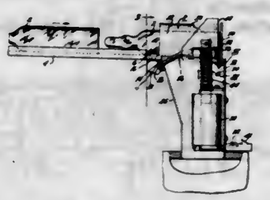
13. In a typewriter or like machine having a carriage, a platen mounted on said carriage, a series of type bars bearing respectively characters of a number of different widths, a ribbon bearing a transfer medium operatively disposed in front of said platen and in the common path of movement of said type bars, and an escapement mechanism for advancing the carriage after each operation of a type bar; selectively actuable power means for operating the respective type bars and the escapement mechanism, feed means operable to advance said ribbon, means operable upon operation of any of said power means to drive said feed means so as to advance said ribbon, and control means distinct from said feed means drive means and said escapement mechanism and operable upon operation of the respective type bars to vary the operation of said feed means by its drive means according to the width of the character printed.

2,734,615
DIAGONAL RIBBON FEED
John H. Van Wallendael, Binghamton, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application December 30, 1952, Serial No. 328,596
4 Claims. (Cl. 197—167)



1. In a ribbon feeding device, a pair of ribbon spools with a ribbon drawn between them, a series of guide rollers for positioning the span of ribbon between such spools, means for operating said spools to feed and reverse the direction of movement of said ribbon back and forth between said spools, a crowned guide roller at one end of said span and an elongated pivot for said crowned guide roller permitting axial movement thereof when the ribbon is drawn in one direction, said pivot being slanted in a plane substantially parallel with the longitudinal path of movement of the ribbon.

2,734,616
ARTICLE TRANSFER DEVICE
Roger E. Schell, Woodbury, and Lester R. Moskowitz, Belmar, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application January 31, 1952, Serial No. 269,308
8 Claims. (Cl. 198—27)

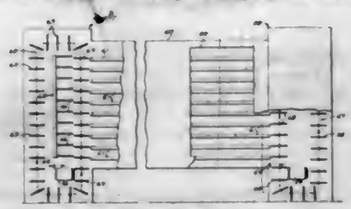


1. A transfer device comprising a pivotally mounted article support member, friction latch means normally holding said member in substantially horizontal position, means responsive to a source of external energy and positioned for exerting sufficient downward force on an article supported on said member to open said latch means and cause downward pivotal movement of said member whereby said member assumes an inclined position.

2,734,617
BAKERY SYSTEM WITH CONTINUOUS PROOFER AND COOLER
Hiram E. Temple, San Gabriel, Calif., assignor to Read Standard Corporation, a corporation of Delaware
Application June 5, 1952, Serial No. 291,894
9 Claims. (Cl. 198—31)

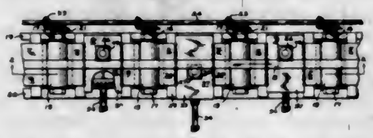
1. In an article conveying apparatus for a bakery system, the combination of: a frame having inlet and outlet ends; a plurality of superimposed, vertically spaced conveyors carried by said frame and extending generally horizontally between said inlet and outlet ends thereof; an inlet conveyor carried by said frame at said inlet end thereof for delivering articles to said inlet end of said frame in single file, said inlet conveyor extending trans-

versely of said superimposed conveyors and being spaced vertically therefrom; an inlet elevating conveyor carried by said frame at said inlet end thereof, said inlet elevating conveyor being provided with a plurality of flights spaced apart therealong and being positioned adjacent said inlet conveyor and said superimposed conveyors so as to periodically align certain of said flights with said inlet conveyor and said superimposed conveyors, respectively; first inlet sweep means carried by said frame at said inlet end thereof and movable relative to said inlet conveyor and said inlet elevating conveyor for transferring



successive groups of articles from said inlet conveyor to successive ones of said flights of said inlet elevating conveyor, respectively; second inlet sweep means carried by said frame at said inlet end thereof and movable relative to said inlet elevating conveyor and said superimposed conveyors for periodically transferring groups of articles from a plurality of said flights of said inlet elevating conveyor to said superimposed conveyors, respectively; and means operatively connected to said superimposed conveyors, said inlet elevating conveyor, said first inlet sweep means and said second inlet sweep means for operating same in timed relation.

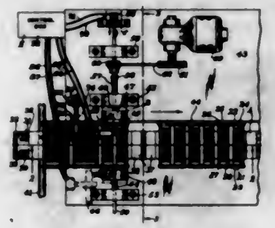
2,734,618
TABLES FOR FEEDING METAL BARS
Charles Palmer, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a corporation of Massachusetts
Application August 10, 1951, Serial No. 241,323
7 Claims. (Cl. 198—33)



4. A table for feeding a metal bar of rectangular cross-section, comprising: a series of spaced, parallel, horizontal rollers for supporting the bar, means for rotating the rollers for feeding the bar longitudinally, idler rollers located on opposite sides of the line of travel of the bar, each idler roller being formed in its upper portion with a surface of upwardly-converging frusto-conical shape and being freely rotatable about a substantially vertical axis, means for moving an idler roller on one side of the bar vertically and laterally of the bar independently of the roller on the other side of the bar, the idler roller which is subject to vertical and horizontal movement being formed in its lower part with a surface of downwardly-converging, frusto-conical shape.

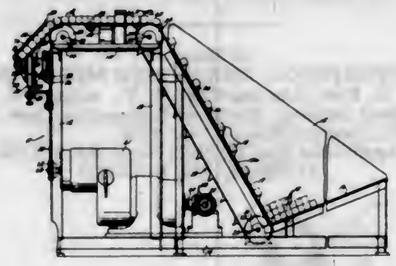
2,734,619
APPARATUS FOR SECURING UNIFORM ORIENTATION
Philip D. Labombarde, Nashua, N. H.
Application June 10, 1954, Serial No. 435,871
8 Claims. (Cl. 198—33)

1. In an apparatus of the class described, intermittent container conveyor means for transporting a line of cylindrical containers in spaced formation up to, and away from, a station on said conveyor means; continuously revolving spindle means positioned opposite the adjacent end of a container at said station for spinning a container around its central longitudinal axis while halted at said station; advancing means, actuated upon the arrival of a container at said station, for advancing said spindle means into engagement with the adjacent end of a con-



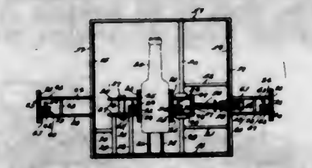
tainer, a sound pick-up needle, at said station, in contact with the curved outer surface of a cylindrical container being revolved by said spindle means for sensing sound variations therearound and electronic means, controlled by said needle for retracting said spindle means upon the sensing of a pre-selected sound from the container by said needle.

2,734,620
APPARATUS FOR FEEDING WORK PIECES FROM A HOPPER TO A DOWEL CUTTING MACHINE
Clarence H. Fischer and William W. Parsons, Dayton, Ohio, assignors, by mesne assignments, to The East Dayton Tool and Die Company, Dayton, Ohio, a corporation of Ohio
Application August 24, 1950, Serial No. 181,282
8 Claims. (Cl. 198—45)



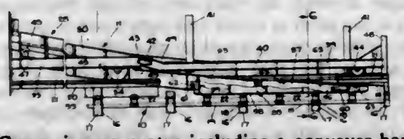
1. An apparatus for delivering work pieces to a machine which performs work thereon, comprising a supporting structure, a hopper at one side of said structure adapted to contain a quantity of work pieces, a conveyor movable upwardly through said hopper to engage work pieces therein and move the same from said hopper, a second conveyor provided with a pair of surfaces disposed at a substantial right angle with respect to one another and at a substantial 45° angle with respect to the horizontal, and located at the other side of said structure operable to move work pieces individually and in a direction transverse to the first mentioned conveyor to said machine, guide means extending downwardly at an angle to the vertical and adapted to receive work pieces discharged from said first mentioned conveyor and to support a plurality of work pieces in engagement one with the other and with the lowermost work piece in engagement with said second conveyor, whereby upon the removal of said lowermost work piece by said second conveyor the next higher work piece on said guide will move into engagement with said second conveyor, and means for operating said conveyors.

2,734,621
CONVEYING MECHANISM
Julius J. Mojonnier, Winfield, Ill., assignor to Mojonnier Bros. Co., Chicago, Ill., a corporation of Illinois
Application April 17, 1951, Serial No. 221,453
1 Claim. (Cl. 198—162)



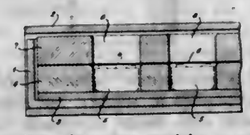
In a conveying mechanism, a main frame having two horizontal portions, disposed in separated parallel planes, and an intermediate inclined portion; a pair of endless belts and driving means therefor, each belt including a chain of links alternately lying in vertical planes and horizontal planes normal to the vertical planes, each horizontal link having secured thereto an article gripping element maintained in vertically extending position; guide means supported in said frame maintaining courses of said belts in parallel opposed relation for gripping articles therebetween and guiding said courses through said horizontal portions and intermediate inclined portion of said frame comprising two vertical, spaced apart parallel channels walls, the lower portion of said vertical chain links being disposed in the channel between said walls and the alternate horizontal chain links slidably resting upon the upper margins of said walls; spaced apart parallel vertically disposed rails positioned in said frame between said article gripping courses for slidably supporting the bottoms of said articles; means contacting the surfaces of said gripping elements opposite their gripping surfaces comprising spaced apart parallel bar members which respectively contact said upper and lower surface portions of said gripping elements and with the said bar members associated with at least one article gripping course being slidably disposed; and spring actuated means in contact with at least one of said contacting means, yieldably urging it toward the associated belt maintaining continuous pressure thereon throughout the article gripping portion of said belts.

2,734,622
CONVEYING APPARATUS, INCLUDING A BODILY MOVABLE BELT SUPPORTING TRANSFER MEANS
Harold S. Everhart, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Application April 6, 1953, Serial No. 346,858
12 Claims. (Cl. 198—186)



1. Conveying apparatus including a conveyer having a main frame, a head pulley and a tail pulley on said main frame, idler roll means on said main frame extending transversely thereof and spaced between said head and tail pulleys, an endless belt conveyer operating over said head and tail pulleys and carried in its working run by said idler rolls, rail means extending longitudinally of said main frame, tripper apparatus including a main frame, means supporting said tripper main frame to travel along said rail means, pulley means on said tripper from over which said endless belt conveyer is reeved, idler roll means on said tripper main frame adapted to carry said endless belt conveyer, a sledge carried directly by said transverse idler roll means on said main frame, idler roll means carried by said sledge for supporting said endless belt conveyer between said idler rolls on said first main frame and said idler roll means on said tripper frame, and towing means interconnecting said tripper frame and said sledge providing for both pivotal movement of said sledge about a horizontal axis and elevational movement to different generally horizontal planes.

2,734,623
PACKAGING OF EXPLOSIVES
Cecil R. Pullum, Alton, and Thabus R. Harvey, East Alton, Ill., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application November 19, 1953, Serial No. 393,164
10 Claims. (Cl. 206—3)



2. A prepared package comprising, a pair of confining members each provided with a plurality of spaced cells arranged in the same pattern, the cells of said members being aligned, a layer of rupturable material between said members, explosive-laden devices in some of said cells, one only of each pair of aligned cells being occupied by an explosive-laden device, and closure means for retaining said parts in the relationship aforesaid.

2,734,624
SPARE KEY HOLDER
Walter Kernicki, Grand Rapids, Mich.
Application December 31, 1952, Serial No. 329,065
1 Claim. (Cl. 206—38)

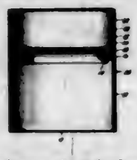


In a spare key holder: a relatively flat card provided with a plurality of slits therethrough arranged to provide a pair of straps for an automobile key and another pair of straps for a house key, the keys being inserted through the slits with the card on one side thereof and the straps on the other side thereof for holding the keys in position on the card, said card being made of molded plastic, projections molded on the card in alignment with the middles of the pairs of straps respectively for engagement in the keyring holes of the keys whereby inadvertent removal of the keys from the card is prevented, and indicia molded on the card for designating the key spaces for the automobile key and the house key respectively, said key holder being of semi-rigid, slightly springable material whereby the keys are sprung into position on the card and thereafter snugly embraced between the straps and the card with said projections seated in the keyring holes of the keys respectively.

2,734,625
PACKAGING UNIT
Charles J. Nelson, Iron Mountain, Mich.
Application August 21, 1952, Serial No. 305,651
1 Claim. (Cl. 206—47)

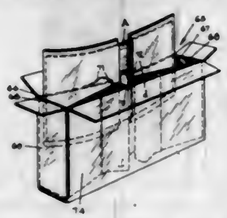
A container for compositely but separately packaging a liquid and a powdered solid, said container comprising

a cylindrical metal receptacle for said liquid, said receptacle having side walls, a bottom wall and a wedge-fitted removable cover, a cylindrical cardboard receptacle for said powdered solid, said cardboard receptacle having a tubular body and a pair of end-caps, said end-caps being formed as cup-shaped elements, the side walls of said end-caps fitting snugly around the outside of said tubular body, one of said end-caps having its side-wall cemented to said body and the other of said end-caps being readily removable, the outside diameters of said end-cap side walls being substantially the same as that of said metal



receptacle, and a pre-formed tubular cardboard casing holding said receptacles in stacked but separable assembled relation with said metal receptacle cover pressing against said fixed end-cap, said casing being open at both ends and substantially equal in length to the combined lengths of said receptacles, the inside diameter of said casing being substantially equal to said receptacle outside diameters so that said casing fits snugly about said receptacles to hold them securely but separably in stacked assembled relation, the inner surface of said casing being rough to increase the frictional gripping action of said casing on said receptacles.

2,734,626
SHIPPING CONTAINER FOR GLASS SHEETS
Melvin C. Koester and Felix J. Mainz, Toledo, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio
Application December 30, 1950, Serial No. 203,626
4 Claims. (Cl. 206—62)



1. In a container for shipping curved sheets of glass, a substantially rectangular box, a curved glass sheet arranged within said box, cushioning envelopes receiving the opposite end portions of the sheet and extending over substantially the entire length thereof for protecting the sheet against scratching and chipping, and resilient filler members overlapping said envelopes and having substantially triangularly shaped portions at opposite sides of the sheet outwardly of the centerline thereof and extending substantially entirely between the top and bottom walls of the box and spacing said sheet from the walls of the box.

2,734,627
APPARATUS FOR SORTING TUBULAR GLASS ARTICLES OF DIFFERENT INTERNAL DIAMETERS
Walter A. Shields, Jamaica, N. Y.
Application August 1, 1951, Serial No. 239,658
14 Claims. (Cl. 209—88)

1. In apparatus for sorting vials of different internal diameters, means for continuously conveying vials in a straight path, a member rotatably mounted adjacent to one side of the conveying means to have reciprocatory movement in a horizontal path toward and away from the conveying means, a series of gages slidably mounted in the reciprocatory member in groups of increasing sizes from one end to the opposite end of the member and yieldingly urged toward the vials on the conveying means to engage one end of said vials and eject vials having internal diameters smaller than the engaging gages from the conveying means by the movement of the reciprocatory member toward the conveying means, and a

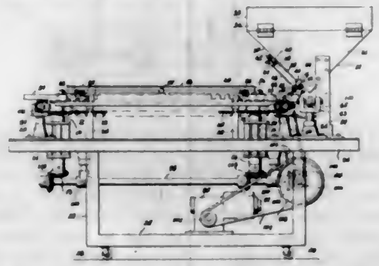
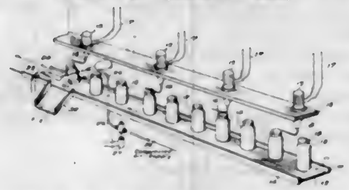


plate having equidistantly spaced openings and mounted adjacent to the side of the conveying means opposite the side adjacent to the reciprocatory member to engage the ends of the vials opposite the ends engaged by the gages and maintain the vials in position to be engaged by the gages and the vials being ejected from the conveying means by the gages through the openings in said plate.

2,734,628
TESTING VACUUM IN VIALS
Earle G. Schlayer, Suffern, N. Y., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
Application October 20, 1952, Serial No. 315,780
5 Claims. (Cl. 209—111)

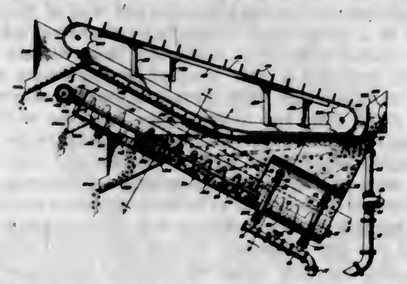


5. A method of selecting properly evacuated, stoppered, metal sealed, evacuated vials which comprises: passing a plurality of such vials along a conveyor; passing a beam of light along the path of the vials in such a position that said beam of light shines on a phototube and is interrupted by each vial in turn as it passes; passing sequentially a plurality of high voltage, high frequency discharges through the vials, one of said discharges occurring at the point at which said light beam is interrupted, thereby serially actuating said phototube by said light beam and by the glow caused by said high frequency discharge when the light beam is interrupted causing the glow from properly evacuated vials to maintain continuous uniform activation of said phototube during the passage of properly evacuated vials; and selectively energizing separating means to separate those vials which fail to cause a glow discharge during this portion of their passage.

2,734,629
PROCESS AND APPARATUS FOR SEPARATING MIXED MATERIALS
William C. Menzies, Wyoming, Pa.
Application January 29, 1953, Serial No. 334,027
6 Claims. (Cl. 209—172.5)

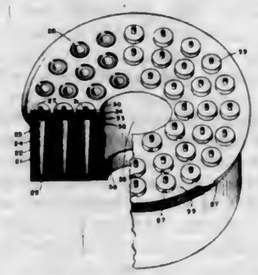
1. An apparatus for the separation of solid materials having different specific gravities comprising a separating vessel, said vessel having an inclined bottom and

having three screw conveyors located therein, each of said screw conveyors being positioned at the inclination of said bottom, two of said conveyors extending from the lowermost portion of said vessel to a point above said vessel, a third central conveyor extending from a point above the lowermost portion of the vessel to a point near the top thereof, a flight conveyor having a portion thereof positioned in a plane substantially parallel to said screw conveyors, said flight conveyor being above



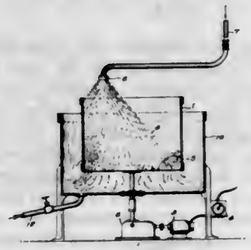
said screw conveyors and extending from an upper level in said vessel to a point above said screw conveyors, means to direct heavy materials to said two conveyors comprising an inverted V-shaped baffle therebetween, and means for directing fluid flow toward said central conveyor comprising plates over said two conveyors inclined downwardly toward said central conveyor, medium-admission nozzles in the bottom of said vessel, and means for the admission of said materials, said last-named means being located above the lowermost portion of said vessel.

2,734,630
MULTIPLE HYDROCYCLONES
Gerrit Jan van der Wal, Amsterdam, Netherlands, assignor to Dorr-Oliver Incorporated, a corporation of Delaware
Application January 22, 1953, Serial No. 332,655
Claims priority, application Netherlands January 25, 1952
15 Claims. (Cl. 209—211)



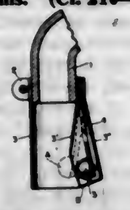
1. A multiple hydrocyclone comprising a block of material with a flat infeed end parallel to a flat underflow end; vortex spaces disposed in the block with the axis of each in parallel alignment and perpendicular to the plane of the infeed end of the block, each vortex space opening directly onto the infeed end of the block and communicating with the underflow end of the block through a coaxial underflow passageway; cover members capping the vortex space openings at the infeed end of the block, each cover member comprising a plate of significant width with the end adjacent the block slightly larger in size than the adjacent vortex space opening, an annular orifice extending through the plate coaxial of the vortex space, a grooved channel in the surface of the end adjacent the block extending from and through the side of the plate to terminate tangentially to the vortex space, which channel cooperates with the adjacent portion of the flat infeed end surface of the block to form a tangential feed conduit to the vortex space whereby each vortex space and its cover member cooperate to form a hydrocyclone; positioning means associated with each cover member for establishing and maintaining the position of each cover member in relation to each adjacent vortex space opening; a clamping plate spacedly set apart from the infed end surface of the block by the cover member, said plate being at least as large as the infeed end of the block and having apertures disposed therethrough, each coaxial with the annular orifice of the adjacent cover member and of size smaller than the size of the cover member end adjacent the block but at least as large as the annular orifice; support means adjacent the underflow end of the block adapted to permit the discharge from each of the underflow passageway outlets to flow therethrough without obstruction; means for pressing the clamping plate towards the support means; means for housing the assembled block, cover members, clamping plate and support means; conduit means for introducing a pressurized feed into and about the space, interrupted by cover members, formed between the infeed end surface of the block and the clamping plate; means for collecting the pressurized discharges from the vortex spaces, that flow out the underflow passageways through said support means adjacent to the underflow end of the block; discharge conduit means in relation to said collection means; means for collecting the pressurized discharges from the vortex spaces, that flows out the annular orifice in the cover member and through the apertures of the clamping plate adjacent thereto; discharge conduit means in relation to said collection means; and pressure sealing means about the joints of the entire assembly.

2,734,631
GRADING PROCESS AND APPARATUS
John J. Kobliska, Dunellen, N. J., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
Application December 23, 1953, Serial No. 400,007
3 Claims. (Cl. 209—237)



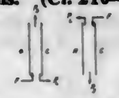
1. A method of screen testing for particle size analysis whereby the percentage of particles in a given sample of larger than a specified size is determined comprising: weighing a sample of the material to be tested, pasting said sample with a wetting agent in an aqueous phase to form thereby a uniform dispersion of the sample as a slurry, charging said weighed sample to a rotatable cylindrical drum having a horizontal screen at the bottom thereof and contiguous upstanding sides forming a sieve, rotating said sieve at a predetermined rate, directing a sheet of liquid at a predetermined rate of flow and pressure and for a predetermined time against the screen at an angle of from 30° to 90° from the horizontal to wash the smaller particles through the screen, whereby the sample particles are classified according to size, the velocity of the sheet of liquid and the rate of rotation of the cylinder being insufficient to cause any appreciable attrition of the sample particles on the screen, drying the residue on the screen, weighing said residue, and calculating the percentage of said residue based on the original sample weight.

2,734,632
WATER TREATING DEVICE
Jack De Ment, Portland, Oreg.
Application February 12, 1952, Serial No. 271,139
4 Claims. (Cl. 210—36)



1. Means for treating a unidirectionally moving stream of liquid comprising secured to a conduit conveying said liquid an envelope member adapted to receive and convey said liquid an envelope member adapted to receive and convey the liquid, said member having an aperture in the wall thereof, a bimetal strip responsive to changes in temperature of the liquid, said strip moving with temperature changes, said strip being secured outside said envelope member by one end substantially parallel to the direction of flow of the liquid and movable at the free distal end towards and away from the stream of moving liquid, and a mass of liquid treating agent attached to the free distal end of the temperature responsive strip, said mass passing through the said aperture and into and out of the moving stream of liquid according to the temperature thereof.

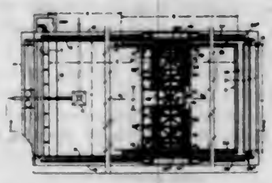
2,734,633
THERMAL DIFFUSION METHOD
Arthur Leicher Jones, Lyndhurst, and Everett C. Hughes, Shaker Heights, Ohio, assignors to The Standard Oil Company, Cleveland, Ohio, a corporation of Ohio
Application June 24, 1952, Serial No. 295,316
2 Claims. (Cl. 210—52.5)



1. In a process for continuously separating, by thermal diffusion in a column defined by two walls spaced apart substantially uniformly between about 0.01 and about 0.15 inch, one of said walls being maintained at a temperature appreciably higher than the other, a liquid mixture into two fractions containing dissimilar materials that are normally liquid under the conditions of separation and which are included in a material normally liquid under the conditions of separation, the improvement which comprises subjecting said liquid to continuous thermal diffusion by continuously introducing said liquid at a rate above the rate of thermal circulation in the column into one end of the column, continuously removing from the other end of the column, a first liquid fraction containing a high concentration of one of the dissimilar materials that was contained in the initial liquid, and continuously removing from the feed end of the column a second liquid fraction containing a lesser concentration of said dissimilar material than was contained in the initial liquid, the ratio of the rate of removal of the first fraction to the rate of feed being less than about 1.5:10.

2,734,634
SCUM SKIMMING DEVICES FOR LONGITUDINAL SEDIMENTATION TANKS HAVING RECIPROCATING SEDIMENT CONVEYING APPARATUS
John H. Knowles, Cos Cob, Conn., assignor to Dorr-Oliver Incorporated, a corporation of Delaware
Application January 25, 1954, Serial No. 405,766
4 Claims. (Cl. 210—55)

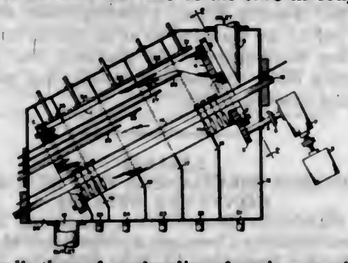
1. A longitudinal settling tank having a carriage spanning the tank and operable to reciprocate between the ends thereof, with sediment raking means supported from the carriage and operable by raising and lowering for effecting conveyance of sediment upon the tank bottom towards a bottom outlet incident to the travel of the carriage, said tank having a sediment discharge zone at the bottom, feed influent means as well as a scum receiving launder at one end of the tank, overflow discharge launder means at the opposite effluent end of the tank; characterized thereby that said launder means comprise a transverse launder section along the end wall of the tank as well as a longitudinal inwardly overhanging launder section extending part-way along each sidewall, and that there are provided a main scum skimming device comprising main skimmer blade means adapted for skimming a wide swath from end to end of the tank, the width of said wide swath being defined by the distance between said overhanging longitudinal launder section, and main actuating means for automatically raising and lowering said main skimmer blade means as between operative and inoperative position in timed relation with the carriage travel to effect one-way skimming towards said scum receiving trough; and that there is further provided at each side of the main skimming device an auxiliary skimming device comprising auxiliary blade means adapted for skimming a narrow swath part-way along said wide swath, namely



from the inner end of said launder section, and auxiliary actuating means associated with said main actuating means for automatically raising and lowering said auxiliary blade means as between operative and inoperative positions so timed with respect to the carriage travel and the operation of said main actuating means as to effect one-way skimming along said narrow swath towards said scum receiving trough simultaneously with the skimming by said main blade means, both said main and said auxiliary skimming blade actuating means comprising main and auxiliary motion transmitting means respectively operatively interconnecting said raking means with said main and auxiliary blade means, said motion transmitting means being adapted to raise and lower both said blade means in timed relationship with the raising and lowering of said raking means, at least said auxiliary motion transmitting means comprising a one-way yieldable connection between said raking means and said auxiliary skimmer blade, with the addition of a cam rail element extending along said longitudinal launder section and cooperatively associated with said one-way yieldable connection and with said auxiliary skimmer blade means whereby said auxiliary skimmer blade means are adapted to override the associated longitudinal launder section incident to the back-and-forth travel of the carriage movement.

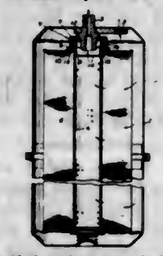
2,734,635
CENTRIFUGAL EXTRACTOR
Leo Leonhard Holzenthal, New Orleans, La., assignor to the United States of America as represented by the Secretary of Agriculture
Application February 26, 1953, Serial No. 339,191
2 Claims. (Cl. 210—67)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. An apparatus for the solvent extraction of oil from oil-bearing materials comprising: a porous tube rotatably supported along its periphery and having an inlet and an outlet end; material inlet means adapted to deposit a slurry of liquid and solid materials into the inlet end of said tube, and material outlet means adapted to discharge solid material from the outlet end of said tube; means for rotating the tube at a rate such as to subject material within the tube to a centrifugal force sufficient to press the material against the inner wall of the tube and to cause said material to move in a substantially circular path around the axis of the tube in conjunction



with the walls thereof; a plurality of stationary adjustable vanes suspended within the tube along the axis thereof from adjustable suspending means mounted outside said tube, said vanes being adapted to discontinuously contact material pressed against the inner wall of the tube and to impart to said material a movement from the inlet end to the outlet end of said tube.

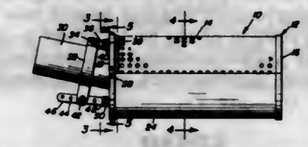
2,734,636
FILTER AND FLUID PRESSURE RELIEF VALVE THEREFOR
William J. Foster, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 15, 1950, Serial No. 179,610
Claims priority, application Great Britain July 21, 1950
4 Claims. (Cl. 210—164)



1. A pressure relief valve for fluids comprising a cup member having a base portion and a side wall portion, said side wall portion having one edge attached to said base and having a free edge at the opposite side, an opening in said base providing a fluid passage, apertures in said side wall portion of the cup for the passage of fluid, an annulus of flexible material engaging said side wall portion around said apertures and normally sealing said apertures and under excessive pressure moving to permit fluid to flow through said apertures, said annulus being restrained against lateral movement on said one side by a portion of the base of said cup and means secured to said free edge of said side wall portion to restrain said annulus against lateral movement.

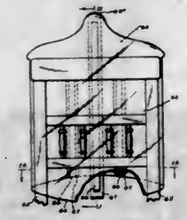
2,734,637
SUCTION LINE SCREEN
Joe Fisher, Fort Benton, Mont.
Application May 15, 1953, Serial No. 355,387
1 Claim. (Cl. 210—170)

A suction line screen comprising a horizontally disposed cylindrical body having a foraminous side wall and open ends, plates secured to opposite ends of the body for closing the same and having semi-circular edge extensions, one of said plates having an outlet opening therein, an imperforate semi-cylindrical guard underlying and supporting said body and fixed to said extensions in spaced relation to said body to support said body in elevated position, a suction tube extending through said opening into said body, a clamp suspending said tube and pivoted on said one plate for tilting to tilt said tube



bodily, a strap extending from said one plate beneath said clamp, and coacting devices on said clamp and strap, respectively, for securing said clamp to said strap in different tilted positions.

2,734,638
CLOTHES HANGER ATTACHMENT FOR CHAIR BACKS
Alfred Feldman, Woodside, N. Y.
Application May 20, 1953, Serial No. 356,183
1 Claim. (Cl. 211—86)



A clothes hanger for attachment to the back of a chair comprising a solid triangular-shaped shoulder receiving portion, a flexible tubular skirt portion enclosing said shoulder receiving portion and depending downwardly therefrom in prolongation thereof, said skirt having a substantially flattened oval shape in cross-section, said skirt having an open bottom end for fitting the depending portion over the back of a chair, spaced stiffening ribs extending from the apex end of said shoulder receiving portion, across said shoulder receiving portion and along the skirt portion to the bottom end thereof whereby said shoulder receiving portion is adapted to stand erect on the top of the back of the chair, and strips secured to the shoulder receiving portion and skirt portion over said ribs.

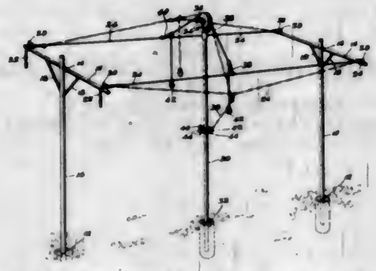
2,734,639
GARMENT SUPPORTING BRACKET FOR AUTOMOBILE USE
Martin Green, Mawah, N. J.
Application April 1, 1953, Serial No. 346,136
1 Claim. (Cl. 211—96)



In a device of the kind described, a base plate having means to mount the same in a place of use and vertically spaced bearing ears outwardly projecting from its ends, a bar adapted to detachably support articles or material for suspension therefrom, said bar having a rearwardly endwise open socket at its rear end portion, an elastically compressible friction element disposed in said socket for axial external projection from its rearwardly open end, and a pivot pin supported by the bearing ears of the base plate for extension through said socket of the bar and the friction element therein, whereby to pivotally connect

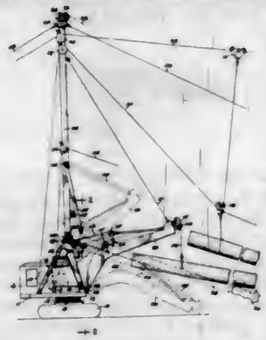
said bar and friction element to the base plate for optional outswinging movement to a service position perpendicular to said base plate or infolded movement to an out of service position parallel to said base plate, the exteriorly projecting end of said friction element being adapted to abut and be compressively engaged by said base plate in the out swung position of the bar, whereby to yieldably retain the latter against accidental displacement from its out swung service position when disposed therein.

2,734,640
SUPPORT FOR CLOTHESLINES
Joseph J. Rosenberger, Mohawk, Mich.
Application August 29, 1952, Serial No. 307,088
1 Claim. (Cl. 211—119.17)



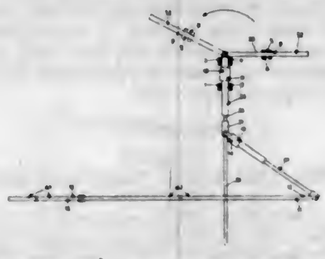
In a clothesline assembly of the type including spaced parallel flexible clotheslines carried by and extending between elevated cross arms, means for holding the intermediate portions of said clotheslines elevated and against sagging, said means comprising, a standard extending upwardly between said clotheslines, a pulley mounted on said standard for rotation above the standard about a horizontal axis which lies parallel to the clotheslines, a flexible member extending over the pulley, and connected to the clothesline intermediate opposite ends thereof for restraining the sag of the clotheslines, extensions carried by the flexible member and extending downwardly therefrom within convenient reach of the user for exerting downward pull on a selected clothesline for lowering it into reach of the user, and a hook carried by the standard below the pulley for engagement by an extension and holding its respective clothesline depressed while clothes are being attached to or removed therefrom.

2,734,641
TOWER YARDER AND LOADER
Hobart Burton, Seattle, Wash., assignor to Washington Iron Works, Seattle, Wash., a corporation of Washington
Application April 11, 1952, Serial No. 281,861
15 Claims. (Cl. 212—7)



1. In a tower yarding and loading assembly, a mount, a platform carried for slueing movements by said mount, spooling drums on said platform, a framework surmounting said platform and made rigid therewith, a spar rotatively mounted on said frame-work for swivel movement about a vertical axis coinciding with the rotary axis of the platform, guy lines bracing the head end of the spar, separate blocks carried by said spar for handling main and haul-back lines each powered by a respective one of said spooling drums, a loading boom attached by its root end to the platform so as to turn in concert with the slueing movements of the platform, and means on said loading boom for handling a tongs line powered by one of said spooling drums.

2,734,642
CONTROL MECHANISM FOR STACKER-CONVEYER SYSTEM
Stanley M. Mercier, Bexley, Ohio, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Application September 18, 1950, Serial No. 185,425
11 Claims. (Cl. 214—10)

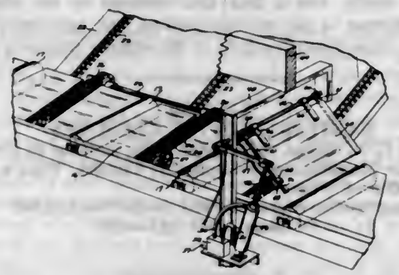


1. In combination, a conveyer, traction means for propelling said conveyer longitudinally, electric motor means for driving said conveyer traction means, a stacker fed by said conveyer, means pivotally attaching said stacker to said conveyer for lateral swinging movement, ground engaging traction means supporting said stacker for propelling it in reverse lateral swinging directions about said pivot means to each side of the longitudinal axis of said conveyer, electric motor means for driving said stacker traction means, and a control system for both said conveyer traction motor means and said stacker traction motor means including means responsive to the height of a spoil stack formed by material discharged from said stacker for energizing and deenergizing said stacker traction motor means whereby said stacker is swung laterally in accordance with the height of said spoil stack, and means operated by said stacker when the latter has swung laterally a predetermined amount for energizing said conveyer traction motor means and reversing the direction of operation of said stacker traction motor means whereby said conveyer is moved longitudinally a predetermined distance and said stacker will discharge material upon said spoil stack along a different path as said stacker swings laterally, said last named operating means including a time delay mechanism.

2,734,643
LUMBER HANDLING DEVICE FOR SAW MILLS
Norman D. MacRae, Laona, Wis., assignor to The Connor Lumber and Land Company, Laona, Wis., a corporation of Wisconsin
Application November 30, 1951, Serial No. 259,222
3 Claims. (Cl. 214—11)

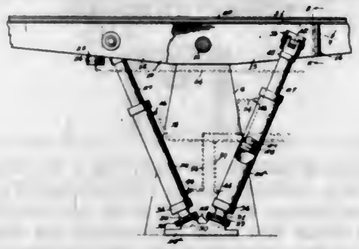
3. In a lumber handling apparatus which includes a saw for cutting lumber from a saw log and a first conveyor for carrying away the cut lumber deposited thereon by a tail sawyer, the combination with said first conveyor of a cross conveyor normally in a plane slightly below and at an angle to the path of said first conveyor, a switch accessible to the tail sawyer, a rock shaft spanning the first conveyor, said switch controlling means for

oscillating the rock shaft, an arm connected with the rock shaft for movement therewith between a raised position and a depending position upon oscillation of the rock shaft, a bumper plate disposed transversely of the first conveyor and pivoted adjacent its upper end substantially coaxially with said rock shaft for movement with said arm upon movement of said arm between a raised and depending position, and for movement independently of said arm when the arm is in depending position to intercept lumber traversing said first conveyor and to be oscillated by such lumber free of said arm, a switch having an actuator, said arm and plate having means adapted to engage the switch and the



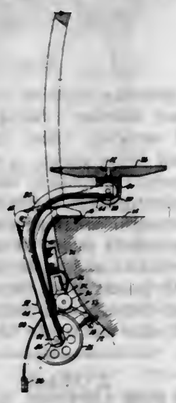
actuator to hold the switch open in the normal position of the bumper plate and to close said switch when the bumper plate is displaced by lumber traversing the first conveyor, said switch having electrical connections and means controlled thereby for lifting the cross conveyor to engage lumber on the first conveyor whereby to render said cross conveyor operative upon such lumber by raising the plane of movement of said conveyor when the switch is closed, the tail sawyer being able, by manipulation of the switch first mentioned, to oscillate said rock shaft and thereby predispose said cross conveyor for ejection of a piece of lumber traversing the conveyor first mentioned whenever such lumber reaches the bumper plate and displaces it to close such switch.

2,734,644
CAR DUMPING APPARATUS
Halver R. Straight, Adel, Iowa, assignor to Straight Engineering Co., Adel, Iowa, a corporation of Iowa
Application December 8, 1952, Serial No. 324,618
2 Claims. (Cl. 214—47)



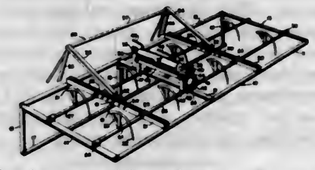
1. In a car dumping apparatus of the type employing an elongated car supporting bridge, including a pair of spaced vertical girders, pivoted at its center to swing in its longitudinal plane, means for rocking said bridge, comprising a pair of upright fluid lift cylinders and coacting pistons, means for connecting the upper ends of said pistons to said bridge at points intermediate its center and its free ends, said means comprising a substantially rectangular frame having a pin in each end pivotally mounted transversely between and in said spaced girders, a pivot pin mounted in the center of the side members of said frame and transversely to and in a plane common to said first pivot pins, a pivot block connecting the upper end of each piston to the corresponding last one of said pins, and fluid actuating means for operating said pistons.

2,734,645
CARGO HOIST MECHANISM
Thorvald K. Petersen, Santa Monica, Calif., assignor to Douglas Aircraft Company, Inc., Santa Monica, Calif.
Application August 1, 1951, Serial No. 239,768
6 Claims. (Cl. 214—77)



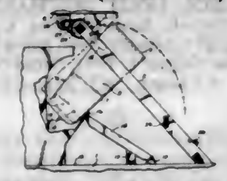
6. A cargo loading and unloading mechanism for transferring cargo between the floor of a vehicle cargo compartment and a lower supporting surface, comprising; a support frame including an arm having an upper end maintained in a position at an edge of the floor, said arm extending downwardly a substantial portion of the distance between the floor and lower surface; lever means having an end thereof pivotally connected to the downwardly extending portion of the arm, said lever means being swingable between upper and lower positions and including first and second sections respectively lying approximately parallel with the frame arm and cargo floor when said lever is in the upward position; means for moving said lever between its respective positions; a cargo platen movably mounted on that lever section paralleling the floor; and means to maintain the platen in substantially the same attitude throughout the travel of the lever including a driven wheel for moving the cargo platen, a driving wheel on the support frame and flexible tension bearing means operatively interconnecting said driving and driven wheels.

2,734,646
HAY LOADER
William Veral Stimpson, Dietrich, Idaho
Application February 13, 1953, Serial No. 336,818
2 Claims. (Cl. 214—147)



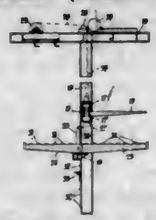
1. A hay loader comprising a boom, a frame adjustably and freely pivotally connected to said boom, said frame having a longitudinally arranged portion and a rear portion depending therefrom, forks pivotally mounted on said frame, said forks being pivoted for movement downwardly and rearwardly of said frame toward said rear portion, said frame normally freely pivoting to a position in which said longitudinally arranged portion is substantially parallel to the ground.

2,734,647
CARTON UNLOADING MACHINE
George M. Cunningham, Portland, Oreg., assignor to American Metal Works, Inc., Portland, Oreg., a corporation of Oregon
Application March 24, 1953, Serial No. 344,344
7 Claims. (Cl. 214—313)



1. A carton unloading machine, comprising a horizontally disposed base defining a filling station, a discharge station mounted vertically above said base but spaced laterally from said filling station, a pair of obliquely disposed guide members extending laterally up from said base, a rectangular rigid tipple having an open face and a closed face arranged intermediate said guides, a link frame member pivotally joined at one end to said base and at the other end to said tipple, said link frame member being pivotally joined to the closed face of said tipple adjacent one end thereof, and means for pivoting said tipple about said other end of the link frame member.

2,734,648
APPARATUS FOR LIFTING, LOWERING AND OTHERWISE TRANSPORTING LOADS
Donald M. King, Stevenage, England
Application December 24, 1954, Serial No. 477,536
Claims priority, application Great Britain September 12, 1952
4 Claims. (Cl. 214—630)



1. Apparatus for lifting, lowering and otherwise transporting loads such apparatus comprising a mobile frame for support on an overhead track, guide means depending from said frame a first load supporting member slidably supported on said guide means to project outwardly therefrom at one side thereof, a second load supporting member disposed below the first and also slidably supported on said guide means said second member incorporating a first rigid part projecting outwardly from said guide means at the same side of the latter as said first load supporting member and a second part projecting outwardly from the opposite side of said guide means and capable of pivotal movement to effect discharge of any load transferred thereto from said first part, means for moving said first and second load supporting members independently of each other along the guide means and means whereby a pivotal movement may be imparted to said second part of said second member when the latter reaches a preselected position on said guide means.

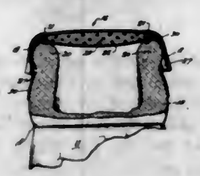
2,734,649
MOISTUREPROOF VIAL CLOSURE
John Charles Callahan, Blauvelt, and Walter John Rumpf, Pearl River, N. Y., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine
Application April 5, 1952, Serial No. 280,734
12 Claims. (Cl. 215—37)

9. A closure for a bottle containing a moisture-sensitive material which comprises a silicone-coated stopper, a microcrystalline wax moisture-proof barrier layer covering at least the major portion of the exposed surface of the stopper, a stopper retaining the ring securing the stopper



in the bottle, and a dust disc adjacent to the stopper and adherent to the microcrystalline wax moisture-proof barrier layer through a hole in the stopper retaining ring.

2,734,650
SANITARY BOTTLE CLOSURES
George L. N. Meyer, Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Company, Cudahy, Wis., a corporation of Wisconsin
Application March 2, 1953, Serial No. 339,787
3 Claims. (Cl. 215—38)



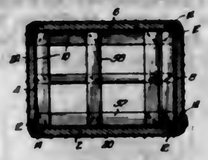
3. In a bottle having a reinforcing ring and a crown closure on said bottle to seal the contents therein, a sanitary bottle seal shrinkable into position and extending over the top of the closure member and tightly embracing both the crown closure and the reinforcing ring with the lower edge thereof extending between the lower edge of the crown closure and the maximum diameter of the reinforcing ring whereby the sanitary seal is removable with the crown closure.

2,734,651
BOTTLE CLOSURES
Alrik Clver Lindström, Stockholm, Sweden
Application March 5, 1951, Serial No. 213,847
Claims priority, application Sweden March 6, 1950
9 Claims. (Cl. 215—40)



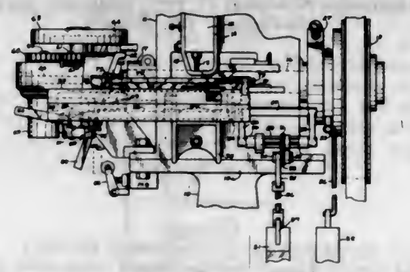
1. A sealing element for use within a cap adapted to be applied to containers having a mouth defined by a container wall portion terminating in an end surface encircling the mouth in a plane transverse to the axis of the opening of the container mouth, the cap having a stud extending centrally inward from the lower surface thereof and an internally threaded cylindrical portion for fitting over the container mouth; said sealing element comprising an imperforate one-piece member of resilient material for insertion in the cap, said sealing member having a conical rim portion of uniform thickness for seating over the container mouth, the conical surface of the rim portion flaring inwardly towards the interior of a container to which it may be applied, and means at the center portion of said sealing member for sliding telescopic engagement with the stud of a cap to connect the sealing member to the cap.

2,734,652
WIRE-BOUND CRATE
John S. McFee, Roselle, Ill., assignor to General Box Company, Chicago, Ill., a corporation of Delaware
Application April 8, 1952, Serial No. 281,160
2 Claims. (Cl. 217—12)



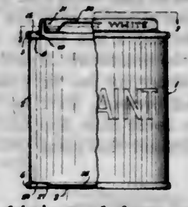
1. In a wire-bound shipping container, the combination of a plurality of side wall sections, each of said sections having a panel of fibrous material, reinforcing structure for the marginal edges of said panel including a pair of vertical slats and horizontal cleats disposed on the outer face of said panel, the inner surface of the end portions of said slats being notched, the outer surface of the end portions of said cleats being notched and in interlocking relationship with said end portions of said slats, said end portions of said cleats terminating inwardly of the outer edge of one slat and projecting beyond the outer edge of the other slat in each of said wall sections so that when said container is assembled the projecting end portions of said cleats interengage the notches in the adjacent slats to provide a rigid corner construction, and a longitudinally extending strand of wire secured to the top and bottom of the reinforcing structure of each of said wall sections for securing the same in assembled relation.

2,734,653
MACHINE FOR SETTING AND SPACING FASTENER ELEMENTS ON GARMENTS
Michael J. Carpinella and Richard V. Rosengrant, Waterbury, Conn., assignors to Scovill Manufacturing Company, Waterbury, Conn., a corporation of Connecticut
Application February 21, 1951, Serial No. 212,136
4 Claims. (Cl. 218—6)



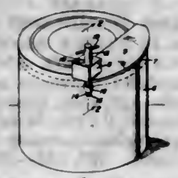
1. In a machine of the class described, a mechanism for automatically shifting a workpiece with respect to a fastener attaching station of the machine, said mechanism comprising a main drive shaft, a clutch drive for said shaft, a solenoid control for said clutch drive, a workpiece support table, table actuating means for shifting said table to a predetermined stop position for each revolution of said main shaft, an electric stop switch actuated by said table actuating means upon a predetermined number of rotations of said shaft, a pair of electric relays designated first and second, said second relay arranged in circuit with said stop switch, a foot operated switch controlling said clutch solenoid through the normally closed switch of said second relay when deenergized, and said foot switch when initially closed completing a circuit through said first relay, said first relay maintaining a closed circuit to said clutch solenoid after release of said foot switch, and the closing of said stop switch energizing said second relay to break the circuit to said clutch solenoid after a predetermined number of shaft revolutions.

2,734,654
SLIP-JOINT FRICTION SEAL CLOSURE FOR CONTAINERS
Israel F. Roberson, Lakewood, Ohio
Application April 17, 1953, Serial No. 349,363
4 Claims. (Cl. 220—42)



1. A slip-joint friction seal closure means for containers comprising a neck of resilient sheet metal that is of inverted U-shape in cross section having an outer wall of substantial height and an inner wall that terminates at its lower end in an inwardly extended seating portion, and a resilient sheet metal lid incorporating a downwardly opening channel for the reception of said neck, the outer flange of the channel presenting continuous uninterrupted inner and outer surfaces from top to bottom and being of a size and shape to snugly fit the outer wall of the neck for a considerable portion of the height of the latter and with its lower edge a substantial distance above the lower end of the neck, the inner flange being of a size and shape to tightly fit within the upper end of the neck and have frictional engagement with a relatively wide area of the inner wall thereof, the lower portion of said inner flange being contracted for frictional engagement within the aforesaid seating portion of the inner wall of the neck and being of substantially frusto conical shape immediately above said seating portion so as to provide therewith accommodations for a liquid seal.

2,734,655
TEAR STRIP REMOVER FOR CANS
Maurice F. Carlson and Catharine S. Carlson, Dearborn, Mich.
Application April 20, 1954, Serial No. 424,382
3 Claims. (Cl. 220—52)

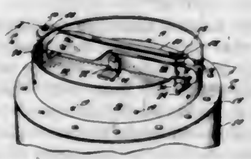


1. A tear strip remover for vacuum sealed cans comprising a hand gripping plate adapted for resting on top of a can, a plurality of vertical bores in the plate adapted to rotatably receive a key in a selected bore for winding a tear strip thereon, and stop means supporting the key at a predetermined selected vertical postion in the bore to vertically adjust the lower end of the key in a downwardly projecting position at the underside of the plate.

2,734,656
WATER TIGHT TANK CLOSURE
Walter Max Schonfeld, San Francisco, Calif., assignor to Todd Shipyards Corporation, a corporation of New York
Application November 25, 1952, Serial No. 322,498
2 Claims. (Cl. 220—57)

1. In a closure for tanks having an opening in a wall thereof, a seat surrounding said opening, and an upstand-

ing cylindrical collar surrounding said seat, a resilient packing ring mounted on said seat, and confined by said collar, a cover plate adapted to fit within said collar upon said packing ring, a hinge link pivotally connected to said collar at one side of said seat and extending across said cover plate but terminating short of the other side of said collar, a pivotal connection between an intermediate point of said hinge link and said cover plate, a pressure lever having an inverted U-shaped portion enclosing and pivoted to said hinge link at the end thereof remote from the point at which said link is hinged to the collar, said collar having a slot in the wall thereof adjacent to the end of the link to which said lever is pivoted, means forming an abutment on the collar at the upper end of said slot, said pressure lever having a lever arm extending across the cover plate and having its U-shaped portion cut away beyond the point where it is pivoted



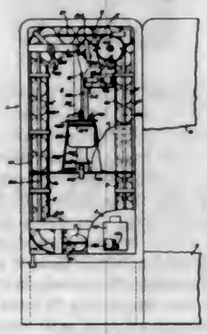
to said link to provide ears projecting forwardly of said pivot point, means for connecting said ears so as to form a bill adapted to be swung outwardly through said slot into engagement with said abutment when the body of the lever is moved down to a position adjacent to said hinge link, the length of said bill from the point where the pressure lever is pivoted to the hinge link being short enough to permit the bill to move out of the slot in the collar and clear the abutment when the pressure lever is raised, so as to permit the cover assembly to swing open without the necessity of dismounting any portion of the assembly, said hinge link and pressure lever being substantially straight, said pressure lever lying closely over said link when closed in down position, the major portions of said link and lever being enclosed within the confines of said collar so as to present a minimum of projection above said collar, thereby permitting close stowage of the closed tank.

2,734,657
APPARATUS FOR HANDLING CONTAINERS MADE OF A FLEXIBLE MATERIAL, SUCH AS PAPER, CARDBOARD, AND THE LIKE
Wilhelm Drese, Dusseldorf, Germany, assignor of one-half to Jagenberg-Werke Akt.-Ges., Dusseldorf, Germany
Application October 2, 1952, Serial No. 312,701
Claims priority, application Germany October 24, 1951
7 Claims. (Cl. 221—251)



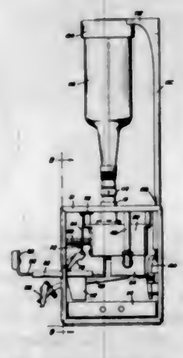
1. Apparatus for individually removing containers from a stack of nested containers, comprising means for supporting the stack in nested relationship and in a position inclined to the horizontal, a movable compressed air nozzle, and means for moving the nozzle laterally of the stack adjacent the container to be removed to depress a container wall to provide a space between the walls of the end two containers so that compressed air flowing from the nozzle will remove the end container.

2,734,658
FLUID DISPENSING APPARATUS
Edward J. Poitras, Holliston, Mass.
Application April 14, 1950, Serial No. 156,014
17 Claims. (Cl. 222—2)



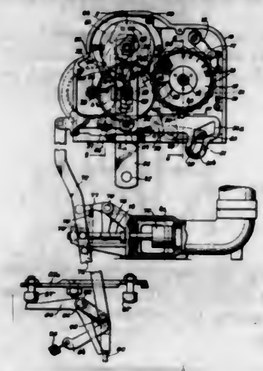
10. Liquid dispensing apparatus comprising a chamber, means to advance seriatim full sealed cans to an opening station therein, means to open and permit drainage of cans as presented at the station, a collecting reservoir in the chamber receiving the liquid so drained, means subject to coin control to dispense measured liquid units from the reservoir, detector means to initiate a can advancing and opening cycle on depletion of the reservoir liquid, and a timer to shut down the machine on failure of liquid replenishment in the course of a successive plurality of such cycles.

2,734,659
MECHANICAL AUTOMATIC LIQUID DISPENSER
John H. Smith, Columbus, Ohio
Application November 17, 1952, Serial No. 320,976
10 Claims. (Cl. 222—2)



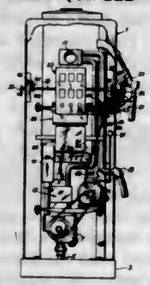
1. A beverage dispenser comprising a casing, a liquid measuring device in said casing including a cylinder and a piston slidable therein, liquid inlet means for said measuring device, liquid outlet means for said measuring device extending to the exterior of said casing, operating means extending to the exterior of said casing and connected to said measuring device, said operating means including a piston rod on said piston having an axial slot and an actuator having a finger movable in said slot, means within said casing adjustably limiting the movement of the finger in the slot for varying the quantity of liquid measured by said measuring device.

2,734,660
LIQUID MEASURING AND DISPENSING APPARATUS
John Fraser, Tolworth, Surbiton, England, assignor to Avery-Hardoll Limited, Tolworth, Surbiton, England
Application May 13, 1952, Serial No. 287,660
Claims priority, application Great Britain May 24, 1951
7 Claims. (Cl. 222—15)



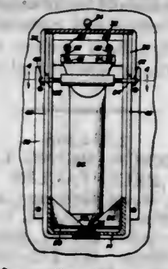
1. Control means for a meter pump, comprising a fluid passage, a valve controlling said passage, operating means for actuating said valve to cut-off the flow of liquid through said passage, said cut-off operating means comprising a manually settable member, meter-operated means to drive said manually settable member, a starting control handle, a bar, means guiding said bar for rectilinear sliding movement, means connecting said bar to said starting control handle for movement of said bar by said handle, a lever pivotally mounted on said bar, linkage means connecting said lever to said valve, said settable member having a peripheral surface provided with a gap, a projection on said lever to engage said peripheral surface and resilient means urging said projection against said peripheral surface, said settable member, when turned to a position in which the gap in the peripheral surface there is out of register with the projection, obstructing movement of the projection and causing the lever to be moved about said projection by movement of the starting control handle to move the linkage means to start delivery of liquid, said settable member being movable by said meter-operated means to a position in which the projection enters the gap and allows movement of the lever about its pivot on the bar to move the linkage means to stop delivery of liquid without movement of the starting control handle.

2,734,661
LIQUID DISPENSING APPARATUS
Roy T. Settergren, Ferguson, and Donald Martin Miller, St. Louis, Mo.; said Miller assignor to said Settergren
Application November 7, 1952, Serial No. 319,266
5 Claims. (Cl. 222—16)



1. In combination with a gasoline dispenser of the type having a pump, a pump motor, a motor-switch linkage, a totalizing register having a rotary element responsive to delivery of gasoline, a nozzle hanger mechanism interconnected with said motor-switch linkage for energizing and de-energizing the motor upon removal and replacement of the nozzle, and a reset mechanism interconnected between the nozzle hanger mechanism and the register for preventing energization of the motor preparatory to reset of the register; the impovement comprising an electric actuator mechanically coupled to said motor switch means, a plurality of sequentially closed contacts electrically connected through individually closable branch circuits to energize the electric actuator, an index coil for sequentially closing said contacts in response to periodic energization of the coil, and a first control switch arranged in association with said totalizing register for periodic actuation by the rotary element thereof, said first control switch being electrically connected to energize the index coil.

2,734,662
DISPENSER FOR COLLAPSIBLE TUBES THAT EMPLOYS A PAIR OF ROLLERS
Mary H. Shippen, Lost Springs, Wyo.
Application February 13, 1953, Serial No. 336,684
14 Claims. (Cl. 222—102)



1. A dispenser for collapsible tubes comprising a casing open at the top and having a discharge aperture in the bottom thereof, a lid for covering said top of said casing, a pair of legs pivotally attached to said lid, a yoke pivotally attached to said legs adapted to underly said aperture, and roller means rotatably carried by said legs.

2,734,663
CONDIMENT SHAKER
Randolph A. Lucas, San Pedro, Calif.
Application March 19, 1953, Serial No. 343,308
2 Claims. (Cl. 222—142.1)



1. A condiment shaker comprising a rectangular receptacle having side walls and a bottom, a partition in said receptacle presenting a pair of juxtaposed chambers for receiving salt and pepper respectively, a perforate top for said receptacle, a closure member overlying said top, a hinge having cooperating hinge leaves secured respectively to one of said side walls and said member, said member projecting beyond the hinge connection to said one side wall, means on said hinge for normally urging said member into overlying relation with said top, said bottom being secured above the lower edge of said side walls and provided with a pair of filler apertures communicating with respective chambers, a single slide member movable into and out of covering relation to said apertures.

2,734,664
MINIATURE ROAD BUILDER
Charles J. Prohaska, Larksville, Pa.
Application July 2, 1953, Serial No. 365,621
1 Claim. (Cl. 222—176)



A decorative toy and miniature road builder comprising a pair of body sections, each of said body sections including side pieces having peripheral walls extending thereabout, a first of said sections having an inwardly positioned peripheral flange secured to the peripheral wall thereof, the peripheral wall of the second of said sections frictionally engaging and overlying said flange, each of said body sections having front and rear wheels rotatably secured thereto, and a discharge slot in the rear of said miniature road builder extending through the peripheral walls of said body sections and extending through said flange, said body sections being filled with sand, said discharge slot having a closure member positioned thereover and adhesively secured to said body sections, the peripheral wall of said first body section being substantially greater in size than the peripheral wall of said second body section.

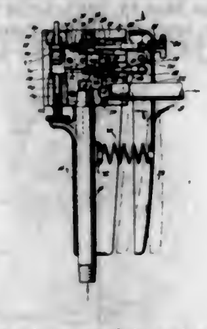
2,734,665
DEVICE FOR DISCHARGING LIQUIDS FROM RECEPTACLES
Karl Hugo Flamm, Hesse, Germany, assignor to Charles Blue, Mineola, N. Y.
Application November 1, 1951, Serial No. 254,285
4 Claims. (Cl. 222—207)



1. A device for dispensing liquid from a receptacle comprising a hollow member of flexible material adapted to be squeezed, means for connecting the hollow member to a receptacle so that the hollow member may project therefrom and be in communication with the interior thereof, said hollow member having a small hole therein, a relatively rigid nozzle having a flange on its inner end and a shank extending through the small hole of the hollow member and the opening within the nozzle being of uniformly tapered formation having its small end communicating with the hollow member and on the flanged end of the nozzle.

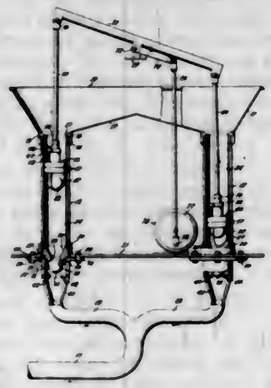
2,734,666
CONTROL VALVE FOR LUBRICATING APPARATUS
Walter Schmid, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a corporation of Virginia
Application November 4, 1950, Serial No. 194,118
8 Claims. (Cl. 222—250)

1. A control valve for delivering uniform measured charges of lubricant, comprising an inlet conduit, an outlet conduit, a measuring cylinder containing a piston, one end of the piston having a smaller area than the other, means forming a permanently open passage connecting the inlet conduit with one end of the measuring cylinder adjacent the smaller end of the piston, a normally closed outlet valve connected between the outlet conduit and the other end of the measuring cylinder independently of the passage, a normally closed recharging valve con-



nected between the inlet conduit and said other end of the measuring cylinder independently of the passage, and means for opening the valves alternately independently of the passage.

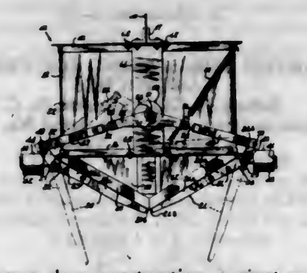
2,734,667
GROUT PUMP
Fred Conklin, Los Angeles, Calif.
Application May 8, 1951, Serial No. 225,222
14 Claims. (Cl. 222—255)



13. Apparatus of the character described for conveying grout and like semi-fluid mixtures comprising, a housing forming a pair of pump chambers, each of said chambers having a movable wall, each of said chambers having an inlet port and an outlet port directly below said inlet port for downward flow of said semi-fluid mixture through said chambers, each of said chambers including a substantially straight, free upright passage for said mixture between said ports, a conduit communicating with said outlet ports to convey the mixture to a point of use, means to reciprocate said movable walls to expand one of said chambers while simultaneously contracting the other chamber, a check valve to control the flow of said mixture through each of said outlet ports, and valve means adjacent to each of said inlet ports to control flow to said chambers, said valve means including a valve seat and a buoyant ball member, supporting means disposed beneath said valve seat for freely supporting said buoyant ball member beneath said valve seat, said buoyant ball member being movable to open position by the impact of the stream of said mixture moving downwardly through said valve seat, said buoyant ball member having a diameter greater than the diameter of said valve seat, said buoyant ball member having an average density

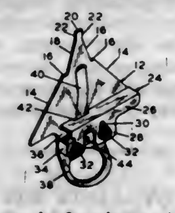
of less than the density of the mixture being pumped so as to facilitate upward closing of the valve means by seating of said ball member upon said valve seat.

2,734,668
WEIGH BOX STRUCTURE HAVING PIVOTALLY MOUNTED DOORS FOR A FIBER HANDLING MACHINE
Alfred W. Gardes, Lebanon, Ind., assignor to Houdaille-Hershey of Indiana, Inc., a corporation of Indiana
Application April 20, 1951, Serial No. 221,995
8 Claims. (Cl. 222—503)



1. In a hopper door construction, a pivot rod, an arm member on each end of said pivot rod, one arm member having oppositely extending portions extending radially outwardly of the axis of said pivot rod, a door to close an opening and carried between said arm members, said door connected to said one arm member by one of said extending portions, and a torque motor having a pivotal driving connection with said one arm member by the other of said extending portions to selectively rotate said rod and said door to open said door.

2,734,669
TAPE POSITIONING AND HOLDING MEANS
James T. King, Manchester, Conn., assignor, by mesne assignments, to Abe Gellman Company, Inc., New York, N. Y., a corporation of New York
Application April 24, 1951, Serial No. 222,590
5 Claims. (Cl. 223—110)



1. A device for use in forming and holding a loop of tape comprising a body member having opposite edges each formed with a shoulder thereon, a forming head connected to said body and projecting beyond said shoulders, and a yieldable member urged toward said body member and located between said opposite edges in position to engage overlapping portions of a tape wrapped about said forming head and engaging said shoulders.

2,734,670
SEWING MACHINE LOOP SHAPER ATTACHMENT
Abraham Gellman, New York, and Sidney Diesenhaus, Monsey, N. Y.
Application November 16, 1951, Serial No. 256,797
2 Claims. (Cl. 223—110)

1. A loop forming device on which loops can be formed prior to the placing of the same in position on a hem, comprising a bottom plate having wing portions and oppositely inclined edges and a tapered portion extending forwardly of the wing portions, a spring finger extending longitudinally of the plate and its end lying over the tapered portion, means for securing the spring finger to the bottom plate, said spring finger securing means including a transversely extending block piece secured to the bottom plate, an angle piece connected to the bottom piece for transverse adjustment relative thereto, a pointed



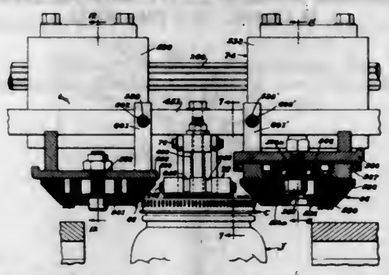
guide member adapted for guiding engagement with a sewing machine claw and extending outwardly over the spring finger, said pointed guide member being adjustably connected to the angle piece for longitudinal adjustment thereof with respect to said angle piece, said angle piece being adjustably connected to the block piece for transverse adjustment along the bottom plate.

2,734,671
FISH STRINGER
Charles W. Adams, Chicago, Ill.
Application October 11, 1952, Serial No. 314,374
5 Claims. (Cl. 224—7)



1. A fish stringer comprising a line, and a retainer on one end of the line, said retainer including a ferrule surrounding an end portion of the line in gripping engagement therewith, a channel portion extending longitudinally and integrally from the end of said ferrule beyond the end of the line, and a cross-bar pivoted in the extended end of the channel portion at a point on the cross-bar intermediate the ends thereof and movable between a position transversely of the ferrule and channel portion and a position longitudinally thereof in which a portion of the cross-bar is disposed in said channel portion.

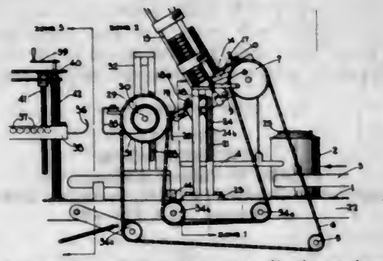
2,734,672
CONTAINER SEALING APPARATUS
Carl L. Day and Frederick E. Fauth, Baltimore, Md., assignors to Crown Cork & Seal Company, Inc., Baltimore, Md., a corporation of New York
Application June 23, 1952, Serial No. 295,024
28 Claims. (Cl. 226—88)



1. In a mechanism to secure a cap element provided with threaded-type engaging means to a threaded-type mouth container element, means to move the container element and a loosely applied cap element in a predetermined path, means in said path to engage the peripheral

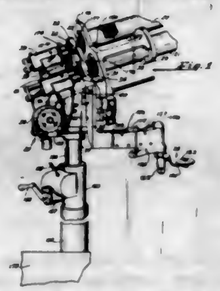
portion of the cap element to cause that element to turn in unthreading direction with respect to the container element as the two elements move along said path, said means including a member provided with a cap engaging surface which is downwardly inclined away from the cap axis, and means beyond said unthreading means to engage one of the elements to turn it in threading direction with respect to the other element.

2,734,673
AUTOMATIC CLOSURE MACHINE
Stanley G. Hazel and Robert B. Richards, Chicago, Ill., assignors to The Sherwin-Williams Company, Cleveland, Ohio, a corporation of Ohio
Application August 15, 1950, Serial No. 179,592
7 Claims. (Cl. 226—88.1)



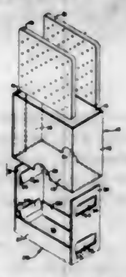
1. In a machine of the class described, an improvement which provides for automatic handling of dual element closures consisting of a fingered inner disk element in compressive assembly within a flanged outer ring element which comprises conveyor means for advancing a container into single point crown contact with a prepositioned closure assembly supported at said point of contact at an angle of less than 90 degrees, and skew to the path of container travel; intermittent, varying and retarding pressure means at said contact point operable at time of said contact against the disk element, to retard momentarily the forward motion of said disk, to align said disk element into co-operative spaced relationship with the crown of said advancing container, to release said disk element from the restrictions of said ring element, to spring the fingers of said disk element home over said crown; guide means to align the disengaged ring element into co-operative spaced relationship with the container engaged disk element, and final pressure means to complete co-operative compressive reassembly of the dual elements of the closure over the container mouth.

2,734,674
BOTTLE CAP FEEDING MECHANISM
Floyd A. Ray, Belvidere, Ill., assignor to Mid-West Bottle Cap Co., Belvidere, Ill., a corporation of Illinois
Application November 5, 1951, Serial No. 254,832
14 Claims. (Cl. 226—88.1)



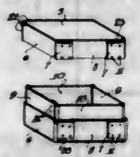
5. In a bottle capping mechanism, a feeding mechanism for removing bottle caps from a pair of separate stacks thereof comprising: a pair of reciprocable suction cup plungers operative when moved forward to engage the adjacent cap in the corresponding stack and operative when retracted to withdraw said cap from the stack, a pair of reciprocable pistons operative respectively to control the positions of said plungers, a control valve communicating with said pistons at opposite sides thereof operative to establish a vacuum and atmospheric pressure respectively at opposite sides of said pistons, and means actuated in response to the advance of a bottle toward the capping position operative to actuate said valve to reverse the vacuum and atmospheric pressure connections to said pistons for reciprocating the pistons in alternate succession.

2,734,675
CARTON FOR MAKING ICE CREAM SANDWICHES
Robert M. Gill, Charlotte, N. C.
Application October 28, 1952, Serial No. 317,200
3 Claims. (Cl. 229—6)



1. A carton for ice cream sandwiches formed from two edible wafers and an ice cream filling, said carton comprising a rectangular sleeve having front and rear walls and a pair of end walls, a substantially U-shaped insert member fitted within said sleeve and comprising a rectangular base of the same size as the interior of said rectangular sleeve, a pair of upstanding side flaps extending from said rectangular base and a pair of upstanding members extending upwardly from opposed ends of said base, said upstanding members each having upper and lower inwardly projecting hinged tabs partially cut therefrom, said tabs extending inwardly within said carton at an angle less than ninety degrees, and said tabs being spaced from the edges of said upstanding members and serving to hold a pair of wafers in spaced relation to each other to permit filling to be placed therebetween to form a sandwich.

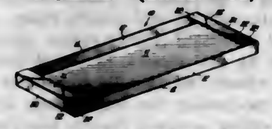
2,734,676
DYNAMITE BOX
Chester A. Lawrence, Philadelphia, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application December 3, 1951, Serial No. 259,559
1 Claim. (Cl. 229—23)



A box assembly comprising an open ended, four-sided, tubular inner lining folded about four parallel, longitudinal, wide-score ribs; a pair of opposing, similar top and bottom closure covers, the peripheral lips of which telescopingly engage said inner liner over its open ends and abut in end-to-end relation near the mid-section of the outside surface of said inner liner; each said closure cover being a folded one-piece blank provided with intersecting

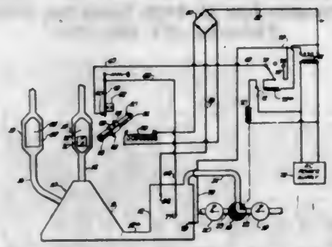
pairs of longitudinal and transverse wide-score ribs and four transverse slots superimposed along the end portions of the transverse ribs from the edge of the blank to the closest longitudinal rib; said four transverse slots each having one straight transverse border extending from the edge of the blank to the closest longitudinal rib, a shorter inner border perpendicular to the transverse border at its inner end and disposed along a portion of said closest longitudinal rib, and a second transverse border commencing at the remote end of said inner border and extending at an obtuse angle thereto for at least a portion of its length; said tubular inner lining and each of said folded closure covers being individually fastened in their respective folded positions by staple stitches; and pressure sensitive tape disposed across the line of abutment of the top and bottom closure covers to hold said covers and the tubular inner lining about which they telescope in assembled relation.

2,734,677
TRAY TYPE CONTAINER
Edwin L. Arneson, Morris, Ill., assignor to Morris Paper Mills, Chicago, Ill., a corporation of Illinois
Application January 7, 1952, Serial No. 265,281
5 Claims. (Cl. 229—32)



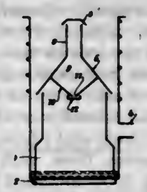
1. In a tray construction having a bottom and side and end walls collapsible inwardly thereon, said end walls having an integral top end flap hinged inwardly thereof to form a partial top cover at the end of the tray, a corner connecting member comprising a connecting flap portion and a connecting tongue portion, said connecting flap portion being hingedly joined at one end to the adjoining side wall and having an adjacent portion of its outer face secured to the inner face of the adjoining end wall, said connecting tongue portion being hingedly joined to said connecting flap portion along a hinge line normal to the hinge line of said connecting flap with said adjoining side wall and said connecting tongue portion being secured in face engaging relation with said top cover forming end flap.

2,734,678
MAGNETIC CONTROL DEVICE FOR PUMPS
Thomas H. Edwards, Richland, Wash., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application February 23, 1954, Serial No. 412,129
4 Claims. (Cl. 230—83)



1. Apparatus for oscillating a liquid level in a container between two limits, comprising a float member having therein a vertical permanent magnet, means using materials of low magnetic permeability for guiding the vertical motion of the float, a pivoted permanent magnet adjacent to the upper end of the vertical magnet when said float is at its lowest most position, said pivoted magnet having a first position involving proximity thereof and the vertical magnet permitted by attraction between the pivoted magnet and the upper end of the vertical magnet and a second position involving proximity of the pivoted magnet and the vertical magnet produced by repulsion between the pivoted magnet and the lower end of the vertical magnet, an electrically actuated mechanical means for adjusting the liquid level, said mechanical means having a control circuit and a normally closed switch in series connection with the control circuit, the normally closed switch opened in response to proximity of the pivoted magnet in its second position, the mechanical means adapted for raising the liquid level in response to closing of said switch and for lowering the liquid level in response to opening thereof, and an electromagnet adjacent to the pivoted magnet and adapted on actuation to rotate said pivoted magnet into said first position thereby closing said switch, means responsive to fall of the liquid to a certain level to actuate the electromagnet.

2,734,679
VAPOUR VACUUM PUMPS
Basil Dixon Power, West Wickham, England, assignor to Edwards High Vacuum Limited, Crawley, England
Application August 25, 1952, Serial No. 306,160
Claims priority, application Great Britain August 29, 1951
6 Claims. (Cl. 230—101)



1. A vapour vacuum pump comprising an upwardly extending housing, an inlet at the top of said housing, an outlet adjacent the lower end of the housing, a main boiler positioned at the bottom of the housing for containing the operating liquid of the pump, a heating means for said boiler, vapour tubes extending successively upwardly within said housing for conducting the vapour resulting from the heated liquid, a plurality of vertically spaced downwardly directed jets fed with vapour by the said vapour tubes, cooling means on said housing providing a cooled surface for condensing the vapour issuing from the jets whereby the condensed vapour flows down the housing to the main boiler, an auxiliary boiler at the lower end of a vapour tube other than the lowermost tube, and positioned in the path of vapour passing to a lower jet to be heated thereby, and means for condensing the heavier fractions of the vapour passing to said lower jet and for feeding the heavier vapour fractions thus condensed, to the auxiliary boiler.

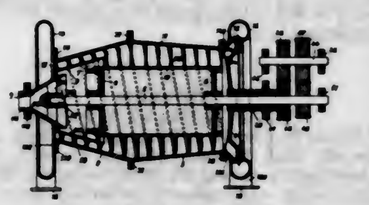
2,734,680
GRAVITY-ACTUATED CLOSURE FOR COIN-CONTROLLED DEVICES
Whitney W. Jones, Philadelphia, Pa.
Application December 16, 1952, Serial No. 326,263
2 Claims. (Cl. 232—44)



1. The combination of a coin-controlled mechanism, with a casing having an annular coin-passing aperture,

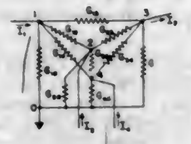
an overhanging shelter extending outwardly from said casing above and in front of said aperture, and a gravity-actuated ball positioned beneath said shelter as a housing, and guide means operative to direct said ball when actuated by gravity to normally close said aperture.

2,734,681
CENTRIFUGAL SEPARATOR
Ludwig Schmiedel, Leipzig, Germany, assignor to Starcosa Maschinen- und Apparatebau Gesellschaft mit beschrankter Haftung, a company of Germany
Application April 24, 1951, Serial No. 222,595
Claims priority, application Germany May 2, 1950
9 Claims. (Cl. 233—7)



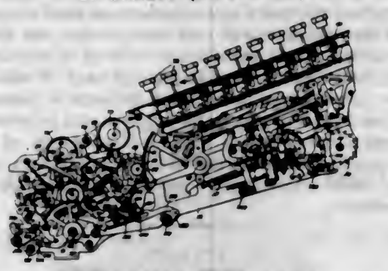
1. A centrifugal separator comprising a horizontally disposed rotary drum tapering from a transverse plane intermediate its ends towards its ends, the peripheral wall of said drum being free from perforations, means mounted adjacent to one end of said drum to feed the liquid to be treated into the latter, a collector mounted adjacent to the other end of said drum and adapted to collect and discharge the liquid issuing from such end, a discharging worm of helical strip form mounted for relative rotation within said drum substantially in contact with the inside of said peripheral wall and adapted to feed axially the deposits separated from said liquid out of at least one end of said drum, means co-ordinated to said last mentioned end of said drum and adapted to collect the solids discharged therefrom by said worm, and means for rotating said drum and said worm about a horizontal axis.

2,734,682
METHOD FOR LEAST SQUARES ADJUSTMENT OF SURVEY NETS
Fred M. Mayes, Newtown Square, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey
Continuation of application Serial No. 174,512, July 18, 1950. This application August 19, 1954, Serial No. 450,923
2 Claims. (Cl. 235—61)



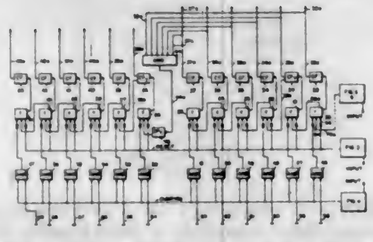
1. A method for the least squares adjustment of a survey net comprising providing an electrical network having junctions corresponding to meshes of said net and having conductances directly connected between pairs of junctions proportional to the lengths of lines common to meshes of said net which correspond to the junctions of the respective pairs, introducing to said junctions, from sources external to the network, currents proportional to the closures of surveys about the meshes respectively corresponding to the junctions, and measuring potential differences between pairs of junctions.

2,734,683
TOTAL TRANSFER MECHANISM
Joseph A. V. Turck, Miami Beach, Fla., assignor to Felt & Tarrant Manufacturing Company, Chicago, Ill., a corporation of Illinois
Original application July 16, 1943, Serial No. 494,907. Divided and this application August 14, 1950, Serial No. 179,206
15 Claims. (Cl. 235—62)



1. In a power driven key-responsive calculating machine having an electric motor, denominational orders of digit keys, a primary and a secondary register, each said register having a plurality of denominational orders of numeral wheels, each of said wheels being actuatable by power derived from said electric motor, actuating mechanism operated by said electric motor to actuate the primary register wheels and digitally controlled by said keys, and clearing mechanism for individually zeroizing each said register; spring actuated devices energized by power from said electric motor for actuating the secondary register numeral wheels; normally inoperative means for connecting the numeral wheels of said primary register with the numeral wheels in the corresponding denominational orders of said secondary register in response to operation of said clearing mechanism for said primary register; and positioning means operable, before the primary register is cleared in a zeroizing operation, to render said normally inoperative means operative, to cause said devices to effect a transfer of the primary register reading to the secondary register during the zeroizing of said primary register in response to subsequent operation of said clearing mechanism for such primary register, and to cause said motor to reenergize said devices in preparation for another such transfer.

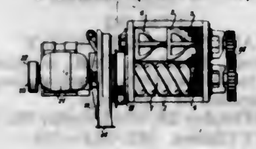
2,734,684
ELECTRONIC COUNTER
Harold D. Ross, Jr., and Clarence E. Frizzell, Poughkeepsie, N. Y., assignors to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application July 21, 1952, Serial No. 300,084
9 Claims. (Cl. 235—92)



1. An electronic counter comprising a plurality of cascade connected bi-stable elements, means connecting said elements into a plurality of groups, each group comprising a plurality of cascade connected bi-stable elements, means supplying actuating input pulses to a first one of the bi-stable elements of a first one of said groups to alter its states of stability to produce operation of all the elements

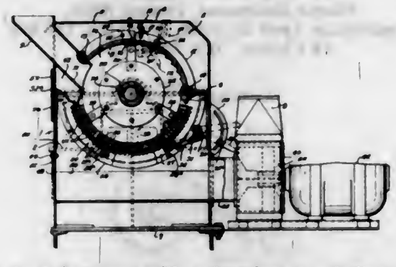
of said first group and means for eliminating the effect on said counter of the rippling time delay in the cascade operation of said bi-stable elements of said first group comprising an "and" circuit controlled by each one of all of the elements of said first group so that when each one of all said first group of elements, is in a similar state of stability, said "and" circuit is so conditioned, that upon application of the next actuating input pulse to said first one of said elements to alter its state of stability, said "and" circuit is de-conditioned to produce a change of energy at its output whereby upon application of said next actuating pulse to said one of the elements there is transmitted by said "and" circuit, to another of said groups, an actuating change of energy prior to cascade operation of the succeeding elements of said first group.

2,734,685
TWO STAGE PULVERIZING APPARATUS FOR KNOT OR PULP OF WOOD, FOR MAKING PAPER STOCK
Tomizo Saito, Tokyo, Japan
Application July 16, 1952, Serial No. 299,146
3 Claims. (Cl. 241—46)



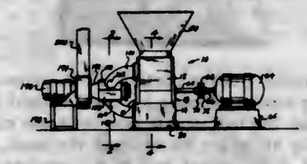
1. A pulverizing mill for knot or pulp comprising a crusher tank, a device provided therein for the coarse-crushing of knot and feeding of the coarsely crushed knot to further pulverizing stage, a second rotary crusher internally connected with said crusher tank and adapted to receive crushed knot therefrom, and a device provided in the said second crusher and adapted to pulverize the said coarsely crushed material into a more finely divided condition and to discharge the final pulverized material, a water feed tube being provided immediately before the second crusher, said first-named device incorporating a transmission screw, rotatable crushing blades, and two parallel, horizontal shafts journaled in the said crusher tank, said screw being rotatably mounted on one of said shafts and said blades being rotatably mounted on the other of said shafts.

2,734,686
ADJUSTABLE HAMMER MILL
Theodore A. Oberhellmann, St. Louis, Mo., assignor to Hammermills, Incorporated, Chicago, Ill., a corporation of Missouri
Application November 12, 1952, Serial No. 319,811
21 Claims. (Cl. 241—82)



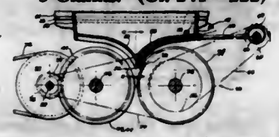
17. In a hammer mill, a housing, a grinding cage in said housing, a substantially straight line, downwardly inclined material inlet chute discharging at its lower end into said cage, a chamber immediately below said chute, an aperture in the bottom wall of said chute for opening into said chamber, an air intake in the side of said chamber, and a fan disposed at the opposite side of the hammer mill housing from said air intake, said fan providing for the passage of an air stream through said chamber and apertured into said grinding cage, said chute, chamber, and aperture being arranged so that material heavier than the material to be ground falls by gravity through said aperture and is trapped in said chamber and material to be ground is carried by said air stream into said cage.

2,734,687
VARIABLE GRIND FEED MILL
William W. Draves, Minneapolis, Minn.
Application October 1, 1952, Serial No. 312,534
9 Claims. (Cl. 241—186)



1. A feed grinding mill comprising grinding means having a variable output as to the grade of grind, ducts leading from said means to a juncture, each of said ducts adapted to transport one specific grade of grind, a single outlet connected to the juncture of said ducts and extending therefrom, a valve positioned at the juncture of said ducts for opening only one of said ducts into said single outlet at a time, and a suction means connected to said single outlet for applying a suction in said ducts.

2,734,688
PAIRED ROLL CRUSHER AND GRIZZLY FEED DEVICE THEREFOR
William W. Sloane, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application November 4, 1952, Serial No. 318,543
3 Claims. (Cl. 241—222)



1. In a roll crusher of the type having a pair of co-operating crushing rolls arranged to nip material and crush same to a desired size at the line of conjugacy of said rolls, the improvement in such a crusher comprising a grizzly mounted above the rolls thereof including means for providing shaking motion thereto, a discharge bottom for said grizzly, said discharge bottom having substantially uniformly spaced discharge openings therein and having curved portions extending toward the line of conjugacy of said rolls, said curved portions meeting along a line spaced a distance from the line of conjugacy of said rolls, said curved portions having radii in planes normal to the axes of said rolls which are greater than the maximum radius of their proximate roll at such corresponding plane, so as to provide a metering space for material passing said discharge openings.

2,734,689
SOUND RECORDING APPARATUS
Raymond E. Zenner, Hollywood, Ill., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application February 20, 1953, Serial No. 338,066
2 Claims. (Cl. 242—54)

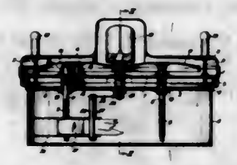
1. Recording apparatus for guiding recording medium in a fixed path from a supply reel past a recording head

and to a take-up reel, said apparatus including a reciprocating level-wind spool for receiving said medium from said reel and delivering it to said take-up reel, an idler disposed between said level-wind and said head, and another driven spool disposed between said head and said idler, said idler and other driven spool each being formed with a groove disposed in alignment with the pass through said head, said driven spool engaging said medium after passage through said head and said idler being positioned



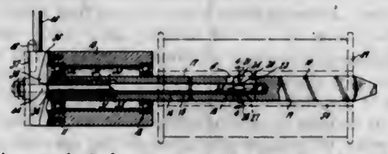
to have a limited arcuate portion of its groove engage said recording medium during its travel to said head and to have another limited arcuate portion again engage the medium during its return travel from the head, whereby said idler and driven spool maintain a straight-line pass of said medium through said head, said level-wind spool being reciprocably driven by said medium travel and said portions of the medium traveling between said idler and said level-wind spools crossing one another for reducing slippage about the level-wind spool.

2,734,690
REVERSIBLE WINDING DEVICE
Walter Limberger, Hamburg, Germany, assignor to Messrs. Lumoprint Zindler K. G., Hamburg, Germany
Application February 9, 1953, Serial No. 335,743
Claims priority, application Germany February 9, 1952
4 Claims. (Cl. 242—55)



1. In a web feeding and reversing mechanism, a stationary supporting member, a first and a second spool rotatably supported in spaced relationship on said stationary supporting member and each adapted to receive the one end of said web, a first and a second friction disk both rotatably supported in spaced relationship on the upper side of said stationary supporting member, a first driving connection between said first friction disk and said first spool, a second driving connection between said second friction disk and said second spool, such driving connections being so designed that the direction of movement of said first spool being opposite to the direction of movement of said second spool when driven by its friction disk respectively in the same direction, a pusher member rotatably supported on the lower saide of said stationary supporting member, two abutments provided between each of the ends of said web and said spools and adapted to engage said pusher member, a movable supporting member rotatably supported on the upper side of said stationary supporting member, an electric motor arranged on said movable supporting member for running in the same direction, a friction wheel drivably connected with said motor, and a two position spring-tensioned snap-action device drivably connected with said pusher member and connected to said movable supporting member to actuate the same for bringing said friction wheel in driving engagement either with said first or said second friction disk.

2,734,691
MANDREL
Edmond Godat, Los Angeles, Calif., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application March 9, 1953, Serial No. 341,086
6 Claims. (Cl. 242—72)



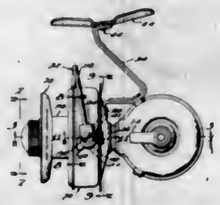
1. A mandrel for a spool having a polygonal bore comprising, an elongated shaft polygonal in cross-section and having two opposed parallel sides, extensible and retractable fingers mounted in each of said opposed sides in an off-center relationship with respect to the axially extending center line of the shaft so that when said fingers are extended they will twist the spool to tightly wedge it on said shaft.

2,734,692
TAPE STORAGE DEVICE
Leland P. Robinson, Pasadena, Calif., assignor, by mesne assignments, to ElectroData Corporation, Pasadena, Calif., a corporation of California
Application October 29, 1953, Serial No. 388,967
7 Claims. (Cl. 242—74)



1. In a mechanism for storing tape, the combination which comprises a first ring having a smooth interior surface and an opening in its wall for the passage of tape, a member disposed within the first ring and rotatable on its axis, springing means fastened to the rotatable member and extending outwardly and pushing toward the smooth interior surface of the first ring for holding the tape between the outer end of the springing means and the smooth surface so that the tape is wound within the ring as the member is rotated, and a second smaller ring fastened within the first ring and substantially coaxial with it and extending partly across the first ring but clear of the path of the springing means.

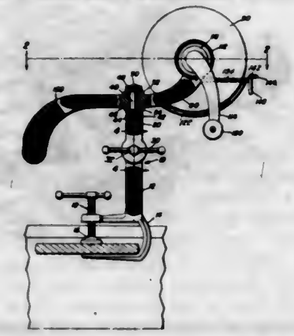
2,734,693
SPINNING REEL
Hector Rabezzana, Fenton, Mich.
Application April 25, 1950, Serial No. 157,896
18 Claims. (Cl. 242—84.4)



1. A spinning type fishing reel including first and second members, a crank mounted on one of said members, means connecting said members for rotation relative to each other between first and second positions for positioning said crank at the right or left side of

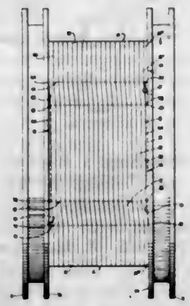
the reel, a bracket secured to one of said members and adapted to be secured to a fishing rod, and means for selectively securing said bracket to the other of said members to selectively secure said members in said positions.

2,734,694
TROTLINE REEL
Harley W. Davidson, Malvern, Ark.
Application May 28, 1953, Serial No. 357,945
3 Claims. (Cl. 242—106)



3. A trotline reel comprising an articulated stand, a securing means on said stand, a fork member journaled on said stand, a control handle on said fork member, said fork member including a pair of fork arms, a tubular sleeve on one of said fork arms, said sleeve being internally threaded adjacent the outer end thereof, a bearing cylinder, said bearing cylinder being externally threaded adjacent each end and having a reduced central portion, a spindle journaled in said cylinder, a head on said spindle, said head being incapable of passing through said internal threads, a spool engaging chuck on said spindle, a bearing sleeve on the other of said fork arms, a driving spindle journaled in said bearing sleeve, a spool engaging chuck on said driving spindle, a crank secured on said driving spindle, a brake disk at each end of said bearing sleeve, a compression contact between said spool chuck and one of said brake disks, a follower disk slidably but non-rotatably secured on said spindle and contacting the other of said brake disk, and an adjusting nut on said spindle.

2,734,695
BALANCED CABLE SPOOLING
Franklin L. Le Bus, Sr., Longview, Tex.
Application July 15, 1954, Serial No. 443,599
4 Claims. (Cl. 242—117)



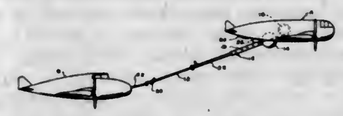
1. In a cable winding apparatus comprising a drum having an essentially cylindrical core with flanges at opposite ends thereof, means providing a combined parallel and helical winding of cable on the outer periphery of the core between the flanges, said means comprising a pair of sets of parallel grooves disposed in diametrically opposed relation on the drum and a pair of sets of helical grooves disposed in diametrically opposed relation on the drum, said sets of helical grooves interposed between the sets of parallel grooves and in end to end relation therewith.

2,734,696
YARN PACKAGE
Robert V. De Vault, Enka, N. C., assignor to American Enka Corporation, Enka, N. C., a corporation of Delaware
Application September 12, 1950, Serial No. 184,504, now Patent No. 2,645,434, dated July 14, 1953, which is a division of application Serial No. 107,128, July 27, 1949, now Patent No. 2,645,554, dated July 14, 1953. Divided and this application September 10, 1951, Serial No. 245,955
1 Claim. (Cl. 242—159)



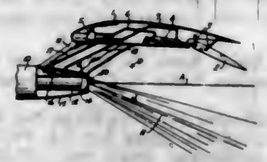
In combination with a freshly spun rayon cake for the protection thereof during subsequent treatment and handling, a liquid permeable, generally rectangular cloth having flexible metallic wires attached to its top and bottom marginal flanges, a central portion of said cloth between its top and bottom marginal flanges extending through the interior of the cake, said wires biasing said central portion to engage the core defining convolutions of the cake and biasing portions of the cloth adjacent to said marginal flanges to overlie and engage the respective ends of the cake, the wires extending for more than 360° around the cake and the side edges of the cloth overlapping to form a continuous protective cover.

2,734,697
AIRPLANE RESCUE TOWING SYSTEM
Harold J. Brow, Warrington, Fla.
Application June 18, 1952, Serial No. 294,115
4 Claims. (Cl. 244—3)



1. An aircraft rescue towing system comprising a winch at one end of said system and a loop on the other end, said winch being mounted on a first movable support and said loop being adapted to be mounted on a second movable support, a flexible cable connected to said winch, a universal joint on said first support, said joint being provided with an extensible housing extending outwardly therefrom, said housing having a free end, said cable extending through said joint and through said housing, a flange on said free end of the housing, a weight releasably connected to said housing and encircling said cable, a pivoted hook connected to the free end of said cable, a trigger connected to said hook and being adapted to effect a rocking movement of said hook around its pivot, upon said triggers being contacted by said weight, said hook being in a position to engage said loop, when the weight is held spaced from said trigger.

2,734,698
AIRPLANE CONTROL SURFACE AND JET DEFLECTOR ARRANGEMENT
Joseph W. Straayer, Birmingham, Mich., assignor to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application January 11, 1954, Serial No. 403,370
3 Claims. (Cl. 244—15)



1. In an airplane, in combination with an airfoil, a control surface located at the trailing edge of said airfoil, means mounting said control surface for movement from a normal neutral position in general conformity with the contour of said airfoil into a controlling position deflected downwardly from the airfoil, a jet engine, means supporting said jet engine at a location beneath the airfoil and with the rear end of its tailpipe ahead of and sufficiently close to the control surface's location that the undeflected jet from the tailpipe would impinge the downwardly deflected control surface, a deflector movably mounted on said jet engine adjacent the tailpipe's rear end but normally substantially out of line with the jet from the tailpipe, and actuating means common to the control surface and to the deflector to move the deflector into position rearwardly of the tailpipe and such as will deflect the jet downwardly to clear the control surface, coincident with movement of the control surface into its downwardly deflected position.

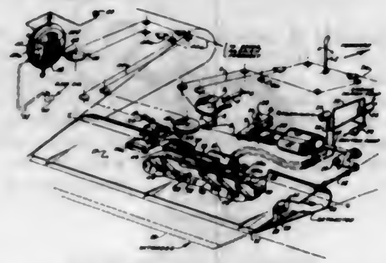
2,734,699
FLUID PROPELLED AND SUSTAINED AIRCRAFT
Alexander M. Lippisch, Cedar Rapids, Iowa, assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application December 12, 1952, Serial No. 325,567
2 Claims. (Cl. 244—23)



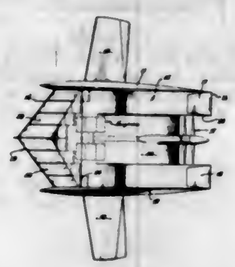
1. A wingless heavier than air aircraft comprising, a fuselage which is generally cigar-shaped and formed with a central opening extending longitudinally therethrough, a forward propelling power plant mounted to said fuselage within said central opening, a plurality of transverse openings formed through said fuselage and communicating with said central opening, a plurality of guide vanes vertically supported by the fuselage within the transverse openings, said guide vanes formed in airfoil shape and mounted so that the side of greater camber faces forwardly of the aircraft, a plurality of vertical openings formed within said fuselage and extending from the bottom thereof to said central opening, and a plurality of driving means mounted in said vertical openings and adapted to produce upward thrusts.

2,734,700
AIRPLANE CONTROL SYSTEM
Herbert E. Metcalf, Los Angeles, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application November 25, 1950, Serial No. 197,617
5 Claims. (Cl. 244—42)

1. In an attitude control system for an airplane having a wide speed range; an attitude control surface, a pilot's control member, means connecting said member to said surface for pilot control of said airplane, the surface area of said control surface being sufficient only to control said airplane under normal pilot control member movements at the higher points of said speed range, a plate mounted to slide rearwardly out of and forwardly into said control surface to respectively increase and decrease the control area of said control surface, actuating means mounted within said control surface and operatively connected to said plate to move said plate rearwardly and forwardly, said actuating means having a reciprocative input driving member positioned in line with a hinge axis of deflection of said control surface, an operating linkage mounted outside said control surface and connected through the forward part of said control surface to said input driving member, said input driving member being divided, between two end connections thereof, into two parts coaxially rotatable with respect to each other whereby deflection of said control surface is allowed without affecting operation of said plate, airspeed-responsive acivating means, and means operatively connecting said activating means to said operating linkage in the direction to cause movement of said plate forwardly into said control surface at high speeds and rearwardly out of said control surface at low speeds.



2,734,701
AIRPLANE WITH RETRACTABLE VARIABLE-INCIDENCE WINGS
William E. Horton, Sunset Beach, Calif., assignor to Horton Aircraft Corporation, Sunset Beach, Calif., a corporation of California
Application May 13, 1952, Serial No. 287,528
1 Claim. (Cl. 244—43)



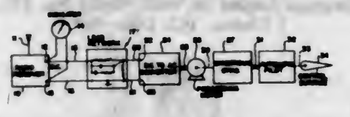
An airplane comprising a fuselage and auxiliary retractable wings, said fuselage having upper, lower and side surfaces; the upper surface being convex to thereby create a low pressure area upon forward movement through the air; said side surfaces extending above said upper surface to prevent spillage of high pressure air into said low pressure area and being formed with horizontal slots; said auxiliary wings being operable to extended position and being retractable into said horizontal slots, said auxiliary wings being also rotatable about a horizontal axis perpendicular to the line of flight of said plane.

2,734,702
METHOD OF LAUNCHING AIRCRAFT
John K. Northrop, Los Angeles, Claude A. Brosterhous, Long Beach, Leigh E. Dunn, Manhattan Beach, John M. Ellison, Gardena, and Dick R. Herman, Los Angeles, Calif., assignors to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Original application September 4, 1948, Serial No. 47,914. Divided and this application June 16, 1952, Serial No. 294,204
2 Claims. (Cl. 244—63)



1. The method of launching an aircraft capable of free flight, the steps comprising: slidably coupling a self- propelled land vehicle to the ground for travel over a course of predetermined direction and an extent sufficient to enable the vehicle to reach a speed near sonic; removably coupling an aircraft to the vehicle; accelerating the vehicle and the aircraft over a major portion of the course to a speed near sonic; uncoupling the aircraft from the vehicle for free flight at said speed; and decelerating the vehicle to zero speed over the remaining portion of the course by engaging the vehicle with water in a channel extending along the course and deflecting the water through an angle at least of the order of 90° to the direction of travel of the vehicle.

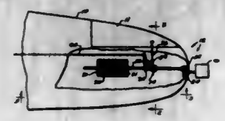
2,734,703
FLIGHT PATH CONTROL APPARATUS
David L. Markusen, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application December 24, 1951, Serial No. 263,099
7 Claims. (Cl. 244—77)



3. Apparatus of the class described comprising, in combination: a simple parallel circuit including a first resistor and a first capacitor; a first series circuit including a second resistor and a second capacitor; means connecting said first series circuit in parallel with said simple parallel circuit to comprise a complex parallel circuit; a third resistor; means connecting said third resistor in series with said complex parallel circuit to comprise a complex series circuit; input terminals connected to the ends of said complex series circuit; output terminals connected to the ends of said third resistor; means energizing said input terminals in accordance with the lateral displacement of an aircraft from a desired path; and means controlling the bank angle of the craft in accordance with the signal appearing at said output terminals.

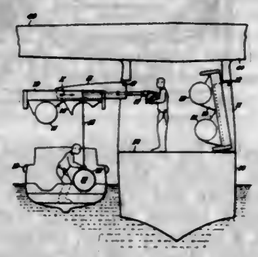
2,734,704
CONTROL FOR REDUCING AIR LOADS ON WINGS
Richard Vogt, Medway, Ohio
Application April 1, 1952, Serial No. 279,905
2 Claims. (Cl. 244—82)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. Gust alleviating means for aircraft wings, comprising in combination with an aircraft wing, an aileron pivotally mounted on said wing, a primary control system for actuating said aileron to vary the lift over the wing, a secondary control system for said aileron operable to actuate said aileron independent of actuation thereof by said primary aileron control system, gust detecting means comprising an auxiliary airfoil pivotally supported on said wing to be responsive to gust air loads acting on said wing, said primary control system comprising a bell crank pivotally and bodily shiftable in the wing, a control rod pivoted to one arm of said bell crank and adapted to pivot the bell crank about its center, and a link pivoted to the other arm of said bell



crank, said link being pivotally connected to an operating arm bracket mounted on the aileron, said auxiliary airfoil extending outward in a spanwise direction from said wind and operatively connected to said bell crank center for bodily displacement of the bell crank pivot upon movement of said auxiliary airfoil, when said control rod is held stationary to rotate said bell crank about one arm pivot connection thereof to shift said link and said bracket to pivot said aileron, yielding means biasing said auxiliary airfoil to a neutral position until the air load thereon exceeds a predetermined value.

2,734,705
APPARATUS FOR MOUNTING BOMBS AND THE LIKE IN AIRCRAFT
Frank Henry Robertson, Carisbrooke, Isle-of-Wight, assignor to Saunders-Roe Limited, Osborne, England
Application October 11, 1950, Serial No. 189,617
4 Claims. (Cl. 244—137)

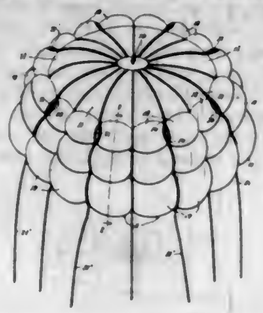


1. In a flying boat having wings and a hull, a door in the side of the hull which is hinged to the hull at its upper edge, means for moving said door upwardly and outwardly in relation to said hull from a closed position to an open position in which it extends substantially parallel to the wings, a tray mounted to slide on the door, a power operated screw jack on said door for moving said tray in relation to said door, when said door is open, in a direction transverse to the hull and, mounted on said tray, at least one crutch for supporting an elongated missile extending in the fore and aft direction of the hull.

2,734,706
MULTICELL PARACHUTE CANOPY
Domina C. Jalbert, Boca Raton, Fla.
Application October 17, 1952, Serial No. 315,391
6 Claims. (Cl. 244—145)

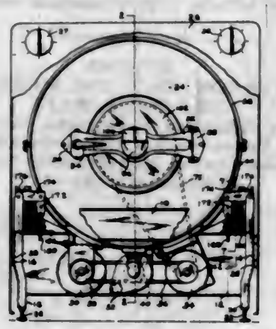
1. A parachute comprising a dome-shaped sheet having a central imperforate portion and a series of panels extending outwardly from said central portion, each of said panels being constituted by a series of cup-shaped pockets, the side edges of each panel being connected to corresponding edges of the adjacent panels, the connections

between said panels having air escape slits spaced around the dome-shaped sheet between the connections adjacent



the center and the connections adjacent the periphery of the sheet.

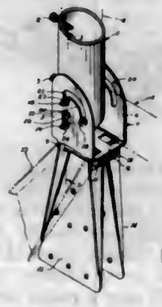
2,734,707
SUPPORT FOR LAUNDRY MACHINES
Peyton W. Douglas, Syracuse, N. Y., assignor, by mesne assignments, to The Murray Corporation of America, Detroit, Mich., a corporation of Delaware
Application July 25, 1950, Serial No. 175,828
2 Claims. (Cl. 248—18)



1. In a support for a washing machine, having an extracting drum rotatable about a substantially horizontal axis extending fore and aft and subject to unbalanced loads, a floating journal supporting frame for the revolving drum, a stationary frame, linkage connecting said journal supporting frame with said stationary frame, said linkage comprising two pairs of horizontal links located on opposite sides of said floating frame with the links of each pair located forward and rearward in respect to the journal frame, and a vertical link depending from each of said horizontal links, each of the vertical links being connected to and supporting the floating frame fore and aft on opposite sides thereof, a rigid element having laterally extending arms connecting the forward and rearward horizontal links of each pair, and upright extending resilient means coacting between said stationary frame and arms for yieldingly maintaining said horizontal links in a substantially horizontal position.

2,734,708
MOUNTING OF ANTENNA MASTS
Max Cohn, South River, N. J., assignor to South River Metal Products Company, Inc., a corporation of New Jersey
Application April 27, 1953, Serial No. 351,241
4 Claims. (Cl. 248—43)

1. A mount for supporting a mast holder comprising a pair of parallel upright walls receiving said mast holder therebetween and each formed with a downwardly concave first slot including an arcuate section extending from a lower end to an upper end and a vertical section extending from a lower end upwardly into communication with the upper end of said arcuate section, said walls each being formed with a second slot in alignment with and below said vertical section of said first slot, the upper end of said second slot terminating at a location spaced from the lower end of said vertical section, a first mounting pin operatively connected to said mast holder and having end portions extending into and guided by said first slots, and a second mounting pin spaced from said first mounting pin and operatively connected to said mast



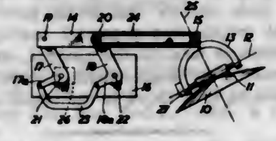
holder, said second mounting pin having end portions extending into and being guided by said second slots, said pin and slot connections mounting said mast holder for movement between an unlocked limit position wherein said first mounting pin is at the lower end of said arcuate section of said first slots and said second mounting pin is at the upper end of said second slots and a locked limit position wherein said first mounting pin is at the lower end of said vertical sections of said first slot and said second mounting pin is at the lower end of said second slot.

2,734,709
FRAMEWORK FOR CHRISTMAS TREE LIGHTING
Charles R. Harrison, Washington, Pa.
Application August 20, 1953, Serial No. 375,357
1 Claim. (Cl. 248—168)



A frame for Christmas tree lights comprising a rectangular horizontal frame structure including side members provided with outturned ends arranged in opposed pairs at the corners of the frame structure, said side members having outwardly extending flanges between said ends of said members, a mast of inverted V-shape rising from said frame structure and having longitudinal members with lower ends secured between diagonally opposite pairs of the outturned ends of the side members, and a plurality of pairs of opposite legs supporting said frame structure and arranged in octopodic relation, alternate pairs of legs being pivotally secured between pairs of outturned ends of the side members, and intermediate pairs of legs being pivotally secured to said flanges, the legs of one of the pairs being swingable on their pivots into alignment with the longitudinal members of the mast to form with said mast an inverted V-shaped structure in said frame.

2,734,710
SUPPORTING MECHANISMS
John Maskill Noble, Dunstable, England, assignor to The English Electric Company Limited, London, England, a British company
Application August 21, 1951, Serial No. 242,947.
Claims priority, application Great Britain August 28, 1950
3 Claims. (Cl. 248—276)



1. A universal pivot support mechanism comprising a bracket having two pivotal axes, one parallel to a perpendicular through the other, the device to be supported being mounted on the bracket pivotally about one of these axes and the bracket being mounted on a carriage pivotally about the other of these axes; the carriage being pivotally mounted on a crank and the crank being pivotally mounted on a base, both about pivotal axes parallel to the bracket-carriage pivotal axis; a pair of sprockets of equal diameter coupled by a chain, one on the bracket-carriage pivotal axis and secured to the bracket and the other on the carriage-crank pivotal axis and secured to the crank, so that the orientations of the bracket and of the crank relative to the carriage are always equal, and means to ensure that the carriage moves always parallel to a fixed axis in the base.

2,734,711
TUMBLER HOLDER
Mary H. Shippen, Lost Springs, Wyo.
Application February 24, 1953, Serial No. 338,391
3 Claims. (Cl. 248—313)



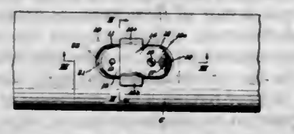
3. A tumbler holder comprising a support casing having spaced front and rear walls, upper and lower slots in said front wall of said casing, upper and lower guide members slidably retained in said casing, all of the dimensions of said guide members being greater than the dimensions of said slots, upper and lower support arms, each of said arms being attached to one of said guide members and extending through one of said slots, tumbler supporting means attached to said support arms, and resilient means terminally attached to the lower portion of said upper guide member and the upper portion of the lower guide member, said resilient means comprising a coil spring within said casing, said tumbler supporting means attached to said upper support arm including an upper body member, and a cylindrical projection of less diameter than said body member attached thereto forming a peripheral groove for reception of the upper edge of a tumbler, the tumbler supporting means attached to said lower support including a base plate, and a guard rail supported above said base plate.

2,734,712
SELF-METERING FLUSH VALVE
James Fraser, Wilmington, Del., assignor to Speakman Company, Wilmington, Del., a corporation of Delaware
Application December 4, 1952, Serial No. 324,059
3 Claims. (Cl. 251—35)



1. In a liquid-metering flush valve, including a casing having an inlet port, an outlet port and a valve seat intermediate said ports, and a timing chamber coaxial with and at the inlet side of said seat and open at its end adjacent said seat, a main valve element having a cylindrical portion co-axial with said seat and chamber and extending into the latter through its open end and rotatable in said chamber and formed with a restricted charging duct having one end open to said inlet port and having its second end opening into said chamber at a distance from the common axis of said valve element and chamber, a control valve governing a discharge port in said chamber, said discharge port being of greater capacity than the charging capacity of said duct and, when opened, effecting a reduction of fluid pressure in said chamber, hydrostatic means associated with said timing chamber and subject to pressures therein, said hydrostatic means opening said main valve when the chamber pressure falls below the pressure in the inlet port and closing said main valve as the chamber pressure becomes equalized with the pressure in the inlet port; the improvement comprising an annulus within and coaxial with said timing chamber and forming an abutment for engagement by the rim portion of the upper end of said main valve element including the second end of said duct when said main valve opens, a tubular member inserted in the upper end of said duct that has a valve seat at its lower end and a ball within said duct that is movable therein between an upper position in which the ball engages the last mentioned seat and a lower position, a stem attached to said ball extending into the bore of said tubular member and having its upper end projecting from the upper end of said tubular member when said ball engages the last mentioned seat but not when said ball occupies said lower position, and means extending through the top wall of said casing for adjusting said annulus toward and away from said top wall, whereby said annulus is adapted to regulate the minimum volume of said timing chamber.

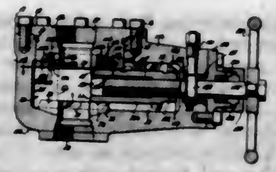
2,734,713
VALVES
Henry N. Webster, Sebring, Fla., assignor to The Webster Corporation, Sebring, Fla., a corporation of Florida
Application March 12, 1953, Serial No. 341,868
7 Claims. (Cl. 251—145)



1. A valve of the character described comprising a slidable elongate closure element adapted, when in closed position, to lap the edge margin of a similarly configured but smaller longitudinally extending port in the wall of

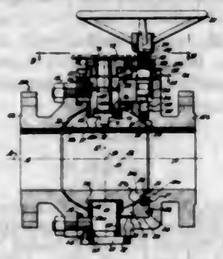
a cylindric conduit from the inside; and a retaining element in the form of an overreaching spring retaining tongue connected at one end to the rear end of the closure element and having at its distal end a transverse upwardly arched portion whereof the curvature is less than the radius curvature of the conduit with the extremities of said portion bearing upon the outer face of the conduit adjacent the long side edges of the port.

2,734,714
VALVE
Granville S. Knox, Los Angeles, Calif., assignor to Hydril Corporation, Los Angeles, Calif., a corporation of California
Application May 16, 1950, Serial No. 162,311
9 Claims. (Cl. 251—171)



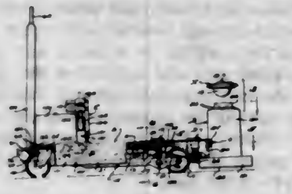
9. In a valve, a body member having a valve chamber and fluid flow ports opening thereto, a valve stopper member in the chamber and movable to and from a position blanking at least one of the ports, in which position a face of the stopper member opposes the body-face defining said one port, there being a channel sunk in at least one of said opposed faces, said channel annularly surrounding said one port at least at times when the stopper member is in port-blanking position, a coherent body of resilient, extrudable plastic packing material in said channel and held against bodily displacement therefrom, the surface of the packing opposite the other of said opposed faces normally lying below said one of the opposed faces, and means for pressurizing said material and thereby causing a resilient extrusion of a portion of said material into sealing engagement with said other face, said means being effectively operable only when said stopper member is in port blanking position.

2,734,715
SPHERICAL VALVE
Granville S. Knox, Glendale, Calif., assignor to Hydril Company, Los Angeles, Calif., a corporation of Ohio
Application December 22, 1952, Serial No. 327,279
14 Claims. (Cl. 251—171)



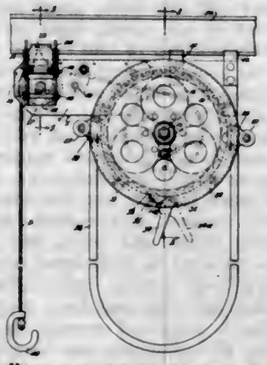
1. In a valve, a body defining a valve chamber, there being at least a pair of flow passages extending from the exterior of the body and opening to the valve chamber at angularly spaced points, a generally spherical stopper mounted in the chamber for rotation about one of its axes, said stopper having a through passage which, in one adjusted position of stopper-rotation, registers with said flow passages and, in another adjusted position of stopper-rotation, is out of register with at least one of said flow passages, means for rotating the stopper, an annular body-face around the valve-chamber-end of one of the flow passages, there being an annular channel in said body and having an annular mouth opening to said body-face, said mouth encircling and being radially spaced from the associated flow passage, a ring of resilient, extrudable, internally tenacious plastic in the channel, there being a way provided in said body and opening to said channel, a displacement member forming a barrier across said way and being movable therethrough, said displacement member being engageable with said plastic and being movable in one direction to effectively pressurize said plastic and in the opposite direction to allow depressurization of said plastic; the plastic, when so pressurized, pressurally and sealingly engaging the defining walls of the channel throughout their extents and being partially extruded through said mouth into pressural sealing engagement with the spherical face of the stopper, and means for selectively moving the displacement member in one direction and allowing it to move in the opposite direction.

2,734,716
PORTABLE LIFT
Frank S. Pearne, Los Angeles, Calif., assignor to Regent Jack Mfg. Co., Inc., Los Angeles, Calif., a corporation of California
Application January 17, 1952, Serial No. 266,905
11 Claims. (Cl. 254—1)



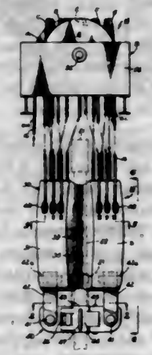
1. In combination, a vertically shiftable elongate substantially horizontal wheel supported carriage, a substantially vertical hydraulic cylinder and piston mechanism pivotally connected to the rear end of the carriage on a horizontal axis extending transversely of the carriage, and means supplying operating fluid to the cylinder including a fluid reservoir supported by the carriage at the forward end portion thereof, a pump having an operating lever accessible at the forward end portion of the carriage, and a fluid handling duct extending from the pump to the cylinder.

2,734,717
HAND OPERATED HOIST CONSTRUCTION
Harris S. Campbell, Bryn Athyn, Pa., assignor to Eastern Rotorcraft Corporation, Neshaminy, Pa., a corporation of Pennsylvania
Application March 8, 1952, Serial No. 275,488
2 Claims. (Cl. 254—169)



1. A manually operated hoist having a housing, reduction mechanism and a cable drum mounted in said housing, a pulley member supported by said housing, an endless belt member contacting said pulley member for hand engagement to operate said hoist, and an extension arm having a cable pulley mounted thereon, four supporting brackets for attaching said hoist to a rail, two of said brackets being fixed in staggered relationship at opposite sides of said hoist, two of said brackets being located in directly opposite relationship close to said cable pulley, one of the said last two brackets being fixed to said hoist and the other being pivotally mounted to swing down below the plane of the rail to provide for removal and attachment to the rail.

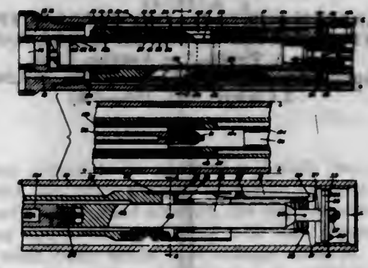
2,734,718
SIDE-OPENING TRAVELING BLOCK AND CROWN BLOCK ARRANGEMENT
Burt S. Minor, Whittier, Calif., assignor to Regan Forge & Engineering Co., San Pedro, Calif., a corporation of California
Application May 26, 1952, Serial No. 290,022
13 Claims. (Cl. 254—190)



1. A traveling block and crown block combination including: a traveling block having two vertical casing sections vertically connected at one side and providing between them at the other side a vertical, laterally directed opening extending substantially the height of the block and opening out to the side thereof and adapted to receive pipe by sidewise movement; elevator means secured to the under side of said traveling block in alignment with said opening to engage and support pipe; vertical sheaves mounted in both of said casing sections on horizontal axes; a crown block to be disposed above said traveling block and having two sets of vertical sheaves disposed on horizontal axes all in the same horizontal plane, most sheaves of one set of crown block sheaves being respectively disposed in substantially the same vertical planes as the sheaves of the traveling block, the sheaves of the other set of crown block sheaves including a spaced pair disposed transversely to said one set and on opposite sides thereof, all of the sheaves of the two blocks having the same diameter; and a line running over the sheaves of the two blocks for supporting and operating the traveling block from the crown block in balanced relation.

2,734,719
PRESSURE CORE TAKERS
Christopher William Otway, London, England, assignor to The British Petroleum Company Limited
Application October 11, 1951, Serial No. 250,821
Claims priority, application Great Britain October 19, 1950
3 Claims. (Cl. 255—1.4)

3. A pressure core taker, comprising an outer barrel, a core drilling bit secured to the lower end of the outer barrel; an intermediate barrel detachably secured within the outer barrel above the drilling bit, said intermediate barrel having an internal sealing shoulder portion adjacent its upper end; an inner core barrel slidable within the intermediate barrel, said core barrel having an internal piston-stop shoulder portion at its upper end; a hollow extension to the upper end of the core barrel, said extension having an external sealing shoulder portion for sealing engagement with the sealing shoulder portion of the intermediate barrel; a pressure-tight piston located within the hollow extension at the upper side of said piston-stop



shoulder portion; the hollow extension being adapted to be filled with gas at high pressure on the upper side of the piston; means for breaking off a core after it has been cut; means in addition to the shoulder portion and including pressure responsive means for sealing off the ends of the intermediate barrel with the core and core barrel inside; and, means for releasably maintaining the core barrel in lowermost position in the intermediate barrel above the drilling bit while the core is being cut.

2,734,720
APPARATUS FOR DRILLING WELLS WITH ORIENTED CURVED BORES OF LARGE RADII
John A. Zublin, Los Angeles, Calif.
Application December 30, 1952, Serial No. 328,679
4 Claims. (Cl. 255—1.6)



3. Apparatus for controlling the direction and extent of deviation of a well bore by the rotary drilling method comprising an elongated relatively inflexible tubular section, an elongated drill collar rotatably mounted in said tubular section and capable of limited lonigtudinal movement relative to said tubular section, interengaging clutch elements carried by said tubular section and said drill collar respectively, means normally holding said clutch elements in disengaged position while permitting engagement of said clutch elements upon limited longitudinal movement of said drill collar within said tubular section, a drill bit carried at the lower end of and rotatable with said drill collar, means at the upper end of said drill collar for connecting same to the lower end of a rotary drill string for rotation therewith and whereby said drill collar may be moved longitudinally relative to said tubular section by lifting of the drill string for engagement of said clutch elements, a collar rigidly secured to said tubular

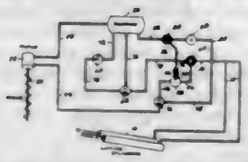
section and having outwardly projecting ribs engageable with the well bore wall to provide a fulcrum about which said tubular section can pivot, and well bore engaging deflecting means carried by said tubular section at a point spaced from said collar acting to urge said inflexible tubular section and said drill bit to pivot about said collar in a predetermined radial direction.

2,734,721
APPARATUS FOR DRILLING WELLS WITH ORIENTED CURVED BORES OR LARGE RADII
John A. Zublin, Los Angeles, Calif.
Application June 4, 1953, Serial No. 359,562
2 Claims. (Cl. 255—1.6)



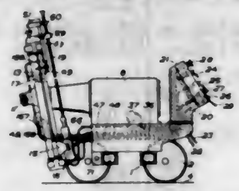
2. Apparatus for controlling the direction and extent of deviation of a well bore by the rotary drilling method comprising an elongated relatively inflexible tubular section, an elongated drill collar rotatably mounted in said tubular section and capable of limited longitudinal movement relative to said tubular section, interengaging clutch elements carried by said tubular section and said drill collar respectively, means normally holding said clutch elements in disengaged position while permitting engagement of said clutch elements upon limited longitudinal movement of said drill collar within said tubular section, a drill bit carried at the lower end of and rotatable with said drill collar, means at the upper end of said drill collar for connecting same to the lower end of a rotary drill string for rotation therewith and whereby said drill collar may be moved longitudinally relative to said tubular section by lifting of the drill string for engagement of said clutch elements, a collar rigidly secured to said tubular section adjacent the lower end thereof and having outwardly projecting ribs engageable with the well bore wall to provide a fulcrum about which said tubular section can pivot and well bore engaging deflecting means carried by said tubular section at a point spaced above said collar acting to urge said inflexible tubular section and said drill bit to pivot about said collar in a predetermined radial direction.

2,734,722
POST HOLE DRILLER
Stephen S. Pokorny, Maquoketa, Iowa
Application August 11, 1952, Serial No. 303,739
13 Claims. (Cl. 255—19)



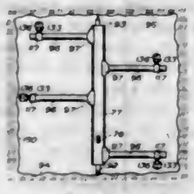
10. In a mounted post hole driller, an elongated frame hingedly mounted on a vehicle, a hydraulic piston-operated cylinder hingedly secured to said elongated frame and the vehicle, an earth auger hingedly and rotatably secured to said elongated frame, a hydraulic motor mechanically connected to said earth auger, a source of hydraulic power, a control valve, a conduit connecting said control valve to said source of hydraulic power, a motor pressure line connecting said motor to said control valve, a cylinder pressure line connecting said cylinder to said control valve, a cylinder return conduit connecting said cylinder to said source of hydraulic power, a bleeder valve in said cylinder return conduit, a relief valve having a by-pass port mounted in said motor pressure line, and a conduit connecting said by-pass port to said cylinder pressure line.

2,734,723
DRILL RIGS OR DRILL SUPPORTING APPARATUS
Jan August Larcén, Stockholm, Sweden, assignor to Aktiebolaget Atlas Diesel, Nacka, Sweden, a corporation of Sweden
Application July 3, 1951, Serial No. 234,934
Claims priority, application Sweden July 3, 1950
13 Claims. (Cl. 255—51)



9. A drill rig comprising a sub-structure, a shaft rotatably mounted on said sub-structure, a reversible motor for driving said shaft in either direction, a feed bar mounted on said shaft, a drill motor and drill rod reciprocably carried by said feed bar, feeding means for said drill motor and drill rod, drill rod guiding means mounted on said feed bar, a cross-head slidably mounted on said feed bar, a second guide means mounted on said cross-head, means for moving said second guide means away from and toward said first guide means to support and guide said drill rod in accordance with the extended length thereof, a control panel mounted on said sub-structure and control means on said panel whereby all drilling operations may be controlled from a single location.

2,734,724
APPARATUS FOR RIGGING OR SUPPORTING ROCK DRILLS
Jan August Larcén, Stockholm, Sweden, assignor to Aktiebolaget Atlas Diesel, Nacka, Sweden, a corporation of Sweden
Application July 3, 1951, Serial No. 234,935
Claims priority, application Sweden July 3, 1950
6 Claims. (Cl. 255—53)



6. A drill rig comprising a substructure, a column movably mounted on said substructure, a carriage slidably mounted on said column, means operably connecting said carriage and column for moving the carriage in either direction on the column to any desired position, a cross bar carried by said carriage and extending substantially transversely to the longitudinal axis of the column, a sliding member movable longitudinally of said cross bar, means operably connecting said sliding member and cross bar for moving the sliding member in either direction on the cross bar to any desired position, a feed bar carried by said sliding member and

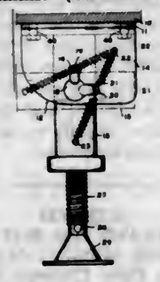
provided with means for carrying and feeding a drill motor and drill rod on said feed bar, extensible and retractable drill rod guide means carried by said feed bar, and control means grouped at a single location for controlling the operation of said carriage moving means, said sliding member moving means, said feeding means, and said drill rod guide means.

2,734,725
ROCK DRILL BIT
Robert H. Holsing, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a corporation of Ohio
Application March 3, 1950, Serial No. 147,430
1 Claim. (Cl. 255—64)



A drill bit adapted to be detachably connected to a drill rod; said drill bit including a body having cutting edges on its forward portion and a rearward collar portion having a drill rod receiving bore, said collar having a transverse narrow slit extending therethrough and partially severing a substantial portion of the collar thereby forming a resilient collar portion, said collar portion being normally bent to provide a bore portion normally out of colinear relationship with the axis of the drill rod receiving bore in the remaining collar portion.

2,734,726
TRAILER JACK
Floyd C. Gebhart, Springport, Ind.
Application June 22, 1953, Serial No. 363,012
6 Claims. (Cl. 254—86)



6. A jack structure for attachment to a vehicle comprising means provided with a plurality of legs having pivotal openings therein, a sleeve positioned in said means adjacent one leg thereof, a flattened lug fixed on said sleeve and projecting through the opening in the adjacent leg, said last-mentioned opening having a vertically extending portion and a horizontally extending portion for engagement with said flattened lug for retaining said sleeve in projected position or in a position transverse thereto, a strut secured at one of its ends to said sleeve and projecting to and having a loose pivoted connection with another leg, said sleeve being engageable with said means at the top thereof, and extensible means projecting from the other end of said sleeve for engagement with the ground.

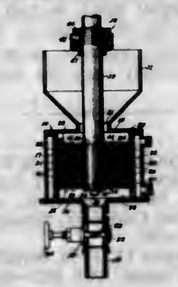
2,734,727
CLEAN ROW FENCE POST
Dolphus W. Hensley, Rosebud, Mo.
Application September 22, 1953, Serial No. 381,607
1 Claim. (Cl. 256—48)

In a fence post comprising a rigid elongated main body adapted to be secured to vertically spaced horizontal fence wires, a relatively short, ground-engaging pointed stake element parallel to and offset from said main body, a straight element rigidly connecting said stake element to the lower end of said main body, said straight element comprising a member integral with said main body and said stake element and extending at obtuse angles thereto, and a rigid plate element rigidly secured to the intermediate portion of said stake element and extending in



a plane normal to the plane of said main body and stake element, said plate element having its top edge extending normal to said stake element, the improvement comprising an apertured lug aligned with and depending from said main body below said straight element, said apertured lug being adapted to receive an auxiliary fence wire to support said auxiliary fence wire close to the ground for preventing small animals from passing thereunder.

2,734,728
MIXING MILL
Claude K. Myers, Bell, Calif.
Application February 9, 1953, Serial No. 335,689
5 Claims. (Cl. 259—107)

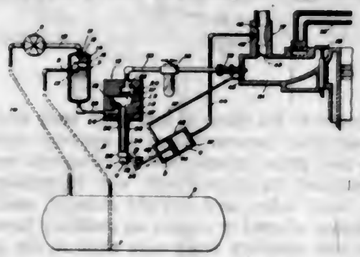


1. In a mixing mill, a plurality of spaced stator plates each having a set of through slots tangent to a circle generated around the common center of said plates, the slots in alternate plates being tangent at an angle opposite to the angle of tangent in the plates between the alternate plates, a plurality of rotor vanes on an axis on said common center and in alternate arrangement with the stator plates and each respectively operatively associated with one of the stator plates, each rotor vane having a set of through slots tangent to a circle generated around said axis, the slots in each rotor vane being tangent at an angle opposite to the angle of tangent of the stator plate with which the same is associated.

2,734,729
PRESSURE TYPE FUEL SYSTEM FOR INTERNAL COMBUSTION ENGINES
Charles F. Loftin, Jr., Tulsa, Okla., assignor to Warren Petroleum Corporation, Tulsa, Okla., a corporation of Delaware
Application February 25, 1954, Serial No. 412,609
3 Claims. (Cl. 261—36)

3. In combination with the intake manifold of an internal combustion engine, a closed, pressure type fuel delivery system comprising a fuel supply tank, a feed line leading from said tank to the intake manifold, a jet injector connected to said fuel line and directed into said manifold, a fuel metering pump interposed in said

feed line and including a reciprocable positive displacement plunger, a carburetor having an air inlet passageway, a venturi throat in said passageway, a throttle valve in said passageway posterior to said venturi throat for controlling the volume of air introduced into said manifold, means anterior to said pump for maintaining a constant pressure on the liquid entering said metering pump, a volume control for said metering pump, including a cylinder, a reciprocable piston dividing said cylinder into two chambers, a line connecting one chamber to the air inlet passageway of said carburetor adjacent said venturi throat, a line connecting the opposite chamber



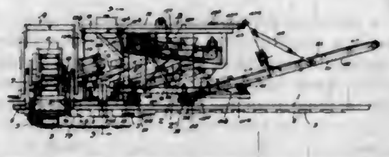
to the intake manifold, whereby the piston is reciprocated in response to the differential pressures between said throat and manifold, a piston rod connected to said piston and projecting from said cylinder, a rotatable stroke-control head actuated by said piston rod and located adjacent the stem of said plunger, an abutment on said stem, in line for engagement with said stroke-control head, and a peripheral notch in said head adapted to engage said abutment, the point of abutment contact with said notch being variable upon rotation of said head, to correspondingly vary the length of stroke of said plunger.

2,734,730

SCREENING ASSEMBLY FOR SCREENING AND RETURNING RAILWAY BALLAST

Henry H. Talboys, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a corporation of Wisconsin

Application August 11, 1950, Serial No. 178,821
7 Claims. (Cl. 262—2)



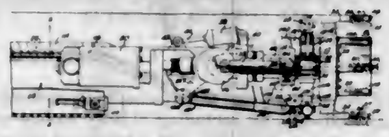
1. In a ballast handling and cleaning assembly adapted for movement along tie supported rails and having an excavating unit adapted to pick up ballast alongside the rails and deliver the ballast to a screening unit, the improvement comprising a screen having a surface allowing relatively fine particles of ballast to pass therethrough while conveying relatively coarse particles of ballast to a discharge end of the screen, conveying means extending beneath said screen for receiving and disposing of said relatively fine particles, a conveyor positioned adjacent the discharge end of said screen and extending transversely of said rails, said conveyor including an endless belt with a discharge end positioned outwardly of said rails, said conveyor being in the line of flow of relatively coarse particles of ballast from said screen while being spaced from the discharge end of said screen, and an adjustable conveying plate including a plurality of telescoping members having conveying surfaces between the discharge end of said screen and said conveyor, said members being extensible to a first position wherein their surfaces receive coarse particles from said screen over the entire discharge end of said screen and deliver coarse particles to said conveyor, said members being retractible to a second position wherein a predetermined proportion of said coarse particles may fall between the discharge end of said screen and said conveyor for deposit in the area between said rails while the remainder of said coarse particles are delivered over said plate to said conveyor for discharge by said conveyor in the area outwardly of said rails.

2,734,731

MINING MACHINE

Frank Cartlidge and Frank A. Lindgren, Chicago, Ill., assignors to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois

Application November 6, 1951, Serial No. 255,058
8 Claims. (Cl. 262—7)



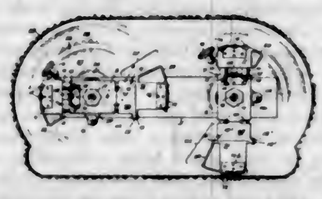
3. In a mining machine a mobile base, a cutter head frame having a pair of boring heads with drive shafts disposed on laterally spaced horizontal axes and with radially elongated arms having cutter devices thereon for cutting contiguous bores in advance of the machine, a pair of axially elongated vertically spaced cutter bars rotatable on horizontal axes disposed generally tangentially to the upper and lower cutting limits of said cutter arms but spaced rearwardly of the circular paths of said cutter arms, said drive shafts being journalled in a pair of laterally spaced housings on said cutter head frame, and said cutter bars each being journalled in auxiliary bearings supported on said drive shaft housings by extensions projecting above and below said drive shaft housings and terminating within the upper and lower cutting limits of said cutter arms, and driving connections for said cutter bars including gears mounted in said drive shaft housings concentric with said drive shafts and driven from said cutter head frame, and operatively connected to gears on said cutter bars by vertically disposed shafts mounted on each of said extensions.

2,734,732

ADJUSTABLE DIAMETER ROTARY CUTTING HEAD FOR MINING MACHINES

Benjamin F. Tracy, Point Pleasant, W. Va., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois

Application November 13, 1953, Serial No. 391,789
8 Claims. (Cl. 262—7)



1. In a mining machine, a rotary cutter head comprising a hub, a power shaft to which said hub is secured, said hub having bore means extending therethrough in a direction transverse to the rotational axis of the hub, supporting rods slidably mounted within said bores, forwardly projecting cutting tools mounted on both ends of said rods, means for adjusting said rods, and means for securing the rods in their adjusted positions varying the diameters of the cuts formed by said cutting tools.

2,734,733

COLLAPSIBLE BORING HEAD FOR MINING MACHINE

Carl A. Wilms, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois

Application December 17, 1953, Serial No. 398,699
11 Claims. (Cl. 262—7)



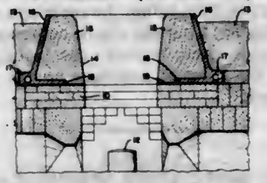
1. In a boring head for mining machines, a hub having a plurality of radially projecting arms with a plurality of cutter-carrying supports projecting forwardly from each of said arms, each of said arms having hinged connection with said hub for inwardly collapsing movement toward the latter in a plane generally perpendicular to the axis thereof, the adjacent sides of said arms and the cutter-carrying supports on said arms being formed for mutually inter-fitting relation with each other for substantially the full length of said arms when in collapsed position.

2,734,734

LINING FOR SOAKING PIT BURNER PORTS

Frederick L. Knight, Lorain, Ohio, assignor to United States Steel Corporation, a corporation of New Jersey

Application June 16, 1952, Serial No. 293,829
3 Claims. (Cl. 263—46)



1. In a soaking pit which includes a bottom of refractory brickwork containing a burner port, a burner beneath said port, and a layer of loose granular material covering said bottom, the combination with said bottom of a port lining comprising a metal form having an annular bottom flange and an integral outer wall extending upwardly from the outer periphery of said flange, and an annular monolithic refractory body within said form, said lining being removably supported on said brickwork and extending upwardly therefrom at least to the depth of said granular material, the opening through said body forming a continuation of the port in said brickwork, the inner circumference of said flange terminating short of the opening through said body so that the refractory of said body protects the metal of said flange from direct exposure to said burner.

2,734,735

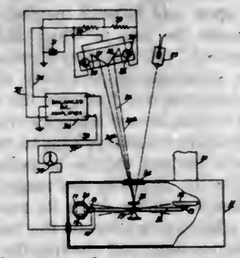
AUTOMATIC WEIGHING SCALE

Robert E. Payne, Gladwyne, Pa., assignor to The Sharples Corporation, a corporation of Delaware

Original application August 15, 1947, Serial No. 768,907, now Patent No. 2,597,899, dated May 27, 1952. Divided and this application March 19, 1952, Serial No. 277,444

1 Claim. (Cl. 265—70)

Apparatus for measuring extremely small forces quickly and with a high degree of accuracy, comprising a balance member and a substantially frictionless fulcrum mounting therefor, said balance member being adapted to be actuated by very small forces applied thereto at one side of its fulcrum, a light reflector mounted on said balance member at the fulcrum thereof, means to project a beam of light onto said reflector, a pair of photo-electric devices arranged so as to receive equal amounts of the light of the reflected light beam when said balance member is in its equilibrium position and to receive greater and lesser amounts of light respectively when said balance member moves from the equilibrium position, an electrical network including said photo-electric devices in electrical opposition to one another for producing two unidirectional voltages which are equal when said balance member is in its equilibrium position and which become unequal when said member moves from said position according to the differential light activation of said photo-electric devices, a normally-balanced circuit including two grid-controlled electron tubes arranged in



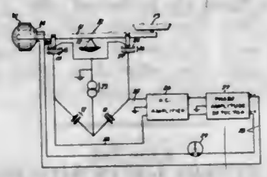
opposed relation to produce an output current of polarity and magnitude according to the relative magnitudes of voltages applied to the control grids of the tubes, connections for applying the aforementioned unidirectional voltages to said grids, whereby said circuit is caused to produce a unidirectional output current of polarity and magnitude according to the direction and magnitude of movement of said balance member from its equilibrium position, restoring means operable upon said balance member at the side of its fulcrum opposite the side at which the forces to be measured are applied, said restoring means comprising a coil and magnetic structure cooperatively associated with said coil to produce reactive force on the balance member upon flow of current in said coil, connections to effect flow of said output current in said coil to cause restoration of the balance member to its equilibrium position, and electrically-operable indicating means connected to the last-mentioned connections to give an indication representative of force being measured.

2,734,736

AUTOMATIC WEIGHING SCALE

Robert E. Payne, Gladwyne, Pa., assignor to The Sharples Corporation, a corporation of Delaware

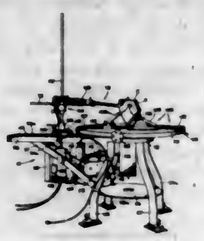
Application March 20, 1952, Serial No. 277,581
2 Claims. (Cl. 265—70)



1. Apparatus for measuring extremely small forces quickly and with a high degree of accuracy, comprising a balance member and a substantially frictionless fulcrum mounting therefor, said member being adapted to be actuated by very small forces applied thereto at one side of its fulcrum, a four-arm electrical network having a pair of variable capacitors included respectively in two arms

of the network and connected to said balance member at opposite sides of its fulcrum to be varied differentially by movement of the balance member about its fulcrum, said network being electrically balanced when the balance member is in its equilibrium position, a source of alternating voltage connected across two diagonal points of said network and having one side grounded, an impedance connected across the other two diagonal points of said network and having its midpoint grounded, whereby a balanced condition of said network produces equal opposing alternating voltages of like phase across the two halves of said impedance, and an unbalanced condition of said network causes unbalance of said voltages and produces a resultant difference voltage of magnitude and phase dependent upon the extent and direction of movement of said balance member from its equilibrium position, means to produce from said difference voltage a unidirectional voltage of a magnitude and polarity dependent upon the amplitude and phase of said difference voltage, restoring means operable upon said balance member at the side of its fulcrum opposite the side at which the forces to be measured are applied, said restoring means comprising a coil and magnet structure cooperatively associated with said coil to produce reactive force on the balance member upon flow of current in said coil, electrical connections for applying said unidirectional voltage to said coil to produce unidirectional current therein of polarity and magnitude according to the direction and magnitude of movement of the balance member from its equilibrium position, thereby to effect restoration of the balance member to its equilibrium position, and electrically-operable indicating means connected to said electrical connections to give an indication representative of force being measured.

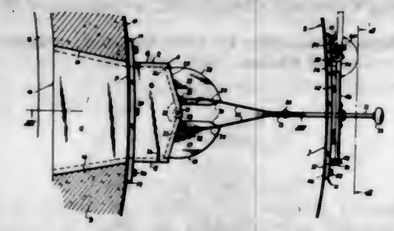
2,734,737
FLAME CUTTING MACHINE
Jack A. Scardina, Baton Rouge, La.
Application May 2, 1952, Serial No. 285,737
23 Claims. (Cl. 266—23)



1. A flame cutting apparatus comprising; a support bar mounted for rotation about a substantially vertical axis, means for adjusting said support bar in a plane perpendicular to said axis, means for rotating said support bar about said axis, work-supporting means carried by said support bar and adapted to support a work piece upon which a flame cut is desired, with a selected axis of the work piece disposed on said vertical axis, and a flame cutting torch disposed in flame cutting relationship to the work piece and adapted to effect a cut on the latter as it rotates with the support bar.

2,734,738
CUPOLA TUYERE GATES WITH INTEGRAL DOWNWARD DEFLECTORS
Nicholas Even, Excelsior, Minn.
Application January 5, 1952, Serial No. 265,177
9 Claims. (Cl. 266—41)

3. A cupola tuyere for installation in a cupola having spaced inner and outer casing walls defining an intervening wind belt, a lining within the inner wall, and said inner wall having a tuyere opening; said tuyere comprising a two section tuyere box having an outer section secured to the inner casing outside of the opening and disposed wholly within the wind belt, air controlling gates movably



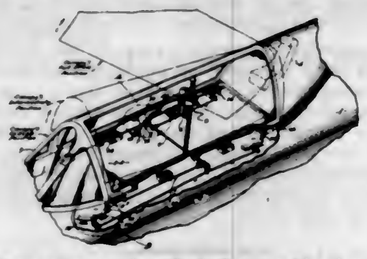
mounted in said outer section, and an inner box section disposed wholly within said inner casing wall in the lining and inside of the said opening in the wall.

2,734,739
LOADING DOCK BUMPER
Joseph Messina, Kansas City, Mo.
Application October 29, 1951, Serial No. 253,731
2 Claims. (Cl. 267—1)



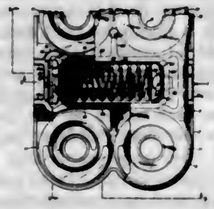
1. In a loading dock bumper, a pair of elongated U-shaped channel members disposed in facing relationship and each having a bight and a pair of spaced legs perpendicular to the bight, the legs of one of the members being telescoped between the legs of the other member for free sliding movement of the members toward and away from each other; stop means along the edges of said legs for limiting the extent of movement away from each other; a plurality of guide pins within the members and mounted on one of the bights; a tubular elastic compression element on each pin respectively between the bights; and means for mounting the channel members on the vertical face of a loading dock.

2,734,740
TWO-STAGE PRELOADED SPRING CARTRIDGE
Willis B. Morris, Hawthorne, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application February 19, 1953, Serial No. 337,797
6 Claims. (Cl. 267—1)



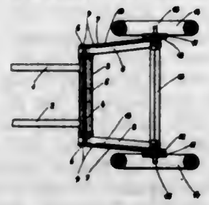
1. Apparatus as described the combination comprising: a spring cartridge including a cylindrical casing, a rod, and spring and stop means in said casing; said rod and casing having relative coaxial and overlapping relationships in which an end of said rod extends from an end of said casing; said spring and stop means being effective to maintain the overlapping relationship of said rod and casing and allow limited relative movement therebetween in an axial direction; said spring and stop means automatically providing said rod with a neutral position relative to said casing in which the amount of relative overlap between said rod and casing is a predetermined amount; said spring and stop means coact to provide a spring assistance to movement of said rod in either direction from said neutral position and first and second non-neutral positions in which the movement of said rod in either direction from said neutral position is resisted by an abrupt change in spring resistance; a mounting structure; a shaft mounted for angular movement on said structure and having a radially extending arm keyed thereto; the end of said casing, opposite the end from which said rod extends, being attached to said structure to pivot about an axis parallel to the axis of said shaft; the extending end of said rod being pivotally attached to said arm whereby opposite angular movement of said arm results in bidirectional axial movement of said rod relative to said casing and provides said shaft with first and second neutral angular positions and four non-neutral angular positions determined by the neutral and non-neutral positions of said rod.

2,734,741
SNUBBING MECHANISM
Emil H. Blattner, Buffalo, N. Y., assignor to The Symington-Gould Corporation, Depew, N. Y., a corporation of Maryland
Application March 31, 1950, Serial No. 153,121
13 Claims. (Cl. 267—9)



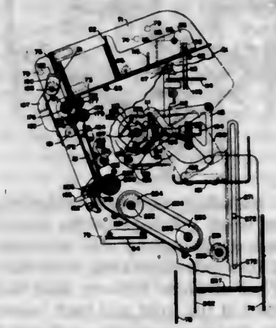
2. In a railway truck spring unit with a built-in snubber, the combination of, top and bottom spring plates, coil springs between said plates, horizontally spaced walls upstanding from said bottom plate, horizontally spaced shoes bearing against said walls, horizontally spaced means downstanding from said top plate, said last named means being spaced inwardly of said unit from the horizontal limits of said walls, a link connecting each downstanding means and related shoe and arranged to pivot relative thereto, and horizontal spring means between said links for urging the latter apart.

2,734,742
ELASTIC SUPPORT FOR REAR WHEELS OF VEHICLES
Kurt Schwenk, Ingolstadt-Donau, Germany, assignor to Auto Union G. m. b. H., Ingolstadt, Germany, a company of Germany
Application March 7, 1951, Serial No. 214,411
6 Claims. (Cl. 267—57)



1. A support for rear wheels of a vehicle, said support comprising, in combination with a vehicle frame, a spring carried by said frame and two axle stubs for the rear wheels, two crank arms, means pivotally connecting ends of said crank arms with said frame, each of said crank arms having two separate portions rigidly connected with each other adjacent the pivot of the crank arm, shield-like plates, and means connecting said plates with said axle stubs, the other ends of said crank arms being connected to said plates, one of said portions of the crank arm being connected to the plate substantially in the horizontal plane through the center of gravity of the vehicle, said one portion substantially resisting the transverse forces exerted upon the vehicle.

2,734,743
RECORD MEDIA FEEDING APPARATUS
Pascal Spurlino and William C. Brown, Dayton, Ohio, assignors to The National Cash Register Company, Dayton, Ohio, a corporation of Maryland
Application December 30, 1950, Serial No. 203,707
6 Claims. (Cl. 271—3)

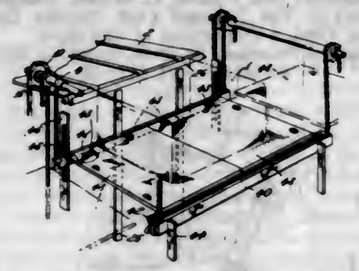


1. In an apparatus of the class described, adapted to be actuated in timed relationship with and under control of an accounting posting machine; a machine release key to initiate a machine operation; a power means to actuate said apparatus and rendered effective upon operation of said accounting machine to drive a plurality of feeding means for removing the front media of a stack of media and causing the same to be engaged by one of said feeding means and fed downwardly and deposited into a position to have data posted therefrom; a member to prevent more than one of said media from being removed from said stack of media upon each operation of said feeding mechanism; another of said feeding means engaging the check on the back side thereof and causing it to be fed further downwardly and engaged by another feeding means to continue the feed of the check and move it into a position to be engaged by a pair of ejecting belts; means for driving the ejecting belts; means for intermittently driving the feeding means which grips the back of the check and the third-mentioned feeding means; a common operating means to drive the first two mentioned feeding means and the intermittent feeding means drive; a movable platform receptacle to receive the record media after it has been ejected by said driving belts; a pair of racks connected to said platform; a reduction gear device to drive said racks downwardly each time a check is deposited thereon; a ratchet and pawl mechanism to operate said reduction gears; a camming device to drive said ratchet and pawl mechanism; and means connected to the camming device and operated by the common driving mechanism to drive said cams.

2,734,744
SHEET FEEDING MACHINES
Headley Townsend Backhouse, Nassau, Bahamas, British West Indies
Application October 31, 1951, Serial No. 254,026
Claims priority, application Great Britain November 2, 1950
6 Claims. (Cl. 271—62)

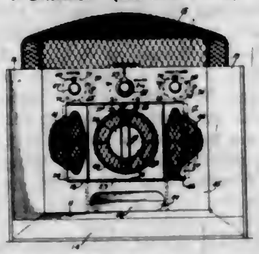
1. A sheet feeding machine comprising a front stacking gauge for locating the front of a pile of sheets within

the machine, a pile-board for carrying a pile of sheets engaging said gauge, primary means for elevating said pile-board including at each side of the machine at the front and back thereof vertically extending members, a sub-frame carried by the members and means for raising said members, said pile-board being carried by said sub-frame and located wholly between said elevating members as viewed from the side of the machine and between said elevating members at the back as viewed from the back of the machine, secondary means for elevating a pile of sheets and the pile-board supporting it transferred thereto from the primary supporting means, said secondary ele-



vating means including vertically extending elevating members at the front and back of the machine at each side thereof, means for raising said secondary elevating members, and two pile-supporting-cross-bars extending transversely of the machine between said two secondary elevating members at the front and back respectively, said front secondary elevating members and said front cross-bar being in front of the said front stacking gauge and having projections extending to the rear side of said gauge adapted to support a pile-board on the rear side, and said back cross-bar having pile-board supporting means projecting beyond the front of said rear elevating members.

2,734,745
REVOLVING TARGET WITH PROJECTILE RETURN
Franklin E. Tarte, Jr., Media, Pa.
Application July 8, 1953, Serial No. 366,742
8 Claims. (Cl. 273—103)



1. In a game device, a target unit mounted for rotary movement about a substantially vertical axis, said unit comprising a hollow structure of polygonal shape horizontally having apertured outer vertical faces and also having radial partitions dividing the interior of said structure into compartments disposed respectively behind said apertured faces, and target receptacles on said faces having respectively different sized target openings disposed substantially vertically which are brought successively into a target position in confronting relation to a playing position by rotary movement of said target unit, whereby a player at the playing position may throw one or more missiles at each target opening, each of said compartments having an opening at the bottom thereof through which a missile entering the compartment through the associated target receptacle may leave the compartment.

2,734,746
SHUTTLECOCK
Louis Sametz and Irving Sametz, Westport, Conn., assignors to Louis Sametz, Inc., Westport, Conn., a corporation of New York
Application March 11, 1952, Serial No. 275,916
2 Claims. (Cl. 273—106)



2. A shuttlecock including in combination a nose piece comprising a homogeneous uniformly resilient body of solid cork contoured to form a bluntly rounded strikable end portion whose surface merges into that of a substantially cylindrical opposite end portion of said body of cork terminating in a plain transverse surface devoid of hollows and projections, a trailing skirt of homogeneous plastic material comprising a flaring frustum-like shell having perforate flexible walls converging toward and integral with a relatively rigid hollow barrel structure of said material comprising a tubular wall and a transverse internal flange forming a socket receptive to said cylindrical end portion of said body of cork, said flange having one face seated on the annular margin of said plain transverse body surface, and a discal cork retainer for said nose piece comprising a head overlapping the opposite face of said flange and a boss of less compass than said head outstanding toward and fastened to said plain transverse surface of said body of cork.

2,734,747
CHANCE SELECTION RHYME ILLUSTRATION DEVICE
Frank J. Lindsley, Benton Harbor, Mich.
Application June 11, 1952, Serial No. 292,815
4 Claims. (Cl. 273—139)



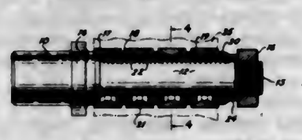
1. A toy comprising a mounting plate including front and rear sheets and means marginally interconnecting such sheets, whereby a pocket is formed between the sheets inwardly of their margins, the front sheet carrying an illustration of a nursery rhyme and being formed with a slit forwardly opening from said pocket, a card movable into and out of the pocket through the slit and having an illustration exposed through withdrawal of the card from the pocket, such illustration pertaining to said rhyme, said card substantially conforming in width to the length of the slit, a lug on the inner end portion of the card projecting lengthwise of the slit beyond an end of the slit to limit outward actuation of the card, and an actuator for the card forwardly projecting from its outer end portion, limiting inward actuation of the card.

2,734,748
DISC PHONOGRAPH RECORDS
John L. Parvin, Merion, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Application April 7, 1951, Serial No. 219,822
The terminal 15 years of the term of the patent to be granted has been disclaimed
3 Claims. (Cl. 274—42)



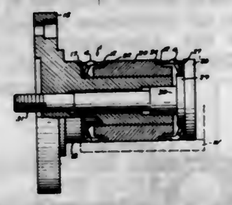
1. A disc phonograph record having a relatively large diameter spindle opening therein, said opening being provided with a plurality of indentations in the periphery thereof, and a hub portion disposed within said opening, said hub portion comprising a unitary structure with said record and having a part provided with a relatively small diameter spindle hole and including sections connecting said part to said periphery only at said indentations, whereby said hub portion may be easily broken away from the remainder of said record within said indentations, said connecting sections being integral with the remainder of the record, the thickness of said sections being a minimum at their areas of connection to said periphery, the thickness of said sections increasing gradually on both sides of said areas.

2,734,749
MULTIPLE SLEEVE EXPANDABLE MANDREL
Milton L. Benjamin, Shaker Heights, Ohio
Application June 29, 1951, Serial No. 234,347
9 Claims. (Cl. 279—2)



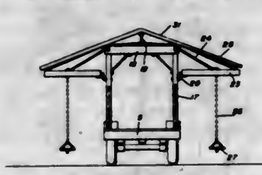
1. An expandable mandrel for holding a work piece having a generally cylindrical bore comprising a spindle, a shank portion at one end of said spindle adapted to be retained by rotatable, power-energized means, a threaded tip portion near the other end of said spindle, a shouldered abutment flange on said spindle near said shank end, a plurality of solid expander rings disposed in spaced relationship along said spindle and adapted to have limited endwise sliding movement thereon, the outer peripheral edges of each said ring being divergently beveled away from the peripheral edge face of the ring, a plurality of expandable sleeves surrounding said spindle in spaced relationship longitudinally of the spindle, each said sleeve being transversely slotted to permit ready expansion from idle position each such sleeve being contractably biased to a nested support on and between two adjacent rings, the interior peripheral edges of each sleeve being conically beveled so that each such beveled edge of a sleeve seats upon and is conically complementary to the adjacent one of the aforesaid beveled edges of the supporting ring, a threaded nut on said tip adapted, by advance rotation thereon, to apply end thrust to the adjacent one of said rings, said end thrust being adapted, by mutual approach motion of said rings transmitted through contact with said sleeves at said complementary beveled edges, to cause said sleeves to expand radially outwardly responsive to said end thrust.

2,734,750
WORK PIECE HOLDER
Edward R. Nyland, Detroit, Mich.
Application January 26, 1955, Serial No. 484,101
15 Claims. (Cl. 279—2)



1. A work engaging element adapted for use with a chuck or the like comprising, an integral body of elastic metal, said body being of ring form and being approximately of L-shape in cross section, one leg of the L-shape extending generally radially, the other leg of the L-shape extending generally axially, the radially inward extremity of the one leg being of unbroken annular form, the free extremity of the other leg being of unbroken annular form, the body between the unbroken annular extremities having a plurality of slots therein extending generally radially and defining a plurality of segments, the annular extremities being spaced axially from each other and adapted to be subjected to compressive forces to thereby cause the segmented body to flex and increase in outside diameter to engage an internal face of the work piece.

2,734,751
TOBACCO PICKER'S CART
Cedric B. Burroughs, Hassell, N. C.
Application October 8, 1953, Serial No. 384,924
2 Claims. (Cl. 280—32.5)

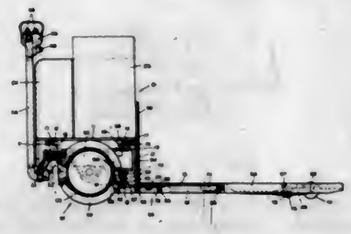


1. A tobacco picker's cart comprising a wheeled platform body having draft means, corner posts at the corners of the body, a top structure supported on the corner posts, an arm swingably connected to each post for swinging inwardly and outwardly at the sides of the cart, flexible hanger type braces extending outwardly and downwardly from the top structure to the outer portion of the arms and said braces at each side of the body being also inclined in a longitudinal direction toward each other to limit outward swinging movement of the arms, seats supported in a suspended position from the front and rear arms at each side of the cart, and a roof on said top structure and projecting outwardly at the sides of the cart and having foldable outer side portions supported on said flexible braces to overlie the seats.

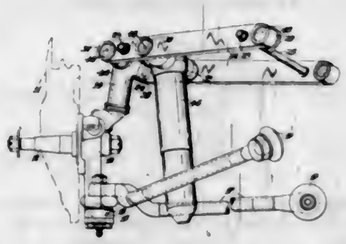
2,734,752
HAND LIFT TRUCK
Wendell E. Boylan and George L. Turner, Buchanan, Mich., assignors to Clark Equipment Company, Buchanan, Mich., a corporation of Michigan
Application June 28, 1950, Serial No. 170,828
2 Claims. (Cl. 280—44)

1. In a hand lift truck, the combination of a main frame including a horizontal platform portion, a wheel unit immediately below said horizontal platform portion, means for mounting said wheel unit to said horizontal platform portion for rotation about a vertical axis, load supporting means disposed forwardly of said main frame,

said load supporting means including a pair of horizontal forwardly extending fork frames, linkage means having connection with said fork frames for elevating the latter, a pair of vertically extending hydraulic piston and cylinder assemblies carried by said main frame below said horizontal platform portion and having direct connection with said linkage means for operating the latter, and said hydraulic piston and cylinder assemblies being arranged at each side of the truck.



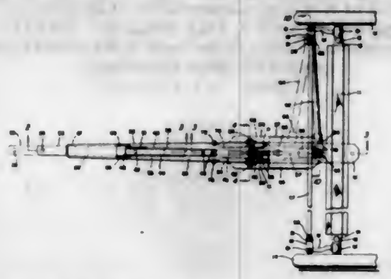
2,734,753
KNEE-ACTION TYPE WHEEL SUSPENSION WITH BUILT IN LUBRICATING SYSTEM
John Alexander Lind, London, England, assignor to Alford & Alder (Engineers) Limited, Walworth, London, England, a British company
Application October 30, 1952, Serial No. 317,623
Claims priority, application Great Britain October 31, 1951
8 Claims. (Cl. 280—96.2)



1. In a vehicle, a suspension comprising a wishbone having two side members, bearings at one end of each side member for pivotal attachment to the vehicle, bearing means at the other end thereof for pivotal attachment to a wheel-carrying element, a hollow reservoir being formed in the interior of one of the side members, and means on the wishbone permitting access to the side member to fill the reservoir therein with oil, said bearings including axially aligned tubular socket portions attached to and closing the ends of the wishbone side members, passages formed in the sockets, said passages being so positioned that they may serve as conduits for fluid flow from the side members into the bearing sockets.

2,734,754
PIVOTALLY-CONNECTED DRAFT TONGUE WITH SELECTIVE STEERING MECHANISM
Eros V. Barker, Galion, Ohio, assignor to The Cobey Corporation, Galion, Ohio, a corporation of Ohio
Application February 17, 1953, Serial No. 337,258
14 Claims. (Cl. 280—103)

1. In a wheeled drawn vehicle, the combination of a draft tongue pivotally secured to said vehicle for movement about a vertical axis, a steering rod having one end thereof pivotally and slidably secured to said tongue intermediate said axis and the free end of said tongue,



and means for selectively shifting said end of said steering rod into pivotal alignment with said vertical axis.

2,734,755
TANDEM AXLE SPRING AND TORQUE ARM ASSEMBLY
Harvey B. Van Raden, Portland, Oreg., assignor to Ne Peer Company, Portland, Oreg., a copartnership
Application February 13, 1953, Serial No. 336,778
4 Claims. (Cl. 280—104.5)

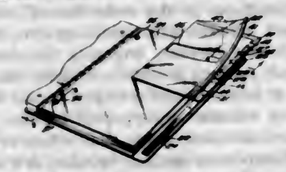


1. A tandem axle assembly for a vehicle comprising an elongated trunnion mounted upon and extending transversely of the vehicle, a pair of elongated, wheel mounting members extending parallel to said trunnion at equal distances before and after said trunnion, a laterally spaced pair of leaf springs extending longitudinally of the vehicle, a pair of spring mounting saddles journaled on and extending above said trunnion and each supporting one of said leaf springs thereabove, means rigidly securing each of said saddles to its associated leaf spring with the ends of said leaf springs respectively overlying said wheel mounting members, a plurality of universal joint means each securing an end of a spring to the upper surface of the adjacent wheel mounting member, a pair of downwardly extending cranks each fixed to a separate one of said wheel mounting members directly beneath one of said universal joint means, a pair of first transverse pivot means each rigidly mounted on a separate one of said cranks, a pair of second transverse pivot means each rigidly mounted on a separate one of said saddles, and a pair of longitudinally extending, rigid links each pivotally connected at one end to a separate one of said first transverse pivot means, then extending diagonally upward and pivotally connected at its opposite end to a separate one of said second transverse pivot means.

2,734,756
MULTI-ENTRY BOOKKEEPING SYSTEMS
Solomon E. Selinker and Samuel M. Berkowitz, Providence, R. I.
Application August 30, 1952, Serial No. 307,266
6 Claims. (Cl. 282—8)

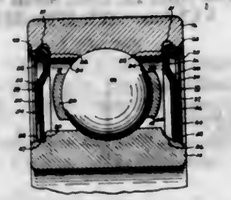
1. In a bookkeeping arrangement for selectively recording multiple identical entries simultaneously on multiple separate forms having a primary holder equipped with spaced upwardly extending book mounting pins, a plastic backing sheet having an opening and an elongated slot in vertical alignment, said opening and slot having hollow pins secured therein for mounting said plastic sheet

on said primary holder mounting pins, said hollow pin in said slot being slidably movable vertically within the slot,



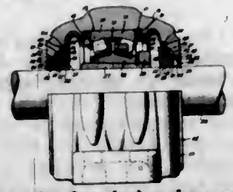
whereby irregularities in spacing of the primary holder mounting pins are compensated.

2,734,757
DEMOUNTABLE CLOSURE
Harry D. Martin, Bristol, Conn., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 21, 1952, Serial No. 267,418
4 Claims. (Cl. 286—5)



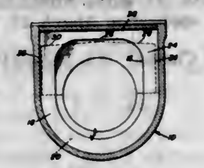
1. In a closure for demountable positioning across an annular lubricant chamber between a pair of relatively rotatable members one of which has an annular groove opening towards the other member, said groove being located between a substantially radially disposed shoulder and an annular land, an annular shield extending alongside the lubricant chamber into spaced relation with said other member, a laterally folded-over shield portion providing a transversely arcuate shield rim having a lesser diameter than that of the annular land, a resiliently deformable sealing washer bonded to one side of the shield and bonded to said rim, the diameter of the sealing washer about the rim being intermediate the diameter of the bottom of the groove and the diameter of said annular land, the transverse external width of said washer bonded to said rim being greater than the width of the annular groove between said shoulder and the inner side of said land, and the sealing washer being demountably seated in resiliently deformable wedging engagement with said side of the land and against said shoulder and located in spaced relation to the bottom of said groove.

2,734,758
BEARING SEAL
Charles F. Schanke, Indianapolis, Ind., assignor to Link-Belt Company, a corporation of Illinois
Application November 20, 1952, Serial No. 321,578
20 Claims. (Cl. 286—5)



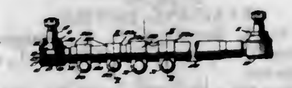
1. In a sealing device for closing the annular space between two relatively rotatable members supported for limited universal movement about a point on the axis of rotation, one of said members having an internal partispherical seal engaging face centered on the aforesaid point of universal movement in surrounding spaced relationship with the other of said members, a floating seal ring having a parti-spherical surface engaging said partispherical face and having an internal surface in closely spaced relation to the outer surface of said other member for free rotation of the latter relative to said floating seal ring, resilient means for maintaining the aforesaid partispherical surfaces in engagement, and a flinger ring mounted on said other member in labyrinth sealing relation to said floating seal ring.

2,734,759
COMBINATION OIL RETAINER AND DUST GUARD
George C. Cook, Martins Ferry, Ohio
Application September 8, 1953, Serial No. 379,006
1 Claim. (Cl. 286—6)



In combination with a journal box having a spaced pair of abutment walls with the sides and bottom of said journal box sealing the space between said walls, a combination oil retainer and dust guard for embracing an axle extending through said walls, said dust guard comprising a lower seal member snugly seated between said walls and positioned below and engaged by the axle, an upper seal member resting on and floatingly mounted above said axle, a resilient strip between said walls spaced from and above said axle a distance greater than the height of said upper seal member, and a seal of plastic material on the outer surface of said resilient strip, said resilient strip comprising a strip of foam rubber, said plastic material comprising asphalt cement, the upper edge of upper seal member having an apex at the center thereof and downwardly divergingly sloping edge portions, the apex of said upper seal member being adapted to engage said resilient strip on upward movement of said upper seal member.

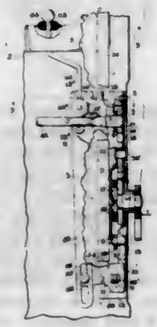
2,734,760
ADJUSTABLE TIE ROD
Donald P. Marquis, Farndale, and Oliver S. French, Detroit, Mich., assignors to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application December 7, 1949, Serial No. 131,544
4 Claims. (Cl. 287—58)



1. In a vehicular steering assembly having adjustable tie rod parts interconnecting transversely spaced apart pivotal joint members establishing steering linkage pivot points, the improvement of a first socket member for one of said joint members having a rod rigidly connected thereto, said rod having a substantially constant outside diameter extending from said first socket member at a point adjacent said one joint member, a second socket member for the other of said joint members, a tube connected to said second socket member and having a bore of substantially constant diameter extending from a point adjacent said other joint member, a separate tubular sleeve member intermediate to and concentric with said rod and said tube, said sleeve member having an unobstructed bore as long as said rod and adapted to completely receive said rod, said sleeve member having an unobstructed peripheral surface as long as the bore of

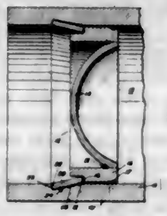
said tube and adapted to be completely received within the bore of said tube, said rod, tube and sleeve thereby telescoping through a range of axial adjustment greater than the length of the assembly in its position of shortest axial adjustment to selectively vary the spacing between the centers of the socket members, first clamping means for fixedly securing said sleeve in axially adjusted position on said rod and second clamping means fixedly securing said sleeve in axially adjusted position within said tube.

2,734,761
DETACHABLE LOCK ROD CONNECTION
Edwin L. Allen, Cleveland Heights, Ohio, assignor, by mesne assignments, to Rudolph I. Schonitzer, Cleveland, Ohio
Original application May 7, 1947, Serial No. 746,521, now Patent No. 2,658,783, dated November 10, 1953. Divided and this application March 27, 1952, Serial No. 278,944
12 Claims. (Cl. 292—216)



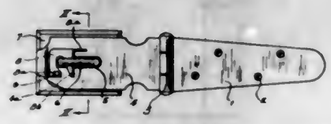
4. In a control mechanism, a housing structure having a cut-away portion, a movable restraining member pivotally supported on said housing structure, said restraining member having an aperture formed therein opposite said cut-away portion, an actuating rod for said restraining member, said rod having a bent end portion insertable into and removable from said aperture from the side of said restraining member which is adjacent the cut-away portion of said housing structure when said rod and restraining member are in one angular relation and being maintained in said aperture by said housing structure when said rod is swung from said angular relation into the space between said housing structure and said restraining member.

2,734,762
RETAINING DEVICE
Benjamin J. Aleck, Brooklyn, N. Y., assignor to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware
Application May 17, 1952, Serial No. 288,401
4 Claims. (Cl. 292—256.6)



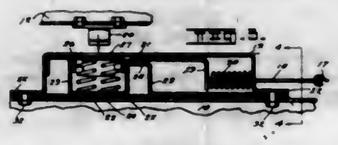
1. A retaining device comprising a retaining member, a retained member laterally adjacent and longitudinally movable relative to said retaining member, each of said members presenting a surface angularly disposed relative to the path of movement of said retained member, said surfaces having substantially the same angular deposition relative to said path of movement, a joint forming member having surfaces at the ends thereof and adapted to be interposed between said retaining and retained members with its end surfaces engaging the surfaces of said retaining and retained members to limit the longitudinal movement of said retained member in one direction, said joint forming member unsupported between its ends and of such cross-sectional shape that when in compression each of its component sections behaves as a short column, all of said surfaces being so angularly disposed relative to the longitudinal path of movement of said retained member that said joint forming member under steady state conditions is subjected substantially solely to oppositely directed collinear forces in resisting movement of said retained member.

2,734,763
HASP FASTENER
George W. Dayhoff, Reading, Pa.
Application April 25, 1952, Serial No. 284,292
4 Claims. (Cl. 292—285)



1. In combination with a staple and a hasp having a slot through which said staple is adapted to project, a fastening element of inverted U-shape adapted to surround the top portion of said staple, the lower extremity of one of the legs of which is pivotally mounted on said hasp, said element having a flange extending outwardly substantially at right angles along the other of said legs, said flange having a downwardly and inwardly tapered edge which is adapted to provide a camming action against the interior of the staple to effect wedging as the result of downward movement of said flange caused by the weight of said fastening element, the top portion of said flange having a horizontally and sidewse extending wing to serve as a thumb piece to facilitate raising and pivotal movement of said fastening element.

2,734,764
LATCH FOR A TRUNK LID
Nick G. Angelo, Youngstown, Ohio
Application August 14, 1952, Serial No. 304,356
1 Claim. (Cl. 292—333)



A latch for a trunk lid comprising a housing including a flat base member and an enclosure disposed thereon, said enclosure having an apertured upper wall disposed in spaced parallel relation to said base member, a body member disposed in said housing on said base member and comprising a metal strip having two vertically spaced horizontally disposed portions joined by a vertical portion, one of said horizontally disposed portions having a U-shaped section therein and defining a first chamber below and in communication with said aperture in said upper wall of said enclosure, the other horizontally disposed portion of said body member being positioned on said base member and with said enclosure defining a second chamber, a keeper slidably disposed in said first chamber and spring means in said first chamber normally urging said keeper toward said aperture, a latch arm comprising a secondary metal strip having two vertically spaced horizontally disposed portions joined by a vertical portion and slidably disposed in said chambers with the uppermost horizontally disposed portion thereof positioned over said keeper and across the U-shaped section of said body member and adjacent said aperture, the other horizontally disposed portion of said latch arm extending into said second chamber and a coil spring in said second chamber about said latch arm normally urging said latch arm into said first chamber, a section of said latch arm extending exteriorly of said second chamber and forming means by which the latch arm may be moved, said keeper normally acting to prevent movement of said latch arm into said first chamber and across said aperture whereby said latch arm may move into said first chamber and across said aperture upon the keeper being moved inwardly of said first chamber away from said aperture.

2,734,765
DOOR PROTECTING ACCESSORY FOR VEHICLES
Marvin L. Henderson, Eglin, Fla., and Daniel Bednarczuk, Flushing, N. Y.; said Bednarczuk assignor to said Henderson
Application September 18, 1951, Serial No. 247,068
4 Claims. (Cl. 293—62)



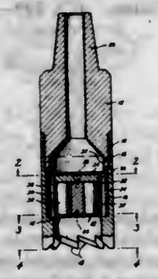
1. A device of the character described for mounting on the side door of a vehicle comprising a bumper comprising a horizontally extending elongated body having a longitudinal groove in its outer face, a strip of metal positioned within said groove, a suction cup formed integrally upon the rear end of the inner face of said body, an auxiliary bumper arm pivoted at its inner end to the forward end of said body, means for latching said auxiliary bumper in parallel relationship to said body, and means for fixing said auxiliary bumper in angular relationship to said body.

2,734,766
SHRIMP HOLDER
Karl C. Envoldsen, Cleveland, Ohio
Original application July 17, 1947, Serial No. 761,573, now Patent No. 2,622,270, dated December 23, 1952. Divided and this application October 14, 1952, Serial No. 314,659
2 Claims. (Cl. 294—25)



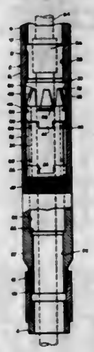
2. A holder for holding the shelled bodies of a plurality of shrimp comprising a channel-shaped member with a longitudinally curved supporting surface having a wider portion at one end adapted to accommodate the head ends of shrimp and a narrower portion at other end adapted to accommodate the tail ends of the shrimp, upstanding side portions along the longitudinal edges of said supporting surface, and a plurality of studs on said supporting surface, said upstanding side portions and projections being on the convex side of said supporting surface.

2,734,767
MAGNETIC JUNK CATCHER
Horace D. Donham, Odessa, Tex.
Application May 24, 1952, Serial No. 289,817
13 Claims. (Cl. 294—65.5)



5. A well fishing tool including, a body with a fluid passage therein and adapted to be carried by a tubular fluid carrying well string to be rotated thereby, an annular toothed cutter mounted on the body to project downwardly below the body and having an internal upwardly facing shoulder, and a permanent magnet junk catcher freely carried between the shoulder and the body and rotatable relative thereto, there being a fluid passage in the fishing tool between the body and the lower end of the catcher where it opens within the cutter, the catcher including an elongate case of non-magnetic material, a pair of spaced permanent magnets in the case, a head at the upper end of the case adjacent the body engaging said magnets and a pair of exposed spaced plates at the lower end of the body adjacent the case and one engaging one of said magnets and another engaging another of said magnets.

2,734,768
HYDRAULIC OVERSHOT
William D. Warner, Oklahoma City, Okla.
Application March 19, 1952, Serial No. 277,380
9 Claims. (Cl. 294—86)



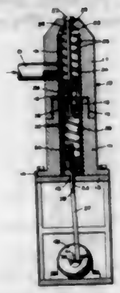
1. An overshot adapted to be telescoped over a string of drill pipe having a tool joint interposed therein, comprising a tubular housing, tubular carrier means reciprocally disposed in the housing, breakable lugs in the housing engaging the carrier means to normally retain the carrier means in one position in the housing, an outwardly extending circumferential flange on the carrier means, an inwardly extending circumferential flange on the housing providing a chamber between said flanges for hydraulic fluid, means carried by the carrier means to engage the drill pipe tool joint upon movement of the tool joint downwardly through the housing, and restricted outlet means for said hydraulic fluid to control the downward movement of the carrier.

2,734,769
INSECT REPELLENT AND DISINFECTANT DEVICE
Bertram I. Holz, Beverly Hills, Calif., assignor to Household Mfg. Co., Los Angeles, Calif., a corporation of California
Application September 16, 1952, Serial No. 309,888
3 Claims. (Cl. 299—24)



1. A repellent and deodorant device, including a container having a perforated end wall, enclosing walls extending from said end wall around its perimeter, said enclosing walls comprising a flat horizontal bottom wall for supporting the device on a surface, generally parallel side walls extending upwardly from said bottom wall, lower walls extending outwardly in opposite directions from said side walls, tapered walls converging upwardly toward each other from the outer ends of said lower walls, a top wall extending between the upper ends of said tapered walls, a perforated cover conforming to, engaging and secured to said enclosing walls, at least one of said enclosing walls having a recess therein, an axial projection on said cover disposed in said recess to align said cover in its position of conformance with said enclosing walls, and a repelling and deodorizing substance in said container.

2,734,770
ATOMIZING NOZZLE
Fred Kurata, Lawrence, Kans., assignor to Kask Technical Corporation, Jackson Heights, N. Y., a corporation of New York
Application October 4, 1948, Serial No. 52,659
4 Claims. (Cl. 299—25)



1. An atomizing nozzle comprising a body portion having a chamber within said body portion and a stationary outlet orifice having an edged seat on the downstream side, said orifice being of smaller cross-sectional dimension and shorter than said chamber, a flexible diaphragm positioned in said chamber and separating said chamber into a nozzle portion including said orifice and a housing portion, a valve member positioned within the nozzle portion of said chamber having one end resting against said diaphragm and the other end seating on said edged seat of said outlet orifice, said valve member passing through said orifice into said chamber of said body portion forming a continuous annular passageway between said valve member and said outlet orifice communicating with said chamber, a first spring positioned within the nozzle portion of said chamber urging said valve member against the edged seat of said outlet orifice, a second spring having one end cooperating with one end of said valve member, a reciprocating member positioned within the housing portion of said chamber pressing against the other end of said second spring, and means separate from said body portion of said nozzle for reciprocating said reciprocating member.

2,734,771
SELF-CLEANING HUMIDIFIER
James F. King, Jr., Winston-Salem, N. C., assignor to The Bahnson Company, Winston-Salem, N. C., a corporation of North Carolina
Application February 18, 1952, Serial No. 272,038
14 Claims. (Cl. 299—63)



1. A self-cleaning humidifier comprising a water inlet adapted to be connected to a source of water under pressure, a rotatable impeller to which water is delivered from said inlet, a motor connected to said impeller for rotating the same, a rotatable grid ring disposed adjacent said impeller for atomizing water distributed to it by said impeller, cleaning means cooperative with said grid ring for cleaning the teeth of said ring as the latter is rotated, a turbine coupled to said grid ring for effecting rotation thereof, and valve controlled pipe means extending to said turbine from said water inlet.

2,734,772
FUEL ATOMIZER
Walter Baier, Stockdorf, near Munich, and Robert von Linde, Planegg, near Munich, Germany, assignors to Wilhelm Baier K. G., Stockdorf, near Munich, Germany, a firm
Application March 17, 1953, Serial No. 342,920
Claims priority, application Germany March 18, 1952
11 Claims. (Cl. 299—63)



1. A burner of the rotary type for atomized liquid fuel comprising a shaft, a support having a body and a periphery fixed on one end of said shaft, an outer frusto-conical member held on said periphery at spaced points, an inner frusto-conical member held on said body, said members each having a narrow and a wide end, said outer member flaring outwardly towards said end of said shaft and said inner member flaring away from said end of said shaft and terminating adjacent to the narrow end of said outer member, means for feeding liquid fuel into said inner member, said inner and outer members forming a passageway for said fuel which is adapted to be atomized at the wide end of said inner member by centrifugal force, said passageway increasing in width from the narrow to the wide end of said outer member, and means for mixing air for combustion with said fuel at said wide end.

2,734,773
MANUALLY OPERATED RESILIENT AEROSOL SPRAY VALVE
Herbert L. Ivins, Cleveland, Ohio, assignor to The Engine Parts Manufacturing Company, Cleveland, Ohio, a corporation of Ohio
Application July 28, 1950, Serial No. 176,363
4 Claims. (Cl. 299—95)



1. An aerosol spray valve device comprising a cylindrical casing having an open end adapted to be attached to a container, and having an end wall at its other end with a substantially central opening therethrough, an annular valve seat member fitted into the casing and having sealing means between it and the inner surface thereof, and having a central bore and an inwardly curved flaring valve seat surface and an annular groove in its periphery, a passage leading from the bore outside of the valve seat to said groove, the casing having a nozzle opening registering with the groove, a tapered resilient plug adapted to fit into and enclose the valve seat surface, a disk-like member having an annular thickened portion at its rim and formed integral with the resilient valve plug, said annular valve member and said end wall having surfaces complementary to said thickened rim for clamping and holding said disk-like member, and means projecting through the opening in said end wall for depressing the disk-like member to open the valve, said disk-like member being of such diameter and thickness and the material thereof and of the plug having such resilience and solidarity that the disk-like member may both stretch and flex to permit the opening of the valve, while the valve plug is sufficiently solid to retain its shape, the diameter of the disk-like member being two or more times greater than that of the diameter of the valve plug.

2,734,774
SPRAY NOZZLE AND VALVE ACTUATING MECHANISM
David O. Manseau, Southfield Township, Oakland County, Mich.
Application June 15, 1951, Serial No. 231,761
7 Claims. (Cl. 299—95)



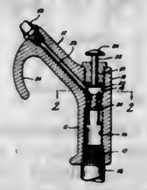
1. A detachable head for a pressurized container having a valve sealed by the pressure of the container acting on said valve in the outward direction, said head being adapted to actuate said valve and comprising a body of resilient material, a push pin sealingly carried by said body and removable therewith, said pin adapted to be actuated manually to unseat said valve to provide a release opening for the container contents, said body of resilient material having mounted therein a threaded insert adapted to engage a thread member on the container for retaining the head thereat and pressing the resilient material of the head contacting the container against the same to effect a seal of the head thereat.

2,734,775
FUEL NOZZLE
Leon R. Carman, Eau Gallie, Fla.
Application September 3, 1953, Serial No. 378,440
3 Claims. (Cl. 299—107)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A fuel nozzle for use in the combustion chamber of an engine consisting of a base having a passage therethrough and adatped to be connected to a source of fuel, an exterior wall of wire cloth connected to said base, and means in said wall defining a discharge orifice, said orifice being substantially larger than the apertures of said cloth, said wall being adapted to be exposed to the heat of the combustion chamber, whereby said nozzle will be sweat cooled by the passage of fuel through said wall directly into the combustion chamber.

2,734,776
BLOW-GUN
Charles H. Elliott, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a corporation of Texas
Application February 6, 1953, Serial No. 335,540
1 Claim. (Cl. 299—149)



A blow-gun comprising a single member formed with an extension integral therewith, a compressed air conveying passageway within said member including an inlet bore having compressed air supplied thereto, a second bore coaxial with said inlet bore, a detachable bushing closing the outer end of said second bore, a plunger slidable through said bushing, an air passage through said extension having one end opening into said second bore, a nozzle at the other end of said passage, a wall between said bores integral with said member, a plurality of orifices through said wall affording communication between said bores, interchangeable valve assemblies in said orifices each bodily removable as a unit upon removal of said bushing, each valve assembly including a valve member normally closing its respective orifice and a valve stem protruding into said second bore, said stems being substantially of equal lengths and adapted to be depressed by said plunger for causing said valve members to open said orifices, said valve assemblies being mounted in said orifices so that when said valve members close said orifices the free ends of said stems are differently spaced from said plunger to cause said valve members to open said orifices successively.

2,734,777
ROLLER SKATE WHEEL
Alfred W. Jewett, Chicago, Ill., assignor to Chicago Roller Skate Company, Chicago, Ill., a corporation of Arizona
Application February 8, 1951, Serial No. 210,039
9 Claims. (Cl. 301—5.7)

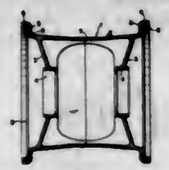
1. A roller skate wheel assembly comprising a wheel body, a support axle, a pair of antifriction bearings rotatably supporting the wheel body on said axle and disposed in predetermined spaced relation within said body, and means for adjustably axially positioning the bearings in respect to the axle, said positioning means comprising

a pair of abutment members adjustably anchored to the axle in predetermined spaced position thereon, said members being disposed on opposite sides of one of the bear-



ings and one of said members being positioned between the bearings to effect the positioning of said one bearing, and through said bearing to effect the positioning of both bearings relative to said axle.

2,734,778
REINFORCED TIRE SUPPORTING MEMBER
Albert W. Cook, Akron, Ohio, assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio
Application May 6, 1950, Serial No. 160,524
3 Claims. (Cl. 301—8)



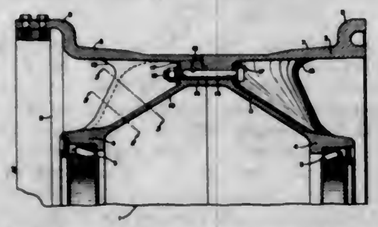
2. In combination, a cast magnesium wheel adapted to receive a pneumatic tire and having at least one radially directed tire bead retaining flange cast integral with the wheel, the flange terminating in an axially directed shoulder flange cast integral with the wheel, and an endless metal ring positioned in compression under the shoulder flange and against the side of the tire retaining flange, said ring pre-stressing the tire retaining flange in a direction opposite to the force of the tire against the flange.

2,734,779
VEHICLE WHEEL
Harry J. Horn, Lansing, Mich., assignor to Motor Wheel Corporation, Lansing, Mich., a corporation of Michigan
Application September 4, 1951, Serial No. 244,917
6 Claims. (Cl. 301—37)



1. In a wheel having a sheet metal wheel body, means on said wheel body for attaching a cover thereto comprising a plurality of fingers sheared out of said wheel body and bent at substantially right angles thereto, each of said fingers being free of one end and being connected with said wheel body along a generally radial line at its other end, said fingers being spaced circumferentially about the axis of said wheel body, the upper edge of each said finger being inclined axially and radially inwardly of said wheel body whereby the outer end of the upper edge of said finger is positioned radially a greater distance from the axis of the wheel body than the junction of said upper edge with the outer face of the wheel body, said free outer end of each finger being inclined with respect to said upper edge to serve as a ramp over which the outer edge of the cover is adapted to be pressed in assembling the cover on the wheel.

2,734,780
METAL WHEEL
Albert W. Cook, Akron, Ohio, assignor, by mesne assignments, to The Goodyear Tire & Rubber Company, a corporation of Ohio
Application August 21, 1952, Serial No. 305,550
3 Claims. (Cl. 301—63)



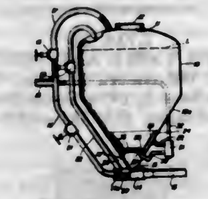
1. A wheel assembly having a rim, axially-spaced hubs, and continuous webs extending from the hubs axially inwardly and radially outwardly to the rim, the wheel being split circumferentially into two parts, and axially-parallel bolts positioned at circumferentially spaced points relatively closely under the rim securing the wheel parts together, the assembly being characterized by forming the webs with circumferentially-extending waves increasing in circumferential length and axial height radially outwardly of the web, the waves of opposed webs substantially bottoming against each other in the region of the split and the bolts extending through the bottoming wave portions of the webs.

2,734,781
METHOD AND APPARATUS FOR ELEVATING GRANULAR MATERIAL
Carl E. Fowler, Jr., Hattiesburg, Miss., and Joseph L. Daily, Chester, Pa., assignors to Houdry Process Corporation, Wilmington, Del., a corporation of Delaware
Application October 17, 1950, Serial No. 190,546
8 Claims. (Cl. 302—25)



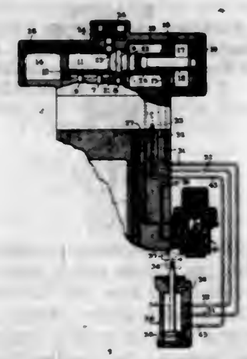
1. A method for elevating granular material through an upwardly extending confined lift path by means of a gaseous lift medium which comprises the steps of passing said material downwardly as a confined compact moving bed about and below the lower end portion of said lift path, said bed being maintained at a constant level by continuously replenishing said granular material, introducing a first stream of lift gas comprising a minor portion of the total lift gas into said moving bed at a substantial distance from the inlet end of said lift path to convey said material at low velocity to said inlet, passing said material through said inlet and along the lower portion of said lift path as a confined annular stream, introducing a second and separate stream of lift gas comprising the substantial major portion of the total lift gas into said moving bed along the lower outer perimeter of said annular stream, and introducing a third separate stream of lift gas also comprising a minor portion of the total lift gas into said moving bed along the lower inner perimeter of said annular stream, said second and third streams of lift gas combining to elevate said material through said lift path at substantially higher velocity and lower particle concentration.

2,734,782
PNEUMATIC CONVEYORS
Hans Emil Galle, Copenhagen, Denmark, assignor to Fuller Company, Catasauqua, Pa., a corporation of Delaware
Application June 25, 1953, Serial No. 364,151
8 Claims. (Cl. 302—53)



1. In a pneumatic system for conveying finely divided material, the combination of a tank having a bottom outlet and an inlet at a higher level, a closure for the inlet, a transport line, intermediate conduit means connecting the transport line with the tank outlet, an extension from the transport line upstream from the junction thereof with said intermediate conduit means, a conduit for introducing air under pressure into an upper portion of the tank, means for introducing air through said extension into the transport line, and a pressure-equalizing connection between the upper portion of the tank and said extension, the cross-sectional area of the extension where the pressure-equalizing connection leads therefrom being greater than the cross-sectional area of the means through which air is introduced into the connection for transport of material, whereby the air in the extension at such place is at a lower pressure than that in said air-introducing means.

2,734,783
AIR BRAKE
Lewis A. Safford, Watertown, N. Y., assignor to The New York Air Brake Company, a corporation of New Jersey
Application July 15, 1954, Serial No. 443,501
4 Claims. (Cl. 303—22)



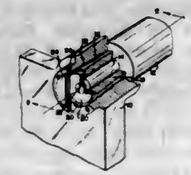
1. A cut-off valve mechanism, comprising in combination, a housing having a brake pipe connection, a motor connection and a valve seat through which flow from the brake pipe connection to the motor connection occurs; a poppet valve arranged to close in the direction of such flow, against said seat; a movable abutment subject in a valve-closing direction to pressure in the motor connection; a rod having lost motion connections with said abutment and with said valve; two springs, a dominant spring biasing said abutment in a valve-opening direction and a weaker spring biasing said valve in a closing direction; a third spring weakly biasing said lost motion rod connection relatively to said abutment in the valve-opening direction; means affording an expansible chamber motor whose relatively movable components are interposed in the lost motion connection between the rod and said poppet valve; means, effective when said valve is closed to subject said expansible chamber motor to the pressure differentials between the brake pipe and motor connections; and a valve, biased to close, controlling a vent from the motor connection, and arranged to be opened by said expansible chamber motor when brake pipe pressure predominates sufficiently to overpower said third spring.

2,734,784
TRUNNION AND BUSHING ASSEMBLY FOR WINDSHIELD WIPER EQUIPMENT
Louis Zaiger, Swampscott, and Robert I. Lappin, Marblehead, Mass.
Application May 28, 1952, Serial No. 290,598
1 Claim. (Cl. 308—15)



A trunnion pin having bearing surfaces of different axial length, the shorter bearing surface constituting part of the longer bearing surface and having an end coterminous with an end of the longer bearing surface, a first groove in the pin spaced from the said coterminous ends of the bearing surfaces defining the axial length of the shorter bearing surface and separating it from the remainder of the longer bearing surface, a shoulder at the said coterminous ends of the bearing surfaces and a second groove in the pin spaced from the first groove and at a greater axial distance from the shoulder than the first groove defining the opposite end of the longer bearing surface, said grooves being adapted to alternatively receive a snap ring for alternate cooperation with the shoulder to hold a bearing corresponding in axial length to the longer bearing surface on the pin between a ring located in the second groove and the shoulder or to hold a bearing corresponding in axial length to the shorter bearing surface on the pin between a ring located in the first groove and the shoulder.

2,734,785
GLASS FIBER BEARING
Harry A. Toulmin, Jr., Dayton, Ohio, assignor, by mesne assignments, to L. O. F. Glass Fibers Company, Toledo, Ohio, a corporation of Ohio
Application June 19, 1953, Serial No. 362,917
20 Claims. (Cl. 308—121)



1. As a new article of manufacture; a bearing element

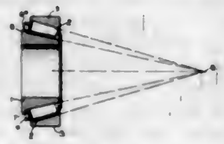
for a rotating member comprising a compressible, resilient, porous body of matted glass fibers which is lubricant permeable.

2,734,786
ROLLER BEARINGS AND CAGES THEREOF
David McNicoll, Aston, Birmingham, England, assignor to British Timken Limited, Birmingham, England, a company of Great Britain
Application October 23, 1952, Serial No. 316,393
10 Claims. (Cl. 308—214)



1. An X-type roller bearing comprising inner and outer race members each provided with two race surfaces at an angle to one another, a cage ring of substantially triangular section with roller-receiving pockets separated by peripheral lands in opposite sides, rollers located in the pockets so as to co-operate with opposed race surfaces on the inner and outer race members and so that the rollers in the pockets at one side of the cage have their axes inclined in one direction whereas those in the pockets at the other side of the cage have their axes inclined in the opposite direction, and separate retaining members fitted and removably held in grooves provided in said lands between the pockets in the two side faces of the cage so that the said retainer members do not project from said lands and so that portions of said members extend beyond said lands and overlap the rollers in the pockets, thereby making the cage, the rollers and one of the race members a self-contained unit assembly.

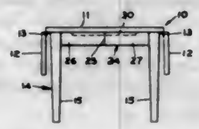
2,734,787
ROLLER BEARINGS
Francis J. L. Dorl, Summit, N. J.
Application April 22, 1953, Serial No. 350,328
4 Claims. (Cl. 308—214)



1. In a taper roller bearing comprising an inner bearing cone, an outer bearing cup and a plurality of one-piece frustro-conical rollers having flat planar bases and a cage therebetween, a thrust flange on said inner bearing cone parallel with the base of said rollers and a free-floating annular ring parallel with the base of said rollers between said thrust flange and said rollers, the inner circumference of said ring bearing on said inner bearing cone.

2,734,788
EXTENSION TABLE HAVING HINGED APRON SECTION
Edward S. Elles, Charlotte, and Henry C. Hawley, Lowell, Mich., assignors to Superior Furniture Company, Lowell, Mich., a corporation of Michigan
Application August 21, 1953, Serial No. 375,693
1 Claim. (Cl. 311—62)

In an extension table having a top with a center section and two hinged drop leafs on each side thereof; an extensible base adjustably mounted below said top and adapted to be extended on either side relative to said center section when said drop leafs are pivoted upwardly flush with said center section, said base having an apron broken at one point for separation into two side apron parts when said base is extended; a center apron divided into two portions; means pivotally mounting said center apron at its upper edge to the underside of said center section between said side apron parts when said



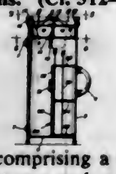
base is extended; said portions of said center apron being pivotally mounted on each side of the point of the break of the apron of said base whereby said base can be selectively extending on either side and the portion of the center apron on the extended side can be swung downwardly to fill the gap created between the two side aprons of said base.

2,734,789
MOLDING FOR TABLE AND COUNTER TOPS
Samuel Wilson, Jr., Tacoma, Wash.
Application June 3, 1954, Serial No. 434,130
1 Claim. (Cl. 311—107)



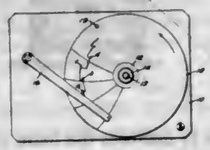
In combination, a table or counter top embodying a normally horizontal base having a flat top surface and a flat right angularly disposed marginal surface, said base having a groove opening outwardly through said marginal surface and defining a horizontal lengthwise keyway, surfacing material bonded to and covering said top surface and having a marginal edge portion projecting beyond and overhanging said marginal surface, and self-edging molding abutting and covering said marginal surface, said molding being composite in construction and embodying a backing and a decorative outer facing therefor, said backing having a keying flange on its inward side fitting into said keyway and said flange having a wedge-shaped bead on its leading end frictionally wedged and thus anchored and retained in said keyway, the thickness of said molding being equal to said overhanging edge portion and the perimeter of the latter being flush with the outer facing of said molding, said facing completely covering the complemental surface of said backing and no portion of the latter being exposed to view.

2,734,790
CARRYING CASE FOR ARROWS
Thaddeus J. Pospie, Novelty, Ohio
Application September 29, 1952, Serial No. 312,066
2 Claims. (Cl. 312—352)



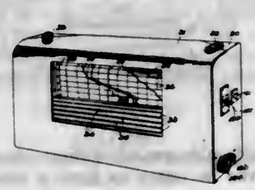
1. A portable case comprising a cylindrical body having a removable cap at one end, a semi-cylindrical rack removably carried in the case and including a perforated top adapted for placing arrows therein and an imperforate bottom and a bar extending vertically at one side of the rack and forming a carrying handle, and lugs internally of the case holding the rack at one side of the case.

2,734,791
MONITORIAL RECORDER
Lewis W. Imm, Los Angeles, Calif., assignor to Librascope, Incorporated, Glendale, Calif., a corporation of California
Application March 13, 1951, Serial No. 215,300
8 Claims. (Cl. 346—17)



1. In pattern-controlled circuit-closing apparatus, a plate, a contact point, a perforated insulator interposed between said plate and said point and movable in a particular pattern relative to said point, the contact point being movable into and out of engagement with the face of the plate in a first direction transverse to the face of the plate and being movable in a second direction parallel to the face of the plate and transverse to the movement of the insulator, and means for controlling the establishment of electrical continuity between said plate and said point through said perforations including mechanism for progressively feeding said insulator in the particular pattern with respect to said point and mechanism for producing controlled intermittent movements of said point with respect to said insulator in the second direction.

2,734,792
RIBBON FEEDING MECHANISM FOR RECORDING AND MEASURING INSTRUMENT
James E. Bevins, Ramsey, and Robert W. Hyde, Englewood, N. J., assignors to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Original application April 16, 1945, Serial No. 588,600. Divided and this application October 27, 1951, Serial No. 254,135
5 Claims. (Cl. 346—136)



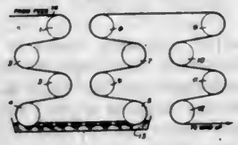
1. In apparatus for marking a chart, a chart driving roller, means for operating said roller at a substantially constant speed, an inked ribbon driven transversely of said chart, automatic means for periodically reversing the direction of traversal of said ribbon, and means including an irreversible clutch connecting said automatic means with said operating means for independently actuating the automatic means.

CHEMICAL

2,734,793
METHOD OF PREPARING WATER-DISPERSIBLE COMPOSITIONS FOR AZO DYEING
Donald E. Marson, Glen Rock, N. J., and Joseph Bianco, Troy, N. Y., assignors to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application July 31, 1951, Serial No. 239,616
2 Claims. (Cl. 8—48)

1. A method of preparing dyeing compositions yielding aqueous dispersions suitable for coloration of cellulose ester, cellulose ether and superpolyamide fibers, which comprises subjecting a heavy aqueous paste containing a substantially water-insoluble diazotizable aromatic amine, and for each part by weight thereof, from ½ to 3 parts of a dispersing agent which is an acid-stable water-soluble magnesium lignosulfonate, to milling so as to subject the particles of said amine to vigorous shearing action in the paste for ½ to 5 hours.

2,734,794
PROCESS FOR WET-DRAWING POLYETHYLENE TEREPHTHALATE
Joseph Gordon Calton, Buffalo, N. Y., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application July 12, 1951, Serial No. 236,399
5 Claims. (Cl. 18—54)



4. A process for producing uniform artificial fibers having the resilience characteristics of the better grades of wool which comprises preparing polyethylene terephthalate fibers of textile denier exhibiting birefringence in the range of 0.004 to 0.011 by spinning 0.50 to 0.70 intrinsic viscosity polymer at speeds in the range of about 900 to 1800 yards per minute, wetting the fibers with water, drawing the wet fibers at temperatures in the range of 35° to 50° C. to a maximum draw ratio of 2.7 to 4.1 times, and heating the drawn fibers in a free-to-shrink condition at temperatures in the range of 90° to 200° C. until relaxed and set and characterized by wool-like resilience.

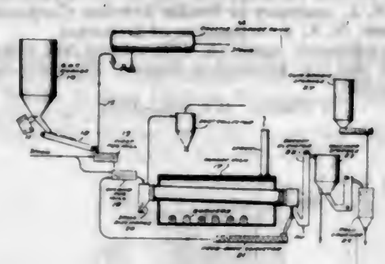
2,734,795
PROCESS FOR PREPARATION OF CHLORIDES OF URANIUM
Ernest C. Evers, Providence, and Charles J. Carignan, Cranston, R. I., assignors to the United States of America as represented by the United States Atomic Energy Commission
No Drawing. Application October 6, 1944, Serial No. 557,544
7 Claims. (Cl. 23—14.5)

1. A method of preparing a chloride of uranium which comprises heating an oxide of uranium in liquid phase contact with a substantial excess of liquid carbon tetrachloride in the presence of extraneous initially added uranium pentachloride, at an elevated temperature in the range from 80° C. to 200° C., and agitating the reaction mixture during the reaction period at a rate sufficient to prevent caking.

2,734,796
COMPOSITION COMPRISING STABLE SOLID SODIUM ALUMINATE AND METHOD OF MANUFACTURING THE SAME
Kenneth D. Ashley, Stamford, and William E. Seaborn, Rowayton, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine
Application February 8, 1952, Serial No. 270,722
12 Claims. (Cl. 23—52)

1. As a new composition of matter, solid sodium aluminate containing a molar excess of Na_2O with respect

to Al_2O_3 in a ratio of from about 1.115 to about 1.155 and containing minor amounts of gum arabic sufficient to suppress the tendency of aluminum hydroxide to separate



out for a considerable period of time, when said composition is dissolved in water to form a substantially clear solution.

2,734,797
PURIFICATION OF $TiCl_3$
Gordon B. Skinner, Dayton, Ohio, assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
No Drawing. Application October 31, 1952, Serial No. 318,102
5 Claims. (Cl. 23—87)

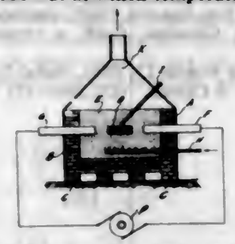
1. The method of purifying $TiCl_3$ with respect to CO by removing CO from a hot gaseous mixture containing $TiCl_3$ and less than 1 mole proportion of CO per 8 mole proportions of $TiCl_3$, which method comprises cooling said gases to a temperature at which CO reacts with $TiCl_3$ to form a precipitation comprising TiC and TiO, and then separating said solids from the remaining gaseous $TiCl_3$.

2,734,798
MANUFACTURE OF HYDROGEN PEROXIDE
Jonas Kamlet, Easton, Conn., assignor to The Goodyear Tire & Rubber Company, a corporation of Ohio
No Drawing. Application August 12, 1953, Serial No. 373,914
10 Claims. (Cl. 23—207)

1. In the process for the manufacture of hydrogen peroxide by the oxidation of an organic hydrazo compound dissolved in an organic solvent in which the hydrazo compound and the resulting azo compound are soluble but in which the hydrogen peroxide formed is substantially insoluble, the oxidation being effected with an oxygen-containing gas, the improvement which consists of effecting the reduction of the azo compound to the corresponding hydrazo compound with a member of the group consisting of sodium hydrosulfide and calcium hydrosulfide in an aqueous medium.

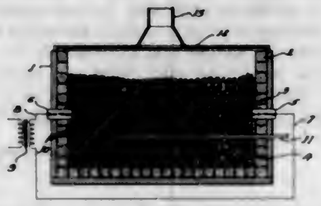
2,734,799
METHOD OF PRODUCING HIGH PURITY GRAPHITE
Lynn Brooks, Bay City, Mich., assignor to United Carbon Products Co., Bay City, Mich.
Application February 20, 1946, Serial No. 649,032
7 Claims. (Cl. 23—209.1)

1. In a method of producing high purity graphite, the step of adding to a mass of amorphous carbon a metallic carbide as a nucleating agent which will react with chlorine to form about 1 to 4% graphite as nuclei when the mass is heated to a temperature of about 1100° C., heating said mass of amorphous carbon to which said nucleating agent has been added to said temperature of 1100° C., then adding chlorine to cause the latter to react with the nucleating agent, and thereafter advancing the temperature to about 2000° C. at which temperature the graphite



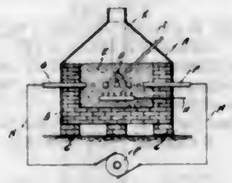
produced serves to nucleate the main mass of amorphous carbon and aids in its transformation to pure graphite.

2,734,800
GRAPHITE PURIFICATION
Lynn Brooks, Bay City, Mich., assignor to United Carbon Products Co., Inc., Bay City, Mich.
Application November 16, 1949, Serial No. 127,594
8 Claims. (Cl. 23—209.9)



1. A process for purifying graphite which comprises the steps of subjecting the impure graphite at elevated temperatures and up to at least 1860° C. to the action of a chlorinating agent selected from the group consisting of chlorine and fully chlorinated hydrocarbons, and subsequently, at a temperature greater than the temperature range within which carbon and fluorine will react, subjecting the graphite to the action of a fluorinating agent selected from the group consisting of fluorine, hydrogen fluoride and fully halogenated hydrocarbons of which at least one of the halogens is fluorine.

2,734,801
METHOD OF REMOVING BORON FROM GRAPHITE
Lynn Brooks, Bay City, Mich., assignor to United Carbon Products Co., Inc., Bay City, Mich.
Application May 26, 1947, Serial No. 750,599
5 Claims. (Cl. 23—209.9)

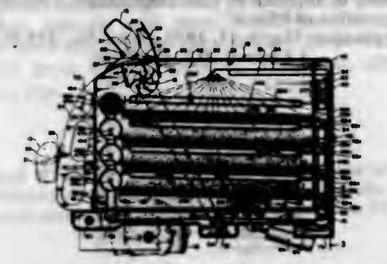


1. A method of removing boron to such an extent from a graphite article that a spectrographic analysis of the treated article indicates the total absence of boron, which comprises the steps of heating the graphite article to a temperature above the dissociation temperature of dichlorodifluoromethane, bringing said dichloro-difluoromethane into reaction with said graphite article to liberate fluorine which reacts with the boron in the graphite article, and passing off the last mentioned reaction products as a volatile compound.

2,734,802
METHOD FOR THE DETECTION OF PATHOLOGICAL QUANTITIES OF PROTEIN IN THE URINE
Karl Philipp Closs, Oslo, Norway
No Drawing. Application June 14, 1952, Serial No. 293,673
Claims priority, application Norway June 14, 1951
8 Claims. (Cl. 23—230)

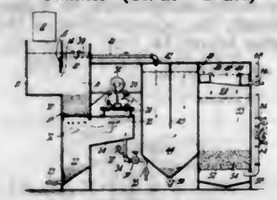
8. A turbidometric reagent for the detection of pathological quantities of protein in urine comprising essentially an aqueous acid solution of potassium polythionate in a concentration of from about 0.05% to about 2.0% by weight of solution, said solution having a pH of about 1.5 and containing sodium chloride dissolved in an amount sufficient to provide a specific gravity of the solution in excess of 1.05.

2,734,803
APPARATUS FOR DIGESTION OF ORGANIC MATERIAL
Simon L. Ruskin, New York, N. Y.
Application February 7, 1951, Serial No. 209,780
26 Claims. (Cl. 23—259.1)



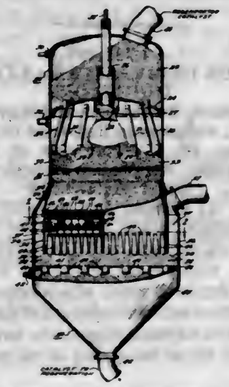
1. In apparatus for fermentation of organic refuse, means forming a chamber, a plurality of screens, means mounting said screens for independent horizontal movement in superposed relation across the chamber and for withdrawal from the central portion thereof, means for drawing the screens across the chamber and for withdrawing them therefrom, and means to introduce refuse into the chamber at a point above the uppermost screen, whereby the screens may be successively extended across the chamber, beginning with the lowermost, and refuse can be piled on each by said introducing means before the higher screens are drawn across the chamber.

2,734,804
SALT DISSOLVING APPARATUS
Thomas F. Courthope, Geneseo, Stanley Martin, Retsof, and Robert G. Sickly, Geneseo, N. Y., assignors to International Salt Company, Scranton, Pa.
Application May 26, 1950, Serial No. 164,514
5 Claims. (Cl. 23—272.6)



1. An apparatus for producing brine from a supply of relatively soluble granular salt including quantities of less soluble granule impurities in the same granular size range, said apparatus comprising a feed material receiving chamber having a settling compartment portion in the bottom thereof, a feed material support bed of substantial depth comprising a mass of discrete particles of solvent-inert material, said particles being of such sizes and forms as to provide interstices therebetween adapted to pass the largest granules of said supply salt and impurities therethrough, said bed being supported upon a screen mounted in said material receiving chamber at a position above the settling compartment portion thereof, said screen being sized to freely pass the largest granules of said supply salt and impurities but to retain said inert bed material, a brine outlet device adjacent the top of said chamber at a level above said bed, solvent liquid supply means discharging into said chamber at a position so as to provide an upflow current of solvent liquid through said bed toward said brine outlet device, liquid pulsator means bearing against the liquid in said chamber for pulsating the liquid flowing upwardly through said support bed, and clean out means at the botom of said settling compartment portion permitting removal therefrom of settled material.

2,734,805
GAS CONTACTING AND DISENGAGING APPARATUS
Reuben T. Savage, Ridley Park, and Reyner Kollgaard, Media, Pa., assignors to Houdry Process Corporation, Wilmington, Del., a corporation of Delaware
Application September 21, 1951, Serial No. 247,684
14 Claims. (Cl. 23—288)



1. Apparatus for contacting gaseous material with granular contact material comprising; an upright elongated vessel adapted to contain a compact moving mass of said contact material flowing concurrently downward with said gaseous material; a plurality of inverted deep channel members having at least a 3 to 1 ratio of depth to average width horizontally positioned and uniformly distributed throughout a common intermediate level within said vessel and supported from the walls thereof, the level of the lowermost edges of said deep channel members dividing said vessel into an upper contact zone and a lower disengaging zone; means arranged to provide a plenum chamber at said intermediate level of said vessel, means for providing lateral gaseous communication between said plenum and said deep channel members; a plurality of gas disengaging members uniformly distributed throughout each of one or more separate levels spaced above said deep channel members; a plurality of conduits extending upwardly from said channel members and supporting said disengaging members, said conduits having their lower ends in open communication with said deep channel members and their upper portions in restricted open communication with said disengaging members, said restricted open communication with said disengaging members being such that fractional portions of the total gaseous material passing downwardly through said contact zone are disengaged from the compact moving mass at each of the successive levels of disengaging members and a substantial remaining portion of gaseous material is disengaged from said mass at the bottom of said contact zone and collected within said deep channel

members, said conduits being arranged and adapted to receive said portions of gaseous material collected by the disengaging members at the upper disengaging levels and to convey the same downwardly into said deep channel members, the cross-sectional flow area of said deep channel members being such as normally to convey the total disengaged gaseous material laterally into said plenum chamber at a velocity insufficient to effect any substantial entrainment of said granular contact material; and means for discharging gaseous material from said plenum chamber.

2,734,806
GERMANIUM ETCHINGS
Sumner P. Wolsky, Waltham, Mass., assignor to Raytheon Manufacturing Company, Waltham, Mass., a corporation of Delaware
No Drawing. Application August 24, 1954, Serial No. 451,953
5 Claims. (Cl. 41—42)

1. The method of altering the surface characteristics of a body of germanium comprising inundating said surface with a chemical solution comprising hydrochloric acid and an oxidizing agent, and then washing said solution from said surface.

2,734,807
BIGUANIDE DERIVATIVES AS CORROSION INHIBITORS
Joseph A. Chenicek, Bensenville, and Ralph B. Thompson, Hinsdale, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware
No Drawing. Application February 1, 1952, Serial No. 269,614
11 Claims. (Cl. 44—72)

3. In the transportation and storage of hydrocarbon oils where the oil contacts metal surfaces in the presence of water, the method of inhibiting corrosion of the metal surfaces by said water which comprises dissolving in the hydrocarbon oil from about 0.0001% to about 2% by weight of a substituted biguanide having a hydrocarbon substituent on at least one of its terminal nitrogen atoms.

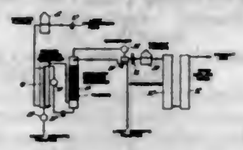
2,734,808
p-PHENYLENEDIAMINE GASOLINE STABILIZERS AND COMPOSITIONS CONTAINING THE SAME
Charles B. Biswell, Woodstown, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application January 6, 1951, Serial No. 204,830
10 Claims. (Cl. 44—74)

1. N-(sec-alkyl)-N'-phenyl - p - phenylenediamine in which the secondary alkyl group contains from 3 to 11 carbon atoms.

4. Gasoline containing, as a stabilizer against rapid deterioration upon aging, a stabilizing amount of N-(sec-alkyl)-N'-phenyl-p-phenylenediamine in which the secondary alkyl group contains from 3 to 11 carbon atoms.

2,734,809
METHOD OF MAKING A FUEL GAS INTERCHANGEABLE WITH NATURAL GAS
Elmore S. Pettyjohn, Evanston, and Henry R. Linden, Franklin Park, Ill., assignors to Institute of Gas Technology, Chicago, Ill., a corporation of Illinois
Application February 11, 1952, Serial No. 270,957
3 Claims. (Cl. 48—197)

1. A method for preparing a gas interchangeable with natural gas which comprises providing in vapor form a light paraffinic petroleum fraction having a final boiling point not in excess of 500° F., passing said vapor through a reactor maintained at a temperature of 1300 to 1550° F. and under a pressure of more than one atmosphere, the residence time in said reactor ranging from two to ten seconds, to thermally crack (without catalyst) said petroleum with the formation of a gas containing paraffins,



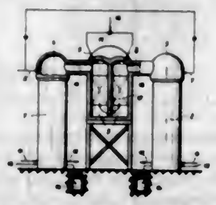
olefins and hydrogen, separating the resulting product into a liquid fraction and a gaseous fraction and passing the gaseous fraction over a hydrogenation catalyst to effect autohydrogenation of said gas.

2,734,810
METHOD OF MAKING OIL GAS INTERCHANGEABLE WITH NATURAL GAS
Elmore S. Pettyjohn, Evanston, and Henry R. Linden, Franklin Park, Ill., and William L. Lee, Atlanta, Ga., assignors to Institute of Gas Technology, Chicago, Ill., a corporation of Illinois
Application March 11, 1952, Serial No. 275,952
4 Claims. (Cl. 48—211)



3. A method of making an oil gas interchangeable with natural gas which comprises passing a hydrocarbon selected from the group consisting of propane, butane, gasoline, light naphtha and mixtures thereof through a heated vessel at a temperature of 1200 to 1600° F. and for a residence time of 10 to 12 seconds to crack said hydrocarbon, immediately passing said hot cracking products into a reactor while simultaneously introducing into the reactor a normally liquid petroleum fraction to crack said fraction in the presence of said hot cracking products and in the absence of steam, the cracking of said fraction being carried out at a temperature of 1350 to 1700 degrees Fahrenheit and at a residence time of from 1 to 5 seconds to obtain a gas containing a major proportion of paraffinic hydrocarbons.

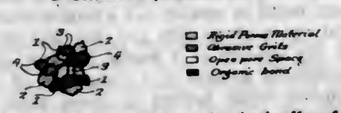
2,734,811
METHOD FOR THE PRODUCTION OF FUEL GAS FROM LIQUID FUELS
Friedrich Totzek and Willy Linder, Essen, Germany, assignors, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware
Application March 14, 1951, Serial No. 215,554
1 Claim. (Cl. 48—214)



A continuous process for endothermically reacting a hydrocarbon with steam to produce combustible gases comprising passing a gas consisting essentially of steam only through a first regenerator which is progressively hotter in the direction of gas flow and thereafter admixing

the heated steam with said hydrocarbon, endothermically reacting the resulting mixture of steam and hydrocarbon in a reaction zone and thereafter cooling the hot endothermic reaction products by passage through a second regenerator which is progressively colder in the direction of gas flow, supplying all of the heat required to complete the preheating and to endothermically react said mixture of steam and hydrocarbon by burning in said reaction zone with a free oxygen-containing gas, simultaneously during said endothermic reaction, a portion but not all of the hydrocarbon contained in said mixture, the hot products of combustion resulting from said burning being cooled by passage, in admixture with said endothermic reaction products, through said second regenerator, periodically reversing the direction of gas flow through said regenerators and reaction zone so that the heat transferred to and stored in said second regenerator during cooling of said endothermic reaction products and said combustion products by passage of the same therethrough, when gas flow is in one direction, is extracted therefrom to preheat said mixture of steam and hydrocarbon by passage of said steam therethrough when gas flow is in the opposite direction, wherein said steam and hydrocarbon can be endothermically reacted continuously to produce combustible gases without requiring a separate, alternating heating step.

2,734,812
ABRASIVE BODIES
Norman P. Robie, Hamburg, N. Y., assignor to Electro Refractories & Abrasives Corporation, Buffalo, N. Y.
Application September 21, 1951, Serial No. 247,651
3 Claims. (Cl. 51—298)



1. An abrasive article composed principally of abrasive granules and a phenolic resin bond therefor, said article comprising also from 1 to 5% by weight of brittle, rigid porous granules containing in excess of 50% by volume of pore space, said granules being selected from the group consisting of expanded perlite, foam glass and expanded plastics.

2,734,813
ABRASIVE ARTICLE
Charles A. Zalud, Chicago, Ill., assignor to Titan Abrasives Company, a corporation of Illinois
No Drawing. Application November 19, 1953, Serial No. 393,215
7 Claims. (Cl. 51—298)

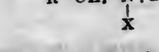
1. An abrasive article including about 160 parts by weight of grains of an abrasive material and a bond intimately associated with said grains, said bond consisting essentially of about 7 to 14 parts by weight of a thermoset resin binder and from a minimum of about 67% to a maximum of about 95%, all by weight of said bond, of an insoluble mineral filler, said filler being in addition to said abrasive material.

2,734,814
STABILIZATION OF HYDROCARBON DISTILLATES
Ralph B. Thompson, Hinsdale, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware
No Drawing. Application June 26, 1952, Serial No. 295,821
13 Claims. (Cl. 52—.5)

1. A hydrocarbon oil heavier than gasoline and normally subject to sediment formation in storage containing, in a small but sufficient amount to retard said sediment formation, a nitropyrimidine.

2,734,815
HERBICIDES
David T. Mowry and Arthur H. Schlesinger, Dayton, Ohio, assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware
No Drawing. Application June 28, 1951, Serial No. 234,144
17 Claims. (Cl. 71—2.5)

5. The method of destroying undesirable plants which comprises applying to said plants a herbicidal composition containing as the active ingredient a quaternary nitrogen compound having the general formula



in which R is selected from the class consisting of alkyl-substituted phenyl radicals and alkyl-substituted naphthyl radicals in which the number of alkyl substituents is from 1 to 3, in which each alkyl radical has from 1 to 12 carbon atoms, and in which the total number of carbon atoms in the alkyl radicals is from 3 to 12, X is selected from the class consisting of chlorine and bromine, and N:D denotes a heterocyclic nitrogen compound of the pyridine series consisting of pyridine, quinoline and isoquinoline and C-linked homologues thereof containing from 1 to 3 C-alkyl substituents, the number of carbon atoms in each of the C-alkyl substituents being from 1 to 2, said active ingredient being present in phytocidal concentration.

2,734,816
PLANT REGULATORS
John W. Wood, Silver Spring, Md., Thomas D. Fontaine, Abington, Pa., and John W. Mitchell, Silver Spring, Md., assignors to the United States of America as represented by the Secretary of Agriculture
No Drawing. Application April 15, 1953, Serial No. 349,113
13 Claims. (Cl. 71—2.6)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A derivative of a D-amino acid wherein the amino acid has been acylated with a nuclearly chlorinated phenoxyacetic acid.

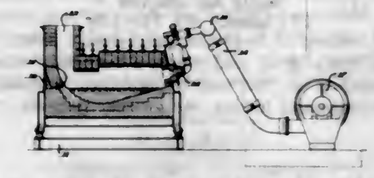
2,734,817
METALLIC POWDERS
Ralph A. Happe, Worthington, Ohio, assignor, by mesne assignments, to Battelle Development Corporation, Columbus, Ohio, a corporation of Ohio
No Drawing. Application February 9, 1952, Serial No. 270,899
4 Claims. (Cl. 75—.5)

1. The method of making dendritic metal particles which comprises the steps of combining copper, iron, and chromium in a liquid state, cooling said combined metals to a solid state to form a predominantly copper matrix in which are embedded particles of an iron-chromium alloy, and removing said copper matrix.

2,734,818
PROCESS OF MAKING STAINLESS STEEL CASTINGS IN A REVERBERATORY FURNACE
Carl George de Laval, Jr., Mount Lebanon Township, Allegheny County, Pa.
Application October 24, 1952, Serial No. 316,594
2 Claims. (Cl. 75—43)

1. The method of operating a direct fired basic lined reverberatory furnace for the manufacture of stainless steel castings in the presence of an oxidizing flame comprising the steps of heating the furnace to a temperature of at least about 3000° F., and thereafter successively repeating the steps of simultaneously charging the furnace throat with high chromium and nickel containing scrap, sufficient material from the group consisting of ferrosilicon and calcium carbide to reduce all chromium oxide

as formed, sufficient material from the group consisting of fluorspar and sodium carbonate to react with all silicon oxides as formed and maintain a fluid slag, and sufficient limestone to maintain a V-ratio of about 2 to 1, maintaining the temperature of the furnace at least about



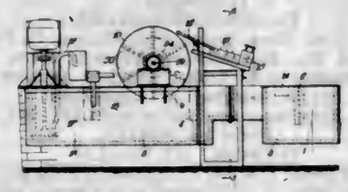
3000° F., melting the charge in the throat of the furnace, permitting the melted charge to flow into the hearth of the furnace, tapping the molten metal at a temperature of at least about 3000° F. and thereafter removing substantially all of the slag resulting from the operation prior to repeating the cycle.

2,734,819

METHOD AND APPARATUS FOR SEPARATION OF METALS, ALLOYS, OR COMPOUNDS FROM A MOLTEN METALLIC SYSTEM

George Kenneth Williams and Leslie Jack Derham, Bristol, England, assignors to The National Smelting Company Limited, London, England

Application May 5, 1951, Serial No. 224,698
Claims priority, application Great Britain May 8, 1950
22 Claims. (Cl. 75—63)



1. In the method of separating a component of the group consisting of metals or alloys of metals from a liquid molten metallic body thereof, the improvement which comprises maintaining a body of molten metallic liquid like that to be treated in a cooling zone, said body being separated generally into two superposed layers, the upper layer being relatively shallow and consisting chiefly of the component to be recovered and the lower layer being relatively deep and consisting chiefly of the remainder of the molten metallic liquid, passing the body of molten metallic liquid to be treated into the body of molten metallic liquid in the cooling zone, cooling the molten metallic body to a temperature not lower than that at which the component separates out in solid form, passing the body of molten metallic liquid thus partially cooled into a second cooling zone, moving a cooling surface through the molten metallic body in the second cooling zone at a temperature at which the desired component separates out and adheres thereto in solid form, withdrawing from the second cooling zone liquid from the molten metallic body thus denuded of said component, removing said component from the moving surface and passing it into the liquid molten metallic body in the first cooling zone for the enrichment of the molten metallic body therein to the point where said component separates out and rises to the top of said body to form a supernatant overlying liquid layer of said component and an underlying liquid layer of the remainder of the molten metallic body still containing some of said component, continuing to pass liquid from the underlying layer into the second cooling zone for treatment with said moving cooling surface, and removing molten component from the supernatant liquid layer in the first cooling zone.

2,734,820

PROCESS AND COMPOSITION FOR TREATING MOLTEN ALUMINUM

Hugh S. Cooper, Shaker Heights, Ohio, assignor to Walter M. Weil, Cleveland, Ohio

No Drawing. Application May 29, 1953, Serial No. 358,577
3 Claims. (Cl. 75—68)

1. The method of treating melts of aluminum and its alloys comprising maintaining a mixture of liquid titanium tetrachloride and liquid boron trichloride in a pressure chamber in about equal proportions, heating said liquid mixture to a temperature in the range of about 45° to 60° C., and maintaining said temperature while withdrawing a stream of vapor from said chamber and introducing it into the metal melt.

2,734,821

RECOVERY OF ELEMENTAL METAL POWDER FROM SALT SOLUTIONS

Felix A. Schaufelberger, Yonkers, N. Y., assignor to Chemical Construction Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application March 14, 1952, Serial No. 276,710
14 Claims. (Cl. 75—108)

1. A method of producing substantially oxide-free nonferrous elemental metal powder, said metal having an oxidation-reduction potential between that of cadmium and that of silver inclusive and being capable of forming with ammonia in aqueous solution a complex cation the salts of which are more soluble than those of the metal, which comprises: adjusting a solution of a dissolved salt of one such metal to contain (*a*) a total concentration of said metal up to about 200 g./l. but less than that at which, in the absence of a partial pressure of reducing gas, a substantial amount of a compound of said metal will precipitate while heating to above about 250° F., (*b*) at least a part of said dissolved metal in a form of a soluble gas-reducible ion, (*c*) a hydrogen ion concentration up to about that equivalent to a 20% free sulfuric acid solution but less than that at which precipitation of said dissolved metal in a form other than elemental metal powder occurs under reduction conditions, and (*d*) a finite amount of a compatible electrolyte; subjecting adjusted solution to an over-pressure of a non-sulfidizing reducing gas of at least about 50 p. s. i. g. while maintaining a total pressure sufficient to prevent boiling, providing a material capable of reacting with acidic anions whereby the hydrogen ion concentration is controlled so as to precipitate elemental metal only, and collecting precipitated metal powder.

2,734,822

METHOD FOR MAKING IMPROVED GRAY CAST IRON AND PRODUCT PRODUCED THEREBY

Roger Maxwell Lamb, Kenilworth, England, assignor to The International Nickel Company, Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application January 23, 1953, Serial No. 332,991
Claims priority, application Great Britain February 1, 1952
12 Claims. (Cl. 75—123)

1. As a new article of manufacture, a gray cast iron containing about 0.04% to about 0.1% magnesium effective to induce the occurrence of graphite in cast iron in a spheroidal form, a detrimental amount of an element subversive to effect of said magnesium and about 0.01% to about 0.06% thorium to counteract the detrimental effect of said subversive element and to provide a cast iron containing more graphite in a spheroidal form than if thorium were absent.

2,734,823

STERLING SILVER ALLOY

Jacob S. Sheff, Flushing, N. Y.

No Drawing. Application July 9, 1951, Serial No. 235,911
3 Claims. (Cl. 75—173)

1. Sterling silver consisting of 92.7% of fine silver and 7.3% of an alloy consisting of 5% nickel, 25% copper and 70% zinc.

2,734,824

PRESSURE VESSELS

Robert A. De Luca, Newton, Mass., assignor, by mesne assignments, to Great Northern Paper Company, Millinocket, Maine, a corporation of Maine

Application October 18, 1954, Serial No. 462,827
15 Claims. (Cl. 92—7)



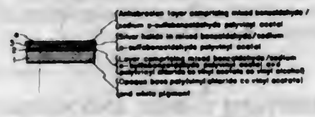
1. A closure for tanks comprising a closure member having a plurality of radial slots about the edge thereof, means including closure carrying members and trunnions for pivotally moving said closure member into and out of a closed position on said tank, a plurality of clamping bolts pivotally carried by said tank and adapted to engage the slots in said closure member when the latter is in the closed position, a locking ring rotatably supported by said tank and movable in one direction to engage said bolts to hold them in engagement with the closure member and movable in another direction to disengage said bolts and means for moving said bolts out of engagement with said closure member.

2,734,825

PHOTOGRAPHIC FILMS

James Gail Morgan, New Brunswick, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application June 16, 1953, Serial No. 362,159
8 Claims. (Cl. 95—9)



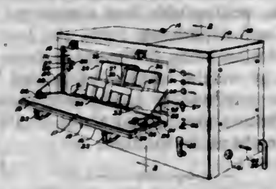
1. A heat-moldable photographic film comprising a flexible base sheet composed of a poly(vinyl chloride co vinyl acetate), predominating in vinyl chloride, and a white pigment as an opacifying agent, bearing in order on one surface a sublayer composed of a mixture of a poly(vinyl chloride co vinyl acetate co vinyl alcohol) and nitrocellulose, a layer composed of a hydrophilic macromolecular mixed benzaldehyde/sodium o-sulfobenzaldehyde polyvinyl acetal, and a light-sensitive layer comprising silver halide grains dispersed in a hydrophilic, macromolecular mixed benzaldehyde/o-sulfobenzaldehyde polyvinyl acetal.

2,734,826

METHOD OF AND APPARATUS FOR STERILIZING INFANTS' FORMULA

Blair E. Stentz and George C. Weingardt, Toledo, Ohio, assignors to The Swartzbaugh Manufacturing Company, Toledo, Ohio, a corporation of Ohio

Application August 30, 1952, Serial No. 307,342
4 Claims. (Cl. 99—212)



3. A process for the terminal sterilization of infants' feeding bottles, formula contained therein and caps thereon, said process comprising, placing said capped, filled bottles in upright position in a sterilizing zone in a spatially isolated atmosphere that is vented to the general atmosphere whereby the pressure in said spatially isolated atmosphere cannot rise above the pressure of the general atmosphere, establishing a pool of water in the bottom of said sterilizing zone out of contact with said bottles, heating said pool of water to raise the temperature thereof to active boiling, sterilizing the bottles, the caps thereon and the formula therein by heat from steam generated from the actively boiling water pool, discontinuing the application of heat to the water pool, raising the level of the water pool by adding cool water to the pool, maintaining the water pool at a level below the level of the caps on the bottles while continuing to add cool water to the pool for slowly cooling the formula and the bottles.

2,734,827

FIRE-RESISTANT PROTECTIVE COATING

Robert M. Hooks, Fort Worth, Tex., assignor to Southwestern Petroleum Co., Inc., Fort Worth, Tex., a corporation of Texas

No Drawing. Application June 26, 1952, Serial No. 295,847
4 Claims. (Cl. 106—15)

1. A fire-resistant, waterproof and weatherproof coating material comprising in major portion substantially equal parts by weight of any asphalt having a melting point of from 160° F. to 180° F. and a volatile asphalt solvent, and including in minor portion 3% to 5% by weight of powder-like, finely divided particles of silica aerogel uniformly dispersed in said asphalt and solvent and 5% to 15% by weight of a fire-retardant chemical.

2,734,828

DEXTRAN COATING COMPOSITION

Harry A. Toulmin, Jr., Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio

No Drawing. Application May 6, 1953, Serial No. 353,441
20 Claims. (Cl. 106—162)

1. As a new article of manufacture for use in a lacquer and the like, a composition comprising a blend of 50% to 95% of a benzyl ether of a dextran and 5% to 50% of an ester of a dextran with a saturated fatty acid containing from 8 to 18 carbon atoms, the ester containing, per anhydroglucopyranosidic unit, from less than 1.0 to 3.0 radicals derived from the fatty acid.

2,734,829
LEAD DRIER CONCENTRATE
Funston G. Lum, Richmond, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware
No Drawing. Application July 24, 1950, Serial No. 175,657
8 Claims. (Cl. 106—310)

1. A paint and varnish drier concentrate comprising a solution in a petroleum thinner of the reaction product of an inorganic, acid-soluble lead compound with a mixture of toluic and naphthenic acids, the lead metal content of said solution being in the range from about 15% to about 35% by weight, and the calculated lead content of the solution attributable to the introduction of lead toluate being from about 3% to about 17.5% by weight, based on the weight of the solution.

2,734,830
WASHING AND SOFTENING TEXTILE GOODS
Walter Hagge and Mathieu Quaedvlieg, Leverkusen-Bayerwerk, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany
No Drawing. Application January 9, 1951, Serial No. 205,214
Claims priority, application Germany January 13, 1950
9 Claims. (Cl. 117—47)

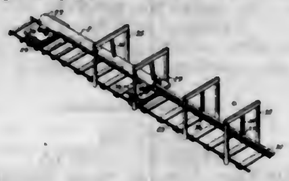
1. A method of laundering finished textile goods that are already soft to the touch and are usually repeatedly laundered, which comprises washing said textile goods in a bath containing a synthetic detergent of the group consisting of long chain alkyl sulfates, long chain alkyl sulfonates and fatty alcohol condensation products and an auxiliary mineral agent of the group consisting of alkali carbonates, alkali silicates and alkali phosphates, and subsequently rinsing the goods in a separate bath containing a cation-active textile softening agent.

2,734,831
METHOD OF FINISHING OPEN-GRAINED POROUS WOOD AND ARTICLE PRODUCED THEREBY
Bjorn Eric Larsson, Philadelphia, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application May 12, 1955, Serial No. 507,977
11 Claims. (Cl. 117—63)

1. The process of producing improved adhesion and scratch resistance in a finishing system on open-grained porous wood which comprises applying to the surface of said wood an aqueous filler composition comprising 5%–60% of finely divided particles of polyvinyl acetate, by weight based on the total composition, drying said aqueous composition, applying thereover a coating composition comprising an organic film-forming material and a liquid organic solvent for said polyvinyl acetate, and drying said coating composition.

2,734,832
METHOD OF PROCESSING PIPES
Jesse M. Lewis, Tulsa, Okla., assignor to Williams Brothers Company, Tulsa, Okla., a corporation of Nevada
Application October 18, 1950, Serial No. 190,856
6 Claims. (Cl. 117—96)

1. In a method of internally coating a pipe section of unusual length for flow of petroleum products therethrough by use of a coating boom having a spray head on the outer end thereof and consisting of suspending the boom in an essentially horizontal position at a plurality of releasably longitudinally spaced supporting positions, telescoping the pipe over the spray head and boom, simultaneously releasing the suspended boom progressively as the pipe passes the spaced supporting positions during the telescoping operation, supplying the spray head with coating material through the boom, spraying the coating material onto the inner walls of the pipe while moving the pipe off of the boom, simultaneously



rotating the pipe in timed relation with the rectilinear movement thereof to apply the coating material in a helical path, and continuing the rotation of the pipe after removal from the boom until the coating material solidifies thereon.

2,734,833
SULFOSUCCINATE ESTERS OF FATTY ACID MONO- AND DIGLYCERIDES
Jack T. Thurston, Riverside, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Application February 25, 1953, Serial No. 338,917
9 Claims. (Cl. 117—139.5)

8. A method of treating textile materials which comprises impregnating the same with a softening and nonyellowing agent comprising a bis-ester of sulfosuccinic acid with a substantially bi-molecular quantity of a member of the group consisting of higher fatty acid monoglycerides, higher fatty acid diglycerides, and mixtures thereof derived from a member of the group consisting of the animal and vegetable oils and fats containing less than 15% by weight polyunsaturated fatty acids.

2,734,834
COATED PILE FABRIC AND METHOD OF MAKING SAME
Leo W. Rainard, Nyack, and Emory P. Mersereau, Jr., Thornwood, N. Y., assignors to Alexander Smith, Incorporated, White Plains, N. Y., a corporation of New York
No Drawing. Application February 19, 1954, Serial No. 411,564
2 Claims. (Cl. 117—169)

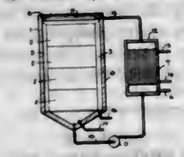
1. A pile fabric having a backing and pile tufts anchored therein nnd extending upwardly therefrom, said pile tufts having a surface coating in an amount of .25% to 5% by weight of the pile of a substance containing a major portion of a hydrous pyrolytic aluminum oxide having a surface area of 15 to 200 $M^2/g.$, an average working particle size of not over .6 micron, said oxide being non-hygroscopic, inert to the atmosphere and inert to the material of the pile fabric, said coated surface having the adherence and whitening characteristics corresponding to an adherence index of not over .85 and a whitening index of not over 10.6 determined as defined herein.

2,734,835
SOIL RESISTANT FABRIC AND METHOD OF MAKING THE SAME
Patrick A. Florio, Elmhurst, and Leo W. Rainard, Nyack, N. Y., assignors to Alexander Smith, Incorporated, White Plains, N. Y., a corporation of New York
No Drawing. Application February 24, 1954, Serial No. 412,383
19 Claims. (Cl. 117—169)

1. The method of reducing the particle adherence characteristics of a fabric having a surface exposed to such particles without producing an undesirable color change therein, which method comprises applying to said surface while in a substantially unsoiled condition a dilute dispersion comprising a liquid vehicle containing

particles of a mixture containing substantial proportions of at least two hydrous stable metal oxides having a surface area of 15 to 200 square meters per gram and an average working particle size of not over .6 micron, said oxides being selected from the group consisting of aluminum, silica, titanium, beryllium, cerium, columbium, germanium, magnesium, thorium, zinc and zirconium, and removing the liquid vehicle to leave on said surface a coating of said particles having a weight of .003 ounce to .054 ounce per square yard of exposed surface area.

2,734,836
PRODUCTION OF PENTOSES FROM CELLULOSIC MATERIALS
John Elian, Uccle-Brussels, and Marcel Le Pingle, Schaerbeek-Brussels, Belgium
Application September 12, 1951, Serial No. 246,251
3 Claims. (Cl. 127—37)

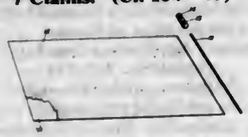


1. In a method of making pentoses by the treatment of pentosan-containing cellulosic materials with an organic acid, the steps of charging the said materials into a closed extraction vessel, continuously extracting the same with acetic acid having a pH between 2 and 4 at a temperature between 80 and 100° C. the extraction liquid being conducted through said vessel in a closed cycle, producing thereby a pentose-containing solution, neutralizing and evaporating said solution and recovering the pentoses by extraction of the residual product.

2,734,837
SURFACE TREATMENT OF TITANIUM OR TITANIUM BASE ALLOYS
Sidney Hands, Walsall, England, assignor to Imperial Chemical Industries Limited, London, England, a corporation of Great Britain
No Drawing. Application September 27, 1954, Serial No. 458,710
Claims priority, application Great Britain October 9, 1953
5 Claims. (Cl. 134—27)

1. Method of surface treatment of titanium or titanium base alloy articles prior to deposition of a coating metal thereon, which comprises treating the surface of the said articles with concentrated hydrochloric acid solution at a temperature between 90° C. and the boiling point of said solution.

2,734,838
WRAPPED PENCIL-SHAPED ARTICLES AND METHOD OF MAKING SAME
John J. Clancy, Westwood, and David W. Lovering, Needham, Mass., assignors to Arthur D. Little, Inc., Cambridge, Mass., a corporation of Massachusetts
Application October 19, 1951, Serial No. 252,171
7 Claims. (Cl. 154—83)



1. As an article of manufacture, a core, and a rigid sheath surrounding said core, said sheath comprising paper tightly wound upon said core, and bonded together and to said core by a binder and heat cured at a temperature between ambient and about 275° F., said binder preventing delamination and consisting essentially of dimethylol urea and a high molecular weight water colloidally soluble polyhydroxy compound selected from the group consisting of starch, hydrolysates of starch, dextrine, pectin, gum acacia, and polyvinyl alcohol, said polyhydroxy compound and said dimethylol urea being present in a weight ratio of between 7:3 and 1:9, said sheath being substantially unaffected by humidity.

7. The process of forming a rigid sheath about a core, which comprises applying to a paper sheet a binder consisting essentially of dimethylol urea and a water colloidally soluble, relatively high molecular weight, polyhydroxy compound selected from the group consisting of starch, hydrolysates of starch, dextrine, pectin, gum acacia, and polyvinyl alcohol, in a weight ratio of between 3:7 and 9:1, respectively, wrapping the thus-treated paper tightly around said core to form said sheath thereabout, and heating the resulting structure at a temperature between ambient and about 275° F. sufficient to cause said polyhydroxy compound and said dimethylol urea to form a reaction product which is substantially unaffected by humidity and which bonds the convolutions of said sheath firmly together against delamination and which also bonds said sheath to said core.

2,734,839
WRAPPED PENCIL-SHAPED ARTICLES AND METHOD OF MAKING SAME
John J. Clancy, Westwood, and David W. Lovering, Needham, Mass., assignors to Arthur D. Little, Inc., Cambridge, Mass., a corporation of Massachusetts
Application October 19, 1951, Serial No. 252,172
6 Claims. (Cl. 154—83)



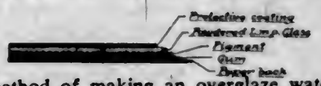
1. As an article of manufacture, a core, and a rigid sheath surrounding said core, said sheath comprising paper tightly wound upon said core, and bonded together and to said core by a binder and heat cured at a temperature between ambient and about 275° F., said binder preventing delamination and consisting essentially of dimethylol urea and a water colloidally soluble protein selected from the group consisting of hide glue, fish glue, and gelatine, said protein and said dimethylol urea being present in a weight ratio of between 7:3 and 1:9, said sheath being substantially unaffected by humidity.

6. The process of forming a rigid sheath about a core, which comprises applying to a paper sheet a binder consisting essentially of a water colloidally soluble protein selected from the group consisting of hide glue, fish glue, and gelatine, and dimethylol urea, in a weight ratio of between 7:3 and 1:9, wrapping the thus-treated paper tightly around said core to form said sheath thereabout, and heating the resulting structure at a temperature between ambient and about 275° F. sufficient to cause said protein and said dimethylol urea to form a reaction product which is substantially unaffected by humidity and which bonds the convolutions of said sheath firmly together against delamination and which also bonds said sheath to said core.

2,734,840
CERAMIC DECALCOMANIA AND METHOD OF MAKING SAME
Laurence E. Kane, Mount Vernon, N. Y., assignor to Commercial Decal, Inc., Mount Vernon, N. Y., a corporation of New York
Application October 1, 1952, Serial No. 312,553
7 Claims. (Cl. 154—99)

1. An overglaze water-mount decalcomania adapted to be applied to a vitreous surface comprising a base sheet,

a liquid soluble adhesive disposed on said base sheet, a pigment pattern disposed on said liquid soluble adhesive providing a configuration which is to appear on the vitreous surface, a layer of powdered low melting point glass containing increments of at least one metallic oxide disposed over said pattern, and a coating engaging said layer of powdered low melting point glass retaining the same substantially in its original layer form whereby after the decalcomania is applied to the vitreous surface and the assemblage fired, the layer of low melting point glass will be fused and form a contiguous, durable, protective coating on the surface overlying the said pigment pattern.



7. The method of making an overglaze water-mount decalcomania which is resistant to chemical and mechanical deterioration which includes the steps of applying a coating of liquid soluble adhesive to a base sheet, printing a pigment pattern thereover, applying a covering of powdered low melting point glass containing increments of at least one metallic oxide over said pattern, and applying a coating over said powdered low melting point glass whereby after the decalcomania is applied to a vitreous surface and the assemblage fired, the layer of powdered low melting point glass will be fused to form a contiguous, durable, protective coating on the article overlying the said pigment pattern.

2,734,841

METHOD OF MAKING BONDED RESILIENT FIBROUS MATERIAL

Peter Merriman, Liverpool, England, assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a corporation of New York

Application November 26, 1951, Serial No. 258,287
6 Claims. (Cl. 154—101)



1. A method of making resilient material of bonded resilient fibers which comprises feeding of web of opened fibers into the nip between a pair of rolling surfaces, supplying a bonding material in closely spaced jets into said web before it passes into the nip between said pair of rolling surfaces, said bonding material consisting of two phases, one phase being a liquid plasticizer and the other phase being a finely divided solid plastic dispersed in said plasticizer, said bonding material being in amount sufficient to bond said fibers at their points of contact and insufficient to span the spaces between said fibers, permitting said web to expand after passing through said nip and thereafter gelling said bonding material.

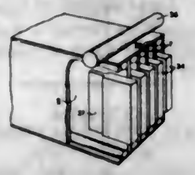
2,734,842

PROCESS OF MANUFACTURING SPACED PLATE ARC EXTINGUISHERS

Russell E. Frink and Robert C. Dickinson, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Original application February 23, 1949, Serial No. 77,793, now Patent No. 2,610,937, dated September 16, 1952. Divided and this application February 16, 1952, Serial No. 271,924
2 Claims. (Cl. 154—122)

1. The method of manufacturing spaced stacked plate arc extinguishers having venting passages between the plates and provided by the adhesive between said plates comprising spreading cement upon a flat backing, holding a plurality of plates in spaced superimposed relationship by a plurality of stepped spacers with the larger width of the spacers between the plates, placing the layer of cement and backing along the side of the plate structure with the cement side against the plates, forcing the cement between the plates by exerting pressure against the backing, pulling the spacers out from between the plates while they are under compression until the smaller width of the spacers is between the plates, and then baking the plate structure until the cement hardens.

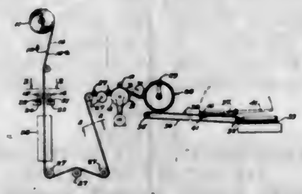


2,734,843

METHOD OF PRODUCING HONEYCOMB

Roger C. Steele, Berkeley, Calif., assignor to Hexcel Products Inc., a corporation of California

Application December 2, 1952, Serial No. 323,634
15 Claims. (Cl. 154—122)



1. In the manufacture of honeycomb material the method which includes the steps of; applying longitudinally extending, spaced, parallel lines of adhesive to face surfaces of continuously moving web material, cutting the web material into completely separated flat sheets of uniform size, and thereafter adhering said sheets to one another with the obverse side of each sheet adhered to an adjacent sheet by a plurality of spaced parallel lines of adhesive and with its reverse side adhered to an adjacent sheet by lines of adhesive disposed in staggered parallel relationship to the said lines of adhesive to which its obverse side is adhered, thereby forming a block of unexpanded honeycomb.

2,734,844

INJECTABLE PENICILLIN REPOSITORY PREPARATION CONTAINING OIL AND GELLED OIL

William M. Ziegler, Clementon, N. J., assignor, by mesne assignments, to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application October 18, 1951, Serial No. 251,992
7 Claims. (Cl. 167—65)

1. An injectable antibiotic preparation capable of maintaining effective therapeutic blood levels over an extended period of time which comprises particles of a therapeutic salt of penicillin coated with a gel comprising an innocuous non-toxic oil dissolved in a ferric salt of a higher fatty acid, the coated particles being dispersed in an innocuous non-toxic oil, the amount of ferric salt ranging from 1 to 10% by weight of the total amount of innocuous non-toxic oil.

2,734,845

AQUEOUS SUSPENSION OF PROCAINE PENICILLIN AND ACID SALT OF ANTIHISTAMINE

Klaus Bauer and Ernst Aubagen, Wuppertal-Elberfeld, Germany, assignors to Schenley Industries, Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application February 4, 1952, Serial No. 269,901
Claims priority, application Germany February 8, 1951
6 Claims. (Cl. 167—65)

1. An aqueous suspension of the procaine salt of penicillin characterized by improved fluidity, wherein the proportion of the salt present, based on total weight, materially exceeds about 10 per cent, that comprises additionally from about 5 to 10 per cent by weight of a salt of a histamine-antagonistic alkylenediamine represented by the formula:

R.X.Z

wherein R is a group, comprising and linked to the remainder of the molecule through a nitrogen atom, comprised of at least two cyclic groups, having a minimum aggregate molecular weight of 150; X is an alkylene group having at least 2 and at most 3 carbon atoms in the chain linking R with the remainder of the molecule; and Z is a group comprising a nitrogen atom, through which it is linked to the remainder of the molecule, chosen from the group consisting of dimethylamino and pyrrolidyl.

2,734,846

AQUEOUS SUSPENSION OF PROCAINE PENICILLIN AND QUATERNARY AMMONIUM SALT OF ANTIHISTAMINE

Ernst Aubagen, Ulrich Hörlein, and Klaus Bauer, Wuppertal-Elberfeld, Germany, assignors to Schenley Industries, Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application May 13, 1952, Serial No. 287,597
Claims priority, application Germany May 15, 1951
6 Claims. (Cl. 167—65)

1. An aqueous suspension of the procaine salt of penicillin characterized by improved fluidity, wherein the proportion of the salt present, based on total weight, materially exceeds about ten per cent, that comprises additionally from about one to seven per cent by weight of an organic quaternary ammonium salt of a histamine-antagonistic alkylenediamine base, said base being represented by the formula:

R.X.Z

wherein R is a group, comprising and linked to the remainder of the molecule through a nitrogen atom, comprised of at least two cyclic groups, havig a minimum aggregate molecular weight of 150; X is an alkylene group having at least two and at most three carbon atoms in the chain linking R with the remainder of the molecule; and Z is a group comprising a nitrogen atom, through which it is linked to the remainder of the molecule, chosen from the group consisting of dimethylamino and pyrrolidyl.

2,734,847

PERSPIRATION INHIBITING COMPOSITION

Frank M. Berger, Princeton, and Sophie L. Plechner, Metuchen, N. J., assignors to Carter Products, Inc., New York, N. Y., a corporation of Maryland

No Drawing. Application August 6, 1952, Serial No. 303,002
8 Claims. (Cl. 167—90)

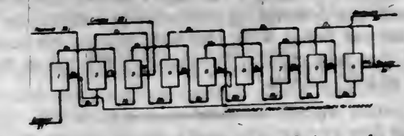
1. A perspiration inhibiting preparation comprising the combination in an aqueous carrier of at least one zirconium salt selected from the class consisting of sodium zirconium lactate, sodium zirconium glycolate and sodium zirconium gluconate and at least one aluminum salt selected from the class consisting of aluminum sulfate and aluminum chloride.

2,734,848

MODIFIED DUO-SOL REFINING

Harold C. Myers, Woodbury, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York

Application April 25, 1952, Serial No. 284,255
11 Claims. (Cl. 196—14.2)



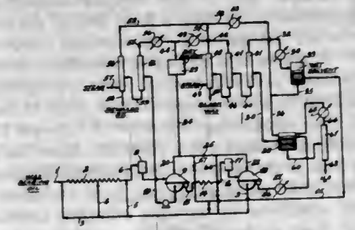
1. In the "Duo-Sol" method of refining mineral oil comprising paraffinic and non-paraffinic constituents which comprises extracting in a plurality of stages an oil comprising paraffinic and non-paraffinic constituents with a refining solvent in the presence of an added liquid having greater solvent power for paraffinic constituents of said oil than for non-paraffinic constituents of said oil, said solvent for paraffinic constituents of said oil and said refining solvent being adapted to form a two liquid phase solvent system, the improvement which comprises selecting a secondary feed other than the aforseaid oil having a response to treatment complementary to that of said oil and of no greater asphalt content than said oil and, whilst the flow rates of said added liquid and said refining solvent remain substantially unaltered and whilst continuing to introduce the aforesaid oil at a maximum rate concomitant with producing in maximum yield a raffinate of required quality, introducing said secondary feed into said "Duo-Sol" system at a point other than the point of introduction of said oil intermediate the initial stage and the final stage dependent upon the relative response to treatment and asphalt content as previously determined, and the more responsive said secondary feed is to treatment relative to said oil the nearer the first stage said secondary feed is introduced to produce a maximum yield of oil of required quality.

2,734,849

SOLVENT DEWAXING OF PETROLEUM OILS

Howard H. Gross, Pleasantville, and Wynkoop Kiersted, Jr., Scarsdale, N. Y., assignors to Texaco Development Corporation, New York, N. Y., a corporation of Delaware

Application March 23, 1953, Serial No. 344,024
6 Claims. (Cl. 196—19)



1. In the production of substantially oil-free wax and dewaxed oil from wax-bearing lubricating oil stock with a dewaxing solvent liquid which exerts a substantially complete solvent action upon oil but substantially no solvent action upon wax constituents of the mixture at separation temperatures of 10° F. and below and in which water is at least partially miscible, and wherein a mixture of said wax-bearing lubricating oil and solvent are chilled to wax separation temperature and subjected to primary wax separation to produce dewaxed oil dissolved in solvent and also primary wax containing some solvent and a small amount of oil, and said primary wax is diluted by admixture with a further quantity of solvent and subjected to a secondary separation to produce a secondary filtrate comprising solvent containing additional dewaxed oil and a secondary wax of low oil

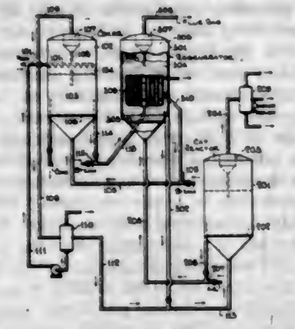
content, the improvement which comprises effecting the dilution of said primary wax with a wet solvent, carrying out the secondary separation at a temperature such that water contained in said wet solvent freezes to form solid ice crystals which are separated with the secondary wax thereby yielding a secondary filtrate comprising dry solvent, and introducing said secondary filtrate as dewaxing solvent liquid with said wax bearing lubricating oil such that said primary dewaxing is effected in the presence of a dry solvent.

2,734,850

FLUID COKING OF HEAVY HYDROCARBONS

James Woodrow Brown, Elizabeth, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application May 19, 1951, Serial No. 227,169
4 Claims. (Cl. 196—49)



1. A process for converting a residual petroleum stock which comprises the following steps: contacting a residual stock with coke particles maintained as a fluid bed at a coking temperature in a coking zone to form additional amounts of coke and hydrocarbon vapors, withdrawing net coke product from said coking zone, passing said hydrocarbon vapors after removing entrained solids therefrom directly to the lower portion of a cracking zone, contacting said hydrocarbon vapors therein with a fluid bed of particulate cracking catalyst at a cracking temperature, withdrawing cracked product vapors from said cracking zone, withdrawing and mixing a portion of said cracking catalyst with a free oxygen-containing gas in a combustion zone, forming a fluid bed of the withdrawn catalytic solids therein at a regeneration temperature at least 100° F. above said coking temperature, withdrawing flue gases from said combustion zone, circulating regenerated catalyst from said regeneration zone to said cracking zone, also circulating regenerated catalyst from said regeneration zone and coke particles from said coking zone to a heat exchange zone, maintaining the regenerated catalyst and coke particles in said heat exchange zone in a fluidized condition in separate adjacent chambers and in indirect heat exchange relation, withdrawing and returning cooled regenerated catalyst from said heat exchange zone to said process, and withdrawing and returning heated coke particles from said heat exchange zone to said coking zone to maintain said coking temperature.

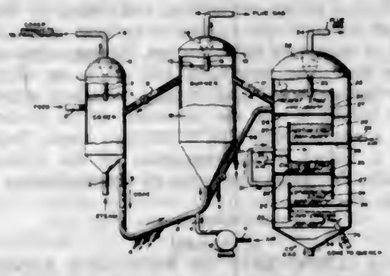
2,734,851

COKE CALCINING PROCESS

Brook I. Smith, Elizabeth, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application March 22, 1954, Serial No. 417,856
3 Claims. (Cl. 202—14)

1. In a process for the calcination of coke the steps of passing finely divided hot coke downwardly through a staged, elongated treating zone, said zone containing in descending order: a preheating zone, a heating zone, a calcining-soaking zone, a reduction zone and a cooling zone and in each zone maintaining the coke in a fluidized state by passing hot coke to be calcined into the preheating zone, simultaneously introducing a CO_2 containing gas into the cooling zone, passing the coke downward through the aforesaid treating zone and the gas upwardly therethrough, heating the coke in the fluidized state in the preheating zone to a temperature of approximately 1100° F. to 1500° F. by means of hot gases emerging from the heating zone, heating the coke in the fluidized state in the heating zone to a temperature in the range of 2000° F. to 2600° F. by means of heat generated in said zone by the combustion with extraneously added air of a gas the carbon content of which consists substantially of CO emerging from the lower calcining soaking zone, maintaining the heated coke in the calcining soaking zone in the fluidized state at a temperature



in the range of 2000° F. to 2600° F. for a period of 5 minutes to 8 hours in the presence of a gas the carbon content of which consists substantially of CO, removing the calcined coke from the calcining soaking zone to the reduction zone, contacting the calcined coke in the fluidized state in the reduction zone at a temperature in the range of 1600° F. to 2000° F. with a gas the carbon content of which consists substantially of CO_2 from the cooling zone thereby converting such CO_2 to CO by reaction with the hot coke and effecting cooling of the coke to the 1600° to 2000° F. temperature, removing the coke from the reduction zone to the cooling section where its temperature is further lowered by contact in the fluidized state with incoming cooler gases containing a substantial amount of CO_2 but essentially no CO, removing coke from the cooling zone and removing flue gas from the preheating zone.

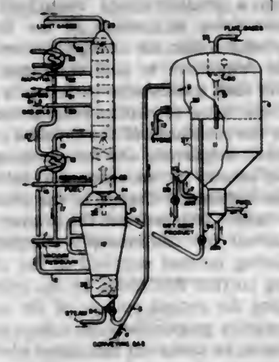
2,734,852

ELUTRIATING-BURNER IN FLUID COKING PROCESSES

John F. Moser, Jr., Baton Rouge, La., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application September 27, 1954, Serial No. 458,370
5 Claims. (Cl. 202—14)

1. An improved method of coking hydrocarbon oils including heavy residual petroleum oils which contain constituents unvaporizable at ordinary pressures without cracking, comprising contacting a hydrocarbon oil with a fluidized bed of finely divided coke in a coking zone maintained at a coking temperature above about 850° F. to produce lower boiling hydrocarbons while depositing coke on the fluidized particles, removing coke from said coking zone and passing it to an elutriation-combustion zone, segmented to contain an elutriation portion and a combustion portion containing fluidized solids, elutriating coke fines from said fluidized solids in said elutriation zone, fluidizing and combusting the remaining relatively coarse coke with a free oxygen-containing gas in said elutriation portion, withdrawing relatively coarse net coke product of improved properties from the lower end of said elutriation portion, overflowing excess coke particles from said elutriation portion into said combustion portion, combusting further amounts of the coke in said combustion zone to raise the temperature of the solids therein



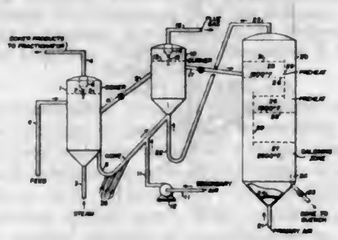
100° to 300° F. above said coking temperature, returning solids from said combustion portion to said coking zone to supply heat thereto, and removing a stream of vaporous reaction products overhead from said coking zone.

2,734,853

INTEGRATED COKING AND CALCINING PROCESS

Brook I. Smith, Elizabeth, and Charles E. Jahnig, Rumson, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application March 22, 1954, Serial No. 417,748
5 Claims. (Cl. 202—31)



1. An integrated coking and calcining process which comprises coking a heavy hydrocarbon oil by contacting the same with hot coke particles in a coking zone wherein the oil is converted to product vapors and carbonaceous solids deposited on the coke particles, removing product vapors from the coking zone, burning a portion of coke particles removed from the coking zone with a combustible gas in a separate burning zone to increase the temperature of said particles, returning a portion of the heated coke particles from the burning zone to the coking zone, introducing a separate stream of coke particles without substantial cooling from the burning zone to a separate calcining zone contained in an auxiliary heating zone, heating the coke in the calcining zone to a temperature in the range of 2000° F. to 3000° F. by burning a portion of the coke therein to essentially CO with a free oxygen-containing gas introduced thereto, maintaining the coke particles in the fluidized state in the calcining zone for a soaking period time interval in the range of 5 minutes to 8 hours, removing calcined coke from the calcining zone, removing a gas containing CO free of CO_2 from the calcining zone and introducing said gas with auxiliary free oxygen-containing gas as fuel to the burning zone.

2,734,854

PURIFICATION AND RECOVERY OF MALEIC ANHYDRIDE

Joseph Nils Oppenson, Concord, Calif., assignor to California Spray-Chemical Corporation, Richmond, Calif., a corporation of Delaware

No Drawing. Application February 23, 1954, Serial No. 412,070
5 Claims. (Cl. 202—42)

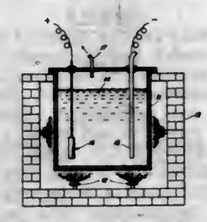
2. A method of recovering maleic anhydride from impurities and associated compounds which comprises continuously introducing to a body of impure maleic anhydride an organic liquid, chemically inert to said maleic anhydride and possessing the characteristic of forming a constant-boiling mixture with said maleic anhydride within the range of 135–190° C., continuously distilling the azeotrope of said organic liquid and maleic anhydride, recovering substantially pure maleic anhydride from the effluent distillate and recycling the said organic liquid to further contact with impure maleic anhydride.

2,734,855

ELECTROLYTIC PREPARATION OF REDUCED TITANIUM CHLORIDE COMPOSITION

Thomas M. Buck, Plainfield, N. J., and Marshall B. Alpert, Staten Island, N. Y., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey

Application November 20, 1951, Serial No. 257,258
3 Claims. (Cl. 204—61)



1. Method for the preparation of reduced titanium chloride composition which comprises employing, in an electrolytic cell having a titanium metal anode, a cathode and a molten salt electrolyte, said electrolyte being composed of at least one compound selected from the group consisting of the halide salts of alkali metals, alkaline earth metals and magnesium, and introducing titanium tetrachloride below the surface of said electrolyte adjacent to said cathode, meanwhile concurrently passing electricity through said cell, said electricity and said $TiCl_4$ being added in a faraday per mol ratio such as to convert all of the titanium tetrachloride to titanium trichloride and titanium dichloride, whereby an electrochemically equivalent amount of titanium metal from the anode is solubilized during the conversion of titanium tetrachloride to reduced titanium chloride.

2,734,856

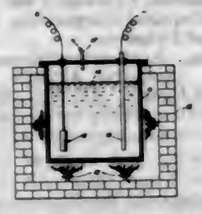
ELECTROLYTIC METHOD FOR REFINING TITANIUM METAL

Frank J. Schultz, Fords, and Thomas M. Buck, Plainfield, N. J., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey

Application October 18, 1951, Serial No. 251,902
3 Claims. (Cl. 204—64)

1. Method for refining titanium metal which comprises passing electric current through an electrolytic cell having an anode and a cathode and a molten halide salt electrolyte, employing impure titanium metal as the anode in said cell, said electrolyte being composed of at least one compound selected from the group consisting of the halide salts of alkali metals, alkaline earth metals, and magnesium, said electrolyte further containing soluble titanium compounds selected from the group consisting of titanium dichloride and titanium trichloride in con-

centration from 0.1 to 5.0 molal, said soluble titanium compounds comprising at least 40% titanium dichloride, and maintaining during the passage of said current an



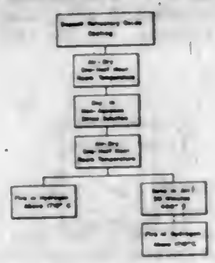
anode current density from 0.01 to 3.0 ampere per square centimeter, and a cathode current density in amperes per square centimeter ranging from 0.1 up to 5 times the numerical molality of the soluble titanium compounds.

2,734,857

PROCESS OF COATING A CATHODE-HEATER ELEMENT

Russell B. Snyder, Chicago, Ill., assignor to The Rauland Corporation, a corporation of Illinois

Application October 11, 1951, Serial No. 250,911
3 Claims. (Cl. 204—181)



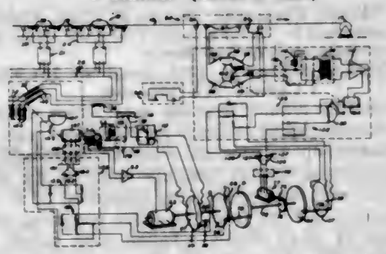
1. The process of forming an insulating coating on a cathode-heater element for an electron-discharge device which comprises the steps of: cataphoretically depositing on said heater element an electrically insulating refractory oxide coating; dipping said coated heater element in an alcohol solution of an organic silicate; and subsequently firing said coated heater element in a non-oxidizing atmosphere at a temperature above the fusing point of silica and below both the boiling point of silica and the boiling point of said refractory oxide.

2,734,858

ELECTROPLATING APPARATUS WITH CURRENT CONTROL MEANS

Robert J. Bachman, Towson, Md., Clay E. Lewis, Wyomissing, Pa., and Paul L. Mueller, Baltimore, and Guy E. Murray, Towson, Md., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York

Application September 30, 1952, Serial No. 312,326
2 Claims. (Cl. 204—211)



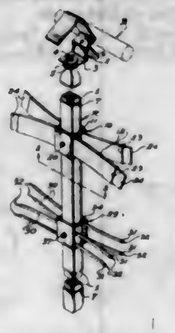
1. In electroplating apparatus wherein a filamentary conductive core is advanced continuously through an electroplating cell to produce a composite electroplated conductor, the improved electroplating control apparatus which comprises a source of E. M. F. having a variable voltage output for supplying plating current to the electroplating cell, resistance monitoring means for detecting variations from a predetermined magnitude in the resistances of successive increments of the finished composite electroplated conductor of a predetermined length, primary means responsive to said resistance monitoring means whenever such a resistance variation is detected for demanding a new value of plating current such as would tend to restore the resistance of the finished conductor to the predetermined magnitude and for changing the output voltage of said source by an amount substantially proportional to the demanded change in the plating current, and secondary means responsive to the primary means and the plating current for continuously comparing the instantaneous plating current supplied to the cell with the value of plating current demanded by the primary means and for changing the output voltage of the source by an amount substantially proportional to a detected variation therebetween so as to maintain the actual plating current substantially constant at whatever magnitude is demanded by the primary means.

2,734,859

PLATING RACK

Allen F. Reilly, Maple Heights, and Julius R. Stoklas, Jr., Cleveland, Ohio, assignors to Keco Plating Co., Cleveland, Ohio, a corporation of Ohio

Application September 26, 1952, Serial No. 311,724
6 Claims. (Cl. 204—297)



1. A rack for suspending articles to be electroplated in an electroplating bath comprising a current conducting rack bar adapted to be immersed in said bath and to make contact with an electric circuit external of the bath, the portion of said bar immersed in said bath being covered with a layer of corrosion resistant insulation, and means for supporting the articles to be plated at selected positions longitudinally on said bar, said means comprising a holder member surrounding said bar, a pair of independent detachable article supporting current conducting insulated arms disposed adjacent to and on opposite sides of said bar and within said holder member and each extending divergently outwardly from and transversely of said bar, the outer extremities of said arms being uninsulated for supporting and making electrical contact with the articles to be plated, each arm having a pointed contact pin connected thereto and projecting inwardly toward said bar from the part of each arm that lies adjacent said bar, screw means threaded into said holder and bearing against one of said arms opposite said pins, said screw means being adjustably threadable in said holder whereby to apply pressure against said arms to cause each contact pin to penetrate insulation on said bar and make electrical contact with said bar.

2,734,860

TREATMENT OF WELL-DRILLING FLUID

Delmar H. Larsen, West Hollywood, and George W. Cummer, Los Angeles, Calif., and Don S. Bolley, Brooklyn, N. Y., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application July 14, 1948, Serial No. 38,758
8 Claims. (Cl. 252—8.5)

1. In the art of drilling wells by the employment of an aqueous clay-laden well-drilling fluid which is subject to additions thereto of formation solids, fluid and salts during the course of drilling, the process comprising, pumping the drilling fluid into the bore-hole and back to the surface and adding to such a fluid during the course of drilling finely divided linseed hulls in amounts sufficient to deposit the same on the wall of the bore-hole so as to maintain a low water loss of at most 10 c. c. A. P. I.

2,734,861

COMPOSITION AND PROCESS FOR PLUGGING PERMEABLE FORMATIONS

Platho P. Scott, Jr., and Robert P. Murphy, Jr., Tulsa, Okla., assignors to Stanolind Oil and Gas Company, Tulsa, Okla., a corporation of Delaware

Application February 13, 1952, Serial No. 271,384
12 Claims. (Cl. 252—8.55)

1. In a composition for bridging fractures in a well the combination of a gelled hydrocarbon which serves as a carrying liquid and between about 200 and 300 pounds of a granular bridging material per barrel of said gelled hydrocarbon, said bridging material comprising a polycyclic aromatic hydrocarbon compound having a freezing point above about 100° F.

2,734,862

SYNTHETIC CASEIN FIBER ELASTIC GREASE

Arnold J. Morway, Rahway, N. J., and Robert P. Spray, Pittsburgh, Pa., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application December 3, 1952, Serial No. 323,928
5 Claims. (Cl. 252—14)

1. An elastic fiber lubricant composition comprising a major proportion by weight of a lubricating grease and a minor proportion by weight of a fibrous mass comprising a major proportion of a mildly elastic wool fiber and about 10 to 40% by weight of a highly elastic extruded monofilament curled casein fiber, which has strong resistance against matting at temperatures up to at least 200° F.

2,734,863

PHOSPHO-SULFURIZED HYDROCARBONS

Robert H. Jones, Irvington, N. Y., and Max W. Hill, Somerville, and Leonard E. Moody, Cranford, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application November 1, 1951, Serial No. 254,442
21 Claims. (Cl. 252—32.7)

12. A hydrocarbon oil composition containing a detergent quantity of a product selected from the class consisting of a phospho-sulfurized substantially non-olefinic hydrocarbon materials and the guanidino and reactive olefinic derivatives thereof, said materials containing at least 1.0 weight per cent of both phosphorus and sulfur in chemically combined form; which product has been contacted during at least one stage of the preparation thereof with a metal selected from the class consisting of iron and copper at elevated temperatures and for an extended period of time, adequate to produce a substantially odorless, non-corrosive product.

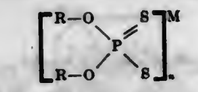
2,734,864

STABILIZED LUBRICATING COMPOSITIONS

James B. Peeso, Stamford, and Edwin O. Hook, New Canaan, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application May 31, 1952, Serial No. 291,656
8 Claims. (Cl. 252—32.7)

1. A hydrocarbon mineral lubricating oil composition comprising a hydrocarbon mineral lubricating oil and, as an antioxidant and anticorrosive agent having a tendency toward heat instability and the formation of sludge upon continued heating thereof at high temperatures, 0.1–3.0% by weight of a dialkyl dithiophosphate having the formula:



in which R is a member of the group consisting of alkyl radicals having from 5 to 30 carbon atoms; M is a polyvalent metal of the group consisting of calcium, strontium, barium, tin, zinc, magnesium, nickel, aluminum and cadmium; and *n* is the valence of M, said oil also containing, as a heat stabilizer for said dithiophosphate, 0.05–1% by weight of an oil soluble wool grease-phosphorus sulfide reaction product.

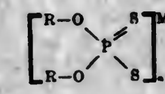
2,734,865

STABILIZED LUBRICATING COMPOSITIONS

James B. Peeso, Stamford, and Edwin O. Hook, New Canaan, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application June 24, 1952, Serial No. 295,346
15 Claims. (Cl. 252—32.7)

1. A hydrocarbon mineral lubricating oil composition comprising a hydrocarbon mineral lubricating oil and, as an antioxidant and anticorrosive agent having a tendency toward heat instability and the formation of sludge upon continued heating thereof at high temperatures, 0.1–3.0% by weight of a dithiophosphate having the formula:



in which R is an alkyl radical containing from 5 to 30 carbon atoms; M is a polyvalent metal from the group consisting of nickel, aluminum, cadmium, tin, zinc, magnesium, calcium, strontium and barium; and *n* is the valence of M said oil also containing as a heat stabilizer for said dithiophosphate 0.05–2% by weight of an oil soluble, neutralized reaction product of a phosphorus sulfide and a member of the group consisting of tall oil fatty acids—alcohol esters and tall oil fatty acid—alcohol mixtures.

2,734,866

STABILIZED LUBRICATING COMPOSITION

Edwin O. Hook, New Canaan, and James B. Peeso, Stamford, Conn., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

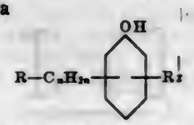
No Drawing. Application June 27, 1952, Serial No. 296,074
12 Claims. (Cl. 252—32.7)

1. A hydrocarbon mineral lubricating oil composition comprising hydrocarbon mineral lubricating oil and, as an anti-oxidant and anti-corrosive agent having a tendency toward heat instability and the formation of sludge upon continued heating thereof at high temperatures, 0.2–3.0% by weight of a terpene-phosphorus sulfide-sulfur reaction product and, as a heat stabilizer, 0.3–1.0% by weight of a neutralized phosphorus sulfide-oxygen reaction product

with a member of the group consisting of esters of alcohols and tall oil fatty acids and mixtures of alcohols and tall oil fatty acids.

2,734,867
ADDITIVE FOR LUBRICANTS
Jesse S. Weissberg, Elizabeth, N. J., and John R. Jones, Seattle, Wash., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application July 25, 1952, Serial No. 300,982
23 Claims. (Cl. 252—42.7)

9. As a new composition of matter, the product obtained by reacting a sulfur chloride with a compound having the formula



wherein R is a cyclohexenyl radical, R′ is an alkyl radical having in the range of 1 to 20 carbon atoms, *n* is an integer from 1 to 10, and *z* is 0 to 1, said reaction being carried out at a temperature in the range of 50° to 250° F. whereby a sulfide derivative of said compound is formed.

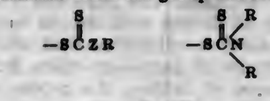
15. A lubricant composition comprising a major proportion of a lubricating oil and in the range of 0.01 to 10% by weight of the product defined by claim 9.

2,734,868
ROCK DRILL LUBRICANT CONTAINING A PHOSPHORUS ACID ESTER AND A SULFURIZED FATTY OIL
Gordon S. Bright, Port Arthur, and Russell W. Hall, Houston, Tex., assignors to The Texas Company, New York, N. Y., a corporation of Delaware
No Drawing. Application May 7, 1952, Serial No. 286,628
7 Claims. (Cl. 252—46.7)

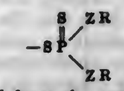
1. A pneumatic tool lubricant consisting essentially of a mineral lubricating oil having a viscosity in the range of from about 300 to 700 seconds Saybolt Universal at 100° F., containing about 0.2 to 3.0 per cent by weight of a phosphorus acid ester selected from the class of oil-soluble and oil-miscible di- and tri- alkyl, aryl and mixed alkyl-aryl phosphates and phosphites, about 0.2 to 5.0 per cent by weight of a non-corrosive sulfurized fatty oil containing at least about 4 per cent by weight of combined sulfur, about 0.1 to 1.0 per cent by weight of a phosphatide emulsifying agent selected from the class consisting of lecithin, cephalin and sphengomyelin, and about 0.1 to 3.0 per cent by weight of a high molecular weight polymeric stringiness agent selected from the class consisting of olefin polymers vinyl ether polymers and polyesters of substituted fatty acids, said stringiness agent having a Saybolt furol viscosity at 210° F. of about 1,000 to 2,000 seconds.

2,734,869
LUBRICATING OIL ADDITIVE
Leo V. Mullen, Jr., Clifton, and James M. Boyle, Bayonne, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application January 2, 1952, Serial No. 264,686
19 Claims. (Cl. 252—47.5)

1. A composition comprising a major proportion of a petroleum hydrocarbon product and a minor oxidation inhibiting quantity of product obtained by reacting a mono-carbonyl ketone containing at least one olefinic double bond, and having in the range of 4 to 30 carbon atoms, with a sulfur halide selected from the class consisting of sulfur chlorides and sulfur bromides, whereby an intermediate product containing added sulfur and halogen is formed, further reacting such intermediate product with a sulfur bearing compound of the formula GY wherein G is a radical selected from the group consisting of —SR,



and



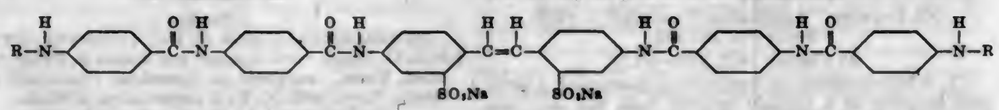
Y is a cation selected from the group consisting of alkali metals, alkaline earth metals and ammonium radicals, R is a hydrocarbon radical having in the range of 1 to about 20 carbon atoms, and Z is selected from the class consisting of oxygen and sulfur, by heating together at a temperature in the range of about 50° to 150° C. for a period of time sufficient to produce a final reaction product which, after separation of by-product cation halide, contains not more than about 1.5% by weight of halogen.

2,734,870
NON-SOAP SYNTHETIC DETERGENT BAR
Allen H. Lewis, Berkeley, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware
No Drawing. Application May 21, 1951, Serial No. 227,507
3 Claims. (Cl. 252—161)

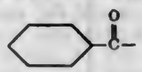
1. A firm, cohesive and macroscopically homogeneous detergent bar consisting essentially of 40 to 60 parts by weight of paraffin wax, 2 to 5 parts by weight of a fatty acid containing 10 to 20 carbon atoms per molecule and 60 to 40 parts by weight of a mixture of water-soluble alkyl aryl sulfonates, the alkyl groups being propylene polymers containing predominantly from 12 to 15 carbon atoms.

2,734,871
WHITE FLUORESCING MARKING INKS FOR TEXTILE IDENTIFICATION
Edward A. McCafferty, Cincinnati, Ohio, assignor to The National Marking Machine Company, Cincinnati, Ohio, a corporation of Ohio
No Drawing. Application January 30, 1952, Serial No. 269,119
3 Claims. (Cl. 252—301.2)

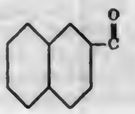
3. An ink for textile identification having a liquid carrying vehicle, of a viscosity and drying rate suitable for use in a marking device, and a normally invisible dyestuff compound dissolved in the liquid vehicle, said invisible dyestuff compound characterized by white fluorescence under ultraviolet light and consisting of an aromatic polyacyl derivative of diamino stilbene disulfonic acid having the general structural formula



where R is a member of the class consisting of



and



2,734,872
METHOD OF MAKING LUMINESCENT MATERIALS
Andrew H. Young, Scotia, N. Y., assignor to General Electric Company, a corporation of New York
No Drawing. Application October 14, 1952, Serial No. 314,749
5 Claims. (Cl. 252—301.6)

1. The method of producing a luminescent material which comprises preparing a mixture consisting of a compound selected from the group consisting of zinc oxide and cadmium oxide and an activator selected from the group consisting of manganese and silver, heating the mixture to a temperature between 500 deg. C. and 900 deg. C. for a period of time in excess of one-half hour, and contacting said mixture with a gas selected from the group consisting of hydrogen sulfide and hydrogen selenide during the temperature treatment.

2,734,873
PRODUCTION OF COPPER CONTAINING CATALYSTS
Laurence Roy Pittwell and Richard John Young, Norton-on-Tees, England, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain
No Drawing. Application May 12, 1952, Serial No. 287,418
Claims priority, application Great Britain June 6, 1951
9 Claims. (Cl. 252—454)

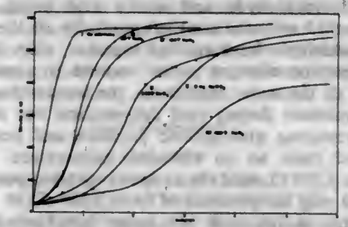
1. A process for the production of a copper-containing catalyst which comprises treating a copper-silicon alloy having a copper content of not less than about 50% by weight and not more than 87.5% by weight with water at elevated pressure and at a temperature in excess of 200° C. to lower the content of elemental silicon present in the alloy by a substantial amount and sufficient to produce an activated catalyst.

2,734,874
PREPARATION OF CATALYSTS OF VANADIUM OXIDE OR CHROMIUM OXIDE ON POROUS CARRIERS
Leonard C. Drake, Wenonah, and Robert L. Smith, Pitman, N. J., assignors to Socony Mobil Oil Company, Inc., a corporation of New York
No Drawing. Application May 21, 1952, Serial No. 289,206
10 Claims. (Cl. 252—461)

1. A method for preparing a catalyst, which comprises adsorbing on a porous carrier at a temperature ranging from ambient temperature up to about 1000° F., but below the decomposition temperature, a sufficient quantity of a metal acetylacetonate from a non-aqueous medium to furnish, upon subsequent decomposition thereof, a catalytically active amount of a metal oxide deposited on said carrier and thereafter heating the carrier with adsorbed metal acetylacetonate for a sufficient time and at a sufficient temperature to convert said adsorbed metal acetylacetone to a deposit of metal oxide on said carrier.

2,734,875
CATALASE INHIBITORS AS RETARDERS IN THE DECOMPOSITION OF HYDROGEN PEROXIDE WITH CATALASE
James F. Lenney, Douglaston, Sutton Redfern, New York, and Robert F. Light, Mount Vernon, N. Y., assignors to Standard Brands Incorporated, New York, N. Y., a corporation of Delaware
Application July 6, 1950, Serial No. 172,352
4 Claims. (Cl. 260—2.5)

1. A method of retarding the reaction of catalase with hydrogen peroxide which comprises incorporating an



alkali metal azide in a mixture comprising catalase and hydrogen peroxide of at least 1% strength.

2,734,876
ALKYD RESINS MODIFIED WITH SUBSTITUTED CARBOCYCLIC ACIDS, AND COMPOSITIONS CONTAINING THE SAME
Theodore F. Bradley, Orinda, Calif., assignor to Shell Development Company, San Francisco, Calif., a corporation of Delaware
No Drawing. Application May 2, 1950, Serial No. 159,656
4 Claims. (Cl. 260—16)

3. A modified alkyd resin comprising the resinous reaction product of a mixture comprising phthalic acid anhydride, glycerol and as a modifying agent 5% to 90% by weight of said resin of p-tertiary butylbenzoic acid.

2,734,877
ACCELERATION OF THE DIMETHYLOL PHENOL CURE OF BUTYL RUBBER BY MEANS OF POLYCHLOROPRENE
Harvey J. Batts and Theodore G. Delang, Indianapolis, Ind., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey
No Drawing. Application June 18, 1952, Serial No. 294,268
4 Claims. (Cl. 260—19)

1. In the method of vulcanizing a rubbery copolymer of an isoolefin having from 4 to 7 carbon atoms with from 0.5 to 10% of a conjugated diolefin having from 4 to 14 carbon atoms by heating the said rubbery copolymer in admixture with a resinous 2,6-dimethylol-4-hydrocarbon substituted phenol as the vulcanizing agent, the improvement which comprises the step of accelerating the said vulcanization by carrying out the said vulcanization in the presence of from 1 to 15 parts of rubbery polychloroprene, per 100 parts of said rubbery copolymer.

2,734,878
OIL-SOLUBLE PHENOLIC RESINS AND AIR-DRYING VARNISHES PREPARED THEREFROM
Sydney Robbins and Robert H. Runk, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
No Drawing. Application July 23, 1952, Serial No. 300,529
9 Claims. (Cl. 260—19)

1. An air-drying varnish comprising as the essential resinous ingredients thereof the product derived by heat-bodying at a temperature of from 220° C. to 250° C. for a period of not in excess of an hour a mixture of (*a*) from 10 to 30 gallons of a glyceride of an unsaturated drying oil fatty acid having at least two ethylenically unsaturated groups and (*b*) 100 pounds of a phenolic resin derived by heating in the presence of substantial amounts of water comprising at least 10% of the weight of the reaction mixture a mixture of phenols composed of from 7 to 20 mol per cent of diphenylolpropane, and from 93 to 80 mol per cent of butyl phenol, and from 1.65 to 2.10 mols of formaldehyde per mol of the phenols, and from ½% to 3%, based on the weight of

the phenols, of oxalic acid as a catalyst, the mixture of phenols, formaldehyde and oxalic acid being refluxed for at least 15 minutes until substantially all the phenols and formaldehyde have reacted together, then dehydrating the reaction mixture under vacuum to remove substantially all the water therefrom, the temperature of the reaction mixture during said dehydration not exceeding 80° C., restoring atmospheric pressure and heating the dehydrated resin to an elevated temperature of from 140° C. to 170° C. until the resinous reaction product has a ball and ring temperature of from 135° C. to 160° C., the mixture of (*a*) and (*b*) being heat-bodied until a 50% solution in xylene has a viscosity of from J to L on the Gardner-Holdt scale, films of the heat-bodied varnish air drying in the order of one hour at room temperature.

2,734,879

WOOD FINISHING COMPOSITION AND METHOD OF MAKING

Frank H. Lyons, Memphis, Tenn., assignor to E. L. Bruce Company, Memphis, Tenn., a corporation of Delaware

No Drawing. Application April 29, 1952, Serial No. 285,060

5 Claims. (Cl. 260—22)

1. A penetrating seal finish having a resin comprising the reaction product of drying oil fatty acids in an amount from about 30 to 50% by weight of the resin, and containing not in excess of 16% saturated fatty acids and not in excess of 40% oleic acid, a pentaerythritol ester of rosin having an acid number of less than 20 and being in an amount from about 18 to 35% by weight of the resin, pentaerythritol in an amount from about 10 to 15% by weight of the resin, dilinoleic acid in an amount from about 5 to 15% by weight of the resin, a major portion of all said ingredients reacted to completion and further reacted to substantial completion with phthalic anhydride in an amount from about 11 to 20% by weight of the resin, said resin having an acid number within the range of about 20 to 85 and a solvent, the penetrating seal finish having a viscosity of about A1 to A3 Gardner scale.

2,734,880

COPOLYMER OF VINYL AROMATIC HYDROCARBON, DEHYDRATED CASTOR OIL ALKYD AND OIL ALKYD MADE FROM OILS HAVING ISOLATED DOUBLE BOND

Heinz Ebring, Krefeld, and Karl Raichle, Krefeld-Uerdingen, Germany, assignors to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany

No Drawing. Application June 4, 1952, Serial No. 291,798

Claims priority, application Germany June 29, 1951

16 Claims. (Cl. 260—22)

1. The process which comprises interpolymerising a monomeric aromatic mono vinyl hydrocarbon with a mixture of alkyd resin comprising the acid radical of dehydrated castor oil and alkyd resin comprising the acid radical of an unsaturated fatty acid with isolated double bonds, in the presence of an inert solvent.

2,734,881

STABILIZED CHLORINE CONTAINING RESINS

Robert E. Lally, Bedford, and Raymond J. O'Hara, Maple Heights, Ohio, assignors to Ferro Corporation, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application September 18, 1951, Serial No. 247,192

4 Claims. (Cl. 260—23)

1. A composition of matter comprising a chlorine containing vinyl resin and from about 0.5% to about 8.0% by weight, based on said resin, of a stabilizer, said stabilizer comprising an admixture of from about 1 to about 5 parts of an epoxy compound having a boiling point not less than 212° F. and from about 1 to about 5 parts of a compound selected from the class consisting of aliphatic polyhydric alcohols having at least two and not more than nine hydroxyl groups and a boiling point not less than 250° F., esters of aliphatic polyhydric alcohols said esters having at least two and not more than nine hydroxyl groups and a boiling point not less than 250° F., and ethers of aliphatic polyhydric alcohols said ethers having at least two and not more than nine hydroxyl groups and a boiling point not less than 250° F.

2,734,882

AGENT FOR CORROSION-PROOFING AND PROCESS FOR PREPARING THE SAME

Werner Kirsch, Remscheid, Germany, assignor to Chemieprodukte G. m. b. H., Leverkusen-Rheindorf, Germany

No Drawing. Application February 9, 1952, Serial No. 270,897

3 Claims. (Cl. 260—28.5)

1. A method for producing a water impermeable corrosion-proofing and sealing composition of high elasticity and considerable plasticity from bituminous materials and high polymers, which comprises copolymerizing a material selected from the group consisting of tar, pitch, and mixtures thereof with from about 5 to 25 percent by weight thereof of a polymer selected from the group consisting of chlorinated rubber, polystyrene, and polyvinylchloride by heating the mixture at temperatures between about 140° C. and about 180° C. in the presence of a metal redox catalyst, and passing a stream of air therethrough.

2,734,883

PROCESS FOR PRODUCING BUTADIENE, STYRENE LATICES OF IMPROVED STABILITY

Stephen T. Bowell, Ian C. Rush, and William Harold Watson, Sarnia, Ontario, Canada, assignors to Polymer Corporation, Limited, Sarnia, Ontario, Canada, a corporation of Canada

No Drawing. Application April 24, 1952, Serial No. 284,264

Claims priority, application Canada December 1, 1951

6 Claims. (Cl. 260—29.7)

1. A process for making synthetic rubber latices by the emulsion polymerization of butadiene 1,3 and styrene in which the butadiene 1, 3 and the styrene are polymerized in the presence of rosin soap as a saponifiable emulsifier and a persulfate catalyst which on decomposition yields sulphuric acid, and in which alkaline material is added during the polymerization reaction to maintain the pH of the reaction mixture above the equivalence point of the rosin soap, namely, a pH of about 9.7.

2,734,884

ALKYL ESTERS AND PLASTIC COMPOSITIONS COMPRISING SAME

Paul V. Smith, Jr., and David W. Young, Westfield, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application April 1, 1952, Serial No. 279,915

7 Claims. (Cl. 260—31.8)

1. A composition of matter comprising 100 parts of a resinous polymer of vinyl chloride, 30 to 60 parts of a neutral ester of an acid chosen from the group consisting of phthalic acid, sebacic acid, azelaic acid and diglycolic acid esterified with a mixture of branched chain primary aliphatic alcohols obtained by hydrogenating the product obtained by reacting a mixture of C—9 olefins with carbon monoxide and hydrogen at a temperature of 250 and 400° F., and pressures between 150 and 400 atmospheres consisting essentially of a mixture of isomeric alcohols having the formula $CH_2OHCR_1HCR_2R_3H$ and $CR_1H_2CR_2R_3CH_2OH$ wherein R_1, R_2, and R_3 are alkyl radicals and have from 1 to 5 carbon atoms and $R_1+R_2+R_3$ contain a total of 7 carbon atoms.

2,734,885

RUBBER TREATMENT

Kenneth W. Doak, Bloomfield, N. J., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application August 31, 1954, Serial No. 453,441

10 Claims. (Cl. 260—41.5)

1. A process which comprises mixing rubber selected from the group consisting of natural rubber, synthetic rubbery homopolymers of aliphatic conjugated diolefin hydrocarbons, and synthetic rubbery copolymers of said diolefin hydrocarbons with copolymerizable monoolefinic compounds with a relatively large amount of rubber-reinforcing carbon black and from 1 to 5 parts, per 100 parts of said rubber, of a malonyl compound having two atoms of halogen selected from the group consisting of chlorine and bromine on the aliphatic carbon atom adjacent to the two carbonyl groups, heating the mixture at a temperature of at least 275° F. but below that at which the rubber would be harmed, masticating the mixture and completing incorporation of vulcanizing and other desired ingredients, shaping the mass, and vulcanizing the resulting shaped mass.

2,734,886

RUBBER TREATMENT

Kenneth W. Doak, Bloomfield, N. J., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application August 31, 1954, Serial No. 453,443

8 Claims. (Cl. 260—41.5)

1. A process which comprises mixing a sulfur-vulcanizable conjugated diolefin polymer rubber containing at least 25% of combined aliphatic conjugated diolefin hydrocarbon with a relatively large amount of a rubber-reinforcing carbon black and a relatively small amount of a solely aliphatic azo compound having bonded to each nitrogen of the azo group a discrete aliphatic carbon atom which has bonded to it a cyano group, an alkyl group with 1–5 carbon atoms, and a substituent selected from the group consisting of hydrogen, methyl, and ethyl, heating the mixture at a temperature of from 275° F. to a point just short of that at which the rubber would be harmed by thermal decomposition, for a time sufficient to substantially lower the torsional hysteresis and substantially increase the electrical resistivity of a vulcanizate of the resulting mixture, masticating the mixture and completing the incorporation of vulcanizing and other desired ingredients, shaping the mass, and vulacnizing the resulting shaped mass.

2,734,887

RUBBER TREATMENT

Kenneth W. Doak, Bloomfield, and Robert A. Gregg, Passaic, N. J., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application August 31, 1954, Serial No. 453,444

6 Claims. (Cl. 260—41.5)

1. A process which comprises mixing rubber selected from the group consisting of Hevea rubber, synthetic rubbery homopolymers of aliphatic conjugated diolefin hydrocarbons and synthetic rubbery copolymers of such hydrocarbons with other ethylenically unsaturated copolymerizable monomeric compounds with a relatively large amount of a rubber-reinforcing carbon black and at least 0.75 part of carbon tetrabromide per 100 parts of said rubber, heating the mixture at a temperature of at least 275° F. but insufficiently elevated to substantially injure the properties of the rubber, masticating the mixture and incorporating vulcanizing and other desired ingredients, shaping the mixture, and vulcanizing the shaped mixture.

2,734,888

DYE RECEPTIVE ACRYLONITRILE POLYMERIZATION PRODUCTS

Gaetano F. D'Alelio, Pittsburgh, Pa., assignor to Koppers Company, Inc., a corporation of Delaware

No Drawing. Application August 31, 1951, Serial No. 244,688

30 Claims. (Cl. 260—45.5)

1. A process for preparing acrylonitrile polymeric compositions having affinity for acid dyes which comprises preparing a polymeric composition containing in polymer form a plurality of units of the formula



and a plurality of polymer units derived from a polymerizable ethylenic acid selected from the class consisting of acrylic, methacrylic, beta-cyanoacrylic, maleic, fumaric, citraconic, mesaconic, and itaconic acids and the inner acid anhydride of maleic, citraconic, and itaconic acids, and reacting at least some of the acid groups of the polymerized ethylenic acid with a monomeric nitrogen compound selected from the class consisting of amino and hydroxy pyridines, amino and hydroxy pyrimidines, amino and hydroxy N,N-dialkyl anilines, and diamino-1,2,4-triazoles, whereby said compound becomes attached to the polymeric ethylenic acid through a linkage of the class consisting of amide and ester linkages.

2,734,889

PROCESS FOR THE POLYMERIZATION OF FORMALDEHYDE EMPLOYING METAL CARBONYL INITIATORS

Frank Clyde Starr, Jr., Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application April 16, 1954, Serial No. 423,844

5 Claims. (Cl. 260—67)

1. A process for polymerizing formaldehyde comprising contacting substantially anhydrous monomeric formaldehyde with a catalytic amount of a polymerization initiator which is a carbonyl of a metal from Group VIII of the Periodic Table, and recovering a high molecular weight addition polymer of formaldehyde.

2,734,890

UREIDOALKYL VINYL ETHERS

Newman M. Bortnick, Oreland, and Sidney Melamed, Philadelphia, Pa., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application April 10, 1953, Serial No. 348,103

20 Claims. (Cl. 260—77.5)

1. A compound of the formula

$$CH_2{=}CHOAN(R)CONH_2$$

wherein A is an alkylene group of two to eighteen carbon atoms, at least two thereof occurring between oxygen and nitrogen, and R is a member of the class consisting of hydrogen and monovalent hydrocarbon groups which contain not over eighteen carbon atoms.

2,734,891
UNSATURATED UREIDO ETHERS AND POLYMERS THEREOF
Sidney Melamed, Philadelphia, Pa., assignor to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware
No Drawing. Application September 7, 1954, Serial No. 454,595
18 Claims. (Cl. 260—77.5)

1. A composition of matter comprising a compound selected from the group consisting of:

$CH_2{:}CHO—A—NRCONHR'$
$CH_2{:}CHO—A—NR^2CONR'R^3$
$CH_2{:}CHO—Y—C(R^4)(R^5)NHCONR'R^3$

and

$CH_2{:}CHO—Z—NHCONR'R^3$

wherein A is selected from the group consisting of the cyclohexylene group and alkylene groups of 2 to 18 carbon atoms, of which a chain of at least two is connected between the adjoining nitrogen and oxygen atoms, R is selected from the group consisting of hydrogen and a monovalent hydrocarbon group of 1 to 18 carbon atoms, R' is selected from the group consisting of aliphatic and cycloaliphatic hydrocarbon groups of 1 to 24 carbon atoms, R^2 is a monovalent hydrocarbon group of 1 to 18 carbon atoms, R^3 is selected from the group consisting of aliphatic and cycloaliphatic hydrocarbon groups of 1 to 24 carbon atoms, Y is an alkylene group of 1 to 2 carbon atoms, R^4 is an alkyl group of 1 to 4 carbon atoms, R^5 is an alkyl group of 1 to 4 carbon atoms, and Z is selected from the group consisting of the cyclohexylene group and alkylene groups of 4 to 18 carbon atoms of which a chain of at least 4 is connected between the adjoining nitrogen and oxygen atoms.

2,734,892
REMOVAL OF $AlCl_3$ CATALYST FROM FRIEDEL-CRAFTS REACTION MASSES
Richard Pence Carter, Beverly, N. J., assignor to Hercules Powder Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application September 10, 1952, Serial No. 308,947
12 Claims. (Cl. 260—93.3)

1. A process for the removal of $AlCl_3$ catalyst from a reaction mass produced by an $AlCl_3$-catalyzed Friedel-Crafts polymerization reaction wherein all of the organic reactants are selected from the group consisting of ethylenically unsaturated hydrocarbons and halogenated hydrocarbons which comprises adding to said reaction mass an alkaline material selected from the group consisting of CaO, $Ca(OH)_2$, MgO and $Mg(OH)_2$, and a liquid consisting of water; agitating the resulting mixture; and removing the resulting precipitate, said alkaline material being employed in an amount of at least 1.5 mole per mole of $AlCl_3$ present and said water being employed in excess of the amount of water necessary to hydrate any oxide employed as alkaline material, said excess being in an amount of from about 0.75 to 15 moles of water per mole of $AlCl_3$ present.

2,734,893
SAPONIFICATION OF "POPCORN" POLYMERS
Norman M. Wiederhorn and Theresa L. MacDonald, Beverly, and Wilson M. Kleibacker, Salem, Mass., assignors to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
No Drawing. Application October 20, 1951, Serial No. 252,396
3 Claims. (Cl. 260—93.5)

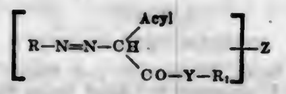
1. A process for the manufacture of long chain polymers which comprises disposing a body of "pop-corn" structure-forming polymerizable monomer selected from the group consisting of styrene, orthochloro styrene, alpha vinyl naphthylene, butadiene, isoprene, methyl methacrylate, ethyl methacrylate, n-propyl methacrylate, n-butyl methacrylate, n-octyl methacrylate and lauryl methacrylate and mixtures of these in contact with from 0.5% to 10% based on the weight of the monomer of an insoluble oxidized drying oil catalyst, said drying oil being the ester of glycerin with three molecules of a multiply unsaturated fatty acid having a plurality of peroxidic radical-forming polymerization-inducing groups, maintaining said monomer in contact with said catalyst at temperatures not higher than 150° C. and in the absence of soluble catalyst to form an insoluble pop-corn polymer comprising linear chains joined to said catalyst, separating said insoluble polymer from the reaction mixture and saponifying said catalyst to separate said linear chains.

2,734,894
CURING 2,4-DIMETHYLSTYRENE POLYMERS WITH TERTIARY BUTYL PEROXIDES
Mervyn Francis Vaughan, Cheam, England, assignor to The Distillers Company Limited, Edinburgh, Scotland, a British company
No Drawing. Application June 12, 1952, Serial No. 293,205
Claims priority, application Great Britain July 3, 1951
13 Claims. (Cl. 260—93.5)

1. A process for the curing of polymerisation products of 2:4-dimethylstyrene, which comprises incorporating in a polymer of 2:4-dimethylstyrene, 0.1 to 5% by weight, on the weight of the polymer, of a peroxide compound of the formula $C(CH_3)_3—O—O—R$, wherein R is selected from the group consisting of alkyl, hydroxy-alkyl, acyl, aralkyl, cyclo-alkyl and alkenyl radicals, and thereafter heating the mixture at a temperature in the range of from 120° to 180° C. until an insoluble and infusible 2:4-dimethylstyrene polymer is obtained.

2,734,895
COBALTIFEROUS AZO-DYESTUFFS
Christian Zickendraht, Binningen, and Arthur Buehler, Rheinfelden, Switzerland, assignors to Ciba Limited, Basel, Switzerland, a Swiss firm
No Drawing. Application August 4, 1952, Serial No. 302,612
Claims priority, application Switzerland August 14, 1951
15 Claims. (Cl. 260—149)

1. A complex cobalt compound containing two monoazo dyestuffs so bound in complex union with a cobalt atom that the proportion of the number of cobalt atoms bound in complex union to the number of monoazo dyestuff molecules is smaller than 1:1, in which complex compound both monoazo dyestuffs present are o:o'-dihydroxy-monoazo dyestuffs free from sulfonic acid and carboxylic acid groups and at least one of them corresponds to the formula



wherein R represents a benzene radical containing a hydroxyl group in ortho position relatively to the azo-linkage, Y represents a member selected from the group consisting of an oxygen atom, an —NH-group and an —N-alkyl-group, R_1 represents a member selected from the group consisting of an aliphatic, an alicyclic and an aromatic radical, and Z represents an aromatically bound sulfonic acid amide group attached to one of the radicals R and R_1, and, when Z represents an $—SO_2NH_2$-group, the dyestuff molecule containing in one of its aromatic radicals a member selected from the group consisting of fluorine, chlorine, lower alkyl and lower alkoxy.

2,734,896
METHOD OF EXTRACTING VITAMIN P FROM CITRUS MOLASSES
Boris T. Sokoloff, Lakeland, Fla.
No Drawing. Application October 29, 1952, Serial No. 317,579
3 Claims. (Cl. 260—210)

3. A method for isolating and recovering each of the three factors of the vitamin P complex contained in citrus molasses, which method comprises adding to and mixing with the molasses a quantity of an absorbent clay, reducing the moisture of the resulting mixture to obtain a substantially dry residue, treating said residue with benzol to extract substantially all the quercitrin-like substance contained in the original molasses, re-drying said residue, treating the re-dried residue with acetone to extract substantially all the hesperidin-like substance contained in the original molasses, again re-drying the residue, and treating the latter with isopropyl alcohol solvent to extract substantially all the eriodictyol-like substance contained in the original molasses.

2,734,897
Δ^7-7-ACYLOXY-9,11-EPOXY-STEROIDS AND PROCESSES OF PREPARING THEM
John M. Chemerda, Metuchen, N. J., assignor to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey
No Drawing. Application August 2, 1951, Serial No. 240,052
17 Claims. (Cl. 260—239.55)

17. Δ^7 - 7 - alkanoyloxy - cyclopentanopolyhydrophenanthrene compounds selected from the group which consists of $\Delta^{7,9(11),22}$-3,7-di(lower alkanoyloxy)-ergostatriene, $\Delta^{7,9(11)}$-7-(lower alkanoyloxy)-bisdehydrotigogenin lower alkanoate, $\Delta^{7,22}$-3-7-di(lower alkanoyloxy)-9,11-epoxy-ergostadiene, Δ^7-7-(lower alkanoyloxy)-9,11-epoxy-dehydrotigogenin lower alkanoate and lower alkyl Δ^7-3,-7-di(lower alkanoyloxy)-9,11-epoxy-cholenate.

2,734,898
PRODUCTION OF HECOGENIN FROM PLANT MATERIAL
Robert Kenneth Callow, Philip Calvert Spensley, and John Warcup Cornforth, London, England, assignors to The National Research Development Corporation, London, England
No Drawing. Application March 24, 1952, Serial No. 278,317
Claims priority, application Great Britain April 2, 1951
6 Claims. (Cl. 260—239.55)

1. A process for the extraction of hecogenin from plant material containing a substance from which hecogenin may be liberated by hydrolysis, which comprises saponifying the total water-insoluble solids recovered from the acid hydrolysis of an alcoholic extract of such plant material by heating with caustic alkali in alcoholic solution, removing a substantial proportion of the alcohol in the reaction mixture by subjecting the latter to steam distillation, and recovering hecogenin from the resultant aqueous suspension by adsorption on activated charcoal, drying said activated charcoal and extracting hecogenin therefrom by means of a solvent.

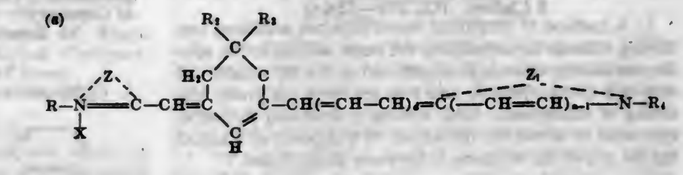
2,734,899
MANUFACTURE OF BROMINATED STEROID COMPOUNDS
Thomas Leigh, Blackley, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain
No Drawing. Application September 10, 1953, Serial No. 379,471
Claims priority, application Great Britain September 19, 1952
8 Claims. (Cl. 260—239.55)

1. A process for the manufacture of α-bromoketones of the steroid series which comprises brominating a keto-steroid selected from the group consisting of methyl 3(α)-acetoxy-12-ketocholanate, hecogenin acetate, 3(α)-acetoxy-17(α)-hydroxy-11:20-diketopregnane and cholestan-3-one with dioxan perbromide.

2,734,900
SENSITIZING DYES AND METHOD OF PREPARATION
Donald W. Heseltine, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
No Drawing. Application December 28, 1953, Serial No. 400,810
14 Claims. (Cl. 260—240.5)

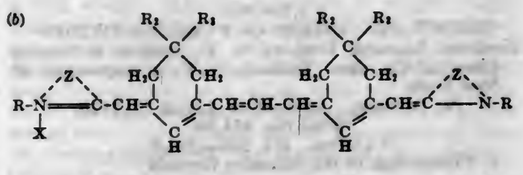
1. A polymethine dye selected from the group consisting of those represented by the following general formulas:

(a)



and

(b)



wherein R and R_4 each represent an alkyl group containing from 1 to 4 carbon atoms, R_2 represents a member selected from the group consisting of a hydrogen atom and a methyl group, R_3 represents a member selected from the group consisting of a hydrogen atom, an alkyl group containing from 1 to 4 carbon atoms, and a mononuclear aromatic group to the benzene series, X represents an acid radical, *d* represents a positive integer of from 1 to 3, Z represents the nonmetallic atoms necessary to complete a heterocyclic nucleus selected from the group consisting of those of the thiazole series, those of the benzothiazole series, those of the naphthothiazole series, those of the benzoxazole series, those of the napthoxazole series, those of the benzoselenazole series, those of the naphthoselenazole series, and those of the thiazoline series, Z_1 represents the nonmetallic atoms necessary to complete a heterocyclic nucleus containing from 5 to 6 atoms in the heterocyclic ring, *n* represents one when Z_1 represents the nonmetallic atoms necessary to complete a heterocyclic nucleus containing 5 atoms in the heterocyclic ring and *n* represents two when Z_1 represents the nonmetallic atoms necessary to complete a heterocyclic nucleus containing 6 atoms in the heterocyclic ring.

2,734,901
PROCESS OF PREPARING INDOLIUM STYRYL DYES
Clarence F. Belcher, Bridgeton, N. J., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application February 5, 1954, Serial No. 408,589
9 Claims. (Cl. 260—240.9)

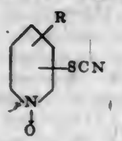
1. In the process of preparing cationic dyes of the 2-(N-dialkylamino)styryl-1,3,3 - trimethyl - 3H - pseudoindolium type by condensing 2-methylene-1,3,3-trimethylindoline and p-N-dialkylaminobenzaldehydes, the improvement which comprises condensing the reactants in an aqueous organic solvent selected from the class consisting of water-soluble lower aliphatic monohydric alcohols, lower aliphatic ketones and lower aliphatic ethers, said solvent containing from 5% to 40% by weight of water based on the weight of the said organic solvent, the said condensation being carried out in the presence of at least 1 molar proportion of phosphoric acid per mol of 2-methylene-1,3,3-trimethylindoline; and crystallizing the relatively pure dye from the said aqueous solvent.

2,734,902
STABLE AQUEOUS SOLUTION OF VITAMIN B_1 AND METHOD FOR PREPARING THE SAME
Leendert Mariaus Kuijvenhoven and Cornelis Westerterp, Oist, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
No Drawing. Application February 17, 1953, Serial No. 337,426
Claims priority, application Netherlands Apr. 29, 1952
8 Claims. (Cl. 260—256.6)

1. A method of preparing stable aqueous solutions containing vitamin B_1 comprising the steps, adding to the solution containing vitamin B_1 about 0.05 to 5% by weight/volume of a thio-carboxylic acid selected from the group consisting of thioglycolic acid, thiomalic acid and thio-dibutyric acid to retard the formation of a deposit, and adjusting the pH of the solution to between about 2 and 7.

2,734,903
THIOCYANIC ESTERS OF PYRIDINE OXIDES
Frederick Leonard, Yonkers, N. Y., assignor to Nepera Chemical Co., Inc., Yonkers, N. Y., a corporation of New York
No Drawing. Application August 23, 1954, Serial No. 451,699
9 Claims. (Cl. 260—294.8)

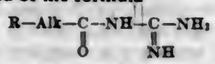
1. Compounds of the following formula:



wherein R is a member of the group consisting of hydrogen, nitro, amino, lower acylamino and lower alkylamino groups.

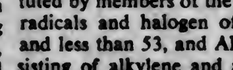
2,734,904
ACYL GUANIDINES AND PROCESSES FOR THE MANUFACTURE THEREOF
Robert R. Burtner, Skokie, Ill., assignor to G. D. Searle & Co., Chicago, Ill., a corporation of Illinois
No Drawing. Application April 6, 1954, Serial No. 421,425
14 Claims. (Cl. 260—295)

1. A compound of the formula

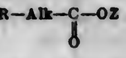


wherein R is selected from the group consisting of furyl, pyridyl, and thienyl radicals, and phenyl radicals substituted by members of the group consisting of lower alkoxyl radicals and halogen of atomic number greater than 9 and less than 53; and Alk is selected from the group consisting of alkylene and alkenylene radicals containing at least 2 and less than 4 carbon atoms.

9. In a process for preparation of compounds of the formula



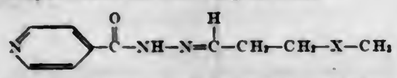
wherein R is selected from the group consisting of furyl, pyridyl, and thienyl radicals, and phenyl radicals substituted by members of the group consisting of lower alkoxyl radicals and halogen of atomic number greater than 9 and less than 53, and Alk is selected from the group consisting of alkylene and alkenylene radicals containing at least two and less than four carbon atoms, the step which comprises reacting guanidine with an ester of the formula



wherein R and Alk have the meanings hereinbefore assigned and Z is a lower alkyl radical, reaction temperatures being between 50° and 150° centigrade.

2,734,905
DERIVATIVES OF PYRIDINE-4-CARBOXYLIC ACID HYDRAZIDE AND METHODS OF MANUFACTURING THE SAME
Otto Zima, Darmstadt-Eberstadt, and Fritz von Werder, Darmstadt, Germany, assignors to E. Merck Aktiengesellschaft, Darmstadt, West Germany, a corporation of Germany
No Drawing. Application July 26, 1954, Serial No. 445,943
7 Claims. (Cl. 260—295)

1. Compounds of the following formula:



wherein X is a member of the group consisting of >S and >SO.

2,734,906
ETHYLENE OXIDE PRODUCTION
Leland J. Beckham, Bermuda District, Va., assignor to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York
No Drawing. Application November 5, 1951, Serial No. 254,980
5 Claims. (Cl. 260—348.5)

1. In a process for producing ethylene oxide involving passing a gas mixture containing ethylene and oxygen in contact with a silver catalyst to promote the reaction between ethylene and oxygen to produce ethylene oxide, the improvement which comprises adding to the gas mixture containing reactants a chlorinated polyphenyl compound boiling within the range of 435° C. to 450° C. in an amount of less than 10 parts per million of the gas mixture.

2,734,907
PROCESS FOR THE PRODUCTION OF Δ^4-3-KETO-PREGNENES
Robert H. Levin, Kalamazoo Township, Kalamazoo County, and Barney J. Magerlein and A Vern McIntosh, Jr., Kalamazoo, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan
No Drawing. Application October 27, 1952, Serial No. 317,156
14 Claims. (Cl. 260—397.45)

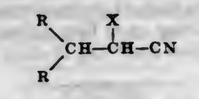
1. A process for the production of a Δ^4-3-ketosteroid having a pregnane carbon skeleton which comprises reacting a 4-halo-3-cyclic ketal steroid having a pregnane carbon skeleton wherein the halogen is selected from the group consisting of chlorine and bromine with a nitrogen carbonyl reagent selected from the group consisting of semicarbazide, hydrazine, phenylhydrazine, 2,4-dinitrophenylhydrazine, and hydroxylamine, in the presence of water and acid, and thereafter reacting the unsaturated ketonic nitrogen derivative thus-formed, in the presence of water, with a carbonyl compound selected from the group consisting of pyruvic acid, benzaldehyde and hydroxybenzaldehydes, to produce the corresponding Δ^4-3-ketosteroid.

2,734,908
METHOD OF PRODUCING ARALKYL CYANIDES
Ferdinand Dengel, Mannheim, Germany, assignor to Knoll A. G. Chemische Fabriken, Ludwigshafen am Rhine, Germany
No Drawing. Application March 22, 1951, Serial No. 217,070
Claims priority, application Germany March 30, 1950
9 Claims. (Cl. 260—465)

1. In a process of producing aralkyl cyanides, the step comprising reacting an aralkyl compound substituted in the aliphatic side chain by halogen, with alkali cyanide in the presence of substantially less than the equimolecular amount of a soluble metal halogenide selected from the group consisting of a metal iodide and a metal bromide, said aralkyl compound being dissolved in a substantially water-free organic solvent having dissolving power for said alkali cyanide.

2,734,909
OXIDATION OF CYANOALKANES TO CYANOALKENES WITH MOLECULAR OXYGEN
Robert E. Gee, Jr., and Hugh J. Hagemeyer, Jr., Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
No Drawing. Application February 28, 1952, Serial No. 274,065
3 Claims. (Cl. 260—465.9)

1. In the preparation of an α,β-unsaturated nitrile by vapor phase oxidation of a corresponding saturated nitrile of the formula



(X being selected from the group consisting of hydrogen and the methyl radical, and R and R' being selected from the group consisting of hydrogen, lower alkyl, and phenyl radicals) by means of molecular oxygen in the presence of a metallic catalyst selected from the group consisting of copper, gold, platinum, palladium, ruthenium, iridium and rhodium, said catalyst being at a temperature in the range of about 500° to 900° C., the improvement comprising the step of passing into contact with the catalyst simultaneously with the saturated nitrile feed about 0.01% to 1.5% based on the weight of the nitrile feed of ethylene dichloride.

2,734,910
MANUFACTURE OF PROPYL NITRATE
James B. Hinkamp, Birmingham, and Roy Sugimoto and Harry R. Dittmar, Royal Oak, Mich., assignors to Ethyl Corporation, New York, N. Y., a corporation of Delaware
No Drawing. Application August 2, 1952, Serial No. 302,426
1 Claim. (Cl. 260—467)

A process for the nitration of propyl alcohol comprising nitrating the propyl alcohol at a temperature between about —8° C. and 10° C. with a urea-free nitration mixture consisting essentially of nitric and sulfuric acids, the sulfuric acid in said mixture being at least about 50 per cent by weight, the water in said mixture being not more than 14 weight per cent, the amount of nitric acid in said mixture being at least equal to the stoichiometric requirement to substantially completely esterify said propyl alcohol, and the ratio by weight of water to sulfuric acid in the final esterification mixture being not more than 0.35 to 1.

2,734,911
REACTION OF CHLOROANILINE AND ISOPROPYL HALOFORMATE
Franklin Strain, Barberton, Ohio, assignor to Columbia-Southern Chemical Corporation, Allegheny County, Pa., a corporation of Delaware
No Drawing. Application August 7, 1952, Serial No. 303,167
7 Claims. (Cl. 260—471)

1. A method of preparing an isopropyl N-chlorophenyl carbamate by reaction of an isopropyl haloformate and a chloroaniline in the presence of a hydrogen halide acceptor which comprises establishing a liquid body containing the chloroaniline and simultaneously and individually adding the isopropyl haloformate and hydrogen halide acceptor to the liquid body under conditions conducive to the preparation of the carbamate.

2,734,912
CARBONYLATION OF AROMATIC HALIDES
Henry J. Leibu, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
No Drawing. Application September 7, 1951, Serial No. 245,645
5 Claims. (Cl. 260—475)

1. The method for carbonylation of an aryl halide having at least one halogen of the class consisting of chlorine and bromine attached directly to a benzene nucleus, said halogen being the sole substituent attached to the said benzene nucleus, which comprises carrying out the said carbonylation reaction at a temperature within the range of 200° C. to 450° C. under a pressure within the range of 200 to 1500 atmospheres in the presence of a solid catalyst consisting essentially of metallic nickel and a member of the class consisting of metallic copper and metallic chromium, and also in the presence of an alkoxy donor of the formula ROR' wherein R is an alkyl group having from 1 to 4 carbon atoms and R' is a member of the class consisting of hydrogen and alkyl groups having from 1 to 4 carbon atoms, and separating from the resulting mixture the ester produced by the carbonylation reaction.

2,734,913
PRODUCTION OF CARBOXYLIC ACID ESTERS BY CARBONYLATION WITH SALTS OF METAL CARBONYL HYDRIDE AND HALOGEN CATALYST
Walter Reppe, Ludwigshafen (Rhine), Nikolaus v. Kutepow, Karlsruhe-Rueppurr, and Eckart Titzenthaler, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany
No Drawing. Application August 27, 1952, Serial No. 306,728
Claims priority, application Germany September 14, 1951
9 Claims. (Cl. 260—488)

1. In the production of carboxylic acid esters by the interaction of aliphatic alcohols with carbon monoxide at elevated temperature and under superatmospheric pressure the step which comprises carrying out the reaction in the presence of a salt derived from a metal carbonyl hydride, selected from the class consisting of the silver, zinc, cadmium and mercury salts of cobalt and iron carbonyl hydrides, and a catalytic amount of halogen.

2,734,914

PRODUCTION OF TEREPHTHALIC AND ISOPHTHALIC ACIDS

Art C. McKinnis, Long Beach, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California

No Drawing. Application February 15, 1954, Serial No. 410,430

14 Claims. (Cl. 260—522)

1. A method for decarboxylating trimellitic acid to form isophthalic acid and terephthalic acid which comprises heating trimellitic acid at a temperature between about 150° and 400° C. in the presence of a substantially neutral reagent which is essentially water, and recovering the resulting isophthalic acid and terephthalic acid.

2,734,915

PRODUCTION OF ACRYLAMIDE AND ACRYLIC ACID

Giffin D. Jones, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application June 7, 1952, Serial No. 292,381

14 Claims. (Cl. 260—526)

1. A method which comprises contacting an aqueous solution of acrylamide and sulfuric acid with a cation exchange resin, whereby the acrylamide is absorbed by the resin leaving the sulfate radicals of the sulfuric acid in the surrounding liquid, separating the thus-treated resin from the surrounding aqueous sulfate solution, and washing the resin with water to extract and recover the acrylamide therefrom.

8. In a method wherein a mixture comprising acrylamide, acrylic acid, ammonium bisulfate and sulfuric acid is made by reacting water with acrylonitrile in the presence of sulfuric acid, the steps of bringing the water content of the mixture to a point such that the amounts of sulfuric acid and water in the mixture correspond to an aqueous sulfuric acid solution of not greater than 70 weight per cent concentration, feeding the solution to water-immersed bed of a cation exchange resin to displace water from the bed, thereafter feeding water to the bed to displace a further amount of liquid from the bed, and collecting successive fractions of the displaced effluent liquid, whereby there is obtained a fraction of the effluent liquid which contains a major portion of the sulfate radicals of the sulfuric acid and subsequent fractions of the effluent liquid which contain a major amount of the acrylic acid and a major amount of the acrylamide.

2,734,916

SEBACIC ACID PRODUCTION IN THE PRESENCE OF BARIUM COMPOUNDS

Don S. Bolley, Watchung, and Frank C. Naughton, North Bergen, N. J., assignors to The Baker Castor Oil Company, Jersey City, N. J., a corporation of New Jersey

No Drawing. Application March 10, 1954, Serial No. 415,426

19 Claims. (Cl. 260—531)

1. A process for the conversion of ricinoleic compounds into other organic compounds including a salt of sebacic acid, which comprises charging a ricinoleic compound and water to an enclosure containing a heated, fluid alkali metal hydroxide bath, said bath having, as a constituent, a barium compound in an amount of from about 0.5 to about 5.0 moles per mole of effective ricinoleic compound.

2,734,917

METHOD OF PREPARING ATROLACTAMIDE

August H. Homeyer, Webster Groves, George B. De La Mater, St. Johns, and Lawrence A. Patterson, Ferguson, Mo., assignors to Mallinckrodt Chemical Works, St. Louis, Mo., a corporation of Missouri

No Drawing. Application December 18, 1953, Serial No. 399,164

5 Claims. (Cl. 260—559)

1. In the method of preparing atrolactamide by reacting acetophenone and hydrogen cyanide and hydrolyzing the resulting cyanohydrin with hydrochloric acid, the improvement which comprises cooling the mixture of hydrogen cyanide and acetophenone in the presence of a basic catalyst to a temperature of less than approximately 0° C., and neutralizing the basic catalyst at that temperature by adding a mineral acid.

2,734,918

QUATERNARY SALTS OF CHLORPHENOXY METHYLAMINES

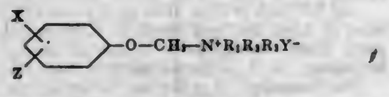
Harry James Barber, Gidea Park, and Maurice Berkeley Green, Hornchurch, England, assignors to May & Baker Limited, Dagenham, England, a company of Britain

No Drawing. Application September 5, 1952, Serial No. 308,158

Claims priority, application Great Britain May 25, 1949

2 Claims. (Cl. 260—567.6)

1. Quaternary salts of phenoxymethylamines of the general formula



where X represents at least one and at most two nuclear chlorine substituents and Z is selected from the class consisting of hydrogen and lower alkyl nuclear substituents, R_1 represents a member of the class consisting of alkyl groups having more than six carbon atoms, R_2 and R_3 are alkyl groups containing up to four carbon atoms and Y is selected from the class consisting of chlorine and bromine.

2,734,919

METHOD OF RESOLVING DL-THREO-1-(p-NITRO PHENYL)-2-AMINO PROPANE-1,3-DIOL

Gaston Amiard, Noisy-le-Sec, Robert Joly, Montmorency, and León Velluz, Paris, France, assignors to Les Laboratoires Francais de Chimiotherapie, Paris, France, a French body corporate

Application February 25, 1953, Serial No. 338,854

Claims priority, application France November 28, 1952

12 Claims. (Cl. 260—570.6)

1. In a method of resolving racemic DL-threo-1-(p-nitro phenyl)-2-amino propane-1,3-diol into its optically active components, the steps comprising dissolving the racemic base DL-threo-1-(p-nitro phenyl)-2-amino propane-1,3-diol at elevated temperature in water, the amount of said racemic base dissolved in said solution being sufficient to produce a saturated non-crystallizing solution at room temperature, adding to said solution and dissolving therein, while at a temperature between about 45° C. and about 80° C., one of the enantiomorphic components of said racemic base in an amount between about 2% by weight and about 12% by weight of said racemic base, cooling said solution to a temperature between about 15° C. and about 27° C., allowing the optically active component to crystallize, and removing the precipitated optically active threo-1-(p-nitro phenyl)-2-amino propane-1,3-diol from the mother liquor.

2,734,920

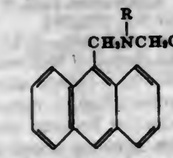
NEW CHEMICAL COMPOUNDS AND THEIR PREPARATION

William T. Hunter, Minneapolis, Minn., and Johannes S. Buck, Albany, N. Y., assignors to Sterling Drug Inc., New York, N. Y., a corporation of Delaware

No Drawing. Application December 14, 1954, Serial No. 475,280

17 Claims. (Cl. 260—570.9)

1. A compound selected from the group consisting of compounds having the formula



wherein X is selected from the class consisting of hydroxy, chlorine, bromine and iodine, and R is selected from the class consisting of hydrogen and lower-alkyl groups; and acid-addition salts thereof.

2,734,921

NICKEL-CATALYSED HYDROGENATION PROCESSES

Thomas Bewley, Epsom, and Basil Vivian Aller, Hull, England, assignors to The Distillers Company Limited, Edinburgh, Scotland, a British company

No Drawing. Application December 1, 1950, Serial No. 198,748

Claims priority, application Great Britain December 7, 1949

4 Claims. (Cl. 260—601)

1. A process for the catalytic hydrogenation of an organic compound selected from the group consisting of aldehydes and ketones and olefinically unsaturated hydrocarbons with hydrogen in the presence of a Raney nickel hydrogenation catalyst, the hydrogen employed containing from 0.001% to 5% by volume of carbon monoxide, wherein the hydrogenation is carried out at a temperature in the range of 20° C.–84° C. and the catalyst is intermittently reactivated during an interruption of the hydrogenation at a temperature of from 100° C.–180° C.

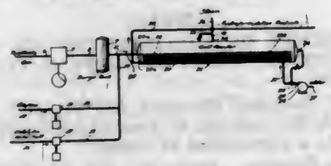
2,734,922

HYDROFORMYLATION OF OLEFINS

Bernard H. Gwynn, Tarentum, and Joel H. Hirsch, Oakmont, Pa., assignors to Gulf Research & Development Company, Pittsburgh, Pa., a corporation of Delaware

Application May 25, 1950, Serial No. 164,211

6 Claims. (Cl. 260—604)



1. A process for the hydroformylation of olefins which comprises passing a reaction mixture comprising hydrogen, carbon monoxide, and a composition consisting essentially of olefins having dissolved therein a catalytic metal salt at a hydroformylation pressure and at selected hydroformylation temperatures through an elongated reaction zone having an inner diameter of from one to 5 inches and an elongation factor of at least about 1,440 in indirect heat exchange relationship with a heat transfer medium under flow conditions such that the residence period is about 10 to about 30 minutes, the linear velocity is at least one foot per second, the Reynolds number is at least about 11,000, and the selected hydroformylation temperatures are within a range of about 20° F. throughout the reaction zone, whereby undesirable deposition of the catalytic metal in the elongated reaction zone is avoided, and a good yield of the desired hydroformylation product is obtained.

2,734,923

PREPARATION OF NAPHTHENIC ALCOHOLS

Charles A. Cohen, Roselle Park, and Louis A. Mikeska, Westfield, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application December 22, 1951, Serial No. 263,007

1 Claim. (Cl. 260—617)

An improved process for preparing a naphthenic alcohol product suitable as an intermediate in the production of highly efficient water-soluble primary naphthenic alcohol sulfate detergents which comprises chlorinating a naphthenic hydrocarbon fraction which is substantially free of olefins, normal paraffins and aromatics, and which has a molecular weight in the range of about 175 to 225, and a boiling range of about 200° to 320° C., dehydrochlorinating the thus chlorinated naphthenic hydrocarbon fraction to produce an olefinic naphthenic product, thereafter subjecting said olefin product to a reaction with carbon monoxide and hydrogen in the presence of a cobalt catalyst at a temperature between about 120° to 250° C., and a pressure of about 150 to about 400 atmospheres to produce an aldehyde product having one more carbon atom than said olefinic material, thereafter hydrogenating said aldehyde product to produce a primary alcohol product, said primary alcohol product comprising a mixture of naphthenic alcohols.

2,734,924

CYCLOALKYLATED BIS-PHENOL DERIVATIVES

Arthur Lambert, Blackley, Manchester, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application December 8, 1952, Serial No. 324,821

Claims priority, application Great Britain December 19, 1951

8 Claims. (Cl. 260—619)

1. Bis - (2 - hydroxy - 3 - α - alkylcycloalkyl - 5 - methylphenyl)-methanes in which the cycloalkyl group is a member of the class consisting of cyclopentyl, methylcyclopentyl, cyclohexyl and methylcyclohexyl and the alkyl substituent has not more than 4 carbon atoms and is attached to the α-carbon atom of the cycloalkyl group.

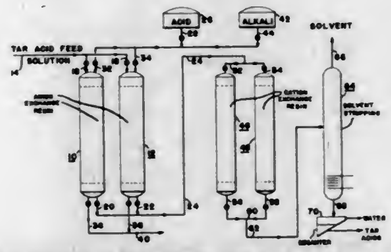
2,734,925

PURIFICATION OF LOW BOILING TAR ACIDS

Martin B. Neuworth, Pittsburgh, Pa., assignor to Pittsburgh Consolidation Coal Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application March 17, 1952, Serial No. 276,991

12 Claims. (Cl. 260—627)



1. The method of separating lower aliphatic carboxylic acids from low boiling tar acids which comprises passing a solution containing said aliphatic carboxylic acids and said low boiling tar acids in intimate contact with an anion exchange resin for a period longer than is

required for the resin to become substantially completely saturated with acids but not longer than is required for the resin to become completely saturated with said carboxylic acids, said resin deriving its exchange capacity essentially from strongly basic groups, and recovering the effluent solution containing tar acids substantially free of carboxylic acids.

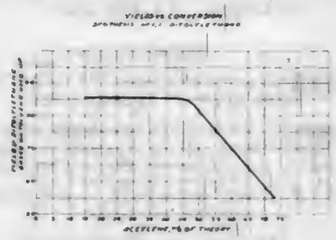
2,734,926
TREATMENT OF HALOGENATED INSULATING LIQUIDS
Edward L. Raab, Pittsfield, Mass., and Fred C. Gorsline, Piltmont, N. Y., assignors to General Electric Company, a corporation of New York
Application November 6, 1951, Serial No. 255,134
4 Claims. (Cl. 260—649)

1. The method of treating liquid halogenated aromatic hydrocarbon material containing a fixative in hydrolyzable combination with a minute amount of reactive halogen impurity greater than the acceptable maximum of about one hundred thousandth percent, which method consists in bringing such contaminated material into contact with substantially pure water, the contact with water including the step of conducting said halogenated hydrocarbon material through a damp filtering medium containing so small an amount of water that the said halogenated hydrocarbon material is not appreciably increased in water content by such filtration, and finally filtering said halogenated hydrocarbon material through a dehydrated sorbent filtering medium to remove substantially all of the water therefrom.

2,734,927
PROCESS OF PRODUCING PERCHLOROINDAN
Heinrich Vollmann, Leverkusen-Wiesdorf, Germany, assignor to Farbenfabriken Bayer Aktiengesellschaft, Leverkusen, Germany, a corporation of Germany
No Drawing. Application February 10, 1953, Serial No. 336,205
Claims priority, application Germany February 13, 1952
4 Claims. (Cl. 260—650)

1. A process for the production of perchloroindan, which comprises chlorinating a compound selected from the group consisting of octachloronaphthalene and octachloronaphthalene-1, 4-dichloride in the presence of iron chloride at temperatures below 250° C.

2,734,928
PRODUCTION OF DIARYLETHANES
Edwin M. Smolin, Stamford, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
Application May 27, 1953, Serial No. 357,800
14 Claims. (Cl. 260—668)



1. In the process of producing 1,1-diarylethanes wherein acetylene is reacted with a compound selected from the group consisting of mono- and di-alkyl substituted benzene in the presence of a sulfuric acid-mercuric sulfate catalyst, the improvement which comprises reacting from about 15% to about 45% of the stoichiometric amount of acetylene required to react with all of the compound selected from the group consisting of mono- and di-alkyl substituted benzene.

2,734,929
DEALKYLATION OF HYDROCARBONS
Thomas F. Doumani, Whittier, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California
No Drawing. Application June 9, 1952, Serial No. 292,592
19 Claims. (Cl. 260—672)

1. A process for dealkylating a hydrocarbon containing an alkyl group bonded to a carbon atom which comprises subjecting said hydrocarbon to vapor phase hydrodealkylation at a temperature between about 900° and 1500° F. and a pressure between about 150 and 5000 p. s. i. g., in the presence of (1) between about 0.5 and 10 moles of hydrogen per mole of said hydrocarbon, (2) a hydrogenation catalyst comprising as an essential active ingredient an oxide of a metal selected from groups VIB and VIII of the periodic table, and (3) a substantial initial proportion, over 0.5 mole per mole of said hydrocarbon, of water vapor.

2,734,930
SEPARATION OF ETHYLBENZENE FROM CRUDE XYLENE FRACTIONS
Maurice J. Schlatter, El Cerrito, Calif., assignor to California Research Corporation, San Francisco, Calif., a corporation of Delaware
No Drawing. Application March 17, 1951, Serial No. 216,245
8 Claims. (Cl. 260—674)

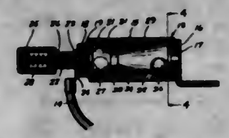
1. The method of removing ethylbenzene from a crude xylene fraction containing ethylbenzene, which comprises selectively alkylating the ethylbenzene by contacting the crude xylene fraction with a quantity of a material of the group consisting of tertiary-alkylating agents, tertiary-alkylbenzenes, tertiary-alkyltoluenes and tertiary-alkylxylenes sufficient to selectively alkylate the major proportion of the ethylbenzene in said fraction in the presence of an alkylation catalyst under alkylating conditions and fractionally distilling the reaction product to separate an overhead fraction comprising unreacted xylenes and characterized by a proportion of ethylbenzene lesser than the proportion of ethylbenzene in the crude xylene fraction and a bottoms fraction rich in tertiary-alkylethylbenzene.

2,734,931
PREPARATION OF GUAIAZULENE BY SULFUR DEHYDROGENATION OF TERPENE-TYPE COMPOUNDS
Sanford L. Steelman, Elmhurst, and Frank J. Lindseth, Oak Park, Ill., assignors to Armour and Company, Chicago, Ill., a corporation of Illinois
No Drawing. Application July 23, 1952, Serial No. 300,526
8 Claims. (Cl. 260—675.5)

1. In a process for preparing guaiazulene from a terpene-type compound which is convertible to guaiazulene by sulphur dehydrogenation, said terpene-type compound being selected from the group consisting of terpenes, sesquiterpenes, and sesquiterpene alcohols, the steps of mixing said terpene-type compound with sulphur and an inert hydrocarbon diluent, and then heating the mixture to a dehydrogenation temperature to effect dehydrogenation of said terpene-type compounds and convert it to guaiazulene, said hydrocarbon being the major component of said mixture and having a higher boiling point than the said terpene-type compound.

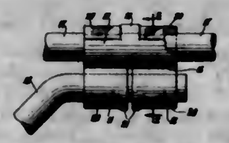
ELECTRICAL

2,734,932
SAFETY DEVICE
Ralph Glenn Barnes, Reno, Nev.
Application January 10, 1950, Serial No. 137,844
17 Claims. (Cl. 123—146.5)



9. In an ignition system for a portable gasoline engine operated tool, a short circuit to ground including a lead wire, a cylinder mounted on the engine and a bushing mounted in one end of said cylinder but insulated therefrom and to which said lead wire is connected, and an electrically conductive ball movable in said cylinder to establish a connection between said bushing and said cylinder in response to centrifugal force set up by an uncontrolled turning motion of the engine.

2,734,933
COMPRESSION TYPE ELECTRIC CONNECTOR
John J. Klocke, Jr., Yonkers, N. Y.
Application August 11, 1950, Serial No. 178,977
7 Claims. (Cl. 174—94)



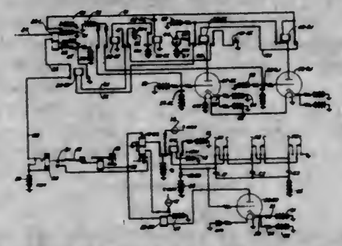
1. In a compression connector for a through wire, an enveloping portion adapted to enclose and grip a first conductor, a plurality of opposed loops connected to said enveloping portion extending outwardly of the enveloping portion, said loops being adapted to be brought into coaxial contiguous alignment with each other to receive a second conductor, said enveloping portion being of sufficiently ductile material to permit it to be compressed about said first conductor, said loops being of sufficiently ductile material to permit them to be compressed about said second conductor.

2,734,934
INSULATED CONDUCTOR AND METHOD OF MAKING SAME
Robert N. McKnight, Fort Wayne, Ind., assignor to Phelps Dodge Copper Products Corporation, Fort Wayne, Ind.
Application July 15, 1954, Serial No. 443,650
3 Claims. (Cl. 174—121)



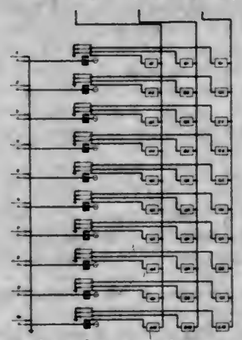
1. An electrical conductor having an insulation covering which comprises the product of partial fusion of a composite yarn wrapped around the conductor, said yarn as so wrapped including an intimate mixture of glass fibers and fibers of a fusible organic dielectric material which is non-carbonizing at temperatures up to about 180° C. and has a substantially higher fusing temperature, said organic material being fused in situ on the conductor, whereby said fused material is in intimate contacts with the glass fibers and acts to hold the glass fibers together and bind them to the conductor.

2,734,935
SELECTIVE CALL CIRCUIT FOR SIGNALING SYSTEMS
Frank Harold Hanley, Butler, N. J., assignor to American Telephone and Telegraph Company, a corporation of New York
Application October 5, 1950, Serial No. 188,547
5 Claims. (Cl. 178—2)



1. In an intercommunicating signaling system, a plurality of stations, a transmission medium interconnecting said stations, a source of calling signals, call accepting means and locking means therefor, a source of busy signals and a plurality of manually operable selecting means at each of said stations, a plurality of timing means at each of said stations, one for each of the others of said stations and effective in response to the operation of one of said selecting means for transmitting from said source of signals at a calling one of said stations a calling signal of a distinctive given duration, other timing means at the wanted one of said stations responsive to the calling signal of a distinctive given duration transmitted from the calling station for operating the call accepting means and locking means therefor at said wanted station, and means controlled by said operated locking means for connecting the source of busy signals at said wanted station to said transmission medium.

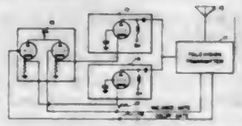
2,734,936
TELETYPEWRITER INVENTORY CONTROL SYSTEM
Donald B. Perry, Maplewood, N. J., assignor to American Telephone and Telegraph Company, a corporation of New York
Application June 21, 1952, Serial No. 294,847
1 Claim. (Cl. 178—2)



In a permutation code receiving system, a selector operable upon the receipt of code signals, a first group

of relays having a normal condition and a prepared condition, circuit means controlled by said selector upon the receipt of a specific sequence of code combinations to cause said first group of relays to assume a prepared condition, a first group of contacts associated with said selector and operable thereby, means interconnecting each of said contacts with a different individual relay in said first group of relays so that the operation of any contact in said first group of contacts will effect the operation of its related relay in said first group of relays only when said group of relays is in a prepared condition, a plurality of groups of registers with each group being related to a different relay in said first group of relays, means interconnecting each group of registers with its related relay in said first group of relays so that the operation of a relay in said first group of relays causes its related group of registers to be placed in a prepared condition, a second group of contacts associated with said selector and operable thereby with each contact being functionally related to a corresponding individual register in each of the groups of registers, and means whereby the operation of each contact in said second group of contacts causes the operation of its related corresponding register in each group of registers that has been placed in a prepared condition.

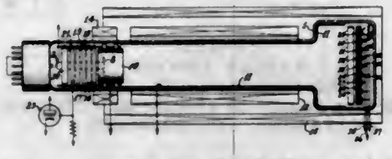
2,734,937
TELEVISION SYNCHRONIZING SYSTEM
Harold E. Beste, Verona, N. J., assignor to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application August 31, 1951, Serial No. 244,667
3 Claims. (Cl. 178—5.2)



1. A color television system comprising means for generating electrical signals representing sequential fields of different predetermined color images, each of said color images being repetitive at a frame rate, each frame being made up of a plurality of field periods, said signal including during each field period a blanking and synchronizing portion, means for generating a pulse of oscillatory energy during each blanking portion and for making the amplitude and duration of all oscillatory pulses the same so as to add an equal amount of energy to each of said blanking portions, the frequency of the oscillatory pulse in one field of each frame being different from the frequency of the oscillatory pulses in the remainder of the fields of each frame, receiver means including a synchronizing circuit operated by said synchronizing portions and responsive also to the amount of energy in said oscillatory pulses, said receiver means comprising, in addition, a color device and a synchronizing circuit therefor, and selective means connected to said last-named synchronizing circuit to apply thereto one of said oscillatory pulses during each frame and to prevent the remaining oscillatory pulses from reaching said synchronizing circuit.

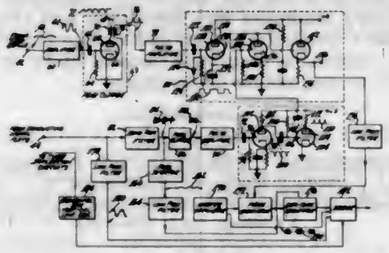
2,734,938
COLOR TELEVISION CAMERA
Elmer Dudley Goodale, New Rochelle, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application November 9, 1951, Serial No. 255,715
11 Claims. (Cl. 178—5.4)

7. A color television camera comprising a color pickup device including means for developing a low velocity scanning beam of electrons, a target structure for said scanning beam including a plurality of interleaved sets of conducting strips, and a collector for electrons of said beam returning from said target, means for deriving re-



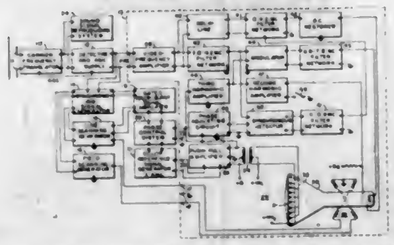
spective component color signals from said strip sets, and means for separately deriving a brightness signal from said collector.

2,734,939
COLOR TELEVISION
William D. Houghton, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application October 30, 1952, Serial No. 317,668
11 Claims. (Cl. 178—5.4)



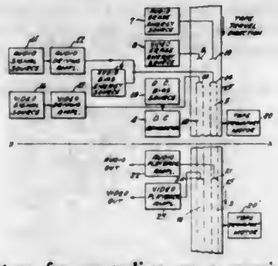
1. A color television system which comprises: a color pickup tube adapted to generate a reference voltage wave of fixed phase and a color signal whose phase with respect to said reference phase is indicative of the hue of an object and whose amplitude is indicative of the saturation of such hue; means operatively associated with said pickup tube for deriving from said color signal a voltage whose magnitude is a function of the phase difference between said color signal and said reference voltage; means for detecting the amplitude of said color signal; a source of carrier wave; and means coupled to said source for varying the phase of a carrier wave from said source in accordance with said derived voltage; and means for modulating the amplitude of said carrier wave in accordance with the magnitude of the output of said detecting means.

2,734,940
IMAGE-REPRODUCING SYSTEM FOR A COLOR-TELEVISION RECEIVER
Bernard D. Loughlin, Lynbrook, N. Y., assignor to Hazeltine Research, Inc., Chicago, Ill., a corporation of Illinois
Application October 5, 1953, Serial No. 384,237
8 Claims. (Cl. 178—5.4)



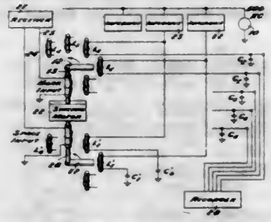
1. An image-reproducing system for a color-television receiver comprising: a circuit for supplying an NTSC signal including a first signal primarily representative of the brightness and a subcarrier wave signal representative of the chromaticity of a televised image; color image-reproducing apparatus including a multicolor image screen and means for scanning said screen with an electron beam having means for conditioning said apparatus to develop a plurality of colors in a sequence repeating at a predetermined frequency in which one of the colors occurs twice; signal-modifying apparatus coupled to said supply circuit for translating said modulated subcarrier wave signal at a predetermined phase with respect to said sequence and for deriving from said subcarrier wave signal a modulated wave signal differing in frequency therefrom and which is a harmonic of said predetermined frequency and has a predetermined phase with respect to said sequence; and a circuit for applying said first signal, said translated modulated subcarrier wave signal, and said derived wave signal to said apparatus for reproducing said color image.

2,734,941
VIDEO RECORDING WITH D. C. BIAS
Joseph A. Zenel, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application June 25, 1954, Serial No. 439,345
6 Claims. (Cl. 178—6.6)



1. In a system for recording on a moving magnetic recording medium television signals containing a video frequency picture component, and a periodically recurrent synchronizing pulse component, said pulse component being uniformly defined by signal waveform excursion exceeding in amplitude those signal excursions defining said picture component, said magnetic recording medium having a remanent magnetism-magnetizing force characteristic graphically depicted by a substantially S-shaped curve having a curved lower portion representing remanent flux storage characteristics for low magnetizing forces, a substantially linear central portion representing remanent flux storage characteristics for a range of moderate magnetizing forces and a curved flattened upper portion representing flux storage characteristics for higher magnetizing forces, the combination of: a source of television signals of the type described; a television signal amplifier means having an input circuit and output circuit; means operatively coupling signals from said source to said amplifier input circuit; a magnetic recording transducer including means for transducing an applied electrical signal into representative variations in a magnetic recording field such that said recording transducer when in recording relation to a moving magnetic recording medium is capable of imposing a varying magnetizing force productive of remanent field patterns on said medium representing a record of applied electrical signals; means operatively coupling said amplifier output circuit to said recording transducer for application of amplified signals to said transducer; means included in said amplifier means for establishing the amplitude of signal applied to said transducers such that the resultant recording field produces recording magnetizing forces within the substantially S-shaped characteristic of the recording medium upon which said transducer is caused to operate; and direct current clamping means direct current coupled with said transducer for establishing the recording current through said transducer at substantially a fixed value during each recurrent synchronizing pulse component regardless of variations in video frequency picture content, said clamping means including means defining said fixed value of current such that the peak of each synchronizing pulse falls in one of said curved portions in said S-shaped characteristic and such that a majority of picture component signal excursions fall along the central linear portion of said S-shaped characteristic.

2,734,942
MAGNETIC COMMUTATOR
Earl T. Heald, Burbank, Calif., assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application September 26, 1952, Serial No. 311,750
9 Claims. (Cl. 178—53)

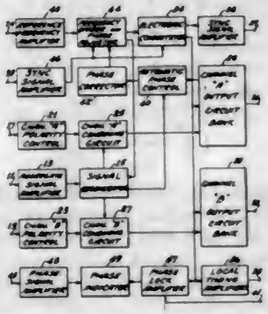


1. A detecting means for a mark-space time sequential code comprising, a receiver receiving radiant energy and producing a pair of outputs corresponding, respectively, to mark and space, a driving means, an output shaft connected to said driving means, a first rotating magnet attached to said output shaft, a second rotating magnet connected to said output shaft, a first inductive coil mounted about said output shaft and inductively coupled to the first magnet and electrically connected to the mark output of said receiver, a second coil mounted about the shaft and inductively coupled to the second magnet and connected electrically to the space output of said receiver, a first plurality of inductors mounted about said first rotating magnet, a second plurality of inductors mounted about said second rotating magnet, one side of said first plurality of inductors connected, respectively, to one side of said second plurality of inductors, a plurality of impedances connected, respectively, to the common sides of said first and second plurality of inductors, an alternating current generator connected to the opposite sides of said impedances, a first plurality of condensers connected to the opposite sides of said first plurality of inductors, a second plurality of condensers connected to the second sides of said second plurality of inductors, and a recording means connected to said first plurality of condensers.

2,734,943
ELECTRONIC DIPLEX RECEIVING DISTRIBUTOR
Anthony Liguori, Hackensack, and Eugene Richard Shenk, Bergenfield, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application September 30, 1952, Serial No. 312,346
18 Claims. (Cl. 178—61)

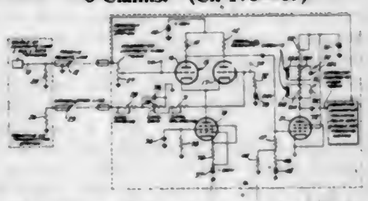
1. An electronic multi-channel receiving distributor system for translating multi-element, fixed length code characters from serial form to separate form including an aggregate signal gating circuit, a signal element regenerator coupled to said gating circuit and comprising a reciproconductive circuit having two stables of equilibrium and complementary output circuits, means to trigger said reciproconductive circuit to one state of equilibrium at channel signal element rate, means to apply pulses to said aggregate signal gating circuit to produce further pulses corresponding to signal elements of one nature to said reciproconductive circuit at channel element rate to trigger said signal element regenerator circuit to the other

state of equilibrium, whereby the output circuits of said reciproconductive circuit provide separate output signal trains of opposite polarity directly and indirectly representative of the input signals, at least one signal combining circuit coupled to said signal element regenerator circuit, a plurality of output signal gating circuits having individual terminals coupled to said combining circuit, said signal combining circuit being arranged to connect said output signal gating circuits selectively to the complementary output circuits of said signal element regenerator circuit in response to applied switching potential, a timing wave generator, means to apply harmonically related timing waves from said timing wave generator in predetermined permutations to said output signal gating circuits to condition the same one at a time for conduction, said output signal gating circuits being arranged to conduct on said conditioning only on the application of a regenerated signal element of one nature by said signal



element regenerator circuit, a phasing signal comparing circuit, means to apply a given phasing signal as received to said comparing circuit and means to apply pulses obtained from said timing waves in predetermined combinations corresponding to said given phasing signal to produce control pulses when said phasing signal pulses fail to correspond, and means coupled between said comparing circuit and said timing wave generator to alter the phase of the latter in response to each control pulse, and a time period indicating circuit including a mixing circuit, a pulse amplifier circuit arranged to apply a relatively sharp pulse to said time period indicating circuit at a given time with respect to a predetermined one of the timing waves produced by said timing wave generator, means selectively to apply said timing waves to said time period indicating circuit, and an indicator in said time period indicating circuit arranged to indicate the presence of said relatively sharp pulse when the applied timing wave fails to coincide in time with said pulse.

2,734,944
DIFFERENTIAL AMPLIFIER METHOD OF CANCELLING RIPPLE PICK-UP
David J. Green, Pacific Palisades, Robert W. Landee, Santa Monica, and Thomas J. Johnson, Jr., Los Angeles, Calif., assignors to Gilfillan Bros. Inc., Los Angeles, Calif., a corporation of California
Application May 7, 1951, Serial No. 224,972
8 Claims. (Cl. 178—69)



2. In a system of the character described, a passive transmission line subject to interference from neighboring sources of low frequency power lines, an auxiliary transmission line substantially the same as said passive transmission line and extending generally parallel therewith throughout its entire length so that both said passive transmission line and said auxiliary transmission line are subject to the same interference, a first amplifying tube having a control electrode thereof coupled to said passive transmission line at said remotely located position, a second amplifying tube having a control electrode thereof coupled to said auxiliary transmission line, said first and second tubes being connected in parallel, a constant current device serially connected with the parallel connected first and second tubes, and an output circuit coupled to said first tube.

2,734,945
WAVE GENERATING SYSTEMS
Richard W. Sonnenfeldt, Haddonfield, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application July 8, 1952, Serial No. 297,690
17 Claims. (Cl. 178—69.5)

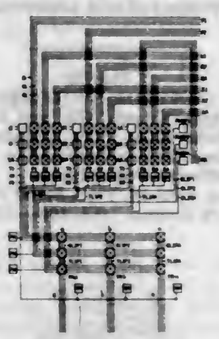


1. In an electrical wave synchronizing system, the combination of, a synchronizing pulse terminal at which appears a recurrent synchronizing signal, a self-sustaining electrical signal generator having a synchronizing signal input terminal, said generator including a multielectrode discharge tube, an electrical gating circuit including a portion of said multielectrode discharge tube and having at least an input signal terminal, an output signal terminal and a control signal terminal, coupling means connected from said synchronizing pulse terminal to said gate circuit input terminal, coupling means connected from said gate circuit output terminal to said signal generator synchronizing signal input terminal, means coupled with said signal generator for producing a control signal synchronous with said signal generator and coupling means from said control signal producing means to said gating circuit control signal terminal.

2,734,946
CIRCUIT ARRANGEMENTS FOR USE IN TELECOMMUNICATION SYSTEMS
Richard Mercer, London, England
Application March 25, 1952, Serial No. 278,344
Claims priority, application Great Britain April 3, 1951
9 Claims. (Cl. 179—18)

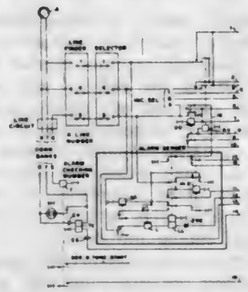
3. In an automatic telecommunication system a plurality of lines, finder switches in at least two switching stages having access to said lines, a route finder switch having access to the inlets of the last stage finder switch control circuits each connected to a different route finder and call responding means seizable by a calling line independent of said finder switches and said route finder and incorporating testing means having simultaneous access to the finder switches of each stage by which the idle or busy condition of the finder switches of the various switching stages giving access to the calling line are tested over circuits independent of the route finder switch

and selective operating circuits thereafter controlled simultaneously by said testing means to effect the selective



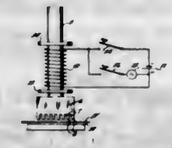
operation of a finder switch of each stage and a route finder to connect a free control circuit with the calling line.

2,734,947
AUTOMATIC TELEPHONE SYSTEM
Theodor Frankel, Rochester, N. Y., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application October 31, 1951, Serial No. 254,110
2 Claims. (Cl. 179—27)



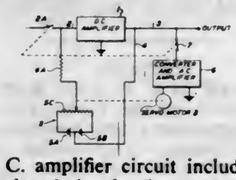
2. In a telephone system, an unattended exchange, a subscriber's station in said unattended exchange, an alarm circuit, an alarm sender in said unattended exchange controlled by said alarm circuit, an attended exchange, an operator in said attended exchange, a two-way trunk interconnecting said exchanges, a two-way trunk circuit terminating said trunk in said unattended exchange, said trunk circuit having at its unattended end a branch circuit for calls outgoing from said unattended exchange and a branch circuit for calls incoming to said unattended exchange, switching means for extending an outgoing call from said subscriber's station to said outgoing branch circuit, means associated with said outgoing branch circuit and operative in response to the initiation both of a call from said subscriber's station and a call from said alarm sender to cause said call to be extended over said trunk, means associated with the attended exchange end of said trunk circuit and operative in response to the initiation by the operator of a call to said unattended exchange to cause said call to be extended over said incoming branch circuit, said first and second mentioned means being effective, in the case of a call outgoing from said subscriber's station, jointly to hold said switching means from said outgoing branch circuit until both said first and second mentioned means have released at the termination of the call, disabling means responsive to the operation of said second mentioned means upon the answering by the operator of an outgoing alarm call to render said alarm sender and said first mentioned means inoperative, said first mentioned means being effective upon its release under the control of said disabling means to cause said trunk circuit to be switched from said outgoing to said incoming branch circuit, thereby to enable the operator to establish an alarm checking connection to said alarm circuit via said incoming branch circuit without first withdrawing from said trunk.

2,734,948
FILM SYNCHRONIZING MARKER
William A. Mueller, Los Angeles, Calif., assignor to Warner Bros. Pictures, Inc., Burbank, Calif., a corporation of Delaware
Application December 7, 1951, Serial No. 260,483
4 Claims. (Cl. 179—100.2)



1. A marking system for magnetic sound film comprising a magnetizable element having an end portion with an alternate series of parallel notches and extensions therein, all of said extensions having their end surfaces adapted to be simultaneously contacted by said film, and means connectable to said element, said means including an alternating current source being adapted to magnetize said extensions to record a reproducible alternating current signal on said magnetic sound film when the end surfaces of said extensions are brought into contact with said film.

2,734,949
DEVICE FOR AUTOMATICALLY AND PERIODICALLY CORRECTING THE ZERO DRIFT IN AN AMPLIFIER
Clifford E. Berry, Altadena, Calif., assignor to Consolidated Engineering Corporation, Pasadena, Calif., a corporation of California
Application August 17, 1951, Serial No. 242,296
10 Claims. (Cl. 179—171)

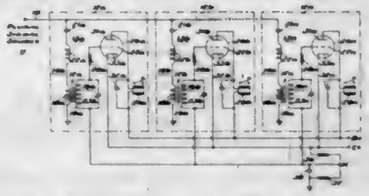


1. In a D. C. amplifier circuit including an input for receiving introduced signals, the combination comprising a variable voltage source connected in parallel to the input, and electro-mechanical means connected to the output of the amplifier to vary the voltage output of the variable source responsive to output of the amplifier with zero input.

2,734,950
CIRCUIT FOR PREVENTING INTERMODULATION
Carl F. Jordan, Jr., Cedar Rapids, Iowa, assignor to Collins Radio Corporation, Cedar Rapids, Iowa, a corporation of Iowa
Application March 18, 1954, Serial No. 417,115
6 Claims. (Cl. 179—171)

1. Means for preventing intermodulation interference in electronic apparatus connected to a plural signal source comprising, a plurality of channels in said apparatus, a frequency selective means in each of said channels connected to said signal source, the frequency selective means of each channel tuned to a different frequency, a plurality of class-C amplifiers, the grids of said amplifiers connected to said frequency selective means respectively, an information receiving means connected in the plate circuit of each of said amplifiers, a first resistor connected

at one end to the cathodes of all said amplifiers, a second resistor connected between the other end of said first resistor and ground, the common point between said first



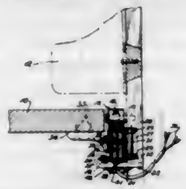
and second resistors connected to said frequency selective means, and a capacitor connected across said second resistor.

2,734,951
ROVING HOLDER FOR A JUKE BOX SELECTOR
James A. Austin, Tampa, Fla.
Application October 5, 1951, Serial No. 249,839
3 Claims. (Cl. 191—22)



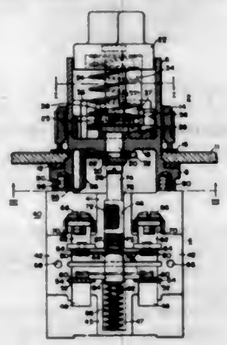
1. In combination with a counter or bar, a juke box selector for roving movement from one end of the counter or bar to the other, said juke box selector including a holder for supporting the selector and comprising an insulated rail fixed in spaced relation to the rear of said counter or bar and extending longitudinally thereof, electrical conductor strips fixedly attached to said rail and electrically connected to a juke box, a bracket extending downwardly from said roving holder, opposed rollers carried by said bracket and movably engaging opposed edges of said rail, flexible electrical contacts carried by said bracket and slidably engaging said fixed conductor strips, and conductor means electrically connecting said flexible electrical contacts with said juke box selector in all positions of said selector along the counter or bar.

2,734,952
ROVING HOLDER FOR A JUKE BOX SELECTOR
James A. Austin, Tampa, Fla.
Application September 2, 1954, Serial No. 453,823
2 Claims. (Cl. 191—22)



1. In combination with a counter or bar, a juke box selector for roving movement along the length of the counter or bar, said juke box selector including spaced mounting posts supporting said selector, a track fixed to the rear of the counter or bar and extending for the length thereof, electrically insulated conductor strips attached to said track for electrical connection to a juke box, flanged rollers carried by said posts and engaging the upper edge of said track and cooperating with said posts to prevent separation of said posts from the track, bar means connected to the lower ends of the posts and extending below and beyond said track, rollers carried by said bar means on the remote side of said track from said posts and bearing against said track, electrical contacts carried by said bar means and slidably engaging respective ones of said conductor strips and conductor means electrically connecting said contacts with said juke box selector in all positions of said selector along the counter or bar.

2,734,953
CONTROL SWITCHES
William D. Jenkins, Atlanta, Ga., and Stanley L. Frank, Beaver, and John Zipay, New Brighton, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application April 30, 1953, Serial No. 352,094
10 Claims. (Cl. 200—16)



1. In a control switch, in combination, supporting means, two sets of stationary contact means, each set comprising at least two separate contact means, a movable contact member for each of said sets of contact means movable into and out of engagement with the contact means of its respective set of contact means, a reciprocable operating member for each movable contact member, actuating means for selectively actuating said operating members comprising an actuating shaft mounted in the supporting means for rotary movement and longitudinal sliding movement in a direction paralleling the direction of reciprocable movement of said operating members, an actuating disc secured to said shaft and having a notch therein, said operating members being biased toward said disc, an operating head secured to the outer end of the actuating shaft for rotating said disc to select a desired operating member and for reciprocating said disc to actuate said selected operating member and its associated movable contact member, said disc being rotatable by the shaft while the disc and the shaft remain in the same position longitudinally of the shaft, the notch in said disc permitting operation of the selected operating member without operating the non-selected operating member, stop means in the supporting means establishing two extreme positions of rotation for the operating head and permitting reciprocation of the head through its entire range of travel at said extreme positions to actuate a selected movable contact member from engagement with one stationary contact means into engagement with another stationary contact means, and spacing means in the supporting means permitting actuation of both movable contact members through only part of their range of travel when the operating head is at a rotative position intermediate said extreme positions.

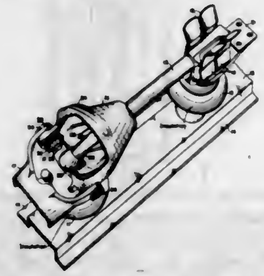
2,734,954
CARD SWITCHING DEVICE
Marshall C. Kidd, Haddon Heights, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application September 30, 1952, Serial No. 312,380
9 Claims. (Cl. 200—46)

1. In a data storage device of the card type the combination comprising a plurality of insulating sheets fastened together in card form at least one of said outside sheets having extending through it at least two openings through which electrical contacts may pass; a conductive path on the surface of another sheet immediately adja-



cent to said last named sheet such that said openings permit access to said conductive path and pressure operated circuit opening means within said laminations connected with said conductive path when connection through said openings are made to said conductive path.

2,734,955
ELECTRIC SWITCHES
James B. Owens, East McKeesport, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application February 26, 1953, Serial No. 339,090
7 Claims. (Cl. 200—48)



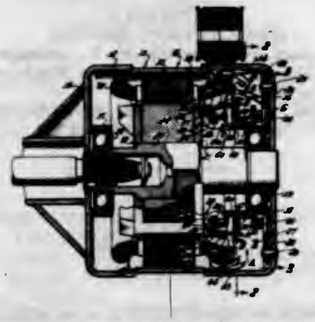
1. In a switch, in combination, a switch blade, supporting means for the switch blade, bearing means in said supporting means rotatably supporting one end of the switch blade, said blade extending through said bearing means, current conducting contact segments encircling said bearing means and engaging substantially the entire periphery of the blade for conducting current from the blade to said supporting means, a terminal member, a hinge pin in said member pivotally supporting said supporting means, additional bearing means in said supporting means for the hinge pin, said pin extending through said additional bearing means, and additional current conducting contact segments encircling said additional bearing means and engaging substantially the entire periphery of the hinge pin for conducting current from the supporting means to the hinge pin and thence to said terminal member.

2,734,956
STOP-MOTION DEVICE
Ralph C. Berker, Providence, R. I.
Application January 11, 1952, Serial No. 266,029
4 Claims. (Cl. 200—61.18)



2. In a stop-motion device for a yarn processing machine comprising a first electric contact, a second elongated electric contact pivotally mounted intermediate the ends thereof at a location thereon so that its center of gravity will be so positioned as to tend to move said second contact by gravity into engagement with the first contact, said second contact moving into engagement with said first contact upon being free of said sliver, and means for applying a magnetic force on said second contact subsequent to said second contact being free of said sliver to hold the second contact into engagement with said first contact upon said second contact moving into engagement with the first contact.

2,734,957
DRIVE MECHANISM
Paul Kaler Beemer, Pasadena, Calif., assignor to Preco Incorporated, Los Angeles, Calif., a corporation of California
Application January 19, 1952, Serial No. 267,285
25 Claims. (Cl. 200—61.39)

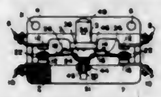


19. In combination, a rotary, primary operating member adapted to be rotated intermittently in opposite directions, an actuating member carried by and bodily rotatable with said operating member and movable individually with respect thereto, a plurality of angularly spaced, electric circuit contact members stationarily mounted about the axis of rotation of the operating member, a drive-receiving member mounted for rotary oscillation about said axis, electric circuit contact members oscillated by oscillations of the drive-receiving member for selective engagement with said first mentioned contact members, a drive taking element on said drive-receiving member, means yieldably urging said actuating member into the path of said drive taking element when the operating member is initially rotated in a given direction, whereby continued rotation of the operating member in said direction rotates said second mentioned contact members from one contacting condition with relation to the stationary contacts toward a second contacting condition, a stationary cam face engageable with said actuating member when the drive-receiving member has rotated the first mentioned contact members to said second contacting condition and, by virtue of such engagement, moving said actuating member out of driving engagement with said drive-taking element, the cam thereafter preventing said actuating member from reengaging said drive-taking element as long as the operating member continues to rotate in said given direction or, after a stop, again starts to rotate in said given direction without an intermediate reversal of direction.

2,734,958
SWITCH
Ralph B. Immel, Williamsville, and Lawrence Pierce, Buffalo, N. Y., assignors to Westinghouse Electric Corporation, Pittsburgh, Pa., a corporation of Pennsylvania
Application July 27, 1951, Serial No. 238,861
16 Claims. (Cl. 200—67)

1. A switch comprising, spaced contacts, a bridging member mounted for movement into and out of bridging engagement with said spaced contacts, said bridging mem-

ber being of a resilient electrical conducting material having contact means at opposite ends thereof for engaging said spaced contacts, an intermediate part of said bridging member being deformed to produce an intermediate longitudinally bowed portion, said bowed portion having



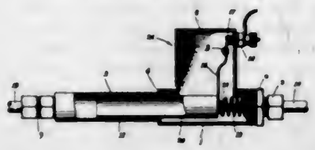
spaced generally U-shaped portions therein, and operating means engageable with said bowed portion between said spaced portions for exerting a transverse force thereon in a direction to cause said bowed portion to reverse its curvature to thus cause snap acting movement of the ends of said bridging member carrying said contact means.

2,734,959
SNAP-ACTION SWITCH
Ralph B. Immel, Williamsville, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application November 28, 1951, Serial No. 258,656
25 Claims. (Cl. 200—67)



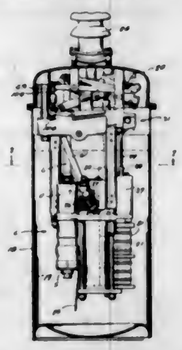
1. An electric switch comprising, a stationary contact, a contact member movable into and out of engagement with said stationary contact, a spring arm formed integrally with the contact member, said spring arm being free to move at both ends, a pivotally mounted operating handle, spring toggle means engaging the spring arm, said spring toggle means being pivotally mounted independently of said operating handle, lost-motion means operatively connecting the operating handle and the spring toggle means, said spring arm and said spring toggle means cooperating to bias the contact member in a predetermined direction, and said spring toggle means being stressed when the operating handle is actuated to actuate the contact member.

2,734,960
SAFETY SIGNAL DEVICE FOR HYDRAULIC BRAKE SYSTEMS
Charles G. Reynolds, Modesto, Calif.
Application October 5, 1953, Serial No. 384,080
2 Claims. (Cl. 200—82)



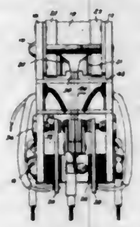
1. A circuit closer comprising a body including an elongated cylinder having opposed end ports adapted for connection to intake and outlet conduits, a piston slidable in the cylinder, a spring yieldably urging the piston to a retracted position adjacent the intake end of the cylinder, a closed housing formed with the body at the outlet end thereof and communicating with the cylinder in upstanding relation thereto, the upper portion of the housing forming an air dome, a terminal of an electric circuit mounted in the housing in said upper portion thereof, the piston when retracted projecting into the housing a short distance, the terminal facing the intake end of the cylinder, a yieldable blade secured on the projecting end of the piston and projecting upwardly in opposed relation to the terminal for engagement therewith only upon advance of the piston a predetermined distance from a retracted position; the blade being relatively narrow compared to the width of the housing, and a cross bar of dielectric material having a clearance fit with the sides of the housing whereby to maintain the blade alined with the terminal irrespective of any tendency of the piston to turn in the cylinder.

2,734,961
CIRCUIT INTERRUPTER
William R. Harry, Hartland, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Original application January 30, 1950, Serial No. 141,336. Divided and this application May 31, 1951, Serial No. 229,182
5 Claims. (Cl. 200—89)



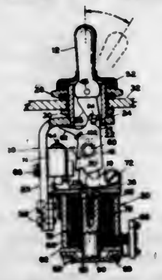
1. A repeating circuit interrupter comprising overload responsive means including a coil and a plunger operated thereby, switch means operated by said plunger to open on overload, means for returning said plunger after a working stroke thereof, a hydraulic cylinder for said plunger having a normally open vent for the free discharge of liquid displaced by said plunger when said plunger is operated by said coil, a counting piston having a portion adjacent to said vent and arranged to close said vent, a cylinder for said counting piston, and a hydraulic pump having a discharge opening communicating with the cylinder for said counting piston and operable on the return stroke of said plunger for advancing said counting piston in a step-by-step manner, whereby the opening characteristics of the interrupter are not altered by the advancing action.

2,734,962
VIBRATOR
Herbert A. Cook, Baltimore, Md.
Application June 11, 1951, Serial No. 230,985
4 Claims. (Cl. 200—93)



2. In an electric circuit controller, first and second spaced magnetic members having first opposed surfaces magnetically spaced by a first distance and second opposed surfaces adjacent said first opposed surfaces magnetically spaced by a second distance greater than said first distance, means for magnetically polarizing said spaced members whereby magnetic flux of a first density bridges the gap between said first opposed surfaces and magnetic flux of a second density bridges the gap between said second opposed surfaces, a resiliently cantilever supported magnetic member having a free end executing an arc of oscillation between said second opposed surfaces substantially tangential to the transition zone between regions of different flux density appearing between said first opposed surfaces and between said second opposed surfaces, an electric winding inducing a magnetic field in said cantilever supported magnetic member, and an electric contact pair closing in response to movement of said cantilever supported magnetic member beyond the region defined by said first opposed surfaces.

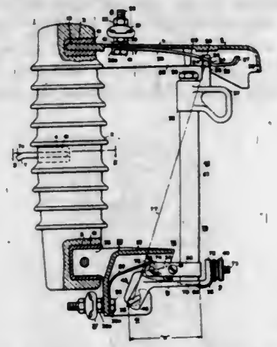
2,734,963
SWITCH
Vincent H. Ardia, Franklin Lakes, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application January 28, 1953, Serial No. 333,711
4 Claims. (Cl. 200—106)



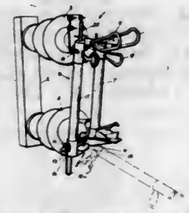
1. A switch comprising a support, a manually movable member mounted on said support for angular movement to either of two positions, a contact adapted for operating an electrical circuit, a contact operating cam pivotally mounted on said support and engageable with said manually movable member, whereby said cam is also movable angularly by said manually movable member to either of two positions, said cam having a slot therein, and means for selectively retaining said member in one position and returning it to the other position including a pawl engageable with said slot, a solenoid engageable with said pawl for rendering the pawl effective and ineffective to engage said slot to lock said cam for retaining said manually operable member in one position, and a spring engageable with said cam for actuating the latter for returning said manually operable member to the other of said positions when said pawl is rendered ineffective to engage said slot.

2,734,964
CIRCUIT INTERRUPTERS
Andrew W. Edwards, East McKeesport, and William J. Paxton, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application December 14, 1951, Serial No. 261,686
4 Claims. (Cl. 200—114)

1. A cutout of the dropout type including a pair of spaced contact assemblies, a fuse holder including a fuse tube and a toggle-link hinge member, the toggle-link hinge member being pivotally mounted upon one of the contact assemblies, means pivotally connecting the fuse tube on one side thereof to the toggle-link hinge member, the toggle-link hinge member having an aperture therein to accommodate one end of the fuse tube and having a substantially right-angle bend at its outer free end on the opposite side of the fuse tube, a fuse link having a flexible fuse link cable extending out of said one end of the fuse tube, and means for securing the cable to the toggle-link hinge member adjacent the opposite side of the fuse tube at the free end thereof to increase the torque arm distance exerted by the fuse link in maintaining the toggle-link hinge member in its stiff leg position.



2,734,965
COMBINATION FUSE CUTOUT AND LOADBREAK CARTRIDGE
Russell A. Wood, South Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application July 11, 1952, Serial No. 298,359
2 Claims. (Cl. 200—114)

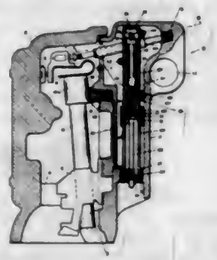


1. In a combination fuse cutout and load-break device, a mounting base having spaced insulators, terminals supported by said insulators, one of said terminals having spaced bearing supports and the other terminal having a latching means and a clamping means spaced therefrom, a fuse cutout normally electrically connecting said terminals and having a bearing means mounted in said bearing supports and extending laterally from one end of said cutout to a point beneath said clamping means, said cutout held by said latching means, a load-break cartridge including a fiber tube having therein a load-break mechanism normally latched in circuit closing position, a sleeve on said load-break cartridge having a hinge pivotally supporting said cartridge on said bearing means, the opposite end of said cartridge engaged by said clamping means, whereby said cutout may be moved to open position without arcing and said load-break mechanism may be subsequently tripped to open the circuit within said cartridge under load.

2,734,966
CIRCUIT INTERRUPTER
Hans P. Schneider, Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application November 20, 1952, Serial No. 321,545
16 Claims. (Cl. 200—114)

1. A switch adapted to be opened under load comprising an insulating housing including a door, two ter-

minal members fixedly spaced from each other within the housing, switch means for connecting and disconnecting said terminal members by movement to closed and open position respectively, insulating door means for moving said switch means, an auxiliary circuit normally connected from one of said fixed terminals to said switch means within said housing, the upper contact of said auxiliary circuit having a spring biasing said contact against the upper of the said two fixed terminal members while said switch means is being operated,



maintaining said contact between the upper movable contact and the upper of the said two fixed terminals after said switch means has disconnected said two terminals, the said auxiliary circuit comprising conductive members normally in series and arc extinguishing non-conductive members, latch means for separating said conductive members and inserting said arc extinguishing non-conductive members in series with said switch means to break the electrical path of said auxiliary circuit, and means for replacing the conductive members in series.

2,734,967
INDICATOR MEANS FOR INDICATING THE CONDITION OF FUSES
Earl G. Benedict, Cobleskill, N. Y.
Application January 9, 1952, Serial No. 265,654
2 Claims. (Cl. 200—121)



1. An electric fuse device having a fusible element, comprising a housing surrounding said fusible element, a coating of an ozone detecting dye having a chromophore group from which ozonides are formed on one of the walls of the housing, said coating changing its color upon appearance of ozone in the air contained in the housing, said ozone being produced by an electric discharge following melting or rupture of the fuse wire.

2,734,968
THERMOSTATIC SWITCH
Clark Cooper, Jr., Moorestown, N. J., assignor to Scaico Controls, Inc., Palmyra, N. J., a corporation of New Jersey
Application June 3, 1954, Serial No. 434,201
10 Claims. (Cl. 200—137)



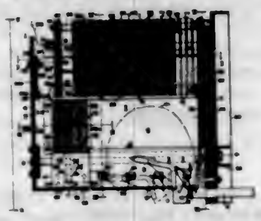
1. A thermostatic switch comprising a tubular housing made of material having a high coefficient of expansion, an assembly of members disposed within said housing along the length thereof and made of material having a relatively low coefficient of expansion, and switch contacts carried by said assembly of members and engaging one another, said assembly including first and second laterally spaced flexible members anchored respectively to the head and foot ends of said housing, and a substantially rigid member extending from a free end portion of said first flexible member toward said housing head and second flexible member, one end portion of said rigid member being rigidly secured to said free end portion of said first flexible member and being movable therewith laterally away from said second flexible member and the opposite end portion of said rigid member being rigidly secured to an intermediate portion of said second flexible member and being movable therewith laterally away from said first flexible member, said switch contacts being mounted respectively on a free end portion of said second flexible member and an intermediate portion of said first flexible member at a substantial distance from said relatively rigid member.

2,734,969
MEANS FOR REDUCING BURNING, PITTING AND CORROSION OF CONTACT POINTS IN CIRCUIT BREAKERS
Marion Mallory, Detroit, Mich.
Application March 7, 1950, Serial No. 148,072
7 Claims. (Cl. 200—144)



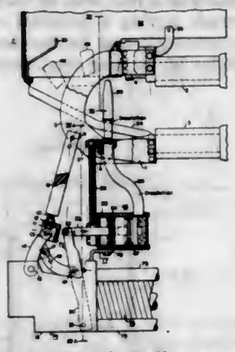
1. In a circuit breaker having a fixed contact point and a movable contact point, a shroud in the form of a cup mounted in fixed relation to, and surrounding, one of said contact points, the other of said contact points extending through the open top of said cup, and a body of electrically non-conducting lubricant which is substantially non-flowing at the operating temperature of the circuit breaker, said lubricant being carried by said cup and enveloping both of said contact points so that their contact faces are always positioned within the body of lubricant and sealed from contact with the surrounding atmosphere.

2,734,970
CIRCUIT INTERRUPTERS
Nelius A. Spears, Jr., Pittsburgh, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application September 28, 1951, Serial No. 248,764
29 Claims. (Cl. 200—147)



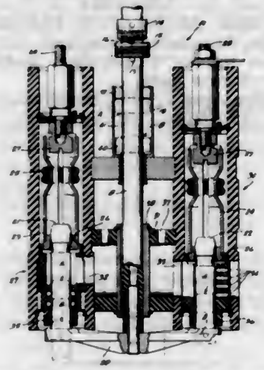
1. A circuit interrupter including a relatively stationary contact cooperable with a movable contact to establish an arc, an arc chute for extinguishing the arc including a plurality of spaced conducting plates disposed along one side of the arcing space in the general plane of contact movement, said conducting plates being positioned substantially transversely to the established arc and insulated from one another so that said arc may move thereinto in the form of a plurality of serially related arc portions, and a plurality of spaced insulating plates disposed along another side of the arcing space in the general plane of contact movement and also disposed substantially transversely of the established arc.

2,734,971
CIRCUIT INTERRUPTERS
Harry J. Lingal and Russell E. Frink, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application September 4, 1952, Serial No. 307,812
18 Claims. (Cl. 200—148)



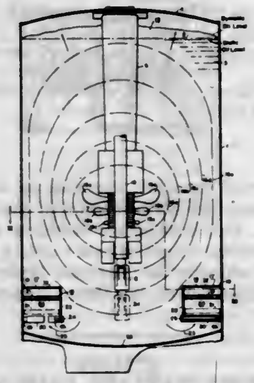
1. A circuit interrupter including a movable contact for establishing an arc, a gas-blast device including a piston and a piston chamber, and a motion-amplifying mechanism interconnecting the movable contact with the gas-blast device causing a higher rate of change of relative movement between the piston and the piston chamber when the movable contact has moved slightly in the opening direction than when the movable contact has progressed to a position later in the opening stroke.

2,734,972
CIRCUIT INTERRUPTERS
Anthony Van Ryan, South Milwaukee, and William R. Harry, Hartland, Wis., assignors to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application January 13, 1951, Serial No. 205,842
4 Claims. (Cl. 200—150)



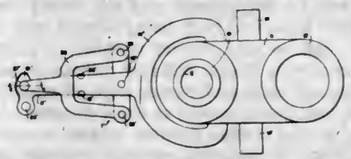
1. A circuit interrupter comprising switch means including separable contacts, insulating means normally enclosing said contacts and confining the arc during separation of said contacts under overload, operating means for separating said contacts on overload, delay means for causing a dwell during the separation of said contacts prior to the time that said contacts are fully separated, and means for projecting a blast of oil between said contacts during said dwell while said contacts are within said insulating means, said operating means being arranged to cause at least one of said contacts to move completely away from said insulating means after cessation of said dwell, said insulating means being hollow and having a central open space for said contacts and an oil inlet opening and a plurality of oil outlet apertures opening to the exterior of said hollow insulating means.

2,734,973
CIRCUIT INTERRUPTERS
John B. MacNeill, Wilkinsburg, Winthrop M. Leeds, Forest Hills, and Benjamin P. Baker, Turtle Creek, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application August 18, 1951, Serial No. 242,518
4 Claims. (Cl. 200—150)



1. A circuit interrupter including a tank containing liquid, means for establishing an arc within the tank to generate pressure therein, a gas cell disposed within the tank below the liquid level trapping gas for absorbing the shock pressure wave during circuit interruption, the liquid rising somewhat within the gas cell during circuit interruption, and a diaphragm on the surface of the liquid within the gas cell to prevent the gradual absorption of the gas by the liquid.

2,734,974
SWITCH WIPER
Kenneth W. Graybill, Elmhurst, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application February 13, 1953, Serial No. 336,732
12 Claims. (Cl. 200—166)

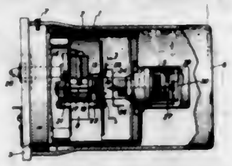


1. A wiper for use in a switch having fixed contacts, comprising a conducting main spring having a terminal, a member having a wiping type contact thereon and an aperture therethrough and being connected to said main spring, a spherical contact having a larger diameter than said aperture and being seated against an edge of said aperture, and a stressed cantilever type spring having its fixed end operatively connected to said main spring and having its free end operatively engaged with said spherical contact, tending to constrain the same in said aperture and against said edge when the wiper is out of engagement with said fixed contact, both said wiping type contact and said spherical contact being engaged with one of said fixed contacts when the wiper is in contact therewith.

2,734,975
ELECTRICAL CONTROL
Frank A. Goss, Jr., Morris Plains, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application January 31, 1951, Serial No. 208,726
4 Claims. (Cl. 201—48)

1. A unit for use in a position control system comprising a housing, a single shaft rotatable in two bearings

fixed in said housing, a looped current-carrying conductor mounted at one end of said shaft, a magnet system forming an air-gap in the path of movement of said conductor, a potentiometer having a circular winding mounted in said housing concentric with said shaft, said potentiometer having a brush secured to and rotatable by said shaft, a



pair of electrical terminals mounted on said housing, an electrical connection between each of said terminals and said winding, each connection including a brush adjustable over a limited length of said winding at the opposite ends thereof whereby the electrical limits of said winding may be aligned with the limits of movement of said brush.

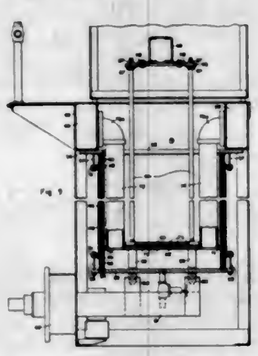
2,734,976
VARIABLE WATTAGE LAMP SOCKET
Leslie R. J. Strege, Carlsbad, N. Mex.
Application August 7, 1953, Serial No. 373,021
2 Claims. (Cl. 201—49)



1. In an electric lamp socket, an internally threaded metallic shell to receive the base of a lamp bulb, a body of insulating material, a contact member axially disposed in said body and having an end portion thereof extending into said shell for engagement with the center contact of the lamp bulb base, said body being formed with a recess at a right angle to said contact member, a plurality of rigid resistance rods having different resistances arcuately arranged in said body and having ends disposed in said recess, said rods being located at equal distances from an axis normal to said contact member located in said recess, a shaft member of insulating material mounted for rotation around said axis, a contact arm of conductive material secured to said shaft member and being selectively engageable with said first-named ends of said resistance rods, means electrically connecting the opposite ends of said rods to said shell, said rods each comprising a hardened matrix of heat resisting insulation material in which is embedded a quantity of comminuted metallic conducting material, said shaft member projecting outside said body, and a pointer knob secured to the outer end of said shaft member.

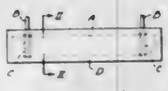
2,734,977
LIQUID RHEOSTAT
Walter Schaelchlin and Charlton H. Storey, Jr., Buffalo, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Original application April 12, 1953, Serial No. 281,956. Divided and this application May 25, 1953, Serial No. 356,995
7 Claims. (Cl. 201—57)

1. A liquid rheostat cell assembly comprising, a frame, a trough on said frame adjacent the top thereof, said trough having a hole through the bottom thereof, a tubular electrolyte container of electrical insulating material having a closed end, support means connected with said trough and said container suspending said container beneath said trough with the open end of said container in fluid tight relation with said trough about said hole, a stationary electrode supported adjacent the bottom of said container and having electrical conductors extending through and sealed with the wall of said container, said stationary electrode having a marginal extension having an opening therethrough and further having a plurality of electrolyte holes for passing electrolyte from one side



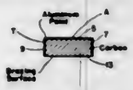
to the other, a moving electrode suspended in said container, and having electrolyte holes therein misaligned with respect to the electrolyte holes in the stationary electrode, electrolyte inlet ducts of electrical insulating material extending through said hole to a point adjacent the bottom of said container and being supported in said opening in said marginal extension of said stationary electrode for admitting electrolyte to said container, said electrolyte overflowing into said trough, and a drain outlet connected with said trough to remove overflow electrolyte.

2,734,978
ELECTRIC RESISTANCE ELEMENTS
Douglas Bulgin, Birmingham, England, assignor to Dunlop Tire and Rubber Corporation, Buffalo, N. Y., a corporation of New York
Application April 7, 1953, Serial No. 347,209
10 Claims. (Cl. 201—75)



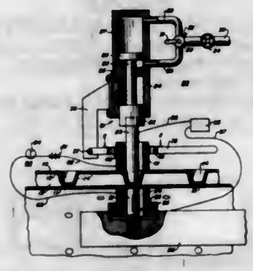
1. An electric resistance element formed of electrically non-conducting elastic cellular material of low permanent set having an adherent coating of a pulverulent electrically conductive material on the surfaces of the cells thereof.

2,734,979
BRAZING TIPS
Robert E. Higley, Clarence, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application April 12, 1952, Serial No. 281,977
5 Claims. (Cl. 219—4)



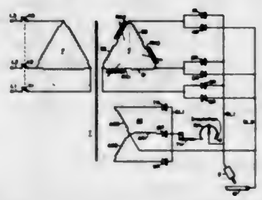
1. A brazing rod composed of carbon, a portion of the surface of which is adapted to engage parts to be brazed and a coating of aluminum on the remaining portion of the surface of said rod.

2,734,980
ELECTRIC SPOT RESISTANCE WELDING APPARATUS
Morton B. Millenson, Bayonne, N. J., assignor to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware
Application June 20, 1952, Serial No. 294,623
1 Claim. (Cl. 219—4)



In electric spot resistance welding apparatus, a pair of opposed electrodes, means fixedly mounting one of said electrodes, means supporting the other of said electrodes for longitudinal movement, pressure applying means operable on said other electrode to move said other electrode longitudinally to apply a predetermined pressure loading on work parts positioned between said electrodes, an annular contact member adjacent to and surrounding said one electrode and fixedly position relative thereto adapted to contact portions of the work parts immediately adjacent to and surrounding the portion of the work parts adapted to be contacted by said one electrode, a longitudinally movable annular pressure applying member immediately adjacent to and surrounding said other electrode, and means operable independently of said electrode to move said annular pressure applying member into contact with portions of the work parts immediately adjacent to and surrounding the portion of the work parts adapted to be contacted by said other electrode to apply pressure thereto to move said work parts into contact with one another.

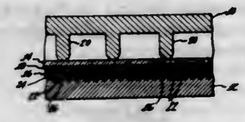
2,734,981
ARC DRIVE CONTROL FOR RECTIFIER WELDER
Harry J. Bichsel, East Aurora, and Martin Rebuffoni, Williamsville, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application February 28, 1952, Serial No. 273,814
14 Claims. (Cl. 219—8)



7. An arc welder comprising a main static rectifier having output terminals and being adapted to deliver at said output terminals the normal operating current for welding, separate current supply means also having output terminals, and a lower open circuit voltage than that of said main rectifier, and means connecting the output terminals of said separate supply to the output terminals of said main rectifier, the magnitude of said lower voltage being such that said supply is adapted to become effective when the arc voltage becomes small by reason of the formation of metal globules or threads during welding and to supply current to blow out said globules or threads before they cause short circuits.

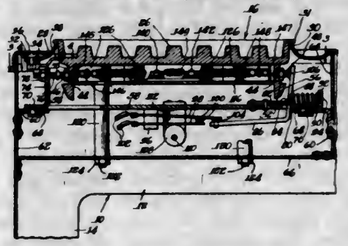
8. Apparatus according to claim 7, characterized by the fact that the circuit including the separate current supply means has a low time constant.

2,734,982
DIELECTRIC HEATING ELECTRODE
Henderson C. Gillespie, Moorestown, and Joseph E. Joy, Collingswood, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application September 28, 1951, Serial No. 248,798
5 Claims. (Cl. 219—10.81)



1. An electrode for use in radio frequency heat sealing having as part of the conductive electrode body a plurality of small protuberances extending outwardly from the main body of the electrode to provide a pebbled working face, the area of the working surface of each protuberance being small compared to the area of the electrode and said working surface of each protuberance having rounded corners.

2,734,983
WAFFLE BAKER
Carl V. Krichton, Geneva, Ill., assignor to McGraw Electric Company, Elgin, Ill., a corporation of Delaware
Application April 2, 1952, Serial No. 279,970
14 Claims. (Cl. 219—19)

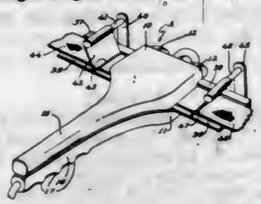


1. A waffle baker or similar cooking utensil comprising a base, a cooking plate having a predetermined coefficient of expansion, means for detachably supporting said cooking plate from said base, means for heating said cooking plate to cook a batter thereon, means for supporting said heating means in juxtaposition to said cooking plate, means for controlling the operation of said heating means, a member having a predetermined coefficient of expansion different from that of said cooking plate, means exclusive of said plate for supporting said member from said base in the vicinity of said cooking plate and in readily separable relation thereto, and means for comparing the different degrees of expansion of said cooking plate and said member to effect operation of said controlling means.

2,734,984
APPARATUS FOR JOINING TAPE
Lawrence J. Brunner, St. Paul, Minn.
Application August 21, 1950, Serial No. 180,611
3 Claims. (Cl. 219—21)

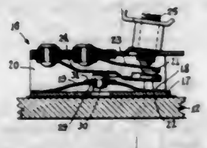
3. A tape joining apparatus including a pair of hingedly connected elongated members provided with handle portions adjacent their distal ends and having opposed recesses adjacent their hinged ends, a closure plate for each recess detachably connected to the respective elongated members, a plurality of gripping prongs on each closure plate, and an electrical heating element contained in each

recess in heat transfer relation with said closure plates, one of said elongated members being equipped with oppositely extending flanges in lateral alignment with said



closure plates, and a wing pivotally mounted on each of said flanges, said wings having toothed edges engageable with a pair of tapes having their edges overlapped between said closure plates.

2,734,985
HEAT-RESPONSIVE CONTROL
Joseph Youhouse, Fairfield, Conn., assignor to Casco Products Corporation, Bridgeport, Conn., a corporation of Connecticut
Application February 21, 1951, Serial No. 212,074
10 Claims. (Cl. 219—25)



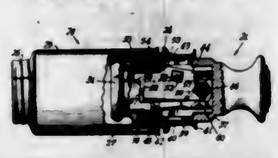
1. In a thermostat, a main heat-responsive means having spaced high and low expansion elements; a movable part operatively connected to said main heat-responsive means to be moved in one direction along a predeterminate path by and in response to heating of said means; and auxiliary means temporarily positioning said part at an advanced point along said path during initial heating of the main heat-responsive means, said auxiliary means including a compensating heat-responsive means juxtaposed to said low-expansion element and in relatively poor heat-conducting relation with the high-expansion element whereby said two heat-responsive means may have different temperatures during the initial heating of the main heat-responsive means.

2,734,986
PYROGRAPH
Francisco Gameros, El Paso, Tex.
Application September 24, 1954, Serial No. 458,050
5 Claims. (Cl. 219—29)



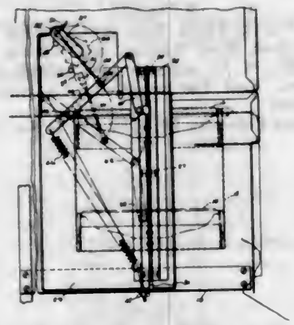
1. An electric pyrographic unit comprising a container including a partition dividing the same into a transformer compartment and a storage compartment; a lid for the container providing access to the storage compartment; a transformer within the transformer compartment; an engraving tool connected electrically to the transformer and adapted to be normally housed in the storage compartment; and means in the electrical connection between the transformer and tool extending into the transformer compartment for regulating the heat produced in said tool.

2,734,987
ELECTRIC CIGAR LIGHTER
Arthur A. Johnson, Bridgeport, Conn., assignor to Automatic Devices Corporation, Bridgeport, Conn., a corporation of Connecticut
Application February 16, 1952, Serial No. 271,879
18 Claims. (Cl. 219—32)



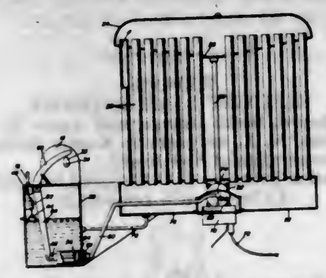
6. A wireless type cigar lighter comprising a holder having an energizing circuit; an igniting unit removably carried by the holder, said unit having a heating element for energization from the circuit of the holder, and having mechanism including a manually operable carrying knob for closing said circuit through the heating element when the knob is moved inward on the holder; automatic means normally rendering the said mechanism inoperative to close said circuit when the igniting unit is being replaced on the holder, said knob moving inward on the holder during such replacement; and means rendering said automatic means inoperative in response to removal of pressure from the knob.

2,734,988
COOKING STOVE
Lewis Dale Beardslee, Greenville, Mich., assignor to Gibson Refrigerator Company, Greenville, Mich., a corporation of Michigan
Application October 18, 1950, Serial No. 190,843
5 Claims. (Cl. 219—37)



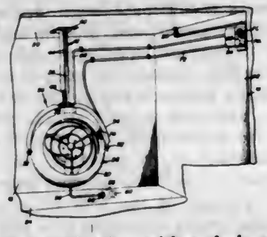
5. In a cooking stove, a stove frame, a deep well cooker shell therein having a vertical slot in the upright side thereof, a burner and burner support vertically movable in said shell, said burner support having a portion thereof projecting through said slot, and mechanism for raising and lowering said burner mounted on said stove frame and connected to said projecting portion of said burner support, said mechanism comprising a crank rotatably mounted on said frame, a lever pivotally mounted on said frame, a link connecting said crank to said lever, cooperating guide means on said frame and burner support for guiding said burner in a vertical path, and spring means connected to said frame and lever for counterbalancing said burner.

2,734,989
ELECTRIC STEAM FURNACE
Wilbur D. Hoffman, Sandusky, Ohio, assignor of fifty per cent to William J. Roeder, Sandusky, Ohio
Application August 25, 1953, Serial No. 376,399
4 Claims. (Cl. 219—39)



3. An electric steam furnace comprising an upper chamber positioned in alignment with a lower housing, a plurality of conduits communicating with said chamber and said housing and holding said chamber and said housing in spaced relationship, an electrical heating unit operatively positioned entirely in said housing and below said conduits, means for selectively supplying electrical current to said heating unit, and means for metering fluid onto said heating unit in said housing, and a blower for removing heated air from between said plurality of conduits.

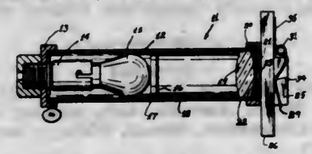
2,734,990
DESK MOUNTED COMBINATION FAN AND HEATER
Harry O. Leuschner, Sarasota, Fla.
Application August 28, 1953, Serial No. 377,115
13 Claims. (Cl. 219—39)



13. For use in combination with a desk, a ventilating attachment comprising a fan, mounting means for securing said fan in suspended relation within the general confines of a desk, said mounting means including a yoke, said fan being pivotally mounted within said yoke, a control panel intended to be mounted on a desk remote from said fan, mechanical linkage extending between said control panel and said fan for remotely controlling the adjustment of said fan within said yoke, a heater carried by said fan, control means for said heater carried by said control panel and connected to said heater.

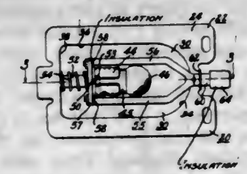
2,734,991
INTERFERENCE WEDGE MONOCHROMATOR
Justin J. Shapiro, Montgomery County, Md., assignor to American Instrument Company, Inc., Silver Spring, Md.
Application May 24, 1954, Serial No. 431,829
7 Claims. (Cl. 240—1)

1. An interference monochromator comprising a tubular housing, a light source mounted in one end of said housing, a collimating lens mounted in the other end of said housing, a plate having a slit therein, means supporting said plate outwardly adjacent said lens, bracket means secured to said other end of the housing, an interference wedge, a color filter between said wedge and said slit and means slidably supporting said wedge on said



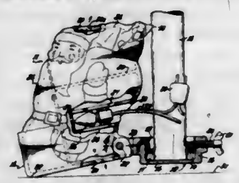
bracket means for movement in a direction perpendicular to said slit and normal to the optical axis of said lens.

2,734,992
COMPARTMENT LIGHT AND SWITCH
Harold V. Elliott, William E. Brown, and Harold F. Brown, Anderson, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application July 26, 1954, Serial No. 445,595
3 Claims. (Cl. 240—7.1)



2. A switch and lamp holder for use in a compartment having an opening closable by a door comprising; a support adapted to be mounted in a wall of said compartment in a position proximate said door, a socket carried by said support for receiving a base of a lamp, a movable contact carried by said support adapted for making electrical contact with a terminal of said lamp when said door is open and a contact actuator having a bifurcated end, the bifurcations passing on either side of said socket and lamp and adapted to move said contact and break the electrical contact between said movable contact and said terminal when said door is closed, and means including a curved wall on said support disposed relative to said lamp for reflecting a portion of the illuminating effect thereof directly through said opening and the remaining portions of the illuminating effect into the interior of said compartment when said door is open.

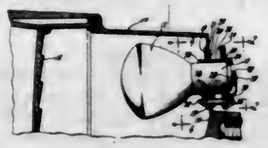
2,734,993
CHRISTMAS TREE STAND
Elwood W. Fritz, Lynwood, Calif.
Application October 3, 1952, Serial No. 312,927
9 Claims. (Cl. 240—10)



1. A Christmas tree stand comprising a structure to be positioned on a supporting surface and carry a tree in upstanding condition, said structure including a body for engaging and supporting the lower end of the tree trunk, a plurality of hollow individual legs extending outwardly in different directions from the body, the individual legs being formed of a light passing material and having translucent figures formed on the walls thereof, individual electric lights contained within said hollow light passing legs and illuminating said translucent figures, and means attaching said legs to said body for es-

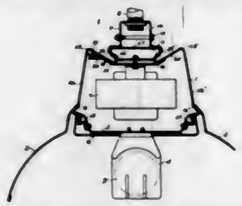
sentially vertical swinging movement relative thereto, said legs having portions spaced above said attaching means for bearing inwardly against and bracing said trunk.

2,734,994
PRE-FOCUS TYPE LIGHT BULB MOUNTING
Lloyd T. Fuqua, Fortville, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 29, 1952, Serial No. 307,027
1 Claim. (Cl. 240—41)



The combination of a reflector having a generally circular aperture and a plurality of smaller apertures arranged about the periphery of said generally circular aperture, a light bulb having a cylindrical base adapted to be inserted into said generally circular aperture and an annular locating flange adapted to abut said reflector and having a plurality of openings adapted to register with said smaller apertures in said reflector, a flat ring of rigid non-conductive material positioned on the side of said reflector oppositely disposed from said bulb locating flange, a plurality of pins connecting said ring to said reflector, each of said pins having one end secured to said ring and the other end extending through one of said smaller apertures and one of said openings, said other end being provided with a conical head to prevent unauthorized withdrawal of said pins from said reflector, a spiral spring surrounding each of said pins and interposed between said reflector and said ring to urge said ring away from said reflector, and a contact member secured to said ring said contact member having a spring blade portion extending outwardly from the periphery of said ring and then curled inwardly toward the center of said ring and into generally parallel relationship thereto to make electrical contact with a contact button on the base of said light bulb.

2,734,995
MULTILAMP FIXTURES FOR ILLUMINATING SYSTEMS OF CONSIDERABLE LENGTH
Eberhard Lenze and Josef Müller, Neheim-Huesten, Germany
Application October 2, 1950, Serial No. 187,872
Claims priority, application Germany October 3, 1949
5 Claims. (Cl. 240—51.11)



1. A lamp fixture comprising a substantially channel-shaped casing having a top and a pair of sides, said top and pair of sides forming a pair of lateral edges at the intersection of the planes thereof, said top consisting of five angularly bent integral elements each enclosing an acute angle with the element situated immediately adjacent thereto, two of said five elements each enclosing an angle of less than 90 degrees with one of said pair of sides, said five elements comprising a median element and two lateral pairs of elements, said median element lying substantially flush with the plane defined by said pair of lateral edges and forming jointly with two of said five elements situated adjacent thereto a straight hollow rail, said rail being substantially recessed in back of the plane defined by said pair of lateral edges and gripped by suspension clamps at the outer surface thereof, a wedge-shaped clamp supporting auxiliary fixture equipment engaging the inner surface of said rail.

2,734,996
ELECTRIC LAMP HOLDERS
Seymour Rogow, South Orange, and Aaron R. Berman, Glen Ridge, N. J., assignors to Keaton Rubber Company, a corporation of New Jersey
Application February 5, 1953, Serial No. 335,204
1 Claim. (Cl. 240—52.3)

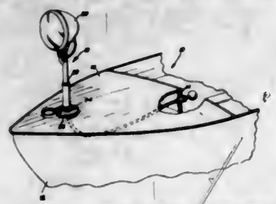


An electric lamp holder consisting of a single piece of resilient material comprising handle, plug-in, switch and socket portions in longitudinal array, said handle and socket portions being each of substantially cylindrical shape, and said switch and plug-in portions being each of substantially conical shape joined together at their bases so as to form a double cone with the two cones forming with each other at their common bases a relatively large space angle and each cone forming at its top a relatively small space angle around the axis of said longitudinal array; said plug-in and switch cones having each diametrical openings; each of said plug-in openings extending through the plug-in cone in a direction substantially perpendicular to the inclination of said plug-in cone; and each of said switch openings extending through the switch cone, first, in a direction substantially perpendicular to its axis and, thereafter, at the outside of said switch cone into an open-ended recess formed in a portion of the wall of said switch cone; said open-ended recess extending in a direction substantially parallel to the axis of said switch cone and having a slot extending through a portion of the wall of said switch cone and along said recess in a direction substantially parallel to the axis of said switch cone; said socket portion having a wall thickness substantially smaller than the overall wall thickness of the two cones joined together; and said socket portion having diametrical slots in its wall extending substantially in the direction of its axis and aligned with the slots through said recesses in said switch cone so as to permit said socket portion together with an adjoining portion of said switch cone to be opened up substantially without affecting said plug-in cone and handle portion.

2,734,997
DEMOUNTABLE REMOTE CONTROLLED DIRIGIBLE LIGHT
Michael A. Frady, New Orleans, La., assignor of fifty per cent to Vincent J. Stassi, New Orleans, La.
Application October 23, 1952, Serial No. 316,384
8 Claims. (Cl. 240—61.6)

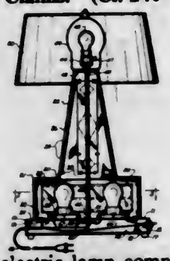
1. A demountable light construction comprising a light, a mounting bracket assembly and a standard, said standard being removably mounted in said bracket assembly and said light being mounted on said standard, electrical

contact means on said bracket assembly directly contacting a portion of said standard to energize the light, said mounting bracket assembly comprising a disk having a central aperture therein, and a bracket secured to and depending below said disk, said standard consisting of longitudinally extensible outer and inner tubular members, means securing said outer member to said disk, said inner member extending through said disk and terminating within said bracket, said light being pivotally attached at



spaced points to upper ends of said outer and inner tubular members, a remote control means connected to said standard and said bracket assembly for pivoting the light about the standard and rotating the light and standard, said remote control means including a socket member mounted for longitudinal and rotational movement in said bracket, the lower end of said inner member being seated in said socket member, resilient means on said standard yieldingly urging said inner member into seating engagement with said socket member.

2,734,998
ELECTRIC LAMP WITH INTERIORLY ILLUMINATED HOLLOW STAND
George L. Norwood, Detroit, Mich.
Application November 4, 1952, Serial No. 318,579
2 Claims. (Cl. 240—81)



1. A portable electric lamp comprising a hollow base having a top wall, a hollow stand provided with light emitting openings and including a lower rectangular portion having side walls provided with flanges extending perpendicularly inward for attachment to said top wall and an upstanding pyramidal upper portion, a plurality of lamp bulbs of different colors mounted in spaced relation on said hollow base top wall and disposed to extend vertically within said lower portion of said stand for emitting colored light through the openings in said stand, and an individual energizing circuit operatively connected to each of said lamp bulbs including a manually operated switch for controlling the particular circuit, said switches being mounted in a wall of said base in spaced apart relation to each other.

2,734,999
CHIMNEY SUPPORT AND CHIMNEY FOR INCANDESCENT BURNER
Carl Bramming, Nashville, Tenn., assignor to Aladdin Industries, Incorporated, Nashville, Tenn., a corporation of Illinois
Application November 1, 1952, Serial No. 318,193
2 Claims. (Cl. 240—99)

1. In a fuel burning lamp having a burner thereon, the combination comprising an annular supporting member adapted to be mounted on the burner, a plurality of angularly spaced chimney supporting clips mounted on said annular member at equal angular intervals around the periphery thereof, each of said clips being formed of flat sheet material and being of generally U-shaped form, each of said clips including a flat horizontal portion disposed in a transverse radial plane, each of said clips having opposed inner and outer fingers projecting upwardly from said horizontal portion in radially spaced-apart relation, each of said inner fingers having a lug portion at its upper end projecting radially outwardly, a chimney detachably mounted on said clips, said chimney being generally tubular and open-ended in form, said chimney having a generally cylindrical lower wall portion with an annular lower edge engaging said horizontal portions of said clips, said lower wall portion having a plurality of substantially horizontal arcuate inwardly projecting ridges spaced around the inside of said lower wall portion at equal angular intervals, said ridges corresponding in number and in angular disposition to said clips, said lower wall portion having arcuate substantially cylindrical entrance elements disposed between said ridges for passing said lugs on said inner fingers, said chimney being rotatable on said clips between a released



position with said entrance elements alined with said inner fingers to permit upward withdrawal of said chimney and a locked position angularly displaced in one direction from said released position with said lugs on said inner fingers disposed above said ridges and engaged therewith in interlocking relation, said lower wall portion having a plurality of inwardly projecting stop elements disposed along said ridges and engaging said inner fingers with said chimney in said locked position to define said locked position and prevent rotation of said chimney beyond said locked position, said lower wall portion having a plurality of outwardly projecting cam locking lobes corresponding in number and angular spacing to said clips, said locking lobes projecting outwardly to a circle of a diameter at least as great as that of a circle encompassing the insides of said outer fingers, said lobes being positioned angularly between said entrance elements and said stop elements so that said lobes will pass said outer fingers in the course of rotation of said chimney between said released and said locked positions, said lobes engaging said outer fingers in said locked position and resisting counter rotation of said chimney to said released position.

2,735,000
GLOBE HOLDER
Bertram A. Wilson, Summerville, Ontario, and Donald C. McCormack, Toronto, Ontario, Canada, assignors to J. A. Wilson Lighting & Display Limited, Toronto, Ontario, Canada, a corporation
Application September 22, 1951, Serial No. 247,894
5 Claims. (Cl. 240—128)

1. A globe holder comprising a support having a downwardly facing supporting surface, a locking sleeve around

the support, the locking sleeve having a lower edge and being movable between an upper and a lower position, a plurality of fingers secured to said surface and projecting downwardly therefrom and then outwardly for engaging the inner surface of a globe, one of the fingers having a pivotal mounting on said surface and being pivotable on said mounting about a substantially vertical axis, said finger having a lever arm extending under said surface from said mounting, the lever arm when the locking sleeve



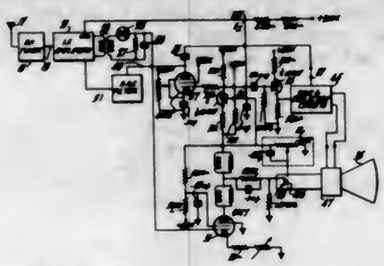
is in the upper position being swingable outwardly beyond the periphery of said surface to pivot said finger inwardly out of globe engaging position, the lever arm when swung outwardly extending below the lower edge of the locking sleeve so that said lower edge may rest on the lever arm, the locking sleeve when the lever arm is not swung outwardly being movable to the lower position where it surrounds the periphery of said surface thereby preventing the lever arm from swinging outwardly beyond the periphery of said surface.

2,735,001
FREQUENCY SYSTEM
Robert Witters, Cedar Rapids, Iowa, assignor to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application December 4, 1950, Serial No. 198,975
3 Claims. (Cl. 250—20)

1. Means for removing amplitude modulation present on an incoming amplitude and frequency modulated signal comprising, a first mixer receiving said incoming signal, a first local oscillator furnishing a signal to said first mixer, a second mixer receiving an input from said first local oscillator, a second local oscillator, a third mixer receiving said incoming signal and an input from said second local oscillator, first filtering means receiving the output of said third mixer, the second mixer receiving an input from the first filter, a second filter receiving the output of the second mixer, and a fourth mixer receiving the output of the second filter and the output of the first mixer.

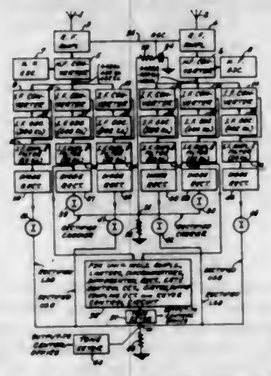
2,735,002
SYNC SEPARATOR AND AGC CIRCUITS FOR TV RECEIVERS
Eugene O. Keizer, Princeton, N. J., and Marlin G. Kroger, Maywood, Ill., assignors to Radio Corporation of America, a corporation of Delaware
Application August 23, 1952, Serial No. 306,004
6 Claims. (Cl. 250—20)

1. In a radio receiver adapted to receive and demodulate modulated signals of the television type, said signals including a recurrent synchronizing pulse component, amplifier means including electron discharge tube means having an electron collecting electrode for the modulated signal, means connected to said amplifier means to obtain demodulated signals, a limiter, means to apply said demodulated signals to said limiter with their direct current component preserved, means to connect said limiter to a source of variable bias obtained from an electron collecting electrode of said amplifier means so that its limiting level will be at a signal level close to but greater than the level of the tips of the synchronizing pulse component of said demodulated signal, an automatic gain control circuit connected with said limiter to obtain a control potential which is a function of the potential difference



between said limiting level and the instantaneous level of the tips of the synchronizing pulse component of said demodulated signal, and means to apply said control potential to said amplifier means for controlling the gain thereof in a direction tending to maintain a given signal level differential between said synchronizing pulse tips and said limiting level.

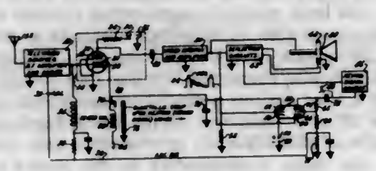
2,735,003
RECEIVER FOR MULTIPLEX SIGNALS
Harold Olaf Peterson, Riverhead, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application August 27, 1952, Serial No. 306,618
13 Claims. (Cl. 250—20)



1. In a receiver for a transmitted multiplex signal consisting of a carrier that is amplitude modulated by one signal and frequency shift keyed by another signal, means for separating the upper and lower amplitude modulation sidebands of the received signal from each other and from the carrier, means for applying the separated carrier to a frequency shift keying receiving circuit for utilization of said other signal, and means for effecting diversity combination of the upper and lower sidebands in a common output circuit for utilization of said one signal.

2,735,004
AUTOMATIC GAIN CONTROL SYSTEMS
Eugene O. Keizer, Princeton, N. J., and Marlin G. Kroger, Oak Park, Ill., assignors to Radio Corporation of America, a corporation of Delaware
Application January 4, 1954, Serial No. 402,008
9 Claims. (Cl. 250—20)

1. In a radio receiving system, the combination of: a signal amplifying means for amplifying received signals; means connected with said amplifying means for controlling the gain thereof as a function of an automatic gain control potential; automatic gain control voltage developing means connected with said amplifying means for developing an automatic gain control potential as a function of received signal strength; means for applying said automatic gain control potential to said gain controlling means; means coupled with said gain



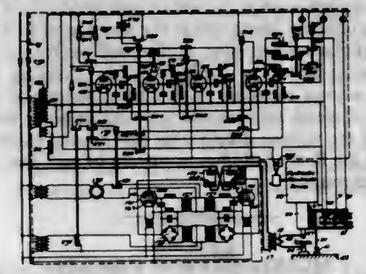
controlling means for controlling its operating mode as to keyed or unkeyed operation, said mode controlling means being responsive to a control voltage; and means for applying an electrical version of said automatic gain control potential to said mode controlling means to define its operating mode as a function of received signal strength.

2,735,005
ADD-SUBTRACT COUNTER
Floyd G. Steele, Manhattan Beach, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application March 27, 1950, Serial No. 152,041
9 Claims. (Cl. 250—27)

9. A two-way binary counting circuit comprising a plurality of flip-flop stages, an upper and lower gate circuit associated with each of said stages, each of said upper gate circuits connected to sense one condition of an associated stage, each of said lower gate circuits connected to sense another condition of an associated stage, an isolator circuit connected at the trigger point of each flip-flop stage except the first, an input line carrying pulses to be counted connected to the trigger point of said first flip-flop stage, an output line from each of said upper gate circuits connected to the isolator circuit of the succeeding stage, an output line from each of said lower gate circuits connected to the isolator circuit of the succeeding stage at a different point electrically isolated from the connection from each of said upper gate circuits, means for qualifying said upper gates and disqualifying said lower gates during additive counting, and means for qualifying said lower gates and disqualifying said upper gates during subtractive counting.

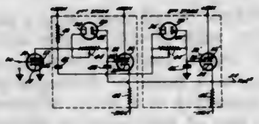
2,735,006
AUTOMATIC TIMING SYSTEM
Clarence B. Stadum, Buffalo, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Original application January 10, 1948, Serial No. 1,523. Divided and this application October 2, 1951, Serial No. 249,377
3 Claims. (Cl. 250—27)

1. A timer including an electric discharge device, a circuit associated with said electric discharge device for controlling the conductivity thereof, energy storage components in said circuit, a plurality of networks to be connected to said components and when so connected controlling the charge on said energy storage components to time the conductivity and non-conductivity of said discharge device, a selector for connecting a selected one



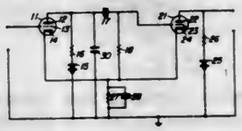
of said networks in circuit with said storage components and means responsive to a property of an operation to be timed for automatically actuating said selector to operate as aforesaid.

2,735,007
TIME-BASE GENERATOR
Robert J. McCurdy, Bridgeboro, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application January 24, 1952, Serial No. 268,024
9 Claims. (Cl. 250—27)



1. A time-base generator comprising a capacitor charging circuit, means for applying a pulse having a predetermined duration to said capacitor charging circuit, integrating means connected to said charging circuit to derive an output which is proportional to the integral of the voltage appearing at the output of said capacitor charging circuit during the duration of said applied pulse, and means for adding said integral voltage to the voltage appearing at the output of said capacitor charging circuit including an electron discharge tube having at least a cathode, an anode, and a control grid, the output of said integrating circuit being connected to the grid of said tube and the cathode of said tube being connected to said capacitor charging circuit, and means for applying a source of operating potential to said anode.

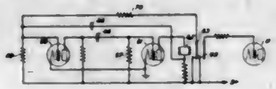
2,735,008
SWEEP CIRCUIT
James K. Scott, North Linthicum, Md., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application June 15, 1953, Serial No. 361,562
4 Claims. (Cl. 250—27)



1. A circuit for generating a sweep current comprising a highly evacuated first triode having a first anode, a first cathode and a first control grid; a first source of direct energy; a first resistor connecting said first source to said first anode; a first capacitor having a first end and a second end; said first end being connected to the junction of said first resistor and said first anode; a second resistor of high value connecting said second end to said first cathode; a second capacitor connected from said first end

to said first cathode; and an output circuit comprising solely a second electron discharge device having a second anode, a second cathode and a second control grid; a second source of direct energy; and a third resistor connecting said second source to said second anode; said second control grid being connected to the junction of said second end and said second resistor; said second electron discharge device being biased to conduct during charging of said first and second capacitors and during periods of no current flow through said second resistor but being biased to cut-off by the voltage drop across said second resistor produced by the flow of discharge current of said first capacitor therethrough.

2,735,009
MULTIVIBRATOR CIRCUIT
William R. Harry, Milwaukee, Wis., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Original application December 27, 1945, Serial No. 637,411. Divided and this application May 17, 1950, Serial No. 162,464
2 Claims. (Cl. 250—36)



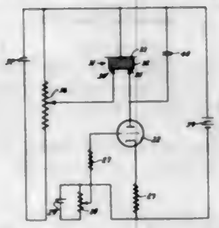
1. A multivibrator circuit comprising a pair of electron discharge devices, each of said devices including a cathode, an anode and a control electrode, said cathodes being connected to a point of reference potential, said anodes being connected to a point of potential positive with respect to that of said point of reference potential, a timing circuit of preassigned time constant interconnecting the anode of one of said devices and the control electrode of the other of said devices, a timing circuit of preassigned time constant interconnecting the anode of said other device and the control electrode of said one device, and means for altering to a preassigned extent the time constant of one of said timing circuits, said timing circuits each including an impedance network, said means comprising electrical relay means connected in the connection of one of said anodes to said point of positive potential, and an impedance for connection with and disconnection from the impedance network of said one of said timing circuits responsive to the electrical condition of said relay means.

2,735,010
STABILIZING BLOCKING OSCILLATOR CIRCUITS
Alda V. Bedford, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application October 12, 1950, Serial No. 189,747
3 Claims. (Cl. 250—36)



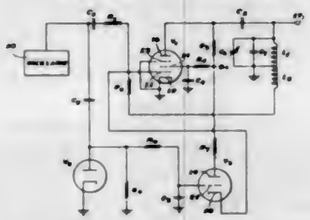
1. In a frequency stabilized time constant controlled oscillator, the combination of: an electronic oscillator tube having at least an anode, a cathode and control electrode; a capacitor having a first and second terminal, said second terminal being directly and galvanically connected with said control electrode; power supply means supplying a source of substantially fixed anode power supply having at least a positive terminal and a negative reference terminal, the value of all potentials supplied by said power supply means being subject to fortuitous variation relative to said reference terminal; a galvanic connection between said cathode and said negative terminal; load means connected between said anode and said positive power supply terminal; diode means having an anode and a cathode, said diode anode being galvanically connected to said capacitor first terminal and said diode cathode to a fixed positive potential on said power supply; signal translation means connected between said load means and the first terminal of said capacitor such to capacitively apply a translated version of the signal developed by said load means in regenerative relation to said control electrode with an amplitude sufficient to produce periodic conduction in said diode means; and resistance means galvanically connected between said control electrode and a fixed positive potential on said power supply, the value of said resistance means being fixed relative to the value of said capacitor to produce a time constant value in the range corresponding to the period of the desired oscillator operating frequency.

2,735,011
OSCILLATING CIRCUIT
Arthur H. Dickinson, Greenwich, Conn., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Application February 1, 1951, Serial No. 208,966
5 Claims. (Cl. 250—36)



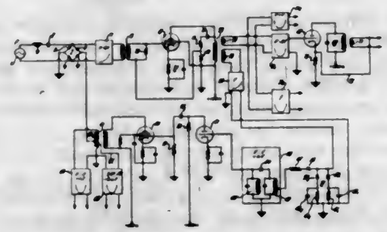
1. An oscillation generator comprising an electron discharge device having a cathode, anode and control electrode, crystal triode means having a current voltage relationship such that the current is a multi-value function of the voltage characteristic, said crystal triode being serially coupled to said device, means for biasing said device, and capacitor means coupled across said crystal triode, said capacitor being charged through said device with the current through said crystal triode being of one value and discharged through said crystal triode with the current through said crystal triode being of a second value.

2,735,012
DISABLING CIRCUIT
Willard F. Werth and Robert C. Mledke, Cedar Rapids, Iowa, assignors to Collins Radio Company, Cedar Rapids, Iowa, a corporation of Iowa
Application April 27, 1951, Serial No. 223,272
2 Claims. (Cl. 250—36)



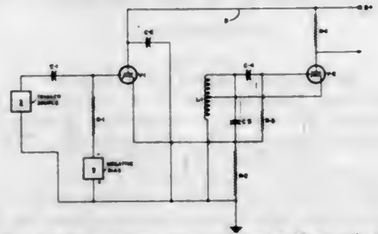
1. In a frequency divider of the harmonic oscillator type, an input oscillator provided with an output terminal, a divider tube having a control grid, a grid resistor connected between said output terminal and ground, one terminal of said resistor being connected to said control grid, a disabling tube having a plate electrode connected to a plate supply voltage and a cathode connected through said grid resistor to ground for applying a portion of said plate supply voltage across said grid resistor when said disabling tube is conductive, and means for rendering said disabling tube conductive when the output of said input oscillator fails.

2,735,013
MULTIPLE FREQUENCY GENERATOR
Norman N. Epstein, Redwood City, Calif., assignor to Lenkurt Electric Co., Inc., San Carlos, Calif., a corporation of Delaware
Application September 28, 1953, Serial No. 382,690
8 Claims. (Cl. 250—36)



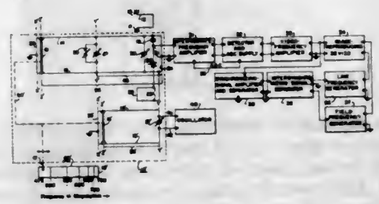
1. A multiple frequency generator for developing a plurality of stable frequency outputs each spaced from a single reference frequency comprising input terminals whereat a source of reference frequency waves is adapted to be connected, a single-balanced modulator having one input circuit connected to said terminals and including a second input and an output circuit, a plurality of load circuits coupled to said output circuit, frequency selective means connected in each of said load circuits, said frequency selective means being selective of frequencies differing by integral multiples of a subharmonic of said reference frequency and one of said frequency selective means being selective of said subharmonic frequency, wave-distorting means coupled to draw energy from the load circuit including said subharmonic selective means, a circuit fed by said wave-distorting means optimally responsive to a harmonic of said subharmonic frequency which differs from said reference frequency by an amount equal to said subharmonic frequency, means for increasing the amplitude level of the said harmonic and connections from the last mentioned circuit to the second input circuit of said modulator.

2,735,014
KEYED OSCILLATOR
John A. Rado, Flushing, N. Y., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application February 19, 1954, Serial No. 411,591
5 Claims. (Cl. 250—36)



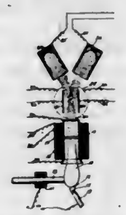
1. A keyed oscillator comprising a first triode having a control grid, an anode, and a cathode; a tank circuit having an inductive component in parallel with series capacitive and resistive components; means for grounding one extremity of the tank circuit; means for coupling the other extremity of the tank circuit to the control grid of the first triode; a resistor which is connected between the junction of the series capacitive and resistive components of the tank circuit and the control grid; means for connecting the cathode of the first triode to an intermediate portion of the inductive component of the tank circuit; a plate circuit for the first triode; a second triode having a control grid, an anode, and a cathode; means for coupling the plate of the second triode to ground; means for normally biasing the control grid of the second triode to cutoff; means for coupling the control grid of the second triode to a periodic trigger signal source; and a plate circuit for the second triode which includes the resistive component of the tank circuit as a cathode resistor.

2,735,015
HIGH-FREQUENCY WAVE-SIGNAL TUNING DEVICE
Charles J. Hirsch, Douglaston, and Meyer Press, Flushing, N. Y., assignors to Hazeltine Research, Inc., Chicago, Ill., a corporation of Illinois
Application April 20, 1950, Serial No. 157,058
4 Claims. (Cl. 250—40)



1. A high-frequency wave-signal tuning device tunable over a selected frequency range comprising: a high-frequency wave-signal transmission line substantially short-circuited at a fixed first point therealong; tuning means longitudinally displaceable along said transmission line and substantially short-circuiting the same at a displaceable second point therealong for selectively tuning said transmission line to substantially an integral multiple of one-quarter wave length greater than one-quarter wave length at each frequency in said range; and a high-frequency trimmer condenser included in said transmission line within the portion thereof resonant at the highest frequency in said range and displaced from said short-circuited first point and nearer said first point than said second point when the device is tuned to the high and low ends of said frequency range for imparting to the device a desired frequency-displacement tuning characteristic over said high end of said frequency range.

2,735,016
PROCESS OF REDUCING ORES AND COMPOUNDS
Charles Sheer, New York, and Samuel Korman, Brooklyn, N. Y.
Application June 24, 1949, Serial No. 101,178
17 Claims. (Cl. 250—41.9)



1. The process of separating the elements of refractory chemical compounds which comprises converting said compounds into a copious flux of ions of the component

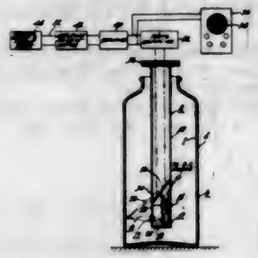
elements, forming said flux into a stream in which the ions have substantially the same kinetic energy and move in parallel paths and then passing said stream through crossed electric and magnetic fields to separate the elemental ions into separate paths and then separately collecting and neutralizing the ions in each path.

2,735,017

METHOD AND APPARATUS FOR INSPECTING HOLLOW ARTICLES

Arthur D. Beard, Haddonfield, N. J., and Everett Eberhard, Phoenix, Ariz., assignors to Radio Corporation of America, a corporation of Delaware

Application February 23, 1951, Serial No. 212,317
13 Claims. (Cl. 250—52)



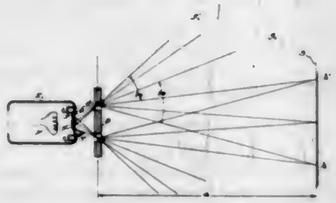
1. A method of inspecting the interior surface of the walls of an empty glass bottle comprising, directing a narrow, focused beam of ultraviolet light to said surface from a light source within the bottle, picking up only the diffuse reflection of said beam from said surface, directing the diffuse reflection upwardly out of the mouth of the bottle and detecting, at a point outside the bottle, changes in the intensity of said reflection caused by the presence of dirt on said surface.

2,735,018

X-RAY MICROSCOPE

Dan McLachlan, Jr., Salt Lake City, Utah, assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

Application February 19, 1953, Serial No. 337,711
4 Claims. (Cl. 250—53)



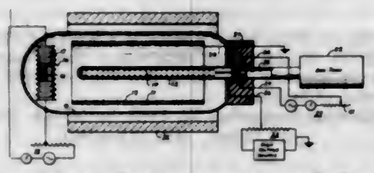
1. As a new article of manufacture useful for the production of enlarged images by means of X-ray diffraction, in combination, an X-ray tube characterized by a target which functions both as a source of X-rays and as a window for X-ray transmission; planar concentric discs arranged to form at least one annular ring between the circumference of the internal disc and the inner edge of the external discs; said concentric discs being so positioned in a plane parallel to the surface of said target that X-rays emerging perpendicularly to the surface of said target at its center pass through the center of said concentric discs; a circle of wire positioned symmetrically in the annular ring between said concentric discs; said circle being of such radius that when an object is placed adjacent to the external surface of said target an enlarged image of said object is formed.

2,735,019

PARTICLE ACCELERATOR

John T. Dewan, Houston, Tex., and Clark Goodman, Boston, Mass., assignors to Schlumberger Well Surveying Corporation, Houston, Tex., a corporation of Delaware

Application July 2, 1952, Serial No. 296,916
11 Claims. (Cl. 250—84.5)



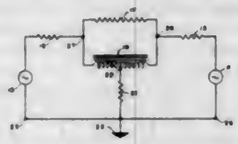
1. A particle accelerator comprising a hollow anode containing ionizable gas, a cathode at least partially surrounding said anode, means for establishing a positive potential gradient between said cathode and said anode and for projecting electrons between said cathode and said anode, means for gradually emitting molecules of said gas from said anode whereby said electrons tend to ionize said gas molecules, and a substance on the inner surface of said cathode for nuclearly reacting with positive ions drawn thereto by said potential gradient.

2,735,020

CURRENT TRAP FOR PREVENTING COUPLING BETWEEN TWO GENERATORS

Jack A. Crawford, Inyokern, Calif., assignor to the United States of America as represented by the Secretary of the Navy

Application June 9, 1953, Serial No. 360,620
2 Claims. (Cl. 307—51)
(Granted under Title 35, U. S. Code (1952), sec. 266)



2. An electrical circuit comprising a load impedance having two terminals, a first source of A. C. potential and a second source of A. C. potential, said sources each having two terminals, one terminal of the first source being connected to one of the terminals of the load impedance, one terminal of the second source being connected to the other terminal of the load impedance, the other terminals of the sources being joined, an autotransformer having a center tap connected in parallel with the load impedance, and a second impedance connected between the center tap of the autotransformer and the joined terminals of the first and second sources, said second impedance having a value substantially equal to one-fourth the value of the load impedance.

2,735,021

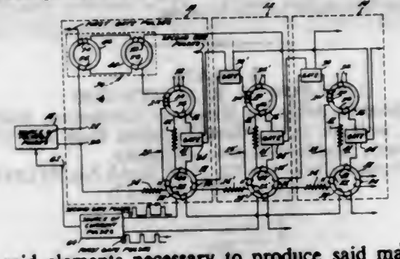
MAGNETIC BINARY DEVICE

Ole K. Nilssen, Collingswood, N. J., assignor to Radio Corporation of America, a corporation of Delaware

Application December 24, 1954, Serial No. 477,525
14 Claims. (Cl. 307—88)

1. A magnetic device comprising a plurality of magnetic elements each having two remanent states of substantial saturation, said elements being capable of changing from an initial one of said remanent states to the other in response to magnetizing forces at least equal to predetermined thresholds, winding means linked to said elements, means for applying voltage pulses to said winding means, said magnetizing force thresholds and the number of turns in said winding means being such that

the energizing current in said winding means of one of said elements necessary to produce said magnetizing force thresholds for said one element is smaller than the energizing current in said winding means of another



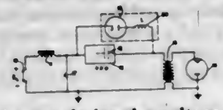
of said elements necessary to produce said magnetizing force threshold for said another element, and means for applying magnetizing forces to said elements to restore them to said intial states when said other element is changed to said other state.

2,735,022

REVERSING CIRCUIT FOR POST-PULSE MODULATOR CHARGE

Harry J. White, Cambridge, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy

Application November 26, 1945, Serial No. 630,941
6 Claims. (Cl. 307—108)



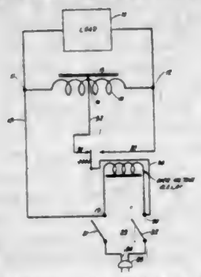
4. Apparatus for regulating the voltage of a pulse modulator system in the presence of post-pulse inverse charges on the pulse forming network, including means to shunt said inverse charges around said network through an inductive circuit resonant with said network to reverse the polarity of said inverse charges in the resonant loop so formed, said resonant loop having a period shorter than the interpulse charging period of said network thereby limiting the amplitude of charge.

2,735,023

ELECTRICAL SYSTEM

Joseph Kozinski, Chicago, Ill., assignor to H. G. Fischer & Co., Franklin Park, Ill., a corporation of Illinois

Application July 13, 1953, Serial No. 367,666
1 Claim. (Cl. 307—112)



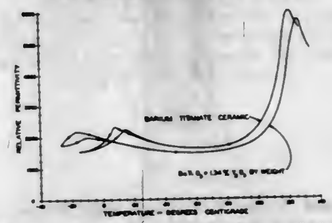
An electrical system comprising a load designed for operation at a particular potential at a standard frequency, said particular potential being the higher of two readily available power potentials, an autotransformer having a winding provided with terminals at the ends and with an intermediate tap, one end terminal and said intermediate tap being adapted for energization at the lower of said two available potentials, the outer terminals of said winding being adapted to supply the higher available voltage, connections between the load terminals and the outer terminals of said autotransformer, a connection between said one outer transformer terminal and one power line, a relay having a winding connected across two wires forming a power line for supplying a power voltage which may be either one or the other available voltages, said relay having a movable contact connected to the other power line wire and having normal and off-normal contacts connected respectively to the intermediate and other terminals of said autotransformer, said relay being designed to close only at the higher of the two available voltages and remain open at the lower of said two voltages.

2,735,024

FIRED CERAMIC BARIUM TITANATE BODY

Frank Kulcsar, Fairview Park, Ohio, assignor, by mesne assignments, to Clevite Corporation, Cleveland, Ohio, a corporation of Ohio

Application October 27, 1951, Serial No. 253,549
11 Claims. (Cl. 310—8.3)



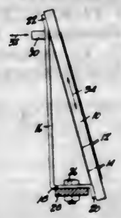
1. A fired ceramic dielectric body consisting essentially of at least ninety two percent by weight of barium titanate and an amount of yttrium equivalent to between about one quarter of one percent and about three percent by weight of yttrium trioxide.

2,735,025

PIEZOELECTRIC DEVICE

Alpha M. Wiggins, South Bend, Ind., assignor to Electro Voice, Inc., Buchanan, Mich., a corporation of Indiana

Application May 20, 1950, Serial No. 163,160
5 Claims. (Cl. 310—8.5)



1. A piezoelectric device comprising a piezoelectric element of the type adapted to generate a voltage when stressed in its plane, a substantially L-shaped harness having its end portions fixedly secured to the end portions of said element, one part of said harness adjacent to one end of said element being anchored to a fixed support, and means associated with a part of said harness spaced from said support for transversely flexing said harness in a direction at an angle to the plane of said piezoelectric element.

2,735,026

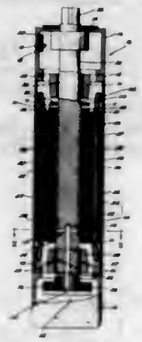
SUBMERSIBLE MOTOR COOLING

John C. Moerk, Freeport, Ill., assignor to Fairbanks, Morse & Co., Chicago, Ill., a corporation of Illinois

Application July 28, 1954, Serial No. 446,311
3 Claims. (Cl. 310—54)

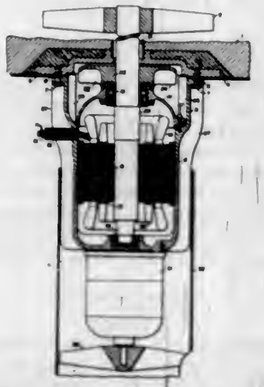
1. In an electric motor, an enclosing casing having communicating main and auxiliary chambers containing fluid coolant, a shaft extending in the casing centrally through the main chamber and having a terminal end portion in said auxiliary chamber, a stator member in

the main chamber, a rotor core element on said shaft in cooperative relation to said stator member and forming therewith a gap open at its ends to the main chamber, passageways extending between and longitudinally along the core element and shaft, each having one end thereof open at that end of the core element remote from said auxiliary chamber, each of said passageways further having its opposite end closed and terminating inwardly of the rotor core end near the auxiliary chamber, said shaft providing an axial bore extending through said terminal end portion of the shaft and being open to said auxiliary



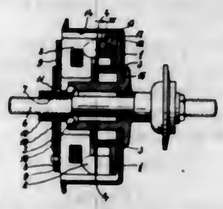
chamber, and further providing radial bores communicating said axial bore with said passageways adjacent the closed ends thereof, and a ring element on said shaft having radial passages therein each communicating with one of the passageways at its open end, said axial and radial bores being effective for delivering fluid coolant from the auxiliary chamber to said passageways, and said ring through its said radial passages effecting discharge of fluid coolant from the passageways into the main chamber for circulation therein and return through said gap to said auxiliary chamber.

2,735,027
ANNEALING FURNACE MOTOR
William H. Formhals, Theodore C. Fockler, and James H. Penney, Buffalo, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application March 26, 1951, Serial No. 217,612
3 Claims. (Cl. 310—58)



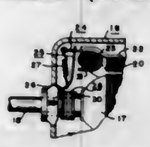
1. An electric motor adapted to be mounted on a wall of a furnace and having a shaft adapted to extend into the furnace, said motor having a unitary housing adapted to be secured at one end to the furnace with a substantially gas-tight seal, the other end of the housing being completely closed to form a solid, gas-tight enclosure for the motor and shaft, bearings for the shaft supported within the housing adjacent the ends thereof, heat transfer means on the shaft on the furnace side of the bearing nearest the furnace, and means on the housing cooperating with said heat transfer means to transfer heat from the shaft to the housing.

2,735,028
LOW-POWER HUB DYNAMO
Pieter Hendrik Johannes Brouwer, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application December 23, 1952, Serial No. 327,589
4 Claims. (Cl. 310—67)



1. A low-power hub dynamo mounted on a shaft member and comprising at least two relatively rotatable parts arranged axially adjacent one another and one of said parts being a multipolar permanent magnet, stop means for maintaining at least a minimum predetermined air gap between said parts and permitting the relative rotation of said parts by rolling friction, said magnet being mounted in said hub for free axial movement with respect to its coupled member, and a member which is resilient axially and rigid tangentially for coupling said other part to said shaft.

2,735,029
MOTOR CONTROL MEANS
John B. Dyer, Syracuse, and Raymond H. Sullivan, Rochester, N. Y., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 6, 1953, Serial No. 347,024
10 Claims. (Cl. 310—77)

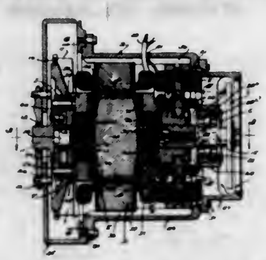


1. Means for decelerating an electric motor including, an armature having a shaft and a coil through which current flows during motor energization and about which the magnetic flux produced by the flow of current therethrough collapses substantially instantaneously upon deenergization of the motor, comprising in combination, brake means for said shaft including a helically wound spring having one end attached to said shaft and having an upturned portion at the other end, and means to actuate said brake means by engaging said upturned portion of said other spring end for decelerating said armature shaft substantially instantaneously with the cessation of current flow through said coil and in response to the collapse of the magnetic flux produced by current flowing through said coil.

2,735,030
ELECTRICAL GENERATOR
Maurice W. Brainard, Los Angeles, Calif., assignor of one-half to O'Keefe & Merritt Company, Los Angeles, Calif., a corporation of California
Application March 3, 1952, Serial No. 274,581
1 Claim. (Cl. 310—261)

A rotor of the character described including, an electrical element including a diametrically disposed pole

piece having flat end faces and diametrically opposite pole portions, and a winding surrounding the pole piece and projecting axially from the end faces thereof, heads at opposite sides of the element with openings receiving the projecting portions of the winding and engaged with the said faces, and means connecting the heads together with



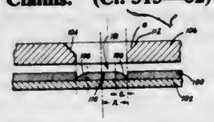
the said element between them, said means including rods extending between the heads and through said element and rods extending between the heads and at the exterior of said element, one of the heads having a portion adapted to carry an auxiliary electrical element, and each head having a part through which the rotor is adapted to be mounted in a machine.

2,735,031
CATHODE RAY TUBES
Leonard Albert Woodbridge, Beaconsfield, England, assignor to Electric & Musical Industries Limited, Hayes, Middlesex, England, a company of Great Britain
Application February 5, 1952, Serial No. 269,931
Claims priority, application Great Britain February 15, 1951
8 Claims. (Cl. 313—70)



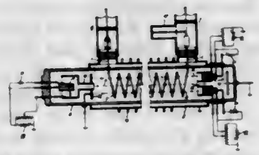
1. A cathode ray tube comprising a plurality of independent cathodes capable of being selectively energised at will the electron streams from which are each adapted to pass through an aperture in a first electrode and then through an aperture in an adjacent electrode, the aperture in said latter electrode having its centre offset with respect to the centre of said first-mentioned aperture, circuit connections to said electrodes for setting up therebetween a constant electrostatic field to cause the electron stream passing therethrough to be deflected in respect of a desired path for said stream whereby if a further suitable constant deflecting field is set up in the vicinity of said electrodes, the electron stream from any one of said cathodes is caused to move first in one direction and then in a changed direction so as thereafter to follow said desired path.

2,735,032
CATHODE RAY TUBE GUN STRUCTURE
William E. Bradley, New Hope, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application October 9, 1952, Serial No. 313,907
16 Claims. (Cl. 313—82)



1. A cathode-ray tube assembly comprising an evacuated envelope and within said envelope an electron beam generating and intensity control system and a beam intercepting member arranged in spaced relationship to said beam generating and control system, said beam generating and control system comprising a cathode electrode and a control electrode arranged in spaced and directly confronting relationship to said cathode and being provided with an aperture, said aperture defining an effective emission area of said cathode and said control electrode being adapted to control the flow of electrons from said effective emission area, said emission area having a surface configuration, a portion of which has a given curvature in a given direction and another portion of which has a curvature in said given direction less than said given curvature, and means for producing at said effective emission area a voltage gradient to accelerate electrons from said emission area through said aperture.

2,735,033
TRAVELING WAVE TUBE
Stanley E. Webber, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application June 18, 1952, Serial No. 294,173
12 Claims. (Cl. 315—3.5)



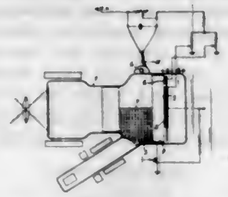
1. In a traveling wave tube of the type having a transmission structure for transmitting an electromagnetic wave at a velocity less than the velocity of light and means for providing an electron beam in proximity to said structure and having a proper relative velocity with respect to said wave to amplify the wave, means for providing a second electron beam in proximity to said structure having a proper relative velocity with respect to a reflected wave to attenuate the reflected wave.

2,735,034
HIGH FREQUENCY ELECTRICAL APPARATUS
Elmer D. McArthur, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application May 17, 1950, Serial No. 162,565
4 Claims. (Cl. 315—4)



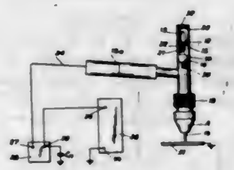
1. High frequency electrical apparatus comprising a source of a beam of electrons, a source of magnetic flux located adjacent said electron beam source for producing a magnetic field perpendicular to said beam, said field causing the electrons of said beam to traverse a circular path, a straight hollow conductor provided at opposite ends with a narrow gap and being located diametrically within said beam such that the gaps are adjacent said beam, another hollow conductor having an adjustable length and provided at one end with a narrow gap which is located opposite and near to a first of said gaps in said first hollow conductor, and a third hollow conductor provided at one end with a narrow gap which is located opposite and close to the second of said gaps in said first conductor.

2,735,035
TELEVISION PICK-UP TUBES AND TRANSMITTING APPARATUS INCORPORATING THE SAME
Frederick H. Townsend and Frederick Geale, Cambridge, England, assignors to Cathodeon Limited, Cambridge, England, a British company
Application June 28, 1954, Serial No. 439,764
Claims priority, application Great Britain July 8, 1953
7 Claims. (Cl. 315—11)



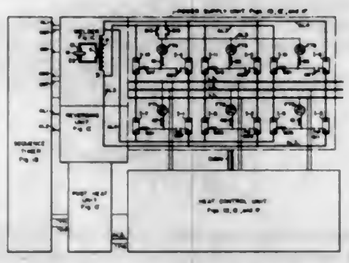
1. Television pick-up tube apparatus incorporating a pick-up tube having a glass envelope, a target and at least two strip-like electrodes located along those edges of the picture area of said target which correspond respectively to the ends of line and frame scanning, a photo-cathode located adjacent the inside wall of and extending approximately half-way round the circumference of said envelope and in front of said target, means for biassing said electrodes positively with respect to said photo-cathode, and lamp means for illuminating said photo-cathode to produce a rain of low-velocity biassing electrons for flooding the entire picture area of the target, said lamp means being arranged close to that part of said tube envelope which lies diametrically opposite said photo-cathode.

2,735,036
ARC WELDING APPARATUS
Charles Volff and Julius Hammerslag, Montreal, Quebec, Canada, assignors to L'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude, Paris, France
Application July 13, 1951, Serial No. 236,516
5 Claims. (Cl. 315—129)



1. Arc welding apparatus comprising, in combination, a torch, a source of welding current, a source of high frequency current permanently tuned within a narrow frequency band upwards of about 10 mHz., electrical connections from said torch to both said sources and from both said sources to the ground, a glow discharge tube, visibly carried by said torch, having two main electrodes, at least one of which is permanently connected to a part of the torch connected to the high frequency source, and means for causing a high frequency current to pass from the torch to the ground through said tube while substantially preventing the passage of low-frequency currents through said tube thereby causing illumination of said tube by high-frequency current only, the specific voltage drop of said tube being within the appropriate range for obtaining clearly visible variations of the tube illumination when the desired open-circuit high frequency voltage appears between the torch and the ground, and for said tube to divert a negligible fraction only of the high frequency current which becomes established across the arc gap after the arc is struck.

2,735,037
ELECTRIC DISCHARGE APPARATUS
Clarence B. Stadum, Snyder, Edward C. Hartwig, Lancaster, and Hubert W. Van Ness, Buffalo, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application April 23, 1952, Serial No. 283,892
28 Claims. (Cl. 315—140)



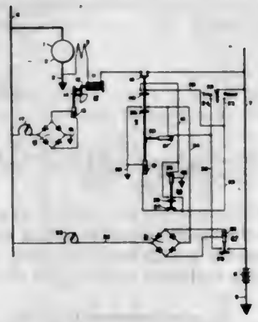
1. In combination, a supply conductor; a first load conductor; a second load conductor; a first electric discharge device having an anode, a cathode and an igniter; a second electric discharge device having an anode, a cathode and an igniter; connections connecting said anodes to said supply conductor; connections connecting the cathode of said first device to said first load conductor; connections connecting the cathode of said second device to said second load conductor; a control circuit common to the igniters of both said devices and including a firing electric discharge device; and means for selectively connecting said control circuit to control one or the other of said igniters, said means including means for connecting said firing device in series with the igniter of the one or the other of said devices which said control circuit controls.

2,735,038
READ-OUT TUBE
Robert D. Hancock, Compton, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application August 18, 1950, Serial No. 180,205
5 Claims. (Cl. 315—334)



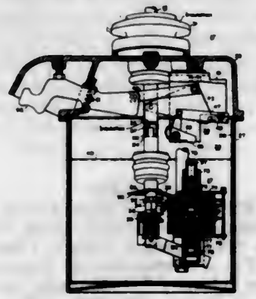
1. A read-out tube, including, an envelope having a light-transmitting portion, an ionizable gas disposed in the envelope at a pressure for producing a glow discharge upon ionization, an anode disposed within the envelope, a plurality of cathodes disposed within the envelope in energizable relationship with respect to the anode, the cathodes in the plurality being disposed in substantially the same plane adjacent to the light-transmitting portion of the envelope, a first group of cathodes in the plurality being disposed relative to one another to define a plurality of enclosures, a second group of cathodes in the plurality being disposed within the enclosures defined by the first group of cathodes and having curvilinear configurations, a third group of cathodes in the plurality being disposed within the enclosures defined by the first group of cathodes and having rectilinear configurations, and means for selectively energizing predetermined cathodes in each group to provide different numerical and alphabetical indications.

2,735,039
OVERVOLTAGE PROTECTION FOR ALTERNATING CURRENT GENERATORS
Niles F. Schuh, Jr., Lima, Ohio, assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application November 22, 1952, Serial No. 322,059
5 Claims. (Cl. 317—13)



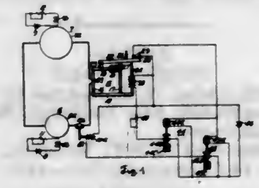
1. A control system for an alternating-current generator having a field winding, said control system including a field relay for controlling the connection of said field winding to a source of direct current, means for actuating said field relay to closed position to effect connection of the field winding to said source, the field relay having latch means for holding it in closed position and trip means for releasing the latch means, a voltage relay, and contact means on the field relay for connecting the voltage relay to be responsive to the generator voltage when the field relay is in closed position, the voltage relay being connected to effect energization of said trip means in response to a predetermined generator voltage to cause opening of the field relay.

2,735,040
ELECTRIC APPARATUS HAVING A PROTECTIVE GAP
Alert M. Opsahl, Pittsburgh, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application February 8, 1951, Serial No. 210,013
5 Claims. (Cl. 317—16)



1. A circuit interrupter comprising a metal casing, a stationary contact and a cooperating movable contact in said casing, electro-responsive means in said casing electrically connected in series circuit relation with said contacts and operable in response to predetermined abnormal conditions in the circuit to effect movement of said movable contact to an open circuit position to interrupt the circuit, said contacts and electro-responsive means being electrically insulated from said casing, a hollow insulating bushing extending through a wall of said casing into the interior thereof, a conductor extending into said bushing from outside said casing and electrically connected in series circuit relation with said electro-responsive means and said contacts, a second conductor coaxially disposed in predetermined spaced relation with the aforesaid conductor in said bushing to provide a protective gap therebetween completely enclosed by said bushing and insulated from said casing for protecting said electro-responsive means from predetermined abnormal voltage conditions, said second conductor being electrically connected to said stationary contact and to said electro-responsive means so that said gap is electrically connected in shunt relation to said electro-responsive means, said stationary contact being supported from said insulating bushing.

2,735,041
ELECTRIC PROTECTIVE SYSTEM UTILIZING CLOSE DIFFERENTIAL RELAY
John W. Wurgler, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application February 21, 1952, Serial No. 272,738
7 Claims. (Cl. 317—49)

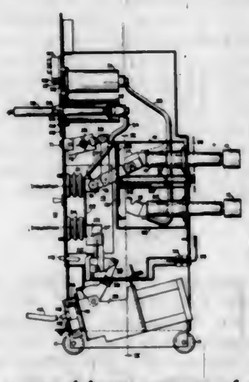


1. In a protective system, the combination of a load circuit, a circuit breaker for said load circuit, a control relay having first and second differentially acting coils, an armature and contact means actuated by said armature, means for supplying to said first coil a control current of magnitude dependent upon the magnitude of the current of said load circuit to attract said armature to actuate said contact means when said load circuit current reaches a first predetermined value, a source of voltage of substantially constant value, a first time delay relay responsive to actuation of said contact means for connecting said second coil to said source a first predetermined time interval after said actuation, and a second time delay relay responsive to said actuation for operating said circuit breaker a second predetermined time interval after said actuation, said second interval being longer than said first interval, the value of the current in said second coil being so selected that a decrease of said load circuit current to a second predetermined value below said first predetermined value during said second time interval causes said armature to be released to prevent said second time delay relay from operating said circuit breaker.

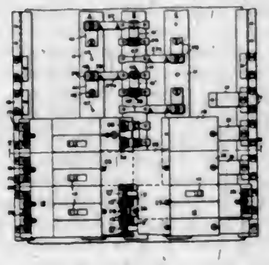
2,735,042
METAL CLAD SWITCHGEAR
Benjamin I. Hayford and Lloyd E. Keck, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application June 26, 1952, Serial No. 295,676
19 Claims. (Cl. 317—99)

1. In a combined grounding and testing device for insertion into a metal clad switchgear cell, in combination, a frame structure movable into the cell, two sets of contact members carried by the structure, a double-throw selector switch, a rotatable shaft for operating said switch to engage one or the other of said sets of contact members, a removable handle for actuating said shaft, said handle being removable from said shaft only when said switch engages one or the other of said sets of contact members, said handle being disposed to prevent insertion of the device into the cell when the handle is on the shaft, a grounding switch carried by the structure, said grounding

switch being electrically connected to said selector switch, a barrier actuated by the selector switch, and an additional barrier actuated by movement of the device into the cell to isolate said contact members.



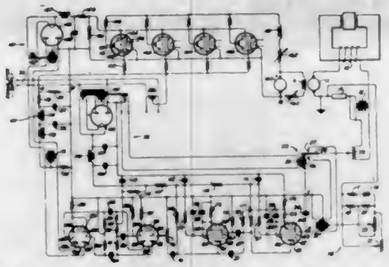
2,735,043
PANELBOARDS
Willis A. Speck, Union, N. J., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application June 24, 1952, Serial No. 295,290
14 Claims. (Cl. 317—119)



1. In a panelboard, in combination, a cabinet, a circuit interrupter disposed in the cabinet, a bus bar, a branch circuit connector for connecting the interrupter to the bus bar, a supplemental connector having a portion directly engaging the branch circuit connector and a portion directly engaging the bus bar, securing means extending through the supplemental connector and the branch circuit connector into the bus bar, and additional securing means extending through the supplemental connector into the bus bar, thereby increasing the effective contact area between the branch circuit connector and the bus bar.

2,735,044
MAGNETIC FIELD REGULATOR
Kenneth G. Macleish, Rochester, N. Y., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application November 21, 1947, Serial No. 787,380
7 Claims. (Cl. 317—123)

1. In a magnet regulator of the type regulating the magnet winding current and comprising a magnet generator, means to compare the input signal to a reference voltage, a converter to change the result of said comparison to an alternating current signal, an alternating current amplifier unit, a rectifier, a variable impedance output unit, and a power amplifier controlling the magnet generator; a voltage divider connected between said rectifier and said variable impedance output unit to reduce the signal to said output unit whereby said amplification unit operates at its point of maximum efficiency,



and a dampening transformer having its primary winding connected in the magnet winding circuit and its secondary winding connected across said converter, thereby providing an opposing regulator input signal for particular load fluctuations.

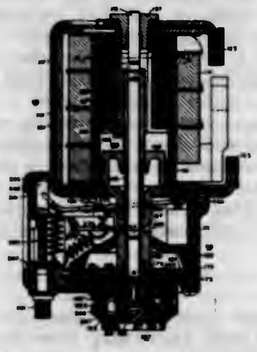
2,735,045
THREE-POSITION RELAY
René Savoie, Sainte-Adresse, France
Application February 27, 1953, Serial No. 339,259
Claims priority, application France March 20, 1952
14 Claims. (Cl. 317—172)



1. An electrical relay comprising an oscillatory magnet and stationary magnet elements arranged to present a group of pole faces in proximity to the arc of swing of a pole face of the oscillatory magnet, said stationary magnet elements comprising two poles each of which has a pair of spaced pole faces, magnetizing elements for inducing polarity in said stationary magnet elements to produce one polarity at one of said pairs of spaced pole faces and the opposite polarity at the other of said pairs of spaced pole faces, the respective polarities being reversible in accordance with the direction of current flow in said magnetizing elements, said pole face of the oscillatory magnet being substantially of a width to span two adjacent pole faces of the stationary magnet elements and the space between them.

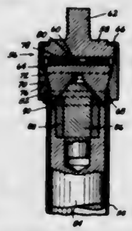
2,735,046
TRIP OPERATING MAGNET
Bernard G. Tremblay and Meri E. Horn, Pittsburgh, Pa., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application February 7, 1950, Serial No. 142,806
8 Claims. (Cl. 317—178)

1. In a circuit breaker, the combination of a trip device operable to effect an automatic operation comprising a trip member, electromagnetic means for operating said trip member including, a fixed core member, a C-shaped magnet yoke comprising a group of relatively thin substantially coextensive sheets of magnetic material, said sheets of magnetic material being disposed peripherally of said C-shaped magnet yoke and parallel thereto, a pair of rigid members substantially coextensive with said sheets disposed one on each side of said group of sheets and in close proximity thereto, said sheets together with said rigid members being bent flatwise and disposed in nested relation to form said C-shaped magnet yoke, said magnet yoke having one leg portion extending from one end of said fixed core member, another leg portion extending parallel to the axis of said fixed core member and a third leg portion extending across the other end of said magnet, said group of sheets and said rigid members being disposed and arranged to form a rigid support for said trip device, said fixed core member being mounted within said C-shaped magnet yoke on said one leg portion thereof, an energizing winding surrounding said fixed core member between said one leg portion and said third leg portion of said magnet yoke, a movable core member having a portion extending into said winding adjacent said third leg portion of said C-shaped magnet yoke and operable



upon energization of said electromagnetic means in response to overload currents to actuate said trip member, time delay means comprising a fluid dashpot for retarding operation of said trip member, valve means for admitting fluid to said dashpot to effect a predetermined time delay in the operation of said trip member, a valve operating armature disposed adjacent said third leg portion of said C-shaped magnet yoke operable upon energization of said electromagnetic means in response to overload currents of predetermined value to operate said valve means, and said third leg portion of said C-shaped magnet yoke having an opening therein adjacent said valve operating armature providing an air gap for effecting operation of said valve operating armature.

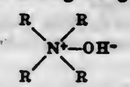
2,735,047
ANTIVIBRATION SOLENOID STRUCTURE
Claude M. Garner, Clayton, Joe Roos, Jr., St. Louis, James A. Wright, Webster Groves, and Thomas P. Fleer, St. Louis, Mo., assignors to Missouri Automatic Control Corporation, St. Louis, Mo., a corporation of Missouri
Application October 2, 1953, Serial No. 383,842
4 Claims. (Cl. 317—186)



3. In a solenoid, a vertical plunger guide sleeve of non-magnetic material, a plunger slidable in said sleeve, said plunger having a conical upper end and having a concentric shading ring of smaller diameter than said plunger embedded in said upper end, a resiliently mounted plunger stop member of magnetic material at the upper end of said sleeve having a conical recess therein adapted to receive the conical end of said plunger thereby to center it in its guide sleeve, and said conical recess having a slightly greater apex angle than that of said conical plunger end, thereby to provide an annual air gap between the outer peripheral areas of said plunger and said plunger stop member.

2,735,048
POWER TRANSMISSION DEVICE
Monroe D. Levy, University City, Mo., assignor to Vickers Incorporated, Detroit, Mich., a corporation of Michigan
No Drawing. Application March 15, 1951, Serial No. 215,867
14 Claims. (Cl. 317—234)

11. A blocking layer device comprising a crystalline selenium layer, a counterelectrode on said layer, and a barrier layer between the electrode and the selenium layer, said barrier being the product formed by the interposition of a quaternary ammonium hydroxide between the electrode and the selenium surface and baking the composite unit before any electroforming, said quaternary ammonium hydroxide having the general formula



where each R is a group having less than four carbon atoms.

2,735,049
TRANSISTOR
Lee de Forest, Los Angeles, Calif.
Application March 31, 1952, Serial No. 279,507
17 Claims. (Cl. 317—235)



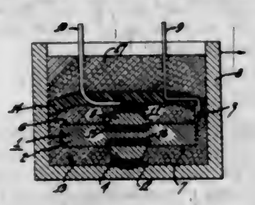
1. An amplifier of the transistor type which includes: an emitter; a collector; a base between said emitter and collector and in electrical contact therewith; and a layer of electron-multiplier material between said base and at least one of the adjoining members,

15. A device of the type described which includes: an emitter; a collector; a base between said emitter and collector; a layer of electron-multiplier material on said collector and in the path of current flowing therethrough; a conducting layer adjacent said layer of electron-multiplier material; a second layer of electron-multiplier material adjacent said conducting layer; a layer of cathodoluminescent material adjacent said second layer of electron-multiplier material; and a light transparent electrically conducting member adjacent said layer of cathodoluminescent material.

2,735,050
LIQUID SOLDERING PROCESS AND ARTICLES MADE THEREBY
Lorne D. Armstrong, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application October 23, 1952, Serial No. 316,517
The terminal 15 years of the term of the patent to be granted has been disclaimed.
4 Claims. (Cl. 317—235)

1. A semi-conductor device comprising a body of semi-conducting material, a mercury-soluble collector element forming a p-n rectifying junction between said body and said collector element, a mercury-soluble emitter element forming another p-n rectifying junction between said body and said emitter element, and two separate mercury soluble surfaces, said collector element and said emitter element being each held in electrical and thermal contact

respectively with said separate mercury-soluble surfaces, said collector element, said emitter element and said surfaces respectively being wetted with a saturated solution



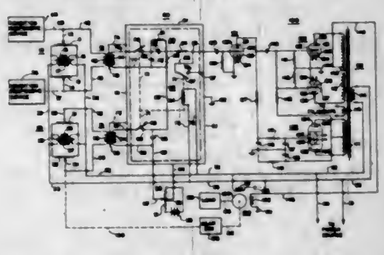
comprising mercury and a metal having at least the same order of solubility in mercury as said collector and said emitter elements.

2,735,051

ELECTRONIC MOTOR CONTROL APPARATUS

Willis H. Gille, St. Paul, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware

Application April 9, 1952, Serial No. 281,376
8 Claims. (Cl. 318—29)



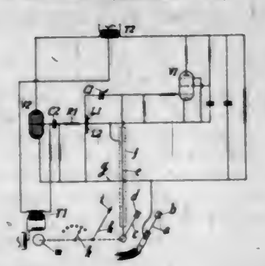
1. Motor control apparatus comprising in combination: a plurality of sources of alternating voltage of variable magnitude; motor means to be positioned in accordance with the algebraic sum of said alternating voltages; means for rectifying and filtering each of said alternating voltages to form unidirectional voltages having magnitudes dependent upon the magnitudes of the corresponding alternating voltages; means combining said unidirectional voltages together to form a resultant unidirectional voltage; means for periodically interrupting said resultant voltage to form an output voltage with an alternating current component; and means for amplifying said output voltage and for controlling the operation of said motor means.

2,735,052

FOLLOW-UP CONTROL FOR INDICATOR

John Ernest Fielden, Wythenshawe, Manchester, England, assignor, by mesne assignments, to Robertshaw-Fulton Controls Company, Greensburg, Pa.

Application May 8, 1950, Serial No. 160,640
4 Claims. (Cl. 318—31)



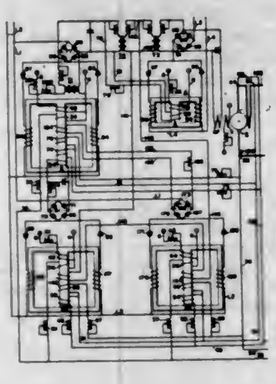
1. In apparatus for indicating movements of a mass, the combination comprising an oscillator, means for controlling oscillations in said oscillator including a capacitor comprising a movable electrode adjacent the mass and having an electrical capacitance relative thereto, said last named means being constructed and arranged to permit said oscillator to oscillate when said capacitance varies in one direction from a predetermined value and to suppress oscillations in said oscillator when said capacitance varies in another direction from said predetermined value, reversible motor means connected to said electrode for moving the same relative to said mass for varying said capacitance, means for energising said motor means for moving said electrode relative to said mass to increase said capacitance, means for energising said motor means for moving said electrode relative to said mass to decrease said capacitance, and circuit means connecting said oscillator and said energising means for rendering one of said energising means operable while said oscillator is oscillating and the other of said energising means operable while said oscillations are suppressed said other energising means including a thyratron connected between a source of alternating current and said motor means, said circuit means including a capacitor connected to the grid of said thyratron for accumulating a negative charge proportional to said oscillations and delaying the firing of said thyratron on at least alternate half cycles of said source while said oscillator is oscillating.

2,735,053

MAGNETIC AMPLIFIER REGULATED CURRENT LIMIT CONTROL FOR WARD LEONARD SYSTEMS

Charlton H. Storey, Jr., Buffalo, and William T. Hunt, Jr., New York, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application February 27, 1953, Serial No. 339,436
16 Claims. (Cl. 318—143)



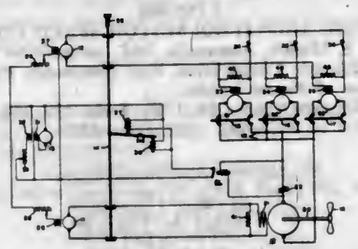
1. In a system of control for dynamoelectric machines, in combination, a main generator having an armature winding and a field winding the excitation of which is to be controlled, at least one motor connected to the generator to thus be operated in accordance with the voltage of said generator, a self-saturating final-stage magnetic amplifier having main windings connected to energize the generator field winding and having a bias winding and a control winding, magnetic amplifier means, responsive to the generator armature current and the generator voltage, connected to energize the control winding of the self-saturating final-stage magnetic amplifier to thus control the excitation of the generator field winding, and damping transformer means, responsive to the rate of output of the self-saturating magnetic amplifier and the output of the magnetic amplifier means for controlling the output of the magnetic amplifier means.

2,735,054

PROTECTIVE SYSTEM FOR DYNAMOELECTRIC MACHINES

Walter Schaelchlin, Buffalo, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application January 18, 1954, Serial No. 404,551
10 Claims. (Cl. 318—144)



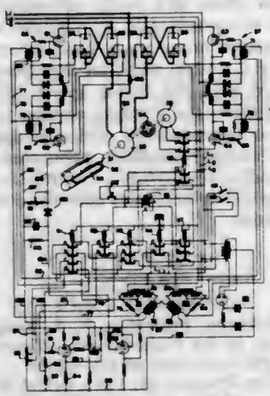
1. In a power system, in combination, a motor having an armature winding and a main field winding, a discharge resistor connected in parallel-circuit relation with the main field winding, said armature winding being connected to a power bus, a plurality of generators connected to said bus, each generator having a main field winding, a discharge resistor connected in parallel-circuit relation with each generator field winding, excitation means for energizing the main field windings of said motor and said generators, circuit interrupting means for opening the motor and the generator main field winding circuits simultaneously, and relay means responsive to the current in the armature winding of the motor for controlling the operation of the circuit interrupting means.

2,735,055

CONTROL CIRCUIT FOR DYNAMIC BRAKING

Charles W. Thomas, Warren, Ohio, assignor to The McKay Machine Company, Youngstown, Ohio, a corporation of Ohio

Application January 12, 1952, Serial No. 266,211
2 Claims. (Cl. 318—212)



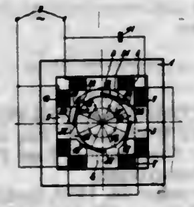
1. In a motor control circuit for the normal operation and/or dynamic braking of induction motors and of the type having in combination with a motor a pair of inversely connected electric discharge devices connecting said motor with a source of A. C. electrical energy, firing circuits for each of said discharge devices, selectively operable means for rendering one of said discharge devices substantially non-conductive whereby a D. C. braking current may be supplied to said motor, and a firing circuit for the other of said discharge devices for varying the conductivity thereof; the improvement in said last mentioned firing circuit comprising a phase shifting bridge and means to alter said bridge in response to the flow of energy to said motor whereby the conductivity of the other of said discharge devices is reduced in response to excessive flow of energy to said motor.

2,735,056

CAPACITOR MOTOR

Barend Martinus Meijer, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

Application July 5, 1952, Serial No. 297,348
Claims priority, application Netherlands July 23, 1951
3 Claims. (Cl. 318—220)



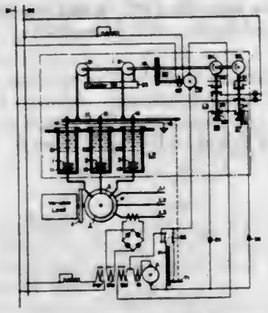
1. A capacitor motor comprising a stator having at least four salient poles, each of said poles being provided with a field coil, the coils of two opposite poles being in series with the capacitor, at least one short-circuited winding surrounding a part of each of said poles, a magnetic bridge having a thickness of not less than 1.4 mm. for magnetically coupling at least two adjacent poles, each of said poles being provided with pole shoes which jointly form a continuous iron circuit, the short-circuited windings being distributed about the total pole circumference at equal distances and the active part of each pole that is screened by a short-circuited winding being equal in length.

2,735,057

ELECTRICAL SYSTEM FOR MOTOR LOAD CONTROL

Walter Schaelchlin and Charlton H. Storey, Jr., Buffalo, and Gerald E. Mathias, Williamsville, N. Y., assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application April 12, 1952, Serial No. 281,956
12 Claims. (Cl. 318—241)



1. In a motor torque control system, in combination, a wound-rotor induction motor, having primary and secondary windings, mechanically coupled to a variable load, a liquid rheostat having fixed electrodes connected to the motor secondary windings, movable electrodes for adjusting the resistance value of the liquid rheostat, supply conductors connected to the motor primary windings, a direct current pilot motor for operating the movable electrodes, a regulating direct-current generator having an output circuit, an adjustable pattern field, an adjustable regulating field, and a self-exciting field; a potentiometer connected across said output circuit and having an adjustable tap, a current transformer interconnected with a sup-

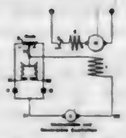
ply conductor, a rectifier connected to the output of the current transformer to thus rectify the output to produce a direct current as a function of the primary winding load current, circuit means for connecting the regulating field to the rectifier, said regulating field and pattern field being wound to produce opposing effects and the adjustment being such that for a selected load of the induction motor the direct-current output voltage will be zero, means connecting said adjustable tap to be driven in dependence of operation of said pilot motor, and circuit means including said adjustable tap for so connecting the direct-current pilot motor to said potentiometer that the direction of rotation and the speed of the pilot motor will be a function of the polarity and magnitude of the tapped voltage of said potentiometer.

2,735,058

REVERSIBLE COMMUTATING-POLE MOTORS

Maurice J. Pascalle, Wilkinsburg, Pa., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application November 26, 1954, Serial No. 471,275
5 Claims. (Cl. 318—297)



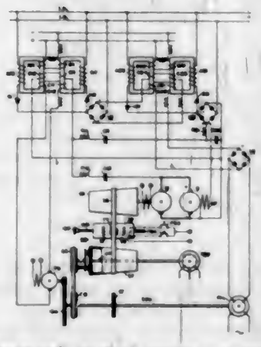
2. A reversible variable-speed direct-current motor, including an armature, a field-winding, a series compensating winding, a series commutating winding, an auxiliary cumulative commutating-winding-means, a means for applying a reversible and variable direct-current excitation-controlling-power to said field-winding, and a rectifying means for converting some of said reversible excitation-controlling-power into unidirectional-current power and applying the same to said auxiliary commutating-winding-means.

2,735,059

MOTOR SPEED CONTROL SYSTEM

Walter Schaelchlin, Buffalo, N. Y., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application June 18, 1952, Serial No. 294,148
3 Claims. (Cl. 318—323)



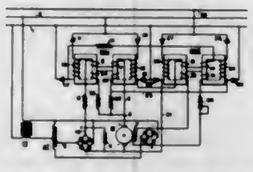
1. A motor speed control system comprising, a pair of cone pulleys, a belt drive interconnecting said pulleys, means connecting one pulley to the motor, a differential having two input connections and an output connection, a constant speed drive engaged with one input connection, the other input connection being engaged with the other of said pulleys, a movable carriage, a belt shifter engaged with said belt drive and resiliently mounted on said carriage, said belt shifter moving with said carriage to move said belt along said pulleys to change the relative speeds of said pulleys, actuator means connected with said carriage and said belt shifter for moving said belt shifter small amounts relative to said carriage to obtain small speed variations of said other pulley, and electrical means connected with said output shaft for controlling said motor.

2,735,060

MAGNETIC AMPLIFIER MOTOR SPEED CONTROL

Franklin S. Malick, Annapolis, Md., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania

Application August 16, 1952, Serial No. 304,709
6 Claims. (Cl. 318—331)



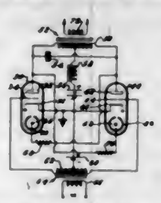
1. In an electric system of control for a direct-current motor, in combination, a direct-current motor having an armature winding and a field winding energized with direct current of a selected magnitude, a pair of supply terminals energized with alternating current, a magnetic amplifier of the self-saturating type, having main windings and series connected rectifying means for each main winding, connected to said supply terminals and said armature winding to thus energize the motor armature winding as a function of the output of the magnetic amplifier, output control means for said magnetic amplifier, said output control means including control windings for the first-named magnetic amplifier, a control magnetic amplifier of the self-saturating type, having main windings and series connected rectifying means for each main winding, connected to said supply terminals and said control windings, a plurality of control windings for the control magnetic amplifier, one of said control windings being connected to be energized at a selected constant value in one sense and being connected to the motor armature to be energized in an opposite sense as a function of the motor armature voltage, whereby the control windings of the control amplifier are effectively energized in accordance with the motor speed error, namely the difference between the voltages applied to control windings of the control amplifier, and a second control winding for the control amplifier connected to the motor armature winding to provide a control current in accordance with the motor armature current to thus provide for IR compensation.

2,735,061

INVERTER CIRCUITS

Edward O. Johnson, Princeton, N. J., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Army

Application October 31, 1952, Serial No. 317,961
10 Claims. (Cl. 321—36)



1. An inverter circuit comprising a pair of gas tubes each having an anode, a grid, a main cathode, an auxiliary cathode, and a constricting electrode surrounding a

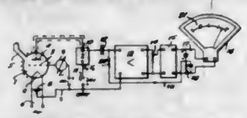
portion of said auxiliary cathode, output means connected in series with said anodes, means to apply a source of unidirectional voltage between the anode and main cathode of each tube, means to apply a source of alternating voltage to the grids of said tubes to fire said tubes cyclically, and means to feed back cyclically a voltage from said output means to the auxiliary cathode of each tube when it is being fired, said feed back means comprising connections from said output means to said auxiliary electrodes.

2,735,062

INSTRUMENTS FOR THE MEASURING OF CERTAIN PROPERTIES THROUGH IONIZATION CURRENTS

George O. Striker, Chicago, Ill.

Application September 27, 1948, Serial No. 51,422
7 Claims. (Cl. 324—33)



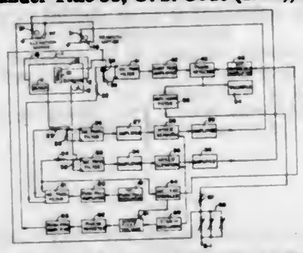
2. An arrangement for the measurement of ionization currents caused by electron emission in a discharge vessel having a filamentary cathode heated by alternating current and furnishing an electron flow periodically varying at twice the frequency of said alternating current; an electron collector electrode; and an ion collector electrode; comprising a load impedance connected between the ion collector electrode and a source of negative potential; a voltage amplifier having an input connected to said load impedance; means for preventing any D. C. potential from being fed to said input of said amplifier so that the latter amplifies only alternating voltage components appearing across said load impedance in response to the periodically varying electron flow in the discharge vessel, said amplifier having a frequency response sharply restricted to twice the frequency of said alternating current, thereby excluding undesired noise or stray voltages from the output of said amplifier; and means responsive to amplified A. C. voltages connected to the output of said amplifier.

2,735,063

TOTAL FIELD MAGNETOMETER

Erick O. Schonstedt, Silver Spring, and Henry R. Irons, Takoma Park, Md., assignors to the United States of America as represented by the Secretary of the Navy

Application August 6, 1952, Serial No. 303,017
9 Claims. (Cl. 324—43)
(Granted under Title 35, U. S. Code (1952), sec. 266)



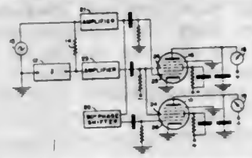
1. A magnetometer for measuring the earth's magnetic field vector comprising a detector head, said detector head including first, second and third magnetic field detector elements having the magnetic axes thereof disposed in mutually perpendicular arrangement, means mounting said detector head for movement about first and second relatively perpendicular axes respectively perpendicular to the magnetic axes of said first and second detector elements, means for supporting said detector head on an aircraft and for maintaining said first axis in substantially true vertical with respect to the earth while the aircraft is in flight, means responsive to a component of the earth's magnetic field vector parallel to the magnetic axes of said first and second detector elements for causing said detector head to be rotated about said first and second axes to a position such that the magnetic axes of said first and second inductors are perpendicular to the earth's magnetic field vector, means for measuring the field detected by the third of said inductors, and means for measuring the angles through which said detector head is rotated about said first and second axes.

2,735,064

APPARATUS FOR RAPID MEASUREMENT OF REAL AND IMAGINARY PARTS OF ADMITTANCE OR IMPEDANCE

Bernard Salzberg, Washington, D. C.

Application August 1, 1952, Serial No. 302,280
10 Claims. (Cl. 324—57)
(Granted under Title 35, U. S. Code (1952), sec. 266)



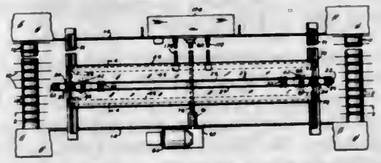
2. An impedance and admittance measuring apparatus comprising a source of alternating current energy directly coupled to the network to be tested, first means directly coupled to said source of alternating current for deriving a first relatively large amplitude voltage sample having a phase and amplitude that are unaffected by said network, second means coupled to the circuit including said source and said impedance for deriving a relatively small amplitude second voltage sample whose phase and amplitude are dependent upon the sense and magnitude of the real and imaginary components of the impedance or admittance of the network under test, nonlinear heterodyne mixing means coupled to said first and second means operative to mix the voltage samples obtained therefrom, thereby producing a D.-C. output of said mixing means linearly related to the real component of the impedance or admittance of said network, means for changing the relative phase of said first and second voltage samples by 90 degrees coupled to said first and second means, which latter phase-changed voltage samples are capable of being mixed in non-linear heterodyne mixing means to produce a D.-C. output linearly related to the imaginary component of the impedance or admittance of said network, and indicating means adapted to be coupled to said mixing means to indicate the incremental D.-C. output of said mixing means.

2,735,065

RESISTANCE MEASURING APPARATUS

Paul L. Mueller, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York

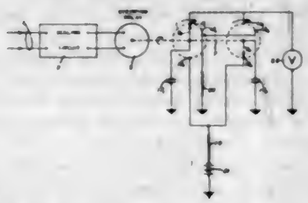
Application September 30, 1952, Serial No. 312,209
5 Claims. (Cl. 324—62)



4. Apparatus for measuring the individual resistances of a plurality of continuously advancing, parallel, horizontally disposed, laterally spaced conductors, which comprises a laterally movable carriage, a support mounted on the carriage for lateral movement therewith

and vertical movement independent of said carriage, a pair of spaced electrical contacts mounted in tandem on the support along an axis parallel to the conductors, electric drive means operable for moving the carriage laterally with respect to the conductors along a predetermined path of travel adjacent thereto, an electrical circuit for operating the drive means, switching means associated with said circuit and actuatable for deenergizing the drive means, means for actuating said switching means to deenergize the drive means whenever the carriage is positioned immediately adjacent to one of the conductors and the contacts thereon are aligned vertically with the conductor, timing means energized by said switching means each time the latter is actuated to deenergize the drive means for reenergizing the drive means after a predetermined time delay, said drive means remaining energized until the switching means is again actuated whereby the carriage moves successively into positions immediately adjacent to each of the conductors and remains stationary in each of such positions for the predetermined time delay, and means operated during the predetermined time delay for moving the support vertically to press the contacts into engagement with the moving conductor so as to establish electrical connections therewith and for subsequently returning the support to its retracted position before the end of said time delay.

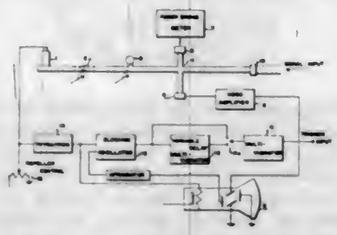
2,735,066
COUNTING-RATE METER
John L. Corl, Richmond, and Richard Gundelfinger, San Pablo, Calif., assignors to Berkeley Scientific Corporation, Richmond, Calif., a corporation of California
Application March 7, 1951, Serial No. 214,366
6 Claims. (Cl. 324—68)



1. A counting rate meter comprising two condensers of substantially equal capacity, a source of substantially constant charging potential for said condensers, indicating means adapted to measure the charge accumulated on said condensers from said source, a charging circuit connected to said source and a discharging circuit for each of said condensers, one of said circuits including a resistor to give a relatively long time constant when connected to one of said condensers and the other of said circuits being of minimum resistance to give a relatively very short time constant when so connected, and switching means actuated by the pulses to be counted and having connections to said condensers and to said circuits and indicating means respectively for interchanging the connections of said condensers between said high resistance circuit and said indicating means and for connecting said low resistance circuit to each of said condensers successively following its connection to said indicating means.

2,735,067
PEAK POWER METER
Elmer F. Deibler and Henry H. George, Silver Spring, Md., and Robert E. Miller, Stanford, Calif., assignors to the United States of America as represented by the Secretary of the Navy
Application November 18, 1954, Serial No. 469,736
2 Claims. (Cl. 324—95)

1. A pulse peak power meter comprising in combination a magic tee, a continuous wave microwave power source connected to a first input arm of the magic tee, a calibrated attenuator in the input of the continuous wave to the magic tee, means connecting the signal pulse to be measured to a second input arm of the magic tee, a calibrated attenuator in the input of the signal pulse to the magic tee, a microwave power meter connected to a first output arm of the magic tee, a detector connected to a second output arm of the magic tee, a first multivibrator actuated by a signal derived from the signal source, a variable delay multivibrator having by-pass means arranged in parallel therewith, the variable delay multivibrator and by-pass means each being in series switching contact with the output of the first multivibrator, a blocking oscillator connected in series with and actuated by the output of the parallel arranged multivibrator and by-pass means, said blocking oscillator upon activation producing a negative pulse and a positive pulse, an oscilloscope having



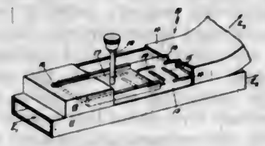
one pair of plates connected to the output of the detector for tracing the continuous wave and signal pulse and another pair of plates coupled to the output of the blocking oscillator to receive the negative pulse therefrom to control the sweep voltage of the oscilloscope, the positive pulse output of said blocking oscillator serving as an intensity control voltage for the oscilloscope, and a thyratron connected to the blocking oscillator to receive a positive pulse supplied therefrom, said thyratron having a negative pulse output produced when the thyratron is triggered by the pulse received from the blocking oscillator, the thyratron output negative pulse being electrically connected to the continuous wave microwave power source to interrupt the production of the continuous wave for a duration determined by the first multivibrator and selectively the delay multivibrator such that a simultaneous exhibit of the trace of the interrupted continuous wave and a trace of the signal pulse appears on the oscilloscope.

2,735,068
POINTER ASSEMBLY FOR AN ELECTRICAL INSTRUMENT
Alfred H. Wolferz, Hillside, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a corporation of New Jersey
Application December 13, 1951, Serial No. 261,533
9 Claims. (Cl. 324—154)



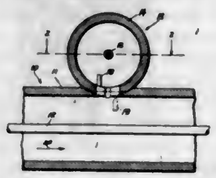
5. An arrangement for securing a pointer to the rotatable coil of an electrical instrument, said arrangement comprising a pointer support rotatable with the coil, said support including a flat base section, a rectangular boss having arcuate ends and an externally-threaded cylindrical section; a hub in the pointer, said hub including a circular aperture having a diameter slightly larger than that of the arcuate ends of said boss such that the boss extends through the hub aperture when the hub abuts against the said base section; a set of recesses in the hub and communicating with the hub aperture, such recesses spaced laterally from the sides of said rectangular boss; a spring washer disposed over the rectangular boss and spanning the pointer hub; a nut threaded on the said cylindrical section and urging the spring washer into contact with the hub; and solid slugs filling the cavities formed between the sides of the rectangular boss and the pointer hub.

2,735,069
ADJUSTABLE POWER DIVIDER AND DIRECTIONAL COUPLER
Henry J. Riblet, Wellesley Hills, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application March 4, 1952, Serial No. 274,767
4 Claims. (Cl. 333—7)



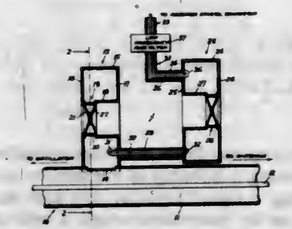
1. In combination, a pair of parallel rectangular wave guides adapted to convey electromagnetic wave energy substantially in one direction only and having a common wide wall, a plurality of pairs of cascaded mutually perpendicular slots each pair of which constitutes a directional coupler and consists of a transversely directed slot in said common wall arranged substantially along the center line thereof and a longitudinally directed slot in said common wall having its center along the axial line of said transversely directed slot, said longitudinally directed slots being arranged alternately adjacent to opposite side edges of said common wall, a member substantially opaque to said electromagnetic energy mounted for longitudinal sliding movement along said common wall for varying the amount of energy directionally transferred between said wave guides as a function of the number of pairs of slots covered by said member.

2,735,070
DIRECTIONAL COUPLING OF COAXIAL TRANSMISSION LINES
Henry J. Riblet, Wellesley Hills, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application October 20, 1950, Serial No. 191,268
3 Claims. (Cl. 333—10)



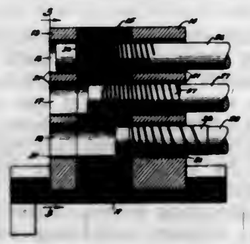
1. A signal-translation system comprising a pair of substantially mutually perpendicular coaxial-transmission lines having an intersecting wall common to both said lines, each line extending in both directions along its axis beyond said intersecting wall, a signal-coupling system connected to said lines comprising a pair of mutually perpendicular slots in said intersecting wall of both lines, a first field distorting element for producing transverse current flow in the region of the crossed slots whereby an additional component of energy is coupled between said lines said first element being positioned in the outer conductor of one of said lines adjacent said slots and extending part way across the interior of said one line only, and a second field distorting element for producing transverse current flow in the region of the cross slots whereby an additional component of energy is coupled between said lines said second element being positioned in the outer conductor of the other of said lines adjacent said slots and extending part way across the interior of said other line only.

2,735,071
DUPLEXING SYSTEMS
Carlo P. Domenichini, Malden, and Harry J. Thomas, Jr., Waltham, Mass., assignors to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application August 31, 1951, Serial No. 244,678
3 Claims. (Cl. 333—13)



1. A signal wave transmission network comprising a first toroidal cavity containing a gap adapted to discharge electrically under the influence of a predetermined electric field, a second toroidal cavity containing an electrical discharge gap, said cavities being substantially resonant to the operating frequency of said network, first means for reactively coupling said first cavity to a transmission line, second means for reactively coupling said first cavity to said second cavity, said first and second coupling means being positioned in close physical relationship in said first cavity such that a substantial portion of the energy of a transmitted pulse is fed directly through said coupling means to said second cavity whereby the gap in said second cavity is discharged before the gap in said first cavity.

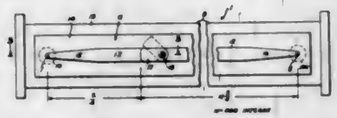
2,735,072
WIDE-RANGE RADIO-FREQUENCY TUNER
Irving R. Versoy, Jr., Norwalk, Conn., assignor to Aladdin Industries, Incorporated, Chicago, Ill., a corporation of Illinois
Application August 25, 1952, Serial No. 306,157
6 Claims. (Cl. 333—24)



4. A wide-range radio-frequency tuner, comprising a pair of conductive energy-exchange electrode elements fixedly spaced apart relative to one another, each of said elements being provided with a plurality of parallel transversely spaced channels therein, said channels in each of said elements being axially aligned with the corresponding channels in the other of said elements, a plurality of generally helical inductance coils axially aligned with said respective channels and mounted for longitudinal movement therein, each of said coils having non-uniform inductance per unit length along the length thereof, each of said coils being longer than the spacing between said

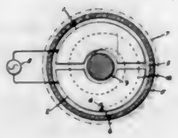
electrode elements and being movable into and along a range of positions with said coil bridging the space between said elements and intimately coupled thereto in energy-exchange relation therewith, said coils being longitudinally staggered and fixed in position with respect to one another and thereby being movable successively into bridging relation between said electrode elements.

2,735,073
BANDPASS FILTER SYSTEM
Donald D. Grieg, North Caldwell, N. J., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application August 2, 1952, Serial No. 302,293
16 Claims. (Cl. 333—73)



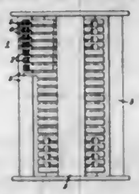
11. A combination filter and bypass system comprising a filter having a housing of conductive material, said housing having a signal input at one end thereof and a signal output at the other end thereof, a wall of said housing having an opening therethrough adjacent the input end of said housing and another opening adjacent the output end of said housing, a conductor disposed in spaced parallel relation to said wall and extending between said openings, and means coupling said conductor through said openings to the interior of said housing to form a bypass communication directly between the input and output ends of said filter.

2,735,074
ELECTRON REACTANCE DEVICE
Elmer D. McArthur, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application January 13, 1950, Serial No. 138,485
13 Claims. (Cl. 333—80)



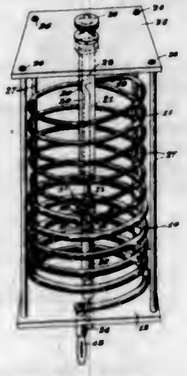
7. An electron reactance device comprising, an electrode structure disposed in an evacuated space and arranged substantially to enclose a cylindrical orbital space said electrode structure having at least one interaction gap defined by a boundary thereof, means for producing a substantially uniform magnetic field within said orbital space, means for injecting electrons tangentially into said orbital space substantially at the periphery thereof, a source of alternating driving potential connected to said electrode structure establishing an electric field across said at least one interaction gap to cause said electrons to be decelerated in curved paths of decreasing radii within said orbital space, said magnetic field having a value to produce increasing phase displacement between said driving potential and currents induced in said source by passage of said electrons between said electrodes as said electrons traverse said radially decreasing paths, and means for collecting those electrons which acquire a predetermined maximum phase displacement, the total current induced in said source by passage of said electrons across said at least one interaction gap having substantially 90 degree phase relation with respect to said driving potential.

2,735,075
SUPPORT MEMBERS FOR END TURNS OF ELECTRICAL COILS
Jesse L. Thomason, Lenox, Mass., assignor to General Electric Company, a corporation of New York
Application July 27, 1951, Serial No. 238,886
8 Claims. (Cl. 336—60)



1. In combination, a stationary electrical induction apparatus having an openly wound electrical winding comprising a plurality of spaced axially superposed conductor layers arranged about a common axis, a plurality of axially extending support members supporting said layers and positioned at peripherally displaced points of said winding and extending axially for substantially the entire axial length of said winding, the conductor layers located in the transverse central region of the winding being unsupported throughout that portion of their length which extends circumferentially between said axially extending support members, and radially extending support members for providing support against axial and radial displacement of a plurality of the axially endmost of said conductor layers, said radially extending support members being positioned intermediately of successive axially extending support members, each respective radially extending support member being positioned between a pair of axially endmost layers of said winding.

2,735,076
ADJUSTABLE COIL
Arthur C. Hudson, Billings Bridge, Ontario, Canada, assignor to National Research Council, Ottawa, Ontario, Canada, a body corporate of Canada
Application April 25, 1952, Serial No. 284,461
6 Claims. (Cl. 336—137)



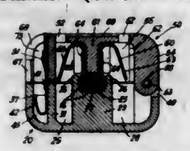
1. An adjustable helically wound coil comprising two sections of conductor having the same winding pitch and diameter and arranged on a common axis, each of said sections of conductor forming spaced turns of said coil, a telescopic connection between at least a part of an individual turn of one of said two sections and at least a part of an individual turn of the other, said telescopic connection being in the direction of a turn of said coil and forming an electrical and mechanical connection between the turns of said two sections, means mounting said two sections of conductor for relative rotation of one with respect to the other about said common axis thereby to vary the length of said coil.

2,735,077
PANEL RELEASE MECHANISM
Ralph D. Jessee, Lima, and Orvel G. Killian, Wapakoneta, Ohio, assignors to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application May 29, 1952, Serial No. 290,774
8 Claims. (Cl. 339—75)



1. In combination, a stationary, elongated, flat mounting tray, a removable panel adapted to be mounted on said tray, a lever mounted on the tray for movement longitudinally thereof, one end of said lever extending transverse to the direction of movement of the lever, the panel having an opening therein to be engaged by said end of the lever, means for moving the lever, and means for effecting transverse movement of said end of the lever to engage it in the opening in the panel when the lever is moved longitudinally of the tray in one direction to move the panel into mounted position, the lever moving the panel into released position and dropping out of said opening when the lever is moved in the other direction.

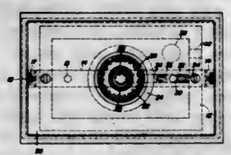
2,735,078
ELECTRIC ATTACHMENT PLUG RECEPTACLE HAVING INSULATION PENETRATING MEANS CONTACTING TWIN CONDUCTORS
Arthur Greenbaum, Tuckahoe, N. Y., assignor to Academy Electrical Products Corporation, New York, N. Y., a corporation of New York
Application March 26, 1954, Serial No. 419,019
10 Claims. (Cl. 339—99)



1. A cord plug receptacle for tapping a flat type two-conductor cord without slitting of the cord of stripping of the conductors; said receptacle comprising, in combination, first and second elongated members of dielectric material arranged to be separated to receive a cord therebetween with the members extending transversely of the cord, and having mating inner faces formed to cooperatively provide a single cord receiving passage extending transversely of said members; interengageable releasable latch means on said members operable to clamp said members onto the cord; said first member having a pair of slots spaced longitudinally of its outer surface to receive the blades of a cord plug; and a pair of conductive contact springs mounted within said first member, each in operative relation to one of said slots to contact a cord plug blade; each spring having a portion extending along such passage and formed with a barb projecting into the passage to pierce the insulation of a cord therein and a conductor of the cord when said members are clamped onto the cord, the barbs being spaced laterally of the channel whereby each barb will pierce a different cord conductor to electrically connect its associated contact spring to such conductor.

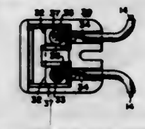
2,735,079
ELECTRICAL WALL SOCKET
Dean F. Passarelli, Albion, N. Y.
Application November 23, 1951, Serial No. 257,722
4 Claims. (Cl. 339—164)

1. A female electrical socket member having a central post, and a pair of sleeves surrounding said post and spaced from said post and from one another but concentric with one another and with said post to provide two concentric annular spaces, each adapted to receive one of the two prongs of a conventional male electrical plug, the distance between the inner annular space and the outer annular space, measured in a straight line diametrically across said post, being substantially equal to the distance between the prongs of said plug, whereby when said prongs are inserted into said annular spaces, said plug straddles both said post and the inner of said two sleeves,



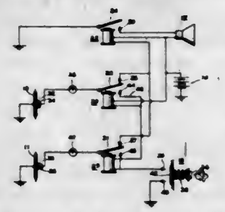
said post and one sleeve at least being made of insulating material, and a pair of electrical conducting rings, concentric with said post, one of said rings being mounted in the periphery of said post and defining with said post the inside of the inner of said two spaces and the other of said rings being mounted in one of said sleeves, so that the prongs of the plug will make electrical contact with said rings regardless of which prong is inserted into which annular space and regardless of what angle about the central post the prongs are inserted into said annular space.

2,735,080
TERMINAL CONNECTING DEVICE
William I. Littman, New Windsor, N. Y., assignor to The Bryant Electric Company, Bridgeport, Conn., a corporation of Connecticut
Application March 20, 1953, Serial No. 343,704
9 Claims. (Cl. 339—269)



6. In a terminal assembly for securing a conductor, in combination, an insulating base, a terminal plate disposed on the base and having a terminal screw threaded therein, upwardly extending projections on the terminal plate adjacent to and at opposite sides of the head of the screw, said base having a recess therein at an edge of the plate, said recess being disposed on a line extending from the shank of the screw between said projections to direct the end of the conductor toward the shank of the screw when the conductor is inserted into the recess.

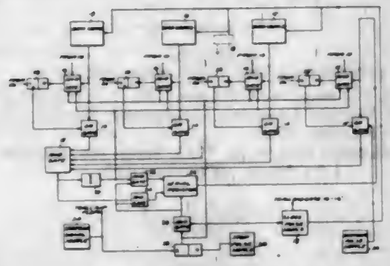
2,735,081
ALTITUDE WARNING SYSTEM
Norman F. Hosford, Towaco, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application October 31, 1949, Serial No. 124,671
3 Claims. (Cl. 340—27)



1. An altitude warning system for aircraft for producing a warning signal when either of two predeter-

mined altitudes is reached and for suppressing said warning signal without thereby inactivating the system, comprising a warning device, two independent circuits for energizing said warning device, each circuit being connected to a source of electric power and having a normally open switch and a normally closed switch connected in series therewith, an altitude responsive device associated with each of said circuits and each altitude responsive device being adapted to close said normally open switch when the craft reaches one of said predetermined altitudes, and one relay associated with each of said normally closed switches and adapted to open its related switch when energized, said relays having serially connected exciting windings connected to a source of electric power and including a common switch for momentarily energizing said windings, each of said relays having a holding circuit including one of said normally open switches so as to remain in actuated position if energized when said common switch momentarily energizes said windings.

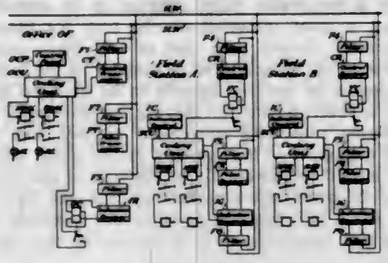
2,735,082
DATA SORTING SYSTEM
Jacob Goldberg, Bonnar Cox, and James E. Heywood, Palo Alto, Calif.
Application March 29, 1954, Serial No. 419,224
9 Claims. (Cl. 340—147)



1. Apparatus for sorting, from a plurality of data sources, signals representative of binary coded numbers ordered serially comprising a first means coupled to all said sources to provide one output when the signals provided from said sources all are representative of one binary digit and to provide another output when the signals provided from said sources are not all representative of said one binary digit, means responsive to said second output and to said one binary digit from a data source to prevent signals from said data source from being applied to said first means, and means to store the output from said first means as one binary digit for said one output and as another binary digit for said another output.

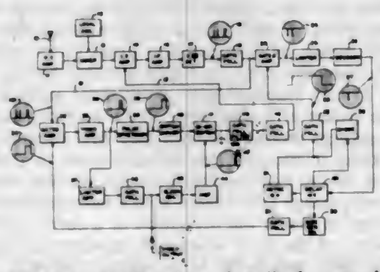
2,735,083
CODED CARRIER REMOTE CONTROL SYSTEMS
Alexander Finlay, Swissvale, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application September 30, 1952, Serial No. 312,341
3 Claims. (Cl. 340—163)

1. In a system for the control of indicators at a central office in accordance with the positions of movable contacts at different field stations by code pulses of a carrier current of a predetermined frequency transmitted over a single transmitting channel connecting the office and the field stations, a source of pilot carrier having a selected frequency different from said predetermined frequency, said source permanently coupled electrically to said channel and constantly active to supply the pilot carrier current simultaneously and constantly to each said station, pilot carrier receivers one at each said station connected to said channel and including means effective to pass said pilot carrier, frequency converter means one at each said station having connection to the pilot carrier receiver at the same station, each said converter means including a biased electron tube amplifier and a frequency selecting circuit, said amplifier tube having input and output electrodes, said input electrodes coupled to said pilot carrier receiver of the same station, said amplifier tube being biased to cutoff to create harmonics of the pilot carrier at the output electrodes of the amplifier, each said frequency selecting circuit coupled to the output electrodes of the amplifier at the same station and including inductance and capacitance tuned to resonance at a harmonic of the pilot carrier selected to correspond to said predetermined fre-



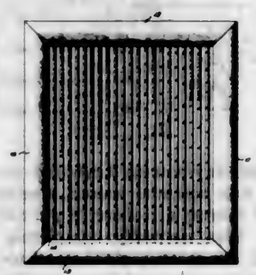
quency, another amplifier tube having input and output electrodes with its input electrodes coupled to said selecting circuit and its output electrodes connected to an output circuit to create in the output circuit voltages of said selected harmonic, coding means at each said station having a coding contact interposed in the output circuit of said another amplifier tube to code the voltage of said selected harmonic according to the operation of said contact, filter means at each station to couple the output circuit of the station to said channel and including circuit elements tuned to pass said selected harmonic and suppress other frequencies, and an indication receiver at said office coupled to said channel and including means effectively energized by said coded harmonic.

2,735,084
PULSE TYPE RECEIVER CIRCUITS
William M. Adkisson, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application September 11, 1952, Serial No. 309,055
19 Claims. (Cl. 340—167)



9. Apparatus of the class described comprising in combination: a source of signal voltage comprising a pair of coding pulses followed by an intelligence pulse forming together a pulse group recurring at a predetermined frequency; a first source of gating voltage having a normal frequency different from said predetermined frequency; a first gating circuit having a first and a second input; circuit means for energizing said first input of said first gating circuit with said signal voltage and for energizing said second input of said first gating circuit with said first gating voltage, said first gating circuit producing an output voltage when said signal voltage and said first gating voltage are of the same relative phase relationship; a first delay means for delaying the first pulse of said pair of coding pulses to coincide with said second pulse of said pair of coding pulses; decoding means energized by said first delay means for producing a synchronizing pulse upon the coincidence of said coding pulses; circuit means energized by said synchronizing pulse for synchronizing said first source of gating voltage to said predetermined frequency said normal frequency of said first source of gating voltage being sufficiently close to said predetermined frequency for said first source of gating voltage to remain essentially synchronized with said predetermined frequency during an absence of said signal voltage for at least three consecutive cycles; a second source of gating voltage energized by said synchronizing pulse; a second gating circuit having a first and a second input; circuit means for energizing said first input of said second gating circuit with said signal voltage and for energizing said second input of said second gating circuit producing an output voltage when said second voltage and said second gating voltage are of the same relative phase relationship; and a second delay means for delaying said synchronizing pulse energizing said second source of gating voltage so that said output voltage of said second gating circuit consists of only said intelligence pulse.

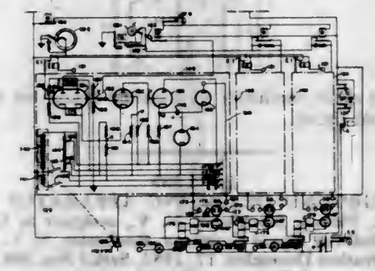
2,735,085
TIMER FOR INDICATING SEQUENTIAL ORDER OF SERVICE
Robert West, Covington, Ky.
Application November 6, 1953, Serial No. 390,621
1 Claim. (Cl. 340—223)



An indicating device comprising a plurality of tubular members, a disc slidably secured within each of said tubular members, a wire connected to each of said discs, a grooved wheel and a gear affixed to said groove wheel, said grooved wheel adapted to wind upon itself said wire when said wheel and gear are rotated, a shaft and a pair of arms movably secured in said indicating device, said gear and said grooved wheel mounted on said shaft, a solenoid plunger connected to said pair of arms, a constantly revolving shaft having a plurality of gears thereon one for each of said pairs of arms, said gears when engaged with the gears on said pairs of arms selectively move one of said discs at a constant rate.

2,735,086
SUPERVISORY SYSTEM FOR RECORD CONTROLLED TRANSLATOR
Robert T. Blakely, Lagrange, N. Y., assignor to International Business Machines Corporation, New York, N. Y., a corporation of New York
Original application May 26, 1951, Serial No. 228,454. Divided and this application June 3, 1953, Serial No. 359,298
2 Claims. (Cl. 340—228)

1. In a record controlled machine, in combination, means for feeding records one by one in succession, cyclic means for analyzing each record for data contained therein, a gaseous discharge tube, with means for firing it comprising a condenser adapted to receive a charge, a bistable trigger which is operable to different ones of either of two sustained electrical on and off states, means operable by said analyzing means for shifting the elec-



trical status of said bistable trigger from its off state to its on state at a differential time in a card analyzing cycle upon the sensing of data contained in a record card, and means for detecting failure of the gaseous tube to fire said means including a photocell and an associated amplifier for operating a relay each time said gaseous discharge tube fires.

2,735,087
ALARM FOR ALUM FEEDER
Will C. Lingerfelt, Morristown, Tenn., assignor to American Enka Corporation, Enka, N. C., a corporation of Delaware
Application October 20, 1952, Serial No. 315,691
4 Claims. (Cl. 340—239)

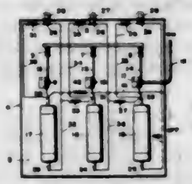


1. An alarm device for announcing variation from normal in the flow of a solid material that comprises means to discharge solid material, a target, means balancing said target in the discharge path of said material, means to supply a fluid to remove solid material from said target at a rate commensurate with the normal rate of delivery of solid material thereto so that the target has a substantially constant weight of material thereon during normal operation, and means responsive to unbalance of said target to actuate an alarm.

2,735,088
FAULTY FUSE INDICATOR
Dan J. Kinzer, Draper, Utah
Application September 9, 1953, Serial No. 379,123
1 Claim. (Cl. 340—250)

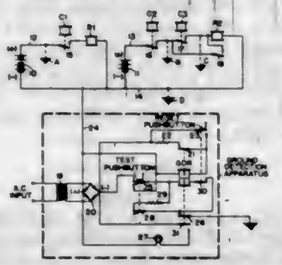
An indicator for a faulty fuse in the fused alternating current load circuit of a motor and the like comprising a lamp, conductors from the lamp to opposite ends of

the fuse under test, a resistor in the conductor attached to the line end of the fuse and a high resistance shunt



from the other conductor to a second branch of the line to the load circuit.

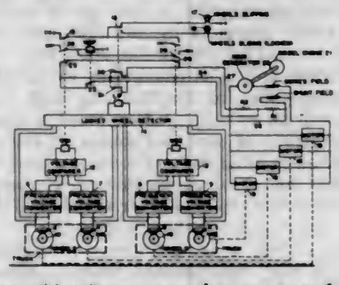
2,735,089
GROUND DETECTING APPARATUS
Clark A. Pickell, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.
Application December 17, 1953, Serial No. 398,811
7 Claims. (Cl. 340—255)



1. In a ground detector system for an electrical circuit organization having a plurality of circuits each being energized by a different source of direct current and having a single common control wire connected to terminals of like polarity on each of said sources of direct current, ground detection apparatus comprising a series-connected combination including the winding of a ground detection relay and another source of direct current, said series-connected combination being connected at one end to said common wire and at the other end to ground, said another source of direct current being connected to aid the polarity of each of said different sources of direct current included in said plurality of circuits, and indicating means governed by the actuation of said ground detection relay, whereby the occurrence of a ground in any of said plurality of circuits results in actuation of said ground detection relay to thereby cause an indication of said ground to be given.

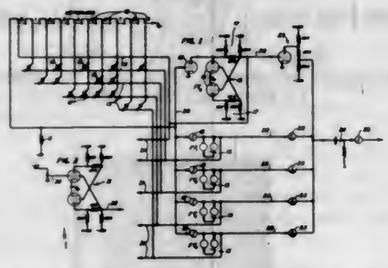
2,735,090
APPARATUS FOR DETECTION OF NONSYNCHRONOUS ROTATION OF LOCOMOTIVE AXLES
Wilho K. Maenpaa, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y.
Application March 18, 1953, Serial No. 343,170
12 Claims. (Cl. 340—268)

1. In apparatus for detecting slipping and sliding wheel conditions on railroad locomotives, speed responsive means associated with each axle to be checked for said slipping and sliding conditions for providing an output voltage proportional in amplitude to the angular velocity of said axle, voltage comparing means governed by said output voltages received from each of a plurality of said speed responsive means associated with said axles for giving a distinctive output when any of said output voltages differs by more than a preselected amount from the other of said output voltages, slide detection means governed by the angular velocities of said axles and being effective to provide a different distinctive output when any of said axles is rotating with an angular velocity below a preselected minimum value irrespective of the relative angular velocities of said axles, and means responsive jointly to said different distinctive outputs re-



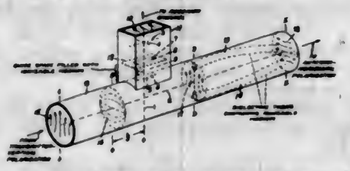
ceived from said voltage comparing means and said slide detection means for providing one kind of indication for said sliding condition and another kind of indication for said slipping condition.

2,735,091
ANTIKEY-BOUNCE CIRCUIT
William H. Burkhart, East Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a corporation of Delaware
Application March 1, 1952, Serial No. 274,475
5 Claims. (Cl. 340—345)



1. In an anti-key-bounce keyboard circuit, the combination of a first potential source, a second, more negative, potential source, a resistor, a plurality of front and back contact keys normally completing a series path from the first source through the resistor to the second source, a plurality of signal lines selectively connectable with said first source through the front contacts of the keys on operation of the latter, a flip-flop connected to each said line and set to one state on application thereto of the potential of said first source, each flip-flop when so set maintaining the associated line at substantially the potential of said first source, and means for resetting said flip-flop to the opposite state on establishment of said series path.

2,735,092
WAVE GUIDE COUPLING SYSTEM AND METHOD
Burton P. Brown, Jr., Baldwinsville, N. Y., assignor to General Electric Company, a corporation of New York
Application August 2, 1948, Serial No. 42,075
30 Claims. (Cl. 343—5)



5. The method of operating a transmitter of pulsed electromagnetic waves, polarized in one plane, and a

pulse-echo receiver, responsive to echoes of said transmitted waves returned from a reflecting object polarized in a transverse plane, through a common signal channel without interaction, which comprises the steps, in the order named, of transmitting said pulsed waves through said common signal channel, rotating the plane of polarization of said pulsed waves through substantially 90°, radiating said rotated pulsed waves toward a remote reflecting object and receiving echo waves of said radiated waves returned from said reflecting object, translating said received echo waves through said channel in the opposite direction without change in polarization, and supplying said translated waves to said receiver.

27. The method of transmitting a signal which comprises producing plane, polarized, electrical waves, and directly rotating the polarization of said waves in response to the intensity of said waves above a predetermined level.

2,735,093
AIRBORNE BEACON ANTENNA
Robert Krausz, Los Angeles, and Donald L. Margerum, Long Beach, Calif., assignors to North American Aviation, Inc.
Application January 2, 1952, Serial No. 264,481
9 Claims. (Cl. 343—725)

1. Means for radiating circularly polarized electromagnetic waves comprising a coaxial wave guide, a tubular conductor connected to said wave guide at one end and having near its free end an axial slot of length equal to one-half the wave length of said electromagnetic waves, a cylindrical conductor centered within said tubular conductor and protruding from the free end thereof, a spacer of dielectric material between said conductors, and means for

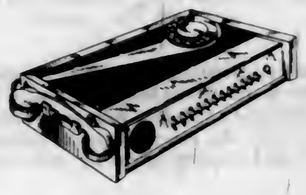


coupling half the electromagnetic energy in said wave guide out said slot the remainder being propagated from the end of said cylindrical conductor with polarization in phase-quadrature with the electromagnetic waves propagated from said slot whereby circularly polarized energy is radiated.

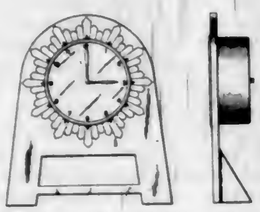
DESIGNS

FEBRUARY 14, 1956

176,893
COMBINATION INTERCOMMUNICATION TELEPHONE AND SWITCH UNIT
Adolf Erwin Adler, London, England, assignor to Modern Telephones (Great Britain) Limited, London, England
Application January 10, 1955, Serial No. 33,898
Term of patent 14 years
(Cl. D26—14)



176,894
CLOCK
John L. Allen, San Diego, Calif.
Application February 9, 1955, Serial No. 34,436
Term of patent 14 years
(Cl. D42—7)



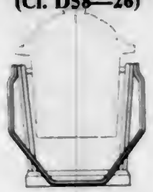
176,895
COMBINATION WINE BOTTLE COOLER, ICE OR BEVERAGE BUCKET AND HOLDER THEREFOR
Joseph N. Amigone, Buffalo, N. Y.
Application May 16, 1955, Serial No. 36,023
Term of patent 14 years
(Cl. D58—17)



176,896
HOLDER FOR A BUCKET
Joseph N. Amigone, Buffalo, N. Y.
Application May 16, 1955, Serial No. 36,025
Term of patent 14 years
(Cl. D58—26)



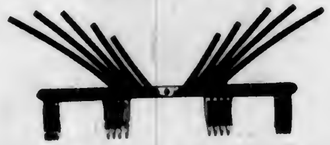
176,897
HOLDER FOR A BUCKET
Joseph N. Amigone, Buffalo, N. Y.
Application May 16, 1955, Serial No. 36,026
Term of patent 14 years
(Cl. D58—26)



176,898
ULTRASONIC THERAPEUTIC APPLICATOR HANDLE
Fritz A. Anderson, Milton, and Sherrill K. Rasmussen, Milton Junction, Wis., assignors to The Burdick Corporation, Milton, Wis., a corporation of Delaware
Application July 26, 1955, Serial No. 37,134
Term of patent 14 years
(Cl. D83—1)



176,899
LADY'S COMB
Siegfried Behr, Flushing, N. Y.
Application September 6, 1955, Serial No. 37,786
Term of patent 7 years
(Cl. D86—8)



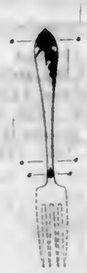
176,900
LADY'S COMB
Siegfried Behr, Flushing, N. Y.
Application September 6, 1955, Serial No. 37,787
Term of patent 7 years
(Cl. D86—8)



176,901
LADY'S COMB
Siegfried Behr, Flushing, N. Y.
Application September 6, 1955, Serial No. 37,788
Term of patent 7 years
(Cl. D86—8)



176,902
FORK OR SIMILAR ARTICLE OF FLAT SILVER
Mark H. Blair, East Providence, R. I., assignor to The Watson Company, Attleboro, Mass., a corporation of Massachusetts
Application May 11, 1955, Serial No. 35,920
Term of patent 14 years
(Cl. D54—12)



176,903
STOCKING
Eric Boettcher, Southampton, Pa.
Application October 13, 1953, Serial No. 27,162
Term of patent 3½ years
(Cl. D47—7)



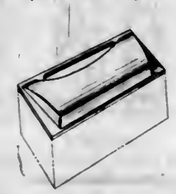
176,904
NASAL AND SINUS IRRIGATOR
Frank E. Brown, Burbank, and George W. Frankel, Los Angeles, Calif.
Application August 30, 1954, Serial No. 32,063
Term of patent 7 years
(Cl. D83—1)



176,905
REFLECTOR FOR FISH TANKS
Julius C. Bruno, Newark, N. J., assignor to General Designs, Inc., a corporation of New Jersey
Application September 15, 1955, Serial No. 37,943
Term of patent 7 years
(Cl. D91—2)



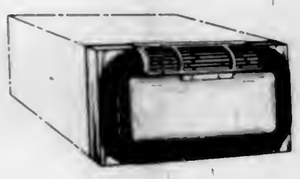
176,906
HOOD REFLECTOR FOR FISH TANKS
Julius C. Bruno, Newark, N. J., assignor to General Designs, Inc., a corporation of New Jersey
Application September 15, 1955, Serial No. 37,944
Term of patent 7 years
(Cl. D91—2)



176,907
SPECTACLE FRAME OR THE LIKE
Walter C. Carmichael, Lexington, Mass., assignor to American Optical Company, Southbridge, Mass., a voluntary association of Massachusetts
Application May 27, 1954, Serial No. 30,701
Term of patent 14 years
(Cl. D57—1)



176,908
ROOM COOLER
Joseph Federico, Buffalo, N. Y., assignor to Carrier Corporation, Syracuse, N. Y., a corporation of Delaware
Application January 27, 1954, Serial No. 28,699
Term of patent 7 years
(Cl. D62—4)



176,909
COMBINED UMBRELLA AND WRITING IMPLEMENT
Howard A. Fellerman, New York, N. Y.
Application August 16, 1955, Serial No. 37,480
Term of patent 7 years
(Cl. D88—3)



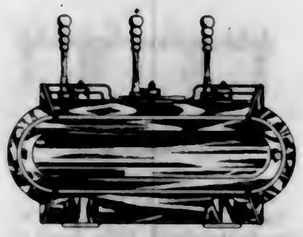
176,910
CHESS PIECE
Donald E. Folley, Fayetteville, N. Y.
Application April 26, 1954, Serial No. 30,176
Term of patent 3½ years
(Cl. D34—5)



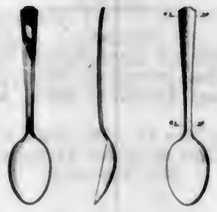
176,911
APRON HOOP
Robert K. Fujioka, Los Angeles, Calif., assignor to Reynolds Industries, Inc., Santa Monica, Calif., a corporation of California
Application April 18, 1955, Serial No. 35,547
Term of patent 3½ years
(Cl. D3—10)



176,912
COMBINATION COFFEE MAKER AND DISPENSER
Camillo Gaggia and Armando Migliorini, Milan, Italy
Application August 16, 1954, Serial No. 31,889
Claims priority, application Italy March 11, 1954
Term of patent 14 years
(Cl. D2—3)



176,913
SPOON OR SIMILAR ARTICLE
Richard Carlton Gavette, Southington, Conn., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn., a corporation of Connecticut
Application September 23, 1954, Serial No. 32,407
Term of patent 14 years
(Cl. D54—12)



176,914
MINIATURE ROASTER
Kenneth C. Gulden, Milwaukee, Wis.
Application June 29, 1955, Serial No. 36,745
Term of patent 14 years
(Cl. D81—10)



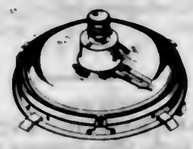
176,915
PORTABLE ROAD SIGNAL
John H. Hagood, Ross C. Albert, and William W. Moss, Birmingham, Ala.
Application February 11, 1955, Serial No. 34,486
Term of patent 14 years
(Cl. D72—1)



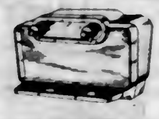
176,916
HANDBAG
William H. Hardy, River Edge, N. J.
Application September 22, 1955, Serial No. 38,055
Term of patent 3½ years
(Cl. D87—3)



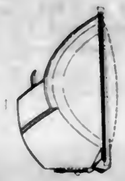
176,917
WHEEL BALANCER
George T. Hemmeter, Los Altos, Calif.
Application July 22, 1955, Serial No. 37,096
Term of patent 14 years
(Cl. D52—1)



176,918
FOUNTAIN HEAD UNIT
Clare E. Hodgman, Mamaroneck, N. Y.
Application June 21, 1955, Serial No. 36,612
Term of patent 3½ years
(Cl. D2—3)



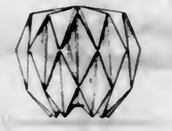
176,919
PHOTOGRAPHIC FLASHGUN OR SIMILAR ARTICLE
James E. Hunter, Jr., Norwood, Mass., assignor to Polaroid Corporation, Cambridge, Mass., a corporation of Delaware
Application January 19, 1955, Serial No. 34,058
Term of patent 14 years
(Cl. D61—1)



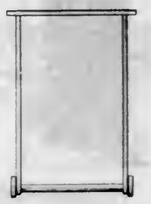
176,920
BRUSH
Ray Rice Hutcheson, Belleville, N. J., assignor to Ox Fibre Brush Co., Inc., Frederick, Md., a corporation of Delaware
Application May 11, 1955, Serial No. 35,926
Term of patent 14 years
(Cl. D9—2)



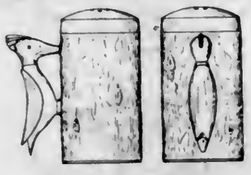
176,921
LAMP SHADE
Earl H. Koepke, Milwaukee, Wis., assignor of fifty per cent to Jack Waldheim, Milwaukee, Wis.
Application September 22, 1955, Serial No. 38,056
Term of patent 7 years
(Cl. D48—16)



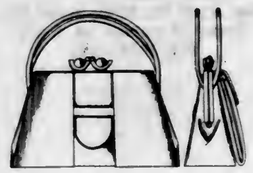
176,922
FOLDABLE SPREAD HOLDER OR SIMILAR ARTICLE
John W. Kruissink, Chicago, Ill., assignor to Doetsche & Bauer Co., Chicago, Ill., a corporation of Illinois
Application June 14, 1955, Serial No. 36,501
Term of patent 14 years
(Cl. D80—9)



176,923
CONDIMENT DISPENSER
Harold J. Marshall, Portland, Oreg.
Application April 4, 1955, Serial No. 35,340
Term of patent 14 years
(Cl. D44—22)



176,924
COMBINED HANDBAG AND SHOPPING BAG
Paula Michaels, Brooklyn, N. Y.
Application September 29, 1955, Serial No. 38,153
Term of patent 3½ years
(Cl. D87—3)



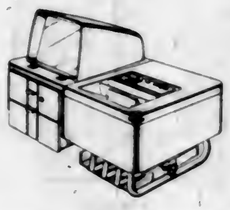
176,925
ELECTRIC HAIR CLIPPER
Hans Munsch, Darmstadt, Germany, assignor to Eisemann G. m. b. H., Stuttgart, Germany
Application February 28, 1955, Serial No. 34,784
Claims priority, application Germany October 5, 1954
Term of patent 7 years
(Cl. D22—5)



176,926
REGISTER
Wilbert J. Parrish, Battle Creek, Mich., assignor to United States Register Company, Battle Creek, Mich., a corporation of Michigan
Application September 27, 1954, Serial No. 32,439
Term of patent 14 years
(Cl. D81—21)



176,927
COMBINED PHOTOGRAPHIC COPYING AND VIEWING APPARATUS
Thomas R. Perzentka, Niles, and Stuart C. Plettner, Evanston, Ill., assignors to Bell & Howell Company, Chicago, Ill., a corporation of Illinois
Application January 26, 1955, Serial No. 34,240
Term of patent 14 years
(Cl. D61—1)



176,928
ADJUSTABLE TABLE
Charles S. Puglia and Chatham C. Clark, Elizabethtown, N. C.
Application April 21, 1955, Serial No. 35,616
Term of patent 14 years
(Cl. D33—14)



176,929
COFFEE MAKER OR SIMILAR ARTICLE
Paul O. Rawson, Jr., Trumbull, and Walter E. Moore, Stratford, Conn., assignors to General Electric Company, a corporation of New York
Application March 25, 1955, Serial No. 35,208
Term of patent 14 years
(Cl. D44—26)



176,930
COMBINED BASSINET AND CHEST
Shafie Saba, Toledo, Ohio, assignor to Paul Darah, Toledo, Ohio
Application April 14, 1955, Serial No. 35,518
Term of patent 14 years
(Cl. D5—5)



176,931
KNITTED FABRIC
Samuel Saftlas, Newark, N. J.
Application May 16, 1955, Serial No. 36,012
Term of patent 3½ years
(Cl. D47—2)



176,932
CORNER BRACKET FOR A DOOR CLOSER
Ernest L. Schlage, Burlingame, Calif., assignor to Schlage Lock Company, a corporation
Application March 9, 1954, Serial No. 29,426
Term of patent 14 years
(Cl. D10—7)

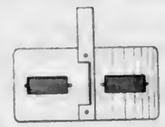


176,933
FENCE POST CAP
Lloyd Spector, Miami Beach, Fla.
Application August 17, 1954, Serial No. 31,893
Term of patent 14 years
(Cl. D28—1)



176,934
ASH TRAY
Oscar L. Swenson, Toledo, Ohio
Application June 10, 1955, Serial No. 36,462
Term of patent 7 years
(Cl. D85—2)

176,935
MARINE RUNNING LIGHT CONVERSION SHIELD FOR LANTERNS
Andre Ulmo, University Heights, and Steven J. Jambor, Cleveland, Ohio
Application October 20, 1955, Serial No. 38,488
Term of patent 3½ years
(Cl. D48—20)



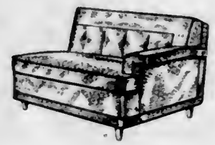
176,936
JEWELED GARMENT SUPPORT
Everell S. Van Tassel, Erie, Pa.
Application April 6, 1955, Serial No. 35,388
Term of patent 14 years
(Cl. D17—3)



176,937
AUTOMOBILE PARKING AID
Richard W. Whitehill, Cleveland, Ohio
Application November 19, 1953, Serial No. 27,677
Term of patent 14 years
(Cl. D14—6)



176,938
SOFA
Forest Wilson, Chicago, Ill., assignor to Stradford Furniture Corporation, Chicago, Ill., a corporation of Delaware
Application February 25, 1954, Serial No. 29,211
Term of patent 7 years
(Cl. D15—11)



LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 14TH DAY OF FEBRUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Armacost, Wilbur H., to Combustion Engineering Inc. Method of superheat control. Re. 24,119, 2–14–56, Cl. 122—479.

Combustion Engineering Inc.: *See*—
Armacost, Wilbur H. Re. 24,119.

LIST OF DESIGN PATENTEES

Adler, Adolf E., to Modern Telephones (Great Britain) Ltd. Combination intercommunication telephone and switch unit. 176,893, 2–14–56, Cl. D26—14.

Albert, Ross C.: *See*—
Hagood, John H., Albert, and Moss. 176,915.

Allen, John L. Clock. 176,894, 2–14–56, Cl. D42—7.

American Optical Co.: *See*—
Carmichael, Walter C. 176,907.

Amigone, Joseph N. Combination wine bottle cooler, ice or beverage bucket, and holder therefor. 176,895, 2–14–56, Cl. D58—17.

Amigone, Joseph N. Holder for a bucket. 176,896, 2–14–56, Cl. D58—26.

Amigone, Joseph N. Holder for a bucket. 176,897, 2–14–56, Cl. D58—26.

Anderson, Fritz A., and S. K. Rasmussen, to The Burdick Corp. Ultrasonic therapeutic applicator handle. 176,898, 2–14–56, Cl. D83—1.

Behr, Siegfried. Lady's comb. 176,899, 2–14–56, Cl. D86—8.

Behr, Siegfried. Lady's comb. 176,900, 2–14–56, Cl. D86—8.

Behr, Siegfried. Lady's comb. 176,901, 2–14–56, Cl. D86—8.

Bell & Howell Co.: *See*—
Perzentka, Thomas R., and Plettner. 176,927.

Blair, Mark H., to The Watson Co. Fork or similar article of flat silver. 176,902, 2–14–56, Cl. D54—12.

Boettcher, Eric. Stocking. 176,903, 2–14–56, Cl. D47—7.

Brown, Frank E., and G. W. Frankel. Nasal and sinus irrigator. 176,904, 2–14–56, Cl. D83—1.

Bruno, Julius C., to General Designs, Inc. Reflector for fish tanks. 176,905, 2–14–56, Cl. D91—2.

Bruno, Julius C., to General Designs, Inc. Hood reflector for fish tanks. 176,906, 2–14–56, Cl. D91—2.

Burdick Corp., The: *See*—
Anderson, Fritz A., and Rasmussen. 176,898.

Carmichael, Walter C., to American Optical Co. Spectacle frame or the like. 176,907, 2–14–56, Cl. D57—1.

Carrier Corp.: *See*—
Federico, Joseph. 176,908.

Clark, Chatham C.: *See*—
Puglia, Charles S., and Clark. 176,928.

Darah, Paul: *See*—
Saba, Shafie. 176,930.

Doetsche & Bauer Co.: *See*—
Kruissink, John W. 176,922.

Eisemann G. m. b. H.: *See*—
Munsch, Hans. 176,925.

Federico, Joseph, to Carrier Corp. Room cooler. 176,908, 2–14–56, Cl. D62—4.

Fellerman, Howard A. Combined umbrella and writing implement. 176,909, 2–14–56, Cl. D88—3.

Folley, Donald E. Chess piece. 176,910, 2–14–56, Cl. D34—5.

Frankel, George W.: *See*—
Brown, Frank E., and Frankel. 176,904.

Fujioka, Robert K., to Reynolds Industries, Inc. Apron hoop. 176,911, 2–14–56, Cl. D3—10.

Gaggia, Camillo, and A. Migliorini. Combination coffee maker and dispenser. 176,912, 2–14–56, Cl. D2—3.

Gavette, Richard C., to R. Wallace & Sons Mfg. Co. Spoon or similar article. 176,913, 2–14–56, Cl. D54—12.

General Designs, Inc.: *See*—
Bruno, Julius C. 176,905.
Bruno, Julius C. 176,906.

General Electric Co.: *See*—
Rawson, Paul O., and Moore. 176,929.

Gulden, Kenneth C. Miniature roaster. 176,914, 2–14–56, Cl. D81—10.

Hagood, John H., R. C. Albert, and W. W. Moss. Portable road signal. 176,915, 2–14–56, Cl. D72—1.

Hardy, William H. Handbag. 176,916, 2–14–56, Cl. D87—3.

Hemmeter, George T. Wheel balancer. 176,917, 2–14–56, Cl. D52—1.

Hodgman, Clare E. Fountain head unit. 176,918, 2–14–56, Cl. D2—3.

Hunter, James E., Jr., to Polaroid Corp. Photographic flash-gun or similar article. 176,919, 2–14–56, Cl. D61—1.

Hutcheson, Ray R., to Ox Fibre Brush Co., Inc. Brush. 176,920, 2–14–56, Cl. D9—2.

Jambor, Steven J.: *See*—
Ulimo, Andre, and Jambor. 176,935.

Koepke, Earl H., 50% to J. Waldheim. Lamp shade. 176,921, 2–14–56, Cl. D48—16.

Kruissink, John W., to Doetsche & Bauer Co. Foldable spread holder or similar article. 176,922, 2–14–56, Cl. D80—9.

Marshall, Harold J. Condiment dispenser. 176,923, 2–14–56, Cl. D44—22.

Michaels, Paula. Combined handbag and shopping bag. 176,924, 2–14–56, Cl. D87—3.

Migliorini, Armando: *See*—
Gaggia, Camillo, and Migliorini. 176,912.

Modern Telephones (Great Britain) Ltd.: *See*—
Adler, Adolf E. 176,893.

Moore, Walter E.: *See*—
Rawson, Paul O., Jr., and Moore. 176,929.

Moss, William W.: *See*—
Hagood, John H., Albert, and Moss. 176,915.

Munsch, Hans, to Eisemann G. m. b. H. Electric hair clipper. 176,925, 2–14–56, Cl. D22—5.

Ox Fibre Brush Co., Inc.: *See*—
Hutcheson, Ray R. 176,920.

Parrish, Wilbert J., to United States Register Co. Register. 176,926, 2–14–56, Cl. D81—21.

Perzentka, Thomas R., and S. C. Plettner, to Bell & Howell Co. Combined photographic copying and viewing apparatus. 176,927, 2–14–56, Cl. D61—1.

Plettner, Stuart C.: *See*—
Perzentka, Thomas R., and Plettner. 176,927.

Polaroid Corp.: *See*—
Hunter, James E., Jr. 176,919.

Puglia, Charles S., and C. C. Clark. Adjustable table. 176,928, 2–14–56, Cl. D33—14.

Rasmussen, Sherrill K.: *See*—
Anderson, Fritz A., and Rasmussen. 176,898.

Rawson, Paul O., Jr., and W. E. Moore, to General Electric Co. Coffee maker or similar article. 176,929, 2–14–56, Cl. D44—26.

Reynolds Industries, Inc.: *See*—
Fujioka, Robert K. 176,911.

Saba, Shafie, to P. Darah. Combined bassinet and chest. 176,930, 2–14–56, Cl. D5—5.

Saftlas, Samuel. Knitted fabric. 176,931, 2–14–56, Cl. D47—2.

Schlage, Ernest L., to Schlage Lock Co. Corner bracket for a door closer. 176,932, 2–14–56, Cl. D10—7.

Schlage Lock Co.: *See*—
Schlage, Ernest L. 176,932.

Spector, Lloyd. Fence post cap. 176,933, 2–14–56, Cl. D28—1.

Stradford Furniture Corp.: *See*—
Wilson, Forest. 176,938.

Swenson, Oscar L. Ash tray. 176,934, 2–14–56, Cl. D85—2.

Ulimo, Andre, and S. J. Jambor. Marine running light conversion shield for lanterns. 176,935, 2–14–56, Cl. D48—20.

United States Register Co.: *See*—
Parrish, Wilbert J. 176,926.

Van Tassel, Everell S. Jeweled garment support. 176,936, 2–14–56, Cl. D17—3.

Waldheim, Jack: *See*—
Koepke, Earl H. 176,921.

Wallace, R., & Sons Mfg. Co.: *See*—
Gavette, Richard C. 176,913.

Watson Co., The: *See*—
Blair, Mark H. 176,902.

Whitehill, Richard W. Automobile parking aid. 176,937, 2–14–56, Cl. D14—6.

Wilson, Forest, to Stradford Furniture Corp. Sofa. 176,938, 2–14–56, Cl. D15—11.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 14TH DAY OF FEBRUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Aagaard, Fridtjof, to American Cyanamid Co. Fluid pressure control. 2,734,526, 2–14–56, Cl. 137—486.

Abresch, Carel F., and F. H. McCormick, to General Motors Corp. Dishwashing machine. 2,734,520, 2–14–56, Cl. 134—174.

Academy Electrical Products Corp.: *See*—
Greenbaum, Arthur. 2,735,078.

Adams, Charles W. Fish stringer. 2,734,671, 2–14–56, Cl. 224—7.

Addressograph-Multigraph Corp.: *See*—
Gollwitzer, Walter T., and Lease. 2,734,453.

Adkisson, William M., to Minneapolis-Honeywell Regulator Co. Pulse type receiver circuits. 2,735,084, 2–14–56, Cl. 340—167.

Agfa Camera-Werk Aktiengesellschaft: *See*—
Brendel, Theodor, and Lautenbacher. 2,734,422.

Agriculture, United States of America as represented by the Secretary of: *See*—
Holzenthal, Leo L. 2,734,635.
Wood, John W., Fontaine, and Mitchell. 2,734,816.

Aircraft Armaments, Inc.: *See*—
Paine, Joseph P. 2,734,383.

Air Devices, Inc.: *See*—
O'Day, Cortland N. 2,734,446.

Akerib, Ezechiel, to Societe Bureau de Recherches et d'Exploitation de Procedes et Brevets. Removable working head, particularly for electric shavers. 2,734,265, 2–14–56, Cl. 30—43.

Aktiebolaget Atlas Diesel: *See*—
Larcén, Jan A. 2,734,723.
Larcén, Jan A. 2,734,724.

Aladdin Industries, Inc.: *See*—
Brammin, Carl. 2,734,999.
Versoy, Irving R., Jr. 2,735,072.

Aleck, Benjamin J., to The M. W. Kellogg Co. Retaining device. 2,734,726, 2–14–56, Cl. 292—256.6.

Alford & Alder (Engineers) Ltd.: *See*—
Lind, John A. 2,734,753.

Allegheny Ludlum Steel Corp.: *See*—
Herres, Schuyler A. 2,734,244.
Southern, Raymond L. 2,734,240.
Southern, Raymond L., and Ely. 2,734,241.

Allen, Edwin L., to R. I. Schonitzer. Detachable lock rod connection. 2,734,761, 2–14–56, Cl. 292—216.

Aller, Basil V.: *See*—
Bewley, Thomas, and Aller. 2,734,921.

Allied Chemical & Dye Corp.: *See*—
Beckham, Leland J. 2,734,906.

Allis-Chalmers Mfg. Co.: *See*—
Wurgler, John W. 2,735,041.

Alpert, Marshall B.: *See*—
Buck, Thomas M., and Alpert. 2,734,835.

Aluminum Bronze Co. Ltd.: *See*—
Cleiff, Joseph A. 2,734,370.

American Can Co.: *See*—
Vitense, Harold R. 2,734,451.

American Cyanamid Co.: *See*—
Aagaard, Fridtjof. 2,734,526.
Ashley, Kenneth D., and Sanborn. 2,734,796.
Callahan, John C., and Rumpf. 2,734,649.
Hook, Edwin O., and Peeso. 2,734,866.
Kobliska, John J. 2,734,631.
McLachlan, Dan, Jr. 2,735,018.
Peeso, James B., and Hook. 2,734,864.
Peeso, James B., and Hook. 2,734,865.
Schlayer, Earle G. 2,734,628.
Smolin, Edwin M. 2,734,928.
Thurston, Jack T. 2,734,833.
Ziegler, William M. 2,734,844.

American Enka Corp.: *See*—
De Vault, Robert V. 2,734,696.
Griset, Ernest J. Jr., and Hart. 2,734,333.
Lingerfelt, Will C. 2,735,087.

American Instrument Co., Inc.: *See*—
Shapiro, Justin J. 2,734,991.

American Machine & Foundry Co.: *See*—
Hungerford, Gordon P., and Jurgensen. 2,734,510.
Hungerford, Gordon P., and Williamson. 2,734,513.
Jurgensen, Delbery F., Jr. 2,734,509.

American Metal Works, Inc.: *See*—
Cunningham, George M. 2,734,647

American Optical Co.: *See*—
Critoph, David I., Herrmann, and Wolford. 2,734,421.
Vaughan, William. 2,734,322.

American Steel Foundries: *See*—
Tack, Carl E. 2,734,255.

American Telephone and Telegraph Co.: *See*—
Hanley, Frank H. 2,734,935.
Perry, Donald B. 2,734,936.

Amiard, Gaston, R. Joly, and L. Velluz, to Les Laboratoires Francais de Chimiotherapie. Method of resolving DL-threo-1(p-Nitro phenyl)-2-amino propane-1,3-diol. 2,734,919, 2–14–56, Cl. 260—510.6.

Ammco Tools, Inc.: *See*—
Billeter, Henry R. 2,734,319.

Andershock, Chester E., to Goodman Mfg. Co. Change speed mechanism for a self-propelled mining machine. 2,734,400, 2–14–56, Cl. 74—785.

Anderson, Ernest L. Insulated window. 2,734,601, 2–14–56, Cl. 189—75.

Anderson, Malcolm G., to The Goodyear Tire & Rubber Co. Method and apparatus for producing lacerations in the road-contacting surface of a tire. 2,734,568, 2–14–56, Cl. 164—10.2.

Angelo, Nick G. Latch for a trunk lid. 2,734,764, 2–14–56, Cl. 292—333.

Anson, Arthur H. Chiropodic sandal. 2,734,286, 2–14–56, Cl. 36—8.5.

Anstalt fur die Entwicklung von Erfindungen und Gewerblichen Anwendungen Energa: *See*—
Brandt, Edgar W. 2,734,425.

Aramian, Harry. Fountain pen. 2,734,486, 2–14–56, Cl. 120—31.

Ardia, Vincent H., to Bendix Aviation Corp. Switch. 2,734,963, 2–14–56, Cl. 200—106.

Argo Metal Products, Inc.: *See*—
Rosen, Marvin R. 2,734,203.

Armour and Co.: *See*—
Steelman, Sanford L., and Lindseth. 2,734,931.

Armstrong, Harry L.: *See*—
Lunn, Alfred G., Jr., and Armstrong. 2,734,444.

Armstrong, Lorne D., to Radio Corp. of America. Liquid soldering process and articles made thereby. 2,735,050, 2–14–56, Cl. 317—235.

Army, United States of America as represented by the Secretary of the: *See*—
Johnson, Edward O. 2,735,061.
Ring, Elliot, and Lorman. 2,734,275.

Arneson, Edwin L., to Morris Paper Mills. Tray type container. 2,734,677, 2–14–56, Cl. 229—32.

Ashford, Leonard F. Machine for cleaning receptacles. 2,734,213, 2–14–56, Cl. 15—304.

Ashley, Kenneth D., and W. E. Sanborn, to American Cyanamid Co. Composition comprising stable solid sodium aluminate and method of manufacturing the same. 2,734,796, 2–14–56, Cl. 23—52.

Asketh, Jordan S. Underground shafts. 2,734,343, 2–14–56, Cl. 61—40.

Atkins, Samuel L.: *See*—
Spooner, Bernard. 2,734,584.

Augenstein, Karl C., to Speidel Corp. Expansible self-retracting linkage. 2,734,339, 2–14–56, Cl. 59—79.

Auhagen, Ernst: *See*—
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Auhagen, Ernst, and K. Bauer, to Schenley Industries, Inc. Aqueous suspension of procaine penicillin and quaternary ammonium salt of antihistamine. 2,734,846, 2–14–56, Cl. 167—65.

Austin, James A. Roving holder for a juke box selector. 2,734,951, 2–14–56, Cl. 191—22.

Austin, James A. Roving holder for a juke box selector. 2,734,952, 2–14–56, Cl. 191—22.

Auto Union G. m. b. H.: *See*—
Schwenk, Kurt. 2,734,742.

Automatic Devices Corp.: *See*—
Johnson, Arthur A. 2,734,987.

Automatic Electric Laboratories, Inc.: *See*—
Graybill, Kenneth W. 2,734,974.

Autoscope, Inc.: *See*—
Smith, Tom F. 2,734,420.

Avery-Hardoll Ltd.: *See*—
Fraser, John. 2,734,660.

Bachman, Robert J., C. E. Lewis, P. L. Mueller, and G. E. Murray, to Western Electric Co., Inc. Electroplating apparatus with current control means. 2,734,858, 2–14–56, Cl. 204—211.

Backhouse, Headley T. Sheet feeding machines. 2,734,744, 2–14–56, Cl. 271—62.

Bade, Alfred G., to The Falk Corp. Mechanical type infinitely variable speed-changing transmission. 2,734,397, 2–14–56, Cl. 74—691.

Badische Anilin- & Soda-Fabrik Aktiengesellschaft: *See*—
Reppe, Walter, v. Kutepow, and Titzenthaler. 2,734,913.

Baer, Walter S., Sr. Constant pressure control valve. 2,734,527, 2–14–56, Cl. 137—506.

Bagnell, Edgar W., to Johnston Testers, Inc. Packer construction. 2,734,582, 2–14–56, Cl. 166—187.

Bahnson Co., The: *See*—
King, James F. Jr. 2,734,771.

Baier, Walter, and R. von Linde, to Wilhelm Baier K. G. Fuel atomizer. 2,734,772, 2–14–56, Cl. 299—63.

Baier, Wilhelm, K. G.: *See*—
Baier, Walter, and von Linde. 2,734,772.

Bailey, Walter, ½ to E. A. Camp, and ½ to H. J. Dorr. Machine for cutting off the end turns of the coils of electrical machine elements. 2,734,573, 2–14–56, Cl. 164—60.

Baker, Benjamin P.: *See*—
MacNeill, John B., Leeds, and Baker. 2,734,973.

Baker Castor Oil Co., The: *See*—
Bolley, Don S., and Naughton. 2,734,916.

Baldwin Piano Co., The: *See*—
Corwin, Merton D. 2,734,416.

Ball, Richard H., T. B. Murdock, and H. M. Ogle, to General Electric Co. Jet-driven helicopter rotor power plant control system. 2,734,585, 2–14–56, Cl. 170—135.4.

Bancroft, Joseph, & Sons Co.: *See*—
Rainard, Leo W., and Shattuck. 2,734,251.
Shattuck, Ewart H. 2,734,229.
Shattuck, Ewart H. 2,734,252.

Barber, Harry J., and M. B. Green, to May & Baker Ltd. Quaternary salts of chlorophenoxy methylamines. 2,734,918, 2–14–56, Cl. 260—567.6.

Barker, Eros V., to The Cobey Corp. Pivotally-connected draft tongue with selective steering mechanism. 2,734,754, 2–14–56, Cl. 280—103.

Barnes, Preston D. Earthworking machine with automatic leveling means. 2,734,293, 2–14–56, Cl. 37—168.

Barnes, Ralph G. Safety device. 2,734,932, 2–14–56, Cl. 123—146.5.

Barnhardt, Scott B.: *See*—
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Bartelt, Donald E.: *See*—
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Bartelt, Harold L., 45% to D. E. Bartelt. Machine for making window bags. 2,734,431, 2–14–56, Cl. 93—8.

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Happe, Ralph A. 2,734,817.

Batts, Harvey J., and T. G. Delang, to United States Rubber Co. Acceleration of the dimethyiol phenol of butyl rubber by means of polychloroprene. 2,734,877, 2–14–56, Cl. 260—19.

Batty, Granville, to Sir James Farmer Norton & Co., Ltd. Swaging machine. 2,734,404, 2–14–56, Cl. 78—21.

Bauer, Klaus: *See*—
Auhagen, Ernst, Hörlein, and Bauer. 2,734,846.

Bauer, Klaus, and E. Auhagen, to Schenley Industries, Inc. Aqueous suspension of procaine penicillin and acid salt of antihistamine. 2,734,845, 2–14–56, Cl. 167—65.

Beard, Arthur D., and E. Eberhard, to Radio Corp. of America. Method and apparatus for inspecting hollow articles. 2,735,017, 2–14–56, Cl. 250—52.

Beardslee, Lewis D., to Gibson Refrigerator Co. Cooking stove. 2,734,988, 2–14–56, Cl. 219—37.

Bebry Bedding Corp.: *See*—
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Bebry, Peter P., to Bebry Corp. Sofa bed construction. 2,734,201, 2–14–56, Cl. 5—13.

Beck, József, deceased, Mrs. J. Beck, née I. Szanto, sole heir, to "Licencia" Talalmanyokat Ertekesito Vallalat. Method of making heat exchanger. 2,734,259, 2–14–56, Cl. 29—157.3.

Beck, Mrs., József: *See*—
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Beckham, Leland J., to Allied Chemical & Dye Corp. Ethylene oxide production. 2,734,906, 2–14–56, Cl. 260—348.5.

Beckwith Mfg. Co.: *See*—
Heaton, Walter H., and Morse. 2,734,289.

Bedford, Alda V., to Radio Corp. of America. Stabilizing blocking oscillator circuits. 2,735,010, 2–14–56, Cl. 250—36.

Bednarczuk, Daniel: *See*—
Henderson, Marvin L., and Bednarczuk. 2,734,765.

Beemer, Paul K., to Preco Inc. Drive mechanism. 2,734,957, 2–14–56, Cl. 200—61.39.

Belcher, Clarence F., to E. I. du Pont de Nemours and Co. Process of preparing indolium styryl dyes. 2,734,901, 2–14–56, Cl. 260—240.9.

Bell, Harry G., and J. D. Gay, Jr., to Gay-Bell Corp. Compacting press. 2,734,450, 2–14–56, Cl. 100—99.

Bell Telephone Laboratories, Inc.: *See*—
Bond, Walter L. 2,734,317.
Goss, Frank A., Jr. 2,734,975.
Harry, William R. 2,735,009.
Reynolds, Frederick W., and Stilwell. 2,734,478.

Belle City Malleable Iron Co.: *See*—
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Bemis Bro. Bag Co.: *See*—
Ottinger, August F. 2,734,541.

Bendix Aviation Corp.: *See*—
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Bevins, James E., and Hyde. 2,734,792.
Groen, William. 2,734,589.
Hosford, Norman F. 2,735,081.
Waltman, Robert M. 2,734,522.

Benedict, Earl G. Indicator means for indicating the condition of fuses. 2,734,967, 2–14–56, Cl. 200—121.

Benjamin, Milton L. Multiple sleeve expandable mandrel. 2,734,749, 2–14–56, Cl. 279—2.

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Fischer, Harry C., and Benua. 2,734,357.

Berdis, Albert J., to United States Steel Corp. Apparatus for prevention of coil breaks. 2,734,551, 2–14–56, Cl. 153—54.

Bergan, Martin D., to The Thomas & Betts Co. Method of forming dead end connectors. 2,734,263, 2–14–56, Cl. 29—433.

Berger, Frank M., and S. L. Plechner, to Carter Products, Inc. Perspiration inhibiting composition. 2,734,847, 2–14–56, Cl. 167—90.

Berkeley Scientific Corp.: *See*—
Corl, John L., and Gundelfinger. 2,735,066.

Berker, Ralph C. Drawing rolls. 2,734,233, 2–14–56, Cl. 19—135.

Berker, Ralph C. Stop-motion device. 2,734,956, 2–14–56, Cl. 200—61.18.

Berkowitz, Samuel M.: *See*—
Selinker, Solomon E., and Berkowitz. 2,734,756.

Berman, Aaron R.: *See*—
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Berndtson, John O., to The Snow-Nabstedt Gear Corp. Reverse gears. 2,734,401, 2–14–56, Cl. 74—792.

Berry, Clifford E., to Consolidated Engineering Corp. Device for automatically and periodically correcting the zero drift in an amplifier. 2,734,949, 2–14–56, Cl. 179—171.

Bertele, Ludwig J. Wide angle objectives having a plurality of axially air spaced components. 2,734,423, 2–14–56, Cl. 88—57.

Bertele, Ludwig J. Wide angle objectives of six air spaced components. 2,734,424, 2–14–56, Cl. 88—57.

Beste, Harold E., to Allen B. Du Mont Laboratories, Inc. Television synchronizing system. 2,734,937, 2–14–56, Cl. 178—5.2.

Bevins, James E., and R. W. Hyde, to Bendix Aviation Corp. Ribbon feeding mechanism for recording and measuring instrument. 2,734,792, 2–14–56, Cl. 346—136.

Bewley, Thomas, and B. V. Aller, to The Distillers Co. Ltd. Nickel-catalyzed hydrogenation processes. 2,734,921, 2–14–56, Cl. 260—601.

Bianco, Joseph: *See*—
Marnon, Donald E., and Bianco. 2,734,793.

Bible, Roy C. Adjustable chart or map holder. 2,734,296, 2–14–56, Cl. 40—86.

Bichsel, Harry J., and M. Rebuffoni, to Westinghouse Electric Corp. Arc drive control for rectifier welder. 2,734,981, 2–14–56, Cl. 219—8.

Billeter, Henry R., to Ammco Tools, Inc. Grinding device. 2,734,319, 2–14–56, Cl. 51—96.

Biswell, Charles B., to E. I. du Pont de Nemours and Co. p-Phenylenediamine gasoline stabilizers and compositions containing the same. 2,734,808, 2–14–56, Cl. 44—74.

Bizak, Louis D., to The Parker Appliance Co. Hydraulic accumulators. 2,734,531, 2–14–56, Cl. 138—31.

Blais, Lionel, to Tricnit Hosiery Mills, Inc. Knitting machine. 2,734,361, 2–14–56, Cl. 66—108.

Blakely, Robert T., to International Business Machines Corp. Supervisory system for record controlled translator. 2,735,086, 2–14–56, Cl. 340—228.

Blanke, Nathan E., to The Harvard Mfg. Co. Utility piece of furniture. 2,734,199, 2–14–56, Cl. 5—2.

Blattner, Emil H., to The Symington-Gould Corp. Snubbing mechanism. 2,734,741, 2–14–56, Cl. 267—9.

Blindenbacher, Kenneth F., and H. W. Fatkin. Measurement indicating means for optical instruments. 2,734,273, 2–14–56, Cl. 33—64.

Blue, Charles: *See*—
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Bodell, Philip T., to Collins & Aikman Corp. Apparatus for drafting textile fibers. 2,734,232, 2–14–56, Cl. 19—131.

Boeing Airplane Co.: *See*—
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Boer, Arpad, to Brillotex Argentina S. A. Combing machine. 2,734,231, 2–14–56, Cl. 19—128.

Bolley, Don S.: *See*—
Larsen, Delmar H., Cummer, and Bolley. 2,734,860.

Bolley, Don S., and F. C. Naughton, to The Baker Castor Oil Co. Sebacic acid production in the presence of barium compounds. 2,734,916, 2–14–56, Cl. 260—531.

Bolton, John W., & Sons, Inc.: *See*—
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Bond, Walter L., to Bell Telephone Laboratories, Inc. Technique and apparatus for making crystal spheres. 2,734,317, 2–14–56, Cl. 51—73.

Bonner, James W., to Lowry Oil Tools, Inc. Pulling tool. 2,734,581, 2–14–56, Cl. 166—98.

Borg-Warner Corp.: *See*—
Shultz, Emmett E. 2,734,258.

Bornand, René. Machine for producing flexible tubing. 2,734,471, 2–14–56, Cl. 113—35.

Bornand, René. Apparatus for producing flexible tubing. 2,734,472, 2–14–56, Cl. 113—35.

Bortnick, Newman M., and S. Melamed, to Rohm & Haas Co. Ureidoalkyl vinyl ethers. 2,734,890, 2–14–56, Cl. 260—77.5.

Böttcher, Paul. Differential gearing. 2,734,398, 2–14–56, Cl. 74—711.

Bowell, Stephen T., I. C. Rush, and W. H. Watson, to Polymer Corp., Ltd. Process for producing butadiene, styrene latices of improved stability. 2,734,883, 2–14–56, Cl. 260—29.7.

Boylan, Wendell E., and G. L. Turner, to Clark Equipment Co. Hand lift truck. 2,734,752, 2–14–56, Cl. 280—44.

Boyle, James M.: *See*—
Mullen, Leo V., Jr., and Boyle. 2,734,869.

Brace, George A., to The Hoover Co. Suction cleaner having wheel adjustment and handle lock. 2,734,216, 1–14–56, Cl. 15—333.

Brace, George A., to The Hoover Co. Suction cleaner wheel adjustments. 2,734,217, 2–14–56, Cl. 15—339.

Brace, George A., to The Hoover Co. Automatic iron rest. 2,734,294, 2–14–56, Cl. 38—79.

Bradley, Theodore F., to Shell Development Co. Alkyd resins modified with substituted carbocyclic acids, and compositions containing the same. 2,734,876, 2–14–56, Cl. 260—16.

Bradley, William E., to Philco Corp. Cathode ray tube gun structure. 2,735,032, 2–14–56, Cl. 313—82.

Brainard, Maurice W., ½ to O'Keefe & Merritt Co. Construction for machines such as engines or the like. 2,734,487, 2–14–56, Cl. 121—194.

Brainard, Maurice W., ½ to O'Keefe & Merritt Co. Electrical generator. 2,735,030, 2–14–56, Cl. 310—261.

Bramming, Carl, to Aladdin Industries, Inc. Chimney support and chimney for incandescent burner. 2,734,999, 2–14–56, Cl. 240—99.

Brandt, Edgar W., to Anstalt fur die Entwicklung von Erfindungen und Gewerblichen Anwendungen Energa. Protector screen device for rocket launchers. 2,734,425, 2–14–56, Cl. 89—36.

Brendel, Theodor, and H. Lautenbacher, to Agfa Camera-Werk Aktiengesellschaft. Photographic objective comprising two outer convergent single elements and two inner divergent meniscus doublets. 2,734,422, 2–14–56, Cl. 88—57.

Briegel, Denzil L. Method and apparatus for casting hollow building units. 2,734,262, 2–14–56, Cl. 29—423.

Bright, Gordon S., and R. W. Hall, to The Texas Co. Rock drill lubricant containing a phosphorus acid ester and a sulfurized fatty oil. 2,734,868, 2–14–56, Cl. 252—46.7.

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British Petroleum Co. Ltd., The: *See*—
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British Timken Ltd.: *See*—
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Brooks, Lynn, to United Carbon Products Co. Method of producing high purity graphite. 2,734,799, 2–14–56, Cl. 23—209.1.

Brooks, Lynn, to United Carbon Products Co., Inc. Graphite purification. 2,734,800, 2–14–56, Cl. 23—209.9.

Brooks, Lynn, to United Carbon Products Co., Inc. Method of removing boron from graphite. 2,734,801, 2–14–56, Cl. 23—209.9.

Brosterhous, Claude A.: *See*—
Northrop, John K., Brosterhous, Dunn, Ellison, and Herman. 2,734,702.

Brouwer, Pieter H. J., to Hartford National Bank and Trust Co., trustee. Low-power hub dynamo. 2,735,028, 2–14–56, Cl. 310—67.

Brow, Harold J. Airplane rescue towing system. 2,734,697, 2–14–56, Cl. 244—3.

Brown, Burton P., Jr., to General Electric Co. Wave guide coupling system and method. 2,735,092, 2–14–56, Cl. 343—5.

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Brown, Harold F.: *See*—
Elliott, Harold V., and W. E. and H. F. Brown. 2,734,992.

Brown, Harry C. Scribing or engraving instrument. 2,734,272, 2–14–56, Cl. 33—27.

Brown, James W., to Esso Research and Engineering Co. Fluid coking of heavy hydrocarbons. 2,734,850, 2–14–56, Cl. 196—49.

Brown, William C.: *See*—
Spurlino, Pascal, and Brown. 2,734,743.

Brown, William E.: *See*—
Elliott, Harold V., and W. E. and H. F. Brown. 2,734,992.

Brown, William T. Trowel device. 2,734,433, 2–14–56, Cl. 94—45.

Bruce, E. L., Co.: *See*—
Lyons, Frank H. 2,734,879.

Brunner, Lawrence J. Apparatus for joining tape. 2,734,984, 2–14–56, Cl. 219—21.

Bryant Electric Co., The: *See*—
Littman, William I. 2,735,080.

Bryant, Forrest L., to Bryant Machinery Corp. Centrifugal liquefier for frozen and solid products. 2,734,502, 2–14–56, Cl. 126—343.5.

Bryant Machinery Corp.: *See*—
Bryant, Forrest L. 2,734,502.

Buck, Johannes S.: *See*—
Hunter, William T., and Buck. 2,734,920.

Buck, Thomas M.: *See*—
Schultz, Frank J., and Buck. 2,734,856.

Buck, Thomas M., and M. B. Alpert, to National Lead Co. Electrolytic preparation of reduced titanium chloride composition. 2,734,855, 2–14–56, Cl. 204—61.

Budd Co., The: *See*—
Strickland, Harold A., Jr. 2,734,600.

Budd, Sydney D., to The Stowaca Fibre & Can Co. Ltd. Ice trays and grids. 2,734,350, 2–14–56, Cl. 62—108.5.

Buehler, Arthur: *See*—
Zickendraht, Christian, and Buehler. 2,734,895.

Bulgin, Douglas, to Dunlop Tire and Rubber Corp. Electric resistance elements. 2,734,978, 2–14–56, Cl. 201—75.

Burbank, Wendell T.: *See*—
Galbraith, Martin, and Burbank. 2,734,375.

Burkhart, William H., to Monroe Calculating Machine Co. Antikey-bounce circuit. 2,735,091, 2–14–56, Cl. 340—345.

Burriss, Nokomis O. Liquid tank filling mechanism. 2,734,524, 2–14–56, Cl. 137—426.

Burroughs, Cedric B. Tobacco picker's cart. 2,734,751, 2–14–56 Cl. 280—32.5.

Burtner, Robert R., to G. D. Searle & Co. Acyl guanidines and processes for the manufacture thereof. 2,734,904, 2–14–56, Cl. 260—295.

Burton, Hobart, to Washington Iron Works. Tower yarder and loader. 2,734,641, 2–14–56, Cl. 212—7.

California Research Corp.: *See*—
Lewis, Allen H. 2,734,870.
Lum, Funston G. 2,734,829.
Schlatter, Maurice J. 2,734,930.

California Spray-Chemical Corp.: *See*—
Ospenson, Joseph N. 2,734,854.

Callahan, John C., and W. J. Rumpf, to American Cyanamid Co. Moistureproof vial closure. 2,734,649, 2–14–56, Cl. 215—37.

Callow, Robert K., P. C. Spensley, and J. W. Cornforth, to The National Research Development Corp. Production of hecogenin from plant material. 2,734,898, 2–14–56, Cl. 260—239.55.

Calton, Joseph G., to E. I. du Pont de Nemours and Co. Process for wet-drawing polyethylene terephthalate. 2,734,794, 2–14–56, Cl. 18—54.

Camp, Edward A.: *See*—
Bailey, Walter. 2,734,573.

Campbell, Harris S., to Eastern Rotorcraft Corp. Hand operated hoist construction. 2,734,717, 2–14–56, Cl. 254—169.

Campbell Products Co.: *See*—
Campbell, William J. 2,734,515.

Campbell, William J., to F. C. Wolff, d. b. a. Campbell Products Co. Smoking stand with accessory supports. 2,734,515, 2–14–56, Cl. 131—238.

Carignan, Charles J.: *See*—
Evers, Ernest C., and Carignan. 2,734,795.

Carlson, Catharine S.: *See*—
Carlson, Maurice F. and C. S. 2,734,655.

Carlson, Maurice F. and C. S. Tear strip remover for cans. 2,734,655, 2–14–56, Cl. 220—52.

Carman, Leon R. Fuel nozzle. 2,734,775, 2–14–56, Cl. 299—107.

Carpinella, Michael J., and R. V. Rosengrant, to Scovill Mfg. Co. Machine for setting and spacing fastener elements on garments. 2,734,653, 2–14–56, Cl. 218—6.

Carter Products, Inc.: *See*—
Berger, Frank M., and Plechner. 2,734,847.

Carter, Richard P., to Hercules Powder Co. Removal of $AlCl_3$ catalyst from Friedel-Crafts reaction masses. 2,734,892, 2–14–56, Cl. 260—93.3.

Cartlidge, Frank, and F. A. Lindgren, to Goodman Mfg. Co. Mining machine. 2,734,731, 2–14–56, Cl. 262—7.

Casco Products Corp.: *See*—
Youhouse, Joseph. 2,734,985.

Cathodeon Ltd.: *See*—
Townsend, Frederick H., and Geale. 2,735,035.

Chamberlain, John J., to The United States Stoneware Co. Method and apparatus for shaping articles of plastic material. 2,734,245, 2–14–56, Cl. 25—21.

Chandler, Austin S., to International Paper Box Machine Co. Cover closing machine. 2,734,324, 2–14–56, Cl. 53—147.

Chauvel, Raymond G., to Societe a responsabilite limitee dite: Gambin & Cie. Feed drive mechanism with backlash eliminator. 2,734,394, 2–14–56, Cl. 74—441.

Chayne, Charles A., to General Motors Corp. Cylinder block. 2,734,497, 2–14–56, Cl. 123—195.

Chemerda, John M., to Merck & Co., Inc. Δ^{7}-7-acyloxy-9, 11-epoxy-steroids and processes of preparing them. 2,734,897, 2–14–56, Cl. 260—239.55.

Chemical Construction Corp.: *See*—
Schaufelberger, Felix A. 2,734,821.

Chemieprodukte G. m. b. H.: *See*—
Kirsch, Werner. 2,734,882.

Chenicek, Joseph A., and R. B. Thompson, to Universal Oil Products Co. Biguanide derivatives as corrosion inhibitors. 2,734,807, 2–14–56, Cl. 44—72.

Cherry, Robert H., and G. M. Foley, to Leeds and Northrup Co. Compensated gas-analysis bridges. 2,734,376, 2–14–56, Cl. 73—27.

Chicago Roller Skate Co.: *See*—
Jewett, Alfred W. 2,734,777.

Christenson, Howard W., to General Motors Corp. Torque converter drive. 2,734,399, 2–14–56, Cl. 74—732.

Christoph, Peter, to C. Plath. Gyro-compasses. 2,734,280, 2–14–56, Cl. 33—226.

Christopher, John W. Toy gun. 2,734,310, 2–14–56, Cl. 46—228.

Christopher, John W. Toy gun. 2,734,311, 2–14–56, Cl. 46—228.

Ciba Ltd.: *See*—
Zickendraht, Christian, and Buehler. 2,734,895.

Cincinnati Shaper Co., The: *See*—
Fritzsch, Ralph C. 2,734,609.

Clancy, John J., and D. W. Lovering, to Arthur D. Little, Inc. Wrapped pencil-shaped articles and method of making same. 2,734,838, 2–14–56, Cl. 154—83.

Clancy, John J., and D. W. Lovering, to Arthur D. Little, Inc. Wrapped pencil-shaped articles and method of making same. 2,734,839, 2–14–56, Cl. 154—83.

Clapp, George H. Weatherproof door stop. 2,734,238, 2–14–56, Cl. 20—69.

Claret, Rene, to Office National d'Etudes et de Recherches Aeronautiques. Angular position data apparatus. 2,734,269, 2–14–56, Cl. 33—1.

Clark Equipment Co.: *See*—
Boylan, Wendell E., and Turner. 2,734,752.

Cleiff, Joseph A., to Aluminum Bronze Co. Ltd. Safety device of and for power-driven wringers. 2,734,370, 2–14–56, Cl. 68—249.

Clevite Corp.: *See*—
Kulcsar, Frank. 2,735,024.

Closs, Karl P. Method for the detection of pathological quantities of protein in the urine. 2,734,802, 2–14–56, Cl. 23—230.

Cobey Corp., The: *See*—
Barker, Eros V. 2,734,754.

Cocker Machine & Foundry Co.: *See*—
Suggs, Thomas F. 2,734,253.

Cohen, Charles A., and L. A. Mikeska, to Esso Research and Engineering Co. Preparation of naphthenic alcohols. 2,734,923, 2–14–56, Cl. 260—617.

Cohn, Max, to South River Metal Products Co., Inc. Mounting of antenna masts. 2,734,708, 2–14–56, Cl. 248—43.

Collins & Aikman Corp.: *See*—
Bodell, Philip T. 2,734,232.

Collins Radio Co.: *See*—
Doelz, Melvin L., and Wallace. 2,734,379.
Heald, Earl T. 2,734,942.
Lippisch, Alexander M. 2,734,699.
Werth, Willard F., and Miedke. 2,735,012.
Witters, Robert. 2,735,001.

Collins Radio Corp.: *See*—
Jordan, Carl F., Jr. 2,734,950.

Collins, Warren E.: *See*—
Nichols, Joseph, Reissmann, and Collins. 2,734,506.
Nichols, Joseph, Reissmann, and Collins. 2,734,507.

Columbia Machinery and Engineering Corp.: *See*—
Pater, Paul G. 2,734,572.

Columbia-Southern Chemical Corp.: *See*—
Strain, Franklin. 2,734,911.

Colvin, Lutishie. Infant's garment. 2,734,194, 2–14–56, Cl. 2—80.

Commercial Decal, Inc.: *See*—
Kane, Laurence E. 2,734,840.

Commonwealth Engineering Co. of Ohio, The: *See*—
Toulmin, Harry A., Jr. 2,734,828.
Wenzelberger, Elwood P. 2,734,355.

Conklin, Fred. Grout pump. 2,734,667, 2–14–56, Cl. 222—255.

Conklin, Patrick H.: *See*—
Dixon, Lowell R., and Conklin. 2,734,277.

Connor Lumber and Land Co., The: *See*—
MacRae, Norman D. 2,734,643.

Consolidated Engineering Corp.: *See*—
Berry, Clifford E. 2,734,949.

Continental Plastic Corp.: *See*—
Kiba, Yoneo. 2,734,222.

Conway, William H.: *See*—
Pabst, Philip F., and Conway. 2,734,454.

Cook, Albert W., to The Goodyear Tire & Rubber Co. Reinforced tire supporting member. 2,734,778, 2–14–56, Cl. 301—8.

Cook, Albert W., to The Goodyear Tire & Rubber Co. Metal wheel. 2,734,780, 2–14–56, Cl. 301—63.

Cook Electric Co.: *See*—
Bellamy, John C. 2,734,606.

Cook, Ernest P., deceased, by F. B. Cook, executrix, to Brown Co. Dewatering apparatus. 2,734,429, 2–14–56, Cl. 92—43.

Cook, Fern B.: *See*—
Cook, Ernest P. 2,734,429.

Cook, George C. Combination oil retainer and dust guard. 2,734,759, 2–14–56, Cl. 286—6.

Cook, Herbert A. Vibrator. 2,734,962, 2–14–56, Cl. 200—93.

Cooper, Clark, Jr., to Scaico Controls, Inc. Thermostatic switch. 2,734,968, 2–14–56, Cl. 200—137.

Cooper, Hugh S., to W. M. Weil. Process and composition for treating molten aluminum. 2,734,820, 2–14–56, Cl. 75—68.

Cori, John L., and R. Gundelfinger, to Berkeley Scientific Corp. Counting-rate meter. 2,735,066, 2–14–56, Cl. 324—68.

Cornforth, John W.: *See*—
Callow, Robert K., Spensley, and Cornforth. 2,734,898.

Corwin, Merton D., to The Baldwin Piano Co. Construction of photoelectric organs. 2,734,416, 2–14–56, Cl. 84—1.17.

Coster, Allan A., to The Reflectone Corp. Variable speed device. 2,734,388, 2–14–56, Cl. 74—198.

Costick, Andrew J., and W. A. Jones, to The Goodyear Tire & Rubber Co. Mold structure. 2,734,227, 2–14–56, Cl. 18—39.

Courthope, Thomas F., S. Martin, and R. G. Sickly, to International Salt Co. Salt dissolving apparatus. 2,734,804, 2–14–56, Cl. 23—272.6.

Cox, Bonnar: *See*—
Goldberg, Jacob, Cox, and Heywood. 2,735,082.

Cozzo, Giuseppe, to Hydropress, Inc. Rolling mill. 2,734,405, 2–14–56, Cl. 80—32.

Crabbs, Herbert J., to Westinghouse Electric Corp. Switch lever locking means. 2,734,374, 2–14–56, Cl. 70—201.

Crampton Mfg. Co.: *See*—
Scherbinski, Floyd P. 2,734,373.

Crawford, Jack A., to the United States of America as represented by the Secretary of the Navy. Current trap for preventing coupling between two generators. 2,735,020, 2–14–56, Cl. 307—51.

Crescas, Charles, and B. P. Elkin. Hypodermic injection devices. 2,734,504, 2–14–56, Cl. 128—218.

Crevier, Roger P., to The Fuller Brush Co. Cylindrical brush. 2,734,210, 2–14–56, Cl. 15—182.

Critoph, David I., J. F. Herrmann, and F. H. Wolford, to American Optical Co. Film projector. 2,734,421, 2–14–56, Cl. 88—28.

Crown Cork & Seal Co., Inc.: *See*—
Day, Carl L., and Fauth. 2,734,672.

Croxall, Robert W., to Elaine of Hollywood Brassiere Co. Brassiere. 2,734,193, 2–14–56, Cl. 2—42.

Cummer, George W.: *See*—
Larsen, Delmar H., Cummer, and Bolley. 2,734,860.

Cunningham, George M., to American Metal Works, Inc. Carton unloading machine. 2,734,647, 2–14–56, Cl. 214—313.

Cyril Bath Co.: *See*—
Fredericks, Joseph A. 2,734,548.

Daily, Joseph L.: *See*—
Fowler, Carl E., Jr., and Daily. 2,734,781.

Daimler-Benz Aktiengesellschaft: *See*—
Hoffmann, Heinrich. 2,734,491.

D'Alelio, Gaetano F., to Koppers Co., Inc. Dye receptive acrylonitrile polymerization products. 2,734,888, 2–14–56, Cl. 260—45.5.

Davey, Paxman & Co. Ltd.: *See*—
Hammond, Arthur C. E. 2,734,496.

Davidson, Harley W. Trotline reel. 2,734,694, 2–14–56, Cl. 242—106.

Davidson Mfg. Co.: *See*—
Hendrix, Don O. 2,734,419.

Davis, Loyd C. Cultivator tool. 2,734,440, 2–14–56, Cl. 97—168.

Dawson, Axel G. Metal sills. 2,734,602, 2–14–56, Cl. 189—75.

Dawson, Edward W., to A. V. Roe Canada Ltd. Reciprocating and rotating blade polisher. 2,734,316, 2–14–56, Cl. 51—7.

Day, Carl L., and F. E. Fauth, to Crown Cork & Seal Co., Inc. Container sealing apparatus. 2,734,672, 2–14–56, Cl. 226—88.

Dayhoff, George W. Hasp fastener. 2,734,763, 2–14–56, Cl. 292—285.

De Forest, Lee. Transistor. 2,735,049, 2–14–56, Cl. 317—235.

Deibler, Elmer F., H. H. George, and R. E. Miller, to the United States of America as represented by the Secretary of the Navy. Peak power meter. 2,735,067, 2–14–56, Cl. 324—95.

De La Mater, George B.: *See*—
Homeyer, August H., De La Mater, and Patterson. 2,734,917.

Delang, Theodore G.: *See*—
Batts, Harvey J., and Delang. 2,734,877.

De Laval, Carl G., Jr. Process of making stainless steel castings in a reverberatory furnace. 2,734,818, 2–14–56, Cl. 75—43.

De Luca, Robert A., to Great Northern Paper Co. Pressure vessels. 2,734,824, 2–14–56, Cl. 92—7.

De Ment, Jack. Water treating device. 2,734,632, 2–14–56, Cl. 210—36.

De Mond, William. Hosiery. 2,734,363, 2–14–56, Cl. 66—173.

Dengel, Ferdinand, to Knoll A. G. Chemische Fabriken. Method of producing aralkyl cyanides. 2,734,908, 2–14–56, Cl. 260—465.

Derham, Leslie J.: *See*—
Williams, George K., and Derham. 2,734,819.

Deters, Elmer M., and G. A. Patterson, to Red Jacket Mfg. Co. Primer for centrifugal pump. 2,734,460, 2–14–56, Cl. 103—113.

Deutsch, Robert D., and O. E. Langos, to Dorothy Flicek Industries, Inc. Jewel-setting tool. 2,734,190, 2–14–56, Cl. 1—4.

De Vault, Robert V., to American Enka Corp. Yarn package. 2,734,606, 2–14–56, Cl. 242—159.

Dewan, John T., and C. Goodman, to Schlumberger Well Surveying Corp. Particle accelerator. 2,735,019, 2–14–56, Cl. 250—84.5.

Dickieson, Edward F., Jr., deceased; N. L. Dickieson, executrix, to N. L. Dickieson. Apparatus for controlling refrigerating systems. 2,734,346, 2–14–56, Cl. 62—4.

Dickieson, Nathalie L.: *See*—
Dickieson, Edward F., Jr. 2,734,346.

Dickinson, Arthur H., to International Business Machines Corp. Oscillating circuit. 2,735,011, 2–14–56, Cl. 250—36.

Dickinson, Robert C.: *See*—
Frink, Russell E., and Dickinson. 2,734,842.

Diesenhaus, Sidney: *See*—
Gellman, Abraham, and Diesenhaus. 2,734,670.

Distillers Co. Ltd., The: *See*—
Bewley, Thomas, and Aller. 2,734,921.
Vaughan, Mervyn F. 2,734,894.

Di Trapani, Frank. Detachable handle. 2,734,221, 2–14–56, Cl. 16—114.

Dittmar, Harry R.: *See*—
Hinkamp, James B., Sugimoto, and Dittmar. 2,734,910.

Dix, Sydney. Milling machine. 2,734,426, 2–14–56, Cl. 90—11.

Dixon, Lowell R., and P. H. Conklin. Gauges. 2,734,277, 2–14–56, Cl. 33—172.

Doak, Kenneth W., to United States Rubber Co. Rubber treatment. 2,734,885, 2–14–56, Cl. 260—41.5.

Doak, Kenneth W., to United States Rubber Co. Rubber treatment. 2,734,886, 2–14–56, Cl. 260—41.5.

Doak, Kenneth W., and R. A. Gregg, to United States Rubber Co. Rubber treatment. 2,734,887, 2–14–56, Cl. 260—41.5.

Doelz, Melvin L., and F. C. Wallace, to Collins Radio Co. Disc holding and frequency measuring apparatus. 2,734,379, 2–14–56, Cl. 73—67.

Dolude, Roman J., to Summers Gyroscope Co. Gravity erection for gyroverticals. 2,734,385, 2–14–56, Cl. 74—5.45.

Dolza, John, to General Motors Corp. Vehicle refrigerating apparatus. 2,734,352, 2–14–56, Cl. 62—117.1.

Domenichini, Carlo P., and H. J. Thomas, Jr., to Raytheon Mfg. Co. Duplexing systems. 2,735,071, 2–14–56, Cl. 333—13.

Donham, Horace D. Magnetic junk catcher. 2,734,767, 2–14–56, Cl. 294—65.5.

Dorl, Francis J. L. Roller bearings. 2,734,787, 2–14–56, Cl. 308—214.

Dorr, Henry J.: *See*—
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Dorr-Oliver Inc.: *See*—
Knowles, John H. 2,734,634.
Van der Wal, Gerrit J. 2,734,630.

Douglas Aircraft Co., Inc.: *See*—
Kleinhans, Schuyler. 2,734,356.
Petersen, Thorvald K. 2,734,645.

Douglas, Peyton W., to The Murray Corp. of America. Support for laundry machines. 2,734,707, 2–14–56, Cl. 248—18.

Doumani, Thomas F., to Union Oil Co. of California. Dealkylation of hydrocarbons. 2,734,929, 2–14–56, Cl. 260—672.

Dow Chemical Co., The: *See*—
Jones, Griffin D. 2,734,915.

Doxford, William, and Sons Ltd.: *See*—
Purdie, William H., Jackson, and Gunn. 2,734,492.

Doyle, John T., to The Kendall Co. Heat-sterilizable elastic film backed bandage. 2,734,503, 2–14–56, Cl. 128—156.

Drake Corp.: *See*—
Drake, Stoney. 2,734,254.

Drake, Leonard C., and R. L. Smith, to Socony Mobil Oil Co., Inc. Preparation of catalysts of vanadium oxide or chromium oxide on porous carriers. 2,734,874, 2–14–56, Cl. 252—461.

Drake, Stoney, to Drake Corp. Warp conditioning process for tying-in machines. 2,734,254, 2–14–56, Cl. 28—72.6.
Draves, William W. Variable grind feed mill. 2,734,687, 2–14–56, Cl. 241—186.
Drese, Wilhelm, ½ to Jagenberg-Werke Akt.-Ges. Apparatus for handling containers made of a flexible material, such as paper, cardboard, and the like. 2,734,657, 2–14–56, Cl. 221—251.
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Saunders, Erle F., and Drysdale. 2,734,334.
Saunders, Erle F., and Drysdale. 2,734,335.
Duling, Irl N., Jr.: *See*—
Ferris, Seymour W., Tench, and Duling. 2,734,365.
Du Mont, Allen B., Laboratories, Inc.: *See*—
Beste, Harold E. 2,734,937.
Dunkelberger, Milton S. Chuck and ratchet mechanism. 2,734,413, 2–14–56, Cl. 81—63.2.
Dunklee, Harold L. Decorative pine cone. 2,734,297, 2–14–56, Cl. 41—13.
Dunlop Tire and Rubber Corp.: *See*—
Bulgin, Douglas. 2,734,978.
Merriman, Peter. 2,734,841.
Dunn, Harold G., F. R. Sibbald, and E. K. Haydon, to The Hoover Co. Washing machines. 2,734,366, 2–14–56, Cl. 68—131.
Dunn, Leigh E.: *See*—
Northrop, John K., Brosterhous, Dunn, Ellison and Herman. 2,734,702.
Du Pont, E. I., de Nemours and Co.: *See*—
Belcher, Clarence F. 2,734,901.
Biswell, Charles B. 2,734,808.
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Larsson, Bjorn E. 2,734,831.
Lawrence, Chester A. 2,734,676.
Leibu, Henry J. 2,734,912.
Morgan, James G. 2,734,825.
Starr, Frank C., Jr. 2,734,889.
Dyer, John B., and R. H. Sullivan, to General Motors Corp. Motor control means. 2,735,029, 2–14–56, Cl. 310—77.
Early, Thomas A., Jr., and E. A. Fitter, to Sperry Rand Corp. Gyroscopic instruments. 2,734,279, 2–14–56, Cl. 33—204.
East Dayton Tool and Die Co., The: *See*—
Fischer, Clarence H., and Parsons. 2,734,620.
Eastern Rotorcraft Corp.: *See*—
Campbell, Harris S. 2,734,717.
Eastman Kodak Co.: *See*—
Gee, Robert E., Jr., and Hagemeyer. 2,734,909.
Heseltine, Donald W. 2,734,900.
Ebco Mfg. Co., The: *See*—
Fischer, Harry C., and Benua. 2,734,347.
Fischer, Harry C., and Benua. 2,734,357.
Eberhard, Everett: *See*—
Beard, Arthur D., and Eberhard. 2,735,017.
Eckel, Oliver C. Door construction. 2,734,234, 2–14–56, Cl. 20—16.
Edwards, Andrew W., and W. J. Paxton, to Westinghouse Electric Corp. Circuit interrupters. 2,734,964, 2–14–56, Cl. 200—114.
Edwards High Vacuum Ltd.: *See*—
Power, Basil D. 2,734,679.
Edwards, Thomas H., to the United States of America as represented by the United States Atomic Energy Commission. Magnetic control device for pumps. 2,734,678, 2–14–56, Cl. 230—83.
Ehring, Heinz, and K. Raichle, to Farbenfabriken Bayer Aktiengesellschaft. Copolymer of vinyl aromatic hydrocarbon, dehydrated castor oil alkyd and oil alkyd made from oils having isolated double bond. 2,734,880, 2–14–56, Cl. 260—22.
Elaine of Hollywood Brassiere Co.: *See*—
Croxall, Robert W. 2,734,193.
Electric & Musical Industries Ltd.: *See*—
Woodbridge, Leonard A. 2,735,031.
Electro Refractories & Abrasives Corp.: *See*—
Robie, Norman P. 2,734,812.
Electro Voice, Inc.: *See*—
Wiggins, Alpha M. 2,735,025.
Electrodata Corp.: *See*—
Robinson, Leland P. 2,734,692.
Elian, John, and M. Le Pingle. Production of pentoses from cellulosic materials. 2,734,836, 2–14–56, Cl. 127—37.
Elipse Lawn Mower Co., Division of Buffalo-Eclipse Corp., The: *See*—
Thelander, Clement C. J. 2,734,390.
Elkin, Bernard P.: *See*—
Cresens, Charles, and Elkin. 2,734,504.
Elkins, Lloyd E., to Stanolind Oil and Gas Co. Production from bituminous sands. 2,734,579, 1–14–56, Cl. 166—11.
Elles, Edward S., and H. C. Hawley, to Superior Furniture Co. Extension table having hinged apron section. 2,734,788, 2–14–56, Cl. 311—62.
Elliott, Charles H., to Reed Roller Bit Co. Blow-gun. 2,734,776, 2–14–56, Cl. 299—149.
Elliott, Harold V., and W. E. and H. F. Brown, to General Motors Corp. Compartment light and switch. 2,734,992, 2–14–56, Cl. 240—7.1.
Ellison, John M.: *See*—
Northrop, John K., Brosterhous, Dunn, Ellison, and Herman. 2,734,702.
Ely, James K.: *See*—
Southern, Raymond L., and Ely. 2,734,241.
Engine Parts Mfg. Co., The: *See*—
Ivins, Herbert L. 2,734,773.
English Electric Co. Ltd., The: *See*—
Noble, John M. 2,734,710.
Enns, John H., to Leeds and Northup Co. Spectrometer system with receiver for reference band illumination. 2,734,418, 2–14–56, Cl. 88—14.
Entwistle, John E., to Harvard Mfg. Co. Bedframe having mobile bookcase headboards. 2,734,202, 2–14–56, Cl. 5—53.
Envoldsen, Karl C. Shrimp holder. 2,734,766, 2–14–56, Cl. 294—25.
Epstein, Herman. Combination can opener and bottle opener. 2,734,204, 2–14–56, Cl. 7—14.25.
Epstein, Norman N., to Lenkurt Electric Co., Inc. Multiple frequency generator. 2,735,013, 2–14–56, Cl. 250—36.
Erdco Engineering Corp.: *See*—
Mittelmann, Eugene. 2,734,380.
Erickson Arthur C. Pie dish. 2,734,449, 2–14–56, Cl. 99—428.
Erling, Herman C. Carriage lift for disc plows. 2,734,437, 2–14–56, Cl. 97—46.59.
Eshbaugh, Jesse E., to General Motors Corp. Vacuum wound vehicle clock. 2,734,337, 2–14–56, Cl. 58—46.
Esso Research and Engineering Co.: *See*—
Brown, James W. 2,734,850.
Cohen, Charles A., and Mikeska. 2,734,923.
Jones, Robert H., Hill, and Moody. 2,734,863.
Morway, Arnold J., and Spray. 2,734,862.
Moser, John F., Jr. 2,734,528.
Moser, John F., Jr. 2,734,852.
Mullen, Leo V., Jr., and Boyle. 2,734,869.
Smith, Brook I. 2,734,851.
Smith, Brook I., and Jahnig. 2,734,853.
Smith, Paul V., Jr., and Young. 2,734,884.
Weissberg, Jesse S., and Jones. 2,734,867.
Ethicon, Inc.: *See*—
Nichols, Joseph, Reissmann, and Collins. 2,734,506.
Nichols, Joseph, Reissmann, and Collins. 2,734,507.
Ethyl Corp.: *See*—
Hinkamp, James B., Sugimoto, and Dittmar. 2,734,910.
Even, Nicholas. Cupola tuyere gates with integral downward deflectors. 2,734,738, 2–14–56, Cl. 266—41.
Everhart, Harold S., to The Jeffrey Mfg. Co. Conveying apparatus, including a bodily movable belt supporting transfer means. 2,734,622, 2–14–56, Cl. 198—186.
Evers, Ernest C., and C. J. Carignan, to the United States of America as represented by the United States Atomic Energy Commission. Process for preparation of chlorides of uranium. 2,734,795, 2–14–56. Cl. 23—14.5.
Fairbanks, Morse & Co.: *See*—
Moerk, John C. 2,735,026.
Falk Corp., The: *See*—
Bade, Alfred G. 2,734,397.
Falk, Louis W. 2,734,392.
Falk, Louis W., and Schmitter. 2,734,396.
Falk, Louis W., to The Falk Corp. Feed screw mechanism. 2,734,392, 2–14–56, Cl. 74—424.8.
Falk, Louis W., and W. P. Schmitter, to The Falk Corp. Twin drive and driven power transmissions. 2,734,398, 2–14–56, Cl. 74—665.
Fallert, Clifford D. *See*—
Repking, Edward F., George, and Fallert. 2,734,349.
Farbenfabriken Bayer Aktiengesellschaft: *See*—
Ehring, Heinz, and Raichle. 2,734,880.
Hagge, Walter, and Quaedvlieg. 2,734,830.
Vollmann, Heinrich. 2,734,927.
Farrel-Birmingham Co., Inc.: *See*—
Forward, Worthy J. F., and Miller. 2,734,256.
Fatkin, Harry W.: *See*—
Blindenbacher, Kenneth F., and Fatkin. 2,734,273.
Fauser, Oscar, Jr., to Oscar Martin Mfg. Co. Exhaust vent and downdraft diverter. 2,734,501, 2–14–56, Cl. 126—307.
Fauth, Frederick E.: *See*—
Day, Carl L., and Fauth. 2,734,672.
Fawick, Thomas L. Device for dynamically balancing a tubular rotary member. 2,734,395, 2–14–56, Cl. 74—573.
Federal Paper Board Co., Inc.: *See*—
Pabst, Philip F., and Conway. 2,734,454.
Feldman, Alfred. Clothes hanger attachment for chair backs. 2,734,638, 2–14–56, Cl. 211—86.
Felt & Tarrant Mfg. Co.: *See*—
Turck, Joseph A. V. 2,734,683.
Fernstrum, Robert W., to Marine Products Co. Dual impeller pump. 2,734,457, 2–14–56, Cl. 103—4.
Ferraro, Frank. Vanity case. 2,734,517, 2–14–56, Cl. 132—83.
Ferris, Seymour W., J. D. Tench, and I. N. Duling, Jr., to Sun Oil Co. Wax composition. 2,734,365, 2–14–56, Cl. 67—22.
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Lally, Robert E., and O'Hara. 2,734,881.
Fewster, James F., and J. W. Noble, to Motion, Inc. Display device. 2,734,295, 2–14–56, Cl. 40—32.
Field, Albert. Abraiding implement. 2,734,321, 2–14–56, Cl. 51—190.
Fielden, John E., to Robertshaw-Fulton Controls Co. Follow-up control for indicator. 2,735,052, 2–14–56, Cl. 318—31.
Findley, George W., to Ford Motor Co. Variable and reversible pitch fan for internal-combustion engine. 2,734,493, 2–14–56, Cl. 123—41.12.
Finlay, Alexander, to Westinghouse Air Brake Co. Coded carrier remote control systems. 2,735,083, 2–14–56, Cl. 340—163.
Finnegan, Edward P. Means for measuring trouser lengths. 2,734,270, 2–14–56, Cl. 33—8.
Firing, Osborne, to Scovill Mfg. Co. Process and apparatus for making zipper fastener stringers. 2,734,546, 2–14–56, Cl. 153—1.
Fischer, Clarence H., and W. W. Parsons, to The East Dayton Tool and Die Co. Apparatus for feeding work pieces from a hopper to a dowel cutting machine. 2,734,620, 2–14–56, Cl. 198—45.
Fischer, H. G., & Co.: *See*—
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Fischer, H. G., and Co., Inc.: *See*—
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Fischer, Harry C., and L. P. Benua, to The Ebco Mfg. Co. Apparatus for producing and dispensing beverages having frozen particles therein. 2,734,347, 2–14–56, Cl. 62—4.
Fischer, Harry C., and L. P. Benua, to The Ebco Mfg. Co. Beverage cooler and dispenser. 2,734,357, 2–14–56, Cl. 62—141.
Fisher, Anton E. Grain pick up attachment for harvesters. 2,734,332, 2–14–56, Cl. 56—312.
Fisher, Joe. Suction line screen. 2,734,637, 2–14–56, Cl. 210—170.
Fitter, Ernest A.: *See*—
Early, Thomas A., Jr., and Fitter. 2,734,279.
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Deutsch, Robert D., and Langos. 2,734,190.
Florio, Patrick A., and L. W. Rainard, to Alexander Smith, Inc. Soil resistant fabric and method of making the same. 2,734,835, 2–14–56, Cl. 117—169.
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Formhals, William H., Fockler, and Penney. 2,735,027.
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Cherry, Robert H., and Foley. 2,734,376.
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Ford, Barton H. and M. J. 2,734,567.
Ford Motor Co.: *See*—
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Formhals, William H., T. C. Fockler, and J. H. Penney, to Westinghouse Electric Corp. Annealing furnace motor. 2,735,027, 2–14–56, Cl. 310—58.
Forward, Worthy J. F., and W. R. Miller, Jr., to Farrel-Birmingham Co., Inc. Cutting tool. 2,734,256, 2–14–56, Cl. 29—96.
Foster, William J., to General Motors Corp. Filter and fluid pressure relief valve therefor. 2,734,636, 2–14–56, Cl. 210—164.
Fowler, Carl E., Jr., and J. L. Daily, to Houdry Process Corp. Method and apparatus for elevating granular material. 2,734,781, 2–14–56, Cl. 302—25.
Frady, Michael A., 50% to V. J. Stassi. Demountable remote controlled dirigible light. 2,734,997, 2–14–56, Cl. 240—61.6.
Frank, Stanley L.: *See*—
Jenkins, William D., Frank, and Zipay. 2,734,953.
Frankel, Theodor, to General Dynamics Corp. Automatic telephone system. 2,734,947. 2–14–56, Cl. 179—27.
Fraser, James, to Speakman Co. Self-metering flush valve. 2,734,712, 2–14–56, Cl. 251—35.
Fraser, John, to Avery-Hardoll Ltd. Liquid measuring and dispensing apparatus. 2,734,660, 2–14–56, Cl. 222—15.
Frawley Corp.: *See*—
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Fredericks, Joseph A., to Cyril Bath Co. Apparatus for forming annular bodies. 2,734,548, 2–14–56, Cl. 153—2.
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Marquis, Donald P., and French. 2,734,760.
Frink, Russell E., and R. C. Dickinson, to Westinghouse Electric Corp. Process of manufacturing spaced plate arc extinguishers. 2,734,842, 2–14–56, Cl. 154—122.
Frink, Russell E.: *See*—
Lingal, Harry J., and Frink. 2,734,971.
Fritz, Elwood W. Christmas tree stand. 2,734,993, 2–14–56, Cl. 240—10.
Fritzsch, Ralph C., to The Cincinnati Shaper Co. Pneumatic clutch control. 2,734,609, 2–14–56, Cl. 192—129.
Frizzell, Clarence E.: *See*—
Ross, Harold D., Jr., and Frizzell. 2,734,684.
Fuller Brush Co., The: *See*—
Crevier, Roger P. 2,734,210.
Fuller Co.: *See*—
Galle, Hans E. 2,734,782.
Funkhouser, Hayes W. Reserve fuel supply device. 2,734,561, 2–14–56, Cl. 158—36.3.
Fuqua, Lloyd T., to General Motors Corp. Pre-focus type light bulb mounting. 2,734,994, 2–14–56, Cl. 240—41.
Fuqua, Robert N. Artificial fish bait. 2,734,301, 2–14–56, Cl. 43—42.05.
Furman, Frank J.: *See*—
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Fyock, Roy L. Anchor handling apparatus. 2,734,475, 2–14–56, Cl. 114—210.
Galbraith, Martin, and W. T. Burbank, to Southerland Paper Co. Apparatus for testing abrasion resistance of printed surfaces. 2,734,375, 2–14–56, Cl. 73—7.
Galland, Opal E. Fruit picking bucket. 2,734,542, 2–14–56, Cl. 150—2.
Galle, Hans E., to Fuller Co. Pneumatic conveyors. 2,734,782, 2–14–56, Cl. 302—53.
Gameros, Francisco. Pyrograph. 2,734,986, 2–14–56, Cl. 219—29.
Gardes, Alfred W., to Houdaille-Hershey of Indiana, Inc. Weigh box structure having pivotally mounted doors for a fiber handling machine. 2,734,668, 2–14–56, Cl. 222—503.
Garner, Claude M., J. Roos, Jr., J. A. Wright, and T. P. Fleer, to Missouri Automatic Control Corp. Antivibration solenoid structure. 2,735,047, 2–14–56, Cl. 317—186.
Garrett Corp., The: *See*—
Jensen, Raymond W. 2,734,442.
Wood, Homer J. 2,734,443.
Gary, Clarence E.: *See*—
Schaelchlin, Walter, and Gary. 2,734,394.
Gassaway, Benjamin F., ½ to J. A. Hull. Reentrant inflation tube and control valve for inflatable articles. 2,734,308, 2–14–56, Cl. 46—90.
Gaudin, Louis, to Invester S. A. Machine for constructing elongated tubular concrete structures. 2,734,248, 2–14–56, Cl. 25—32.
Gay-Bell Corp.: *See*—
Bell, Harry G., and Gay. 2,734,450.
Gay, Douglas J., Jr.: *See*—
Bell, Harry G., and Gay. 2,734,450
Gaylord Container Corp.: *See*—
Repking, Edward F., George, and Fallert. 2,734,349.
Geale, Frederick: *See*—
Townsend, Frederick, H., and Geale. 2,735,035.
Geauque, Robert E.: *See*—
Laub, Herman, III. 2,734,323.
Gebhart, Dave F. Tractor mountable support frame and cutting assembly. 2,734,326, 2–14–56, Cl. 56—25.4.
Gebhart, Floyd C. Trailer jack. 2,734,726, 2–14–56, Cl. 254—86.
Gee, Robert E., Jr., and H. J. Hagemeyer, Jr., to Eastman Kodak Co. Oxidation of cyanoalkanes to cyanoalkenes with molecular oxygen. 2,734,909, 2–14–56, Cl. 260—465.9.
Geisler, Harold F., to Meat Separator Corp. Apparatus for separating meat from bones. 2,734,537, 2–14–56, Cl. 146—76.
Geisler, Harold F., to Meat Separator Corp. Method of separating meat. 2,734,540. 2–14–56, Cl. 146—222.
Geldhof, Peter E., to Whirlpool-Seeger Corp. Agitator. 2,734,367, 2–14–56, Cl. 68—133.
Gellman, Abe, Co., Inc.: *See*—
King, James T. 2,734,669.
Gellman, Abraham, and S. Diesenhaus. Sewing machine loop shaper attachment. 2,734,670, 2–14–56, Cl. 223—110.
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Marnon, Donald E., and Bianco. 2,734,793.
General Box Co.: *See*—
McFee, John S. 2,734,652.
General Controls Co.: *See*—
Ray, William A. 2,734,564.
General Dynamics Corp.: *See*—
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General Electric Co.: *See*—
Ball, Richard H., Murdock, and Ogle. 2,734,585.
Brown, Burton P., Jr. 2,735,092.
McArthur, Elmer D. 2,735,034.
McArthur, Elmer D. 2,735,074.
Raab, Edward L., and Gorsline. 2,734,926.
Thomason, Jesse L. 2,735,075.
Wakefield, Kenneth E. 2,734,603.
Webber, Stanley E. 2,735,033.
Young, Andrew H. 2,734,872.
General Motors Corp.: *See*—
Abresch, Carel F., and McCormick. 2,734,520.
Chayne, Charles A. 2,734,497.
Christenson, Howard W. 2,734,399.
Doiza, John. 2,734,352.
Dyer, John B., and Sullivan. 2,735,029.
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Eshbaugh, Jesse E. 2,734,337.
Foster, William J. 2,734,636.
Fuqua, Lloyd T. 2,734,994.
Hirsch, Richard A. 2,734,587.
Johnson, Bertil, and Shaw. 2,734,481.
Martin, Harry D. 2,734,757.
Rausch, John T. 2,734,525.
Wiggans, John M. 2,734,523.
Wright, Clifford B., and Haines. 2,734,586.
General Railway Signal Co.: *See*—
Maenpaa, Wilho K. 2,735,090.
Pickell, Clark A. 2,735,089.
George, Henry H.: *See*—
Deibler, Elmer F., George, and Miller. 2,735,067.
George, Walter C.: *See*—
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Beardslee, Lewis D. 2,734,988.
Gilbreth, Barbara F., and B. J. Williams. Tape roll holder and tear strip. 2,734,575, 2–14–56, Cl. 164—84.5.
Gildemeister & Co. A.-G.: *See*—
Möbius, Walter. 2,734,415.
Gilfillan Bros., Inc.: *See*—
Green, David J., Landee, and Johnson. 2,734,944.
Gill, Robert M. Carton for making ice cream sandwiches. 2,734,675, 2–14–56, Cl. 229—6.
Gille, Willis H., to Minneapolis-Honeywell Regulator Co. Electronic motor control apparatus. 2,735,051, 2–14–56, Cl. 318—29.
Gillespie, Henderson C., and J. E. Joy, to Radio Corp. of America. Dielectric heating electrode. 2,734,982, 2–14–56, Cl. 219—10.81.
Gipperich, Helmut. Vise actuated by differential screw. 2,734,410, 2–14–56, Cl. 81—33.
Gissel, Kurt: *See*—
Leitz, Ludwig, and Gissel. 2,734,434.
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Robinson, Ernest B., and Glasby. 2,734,432.
Glenn, Carl. Flattening hammer for stove top. 2,734,550, 2–14–56, Cl. 153—48.
Globe Oil Tools Co.: *See*—
Goodwin, John S. 2,734,427.
Glynn, Edwin A., to Super Mold Corp. of California. Tread centering device for tire molds. 2,734,225, 2–14–56, Cl. 18—18.
Godat, Edmond, to United States Rubber Co. Mandrel. 2,734,691, 2–14–56, Cl. 242—72.

Golbert, Serge, to Societe Nationale de Constructions Aeronautiques du Sud-Est. Method of stretch-bending sheet metal. 2,734,474, 2–14–56, Cl. 113—51.

Goldberg, Jacob, B. Cox, and J. E. Heywood. Data sorting system. 2,735,082, 2–14–56, Cl. 340—147.

Gollwitzer, Walter T., and R. H. Lease, to Addressograph-Multigraph Corp. Skip-print control in address printing machines. 2,734,453, 2–14–56, Cl. 101—58.

Goodale, Elmer D., to Radio Corp. of America. Color television camera. 2,734,938, 2–14–56, Cl. 178—5.4.

Goodman, Clark: *See*—
Dewan, John T., and Goodman. 2,735,019.

Goodman Mfg. Co.: *See*—
Andershock, Chester E. 2,734,400.
Cartlidge, Frank, and Lindgren. 2,734,731.
Sloane, William W. 2,734,688.
Tracy, Benjamin F. 2,734,732.
Wilms, Carl A. 2,734,733.

Goodrich, B. F., Co., The: *See*—
Lombardi, Michael W. 2,734,239.

Goodwin, John S., to Globe Oil Tools Co. Milling machine for operating upon metal blanks. 2,734,427, 2–14–56, Cl. 90—11.62.

Goodyear Tire & Rubber Co., The: *See*—
Anderson, Malcolm G. 2,734,568.
Cook, Albert W. 2,734,778.
Cook, Albert W. 2,734,780.
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Kamlet, Jonas. 2,734,798.

Gordon, Jewell M. Fruit receiving conveyor. 2,734,611, 2–14–56, Cl. 193—7.

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Goss, Frank A., Jr., to Bell Telephone Laboratories, Inc. Electrical control. 2,734,975, 2–14–56, Cl. 201—48.

Graver Tank & Mfg. Co., Inc.: *See*—
McKelvey, Lawrence N., Jr., and Segrest. 2,734,593.

Graves, Lloyd T., ½ to W. B. Steele. Doser-blade mounting. 2,734,292, 2–14–56, Cl. 37—144.

Graybill, Kenneth W., to Automatic Electric Laboratories, Inc. Switch wiper. 2,734,974, 2–14–56, Cl. 200—166.

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Green, David J., R. W. Landee, and T. J. Johnson, Jr., to Gilfillan Bros., Inc. Differential amplifier method of cancelling ripple pick-up. 2,734,944, 2–14–56, Cl. 178—69.

Green, Iris F.: *See*—
Phillips, Violet, and Green. 2,734,288.

Green, Martin. Garment supporting bracket for automobile use. 2,734,639, 2–14–56, Cl. 211—96.

Green, Maurice B.: *See*—
Barber, Harry J., and Green. 2,734,918.

Greenbaum, Arthur, to Academy Electrical Products Corp. Electric attachment plug receptacle having insulation penetrating means contacting twin conductors. 2,735,078, 2–14–56, Cl. 339—99.

Greer, Fred W., to J. W. Greer Co. Conveyor trays. 2,734,283, 2–14–56, Cl. 34—238.

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Greer, Fred W. 2,734,283.

Gregg, Robert A.: *See*—
Doak, Kenneth W., and Gregg. 2,734,887.

Grieg, Donald D., to International Telephone and Telegraph Corp. Bandpass filter system. 2,735,073, 2–14–56, Cl. 333—73.

Griffin, Cecil M. Tube cleaner. 2,734,208, 2–14–56, Cl. 15—104.06.

Grinling, Patrick H. Secateurs. 2,734,268, 2–14–56, Cl. 30—193.

Griset, Ernest J., Jr., and D. L. Hart, to American Enka Corp. Abrading yarn. 2,734,333, 2–14–56, Cl. 57—2.

Groen, William, to Bendix Aviation Corp. Speed-responsive control system for vehicle steering mechanisms. 2,734,589, 2–14–56, Cl. 180—79.2.

Gross, Howard H., and W. Kiersted, Jr., to Texaco Development Corp. Solvent dewaxing of petroleum oils. 2,734,849, 2–14–56, Cl. 196—19.

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Corl, John L., and Gundelfinger. 2,735,066.

Gunn, John G.: *See*—
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Gwynn, Bernard H., and J. H. Hirsch, to Gulf Research & Development Co. Hydroformylation of olefins. 2,734,922, 2–14–56, Cl. 260—604.

Häberle, Albert, and E. Kemper, to Koppers Co., Inc. Ignition system for the flare pipe of gas producers. 2,734,562, 2–14–56, Cl. 158—125.

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Hager, C., & Sons Hinge Mfg. Co.: *See*—
Park, Harry. 2,734,223.

Hagge, Walter, and M. Quaedvlieg, to Farbenfabriken Bayer Aktiengesellschaft. Washing and softening textile goods. 2,734,830, 2–14–56, Cl. 117—47.

Haines, John F.: *See*—
Wright, Clifford B., and Haines. 2,734,586.

Hall, Russell W.: *See*—
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Halliden, Karl W., to The Halliden Machine Co. Flying shears having preselected miss-cut action. 2,734,570, 2–14–56, Cl. 164—48.

Halliden Machine Co., The: *See*—
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Hallock, John H.: *See*—
Hallock, Ruth G. and J. H. 2,734,464.

Hallock, Ruth G. and J. H. Method and means for rolling pie dough. 2,734,464, 2–14–56, Cl. 107—50.

Hammermills, Inc.: *See*—
Oberhellmann, Theodore A. 2,734,686.

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Volff, Charles, and Hammerslag. 2,735,036.

Hammial, Le Roy L., and V. C. Benoit. Roofing materials and roof construction. 2,734,466, 2–14–56, Cl. 108—12.

Hammond, Arthur C. E., to Davey, Paxman & Co. Ltd. Internal combustion engines. 2,734,496, 2–14–56, Cl. 123—139.

Hammond, Edmund B., Jr., to Sperry Rand Corp. Compensated gyroscopic horizon. 2,734,278, 2–14–56, Cl. 33—204.

Hancock, Robert D., to Northrop Aircraft, Inc. Read-out tube. 2,735,038, 2–14–56, Cl. 315—334.

Handa, Sidney, to Imperial Chemical Industries Ltd. Surface treatment of titanium or titanium base alloys. 2,734,837, 2–14–56, Cl. 134—27.

Hanley, Frank H., to American Telephone and Telegraph Co. Selective call circuit for signaling systems. 2,734,935, 2–14–56, Cl. 178—2.

Hannah, Ottis B. Live bait bucket. 2,734,305, 2–14–56, Cl. 43—56.

Happe, Ralph A., to Battelle Development Corp. Metallic powders. 2,734,817, 2–14–56, Cl. 75—.5.

Harper, George G. Collapsible buck saw. 2,734,536, 2–14–56, Cl. 145—32.

Harris, Robert L., and M. Lothrop, to Yuba Mfg. Co. Burner and combustion system. 2,734,560, 2–14–56, Cl. 158—4.

Harris-Seybold Co.: *See*—
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Harrison, Charles R. Framework for Christmas tree lighting. 2,734,709, 2–14–56, Cl. 248—168.

Harrison, James A. Machine for cleaning pipettes, petri dishes, and other articles. 2,734,518, 2–14–56, Cl. 134—56.

Harrison, Roland, and P. Kepple, to Kool Vent Metal Awning Corp. of America. Awning louvre fastener. 2,734,236, 2–14–56, Cl. 20—57.5.

Harrison, Walter M., to Teddington Aircraft Controls Ltd. Fluid flow control valves. 2,734,529, 2–14–56, Cl. 137—628.

Harry, William R.: *See*—
Van Ryan, Anthony, and Harry. 2,734,972.

Harry, William R., to McGraw Electric Co. Circuit interrupter. 2,734,961, 2–14–56, Cl. 200—89.

Harry, William R., to Bell Telephone Laboratories, Inc. Multivibrator circuit. 2,735,009, 2–14–56, Cl. 250—36.

Hart, David L.: *See*—
Griset, Ernest J., Jr., and Hart. 2,734,333.

Hartford National Bank and Trust Co.: *See*—
Brouwer, Pieter H. J. 2,735,028.
Köhler, Jacob W. L. 2,734,354.
Kuijvenhoven, Leendert M., and Westerterp. 2,734,902.
Lips, Eduard M. H., and Wiegersma. 2,734,243.
Meijer, Barend M. 2,735,056.

Hartwig, Edgar C.: *See*—
Stadum, Clarence B., Hartwig, and Van Ness. 2,735,037.

Harvard Mfg. Co., The: *See*—
Blanke, Nathan E. 2,734,199.

Harvard Mfg. Co.: *See*—
Entwistle, John E. 2,734,202.

Harvey, Thabus R. *See*—
Pullum, Cecil R., and Harvey. 2,734,623.

Hawley, Henry C.: *See*—
Elles, Edward S., and Hawley. 2,734,788.

Hay, William D., to Alexander Smith, Inc. Crimping apparatus. 2,734,228, 2–14–56, Cl. 19—66.

Haydon, Edward K.: *See*—
Dunn, Harold G., Sibbald, and Haydon. 2,734,366.

Hayes, Thomas B. Pump speed control arrangement. 2,734,458, 2–14–56, Cl. 103—35.

Hayford, Benjamin I., and L. E. Keck, to Westinghouse Electric Corp. Metal clad switchgear. 2,735,042, 2–14–56, Cl. 317—99.

Hays, Robert A., Jr. Apparatus for automatically setting and releasing vehicle brakes. 2,734,590, 2–14–56, Cl. 180—82.

Hazel, Stanley G., and R. B. Richards, to The Sherwin-Williams Co. Automatic closure machine. 2,734,673, 2–14–56, Cl. 226—88.1.

Hazeltine Research, Inc.: *See*—
Hirsch, Charles J., and Press. 2,735,015.
Loughlin, Bernard D. 2,734,940.

Head, Carl T., to Pillsbury Mills, Inc. Cutting and handling dough. 2,734,465, 2–14–56, Cl. 107—54.

Heald, Earl T., to Collins Radio Co. Magnetic commutator. 2,734,942, 2–14–56, Cl. 178—53.

Heaton, Walter H., and R. W. Morse, to Beckwith Mfg. Co. Shoe stiffener, including a lamina of polyethylene. 2,734,289, 2–14–56, Cl. 36—68.

Hebrank, Charles R. Combination seat and fatigue-relieving back rest. 2,734,556, 2–14–56, Cl. 155—131.

Hedwin Corp.: *See*—
Winstead, Thomas W. 2,734,224.

Hencken, Harold G., to Taco Heaters, Inc. Vent valve. 2,734,521, 2–14–56, Cl. 137—197.

Henderson, Marvin L., and D. Bednarczuk; said Bednarczuk assor. to said Henderson. Door protecting accessory for vehicles. 2,734,765, 2–14–56, Cl. 293—62.

Hendrix, Don O., to Davidson Mfg. Co. Interferometer. 2,734,419, 2–14–56, Cl. 88—14.

Hensley, Dolphus W. Clean row fence post. 2,734,727, 2–14–56, Cl. 256—48.

Hercules Powder Co.: *See*—
Carter, Richard P. 2,734,892.

Herman, Dick R.: *See*—
Northrop, John K., Brosterhous, Dunn, Ellison and Herman. 2,734,702.

Herres, Schuyler A., to Allegheny Ludlum Steel Corp. Process of refining and melting titanium. 2,734,244, 2–14–56, Cl. 22—214.

Herrmann, John F.: *See*—
Critoph, David I., Hermann, and Wolford. 2,734,421.

Heseltine, Donald W., to Eastman Kodak Co. Sensitizing dyes and method of preparation. 2,734,900, 2–14–56, Cl. 260—240.5.

Hexcel Products Inc.: *See*—
Steele, Roger C. 2,734,843.

Heywood, James E.: *See*—
Goldberg, Jacob, Cox, and Heywood. 2,735,082.

Hickok, Glenn G., to Ionia Mfg. Co., Inc. Kneeling bench for folding chairs. 2,734,557, 2–14–56, Cl. 155—166.

Higley, Robert E., to Westinghouse Electric Corp. Brazing tips. 2,734,979, 2–14–56, Cl. 219—4.

Hill, Francis A. Refrigerating device for automobiles. 2,734,353, 2–14–56, Cl. 62—117.1.

Hill, Max W.: *See*—
Jones, Robert H., Hill, and Moody. 2,734,863.

Hills, Thomas H. Developing apparatus for photographic films, plates and papers. 2,734,436, 2–14–56, Cl. 95—89.

Himmelfarb, Max. Chilled beverage container with ice segregating tube. 2,734,358, 2–14–56, Cl. 62—142.

Hindmarch, Thomas. Fluid cooled and operated clutches. 2,734,607, 2–14–56, Cl. 192—86.

Hindsley, Mark H. Valve brass musical instrument. 2,734,417, 2–14–56, Cl. 84—394.

Hinkamp, James B., R. Sugimoto, and H. R. Dittmar, to Ethyl Corp. Manufacture of propyl nitrate. 2,734,910, 2–14–56, Cl. 260—467.

Hirsch, Charles J., and M. Press, to Hazeltine Research, Inc. High-frequency wave-signal tuning device. 2,735,015, 2–14–56, Cl. 250—40.

Hirsch, Joel H.: *See*—
Gwynn, Bernard H., and Hirsch. 2,734,922.

Hirsch, Richard A., to General Motors Corp. Propeller torque unit construction. 2,734,587, 2–14–56, Cl. 170—160.33.

Hoern, Joseph H. Remote control mechanism for adjusting rotary cutting tools. 2,734,402, 2–14–56, Cl. 77—4.

Hoffman, Wilbur D., 50% to W. J. Roeder. Electric steam furnace. 2,734,989, 2–14–56, Cl. 219—39.

Hoffmann, Heinrich, to Daimler-Benz Aktiengesellschaft. Prechamber compression ignition engine. 2,734,491, 2–14–56, Cl. 123—32.

Holdeman, Charles L. Container for fly and similar lures. 2,734,306, 2–14–56, Cl. 43—57.5.

Holsing, Robert H., to The Timken Roller Bearing Co. Rock drill bit. 2,734,725, 2–14–56, Cl. 255—64.

Holz, Bertram I., to Household Mfg. Co. Insect repellent and disinfectant device. 2,734,769, 2–14–56, Cl. 299—24.

Holsenthal, Leo L., to the United States of America as represented by the Secretary of Agriculture. Centrifugal extractor. 2,734,635, 2–14–56, Cl. 210—67.

Homeyer, August H., G. B. De La Mater, and L. A. Patterson, to Mallinckrodt Chemical Works. Method of preparing atrolactamide. 2,734,917, 2–14–56, Cl. 260—559.

Hook, Edwin O.: *See*—
Peeso, James B., and Hook. 2,734,864.
Peeso, James B., and Hook. 2,734,865.

Hook, Edwin O., and J. B. Peeso, to American Cyanamid Co. Stabilized lubricating composition. 2,734,866, 2–14–56, Cl. 252—32.7.

Hooks, Robert M., to Southwestern Petroleum Co., Inc. Fire-resistant protective coating. 2,734,827, 2–14–56, Cl. 106—15.

Hoover Company, The: *See*—
Brace, George A. 2,734,216.
Brace, George A. 2,734,217.
Brace, George A. 2,734,294.
Dunn, Harold G., Sibbald, and Haydon. 2,734,366.
Gerber, Dale C. 2,734,214.
Hurd, Claud C. 2,734,595.
Kaufman, George E. 2,734,219.
Koch, Roy F. 2,734,212.
Tschudy, Donald B. 2,734,220.
Vance, John E. 2,734,211.
Vance, John E. 2,734,218.
Wilson, Herbert W. 2,734,215.

Hörlein, Ulrich: *See*—
Aughagen, Ernst, Hörlein, and Bauer. 2,734,846.

Horn, Harry J., to Motor Wheel Corp. Vehicle wheel. 2,734,779, 2–14–56, Cl. 301—37.

Horn, Merl E.: *See*—
Tremblay, Bernard G., and Horn. 2,735,046.

Hornung, Stephen A., to Otis Elevator Co. Elevator control system testing apparatus. 2,734,598, 2–14–56, Cl. 187—29.

Horton Aircraft Corp.: *See*—
Horton, William E. 2,734,701.

Horton, William E., to Horton Aircraft Corp. Airplane with retractable variable-incidence wings. 2,734,701, 2–14–56, Cl. 244—43.

Hosford, Norman F., to Bendix Aviation Corp. Altitude warning system. 2,735,081, 2–14–56, Cl. 340—27.

Hotchkin, James R., to The Palnut Co. Sheet metal lock nut with resilient conical flange. 2,734,547, 2–14–56, Cl. 151—38.

Houdaille-Hershey of Indiana, Inc.: *See*—
Gardes, Alfred W. 2,734,668.

Houdry Process Corp.: *See*—
Fowler, Carl E., Jr., and Daily. 2,734,781.
Savage, Reuben T., and Kollgaard. 2,734,805.

Houghton, William D., to Radio Corp. of America. Color television. 2,734,939, 214–56, Cl. 178—5.4.

Household Mfg. Co.: *See*—
Holz, Bertram I. 2,734,769.

Hoye, Charles G. Fuse socket cleaning tool. 2,734,320, 2–14–56, Cl. 51—186.

Hudson, Arthur C., to National Research Council. Adjustable coil. 2,735,076, 2–14–56, Cl. 336—137.

Hughes, Everett C.: *See*—
Jones, Arthur L., and Hughes. 2,734,633.

Hull, Joseph A.: *See*—
Gassaway, Benjamin F. 2,734,308.

Hungerford, Gordon P., and D. F. Jurgensen, Jr., to American Machine & Foundry Co. Tobacco sheet material and method of forming. 2,734,510, 2–14–56, Cl. 131—15.

Hungerford, Gordon P., and J. T. Williamson, to American Machine & Foundry Co. Method and apparatus for making tobacco sheet material. 2,734,513, 2–14–56, Cl. 131—140.

Hunt, William T., Jr.: *See*—
Storey, Charlton H., Jr., and Hunt. 2,735,053.

Hunter, Maude F. Tie for surgical packs. 2,734,543, 2–14–56, Cl. 150—52.

Hunter, William T., and J. S. Buck, to Sterling Drug Inc. New chemical compounds and their preparation. 2,734,920, 2–14–56, Cl. 260—570.9.

Hurd, Claud C., to The Hoover Co. Suction cleaners. 2,734,595, 2–14–56, Cl. 183—51.

Hursh, Samuel R., and J. B. McWilliams. Railway track ballast tamping apparatus. 2,734,463, 2–14–56, Cl. 104—12.

Hyde, Robert W.: *See*—
Bevins, James E., and Hyde. 2,734,792.

Hydril Co.: *See*—
Knox, Granville S. 2,734,714.
Knox, Granville S. 2,734,715.

Hydropress, Inc.: *See*—
Cozzo, Giuseppe. 2,734,405.

Imm, Lewis W., to Librascope, Inc. Monitorial recorder. 2,734,791, 2–14–56, Cl. 346—17.

Immel, Ralph B., and L. Pierce, to Westinghouse Electric Corp. Switch. 2,734,958, 2–14–56, Cl. 200—67.

Immel, Ralph B., to Westinghouse Electric Corp. Snap-action switch. 2,734,959, 2–14–56, Cl. 200—67.

Imperial Chemical Industries Ltd.: *See*—
Hands, Sidney. 2,734,837.
Lambert, Arthur. 2,734,924.
Leigh, Thomas. 2,734,899.
Pittwell, Laurence R., and Young. 2,734,873.

Institute of Gas Technology: *See*—
Pettyjohn, Elmore S., and Linden. 2,734,809.
Pettyjohn, Elmore S., Linden, and Lee. 2,734,810.

International Business Machines Corp.: *See*—
Blakely, Robert T. 2,735,086.
Dickinson, Arthur H. 2,735,011.
Mills, Albert W., Furman, and Rabenda. 2,734,610.
Page, Ralph E. 2,734,614.
Ross, Harold D., Jr., and Frizzell. 2,734,684.
Van Wallendael, John H. 2,734,615.

International Nickel Co., Inc., The: *See*—
Lamb, Roger M. 2,734,822.

International Paper Box Machine Co.: *See*—
Chandler, Austin S. 2,734,324.

International Salt Co.: *See*—
Courthope, Thomas F., Martin, and Sickly. 2,734,804.

International Telephone and Telegraph Corp.: *See*—
Grieg, Donald D. 2,735,073.

Invester S. A.: *See*—
Gaudin, Louis. 2,734,248.

Ionia Mfg. Co., Inc.: *See*—
Hickok, Glenn G. 2,734,557.

Irons, Henry R.: *See*—
Schonstedt, Erick O., and Irons. 2,735,063.

Ivins, Herbert L., to The Engine Parts Mfg. Co. Manually operated resilient aerosol spray valve. 2,734,773, 2–14–56, Cl. 299—95.

J & B Building Products: *See*—
Thompson, Harold D. 2,734,250.

Jackson, Percy: *See*—
Purdie, William W., Jackson, and Gunn. 2,734,492.

Jacobson, Moses G., to Mine Safety Appliance Co. Apparatus for measuring component ratios of fluid mixture streams. 2,734,381, 2–14–56, Cl. 73—196.

Jagenberg-Werke Akt.-Ges.: *See*—
Drese, Wilhelm. 2,734,657.

Jahnig, Charles E.: *See*—
Smith, Brook I., and Jahnig. 2,734,853.

Jalbert, Domina C. Multicell parachute canopy. 2,734,706, 2–14–56, Cl. 244—145.

Jansen, Bernhard. Spring action driving gear with variable torque for load changeover switches of regulating transformers. 2,734,837, 2–14–56, Cl. 74—99.

Jardier, Inc.: *See*—
Kletzien, Hobart H. 2,734,430.

Jeffrey Mfg. Co., The: *See*—
Everhart, Harold S. 2,734,622.
Mercier, Stanley M. 2,734,642.

Jenkins, William D., S. L. Frank, and J. Zipay, to Westinghouse Electric Corp. Control switches. 2,734,953, 2–14–56, Cl. 200—16.

Jensen, Raymond W., to The Garrett Corp. Dual differential and ratio lockout mechanism. 2,734,442, 2–14–56, Cl. 98—1.5.

Jessee, Ralph D., and O. G. Killian, to Westinghouse Electric Corp. Panel release mechanism. 2,735,077, 2–14–56, Cl. 339—75.

Jewett, Alfred W., to Chicago Roller Skate Co. Roller skate wheel. 2,734,777, 2–14–56, Cl. 301—5.7.

Joggler Corp., The: *See*—
Yonash, Robert F. 2,734,552.

John, Albert J. Oar rest. 2,734,206, 2–14–56, Cl. 9—1.

Johnson, Arthur A., to Automatic Devices Corp. Electric cigar lighter. 2,734,987, 2–14–56, Cl. 219—32.

Johnson, Bertil, and W. C. Shaw, to General Motors Corp. Sand core dipping machine. 2,734,481, 2–14–56, Cl. 118—421.

Johnson, Edward O., to the United States of America as represented by the Secretary of the Army. Inverter circuits. 2,735,061, 2–14–56, Cl. 321—36.

Johnson, Thomas J., Jr.: *See*—
Green, David J., Landee, and Johnson. 2,734,944.

Johnston Testers, Inc.: *See*—
Bagnell, Edgar W. 2,734,582.

Jo-Line Tools Inc.: *See*—
Woods, Robert G. 2,734,411.

Joly, Robert: *See*—
Amiard, Gaston, Joly, and Velluz. 2,734,919.

Jones, Arthur L., and E. C. Hughes, to The Standard Oil Co. Thermal diffusion method. 2,734,633, 2–14–56, Cl. 210—52.5.

Jones, Evan A., to Universal Oil Products Co. Separation of gases. 2,734,592, 2–14–56, Cl. 183—2.

Jones, George F. Fertilizer tool. 2,734,468, 2–14–56, Cl. 111—95.

Jones, Giffin D., to The Dow Chemical Co. Production of acrylamide and acrylic acid. 2,734,915, 2–14–56, Cl. 260—526.

Jones, John R.: *See*—
Weissberg, Jesse S., and Jones. 2,734,867.

Jones, Robert H., M. W. Hill, and L. E. Moody, to Esso Research and Engineering Co. Phospho-sulfurized hydrocarbons. 2,734,863, 2–14–56, Cl. 252—32.7.

Jones, Walter A.: *See*—
Costick, Andrew J., and Jones. 2,734,227.

Jones, Whitney W. Gravity-actuated closure for coin-controlled devices. 2,734,680, 2–14–56, Cl. 232—44.

Jonsson, Johan E., to Telefonaktiebolaget L M Ericsson. Method of producing contact spring sets. 2,734,257, 2–14–56, Cl. 29—155.55.

Jordan, Carl F., Jr., to Collins Radio Corp. Circuit for preventing intermodulation. 2,734,950, 2–14–56, Cl. 179—171.

Joy, Joseph E.: *See*—
Gillespie, Henderson C., and Joy. 2,734,982.

Jurgensen, Delbert F., Jr.: *See*—
Hungerford, Gordon P., and Jurgensen. 2,734,510.

Jurgensen, Delbert F., Jr., to American Machine & Foundry Co. Tobacco sheet material and method of making the same. 2,734,509, 2–14–56, Cl. 131—15.

Kaiser Aluminum & Chemical Corp.: *See*—
Smith, Arthur D. 2,734,407.

Kamlet, Jonas, to The Goodyear Tire & Rubber Co. Manufacture of hydrogen peroxide. 2,734,798, 2–14–56, Cl. 23—207.

Kane, Laurence E., to Commercial Decal, Inc. Ceramic decalcomania and method of making same. 2,734,840, 2–14–56, Cl. 154—99.

Kask Technical Corp.: *See*—
Kurata, Fred. 2,734,770.

Kauffman, Walter L., II, to Lovell Mfg. Co. Dryers. 2,734,281, 2–14–56, Cl. 34—87.

Kauffman, Walter L., II, to Lovell Mfg. Co. Wringers. 2,734,372, 2–14–56, Cl. 68—255.

Kaufman, George E., to The Hoover Co. Handle and nozzle controls for suction cleaners. 2,734,219, 2–14–56, Cl. 15—361.

Keaton Rubber Co.: *See*—
Rogow, Seymour, and Berman. 2,734,996.

Keck, Lloyd E.: *See*—
Hayford, Benjamin I., and Keck. 2,735,042.

Keco Plating Co.: *See*—
Reilly, Allen F., and Stoklas. 2,734,859.

Kedrowski, John J. Baby crib structure. 2,734,200, 2–14–56, Cl. 5—11.

Kelzer, Eugene O., and M. G. Kroger, to Radio Corp. of America. Sync separator and AGC circuits for TV receivers. 2,735,002, 2–14–56, Cl. 250—20.

Kelzer, Eugene O., and M. G. Kroger, to Radio Corp. of America. Automatic gain control systems. 2,735,004, 2–14–56, Cl. 250—20.

Kellogg, M. W., Co., The: *See*—
Aleck, Benjamin J. 2,734,762.
Millenson, Morton B. 2,734,980.

Kemper, Eugen: *See*—
Häberle, Albert, and Kemper. 2,734,562.

Kendall Co., The: *See*—
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Kennedy, Charles H., Jr., and W. H. Wade, to Smith-Corona Inc. Power mechanism for typewriting machines. 2,734,613, 2–14–56, Cl. 197—17.

Keppie, Paul: *See*—
Harrison, Roland, and Keppie. 2,734,236.

Kernicki, Walter. Spare key holder. 2,734,624, 2–14–56, Cl. 206—38.

Kiba, Yoneo, to Continental Plastics Corp. Hinge structure for molded boxes. 2,734,222, 2–14–56, Cl. 16—128.

Kidd, Marshall C., to Radio Corp. of America. Card switching device. 2,734,954, 2–14–56, Cl. 200—46.

Kiersted, Wynkoop, Jr.: *See*—
Gross, Howard H., and Kiersted. 2,734,849.

Killian, Orvel G.: *See*—
Jessee, Ralph D., and Killian. 2,735,077.

King, Donald M. Apparatus for lifting, lowering and otherwise transporting loads. 2,734,648, 2–14–56, Cl. 214—630.

King, Harold W.: *See*—
True, Charles H., Jr., and King. 2,734,192.

King, James F., Jr., to The Bahnson Co. Self-cleaning humidifier. 2,734,771, 2–14–56, Cl. 299—63.

King, James T., to Abe Geilman Co., Inc. Tape positioning and holding means. 2,734,669, 2–14–56, Cl. 223—110.

Kinzer, Dan J. Faulty fuse indicator. 2,735,088, 2–14–56, Cl. 340—250.

Kirsch, Werner, to Chemieprodukte G. m. b. H. Agent for corrosion-proofing and process for preparing the same. 2,734,882, 2–14–56, Cl. 260—28.5.

Kleibacker, Wilson M.: *See*—
Wiederhorn, Norman M., MacDonald, and Kleibacker. 2,734,893.

Kleinhans, Schuyler, to Douglas Aircraft Co., Inc. Cabin supercharging system with cooling means. 2,734,356, 2–14–56, Cl. 62—136.

Kleinman, Jacob L. Shaving implements. 2,734,264, 2–14–56, Cl. 30—40.

Kletzien, Hobart H., to Jardier, Inc. Method of making molded fibrous products. 2,734,430, 2–14–56, Cl. 92—54.

Klosin, John J., Jr. Compression type electric connector. 2,734,933, 2–14–56, Cl. 174—94.

Knight, Frederick L., to United States Steel Corp. Lining for soaking pit burner ports. 2,734,734, 2–14–56, Cl. 263—46.

Knoll A. G. Chemische Fabriken: *See*—
Dengel, Ferdinand. 2,734,908.

Knowles, John H., to Dorr-Oliver Inc. Scum skimming devices for longitudinal sedimentation tanks having reciprocating sediment conveying apparatus. 2,734,634, 2–14–56, Cl. 210—55.

Knox, Granville S., to Hydril Corp. Valve. 2,734,714, 2–14–56, Cl. 251—171.

Knox, Granville S., to Hydril Co. Spherical valve. 2,734,715, 2–14–56, Cl. 251—171.

Koblitska, John J., to American Cyanamid Co. Grading process and apparatus. 2,734,631, 2–14–56, Cl. 209—237.

Koch, Roy F., to The Hoover Co. Brush structure. 2,734,212, 2–14–56, Cl. 15—183.

Koester, Melvin C., and F. J. Mainz, to Libbey-Owens-Ford Glass Co. Shipping container for glass sheets. 2,734,626, 2–14–56, Cl. 206—62.

Köhler, Jacob W. L., to Hartford National Bank and Trust Co., trustee. Refrigerator gas liquification device. 2,734,354, 2–14–56, Cl. 62—122.

Kollgaard, Reyner: *See*—
Savage, Reuben T., and Kollgaard. 2,734,805.

Kollmann, Melvin F.: *See*—
Rose, John J., and Kollmann. 2,734,477.

Kool Vent Metal Awning Corp. of America: *See*—
Harrison, Roland, and Keppie. 2,734,236.

Koppers Co., Inc.: *See*—
D'Alelio, Gaetano F. 2,734,888.
Häberle, Albert, and Kemper. 2,734,562.
Totzek, Friedrich, and Linder. 2,734,811.

Korman, Samuel: *See*—
Sheer, Charles, and Korman. 2,735,016.

Kosinski, Joseph, to H. G. Fischer and Co., Inc. Therapeutic apparatus for applying dry heat to body cavities. 2,734,508, 2–14–56, Cl. 128—401.

Kosinski, Joseph, to H. G. Fischer & Co. Electrical system. 2,735,023, 2–14–56, Cl. 307—112.

Krausz, Robert, and D. L. Margerum, to North American Aviation, Inc. Airborne beacon antenna. 2,735,093, 2–14–56, Cl. 343—725.

Kreinik, Jerry, to the United States of America as represented by the Secretary of the Navy. Plastic rain cap cover, molded. 2,734,197, 2–14–56, Cl. 2—187.

Krichton, Carl V., to McGraw Electric Co. Waffle baker. 2,734,983, 2–14–56, Cl. 219—19.

Kroger, Marlin G.: *See*—
Kelzer, Eugene O., and Kroger. 2,735,002.
Kelzer, Eugene O., and Kroger. 2,735,004.

Kroner, Victor F. Seats for use by fishermen. 2,734,555, 2–14–56, Cl. 155—131.

Kuijvenhoven, Leendert M., and C. Westerterp, to Hartford National Bank and Trust Co., trustee. Stable aqueous solution of vitamin B_1 and method for preparing the same. 2,734,902, 2–14–56, Cl. 260—256.6.

Kulcsar, Frank, to Clevite Corp. Fired ceramic barium titanate body. 2,735,024, 2–14–56, Cl. 310—8.3.

Kurata, Fred, to Kask Technical Corp. Atomizing nozzle. 2,734,770, 2–14–56, Cl. 299—25.

Kurek, Edwin J., to The Pyle-National Co. High pressure converter. 2,734,447, 2–14–56, Cl. 98—40.

Kutsche, August A. Urinal. 2,734,198, 2–14–56, Cl. 4—110.

L. O. F. Glass Fibers Co.: *See*—
Toulmin, Harry A., Jr. 2,734,785.

Labombarde, Philip D. Apparatus for securing uniform orientation. 2,734,619, 2–14–56, Cl. 198—33.

La Bonte, George T. Rotary lawn mower and edger. 2,734,325, 2–14–56, Cl. 56—25.4.

L'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procedes Georges Claude: *See*—
Volff, Charles, and Hammerslag. 2,735,036.

Lally, Robert E., and R. J. O'Hara, to Ferro Corp. Stabilized chlorine containing resins. 2,734,881, 2–14–56, Cl. 260—23.

Lamb, Roger M., to The International Nickel Co., Inc. Method for making improved gray cast iron and product produced thereby. 2,734,822, 2–14–56, Cl. 75—123.

Lambert, Arthur, to Imperial Chemical Industries Ltd. Cycloalkylated bis-phenol derivatives. 2,734,924, 2–14–56, Cl. 260—619.

Landee, Robert W.: *See*—
Green, David J., Landee, and Johnson. 2,734,944.

Landers, Frary and Clark: *See*—
Russell, William J. 2,734,539.

Langos, Otto E.: *See*—
Deutsch, Robert D., and Langos. 2,734,190.

Lappin, Robert I.: *See*—
Zaiger, Louis, and Lappin. 2,734,784.

Larcén, Jan A., to Aktiebolaget Atlas Diesel. Drill rigs or drill supporting apparatus. 2,734,723, 2–14–56, Cl. 255—51.

Larcén, Jan A., to Aktiebolaget Atlas Diesel. Apparatus for rigging or supporting rock drills. 2,734,724, 2–14–56, Cl. 255—53.

Larrison, John E.: *See*—
Martin, William J., and Larrison. 2,734,230.

Larsen, Delmar H., G. W. Cummer, and D. S. Bolley, to National Lead Co., Treatment of well-drilling fluid. 2,734,860, 2–14–56, Cl. 252—8.5.

Larsson, Bjorn E., to E. I. du Pont de Nemours and Co. Method of finishing open-grained porous wood and article produced thereby. 2,734,831, 2–14–56, Cl. 117—63.

Lasker, Charles C. Manually operated snow removal tool. 2,734,291, 2–14–56, Cl. 37—53.

Laub, Herman, III, 15% to R. E. Geauque. Container uncaser and caser. 2,734,323, 2–14–56, Cl. 53—21.

Lautenbacher, Hans: *See*—
Brendel, Theodor, and Lautenbacher. 2,734,422.

LaWarre, Robert W.: *See*—
Rawls, Vaughn. 2,734,553.

Lawler, Paul, Jr. Sample support for refrigerating cabinets. 2,734,345, 2–14–56, Cl. 62—1.

Lawrence, Chester A., to E. I. du Pont de Nemours and Co. Dynamite box. 2,734,676, 2–14–56, Cl. 229—23.

Layne, Leslie A. Method and apparatus for repairing broken casing in well bores. 2,734,580, 2–14–56, Cl. 166—14.

Lease, Robert H.: *See*—
Gollwitzer, Walter T., and Lease. 2,734,453.

Le Bus, Franklin L., Sr. Balanced cable spooling. 2,734,695, 2–14–56, Cl. 242—117.

Lee, William L.: *See*—
Pettyjohn, Elmore S., Linden, and Lee. 2,734,810.

Leeds and Northrup Co.: *See*—
Cherry, Robert H., and Foley. 2,734,376.
Enns, John H. 2,734,418.

Leeds, Winthrop M.: *See*—
MacNeill, John B., Leeds, and Baker. 2,734,973.

Leibu, Henry J., to E. I. du Pont de Nemours and Co. Carbonylation of aromatic halides. 2,734,912, 2–14–56, Cl. 260—475.

Leigh, Thomas, to Imperial Chemical Industries Ltd. Manufacture of brominated steroid compounds. 2,734,899, 2–14–56, Cl. 260—239.55.

Leitz, Ernst, G. m. b. H.: *See*—
Leitz, Ludwig, and Gissel. 2,734,434.

Leitz, Ludwig, and K. Gissel, to Ernst Leitz, G. m. b. H. Apparatus for coupling an exchangeable objective with a range finder of a photographic camera. 2,734,434, 2–14–56, Cl. 95—44.

Lenkurt Electric Co., Inc.: *See*—
Epstein, Norma N. 2,735,013.

Lenney, James F., S. Redfern, and R. F. Light, to Standard Brands Inc. Catalase inhibitors as retarders in the decomposition of hydrogen peroxide with catalase. 2,734,875, 2–14–56, Cl. 260—2.5.

Lenze, Eberhard, and J. Müller. Multilamp fixtures for illuminating systems of considerable length. 2,734,995, 2–14–56, Cl. 240—51.11.

Leonard, Frederick, to Nepera Chemical Co., Inc. Thiocyanic esters of pyridine oxides. 2,734,903, 2–14–56, Cl. 260—294.8.

Leonardi, Benedict R. Filter. 2,734,435, 2–14–56, Cl. 95—73.

Le Pingle, Marcel: *See*—
Ellan, John, and Le Pingle. 2,734,836.

Les Laboratoires Francais de Chimiotherapie: *See*—
Amiard, Gaston, Joly, and Velluz. 2,734,919.

Leuschner, Harry O. Desk mounted combination fan and heater. 2,734,990, 2–14–56, Cl. 219—39.

Levin, Joel. Bobby pin receptacle and spreader. 2,734,516, 2–14–56, Cl. 132—1.

Levin, Robert H., B. J. Magerlein, and A V. McIntosh, Jr., to The Upjohn Co. Process for the production of Δ^4-3-ketopregnenes. 2,734,907, 2–14–56, Cl. 260—397.45.

Levitt, Joshua. Foot correcting and supporting attachment. 2,734,285, 2–14–56, Cl. 36—8.5.

Levy, Monroe D., to Vickers Inc. Power transmission device. 2,735,048, 2–14–56, Cl. 317—234.

Lewis, Allen H., to California Research Corp. Non-soap synthetic detergent bar. 2,734,870, 2–14–56, Cl. 252—161.

Lewis, Clay E.: *See*—
Bachman, Robert J., Lewis, Mueller, and Murray. 2,734,858.

Lewis, Jesse M., to Williams Brothers Co. Method of processing pipes. 2,734,832, 2–14–56, Cl. 117—96.

Libbey-Owens-Ford Glass Co.: *See*—
Koester, Melvin C., and Mainz. 2,734,626.

Librascope, Inc.: *See*—
Imm, Lewis W. 2,734,791.

"Licencia" Talalmanyokat Ertekesito Vallalat, The Firm: *See*—
Beck, József. 2,734,259.

Lieberknecht, Karl, Inc.: *See*—
Zesch, Eugene M. 2,734,360.

Light, Donald W. Laminated paper yarns and fabrics, including the same. 2,734,532, 2–14–56, Cl. 139—420.

Light, Robert F.: *See*—
Lenney, James F., Redfern, and Light. 2,734,875.

Liguori, Anthony, and E. R. Shenk, to Radio Corp. of America. Electronic diplex receiving distributor. 2,734,943, 2–14–56, Cl. 178—61.

Limberger, Walter, to Messrs. Lumoprint Zindler K. G. Reversible winding device. 2,734,690, 2–14–56, Cl. 242—55.

Lind, John A., to Alford & Alder (Engineers) Ltd. Knee-action type wheel suspension with built in lubricating system. 2,734,753, 2–14–56, Cl. 280—96.2.

Linden, Henry R.: *See*—
Pettyjohn, Elmore S., and Linden. 2,734,809.
Pettyjohn, Elmore S., Linden, and Lee. 2,734,810.

Lindenblad, Nils E., to Radio Corp. of America. Electric cooling apparatus. 2,734,344, 2–14–56, Cl. 62—1.

Linder, Willy: *See*—
Totzek, Friedrich, and Linder. 2,734,811.

Lindgren, Frank A.: *See*—
Cartlidge, Frank, and Lindgren. 2,734,731.

Lindseth, Frank J.: *See*—
Steelman, Sanford L., and Lindseth. 2,734,931.

Lindsley, Frank J. Chance selection rhyme illustration device. 2,734,747, 2–14–56, Cl. 273—139.

Lindström, Alrik C. Bottle closures. 2,734,651, 2–14–56, Cl. 215—40.

Lingal, Harry J., and R. E. Frink, to Westinghouse Electric Corp. Circuit interrupters. 2,734,971, 2–14–56, Cl. 200—148.

Lingerfelt, Will C., to American Enka Corp. Alarm for alum feeder. 2,735,087, 2–14–56, Cl. 340—239.

Link-Belt Co.: *See*—
Schanke, Charles F. 2,734,758.

Lippisch, Alexander M., to Collins Radio Co. Fluid propelled and sustained aircraft. 2,734,699, 2–14–56, Cl. 244—23.

Lips, Eduard M. H. and S. Wiegerama, to Hartford National Bank and Trust Co. Method of securing a metal skin in a matrix block. 2,734,243, 2–14–56, Cl. 22—193.

Little, Arthur D., Inc.: *See*—
Clancy, John J., and Lovering. 2,734,838.
Clancy, John J., and Lovering. 2,734,839.

Littman, William I., to The Bryant Electric Co. Terminal connecting device. 2,735,080, 2–14–56, Cl. 339—269.

Lockman, Carl J., to Rosenblad Corp. Heat treating a fluid substance. 2,734,565, 2–14–56, Cl. 159—20.

Loftin, Charles F., Jr., to Warren Petroleum Corp. Pressure type fuel system for internal combustion engines. 2,734,729, 2–14–56, Cl. 261—36.

Lombardi, Giuseppe. Charcoal broiler. 2,734,499, 2–14–56, Cl. 126—25.

Lombardi, Michael W., to The B. F. Goodrich Co. Hollow resilient strip for sealing closure joints. 2,734,239, 2–14–56, Cl. 20—69.

Lones, Wesley O.: *See*—
Rawls, Vaughn. 2,734,553.

Long, Benjamin H., to Tobacco Machine Supply Co., Inc. Wrapper flag applying mechanism for cigar wrapping machines. 2,734,511, 2–14–56, Cl. 131—29.

Long, Benjamin H., to Tobacco Machine Supply Co., Inc. Leaf stretch adjusting mechanism for cigar wrapping machines. 2,734,512, 2–14–56, Cl. 131—33.

Longo, Joseph J., to Belle City Malleable Iron Co. Fluid actuated speed control device. 2,734,608, 2–14–56, Cl. 192—116.5.

Lorman, Charles E.: *See*—
Ring, Elliot, and Lorman. 2,734,275.

Lothrop, Marcus: *See*—
Harris, Robert L., and Lothrop. 2,734,560.

Loughlin, Bernard D., to Hazeltine Research, Inc. Image-reproducing system for a color-television receiver. 2,734,940, 2–14–56, Cl. 178—5.4.

Lovell Mfg. Co.: *See*—
Kauffman, Walter L., II. 2,734,281.
Kauffman, Walter L., II. 2,734,372.

Lovering, David W.: *See*—
Clancy, John J., and Lovering. 2,734,838.
Clancy, John J., and Lovering. 2,734,839.

Lovesey, Alfred C., to Rolls-Royce Ltd. Gas turbine engine with means for reheating turbine exhaust gases. 2,734,341, 2–14–56, Cl. 60—35.6.

Lowry Oil Tools, Inc.: *See*—
Bonner, James W. 2,734,581.

Lucas, Randolph A. Condiment shaker. 2,734,663, 2–14–56, Cl. 222—142.1.

Luenberger, Frederick O., to U. S. Electrical Motors, Inc. Mounting for transmission and drive. 2,734,393, 2–14–56, Cl. 74—425.

Lum, Funston G., to California Research Corp. Lead drier concentrate. 2,734,829, 2–14–56, Cl. 106—310.

Lunn, Alfred G., Jr., and H. L. Armstrong: said Armstrong assor. to D. E. Lunn. Conveyances for the transportation of baby chicks. 2,734,444, 2–14–56, Cl. 98—10.

Lunn, Dorothy E.: *See*—
Lunn, Alfred G., Jr., and Armstrong. 2,734,444.

Lurie, Benjamin L. Pivoted-jaw pipe wrench having a jaw-actuating spring. 2,734,414, 2–14–56, Cl. 81—91.

Lyons, Frank H., to E. L. Bruce Co. Wood finishing composition and method of making. 2,734,879, 2–14–56, Cl. 260—22.

Maccarone, Fred. Cushion insole. 2,734,287, 2–14–56, Cl. 36—28.

MacDonald, Theresa L.: *See*—
Wiederhorn, Norman M., MacDonald, and Kleibacker. 2,734,893.

MacKay, Grace A. Treatment of psoriosis, commonly called "scaly bark disease." 2,734,314, 2–14–56, Cl. 47—58.

Macleish, Kenneth G., to the United States of America as represented by the United States Atomic Energy Commission. Magnetic field regulator. 2,735,044, 2–14–56, Cl. 317—123.

MacNeill, John B., W. M. Leeds, and B. P. Baker, to Westinghouse Electric Corp. Circuit interrupters. 2,734,973, 2–14–56, Cl. 200—150.

MacRae, Norman D., to The Connor Lumber and Land Co. Lumber handling device for saw mills. 2,734,643, 2–14–56, Cl. 214—11.

Maenpaa, Wilho K., to General Railway Signal Co. Apparatus for detection of nonsynchronous rotation of locomotive axles. 2,735,090, 2–14–56, Cl. 340—268.

Magerlein, Barney J.: *See*—
Levin, Robert H., Magerlein, and McIntosh. 2,734,907.

Mainz, Felix J.: *See*—
Koester, Melvin C., and Mainz. 2,734,626.

Malick, Franklin S., to Westinghouse Electric Corp. Magnetic amplifier motor speed control. 2,735,060, 2–14–56, Cl. 318—331.

Mallinckrodt Chemical Works: *See*—
Homeyer, August H., De La Mater, and Patterson. 2,734,917.

Mallory, Marion. Means for reducing burning, pitting and corrosion of contact points in circuit breakers. 2,734,969, 2–14–56, Cl. 200—144.

Mallory, William R. Safety device for hydraulic brake systems. 2,734,342, 2–14–56, Cl. 60—54.5.

Mandel, Jacob J. Fishing apparatus. 2,734,300, 2–14–56, Cl. 43—26.1.

Manseau, David O. Spray nozzle and valve actuating mechanism. 2,734,774, 2–14–56, Cl. 299—95.

Marburg, Edgar, to United States Steel Corp. Ingot molds. 2,734,242, 2–14–56, Cl. 22—139.

Margerum, Donald L.: *See*—
Krauss, Robert, and Margerum. 2,735,093.

Marine Products Co.: *See*—
Fernstrum, Robert W. 2,734,457.

Markusen, David L., to Minneapolis-Honeywell Regulator Co. Flight path control apparatus. 2,734,703, 2–14–56, Cl. 244—77.

Marnon, Donald E., and J. Bianco, to General Aniline & Film Corp. Method of preparing water-dispersible compositions for azo dyeing. 2,734,093, 2–14–56, Cl. 8—48.

Marquette Metal Products Co., The: *See*—
Moulton, Lloyd J. 2,734,490.

Marquis, Donald P., and O. S. French, to Thompson Products, Inc. Adjustable tie rod. 2,734,760, 2–14–56, Cl. 287—58.

Marsh, Richard O., Jr. Belt connected roller arrangements for forming vehicle tracks and other purposes. 2,734,476, 2–14–56, Cl. 115—1.

Martell, George E., to Geo. J. Meyer Mfg. Co. Apparatus for cutting flexible strip material into measured lengths. 2,734,571, 2–14–56, Cl. 164—49.

Martin, Harry D., to General Motors Corp. Demountable closure. 2,734,757, 2–14–56, Cl. 286—5.

Martin, Oscar, Mfg. Co.: *See*—
Fauser, Oscar, Jr. 2,734,501.

Martin, Stanley: *See*—
Courthope, Thomas F., Martin, and Sickly. 2,734,804.

Martin, William J., and J. E. Larrison. Cotton fiber blender. 2,734,230, 2–14–56, Cl. 19—96.

Massey-Harris-Ferguson, Inc.: *See*—
Todd, Everett W. 2,734,438.

Masson, Rudolph F. Instrument for attaching fishhooks to leaders. 2,734,299, 2–14–56, Cl. 43—1.

Mathias, Gerald E.: *See*—
Schaelchlin, Walter, Storey, and Mathias. 2,735,057.

May & Baker Ltd.: *See*—
Barber, Harry J., and Green. 2,734,918.

Mayes, Fred M., to Sun Oil Co. Method for least squares adjustment of survey nets. 2,734,682, 2–14–56, Cl. 235—61.

McArthur, Elmer D., to General Electric Co. High frequency electrical apparatus. 2,735,034, 2–14–56, Cl. 315—4.

McArthur, Elmer D., to General Electric Co. Electron reactance device. 2,735,074, 2–14–56, Cl. 333—80.

McCafferty, Edward A., to The National Marking Machine Co. White fluorescing marking inks for textile identification. 2,734,871, 2–14–56, Cl. 252—301.2.

McCormack, Donald C.: *See*—
Wilson, Bertram A., and McCormack. 2,735,000.

McCormick, Francis H.: *See*—
Abresch, Carel F., and McCormick. 2,734,520.

McCullough, Paul J., to The Toastswell Co., Inc. Bread toaster. 2,734,448, 2–14–56, Cl. 99—328.

McCurdy, Robert J., to Radio Corp. of America. Time-base generator. 2,735,007, 2–14–56, Cl. 250—27.

McDowell Co., Inc.: *See*—
Widdowson, Carl A. 2,734,519.

McFee, John S., to General Box Co. Wire-bound crate. 2,734,652, 2–14–56, Cl. 217—12.

McGraw Electric Co.: *See*—
Harry, William R. 2,734,961.
Krichton, Carl V. 2,734,983.
Schneider, Hans P. 2,734,966.
Van Ryan, Anthony, and Harry. 2,734,972.
Wood, Russell A. 2,734,965.
Zimsky, John J. 2,734,459.

McIntosh, A. Vern, Jr.: *See*—
Levin, Robert H., Magerlein, and McIntosh. 2,734,907.

McKay Machine Co., The: *See*—
Thomas, Charles W. 2,735,055.

McKelvey, Lawrence N., Jr., and A. F. Segrest, to Graver Tank & Mfg. Co., Inc. Demulsifier. 2,734,593, 2–14–56, Cl. 183—2.7.

McKinnis, Art C., to Union Oil Co. of California. Production of terephthalic and isophthalic acids. 2,734,914, 2–14–56, Cl. 260—522.

McKnight, Robert N., to Phelps Dodge Copper Products Corp. Insulated conductor and method of making same. 2,734,934, 2–14–56, Cl. 174—121.

McLachlan, Dan, Jr., to American Cyanamid Co. X-ray microscope. 2,735,018, 2–14–56, Cl. 250—53.

McNicoll, David, to British Timken Ltd. Roller bearings and cages thereof. 2,734,786, 2–14–56, Cl. 308—214.

McRae, Lawrence T. Clock system. 2,734,336, 2–14–56, Cl. 58—24.

McWilliams, James B.: *See*—
Hursh, Samuel R., and McWilliams. 2,734,463.

Meat Separator Corp.: *See*—
Geisler, Harold F. 2,734,537.
Geisler, Harold F. 2,734,540.

Meeker, Paul C., to National Super Service Co. Inc. Air filtering cleaners. 2,734,594, 2–14–56, Cl. 183—37.

Meijer, Barend M., to Hartford National Bank and Trust Co. Capacitor motor. 2,735,056, 2–14–56, Cl. 318—220.

Melamed, Sidney: *See*—
Bortnick, Newman M., and Melamed. 2,734,890.

Melamed, Sidney, to Rohm & Haas Co. Unsaturated ureido ethers and polymers thereof. 2,734,891, 2–14–56, Cl. 260—77.5.

Menzies, William C. Process and apparatus for separating mixed materials. 2,734,629, 2–14–56, Cl. 209—172.5.

Mercer, Richard. Circuit arrangements for use in telecommunication systems. 2,734,946, 2–14–56, Cl. 179—18.

Mercier, Stanley M., to The Jeffrey Mfg. Co. Control mechanism for stacker-conveyer system. 2,734,642, 2–14–56, Cl. 214—10.

Merck & Co., Inc.: *See*—
Chemerda, John M., 2,734,897.

Merck, E. Aktiengesellschaft: *See*—
Zima, Otto, and von Werder. 2,734,905.

Merriman, Peter, to Dunlop Tire and Rubber Corp. Method of making bonded resilient fibrous material. 2,734,841, 2–14–56, Cl. 154—101.

Merritt, Robert H. Torque engaged brake. 2,734,599, 2–14–56, Cl. 188—141.

Mersereau, Emory P., Jr.: *See*—
Rainard, Leo W., and Mersereau. 2,734,834.

Messina, Joseph. Loading dock bumper. 2,734,739, 2–14–56, Cl. 267—1.

Messrs. Lumoprint Zindler K. G.: *See*—
Limberger, Walter. 2,734,690.

Metcalf, Herbert E., to Northrop Aircraft, Inc. Airplane control system. 2,734,700, 2–14–56, Cl. 244—42.

Meyer, Geo. J. Mfg. Co.: *See*—
Martell, George E. 2,734,571.
Meyer, George L. N. 2,734,650.

Meyer, George L. N., to Geo. J. Meyer Mfg. Co. Sanitary bottle closures. 2,734,650, 2–14–56, Cl. 215—38.

Meyers, Sidney E., to Wood Conversion Co. Filterability testing of suspensions of solids in a liquid. 2,734,378, 2–14–56, Cl. 73—63.

Mid-West Bottle Cap Co.: *See*—
Ray, Floyd A. 2,734,674.

Miedke, Robert C.: *See*—
Werth, Willard F., and Miedke. 2,735,012.

Mikeska, Louis A.: *See*—
Cohen, Charles A., and Mikeska. 2,734,923.

Milan, Daniel A. Sprinkling system. 2,734,583, 2–14–56, Cl. 169—5.

Millás, José C. Fountain pen. 2,734,485, 2–14–56, Cl. 120—47.

Millenson, Morton B., to The M. W. Kellogg Co. Electric spot resistance welding apparatus. 2,734,980, 2–14–56, Cl. 219—4.

Miller, Donald M.: *See*—
Settergren, Roy T., and Miller. 2,734,661.

Miller Pottery Engineering Co.: *See*—
Ryckman, George E. 2,734,247.

Miller, Robert E.: *See*—
Deibler, Elmer F., George, and Miller. 2,735,067.

Miller, William R., Jr.: *See*—
Forward, Worthy J. F., and Miller. 2,734,256.

Milligan, Harold E., and J. E. Muehring. Tremie. 2,734,612, 2–14–56, Cl. 193—30.

Milligan, William G.: *See*—
Peck, Guy C., and Milligan. 2,734,303.

Mills, Albert W., F. J. Furman, and E. J. Rabenda, to International Business Machines Corp. Drive mechanism for paper feeding device. 2,734,610, 2–14–56, Cl. 192—145.

Mine Safety Appliances Co.: *See*—
Jacobson, Moses G. 2,734,381.

Minneapolis-Honeywell Regulator Co.: *See*—
Adkisson, William M. 2,735,084.
Gille, Willis H. 2,735,051.
Markusen, David L. 2,734,703.

Minor, Burt S., to Regan Forge & Engineering Co. Side-opening traveling block and crown block arrangement. 2,734,718, 2–14–56, Cl. 254—190.

Missouri Automatic Control Corp. *See*—
Garner, Claude M., Roos, Wright, and Fleer. 2,735,047.

Mitchell, John W.: *See*—
Wood, John W., Fontaine, and Mitchell. 2,734,816.

Mittelmann, Eugene, to Erdco Engineering Corp. Magnetic flowmeter. 2,734,380, 2–14–56, Cl. 73—194.

Möbius, Walter, to Gildemeister & Co. A.-G. Frame for lathes and turret lathes. 2,734,415, 2–14–56, Cl. 82—32.

Moerk, John C., to Fairbanks, Morse & Co. Submersible motor cooling. 2,735,026, 2–14–56, Cl. 310—54.

Mojonnier Bros. Co.: *See*—
Mojonnier, Julius J. 2,734,621.

Mojonnier, Julius J., to Mojonnier Bros. Co. Conveying mechanism. 2,734,621, 2–14–56, Cl. 198—162.

Molz, Harold A., and J. E. Peake. Mechanical negative process and resist. 2,734,298, 2–14–56, Cl. 41—46.

Monroe Calculating Machine Co.: *See*—
Burkhart, William H. 2,735,091.
Phinney, Robert E. 2,734,455.

Monsanto Chemical Co.: *See*—
Mowry, David T., and Schlesinger. 2,734,815.
Skinner, Gordon B. 2,734,797.

Moody, Leonard E.: *See*—
Jones, Robert H., Hill, and Moody. 2,734,863.

Morgan Construction Co.: *See*—
O'Malley, Joseph M. 2,734,406.
Palmer, Charles. 2,734,618.

Morgan, James G., to E. I. du Pont de Nemours and Co. Photographic films. 2,734,825, 2–14–56, Cl. 95—9.

Moriarty, William J. Arc pantograph. 2,734,271, 2–14–56, Cl. 33—25.

Morris Paper Mills: *See*—
Arneson, Edwin L. 2,734,677.

Morris, Willis B., to Northrop Aircraft, Inc. Two-stage preloaded spring cartridge. 2,734,740, 2–14–56, Cl. 267—1.

Morris, Willard L., to Union Stock Yards & Transit Co. of Chicago. Method of agricultural cultivation. 2,734,313, 2–14–56, Cl. 47—58.

Morse, Ronald W.: *See*—
Heaton, Walter H., and Morse. 2,734,289.

Morway, Arnold J., and R. P. Spray, to Esso Research and Engineering Co. Synthetic casein fiber elastic grease. 2,734,862, 2–14–56, Cl. 252—14.

Mosberg, Abraham. Device for use in the making of piped button holes. 2,734,470, 2–14–56, Cl. 112—77.

Moser, John F., Jr., to Esso Research and Engineering Co. Pressure control in fluid solids system. 2,734,528, 2–14–56, Cl. 137—571.

Moser, John F., Jr., to Esso Research and Engineering Co. Elutriating-burner in fluid coking processes. 2,734,852, 2–14–56, Cl. 202—14.

Moskowitz, Lester R.: *See*—
Schell, Roger E., and Moskowitz. 2,734,616.

Moss, Lois E. Hood-forming rain cloak. 2,734,195, 2–14–56, Cl. 2—84.

Motion, Inc.: *See*—
Fewster, James F., and Noble. 2,734,295.

Motor Wheel Corp.: *See*—
Horn, Harry J. 2,734,779.

Moulton, Lloyd J., to The Marquette Metal Products Co. Dual fuel engine control system. 2,734,490, 2–14–56, Cl. 123—27.

Mowry, David T., and A. H. Schlesinger, to Monsanto Chemical Co. Herbicides. 2,734,815, 2–14–56, Cl. 71—2.5.

Muehring, John E.: *See*—
Milligan, Harold E., and Muehring. 2,734,612.

Mueller, Paul L.: *See*—
Bachman, Robert J., Lewis, Mueller, and Murray. 2,734,858.

Mueller, Paul L., to Western Electric Co., Inc. Resistance measuring apparatus. 2,735,065, 2–14–56, Cl. 324—62.

Mueller, William A., to Warner Bros. Pictures, Inc. Film synchronising marker. 2,734,948, 2–14–56, Cl. 179—100.2.

Mulheim, Joseph E., and S. B. Barnhardt, to Westinghouse Electric Corp. Flexible drive means. 2,734,359, 2–14–56, Cl. 64—1.

Mullen, Leo V., Jr., and J. M. Boyle, to Esso Research and Engineering Co. Lubricating oil additive. 2,734,869, 2–14–56, Cl. 252—47.5.

Müller, Josef: *See*—
Lenze, Eberhard, and Müller. 2,734,995.

Murdock, Thomas B.: *See*—
Ball, Richard H., Murdock, and Ogle. 2,734,585.

Murphy, Robert P., Jr.: *See*—
Scott, Platho P., Jr., and Murphy. 2,734,861.

Murray Corp. of America, The: *See*—
Douglas, Peyton W. 2,734,707.
Simonaitis, Bennie J. 2,734,369.

Murray, Guy E.: *See*—
Bachman, Robert J., Lewis, Mueller, and Murray. 2,734,858.

Myers, Bruce V. Space heater. 2,734,500, 2–14–56, Cl. 126—110.

Myers, Claude K. Mixing mill. 2,734,728, 2–14–56, Cl. 259—107.

Myers, Harold C., to Socony Mobil Oil Co. Modified duo-sol refining. 2,734,848, 2–14–56, Cl. 196—14.2.

National Cash Register Co., The: *See*—
Spurlino, Pascal, and Brown. 2,734,743.

National Lead Co.: *See*—
Buck, Thomas M., and Alpert. 2,734,855.
Larsen, Delmar H., Cummer, and Bolley. 2,734,860.
Schults, Frank J., and Buck. 2,734,856.

National Marking Machine Co., The: *See*—
McCafferty, Edward A. 2,734,871.

National Research Council: *See*—
Hudson, Arthur C. 2,735,076.

National Research Development Corp., The: *See*—
Callow, Robert K., Spensley, and Cornforth. 2,734,898.

National Smelting Co. Ltd., The: *See*—
Williams, George K., and Derham. 2,734,819.

National Super Service Co. Inc.: *See*—
Meeker, Paul C. 2,734,594.

Naughton, Frank C.: *See*—
Bolley, Don S., and Naughton. 2,734,916.

Navy, United States of America as represented by the Secretary of the: *See*—
Crawford, Jack A. 2,735,020.
Deibler, Elmer F., George, and Miller. 2,735,067.
Krelnik, Jerry. 2,734,197.
Rado, John A. 2,735,014.
Schonstedt, Erick O., and Irons. 2,735,063.
Scott, James K. 2,735,008.
White, Harry J. 2,735,022.
Zenner, Raymond E. 2,734,689.

Nelson, Charles J. Packaging unit. 2,734,625, 2–14–56, Cl. 206—47.

Nemeth, Otto R. Finger nail polish drier. 2,734,282, 2–14–56, Cl. 34—202.

Ne Peer Co.: *See*—
Van Raden, Harvey B. 2,734,755.

Nepera Chemical Co., Inc.: *See*—
Leonard, Frederick. 2,734,903.

Neubauer, Charles A. Plane. 2,734,535, 2–14–56, Cl. 145—14.

Neudauer, Albert E. Hand rule punch for printers. 2,734,569, 2–14–56, Cl. 164—10.5.

Neuworth, Martin B., to Pittsburgh Consolidated Coal Co. Purification of low boiling tar acids. 2,734,925, 2–14–56, Cl. 260—627.

Newel, Robert E. Electrically controlled valve for gas lines and the like. 2,734,563, 2–14–56, Cl. 158—129.

New York Air Brake Co., The: *See*—
Safford, Lewis A. 2,734,783.

Nichols, Joseph, T. L. Reissmann, and W. E. Collins, to Ethicon, Inc. Silk sutures and ligatures. 2,734,506, 2–14–56, Cl. 128—335.5.

Nichols, Joseph, T. L. Reissmann, and W. E. Collins, to Ethicon, Inc. Cotton sutures and ligatures. 2,734,507, 2–14–56, Cl. 128—335.5.

Nilssen, Ole K., to Radio Corp. of America. Magnetic binary device, 2,735,021, 2–14–56, Cl. 307—88.

Noble, John M., to The English Electric Co. Ltd. Supporting mechanisms. 2,734,710, 2–14–56, Cl. 248—276.

Noble, John W.: *See*—
Fewster, James F., and Noble. 2,734,295.

Nordberg Mfg. Co.: *See*—
Talboys, Henry H. 2,734,730.

Norris, Edward O. Centrifugal spraying coating apparatus. 2,734,479, 2–14–56, Cl. 118—326.

Norris, Edward O. Centrifugal spray coating apparatus. 2,734,480, 2–14–56, Cl. 118—326.

North American Aviation, Inc.: *See*—
Krauss, Robert, and Margerum. 2,735,093.

Northrop Aircraft, Inc.: *See*—
Hancock, Robert D. 2,735,038.
Metcalf, Herbert E. 2,734,700.
Morris, Willis B. 2,734,740.
Northrop, John K., Brosterhous, Dunn, Ellison, and Herman. 2,734,702.
Steele, Floyd G. 2,735,005.

Northrop, John K., C. A. Brosterhous, L. E. Dunn, J. M. Ellison, and D. R. Herman, to Northrop Aircraft, Inc. Method of launching aircraft. 2,734,702, 2–14–56, Cl. 244—63.

Norton, Sir James Farmer, & Co., Ltd.: *See*—
Batty, Granville. 2,734,404.

Norwood, George L. Electric lamp with interiorly illuminated hollow stand. 2,734,998, 214–56, Cl. 240—81.

Nothdurft, Karl F. Double acting spring lock washer. 2,734,545, 2–14–56, Cl. 151—38.

Nyland, Edward R. Work piece holder. 2,734,750, 2–14–56, Cl. 279—2.

Oberhellmann, Theodore A., to Hammermills, Inc. Adjustable hammer mill. 2,734,686, 2–14–56, Cl. 241—82.

O'Day, Cortland N., to Air Devices, Inc. Ceiling installation. 2,734,446, 2–14–56, Cl. 98—40.

Offen, Arthur, to Arthur Offen Developments Ltd. Laps. 2,734,318, 2–14–56, Cl. 51—92.

Offen, Arthur, Developments Ltd.: *See*—
Offen, Arthur. 2,734,318.

Office National d'Etudes et de Recherches Aeronautiques: *See*—
Claret, Rene. 2,734,269.

Ogle, Hugh M.: *See*—
Ball, Richard H., Murdock, and Ogle, 2,734,585.

O'Hara, Raymond J.: *See*—
Lally, Robert E., and O'Hara. 2,734,881.

O'Keefe & Merritt Co.: *See*—
Brainard, Maurice W. 2,734,487.
Brainard, Maurice W. 2,735,030.

Olin Mathieson Chemical Corp.: *See*—
Pullum, Cecil R., and Harvey. 2,734,623.

Olson, Harry F., and J. Preston, to Radio Corp. of America. Loudspeaker structure. 2,734,591, 2–14–56, Cl. 181—31.

O'Malley, Joseph M., to Morgan Construction Co. Bearing assembly for rolling mill. 2,734,406, 2–14–56, Cl. 80—55.

Onsrud Machine Works, Inc.: *See*—
Onsrud, Rudolph F. 2,734,428.

Onsrud, Rudolph F., to Onsrud Machine Works, Inc. Universal router. 2,734,428, 2–14–56, Cl. 90—15.

Opsahl, Albert M., to Westinghouse Electric Corp. Electric apparatus having a protective gap. 2,735,040, 2–14–56, Cl. 317—16.

Oravets, Elizabeth E. Toy school. 2,734,307, 2–14–56, Cl. 46—12.

Orner, Harry. Screw-tensioning device. 2,734,412, 2–14–56, Cl. 81—52.4.

Ospenson, Joseph N., to California Spray-Chemical Corp. Purification and recovery of maleic anhydride. 2,734,854, 2–14–56, Cl. 202—42.

O'Sullivan, John F., to Frawley Corp. Ball point pen. 2,734,484, 2–14–56, Cl. 120—42.03.

Otis Elevator Co.: *See*—
Hornung, Stephen A. 2,734,598.

Ottinger, August F., to Bemis Bro. Bag Co. Harvesting sacks. 2,734,541, 2–14–56, Cl. 150—2.

Otway, Christopher W., to The British Petroleum Co. Ltd. Pressure core takers. 2,734,719, 2–14–56, Cl. 255—1.4.

Owens, James B., to Westinghouse Electric Corp. Electric switches. 2,734,955, 2–14–56, Cl. 200—48.

Pabst, Philip F., and W. H. Conway, to Federal Paper Board Co., Inc. Sheet edge trimmer for printing presses. 2,734,454, 2–14–56, Cl. 101—246.

Padrick, John R. Earthworking and planting implement. 2,734,439, 2–14–56, Cl. 97—78.

Page, Ralph E., to International Business Machines Corp. Proportional ribbon feed mechanism. 2,734,614, 2–14–56, Cl. 197—151.

Paine, Joseph P., to Aircraft Armaments, Inc. Method of and apparatus for controlling the angular movement of a body. 2,734,383, 2–14–56, Cl. 74—1.

Palmer, C. D., Brass & Copper Co. Inc.: *See*—
Palmer, Charles D. 2,734,267.

Palmer, Charles, to Morgan Construction Co. Tables for feeding metal bars. 2,734,618, 2–14–56, Cl. 198—33.

Palmer, Charles D., to C. D. Palmer Brass & Copper Co. Inc. Hand tube cutting apparatus. 2,734,267, 2–14–56, Cl. 30—102.

Palnut Co., The: *See*—
Hotchkin, James R. 2,734,547.

Parish, Frank P., to Sanitary Products Corp. Coated tampon. 2,734,505, 2–14–56, Cl. 128—285.

Park, Harry, to C. Hager & Sons Hinge Mfg. Co. Loose-pin butt-hinge. 2,734,223, 2,734,223, 2–14–56, Cl. 16—169.

Parker Appliance Co., The: *See*—
Bisak, Louis D. 2,734,531.

Parker, Edwin C. Necktie. 2,734,196, 2–14–56, Cl. 2—150.

Parrelli, Benjamin F., to United Shoe Machinery Corp. Machines for shaping shoe uppers. 2,734,207, 2–14–56, Cl. 12—97.

Parsons, William W.: *See*—
Fischer, Clarence H., and Parsons. 2,734,620.

Parvin, John L., to Radio Corp. of America. Disc phonograph records. 2,734,748, 2–14–56, Cl. 274—42.

Pasculle, Maurice J., to Westinghouse Electric Corp. Reversible commutating-pole motors. 2,735,058, 2–14–56, Cl. 318—297.

Passarelli, Dean F. Electrical wall socket. 2,735,079, 2–14–56, Cl. 339—164.

Pater, Paul G., to Columbia Machinery and Engineering Corp. Camber adjuster for squaring shear slides. 2,734,572, 2–14–56, Cl. 164—58.

Patterson, Glenn A.: *See*—
Deters, Elmer M., and Patterson. 2,734,460.

Patterson, Lawrence A.: *See*—
Homeyer, August H., De La Mater, and Patterson. 2,734,917.

Paxton, William J.: *See*—
Edwards, Andrew W., and Paxton. 2,734,964.

Payne, Robert E., to The Sharples Corp. Automatic weighing scale. 2,734,735, 2–14–56, Cl. 265—70.

Payne, Robert E., to The Sharples Corp. Automatic weighing scale. 2,734,736, 2–14–56, Cl. 265—70.

Peake, James E.: *See*—
Molz, Harold A., and Peake. 2,734,298.

Pearne, Frank S., to Regent Jack Mfg. Co., Inc. Portable lift. 2,734,716, 2–14–56, Cl. 254—1.

Peck, Guy C., and W. G. Milligan. Fishing bobber. 2,734,303, 2–14–56, Cl. 43—43.11.

Peeso, James B.: *See*—
Hook, Edwin O., and Peeso. 2,734,866.

Peeso, James B., and E. O. Hook, to American Cyanamid Co. Stabilized lubricating compositions. 2,734,864, 2–14–56, Cl. 252—32.7.

Peeso, James B., and E. O. Hook, to American Cyanamid Co. Stabilized lubricating compositions. 2,734,865, 2–14–56, Cl. 252—32.7.

Pelouch, James J., to H. C. Schott. Vehicle hoist safety structure. 2,734,597, 2–14–56, Cl. 187—8.74.

Penney, James H.: *See*—
Formhals, William H., Fockler, and Penney. 2,735,027.

Peo, Howard J. Flea repelling animal collar. 2,734,483, 2–14–56, Cl. 119—160.

Perry, Donald B., to American Telephone and Telegraph Co. Teletypewriter inventory control system. 2,734,936, 2–14–56, Cl. 178—2.

Petersen, Thorvald K., to Douglas Aircraft Co., Inc. Cargo hoist mechanism. 2,734,645, 2–14–56, Cl. 214—77.

Peterson, Charles D., to Universal Controls Corp. Diaphragm housing. 2,734,330, 2–14–56, Cl. 137—788.

Peterson, Harold O., to Radio Corp. of America. Receiver for multiplex signals. 2,735,003, 2–14–56, Cl. 250—20.

Peterson, Robert E. Portable lighters. 2,734,364, 2–14–56, Cl. 67—7.1.

Pettyjohn, Elmore S., and H. R. Linden, to Institute of Gas Technology. Method of making a fuel gas interchangeable with natural gas. 2,734,809, 2–14–56, Cl. 48—197.

Pettyjohn, Elmore S., H. R. Linden, and W. L. Lee, to Institute of Gas Technology. Method of making oil gas interchangeable with natural gas. 2,734,810, 2–14–56, Cl. 48—211.

Phelps Dodge Copper Products Corp.: *See*—
McKnight, Robert N. 2,734,934.

Philco Corp.: *See*—
Bradley, William E. 2,735,032.

Phillips, Curt M. Attachment for grain harvesting machine. 2,734,331, 2–14–56, Cl. 56—296.

Phillips Petroleum Co.: *See*—
Simms, Russell K. 2,734,566.

Phillips, Violet, and L. F. Green. Heels for footwear. 2,734,288, 2–14–56, Cl. 36—36.

Phinney, Robert E., to Monroe Calculating Machine Co. Two-color ribbon control for listing calculators. 2,734,455, 2–14–56, Cl. 101—336.

Pickell, Clark A., to General Railway Signal Co. Ground detecting apparatus. 2,735,089, 2–14–56, Cl. 340—255.

Pierce, Daniel H. Yielding spacer. 2,734,495, 2–14–56, Cl. 123—90.

Pierce, Lawrence: *See*—
Immel, Ralph B., and Pierce. 2,734,958.

Pilkington, Richard. Lawn edger attachment for a lawn mower. 2,734,330, 2–14–56, Cl. 56—251.

Pillsbury Mills, Inc.: *See*—
Head, Carl T. 2,734,465.

Pilsetnieks, Daidris: *See*—
Uhlig, Eric J., and Pilsetnieks. 2,734,338.

Pittsburgh Consolidation Coal Co.: *See*—
Neuworth, Martin B. 2,734,925.

Pittsburgh Plate Glass Co.: *See*—
Poundstone, William W. 2,734,315.

Pittwell, Laurence R., and R. J. Young, to Imperial Chemical Industries Ltd. Production of copper containing catalysts. 2,734,873, 2–14–56, Cl. 252—454.

Plath, C.: *See*—
Christoph, Peter. 2,734,280.

Plechner, Sophie L.: *See*—
Berger, Frank M., and Plechner. 2,734,847.

Poitras, Edward J. Fluid dispensing apparatus. 2,734,658, 2–14–56, Cl. 222—2.

Pokorny, Stephen S. Post hole driller. 2,734,722, 2–14–56, Cl. 255—19.

Polymer Corp., Ltd.: *See*—
Bowell, Stephen T., Rush, and Watson. 2,734,883.

Porte, Eugène F. Volumetric rotary machine operating in a continuous stream of fluid. 2,734,461, 2–14–56, Cl. 103—121.

Pospie, Thaddeus J. Carrying case for arrows. 2,734,790, 2–14–56, Cl. 312—352.

Poundstone, William W., to Pittsburgh Plate Glass Co. Method of forming fused bifocal lens blanks. 2,734,315, 2–14–56, Cl. 49—82.1.

Power, Basil D., to Edwards High Vacuum Ltd. Vapour vacuum pumps. 2,734,679, 2–14–56, Cl. 230—101.

Preco Inc.: *See*—
Beemer, Paul K. 2,734,957.

Preiss, Richard E. Oar holder. 2,734,205, 2–14–56, Cl. 9—1.

Press, Meyer: *See*—
Hirsch, Charles J., and Press. 2,735,015.

Preston, John: *See*—
Olson, Harry F., and Preston. 2,734,591.

Prohaska, Charles J. Miniature road builder. 2,734,664, 2–14–56, Cl. 222—176.

Pullum, Cecil R., and T. R. Harvey, to Olin Mathieson Chemical Corp. Packaging of explosives. 2,734,623, 2–14–56, Cl. 206—3.

Purdie, William H., P. Jackson, and J. G. Gunn, to William Doxford and Sons Ltd. Fuel injection systems for internal-combustion engines. 2,734,492, 2–14–56, Cl. 123—41.

Pyle-National Co., The: *See*—
Kurek, Edwin J. 2,734,447.

Quaedvlieg, Mathieu: *See*—
Hagge, Walter, and Quaedvlieg. 2,734,830.

Quarmby, Robert C., to United Shoe Machinery Corp. Nail distributors. 2,734,191, 2–14–56, Cl. 1—39.1.

Raab, Edward L., and F. C. Gorsline, to General Electric Co. Treatment of halogenated insulating liquids. 2,734,926, 2–14–56, Cl. 260—649.

Rabenda, Edward J.: *See*—
Mills, Albert W., Furman, and Rabenda. 2,734,610.

Rabezzana, Hector. Spinning reel. 2,734,693, 2–14–56, Cl. 242—84.4.

Radiant-Aire Corp.: *See*—
Whitney, Nicholas E. 2,734,445.

Radio Corp. of America: *See*—
Armstrong, Lorne D. 2,735,050.
Beard, Arthur D., and Eberhard. 2,735,017.
Bedford, Alda V. 2,735,010.
Gillespie, Henderson C., and Joy. 2,734,982.
Goodale, Elmer D. 2,734,938.
Houghton, William D. 2,734,939.
Kelzer, Eugene O., and Kroger. 2,735,002.
Kelzer, Eugene O., and Kroger. 2,735,004.
Kidd, Marshall C. 2,734,954.
Liguori, Anthony, and Shenk. 2,734,943.
Lindenblad, Nils E. 2,734,344.
McCurdy, Robert J. 2,735,007.
Nilssen, Ole K. 2,735,021.
Olson, Harry F., and Preston. 2,734,591.
Parvin, John L. 2,734,748.
Peterson, Harold O. 2,735,003.
Schell, Roger E., and Moskowitz. 2,734,616.
Sonnenfeldt, Richard W. 2,734,945.
Zenel, Joseph A. 2,734,941.

Rado, John A., to the United States of America as represented by the Secretary of the Navy. Keyed oscillator. 2,735,014, 2–14–56, Cl. 250—36.

Raichle, Karl: *See*—
Ehring, Heinz, and Raichle. 2,734,880.

Rainard, Leo W.: *See*—
Florio, Patrick A., and Rainard. 2,734,835.

Rainard, Leo W., and E. H. Shattuck, to Joseph Bancroft & Sons Co. Crimping apparatus. 2,734,251, 2–14–56, Cl. 28—1.

Rainard, Leo W., and E. P. Mersereau, Jr., to Alexander Smith, Inc. Coated pile fabric and method of making same. 2,734,834, 2–14–56, Cl. 117—169.

Rauland Corp., The: *See*—
Snyder, Russell B. 2,734,857.

Rausch, Burdette L. Method of relief or embossed printing. 2,734,452, 2–14–56, Cl. 101—32.

Rausch, John T., to General Motors Corp. Air flow control means. 2,734,525, 2–14–56, Cl. 137—480.

Rawls, Vaughn, 30% to R. W. LaWarre, and 10% to W. O. Lones. Method of and apparatus for rebuilding pneumatic tires. 2,734,553, 2–14–56, Cl. 154—9.

Ray, Floyd A., to Mid-West Bottle Cap Co. Bottle cap feeding mechanism. 2,734,674, 2–14–56, Cl. 226—88.1.

Ray, William A., to General Controls Co. Gas-burner control system. 2,734,564, 2–14–56, Cl. 158—130.

Raytheon Mfg. Co.: *See*—
Domenichini, Carlo P., and Thomas. 2,735,071.
Riblet, Henry J. 2,735,069.
Riblet, Henry J. 2,735,070.
Wolsky, Sumner P. 2,734,806.

Read Standard Corp.: *See*—
Temple, Hiram E. 2,734,617.

Rebuffoni, Martin: *See*—
Bichsel, Harry J., and Rebuffoni. 2,734,981.

Red Jacket Mfg. Co.: *See*—
Deters, Elmer M., and Patterson. 2,734,460.

Redfern, Sutton: *See*—
Lenney, James F., Redfern, and Light. 2,734,875.

Reed Roller Bit Co.: *See*—
Elliott, Charles H. 2,734,776.

Reflectone Corp., The: *See*—
Coster, Allan A. 2,734,388.

Regan Forge & Engineering Co.: *See*—
Minor, Burt S. 2,734,718.

Regent Jack Mfg. Co., Inc.: *See*—
Pearne, Frank S. 2,734,716.

Reid, Henry. Work-holding clamp for trimming machines. 2,734,574, 2–14–56, Cl. 164—79.

Reilly, Allen F., and J. R. Stoklas, Jr., to Keco Plating Co. Plating rack. 2,734,859, 2–14–56, Cl. 204—297.

Reissmann, Thomas L.: *See*—
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Nichols, Joseph, Reissmann, and Collins. 2,734,507.

Repking, Edward F., W. C. George, and C. D. Fallert, to Gaylord Container Corp. Refrigerated container. 2,734,349, 2–14–56, Cl. 62—83.

Reppe, Walter, N. v. Kutepow, and E. Titzenthaler, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Production of carboxylic acid esters by carbonylation with salts of metal carbonyl hydride and halogen catalyst. 2,734,913, 2–14–56, Cl. 260—488.

Reynolds, Charles G. Safety signal device for hydraulic brake systems. 2,734,960, 2–14–56, Cl. 200—82.

Reynolds, Frederick W., and G. R. Stilwell, to Bell Telephone Laboratories, Inc. Apparatus for fabricating a composite electrical conductor. 2,734,478, 2–14–56, Cl. 118—8.

Reynolds, Julian L. Apparatus for shaping tubes by fluid pressure. 2,734,473, 2–14–56, Cl. 113—44.

Riblet, Henry J., to Raytheon Mfg. Co. Adjustable power divider and directional coupler. 2,735,069, 2–14–56, Cl. 333—7.

Riblet, Henry J., to Raytheon Mfg. Co. Directional coupling of coaxial transmission lines. 2,735,070, 2–14–56, Cl. 333—10.

Richards, Robert B.: *See*—
Hazel, Stanley G., and Richards. 2,734,673.

Richardson, Elmer L. Cylinder and fluid dispersing rib. 2,734,368, 2–14–56, Cl. 68—142.

Ries, Elmer F. Walking aids. 2,734,554, 2–14–56, Cl. 135—22.

Ring, Elliot, and C. E. Lorman, to the United States of America as represented by the Secretary of the Army. Thickness gage. 2,734,275, 2–14–56, Cl. 33—147.

Robbins, Sydney, and R. H. Runk, to Westinghouse Electric Corp. Oil-soluble phenolic resins and air-drying varnishes prepared therefrom. 2,734,878, 2–14–56, Cl. 260—19.

Roberson, Israel F. Slip-joint friction seal closure for containers. 2,734,654, 2–14–56, Cl. 220—42.

Roberts, Leonard C. Band saw blades. 2,734,533, 2–14–56, Cl. 143—133.

Robertshaw-Fulton Controls Co.: *See*—
Fielden, John E. 2,735,052.

Robertson, Frank H., to Saunders-Roe Ltd. Apparatus for mounting bombs and the like in aircraft. 2,734,705, 2–14–56, Cl. 244—137.

Robie, Norman P., to Electro Refractories & Abrasives Corp. Abrasive bodies. 2,734,812, 2–14–56, Cl. 51—298.

Robinson, Ernest B., and F. G. Glasby; said Glasby assor. to said Robinson. Machine for the production of helically wound tubes. 2,734,432, 2–14–56, Cl. 93—80.

Robinson, Leland P., to Electrodata Corp. Tape storage device. 2,734,692, 2–14–56, Cl. 242—74.

Roe, A. V., Canada Ltd.: *See*—
Dawson, Edward W. 2,734,316.

Roeder, William J.: *See*—
Hoffman, Wilbur D. 2,734,989.

Rogow, Seymour, and A. R. Berman, to Keaton Rubber Co. Electric lamp holders. 2,734,996, 2–14–56, Cl. 240—52.3.

Rohm & Haas Co.: *See*—
Bortnick, Newman M., and Melamed. 2,734,890.
Melamed, Sidney. 2,734,891.

Rolls-Royce Ltd.: *See*—
Lovesey, Alfred C. 2,734,341.

Roos, Joe, Jr.: *See*—
Garner, Claude M., Roos, Wright, and Fleer. 2,735,047.

Rose, John J., and M. F. Kollmann. Crankshaft position indicator. 2,734,477, 2–14–56, Cl. 116—124.

Rosen, Marvin R., to Argo Metal Products, Inc. Head board bracket. 2,734,203, 2–14–56, Cl. 5—285.

Rosenberger, Joseph J. Support for clotheslines. 2,734,640, 2–14–56, Cl. 211—119.17.

Rosenblad Corp: *See*—
Lockman, Carl J. 2,734,565.

Rosengrant, Richard V.: *See*—
Carpinella, Michael J., and Rosengrant. 2,734,653.

Ross, Harold D., Jr., and C. E. Frizzell, to International Business Machines Corp. Electronic counter. 2,734,684, 2–14–56, Cl. 235—92.

Ruhr, Heinrich R., to United Shoe Machinery Corp. Welt guiding and cutting. 2,734,469, 2–14–56, Cl. 112—44.

Rumpf, Walter J.: *See*—
Callahan, John C., and Rumpf. 2,734,649.

Runk, Robert H.: *See*—
Robbins, Sydney, and Runk. 2,734,878.

Rush, Ian C.: *See*—
Bowell, Stephen T., Rush, and Watson. 2,734,883.

Ruskin, Simon L. Apparatus for digestion of organic material. 2,734,803, 2–14–56, Cl. 23—259.1.

Russell, William J., to Landers, Frary and Clark. Food chopper and base therefor. 2,734,539, 2–14–56, Cl. 146—182.

Ryckman, George E., to Miller Pottery Engineering Co. Cup finishing machine. 2,734,247, 2–14–56, Cl. 25—24.

Safford, Lewis A., to The New York Air Brake Co. Air brake. 2,734,783, 2–14–56, Cl. 303—22.

Saito, Tomizo. Two stage pulverizing apparatus for knot or pulp of wood, for making paper stock. 2,734,685, 2–14–56, Cl. 241—46.

Salsberg, Bernard. Apparatus for rapid measurement of real and imaginary parts of admittance or impedance. 2,735,064, 2–14–56, Cl. 324—57.

Sametz, Irving: *See*—
Sametz, Louis and I. 2,734,746.

Sametz, Louis and I., to Louis Sametz, Inc. Shuttlecock. 2,734,746, 2–14–56, Cl. 273—106.

Sametz, Louis, Inc.: *See*—
Sametz, Louis and I. 2,734,746.

Sams, Arthur M. Perspective drawing instrument. 2,734,274, 2–14–56, Cl. 33—77.

Sanborn, William E.: *See*—
Ashley, Kenneth D., and Sanborn. 2,734,796.

Sanitary Products Corp.: *See*—
Parish, Frank P. 2,734,505.

Saunders, Erle F., and D. Drysdale. Strand break detecting apparatus. 2,734,334, 2–14–56, Cl. 57—81.

Saunders, Erle F., and D. Dryadale. Strand interrupting and feeding apparatus. 2,734,335, 2–14–56, Cl. 57—86.

Saunders-Roe Ltd.: *See*—
Robertson, Frank H. 2,734,705.

Savage, Ruben T., and R. Kollgaard, to Houdry Process Corp. Gas contacting and disengaging apparatus. 2,734,805, 2–14–56, Cl. 23—288.

Savoie, René. Three-position relay. 2,735,045, 2–14–56, Cl. 317—172.

Sayre, Ray H. Production of perforate ceramic ware. 2,734,246, 2–14–56, Cl. 25—24.

Scaico Controls, Inc.: *See*—
Cooper, Clark, Jr. 2,734,968.

Scardina, Jack A. Flame cutting machine. 2,734,737, 2–14–56, Cl. 266—23.

Schaefer, Edward J. Submersible water pumping system. 2,734,462, 2–14–56, Cl. 103—223.

Schaelchlin, Walter, to Westinghouse Electric Corp. Protective system for dynamoelectric machines. 2,735,054, 2–14–56, Cl. 318—144.

Schaelchlin, Walter, to Westinghouse Electric Corp. Motor speed control system. 2,735,059, 2–14–56, Cl. 318—323.

Schaelchlin, Walter, and C. E. Gary, to Westinghouse Electric Corp. Variable speed drive belt shifter. 2,734,391, 2–14–56, Cl. 74—242.3.

Schaelchlin, Walter, and C. H. Storey, Jr., to Westinghouse Electric Corp. Liquid rheostat. 2,734,977, 2–14–56, Cl. 201—37.

Schaelchlin, Walter, C. H. Storey, Jr., and G. E. Mathias, to Westinghouse Electric Corp. Electrical system for motor load control. 2,735,057, 2–14–56, Cl. 318—241.

Schanke, Charles F., to Link-Belt Co. Bearing seal. 2,734,758, 2–14–56, Cl. 286—3.

Schaufelberger, Felix A., to Chemical Construction Corp. Recovery of elemental metal powder from salt solutions. 2,734,821, 2–14–56, Cl. 75—108.

Schell, Roger E., and L. R. Moskowitz, to Radio Corp. of America. Article transfer device. 2,734,616, 2–14–56, Cl. 198—27.

Schenley Industries, Inc.: *See*—
Auhagen, Ernst, Hörlein, and Bauer. 2,734,846.
Bauer, Klaus, and Auhagen. 2,734,845.

Scherbinski, Floyd P., to Crampton Mfg. Co. Lock mechanism for a latch. 2,734,373, 2–14–56, Cl. 70—13.

Schiek, Eugene A. Drop-wire and drop wire assembly. 2,734,362, 2–14–56, Cl. 66—163.

Schlatter, Maurice J., to California Research Corp. Separation of ethylbenzene from crude xylene fractions. 2,734,930, 2–14–56, Cl. 260—674.

Schlayer, Earle G., to American Cyanamid Co. Testing vacuum in vials. 2,734,628, 2–14–56, Cl. 209—111.

Schlesinger, Arthur H.: *See*—
Mowry, David T., and Schlesinger. 2,734,815.

Schlumberger Well Surveying Corp.: *See*—
Dewan, John T., and Goodman. 2,735,019.

Schlumbohm, Peter. Automobile with heat dissipating air duct. 2,734,588, 2–14–56, Cl. 180—58.

Schmid, Walter, to Stewart-Warner Corp. Control valve for lubricating apparatus. 2,734,666, 2–14–56, Cl. 222—250.

Schmiedel, Ludwig, to Starcosa Maschinen- und Apparatebau Gesellschaft mit beschrankter Haftung. Centrifugal separator. 2,734,681, 2–14–56, Cl. 233—7.

Schmitter, Walter P.: *See*—
Falk, Louis W., and Schmitter. 2,734,396.

Schneider, Hans P., to McGraw Electric Co. Circuit interrupter. 2,734,966, 2–14–56, Cl. 200—114.

Schonfeld, Walter M., to Todd Shipyards Corp. Water tight tank closure. 2,734,636, 2–14–56, Cl. 220—57.

Schonitzer, Rudolph I.: *See*—
Allen, Edwin L. 2,734,761.

Schonstedt, Erick O., and H. R. Irons, to the United States of America as represented by the Secretary of the Navy. Total field magnetometer. 2,735,063, 2–14–56, Cl. 324—43.

Schott, Harold C.: *See*—
Pelouch, James J. 2,734,597.

Schreyer, Edward P. Electric shaver. 2,734,266, 2–14–56, Cl. 30—43.

Schroeder, Leslie R., to Warwick Mfg. Corp. Radio tuner. 2,734,386, 2–14–56, Cl. 74—10.7.

Schuh, Niles F., Jr., to Westinghouse Electric Corp. Overvoltage protection for alternating current generators. 2,735,039, 2–14–56, Cl. 317—13.

Schultz, Frank J., and T. M. Buck, to National Lead Co. Electrolytic method for refining titanium metal. 2,734,856, 2–14–56, Cl. 204—64.

Schum, Joseph W.: *See*—
Schum, Robert H. and J. W. 2,734,409.

Schum, Robert H. and J. W. Bar-stock vise. 2,734,409, 2–14–56, Cl. 81—33.

Schwenk, Kurt, to Auto Union G. m. b. H. Elastic support for rear wheels of vehicles. 2,734,742, 2–14–56, Cl. 267—57.

Scott, James K., to the United States of America as represented by the Secretary of the Navy. Sweep circuit. 2,735,008, 2–14–56, Cl. 250—27.

Scott, Platho P., Jr., and R. P. Murphy, to Stanolind Oil and Gas Co. Composition and process for plugging permeable formations. 2,734,861, 2–14–56, Cl. 252—8.55.

Scovill Mfg. Co.: *See*—
Carpinella, Michael J., and Rosengrant. 2,734,653.
Firing, Osborne. 2,734,546.
Seaver, Donald A. 2,734,309.

Searle, G. D., & Co.: *See*—
Burtner, Robert R. 2,734,904.

Seaver, Donald A., to Scovill Mfg. Co. Sound maker. 2,734,309, 2–14–56, Cl. 46—180.

Segrest, Allmon F.: *See*—
McKelvey, Lawrence N., Jr., and Segrest. 2,734,593.

Selinker, Solomon E., and S. M. Berkowitz. Multi-entry bookkeeping systems. 2,734,756, 2–14–56, Cl. 282—8.

Seltzer, William, to Vineland Poultry Laboratories. The method of controlling the sex of avian embryo, improving embryo hatchability and improving viability of the hatched chick. 2,734,482, 2–14–56, Cl. 119—1.

Settergren, Roy T., and D. M. Miller: said Miller assor. to said Settergren. Liquid dispensing apparatus. 2,734,661, 2–14–56, Cl. 222—16.

Seurbom, Anton. Adjustable shoe. 2,734,284, 2–14–56, Cl. 36—2.5.

Shapiro, Justin J., to American Instrument Co., Inc. Interference wedge monochromator. 2,734,991, 2–14–56, Cl. 240—1.

Sharples Corp., The: *See*—
Payne, Robert E. 2,734,735.
Payne, Robert E. 2,734,736.

Shattuck, Ewart H.: *See*—
Rainard, Leo W., and Shattuck. 2,734,251.

Shattuck, Ewart H., to Joseph Bancroft & Sons Co. Crimping apparatus. 2,734,229, 2–14–56, Cl. 19—66.

Shattuck, Ewart H., to Joseph Bancroft & Sons Co. Crimping apparatus. 2,734,252, 2–14–56, Cl. 28—1.

Shaw, Willard C.: *See*—
Johnson, Bertil, and Shaw. 2,734,481.

Sheer, Charles, and S. Korman. Process of reducing ores and compounds. 2,735,016, 2–14–56, Cl. 250—41.9.

Sheff, Jacob S. Sterling silver alloy. 2,734,823, 2–14–56, Cl. 75—173.

Shell Development Co.: *See*—
Bradley, Theodore F. 2,734,876.

Shenk, Eugene R.: *See*—
Liguori, Anthony, and Shenk. 2,734,943.

Sherman, William G. Two-way friction clutch. 2,734,605, 2–14–56, Cl. 192—48.

Sherwin-Williams Co., The: *See*—
Hazel, Stanley G., and Richards. 2,734,673.

Shields, Walter A. Apparatus for sorting tubular glass articles of different internal diameters. 2,734,627, 2–14–56, Cl. 209—88.

Shippen, Mary H. Dispenser for collapsible tubes that employs a pair of rollers. 2,734,662, 2–14–56, Cl. 222—102.

Shippen, Mary H. Tumbler holder. 2,734,711, 2–14–56, Cl. 248—313.

Shults, Emmett E., to Borg-Warner Corp. Method of assembling pressure loaded type, intermeshing gear pumps. 2,734,258, 2–14–56, Cl. 29—156.4.

Sibbald, Frederick R.: *See*—
Dunn, Harold G., Sibbald, and Haydon. 2,734,366.

Sickly, Robert G.: *See*—
Courthope, Thomas F., Martin, and Sickly. 2,734,804.

Simms, Russell K., to Phillips Petroleum Co. Concentration of ammonium nitrate solutions. 2,734,566, 2–14–56, Cl. 159—44.

Simonaitis, Bennie J., to The Murray Corp. of America. Washing machine water inlet. 2,734,369, 2–14–56, Cl. 68—207.

Sims, Redding. Ventilated awning. 2,734,237, 2–14–56, Cl. 20—57.5.

Skinner, Gordon B., to Monsanto Chemical Co. Purification of $TiCl_4$. 2,734,797, 2–14–56, Cl. 23—87.

Slezak, Vincent F. Tape dispensing device. 2,734,576, 2–14–56, Cl. 164—84.5.

Sloane, William W., to Goodman Mfg. Co. Paired roll crusher and grizzly feed device therefor. 2,734,688, 2–14–56, Cl. 241—222.

Smith, Alexander, Inc.: *See*—
Florio, Patrick A., and Rainard. 2,734,835.
Hay, William D. 2,734,228.
Rainard, Leo W., and Mersereau. 2,734,834.

Smith, Arthur D., to Kaiser Aluminum & Chemical Corp. Taper rolling mill. 2,734,407, 2–14–56, Cl. 80—56.

Smith, Brook I., to Esso Research and Engineering Co. Coke calcining process. 2,734,851, 2–14–56, Cl. 202—14.

Smith, Brook I., and C. E. Jahnig, to Esso Research and Engineering Co. Integrated coking and calcining process. 2,734,853, 2–14–56, Cl. 202—31.

Smith-Corona, Inc.: *See*—
Kennedy, Charles H., Jr., and Wade. 2,734,613.

Smith, James L. Fluid-pressure-actuated vise. 2,734,408, 2–14–56, Cl. 81—17.2.

Smith, John H. Mechanical automatic liquid dispenser. 2,734,659, 2–14–56, Cl. 222—2.

Smith, Paul V., Jr., and D. W. Young, to Esso Research and Engineering Co. Alkyl esters and plastic compositions comprising same. 2,734,884, 2–14–56, Cl. 260—31.8.

Smith, Robert L.: *See*—
Drake, Leonard C., and Smith. 2,734,874.

Smith, Tom F., to Autoscope, Inc. Drive-in theatre with individual car screens. 2,734,420, 2–14–56, Cl. 88—24.

Smolin, Edwin M., to American Cyanamid Co. Production of diarylethanes. 2,734,928, 2–14–56, Cl. 260—668.

Snow-Nabstedt Gear Corp., The: *See*—
Berndtston, John O. 2,734,401.

Snyder, Russell B., to The Rauland Corp. Process of coating a cathode-heater element. 2,734,857, 2–14–56, Cl. 204—181.

Soave, John G., to Waldes Kohinoor, Inc. Automatic control mechanisms for machines with interpendently operating parts. 2,734,604, 2–14–56, Cl. 192—31.

Societe a responsabilite limitee dite: Gambin & Cie.: *See*—
Chauvel, Raymond G. 2,734,394.

Societe Bureau de Recherches et d'Exploitation de Procedes et Brevets: *See*—
Akerib, Ezechiel. 2,734,265.

Societe Nationale de Constructions Aeronautiques du Sud-Est: *See*—
Golbert, Serge. 2,734,474.

Socony Mobil Oil Co., Inc.: *See*—
Drake, Leonard C., and Smith. 2,734,874.
Myers, Harold C. 2,734,848.
Traver, Alfred E. 2,734,377.

Sokoloff, Boris T. Method of extracting vitamin P from citrus molasses. 2,734,896, 2–14–56, Cl. 260—210.

Sonnenfeldt, Richard W., to Radio Corp. of America. Wave generating systems. 2,734,945, 2–14–56, Cl. 178—69.5.

South River Metal Products Co., Inc.: *See*—
Cohn, Max. 2,734,708.

Southern, Raymond L., to Allegheny Ludlum Steel Corp. Vacuum pouring apparatus. 2,734,240, 2–14–56, Cl. 22—73.

Southern, Raymond L., and J. K. Ely, to Allegheny Ludlum Steel Corp. Vacuum pouring apparatus. 2,734,241, 2–14–56, Cl. 22—73.

Southwestern Petroleum Co., Inc.: *See*—
Hooks, Robert M. 2,734,827.

Speakman Co.: *See*—
Fraser, James. 2,734,712.

Spears, Neilus A., Jr., to Westinghouse Electric Corp. Circuit interrupters. 2,734,970, 2–14–56, Cl. 200—147.

Speck, Willis A., to Westinghouse Electric Corp. Panelboards. 2,735,043, 2–14–56, Cl. 317—119.

Speed Queen Corp.: *See*—
Thiele, Berthold R. 2,734,371.

Speidel Corp.: *See*—
Augenstein, Karl C. 2,734,339.

Spensley, Philip C.: *See*—
Callow, Robert K., Spensley, and Cornforth. 2,734,898.

Sperry Rand Corp.: *See*—
Early, Thomas A., Jr., and Fitter. 2,734,279.
Hammond, Edmund B., Jr. 2,734,278.

Spiller, William R., and L. L. West, to Harris-Seybold Co. Multiple spindle paper drill. 2,734,577, 2–14–56, Cl. 164—90.

Spooner, Bernard, ⅓ to S. L. Atkins. Tobacco pouch. 2,734,584, 2–14–56, Cl. 150—1.

Spotnails, Inc.: *See*—
True, Charles H., Jr., and King. 2,734,192.

Spray Robert P.: *See*—
Morway, Arnold J., and Spray. 2,734,862.

Spurlino, Pascal, and W. C. Brown, to The National Cash Register Co. Record media feeding apparatus. 2,734,743, 2–14–56, Cl. 271—3.

Stadum, Clarence B., to Westinghouse Electric Corp. Automatic timing system. 2,735,006, 2–14–56, Cl. 250—27.

Stadum, Clarence B., E. C. Hartwig, and H. W. Van Ness, to Westinghouse Electric Corp. Electric discharge apparatus. 2,735,037, 2–14–56, Cl. 315—140.

Standal, Stanley. Inserted saw tooth with chip deflecting lip. 2,734,534, 2–14–56, Cl. 143—151.

Standard Brands Inc.: *See*—
Lenney, James F., Redfern, and Light. 2,734,875.

Standard Oil Co., The: *See*—
Jones, Arthur L., and Hughes. 2,734,630.

Stanolind Oil and Gas Co.: *See*—
Elkins, Lloyd E. 2,734,579.
Scott, Platho P., Jr., and Murphy. 2,734,861.

Starcosa Maschinen- und Apparatebau Gesellschaft mit beschrankter Haftung: *See*—
Schmiedel, Ludwig. 2,734,681.

Starr, Frank C., Jr., to E. I. du Pont de Nemours and Co. Process for the polymerization of formaldehyde employing metal carbonyl initiators. 2,734,889, 2–14–56, Cl. 260—67.

Stassi, Vincent J.: *See*—
Frady, Michael A. 2,734,997.

Steele, Floyd G., to Northrop Aircraft, Inc. Add-subtract counter. 2,735,005, 2–14–56, Cl. 250—27.

Steele, Homer M. Gutter screen. 2,734,467, 2–14–56, Cl. 108—30.

Steele, Roger C., to Hexcel Products Inc. Method of producing honeycomb. 2,734,843, 2–14–56, Cl. 154—122.

Steele, William B.: *See*—
Graves, Lloyd T. 2,734,292.

Steelman, Sanford L., and F. J. Lindseth, to Armour and Co. Preparation of guaiazulene by sulfur dehydrogenation of terpene-type compounds. 2,734,931, 2–14–56, Cl. 260—675.5.

Stentz, Blair E., and G. C. Weingardt, to The Swartzbaugh Mfg. Co. Method of and apparatus for sterilizing infant's formula. 2,734,826, 2–14–56, Cl. 99—212.

Sterling Drug Inc.: *See*—
Hunter, William T., and Buck. 2,734,920.

Stevens, Jerome W. Two piece nut having tensioning and camming locking features. 2,734,544, 2–14–56, Cl. 151—19.

Stewart, Donald J. Nutation damper. 2,734,384, 2–14–56, Cl. 74—5.5.

Stewart-Warner Corp.: *See*—
Schmid, Walter. 2,734,666.

Stewart, William L. Portable refrigerator. 2,734,351, 2–14–56, Cl. 62—116.

Stilwell, George R.: *See*—
Reynolds, Frederick W., and Stilwell. 2,734,478.

Stimpson, William V. Hay loader. 2,734,646, 2–14–56, Cl. 214—147.

Stoklas, Julius R., Jr.: *See*—
Reilly, Allen F., and Stoklas. 2,734,859.

Storey, Charlton H., Jr.: *See*—
Schaelchlin, Walter, and Storey. 2,734,977.
Schaelchlin, Walter, Storey, and Mathias. 2,735,057.

Storey, Charlton H., Jr., and W. T. Hunt, Jr., to Westinghouse Electric Corp. Magnetic amplifier regulated current limit control for Ward Leonard systems. 2,735,053, 2–14–56, Cl. 318—143.

Stowaca Fibre & Can Co. Ltd.: *See*—
Budd, Sydney D. 2,734,350.

Straayer, Joseph W., to Boeing Airplane Co. Airplane control surface and jet deflector arrangement. 2,734,698, 2–14–56, Cl. 244—15.

Straight Engineering Co.: *See*—
Straight, Halver R. 2,734,644.

Straight, Halver R., to Straight Engineering Co. Car dumping apparatus. 2,734,644, 2–14–56, Cl. 214—47.

Strain, Franklin, to Columbia-Southern Chemical Corp. Reaction of chloroaniline and isopropyl haloformate. 2,734,911, 2–14–56, Cl. 260—471.

Strecker, Gerald. Change speed gear of the adjustable rotary roller type. 2,734,389, 2–14–56, Cl. 74—200.

Strege, Leslie R. J. Variable wattage lamp socket. 2,734,976, 2–14–56, Cl. 201—49.

Strickland, Harold A., Jr., to The Budd Co. Sealed brake drum closure. 2,734,600, 2–14–56, Cl. 188—218.

Striker, George O. Instruments for the measuring of certain properties through ionization currents. 2,735,062, 2–14–56, Cl. 324—33.

Striplin, Marcus M., Jr., to Tennessee Valley Authority. Drying gases. 2,734,596, 2–14–56, Cl. 183—145.

Stuck, Harold D., to John W. Bolton & Sons, Inc. Process of repairing Jordan plugs. 2,734,261, 2–14–56, Cl. 29—401.

Sugimoto, Roy: *See*—
Hinkamp, James B., Sugimoto, and Dittmar. 2,734,910.

Suggs, Thomas F., to Cocker Machine & Foundry Co. Variable speed drive apparatus. 2,734,253, 2–14–56, Cl. 28—36.

Sullivan, Raymond H.: *See*—
Dyer, John B., and Sullivan. 2,735,029.

Summers Gyroscope Co.: *See*—
Dolude, Roman J. 2,734,385.

Sun Oil Co.: *See*—
Ferris, Seymour W., Tench, and Duling. 2,734,365.
Mayes, Fred M. 2,734,682.

Super Mold Corp. of California: *See*—
Glynn, Edwin A. 2,734,225.

Superior Furniture Co.: *See*—
Elles, Edward S., and Hawley. 2,734,788.

Sutherland Paper Co.: *See*—
Galbraith, Martin, and Burbank. 2,734,375.

Swartzbaugh Mfg. Co.: *See*—
Stentz, Blair E., and Weingardt. 2,734,826.

Sweetman, William G. Gun perforator. 2,734,456, 2–14–56, Cl. 102—21.6.

Symington-Gould Corp., The: *See*—
Blattner, Emil H. 2,734,741.

Szanto, Ilona: *See*—
Beck, József. 2,734,259.

Tack, Carl E., to American Steel Founderies. Means for resurfacing brake rotors. 2,734,255, 2–14–56, Cl. 29—90.

Taco Heaters, Inc.: *See*—
Hencken, Harold G. 2,734,521.

Talboys, Henry H., to Nordberg Mfg. Co. Screening assembly for screening and returning railway ballast. 2,734,730, 2–14–56, Cl. 262—2.

Tarte, Franklin E., Jr. Revolving target with projectile return. 2,734,745, 2–14–56, Cl. 273—103.

Teddington Aircraft Controls Ltd.: *See*—
Harrison, Walter M. 2,734,529.

Telefonaktiebolaget L M Ericsson: *See*—
Jonsson, Johan E. 2,734,257.

Temple, Hiram E., to Read Standard Corp. Bakery system with continuous proofer and cooler. 2,734,617, 2–14–56, Cl. 198—31.

Tench, John D.: *See*—
Ferris, Seymour W., Tench, and Duling. 2,734,365.

Tennessee Valley Authority: *See*—
Striplin, Marcus M., Jr. 2,734,596.

Texaco Development Corp.: *See*—
Gross, Howard H., and Kiersted. 2,734,848.

Texas Co., The: *See*—
Bright, Gordon S., and Hall. 2,734,868.

Thelander, Clement C. J., to The Ellipse Lawn Mower Co., Division of Buffalo-Eclipse Corp. Clutch-pulley assembly. 2,734,390, 2–14–56, Cl. 74—230.24.

Thiele, Berthold R., to Speed Queen Corp. Power reset wringer. 2,734,371, 2–14–56, Cl. 68—253.

Thomas & Betts Co., The: *See*—
Bergan, Martin D. 2,734,263.

Thomas, Charles W., to The McKay Machine Co. Control circuit for dynamic braking. 2,735,055, 2–14–56, Cl. 318—212.

Thomas, Harry J., Jr.: *See*—
Domenichini, Carlo P., and Thomas. 2,735,071.

Thomason, Jesse L., to General Electric Co. Support members for end turns of electrical coils. 2,735,075, 2–14–56, Cl. 336—60.

Thompson, Harold D., to J & B Building Products. Forming apparatus for concrete and the like. 2,734,250, 2–14–56, Cl. 25—131.5.

Thompson Products, Inc.: *See*—
Marquis, Donald P., and French. 2,734,760.

Thompson, Ralph B.: *See*—
Chenicek, Joseph A., and Thompson. 2,734,807.

Thompson, Ralph B., to Universal Oil Products Co. Stabilization of hydrocarbon distillates. 2,734,814, 2–14–56, Cl. 52—5.

Thorley, Cecil H. Automotive body repair tool. 2,734,549, 2–14–56, Cl. 153—35.

Thurston, Jack T., to American Cyanamid Co. Sulfosuccinate esters of fatty acid mono- and diglycerides. 2,734,833, 2–14–56, Cl. 117—139.5.

Timken Roller Bearing Co., The: *See*—
Holsing, Robert H. 2,734,725.

Timpner, Henry. Work set-up device. 2,734,403, 2–14–56, Cl. 77—62.

Titan Abrasives Co.: *See*—
Zalud, Charles A. 2,734,813.

Titzenthaler, Eckart: *See*—
Reppe, Walter, v. Kutepow, and Titzenthaler. 2,734,913.

Toastswell Co., Inc., The: *See*—
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D10— 7: Des. 176,932
D14— 6: Des. 176,937
D15—11: Des. 176,938

D17— 3: Des. 176,936
D22— 5: Des. 176,925
D26—14: Des. 176,893
D28— 1: Des. 176,933
D33—14: Des. 176,928
D34— 5: Des. 176,910
D42— 7: Des. 176,894
D44—22: Des. 176,923

D44—26: Des. 176,929
D47— 2: Des. 176,931
7: Des. 176,903
D48—16: Des. 176,921
20: Des. 176,935
D52— 1: Des. 176,917
D54—12: Des. 176,902
Des. 176,913

D57— 1: Des. 176,907
D58—17: Des. 176,895
26: Des. 176,896
Des. 176,897
D61— 1: Des. 176,919
Des. 176,927
D62— 4: Des. 176,908
D72— 1: Des. 176,915

D80— 9: Des. 176,922
D81—10: Des. 176,914
21: Des. 176,926
D83— 1: Des. 176,898
Des. 176,904
D85— 2: Des. 176,934
D86— 8: Des. 176,899

D86— 8: Des. 176,900
Des. 176,901
D87— 3: Des. 176,916
Des. 176,924
D88— 3: Des. 176,909
D91— 2: Des. 176,905
Des. 176,906

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
February 14, 1956 Volume 703 Number 2

TRADEMARKS

NOTICES

Service by Publication

A petition, No. 6573, having been filed by Pemco Corporation to cancel Registration No. 385,021 of Harbison-Walker Refractories Company, Pittsburgh, Pa., and this Office, having been informed that title to the mark of said registration has been transferred to Dr. Erich Heinz and having been unable to effect service of notice of the proceeding upon said Dr. Erich Heinz or other person who may claim title to said mark, notice is hereby given that unless any such person or his legal representative shall enter an appearance within thirty days from the date of this publication, the cancellation will be proceeded with as in the case of default.

DAPHNE LEEDS,
Assistant Commissioner of Patents.

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 167,501 ("RCA" and design), Radio Corporation of America, Radio receiving, detecting, and transmitting sets and parts thereof, etc., **filed** Jan. 9, 1956, D. C., S. D. N. Y., Doc. 106/126, *Radio Corporation of America* v. *Samuel Cohen*. Stipulation and judgment for injunction (notice Jan. 18, 1956).

TM 288,284 (The Canteen), Automatic Canteen Company of America, Vending machines, **filed** Jan. 14, 1956, D. C., W. D. S. C. (Greenville), Doc. 1902, *Automatic Canteen Company of America* v. *Atlas Vending Co.*

TM 295,850 ("Blue Coral" and design), H. D. Triantafillu, doing business as H. D. T. Company Factors, Inc., Polish for automobiles and all duco, lacquered, varnished, or baked enamel finishes; **TM 384,438** ("Blue Coral Sealer" and design), same, Nonclouding polish preservative for protecting polished wood, leather, and metal surfaces; **TM 562,745** (Blue Coral), H. D. Triantafillu, Polish in liquid and paste forms for automobiles and all lacquer, lacquered, varnished, or baked enamel finishes, etc.; **TM 566,138**, same, H. D. T. Company Factors, Inc., Automobile cleaning and polishing service, **filed** Jan. 3, 1955, D. C. N. J. (Newark), Doc. 1/55, *H. D. T. Company Factors, Inc.* v. *George N. Smith et al.* Consent order of dismissal Jan. 12, 1956.

TM 313,768 (Esquire), Esquire, Inc., Monthly publication, **filed** Oct. 5, 1954, D. C., S. D. N. Y., Doc. 96/75, *Esquire, Inc.* v. *329 Lexington Corp.* "Notice of voluntary dismissal" Jan. 5, 1956.

TM 322,650 (*a*) (Evenflo), The Pyramid Rubber Co., Nipples, nipple retaining caps, and nursing bottles; **TM 562,415, TM 566,385**, same, Complete nursers; **TM 549,434, TM 562,725** ("Evenflo" and design), same, Nursers, nursing bottles, etc.; **TM 352,346** (Vitaflo), same, Nipples, retaining caps, sealing discs and nursing bottles, **filed** Sept. 2, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18722–WM, *The Pyramid Rubber Co.* v. *L. B. Sales Co. et al.* Consent judgment; injunction restraining defendants from using terms "Easy-Flo" and "Easy-Flow" (notice Jan. 4, 1956).

TM 322,650 (*b*) (Evenflo), The Pyramid Rubber Company, Nipples, nipple retaining caps, and nursing bottles; **TM 562,415, TM 566,385**, same, Complete nursers; **TM 549,434, TM 562,725** ("Evenflo" and design), same, Nursers, nursing bottles, etc.; **TM 587,173**, same, Electric devices for heating water, etc.; **TM 587,172, TM 587,174** (Evenflo), same, **filed** Jan. 18, 1956, D. C. N. J. (Newark), Doc. 26/56, *The Pyramid Rubber Co.* v. *Plastic Dispensers, Inc.*

TM 342,491 ("Chester Barrie" and design), Simon Ackerman Clothes, Inc., Republished by Simon Ackerman Manufacturers & Tailors, Inc., Clothing and accessories—namely, men's and young men's suits, overcoats, etc., **filed** Jan. 17, 1956, D. C.,

CONDITION OF TRADEMARK APPLICATIONS AS OF JANUARY 20, 1956

Total number of applications awaiting action (excluding renewals and republications)..... 8,459
Date of oldest new application..... June 1, 1955
Date of oldest amended application..... Oct. 3, 1955

MERCHANT, JOHN, Executive Examiner

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application: New	Oldest Application: Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	8-1-55	10-14-55
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	6-1-55	10-3-55
III. WENDT, C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	7-7-55	10-24-55
Renewals (All Classes)	12-1-55	.....
Sec. 12 (c) Publications (All Classes)	12-2-55	.....

Applications Filed During Week Ending January 20, 1955—468

Registrations Issued..... 445—No. 621,043 to No. 621,487
Renewals Issued..... 54

S. D. N. Y., Doc. 106/215, *Chester Barrie, Ltd.* v. *The Chester Laurie, Ltd., et al.*

TM 352,346. (See TM 322,650 (*a*).)

TM 379,295 ("Las Palmas" and design), Ramirez & Feraud Chili Co., Canned Spanish red chili sauce and canned beans with chili sauce, **filed** Jan. 19, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19355–WM, *Ramirez & Feraud Chili Co.* v. *Las Palmas Food Company of California, Inc., et al.*

TM 380,600 (Continental), Continental Foods, Inc., Packaged soups, **filed** Dec. 6, 1955, D. C., S. D. N. Y., Doc. 105/243, *Thomas J. Lipton, Inc.* v. *Continental Coffee Co.* "Notice of voluntary dismissal" Jan. 18, 1956.

TM 384,438. (See TM 295,850.)

TM 549,434. (See TM 322,650 (*a*) and (*b*).)

TM 562,415. (See TM 322,650 (*a*) and (*b*).)

TM 562,725. (See TM 322,650 (*a*) and (*b*).)

TM 562,745. (See TM 295,850.)

TM 565,110 (Dr. West's), **TM 565,112** (Miracle-Tuft), Weco Products Company, Toothbrushes and denture brushes, **filed** Mar. 18, 1953, D. C., S. D. N. Y. Doc. 83/292, *Weco Products Co.* v. *L. S. Amster Co. et al.* Stipulation and order of discontinuance on Dec. 5, 1955, vacated (notice Dec. 16, 1955); Judgment for injunction (notice Jan. 6, 1956).

TM 565,112. (See TM 565,110.)

TM 566,138. (See TM 295,850.)

TM 566,385. (See TM 322,650 (*a*) and (*b*).)

TM 568,466 (Spray net), Helene Curtis Industries, Inc., Wave set, **filed** Jan. 5, 1956, D. C., S. D. N. Y., Doc. 106/84, *Helene Curtis Industries, Inc.* v. *The Wella Corp.*

TM 587,172. (See TM 322,650 (*b*).)

TM 587,173. (See TM 322,650 (*b*).)

TM 587,174. (See TM 322,650 (*b*).)

TM 602,037 (Morocco), Nidia Botanical Garden, Incense powder, **filed** May 6, 1955, D. C., S. D. N. Y., Doc. 100/274, *Nidia Botanical Garden* v. *Darya Products Co. et al.* Stipulation and order of discontinuance (notice Jan. 16, 1956).

TM 602,421 (Lanolized), W. F. Doyle, Hosiery for men, women, and children; **TM 609,933**, same, Lanolized, Incorporated, Hosiery, underwear, handkerchiefs, pajamas, shirts and undershirts for men, women and children, etc., **filed** Jan. 12, 1956, D. C. N. J. (Newark), Doc. 15/56, *Lanolized, Inc.* v. *Fablok Mills, Inc.*

TM 609,933. (See TM 602,421.)

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.
As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 1

SN 675,005. Rayonier Incorporated, New York, N. Y. Filed Oct. 18, 1954.



The drawing is hatched or lined for yellow and black.
For Wood Pulp.
Use since on or about Aug. 20, 1954.

SN 680,984. United-Hagie Hybrids, Inc., Des Moines, Iowa. Filed Feb. 2, 1955.



For Hybrid Seed Corn.
Use since summer of 1944.

CLASS 2

SN 674,217. Bemis Bro. Bag Company, St. Louis, Mo. Filed Oct. 4, 1954.

RUF-GRIP

Applicant claims ownership of Reg. No. 577,187.
For Paper Bags.
Use since Sept. 23, 1954.

SN 675,641. Linwood Corporation, Evanston, Ill. Filed Oct. 28, 1954.



For Plastic Pitchers and Tumblers.
Use since Oct. 8, 1954.

SN 675,837. Herbert H. Somers, Fort Wayne, Ind. Filed Nov. 1, 1954.

Can-Stak

For Can Stacking Device.
Use since Sept. 4, 1954.

SN 676,192. The Hankins Container Company, Cleveland, Ohio. Filed Nov. 8, 1954. Sec. 2(f).



No claim is made to the word "Cleveland" or the outline of the State of Ohio apart from the mark as shown. Applicant claims ownership of Reg. No. 312,962.
For Corrugated Board and Fibreboard Boxes, Containers, Shipping Cartons, and Lamp Wrappers.
Use since Aug. 1, 1933.

SN 676,743. Meese, Inc., Madison, Ind. Filed Nov. 16, 1954.

"MARK O' MERIT"

For Insulated Shipping and Storage Containers, Canvas Baskets, and Hampers.
Use since Oct. 20, 1954.

SN 688,701. Beacon Plastics Corporation, Newton, Mass. Filed June 2, 1955.



The notation "Your Best Buy in Plastics" is disclaimed apart from the mark as shown. Applicant claims ownership of Reg. No. 443,547.
For Plastic Articles—Namely, Tumblers, Dishes, Trays, Pitchers, Refrigerator Boxes, Salt and Pepper Shakers, Sugar Bowls, Cream Pitchers, Waste Baskets, Dishpans, Basins, Mixing Bowls, Cups, Butter Dishes, Egg Dispensers for Containing and Individually Dispensing Eggs, Cake Covers, Cake Saver Sets, Lazy Susans, Canisters, Cookie Jars, and Bread Boxes.
Use since Mar. 1, 1951.

CLASS 3

SN 678,436. Chanel, Inc., New York, N. Y. Filed Dec. 16, 1954. Sec. 2(f).

CHANEL

Applicant claims ownership of Reg. Nos. 513,132, 195,360, and others.
For Women's Handbags.
Use since 1938.

CLASS 4

SN 667,454. Show-Off, Inc., Jamestown, N. Y. Filed June 1, 1954.

Show-off

Applicant claims ownership of Reg. Nos. 605,477, 609,833, and 616,543.
For Furniture Wax and Equivalent Gloss Coatings.
Use since May 19, 1954.

SN 694,040. Beauty Luster, Inc., Shreveport, La. Filed Sept. 1, 1955.

BEAUTY LUSTER

For Combination Liquid Wax, Polish, and Cleaner for Automobiles.
Use since May 20, 1955.

SN 694,904. Norton Company, Troy, N. Y. Filed Sept. 19, 1955.

SCREEN-BAK

For Coated Abrasives.
Use since on or about Mar. 17, 1954.

CLASS 5

SN 694,614. Wesson Houseware Products Company, Inc., Chicago, Ill. Filed Sept. 13, 1955.

PLASTI-FIX

For General Purpose Adhesive.
Use since Jan. 28, 1952.

CLASS 6

SN 661,250. American Metallurgical Products Company, Pittsburgh, Pa. Filed Feb. 18, 1954.

SOLO H

For Chemical Additives To Be Added to a Molten Bath of Steel for the Elimination of Gases Such as Hydrogen From the Steel.
Use since Apr. 13, 1953.

SN 661,277. International Minerals & Chemical Corporation, Chicago, Ill. Filed Feb. 18, 1954.

PLASTI-BOND

For Hydrocarbon Resin-Containing Additives for Use in Green Sand Molding for Promoting Flowability of the Sand in the Green Sand Molding Process.
Use since Oct. 5, 1953.

SN 667,500. California Spray-Chemical Corporation, Wilmington, Del. Filed June 2, 1954.

ORTHO

Applicant claims ownership of Reg. Nos. 121,042, 589,153, and others.
For Industrial Deodorizers.
Use since Feb. 19, 1954.

SN 677,717. Carleton Laboratory, Inc., Chicago, Ill., by change of name from Knox Laboratory, Inc. Filed Dec. 3, 1954.

PY-TOX

For Rodenticide.
Use since Oct. 25, 1954.

SN 680,064. Calgon, Incorporated, Pittsburgh, Pa. Filed Jan. 18, 1955.

CALSOFIX

For Chemical Compounds Used in the Preparation of Pure Salt Brines.
Use since Apr. 27, 1954.

SN 680,359. Oliver W. Burke, Jr., d. b. a. Burke Research Company, Van Dyke, Mich. Filed Jan. 24, 1955.

OZO-88

For Antioxidant.
Use since Jan. 13, 1955.

SN 680,655. American Termicide Company, Inc., Atlanta, Ga. Filed Jan. 28, 1955.

TERMICIDE

For Wood Preservative.
Use since Feb. 25, 1954.

SN 683,913. Fowsner & Minthorne, Buffalo, N. Y. Filed Mar. 21, 1955.

baby-sweet

For Deodorant To Be Applied to Infants' Soiled Apparel and Bedding.
Use since Nov. 26, 1954.

SN 685,389. Oklahoma Chemical Company, Oklahoma City, Okla. Filed Apr. 12, 1955. Sec. 2(f).

PARATREAT

For Liquid Paraffin Solvent, Which Is Used in Oil Wells for the Prevention, Treatment, and Dissolving of Paraffin.
Use since Oct. 5, 1936.

SN 688,483. Union Bay State Chemical Co., Inc., Cambridge, Mass. Filed May 27, 1955.

HYCRYL

For Stabilizing and Suspending Agents.
Use since Mar. 16, 1955.

CLASS 7

SN 677,846. William E. Wright & Sons Company, West Warren, Mass. Filed Dec. 6, 1954.

Bow Curl

For Ribbon and Tapes for Gift Wrapping Purposes.
Use since Nov. 16, 1954.

SN 679,811. Polymer Industrie Chimiche S. P. A., Milan, Italy. Filed Dec. 2, 1954.

MOVIL

Priority under Sec. 44(d). Italian application filed June 10, 1954, Reg. No. 119,887, dated Nov. 25, 1954.
For Rope and Strings.

SN 683,982. Oakdale Cotton Mills, Jamestown, N. C. Filed Mar. 22, 1955.

Oakdale

For Twines, Cordages, and Ropes Made of Cotton and Synthetic Fibers.
Use since 1880.

SN 683,983. Oakdale Cotton Mills, Jamestown, N. C. Filed Mar. 22, 1955.



For Twines, Cordages, and Ropes Made of Cotton and Synthetic Fibers.
Use since 1950.

CLASS 8

SN 683,635. Supreme Merchandise Co., New York, N. Y. Filed Mar. 16, 1955.

Supreme

For Cigarette Lighters.
Use since Feb. 17, 1955.

SN 697,888. The American Automobile Association (Incorporated), Washington, D. C. Filed Nov. 23, 1955.

AAA

Applicant claims ownership of Reg. No. 342,479.
For Ash Trays and Pyrophoric Lighters.
Use since 1922.

CLASS 9

SN 676,755. Perforating Guns Atlas Corporation, Houston, Tex. Filed Nov. 16, 1954.



For Oil Field Perforating Guns, Explosive Charges, and Projectiles.
Use since June 4, 1954.

SN 676,756. Perforating Guns Atlas Corporation, Houston, Tex. Filed Nov. 16, 1954.

MIGHTY MOUSE

For Oil Field Perforating Guns, Explosive Charges, and Projectiles.
Use since June 4, 1954.

SN 687,306. Mine Safety Appliances Company, Pittsburgh, Pa. Filed May 11, 1955.

MSA
SAFETY EQUIPMENT HEADQUARTERS

The words "Safety Equipment Headquarters" are disclaimed apart from the mark as shown. Applicant claims ownership of Reg. No. 398,482.
For Mine Blasting Apparatus, Carriers for Explosives and Detonators, Powder Bags, Projectiles, Cartridges, and Parts Therefor.
Use since at least as early as January 1953.

SN 687,696. Goodyear Aircraft Corporation, Akron, Ohio. Filed May 17, 1955.

TRANSLAUNCHER

For Launchers for Missiles.
Use since Feb. 5, 1955.

SN 687,755. American Weapons Corporation, Burbank, Calif. Filed May 18, 1955.

FRONTIER SIX SHOOTER

No claim is made to the words "Six Shooter" apart from the mark as shown.
For Revolvers and Parts Thereof.
Use since Mar. 25, 1955.

SN 687,756. American Weapons Corporation, Burbank, Calif. Filed May 18, 1955.

PEACEMAKER SIX SHOOTER

No claim is made to the words "Six Shooter" apart from the mark as shown.
For Revolvers and Parts Thereof.
Use since Mar. 25, 1955.

SN 688,101. Universal Match Corporation, St. Louis, Mo. Filed May 23, 1955.

Matchorama

For Match Books.
Use since May 3, 1955.

CLASS 10

SN 683,005. Western Peat Company Limited, Lulu Island, British Columbia, Canada. Filed Mar. 7, 1955.

EXPANSO - SEAL

For Ground Sphagnum Peat Moss for Horticultural Purposes.
Use since Jan. 28, 1955.

SN 685,232. The American Compost Corporation, Cumberland, Md., to The International Compost Corporation, Cumberland, Md. Filed Apr. 11, 1955.

Jung-le

For Organic Fertilizer.
Use since Mar. 15, 1955.

SN 693,528. Chemical Enterprises, Inc., New York, N. Y. Filed Aug. 23, 1955.



For Agricultural Fertilizer.
Use since May 16, 1955.

CLASS 11

SN 685,295. Albert Padberg, Wuppertal-Sonnborn, Germany. Filed Apr. 11, 1955.



Applicant claims ownership of German Reg. No. 104,372, dated Jan. 17, 1908.
For Ink Ribbons and Carbon Papers.

CLASS 12

SN 675,024. Southport Paint Company, Inc., New Orleans, La. Filed Oct. 18, 1954.

Durabond

For Pitch-Like Composition Derived From Cottonseed Gum and Used in Preparing Built-Up Roofs.
Use since Aug. 1, 1952.

SN 689,161. Pluswood Industries, Oshkosh, Wis. Filed June 8, 1955.

PLUSWOOD - OSHKOSH - WIS.

No registration rights are claimed for the words "Oshkosh-Wis." apart from the mark as a whole.
For Plywood.
Use since Nov. 1, 1952; and since June 1942 as to "Pluswood."

SN 697,684. Harold R. Jones, Inc., Eugene, Oreg. Filed Nov. 4, 1955.

SERVICE BOARD

For Plywood.
Use since Aug. 30, 1955.

CLASS 13

SN 671,923. Anderson Machine Corporation, Jamestown, N. Y., now by change of name Anderson Screw Products, Inc. Filed Aug. 19, 1954.



For Products Produced by Hand or Automatic Screw Machines—Namely, Screws, Studs, Pins, Plugs, Tubular Rods, and Atomizer Type Nozzles.
Use since Aug. 6, 1951.

SN 677,377. Arrowsmith Tool and Die Corporation, Los Angeles, Calif. Filed Nov. 29, 1954.

ARROWSMITH

For Hardware—Namely, Overhead Door Hardware, Gate Hinges, Gate Latches, Pull Handles, Locks, and Slide Bolts.
Use since June 30, 1951, on pull handles, locks, and slide bolts.

SN 686,818. The Fairfacts Company, Trenton, N. J. Filed May 4, 1955.



For Vitreous China Bathroom Accessories.
Use since July 1, 1931.

SN 694,070. Krouse-Doremus Foundry Co., Clifton, N. J. Filed Sept. 1, 1955.

GOLDEN GATE

For Valves for Kegs, Barrels, and Other Packages for Beer, Ale, and Other Liquids; and Faucets, Vents, Couplings, and Connections Used With Said Valves.
Use since May 1, 1955.

CLASS 14

SN 672,620. American Nickeloid Company, Peru, Ill. Filed Sept. 2, 1954. Sec. 2(f) as to "Nickeloid."



Applicant claims the exclusive right to the use of the word "Metals" as a part of its trademark, but not otherwise. Applicant claims ownership of Reg. No. 553,829.
For Sheets, Strips, and Coils of Aluminum, Brass, Copper, Steel, and Zinc; Sheets, Strips, and Coils of Aluminum, Brass, Copper, Steel, and Zinc, Plated With Brass, Chromium, Copper, and Nickel, and/or Coated With Lacquer or Other Protective and Decorative Coatings.
Use since on or about June 28, 1954; and since July 1898 as to "Nickeloid."

SN 692,775. Eutectic Welding Alloys Corporation, Flushing, N. Y. Filed Aug. 10, 1955.

EUTECBOR

Applicant claims ownership of Reg. Nos. 400,825, 605,671, and others.
For Metallic Welding Rods.
Use since Aug. 1, 1955.

CLASS 15

SN 682,756. Savings Oil Company, Tupelo, Miss. Filed Mar. 3, 1955.

$AVING$

Applicant claims ownership of Reg. No. 545,417.
For Gasoline, Motor Oil, Diesel Fuel, Kerosene, and Other Petroleum Products.
Use since Oct. 10, 1951.

SN 686,859. Specialty Products Company, Jersey City, N. J. Filed May 4, 1955.

GLASOL

For Non-Carbonising Lubricating Oil for Glass Working Machinery.
Use since 1938.

SN 686,860. Specialty Products Company, Jersey City, N. J. Filed May 4, 1955.

GLASSCUT

For Concentrated Emulsifiable Oil Serving as a Lubricant and Coolant for Glass Working Machinery.
Use since 1938.

SN 686,861. Specialty Products Company, Jersey City, N. J. Filed May 4, 1955.

GLASSFLOW

For Emulsifiable Oil Intended as a Lubricant for Glass Working Machinery.
Use since 1939.

SN 687,774. Esso Standard Oil Company, New York, N. Y. Filed May 18, 1955.

STER-MAR

For Lubricating Oils and Greases.
Use since Oct. 14, 1954.

SN 688,571. Panther Oil & Grease Mfg. Company, Fort Worth, Tex. Filed May 31, 1955.

PANCO WONDERPLATE

Applicant claims ownership of Reg. No. 375,021.
For Multi-Purpose White Lithium Lubricating Grease.
Use since February 1955.

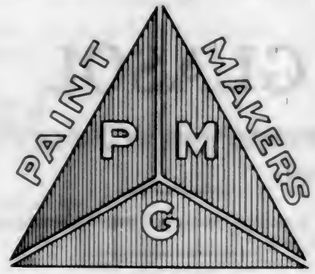
SN 688,668. Quaker State Oil Refining Corporation, Oil City, Pa. Filed June 1, 1955.



No exclusive claim is made to the words "Super Blend" and "Motor Oil" apart from the mark as shown. The drawing is lined for the colors green and gold. Applicant claims ownership of Reg. Nos. 106,015, 336,159, and others.
For Motor Oil.
Use since Sept. 16, 1954; and since 1914 as to "Quaker State."

CLASS 16

SN 692,226. Gulf States Paint Company, Houston, Tex. Filed Aug. 1, 1955.



For Paints, Enamels, Lacquers, Varnishes, Stains, and Painters' Materials—Namely, Undercoaters, Primers, Sizes, Sealers, and Pigments.
Use since February 1950.

SN 692,858. National Gypsum Company, Buffalo, N. Y. Filed Aug. 11, 1955.

CUSTOM-TINT

For Colors for Paint.
Use since Mar. 18, 1955.

CLASS 17

SN 696,485. R. G. Sullivan Incorporated, Manchester, N. H. Filed Oct. 17, 1955.

In Every Case

For Cigars.
Use since June 19, 1920.

CLASS 18

SN 634,335. Musher Foundation Incorporated, New York, N. Y. Filed Aug. 22, 1952.

Aveeno

Applicant claims ownership of Reg. Nos. 410,897, 334,597, and others.
For Colloid Fraction of Oatmeal for Use in Colloid Therapy, To Be Used To Soothe and Relieve Irritated, Itching or Inflamed Skin Areas.
Use since on or about Dec. 1, 1943.

SN 646,013. Chas. Pfizer & Co., Inc., Brooklyn, N. Y. Filed Apr. 27, 1953. Sec. 2(f) as to "Pfizer."

Pfizer

Applicant claims ownership of Reg. No. 501,762.
For Pharmaceutical Preparations for Human and Veterinary Use—Namely, Animal Feed Supplements, Antibiotics, Derivatives Thereof and Vitamins, Either Alone or in Combination.
Use since Nov. 30, 1951, on animal feed supplements.

SN 652,096. Chase Chemical Company, Newark, N. J. Filed Aug. 21, 1953.

CANDICAPS

For Medicinal and Pharmaceutical Tablets Having a Palatable Coating Integral With the Filter Material of the Tablet.
Use since in February 1944.

SN 665,012. Benjamin F. Breslauer, d. b. a. The A. Breslauer Company, New York, N. Y. Filed Apr. 22, 1954.

"HAPPY FEET"

For Foot Lotion for Treating Callouses, To Relieve Tired and Burning Feet and To Prevent Athlete's Foot.
Use since Mar. 19, 1954.

SN 672,367. Gerhard W. Ahrens, d. b. a. Dermaphor Laboratories, Brooklyn, N. Y. Filed Aug. 30, 1954.

DERMAPHOR

For Skin Conditioner Preparation for the Body and Feet Used in the Treatment of Minor Skin Irritations, Blemishes, Bunions, and Callouses; Dryness and Hardening.
Use since Aug. 25, 1954.

SN 677,530. Sana Balm Co., Philadelphia, Pa. Filed Nov. 30, 1954.

SANA BALM

Applicant claims ownership of Reg. No. 123,806.
For Medicated Deodorant Powder for Treatment of Chafing, Bed Sores, Sunburn, Hives, and Athlete's Foot.
Use since June 29, 1918.

SN 678,296. Wilbrin Laboratories, Detroit, Mich. Filed Dec. 13, 1954.

CITROTAL

For Analgesic and Diuretic Combination.
Use since February 1953.

SN 678,297. Wilbrin Laboratories, Detroit, Mich. Filed Dec. 13, 1954.



"New Vitality for People Over 35" is hereby disclaimed.
For Vitamin and Mineral Dietary Supplement.
Use since February 1953.

SN 679,188. Benjamin H. Silberg, d. b. a. Armsil Laboratory, Averill Park, N. Y. Filed Dec. 30, 1954.

ARTHOVITE

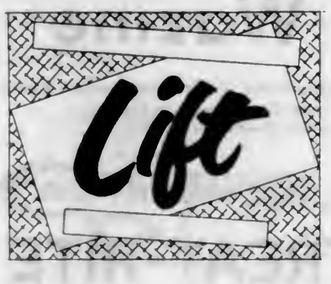
For Pharmaceutical Preparation for the Treatment of Arthritical Diseases.
Use since September 1954.

SN 680,812. Slim-Line Company, Chicago, Ill., to The Fleetwood Company, Chicago, Ill. Filed Jan. 31, 1955.

SLIM-LINE

For Dietary Food Supplement for Reducing Weight.
Use since Dec. 28, 1953.

SN 682,594. G. B. Rednor Products Co., Trenton, N. J. Filed Mar. 1, 1955.



The drawing is lined for the color orange.
For Vitamin Tablets.
Use since on or about Nov. 3, 1954.

SN 682,927. Hychex Products, Chicago, Ill. Filed Mar. 7, 1955.

HYCHEX

For Vaginal Cream and Vaginal Jelly.
Use since on or about Oct. 1, 1937.

SN 683,785. Lakeside Laboratories, Inc., Milwaukee, Wis. Filed Mar. 18, 1955.

TRIDAL

For Tablet Medication Intended for Colonic Disorders.
Use since Feb. 18, 1955.

SN 687,086. Milligan & Son, Inc., Sioux City, Iowa. Filed May 9, 1955.

Siouxland

For Medicated Salt for Use as an Aid in the Prevention of Frothy Bloat in Animals.
Use since April 1954.

SN 687,772. Dorn & Mitchell Laboratories, Inc., Birmingham, Ala. Filed May 18, 1955.

CocciVac

For Vaccine for Poultry.
Use since July 1, 1952.

SN 689,054. Roy S. Lodolyn, d. b. a. Lodolyn Drug Products Co., Lakewood, Ohio. Filed June 7, 1955.

PO-K-TAB

For Medicinal Preparation in Tablet Form for the Symptomatic Treatment of Muscular Aches, Headaches, Arthritis, and Rheumatism.
Use since May 9, 1955.

SN 689,343. Chicago Pharmacal Company, Chicago, Ill. Filed June 13, 1955.

ANTEMIA

For Medicinal Preparation in Tablet Form for Use as a Hematinic in the Treatment of Anemia and as a Dietary Supplement.
Use since Aug. 20, 1954.

SN 689,478. Finaf, Inc., South Charleston, W. Va. Filed June 14, 1955.

FINAF

For Antifungal Preparation.
Use since Jan. 2, 1935.

SN 689,572. Holland-Rantos Co., Inc., New York, N. Y. Filed June 15, 1955.

Hollandex

Applicant claims ownership of Reg. No. 338,362.
For Pharmaceutical Preparation for Topical Application for Protection Against and Treatment of Skin Disorders.
Use since May 27, 1955.

SN 689,657. Irving S. Rossoff, Taylorville, Ill. Filed June 16, 1955.

UTERASE

For Veterinary Compounds Used in the Intrauterine Treatment of Domestic Animals.
Use since Apr. 22, 1953.

SN 689,850. Eli Lilly and Company, Indianapolis, Ind. Filed June 20, 1955.

VALMID

For Medicinal Preparation of Ethinamate, a Short-Acting Nonbarbiturate Sedative Used in the Management of Simple Insomnia.
Use since Apr. 29, 1955.

SN 689,896. The Upjohn Company, Kalamazoo, Mich. Filed June 20, 1955.

Corbiot

For Veterinary Hormonal Preparation.
Use since Mar. 10, 1955.

SN 689,897. The Upjohn Company, Kalamazoo, Mich. Filed June 20, 1955.

Cardrase

For Diuretic.
Use since Mar. 10, 1955.

SN 689,898. The Upjohn Company, Kalamazoo, Mich. Filed June 20, 1955.

Pamoid

For Sedative.
Use since Mar. 10, 1955.

SN 689,950. The McCambridge & McCambridge Co., Riverdale, Md. Filed June 21, 1955.



For Rubbing Alcohol Compound and Epsom Salts.
Use since Apr. 19, 1955.

SN 690,019. McNeil Laboratories, Incorporated, Philadelphia, Pa. Filed June 22, 1955.

ALGOSON

For Analgesic-Antipyretic Tablets.
Use since Sept. 25, 1952.

SN 690,107. Vick Chemical Company, New York, N. Y. Filed June 23, 1955.

ActivAge

For Fortified Tonic Preparation.
Use since June 13, 1955.

SN 690,323. Chas. Pfizer & Co., Inc., Brooklyn, N. Y. Filed June 27, 1955.

MATROMYCIN

For Antibiotic Preparation.
Use since June 13, 1955.

SN 690,324. Chas. Pfizer & Co., Inc., Brooklyn, N. Y. Filed June 27, 1955.

STRENALIN

For Hormone-Vitamin Preparation.
Use since June 13, 1955.

SN 690,480. Merck & Co., Inc., Rahway, N. J. Filed June 29, 1955.

INVERSINE

For Medicinal Preparation for Use as Hypotensive Agent.
Use since May 2, 1955.

SN 690,489. Dr. Salsbury's Laboratories, Charles City, Iowa. Filed June 29, 1955.

Wazine

For Drinking Water Worming Preparation Effective for the Removal of Large Roundworms in Poultry.
Use since on or about June 27, 1955.

SN 690,513. Vulcan Jet & Turbine Corp., New Rochelle, N. Y. Filed June 29, 1955.

TREAT-RITE

For Medicine for Tropical Fish.
Use since Apr. 15, 1955.

CLASS 19

SN 668,912. Mercury Mobile Home, Inc., Des Moines, Iowa. Filed June 25, 1954.

Mercury Mobile Home

Disclaimer is made to any rights to the words "Mobile Home," when used separately and apart from the mark as shown.
For House Trailers.
Use since June 21, 1954.

SN 683,574. Arnold, Schwinn & Co., Chicago, Ill. Filed Mar. 16, 1955. Sec. 2(f) as to "Schwinn."

SCHWINN AMERICAN

The word "American" is disclaimed apart from the mark as shown. Applicant claims ownership of Reg. Nos. 526,131 and 404,963.
For Bicycles.
Use since Oct. 7, 1954.

SN 696,144. Willard L. Groene, Phoenix, Ariz. Filed Oct. 10, 1955.

CYL-FLO

For Automobile Air Conditioning Duct System.
Use since Aug. 22, 1955.

CLASS 21

SN 651,975. Engis Equipment Company, Chicago, Ill., to Diamantprodukter Aktiebolag, Hagersten, Sweden. Filed Aug. 18, 1953.

Di-Profiler

For Electrically Power-Driven, Reciprocating Hand Machine Used for Grinding, Filing, Scraping, Honing, Lapping, Polishing, and the Like.
Use since Mar. 28, 1953.

SN 666,741. E. Victor Nelson, d. b. a. Deltron Co., Long Beach, Calif., from Deltron Co. Filed May 20, 1954.

DELTRON

For Hand Held Radio Transmitters for Remote Control of Model Airplanes, Boats, and Cars, Also the Counter-Part Receivers.
Use since Jan. 29, 1954.

SN 674,451. Cook Electric Company, Chicago, Ill. Filed Oct. 7, 1954.

Counterpoise Relay

Applicant disclaims the word "Relay" apart from the mark as shown.
For Electric Relays.
Use since on or about Sept. 23, 1954.

SN 674,844. Realisations Ultrasoniques S. A. R. L., St. Maur (Seine), France. Filed Oct. 14, 1954.

AEROSONIC

Priority under Sec. 44(d). French Reg. No. 441,149, dated Apr. 15, 1954 (Paris); Natl. Inst. No. 33,497.
For Supersonic Generators and Parts Therefor.

SN 676,493. General Cable Corporation, New York, N. Y. Filed Nov. 12, 1954.

SUPERTUF

For Jacketed Electrical Conductors.
Use since May 14, 1954.

SN 676,696. Westric Battery Company, Denver, Colo. Filed Nov. 15, 1954.

Westric MOTOR-MASTER

Applicant claims ownership of Reg. No. 151,634.
For Storage Batteries.
Use since about Jan. 1, 1920, as to "Westric"; and since May 1951 on the mark as shown.

SN 681,231. Weston Electrical Instrument Corporation, Newark, N. J., to Weston Electrical Instrument Corporation, Newark, N. J. Filed Feb. 7, 1955. Sec. 2(f).

WESTON

Applicant claims ownership of Reg. No. 186,822.
For Sensitive Relays and Electrical Switch Equipment Controlled by Relays, Light Sensitive Cells, and Transformers.
Use since 1920.

SN 683,397. International Standard Electric Corp., New York, N. Y. Filed Mar. 14, 1955.

STANTEC

For Counter Tubes for Computators.
Use since Jan. 27, 1955.

SN 687,331. Voltarc Tubes, Inc., Norwalk, Conn. Filed May 11, 1955.

Haleon

For Fluorescent Coated Glass Tubing for Electrical Use.
Use since Dec. 15, 1954.

SN 691,185. Air-Way Industries, Inc., Toledo, Ohio. Filed July 13, 1955.

Air-Way SANITIZOR

Applicant claims ownership of Reg. Nos. 169,281, 433,510, and others.
For Electrical Suction Cleaners and Parts and Accessories Thereof—Namely, Attachment Suction Tools for Cleaning

Walls, Upholstery, and Radiators, Dust Collectors, Floor Brushes for Attachment to Electrical Suction Cleaner Nozzles, and Extension Tubing for Attachment of Accessory Suction Devices.
Use since January 1949.

SN 691,326. John R. Scantlin, d. b. a. J. R. Scantlin Electronics, Inglewood, Calif., to General Dynamics Corporation, New York, N. Y. Filed July 14, 1955.

pagemaster

For Electrical Signaling Systems and Components Therefor, Including Apparatus in the Nature of Code Sending Devices, and Receivers.
Use since June 1954.

SN 695,085. General Dynamics Corporation, San Diego, Calif. Filed Sept. 21, 1955.

CHARACTRON

For Cathode Ray Display Tube Display Console.
Use since July 11, 1955.

SN 695,431. McGraw Electric Company, Elgin, Ill. Filed Sept. 27, 1955.

POWERMATIC

For Electric Appliances—Namely, Toasters.
Use since July 27, 1954.

CLASS 22

SN 661,421. Gilbert Deschatre, Rio de Janeiro, Brazil. Filed Feb. 23, 1954.

READIT

Priority under Sec. 44(d). Brazilian application filed Aug. 27, 1953, Reg. No. 176,025, dated Sept. 1, 1955.
For Toys, Games, and Pastimes—Namely, Blocks, Plates, Chips, and Playing Cards From Which Children Learn to Read, Write, Count, and Draw.

SN 668,277. Norman H. Sanger, Columbus, Ohio. Filed June 15, 1954.

SPACEROO

For Game for Personal Entertainment Featuring Ejected Rolling Balls or Spheres Aimed at Pockets.
Use since Feb. 9, 1954.

SN 676,346. Waikiki Equipment Company, Honolulu, Territory of Hawaii. Filed Nov. 9, 1954.

SWIM-PIPE

For Breathing Apparatus for Swimmers.
Use since Nov. 6, 1950.

SN 679,032. Michel Casanovas, Nice, France. Filed Dec. 28, 1954.

THE "MARINO"

For Apparatus for Use in Swimming and Underwater Sports—Namely, Underwater Masks and Helmets, Underwater Goggles, Snorkel Tubes, Respirator Apparatus Comprising Masks and Rigid or Flexible Tanks or Containers for Oxygen or Air Connected Thereto and Harnesses for Affixing Such Tanks and Containers to the Wearer's Body, Rubber or Plastic Fin Pieces for Attachment to the Limbs as an Aid to Swimming, Underwater Guns and Projectile Devices and Darts, Gaffs, Spears and Tridents for Underwater Fishing.
Use since July 19, 1952.

SN 679,554. Arthur C. Cadogan, Rock Island, Ill. Filed Jan. 7, 1955.

TREET

For Processed Fishing Bait.
Use since on or about June 1, 1952.

SN 679,803. Sportex GmbH, Ulm/Donau, Germany. Filed Jan. 12, 1955.

TURBO

Priority under Sec. 44(d). German application filed July 24, 1954, Reg. No. 667,697, dated Dec. 7, 1954.
For Sporting Goods—Namely, Tennis Balls, Golf Balls, Base Balls, Play- and Beach Balls, Shuttles Made of Genuine or Artificial Feathers for Badminton, Fishing Implements—Namely, Fishing Rods, Fishing Lines, Fishing Hooks, Fishing Reels, Artificial Fishing Lures.

SN 680,185. Doodlehead, Inc., Croton-on-Hudson, N. Y. Filed Jan. 20, 1955.

doodlehead

For Hand Puppets.
Use since Mar. 5, 1954.

SN 680,271. George E. Hazard, Rochester, N. Y. Filed Jan. 21, 1955.

JUMBLE

For Game, Specifically a Plurality of Blocks in the Form of Cubes, Each Bearing Letters or Other Characters on All Six Faces, So That They May Be Arranged To Form Words.
Use since Oct. 10, 1954.

SN 680,739. Emenee Industries, Inc., New York, N. Y. Filed Jan. 31, 1955.

EMENEE

For Musical Toys—Namely, Trumpets, Clarinets, Xylophones, Saxophones, Tubas, Trombones, Guitars, Ukuleles, and Accordions.
Use since 1951.

SN 680,909. Sportex GmbH, Ulm/Donau, Germany. Filed Feb. 1, 1955.

SPORTEX

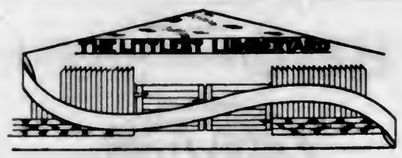
Applicant claims ownership of German Reg. No. 629,763, dated Nov. 12, 1952.
For Sporting Goods—Namely, Tennis Balls, Golf Balls, Base Balls, Play- and Beach Balls, Shuttles Made of Genuine or Artificial Feathers for Badminton, Fishing Implements—Namely, Fishing Rods, Fishing Lines, Fishing Hooks, Fishing Reels, Fishing Leaders, Artificial Fishing Lures.
Use since October 1949.

SN 680,978. Robert L. Seay, Phoenix, Ariz. Filed Feb. 2, 1955.

MARITIME

For Board Game Involving the Movement of Ships and Cargoes.
Use since Nov. 15, 1953.

SN 681,621. Margaret Orcutt, Manhattan Beach, Calif. Filed Feb. 14, 1955.



For Sets of Toy Parts Used in the Construction of Toys.
Use since Dec. 27, 1954.

SN 682,567. Keller Corporation, Brooklyn, N. Y. Filed Mar. 1, 1955.

Wip-Top

For Toy Tops.
Use since January 1953.

SN 682,866. Mary Phillips Buckner, d. b. a. Peace Garden Nursery, Lemont, Ill. Filed Mar. 7, 1955.



For Toys—Namely, Jig Saw Puzzles, Word Games, Dolls and Doll Clothes, Sewing Kits, Clay Modeling Sets, and Toy Garden Sets and Tools.
Use since Dec. 11, 1954.

SN 684,231. Pierson's Tackle Company, Grand Rapids, Mich. Filed Mar. 25, 1955.

CHE'GE GON

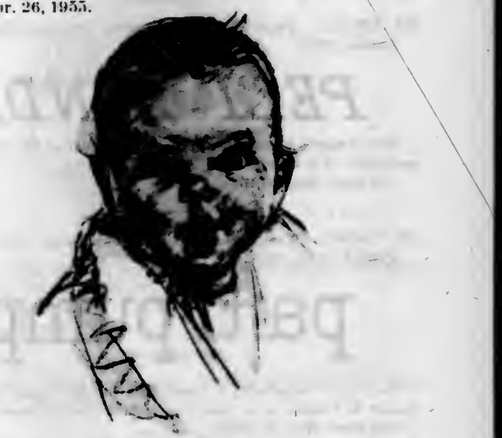
For Artificial Fish Lures.
Use since Jan. 10, 1955.

SN 686,235. Paul E. Taberski, Dowagiac, Mich. Filed Apr. 25, 1955.

LAWMAKERS

For Educational and Amusement Games Involving the Use of a Chance Device and the Exercise of Mental Skill and Choice in Advancing Playing Markers to a Goal According to Rules of the Game.
Use since on or about Aug. 15, 1954.

SN 686,298. Gerber Products Company, Fremont, Mich. Filed Apr. 26, 1955.



The representation of the infant's head is an artistic drawing of a picture of Ann Turner Cook taken when a child and whose consent is of record. Applicant claims ownership of Reg. Nos. 313,879 and 600,094.
For Dolls, Layettes, and Miniature Feeding Sets for Dolls.
Use since Feb. 28, 1955.

SN 686,407. The Vogel Manufacturing Company, Bridgeport, Conn. Filed Apr. 27, 1955.

Mod-I-Stix

For Construction Game or Toy Sets Comprising a Number of Interlocking Pieces.
Use since on or about Apr. 16, 1955.

SN 687,739. George L. Trager, d. b. a. Trager Manufacturing Co., Seattle, Wash. Filed May 17, 1955.

Charlie BUOY

For Inflatable Life Preserver Garments.
Use since June 17, 1954.

SN 688,736. Herbert P. Kakuske, d. b. a. The Vokab Company, Janesville, Wis. Filed June 2, 1955.

VOKAB

For Word-Game Books—a Book Used in a Game or Contest in Which the Basic Principle Is the Correct Selection of Words Which Begin With Specified Letters and Which Fall Into Preselected Categories or Classifications.
Use since October 1937.

SN 688,746. Patsie Sinkey Norrick, Seattle, Wash. Filed June 2, 1955.

PETER PELICAN

For Animal Figures Fancifully Presenting the General Appearance of a Young Pelican.
Use since May 9, 1955.

SN 688,747. Patsie Sinkey Norrick, Seattle, Wash. Filed June 2, 1955.

PELI DANDI

For Animal Figures Fancifully Presenting the General Appearance of a Young Pelican.
Use since May 23, 1955.

SN 688,850. The Pioneer Rubber Company, Willard, Ohio. Filed June 3, 1955.

parti-pump

For Toy Comprising a Container for Balloons, Which Container Is Usable as a Pump To Inflate the Balloons.
Use since May 15, 1955.

SN 688,918. Evans Case Co., North Attleboro, Mass. Filed June 6, 1955.

Ecco

For Artificial Fishing Lures.
Use since Mar. 18, 1955.

SN 698,108. The Ohio Bowling & Billiard Supply Co., Cleveland, Ohio. Filed Nov. 25, 1955.

MAJOR

For Bowling Pins.
Use since Feb. 8, 1946.

SN 698,109. The Ohio Bowling & Billiard Supply Co., Cleveland, Ohio. Filed Nov. 25, 1955.

CLASSIC

For Bowling Pins.
Use since Feb. 8, 1946.

CLASS 23

SN 658,058. Franklin Manufacturing Co., Inc., Westmont, N. J. Filed Dec. 16, 1953. Sec. 2(f).

Franklin

For Tools for Expanding Tubing.
Use since on or about August 1943.

SN 674,466. Ingersoll-Rand Company, Phillipsburg, N. J. Filed Oct. 7, 1954.

Ingersoll-Rand PAC-AIR

The drawing is lined to indicate the colors red and blue.
For Portable Gas Compressors.
Use since June 16, 1954.

SN 675,966. Champion Pneumatic Machinery Co., Princeton, Ill. Filed Nov. 3, 1954.

CHAMPION QUALITY CPMC

Applicant claims ownership of Reg. No. 178,235.
For Air Compressors, Car Washers, Ceiling Air Hose Reels, and Automatic Tank Drains.
Use since August 1927.

SN 679,074. Malcolm Arthur Ball, d. b. a. Ball Drainage Co., Elgin, Ill. Filed Dec. 29, 1954.

EASY PUSH

For Finding Probe for Drainage Tile, Plumbing Fixtures, and Other Liquid Flow Systems.
Use since Aug. 3, 1954.

SN 680,236. Tobin-Arp Manufacturing Company, Minneapolis, Minn. Filed Jan. 20, 1955.

TAMCO

The drawing is lined for red.
For Scouring Machines for Wet Blasting Articles To Remove Foreign Matter Therefrom, and Parts Thereof; Equipment for Reconditioning Engines—Namely, Line Boring Machines, Pin Fitting Machines, Bearing Resizers, Valve Seat Grinders, Valve Refacers, and Parts Thereof; Garage and Service Station Equipment—Namely, Mechanically Operated Tire Changing Equipment, Mechanically Operated Jacks, and Parts Thereof.
Use since Dec. 13, 1948, as to TA within a diamond on line boring machines; and since Feb. 1, 1954, as to the mark shown on equipment for reconditioning engines.

SN 689,658. Savemore, Inc., Atlantic Highlands, N. J. Filed June 16, 1955.



The numeral "25" and the word "Cents" are disclaimed.
For Manually Operated Savings Stamp Vending Machines.
Use since November 1954.

SN 691,580. Pneumafil Corporation, Charlotte, N. C. Filed July 19, 1955.

LINT PNEUMAFIL FREE

For Creels Such as Used in Textile Mills.
Use since Dec. 20, 1954.

SN 691,655. American Type Founders, Inc., Elizabeth, N. J., to American Type Founders Co., Inc., Elizabeth, N. J. Filed July 21, 1955.

Kwikplate

For Printing Frame for Making Offset Printing Plates.
Use since Mar. 7, 1955.

SN 693,223. Whitin Machine Works, Whitinsville, Mass. Filed Aug. 16, 1955.

WHITIN SUPERFLEX

The drawing is lined for red. Applicant claims ownership of Reg. Nos. 121,375, 320,322, and 349,639.
For Spinning Frames (Cotton).
Use since Nov. 1, 1954.

SN 693,224. Whitin Machine Works, Whitinsville, Mass. Filed Aug. 16, 1955.

WHITIN FLEX-SPIN SPINDLE

The drawing is lined for red. Applicant claims ownership of Reg. Nos. 121,375, 320,322, and 349,639.
For Spinning Frames (Wool).
Use since Feb. 21, 1955.

SN 693,225. Whitin Machine Works, Whitinsville, Mass. Filed Aug. 16, 1955.

WHITIN HI-PRO DRIVE

The drawing is lined for red. Applicant claims ownership of Reg. Nos. 121,375, 320,322, and 349,639.
For Roving Frames.
Use since June 28, 1954.

SN 693,226. Whitin Machine Works, Whitinsville, Mass. Filed Aug. 16, 1955.

WHITIN QUIK-SET ANTI-DRAFT SETTING GEARS

The drawing is lined for red. Applicant claims ownership of Reg. Nos. 121,375, 320,322, and 349,639.
For Roving Frames.
Use since Aug. 30, 1954.

SN 693,227. Whitin Machine Works, Whitinsville, Mass. Filed Aug. 16, 1955.

WHITIN SPEED-MATIC WINDER

The drawing is lined for red. Applicant claims ownership of Reg. Nos. 121,375, 320,322, and 349,639.
For Winders.
Use since Sept. 10, 1954.

SN 694,831. Zephyr Engineered Products, Inc., Milford, Pa. Filed Sept. 16, 1955.

MINI-SUPERCHARG'R

For Device Interposed Between the Carburetor and Intake Manifold of an Internal Combustion Engine for Reducing the Fuel Charge to a Minutely Divided State and Supplying Additional Air Thereto.
Use since on or about Feb. 16, 1955.

SN 694,869. Ford Motor Company, Dearborn, Mich. Filed Sept. 19, 1955.

FLEXO-HITCH

For Harrows.
Use since June 29, 1955.

SN 695,019. Petersen Manufacturing Company, Inc., De Witt, Nebr. Filed Sept. 20, 1955. Sec. 2(f).

VISE-GRIP

Applicant claims ownership of Reg. Nos. 175,602, 543,333, and others.
For Wrenches, Pliers, and Work-Holding Clamps.
Use since Nov. 6, 1922, on wrenches and pliers.

SN 695,074. The Cincinnati Milling Machine Co., Cincinnati, Ohio. Filed Sept. 21, 1955.

Hydrospin

For Machine Tools—Namely, for Metal Shaping Machines.
Use since on or about Dec. 1, 1954.

SN 695,215. The Galion Iron Works & Manufacturing Company, Galion, Ohio. Filed Sept. 23, 1955.

GRADE-O-MATIC

For Road Graders.
Use since Sept. 13, 1955.

CLASS 26

SN 661,621. Electroacustic G. m. b. H., Kiel, Germany. Filed Feb. 25, 1954.

FISCHLUPE

Applicant claims ownership of German Reg. No. 615,359, dated Jan. 10, 1952.
For Underwater Echo Sounding Apparatus.

SN 668,786. Smethurst High-Light Limited, Heaton, Bolton, England. Filed June 23, 1954.

ATHENE

Applicant claims ownership of British Reg. No. 632,143, dated Oct. 18, 1944.
For Electron Microscope Specimen Grids and Optical Devices—Namely, Electron Microscope Aperture Discs and Optical Graticules.

SN 671,579. Sam Orleans & Associates, Inc., Knoxville, Tenn. Filed Aug. 12, 1954. Sec. 2(f).

RURAL AMERICA Review

For Pictorial Reel Film of Matters of Interest to Farmers and Suburban Dwellers Active in the Field of Agriculture and Farm Life, and Issued From Time to Time.
Use since Nov. 20, 1947.

SN 675,106. Superior Instruments Co., New York, N. Y. Filed Oct. 19, 1954.

MANUFACTURED BY SIECO SUPERIOR INSTRUMENTS CO

For Instruments for Testing, Checking and Measuring Voltage, Amperage, Resistance, Capacity Reactance, Inductance and Decibel Volume in Electric and Electronic Instruments, Appliances and Devices—Namely, Voltage and Ohmage Milliameters; Combined Voltage and Ohmage Milliameters and Capacity Reactance, Inductance and Decibel Measuring Devices; Bar-Generator Television Receiver Checking Devices; Radio Vacuum Tube Testing Devices; Television Picture Tube Testing Devices; Signal Generating Radio Receiver Testing Devices; Combined Voltage, Amperage and Resistance Measuring Devices; and Combined Voltage, Amperage, Resistance and Leakage Measuring Devices.
Use since on or about Aug. 1, 1946.

SN 681,232. Weston Electrical Instrument Corporation, Newark, N. J., to Weston Electrical Instrument Corporation (new corporation), Newark, N. J. Filed Feb. 7, 1955. Sec. 2(f).

Weston

Applicant claims ownership of Reg. No. 186,822.
For Instruments and Apparatus for Determining Humidity and the Moisture Content of Materials.
Use since Oct. 6, 1947.

SN 681,234. Weston Electrical Instrument Corporation, Newark, N. J., to Weston Electrical Instrument Corporation (new corporation), Newark, N. J. Filed Feb. 7, 1955. Sec. 2(f).

WESTON

Applicant claims ownership of Reg. No. 186,822.
For Electrical Apparatus for Testing Electron Tubes, Bimetallic Thermometers, Light-Measuring Instruments, Photographic Analysers, Electronic Amplifiers and Controllers, Standard Cells, Electrical Circuit Analysers, Tachometers and Tachometer Generators and Resistor Units.
Use since 1928.

SN 681,892. Taylor Instrument Companies, Rochester, N. Y. Filed Feb. 17, 1955. Sec. 2(f).

Taylor

Applicant claims ownership of Reg. No. 314,945.
For Altimeters, Anemometers, Aneroid Barometers, Mercury Barometers, Recording Barometers, Compasses, Temperature Regulators Including Heat-Sensitive Elements, Temperature Recorders and Indicators, Pressure Regulators and Vacuum Regulators Including Pressure-Sensitive Elements, Time Cycle Regulators, Time Interval Regulators, Gas Leak Indicating Gauges, Absolute Pressure Gauges, Air Ganges, Pressure and Vacuum Indicating Gauges, Pressure and Vacuum Recording Gauges, Rain Gauges, Indicating Hygrometers, Recording Hygrometers, Regulating Hygrometers, Hydrometers and Accessories, Combined Hydrometers and Thermometers (Thermo-Hydrometers), Load Indicators, Load Recorders, Tension Indicators, Tension Recorders, Volumetric Pressure Indicators, Volumetric Pressure Recorders, Manometers, Indicating Psychrometers, Recording Psychrometers, Humidity Regulators, Thermocouples and Accessories, Thermometers, Thermometer Accessories Including Wells, Sockets, Ferrules and Fittings, Fluid Flow Regulators, Fluid Flow Recorders, Fluid Flow Indicating Gauges, Temperature and Pressure Transmitters Including Temperature and Pressure-Sensitive Elements, Liquid Level Regulators, Liquid Level Recorders, Liquid Level Indicators, Differential Pressure Indicators, Differential Pressure Recorders, Differential Pressure Controllers, Fluid Flow Integrators.
Use since December 1932 on all the goods except temperature and pressure transmitters.

SN 692,214. Dynamic Center Engineering Co., Inc., Lawrenceville, Ga. Filed Aug. 1, 1955.

FLITE POSITIVE

For Wheel Balancing Device.
Use since on or about July 1, 1955.

CLASS 27

SN 691,124. Fa. Uhrenfabrik "Timex" Jaisle & Co. K. G., Pforzheim, Germany. Filed July 12, 1955.

T·W·C

For Wrist Watches.
Use since Jan. 2, 1955.

SN 692,931. General Time Corporation, New York, N. Y. Filed Aug. 12, 1955.

CLOCK OF TOMORROW

For Clocks.
Use since June 20, 1955.

CLASS 28

SN 674,846. Royal of Pittsburgh, Inc., Pittsburgh, Pa. Filed Oct. 14, 1954.

Royal

For Custom Jewelry Consisting of Metal Necklaces, Bracelets, Earrings, and Imitation Pearls.
Use since July 1939.

CLASS 29

SN 657,700. Dupli-Color Products Co., Inc., Chicago, Ill. Filed Dec. 9, 1953.

MAGIC BRUSH

No registration rights are claimed for the word "Brush" apart from the mark as shown.
For Fountain Brush Applicators for Applying Paints, Lacquers, Waxes, and the Like to Finished Surfaces, Sold Filled.
Use since Oct. 26, 1953.

SN 662,617. Econ-O Cloth, Chicago, Ill. Filed Mar. 15, 1954.

ECON-O-CLOTH

For Untreated Felt and Plastic Pads Sold Exclusively in Bulk Lots to Manufacturing Opticians for Use in Polishing Ophthalmic Lenses.
Use since April 1944.

CLASS 31

SN 685,093. Cambridge Filter Corporation, Syracuse, N. Y. Filed Apr. 7, 1955.

AEROSOLVE

For Filters Primarily Used as Air Filters.
Use since May 24, 1954.

CLASS 32

SN 677,516. Mauser Kommandit-Gesellschaft, Koln-Ehrenfeld, Germany. Filed Nov. 30, 1954. Sec. 2(f).

MAUSER

Applicant claims ownership of German Reg. No. 637,245, dated Apr. 22, 1953.

For Articles of Furniture of Steel and Other Materials—Namely, Desks, Typewriter Desks, Index Card Cases, Index Card Cabinets, Shelves for Files, File Cabinets, File Cases, Tables, Cabinets, Chairs, Stools, Wardrobes, Tool Cabinets, Instrument Cabinets, Couches, Beds.

SN 682,701. The Bunting Company, Inc., Philadelphia, Pa. Filed Mar. 3, 1955.

Bunting

"America's Finest"

Applicant disclaims the words "America's Finest" apart from the mark as shown. Applicant claims ownership of Reg. Nos. 376,547, 515,909, and 515,910.

For Outdoor Furniture—Namely, Gliders, Chairs, Rockers, Settees, and Tables.

Use since July 1953.

SN 690,433. Conant Ball Company, Gardner, Mass. Filed June 29, 1955. Sec. 2(f).

CONANT BALL · 1852 · FURNITURE MAKERS ·

Applicant disclaims the words "Furniture Makers" apart from the mark as shown.

For Household Furniture—Namely, Beds, Chests, Night Stands, Dressers, Mirrors, Vanities, Hi-Boys, Chests on Chests, Benches, Stools, Buffets, Cabinets, Tables, Chairs, Corner Cabinets, Chinas, End Tables, Cocktail Tables, Lamp Tables, Tavern Tables, Serving Tables, Bookcases, Corner Bookcases, Desks, Servers, Secretaries, Settees, Benches, Sofas, and Occasional Chairs.

Use since Jan. 1, 1947.

SN 693,825. Hamilton Manufacturing Corporation, Columbus, Ind. Filed Aug. 29, 1955.

Stylaire

For Serving Carts and Stools.

Use since May 24, 1955.

CLASS 34

SN 670,485. Hot-Tossie, Inc., Chicago, Ill. Filed July 23, 1954.

HOT-TOSSIE

For Table Service Implements, Bread, Roll, and Muffin Warmers.

Use since June 2, 1954.

SN 687,640. Southern California Water Heater Manufacturers Association, La Habra, Calif. Filed May 16, 1955. COLLECTIVE MARK.

Verified Long Life

The drawing is lined for blue. No claim is made to the words "Verified Long Life" apart from the other features of the mark.

For Gas Water Heaters.

Use since May 3, 1955.

SN 688,601. Typhoon Air Conditioning Co., Inc., Brooklyn, N. Y. Filed May 31, 1955.

TYPHOON

For Space Cooling, Heating, and Ventilating Apparatus, Including Room Heaters, Room Air Conditioners, and Combination Room Heaters and Air Conditioners, Heat Pumps and Parts Thereof.

Use since March 1939.

SN 688,604. E. Van Noorden Company, Boston, Mass. Filed May 31, 1955.

EXHAUST MASTER

For Gravity Roof Ventilators.

Use since May 18, 1955.

CLASS 35

SN 676,054. The Haynes Manufacturing Co., Cleveland, Ohio. Filed Nov. 4, 1954.

"Cushion Seal"

For Neoprene Gaskets for Sanitary Fittings.

Use since June 1, 1954.

CLASS 36

SN 672,547. Gordon V. Thompson, Limited, Toronto, Ontario, Canada. Filed Aug. 31, 1954.

Gavotte

For Mechanically Grooved Phonograph Records.

Use since May 23, 1949.

SN 674,546. Accordion Manufacturers and Wholesalers Outlet, Chicago, Ill. Filed Oct. 11, 1954.

Concerto

For Accordions.

Use since Oct. 26, 1949.

SN 674,981. London Records, Inc., New York, N. Y. Filed Oct. 18, 1954. Sec. 2(f) as to "London."

LONDON

Applicant claims ownership of Reg. Nos. 506,400, 506,401, and 593,643.

For Grooved Phonograph Records.

Use since during the month of October 1947.

SN 678,459. Jewish Music Documentary Society, Inc., New York, N. Y. Filed Dec. 16, 1954.

JMDS

For Grooved Phonograph Records.

Use since August 1954.

SN 686,525. Chicago Musical Instrument Co., Chicago, Ill. Filed Apr. 29, 1955.

OPERA

For Wind Band Instruments—Namely, Clarinets and Saxophones.

Use since Aug. 25, 1930.

SN 687,692. Gibson, Inc., Kalamazoo, Mich. Filed May 17, 1955.

FRETLESS WONDER

For Guitars and Like Stringed Musical Instruments of the Plucked String Type.

Use since Mar. 24, 1955.

SN 687,693. Gibson, Inc., Kalamazoo, Mich. Filed May 17, 1955.

COUNTRY WESTERN

For Stringed Musical Instruments of the Fretted Plucked String Type.

Use since Mar. 14, 1955.

SN 688,104. Vanity Fair Electronics Corporation, Brooklyn, N. Y. Filed May 23, 1955.

VANI-TONE

For Volume Control Apparatus for Mechanical Phonographs.

Use since Mar. 15, 1955.

CLASS 37

SN 642,184. United States Envelope Company, Springfield, Mass. Filed Feb. 12, 1953. Sec. 2(f) as to "Self Seal."

SELF SEAL

THE DRY SEAL

envelopes

The words "The Dry Seal Envelopes" are disclaimed, apart from the mark as shown. Applicant claims ownership of Reg. Nos. 342,657, 616,567, and others.

For Correspondence and Mailing Envelopes.

Use since Nov. 1, 1949; and since Aug. 22, 1935, as to "Self Seal."

SN 649,906. Rushmore Paper Mills Inc., Gouverneur, N. Y. Filed July 6, 1953.

BLUE RIBBON

Applicant claims ownership of Reg. No. 310,733.

For Paper Napkins, Paper Towels, and Toilet Paper.

Use since in July 1912.

SN 682,170. The National Acme Company, Cleveland, Ohio. Filed Feb. 23, 1955.

CHRONOLOG

For Paper Rolls for Use in Connection With Recording Instruments.

Use since on or about Apr. 9, 1932.

SN 682,200. The Sorg Paper Company, Middletown, Ohio. Filed Feb. 23, 1955.

TENSALEX

For Rubber Impregnated Paper.

Use since Oct. 20, 1954.

SN 682,201. The Sorg Paper Company, Middletown, Ohio. Filed Feb. 23, 1955.

TENSALON

For Rubber Treated Paper.
Use since Oct. 11, 1954.

SN 682,905. Gilbert Paper Company, Menasha, Wis. Filed Mar. 7, 1955. Sec. 2(f).

Cheltenham

Applicant claims ownership of the mark shown in Reg. No. 502,431.
For Bond Paper.
Use since May 6, 1937.

SN 682,940. The Lawrence Paper Company, Lawrence, Kans. Filed Mar. 7, 1955.

Hayhawk
E-ZE-WRAP

"E-Ze-Wrap" is disclaimed apart from the mark as shown. Applicant claims ownership of Reg. Nos. 88,836, 332,097, and others.
For Corrugated Paper.
Use since Jan. 31, 1955.

SN 683,622. F. L. Russell Corporation, Saugerties, N. Y. Filed Mar. 16, 1955.

Sterling

For Photograph Albums.
Use since Sept. 21, 1954.

SN 683,778. David Kahn, Inc., North Bergen, N. J. Filed Mar. 18, 1955.

R

For Fountain Pens and Parts Thereof, Including Pen Points and Pen Point Units.
Use since Jan. 31, 1955.

SN 683,811. Puritan Stationery Company, Inc., Philadelphia, Pa. Filed Mar. 18, 1955.

Lord Rochester

For Writing Paper and Mailing Envelopes, and Tablets of Writing Paper.
Use since Feb. 1, 1950.

SN 684,491. Sterling Pulp & Paper Company, Eau Claire, Wis. Filed Mar. 29, 1955.

TUFFY

For Paper Towels.
Use since Mar. 10, 1954.

SN 684,717. The Chicago Desk Pad Company, Inc., Chicago, Ill. Filed Apr. 1, 1955.



For Desk Pads, Phone Book Covers, Salesmen's Display Binders, Acetate Sheet Protectors, and Shop Ticket Holders Made of Acetate and Vinyl.
Use since Mar. 28, 1955.

SN 685,322. United Paper Company, Tampa, Fla. Filed Apr. 11, 1955.

UNITED

Applicant claims ownership of Reg. Nos. 155,106 and 219,403.
For Napkins, Wax Paper, Wrapping Paper, Paper Crate Guards and Paper Liners Used for Lining Baskets, Boxes, Crates, and Railroad Cars.
Use since 1902 on wrapping paper.

SN 685,580. Gulf States Paper Corporation, Tuscaloosa, Ala. Filed Apr. 15, 1955.

SQUARE OAK

The drawing is lined for red.
For Paper Bags.
Use since on or about Jan. 5, 1955.

SN 685,581. Gulf States Paper Corporation, Tuscaloosa, Ala. Filed Apr. 15, 1955.

Blue Spruce

Applicant claims ownership of Reg. No. 581,163.
For Paper Bags.
Use since on or about June 1, 1950.

SN 686,041. Clara E. Friedman, New York, N. Y. Filed Apr. 22, 1955.

TRIPSTER

For Travelers' Itinerary Card.
Use since Apr. 5, 1955.

SN 686,303. Gulf States Paper Corporation, Tuscaloosa, Ala. Filed Apr. 26, 1955.



The drawing is lined for the color red.
For Paper Bags.
Use since on or about Nov. 1, 1954.

SN 686,304. Gulf States Paper Corporation, Tuscaloosa, Ala. Filed Apr. 26, 1955.

Royal Oak

Applicant claims ownership of Reg. No. 558,746.
For Paper Bags.
Use since on or about Nov. 1, 1954.

SN 686,566. Potter-McCune Company, McKeesport, Pa. Filed Apr. 29, 1955.

POMCO

For Waxed Paper, Paper Sandwich Bags.
Use since September 1954.

SN 688,630. The Cromwell Paper Company, Chicago, Ill. Filed June 1, 1955.

STAK GRIP

For All Purpose Bags Made of Kraft Paper.
Use since Apr. 18, 1955.

CLASS 38

SN 639,691. The Catholic Digest International Inc., New York, N. Y., to The Catholic Digest, Inc., St. Paul, Minn. Filed Dec. 18, 1952. Sec. 2(f).

Lo MEJOR del Catholic Digest

The mark is freely translated as "The Best From the Catholic Digest." Applicant claims ownership of Reg. Nos. 347,302 and 348,939.
For Periodical.
Use since Mar. 12, 1952.

SN 678,376. Chicago Show Printing Company, Chicago, Ill. Filed Dec. 15, 1954.

SQUEE-ZEE

For Printed Advertising Displays.
Use since on or about Nov. 1, 1954.

SN 682,606. Wayne Knitting Mills, Fort Wayne, Ind. Filed Mar. 1, 1955.

"Fashion Marks"

For Periodical Publication.
Use since June 1954.

SN 682,839. The United States Trademark Association, New York, N. Y. Filed Mar. 4, 1955. Sec. 2(f).

THE TRADEMARK REPORTER

Applicant claims ownership of the mark shown in Reg. No. 279,395.
For Monthly Publication.
Use since at least as early as July 1911.

SN 687,126. St. Paul & Tacoma Lumber Co., Tacoma, Wash. Filed May 9, 1955.

the TREE LIFE LOG

Applicant claims ownership of Reg. Nos. 263,784, 524,789, and others.
For Periodical House Organ Magazine.
Use since February 1948.

SN 687,650. Chester D. Tripp, d. b. a. Economic Trend Line Studies, Chicago, Ill. Filed May 16, 1955. Sec. 2(f).

Economic Trend Line Studies

Applicant claims ownership of Reg. No. 421,057.
For Weekly News Letters Relating to Economic Studies and Charts and Explanations Thereon Relating to Said Studies Published From Time to Time.
Use since Sept. 29, 1942.

SN 688,470. Sigma Delta Chi, Professional Journalistic Fraternity, Chicago, Ill. Filed May 27, 1955.

THE QUILL

For Magazine.
Use since Feb. 1, 1910.

SN 688,635. National Comics Publications, Inc., New York, N. Y. Filed June 1, 1955.

The BRAVE and the BOLD

For Periodical Publication.
Use since Mar. 28, 1955.

SN 688,808. Hulda E. Ekenberg, Los Angeles, Calif. Filed June 3, 1955.

NAME DAY

For Greeting Cards and Calendars.
Use since May 28, 1955.

SN 688,817. Grosset & Dunlap, Inc., d. b. a. McLoughlin Bros., New York, N. Y. Filed June 3, 1955.

CLOVER BOOKS

Applicant hereby disclaims the word "Books" apart from the mark as shown.
For Books.
Use since May 11, 1955.

SN 688,820. Hitchcock Publishing Company, Wheaton, Ill. Filed June 3, 1955.

Resale,

Applicant claims ownership of Reg. No. 405,298.
For Publication Issued Monthly.
Use since 1943.

SN 688,821. Hitchcock Publishing Company, Wheaton, Ill. Filed June 3, 1955. Sec. 2(f).

WOOD WORKING Digest

For Publication Issued Monthly.
Use since 1943.

SN 689,038. Hitchcock Publishing Company, Wheaton, Ill. Filed June 7, 1955. Sec. 2(f).

Machine and Tool
BLUE BOOK

For Publication Issued Monthly.
Use since 1945.

SN 689,106. Frank Lawson Wright, Mamaroneck, N. Y. Filed June 7, 1955.

The Customart Press

For Weekly Classified Advertisements Publication.
Use since Nov. 3, 1949.

SN 693,644. Opinion Research Corporation, Princeton, N. J. Filed July 26, 1955.

THE PUBLIC OPINION INDEX FOR INDUSTRY

For Reports Published Monthly.
Use since Oct. 29, 1943.

CLASS 39

SN 667,453. Sea-B's, Inc., New York, N. Y. Filed June 1, 1954.

Sea-B's

For Women's and Misses' Beachwear—Namely, Swim Suits.
Use since on or about Apr. 1, 1954.

SN 668,715. Evan-Picone, Inc., New York, N. Y. Filed July 26, 1954.

Diva

For Slacks, Shorts for Outer Wear, and Pedal Pushers, for Women and Misses.
Use since May 1, 1952.

SN 674,298. Billy Taub 40th St. Corp., New York, N. Y. Filed Oct. 4, 1954.

Billy Taub

For Men's Wearing Apparel—Viz, Overcoats, Suits, Silk and Knitted Neckties and Mufflers, Ulsters, Silk and Woolen Sweaters, Bath Robes, Silk and Woolen Fibre Dressing Gowns; Men's, Women's, and Children's Suede, Mocha, Fur-Lined, and Knit-Lined Gloves.
Use since in February 1918.

SN 679,127. The Wilson Rubber Company, Canton, Ohio. Filed Dec. 29, 1954. Sec. 2(f).

WIL-GARD

Applicant claims ownership of Reg. No. 589,731.
For Gloves and Finger Cots Made of Natural Rubber and Synthetic Rubber Materials for Industrial and Household Use.
Use since on or about Nov. 3, 1947.

SN 679,539. Tru-Step Hosiery Company, Milwaukee, Wis. Filed Jan. 6, 1955.

ADD-A-SIZE

For Men's, Ladies', Children's, and Infants' Hosiery.
Use since Nov. 15, 1954.

SN 679,723. Marco Fischbein, Milan, Italy. Filed Jan. 11, 1955.

VERYLON

Claims priority under Sec. 44(d). Italian application filed July 20, 1954, Reg. No. 119,532, dated Oct. 8, 1954.
For Raincoats, Waterproof Jackets, Sport Jackets and Coats for Men, Women, and Children; Sports Dresses, Slacks, and Hats for Women and Girls; and Trousers, Slacks, and Caps for Men and Boys.

SN 679,842. Gotham Hosiery Company, Inc., New York, N. Y. Filed Jan. 13, 1955.

GLAMORALLS

For Negligees.
Use since Dec. 24, 1954.

SN 680,489. I. Schneierson & Sons, Inc., New York, N. Y. Filed Jan. 25, 1955.

wonder-tex

For Ladies' and Children's Slips and Nightgowns of a Textile Fabric.
Use since Dec. 14, 1954.

SN 680,490. Spirite Manufacturing Co., Inc., New York, N. Y. Filed Jan. 25, 1955.

Dee-Mure

For Brassieres.
Use since on or about July 21, 1954.

SN 681,081. Fishel-Cohen, Inc., New York, N. Y. Filed Feb. 4, 1955.

L'Angorlana

For Ladies' and Misses' Coats, Suits.
Use since Dec. 15, 1954.

SN 682,806. Jordan Marsh Company, Boston, Mass. Filed Mar. 4, 1955. Sec. 2(f).

Lady Jordan

Applicant claims ownership of Reg. No. 360,268.
For Hosiery.
Use since Nov. 28, 1954.

SN 683,571. Wollun Products Corporation, Carrollton, Ga. Filed Mar. 15, 1955.

"Tuf Hide"

For Work Clothing, Made of Denims and Cotton Twill, for Girls, Boys, and Men.
Use since Dec. 16, 1954.

SN 684,082. The United States Shoe Corporation, Cincinnati, Ohio. Filed Mar. 23, 1955.

THE TY-LO

For Ladies' Shoes.
Use since on or about Mar. 10, 1955.

SN 684,229. Model Brassiere Corp., New York, N. Y. Filed Mar. 25, 1955.



The trademark consists of a fabric daisy.
For Brassieres and Corsets.
Use since Mar. 15, 1955.

SN 684,884. Saks & Company, New York, N. Y. Filed Apr. 4, 1955.

PINCH-PUNCH

For Men's, Women's, and Misses' Hats.
Use since Feb. 2, 1933.

SN 685,113. Manchester Hosiery Mills, Manchester, N. H. Filed Apr. 7, 1955.

Lanylon

For Women's and Girls' Hosiery.
Use since Mar. 11, 1955.

SN 685,381. Little Miss English Ltd., New York, N. Y. Filed Apr. 12, 1955.

Acri-mates

For Women's and Misses' Sweaters, Skirts, Blouses, Slacks, Brassieres, and Shorts.
Use since Apr. 4, 1955.

SN 685,886. Brookville Glove Manufacturing Company, Inc., d. b. a. Brookville Glove Co., Brookville, Pa. Filed Apr. 20, 1955.

Glamor-Gards

For Household and Garden Gloves Made From a Knitted or Woven Fabric Impregnated and Coated With Vinyl Plastic.
Use since Feb. 17, 1955; and since November 1952 as to "Glamor."

SN 686,114. Thomson Company, Thomson, Ga. Filed Apr. 22, 1955. Sec. 2(f).



For Men's and Boys' Trousers.
Use since June 1946.

SN 686,116. The United States Shoe Corporation, Cincinnati, Ohio. Filed Apr. 22, 1955.

COBBIE SUBURBANITES

Applicant claims ownership of Reg. No. 151,287.
For Shoes, More Specifically Ladies' Shoes.
Use since on or about Jan. 20, 1955.

SN 686,495. Sweet-Orr & Co., Inc., New York, N. Y. Filed Apr. 28, 1955.

PREP-TANS

For Men's and Boys' Work Pants.
Use since on or about Apr. 11, 1955.

SN. 686,496. Sweet-Orr & Co., Inc., New York, N. Y. Filed Apr. 28, 1955.

PREP-GREYS

For Men's and Boys' Work Pants.
Use since on or about Apr. 11, 1955.

SN 686,903. L. Greif & Bro., Inc., Baltimore, Md. Filed May 5, 1955.

Eldorado

For Suits, Topcoats, Overcoats, Slacks, Sport Coats, and Jackets for Men, Boys, and Youths.
Use since Mar. 25, 1955.

SN 687,000. The Puritan Sportswear Corp., Altoona, Pa. Filed May 6, 1955. Sec. 2(f).

INVERNESS

Applicant claims ownership of Reg. No. 346,299.
For Clothing Made of Knitted or Woven Goods—Namely, Men's and Boys' Bathing Suits, Beach Robes, Outer Shirts, Sport Jackets, Hunting Coats, Ski Suits, and Blouses.
Use since Mar. 2, 1936.

SN 687,481. Zona Lee, San Francisco, Calif. Filed May 13, 1955.

ZonaLee

For Infants' Wear Including Jackets, Vests, Plastic Lined Pants, Garments With Long Pant Legs, Front Bibs and Back Straps, Both With and Without Accompanying Shirts or Blouses, Infants' Dresses, Play Suits, One-Piece Garments With Long Pant Legs, Short and Shirt Sets, Robes and Sunsuits.
Use since July 1944.

SN 687,789. Kushins, Inc., Santa Rosa, Calif. Filed May 18, 1955.

WORKWELLS

For Men's, Women's, and Boys' Shoes.
Use since on or about Mar. 1, 1955.

SN 688,038. H. L. Green Company, Inc., New York, N. Y. Filed May 23, 1955.



For Hosiery.
Use since September 1933.

SN 688,174. Nu-Maid Hosiery Mills, Inc., Darby, Pa. Filed May 24, 1955.

Rena

For Ladies' Hosiery.
Use since May 5, 1955.

SN 688,256. Palmyra Hosiery Mills, Inc., Albany, Ga. Filed May 25, 1955.

Dream by palmyra

Applicant claims ownership of Reg. No. 526,229.
For Ladies' Hosiery.
Use since Mar. 1, 1955.

SN 688,296. Auszmann Inc., Lansdale, Pa. Filed May 26, 1955.

CAR 'n CAMPUS

For Women's and Girls' Sport Clothing—Namely, Jackets, Coats, Separates, Blouses, Skirts, and Dresses.
Use since Apr. 11, 1955, on coats and jackets.

SN 688,305. A. Chatila & Co., Brooklyn, N. Y. Filed May 26, 1955.

Whirl a Weve

For Knitted Garments for Dancing—Namely, Leotards, All Styles and Models, Also Tights, Trunks, Skirts, Midriff Sets, and Tunic Sets for Children, Girls, Women, Boys, and Men.
Use since July 1, 1950.

SN 688,313. Dallas Hosiery Mills, Dallas, Ga. Filed May 26, 1955.



The representation of the goods and the word "Genuine" are disclaimed apart from the mark as shown.
For Socks.
Use since July 3, 1950.

SN 688,541. Kelray Knitting Mills, Inc., New York, N. Y. Filed May 31, 1955.

RAYS

For Ladies', Misses', and Children's Panties, Step-Ins, Bloomers, Pajamas, Briefs, Nightgowns, and Chemises.
Use since May 11, 1955.

SN 688,590. Spartans Manufacturing Co., Inc., New York, N. Y. Filed May 31, 1955.

Jay Vees

For Men's and Boys' Dress and Sport Shirts.
Use since May 4, 1955.

SN 690,083. I. C. Isaacs & Company, Incorporated, Baltimore, Md. Filed June 23, 1955.

TURN-TO

For Ladies' and Girls' Slacks.
Use since June 14, 1955.

SN 690,923. Wispese Corp., New York, N. Y. Filed July 7, 1955.



The mark constitutes the Greek letters "Phi" and "Pi."
For Girdles and Panty Girdles.
Use since June 1, 1955.

SN 691,116. Bonnie-Frances Lingerie Company, Inc., New Orleans, La. Filed July 12, 1955.



The wording "The Emblem of Better Fashions" is disclaimed apart from the mark as a whole.
For Lingerie—Namely, Slips, Petticoats, Panties, Gowns, Pajamas, Robes, and Negligees.
Use since October 1951.

SN 691,281. H. Daust Mfg. Co., St. Louis, Mo. Filed July 14, 1955.



For Baby Pants.
Use since June 20, 1955.

SN 691,395. Silf Skin, Inc., New York, N. Y. Filed July 15, 1955.

New Slant

For Women's Girdles and Panties.
Use since June 19, 1955.

SN 691,547. Boyer-Campbell Company, Detroit, Mich. Filed July 19, 1955.

SUPERGARD

For Protective Safety Hats Comprising a Headgear and a Hard Outer Shell Mounted on and Spaced From the Headgear.
Use since June 27, 1955.

SN 693,421. Airborne Shoes Limited, Leicester, England. Filed Aug. 22, 1955.

LIZIBETANS

Applicant claims ownership of British Reg. No. 710,645, dated Sept. 17, 1952.
For Boots, Bootees, Shoes, Slippers, and Sandals.

SN 693,620. Northwood Fur Farm, Cary, Ill. Filed Aug. 24, 1955.

BLACK SAPPHIRE

For Mink Garments—Namely, Coats, Capes, Jackets, Stoles, and Scarfs.
Use since Dec. 15, 1953.

SN 693,621. Northwood Fur Farm, Cary, Ill. Filed Aug. 24, 1955.

BLACK VELVET

For Mink Garments—Namely, Coats, Capes, Jackets, Stoles, and Scarfs.
Use since Jan. 15, 1954.

SN 693,663. Chipman Knitting Mills, Easton, Pa. Filed Aug. 25, 1955.

Romanude

For Women's Hosiery.
Use since June 24, 1955.

SN 693,755. I. B. Kleinert Rubber Company, New York, N. Y. Filed Aug. 26, 1955.

SOLITE

For Girdles.
Use since Mar. 16, 1955.

SN 693,758. Merker Counter Company, Inc., Haverhill, Mass. Filed Aug. 26, 1955.

MEL-O-TOP

For Shoe Counters.
Use since Aug. 12, 1955.

SN 693,882. Kay Windsor Frocks, Inc., Boston, Mass. Filed Aug. 29, 1955.

SECRETARY OF THE MONTH

For Dresses.
Use since July 19, 1955.

SN 693,903. Di Fini Originals, Inc., New York, N. Y. Filed Aug. 30, 1955.

Lady Par

For Ladies' Golf Garments—Namely, Slacks, Shorts, Skirts, Shirts, Blouses, Sport Coats, Dresses, Sweaters, Jackets, and Pedal Pushers.
Use since Nov. 19, 1954.

SN 693,990. Robert Hall Clothes, Inc., New York, N. Y. Filed Aug. 31, 1955.

GLENDOUGLAS

For Ladies' and Misses', Men's and Boys' Sweaters.
Use since on or about Aug. 9, 1955.

SN 694,071. The Lovable Brassiere Co., Atlanta, Ga. Filed Sept. 1, 1955.

DATON

For Brassieres.
Use since Aug. 3, 1955.

SN 694,260. Philip Shlansky & Sons, Inc., New York, N. Y. Filed Sept. 6, 1955.

ORNELLA

For Ladies' and Misses' Coats, Suits, Jackets, and Outer Skirts.
Use since Aug. 2, 1954.

SN 694,454. Saks & Company, New York, N. Y. Filed Sept. 9, 1955.

Safinia

For Women's and Misses' Coats, Suits, Dresses, Jackets, Blouses, Outer Skirts, and Jumpers.
Use since July 11, 1955.

SN 694,460. Trefousse Gloves, Inc., New York, N. Y. Filed Sept. 9, 1955.

CHAMBORD

For Gloves.
Use since Aug. 24, 1955.

SN 694,499. Monarch Garment Corp., New York, N. Y. Filed Sept. 12, 1955.

Sutton Park

For Coats and Suits for Women and Young Women and Misses.
Use since June 1, 1936.

SN 697,893. The American Automobile Association (Incorporated), Washington, D. C. Filed Nov. 23, 1955.

AAA

Applicant claims ownership of Reg. No. 344,381.
For Overalls, Raincoats and Rain Caps, Arm Bands, Parade Caps, and Belts for Outer Wear.
Use since 1921.

SN 698,327. Wm. P. Goldman & Bros. Inc., New York, N. Y. Filed Nov. 14, 1955.

Glen Guard

Applicant claims ownership of Reg. No. 430,642.
For Men's Suits, Topcoats, Overcoats, Slacks, Sport Coats, and Jackets.
Use since Mar. 1, 1936.

CLASS 40

SN 675,234. Schner-Block Company, Inc., New York, N. Y. Filed Oct. 21, 1954. Sec. 2(f).

Exquisit

Applicant claims ownership of Reg. No. 337,208.
For Buttons.
Use since 1931.

SN 679,971. James J. Barry, Jr., d. b. a. J. J. Barry & Co., Chicago, Ill. Filed Jan. 17, 1955.

Witch

For Needle Threaders.
Use since Sept. 11, 1953.

SN 688,828. Knobby Krafters, Attleboro, Mass. Filed June 3, 1955.

knobby twist pins

No claim is made to the word "Pins" apart from the mark as shown. Applicant claims ownership of Reg. No. 243,881.
For Screw Pins for Fastening Tidies, Slip Covers, Tags, Etc.
Use since Feb. 1, 1955.

CLASS 42

SN 667,497. Bourne Mills, Fall River, Mass. Filed June 2, 1954.

OPALON

For Sateen Drapery Fabrics Composed of Cotton and Rayon Fibers.
Use since June 25, 1953.

SN 677,689. Woolmark Corporation, New York, N. Y. Filed Dec. 2, 1954.

LANALUX

For Woven Piece Goods of Wool and Wool Blends.
Use since Nov. 9, 1954.

SN 678,614. Electric Parts Corporation, Chicago, Ill. Filed Dec. 20, 1954.

SLUMBEREST

Applicant claims ownership of Reg. No. 311,112.
For Blankets, Quilts, and Bed Sheets.
Use since Sept. 15, 1933.

SN 680,986. Woolmark Corporation, New York, N. Y. Filed Feb. 2, 1955.

Wedgmoor

For Woven Piece Goods of Wool and Wool Blends.
Use since Nov. 23, 1954.

SN 687,182. Carlton Mills Company, Philadelphia, Pa. Filed May 10, 1955.

CARAZIB

For Woolen Fabrics, and Part Wool Fabrics.
Use since Apr. 12, 1955.

SN 688,003. Aktiengesellschaft Cilander, Herisau, Switzerland. Filed May 23, 1955.

CILONDA

Applicant claims ownership of Swiss Reg. No. 155,103, dated Feb. 25, 1955; and U. S. Reg. Nos. 156,977, 305,155, and others.
For Finished Textile Piece Goods of Cotton, Wool, Silk, and Synthetic Fibers.

SN 688,698. Amerotron Corporation, New York, N. Y. Filed June 2, 1955.

BEAV-R-MIX

For Piece Goods Consisting of Wool and Beaver.
Use since Mar. 29, 1955.

SN 690,551. Robert Hall Clothes, Inc., New York, N. Y. Filed June 30, 1955.

Robert Hall

Applicant claims ownership of Reg. Nos. 523,355 and 571,688.
For Piece Goods of Nylon, Rayon, Cotton, Wool or Silk, or Substitutes Therefor, or Combinations Thereof.
Use since on or about June 10, 1955.

SN 690,865. Congoleum-Nairn Inc., Kearny, N. J. Filed July 7, 1955.

GOLD SEAL

Applicant claims ownership of Reg. No. 514,476.
For Fibre Rugs.
Use since June 21, 1955.

SN 691,168. J. P. Stevens & Co., Inc., New York, N. Y. Filed July 12, 1955.

TWIST · SHEEN

For Cotton Piece Goods.
Use since June 6, 1955.

SN 693,745. Glen Raven Cotton Mills, Inc., Glen Raven, N. C. Filed Aug. 26, 1955.

ARAMANGO

For Cotton Piece Goods.
Use since Aug. 16, 1955.

SN 694,151. Reeves Brothers, Inc., New York, N. Y. Filed Sept. 2, 1955.

REBOUND

For Cotton Piece Goods.
Use since in or about August 1954.

SN 694,204. Dan River Mills, Incorporated, Danville, Va. Filed Sept. 6, 1955.

THICKET

For Cotton Fabric in the Piece.
Use since Aug. 12, 1955.

SN 694,205. Dan River Mills, Incorporated, Danville, Va. Filed Sept. 6, 1955.

LOOP THE LOOP

For Cotton Fabric in the Piece.
Use since Aug. 16, 1955.

SN 694,206. Dan River Mills, Incorporated, Danville, Va. Filed Sept. 6, 1955.

THATCH

For Cotton Fabric in the Piece.
Use since Aug. 11, 1955.

CLASS 43

SN 685,546. Oakdale Cotton Mills, Jamestown, N. C. Filed Mar. 22, 1955.

Oakdale

For Threads and Yarns Made of Cotton and Synthetic Fibers.
Use since 1880 on threads and yarns made of cotton.

SN 685,547. Oakdale Cotton Mills, Jamestown, N. C. Filed Mar. 22, 1955.



For Threads and Yarns Made of Cotton and Synthetic Fibers.
Use since 1950.

SN 686,359. Durham Hosiery Mills, Durham, N. C. Filed Apr. 27, 1955.

PHANTOM

Applicant claims ownership of Reg. No. 201,200.
For Various Types of Yarns.
Use since Dec. 6, 1954.

SN 697,717. Sumitomo Shoji Kabushiki Kaisha, Higashi-ku, Osaka, Japan. Filed Nov. 4, 1955.



Applicant claims ownership of Japanese Reg. Nos. 429,383, 429,384, 429,385, and 429,386, all dated Aug. 12, 1943.
For Raw Silk, Silk Yarn, Artificial Silk Yarn, Wild Silk Yarn, "Tegusu" (Threads of Wild Silk Cocoons), Gold and Silver Threads; Cotton Yarn; Woolen Yarn; Hemp Yarn and Yarns Not Included in the Foregoing Denominations.

SN 697,757. Bernhard Ulmann Co. Inc., Long Island City, N. Y. Filed Nov. 7, 1955.

SURE-MATCH

For Art Needlework Yarns.
Use since Mar. 15, 1955.

SN 697,867. Bernhard Ulmann Co. Inc., Long Island City, N. Y. Filed Nov. 7, 1955.

TRU-MATCH

For Art Needlework Yarns.
Use since Mar. 14, 1955.

CLASS 44

SN 661,299. Joseph Struhl Co., Inc., Brooklyn, N. Y., to Struway Products Corp., Brooklyn, N. Y. Filed Feb. 18, 1954.

BOTTLE BUDDY

For Nursing Bottle Holders.
Use since Jan. 28, 1954.

SN 676,702. Zenith Radio Corporation, Chicago, Ill. Filed Nov. 15, 1954. Sec. 2(f).

the royalty of hearing

Applicant claims ownership of Reg. Nos. 533,267, 553,555, and 581,375.
For Electrical Hearing Aids and Parts Thereof.
Use since Jan. 13, 1949.

SN 687,304. Mine Safety Appliances Company, Pittsburgh, Pa. Filed May 11, 1955.

MSA
SAFETY EQUIPMENT HEADQUARTERS

The words "Safety Equipment Headquarters" are disclaimed apart from the mark shown in the drawing. Applicant claims ownership of Reg. Nos. 204,301 and 403,670.
For Respiratory Protective Apparatus; Eye and Face Protective Apparatus; Safety Belts, Miners' Belts, Safety Harnesses, Safety Straps, Safety Lines, Life Lines and Reels, Linemen's Climbers; Ear Protective Apparatus; Respiratory Therapy Apparatus; First Aid Apparatus; Parts Thereof and Accessories Thereto.
Use since at least as early as January 1953.

SN 694,427. Institutional Products Corporation, New York, N. Y. Filed Sept. 9, 1955.

ALCOFOLD

For Portable Folding Alcohol Sterilizers.
Use since during the year 1940.

SN 694,722. Leonard Long, d. b. a. Bator Scientific Products Co., Atlanta, Ga. Filed Sept. 15, 1955.

WRIGGELATOR

For Device for Supporting, Positioning, and Immobilizing Live Bodies, Commonly Known as an Infant Immobilizer.
Use since July 29, 1955.

CLASS 45

SN 694,370. Leslie W. Knutson, d. b. a. K-N Sales Co., Longview, Tex. Filed Sept. 8, 1955.



For Root Beer Concentrate.
Use since Mar. 18, 1953.

SN 695,065. International Union of United Brewery, Flour, Cereal, Soft Drink and Distillery Workers of America, Cincinnati, Ohio. Filed Aug. 5, 1955. COLLECTIVE MARK.



For Soft Drinks, Including Cider, Having Less Than 7% Alcohol by Volume, Maltless and Non-Alcoholic, Cereal, Beverages and Natural Spring Mineral Waters.
Use since December 1912.

CLASS 46

SN 621,649. Archer-Daniels-Midland Company, Minneapolis, Minn. Filed Nov. 26, 1951.



For Alfalfa in Its Natural State, Chopped Alfalfa, Dehydrated Alfalfa, and Dehydrated Alfalfa Meal, All for Use as a Supplement in Feed for Cattle.
Use since during June 1940.

SN 624,455. Promotional Enterprises, Inc., New York, N. Y. Filed Feb. 2, 1952.



The portrait shown in the drawing is that of the television star Fran Allison, whose consent to the use and registration of her picture is of record.
For Bread.
Use since Jan. 14, 1952.

SN 652,168. Chunky Chocolate Corp., also known as Chunky Chocolate Corporation, Brooklyn, N. Y., to Loft Candy Corporation, Long Island City, N. Y. Filed Aug. 24, 1953.

SWEET 'n SLIM

For Candy.
Use since on or about June 16, 1953.

SN 652,509. D & F Enterprises, St. Paul, Minn., to National Dairy Queen Development Co., Davenport, Iowa. Filed Aug. 31, 1953.



The lining in the drawing constitutes lining forming part of the mark and does not represent color.
For Ice Cream Bars and Ice Milk Bars.
Use since Aug. 27, 1953.

SN 652,829. Buffalo Cooked Shrimp Co., Inc., Buffalo, N. Y., from Buffalo Cooked Shrimp Company. Filed Sept. 8, 1953.



For Frozen Cooked and Breaded Shrimp.
Use since July 2, 1953.

SN 663,366. Grace Chemical Company, New York, N. Y., to W. R. Grace & Co., New York, N. Y. Filed Mar. 26, 1954.

PROTREA

For Urea Feed Compound Used as a Substitute for Protein in Ruminant Animal Feeds.
Use since Mar. 12, 1954.

SN 663,887. Dixie Home Stores, Greenville, S. C. Filed Apr. 5, 1954.

Thrifty Maid

For Canned Peas, Canned Tomatoes, and Canned Corn.
Use since Aug. 26, 1953.

SN 671,629. Calavo, Inc., Los Angeles, Calif., now by merger Calavo Growers of California. Filed Aug. 13, 1954.



The words "Tropical Fruit" are disclaimed apart from the mark as shown. Applicant claims ownership of Reg. Nos. 357,974, 561,743, and others.
For Fresh Limes, Fresh Avocados, and Fresh Mangoes.
Use since June 4, 1954, on fresh limes.

SN 673,790. Stuckey's, Inc., Eastman, Ga. Filed Sept. 24, 1954. Sec. 2(f) as to "Stuckey's."



The drawing is lined for brown.
For Pecan Candy.
Use since May 15, 1954; and since Jan. 1, 1947, as to "Stuckey's."

SN 676,229. Thurston L. Reavis, d. b. a. Reavis Vending Supply Co., St. Louis, Mo. Filed Nov. 8, 1954.



For Confectionery Flavoring Syrups.
Use since Oct. 15, 1954.

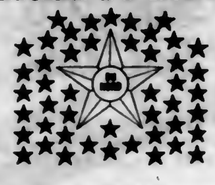
SN 678,400. Kerney J. Hurst, d. b. a. Hurst's Dairy Supreme, Jackson, Miss. Filed Dec. 15, 1954.



For Ice Cream, Frozen Custard, Sherbet, Ice Milk, and Butter Fat.
Use since Feb. 9, 1954.

SN 679,366. Burrus Mills, Incorporated, d. b. a. Pan American Flour Mills, Dallas, Tex. Filed Jan. 4, 1955.

ETOILE DU DORD



The word "Etoile" means "Star" and the words "Du Nord" mean "Of the North." Applicant claims ownership of Reg. Nos. 533,359, 231,507, and others.
For Wheat Flour.
Use since June 1952.

SN 680,065. Calgon, Incorporated, Pittsburgh, Pa. Filed Jan. 18, 1955.

CURAVIS

Applicant claims ownership of Reg. No. 604,548.
For Chemical Compositions Used in the Treatment of Meats and Meat Products To Improve Their Color and Moisture Retention.
Use since Sept. 1, 1954.

SN 680,573. American Cyanamid Company, New York, N. Y. Filed Jan. 27, 1955.

ACRONIZE

For Food Preservative.
Use since Jan. 14, 1955.

SN 683,062. The Procter & Gamble Company, Cincinnati, Ohio. Filed Mar. 8, 1955.

DUEX

For Edible Combination of Monoglycerides, Diglycerides and Triglycerides of Hydrogenated Vegetable Oil.
Use since Feb. 10, 1955.

SN 683,216. Marhoefer Packing Company, Inc., Chicago, Ill. Filed Mar. 10, 1955.

Smokist

For Pork Sausage.
Use since Feb. 2, 1932.

SN 683,866. Irving Epstein, d. b. a. French Steak Company, Swoyersville, Pa. Filed Mar. 21, 1955.



For Meats—Namely, Frozen Beef Steaks.
Use since 1930.

SN 684,135. International Milling Company, Minneapolis, Minn. Filed Mar. 24, 1955.

WHITE PRANCER

Applicant claims ownership of Reg. No. 392,639.
For Wheat Flour.
Use since at least as early as May 22, 1941.

SN 684,488. James P. Spoto, d. b. a. Northwestern Canning & Packing Co., Seffner, Fla. Filed Mar. 29, 1955.

HOPPIN JON

For Canned Vegetables, Canned Pork and Beans, Canned Spaghetti.
Use since June 8, 1953.

SN 684,672. Morton Salt Company, Chicago, Ill. Filed Mar. 31, 1955. Sec. 2(f) as to "Myles."



Applicant claims ownership of Reg. Nos. 215,434, 509,300, and others.
For Salt.
Use since May 1952; and since July 1903 as to "Myles."

SN 684,920. Berelson, Inc., San Francisco, Calif. Filed Apr. 5, 1955.

Tropic Star

For Canned Fish.
Use since Mar. 18, 1955.

SN 684,952. Ronald L. Mamlok, d. b. a. R. Mamlok, San Mateo, Calif. Filed Apr. 5, 1955.

PICA BELLA

For Canned Fish.
Use since November 1953.

SN 684,953. Ronald L. Mamlok, d. b. a. R. Mamlok, San Mateo, Calif. Filed Apr. 5, 1955.

La NINFA

The mark may be translated as "The Nymph."
For Canned Fish.
Use since November 1953.

SN 686,358. Dodge & Olcott, Inc., New York, N. Y. Filed Apr. 27, 1955.

DOLCOSEAL

Applicant claims ownership of Reg. Nos. 547,521 and 608,412.
For Compounds Used in Flavoring Food and Confections—Namely, Locked-In Flavors, Such as Flavor Buds.
Use since Mar. 1, 1953.

SN 686,439. Robert J. Ghiglia, d. b. a. Merced Produce & Packing Co., Chowchilla, Calif. Filed Apr. 28, 1955.

LUCKY BUY

For Fresh Fruits and Fresh Vegetables.
Use since Apr. 13, 1955.

SN 686,691. R. & G. Distributors, Inc., New York, N. Y. Filed May 2, 1955.

R & G

Applicant claims ownership of Reg. No. 280,856.
For Canned Fish.
Use since July 1, 1930.

SN 687,808. The Pierce Oil Products Corporation, East Rochester, N. Y. Filed May 18, 1955.

PIERCO

For Edible Vegetable Oils.
Use since during 1919.

SN 687,927. Evangeline Pepper & Food Products, Inc., St. Martinsville, La. Filed May 20, 1955.

EVANGELINE

Applicant claims ownership of Reg. Nos. 515,311, 522,154, and 528,215.
For Italian Peppers, Distilled Vinegar, Worcestershire Sauce, Creole Catsup, and Steak Sauce.
Use since in the year 1920 on Worcestershire sauce.

SN 687,929. Farmers' Rice Growers Cooperative, San Francisco, Calif. Filed May 20, 1955.

CROWN

Applicant claims ownership of Reg. No. 581,588.
For Rice.
Use since Apr. 23, 1955.

SN 688,065. Northwest Packing Company, Portland, Oreg. Filed May 23, 1955.

OREGON TRAIL

Applicant claims ownership of Reg. No. 441,581.
For Canned Vegetables, Frozen Fruits, and Canned Fruits.
Use since May 1, 1923, on canned vegetables.

SN 688,185. Prepared Foods, Inc., Lafayette, Ind. Filed May 24, 1955.

Dinner Bell

For Prepared Frozen Foods—Namely, Beef Pot Pie, Chicken Pot Pie, Turkey Pot Pie, Apple Pie, Cherry Pie, and Peach Pie.
Use since May 2, 1955.

SN 688,186. Prepared Foods, Inc., Lafayette, Ind. Filed May 24, 1955.

Fiesta

For Prepared Frozen Foods—Namely, Beef Pot Pie, Chicken Pot Pie, Turkey Pot Pie, Apple Pie, Cherry Pie, and Peach Pie.
Use since May 2, 1955.

SN 688,453. Ottenberg's Bakers, Inc., Washington, D. C. Filed May 27, 1955.

Nosh-a-Rye

For Bread.
Use since Mar. 9, 1955.

SN 688,507. Porter L. Crane, Wolcott, N. Y. Filed May 31, 1955.

APPLEOLA FARMS

For Apple Juice.
Use since Feb. 19, 1955.

SN 688,743. Meat Industry Suppliers, Inc., Chicago, Ill. Filed June 2, 1955.

SOLPHOS

For Blend of Edible Phosphates for Use in Making Meat Products.
Use since Apr. 13, 1955.

SN 688,831. Martin Produce, Inc., Salinas, Calif. Filed June 3, 1955.

CASH & CARRY

For Fresh Vegetables.
Use since April 1949.

SN 689,018. Walter C. Becker, d. b. a. Walbeck Foods, Kennett Square, Pa. Filed June 7, 1955.

Walbeck

For Pickles.
Use since May 1, 1924.

SN 689,031. Food Fair Stores, Inc., Philadelphia, Pa. Filed June 7, 1955. Sec. 2(f).

FYNE-SPRED

Applicant claims ownership of Reg. No. 590,938.
For Margarine.
Use since Oct. 24, 1949.

SN 689,265. The Borden Company, New York, N. Y. Filed June 10, 1955.

Tulip

Applicant claims ownership of Reg. Nos. 237,491 and 279,660.
For Cheese.
Use since Dec. 31, 1947.

SN 689,320. Voinvienti-Osuuslilke Valio r. l., d. b. a. Valio Co-Operative Butter Export Association, Helsinki, Finland. Filed June 10, 1955.

VALIO

The word "Valio" means "Elite," "Choice," or "Select."
Applicant claims ownership of Finnish Reg. No. 27,173, dated Dec. 9, 1953; and U. S. Reg. No. 323,065.
For Cheese.

SN 689,454. Armour and Company, Chicago, Ill. Filed June 14, 1955. Sec. 2(f).

CASERTA

For Sausage.
Use since 1917.

SN 689,525. Snively Groves, Inc., Winter Haven, Fla. Filed June 14, 1955.

ST. HELENA

For Fresh Citrus Fruits.
Use since 1935.

SN 689,639. Mutual Orange Distributors, Redlands, Calif. Filed June 16, 1955.

MR. ORANGE

For Fresh Oranges.
Use since Sept. 28, 1954.

SN 689,640. Mutual Orange Distributors, Redlands, Calif. Filed June 16, 1955.

MR. LEMON

For Fresh Lemons.
Use since Sept. 28, 1954.

SN 689,641. Mutual Orange Distributors, Redlands, Calif. Filed June 16, 1955.

MR. AVOCADO

For Fresh Avocados.
Use since Mar. 30, 1955.

SN 689,642. Mutual Orange Distributors, Redlands, Calif. Filed June 16, 1955.

MR. GRAPEFRUIT

For Fresh Grapefruit.
Use since Sept. 28, 1954.

SN 689,770. Taste Engineering, Inc., Chicago, Ill. Filed June 17, 1955.

Tastelation

For Flavors and Flavor Intensifiers for Animal Foods and Feed Supplements.
Use since May 5, 1955.

SN 689,809. Tom Cox, d. b. a. Good-Health Confections, Saugus, Calif. Filed June 20, 1955.

CAROLATE

For Candy.
Use since June 29, 1954.

SN 690,086. Kern Foods, Inc., Cincinnati, Ohio. Filed June 23, 1955.

Sea Breeze

For Candy.
Use since Jan. 24, 1945.

SN 690,388. Milford Canning Company, Milford, Ill. Filed June 28, 1955.

Big Value

For Canned Vegetables.
Use since during 1935.

SN 690,464. W. H. Hairston, d. b. a. Hairston Produce Company, Dallas, Tex. Filed June 29, 1955.

Pat'n Mike

For Fresh Vegetables and Fruits—Namely, Potatoes, Onions, Celery, Spinach, Carrots, Tomatoes, Peppers, Lettuce, Oranges, Lemons, Grapefruit, Apples, and Frozen Orange Juice.
Use since Oct. 15, 1953.

SN 694,398. Cousins Virdel, Inc., South Lyon, Mich. Filed Sept. 8, 1955.

DINNER BELL

For Canned and Dry Dog Food.
Use since Feb. 1, 1929.

CLASS 47

SN 670,808. Munson G. Shaw Co., Inc., New York, N. Y. Filed July 29, 1954.

Nº 30

For Wines.
Use since Nov. 30, 1943.

SN 681,326. Companhia Geral da Agricultura das Vinhas do Alto Douro, S. A. R. L., Oporto, Portugal. Filed Jan. 19, 1955.

REAL COMPANHIA VELHA

The Portuguese words "Real Companhia Velha" may be translated as "Royal Old Company." Applicant claims ownership of Portuguese Reg. No. 60,941, dated July 27, 1948; and U. S. Reg. Nos. 316,340 and 328,081.
For Wines.

SN 694,067. Italian Swiss Colony, San Francisco, Calif. Filed Sept. 1, 1955.



For Wines.
Use since Nov. 29, 1954.

CLASS 48

SN 683,877. Arthur Guinness Son & Co., Ltd., London, England. Filed Mar. 21, 1955.



For Beer and Ale.
Use since on or about Feb. 21, 1955.

SN 691,601. American Brewery, Incorporated, Baltimore, Md. Filed July 20, 1955.



For Beer.
Use since Apr. 18, 1955.

SN 695,064. International Union of United Brewery, Flour, Cereal, Soft Drink and Distillery Workers of America, Cincinnati, Ohio. Filed Aug. 5, 1955. COLLECTIVE MARK.



For Beer, Ale, Stout, and Porter.
Use since October 1896.

CLASS 49

SN 694,096. Max Sobel Wholesale Liquors, San Francisco, Calif. Filed Sept. 1, 1955.

Ballerina

For Vodka.
Use since Jan. 25, 1955.

CLASS 50

SN 657,384. Wendell C. Spear, d. b. a. Spear Engineering Company, Colorado Springs, Colo. Filed Dec. 3, 1953.

DAY-n-NIGHT

For Non-Electrical, Residental Markers and Nameplates Bearing Names, House Numbers and/or Other Data Adapted for Use on Houses, Lawns, Gateways, Streets and Roads and Other Places Where Information Identifying or Locating Residences Is Commonly Carried, Made and Sold as Complete Markers on Individual Mail Orders.
Use since on or about Sept. 14, 1949.

SN 676,894. The Jason Corporation, Hoboken, N. J. Filed Nov. 18, 1954.

Fabriseal

For Reinforced Plastic Sheeting Simulating Leather.
Use since November 1953.

SN 679,622. Western Progress, Inc., San Jose, Calif. Filed Jan. 7, 1955.

SafetyScope

For Highway Warning Devices Consisting of an Adjustable Stand of the Telescopic or Folding Type Upon the Top of Which May Be Mounted Flares, Rotary Reflectors or Other Elements for Signalling Purposes.
Use since Mar. 3, 1954.

SN 679,812. Polymer Industrie Chimiche S. P. A., Milan, Italy. Filed Dec. 2, 1954.

MOVIL

Priority under Sec. 44(d). Italian application filed June 10, 1954, Reg. No. 119,887, dated Nov. 25, 1954.
For Tents and Tarpaulins.

SN 684,376. Ag. Engineering Co., Chestertown, Md. Filed Mar. 29, 1955.

SAVE-ALL FARROWER

For Suckling and Farrowing Crates—Namely, Structures Designed for Facilitating the Birth of Pigs and the Subsequent Suckling Thereof.
Use since June 22, 1954.

SN 686,346. West Penn Closure Corporation, Warren, Pa. Filed Apr. 26, 1955.



The words "Makers of the First Flexible Spouts," the word "Closures" and the representation of the goods, are hereby disclaimed.
For Plastic Closure Spout Designed To Fit Various Types of Conventional Beaded Nozzle Cans.
Use since Apr. 7, 1955.

SN 687,351. Ernest Chandler, Inc., New York, N. Y. Filed May 12, 1955.

Cabana Rama

Applicant disclaims use of the word "Cabana" apart from the mark shown.
For Beach Cabanas, or the Like.
Use since Jan. 12, 1955.

SN 694,363. Glostex Products, Inc., Chicago, Ill. Filed Sept. 8, 1955.

FLAPPERS

For Pennants and Streamers Used for Advertising Purposes.
Use since Aug. 17, 1955.

CLASS 51

SN 661,196. Harper Method, Rochester, N. Y., to Harper Method, Inc., New York, N. Y. Filed Feb. 17, 1954.

"KeraGENE"

For Permanent Wave Lotion; Liquid Conditioner for the Hair; Tonic To Aid in the Control of Dandruff; and Styling Lotion for the Hair.
Use since Oct. 31, 1950.

SN 664,368. Vicdeal, Inc., El Monte, Calif. Filed Apr. 12, 1954.

Cynstik

For Combination Lipstick Brush and Eyebrow Pencil.
Use since on or about Oct. 1, 1953.

SN 673,190. Minitint Company, Chicago, Ill. Filed Sept. 14, 1954.

"MINITINT"

For Hair Dye and Hair Tint.
Use since June 15, 1954.

SN 674,708. Societe Monsavon-L'Oreal, Societe Anonyme, d. b. a. L'Oreal-Paris, Paris (Seine), France. Filed Oct. 12, 1954.

RÉGÉ-COLOR

Applicant claims ownership of French Reg. No. 424,689, dated Dec. 26, 1952.
For Perfumes, Nail Polish, Lipsticks, Rouge, Face and Body Powder, Sun Tan Oil, Beautifying Skin Lotions, and Hair Preparations—Namely, Hair Lotions, Hair Dyes, Color Rinses, Hair Tints, Hair Bleaches, Hair Rinses, Permanent Waving Liquids, and Hair Oils.

SN 675,355. John Badovinac, d. b. a. Badovinac's French Perfume Company and also as Badovinac, Seattle, Wash. Filed Oct. 25, 1954.

SCENTED GOLD

For Liquid Perfume.
Use since Oct. 19, 1954.

SN 675,431. The Realistic Company, Cincinnati, Ohio. Filed Oct. 25, 1954.

"So Natural!"

For Hair Curling Lotion for Use Exclusively by Professional Beauticians and the Like.
Use since on or about Aug. 12, 1954.

SN 675,556. Fuller Products Co., Chicago, Ill. Filed Oct. 27, 1954. Sec. 2(f).

Fuller's QUALITY

Applicant claims ownership of Reg. No. 353,716.
For Preparations Designed To Stimulate the Growth of Hair, Pressing Oil, Hair Dressing, Cosmetic Skin Lotion, Body Deodorants, After-Shaving Lotion, and Brilliantine.
Use since July 1, 1936.

SN 677,524. Helene Pessl, Inc., New York, N. Y. Filed Nov. 30, 1954.

PINK POPSICLE

For Lipstick, Hand Lotion, Toilet Water, Nail Polish, and Dusting Powder.
Use since Nov. 18, 1954.

SN 677,612. Societe Monsavon-L'Oreal, Societe Anonyme, d. b. a. L'Oreal-Paris, Paris (Seine), France. Filed Dec. 1, 1954.

SUPER Oréal blanc

Applicant claims ownership of French Reg. No. 444,725, dated Aug. 26, 1954.
For Sun Tan Oil, Cosmetic Lotions, Lip Rouge, Hair Lotion, Perfume, Nail Polish, Powder, Rouge, Hair Coloring, Hair Rinses, Hair Dyes, Hair Tints, Hair Bleaches, Hair Oils, Permanent Waving and Hair Curling Liquids.

SN 680,286. Master Merchandise Corp., New York, N. Y. Filed Jan. 21, 1955.

3 COINS IN THE Fountain

The coins shown merely indicate coins, without regard to any particular kind of coins.
For Perfume.
Use since May 10, 1954.

SN 681,303. Sardeau, New York, N. Y. Filed Feb. 8, 1955.
Applicant claims ownership of Reg. No. 426,251.

Sardo

For Bath Oils.
Use since Jan. 7, 1955.

SN 681,928. Max Factor & Co., Hollywood, Calif. Filed Feb. 18, 1955.

RED TAPE

For Lipstick.
Use since Jan. 14, 1955.

SN 683,563. Spaulding B. Settle, Sr., d. b. a. Bedford Distributing Company, Jersey City, N. J. Filed Mar. 15, 1955.

Kay Kel

For Hair Oil Smokeless Pressing Cream and a Scalp Cream and a Brilliantine.
Use since February 1950.

SN 684,000. The Wella Corporation, Englewood, N. J. Filed Mar. 22, 1955. Sec. 2(f).

WELLA-LUSTRA

Applicant claims ownership of Reg. Nos. 585,904, 575,178, and others.
For Neutralising Preparation Containing Lanolin for Use on the Hair After Permanent Waving, Dyeing or Shampooing.
Use since 1938.

SN 684,682. The Rilling-Dermetics Company, New York, N. Y. Filed Mar. 31, 1955.

Metics

For Cosmetics—Namely, Skin Fluid Preparations and Skin Emollients.
Use since Jan. 5, 1955.

CLASS 52

SN 670,857. Arnold Sampson, d. b. a. E-Z-Est Products Co., Oakland, Calif. Filed July 30, 1954.

Applicant claims ownership of Reg. No. 608,926.
For Chemicals and Chemical Compositions for Cleaning Precious Metal, Non-Precious Metal, Coated or Plated Precious and Non-Precious Metal, Glass and Jeweled Surfaces; for Cleaning or Removing Tarnish From Metals and for Oven Cleaner.
Use since June 1951.

SN 679,845. Industrial Soap Company, St. Louis, Mo. Filed Jan. 13, 1955.

Lady Aileen

For Soap.
Use since Nov. 22, 1954.

SN 685,408. John T. Stanley Co., Inc., New York, N. Y. Filed Apr. 12, 1955.

STANZO

For Powdered Detergent for General Cleaning Purposes.
Use since April 1951.

SN 691,314. National Chemical Laboratories, Inc., West Palm Beach, Fla. Filed July 14, 1955.

TURGE

For Laundry Powder for Use in Automatic Clothes Washing Machines.
Use since Dec. 15, 1954.

SERVICE MARKS

CLASS 100

SN 686,800. Billiard & Bowling Institute of America, Philadelphia, Pa. Filed May 4, 1955.

BILLIARD AND BOWLING INSTITUTE OF AMERICA

For Promoting Interest in Billiards and Bowling.
Use since Sept. 15, 1953.

SN 688,558. Montana-Dakota Utilities Co., Minneapolis, Minn. Filed May 31, 1955.

Genie

For Utility Services—Namely, Supplying Gas for Heat and Power.
Use since Aug. 10, 1951.
Subj. to Intf. with SN 674,745.

CLASS 101

SN 685,403. Rogers Engraving Co., Inc., Long Island City, N. Y. Filed Apr. 12, 1955.

HIGH FIDELITY BLUE CHIP

The words "Photo-Engraving" are hereby disclaimed.
For Photo-Engraving Service.
Use since Mar. 31, 1955.

CLASS 102

SN 658,852. A. Gordon Merry, d. b. a. A. Gordon Merry Agency, Huntington, W. Va.; A. Gordon Merry, Jr., administrator of the estate of A. Gordon Merry, deceased. Filed Dec. 31, 1953.

"GOODBYE ANXIETY"

For General Insurance Brokerage Services.
Use since February 1921.

SN 679,899. Doane Agricultural Service, Inc., St. Louis, Mo. Filed Jan. 14, 1955.



Applicant claims ownership of Reg. Nos. 507,103, 565,035, and 539,511.

For Appraising Rural Land, Buildings, Livestock, Crops, Implements, and Other Rural Property.

Use since Oct. 1, 1919.

SN 682,402. Conger Life Insurance Company, Miami, Fla. Filed Feb. 28, 1955.



No claim is made to the wording "Hospitalization-Life-Accident" and "Miami, Fla." apart from the mark as shown.

For Underwriting of Hospitalization, Life, and Accident Insurance.

Use since Jan. 1, 1953.

SN 689,830. Fidelity Union Trust Company, Newark, N. J. Filed June 20, 1955.

One Stop Banking

For Banking Services—Namely, Financing, Credit, Collection and Loan Services, Compound Interest Accounts, Trust Department Services, Safe Deposit Services, Foreign Exchange and Letters of Credit.

Use since in or about January 1949.

CLASS 106

SN 684,182. American-London Shrinkers Corporation, New York, N. Y. Filed Mar. 25, 1955.

PERMA-SHRUNK

For Shrinking Textile Fabrics in the Piece of Others, and Imparting a Relaxed Finish Thereon.

Use since June 3, 1952.

CLASS 107

SN 682,435. International Toastmistress Clubs, Inc., Huntington Park, Calif. Filed Feb. 28, 1955. COLLECTIVE MARK.



Applicant claims ownership of Reg. No. 367,826.

For Training in Leadership, in Oral Expression Including Public Speaking, and in Criticism Thereof.

Use since November 1940.

CERTIFICATION MARKS

CLASS A

SN 685,538. Virginia State Chamber of Commerce, Inc., Richmond, Va. Filed Apr. 14, 1955.



The drawing is lined for red. The mark certifies that the goods originate in Virginia and meet certain standards of quality set by the applicant.

For Smoked Turkeys and Fresh Apples.

Use since Oct. 15, 1954, on smoked turkeys.

SN 690,508. United States Department of the Navy, Material and Services Bureau of Aeronautics, Washington, D. C. Filed June 29, 1955.

AN

The mark certifies that the goods are manufactured in accordance with standard Government specifications for aeronautical equipment.

For Control Pulleys, Universal Joints, Turn Buckles, and Anti Friction Ball Bearings.

Use since on or about Jan. 16, 1941, on control pulleys.

SN 697,180. National Tire Dealers and Retreaders Association, Inc., Washington, D. C. Filed Oct. 26, 1955.



The mark certifies that the user is a subscriber to the Tire Retreading Institute and retreads tires in accordance with the standards and specifications promulgated by said Institute.

For Retreaded Tires.

Use since Oct. 11, 1955.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

621,043. CONSOL HANNA GEORGETOWN H AND DESIGN. Pittsburgh Consolidation Coal Company. SN 681,293. Pub. 11–15–55. Filed 2–8–55.

CLASS 2

621,044. UNIPAK. Minnesota Mining & Manufacturing Company. SN 664,086. Pub. 4–12–55. Filed 4–7–54.

CLASS 4

621,045. LEATHER MAGIC. Schultz Shoe Company, Inc. SN 626,751. Pub. 2–23–54. Filed 3–20–52.

CLASS 10

621,046. TRICO. Tri-State Fertilizer Company. SN 684,365. Pub. 11–1–55. Filed 3–28–55.

CLASS 12

621,047. REPRESENTATION OF A PIECE OF SHEET MATERIAL WITH SPACED RED LINES. Glenn A. Morthland, d. b. a. Compotite Shower Pan. SN 635,143. Pub. 11–15–55. Filed 9–11–52.

621,048. KEYSTONE. Keystone Alloys Company. SN 659,720. Pub. 11–15–55. Filed 1–19–54.

621,049. ORANGE COLORED CORE AROUND WHICH TAPE IS WOUND. The Reardon Company. SN 670,758. Pub. 11–15–55. Filed 7–28–54.

621,050. NB STAR BRAND AND DESIGN (REPRESENTATION OF A STAR IN A CIRCLE). Nickey Brothers, Inc. SN 673,933. Pub. 11–15–55. Filed 9–28–54.

621,051. SCULPTURED STONE BY SEABOARD AND DESIGN. Leonard Monachello, d. b. a. Seaboard Home Improvement Co. SN 674,900. Pub. 11–15–55. Filed 10–15–54.

621,052. CARPORCH. Orchard Brothers Incorporated. SN 675,092. Pub. 11–15–55. Filed 10–19–54.

621,053. ALBASEAL. Johns-Manville Corporation. SN 675,800. Pub. 11–15–55. Filed 11–1–54.

621,054. RL AND DESIGN (REPRESENTATION OF A SHIELD). Resolite Corporation. SN 676,760. Pub. 11–15–55. Filed 11–16–54.

621,055. PAN-L-WUD PLW AND DESIGN. H. C. Cameron Lumber Co., Inc. SN 677,866. Pub. 11–15–55. Filed 12–7–54.

621,056. ANJAC. Anjac Manufacturing Company. SN 686,019. Pub. 11–15–55. Filed 4–22–55.

621,057. SN GOLD SEAL AND DESIGN. Smith-Nielsen Logging and Lumber Company. SN 686,486. Pub. 11–15–55. Filed 4–28–55.

621,058. HARBORWAVE. Harbor Plywood Corporation. SN 688,039. Pub. 11–15–55. Filed 5–23–55.

621,059. HYDRACLAVED. Ash Grove Lime & Portland Cement Company. SN 691,544. Pub. 11–15–55. Filed 7–19–55.

621,060. NAKORA. United States Plywood Corporation. SN 691,648. Pub. 11–15–55. Filed 7–20–55.

CLASS 13

621,061. JAL KLAMP ETC. AND DESIGN. Jones & Laughlin Steel Corporation. SN 665,602. Pub. 11–15–55. Filed 5–3–54.

621,062. TOPS BY UNITED. United Metal Hose Co., Inc. SN 680,048. Pub. 11–15–55. Filed 1–17–55.

621,063. NOMUS. Nomus Products, Inc. SN 680,217. Pub. 11–15–55. Filed 1–20–55.

621,064. STAINLESS WARE CO. OF AMERICA ETC. AND DESIGN. Stainless Ware Co. of America. SN 681,214. Pub. 11–15–55. Filed 2–7–55.

621,065. ATOMIC AND DESIGN. Atomic Fence Corporation. SN 681,334. Pub. 11–15–55. Filed 2–9–55.

621,066. TUFF-LITE. Industrial Plastic Company. SN 682,560. Pub. 11–15–55. Filed 3–1–55.

621,067. AJAX. Ajax Hardware Manufacturing Corporation. SN 691,651. Pub. 11–15–55. Filed 7–21–55.

621,068. RAWL. The Rawlplug Company Limited. SN 691,782. Pub. 11–15–55. Filed 7–22–55.

621,069. WRAPLOCK. Ideal Corporation. SN 692,143. Pub. 11–15–55. Filed 7–29–55.

621,070. HOYT WIRE CLOTH ETC. AND DESIGN. Hoyt Wire Cloth Company. SN 692,234. Pub. 11–15–55. Filed 8–1–55.

621,071. DISPOSA-PAN. Disposa-Ware Corporation. SN 692,317. Pub. 11–15–55. Filed 8–2–55.

621,072. "DORBOS." Hubert A. Guyer. SN 692,466. Pub. 11–15–55. Filed 8–4–55.

621,073. BELA. J & J Tool and Machine Co. SN 692,521. Pub. 11–15–55. Filed 8–5–55.

621,074. K3. Joseph Kabakoff, d. b. a. Joseph Kabakoff & Company. SN 692,605. Pub. 11–15–55. Filed 8–8–55.

621,075. PENCO 1869 AND DESIGN. Penn Metal Corporation of Penna. SN 692,637. Pub. 11–15–55. Filed 8–8–55.

621,076. RESINITE. Resin Industries. SN 692,641. Pub. 11–15–55. Filed 8–8–55.

621,077. SHELF-MATES AND DESIGN. Lewis Abramson. SN 692,687. Pub. 11–15–55. Filed 8–9–55.

621,078. CLEAN-CUT CAREFULLY MADE. Chas. O. Larson Co. SN 693,553. Pub. 11–15–55. Filed 8–23–55.

621,079. ADJUSTA-FLO. Sullivan Valve and Engineering Company. SN 693,575. Pub. 11–15–55. Filed 8–23–55.

621,080. DUAL ADJUSTA-FLO. Sullivan Valve and Engineering Company. SN 693,576. Pub. 11–15–55. Filed 8–23–55.

CLASS 14

621,081. M B M CAST TO LAST AND DESIGN. M. B. M. Foundry Company, Inc. SN 667,414. Pub. 11–15–55. Filed 6–1–54.

CLASS 15

621,082. GRAFETT. The Ohio Brass Company. SN 684,334. Pub. 11–15–55. Filed 3–28–55.

621,083. THE GREMLIN'S ENEMY AND DESIGN. Jack H. Weiner, d. b. a. U. S. Highway Supply Co. (Not Incorporated). SN 685,324. Pub. 11–15–55. Filed 4–11–55.

621,084. DOWLUBE. The Dow Chemical Company. SN 685,438. Pub. 11–15–55. Filed 4–13–55.

621,085. WHALE. Whale Oil Company Incorporated. SN 686,252. Pub. 11–15–55. Filed 4–25–55.

CLASS 16

621,086. TREDEX. The Modene Paint Company, Inc. SN 678,800. Pub. 11–15–55. Filed 12–22–54.

621,087. DRIP CARPET. Melbourne E. Erb, d. b. a. National Vinyl Products. SN 685,825. Pub. 11–15–55. Filed 4–19–55.

621,088. LIFEGUARD. Southern California Disinfecting Co. SN 686,341. Pub. 11–15–55. Filed 4–26–55.

621,089. DURAFLOR. Sun Chemical Corporation. SN 687,508. Pub. 11–15–55. Filed 5–13–55.

621,090. LUSTERLO. American-Marietta Company, d. b. a. Berry Brothers. SN 688,794. Pub. 11–15–55. Filed 6–3–55.

621,091. BERRYSEAL. American-Marietta Company, d. b. a. Berry Brothers. SN 688,795. Pub. 11–15–55. Filed 6–3–55.

621,092. PROFILM. Poor & Company. SN 691,149. Pub. 11–15–55. Filed 7–12–55.

621,093. QUIK-TEX. Sapolin Paints Inc. SN 691,302. Pub. 11–15–55. Filed 7–15–55.

621,094. WATERFOIL. Sun Chemical Corporation. SN 691,398. Pub. 11–15–55. Filed 7–15–55.

621,095. TVT TINTO-VINYL-TITE. Seidlits Paint & Varnish Company. SN 691,517. Pub. 11–15–55. Filed 7–18–55.

CLASS 17

621,096. FACTORY SMOKERS NO. 9 AND DESIGN. Northwest Cigar Corporation. SN 683,225. Pub. 11–15–55. Filed 3–10–55.

621,097. NORTHWEST NO. 9 AND DESIGN. Northwest Cigar Corporation. SN 683,226. Pub. 11–15–55. Filed 3–10–55.

CLASS 18

621,098. TRISULPEN. Premo Pharmaceutical Laboratories, Inc. SN 671,269. Pub. 11–15–55. Filed 8–6–54.

621,099. ROEGEMS. Chas. Pfizer & Co., Inc. SN 674,764. Pub. 11–15–55. Filed 10–13–54.

621,100. SULADYNE. The Stuart Company. SN 684,893. Pub. 11–15–55. Filed 4–4–55.

621,101. GYNBEN. Bentex Pharmaceutical Company. SN 687,670. Pub. 11–15–55. Filed 5–17–55.

621,102. CYTONATE. The Wm. S. Merrell Company. SN 687,873. Pub. 11–15–55. Filed 5–19–55.

621,103. ASCALYT. Thos. Leeming & Co., Inc. SN 687,952. Pub. 11–15–55. Filed 5–20–55.

621,104. SEMTABS. The S. E. Massengill Company. SN 687,957. Pub. 11–15–55. Filed 5–20–55.

621,105. SEALTABS. The S. E. Massengill Company. SN 687,958. Pub. 11–15–55. Filed 5–20–55.

621,106. VARITON. Schering Corporation. SN 692,273. Pub. 11–15–55. Filed 8–1–55.

CLASS 19

621,107. TRANSIT VAN AND DESIGN. Transit Van Corporation. SN 594,735. Pub. 11–15–55. Filed 3–27–50.

621,108. TRANSIT VAN. Transit Van Corporation. SN 616,738. Pub. 11–15–55. Filed 7–20–51.

621,109. BATTENCRAFT. Louis Philippe Bourque. SN 677,635. Pub. 11–15–55. Filed 12–2–54.

621,110. JURID. Jurid Werke Aktiengesellschaft. SN 679,912. Pub. 11–15–55. Filed 1–14–55.

621,111. AUTO UNION DKW AND DESIGN. Auto Union G. m. b. H. SN 681,482. Pub. 11–15–55. Filed 2–11–55.

621,112. THE BRITISH MOTOR CORPORATION LTD. AND DESIGN. The British Motor Corporation Limited. SN 683,962. Pub. 11–15–55. Filed 3–22–55.

621,113. CAM-O-MATIC. Trico Products Corporation. SN 687,424. Pub. 11–15–55. Filed 5–12–55.

621,114. CUDA CRAFT AND REPRESENTATION OF A FISH. H. Raymond Bond. SN 689,264. Pub. 11–15–55. Filed 6–10–55.

621,115. HYDEPAK AND DESIGN. Hyde Corporation. SN 691,862. Pub. 11–15–55. Filed 7–25–55.

CLASS 20

621,116. APPROVED ADOA PRODUCTS AND DESIGN. Adoa Corporation. SN 675,746. Pub. 11–15–55. Filed 11–1–54.

621,117. STYL-O-VIN. Wall Trends, Inc. SN 683,002. Pub. 11–15–55. Filed 3–7–55.

CLASS 21

621,118. LUMIWEAVE. Imperial Lighting Products Company. SN 671,828. Pub. 11–15–55. Filed 8–17–54.

621,119. VINALIER. Imperial Lighting Products Company. SN 671,829. Pub. 11–15–55. Filed 8–17–54.

621,120. MF. American Brake Shoe Company. SN 672,037. Pub. 11–15–55. Filed 8–23–54.

621,121. BUG-A-WAY. Westinghouse Electric Corporation. SN 672,260. Pub. 11–15–55. Filed 8–25–54.

621,122. EVANS AND DESIGN. Evans Case Co. SN 673,511. Pub. 11–15–55. Filed 9–21–54.

621,123. STIEBEL ELTRON AND DESIGN. Theodor H. Stiebel. SN 674,711. Pub. 11–15–55. Filed 10–12–54.

621,124. GOLDEN WAND. Peerless Products Industries. SN 676,753. Pub. 11–15–55. Filed 11–16–54.

621,125. MIR-A-CALL. Mir-A-Call Corporation. SN 677,432. Pub. 11–15–55. Filed 11–29–54.

621,126. LEE. Laboratory of Electronic Engineering, Inc. SN 680,198. Pub. 7–26–55. Filed 1–20–55.

621,127. EPINATE PB AND DESIGN. American Printed Circuits Company, Inc. SN 682,698. Pub. 11–15–55. Filed 3–3–55.

621,128. INDUCT-A-PLATE. E. A. Myers & Sons, Inc. SN 683,419. Pub. 11–15–55. Filed 3–14–55.

621,129. BEACON RAY. Federal Sign and Signal Corporation. SN 687,930. Pub. 11–15–55. Filed 5–20–55.

621,130. SUPER SPEED. Edwin L. Wiegand Company. SN 688,114. Pub. 11–15–55. Filed 5–23–55.

621,131. HUBBELLOCK. Harvey Hubbell, Incorporated. SN 688,150. Pub. 11–15–55. Filed 5–24–55.

621,132. NJE. New Jersey Electronics Corp. SN 689,071. Pub. 11–15–55. Filed 6–7–55.

CLASS 22

621,133. DOUBLE SERVICE. MacGregor Sport Products, Inc. SN 653,388. Pub. 11–15–55. Filed 9–18–53.

621,134. DEMCO. Dana E. Morrison, Jr., d. b. a. Dana E. Morrison, Jr. Co. SN 653,988. Pub. 11–15–55. Filed 9–30–53.

621,135. SCRABBLE. Production and Marketing Company. SN 656,109. Pub. 11–15–55. Filed 11–9–53.

621,136. A. B. T. MFG. CORP. CHICAGO, U. S. A. AND DESIGN. A. B. T. Manufacturing Corp. SN 667,600. Pub. 11–15–55. Filed 6–3–54.

621,137. SURPRISE AND DESIGN. Leone D. Cook, d. b. a. Surprise Co. SN 670,414. Pub. 11–22–55. Filed 7–22–54.

621,138. DURA-THIN. A. G. Spalding & Bros. Inc. SN 671,278. Pub. 11–22–55. Filed 8–6–54.

621,139. LAZY BASEBALL AND DESIGN. Anne Carroad, d. b. a. Lazy Baseball Company. SN 671,805. Pub. 11–22–55. Filed 8–17–54.

621,140. NANETTE. Arranbee Doll Company, Inc., d. b. a. "R & B." SN 677,541. Pub. 11–22–55. Filed 12–1–54.

621,141. KID-E-MAT. Gordon Printing Company. SN 681,689. Pub. 11–22–55. Filed 2–15–55.

621,142. LETTER-ROU. Memphis Plastic Enterprises, Inc. SN 682,573. Pub. 11–22–55. Filed 3–1–55.

CLASS 23

621,143. REPRESENTATION OF A BEAVER. Beaver Industries. SN 634,882. Pub. 11–22–55. Filed 9–5–52.

621,144. REED CHIP EJECTING. Reed Manufacturing Company. SN 649,537. Pub. 11–15–55. Filed 6–29–53.

621,145. QUICK AND DESIGN. Gebrüder Miller, Gesellschaft m. b. H. SN 652,622. Pub. 11–22–55. Filed 9–1–53.

621,146. TURBO-COMPOUND. Curtiss-Wright Corporation. SN 655,117. Pub. 11–15–55. Filed 10–21–53.

621,147. PRAKTIK AND DESIGN. Felix Glatz Import Co., Inc. SN 657,915. Pub. 11–22–55. Filed 12–14–53.

621,148. CENTRMIL. Sundstrand Machine Tool Co. SN 660,513. Pub. 11–15–55. Filed 2–2–54.

621,149. WHIZ-BURGER. Roy Whitney. SN 665,261. Pub. 11–15–55. Filed 4–26–54.

621,150. GRILL KING AND DESIGN. American Vending Corp. SN 671,290. Pub. 11–22–55. Filed 8–9–54.

621,151. RED BIRD. Monark Silver King, Inc. SN 672,429. Pub. 11–22–55. Filed 8–30–54.

621,152. DEWALT. DeWalt Inc. SN 673,580. Pub. 11–22–55. Filed 9–22–54.

621,153. TURBO-SWEEP. Parker Sweeper Company. SN 673,679. Pub. 11–15–55. Filed 9–23–54.

621,154. GRIFFIN AND DESIGN (REPRESENTATION OF A SAW BLADE). G. W. Griffin Co. SN 673,823. Pub. 11–15–55. Filed 9–27–54.

621,155. MILESMASTER. Schneider Carburetor Co., now by change of name to Milesmaster, Inc. SN 674,096. Pub. 11–22–55. Filed 9–30–54.

621,156. EASTERN INDUSTRIES MIXER DIVISION AND DESIGN. Eastern Industries, Incorporated. SN 674,953. Pub. 11–15–55. Filed 10–18–54.

621,157. DRILLMATION. Samuel S. Schmidt, d. b. a. Drillmation Company. SN 675,436. Pub. 11–15–55. Filed 10–25–54.

621,158. PERF-A-BASE. The Perf-A-Base Co. SN 676,404. Pub. 11–15–55. Filed 11–10–54.

621,159. DIAMOND BACK. Lawrence K. Hall, d. b. a. Highland Industries. SN 676,889. Pub. 11–15–55. Filed 11–18–54.

621,160. VULCA-SPRAY. Ralph R. Reading, d. b. a. Reading Tire Machinery Company. SN 678,148. Pub. 11–15–55. Filed 12–10–54.

621,161. OHR AND DESIGN. Rutherford Press, Inc. SN 679,339. Pub. 11–15–55. Filed 1–3–55.

621,162. POWER CHIEF AND DESIGN. Nordberg Manufacturing Company. SN 680,896. Pub. 11–15–55. Filed 2–1–55.

621,163. SOAK-O-HO. Hoke Oil & Fertilizer Company. SN 681,272. Pub. 11–15–55. Filed 2–8–55.

621,164. PNEUMACARD. Pneumafil Corporation. SN 681,297. Pub. 11–15–55. Filed 2–8–55.

621,165. BLU-MOL. Millers Falls Company. SN 681,611. Pub. 11–15–55. Filed 2–14–55.

621,166. ALLCHEM. Eco Engineering Company, division of Economy Faucet Company. SN 681,681. Pub. 11–15–55. Filed 2–15–55.

621,167. RUBBERCHEM. Eco Engineering Company, division of Economy Faucet Company. SN 681,682. Pub. 11–15–55. Filed 2–15–55.

621,168. CENTRICHEM. Eco Engineering Company, division of Economy Faucet Company. SN 681,683. Pub. 11–15–55. Filed 2–15–55.

621,169. WESCO ETC. AND DESIGN. Stop-Motion Devices Corporation. SN 682,204. Pub. 11–15–55. Filed 2–23–55.

621,170. SCULPTOMILL. Robert H. Brooks Co. SN 682,619. Pub. 11–15–55. Filed 3–2–55.

621,171. GERBER. Gerber Sheet Metal Incorporated. SN 682,904. Pub. 11–15–55. Filed 3–7–55.

621,172. HARDITE. Strunk Equipment Company. SN 683,722. Pub. 11–15–55. Filed 3–17–55.

621,173. DIMONDITE. Strunk Equipment Company. SN 683,725. Pub. 11–15–55. Filed 3–17–55.

621,174. PHILLIPS. Phillips Manufacturing Co. SN 683,807. Pub. 11–15–55. Filed 3–18–55.

621,175. RIPIT. Ripit Sales Co. SN 683,814. Pub. 11–15–55. Filed 3–18–55.

621,176. MILLERS FALLS ETC. Millers Falls Company. SN 683,899. Pub. 11–22–55. Filed 3–21–55.

621,177. NUMBER GUN. The Roberts Numbering Machine Company. SN 683,918. Pub. 11–15–55. Filed 3–21–55.

621,178. IN-A-GRIP. Stevens Walden, Inc. SN 683,931. Pub. 11–22–55. Filed 3–21–55.

621,179. DOWCO AND DESIGN. J. R. Dowdell & Co. SN 684,543. Pub. 11–15–55. Filed 3–30–55.

621,180. HYPRO. Hypro Engineering, Inc. SN 684,660. Pub. 11–15–55. Filed 3–31–55.

621,181. "AUTOSEP." Coastguard Separators Limited. SN 684,927. Pub. 11–15–55. Filed 4–5–55.

621,182. TEENIE-WEENIE. Imperial Knife Company, Inc. SN 685,109. Pub. 11–15–55. Filed 4–7–55.

621,183. ULTRA. R. Wallace & Sons Manufacturing Company. SN 685,148. Pub. 11–15–55. Filed 4–7–55.

621,184. NUCRETOR. Air Placement Equipment Company. SN 685,229. Pub. 11–15–55. Filed 4–11–55.

621,185. AIRPLACO AND DESIGN. Air Placement Equipment Company. SN 685,230. Pub. 11–15–55. Filed 4–11–55.

621,186. TEX-CUTTER. Texas Foundries, Inc. SN 685,321. Pub. 11–15–55. Filed 4–11–55.

621,187. EDGEMASTER. Robert M. Burmeister, d. b. a. R. M. B. Products. SN 685,650. Pub. 11–22–55. Filed 4–18–55.

621,188. STAN-PAK. Stanley Mikulec, d. b. a. Stan-Pak Industries. SN 685,841. Pub. 11–22–55. Filed 4–19–55.

621,189. NU-LIFE. Nu-Life, Incorporated. SN 685,846. Pub. 11–15–55. Filed 4–19–55.

621,190. WACO AND DESIGN. Washington Aluminum Company, Inc. SN 685,873. Pub. 11–22–55. Filed 4–19–55.

621,191. PRESELECTOR DYNA-SHIFT. The Monarch Machine Tool Company. SN 685,918. Pub. 11–22–55. Filed 4–20–55.

621,192. RUFTUF. The Osborn Manufacturing Company. SN 685,922. Pub. 11–22–55. Filed 4–20–55.

621,193. CALYPSO. Lyon, Incorporated. SN 685,991. Pub. 11–22–55. Filed 4–21–55.

621,194. ROTO-INDEXER. Troyke Manufacturing Company. SN 686,006. Pub. 11–22–55. Filed 4–21–55.

621,195. RATE-MAKER AND DESIGN. Kent-Moore Organization, Inc. SN 686,058. Pub. 11–22–55. Filed 4–22–55.

621,196. TENS-A-MATIC. Murray Equipment Company, Inc. SN 686,071. Pub. 11–22–55. Filed 4–22–55.

621,197. EDGE'N TRIM. Cooper Manufacturing Company. SN 686,157. Pub. 11–22–55. Filed 4–25–55.

621,198. KWIK GRIP. Emsco Manufacturing Company. SN 686,173. Pub. 11–22–55. Filed 4–25–55.

621,199. DIAL-A-PRICER. The Monarch Marking System Company. SN 686,323. Pub. 11–22–55. Filed 4–26–55.

621,200. MOW-CYCLE. Orly Musgrave. SN 686,383. Pub. 11–15–55. Filed 4–27–55.

621,201. MOTO POUCH. Edwin Helmreich. SN 686,544. Pub. 11–22–55. Filed 4–29–55.

621,202. REECHET. Reechet Tool Corporation. SN 686,569. Pub. 11–22–55. Filed 4–29–55.

621,203. SPORTY. Colonial Knife Company, Inc. SN 686,614. Pub. 11–15–55. Filed 5–2–55.

621,204. ROLL-MASTER. Hardsoeg Pneumatic Tool Company. SN 686,637. Pub. 11–15–55. Filed 5–2–55.

621,205. COMPAK AND DESIGN. Hayssen Manufacturing Company. SN 686,638. Pub. 11–22–55. Filed 5–2–55.

621,206. ONE ARM PAPERHANGER. Hyde Manufacturing Company. SN 686,652. Pub. 11–22–55. Filed 5–2–55.

621,207. K AND DESIGN. Kiekhaefer Corporation. SN 686,661. Pub. 11–22–55. Filed 5–2–55.

621,208. K AND DESIGN. Kiekhaefer Corporation. SN 686,662. Pub. 11–22–55. Filed 5–2–55.

621,209. METALOK. Adolph Gottscho, Inc. SN 686,734. Pub. 11–15–55. Filed 5–3–55.

621,210. AUTOMOLDER. Standard Tool Company. SN 686,783. Pub. 11–22–55. Filed 5–3–55.

621,211. LO-JET. Air Conversion Research Corporation. SN 686,797. Pub. 11–15–55. Filed 5–4–55.

621,212. K AND DESIGN. Kiekhaefer Corporation. SN 686,833. Pub. 11–22–55. Filed 5–4–55.

621,213. CAN-DO. Western Reserve Manufacturing Company. SN 686,868. Pub. 11–22–55. Filed 5–4–55.

621,214. MIX-ELVATOR. Air Placement Equipment Company. SN 686,871. Pub. 11–15–55. Filed 5–5–55.

621,215. PACESETTER. Brother International Corp. SN 686,881. Pub. 11–22–55. Filed 5–5–55.

621,216. GREEN-CON. Clipper Manufacturing Company. SN 686,886. Pub. 11–15–55. Filed 5–5–55.

621,217. DESIGN OF KEY BOW. Schlage Lock Company. SN 687,128. Pub. 11–15–55. Filed 5–9–55.

621,218. SKY-WORKER. Tey Manufacturing Corporation. SN 687,140. Pub. 11–22–55. Filed 5–9–55.

621,219. "THE BEARCAT" AND DESIGN. Western Land Roller Company. SN 687,155. Pub. 11–22–55. Filed 5–9–55.

621,220. SHANKEMAT. Kem Button Corporation. SN 687,295. Pub. 11–22–55. Filed 5–11–55.

621,221. ZIT-SPORT-AIDE. Leo P. Brandewie, d. b. a. Zit Manufacturing Co. SN 687,345. Pub. 11–15–55. Filed 5–12–55.

621,222. SUPER STANDARD. American Machine & Foundry Company. SN 687,441. Pub. 11–22–55. Filed 5–13–55.

621,223. ROTODYNO. Roto Bag Machine Corporation. SN 687,498. Pub. 11–22–55. Filed 5–13–55.

621,224. TRANS-LIFT. Detrex Corporation. SN 687,546. Pub. 11–22–55. Filed 5–16–55.

621,225. SKY HOOK. The G. A. Gray Company. SN 691,565. Pub. 11–15–55. Filed 7–19–55.

621,226. MATCH MAKER. The G. A. Gray Company. SN 691,566. Pub. 11–15–55. Filed 7–19–55.

621,227. HANDYMILL. The G. A. Gray Company. SN 691,568. Pub. 11–22–55. Filed 7–19–55.

621,228. PNEUMIX. Eclipse Air Brush Co. SN 691,755. Pub. 11–22–55. Filed 7–22–55.

621,229. DESIGN OF MAN AND CIRCLES. General Motors Corporation. SN 692,133. Pub. 11–15–55. Filed 7–29–55.

621,230. LI'L SHARPY. Milwaukee File Co. SN 692,187. Pub. 11–22–55. Filed 7–29–55.

621,231. HITCH-LIFT. F. Jos. Lamb Company. SN 692,240. Pub. 11–15–55. Filed 8–1–55.

CLASS 24

621,232. PYRON-H. Southern Mills, Inc. SN 671,913. Pub. 11–15–55. Filed 8–18–54.

621,233. PYRON-C. Southern Mills, Inc. SN 680,908. Pub. 11–15–55. Filed 2–1–55.

621,234. SMARTA AND DESIGN. Smarta Washers, Incorporated. SN 685,134. Pub. 11–15–55. Filed 4–7–55.

CLASS 26

621,235. STARRETT AND DESIGN. The L. S. Starrett Company. SN 639,243. Pub. 11–15–55. Filed 12–9–52.

621,236. SPARTA-FOLD. Herold Manufacturing Co., to Herold Products Co., Inc. SN 666,282. Pub. 11–15–55. Filed 5–13–54.

621,237. NRC AND DESIGN. National Research Corporation. SN 670,368. Pub. 11–15–55. Filed 7–21–54.

621,238. DRIMAC. Elliott Brothers (London) Limited. SN 672,387. Pub. 11–15–55. Filed 8–30–54.

621,239. APECO SYSTEMATIC. American Photocopy Equipment Company. SN 673,324. Pub. 11–22–55. Filed 9–17–54.

621,240. MEMBER MASTER OPTICIANS' B IN A SHIELD DESIGN. Master Prescription Opticians' Association. SN 674,683. COLLECTIVE MARK. Pub. 11–22–55. Filed 10–12–54.

621,241. SOLAGON. Agfa Camera-Werk Aktiengesellschaft. SN 674,918. Pub. 11–15–55. Filed 6–8–54.

621,242. "ANOTHER DISTRIBUTYPER." Robotyper Corporation. SN 676,913. Pub. 11–22–55. Filed 11–18–54.

621,243. TRANSITRON. Transitron Inc. SN 678,487. Pub. 11–22–55. Filed 12–16–54.

621,244. D DURST ON A SHIELD DESIGN. Durst S.-A. SN 678,612. Pub. 11–22–55. Filed 12–20–54.

621,245. 3 IN 1 KNIT CHEK. C. J. Bates & Son. SN 680,122. Pub. 11–15–55. Filed 1–19–55.

621,246. "REEF." Reef Industries Inc. SN 681,548. Pub. 11–15–55. Filed 2–11–55.

621,247. AUPETTE. Seligs Laboratories, Inc., to Clay-Adams, Inc. SN 682,759. Pub. 11–15–55. Filed 3–3–55.

621,248. IMICRO. Tesa S. A. SN 682,765. Pub. 11–15–55. Filed 3–3–55.

621,249. NIAFRAM. American Machine and Metals, Inc. SN 683,573. Pub. 11–15–55. Filed 3–16–55.

621,250. REL AND DESIGN. Rel Plastics Corporation. SN 684,238. Pub. 11–15–55. Filed 3–25–55.

621,251. "STORM QUEEN." Harvey B. Anderson, d. b. a. Anderson Gun Shop. SN 684,711. Pub. 11–15–55. Filed 4–1–55.

621,252. BLUE LINE. Kimble Glass Company. SN 686,983. Pub. 11–22–55. Filed 5–6–55.

621,253. KELSH-PLOTTER. The Kelsh Instrument Co., Inc. SN 687,602. Pub. 11–22–55. Filed 5–16–55.

621,254. AQUAPROBE. Daniel J. Pikosky, d. b. a. General Scientific Equipment Co. SN 687,936. Pub. 11–22–55. Filed 5–20–55.

621,255. MIGHTY HANDY. Keuffel & Esser Company. SN 687,947. Pub. 11–15–55. Filed 5–20–55.

621,256. POLAROID. Polaroid Corporation. SN 688,260. Pub. 11–15–55. Filed 5–25–55.

621,257. FELLOWS AND DESIGN. The Fellows Gear Shaper Company. SN 688,719. Pub. 11–15–55. Filed 6–2–55.

621,258. PRIVATE-EYE. American Photocopy Equipment Company. SN 689,014. Pub. 11–15–55. Filed 6–7–55.

621,259. PROTYPE. Protype, Inc. SN 689,077. Pub. 11–15–55. Filed 6–7–55.

621,260. BUDGET BOY. Theodore Jay Gordon. SN 689,133. Pub. 11–15–55. Filed 6–8–55.

621,261. PROTECTUS. Neptune Meter Company. SN 689,233. Pub. 11–22–55. Filed 6–9–55.

621,262. CREST. Neptune Meter Company. SN 689,234. Pub. 11–22–55. Filed 6–9–55.

621,263. RELIANT. Eastman Kodak Company. SN 689,367. Pub. 11–22–55. Filed 6–13–55.

621,264. FELLOWS AND DESIGN. The Fellows Gear Shaper Company. SN 689,376. Pub. 11–15–55. Filed 6–13–55.

CLASS 27

621,265. POLAROUTER. The Henri Stern Watch Agency, Inc. SN 679,804. Pub. 11–15–55. Filed 1–12–55.

621,266. COURTLEY AND DESIGN. Swiss Radium & Dial Painting Co., Inc. SN 687,422. Pub. 11–15–55. Filed 5–12–55.

621,267. CAPTAIN NEMO. The Gruen Watch Company. SN 687,780. Pub. 11–15–55. Filed 5–18–55.

621,268. AQUARIUS. The Sessions Clock Company. SN 687,990. Pub. 11–15–55. Filed 5–20–55.

621,269. JEWEL HOUSE AND DESIGN. S. H. Clausin & Co. SN 688,505. Pub. 11–15–55. Filed 5–31–55.

621,270. ULTRASONIC. Enicar Watch Corporation. SN 688,515. Pub. 11–15–55. Filed 5–31–55.

621,271. BULOVA AND V DEVICE. Bulova Watch Company, Inc. SN 689,446. Pub. 11–15–55. Filed 6–30–55.

621,272. V DEVICE. Bulova Watch Company, Inc. SN 689,447. Pub. 11–22–55. Filed 6–30–55.

CLASS 28

621,273. THE FOUR HUNDRED COLLECTION BY LA TAUSCA AND DESIGN. Heller-Sperry, Inc. SN 682,923. Pub. 11–15–55. Filed 3–7–55.

621,274. A AND CIRCLE DESIGN. Aurora Jewelry Company. SN 684,996. Pub. 11–22–55. Filed 4–6–55.

621,275. FIANCE. Goldstein-Gerson Co., Inc. SN 686,129. Pub. 11–15–55. Filed 3–21–55.

621,276. LOHENGRIN AMERICA'S MOST FAMOUS NAME IN WEDDING RINGS. Blancard & Company, Inc. SN 688,125. Pub. 11–15–55. Filed 5–24–55.

621,277. FEATURE-TONE. Feature Ring Co., Inc. SN 690,374. Pub. 11–15–55. Filed 6–28–55.

621,278. FEATURE-GLO. Feature Ring Co., Inc. SN 690,375. Pub. 11–22–55. Filed 6–28–55.

CLASS 31

621,279. CURTIS. Curtis Manufacturing Company. SN 643,297. Pub. 11–15–55. Filed 3–9–53.

621,280. DEAN. Dean Products Inc. SN 647,481. Pub. 11–15–55. Filed 5–22–53.

621,281. SPEED-SAK. Lewyt Corporation. SN 677,423. Pub. 11–22–55. Filed 11–29–54.

621,282. Kx. The Kendall Company. SN 677,879. Pub. 11–15–55. Filed 12–7–54.

621,283. MICRONIC. Purolator Products, Inc. SN 679,935. Pub. 11–22–55. Filed 1–14–55.

CLASS 32

621,284. FURNITURE BY TOMLINSON TAILOR MADE. Tomlinson of High Point. SN 661,602. Pub. 11–15–55. Filed 2–24–54.

621,285. VALLEY AND DESIGN. Valley Upholstery Corp. SN 666,556. Pub. 11–22–55. Filed 5–17–54.

621,286. RESILATOP. Nachman Corporation. SN 672,434. Pub. 11–22–55. Filed 8–30–54.

621,287. APPROVED ADOA PRODUCTS AND DESIGN. Adoa Corporation. SN 675,745. Pub. 11–15–55. Filed 11–1–54.

621,288. CROSS TOP AND DESIGN. Nachman Corporation. SN 676,393. Pub. 11–15–55. Filed 11–10–54.

621,289. HAND-D. Robert S. Daniel, d. b. a. Commercial Visible Systems. SN 679,145. Pub. 11–22–55. Filed 12–30–54.

621,290. U-MAKE-(K)IT. Anthony Manfredi, d. b. a. A. M. Wood Novelty Co. SN 682,350. Pub. 11–22–55. Filed 2–25–55.

621,291. SPHERETTES. The National Plastic Products Company. SN 683,131. Pub. 11–22–55. Filed 3–9–55.

621,292. SUNBURST. Modern Upholstered Chair Co., Inc. SN 683,700. Pub. 11–22–55. Filed 3–17–55.

621,293. SCHARCO. Scharco Manufacturing Corp. SN 683,715. Pub. 11–22–55. Filed 3–17–55.

621,294. THEME. Simmons Company. SN 683,719. Pub. 11–22–55. Filed 3–17–55.

621,295. SMARTSET. Kroehler Mfg. Co. SN 684,052. Pub. 11–22–55. Filed 3–23–55.

621,296. BEAUTYREST. Simmons Company. SN 684,075. Pub. 11–22–55. Filed 3–23–55.

CLASS 33

621,297. TOBEX. Blue Ridge Glass Corporation. SN 688,703. Pub. 11–22–55. Filed 6–2–55.

621,298. MURALEX. Blue Ridge Glass Corporation. SN 688,704. Pub. 11–22–55. Filed 6–2–55.

621,299. NUWELD. Blue Ridge Glass Corporation. SN 688,705. Pub. 11–22–55. Filed 6–2–55.

621,300. DOUBLEX. Blue Ridge Glass Corporation. SN 688,706. Pub. 11–22–55. Filed 6–2–55.

621,301. FACTROLITE. Mississippi Glass Company. SN 690,022. Pub. 11–22–55. Filed 6–22–55.

CLASS 34

621,302. SUBURBAN HANDI-KOOK. Samuel Stamping & Enameling Company. SN 656,908. Pub. 11–15–55. Filed 11–24–53.

621,303. WINKLER ETC. AND DESIGN. Stewart-Warner Corporation. SN 667,464. Pub. 11–15–55. Filed 6–1–54.

621,304. SILK-LITE. The Coleman Company, Inc. SN 669,970. Pub. 11–22–55. Filed 7–14–54.

621,305. AUTOCARB. Surface Combustion Corporation. SN 674,197. Pub. 11–22–55. Filed 10–1–54.

621,306. S AND DESIGN (REPRESENTATION OF 3 BLOCKS). Stone Boiler Equipment Corp. SN 676,675. Pub. 11–22–55. Filed 11–15–54.

621,307. G AND DESIGN. Graets Aktiengesellschaft. SN 677,150. Pub. 11–15–55. Filed 11–23–54.

621,308. PLANNAIR. Plannair Limited. SN 680,408. Pub. 11–15–55. Filed 1–24–55.

621,309. PERIMAHEAT. Young Radiator Company. SN 681,817. Pub. 11–15–55. Filed 2–16–55.

621,310. COKAL. American Coal Burner and Wood Stoker Corporation. SN 681,823. Pub. 11–15–55. Filed 2–17–55.

621,311. ACI AND DESIGN. American Coils Co. SN 681,825. Pub. 11–15–55. Filed 2–17–55.

621,312. WEBSTER ROTONETIC. The Webster Engineering Company. SN 682,215. Pub. 11–22–55. Filed 2–23–55.

621,313. WEBSTER DUONETIC. The Webster Engineering Company. SN 682,216. Pub. 11–22–55. Filed 2–23–55.

621,314. SUPER-MATIC. Eclipse Fuel Engineering Co. SN 682,252. Pub. 11–15–55. Filed 2–24–55.

621,315. CVH. John S. Zink, d. b. a. John Zink Company, to John Zink Company. SN 682,313. Pub. 11–15–55. Filed 2–24–55.

621,316. R REDMOND AND DESIGN. Redmond Company, Inc. SN 682,477. Pub. 11–22–55. Filed 2–28–55.

621,317. ARMOR-GLAS. Utility Appliance Corp. SN 682,508. Pub. 11–22–55. Filed 2–28–55.

621,318. CARRY COOL. Utility Appliance Corp. SN 682,509. Pub. 11–22–55. Filed 2–28–55.

CLASS 35

621,319. CONTINENTAL AND DESIGN. Continental Gummiwerke Aktiengesellschaft. SN 651,808. Pub. 11–22–55. Filed 8–14–53.

621,320. FLUORLASTIC. The Joclin Manufacturing Company. SN 682,646. Pub. 11–22–55. Filed 3–2–55.

621,321. SNOW-TEX AND DESIGN. Mulhern Belting Company, Inc. SN 692,009. Pub. 11–15–55. Filed 7–27–55.

621,322. ROADSTER. Atlas Supply Company. SN 692,039. Pub. 11–15–55. Filed 7–28–55.

CLASS 36

621,323. CHAUVET A PARIS AND DESIGN. Madame Veuve Chauvet née Louise Eugénie Feuillet. SN 678,718. Pub. 11–22–55. Filed 12–21–54.

621,324. HARMONETTA. M. Hohner, Inc. SN 685,375. Pub. 11–15–55. Filed 4–12–55.

621,325. CAPITOL AND DESIGN. Capitol Records, Inc. SN 693,290. Pub. 11–22–55. Filed 9–2–55.

CLASS 37

621,326. MARS. J. S. Staedtler. SN 653,938. Pub. 11–15–55. Filed 9–29–53.

621,327. TRADITION. J. S. Staedtler. SN 653,941. Pub. 11–15–55. Filed 9–29–53.

621,328. KIDTEX. The S. K. Smith Company. SN 667,352. Pub. 11–15–55. Filed 5–28–54.

621,329. THRIFCO ETC. AND DESIGN. John B. Hichborn. SN 671,341. Pub. 11–22–55. Filed 8–9–54.

621,330. TUFF OAK. Gulf States Paper Corporation. SN 674,461. Pub. 11–15–55. Filed 10–7–54.

621,331. KWIKSET AND DESIGN. Kwikset Locks, Inc. SN 675,804. Pub. 11–22–55. Filed 11–1–54.

621,332. STURDY OAK AND DESIGN. Gulf States Paper Corporation. SN 675,985. Pub. 11–15–55. Filed 11–3–54.

621,333. JACARCO HYMNAL COVER. Jack A. Carter. SN 676,865. Pub. 11–15–55. Filed 11–18–54.

621,334. BEMIS RIPP-TABB. Bemis Bro. Bag Company. SN 679,135. Pub. 11–15–55. Filed 12–30–54.

621,335. LITTLE LEAGUE. Little League Baseball, Inc. SN 679,169. Pub. 11–15–55. Filed 12–30–54.

621,336. TRIM TOWN. Union Bag & Paper Corporation. SN 681,222. Pub. 11–15–55. Filed 2–7–55.

621,337. PORTHOS. The United Mfg. Corp. SN 681,224. Pub. 11–22–55. Filed 2–7–55.

621,338. ½ MARK. Merchant Suppliers Paper Co. SN 682,574. Pub. 11–22–55. Filed 3–1–55.

621,339. HERMES. Crocker, Burbank Papers Inc. SN 682,710. Pub. 11–22–55. Filed 3–3–55.

CLASS 38

621,340. THERMO GRAVURE AND DESIGN. Valid Process Company. SN 636,040. Pub. 11–15–55. Filed 10–1–52.

621,341. GOLD COAST. The Miami Daily News, Inc. SN 647,215. Pub. 11–15–55. Filed 5–18–53.

621,342. THE DELTASIG OF DELTA SIGMA PI. International Fraternity of Delta Sigma Pi, Inc. SN 654,974. Pub. 11–15–55. Filed 10–19–53.

621,343. LA TIENDA. Canterbury Press. SN 665,180. Pub. 11–22–55. Filed 4–26–54.

621,344. COUNTER-SPYING AND DESIGN. Peggy Stalnaker Sheehan. SN 673,872. Pub. 11–22–55. Filed 9–27–54.

621,345. THE WEE PIANIST. Maud H. Mosher. SN 675,901. Pub. 11–22–55. Filed 11–2–54.

621,346. ED-U-BOOK. Ed-U-Cards Mfg. Corp. SN 676,046. Pub. 11–22–55. Filed 11–4–54.

621,347. BIG BOY. Norcross, Inc. SN 677,266. Pub. 11–22–55. Filed 11–15–54.

621,348. BLOSSOM TIME. Norcross, Inc. SN 677,267. Pub. 11–22–55. Filed 11–15–54.

621,349. CARROTS. Norcross, Inc. SN 677,268. Pub. 11–22–55. Filed 11–15–54.

621,350. A LUIGI CARD. Norcross, Inc. SN 677,271. Pub. 11–22–55. Filed 11–15–54.

621,351. NATIONAL SCREW MACHINE PRODUCTS ETC. National Screw Machine Products Association. SN 681,618. Pub. 11–22–55. Filed 2–14–55.

621,352. FLORIDA SPEAKS AND SUNRISE. Florida Speaks Corporation. SN 682,139. Pub. 11–22–55. Filed 2–23–55.

621,353. IT'S UP TO YOU. Christian Freedom Foundation, Inc. SN 684,279. Pub. 11–22–55. Filed 3–28–55.

621,354. A-PAC-O LION AND DESIGN. Atlanta Paper Company. SN 684,523. Pub. 11–22–55. Filed 3–30–55.

621,355. JUST PLAIN FOLKS. Kenneth P. Folks. SN 684,550. Pub. 11–22–55. Filed 3–30–55.

CLASS 39

621,356. BOBBIE JEANS BY FAIRVIEW AND DESIGN. Fairview Frocks. SN 649,227. Pub. 11–22–55. Filed 6–23–53.

621,357. "SIMON SIMPLE." Simon Simple Craft and Toy Co. SN 666,876. Pub. 11–22–55. Filed 5–21–54.

621,358. CALIFORNIA WEIGHT. Chester H. Roth Company Inc., Esquire Socks Division. SN 671,591. Pub. 11–22–55. Filed 8–12–54.

621,359. "WHITE COLLAR GIRL." Neumode Hosiery Co. SN 673,378. Pub. 11–22–55. Filed 9–17–54.

621,360. FERNCRAFT. Fern Shoe Company. SN 677,046. Pub. 11–22–55. Filed 11–22–54.

621,361. SHADOWLITE. Andrew Geller, Inc. SN 678,028. Pub. 11–22–55. Filed 12–9–54.

621,362. CASINO. Harry Himmelstein. SN 680,756. Pub. 11–15–55. Filed 1–31–55.

621,363. PAISANO. Stone-Tarlow Co., Inc. SN 681,889. Pub. 11–22–55. Filed 2–17–55.

621,364. THE 'JONE-ZY'. Bronston Hat Company, Inc. SN 683,576. Pub. 11–22–55. Filed 3–16–55.

621,365. STA-FLAT. The Warner Brothers Company. SN 683,638. Pub. 11–22–55. Filed 3–16–55.

621,366. CLING-ETTES. Davenport Hosiery Mills, Inc. SN 684,403. Pub. 11–22–55. Filed 3–29–55.

621,367. MILES. Melville Shoe Corporation. SN 684,740. Pub. 11–22–55. Filed 4–1–55.

621,368. POINTERS. Trep Art. SN 684,767. Pub. 11–22–55. Filed 4–1–55.

621,369. GAZELLES AND DESIGN. Gray Brothers Shoes, Inc. SN 684,834. Pub. 11–22–55. Filed 4–4–55.

621,370. I. Q. AND DESIGN. Charles Sales Co., Inc., d. b. a. The Charles Sales Co. SN 684,924. Pub. 11–22–55. Filed 4–5–55.

621,371. PARK CREST OF DALLAS PC AND DESIGN. Parkland Sportswear Co., Inc. SN 684,962. Pub. 11–22–55. Filed 4–5–55.

621,372. PAL-MATES AND DESIGN. Leyton Sportswear Company. SN 688,647. Pub. 11–22–55. Filed 6–1–55.

621,373. BREECHLINGS. S. J. Buchman Co., Inc. SN 688,798. Pub. 11–22–55. Filed 6–3–55.

621,374. INVINCIBLE. George W. Wagner. SN 693,645. Pub. 11–22–55. Filed 7–29–55.

621,375. PERMATONE AND DESIGN. Chester H. Roth Co., Inc. SN 694,174. Pub. 11–22–55. Filed 9–21–55.

621,376. PERMACOLOR. Chester H. Roth Co., Inc. SN 694,175. Pub. 11–22–55. Filed 9–21–55.

621,377. DURACHROME. Chester H. Roth Co., Inc. SN 694,176. Pub. 11–22–55. Filed 9–21–55.

CLASS 42

621,378. SOFT AS A SUMMER CLOUD SLEEP EASY. F. W. Woolworth Co. SN 682,609. Pub. 11–22–55. Filed 3–1–55.

621,379. DUCKTONE. D. B. Fuller & Co., Inc. SN 683,874. Pub. 11–22–55. Filed 3–21–55.

621,380. CALGLAZED. Callaway Mills Company. SN 683,963. Pub. 11–22–55. Filed 3–22–55.

621,381. GUANADA. H. M. Prince Textiles Inc. SN 684,064. Pub. 11–22–55. Filed 3–23–55.

621,382. ALPA-SEEL. Security Mills, Inc. SN 684,074. Pub. 11–22–55. Filed 3–23–55.

621,383. BOSTANN. Turner Halsey Company. SN 684,079. Pub. 11–22–55. Filed 3–23–55.

621,384. A WORLD OF COLOR. A. D. Juilliard & Co., Inc. SN 684,315. Pub. 11–22–55. Filed 3–28–55.

621,385. DURO-DUK AND DESIGN. William L. Barrell Company, Inc. SN 684,387. Pub. 11–22–55. Filed 3–29–55.

621,386. KING KOOL AND DESIGN. The John P. King Mfg. Co. SN 684,565. Pub. 11–22–55. Filed 3–30–55.

621,387. KING ROYAL. The John P. King Mfg. Co. SN 684,566. Pub. 11–22–55. Filed 3–30–55.

621,388. PRIDE OF KING. The John P. King Mfg. Co. SN 684,567. Pub. 11–22–55. Filed 3–30–55.

621,389. FULCHENE. D. B. Fuller & Co., Inc. SN 684,726. Pub. 11–22–55. Filed 4–1–55.

621,390. SECURAMAT. Security Mills, Inc. SN 684,887. Pub. 11–22–55. Filed 4–4–55.

621,391. MARKRITE. The Stearns & Foster Company. SN 684,891. Pub. 11–22–55. Filed 4–4–55.

CLASS 44

621,392. AC-LAB. Harry Bramson, d. b. a. AC-Lab Equipment Company. SN 678,367. Pub. 11–22–55. Filed 12–15–54.

621,393. THE RUSH MEDULLARY PIN. The Berivon Company. SN 686,512. Pub. 11–22–55. Filed 5–2–55.

621,394. MYERSON'S AESTHETIC. Myerson Tooth Corporation. SN 686,559. Pub. 11–22–55. Filed 4–29–55.

621,395. CELLOX AND DESIGN. The Joa Company. SN 687,289. Pub. 11–22–55. Filed 5–11–55.

621,396. CELLOX NOVA. The Joa Company. SN 687,290. Pub. 11–22–55. Filed 5–11–55.

621,397. MECHANETTE. O. E. M. Corporation. SN 688,350. Pub. 11–22–55. Filed 5–26–55.

CLASS 45

621,398. MIX MAID. Cede, Inc. SN 664,653. Pub. 11–22–55. Filed 4–16–54.

CLASS 46

621,399. 'TATER-DOG AND DESIGN. Dietz Newland. SN 648,592. Pub. 11–22–55. Filed 6–11–53.

621,400. BONNIE DOG-E-STU. California Pet Foods Co., to Allan D. Lynn. SN 651,639. Pub. 11–22–55. Filed 8–11–53.

621,401. REPRESENTATION OF TENNESSEE OUTLINE AND ELLIPSES. East Tennessee Packing Co. SN 654,884. Pub. 11–22–55. Filed 10–16–53.

621,402. WILLMARK AND REPRESENTATION OF A CHEF WITH SPOON. Willmark Sales Company, Inc. SN 660,522. Pub. 11–22–55. Filed 2–2–54.

621,403. CHINA BEAUTY. The Great China Food Products Co. SN 662,444. Pub. 11–22–55. Filed 3–11–54.

621,404. OLE TIMER. Lay Packing Co., Inc. SN 662,549. Pub. 11–22–55. Filed 3–12–54.

621,405. ASCORBO RICO. Sasson-King, Inc. SN 666,535. Pub. 11–22–55. Filed 5–17–54.

621,406. "WE NEED MINERALS" AND DESIGN. Darling & Company. SN 666,652. Pub. 11–22–55. Filed 5–19–54.

621,407. HUBBARD'S. Hubbard Milling Company. SN 670,929. Pub. 11–22–55. Filed 8–2–54.

621,408. IT'S KISS-PROOF AND DESIGN. Benjamin B. Deretchin, d. b. a. Derry Products Company. SN 672,724. Pub. 11–22–55. Filed 9–3–54.

621,409. TABLE TALK. Theodore J. Mavrogianis, d. b. a. Table Talk. SN 677,897. Pub. 11–22–55. Filed 12–7–54.

621,410. FULHAM BROTHERS 4 FISHERMEN BRAND AND DESIGN. Fulham Brothers, Inc. SN 678,104. Pub. 11–22–55. Filed 12–10–54.

621,411. SHORE BEST AND DESIGN. Shore's Market, Inc. SN 679,414. Pub. 11–22–55. Filed 1–4–55.

621,412. THEY'RE OUT OF THIS WORLD CARVEL FLYING SAUCER AND DESIGN. Thomas Carvel. SN 680,178. Pub. 11–22–55. Filed 1–20–55.

621,413. ADMIRAL SEA SALT ETC. Trace Elements Corporation. SN 681,049. Pub. 11–22–55. Filed 2–3–55.

621,414. COOL AND DELICIOUS AND DESIGN. C & D Flavor Company. SN 682,123. Pub. 11–22–55. Filed 2–23–55.

621,415. NANCY LYNN. The Grand Union Company. SN 682,916. Pub. 11–22–55. Filed 3–7–55.

621,416. ALOHA AND DESIGN. Hawaiian Pineapple Company, Limited. SN 684,423. Pub. 11–22–55. Filed 3–29–55.

CLASS 47

621,417. GUILD VINO DA TAVOLA AND DESIGN. Wine Growers Guild. SN 668,223. Pub. 11–22–55. Filed 6–14–54.

621,418. VISTA D'ORO. Montebello Wine Company of California. SN 681,613. Pub. 11–22–55. Filed 2–14–55.

CLASS 48

621,419. KOEHLER'S JK AND DESIGN. The Erie Brewing Company. SN 577,665. Pub. 11–22–55. Filed 4–25–49.

621,420. KOEHLER'S ERIE. The Erie Brewing Company. SN 578,914. Pub. 11–22–55. Filed 5–13–49.

621,421. KOEHLER'S 3 FINE BREWS AND DESIGN. The Erie Brewing Company. SN 608,414. Pub. 11–22–55. Filed 1–5–51.

621,422. MUNCHEN SALVATOR AND DESIGN. Paulaner-Salvator-Thomasbrau, A. G. SN 666,977. Pub. 11–22–55. Filed 3–24–54.

621,423. A AND EAGLE DESIGN. Anheuser-Busch, Incorporated. SN 684,994. Pub. 11–22–55. Filed 4–6–55.

621,424. BUSCH. Anheuser-Busch, Incorporated. SN 684,995. Pub. 11–22–55. Filed 4–6–55.

621,425. BROWN DERBY. Beverage Distributors, Inc., d. b. a. Drexel Distributing Company. SN 686,947. Pub. 11–22–55. Filed 5–6–55.

CLASS 49

621,426. BLACK VELVET. W. & A. Gilbey Limited. SN 674,963. Pub. 11–22–55. Filed 10–18–54.

621,427. THE BRACKEN. John Gross and Company. SN 682,008. Pub. 11–22–55. Filed 2–21–55.

621,428. GLEN GORSE. John Gross and Company. SN 682,009. Pub. 11–22–55. Filed 2–21–55.

621,429. SCOTCH BROTH. John Gross and Company. SN 682,011. Pub. 11–22–55. Filed 2–21–55.

CLASS 50

621,430. ROTO-LOOM. Boston Woven Hose and Rubber Company. SN 674,438. Pub. 11–22–55. Filed 10–7–54.

621,431. SHAGORAMA. Forester Furs, Inc. SN 682,417. Pub. 11–22–55. Filed 2–28–55.

621,432. NU-LOOM AND DESIGN. Boston Woven Hose and Rubber Company. SN 683,749. Pub. 11–22–55. Filed 3–18–55.

621,433. REDDI WIP. Reddi-Wip, Inc. SN 684,237. Pub. 11–22–55. Filed 3–25–55.

621,434. MINIPLAC. The Greenland Manufacturing Company. SN 684,940. Pub. 11–22–55. Filed 4–5–55.

621,435. C. C. T. COLOR CORRECT TAVALON. Jamestown Finishing Products, Inc. SN 685,586. Pub. 11–22–55. Filed 4–15–55.

621,436. SHU-FAB. Lowell Counter Company. SN 685,593. Pub. 11–22–55. Filed 4–15–55.

CLASS 51

621,437. IDA DICKENS SUPREME. Ida Dickens. SN 682,878. Pub. 11–22–55. Filed 3–7–55.

621,438. FRESH. Pharma-Craft Corporation. SN 683,228. Pub. 11–22–55. Filed 3–10–55.

621,439. LANOLIN PLUS. Saint Cornelius the Centurion Chapel of Valley Forge Military Academy. CONSOLIDATED CERTIFICATE. SN 684,785, pub. 9–20–55, filed 4–20–55, Cl. 51; SN 684,786, pub. 9–20–55, filed 4–20–55, Cl. 52.

CLASS 52

621,439. CONSOLIDATED CERTIFICATE. See Class 51.

621,440. ENSTRIP. Enthone Incorporated. SN 669,541. Pub. 11–22–55. Filed 7–7–54.

621,441. MIX-IT. The Phillips Corporation, Inc. SN 672,241. Pub. 11–22–55. Filed 8–25–54.

621,442. NEW! "ROUGH ON RUST" AND CORROSION AND DESIGN. Jule F. Friedin, d. b. a. Southern Oxide Chemical Mfgrs. SN 672,404. Pub. 11–22–55. Filed 8–30–54.

621,443. FAME. Wyandotte Chemicals Corporation. SN 678,568. Pub. 11–22–55. Filed 11–18–54.

621,444. ESODERM. Priory Laboratories Ltd. SN 680,302. Pub. 11–22–55. Filed 1–21–55.

621,445. BUCKEYE CLEAN CHARGE. The Davies-Young Soap Company. SN 683,860. Pub. 11–22–55. Filed 3–21–55.

621,446. K2. New York Silicate Book Slate Co., Inc. SN 684,747. Pub. 11–22–55. Filed 4–1–55.

621,447. FLEXO. Swift & Company. SN 687,015. Pub. 11–22–55. Filed 5–6–55.

621,448. KLEINOL AND DESIGN. Kleinol-Produktion G. m. b. H. SN 687,207. Pub. 11–22–55. Filed 5–10–55.

621,449. KING. The Andrew Jergens Company. SN 687,288. Pub. 11–22–55. Filed 5–11–55.

621,450. M'LADY. M'Lady, Inc. SN 687,312. Pub. 11–22–55. Filed 5–11–55.

621,451. RAINBOW. Columbia Ribbon & Carbon Manufacturing Company, Inc. SN 687,677. Pub. 11–22–55. Filed 5–17–55.

621,452. SIERRA PINE. Los Angeles Soap Company. SN 687,706. Pub. 11–22–55. Filed 5–17–55.

621,453. DYNAHUE. The Pennsylvania Salt Manufacturing Company. SN 687,728. Pub. 11–22–55. Filed 5–17–55.

Service Marks

CLASS 100

621,454. CLOVER FARM STORES AND DESIGN. Clover Farm Stores Corporation. SN 605,510. Pub. 11–22–55. Filed 10–26–50.

621,455. HOME TOWN HARDWARE. Northern Wholesale Hardware Co. SN 639,706. Pub. 11–22–55. Filed 12–18–52.

621,456. AMERICAN FEDERATION OF THE PHYSICALLY HANDICAPPED AND DESIGN. American Federation of the Physically Handicapped, Inc. SN 663,244. Pub. 11–22–55. Filed 3–25–54.

CLASS 101

621,457. AUTO BIOGRAPHY. Dick Lewis Ad Planning, Incorporated. SN 683,786. Pub. 11–22–55. Filed 3–18–55.

CLASS 102

621,458. SAVING SANDY AND DESIGN. Fidelity Federal Savings and Loan Association of Glendale. SN 634,078. Pub. 11–22–55. Filed 8–18–52.

621,459. AID IN CIRCLE DESIGN. Aid Investment and Discount, Inc. SN 664,117. Pub. 11–22–55. Filed 4–8–54.

621,460. NATIONAL HOSPITAL ASSOCIATION AND DESIGN. National Hospital Association. SN 683,058. Pub. 11–22–55. Filed 3–8–55.

CLASS 103

621,461. ALWAYS CALL CHARLIE ETC. AND DESIGN. ACC Television and Repair Service. SN 660,099. Pub. 11–22–55. Filed 1–26–54.

621,462. ARMCO. Armco Steel Corporation. SN 671,293. Pub. 11–22–55. Filed 8–9–54.

CLASS 104

621,463. U—UNITED UTILITIES SYSTEM AND DESIGN. United Utilities, Incorporated. SN 662,483. Pub. 11–22–55. Filed 3–11–54.

CLASS 105

621,464. PHILLIPS 66 AND DESIGN. Phillips Petroleum Company. SN 634,110. Pub. 11–22–55. Filed 8–18–52.

621,465. M S & G. Metropolitan Sand and Gravel Corporation. SN 663,112. Pub. 11–22–55. Filed 3–23–54.

621,466. RENTMASTER AND DESIGN. Power Tool Rentals, Inc. SN 673,862. Pub. 11–22–55. Filed 9–27–54.

621,467. NORGULF. North Atlantic and Gulf Steamship Company, Incorporated. SN 687,487. Pub. 11–22–55. Filed 5–13–55.

CLASS 106

621,468. VELVET-SOFT AND REPRESENTATION OF A SPIGOT. Gerald E. White, d. b. a. Velvet Service Company. SN 623,999. Pub. 11–22–55. Filed 1–23–52.

621,469. SEABOARD METAL PRODUCTS COMPANY AND DESIGN. Seaboard Metal Products Co. SN 658,416. Pub. 11–22–55. Filed 12–22–53.

CLASS 107

621,470. THE ADVENTURES OF CAPTAIN HARTZ AND DESIGN. Hartz Mountain Products Corporation. SN 659,547. Pub. 11–22–55. Filed 1–15–54.

621,471. THE TRAVELER. James T. Trierweiler, d. b. a. James T. Wyler and/or Jim Wyler. SN 675,110. Pub. 11–22–55. Filed 10–19–54.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 2

621,472. The Tas-T-Nut Company, Baltimore, Md. SN 686,586. Filed 4–29–55.

SHO-PAK

For Cardboard, Paper, Plastic and the Like Containers—Namely, Boxes, Cans, Packages.
Use since August 1936.

CLASS 12

621,473. United Gilsonite Laboratories, Scranton, Pa. SN 677,254. Filed P. R. 11–24–54. Am. S. R. 10–14–55.

fil

For Spackling Compound.
Use since June 8, 1954.

621,474. George Ray, d. b. a. Overhead Door Company of Eustis, Eustis, Fla. SN 692,260. Filed 8–1–55.

Ray's "EASY"

For Doors Used in the Construction of Buildings.
Use since Jan. 1, 1953.

CLASS 13

621,475. Soss Manufacturing Co., Detroit, Mich. SN 675,513. Filed P. R. 10–26–54. Am. S. R. 11–25–55.

SOSS INVISIBLE HINGES

For Hinges.
Use since on or about Oct. 6, 1933.

CLASS 18

621,476. Julius R. Kaplan, d. b. a. Gas-Ease Laboratories, San Pedro, Calif. SN 676,895. Filed P. R. 11–18–54. Am. S. R. 11–28–55.

Gas-Ease

For Preparation for the Relief of Acid Indigestion, Sour Stomach, and Heartburn.
Use since Nov. 14, 1950.

CLASS 21

621,477. C-D Products, Inc., Schiller Park, Ill. SN 664,512. Filed P. R. 4–14–54. Am. S. R. 11–29–55.

POWER KIT CORRECT CD DESIGN

For Fishermen's Kits of the Type That Comprises a Cover-Equipped Box Having Therein a Portable Electric Motor and a Fish Scaler and Other Rotary Tools Which Are Adapted To Be Selectively Connected to the Motor.
Use since Jan. 5, 1954.

CLASS 26

621,478. Oil Metering and Processing Equipment Corporation, Houston, Tex. SN 681,933. Filed P. R. 2–18–55. Am. S. R. 11–15–55.

WELL TESTER

For Oil and Gas Separators Used To Measure the Production From Oil, Distillate, and Gas Wells.
Use since Mar. 16, 1953.

621,479. Hellige, Incorporated, Garden City, N. Y. SN 686,307. Filed 4–26–55.

TRU-COUNT

For Hemacytometers, Counting Chambers, and Hemacytometer Cover Glasses.
Use since Feb. 19, 1954, on counting chambers.

CLASS 28

621,480. Ross Watch Case Corporation, Long Island City, N. Y. SN 695,765. Filed 10–3–55.

Ross

For Rings, Earrings, and Bracelets.
Use since Sept. 1, 1945.

CLASS 31

621,481. Cronstroms Manufacturing, Inc., d. b. a. Cronstroms Manufacturing Co., Minneapolis, Minn. SN 670,338. Filed P. R. 7–21–54. Am. S. R. 7–22–55.

PIK-NIK

For Portable Ice Boxes.
Use since July 15, 1954.

CLASS 46

621,482. Superior Feed Mills, Inc., Oklahoma City, Okla. SN 662,029. Filed P. R. 3–4–54. Am. S. R. 2–2–55.

Superior
CHICK TO PULLET

The lining indicates red.
For Feeds for Poultry.
Use since Jan. 1, 1944.

621,483. Bongards Co-Operative Creamery Association, d. b. a. The Bongards Creameries, Bongards, Minn. SN 669,170. Filed P. R. 6–30–54. Am. S. R. 10–28–55.

BAKER'S BLEND

For Composition of Primarily Dried Whey Powder and Dried Skim Milk for Use in Baking Processes.
Use since Feb. 20, 1954.

621,484. Pyplan Company, Bloomfield, N. J. SN 678,813. Filed 12–22–54.



For Unbaked Pies.
Use since February 1953.

CLASS 52

621,485. Amos E. Hall, Sarasota, Fla. SN 674,070. Filed P. R. 9–30–54. Am. S. R. 6–9–55.

HALL'S
Chrome Seal

For Compound for Cleaning Chromium and for Preventing Rust on the Same.
Use since July 1951.

Service Marks
CLASS 100

621,486. Vulcan Service Company, Inc., Birmingham, Ala. SN 656,279. Filed P. R. 11–12–53. Am. S. R. 9–15–54.

SELECT-A-GIFT

For Selecting Gifts for Donors.
Use since Nov. 1, 1950.

CLASS 107

621,487. San Diego Junior Chamber of Commerce, San Diego, Calif. SN 634,016. Filed P. R. 7–5–52. Am. S. R. 5–23–55.

yellowtail derby

For Entertainment Service in the Nature of an Annual Fishing Contest.
Use since May 1946.

TRADEMARK REGISTRATIONS RENEWED

106,429. S. P. F. Cl. 6. 10–19–15.
107,732. LOTUS AND DESIGN. Cl. 39. 12–28–15.
107,738. DESIGN OF TURBINE WHEEL. Cl. 23. 12–28–15.
107,904. DREADNAUGHT. Cl. 2. 1–4–16.
108,124. BUYERS. Cl. 37. 1–18–16.
108,865. ELECTROMET. Cl. 14. 2–29–16.
109,023. NULOMOLINE ETC. Cl. 46. 3–14–16.
109,505. BELDING'S IN CIRCLE. Cl. 43. 4–11–16.
109,511. BELDING'S IN CIRCLE. Cl. 42. 4–11–16.
109,607. SUNNY SOUTH. Cl. 6. 4–11–16.
109,626. AMERICAN FEDERATION OF MUSICIANS AND DESIGN. Cl. 38. 4–11–16.
109,682. PERFECT FITTING. Cl. 39. 4–11–16.
109,724. GEOMETRIC. Cl. 23. 4–18–16.
109,815. DENTYSILK. Cl. 44. 4–18–16.
109,970. WELCH'S. Cl. 46. 4–25–16.
110,105. AMITY. Cl. 3. 5–2–16.
110,196. A. Cl. 12. 5–9–16.
326,847. N AND M. Cl. 17. 8–6–35.
328,134. DESIGN OF TOWER. Cl. 3. 9–17–35.
329,748. PEMCO AND DESIGN. Cl. 1. 11–12–35.
329,813. BOND. Cl. 42. 11–12–35.
330,157. AIR CONDITIONED FABRICS. Cl. 42. 11–19–35.
330,483. "PLANTERS' PUNCH" ETC. Cl. 49. 12–3–35.
330,627. LIVELY-TOP. Cl. 39. 12–10–35.
330,680. SEDAN KNIT FLEECE. Cl. 39. 12–10–35.
330,761. BEVITAM. Cl. 18. 12–17–35.
330,834. ENCORE. Cl. 49. 12–17–35.
330,842. FILMET. Cl. 44. 12–17–35.
330,860. GORDON SHORTIES. Cl. 39. 12–17–35.
330,884. SYLEX YARNS ETC. AND DESIGN. Cl. 43. 12–17–35.
330,972. PHILLIES PHILADELPHIA AND DESIGN. Cl. 17. 12–24–35.
331,003. RED DIAMOND. Cl. 12. 12–24–35.
331,004. RED DIAMOND ETC. AND DESIGN. Cl. 12. 12–24–35.
331,154. BLONY BUBBLE AND DESIGN. Cl. 46. 12–31–35.
331,467. HI-TEEN SHOP. Cl. 39. 1–7–36.
332,112. POLARBOARD. Cl. 37. 2–4–36.
332,394. GREYHOUND. Cl. 39. 2–11–36.
332,466. CLIMATEER. Cl. 39. 2–18–36.
332,585. COCO RICO ETC. AND DESIGN. Cl. 45. 2–18–36.
332,653. WRAPSURE. Cl. 37. 2–18–36.

332,715. OXYFUME. Cl. 6. 2–25–36.
332,790. TWIN POPSICLE. Cl. 46. 2–25–36.
332,938. HAND-EE. Cl. 23. 3–3–36.
333,157. POLAR-TEX BOND AND DESIGN. Cl. 39. 3–10–36.
333,243. BIG BEN IN OVAL. Cl. 39. 3–10–36.
333,390. SEAFROST. Cl. 46. 3–17–36.
333,474. BETTY JEAN ETC. AND DESIGN. Cl. 39. 3–24–36.
333,500. TERGITOL. Cl. 6. 3–24–36.
333,578. FREEMAN FREE-FLEX AND DESIGN. Cl. 39. 3–24–36.
333,691. TERGITOL. Cl. 52. 3–31–36.
334,063. EV-R-FLEX. Cl. 39. 4–21–36.
334,333. TWEED. Cl. 51. 4–28–36.
334,531. DEEPDALE. Cl. 49. 5–5–36.
334,532. CLUBMAN. Cl. 49. 5–5–36.

TRADEMARK REGISTRATIONS CANCELED

Section 8

31,821. CYCLONE. Cl. 23. 7–19–98.
79,002. P B ETC. AND REPRESENTATION OF CHICKEN WITHIN CIRCULAR DESIGN. Cl. 12. 7–26–10.
113,236. EATONIA. Cl. 37. 10–10–16.
118,824. IMPORTERS GUIDE. Cl. 38. 10–2–17.
119,315. FATHER GEORGE AND PORTRAIT OF GEORGE WASHINGTON. Cl. 42. 11–13–17.
120,320. AJAX AND PORTRAIT OF AJAX. Cl. 14. 2–5–18.
121,122. BULL GRIP. AND REPRESENTATION OF BULL DOG. Cl. 35. 4–9–18.
124,666. LITTLE BEES BB AND REPRESENTATION OF BEES WITHIN OVAL DESIGN. Cl. 17. 3–11–19.
126,614. CONCHO. Cl. 46. 9–23–19.
156,033. BABE WEAR AND REPRESENTATION OF BABY. Cl. 39. 6–13–22.
157,035. DOUBLE LIFE. Cl. 39. 7–25–22.
160,152. GRAND. Cl. 34. 10–17–22.
187,185. BLUE GOOSE. Cl. 46. 7–29–24.
188,273. LUNCHEON. Cl. 46. 8–19–24.
204,054. CORTEZ AND PORTRAIT OF CORTEZ. Cl. 46. 10–6–25.
212,611. PLEE-ZING. Cl. 44. 5–11–26.
229,700. SURFSPAR. Cl. 16. 7–5–27.
241,852. CRESTONE. Cl. 46. 5–8–28.
248,719. IRON FIREMAN. Cl. 34. 10–30–28.
294,526. DURO CLEAR. Cl. 11. 5–31–32.
298,418. MILLBROOK CLUB AND REPRESENTATION OF MAN ON HORSEBACK. Cl. 45. 10–25–32.
299,124. WOOSIES. Cl. 45. 11–22–32.
311,162. "THE STOCKING WITH THE MAGIC STRIP". Cl. 39. 3–13–34.
315,350. GEOMETRIC DESIGN. Cl. 19. 7–24–34.
336,192. "HAPPY EVENT". Cl. 39. 6–30–36.
340,222. SUPER-FLAME "THE PROOF IS IN THE HEATING" AND DESIGN. Cl. 34. 11–3–36.
359,203. SUPERWASHED AND REPRESENTATION OF CRUCIBLE. Cl. 1. 8–9–38.
360,357. RATHSKELLER. Cl. 48. 9–13–38.
361,038. TRIPLE TREAT. Cl. 46. 10–4–38.
361,955. ROTO-SPRA. Cl. 6. 11–8–38.
364,990. PRECIOUS COSMETICS. Cl. 6. 2–21–39.
365,535. HUBBELLITE. Cl. 12. 3–14–39.
366,619. MAYFAIR CREAMY MINTS MAYFAIR CANDY CO. Cl. 46. 4–25–39.
369,199. MAGIC MENU MUSHROOMS AND DESIGN. Cl. 46. 7–18–39.
374,474. LEMONATED. Cl. 4. 1–9–40.
375,681. CALO AND REPRESENTATION OF CUP AND SAUCER. Cl. 46. 2–27–40.
376,017. COLOMBO AND DESIGN. Cl. 47. 3–12–40.
381,622. JEAN LAFITTE AND DESIGN. Cl. 49. 10–1–40.
383,188. VENOMIN AND LANDSCAPE DESIGN. Cl. 6. 11–26–40.
385,823. DEE TEE. Cl. 21. 3–18–41.
389,778. ALOLOID. Cl. 6. 8–19–41.
405,119. HUBBELLITE AND REPRESENTATION OF MAN. Cl. 12. 1–11–44.
411,548. CYRON AND H WITHIN KEYSTONE DESIGN. Cl. 6. 1–23–45.
411,755. DIAMOND. Cl. 36. 1–30–45.
412,733. CATHAY. Cl. 3. 3–20–45.
413,329. CAVENCREST. Cl. 30. 4–17–45.
413,446. CAVENCREST. Cl. 22. 4–24–45.
415,104. TOMBASIL. Cl. 14. 7–10–45.
415,904. CAVENCRAFT. Cl. 39. 8–21–45.
421,123. CORN MASTER. Cl. 23. 5–21–46.
421,436. REPRESENTATION OF CHILD AND RABBIT. Cl. 42. 6–4–46.
422,453. COMPENSAMATIC. Cl. 27. 7–23–46.
433,727. ACE WITHIN DIAMOND DESIGN. Cl. 14. 10–28–47.
437,675. SELECT-O-WEED. Cl. 6. 3–30–48.
439,982. MOUNTAIN GREEN. Cl. 4. 8–3–48.
440,352. AUTO CLERK. Cl. 23. 8–24–48.
500,378. E-Z-LIFE. Cl. 34. 5–18–48.
500,500. PATRICIAN. Cl. 29. 6–1–48.
502,467. SCENARIO. Cl. 6. 9–28–48.
502,830. LAHAR. Cl. 46. 10–12–48.
503,367. PALMER AND DESIGN. Cl. 2. 10–26–48.
503,530. SILHOUETTE. Cl. 41. 10–26–48.
503,559. "CHALK LINE". Cl. 42. 10–26–48.
503,568. EXQUISITE. Cl. 42. 10–26–48.
503,765. SPARTUS. Cl. 26. 11–9–48.
503,889. WAYNE WITHIN CIRCULAR DESIGN. Cl. 19. 11–16–48.
504,381. THE "GOVERNOR". Cl. 40. 11–30–48.
504,710. "RENO RING". Cl. 28. 12–7–48.
504,733. COVEY. Cl. 2. 12–14–48.
505,278. FAMOUS LADY. Cl. 39. 12–28–48.
505,363. TAPE-EZE. Cl. 6. 1–4–49.
505,539. BARCLAY. Cl. 1. 1–4–49.
505,626. TERHUNE'S PURE PLANT FOOD WITHIN DIAMOND DESIGN. Cl. 10. 1–11–49.
505,705. RABINGO. Cl. 22. 1–18–49.
505,753. GUARDIAN. Cl. 36. 1–18–49.
505,792. PLY-TEX. Cl. 35. 1–18–49.
505,856. TEANNE. Cl. 4. 1–18–49.
506,052. ICE LAKE AND LANDSCAPE DESIGN. Cl. 45. 1–25–49.
506,098. MLLE'S OWN STORK CLUB. Cl. 38. 1–25–49.
506,557. PRAMETTE. Cl. 19. 2–8–49.
506,598. CUGATS NUGATS THE CANDY OF THE STARS CUGAT BY XAVIER AND REPRESENTATION OF XAVIER CUGAT. Cl. 46. 2–8–49.
507,207. SCHOOL BOY. Cl. 46. 3–1–49.
508,740. MONROE. Cl. 37. 4–19–49.
508,954. LADY CREST. Cl. 39. 4–26–49.
509,186. DEAN-JONES SPORTSWEAR. Cl. 39. 4–26–49.
509,378. FRUDRON. Cl. 45. 5–3–49.
510,874. PANEL-PAK. Cl. 46. 6–14–49.
510,875. FW AND DESIGN. Cl. 42. 6–14–49.
510,876. BABY TIME AND REPRESENTATION OF CHILD. Cl. 2. 6–14–49.
519,941. GEOMETRIC DESIGN. Cl. 6. 6–14–49.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

336,325. CARAVAN AND DESIGN. Cl. 22. 6–30–36. The United States Playing Card Company, East Norwood, Cincinnati, Ohio. Amended to appear:



588,474. BUTTER BRITTLE AND DESIGN. Cl. 46. 4–13–54. Bobs Candy & Peanut Company, Inc., Albany, Ga. Amended to appear:



TRADEMARK REGISTRATIONS—NEW CERTIFICATES

New Certificates issued under sections 7(c), 7(f), 7(g) of the Trademark Act of 1946 for the unexpired term of the original registrations.

587,218. IGNIT-O-GARDS AND DESIGN. Cl. 21. Illinois Accessories Company. 3–23–54. New Cert. Sec. 7(c), to Switches Incorporated, Chicago, Ill., 2–14–56.

601,584. ILLACO AND DESIGN. Cl. 21. Illinois Accessories Company. 2–1–55. New Cert. Sec. 7(c), to Switches Incorporated, Chicago, Ill., 2–14–56.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 6

389,733. Aug. 19, 1941. The Ruby Chemical Company, Columbus, Ohio. Pub. by registrant.



The drawing is lined for the color blue. The words "Stainless," "Steel," "Soldering Flux," "Mfg. by," "Columbus, Ohio, U. S. A." are disclaimed apart from the mark as shown.

For Soldering and Tinning Flux.

CLASS 21

328,820. Oct. 8, 1935. United States Rubber Products, Inc., New York, N. Y. Pub. by United States Rubber Company, New York, N. Y.

USRUB

For Assembled Electric Conductors, Including Contact Prongs, Plugs, and Conductors.

CLASS 23

371,810. Oct. 10, 1939. Consolidated Machinery & Supply Co., Ltd., Los Angeles, Calif. Pub. by registrant.

COMET

For Power Saws and Woodworking Machinery.

401,191. Apr. 27, 1943. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

FOURSOME

For Dry Shavers and Parts Thereof.

CLASS 26

385,100. Feb. 18, 1941. Action Color Pictures, Inc., Long Island City, N. Y. Pub. by Morris B. Beck, Fair Haven, N. J.

TELEVISUAL

For Picture Projecting Apparatus for the Projection of Still Pictures From Film the Apparatus Not Partaking in Any Way of the Nature of Radio or Television.

CLASS 37

325,176. June 11, 1935. Carew Manufacturing Company, South Hadley Falls, Mass. Pub. by Byron Weston Company, Dalton, Mass.

LENOX LEDGER

The word "Ledger" is disclaimed apart from the mark as shown.

For Ledger Paper.

386,710. Apr. 22, 1941. The Victor Safe & Equipment Company, Inc., North Tonawanda, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

RECORDEX

For Card Indexes and Folders.

389,272. July 29, 1941. Remington Rand Inc., Buffalo, N. Y. Pub. by Sperry Rand Corporation, New York, N. Y.

REMROCK

For File Holders.

CLASS 39

106,567. Oct. 26, 1915. Colchester Rubber Company, Colchester, Conn. Pub. by United States Rubber Company, New York, N. Y.



For Rubber Boots and Shoes.

CLASS 46

191,743. Nov. 18, 1924. Fullerton Mutual Orange Association, Fullerton, Calif. Pub. by Harry Sham, d. b. a. Placentia Fruit Distributors, Placentia, Calif.

Gorgeous

For Fresh Citrous Fruits—Namely, Fresh Oranges.

363,708. Jan. 3, 1939. Golden State Company, Ltd., San Francisco, Calif. Pub. by Foremost Dairies, Inc., San Francisco, Calif.

NUTRIMIX

For Skim Milk Solids in Powdered Form.

LIST OF REGISTRANTS OF TRADEMARKS

A. B. T. Mfg. Corp., Chicago, Ill. 440,352, canc. Cl. 23.
A. B. T. Mfg. Corp., Chicago, Ill. 621,136, pub 11–15–55. Cl. 22.
ACC Television and Repair Service, Hamilton County, Ohio. 621,461, pub. 11–22–55. Cl. 103.
AC-Lab Equipment Co.: *See*—
Bramson, Harry.
A. M. Wood Novelty Co.: *See*—
Manfredi, Anthony.
Abramson, Lewis, Albany, N. Y. 621,077, pub. 11–15–55. Cl. 13.
Ace Mfg. Corp., Philadelphia, Pa. 433,727, canc. Cl. 14.
Action Color Pictures, Inc., Long Island City, N. Y., by M. B. Beck, Fair Haven, N. J. 385,100, 12(c) pub. 2–14–56. Cl. 26.
Addressograph-Multigraph Corp., Cleveland, Ohio. 294,526, canc. Cl. 11.
Adoa Corp., Asheville, N. C. 621,116, pub. 11–15–55. Cl. 20.
Adoa Corp., Asheville, N. C. 621,287, pub. 11–15–55. Cl. 32.
Agfa Camera-Werk Aktiengesellschaft, Munich, Germany. 621,241, pub. 11–15–55. Cl. 26.
Aid Investment and Discount, Inc., Akron, Ohio. 621,459, pub. 11–22–55. Cl. 102.
Air Conversion Research Corp., Chicago, Ill. 621,211, pub. 11–15–55. Cl. 23.
Air Placement Equipment Co., Kansas City, Mo. 621,184–5, pub. 11–15–55. Cl. 23.
Air Placement Equipment Co., Kansas City, Mo. 621,214, pub. 11–15–55. Cl. 23.
Ajax Hardware Mfg. Corp., Los Angeles, Calif. 621,067, pub. 11–15–55. Cl. 13.
Ajax Metal Co., The, Philadelphia, Pa. 120,320, canc. Cl. 14.
Ajax Metal Co., The, Philadelphia, Pa. 415,104, canc. Cl. 14.
American Brake Shoe Co., New York, N. Y. 621,120, pub. 11–15–55. Cl. 21.
American Brake Shoe and Foundry Co., The, Wilmington, Del., and New York, N. Y. 315,350, canc. Cl. 19.
American Coal Burner and Wood Stoker Corp., Chicago, Ill. 621,310, pub. 11–15–55. Cl. 34.
American Coils Co., Newark, N. J. 621,311, pub. 11–15–55. Cl. 34.
American Federation of Musicians, New York, N. Y. 109,626, ren. 4–11–56. Cl. 38.
American Federation of the Physically Handicapped, Inc., Washington, D. C. 621,456, pub. 11–22–55. Cl. 100.
American Glossite Co., Inc., The, New York, N. Y. 411,755, canc. Cl. 36.
American Machine & Foundry Co., New York, N. Y. 621,222, pub. 11–22–55. Cl. 23.
American Machine and Metals, Inc., Sellersville, Pa. 621,249, pub. 11–15–55. Cl. 26.
American-Marietta Co., d. b. a. Berry Brothers, Chicago, Ill. 621,090–1, pub. 11–15–55. Cl. 16.
American Molasses Co.: *See*—
Nulomoline Co., The.
American Photocopy Equipment Co., Chicago, Ill. 621,239, pub. 11–22–55. Cl. 26.
American Photocopy Equipment Co., Chicago, Ill. 621,258, pub. 11–15–55. Cl. 26.
American Printed Circuits Co., Inc., Metuchen, N. J. 621,127, pub. 11–15–55. Cl. 21.
American Vending Corp., Oakbrook, Hinsdale, Ill. 621,150, pub. 11–22–55. Cl. 23.
Amity Leather Products Co.: *See*—
Rolfs, Robert H.
Anderson Gun Shop: *See*—
Anderson, Harvey B.
Anderson, Harvey B., d. b. a. Anderson Gun Shop, Yakima, Wash. 621,251, pub. 11–15–55. Cl. 26.
Anheuser-Busch, Inc., St. Louis, Mo. 621,423–4, pub. 11–22–55. Cl. 48.
Anjac Mfg. Co., Los Angeles, Calif. 621,056, pub. 11–15–55, Cl. 12.
Arkansas Soft Pine Bureau, Little Rock, Ark. 110,196, ren. 5–9–56. Cl. 12.
Armco Steel Corp., Middletown, Ohio. 621,462, pub. 11–22–55. Cl. 103.
Arranbee Doll Co., Inc., d. b. a. "R & B," New York, N. Y. 621,140, pub. 11–22–55. Cl. 22.
Ash Grove Lime & Portland Cement Co., Kansas City, Mo. 621,059, pub. 11–15–55. Cl. 12.
Atlanta Paper Co., Atlanta, Ga. 621,354, pub. 11–22–55. Cl. 38.
Atlas Supply Co., Newark, N. J. 621,322, pub. 11–15–55. Cl. 35.
Atomic Fence Corp., Fall River, Mass. 621,065, pub. 11–15–55. Cl. 13.
Aurora Jewelry Co., Providence, R. I. 621,274, pub. 11–22–55. Cl. 28.
Auto Union G. m. b. H., Ingolstadt-Donau, Germany. 621,111, pub. 11–15–55. Cl. 19.
Barrell, William L., Co., Inc., New York, N. Y. 621,385, pub. 11–22–55. Cl. 42.
Bates, C. J., & Son, Chester, Conn. 621,245, pub. 11–15–55. Cl. 26.
Bay Co., The, Bridgeport, Conn., to Parke, Davis & Co., Detroit, Mich. 330,842, ren. 12–17–55. Cl. 44.
Bayuk Cigars Inc., Philadelphia, Pa. 330,972, ren. 12–24–55. Cl. 17.
Beaver Industries, Chicago, Ill. 621,143, pub. 11–22–55. Cl. 23.
Beck, Morris B.: *See*—
Action Color Pictures, Inc.
Belding Bros. & Co., Rockville, Conn., and New York, N. Y., to Belding Heminway Co., Inc., New York, N. Y. 109,505, ren. 4–11–56. Cl. 43.
Belding Bros. & Co., Rockville, Conn., and New York, N. Y., to Belding Heminway Co., Inc., New York, N. Y. 109,511, ren. 4–11–56. Cl. 42.
Belding Bros. & Co., Rockville, Conn., and New York, N. Y., to Belding Heminway Co., Inc., New York, N. Y. 109,815, ren. 4–18–56. Cl. 44.
Belding Heminway Co., Inc.: *See*—
Belding Bros. & Co.
Bell & Zoller Coal Co., Chicago, Ill. 359,203, canc. Cl. 1.
Bemis Bro. Bag Co., St. Louis, Mo. 621,334, pub. 11–15–55. Cl. 37.
Bentex Pharmaceutical Co., Houston, Tex. 621,101, pub. 11–15–55. Cl. 18.
Berivon Co., The, Meridian, Miss. 621,393, pub. 11–22–55. Cl. 44.
Berry Brothers: *See*—
American-Marietta Co.
Beverage Distributors, Inc., d. b. a. Drexel Distributing Co., San Francisco, Calif. 621,425, pub. 11–22–55. Cl. 48.
Blancard & Co., Inc., New York, N. Y. 621,276, pub. 11–15–55. Cl. 28.
Blue Ridge Glass Corp., Kingsport, Tenn. 621,297–300, pub. 11–22–55. Cl. 33.
Bobrow Bros., Philadelphia, Pa. 124,666, canc. Cl. 17.
Bobs Candy & Peanut Co. Bobs Candy & Peanut Co., Inc., Albany, Ga. Am. 7(d). Cl. 46.
Bobs Candy & Peanut Co., Inc.: *See*—
Bobs Candy & Peanut Co.
Bond, H. Raymond, Miami, Fla. 621,114, pub. 11–15–55. Cl. 19.
Bond Stores, Inc., to Bond Stores, Inc., New York, N. Y. 329,813, ren. 11–12–55. Cl. 42.
Bond Stores, Inc., to Bond Stores, Inc. (1937), New York, N. Y. 330,680, ren. 12–10–55. Cl. 39.
Bond Stores, Inc., to Bond Stores, Inc., New York, N. Y. 333,157, ren. 3–10–56. Cl. 39.
Bond Stores, Inc. (1937): *See*—
Bond Stores, Inc.
Bongards Co-Operative Creamery Association, d. b. a. The Bongards Creameries, Bongards, Minn. 621,483. Cl. 46.
Bongards Creameries, The: *See*—
Bongards Co-Operative Creamery Association.
Booth's Distilleries Ltd., London, England, to The Rum Co. (Jamaica) Ltd., Kingston, Jamaica, B. W. I. 330,834, ren. 12–17–55. Cl. 49.
Bostock, Edwin, & Co., Ltd., to Lotus, Ltd., Stafford, England. 107,732, ren. 12–28–55. Cl. 39.
Boston Woven Hose and Rubber Co., Cambridge, Mass. 621,430, pub. 11–22–55. Cl. 50.
Bourque, Louis P., Farmingdale, N. Y. 621,109, pub. 11–15–55. Cl. 19.
Bramson, Harry, d. b. a. AC-Lab Equipment Co., New York, N. Y. 621,392, pub. 11–22–55. Cl. 44.
Brandewie, Leo P., d. b. a. Zit Mfg. Co., Sidney, Ohio. 621,221, pub. 11–15–55. Cl. 23.
British Motor Corp. Ltd., The, Cowley, Oxford, England. 621,112, pub. 11–15–55. Cl. 19.
Bronston Hat Co., Inc., Plainfield, N. J. 621,364, pub. 11–22–55. Cl. 39.
Brother International Corp., New York, N. Y. 621,215, pub. 11–22–55. Cl. 23.
Brooks, Robert H., Co., Rockford, Ill. 621,170, pub. 11–15–55. Cl. 23.
Brown, Clarence S., & Co., Inc.: *See*—
Margulies, Larry J.
Brown Durrell Co., Cambridge, Mass. 330,627, ren. 12–10–55. Cl. 39.
Brown Durrell Co., Cambridge, Mass. 330,860, ren. 12–17–55. Cl. 39.
Buchman, S. J., Co., Inc., New York, N. Y. 621,373, pub. 11–22–55. Cl. 39.
Bulova Watch Co., Inc., Flushing, N. Y. 621,271, pub. 11–15–55. Cl. 27.
Bulova Watch Co., Inc., Flushing, N. Y. 621,272, pub. 11–22–55. Cl. 27.
Burmeister, Robert M., d. b. a. R. M. B. Products, Pasadena, Calif. 621,187, pub. 11–22–55. Cl. 23.
C & D Flavor Co., Houston, Tex. 621,414, pub. 11–22–55. Cl. 46.
C-D Products, Inc., Schiller Park, Ill. 621,477. Cl. 21.
California Pet Foods Co., Sacramento, Calif., to A. D. Lynn. 621,400, pub. 11–22–55. Cl. 46.
Callaway Mills Co., La Grange, Ga. 621,380, pub. 11–22–55. Cl. 42.
Cameron, H. C., Lumber Co., Inc., Olivia, N. C. 621,055, pub. 11–15–55. Cl. 12.
Canterbury Press, Chicago, Ill. 621,343, pub. 11–22–55. Cl. 38.
Capitol Records, Inc., Los Angeles, Calif. 621,325, pub. 11–22–55. Cl. 36.
Carbide and Carbon Chemicals Corp., to Union Carbide and Carbon Corp., New York, N. Y. 332,715, ren. 2–25–56. Cl. 6.

Carbide and Carbon Chemicals Corp., to Union Carbide and Carbon Corp., New York, N. Y. 333,500, ren. 3–24–56. Cl. 6.
Carbide and Carbon Chemicals Corp., to Union Carbide and Carbon Corp., New York, N. Y. 333,691, ren. 3–31–56. Cl. 52.
Carew Mfg. Co., South Hadley Falls, by Byron Weston Co., Dalton, Mass. 325,176, 12(c) pub. 2–14–56. Cl. 37.
Carroad, Anne, d. b. a. Lazy Baseball Co., Elmhurst, N. Y. 621,139, pub. 11–22–55. Cl. 22.
Carruth, R. K., Macon, Ga. 121,122, canc. Cl. 35
Carter, Jack A., Danville, Va. 621,333, pub. 11–15–55. Cl. 37.
Carvel, Thomas, Yonkers, N. Y. 621,412, pub. 11–22–55. Cl. 46.
Catechetical Guild, St. Paul, Minn. 505,753, canc. Cl. 36.
Cavendish Trading Corp., New York, N. Y. 412,733, canc. Cl. 3.
Cavendish Trading Corp., New York, N. Y. 413,329, canc. Cl. 30.
Cavendish Trading Corp., New York, N. Y. 413,446, canc. Cl. 22.
Cavendish Trading Corp., New York, N. Y. 415,904, canc. Cl. 39.
Cede, Inc., Bloomfield, N. J. 621,398, pub. 11–22–55. Cl. 45.
Charles Sales Co., Inc., d. b. a. The Charles Sales Co., Chelsea, Mass. 621,370, pub. 11–22–55. Cl. 39.
Charles Sales Co., The: *See*—
Charles Sales Co., Inc.
Chemical Paper Mfg. Co., Holyoke, Mass. 108,124, ren. 1–18–56. Cl. 37.
Chicago Mill and Lumber Co., Chicago, Ill. 107,904, ren. 1–4–56. Cl. 2.
Chicago Wheel & Mfg. Co., Chicago, Ill. 332,938, ren. 3–3–56. Cl. 23.
Christian Freedom Foundation, Inc., New York, N. Y. 621,353, pub. 11–22–55. Cl. 38.
Circo Products Co., Cleveland, Ohio. 385,823, canc. Cl. 21.
Clausin, S. H., & Co., Minneapolis, Minn. 621,269, pub. 11–15–55. Cl. 27.
Clay-Adams, Inc.: *See*—
Seligs Laboratories, Inc.
Cleveland Co-Operative Stove Co., The, Cleveland, Ohio. 160,152, canc. Cl. 34.
Clipper Mfg. Co., Kansas City, Mo. 621,216, pub. 11–15–55. Cl. 23.
Clover Farm Stores Corp., Cleveland, Ohio. 621,454, pub. 11–22–55. Cl. 100.
Coastguard Separators Ltd., Newcastle-Upon-Tyne, England. 621,181, pub. 11–15–55. Cl. 23.
Coco Rico Inc.: *See*—
Luque & Fuertes.
Cohen, Abe H., Pittsburgh, Pa. 505,705, canc. Cl. 22.
Colchester Rubber Co., Colchester, Conn., by United States Rubber Co., New York, N. Y. 106,567, 12(c) pub. 2–14–56. Cl. 39.
Coleman Co. Inc., The, Wichita, Kans. 621,304, pub. 11–22–55. Cl. 34.
Colonial Knife Co., Inc., Providence, R. I. 621,203, pub. 11–15–55. Cl. 23.
Colorado Milling & Elevator Co., The, d. b. a. The La Junta Flour Mills, Denver and La Junta, Colo. 187,185, canc. Cl. 46.
Colorado Milling & Elevator Co., The, d. b. a. The Monte Vista Flour Mills, Monte Vista, Colo. 241,852, canc. Cl. 46.
Columbia Ribbon & Carbon Mfg. Co., Inc., Glen Cove, N. Y. 621,451, pub. 11–22–55. Cl. 52.
Commercial Visible Systems: *See*—
Daniel, Robert S.
Compotite Shower Pan: *See*—
Morthland, Glenn A.
Connelly Containers, Inc.: *See*—
Gum, Inc.
Consolidated Machinery & Supply Co., Ltd., Los Angeles, Calif. 371,810, 12(c) pub. 2–14–56. Cl. 23.
Continental Gummiwerke Aktiengesellschaft, Hannover, Germany. 621,319, pub. 11–22–55. Cl. 35.
Cook, Leone D., d. b. a. Surprise Co., Wheatridge, Colo. 621,137, pub. 11–22–55. Cl. 22.
Cooper Mfg. Co., Marshalltown, Iowa. 621,197, pub. 11–22–55. Cl. 23.
Cortez Growers Association, Turlock, Calif. 204,054, canc. Cl. 46.
Covey, Luther, d. b. a. Covey Sheet Metal Works, Holdenville, Okla. 504,733, canc. Cl. 2.
Covey Sheet Metal Works: *See*—
Covey, Luther.
Craddock-Terry Co., Lynchburg, Va. 157,035, canc. Cl. 39.
Crocker, Burbank Papers Inc., Fitchburg, Mass. 621,339, pub. 11–22–55. Cl. 37.
Cronstroms Mfg. Co.: *See*—
Cronstroms Mfg., Inc.
Cronstroms Mfg., Inc., d. b. a. Constroms Mfg. Co., Minneapolis, Minn. 621,481. Cl. 31.
Curtis Mfg. Co., St. Louis, Mo. 621,279, pub. 11–15–55. Cl. 31.
Curtiss-Wright Corp., Woodridge, N. J. 621,146, pub. 11–15–55. Cl. 23.
Daniel, Robert S., d. b. a. Commercial Visible Systems, Washington, D. C. 621,289, pub. 11–22–55. Cl. 32.
Darling & Co., Chicago, Ill. 621,406, pub. 11–22–55. Cl. 46.
Davenport Hosiery Mills, Inc., Chattanooga, Tenn. 621,366, pub. 11–22–55. Cl. 39.
Davies-Young Soap Co., The, Dayton, Ohio. 621,445, pub. 11–22–55. Cl. 52.
Dean Products Inc., Brooklyn, N. Y. 621,280, pub. 11–15–55. Cl. 31.
Defiance Dairy Products Co., The, Defiance, Ohio. 188,273, canc. Cl. 46.
Delapenha, R. U., & Co., Inc., New York, N. Y., to Myers Rum Co. Ltd., Nassau, Bahamas. 330,483, ren. 12–3–55, Cl. 49.
De Laval Steam Turbine Co., Trenton, N. J. 107,738, ren. 12–28–55. Cl. 23.
Deretchin, Benjamin B., d. b. a. Derry Products Co., Brooklyn, N. Y. 621,408, pub. 11–22–55. Cl. 46.
Derry Products Co.: *See*—
Deretchin, Benjamin B.
Detrex Corp., Detroit, Mich. 621,224, pub. 11–22–55. Cl. 23.
DeWalt Inc., Lancaster, Pa. 621,152, pub. 11–22–55. Cl. 23.
Dickens, Ida, Kansas City, Mo. 621,437, pub. 11–22–55. Cl. 51.
Disposa-Ware Corp., Philadelphia, Pa. 621,071, pub. 11–15–55. Cl. 13.
Dow Chemical Co., The, Midland, Mich. 621,084, pub. 11–15–55. Cl. 15.
Dowdell, J. R., & Co., Dallas, Tex. 621,179, pub. 11–15–55. Cl. 15.
Drexel Distributing Co.: *See*—
Beverage Distributors, Inc.
Drillmation Co.: *See*—
Schmidt, Samuel S.
Durango Coca-Cola Bottling Co., Durango, Colo. 506,052, canc. Cl. 45.
Durst S.-A., Bolzano, Italy. 621,244, pub. 11–22–55. Cl. 26.
East Tennessee Packing Co., Knoxville, Tenn. 621,401, pub. 11–22–55. Cl. 46.
Eastern Industries, Inc., East Norwalk, Conn. 621,156, pub. 11–15–55. Cl. 23.
Eastman Kodak Co., Rochester, N. Y. 621,263, pub. 11–22–55. Cl. 26.
Eaton, Crane & Pike Co., Pittsfield, Mass. 113,236, canc. Cl. 37.
Eclipse Air Brush Co., Newark, N. J. 621,228, pub. 11–22–55. Cl. 23.
Eclipse Fuel Engineering Co., Rockford, Ill. 621,314, pub. 11–15–55. Cl. 34.
Eco Engineering Co., Division of Economy Faucet Co., Newark, N. J. 621,166–8, pub. 11–15–55. Cl. 23.
Ed-U-Cards Mfg. Corp., New York, N. Y. 621,346, pub. 11–22–55. Cl. 38.
Electro Metallurgical Co., Glen Ferris, W. Va., and Niagara Falls, N. Y., to Union Carbide and Carbon Corp., New York, N. Y. 108,865, ren. 2–29–56. Cl. 14.
Elliott Brothers (London) Ltd., London, England. 621,238, pub. 11–15–55. Cl. 26.
Elysee Lingerie Corp.: *See*—
First Lady Lingerie Corp.
Emsco Mfg. Co., Los Angeles, Calif. 621,198, pub. 11–22–55. Cl. 23.
Enicar Watch Corp., New York, N. Y. 621,270, pub. 11–15–55. Cl. 27.
Enthone Inc., New Haven, Conn. 621,440, pub. 11–22–55. Cl. 52.
Erb, Melbourne E., d. b. a. National Vinyl Products, Redwood City, Calif. 621,087, pub. 11–15–55. Cl. 16.
Erie Brewing Co., The, Erie, Pa. 621,419–21, pub. 11–22–55. Cl. 48.
Esmond Mills, Inc., The, Esmond, R. I. 421,436, canc. Cl. 42.
Essential Chemical Co., Milwaukee, Wis. 439,982, canc. Cl. 4.
Evans Case Co., North Attleboro, Mass. 621,122, pub. 11–15–55. Cl. 21.
Fairview Frocks, Philadelphia, Pa. 621,356, pub. 11–22–55. Cl. 39.
Family Kitchen Products Co., Phoenix, Ariz. 384,075, canc. Cl. 46.
Famous Lady, Woodbine, N. J. 505,278, canc. Cl. 39.
Feature Ring Co., Inc., New York, N. Y. 621,277, pub. 11–15–55. Cl. 28.
Feature Ring Co., Inc., New York, N. Y. 621,278, pub. 11–22–55. Cl. 28.
Federal Sign and Signal Corp., Chicago, Ill. 621,129, pub. 11–15–55. Cl. 21.
Fellows Gear Shaper Co., The, Springfield, Vt. 621,257, pub. 11–15–55. Cl. 26.
Fellows Gear Shaper Co., The, Springfield, Vt. 621,264, pub. 11–15–55. Cl. 26.
Fenwick Textiles, Inc., New York, N. Y. 503,559, canc. Cl. 42.
Fern Shoe Co., Los Angeles, Calif. 621,360, pub. 11–22–55. Cl. 39.
Feuillet, Louise E.: *See*—
Veuve Chauvet, Madame.
Fidelity Federal Savings and Loan Association of Glendale, Glendale, Calif. 621,458, pub. 11–22–55. Cl. 102.
Fine Cotton Spinners & Doublers Association, Ltd., The, to Fine Spinners & Doublers Ltd., Manchester, England. 330,884, ren. 12–17–55. Cl. 43.
Fine Spinners & Doublers Ltd.: *See*—
Fine Cotton Spinners & Doublers Association, Ltd., The.
First Lady Lingerie Corp., to Elysee Lingerie Corp., New York, N. Y. 508,954, canc. Cl. 39.
Florida Speaks Corp., St. Petersburg, Fla. 621,352, pub. 11–22–55. Cl. 38.
Florida Wood Products Co., Jacksonville, Fla., to the Glidden Co., Cleveland, Ohio. 109,607, ren. 4–11–56. Cl. 6.
Folks, Kenneth P., Orlando, Fla. 621,355, pub. 11–22–55. Cl. 38.
Foremost Dairies, Inc.: *See*—
Golden State Co., Ltd.
Forester Furs, Inc., New York, N. Y. 621,431, pub. 11–22–55. Cl. 50.
Forster Willi & Co., St. Gall, Switzerland. 310,875, canc. Cl. 42.
Fournier, Peter, d. b. a. Trenton Heating & Mfg. Co., Trenton, Mich. 500,378, canc. Cl. 34.
Freeman Shoe Corp., Beloit, Wis. 333,578, ren. 3–24–56. Cl. 39.
Friedin, Jule F., d. b. a. Southern Oxide Chemical Mfgrs., Miami, Fla. 621,442, pub. 11–22–55. Cl. 52.

Fulham Brothers, Inc., Boston, Mass. 621,410, pub. 11–22–55. Cl. 46.
Fuller, D. B., & Co., Inc., New York, N. Y. 621,379, pub. 11–22–55. Cl. 42.
Fuller, D. B., & Co., Inc., New York, N. Y. 621,389, pub. 11–22–55. Cl. 42.
Fullerton Mutual Orange Association, Fullerton, by H. Sham, d. b. a. Placentia Fruit Distributors, Placentia, Calif. 191,743, 12(c) pub. 2–14–56. Cl. 46.
Galter, Jack, Chicago, Ill. 503,765, canc. Cl. 26.
Gas-Ease Laboratories: *See*—
Kaplan, Julius R.
Gebrüder, Miller, Gesellschaft m. b. H., Innsbruck (Tirol), Austria. 621,145, pub. 11–22–55. Cl. 23.
Geller, Andrew, Inc., Brooklyn, N. Y. 621,361, pub. 11–22–55. Cl. 39.
General Motors Corp., Detroit, Mich. 621,229, pub. 11–15–55. Cl. 23.
General Scientific Equipment Co.: *See*—
Pikosky, Daniel J.
Geometric Tool Co., The, New Haven, Conn., to Greenfield Tap and Die Corp., Greenfield, Mass. 109,724, ren. 4–18–56. Cl. 23.
Gerber Sheet Metal Inc., Minneapolis, Minn. 621,171, pub. 11–15–55. Cl. 23.
Gettelman, A., Brewing Co., Milwaukee, Wis. 360,337, canc. Cl. 48.
Gilbey, W. & A., Ltd., London, England, and New Toronto, Ontario, Canada. 621,426, pub. 11–22–55. Cl. 49.
Glatz, Felix, Import Co., Inc., New York, N. Y. 621,147, pub. 11–22–55. Cl. 23.
Glazer, Max, d. b. a. Real Juice Co., Dallas, Tex. 299,124, canc. Cl. 45.
Glidden Co., The: *See*—
Florida Wood Products Co.
Golden State Co., Ltd., by Foremost Dairies, Inc., San Francisco, Calif. 363,708, 12(c) pub. 2–14–56. Cl. 46.
Goldstein-Gerson Co., Inc., New York, N. Y. 621,275, pub. 11–15–55. Cl. 28.
Gordon Printing Co., Davenport, Iowa. 621,141, pub. 11–22–55. Cl. 22.
Gordon, Theodore J., Las Cruces, N. Mex. 621,260, pub. 11–15–55. Cl. 26.
Gottscho, Adolph, Inc., Hillside, N. J. 621,209, pub. 11–15–55. Cl. 23.
Governor Fastener Co., New York, N. Y. 504,381, canc. Cl. 40.
Graetz Aktiengesellschaft, Altena/Westphalia, Germany. 621,307, pub. 11–15–55. Cl. 34.
Grand Union Co., The, East Paterson, N. J. 621,415, pub. 11–22–55. Cl. 46.
Gray Brothers Shoes, Inc., Syracuse, N. Y. 621,369, pub. 11–22–55. Cl. 39.
Gray, G. A., Co., The, Cincinnati, Ohio. 621,225–6, pub. 11–15–55. Cl. 23.
Gray, G. A., Co., The, Cincinnati, Ohio. 621,227, pub. 11–22–55. Cl. 23.
Great China Food Products Co., The, Chicago, Ill. 621,403, pub. 11–22–55. Cl. 46.
Greenebaum, J., Tanning Co., Chicago, Ill. 505,539, canc. Cl. 1.
Greenfield Tap and Die Corp.: *See*—
Geometric Tool Co., The.
Greenland Mfg. Co., The, Hockley, Birmingham, England. 621,434, pub. 11–22–55. Cl. 50.
Griffin, G. W., Co., Franklin, N. H. 621,154, pub. 11–15–55. Cl. 23.
Grosche, Bruno, & Co., New York, N. Y., to James Huggins & Son, Inc., Malden, Mass. 106,429, ren. 10–19–55. Cl. 6.
Gross, John, and Co., Baltimore, Md. 621,427–9, pub. 11–22–55. Cl. 49.
Gruen Watch Co., The, Cincinnati, Ohio. 621,267, pub. 11–15–55. Cl. 27.
Gulf States Paper Corp., Tuscaloosa, Ala. 621,330, pub. 11–15–55. Cl. 37.
Gulf States Paper Corp., Tuscaloosa, Ala. 621,332, pub. 11–15–5. Cl. 37.
Gum, Inc., to Connelly Containers, Inc., Philadelphia, Pa. 331,154, ren. 12–31–55. Cl. 46.
Guyer, Hubert A., Richardson Park, Wilmington, Del. 621,072, pub. 11–15–55. Cl. 13.
Hall, Amos E., Sarasota, Fla. 621,485. Cl. 52.
Hall, Lawrence K., d. b. a. Highland Industries, Greenville, Maine. 621,159, pub. 11–15–55. Cl. 23.
Harbor Plywood Corp., Aberdeen, Wash. 621,058, pub. 11–15–55. Cl. 12.
Hardsocg Pneumatic Tool Co., Ottumwa, Iowa. 621,204, pub. 11–15–55. Cl. 23.
Harts Mountain Products Corp., New York, N. Y. 621,470, pub. 11–22–55. Cl. 107.
Hawaiian Pineapple Co., Ltd., Honolulu, Hawaii. 621,416, pub. 11–22–55. Cl. 46.
Hayssen Mfg. Co., Sheboygan, Wis. 621,205, pub. 11–22–55. Cl. 23.
Heller-Sperry, Inc., New York, N. Y. 621,273, pub. 11–15–55. Cl. 28.
Hellige, Inc., Garden City, N. Y. 621,479. Cl. 26.
Helmreich, Edwin, West Lafayette, Ohio. 621,201, pub. 11–22–55. Cl. 23.
Henryson, L. P., & Co., Inc., New York, N. Y. 503,530, canc. Cl. 41.
Herold Mfg. Co., to Herold Products Co., Inc., Chicago, Ill. 621,236, pub. 11–15–55. Cl. 26.
Herold Products Co., Inc.: *See*—
Herold Mfg. Co.
Heublein, Inc.: *See*—
Ste. Pierre Smirnoff Fils, Inc.
Hichborn, John B., Washington, D. C. 621,329, pub. 11–22–55. Cl. 37.
Highland Industries: *See*—
Hall, Lawrence K.
Highland Sales Co., Denver, Colo. 369,199, canc. Cl. 46.
Himmelstein, Harry, New York, N. Y. 621,362, pub. 11–15–55. Cl. 39.
Hoerner Boxes, Inc.: *See*—
Iowa Fiber Box Co.
Hohner, M., Inc., New York, N. Y. 621,324, pub. 11–15–55. Cl. 36.
Hoke Oil & Fertilizer Co., Raeford, N. C. 621,163, pub. 11–15–55. Cl. 23.
Horlick Laboratories, Inc., Racine, Wis. 411,548, canc. Cl. 6.
Hoyt Wire Cloth Co., Lancaster, Pa. 621,070, pub. 11–15–55. Cl. 13.
Hubbard Milling Co., Mankato, Minn. 621,407, pub. 11–22–55. Cl. 46.
Hubbell, Harvey, Inc., Bridgeport, Conn. 621,131, pub. 11–15–55. Cl. 21.
Huggins, James, & Son, Inc.: *See*—
Grosche, Bruno, & Co.
Hunter Mfg. and Commission Co., New York, N. Y., and Greensboro, N. C. 119,315, canc. Cl. 42.
Hyde Corp., Fort Worth, Tex. 621,115, pub. 11–15–55. Cl. 19.
Hyde Mfg. Co., Southbridge, Mass. 621,206, pub. 11–22–55. Cl. 23.
Hypro Engineering, Inc., Minneapolis, Minn. 621,180, pub. 11–15–55. Cl. 23.
Ideal Corp., Brooklyn, N. Y. 621,069, pub. 11–15–55. Cl. 13.
Illinois Accessories Co., to Switches Inc., Chicago, Ill. 587,218, new cert. Cl. 21.
Illinois Accessories Co., to Switches Inc., Chicago, Ill. 601,584, new cert. Cl. 21.
Imperial Knife Co., Inc., Providence, R. I. 621,182, pub. 11–15–55. Cl. 23.
Imperial Lighting Products Co., Latrobe, Pa. 621,118–19, pub. 11–15–55. Cl. 21.
Indianapolis Glove Co., to Indianapolis Glove Co., Inc., Indianapolis, Ind. 332,394, ren. 2–11–56. Cl. 39.
Indianapolis Glove Co., to Indianapolis Glove Co., Inc., Indianapolis, Ind. 333,243, ren. 3–10–56. Cl. 39.
Indianapolis Glove Co., Inc.: *See*—
Indianapolis Glove Co.
Industrial Plastic Co., Raritan Township, N. J. 621,066, pub. 11–15–55. Cl. 13.
International Fraternity of Delta Sigma Pi, Inc., Chicago, Ill. 621,342, pub. 11–15–55. Cl. 38.
International Shoe Co., St. Louis, Mo. 334,063, ren. 4–21–56. Cl. 39.
Iowa Fiber Box Co., to Hoerner Boxes, Inc., Keokuk, Iowa. 332,112, ren. 2–4–56. Cl. 37.
Iron Fireman Mfg. Co., Portland, Oreg. 248,719, canc. Cl. 34.
J & J Tool and Machine Co., Chicago, Ill. 621,073, pub. 11–15–55. Cl. 13.
Jamestown Finishing Products, Inc., Jamestown, N. Y. 621,435, pub. 11–22–55. Cl. 50.
Jergens, Andrew, Co., The, Cincinnati, Ohio. 621,449, pub. 11–22–55. Cl. 52.
Joa Co., The, Lake Wales, Fla. 621,395–6, pub. 11–22–55. Cl. 44.
Joclin Mfg. Co., The, North Haven, Conn. 621,320, pub. 11–22–55. Cl. 35.
Johns-Manville Corp., New York, N. Y. 621,053, pub. 11–15–55. Cl. 12.
Jones, Dean, Inc., Kansas City, Mo. 509,186, canc. Cl. 39.
Jones & Laughlin Steel Corp., Pittsburgh, Pa. 621,061, pub. 11–15–55. Cl. 13.
Julliard, A. D., & Co., Inc., New York, N. Y. 621,384, pub. 11–22–55. Cl. 42.
Jurid Werke Aktiengesellschaft, Duesseldorf-Grafenberg, Germany. 621,110, pub. 11–15–55. Cl. 19.
Kabakoff, Joseph, d. b. a. Joseph Kabakoff & Co., La Grange, Ill. 621,074, pub. 11–15–55. Cl. 13.
Kabakoff, Joseph, & Co.: *See*—
Kabakoff, Joseph.
Kaplan, Julius R., d. b. a. Gas-Ease Laboratories, San Pedro, Calif. 621,476. Cl. 18.
Kelsh Instrument Co., Inc., The, Baltimore, Md. 621,253, pub. 11–22–55. Cl. 26.
Kem Button Corp., Brooklyn, N. Y. 621,220, pub. 11–22–55. Cl. 23.
Kendall Co., The, Walpole, Mass. 621,282, pub. 11–15–55. Cl. 31.
Kent-Moore Organization, Inc., Detroit, Mich. 621,195, pub. 11–22–55. Cl. 23.
Kentucky Fertilizer Works, Winchester, Ky. 505,626, canc. Cl. 10.
Keuffel & Esser Co., Hoboken, N. J. 621,255, pub. 11–15–55. Cl. 26.
Keystone Alloys Co., Derry, Pa. 621,048, pub. 11–15–55. Cl. 12.
Kiekhaefer Corp., Cedarburg, Wis. 621,207–8, pub. 11–22–55. Cl. 23.
Kiekhaefer Corp., Cedarburg, Wis. 621,212, pub. 11–22–55. Cl. 23.
Kimble Glass Co., Toledo, Ohio. 621,252, pub. 11–22–55. Cl. 26.
King, John P., Mfg. Co., The, Augusta, Ga. 621,386–8, pub. 11–22–55. Cl. 42.
Kleinol-Produktion G. m. b. H., Hamburg, Germany. 621,448, pub. 11–22–55. Cl. 52.
Kroehler Mfg. Co., Naperville, Ill. 621,295, pub. 11–22–55. Cl. 32.
Kwikset Locks, Inc., Anaheim, Calif. 621,331, pub. 11–22–55. Cl. 37.
Laboratory of Electronic Engineering, Inc., Washington, D. C. 621,126, pub. 7–26–55. Cl. 21.
La Junta Flour Mills, The: *See*—
Colorado Milling & Elevator Co., The.

Lamb, F. Jos., Co., Detroit, Mich. 621,231, pub. 11–15–55. Cl. 23.
Larson, Chas. O., Co., Sterling, Ill. 621,078, pub. 11–15–55. Cl. 13.
Lay Packing Co., Inc., Knoxville, Tenn. 621,404, pub. 11–22–55. Cl. 46.
Lazy Baseball Co.: *See*—
Carroad, Anne.
Leeming, Thos., & Co., Inc., New York, N. Y. 621,103, pub. 11–15–55. Cl. 18.
Lentheric, Inc., to Lentheric, Inc., New York, N. Y. 334,333, ren. 4–28–56. Cl. 51.
Les Parfums Norante, Societe a Responsabilite Limitee, Melun, France. 520,467, canc. Cl. 6.
Levy Bros. & Adler Rochester, Inc., to Timely Clothes, Inc., Rochester, N. Y. 332,466, ren. 2–18–56. Cl. 39.
Lewis, Dick, Ad Planing, Inc., Olympia, Wash. 621,457, pub. 11–22–55. Cl. 101.
Lewyt Corp., Brooklyn, N. Y. 621,281, pub. 11–22–55. Cl. 31.
Leyton Sportswear Co., New York, N. Y. 621,372, pub. 11–22–55. Cl. 39.
Little League Baseball, Inc., Williamsport, Pa. 621,335, pub. 11–15–55. Cl. 37.
Logston, Pat., d. b. a. Southern Cooperative Canneries, Los Angeles, Calif. 361,038, canc. Cl. 46.
Los Angeles Soap Co., Los Angeles, Calif. 621,452, pub. 11–22–55. Cl. 52.
Lotus, Ltd.: *See*—
Bostock, Edwin, & Co., Ltd.
Lowe, Joe, Corp.: *See*—
Popsicle Corp. of the United States, The.
Lowell Counter Co., Lowell, Mass. 621,436, pub. 11–22–55. Cl. 50.
Luque & Fuertes, to Coco Rico Inc., Naguabo, Puerto Rico. 332,585, ren. 2–18–56. Cl. 45.
Lynn, Allan D.: *See*—
California Pet Foods Co.
Lyon, Inc., Detroit, Mich. 621,193, pub. 11–22–55. Cl. 23.
M. B. M. Foundry Co., Inc., Garfield Heights, Ohio. 621,081, pub. 11–15–55. Cl. 14.
MacGregor Sport Products, Inc., Cincinnati, Ohio. 621,133, pub. 11–15–55. Cl. 22.
Madame Veuve Chauvet, née Louise Eugénie Feuillet, Saussay par Anet (Eure-et-Loir), France. 621,323, pub. 11–22–55. Cl. 36.
Manfredi, Anthony, d. b. a. A. M. Wood Novelty Co., Northport, N. Y. 621,290, pub. 11–22–55. Cl. 32.
Margulies, Larry J., to Clarence S. Brown & Co., Inc., New York, N. Y. 330,157, ren. 11–19–55. Cl. 42.
Massengill, S. E., Co., The, Bristol, Tenn. 621,104–5, pub. 11–15–55. Cl. 18.
Master Prescription Opticians' Association, Philadelphia, Pa. 621,240, pub. 11–22–55. Cl. 26.
Mavrogianis, Theodore J., d. b. a. Table Talk, Wilmington, N. C. 621,400, pub. 11–22–55. Cl. 46.
Mayfair Candy Co.: *See*—
Powell, D. H.
McCallum-Legaz Fish Co., Inc., Seattle, Wash. 333,390, ren. 3–17–56. Cl. 46.
Melville Shoe Corp., New York, N. Y. 621,367, pub. 11–22–55. Cl. 39.
Memphis Plastic Enterprises, Inc., Memphis, Tenn. 621,142, pub. 11–22–55. Cl. 22.
Menda Co., Altadena, Calif. 510,876, canc. Cl. 2.
Merchant Suppliers Paper Co., New York, N. Y. 621,338, pub. 11–22–55. Cl. 37.
Merck & Co., Inc., Rahway, N. J., to The Wm. S. Merrell Co., Cincinnati, Ohio. 330,761, ren. 12–17–55. Cl. 18.
Merrell, Wm. S., Co., The: *See*—
Merck & Co., Inc.
Merrell, Wm. S., Co., The Cincinnati, Ohio. 621,102, pub. 11–15–55. Cl. 18.
Metropolitan Sand and Gravel Corp., Port Washington, N. Y. 621,465, pub. 11–22–55. Cl. 105.
Meyers, Louis, & Son, to Louis Meyers & Son, Inc., New York, N. Y. 109,682, ren. 4–11–56. Cl. 39.
Meyers, Louis, & Son, Inc.: *See*—
Meyers, Louis, & Son.
Miami Daily News, Inc., The, Miami, Fla. 621,341, pub. 11–15–55. Cl. 38.
Mikulec, Stanley, d. b. a. Stan-Pak Industries, Buffalo, N. Y. 621,188, pub. 11–22–55. Cl. 23.
Milemaster, Inc.: *See*—
Schneider Carburetor Co.
Millbrook Products Co., Somerville, Mass. 298,418, canc. Cl. 45.
Millers Falls Co., Greenfield, Mass. 621,165, pub. 11–15–55. Cl. 23.
Millers Falls Co., Greenfield, Mass. 621,176, pub. 11–22–55. Cl. 23.
Milner & Coke Ltd., London, England. 509,378, canc. Cl. 45.
Milwaukee File Co., Milwaukee, Wis. 621,230, pub. 11–22–55. Cl. 23.
Minnesota Mining & Mfg. Co., St. Paul, Minn. 621,044, pub. 4–12–55. Cl. 2.
Mir-A-Cali Corp., Chicago, Ill. 621,125, pub. 11–15–55. Cl. 21.
Mississippi Glass Co., St. Louis, Mo. 621,301, pub. 11–22–55. Cl. 33.
Missouri Portland Cement Co., St. Louis, Mo. 331,003–4, ren. 12–24–55. Cl. 12.
M'Lady, Inc., Tuscaloosa, Ala. 621,450, pub. 11–22–55. Cl. 52.
Mock, Judson, Voehringer Co., Inc., Long Island City, N. Y. 311,162, canc. Cl. 39.
Modene Paint Co., Inc., The, Chelsea, Mass. 621,086, pub. 11–15–55. Cl. 16.
Modern Upholstered Chair Co., Inc., Morristown, Tenn. 621,292, pub. 11–22–55. Cl. 32.
Monachello, Leonard, d. b. a. Seaboard Home Improvement Co., West Babylon, N. Y. 621,051, pub. 11–15–55. Cl. 12.
Monarch Machine Tool Co., The, Sidney, Ohio. 621,191, pub. 11–22–55. Cl. 23.
Monarch Marking System Co., The, Dayton, Ohio. 621,199, pub. 11–22–55. Cl. 23.
Monark Silver King, Inc., Chicago, Ill. 621,151, pub. 11–22–55. Cl. 23.
Monte Vista Flour Mills, The: *See*—
Colorado Milling & Elevator Co., The.
Montebello Wine Co. of California, San Francisco, Calif. 621,418, pub. 11–22–55. Cl. 47.
Morgan Co., The, Peoria, Ill. 229,700, canc. Cl. 16.
Morrison, Dana E., Jr., d. b. a. Dana E. Morrison, Jr., Co., Chicago, Ill. 621,134, pub. 11–15–55. Cl. 22.
Morrison, Dana E., Jr., Co.: *See*—
Morrison, Dana E., Jr.
Morthland, Glenn A., d. b. a. Compotite Shower Pan, Los Angeles, Calif. 621,047, pub. 11–15–55. Cl. 12.
Morton Salt Co.: *See*—
Myles Salt Co., Inc.
Mosher, Maud H., Staten Island, N. Y. 621,345, pub. 11–22–55. Cl. 38.
Mulhern Belting Co., Inc., New York, N .Y. 621,321, pub. 11–15–55. Cl. 35.
Murray Equipment Co., Inc., Detroit, Mich. 621,196, pub. 11–22–55. Cl. 23.
Musgrave, Orly, Springfield, Ohio. 621,200, pub. 11–15–55. Cl. 23.
Myers, E. A., & Sons, Inc., Mt. Lebanon, Pittsburgh, Pa. 621,128, pub. 11–15–55. Cl. 21.
Myers Rum Co. Ltd.: *See*—
Delapenha, R. U., & Co., Inc.
Myerson Tooth Corp., Cambridge, Mass. 621,394, pub. 11–22–55. Cl. 44.
Myles Salt Co., Inc., New Orleans, La., to Morton Salt Co., Chicago, Ill. 510,874, canc. Cl. 46.
Nachman Corp., Chicago, Ill. 621,286, pub. 11–22–55. Cl. 32.
Nachman Corp., Chicago, Ill. 621,288, pub. 11–15–55. Cl. 32.
National Hospital Association, Portland, Oreg. 621,460, pub. 11–22–55. Cl. 102.
National Plastic Products Co., The, Odenton, Md. 621,291, pub. 11–22–55. Cl. 32.
National Research Corp., Cambridge, Mass. 621,237, pub. 11–15–55. Cl. 26.
National Screw Machine Products Association, Cleveland, Ohio. 621,351, pub. 11–22–55. Cl. 38.
National Vinyl Products: *See*—
Erb, Melbourne E.
Nekoosa-Edwards Paper Co., Port Edwards, Wis. 332,653, ren. 2–18–56. Cl. 37.
Neptune Meter Co., New York, N. Y. 621,261–2, pub. 11–22–55. Cl. 26.
Neumode Hosiery Co., Chicago, Ill. 621,359, pub. 11–22–55. Cl. 39.
New Jersey Electronics Corp., Kenilworth, N. J. 621,132, pub. 11–15–55. Cl. 21.
Newland, Dietz, Cedar Rapids, Iowa. 621,399, pub. 11–22–55. Cl. 46.
New York Silicate Book Slate Co., Inc., New York, N. Y. 621,446, pub. 11–22–55. Cl. 52.
Nickey Brothers, Inc., Memphis, Tenn. 621,050, pub. 11–15–55. Cl. 12.
Niles & Moser Cigar Co., Kansas City, Mo. 326,847, ren. 8–6–55. Cl. 17.
Nivada Watch Corp., New York, N. Y. 422,453, canc. Cl. 27.
Nomus Products, Inc., Minneapolis, Minn. 621,063, pub. 11–15–55. Cl. 13.
Norcross, Inc., New York, N. Y. 621,347–50, pub. 11–22–55. Cl. 38.
Nordberg Mfg. Co., Milwaukee, Wis. 621,162, pub. 11–15–55. Cl. 23.
North Atlantic and Gulf Steamship Co., Inc., New York, N. Y. 621,467, pub. 11–22–55. Cl. 105.
Northern Wholesale Hardware Co., Portland, Oreg. 621,455, pub. 11–22–55. Cl. 100.
Northmont Hosiery Corp., Reading, Pa., New York, N. Y. 364,990, canc. Cl. 6.
Northwest Cigar Corp., St. Paul, Minn. 621,096–7, pub. 11–15–55. Cl. 17.
Nu-Life, Inc., Pittsburgh, Pa. 621,189, pub. 11–15–55. Cl. 23.
Nulomoline Co., The, to American Molasses Co., New York, N. Y. 109,023, ren. 3–14–56. Cl. 46.
O. E. M. Corp., East Norwalk, Conn. 621,397, pub. 11–22–55. Cl. 44.
Ohio Brass Co., The, Mansfield, Ohio. 621,082, pub. 11–15–55. Cl. 15.
Ohio Fruit Products Co.: *See*—
Rahal, Joseph E.
Oil Metering and Processing Equipment Corp., Houston, Tex. 621,478. Cl. 26.
Oliver Corp., The, Chicago, Ill. 421,123, canc. Cl. 23.
Onita Specialty Co., Brooklyn, N. Y. 156,033, canc. Cl. 39.
Onondaga Silk Co., Inc., New York, N. Y. 503,568, canc. Cl. 42.
Orchard Brothers Inc., Rutherford, N. J. 621,052, pub. 11–15–55. Cl. 12.
Osborn Mfg. Co., The, Cleveland, Ohio. 621,192, pub. 11–22–55. Cl. 23.
Overhead Door Co. of Eustis: *See*—
Ray, George.
Owens Brush Co., Toledo, Ohio. 500,500, canc. Cl. 29.
Palmer, Frank D., Inc., Chicago, Ill. 503,367, canc. Cl. 2.
Paraffine Paint Co., The, San Francisco, Calif. 79,002, canc. Cl. 12.
Paristyle Bags, Inc., New York, N. Y. 328,134, ren. 9–17–55. Cl. 3.
Parke, Davis & Co.: *See*—
Bay Co., The.

Parker Sweeper Co., Springfield, Ohio. 621,153, pub. 11–15–55. Cl. 23.
Parkland Sportswear Co., Inc., Dallas, Tex. 621,371, pub. 11–22–55. Cl. 39.
Paulaner-Salvator-Thomasbrau, A. G., Munich, Germany. 621,422, pub. 11–22–55. Cl. 48.
Peerless Products Industries, Chicago, Ill. 621,124, pub. 11–15–55. Cl. 21.
Pemco Corp.: *See*—
Porcelain Enamel and Mfg. Co. of Baltimore, The.
Penn Metal Corp. of Penna., Philadelphia, Pa. 621,075, pub. 11–15–55. Cl. 13.
Pennsylvania Salt Mfg. Co., The, Philadelphia, Pa. 621,453, pub. 11–22–55. Cl. 52.
Perf-A-Base Co., The, St. Louis, Mo. 621,158, pub. 11–15–55. Cl. 23.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 621,099, pub. 11–15–55. Cl. 18.
Pharma-Craft Corp., New York, N. Y. 621,438, pub. 11–22–55. Cl. 51.
Philadelphia Textile Machinery Co., Philadelphia, Pa. 31,821, canc. Cl. 23.
Phillips Corp., Inc., The, West Somerville, Mass. 621,441, pub. 11–22–55. Cl. 52.
Phillips Mfg. Co., Chicago, Ill. 621,174, pub. 11–15–55. Cl. 23.
Phillips Petroleum Co., Bartlesville, Okla. 621,464, pub. 11–22–55. Cl. 105.
Pikosky, Daniel J., d. b. a. General Scientific Equipment Co., Hamden, Conn. 621,254, pub. 11–22–55. Cl. 26.
Pittsburgh Consolidation Coal Co., Pittsburgh, Pa. 621,043, pub. 11–15–55. Cl. 1.
Placentia Fruit Distributors: *See*—
Fullerton Mutual Orange Association.
Plannair Ltd., Leatherhead, England. 621,308, pub. 11–15–55. Cl. 34.
Plee-Zing Corp., The, New York, N. Y., and Savannah, Ga. 212,611, canc. Cl. 44.
Pneumafil Corp., Charlotte, N. C. 621,164, pub. 11–15–55. Cl. 23.
Polaroid Corp., Cambridge, Mass. 621,256, pub. 11–15–55. Cl. 26.
Poor & Co., Chicago, Ill. 621,092, pub. 11–15–55. Cl. 16.
Popsicle Corp. of the United States, The, to Joe Lowe Corp., New York, N. Y. 332,790, ren. 2–25–56. Cl. 46.
Porcelain Enamel and Mfg. Co. of Baltimore, The, to Pemco Corp., Baltimore, Md. 329,748, ren. 11–12–55. Cl. 1.
Powell, D. H., d. b. a. Mayfair Candy Co., Seattle, Wash. 366,619, canc. Cl. 46.
Power Tool Rentals, Inc., Los Angeles, Calif. 621,466, pub. 11–22–55. Cl. 105.
Premo Pharmaceutical Laboratories, Inc., South Hackensack, N. J. 621,098, pub. 11–15–55. Cl. 18.
Prince, H. M., Textiles Inc., New York, N. Y. 621,381, pub. 11–22–55. Cl. 42.
Priory Laboratories Ltd., West Drayton, Middlesex, England. 621,444, pub. 11–22–55. Cl. 52.
Prouction and Marketing Co., Newtown, Conn. 621,135, pub. 11–15–55. Cl. 22.
Protype, Inc., New York, N. Y. 621,250, pub. 11–15–55. Cl. 26.
Purolator Products, Inc., Rahway, N. J. 621,283, pub. 11–22–55. Cl. 31.
Pyplan Co., Bloomfield, N. J. 621,484. Cl. 46.
"R & B": *See*—
Arranbee Doll Co.
R. M. B. Products: *See*—
Burmeister, Robert M.
Rahal, Joseph E., d. b. a. Ohio Fruit Products Co., Cleveland, Ohio. 502,830, canc. Cl. 46.
Rawlplug Co. Ltd., The, London, England. 621,068, pub. 11–15–55. Cl. 13.
Ray, George, d. b. a. Overhead Door Co. of Eustis, Eustis, Fla. 621,474. Cl. 12.
Reading, Ralph R., d. b. a. Reading Tire Machinery Co., Hawthorne, Calif. 621,160, pub. 11–15–55. Cl. 23.
Reading Tire Machinery Co.: *See*—
Reading, Ralph R.
Real Juice Co.: *See*—
Glazer, Max.
Reardon Co., The, St. Louis County, Mo. 621,049, pub. 11–15–55. Cl. 12.
Reddi-Wip, Inc., Los Angeles, Calif. 621,433, pub. 11–22–55. Cl. 50.
Redmond Co., Inc., Owosso, Mich. 621,316, pub. 11–22–55. Cl. 34.
Reechet Tool Corp., Cleveland, Ohio. 621,202, pub. 11–22–55. Cl. 23.
Reed Mfg. Co., Erie, Pa. 621,144, pub. 11–15–55. Cl. 23.
Reef Industries Inc., East Detroit, Mich. 621,246, pub. 11–15–55. Cl. 26.
Rel Plastics Corp., East Paterson, N. J. 621,250, pub. 11–15–55. Cl. 26.
Remington Rand Inc., Buffalo, by Sperry Rand Corp., New York, N. Y. 389,272, 12(c) pub. 2–14–56. Cl. 37.
Remington Rand Inc., Buffalo, by Sperry Rand Corp., New York, N. Y. 401,191, 12(c) pub. 2–14–56. Cl. 23.
Reserve Research Co., The, Cleveland, Ohio. 389,778, canc. Cl. 6.
Resin Industries, Santa Barbara, Calif. 621,076, pub. 11–15–55. Cl. 13.
Resolite Corp., Zelienople, Pa. 621,054, pub. 11–15–55. Cl. 12.
Richey, Bing: *See*—
Richey, Mary B.
Richey, Mary B., d. b. a. B. Richey, North Hollywood, Calif. 504,710, canc. Cl. 28.
Ripit Sales Co., Chicago, Ill. 621,175, pub. 11–15–55. Cl. 23.
Roberts Numbering Machine Co., The, Brooklyn, N. Y. 621,177, pub. 11–15–55. Cl. 23.
Robertson, H. H., Co., Pittsburgh, Pa. 365,535, canc. Cl. 12.
Robertson, H. H., Co., Pittsburgh, Pa. 405,119, canc. Cl. 12.
Robotyper Corp., Hendersonville, N. C. 621,242, pub. 11–22–55. Cl. 26.
Rohloff Mfg. Co., Toledo, Ohio. 505,363, canc. Cl. 6.
Rolfs, Robert H., to Amity Leather Products Co., to Amity Leather Products Co., West Bend, Wis. 110,105, ren. 5–2–56. Cl. 3.
Rosenstein, Nettie, Inc., New York, N. Y. 505,856, canc. Cl. 4.
Ross Watch Case Corp., Long Island City, N. Y. 621,480. Cl. 28.
Roth, Chester H., Co., Inc., New York, N. Y. 621,375–7, pub. 11–22–55. Cl. 39.
Roth, Chester H., Co. Inc., Esquire Socks Division, New York, N. Y. 621,358, pub. 11–22–55. Cl. 39.
Roto Bag Machine Corp., New York, N. Y. 621,223, pub. 11–22–55. Cl. 23.
Ruby Chemical Co., The, Columbus, Ohio. 389,733, 12(c) pub. 2–14–56. Cl. 6.
Rum Co. (Jamaica) Ltd., The: *See*—
Booth's Distilleries Ltd.
Rutherford Press, Inc., East Rutherford, N. J. 621,161, pub. 11–15–55. Cl. 23.
Saint Cornelius the Centurion Chapel of Valley Forge Military Academy, Wayne, Pa. 621,439. Pub. 9–20–55, Cl. 51; pub. 9–20–55, Cl. 52. (Consolidated certificate, Classes 51, and 52.)
Ste. Pierre Smirnoff Fls. Inc., New York, N. Y., to Heublein, Inc., Hartford, Conn. 334,531–2, ren. 5–5–56. Cl. 49.
Samuel Stamping & Enameling Co., Chattanooga, Tenn. 621,302, pub. 11–15–55. Cl. 34.
San Diego Junior Chamber of Commerce, San Diego, Calif. 621,487. Cl. 107.
San Gabriel Wine Co., Inc., New York, N. Y. 376,017, canc. Cl. 47.
Sapolin Paints Inc., New York, N. Y. 621,093, pub. 11–15–55. Cl. 16.
Sasson-King, Inc., Lakeland, Fla. 621,405, pub. 11–22–55. Cl. 46.
Saxerac Co., Inc., New Orleans, La. 381,622, canc. Cl. 49.
Scharco Mfg. Corp., Mount Vernon, N. Y. 621,293, pub. 11–22–55. Cl. 32.
Schering Corp., Bloomfield, N. J. 621,106, pub. 11–15–55. Cl. 18.
Schlage Lock Co., San Francisco, Calif. 621,217, pub. 11–15–55. Cl. 23.
Schmidt, Samuel S., d. b. a. Drillmation Co., Hazel Park, Mich. 621,157, pub. 11–15–55. Cl. 23.
Schultz Shoe Co., Inc., St. Louis, Mo. 621,045, pub. 2–23–54. Cl. 4.
Schneider Carburetor Co., St. Louis, Mo., now by change of name to Milesmaster, Inc. 621,155, pub. 11–22–55. Cl. 23.
Seaboard Home Improvement Co.: *See*—
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Seaboard Metal Products Co., Newark, N. J. 621,469, pub. 11–22–55. Cl. 106.
Security Mills, Inc., New York, N. Y. 621,382, pub. 11–22–55. Cl. 42.
Security Mills, Inc., New York, N. Y. 621,390, pub. 11–22–55. Cl. 42.
Seidlitz Paint & Varnish Co., Kansas City, Mo. 621,095, pub. 11–15–55. Cl. 16.
Seligs Laboratories, Inc., to Clay-Adams, Inc., New York, N. Y. 621,247, pub. 11–15–55. Cl. 26.
Semler, R. B., Inc., New Canaan, Conn. 510,941, canc. Cl. 6.
Sessions Clock Co., The, Forestville, Conn. 621,268, pub. 11–15–55. Cl. 27.
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Fullerton Mutual Orange Association.
Sheehan, Peggy S., Alexandria, Va. 621,344, pub. 11–22–55. Cl. 38.
Sherwin-Williams Co., The, Cleveland, Ohio. 361,955, canc. Cl. 6.
Shore's Market, Inc., Providence, R. I. 621,411, pub. 11–22–55. Cl. 46.
Sierra Vista Packing Association, Riverside, Calif. 507,207, canc. Cl. 46.
Simmons Co., New York, N. Y. 621,294, pub. 11–22–55. Cl. 32.
Simmons Co., New York, N. Y. 621,296, pub. 11–22–55. Cl. 32.
Simon Simple Craft and Toy Co., Orange, N. J. 621,357, pub. 11–22–55. Cl. 39.
Sitterley, James E., New York, N. Y. 118,824, canc. Cl. 38.
Smarta Washers, Inc., Chester, Conn. 621,234, pub. 11–15–55. Cl. 24.
Smith-Nielsen Logging and Lumber Co., Spokane, Wash. 621,057, pub. 11–15–55. Cl. 12.
Smith, S. K., Co., The, Chicago, Ill. 621,328, pub. 11–15–55. Cl. 37.
Soss Mfg. Co., Detroit, Mich. 621,475. Cl. 13.
Southern California Disinfecting Co., Los Angeles, Calif. 621,088, pub. 11–15–55. Cl. 16.
Southern Cooperative Canneries: *See*—
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Southern Mills, Inc., Atlanta, Ga. 621,232–3, pub. 11–15–55. Cl. 24.
Southern Oxide Chemical Mfgrs.: *See*—
Friedin, Jule F.
Spalding, A. G., & Bros. Inc., Chicopee, Mass. 621,138, pub. 11–22–55. Cl. 22.
Sperry Rand Corp.: *See*—
Remington Rand Inc.
Victor Safe & Equipment Co., Inc., The.
Staedtler, J. S., Nurnberg, Germany. 621,326–7, pub. 11–15–55. Cl. 37.
Stainless Ware Co. of America, Walled Lake, Mich. 621,064, pub. 11–15–55. Cl. 13.

Standard Tool Co., Leominster, Mass. 621,210, pub. 11–22–55. Cl. 23.
Stan-Pak Industries: *See*—
Mikulec, Stanley.
Starrett, L. S., Co., The, Athol, Mass. 621,235, pub. 11–15–55. Cl. 26.
Stearns & Foster Co., The, Lockland, Cincinnati, Ohio. 621,391, pub. 11–22–55. Cl. 42.
Steele-Wedeles Co., Chicago, Ill. 374,474, canc. Cl. 4.
Steele-Wedeles Co., Chicago, Ill. 375,681, canc. Cl. 46.
Stern, Henri, Watch Agency, Inc., The, New York, N. Y. 621,265, pub. 11–15–55. Cl. 27.
Stevens Walden Inc., Worcester, Mass. 621,178, pub. 11–22–55. Cl. 23.
Stewart-Warner Corp., Chicago, Ill. 621,303, pub. 11–15–55. Cl. 34.
Stiebel, Theodor H., Holzminden, Weser, Germany. 621,123, pub. 11–15–55. Cl. 21.
Stone Roller Equipment Corp., Brooklyn, N. Y. 621,306, pub. 11–22–55. Cl. 34.
Stone, L. R., Co., Inc., Los Angeles, Calif. 506,598, canc. Cl. 46.
Stone-Tarlow Co., Inc., Brockton, Mass. 621,363, pub. 11–22–55. Cl. 39.
Stop-Motion Devices Corp., Brooklyn, N. Y. 621,169, pub. 11–15–55. Cl. 23.
Street & Smith Publications, Inc., New York, N. Y. 506,098, canc. Cl. 38.
Strunk Equipment Co., Coatesville, Pa. 621,172–3, pub. 11–15–55. Cl. 23.
Stuart Co., The, Pasadena, Calif. 621,100, pub. 11–15–55. Cl. 18.
Sullivan Valve and Engineering Co., Butte, Mont. 621,079–80, pub. 11–15–55. Cl. 13.
Sun Chemical Corp., Long Island City, N. Y. 621,089, pub. 11–15–55. Cl. 16.
Sun Chemical Corp., Long Island City, N. Y. 621,094, pub. 11–15–55. Cl. 16.
Sundstrand Machine Tool Co., Rockford, Ill. 621,148, pub. 11–15–55. Cl. 23.
Super Oil Heet Co., Brooklyn, N. Y. 340,222, canc. Cl. 34.
Superior Feed Mills, Inc., Oklahoma City, Okla. 621,482. Cl. 46.
Surface Combustion Corp., Toledo, Ohio. 621,305, pub. 11–22–55. Cl. 34.
Surprise Co.: *See*—
Cook, Leone D.
Swift & Co., Chicago, Ill. 621,447, pub. 11–22–55. Cl. 52.
Swigart Paper Co., Chicago, Ill. 508,740, canc. Cl. 37.
Swiss Radium & Dial Painting Co., Inc., New York, N. Y. 621,266, pub. 11–15–55. Cl. 27.
Switches Inc.: *See*—
Illinois Accessories Co.
Table Talk: *See*—
Mavroglanis, Theodore J.
Tas-T-Nut Co., The, Baltimore, Md. 621,742. Cl. 2.
Tesa S. A., Renens, Switzerland. 621,248, pub. 11–15–55. Cl. 26.
Texas Foundries, Inc., Lufkin, Tex. 621,186, pub. 11–15–55. Cl. 23.
Tey Mfg. Corp., Milford, Conn. 621,218, pub. 11–22–55. Cl. 23.
Thermoid Co., Trenton, N. J. 505,702, canc. Cl. 35.
Timely Clothes, Inc.: *See*—
Levy Bros. & Adler Rochester, Inc.
Tomlinson of High Point, High Point, N. C. 621,284, pub. 11–15–55. Cl. 32.
Trace Elements Corp., Houston, Tex. 621,413, pub. 11–22–55. Cl. 46.
Transitron Inc., New York, N. Y. 621,243, pub. 11–22–55. Cl. 26.
Transit Van Corp., Redwood City, Calif. 621,107–8, pub. 11–15–55. Cl. 19.
Trenton Heating & Mfg. Co.: *See*—
Fournier, Peter.
Trep Art, Milwaukee, Wis. 621,368, pub. 11–22–55. Cl. 39.
Tretex Dress Co., New York, N. Y. 336,192, canc. Cl. 39.
Trico Products Corp., Buffalo, N. Y. 621,113, pub. 11–15–55. Cl. 19.
Trierweiler, James T., d. b. a. James T. Wyler and/or Jim Wyler, New York, N. Y. 621,471, pub. 11–22–55. Cl. 107.
Tri-State Fertilizer Co., Burlington, Iowa. 621,046, pub. 11–1–55. Cl. 10.
Troyke Mfg. Co., Cincinnati, Ohio. 621,194, pub. 11–22–55. Cl. 23.
Turner Halsey Co., New York, N. Y. 621,383, pub. 11–22–55. Cl. 42.
Union Bag & Paper Corp., New York, N. Y. 621,336, pub. 11–15–55. Cl. 37.
Union Carbide and Carbon Corp.: *See*—
Carbide and Carbon Chemicals Corp.
Electro Metallurgical Co.
United Gilsonite Laboratories, Scranton, Pa. 621,473. Cl. 12.
United Metal Hose Co., Inc., Long Island City, N. Y. 621,062, pub. 11–15–55. Cl. 13.
United Mfg. Corp., The, West Reading, Pa. 621,337, pub. 11–22–55. Cl. 37.
U. S. Highway Supply Co.: *See*—
Weiner, Jack H.
United States Playing Card Co., The, East Norwood, Cincinnati, Ohio. 336,325. Am. 7(d). Cl. 22.
United States Plywood Corp., New York, N. Y. 621,060, pub. 11–15–55. Cl. 12.
United States Rubber Co.: *See*—
Colchester Rubber Co.
United States Rubber Products, Inc.
United States Rubber Products, Inc., by United States Rubber Co., New York, N. Y. 328,820, 12(c) pub. 2–14–56. Cl. 21.
United Utilities, Inc., Kansas City, Mo. 621,463, pub. 11–22–55. Cl. 104.
Utility Appliance Corp., Los Angeles, Calif. 621,317–18, pub. 11–22–55. Cl. 34.
Valid Process Co., New York, N. Y. 621,340, pub. 11–15–55. Cl. 38.
Valley Upholstery Corp., New York, N. Y. 621,285, pub. 11–22–55. Cl. 32.
Velvet Service Co.: *See*—
White, Gerald E.
Venomin Co., The, Lorain, Ohio. 383,188, canc. Cl. 6.
Victor Safe & Equipment Co., Inc., The, North Tonawanda, by Sperry Rand Corp., New York, N. Y. 386,710, 12(c) pub. 2–14–56. Cl. 37.
Vulcan Service Co., Inc., Birmingham, Ala. 621,486. Cl. 100.
Wagner, George W., New York, N. Y. 621,374, pub. 11–22–55. Cl. 39.
Wall Trends, Inc., Brooklyn, N. Y. 621,117, pub. 11–15–55. Cl. 20.
Wallace, R., & Sons Mfg. Co., Wallingford, Conn. 621,183, pub. 11–15–55. Cl. 23.
Walter, Louis, & Co. Inc., Kansas City, Mo. 333,474, ren. 3–24–56. Cl. 39.
Wanamaker, John, Philadelphia, Philadelphia, Pa. 506,557, canc. Cl. 19.
Waples-Platter Grocer Co., Denison, Tex. 126,614, canc. Cl. 46.
Warner Brothers Co., The, Bridgeport, Conn. 621,365, pub. 11–22–55. Cl. 39.
Washington Aluminum Co., Inc., Baltimore, Md. 621,190, pub. 11–22–55. Cl. 23.
Wayne Works, The, Richmond, Ind. 503,889, canc. Cl. 19.
Webster Engineering Co., The, Tulsa, Okla. 621,312–13, pub. 11–22–55. Cl. 34.
Weiner, Jack H., d. b. a. U. S. Highway Supply Co., Chicago, Ill. 621,083, pub. 11–15–55. Cl. 15.
Welch Grape Juice Co., Inc., The: *See*—
Welch Grape Juice Co., The.
Welch Grape Juice Co., The, to The Welch Grape Juice Co., Inc., Westfield, N. Y. 109,970, ren. 4–25–56. Cl. 46.
Western Land Roller Co., Hastings, Nebr. 621,219, pub. 11–22–55. Cl. 23.
Western Reserve Mfg. Co., Cleveland, Ohio. 621,213, pub. 11–22–55. Cl. 23.
Westinghouse Electric Corp., Pittsburgh, Pa. 621,121, pub. 11–15–55. Cl. 21.
Weston, Byron, Co.: *See*—
Carew Mfg. Co.
Whale Oil Co. Inc., Brooklyn, N. Y. 621,085, pub. 11–15–55. Cl. 15.
White, Gerald E., d. b. a. Velvet Service Co., Middleville, Mich. 621,468, pub. 11–22–55. Cl. 106.
Whitney, Roy, Decatur, Ill. 621,149, pub. 11–15–55. Cl. 23.
Wiegand, Edwin L., Co., Pittsburgh, Pa. 621,130, pub. 11–15–55. Cl. 21.
Willmark Sales Co., Inc., Brooklyn, N. Y. 621,402, pub. 11–22–55. Cl. 46.
Wilson, Andrew, Inc., Springfield, N. J. 437,675, canc. Cl. 6.
Wine Growers Guild, Lodi, Calif. 621,417, pub. 11–22–55. Cl. 47.
Woolworth, F. W., Co., New York, N. Y. 621,378, pub. 11–22–55. Cl. 42.
Wyandotte Chemicals Corp., Wyandotte, Mich. 621,443, pub. 11–22–55. Cl. 52.
Wyler, James T.: *See*—
Trierweiler, James T.
Wyler, Jim: *See*—
Trierweiler, James T.
Young Radiator Co., Racine, Wis. 621,309, pub. 11–15–55. Cl. 34.
Younker Brothers, Inc., Des Moines, Iowa. 331,467, ren. 1–7–56. Cl. 39.
Zink, John, Co.: *See*—
Zink, John S.
Zink, John S., d. b. a. John Zink Co., to John Zink Co., Tulsa, Okla. 621,315, pub. 11–15–55. Cl. 34.
Zit Mfg. Co.: *See*—
Brandewie, Leo P.

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PATENTS

NOTICES

Adjudicated Patents

(C. A. Ind.) Kreidel Patent No. 2,171,217 (285—87), for a metal packing ring for use with screwed pipe joints or couplings, *Held* invalid. *The Weatherhead Company et al.* v. *Drillmaster Supply Company et al.*, 227 F.2d 98; 107 USPQ 184.

(D. C. Calif.) Johnson Patent No. 2,618,496 (287—62), for an adjustable supporting leg, *Held* invalid. *Up-Right, Inc., et al.* v. *The Patent Scaffolding Co., Inc.*, 135 F. Supp. 813; 108 USPQ 32.

(C. A. Ill.) Toulon Reissue Patent No. 22,055 (250—36), for a synchronization system for television. Claims 5 to 7, 9, 10 and 13, *Held* valid and infringed. *Hazeltine Research, Inc.* v. *Arco Manufacturing Corporation et al.*, 227 F.2d 137; 107 USPQ 187.

Disclaimers

2,647,711.—*Joseph M. Margulis*, Philadelphia, Pa. WALL SUPPORTED HANGER. Patent dated Aug. 4, 1953. Disclaimer filed Feb. 1, 1956, by the assignee, *Jiffy Enterprises, Inc.*

Hereby enters this disclaimer to claim 1 of said patent.

2,654,080.—*Frank A. Browne, Jr.*, Brookline, Mass. MAGNETIC MEMORY STORAGE CIRCUITS AND APPARATUS. Patent dated Sept. 29, 1953. Disclaimer filed Jan. 20, 1956, by the assignee, *American Machine & Foundry Company.*

Hereby enters this disclaimer to claims 1, 4, 5, 6, 7, 8, 9, 12, 13, and 14, of said patent.

2,693,460.—*Domenick D. Gagliardi*, Westerly, R. I. MATERIALS FOR FINISHING TEXTILES AND PROCESSES FOR PRODUCING AND USING THE SAME. Patent dated Nov. 2, 1954. Disclaimer filed Jan. 26, 1956, by the assignee, *Sun Chemical Corporation.*

Hereby enters this disclaimer to claims 2 and 7 of said patent.

Patents Available for Licensing or Sale

2,684,786. Rotatable Metering Dispenser. Edward A. Silver (and John A. Slipher), 4360 Colerain Ave., Columbus, Ohio.

2,719,898. Switch Operating Attachment. K. W. Allen, P. O. Box 423, Palmdale, Calif.

2,720,393. Window Sash Gear Operator and Lock (for Double Hung Windows of Aluminum, Steel, or Wood Sash). Charles N. Valentine, 5544 Trinidad Way, San Diego 14, Calif.

2,730,148. Method of Treating Vegetable Material. Carlo Matarrese, 59—21 150th St., Flushing 55, N. Y.

General Electric Company is prepared to grant non-exclusive licenses on reasonable terms to domestic manufacturers under the following 19 patents.

Applications for licenses under these patents should be addressed to: Patent Counsel, Construction Materials Division, General Electric Company, 1285 Boston Ave., Bridgeport 2, Conn.

2,153,366. Lamp Socket.
2,269,241. Terminal Conductor.
2,236,697. Thermal Switch.
2,330,161. Switch for Electric Discharge Devices.
2,349,354. Electric Switch.
2,367,655. Starting Control for Electric Discharge Devices.
2,367,888. Flashlight.
2,372,149. Starting Control for Electric Discharge Devices.
2,379,115. Starting Control for Electric Discharge Devices.
2,392,164. Lamp Holder.
2,405,815. Lamp Holder.
2,412,820. Tubular Lamp and Holder Therefor.
2,425,902. Starting Control for Electric Discharge Devices.
2,427,930. Apparatus for Continuously Sheathing Cores of Material.
2,441,456. Lamp Holder.
2,447,353. Tubular Lamp Holder.
2,459,578. Glow Switch.
2,482,442. Control Unit for Discharge Lamps.
2,516,864. Method of Making Hose From Extrudable Elastomeric Composition.

New Applications Received During December 1955

Patents	6,501
Designs	429
Plants	11
Reissues	10
Total	6,951

Issue

Patents	930—No.	2,735,094 to No.	2,736,023, incl.
Designs	29—No.	176,939 to No.	176,967, incl.
Reissues	3—No.	24,120 to No.	24,122, incl.
Total	962		

CONDITION OF PATENT APPLICATIONS AS OF DECEMBER 30, 1955

Total number of pending applications (excluding Designs)	221,231
Total number of pending Design applications	7,028
Total number of applications awaiting action (excluding Designs)	134,473
Total number of Design applications awaiting action	2,993
Date of oldest new application	Aug. 2, 1954
Date of oldest amended application	Oct. 13, 1953

ROSA, M. C., Executive Examiner

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 48, 51, 54, 69, 70.
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 18, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	12-30-54	1-28-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	5-2-55	11-16-54
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	4-5-55	1-25-54
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	3-31-55	3-26-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	2-23-55	5-28-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic, Amides, Amines, General Organic Processes	2-9-55	4-2-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	4-7-55	12-14-53
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	12-8-54	4-14-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	4-4-55	3-22-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	5-2-55	6-21-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	3-2-55	11-6-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	2-14-55	2-10-54
14. (III) MANIAN, J. C., (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire, Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	2-4-55	3-9-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	4-1-55	3-30-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	2-4-55	1-11-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	3-24-55	6-21-54
18. (VI) BLUM, A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	12-8-54	1-7-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	3-8-55	5-20-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	4-22-55	4-22-54
21. (III) MADER, R. C., Textiles	3-21-55	3-22-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	3-7-55	3-31-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	9-16-54	10-15-53
24. (III) DRACOPOULOS, P. T., (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	2-9-55	10-13-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	3-3-55	3-3-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	4-25-55	11-8-54
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	3-23-55	8-12-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	3-2-55	5-14-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	3-2-55	8-3-54
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	6-23-55	7-6-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	1-17-55	7-26-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	4-4-55	9-13-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	3-17-55	1-29-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Imple ments	3-3-55	3-2-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	3-10-55	6-1-54
36. (V) McFADYEN, A. D., Measuring and Testing	2-14-55	11-10-54
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	1-31-55	7-6-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g. Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	3-10-55	5-26-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	4-1-55	4-2-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	4-1-55	5-10-54
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	10-8-54	12-13-53
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	12-17-54	6-4-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	3-15-55	3-22-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	2-25-55	11-16-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	4-4-55	9-9-54
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	1-3-55	2-4-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	2-28-55	8-19-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	4-5-55	4-7-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	3-23-55	4-2-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	3-10-55	6-3-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	4-27-55	3-22-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	2-1-55	2-8-54
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	12-10-54	3-3-54
56. (I) KEELY, J. E., (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	3-17-55	7-8-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	7-1-55	7-2-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	3-17-55	2-11-54
59. (I) HENKIN, B., (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	2-24-55	3-5-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	4-1-55	10-11-54
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	3-1-55	8-23-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	3-17-55	1-15-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	3-15-55	3-1-54
66. (V) LISANN, I., Geometric Instruments; Automatic Weighing Scales; Acoustics	2-25-55	12-30-53
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	2-17-55	10-12-54
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	3-1-55	11-19-53
70. (II) BREWRINK, J. L., Explosive Weapons, Ammunition, Charges and Composition; Explosive Charge Manufacturing; Jet Motor Processes; Torpedoes; Radar; Sonar; Automatic Pilots; Antennas; Actinide Series (e. g. Fissionable) Compounds; Irradiation Chemistry; Mass Spectrometers	8-2-54	10-13-53
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making	5-2-55	11-1-54
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers	4-5-55	6-11-54
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	5-31-55	8-11-54
CLASS. DIVS. IV (VI) SMITH, (Mrs.) M. P., Harrows; Plows; Earth Rollers	4-14-55	8-23-54
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	4-7-55	12-8-54
DESIGNS (III) A—BREHM, G. I., Industrial Arts	6-17-55	7-5-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts	6-1-55	8-2-55

The following divisions have been abolished: 10, 44, 46, 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during February 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1953*.

Patents	Numbers 2,145,844 to 2,149,249, inclusive
Plant Patents	Numbers 313 to 316, inclusive

DECISIONS IN PATENT CASES

Commissioner's Decision

IN RE APPLICATION PAPERS FILED SEPTEMBER 10, 1954

Decided May 20, 1955

1. APPLICATION—PRACTICE UNDER RULE 47 AND 35 U. S. C. 116 AND 118—DECEASED INVENTOR.

Held that the language in 35 U. S. C. 116 and 118 "cannot be found or reached after diligent effort" has no reasonable application to a deceased joint inventor, and that it is obviously not the intent of the law to establish Rule 47 as an alternative to the usual procedure under Rule 42.

2. SAME—SAME.

Held that application papers are properly refused acceptance under 35 U. S. C. 116 and 118 where the joint inventor designee "is deceased but the widow states that there was no occasion for probating the estate and no personal representative was appointed."

ON PETITION.

DENIED.

CROCKER, *Assistant Commissioner:*

The applicant * * * [living joint inventor] requests review of the refusal to accept the above identified papers as an application under the provisions of Sections 116 and 118 of the title 35 of the United States Code. The joint inventor * * * is deceased but the widow states that there was no occasion for probating the estate and no personal representative was appointed.

Petitioner asserts that the situation is embraced within the terms of the statute since, insofar as obtaining an inventor's signature is concerned, the effect is the same whether he refuses to sign, cannot be located, or is deceased. [1] However, it is apparent that the language of noted sections "cannot be found or reached after diligent effort" has no reasonable application to a deceased inventor. To adopt the petitioner's reasoning would establish Rule 47 as an alternative to the usual procedure under Rule 42, which, obviously, is not the intent of the law.

[2] The petition is denied.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

1,856,627(a), H. W. Fletcher, Cutter for earth boring drills; **1,983,316**, Scott and Garfield, Three-cone bit, **filed** Nov. 19, 1947, D. C., W. D. Okla. (Oklahoma City), Doc. 3788, *Hughes Tool Co.* v. *C. F. Williams, Jr.* Patents held infringed; injunction issued; counterclaim dismissed Jan. 19, 1956.

1,856,627(b), H. W. Fletcher, Cutter for earth boring drills; **2,333,746**, F. L. Scott et al., Cutter teeth for well drills; **1,983,316**, Scott and Garfield, Three-cone bit, **filed** May 3, 1949, D. C., W. D. Okla. (Oklahoma City), Doc. 4370, *Hughes Tool Co.* v. *D. B. Cole.* Judgment: pursuant mandate U. S. C. A., 10th Cir.: patents held infringed; injunction issued; counterclaim dismissed Jan. 19, 1956. **Same**, Doc. 4374, *Hughes Tool Co.* v. *B. F. Conaghan.* Decree as above.

1,983,316. (See 1,856,627(*a*) and (*b*).)

2,084,737, I. Alter, Bag with spring closure, **filed** Sept. 7, 1955, D. C., S. D. N. Y., Doc. 103/175, *Isador Alter* v. *Ranay, Inc., et al.* Stipulation and order of discontinuance Jan. 20, 1956.

2,210,802, M. H. Dolgoff, Hair holder, **filed** Jan. 18, 1954, D. C., S. D. Calif. (Los Angeles), Doc. 16195–WM, *Marion Harrison Dolgoff* v. *The Kaynar Co.* Summary judgment, pursuant to motion of defendants against plaintiff; first amended complaint of plaintiff dismissed with prejudice (notice Jan. 17, 1956).

2,279,125, L. Mintzes, Garment, **filed** May 6, 1952, D. C., S. D. N. Y., Doc. 75/238, *Tom Broderick Co.* v. *Ramsey Sportswear Co., Inc.* Judgment dismissing supplemental complaint Dec. 16, 1955.

2,333,746. (See 1,856,627(*b*).)

2,371,471, B. Rothstein, Bottle carrier, **filed** Jan. 19, 1956, D. C., E. D. Pa. (Philadelphia), Doc. 20143, *Old Fashion Ma's Root Beer Bottling Co.* v. *Container Corporation of America.*

2,388,558, L. Loewy, Metal extrusion press and methods of operating same, **filed** May 28, 1954, D. C. N. J. (Newark), Doc. 409/54, *Hydropress, Inc.* v. *The Watson-Stillman Co.* Consent order of dismissal (notice Jan. 20, 1956).

2,510,622, A. P. Denis, Cable shortening device, **filed** Oct. 13, 1955, D. C. Mass. (Boston), Doc. 55/911–A, *Denis Mfg. Co. Inc.* v. *Perfect Parts Inc. et al.*

2,561,270, P. W. Felt, Liquefied petroleum gas lighter, **filed** Feb. 1, 1952, D. C. Minn. (Minneapolis), Doc. 3970, *Brown & Bigelow Inc.* v. *Ronson Art Metal Works, Inc., et al.* Consent judgment of dismissal Dec. 19, 1955.

2,566,595, P. C. Cameron, Teething aid, **filed** Sept. 7, 1954, D. C., S. D. N. Y., Doc. 95/282, *Peter C. Cameron* v. *Zadek-Feldstein Co. Inc.* Stipulation and order of dismissal (notice Jan. 26, 1956).

2,568,542, A. A. Friestedt, Nonskid tire, **filed** June 12, 1953, D. C., N. D. Ill. (Chicago), Doc. 53c1378, *Tire Wire Products Co., Inc.* v. *Fred B. Friestedt, W. F. and John Barnes Co.* (W. F. and John Barnes Co. included as party-defendant Feb. 3, 1954). Consent decree: patent held valid and infringed; plaintiff enjoined Jan. 26, 1956.

2,577,953, A. deVries et al., Sash balancing mechanism, **filed** June 8, 1955, D. C., W. D. N. Y. (Buffalo), Doc. 6022, *Unique Balance Co. Inc. et al.* v. *The Caldwell Mfg. Co.* Order of discontinuance Jan. 26, 1956.

2,594,755, P. W. Felt, Liquefied petroleum gas lighter, **filed** May 5, 1952, D. C. Minn. (Minneapolis), Doc. 4075, *Brown & Bigelow Inc.* v. *Ronson Art Metal Works, Inc., et al.* Consent judgment of dismissal Dec. 19, 1955.

2,597,154, M. Maccaferri, Stringed musical instrument; **2,614,448**, same, Bridges for stringed musical instruments; **2,649,827**, same, Sounding board for stringed musical instruments; **2,649,828**, same, Fretted finger board for stringed musical instruments and method of making the same; **2,664,022**, same, Nut for stringed musical instruments, **filed** July 22, 1952, D. C., S. D. N. Y., Doc. 77/238, *French American Reeds Mfg. Co., Inc.* v. *Emmenee Industries.* Stipulation and order of discontinuance (notice Jan. 24, 1956).

2,598,026, J. J. Warner, Phonograph having speaker pickup unit, **filed** Nov. 17, 1955, D. C., N. D. Calif. (San Francisco), Doc. 35064, *Eunice N. Van Winkle* v. *Happy Toy Mfg. Co.* Consent judgment; patent held valid and infringed; defendants enjoined Jan. 16, 1956.

2,599,661, A. D. Richardson, Suspension galvanometer and magnet assembly, **filed** Jan. 25, 1956, D. C., N. D. Okla. (Tulsa), Doc. 3850, *Consolidated Electrodynamics Corp.* v. *Midwestern Instruments, Inc.*

2,614,448. (See 2,597,154.)

2,621,879, E. T. Lundeen, Pallet support, **filed** Feb. 8, 1955, D. C., W. D. Ark. (Fort Smith), Doc. 1180, *The Paltier Corp.* v. *Ray Smith et al.* Consent decree against remaining defendant, Ray Smith, doing business as Smith Pallet Company; patent held infringed; defendant enjoined Jan. 19, 1956.

2,632,165, B. Murdock, Girdle construction, **filed** Oct. 20, 1955, D. C. N. J. (Newark), Doc. 950/55, *Fortuna Foundations, Inc., et al.* v. *Flexnit Co., Inc.* Order of discontinuance Jan. 25, 1956.

2,649,276, T. L. Titus, Liquid dispensing device, **filed** Dec. 15, 1955, D. C. Colo. (Denver), Doc. 5232, *The Wyott Mfg. Co., Inc.* v. *The Doran Coffee Roasting Co., Inc.*

2,649,827. (See 2,597,154.)

2,649,828. (See 2,597,154.)

2,655,225, M. R. Harris, Vehicle barrier, **filed** Oct. 21, 1954, D. C., N. D. Ill. (Chicago), Doc. 54c1543, *Fred Ex Enterprises, Inc.* v. *Harris Barrier, Inc., et al.* On May 9, 1955, cause 54c1708 consolidated with this cause; stipulation and order dismissing cause with prejudice Jan. 18, 1956. Same, **filed** Nov. 17, 1954, D. C., N. D. Ill. (Chicago), Doc. 54c1708, *Harris-Barrier, Inc.* v. *Fred Ex Enterprises, Inc.* May 9, 1955, cause consolidated with 54c1543; decree as above.

2,664,022. (See 2,597,154.)

2,694,419, J. C. Larsen, Wire working machine: 2,730,141, R. C. Gates, Method of making structural form ties, **filed** Jan. 17, 1956, D. C. Colo. (Denver), Doc. 5265, *Gates & Sons, Inc.* v. *American Form Tie Co.*

2,730,141. (See 2,694,419.)

2,732,327, W. K. Teller, Anti-perspirant stick, **filed** Jan. 25, 1956, D. C., M. D. Ga. (Macon), Doc. 1270, *Pharma-Craft Corp.* v. *F. W. Woolworth Co. et al.*

Des. 144,255, P. D. Ney, Slipper or similar article, **filed** Jan. 26, 1956, D. C., S. D. Calif. (Los Angeles), Doc. 19405, *Paddies, Inc., et al.* v. *May Department Stores.*

REISSUES

FEBRUARY 21, 1956

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,120
PACKAGING MATERIAL

Paul Brown, New York, N. Y., assignor to Packaging Materials Corp., Providence, R. I., a corporation of Rhode Island

Original No. 2,704,268, dated March 15, 1955, Serial No. 254,692, November 3, 1951. Application for reissue August 25, 1955, Serial No. 530,655

4 Claims. (Cl. 154—55)



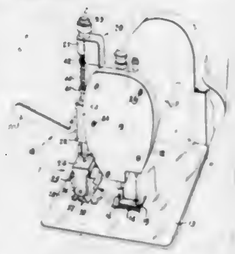
3. As a new article of manufacture, a material of which to manufacture shipping cases comprising a molded corrugated sheet of felted fibrous pulp having approximately flat strips of pressed felted pulp alternating with corrugations built up of pressed felted pulp to a substantially greater thickness than said strips, said strips lying substantially in a common plane extending approximately in line with the bases of the corrugations, the opposite face of the sheet having shallow recesses extending therein opposite said corrugations, said flat strips being not substantially greater in width than the corrugations, a reinforcing sheet of paper applied across the crowns of said corrugations and secured by adhesive, and a second reinforcing sheet of paper applied across said flat strips and secured thereto by adhesive.

24,121
PULLER FEED CARRIER ATTACHMENT

Joseph Galkin, New York, N. Y.

Original No. 2,692,568, dated October 26, 1954, Serial No. 243,824, August 27, 1951. Application for reissue July 5, 1955, Serial No. 520,169

4 Claims. (Cl. 112—214)



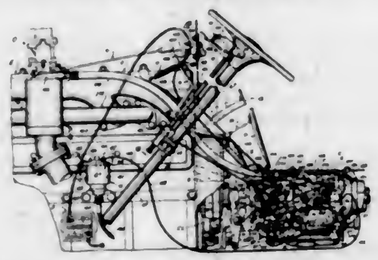
1. In a unitary roller carrier attachment for an upper toothed roller of a puller-feed of a sewing machine for feeding fabric in coacting timed relation with the feed-dog of the sewing machine and with a driven toothed lower roller in the base of said machine, said base having an opening permitting said lower roller to project slightly above said base, said base providing a planar support for the fabric worked upon from the needle continuously to and beyond said lower roller, said carrier attachment comprising an end plate attachable to the head of the sewing machine solely with the existing head screws and including a bracket extending from the rear wall of said end plate, said end plate having an elongated bearing extension of square cross-section integral therewith for supporting a roller carrier rod for vertical reciprocatory movements, means integral with said rod for maintaining said carrier rod and said upper roller in alignment with said lower roller, and thereby permitting the center line of said elongated bearing extension to be positioned substantially in line with the upright rear edge portion of the front face of said end plate and said rollers to closely approach said needle, a yoke having said upper roller rotatably mounted thereon, said roller carrier rod having a circular upper portion and a lower bearing portion of square cross-section, means on the lower end portion of said carrier rod for pivotally supporting said yoke for limited movement in two directions, said bracket having resilient means urging said yoke in a downward direction to bring said upper toothed wheel in coacting meshed relation with said lower toothed wheel, said pivotal yoke mounting permitting the teeth of said upper toothed wheel to automatically aline with the teeth of said coacting lower toothed wheel, and a lever associated with said carrier rod for raising and lowering said upper toothed wheel respectively from and to effective operating position.

24,122
AUTOMOTIVE VARIABLE-RATIO POWER TRANSMISSION

Glenn T. Randol, Mountain Lake Park, Md.

Original No. 2,644,559, dated July 7, 1953, Serial No. 624,042, October 23, 1945. Application for reissue November 6, 1953, Serial No. 390,771

264 Claims. (Cl. 192—.073)



1. In a motor vehicle change-speed drive transmission and control therefor; said transmission comprising a plurality of [enmeshable] *enmeshing* gears sets for selectively establishing at least a pair of different forward speed two-way drives; means including a clutch for establishing a first speed drive through one of said gear sets [when enmeshed] *in meshing relation*; clutching means for establishing a second speed drive through another gear set in constant mesh [gear set]; means effective for rendering said first speed drive inoperative automatically upon declutching said first speed drive prior to initial establishment of said second speed drive without demeshing the first speed gear set; means for reverting to said first speed drive automatically upon declutching said second speed drive and reclutching said first speed drive by its clutch means; and means operable for automatically controlling the declutching and reclutching of second and first speed drives, respectively, when the vehicle is operating within a predetermined speed range.

PATENTS

GRANTED FEBRUARY 21, 1956

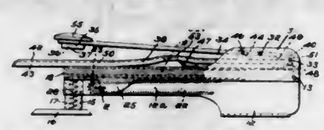
GENERAL AND MECHANICAL

2,735,094
PAPER STAPLING MACHINE

Theodore Plotkin, Brookline, Mass.

Application May 19, 1953, Serial No. 355,986

11 Claims. (Cl. 1—3)



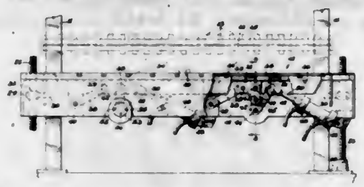
1. A device for applying staples comprising a body, having a base portion adapted to rest on a supporting surface and an arm projecting from said base; a magazine for staples mounted on said body; a staple driving head mounted on said arm and slidable with respect thereto in a direction generally perpendicular to said surface; means for feeding staples in said magazine one at a time to said head; a foot attached to said head and adapted to engage said supporting surface; a first lever connected to said magazine adjacent said base portion and swingable toward and away from said supporting surface; an anvil mounted on said first lever and adapted to cooperate with said driving head to drive and clinch a staple; a second lever connected to said magazine adjacent said base portion and swingable in the same direction as said first lever, said second lever having a plate disposed between said head and said anvil, and the plate having an opening adapted to admit said anvil; and a linkage connecting said levers and adapted to carry said anvil into cooperation with said driving head when said plate is moved toward said surface.

2,735,095
NAIL CLINCHER MECHANISM

Robert G. Miller, Wabash, Ind., assignor to The G. M. Diehl Machine Works, Inc., Wabash, Ind., a corporation of Indiana

Application February 17, 1954, Serial No. 410,914

10 Claims. (Cl. 1—15)



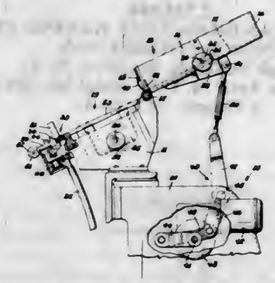
1. In a nailing machine comprising a frame, a table carried on said frame and providing a substantially horizontal upper surface for supporting a work-piece, and means carried on said frame above said table and movable toward said table into engagement with said work-piece to hold said work-piece solidly against said upper surface and to drive a nail into and through said work-piece, said upper table surface having an aperture therethrough registrable with said nail to permit said nail to project below said upper table surface, the combination of means for clinching said nail against the underside of said work-piece comprising a plate enterable in said aperture, means carried by said table and supporting said plate for movement thereof along a path inclined with respect to said upper table surface between a position spaced downward from said upper surface and a position substantially flush with said upper surface, and means drivingly connected to the last-said means for so moving said plate between such positions.

2,735,096
NAILING MACHINE, HOPPER, FEEDER AND PICKER MECHANISM

Robert G. Miller, Wabash, Ind., assignor to The G. M. Diehl Machine Works, Inc., Wabash, Ind., a corporation of Indiana

Application February 8, 1954, Serial No. 408,646

15 Claims. (Cl. 1—16)



1. In a machine of the class described, the combination of a nail feeder mechanism comprising a downwardly inclined bed provided with a plurality of slots extending from the lower edge to the upper edge thereof and adapted each to receive and hold therein a single file of nails hanging from their heads, picker means for blocking the lower end of each of said slots to prevent the escape of nails therefrom but operable to open said lower ends to release the nails serially from said slots, and hopper means for delivering the nails into the slots in said feeder mechanism comprising a box mounted for swinging movement about a lower edge thereof upon a substantially horizontal axis substantially through the upper ends of said slots, and means for positively driving said hopper means both upwardly and downwardly to oscillate said box between a position substantially in the plane of the bed of said feeder mechanism and a position oppositely inclined from said plane, said driving means causing said box to dwell momentarily in its first-said position, to move slowly out of its first-said position and then sharply into its second-said position, and to return relatively rapidly, with a sudden stop, to its first-said position.

2,735,097
SHINGLER'S HATCHET

Le Roy Henry Alford, deceased, late of Milwaukie, Oreg., by Grace Hilda Alford, administratrix, Milwaukie, Oreg.

Application November 16, 1953, Serial No. 392,364

3 Claims. (Cl. 1—45)

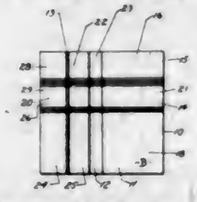
1. A hammer having a driving head formed thereon, a nail feeder attached to said head and forming an elongated slot constituting a nail raceway, the nail raceway terminating at its forward end under the driving head, a nail holding finger mounted on the feeder and extending retractably across the forward end of said raceway for releasably holding a nail in position under the driving head,

the nails being suspended by their heads through said slot, a trigger movable on the nail feeder, nail dispensing means operable by the trigger for dispensing nails individually toward the nail holding finger, a cover plate mounted retractably on the nail feeder and normally engaging the



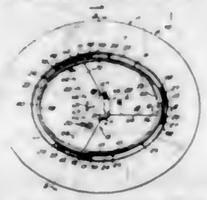
heads of nails in the raceway to prevent displacement of the nails during operation of the hammer, and means operable by the trigger for raising the cover plate out of contact with the nail heads when the dispensing means is dispensing a nail to the nail holding finger.

2,735,098
POCKET HANDKERCHIEF HAVING FOLD INDICIA THEREUPON
Joseph M. Gindi, Brooklyn, N. Y.
Application April 14, 1955, Serial No. 501,263
3 Claims. (Cl. 2—1)



1. A pocket handkerchief having a plurality of progressive series of fold-line indicating marks thereupon, the first series including a line upon said handkerchief extending across the body thereof and indicating the first fold to be made, and each succeeding series of marks having one additional line adjacent the first-named line indicating each successive fold to be made, wherein said lines collectively resemble an ornamental design and show the order of folding said handkerchief.

2,735,099
SAFETY HAT
Howard B. Lewis, Newport Beach, Calif.
Application April 26, 1952, Serial No. 284,576
2 Claims. (Cl. 2—3)



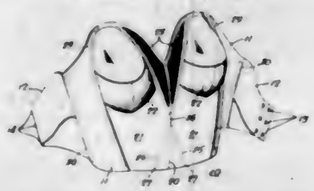
1. In a safety hat, the combination of: a head-protecting shell; a plurality of cradle supporting means secured to the inner face of said shell and each having a central rigid fastening bar spaced from the inner face of said shell and a pair of flexible spring arms integral therewith, said spring arms extending in opposite directions generally circumferentially of said shell from portions adjacent the ends of said bar and spaced from said shell; a head-engaging cradle within and spaced from said shell, said cradle comprising head-engaging straps connected to each of said fastening bars at one end and to each other at their other ends and an annular headband having peripheral pockets receiving said spring arms, each of said spring arms extending snugly into its respective pocket a substantial distance and conforming closely to the curvature of said headband whereby to distribute shock forces over a substantial portion of said headband.

2,735,100
GIRDLE
Olga Erteszek, Los Angeles, Calif.
Application April 9, 1953, Serial No. 347,704
1 Claim. (Cl. 2—37)



A foundation garment comprising an elastic girdle body having a portion adapted to extend upwardly above the waist of a wearer, the material of said body containing a horizontally extending slit at the back of the body and at approximately the waistline of the wearer, said girdle body including elastic material having both horizontal and vertical stretchability and extending horizontally above said slit and then downwardly at the opposite sides of the slit and inwardly therebeneath, said elastic material forming opposite side portions of the garment extending substantially the entire vertical dimension thereof, and said body including an elastic panel having vertical elasticity but relatively less horizontal elasticity and extending vertically between said side portions and terminating upwardly at said slit, the horizontal extent of said slit being not greater than about two-thirds of the width of said girdle body at the level of said slit.

2,735,101
BRASSIERE CONSTRUCTION
Herbert Barg, Merion, Pa., assignor to True Form Corset Company, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application May 20, 1954, Serial No. 431,242
3 Claims. (Cl. 2—42)



1. In a brassiere, a front body portion comprising lower panels terminating at their upper edges in breast cups arranged in laterally spaced relation with respect to each other at opposite sides of the median line of the front body portion, and a pair of stiffening elements secured to the front body portion along the length of the elements, said stiffening elements crossing one over the other at a point along the median line of said front body portion intermediate the upper and lower edges of the lower panels and each extending from the lower marginal edge of the lower panels at one side of said median line obliquely upward along the inner edge of the breast cup at the opposite side of said median line

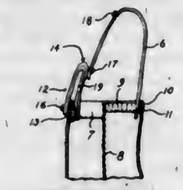
to the upper marginal edge of said front body portion, and comprising resilient elongated members flush with the plane of said body portion and flexible in one lateral direction substantially normal to said plane, substantially inflexible in a lateral direction within the plane of said sections, and capable of being twisted along the longitudinal axis to conform to the curvature of the body of the wearer of the brassiere.

2,735,102
INFANT'S OVERALL GARMENT
Sybil E. Plattner, Seattle, Wash.
Application July 26, 1952, Serial No. 301,039
1 Claim. (Cl. 2—80)



In a child's overall garment, the combination of a bifurcated nether garment structure having a continuous waist-encircling portion including a front part and a back part, said back part being one and one half times the length of said front part, a bib structure joined along its lower edge to said front part of the waist-encircling portion of said nether garment structure, a pair of shoulder straps each having one end attached to the upper portion of said bib structure and the other end attached to the lower portion of said bib structure adjacent the junction between said bib structure and said front part of the waist-encircling portion of said nether garment structure so that said back part of said waist-encircling portion is entirely free from said straps, a draw string casing formed in, and extending along, said back part of said waist-encircling portion, and draw string means disposed in said casing whereby said waist-encircling portion may be either drawn tightly about the waist of the child or loosened to allow removal of the nether garment structure from the torso and legs of the child without disturbing the shoulder straps.

2,735,103
CHILD'S OVERALL GARMENT WITH BIB
Celia Saftlas, Maplewood, N. J.
Application November 18, 1953, Serial No. 392,856
1 Claim. (Cl. 2—80)



In a child's garment having a lower body covering portion including a waist band having front and rear portions; an elongated, generally rectangular panel member secured along one end to the front portion of the waist band and extending upwardly therefrom to position the opposite end of the panel member adjacent the neck of the wearer, shoulder straps each secured at one end to the rear portion of the waist band, the opposite ends of the shoulder straps being connected to the inner surface of the panel member at points on a line substantially mid-way between the said secured and said opposite ends of the panel member and substantially parallel to said waist band, the portion of the panel member between said line and the said opposite end of the panel member being foldable outwardly and downwardly over the portion of the panel member between said line and said secured end of the panel, and means carried respectively by the said opposite end of the panel member, said shoulder straps and said waist band for releasably and selectively securing said first-mentioned portion of the panel member in upwardly extended or in downwardly folded position.

2,735,104
COLLAR STAY
Charles J. Finan, United States Air Force
Application March 25, 1954, Serial No. 418,633
6 Claims. (Cl. 2—132)



1. A collar stay comprising a wire frame of generally triangular configuration open in the center, a spring housing secured at an apex of the triangular frame, a single piece wire fabric engaging member slidably inserted in said spring housing and having a portion extending outwardly from said frame at the said apex, spring means in said housing operatively connected with said fabric engaging member and biasing said member to an extended position, a bend in said wire in said housing constituting stop means for determining full extension of said wire out of said housing and additionally a seat for said spring.

2,735,105
TIE BARRETTES
Emil Traub, Newark, N. J.
Application January 20, 1954, Serial No. 405,182
1 Claim. (Cl. 2—150)



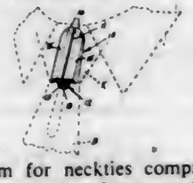
A necktie sheath of the class described comprising a tie-embracing tapered flattened tubular body having U-folded side-edges connected by front and rear walls, said body terminating at its upper end in an elliptical top and at its lower end in a relatively smaller elliptical bottom, said rear wall having formed therein a tie-entrance slot extending lengthwise of said body from said top to said bottom, a pin secured to the back face of said front wall at a location directly opposite the tie-entrance slot and having a sharpened portion thereof extending below said bottom, and a pair of substantially V-shaped tie-receiving notches formed entirely within said side-edges and rear wall and opening into said top.

2,735,106
COMBINED NECKTIE HOLDER AND NECKTIE KNOT
John F. Mercer, Highland, Ind.
Application January 13, 1955, Serial No. 481,671
1 Claim. (Cl. 2—150)



In a necktie, a holder and knot forming member comprising a transversely curved front wall of wedge shape having the small end lowermost, transversely curved side walls, a pair of rear walls extending from said side walls, said rear walls being disposed with their inner edges in spaced apart relation, a hook-shaped tab carried by the upper edge of each rear wall adjacent the inner edge of the latter, said tabs extending inwardly and downwardly, and a tie clamping member of truncated V-shape engageable in said holder with the upper edge thereof engaging under said tabs, the lower small end of said clamping member being formed into a roll for pressing engagement with that portion of the necktie disposed in the lower small end of the holder, said tabs holding said clamping member against upward movement.

2,735,107
PLEAT FORMS FOR NECKTIES
John L. Myers, Kellogg, Idaho
Application May 22, 1953, Serial No. 356,851
3 Claims. (Cl. 2—153)



1. A pleat form for neckties comprising upper and lower separable companion forms, each having a body made of sheet material and having dimensions adapting it to be fitted within a loose knot of a four-in-hand necktie, one above and one below the tie body; said lower form having at least one longitudinally extending recess; said upper form being folded longitudinally midway its width upon itself in face to face engagement to form a flange and thence upwardly spaced from the fold having outwardly disposed integral wings extending the full length of and disposed at right angles to the flange and being substantially arcuate in transverse configuration and having forwardly converging front edges on said wings; said flange being adapted to fit within said recess, whereby the tie body is pleated at the point where it emerges from the knot.

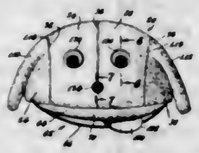
2,735,108
HEAT INSULATING HAND COVERING
Frits Cremer, New York, N. Y., assignor, by mesne assignments to Marbill Company, Providence, R. I., a corporation of Rhode Island
Application October 7, 1952, Serial No. 313,543
12 Claims. (Cl. 2—158)

1. A heat-insulating mitt for protecting the wearer's hand in a cold atmosphere, said mitt having palm and finger portions and comprising outer and inner skins of flexible waterproof material which are free from each other at least throughout the entire palm portion and at that portion which covers the back of the wear's hand and heat insulating material of substantially uniform thickness interposed between the outer and inner skins wherever the latter are free from each other, said heat insulating material comprising independent plies of fibrous textile fabric having loose projecting fibers, the respective fibrous



plies being bonded to the inner surfaces of the outer and inner skins respectively, but being freely movable relatively to each other.

2,735,109
NOVELTY CAP CONSTRUCTION
Samuel Feldman, New York, N. Y.
Application July 14, 1952, Serial No. 298,704
2 Claims. (Cl. 2—195)

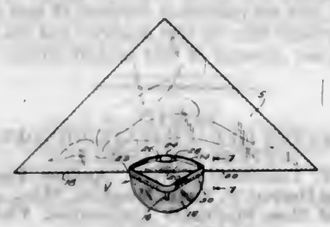


1. An article of manufacture comprising a plurality of areas of flexible material secured together at their abutting edges to form a cap body defining a downwardly open chamber to receive the head of a wearer, and inturned rim integral with said cap body, a sweat band secured in overlying relationship to said inturned rim, a frontal portion of said junction between said inturned rim and said sweat band being separated to define an opening, a dual visor assembly with a rear portion thereof inserted in said opening, first stitching means secured to said dual visor assembly in said opening engaging the same with said inturned rim and sweat band; eye and nose simulating means carried by said cap body at a forward position thereof including a plurality of eye simulating members and a nose simulating member disposed below said eye simulating members; said dual visor assembly comprising a pair of lip simulated means mutually angularly spaced, tongue simulating means disposed between said pair of lip simulating means and secured at a rearward portion thereof, skin simulating means overlying the outer face of the said pair of lip simulating means, and lip lining means overlying the inner face of said pair of lip simulating means on each side of asid tongue simulating means, all said means being secured at a rearward portion thereof in said opening, to simulate a partly opened lifelike mouth of a figure; said eye and nose simulating means being disposed above said dual visor assembly, whereby said cap body represents the head of said figure.

2,735,110
HEADWEAR FOR WOMEN
Opal Baker, New York, N. Y., assignor to Far East Associates, Inc., New York, N. Y., a corporation of New York
Application March 16, 1954, Serial No. 416,482
3 Claims. (Cl. 2—198)

1. A scarf cap for feminine wear comprising a visor assembly including a patterned visor of relatively stiff material, said visor having a rear edge, a headband the forward portion of which is secured along the rear edge of the visor, and said scarf cap further comprising a triangular half square fabric scarf, an elastic insert in the center

portion of the long edge of the scarf, means securing spaced points only on the long edge of the scarf on either side of the elastic insert to the visor assembly near the



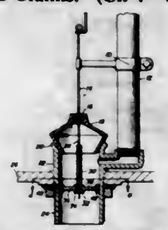
corners of the visor, the aforesaid arrangement being such that the scarf cap may be worn in a variety of ways with the elastic insert disposed either in front of or behind the head.

2,735,111
BELT LOOP HOLDER
Edna M. Franklin, Oklahoma City, Okla.
Application May 22, 1952, Serial No. 289,354
1 Claim. (Cl. 2—236)



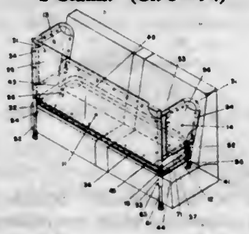
In a means for anchoring a belt loop to a garment-forming fabric the combination with a string-like element having each end, respectively, secured within a pointed-ended tubate body adapted for transversely pivoting with relation to said element, of: a pliant fabric folded upon itself forming two tab portions, whereby one of said tab portions may be flatly disposed on the inner surface of a garment-forming fabric, leaving the other tab portion free to swing toward and away from the first said tab portion; and means for fastening said two tab portions together, whereby said tubate ends of said string-like element may be thrust through said garment-forming fabric and said fastened tab portion in spaced-apart relation and disposed flatly thereagainst by pivoting said tubate ends and fastening said tab portions together, thereby forming a belt loop on the outer side of the garment-forming fabric.

2,735,112
FLUSH VALVE
George Myers, Jefferson County, Tex.
Application May 22, 1953, Serial No. 356,627
2 Claims. (Cl. 4—57)



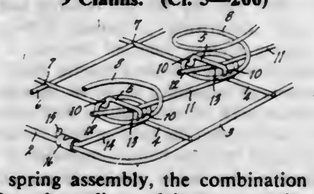
1. A flush valve comprising a discharge conduit having a valve seat at the upper portion thereof, a resilient ball valve adapted to be seated on said valve seat, a pilot rod depending from said ball valve, a tubular guide within said discharge conduit, said pilot rod extending into said tubular guide, and means secured to said tubular guide vertically and horizontally adjustably frictionally securing said tubular guide in said discharge conduit, the lower end of said tubular guide being threaded, said means including a guide block threadedly secured to said tubular guide, said guide block having a pair of divergent arms, and friction elements threadedly adjustably secured on said arms, the outer surfaces of said friction elements being roughened.

2,735,113
AUTO BED FOR INFANT
William J. Turner, Mount Gilead, Ohio
Application January 2, 1953, Serial No. 329,325
1 Claim. (Cl. 5—94)



For use on the seat of an automobile which has a floor, said seat having a substantially horizontal seat member, and having a back member disposed substantially vertically but slanting backward as it extends upward from the seat member, an improved device serving as an enclosure and as a bed and comprising a tubular front section metal frame extending substantially vertically, having side tubular frame members and a top tubular frame member; a pair of L-shaped tubular members having a horizontal portion pivoted to the front section about a substantially vertical axis and having a slanting portion extending downward in a direction substantially parallel to the slant of the back member of the seat; a seat section tubular metal frame pivoted to the front section about a horizontal axis; individual covers in stretched condition secured to each of said sections, each cover being formed with a hem along each of its edges; a rod extending through each of said tubular frames and through one of said hems; a pair of relatively long leg sections formed as continuations of the side frame members of said front section; an adjustable foot member adjustably secured to each of said long leg sections and contacting with the floor of said automobile; a pair of relatively short leg sections formed as continuations of the slanting tubular portion of each of the side sections; and an adjustable slanting foot member adjustably secured to each of said short leg sections and contacting with the seat of said automobile.

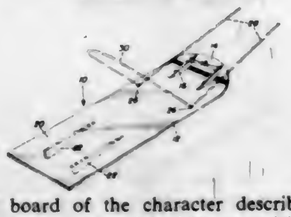
2,735,114
SPRING ASSEMBLY
Leland O. Collins, Detroit, Mich., assignor to L. A. Young Spring & Wire Corporation, Detroit, Mich., a corporation of Michigan
Application July 7, 1953, Serial No. 366,431
9 Claims. (Cl. 5—266)



6. In a spring assembly, the combination of a frame member, base bars disposed in transversely spaced relation to each other and to said frame member and having longitudinally spaced upwardly projecting loops therein, and conical springs having arms extending from their bottom coils disposed on said base bars with their bottom coils embracing the loops thereof, the arms of the springs mounted on one base bar being inserted through

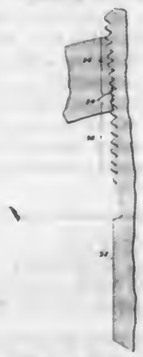
the loops of an adjacent base bar and over the bottom coils of the springs arranged thereon for securing the springs to the base bars, the arms of the springs adjacent said frame member being secured thereto.

2,735,115
TOBOGGAN
George D. Dees, Milford, Mich.
Application January 30, 1953, Serial No. 334,267
1 Claim. (Cl. 9—21)



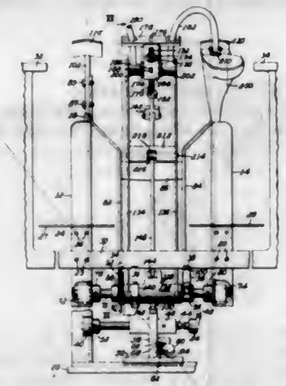
A surf board of the character described including: a flat board of a substantial width comprising an upwardly curved bow, the aft portion of said board providing a rider supporting area, a stand rope having its ends anchored to the longitudinal marginal portions of the board intermediate said rider supporting area and the bow, a pair of spaced, parallel, substantially segmental braces secured longitudinally in the bow on the upper side of the board, and a pair of spaced, parallel, substantially triangular fins mounted on the board beneath the rider supporting area for reinforcing same and stabilizing the board, said fins being in longitudinal alignment with the braces and cooperable therewith for resisting twisting action of the board.

2,735,116
COMBINED DRILL AND TAP
Frank H. Mueller, Decatur, Ill., assignor to Mueller Co., Decatur, Ill., a corporation of Illinois
Application April 27, 1953, Serial No. 351,119
1 Claim. (Cl. 10—140)



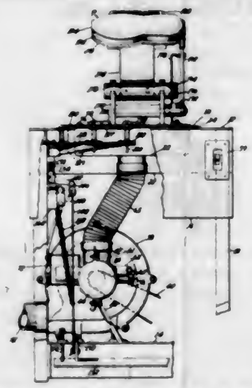
A combined drill and tap for the drilling and tapping of mains or pipes comprising: a leading drilling section; a following tapping section adjacent thereto; a plurality of circumferentially-spaced cutters having flutes therebetween in said tapping section; a series of leading straight tapping threads on each of said cutters with said straight threads being chamfered at the leading end of each of said cutters, said straight threads being otherwise of uniform shape and diameter and being unrelieved on their crests and sides circumferentially rearwardly of their cutting edges; and a series of following tapered tapping threads on each of said cutters merging smoothly with the said straight threads thereon, said tapered threads being of progressively increasing root and crest diameters and being relieved on their crests and sides circumferentially rearwardly of their cutting edges, said straight thread series and said tapered thread series being of generally the same length and said length being generally of the order of the thickness of the wall of the main or pipe to be drilled and tapped, and the maximum diameter of said drill section being greater than the root diameter and less than the maximum crest diameter of said straight threads.

2,735,117
APPARATUS TO FACILITATE JOINDER OF UPPERS AND INSOLES
Theodore P. Courchene, Beverly, Andrew Eppler, Jr., Lynn, and Herbert W. Jarvis, Hingham, Mass., assignors to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application November 5, 1952, Serial No. 318,942
9 Claims. (Cl. 12—1)



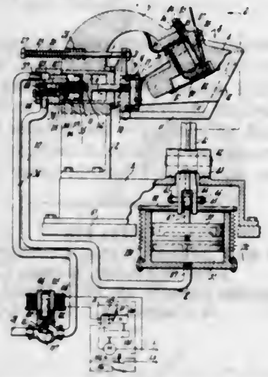
1. Apparatus for use in making shoes including a jack for supporting a shoe last in inverted position, a movably mounted arm for holding an insole in position on the bottom face of said last, a gage movably mounted with respect to the heel end of said last, and treadle means operatively linked to said gage and arm for first bringing said gage into contact with the heel ends of said last and insole then operating said arm to hold the insole against the bottom face of said last and releasing said gage.

2,735,118
SOLE LOCATING AND HOLDING APPARATUS
Fred T. MacKenzie, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application September 8, 1953, Serial No. 378,783
6 Claims. (Cl. 12—17)



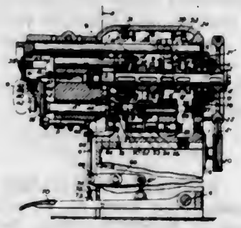
4. In a sole locating apparatus, a perforated suction table, means for producing suction through said table, a damper operable to control the suction, interconnected gages for locating sole-shaped pieces laid on said suction table, and treadle operated means for withdrawing said gages constructed and arranged to operate said damper to close it as the gages are withdrawn.

2,735,119
SHOE PRESSING MACHINE
Milton L. Dodge, Newburyport, Mass., assignor to Compo Shoe Machinery Corporation, Boston, Mass., a corporation of Delaware
Application June 30, 1954, Serial No. 440,516
22 Claims. (Cl. 12—51)



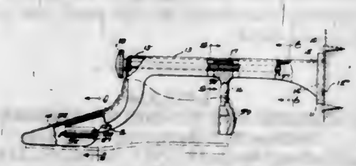
1. A shoe pressing machine comprising a form over which a shoe to be pressed may be placed, means for pressing a shoe against said form, means for heating said form, mechanism for closing and opening said pressing means relative to a shoe on said form, timing mechanism, and means controlled by said timing mechanism actuating said opening and closing mechanism to open said pressing means after a predetermined time during which said pressing means has been closed.

2,735,120
MACHINE FOR MANUFACTURE OF SHOE SOLES
Josef Zelinka, Gottwaldov, Czechoslovakia, assignor to Svit, narodni podnik, Gottwaldov, Czechoslovakia
Application August 31, 1951, Serial No. 244,583
Claims priority, application Czechoslovakia August 31, 1950
10 Claims. (Cl. 12—85.2)



1. In a machine for trimming and channelling shoe and other footwear soles and of the type including a machine frame, a longitudinal rotary cam shaft, which actuates the trimming, channelling and associated tools of the machine, bearings in said frame in which said shaft is journalled, a longitudinal upper feed shaft, a longitudinal trimming-knife rod, and a longitudinal lower channelling-knife shaft, said shafts and rod being borne by said frame and individually carrying the respective tools; the combination of bearings for the cam shaft, the upper and lower shafts and the rod, said bearings all being arranged in approximately the same vertical plane, so that the upper feed shaft, the trimming-knife rod, the cam shaft and the lower channelling-knife shaft are all arranged immediately above each other, first and second cams on the cam shaft, a dependent arm on the upper feed shaft, said first and second cams both acting on said arm to rock said feed shaft and move it longitudinally, an upright arm on said lower channelling-knife shaft, which is rockable by said upright arm, a third cam on the cam shaft for rocking said upright arm, a motion-converting device on the cam shaft and an operative connection between said device and said trimming-knife rod for transmitting longitudinal reciprocation to this rod.

2,735,121
WALL SUPPORTED SHOE HOLDER AND STRETCHER
Arnold A. Hansen, Des Plaines, Ill.
Application March 1, 1955, Serial No. 491,247
5 Claims. (Cl. 12—128.6)



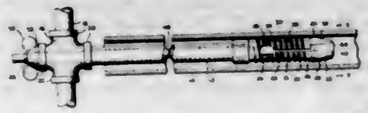
1. A combined shoe holder and stretcher comprising, in combination, a mounting bracket adapted to be attached to a wall or other vertical surface, a bracket arm of channel cross-section removably secured to said bracket, an elongated screw rotatably mounted within said bracket arm, said bracket arm having a foot portion of channel construction, a pair of inwardly directed flanges formed integrally with said foot portion, a tang extending perpendicularly to each of said flanges, a shoe tree mounted on said foot portion, a spring clip secured to said tangs and operative to retain said shoe tree in position for use, and a heel post threadably mounted on said screw and operative upon rotation of said screw firmly to grasp a shoe for shining, cleaning or the like.

2,735,122
TUBE CLEANING
Clarence B. Pletcher, Buchanan, Mich.
Application July 2, 1953, Serial No. 365,609
4 Claims. (Cl. 15—104.3)



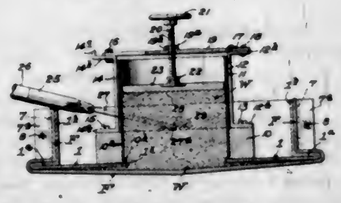
1. A device adapted to axially move through a pipe comprising an elongated casing of a diameter smaller than the diameter of the pipe to be cleaned, a plurality of runners of spring material extending axially of the casing and disposed equidistantly around the circumference thereof, each of said runners including ends fixedly secured to the casing and having a portion intermediate said ends bowed outwardly from said casing, at least one drive means to move said device axially of said pipe, said drive means mounted on the intermediate portion of one of said runners, and extending outwardly at a slight angle to said runner and into engagement with the inner wall of said pipe, and means for energizing said drive means.

2,735,123
PIPE CLEANING TOOL
Frank H. Mueller and Frederick Tratzik, Decatur, Ill., assignors to Mueller Co., Decatur, Ill., a corporation of Illinois
Application July 2, 1952, Serial No. 296,842
5 Claims. (Cl. 15—104.09)



1. A pipe cleaning tool comprising: an elongated tubular head having a plurality of longitudinal slots extending inwardly from one end thereof to divide said head into a plurality of resilient fingers; at least one longitudinal peripheral scraping edge on and adjacent the forward end of each of said fingers; a helical rib on said head partially interrupted by said slots and encircling said head rearwardly of said edges; an elongated operating body extending rearwardly of said head; and means for expanding said head.

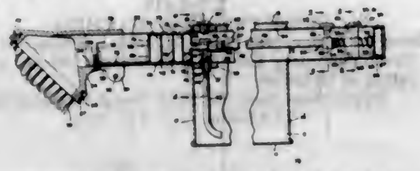
2,735,124
DEVICE FOR FINISHING FLOORS
Nathan B. Wilson, Savannah, Ga.
Application March 30, 1951, Serial No. 218,500
2 Claims. (Cl. 15—131)



1. A device of the character specified, comprising a base plate; a flexible porous sheet marginally clamped across the bottom of the base plate providing a space between the sheet and base plate; said plate having a central opening therethrough; a receptacle for wax or the like removably mounted on the plate, and having an open bottom registering with said plate opening; means for forcing the wax inwardly of said receptacle towards the plate and within the space between the sheet and bottom of the plate; a handle operatively connected to the plate; said receptacle having an open top; opposed brackets operatively connected to the plate disposed at opposite sides of the receptacle; a bar hingedly mounted on one bracket and overlying the top of the receptacle with its outer end contacting the other bracket; means for locking the outer end of the bar to said other bracket; and said forcing means comprising a screw shaft threaded through the center of the bar, a plunger rotatably carried by the lower end of the screw shaft and adapted to fit within the receptacle, and means on the upper end of the screw shaft for rotating said shaft.

2,735,125
FOAM GENERATING CLEANING DEVICE
Hocken C. Erbs, Cleveland, Ohio
Application February 23, 1952, Serial No. 273,034
7 Claims. (Cl. 15—131)

6. In a device of the character described, a fluid container, a tubular element secured to said container, a valve disposed in said tubular element and having an axial bore therein which is coaxial with the axis of said tubular element, a supply providing selective communication between the interior of said container and said axial bore, means for forcing fluid from said container into said axial bore, a control rod extending axially through said tubular element and operative to rotate said valve, an element connected to said rod through an opening in said tubular element and partially embracing said tubular element and rotatable about said tubular element to rotate said control rod, said fluid-forcing means comprising a pair of discs disposed in said tubular element



and in contiguity with each other and each having openings therein for admitting air pressure, one of said discs being secured against rotation relatively to said tubular element, and an element connected to the other of said discs through an opening in said tubular element and partially embracing said tubular element and rotatable about said tubular element to rotate the other of said discs.

2,735,126
MOP HOLDER HAVING CLAMPING JAWS
John R. Proffitt, Dalton, Ga.
Application January 25, 1952, Serial No. 268,167
4 Claims. (Cl. 15—147)



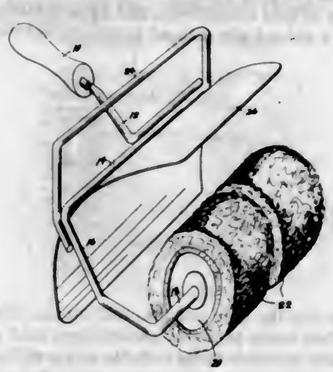
1. A mop holder comprising an upper hollow head section including a top and depending generally vertical sides and generally horizontal wide shoulders projecting inwardly from the sides, a lower hollow head section comprising a bottom and upwardly extending sides and generally horizontal wide shoulders projecting inwardly from such sides, the generally horizontal wide shoulders of the lower head section being arranged beneath the generally wide horizontal shoulders of the upper head section and serving to clamp portions of a mop element between the same, generally vertical locking jaws carried by the inner edges of the shoulders of the upper head section and depending below the same and having angularly arranged portions, and generally vertical locking jaws carried by the inner edges of the shoulders of the lower head section and depending below such shoulders and arranged outwardly of the first-named locking jaws for interlocking coaction therewith.

2,735,127
FINGER COT ERASER
Henry M. Parsons, New York, N. Y., assignor to Psychological Research Associates Corp., New York, N. Y., a corporation of New York
Application October 26, 1953, Serial No. 388,273
1 Claim. (Cl. 15—227)



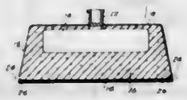
A finger-cot for controlled erasure of a grease pencil mark and the like, comprising an inner body of soft material shaped like a bag to fit closely around a finger, an outer covering of grease-absorbent material secured around the closed end of the inner body, and a generally U-shaped stiff wire with its central portion extending between the closed end of the inner body and the said outer covering in position to be pressed against the outer covering by the end of a finger in the cot.

2,735,128
PAINT ROLLER FOR WOVEN WIRE FENCES, ETC.
David H. Adams, Holden, Mass.
Application June 24, 1952, Serial No. 295,190
2 Claims. (Cl. 15—230)



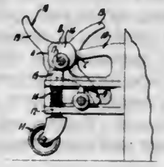
1. A paint roller for applying paint to woven wire fences of the type having spaced parallel strands interwoven with like spaced parallel strands at an angle to the first-named strands, said paint roller comprising a handle, means forming a shaft thereon, a plurality of discs arranged in parallel relation to rotate on the shaft, a cover of fuzzy absorbent material on the periphery of each disc, said covers extending over the side edges of the discs adjacent each other and over the side edges remote from each other, means holding the discs against substantial axial movement on the shaft and in mutually spaced relation but with substantial contact of the absorbent surfaces only of each adjacent disc, whereby said roller may be passed along a wire fence applying paint to the major portion of the surface of the strands thereof, the peripheries of the discs and the covers being relatively broad to cover the crossed strands with the roller passing along parallel to the other strands with one strand between discs and the next two adjacent strands at the outer edges of the discs, all three strands receiving paint from the absorbent covers.

2,735,129
SPONGE RUBBER BROOM
Wallace J. Lorenz, Arlington, Calif.
Application January 23, 1953, Serial No. 332,824
1 Claim. (Cl. 15—244)



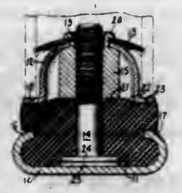
A sponge rubber broom comprising a body and a handle, a socket in the body for the handle, a relatively stiff yet flexible reinforcing element integral with the socket, said reinforcing element tapering downwardly and tapering outwardly from its central portion, an elongated unitary sponge rubber main body portion fixed thereto and completely enclosing the reinforcing element, the sponge rubber body portion having straight parallel sides, downwardly and outwardly sloping ends, and a beveled bottom surface, an integral skin partially enclosing the sides and the entire area of the bottom surface of the spong rubber body portion, said integral skin being cut away adjacent the lower periphery of the broom portion, said cut away portion exposing the inner porous sponge rubber body for better collection and absorption of foreign materials.

2,735,130
RETRACTABLE CASTER
Robert K. Unsworth, Redwood City, Calif., assignor to Magna Engineering Corporation, San Francisco, Calif., a corporation of California
Application March 13, 1951, Serial No. 215,245
5 Claims. (Cl. 16—33)



1. A frame; a caster pintle mounted in said frame for axial movement relative thereto; a cam cylinder mounted on said frame over said pintle and in contact therewith for rotation in a given direction on a horizontal eccentric axis; a plurality of stepped dwell faces formed on said cylinder, each said dwell face being spaced from its contiguous dwell face not more than 90°; a plurality of foot pedals associated with said cam and arranged for rotation about said eccentric axis and extending substantially radially therefrom, there being one such pedal adjacent the trailing edge of each of said dwell face and an additional such pedal located not more than 90° rearwardly of the last of the preceding pedals; and spring means for biasing said pintle upwardly against said cam cylinder.

2,735,131
CASTER GLIDE
Michael Kramcsak, Jr., Bridgeport, Conn., assignor to The Bassick Company, Bridgeport, Conn., a corporation of Connecticut
Application December 20, 1950, Serial No. 201,776
15 Claims. (Cl. 16—42)



14. A caster glide comprising a hollow spacer member carrying a retainer in the form of a shallow umbrella of resilient material having peripheral anchoring projections whereby it is locked in position in the lower open end of a furniture leg, a glide base having fixed thereto an upstanding screw, a nut for engaging said screw fixedly carried by the spacer member interiorly of the spacer member and fastened at its upper end to the spacer member, said base being smooth and round so as to inhibit unscrewing of the screw by hand, and a pressure member exerting upward pressure on the nut to inhibit unscrewing of the screw.

2,735,132
DOOR CLOSER AND CHECK
George Wartian, Detroit, Mich., assignor to Wartian Lock Company, St. Clair Shores, Mich., a corporation of Michigan
Application January 14, 1953, Serial No. 331,156
13 Claims. (Cl. 16—52)



10. In a door closer and check, a cylinder, a piston reciprocable in said cylinder, a valve member carried by said piston, said valve member having a passage therein communicating with said cylinder on opposite sides of said piston, means at one end of said cylinder with which one end of said valve member is engageable during the last portion of piston movement in one direction, said means including a surface formed to cooperate with said one end of said valve member to form a restriction between said one end of said cylinder and said passage in said valve member when said valve member is in engagement with said means.

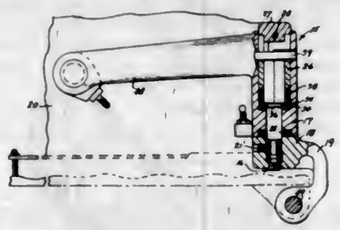
2,735,133
HINGE
Lester L. Hey and Eldon M. Pipal, Burbank, Calif.; said Hey assignor to said Pipal
Application January 16, 1950, Serial No. 138,856
3 Claims. (Cl. 16—128)



1. A hinge comprising two hinge straps of uniform thickness throughout engaged one within the other and having a pivotal joint therebetween, at least one of said hinge straps comprising a flat section having a laterally extending element thereon adapted to engage the edge of a door for fixing the position of the flat section with respect thereto, and a sleeve expandable laterally throughout its length extending from the flat section in a direction transverse relative to the joint and adapted to be inserted within a structural member, said sleeve having an operative position wherein the sleeve is in expanded relationship adapted to grip said structural member.

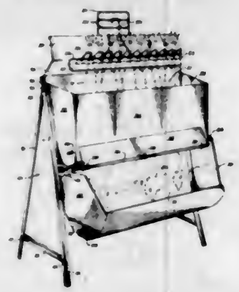
2,735,134
LOCK HINGE
Xan B. K. Green, New Paltz, and Harry Preble, Jr., Cross River, N. Y., assignors to General Slicing Machine Co., Inc., Walden, N. Y., a corporation of New York
Application June 18, 1953, Serial No. 362,566
4 Claims. (Cl. 16—144)

1. In a lock hinge structure, a first member having a bore therethrough, a second member positioned in contact with the first member and across one end of said bore; the other end of said bore being counterbored, a tubular member longitudinally positioned within the counterbore and slidable therealong; the end of said tubular member furtherest from the plane of contact of said first and second members, having a plurality of pairs of spaced diametrically opposite longitudinal extensions determining pairs of diametrically opposite longitudinal notches in said tubular member; one pair of said diametrically opposite extensions being longer than the others, a finger piece carried by at least one of said longer extensions, accessible at the mouth of said counterbore and adapted to be manually pushed to move the tubular member inwardly in the counterbore, a first pin secured to the first member and extending diametrically across and within said counterbore and positioned in normal rest position through a diametrically opposite pair of said notches; said notch-engagement pin when in any of said pairs of diametrically opposite notches, holding the tubular member against rotation within the counterbore, spring means within the said counterbore urging said tubular member in a direction outwardly of said counterbore and against said notch-engaging pin, a second pin secured to the second member



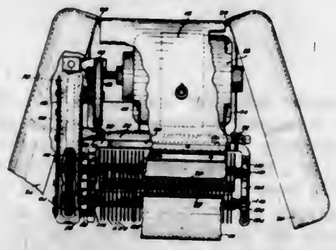
and extending into the bore and into said tubular member; the first member being rotatably mounted on said second pin; said tubular member being slidable along said second pin, means on said second pin engaging said tubular member against rotation about such second pin and stressed suring means within said counterbore, mounted and held against movement on said second pin; such stressed spring means pressing the first member against the second member; said tubular member when slid a sufficient distance into the said counterbore that the first pin is out of said notches, freeing said first member for rotation about said second pin within the spaces between said longer extensions whereby said first pin can be positioned to be set in any pair of opposite notches upon relative rotation of the first and second members and the subsequent release of the tubular member.

2,735,135
FOWL SLAUGHTERING STAND
Charles W. Gibbs and Darrel E. Gibbs, Boulder, Colo.
Application November 15, 1952, Serial No. 320,672
8 Claims. (Cl. 17—11)



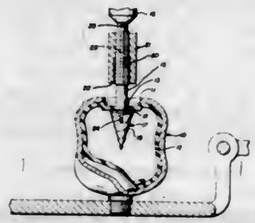
1. A slaughter and drainage apparatus comprising in combination an open top and open bottom compartment adapted to substantially enclose and restrain the dying movements of one or more fowl bodies, said compartment formed with opposed end walls and downwardly converging front and back walls with the top opening thereof having a greater area than said bottom opening, a trough positioned beneath the open bottom of said compartment, suspension means supported by said apparatus and positioned above the open top of said compartment, and a rack supported by said suspension means, said rack being operatively associated with said compartment and located above said open top by which one or more fowl bodies are adapted to be suspended by the shanks thereof in head down position with limited freedom of convulsive movements within said compartment.

2,735,136
FOOD PROCESSING MACHINE
Oscar Robert Deckert, Newtonville, Mass.
Original application November 24, 1948, Serial No. 61,798, now Patent No. 2,704,858, dated March 29, 1955. Divided and this application October 27, 1953, Serial No. 398,136
5 Claims. (Cl. 17—26)



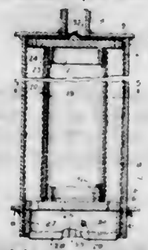
1. In a meat tenderizing machine, a casing, a motor located in the casing, a transverse bearing member secured at the front side of the casing and supporting a gear mechanism driven by the motor, a U-shaped carrier frame cradled in the bearing member, a pair of multiple cutter rolls journaled in the carrier frame and being operatively connected to the gear mechanism, each cutter roll bearing a plurality of disc cutters and intervening spacers and a series of stripper elements adjustably supported between the disc cutters, said stripper elements being formed with scavenging edges arranged to engage against the spacers and remove material therefrom when the spaces are rotated by the said motor.

2,735,137
MECHANICAL EXTRACTING APPARATUS FOR STRIPPING FLEXIBLE HOLLOW ARTICLES FROM REENTRANT MOLD CAVITIES
Theodore A. Miller and Theodore A. Miller, Jr., Cuyahoga Falls, Ohio
Application March 21, 1955, Serial No. 495,610
7 Claims. (Cl. 18—2)



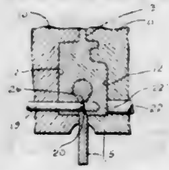
1. Apparatus for stripping a flexible hollow article having an aperture from a reentrant mold cavity in which it was formed, said apparatus comprising a rotatable spindle, a conical screw-threaded clamping member secured to the end of said spindle for expanding the aperture and entering the article, a second clamping member mounted on said spindle for clamping margins of the article about its aperture to said conical clamping member, and a passage through said conical clamping member and said spindle and communicating with the atmosphere for providing escape of air from the article.

2,735,138
WATER COOLED VACUUM AND PRESSURE MOLD
Francis H. Luehm, La Habra, and Edwin B. Smith, Arcadia, Calif., assignors to Calresin Corporation, Arcadia, Calif., a corporation of California
Application March 30, 1953, Serial No. 345,374
11 Claims. (Cl. 18—26)



1. A mold, comprising an outer tube, a closure at one end of said tube, a valved port in said closure, a removable cylindrical mandrel in said tube, an exterior diameter of said mandrel being substantially less than the interior diameter of said outer tube, a plate at each end of said mandrel, one of said plates being positioned in said tube closely adjacent said closure, the other of said plates being positioned adjacent the opposite end of said tube, the edges of said plates being adjacent the inner surface of said tube, a plurality of ports in said plates between the edges of said plates and the exterior surface of said mandrel, said ports communicating with the annulus between the exterior surface of said mandrel and the interior surface of said tube, means for introducing molten material into the ends of said tube, and means for withdrawing air from said ports the ports in said one plate being sufficiently small to permit congealing of said molten material in said last named ports and to substantially prevent introduction of said material between said one plate and said closure.

2,735,139
METHOD OF SECURING SEPARABLE FASTENER ELEMENTS TO STRINGER TAPES
Louis H. Morin, Bronx, N. Y.
Application December 23, 1952, Serial No. 327,495
5 Claims. (Cl. 18—59)



1. The herein described method of securing scoops of separable fastener stringers against displacement on a mounting tape, which includes the steps of supporting an edge portion of a tape within a cavity formed by a pair of dies, then forming an opening in that portion of the tape disposed within the die cavity by moving a pin through the die cavity and through that part of the tape disposed within the die cavity, then injecting casting material under pressure into the die cavity while maintaining said opening in the tape and then withdrawing the pin from the opening in the tape and simultaneously forcing the casting material through said opening under pressure as the pin is withdrawn.

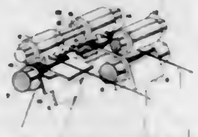
2,735,140
CARD CLOTHING
Edmond E. Fournier, Worcester, Mass.
Application June 4, 1954, Serial No. 434,403
1 Claim. (Cl. 19—114)

Card clothing comprising a foundation and a plurality of teeth therein, each tooth having a portion embedded in

the foundation and an exposed portion extending from a surface thereof, the embedded portions of the teeth each comprising a pair of relatively angularly disposed runs, one embedded run being located at an incline to the foundation and protruding through the same at said surface and continuing outwardly at substantially the same angle of inclination as that of the embedded portion of the inclined run, and said teeth extending at a further inclination from the termination of the exposed inclined run.

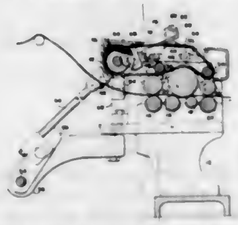


2,735,141
CONDENSER SUPPORTS
Philip B. Tarbox, Saco, Maine, assignor to Saco-Lowell Shops, Boston, Mass., a corporation of Maine
Application June 29, 1954, Serial No. 439,959
4 Claims. (Cl. 19—131)



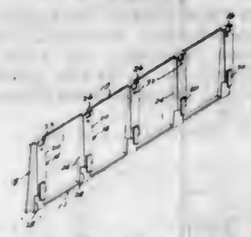
1. A drafting mechanism comprising a pair of delivery rolls at the forward end, a fiber control mechanism mounted rearwardly thereof, said control mechanism including an endless looped apron and an apron bar within the loop of said apron in contact with said apron near said delivery rolls, a pair of sliver condensers connected together with a tie bar, said condensers being normally maintained in operative position by said delivery rolls and adapted to be moved in a direction parallel to the axis of said delivery rolls by sliver passing therethrough, and flexible supporting means extending slackly between said tie bar and said apron bar, and having its ends fixedly attached to said tie bar and said apron bar respectively, to allow normal movement of said tie bar in a direction parallel to the axis of said delivery rolls and prevent substantial forward movement thereof upon opening of said delivery rolls.

2,735,142
CLEARERS
Douglas G. Noiles, Kennebunk, Maine, assignor to Saco-Lowell Shops, Boston, Mass., a corporation of Maine
Application June 17, 1954, Serial No. 437,415
7 Claims. (Cl. 19—139)



1. In a drafting mechanism having a series of drafting rolls, an endless looped clearer belt contacting said drafting rolls, belt supporting and driving means including roll means mounted within the loop of said belt for supporting said belt in contact with the surfaces of said drafting rolls and for driving said belt, said belt supporting and driving roll means having a plurality of closely spaced, resilient and sharp belt driving pins mounted on and extending throughout its peripheral surface and extending outwardly therefrom to engage the surface of said endless belt far enough only to drive said belt, and means for rotating said belt supporting and driving roll means to drive said belt.

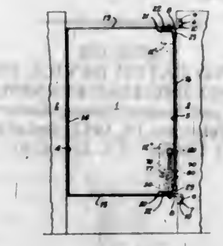
2,735,143
PANEL SIDING
Harlan M. Kearns, Lexington, Ky.
Application March 25, 1952, Serial No. 278,360
1 Claim. (Cl. 20—5)



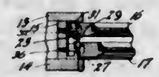
In an exterior siding for buildings, a thin, flat, elongated body of rectangular outer configuration adapted to extend horizontally in overlying relation to the vertical wall surface of a building, said body lying in a plane inclined slightly from the vertical; a plurality of transverse ribs formed upon one surface of the body and extending fully from the top to the bottom edge thereof, said ribs extending normally to the length of the body and being spaced substantial distances apart with each of the ribs being relatively narrow as compared to the width of the spaces defined therebetween, the ribs being of such thickness at their upper ends as to space the top edge of said body away from said surface of the building, whereby said spaces defined between the ribs open upwardly to communicate with the spaces defined between the ribs of a like siding disposed immedately thereabove, each rib being formed, at its upper end, with a relatively shallow recess and being formed, at its lower end, with an angular recess adapted to receive the top edge portion of a like siding immediately therebelow; an elongated, longitudinally extending bottom rib formed upon said surface of the body and intersecting with the lower ends of said transverse ribs, said bottom rib being of a thickness corresponding to the thicknesses of the recessed, lower ends of the first-named ribs, the first named ribs having those surfaces thereof that are faced away from the body extending within a common plane inclined slightly from the vertical, so as to be spaced away from said wall surface of the building, thereby to bring the several spaces of each body in communication with one another, thus to form a continuous blanket air space between the wall surface of said building and the siding applied thereto; and tongue elements secured to said surfaces of the ribs at the lower ends of the ribs, the tongue elements having free end portions projecting downwardly into the recesses of the lower ends of the ribs, to engage in the recesses of the upper ends of the first-named ribs of a like piece of siding disposed immediately therebelow.

2,735,144
HINGE ASSEMBLIES FOR SWINGING DOORS
Thomas F. Anderson, Chagrin Falls, and Kent W. Benham, South Euclid, Ohio, assignors to The Sanymetal Products Co., Inc., Cleveland, Ohio, a corporation of Ohio
Original application June 19, 1951, Serial No. 232,414, now Patent No. 2,604,683, dated July 29, 1952. Divided and this application March 11, 1952, Serial No. 275,912
5 Claims. (Cl. 20—16)

1. In combination with a door presenting side wall forming facing panels secured together in spaced relationship, a door hinge assembly which includes, a corner reinforcing bracket having a vertical leg embracing the rear vertical edges of said spaced facing panels, a horizontal leg integral with said vertical leg and presenting a horizontal web and a pair of spaced side flange portions overlapping and embracing therebetween adjacent horizontal edge portions of said spaced facing panels, and a boss portion integral with said horizontal leg and extending into the door body between said spaced facing panels, said boss portion having a vertical extending pintle rod receiving bore whose outer end merges into an enlarged bearing receiving pocket axially aligned with said bore, a hinge bracket having a door-jamb attaching part projecting beyond the rear edge of the door and a horizontal arm extending therefrom and overlying the web of said corner bracket, a pintle rod having a shank extending through said bearing pocket and bore and into the body of the door between said facing panels and an outer end portion extending outwardly of said bearing pocket, means for securing the outer end portion of said pintle rod to the horizontal arm of said hinge bracket, and a bearing unit pocketed between said bearing pocket and said horizontal arm and in axial alignment with the axis of said pintle rod.

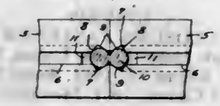


2,735,145
WINDOW CONSTRUCTION
Michael Kraesky, Laurel, Md.
Application December 30, 1952, Serial No. 328,732
1 Claim. (Cl. 20—52.2)



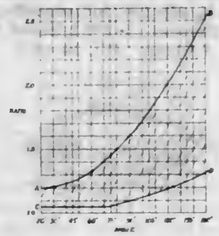
In a window construction comprising a frame and sashes slidable in parallel planes therein, a one-piece flexible channel member mounted in each side of the frame and each having laterally spaced channels located in the respective planes of the sashes to receive and guide the respective edges thereof, each of said channel members having inner and outer flexible flanges extending along its lateral edges and engaging the inner and outer portions respectively of the frame to form weatherproof joints between the frame and sashes, and having a guiding rib integral therewith and engaging adjacent edges of the sashes, the channel member at one side of the frame being tiltable about the flange at one of its lateral edges to move the channel at its other side in a direction away from the channel member at the other side of the frame for insertion or removal of the respective sash, and springs mounted between the tiltable channel member and the respective side of the frame, each spring being composed of resilient sheet metal of concavo-convex form slotted from its opposite edges toward its center to form pairs of individually yieldable arms at its opposite sides which bear against the respective channels of the tiltable channel member.

2,735,146
BUILDING BLOCK CONSTRUCTION
Nathan M. Purviance, Lewiston, Idaho
Application January 27, 1953, Serial No. 333,557
1 Claim. (Cl. 20—92)



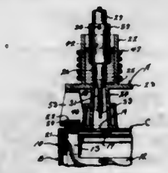
The combination with building blocks having straight-walled substantially V-shaped key-ways in surfaces thereof, the key-ways of adjacent blocks aligning in the formation of a course, each keyway being formed of a pair of confronting V-shaped channels, the outer edge of each channel being flush with the adjacent surface of each block, of keys of parallel cylindrical construction, fitted within said V-shaped keyways, each block being formed with a rectangular groove at the inner end of each keyway thereby providing inner spaces between portions of said keys and keyways for insertion of a key-removing tool.

2,735,147
GATING SYSTEM FOR CASTING METALS
Friedrich Nielsen, Muhlacker, Germany
Application January 9, 1953, Serial No. 330,479
Claims priority, application Germany October 31, 1949
3 Claims. (Cl. 22—134)



1. In a gating system, a molten metal pouring runner having an inlet end and a discharge gate, further comprising communicating channel sections joined to each other and forming a runner having a plurality of angles to effect a loss in kinetic energy in metal flowing through said sections to said discharge gate, each channel section between said inlet end and said discharge gate being successively increased in cross-section in a ratio lying between the curves AB and CD in Figure 9 of the drawings.

2,735,148
PROCESS FOR CASTING STORAGE BATTERY STRAPS AND TERMINALS
John K. Shannon and Robert R. Schmit, Kenosha, Wis.
Application February 27, 1953, Serial No. 339,232
2 Claims. (Cl. 22—202)



1. In a process for casting shoulders and straps on the lugs of assembled storage battery plates and forming battery terminal posts which consists in placing the assembled plates in a case, closing the case by a cover having interior mold cavities with the tips of the lugs in the cavities, pre-heating the tips of the lugs in the cavities by electric induction coils disposed in close proximity to the

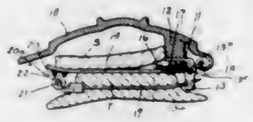
cover directly above the tips of the lugs and introducing free flowing molten metal into the cavities around the preheated tips of the lugs.

2,735,149
CLOSURE FASTENER
Joseph James Frank, Union, N. J.
Application August 13, 1951, Serial No. 241,511
5 Claims. (Cl. 24—30.5)



5. A closure fastener made of return bent flexible but stiff metal formed at its midlength in the shape of a channel, a longitudinally extending web forming the bottom of the channel, longitudinally extending sides projecting from opposite sides of said web, the said web extending beyond said sides and being provided with return bent ends, the height of said sides being progressively reduced toward the ends and merging into the extended part of the central web.

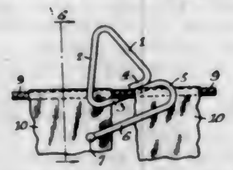
2,735,150
ORNAMENTAL CLASP
Doris K. Huston, Indianapolis, Ind.
Application October 14, 1952, Serial No. 314,672
1 Claim. (Cl. 24—85)



In an ornamental clasp for a shoulder bag strap, an elongated flat retaining bar having a convex portion at one end thereof, spaced apertured ears projecting from said bar end, hinge pintles extending outwardly from the side edges of said bar at the opposite end thereof, a masking portion having spaced apertured ears projecting from one end thereof, the last mentioned apertures pivotally receiving said hinge pintles, a hook projecting from said masking portion beyond said pintles and disposed between said last mentioned apertured ears, a spring connected at one end to the upper face of said flat bar and at its opposite end to said hook, the connection of the spring to said bar and to said hook being normally above the plane of said hinge pintles, a cam member having laterally extending pintles engaged in the apertures of said first mentioned ears, said cam member having a side to frictionally engage the adjacent face of said convex portion, and prongs secured to and projecting from the opposite side of said cam member.

2,735,151
CLOTHES PIN
Henrick Wachsman, Montreal, Quebec, Canada
Application May 24, 1954, Serial No. 431,983
3 Claims. (Cl. 24—139)

3. A clothes pin comprising a length of rod-like material having a pair of connected strands in spaced relationship, the extension of one of said strands being reversely bent into a strand portion constituting a clothes line-receiving loop, said strands and loop strand portion lying in the plane, the extension of the other strand terminating in an operating handle lying in a plane substantially normal to said first plane, both said strands and strand portion operable for fastening adjacent pieces of clothes on the line, said rod-like material



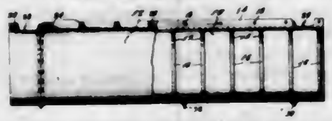
being sufficiently yieldable for insertion on the clothes line within the loop.

2,735,152
BUCKLE AND CATCH DEVICE FOR BELTS, STRAPS AND THE LIKE FLEXIBLE STRIPS
Roland Beuchat and Samuel Junod, Geneva, Switzerland
Application February 15, 1952, Serial No. 271,698
1 Claim. (Cl. 24—178)



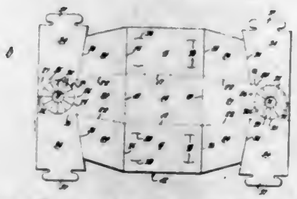
A buckle for elongated perforated flexible strips comprising a body including a cross member at its front and two longitudinal sides each provided with a narrow longitudinal slot the front end of which terminates with a circular opening of a larger diameter, a tubular member to which one end of the flexible strip is secured extending between the sides of the body, a piston slidingly carried inside each end of the tubular member and including an inner section the diameter of which is intermediate between the breadth of the slot and the diameter of the circular opening and an outer section of smaller diameter projecting through and guided by the corresponding slot in the buckle body, a spring inside the tubular member urging the pistons apart into engagement with the slots and urging their outer sections into engagement with the circular opening when they register therewith, a catch pivotally secured to said tubular member round an axis parallel with the axis of the latter and adapted to engage a perforation of the strip and to bear through its free end on the cross-member of the buckle when the sliding tubular member registers with the circular openings while it releases the cross-member and the perforations when said inner sections have receded and the tubular member is held by outer piston sections registering with the slots to the rear of the circular openings.

2,735,153
MOLD
Carl W. Chanlund, Salt Lake City, Utah, assignor, by mesne assignments, to Cen-Vi-Ro Pipe Corporation, South Gate, Calif., a corporation of Delaware
Application September 29, 1950, Serial No. 187,443
6 Claims. (Cl. 25—127)



1. A cylindrical mold comprising a cylindrical inner shell, a cylindrical outer shell, each of said shells being provided with a single longitudinal split forming abutting end portions, a plurality of circumferential spacing ribs between said shells and an air valve extending disposed in the said outer shell, said shells and ribs being of relatively thin and resilient material so that said end portions may be sprung apart to open said mold.

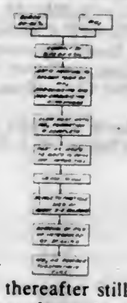
2,735,154
PIPE JOINT MOLD
George P. Killian, Marvin F. Hall, and Wharton S. Sanders, Scarsdale, N. Y., assignors to Better Boxes, Incorporated, Washington, D. C., a corporation of Delaware
Application July 12, 1951, Serial No. 236,352
4 Claims. (Cl. 25—127)



1. An upwardly opening mold trough folded from an integral blank of sheet material and adapted to be fitted about a field joint joining pipe sections for forming a completely encasing molded envelope of corrosion-resistant material about the field joint and adjacent surfaces of the pipe sections, comprising joined bottom, side and end walls folded with respect to one another to form an upwardly opening trough of substantially U-shaped longitudinal and transverse cross section, said bottom and side walls each having rectangular central panel portions disposed parallel to the axis of the pipe sections and end portions joined to the opposing end edges of the panel portions along fold lines and extending from said panel portions to said end walls, each of said end portions of said bottom and side walls being inclined to the plane of said central panel portions and converging in the direction of said end walls toward the axis of said pipe sections to form convergingly tapered end portions of said trough, the end walls being joined along fold lines to said bottom end portions remote from said central panel portion and extending upright from said bottom wall to be disposed at spaced points oppositely directed along the pipe sections from said field joint, said end walls having axially aligned openings centrally disposed therein complementary to the periphery of said pipe sections to accommodate said pipe sections and position said side and bottom walls in preselected spaced relation to the surfaces of said field joint to be coated, and having slits therein extending from said openings to a free edge of said end walls to permit said end walls to be spread about the pipe sections and seat the pipe sections in said opening, and fastening flaps joined along fold lines to the lateral edges of said end walls and extending from said end walls in overlying relation to the side wall end portions, and means for securing said fastening flaps to said side walls.

2,735,155
PRODUCTION OF METAL BORIDE WITHOUT AND WITH AN EXCESS OF BORON
Frank W. Glaser, New York, N. Y., assignor, by mesne assignments, to Borolite Corporation, Pittsburgh, Pa., a corporation of Delaware
Application August 15, 1951, Serial No. 241,991
8 Claims. (Cl. 25—156)

1. The method of producing a substantially pure homogeneous powder mixture consisting essentially of a refractory metal boride and boron, which comprises the steps of providing an intimate initial mixture of powder particles of a major ingredient consisting essentially of at least one hydride of a metal selected from the group consisting of zirconium, titanium, vanadium, chromium, tungsten, molybdenum and mixtures thereof with powder particles of additional ingredients consisting essentially of boron, compacting said mixture under pressure to form a compact, heating of said compact at elevated temperature at which said major ingredient decomposes and yields said metal, thereafter further heating of said compact at a different elevated temperature at which said yielded metal combines with said boron to form a metal boride, said ingredients containing an amount of boron in excess of the amount required to



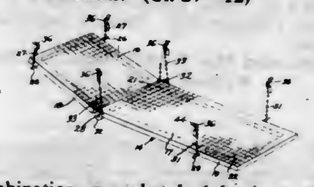
form said metal boride, thereafter still further heating of said compact at a different elevated temperature at which impurities contained in said compact are removed, and thereafter disintegrating said compact into a mixture of powder particles containing said metal boride and an excess of boron.

2,735,156
CURVED SPREADER GUIDE
Augustus E. Craver, Fredericksburg, Va., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application March 15, 1952, Serial No. 276,828
2 Claims. (Cl. 26—63)



1. An arcuate roll for spreading and guiding a web comprising a fixed curved shaft, a plurality of segmental rollers rotatably mounted thereon and being spaced apart axially of the shaft, a common resilient sleeve surrounding the plurality of rollers, and a covering sleeve of a textile material tightly fitting around the resilient sleeve.

2,735,157
ADJUSTABLE CASKET BED
Dean Hotchkiss, Cecil V. Deckwa, and Fay Pettigrew, Sacramento, Calif.
Application April 10, 1953, Serial No. 347,882
2 Claims. (Cl. 27—12)



2. In combination, a casket bed having a body-support rectangular frame, webbing mounted on said body-support frame, a head rest frame, second webbing mounted on said head rest frame, at least six brackets, each said bracket having an inwardly-extending projection, a downwardly extending leg adapted to fit against the side of the casket in which it is installed and an outwardly projecting top adapted to fit over the top edge of the side of said casket, at least two chains supporting said head rest frame from corresponding brackets, and at least four additional chains supporting said body-support frame from corresponding brackets, each said chain having a plurality of enlarged links and a plurality of connecting narrower links, each said bracket being formed

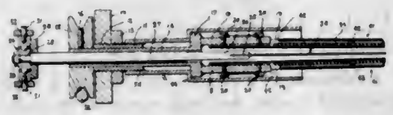
to receive the narrower links of said chain in a plurality of positions of adjustment of the length of said chain between said bracket and said bed.

2,735,158
BOBBIN CLEANING DEVICE
Harry A. Wilson, South Spencer, and Elmer C. Alix, Charlton City, Mass., assignors to The A & W Machine Company, Charlton City, Mass., a corporation of Massachusetts
Application March 29, 1954, Serial No. 419,518
7 Claims. (Cl. 28—19)



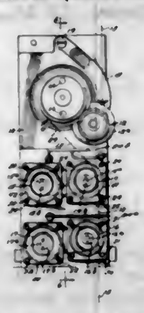
1. A device of the character described comprising a bracket, a bearing member supported in said bracket, means rotatably supported in said bearing member, a rectangular tubular member supported for rotation by said means in said bearing member, means having a plurality of teethlike members thereon fixedly supported on diametrically opposed sides of said rectangular tubular member throughout the major portion of the length thereof, means having a plurality of teethlike members thereon slidably supported on diametrically opposed sides of said rectangular tubular member and extending throughout the major portion of the length thereof, means for imparting a rotary movement to said ractangular tubular member and means for imparting a reciprocatory movement to said slidably supported means.

2,735,159
BOBBIN CLEANING DEVICE
Harry A. Wilson, South Spencer, and Elmer C. Alix, Charlton City, Mass., assignors to The A & W Machine Company, Charlton City, Mass., a corporation of Massachusetts
Application May 5, 1955, Serial No. 506,216
4 Claims. (Cl. 28—19)



1. A device for removing waste weft from bobbins comprising relatively long and narrow strips of material supported in spaced back-to-back relation with each other and having closely related teethlike members extending outwardly of the exposed sides thereof, a relatively long and narrow blade intermediate said long and narrow strips of material having opposed toothed edges extending outwardly of the opposed sides of said long and narrow strips of material, means for rotating said strips of material and said blade simultaneously as a unit and means for imparting a reciprocating movement to said blade during said rotation.

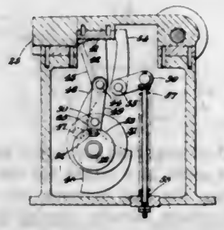
2,735,160
YARN STRETCHING DEVICE
Ralph H. Carter, Johnson City, Tenn., assignor to North American Rayon Corporation, New York, N. Y., a corporation of Delaware
Application December 8, 1954, Serial No. 473,781
15 Claims. (Cl. 28—71.4)



1. An apparatus for stretching thread comprising in combination a frame, a first thread feed roller, a shaft for supporting said feed roller near the top of said frame, a second thread feed roller, means for supporting said second feed roller so that the peripheral surface thereof is driven from the peripheral surface of said first feed roller, a first pair of stretch rollers, shafts attached to said stretch rollers, means for supporting said stretch rollers and the shafts thereof on the front of said frame so that the axis of one of said stretch rollers is disposed at a slight upwardly inclined angle with respect to the axis of the other of said stretch rollers, a second pair of stretch rollers positioned below said first pair, means including shafts for said second pair of stretch rollers for supporting said second pair of stretch rollers offset to the front of said first pair of stretch rollers, the axes of said second set of stretch rollers also being disposed at slight angles with respect to each other so that one of said second pair of stretch rollers is inclined upwardly, means for driving said first feed roller, means for driving both pairs of said stretch rollers, and means for feeding yarn to said second feed roller so that said yarn passes around the bottom of said second feed roller, between said feed rollers, and over the top of said first feed roller toward the bottom thereof and to the upwardly inclined stretch roller of said first pair of stretch rollers, said yarn being wound around said first pair of stretch rollers a plurality of times, said second pair of stretch rollers being offset to the front of said first pair far enough so that yarn progressing over the upwardly inclined roller of said first pair to the front thereof is advanced in position to be fed therefrom to the inner end of the upwardly inclined one of said second pair of stretch rollers, said driving means driving said pairs of stretch rollers at different predetermined speeds so that the yarn may be stretched a predetermined amount in passing over said stretch rollers, and means for receiving and collecting the stretched yarn from said second pair of stretch rollers.

2,735,161
OPERATING MECHANISM FOR RECIPROCATING TURRET SLIDES AND INDEXING THE TURRET THEREON IN MACHINE TOOLS
William Elias Reginald Pulman, Hove, England, assignor to C. V. A. Jigs, Moulds & Tools Limited, Hove, England, a British company
Application May 19, 1952, Serial No. 288,588
Claims priority, application Great Britain May 18, 1951
5 Claims. (Cl. 29—44)

1. Operating mechanism for reciprocating a turret slide in a machine tool, which mechanism comprises a continuously-rotating cam for moving the turret slide in its working movement, a lever arm, a pivotal mounting for said lever arm intermediate its ends, a cam follower at one end of the lever arm engaging said cam, connecting means at the other end of the lever arm providing a driving connection with the turret slide, means for moving said pivotal mounting and thereby the end of the lever arm connected with the turret slide in a direction such that the turret slide moves away from the work, and timing means operating said means for moving said pivotal mounting in timed relationship with the operation of said continuously-rotating cam.

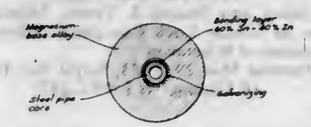


2,735,162
METHOD OF MAKING HEATING ELEMENTS
Alfred J. Huck, St. Louis, Mo., assignor to Knapp-Monarch Company, St. Louis, Mo., a corporation of Delaware
Application June 23, 1952, Serial No. 295,074
4 Claims. (Cl. 29—155.5)



1. A method of making electric heating elements of the kind specified comprising the steps of first providing a metallic tube positively formed with a predetermined axially-irregular inner surface, said tube containing an axially-disposed coiled resistance element and being filled with an elongated body of electrical-insulating, heat-conducting, ceramic-forming material in plastic form, plugging each end of the tube with an electrical-insulating plug which in an outer position prevents endwise movement of the body of plastic insulating material and through which the terminal ends of the resistance element extend, subjecting the plugs to pressure for moving them axially of the tube to inward positions therein, the body of plastic insulating material being thereby expanded in diameter by the plugs so as to substantially fill the tube between them and tightly fit the axially-irregular inner surface of the tube, fixing the plugs in their inward positions in the ends of the tube element, and heating the heating element to reduce said body of plastic material to a ceramic.

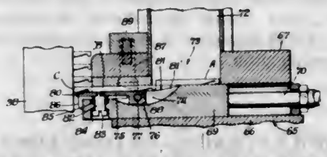
2,735,163
COMPOSITE MAGNESIUM-IRON ARTICLES
William B. Brooks and Claire M. Shigley, Lake Jackson, Tex., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware
Application April 27, 1951, Serial No. 223,314
4 Claims. (Cl. 29—196.2)



1. A composite metal article comprising a galvanized ferrous metal and a magnesium metal integrally bonded together by an intermediate thin layer of a tin-zinc alloy containing 40 to 75 per cent by weight of tin, balance substantially zinc.

4. The method of forming a composite metal article which comprises dipping a galvanized steel core in a molten tin-zinc alloy containing about 60 per cent by weight of tin, balance zinc to coat the same with the alloy, and then casting a magnesium metal about the coated core.

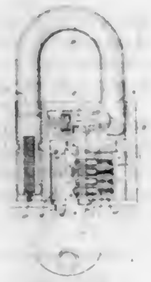
2,735,164
MACHINE FOR REMOVING SPACERS FROM RADIATOR CORES
Roy W. Boyd, Chicago, August Van Vooren, Evanston, and Harold Ruehl, Chicago, Ill., assignors to International Harvester Company, a corporation of New Jersey
Application September 29, 1951, Serial No. 248,925
4 Claims. (Cl. 29—202)



1. A machine for removing fin spacers from radiator core assemblies comprising, a supporting structure, a table on said supporting structure, said table having a vertically extending opening, elevating structure movable through said opening, actuating means connected to said elevating structure and adapted to raise said elevating structure through said opening, clamping means on said elevating structure for removably locking a radiator magazine having an assembled radiator core including fin spacers to said elevating structure, the fin spacer being positioned in the magazine in stacked relation between the fins, a spacer withdrawing means positioned adjacent to the opening, said withdrawing means comprising a horizontally reciprocable plunger, means connected to said plunger for reciprocating the same, an arcuate recess formed in said plunger, an upright stacking container positioned above said recess, said stacking container being open at its lower end for receiving fin spacers, a withdrawal plate hingedly connected within the recess to said plunger, said plate having a hook portion adjacent one end, said hook portion being engageable with a hook on each fin spacer whereby upon reciprocation of said plunger a fin spacer is withdrawn from the magazine, a stop on said table engageable with each fin spacer prior to its withdrawal, said stop being arranged to limit the descent of said elevating structure through said opening whereby the succeeding spacer to be withdrawn is positioned in position adjacent the withdrawal plate, resilient means engageable with the spacers for limiting movement of the spacer to the direction of withdrawal and means adjacent the arcuate recess on said plunger engaging each spacer

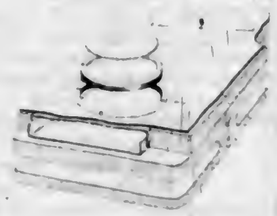
for successively moving said spacers upwardly into said stacking container after they have been withdrawn and during reciprocation of said plunger.

2,735,165
METHOD OF ASSEMBLING LOCK TUMBLER PINS OR THE LIKE
Harry E. Soref and Daniel J. Foote, Milwaukee, Wis., assignors to Master Lock Company, Milwaukee, Wis., a corporation of Wisconsin
Application May 29, 1953, Serial No. 358,406
10 Claims. (Cl. 29—407)



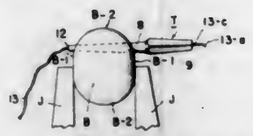
1. In a method of assembling a lock wherein the individuality of the lock is dependent upon the spaced mounting within the lock of different sized key actuated movable elements, the steps of providing different precolored, different sized elements with all of the elements of the same size bearing the same color, preparing a specification which designates by color the elements to be used in certain positions in the specific lock assemblage, and finally operatively mounting the prescribed colored elements in the lock assemblage pursuant to the specification.

2,735,166
HAND HOLE FORMING METHOD FOR CELLULAR FLOOR WIRE DISTRIBUTING SYSTEMS
Harry J. Hoseason, Toronto, Ontario, Canada
Application August 6, 1953, Serial No. 372,666
2 Claims. (Cl. 29—407)



1. A method of forming a hand hole in a floor duct concealed by a preformed floor covering which comprises identifying a circular knockout portion in said duct by applying a marker to the axis of said portion prior to laying of said floor covering puncturing said covering by the marker to provide a visible indication of the axis of said portion, said marker projecting upwardly from said knockout portion a distance not substantially greater than the thickness of the floor covering subsequently scribing a circle on said covering about said axis, and then removing the scribe-enclosed covering portion and the underlying knockout portion to form the hand hole and applying a separable hand hole cover structure to said hand hole.

2,735,167
METHOD OF AND APPARATUS FOR ATTACHING A MEMBER TO A RESILIENT BODY
William Olsen, Elizabeth City, N. C.
Application May 2, 1950, Serial No. 159,546
2 Claims. (Cl. 29—433)



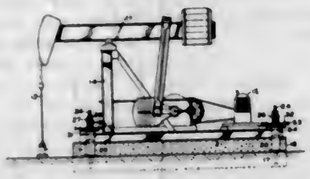
1. A method of engaging, in a golf ball, a portion of a flexible cord to serve as a tether for the ball, which consists in squeezing the ball between two members having parallel plane surfaces thereby altering the spherical shape of the ball by elongating it parallel with said surfaces, forming a rectilinear bore through the squeezed elongated ball normal to said surfaces, inserting the portion of the cord through said bore, and releasing the ball to restore it to spherical form thereby causing the ball to grip the inserted portion by reason of said bore assuming an arcuate form.

2,735,168
METHOD FOR PRESTRESSING
Fritz Leonhardt, Stuttgart, and Willy Baur, Stuttgart-Bad Cannstatt, Germany
Application March 31, 1952, Serial No. 279,702
1 Claim. (Cl. 29—452)



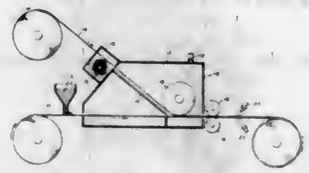
A method of compensating for the prestressing force lost by friction at a bend of a bent stressed unit acting to prestress a mass that comprises forming a mass with a bent stressable unit therein in a plurality of bends, stressing the unit throughout its length, anchoring the ends of the unit to retain the stress, and applying a supplementary stress at each of a plurality of bends with at least one recess at each bend by bending at least one section of the unit around parts of a stressing shoe, bolting said parts together and applying a stress to said shoe by means of a jack.

2,735,169
POSITIVE SUSPENSION, LEVELING, AND ALIGNING METHOD
Victor E. Baum, Great Bend, Kans.
Application December 11, 1951, Serial No. 261,013
4 Claims. (Cl. 29—458)



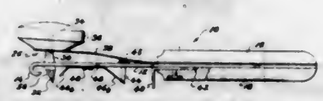
1. A method for setting machinery at a previously unprepared site, which comprises, suspending the machinery above the selected and unprepared site; pouring a concrete foundation up under the suspended machinery; maintaining said machinery suspended until said concrete has partially cured; aligning said machinery; and lowering said machinery into contact with said partially cured concrete so as to compress same to compensate for contraction thereof during the curing period.

2,735,170
METHOD OF PRODUCING A MULTILAYER STRIP
Chester C. Moffatt, San Gabriel, Calif., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich., a corporation of Michigan
Application September 14, 1948, Serial No. 49,216
1 Claim. (Cl. 29—488)



The process of producing a multi-layer strip which comprises: taking a strip of commercial copper-plated steel, of approximately 0.025 to 0.125 inch thick, depositing on the copper-coated side of the steel a thin layer of copper powder, heating the strip in a non-oxidizing atmosphere to a temperature sufficient to melt the copper powder; heating a strip of wrought aluminum material in a non-oxidizing atmosphere to a temperature below the melting point of the aluminum material; bringing the heated aluminum strip into contact with the heated copper layer; and thereafter holding the two strips in contact wtih each other for a time and at a temperature sufficient to metallurgically bond them together, while maintaining them in a non-oxidizing atmosphere.

2,735,171
CAN OPENING IMPLEMENT
Sidney D. Blue, Larchmont, N. Y.
Application April 28, 1955, Serial No. 504,620
12 Claims. (Cl. 30—6.1)



1. A can opening implement comprising an elongated member having a hook-shaped projection at one end for engagement under a rim at the top of a can thereby to form a fulcrum for rocking of said member between an initial position inclined relative to the plane of the can top and a position parallel to said plane and extending across the can top, a pointed plunger slidably extending through said member adjacent said one end of the latter, and means yieldably retaining said plunger relative to said member so that only a limited portion of the pointed plunger projects through said member for initially puncturing the cap top with an opening of less area than the largest cross-section of the plunger during the rocking of said member to said position parallel to the can top, whereby such opening is then enlarged by depressing said plunger relative to said member and the edges of the enlarged opening are flanged downwardly into the interior of the can.

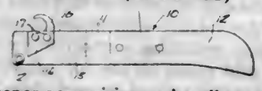
2,735,172
CAN OPENER
Ralph E. Kreger, Detroit, Mich., assignor to Detroit Stamping Company, Detroit, Mich., a corporation of Michigan
Application April 22, 1955, Serial No. 503,107
6 Claims. (Cl. 30—10)

1. A can opener characterized by relatively long and short pivotally connecting elements, each element being provided with an opening prong at one end and a flange at the other end whereby either of said elements may be employed as a reaction element anchored by its flange



to the lower end of a can while the other is employed as an opening element to pierce the top of the can.

2,735,173
CAN OPENER
Louis W. Deden, Chicago, Ill.
Application August 23, 1955, Serial No. 530,005
9 Claims. (Cl. 30—22)



1. A can opener comprising: a handle, a relatively narrow body member connected to said handle, said body member including an arcuate portion adapted generally to conform to the curved peripheral surface of a can, a cutter blade on said arcuate portion, a spacer member disposed between said cutter blade and said arcuate portion to space said cutter blade laterally with respect to said arcuate portion, said cutter blade having a cutting edge sloping upwardly generally in the direction of said handle, an end portion of said arcuate portion, said end portion being disposed at an angle with respect to the normal vertical plane of said body; said end portion having an opening, a can bead-gripping member supported on said end portion, said gripping member including a wheel of frusto-conical shape having a relatively sharp peripheral edge, a shaft on said wheel, said shaft having a substantially lesser outer diameter dimension than the inner diameter dimension of said opening, whereby said shaft is loosely journalled in said opening and said wheel is self-adjusting into gripping relation with the bead of a can and is rolled with respect thereto during opening of said can.

2,735,174
SAFETY RAZOR CONSTRUCTION
John Lee Gyllenberg, Baker, Oreg., assignor to Anthony Brandenthaler, Baker, Oreg.
Application December 11, 1951, Serial No. 260,997
7 Claims. (Cl. 30—49)



6. In a safety razor including a cap, a guard, a handle and a handle attachment means formed on said cap and extending through said guard adapted to receive said handle in a first angular position and to engage said handle in a second angular razor operative position; means for locking said handle in said operative position including a retractable detent extending from said handle and a notch in said attachment means adapted cooperatively to receive said detent, and means for retracting said detent including an actuating plunger biased normally out-

wardly of said handle and motion direction reversing means within said handle operatively connected to said detent and said plunger operative upon depression of said plunger to retract said detent from engagement with said notch.

2,735,175
ALUMINUM CABLE CUTTER
John R. Tallman, Chicago, Ill.
Application December 15, 1954, Serial No. 475,439
4 Claims. (Cl. 30—91)



1. In a tool for cutting steel cored stranded aluminum conductor cables, a tubular structure adapted to fit tightly about a cable end to be cut, said structure having at one end a cylindrical extension coaxial therewith, a cutter head rotatably mounted on said one end of said structure, a cutter plate slidably mounted on said head for movement therewith and for relative adjustment radially of said extension, the latter providing a stop limiting inward radial movement of said plate, means for adjusting said plate, and a cutter member carried by said plate projecting radially inward beyond the inner end thereof and movable thereby across and radially inward beyond the outer end of said extension into cutting engagement with the cable end to be cut.

2,735,176
VETERINARY SURGICAL KNIFE
William J. Costin, Warsaw, N. C.
Application May 22, 1953, Serial No. 356,672
2 Claims. (Cl. 30—162)



1. In a knife, a hollow handle having side walls, a blade disposed in said handle, said blade having opposite sides slidably engaging said side walls, said side walls having inner and outer sides, one of said side walls having a longitudinal groove in its inner side and holes at the opposite ends of the groove opening through said one side wall, the other side wall having a longitudinal slot therethrough, a pin extending through the blade, said pin having a first end projecting outwardly through said slot and a second end engaged in said groove and engageable through said holes so as to hold said blade in an extended or retracted position within the hand, and means on said first end of the pin for engaging and disengaging the pin from said holes and moving the blade end-wise in the handle, said second end of the pin and said holes being smaller in diameter than said groove, a lateral flange on said pin inwardly of said second end of the pin, said flange being larger in diameter than said second end of the pin and being slidably engaged in said groove, said second end of the pin being arranged to slide against a portion of said groove in transit between said holes.

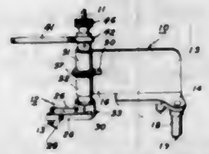
2,735,177
ENGRAVING INSTRUMENT USED IN MAP MAKING
Harold K. Adams, Brentwood, Md.
Application October 14, 1953, Serial No. 386,082
8 Claims. (Cl. 30—164.9)

4. A tool adjusting means for an engraving instrument of the type for scratching a coating on a flat sheet and having a horizontally elongated body to be grasped by the fingers and moved over a flat sheet, the body carrying an upright scratching tool at its front and means at its rear to support the body for sliding and tilting movement on a flat sheet, said tool adjusting means comprising in combination an upright shaft, means rotatably mounting the shaft at the front of the body of the instrument, a tool carrying arm of rigid material disposed horizontally



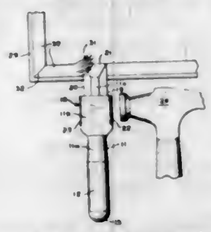
in a plane below the lower end of said shaft and extending laterally from the axis of said shaft, upright scraping tool means at the outer end of said arm and having a scratching edge portion which extends in a direction transversely of the longitudinal plane of said arm, and a universal joint connection between the inner end of said arm and said shaft, whereby said transverse scratching edge portion may be tilted both longitudinally and transversely.

2,735,178
ENGRAVING INSTRUMENT USED IN MAP MAKING
Harold K. Adams, Riverdale, Md.
Application July 22, 1955, Serial No. 523,762
3 Claims. (Cl. 30—164.9)



1. An engraving instrument for use in map making having an elongated body to be grasped by the fingers and moved over a coated sheet, means at the rear of the body to support it for sliding movement, an upright shaft rotatably mounted at the front of the body, a horizontal swingable arm projecting laterally from the lower end of said shaft, a tool having a scratching end carried by the free end of said arm, and frictional clamping means interposed between said shaft and said body to hold said shaft against rotation and prevent swinging movement of the arm relative to the body.

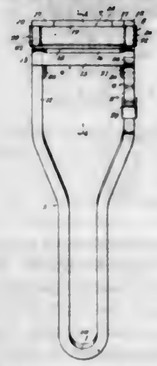
2,735,179
CHISEL FOR REMOVING PUTTY
Edward W. Stanton, Brooklyn, N. Y.
Application April 26, 1954, Serial No. 425,531
1 Claim. (Cl. 30—168)



A tool for removing putty from stained glass windows comprising a chisel shaped member having a short blade provided with an outer cutting edge and two adjacent side cutting edges extending to the outer cutting edge,

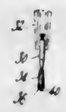
an enlarged portion on said tool having extensions on opposite sides provided with flat faces to form anvils to receive hammer blows when the side cutting edges are used in the removal of putty, and a short handle attached to said enlarged portion.

2,735,180
SKIVING TOOL
Max Pill, Pomona, Calif.
Application March 17, 1953, Serial No. 342,910
7 Claims. (Cl. 30—283)



5. A skiving tool comprising a handle having two spaced parallel ends, said ends being bent at an angle to the plane of said handle, a plate affixed to and spanning said ends, said plate having at least one stop block against which a blade is adapted to be positioned, a pair of laterally movable clips fitting over each of said ends and engaging said blade, and a resilient member biased to hold each of said clips against said blade and said plate.

2,735,181
DENTAL GRINDING TOOL
Victor H. Carpenter, Boston, Mass.
Application February 3, 1953, Serial No. 334,849
3 Claims. (Cl. 32—59)



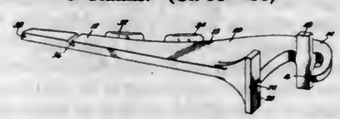
1. A dental grinding tool comprising a stem, an approximately cylindrical abrasive element on an end portion of said stem, said element having an end face in the form of a shallow conical concavity, and a guide pin coaxial with said stem projecting from said end of the abrasive element.

2,735,182
PROTRACTOR
Otto F. Kalberer, Warwick, R. I., assignor to Industrial Tool & Machine Co., a corporation of Rhode Island
Application February 5, 1953, Serial No. 335,250
2 Claims. (Cl. 33—75)



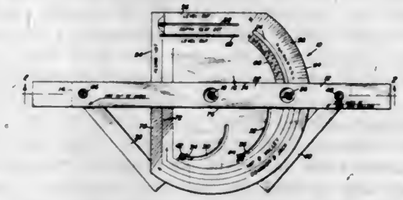
1. In combination with a machine tool table having a longitudinal slot therein, a protractor for obtaining angles on said table with reference to said slot comprising a semi-circular frame providing a straight bar and a curved side, a first recess on the straight bar of said frame at the mid point thereof, a plurality of similar second recesses on the curved side of said frame spaced from each other, one of said second recesses providing a datum point, a first key pivotally received in said first recess, a second key pivotally received in a selected one of the second recesses, said frame having a straight edge thereon extending parallel to a plane passing centrally through said first recess and the said datum second recess, said keys being adapted to be received in engagement with the sides of said slot to mount said frame on said table to position said straight edge to make an included angle with the side of said slot corresponding to the angular spacing between said keys with reference to the said datum point.

2,735,183
ALIGNING GUIDE FOR MASONS
Robert B. Taylor, Downers Grove, Ill., assignor to Structural Clay Products Research Foundation, Chicago, Ill., a trade association
Application April 15, 1953, Serial No. 348,864
3 Claims. (Cl. 33—86)



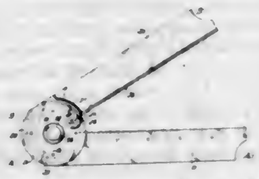
1. For use with an L-shaped mason's story pole, the legs of which orient themselves respectively perpendicular and parallel to a brick wall at a corner thereof, a guideline holder characterized by an elongate body; a hook portion at one end of the body of the guideline holder having end, throat, and base portions; an inwardly facing lug at the end of the hook, a bar in the throat of the hook presenting a planar face parallel with the axis of the body, a second bar at the base of the hook presenting a planar face perpendicular with the axis of the body, means defining a guideline support adjacent the plane of the hook base bar, second means defining a body guideline support in spaced parallel relation with the first guideline support means, and body guideline securing means for securing a guideline to the holder after the guideline is oriented in the guideline support means thereby translating the tautness in the line into reactive forces between the hook faces and the story pole temporarily securing the guideline holder to the story pole at preselected stations.

2,735,184
ROOF FRAMER
Royal E. Chamberlain, Paradise, Calif.
Application November 29, 1954, Serial No. 471,588
6 Claims. (Cl. 33—91)



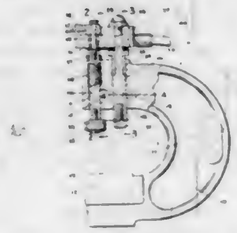
1. A roof framing tool comprising an elongated bar having an elongated centrally disposed opening therethrough, a plate rotatably mounted within said opening, a pair of substantially L-shaped elements pivotally mounted in said opening of said bar, cam slots in said plate, and fastening means pivotally slidably attaching said L-shaped elements to said plate, said fastening means being engaged in said cam slots.

2,735,185
PROTRACTOR
Max Naphtal, Los Angeles, Calif., assignor of one-half to Irving Naphtal, Los Angeles, Calif.
Application March 23, 1953, Serial No. 343,899
3 Claims. (Cl. 33—120)



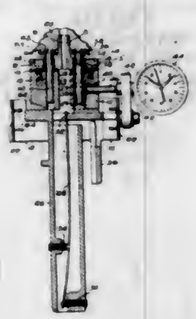
1. In a drafting instrument of the type described, the combination of; a first flat arm comprising a parallel edged straight edge portion and an integral circular hinge portion having a shallow concentric recess therein of nearly the same diameter as the hinge portion, a separate printed graduated scale in said recess, a second arm comprising a parallel edges straight edge portion and an integral circular hinge portion offset so that the bottom surfaces of the straight edge portions are co-planar when the hinge portions are overlapped, said second arm being formed of a transparent, tough, moldable material and having a short focus magnifying lens cast integral on the hinge portion and disposed to magnify the portion of the scale lying below it, and means integral with the hinge portions interengaging to pivot the arms for relative angular movement the extent of which is indicated on the scale beneath the said lens.

2,735,186
GAUGING DEVICE
Henry L. Boppel, Dayton, Ohio, assignor to The Sheffield Corporation, Dayton, Ohio, a corporation of Ohio
Application December 8, 1951, Serial No. 260,640
4 Claims. (Cl. 33—147)



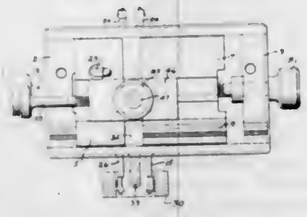
4. An air gauging unit adapted for mounting in a pair of parallel holes of a C-shaped frame of a go, no-go snap gauge, comprising a supporting member adapted to be adjustably fixed in one of the holes, an orifice block fixed to one end of said member having a hole therethrough for situation in coaxial relationship with the other of said holes in said frame and having a fluid supply passage adapted for connection to a fluid flow gauging device and also having an orifice opening through its upper surface laterally of the hole therethrough and through which fluid supplied thereto under pressure is discharged, a work engaging bar, spaced parallel spring blades fixed at opposite ends thereof to the supporting member and the bar and carrying the bar for movement in the coaxial holes of the frame and orifice block, and a flow controlling member carried by said bar adjacent the upper surface of said orifice block and in cooperative association wtih said orifice, said orifice block and flow controlling member having spaced opposed surfaces across their forward edges adapted for the interposition therebetween of maximum and minimum spacer elements of known size difference to obtain predetermined orifice openings in setup operations.

2,735,187
TAPER GAGE
Paul A. Grobey, Springfield, Vt., assignor to Bryant Chucking Grinder Company, Springfield, Vt., a corporation of Vermont
Application September 11, 1953, Serial No. 379,497
7 Claims. (Cl. 33—174)



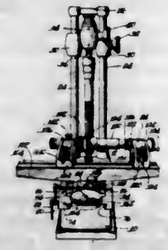
1. A taper gage, comprising a pair of relatively movable supports, tapered gage elements on said supports for movement in a plane toward and away from one another for engagement with the sides of a tapered workpiece, a plunger mounted on one of said supports for movement in a direction perpendicular to said plane to engage with the end face of said workpiece, a dial indicator mounted on the other of said supports, and compensating camming means interposed between said plunger and said dial indicator, said means having a cam surface corresponding to the taper of said gage elements effective to cancel said gage element taper as said plunger is moved by said workpiece, said dial indicator being simultaneously responsive to the relative positions of said gage elements and the position of said plunger.

2,735,188
HOLE GAGE
Joseph Sunnen, Clayton, Mo.
Application May 26, 1952, Serial No. 289,990
10 Claims. (Cl. 33—178)



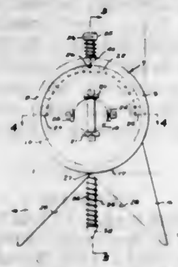
10. In an internal diameter gage, a group of three gaging fingers comprising a pair of horizontally spaced gaging fingers coextending in parallel relationship and a work support finger coextending in parallel relationship with said gaging fingers and being arranged above and between them, one of said gaging fingers being relatively stationary and the other of said gaging fingers and said support finger being adjustable, said support finger having a vertical web portion extending downwardly between said gaging fingers, and said gaging fingers having flat, vertical, adjacent sides which are substantially contiguous with the sides of said web portion when said fingers are in a contracted position, a work contact element projecting from the upper surface of said support finger, and each of said gaging fingers having an elongated work contacting element fitted in a bore which enters at the end of the finger and extends at an angle to its axis and breaks through the side thereof.

2,735,189
APPARATUS FOR TESTING SPLINES
Swan O. Bjornberg, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a corporation of Illinois
Application July 27, 1951, Serial No. 238,831
3 Claims. (Cl. 33—179.5)



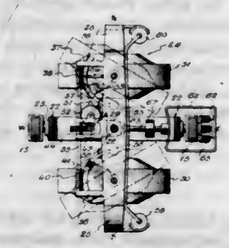
3. Apparatus for testing toothed splines comprising a base, a vertically disposed center at the bottom of said base, a pair of spaced apart columns upstanding on said base and parallel to one another, a rack on each of said columns, a fixture mounted on both of said columns and vertically adjustable thereon, a center carried by said fixture in alignment with the first mentioned center and opposed thereto, rotary means carried by said fixture and extending transversely across both of said columns, said rotary means including pinion means meshing with both of said racks for vertically adjusting said fixture free from tilting, means for rotating said rotary means for effecting such vertical adjustment, a spline to be tested being carried by the said centers, testing means adapted to be in driving engagement simultaneously with a plurality of the teeth of said spline, means for mounting said testing means on said base for movement toward and away from said spline, indicating means responsive to movements of said testing means toward and away from said spline, and means for operating said testing means successively to test the teeth of said spline.

2,735,190
PIPE MARKING DEVICE
Woodrow W. Jordan, Louisa, and Phillip W. Spencer, Greenup, Ky.; said Jordan assignor to Lewis McCubbin, Greenup, Ky.
Application July 31, 1953, Serial No. 371,474
2 Claims. (Cl. 33—189)



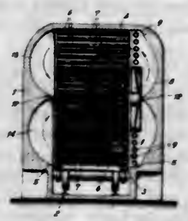
1. In a pipe marking device, a body comprising an annulus having a periphery and front and back sides and a radially inward surface, a pair of legs projecting radially from the periphery of the annulus and having convergent pipe engaging surfaces meeting in an intersection at the periphery of the annulus, the said radially inward surface of the annulus at the back side of the annulus being provided with an annular groove, a protractor disc having a peripheral edge rotatably seated in said groove, means holding the protractor disc in place, a lower bracket projecting rearwardly from the back side of the annulus in alignment with said intersection, an upper bracket projecting rearwardly from the back side of the annulus and with said lower bracket aligned with a diameter of the annulus, a punch shaft slidably engaged through said brackets, a striking head on the upper end of the shaft and a marking point on the lower end of the shaft and positioned between said legs below said intersection, a protractor scale on the front side of the protractor disc remote from the punch shaft, said scale having a central zero point, a fixed reference point on the front side of the annulus in line with said diameter, and bubble level means fixed on the front of the protractor disc in line with said zero point, said annulus projecting forwardly from and protectively with respect to said protractor disc, said scale and said bubble level means.

2,735,191
GYROSCOPIC COMPASS INSTRUMENT
Leslie F. Carter, Leonia, N. J., assignor to Sperry Rand Corporation, a corporation of Delaware
Application December 10, 1952, Serial No. 325,153
8 Claims. (Cl. 33—226)



8. In a constant period gyroscopic compass instrument, a sensitive element supported with freedom about an azimuth axis having a pair of rotor frames thereon adjustable about spaced vertical axes to change its gyroscopic angular momentum, a settable member on said element for effecting the adjustment of said rotor frames, and a latitude indicator having pointer and scale parts, one of which is fixed to one of the rotor frames and the other of which is fixed to the sensitive element.

2,735,192
DRYING KILN
Hermann Geul, Stuttgart-Hedelfingen, Germany
Application March 23, 1953, Serial No. 344,110
Claims priority, application Germany October 3, 1952
3 Claims. (Cl. 34—223)



1. A kiln for drying materials arranged in a pile of horizontal layers vertically spaced apart comprising a chamber having all its inner walls closely encompassing the pile, a suction fan having a diameter equal to one-half of the major dimension of the pile mounted on one side wall of said chamber with its blades vertically extending over the middle two quarters of the height of the pile and rotatable in a plane in close clearance with the pile, a first curved surface in said wall extending from the axis of said fan to an end of said chamber for directing drying gas moved by said fan to the part of the chamber not covered by said fan whereby the drying gas will flow under pressure through said pile to the opposite side wall, a second curved surface oppositely facing said first surface for directing the drying gas without substantial loss

of velocity to the portion of said pile lying opposite said fan and then through said pile to said fan for recirculation, and similar curved surfaces extending from the axis of said fan to the other end of said chamber.

2,735,193
READING TRAINING DEVICE
Lee A. Moulton, Redondo Beach, Calif.
Application September 16, 1950, Serial No. 185,237
10 Claims. (Cl. 35—35)



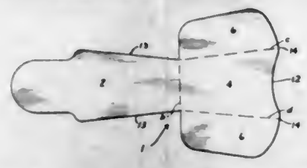
1. A reading training device comprising a plate, a shutter extending along one edge of said plate, and forming an extension of the plate, means pivotally mounting said shutter on the plate for tilting movement relative to the plate to frame an elongated aperture with the edge of the plate, trigger means operably engaging the shutter to tilt said shutter on said pivotal mounting away from the plate, and spring means engaging the shutter to return said shutter to engagement with said one edge of the plate.

2,735,194
RING DESIGN DISPLAY DEVICE
Paul A. Kaiser, Indianapolis, Ind., assignor to Herff Jones Co., Indianapolis, Ind., a corporation of Indiana
Application July 14, 1954, Serial No. 443,399
1 Claim. (Cl. 35—49)



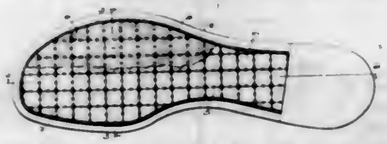
In a device for displaying a flat design of a ring in an arcuate and depth indicating form, a fixed box-like structure having a floor and a rectangular tubular section thereabout defining a central well having a floor and side and end walls spaced inwardly from outside side and end walls of the structure; a box set in said well with a floor and side and end walls approximately coextensive with the floor and contacting corresponding walls of the well; a mat set in said set-in-box coextensive with said set-in-box floor, said mat having a flat marginal area therearound of the appearance of an outwardly flaring area defining a flat central area therewithin; an arcuate design carrying member having a marginal edge conforming to a selective design, open at opposite ends between marginal edges; means fixing said edges to said mat within said mat central area, said means being concealed within said arcuate member; said arcuate member bowing from said mat a distance approaching the depth of said set-in-box; a transparent sheet extending across said set-in-box from its side and end walls; a cover extending around and over said tubular section terminating by an inner margin extending inwardly over and somewhat beyond said set-in-box side and end walls defining a window less in area than the floor of said box, across which window said transparent sheet extends; and a second cover extending around and over said first cover terminating by an inner marginal edge around and spaced back from the margin of said first cover, leaving exposed a narrow band of said first cover around said window.

2,735,195
DISPOSABLE SLIPPER
Mark S. Eaton, West Acton, Mass., assignor to Propack, Inc., Hingham, Mass., a corporation of Massachusetts
Application April 13, 1953, Serial No. 348,363
1 Claim. (Cl. 36—9)



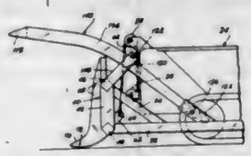
A blank for forming a disposable slipper comprising an integral element of disposable material defined by a raw surrounding edge, said integral element comprising a longitudinally extending sole portion having integral therewith at the toe end thereof an upper portion adapted to be folded back on said sole portion along said toe end thereof, said upper portion having integral therewith and extending laterally therefrom on opposed sides thereof a pair of flap portions adapted to be folded down from said upper portion along a pair of fold lines between said flap portions and said upper portion and to be secured beneath said sole portion, said upper portion and said flap portions being defined opposite said toe end by adjoining portions of said raw surrounding edge, said adjoining portions merging into one another in smooth convex curves extending across said fold lines.

2,735,196
SHOE INNERSOLE WITH FILLER RETAINING MEANS
Harry Done, Washington, D. C.
Application January 27, 1954, Serial No. 406,620
1 Claim. (Cl. 36—22)
(Granted under Title 35, U. S. Code (1952), sec. 266)



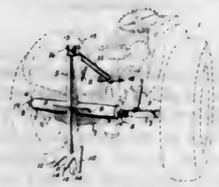
An innersole for shoes comprising a body portion, an upstanding flange extending around a part of the body portion, a woven fabric liner composed mainly of thin warp and weft threads secured to the body portion and the inner face of the flange, and a plurality of large spaced cords extending transversely and longitudinally incorporated in the surface of said liner, whereby to form rectangular retaining projections to engage the filler of the shoe.

2,735,197
TIMBER RAKE ATTACHMENT
John F. Struemph, Vienna, Mo.
Application May 1, 1950, Serial No. 159,240
4 Claims. (Cl. 37—2)



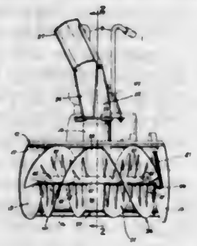
1. A timber rake attachment for tractors and the like, comprising a yoke-like member; side bars fastened adjacent the ends of said member for pivotally fastening it to a tractor whereby it extends transversely in front thereof; a series of spaced teeth extending downwardly and forwardly from the lower edge of said yoke-like member; a boom-like member including a transverse element and leg elements removably fastened to the yoke-like member and the side bars; bifurcated brackets extending upwardly from adjacent the ends of the yoke-like member to receive the leg elements; and socket-like portions on the side bars to receive the ends of the leg elements, the transverse element extending above the yoke-like member and a predetermined distance in front of the teeth so that a tree being driven down by the boom-like member will fall to a predetermined angle before the root end thereof is engaged by the teeth.

2,735,198
TRACTOR ACTUATED GRUBBING IMPLEMENT FOR SMALL TREES AND THE LIKE
Alvin A. Zogg and William E. Stephens, Houston, Tex.
Application March 12, 1951, Serial No. 215,068
3 Claims. (Cl. 37—2)



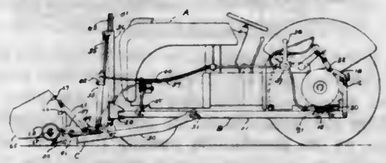
2. In a grubbing implement, an upright member having a downwardly and rearwardly extended pronged digging means at one end and a pivotally mounted connecting bar at the other end, said bar being downwardly extended and pivotally anchored to a tractor, and arms extending laterally from said upright member having means at the free ends thereof pivotally connected with the lifting bars of a tractor to selectively move said digging means into grubbing position and to elevate said digging means to complete the grubbing operation, the connecting bar being shorter than the lifting bars, to impart a rearward thrust.

2,735,199
ROTARY SNOW PLOW
William F. Wanner, Archie O. Williamson, and Dudley O. Hall, Minneapolis, Minn., assignors to Wm. Bros Boiler & Manufacturing Co., Minneapolis, Minn., a corporation of Minnesota
Application September 18, 1952, Serial No. 310,156
2 Claims. (Cl. 37—43)



1. In combination with a snow plow including, an elongated transverse housing having a central discharge opening, a rotor mounted in said housing and comprising an elongated centrally disposed member having right and left-hand spiral vanes mounted thereon for conveying snow inwardly to said discharge opening, said right and left-hand spiral vanes having their inner edges slitted to provide a plurality of radial air-circulating passages in said vanes which gradually diminish in size in an outward direction, the relatively larger inner portions of said air-circulating passages permitting snow and air to circulate therethrough and thus prevent the accumulation of snow and other matter at the center of the rotor, when the plow is in operation.

2,735,200
DUAL-ACTION BULL DOZER TRACTOR ATTACHMENT
Bruno F. Arps, New Holstein, Wis., assignor to Arps Corporation, New Holstein, Wis.
Application September 15, 1951, Serial No. 246,767
2 Claims. (Cl. 37—144)



1. A bull dozer attachment for a standard tractor, comprising a main frame longitudinally hingedly connected to opposite ends of the tractor; manually operated means connected to the main frame for tilting it including a transverse shaft having means for manually turning it, bearings on opposite ends of said shaft having connections with the tractor frame for free vertical movement of the shaft, bars secured to end portions of the main frame and converging upwardly and being hingedly connected at their upper ends to the shaft; a supplemental frame transversely hingedly connected to the main frame; a scraper blade mounted on the forward end portion of said supplemental frame; and a hydraulic ram forming an operating connection between the main frame and the supplemental frame.

2,735,201
LAUNDRY PRESSES
Ronald Percy Gudgeon, Luton, England, assignor to Brown & Green Limited, Luton, England, a British company
Application September 23, 1950, Serial No. 186,435
1 Claim. (Cl. 38—21)



In a garment press, a press table comprising a buck supporting arm pivotally secured intermediate the length thereof to the table for pivotal movement about a substantially horizontal axis, a plurality of bucks supported on said arm, each of said bucks being mounted for pivotal movement about a horizontal axis extending parallel to the pivotal axis of the arm, and pressing surfaces on said bucks adapted to receive respectively portions of a garment, the said pivotal mounting of the bucks ensuring intimate contact of each buck with the press head of the press and permitting irregularities in the thickness of the different portions of a garment placed upon the bucks.

2,735,202
AUTOMOBILE TOLL COLLECTOR WITH BARRIER
Bertell W. King, Brooklyn, N. Y.
Application November 27, 1953, Serial No. 394,594
22 Claims. (Cl. 39—6)

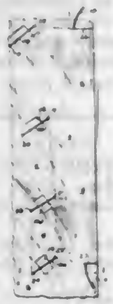
1. An automobile toll collector barrier comprising a platform mechanism having front and rear ends and a top surface, the platform mechanism having a length at least that of the distance between the front wheels and rear wheels of a vehicle, means pivotally mounting the

platform mechanism between the ends thereof, the rear end of the platform mechanism being normally urged to level position, the rear end of the platform mechanism being raised to form a barrier by the weight of an automobile passing over the front end, the platform mechanism being adapted to be mounted with the rear end of its top surface at road level when down, a first latch means engaging the platform mechanism for holding the rear end thereof elevated, an auxiliary barrier



means pivotally mounted at the rear end of the platform mechanism and movable from a top surface level to an elevated pivotal position thereabove, operating means carried by the front end of the platform mechanism and operated by an automobile passing thereover and connected with the auxiliary barrier means to raise the same, a second latch means latching the auxiliary barrier means in elevated position, and means to release the two latch means.

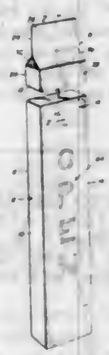
2,735,203
ADVERTISING DISPLAY DEVICES AND METHOD FOR FORMING AND ASSEMBLING THE SAME
Sol J. Berger and Oscar W. Jacobson, Chicago, Ill., assignors to Berger-Amour, Chicago, Ill., a partnership
Application July 26, 1951, Serial No. 238,753
2 Claims. (Cl. 40—128)



2. The method of producing a display device which consists in the steps of providing a panel of relatively stiff sheet material bearing a series of elements on one surface thereof arranged in relatively closely adjacent relation, punching out a void between adjacent elements, arranging a single string so that portions thereof cross over said voids all on one side of said panel, securing said string to said elements at points adjacent opposite sides of said voids, severing string portions between points of securement so that said elements when severed from the panel are connected in series by portions of said string crossing over each of said voids.

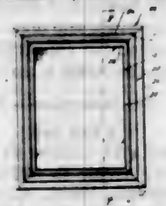
2,735,204
ADVERTISING SIGN
Irvin R. Grant, Ola, Ark., assignor of fifty per cent to Leon Countz, Ola, Ark.
Application June 19, 1952, Serial No. 294,381
1 Claim. (Cl. 40—128)

In an advertising sign construction, an elongate flat-faced panel adapted to rest with one of its flat faces bearing removably against a stationary support such as a store window pane or the like, the respective front and back faces of said panel being adapted to carry and display selectively usable advertising media, a relatively small rectangular block, of a thickness corresponding to said panel and of a length corresponding to the width of said panel and coplanar with and spaced from one end of said panel, a nail passing through a central passage provided therefor in said block and driven into the adjacent end of said panel and swivelly suspending said panel from said block, a gummed attaching flap adapted to be adhesively fastened to said pane,



and a flexible hinge forming connection joining said flap with said block to permit the block and panel to be conjointly suspended from the flap and to permit the user to lift one flat side of the panel away from the supporting pane and to swing it out to a clearing position and to turn it relative to the block by way of the swivel in the manner and for the purposes described.

2,735,205
INVERTIBLE AND ADJUSTABLE PICTURE FRAMES
David M. Knox, New York, N. Y.
Application August 6, 1953, Serial No. 372,753
5 Claims. (Cl. 40—155)



5. A holder for pictures or the like comprising: an outer frame having opposing face surfaces each including ornamentation adapted alternatively for optical cooperation with a picture or the like, said outer frame having an inner edge constructed to form an aperture and said outer frame being arranged whereby an inner frame may be inserted and withdrawn in and from said aperture alternatively on opposite sides of the outer frame; an inner frame having means for carrying a picture or the like and having an outer edge arranged to permit said insertion and withdrawal on said opposite sides whereby a picture optically cooperates with one or the other of said face surfaces; and resilient means operating between the inner edge of said outer frame and the outer edge of said inner frame and adapted to permit said insertion and withdrawal and further being adapted to hold the frames together when the inner frame is inserted in the aperture.

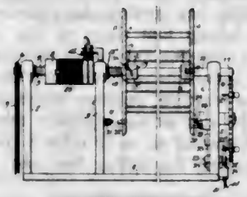
2,735,206
BOX-MAGAZINE FOR FIREARMS
Wallace B. Butler, Hamden, and Melvin M. Johnson, Jr., New Haven, Conn., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application December 6, 1950, Serial No. 199,430
13 Claims. (Cl. 42—18)

1. A box-magazine for firearms comprising: a magazine-body having side walls, end walls and a body-supporting bottom plate, said side walls having laterally opposed resilient cartridge hold-down lips along a portion of the upper edges thereof and a follower and follower-spring assembled in said body arranged to urge cartridges therein up into engagement with the said hold-down lips of said



side walls, one of said resilient hold-down lips terminating rearwardly of the other so as to effect complete release of one side of a cartridge-head prior to the release of the opposite side thereof whereby the cartridge-head is deflected laterally of the longitudinal axis of said magazine as the cartridge is moved forwardly therein.

2,735,207
AUTOMATIC FISHING APPARATUS
Thorbjörn N. Christiansen, Nyksund, Vesteralen, Norway
Application December 15, 1953, Serial No. 398,404
9 Claims. (Cl. 43—15)



1. In an automatic fishing apparatus the combination of a base structure, a drum shaft rotatably supported in said base, a line drum on said shaft, a fishing line wound about said drum, a continuously rotating driving shaft, a drive gear including a clutch interconnecting said shafts, spring means tending to disengage said clutch, operating means for engaging said clutch against the action of said spring means, and control means operated by said drum shaft when rotated during rewinding of the line thereon by its own weight and adjustable to act upon said operating means, to engage said clutch when said drum shaft has effected a predetermined number of revolutions, so as to rotate said drum shaft in reversed direction.

2,735,208
FISHING RODS
John E. Bartletti, Antigo, Wis.
Application April 19, 1951, Serial No. 221,929
3 Claims. (Cl. 43—24)



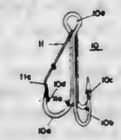
1. The combination with a tubular fishing rod having a bore, of a fishing line, an elongated cap for the tip end of the rod, the said tip end of the rod being externally threaded, the said cap being provided with an elongated passageway and a cylindrical recess continuous with the passageway and being of a larger diameter than the said pasageway, the wall of the said recess being internally threaded to engage the external threads on the rod, and the said wall of the recess and those of the passageway being connected by a shoulder which is in a plane perpendicular to the passageway, the axes of the passageway, recess and the bore of the rod being in alignment and a fishing line threaded through the said aligned passageway, recess and bore, and a compressible pad so disposed in the passageway and recess as to surround the line, the compression of the pad against the line being varied by rotating the threaded cap on the rod whereby when the cap is advanced axially on the rod tip threads the pad will be compressed between the tip end of the rod and said shoulder to radially squeeze the pad against the line, the said pad being saturated with an anti-freeze solution so that the line, when reeled, may be both wiped and protected from freezing.

2,735,209
PLASTIC FISH BAIT
Thomas G. Faulkner, Tampa, Fla.
Application May 10, 1954, Serial No. 428,583
1 Claim. (Cl. 43—42.35)



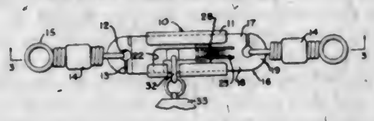
In a device of the kind described, a reinforcing element shaped to represent the vertical side elevation of a fish, said reinforcing element comprising a pair of forms each defining the peripheral outline of a fish and having a hollow interior and each having an inwardly projecting front and rear portion, said respective front portions being joined together and said rear portions being joined together to form inwardly projecting bosses, said pair of forms having grooves in the proximal sides thereof, a cementitious material in said grooves for securing said forms together in aligned relation, side plates being peripherally secured to the outer side of said forms and spaced from one another by said reinforcing elements to form a hollow lure, said bosses forming means for the attachment of hooks, and a tow line.

2,735,210
WEED GUARD
Charles A. Hinkal, Williamsport, Pa.
Application August 19, 1953, Serial No. 375,123
2 Claims. (Cl. 43—43.6)



1. In combination with a fish hook of the multiple type having an eye on a shank and a plurality of barbed hooks, the hooks forming crotches at the lower end of the shank, a weed guard for each barbed hook, each guard comprising a wire formed into a loop at one end said loop being threaded over the barbed end of one of said hooks and pulled into engagement with said crotch, a portion of the remainder of said wire extending through the eye of the hook and having an end portion movable into a position behind and in locking engagement with the barb of the hook over which the loop of the wire has been threaded, each of said weed guards being made of spring wire for the development of a spring force for holding the extended end portion in position behind the barb, said extended portion being shaped to overlie the point of each hook.

2,735,211
SINKER RELEASE STRUCTURE
Jon E. Grobl and Roy J. Renholts, Oakland, Calif.
Application May 25, 1953, Serial No. 357,136
4 Claims. (Cl. 43—43.12)



4. In a sinker release structure, a pair of telescopically engaged parts relatively movable between expanded and contracted positions, line securing means at the outer end of each part, one of said parts including a pair of opposed elongated guideways disposed along opposite edges thereof, one of said guide-ways having a pair of spaced notches therein to receive selectively an eye of a sinker, the other of said parts comprising an elongated member slidably engaged with said guide-ways and having a sinker retaining portion disposed adjacent to the notched guideway, said parts including means for releasably retaining said part in an expanded sinker releasing position or in either of two contracted sinker retaining positions, said retaining means including means for requiring different amounts of pull for sinker release at said respective sinker retaining positions, said sinker retaining portion extending across both of said notches in one contracted position of the parts and across only one of said notches in the other contracted position of the parts, movement of the parts to the expanded position thereof serving to move said sinker retaining portion from alignment with said notches.

2,735,212
TROLLING RELEASE
John W. Baum, Eugene, Oreg.
Original application October 30, 1950, Serial No. 193,003, now Patent No. 2,667,008, dated January 26, 1954. Divided and this application June 15, 1953, Serial No. 361,586
4 Claims. (Cl. 43—43.12)



1. A trolling release of the character described comprising a first wire member having a straight body section bent and coiled on itself at one end to form an eyelet and a lateral spring arm; a second wire member having an elongated body portion terminating at one end in an eyelet and offset at the other end to form a keeper for the lateral spring arm, the said keeper having its free end coiled about the body portion to form a journal bearing, a coiled wire keeper slidably engaging the body section, said bearing and said coiled wire keeper receiving the body portion of the first said wire member in sliding engagement, and the spring arm keeper receiving the lateral spring arm in spring bearing engagement, the two wire members being mutually displaceable, against the spring bias of said spring arm, by opposed pulls on the two said members.

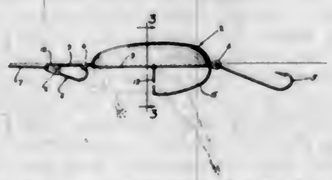
2,735,213
FISHING DEVICE
Frederick M. Reeves, Tacoma, Wash.
Application February 20, 1953, Serial No. 338,047
2 Claims. (Cl. 43—43.13)

1. In combination with a fishing line, a cylinder defining an elongated hollow body member having open forward and rear ends and an unobstructed bore extending between said ends, said cylinder having a bottom portion extending to beyond the forward end of a top portion thereof, the forward end defining a beveled open face, and attaching members secured to and disposed above the top portion and adjacent the ends of the cylinder and to each of which the fishing line is connected, said fishing line extending forwardly and upwardly at an angle from the forward attaching member when the cylinder is pulled by the fishing line through the water with the forward end of the cylinder constituting the leading end thereof, whereby the axis of the cylinder will be disposed at an angle to the fishing line portion extending forwardly from the cylinder such that water will enter the forward end of the cylinder and by impinging against the bottom



portion thereof will deflect the forward cylinder end downwardly to produce a diving action of the cylinder and a downward pull on the fishing line, said forward attaching member including means for releasing the fishing line from engagement therewith in response to a sudden jerk on the fishing line so that the cylinder will be connected to the fishing line only by the rear attaching member for free swinging movement relative to the fishing line to assume a position with the axis thereof disposed at an angle of at least 90° relative to the fishing line and with the forward end of the cylinder then disposed as the trailing end thereof so as to offer a minimum of resistance to retrieving the fishing line and cylinder.

2,735,214
BAIT HOLDING FISH LURES
Gilbert Stenseng, Minneapolis, Minn.
Application August 20, 1953, Serial No. 375,329
4 Claims. (Cl. 43—44.4)

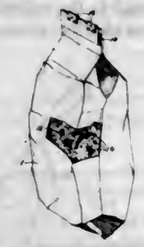


1. A fish lure comprising an elongated transparent float having a flat bottom, means at the forward end of the float for attaching a fish line thereto, a fish hook attached to the rear end of said float, and a substantially semi-circular member having its terminals secured to said float at the opposite sides thereof and intermediately of its ends, said member serving to embrace the body of a frog and retain it in a life-like position against the bottom of the float.

2,735,215
LIVE BAIT BAG
Robert Edward Rutledge, Kalamazoo, Mich.
Application February 16, 1954, Serial No. 410,554
1 Claim. (Cl. 43—55)

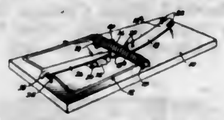
A package suitable for shipping and preserving live fishworms, comprising the combination of a bag having walls of thin, porous, flexible, high wet strength paper, adapted to retain its strength when moist and to permit the passage of gas to facilitate cooling through evaporation of water from the contents thereof, said paper being secured in bag form by means of waterproof adhesive,

said bag being substantially filled with wettable, loose, cushioning packing material, said bag having a readily available access opening for inserting and removing worms, and said packing material being adapted to cushion and protect worms in said material in said bag from pressure



exerted on the walls of the filled bag and because of its looseness permitting the circulation of gases therethrough whereby moisture used to dampen said packing material may evaporate to cool the contents of the bag and may pass through said material and the porous walls of said bag when it is closed, to facilitate cooling by evaporation.

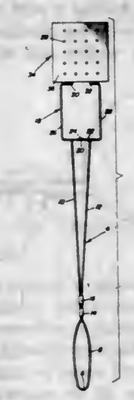
2,735,216
MOUSE TRAP
James H. Stebbins, Oelwein, Iowa
Application May 23, 1955, Serial No. 510,310
4 Claims. (Cl. 43—83.5)



1. An animal trap comprising a base, a striker mounted on said base for pivotal swinging movement thereacross, a power spring serving to bias said striker toward a position of overlying engagement against said base, an actuator lever pivotally mounted on said base, a magnet fixedly secured to said base, and a latch lever pivotally secured to said base and adapted to engage said magnet and be held thereby in a position for retaining said striker in cocked position against the bias of said power spring, said actuator lever when pivoted serving to move said latch lever away from said magnet and thereby release said striker for trapping movement.

2,735,217
FLY SWATTER
John P. Hufnagel, Mansfield, Pa., assignor of fifty per cent to Percy A. Coles, Mansfield, Pa.
Application May 19, 1953, Serial No. 355,941
2 Claims. (Cl. 43—137)

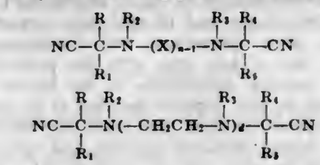
1. A fly swatter comprising a handle unit formed from wire having a bend between its ends and fashioned at the bend into a loop-like hand grip and further fashioned into a pair of expansible and contractible elongate limbs, a ferrule snugly embracing the inner end portions of said limbs adjacent to and fixedly closing the loop of said hand grip and binding the embraced portions of the limbs firmly together, said limbs being resilient, linearly straight from end to end and normally biased to expand and thus spread the limbs apart into outwardly divergent relationship, the outer end portions of the wire beyond the outer ends of the respective limbs having lateral bends in directions away from said limbs and crossing intermediate their ends, and provided with parallel spaced arms having inwardly directed terminals spaced away from each other and defining a resilient expansible and contractible frame, said frame being normally contracted, a rigid metal manually regulable sleeve slidably mounted on said limbs and shiftable from a position adjacent to said ferrule to a position abutting said frame for contracting and moving the limbs toward and from each other and for thus mechanically and positively spreading and maintaining the frame in its extreme



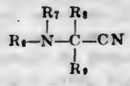
expanded state, and a readily attachable and detachable swatter head of an open-ended envelope type adapted to be removably mounted on and held in place on said frame by the inherent retention properties of the component parts of said frame.

2,735,218
AMINO NITRILES AS METAL COMPLEXING AGENTS IN CRACKED GASOLINE
Donald J. Shields, John W. Thompson, and M B Knowles, Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
No Drawing. Application March 28, 1952, Serial No. 279,215
6 Claims. (Cl. 44—72)

1. A cracked gasoline, which has been treated with a copper-containing reagent, containing from 0.0001 to 0.1 weight percent, based on the cracked gasoline, of an amino nitrile selected from the group consisting of those represented by the following general formulas:



and

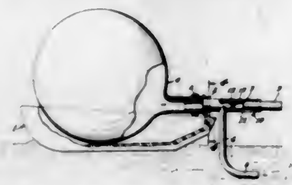


wherein R, R_1, R_2, R_3, R_4, R_5, R_7, R_8, and R_9 each represents a member selected from the group consisting of a hydrogen atom, a lower alkyl group, and a monocyclic aryl group, R_6 represents a monocyclic hydrocarbon aryl group, X represents a member selected from the group consisting of an alkylene group and a phenylene group, *d* represents a positive integer of from 1 to 3, and *n* represents a positive integer of from 1 to 2.

2,735,219
TOY BOAT
Victor Genez Gates, Santa Monica, Calif.
Application September 23, 1955, Serial No. 536,139
8 Claims. (Cl. 46—95)

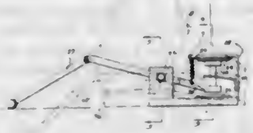
1. In a jet propelled toy boat, a hull; an air tube attached to the rear end of the hull and extending fore and aft; an inflatable elastic bladder having a neck attached to the forward end of said air tube and resting within the

hull; a jet discharge tube projecting downwardly from an intermediate portion of said air tube and having a rearwardly directed end portion constituting a jet nozzle for discharging air into the body of water in which the hull is floated, said air tube having a port through which said jet tube communicates with the interior thereof; a mouthpiece tube fitted snugly within said air tube and having



limited axial sliding movement therein between a forward inflation position wherein which it closes said port and a rearward position in which it uncovers said port for discharge of air from the bladder through said jet tube; and a forwardly opening check valve in said mouthpiece tube, for preventing discharge of air rearwardly through said valve tube.

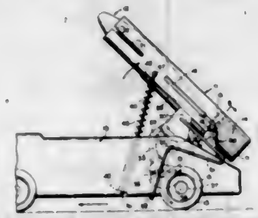
2,735,220
NOISE-MAKING TOY DEVICE
Richard D. Miles, Kutztown, Pa.
Application December 3, 1954, Serial No. 472,851
2 Claims. (Cl. 46—175)



2. A noise-making device comprising a support member for attachment to a shoe on a person's foot, a spur connected intermediate of its end to said support member for movement of one end of said spur upwardly and downwardly upon engagement and disengagement of of said one end of said spur with the ground during walking or running movements of the person, spring means carried by said support member at its other end operatively connected with said spur for biasing said spur into its ground engaging position, and noise-making means carried by said support member and engageable with said other end of said spur for effecting actuation of said noise-making means upon movement of said one end of said spur between its upward position and its downward position, said noise-making means including a pair of anvil members and a reciprocally-mounted hammer member disposed between said anvil members and engageable alternatingly therewith when engaged by said other end of said spur.

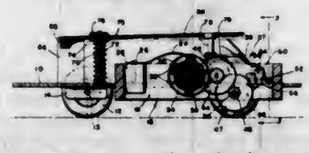
2,735,221
TOY WEAPON CARRIER
Ernest Fields, New York, N. Y.
Application November 10, 1954, Serial No. 467,970
11 Claims. (Cl. 46—202)

3. A toy weapon carrier comprising a wheeled vehicle adapted for travel on a base, a barrel for receiving a missile pivotally mounted near its rear end on said vehicle, a missile for insertion in said barrel, spring means disposed within the barrel, retention means movable with the barrel for releasably retaining the spring means in tensioned condition, release of said spring means ejecting a missile inserted in the barrel, release means on the vehicle engageable with said retention means in a predetermined elevational position of the barrel for releasing said retention means, and a spring movement for propelling the vehicle on a base upon which it is placed and elevating the barrel, said spring movement including at least one bar pivoted to the vehicle and slidably linked to the barrel to provide for pivotal movement of the



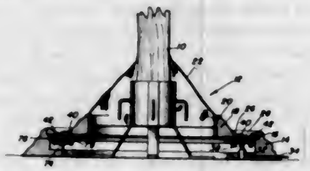
later between a depressed limit position and an elevated limit position, a coil spring encompassing said bar and abutting against the vehicle and the barrel respectively, depression of the barrel compressing the spring and re-expansion of the spring urging the barrel into its elevated position, and motion transmission means coupling the barrel with a wheel of the vehicle for rotating said wheel by the elevation movement of the barrel.

2,735,222
SPRING WOUND TOYS
Marvin I. Glass, Chicago, Ill.
Application August 20, 1952, Serial No. 305,475
2 Claims. (Cl. 46—208)



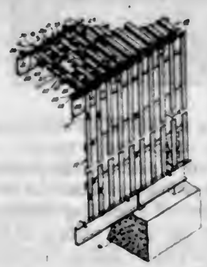
1. A toy comprising a carriage having an axle and wheels thereon, a spring wound mechanism supported within said carriage, said mechanism comprising a clock spring, a plurality of gears operated by said clock spring and operatively connected to said axle, other gears driven by said first mentioned gears, said other gears driving a star wheel, an escapement member mounted to move freely with respect to said star wheel, said escapement member having a bowed section, means for normally maintaining said bowed section of said escapement member in a positive locking position with respect to said star wheel to arrest rotation of all of said gears, depressible means for moving said said bowed section of said escapement member to release said star wheel for rotation and simultaneously permit all said gears to rotate to drive said aforementioned axle.

2,735,223
DECORATIVE TOY FOR CHRISTMAS TREES
Harry J. Brown and Regis G. Bailey, Pittsburgh, Pa.
Application November 15, 1954, Serial No. 468,858
3 Claims. (Cl. 46—240)



1. A toy comprising a lower base portion having a motor driving a friction drive wheel mounted thereon, other wheels rotatably mounted on said lower base portion, pairs of spring pressed rollers mounted on said lower base portion and resiliently urged inwardly towards said drive wheel and said other wheels, annular metallic bands received between said rollers and said drive wheel and said other wheels, magnets carried by said bands, an upper base portion overlying said bands, said upper base portion having trackways in alignment with said bands, said lower base portion and said upper base portion being sectional and encompassing the base of an ornament, and a flexible cloth secured to said upper base portion engaging said ornament.

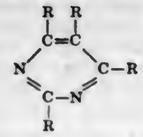
2,735,224
ADJUSTABLE LATH HOUSE
James Royden Estey, South Pasadena, Calif., assignor to Aluminex Incorporated, Los Angeles, Calif., a corporation of California
Application November 12, 1952, Serial No. 319,976
10 Claims. (Cl. 47—26)



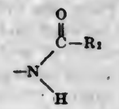
1. In a lath house, the combination of: a stationary lath panel comprising a plurality of spaced, parallel laths; a movable lath panel adjacent and parallel to said stationary lath panel and comprising a plurality of spaced, parallel laths, said laths of said movable lath panel being parallel to said laths of said stationary lath panel; and means mounting said movable lath panel for movement relative to said stationary lath panel in a transverse direction relative to said laths of said panels from a position wherein said laths of said movable lath panel are in register with said laths of said stationary lath panel to a position wherein said laths of said movable lath panel are in registry with the spaces between said laths of said stationary lath panel, said movable lath panel comprising a plurality of sections arranged end to end and extending in the direction of movement thereof, said lath house including adjustable means interconnecting said sections of said movable lath panel for adjusting the spacings of said sections.

2,735,225
PYRIMIDINES AS PLANT RESPONSE SUBSTANCES
Lyle D. Goodhue and John E. Mahan, Bartlesville, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware
No Drawing. Application September 14, 1951, Serial No. 246,710
16 Claims. (Cl. 47—57.5)

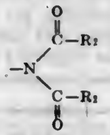
1. A method for modifying the growth of a plant which comprises subjecting the plant, at some period of its growth, to the action of an amount and concentration sufficient to achieve the desired result of a substituted pyrimidine represented by the general formula



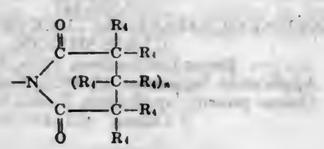
wherein one of the R's is a substituted amino radical selected from the group consisting of



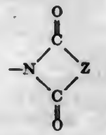
and



and

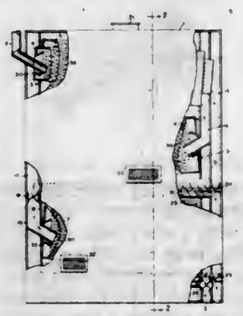


and



where R_2 is selected from the group consisting of an alkyl radical containing not more than 6 carbons, an aryl radical and an alkaryl radical; R_3 is selected from the group consisting of an alkyl radical containing not more than 6 carbons, an aryl radical and an alkaryl radical; n is an integer from 0 to 2; R_4 is selected from the group consisting of hydrogen and an alkyl radical containing not more than 2 carbon atoms; Z is selected from the group consisting of unsubstituted and substituted phenyl, dihydrophenylene, tetrahydrophenylene and hexahydrophenylene radicals, the substituted radicals containing substituents selected from the group consisting of halogen atoms, nitro radicals, hydroxy radicals, alkoxy radicals and alkyl radicals; and the remaining R's are selected from the group consisting of hydrogen, an alkyl radical containing not more than 6 carbon atoms, an aryl radical, substituted aryl radicals and a halogen atom.

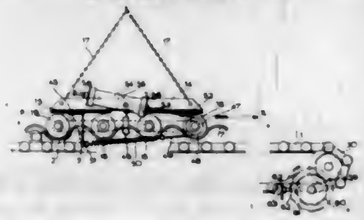
2,735,226
METHOD AND APPARATUS FOR TREATING COTTON SEED
Gerald N. Franks, Greenville, and Charles S. Shaw, Leland, Miss.
Application July 28, 1953, Serial No. 370,902
8 Claims. (Cl. 47—58)
(Granted under Title 35, U. S. Code (1952), sec. 266)



2. Apparatus for cleaning, drying, and sterilizing cotton planting seed without destroying the fibres on said seed comprising a chamber having an upper and a lower compartment sealed from each other; inclined foraminous

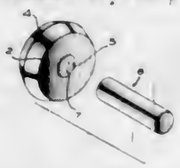
cylinders rotatably mounted in said compartments; seed inlet means at the top of the upper compartment; means for transferring seed from one cylinder to a cylinder directly below it; means between said upper and lower compartment to permit transfer of seed from the upper to the lower compartment without passage of gases between said compartments; seed removal means at the bottom of the lower compartment; inlet and exhaust means for supplying heated air and sterilizing gas to the upper compartment and removing exhausted gases therefrom; and inlet and exhaust means for supplying cold air and removing the same from the lower compartment.

2,735,227
CONTINUOUS MANUFACTURE OF CORRUGATED GLASS SHEETS
Roger Guilleminot, Paris, France
Application September 25, 1953, Serial No. 382,441
Claims priority, application France October 7, 1952
3 Claims. (Cl. 49—3)



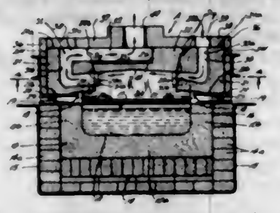
1. In an apparatus for the continuous manufacture of corrugated sheets of glass comprising a movable endless chain having a continuous movement and being composed of alternate concave and convex members brought together so as to form a continuous corrugated surface on to one extremity of which is introduced a rolled glass sheet, a shaping device comprising a movable support, rollers mounted on the said support, connection means coupled to the said rollers in such manner that the rotation of each of the said rollers is exactly the same, driving means for at least one of the said rollers, said means being mounted on the movable support, a vertically-movable suspension for the said movable support, and means actuating the said driving means by the movement of the endless chain.

2,735,228
GLASS CUTTING TOOL
William H. Shortell, Greenfield, Mass., assignor to Millers Falls Company, Greenfield, Mass., a corporation of Massachusetts
Application December 21, 1954, Serial No. 476,659
4 Claims. (Cl. 49—52)



3. A carbide glass cutting wheel and mounting pin assembly for a standard glass cutter tool having a rotatably mounted wheel with a sharp edge extending peripherally beyond the cutting head thereof and adapted to score a sheet of glass along a predetermined line; said assembly comprising a thin circular carbide wheel having an axially disposed central pin mounting bore characterized by an unfinished rough bearing surface having unsmoothed surface irregularities, and a wheel mounting pin fixed in the head of the cutter carrying said carbide wheel with said pin formed of case hardened extremely hard steel rod stock which has been formed with a surface coating of soft metal, the rotation under pressure of said wheel in use being capable of transferring the soft metal of the pin surface to the inside bearing surfaces of said wheel bore during an initial period of use whereby the irregularities thereof are filled up and glazed over to produce a smooth bearing surface for running on the hardened pin surface.

2,735,229
FOREHEARTH HIGH EFFICIENCY COOLING SECTION
William T. Honiss, West Hartford, Conn., assignor to Emhart Manufacturing Company, Hartford, Conn., a corporation of Delaware
Application June 24, 1954, Serial No. 439,064
15 Claims. (Cl. 49—54)



1. In a cooling section of a forehearth for molten glass, a roof structure comprising a middle portion having an under surface and a pair of side portions, the side portions having transversely spaced inner side surfaces on lower portions thereof extending downwardly from opposite side edges of the under surface of the middle portion and coacting therewith to define a laterally confined space beneath said under surface, each of said roof structure side portions being provided with a series of alternating cooling air intake and exhaust passages having outlets and inlets, respectively, in the inner side surface of its lower portion close to the adjacent edge of the under surface of said roof structure middle portion.

15. A refractory block for use as the key block in an arched transverse roof section of a cooling section of a forehearth for molten glass, said block having a cavity in its top extending for the greater part of the width and length of the block and being provided with a pair of grooves respectively extending through the opposite side surfaces of the block at diagonally opposite corner portions of the cavity, said block having its opposite side surfaces formed with outwardly projecting or offset portions extending along the upper edge of the block.

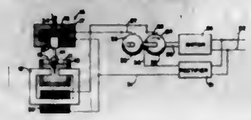
2,735,230
PROCESS OF FABRICATING GLASS ARTICLES
Vaughan Morrill, Jr., Clayton, Mo.
Application January 10, 1952, Serial No. 265,749
9 Claims. (Cl. 49—79)



7. In the art of fabricating integral hollow bodies of accurately known capacity, the process comprising forming complementary open-edged members of known capacity, positioning said members with the edges of said members in abutment, gauging the external radial dimensions of said members while in abutted position, heating the edges of said members above the softening temperature of said members whereby the external configuration

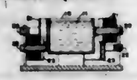
of said members is altered but the quantity of matter in said members remains constant, fusing said members together at said edges and, in the said abutted position, restoring the fused members to their gauged external radial dimensions.

2,735,231
SHARPENING OR POLISHING DEVICE
Luther G. Simjian, Greenwich, Conn., assignor to The Reflectone Corporation, Stamford, Conn., a corporation of Connecticut
Application May 22, 1953, Serial No. 356,742
11 Claims. (Cl. 51—7)



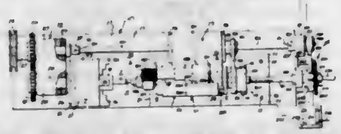
1. A sharpening device for a cutting instrument comprising; a mixture in a container which surrounds a portion of the cutting instrument; said mixture comprising a liquid, abrasive particles, and magnetic particles; means for supporting and moving said portion of said cutting instrument in said mixture; and means applying a variable magnetic field to the mixture to vary the consistency thereof.

2,735,232
POLISHING DEVICE
Luther G. Simjian, Greenwich, Conn., assignor to The Reflectone Corporation, Stamford, Conn., a corporation of Connecticut
Original application May 22, 1953, Serial No. 356,742. Divided and this application April 11, 1955, Serial No. 500,344
6 Claims. (Cl. 51—7)



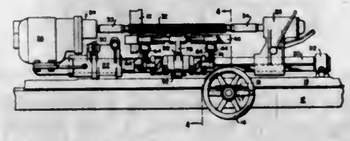
1. A polishing device comprising; a mixture in a container which surrounds an object to be polished; said mixture comprising a liquid, abrasive particles, and magnetic particles; and means for applying a polyphase alternating magnetic field to the mixture for alternately varying the viscosity of the mixture and for displacing the particles in the mixture.

2,735,233
LAPPING MACHINE
Ferdinand J. Henkel, Royal Oak, Mich., assignor to Lamina Dies and Tools, Inc., Berkley, Mich., a corporation of Michigan
Application August 15, 1952, Serial No. 304,587
7 Claims. (Cl. 51—50)



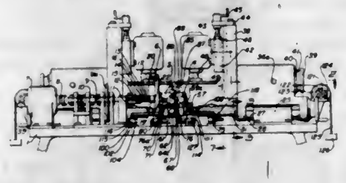
1. A lapping machine comprising a base, a workpiece holder rotatably mounted on said base, a lap holder rotatably mounted on said base with its axis of rotation disposed substantially coaxial with the axis of rotation of said workpiece holder, a carriage reciprocably mounted on said base for travel axially toward and away from one of said holders, one of said holders being mounted on said carriage for axial reciprocation relatively to the other holder and also relatively to said carriage, rotary power-driven holder-rotating mechanism mounted on said base and drivingly and rotatingly connected to said holders, a power-driven holder oscillator drivingly connecting said holder-rotating mechanism to said reciprocable holder and responsive to the rotation of said holder-rotating mechanism to reciprocate said reciprocable holder relatively to said carriage, said oscillator being arranged to reciprocate said reciprocable holder periodically in timed relationship with a predetermined amount of rotation of the other holder, and carriage-feeding mechanism responsive to the travel of said reciprocable holder a predetermined distance toward the other holder for advancing said carraige and said reciprocable holder bodily a predetermined distance toward said other holder.

2,735,234
BUFFING ATTACHMENT FOR DRAWING ROLLS
Kenneth P. Swanson, Abington, Mass., assignor to Progressive Engineering, Inc., Rockland, Mass., a corporation of Massachusetts
Application December 15, 1954, Serial No. 475,489
10 Claims. (Cl. 51—95)



1. In a drawing roll buffing machine embodying a grinding wheel, two rotatably mounted and axially aligned centers laterally of and axially parallel with the grinding wheel, means providing for relative axial movement of the grinding wheel and centers and power means for rotating one of the centers, an attachment comprising a cylindrical driving roll supported in axially fixed and true running axial alignment by and between the centers, work supporting means including two spaced members for rotatably supporting parallel with the driving roll a drawing roll to be buffed, means for mounting the work supporting means in operative position on the machine for simultaneous movement of said members toward and from the driving roll, and means for moving the work supporting means forwardly and rearwardly respectively to bring the drawing roll into and out of peripheral driving engagement with the driving roll and into and out of position to be engaged by the grinding wheel.

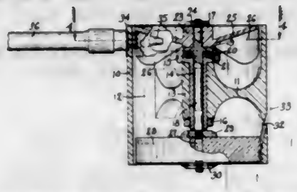
2,735,235
GRINDING MACHINES
John M. Luers, Mount Clemens, Mich.
Application February 5, 1953, Serial No. 335,380
11 Claims. (Cl. 51—100)



1. A grinding machine including a bed, a work table mounted for reciprocation thereon, means for reciprocating the table, a carriage slidably mounted on the bed for movement at right angles to the path of movement of the work table, a grinding wheel mounted in said carriage and including means for rotating the latter mounted on the carriage, a template mounted on one side of the work table, support means rigidly connected to said carriage, a follower mounted on said support means so as to extend from said carriage toward said template, means urging the carriage toward the work table where-

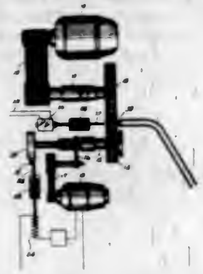
by the follower is retained in contact with the template, means interposed in the support means for changing the distance which the follower projects from the carriage, and a feed mechanism responsive to reciprocation of the work table including means for actuating the interposed means whereby upon each stroke of the table the carriage is moved toward said table.

2,735,236
GRINDING DEVICE FOR KNIVES AND THE LIKE
Henry H. Townshend, New Haven, Conn., assignor to J. T. Henry Manufacturing Co., Inc., Hamden, Conn., a corporation of Connecticut
Application November 5, 1953, Serial No. 390,367
3 Claims. (Cl. 51—102)



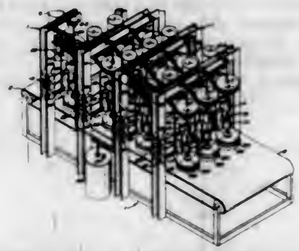
2. A knife sharpener comprising a substantially cylindrical casing open at both ends, a web provided at an intermediate portion of the casing, a bearing supported by said web, a shaft rotatably mounted in said bearing, a turbine wheel secured to the upper end of said shaft, said turbine wheel having a body portion serving as a closure member for the upper end of the casing, and blades secured at the lower surface of, and depending downwardly from, the body member, a grinding wheel within said casing and secured to the lower end of said shaft below said web, an inlet member arranged tangentially of the casing adjacent the turbine wheel, a nozzle carried by said inlet member to direct a jet of fluid against the blades of the wheel, and said web being provided with openings to permit discharge of the fluid from said turbine wheel downwardly over the grinding wheel.

2,735,237
SPEED REGULATION FOR CONTROL WHEELS
Harold E. Balsiger, Waynesboro, Pa., assignor to Landis Tool Company, Waynesboro, Pa.
Application February 19, 1953, Serial No. 337,761
10 Claims. (Cl. 51—103)



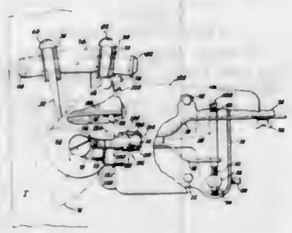
1. A grinding machine comprising a bed, peripherally opposed grinding and control wheels rotatably mounted thereon and forming a grinding throat therebetween, means for driving said control wheel continuously at varying speeds, said control wheel having a portion of relatively shorter radius to permit the introduction of a workpiece and its ejection when ground, and means for reducing the speed of the driving means of said control wheel while said portion of shorter radius passes thru the point of operation.

2,735,238
GLASS POLISHING MACHINE
Howard H. Heffley, Toledo, Ohio, assignor to The Toledo Plate and Window Glass Company, Toledo, Ohio, a corporation of Ohio
Application September 27, 1954, Serial No. 458,430
4 Claims. (Cl. 51—110)



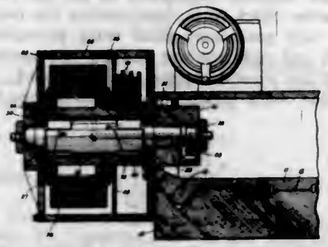
1. A glass polishing machine, comprising, in combination, a frame, a substantially horizontal conveyor belt supported by the frame for moving pieces of flat glass of various widths through the machine, a plurality of polishing assemblies rotatably mounted on the frame, each assembly including a vertical shaft, a belt driven pulley through which the shaft extends, the shaft constantly rotating with the pulley but being vertically slidable therethrough, an apertured polishing disk attached to an end of the shaft, a vertically shiftable bearing in which the shaft rotates but in which the shaft is not slidable and a manually controlled lifter for said bearing operable at will by an attendant for raising the disk vertically sufficiently to permit visual inspection of the glass being polished, all of said disks being above and substantially parallel to said conveyor belt, and manually controlled means for feeding polishing compound under pressure through the apertured disks onto the glass.

2,735,239
LINING ROUGHING MACHINES
George William Gibson, Leicester, England, assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application May 5, 1953, Serial No. 353,169
Claims priority, application Great Britain May 28, 1952
6 Claims. (Cl. 51—128)



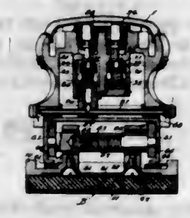
1. A machine for abrading the marginal portion of a piece of flexible sheet material having, in combination, an abrading disk mounted for rotational movement in a fixed position and having its upper abrasive face substantially in a horizontal plane, a guard located above the abrading disk having a slot therein to permit access to said disk said guard having a work supporting surface adjacent said slot, and yieldable means arranged to maintain the marginal portion of a piece of sheet material in contact with the abrading disk where access is permitted by said slot as successive portions of said marginal portion are progressively presented to the abrading disk.

2,735,240
GRINDING WHEEL MOUNTING
John Robert Fries and Harold E. Balsiger, Waynesboro, Pa., assignors to Landis Tool Company, Waynesboro, Pa.
Application December 15, 1950, Serial No. 201,006
4 Claims. (Cl. 51—166)



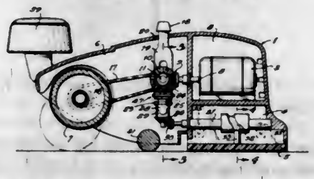
1. In a grinding machine, a base, a support for a grinding wheel on said base, a stationary spindle mounted on said support, peripherally spaced bearing members on said spindle, a single adjusting means in said spindle acting radially on one of said bearing members, the peripheral spacing of said bearing members being such that said adjustment effects all of said bearing members equally, and a grinding wheel mounted for rotation on said bearing members.

2,735,241
RUBBING MACHINE
Robert W. Hilgers, Rockford, Ill., assignor to Sundstrand Machine Tool Co., a corporation of Illinois
Application January 26, 1953, Serial No. 333,141
9 Claims. (Cl. 51—170)



1. In a rubbing machine having a generally rectangular housing shaped to fit the hand of an operator, a fluid motor mounted in said housing and having a drive shaft with an eccentric portion at one end for actuating a shoe and an opposed counterweight, said housing having a fluid inlet connected with said motor, a valve mounted in said housing for controlling the flow of fluid to the motor, said housing having a movable cover in engagement with said valve to control the positioning thereof, and a generally rectangular plate secured to the base of the housing and having downwardly extending portions with inturned edges forming guide tracks for slidably mounting a shoe assembly, said shoe assembly comprising a generally rectangular shoe adapted to receive sheets of abrasive material on its under side, a pair of tubular members each having an open end and a closed end, a square block attached to each tubular member at its closed end, a cylindrical member slidably mounted in the open end of each tubular member, a square block on the exposed end of each of said cylindrical members, said square blocks being slidably mounted in said guide tracks for rectilinear movement, a coil spring urging said members apart and said blocks against said guide tracks, a plurality of arms upstanding from the shoe and slidably supporting the shoe on said tubular members for movement in a direction normal to the direction of movement of said tubular members, a thrust bearing disposed between said shoe and the eccentric portion of the drive shaft to counteract the thrust on the shoe as a result of the rubbing action, rotation of the drive shaft causing movement of the shoe on the tubular members and movement of the tubular members along the guide tracks to produce an orbital path of movement of the shoe, and coolant means for the shoe including an inlet mounted on the housing and a valve positioned to control the flow of the coolant and to be operated by the movable cover.

2,735,242
SANDING DEVICE
Austin R. Baer, Chestnut Hills, Mass.
Application February 9, 1953, Serial No. 335,959
5 Claims. (Cl. 51—170)



1. A sanding device comprising a housing, a flat surface reciprocating sanding member slidably fitted to one end of said housing for longitudinal reciprocating movement, a drum sanding member, a drum supporting shaft rotatably mounted at the other end of said housing, the drum axis being positioned at right angles to the line of movement of the reciprocating sander and the drum surface being displaced from the plane of the reciprocating sander, a roller rotatably mounted in the housing between the sanding members having its axis parallel to the drum axis and its surface in the plane of the reciprocating sander, a motor mounted in the housing over the reciprocating sanding member and having a drive shaft parallel to the direction of motion of the reciprocating sanding member, a reciprocating drive mechanism for the reciprocating sander having its axis vertically disposed below the motor drive shaft, a vertical connecting shaft between the motor drive shaft and the reciprocating drive mechanism, coupling means for said connecting shaft, a cross shaft rotatably mounted to the housing in a direction parallel to the axis of the drum and intersecting the axis of the motor drive shaft, coupling means for said cross shaft, connecting means between the cross shaft and the drum supporting shaft to cause the two shafts to rotate simultaneously, gearing means to transmit rotation of the drive shaft to the connecting shaft and the cross shaft, a lever arm pivotally mounted on the housing and projecting through said housing, said lever being adapted to simultaneously operate both coupling means to alternatively actuate the drum sanding member and the reciprocating sanding member, a gripping member attached to the housing above the reciprocating sanding member, and a second gripping member attached to the housing above the drum sanding member.

2,735,243
ABRASIVE CUTTING WHEELS
Hugh V. Allison, Fairfield, Conn., assignor to American Chain and Cable Company, Inc., Bridgeport, Conn., a corporation of New York
Application March 26, 1953, Serial No. 344,816
8 Claims. (Cl. 51—207)

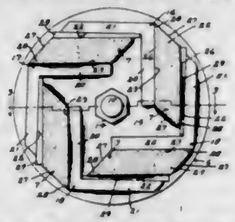
1. An abrasive wheel of the cutting wheel type having a thickness not more than 1/18 of the diameter for wheels up to 20" diameter and not more than 1/60 of the diameter for wheels larger than 20" diameter, comprising a circular disc including a circular material cutting rim portion of bonded abrasive material having flat substantially parallel side surfaces and a material cutting central portion of bonded abrasive material integral with said rim por-

tion having its side surfaces inwardly offset with respect to the side surfaces of said rim portion, said cutting wheel presenting a continuous cutting periphery throughout the life of the rim portion and the central portion thereof, the thickness between the side surfaces of said



rim portion determining the width of cut during the cutting life of said rim portion and the thickness between the side surfaces of said central portion determining the width of cut following the wearing away of the rim portion.

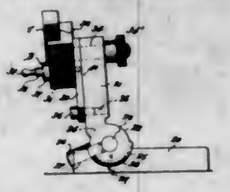
2,735,244
CONCRETE GRINDER
Howard P. Brown, Columbus, Miss.
Application June 15, 1955, Serial No. 515,721
5 Claims. (Cl. 51—209)



4. A grinder of the character described comprising a rotary driven disk-shaped head having a substantially flat underside provided with four depending projections forming lugs, said lugs being disposed in corresponding spaced apart relation to one another and each including an inner arm and an outer arm, the axes of said inner arms being disposed nearer the center of the head than the axes of said outer arms, the outer longitudinal edge of the inner arm of each lug being disposed at an obtuse angle to the inner longitudinal edge of the outer arm of said lug, grinding blocks having substantially flat top surfaces bearing against the underside of the head and including front walls having portions bearing against said outer edges of the inner arms and rear walls having portions spaced from said inner edges of the outer arms and disposed in inwardly converging relation thereto, and wedges disposed between said rear walls and said outer arms for detachably securing the blocks to the underside of the head, said blocks being thicker than the lugs and having substantially flat undersides adapted to engage a surface to be ground.

2,735,245
FIXTURE FOR SUPPORTING A TOOL SUBJECT TO GRINDING
Rocco F. Grieco, Millburn, N. J.
Application July 15, 1954, Serial No. 443,461
5 Claims. (Cl. 51—220)

1. A fixture to support a cutting tool for grinding comprising a base, a transverse carrier block having a flat outer face upstanding from said base, an elongated chuck pivotally supported intermediate its ends in connection with said carrier block for revolving movement in plane parallel to the flat outer face of the latter, said chuck having a longitudinal channel to receive and support a tool for projection from its forward end, a flat positioning plate disposed contiguous to the flat outer face of said carrier block to lie intermediate the latter and said chuck, said positioning plate being pivotally supported for left and right rotative shifting movement about the axis of the pivotal support of said chuck, a manually releasable chuck locking bolt means carried by the rear-



ward end portion of the chuck, said positioning plate having left and right groups of sockets offset from the pivotal axis of the chuck at predetermined radial angles and selectively engageable by said chuck locking bolt means, whereby to dispose the chuck in selected position to present the tool held thereby to a grinding wheel according to a given cutting end formation of the tool desired to be produced, and means to releaseably fix said carrier block selectively in a perpendicular normal position or in left or right rotatively shifted position accordingly as straight or offset cutting end formations of the tool are desired to be produced.

2,735,246
LAPIDARY TEMPLATE AND DOP-STICK
Fred W. Ponting, Phoenix, Ariz.
Application February 24, 1953, Serial No. 338,325
2 Claims. (Cl. 51—229)



1. In a lapidary template and dop-stick assembly including a handle, a flange formed on one end of said handle having an abutment surface, a beveled abrasive wheel engaging template having a large edge and a smaller edge, means for mounting said template with either said large edge or small edge adjacent said abutment surface on said flange, means inter-engaging between said flange and said template to prevent rotation of said template on said flange and handle, and clamping means for securing said template to said abutment surface on said flange, said means including a draw bar extending through a central bore in said handle, a threaded end on the outer end of said draw bar engaging a threaded bore in said template, and a knurled knob on the opposite end of said draw bar at the rear end of said handle operable to clamp said template to said flange on said handle.

2,735,247
KNIFE SHARPENER ATTACHMENT
Glen H. Holzhausen and William W. Haefliger, Los Angeles, Calif.
Application June 23, 1953, Serial No. 363,456
6 Claims. (Cl. 51—241)

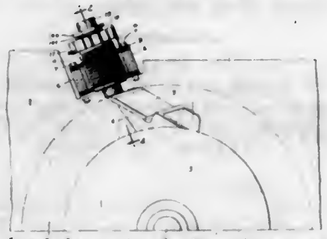
1. The combination comprising a home electric mixer beater having blades connected to a stem, a deformable body centrally mounted on said stem, said body having a side surface and a central aperture extending between opposite ends of the body, there being a slot extending

between said opposite ends and interconnecting said aperture with said side surface, and an annular sharpener unit encircling said beater stem and mounted on said



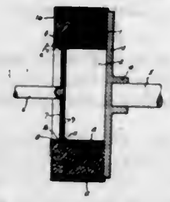
body, said unit having an inner surface engaging said side surface and carrying annular abrasive means spaced radially outwardly from said opening.

2,735,248
SHARPENING ATTACHMENT FOR ROTARY CUTTER HEADS
James R. West, New Holland, and James L. Stackhouse, Lancaster, Pa., assignors, by mesne assignments, to Sperry Rand Corporation, New Holland, Pa., a corporation of Delaware
Application December 30, 1952, Serial No. 328,661
4 Claims. (Cl. 51—246)



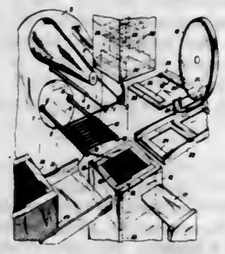
3. A cutter head sharpening device comprising a guide track, a carriage guided for reciprocation along said track and formed with a threaded bore therethrough transversely to the movement of said carriage, an externally threaded chuck operatively disposed in said bore, an abrasive tool held in said chuck, a ratchet wheel fixed coaxially to said chuck, and a driving detent fixedly supported relative to said track to operatively engage and partially rotate said ratchet wheel during each reciprocation thereof.

2,735,249
COLD GRINDING MACHINE
William Martin, Schenectady, and Elbert J. Weller, Scotia, N. Y., assignors to General Electric Company, a corporation of New York
Application December 30, 1953, Serial No. 401,146
6 Claims. (Cl. 51—267)



1. In a porous face type grinding wheel having a central bore and a radial working face, means positioned within said bore to hold a substantially unbroken band of coolant in intimate contact with the portion of the inner peripheral surface of said wheel contiguous the working face thereof to force the coolant to flow through the interstices of said wheel to maintain the pores in the working face thereof full of coolant, and means on the portion of the inner peripheral surface of said wheel remote from the working face for preventing the entry of coolant into said wheel at points remote from said working surface.

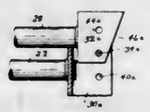
2,735,250
METHOD OF AND MEANS FOR THE MANUFACTURE OF THREAD PACKS
Heinrich Buddecke, Rheda, Germany
Application January 22, 1952, Serial No. 267,683
15 Claims. (Cl. 53—7)



1. A method for preparing thread packs consisting of layers being composed of flat pressed, longitudinal helicoidal thread windings the end turns of which are separated by separating strips, each layer being formed by coiling the thread on a coiling mandrel of oblong rectangular section upon moving it relatively round said mandrel in helicoidal fashion, holding stationary the central portion of the windings, withdrawing the coiling mandrel out of the windings and pressing flat the stripped off coil, thereby placing the individual windings in such a way that they are superimposed in scale like fashion to one another.

6. In an apparatus for preparing thread packs composed of separate layers of flat pressed, longitudinal helicoidal thread-windings the end turns of which are separated by separating strips, a coiling mandrel of rectangular section, means adapted to slidably arrange said coiling mandrel in a horizontal plane, a thread dispensing mechanism, including a bobbin and a thread guide, means adapted to rotate said thread dispensing mechanism round said coiling mandrel upon coiling the thread on the mandrel in a helicoidal fashion, means adapted to strip off the coiled thread layer from the mandrel, and means adapted to hold stationary the said layer in its center during stripping off.

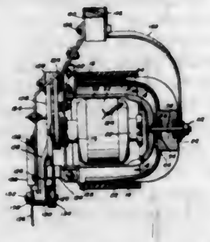
2,735,251
SECTIONAL HINGE CONNECTED DRAWBARS
Paul A. Dlugosch, Sac City, Iowa, assignor to Noble Manufacturing Company, Sac City, Iowa
Application February 26, 1953, Serial No. 338,971
1 Claim. (Cl. 55—150)



In a sectional drawbar for harrows and the like including a mid-section and end sections, opposed ends of said sections hingedly connected whereby the end sections will be vertically swingable when the bar is in use; the combination of a U-member carried by each of the opposed bar section ends as a hinge element-providing extension of the latter and having side walls and a bight wall, each bight wall transversely secured to and functionally integral with the end portion of the related bar section and projecting above the plane of the latter when the drawbar is in use, the side walls of opposed U-members being longitudinally overlapped, a transverse pivot means operatively connecting each set of overlapped side walls and pivotally connecting the respective end bar sections to the mid-bar section for vertical swinging move-

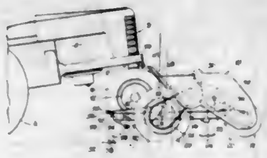
ment when the drawbar is in use, each pivot means positioned closer to the top side wall edges and free ends of the related mid-section-carried U-member than to the bottom edges and bight wall thereof, whereby when the drawbar is in use to permit the end sections to be swung upwardly to mid-section-overlying position and in supported engagement with the top bight wall edge of the adjacent mid-section-carried U-member, and at least one of the free side wall ends of one of each pair of related U-members engaging the bight wall of the adjacent U-member whereby to limit downward swinging movement of the end sections when the bar is in use.

2,735,252
LAWN EDGER
Robert W. McClendon, Corpus Christi, Tex.
Application November 23, 1955, Serial No. 548,694
8 Claims. (Cl. 56—25.4)



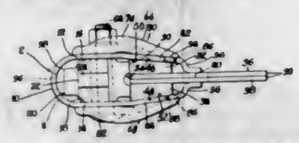
1. A lawn edger comprising a frame having a handle connected thereto, said frame having a motor mounted thereon, a dish-shaped wheel encircling and rotatably supporting said frame and motor, a cutter supporting arm connected to said frame, a cutter rotatably mounted on said arm, and driving connection between said motor and said cutter.

2,735,253
TRACTOR-IMPLEMENT COUPLING ARRANGEMENT FOR A HARVESTER
Edwin F. Huddle, Elmwood Park, Ill., assignor to International Harvester Company, a corporation of New Jersey
Application March 17, 1952, Serial No. 277,033
4 Claims. (Cl. 56—27)



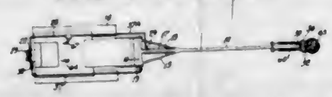
1. In a coupling arrangement between an implement and a tractor having a steering wheel assembly, said implement comprising a framework having front and rear ends, ground engaging wheel means disposed in supporting relation to said framework intermediate its ends, coupling means mounted on the framework intermediate its ends and formed and arranged to couple with said steering wheel assembly when the same is moved thereonto whereby said framework and steering assembly move as a unit, a crop harvesting unit disposed forwardly of said steering wheel assembly and mounted upon the forward end of said framework, said unit having driven mechanism, and a drive transmission operatively connecting said wheel means and said mechanism, said tractor having a portion of its weight supported from said wheel means and affording traction increase for said wheel means.

2,735,254
DOUBLE SICKLE CUTTING ASSEMBLY
Edwin F. Huddle, Elmwood Park, Ill., assignor to International Harvester Company, a corporation of New Jersey
Application February 26, 1952, Serial No. 273,418
17 Claims. (Cl. 56—297)



1. In a cutter for a mower, a U-section sheath, a pair of superposed knife blades within the sheath projecting through the forward open edge thereof, bearing means adjustably mounted within the sheath and buttressed against the back edges of said knives, and cooperating wedge means on the sheath and knives having substantially flat faces in slidable engagements and wedging said knives together in shearing relationship. said wedge means on the knives movable therewith by said bearing means to effect a wedging action with said wedge means on the sheath along said faces.

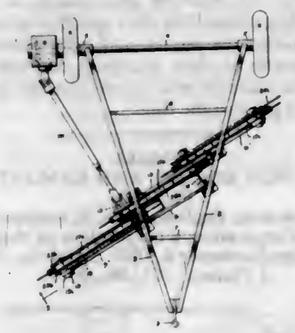
2,735,255
HYDRAULIC TREE SHAKER
Chester H. Harper and Kenneth M. Allen, Newberg, Oreg.
Application April 25, 1952, Serial No. 284,376
9 Claims. (Cl. 56—328)



1. An apparatus for imparting reciprocating movement in selective amounts with regard to distance and force, comprising a plunger, a guide supporting said plunger for reciprocating movement, a head on one end of said plunger, a spring on said plunger urging said head away from said guide, a pair of adjustable springs between said head and guide opposing said first mentioned spring, a hydraulic cylinder having a piston coaxial with said plunger and capable of being brought into contact with one end of said plunger, a spacer supporting said guide one one end of said cylinder, a spring anchor on said piston, a flange on the opposite end of said cylinder, tension springs between said spring anchor and flange urging the end of said piston away from the adjacent end of said plunger, and means for supplying a controlled oil pressure within said cylinder.

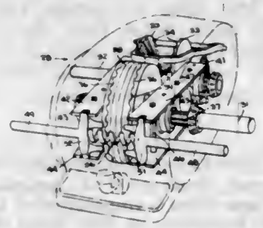
2,735,256
SIDE DELIVERY RAKE
James Rex West, New Holland, Pa., assignor, by mesne assignments, to Sperry Rand Corporation, a corporation of Delaware
Application July 23, 1952, Serial No. 300,396
4 Claims. (Cl. 56—376)

1. A side delivery rake comprising a portable frame adapted for longitudinal movement, a plurality of rotors supported from said frame for rotation about relatively laterally spaced parallel axes diagonal to the rake movement, an endless flexible raking element supported on and movable around each pair of laterally adjacent rotors, in combination with power drive means for rotating one of said rotors whereby driven movement will be transmitted to all of said interconnected rotors and raking elements, said raking elements being disposed in relatively laterally overlapping echelon formation so that their lower runs jointly provide a laterally continuous raking action, but in spaced relation whereby as the hay passes from each of said raking elements to the next, it will move around and be rolled by an upwardly moving section of each such raking element, one of said rotors being supported for rotation about a fixed axis, a rigid arm being



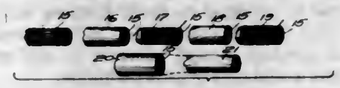
pivotally connected with said rotor for vertical swinging movement, and another of said rotors being carried by said arm for bodily movement about said fixed axis of rotation of said one rotor.

2,735,257
WINDING AND TWISTING
Robert H. Legard, Jr., Narrows, and Earl R. Meadows, Pearisburg, Va., assignors to Celanese Corporation of America, New York, N. Y., a corporation of Delaware
Application September 24, 1954, Serial No. 458,076
1 Claim. (Cl. 57—93)



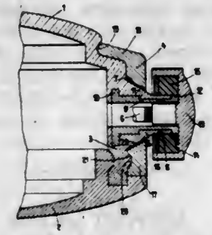
Apparatus for the twisting and winding of filamentary material comprising a spindle for holding and rotating a wound package of filamentary material, means for driving said spindle, a mounting for holding and rotating a support for a second package of filamentary material to wind the filamentary material from said first package onto said second package, means for driving said mounting, a guide positioned axially of said spindle for receiving the filamentary material being unwound from said first package, the construction and arrangement being such that said yarn becomes twisted as it passes from said first package to said second package, means for varying the relative speeds of said two driving means so as to decrease the speed of said mounting driving means relative to the speed of said spindle driving means as the diameter of said second package increases due to the winding of filamentary material thereon, said varying means comprising an input shaft driven at a speed proportional to the speed of said spindle and carrying a pair of pulleys having opposed conical faces, an output shaft connected to said mounting driving means and carrying a pair of pulleys having opposed conical faces, an endless belt connecting said pairs of pulleys and engaging said conical faces for driving said output shaft thereby, a pair of levers, each of said levers being operatively connected to one of each of said pairs of pulleys for varying the spacing of said pulleys so as to vary the ratio of the speeds of said input and output shafts, a spring acting on said levers and urging said levers in a direction to increase the ratio of the speeds of said input and output shafts, a pair of rods each connected to one of said levers, a pair of rotatable cams having surfaces engaged by said rods for operating said levers through said rods, the surfaces of said cam being so constructed as to effect, by their operation of said levers, an increase in the ratio of the speeds of said input and output shafts during the time necessary to wind said second package fully, and means for driving said cams at a speed proportional to the speed of said spindle and at a rate such that the desired increase in the ratio of the speeds of said input and output shafts is effected during each cycle of complete winding of said second package.

2,735,258
MANUFACTURE AND CONSTRUCTION OF STRINGS
Julian T. Crandall, Ashaway, R. I.
Application August 9, 1951, Serial No. 241,065
5 Claims. (Cl. 57—140)



1. In the manufacture of strings, the steps of forming a core of linear multi-filament strands of thermoplastic material, coating the core with a solution of the same thermoplastic material, drying the coated core, winding a monofilament of the same thermoplastic material on the dried coated core to form a spiral layer thereon, coating the spiral layer with a solution of the same thermoplastic material, and drying the spiral layer coating, whereby a composite string results.

2,735,259
WATERTIGHT WATCHCASE
Armin Gisiger, Selzach, Switzerland
Application November 2, 1954, Serial No. 466,365
Claims priority, application Switzerland December 17, 1953
5 Claims. (Cl. 58—90)

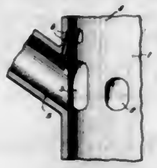


1. A watertight watch-case, comprising a bell-shaped crystal, a back removably and tightly fixed to the crystal, and a centre surrounding the crystal wall, characterized by a tube serving to guide a control member, this tube being integral with the crystal and having in its interior a metallic reinforcing sleeve anchored in the crystal wall, the said tube being adapted to come at least partially into contact with a sealing packing of the control member.

2,735,260
MEANS FOR PREVENTING THE FORMATION OF OIL CARBON DEPOSITS ON THE INNER SURFACE OF THE EXHAUST PORT IN A TWO-CYCLE DIESEL ENGINE
Ludwig Laubender, Traustein, Germany, assignor to F. A. Krauss-Maffei A. G., Munich, Allach, Germany
Application July 24, 1953, Serial No. 370,087
Claims priority, application Germany August 1, 1952
4 Claims. (Cl. 60—29)

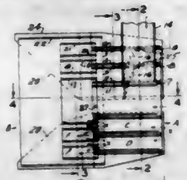
1. Carbon deposit formation preventing means for an internal combustion engine comprising a cylinder, an exhaust port formed in the wall of said cylinder, an exhaust duct communicating with said port, and means defining a

combustion space within said cylinder and adjacent to said port, said formation preventing means comprising exhaust gas guiding means defining a continuous burn-off passage which communicates directly between a portion of said exhaust duct immediately adjacent to said port and a portion of said combustion space adjacent to said



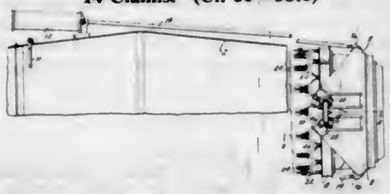
port, said burn-off passage comprising at least a portion which is inclined obliquely with respect to the axis of said cylinder and is arranged to direct burning exhaust gases into said duct at high velocity for burning away carbon deposits at portions thereof adjacent to said port where such deposits would otherwise accumulate.

2,735,261
BLAST DIRECTOR FOR FLUID STREAMS
William C. Walker, Granite City, Ill.
Application September 8, 1950, Serial No. 183,756
4 Claims. (Cl. 60—35.5)



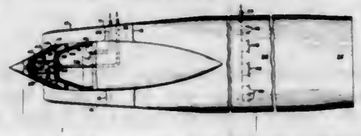
1. A director for a fluid blast from a discharge tube, comprising two units, each consisting of a series of concentric substantially straight-sided annular chambers of progressively larger diameters, said units being arranged substantially end to end with the walls of the chambers of one unit disaligned with the walls of the chambers of the other unit, and a conduit for conveying a blast to all of the chambers of one unit near the end of the latter remote from the other unit and directing the discharge from said conduit towards the other unit.

2,735,262
SUPPORT MEANS
Frederick L. Geary, Springfield, Mass., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application April 28, 1952, Serial No. 284,789
14 Claims. (Cl. 60—35.6)



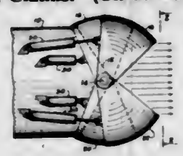
8. An afterburner arrangement including a duct through which hot gas flows, a fuel supply means in the duct, a thrust nozzle mounted on the downstream end of said duct, a variable area nozzle mounted in surrounding relation to the thrust nozzle and movable into a position overlying the end of the thrust nozzle for decreasing the effective area of the thrust nozzle, a ring surrounding the thrust nozzle in closely spaced relation thereto, said ring being slightly larger than the thrust nozzle to such an extent that the thrust nozzle will expand by thermal expansion into engagement with the ring when the thrust nozzle is in operation, the ring supporting the thrust nozzle against distortion and said ring being located within and surrounded by the variable area nozzle, a supporting means extending around the duct and supporting said ring and said variable area nozzle, and sealing means around said thrust nozzle to close the space between the thrust nozzle and the variable area nozzle, thereby to minimize the flow of hot gas past the ring.

2,735,263
COMBINATION ROCKET AND RAM-JET POWER PLANT
Jack O. Charshafian, Englewood, N. J., assignor to Curtiss-Wright Corporation, a corporation of Delaware
Application December 6, 1947, Serial No. 790,195
4 Claims. (Cl. 60—35.6)



1. A jet engine comprising an open-ended duct-like member; a rocket carried by said duct-like member; said rocket having a combustion chamber and having an annular conical discharge conduit adapted to discharge rocket combustion gases co-axially into said duct-like member in a hollow conical jet so as to induce air flow through said duct-like member; and means providing a fuel passage about each wall of said annular discharge conduit such that the fuel supplied to said combustion chamber first flows along that annular wall of said discharge conduit most remote from the air flow path through said duct-like member and then said fuel flows along the other annular wall of said discharge conduit before it discharges into said combustion chamber.

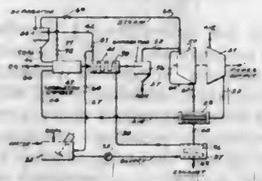
2,735,264
NOZZLE CONSTRUCTION FOR JET ENGINES
Charles S. Jewett, Ramsey, N. J., assignor to Curtiss-Wright Corporation, a corporation of Delaware
Application September 30, 1948, Serial No. 51,881
11 Claims. (Cl. 60—35.55)



9. An adjustable nozzle construction for an engine having an exhaust duct with a circular discharge opening through which the engine exhaust gases discharge for providing forward propulsive thrust; said nozzle construction comprising two pairs of concentric relatively movable spherical segments; each of said segments having its own means pivotally mounting said segment about an axis disposed adjacent to discharge end of said duct and common to the pivotal axis of the other segments and one of the spherical segments of each pair having a smaller radius than the other segment of said pair so as to be pivotally movable within said other segment.

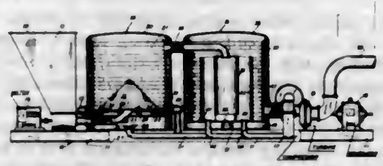
2,735,265
PROCESS AND APPARATUS FOR THE GENERATION OF POWER FROM A SOLID CARBONACEOUS FUEL
du Bois Eastman, Whittier, Calif., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application September 28, 1954, Serial No. 458,891
21 Claims. (Cl. 60—39.05)

1. In a process for the generation of power from a solid carbonaceous material wherein said material is subjected to combustion at a superatmospheric pressure and resulting hot products of combustion used as working fluid in a gas turbine, the improvement which comprises forming a fluid suspension of particles of solid carbonaceous material in a vaporizable liquid, passing the suspension at an elevated pressure to a heating coil as a confined stream in turbulent flow wherein it is heated to a temperature at least sufficient to vaporize the liquid and form a dispersion of solid carbonaceous material in a vapor, subjecting said dispersion to combustion at superatmospheric pressure, and passing resulting hot gases from said combustion zone to a gas turbine as working fluid for said turbine.



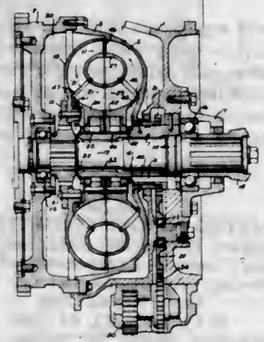
17. Power generating apparatus comprising, in combination a gas turbine; a gas generating furnace connected to said turbine; means for supplying combustion supporting fluid to said furnace; means for preparing a fluid suspension of particles of a carbonaceous fuel in a vaporizable liquid; an elongated tube having diameter at least three times the diameter of the largest of said particles, said tube having an entrance connected to said last-named means and an exit connected to said furnace; and means for heating said tube to a high temperature to vaporize said liquid during passage through said tube and form a flowing dispersion in vapor of disintegrated particles of said carbonaceous material, said last-named means comprising means for passing hot exhaust gases from said turbine in heat exchange relationship with said tube.

2,735,266
COMBINATION APPARATUS FOR PRODUCING POWER FROM WOOD WASTE
George H. Atherton, Corvallis, Oreg., assignor to the State of Oregon, acting by and through the State Board of Forestry
Application January 14, 1952, Serial No. 266,329
1 Claim. (Cl. 60—39.12)



Combustion apparatus for use in conjunction with a heat engine to obtain useful energy from the combustion of wood refuse such as sawdust and the like, comprising a structure forming a primary combustion chamber, a horizontally disposed grate within said chamber, a plurality of horizontally disposed fuel distributing plates in said chamber disposed in a vertically spaced-apart arrangement above said grate, said plates being of progressively smaller area in the vertical direction, whereby an excess of refuse fed onto the upermost plate will progressively fall from plate to plate and subsequently to said grate, means for feeding said wood refuse onto the uppermost of said plates at a rate whereby a supply of refuse will continually be supplied to successively lower plates and to said grate, means for introducing air to said primary chamber beneath said grate, means for introducing air to said chamber above said grate, a structure forming a secondary combustion chamber, flue means communicating with said chambers for transporting the gaseous products of combustion formed in said primary chamber to said secondary chamber, means within said secondary chamber defining a tortuous path for said gases whereby to lengthen the path of travel of said gases through said secondary chamber, means for introducing air to said secondary chamber to complete the combustion of combustible gases contained in the gaseous products of said primary combustion chamber, and means for conducting the gaseous products of combustion from said secondary chamber.

2,735,267
FLUID TORQUE CONVERTER CONSTRUCTION
Robert M. Tuck, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 21, 1952, Serial No. 289,116
4 Claims. (Cl. 60—54)

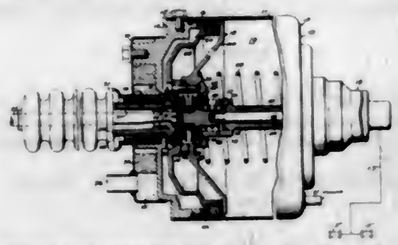


2. A fluid torque converter comprising, an impeller, a turbine member, and at least one stator member, all having outer walls, and all cooperating to form a torus chamber adapted to be maintained full of liquid under pressure and in which the liquid flows while operating, for the transmission of torque from the impeller member to the turbine member, there being a clearance between the outlet end of the turbine member and the inlet end of the stator member which forms a passage between their outer walls, the turbine member and stator member having hub portions outside the torus chamber which define a space therebetween, the outer portion of the space joining with the said passage between the outer walls of the turbine member and stator member, one member having a cylindrical surface positioned adjacent the outer portion of said space and which has one free edge, the other member having a substantially radial surface positioned radially outwardly of the said cylindrical surface and adjacent said passage and facing toward said passage, and a sealing ring freely axially slidable on said cylindrical surface of the one member and subject on one side to pressure of the liquid in said passage to be held thereby with its opposite side seating against said radial face of the other member, to thereby contain the liquid pressure and prevent same from access into said space, thereby relieving the turbine member of axial thrust on its hub portion.

2,735,268
BOOSTER BRAKE MECHANISM
William Stelzer, Summit, N. J.
Application September 17, 1953, Serial No. 380,754
16 Claims. (Cl. 60—54.6)

8. A booster brake mechanism comprising a master cylinder, a differential fluid pressure operated motor having a casing and a pressure responsive unit therein dividing said casing to form a constant pressure chamber and a variable pressure chamber and having a fluid displacing portion projecting into said master cylinder, means for connecting said constant pressure chamber to a source of pressure, said pressure responsive unit having a control

chamber therein in constant communication with said variable pressure chamber and having an atmospheric pressure chamber in one end, and a differential pressure chamber in the other end communicating with said constant pressure chamber, said control chamber having valve seats in the ends thereof, a pair of valves in said control cham-



ber respectively engageable with said valve seats, means axially movable in said pressure responsive unit for operating said valves, said axially movable means being movable in one direction to unseat one of said valves and in the other direction to unseat the other valve, and resilient means connecting each valve to said axially movable means.

2,735,269

SEALING POROUS FORMATIONS

Paul G. Carpenter, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application October 25, 1949, Serial No. 123,540

20 Claims. (Cl. 61—36)

3. A composition, useful for sealing porous formations, which composition consists essentially of an aqueous solution of a water-soluble salt of a water-insoluble organic acid, an aldehyde containing only carbon, hydrogen, and oxygen, and an inorganic oxidizing compound.

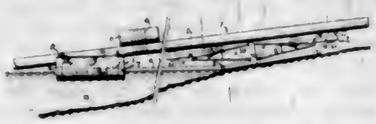
2,735,270

LAUNCHING STRUCTURES AND METHODS

Samuel V. Collins, Victoria, Tex.

Application November 26, 1952, Serial No. 322,720

7 Claims. (Cl. 61—72)



1. Launching apparatus for guiding an object between positions in and out of a body of water including a series of object cradling guides spaced from one another in the longitudinal direction of object launching, a series of rocking frames, each having a pivot mounting intermediate its opposite ends and mounting a pair of said guides, one on each side of said pivot mounting, a buoyant support pivotally mounting one of said rocking frames and being located in the body of water to rise and fall with changes in level of the body of water to maintain the pivot axis of the frame mounting on said buoyant support at constant relation with the water surface level, a swinging truss member, means pivotally mounting said truss member a pair of said swinging frames one on each side of the swinging axis of said truss member, a base pivotally supporting said swinging truss member at a point intermediate the pivot mountings thereon of said pair of rocking frames and a tie connection having its opposite ends pivotally joined respectively with said base and said buoyant support holding them against misalignment of their respective cradle guides in the direction of launching while accommodating changes in relative level of the base and said buoyant support.

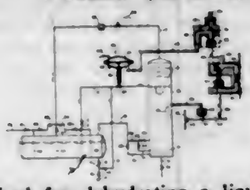
2,735,271

DEHYDRATION OF LIQUEFIED PETROLEUM GAS

Edmond W. Evans, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application September 30, 1954, Serial No. 459,317

9 Claims. (Cl. 62—1)



1. A method for dehydrating a liquefield petroleum gas containing moisture and stored in a tank under superatmospheric pressure comprising withdrawing vapor from said storage tank, introducing the withdrawn vapor into a treating zone maintained under a pressure below said superatmospheric pressure, withdrawing liquefied gas from said storage tank, introducing the withdrawn liquid into said treating zone whereby the introduced liquefied gas vaporizes and cools the vapor contents of the treating zone by direct heat exchange to a temperature below the dew point of the vapor in the treating zone, from said treating zone withdrawing cooled vapor having a lower moisture content than the moisture content of the vapor introduced into said treating zone, compressing this withdrawn lower moisture content vapor and introducing the compressed vapor into the liquid phase in the storage tank.

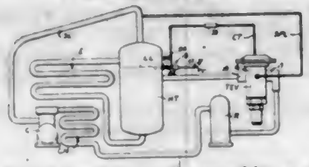
2,735,272

LIQUID-LEVEL CONTROL DEVICES

Harold T. Lange, Webster Groves, Mo., assignor to Sporlan Valve Co. Inc., St. Louis, Mo., a corporation of Missouri

Application August 13, 1951, Serial No. 241,641

7 Claims. (Cl. 62—8)



1. In a liquid level control assembly, a closed liquid receiver, the liquid level within which is to be controlled in correlation with a pressure condition, a source of liquid supply to the receiver, a suction line adapted to exhaust gas from said receiver, a valve located to control flow between said source and the receiver, a valve motor, valve motor actuating devices including a first device responsive to temperature in the region of desired maximum liquid level in the receiver, heating means in such liquid level region, said heating means being in thermal exchange relation to said first device and to the liquid in said receiver, and being of a low heat output such that adjacence of the liquid thereto will substantially absorb and nullify the heating effect of such heating means, and a second motor actuating device responsive to pressure in said suction line, the valve, valve motor and actuating devices being freely operable at all times in response to differentials in pressures influencing said devices.

2,735,273

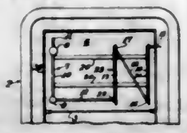
REFRIGERATOR EVAPORATOR

Si J. Williams, Jr., Evansville, Ind., assignor to International Harvester Company, a corporation of New Jersey

Application December 29, 1952, Serial No. 328,450

2 Claims. (Cl. 62—99)

1. In a refrigerator, an inner liner disposed within said refrigerator, a horizontally disposed tray mounted in cooperation with said inner liner to thereby form a freezer compartment positioned within said inner liner above said tray, evaporator means disposed within said compartment for refrigeration of said compartment comprising three vertically disposed walls, each of said walls formed entirely in a vertical plane, mounting means for mounting said walls in a parallel spaced-apart relation, the first of said walls comprising an upper and a lower header and a plurality of parallel tubes interconnecting said upper and lower headers, the second and third of said walls each



comprising a length of serpentine tubing having horizontally disposed straight sections interconnected by curved sections, said straight sections disposed in a parallel spaced-apart relation, an inlet tube connected to the upper end of said third wall, a connecting tube connected to the lower end of said third wall and the upper end of said second wall, a second length of connecting tubing connected to the lower end of said second wall and to said lower header and an outlet tube connected to the upper surface of said upper header.

2,735,274

REFRIGERATING APPARATUS WITH AIR BAFFLE

Leonard J. Mann, John M. Murphy, and Verlos G. Sharpe, Dayton, Ohio, assignors to General Motors Corporation, Dayton, Ohio, a corporation of Delaware

Application July 26, 1952, Serial No. 301,138

5 Claims. (Cl. 62—103)



1. In a refrigerator having a food storage compartment and a frozen food compartment, a first evaporator for cooling said frozen food compartment, a second evaporator for cooling said food storage compartment, said frozen food compartment being disposed above said food storage compartment, means for supplying liquid refrigerant to said evaporators, said second evaporator being disposed adjacent the upper rear portion of said food storage compartment, an air directing baffle supported in front of said second evaporator, said baffle having openings provided adjacent its lower edge for the passage of air through the lower portion of the baffle, means for directing condensate forming on the upper portion of said baffle above said openings away from the upper edges of said openings, said last named means comprising means for transferring condensate from the front side of the baffle towards the back side of the baffle, and means for directing the condensate from the lower edge of said baffle onto the rear wall of said food storage compartment.

2,735,275

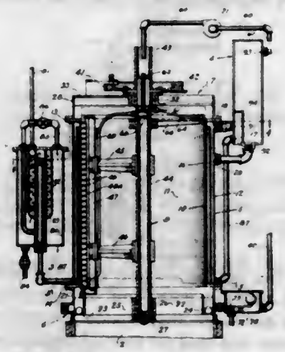
ICE MAKING MACHINE AND THE ART THEREOF

Lyle E. Branchflower, Seattle, Wash.

Application February 8, 1951, Serial No. 210,030

7 Claims. (Cl. 62—107)

1. A flake ice maker and removing device comprising a vertical cylindrical shell member open at the bottom and having an inner surface; refrigerating means refrigerating said inner surface so that water deposited on said surface will form into ice; water supply means depositing water on said inner surface; a driven member coaxially mounted of and in said cylinder; and a plurality of axially spaced apart ice removal blades carried by said driven member, each having an outer ice engaging edge portion disposed gener-



ally in a horizontal plane, in close proximity to said inner surface, having the leading portion thereof disposed at a higher elevation than the trailing portion and having a substantially flat and horizontal lower surface portion and an inclined upper surface portion which surfaces join to form an edge, whereby ice forming on said inner surface is removed at a plurality of locations and moves downwardly toward said open bottom of said cylindrical shell.

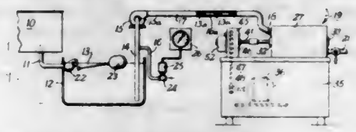
2,735,276

PROCESS AND APPARATUS FOR CONTINUOUSLY FREEZING CONFECTIONS

Emery Thompson, Jr., New Rochelle, N. Y., assignor to Emery Thompson Machine & Supply Company, New York, N. Y., a corporation of New York

Application April 17, 1952, Serial No. 282,881

19 Claims. (Cl. 62—114)



1. A method of continuously manufacturing ice cream, which includes the steps of, conducting under pressure alternate slugs of mix and air from respective sources of supply, said air slugs being of substantially uniform shape and said mix slugs being of substantially uniform shape, subjecting the mix and air to the action of a refrigerant, and at the same time agitating the mixture of mix and air.

2,735,277

COMBINATION PANEL AND REFRIGERATION UNIT

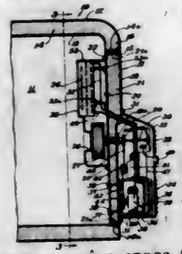
Adna R. Clark, Evansville, Ind., assignor to International Harvester Company, a corporation of New Jersey

Application June 3, 1954, Serial No. 434,187

5 Claims. (Cl. 62—117)

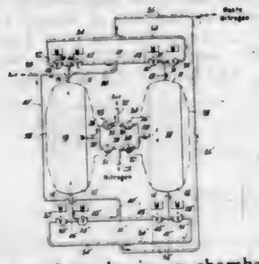
1. In an automotive truck refrigeration unit, the combination, comprising: a thermally insulated wall member hingedly and removably mounted over a cargo-loading and unloading access opening that opens into a cargo-carrying space to be cooled within the truck; air cooling means; air circulating means cooperative with said air cooling means for moving air from the cargo-carrying space to be cooled into heat exchange relation with said air cooling means and thereafter back into the cargo-carrying space to be cooled; said air cooling means and

said air circulating means being disposed adjoining the surface of said wall member that faces the cargo-carrying space to be cooled; refrigerating apparatus including a compressor, condenser and self-contained compressor driving engine all disposed adjoining a surface of said wall member that is exterior of the cargo-carrying space to be cooled; air moving means disposed adjacent said refrigerating apparatus and operative to move air from the atmos-



phere outside the cargo-carrying space to be cooled into heat exchange relation with said refrigerating apparatus and thereafter back into the outside atmosphere; said air circulating means and said air moving means being mounted on a common drive shaft and drivingly connected to said driving engine for operation thereby; and having said insulated wall member, said air cooling means, said air circulating means, and said refrigerating apparatus removable as a unitary assembly from the automotive truck.

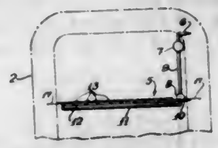
2,735,278
COLD ACCUMULATOR
Philip Kearney Rice, White Plains, N. Y., assignor to Union Carbide and Carbon Corporation, a corporation of New York
Application July 9, 1951, Serial No. 235,746
7 Claims. (Cl. 62—122)



1. A cold accumulator having a chamber defined by side walls closed by end heads; warm gas conduit means associated with each of said end heads; cold gas conduit means associated with said chamber intermediately of said end heads and adapted for separate withdrawal from and supply to said chamber of cold gas, said cold gas conduit means being in simultaneous gas flow communication with both of said warm gas conduit means at said end heads and comprising a gas distributor constructed to distribute the flow of gas at the central portion of said chamber in communication with conduit means extending gas-tightly through said side walls of said chamber; and heat storage filler mass disposed within said chamber substantially equally between each end head and said cold gas conduit means.

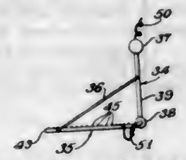
2,735,279
REFRIGERATOR EVAPORATOR
Si J. Williams, Jr., Evansville, Ind., assignor to International Harvester Company, a corporation of New Jersey
Application December 11, 1952, Serial No. 325,322
8 Claims. (Cl. 62—126)

1. An evaporator for a refrigerator comprising horizontally disposed shelf means for supporting and cooling food placed thereon, tubing means mounted in thermal contact to the underside of said shelf means, said tubing means operating to cool said shelf means when a cooling agent is conducted therethrough and operating to heat said shelf means when a heating agent is conducted therethrough, said shelf means comprising strip means operable responsive to the operation of said tubing means



when a cooling agent is conducted therethrough to assume a substantially closed flat plane surface, and operable responsive to the operation of said tubing means when a heating agent is conducted therethrough to assume an irregular surface comprising a plurality of parallelly spaced apart strips bowed in a generally downward direction along the longitudinal axis of said strips.

2,735,280
REFRIGERATOR EVAPORATOR
Si J. Williams, Jr., Evansville, Ind., assignor to International Harvester Company, a corporation of New Jersey
Application December 11, 1952, Serial No. 325,323
2 Claims. (Cl. 62—126)

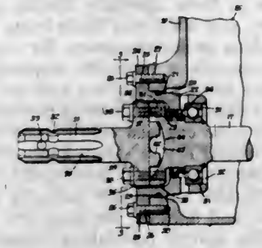


1. An evaporator for a refrigerator comprising a horizontally disposed base portion and a vertically disposed rear wall portion, said rear wall portion comprising an upper and a lower header and a plurality of parallel tubes interconnecting said headers, said base portion comprising a length of serpentine tubing having straight parallel sections interconnected by curved sections, said straight sections positioned in a horizontal plane including said lower header, said straight sections further positioned perpendicular to the longitudinal axis of said lower header, a plurality of rods mounted in a parallel spaced apart relationship to each other and to the longitudinal axis of said lower header on the upper surface of said serpentine tubing in thermal contact therewith, a pair of diagonal braces, each one of said braces mounted from one end of said rear wall portion to one end of said base portion, a length of capillary tubing connected between one end of said serpentine tubing and said lower header, a second length of capillary tubing connected to the upper surface of the upper header, whereby said second length of capillary tubing serves as an inlet tube for liquid refrigerant, and whereby the other end of said serpentine tubing forms an outlet tube.

2,735,281
SHROUDED POWER TAKE-OFF SHAFT FOR TRACTORS
Clarence A. Hubert, Chicago, and John R. Orelind, Wilmette, Ill., assignors to International Harvester Company, a corporation of New Jersey
Application September 9, 1952, Serial No. 308,672
2 Claims. (Cl. 64—1)

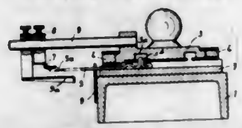
1. In a power take-off assembly for tractors and the like having a casing body with a side wall, means providing an opening communicating through said side wall, said opening having an intermediate portion between

inner and outer end portions respectively thereof, an anti-friction bearing unit mounted in the inner end portion of said opening, a power take-off shaft having an outer end portion with a radially extending flange and a diametric driving socket in the end of such end portion radially inward from said flange, said shaft being journalled in the bearing unit and extending into the casing while said flange is closely shrouded within the outer end portion of



said opening, sealing means disposed between the intermediate portion of the opening and a section of the shaft between the flange and the bearing unit, and means for releasably attaching the flange of a radially flanged extension shaft in coaxial relation with said power take-off shaft comprising threaded holes extending axially in the power take-off shaft flange and exposed through the outer end portion of said opening.

2,735,282
THREAD GUIDE FOR HAND-OPERATED KNITTING MACHINES
Erich Piltz, Markdorf, Baden, Germany, assignor to Willy Werner Lenkelt, Markdorf, Germany
Application August 31, 1953, Serial No. 377,572
Claims priority, application Germany November 8, 1952
9 Claims. (Cl. 66—60)



1. A hand knitting machine, comprising, in combination a plurality of needles each having a hook and a latch, a lock adapted to carry out rectilinear movements in opposite directions, said lock advancing and retracting said needles, a thread guide connected to said lock so as to be moved in a direction parallel to the direction of the rectilinear movements of said lock, said thread guide having a thread guiding slot extending in the direction of movement of said lock, and pointed ends forming part of said thread guide and being arranged substantially in the prolongation of the longitudinal axis of said slot so as to engage said hooks of said needles and thereby to open said latches thereof.

2,735,283
KNITTED CAP STRUCTURE
Walter E. Schuessler, Chicago, Ill.
Application February 24, 1953, Serial No. 338,209
2 Claims. (Cl. 66—171)

1. A knitted cap and scarf integrally formed from a single swatch having a front edge and a rear edge, said front edge having a central V-shaped recess and a V-shaped recess on each side thereof, said rear edge having a pair of V-shaped rear recesses, said swatch also having a pair of elongated flap portions extending laterally beyond said recesses, the front edge portions defining said V-shaped central recess and the rear edge portions defining each of said V-shaped rear recesses being joined together and the rear edges of said flap portions adjacent said rear recesses being joined to provide a cap body, said elongated flap portions extending outwardly be-



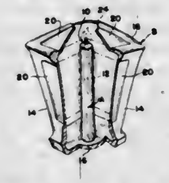
yond their joined rear edges adjacent said rear recesses to provide free and elongated scarf portions.

2,735,284
GAS LIGHTING IMPLEMENT
John W. Hobing, Cincinnati, Ohio, assignor to Raymond A. Haneberg and Richard H. Haneberg, Cincinnati, Ohio
Application October 9, 1953, Serial No. 385,180
5 Claims. (Cl. 67—6.1)



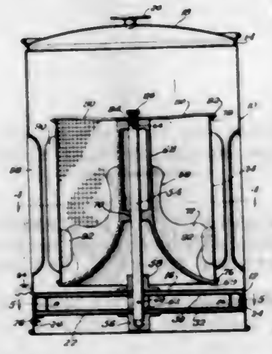
1. A gas lighter comprising a handle made from a single piece of strip metal and formed to provide a pair of relatively movable arms joined together at common ends, a U-shaped yoke formed on the free end of one arm to provide a pair of spaced legs interconnected by a transverse base portion, a freely rotatable tubular file removably positioned between the legs of the U-shaped portion, a journal stud embossed on the inner face of each of the said legs and each extending into an adjacent end of the tubular file, a hood having a top wall, side walls depending from the top wall and each of said walls having an inturned flange formed on its lower terminal end, said hood being slidable over the U-shaped member into a position such that the interior faces of the hood side walls engage against the exterior faces of the legs of the U-shaped portion to hold said legs together under compression and move the journal studs carried by the legs into proximate positions with respect to the ends of the file.

2,735,285
ORNAMENTAL CANDLE
George Ferieger, Philadelphia, Pa., assignor to Penn Wax Works, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application April 27, 1955, Serial No. 504,177
1 Claim. (Cl. 67—21)



An integrally formed ornamental candle comprising a combustible wax stick candle and a decorative wax translucent shell having a hollow chamber therein, said shell having a floor, a roof, and walls being of a wax material of a lesser degree of meltability than said combustible wax stick candle, said stick candle being spaced from said walls and projecting from said floor through said hollow chamber to said roof, a wick in said stick candle extending externally of said roof, said roof surrounding and blending with said stick candle and being of a wax material which will melt with the melting of said stick candle.

2,735,286
WATER POWERED WASHING MACHINE
Pierce Sperry, Harrison, Ohio
Application April 7, 1953, Serial No. 347,269
7 Claims. (Cl. 68—151)



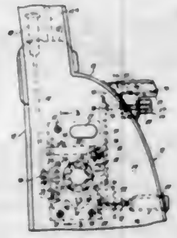
1. In a washing machine, a tubular casing, a partition dividing said casing into a lower water wheel compartment and an upper washing compartment of substantially equal diameter, a water wheel in said water wheel compartment and having a shaft projecting upwardly into said washing compartment, a nozzle directed toward said water wheel for rotating the same when water under pressure is supplied to said water wheel, an agitator on said shaft, a basket extending upwardly from the periphery of said agitator, said casing and basket wall having baffle blades of triangular cross section extending therefrom and having rounded apices to agitate the washing fluid in said casing by squeezing it from between said baffle blades as they pass each other as said agitator is rotated by said water wheel.

2,735,287
KEY-OPERATED LOCK
Roger Parlier, Geneva, Switzerland
Application May 26, 1951, Serial No. 228,383
Claims priority, application Switzerland January 19, 1951
2 Claims. (Cl. 70—129)



1. A key operated lock comprising a lock casing adapted to be secured on the outer side of a door, a housing adapted to be fastened on the inner side of the door a bolt slidable in said housing, an ordinary key and a special key both having identical normal bittings on either side, the special key being further provided with a supplementary hump, said lock casing being provided with a cylindrical cavity having two pairs of diametrally opposite grooves, extending axially therein and having stopping flanks, the said two pairs of grooves limiting, about the axis of said cylindrical cavity, a first angular field corresponding to the necessary amount of rotation of the ordinary key to bring said slidable bolt from a locking to a releasing position and vice-versa, the said cylindrical cavity including a radially enlarged segmental hollow portion extending on its periphery from one flank of said axial grooves up to a special abutment over a second angular field substantially equal to twice said first angular field, an intermediate radial abutment inwardly projecting from the wall of said segmental portion and having a stopping edge located in the middle of said second angular field, a cage rotatably disposed in said cylindrical cavity and provided with a guiding perforation for said ordinary and special keys, said cage comprising two opposite walls in which are formed a plurality of pairs of guiding apertures facing one another, one or more of said guiding apertures facing, besides, said segmental hollow portion, a plurality of pairs of normal locking blades slidable in some of said guiding apertures, at least one additional blade slidable in those apertures facing said segmental hollow portion, said additional blade being provided with a terminal locking projection, means for urging said additional blade towards a normally stopping position by coaction of said locking projection with said intermediate abutment, said additional blade being provided with a contacting surface to be engaged only by said supplementary hump of the special key, a safety knob provided with a crank-piece adapted to always drive said bolt, said safety knob being rotatable and axially movable within a guiding aperture in said housing, the inner end of said rotatable cage having normal positioning recesses and special positioning recesses spaced apart from one another by an angular amount equal to said first angular field, dowels fastened to the inner end of said safety knob, spring means urging said dowels into engagement with either said normal or special positioning recesses, whereby said safety knob is adapted to actuate said bolt irrespective of whether said normal and additional blades are locked or released, whilst said supplementary hump of the special key is adapted to release said additional blade from said intermediate abutment, thus permitting an actuation of said rotatable cage in said second angular field of action.

2,735,288
LOCK
Earl M. Trammell, Jr., St. Louis, Mo.
Application August 3, 1953, Serial No. 372,029
8 Claims. (Cl. 70—135)



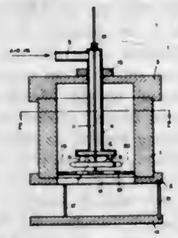
1. In a door latch assembly including latch mechanism embodying a movable latch arm for installation within the door, a latch-arm-blocking member movable into and out of the path of the latch arm for selectively precluding and permitting effective actuation of said arm, the door being provided with an exterior slot providing for access therethrough of any thin instrument, a lock-conditioning element shielded against direct digital actuation, but located adjacent said slot in position to be actuated by any thin instrument extended through and depressed along the slot, an operating connection between said lock-conditioning element and said blocking member, said connection including means adapted to engage the blocking member to permit movement of said blocking member by said element only in a direction to block said latch arm, and adapted to disengage operatively from said blocking member after movement of the blocking member to a blocking position, and a key-operated lock connected to said blocking member, and adapted to move said member in a direction out of the path of said latch arm and to condition said means for subsequent operative actuation of said element by the instrument.

2,735,289
PLUNGER-GUARD ASSEMBLIES FOR AUTOMOBILE DOORS
Earl M. Trammell, Jr., St. Louis, Mo.
Application July 2, 1953, Serial No. 365,747
16 Claims. (Cl. 70—181)



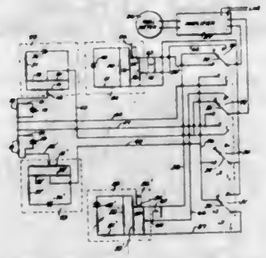
1. In an inside-locking plunger assembly for automobile door locks, a reciprocally movable locking plunger projecting from a door and a hollow elongate enclosure for the plunger normally supported by a fixed element of the door adjacent the plunger but freely movable within predetermined limits along the path of the plunger, the enclosure being provided with a narrow slot limited and proportioned to receive a key presented in a direction across the plunger, the slot being of a width such as laterally to guide the key shank through a translatory movement of the key to an extent fully to actuate the plunger in one direction.

2,735,290
WEAR TESTING DEVICE
Elmer Fred Macks, Parkview, Ohio
Application November 6, 1952, Serial No. 319,055
8 Claims. (Cl. 73—7)



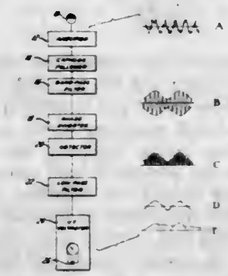
1. A testing device comprising a closed raceway resiliently mounted on a base, a plurality of rolling elements disposed within said raceway, a plurality of nozzles located centrally of said raceway and supplied by fluid feeding and pressurizing means for propelling said rolling elements in rolling contact with said raceway.

2,735,291
WEIGHT AND CENTER OF GRAVITY COMPUTING APPARATUS
James E. Quinn, Chicago, Ill., assignor to Streeter-Amet Company, Chicago, Ill., a corporation of Illinois
Application September 27, 1952, Serial No. 311,931
4 Claims. (Cl. 73—65)



1. A weight and center of gravity computing apparatus comprising a pair of weight supporting devices adapted to engage and support spaced points on an object whose weight and center of gravity are to be determined, means in said devices to produce forces proportional to the weight supported by the devices respectively, a pair of adjustable force producing units, a force indicating instrument, adjustable controlling means connected to the devices and the instrument and having one position in which it connects one of the devices and one of the units to the instrument to indicate the difference in the forces produced thereby, the controlling means having a second position in which it connects both of said devices in series aiding relation to each other and the other of the units to the instrument to indicate the difference in the sum of the forces produced by the device and the force produced by the unit, a pair of adjustable force multiplying units connected to the controlling means and the force producing units to multiply the forces produced by the units respectively, one of the force multiplying units being adjustable in accordance with the distance between said points on the object and the other in accordance with the distance from one of said points to the center of gravity of the object, and the controlling means having a third position in which it connects the force multiplying units to the instrument to measure the difference in the forces developed by the force multiplying units.

2,735,292
TIRE THUMP MEASURING APPARATUS
David C. Apps, Brighton, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application September 11, 1952, Serial No. 309,124
7 Claims. (Cl. 73—69)

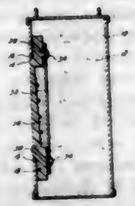


1. Apparatus for obtaining a measure of the intensity of tire thump vibrations resulting from the beating of successive higher order vibrations which are produced by the tires of a vehicle and are harmonically related to the rotational speed of the wheels thereof, said vibrations being included within a complex vibration pattern excited by the vehicle, said apparatus comprising, in combination, means for sensing and converting the vibrations produced by said vehicle into electrical waves representative thereof, means connected to said sensing means and separating from said electrical waves components thereof lying within a frequency band corresponding to the range over which said higher order vibrations are excited and produce said tire thump vibrations, means connected to said separating means for deriving from said wave components lying within said frequency band said tire thump vibrations corresponding to variations in the total intensity of said beating successive higher order vibrations, and means for indicating the intensity of said separated tire thump vibrations.

2,735,293
FLUID CONTENT GAUGE FOR LIGHTER
Erick L. Ahlgren, Houston, Tex.
Application August 27, 1952, Serial No. 306,536
4 Claims. (Cl. 73—73)

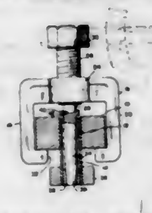
1. In a lighter having a fluid fuel container provided with a window opening, a translucid member disposed in said opening and having an elongated recess therein

opening inwardly of the container opposite said opening, said recess varying in depth from end to end thereof



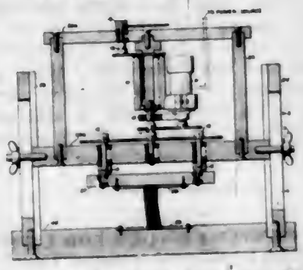
and having longitudinally spaced ribs therein, and a mass of finely divided material substantially filling said recess.

2,735,294
APPARATUS FOR TESTING THE EFFECTIVENESS OF TUBE ROLLING
Frank F. Fisher, Detroit, Mich., assignor to The Airetool Manufacturing Company, Springfield, Ohio, a corporation of Ohio
Application November 19, 1951, Serial No. 257,105
12 Claims. (Cl. 73—88)



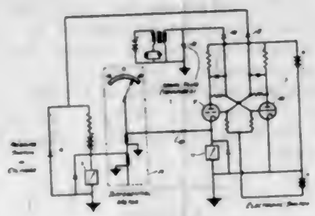
1. Testing apparatus for testing the effectiveness of tube rolling comprising a test block having a hole extending therethrough from end to end in which a tube is rolled, a support for said block extending across one end of said block and including means engaging the opposite end thereof, means on the portion of said support extending across said one end thereof and including a member extending into and movable axially of the hole in said block, means for connecting said member to a tube rolled in the hole in said block at a point beyond said block from said one end thereof to apply a pull to the rolled connection, actuating means for moving said member axially of the hole to free the tube from said block, and means for measuring the force required to move the tube longitudinally of the hole in said block.

2,735,295
APPARATUS FOR TESTING RUBBER
Raymond G. Piety, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application December 18, 1951, Serial No. 262,307
8 Claims. (Cl. 73—100)



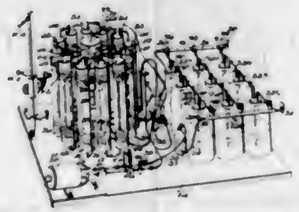
1. An apparatus for testing a sample of pliable material which comprises a first sample holding means for securing one side of said sample motionless; a second sample holding means spaced from said first sample holding means for securing and displacing the opposite side of said sample a predetermined distance radially from its axis extending between said first and second sample holding means so as to develop a constant shear in said sample; means for moving said second sample holding means along the perimeter of a circle, which is normal to the said axis of said sample, and which has a radius equal to the displacement developed in said sample; and means for measuring work done on said sample.

2,735,296
SPARK ADVANCE INDICATOR
Alfred E. Traver, Great Neck, N. Y., assignor to Socony Mobil Oil Company, Inc., a corporation of New York
Application August 10, 1953, Serial No. 373,386
5 Claims. (Cl. 73—116)



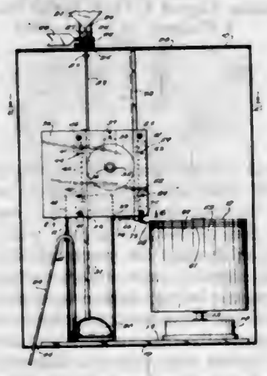
1. Apparatus for determining spark setting in an operating spark ignition engine comprising a pressure operated switch to be inserted in the spark plug opening of a selected cylinder, means for adjusting the operating pressure on said switch to cause it to close by compression pressure a sufficient time before top dead center to be closed when the spark event occurs and to permit its opening at an equal length of time after top dead center, a first electrical circuit closed by said switch and in said circuit measuring means to determine the portion of the engine operation cycle during which the switch remains closed, a second electrical circuit, means whereby the closing of said switch initiates current flow in said second circuit, means to maintain the removed spark plug operative to produce a spark while removed from the selected cylinder, means operated by the firing of said spark plug to stop the flow of current in said second circuit, and measuring means to determine the portion of the engine operative cycle during which the second circuit remains closed, whereby, from comparison with the reading from the first circuit the position of the spark event in the engine cycle can be determined.

2,735,297
PAPER HUMIDITY EXPANSION APPARATUS
Ladislav Boor, Bethesda, Md., and Thomas Di Filippo, Philadelphia, Pa., assignors to the United States of America as represented by the Secretary of the Army
Application May 12, 1954, Serial No. 429,414
7 Claims. (Cl. 73—159)
(Granted under Title 35, U. S. Code (1952), sec. 266)



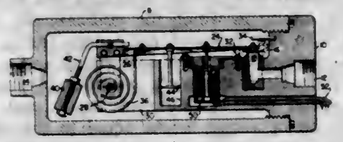
1. Apparatus for facilitating the measurement of the expansion under controlled humidity of hygroscopic sheet material specimens comprising, in combination, a support; a series of vertical specimen-holding testing tubes carried by the support and being transparent at least in part to permit visual inspection and measurement of the specimens from outside; conduit means connecting the testing tubes in series; all the testing tubes being hollow and sealed at both ends; air pump means and conduits connected to the series of testing tubes and constructed and arranged to force air through the testing tubes seriatim; a solution in a sealed container; conduit means delivering air from the series of testing tubes into said solution; conduit means to deliver air after passing through said solution to the suction side of the air pump means; and a specimen holder within each testing tube; the testing tubes being each of minimum dimensions to enclose the specimen holder and a specimen held thereby and to surround the specimen with a minimum volume of air; the entire apparatus providing a system sealed off from the atmosphere and being of small volumetric capacity so that the air circulated through the system will pick up its full complement of moisture, as determined by the character of the solution, within a minimum time.

2,735,298
RECORDING RAIN GAUGE
Charles Dispenza, Maplewood, N. J.
Application December 22, 1953, Serial No. 399,671
6 Claims. (Cl. 73—171)



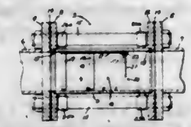
2. In a recording rain gauge, an open top receptacle for collecting rainfall, a tank disposed below said open top receptacle, piping arranged in communication between said open top receptacle and said tank for conveying the rainfall collected in the open top receptacle to and discharging the same in the tank, a motor driven recording drum, means mounting said recording drum in fixed parallel relation with said tank, a float having an upwardly disposed stem arranged in said tank, a rack affixed to said stem, a rack disposed in spaced parallel relation with reference to said first mentioned rack, a stylus affixed to the lower end of said last mentioned rack, a gear mounted for rotation between said racks, said gear having a toothed periphery means guidedly mounting said racks in engagement with the toothed periphery of said gear on opposite sides thereof for downward movement of said second mentioned rack and said stylus responsive to the upward movement of the first mentioned rack by the rising of the float in the tank with the collection of rainfall therein, a support for said open top receptacle mounted on said piping for pivotal turning movement, a vane carried by said support for directing said receptacle into the wind, and said receptacle having front and rear wall portions at the top thereof disposed in angular relation to the horizontal so as to slope in the direction of the rainfall when the receptacle is directed into the wind.

2,735,299
FLOWMETER
John F. Blackburn, Belmont, and Shih-ying Lee, Watertown, Mass., assignors, by mesne assignments, to the United States of America
Application April 22, 1952, Serial No. 283,730
8 Claims. (Cl. 73—228)



1. A flowmeter comprising a casing having a chamber within, inlet and outlet passages for said chamber, a nozzle connected to the inlet passage and discharging into the chamber, said nozzle having its downstream end outer walls tapered inwardly to intersect the nozzle bore at an acute angle so as to terminate the nozzle with a sharp edge, a plate larger in area than the cross-sectional area of the nozzle, said plate being mounted in a plane substantially normal to the nozzle axis and movable toward and away from the nozzle in response to variations in fluid flow therethrough to provide a variable orifice between the plate and the sharp edge of the nozzle, a spring for urging the plate toward the nozzle with substantially constant force over the range of movement of the plate, counterbalance means connected with the plate to render the restoring force on the plate substantially independent of gravity, means for indicating the spacing between plate and nozzle upon the flow of fluid therebetween, and means for limiting the movement of the plate from the nozzle to a distance approximately one-eighth the diameter of the nozzle to provide a substantially linear relation between fluid flow rate and orifice opening.

2,735,300
FLOW INDICATOR
William E. Dungan, Salem, and Raymond L. Watrous, Jr., Roanoke, Va., assignors to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application August 16, 1952, Serial No. 304,796
2 Claims. (Cl. 73—228)

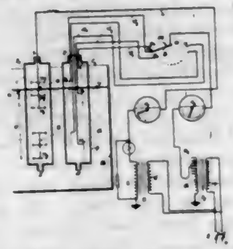


1. Flow-measuring apparatus for relatively viscous fluids comprising a substantially horizontal fluid conduit, a transparent section in the conduit, a relatively heavy weight member suspended from the top of said transparent section so that the center of mass of the weight member under no flow conditions in the conduit is no higher than the center of the conduit, a length of filamentary material for suspending said weight, and a detachable support in the transparent section to which said filamentary material is connected.

2,735,301
HIGH ACCURACY ELECTRIC LEVEL INDICATOR
Louis Schwob, Paris, France, assignor of one-half to Societe Anonyme Dite: "Appareillage V. F. B.," Argenteuil, France, a French company
Application December 31, 1952, Serial No. 328,856
Claims priority, application France January 18, 1952
4 Claims. (Cl. 73—304)

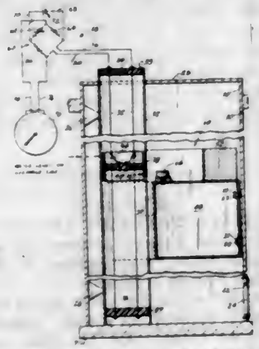
1. An electric level indicator comprising a metal sheath open at both ends and immersed in the liquid the level of which is to be ascertained, an insulated hollow mem-

ber within the sheath constituting part of a partition subdividing the inside of said sheath into two compartments, a primary limnimetric scale including a plurality of metal contact-pieces within said sheath and lying at superposed levels, resistances connecting said contact-pieces in series, said contact-pieces and resistances being inserted inside the first compartment of the sheath, a first milliammeter an electric circuit in which the milliammeter is inserted in series with the series of resistances and a supply of low A. C. voltage inserted in said circuit and a secondary limnimetric scale including a plurality of similar independent metal parts within said sheath and extending each over an operative height equal to the spacing between two corresponding successive contact-pieces of the first scale, each of said parts lying in horizontal register with the interval separating the two corresponding successive contact-pieces of the first scale, said metal parts



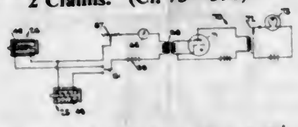
being inserted in the second compartment of the sheath and mounted therein insulatingly with reference to the sheath, partition and one another, said independent metal parts constituting resistances so arranged as to be progressively shorted out by the liquid to vary the effective resistance in the gauge circuit, a multiple way switch constituted by a common terminal, a plurality of connecting terminals and means selectively connecting said common terminal with the different connecting terminals, leads connecting each of said switch connecting terminals with the corresponding parts of the second scale, a second milliammeter, a circuit connecting said second milliammeter with the common terminal of the switch, a source of low A. C. voltage inserted in said circuit for feeding said second milliammeter and means for grounding the metal sheaths and adapted to close the corresponding circuits over the corresponding milliammeters and the immersed parts of the corresponding scales.

2,735,302
LIQUID LEVEL INDICATOR
Mackay C. Saylor, Montclair, N. J.
Application August 7, 1952, Serial No. 303,199
4 Claims. (Cl. 73—313)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. In a liquid-level indicating apparatus, a first elongated cylindrical tube positioned upright with its lower end submmerged in the liquid to be measured, a second elongated cylindrical tube of smaller diameter than that of the first tube and disposed upright within the first tube in fixed position with reference thereto, the first and second tubes being substantially co-extensive, a horseshoe magnet positioned within the first tube with its pole faces closely adjacent to the outer surface of the second tube on respective opposite sides thereof, a float within the first tube, the magnet being secured fixedly to the float to be buoyed to the surface of the liquid to be measured, a pair of resistance wires extending lengthwise inside the second tube substantially coextensive therewith and insulated therefrom, a cylindrical armature in the second tube and held at the level of the pole faces by the attraction of the magnet, the armature being provided with a pair of apertures companion to the pair of resistance wires for passage thereof, a bus bar secured fixedly to the armature and positioned to slide along the pair of resistance wires in circuit-closing contact therewith, and an electrical measuring device connected across the ends of the pair of resistance wires and operative to measure the resistance of those portions of the several wires of the pair within the circuit of the bus bar, as determined by the position of the float to indicate the surface level of the liquid to be measured.

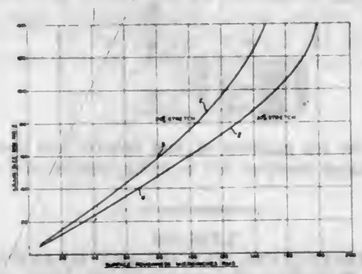
2,735,303
SEISMIC DEPTH GAUGING SYSTEM
Richard J. Haase, Houston, Tex., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application August 3, 1953, Serial No. 371,751
2 Claims. (Cl. 73—398)



1. In a fluid pressure indicator, a magnetic yoke comprising coaxial inner and outer cylinders separated by an annular gap therebetween, a magnetic material element permanently closing said gap at one end of the yoke, a mandrel passing through the inner cylinder and movable along the axis thereof, an armature carried by the mandrel, said armature being adapted to contact the faces of said cylindrical members perpendicular to the axis thereof to close magnetically said annular gap at the other end of the yoke, means comprising a diaphragm exposed to fluid pressure for applying pressure to the mandrel in such a direction as to move the armature out of contact with said yoke, a solenoid winding disposed in said annular gap, means comprising a source of current connected in circuit with the solenoid winding for applying to the armature an electromagnetic pull to move said armature in the opposite direction when said circuit is closed, current carrying means manually operable to change the intensity of the current in the solenoid to cause the solenoid to pull the armature into contact with the faces of said cylindrical members, signal means responsive to the electrical transient arising when said faces are contacted by said armature, and indicator means connected in said circuit for indicating the intensity of the current in the solenoid winding at the instant when said annular gap is magnetically closed by said armature against the effect of said pressure.

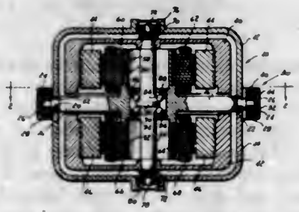
2,735,304
METHOD OF EVALUATING COPPER BASE ALLOYS
John D. Berwick, Jr., North Haven, Conn., assignor to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application February 27, 1952, Serial No. 273,758
4 Claims. (Cl. 73—432)

1. The method of determining the grain size of a test sample of a rolled metal having a polyhedral structure which comprises stretching the test sample by a predetermined amount and quantitatively measuring the surface roughness of the sample after such stretching, whereby the grain size of such test sample may be determined by



converting the so measured surface roughness into grain size by means of experimentally determined data on the relation between grain sizes and corresponding surface roughnesses of rolled specimens of such a metal which have been stretched such predetermined amount.

2,735,305
BALANCED GYROSCOPE
James C. Mathiesen, Pleasantville, N. Y., assignor, by mesne assignments, to Norden-Ketay Corporation, a corporation of Illinois
Application June 3, 1952, Serial No. 291,448
4 Claims. (Cl. 74—5)



1. A gyroscope having a housing, a rotor mounted in the housing for rotation about a spin axis, means for mounting the housing for pivotal movement about a tilt axis extending at right angles to the spin axis, said rotor being formed with two symmetrical parts of equal mass, a shaft coaxial with the spin axis of the rotor, means for mounting said rotor parts upon said shaft for rotation therewith, a bearing support member carried by the housing symmetrical with a plane passing through the tilt axis at right angles to the spin axis, a central bearing for said shaft, means for mounting said bearing upon said bearing support member symmetrical with the plane thereof, coacting means carried by said shaft longitudinally central thereof and said bearing for positioning the center of the shaft against any axial movement with respect to the housing, a second bearing carried by the housing on one side of the plane, a third bearing carried by the housing on the other side of said plane symmetrical with the second bearing, said bearings being disposed coaxially with said shaft, means including the second bearing for floatingly supporting one end of the shaft and means including the third bearing for floatingly supporting the other end of the shaft.

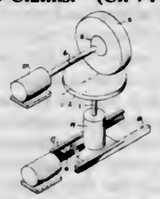
2,735,306
TORQUE INCREASING MEANS
Otis Pendergast Reed, Brazil, Ind.
Application October 16, 1951, Serial No. 251,590
1 Claim. (Cl. 74—120)

The combination of a motor; a rack bar; a pawl reciprocated by said motor over teeth on the bar advancing the bar in one direction; a spring resisting said advancement; a hold pawl engaging said rack teeth and retaining the bar in advanced positions against the resistance of said spring; both of said pawls being yieldingly biased toward said bar teeth; a pawl lift member; lost motion means interconnecting both of said pawls with said lift member; means latching said lift member in a position holding said pawls from the path of said teeth; latching means actuating mechanism comprising a snap-action past-center rocker; a shiftable connection between said rocker and said lift member, a lost motion connection with said rack bar and said rocker shifting the rocker to move said lift member through said connection into said pawl holding position upon predetermined advancement of said bar releasing the



bar to reverse travel under pull of said spring, a latch bar rockably biased toward said lift member, a lever system connected with said rocker and holding said latch bar away from said lift member during said bar advancement, said lever system being actuated by said rocker shifting to place the latch member in engagement with said lift member and thereby maintain the pawls out of the path of the bar teeth during said bar reverse travel, and an abutment on said bar shifting said leverage system upon predetermined reverse bar travel moving said latch bar out of lifting member engagement and simultaneously returning said rocker to its initial position and releasing said lift member allowing said pawls to return to bar tooth contact; and an output shaft driven by said bar reverse travel.

2,735,307
MECHANICAL INTEGRATING DEVICE
Arnold T. Nordsieck, La Jolla, Calif.
Application December 24, 1951, Serial No. 263,095
8 Claims. (Cl. 74—194)

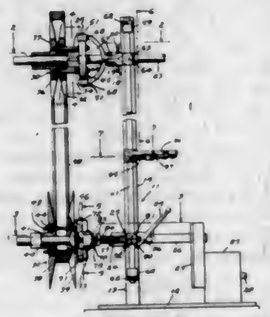


1. A mechanical integrating device comprising a flat rotatable disc, means for rotating said disc about its axis of symmetry, an output shaft supported with its axis normal to and intersecting the axis of said disc, a wheel engaging the surface of said disc and having a rounded tread portion and pivotally connected to said output shaft with angular freedom with respect thereto except about the axis of said shaft, spring means for normally holding said wheel perpendicular to said shaft, and means for controllably translating said disc with respect to said wheel along the axis of said shaft while said disc is rotating, whereby the output rotation of said shaft bears the same ratio to the rotation of said disc as the distance between the axis of said disc and the point of contact between said wheel and said disc bears to the radius of said wheel.

2,735,308
VARIABLE SPEED DRIVE AND CLUTCH
Alf A. Peterson, Hallock, Minn.
Application February 11, 1955, Serial No. 487,575
4 Claims. (Cl. 74—230.17)

1. An apparatus of the character described comprising an elongated frame member, parallel shafts journalled in

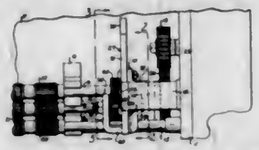
said frame member including a drive shaft and a driven shaft, a first belt pulley connected to the driven shaft, a second belt pulley connected to the drive shaft, an endless V-belt trained over said belt pulleys, each belt pulley including a fixedly mounted cone shaped disk forming one pulley section and a slidably mounted cone shaped disk section, means slidably connecting the fixed and slidable sections of each belt pulley for rotation of said sections as a unit with the shaft individual thereto, a control rod, bearing means supported by the frame member in which said control rod is journalled for rotation about an axis disposed substantially crosswise of the axes of said shafts, a first lever means and a second lever means secured to the control rod and projecting laterally therefrom, a first thrust bearing means swivelly and non-slidably connected to the slidable connecting means of said first belt pulley and disposed between the frame member and the fixed pulley section thereof, said fixed pulley section being disposed between said first thrust bearing means and the slidable pulley section of the first belt pulley, a connecting means pivotally connected to said first thrust bearing means and to said first lever means, a second thrust bear-



ing means swivelly mounted on the second belt pulley, between said belt pulley and the frame member and bearing directly against the slidable belt pulley section thereof, a second connecting means pivotally connected to said second thrust bearing means and to said second lever means, manually actuated means connected to and projecting laterally from the control rod for turning the control rod in either direction for simultaneously exerting a thrust or pull on said first and second thrust bearing means through the connecting means individual thereto for opening one of the belt pulleys and simultaneously closing the other belt pulley for radially varying the position of engagement of the belt with the belt pulleys for varying the relative speed of rotation of the belt pulleys and the shafts individual thereto, said second connecting means including a rod, a collar pivotally connected to said second lever means for slidably engaging the rod of said second connecting means, and spring means carried by said second connecting means and bearing against said collar for urging the second connecting means toward said second belt pulley for urging the second belt pulley toward a closed position for yieldably tensioning the belt.

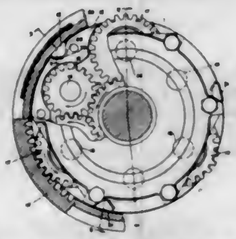
2,735,309
CHANGE GEAR SUPPORT FOR SPINNING FRAMES AND THE LIKE
Gilbert W. Tew, Spartanburg, S. C., assignor, by mesne assignments, to Deering Milliken Research Corporation, Pendleton, S. C., a corporation of Delaware
Application November 22, 1952, Serial No. 322,113
6 Claims. (Cl. 74—325)

1. A change gear bracket for spinning machine and the like adapted to be secured to a standard on said machine and serving to support change gears comprising a generally U-shaped member having a web portion and two extending parallel leg portions, said leg portions each having a bore therein, a stud rotatably mounted in said bores, means for securing the change gears on said stud



between the leg portions of said bracket and means on said U-shaped member for securing said bracket to said machine.

2,735,310
ANTIRATTLING PLANETARY GEARING
Forest R. McFarland, Huntington Woods, Mich., assignor to Studebaker-Packard Corporation, a corporation of Michigan
Application September 25, 1951, Serial No. 248,137
8 Claims. (Cl. 74—409)

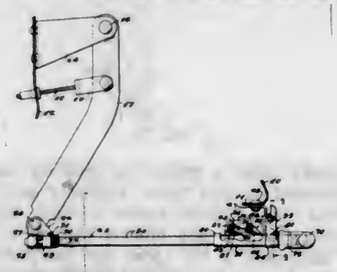


1. A means for dampening the effects of vibration produced by backlash or the like in a planetary gearing means comprising a driving shaft and a driven shaft, a sun gear, a planetary disc shaped carrier member for supporting a pinion gear train having inner and outer gears, and a ring gear meshing with the outer pinion gear of said train, said sun gear and said carrier each being fixed respectively to one of said shafts, said ring gear having an integral cylindrical collar member generally concentrically arranged with respect to and surrounding at least a portion of said carrier, said carrier being mounted to rotate within said collar, and a plurality of one-way friction shoe means, said carrier having a plurality of slantingly disposed slots formed therein, said shoes being slidingly mounted in said slots, springs trapped between the floor of said slots and said shoes to urge them outwardly, said shoes having an outer surface formed to the radius of the periphery of said disc shaped carrier, and the outer surfaces of said shoes being adapted to engage against the inside surface of said collar to permit relative movement between said members to take place more easily in one direction than in the other.

2,735,311
MECHANISM CONTROL
Robert S. Hinsey, Toledo, Ohio, assignor to The Bingham-Herbrand Corporation, Toledo, Ohio, a corporation of Ohio
Application February 16, 1951, Serial No. 211,398
4 Claims. (Cl. 74—502)

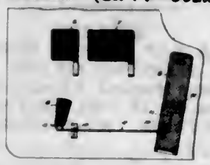
2. Mechanism for actuating the parking brakes of a vehicle including, in combination, a support; a U-shaped bracket secured to the support; a rod adapted to be connected to the brake mechanism to be controlled, said bracket having guide means formed thereon, said rod extending through said guide means and adapted for longitudinal and limited rotary movement relative to the bracket; a pair of longitudinally spaced shafts supported by the walls of the U-shaped bracket; a pair of channel-shaped pawls, each of said pawls having a planar bight

portion and spaced parallel wall portions, said wall portions having openings through which the shafts extend whereby the pawls are pivotally supported upon said shafts, said rod being formed with a plurality of longitudinally spaced teeth, the forward edge surface zones of the planar portions of the pawls being hardened and adapted for engagement with the teeth to retain the rod in a longi-



tudinally adjusted position, said rod being formed with an uninterrupted surface whereby rotation of the rod disengages the pawls from the teeth of the rod to facilitate longitudinal retractive movement of the rod, and a spring formed of spring wire having loop portions surrounding the shafts and end portions engageable with the pawls for normally biasing the pawls into engagement with the rod.

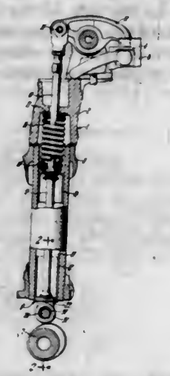
2,735,312
ACCELERATOR PEDAL OPERATING ATTACHMENT FOR MOTOR VEHICLES
Charles E. Howard, Troy, N. C.
Application March 19, 1953, Serial No. 343,375
3 Claims. (Cl. 74—562.5)



1. The combination with the accelerator pedal and floor board of a motor vehicle, of an accelerator operating attachment, comprising a rod, means for pivotally mounting said rod on such floor board, a bracket secured to the under surface of said accelerator pedal, a bearing block pivotally mounted within said bracket, said bearing block having an opening through which one end of said rod extends, pivotally connecting said rod with the said accelerator pedal, and the other end of said rod providing an auxiliary accelerator pedal for movement of the first-mentioned accelerator pedal.

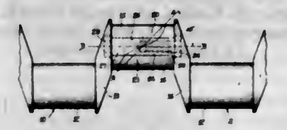
2,735,313
FOLLOWER
John Dickson, Huntington Woods, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 22, 1950, Serial No. 157,611
10 Claims. (Cl. 74—569)

9. In an articulated cam follower means, a cam engaging roller, a shaft radially supporting the roller, a bifurcated portion embracing the roller and supporting the shaft on opposite sides of the roller, said roller having a bore journaled by the shaft, said bore being bell-mouthed at both ends to accommodate deflection of the shaft under bending loads imposed by the roller, said bifurcated portion terminating at its end remote from the roller in a cup-shaped portion guided for axial reciprocation toward and away from the cam, a first push rod having one end socketed within said cup-shaped portion and its opposite end extending longitudinally outward therefrom, a second push rod in series with the first push rod, and a member in direct thrust transmitting engagement with the adjacent ends of the push



rods, said member being socketed in one of said adjacent ends and socketably receiving the other of said adjacent ends, said member being guided for reciprocation in alignment with said cup-shaped portion.

2,735,314
SECTIONAL CRANKSHAFT
Carl H. Melle, Fort Wayne, Ind., assignor to International Harvester Company, a corporation of New Jersey
Application January 23, 1952, Serial No. 267,868
1 Claim. (Cl. 74—598)

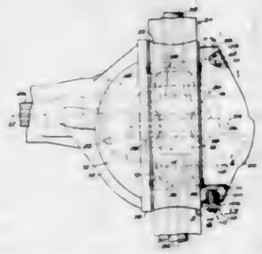


A crankshaft connecting said rod journal construction, comprising a first crank arm, a first journal portion integral therewith and having a circular outer surface, said journal portion having a free end; a second crank arm, a second journal portion integral therewith and having a circular outer surface, said second journal portion having a free end adapted to abut the free end of said first journal portion to form a cylindrical journal, the abutting surfaces of said free ends having complementary sine generated contours generated from a single flat plane disposed at an angle of approximately 45° with respect to the longitudinal axis of said cylindrical journal, the longitudinal axis of said cylindrical journal intersecting said flat plane at a point spaced substantially midway between said first and second crank arms; and clamping means for maintaining said journal portions in abutting relationship.

2,735,315
DIFFERENTIAL PEDESTALS HAVING LONGITUDINALLY ADJUSTABLE ANTISPREAD MEMBER
Richard L. Zenker, Grosse Pointe Woods, Mich., assignor to Studebaker-Packard Corporation, a corporation of Michigan
Application August 31, 1953, Serial No. 377,396
2 Claims. (Cl. 74—607)

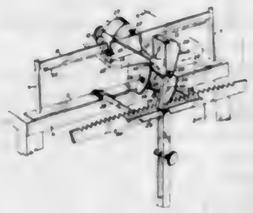
1. In combination in a generally elongated rear axle housing having central axially aligned front and rear openings, a pair of spaced apart bearings for rotatably supporting a differential case between said openings, a differential carrier having a structure for receiving each of the bearings and each including a bearing pedestal, a bearing cap bolted thereto, and a bearing adjuster cap

threadably received in each bearing pedestal and cap structure, a domed pressed sheet metal cover having a radially disposed base flange for attachment to the margin of the rear axle housing opening and being provided with a flattened wall-portion in the side of the dome in adjacency to at least one of said bearing caps, said one bearing cap having a thickened boss near the mid-point thereof, a nut passed through an opening in a flattened wall portion and



being rigid therewith, and a pre-loading stud threadably received in the nut, said thickened boss on the bearing cap having a locking pin passed through and anchored within a transverse aperture therein to engage and restrain movement of the bearing adjuster cap in a pre-adjusted locked position, and having the end surface thereof in direct engagement with the pre-loading stud to restrain deflection of the cap in a stud-determined pre-loaded position of the corresponding bearing.

2,735,316
SAW SHARPENING DEVICE
Charles D. Keck, East Mauch Chunk, Pa.
Application September 11, 1952, Serial No. 309,013
2 Claims. (Cl. 76—40)



1. In a saw sharpening device of the type having clamping means to hold a saw to be sharpened in a fixed position, rotary grinding means, a drive motor for said grinding means, a carriage for supporting said grinding means, means supporting said carriage for movement in a direction parallel to the saw, and means mounted on said carriage to adjustably support said grinding means, the improvement which comprises a supporting arm pivoted on said carriage and freely movable about a horizontal axis, an inverted U-shaped frame secured by one leg to the end of said arm and positioned directly over the saw, said drive motor being pivotally mounted on the legs of said U-shaped frame and being freely movable about an axis normal to the pivot axis of the supporting arm, a grinding wheel shaft assembly mounted directly below and supported by said drive motor and being freely rotatable about an axis normal to the pivot axis of the motor in said U-shaped frame, said shaft assembly including a shaft driven by said motor and rotatable about an axis normal to the axis of rotation of said shaft assembly, said grinding means comprising a pair of grinding wheels mounted on opposite ends of said shaft, and a hand grip member secured to the shaft assembly for manipulating said grinding wheels in a universal movement with respect to the supporting carriage.

2,735,317
PRODUCT DISPOSAL FOR MACHINE TOOLS
Robert H. Sprink, Maumee, Ohio, assignor to Toledo Die & Manufacturing Co., Maumee, Ohio, a corporation of Ohio
Application March 23, 1953, Serial No. 344,042
1 Claim. (Cl. 78—96)



In combination, a frame, an anvil on said frame, a ram mounted on said frame vertically movable to and from said anvil, bracket means on said frame, a rock shaft supported by said bracket means, a paddle pivotably supported at its upper end on said shaft, said paddle having an intermediate length extending downwardly past the bottom of said ram and having its lower end inwardly directed to be under said ram in the upward position thereof to catch any work piece that may be temporarily stuck to said ram and subsequently released, means biasing said paddle inwardly toward said ram to the aforesaid position, said paddle having its end under said ram and its length at an angle to the vertical with the lower portion thereof in the path of said ram so that upon downward movement said ram will engage said length and cam said paddle out of the way, and an air blast positioned to blow a work piece off of said paddle end before the ram cams the paddle out of the way, thusly preventing work piece from falling upon said anvil.

2,735,318
BOTTLE CAP OPENER WITH CAP PIERCING MEANS
James Hrebicek, Chicago, Ill.
Application July 15, 1953, Serial No. 368,095
4 Claims. (Cl. 81—3.48)



1. A device for turning caps of the screw type for bottles, jars or the like, said device comprising a body member for placement against the top of a cap, spaced gripper members extending from the body in the same direction from the plane of the body and adapted to engage the sides of the cap when the device is turned in a direction to loosen the cap, said gripper members being spaced apart a distance less than the diameter of the cap across said sides, and means on the body for piercing the cap, said piercing means being disposed in a sector of the cap bounded by diameters struck from each gripper member at the point of contact of the gripper member with the side of the cap and exterior to and trailing the sector included between the gripper members when the device is turned in the said direction.

2,735,319
WIRE STRIPPING SCISSORS
Henry W. Schaufelberger, Union, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application July 3, 1952, Serial No. 297,108
2 Claims. (Cl. 81—9.5)

1. A wire stripping unit for a pair of pivotal scissors comprising members mounted for movement into open

and closed positions about a pivot and having companion recesses in adjacent surfaces to close about a covered wire and remove a desired length of the covering from the wire during relative movement of the closed members and the wire, and a guide mounted on one of the members



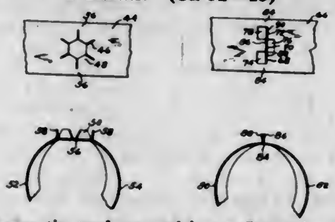
and having a projection extending transversely of the space between the members when in open positions to bar movement of the wire beyond the recesses, the projection having a surface extending arcuately about the pivot and touching the recesses at all times to assure positioning of the wire in the recesses.

2,735,320
WIRE STRIPPING DEVICE
Ralph W. Green, Elizabeth, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application October 28, 1953, Serial No. 388,728
The terminal 15 years of the term of the patent to be granted has been disclaimed
5 Claims. (Cl. 81—9.5)



1. A wire stripping device comprising an elongated frame member, a handle member mounted at one end of said frame member, clamping arms pivotally mounted on said frame member, said arms terminating in clamping jaws at one end and engaging said handle member at the other end, a stripping assembly slidably mounted on said frame member, said assembly comprising stripping knives adapted to be closed on each other and means for closing said knives on an insulated wire, said stripping knives being disposed adjacent said clamping jaws, and means mounted on said stripping assembly by which said stripping assembly may be drawn away from said clamping jaws.

2,735,321
FINGER TIP TOOLS
Frances Browne and Harry A. Browne, Jordan, N. Y., assignors of one-fourth to John T. Mains and one-fourth to Francis P. Keiper, both of Syracuse, N. Y.
Application November 26, 1952, Serial No. 322,748
2 Claims. (Cl. 81—13)



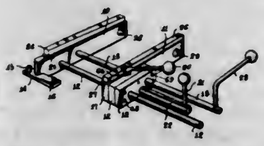
2. A finger tip tool comprising a flat strip of resilient material formed into a tapered C-shape open ring adapted to resiliently fit on the end of a finger tip, and threaded-fastening-engaging members struck outwardly from said strip material and centrally thereof, said strip being rendered more flexible in the region of said struck out members than elsewhere, said members having their outer tips movable circumferentially with respect to one another upon flexing said strip in said region by increasing the diameter of the open ring whereby to grip a threaded fastening by circumferential relative movement between said tips.

2,735,322
PIVOTED HAND TOOL FOR COMPRESSING CLIPS AROUND FLANGES
Sidney S. Meisler, Queens Village, N. Y.
Application January 17, 1952, Serial No. 266,853
1 Claim. (Cl. 81—15)



A device for forming a clamp around the superposed rolled edges of the ends of two drums, the device comprising a housing, said housing comprising spaced parallel plates, said plates having aligned slots to receive said rolled edges and further having aligned recesses in the inner surfaces substantially along the center lines of said plates and bisecting the slots at a right angle, a pair of jaw members coacting with the aligned slots in opposed relationship intermediate said plates, said jaw members having aligned and downwardly directed recesses formed in the opposed surfaces thereof, pivotal mounting means for each jaw member through said plates and recess and dividing each jaw member into a power arm and a weight arm, an anvil support disposed in the recesses of said jaw members and held in place by the pivotal mounting means thereof, an inverted U-shaped anvil disposed over said anvil support, said anvil having a rib on the outer surface of each side coacting with the aligned recesses in said plates, means for removably securing said anvil to said plates, and handle means for the power arms of said jaw members, said handle means comprising two rearwardly extended members, pivotal mounting means for said members slidable in the longitudinal recesses of said plates and dividing each member into a second weight arm and a second power arm, and means for pivotally connecting together one of the second mentioned weight arms to the power arm of one of the jaw members.

2,735,323
QUICK-SETTING VISE CLAMP
Thomas D. Phillips, Laguna Beach, Calif.
Application August 27, 1953, Serial No. 376,771
3 Claims. (Cl. 81—17)



1. A clamp comprising in combination: a pair of parallel guide rods; a fixed jaw secured to said guide rods; a movable jaw having bores slidably receiving said guide rods; a block fixed to said movable jaw and having a recess therein through which said guide rods pass; a locking plate within said recess having an aperture loose-

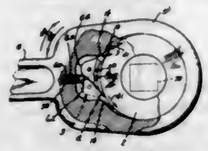
ly passing one of the guide rods; a second locking plate within said recess having an aperture loosely passing the other guide rod; means normally positioning said locking plates in a plane normal to said guide rods; and cam means mounted on said block for engaging and camming said locking plates to grip said guide rods, said cam means being positioned to engage one of said plates prior to the other whereby said one plate will be gripped to its rod prior to the gripping of the other plate to its rod, so that, while said other plate remains free to slide on its rod, said cam means will react against said first gripped plate to slightly rock said movable jaw, and after both plates are gripped to said rods, said cam means will react simultaneously against both gripped plates to slidably advance said movable jaw.

2,735,324

FRICTION ACTION RATCHET WRENCH

Maurice H. Goldwater, Glendale, Calif., and Vernon R. Hermanson, Winona, Minn.

Application September 11, 1953, Serial No. 379,488
2 Claims. (Cl. 81—60)



1. In a ratchet wrench of the type described, a head portion provided with a concentric annular recess for supporting a ratchet-head cylinder, an integral handle extended rearwardly from the head portion, said cylinder having a smooth periphery and being provided with means for supporting a wrench socket extended axially from one face thereof, an offset recess disposed rearwardly of the annular recess and joined thereto by rounded shoulder portions symmetrically disposed with respect to the handle axis, a triangularly-shaped pawl slidably supported in said offset recess, said pawl having a gripping surface concentric with the periphery of the cylinder, laterally extended wedge-shaped projections for cooperation with the respective shoulder portions, and a rounded apex for cooperation with a spring-pressed biasing means, manually operated means for positioning the pawl at a selected side of the handle axis, whereby the biasing means will cause the corresponding wedge-shaped projections to wedge between the cylinder periphery and the contiguous shoulder portion, thereby locking the cylinder to the head for turning the workpiece in a preselected direction.

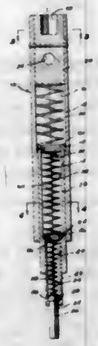
2,735,325

MULTIPLE WRENCH WITH TELESCOPING SECTIONS

Hilton A. Rudd, Sr., Woodbridge, Va.

Application September 1, 1954, Serial No. 453,494
2 Claims. (Cl. 81—71)

2. A multiple implement for use with screws of the type having tool engaging heads, said implement comprising a tubular shell having a polygonal internal contour which conforms to the external contour of the head of a screw, an internal shoulder formed in the shell and extending inwardly therefrom intermediate the ends thereof to define a stop, a tubular plunger having a polygonal internal contour which conforms to the external contour of the head of a second and also smaller screw and having a polygonal external contour which conforms to the internal contour of the tubular shell, said plunger being mounted in the tubular shell to rotate therewith and to move longitudinally through one end thereof, a flange carried by the plunger and extending outwardly therefrom adjacent the end thereof and within the tubular shell for engaging the shoulder and arresting outward movement of the plunger, a plug closing the end of the tubular shell remote from that through which the plunger moves, said plunger having a turning tool receiving socket extending thereinto through the end thereof remote from the shoulder, a compression coiled spring within the tubular shell and bearing on the plug and on the flange for yieldingly projecting the plunger through the end of the tubular shell remote from the plug, a plug closing the end of the tubular plunger adjacent the flange, an internal shoulder formed in the tubular plunger and projecting inwardly therefrom intermediate the ends thereof, a socket mounted



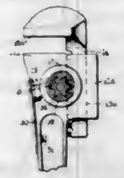
in the tubular plunger to rotate therewith and to move longitudinally through the end thereof remote from the plug, an annular flange carried by the socket and extending outwardly therefrom and within the tubular plunger for engaging the shoulder in said plunger and limiting outward movement of the socket relative to the plunger, said socket having a polygonal internal contour adapted to fit the head of a still smaller screw, and a compression coiled spring within the tubular plunger and bearing on the socket and on the plug in the tubular plunger for yieldingly holding said socket projected through the end of the tubular plunger remote from the plug.

2,735,326

QUICK-ADJUSTING WRENCH

Porter S. Morgan, Westport, Conn., assignor to I. L. Hartenberg, Fairfield, Conn., as trustee

Application April 22, 1952, Serial No. 283,559
14 Claims. (Cl. 81—100)



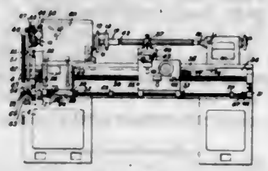
1. An adjustable wrench comprising a pair of jaws having relative closing and opening movement, one of said jaws having a shank provided with tooth formations extending along the direction of said movement; a toothed wheel rotatably carried by the other jaw, meshing with said tooth formations; a friction brake wheel secured to the toothed wheel to turn therewith and control the turning thereof, both said wheels being free to rotate in response to relative closing movement of said jaws; means providing a fixed brake surface on the wheel-carrying jaw, said brake surface being inclined with respect to the direction of movement of said shank and being engageable by an annular portion of said brake wheel; means on said wheel-carrying jaw, guiding said brake wheel into wedging engagement with said brake surface to lock the wheels against turning in response to force applied to the toothed wheel by said tooth formations in the direction of opening movement thereof, thereby to prevent opening of the jaws, said brake wheel having an appreciably greater diameter than the maximum diameter of the toothed wheel and the angle of inclination between the brake surface at the point of engagement thereof and the direction of movement of the shank being relatively large, thereby to enable the brake wheel to effectively prevent slippage of said wheels during said application of force to the gear wheel, said large angle of inclination providing for ready release of the wedged brake wheel in response to transaxial force applied thereto; and an elongate handle affixed to and extending from one jaw, for manipulating the jaws as a whole when the wrench is being used.

2,735,327

AUTOMATIC THREAD STOP MECHANISM

Eugene L. Ritter, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Co., Cincinnati, Ohio, a corporation of Ohio

Application November 12, 1952, Serial No. 319,903
2 Claims. (Cl. 82—21)



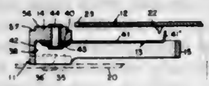
1. In a lathe having a bed, a headstock mounted thereon and a lead screw journaled on the bed for driving a tool carriage, the combination with a power driven spindle in said headstock, of a one-tooth clutch for operatively connecting said spindle to said lead screw, a control rod mounted on the bed for axial movement, a pair of levers supported on the bed for opposite rotation in response to axial movement of the rod in either direction, a shifter arm for said one-tooth clutch, said levers having a lost motion connection to said shifter arm whereby one direction of axial movement of the rod will cause one lever to actuate said shifter in a prescribed direction, and the other direction of axial movement of said rod will cause the other lever to move said shifter in the same prescribed direction.

2,735,328

MUSIC COMB MOUNTING MEANS

Joseph F. Bangs, Burbank, and Theodore R. Duncan, North Hollywood, Calif.; said Bangs assignor to said Duncan

Application October 2, 1950, Serial No. 187,846
8 Claims. (Cl. 84—94)



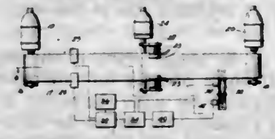
1. In a music producing device, a mounting base adapted to be secured to a sounding board, comprising a body formed to provide an elongated music comb mounting section providing one surface against which a music comb can be mounted and a second surface for abutting engagement with the sounding board, and extension means spaced from the plane of said second surface projecting laterally of said comb mounting section providing a bearing support for rotatably mounting a plucking disk said extension means comprising a pair of converging arms extending from the ends of said comb mounting section and terminating in an apertured boss providing a bearing surface against which to secure a plucking disk.

2,735,329

TEAR DETECTING AND INDICATING MEANS FOR SHEET METAL

Frederick A. Meunier, Cleveland, Ohio, assignor to Republic Steel Corporation, Cleveland, Ohio, a corporation of New Jersey

Application March 29, 1950, Serial No. 152,740
2 Claims. (Cl. 88—14)



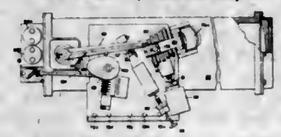
1. In combination, a continuous strip mill including means for feeding a web of sheet metal; a winder for forming the web into a coil; a detector head including means for projecting a beam of light at an adjustably predetermined zone on the web and a light-sensitive device responsive to light passing through discontinuities of the web in the said zone; means for amplifying the response of the light-sensitive device; and means actuated by the amplifying means and positioned ahead of the winder for fixing a marking tape on the web adjacent the position of discontinuities discovered by the detector head so that the tape extends from the margin of the web and of the coil.

2,735,330

SPECTROGRAPH SYSTEM WITH MOTOR CONTROLLED DISPERSING ELEMENT

Norman E. Polster, Huntingdon Valley, Pa., assignor to Leeds and Northrup Company, Philadelphia, Pa., a corporation of Pennsylvania

Application August 10, 1951, Serial No. 241,172
16 Claims. (Cl. 88—14)



1. In a spectrograph system, a monochromator having a light dispersing element associated with an arm movable to vary the wavelength of the output radiation, a cam for engaging said arm, a turret having adjustable stops spaced for sequential positioning in the path of said arm for successive angular positions of the turret and preset respectively to correspond with the wavelengths of different spectral lines of the dispersed radiation, a first motor for driving said cam for controlling rocking movement of said arm away from and back toward engagement with a turret stop, a second motor for actuating said turret sequentially to position said stops for engagement by said arm, and means for precluding actuation of said turret when said arm is in the path of said stops comprising switching means in circuit with said second motor and actuated by said first motor to energize said second motor when said cam driven by said first motor is in engagement with said arm and holding it clear of said path.

2,735,331

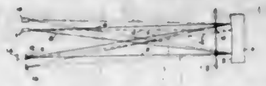
APPARATUS FOR OPTICAL INSPECTION OF GLASS SHEETS

Harold A. McMaster, Genoa, and Roy W. Wampler, Toledo, Ohio, assignors to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a corporation of Ohio

Continuation of application Serial No. 90,806, May 2, 1949 and forfeited. This application February 15, 1954, Serial No. 410,180
15 Claims. (Cl. 88—14)

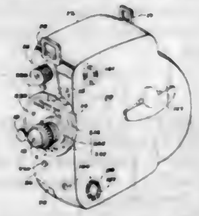
1. In an apparatus for inspecting glass sheets for wedge effects producing deviations of light rays passing there-

through, in combination, means for conveying glass sheets along a definite path, a concave mirror behind but adjacent to and facing said conveying means, a point source of light in front of and spaced from said conveying means for illuminating the mirror, an opaque screen of limited



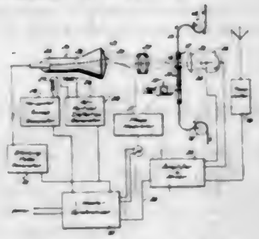
area located at the image plane of the mirror and laterally of said source of light for intercepting light rays that are undeviated by glass sheets on said conveying means, and a photoelectric device for receiving light reflected from the mirror that is deviated by said glass and passes the screen.

2,735,332
MOTION-PICTURE CAMERA
Joseph Mihalyl, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application June 21, 1954, Serial No. 437,922
19 Claims. (Cl. 88—16)



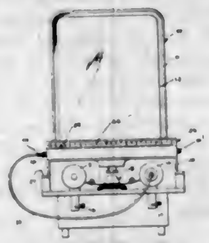
17. In a motion-picture camera the combination of a casing; a supply spindle adapted to receive a supply roll of film, a take-up spindle; a film gate provided with a pair of exposure apertures in side-by-side relation for exposing opposite halves of a film strip as it is moved through the gate in opposite directions; shiftable means for driving the film in opposite directions for the successive exposure of each half thereof; means for automatically stopping and locking said driving means when a given length of film just short of that contained on the supply roll is fed to the take-up spindle; means for shifting said driving means to reverse the direction of drive of the film; and means actuated by said shifting means for releasing said driving means to run the film from the take-up spindle back onto the supply roll.

2,735,333
MOTION PICTURE-TELEVISION SYSTEM WITH INTERMITTENT FILM MOVEMENT
George Alfred Mitchell, Pasadena, Calif., assignor to Mitchell Camera Corporation, Glendale, Calif., a corporation of Delaware
Application July 14, 1951, Serial No. 236,751
5 Claims. (Cl. 88—18.4)



1. An intermittent film movement of the claw type, comprising in combination with a film guide, a pivot spaced transversely from the plane of the film guide, a claw arm slidingly pivoted at one end on the pivot, extending from the pivot toward the film guide, and carrying a film engaging claw at its free swinging end, a rotatable pull down cam engaging the claw arm to move the free end of the arm in a movement cycle composed of a pull down stroke and a return stroke longitudinal of the film guide, the engagement of the cam with the claw arm allowing movement of the claw arm and its claw radially of the pivot and transversely of the film guide into film-meshing and unmeshing positions, a rotatable meshing cam mounted for rotation about the pivot axis, two cam followers mounted on the claw arm at diametrically opposite sides of the pivot axis and engaging the periphery of the meshing cam at diametricaly opposite points, the meshing cam being composed of first and second cam members, the first cam member being peripherally engaged by one of the followers and having a peripheral cam face with two projecting cam lobes, spaced 144° apart about the cam axis, and engaging said follower to move the claw arm into film meshing position, the second cam member being peripherally engaged by the other follower and having a peripheral cam face complementary in form to the cam face of the first cam, the pull down cam driving the claw arm through one complete movement cycle for each revolution of the cam, and means for driving the two cams in the ratio of five revolutions of the pull down cam for each revolution of the meshing cam.

2,735,334
INDEXING DEVICE
Herbert F. Emery, White River Township, Muskegon County, and Donald E. Peru, Fruitport, Mich.
Application April 16, 1952, Serial No. 282,724
2 Claims. (Cl. 88—24)

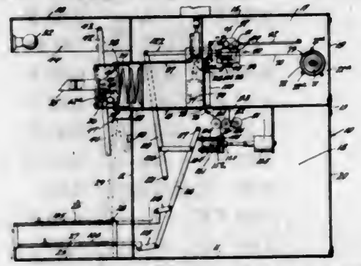


1. In a structure for determining the location of a portion of a film reel, the combination comprising: a micro-film reader having a film take-up spindle and means for actuating said spindle; an indexing device usable with said micro-film reader and mounted externally thereof, said indexing device including: an elongated frame having a pair of end members, a screw rotatably supported at its opposite ends upon and between said end members, an indicia strip and means removably mounting same upon said frame parallel with and adjacent to said screw, a rider having means thereon engaging said screw for movement lengthwise thereof upon rotation of said screw, an indicator on said rider extending partially across said strip, a reel mountable upon and rotatable with said spindle, and a flexible cable co-axially secured at one end thereof to said reel, the other end of said cable being secured to one end of said screw.

2,735,335
PHOTOGRAPHIC APPARATUS
Ralph R. Shaw, Washington, D. C.
Application August 15, 1952, Serial No. 304,550
17 Claims. (Cl. 88—24)

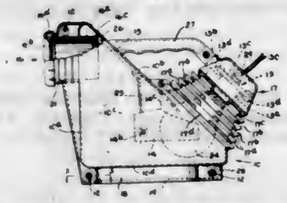
1. Photographic apparatus comprising a camera body, a stage associated with said camera body for supporting an object to be photographed at a predetermined ratio

of size of image to size of object, a camera associated with said camera body including a movable lens assembly and means for moving an image receptive strip in the appropriate plane therewithin, a second stage associated with said camera body for supporting an object to be photographed at a different ratio of size of image to size of object, said second stage being disposed intermediate said



first stage and said lens assembly and said lens assembly normally being focused on said second stage, means mounting said second stage for movement away from its position between the lens assembly and first stage to expose the latter to the lens assembly, and means engageable by the second stage only when it is so moved to automatically focus the lens assembly on the first stage.

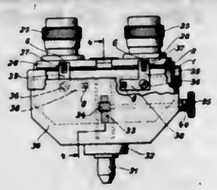
2,735,336
PROJECTOR FOR CASTING IMAGES OF OPAQUE OBJECTS UPON A SCREEN
Sidney Bersudsky, Toronto, Ontario, Canada, assignor to Kelton Corporation Limited, Toronto, Ontario, Canada, a corporation
Application February 7, 1955, Serial No. 486,314
5 Claims. (Cl. 88—24)



1. A projector for casting images of opaque objects on a projection surface comprising a casing of substantially prismic form having a front face, a top face sloping downwardly from the top of the front face, and a base having an aperture adapted to register with a surface having representations to be projected, a lens assembly in the front face, a hollow dome extending from the lower end of the sloping top face, a light source mounted in the dome to illuminate the said surface, and a mirror inside the sloping top face to reflect light from the said surface through the lens assembly to the projection surface, the dome wall having closely spaced circumferential ridges and having slots between the adjacent ridges to provide ventilation, the ridges adjacent the slots forming disc-like baffles in a stepped arrangement shielding the eyes of a person behind the projector from the light which escapes through the ventilating slots from the lamp.

2,735,337
BINOCULAR MICROSCOPE
Karl Frischmann, Wetzlar-Garbenheim, Germany, assignor to Ernst Leitz, G. m. b. H., a corporation of Germany
Application August 7, 1953, Serial No. 373,019
Claims priority, application Germany August 11, 1952
1 Claim. (Cl. 88—39)

In a binocular microscope, an objective casing having an open top and a bottom forming a centrally located objective tube, an objective in said tube, a prism housing supported to move vertically within said objective casing, a light ray dividing prism secured in the bottom of said prism housing in axial alinement with the said objective, a centrally located toothed rack secured on one side of said prism housing, a shaft rotatably supported in said casing and extending to the outside thereof, a gear on the inner end of said shaft engaging the said toothed rack, a hand knob on the outer end of said shaft for rotating the latter and the said gear whereby to move the said prism housing vertically up or down within the casing, an ocular tube in said prism housing on each side of said rays dividing prism, each of said ocular tubes having ocular lenses at the top and a light rays receiving and reflecting prism at the bottom for receiving the light rays from said ray dividing prism and reflecting the rays upward to said ocular lenses, a base plate secured to each of said ocular tubes



and engaging said prism housing to slide laterally thereupon, a bolt on each ocular tube base plate, another bolt for each base plate secured in said objective casing and a lever for each base plate fixedly pivoted on said prism housing to move therewith, said levers slidably engaging the said pairs of bolts for moving the base plates and ocular tubes laterally upon said prism housing to vary the interpupillary distance between the ocular tubes in proportional response to the simultaneous vertical movement of the light ray dividing prism and the oculars when said prism housing is moved vertically within said objective casing by operation of the aforesaid toothed rack and gear, said bolts and said levers being enclosed within the said housing and the said casing on the side opposite to the location of the said rack and gear whereby to secure an evenly balanced vertical movement of the prism housing within the objective casing.

2,735,338
OPHTHALMIC DEVICES
Louis S. Porter, Brooklyn, N. Y.
Application July 27, 1950, Serial No. 176,158
7 Claims. (Cl. 88—52)



1. In a spectacles combination, a spectacles frame having principal lenses coordinated therewith and a pair of temples each hingedly attached to said frame by a pivot association at the end portion of the respective temples, a recess within the body of each said temple and a slot communicating therewith, said recess and slot being positioned on the inner face of the temple, the said slot extending toward the hinged end portion of the temple, an auxiliary lens and mounting means therefor coordinated with each said temple, said lens and mounting means being adapted for substantially complete positioning within the said recess and communicating slot, a pivot means positioned within the said slot, the said mounting means being rotatably supported by and secured to the said pivot means at the end portion of the mounting means positioned within the slot, said pivot means being affixed to the temple in substantial alignment in a transverse

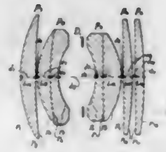
plane parallel to the plane of the spectacles frame with the pivot of the said hinged attachment of the temple to the frame, whereby the said mounting means and its auxiliary lens are rotatably positionable in a zone of vision approximate the inner face of the spectacles lens nearest thereto and within the said recess and communicating slot provided therefor.

2,735,339

WIDE ANGLE HIGH APERTURE FIVE COMPONENT PHOTOGRAPHIC OBJECTIVE

Yoshikazu Doi, Odawara City, Japan, assignor to Fuji Photo Film Co., Ltd., Minami-Ashigaramachi, Ashigarakami-gun, Kanagawa Prefecture, Japan, a company of Japan

Application September 14, 1954, Serial No. 455,847
Claims priority, application Japan January 12, 1954
2 Claims. (Cl. 88—57)



1. A wide angle high aperture objective comprising five components P_2, P_2, P_3, P_4 and P_5, each suffix of those symbolic letters being numerated from the side of the object, separated by air of which the first, the fourth and the fifth components P_1, P_4 and P_5 consist of a single positive lens respectively, while the second and the third components P_2 and P_3 forming respectively meniscus convex toward the object and the image plane consist respectively of two single lenses cemented together, characterized in that the equivalent focal length of the whole lens system denoted by f'_e has the following relation:

$$2.1<\frac{f'_e}{r_3}<2.7;\quad 0.70<\left|\frac{d_5}{r_5}\right|<0.80;\quad 0.63<\left|\frac{d_3}{r^6}\right|<0.75$$

$$0.1<\left|\frac{d_3+d_4}{f'_e}\right|<0.15;\quad 2.2<\left|\frac{f'_e}{r_8}\right|<2.8$$

and

$$0.13<\left|\frac{d_6+d_7}{f'_e}\right|<0.17$$

and the refractive index for the d line of the medium comprising at least more than two positive single lenses exceeds 1.70.

2,735,340

PHOTOGRAPHIC OBJECTIVES FORMED OF TWO SIMPLE POSITIVE COMPONENTS AND TWO NEGATIVE MENISCUS COMPONENTS AXIALLY ALIGNED THEREBETWEEN

George H. Aklin, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application June 25, 1954, Serial No. 439,420
5 Claims. (Cl. 88—57)



1. An objective for photographic purposes comprising two simple positive lens components and two negative meniscus doublets axially aligned therebetween, one doublet being cemented and the other having a small air gap whose maximum thickness is at the axis and is less than 0.02 F, where F is the equivalent focal length of the objective, in which the radii of curvature R of the lens surfaces and the refractive indices N of the lens elements for the D spectral line are within the following limits:

$$-0.58 < (F/R_a) < +0.78$$
$$-0.58 < (F/R_b) < +0.78$$
$$-0.58 < (F/R_c) < +0.78$$
$$0.50\ F < +R_1 < 0.90\ F$$
$$F < +R_2 < 20\ F$$
$$0.38\ F < +R_3 < 0.58\ F$$
$$0.27\ F < +R_4 < 0.37\ F$$
$$0.27\ F < +R_5 < 0.37\ F$$
$$0.37\ F < +R_6 < 0.54\ F$$
$$-0.20 < (F/R_7) < +0.80$$
$$0.60\ F < +R_8 < 1.20\ F$$
$$1.66 < N_1 < 1.92$$
$$1.66 < N_2 < 1.82$$
$$1.55 < N_3 < 1.72$$
$$1.58 < N_4 < 1.72$$
$$1.66 < N_5 < 1.82$$
$$1.68 < N_6 < 1.90$$

and moreover

$$+0.4<\left(\frac{F}{R_a}+\frac{F}{R_b}+\frac{2F}{R_c}\right)<+2.0$$

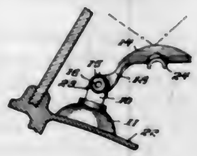
where the + and − values of the radii denote surfaces respectively concave and convex to the center of the objective, where R_a and R_b refer to the surfaces bounding the airgap, R_c refers to the cemented surface and R_1 to R_8 inclusive refer to the exterior surfaces of the respective components in order from front to rear, and where N_1 to N_6 refer to the respective lens elements in order from front to rear.

2,735,341

REFLECTIVE TRAFFIC SIGNAL SPOTTER

Benjamin F. Borsody, Arlington, Va.

Application September 26, 1951, Serial No. 248,423
1 Claim. (Cl. 88—81)



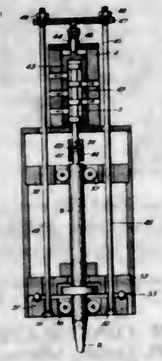
In a traffic signal spotter, the combination which comprises an L-shaped bracket having a vacuum cup mounting leg and a mirror holding leg, each of said legs having openings therethrough, a vacuum cup having a socket therein, a threaded stud having a head positioned with said head in the socket of the vacuum cup and with a threaded portion thereof extended through the opening in the vacuum cup mounting leg of the bracket, a thumb nut on the threaded portion of said stud for retaining the bracket in adjusted positions with relation to the stud, said thumb nut being arranged on the opposite side of said lug from said vacuum cup, a spoon shaped reflector having a bowl with an arm extended from one side and said bowl having a concave surface on the inside and a convex surface on the outside, said arm being arranged in superposed relation with respect to the mirror holding leg of said bracket, both of said inside and outside surfaces of the bowl being reflecting, and a friction rivet extending through the opening in the mirror holding leg for adjustably securing the arm of the bowl to the mirror holding leg of the bracket.

2,735,342

SERVOMOTOR CONTROL SYSTEM FOR COPYING MACHINE TOOLS

Rolf Glaser, Rorschach, Switzerland, assignor to Rigid Limited, Rorschacherberg, Switzerland

Application March 10, 1949, Serial No. 80,661
Claims priority, application Switzerland March 12, 1948
1 Claim. (Cl. 90—62)



In a fluid pressure servo-motor control system for at least one pressurized liquid controlled working piston, a cylinder having inlet and outlet ports for said pressurized liquid, a control sleeve axially slidable in said cylinder to control said ports, said control sleeve having inlet and outlet ports registering with the ports in said cylinder, a slide valve in said sleeve to control the ports in said sleeve, an axially and transversely movable tracer in alignment with and connected to said slide valve to move said slide valve axially on an axial displacement of said tracer, an oscillatory suspended plate on which said tracer is mounted, means coacting with said plate to transform transverse movement of said tracer into axial movement of said plate, and means connecting said plate with said sleeve for axial movement only upon transverse movement of said tracer.

2,735,343

COMBINED SLICE AND ADJUSTABLE DECKLE MECHANISM FOR FOURDRINIER MACHINE

Fernand H. Willemain, Holyoke, Mass., assignor to American Writing Paper Corporation, Holyoke, Mass., a corporation of Delaware

Application December 20, 1954, Serial No. 476,347
6 Claims. (Cl. 92—44)



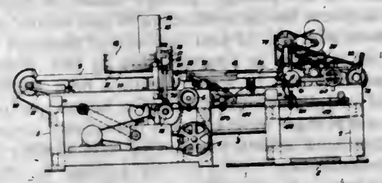
1. Combined slice and deckle mechanism for Fourdrinier paper machine comprising in combination, a structure including elongated transversely spaced substantially vertical side walls and an inlet for paper stock at the rear end thereof, a pair of elongated transversely spaced primary deckle shoes extending forwardly from said inlet, a transversely disposed rigid slice forwardly of said primary shoes, a pair of transversely spaced secondary deckle shoes forwardly of said rigid slice, a transversely disposed flexible slice forwardly of said secondary shoes having a flexible lip, a pair of elongated transversely spaced deckle edge rulers extending forwardly from said flexible slice, separate means connecting said primary and secondary shoes of the pairs thereof and said pair of deckle rulers to said structure arranged for relative transverse adjustment of the shoes of the pairs thereof and of the said rulers of the pair thereof towards and away from one another and longitudinal alignment of said shoes and rulers.

2,735,344

BOX FOLDING AND STAPLING MACHINES

Olof Einar Larsson, Orebro, Sweden

Application October 3, 1952, Serial No. 313,002
Claims priority, application Sweden October 3, 1951
2 Claims. (Cl. 93—49)



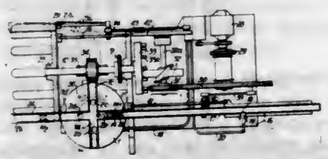
1. A box folding and stapling machine consisting of two separate units, the first unit comprising a folding device, means for conveying a cardboard blank to said folding device, and an alignment member adapted to abut against the trailing edge of the blank in the stapling position thereof, said second unit comprising a stapling apparatus and an abutment member adapted to abut against the leading edge of the blank in the stapling position thereof, and manually operable means for moving one of said units in toto with respect to the other unit in the conveying direction of the blank to set the machine in condition for conveying, folding and stapling blanks of another length.

2,735,345

METHODS AND APPARATUS FOR INSERTING FILTER SUBSTANCES IN MOUTHPIECES FOR CIGARETTES, CIGARS, AND THE LIKE

Ludwig Rode, Kreis Lauenburg, Schleswig-Holstein, Germany, assignor to Kurt Korber & Co. K. G., Hamburg-Bergedorf, Germany

Application March 5, 1953, Serial No. 340,489
Claims priority, application Germany March 18, 1952
10 Claims. (Cl. 93—77)

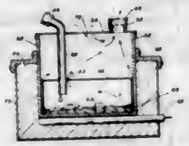


1. In the production of filter mouthpieces for cigarettes, the method comprising the steps of positioning a slug of filter material outside one end of a mouthpiece sleeve, entering the hollow perforated head of a plunger through the opposite end of said mouthpiece sleeve, creating a vacuum in the interior of said hollow perforated plunger head so as to force said slug into said mouthpiece sleeve by suction, eliminating the vacuum from said plunger head, and removing said plunger head from said mouthpiece sleeve.

5. In an apparatus for producing filter mouthpieces for cigarettes, a rotatably mounted carrier member, a plurality of diametrical passages through said carrier member, for receipt of a mouthpiece sleeve in each end portion of said passages, transverse bores in said carrier member leading from the outside into said passage one at each side of the center of said carrier member and all said bores having their centers on a circle the center of which lies on the axis of rotation of said carrier member, feeding means associated with said carrier member and having its outlet on said circle for feeding a string of filter material toward said carrier member, means associated with said carrier member for intermittently

rotating said carrier member to successively place said bores in registry with said outlet to permit said string of filter material to be fed into said bores successively, severing means associated with said carrier member for severing said string of filter material adjacent the entrance to the bore into which said filter material is being fed so as to leave a plug of said filter material in the passage communicating with said bore and in a position adjacent the inner end of said mouthpiece sleeve supported in said end portion of the passage, plunger means reciprocably mounted adjacent the circumference of said carrier means in alignment with one of said diametrical passages when said carrier member is intermittently at rest with said feeding means outlet in registry with a bore leading to another of said diametrical passages, a hollow perforated head on said plunger means, means operatively connected with said plunger means for moving said plunger head into the mouthpiece sleeve in the passage in registry with said plunger means, and vacuum means operatively connected with said plunger head for temporarily creating a vacuum in said plunger head when in said mouthpiece sleeve so as to force said slug of filter material into said mouthpiece sleeve by suction, said means for moving said plunger being operative to then continue said movement of the plunger through said diametrical passage to eject said mouthpiece sleeve and slug therefrom at the opposite end of said passage and to retract said plunger and head from said passage.

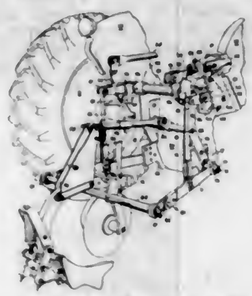
2,735,346
APPARATUS FOR AUTOMATIC DISPOSAL OF WASTE DEVELOPER IN DRY PRINTING AND DEVELOPING MACHINES
Frederick H. Frantz, Binghamton, N. Y., assignor to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware
Application April 24, 1952, Serial No. 284,100
3 Claims. (Cl. 95—94)



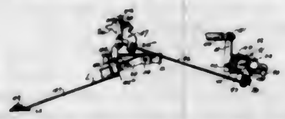
1. In a developing apparatus for light sensitive material of the type utilizing a volatile liquid which forms a gas for development, a developing chamber, means in said chamber for generating said gas by evaporation of said liquid, a drain in said chamber for removing the condensate of the vaporized liquid, a closed container into which said condensate is drained, comprising a metal box, a heat confining shield dividing said box into an upper and a lower section, a conduit connected to said drain and extending into said lower section, said shield having vents communicating with said upper section, means for heating said container and vaporizing the condensate collected therein, an air inlet to said container and forced air exhaust means attached to said container for removing the vapor therefrom.

2,735,347
LIFT SHAFT FOR TRACTORS
Everett W. Todd, Racine, Wis., assignor to Massey-Harris-Ferguson Inc., Racine, Wis., a corporation of Maryland
Application December 13, 1954, Serial No. 474,785
10 Claims. (Cl. 97—46.43)

1. A lift shaft for a tractor comprising; a tube adapted to be rotatably mounted to said tractor, power means operatively connected to said tube for rotating said tube, a shaft rotatably mounted within said tube and extending therefrom at either end, a rearwardly extending lift arm secured to one end of said shaft, a second lift arm rotatably mounted on the other end of said shaft, means for locking said second lift arm with said shaft for rotation therewith, a one-way lift connection between said tube and said lift arms, front mounted implement connections secured to said tube for movement therewith.

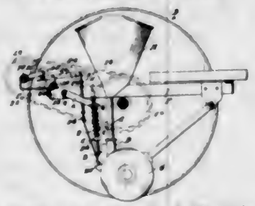


2,735,348
PLOW CONSTRUCTION
Joseph H. Taylor, Athens, Tenn.
Application August 28, 1951, Serial No. 243,954
2 Claims. (Cl. 97—47.1)



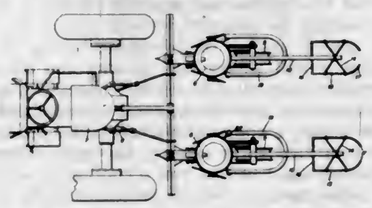
1. In an agricultural implement adapted to be drawn by tractors the combination of a main implement frame, an earth working implement mounted upon the main implement frame, a furrow wheel, a bracket rigidly and detachably connected with the rear end of said implement frame, a transverse substantially horizontal shaft rotatably supported upon said bracket, a lever fixedly connected directly upon said shaft and extending upwardly, a connecting rod pivotally connected to the lever spaced above said horizontal shaft, a bracket extension rigidly connected directly upon said horizontal shaft extending rearwardly transverse therefrom, a yoke pivotally connected upon said bracket extension upon an upright substantially vertical axis which is spaced rearwardly from the said horizontal shaft, and means rotatably supporting the furrow wheel upon the rear end of said yoke spaced rearwardly of said upright substantially vertical axis, a transverse lever arm fixedly connected to said yoke at a location spaced rearwardly of said upright substantially vertical axis, and a furrow wheel connecting rod pivotally connected upon the last mentioned lever spaced from its connection with said yoke and extending forwardly along the implement frame.

2,735,349
DISK SEEDER ATTACHMENT
Joseph Greaves, Toston, Mont.
Application June 19, 1953, Serial No. 362,779
5 Claims. (Cl. 97—55)



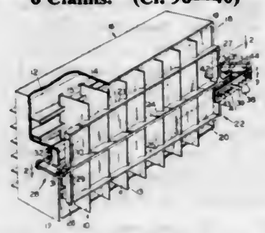
1. An attachment for a grain drill including a frame, wheels supporting said frame, a plurality of co-axial vertically movable furrow forming disks disposed beneath and supported by the frame, a spring yieldably urging each disk to its furrowing position, manual means operatively engaged with said disks for simultaneously elevating same from said furrowing position; said attachment comprising a shaft rotatably supported by said frame, drive means between one of said wheels and said shaft, a clutch in said drive means, a plurality of arms secured to said shaft at spaced points axially thereof and in angular relation to each other, a lever corresponding to each arm pivotally secured intermediate its ends to said frame, corresponding ends of the levers being successively engageable by said arms upon rotation of said shaft, and cables connecting the other ends of said levers to the respective disks.

2,735,350
SEED COVERING DRAG CONTROL FOR ROW CROP PLANTERS
Carney M. Estes, White Deer, Tex.
Application October 26, 1953, Serial No. 388,202
1 Claim. (Cl. 97—56)



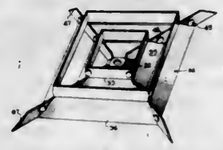
A drag attachment for tractor drawn planters comprising a beam attached at one end to the planter and extending rearwardly therefrom, a flexible hanger at the rear end of the beam, a substantially U-shaped drag attached at its side portions in a substantially horizontal position to the lower end of the hanger member, a substantially U-shaped conector having downwardly projecting pins at its end portions, sleeves on the planter in which the pins are inserted to support the connector in a horizontal position, and flexible means connecting the drag to the connector to pull the drag behind the planter.

2,735,351
ADJUSTABLE LOUVER VENTILATING GRILLE ASSEMBLY
Henry C. Abrahamsen, Evansville, Ind., assignor to International Harvester Company, a corporation of New Jersey
Application August 18, 1952, Serial No. 304,929
6 Claims. (Cl. 98—40)



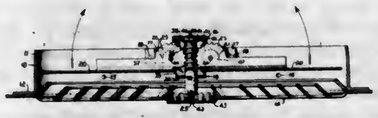
1. A louvered assembly for deflecting gases and the like into a specific locality, comprising: an open ended casing; a plurality of parallel spaced apart fins fashioned of a plastic material and positioned within said casing and disposed across an opening therethrough; said fins being connected together by integrally fashioned connecting members of plastic material and disposed proximate an edge portion of the fins; means for deforming said fins along the transverse axes of each whereby gas currents and the like flowing through the casing are deflected into a specific locality, including a fin deforming member adapted for engaging an edge portion of each of said fins, and operable upon movement therewith for simultaneously deforming all the fins, hinging mechanism disposed at opposite ends of said fin deforming member for pivotally connecting through lost-motion connections respective ends of said member to proximate walls of said casing, a notched bracket affixed to one wall of said casing, and an operating handle affixed to said fin deforming member and operative to engage the notches in said bracket in a lockable relation for retaining said fins in any one of a number of deformed positions.

2,735,352
AIR DISCHARGING AND DISTRIBUTING MEANS
Charles Demuth, Mineola, N. Y., assignor to Charles Demuth & Sons, Inc., Mineola, N. Y., a corporation of New York
Application October 16, 1952, Serial No. 315,165
2 Claims. (Cl. 98—40)



1. A louver assembly having a plurality of rectangularly shaped open ended hollow louvers of progressively larger outlines and so positioned that those of larger outline respectively surround the smaller ones with spacings therebetween, said rectangularly shaped louvers each comprising outwardly flaring side wall portions and vertical side wall portions, flat sheet metal ribs mounted on edge and extending from the central zone of the assembly diagonally outwardly through the flaring side wall portions of said louvers and secured thereto, and means disposed at said central zone secured to the inner ends of said ribs and provided with a central opening for receiving a supporting member, the outer ends of said ribs extending outwardly beyond the corners of the outermost rectangular louver and providing engageable portions for supporting a surrounding frame.

2,735,353
BUTTERFLY DAMPER
Clarence O. Griner, Ceresco, Mich., assignor to United States Register Company, Battle Creek, Mich., a corporation of Michigan
Application May 11, 1953, Serial No. 354,315
12 Claims. (Cl. 98—40)



1. A damper comprising a gaseous fluid conducting member, a diametrical bar with an enlarged central portion, said bar spanning and secured at its ends to said fluid conducting member, two butterfly dampers disposed at opposite sides of said diametrical bar, means pivotally mounting said dampers on parallel axes, two toothed segments secured to said dampers respectively, said segments being in alinement with each other substantially perpendicular to said diametrical bar and opposite said enlarged central portion of same, a single worm gear meshing with both of said segments, a separate pivot means for said dampers at the center of said toothed segments, said last named pivot means being in aline-

ment with said first mentioned means pivotally mounting said dampers, and mounting means mounting said worm gear on said diametrical bar at said enlarged central portion of same.

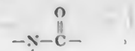
2,735,354

METHOD OF TREATING CONTAINERS FOR FOOD

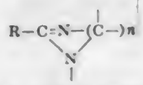
Albert C. Edgar, River Forest, and Hiram T. Spannuth, Chicago, Ill., assignors to Wilson & Co., Inc., a corporation of Delaware

No Drawing. Application December 17, 1954, Serial No. 476,056
33 Claims. (Cl. 99—187)

8. The process of preventing the adhesion of food material to the inner surfaces of a container in which the food material is cooked, which comprises applying to such surfaces prior to cooking the said material in said container, a coating comprising a compound of the class consisting of (1) nitrogen-containing compounds having at least one N-acyl group



wherein the acyl radical contains at least 10 carbon atoms and (2) cycloimidine compounds having therein the group



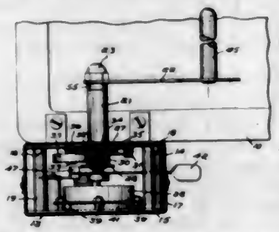
in which *n* is a whole number greater than 1 and R is an alkyl radical having at least 9 carbon atoms, said compound having a melting point above about 155° F., and cooking the said material in said container while the same is in contact with said coating.

2,735,355

FRYING DEVICE FOR DOUGHNUTS

Alexander S. Brenner, Chelsea, Mass., assignor to Donuts Inc., Boston, Mass., a corporation of Massachusetts

Application February 17, 1953, Serial No. 337,311
3 Claims. (Cl. 99—336)



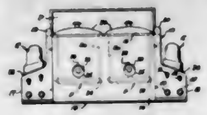
1. A frying device for food such as doughnuts comprising: a frying tank of sufficient depth to allow the food to be submerged in fat contained therein; a horizontal shaft extending over said tank, a food carrying arm attached to said shaft and movable into and out of the tank; means for securing food to said arm, a latch member attached to one end of said shaft; a lever rotatively mounted alongside said latch member in a plane perpendicular to said shaft; a projection on said latch member extending into the plane of rotation of said lever, whereby manual rotation of the lever to a predetermined position rotates said shaft to bring said arm into a position in which the food is held completely submerged in the fat by said securing means; a second latch member having a shoulder adapted to engage said projection when said arm is in said position; a spring urging said second latch member into engagement with said projection; means for rotating said lever at a predetermined rate in the direction away from said projection; means operated by said lever on reaching a second predetermined position for disengaging said shoulder from said projection; and a spring adapted to return said arm to a position in which the food is above the level of the fat when said latch members are disengaged.

2,735,356

ELECTRIC GRILLS

Irving Sacks, Brooklyn, N. Y.

Application April 28, 1953, Serial No. 351,710
1 Claim. (Cl. 99—339)



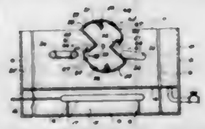
An electric grill comprising a casing having a central portion having two opposed vertical walls and surfaces adjoining said walls and extending downwardly in opposite directions, at least one separate vertical blade-like bun cutter and toaster upon each one of said surfaces, each of said bun cutters and toasters having a central plane intersecting the adjacent vertical wall at an acute angle, the central portion of the casing having at least one opening, a well within said opening and having a flange extending over the edge of said opening, a gasket under the bottom of said flange, another gasket over the top of said flange, a collar connected to the casing and extending over said other gasket, an inner receptacle within said well and having a rim supported by said collar, said collar having a recess formed therein, and a cover having a downwardly turned periphery removably supported in said recess.

2,735,357

COOKING APPARATUS TURNOVER DEVICE

Robert Edmund Gagnon, Vancouver, British Columbia, Canada, assignor of one-third to Paul Vance Gagnon, and one-third to Marcel Alphonse Gagnon, both of Vancouver, British Columbia, Canada

Application December 10, 1951, Serial No. 260,862
13 Claims. (Cl. 99—409)



1. In apparatus for cooking doughnuts and the like in hot liquor, the combination with a cooking vessel containing the liquor, of a turnover device comprising a hollow drum rotatably mounted adjacent the surface of the liquor, said drum having a peripheral wall the greater part of which is solid, means for rotating the drum, said drum being mounted so that at least part of it is moved into and out of the liquor as it is rotated, a shoulder on the drum extending longitudinally thereof and outwardly from its centre of rotation, and a slot in the drum near the inner edge of the shoulder ahead of the latter relative to the direction of rotation of the drum.

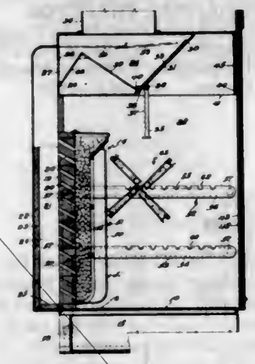
2,735,358

CHARCOAL BROILER GRILL

Maxon E. Gilbert, North Scituate, R. I.

Application June 10, 1953, Serial No. 360,759
7 Claims. (Cl. 99—427)

6. In a broiler apparatus for cooking meats by exposure to a burning charcoal fuel having a casing provided with a vertically extending fuel compartment with a grated front for exposing the burning coals, a support for a rotatable spit comprising a hollow vertically extending member at each side of said fuel compartment and attached to said casing, each of said members having a pair of hollow horizontal arms integrally joined to said member extending toward the front of the casing one above the other and each provided with a plurality of bearing openings with the openings in one pair of arms being aligned with the openings in the other pair of arms,



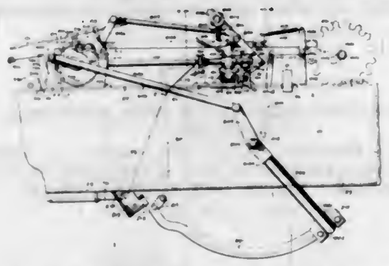
an endless sprocket chain drive housed within one of said members and the arms thereof, guide means within the said one member and the arms thereof for supporting and guiding said chain in its path of movement, and a spit received in any pair of said aligned openings and having a sprocket wheel thereon engageable with the portion of the chain exposed at the chosen opening for rotation of said spit in front of said grated opening.

2,735,359

BALE SIDE WIRE TIER MECHANISM

John P. Tarbox, Philadelphia, Pa., assignor, by mesne assignments, to Sperry Rand Corporation, New Holland, Pa., a corporation of Delaware

Application April 1, 1953, Serial No. 346,080
32 Claims. (Cl. 100—23)



1. In a hay baler of the class in which bales of hay are formed in and moved longitudinally through a bale case, the combination with said bale case of strand tying mechanism comprising a twister having a radial slot and means mounting same on the bale case for rotation about an axis parallel to the longitudinal axis of the bale case, said twister normally being at rest in a position wherein its radial slot opens toward the bale case, means for continuously rotating the twister a plurality of complete revolutions during each of its tying cycles and bringing it to rest in said position, needle means movably supported on the bale case for projecting a strand loop around an end of a bale in said case to a delivery point in substantial longitudinal alignment with said twister, and strand laying means mounted on said bale case for moving one strand of said loop from said delivery point between the bale case and twister and into the twister slot.

2,735,360

LEMON SLICE SQUEEZERS

Willie Battke, Stuttgart-Oberturkheim, Germany, assignor to F. Ritter & Sohn, Munich-Pasing, Germany, a co-partnership

Application January 5, 1953, Serial No. 329,589
1 Claim. (Cl. 100—234)



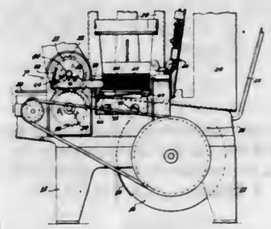
A citrus slice squeezer comprising a pair of opposed upper and lower pressure plates of substantially semicircular shape when viewed in plan, said plates being hinged together along the chord portions thereof, and each being provided with a handle adapted to press the opposing surfaces of said plates together, the lower plate having a peripheral upturned flange and having a raised portion forming a flat pressing plateau with an arcuate rim concentric with and spaced from said upturned flange, to define a channel portion in said lower plate between said flange and rim, the upper plate having a peripheral downturned flange provided with a sharpened arcuate cutting edge, said cutting edge adapted to engage said lower plate in said channel portion below said plateau and being concentric with said upturned flange and spaced therefrom a radial distance corresponding in magnitude to the average thickness of a citrus peel, when said plates are pressed together, whereby said edge is adapted to sever the peel from the pulp portion of a citrus slice and only the pulp portion will be squeezed between the plates when pressed together.

2,735,361

APPARATUS FOR PRINTING ROLL CONTROL

Arthur W. Ketter, Toronto, Ontario, Canada, and Harmon P. Elliott, Watertown, Mass., assignors to The Elliott Addressing Machine Company, Cambridge, Mass., a corporation of Massachusetts

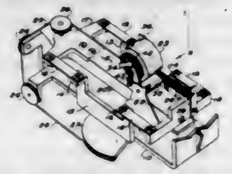
Application November 30, 1954, Serial No. 472,199
5 Claims. (Cl. 101—53)



1. In a printing machine a platen roll and a printing roll fixed respectively on driving and driven shafts and associated for printing coaction when the two rolls rotate simultaneously, a sleeve rotatably mounted on said driven shaft, drive connection between said driving shaft and said sleeve whereby said sleeve is rotated when said driving shaft rotates, a latch-lever pivotally mounted on said sleeve with the axis of its pivot outward from and parallel to the axis of said sleeve, resilient means yieldingly maintaining said lever in latched engagement with said driven shaft whereby said driven shaft and the printing roll thereon rotate with said sleeve so long as the lever is in said latched engagement with the driven shaft, said lever having a portion projecting substantially outward from said sleeve, an abutment pivotally mounted at a fixed location and gravity-actuated to a position in the path of said projecting portion of said lever as the lever is carried on said rotating sleeve around the axis of the sleeve whereby said lever is rocked about its pivot in opposition to

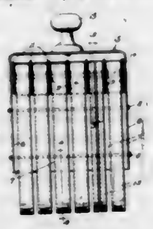
said resilient means each time said projecting portion of the lever engages said abutment, thereby to move said lever to an unlatched position with respect to said driven shaft, and means responsive to a work element at a predetermined location for moving and holding said abutment out of the path of said lever whenever a work element is at said predetermined location.

2,735,362
ROLLER PRINTER
Lawrence S. Williams, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a corporation of New Jersey
Application January 8, 1953, Serial No. 330,273
9 Claims. (Cl. 101—93)



1. In a printing mechanism, in combination, at least one type bearing member adapted to be positioned in a printing station, means for supporting an element to receive an imprint in juxtaposition with the type on said type bearing member, a frame, a track mounted on said frame, said track extending in a plane substantially parallel to the face of the type during all positions of the printing roller, a carriage mounted to reciprocate along said track, means for reciprocating said carriage along said track, a pivotal member carried on said carriage, a rotatable roller carried by said pivotal member, means comprising a latch for pivoting said member to place the roller into contact with the element, said member being pivoted additionally by friction between the roller and the element when the carriage is moved along the track on its printing stroke, the additional pivoting of the member causing it to be released from the latch, means for pivoting said pivotal member at the end of the printing stroke whereby said roller moves out of contact with said element, and means for returning said carriage toward its starting position on said track with the roller remaining in its last-pivoted position.

2,735,363
DATE AND NUMBER STAMP
Harold W. Finch, Margaretville, N. Y.
Application September 9, 1952, Serial No. 308,660
3 Claims. (Cl. 101—111)



1. A number stamp comprising a frame having an open lower end, a stationary member mounted within the frame, said stationary member having longitudinally disposed spaced grooves formed in the outer surface thereof, individual rectangular frames mounted on and extending around said stationary member movable within said grooves, said rectangular frames extending beyond the lower end of the stationary member, wheels mounted on the upper ends of the rectangular frames, webs having indicia thereon operating over said wheels and lower ends of the rectangular frames opposite to said wheels, springs disposed within the frames bearing against the lower ends of the stationary members biasing said frames away from the stationary member, and means for effecting rotation of said wheels.

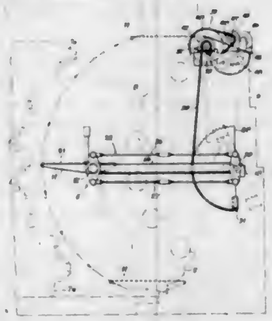
2,735,364
OFFSET PRINTING PROCESS AND MECHANISM THEREFOR
Rudolf Müller, Mutterstadt-Pfalz, Germany
Application March 4, 1952, Serial No. 274,690
Claims priority, application Germany March 7, 1951
6 Claims. (Cl. 101—142)



1. In a mechanism for lithographing of the offset type comprising a supporting means for a printing plate, a printing plate supported thereon having image and non-image areas, means for applying printing ink to said plate, means for cooling said supporting means to condense moisture on said plate whereupon the moisture will cling to the non-image areas thereof and repel printing ink, the printing plate being cooled thereby to a temperature below the dew point of the atmosphere, an offset cylinder containing means for transferring an inked image from the plate onto material to be printed, means for heating the surface of said offset cylinder to keep it free of moisture and maintain the inked image thereon in an image transferable consistency, and a liquid water soluble freezing point depressant located on said printing plate.

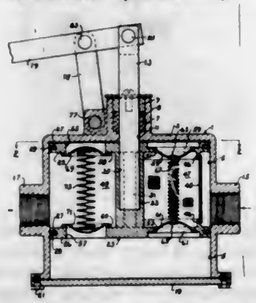
5. The process of offset printing comprising the steps of condensing moisture on an inked printing plate, while simultaneously subjecting the exposed surface of said plate to a liquid water soluble freezing point depressant, transferring the inked image from said plate to the surface of an offset cylinder, heating the offset cylinder surface to maintain it free of moisture and the inked image thereon in a transferable consistency, and transferring the inked image from the offset cylinder surface to a preselected material to be printed.

2,735,365
ELEVATOR STRUCTURE FOR PRINTING PRESSES
Edward S. Bromberg, Dallas, Tex., assignor to Pollock Paper Corporation, Dallas, Tex., a corporation of Texas
Application July 28, 1953, Serial No. 370,663
3 Claims. (Cl. 101—181)



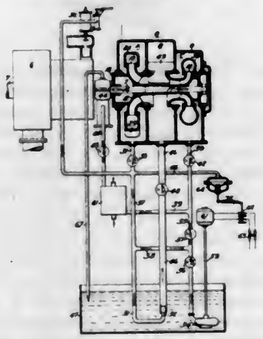
1. In a printing press, a roll stack comprising vertically spaced print rolls arranged in an arcuate series, pivotally mounted platform support arms provided for movement relative to said rolls, a platform supported for pivotal movement on the free ends of said support arms for vertical movement along an arcuate line of travel generally parallel to the arcuate series of rolls responsive to pivotal movement of said arms, and means to maintain said platform parallel to a horizontal plane during vertical movement traversing said rolls.

2,735,366
REVERSIBLE PUMP
Scott L. Hunter, Ossian, Ind.
Application September 15, 1951, Serial No. 246,779
16 Claims. (Cl. 103—3)



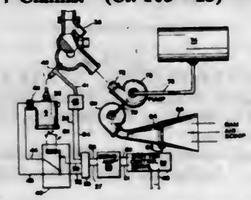
1. A pump comprising a cylinder having a number of ports disposed at different circumferential positions on said cylinder, a piston rotatably and reciprocably mounted in the cylinder, means defining a chamber in the piston which in one rotated position will communicate with one port and in a different rotated position will communicate with another port, port means in the piston disposed to establish communication between the chamber and an end of the cylinder, valve means for controlling the port means, and valve means associated with the port which constitutes the outlet port.

2,735,367
LIQUID SUPPLY MEANS FOR A ROTARY MACHINE
Clarence E. Kenney, Hartland, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application June 10, 1952, Serial No. 292,763
10 Claims. (Cl. 103—4)



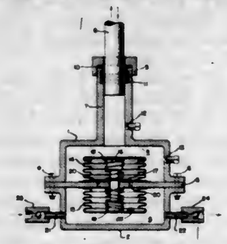
1. In a machine having a rotary shaft portion projecting therefrom, the combination comprising: dual pump means including a pair of runner elements fixed in axially spaced relation with respect to each other on said shaft for movement therewith and a pair of axially spaced volute elements operatively surrounding said runner elements; stationary casing means sealingly enclosing said pump means and having internal partitions coacting with said volute and runner elements to form a separate discharge chamber for each of said volute elements and a common inlet chamber intermediate said separate discharge chambers; said stationary casing having oppositely disposed wall portions extending substantially parallel to said shaft and a longitudinally extending slot in each wall portion, means provided on each of said volute elements in slidable engagement with said slots in said wall portions nonrotatably supporting said volute elements for limited movement axially of said shaft; and seal means interposed between and operatively uniting said runner and volute elements for rotation of said runner relative to said volute elements.

2,735,368
FUEL CONTROL SYSTEM
Mario Antonazzi, Cresskill, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application May 15, 1950, Serial No. 162,104
7 Claims. (Cl. 103—13)



1. In a fuel flow system wherein a ram air scoop provides driving fluid to a turbine, which drives a fuel pump to supply fuel to a combustion chamber, in combination therewith, a fuel valve, a fuel pressure lead on said valve, a casing, a magnet axially disposed in said casing, a coil wound around said magnet, a magnetically permeable cage about said magnet in contact with one pole thereof defining a magnetic path, said case being broken at the other pole of said magnet to interrupt said path, a diaphragm at said other pole of said magnet, conduit means connecting said pressure port to said diaphragm, a magnetically permeable plunger movable with said diaphragm adapted to complete said magnetic path, a synchronous chopper, said coil connected to said chopper, a pressure sensor, said sensor connected to said fuel pressure lead to convert said pressure into an electrical current, an amplifier and a servo, a twin triode, said chopper feeding current to one grid of said triode, the current from said sensor connected to the other grid of said triode, the cathodes of said triode being grounded, a summing resistor, said cathodes connected to said summing resistor so as to combine said currents fed into said grids, the sum of said currents fed into said amplifier to drive said servo, said servo governing the flow of air through said scoop to regulate the speed of said turbine and pump and thereby stabilize said fuel flow in said system.

2,735,369
BELLOWS PUMP
William E. Turvey, La Grange, Ill., assignor to Universal Products Company, Chicago, Ill., a corporation of Delaware
Application July 30, 1952, Serial No. 301,699
9 Claims. (Cl. 103—44)



1. A pumping apparatus comprising in combination, a pump housing having an internal dividing partition form-

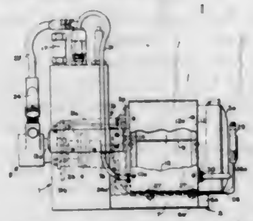
ing a liquid retaining hydraulic pressure section and a fluid pumping section, a reciprocating piston member extending into a portion of said hydraulic pressure section, an expansible and compressible bellows member connecting with and sealed to said dividing partition on one side of the latter within said hydraulic pressure section and an opposing bellows member connecting with and sealed to the dividing partition in the pumping section, a connecting rod extending through said dividing partition and connecting to each of said bellows members, fluid inlet and outlet ports connecting with said fluid pumping section and check valve means at said ports whereby a fluid may be drawn into and discharged from said pumping section responsive to the displacement action of said reciprocating piston member within said hydraulic section and the accompanying displacement of the bellows member in each of said divided sections.

2,735,370

CARBONATING APPARATUS

Harold E. Lance, Royal Oak, Mich., assignor to Temprite Products Corporation, Birmingham, Mich., a corporation of Michigan

Application November 12, 1953, Serial No. 391,563
8 Claims. (Cl. 103—118)



1. Apparatus for carbonating liquids comprising an upright cylindrical tank for receiving gas and liquid to be carbonated; a horizontal electrical motor and pump assembly of which the pump casing is rigidly supported from one end of the stator of the motor for direct drive of the pump by the motor; control means for the motor; a conduit connecting the discharge of the pump to the liquid receiving inlet of the tank; and a separate supporting structure, for the pump and motor assembly, for the control means of the motor and for the carbonator tank, the said structure comprising a bottom sheet-metal base part directly above and on which the electric motor is mounted and from which the pump is supported through its rigid connection with the motor, an upright flat-surfaced sheet-metal part rising from the base part at one side of and closely adjacent to the motor with its major flat surfaces parallel to the motor axis and serving as a support for the motor control means, and a flexible clamping band rigidly secured to the upright part of the supporting structure adjacent the pump end of the motor and embracing and supporting the tank.

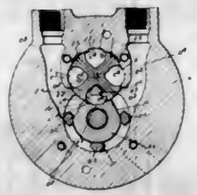
2,735,371

ROTARY FLUID PRESSURE ENGINE

Edward Harry Johnson, Coventry, England, assignor to The Keelavite Company Limited, Coventry, England, a company of Great Britain

Application November 21, 1951, Serial No. 257,446
11 Claims. (Cl. 103—125)

1. A rotary fluid pressure pump or motor of a type comprising a casing enclosing an annular blade chamber and having inlet and outlet ports, a rotor having blades which extend across the blade chamber and make a sealing fit with the inner and outer circumferential walls thereof relatively to which the rotor rotates about the axis of the blade chamber, and at least one rotary abutment with its axis parallel to the axis of the rotor extending across the blade chamber between the inlet and outlet ports and lying mainly within and making a sealing fit with an abutment receiving recess in one of the circumferential walls of the blade chamber and making a sealing fit with a second abutment receiving recess in the other circumferential wall of the blade chamber, said recesses being of the same diameter but subtending different arcs, the abutment containing in its periphery recesses at least some of which are arranged to come into position to receive a blade and permit it to pass the abutment as it comes to the point at which the abutment extends across the blade chamber, said peripheral recesses being arranged in dia-



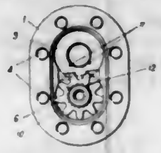
metrically opposed connected pairs constituting pressure equalizing openings between sealing parts of the abutment wherein the dimensions of the parts are such that the total circumferential widths of sealing engagement between the blades and the inner and outer walls of the blade chamber and between the abutment and each of the abutment receiving recesses remains unchanged throughout rotation of the rotor and abutment, whereby the rotational speed of the rotor for a fixed rate of flow is maintained substantially constant at all angular positions of the rotor and vice versa.

2,735,372

GEAR PUMP OR MOTOR

Douglas Gerhard Booth and Frederick Baines, Ilford, England, assignors to The Plessey Company Limited, Ilford, England, a British company

Application May 20, 1952, Serial No. 288,902
3 Claims. (Cl. 103—126)



1. In a gear pump housing having a pump chamber formed therein, said housing having an inlet leading to and an outlet leading from the pump chamber, a pair of intermeshing gears in said pump chamber for pumping liquid from said inlet to said outlet, said gears having axially extended journals, bearing bushes carried in said housing supporting said journals and sealably engaging the corresponding gear side faces, said gears having at least one slot between the teeth extending entirely through the gear from one face to the other parallel to the axis of said gear, said bushes facing the respective gear side faces having a radial groove adjacent to the outlet extending from the bore of the bearing and the axial extent of the slot in the space between the teeth.

2,735,373

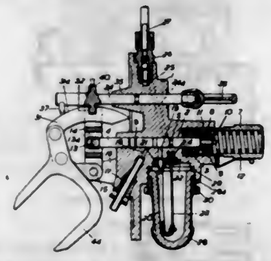
MEANS FOR PRIMING THE LIQUID CIRCUIT OF RECIPROCATING PUMPS FOR LIQUID OR OIL

Camille Clare Sprankling Le Clair, Crabtree, Plymouth, England, assignor to Tecalemit Limited, Brentford, England

Application December 28, 1951, Serial No. 263,923
Claims priority, application Great Britain January 1, 1951
6 Claims. (Cl. 103—153)

1. A pump of the class described comprising a body provided with a bore having an inlet and an outlet and

forming a pump cylinder, a plunger slidably mounted in said bore and adapted to force fluid through said outlet, a pivoted link mounted on said body and connected to said plunger and having in its free end a slot transverse to the path of movement of said link, a driving mechanism including a pivoted rocker mounted on said body and adapted to engage said link, said rocker having a slot in its free end transverse to the path of movement of said rocker, a manually operable priming rod for driving said



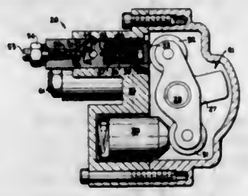
link, said rod being reciprocable and turnable in a second bore in the pump body, and a disc secured to said priming rod whereby in one angular position of said rod one portion of said disc engages the slots of the rocker arm and link, and in a second angular position of said rod another portion of said disc engages said link but provides a notch in the path of movement of said rocker to permit operation of the plunger by said priming rod without interrupting the movement of the pivoted rocker.

2,735,374

PUMP COMPENSATOR

Edwin L. Shaw and Ellis H. Born, Columbus, Ohio, assignors to The Denison Engineering Company, Columbus, Ohio

Application November 20, 1952, Serial No. 321,684
8 Claims. (Cl. 103—162)



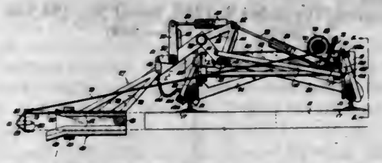
1. In a fluid energy translating device of the type having a casing with inlet and outlet ports, a cylinder barrel in said casing, said cylinder barrel having piston chambers alternately communicating with said ports, pistons disposed for reciprocation in said piston chambers and adjustable means in said casing for controlling the movement of said pistons; pressure responsive means for adjusting said piston movement controlling means comprising means on said casing forming a compensator piston chamber; a compensator piston disposed for reciprocation in said chamber and engaging said adjustable means; passage means connecting the outlet port and said compensator piston chamber; an unbalanced pressure responsive valve in said passage to control fluid flow therethrough; an exhaust passage leading from said compensator piston chamber; a differential piston valve controlling the flow of fluid through said exhaust passage, the larger area of said piston valve being exposed to fluid pressure in said passage in advance of said compensator piston chamber to urge said differential piston valve toward exhaust passage closing position; and a restricted passage connecting said passage means at the larger area of said differential piston valve and exhaust.

2,735,375

RAILROAD TIE REPLACING MACHINE

Bernard H. Hesemann, Orleans, Nebr.

Application May 26, 1952, Serial No. 289,931
26 Claims. (Cl. 104—9)



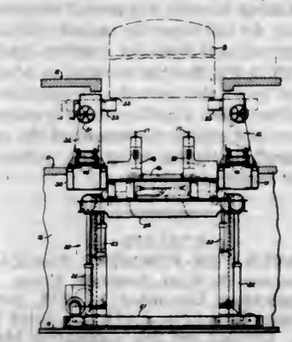
1. In a railroad tie handling machine of the character described, a truck adapted to travel on a railroad track, a boom pivoted on the truck to swing up and down about an axis parallel to the track, said boom when lowered projecting laterally from the truck so that its free end is beside the track, a tie guide carried by the boom at the free end thereof for receiving a tie and holding same with its longitudinal axis disposed generally crosswise of the track, mechanism connected to the boom for raising and lowering the free end thereof, thereby to adjust the elevation of said guide, and adjustment means operative at any elevation of the guide for varying the inclination of the tie relative to horizontal.

2,735,376

APPARATUS FOR SUPPORTING RAILWAY VEHICLES

Lloyd H. Holdeman, Muskegon, Mich., assignor to Manning, Maxwell & Moore, Inc., Muskegon, Mich., a corporation of New Jersey

Application April 13, 1951, Serial No. 220,842
5 Claims. (Cl. 104—32)



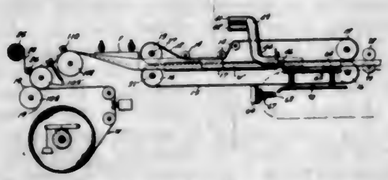
1. Vehicle supporting apparatus for use in a railway shop installation including a service track having a section adapted to be lowered into a drop pit intersecting and extending beneath the service track for removing wheels or trucks from a vehicle on the service track, said apparatus serving to support the vehicle while the wheels or trucks are removed and comprising, in combination, a pair of beams extending across the pit on opposite sides of said track section, an upright pedestal mounted on each of said beams for adjustable positioning longitudinally of the beam, a supporting bar mounted on each pedestal for endwise sliding movement transversely of the service track between a retracted position clear of a vehicle standing on said track section and a projected position with one end underlying and supporting the body of the vehicle, a vehicle engaging pad supported on each of the bars for movement longitudinally of the bar, and manually operable means mounted on one of said bars and operatively connected to the associated pad for shifting such associated pad longitudinally of the bar, the pad on the other of said bars being shifted concurrently therewith by the movement of the vehicle engaged by the pads.

2,735,377
CARGO TIE-DOWN
Edwin C. Elmer, Glendale, Calif., assignor to C. J. W. Corporation, North Hollywood, Calif., a corporation of California
Application November 9, 1950, Serial No. 194,748
3 Claims. (Cl. 105—369)



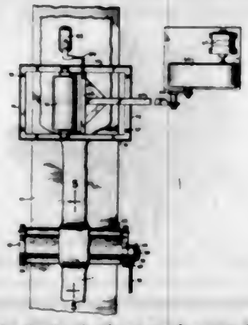
3. A device for releasably anchoring a flexible member to a rail member having a head portion of circular cross-section, comprising: a pair of strap-like connectors, each being bent between its ends along a bend line to form angularly extending first and second end portions, said connectors being assembled in back-to-back relation for rocking movements at said bend lines with the first end portions adjacent and the second end portions adjacent, said second end portions each having an elongate open ended notch at right angles to its bend line for receiving the rail head portion therethrough, and said notches each having an edge terminating at its open end in inwardly extending spaced apart lip projections cooperating in divergent positions of the second end portions to continuously engage and grip the rail head substantially throughout its length so as to anchor the connectors against any movement along the rail, but permit movement of the connectors along the rail when the second end portions are in parallel relation, said first end portions having openings through which the flexible member is adapted to be looped so as to move the second end portions into said divergent positions when a pulling force is exerted on the flexible member, and enable movement of the second end portions to parallel relation when the pulling force is released on said flexible member.

2,735,378
APPARATUS FOR FORMING PACKAGES
Clarence W. Vogt, Norwalk, Conn.
Original application December 2, 1949, Serial No. 130,729, now Patent No. 2,691,257, dated October 12, 1954. Divided and this application March 15, 1952, Serial No. 276,780
5 Claims. (Cl. 107—4)



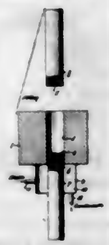
1. Apparatus for forming packages, comprising means for feeding at least one sequence of enwrapments in a given path, means for shaping said enwrapments to provide a plurality of trough-like channels therein, means for advancing said enwrapments intermittently along said path in increments equal to about one-half the length of an enwrapment, means for continuously feeding material to be wrapped, a plurality of extruding orifices receiving the material, and discharging it into different channels in the enwrapments, closure mechanism for the orifices, and means to actuate the closure mechanism to open one of the orifices while closing another to deposit the material alternately on said enwrapments in said different channels in pieces spaced apart lengthwise of said channels.

2,735,379
ART OF SHEETING DOUGH
Le Conie Stiles, Seattle, Wash.
Application May 22, 1951, Serial No. 227,549
6 Claims. (Cl. 107—12)



1. The method of relaxing an elongated body of sheeted dough while the dough moves from one point to another by energy derived from a moving supporting surface, comprising elevating the dough body off of said surface at a localized point through which said surface moves and while so elevated, causing the dough body to progress along a guided overhead path before descending onto said surface at a second localized point through which said surface moves and spaced beyond the first-named point.

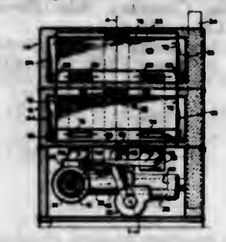
2,735,380
MEANS FOR TABLETING SUGAR
Leslie H. Bowes, Akron, Ohio
Application December 11, 1953, Serial No. 397,581
1 Claim. (Cl. 107—17)



Apparatus for forming compressed tablets, including means providing a die cavity, an ejecting punch reciprocable axially of said cavity having an operative head in intimate sliding contact with the wall of said cavity and a shank of less diameter than the diameter of said cavity, and means for introducing steam into said cavity around the shank of said punch as the punch reciprocates.

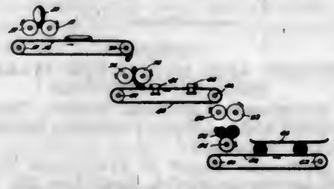
2,735,381
OIL FIRED BAKE OVEN
Bowman K. Breed, Chicago, Ill., assignor to Preferred Utilities Manufacturing Corporation, New York, N. Y., a corporation of Delaware
Application November 25, 1952, Serial No. 322,525
5 Claims. (Cl. 107—55)

3. An air-conditioning section for a composite bake oven embodying an oven compartment, said section comprising a heat source, a blower, a stack conduit, an exhaust gas flue extending from said heat source to said stack conduit, a duct extending from said blower to said heat source and including a portion jacketing the heat source and a portion jacketing the exhaust flue, branch conduits extending from the heat source jacketing portion of said duct adapted to convey heated air to the



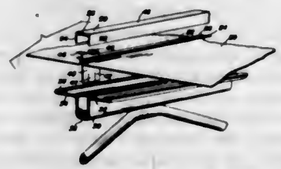
oven compartment, and a nozzle extending from the flue-jacketing portion of said duct into the flue and directed in the travel path of the exhaust gas.

2,735,382
CROSS OR DIAGONAL SHEETING OF DOUGH
Francis Frederick Hansen, Pittsburgh, Pa.
Application December 27, 1951, Serial No. 263,572
2 Claims. (Cl. 107—54)



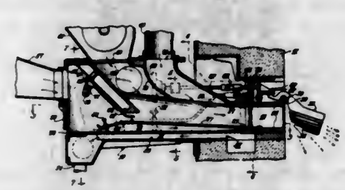
1. In the method of preparing dough for baking, the steps of rolling the dough into a flat sheet, supporting the flat sheet on a level support and advancing it to be further rolled, revolving the sheet in a horizontal plane relative to the direction in which it is being advanced, and subjecting it to a second rolling operation after it has been revolved a dstance such that the second rolling elongates the dough at an angle to the direction in which it was first elongated, and thereafter curling the sheet into a loaf form.

2,735,383
ROOF AND WALL CONSTRUCTION FOR PREFABRICATED BUILDINGS
Fred Gerbracht, Berkeley, Calif.
Application March 6, 1950, Serial No. 147,779
2 Claims. (Cl. 108—21)



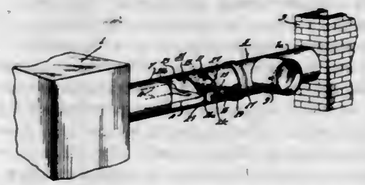
1. In a prefabricated building having cord truss members with a U-shaped panel supporting portion and panels supported thereon, an elongated support and leak-proof seam construction comprising outwardly flared lateral flanges on free ends of legs of the U-shaped portion, the outer marginal edges of said lateral flanges being folded and inturned upon said flanges and terminating in spaced substantially parallel relation to each other to provide spaced apart panel supports on said U-shaped portion, panels seated upon said panel supports, the adjoining marginal edges of adjacent panels overlying said lateral flanges, the overlying edges being cylindrically curved upward and over their respective panels, said curved edges being spaced apart, said U-shaped portion having a lower slotted portion therein, a flat plate extending through said lower slotted portion and between the marginal edges of said flanges and panels, outwardly diverging bendable fingers on one end of said plate extending over said curved edges of said panels, diverging bendable fingers on the other end of said plate extending through the slotted portion of said U-shaped portion and engaging a lower surface portion thereof, a channel strip including a web portion and parallel side wall portions embracing said curved edges and diverging bendable fingers thereon and having inturned curved edges engaging said curved edges of said panels, and a resilient strip interposed between said curved edges of said adjacent panels and said web portion of said channel strips, the web portion and parallel side wall portions clampingly enclosing therebetween the resilient strip, the curved edges of adjacent panels, and the diverging bendable fingers on said curved edges.

2,735,384
STOKER
George A. Kohout, Chicago, Ill.
Application January 28, 1952, Serial No. 268,537
7 Claims. (Cl. 110—104)



7. A stoker for small size solid fuels comprising a generally boot-shaped housing, said housing having a generally rectangular discharge opening at the toe end thereof, the long dimension of said opening extending transversely of said housing, a pair of vertically disposed baffles mounted in a hinged manner one on each side of said discharge opening, the length of each baffle being substantially half the opening width, means for selectively adjusting the hinge angle of each baffle, a horizontally disposed deflector baffle mounted in a hinged manner above and forwardly of said discharge opening, said last baffle having its underneath face provided with laterally diverging stepped vertical walls facing said opening, means for adjusting the hinge angle of said last baffle, said boot-shaped housing having an opening at the rear thereof for the entrance of pressurized gaseous material and an opening at the top thereof for the entrance of small size solid fuels, and an inclined plate member extending downwardly and forwardly from the rear edge of said top opening, said plate member terminating at its lower end short of the housing bottom and having means for selectively varying the length thereof.

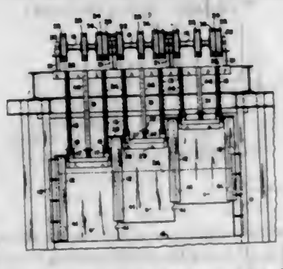
2,735,385
DRAFT CONTROL FOR FURNACES
Gaetano De Ascentiis, Camden, N. J.
Application October 4, 1954, Serial No. 460,051
7 Claims. (Cl. 110—163)



1. A draft control for furnaces comprising a section of pipe adapted to form a portion of a smoke pipe connecting a furnace to its chimney and having a first end for

connection to the furnace and a second end for connection to the chimney, a pivoted damper in said section, means normally maintaining said damper closed, said means being yieldable in response to a draft from said pipe section first end to permit such draft to open said damper, and baffle means in said pipe section between said first end thereof and said damper disposed adjacent to said damper, said baffle means having a first portion disposed substantially along the axis of said pipe section and a second portion disposed in angular relation to said first portion and facing said pipe section first end whereby to guide toward said pipe section second end products of combustion when said damper is open and to cooperate with said damper to reflect back to said pipe section first end heat rays coming from the furnace when said damper is closed.

2,735,386
FURNACE DOORS AND SEALS
Levi S. Longenecker, Mount Lebanon, Pa.
Application December 3, 1952, Serial No. 323,876
13 Claims. (Cl. 110—176)



10. The combination with a furnace having a charging opening in a wall thereof, of a door for controlling the opening, a track extending above said door, wheel means operatively secured to the top portion of said door to ride on said track, winding means positioned for operating said door, means cooperating with a top portion of said door to support and raise and lower it with respect to the furnace opening, and said last-mentioned means having portions connected between said winding means and said door and having portions positively retaining said door on said track.

2,735,387
BUTTON-SEWING ATTACHMENTS
Carl G. Baehr, West Haven, and John Connors, Hamden, Conn., assignors to The Greist Manufacturing Company, New Haven, Conn., a corporation of Connecticut
Application June 27, 1952, Serial No. 295,956
6 Claims. (Cl. 112—115)



1. A button-sewing attachment for sewing machines comprising a frame, a button carrier pivoted on the frame for oscillating movement in a substantially horizontal plane, means for oscillating said carrier including a fork arm pivoted on the frame for attachment to the needle bar of the machine, and connections between said carrier and fork arm, said carrier having a button seat thereon, and a thread-supporting finger carried by the carrier and extending over the button seat in spaced relation thereto to lie above the button on said seat, said finger being tapered in thickness and means mounting said finger on the carrier for movement toward and from the pivot point of the carrier.

2,735,388
BINDERS
Carl G. Baehr, West Haven, Conn., assignor to The Greist Manufacturing Company, New Haven, Conn., a corporation of Connecticut
Application September 26, 1951, Serial No. 248,336
3 Claims. (Cl. 112—137)



1. A sewing machine binding attachment comprising a plate, means for securing said plate to the presser bar of the sewing machine to extend forwardly therefrom, said plate having a scroll-supporting member projecting upwardly and rearwardly therefrom, a scroll-carrying member, means for securing the latter to the supporting member for rotative adjustment, the axis of rotation of said scroll-carrying member being substantially coincident to a longitudinal axis extending through the scroll, and a scroll carried by said last-named member with its axis inclined downwardly and rearwardly.

2,735,389
METHOD AND MEANS FOR MAKING WROUGHT FITTINGS
Paul D. Wurzburger, Cleveland Heights, Ohio, assignor to Northern Indiana Brass Company, Elkhart, Ind., a corporation of Indiana
Original application August 23, 1947, Serial No. 770,293, now Patent No. 2,603,175, dated July 15, 1952. Divided and this application July 2, 1952, Serial No. 296,850
7 Claims. (Cl. 113—44)



1. The method of making a wrought branch fitting such as a T, whose volume is smaller than the volume of the blank from which it is formed by extruding at least one lateral leg outwardly from an imperforate tubular blank confined in the channel of a forming die while shortening the blank to form a head portion, which comprises confining a voided body of substantially incompressible flowable filler material having a volume greater than the leg to be formed within the imperforate tubular blank, said body of filler material having an internal void of volume at least as great as the difference between the volume of the blank and the volume of the wrought piece and having a high viscosity substantially resistant to reduction of its void at pressures below the bursting strength of said blank which facilitate working the blank but permitting reduction of its void at greater pressures likewise below the bursting strength of the blank, imposing longitudinal metal flowing compression forces upon the ends of said blank in the die and substantially simultaneously and continuously exerting on the whole area of the ends of said body of filler material forces which create and maintain an internal pressure within said body sufficient to facilitate extruding said leg but less than the bursting strength of said blank, moving all the filler material at the ends of the body of filler material toward the extruded leg, maintaining the end of the extruded leg unsupported, confining the whole of said body of filler material to a space of decreasing size within said fitting while forcing part of said body of filler material to flow into said leg, changing the shape of the internal void as said filler material flows into said leg, working the stock of the blank to induce extrusion of said leg, and reducing the volume of said void as the shape of the void is changed and as the stock of the blank is being worked.

2,735,390
METHOD OF PRODUCING DEEP-DRAWN SHAPES IN SHEET METAL
John H. Engel, Escondido, Calif.
Application July 28, 1952, Serial No. 301,193
9 Claims. (Cl. 113—51)



1. A method for producing deep-drawn shapes in metal sheets, including: forming a flexible pattern having a cupped portion of the final shape required; shaping said cupped portion of the flexible pattern into a series of waves disposed in a generally flatter zone than the final shape required while avoiding increase in the projected area of the pattern; producing a preforming die conforming with said shaped flattened cupped portion of said flexible pattern; shaping a metal sheet from said preforming die, thereby partially stretching and shrinking and partially shaping said sheet; and thereafter subjecting such preformed sheet to the action of finish dies to yield the final shape required.

2,735,391
WARSHIP WEAPONS SYSTEM, INCLUDING AIRCRAFT STORING AND LAUNCHING ARRANGEMENT
Herbert H. Buschers, Towson, Md., assignor to The Glenn L. Martin Company, Middle River, Md., a corporation of Maryland
Application July 25, 1952, Serial No. 300,921
6 Claims. (Cl. 114—1)



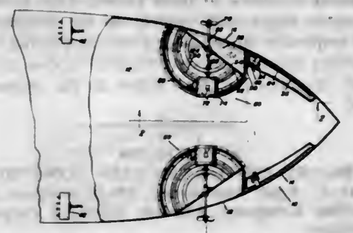
1. An aircraft storage and launching arrangement particularly adapted for use on the deck of ships of the submarine type comprising, a hangar secured to said deck, said hangar having a plurality of pairs of spaced hangar guide rails carried therein for supporting a plurality of aircraft in stacked relationship one above the other, a pair of spaced guide rails secured to said deck adjacent said hangar and extending in a direction generally parallel with said hangar guide rails, a retractable launcher carried by said last mentioned guide rails for movement therealong between a loading position adjacent said hangar and a launching position spaced from said hangar, said launcher including a pair of launcher guide rails extending generally parallel with said hangar guide rails, a retracting mechanism carried by said launcher for raising and lowering said launcher guide rails so as to be coaxially aligned with either of said plurality of pairs of hangar guide rails whereby in loading position said launcher guide rails engage said hangar guide rails in end to end relationship, means for moving said aircraft along said rails and onto said launcher when said launcher and hangar guide rails are coaxially aligned and in end to end engagement, means for releasably securing said aircraft in position on said launcher, and means for locking said launcher in the raised position for launching said aircraft.

2,735,392
BOAT HULL HAVING AN UPWARDLY ARCHED BOTTOM
Earl W. Cox, Seattle, Wash.
Application December 10, 1952, Serial No. 325,051
3 Claims. (Cl. 114—62)



1. A boat having a hull formed with a water dividing prow and with opposite sidewall portions extending substantially to the full length of the hull in parallel vertical planes and to equal, uniform depth, and said hull having a bottom of upwardly arched and substantially semi-cylindrical form, extended between and joined with said sidewall portions along their lower edges and providing a water confining channel that opens to prow and stern ends of the boat, said bottom having outwardly and upwardly formed portions at its forward end, at opposite sides of the prow, joined with the forward ends of said sidewall portions to provide cut-waters and forming upwardly and laterally flared valleys whereby head waters are funneled into said channel, as the boat moves forwardly and said bottom having similarly upwardly formed portions at its rear end, joined with the rear ends of said sidewall portions; said bottom and said sidewall portions as thus joined providing parallel, laterally spaced water displacement bows whereby the hull is floated in the water with the top of the arched bottom substantially at the level of the water line, and a boat driving propeller positioned in said channel in its central longitudinal plane and substantially above the level of the lower edges of said sidewall portions of the hull.

2,735,393
SHIP PROPULSION AND STEERING ARRANGEMENT
Gerald C. White, Macon, Ill.
Application October 29, 1953, Serial No. 389,001
6 Claims. (Cl. 114—147)



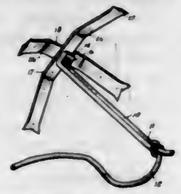
1. A ship propulsion arrangement in the forward part of the hull of a vessel and adapted to be used in the maneuvering of a vessel comprising opposed openings in the outer skin of the hull of the vessel, doors slidably mounted in said hull for closing said openings, chambers formed in said hull in communication with said openings sealing the rest of said hull from said openings, said chambers including forwardly converging bulkheads, drive shafts pivotally mounted in said bulkheads and extending therethrough, propellers on the free ends of said shafts, means in said hull for rotating said shafts and hence said propellers, said shafts being capable of being pivoted into said chamber, arcuate toothed tracks in said hull adjacent said bulkheads, carriages carrying said shafts having said means for driving said shafts mounted thereon, motors suspended below said carriages and driving toothed wheels, said toothed wheels engaging said tracks so that upon actuation of said motors, said carriages will be displaced along said tracks thus pivoting said shafts.

2,735,394
ANCHOR
John R. Walpole, Lampasas, Tex.
Application January 14, 1953, Serial No. 331,195
3 Claims. (Cl. 114—206)



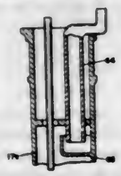
1. An anchor having a heavy flat portion to rest upon the bottom, a pair of prongs attached to said flat portion near one edge thereof and extending at substantially a right angle away from the undersurface of said flat portion, a lift rod extending over said flat portion and having at each end a vertical riser seated in and attached to said flat portion, one such riser being located at a point between said prongs, the other such riser being located near the other edge of said flat portion, and a chain having at its end a ring, said ring being mounted to surround said lift rod and risers and slide thereon.

2,735,395
COLLAPSIBLE ANCHOR
Charles W. Ballman, Indianapolis, Ind.
Application January 29, 1953, Serial No. 334,061
1 Claim. (Cl. 114—207)



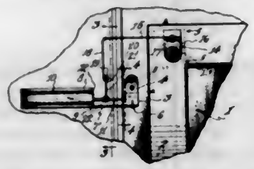
An anchor comprising a pair of crossed flukes, said flukes being of generally uniform width throughout their entire lengths and the extremities of said flukes each terminating in a plane generally at right angles to the axis of the fluke, thereby forming corners, the corners of each fluke being flattened to form points, each point lying at a divergent angle with respect to the longitudinal axis of the respective fluke, a member connecting said flukes for holding them in crossed relation to one another, and a shank mounted on said flukes at the crossed portion thereof.

2,735,396
OUTBOARD MOTOR COLUMN CONSTRUCTION
Kenneth C. Agar, Ann Arbor, Mich., assignor to Clinton Machine Company, Clinton, Mich., a corporation of Michigan
Application June 25, 1954, Serial No. 439,225
9 Claims. (Cl. 115—17)



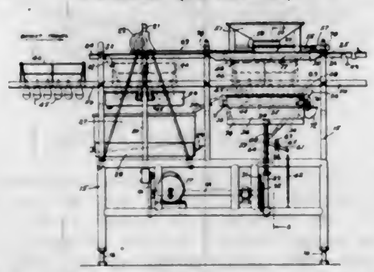
1. In an outboard motor of the class described having a propeller driven by an internal combustion engine; a tubular column for supporting said propeller; a drive shaft extending through said column for driving said propeller through a driving mechanism; a conduit for conducting exhaust gases from said motor extending into said column; means for retaining said conduit in fixed relation to said column; an outlet discharge spout on said column for discharging exhaust gases adjacent to said propeller; and a cup-shaped member on said column, the open end of said conduit extending into said cup-shaped member to provide a baffle for preventing the passage of water into said conduit when the column is turned upside down.

2,735,397
DOOR SIGNALING MEANS
Joseph F. Bishop, Newark, N. J.
Application November 19, 1953, Serial No. 393,173
3 Claims. (Cl. 116—100)



1. A door signaling means including a structure for mounting on a door frame and a cooperative part for mounting on the frame door, said structure having a metallic block at one end with means for fastening the block to a door frame, the structure also having a plurality of spaced circular reeds of different lengths fastened to the block and extending therefrom and an echo chamber comprising a casing positioned over the free ends of the reeds and toward but not to said block to leave a free space, and a lever adapted to be adjustably mounted on the door and having a part carrying a device for striking the reeds at said free space when the door is opened or closed.

2,735,398
CONFECTION MACHINE
Joseph B. Orrell, Los Angeles, and August E. Wilshusen, Whittier, Calif., assignors to Drumstick, Inc., Fort Worth, Tex., a corporation of Texas
Application December 20, 1952, Serial No. 327,062
4 Claims. (Cl. 118—28)



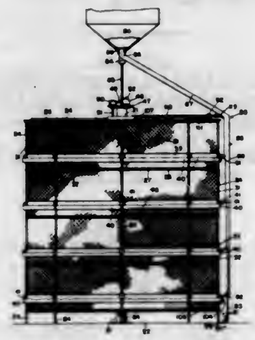
1. In a confection machine adapted particularly for applying chocolate and comminuted nuts to ice cream cones at separate stations, comprising a framework, continuous rails extending the length of the working portion of the machine, a plurality of ice cream cone holding baskets adapted to be moved through the machine by riding on the rails, means for advancing the baskets in a step-by-step relationship on the rails through the machine, a vertically reciprocable chocolate-holding pan for applying chocolate to the cones in inverted position in one step at the first station, a vertically reciprocable nut holding pan adapted to apply nuts by pressure operation to the chocolate coated cones in said inverted position in a succeeding step at the second station, a single motor for moving the baskets intermittently along the rails, and reciprocating the pans, all in synchronisms, a hopper for the nut particles and a measuring dispenser beneath the hopper and above the nut pan, said measuring dispenser being actuated in timed relationship to the basket moving means, means movable with the nut holding pan to level the nuts delivered thereto from the hopper through the measuring means, said means including a bell-crank, a slotted link connecting one arm of the bell-crank to the machine frame, means for pivoting the bell-crank to the pan moving means, an extension slidable on the other end of the bell-crank, a support on the extension projecting into the nut pan, and a leveling rod on the support, said rod extending across the nut pan.

2,735,399
MILKING APPARATUS
Fernand J. J. J. Henrard, Remicourt, Belgium, assignor to Babson Bros. Co., a corporation of Illinois
Application January 15, 1954, Serial No. 404,360
Claims priority, application Netherlands April 25, 1953
1 Claim. (Cl. 119—14.46)



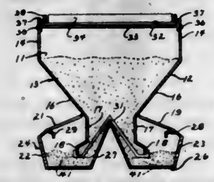
A lid of the character described for a milking device, comprising: a lid member having an upstanding arcuate portion adjacent the front edge thereof merging into a downwardly extending rear surface, at least a portion of said rear surface being transparent; and a plurality of straight tubular members adapted for attachment to the milk tubes of a teat cup assembly, integrally mounted in the front surface of said upstanding portion near the top thereof, each member having an axial opening therethrough and terminating a substantial distance from said transparent rear surface, the axis of each member being aligned to intersect a midportion of said transparent portion at an angle, directing the flow of milk thereagainst to wash said portion continually, preventing the accumulation of condensate thereon.

2,735,400
AUTOMATIC FEED POULTRY BATTERY
Sherman C. Stubbs, Danville, Ill.
Application February 3, 1954, Serial No. 407,869
12 Claims. (Cl. 119—18)



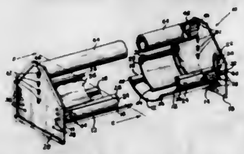
1. A poultry battery comprising a plurality of superimposed tiers defining superimposed stationary fowl occupying annular spaces, each of said tiers or fowl occupying spaces having a closed top, a floor and foraminous inner and outer walls, a center service well disposed within said inner walls and extending from top to bottom of the battery and having an open lower end, watering troughs disposed in said service well and supported by said foraminous inner walls above each of the floors, a water supply pipe adapted to contain water under pressure extending upwardly into the poultry battery through said service well and having branch pipes opening into said watering troughs, means automatically controlling the supply of water from said branch pipes to the watering troughs, feed troughs disposed around the poultry battery and supported thereon externally of the outer foraminous walls and above each of said floors, said inner and outer foraminous walls having openings above and adjacent said troughs affording access to the troughs for the heads of fowls, a gravity supplied feed supply pipe having a portion extending vertically along the outer side of the battery and including downwardly inclined discharge spouts opening above said feed troughs for supplying feed thereto, and a driving means connected to said feed supply pipe for imparting rotation thereto for causing the feed supply pipe to travel around the battery for supplying feed circumferentially to said feed troughs.

2,735,401
POULTRY FEEDER
Alan G. Diseker, Decatur, Ala.
Application October 19, 1953, Serial No. 386,687
1 Claim. (Cl. 119—52)



A poultry feeder comprising an open top feed hopper having end walls and downwardly converging side walls, a feed trough beneath said hopper and communicating therewith, an inverted V-shaped ridge in the bottom of said trough along the longitudinal center thereof, and removable support members of substantially inverted V-shape extending over said ridge with the free ends thereof engaging beneath the lower edges of said hopper and terminating in upwardly extending hook portions positioned outwardly of said lower edges whereby the hopper is supported along the length thereof.

2,735,402
VARIABLE CAPACITY POULTRY TROUGH
Anthony De Lorenzo, Duxbury, Mass.
Application December 6, 1952, Serial No. 324,529
5 Claims. (Cl. 119—61)

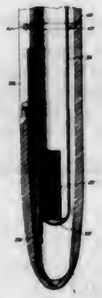


1. A poultry feeder comprising, a trough member having two sides and two ends, an end plate fixed to each of said ends transversely to said trough, an elongated member mounted at its ends to rotate in said end plates above said trough, upwardly directed stationary guide members rigidly fixed to said end plates, a side-wall at each of said sides, said side walls being mounted to slide upwardly in said guide members in extension of said sides, and means for fixing said side-walls in place.

2,735,403
INK SUPPLY MEANS FOR FOUNTAIN PEN
Harry L. Morrill, Jr., Marietta, Ga.
Application February 14, 1950, Serial No. 144,171
5 Claims. (Cl. 120—42.16)

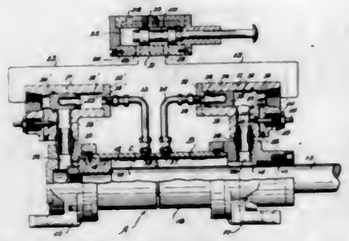
1. A fountain pen comprising an elongated pen body, a flexible sac forming an ink reservoir housed within said pen body and extending longitudinally thereof, said reservoir having a delivery end in communication with a

capillary ink-feed passage located in said pen body, a body of ink-absorbent material located within said reservoir, said absorbent body being attached to a wall of said sac and being spaced from the delivery end of said reservoir, the size of said absorbent body being substantially less than the volume of said reservoir, a filling lever, and means supporting said filling lever on said pen body, said filling lever being operable to collapse then release said sac to draw ink into said reservoir through said capillary ink-feed passage to saturate said absorbent body and fill said reservoir, said absorbent body acting to trap



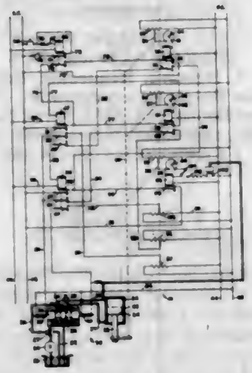
a portion of the ink drawn into said reservoir, the remainder of said ink being free ink capable of being drawn from said reservoir by said capillary ink-feed passage when the pen is used for writing, said absorbent body being compressible by said filling lever to expel ink held by said absorbent body into said reservoir and thus free said ink and make it available to said ink-feed passage to provide a small reserve supply of free ink within said reservoir after the original supply of free ink not trapped by said absorbent body has been depleted.

2,735,404
RECIPROCATING FLUID ACTUATED MOTORS AND CUSHIONING VALVE THEREFOR
William L. Komph, Sr., Port Huron, Mich., assignor to The Wellman Engineering Company, Cleveland, Ohio, a corporation of Ohio
Application December 31, 1952, Serial No. 329,066
9 Claims. (Cl. 121—38)



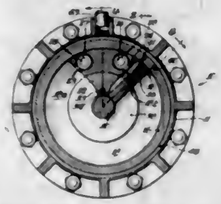
1. In a reciprocating type fluid pressure actuated mechanism, a power cylinder, a valve cylinder, a first port or aperture in one end of said valve cylinder adapted to be selectively connected with a source of fluid pressure and with exhaust, a second port or conduit in one side of said valve cylinder adjacent to but spaced from said one end of said valve cylinder and in communication with one end of said power cylinder, a piston-like valve member reciprocable in said valve cylinder to open and close said second port or conduit, a third port or conduit in the other end of said valve communicating with said power cylinder intermediate opposite ends thereof, a fourth conduit connecting said first and second conduits, and a variable orifice in said fourth conduit.

2,735,405
HYDROELECTRIC CONTROL SYSTEM FOR HYDRAULIC APPARATUS
George M. Hipple, Columbus, Ohio, assignor to The Denison Engineering Company, Columbus, Ohio, a corporation of Ohio
Application April 21, 1953, Serial No. 350,024
6 Claims. (Cl. 121—38)



1. In a hydraulic device of the type having a reversible fluid motor and a source of fluid pressure, apparatus for controlling the flow of fluid from said pressure source to said motor to govern the operation of the latter comprising a distributing valve between said fluid pressure source and said motor; electro-responsive means for actuating said distributing valve, said means being responsive in proportion to the current supplied thereto; an electric circuit for said electro-responsive means; said circuit having branches arranged for selective connection with said electro-responsive valve actuating means, said branches supplying currents with different characteristics to said electro-responsive means to secure different operations of said valve and fluid motor; and means actuated by said fluid motor to connect said branches one at a time with said electro-responsive valve actuating means at predetermined stages of operation of said fluid motor.

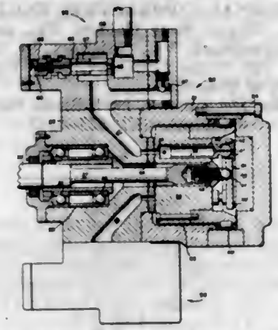
2,735,406
PRESSURE FLUID VANE TYPE MOTOR FOR STEERING MECHANISMS AND THE LIKE
Robert E. Britton, Holland, Mich., assignor of one-half to Francis G. Filippi
Application June 17, 1952, Serial No. 294,035
9 Claims. (Cl. 121—41)



1. A fluid control device comprising a casing having a chamber therein, a motor vane in the chamber and dividing the same into a first section on one side of the vane and a second section on the other side of the vane, a shaft rotatably mounted in the casing and secured to the vane movably to support the same, means for constantly introducing fluid under pressure into both sections of the chamber, a movable member forming at least a portion of one wall of the chamber and provided with a pair of spaced ports for draining fluid from both sections of the chamber, said sections being in communication with said fluid introducing means regardless of the position

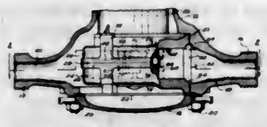
of the vane relative to said ports, and means for moving the member to move a port therein at least partially behind the vane to throttle such port whereby the ensuing increase in pressure in the section in communication with the last mentioned port will cause the vane to move in the same direction as the member in a follow-up manner.

2,735,407
HYDRAULIC MOTOR
Ellis H. Born, Columbus, Ohio, assignor to The Denison Engineering Company, Columbus, Ohio, a corporation of Ohio
Application May 8, 1952, Serial No. 286,666
3 Claims. (Cl. 121—62)



1. Hydraulic apparatus comprising a fluid pressure energy translating device having a casing forming a chamber; a cylinder barrel disposed in said chamber; a port plate in said chamber, said cylinder barrel and port plate being in relative rotary sliding engagement; an annular bearing area on the surface of said port plate engaged by said cylinder barrel, said port plate having spaced ports in said annular bearing area alternately communicating with ports formed in the complemental surface of said cylinder barrel upon relative rotary movement; an additional bearing area on the engaging surface of one of said members, said additional bearing area being provided with port means; a source of fluid under pressure; a fluid conductor leading from said pressure source to one of the ports in the annular bearing area on said port plate; a branch passage leading from said conductor to the port means in said additional bearing area; and normally closed valve means between said conductor and said branch passage, fluid flow through said conductor tending to open said valve to admit fluid to said branch passage.

2,735,408
METER
Patrick J. Rochford, Hoboken, and Robert Z. Hague, Oradell, N. J., assignors to Rockwell Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application May 17, 1951, Serial No. 226,836
11 Claims. (Cl. 121—68)



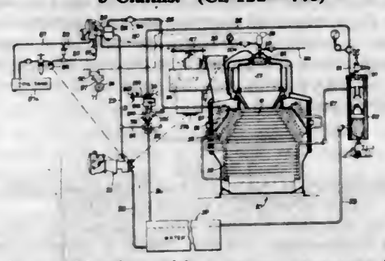
1. In a fluid meter, a measuring chamber and a rigid fluid actuated piston mounted for free oscillation therein with respect to an axis under the influence of fluid pressure applied thereto, a flow division member in said chamber between inlet and outlet ports therefor, said piston being slotted to straddle in a free sliding fit the flow division member, and shock cushioning means at all points of contact between the piston and the flow division member.

2,735,409
BLAST NOZZLES FOR MELTING FURNACES
Bruno Aurin, Hemer (Westphalia), and Willi Dehne, Dortmund-Horde, Germany, assignors to Herr Ernst Thomas, Hemer (Westphalia), Germany
Application December 10, 1952, Serial No. 325,184
Claims priority, application Germany December 11, 1951
7 Claims. (Cl. 122—6.6)



1. A blast nozzle comprising a hollow nozzle head in the form of a hollow ring-shaped chamber, a rear closure part in the form of a ring, a conical internal tube forming a fluid passage extending from and connected to the rear part and to the nozzle head, a spirally wound tube forming a conical outer cover between the nozzle head and the rear part and spaced from the conical internal tube, the spiral tube being in contact as to adjacent spirals and forming a smooth conical outer surface, means to secure the conical internal tube and the spirally wound tube between the nozzle head and the rear closure part including means in the space between the conical internal tube and the spirally wound tube to admit fluid to circulate into the nozzle head, and an inlet and an outlet through the rear closure part for a cooling fluid connected to the spirally wound tube and the conical internal tube.

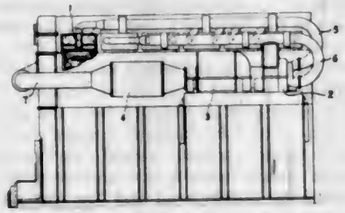
2,735,410
WATER BY-PASS REGULATOR FOR STEAM GENERATOR CONTROL MECHANISM
Roy J. Armbrust and Joseph E. La Rocque, Chicago, Ill., assignors to Vapor Heating Corporation, Chicago, Ill., a corporation of Delaware
Application March 1, 1952, Serial No. 274,362
5 Claims. (Cl. 122—448)



1. In combination with a steam generator having a fire chamber, a fuel line for delivering fluid fuel to said fire chamber, a fuel valve in the fluid line, a feed water conduit leading to said generator, and a pump of uniform capacity for delivering feed water through said conduit to the generator; of means for varying the delivery of water to the generator in relation to the steam pressure therein and for varying the delivery of fuel to the fire chamber in relation to the flow of water to the generator comprising a normally closed bleeder valve communicating with the feed water conduit at a location intermediate the pump and the generator, a pressure actuated structure responsive to the steam pressure in the generator and operatively associated with said bleeder valve to open the same to an extent commensurate with the steam pressure developed in the generator and thereby vary the delivery of feed water to the generator, a control unit interposed in the feed water conduit and including an element responsive to the flow of water to the generator and operatively associated with said fuel valve for proportionately varying its open position in relation

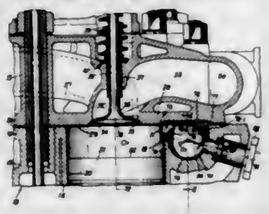
to the rate of flow of feed water to the generator, and means associated with said pressure actuated structure for delaying further movement thereof when a predetermined maximum steam pressure is attained, said delaying means being rendered ineffective upon the development of a predetermined higher steam pressure in the generator.

2,735,411
METHOD OF OPERATING SUPERCHARGED FOUR-STROKE INTERNAL-COMBUSTION ENGINES
Karl Zinner, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a corporation of Germany
Application December 29, 1949, Serial No. 135,735
Claims priority, application Germany August 6, 1949
3 Claims. (Cl. 123—1)



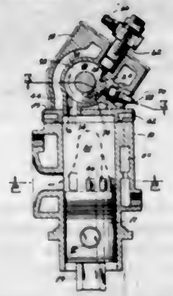
1. The method of operating a four-stroke cycle diesel engine operating with a supercharging pressure above 2 kgs./cm.² absolute and a mean effective pressure above 12 kgs./cm.² to obtain substantially improved specific fuel economy comprising the steps of supercharging air for supply to the engine, cooling the supercharged air to a temperature such that the adiabatic rise of temperature caused by the supercharging is not exceeded, introducing said cooled supercharged air into the engine in a controlled quantity of two to three times the stoichiometric amount of air required for complete combustion, retaining substantially the entire quantity of said air in the engine cylinder, compressing said air during the compression stroke to a pressure of approximately 70 to 145 atmospheres in the absence of combustion, and causing during combustion a substantial pressure increase of at least 15 atmospheres above the pressure at the end of said compression by introduction of fuel into said compressed air to produce said power stoke.

2,735,412
COMPRESSION IGNITION INTERNAL-COMBUSTION ENGINE CONSTRUCTION
Matthew C. Kuepfer, Canton, Ohio, assignor to Hercules Motors Corporation, Canton, Ohio, a corporation of Ohio
Application December 1, 1951, Serial No. 259,365
16 Claims. (Cl. 123—32)



1. In an internal combustion engine, a cylinder having a bore extending therethrough, cylinder head means having an inner face extending across one end of the cylinder bore, a piston operative for reciprocation in the cylinder bore and forming with the cylinder bore and the cylinder head means inner face a cylinder chamber, walls forming a mixing and combustion chamber adjacent the cylinder and a passageway extending and providing a communication between the cylinder head end of the cylinder chamber and the mixing and combustion chamber, means for introducing combustion supporting medium into the cylinder chamber, means for injecting fuel particles into the mixing and combustion chamber, means for cooling the walls forming the mixing and combustion chamber, the walls forming the mixing and combustion chamber including a shell having one thickness, and a heat collecting and transfer flange extending outwardly from the shell and having a thickness greater than the thickness of the shell and constituting the bottom wall of the passageway.

2,735,413
INTERNAL-COMBUSTION ENGINES
Wolfgang E. Meyer, State College, Pa., and Rafael H. Brand, Waynesboro, Va., assignors, by mesne assignments, to The Texas Company, New York, N. Y., a corporation of Delaware
Application December 5, 1952, Serial No. 324,286
4 Claims. (Cl. 123—32)

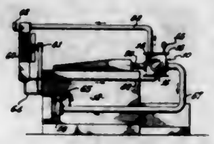


1. An internal combustion engine of the reciprocating piston type comprising, in combination, a cylinder with piston therein providing a main cylinder space, a head having only mechanical clearance with the piston in upper dead center position, said head containing an auxiliary combustion chamber of annular shape generated by a plane surface revolved about a predetermined axis, a transfer passage connecting said auxiliary combustion chamber to said main cylinder space and disposed tangentially to an inscribed circle within said combustion chamber for directing air through said combustion chamber in a high velocity swirl about said axis responsive to a compression stroke of said piston, said transfer passage intercepting said auxiliary combustion chamber well within the diametral limits of internal tangency and together therewith having a volume relative to the volume of said main cylinder space providing a compression ratio in excess of 8:1, means for scavenging said main cylinder space, and fuel injection and positive ignition means for effecting a flame-front type of combustion in the annular combustion chamber with said flame front oriented in a cross section of said annular chamber taken in a plane through said axis, said cross section being such that all of the flowing air increments across which said flame front type of combustion is maintained are moving at substantially the same linear velocity whereby better combustion control is obtained.

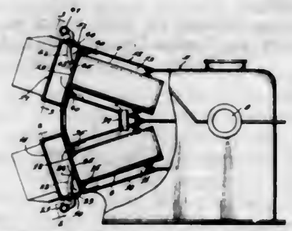
2,735,414
LIQUID COOLING SYSTEM FOR INTERNAL-COMBUSTION ENGINES
Adolph Tacchella, Altadena, Calif.
Application December 9, 1950, Serial No. 200,022
12 Claims. (Cl. 123—41.23)

1. In a liquid cooling system for an internal combustion engine, the combination comprising: an engine block having an inlet and outlet for liquid coolant; a tank for containing a body of liquid; a liquid inlet for the tank

connected to and receiving liquid from the engine block outlet, said inlet including passage forming means providing a liquid passage of gradually decreasing cross section followed by an abrupt increase in cross section at which pressure is reduced to form vapor; a vapor separating chamber within the tank and opening to the tank interior below the liquid level therein, said chamber receiving liquid from the inlet for the tank; a liquid outlet passage from the tank communicating with the separating chamber and discharging to the tank exterior; a vapor outlet from the tank above the liquid level therein; a pump delivering liquid to the engine block inlet and receiving liquid from the tank; and means for cooling and condensing vapor received from the tank.



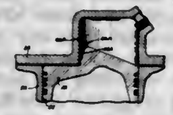
2,735,415
COOLING SYSTEM FOR DIESEL ENGINE
Frank G. Slonek, Chicago, Ill., assignor to Page Engineering Company, Chicago, Ill., a corporation of Illinois
Application September 20, 1954, Serial No. 457,261
5 Claims. (Cl. 123—41.44)



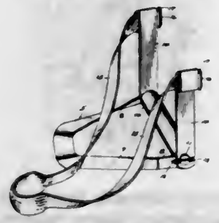
1. In a diesel engine having generally hollow cylinder heads associated with cylinders surrounded by spaced jackets; a cooling system comprising a pump, a first pipe leading from said pump to a point adjacent a cylinder head, a second pipe leading from said first pipe through a wall of said cylinder head to a discharge end within said head adjacent the cylinder-closing wall of said head, the discharge from said second pipe being directed at the central region of said cylinder-closing wall whereby maximum cooling is provided at said central region, said head having ports leading to the space between the associated cylinder and jacket, a third pipe leading from said space to the space between an adjacent cylinder and the jacket thereof, the head of said adjacent cylinder having ports leading from said last named space to the hollow interior thereof, and a fourth pipe leading from the central region of the cylinder-closing wall of said last named head to the exterior of said head whereby maximum cooling is provided at said central region.

2,735,416
PISTON AND CYLINDER CONSTRUCTION FOR INTERNAL-COMBUSTION ENGINE
Henry George Ferguson, Stow-on-the-Wold, Alexander Senkowski, Earlsdon, Coventry, and William Henry Harrow, Coundon, Coventry, England, assignors, by mesne assignments, to Harry Ferguson, Inc., Detroit, Mich., a corporation of Delaware
Application September 28, 1951, Serial No. 248,674
Claims priority, application Great Britain September 29, 1950
16 Claims. (Cl. 123—191)

1. In an internal combustion engine, the combination comprising a cylinder, a head closing one end of said cylinder, and a piston reciprocable in said cylinder, said head and piston having step portions adapted to interfit as said piston approaches a top dead center position to define a pump chamber and combustion chamber, said step portions upon interfitting having faces disposed in spaced relation and formed to define a passage diminishing in cross section toward its edges and affording restricted communication between said chambers, a portion of the charge introduced into said cylinder being compressed in said pump chamber and forced therefrom through said passage in a generally centrally concentrated stream into said combustion chamber upon further movement of said piston toward top dead center position so as to create turbulence in the portion of the charge in said combustion chamber.

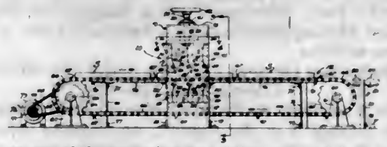


2,735,417
SLING SHOT
Joseph Denekar, Cohoes, N. Y.
Application November 25, 1953, Serial No. 394,321
1 Claim. (Cl. 124—20)



In a sling shot, a frame embodying a substantially U-shaped member constructed of wide strap metal, providing spaced arms, the wide surfaces of said arms being disposed vertically, a bar connected between the ends of the U-shaped frame providing a handle, said arms having elongated depressions formed at the ends thereof, vertical bars rising from the frame at the ends of said handle, said vertical bars having enlargements fitted within said depressions, screws extending through said vertical bars and positioned in the ends of said handle securing said vertical bars against movement with respect to said U-shaped member and handle, and an elastic member having its ends connected to the upper ends of said bars, the intermediate portion of said elastic member providing a pocket for a projectile, and said elastic member adapted to direct a projectile forwardly between said arms when the elastic band is stretched and released.

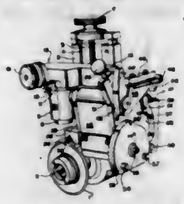
2,735,418
STONE GROOVING MACHINE
Martin O. Loeffler, Detroit, Mich.
Application February 2, 1953, Serial No. 334,679
2 Claims. (Cl. 125—9)



1. A stone slab grooving machine comprising an elongated framework having an opening with a stone slab path therethrough for the passage of the stone slabs while being grooved, a pair of grooving tool carriers disposed in said framework on opposite sides of said path and

facing opposite sides of the slabs traversing said path, a multiplicity of resilient grooving tool supports mounted on each tool carrier in transversely-spaced relationship and directed toward opposite sides of said slabs traversing said slab path through said opening, a multiplicity of stone slab grooving tools mounted on said tool supports and projecting into said opening into engagement with the opposite sides of slabs passing therethrough along said slab path, said tools having grooving tips spaced transversely apart from one another at the predetermined separations desired for the slab grooves, a movable conveyor extending to and away from said framework opening at opposite sides thereof and arranged to move the slabs to be grooved along said slab path through said opening and past said grooving tools, and a power source drivingly connected to said conveyor, said grooving tool supports comprising leaf springs mounted on said tool carrier and holding said grooving tools.

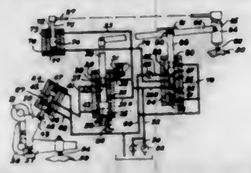
2,735,419
ABRASIVE WHEEL DRESSER
Joseph J. Osplack, Detroit, Mich., assignor to Vinco Corporation, Detroit, Mich., a corporation of Michigan
Application November 30, 1953, Serial No. 394,993
3 Claims. (Cl. 125—11)



1. Grinding wheel dressing apparatus comprising in combination a supporting frame, a first radial member journalled in said frame for rotation about a first axis, a second radial member journalled in said first member for rotation about a second axis parallel to and remote from said first axis, a dressing tool having a dressing tip and being fixed to said second member at a position remote from said second axis, a cam plate fixed to said frame and normal to said first axis, the periphery of said cam plate having a contour related to the desired contour of the wheel to be dressed, and means engaging the periphery of the cam plate and operatively connected to said second member for effecting a rotation of said second member about said second axis as said first member is rotated about said first axis, which rotation of said second member is related to the departure of the peripheral contour of the cam from an arc which is circular about said first axis whereby, when said supporting frame is placed adjacent a rotatably mounted wheel to be dressed with said first axis normal to a plane including the rotational axis of the wheel, said tool tip is in engagement with the periphery of the wheel.

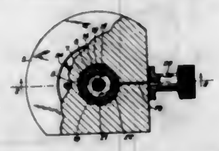
2,735,420
GRINDING WHEEL TRUING MECHANISM
Albert H. Dall, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Co., Cincinnati, Ohio, a corporation of Ohio
Application October 22, 1954, Serial No. 463,954
7 Claims. (Cl. 125—11)

1. In a grinding machine, a support, a rotatable wheel spindle journaled in the support, an abrasive wheel carried by the spindle for rotation thereby, and means for producing a contour on the surface of the abrasive wheel including a template carried by the shaft for rotation therewith, a template follower carried by the support and mounted for movement relative to the support, a truing tool mounted on the support for movement in a direction toward and from the abrasive wheel, a tool actuating hydraulic motor, a source of hydraulic pressure, and means for variably controlling the reaction of the hydraulic pressure on said hydraulic motor including a first conduit coupling the source of pressure to one side of said hydraulic motor, a second conduit coupled to the other side



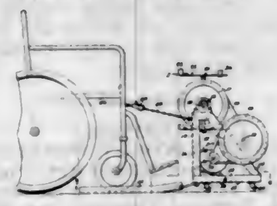
of said hydraulic motor, a movable selector valve for alternatively connecting the second conduit to the source of pressure or to exhaust, a movable by-pass valve coupled with the first conduit for controlling the pressure in said conduit, and means connecting said selector valve and said by-pass valve for varying the position of the selector valve in accordance with movement of the bypass valve.

2,735,421
SHAPING OF BODIES OF CRYSTALLINE CARBON
Robin J. Cook, Florida, Transvaal, Union of South Africa, assignor, by mesne assignments, to Diamond Abrasive Products Limited, Johannesburg, Transvaal, Union of South Africa
Application October 20, 1952, Serial No. 315,701
Claims priority, application Great Britain October 22, 1951
13 Claims. (Cl. 125—30)



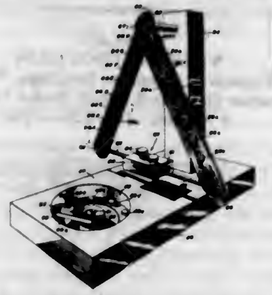
1. An apparatus for shaping bodies of crystalline carbon comprising a cylindrical casing having its inner wall composed of hard metal, access means at the top portion of the casing for introducing said bodies into said casing, means for injecting a jet of high pressure fluid tangentially into the casing, and a tubular member positioned axially of the cylindrical casing to provide an outlet for said fluid from the casing.

2,735,422
EXERCISE CYCLE
William Lloyd Jones, La Porte, Ind.
Application November 4, 1954, Serial No. 466,722
2 Claims. (Cl. 128—25)



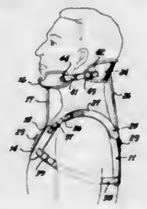
1. An exercise cycle for use by a person seated in a wheel chair, comprising a base frame of substantially U-shape in plan, traction wheels carried by said base, a crankshaft having a pair of offsets, means rotatably supporting said crankshaft above said base, a pedal on each offset, means rotating said crankshaft, a pair of channel-shaped wheel guides adapted to be engaged by the front wheels of the chair, means securing said guides to said base frame, and a pair of flexible chair holding members carried by said crankshaft supporting means, said holding members being engageable with the front of the chair frame for holding the latter against rearward movement on said guides.

2,735,423
EYE EXERCISING DEVICE
Alfred A. Powell, Fairfax, Va.
Application January 29, 1954, Serial No. 407,185
8 Claims. (Cl. 128—76.5)
(Granted under Title 35, U. S. Code (1952), sec. 266)



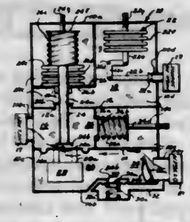
3. An optical exercising device comprising a base member, a vertical supporting member affixed to said base member, an arm pivotally mounted at its center on the free end of said vertical member so as to pivot in a vertical plane, adjustable means to vary and fix said arm at any angle relative to said vertical member, a light mounted on each end of said arm, each of said light being of a different color, and control means in said base member for said colored lights comprising, a pair of contacts each of which is electrically connected to one of said lights, a pivoted contact arm connected to a current source and spring biased to electrically engage one of said contacts and movable to engage the other of said contacts, a motor-driven cam whose surface engages the free end of the contact arm, said cam adapted to move the contact arm away from the contact against which said arm is biased to contact with the other contact and to permit said arm to return after one-half revolution of the cam, thereby enabling said colored lights to be lighted alternately.

2,735,424
CERVICAL BRACE
Milburn J. Benjamin, Glendale, Calif.
Application March 31, 1953, Serial No. 345,783
1 Claim. (Cl. 128—87)



Cervical brace apparatus comprising in combination a back plate of leather covered metal adapted to rest against the back of a person, a pair of arcuate leather covered shoulder plates pivotally and frictionally attached to said back plate at the respective upper corners of said back plate, said shoulder plates being adapted to rest upon the shoulders of the person, a leather covered chest plate adapted to rest against the chest of the person, a pair of shoulder straps adjustably connecting the respective forward ends of said shoulder plates to the upper corners of said chest plate, a pair of chest straps connecting the respective lower corners of said back plate with the corresponding lower corners of said chest plate and adapted to extend beneath the arm pits of a person, a chin plate adapted to rest beneath the chin of a person and having a brace extending substantially vertically downwardly therefrom, said brace being secured to said chest plate for vertical adjustment with respect thereto, and occipital plate adapted to be disposed against the occiput of the person, a rear brace secured to said occipital plate and extending downwardly therefrom, means adjustably securing said rear brace to said back plate for vertical adjustment with respect thereto, and a pair of chin straps connecting said chin plate with said occipital plate at the respective sides of the person's head.

2,735,425
ANTINEGATIVE G VALVE MECHANISM
Walter O. Wilkening, Bryan, Ohio, assignor to The Aro Equipment Corporation, Bryan, Ohio, a corporation of Ohio
Application January 11, 1954, Serial No. 403,411
7 Claims. (Cl. 128—142)



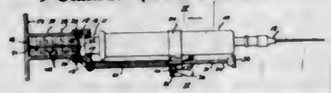
1. A valve control unit to control pressure in a helmet in response to acceleration, comprising in combination: a housing having a chamber in communication with the helmet, and a pair of auxiliary spaces communicating with the chamber through ports; means to supply air under predetermined pressure to one of said spaces; weight operated valve means operable to admit air from said one space to said chamber upon predetermined negative G acceleration; means to supply oxygen to the other of said spaces under pressure less than said predetermined pressure; weight operated valve means operable to close the port from said other space to said chamber upon predetermined negative G acceleration; a valve having a pair of opposed pressure-responsive faces, one in communication with said means to supply oxygen and the other in communication with said other space, the valve being operable to define a relief passage from said other space to the atmosphere when the pressure in said other space exceeds the pressure of said means to supply oxygen.

2,735,426
FOAM RUBBER SHEET MATERIAL
John Mitchell Claydon, Trumbull, Conn., assignor to Connecticut Bandage Mills, Inc., Bridgeport, Conn., a corporation of Connecticut
Application December 24, 1953, Serial No. 400,163
11 Claims. (Cl. 128—156)



1. Bandage material comprising, a one-way stretchable fabric backing and a foam rubber surface layer, the said foam rubber surface layer being provided with a surface slit.

2,735,427
HYPODERMIC SYRINGE
John J. Sullivan, Buffalo, N. Y.
Application April 23, 1953, Serial No. 350,691
9 Claims. (Cl. 128—218)



1. An attachment for a hypodermic syringe having a barrel, a plunger slidable within the barrel and having a bead thereon, and a needle carried by the barrel, said attachment consisting of a sterilizing kit comprising a casing, a cover for the casing, means for demountably securing the casing to the bead of the plunger, and a plurality of sterilizing units carried by the casing.

2,735,428
HYPODERMIC SYRINGES
Ralph L. Huber, deceased, late of Seattle, Wash., by Jennie L. Huber, administratrix, Seattle, Wash.
Application April 26, 1954, Serial No. 425,443
4 Claims. (Cl. 128—218)



1. A hypodermic syringe comprising a cylindrical barrel formed with a closing wall at its outer end and a hypodermic needle sealed through the closing wall with one end of the needle extending into the barrel said closing wall having an air relief port therethrough, a needle pierceable stopple fitted in the barrel adjacent said end of the needle, means integral with said closing wall and means integral with said stopple co-acting to form a sealed chamber surrounding said inner end of the needle, a piston stopple in the inner end of the barrel and a medicament compartment between the stopples.

2,735,429
HYPODERMIC SYRINGES
Ralph L. Huber, deceased, late of Seattle, Wash., by Jennie L. Huber, administratrix, Seattle, Wash.
Application April 26, 1954, Serial No. 425,444
1 Claim. (Cl. 128—218)



A hypodermic syringe of the character described comprising a barrel formed with a closing wall at one end and a hypodermic needle sealed through said wall with the inner end of the needle extending into the barrel, a partitioning stopple disposed in the barrel adjacent the said closing wall and a piston stopple normally disposed in the opposite end of the barrel; said partitioning stopple comprising side walls and a diaphragmatic end wall, said end wall being of relatively thin, elastic, transparent material and of substantially greater diameter than the inside diameter of the syringe barrel whereby sufficient fullness is provided to effect cupping of the end wall when the stopple is contained within the barrel.

2,735,430
HYPODERMIC SYRINGES
Ralph L. Huber, deceased, late of Seattle, Wash., by Jennie L. Huber, administratrix, Seattle, Wash.
Application November 19, 1954, Serial No. 469,981
5 Claims. (Cl. 128—218)

1. A hypodermic syringe of the character described comprising a barrel formed with a closing end wall at one end, a hypodermic needle sealed through said end wall with the inner end of the needle extending into the barrel, a bead stopple disposed in the barrel adjacent the inner



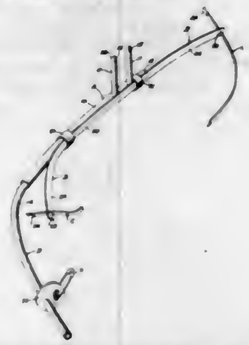
end of the needle, an axial passage through the bead stopple, a bead removably secured in the passage and said bead having a bore therein adapted to receive the inner end of the needle.

2,735,431
VACCINATING GUN
Francis J. Swanson, Saratoga, Wyo.
Application October 1, 1954, Serial No. 459,620
4 Claims. (Cl. 128—224)



1. An injector comprising a cylinder, a piston having an extended stem with ratchet teeth in one side positioned in the cylinder with the stem extended from one end thereof, a grip extended from one side of the cylinder, a trigger pivotally mounted on the forward portion of the grip, a rod extended through the grip, means pivotally connecting one end of the rod to the trigger, a pawl carried by the opposite end of the rod which extends from the rear portion of the grip, said pawl positioned to engage the ratchet teeth of the stem of the piston, a thumb screw having a longitudinally disposed opening extended therethrough threaded in the grip, said rod extended through the thumb screw, and resilient means in the grip positioned to coact with the thumb screw for retaining the rod and pawl carried thereby in adjusted positions.

2,735,432
CANNULA
Charles H. Hudson, Los Angeles, Calif.
Application May 5, 1954, Serial No. 427,811
3 Claims. (Cl. 128—348)



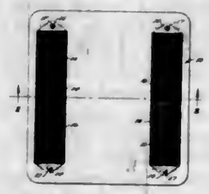
1. An improved nasal cannula adapted to both protect the soft nasal tissue and to positively direct fluid flow within the nasal passages comprising: a soft, flexible, substantially flat mounting strap, and a soft, flexible lead tube having an open end and a closed end bonded to said mounting strap; said lead tube having a pair of tubular extensions protruding from said tube with each tubular extension having an orifice spaced inwardly from a relatively smooth closed end; said lead tube and tubular extensions forming a flexible nasal cannula providing a smooth contacting surface adjacent the soft tissues of the nasal passage during insertion of each tubular extension into a patient's nostril, and providing, also, a positive fluid path directing fluids outwardly from said orifices at a desired position within the nasal passage after insertion.

2,735,433
BINDER FOR MAGAZINES AND THE LIKE
David D. Stephens, Birmingham, Ala., assignor to Metal Fabricators & Finishers, Inc., a corporation of Alabama
Application February 2, 1953, Serial No. 334,620
4 Claims. (Cl. 129—38)



1. The combination with a binder for magazines and the like embodying hinged covers having a channel member mounted therebetween, of upturned web portions at each end of said channel, a retaining bar pivotally connected at one end to one of said upturned web portions, there being a slot in the other upturned web portion in position to receive the free end of said retaining bar, a downwardly projecting locking member carried by the free end of said retaining bar in position to lie outwardly of and adjacent said other upturned web portion when the retaining bar is in said slot, there being a threaded opening in the lower portion of said locking member extending in a direction substantially parallel to the longitudinal axis of said retaining bar, there being a threaded opening in said other upturned web portion in alignment with the threaded opening in the locking member when said retaining bar is within said slot, and a threaded screw carried in said threaded opening in the locking member and adapted to fit in the threaded opening in said other upturned web portion.

2,735,434
CALLUS REMOVER
Prentiss P. De Rossett, Monroe, La.
Application June 30, 1953, Serial No. 365,095
1 Claim. (Cl. 132—76.4)



An abrasive callus remover comprising a platform fabricated of resilient material, said platform being provided with a pair of spaced parallel recesses, a body member seated in each of said recesses and including flat end portions secured to said platform, the upper surface of each of said body members being rounded, there being cross cut grooves in the upper surface of each of said body members defining abrading surfaces.

2,735,435
APPLICATOR FOR LIPSTICK
Samuel S. Feinstein, Brooklyn, N. Y.
Application May 25, 1953, Serial No. 357,770
7 Claims. (Cl. 132—88.7)

1. A lipstick applicator comprising a disk, said disk being partially folded so as to constitute two flaps at an angle to each other, said disk being of lipstick-impervious material, a layer of permeable mesh fabric on the inner face of said folded disk, said disk having openings on the outer face corresponding to the shape of a person's lips, a backing piece on the inner face of said layer, a



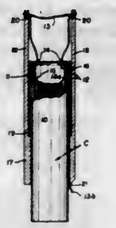
lipstick composition on the outer face of said backing, and means for holding said disk, layer and backing as a unit.

2,735,436
DENTAL-FLOSS HOLDER
Louis Russo, Fitchburg, Mass.
Application March 21, 1955, Serial No. 495,462
1 Claim. (Cl. 132—91)



A dental-floss holder comprising a one-piece handle, spaced floss-holding arms thereon co-planar therewith, and floss-end securing means, said means including a fixed button on the handle adjacent the arms, said button having an undersurface closely adjacent a surface of the handle, said undersurface being slanted at an angle making a V-shape with respect to the handle surface for frictionally holding thread ends wound therein, said handle surface adjacent the button being provided with a series of small transverse, spaced, friction grooves, said arms extending from the proximity of the button in spaced relation and terminating in aligned V-shaped thread-guiding notches extending inwardly from the ends of the arms, said V-shaped notches terminating at their smaller, inner ends in aligned parallel-sided, thread-holding notches, and a thread holding and guiding groove extending from the inner end of one of the said thread-holding notches along a side edge of one of the arms slantingly to the said handle surface adjacent the button.

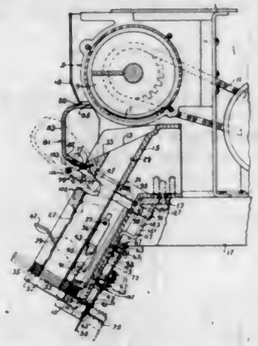
2,735,437
DENTAL FLOSS APPLICATOR
Francis S. Coyle, Boulder, Colo.
Application September 30, 1953, Serial No. 383,203
4 Claims. (Cl. 132—92)



4. A floss holder for a floss-containing cartridge formed as a cylindrical ampoule having a loosely-fitted flanged lid with mating screw threads adapted to permit the lid to be turned and tightened upon the ampoule and passage means through the lid and between the lid and ampoule adapted to permit a loop of floss to be extended from the ampoule and secured by tightening of the lid upon the ampoule, comprising, in combination, a body portion adapted to slidingly embrace said ampoule and a pair of fingers extending from the body portion at each side of and beyond said lid and adapted to engage said loop at their extended ends and thereby hold a reach of

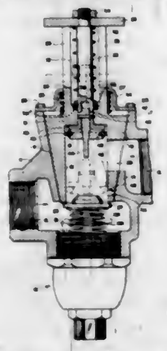
floss between the extended ends which may be tightened by slidable extension of the body and fingers along the ampoule to tension the loop.

2,735,438
FARE BOX
Clarence F. Rogier, Chicago, Ill., assignor to Johnson Fare Box Co., Chicago, Ill., a corporation of Delaware
Application February 24, 1951, Serial No. 212,598
12 Claims. (Cl. 133—5)



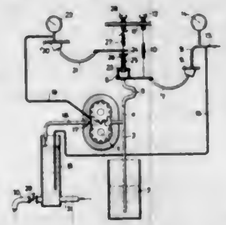
1. In a fare box, a check sorter mounted on the fare box to receive checks therefrom and to discharge checks of the same denomination downwardly at a predetermined station, a changer having a frame mounted on the fare box, tubes mounted on the frame adjacent the stations to receive the checks from the sorter, the improvement which comprises means for mounting said check tubes with their longitudinal axes parallel to each other, said frame having a surface disposed at a downward angle with respect to the vertical, said tubes terminating in said frame and communicating with said surface through bores in the frame, the ends of said bores being disposed below the respective stations and terminating in openings which are larger in area than the checks, a housing on said frame defining an opening adjacent the sorter and said surface, and a tray hingedly attached to the frame, adjacent the lower portion of said surface, said tray being rotatable on said hinge to a position in which it substantially closes said opening.

2,735,439
COMBINED MANUAL AND SAFETY VALVE
Charles D. Coffey, Inglewood, Calif., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application December 29, 1951, Serial No. 264,152
6 Claims. (Cl. 137—66)



1. A safety valve comprising a valve body having an inlet and a main outlet with a dividing wall therebetween, a bore through said wall with a valve seat at the inlet end thereof, a small passage leading from the exterior of said body to a point intermediate the ends of said bore, a safety valve biased into seating engagement with said seat, a condition responsive means capable of holding but not attracting said valve to its open position, a piston positioned to move into and out of said bore from the other end thereof and having a stem extending therefrom, an axial bore in the inner end of said stem, a pin slidable in said axial bore and extending therebeyond, a lost-motion connection between said pin and stem, a disc on said pin and spaced from said piston and positioned intermediate the ends of said pin, said disc having an arcuately beveled upper edge, and an expandable ring around said beveled edge and engageable by said piston when said stem moves said piston and pin against said safety valve to expand said ring against said bore between said inlet and said outlet prior to continued movement of said stem, expandable ring and disc and movement of said safety valve to its valve open position wherein said safety valve is capable of being held by said condition responsive means, the intermediate point at which said small passage communicates with said bore being between said inlet end and the innermost point reached by the expandable ring when the safety valve is moved to its open position.

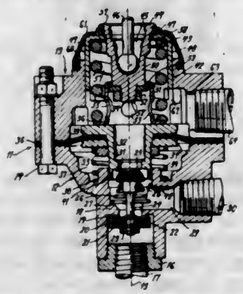
2,735,440
DEVICE FOR CONTINUOUS SUPPLY OF A LIQUID
Karl Torsten Källe, Saffle, Sweden
Application February 12, 1954, Serial No. 409,993
6 Claims. (Cl. 137—87)



3. A device for continuous supply of liquid to a flow of medium, comprising a rotary pump, an inlet for the liquid and an inlet for gas to the suction side of the pump, an outlet for the mixture of liquid and gas from the pressure side of the pump having a restricted portion therein, an adjustable valve connected to the gas inlet for adjusting the proportion of gas sucked by the pump, a first pressure responsive element subjected to the pressure ahead of the restricted outlet passage and connected to said adjustable valve to open said valve in dependence on said pressure to keep the quantity of liquid discharged substantially constant at a constant flow of the medium, and a second pressure responsive element subjected to the pressure of the flowing medium and connected to said adjustable valve to adjust said valve in dependence on pressure variations of said flowing medium to adjust the amount of gas supplied to the suction side of said pump and thereby adjust the amount of liquid supplied to the flowing medium from said pump.

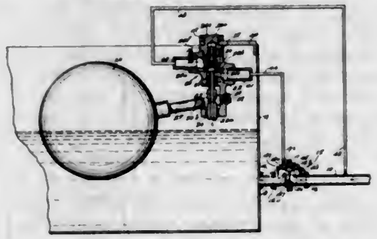
2,735,441
VALVE CAGE ASSEMBLY
Paul G. Regna, Hanley Hills, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a corporation of Delaware
Application March 5, 1951, Serial No. 213,867
3 Claims. (Cl. 137—102)

3. In a fluid pressure control mechanism, a casing comprising first and second portions, means including a flexible diaphragm for connecting said first and second portions, an exhaust chamber in said first portion adjacent one side of said diaphragm, an exhaust port for said exhaust chamber, a pressure chamber in said second portion adjacent said diaphragm on the side opposite said exhaust chamber, a valve chamber adjacent the lower end of said pressure chamber having inlet and outlet ports therein, an exhaust valve stem carried by said diaphragm and slidably received in said valve chamber, said exhaust valve stem having a passage therein for connecting said exhaust chamber with said valve chamber, a restricted passage for connecting said valve chamber with said pressure chamber, a spring biased exhaust valve in said valve chamber for controlling said passage in said exhaust valve stem, an inlet valve associated with said exhaust valve for controlling the flow of pressure fluid between said inlet port and said valve chamber, said first portion having an enlarged bore therein and a self-contained cage assembly re-



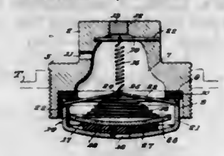
ciprocally mounted in said bore and on first mentioned side of said diaphragm, said self-contained cage assembly comprising a central member, a cage member positioned in an abutting relation to said central member near one end thereof with the exterior of the cage member slidably contacting the wall of said bore, a projecting flange near the other end of said central member, a second cage member slidably and guidably carried by said central member, said second cage member having an annular flange in abutting relation with respect to said diaphragm and being adapted to move therewith, said second cage member having a second flange normally abutting said projecting flange and positioned between said projecting flange and the upper end of the central member, and a spring positioned between said cage members and holding said first cage member against said central member, said spring being held in compression between said cage members.

2,735,442
AUTOMATIC CONTROL FOR LIQUID SUPPLYING CONDUIT
Robert W. Kenney, South Pasadena, Calif., assignor to Stanley G. Harwood, South Pasadena, Calif.
Application February 6, 1953, Serial No. 335,489
3 Claims. (Cl. 137—413)



1. A device for controlling the level of fluid in a container to be used in connection with an inlet conduit having a pressure responsive valve therein comprising a casing positioned within and integral with said container having in combination, a valve normally in closed position, a movable valve seat having a passage therethrough to the atmosphere adapted to be moved to open said valve, means responsive to the water level in said container for operating said movable valve seat, a conduit connecting one side of said valve with one side of said pressure responsive valve, a second conduit connecting said passage and said movable valve seat and the other side of said valve with the other side of said pressure responsive valve whereby when said valve is seated, said second conduit drains through said passage in said movable valve seat reducing the pressure at one side of said pressure responsive valve whereby the pressure of the normal flow of fluid through said inlet conduit opens and passes through said pressure responsive valve into said container and as the level of fluid rises in said container said movable valve seat is moved against said valve to open the same and simultaneously close said passage in said movable valve seat whereby said first conduit drains into said second conduit increasing the pressure at said last mentioned side of said pressure responsive valve to place and hold the same in closed position.

2,735,443
AUTOMATIC BI-DIRECTIONAL FLOW VALVES
Clarence E. Beck, Tipton, Ind.
Application February 26, 1953, Serial No. 339,052
1 Claim. (Cl. 137—493.3)

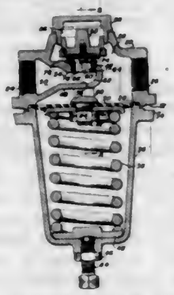


In a pressure control valve for a liquid tank, a body having a downwardly opening recess therein, externally threaded at its lower open end and an annular shoulder inwardly of the open end constituting a valve seat, a yieldable ring on said seat, said body having a vent opening therein upwardly of the valve seat, reversely operating check valves comprising a cup-shaped member in the open end of said body with the edge of the side wall of said member engaged with the yieldable ring on the valve seat, a cross bar extending diametrically of the side wall of the cup-shaped member adjacent the open side thereof, a spring support for the cup-shaped member extending between the upper closed end of the body and the central portion of the cross bar for holding the cup-shaped member freely suspended within the body and engaged with the yieldable ring in the body with said member constituting an outwardly opening check valve, said cup-shaped member having a central valve opening in the bottom thereof, a yieldable valve disk mounted in the cup-shaped member and a separate spring interposed between said cross bar and valve disk for holding the latter in closing relation to the valve opening and said valve disk constituting an inwardly opening check valve.

2,735,444
FLUID PRESSURE REGULATOR
Frank H. Mueller and Earl E. Tinker, Decatur, Ill., assignors to Mueller Co., Decatur, Ill., a corporation of Illinois
Application April 8, 1953, Serial No. 347,568
5 Claims. (Cl. 137—505.44)

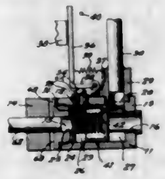
1. In a fluid pressure regulator having a recovery chamber provided with an inlet and an outlet, a reciprocating valve disc in the chamber controlling the inlet, means for yieldingly urging the disc to open position, and means responsive to the pressure within the chamber for urging the disc to closed position, the combination of means defining a valve orifice having an annular valve seat for the

disc at the outlet end thereof, the walls of said orifice being flared in the direction of fluid flow, the flare angle of said orifice being of the order of from about 30° to about 45°.



to the axis of said valve seat and the minor diameter of said orifice being of the order of from about ½ to ⅔ of the major diameter thereof, whereby the efficiency of the regulator is increased.

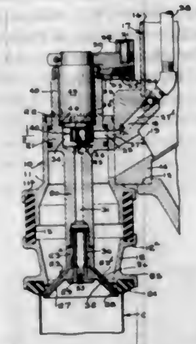
2,735,445
RELIEF VALVE
William A. Ray, North Hollywood, and Everett W. Rossow, Glendale, Calif., assignors to General Controls Co., Glendale, Calif., a corporation of California
Application April 30, 1951, Serial No. 223,702
4 Claims. (Cl. 137—620)



1. In a valve structure for conveying fluid from a pressure source thereof to a motor operable in one direction by the fluid, as well as for controlling discharge of such fluid from the motor to effect operation of the motor in an opposite direction: a casing having a chamber; means forming a partition dividing said chamber into a first and a second compartment and being movable in opposite directions in response to reversal of fluid pressure difference in the compartments; said casing having a fluid supply passage leading to said first compartment and a motor supply passage leading from said second compartment; means forming a restricted passage continuously interconnecting said first and second compartments whereby fluid from said supply passage can pass to the second compartment; means defining a vent for said second compartment; valve means operated by movement of said partition for controlling flow through said vent, the arrangement being such that when the fluid pressure in said first compartment becomes substantially less than that in the second compartment the resultant movement of the partition effects opening of the vent to permit discharge of fluid from the second compartment; and a pilot valve for so venting said first compartment as to effect said vent-opening movement of the partition.

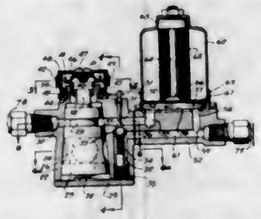
2,735,446
FILLING VALVE
John Boyce, San Jose, Calif., assignor to Food Machinery and Chemical Corporation, San Jose, Calif., a corporation of Delaware
Application August 1, 1951, Serial No. 239,781
2 Claims. (Cl. 137—625.42)

1. Valve structure comprising a valve chamber defined by a cylindrical wall and having an axially disposed passage therein, said chamber wall having a pair of adjacent ports extending radially therethrough, a shaft rotatably mounted in said chamber and having an eccentric valve stem projecting thereinto, a cylindrical valve of deformable material rotatably mounted on said stem, the distance between the valve stem axis and the wall between said ports being less than the radius of an uncompressed portion of the cylindrical valve by an amount sufficient



to deform and compress a peripheral valve portion against the chamber wall to such an extent as to cover said ports simultaneously in one position of the valve, and means for rotating said shaft to roll the deformed peripheral valve portion along said chamber wall while maintaining it in compressed condition, whereby to selectively close said ports in other positions of the valve.

2,735,447
VALVE STRUCTURE
William A. Ray, North Hollywood, Calif., assignor to General Controls Co., Glendale, Calif., a corporation of California
Original application May 11, 1946, Serial No. 669,037, now Patent No. 2,566,372, dated September 4, 1951. Divided and this application April 9, 1951, Serial No. 220,033
2 Claims. (Cl. 137—630.19)



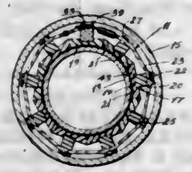
1. In a valve structure: a main valve comprising a plug rotatable to open and closed controlling positions; a momentarily operable supplementary valve having an open and a closed controlling position, said supplementary valve having actuating means and including a spring biasing the supplementary valve to one of its controlling positions and said actuating means to unactuated position; handle means for rotating said plug and including a part operatively engageable, only when the plug is rotated to a given one of said controlling positions, with said actuating means so that continued rotation of the handle means while the plug is in said given position effects movement of the actuating means against the force of said spring and operation of the supplementary valve to the other of its controlling positions; and a lost-motion connection between the handle means and the plug permitting such relative rotation of the same that, following said operation of the supplementary valve, the handle means can rotate freely under the force of said spring acting through said actuating means, without effecting rotation of the plug, to its previous position wherein the supplementary valve is again in its biased position.

2,735,448
PIPE SPACING DEVICE
Lewis H. Phelps, Jr., Riverside, Conn., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application December 16, 1952, Serial No. 326,324
4 Claims. (Cl. 138—65)



1. A pipe spacing device adapted to be secured around the outer surface of a pipe comprising a wide strap having first and second ends; a plurality of pipe spacing blocks carried by said strap; and strap-fastening and tensioning means including a part secured to said first end, said means having a slot therein for receiving said second end whereby said pipe spacing device may be adapted for positioning around a pipe by manually pulling said second end through said slot until an initial degree of tightness is obtainable, and said means comprising tensioning mechanism operable for further tensioning said strap beyond said initial degree.

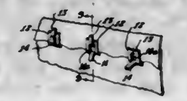
2,735,449
PIPE SPACING DEVICE
James H. Grahame, Mount Vernon, N. Y., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application December 23, 1952, Serial No. 327,625
9 Claims. (Cl. 138—65)



1. A pipe spacing device comprising a series of T-shaped pipe spacer blocks comprising relatively wide bases having inner surfaces adapted to rest on the outside surface of a pipe, and relatively narrow stems projecting outwardly from said bases and having outer surfaces adapted to be positioned adjacent the internal surface of a casing; connecting means passing transversely of said blocks intermediate said inner and outer surfaces and connecting said blocks together as a string of blocks adapted to be positioned around said pipe, said string having ends adapted to be coupled together, said blocks being adapted to be spaced from one another in said string in such correlation with the circumference of said pipe that when said string is positioned around said pipe said bases are contiguous to one another so as to brace said blocks against twisting on said connecting means; and means for coupling together said ends of said string when positioned around said pipe.

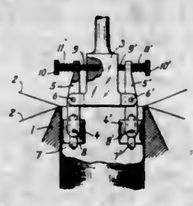
9. An improved pipe spacer block for a pipe spacing device, said pipe spacer block being a T-shaped member of electrically insulating material comprising a relatively wide base having a channel therein and a separate relatively narrow stem fitting within said channel and projecting outwardly from said base, said stem having a single bore transversely therethrough for receiving a connector member.

2,735,450
LOCKING STRUCTURE FOR NESTABLE CULVERT PIPE
Robert A. Brayton, William Charles Boyle, and Charles Harry Campbell, Middletown, Ohio, assignors to Armco Steel Corporation, Middletown, Ohio, a corporation of Ohio
Application February 7, 1952, Serial No. 270,346
2 Claims. (Cl. 138—70)



1. In a culvert pipe of the notched type composed of semicircular sections, wherein one edge of each section is notched at intervals to provide opposite seats for the unnotched edge of the other section; a locking structure comprising a substantially U-shaped cut in each notch, spaced from the edge thereof and disposed to define an outwardly directed attached tongue, a series of spaced parallel pairs of cuts in the unnotched edges of said sections, each pair of cuts defining an outwardly directed attached tab, said attached tabs and tongues being aligned and mutually opposed in the assembled condition of the pipe, with said tongues struck outwardly and said tabs bent outwardly through the spaces vacated by said tongues and bent back against the pipe.

2,735,451
CIRCULAR LOOMS FOR WEAVING OF HOSES
Christian Christiansen, Oslo, and Gustav Otto Karl Rüsch, Mandal, Norway
Application August 10, 1953, Serial No. 373,357
4 Claims. (Cl. 139—13)



1. A circular loom for weaving of hoses of the type comprising a weaving ring at the upper edge of which the weaving is effected, including a calender comprising the weaving ring and at least one roller vertically journalled in the interior of the weaving ring and supported adjacent the wall of the latter below the top edge of the same.

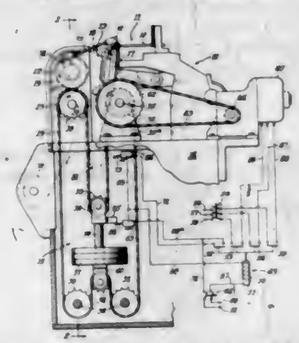
2,735,452
METHOD FOR THE PRODUCTION OF A PATTERNED DOUBLE WOVEN PILE FABRIC HAVING FLOATING PILE THREADS
Henricus Wilhelmus Josephus Hellebrekers, Gorssel, Netherlands, assignor to Koninklijke Vereenigde Tapijtfabrieken N. V., Deventer, Netherlands, a Dutch company
Application September 29, 1953, Serial No. 383,058
Claims priority, application Netherlands October 3, 1952
3 Claims. (Cl. 139—397)



3. A woven pattern pile fabric in double cloth comprising two sets of foundation warps interwoven with related wefts to define two foundation cloths, a first kind of pile warps interwoven with spaced apart groups of said wefts in both foundation cloths, the portions of said first kind of pile warps between said groups of wefts floating at the outside of the double cloth, a second kind

of pile warps interwoven with the wefts in both foundation cloths between said spaced apart groups and having the portions thereof floating at the outside of the double cloth in the regions of said groups, said pile warps of the first kind extending into and out of the double cloth at the same wefts where said pile warps of the second kind extend out of and into, respectively, the double cloth and at opposite sides of the latter so that said first and seconds kinds of pile warps extend cojointly through the double cloth at said same wefts defining the transitions between the elements of the fabric pattern whereby, when said pile warps are cut to divide the double cloth into two portions, said floating portions can be drawn out without resulting in faults at said transitions between the elements of the fabric pattern.

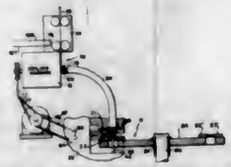
2,735,453
SCREEN TAKE-UP CONTROL MECHANISM
Robert A. Christy, Park Forest, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application August 16, 1952, Serial No. 304,813
11 Claims. (Cl. 139—304)



1. A device for tensioning a web which is intermittently advanced by incremental amounts out of a web forming machine, the combination of a pair of pressure rollers adapted to receive the web therebetween and to prevent slippage of the web between the rollers due to friction between the web and the rollers, said rollers being drivingly interconnected with each other, a gravity motor for exerting a substantially constant driving torque on said rollers and normally effective to tension the web, the web forming machine being adapted to incrementally feed out the web at a higher rate of speed than said gravity motor is capable of driving said pressure rollers, and means including a one-way clutch having a driving member actuated by said forming machine when the machine functions to intermittently advance the web for positively driving said rollers so as to tension the web during each advancing movement thereof, said last-named means being effective to tension the web and to hold the web in each advanced position momentarily until said gravity motor is again effective to tension the web.

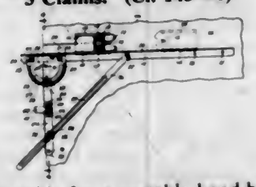
2,735,454
METHOD AND A DEVICE FOR MAKING WIRE COILS
John O. Forster, Harrison, N. Y., assignor to Heli-Coil Corporation, Danbury, Conn., a corporation of Delaware
Application September 18, 1953, Serial No. 381,103
12 Claims. (Cl. 140—1)

1. A method of making wire coils of a predetermined length which comprises the steps of continuously coiling, at a coiling point, a wire advancing from a stock, so as to form a continuous spiral, guiding the spiral with its leading end to a stationary gripping point spaced from said coiling point a distance of at least several times said predetermined length while confining the spiral throughout said whole distance so as to keep the length of said spiral constant between said coiling point and said gripping point, gripping said spiral at said gripping point when a leading end portion projects beyond said gripping point a distance according to said predetermined length, holding the gripped spiral portion temporarily stationary thereby causing the wire portion coiled during the gripping period elastically to increase the diameter of the confined spiral portion, severing said leading end portion from said gripped spiral close to said gripping point, and releasing the grip on said spiral thereby causing said spiral to advance beyond said gripping point owing to a decrease of the precedingly increased spiral diameter and to the continued coiling.



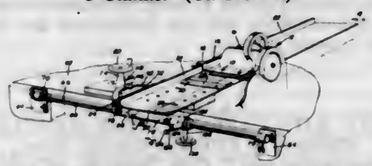
12. A device for producing wire coils of a predetermined length, comprising a continuously operating wire coiling machine producing a spiral from a wire stock, a pair of jaws in a location remote from the point where said spiral forms and in the path of said spiral, and stationary with respect to said coiling machine, said jaws being adapted to clamp and hold a portion of said spiral temporarily immovable, a spring connected to said jaws and tending to hold said jaws in an open position, a cutter close to said jaws and adapted to sever from said spiral an end portion projecting from said jaws, a cyclically operative drive to close temporarily said jaws against the restraint of said spring and to operate said cutter each time a spiral portion according to said predetermined length projects from said jaws, and a tubular conduit extending from said point where said spiral forms to said jaws, said conduit having an inner diameter somewhat larger than the outer diameter of said spiral when in a free state, and having a length several times said predetermined length.

2,735,455
PORTABLE HAND-HELD POWER SAW TOOL AND ANGLE GUIDE THEREFOR
Harold S. Forsberg, Shelton, Conn.
Application June 24, 1953, Serial No. 363,817
3 Claims. (Cl. 143—6)



1. An angle guide for a portable hand-held power saw tool or the like, comprising an elongated tool guide bar of right-angular cross-section including a horizontal base part and an upwardly extending vertical flange part at the outer edge of said base part, a planular sector plate including an attaching part adapted to overlie said base part of said guide bar and a projecting part adapted to project from the inner edge of said horizontal base part with its underside in the same horizontal plane as the upper side of said horizontal base part of said guide bar, said projecting part having pivot means and an arcuate slot concentric to said pivot means, means adjacent the respective ends of said guide bar and equidistant therefrom for the selective attachment thereto of said sector plate adjacent either of said ends, a clamping bar of right-angular cross-section having a horizontal base part and a downwardly extending vertical flange part, a pair of pivot means carried by said clamping bar one adjacent each end thereof and equidistant therefrom and each adapted for selective cooperative engagement with said pivot means of said sector plate through the engagement of the upper side of said base part of said clamping bar with the underside of said projecting part of said sector plate, said horizontal base parts of the said guide bar and said clamping bar being of corresponding thickness whereby in the connected relation of said clamping bar with said sector plate the undersides of both said horizontal base parts are in the same horizontal plane, a pair of securing means carried by said clamping bar one adjacent each end thereof and equidistant therefrom and each spaced inwardly from said respective pivot means a distance corresponding to the radius of said arcuate slot and adapted for cooperative engagement in said slot coincidentally with the engagement of said respective pivot means with said pivot means of said sector plate, and fastener means for cooperation with said securing means to secure the position of angular adjustment of said clamping bar relatively to said sector plate.

2,735,456
PORTABLE SAW GUIDE AND MITER ATTACHMENT
James W. W. Grier and Veriee P. Grier, Belmont, N. C.
Application January 6, 1954, Serial No. 402,506
5 Claims. (Cl. 143—6)



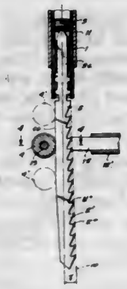
3. A saw guide and miter attachment for use with a portable hand saw comprising a carriage adapted to be secured to the saw, a first elongate plate having a track thereon for guiding the carriage for longitudinal movement, a second plate pivotally secured adjacent one end to said first plate and lying in a plane parallel to said first plate, means connecting said second plate to said first plate for adjusting the angle between said plates, an elongated supporting member arranged parallel to said second plate and adapted to be secured to the edge of a table and means mounting said second plate on the supporting member for longitudinal movement of the attachment and saw carriage along the table.

2,735,457
SCROLL SAW BLADE HOLDING MEANS
Matthew Raspanti, Brooklyn, N. Y.
Application October 25, 1954, Serial No. 464,349
10 Claims. (Cl. 143—73)



8. In a scroll saw, the combination of a hollow plunger having a guideway, a saw blade holder slidable in said guideway, means for securing an end portion of a saw blade to said holder, and a chuck at the lower end of said plunger for securing an intermediate portion of said saw blade for movement with said plunger.

2,735,458
SELF-FEEDING SAW BLADE FOR RECIPROCATING MOTOR SAWS
Albin Buchmann, Soleure, Switzerland
Application April 28, 1952, Serial No. 284,809
Claims priority, application Switzerland April 27, 1951
1 Claim. (Cl. 143—133)



For use with a reciprocating motor saw, a saw blade having a longitudinal axis and being composed of a single shank portion located at the rear end of the blade and adapted to be attached to the motor saw, and of an integral elongated cutting portion extending from said elongated shank portion to the front end of said saw blade, said cutting portion having a guide edge adapted to engage a supporting member and extending parallel to said axis and a cutting edge inclined to said guide edge and formed along its entire length with a row of cutting teeth all of which are directed toward said elongated shank portion and have transverse cutting edges facing said elongated shank portion, the transverse distances between at least some consecutive cutting teeth of said row of cutting teeth and said guide edge gradually increasing toward the front end of said saw blade so that when said saw blade is reciprocated in direction of said longitudinal axis, said cutting teeth are urged by said supporting member to cut into material engaged by the same during rearward reciprocating strokes of said saw blade and move away from the material during the forward stroke of the saw blade so that forward strokes are made without resistance.

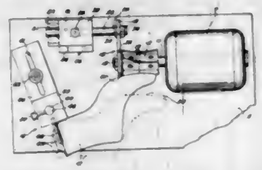
2,735,459
CIRCULAR SAW BLADE FOR CUTTING WOOD WHICH CONTAINS NAILS
Emanuel Stauder, Irondequoit, N. Y., assignor to Huther Brothers Saw Manufacturing Company, Rochester, N. Y., a corporation of New York
Application April 28, 1953, Serial No. 351,587
3 Claims. (Cl. 143—133)



1. A one-piece wood and metal cutting saw comprising a circular blade having peripheral toothed sec-

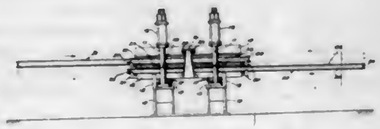
tions spaced circumferentially of said blade and raker teeth located between adjacent sections, said blade being cut away in advance of said raker teeth to form chip-receiving gullets, each of said sections being formed with a series of cutting teeth with the sides of each cutting tooth bevelled inwardly towards the center plane of said blade to form a cutting point with said points lying in a common plane, and said raker teeth having sharp leading edges extending from one face to the other of said blade at a radial distance from the center thereof not greater than the base line of said cutting teeth.

2,735,460
TOE FINISHING MACHINE FOR LASTS
Henry G. Clausing, Portsmouth, Ohio, assignor to Vulcan Corporation, Portsmouth, Ohio, a corporation of Ohio
Application November 18, 1954, Serial No. 469,598
4 Claims. (Cl. 144—134)



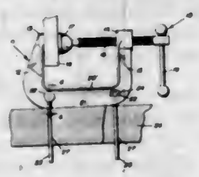
1. In a machine for finishing the toe sole portions of shoe lasts, a rotary cutter, a series of longitudinally extending blades mounted on the cutter in oblique planes with respect to the cutter axis, each of said blades having a concave cutting edge to provide for the longitudinal curvature of the last toe sole portion, a last toe guide plate mounted in close proximity to one end of the rotary cutter and disposed in a plane normal to the cutter axis, said plate having a circular edge substantially concentric with the cutter for rolling engagement with a laterally extending intermediate portion of the last toe sole surface, and an outwardly divergent saddle means mounted at a distance from the guide plate for receiving the last dog stub of the heel part to secure rocking movement of the last around its longitudinal axis.

2,735,461
PRESS FOR MAKING MULTI-PLY PANELS
Paul G. Pater, Hamilton, Ohio, assignor to Columbia Machinery and Engineering Corporation, Hamilton, Ohio
Application October 15, 1953, Serial No. 386,348
5 Claims. (Cl. 144—281)



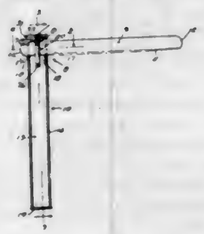
1. In a press for making multi-ply panels, a base mounting a stationary platen, a pair of vertically movable platens mounted on the base below the stationary platen and disposed one beneath the other, a plurality of vertically acting motors fixed on the base and having their movable parts connected to the lowermost movable platen, a work charging and discharging table for each movable platen, roller means on each platen for shiftably mounting each table on its respective platen, each table comprising a pair of longitudinally extending frame members straddling its respective platen, cross members connecting the ends of the said frame members, a flat work support plate secured at its marginal edges to the table frame and cross members and supported thereby in a plane above the pressure face of the platen, said table having a length dimension greater than twice the length of the platen which it serves, and drive means actuated in unison for shifting the tables in opposite longitudinal directions on their respective platens.

2,735,462
CLAMP WITH PIVOTED BENCH MOUNTING MEANS
Joseph Olsen, Portland, Oreg.
Application February 11, 1953, Serial No. 336,345
4 Claims. (Cl. 144—304)



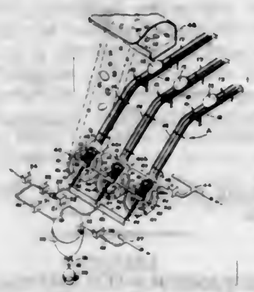
1. A clamp for mounting on a support having a multiplicity of spaced holes therein, said clamp including a substantially U-shaped frame, coacting jaws on the ends of said frame, and a pair of pins pivotally mounted on the end portions of the bight of the frame and engageable selectively in the holes for adjustably and removably mounting the clamp in position for use on the support, said pins being swingable to inoperative position adjacent to and in parallelism with the bight when the clamp is removed from the support.

2,735,463
SAW WITH CARRYING CASE HANDLE
Raymond D. Philbrick, Ericson, Nebr.
Application July 9, 1954, Serial No. 442,296
3 Claims. (Cl. 145—31)



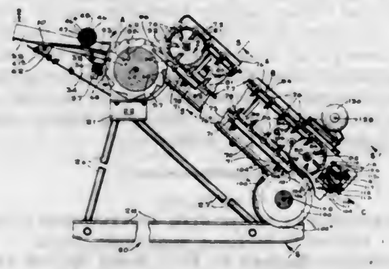
1. A saw of the character described comprising an elongated saw blade having a toothed edge extending substantially from end-to-end thereof and an opposite back edge, a combination case and handle comprising an elongated case having a closed bottom and an open top, said case having aligned slots extending longitudinally thereof and opening outwardly of the top of the case, a pin extending transversely through the case and disposed inwardly of the case with respect to said slots, a bolt having one end disposed within said case and an opposite threaded end projecting from the top of said case, said pin extending transversely through the bolt near the first mentioned inner end thereof for anchoring the bolt in the case, said bolt being provided with a longitudinally extending slot and being slidably movable on said pin to align the bolt slot with the slots of said case for accommodating an end of the saw blade in said slots of the case and bolt, said pin being disposed transversely of the saw blade, and a cap member threadedly engaging the outer threaded end of said bolt and bearing against the back edge of the saw blade for clamping the saw blade between said cap member and the inner ends of the slots of said case.

2,735,464
AUTOMATIC EVACUATOR FOR REMOVING THE EGGMEAT CONTENTS OF EGGS
Danyal N. Kerven, Newark, N. J.
Application January 25, 1955, Serial No. 483,879
12 Claims. (Cl. 146—2)



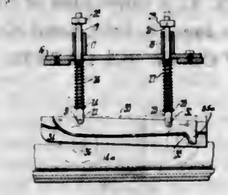
1. In an automatic egg evacuator for removing the contents of eggs, spaced resilient egg receivers, conveying means for delivering eggs to each of said receivers in predetermined spaced intervals, and a pressure suction evacuating means for removing the contents of said eggs delivered to said receivers including, paired hollow needle sets for each of said receivers having their upper ends disposed in relation to the receiving ends of said egg receivers to pierce eggs conveyed thereto, a reservoir, a conduit system connecting said paired hollow needle sets to said reservoir to pass the egg content removed by said hollow needles to said reservoir, a source of suction and a source of pressure air communicating with said hollow needles, valve means responsive to automatic signals for controlling the application of suction and pressure through said pressure suction evacuating means in a predetermined operation cycle whereby at least one alternate path of egg evacuation through said hollow needles will be provided.

2,735,465
MACHINE FOR ORIENTING AND SLICING OVALOIDAL FRUIT SUCH AS APRICOTS
Bruce H. Kellogg, Los Gatos, Calif., assignor to Food Machinery and Chemical Corporation, San Jose, Calif., a corporation of Delaware
Application December 17, 1949, Serial No. 133,648
15 Claims. (Cl. 146—72)



11. Mechanism for slicing ovaloidal fruit, such as apricots, into their natural halves, comprising an inclined fruit guiding chute, fruit support means adapted to align and control the rate of descent of the fruit within said chute, a rotary slicing knife arranged at the lower end of the chute in the vertical plane of symmetry thereof, and an elongated slicing knife blade disposed above and spaced vertically from said chute and rotary slicing knife for cooperation with the rotary slicing knife in the slicing of the fruit and for maintaining the alignment of the fruit during the slicing operation.

2,735,466
APRICOT SPLITTER
Martin Krstinich, Sunnyvale, Calif.
Application February 18, 1950, Serial No. 144,894
1 Claim. (Cl. 146—72)



An apricot splitter and pitter comprising: a frame provided with a pair of spaced, vertical bearings; a rod slidably mounted in each of said bearings; an elongated, horizontally extending, downwardly facing apricot splitting and pitting knife pivotally supported by the lower ends of said rods for vertically bodily movement and rocking relative to said frame, the forward end of said knife being upwardly curved and the rear end thereof being provided with a downwardly extending pit arresting heel; spring means operating between each of said rods and said frame for downwardly biasing said rods; and an endless conveyor mounted on said frame for movement immediately beneath and generally parallel to said knife, said conveyor forming a V-shaped trough for supporting apricots in alignment with said knife.

2,735,467
APPARATUS FOR CUTTING UP ONIONS AND THE LIKE
Ernst Hellmich, Stuttgart-Botnang, Germany
Application April 15, 1950, Serial No. 156,065
2 Claims. (Cl. 146—78)



1. An apparatus useful for cutting onions or the like, said apparatus comprising a cutting board, a cutting base mounted on said cutting board adjacent an edge of said cutting board, said cutting base being substantially smaller than said cutting board and having a cutting edge located at one side of said cutting base away from the cutting board edge to which said cutting base is adjacent whereby the surface of said cutting board not occupied by said cutting base can form a collecting surface for onions or the like cut at said cutting base, an elongated lever having a handle at one end, means pivotally supporting said lever at the other end for up and down movement with respect to the cutting edge of said cutting base, an integral spring extension at one end of said cutting edge engaging said lever supporting means to bias said lever toward said cutting base, said lever supporting means including means to maintain said lever in any intermediate position against the force of gravity but permitting said lever to be raised without lifting said cutting board, an elongated cutting knife carried by said lever and having a cutting edge adapted to engage the cutting edge of said cutting base in shearing relation, and a plurality of short knives also carried by said lever, said short knives being disposed in transverse relation with respect to said elongated knife and being positioned in spaced apart relation along said elongated knife whereby an onion or the like positioned at the cutting edge of said cutting base may be cut into a plurality of pieces by one cutting movement of said lever.

2,735,468

DETACHABLY-MOUNTED DISC BLADE FOR FOOD SLICING MACHINES

Xan B. K. Green, New Paltz, and Harry Preble, Jr., Cross River, N. Y., assignors to General Slicing Machine Co., Inc., Walden N. Y., a corporation of New York

Application June 18, 1953, Serial No. 362,552

7 Claims. (Cl. 146—102)



1. In a slicing machine of the character described, a disc slicing blade having a central hole, a gear coaxially secured on one surface of the blade having a central circular hole smaller than the hole in the blade, a frame piece having opposite surfaces, a ring boss extending from one surface thereof; the free end portion of said boss being of reduced diameter and such free end having a flat face; said gear being removably rotatably mounted on said reduced portion; said frame member having a hole therethrough centrally of and communicative with the interior of said boss; the hole in the blade being larger than the hole at the reduced end of said boss, a plate loosely positioned within the hole in the blade, coplanar with said blade and in contact with the face of the ring boss, disengageable cooperating means on said plate and boss to maintain said plate against axial rotary movement; said plate overlapping the hole of the gear; a shank having a head, a member rotatably carried on the shank; said member having a plurality of resilient fingers extending away from said head, means on said shank to maintain said member thereon; said frame piece being positioned between the gear and said spring finger carrying member and in contact with said member; said fingers being positioned through the hole in the frame piece and into the ring boss in spaced relation with said plate; said fingers releasably engaging said frame piece within said hole, and disengageable means on said plate and shank in threaded engagement positioned within the boss; the adjacent faces of the gear and plate being in sliding contact; said knob being turnable to free the plate and knife for removal from the frame piece while said spring fingers maintain said knob and its shank associated with the frame piece, during such turning and after removal of said plate and knife from the frame piece.

2,735,469

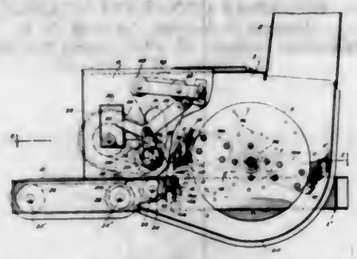
REEL TYPE CHOPPING MECHANISM

James Rex West, New Holland, Pa., assignor, by mesne assignments, to Sperry Rand Corporation, a corporation of Delaware

Application February 29, 1952, Serial No. 274,099

4 Claims. (Cl. 146—117)

1. A chopper and blower unit comprising a housing having a feed opening and a discharge opening, a chopper and blower reel rotatable in said housing, said reel comprising substantially tangentially directed knives and fan blades extending radially inwardly from locations contiguous to the inner surfaces of the respective knives between said surfaces and the rotational axis of the reel to create air currents for conveying the chopped material



and for clearing the material from the cutting edges of said knives.

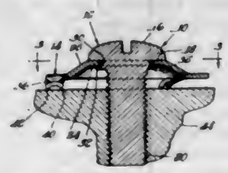
2,735,470

LOCK WASHER WITH BITING TEETH

Ouglesa Jules Poupitch, Itasca, Ill., assignor to Illinois Tool Works, Chicago, Ill., a corporation of Illinois

Application January 12, 1953, Serial No. 330,738

4 Claims. (Cl. 151—37)



1. A rotary fastener assembly, comprising a threaded rotary fastener element adapted to cooperate with a complementary threaded element, and a locking device comprising a generally annular sheet material body member, said body member including a centrally uninterrupted generally frusto-conical body section and a substantially flat radial flange integral with the outer margin of said frusto-conical body section, positively interlocking means on said body member and said fastener element preventing relative rotation in opposite directions between said body member and said threaded rotary fastener element, generally circumferentially extending finger-like elements struck entirely from within said flange and each having one end integral with said body member and having a free end extending generally circumferentially of said body member, said free ends of said finger-like elements being disposed axially outwardly of said body member and having radially extending concave terminal edges, and substantially only said free ends having concavo-convex radial cross sections with their concave sides facing generally away from said body member so that the corners at opposite ends of said concave terminal edges provide spaced teeth portions projecting axially outwardly for engagement with a workpiece.

2,735,471

SUPPLEMENTAL SHOE FOR AUTOMOBILE TIRES

Willard D. McLean, Snohomish, Wash.

Application January 25, 1954, Serial No. 405,831

1 Claim. (Cl. 152—187)



A supplemental externally applicable shoe for automobile tires, comprising: an annular casing, essentially U-shaped in transverse section, provided with a tread

portion to cover the tread of a tire and having inwardly extending sidewall portions covering part of the sidewalls of such tire; said casing having an annular inflatable air compartment formed in said tread portion and a separate annular air compartment in each sidewall portion; an independent air valve connected to each compartment; said compartments each having in transverse cross-section an oblong outline, elongated transversely in said tread portion and elongated radially in said sidewall portions; the compartments in the sidewall portions partially lapping the compartment in said tread portion and extending inwardly therefrom; said tread portion having an exterior ground engaging surface; and said compartments in said sidewall portions being inflatable to a substantially higher air pressure than the compartment in said tread portion whereby said ground engaging surface may be concavely depressed in its center upon ground engaging contact.

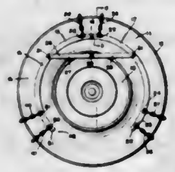
2,735,472

ANTISKID DEVICE FOR VEHICLE TIRES

Lambert L. Beery, St. Paul, Minn.

Application October 11, 1952, Serial No. 314,382

3 Claims. (Cl. 152—242)



1. An anti-skid device for a vehicle tire applicable to a wheel having a brake drum, said device comprising two elongated rigid members connected together at adjacent ends thereof and arranged in diverging relation, with the free ends spread apart, the ends of said members lying substantially at the apexes of an equilateral triangle, said rigid members being adapted to be inserted over the tire and being spaced outwardly from the brake drum, a link connected to said members, respectively, at localities between the middles of said members and the connected ends thereof and nearer the middles of said members, respectively, than the connected ends to bring said link outwardly of and adjacent to said brake drum, an elongated flexible member on the outer side of the tire and having loose ends, cross chains extending laterally about the tire and connected to said rigid members at the ends thereof and to said flexible member and means for securing the ends of said flexible member together.

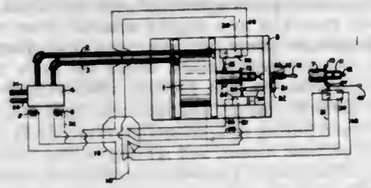
2,735,473

HOSE COUPLING MOUNTING MACHINE

Lewis Kenneth Diget and Raymond S. Doerr, Battle Creek, Mich., assignors to H. B. Sherman Manufacturing Company, Battle Creek, Mich., a corporation of Michigan

Application February 27, 1950, Serial No. 146,434

3 Claims. (Cl. 153—1)



1. In an electrical apparatus for controlling the movement of a reciprocating member in manner moving it from one end of its travel to the other and then back to starting position, which comprises a reversible source of moving power, means for operably connecting said source of moving power to said reciprocating member, a pair of solenoids controlling the reversing of the movement of said source of moving power, a starting switch, said starting switch being of the normally open single electric circuit type, a return switch, said return switch being of the normally open single electric circuit type, a current break switch, said current break switch being of the double electric circuit type with either circuit open when the other is closed, one of said electric circuits of said current break switch being in the electric circuit controlling movement of said reciprocating member in one direction while the other electric circuit of said current break switch is in the electric circuit controlling the reverse movement of said reciprocating member, said current break switch normally remaining closed in the reverse movement electric circuit, means moving in unison with said reciprocating member for contacting and operating said return switch to close the circuit through same at the end of the first movement of said reciprocating member and also to contact and operate said current break switch at the end of the reverse movement of said reciprocating member to open the return movement electric circuit through same and also to close the first direction movement electric circuit through same, thus resetting the apparatus ready for repeating the forward and reverse movement cycle upon further actuation of said starting switch to close electric circuit through same, and an electric circuit operably connecting said switches so that said starting switch circuit is in series with the solenoid controlling the forward movement of said reciprocating member and also in series with the closed forward movement circuit portion of said current break switch at the start of the expansion cycle, and said return switch is in series with the other of said solenoids and also in series with the closed reverse movement circuit portion of said current break switch at the start of the reverse movement portion of the operating cycle, thus making possible the reversible movement of said reciprocating member in continuous sequence to complete the cycle of operation of the apparatus once the starting switch has been actuated.

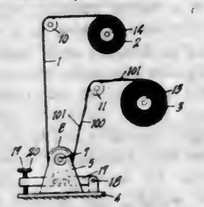
2,735,474

METHOD OF PRODUCING COMPRESSION STRESSES IN THE EDGES AND SUBSTANTIALLY REDUCING THE CAMBER OF AN ELONGATED FLEXIBLE METAL STRIP

Glenn L. Sherwood, Benton Harbor, Mich., assignor of one-third to Henry L. Johnson and one-third to Ferdinand J. Thar, both of Benton Harbor, Mich.

Original application March 9, 1951, Serial No. 214,748, now Patent No. 2,717,626, dated September 13, 1955. Divided and this application October 28, 1952, Serial No. 317,276

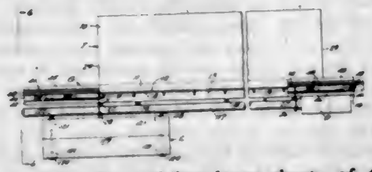
7 Claims. (Cl. 153—32)



1. The method of producing compression stresses in the longitudinal edges of a thin relatively narrow elongated springably bendable metal strip comprising the steps of translating the strip longitudinally and while the strip is traveling continuously springably longitudinally bending the strip in one portion of its travel, and simultaneously transversely springably bending substantial arcs of the longitudinally curvedly springably bent portion of the strip with the central portion of the bend interiorly supported and externally unsupported and wth the longi-

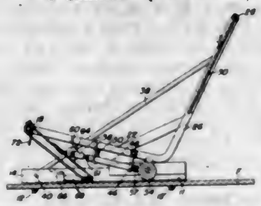
tudinal edge portions at each side of the internally supported central portion externally supported and interiorly unsupported, such longitudinal edge portions being exteriorly supported so that the travel of the said longitudinal edge portions through a major portion of the longitudinal bend of the strip is substantially less than that of the interiorly supported central portion of the strip.

2,735,475
APPARATUS FOR WELDING LARGE SHEETS OF THERMOPLASTIC MATERIAL
Gilmore T. Schjeldahl, Farmington, Minn., assignor to Herb-Shelly-Inc., Farmington, Minn., a corporation of Minnesota
Application July 16, 1953, Serial No. 368,350
8 Claims. (Cl. 154—42)



1. A machine for welding large sheets of thermoplastic material in a long continuous seal comprising, a sheet supporting and clamping table for maintaining a longitudinally off-set fold along the length of said sheets, a guideway secured in spaced parallel relation with said table and with an off-set fold of overlapping plastic sheets when positioned within the clamping portion thereof, and a traveling weld mechanism mounted for longitudinal movement along said guideway, said travelling weld mechanism having a heating element for welding said off-set fold during steady and even travel thereof along the guideway and in close clearance with said off-set fold.

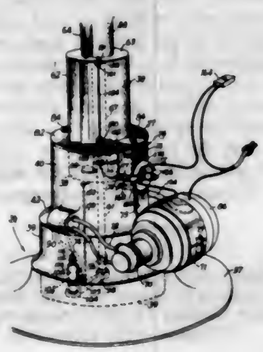
2,735,476
CRASH SEAT
Herman P. Fieber, Toledo, Oreg.
Application January 4, 1955, Serial No. 479,824
6 Claims. (Cl. 155—9)



1. For use in a motor vehicle, a pair of substantially parallel guide elements secured to a vehicle floor, a seat frame including a bottom and back portion pivotally carried by said guide elements, means connected between the back portion of said seat and said guide elements to permit said seat frame to pivot upwardly, an impact responsive weight operably secured to said seat frame, latch means operably associated between said seat frame and vehicle floor for immediate actuation by said impact responsive weight, and means operably connected between said vehicle floor and said seat frame for preventing excessive upward pivotal movement of said seat frame.

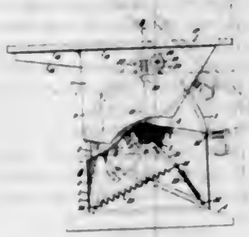
2,735,477
DENTAL CHAIR AND THE LIKE
Joseph Wurm and Joseph George Wurm, Maspeth, N. Y.
Application August 24, 1951, Serial No. 243,438
4 Claims. (Cl. 155—25)

1. In an adjustable chair, in combination, hydraulically operated extensible means for raising and lowering the chair, a pump for hydraulic fluid, an electric motor for driving said pump, means forming a hydraulic fluid sump, means forming a hydraulic circuit including said extensible means and a by-pass valve to divert the hydraulic fluid from said pump directly to said sump, means responsive to a predetermined upward movement of the chair



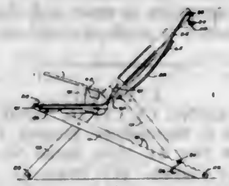
controlling the by-pass valve, electric circuit means controlling said motor and including a switch, and switch operating means comprising a vertical-sliding bracket and a vertical rod associated therewith and positioned to be raised by the moving of the chair to its fully opened position whereby the switch is responsive to movement of the chair to stop the motor.

2,735,478
CONVERTIBLE TABLE AND SEAT
James R. Mayer, Atlanta, Ga.
Application March 25, 1955, Serial No. 496,844
5 Claims. (Cl. 155—43)



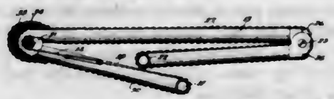
1. A convertible table, including pedestal means, a table top, means pivotally mounted in said pedestal means and rotative with said table top for pivotally mounting said table top upon said pedestal means whereby the table top may be swung from horizontal to vertical position, and vice versa, seat means associated with said table top and swingable therewith as a unitary structure from non-seat-forming position where the table top is in horizontal position, to seat-forming position where the table top is in vertical position, an arm radially offstanding from said pivotal mounting means and rotatable therewith, and resilient means having ends connected respectively with said arm and pedestal means, and serving to bias said top to a position of resiliently controlled equilibrium substantially midway between its ultimate horizontal and vertical positions, said resilient means being put under tension by said arm when said table top is in either of its said ultimate positions and thus serving also to resiliently aid in adjustment of said top from its horizontal position to its vertical position and vice versa.

2,735,479
LEG REST ATTACHMENT FOR A FOLDING CHAIR
Hubert D. Bugg, Yuma, Ariz., assignor of twenty-five per cent to J. S. Bugg, Jr., Laguna Beach, Calif.
Application May 8, 1953, Serial No. 353,879
2 Claims. (Cl. 155—171)



1. In a foldable chair comprising a frame including seat bars disposed in spaced apart and substantially parallel relationship, back bars disposed in spaced apart and substantially parallel relationship and each pivotally connected intermediate its length to a corresponding seat bar intermediate the length of the latter, a rod extending between and secured at its ends to said seat bars at the front ends of the latter, and a flexible webbing extending between said back bars and having one end connected to the upper ends of said back bars and having the other end connected to said rod, the improvement consisting of a leg rest attachment arranged in longitudinal alignment with respect to said back bars adjacent said rod and having one end releasably connected to said rod for movement from its extended position to a seat-reinforcing position underneath the adjacent portion of said webbing, and flexible connectors extending from the other end of said attachment and detachably connectable to said back bars to hold said attachment in its seat-reinforcing position.

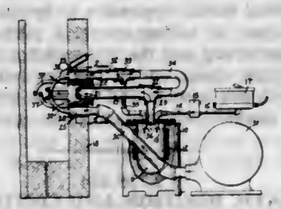
2,735,480
SEAT AND LEG REST
Theodore E. Mead, Wilmette, Ill., assignor, by mesne assignments, to Lifegard Sign Corporation, Chicago, Ill., a corporation of Illinois
Application March 22, 1954, Serial No. 417,720
4 Claims. (Cl. 155—182)



1. A leg rest for use with chairs, comprising a seat portion adapted to lie flat upon the seat of a chair and a leg rest portion of greater length than said seat portion extending downwardly from said seat portion and hinged to said seat portion, the forward portion of said leg rest being mounted upon a second hinge for movement to a downwardly-inclined position with respect to the remainder of said leg rest portion.

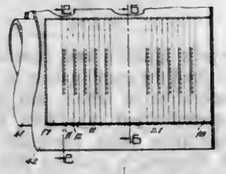
2,735,481
BURNERS FOR LIQUID FUELS
Robert Reichhelm, Stratford, Conn., assignor to The Robert Reichhelm Company, Incorporated, Stratford, Conn., a corporation of Connecticut
Application August 6, 1952, Serial No. 302,983
4 Claims. (Cl. 158—5)

1. In a gasifier and burner a gasifying chamber, means to introduce into said chamber the fuel to be gasified, a combustion chamber, said gasifying chamber being disposed without the combustion chamber, means to deliver gasified fuel from the gasifying chamber to the combustion chamber, a source of air under pressure, means to convey air from said source through the combustion chamber, to heat the same, to a delivery conduit without the combustion chamber, and means connecting said conduit with said gasifying chamber to deliver a part, only, of said heated air to the latter, and means also connecting said conduit to said fuel delivery means leading to the combustion chamber to deliver the remainder of said



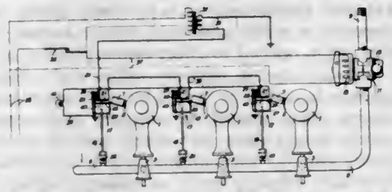
heated air to the gasified fuel at a point without the combustion chamber during its passage from the gasifying chamber to the combustion chamber.

2,735,482
BURNERS FOR THE PRODUCTION OF SYNTHESIS GAS
Malcolm H. Tuttle, New Rochelle, N. Y., assignor to Hydrocarbon Research, Inc., New York, N. Y., a corporation of New Jersey
Application December 7, 1951, Serial No. 260,485
5 Claims. (Cl. 158—118)



1. Apparatus for mixing gaseous reactants which comprises a flat plate; a plurality of spaced parallel grooves in one face of said plate, said grooves extending from the interior of said plate to one edge of the plate with alternate grooves extending beyond the inner ends of the remaining intermediate grooves; a second flat plate coextensive with the first plate and positioned against the grooved face of said first plate to close said grooves and form elongated parallel passageways open at one edge of said plates; a transverse passageway in said second plate coinciding with the longer grooves beyond the inner ends of said shorter grooves to supply a stream of reactant gas to each of said longer grooves; openings in said first plate adjacent the inner end of each of said shorter grooves; a conduit for one of said gaseous reactants communicating with each of said openings on the side of said first plate opposite said parallel grooves; and a second conduit for the other of said gaseous reactants communicating with said transverse passageway in said second plate.

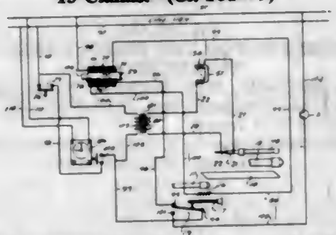
2,735,483
IGNITER SYSTEMS FOR GAS RANGES
Almer H. Brodbeck, Webster Groves, and Bradley C. Douglas, Kirkwood, Mo., assignors to Magic Chef, Inc., a corporation of New Jersey
Application August 29, 1951, Serial No. 244,142
13 Claims. (Cl. 158—122)



7. A gas range electric igniter system comprising a plurality of burners, a gas supply line, a plurality of

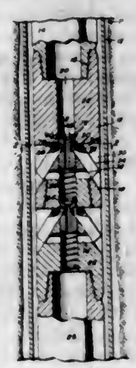
igniters, each igniter consisting of a pilot gas line having outlet means adapted to produce a pilot flame and connected with the supply line, an ignition coil, a normally closed thermal switch responsive to heating by said pilot flame to open, a voltage-operated pilot signal device a circuit connecting said thermal switches in parallel with the pilot signal device and connecting said ignition coils in series with one another and in series with the parallel-connected thermal switches and pilot signal device.

2,735,484
AUTOMATIC IGNITION AND CONTROL MECHANISM FOR GASEOUS FUEL BURNERS
John M. Hoff, Mansfield, Ohio, assignor to The Tappan Stove Company, Mansfield, Ohio, a corporation of Ohio
Application May 4, 1953, Serial No. 352,635
13 Claims. (Cl. 161—9)



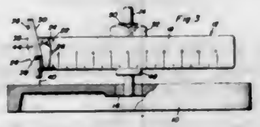
1. In an automatic ignition and control apparatus of the character described the combination of a main burner, a pilot burner operative to ignite said main burner, a control burner spaced from said pilot burner, electric ignition means operative when energized to ignite said pilot and control burners, a gaseous fuel supply manifold, a main conduit through which fuel is supplied to said main burner from said manifold, a safety control unit operative to cut off the supply of fuel to said main burner and said pilot and control burners interposed in said conduit between said main burner and said manifold, a manually operable shut off valve interposed in said conduit between said safety control unit and said main burner, a branch conduit extending between said safety control unit and said pilot and control burners through which fuel is supplied to said pilot and control burners, a solenoid operatively associated with said safety control unit, said solenoid being operative upon energization to first set said safety control unit in condition to supply fuel to said pilot and control burners while cutting off the supply of fuel to said main burner and upon subsequent deenergization to set said safety control unit in condition to also supply fuel to said main burner, an electromagnet associated with said safety control unit and operative when energized to maintain said safety control unit in said last set condition, a thermocouple adapted to be heated by said pilot burner, an electric circuit between said thermocouple and said electromagnet through which said magnet is energized by said thermocouple when said thermocouple is heated, a manually operable normally open master switch, a normally closed supplemental master switch disposed in series with said master switch, said master switch and said supplemental master switch being operative when both are closed to effect the energization of said solenoid and said electric ignition means, a normally closed switch means disposed in series with said master switch which is operative when opened to effect deenergization of said solenoid and said electric ignition means, and a thermostatic element adapted to be heated by said control burner and operative when heated to maintain said normally closed switch means open and when cool to maintain said normally closed switch means closed, a transformer having a primary winding and a secondary winding, said secondary winding being connected into said thermocouple circuit, said transformer being operative when energized to superimpose an alternating current upon the thermocouple current of sufficient voltage to blanket out the thermocouple current and thereby deenergize said electromagnet, said master switch and said supplemental master switch each being operative when open to effect the energization of said transformer, and a time control mechanism operative to open and close said supplemental master switch at predetermined set times.

2,735,485
CASING CUTTING TOOL
George E. Metcalf, Jr., Denver, Colo.
Application May 21, 1954, Serial No. 431,416
9 Claims. (Cl. 164—.8)



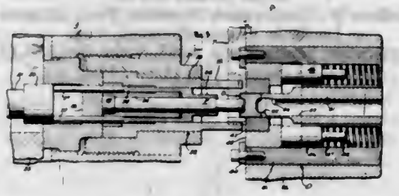
1. A casing milling tool comprising a tubular body, said body having a plurality of longitudinally spaced tool mounting slots therein, said mounting slots communicating with the bore of said tubular body, a pivot pin extending transversely across each of said mounting slots, milling cutters having elongated pivot apertures adjacent one end thereof, said pins extending through said apertures, springs carried by the pins and engaging said cutters, each spring urging a portion of each of said cutters into the bore of said tubular body, piston means slidable in the bore of said body, shoulders on said piston means, said piston means being operable to successively engage said shoulders with the portion of the cutters extending into the bore to rotate said cutters about said pins.

2,735,486
ABRASIVE DISC OR GASKET CUTTER MOUNTED FOR ROTATION ABOUT A SPINDLE
Arnold A. Millard, Carson City, Nev.
Application September 25, 1953, Serial No. 382,388
1 Claim. (Cl. 164—71)



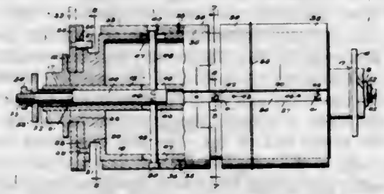
A cutter for abrasive discs and the like comprising a base member constituting a table for supporting the material to be cut, a spindle mounted at the center of said base member and projecting upwardly therefrom, a cutter blade supporting bar, means on said bar receiving said spindle permitting rotation of said bar around said spindle, a cutter blade secured to the end of said bar, means on said bar permitting angular adjustment of said cutter blade with respect to said bar, said last named means comprising a face portion secured to an end of said bar at an angle to the longitudinal axis of the bar, a series of serrations on said face portion on the side away from said bar lying in a plane transverse to and oblique with respect to the axis of said bar, a cutter blade holder, said holder having a series of serrations on one side thereof and means for retaining the serrations on the holder in engagement with the serrations on the face portion, at least one transverse pin in said holder, and notches in one edge of said blade engageable with said pin to adjust said blade in the holder in different longitudinally adjusted positions.

2,735,487
NUT PIERCING MACHINE
John H. Friedman, Tiffin, Ohio, assignor to The National Machinery Company, Tiffin, Ohio, a corporation of Ohio
Original application June 17, 1949, Serial No. 99,770. Divided and this application November 25, 1952, Serial No. 322,490
8 Claims. (Cl. 164—86)



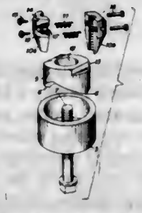
1. In a cold header, a die block and a relatively reciprocable header slide, a punch on said slide, said die block having formed therein in a slug-receiving bore surrounded by a fixed shoulder for backing up a blank to be punched, a sleeve slidably mounted on said die block and having a bore for surrounding and confining the side wall of a blank disposed against said shoulder, means for positioning said sleeve to confine the blank before the blank is punched, means to advance said punch to punch and sever a slug from the blank while the latter is confined, means carried by said slide spaced from the outer periphery of said blank to engage and progressively move said sleeve as the punch advances, said sleeve being moved clear of the blank, means to hold said blank against said shoulder, and means to withdraw said punch means from the blank with the sleeve clear of the blank and the side wall thereof unconfined.

2,735,488
PERFORATING ATTACHMENT FOR PRINTING MACHINES FOR PRODUCING LONGITUDINAL AND TRANSVERSE ROWS OF PERFORATIONS IN SHEETS
Harold S. Anderson and Sumner W. Dow, Boston, Mass.
Application August 21, 1950, Serial No. 180,594
2 Claims. (Cl. 164—100)



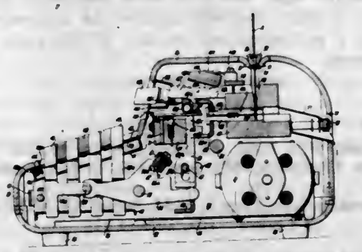
1. In a sheet perforating machine, a rotatable cylinder having an axially extending internal rib, and an external rectangular groove extending into said rib, a plurality of pairs of axially slotted sleeves fitted on said cylinder for longitudinal sliding movement therealong and having their slots in register with said cylinder groove, a perforating blade extending circumferentially around said cylinder between each pair of said sleeves and projecting outwardly of the sleeves, means to clamp each pair of said sleeves against opposite sides of the respective blades, independent means to move at least one of said pairs of sleeves and the clamped blade longitudinally of said cylinder, a carrier bar closely fitted in said slots and carrying an axial perforating blade, means for adjustably fixing said bar in said cylinder groove to adjust said axial blade to any suitable height above said sleeves.

2,735,489
QUICK-RELEASE KNOCKOUT PUNCH
Jess Van Fowler, San Diego, Calif.
Application March 6, 1953, Serial No. 340,937
4 Claims. (Cl. 164—101)
(Granted under Title 35, U. S. Code (1952), sec. 266)



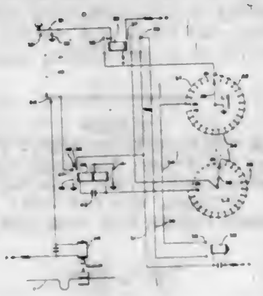
3. A quick-release knock-out punch comprising first and second interfitting cutting members, first and second threadedly engaged and radially separable means for respectively applying opposed pressures to said first and second members to drive said members toward each other and punch a work piece interposed therebetween, means responsive to said pressures for preventing radial separation and maintaining threaded engagement of said first and second means during the punching operation, and means responsive to the release of said pressures for radially separating said threadedly engaged means.

2,735,490
KEYSORT KEYPUNCH
Hunter E. Hooe, Athens, Ohio, assignor, by mesne assignments, to Royal McBee Corporation, a corporation of New York
Application September 25, 1951, Serial No. 248,249
9 Claims. (Cl. 164—112)



1. A device of the class described comprising a plurality of coding zones, each coding zone having a plurality of digit punches and a zero punch, means for selectively conditioning each of the digit punches for actuation, means for automatically conditioning the zero punch for actuation, means for rendering said last-mentioned means inoperative upon actuation of at least one of the digit conditioning means, means for simultaneously actuating all of the punches conditioned for actuation, and means for selectively manually rendering any of said zero punch conditioning means inoperative regardless of whether any of the digit conditioning means associated therewith is operated.

2,735,491
METERED CIRCUIT FOR EFFECTING REPEATED RECORDING OPERATIONS
Albert E. Frost, Bloomfield, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a corporation of New York
Application January 11, 1951, Serial No. 205,585
1 Claim. (Cl. 164—113)



In a device for recording telegraphic code characters on a control tape, a keyboard having a key lever representing a particular code character, pulse generating means for producing a series of operating pulses, a recording mechanism initially controlled by operation of the said key lever and subject to further control by the output of said pulse generating means, delay means controlled by the said key lever for operatively associating said pulse generating means with said recording mechanism to cause a succession of pulses to be applied to said recording mechanism to cause a like succession of code characters represented by said key lever to be recorded on said control tape, and pulse counting means comprising a stepping switch, a stepping magnet therein having an initial position and adapted by connection to the said pulse generating means to step the said switch away from said initial position and into successive contact positions by means of the said control pulses, contacts to deenergize the said pulse generating means after a predetermined number of steps have been made and further contacts therein connected to restore the said delay means to the said initial position simultaneously with deenergizing the said pulse generating means, whereby a fixed predetermined number of said operating pulses are applied to said recording mechanism whereby depression of said key lever causes immediate recording of a predetermined code character on the control tape, and continued depression thereof throughout a delay interval initiates the successive recording of a predetermined number of like code characters thereon.

2,735,492
HAND PUNCH
Stanley Cain, Fox Lake, Ill., assignor to McGill Metal Products Company, Marengo, Ill., a corporation of Illinois
Application September 2, 1954, Serial No. 453,904
2 Claims. (Cl. 164—121)



1. In a hand punch having a pair of pivotally connected cross-levers providing a pair of jaws and a pair of handles on opposite ends thereof, one jaw carrying a punch member and the other a cutting die, and a spring member interposed between the handles normally urging the spreading apart of said jaws, a combination stripper and movement limiting member secured between said jaws and comprising an integral stamping formed from an elongate flat integral strip of resilient metal having an intermediate right-angle step portion thereby forming a flat rear part and a longer flat offset front part, the flat rear part being secured to the jaw carrying the die and the front part having a perforate end aligned with the punch member and curved around and forward of the tip of the punch carrying jaw, a free-ended lug struck from the offset front part at the junction thereof with said step portion and being a planar continuation of said step portion beyond said front part, an integrally bent hook portion on the free end of the lug in the path of spreading movement of said die-carrying jaw for limiting the movement thereof, and a rivet for securing said rear part to said die-carrying jaw, said rivet being located substantially adjacent said right angle step portion.

2,735,493
SCREEN AND LINER SETTING, SETTING TOOL AND WASH PIPE
Theodore W. Munhausen, Houston, Tex., assignor to Leslie A. Layne, Houston, Tex.
Application September 2, 1953, Serial No. 378,113
3 Claims. (Cl. 166—144)



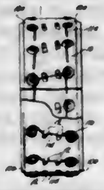
1. In combination, a screen and liner setting comprising a set shoe, a screen, a liner and a collapsible packer disposed one above the other and connected end to end, the packer including a barrel connected at its lower end to the upper end of the liner, a stem receivable telescopically within the barrel and extending upwardly therefrom, and a canvas tube surrounding the stem and connected at its ends to the stem and the barrel, respectively, a coupling connected at its lower end to the upper end of the stem and having an annular groove formed in the inner wall thereof, a string of tubing, a setting tool connected to the lower end of the tubing and received within the stem, below the annular groove of the coupling, the setting tool having a plurality of spring biased expansible dogs receivable in the annular groove of the coupling whereby the weight of the string of tubing may be caused to bear upon the stem to expand the packer, a pipe comprising a downward extension of the setting tool and extending downwardly thru the packer, coupling means comprising a downward extension of the packer barrel and connecting the lower end of the packer barrel to the upper end of the liner, a tubular fitting connected at its upper end to the lower end of the pipe and connected by left-hand threads to the coupling means, and a wash pipe disposed within the tubing and freely movable longitudinally with respect thereto, the lower end of the wash pipe engaging a seat provided therefor in the set shoe and the upper end of the wash pipe carrying a tubular piston, the tubular fitting slidably engaging the wash pipe and having an internal shoulder for engagement by an external shoulder formed by the under side of the tubular piston.

2,735,494
HINGE FOR WELL SCRATCHER
Kenneth A. Wright, Los Angeles, Calif.
Application April 17, 1950, Serial No. 156,339
3 Claims. (Cl. 166—173)



1. A scratcher collar for a well pipe comprising an annular body adapted to encircle the pipe, the body having a pair of axially spaced outwardly projecting ribs formed integrally therewith, a plurality of scratcher fingers, each of said fingers having an attachment portion thereof resting on a surface of the body between said ribs, means for securing said attachment portion of each scratcher finger to the body, the body including substantially semi-circular arcuate sections connected end-to-end, the ribs terminating short of the ends of the body sections, each section being formed of one integral piece of sheet metal having flat ends and having integral projections extending from the said ends, said projections being curved radially outwardly for approximately three quarters of a revolution to form sockets, said projections being substantially flush with the inner circumference of the arcuate sections and extending radially outwardly for a distance not substantially exceeding the outer diameter of the ribs, and pins disposed in the sockets connecting the projections on adjacent ends of the sections.

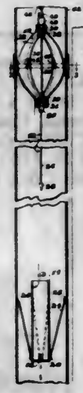
2,735,495
WELL BORE SCRATCHER
Jesse E. Hall, Sr., Weatherford, Tex.
Application June 18, 1953, Serial No. 362,475
8 Claims. (Cl. 166—173)



1. In a well bore scratcher, the combination with a circular collar band support adapted to be fitted over a casing, of a plurality of wire abrading units attached to the collar, said units each comprising a central straight cross-over portion disposed against the collar, a pair of coil springs wound into the wire at the extremities of the cross-over portion each having one coil thereof disposed flat against the collar, said cross-over portion extending between the coil springs substantially at a diametric position intermediate the coils, and a free end portion projecting from each of the respective coil springs outwardly away from the collar, said wire units being attached to said collar by at least one tongue overlapping and confining said cross-over portion.

2,735,496
OIL WELL BRIDGE
Charles D. Wilson, Great Bend, Kans.
Application May 28, 1954, Serial No. 432,963
5 Claims. (Cl. 166—192)

1. In a deep well plugging device, an expanding bridge element, a canister element comprising a hollow tube having one end closed, an aperture in the closed end of the tube, a plurality of U-shaped rods, the said rods being pivotably attached to the outside of the said tube at the closed end and projecting upwardly from the said



tube, the bridge element being withdrawably inserted within the open end of the said tube.

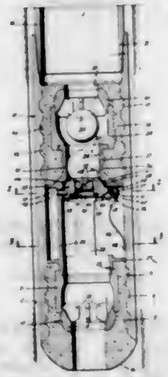
2,735,497
TUBING ANCHOR
Edward C. Brumleu, Los Angeles, and Ross M. Mehl, Lynwood, Calif., assignors to Western Pressure Control, Los Angeles, Calif., a limited partnership
Application August 17, 1951, Serial No. 242,358
10 Claims. (Cl. 166—212)



1. A pressure actuated tubing anchor comprising: a tubular body having an annular shoulder thereon; a locking structure comprising a mandrel and a sleeve piston connected thereto, said locking structure being movable relative to said tubular body, said mandrel having a plurality of tapered surfaces, said surfaces converging downwardly; said sleeve piston comprising a cylinder slidably encircling said annular shoulder and an inwardly projecting piston head connected to said cylinder and slidably engaging said tubular body beneath said annular shoulder, thereby forming a working chamber; a port communicating between said working chamber and the interior of said tubular body whereby said chamber tends to expand when pressure inside said tubular body exceeds that outside; a plurality of slips adapted to move inwardly toward and outwardly away from said tubular body, said slips having tapered surfaces slidably engaging the respective tapered surfaces of said mandrel, said slips having serrated surfaces adapted to engage a well casing when said slips are forced outwardly and to lock said tubing anchor against downward movement; and means including a pair of relatively movable but interengageable surfaces located respectively on said structure

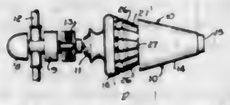
and on said tubular body for jarring said mandrel to release said slips from the well casing when said tubular body is pulled upward.

2,735,498
APPARATUS FOR AUTOMATICALLY FILLING A WELL BORE CONDUIT
John F. Muse, Montebello, Calif., assignor to Baker Oil Tools, Inc., Vernon, Calif., a corporation of California
Application April 27, 1953, Serial No. 351,397
13 Claims. (Cl. 166—225)



1. In subsurface apparatus for filling a conduit string with fluid in a well bore: a tubular member adapted to form part of the conduit string and having means thereon for attachment to an adjacent conduit string section; said tubular member having a valve seat thereon fixed with respect thereto and a valve member movable longitudinally out of engagement from said seat and longitudinally into engagement with said seat to restrict upward flow of fluid through said seat; flow control means providing a restricted passage in said tubular member through which fluid can flow upwardly and by-pass said valve member when said valve member engages said seat; and valve means movable to a position across said restricted passage to close said restricted passage.

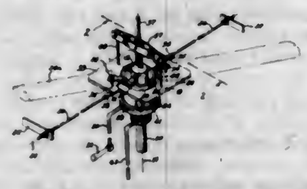
2,735,499
DUAL PURPOSE GAS TURBINE ENGINE
Otto William Ehlers, Hermosa Beach, Calif.
Application May 21, 1951, Serial No. 227,376
14 Claims. (Cl. 170—135.71)



12. In a gas turbine engine, the combination of: a bladed turbine wheel, a compressor mounted coaxially of the turbine wheel and connected to be driven thereby, a burner unit having a discharge outlet for directing a blast of hot gases into the bladed turbine wheel, and means providing a movable mounting for said burner unit so that it may be moved relative to the compressor to a position wherein the blast of hot gases therefrom passes outside the periphery of the turbine wheel.

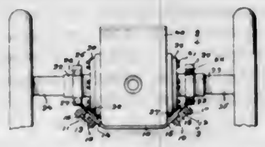
13. A gas turbine engine and airscrew combination for propelling an aircraft, comprising: a rotary turbine, a shaft connected thereto, a compressor mounted coaxially of the shaft and driven thereby, a plurality of burner units each having a discharge outlet for directing a blast of hot gases through the turbine, certain of the burner units being movably mounted relative to the compressor so that the hot gases issuing therefrom may be directed to by-pass the turbine, means including a releasable clutch for driving the airscrew from said shaft whereby maximum power may be applied to the shaft by causing hot gases discharging from all burner units to pass through the turbine, and whereby lower power may be applied to the shaft by causing the movable burner units to discharge their hot gases to by-pass the turbine.

2,735,500
HELICOPTER ROTOR STRUCTURE
John A. Perry, Phoenix, Ariz.
Application August 3, 1953, Serial No. 372,043
8 Claims. (Cl. 170—160.25)



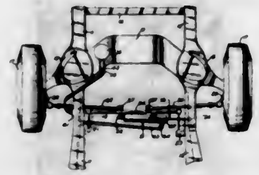
1. In a helicopter rotor structure, a drive shaft rotatable about a vertical axis, a transverse shaft, having an axis radially disposed relative to said vertical drive shaft axis, pivotally mounted on said drive shaft to rock about a radially disposed axis at right angles to the axis of said transverse shaft, a first ring around said drive shaft mounted at diametrically opposite positions on said transverse shaft, rigid control rod means pivotally connected to said first ring on an axis at right angles to and intersecting the axis of said transverse shaft operable to rock said ring about the axis of said transverse shaft, said last mentioned means including an inner control ring rigidly secured to said control rod means so that said inner control ring rotates with said first ring and said drive shaft, an outer control ring, anti-friction bearing means between said inner and outer control rings, a control lever fixed to outer control ring, an operating handle under pilot control operable to tilt said outer and inner control rings and said first ring to effect cyclic control of said rotor structure, hinge members pivotally mounted on said transverse shaft to swing about the axis thereof, and rotor blades mounted on said hinge members with said blades located above the plane of rotation of the axis of said transverse shaft and with the longitudinal axes of said blades angularly disposed relative to said axis of said transverse shaft.

2,735,501
TRACTOR REAR AXLE HOUSING ASSEMBLY SUPPORT
Joe D. Loyd, Hosston, La., assignor, by decree of distribution, of one-half to Myrtle H. Loyd and one-half to Clyde C. Loyd.
Application October 8, 1954, Serial No. 461,150
4 Claims. (Cl. 180—75)



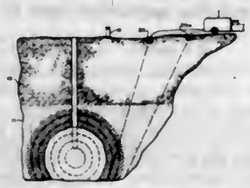
1. A tractor rear axle housing assembly support for a rear axle assembly having a central or differential housing part and two side axle housing parts connected thereto, said side axle housing parts having connecting flanges thereon and the underside of the central or differential housing extends below the axle housing parts, comprising a base plate positioned below the central part of the housing and means clamping ends of the base plate to side parts of the rear axle housing with the clamping means bearing against the connecting flanges of the rear axle housing parts whereby said connecting flanges are retained in tension.

2,735,502
HYDRAULIC POWER STEERING WITH VALVED PISTON
George H. Muller, Northville, Mich., assignor to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application October 17, 1952, Serial No. 315,353
5 Claims. (Cl. 180—79.2)



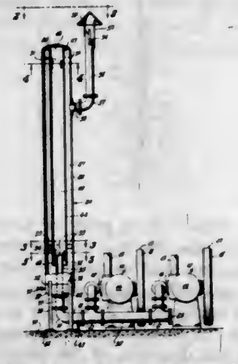
1. In a power steering device for a motor vehicle having a frame member, steerable road wheels and a manually operable steering gear mounted upon said frame member, and a movable steering linkage member between said steering gear and said road wheels to transmit manual steering effort to said road wheels, a cylinder having one end thereof connected to one of said members, a piston rod reciprocable within said cylinder and having one end extending beyond the opposite end of said cylinder and connected to the other of said members, a pair of axially spaced stops on the inner end of said piston rod, a piston slidably mounted upon said piston rod between said stops, spring means carried by said piston rod normally yieldably maintaining said piston at an intermediate position between said stops, said piston and piston rod having cooperating passages formed therein and interconnecting with each other in the said intermediate position of said piston to establish communication between opposite sides of said piston to permit the flow of fluid between opposite ends of said cylinder during manual steering and during the recovery from a power assisted steering movement, a source of fluid pressure, and means for selectively supplying said fluid pressure to one end of said cylinder to move said piston relative to said piston rod against the action of said spring means toward one of said stops to apply power steering effort to said piston rod, said passages being blocked when said piston is moved to a position adjacent one of said stops to close the communication through said piston between opposite ends of said cylinder.

2,735,503
METHOD OF SEISMIC PROSPECTING
Robert B. Rice and Sam D. Elliott, Bartlesville, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware
Application November 28, 1952, Serial No. 322,956
11 Claims. (Cl. 181—.5)



6. A method of producing seismic waves in an unconsolidated layer having a loose sand zone therein which comprises initially forming a spherical cavity in a loose sand zone in said unconsolidated layer by the detonation of a small charge in said loose sand zone, springing said cavity by the detonation of successive water-tamped charges of such size that the walls of said cavity are compressed to a maximum thereby resulting in a spherical cavity of maximum diameter, and detonating therein an additional explosive charge sufficient to produce seismic waves.

2,735,504
PULSATION DAMPENER FOR GASEOUS STREAMS
Golden A. Moyer, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application July 13, 1953, Serial No. 367,423
16 Claims. (Cl. 181—36)



1. A pulsation dampener for a substantially unexpanded pulsating gaseous stream consisting essentially of an elongated cylindrical body forming an enclosed chamber, an inlet conduit for said unexpanded pulsating gaseous stream extending into said chamber a substantial but minor distance less than half the length of said chamber along the axis of said chamber and disposed to discharge said substantially unexpanded pulsating gaseous stream directly into said chamber axially thereof, a single outlet conduit disposed to exhaust said gaseous stream from said chamber after the dampening of pulsations therein has been concluded connected to said chamber in a radial direction at a point about one fourth the length of the chamber from the end opposite said inlet conduit, and a cylindrical partition having one end thereof sealed to the end of said chamber opposite said inlet conduit, said partition being disposed with its other end extending toward the other end of said chamber to a point substantially beyond the end of said inlet conduit and spaced from said inlet conduit and from the wall of said chamber between the same to form two concentric pulsation receiving chambers, said partition having a series of longitudinal slots disposed angularly in a transverse plane adjacent the end of said inlet conduit, and a similar series of slots disposed in a transverse plane between said outlet conduit and the adjacent end of said chamber, the wall of said body, and the wall of said partition at least throughout its major longitudinal extent, being imperforate whereby there is provided a central imperforate tube section into which the substantially unexpanded pulsating gaseous stream is discharged for expansion by paths of not more than three substantially different lengths to said outlet conduit.

2,735,505
FLEXIBLE PACKING IN SUPPLEMENTAL SOCKET
Harry Kleiman, New York, N. Y.
Application June 2, 1952, Serial No. 291,269
3 Claims. (Cl. 182—7)

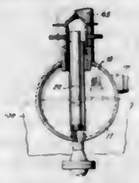
1. A sink trap comprising a J-bend pipe and a communicating pipe, both being of one-piece construction, formed of thin-walled tubing and one being telescopable

with respect to the other, the inner and outer telescoping pipe sections having outwardly and inwardly facing opposed surfaces respectively with substantially the same diameter so as to be a snug fit one within the other, said opposed surfaces each having a registering annular recess of fixed dimension therearound each opening toward the other, and a ring of sealing material in one of said recesses and projecting out therefrom toward said other recess and compressively received therein so as to seal the joint between said two pipe sections when they are telescoped, the outer telescoping pipe section being wider than the remainder of the pipe of which it is a part, an internal



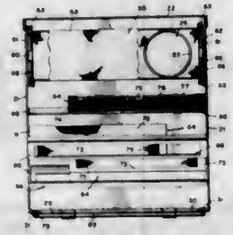
abutment being defined at its point of junction with said remainder of said pipe, the end of said inner telescoping pipe section engaging said abutment when said sections are telescoped and when said annular recesses are in registration, said engagement defining a ground seal, said annular recess in the outer of said opposed surfaces being elongated in the direction of the longitudinal axis of said surfaces, said sealing ring also being elongated in said direction, the outer surface of said sealing ring which is received within said annular recess being provided with a groove extending around said ring, an annular opening thus being defined between said outer ring surface and the inwardly facing surface of said recess.

2,735,506
COMBINATION DEHYDRATOR-SEPARATORS FOR PETROLEUM WELL STREAMS
Clarence O. Glasgow, Tulsa, Okla., assignor to National Tank Company, Tulsa, Okla., a corporation of Nevada
Application September 29, 1954, Serial No. 459,028
5 Claims. (Cl. 183—2.7)



1. A combination liquid-gas separator and gas dehydrator for petroleum well streams including, a unitary elongate horizontal vessel, a transverse vertical partition in the vessel dividing said vessel into a separator section and a reconcentrator section having the partition as a wall in common, a well stream inlet to the separator section, means for discharging liquids from the separator section, a gas outlet from the separator section, a liquid desiccant inlet to the separator section, means in the separator section for separating the liquid and gaseous phases of the well stream, means in the separator section for passing the separater gaseous phase in contact with the liquid desiccant to dehydrate the gaseous phase, heating means in the reconcentrator section, water vapor discharge means in the reconcentrator section, means for admitting dilute desiccant to the reconcentrator section and delivering reconcentrated desiccant therefrom, means for circulating dilute desiccant from the separator section to the reconcentrated section and for circulating reconcentrated desiccant from the reconcentrator section to the separator section, the reconcentrator section having a reconcentrated-desiccant accumulation chamber adjoining the vertical partition with the partition forming one wall of the chamber, and a baffle depending from the top wall of the reconcentrator section into the chamber closely adjacent the partition.

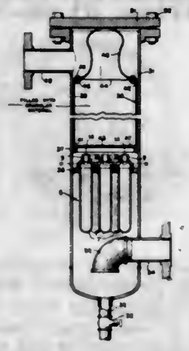
2,735,507
DE-LINTING DEVICES FOR CLOTHES DRYERS
Herbert Vogel, Roslyn Heights, N. Y.
Application March 25, 1954, Serial No. 418,619
4 Claims. (Cl. 183—4.3)



1. In a lint catching device for a motorized clothes drying machine having a discharge port for lint-bearing moist air, a vertically extending housing having an air inlet in its upper rear portion nearer to one side than to the other as well as a downwardly directed air outlet in its bottom having an area larger than that of the inlet whereby air expelled from the dryer is blown downwardly through the housing, means for securing the housing to the dryer with the discharge port and air inlet in registry, a removable disposable self-sustaining air-permeable receptacle having side and end walls of woven fabric through all of which de-linted air is blown, collar-bearing means forming an air inlet to the receptacle adapted air-tightly to engage the port, moisture absorbing rack means between the receptacle and the air outlet, a door on the face of the housing providing access for removal and replacement of the receptacle, and support means for detachably holding the receptacle horizontally in the housing comprising bracket means on each of two opposite walls of the housing adjacent end walls of the receptacle, a frame at each end of the receptacle adapted to slide into and out from its engaging bracket, and means at each end of the receptacle for securing one end of the receptacle to one frame whereby the receptacle is suspended bridgingly by the latter means between the brackets and the frames therein but with its ends spaced from the walls of the housing that carries the brackets.

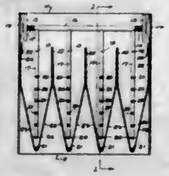
2,735,508
GAS CLEANER
Elvin L. Krieble, Lansdale, Pa., assignor to Selas Corporation of America, Philadelphia, Pa., a corporation of Pennsylvania
Original application April 16, 1951, Serial No. 221,204, now Patent No. 2,701,624, dated February 8, 1955. Divided and this application June 28, 1954, Serial No. 439,664
2 Claims. (Cl. 183—4.3)

1. In a gas cleaning device, the combination of means forming an elongated cylindrical container closed at one end and open at the other, a partition having an opening therein fastened across said container, means forming an inlet between said partition and said closed end, a porous hydrophobic membrane, a member having an opening therein attached to said membrane, means to fasten said member in the opening of said partition from the open end of said container whereby gas flowing through said inlet must pass through said membrane and member to pass said partition, means forming a ledge around the inside of said container between the partition and the open end thereof, a cylindrical canister adapted to hold an adsorbing material and having perforated ends received in the open end of said container and resting against said ledge, sealing means between said canister and ledge,



means forming an outlet to said container between the end of said canister and said open end, a closure for said open end, and spring means forming a handle for said canister engaged by said closure to force said canister against said sealing means whereby gas flowing through said partition must pass through said canister.

2,735,509
ELECTROSTATIC PRECIPITATOR
Arnold C. Fields, Medfield, Mass., assignor to Westinghouse Electric Corporation, East Pittsburgh, Pa., a corporation of Pennsylvania
Application April 1, 1953, Serial No. 346,133
7 Claims. (Cl. 183—7)



1. An electrostatic precipitator comprising means including a pair of spaced-apart, parallel side walls forming a gas passage having a gas inlet at one end and having a gas outlet at the other end, a sheet like electrode member extending from one of said walls to the other and being folded so as to have a plurality of spaced-apart sheet sections extending parallel to said walls and to have V-shaped sheet sections between adjacent pairs of said parallel sheet sections and located between said outlet and said sections, said sections having electrically conductive surfaces, said V-shaped sections diverging towards said inlet and having a plurality of closely spaced relatively small perforations therein, a plurality of ionizer wires supported between said first mentioned sheet sections, and a plurality of spaced-apart metal rod electrodes extending parallel to said side walls and between the sides of said V-shaped sections in alignment with the apices thereof.

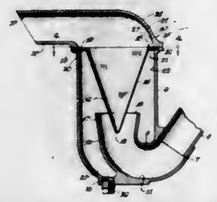
2,735,510
STATIONARY CONDENSER
William P. Dooley, South Charleston, W. Va., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application April 28, 1953, Serial No. 351,676
3 Claims. (Cl. 183—57)

1. Apparatus for condensing fibers suspended in a gaseous fluid comprising a chamber having a pervious wall, a fiber introducing conduit connected with the chamber, a housing enclosing the pervious wall of the chamber, end plates for the housing, a perforated cylindrical member within the housing, a mounting for the cylindrical member, the cylindrical member and its mounting dividing the housing into a pair of compartments, a hollow fixed shaft within the cylindrical member which shaft lies concentrically with the member and is supported by the housing end plates, one end of said shaft being connected with a pressure source, a tubular shaft rotatably mounted on the fixed shaft, radially and axially extending plates secured to the tubular shaft which plates extend into close clearance with the inner periphery of the cylindrical member to divide the interior of the cylindrical member into two compartments, two semicircular plates secured to the rotatable tubular shaft at points spaced inwardly from the housing end plates and extending radially to the inner periphery of the cylindrical member, said axially extending



plates and semicircular plates forming with the shaft an isolation valve adapted to divide an intermediate zone within the cylindrical member into two semicylindrical sections isolated from one another and to provide end chambers in the cylindrical member which communicate with only one of the semicylindrical sections, the periphery of the cylindrical member being perforated in the intermediate zone only; means for intermittently rotating the tubular shaft, suction conduits leading into the end chambers, apertures in the fixed hollow shaft and in the rotatable tubular shaft for providing intercommunication between the bore of the fixed shaft and the semicylindrical section of the cylindrical member which is not in communication with the end chambers whereby air under pressure may be introduced into the non-communicating section of the cylindrical member a normally closed valve positioned in the hollow shaft; and means for periodically opening the valve.

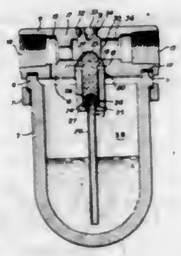
2,735,511
INTERNAL-COMBUSTION ENGINE SPARK ARRESTOR
Rudolph A. Holmberg, Chicago, Ill., assignor to International Harvester Company, a corporation of New Jersey
Application December 31, 1953, Serial No. 401,587
1 Claim. (Cl. 183—72)



In a spark arrestor for an internal combustion engine, a housing having an upright hollow cylindrical body portion with a closed bottom, an inlet pipe integral with said body portion and extending through a side thereof at said bottom and provided with an inlet portion adapted for connection to the exhaust manifold of an associated internal combustion engine and extending diagonally up-

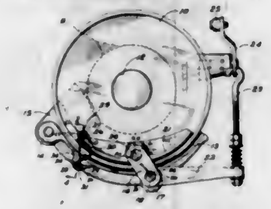
wardly from the bottom of said casing, said pipe further having an intermediate downwardly curved portion integral with said bottom and disposed within the lower end of said housing and merging at one end with said inlet portion, said pipe further having an integral upwardly flaring outlet portion extending upwardly from the other end of said intermediate portion in substantially centered relation to the interior of said housing and forming a well thereabout with the sides of the housing at the bottom thereof, said intermediate portion providing an impinging surface for spark particles athwart the direction of movement of gases from said inlet portion and into said outlet portion, said outlet portion terminating in an upwardly open upper end intermediate the ends of said body portions of the housing, a conical screen baffle having a lower pointed end within said upper end of said outlet portion in substantially centered radially spaced relation thereto, said baffle extending from said pointed end within said body portion in substantially centered relation thereto and terminating at the upper end of said body portion in an upper wide base of a diameter less than that of said housing and having at said base an outturned flange portion overlapping the upper edge of said body portion, an imperforate baffle ring circumscribing said screen baffle at said base and positioned beneath said flange portion and having a surface facing downwardly into said body portion and seated about its outer periphery upon the upper edge of said body portion and providing a surface area extending radially inwardly from the interior periphery of said body portion to the periphery of said conical baffle, and an exhaust pipe connected at one end to said flange portion and clamping said ring with the upper end of said body portion and having a horizontally extending outlet portion providing a particle impinging surface extending athwart the direction of flow of gases from said body portion; said outlet portion having a frusto-conical surface of a pitch slightly less than that of said conical baffle and oriented to guide particles entrained in the gases issuing from said outlet portion against said conical baffle in an area intermediate its bottom end and upper base at an extremely acute angle thereto to effect a sliding action by the particles along the baffle.

2,735,512
WICK TYPE OIL-FOG LUBRICATOR
Delbert G. Faust, Englewood, Colo., assignor to C. A. Norgren Co., Englewood, Colo., a corporation of Colorado
Application July 17, 1952, Serial No. 299,319
13 Claims. (Cl. 184—55)



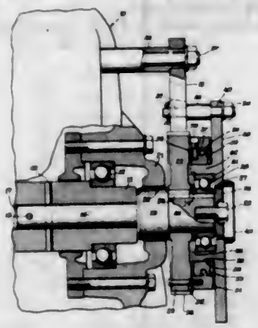
1. A fog generator comprising a reservoir adapted to contain a quantity of fluid and having an air passage through which air is forced to entrain fluid particles, wick means extending into said passage, means for supplying fluid to said wick means, and valve means operably intercommunicating with said wick means for controlling the velocity of air through said passage across said wick means.

2,735,513
BRAKE MECHANISM
Bryan E. House, Ashtabula, Ohio, assignor to Detroit Duo-Grip Brake Corporation, Detroit, Mich., a corporation of Michigan
Application November 6, 1953, Serial No. 390,546
5 Claims. (Cl. 188—76)



1. A brake shoe assembly comprising a flanged brake drum, a bellcrank, pintles thereon disposed in straddled relation with the flange of said drum, a fixed outer brake shoe pivot post, an outer brake shoe fulcrumed thereon and upon the outer pintle of said bell crank, an inner brake shoe fulcrumed on the inner pintle of the bell crank and a spring wire loop mounted for tensive adjustment on the outer brake shoe adjacent said fixed post and upon the adjacent end of said inner shoe.

2,735,514
BACK-STOP MECHANISM
Daniel A. Schrock, Boise, Idaho, assignor to Idaho Sprocket and Machine Works, Boise, Idaho, a copartnership
Application May 27, 1952, Serial No. 290,123
8 Claims. (Cl. 188—82.4)

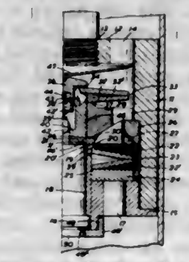


8. A back-stop mechanism comprising a rotatable ratchet and a dog therefor; in combination with a shiftable control member driven by said ratchet through a centrifugal release clutch comprising disengageable friction surfaces, means urging said surfaces into engagement, and clutch release means responsive to rapid rotation of the ratchet; together with an operating connection extending between the control member and the ratchet dog.

2,735,515
FLUID PRESSURE RELIEVING APPARATUS
John Leslie Cloudsley, West Wycombe, England
Application February 27, 1951, Serial No. 212,851
2 Claims. (Cl. 188—88)

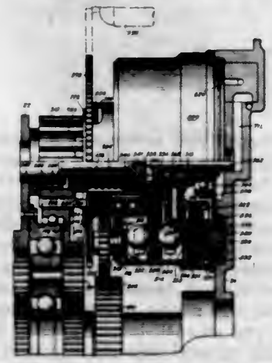
1. A hydraulic shock absorber comprising a liquid filled cylinder, a piston reciprocable therein, valve means within the piston permitting restricted flow of the liquid through the piston when the latter moves along the cylinder in one direction, and means also within the piston permitting relatively free flow of the liquid through the piston when the latter moves along the cylinder in the opposite direction, the said flow restricting valve means comprising a valve member and a valve seating member

therefor, said valve member being in the form of a pair of dished resilient annular discs placed face to face with their outer peripheries in contact with one another, one disc of the pair being normally seated annularly at its inner periphery against the valve seating member and being subject to deflection by the liquid pressure upon it



when the piston moves in the aforesaid one direction, said deflection being away from said seating member and causing an annular opening for the restricted flow of the liquid between the said seating member and the said inner periphery of the said one disc and thence through the pair of discs.

2,735,516
BRAKE MECHANISM
Charles W. Chillson, Caldwell, N. J., assignor to Curtiss-Wright Corporation, a corporation of Delaware
Original application June 8, 1946, Serial No. 675,383, now Patent No. 2,640,552, dated June 2, 1953. Divided and this application November 12, 1952, Serial No. 320,045
7 Claims. (Cl. 188—105)



7. In a rotating system including a non-rotating support, a friction brake connected between said support and part of said rotating system, means positively energized by system rotation urging said brake to braking position, a servo mechanism including a connection from said mechanism to overcome said positively energized means during normal operation of the servo mechanism, said brake being engaged by said positively energized means upon failure of said servo mechanism, and means operable selectively and connected to engage and disengage said brake during normal operation of the rotating system and servo mechanism.

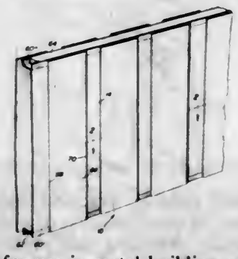
2,735,517
VEHICLE FLOOR
William H. Peterson, Homewood, Ill., assignor to Pullman-Standard Car Manufacturing Company, Chicago, Ill., a corporation of Delaware
Application December 13, 1952, Serial No. 325,776
8 Claims. (Cl. 189—34)

1. A vehicle floor comprising a plurality of elongated metal members arranged in side by side spaced relation, each of the members having a pair of side walls with wooden boards alternating between the members, each of the side walls of the members being provided with an opening, a bendable tab extending from the bounding wall of the opening in each side wall and the tabs on the same



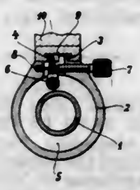
member projecting toward each other, and a bent floor clip extending between the pair of side walls on each of the members and positioned in the openings in parallel abutting relation with the respective tabs, the tabs bending with the clip as the clip is driven from bent position to a straight position into adjacent boards.

2,735,518
PREFABRICATED WALL PANELS
Aaron W. Schopper, Phoenix, Ariz.
Application February 7, 1955, Serial No. 486,598
7 Claims. (Cl. 189—34)



1. A panel for use in metal building construction comprising a central panel section having parallel panel sections integrally formed therewith and extending normal thereto, flanges integral with said parallel panel sections extending outwardly normal thereto, the upper end of said central panel section being bent toward said flanges to form a shelf, the upper ends of said parallel panel sections being bent outwardly to form supports and angularly downwardly to abut against said parallel panel sections forming diagonal braces for said supports.

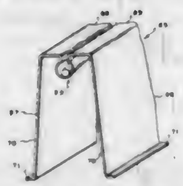
2,735,519
DOVETAIL CONNECTION FOR MICROSCOPES
Karl Frischmann, Wetzlar-Garbenheim, Germany, assignor to Ernst Leitz, G. m. b. H., Wetzlar, Germany, a corporation of Germany
Application October 15, 1952, Serial No. 314,783
1 Claim. (Cl. 189—36)



A dovetail connection for removably connecting one part to another part comprising an integral dovetail slot in the one part, a complementary dovetail rail in the other part consisting of a fixed rail portion projecting from said other part for engagement with the one side of the said dovetail slot, an opening provided in said other part in substantial alinement with said integral dovetail slot in the one part, one side of said opening

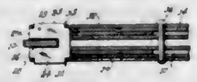
being formed by said fixed rail portion, a movable rail portion pivoted on said other part at a point spaced from said opening in substantial alinement therewith, said movable rail portion extending from said pivot through said opening into complementary rail forming relation with said fixed rail portion for engagement with the inside surface of the opposite side of said dovetail slot and to move laterally across said dovetail slot within said slot and said opening, a spring in said other part engaging said movable rail portion to move the same to vary the distance between said rail portions and a clamping screw in said other part extending into the said opening to engage the movable rail portion to clamp it in operative sliding relation with the said inside surface of the slot, said movable rail portion having a range of movement within the dovetail slot and said opening with respect to said integral rail portion enabling said dovetail rail to pass through the mouth of the said slot for separation of the said two parts.

2,735,520
STRUCTURAL MEMBER
Tappan Collins, Grosse Pointe Woods, Mich., assignor to National Steel Corporation, a corporation of Delaware
Application September 9, 1949, Serial No. 114,882
13 Claims. (Cl. 189—37)



1. An elongated nailable structural member formed from a single piece of sheet material comprising laterally spaced longitudinally extending side portions presenting spaced longitudinal adjacent edges; a longitudinally extending grooved portion integrally connecting the side portions; the longitudinally extending grooved portion including a pair of spaced longitudinally extending shoulder portions integrally joined along their longitudinal edges to the adjacent longitudinal edges of the side portions and extending outwardly in the same direction from the side portions, and a curved portion having spaced longitudinally extending edges integrally joined to the shoulder portions; the curved portion forming a nail-receiving slot and the spaced shoulder portions defining a restricted throat opening extending from between the side portions into the nail-receiving slot; successive lengths of the curved portion being laterally displaced alternately in opposite directions with the longitudinal axis of the nail-receiving slot being laterally displaced alternately in opposite directions with respect to a plane passing through the throat substantially intermediate the shoulder portions, the plane being substantially perpendicular to a second plane passing through the longitudinal edges of the shoulder portions.

2,735,521
WINDOW CONSTRUCTION WITH MEANS FOR HOLDING THE SASH IN OPEN POSITIONS
Anthony Herman Armerding, North Plainfield, N. J., assignor to Armerding Developments, Inc., North Plainfield, N. J., a corporation of New Jersey
Application January 7, 1953, Serial No. 330,129
7 Claims. (Cl. 189—72)



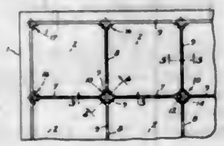
1. In a window structure, a window frame including top and bottom rails and side jambs connecting said rails, each jamb having a vertical rail projecting therefrom toward the other jamb and each vertical rail having opposite flat faces parallel to the general plane of said frame, a sash having stiles and rails vertically slidable on said vertical rails, a clutch plate mounted in said sash to tilt about an axis parallel with the plane of the sash and perpendicular to the stile and having a slot into which one of said vertical rails extends, said slot being of a width greater than the thickness of said vertical rail and having edges approximately parallel to said flat faces of said vertical rail to grip said faces of the rail when the clutch plate is tilted in one direction about said axis, said angular edges being slidable freely along said faces of said vertical rail when the clutch plate is tilted in the opposite direction, spring actuated means in said sash and connected to said clutch plate for normally tilting said clutch plate in the first-mentioned direction, and means on the sash and connected to the clutch plate for positively tilting the clutch plate in the second-mentioned direction.

2,735,522
LIGHT CONTROL FIXTURE
Sherman H. Lee, San Francisco, Calif., assignor of one-half to Cepco, Inc., San Francisco, Calif., a corporation of California, and one-half to Lippincott & Smith, San Francisco, Calif., a partnership
Original application November 14, 1949, Serial No. 126,991. Divided and this application April 18, 1951, Serial No. 221,711
4 Claims. (Cl. 189—84)



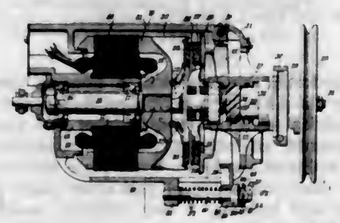
1. A light control unit comprising a rectangular grid frame each side whereof comprises a channel member having a web forming the inner periphery of said frame and having spaced slots formed therein perpendicular to the length of said channel and holes in one flange of said member adjacent to said web and opening into said slots, a grid of rectangularly intersecting louvers the ends whereof extend through opposite sides of said frame, a roll of a diameter to permit insertion through said hole formed in the end of each louver inserted in said hole and abutting said channel adjacent said slots, an angular member having a flange projecting inwardly and secured over said channel member to close the same forming a box section therewith and covering said holes to prevent the withdrawal of said louvers from said slots.

2,735,523
TILE FACED WALL
Arthur R. Leyerle, Rocky River, Ohio, and Harry W. Gillis, Nappanee, Ind., assignors to Vitreous Steel Products Company, Cleveland, Ohio, a corporation of Ohio
Application April 30, 1952, Serial No. 285,290
6 Claims. (Cl. 189—85)



1. A wall structure having a wall body and a facing of polygonal tiles that are regularly spaced with their inner surfaces engaging said wall body and their side edges alined to provide straight intersecting filler joints, said tiles having blunt corners that are spaced circumferentially around the joint intersections and that provide an enlarged filler receiving space at each intersection, said blunt corners having openings spaced from their wall engaging surfaces and clips fastening said tiles to said wall body, each of said clips having a base portion secured to said wall body substantially at the center of one of said enlarged spaces and integral resiliently bendable arms extending outwardly from said base portion and wall body, each of said arms having an inclined inner portion extending laterally outwardly from said base portion of the clip and terminating in a free end portion extending laterally inwardly with a reversely bent intermediate portion projecting laterally into an adjacent tile opening, said free end portion providing a cam surface engageable by said inner surface of the adjacent tile at a corner thereof for independently springing the arm laterally inwardly toward said center to snap said intermediate portion into place in the adjacent tile opening as the tile is moved toward said wall body.

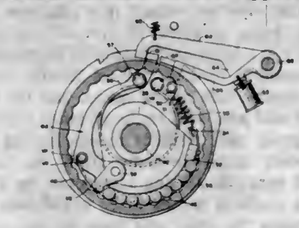
2,735,524
ELECTRIC CLUTCH-BRAKE DRIVING DEVICES
Harry B. Fuge, Somerville, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a corporation of New Jersey
Application February 14, 1951, Serial No. 210,954
7 Claims. (Cl. 192—18)



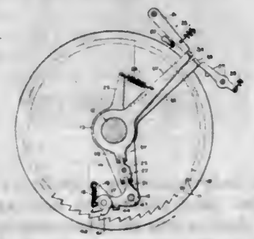
1. In an electric clutch-brake mechanism having a frame, an electrically actuated driving clutch element, a brake spaced therefrom, a driven clutch element interposed between said driving clutch element and said brake, mechanism for moving said driven clutch element into engagement with either the driving clutch element or the brake, a support for said brake, spring means for biasing said brake support away from said driving clutch element, a screw threaded into said frame and having a skirted head portion formed with feeler prongs, and a member formed with a ridge portion carried by said brake-support and coacting with said feeler prongs, said member and feeler prongs serving to limit the minimum spacing between the driving clutch element and the brake and for locking said screw in its adjusted position.

2,735,525
CLUTCH
Frank Martindell, Western Springs, Ill., assignor to Teletype Corporation, Chicago, Ill., a corporation of Delaware
Application February 3, 1951, Serial No. 209,299
22 Claims. (Cl. 192—27)

1. In a roller clutch, a driving member, driven means, a support spaced from said driving member to provide a raceway therebetween, a plurality of abutting rollers positioned within said raceway, a reaction member engaging the last of said rollers, and means movably mounted on the driven means for engaging and forcing said rollers against the reaction member to move one of said rollers transversely of the direction of force application to effectuate a driving connection between the driving member and driven means.

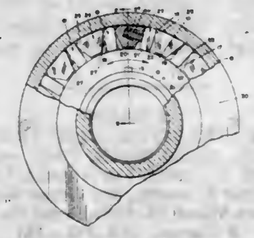


2,735,526
POSITIVE ENGAGING CLUTCH
Wilbur R. Gemmel, Wheaton, Ill., assignor to Teletype Corporation, Chicago, Ill., a corporation of Delaware
Application October 2, 1951, Serial No. 249,280
12 Claims. (Cl. 192—28)



1. In a positive engaging clutch, a multi-toothed driving member, a driven member, a link movably mounted on the driven member, a two toothed pawl pivotally mounted on the link, means for moving the link to bring a first tooth of the two toothed pawl into engagement with a tooth on the driving member, whereby the inertia of the driving member acts to pivot the pawl to move the second tooth of the pawl into engagement with another tooth on the driving member so that the driving force is imparted through this second tooth to the driven member.

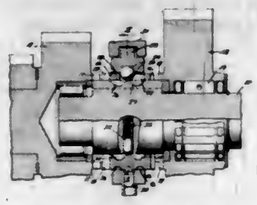
2,735,527
TRAPPED SPRING SPRAG CLUTCH
Forest R. McFarland, Huntington Woods, Mich., assignor to Studebaker-Packard Corporation, a corporation of Michigan
Application October 15, 1951, Serial No. 251,307
3 Claims. (Cl. 192—45.1)



1. A one-way coupling device comprising an inner member having a race on its periphery and an outer member that provides an outer race spaced from the inner member, a plurality of elongated sprags disposed in a spaced relation between the inner and outer races, said sprags being generally symmetrical about a center point and a plurality of spacers disposed one between each pair of adjacent sprags, said spacers being generally coextensive with said sprags so as to substantially fill the space between adjacent sprags but said spacers being

spaced sufficiently away from said inner member to avoid any wedging thereof, each of said spacers having a nose formed on one side to contact one adjacent sprag, said nose portion being adapted to contact the side of the adjacent sprag at a location adjacent to its outermost edge, and an expandible resilient means fixedly disposed between the opposite side of the spacer and the other adjacent sprag of said pair, said resilient means bearing against said other sprag, said resilient means having its contact with said other sprag inwardly from the center point thereof, each sprag thus being acted upon by a contacting spacer and a resilient means to be urged into a gripping position between the inner and outer races.

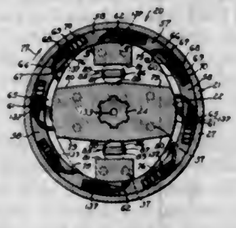
2,735,528
TOOTH CLUTCHES
Adiel Y. Dodge, Rockford, Ill.
Application February 28, 1951, Serial No. 213,141
8 Claims. (Cl. 192—48)



1. A tooth clutch comprising a shaft, a sleeve mounted on the shaft for axial sliding but held against rotation relative to the shaft, a pair of clutch members around the shaft adjacent to the opposite ends of the sleeve, the clutch members and the ends of the sleeve being formed with clutch teeth to interengage when the sleeve is moved toward the respective clutch members, the sleeve having two sets of openings therein, the shaft having axially spaced sets of recesses therein one to register with one set of openings when the sleeve is moved toward one of the clutch members and the other to register with the other set of openings when the sleeve is moved toward the other of the clutch members, actuating and locking members movable through the openings into the recesses, and a shift collar slidable on the sleeve and formed with an internal recess to receive the locking members, the internal recess having its sides lying at acute angles to the shaft axis to cam one set or the other of the locking members into the recesses when the shift collar is moved toward one or the other of the clutch members there being means to provide lost motion between the shift collar and the sleeve when either set of actuating and locking members is moved inward so that said set will be released before the shift collar engages the other set of actuating and locking members to move the sleeve through them.

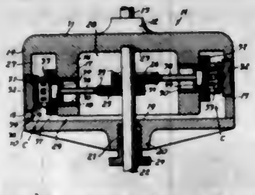
2,735,529
VARIABLE-RATIO HYDRAULIC TRANSMISSION
Walter S. Austin, Grand Rapids, Mich., assignor of one-third to Ruth A. Austin, Los Angeles, Calif., and one-third to Walter S. Austin, Jr., Grand Rapids, Mich.
Application March 19, 1951, Serial No. 216,428
8 Claims. (Cl. 192—58)

1. In a hydraulic transmission, the combination of: driving and driven rotors providing therebetween a space for a liquid and providing an outlet passage which communicates with said space, the maximum cross-sectional area of said space exceeding the maximum cross-sectional area of said passage; a plurality of vanes carried by said driving rotor and adapted to traverse said space, whereby said vanes tend to discharge liquid from said space through said outlet passage upon rotation of said driving rotor relative to said driven rotor; and a valve carried by said driven rotor and controlling the rate of discharge of liquid from said space through said outlet passage, said valve being pivoted on said driven rotor and having



unequal areas on opposite sides of its pivot axis, pressure in said space against the smaller of said areas biasing said valve closed and pressure in said space against the larger of said areas biasing said valve open.

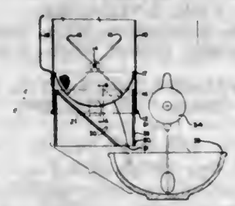
2,735,530
HYDRAULIC TRANSMISSION
Fedir Kostenko, Philadelphia, Pa.
Application January 26, 1953, Serial No. 333,142
2 Claims. (Cl. 192—60)



2. In a hydraulic transmission, a housing consisting of a circular plate having a peripheral flange and a concentric cylindrical wall outstanding from said plate providing an annular chamber and a main chamber communicating with one another, a cover plate for said housing, a drive shaft journalled in said cover plate and extending into said housing, a cam drivably mounted on said drive shaft within said housing, a cylinder carried by said concentric wall and radially disposed within said housing, the said peripheral flange having an aperture therein to permit the insertion of said cylinder into said housing, a plug threadably mounted in said aperture, a piston reciprocal in said cylinder and operatively connected to said cam, said cylinder being formed with a plurality of ports communicating with said annular chamber, a hydraulic medium within said housing, a floating ring about said cylinder between said cylindrical wall and peripheral flange, said ring being adapted for radial movement for closing said ports under the influence of the centrifugal force of rotation of said housing, a coil spring surrounding said cylinder in contact with said ring and peripheral flange normally biasing said ring into a position leaving said ports open, and an electromagnet under the control of a manually operable switch associated with said cylinder and ring for moving said ring to a port closing position.

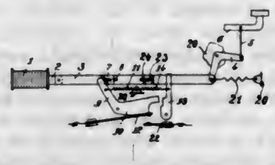
2,735,531
ATTACHMENT FOR FLOUR SIFTER
Sylvia E. Spivey, San Jose, Calif.
Application November 3, 1951, Serial No. 254,713
1 Claim. (Cl. 193—2)

An attachment for a hand flour sifter having a rigid cylindrical tubular body portion with a sifting screen mounted transversely across said body portion and spaced upwardly from the lower end thereof, an agitator being mounted for movement above said screen with means for actuating said agitator; said attachment comprising a rigid cylindrical tubular body portion of a diameter to fit telescopically on the lower end of said sifter body to be co-extensive therewith, and a rigid, smooth, deflector plate of inverted, truncated, conical section joined marginally except at its truncated apex portion, and mounted transversely of said attachment body portion with the conic axis of said deflector plate disposed parallel to and ad-



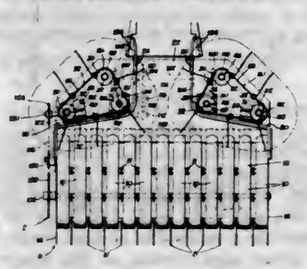
jacent one side of the attachment body portion, the truncation of said deflector plate providing a small discharge opening between the cylindrical wall of the attachment and the truncated lower edge of the deflector plate, the slope of the conical deflector plate being such as to cause flour falling thereon from the sifter to gravitate through the discharge opening.

2,735,532
APPARATUS FOR CONTROLLING KEYS OF BUSINESS MACHINES
Georg Meyer, Frankfurt (Main), Germany, assignor to Siemag Feinmechanische Werke G. m. b. H., Eiserfeld (Sieg), Germany
Application September 30, 1954, Serial No. 459,376
4 Claims. (Cl. 197—19)



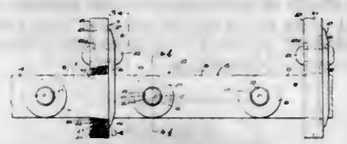
1. In an electrically operable business machine, in combination, support means; an operating key movably carried by said support means; linkage means operatively connected to said key; means carried by said support means for urging said linkage means and key to an inoperative starting position; a solenoid operatively connected to said linkage means for actuating said key through said linkage means when said solenoid is energized; a switch located in the circuit of said solenoid; a switch operating member engaging said switch for opening same upon movement of said switch operating member in one direction and for closing said switch upon movement of said switch operating member in an opposite direction, said switch operating member being located in the path of movement of a portion of said linkage means when the latter is moved upon energizing of said solenoid to be moved by said portion of said linkage means in said one direction to open said switch upon energizing of said solenoid so as to de-energize said solenoid immediately after energizing thereof; and releasable catch means carried by said support means for movement to and from a position engaging said switch operating member to prevent movement thereof in said opposite direction, said catch means being located in the path of movement of a portion of said linkage means during return of said linkage means to its starting position after de-energizing of said solenoid so as to be moved by said linkage means away from said position engaging said switch operating member to release the latter for movement in said opposite direction to close said switch.

2,735,533
HARVESTING GATHERING MECHANISM
William F. Collins, Westmont, and Thomas J. Scarnato, Chicago, Ill., assignors to International Harvester Company, a corporation of New Jersey
Application September 29, 1951, Serial No. 248,986
5 Claims. (Cl. 198—162)



1. In a harvesting machine, an upright paneling having angularly arranged generally flat sections defining crop guiding surfaces on one side thereof and an outer corner, said paneling having generally horizontal slots therethrough extending from one section to the other, means for shifting the crop along one of said sections to said corner, then around the corner and along the other section and comprising an annular bearing member positioned inside said corner and rotatable on an axis generally parallel to the planes of the sections, a flexible element movable on a portion of the periphery of the member facing toward the paneling and having a rectilinear length running along the opposite side of the one section generally parallel thereto and another rectilinear length extending from said member along the opposite side of the other section in diverging relationship thereto, and outstanding fingers on the element adapted to enter the slots at the one section, sweep around the corner and along the other section and gradually withdraw therefrom, said fingers being flexible and deflectable in a trailing direction as respects to their direction of movement as the movement of said fingers is accelerated about said corner and abruptly slowed along said other length of said element whereby causing said fingers to pitch the crops engaged thereby along said other section.

2,735,534
FLIGHT CONVEYOR
Henry W. Hapman, Hickory Corners, Mich., assignor of forty per cent to Hannah Jane Hapman, Hickory Corners, Mich.
Application September 10, 1951, Serial No. 245,922
3 Claims. (Cl. 198—176)



1. A flight conveyor comprising a flexible conveyor chain composed of outer and inner links pivotally connected to one another, certain of said inner links each comprising an elongated bar having pivot bores disposed at its opposite ends, a tapered portion disposed in the intermediate part thereof, a plate-shaped abutment disposed adjacent the larger end of said tapered portion; a circular disc flight having a tapered hole therethrough spaced away from the center and disposed near the periphery thereof, said hole corresponding in configuration and taper to said tapered portion and snugly mounted thereon in mating engagement therewith, and fastening means securing said abutment and flight together.

2,735,535
REINFORCEMENT FOR FLIGHTS IN ENDLESS METAL CONVEYORS
William H. C. Ness, Los Angeles, Calif., assignor to National Cornice Works, Los Angeles, Calif.
Application April 6, 1953, Serial No. 347,120
2 Claims. (Cl. 198—195)



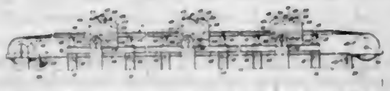
1. In combination with the flight section of an endless conveyor having adjacent flight sections united by hinges, each of said hinges having a flat reinforcing flange which extends transversely to the path of movement of the flight section, a reinforcing plate formed from a single piece of metal, said plate being bent back on itself at the center to provide a midwidth portion which snugly embraces the outer edge portion of the flange, said midwidth portion abutting and extending substantially parallel to the outer portions of the flange on opposite sides thereof, said reinforcing plate having a pair of side portions abutting and extending substantially parallel to the inner portion of the flange on opposite sides thereof, said side portions being attached to the inner portion of said flange, said reinforcing plate having between its center and each of its side portions a reinforcing part deflected outwardly from said flange, said outwardly deflected reinforcing parts combining to form a hollow beam reinforcement for the flange of said flight section, said flange extending substantially diagonally across said hollow beam to form a diagonally reinforced hollow beam structure which permits said flight section to carry a heavier load.

2,735,536
APPARATUS FOR AUTOMATICALLY CENTERING AND ALIGNING MOVING OBJECTS
Edwin T. Lorig, Pittsburgh, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Application December 7, 1951, Serial No. 260,436
10 Claims. (Cl. 198—202)



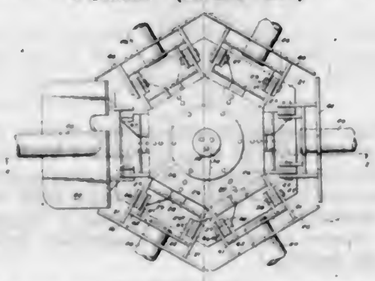
1. Apparatus for centering a strip comprising a pair of rotatable spaced apart shafts, a flexible member fastened to and extending between said shafts, and spaced apart strip supporting members fastened to said flexible member, said strip supporting members providing a pair of spaced apart strip engaging surfaces on each side of the transverse center line of said flexible member, the diameter of the strip engaging surface adjacent the transverse center line of the flexible member being greater than the diameter of the strip engaging surface remote from the said transverse center line.

2,735,537
BELT CONVEYOR
Henry G. Keller, Glenside, Pa., assignor to Link-Belt Company, a corporation of Illinois
Application November 5, 1951, Serial No. 254,852
16 Claims. (Cl. 198—203)



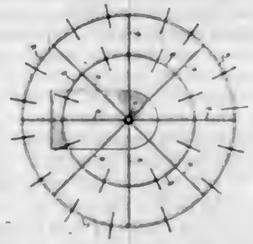
1. A belt conveyor, comprising an endless flexible conveying belt, means for supporting said belt, and a drive unit formed of a plurality of longitudinally spaced pairs of drive wheels associated with each edge portion of said belt, the drive wheels of each of said pairs having their peripheral surfaces spaced from the opposite surfaces of the associated belt edge portion, a pair of drive belts trained over the drive wheels at each edge portion of the conveying belt, each of said pairs of drive belts drivingly engaging a belt edge portion, and means for driving said drive wheels.

2,735,538
COIL UNLOADER
Walter G. Boehm, Birmingham, Mich., assignor to Jervis B. Webb Company, Detroit, Mich., a corporation of Michigan
Application March 4, 1954, Serial No. 414,074
4 Claims. (Cl. 198—209)



1. In a coil unloader having a pedestal base structure, a turntable rotatably mounted thereon, and means for rotating said turntable; a purality of coil handling arm assemblies, means for connecting each of said coil handling arm assemblies to said turntable in radial relation to the rotational center thereof for pivotal movement about a substantially horizontal hinge axis; cam means carried by said base in vertically spaced relation to said turntable, said cam means including a portion concentric with the axis of rotation of said turntable and a portion eccentric thereto; and means for supporting each of said arm assemblies and for controlling pivotal movement thereof about said hinge axis in response to rotation of said turntable to cause each arm assembly to be raised to an upwardly inclined loading position and to lower and maintain said loaded arm assembly at a substantially horizontal unloading position, said means including said cam means and a back plate rigidly secured to each arm transversely thereof adjacent said hinge axis, said back plate serving to define the position of a load on said arm and having a crank portion extending to one side of said pivotal axis, said crank portion being provided with a cam follower contacting said cam means.

2,735,539
AUTOMATIC ELECTRICALLY CONTROLLED CONVEYOR
Phillip T. Snyder, Orangevale, Calif.
Application October 1, 1954, Serial No. 459,670
5 Claims. (Cl. 198—209)



1. In an electrically operated rotary conveyor, a rotatable conveyor shaft, driving means including a motor for rotating said shaft, a plurality of normally closed first switches arranged in a circle concentric with said

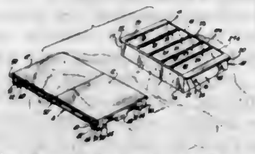
shaft, each first switch having a first operating member, a first switch control plate connected to the shaft and engaging said operating members to keep all said switches open, said first plate having a V-shaped opening movable successively into position over said switches whereby at any given time one only of the said switches will be closed, a plurality of normally open second switches arranged in a circle, each said second switch having a second operating member, an operator actuated second switch control plate engaging said second operating members to keep all said normally open second switches closed, said second plate having a V-shaped opening, movable under control of the operator over a selected one of the normally open second switches, a power source and circuit connections connecting said motor to said power source by way of said closed and open switches until said shaft and said first control switch plate rotate so that said V-shaped opening in said first switch control plate arrives over the normally closed first switch corresponding to said selected normally open second switch.

2,735,540
LACING-UP DEVICE
Eugene C. Gibson, Havertown, Pa., and Lawrence C. Holt, Wilmington, Del., assignors, by direct and mesne assignments, to The Chemstrand Corporation, Wilmington, Del., a corporation of Delaware
Application November 14, 1951, Serial No. 256,346
11 Claims. (Cl. 203—67)



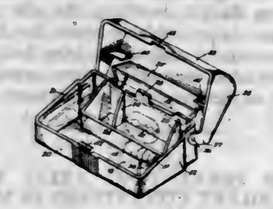
1. A lacing-up device for directing a running length of material into a feeding mechanism, comprising material feeding means, material positioning means mounted adjacent the feeding means, said positioning means comprising a material-positioning member having curved sides converging toward the feeding means, rollers mounted on either side of the member at a point adjacent the curved sides thereof farthest removed from the feeding means, said rollers being positioned to contact the material when the material-positioning means is actuated, means for moving the positioning means toward and away from the feeding means, and material cutting means positioned adjacent the feeding means.

2,735,541
DEVICE FOR STORING PAPER MONEY AND COINS
Arthur R. Mosler, New York, N. Y., assignor to The Mosler Safe Co., New York, N. Y., a corporation of New York
Application September 18, 1951, Serial No. 247,032
5 Claims. (Cl. 206—.81)



1. A device for storing coins and paper currency comprising a rectangular plate having walls forming a shallow upwardly opening recess adapted to receive paper money flat and hold it against sidewise or endwise movement, the plate having at its ends depending portions each provided with a groove facing the groove in the other portion and with hinge knuckles, a pair of recess covers each hinged to the hinge knuckles at one end and of a length to meet over the middle of the recess and of a width to cover the recess, and an upwardly opening coin box having at its ends flanges to slidably fit the grooves in the depending portions of the plate, the top of the coin box and the lower face of the plate having cooperative shape to effect, when in one position, closure of the coin box, the coin box and plate having cooperative stops to limit the sliding to said position.

2,735,542
CONTAINER FOR SAFETY RAZOR AND BLADES
Meyer J. Shnitzler, Brookline, Mass., assignor to The Gillette Company, a corporation of Delaware
Application April 19, 1950, Serial No. 156,734
2 Claims. (Cl. 206—16)



1. A case of molded plastic material for a safety razor set comprising a tray member and a hinged cover member each having front, rear and end walls, the end walls of said cover member having parallel apertured hinge ears that overlap the end walls of the tray member in flat-wise relation, the latter having pintles extending into the ear apertures pivotally connecting the cover member to the tray member, the juxtaposed edges of the rear walls of said tray and cover members being spaced apart to provide a venting gap, and interfitting tongue and slot means on said rear walls intermediate said hinge ears at a substantial distance therefrom, said tongue means extending into closer proximity to the innermost edge of said slot means than the minimum venting gap distance, and said tongue means further being of sufficient width to afford it adequate stiffness in a direction perpendicular to the planes of said parallel hinge ears to safeguard said ears against breakage which might otherwise result from a relative longitudinal displacement of said members.

2,735,543
SMOKING PIPE TOBACCO CARTRIDGE PACKAGES
William Trow, New York, N. Y., assignor to Pipe-Pac Tobacco Corp., New York, N. Y., a corporation of New York
Application September 3, 1952, Serial No. 307,648
2 Claims. (Cl. 206—48.5)



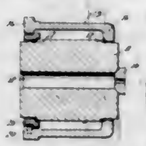
1. A smoking pipe tobacco cartridge package comprising a sleeve of woven heat resisting material, tobacco within said sleeve, the ends of the sleeve being twisted, means to grip the twisted ends of the sleeve, and an outer tube of thermo plastic, light transmitting, sheet material surrounding said sleeve, with the twisted ends of the sleeve positioned centrally axially of the tube between the flattened ends of the tube the ends of the tube being flattened and adhered together over the twisted ends of the sleeve positioned therein.

2,735,544
SURGICAL DRAPE PACKAGE
Reynolds Guyer, St. Paul, Minn., assignor to Waldorf Paper Products Company, St. Paul, Minn., a corporation of Minnesota
Application October 26, 1951, Serial No. 253,359
6 Claims. (Cl. 206—63.2)



1. A folder for containing an envelope or the like having flat opposed edges, the folder including a bottom panel, side panels foldably connected to opposite sides of said bottom panel, locking flanges foldably connected to said side panels and clamping flanges secured to said locking flanges, said clamping flanges being wider than the locking flanges and being folded thereupon in substantially surface contact therewith, with the free edge of the clamping flanges overlying the side panels, said clamping flanges being foldable upon the flat edges of the envelope contained and the locking flanges and side panels being foldable over said bottom panel to fold the marginal edges of the envelope therebetween.

2,735,545
MEANS FOR PREVENTING AXIAL DISPLACEMENT OF BILLET CONTAINERS IN METAL EXTRUSION PRESSES
Eric Norman, Bournemouth West, England, assignor to The Loewy Engineering Company, Limited, London, England, a corporation of Great Britain
Application July 18, 1952, Serial No. 299,643
Claims priority, application Great Britain July 23, 1951
6 Claims. (Cl. 207—15)

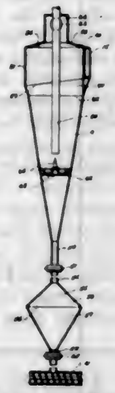


1. In a metal extrusion press having a billet container and a container holder housing said billet container, an inturned flange on said container holder having spaced recesses therein, means for preventing axial movement of said billet container when inside said holder, consisting of a ring which has outwardly projecting tongues and is adapted when interposed between said container and said container holder to engage said flange from behind by means of said tongues, said tongues being adapted to be moved into a position opposite the recesses in said flange to permit said ring to be slid past the flange and out of the said container holder an abutment means on said ring to simultaneously engage the container to axially hold said container in the container holder when said ring is in engagement with said flange.

2,735,546
THERMAL CONDITIONING FOR ELECTROSTATIC SEPARATION OF GARNET
Foster Fraas, Hyattsville, Md., assignor to the United States of America as represented by the Solicitor of the Department of the Interior
No Drawing. Application December 1, 1952, Serial No. 323,524
7 Claims. (Cl. 209—11)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A method of conditioning garnet containing an iron-group element and having a mineral form selected from the class consisting of rhodolite, pyrope, uvarovite, grossularite, and spessarite, for electrostatic separation comprising thermally treating said garnet to increase the electrical conductivity thereof.

2,735,547
CONE SEPARATOR
Gustave A. Visnac, Vancouver, British Columbia, Canada
Application May 7, 1951, Serial No. 224,931
15 Claims. (Cl. 209—211)



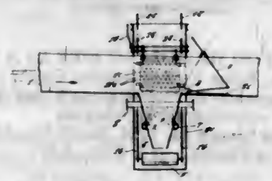
2. A cone separator comprising an upper cylindrical section, a lower section in the form of an inverted cone communicating with the bottom of the upper section, a valve-controlled outlet at the bottom of the cone section, an entrance for the upper section, means for directing a fluid containing particles from a source to the section entrance, means for directing fluid and particles from the entrance downwardly and inwardly in a continuously tightening spiral flow, a fluid outlet at the top of the upper section, a pipe connected to the means for directing fluid with particles to the entrance and opening downwardly in the lower section centrally thereof through which some of the fluid containing particles may be discharged into said section, and means for directing the fluid and particles from the pipe upwardly through the upper section centrally thereof.

2,735,548
SIFTER DEVICE
Alice C. Hoiness, Billings, Mont.
Application October 18, 1954, Serial No. 462,762
3 Claims. (Cl. 209—283)



1. A sifter device for use with a cardboard carton of flour, or the like comprising, a hollow tubular element open at both ends, a rotatable agitator element rotatably carried in said tubular element, an exteriorly disposed handle for manually rotating said agitator element, said rotatable agitator element including a plurality of spaced apart axially extending rods, a curved screen mounted in said tubular element on one side of said agitator element, said rods of said rotatable agitator element being adapted to lightly engage said screen in the rotation of said agitator, a non-spill flange exteriorly carried by said tubular element and extending around the outer surface thereof, said exterior non-spill flange being disposed on the other side of said agitator element with reference to said interiorly positioned curved screen, said tubular element being slotted intermediate the said non-spill flange and an open end of said tubular element to provide two pairs of oppositely disposed slots, each of said slots in each pair of slots being spaced apart from the other of said slots in the pair, a spring element for each pair of slots mounted within said tubular element on the interior surface thereof, each of said spring elements including two spaced apart fingers each projecting through each of said slots and each being adapted to be moved toward the interior of said tubular element against the bias of the spring element, each of said fingers having an edge slanting outwardly and downwardly from the exterior surface of said tubular element when said finger is in normal position to terminate short of the surface of said non-spill flange, each of said fingers having an edge extending inwardly from said terminal point toward the outer surface of said tubular element to provide a clearance between said inwardly extending edge and the surface of said non-spill flange to snugly receive a portion of the top of the carton.

2,735,549
SAND AND STONE INTERCEPTING MEANS FOR BEET-FLOATING TROUGHS
Heinrich Bammann, Muelheim-on-Ruhr, Germany
Application July 16, 1953, Serial No. 368,253
Claims priority, application Germany July 18, 1952
2 Claims. (Cl. 209—454)



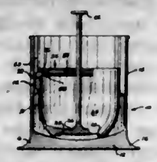
1. A sand and stone interceptor for beet flotation troughs comprising in combination with a receptacle for said sand and stones arranged below an open trough bottom section and with means therein for producing an upward propulsion, a housing in said portion of the trough above said receptacle, formed by a part of the latter projecting into said trough, perforated double walls within said housing serving as a pressure equalizing means, each wall consisting of two slidable panels for displacement with respect to one another, and a weir at the downstream end of said trough bottom opening with means for adjusting the position of said weir.

2,735,550
METHOD AND DEVICE FOR MAGNETIC FILTRATION
Bengt G. Fagerberg, Malmberget, Sweden, assignor to Sala Maskinfabriks A. B., Sala, Sweden
Application January 4, 1952, Serial No. 264,899
10 Claims. (Cl. 210—1.5)



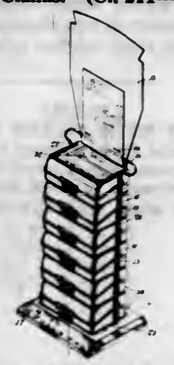
1. A filtering device of the class described, comprising: a revoluble hollow drum; a porous circumferentially extending filter member carried by said drum; means for producing an air pressure differential on opposite sides of said filter member by providing a suction space at one side of said filter member; and magnet means disposed in proximity to said filter member on said one side for augmenting the action of said pressure differential for urging magnetic particles to be drawn to said filter member.

2,735,551
GRAVY SEPARATOR
Arnold J. Walker, Queens, N. Y.
Application February 9, 1953, Serial No. 335,890
2 Claims. (Cl. 210—51)



1. A gravy separator comprising a first container and a second container concentric with and of smaller diameter and lesser height than said first container, said first container including a plurality of guide channels of equal length extending along the longitudinal axis of said wall, and said second container including a plurality of wing members in alignment with said guide members, one of said wing members of said second container riding in each of said guide channels, a weighted base at the bottom of said second container and a trap extending around the upper perimeter of said second container, said trap comprising an outer wall and an inner wall extending below the level of said outer wall and a channel within and between said walls.

2,735,552
DISPLAY RACK
Meyer J. Shnitzler, Brookline, and Robert L. Sinclair, Cambridge, Mass., assignors to The Gillette Company, a corporation of Delaware
Application June 13, 1950, Serial No. 167,801
12 Claims. (Cl. 211—49)

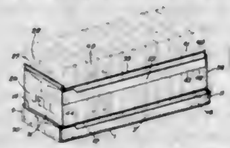


7. For use with containers having channels formed in their walls, a display stand for supporting said containers comprising a base and two upstanding standards secured to said base in parallel relationship to each other, the upper ends of said two standards being connected together by a web, said web being comprised of a loop and two lateral extensions connected to said standards, said loop being disposed in a plane different from the plane of said standards, whereby said standards will be adapted to be received in the channels of said containers.

2,735,553
FRONT FEEDER SHELF MERCHANDIZER
Robert M. Lehman, Summit, N. J.
Application August 28, 1951, Serial No. 243,972
1 Claim. (Cl. 211—49)

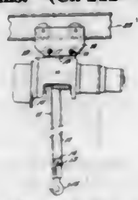
A front-feed disposable combination packaging and marketing container made of flexible light weight sheet material capable of being knocked down to flat condition, and in which packages are adapted to be arranged in a horizontal row, comprising a rectangular tray having a flat bottom section, short vertical sides projecting from the entire length of the side edges of said bottom section,

a front section projecting from the forward edge of the bottom section, a rubber band anchored at the forward end of said tray and adapted to be capable of encircling, when stretched, any packages which may be disposed in said tray and to pull them forwardly against the front section, an upper tray made of lightweight sheet material and superimposed over the aforesaid lower tray and in lateral locked relation therewith, said upper tray comprising a flat substantially rectangular bottom section adapted to rest on the packages disposed in the aforesaid lower tray, narrow vertical sides projecting from the edges of said latter bottom section, lateral, inwardly-folding flaps extending from the front and rear edges of said latter sides, a long extension projecting from the



front edge of said latter bottom section, directed upwardly and folded over said latter front flaps and directed downwardly to act as a display card and lateral locking means, and terminating on the inside of the front extension of the bottom section of said lower tray, another long extension projecting from the rear edge of the bottom section of the upper-tray, directed upwardly over the adjacent rear flaps and directed downwardly, terminating on the inside of the rear extension on the bottom section of said lower tray and acting as lateral locking means, and a rubber band anchored in the fold of the front extension of said bottom section of the upper tray and adapted to be capable of encircling, when stretched, any packages which may be disposed in said tray and to pull them forwardly against the front section of said tray.

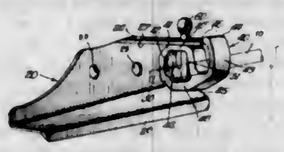
2,735,554
HOIST WITH TILTED DRUM
Roy Ober, Springfield, Ohio, assignor to Robbins & Myers, Inc., Springfield, Ohio, a corporation of Ohio
Application December 10, 1954, Serial No. 474,523
4 Claims. (Cl. 212—134)



1. A hoist having a flanged drum upon which a hoisting cable is adapted to be wound, means for rotating said drum, and means for suspending said hoist from an overhead support with the axis of said drum displaced from the horizontal such that that end of the drum toward which the cable convolutions are added in the first layer on said drum is the higher.

2,735,555
COUPLER OPERATING ROD BRACKET
James S. Swann, Homewood, Ill., assignor to Standard Railway Equipment Manufacturing Company, Chicago, Ill., a corporation of Delaware
Application August 25, 1954, Serial No. 452,063
8 Claims. (Cl. 213—171)

8. A supporting bracket for an operating rod adapted to operate a car coupler upon manual rotation of said rod, said bracket comprising a mounting plate having upright member, an upper arm and a lower flange, said upper arm and lower flange defining a channel, said lower flange being downwardly inclined from said upright member, means for mounting said plate on a car, a head removably mounted in said channel comprising a body member and a hook member projecting from the outer end of said body member for supporting said operating rod, said body member having an upper portion abutting said upper arm and a lower portion abutting said lower flange, said hook member having an upwardly open end closed by said upper arm when said head member is



mounted in said channel, a boss mounted on the inner end of said body member, said mounting plate having a raised portion between said upper arm and said lower flange, an aperture in said raised portion adapted to receive said boss of said body member, axially aligned holes provided in said upper arm, lower arm and said body member, and a pin removably mounted in said holes for removably securing said head in said channel.

2,735,556
APPARATUS FOR HANDLING PIPE IN A DERRICK
Albert L. Stone, Palos Verdes Estates, Calif., assignor, by mesne assignments, to Esso Research and Engineering Company, a corporation of Delaware
Application March 14, 1950, Serial No. 149,514
8 Claims. (Cl. 214—2.5)

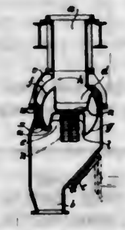


1. Apparatus for use in a derrick having a traveling block flexibly suspended at the center-line thereof, comprising an elongated guide member adapted to be mounted substantially upright in the derrick, a runner member movable along said guide member and guided thereby, a flexible element extending substantially the length of the guide member and operatively interconnecting the traveling block and the runner member, and a power device operatively connected to said flexible element for varying the effective length thereof to thereby selectively cause said block to travel along a laterally offset path or to permit said block to travel along its path of free suspension.

2,735,557
COKE EXTRACTOR FOR VERTICAL RETORT
Frederick Joseph West and Ernest West, Manchester, England, assignors to West's Gas Improvement Company Limited, Manchester, England, a British company
Application December 11, 1952, Serial No. 325,312
Claims priority, application Great Britain December 27, 1951
4 Claims. (Cl. 214—35)

1. A coke extractor for a vertical retort for the carbonisation of coal and the like comprising two coke

pockets or receptacles arranged back to back as a unitary structure with the pockets facing in opposite directions, each pocket extending beneath the retort for its whole length and width when it is in a full receiving position, and the peripheral sides of the extractor when the leading edge of each pocket is in vertical alignment with a side of the retort, that is from the leading edge of



one pocket to the trailing edge of the other pocket, being cylindrical, the extractor being carried by trunnions at its ends, the extractor being turned slowly in one direction, either intermittently or continuously, so that the upper pocket becomes the lower pocket and vice versa, and with a gap through the extractor where the bases of the two pockets come together, a pivoted door in said gap and locking means for the door.

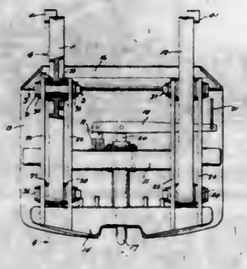
2,735,558
AUTOMATIC LOWERING AND UNLOADING APPARATUS
William J. Chesher, Littlefield, Tex.
Application January 7, 1954, Serial No. 402,765
10 Claims. (Cl. 214—103)



1. Unloading apparatus comprising an inclined supporting frame, an article supporting carriage mounted on the frame for movement therealong between an upper article receiving position and a lower article discharging position, said carriage being movable downwardly from article receiving to article discharging position by the weight of an article placed thereon, resilient means connected between the carriage and frame for returning the carriage to article receiving position when an article is discharged therefrom, and closed fluid circuit means connected between the frame and carriage for controlling the rate of movement of the carriage said controlling means including means for establishing a maximum rate of movement of the piston near the limits of its travel and additional means for setting an adjustable rate of movement intermediate of its travel.

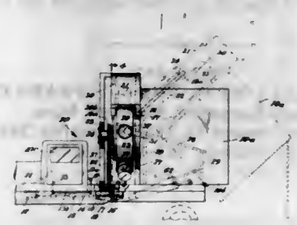
2,735,559
EXCAVATOR DIPPER DOOR
Will S. Burdick, Wauwatosa, and Karl Schneider, Greenfield, Wis., assignors to Harnischfeger Corporation, Milwaukee, Wis., a corporation of Wisconsin
Application March 27, 1952, Serial No. 278,918
2 Claims. (Cl. 214—145)

1. In an excavator dipper having a door panel and a hinge strap, the improvement in a connection between said panel and strap comprising means forming a strap receiving channel and including substantially parallel spaced flanges mounted on said panel and laterally embracing said strap, the thickness of said strap being less than the spacing between channel flanges, said strap and strap flanges being provided with aligned pin openings and a pin therein for interconnecting said strap and flanges, the external diameter of the pin being less than the diameter



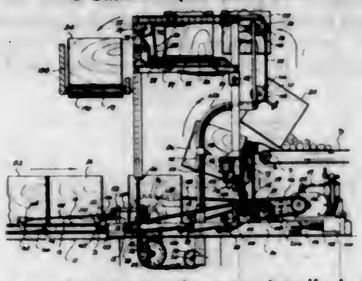
of the strap opening, a resilient bushing ensleeved on the pin and disposed between the pin and the wall of the strap opening for cushioning door panel and strap impact shocks transmitted in a direction transverse to the axis of the pin, and resilient end cushions of larger diameter than the bushings aforesaid between the sides of the strap and the said flanges to cushion door panel and strap impact shocks transmitted in a direction aligned with the axis of the pin.

2,735,560
SELF-LOADING VEHICLE
Joseph Rudolph Weber, New York, N. Y.
Application May 6, 1954, Serial No. 428,100
13 Claims. (Cl. 214—302)



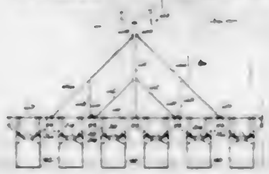
1. In a self loading dump truck having an engine, a chassis, a tank for reception of refuse in solid and liquid form with a front end and a rear end, said tank being tiltably supported on said chassis, and a device for tilting said tank around an axis in the proximity of said rear end thereof, in combination: an automatic system for reception and dumping of refuse from containers into said tank, including a rotatable closure member at said front end of said tank, said closure member having a substantially cylindrical portion, an operative connection between said engine and said closure member for unidirectionally rotating said cylindrical portion, means for controlling the rotation of said cylindrical portion, said cylindrical portion having a plurality of radially disposed openings, a cradle tiltably supported in the proximity of each of said openings, each of said cradles having a platform and arms for retaining and releasing a refuse container placed onto said platform on continued unidirectional rotation of said closure member, and means for actuating said arms and for tilting said cradles, whereby containers placed on said platforms of each of said cradles are tilted over an adjacent one of said openings in said cylindrical portion on continuous unidirectional rotation thereof.

2,735,561
BOX DUMPING MACHINE
William Louis Van Doren, Wenatchee, Wash.
Application July 25, 1949, Serial No. 106,514
6 Claims. (Cl. 214—311)



1. In a machine of the character described, a continuously moving conveyor belt operable for the conveyance of boxes thereon from a source of supply, a gate mechanism comprising a revolubly mounted shaft extending transversely of and below said belt, arms extended from said shaft and adapted to check the advancement of boxes by the conveyor, a latch plate fixed on the shaft, a pivoted latch lever arranged to engage the plate to hold the shaft against rotation and the gate in closed position, a pivotally mounted control lever operatively connected with the latch lever and operable to disengage said latch lever from the said plate to permit gate opening rotation of the shaft, a box restraining means located back of the gate, comprising a revolubly mounted cross shaft below the conveyor belt, arms fixed thereto and adapted to be swung into holding contact with advancing boxes, an actuating lever arm for said cross shaft and means connecting the said lever arm with the said control lever whereby the cross shaft is rotatably actuated to cause the said box engaging arms to be swung into box restraining position with the opening of the said gate to prevent advancement of boxes back of that immediately adjacent the gate when it is opened.

2,735,562
GOLF BALL RETRIEVING APPARATUS
Casey Kazanjian, Methuen, Mass.
Application January 18, 1952, Serial No. 267,025
11 Claims. (Cl. 214—350)



1. In a retrieving apparatus for golf balls and the like, a plurality of trays, means for dragging said trays along and in contact with the ground in spaced apart side by side relation, each tray having an upstanding front wall provided with an opening, plows mounted in said openings and having elevated front portions spaced in front of said walls, and guide means rearwardly converging toward the spaces between the plows and the walls of the trays for directing golf balls and the like into said openings.

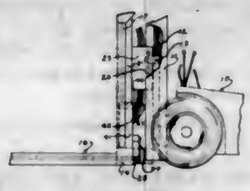
2,735,563
RUNNING BOARD HANDLING ATTACHMENT FOR LIFT TRUCKS
Henry L. Kelly, San Antonio, Tex.
Application December 3, 1953, Serial No. 395,987
1 Claim. (Cl. 214—620)

A freight car running board lifting and handling device for use with a fork lift truck of the type having laterally and vertically movable arms, comprising a lug having an elongate channel shaped member with top, bottom and side walls forming an opening for receiving an arm of said truck, said lug further having a depending inwardly



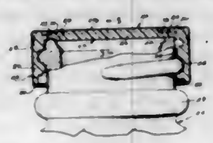
turned lip providing an inclined plane of substantial area to support said running board by engaging the undersurface thereof.

2,735,564
LIFT FORK FOR BRICK STACKS
Lindsay N. Bickerstaff, Columbus, Ga., assignor to Bickerstaff, Inc., Columbus, Ga., a corporation of Georgia
Application August 27, 1953, Serial No. 376,827
1 Claim. (Cl. 214—655)



In a lift fork, a tine frame including a rigid base beam, a plurality of rigid tines rigidly connected to the base beam and extending forwardly therefrom, gripper shafts rotatably mounted on the sides of the tines and extending through the base beam, yieldable gripper elements mounted on the shafts and disposed upon rotation of the shafts to grip and hold objects to be lifted, rocker arms on the ends of the shafts adjacent the base beam, cylindrical lift frame members rigidly connected to the base beam and extending upwardly therefrom, sleeves slidably mounted on said lift frame members, a cross bar connecting the sleeves, links connecting the cross bar to the rocker arms, a yoke member rigidly connecting the sleeves above the cross bar, a pressure cylinder mounted on the base beam, a piston for the cylinder having a piston rod passing slidably through the yoke, and spaced nuts on the piston rod for engaging the yoke and for varying the effective stroke of the piston.

2,735,565
VENTING CLOSURES
Jack M. Wheaton and Fred G. Pellett, Toledo, Ohio, assignors to Owens-Illinois Glass Company, a corporation of Ohio
Application July 11, 1952, Serial No. 298,352
6 Claims. (Cl. 215—56)



1. The combination of a closure and a container formed with a neck and an annular sealing surface, said closure comprising a relatively rigid shell and an insert formed of a material which is flexible and resilient when formed in thin sections, said shell comprising a flat top portion and a depending marginal skirt, said insert comprising a complementary flat top portion and a depending marginal skirt whereby the insert is securely held within said shell, means formed on the interior surface of the skirt

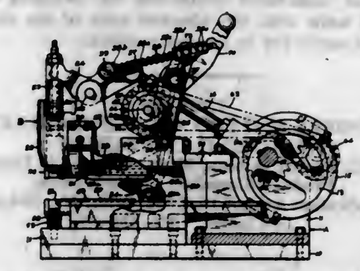
of said insert for removably securing the closure to the neck of the container, said insert being formed with an annular depressed portion of uniform width on the top surface thereof overlying the sealing surface of the container, said shell and insert being substantially coextensive except at said annular depressed portion, and thereby providing an annular space between the top portion of the shell and the top portion of the insert, said annular depressed portion being in the form of a web substantially thinner than the adjoining top portion, the web being of greater width than the underlying sealing surface and of substantially uniform thickness throughout its width and being flexed upwardly into said space when the closure is secured to the neck of the container, said annular depressed portion having sections thereof which are equally spaced apart and are thinner than the remainder, whereby said sections may further flex upwardly under the action of internal pressure within the container and thereby relieve said pressure, the said shell forming a means to oppose downward movement of the skirt of the insert as a whole relative the top portion when the closure is moved down on the container neck to sealing position.

2,735,566
POURING STOPPER FOR CONTAINERS
Carl Bramming, Nashville, Tenn., assignor to Aladdin Industries, Incorporated, Nashville, Tenn., a corporation of Illinois
Application July 9, 1952, Serial No. 297,893
2 Claims. (Cl. 215—77)



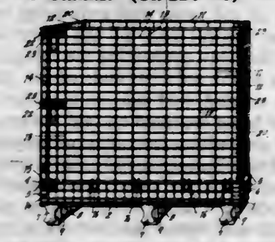
2. A closure for a vacuum bottle, comprisng a soft resilient rubber-like stopper having a hollow generally cylindrical downwardly tapering body portion adapted to be received in the neck of the vacuum bottle, said body portion having an axial aperture therethrough, said body portion having an upwardly facing internal annular shoulder thereon at the upper end of said aperture, a spider mounted in the lower end portion of said aperture and having an axial opening therein with double-lead internal threads therealong, said spider having a plurality of radial arms and being split longitudinally along a diametrical plane bisecting a pair of said arms to define a pair of identical half-spider elements composing said spider, said body portion having a plurality of grooves in the lower end of said aperture for receiving said arms and holding said half-spider elements in abutting assembled relation, said half-spider elements having interlocking elements thereon for maintaining registration therebetween, said half-spider elements having identical double-lead thread elements therein composing said double-lead threads, a plug having an externally double-threaded shank in threaded engagement with said opening in said spider, said plug having an enlarged manually rotatable head on the upper end of said shank for movement into and out of sealing engagement with said annular shoulder to close and open said aperture, said head having a soft resilient annular gasket carried on the underside thereof for engaging said shoulder, said shank having an enlarged retaining element on its lower end for limiting upward movement of said plug, and an annular tapering upwardly extending outwardly flaring curved pouring lip formed integrally with said rubber-like stopper and surmounting said body portion above said shoulder.

2,735,567
FASTENER ATTACHING MACHINE
Michael J. Carpinella, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a corporation of Connecticut
Application May 10, 1952, Serial No. 287,081
4 Claims. (Cl. 218—6)



1. In a fastener setting machine, a setting unit comprising a head and a stationary anvil, a reciprocating setting punch operating in said head, a short bell-crank mounted on said head and connected to said punch, fastener holding jaw members associated with said anvil and with said punch, separate pusher slides for feeding fasteners into said jaw members, and a common lever pivoted on said head, operated by said bell-crank and having link connection with each of said slide means, and means for oscillating said short bell-crank.

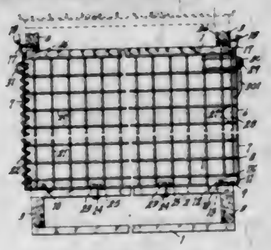
2,735,568
COLLAPSIBLE WALLED PALLETS
Dewey H. Bitney, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich.
Application April 22, 1952, Serial No. 283,581
3 Claims. (Cl. 220—6)



1. In a walled pallet the combination of a grid-like bottom comprising a lower and an upper series of parallel slats disposed with the slats of the series in crossed relation and fixedly connected at their crossing points, the ends of a plurality of the slats of the lower series being turned upwardly and constituting vertical side wall elements, there being a plurality of the slats of the upper series disposed horizontally on the inner sides of such upright end portions of the lower series and coacting therewith to provide opposed relatively fixed side members, one of the horizontally disposed slats being at the upper ends of the upright end portions, vertically spaced U-shaped horizontal end wall slats disposed with their arms on the inner sides of and fixedly secured to a plurality of said vertical side wall elements, spaced vertical end wall slats secured to the inner sides of said horizontal end wall slats and coacting therewith to provide relatively fixed end wall members, loop-like hinge members secured to said side wall members, and grid-like collapsible side and end walls comprising vertical and horizontal slats, the lower horizontal slats of the side walls being hingedly engaged within the loops of said hinge members on said fixed side wall members in supported relation to the upper horizontal slats of the fixed side wall members, said side and end walls being swingably connected in pairs to permit the collapsing of the end walls on the

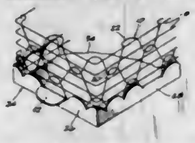
inner sides of the side walls, said fixed end wall members being spaced to permit collapsing of one collapsed pair of side and end walls to a downwardly inclined position between them and the collapsing of the other pair to a substantially horizontal position in supported relation to the pair collapsed between the fixed side walls, and means for detachably connecting the swinging ends of said end walls with the adjacent ends of the side walls when the walls are in erected position.

2,735,569
COLLAPSIBLE WALLED STACKING PALLET AND STACKING CONTAINER
Charles C. Averill, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich.
Application August 16, 1952, Serial No. 304,675
14 Claims. (Cl. 220—6)



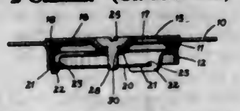
13. A collapsible stacking container comprising a bottom member, side walls having inwardly projecting bottom extensions hingedly connected at their inner edges to the bottom member in spaced relaion to its side edges and resting upon the bottom member when in erected position, end walls swingably connected at one vertical edge to the vertical edge of one side wall, the opposite vertical edge of the other end wall being swingably connected to the vertical edge of the other side wall, and means for detachably connecting the swinging ends of the end members to the adjacent ends of the side walls when the walls are erected, said side walls projecting above the end walls and being mounted on said bottom member with their bottom extensions extending outwardly beyond the side edges of said bottom member and with their ends to which the end walls are swingably connected spaced inwardly from the end edges of the bottom member so that the end walls rest upon the bottom member when in erected position and constitute supports for a superimposed container stacked with its bottom member disposed on said end walls and between the portions of the side walls projecting above the end walls.

2,735,570
BASKET
Raymond F. Stockton, Sunland, Calif.
Application July 6, 1953, Serial No. 366,103
2 Claims. (Cl. 220—19)



2. A basket comprising open mesh wire side walls formed of sinuously-shaped and partially overlapped wires traversed by horizontal wires, said wires being mutually connected together at their points of contact with each other, an impervious bottom having upstanding marginal portions arranged adjacent the outer sides of the side walls, the bottom portions of the lowermost sinuous wire contacting the bottom, the upstanding marginal portions on the bottom having lugs thereon bent inwardly and downwardly over a horizontal wire of the wire side walls thus securing the bottom to the side walls, the uppermost portions of the top sinuous wire of the side walls being bent inwardly to provide openings at the tops of the side walls and arranged over the bottom through which flower stems may be inserted.

2,735,571
FILLER CAP ASSEMBLY
Arthur E. Lockwood, Springfield, Ohio, assignor to The Steel Products Engineering Company, Springfield, Ohio, a corporation of Ohio
Application December 31, 1952, Serial No. 328,877
2 Claims. (Cl. 220—25)



1. A filler cap assembly for the inlet of a container to retain positive pressure on the contents thereof, comprising an adapter including an annular rim and a cylindrical flange extending from said rim and forming the inlet opening, a cover proportioned to seat on said rim, gasket means carried by said cover for sealing against said rim in the closed position of said cover, an insert member carried by said cover and receivable within said flange, a multi-armed leaf spring carried by said insert member and being in the unstressed condition thereof generally spherically bowed outwardly toward said cover, said insert member having radial slots therethrough receiving said spring arms therethrough in guided relation, said spring being proportioned in said unstressed condition to retain the ends of said arms within said slots and said inlet opening for free insertion of said insert member into said flange, said cover having a recess in the central portion thereof, a screw threaded through said cover and including a head adapted to be received within said recess in flush relation with the surrounding portion of said cover, means connecting the inner end of said screw with said spring to cause flattening of said spring upon inward threaded movement of said screw with resulting projection of said arms into overlapping and locked relation with said flange, the portions of said insert member having said slots therein being cylindrically curved about a diameter relatively slightly less than the diameter of said flange to provide support for said projecting ends of said arms correspondingly close to said flange, and gasket means carried by said screw for sealing against the bottom of said recess in the closed position of said assembly.

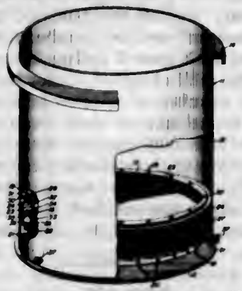
2,735,572
FILLER CAP ASSEMBLY
Delmond L. Getz, Springfield, Ohio, assignor to The Steel Products Engineering Company, Springfield, Ohio, a corporation of Ohio
Application May 18, 1953, Serial No. 355,710
6 Claims. (Cl. 220—25)



1. A filler cap assembly for the inlet of a container to retain positive pressure on the contents thereof, comprising means including an annular rim and a tubular flange extending from said rim inwardly of the container forming an inlet opening for said container, a closure including a compressible annular gasket adapted to seal against said rim, a retainer receivable in close fitting relation within said opening and having a connection with said closure, a leaf spring carried by said retainer and having a generally spherically outwardly bowed shape in the unstressed condition thereof, said spring including a plurality of arms

radiating from the central portion thereof and proportioned in said unstressed position of said spring to lie within the diameter of said opening, an operating member movable axially in said retainer between respectively raised and lowered positions, means securing said central portion of said spring to said operating member for deflection thereby to a more nearly flat shape in said lowered position of said operating member to cause said arms to project radially of said retainer into overlapping and interlocked relation with said flange, guiding means located at substantially the periphery of said retainer for closely supporting relation with said projecting arm ends in the locked position thereof, said operating member including a portion connected with said closure and responsive to deflection of said spring by said operating member to draw said closure into sealed relation with said rim, and said connection between said closure and said retainer including loosely interfitting parts providing for limited axial movement of said closure with respect to said retainer to compensate for variations in the cross-sectional size of said gasket.

2,735,573
FLOATING ROOF SEAL
Alexander F. Fino, Warren, Pa., assignor to Hammond Iron Works, Warren, Pa., a corporation of Pennsylvania
Application May 22, 1953, Serial No. 356,661
1 Claim. (Cl. 220—26)



A liquid storage tank having a cylindrical wall, a bottom, and a floating roof for liquids within the tank adapted to rise and fall with the liquid level in the tank, said roof being of smaller diameter than the inside of said cylindrical wall to provide an annular space between its periphery and the tank, a horizontal annular flange secured to said roof and disposed slightly lower than the displacement level thereof and extending substantially midway between the periphery of said roof and the inside of said cylindrical wall, an annular flexible band secured along its upper edge to a portion of the roof above said flange and extending downwardly therefrom and connected along its lower edge to said flange to provide an enclosed liquid resistant space between the band and the periphery of the floating roof, a liquid-containing flexible hollow member of annular shape disposed in said liquid resistant space and supported partially from said flange and partially from said band, the portion of said band which supports the hollow member being substantially horizontal and the lowermost point of contact between the band and the cylindrical wall being disposed substantially at the displacement level of the roof to minimize gas collecting space between the band and the liquid level of the tank.

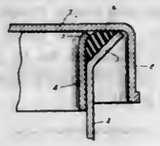
2,735,574
FLOATING ROOF FOR A HYDROCARBON STORAGE TANK
William H. Williams, Long Beach, Calif.
Application October 23, 1953, Serial No. 387,839
9 Claims. (Cl. 220—26)

1. A floating tank for use with a storage tank having upstanding side walls and a bottom wall, comprising: a main section formed with an aperture; an auxiliary section normally covering said aperture; first support means for holding said main section spaced above said bottom wall when the contents of said tank are drained; and, second support means for holding said auxiliary section



spaced above said bottom wall when the contents of said tank are drained, said support means being arranged to hold said auxiliary section at a different elevation than said main section whereby an opening will be defined therebetween.

2,735,575
SEALING ENCLOSURE FOR TANK
Eugene J. Lehman, Zanesville, Ohio, assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application February 17, 1953, Serial No. 337,263
3 Claims. (Cl. 220—46)



1. In a tank construction, in combination, a tank casing having a peripherally continuous upwardly and outwardly flaring flange at the open end thereof, a cover for sealing the open end of said casing, a peripherally continuous collar slidably telescoped within said casing and independently movable relative to said cover and said casing, said cover extending over the outer margin of said flange and adapted to seat directly against said flange and said collar and defining therewith an annular enclosed channel having fixed dimensions, and a continuous gasket of pliable material circumjacent said collar within said channel and compressed between said flange, said cover and said collar.

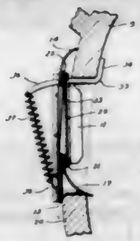
2,735,576
KEY STRUCTURE FOR TEAR STRIP CONTAINERS
Margaret Ruffin Wilkins, Greenville, S. C.
Application July 8, 1953, Serial No. 366,835
1 Claim. (Cl. 220—52)



In a key for removing a tear strip from a can, a main body portion, a handle at one end of said portion, a severable tip at the other end thereof, a longitudinal slot in said body portion intermediate the ends thereof for the reception of the end of a tear strip, opposed

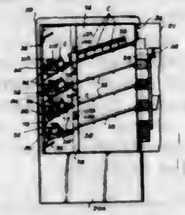
pairs of spaced triangular shoulders having facing parallel sides projecting from opposite sides of said body portion, with the ends of the slot in alignment with said parallel sides, the outermost ends of said shoulders terminating in relatively sharp points for engagement with the surface of said can, said shoulders extending outwardly a substantial distance beyond the sides of said body portion and forming abutments between which a tear strip is rolled when removed from the can.

2,735,577
SHIELD FOR PUMP CRADLES
Glenn M. Russell, Teague, Tex.
Application September 23, 1952, Serial No. 310,951
8 Claims. (Cl. 220—55)



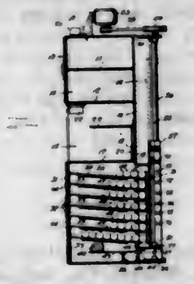
1. A removable shield for covering a pump cradle opening which comprises, in combination, a cover plate assembly of a size as to substantially extend across the cardle opening and including a portion adapted to releasably engage one edge of the cradle opening, a rod having a loose sliding engagement with said assembly and extending transversely to either side thereof, resilient means between one end of said rod and said assembly to bias the other end of the rod away from said engaging portion of the assembly, said rod being remote from said engaging portion and situated as to have its said other end engage an edge of said cradle opening opposite said edge engaged by said portion.

2,735,578
BEVERAGE VENDING MACHINE
Almon C. Woodruff, Van Nuys, Calif.
Application June 27, 1952, Serial No. 295,895
26 Claims. (Cl. 221—11)



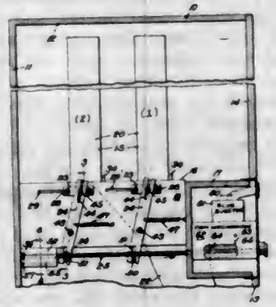
1. In a beverage vending machine the combination of: a plurality of vertically spaced inclined storage shelves, each of said shelves being formed to support a group of individual containers arranged in a series of parallel columns extending downwardly on the surface of said shelf for gravity feed therefrom; conveyor means having belt means extending along the lower edge of each of said shelves and driving means operable to advance said belt means step by step for advancing said containers to the forward end thereof, said conveyor means including a blocking member movable from a loading position permitting a row of containers, consisting of one container from each of said columns, to be loaded on said conveyor means, to an operating position blocking the feed of containers from said shelf; and means for moving said blocking member from said operating position to said loading position when a complete row of containers has been advanced to the front of said conveyor means and returning said blocking member to the operating position when a subsequent row has been loaded on said conveyor means.

2,735,579
PANTRY ELEVATOR SHELF
Clifford B. Wynn and Helen L. Wynn, Sanford, Fla.
Application April 26, 1954, Serial No. 425,696
6 Claims. (Cl. 221—123)



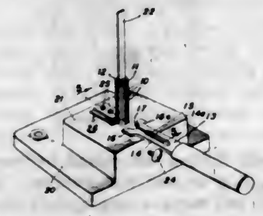
1. A kitchen or store cabinet, comprising a stationary cabinet member having a refill compartment provided with a plurality of stationary refill shelves located at different levels, a stationary take-off shelf located above the refill compartment, and an elevator member having a cabinet portion equipped with spaced shelves corresponding with the shelves of the refill chamber, motor means for bringing the elevator member to selected positions to present a selected shelf to the take-off shelf, and for lowering the elevator member to a refill position with its shelves adjacent the refill shelves of the stationary cabinet, and means for automatically stopping the motor when a predetermined elevator shelf has reached the take-off level or when the elevator has reached the refill position.

2,735,580
COMBINED SELECTING AND EJECTING MECHANISM FOR MULTIPLE VENDING MACHINES
Harry Galin, Yonkers, and Lawrence Reiss, New Rochelle, N. Y.
Application May 7, 1952, Serial No. 286,582
4 Claims. (Cl. 221—127)



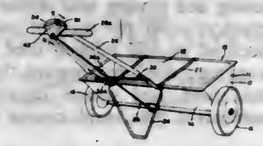
1. In a machine of the character described, a combined selector and ejector rod, means mounting said rod for both rotary and sliding movements, said mounting means including an elongated body having a longitudinal bore in which said rod is slidably and rotatably positioned, the interior of said body having a plurality of longitudinal channels which open into said bore throughout their lengths and are disposed at different radial angles around said bore, said body also having a transverse recess into which one end of said bore and one end of each of said channels open, a control pin projecting radially from said rod and normally disposed in said transverse recess when said rod is in one position of longitudinal adjustment, said pin being movable by rotation of said rod into alinement with any one of said channels so that said rod may be moved longitudinally as said pin slides in one of said channels, a plurality of ejector-actuating pins spaced apart longitudinally on said rod, the last mentioned pins projecting from said rod at different radial angles corresponding to the radial arrangement of said channels, and a plurality of ejector-operating levers mounted in a row parallel with the axis of said rod, said levers corresponding in number with the last mentioned pins and having slots to selectively receive said pins.

2,735,581
DISPENSERS FOR RETAINING RINGS
Hans Erdmann, Maplewood, N. J., assignor to Waldes Kohinoor, Inc., Long Island City, N. Y., a corporation of New York
Application July 30, 1953, Serial No. 371,360
2 Claims. (Cl. 221—220)



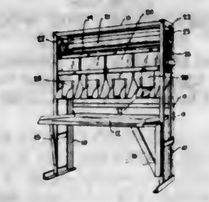
1. A retaining-ring dispenser enabling the dispensing of single open-ended retaining rings from a stack thereof by means of a ring-gripping applicator tool having a substantially semi-circular ring recess and an arcuate backing flange for supporting a ring seated in said recess from one side thereof, comprising a base having a horizontal working surface, a vertically disposed stack rod supported in said base and extending upwardly from said working surface for holding a plurality of rings positioned on same with their open ends facing rearwardly in stack formation, a plane stack-supporting member affixed flush on said working surface and having thickness corresponding to the thickness of the tool backing-flange, said member comprising a plate having a protrusion of shape generally corresponding to that of the applicator recess as defined by the tool backing flange, said protrusion being provided with an opening, said stack rod extending through said opening and having an upper portion of width slightly less than the internal diameter of said rings and a reduced-width lower end portion terminating above the supporting member a distance substantially equalling the thickness of a single ring, the width of said reduced-width end portion corresponding substantially to the width of the gap between the open ends of said ring, and an upper plate affixed flush on the first-named plate and having a forward edge which is stepped rearwardly from said protrusion and a forward extension thereon which is shaped to enter the gap between the open ends of at least the lowermost ring resting on said protrusion, the construction and arrangement being such that when a tool placed on said working surface with its recess in alignment with the lowermost ring of a stack thereof supported on said supporting member, and with its backing flange disposed flush against said working surface, is pushed rearwardly, it forces the middle portion of the lowermost ring against the stack rod and thereupon grips the same, and being further such that the gripped ring may disengage from the reduced width lower-end portion of the stack rod while the remaining rings of the stack are held thereto by the wider upper portion of said rod.

2,735,582
APPARATUS FOR DISTRIBUTING COMMINUTED MATERIAL
James H. Wilson, Salem, Ohio, assignor to The Salem Tool Company, Salem, Ohio, a corporation of Ohio
Application May 6, 1953, Serial No. 353,259
10 Claims. (Cl. 222—43)



1. Apparatus for distributing comminuted materials including, walls forming a material hopper, one of said hopper walls being provided with material discharge outlets therein, a damming member slidably mounted on said hopper for opening and closing movement relative to said discharge outlets, a crank rod having operative connection with said slidable damming member, handle means secured to and extending from said hopper, said crank rod rotatably supported from and along the length of said handle means, a plate member secured upon the outer end portion of the crank rod and having an arcuate slot therein, a stop member selectively adjustable in said arcuate slot, and a fixed stop upon the handle engageable with said adjustable stop member, whereby rotation of said plate and crank rod may be controlled within preselected limitations.

2,735,583
MATERIALS DISPENSING DEVICE
Charles E. Misch, New York, N. Y.
Application December 8, 1950, Serial No. 199,748
8 Claims. (Cl. 222—129)



1. In an ingredient dispenser, a supporting frame comprising spaced parallel uprights, a set of bins arranged side by side in the space between said uprights, each bin having an upper filling opening and a lower outlet opening, means for mounting said bins for linear up and down movement as a unit with respect to said frame, a work table extending between said uprights, and means for pivotally supporting said table on said frame, said means being so constructed and arranged that the table may be moved between an operative horizontal position underlying said bins when the latter are raised and an inoperative vertical position out of the path of movement of said bins when the latter are to be lowered for filling thereof, said table supporting means including means for supporting the table in its horizontal operative position below the bins and between the frame uprights and in the path of up and down movement of the bins.

2,735,584
COMBINATION SALT AND PEPPER SHAKER
Raymond R. Pullen, Rumson, N. J.
Application April 27, 1953, Serial No. 351,365
1 Claim. (Cl. 222—142.1)

A combination salt and pepper shaker comprising hollow housing having a pitched roof closure at the top thereof and a bottom wall, a partition within said housing and extending from said bottom wall to the apex of said pitched roof and sealing off the interior of said hous-

ing into two separate compartments, removable means at the bottom of each of said compartments for filling the same, and a pair of diagonally opposite shaker caps provided in said pitched roof, and means for opening and closing said shaker caps, each of said shaker caps comprising a hemispherical perforated surface, said means of opening and closing said shaker caps comprising a hemispherical cover for each of said shaker caps, a pivot pin secured to said pitched roof above each of said shaker caps and displaced toward the adjacent end of said pitched roof, and means interconnecting said covers and said pivot pins, said means interconnecting



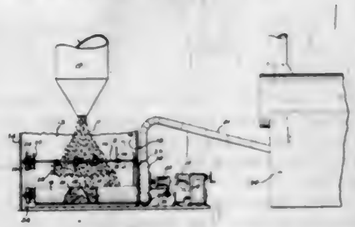
said covers and pivot pins comprising an arm connected to the periphery of each of said covers and extending towards the adjacent pivot pin, the free end of said arm having a semicircular cutout adapted to receive the pivot pin, the ends of said arm terminating in a pair of laterally extending pins, said pivot pin having oppositely disposed openings receiving said pins, the lower peripheral edge of each of said covers having a laterally extending flange terminating in a second flange of substantially right angles thereto, and a hemispherical layer of resilient material disposed within each of said covers and secured in place by said flanges.

2,735,585

APPARATUS FOR CONVEYING WOOD SHAVINGS AND THE LIKE

Edward Trent Douglass, Jr., Birmingham, Ala.

Application April 30, 1953, Serial No. 352,107
4 Claims. (Cl. 222—238)



1. The combination with a bin having a conveyor in the lower portion thereof, of a plurality of rigid breaker members mounted yieldingly on a shaft for rotation in said bin, each having a curved edge along the leading side thereof.

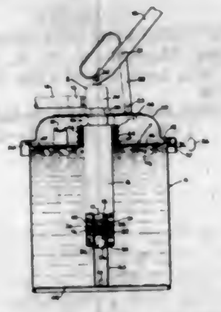
2,735,586

SEALED FOLLOW-PLATE FOR LUBRICANT DISPENSERS

Richard P. Field, Cincinnati, Ohio, assignor to Balcrank, Inc., Disney, near Marburg, Cincinnati, Ohio, a corporation of Ohio

Application January 18, 1954, Serial No. 404,721
4 Claims. (Cl. 222—260)

4. A follow plate for a lubricant dispensing pump of the type adapted to be mounted upon a lubricant container and having a pump cylinder including an intake passageway to withdraw lubricant by suction from the lower portion of the container, the follow plate adapted to provide a seal relative to the lubricant in the container below the follow plate and to maintain said seal as the follow plate moves to the bottom of the container, said follow plate comprising, a pair of spaced follow plate discs formed of relatively rigid sheet material, said discs having a central opening to receive the pump cylinder, a sealing strip formed of relatively thin flexible material, said sealing strip having an inner edge portion interposed between and extending around the periphery of said discs, means engaging the discs and clamping the inner edge portion therebetween, said strip having a peripheral edge portion extending outwardly beyond the periphery of the discs to provide a seal relative to the internal surface of the container, a generally cylindrical sealing sleeve formed of relatively thin flexible material, said sleeve projecting upwardly from the plane of the discs and having a flange



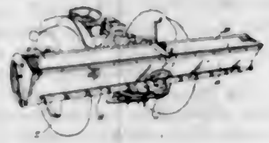
at the lower end thereof interposed between the spaced discs and extending around the periphery of the central opening thereof, and means engaging said discs and clamping the said flange therebetween, the sealing sleeve having a substantial length, the thin flexible sleeve being compressible circumferentially into contact with the periphery of the pump cylinder in response to atmospheric pressure and providing an air seal around the cylinder above the follow plate, the sleeve being collapsible lengthwise between the pump and follow plate when the lubricant level is adjacent the upper end of the container and being expansible to full length in response to the downward motion of the follow plate to provide a seal above the said intake passageway as the follow plate moves downwardly in the container.

2,735,587

MATERIAL DISTRIBUTING MEANS

Emert J. Lattner and Harold H. McLeland, Cedar Rapids, Iowa, assignors to Century Engineering Corporation, Cedar Rapids, Iowa, a corporation of Iowa

Application April 20, 1953, Serial No. 349,894
5 Claims. (Cl. 222—267)



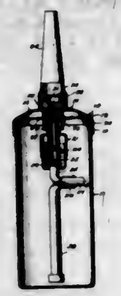
1. In a seeder, an elongated hopper to extend transversely of a towing vehicle and the hopper having a substantially vertical front wall and rear wall inclined upwardly and rearwardly, the two walls being in approximate V relation to each other, a drive shaft extending through the front wall, a crank pin on the end of the drive shaft within the hopper, a cup on the crank pin, pull arms extending to the opposite ends of the hopper and through the end walls thereof, levers pivotally mounted at the hopper ends, and a chain mounted on the lower ends of the levers extending lengthwise through the bottom of the hopper to agitate seed and dispensing openings in the bottom of the hopper for feeding seed.

2,735,588

PUMP ATTACHMENT FOR FLUID CANS

Eugene D. Elton, Napa, Calif., assignor to Olen A. Miller, Visalia, Calif.

Application December 30, 1954, Serial No. 478,721
1 Claim. (Cl. 222—324)



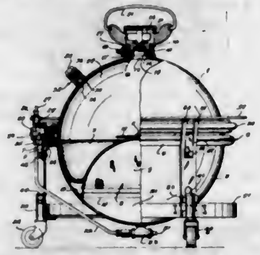
A pump attachment for an open ended can comprising a cap engageable over the open end of the can, a looped handle carried by said cap, an upstanding nipple carried by said cap, a tube depending from said cap and communicating with said nipple, a pump formed of a pair of telescoping cups, one of said cups being fixed to said tube and the other of said cups being slidable on said tube, a spring constantly urging said slidable tube upwardly, a pump operating lever rockably carried by said cap, a plunger interposed between said lever and said slidable cup, an inwardly closing check valve at the upper end of said tube, a second inwardly opening check valve in said tube below said pump, a spout mounted on and extending from said nipple, a flexible inlet tube connected at one end to said first named tube, and a weight on the inner end of said flexible tube adapted to maintain said inner end of said flexible tube immersed in the liquid in the can.

2,735,589

PORTABLE DEVICE FOR FILLING HYDRAULIC BRAKE SYSTEMS WITH BRAKE FLUID

Arthur N. Milster, St. Louis, and Ralph W. Shartle, Richmond Heights, Mo., assignors to Wagner Electric Corporation, St. Louis, Mo., a corporation of Delaware

Application June 21, 1950, Serial No. 169,322
6 Claims. (Cl. 222—386.5)



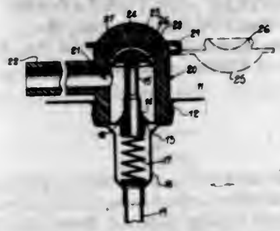
6. A pressure reservoir for hydraulic fluid comprising a sealed hollow body member symmetrical about at least one plane passed therethrough, a flexible diaphragm having its periphery lying substantially in said one plane and secured thereat to said body member to provide a hydraulic fluid receiving chamber on one side of the diaphragm, said diaphragm being of great enough area as to contact the inner surface of said body member defining said hydraulic fluid receiving reservoir throughout substantially the entire area thereof while the diaphragm remains in unstretched condition, a foraminous diaphragm-supporting member secured within said body member on the opposite side of said diaphragm, said foraminous member being of sufficient area as to define with an inner surface portion of the hollow body an air chamber of large enough volume so that entrapped air under pressure therein may expand to the full volume of said hollow body member and expel all of the hydraulic fluid from within its chamber, hydraulic fluid outlet means communicating with the hydraulic fluid chamber, and air inlet means communicating with the air chamber.

2,735,590

COMBINED CLOSURE AND VALVE OPERATING MEMBER

John E. Ayres, Elizabeth, N. J., assignor, by direct and mesne assignments, to Oil Equipment Laboratories, Incorporated, Elizabeth, N. J., a corporation of New Jersey

Application October 2, 1952, Serial No. 312,784
4 Claims. (Cl. 222—394)



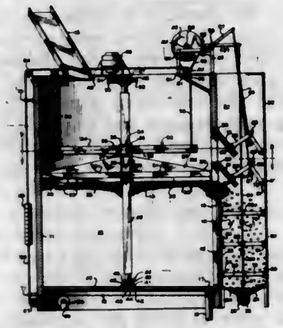
1. A dispenser and valve operating unit for a pressurized container which comprises a body having a chamber therein and having a discharge passageway communicating with said chamber, one end of said body telescopically engaging with side walls formed on a container, said end of the body having an opening therein communicating with the chamber in the body and with a valve controlled opening in the container, a flexible diaphragm extending across and closing the other end of said chamber, side-walls extending upwardly from the body above said diaphragm and defining an opening in the body above the diaphragm, a cover removably fitted in said opening to the diaphragm and a flexible strap connecting said cover to the body.

2,735,591

APPARATUS FOR STORING AND DISPENSING ICE IN PARTICLE FORM

Lyle E. Branchflower, Seattle, Wash.

Application June 12, 1951, Serial No. 231,207
3 Claims. (Cl. 222—405)



1. Ice storage and dispensing mechanism comprising a circular storage bin for receiving and storing small particles of ice, said bin having a discharge opening in its side for the dispensing of ice therethrough; closure means for closing said opening; ice moving mechanism within said bin including a central shaft and an impeller-type member non-rotatably slidable along said shaft and following the surface of the ice for leveling the ice in said bin, said impeller-type member comprising a frame, curved, ice pusher members extending outwardly from

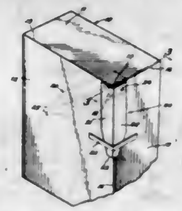
said shaft and supported by said frame; ice piercing projections depending from said curved members; shoes supported by said frame member having an extended surface portion adapted to ride on the surface of the ice and to determine the extent of piercing of said projections in the ice; suspension means for said impeller-type member supporting the said impeller-type member so that it may be raised and lowered on said shaft to follow the level of the ice in said bin; power means for rotating said shaft with said impeller-type member slidable thereon; and a chute for the reception of ice discharged from said bin.

2,735,592
MEASURING AND DISPENSING DEVICE FOR BOTTLES AND CONTAINERS
Frank N. Stanger, Erie, Pa.
Application March 24, 1953, Serial No. 344,371
1 Claim. (Cl. 222—449)



A device for measuring a predetermined amount of fluid from a container, comprising a neck chamber therefor, said chamber having opposed inner and outer openings, inner and outer resilient valve members for each opening, rigid connecting means between said members of such length that said members seal at each opening, said valve members being vertically and horizontally movable to allow passage of fluid into or out of said chamber.

2,735,593
DISPENSING GUIDE ELEMENT FOR CARTONS
Samuel H. Levinson, Cincinnati, Ohio
Application October 25, 1954, Serial No. 464,438
1 Claim. (Cl. 222—531)



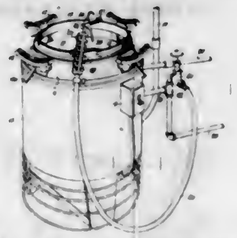
In a device of the character described in combination with a carton having side and end walls adjoined to form a heightwise corner, and a top panel disposed at right angles to said walls and having its side and end edges joined to the side and end walls, respectively, of a dispensing opening made through and restricted to a corner portion of the side wall formed by the heightwise corner and the side edge of the top panel, a discharge guide element having an L-shape in lateral section throughout its longitudinal extent, said element normally straddling the heightwise corner and having its upper edge flush with the top panel, said element having a pair of flat wing portions normally lying contiguous to the exterior faces of the side and end portions forming the heightwise corner with one wing covering the dispensing opening, a pivotal connection extending through the other wing and the end wall at right angles thereto, said connection being located in the corner portion of the end wall formed by the heightwise corner and the end edge of the top panel and closer to the said edge than to the said corner, the pivoted wing of the element being adapted to swing upwardly through approximately a right angle in the plane of the end wall and carry the other wing to a dispensing position at right angles to the side wall and into substantially the plane of the top panel whereby upon turning the carton end-for-end its contents may be discharged through the dispensing opening and down the guide element.

2,735,594
POURING SPOUT ATTACHMENT
Samuel J. Carnes, Camden, Ark.
Application April 13, 1954, Serial No. 422,738
1 Claim. (Cl. 222—567)



A demountable pouring spout attachment for use in connection with a fluid container of the type which has a polygonal body portion formed of parallel walls and a top portion formed of upwardly converging walls, with a pouring opening formed in one of said converging walls, said attachment including a supporting member adapted to encompass and tightly to engage the junction of said body portion with said top portion, a supporting wall carried by a side of said supporting member and adapted to extend upwardly into juxtaposition with said pouring opening, and a spout carried by said wall in registration with said opening and including spaced side walls and a bottom wall connecting the lower edges of said side walls, said side walls and said bottom wall projecting to one side of said supporting wall for engagement with the edges of said pouring opening, and projecting to the other side of said supporting wall to conduct the liquid issuing from said pouring opening into a receiver for said liquid.

2,735,595
GARMENT FINISHING MACHINE
William C. Glover, Jr., Kansas City, Mo.
Application June 16, 1952, Serial No. 293,779
5 Claims. (Cl. 223—70)



1. A holding device for the lower extremity of a garment processed in a garment finishing machine comprising an open-top cowling rotatably mounted on said machine, a ring fixedly mounted within the cowling, a plurality of clamping brushes mounted on the outside of the cowling and a plurality of brush buffers attached to the outside of the ring and cooperating with the brushes to hold the lower hem of the garment.

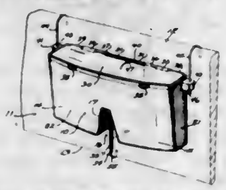
2,735,596
DEVICE FOR HOLDING A FISHING POLE
Wiley R. Smedley and Claude C. Smedley, El Monte, Calif.
Application May 24, 1954, Serial No. 431,772
4 Claims. (Cl. 224—5)

1. In a device of the character described to support a fishing pole from a fisherman's belt, the combination of:

a base member; means to attach said base member to the fisherman's belt; socket means on said base member to seat the butt end of the fishing pole; means for releasable engagement with the fishing pole at a point spaced from said butt end to connect the fishing pole with the base member above said socket means, said releasable means being dimensioned in length to hold said fishing pole in a position outwardly inclined from the base member, said releasable means being connected to said base member by a hinge construction that substantially confines the movement of the releasable means to an arcuate path in a substantially vertical plane whereby said releasable means resists lateral movement of the fishing pole relative to said socket means, said releasable means comprising a pair of spring wire arms extending forward from spaced points on said hinge construction, said arms crossing each other and being bent at their outer ends to form two corresponding co-engaging hooks, said hooks being turned towards each other to engage the fishing pole in overlapping relation from opposite sides of the fishing pole; and a ring member embracing said arms in the region of their intersection, said ring member being manually slidable inward along the two arms to cause said hooks to spread apart to receive said fishing pole.



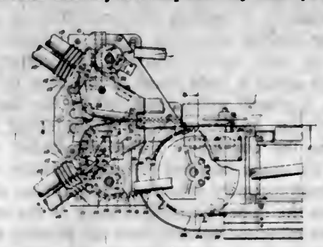
2,735,597
SPECTACLE HOLDER FOR ATTACHMENT TO A PANEL SURFACE IN AN AUTOMOBILE
Howard E. Treleven, Fond du Lac, Wis., assignor to Tre Brothers Manufacturing Company, Fond du Lac, Wis., a corporation of Wisconsin
Application January 26, 1953, Serial No. 333,061
2 Claims. (Cl. 224—29)



1. A receptacle for spectacles having spaced front and rear walls forming interior lobe spaces for reception of the respective lenses of a pair of spectacles and providing an opening at the upper sides thereof to enable insertion and removal of the spectacles into and from the receptacle, and a movable top disposed at an angle to said front and rear walls closing said opening, the lobe spaces being separated by a receptacle wall in V configuration with the apex of the V spaced inwardly of the receptacle whereby said V-shaped wall delimits a zone of free space between the legs of the V, resilient attaching means for securing one side of the receptacle to a panel-like sun visor of an automobile, said attaching means being in said zone and connected to the receptacle only at said apex, further attaching means connected to the sides of said receptacle and extending in a direction opposite to that of said first-mentioned attaching means, and means for connecting said top to one of said spaced walls and means for retaining said top in closed position.

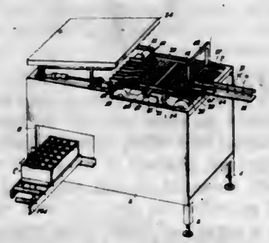
2,735,598
PACKAGING MACHINE
Lester H. Messinger, Trumbull, Conn., assignor to Remington Arms Company, Inc., Bridgeport, Conn., a corporation of Delaware
Application December 28, 1951, Serial No. 263,858
33 Claims. (Cl. 226—14)

1. Apparatus for the continuous packaging of articles comprising a plurality of similar conveyors, driving means for said conveyors, means for segregating articles into groups and delivering a segregated group of articles to each of said conveyors, means for bringing the groups of articles on said conveyors respectively into juxtaposition,



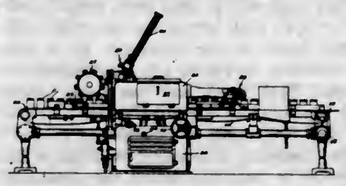
and means operable as said juxtaposed groups are moved by the conveyors for gradually moving a container transversely to the line of movement of said juxtaposed groups into housing relationship to each juxtaposed group of articles.

2,735,599
BOTTLE CASE FILLING MACHINE
Amos L. Thurman, Knoxville, Tenn.
Application July 24, 1952, Serial No. 300,608
33 Claims. (Cl. 226—14)



1. In a bottle case filling machine, a combination of a receiving unit having means for receiving and supporting by the necks thereof a complement of bottles in pre-determined relation, and a loading unit below the receiving unit arranged to receive the complement of bottles from the receiving unit and having means for bodily conveying said complement of bottles downwardly from the receiving unit to transfer said bottles to a case.

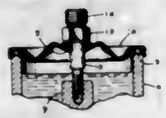
2,735,600
APPARATUS FOR SEALING CONTAINERS
John Hohl, Olav Bjering, and Walter J. Ringel, Toledo, Ohio, assignors to Owens-Illinois Glass Company, a corporation of Ohio
Application August 13, 1952, Serial No. 304,092
20 Claims. (Cl. 226—82)



1. In a container sealing apparatus, the combination of a base, an upper housing mounted for vertical displacement relative to the base, a horizontally traveling endless conveyor mounted on said base for carrying containers in a substantially straight line below a series of operating units including a headspacer mounted on said upper housing above the conveyor and having headspacer units adapted to enter the mouths of the containers, a worm mounted on said base adjacent to the conveyor and in

advance of the headspacer for timing and spacing the containers below the headspacer, a cap feed unit mounted on said upper housing and including a chute extending downwardly and inclined toward the direction of travel of the containers, a sealing unit mounted on said upper housing for sealing the caps to the containers, a coder mounted on said upper housing and constructed and arranged to apply a code mark to the caps of the sealed containers, a second worm mounted on the base adjacent to the conveyor and in advance of the coder for timing and spacing the containers below the coder, means for displacing the upper housing vertically relative to the base thereby simultaneously adjusting the position of the various units on the upper housing relative to the units on the base, means mounted in said base for driving the various components on the base and the upper housing, and interconnecting means between said driving means and the various units.

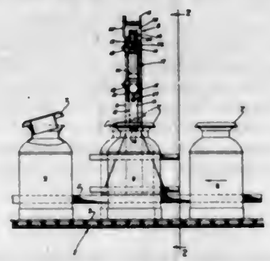
2,735,601
HYDRAULIC BRAKE SERVICING EQUIPMENT
Harry B. Barrett, Clayton, Mo.
Application May 27, 1955, Serial No. 511,669
8 Claims. (Cl. 226—113)



1. A filling cap for the filling opening in a fluid reservoir of an hydraulic brake system, said filling cap comprising a closure member sized to fit upon and extend closurewise across said filling opening, said member having an annular rim adapted to be seated upon said reservoir, a stem mounted in and extending through said member and provided on one end with means for connection with a supply of brake fluid under pressure and being adapted on its other end to dip down into the reservoir for immersion in the fluid when the reservoir is fully filled, means externally of the filling stem forming a leak port through the member to permit displaced air and excess fluid to escape from the reservoir as the reservoir is being filled, said closure member being dished downwardly in that portion of its area lying within the rim and relative thereto to provide a formed portion which dips down into the fluid when the reservoir has been fully filled through said stem and with said filling cap in place on the reservoir, said formed portion together with the immersed portion of the stem, when the filling cap and stem are in operative position on the reservoir, being of such size and shape as to effect a volumetric displacement of fluid which, taken together with the volumetric displacement of the immersed end of the stem, will leave a net volumetric displacement of fluid in the reservoir so that upon removal of said filling cap the level of fluid left in the reservoir will be slightly below the level of the reservoir by a predetermined amount whereby to create a predetermined air space between said fluid level and the upper margin of the reservoir, and means operatively associated with the filling cap and projecting in position to extend in the reservoir for coupling connection with an element within the reservoir to hold the filling cap detachably thereon.

2,735,602
APPARATUS FOR UNSEATING MILK CAN COVERS
Wesley Wise, Kiel, Wis.
Application April 27, 1953, Serial No. 351,349
8 Claims. (Cl. 226—129)

1. In an apparatus of the class described, conveyor means for transporting containers from one place to another, and each container having a cover frictionally secured thereto, a supporting structure mounted over the conveyor, knocker means movable in said supporting structure and engageable with opposite sides of the can



cover, and means controlled by movement of the containers to automatically effect operation of said knocker means to unseat each container cover, as the containers successively pass said knocker.

2,735,603
FIRE ESCAPE
Calvin H. Corey, Alexandria, Va.
Application March 3, 1952, Serial No. 274,586
3 Claims. (Cl. 228—40)



1. An extensible fire escape comprising a pair of spaced parallel tapes of metallic material, said tapes being formed with a plurality of juxtaposed loops with adjacent loops interconnected by intermediate portions of the tapes, a plurality of rungs secured to and extending between corresponding intermediate portions, and hooks on one end of the tapes for suspending the fire escape from a suitable support and with bight portions of the loops constituting abutment means for spacing the rungs away from a wall.

2,735,604
FIBER CONTAINER END STRUCTURE
Hans Zerlin, Dusseldorf, Germany, assignor of one-half to Jagenberg-Werke Akt.-Ges., Dusseldorf, Germany
Application June 18, 1953, Serial No. 362,447
5 Claims. (Cl. 229—5.5)



4. In a fiber container, a tubular body portion of substantially rectangular section including two pairs of opposed side wall panels, an inserted closure for at least

one end of said tubular body portion, said closure comprising a fibrous sheet, substantially rectangular in plane and having a length along its major axis slightly longer than the distance between the opposed side wall panels of the body that are perpendicular to the major axis of the closure, said closure including opposed longer outwardly curved edges and opposed shorter straight edges, the two opposed body panels engaged with the curved edges of the closure being bowed outwardly by said edges and thereby tensioned, and the closure being bowed inwardly of the container body from the plane of the straight edges of the closure.

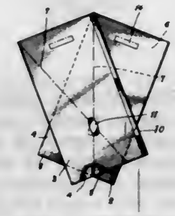
2,735,605
POURING SPOUT FOR CONTAINERS
Arthur Read, Portland, Oreg., assignor, by mesne assignments, to Floseal Corporation, a corporation of Delaware
Application October 3, 1951, Serial No. 249,451
1 Claim. (Cl. 229—7)



A carton having an outside wall cut away to provide a generally triangular opening formed with an acute lower angle, an inside wall secured to and against the inner side of said outside wall relative to the inside of said carton and having a continuous line of severance forming a flat spout forming closure supported along a hinge line coincident with one side of said acute angle for swinging through said opening, said closure having a fold line substantially aligned with the other side of said acute angle dividing said closure into an outer and an inner wing, said outer wing being in lapping relation to but free from the part of said outside wall along said other side of said acute angle, said line of severance extending from said hinge line over said triangular opening along and spaced slightly below the upper edge of said opening that is opposite to said lower angle, said line of severance, as it approaches said other side of said acute angle and at a point within said opening extending angularly outwardly relative to said hinge line and to said acute angle and intersecting the edge of said opening at said other side of said acute angle forming a notch with the edge of said opening that is opposite to said hinge line wherein upon swinging the closure outwardly through said opening the edge of said outer wing along said line of severance will ride, the portion of said outside wall cut away to form said triangular opening being secured to said inner wing of the closure and having a marginal portion thereof projecting above the upper edge of said inner wing forming a pull tab secured to said closure.

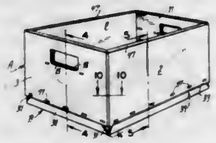
2,735,606
SHIPPING VESSELS FOR TELEVISION TUBES
Richard E. Paige, New York, N. Y.
Application November 4, 1950, Serial No. 194,047
3 Claims. (Cl. 229—14)

1. A support comprising a blank of stiff flexible material having a rectangular outline, with transverse score lines extending entirely across the blank from one long edge to the other and being parallel to the short edges of the blank and to one another, and in positions dividing the blank into four substantially equal rectangular sections, each section having a diagonal score line extending from one corner thereof at one and the same long edge of the blank towards the opposite long edge and contacting said last-named edge at a point spaced from the diagonal corner of the respective section, said diagonal lines being parallel and dividing each section into two portions, each section having an aperture intersected by the diagonal score line thereon, the apertures all being at equal distances from one and the same end of each diagonal line, the opposite short edges of said blank being united and said blank being folded so that two sections overlie the other two sections, one overlying section then being bent along its diagonal line and the other overlying section superposed diagonally on said one overlying



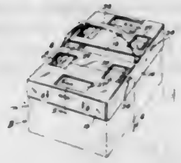
section, the section under the other overlying section also being folded on its diagonal score line, all said apertures then registering, the blank with the sections in such positions being capable when said sections are bent along their diagonal score lines, of assuming a shape with two enclosed pyramidal spaces having a common apex therein, said apertures all being located and registering at said apex, and each of said portions being laid against another portion to form exterior diagonal ribs, one of said portions in each section having the outline of a trapezoid, and said aperture in each section being closer to the said opposite long edge.

2,735,607
NESTABLE CONTAINERS
Paul Wasyluka, St. Louis, Mo., assignor to Gaylord Container Corporation, St. Louis, Mo., a corporation of Maryland
Application January 30, 1953, Serial No. 334,189
4 Claims. (Cl. 229—14)



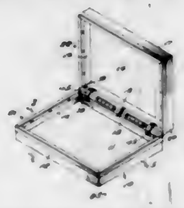
1. A nestable paperboard container comprising connected together, vertically disposed inner and outer wall structures and a bottom closing structure, the upper edge of the wall structures being defined by a fold which integrally joints the same, the bottom structure including a bottom panel and a depending converging continuation of the lower portion of the inner wall structure, a lower portion of the outer wall being reversely folded and forming an abutment, which abutment faces downwardly but spaced above the bottom panel and is fixedly disposed relative thereto, the said bottom face of said abutment lying in a plane which substantially traverses said converging continuation of the lower portion of the bottom wall structure, thus exposing a portion of the converging bottom wall structure below the said bottom face of the abutment for nesting same within the upper portion of a similarly formed container and for engagement of the abutment with the upper folded edge of the last mentioned container.

2,735,608
BASKET WITH STACKING LID
Walter C. George, St. Louis, Mo., assignor to Gaylord Container Corporation, St. Louis, Mo., a corporation of Maryland
Application August 9, 1954, Serial No. 448,549
4 Claims. (Cl. 229—43)



1. A container with upstanding walls connected to a bottom panel and a closure member comprising a cover panel with a peripheral rim formed of flanges depending therefrom and having a plurality of separate load supporting ledges positioned at intermittent intervals on the inner face of said rim, said ledges being formed of tabs cut from and integral with said cover panels, said tabs being folded downwardly against the inner face of said flanges, thence reversely upward about cut scores and secured to the inner face of the rim of said cover member, forming load supporting ledges which terminate in flat, 2-ply bearing faces in a horizontal plane above the lower ends of said rim, said cover member telescoping the upper portions of the container walls in the closed position with said lower edges of said ledges seating on the upper edges of the container walls, rigidly maintaining said cover panel in a horizontal plane above the level of the walls and of the contents of said container, and transmitting the weight of superimposed containers exclusively on the container wall.

2,735,609
HINGE AND RIM FOR A BOX
Howard A. Prew, Providence, R. I., assignor to Pru-Lesco, Inc., a corporation of Rhode Island
Application May 9, 1952, Serial No. 286,861
2 Claims. (Cl. 229—44)



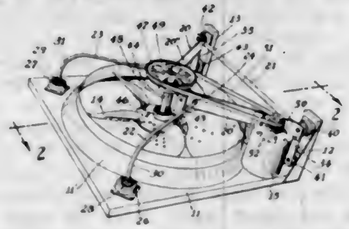
1. In a box a cardboard body section having a bottom wall with upstanding front, back, and side walls, a cardboard cover section having a top with depending front, back, and side walls, said back walls being in edge-to-edge abutting relation, a pair of metal rims of channel shape, each receiving in its channel the front, back, and side walls of one box section, one of the walls of each channel rim along the back wall of each section being deflected to form hinge eyes and a hinge pintle extending through the eyes of two rims to hingedly relate the body and cover sections of the box, a C-shaped spring engaging one of the inner walls of each channel rim along the back wall of each section, an integral abutment on one of the adjacent inner wall corner portions of the side wall receiving portions of the rim engaging an adjacent corner wall portion of the hinge carrying portion of the rim to assist in preventing the hinge carrying channel portion from lifting through action of said spring.

2,735,610
HINGED PAPER BOX WITH HINGE COVERING FLAP
Lewis Douglas Young, Providence, R. I., assignor to Douglas Young, Inc., a corporation of Rhode Island
Application November 30, 1953, Serial No. 394,964
1 Claim. (Cl. 229—44)



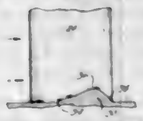
A hinged box comprising a cardboard body section having an outer paper cover and an upstanding back wall, a cardboard cover section having inner and outer paper covers and a depending back wall, a metal hinge comprising a pair of plates, means for securing one plate to one back wall and means for securing the other plate to the other back wall, and a flap of sheet material secured between one hinge plate and the back wall of the cover section by the means securing the plate thereto and extending upwardly along the cover and then back upon itself and over the hinge, a pad in frictional engagement with said walls of the body section and the other end of the flap extending between the pad and the body section to hold the flap in hinge-covering relation, thereby enhancing the appearance of the inside of the box.

2,735,611
VENTILATING APPARATUS
Wallace W. McLean, Princeton, N. J.
Application February 25, 1954, Serial No. 412,525
9 Claims. (Cl. 230—117)



1. A ventilating fan assembly including a supporting housing having a panel provided with an opening, a frame for supporting a fan within said opening and comprising a supporting means having radially extending arms, a fan rotatably supported on said supporting means, shock absorbing devices including flexible diaphragms connected between the outer ends of said arms and said panel and a driving motor mounted on one only of said arms and connected to said fan, at least two adjacent of said arms of said frame being flexible.

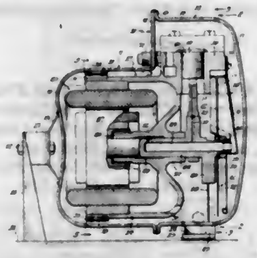
2,735,612
BLADE PASSAGE CONSTRUCTION FOR COMPRESSORS AND DIFFUSERS
George F. Hausmann, Hartford, Conn., assignor to United Aircraft Corporation, East Hartford, Conn., a corporation of Delaware
Application April 20, 1950, Serial No. 157,138
2 Claims. (Cl. 230—122)



1. In a compressor having inner and outer walls of predetermined diameters respectively forming an annular

passage, said passage having a longitudinal axis, a row of vanes fixed to said walls of airfoil shape and circumferentially spaced transversely of the axis of said passage, each of said vanes substantailly spanning said annular passage in a radial direction and extending from one of said walls to the other, said vanes having a chordwise length extending along the longitudinal axis of said passage, and a protrusion extending into said passage from at least one of said walls and spanning the entire space between circumferentially adjacent vanes, said protrusion having a smoothly curved shape diverging at a predetermined rate from the diameter of said one wall and subsequently converging at a greater rate to the diameter of said one wall in a direction downstream along said longitudinal axis, said protrusion having its point of maximum divergence located approximately within the last downstream quarter of the chordwise length of the vanes but upstream of the trailing edge thereof.

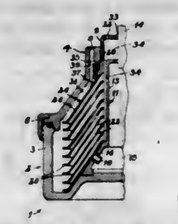
2,735,613
REFRIGERATION UNIT
John Calling, Evansville, Ind.
Original application June 23, 1945, Serial No. 601,195. Divided and this application January 22, 1952, Serial No. 267,572
4 Claims. (Cl. 230—206)



1. In a refrigerating device having a casing providing an oil reservoir in the lower portion thereof and a frame structure resiliently mounted within the casing and supporting a compressor, a shaft rotatably carried by the frame in a horizontal position above the oil reservoir in the casing, means for supplying oil from the reservoir to the shaft comprising an oil flinger disk carried by the shaft proximate one end thereof for rotation therewith and of such size as to dip into the reservoir, a receptacle secured to the frame structure independently of the casing and disposed so as to encircle substantially the upper half of the disk and constructed and arranged to catch oil flung against the interior surface thereof by the disk, and means including a trough adjacent the lower portion of the receptacle for directing oil collected therein to the shaft.

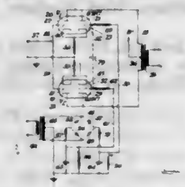
2,735,614
APPARATUS FOR STANDARDIZING MILK
Paul Hubmann, Cham Zug, Switzerland, assignor, by mesne assignments, to Package Machinery Company, a corporation of Massachusetts
Application February 20, 1951, Serial No. 211,929
3 Claims. (Cl. 233—29)

1. A centrifugal separator having rotatable means forming a separating space and provided with the usual stack of spaced apart centrifugal separating discs, said discs having axially aligned off center openings therein for permitting the passage of liquid into the space between the discs, whereby any liquid in the space between the discs at the openings is subjected to some centrifugal action and the heavier materials move radially outwardly while the lighter materials move radially inwardly, means for delivering liquid to the off center opening at an end disc of the stack of discs and withdrawing some liquid from the off center opening of the opposite end disc of the stack of discs as a continuous stream, whereby that withdrawn liquid has moved through the aligned openings in the stack of discs and been subjected to a minimum of centrif-



ugal action, means for adjusting the volume of that stream, said separator having a discharge outlet for the lighter materials that move from the off center openings in a direction toward the axis of rotation of said rotatable means and means for withdrawing liquid from the periphery of the stack of discs as a continuous stream.

2,735,615
ELECTRONIC ANALOG MULTIPLIER CIRCUIT
Harvey O. Hoadley, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application June 19, 1952, Serial No. 294,509
2 Claims. (Cl. 235—61)

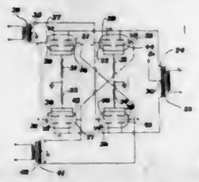


1. A symmetrical electronic analog computer comprising an output transformer having a primary winding, two similar pairs of triodes, each triode of each pair having an anode, a cathode and a control grid, the triodes of each pair having commoned anodes and commoned cathodes, unbypassed equal resistors connecting said cathodes of one pair and said cathodes of the other pair, said commoned anodes of each pair being connected to opposite ends of said primary winding, a source of anode potential connected to said primary winding at the midpoint thereof, input means for applying a multiplicand signal to the grid of one triode of said each pair whereby said grids are equally biased with respect to ground and input means for applying an unidirectional potential proportional to the amplitude of a multiplier signal to the grid of the other triode of said each pair, whereby a signal equal to the product of said multiplicand signal and said multiplier signal is induced in said primary winding of said output transformer.

2,735,616
ELECTRONIC MULTIPLIER CIRCUIT
Harvey O. Hoadley, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application June 19, 1952, Serial No. 294,510
5 Claims. (Cl. 235—61)

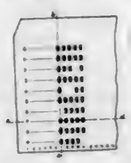
1. A symmetrical electronic analog multiplier for obtaining the product of a multiplicand signal and a multiplier signal comprising an output transformer having a primary winding, four similar amplifying devices each comprising an amplifier triode and a control triode having commoned anodes and commoned cathodes, each said

triode having a control grid, each said device having an equal resistor connecting said commoned cathodes to ground, said commoned anodes of the first and third said devices being connected to one end of said primary winding, said commoned anodes of the second and fourth said devices being connected to said primary winding at the other end thereof, a source of anode potential connected to said primary winding at the midpoint thereof, input



means for applying said multiplicand signal in push-pull to said grids of said amplifier triodes of said first and third devices and in push-pull to said grids of said amplifier triodes of said second and fourth devices, and input means for applying said multiplier signal in push-pull to said grids of said control triodes of said first and third devices and in push-pull but opposite phase to said grids of said control triodes of said second and fourth devices.

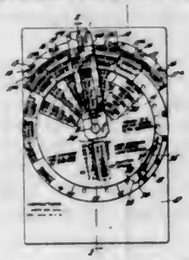
2,735,617
PROCESS FOR RECORDING ON A RECORDING CARD OR STRIP
Knut Andreas Knutsen, Paris, France, assignor to Compagnie des Machines Bull (Societe Anonyme), Paris, France
Application July 16, 1951, Serial No. 237,043
Claims priority, application France July 18, 1950
4 Claims. (Cl. 235—61.12)



1. In the art of producing permanent records on record cards having each a plurality of discrete index-point positions disposed according to columns and numbered lines, the method which comprises the steps of apposing on all of said plurality of index-point positions of a card a first predetermined material with optical properties similar to those of the card material to form characters substantially invisible on said card, and of then apposing on one or more selected index-point positions a second material which chemically reacts on said first material to form visible characters representative of a to be recorded datum by their positions and forms.

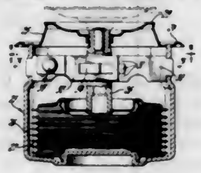
2,735,618
PHOTOGRAPHIC EXPOSURE CALCULATOR
William W. Venable, Charleston, W. Va.
Application February 28, 1952, Serial No. 274,000
5 Claims. (Cl. 235—64.7)

1. A photographic exposure calculator comprising a base having a series of indicia thereon designating different light conditions, a plurality of discs rotatably mounted on said base in superposed relation and including an upper disc having season denoting indicia, a lower disc and an intermediate disc, said lower disc having a series of subject denoting indicia thereon for cooperation with the indicia on said base, said intermediate disc being smaller in diameter than said lower disc and being selectively movable to different operative positions thereon, said intermediate disc having a plurality of tables of shutter speeds on its upper face and further having film density correction factor indicia thereon positionable in predetermined relationship to cooperating indicia on said lower disc when the former is moved to its different operative positions, means for releasably connecting said intermediate disc to said lower disc in a selected operating position for rotation therewith, a normally stationary member mounted on said base outwardly of said upper disc and



including means adapted to cooperate with season denoting indicia on said upper disc, said normally stationary member being selectively movable to different operative positions on said base in accordance with the characteristics of the film to be used, and means for retaining said normally stationary member in a selected operating position, said upper disc having a window for exposing one of the table of shutter speeds on the intermediate disc.

2,735,619
THERMOSTAT FOR ENGINE COOLING SYSTEMS
Arthur J. Schutt and Charles F. Whitmore, Lockport, N. Y., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 14, 1950, Serial No. 138,582
9 Claims. (Cl. 236—34)

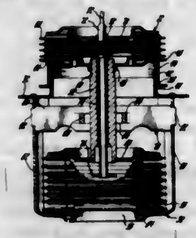


4. In a thermostat, a bellows, a valve, a stem connecting the valve to the bellows, a relatively narrow guide member for said stem extending transversely of the latter and being disposed intermediate said valve and bellows, and means to inhibit the induction of the vibrations in the bellows, said last mentioned means comprising leaf spring means carried by said guide member and disposed transversely of and constantly engaging said stem, and said leaf spring lying within the narrow confines of said guide member.

2,735,620
THERMOSTATICALLY OPERABLE VALVE MECHANISMS
Charles S. Bailey, Lockport, N. Y., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 14, 1952, Serial No. 266,268
16 Claims. (Cl. 236—34)

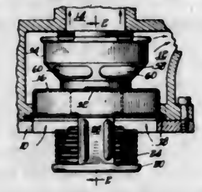
1. A pressure compensating valve mechanism, comprising, a supporting frame, a valve seat provided on said frame, a valve element normally engaging said seat, a spring bellows mounted on said frame for actuating said valve element toward open position when the temperature to which said bellows is subjected exceeds a predetermined value, a second spring bellows mounted on said valve element, a stem connecting said first bellows to said valve element having a communicating passage therein connecting the interiors of said first and second

bellows, a thermostatic liquid completely filling said first and second bellows and said communicating passage, whereby any pressure imposed on said second bellows tending to actuate said valve in one direction is com-



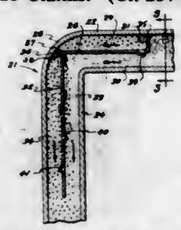
municated to said first bellows causing an equal and opposite pressure to be imposed on said valve by said first bellows tending to move said valve in the opposite direction.

2,735,621
BY-PASS THERMOSTAT
Bransford R. Homfeldt and Orlando J. Chiappe, Elgin, Ill., assignors to Flexonics Corporation, Maywood, Ill., a corporation of Illinois
Application March 31, 1952, Serial No. 279,646
8 Claims. (Cl. 236—34.5)



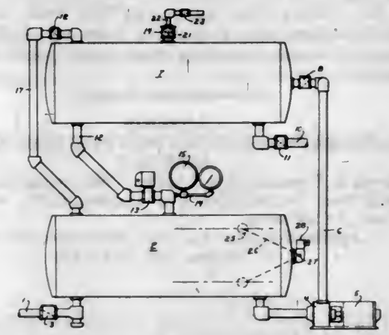
1. A multiflow control thermostat for internal combustion engines and the like, comprising a sheet material casing including a cup-shaped portion mountable on an engine block and a tubular portion secured to an end of the cup-shaped portion, said end having an opening therethrough, plate means closing the free end of the tubular portion, said plate means having a central opening therethrough, said tubular portion having a lateral opening intermediate the ends thereof, a diaphragm shiftable in accordance with temperature, and a single valve member secured to the diaphragm and shiftable therewith, said valve member having an opening through which fluid may pass to said central opening, and a pair of valve portions respectively cooperable with said lateral and central openings.

2,735,622
HEATING SYSTEM
Ralph Pintarelli, Johnston, R. I.
Application March 2, 1955, Serial No. 491,741
15 Claims. (Cl. 237—63)



1. A device for interpositioning in the piping of a closed, hot water heating system to prevent the blocking of the system by air contained therein; said device comprising a body defining two substantially parallel passages extending therethrough and having horizontal entry portions arranged one above the other to respectively receive a flow of air-laden water and a flow of air-free water, the passage receiving the flow of air-free water being substantially unobstructed throughout its length, the passage receiving the flow of air-laden water having obstructions therein at least at the entry portion thereof and at a location intermediate its ends to define relatively small openings through which the air-laden water must pass thereby to break up the air contained in the water into minute bubbles, and said two passages communicating with each other at the ends thereof remote from said entry portions to co-mingle the air-free water and the water containing air in the form of minute bubbles.

2,735,623
DEAERATING VACUUM RETURN RECEIVER
Charles I. Baker, Pittsburgh, Pa.
Application July 29, 1955, Serial No. 525,314
6 Claims. (Cl. 237—68)

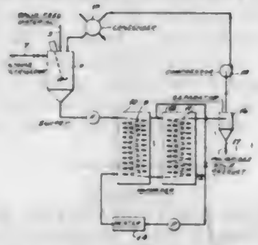


4. A return receiver for deaerating water in a steam heating system, comprising a closed lower tank having a condensate inlet, a closed upper tank having an outlet adapted to lead to a boiler, a pump having an inlet connected with the lower tank and an outlet connected with the upper tank for delivering condensate from the lower tank to the upper tank, a water conduit connecting the bottom of the upper tank with the lower tank, a normally closed return valve in said conduit, a gas conduit connecting the top of the lower tank with the upper tank, a check valve in the gas conduit preventing downward flow, a vent connected with the top of the upper tank, a check valve in the vent preventing air flow into the upper tank, means for operating the pump when the lower tank is nearly full of condensate, means operated when the condensate in the lower tank falls to a predetermined low level for stopping the pump and opening said return valve until the condensate in the lower tank again is high enough for the pump to operate, and means responsive to a predetermined low pressure in the lower tank for maintaining said return valve closed until said pressure rises to a predetermined value again.

2,735,624
PULVERIZING PROCESS, INCLUDING FORMING A SLURRY OF SOLID PARTICLES AND A LIQUIFIED NORMALLY GASEOUS REFRIGERANT, VAPORIZING THE LIQUID, AND TURBULENTLY PASSING THE VAPORIZED DISPERSION THROUGH A ZONE OF HIGH VELOCITY AND DECREASING PRESSURE
Roland A. Beck, Whittier, Calif., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application July 10, 1952, Serial No. 298,021
12 Claims. (Cl. 241—17)

1. A process which comprises forming a mixture of particles of a solid material with a liquefied normally

gaseous refrigerant, passing said mixture into and through a heating zone wherein said refrigerant is substantially completely vaporized thereby forming a low temperature dispersion of solid particles in a stream of the resulting vapor, passing said dispersion through a succeeding zone of high velocity flow while reducing the pressure there-

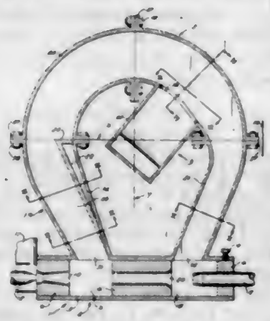


of, subjecting the flowing stream therein to turbulence and high velocity whereby said particles are subjected to the disintegrating action resulting from said highly turbulent flow, and discharging from said high velocity zone said stream containing finely ground solids suspended therein.

2,735,625
APPARATUS AND METHOD FOR PROCESSING ASPHALT
Marvin B. Preeman, Los Angeles, Calif., assignor to Standard Steel Corporation, Los Angeles, Calif., a corporation of California
Application May 12, 1952, Serial No. 287,433
17 Claims. (Cl. 241—18)

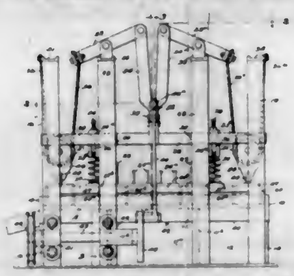
1. A method of handling asphalt to supply an asphalt mixer, including the steps of: conveying the asphalt in lump form to a point adjacent the mixer; grinding the asphalt to powder form at said point; mechanically conveying the powdered asphalt along a path from said point to the mixer; and blowing air along said path to dissipate heat created by the grinding operation and to facilitate the movement of the powdered asphalt along the path.

2,735,626
JET GRINDING MILL
Conrad M. Trost, Moorestown, N. J.
Application January 3, 1955, Serial No. 479,451
8 Claims. (Cl. 241—39)



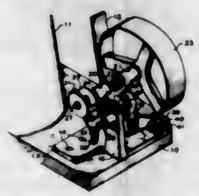
1. In a pulverizing apparatus of the fluid jet type, the combination comprising: a housing; means in said housing defining within said housing an impact chamber and a return chamber, said last-named means including also a pair of spaced, coaxial passageways, one of said passageways leading from one end of said housing to said impact chamber and the other of said passageways leading from said return chamber to said impact chamber, said passageways being of substantially less cross-sectional area than said chambers; a first nozzle mounted at the other end of said housing, said first nozzle extending into said return chamber and being adapted for directing grinding fluid into said impact chamber through said other of said passageways; a second nozzle mounted in said one end of said housing and adapted to direct grinding fluid into said impact chamber through said one of said passageways; a classifying chamber having one end in communication with said impact chamber and another end in communication with said returned chamber, said classifying chamber having a curvilinear portion intermediate its two ends; an off-take opening in the radially inward wall of said curvilinear conduit adjacent to said another end of said classifying chamber.

2,735,627
ROCK GRINDING MILL
James L. Brickley, Spokane, Wash.
Application May 15, 1953, Serial No. 355,370
5 Claims. (Cl. 241—270)



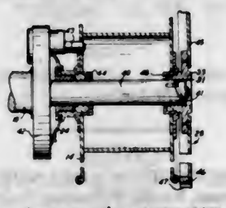
1. A rock crushing mill comprising a lower frame having a solid wall forming an anvil on which stone is crushed, an upper open frame overlying said lower frame and mounted for reciprocation relative thereto and adapted to crush particles of stone lodged on said anvil, spring means urging said upper frame downwardly into rock crushing contact with said anvil, powered means including a crank connected at one end to said anvil for intermittently raising said upper frame against the pressure of said spring means and then quickly releasing the same whereby particles of rock may be crushed on said anvil in a continuous operation by series of rapidly recurring sharp blows.

2,735,628
BOBBIN WINDER
Harry H. Weatherford, Smithville, Tenn.
Application December 15, 1952, Serial No. 325,969
4 Claims. (Cl. 242—22)



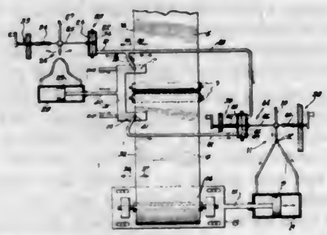
1. In a bobbin winder having a rotatably mounted shaft adapted to receive a bobbin thereon, a guide mounted on a hub and having a portion adapted to be located between the ends of the bobbin and to be contacted by thread on the bobbin, said guide having an aperture, a pin fixed to said frame and extending into said aperture, said pin being mounted to engage said hub upon the bobbin becoming filled, a spring associated with said pin for biasing said guide toward said shaft, a detent on said guide, and a projection associated with said shaft adapted to be engaged by said detent when the parts are in one position, and said guide being adapted to be moved when sufficient thread is wound to withdraw said detent from beneath said projection.

2,735,629
TAKE-UP REEL APPARATUS
William T. Hicks, Glen Rock, Jack E. Leard, East Orange, and William G. Pharo, Paterson, N. J., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application July 20, 1954, Serial No. 444,512
5 Claims. (Cl. 242—25)



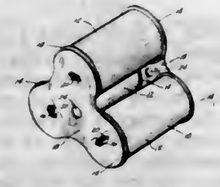
2. Take-up reel supporting apparatus having in combination an arbor having a pair of opposed, closed helical grooves opening at one end thereof and a longitudinal slot extending transversely therethrough and across the helical grooves, a spring biased locking bar slidably mounted in the slot normally blocking the grooves, release means for sliding the bar out of the grooves, a resilient member on the arbor against which reels are mounted and a removable reel retaining member for the end of the arbor for holding a reel against the resilient member, said retaining member having a central aperture for the arbor and a pair of opposed pins extending radially into the aperture for guiding the retaining member on the arbor along the helical grooves.

2,735,630
LAMINATING WEB GUIDE
Herbert Ziebolz, Chicago, Ill., assignor to Askania Regulator Company, Chicago, Ill., a corporation of Illinois
Application September 14, 1953, Serial No. 379,812
6 Claims. (Cl. 242—76)



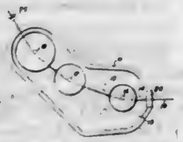
1. In apparatus for the continuous lamination of a plurality of webs between combining rolls, and including a system for maintaining an edge of a second web substantially in registration with a corresponding edge of a first web as both are fed to said rolls, and wherein said system comprises a support movable laterally of and toward and away from the travel path of said first web edge, a first detector mounted on and movable with said support for cooperation with said first web edge to develop a signal of a sense corresponding to the direction of displacement of said support and detector from a preselected positional relation to said first web edge, a first servomotor system controlled by signals developed by said first detector and operatively connected with said support to move it and said detector to said positional relation upon development of a signal by the latter, a second detector mounted on and movable with said support for cooperation with said second web edge to develop a signal of a sense corresponding to the direction of displacement of said second web edge from a preselected positional relation to said second detector which corresponds to registration of said web edges, and second servomotor mechanism controlled by a signal developed by said second detector and operable thereby to move said second web laterally to establish said positional relation and registration of its said edge; the improvement comprising signal transmitting means connected with said first detector and second servomotor mechanism to transmit to the latter a signal for operating it to move said second web in the direction of movement of said support and detectors that coresponds to the sense of the signal developed by said first detector.

2,735,631
DISPLAY MOUNTING FOR SPOOLS
John R. Sexton, Meriden, Conn.
Application April 12, 1954, Serial No. 422,476
1 Claim. (Cl. 242—139)



A display mounting for a group of spools comprising a plurality of spools arranged with their axes parallel to each other having central sleeve portions and provided with heads lying in coplanar alignment at their opposite ends, said heads having central openings therein of less diameter than the sleeves, a sheet of flexible material lying adjacent the outside surfaces of said spool heads at each of the opposite ends, said sheets having spaced pierced portions providing projections having winged tongues, said tongues being bent to extend within the central openings in said heads and the winged portions thereof extending laterally and engaging against the under surfaces of said heads.

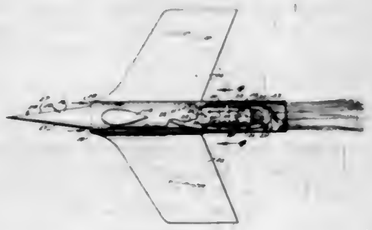
2,735,632
WARPER TENSION DEVICE
Marion L. Robinette and Wendell G. Faw, Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application March 25, 1953, Serial No. 344,637
4 Claims. (Cl. 242—150)



1. In a yarn tensioning mechanism, the combination with a base, of a plurality of yarn snubbing posts carried by said base, a yarn lead-in guide positioned ahead of said posts for directing the yarn to be the first of said posts, an intermediate post positioned beyond said first post and offset laterally from the yarn path between said guide and said first post to cause said yarn to be deflected in one direction and through an angle in passing over said first post, and another post positioned beyond said intermediate post and offset laterally from the yarn path between

said first and intermediate posts to cause the yarn to be deflected further in said one direction and through an angle equal to said first angle, said other post being positioned between said intermediate post and a yarn guide and offset relative thereto to cause the yarn in passing over said other post to be deflected still further in said one direction and through said angle.

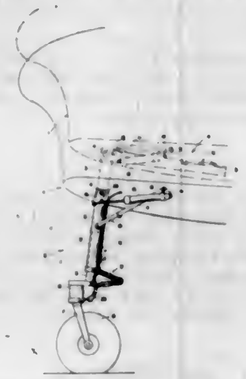
2,735,633
JET PROPELLED AIRCRAFT
James W. Manning, Huntington Park, Calif.
Application July 1, 1953, Serial No. 365,473
1 Claim. (Cl. 244—74)



In an aircraft, a body having a pointed nose on the front end thereof, said nose having its bottom and top surfaces rounded and the side portions of said nose being flat, said body having a pair of spaced apart parallel passageways therein having forwardly facing intake openings for the egress therethrough of air, said passageways extending longitudinally through said body, a longitudinally disposed louvered tail pipe positioned within said body adjacent the rear end thereof, said tail pipe adapted to receive gases from a combustion chamber, said tail pipe being provided with a plurality of spaced cut outs, said passageways communicating with said tail pipe through said cut outs whereby said tail pipe creates suction so that air is drawn in from the front of the aircraft through said passageways to thereby reduce resistance on the front of the aircraft and increase the thrust or speed of the aircraft, a plurality of spaced apart conduits extending to the rear of said body and adapted to be connected to a source of fuel, a spray head mounted on the rear of each of said conduits and positioned rearwardly of said tail pipe, said tail pipe having its ends opened, said cut outs being defined by struck out portions which flare outwardly and rearwardly whereby a portion of the gases passing through the tail pipe is permitted to escape outwardly through the cut outs and whereby cold unburned air can not pass into the tail pipe, the fuel supplied by said spray heads adapted to be burned with the air from said passageways to produce additional thrust for the aircraft.

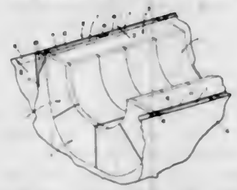
2,735,634
EXTENSIBLE STRUT
John P. Fosness, Pacific Palisades, Calif., assignor to North American Aviation, Inc.
Application October 27, 1952, Serial No. 317,089
7 Claims. (Cl. 244—104)

1. In an aircraft having a wheel, an extensible shock absorbing strut comprising an outer cylinder secured to and carried by said aircraft; an inner cylinder reciprocable within said outer cylinder, the lower portions of said inner cylinder being adapted to engage wheel supporting means, said inner cylinder including a fixed head portion over the lower end thereof; a freely floating piston reciprocable in the lower portion of said inner cylinder; stop means fixed relative to said outer cylinder and disposed in said inner cylinder above said piston and engageable thereby; shock absorbing means in said cylinders; and means for introducing pressurized fluid beneath said piston whereby said piston is forced upwardly against said stop means



and said outer cylinder is subsequently forced upwardly relative to said inner cylinder.

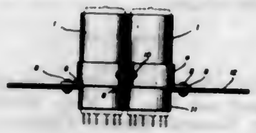
2,735,635
FIRE PREVENTION ARRANGEMENT
James D. Hoffman, Pacific Palisades, Calif., assignor to North American Aviation, Inc.
Application October 15, 1952, Serial No. 314,891
3 Claims. (Cl. 244—135)



1. In an aircraft having a fuel tank assembly a fire prevention arrangement comprising a plurality of containers having exterior walls adjacent portions of the surface of said tank assembly, said containers being closely associated one with the other so as to substantially blanket said portions of said tank assembly; means disposed adjacent wall portions of said containers opposite said firstly mentioned walls for holding said containers so positioned; an inert pressurized gas in said containers, each of said containers having a plurality of flexible inelastic thread elements of a predetermined length interconnecting said walls for limiting movement of said walls away from each other by said pressurized gas, said thread elements collectively permitting such movement of said walls to a contour substantially complementary to said tank assembly surface portions and said means for holding said containers adjacent said tank assembly, whereby said tank assembly and said means for holding said containers are free of loads from said pressurized gas; and valve means connected with each of said containers for retaining said gas therein.

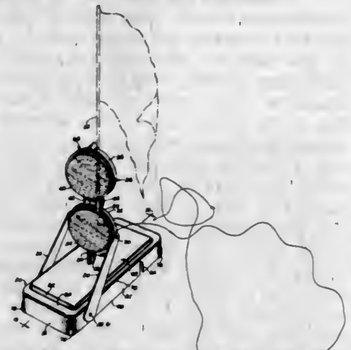
2,735,636
MOUNTING DEVICE FOR VACUUM TUBES
Lester R. Snyder, Fort Wayne, Ind., assignor to Farnsworth Research Corporation
Application April 20, 1953, Serial No. 349,749
6 Claims. (Cl. 248—27)

1. A mounting device for securing a plurality of vacuum tubes in position, each vacuum tube including an electrode-enclosing envelope, comprising a plurality of resilient cylinders which are C-shaped in cross-section serving as tube holders, each holder having a tube-receiving opening therein which is radially adjustable, each holder being made of heat-conducting material, and means securing all of said cylinders contiguously together in a



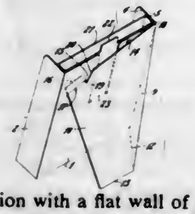
cluster, said means being operable to adjust the size of the openings of all holders simultaneously.

2,735,637
SIGNALING DEVICE
William P. Tolbert, Fort Madison, Iowa, assignor to Anthes Force Oiler Company, Fort Madison, Iowa, a corporation of Iowa
Application December 8, 1949, Serial No. 131,786
9 Claims. (Cl. 248—33)



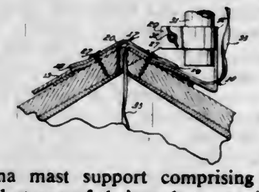
1. A portable road flare comprising a reflector, a frame in which said reflector is mounted, a pan adapted to rest in an inverted position on the road, links outside of and pivotally connected to opposite sides of said pan and to opposite sides of said frame, interengageable means on said pan and frame for holding said reflector stable in an upstanding position on said inverted pan, said frame being dimensioned to fit entirely within said pan, and, when said means are disengaged, being swingable to pass into said pan, said sides of said pan being slotted to provide clearance for the passage of the pivots between said frame and said links.

2,735,638
PORTABLE CARDBOARD DISPLAY MEMBERS
Wallace E. Hanson, Springfield, Mass., assignor to Sample-Durick Company, Incorporated, Chicopee, Mass., a corporation of New York
Application December 6, 1952, Serial No. 324,575
2 Claims. (Cl. 248—35)



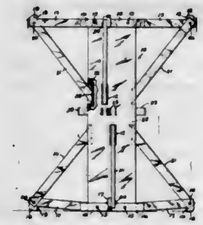
1. In combination with a flat wall of cardboard or the like adapted to be supported from its bottom edge and held in a substantially upright rearwardly-tilted position for display, of a first easel-forming member having first and second side edges and a lower edge interconnecting the lower ends of said side edges and disposed at an acute angle with respect to each, the first side edge of said member being hingedly connected to one side edge of said wall and the second side edge of said member converging upwardly away from said lower edge with respect to said first side edge, a second easel-forming member having upper and lower edges and side edges interconnecting them, one side edge of the second member being hingedly connected to the second side edge of the first member, said first and second members being movable on their hinged connections from inactive positions in which both lie flatly against the back of said wall in coplanar relation to active positions in which the first member swings outwardly from said wall at a substantial acute angle thereto with its lower edge supporting it and the second member extends at a substantial obtuse angle to the first member with the lower edges of both members and the bottom edge of said wall being located in a common plane disposed at an acute angle to the back of said wall and the upper edge of the second member engaging the back of said wall, and interengageable means on the back of said wall and on the upper edge of the second member for holding both members in active easel-forming position with their lower edges located in said plane and the lower edge of the second member substantially parallel with the bottom edge of said wall.

2,735,639
ANTENNA MAST SUPPORT
Otto Harrison Gilfry, Buena Park, Calif.
Application June 4, 1953, Serial No. 359,517
1 Claim. (Cl. 248—43)



An antenna mast support comprising a leg and a tongue joined at one of their ends to provide a V-shaped support member, a U-clamp having a pair of arms to receive an antenna mast, said arms being provided with parallel lugs extending from the ends of the arms, said U-clamp being integral with one end portion of the leg of said support and extended from the end portion of the leg at right angles thereto, a bolt having a wing nut thereon extended through the lugs, the tongue of said support having openings therethrough to receive an antenna lead-in wire and fastening means and barbs on the edges thereof to engage the shingles of a roof and said tongue being positioned at one side of said clamp at an angle thereto.

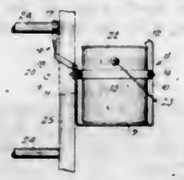
2,735,640
FOLDING SUPPORT FOR RECEPTACLES
George Banks, Scranton, Pa.; Mary Ann Banks, administratrix to said George Banks, deceased
Application June 8, 1950, Serial No. 166,934
1 Claim. (Cl. 248—166)



A support for containers comprising a multi-sided body having identical upper and lower end portions,

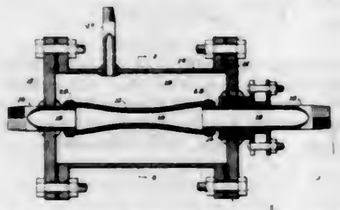
recesses in each side of the body, L-shaped bracket members having transverse end surfaces encircling the top and bottom extremities of said body, the end surfaces of adjacent members being spaced and provided with aligned bores, jointed arms each comprising a support arm and a brace member, each support arm being attached by a pivot in the bores in adjacent spaced end surfaces between each pair of L-shaped members, one of said brace members being hinged to the outer end of each arm, said pivotally attached arms being selectively horizontally positioned or folded along the sides of the body, the free end of each brace member seating in a corresponding recess to hold said support arms in said horizontal position, and raised lugs on the outer ends of the support arms to prevent lateral movement of a container.

2,735,641
COLLAPSIBLE CAN HOLDER
Edmund W. Joecks, Madison, Conn.
Application December 24, 1952, Serial No. 327,810
3 Claims. (Cl. 248—210)



1. The combination, in a holder for paint cans and the like, of a U-shape can supporting member including two spaced side bars and a connecting portion, one of said bars being of greater length than the other, a band for encircling the can and pivoted at diametrically opposite points to the inner faces of said side bars to turn within said U-shape member, a rearwardly extending arm including a short section at its forward end mounted to turn on the pivotal connection of the shorter one of said bars, an outwardly turned lateral section and a rear section terminating in a return bend to provide a support engaging hook, a detent on the shorter one of said bars for limiting angular movement of said arm, and a projection on the longer one of said bars for engaging over the top rim of the can when the can is seated on said connecting portion.

2,735,642
FLUID FLOW REGULATING VALVE
James E. Norman, Imperial County, Calif.
Application June 8, 1951, Serial No. 230,621
3 Claims. (Cl. 251—5)



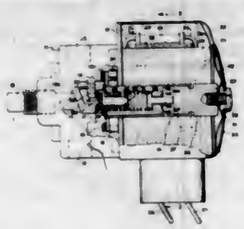
1. A fluid flow regulating valve comprising a section of pliable tube connected in a fluid conduit, a substantially constant independent fluid pressure being applied to the external surface of the pliable tube, the flexibility of the tube and the independent fluid pressure being correlated to the static pressure in the tube for any predetermined flow condition so that collapse of the tube will result due to decrease in the static pressure resulting from increase in said predetermined rate of flow whereby the flow is sufficiently arrested to increase the static pressure in the tube to thereby expand the tube to provide for the predetermined flow condition and subsequent collapse of the tube whereby a pulsating character is imparted to flow within said fluid conduit.

2,735,643
THROTTLE RETURN CHECK
Erwin J. Reppert and John M. Kelly, Rochester, N. Y., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application August 8, 1952, Serial No. 303,292
3 Claims. (Cl. 251—54)



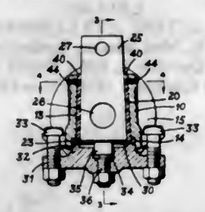
1. A dash pot for retarding the closing movements of a carburetor throttle valve which is provided with an arm movable therewith for engagement by a control member of said dash pot, said dash pot comprising a housing, a diaphragm dividing said housing into two chambers and operative when moved to transfer air from one chamber to the other, said control member being connected to said diaphragm and extending outwardly of the housing, a substantially rigid plate, a part of the surface of which is bonded to the diaphragm adjacent the periphery thereof so that the plate is movable with the diaphragm and the diaphragm is also movable relatively thereto, said plate having an unrestricted opening therein through which air can pass when the diaphragm is moved in one direction, a raised surface on said plate surrounding said unrestricted opening and engageable by the relatively movable port of said diaphragm when moved in the opposite direction to block the flow of air through said unrestricted opening, and said plate having a constantly open restricted opening through which air can pass when the diaphragm is moved in said opposite direction, whereby movement of the diaphragm and control member is retarded in one direction and unretarded in the other.

2,735,644
VALVE
Carl J. Bishofberger, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Application November 20, 1950, Serial No. 196,555
7 Claims. (Cl. 251—77)



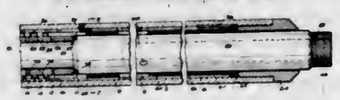
1. A solenoid valve comprising an open-side valve body having an inlet and an outlet with a valve seat therebetween, a valve cooperable with said seat and having a stem thereon, a cup-shaped tube positioned on said valve body for sealing said open side, a hollow plunger in said tube, one end of said plunger normally abutting against said valve and having an opening therein through which said stem slidably extends, a head on said stem of larger diameter than said opening and normally spaced from said one end, the other end of said plunger having a hole therein and normally spaced from the closed end of said tube, a thrust pin slidably extending from the closed end of said tube through said hole and having a head thereon within said plunger of larger diameter than said hole, a spring between said one end and said thrust pin head for holding said valve closed, an electrically energizable coil surrounding said tube, and a resistor having a negative coefficient of resistance connected in series with said coil.

2,735,645
PLUG VALVE WITH PLUG RETAINING LINER KEY
Jacob B. Freed, Dayton, Ohio, assignor to The Duriron Company, Inc., Dayton, Ohio, a corporation of New York
Application April 7, 1955, Serial No. 499,958
7 Claims. (Cl. 251—192)



1. A lined plug valve comprising a valve body having flow passages therethrough and a tapered bore therein extending transversely of said flow passages, a tapered sleeve liner of deformable material fitted within said bore and having apertures therein for alignment with said flow passages, a tapered plug received within said liner and having a port therethrough for connecting said flow passages, means for pressing said plug into said liner to deform said liner into continuous circumferential sealing engagement with said bore and said plug on all sides of said flow passages, means for rotating said plug to move said port into and out of alignment with said flow passages, at least one groove in the smaller end of said liner located in predetermined angular relation with said apertures, a projection extending inwardly from the wall of said bore adjacent the smaller end thereof for engagement within each said groove upon insertion of said liner in said bore to resist movement of said liner axially of said bore toward the smaller end thereof under the deforming pressure of said pressing means, said projection being located in predetermined angular relation with said flow passages to lock said liner with said apertures aligned with said flow passages throughout the rotational movement of said plug, and the radial distance from the inner end of said projection to the axis of said bore being less than the radius of the larger end of said plug to provide for positive engagement of said projection with said plug in response to axial movement of said plug and thereby to limit axial movement of said plug toward the smaller end of said bore.

2,735,646
OIL WELL DRILLING TURBINE SCREEN ASSEMBLY
George P. Wagner, Mount Vernon, N. Y., assignor to The Engineering Development Company, Incorporated, a corporation of Texas
Application November 22, 1949, Serial No. 128,844
8 Claims. (Cl. 253—32)



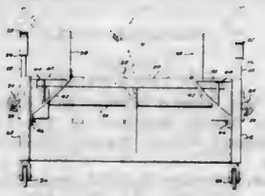
1. In an oil well drilling turbine, a casing, a shaft mounted to turn in the casing, said shaft having a bore therein, cooperating turbine blades on said shaft and casing, said shaft and casing having a space therebetween on one side of said turbine blades, means between the casing and shaft closing the end of said space remote from the turbine blades, a screen in an intermediate part of said space, said shaft having an opening therein connecting the part of the space on the side of the screen remote from the turbine blades to the bore, said casing having an opening therethrough into the part of the space on the side of said screen nearest the turbine blades, and removable means for closing said last opening.

2,735,647
IMPULSE TURBINE ARRANGEMENTS
Pierre Duport, Grenoble, France, assignor to Etablissements NEYRPIC, Grenoble, France, a corporation of France
Application June 20, 1951, Serial No. 232,495
Claims priority, application France June 24, 1950
6 Claims. (Cl. 253—140)



1. In an impulse turbine, a shaft rotatable on a vertical axis, a runner fixed on said shaft for rotation therewith, bearing means engaging said shaft for receiving forces acting on said shaft transversely of said vertical axis thereof, at least three nozzles each directed tangentially of said runner and unsymmetrically distributed about the periphery of said runner in unequally spaced relation to each other within a peripheral angle between the extreme nozzles that is less than the corresponding angle between said extreme nozzles for uniform distribution of said nozzles about said axis so that water jets discharged through said nozzles produce a resultant force in a predetermined direction transversely of said shaft axis, said bearing means being disposed to oppose said force acting in said direction.

2,735,648
LIFTING DEVICE FOR CARD LICKER-IN ROLLS
Clifton Y. Bumgardner, Lancaster, S. C., assignor to The Springs Cotton Mills, a corporation of South Carolina
Application September 21, 1954, Serial No. 457,513
5 Claims. (Cl. 254—6)



1. A lifting device for installing and removing card licker-in rolls, said device comprising an open-sided rectangular frame structure having a side section formed in a length exceeding the width of the feed end of a card frame and end sections connected adjacent each end of said side section in right angular relation thereto and formed in a length sufficient to reach beneath the licker-in roll axis when said frame structure is disposed in surrounding relation at said card frame feed end, said end sections being formed with vertical guideways alignable beneath said licker-in roll axis when said frame structure is disposed in said surrounding relation, a pair of yoke members having respective head portion shaped selectively

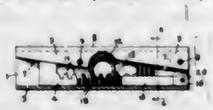
for lifting support at respective portions of said licker-in roll extending axially beyond said card frame feed end at each side thereof and having identical shank portions shaped for sliding disposition in said end section guideways and formed as lifting racks, rack gears supported on each of said end sections for engagement with the racks formed by said yoke shank portions, and a worm and worm wheel supported on said side section for driving both of said rack gears, the shank portions of said yoke members being retained vertically in said end section guideways only by said rack gears and being interchangeable between said guideways for use in installing or removing either hand of licker-in roll.

2,735,649
PNEUMATIC SPIKE EXTRACTOR
Sven Arild Swallert, Lidingo, Sweden
Application September 16, 1953, Serial No. 380,402
3 Claims. (Cl. 254—18)



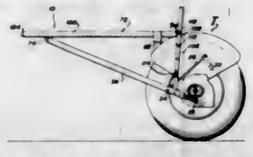
1. A pneumatic spike extractor, comprising a cylinder, a piston therein, means for alternately connecting the cylinder chambers on both sides of the piston with a source of pressure gas, a piston rod connected to said piston projecting through one end of said cylinder, fixed abutments adjacent the end positions of said piston rod, two jaws pivotably mounted on the outer end of said rod having locking members thereon, a double-armed lever pivotably mounted on said piston rod and rockable between two end positions by engaging said fixed abutments, locking members provided on said lever at both sides of its pivot to cooperate with said locking members on said jaws to lock the jaws in open and gripping position respectively when said rod is retracted and protruded respectively.

2,735,650
PRINTER'S QUOIN
James Edgar Lee, Grand Haven, and Freeman Barney, Spring Lake, Mich., assignors to The Challenge Machinery Company, Grand Haven, Mich., a corporation of Michigan
Application February 25, 1954, Serial No. 412,496
1 Claim. (Cl. 254—42)



A printer's quoin comprising, an open ended channel shaped casing, an inner and an outer co-acting wedge bar mounted within said casing, the inner wedge bar having longitudinal sliding movement and the outer wedge bar having transverse sliding movement, means for retaining said wedge bars in said casing, manual means for sliding said inner wedge bar to a plurality of positions, and yieldable retaining means for holding said inner wedge bar in its adjusted positions comprising, a leaf spring detent located entirely within the casing, means for attaching said detent to a side of said casing, said attaching means being located close to an open end of the casing and accessible through said open end for removal and replacement, and a recess in a side of the inner wedge bar adjacent that side of the casing to which said detent is attached, said recess extending longitudinally of the wedge bar and through the end thereof nearest said fastening means, said wedge bar having ratchet teeth at the base of said recess and the free end of said detent extending into said recess and engaging said ratchet teeth, said detent being insertable into said casing and said recess through the open end of the casing.

2,735,651
TRACTOR ATTACHMENT
Francis H. McClernon, Springfield, Mo.
Application October 8, 1953, Serial No. 384,875
13 Claims. (Cl. 254—124)



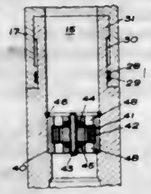
1. For use on a tractor equipped with a Ford-Ferguson type draw-bar assembly, an attachment comprising a pair of rearwardly extending rails pivotally secured at their near ends to the underside of the rear axle of said tractor and rigidly secured at substantially their midportions to said draw bar assembly, and a platform resting on the upper edges of said rails, the far end of said platform being pivotally secured to the far ends of said rails.

2,735,652
CORE TAKING AND ORIENTING METHOD
Edward Fay Brady, Long Beach, Calif., assignor to Eastman Oil Well Survey Company, Denver, Colo., a corporation of Delaware
Application March 20, 1950, Serial No. 150,720
7 Claims. (Cl. 255—1.4)



1. In a method of taking and orienting a core by the use of a core barrel movable into and out of a bore with a drill pipe and core drill bit and by the use therewith of a drift indicator instrument of the magnetic type operable to obtain data when having a predetermined position with respect to permanent magnets carried by the drill pipe, said method comprising the taking of the core by rotating the drill pipe, making a recording of the inclination of the axis of the core while the bottom of the core is attached to the earth and undisturbed with respect to the position it has in the earth, removing together the drill pipe and core from the bore after the core is broken from the earth, and then marking the core while undisturbed in the core barrel and in such a manner that its relationship with one of the permanent magnets and thereby the obtained record at the time the record was made will be known after the core is removed from the core barrel.

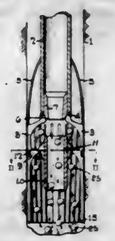
2,735,653
DEVICE FOR DRILLING WELLS
Walter J. Bielstein, Corpus Christi, Tex., assignor, by mesne assignments, to Esso Research and Engineering Company, Elizabeth, N. J., a corporation of Delaware
Application May 21, 1952, Serial No. 289,159
5 Claims. (Cl. 255—3)



4. A device for drilling a well which comprises, in combination, a hollow drill stem connected at its lower end to a drill bit, a drill collar arranged within said drill stem provided with a passageway for drilling fluid, a stationary valve housing arranged in the passageway in said drill collar having ports for passage of drilling fluid therethrough, a rotatable valve element arranged in said valve housing, said rotatable valve element being provided with ports inclined to the axis of the drill collar for passage of drilling fluid and opposed surfaces also inclined to the axis of the drill collar, said valve element being of a general cylindrical shape having opposite peripheral segmental recesses providing said opposed inclined surfaces, flow of drilling fluid through the drill collar passageway impinging against said inclined surfaces to rotate said valve element relative to the ports of said valve housing to restrict said flow of drilling fluid to flow through said ports in the rotatable valve element when said rotatable valve element is rotated into position to close the ports in the valve housing, a keyway arranged in said drill stem, and a key on said drill collar slidably arranged in said keyway to prevent upward travel of vibrations created by restriction of flow of said drilling fluid whereby rotation of said rotatable valve element is maintained and said vibrations are transmitted downwardly on said drill stem on restriction of fluid flow through the passageway in said drill collar to flow through said ports in the rotatable valve element.

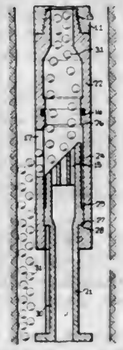
2,735,654
EXPANDING TYPE MOMENTUM PELLET IMPACT DRILLING APPARATUS
Alexander B. Hildebrandt, Tulsa, Okla., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application October 28, 1952, Serial No. 317,318
4 Claims. (Cl. 255—61)

1. A drilling apparatus comprising in combination: a tubular support member, a plurality of circumferentially arranged shroud segments held by said support member in flexible relation thereto and extending below said support member in a manner defining an open-bottom shroud adapted to maintain a plurality of pellets in captive circulation therewithin, a first nozzle element supported by said tubular member adjacent the lower termination thereof and adapted to eject therefrom a high velocity stream of fluid, a second nozzle element supported below said first nozzle element in spaced concentric relation therewith, said second nozzle element being spaced from said shroud elements and from said first nozzle element to provide for upward passage of pellets between said second nozzle element and said shroud and for entry of pellets into the top of said second nozzle, means biasing said



shroud segments inwardly with respect to the vertical axis of the apparatus and means adapted to force said shroud segments outwardly in opposition to said bias when fluid pressure is built up within said tubular support as a result of forcing fluid out of said support through said first nozzle.

2,735,655
RECHARGING DEVICE FOR PELLET IMPACT DRILL BITS
John E. Ortloff, Tulsa, Okla., assignor to Esso Research and Engineering Company, a corporation of Delaware
Application November 18, 1952, Serial No. 321,176
3 Claims. (Cl. 255—61)



1. In a drill bit assembly for drilling a bore hole in the earth by entraining pellets in a high velocity stream of fluid, which assembly includes a tubular support member terminating in a jet nozzle adapted to produce said high velocity fluid stream, said nozzle being of smaller diameter than said pellets, an improved apparatus for supporting said assembly from a drill pipe in the bore hole and for introducing pellets from said drill pipe into said bore hole in the vicinity of said nozzle which comprises a cylindrical member attachable to a drill pipe, said member having a vertical bore extending therethrough and a side port communicating with said bore, a piston member slidably fitting within said vertical bore in said cylndrical member and slidable from a first position closing said port to a second position exposing said port, said piston member having a vertical bore extending therethrough, a head member at the top of said piston closing the bore thereof, said head having at least one port communicating with said last named bore, said port being of smaller diameter than said pellets, and means for supporting said first named tubular support member from said piston member, whereby when said assembly is above the bottom of the bore hole said piston will move to said second position and when said assembly is lowered into contact with the bottom of the bore hole said piston will be moved to said first position.

2,735,656
ROCK DRILLING BIT
Stig Per Gustav Höglund, Sandviken, and Anders Gustav Kindahl, Sundsvall, Sweden, assignors to Sandvikens Jernverks Aktiebolag, Sandviken, Sweden
Application March 20, 1950, Serial No. 150,576
Claims priority, application Sweden March 19, 1949
3 Claims. (Cl. 255—63)



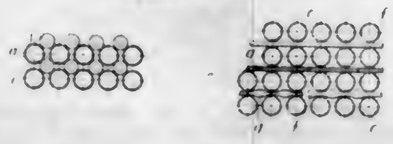
1. A rock drilling bit comprising a drill bit body having an elongated groove formed in its forward face considered in the direction of drilling, an elongated cutting insert of hard metal secured in said groove, said groove, in its longitudinal direction, being directed substantially transversely of the central axis of said bit body, said groove extending substantially through the central axis to the periphery of said body, the bottom of said groove situated near said central axis being located forwardly in the drilling direction of the portions of the bottom located near the periphery of said bit body, said cutting insert having curved wear surfaces facing in the direction of drilling, the portions of said wear surfaces located at and near said central axis being located forwardly, in the direction of drilling, of the portions of the wear surfaces located in the vicinity of the lateral periphery of said drill bit body, the angle between a line tangent to the portion of said wear surface most remote from said axis and said axis being greater than the angle between a line tangent to the portion of said bottom most remote from said axis and said axis, said insert having a base portion having a form corresponding to that of the bottom of said groove, whereby the thickness of said insert, in the direction of drilling, toward the laterally remote portions of said insert is greater than toward the center thereof.

2,735,657
REFRIGERATING APPARATUS FOR AUTOMOBILES WITH REHEAT MEANS
Webster J. Owen, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 19, 1953, Serial No. 331,985
2 Claims. (Cl. 257—3)



1. In an air conditioning system for use in conditioning the passenger compartment of a car of the type having a main engine for propelling said car and provided with a cooling system using a liquid such as water for dissipating the engine heat, an evaporator, means for circulating air to be conditioned in thermal exchange relationship with said evaporator, refrigerant liquefying means for supplying liquid refrigerant to said evaporator, means for reducing the cooling capacity of said evaporator when said evaporator has excess cooling capacity comprising means for reheating the effective air leaving said evaporator, said last named means including a reheat coil and means for circulating liquid from the car engine cooling system through said reheat coil, control means responsive to the temperature of the air in said passenger compartment for controlling the flow of said liquid from said engine to said reheat means to maintain comfort within said passenger compartment, means responsive to the temperature of the air flowing from said evaporator to said reheat means for by-passing said control means and for supplying liquid from said car engine cooling system to said reheat coil whenever the temperature of the air leaving said evaporator falls below the freezing point of said liquid so as to prevent freeze-up of said liquid in said reheat coil.

2,735,658
TUBULAR SURFACF HEAT EXCHANGER
Stanley S. Cook, Wallsend-on-Tyne, England, assignor to The Parsons Marine Steam Turbine Company Limited, Wallsend-on-Tyne, England
Application November 2, 1948, Serial No. 57,933
Claims priority, application Great Britain November 5, 1947
7 Claims. (Cl. 257—236)



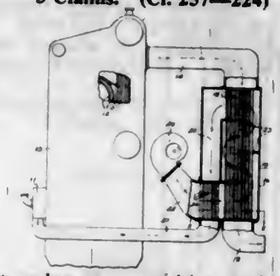
1. A tubular surface heat exchanger, comprising a plurality of tubes for conducting a hotter fluid, a casing surrounding the tubes and tube plates at the ends of the tubes for supporting the same in parallelism and spaced relation, filling members disposed in the interspaces between and in close contact with the tubes throughout substantially their entire lengths but out of contact therewith adjacent the tube plates, the said filling members being free to move crosswise of the tubes except as restrained thereby, supply and discharge connections to the casing for circulating a cooler fluid, the said supply and discharge connections being positioned for communicating with the interspaces between the tubes adjacent the tube plates, whereby the cooler fluid is supplied and discharged by a cross flow but circulated in parallelism to the hotter fluid.

2,735,659
CONDENSER FOR CRYSTAL GROWING APPARATUS
Nelson N. Estes, Silver Spring, Md.
Original application March 21, 1949, Serial No. 82,675, now Patent No. 2,686,712, dated August 17, 1954. Divided and this application June 28, 1954, Serial No. 439,943
2 Claims. (Cl. 257—28)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A device of the character disclosed for condensing water within an enclosed chamber having an atmosphere of water vapor therein comprising, in combination, a cup shaped member arranged upright within said chamber, an elongated cylindrical member having a plurality of radially and longitudinally extending fins secured at one end thereof and arranged to be interfittingly and telescopically received within said cup shaped member and in spaced relation with respect to the bottom of the cup member thereby to define a water collecting chamber in the bottom of the cup and a plurality of radially disposed chambers between said fins for passing water and water vapor therethrough into said water collecting chamber, conduit means extending from outside said enclosed chamber through said tubular member into fluid communication with said water collecting chamber, a second conduit means extending from outside said enclosed chamber through the length of the tubular member substantially to the bottom end thereof and then back through the member and outwardly of the enclosed chamber for passing a cooling fluid through the tubular member, and means forming a plurality of ports arranged circumferentially in said cup member in communication with said bottom and radially disposed chambers therein thereby to provide a plurality of paths for circulation of water vapor through said radially disposed chambers and outwardly of the cup member through said ports, said ports being so arranged as to cut off said water vapor paths when the water level in the cup member rises to a predetermined depth.

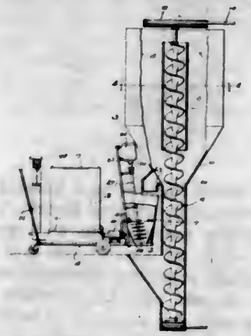
2,735,660
AIR HEATING
Ollison Craig, Worcester, Mass., assignor to Riley Stoker Corporation, Worcester, Mass., a corporation of Massachusetts
Application August 2, 1950, Serial No. 177,297
3 Claims. (Cl. 257—224)



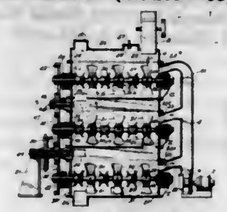
1. A heat exchanger, comprising: a first end wall, a second end wall, and a longitudinal shell secured to said end walls to define an elongated casing, a first baffle within said casing extending transversely adjacent the second end wall from one portion of the shell to a point adjacent an opposite portion of the shell, said baffle being parallel to the end walls, a longitudinal partition extending from the first baffle to a point adjacent the first end wall, a series of transverse baffles extending partially across the space between the partition and the said opposite portion of the shell to define a tortuous path in said space, a first tube bundle comprising a plurality of tubes having ends received in apertures in said end walls and extending longitudinally within the said space, a second tube bundle comprising a plurality of tubes having ends received in apertures in the second end wall and the first baffle, the second tube bundle extending parallel to and spaced from the first tube bundle, an air inlet aperture in the shell between the first baffle and said second end wall adjacent the second tube bundle, an air outlet communicating with the ends of the tubes of the second tube bundle at the second end wall, a heating gas inlet communicating with one end of the first tube bundle, and a heating gas outlet communicating with the other end of the first tube bundle, whereby heating gases may flow longitudinally through the tubes of the first tube bundle in heat exchange relationship with air flowing serially over the tubes of the second and first tube bundles and thence through the tubes of the second tube bundle.

2,735,661
MOLASSES MIXER
Charles L. Patterson, Fulton, Ind.
Application November 5, 1953, Serial No. 390,383
1 Claim. (Cl. 259—22)

In combination a feed and molasses mixing means, comprising an upper hopper, a discharge spout in the lower portion of said hopper, a lower hopper having an open upper end confronting said spout, a conveyor between said hoppers for moving the feed from the lower hopper to the upper hopper, a molasses mixer comprising a mobile scale, a molasses tank on said scale, a mixing hopper adjacent said tank and removably engageable between said spout and said lower hopper, means discharging molasses from said tank to said mixing hopper, and means for mixing the molasses and feed in said mixing hopper.

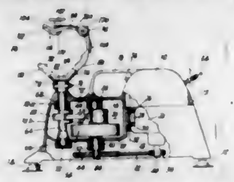


2,735,662
SAND CONDITIONING APPARATUS
Algot A. Wickland, Chicago, Ill.
Application February 19, 1953, Serial No. 337,803
4 Claims. (Cl. 259—68)



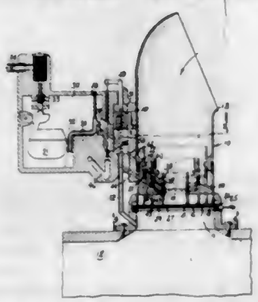
1. In a continuous sand conditioning apparatus comprising two or more sand mixing compartments mounted horizontally one above the other and having connected passages whereby sand delivered to the upper compartment is successively delivered from an upper to a lower compartment, a power driven shaft in each of said compartments and each shaft provided with removable paddles mounted thereon, said paddles being so constructed and arranged as to lift the sand, blend, compress and propel it longitudinally along the shaft from one end to the other where it is discharged into a lower compartment, each mixing compartment being enclosed but with a port opening adjacent each end in the upper portion thereof, a blower system having a common inlet duct provided with spaced branch pipes with each pipe connected to and discharging through a port opening at one end of and into the upper portion of its compartment whereby said branch pipes discharge and direct into the upper portion of one end of each compartment an air blast under pressure to impinge upon the sand, paddles and interior walls of one compartment and the underside of the mixing compartment thereabove, and an exhaust system including a common exhaust duct provided with spaced branch pipes with each pipe connected to and exhausting through a port opening at the other end of its compartment above said shaft and paddles, thereby causing a continuous flow of fresh air through each compartment and over the rotating shaft and paddles and over the sand mixture and the underside of the mixing compartment thereabove to thereby dissipate the heat from the walls of the compartments and cool and aerate the sand mixture in its travel through said compartments.

2,735,663
MIXING DEVICE
William E. Holt, Oakland, Calif.
Application September 5, 1951, Serial No. 245,173
5 Claims. (Cl. 259—75)



1. A mixing device comprising a housing enclosing an electric motor vertically mounted therein, a rear vertical drive shaft laterally spaced from and operatively connected to said motor, an eccentric on said shaft, a front vertical drive shaft projecting through said housing, a connecting rod on said eccentric pivotally connected to said front drive shaft and arranged to oscillate said shaft about its vertical axis, means forming a lubricating oil compartment in said housing enclosing said eccentric, connecting rod, and the lower portion of said front drive shaft, and a receptacle holder mounted on said front drive shaft externally of said housing and arranged to receive a horizontally positioned receptacle.

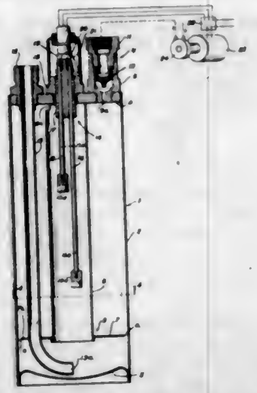
2,735,664
CARBURETOR FOR INTERNAL COMBUSTION ENGINES
John G. Gamble, Milford, Conn.
Application March 16, 1955, Serial No. 494,621
11 Claims. (Cl. 261—23)



1. A carburetor for an internal combustion engine, said carburetor comprising a chamber having a plurality of venturi tubes therein, means to admit air and fuel to each of said tubes, and a single diaphragm throttle valve having a central expandable opening therein controlling the discharge ends of said tubes, said valve being movable to enlarge the valve opening to permit discharge from said tubes serially and cumulatively.

2,735,665
CARBONATOR
Harold E. Lance, Royal Oak, Mich., assignor to Temprite Products Corporation, Birmingham, Mich., a corporation of Michigan
Application November 12, 1953, Serial No. 391,562
4 Claims. (Cl. 261—27)

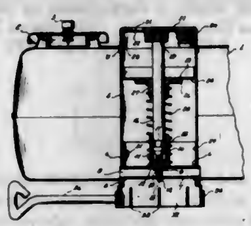
1. Liquid carbonating apparatus comprising a closed tank for holding carbon dioxide gas and liquid to be carbonated; baffle means in the tank chamber comprising an upright tubular part with its lower end open and its upper end in communication with the surrounding tank chamber and a bottom part extending from the lower end of the tubular part across the tank chamber toward the side wall thereof and above and substantially separated from the bottom wall thereof, the baffle means serving to divide the tank chamber into a liquid agitation zone overlying the bottom part and surounding the tubular part of the baffle means and a liquid quiescent zone below the bottom part and within the tubular part of the baffle means and there being between the bottom part of the agitation zone and the part of the quiescent zone below the bottom part of the baffle means a communication opening adjacent the side wall of the tank formed and arranged to restrict the passage from the agitation zone to the quiescent zone of bubbles of undissolved gas while permitting large volume flow therethrough of liquid; means for conducting gas under pressure into the tank chamber; means for conducting liquid under pressure into the tank chamber comprising a nozzle arranged to deliver a solid jet of liquid directly into the agitation zone of the chamber and the body of liquid therein to strongly agitate the liquid and intimately intermix it and the gas present in the said zone by formation of a great mass of bubbles therein, the nozzle having its axis disposed to direct the liquid jet directly toward the upper surface of the bottom part of the baffle means; means disposed in the quiescent zone within the



tubular part of the baffle means for controlling the admission of liquid through the nozzle and maintaining the level of the liquid in the tank above the level of the said communication opening between the agitation and quiescent zones of the tank chamber; and a carbonated-liquid discharge conduit having an inlet opening in the quiescent zone affording a free and unobstructed discharge flow of carbonated liquid through said conduit, the said opening being disposed directly below the lower open end of the tubular part of the baffle means and in a relation to the baffle means such that the path of all liquid moving from the said communication opening between the agitation and quiescent zones to the inlet opening of the discharge conduit must pass beneath the lower open end of the baffle tube and approach the said inlet opening in a downward direction at a velocity that is much lower than the velocity of liquid flow through the discharge conduit, whereby bubbles of undissolved gas in the liquid flowing from the communication opening to the inlet opening of the liquid discharge conduit are permitted to rise through the liquid in the tubular part of the baffle means.

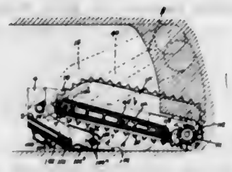
2,735,666
EMERGENCY FUEL SUPPLY DEVICE FOR INTERNAL COMBUSTION ENGINES
Vito Fresolone, Union, N. J.
Application October 5, 1951, Serial No. 249,881
4 Claims. (Cl. 261—71)

2. An emergency fuel supply device for attachment to the conventional carburetor of an internal combustion engine comprising: a fuel supply tank wholly separate and independent of the carburetor, an air tube extending vertically through the tank, a fuel supply tube arranged transversely across the air inlet tube and internally communicating with the interior of the storage tank, and valvular means for controlling the discharge of fuel from the interior of the fuel supply tube to the interior of the



air tube, in combination with an adapter one end portion of which is fitted into the lower end of the air tube and is provided with bayonet slots engaging the fuel supply tube to detachably secure the adapter to said air tube and tank.

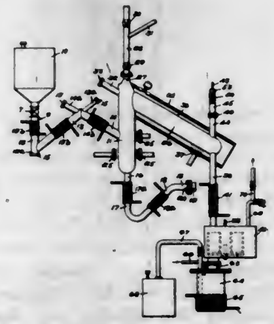
2,735,667
COAL MINING APPARATUS WITH RELATIVELY MOVABLE CUTTER BARS
Raoul Potvin, Franklin, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application November 27, 1951, Serial No. 258,337
15 Claims. (Cl. 262—29)



1. In a mining machine, a disintegrating head mechanism for removing mineral from a solid mine vein, said head mechanism mounted to move in a direction opposed to its length and comprising parallel outer disintegrating elements movable in parallel orbits to form parallel slots in the mineral of a mine vein, intermediate disintegrating elements movable in parallel orbits in parallelism with the orbits of said outer elements and cooperating to form a transverse opening in the mineral with such opening extending between and communicating with said parallel slots thereby to provide a core of mineral between the slots, means for mounting said intermediate disintegrating elements for movement relative to said outer elements in substantially the same direction as the direction of operating movement of said head mechanism to effect tearing away of the core as said head mechanism is moved as aforesaid, and means for moving said intermediate disintegrating elements as aforesaid relative to said outer elements.

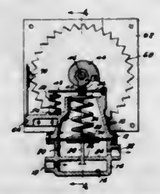
2,735,668
RECOVERY OF SODIUM AND CALCIUM METALS FROM ELECTROLYTIC SLUDGE
Bernard A. Gruber, Lynnfield, Emanuel Gordon, Salem, and Robert A. Jermain, Manchester, Mass., assignors to Metal Hydrides Incorporated, Beverly, Mass., a corporation of Massachusetts
Application December 1, 1952, Serial No. 323,412
1 Claim. (Cl. 266—19)

A normally hermetically sealed apparatus for separately recovering sodium and calcium metals by distillation from electrolytic sludge containing said metals which comprises a substantially vertical distillation receptacle, therein toward its other end by gravity, said other end a condenser communicating with the upper portion of said receptacle and arranged to permit molten metal to flow of the condenser having a discharge outlet, a valve for opening and closing said outlet, means for opening and closing said valve while maintaining the apparatus hermetically sealed, means adapted for communication with said outlet for separately casting said metals while maintaining the apparatus hermetically sealed, means for feeding molten sludge into the distillation receptacle while maintaining it hermetically sealed, means for introducing an inert gas at atmospheric pressure into the intercommunicable portions of the apparatus, means for sub-



jecting said intercommunicable portions to reduced pressure, means for controlling the temperature of said condenser, and means for heating the sludge in said receptacle to a temperature above the boiling temperature of sodium metal but below the boiling temperature of calcium metal at atmospheric pressure whereby sodium metal may be distilled and recovered from the sludge in said receptacle when said inert gas is in said intercommunicable portions and said calcium metal may be distilled at said temperature and recovered from said sludge when said intercommunicable portions are subjected to reduced pressure.

2,735,669
STEP VALVE FOR PRESSURE REGULATION
Ernst E. Seiler, Huntsville, Ala., assignor to the United States of America as represented by the Secretary of the Army
Application March 18, 1952, Serial No. 277,310
2 Claims. (Cl. 267—1)
(Granted under Title 35, U. S. Code (1952), sec. 266)



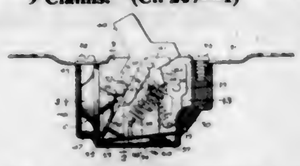
1. In a spring urged diaphragm fluid pressure regulator, spring adjustment means comprising, a housing, a diaphragm spring within said housing, a cam rotatably mounted on said housing and adapted to vary the force of said diaphragm spring, a lever pivotally mounted on said housing and having its intermediate portion interposed between said cam and said diaphragm spring, a lever spring mounted on said housing and urging said lever against said cam, said lever spring acting at the free end of said lever to provide a greater moment arm between said lever spring and the cam contact point on said lever than between said point and said pivot, whereby said lever spring overcomes the friction in said pivot independent of said diaphragm spring.

2,735,670
SELF-CENTERING SHOCK ABSORBER
Harold E. Schultze, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application May 22, 1952, Serial No. 289,285
6 Claims. (Cl. 267—1)



1. A self-centering shock absorber consisting of a fixed cylinder provided with head members, a fluid reservoir surrounding the cylinder and attached to said cylinder head members; a rod slidably extending through one cylinder head member and having a piston thereon within the cylinder, said piston normally being positioned between two spaced apertures in the cylinder wall connecting said cylinder with the reservoir; two oppositely acting fluid flow restricting valves in the piston; a one way valve in each cylinder head member providing communication between the reservoir and the respective cylinder chambers on each side of the piston; two separate coil springs surrounding the reservoir, one coil spring abutting against the rod carrying head member, the other coil spring against an annular flange on the reservoir; a shiftable abutment interposed between said springs; and means secured to said shiftable abutment and the piston rod interconnecting the same.

2,735,671
TIME DELAY MECHANISM
Frank O. Kuhn, Flint, Mich.
Application April 3, 1953, Serial No. 346,655
9 Claims. (Cl. 267—1)



1. A time delay mechanism comprising a cup having outwardly flaring side walls, said side walls having a radially extending peripheral portion, a cylindrical flange formed integrally with the outer edge of said radial portion, a compressible diaphragm positioned within said flange and engaging said radial portion of said cup to form a chamber between said diaphragm and said cup, a flat lock ring superposed over the peripheral portion of said diaphragm and likewise positioned within said flange, lock lugs formed in said flange and in engagement with said lock ring to normally maintain the entire peripheral portion of said diaphragm under pressure between said lock ring and radial portion of said cup, said lock ring being chordally cut away to form an outlet valve for said chamber of the exposed sector of said diaphragm in conjunction with the adjacent radial portion of the cup, and means for metering the entrance of gaseous fluid to said chamber.

2,735,672
COMBINED LINER AND PROTECTOR FOR LEAF SPRINGS
Stephen D. Bradley, Detroit, Mich., assignor, by mesne assignments, to Spring Cover Manufacturing Company, Inc., Detroit, Mich., a corporation of Michigan
Application December 16, 1950, Serial No. 201,144
2 Claims. (Cl. 267—49)



1. A liner and protector for leaf springs comprising an elongated strip of flexible and deformable material having beaded side edge portions, said strip being adapted to be arranged between adjacent leaves of the spring and having a substantially flat central portion of less width than the leaves with which it is to be assembled, the beaded side edge portions of the strip being connected to said central portion by angularly disposed webs joined at their connection with said central portion so as to define an elongated hollow space therebetween to permit compression of said webs against each other by the leaves with which the strip is to be assembled.

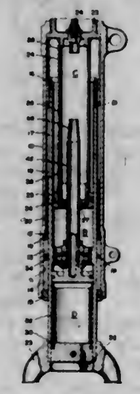
2,735,673
AUXILIARY SUSPENSION BUMPER
George H. Muller, Northville, Mich., assignor to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application January 10, 1952, Serial No. 265,783
7 Claims. (Cl. 267—63)



1. A resilient suspension bumper for a motor vehicle having a sprung member and an unsprung member mounted for relative movement toward and away from each other, comprising a unitary bumper of resilient material having a base portion positioned adjacent one of said members and so located as to be engaged by the other of said members upon a predetermined movement of said members toward each other, means supporting said base of the bumper upon said one member, said base being formed with a pair of shoulders on opposite sides thereof facing outwardly from said one member, and a pair only of diverging wings integrally formed with said base and projecting outwardly beyond said shoulders and foldable toward said shoulders when engaged by said other member, the over-all span of said pair of diverging wings in a direction transversely of the bumper being less in the free position of said bumper than the over-all transverse width of the base portion of said bumper, said diverging wings being yieldably foldable at a relatively low spring rate when initially engaged by said other member and being engageable with said shoulders upon a predetermined further movement of said other member toward one member to provide a materially increased spring rate for the bumper.

2,735,674
SHOCK ABSORBING STRUT
Ira D. Smith, Bedford, Julius J. Takacs, Lyndhurst, and Richard F. Warner, Cleveland, Ohio, assignors to The Cleveland Pneumatic Tool Company, Cleveland, Ohio, a corporation of Ohio
Application February 11, 1953, Serial No. 336,344
5 Claims. (Cl. 267—64)

1. A shock absorbing unit comprising an outer casing arranged to telescope with a lower casing, a pair of partitioned fluid containing chambers in said casings, a first and a second path of communication between said chambers through which fluid is displaced to dissipate energy during compression of the unit, said second path including a tubular element extending from one of said chambers to the other, means on said element responsive to the inward telescoping movement of said casings for closing



said first path after the initial compression of said unit, and means including a plunger valve in fluid tight engagement with said element slidable relative thereto by virtue of pressure variation in one of said chambers for controlling the effective size of said second path.

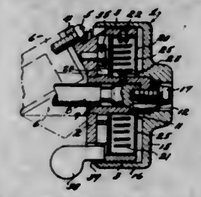
2,735,675
MEANS FOR CLOSING DOORS
Eric Stanley Lindsey, London, England, assignor to Caston Barber Limited, London, England, a British company
Application June 3, 1954, Serial No. 434,219
4 Claims. (Cl. 268—69)



1. Means for closing a door by dead weight closing gear, comprising a tubular guide, upper and lower weights slidably mounted within said guide, a flexible connection attached to and extending from the door freely through the upper weight to an anchorage on the lower weight, an open-ended tube for supporting the upper weight from the lower weight when the door is open, and stop means carried by said guide to arrest the movement of the upper weight at a predetermined point in the door closure movement.

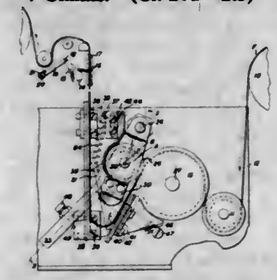
2,735,676
WINDOW REGULATOR
Howard E. Lange, North Miami, Fla.
Application September 22, 1954, Serial No. 457,662
1 Claim. (Cl. 268—104)

A semi-automatic window regulator for the glazed panels of a window assembly inter-connected for simultaneous manipulation thereof through a crank actuated operating means, which regulator comprises a fixed casing member secured to said window assembly in a position over and around its operating means from which the crank has been removed, a rotatable casing member encompassing said fixed member, and bearing thereon, in engagement with and driving the window operating means, a coiled spring disposed within and secured between said casing members, said spring being energized by movement of the rotatable casing member as the window panels are opened whereby to exert a sufficient counter-rotative



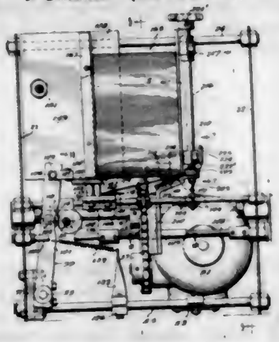
effect against said rotatable casing member to insure a spring-driven closing of the window panels, and a detent securing the outer rotatable casing member and the window operating means against counter-rotation induced by said energized spring, said detent being releasable to permit counter-rotation of the outer rotatable casing member and the window operating means to close the window panels.

2,735,677
AUTOMATIC LOOP CONTROL MECHANISM
Otto Sandvik and Jasper S. Chandler, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey
Application December 24, 1952, Serial No. 327,832
7 Claims. (Cl. 271—2.3)



1. An automatic loop control for maintaining a free loop of film in front of a film strip feeding means which withdraws film from said loop at a given rate, and comprising in combination a smooth film driving drum for feeding film into said loop; means for holding the film in wrapped relation with the periphery of said drum, including a pivoted guide member, a presser roll carried by said guide member to move between an operative position, wherein it presses said film onto the periphery of said drum with sufficient pressure that the drum feeds the film with no appreciable slippage, and an inoperative position, wherein it allows slippage between the film and drum; means for rotating said drum at such a rate that when no slippage occurs between the film and its periphery it will feed the film into said loop at a rate in excess of that at which said feeding means draws film from said loop; a spring acting on said guide member to normally move said presser roller to its operative position; means for directly moving said presser roll to its inoperative position against the action of said spring when said loop expands beyond a given size, and comprising a loop confining means including a movable loop-confining member directly connected to said guide member and normally moved by said spring to a position to confine a reach of the loop of film to a loop of given size and adapted to be engaged and moved by said reach to counteract the force of said spring when said loop expands beyond said given size.

2,735,678
FOLDED CARTON FEEDING AND PRINTING DEVICE
James G. McKay, Chicago, Ill.
Application September 18, 1953, Serial No. 380,935
9 Claims. (Cl. 271—10)



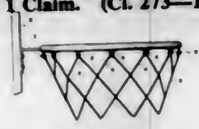
1. In apparatus for supporting a stack of flat articles such as folded cartons, stripping a single article from the bottom of the stack and ejecting same from said apparatus, said apparatus comprising a magazine having a stack of articles therein, means defining a well offset from said stack and having supporting means on opposite sides thereof carrying the said stack, a reciprocating pusher adapted to move at least partially across said well from one of said sides to engage the edge of the bottom-most article and push same off the first supporting means to move same into alignment with the well whereby to cause said article to rotate about the other supporting means downward into said well, a conveyor chain in said well for carrying articles out of said well in a direction perpendicular to the line of movement of said pusher and normally clearing the bottom-most member when supported, and drive means for driving the pusher and chain in synchronism, the herein invention which comprises: said second supporting means including a slanted wall of said well engaging an edge of the bottom-most article at substantially the same level as said first supporting means, said magazine including a vertical wall having its bottom edge spaced above said slanted wall whereby to form therewith a throat to receive the edge of said article when pushed as aforesaid and the slanted wall continuing beyond said wall to enable said movement, the vertical width of said throat being substantially less than the thickness of two articles but greater than the thickness of one article, and means for adjusting the width of the throat for enabling said apparatus to be used with different thicknesses of articles.

2,735,679
COMBINED TEETER-TOTTER AND MERRY-GO-ROUND
Harold A. Mortenson, Seattle, Wash.
Application January 19, 1953, Serial No. 331,930
4 Claims. (Cl. 272—30)



1. Amusement apparatus of the character indicated comprising a board providing a seat at each end thereof, a base presenting a mounting standard, a thimble sleeved for rotary movement upon said mounting standard, and a comparatively stiff coil spring secured to said thimble with the upper end projecting thereabove and so connected with the board intermediate the two seats as to sustain the board upon said spring.

2,735,680
BASKETBALL GOAL
Howard M. Ross, Yonkers, N. Y.
Application November 2, 1953, Serial No. 389,788
1 Claim. (Cl. 273—1.5)



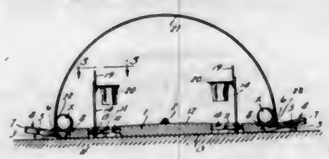
In a basketball goal, a ring, a hook for attaching a net to the ring comprising a single length of heavy wire stock having its terminal end portions directed away from each other in substantial alignment and secured to the under surface of the ring, vertical portions depending from the inner ends of said terminal end portions in spaced parallelism with their lower ends return bent forwardly into spaced parallel upright portions of less height than the depending portions and having their upper ends return bent horizontally partially around the depending portions and connected to each other by a vertical bight at the midportion of the single length of wire stock, said vertical bight being spaced behind the depending portions for threading a net cord through said last named space and into seating relation with the bend connecting the depending and upright portions.

2,735,681
SWEEP MECHANISM FOR BOWLING ALLEY
Kenneth C. Sherman, Stonington, Conn., assignor, by mesne assignments, to General Dynamics Corporation, New York, N. Y., a corporation of Delaware
Application May 1, 1952, Serial No. 285,401
3 Claims. (Cl. 273—54)



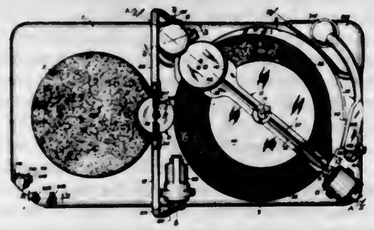
1. In combination with a bowling alley, sweep means comprising a blade, means normally supporting said blade in an idle position extending rearward from said supporting means along a side of the alley and substantially above the level of the alley, means for releasing said blade for limited downward movement under gravity, means for causing said blade to swing outward and forward across the alley as it descends, means automatically operating to move the blade along the alley through a sweeping stroke and then in the reverse direction through a return stroke to its initial position, and means for raising and swinging the blade during said return stroke.

2,735,682
BASKETBALL GAME
Robert E. Sweet, Minneapolis, Minn.
Application September 7, 1955, Serial No. 532,891
6 Claims. (Cl. 273—85)



1. In a device of the class described, a court-forming baseboard, a pair of spaced basket-carrying brackets projecting upwardly from said baseboard one each in spaced relation to an opposite end of said baseboard, ball-striking levers pivotally mounted at opposite ends of said baseboard one each behind one of said basket-carrying brackets and in substantial alignment therewith, the inner ends of said levers adapted to engage a ball placed thereover upon lowering movement of the outer ends of said levers, an arcuate guide strip overlying said basket-carrying brackets and the inner ball-striking ends of said levers, the opposite ends of said arcuate guide strip being secured to said base plate intermediate the inner ball-striking ends of said levers and their pivotal connections to said base board, whereby to influence the trajectory of a ball in the direction of the opposite basket.

2,735,683
RECORD PLAYER
Victor G. Klein and Rudy F. Schneller, St. Louis, and Carl H. Mueller, Ferguson, Mo., assignors to Lincoln Engineering Company, St. Louis, Mo., a corporation of Missouri
Application June 15, 1949, Serial No. 99,151
17 Claims. (Cl. 274—10)



1. A record changer comprising a frame, a turntable mounted on the frame for pivotal movement about a horizontal axis between an upright position wherein it faces upward and an inverted position wherein it faces downward, a platform on the frame located adjacent the turntable for holding a stack of records to be played, a record transfer arm pivoted on the frame for swinging movement about a horizontal axis extending between the turntable and platform, and a record lifter pivoted on a horizontal axis on the record transfer arm, the latter being swingable on its pivotal axis between a position extending over the platform to engage the record lifter flatwise with the uppermost record of the stack and a position extending over the upright turntable to deposit a record flatwise thereon, the pivotal axis of the turntable extending diagonally with respect to the pivotal axis of the transfer arm.

2,735,684
SELF-CLOSING SAFETY MECHANISM FOR RELEASABLY RETAINING A ROTATABLE MEMBER
Nelson C. Longee, Oakland, Nufer Godzyk, Jr., Clifton, and Zoltan D. Fodor, Lodi, N. J., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application December 21, 1954, Serial No. 476,664
11 Claims. (Cl. 279—1)



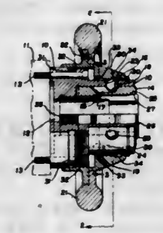
1. A self-closing safety mechanism for releasably retaining a rotatable member comprising a support, a chuck rotatably mounted on said support, a collar mounted on said chuck for rotation therewith and slidable thereon between positions at which the chuck is open or closed, means on said collar cooperating with means on said support for automatically moving said collar from the open position to the closed position upon rotation thereof and for maintaining said collar in the closed position.

2,735,685
CHUCK FOR JIG SAWS OR THE LIKE
Michael Joseph Karr, Kalamazoo, Mich., assignor to Atlas Press Company, Kalamazoo, Mich., a corporation of Michigan
Application October 26, 1951, Serial No. 253,355
4 Claims. (Cl. 279—44)



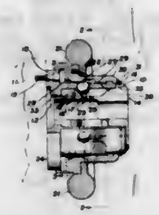
1. In a machine tool the combination of a cylindrical chuck body having a longitudinally-extending notch therein formed by substantially radially-extending walls at 90° to one another, a chuck jaw comprising a cylindrical segment having a pair of flat walls at 90° to one another, which, with said chuck body, substantially forms a cylinder, a ring surrounding said chuck body and jaw, a screw threaded in said ring and bearing on said jaw to force it into clamping engagement in said notch a saw clamped in said notch and having flat sides and a cutting edge, one flat side lying against one of the said walls of said notch and the other flat side engaging one of the walls of said chuck jaw, said saw being shiftable on unclamping to engage the other wall of said notch for 90° adjustment of its cutting edge and means for retaining said chuck jaw within said ring.

2,735,686
CHUCKING DEVICE
John R. Cox, Cleveland, Ohio
Application October 19, 1953, Serial No. 386,807
10 Claims. (Cl. 279—50)



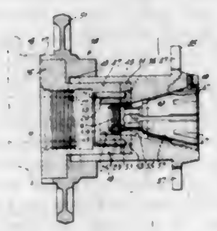
1. A chuck comprising in combination a base, said base having an open space for accommodating a collet and adapted to mount a collet in said open space, an actuating head in said open space and adapted to surround and actuate said collet by reciprocal movement of the actuating head in a direction axially of the collet, said actuating head having opposed camming surfaces inclined toward each other and arranged on the outer wall of the actuating head, a pair of sets of balls carried by said base around said actuating head and movable radially toward and away from said actuating head, the sets of balls being spaced apart in an axial direction and arranged for the balls of one set to engage one of said opposed camming surfaces and the balls of the other set to engage the other of said opposed camming surfaces, and an operating member carried by said base for alternately moving one of said sets of balls radially inward and permitting the other of said sets of balls to move radially outward, the alternate movement of said sets of balls against the opposed camming surfaces of the actuating head causing reciprocal movement of the actuating head for actuating said collet.

2,735,687
CAM-OPERATED CHUCK
John R. Cox, Cleveland, Ohio
Application October 19, 1953, Serial No. 386,806
10 Claims. (Cl. 279—51)



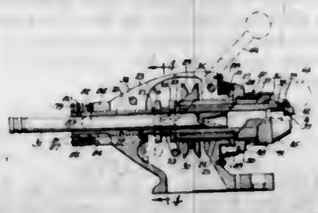
1. A chuck comprising a base having a cylindrical open space disposed therein, a collet disposed in said open space and slidably carried by said base to move axially of said open space, a camming member carried by said collet and extending radially outward therefrom, said collet being movable to open and close upon movement of said camming member, said camming member having a first camming surface and a second camming surface arranged in opposition to each other, an operating member threadably engaged to and embracing said base and arranged to move forwardly and rearwardly of the base, said operating member having a third camming surface and a fourth camming surface arranged in opposition to each other, and first roller means and second roller means carried by said base and movable radially thereof, said first roller means being arranged to be alternately moved radially inward and outward by the first camming surface of the camming member and by the third camming surface of the operating member and said second roller means being arranged to be alternately moved radially inward and outward by the second camming surface of the camming member and by the fourth camming surface of the operating member, the operation of said operating members moving said camming member by movement of said roller means relative to said camming surfaces.

2,735,688
COLLET AND CHUCK
Herve R. Duchesneau, New Bedford, Mass., and Arthur R. Carling, West Hartford, Conn., assignors to Aco Incorporated, Hartford, Conn.
Application October 24, 1952, Serial No. 316,598
18 Claims. (Cl. 279—53)



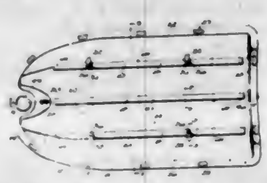
1. A work holding apparatus for a lathe or the like comprising a spindle body attachable on the spindle of a machine, a threaded nut within said body and freely movable longitudinally therein, a chuck body, a collet insertable through the axial aperture of said chuck body and engageable by said nut, the engagement of said nut and said collet causing said chuck body to be frictionally engaged by said spindle body.

2,735,689
CHUCK MECHANISM
Jens Axel W. Madsen, Sioux City, Iowa, assignor to Albertson & Company, Inc., Sioux City, Iowa, a corporation of Iowa
Application November 1, 1952, Serial No. 318,180
16 Claims. (Cl. 279—74)



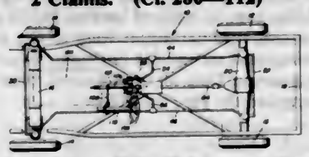
1. A chuck mechanism comprising a hollow spindle, a nose-piece mounted in one end of the spindle and projecting axially therefrom, said nose-piece having slots in the projecting end thereof which extend radially of the axis of the spindle, gripping elements mounted in said slots for movements radially of the spindle axis, a chuck sleeve mounted on the exterior of the spindle adjacent the said one end thereof and having an internal conical surface for engagement with said gripping elements to control the positions thereof radially of the spindle axis, a collar threaded onto the chuck sleeve, a sleeve bearing fixed to the exterior of the spindle and having a flange at one end thereof, a ring secured to the collar, the ring and the collar loosely receiving the flange of the sleeve bearing between them, springs mounted in the ring to force the collar and flange together, the sleeve bearing having a plurality of axially extending openings therein, a plurality of push rods mounted for linear movements in said openings and being longer than the sleeve bearing, one end of each push rod engaging the chuck sleeve and the other end projecting beyond the end of the sleeve bearing opposite the end at which the flange is located, and actuating means including a hand lever for applying force against the projecting end of each push rod to cause the push rods to move the collar and the chuck sleeve axially of the spindle against the action of the springs in said ring, whereby the internal conical surface on the chuck sleeve is shifted with respect to the gripping elements so that the gripping elements may move radially outwardly.

2,735,690
SLED WITH DETACHABLE RUNNER
Frederick T. Paden, Collingswood, N. J., and Alexander C. H. Weiss, Chicago, Ill., assignors to the United States of America as represented by the Secretary of the Army
Application May 16, 1952, Serial No. 288,362
3 Claims. (Cl. 280—12)
(Granted under Title 35, U. S. Code (1952), sec. 266)



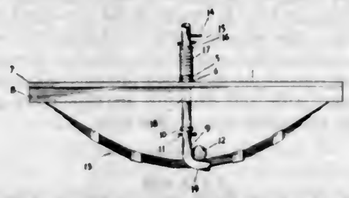
1. In a sled a unitary body portion of substantially stiff sheet material and including a bottom, transversely spaced longitudinal channels formed in the bottom and extending continuously for substantially the entire length of the bottom, the channels having tops spaced above said bottom and sides which converge upwardly, the sides of the channels having transverse openings spaced above the bottom of the sled body portion, runners engaging within the channels and extending throughout substantially their entire lengths and having upwardly converging sides which contact the converging sides of the channels, the lower surfaces of the runners being spaced below the bottom of the sled body portion, the runners having spaced transverse openings for registration with the openings of the channels and being provided in their tops with longitudinal grooves, pin means engaging through the registering openings of the runners and channels and securing the runners within the channels, there being openings formed in the tops of the channels above the grooves of the runners, upwardly directed screws extending through the openings in the tops of the channels and having their heads disposed within the space afforded by said grooves, lashing elements connected with the screws, and a towing element secured to the sled body portion near its forward end.

2,735,691
STEERING CONTROLLED VEHICLE STABILIZING SYSTEM
Marvin C. Carlson, Valparaiso, Ind.
Application October 8, 1953, Serial No. 384,927
2 Claims. (Cl. 280—112)



1. In a vehicle having a frame supported by wheels, a source of fluid pressure, a fluid motor associated with each of the vehicle wheels and connected between said frame and its supporting wheels to control vertical movement of the frame, each fluid motor having a piston which divides the motor into two chambers, a first conduit connecting the chambers at corresponding ends of the fluid motors on one side of the vehicle frame with said source, a second conduit connecting the chambers at corresponding ends of the other fluid motors with said source, fluid conductors at each end of said frame interconnecting the chambers of the relatively opposite ends of said motors, and means connected with the steering mechanism of the vehicle for selectively connecting one of said conduits with said source while simultaneously relieving the pressure of the other of said conduits.

2,735,692
VEHICLE SPRING IMMOBILIZING DEVICE
Kenneth T. Vogt, Reno, Nev., assignor of fifty per cent to the firm of Samuelson and Johnson, Reno, Nev., a partnership consisting of Norman H. Samuelson and James W. Johnson, Jr., and fifty per cent to Cyrus D. Samuelson, Hackensack, N. J.
Application January 9, 1953, Serial No. 330,448
2 Claims. (Cl. 280—150)



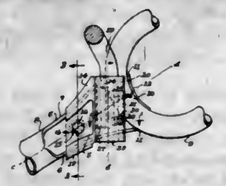
1. A spring immobilizing device for a spring-supported vehicle wheel and axle comprising a rod with a right angle portion at the lower end; said right angle portion being shaped to fit under the axle housing of the vehicle; a spring being mounted on the upper portion of said rod and being held in place by upper and lower containing means; said lower containing means bearing on a substantially rigid portion of the vehicle.

2,735,693
MUD GUARD FOR TRACTOR CAB
William C. Eaves, Elyria, and Richard W. Whitehill, Cleveland, Ohio
Application May 29, 1952, Serial No. 290,666
10 Claims. (Cl. 280—154.5)



1. In combination, a truck tractor having a cab body and chassis with front and rear wheels, said chassis including channel bars extending longitudinally thereof, rigid guard-holding means extending transversely across said channel bars and positioned at a point between said rear wheels and said cab body, flexible guard means having its lower portion secured to said holding means in a plane substantially parallel thereto and extending upwardly at least to a point to intercept the throw of moisture and other foreign matter from said rear wheels onto the rear of said cab body and elsewhere in the path of such throw, and means for attaching said holding means in wedging engagement with the flanges of said channel bars.

2,735,694
BICYCLE KICK STAND MOUNTING BRACKET
Lyle C. Atwood and Agnar Johnson, Rockford, Ill., assignors to Atwood Vacuum Machine Company, Rockford, Ill., a corporation of Illinois
Original application November 22, 1950, Serial No. 197,022, now Patent No. 2,685,452, dated August 3, 1954. Divided and this application April 7, 1952, Serial No. 281,004
4 Claims. (Cl. 280—301)

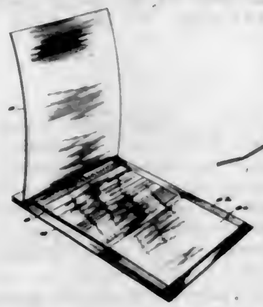


1. In combination, a cycle frame member formed to provide a downwardly opening channel defined by a top wall and spaced side walls extending downwardly therefrom and having bottom edges in a common substantially horizontal plane, a mounting bracket for a cycle attachment, such as a kick stand, comprising a horizontally disposed attaching plate of generally rectangular form abutting said bottom edges and having a central portion offset upwardly from the plane of the plate and profiled to fit non-rotatively between said side walls, said plate having one longitudinal edge portion bent to upwardly opening channel-shaped cross-section receiving in the trough thereof the edge portion of one of said side walls to further hold said plate positively against rotation from a predetermined assembled position on the frame and so that a single bolt will suffice to secure the plate, and a bolt fastening said plate to said frame member entered in a hole provided in the top wall of said frame member and in a registering hole provided in said plate substantially centrally of said upwardly offset central portion.

2,735,695
BILLING BOOK
Lyle M. Bryngelson, Finley, N. Dak.
Application July 3, 1953, Serial No. 365,915
5 Claims. (Cl. 282—23)

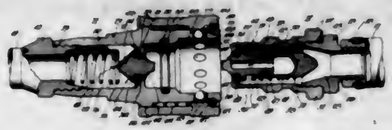
1. A billing book comprising a plurality of envelope pages alternated with record pages, each envelope page being superimposed above a record page, and being composed of a billing slip portion co-extensive with said record page and a preformed envelope body portion, said billing

slip portion and record page having registering information lines whereby data written on said billing slip will be carbon copied on said record page, and said billing



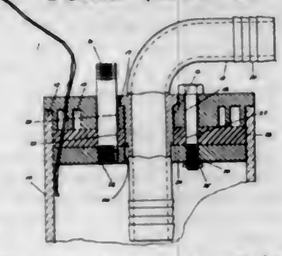
strip having a preprinted post address on the reverse face thereof, and being foldable onto said body portion as a closure flap to present said address on the face of the envelope.

2,735,696
COUPLING
Gene L. Omon and Kurt E. Hohnl, Milwaukee, Wis., assignors to J. I. Case Company, Racine, Wis., a corporation of Wisconsin
Application October 3, 1951, Serial No. 249,552
1 Claim. (Cl. 284—19)



A valved coupling comprising, a pair of valve housings, inwardly facing valve seats in each of said housings, means releasably coupling said valve housings together, one of said valves including an element movable relative to the associated valve seat, said element having a relatively large pressure bearing surface facing inwardly of the housing, a strong spring disposed within the associated housing in engagement with said one valve for biasing said one valve toward its seat, the other of said valves including a tubular valve guide fixedly positioned within said housing and having its inwardly facing end closed, a valve piston slidably supported in said guide element for movement relative to the associated valve seat, means defining a bleed port leading from a point within said tubular valve guide to a point beyond the last mentioned valve seat, as related to said valve guide when said valve is on said seat, said element and said valve piston, respectively, having outwardly projecting axial portions disposed for engagement with each other when said valve housings are coupled together, a circumferentially projecting portion on said valve piston having an outside diameter greater than the outside diameter of said valve guide, said circumferentially projecting portion having a relatively small fluid pressure bearing surface, as compared with said element, facing inwardly of the housing, and a spring, relatively weak, as compared with the first mentioned spring, disposed between said valve piston and the end portion of said guide element, said circumferentially projecting portion coacting with the outer edge portion of said guide to limit the inward travel of said valve piston, and means for guiding the movement of said element in its associated housing axially of said valve piston portion of the other valve, said means affording engagement of said element with the associated valve seat when said housings are uncoupled from each other.

2,735,697
SEALED REDUCER JOINT BETWEEN PIPES
Clarence V. Zanin, Clarendon Hills, Ill.
Application January 12, 1953, Serial No. 330,765
1 Claim. (Cl. 285—22)



A well seal comprising a cap provided with a plurality of concentric grooves of different diameters opening on one face thereof, a bore and a counterbore opening on the other face thereof inside the innermost groove, the bore extending completely through the cap, a pipe connector having a flanged collar thereon fitting into the bore and the counterbore, a well casing received into one of the grooves of the cap, a resilient gasket fitting around the collar and extending laterally at least to the inner rim of the well casing, and means for pressing the gasket tightly against the grooved face of the cap and laterally against the well casing and the pipe connector.

2,735,698
HEADER PLATE-TUBE JOINT FOR HEAT-EXCHANGER CORE-UNITS
Howard F. Brinen, Racine, Wis., assignor to Young Radiator Company, Racine, Wis., a corporation of Wisconsin
Application August 1, 1952, Serial No. 302,220
2 Claims. (Cl. 285—56)

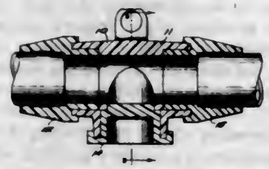


1. A ferruled header-plate and tube joint for a thin-wall tubular heat exchanger wherein the heat transfer is between fluids one of which is flowing under high pressure and high temperature relative to the other, the joint comprising a steel header plate of a thickness not less than ten times the thickness of the tube wall and formed with an aperature greater in diameter than the outside diameter of the tube, an aluminum tube with a wall thickness approximately five hundredths of an inch, the tube end extending through the header plate and within the thickness of the plate being cold-worked expanded radially outward to an inside diameter not less than two percent greater than the normal inside diameter of the tube with the exterior of the tube wall in firm and intimate contact with and exerting an expanding pressure against the aperture wall, and a steel thin-wall ferrule of a length substantially equal to the length of the expanded tube end and having a tapered end press fitted into the expanded tube and cold-worked expanded radially outward with the exterior wall of the expanded ferrule in firm and intimate contact with and exerting an expanding pressure against the expanded end of the tube.

2,735,699
SNAP FIT PLASTIC PIPE CONNECTOR ASSEMBLY
William H. Chadbourne, Evanston, Ill., assignor to The Danielson Manufacturing Company, a corporation of Connecticut
Application January 23, 1951, Serial No. 207,385
2 Claims. (Cl. 285—71)

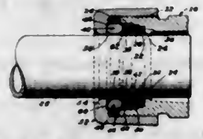
1. In a pipe connector assembly of slightly yieldable plastic material, a central body portion having a flow passage formed therein, a socket communicating with the

central flow passage, said socket being defined by an annular flange formed integral with said body portion and having an inner diameter greater than the diameter of said central flow passage to form an annular shoulder, said flange terminating in a conically formed tip converging toward the free end of the flange, said socket releasably receiving an adaptor therein, said adaptor including a body having a nipple formed integral therewith, said nipple including an outer cylindrical portion having an outer surface parallel to the inner surface of said flange and being slidably received thereby, the outer edge of said nipple abutting against said shoulder, the inner portion of said



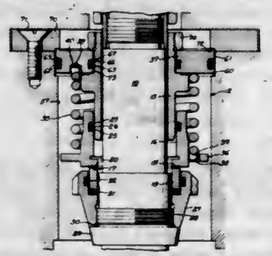
nipple being inclined toward the longitudinal axis thereof, a flow passage formed in said adaptor, the diameter of the portion of the adaptor flow passage extending through said nipple being substantially equal to the diameter of said central flow passage, an annular bead formed integral with said adaptor body and spaced from said nipple to define an annular recess therewith, the inclined portion of said nipple forming a wall of said recess, the inner surface of said bead being inclined in parallel relation to the inner portion of said nipple and defining the outer wall of said recess, said recess forming a conical channel for snap receiving and releasably retaining said conically formed tip therein.

2,735,700
PACKED SCREW THIMBLE PIPE JOINT
Walter J. Bowan and Donald W. Ferry, Decatur, Ill., assignors to Mueller Co., Decatur, Ill., a corporation of Illinois
Application April 1, 1952, Serial No. 279,822
2 Claims. (Cl. 285—122)



1. In a pipe joint the combination comprising: a hollow body having a terminal portion provided with an annular packing recess terminating at the inner end thereof in a flat annular shoulder forming a pipe-receiving aperture of less diameter than that of said recess, said recess having an outer cylindrical section merging into an inner, inwardly-tapering section which terminates in said shoulder; a yielding resilient rubber-like annular gasket complementary to said recess, disposed therein, and having a flat outer end face substantially flush with the outer end of said recess when said gasket is relaxed; a reversible rigid follower ring directly engaged with said gasket and of an outer diameter to be snugly received in said cylindrical section of said recess and an inner diameter to snugly embrace the pipe, the opposite ends of said ring being of identical configuration and each having a flat end face normal to the axis of said ring and of a radial width equal to at least a major portion of the radial width of said ring, at least a major portion of the longitudinal projection of said tapering recess section being in longitudinal alignment with said ring flat end face engaged with said gasket, each of said ring ends having a beveled radially-inner edge which when opposed to said gasket end face defines an annular cavity for flow of gasket material thereinto, the radial width of said cavity being relatively small as compared to that of said ring flat end faces; and means connected to said body for forcefully urging said ring against said gasket, whereby said ring flat end face engaged with said gasket immediately compresses the latter against said tapering recess section to constrict the inner section of said gasket about the pipe and on further compression to effect flow of resilient gasket material into said cavity to continuously maintain compression on said gasket on any wear of that surface thereof in contact with the pipe.

2,735,701
SEAL CONSTRUCTION
Murry F. Ecker, Downey, and Doran B. Harney, Compton, Calif., assignors to Pacific Pumps, Inc., Huntington Park, Calif., a corporation of California
Application July 24, 1952, Serial No. 300,632
8 Claims. (Cl. 286—11.14)



1. A sealing means for preventing leakage from a zone containing fluid under high pressure along a rotary shaft having an inner portion which is disposed in said zone and an outer portion which is external to said zone, said inner portion of said shaft being restrained against outward axial movement by restraining means engaging said outer portion thereof, but said inner portion of said shaft nevertheless moving axially outward to some extent due to yielding of said restraining means and axial compression of said shaft produced by said high pressure, said sealing means including: a nonrotatable sleeve surrounding said shaft; a first, nonrotatable annular sealing member in telescoped relation with said sleeve, said first sealing member having a first sealing face; an annular seal between said sleeve and said first sealing member; a second annular sealing member mounted on said shaft for rotation therewith, said second sealing member having a second sealing face engaging said first sealing face; and yieldable supporting means for said sleeve exposed to said high pressure and having a yieldability due to said high pressure which is substantially equal to said outward movement of said inner portion of said shaft which is produced by said high pressure so as to minimize relative axial movement between said sleeve and said first sealing member.

2,735,702
BRACKET FOR FOLDING LEG
Charles O. Larson, Sterling, Ill.
Application February 16, 1951, Serial No. 211,405
3 Claims. (Cl. 287—14)



1. A bracket for pivotally and foldably uniting legs to a table top or other support comprising a pair of side plates spaced apart the width of the leg to receive the leg therebetween and being normally vertically disposed when the leg is in operative supporting position, each side plate having at its upper edge an integral extension dis-

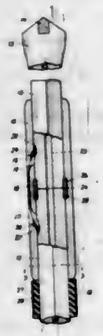
posed at right angles to the plate, said extensions lying in the same plane and being formed with means for attachment to the underside of the table or support, said side plates each having a pair of spaced holes having their centers disposed substantially in a common vertical plane, the holes of each pair being aligned for the reception of a clamping bolt, and a projection formed on each plate at the top thereof to form with the other plate a pair of end plates to form a four sided socket for the top portion of the associated leg.

2,735,703
PIVOTED ROD JOINT
William D. Goodman, Mesquite, Tex.
Application July 21, 1951, Serial No. 237,978
5 Claims. (Cl. 287—99)



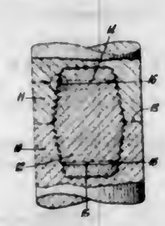
1. A connector for detachably securing a driving member to a driven member, the latter having an axially bored elongate shank and a transverse pin extending therethrough below the bore thereof, said connector comprising: a sleeve having a pair of diametrically opposed elongate slots therein, an end member on said sleeve having an open side and matching elongate slots in opposite walls thereof, said elongate shank being receivable in said end member between said opposing walls with the ends of said transverse pin extending into the slots of said walls, said shank being pivotable about said transverse pin to a position perpendicular to said sleeve, a plunger reciprocable in said sleeve and receivable in the bore of said shank for rigidly securing said sleeve in axial alignment with said shank, and means carried by said plunger and operable in the slots of said sleeve for actuating said plunger.

2,735,704
JOINT FOR ROCK DRILLS
Bengt Erik Ragnwald Löfqvist, Sandviken, Sweden, assignor to Sandvikens Jernverks Aktiebolag, Sandviken, Sweden, a joint stock company
Application September 5, 1951, Serial No. 245,111
Claims priority, application Sweden October 18, 1950
4 Claims. (Cl. 287—114)



4. In a percussion rock drill rod and the like, separable drill rod members having non-circular sections, each of said members being provided with a recess in a side wall near but spaced from its respective end, a sleeve fitting over the ends and having an inner surface corresponding in shape to said non-circular drill rod members, said sleeve being provided with two longitudinally spaced openings in the wall thereof, said openings being normally located partly coincident with said recesses with said rod members abutting within the sleeve, a single elongated locking device extending along the part of said sleeve between said openings and having its ends projecting inwardly through said openings into said recesses, the distance between the remote ends of said openings being less than the longitudinal extent of said locking device, said locking device comprising a flat spring having relatively thick ends, the spaces provided by said recesses being of sufficient size to accommodate the ends of said locking device freely to allow slight relative movement between the rod members and sleeve to reduce fatigue stresses in operation, the distance between the remote inside edges of said openings of said sleeve and the respective near extremities of said recesses being less than the thickness of the corresponding end of said locking device when said sleeve and rods are in a relative position where said edge is coincident with said extremity, whereby relative movement between the drill rod members and sleeve in either axial direction is limited by said ends of said locking device being jammed between said remote edges and near extremities.

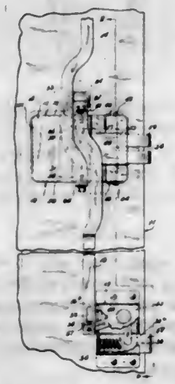
2,735,705
ELECTRODE JOINT
Harry V. Johnson and Neal J. Johnson, Niagara Falls, N. Y., assignors to Union Carbide and Carbon Corporation, a corporation of New York
Application October 12, 1954, Serial No. 461,714
5 Claims. (Cl. 287—127)



1. An electrode joint comprising contiguous electrode sections each provided with a threaded recess in the contiguous end face thereof, a nipple threaded into said recesses and holding said electrode sections with their end faces in mechanical and electrical contact, the threads of said recesses and said nipple providing clearance spaces therebetween when said nipple is tightened in said recesses, the end portions of the nipple being each provided with a bore generally normal to its longitudinal axis and a fusible thermal setting binder in said bores adapted to run out of said bores when melted and in volume sufficient to fill less than a major portion of the thread clearance spaces of the joint.

5. In a threaded carbonaceous connecting nipple for an electrode joint of the character in which the ends of carbonaceous electrode sections are provided with threaded recesses and a threaded nipple is provided which has its opposite ends entering said recesses and in which the threads of said recesses and said nipple provide clearance spaces therebetween when said nipple is tightened in said recesses; the improvement wherein the end portions of the nipple are each provided with a bore extending inwardly from the threaded surface generally normal to the longitudinal axis of the nipple and a fusible thermal setting binder is carried in said bores, is adapted to run out of said bores when melted, and is in volume sufficient to fill less than a major portion of the aforementioned thread clearance spaces when such nipple is embodied in an electrode joint of the character described.

2,735,706
MULTIPLE-BOLT FLUSH DOOR LOCK
Albert L. Pelcin, Maple Heights, Ohio, assignor to The Eastern Malleable Iron Company, Cleveland, Ohio, a corporation of Connecticut
Application April 8, 1953, Serial No. 347,505
10 Claims. (Cl. 292—34)



1. In lock mechanism of the character described, a sheet metal body including a bottom wall having first and second guideways thereon of which the first guideway intersects the second guideway at substantially right angles at an intermediate point of the latter, a first bolt slidable in said first guideway, handle means supported by said body for pivotal movement and engageable with said first bolt for causing movement of the latter along said first guideway, other movable bolt means including a pair of members slidable in said second guideway with their inner ends presented toward the inner end of said first bolt, oppositely inclined bearing surfaces on the inner ends of said members and defining a wedge recess and oppositely inclined bearing surfaces on said first bolt and defining a wedge portion on the latter having cooperating wedging engagement in said wedge recess such that movement of said first bolt along said first guideway wedgingly imparts movement to said members in an outward direction along said second guideway.

2,735,707
SASH LATCHING MECHANISM
Joseph Sylvan, Berkley, Mich.
Application June 17, 1952, Serial No. 293,887
4 Claims. (Cl. 292—57)



2. A latch for relatively shiftable upper and lower sashes having cooperating meeting rails defining a pair of inwardly opening linear channels having bottom walls and resilient converging side walls, comprising: a latch having an enlarged end portion, said latch mounted on one meeting rail and rotatable and shiftable to project its enlarged end from the channel of the rail in which mounted into the channel of the other rail, said head being engageable with the resilient converging walls of the other rail as the latch is rotated to urge the rails toward each other and yieldably resist rotation of the latch.

2,735,708
DOOR LOCK
Floyd J. Teed, South Bend, Ind., assignor, by mesne assignments, to Studebaker-Packard Corporation, a corporation of Michigan
Application February 24, 1953, Serial No. 338,306
2 Claims. (Cl. 292—182)



1. A door lock adapted for use on a structure having first and second doors hinged to the frame of the structure said door lock comprising a locking plunger engageable with said first door for locking said first door, actuating means associated with said second door and being operable to effect movement of said locking plunger into locking engagement with said first door when said second door is closed and effect movement of said locking plunger out of locking engagement with said first door when said second door is opened, said actuating means including an actuating plunger engageable with said second door, a flexible cable interconnecting said locking plunger and said actuating plunger, first spring means disposed between said frame and said locking plunger, and second spring means disposed between said frame and said actuating plunger having a greater force than said first spring means.

2,735,709
HATCH COVER LOCK
Alfred L. Thompson, Munster, Ind., assignor to Standard Railway Equipment Company, Chicago, Ill., a corporation of Delaware
Application November 7, 1951, Serial No. 255,183
5 Claims. (Cl. 292—241)

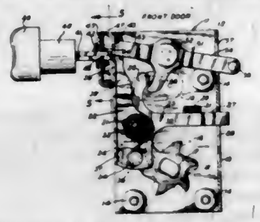


4. A lock for the cover of a railway car hatch frame, said lock comprising a base plate, a flange extending normal to said base plate, an offset operating handle mounted upon said cover so as to swing in a plane parallel to said base plate, the offset portion extendable parallel to said flange, said handle having a hooked end engageable with an inclined surface of a car part to force the cover to closed position upon movement of said handle in one direction, and means to secure said offset portion of the handle to said flange in the closed position of said handle.

2,735,710
DOOR LOCK
Thomas C. Dingman and John W. Jamieson, Dearborn, Mich., assignors to Ford Motor Company, Dearborn, Mich., a corporation of Delaware
Application December 11, 1952, Serial No. 325,384
8 Claims. (Cl. 292—280)

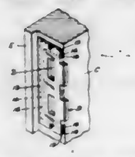
1. In a latch mechanism for a motor vehicle door, a mounting plate having an end flange mounted upon the door adjacent the end wall thereof and a side flange extending substantially at right angles to the end flange adjacent the inner side wall of the door, a toothed rotor rotatably mounted upon the end flange at one side thereof, a toothed ratchet on the opposite side of said end flange from said rotor and mounted for rotation with said rotor as a unit, a pawl mounted upon said end flange on the same side as said ratchet and adapted to engage the teeth

of said ratchet to hold said ratchet and rotor against rotation in one direction, an outer manually operable release lever pivotally mounted upon said end flange and having an operative connection with said pawl, a control member pivotally mounted upon said end flange having a portion immediately adjacent the actuated end of said release lever arranged in one position of said control member to block pivotal movement of said release lever and in



another position of said control member to permit pivotal movement of said release lever, and an outer manually operable member rotatably and slidably mounted upon said mounting plate adjacent the actuated end of said release lever for actuation of said release lever upon sliding movement of said last mentioned member, and means connecting said last mentioned member and said control member to move the latter between locked and unlocked positions upon rotation of said outer manually operable member.

2,735,711
LOCK GUARD
Fred A. Trachsler, Vallejo, Calif.
Original application April 24, 1950, Serial No. 157,715, now Patent No. 2,631,881, dated March 17, 1953. Divided and this application October 21, 1952, Serial No. 315,969
3 Claims. (Cl. 292—346)



1. A lock guard for use to prevent opening of a cam-type bolt by insertion of a pliable strip between the door and jamb from the stop side of the door comprising a rigid, substantially flat strike plate for said jamb apertured for reception of a lock bolt and formed with its side edge adapted to be positioned nearest the stop and grooved to form parallel flanges with a recess between said flanges, said recess being arranged to intercept a pliable strip and extending adjacent said bolt, one of said flanges being adapted to lie close against said door in the vicinity of said bolt between said bolt and said stop.

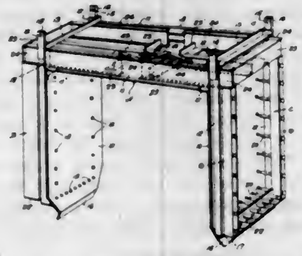
2,735,712
HINGE AND STOP PROVISIONS FOR HAND OPERATED IMPLEMENTS OR TOOLS
Claude W. Hart, Seymour, Ind., assignor to Seymour Manufacturing Company, Seymour, Ind., a corporation of Indiana
Application January 7, 1953, Serial No. 330,041
5 Claims. (Cl. 294—50.5)

1. A combined stop and pivot assembly for a post hole digger having a pair of handles, and a hollow blade carried by the lower end of each handle, the pivot assembly comprised of two companion coacting parts, each such part including a base attached to an inside face portion of one handle near its lower end, a pair of apertured pivot ears carried by and projected outwardly of the base toward the opposite handle, the two parts of the pivot assembly being vertically in register, with the pivot ears of one of said parts laterally adjacent corresponding ears of the companion part, and with the apertures of the ears in register, a pivot pin common to and extended through the several ear apertures, and stop arms carried by the respective said parts of the pivot assembly



in positions to abut each other above said pivot pin upon extreme approaching movement of the handles, and serving thereby to limit the handle spacing in one position of the relatively movable parts, said stop arms being located at an appreciable distance upwardly of the handles, in respect to the pivot pin.

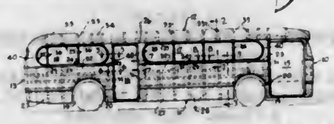
2,735,713
LOG GRAB
Gordon M. Blakeley, deceased, late of Belgrade, Maine, by Edna B. Blakeley, executrix, Belgrade, Maine, assignor to The Diamond Match Company, New York, N. Y., a corporation of Delaware
Application October 8, 1951, Serial No. 250,222
12 Claims. (Cl. 294—67)



1. A log grab comprising a frame including a pair of spaced plates adapted to be placed on each end of at least one log to be lifted, at least one hole through each said plate, at least one gripping member located outwardly from each said plate, one of said gripping members being spring-mounted, means on said grab for moving said gripping members in a direction toward said plates, said gripping members being aligned with said holes so that as said gripping members move to the operative position said gripping members extend through said holes to engage the end of the log and when said gripping members are retracted the gripping members will move to a position behind said plates whereby the plates act as strippers to remove the log from the gripping members.

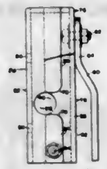
2,735,714
BODY FRAMEWORK FOR LARGE-CAPACITY VEHICLES, PARTICULARLY BUSSES
Walter B. Dean and Albert G. Dean, Narberth, Pa., assignors to The Budd Company, Philadelphia, Pa., a corporation of Pennsylvania
Application December 18, 1952, Serial No. 326,635
3 Claims. (Cl. 296—28)

1. In a bus or similar large-capacity passenger vehicle: a side wall, a roof, a window opening in said side wall adjoined by said roof; a window frame surrounding said opening and comprising a continuous, closed-figure rail; side wall posts secured to, ending at and extending downwardly from the lower marginal portion of said rail; roof carlines secured to, ending at and extending upwardly and inwardly from the upper marginal portion of said rail; mullions interconnecting and ending at said upper



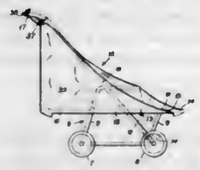
and lower marginal portions of said rail; at least certain ones of said posts, carlines, and mullions being arranged in a common transverse plane so as to present together a continuous vertical and transverse body frame structure with said rail extending uninterruptedly between their adjacent ends.

2,735,715
TAIL GATE HINGE AND LATCH DEVICE
Francis Reifsteck, Champaign, Ill., assignor of one-sixth to J. Warren Kinney, Jr., Cincinnati, Ohio, and one-sixth to R. E. Winkelmann, and one-sixth to Jackson M. Luker, Urbana, Ill.
Application November 7, 1950, Serial No. 194,431
3 Claims. (Cl. 296—51)



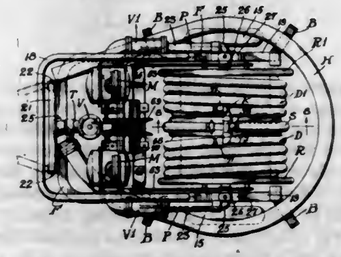
1. A tail gate hinge and latch device comprising a mounting element for attachment to a supporting surface, a latching element pivotally secured to the lower portion of the mounting element, each of said elements including confronting notches dimensioned to receive a hinge pin therebetween, and a latch lever pivotally secured to the upper portion of said mounting element for movement into and out of engagement with that end of the latching element remote from its pivotal connection with the mounting element for releasably securing said latching element in closed abutting relationship with the mounting element.

2,735,716
BABY STROLLER PROTECTOR
Leona S. Shimabukuro, Chicago, Ill., assignor of one-half to Harold Y. W. Kim, Chicago, Ill.
Application November 22, 1954, Serial No. 470,184
4 Claims. (Cl. 296—78)



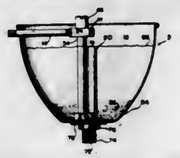
1. A protector for baby strollers, comprising an enclosure of substantially prismatic configuration including a quadrilateral top panel portion, a pair of triangular panel portions secured to opposite sides of the said top panel portion, the said triangular panel portions having portions thereof folded to form an end panel portion, the free edges thereof being secured to form the said end panel portion, the top edge of the said top panel portion and the top edge of the said end panel portion defining a mouth to allow the handle of a baby stroller to pass therethrough, and cooperating fastening means on opposed edges of the said mouth for securing removably the said protector to the said stroller.

2,735,717
FUELING APPARATUS FOR AIRCRAFT
Gerald J. Harman, Beverly Hills, Calif.
Application March 19, 1952, Serial No. 277,519
6 Claims. (Cl. 299—78)



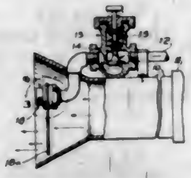
2. In a fueling apparatus for aircraft: a frame having rigidly supported thereon a pair of pipes spaced from each other at one of their ends; an axle rotatably mounted on the spaced ends of said pipes and having separate passages therein communicating respectively with said pipe ends; a pair of reels mounted on the axle for rotation independently of each other; a pair of delivery hoses respectively connected at one end to said passages and adapted to be coiled on the respective reels; a supplemental hose of a greater inside diameter than the delivery hoses; said reels having inner rims spaced to form a third reel upon which the supplemental hose can be coiled; and a coupling for connecting the supplemental hose to the other ends of both of the delivery hoses, so constructed as to straddle the inner reel rims and thus allow coiling of the supplemental hose on the third reel while connected to the delivery hoses.

2,735,718
SOLUTION FORMING AND DISPENSING DEVICE
James D. Robinson, Memphis, Tenn.
Application July 14, 1953, Serial No. 367,956
8 Claims. (Cl. 299—83)



1. A solution forming and dispensing device comprising, in combination, a receptacle having lower and upper portions, said receptacle being adapted to hold a bed of loose material to be dissolved in the lower portion and having an over-flow outlet in the upper portion, jet forming means in the bottom of said lower portion, said jet forming means comprising a fitting having a generally flat underside disposed towards the bottom of said receptacle, and having a substantially annular channel in said underside, and a peripheral side wall surrounding said channel, a flat sealing member underlying said channel and tightly engaging between said fitting and the bottom of said receptacle, said side wall having a plurality of minute openings therethrough extending respectively in various directions for directing minute streams of liquid outwardly from the fitting whereby to melt into the bed of the material in said lower portion, and means for feeding liquid under pressure to said jet forming means.

2,735,719
PAINT SPRAYER
Dan Loe, Simi, Calif.
Application December 28, 1953, Serial No. 400,396
3 Claims. (Cl. 299—86)



1. In a paint sprayer having a source of paint under pressure and an air blower, a valve connected on one side to said paint source, said valve being manually operable to permit the flow of paint therethrough, an air blower tube having an open end connected to said air blower, a substantially cylindrical paint spraying tip connected to the other side of said valve, said tip being disposed within said air blower tube adjacent said open end, said tip being closed except for a paint outlet comprising a slit extending downwardly and slightly forwardly from the horizontal axis of said tip adjacent the end thereof, said slit comprising an arc extending around part of the circumference of said tip, said valve adapted to permit paint to flow through said valve into said paint tip and out said paint outlet into the stream of air flowing through said air blower tube to be blown against the painting surface over a wide area.

2,735,720
CARBONATOR
Orville F. Evert, San Francisco, Calif.
Application April 15, 1952, Serial No. 282,409
2 Claims. (Cl. 299—120)

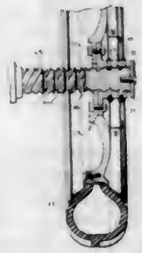


1. In a carbonating tank of the character described, a nozzle block, a central vertical, liquid-delivering passageway extending downwardly into said block, a cylindrical channel extending horizontally through said block, said passageway leading into said cylindrical channel, the wall of said channel being threaded at its extremities, a pair of threaded identical spray heads removably mounted in the ends of said channel respectively, each of said spray heads having a major internal diameter portion at its inner end and an outer portion of constantly decreasing internal diameter, a discharging orifice of relatively small diameter at the outer extremity of each spray head, said orifices positioned axially with respect to said channel, and a cylindrical, flow-directing member in said channel, the ends of said flow-directing member resting in said spray heads respectively, a spiral rib extending over the cylindrical surface of said member from one end to the other, the outside diameter of said spiral rib being approximately equal to the major internal diameter portions of said spray heads, whereby liquid under pressure reaching said channel from said passageway will encounter the middle portion of said member and will be divided and directed by said member in opposite spiral paths into said spray heads respectively.

2,735,721
METHOD OF MAKING A DISPOSABLE SCOURING PAD
Bertha S. Rafferty, Skagway, Territory of Alaska
Application March 24, 1950, Serial No. 151,572
1 Claim. (Cl. 300—21)

A method of backing a soap-filled pad of metal wool with a protective covering, said method comprising placing the covering over the pad, applying heat and pressure to the outside of the covering, such heat being regulated to melt the soap adjacent the covering and said pressure serving to force the melted soap against the protective covering, removing the heat, cooling the melted soap to resolidify it and bind the pad and covering together, and removing the pressure.

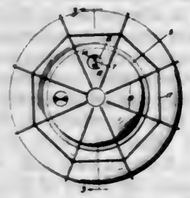
2,735,722
SPIRALED HUB FOR TRACTOR REAR WHEELS
Eugene Victor Bowles and Geraldine C. Bowles, Strathmore, Calif.
Application December 21, 1951, Serial No. 262,829
1 Claim. (Cl. 301—1)



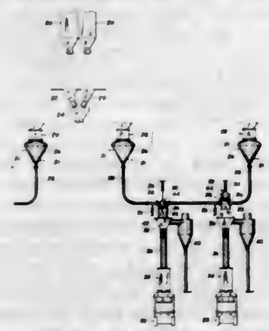
In a tractor rear wheel and axle assembly, a rear axle formed with a spiral thread and with longitudinally spaced peripheral grooves extending around the axle and intersecting the thread, each groove being contained in a respective plane perpendicular to the axis of the axle, an internally threaded hub on said axle and engaged with said spiral threads, said hub being adjustable along the axle by rotating the hub relative to said axle, said hub being rectangular in cross section and being formed with a transverse slot normal to opposing surfaces of the hub and including said axle, said slot extending completely through the hub and being longer than the diameter of the axle, a U-shaped clamping bolt engaged on said axle in said slot and having its bight portion received in one of said peripheral grooves, the legs of said bolt extending outside the periphery of said hub, and clamping nuts engaged on said legs and bearing against said periphery.

2,735,723
TRACTION ATTACHMENT FOR VEHICLE WHEELS
William D. Shireman, De Witt, Ark.
Application July 2, 1953, Serial No. 365,700
4 Claims. (Cl. 301—44)

1. In a traction device for vehicle wheels, a disk, internal wheel rim clamping means supported in a protected position behind the disk and manipulated from a position at the front of the disks, fixed wheel rim engaging means internally of the disk and positioned in diametrically opposed relation to said wheel rim clamping means and coacting with each other for clamping engagement internally of the wheel rim for mounting the disk at the side of a wheel, and a plurality of fins welded edgewise against the outer surface of the disk in a radially disposed position and projecting outwardly beyond the tread of the wheel.

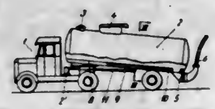


2,735,724
PNEUMATIC MATERIAL HANDLING APPARATUS
John H. Kauffman, Elkhart, Ind., and Raymond H. Moore, Birmingham, Mich., assignors, by mesne assignments, to Studebaker-Packard Corporation, a corporation of Michigan
Application May 6, 1952, Serial No. 286,314
6 Claims. (Cl. 302—28)



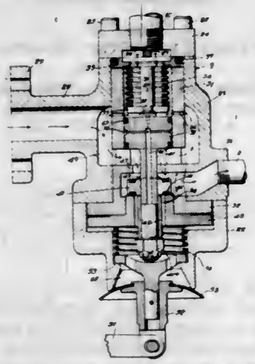
1. Valve means for pneumatic conveying systems comprising a stationary frame, a pair of spaced stationary pipe sections associated with said stationary frame, a movable frame supported by said stationary frame, said movable frame including a plurality of legs straddling said stationary pipe sections for guiding movement of said movable frame with respect to said stationary frame and said stationary pipe sections, a motor mounted on said stationary frame and operatively associated with said movable frame for effecting movement thereof, a pipe section mounted on said movable frame and adapted to be disposed between said stationary pipe sections to form therewith a continuous conduit, a baffle box mounted on said movable frame to one side of said pipe section and adapted to be disposed between said stationary pipe sections, said motor being adapted selectively to move said pipe section carried by said movable frame and said baffle box between said stationary pipe sections, sealing means for selectively sealing said pipe section carried by said movable frame and said baffle box to said stationary pipe sections, a second motor supported by said stationary frame and operatively associated with said sealing means for effecting actuation thereof, and control devices carried at opposite ends of said movable frame and adapted for cooperation with said stationary pipe sections, said control devices being four in number and being paired and adapted for actuation by said stationary pipe sections when said movable frame is moved to either one of two predetermined positions wherein said pipe section carried by said movable frame and said baffle box respectively are aligned with said stationary pipe sections, said control devices, as paired, being included in the control circuit for said second motor to accommodate actuation of said second motor in response to movement of said movable frame to either one of its two predetermined positions.

2,735,725
APPARATUS FOR DISCHARGING PULVERULENT MATERIAL
Hans Emil Galle, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y., a corporation of New Jersey
Application January 27, 1953, Serial No. 333,533
Claims priority, application Great Britain January 30, 1952
2 Claims. (Cl. 302—52)



1. A container for pulverulent material, which comprises an enclosure having a bottom wall sloping lengthwise and provided with a discharge outlet at its low end, the wall being permeable by air and formed of a central section and at least a pair of lateral sections diverging upwardly from the opposite side edges of the central section, the sections extending substantially the length of the wall, means forming air chambers having the respective sections at their tops, and means for supplying air under a selected pressure to the chamber beneath the central section and at lower pressures to the chambers beneath the lateral sections.

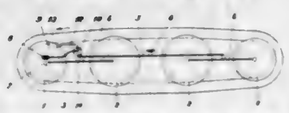
2,735,726
RAILROAD AIR VALVE
Karl A. Klingler, Naperville, Ill., and William O. Martin, Fort Smith, Ark., assignors to Crerar Adams & Co., Chicago, Ill., a corporation of Illinois
Application November 28, 1951, Serial No. 258,702
2 Claims. (Cl. 303—68)



1. In combination, a train pipe adapted to contain, at one time, air above, and at another time, air at atmospheric pressure, an AB valve connected to the train pipe, an air pressure reservoir connected to the train pipe through the AB valve, a brake cylinder connected to air pressure reservoir through the AB valve, a control valve housing connected to the AB valve and providing communication between the AB valve and the brake cylinder, a direct connection between the train pipe and the control valve housing independent of the AB valve, a single free piston mounted to reciprocate in the control valve housing, an exhaust port in the control valve housing adapted to discharge to atmosphere, a valve member actuated by the piston, adapted in one position to close the exhaust port and open communication between the AB valve and the brake cylinder and in another position to close communication between the AB valve and the brake cylinder and open the exhaust port permitting air from brake cylinder to discharge to atmosphere, means subject to train pipe pressure for moving the piston to exhaust-port closing position, said control valve housing including port

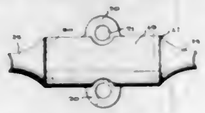
means for applying balancing AB pressure to opposite ends of the piston when the valve member is in exhaust-port closing position, manual means for positively moving the piston and valve to exhaust port open position, in which communication between the AB valve and the brake cylinder is closed, said control valve housing including piston controlled port means for venting the AB pressure from the top of the piston when the latter is moved to exhaust-port open position, while maintaining the underface of the piston to AB pressure to hold the valve in exhaust-port open position while sealing the control valve housing against loss of AB pressure.

2,735,727
REDUCING THE FRICTIONAL RESISTANCE BETWEEN BELTS AND PULLEYS
Giovanni Bonmartini, Rome, Italy, assignor to "Est" Etablissement Sciences Techniques, Vaduz, Liechtenstein, a company of Liechtenstein
Application June 6, 1951, Serial No. 230,199
Claims priority, application Italy April 19, 1951
6 Claims. (Cl. 305—1)



1. In a bogie comprising an endless track of rubber-like material and a plurality of grooved pulleys on which said track runs, a lubricant feed device mounted on said bogie adjacent said grooved wheel, driving connections between said wheel and said feed device for actuating the latter and means for discharging lubricant from said feed device onto the periphery of said wheel.

2,735,728
TRACK STRUCTURE FOR TRACK-LAYING VEHICLES
Dana C. Powell, Live Oak, Fla.
Application June 24, 1952, Serial No. 295,168
4 Claims. (Cl. 305—10)



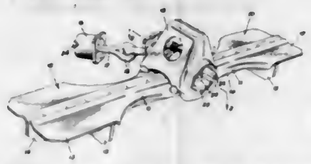
1. In a track laying vehicle a series of coacting shoes forming a tread surface, each shoe having a track rail engaging plate, an inner block overlying and secured to a side of said plate, said inner block having an outer side and having corners provided with recesses, an outer block overlying said outer side of the inner block, said outer block having an inner side, registered cable clamping grooves in the outer and inner sides of the blocks, positioning lugs depending from said outer block and engaging in said recesses, and means releasably clamping the blocks in superimposed relation.

2,735,729
VEHICLE TRACK SHOE CONSTRUCTION
Desmond Messenger, Stewart Whithard, and Glen W. Phelps, Orillia, Ontario, Canada, assignors to The Track Corporation Limited, Orillia, Ontario, Canada
Application May 18, 1954, Serial No. 430,571
4 Claims. (Cl. 305—10)



1. An endless track shoe for attachment to rubber tired dual vehicle wheels and comprising a sole plate adapted to rest against and extend across a pair of dual wheel tires and being of a length substantially greater than the distance between the outer walls of the dual wheel tires to which it is adapted to be attached, whereby the end portions of the sole plate substantially protrude beyond said outer walls, a traction lug extending lengthwise and centrally of the ground contacting face of the sole plate, said protruding end portions of the sole plate being of greater width than the widths of the portions of the sole plate against which the tires rest and having flat ground contacting faces on each side of the traction lug, and lips formed upon the edges of the ground contacting face of the portion of the sole plate intermediately of the protruding end portions.

2,735,730
VEHICLE TRACK SHOE ASSEMBLY
Desmond Messenger, Stewart Whithard, and Glen W. Phelps, Orillia, Ontario, Canada, assignors to The Track Corporation Limited, Orillia, Ontario, Canada
Application May 18, 1954, Serial No. 430,572
8 Claims. (Cl. 305—10)



1. An endless track for application to the tires of tandem pneumatic vehicle road wheels and comprising a plurality of track shoes, housings mounted upon the wheel engaging faces of the shoes, shoe couplings extending between the housings, sockets extending inwardly from the opposite sides of the housings, plugs secured to the free ends of the couplings and receivable within the sockets, and lugs protruding from the plugs to engage the sockets and anchor the plugs within the sockets.

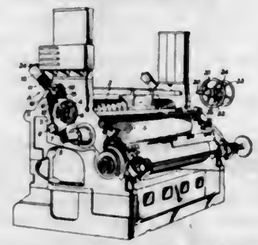
2,735,731
THREE-ELEMENT FLEXURE PIVOT
Darwin L. Freebairn, Jr., Whittier, Eugene E. Kinsey, Long Beach, and Abigail E. C. Beutler, Los Angeles, Calif., assignors to North American Aviation, Inc.
Application April 12, 1954, Serial No. 422,436
5 Claims. (Cl. 308—2)



1. A flexure pivot comprising a base portion, three symmetrical beam elements attached thereto, and a central body supported by said beam elements, the improvement which comprises having each of the beam elements cross the others 87.3% of the free span distance from one end to the other of said beam elements.

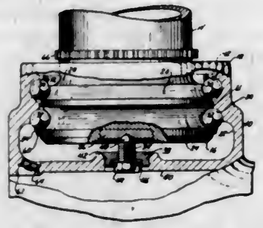
2,735,732
ADJUSTING DEVICES FOR ADJUSTABLE MEMBERS SUCH AS ROLLERS
Tom Rowlands and Frank Egremont Dobson, Deptford, London, England, assignors to Molins Machine Company Limited, London, England, a British company
Application March 6, 1953, Serial No. 340,849
Claims priority, application Great Britain March 18, 1952
5 Claims. (Cl. 308—60)

1. Apparatus comprising an adjustable roller, a roller opposed thereto, a mounting for said adjustable roller, a member connected to said mounting and movable endwise to move the adjustable roller toward and away from said opposed roller, said member comprising a first threaded part and a cooperating threaded part having threaded engagement with said first threaded part, a fixed abutment engageable with said cooperating threaded part to limit endwise movement of said member in a direction such as to move said adjustable roller toward said opposed



roller, resilient pressure means urging said member in said direction and thereby urging said cooperating threaded part against said abutment, said pressure means being capable of yielding so as to allow the adjustable roller to be pressed away from said opposed roller by excessive pressure on said adjustable roller, and whereby relative rotation of said threaded parts effects endwise movement of said member to move said adjustable roller toward or away from said opposed roller.

2,735,733
BLADE RETENTION BEARING
Maurice E. Cushman, Verona, N. J., assignor to Curtiss-Wright Corporation, a corporation of Delaware
Application April 10, 1952, Serial No. 281,643
1 Claim. (Cl. 308—174)



A bearing arrangement including an integral annular socket, a circular butt inserted within the socket, the butt external diameter being slightly smaller than the socket internal diameter, said butt and socket each having a plurality of axially spaced ball race grooves formed integrally therein, rows of balls between the butt and socket contacting opposed race grooves, said race grooves each having a depth of substantially a ball radius from said butt external diameter and said socket internal diameter, said bearing arrangement including a relief groove in the butt intercepting the outermost butt race groove at its smallest diameter, said relief groove having a depth relative to said butt external diameter substantially equal to a ball diameter, said relief groove being disposed outwardly from the outermost butt race groove, a relief groove in the socket intercepting the innermost socket race groove at its largest diameter, said socket relief groove having a depth relative to said socket internal diameter substantially equal to a ball diameter, said socket relief groove being disposed inwardly from the innermost socket race groove, said socket and butt being relatively axially movable to bring the butt race groove into the plane of the socket relief groove and to bring the socket race groove into the plane of the butt relief groove for installation and removal of the rows of balls relative to respective sets of grooves, and being axially movable to bring the socket and butt race groove into coplanar relation so that installed balls bear on the surfaces of respective race grooves.

2,735,734
BEARING MOUNTING
Irving Kalikow, Swampscott, Mass., assignor to General Electric Company, a corporation of New York
Application March 23, 1954, Serial No. 418,148
3 Claims. (Cl. 308—189)



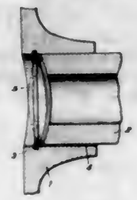
1. An anti-friction bearing mounting for a shaft subjected to high vibration forces tending to cause creep rotation of the bearing and subjected to expansion and contraction causing axial movement of the bearing, comprising an anti-friction bearing having a nominal diameter within manufacturing tolerances, an annular supporting hub for said bearing having a wall of substantial thickness split axially at one end to form a plurality of rigid arcuate segments engaging the outer surface of said bearing, the inner cylindrical surface of said hub having an inverse taper with a diameter at its largest end being from .0001" to .0002" smaller than the diameter of the largest bearing of said nominal diameter so that said segments tightly engage said bearing to secure it against creep rotation while providing for axial movement of said bearing by expansion or contraction of said shaft without destructive axial loading thereof.

2,735,735
SYRINGE CONSTRUCTION
Martin S. Abel, Oakland, Calif.
Application April 14, 1952, Serial No. 282,252
19 Claims. (Cl. 309—4)



1. A plunger for use in a medical syringe barrel, said plunger being made of resiliently deformable material and being hollow to provide an interior space for radially inward yielding action whereby the plunger may be contracted from its inherent unstressed diameter through a range of smaller diameters, the inherent unstressed diameter of the plunger being greater than the internal diameter of the syringe barrel, with said range of diameters including the internal diameter of the syringe barrel so that the plunger may operate in the syringe barrel with radially outward pressure to insure a snug sliding fit and so that the plunger will maintain such sliding fit throughout a range of change of the internal diameters of the barrel and plunger caused by thermal expansion and contraction, said plunger having a continuous peripheral wall and an end wall at its leading end united thereto in a fluid-tight manner to seal off the interior of the plunger from the interior of the barrel when the plunger is in operating position in the barrel.

2,735,736
APPARATUS FOR SEALING THE SPACE BETWEEN A PISTON AND FLOATING WRIST PIN THEREOF AND PROCESS FOR ASSEMBLING THE SAME
Ludwig Laubender, Traunstein, Upper Bavaria, Germany, assignor to Krauss-Maffei Aktiengesellschaft, Munich-Allach, Germany
Application February 26, 1953, Serial No. 338,983
Claims priority, application Germany October 14, 1952
5 Claims. (Cl. 309—19)



1. Apparatus for sealing the space between a piston and floating wrist pin thereof, comprising, in combination, a piston formed with an opening passing therethrough; a wrist pin freely mounted in said opening; and a circular dished plate located next to an end of said wrist pin in said opening of said piston and having its outer periphery pressed against said piston so that oil cannot flow in said opening beyond said wrist pin and plate located next to the same, said plate consisting of a springy material and engaging said end of said wrist pin in a position between the flat position of said plate and the unstressed position of said plate so that said wrist pin end prevents said plate from moving to said unstressed position thereof.

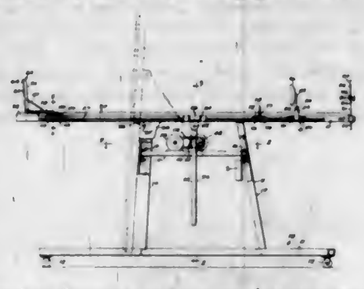
2,735,737
DIAPERING SUPPORT
Helen Clare Hancock, New Orleans, La.
Application June 15, 1953, Serial No. 361,613
3 Claims. (Cl. 311—2)



1. In a diapering support structure the combination including: a wall mounted paper dispensing container provided with a slit orifice and having a hinge along the forward face parallel to and beneath the orifice; an infant cradling body contoured support member hinged to said container; a serrated tearing edge mounted in said container and above said slit orifice; an access slot above said orifice for withdrawing sheets of paper; an arcuate baffle in said container directing paper flow through said slit; and collapsible supporting arms attached pivotally to said support member at one end and pivotally attachable to the wall at the other end.

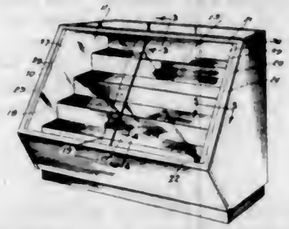
2,735,738
ATTACHMENT FOR OPERATING TABLES
William E. Berne, Columbia, S. C.
Application November 25, 1953, Serial No. 394,269
4 Claims. (Cl. 311—10)

1. A table structure comprising parallel longitudinal frame members each having a vertical flange, a guide bar of circular cross section arranged against the vertical flange of each frame member, fastening elements passing through said frame members and radially into said guide bars to secure the latter in position, and means appurtenant to the use of the table structure comprising a split sleeve receiving each of said guide bars and slidable therealong, each of said sleeves having above and below the split thereof flat alined faces engageable with the adja-



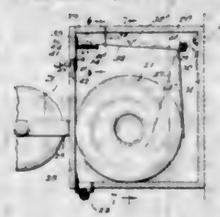
cent vertical flange to prevent turning movement of said sleeves on said guide bars.

2,735,739
SELF-SERVER DISPLAY CABINET
Domenico Patriarca, Cranston, R. I.
Application November 16, 1951, Serial No. 256,785
4 Claims. (Cl. 312—31)



3. A display and sales cabinet for cigars, including a base, side walls, a rear wall, a top, a lower front wall and an upper front opening, said upper front opening inclining forwardly from the top to the lower front wall and said lower front wall inclining rearwardly from the upper front opening, said upper front opening having a top rail, a bottom rail, and side rails, the top and bottom rails having longitudinal front and rear spaced runways, and the side rails having longitudinal grooves provided with sealing strips, transparent panels slidably mounted in said runways and adapted to seal seat in said side rail grooves, a step back perforated step partition in said cabinet extending rearwardly and upwardly from the top of the lower front wall to the top of the rear wall, a humidifier positioned behind the perforated step partition, means for mounting said humidifier in elevated relation with respect to said base whereby to afford better circulation of the humidified atmosphere through the step partition.

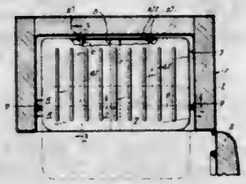
2,735,740
TOILET PAPER CABINET
Cyril A. Soans, River Forest, Ill.
Application December 14, 1953, Serial No. 398,113
2 Claims. (Cl. 312—234)



2. A toilet paper package storage container which includes a stationary part and a closure part manually movable from an open position into position to close the container and which is arranged to return automatically to its open position when the container is empty so as to permit insertion of a spare package, and a lock at all times manually releasable at will for holding the closure part in closed position, which lock is effective to latch said closure part in closed position when a package is in the container but is ineffective to hold said closure part in closed position when the package is not in the container, said lock including a pair of inter-engaging members carried respectively by the container parts, one of said members being held in effective operative engagement with the other member by the spare package when said package is in the container.

2,735,741
REFRIGERATOR SHELF CONSTRUCTION
Edward Stanley Laben, Chicago, Ill., assignor to General Electric Company, a corporation of New York
Application November 7, 1952, Serial No. 319,343
2 Claims. (Cl. 312—351)

1. A removable shelf assembly for a refrigerator cabinet or the like having side and rear walls, comprising, in combination, a supporting structure having a transverse bar arranged to extend across the inside of the cabinet near the front thereof and a substantially U-shaped rod-like structure secured at its bight to said transverse bar intermediate the ends thereof and having mutually spaced parallel members extending rearwardly of said transverse bar at right angles thereto each said parallel member being a substantial distance from the adjacent end of said bar; a substantially rectangular shelf having side flanges arranged for slidable support on said transverse bar and a rear flange provided with openings slidably accommodating said rearwardly extending members, said flanges extending below the lowermost plane of said supporting structure members; stop means on said side



flanges to limit the extent of displacement of said shelf on said supporting structure; and means for removably mounting said supporting structure within said cabinet, comprising bracket members for securement to said cabinet side walls and having upwardly facing recessed portions to releasably receive the ends of said transverse bar, and socketed members for securement to the rear wall of said cabinet and having forwardly facing recesses to releasably receive the ends of said rearwardly extending members.

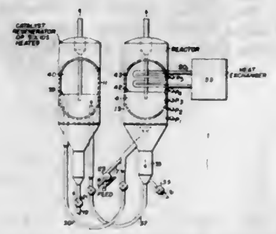
CHEMICAL

2,735,742
INHIBITION OF DARK SPOTS ON FRESHLY SPUN VISCOSE BY WASHING WITH A SPECIFIC SEQUESTERING AGENT
Donald J. Godehn, Hendersonville, N. C., assignor to American Enka Corporation, Enka, N. C., a corporation of Delaware
No Drawing. Application November 2, 1955, Serial No. 544,610
8 Claims. (Cl. 8—137.5)

1. In a process in which freshly spun acid viscose rayon packages are washed with water and desulphured with an alkaline sulphide solution whereby dark spots are formed, and dinginess results in the rayon, the step that comprises washing the packages during one of the aftertreating operations with an aqueous solution having dissolved therein a sufficient amount of an alkali metal salt of ethylene diamine poly aliphatic saturated mono basic carboxylic acid selected from the group consisting of acetic and propionic acid and for a period of time and at a temperature sufficient to inhibit the formation of dark spots and dinginess.

2,735,743
TRANSFER OF HEAT IN FLUIDIZED SOLIDS SYSTEMS
Walter A. Rex, Westfield, N. J.; Virginia C. Rex, administratrix of the said Walter A. Rex, deceased, assignor to Esso Research and Engineering Company, a corporation of Delaware
Application May 11, 1953, Serial No. 354,278
3 Claims. (Cl. 23—1)

1. In a fluid reaction process wherein a gasiform material is passed upwardly through a body of fluidized finely divided solids maintained in a fluid reaction zone as a dense phase bed of solids having an interface with a disperse phase of solids thereabove, wherein said reaction zone is maintained at a pressure substantially above atmospheric while fluidizing said bed with a fluidizing gas, including said gasiform material, at a velocity of from about 0.2 to about 1.25 feet per second, a method for establishing a temperature gradient in said dense phase bed which is abnormal to said reaction, comprising introducing a fluid head exchange medium into indirect heat exchange relation with said solids and said fluidizing gas within a vertically limited portion of said reaction zone wherein the upper and lower outside

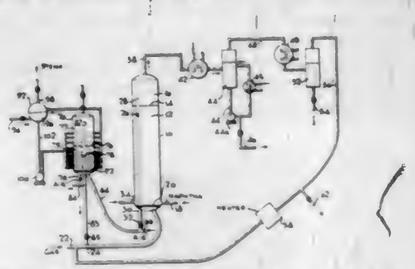


limits of said limited portion are at a distance from said interface which is not substantially greater than 20% of the full depth of said dense phase bed at the interface, and wherein said limited portion thus defined includes said interface.

2,735,744
METHOD OF AND APPARATUS FOR CONTROLLING REGENERATOR TEMPERATURES
Walter A. Rex, deceased, late of Westfield, N. J., by Virginia C. Rex, administratrix, Westfield, N. J.; said Walter A. Rex assignor to Esso Research and Engineering Company, a corporation of Delaware
Continuation of application Serial No. 192,471, October 27, 1950. This application December 23, 1954, Serial No. 477,434
5 Claims. (Cl. 23—1)

1. In a process wherein catalyst is circulated between a reactor and a regenerator and a dense fluidized bed of catalyst is maintained in said regenerator from which a certain amount of heat is removed by contact with indirect heat exchange surfaces, the improvement which com-

prises changing the level of the dense fluidized bed in said regenerator to contact varying amounts of indirect heat



exchange surfaces to change the amount of heat withdrawn from the dense fluidized bed in said regenerator.

2,735,745

OXIDATION OF URANOSIC OXIDE TO URANIUM TRIOXIDE WITH NITRIC ACID VAPOR

Edward R. Flook and Roger G. Sweet, Kenmore, N. Y., assignors to the United States of America as represented by the United States Atomic Energy Commission

No Drawing. Application January 29, 1948, Serial No. 5,196

1 Claim. (Cl. 23—14.5)

A process for the oxidation of uranosic oxide to uranium trioxide, comprising heating uranosic oxide at a temperature between 400–500° C. in the presence of nitric acid vapor and cooling the reactants to below 400° C. while maintaining nitric acid vapor in the system until the reactants are cooled below 400° C.

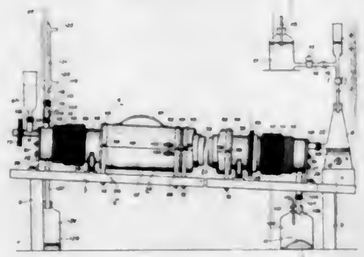
2,735,746

METHOD OF PRODUCING URANIUM TETRACHLORIDE

Horace R. McCombie, Pittsburg, Calif., and Edward L. Wagner, Oak Ridge, Tenn., assignors, by mesne assignments, to the United States of America as represented by the United States Atomic Energy Commission

Application February 23, 1944, Serial No. 523,602

5 Claims. (Cl. 23—14.5)



1. The process for producing uranium tetrachloride comprising continuously introducing finely divided uranium dioxide into an elongated reaction zone having input and discharge points and heated to establish a temperature gradient of from about 440° C. to about 475° C. therebetween, continuously advancing said uranium dioxide through said reaction zone, continuously introducing gaseous carbon tetrachloride at the discharge end of said reaction zone to contact said uranium dioxide in a turbulent countercurrent fashion so as to produce finely divided crystalline uranium tetrachloride therefrom, continuously withdrawing said uranium tetrachloride from the discharge point of said reaction zone, recovering carbon tetrachloride from the effluent gaseous reaction products, and reintroducing the recovered carbon tetrachloride to contact said uranium dioxide.

2,735,747

METHOD OF TREATING RARE EARTH ORES

John Bryant Kasey, Bakersfield, Calif.

No Drawing. Application April 30, 1952, Serial No. 285,319

15 Claims. (Cl. 23—16)

1. The method of treating ore containing valuable rare earth carbonates including lanthanum carbonate and a valueless gangue component, at least a part of the gangue component also being in the form of a carbonate which decomposes at a temperature below that of the rare earth carbonates, comprising heating the ore in a divided state to a temperature between the decomposition temperature of said rare earth carbonates and a temperature below where incipient fusion of the ore occurs, said gangue carbonate component also simultaneously decomposing during said heating step, to thereby convert the rare earth carbonates including lanthanum carbonate and said carbonate gangue component into the oxide form, the specific gravity of the converted rare earth oxides being greater than the specific gravity of the original rare earth carbonates and greater than the specific gravity of the gangue oxide-component, whereby said mixture of oxides is amenable to gravity separation, and recovering the valuable rare earth oxides from the mixture of oxides by gravity separation.

2,735,748

PROCESS FOR RECOVERY OF TUNGSTEN VALUES

Eugene Wainer, Cleveland Heights, Ohio, assignor, by mesne assignments, to Sylvania Electric Products Inc., New York, N. Y., a corporation of Massachusetts

No Drawing. Application July 12, 1951, Serial No. 236,475

8 Claims. (Cl. 23—51)

1. In a process of recovering tungsten from tungsten tool steels the steps comprising, heating the alloy at 1100–1300° C. under carburizing conditions to complete hardness, quench-cooling the carburized material, digesting the material in a sulphuric acid solution with adding of increments of the acid at a rate controlling the temperature to around 100° C., continuing the digestion until a carbide sludge forms, separating the liquid from the carbide sludge, adding to the liquid nitric acid in amount about ten to thirty per cent of the weight based on the anhydrous HNO_3 content, boiling to formation of a precipitate, separating the precipitate and combining it with the carbide sludge, drying such mass and calcining in oxidized conditions at 750–850° C., then digesting in caustic soda solution at around 100° C., diluting, washing the precipitate formed, and collecting the tungsten liquor for further processing.

2,735,749

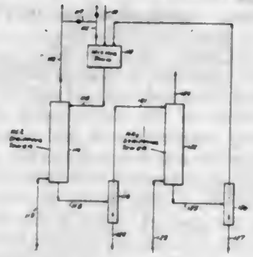
THE SEPARATE RECOVERY OF AMMONIA AND HYDROGEN CHLORIDE FROM AMMONIUM CHLORIDE

Carl F. Prutton, Baltimore, Md., Warren Standish Miller, Houston, Tex., and Louis C. Hirdler, Maplewood, La., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia

Application August 16, 1951, Serial No. 242,151

7 Claims. (Cl. 23—154)

1. A process for separating ammonia and hydrogen chloride from ammonium chloride which comprises mixing a slurry of ammonium chloride in an inert thermally stable organic liquid with a melt of a bisulfate in a mixing zone in an amount providing about 0.15 to 0.75 mole of ammonium chloride per mole of bisulfate, circulating the ammonium chloride containing melt from the mixing zone through successive hydrogen chloride and ammonia stripping zones, maintaining a stripping temperature of about 220° to 270° C. in the hydrogen chloride stripping zone, separately removing a vapor stream and the partially stripped melt from the hydrogen chloride stripping zone, maintaining a stripping temperature of 330° to 380° C. in the ammonia stripping zone, separately removing a vapor stream and the stripped melt from the ammonia stripping zone, controlling the stripping temperatures in the hydrogen chloride and ammonia stripping zone by direct injection of externally heated vapors of the organic liquid, returning the stripped melt to the mixing zone, recovering hydrogen chloride from the vapor stream removed from the hydrogen chloride stripping zone and recovering ammonia from the vapor stream removed from the ammonia stripping zone.



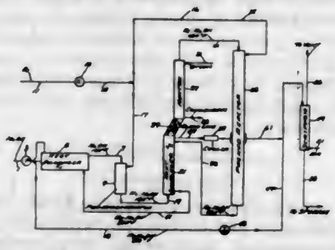
2,735,750

METHOD OF REDUCING THE CHLORATE CONTENT OF AQUEOUS ALKALI METAL HYDROXIDE WHICH CONTAINS CHLORATE

Henry W. Rahn, Corpus Christi, Tex., assignor to Columbia-Southern Chemical Corporation, a corporation of Delaware

Application March 11, 1950, Serial No. 149,043

8 Claims. (Cl. 23—184)



2. The method of reducing the chlorate content of aqueous sodium hydroxide solution containing chlorate, which comprises introducing hydrogen in elemental state into the sodium hydroxide solution and heating the solution containing hydrogen in the presence of nickel at a superatmospheric pressure, the hydrogen pressure being not less than 25 pounds per square inch, and at a temperature not less than 180° C.

2,735,751

PROCESS OF DECOMPOSING BARIUM SULFATE AND OBTAINING PRODUCTS OF VALUE THEREFROM

Fredrik W. de Jahn, New York, N. Y., assignor of fifty-five per cent to Alan N. Mann, Scarsdale, N. Y.

No Drawing. Application July 19, 1954, Serial No. 444,399

5 Claims. (Cl. 23—186)

1. The process of producing products of value from barium sulfate ore which comprises mixing such ore in finely ground state with finely ground iron sulfide in the proportions of from 1 to 5 mols of iron sulfide for each mol of barium sulfate, forming the mixture into aggregates, causing such mixture to react in a flowing current of steam at a temperature in excess of 750° C. but below the temperature of fusion whereby the sulfur is largely driven out and the aggregated material is rendered porous, passing hydrogen through such material at a temperature of at least about 550° C. but below the temperature of fusion to drive out oxygen and leaching out soluble barium hydroxide from the residue with hot water.

2,735,752

HYDRAZINE RECOVERY PROCESS

Floyd T. Neth, Baton Rouge, La., assignor to The Ohio State University Research Foundation, Columbus, Ohio, a corporation of Ohio

No Drawing. Application August 4, 1953, Serial No. 372,383

10 Claims. (Cl. 23—190)

1. The method of separating hydrazine from combinations selected from the group consisting of the anhydrous hydrohalides of hydrazine and mixtures of hydrazine with halogen salts of ammonia comprising dissolving said combination in anhydrous liquid ammonia, adding thereto in liquid ammonia solution a quantity of a metal of the alkali and alkaline earth groups equivalent to the halogen in said combination, providing in the mixture thus formed a quantity of liquid ammonia sufficient to produce a dilute solution of said metal, thereby forming the metal salt of said halogen, and then fractionally distilling the reaction mixture to recover separately ammonia and hydrazine.

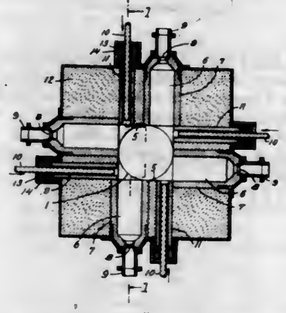
2,735,753

MANUFACTURE OF CARBON BLACK

Harold A. Braendle, Garden City, N. Y., assignor to Columbian Carbon Company, New York, N. Y., a corporation of Delaware

Application March 29, 1951, Serial No. 218,198

5 Claims. (Cl. 23—209.4)

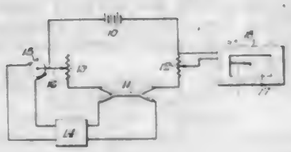


1. In the process of producing furnace black by the thermal decomposition of hydrocarbons wherein the hydrocarbon is rapidly and uniformly mixed with hot blast flame gases passing through a confined, elongated reaction chamber and decomposed by heat absorbed from the hot gases to form carbon black in suspension, the suspension being withdrawn from the downstream end of the reaction chamber and the carbon black separated therefrom, the steps comprising generating a plurality of streams of hot blast flame gases and separately passing the respective streams at high velocity into one end of an elongated reaction chamber of substantially cylindrical cross-section in a direction substantially at right angles to the longitudinal axis of the chamber, and generally tangential thereto, separately injecting a stream of the hydrocarbons to be decomposed into each of the respective streams of blast flame gases, just as it enters the reaction chamber, in a direction substantially at right angles to the direction of flow of the hot gas stream, and immediately thereafter, impinging each of the resultant streams of blast flame gases and hydrocarbons at a substantial angle upon an entering adjacent stream of blast flame gases and hydrocarbon and thereby rapidly uniformly mixing the hydrocarbons with the hot gases.

2,735,754
INDUSTRIAL CORROSION TESTING AND RECORDING

Andrew Dravnieks, Park Forest, Ill., assignor to Standard Oil Company, Chicago, Ill., a corporation of Indiana

Application April 2, 1951, Serial No. 218,828
15 Claims. (Cl. 23—230)

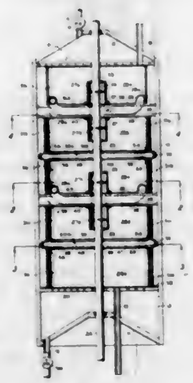


4. An apparatus for use in corrosion testing comprising a test strip sample, a carrier for said test strip sample adapted to be introduced into a flowing stream of corrosive fluids, a current source applied across said sample, a variable resistance in series with said current source and said sample, a second resistor in series with said current source, said sample, and said variable resistance, a recording potentiometer across said second resistance, a potential-sensing means applied across said sample, a control means for adjusting said variable resistance whereby current passing through the sample is controlled, and a control means responsive to the potential-sensing means for automatically and simultaneously reducing the current flow through the sample so as to maintain a constant potential drop thereacross, said recording potentiometer measuring changes in the current flow through the circuit which indicate the extent of corrosion of the sample.

2,735,755
METHOD OF LIQUID-LIQUID CONTACTING

Samuel C. Carney, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Original application November 18, 1948, Serial No. 60,778, now Patent No. 2,672,406, dated March 16, 1954. Divided and this application January 17, 1952, Serial No. 267,117
14 Claims. (Cl. 23—310)



1. In the art of contacting immiscible liquids, the steps which consist in producing rotary movement of an annular body of liquid, directing a stream of liquid droplets radially into the peripheral region of said rotating body, and directing another stream of liquid droplets radially against the inner surface of said rotating body whereby the rotating liquid body contacts the two streams of liquid particles with a shearing action.

2,735,756
PROCESS FOR PREPARING SOIL IMPROVEMENT MATERIALS

Eduard Farber, Washington, D. C., assignor to Timber Engineering Company, Washington, D. C., a corporation of Delaware

No Drawing. Application June 16, 1953, Serial No. 362,139
9 Claims. (Cl. 71—23)

1. In a process including the steps of heating a particulate lignocellulosic material and a mineral acid at a temperature in excess of the boiling point of water but below the charring temperature of said material to produce a substantially dry soil improving agent, the improvement which comprises contacting said agent, at a temperature in excess of the boiling point of water, with an aqueous medium to generate steam in situ in said agent and enhance the effectiveness thereof for improving soils as seed germination and plant growing media.

2,735,757
MANUFACTURE OF IRON POWDER

Heinz Georg Gerhard Zapf, Huskvarna, Sweden, assignor to Husqvarna Vapenfabriks Aktiebolag, Huskvarna, Sweden, a corporation of Sweden

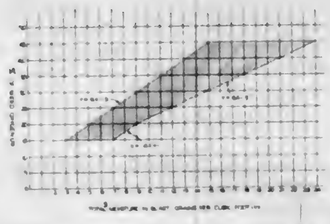
No Drawing. Application January 27, 1953, Serial No. 333,609
Claims priority, application Sweden January 29, 1952
5 Claims. (Cl. 75—.5)

1. A method of producing iron powder, comprising the steps of preparing an aqueous haloid salt solution containing iron ions, oxidizing said solution by means of air so as to precipitate iron therefrom in the form of a hydrate sludge, separating said sludge and said solution, washing and drying said sludge and thereupon reducing the same to iron powder by means of a gaseous reducing agent and in a plurality of stages, at least the last one of said stages being carried out in hydrogen, regenerating said separated solution as to its iron content by dissolving iron scrap therein, and thereupon again oxidizing said solution, said oxidizing and regenerating steps forming a cycle of operations.

2,735,758
METHOD OF TREATING IRON BEARING MATERIAL IN METALLURGICAL FURNACES

Julius H. Strassburger, Steubenville, Ohio, assignor to National Steel Corporation, a corporation of Delaware

Application October 3, 1952, Serial No. 312,878
6 Claims. (Cl. 75—41)

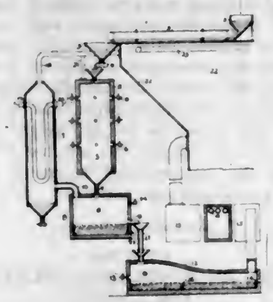


1. The method of operating a blast furnace in which iron bearing material is smelted and in which coke is burned, comprising the steps of continuously forming an air blast mixture enriched with oxygen and containing an aqueous fluid and discharging the blast mixture into the furnace, the blast mixture including from about 1.5% to 2.0% oxygen enrichment and an aqueous fluid content in accordance with the following: a minimum content of aqueous fluid varying from 3 to 5 grains of water vapor per cubic foot of blast according to the equation $Y=4X-3$; and a maximum content of aqueous fluid varying from 7 to 9 grains of water vapor per cubic foot of blast according to the equation $Y=4X+1$; where Y is the quantity of aqueous fluid in the blast and X the percentage of oxygen enrichment.

2,735,759
PROCESS OF SMELTING COPPER SULFIDE ORES

William E. Greenawalt, Denver, Colo.

Application February 8, 1951, Serial No. 210,070
4 Claims. (Cl. 75—74)



1. A process of smelting finely divided copper sulphide ore comprising, showering the ore through the highly heated atmosphere of a melting chamber to melt it, withdrawing the resulting molten copper product, the ore slag, and the melting chamber gas in a combined continuous stream from the melting chamber, separating the molten copper product and the ore slag from the melting chamber gas, then flowing the mixture of molten copper product and ore slag, separated from the melting chamber gas, into a reverberatory smelting furnace to complete the smelting and separate the molten copper matte from the molten ore slag, and separately withdrawing the molten copper matte and the molten ore slag from the smelting furnace.

2,735,760
$CoCO_3$ PRECIPITATION FROM Ni-Co SOLUTIONS

Louis N. Allen, Jr., Short Hills, and Harry G. Bocckino, Iselin, N. J., assignors to Chemical Construction Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application December 28, 1954, Serial No. 478,210
16 Claims. (Cl. 75—119)

1. In recovering high purity nickel from ammoniacal-ammonium salt solution containing dissolved nickel and cobalt values in which the cobalt content is precipitated as a carbonate by adjusting the ammonia and ammonium salt content of the solution to retain the nickel in solution and heating so-adjusted solution to selectively precipitate cobalt carbonate, the combination therewith of the improvement characterized by carrying out the heating of the adjusted solution in the presence of about 5 to about 30 grams per liter of at least a minus 50 mesh powdered metal selected from the group consisting of nickel and cobalt.

2,735,761
TERNARY URANIUM ALLOY

Frank A. Rough and Henry A. Saller, Columbus, Ohio, assignors to the United States of America as represented by the United States Atomic Energy Commission

No Drawing. Application July 14, 1954, Serial No. 443,450
2 Claims. (Cl. 75—134)

1. As a new composition of matter, a ternary alloy containing about 5% by weight of chromium, from 0.5 to 10% of iron and the remainder uranium.

2,735,762
WOOD PULPING PROCESS

James d'A. Clark, Longview, Wash.

Application September 24, 1953, Serial No. 382,065
10 Claims. (Cl. 92—6)



1. In the method of pulping wood, the steps of reducing blocks of wood into wafers of substantially uniform dimension by cutting the face of the wooden block with cutting edges parallel to and moved across the grain into wafers having a width corresponding to the width of the individual cutting edges, a thickness ranging from 0.01 to 0.1 inch and a length up to 5 inches, said wafers being produced without crushing or bruising, treating the wafers with cooking liquor, and then reducing the cooked wafers into pulp.

2,735,763
PROCESS FOR MANUFACTURING SMALL PARTS FROM THIN METALS

Alfred E. Heath, Bordentown, N. J., assignor to Radio Corporation of America, a corporation of Delaware

No Drawing. Application October 27, 1954, Serial No. 465,127
6 Claims. (Cl. 95—5.7)

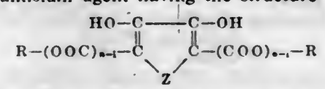
1. In a process for manufacturing small parts from a thin sheet of metal, the steps comprising coating a surface of said sheet with a light-sensitive resist, exposing said coated surface to a light image in the nature of a pattern, removing the unexposed resist, backing said sheet with a substantial thickness of wax, etching away the metal sheet uncovered by the removed resist, and supercooling the wax backed parts thereby causing the parts to be released by the wax.

2,735,764
HETEROCYCLIC ANTISTAIN AGENTS

Charles F. H. Allen and Paul W. Vittum, Rochester, N. Y. assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application December 24, 1952, Serial No. 327,941
5 Claims. (Cl. 95—6)

1. A color-forming photographic emulsion having reduced fogging tendency, comprising a silver halide emulsion having incorporated therein a non-diffusing coupler compound capable of coupling with the oxidation product of a primary aromatic amino color developer and a non-diffusing antistain agent having the structure



in which R is a hydrocarbon radical, n is a positive integer from 1 to 2 and Z is selected from the class consisting of oxygen, sulfur and nitrogen atoms.

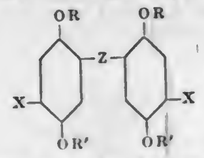
2,735,765
BIHYDROQUINONE ANTISTAIN AGENTS

Anthony Loria, Paul W. Vittum, and Arnold Weissberger, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application June 3, 1953, Serial No. 359,423
7 Claims. (Cl. 95—6)

1. A color-forming photographic emulsion having reduced fogging tendency, comprising a silver halide emulsion having incorporated therein a non-diffusing coupler compound capable of coupling with the oxidation product

of a primary aromatic amino developing agent and as an antistain agent a bihydroquinone having the formula



where R is selected from the class consisting of hydrogen and a methyl radical, R′ is selected from the class consisting of hydrogen and a methyl radical, X is selected from the class consisting of hydrogen and amino group and an alkyl group having from 1 to 18 carbon atoms, and Z is selected from the class consisting of methylene, isobutylene and N,N′-dimethylenebenzidine groups and a single chemical bond.

2,735,766

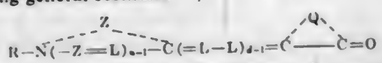
PREVENTION OF DYE WANDERING IN PHOTOGRAPHIC EMULSIONS

George D. Hill, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application May 15, 1952, Serial No. 288,031

9 Claims. (Cl. 95—7)

1. In a process of preparing a mixture of two photographic silver halide emulsions, one of said emulsions being optically sensitized and having a contrast higher than that of the other non-optically sensitized emulsion, the step which comprises combining the silver nitrate with the water-soluble halide in the presence of an optical sensitizing dye selected from those represented by the following general formula:



wherein R represents an alkyl group, L represents a methine group, *d* represents a positive integer of from 1 to 3, *n* represents a positive integer of from 1 to 2, and Z and Q each represents the non-metallic atoms necessary to complete a heterocyclic nucleus containing from 5 to 6 atoms in the heterocyclic ring, in the production of the emulsion of higher contrast and thereafter mixing the said emulsion of higher contrast containing the optical sensitizing dye and the said emulsion of lower contrast together.

2,735,767

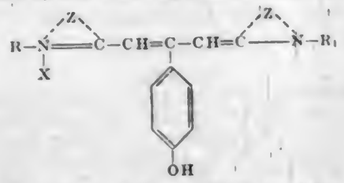
SENSITIZED PHOTOGRAPHIC EMULSION

Leslie G. S. Brooker, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application September 4, 1952, Serial No. 307,925

8 Claims. (Cl. 95—7)

1. A photographic silver halide emulsion sensitized with a symmetrical sensitizing dye selected from those represented by the following general formula:



wherein R and R_1 each represents an alkyl group, X represents an acid radical, and Z represents the non-metallic atoms necessary to complete a heterocyclic nucleus selected from the group consisting of those of the benzothiazole series and those of the naphthothiazole series.

2,735,768

REDUCTION OF VISCOSITY OF PACKET PHOTOGRAPHIC EMULSIONS

John C. McFall and Henry C. Yutzy, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application December 16, 1952, Serial No. 326,346

8 Claims. (Cl. 95—7)

1. A method for lowering the viscosity of a packet gelatin-silver halide photographic emulsion containing therein a methacrylic acid-methyl methacrylate polymer and a packet forming polymer selected from the group consisting of the styrene-maleamic acid packet forming polymers, the styrene-maleic anhydride packet forming polymers, the styrene-acrylic anhydride packet forming polymers and the styrene-methacrylic anhydride packet forming polymers which comprises adding to the packet emulsion ½–5%, based on the dry weight of gelatin and polymer, of a water-soluble salt selected from the group consisting of the water-soluble inorganic acid salts of magnesium, potassium and barium.

2,735,769

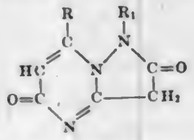
STABILIZED PHOTOGRAPHIC SILVER HALIDE EMULSIONS

Charles F. H. Allen and Harry R. Beilfuss, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application July 1, 1953, Serial No. 365,541

5 Claims. (Cl. 95—7)

1. A photographic silver halide emulsion containing from 0.01 to 5.0 g. per mole of silver halide of a compound selected from those represented by the following general formula:



wherein R and R_1 each represents a member selected from the group consisting of an alkyl group, an aryl group and a heterocyclic group.

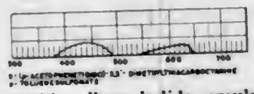
2,735,770

SENSITIZED PHOTOGRAPHIC SILVER HALIDE EMULSIONS

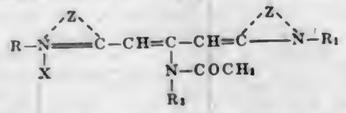
Leslie G. S. Brooker and Frank L. White, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Original application October 4, 1952, Serial No. 313,194, now abandoned. Divided and this application June 16, 1954, Serial No. 437,110

9 Claims. (Cl. 95—7)



1. A photographic silver halide emulsion sensitized with a symmetrical carbocyanine dye selected from those represented by the following general formula:



wherein R and R_1 each represents an alkyl group, R_3 represents a member selected from the group consisting of a hydrogen atom, an alkyl group, and an aromatic carbocyclic group, X represents an acid radical, and Z represents the non-metallic atoms necessary to complete

a heterocyclic nucleus selected from the group consisting of those of the benzothiazole series and those of the naphthothiazole series.

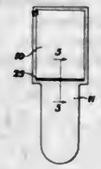
2,735,771

COMBINED LIGHT SENSITIVE FILM AND DRAW TAB FOR FILM PACKS AND METHOD OF MAKING SAME

Charles R. Fordyce and Ben C. Michener, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application January 10, 1952, Serial No. 265,876

10 Claims. (Cl. 95—9)



1. A combined light-sensitive film and paper draw tab for film packages comprising a sheet of film having a light-sensitive emulsion on one surface and a gelatin coating on and integral with the opposite surface, a paper draw tab, said draw tab lying in face-to-face relation with the gelatin coated surface of said film and attached thereto along one edge only extending transversely of said tab by a narrow intimate thermo-fused bond between said gelatin coating and said paper, said bond consisting solely of the gelatin comprising said coating.

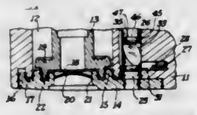
2,735,772

CHAMBER CLOSING MEMBER

Joseph Mihalyi, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

Application March 13, 1951, Serial No. 215,345

7 Claims. (Cl. 95—31)



6. In a roll film camera, the combination with a camera body formed with a spool receiving chamber, of a closure member movable to one position to close said chamber, a depending shaft carried by said member and slidably positioned in a registering opening formed in said body, a spring member carried by said body and engaging said shaft yieldably to retain said member releasably in chamber closing position, said closure member being movable axially toward and away from said chamber in axial registration therewith, a cam formed on said shaft, said cam extending axially along said shaft and radially from a point at one side of said shaft to a point beyond the axis of said shaft, as said member is moved away from said body said spring will move along said cam until said second point is reached at which time the spring will engage the shaft in eccentric relation and will impart a rocking movement to said shaft to move said member automatically out of registering relation with said chamber, and means on said shaft cooperating with said spring both to limit the rocking movement of said shaft and member and to retain said member yieldably and releasably in an inoperative position out of registry with said chamber.

2,735,773

METHOD OF PRODUCING A PHOTOGRAPHIC IMAGE BY PHYSICAL DEVELOPMENT

Cornelis Johannes Dippel and Harke Jan Houtman, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

No Drawing. Application March 18, 1952, Serial No. 277,276

Claims priority, application Netherlands March 27, 1951

11 Claims. (Cl. 95—88)

1. A method of producing photographic contrasts which comprises the steps of selectively exposing portions of a light-sensitive system containing a light-sensitive diazosulphonate and an antiregression agent other than said diazosulphonate consisting of a water-soluble salt of a metal selected from the group consisting of lead, lanthanum, thorium, uranium, cadmium, zinc, copper, cobalt and chromium, to decompose said diazosulphonate and form a stable light-decomposition product and subjecting said light-decomposition product to the action of a soluble mercurous salt in the presence of moisture to form a physically intensifiable contrast.

2,735,774

CONCENTRATED PHOTOGRAPHIC FIXING SOLUTIONS

Richard W. Henn, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application July 26, 1954, Serial No. 445,933

5 Claims. (Cl. 95—88)

1. A photographic fixing composition in suspension in a colloidal gel, comprising a water soluble colloidal gel of an ester of alginic acid and suspended therein a thiosulfate selected from an alkali sulfite and an ammonium sulfite, a hardening agent, boric acid and a salt of a solid organic acid selected from the group consisting of acetic acid and citric acid.

2,735,775

SILAGE ADDITIVE

Jesse B. Bronstein, Jr., and Franklin B. Wells, Allentown, Pa., assignors to Trojan Powder Company, a corporation of New York

Application June 29, 1953, Serial No. 364,662

4 Claims. (Cl. 99—8)

1. A silage additive consisting essentially of sodium bisulfite and calcium formate in the proportion of 30–90 parts of the bisulfite for 100 of the combined weight of the bisulfite and formate.

2,735,776

PROCESS FOR TREATMENT OF MEATS, SAUSAGE PRODUCTS, AND INTESTINES

Wilhelm Bickel, Mannheim, Germany, assignor to Calgon, Incorporated, Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application May 16, 1952, Serial No. 288,333

Claims priority, application Germany May 19, 1951

6 Claims. (Cl. 99—107)

1. A method for the treatment of meat and sausage products and intestines of any kind which comprises treating said products with a solution which contains from about 2 percent to about 10 percent by weight of a mixture comprising 80 parts by volume of tartaric acid and 20 parts by volume of sodium hexametaphosphate.

2,735,777

PROCESS FOR THE IMPROVEMENT OF TASTE, DIGESTIBILITY, AND STABILITY OF FISH MEAT

Albert Meyer, Ramsen, Germany, assignor to Calgon, Incorporated, Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application May 19, 1952, Serial No. 288,759
Claims priority, application Germany May 19, 1951
10 Claims. (Cl. 99—111)

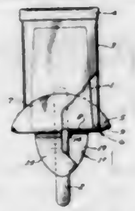
1. A method of improving the keeping properties of fish meat which is preserved in an uncooked state in brine which comprises exposing said fish meat to a sodium chloride brine containing from about 0.2 percent to about 2.0 percent by weight of a polymeric phosphoric acid compound based on the weight of the fish meat so exposed.

2,735,778

INDIVIDUALLY PACKAGED FROZEN CONFECTION

Don A. Taylor, Wadsworth, Ohio

Application September 5, 1952, Serial No. 307,999
7 Claims. (Cl. 99—180)



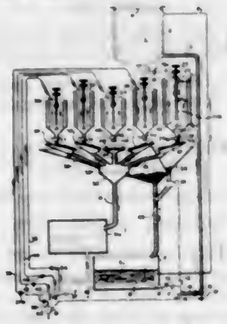
1. A frozen confection including a body of frozen confection, a handle connected thereto and extending from the base thereof, a shield disposed against the base and having a passage through which the handle extends, said shield having a margin which throughout its peripheral extent extends outwardly beyond the body, a relatively stiff reinforce including a base portion having a passage through which the handle extends and in supporting relation to the underface of the shield and having a lateral portion angularly disposed to the plane of the base portion and extending away from the body lengthwise of the handle and lying alongside the handle, and said lateral portion being readily bendable toward and against a side of the handle by finger pressure.

2,735,779

METHOD OF DEHYDRATION BY FREEZING

Elwood Paul Wenzelberger, Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio

Application June 26, 1950, Serial No. 170,285
10 Claims. (Cl. 99—205)



1. In a method of dehydrating a liquid composition containing a relatively low solids content, the steps comprising freezing a portion of the water in the composition to form ice crystals, agitating the composition and ice crystals, segregating from the partially dehydrated liquid ice crystals beyond a predetermined size, successively and by application of progressively lower temperatures freezing additional portions of the water from the partially dehydrated resultant liquid, and mixing back into the so-concentrated liquid at least a portion of undissolved solids, and applying a vibratory action on the liquid after each freezing operation thereby separating ice crystals of predetemined size from the liquid.

2,735,780

MARKING COMPOSITIONS

George C. Le Compte, Arlington, Va., and Waldo C. Ault, Philadelphia, Pa., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application November 17, 1950, Serial No. 196,337
4 Claims. (Cl. 106—19)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A marking composition consisting essentially of a pigment dispersed in a vehicle composed essentially of a wool grease fraction that is retained as solute on maintaining a solution of wool grease in a solvent of the group consisting of lower aliphatic alcohols and ketones at a temperature within the range of from about 0° to about 10° C.

2,735,781

SIZING OF TEXTILES

Jean Fraizy, Lyon, France, assignor to Societe "Rhodiaceta," Paris, France, a company of France

No Drawing. Application February 29, 1952, Serial No. 274,309
Claims priority, application France April 9, 1951
1 Claim. (Cl. 106—135)

A sizing agent for all kinds of textiles, which consists of an aqueous solution of gelatine containing 2 to 6% by weight of diethanolamine nitrate.

2,735,782

STABILIZED PIGMENTED CELLULOSE ACETATE-BUTYRATE MOLDING COMPOSITIONS CONTAINING PROPYL GALLATE

George C. De Croes and John W. Tamblyn, Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester N. Y., a corporation of New Jersey

No Drawing. Application September 15, 1952, Serial No. 309,742
1 Claim. (Cl. 106—182)

A cellulose acetate-butyrate molding composition stabilized against weathering by a content of approximately 1 part of propyl gallate and 2 parts of the anatase form of titanium dioxide pigment per 100 parts of cellulose acetate-butyrate, by weight.

2,735,783

CELLULOSE ORGANIC ESTER MOLDED OBJECTS CONTAINING PHOTOTROPIC DYES

John W. Tamblyn and Gerald M. Armstrong, Kingsport, Tenn., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application March 22, 1952, Serial No. 278,108
4 Claims. (Cl. 106—193)

1. A molded object composed of a cellulose organic acid ester plastic comprising a cellulose ester selected from the group consisting of cellulose acetate, cellulose acetate-propionate, and cellulose acetate-butyrate, a plasticizer for the cellulose ester, and, as a weathering inhibitor, from 0.1 part to 10 parts by weight, per 100 parts by weight of cellulose ester, of a phototropic azo dye selected from the group consisting of p-phenylazodiphenylamine, p-[p-dimethylamino)phenylazo]acetanilide, p-[o-chlorophenylazo] - N.N - dimethylaniline, 4-[o-chlorophenylazo] - N-methyl-m-toluidine and 2,5 - dimethoxy - 4 - phenylazoaniline.

2,735,784

PROCESS OF ELECTROSTATIC PRINTING

Harold G. Greig and Charles J. Young, Princeton, N. J., assignors to Radio Corporation of America, a corporation of Delaware

No Drawing. Application July 30, 1953, Serial No. 371,416
5 Claims. (Cl. 117—17.5)

1. A process of printing which comprises forming a powder image in a particular configuration on a printing base, said powder image comprising a finely-divided and intimate mixture of a zinc-containing material and a resin containing vinyl and chloride radicals, and heating said powder image until said resin and said zinc-containing material react to convert said powder image to a black color.

2,735,785

PROCESS OF ELECTROSTATIC PRINTING

Harold G. Greig, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware

No Drawing. Application July 30, 1953, Serial No. 371,415
6 Claims. (Cl. 117—17.5)

1. A process of printing comprising forming a dry powder image in a particular configuration with a powder comprising a member of the group consisting of (1) a resin containing vinyl and chloride radicals and (2) a zinc-containing material, contacting said powder image with the other member of said group and then heating said combination until said contacted members react to convert said powder image to a black color.

2,735,786

AIR PERMEABLE, RESIN-COATED FABRIC AND PROCESS OF MAKING THE SAME

August F. Schramm, Jr., White Plains, N. Y.

No Drawing. Application August 4, 1953, Serial No. 372,406
4 Claims. (Cl. 117—19)

1. In making a resin treated fabric that is permeable to air and absorptive of water, the process which comprises applying to the fabric an emulsion of microscopic particles of solid water insoluble resin dispersed in water, the emulsion being applied to a surface of the fabric in limited proportion less than that required for saturation and less than that which, after drying, would produce a continuous impermeable film on the fabric, then applying over the emulsion treated, wet surface macroscopic particles of solid water insoluble resinous composition that are thermoplastic and compatible with the plastic material of the said emulsion, removing those of the applied macroscopic particles that are not in direct contact with the emulsion treated fabric, this removal leaving spaces between remaining macroscopic particles, then warming the macroscopic particles and the emulsion to the temperature of drying of the water from the emulsion and softening of the macroscopic particles and particles of plastic material of the emulsion, and pressing the macroscopic particles in the thus softened condition against the particles applied in the emulsion.

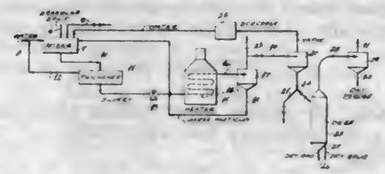
2,735,787

PROCESS FOR PULVERIZING SOLID MATERIALS

Du Bois Eastman, Whittier, Calif., and Leon P. Gaucher, Tuckahoe, N. Y., assignors to The Texas Company, New York, N. Y., a corporation of Delaware

Application April 14, 1953, Serial No. 348,642
24 Claims. (Cl. 117—66)

1. A process which comprises pulverizing a mass of relatively coarse particles of at least one solid disintegratable material by mixing said particles with a vaporizable liquid and forming therewith a free-flowing slurry; passing said slurry into and through an initial portion of a tube having a substantial length compared to its inside diameter; vaporizing said liquid by heating said slurry during passage thereof through said tube to a temperature well above the boiling point of said liquid at the



pressure existing in said tube, thereby forming a dispersion of said solid particles in the resulting vapor; disintegrating said coarse particles and forming a mass of relatively fine particles by passing said dispersion through the latter portion of said tube in turbulent flow at a velocity greater than 25 feet per second while maintaining said dispersion at a temperature well above said boiling point, but below the temperature at which chemical reaction of said material with said vapor occurs; and withdrawing relatively fine particles of said solid material from said tube.

2,735,788

IMMERSION TINNING FROM STANNATE SOLUTIONS

Frederick A. Lowenheim, Plainfield, and Herbert B. Forman, Hillside, N. J., assignors to Metal & Thermit Corporation, New York, N. Y., a corporation of New Jersey

No Drawing. Application December 6, 1951, Serial No. 260,347
7 Claims. (Cl. 117—130)

1. The process of forming an immersion coating of tin on the surface of materials selected from the class consisting of copper and copper base alloys which comprises contacting the surface of said materials with an aqueous alkaline solution containing dissolved tin in the stannate condition and a cyanide.

2,735,789

BROMINATED PHOSPHONATE POLYMERS AND METHODS OF FLAMEPROOFING THEREWITH

Arthur Dock Fon Toy, Park Forest, and Kenneth H. Rattenbury, Chicago Heights, Ill., assignors to Victor Chemical Works, a corporation of Illinois

No Drawing. Application August 5, 1952, Serial No. 302,836
13 Claims. (Cl. 117—137)

1. A brominated polymer of di(beta gamma unsaturated)alkenyl monochloromethanephosphonate.

7. The method of flameproofing a cellulosic fabric which comprises applying a solution of a brominated partial polymer of a di-(beta gamma unsaturated)alkenyl monochloromethanephosphonate to the fabric, removing the excess solution and heating at a temperature and for a time sufficient to fix the polymer on the fabric in an amount of at least 10% by weight of the untreated fabric.

2,735,790

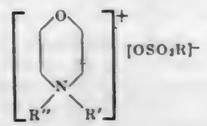
COMPOSITION AND METHOD FOR IMPARTING SOFTNESS AND ANTI-STATIC PROPERTIES TO ACRYLONITRILE FIBERS

Calvin J. Waitkus, Decatur, Ala., assignor to The Chemstrand Corporation, Decatur, Ala., a corporation of Delaware

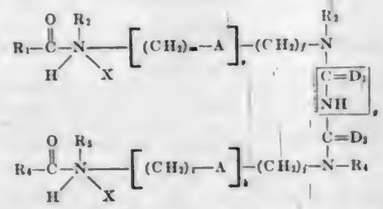
No Drawing. Application October 20, 1954, Serial No. 463,589
9 Claims. (Cl. 117—138.8)

5. The method of imparting lubricity, softness and anti-static properties to shaped articles comprising an

acrylonitrile polymer containing by weight in the molecule at least 80 percent of acrylonitrile which comprises applying to the article an aqueous dispersion containing from one to 5 percent solids, said solids comprising from 20 percent to 50 percent by weight of a non-ionic surface active partial ester of a polyhydric alcohol and an aliphatic carboxylic acid, said alcohol having from two to 8 carbon atoms, from 15 percent to 35 percent of a non-ionic surface active polyether prepared by condensing from 150 to 250 parts of ethylene oxide with a member selected from the group consisting of water-insoluble hydroxy-fatty acids, esters of such acids, and esters, from 10 percent to 40 percent of a cationic surface active quaternary ammonium compound having the formula:



wherein R represents an alkyl radical having less than 5 carbon atoms, R′ represents an alkyl radical having less than 5 carbon atoms, and R″ represents an alkyl radical having more than 10 carbon atoms, and from 5 percent to 25 percent of a substituted carbamyl compound having the formula:

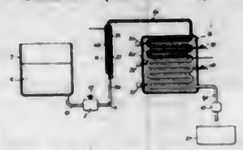


wherein R_1 and R_6 are selected from the group consisting of saturated alkyl radicals containing at least 6 carbons; R_2, R_3, R_4, and R_5 are selected from the group consisting of hydrogen, alkyl and hydroxyalkyl radicals containing less than 5 carbons and in which R_3 and R_4 may further represent an acid amide chain derived from an acid and a polyamine; D_1 and D_2 are selected from the group consisting of oxygen, sulfur, and imido groups, the number of such groups being as g ranges from 0 to 3; g is an integer from 0 to 3; A is selected from the group consisting of oxygen, sulfur, amino groups, alkyl-substituted amino groups containing less than 5 carbons, and alkylol substituted amino groups containing less than 5 carbons; f and j are integers from 1 to 6; e and k are integers from 0 to 6; m and t are integers from 1 to 6; and X is a negative radical selected from the group consisting of acyl and halogen.

2,735,791
WATERPROOFING COMPOSITIONS AND THEIR USE IN COATING
Pierre Pascal Peyrot and Jacques Proriol, Lyon, France, assignors to Societe des Usines Chimiques Rhone-Poulenc, Paris, France, a French body corporate
No Drawing. Application August 2, 1954, Serial No. 447,434
Claims priority, application France August 5, 1953
8 Claims. (Cl. 117—161)

5. Organic fibrous material water-proofed by the presence thereon of 0.5 to 6% of its weight of a water-proofing composition comprising, calculated on the dry solid content, 20 to 60% by weight of a methyl polysiloxanic resin having a CH_3:Si ratio between 1.3:1 and 1.7:1, 25 to 50% by weight of a methyl polysiloxanic oil having a CH_3:Si ratio between 1.9:1 and 2.1:1 and from 8 to 40% by weight of triethanolamine titanate.

2,735,792
APPARATUS FOR THE CONTINUOUS CONVERSION OF STARCH
Karl Kristian Kobs Krøyer, Arhus, Denmark
Application July 17, 1951, Serial No. 237,202
7 Claims. (Cl. 127—1)



1. An apparatus for the continuous conversion of polysaccharide materials comprising a heat exchanger having a continuous flow space between outer and inner heating surfaces, means for continuously supplying convertible polysaccharide medium to one end of said flow space at a pressure substantially above that of saturated steam at the maximum temperature of the polysaccharide medium occurring in said heat exchanger and a tubular converter connected to the other end of said flow space for receiving the polysaccharide medium heated therein said heat exchanger and said tubular converter being constructed to form a continuous conduit system for the treatment of a continuous flow of said polysaccharide medium in the absence of steam.

2,735,793
PROCESSING OF RUBBER
Charles E. Hoke, Ferndale, Mich., assignor to United States Rubber Company, New York, N. Y., a corporation of New Jersey
Application October 10, 1952, Serial No. 314,016
6 Claims. (Cl. 134—6)



1. In a method of processing raw sulfur-containing vulcanizable rubber stocks which tend to form sulfur bloom on their surface, including the steps of shaping the vulcanizable rubber stock and storing the shaped stock in contact with a cloth liner, subsequently removing the liner, and thereafter reusing the liner with a subsequent batch of vulcanizable rubber stock, until the liner becomes contaminated with a definite amount of bloomed sulfur picked up from the surface of the said raw sulfur-containing vulcanizable rubber stocks, the improvement which comprises the step of cleaning the said contaminated liner by intimately contacting the liner with a normally solid plastic material in which the sulfur contained in the contaminated liner is soluble, maintaining the said liner and plastic in intimate contact for a sufficient period of time for the sulfur to diffuse out of the liner and into the plastic, and thereafter separating the plastic containing the dissolved sulfur from the resulting cleaned liner, said solid plastic material being sufficiently free of sulfur, before contacting the plastic with the sulfur-contaminated cloth liner, to have substantial capacity to attract and dissolve additional sulfur with which it comes in contact, whereby the plastic acts as a solid solvent medium for dissolving the contaminating sulfur from the cloth liner.

2,735,794
METHOD OF CLEANING AND STERILIZING TUBULAR MEMBERS
Clarence B. Pletcher, Buchanan, Mich.
Application July 8, 1952, Serial No. 297,732
2 Claims. (Cl. 134—24)

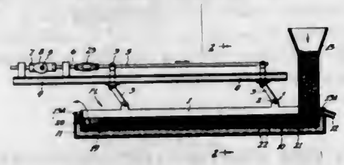
1. A method of cleaning and sterilizing the bore of a tubular member comprising the steps of passing a liquid

supply pipe axially through the bore of the tubular member, ejecting liquid under high pressure from one end of the pipe through a plurality of passages in a spraying nozzle in the form of projecting jets extending in a circumferentially spaced uniform fashion in a common



circle around the nozzle and issuing rearwardly and tangentially from the passages and projecting against the surface of the bore at angles less than right angles, drawing air from the bore of the tubular member in front of the nozzle into the nozzle passages and mixing the air with the liquid in the passages in the nozzle.

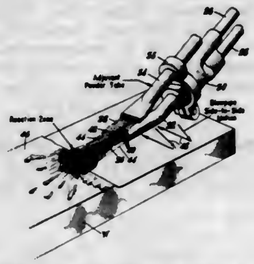
2,735,795
METHOD AND APPARATUS FOR COUNTERCURRENTLY CONTACTING SOLIDS WITH LIQUIDS
Donald Eric Weiss, Blackburn, Victoria, and Everard Arthur Swinton, Mount Eliza, Victoria, Australia, assignors to Commonwealth Scientific and Industrial Research Organization, East Melbourne, Victoria, Australia, a body corporate
Application February 25, 1953, Serial No. 338,822
Claims priority, application Australia April 7, 1952
10 Claims. (Cl. 134—25)



3. Apparatus for obtaining continuous countercurrent contact between solid particles and a liquid; said apparatus comprising a longitudinal housing having a screen therein dividing the housing into an upper and a lower compartment, means introducing a liquid into said housing at a first location along the length thereof, means withdrawing the liquid from said housing at a second location spaced longitudinally from said first location and at a rate sufficient to provide a continuous flow of the liquid from said first to second location while maintaining a level of liquid in the housing which inundates said screen to a substantial depth, means continuously feeding solid particles to said upper compartment at a third location spaced longitudinally from said first location in the direction toward said second location, means for withdrawing solid particles from said upper compartment at a fourth location spaced longitudinally from said third location in the direction toward said first location, means repeatedly effecting relative movement of said screen and lower compartment along a path having vertical and horizontal components of which the horizontal component of the movement of said screen relative to the lower compartment during downward movement of the screen relative to the lower compartment is in the direction from said third location toward said fourth location, and means sealing said screen at the periphery thereof with respect to said lower compartment so that during said downward relative movement of the screen the liquid surges strongly upward through the screen to non-turbulently fluidize the solid particles, while, during upward relative movement of the screen the particles settle on the latter, and the particles traverse the screen longitudinally in the direction toward said fourth location during the repeated relative movements of said screen and lower compartment.

9. A method of obtaining continuous countercurrent contact between solid adsorbent particles and a liquid solution, which comprises the steps of introducing liquid solution at one end of a pulsating swinging sieve jig, causing liquid solution to flow through the jig by withdrawing it at the opposite end of the jig, feeding in solid adsorbent particles to a compartment above the sieve at a position longitudinally apart from that at which the liquid solution enters the jig, forming a non-turbulent fluidized bed of the solid adsorbent particles by adjusting the pulsations of the jig, and cousing the solid adsorbent particles to traverse the screen in a direction opposite to that of the flow of liquid solution by removing the solid adsorbent particles from said compartment at a point longitudinally apart from that at which they are fed in the apparatus.

2,735,796
PROCESS FOR THERMOCHEMICALLY WASHING FERROUS METAL CASTINGS
Dewitt T. Kelley, Nixon, and Roger S. Babcock and Edward M. Holub, Plainfield, N. J., assignors to Union Carbide and Carbon Corporation, a corporation of New York
Application January 14, 1952, Serial No. 266,388
3 Claims. (Cl. 148—9.5)

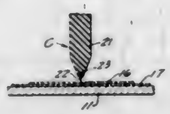


1. Process of thermochemically washing ferrous metal castings which comprises applying at an acute included angle against the surface to be washed a round gouging-velocity stream of commercially pure oxygen which is surrounded by flames, including laterally positioned flames, extending in the same general direction as such oxygen stream, simultaneously applying against such surface at a somewhat greater acute included angle a flat stream of air-borne powder composed mainly of iron which overlaps said oxygen stream and all of such preheating flames including the laterally positioned flames thereof, starting a thermochemical reaction with the surface material, and moving such streams and flames transversely back and forth across such surface while advancing them along the surface in the general direction of such streams, thereby thermochemically cleaning the same by removing metal, incrustations and other foreign mater therefrom as a result of the combined melting and planing action of such flames and oxygen and air-borne powder streams such laterally positioned flames and overlapping powder stream cooperating with the oxygen stream to obtain combustion at the leading sides of the reaction zone during such lateral movements.

2,735,797
METHOD OF HEAT SEALING AND SEVERING PLASTIC SHEETS
Gilmore T. Schjeldahl, Farmington, Minn., assignor to Herb-Shelly-Inc., Farmington, Minn., a corporation of Minnesota
Application December 1, 1952, Serial No. 323,489
5 Claims. (Cl. 154—116)

1. The method of reinforcing and severing a previously formed narrow transverse heat seal across a plurality of thermoplastic fusible sheets which consists in bringing into contact longitudinally of said heat seal and within its side edges a heated sharp edged tool, melting through the plurality of sheets at said seal to sever the sheets and simultaneously form a molten beaded edge at each edge of the line of sever, and removing the sharp edged tool from

the line of sever and allowing said molten beaded edges to cool and solidify.



4. In a plastic product having a plurality of thermoplastic sheets, an edge weld comprising a fused band adjacent the outer edge of said weld, said band having a thickness slightly less than the composite thickness of said plurality of plastic sheets, and a further seal at the extreme outer edge of said weld having a beaded configuration of thickness greater than the first mentioned narrow band seal.

2,735,798

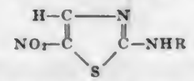
ACYL AMINO-NITROTHIAZOLE COMPOSITIONS FOR ORAL ADMINISTRATION IN CONTROL OF TRICHOMONAS VAGINALIS VAGINITIS

Alfred B. Kupferberg, Somerville, William C. Mende, Neshanic, Nathan Millman, Somerville, and Heron O. Singher, Plainfield, N. J., assignors to Ortho Pharmaceutical Corporation, a corporation of New Jersey

No Drawing. Application October 21, 1952, Serial No. 316,088

12 Claims. (Cl. 167—55)

1. A composition of matter in dosage unit form for oral administration effective in the control of *Trichomonas vaginalis* vaginitis which comprises a compound of the formula



in which R is an acyl radical in intimate admixture with an inert solid diluent and surrounded by an enteric layer of substance which is substantially insoluble in acid stomach secretions and soluble in alkaline intestinal fluids.

2,735,799

EPINEPHRINE OINTMENT AND METHOD OF PREPARATION THEREOF

Harold A. Abramson, New York, N. Y.

No Drawing. Application February 18, 1953, Serial No. 337,679

8 Claims. (Cl. 167—63)

1. The method of preparing an oleaginous epinephrine composition which may be exposed to air without substantial loss of epinephrine potency which comprises, dispersing particles of a physiologically active epinephrine compound in a solution of an organic anti-oxidant in an organic solvent in which solution the epinephrine is substantially insoluble, vaporizing the solvent so as to form a solid residue of particles composed of epinephrine and said organic anti-oxidant, and uniformly blending said residue in an oleaginous vehicle.

6. Epinephrine ointment which is stable to oxidation comprising particles composed of physiologically active epinephrine and an organic anti-oxidant substance uniformly dispersed throughout an ointment base, said ointment being prepared substantially according to the method of claim 1.

2,735,800

STEROIDS

Herbert C. Murray, Hickory Corners, and Durey H. Peterson, Kalamazoo, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

Application July 5, 1952, Serial No. 297,242

27 Claims. (Cl. 195—51)

1. In an aerobic mycelial fermentation process of introducing oxygen into a steroid, the steps comprising oxygenating a steroid with at least 0.5 gram, on a dry basis, of mycelium per gram of steroid until the weight ratio of thus oxygenated steroid to residual starting steroid is at least four to one and then separating and isolating the resulting oxygenated steroid.

2,735,801

CATALYST SUPPORTS AND PROCESS FOR PREPARING THE SAME

Carlos L. Gutzeit, Woodbury, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York

No Drawing. Application February 9, 1951, Serial No. 210,285

2 Claims. (Cl. 196—50)

1. A process for effecting reforming of petroleum naphthas, which comprises contacting a petroleum naphtha with a catalyst comprising chromium oxide supported on a silica-alumina support in which silica and alumina are present in a mole ratio falling within the range varying between about 10:90 and about 30:70, respectively, obtained by effecting the coprecipitation of hydrous silicon oxide and hydrous aluminum oxide at a pH varying between about 9.5 and about 11.5, to produce a mixture of coprecipitated hydrous silicon oxide and hydrous aluminum oxide, aging said mixture at said pH for a period of time falling within the range varying from about 4 hours to about 24 hours, washing said mixture to remove water-soluble impurities, drying said mixture, and calcining said mixture, said contacting taking place at a temperature varying between about 900° F. and about 1050° F., and at a pressure varying between atmospheric and about 65 pounds per square inch.

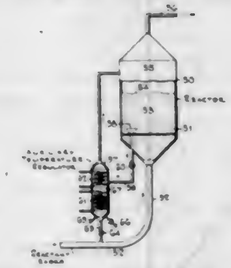
2,735,802

METHOD FOR CONTROLLING TEMPERATURES IN FLUIDIZED SOLIDS SYSTEMS FOR THE CONVERSION OF HYDROCARBONS

Charles E. Jahnig, Red Bank, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application December 23, 1950, Serial No. 202,494

2 Claims. (Cl. 196—52)



1. In a process for the conversion of hydrocarbons in contact with finely divided catalytic solids wherein said catalytic solids are continuously circulated from a hydrocarbon conversion zone to a separate regeneration zone where inactivating carbonaceous deposits are burned from the catalytic solids and thence back to the conversion zone, and wherein an oxygen-containing regeneration gas is supplied to the regeneration zone at a sufficient rate to maintain the finely divided catalytic solids therein as a dense fluidized bed, the improvement which comprises withdrawing hot catalytic solids from said dense fluidized bed of the regeneration zone, maintaining the withdrawn catalytic solids as an auxiliary dense fluidized bed having an upper level and a disperse phase thereabove in a heat exchange zone having a relatively small horizontal cross section in comparison with the horizontal cross section of the dense fluidized bed in the regeneration zone, maintaining a cool heat exchange fluid in indirect heat exchange relation with the withdrawn catalytic solids along a heat

exchange surface extending from the auxiliary dense fluidized bed into the disperse phase thereabove, thereby cooling the said catalytic solids, withdrawing cooled catalytic solids downwardly from the auxiliary dense fluidized bed, mixing the withdrawn cooled catalytic solids with oxygen-containing regeneration gas, and passing the resultant mixture into said regeneration zone, and regulating the rate at which the catalytic solids are supplied to and withdrawn from the auxiliary dense fluidized bed in order to control the position of the upper level of the said auxiliary dense fluidized bed in contact with the heat exchange surface and thereby control the proportion of the heat exchanger surface immersed in the auxiliary dense fluidized bed.

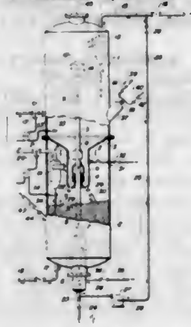
2,735,803

METHOD FOR CONTACTING SUB-DIVIDED SOLID PARTICLES WITH DIFFERENT FLUID STREAMS WITHIN SEPARATE SUPERIMPOSED CONTACTING ZONES

Frederick W. Leffer, Riverside, Ill., assignor to Universal Oil Products Company, Des Plaines, Ill., a corporation of Delaware

Original application February 26, 1949, Serial No. 78,594. Divided and this application March 30, 1953, Serial No. 345,376

6 Claims. (Cl. 196—52)



1. In a process wherein a descending bed of particulated solid is maintained in each of two superimposed confined contacting zones, a stream of the particulated solid is withdrawn from the lower portion of the lower bed and transferred by the lifting action of a gasiform transfer medium through a substantially vertical straight-line passageway to the upper portion of the upper bed, and particulated solid is passed from the lower portion of said upper bed as a descending annular column around said straight-line passageway to the top portion of said lower bed while a stream of fluid is contacted with the solid in said lower bed and another stream of fluid is contacted with the solid in said upper bed, the improved method of assuring free gravitational flow of said solid in said annular column and substantial preclusion of fluid flow from either one of said contacting zones into said annular column which comprises maintaining the annular column in between the descending beds at a substantially smaller cross-section than either of said beds, regulating the flow of fluid through said upper bed at a selected point of the lower portion of the upper contacting zone and the flow of fluid through the lower bed at a selected point of the upper portion of the lower contacting zone and above the bed in the latter, introducing a stream of sealing fluid into said annular column at at least one point intermediate its upper and lower ends, and adjusting the fluid flow at at least one of said selected points in response to variations in differential between the fluid pressures existing in the immediate proximity of the upper and lower ends of said annular column to maintain a continuous flow of said sealing fluid both upwardly and downwardly a substantial distance through said annular column.

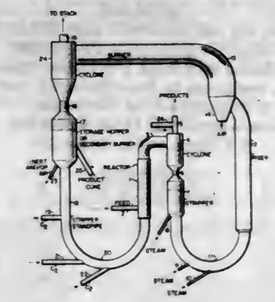
2,735,804

USE OF NORMALLY GASEOUS HYDROCARBON FOR STRIPPING OF CIRCULATING COKE IN A FLUIDIZED COKING PROCESS

Edward D. Boston, Westfield, and Brook I. Smith, Elizabeth, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application August 19, 1954, Serial No. 450,914

6 Claims. (Cl. 202—14)



1. In a process for converting a heavy hydrocarbon oil to low molecular weight normally gaseous unsaturated hydrocarbons, aromatics, and coke by the steps of contacting the oil charge stock with fluidized, inert, particulate solids in a reaction zone at a temperature of 1300° to 2100° F. wherein the oil is converted to product vapors and carbonaceous solids are continuously deposed on the particular solids; removing product vapors from the reaction zone; heating the circulating particulate solids removed from the reaction zone in a separate heating zone to increase the temperature of such solids to at least 1400° F.; returning circulating heated solids from the heating step to the reaction zone to supply heat thereto and wherein the particulate solids from the heating step contain occluded gases including carbon dioxide, carbon monoxide, and oxygen, the improvement which comprises removing a major proportion of the occluded gases from the circulating coke from the heating step before it reaches the reaction zone by stripping the circulating coke from the heating step with a normally gaseous hydrocarbon having at least two carbon atoms.

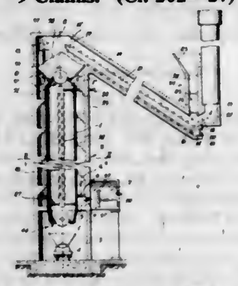
2,735,805

METHOD AND RETORT ARRANGEMENT FOR CARBONIZING SAWDUST FROM WOOD

Fernando M. Mora, Magdalena, Argentina

Application August 10, 1954, Serial No. 448,835

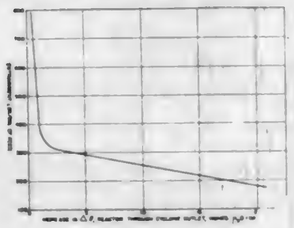
9 Claims. (Cl. 202—27)



9. A method for carbonizing sawdust and collecting substantially all the gases arising out of said carbonization, which comprises the steps of progressively drying the sawdust with the used heating gases arising out of the carbonizing retort whilst the sawdust is displaced towards the inlet of said retort, forming a sawdust accumulation at said inlet and preheating there said sawdust, intermittently supplying successive charges of sawdust into said retort and substantially vertically displacing said successive sawdust

charges downwardly towards the outlet of said retort and discharging through said outlet successive intermittent charges of carbonized sawdust and collecting and withdrawing during said carbonization by means of a collector duct arranged in said retort the gases produced by said carbonization in substantially all the zones of said retort.

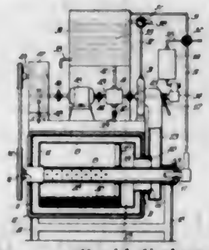
2,735,806
METHOD OF SCOURING EQUIPMENT IN A FLUID COKING PROCESS
Byron V. Molstedt and John Frederick Moser, Jr., Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware
Application August 23, 1954, Serial No. 451,382
5 Claims. (Cl. 202—38)



4. In a hydrocarbon oil conversion process wherein a coking charge stock boiling above about 900° F. is contacted with particulate coke having a true particle density in the range of 90 to 110 lbs./ft.^{3} and maintained at a coking temperature in the range of 850° to 1600° F., wherein said coke is maintained in said coking zone as a dense fluidized bed, and wherein conversion products are withdrawn from the upper surface of said bed as a relatively dilute solids-gas suspension; the improvement which comprises maintaining the particle size of said particulate coke substantially in the range of 40 to 500 microns, controlling the particle size distribution of said particulate coke so that 10 to 20 wt. per cent of said particulate coke is smaller than 147 microns, 30 to 60 wt. per cent is smaller than 175 microns and 60 to 90 wt. per cent is smaller than 246 microns, maintaining the density of said fluidized bed in the range of 30 to 55 lbs./ft.^{3}, introducing said feed stock into said coking zone in an amount in the range of 25 to 150 bbl./day/ft.^{2} of reactor cross-sectional area, adjusting the superficial velocity of gases passing upwardly through said upper surface to a velocity in the range of 1 to 5 ft./sec., so as to secure a minimum entrainment of said particulate coke in said vapors withdrawn of at least 400 lbs./bbl. of said charge stock whereby coke deposition on the confines of said solids-gas suspension is substantially eliminated.

2,735,807
SELF-CLEANING APPARATUS FOR PURIFYING SEA WATER BY DISTILLATION
Oscar H. Banker, Evanston, Ill., assignor to New Products Corporation, Chicago, Ill., a corporation of Illinois
Application October 20, 1951, Serial No. 252,223
19 Claims. (Cl. 202—238)

15. Self-cleaning evaporator equipment comprising a vaporizer drum to receive aggregate material, means to shift said drum sufficiently to agitate said material, said shifting means comprising a device to control the shifting of the drum at said two distinct speeds so as to produce agitation of the material in two distinct degrees of violence, means to heat said material in said drum, a vapor discharge duct communicating with the interior of said drum, a condenser coil supplied by said drum when the same is shifted relatively slowly, a disposal line supplied by said drum when the same is shifted at a distinctly higher speed, means to withdraw vapor and the like from said drum through said duct and forward the same to said coil including a manually controllable valve selectively operable to communicate said duct with said coil or with said disposal line, a condenser casing housing said coil and provided with means



to supply liquid thereto, a liquid discharge line from said casing to the interior of said drum, a compressor, and a manually operable valve selectively communicating said compressor or said liquid discharge line with the interior of said drum.

2,735,808
MIRROR BRIGHT SILVER PLATING
Lawrence Greenspan, Bronx, N. Y., assignor to The American Platinum Works, Newark, N. J., a corporation of New Jersey
No Drawing. Application January 31, 1955, Serial No. 485,329
21 Claims. (Cl. 204—46)

1. The method of electrodepositing bright silver, which comprises electrolyzing a tartrate-free solution containing silver cyanide, an alkali metal cyanide, an alkali metal carbonate, and a sufficient amount of a soluble complex of an alkali metal, antimony and a straight chain polyhydroxy aliphatic compound to impart brightness to the silver electrodeposit, said complex being formed by heating to boiling an aqueous mixture of 1 part antimony compound, 1–6 parts polyhydroxy aliphatic compound, and 1–4 parts alkali metal hydroxide until complete solution is obtained.

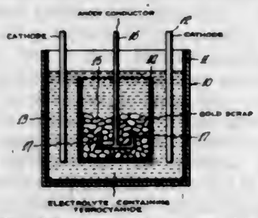
2,735,809
MIRROR BRIGHT SILVER PLATING
Lawrence Greenspan, Bronx, N. Y., assignor to The American Platinum Works, Newark, N. J., a corporation of New Jersey
No Drawing. Application January 31, 1955, Serial No. 485,330
23 Claims. (Cl. 204—46)

1. The method of electrodepositing bright silver which comprises electrolyzing a solution containing silver cyanide, an alkali metal cyanide, an alkali metal carbonate, and a sufficient amount of a soluble complex of an alkali metal, bismuth, and a straight chain polyhydroxy aliphatic compound to impart brightness to the silver electrodeposit, said complex being formed by heating to boiling an aqueous mixture of 1 part bismuth compound, 1–6 parts polyhydroxy aliphatic compound, and 1–4 parts alkali metal hydroxide until complete solution is obtained.

2,735,810
RECOVERY OF GOLD FROM SCRAP CONTAINING IT
Francis P. Gagliano, Jackson Heights, N. Y., assignor to Secon Metals Corporation, White Plains, N. Y., a corporation of New York
Application February 10, 1954, Serial No. 409,475
8 Claims. (Cl. 204—110)

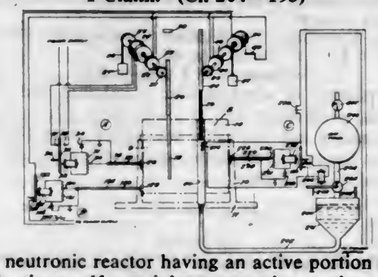
1. An electrolytic process of recovering gold from gold plated metals, which comprises subjecting the gold plated metal to electrolysis employing an electrolytic bath containing a ferrocyanide from the group consisting of

alkali metal and ammonium ferrocyanide and a cyanide from the group consisting of alkali metal and ammonium



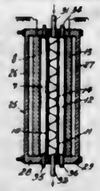
cyanides, the ratio of ferrocyanide to cyanide in the bath being within the range of from 2:1 to 5:1 by weight.

2,735,811
REACTOR CONTROL
Alvin M. Weinberg, Oak Ridge, Tenn., Gale J. Young, Chicago, Ill., Philip Morrison, Pittsburgh, Pa., and Leo A. Ohlinger, Chicago, Ill., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application December 13, 1945, Serial No. 634,858
1 Claim. (Cl. 204—193)



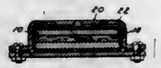
In a neutronic reactor having an active portion adapted to maintain a self-sustaining neutronic reaction, the improved construction comprising a tube extending into the active portion, a container exterior to the active portion, a body of a water solution having a volatile ammonium compound within the container, a rod of boron steel aligned with the tube, fluid-flow means to eject the solution from the container into the tube, and actuating means coupled to the rod to move the rod into the tube.

2,735,812
ELECTRODIALYZING APPARATUS WITH SUPPORTED MEMBRANES
Cornelis van Hoek, Wassenaar, Netherlands, assignor to Nederlandse Centrale Organisatie Voor Toegepast-Natuurwetenschappelijk Onderzoek, The Hague, Netherlands, a corporation of the Netherlands
Application March 10, 1953, Serial No. 341,559
Claims priority, application Netherlands March 13, 1952
8 Claims. (Cl. 204—301)



1. In electrodialyzing apparatus comprising a chamber containing electrodes and flexible permeable membranes forming compartments therebetween and means for directing liquid through said compartments including an inlet for liquid at one end of the compartment and an outlet for liquid at the other end, the combination therewith of supporting members interposed between and engaging said membranes and said electrodes to maintain them in accurately spaced relation, said supporting members comprising sheets of insulating material having a multiplicity of perforations widely distributed therein, said sheets having corrugations therein to engage said electrodes and said membranes, said corrugations being interrupted to avoid uninterrupted line contact between said supporting members and the electrodes and membranes.

2,735,813
LINER MATERIAL FOR LEAF SPRING ASSEMBLIES
Harry B. Denman, Detroit, Mich., assignor to Detroit Gasket & Manufacturing Company, Detroit, Mich., a corporation of Michigan
Application March 27, 1952, Serial No. 278,869
4 Claims. (Cl. 252—12)



2. A spring liner consisting of a synthetic rubber compound comprising:

Synthetic chloroprene rubber	pounds	100
Standard Accelerator: beta-alpha-naphthylamine	pounds	2
MgO (curing agent)	do	3
Fine Extrusion Furnace Carbon Black	do	43
Di-ortho-tolylguanidine salt of dicatichol borate	ounces	8
Zinc oxide (activator)	pounds	5
Stearic acid	do	5
Paraffin wax	do	5
Castor oil	do	5

2,735,814
DIE FORGING COMPOUND
Lee N. Hodson, Sr., and Theodore C. Foin, Chicago, Ill., assignors to The Hodson Corporation, a corporation of Delaware
No Drawing. Application July 19, 1952, Serial No. 299,907
13 Claims. (Cl. 252—30)

1. A die forging composition comprising, on a weight basis, 5 to 30% graphite, 2 to 15% hemicellulose, 1 to 15% of kettle bodied fish oil, 2.5 to 6% bentonite, 0.15 to 2.5% polyethylene glycol monooleate, and the balance water to 100%.

2,735,815
PREPARATION OF SOAP-SALT COMPLEXES UTILIZING PREFORMED ACID SALT
Arnold J. Morway, Rahway, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware
No Drawing. Application July 20, 1954, Serial No. 444,665
11 Claims. (Cl. 252—39)

1. An improved method for preparing a lubricating grease composition containing a grease-thickening proportion of a complex soap-salt thickener which comprises preforming an acid salt having the formula

$$M(C_2H_3O_2)_2.(C_2H_4O_2)_n$$

where M is an alkaline earth metal selected from the group consisting of calcium, barium and strontium and n is an integer of 1 to 3, forming a mixture comprising a major proportion of a lubricating oil, a minor proportion of said acid salt, a minor proportion of a high molecular weight carboxylic acid and a basic reacting compound of a metal in an amount sufficient to neutralize said high molecular weight carboxylic acid and the free acid of said acid salt, heating the resultant mixture at an elevated temperature until a soap-salt complex is formed and then cooling to obtain said lubricating grease composition, the proportions of said salt and said soap in said complex being about 0.5 to 40 mols of salt per mol of soap.

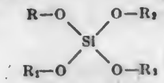
2,735,816

FLUID COMPOSITIONS CONTAINING AN ORTHOSILICATE

Robert L. Merker, Bellevue, Pa., and William A. Zisman, Washington, D. C.

No Drawing. Application June 18, 1953, Serial No. 362,696
9 Claims. (Cl. 252—40.7)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A fluid composition comprising a liquid saturated aliphatic normal ester of a saturated aliphatic carboxylic acid, which ester has a boiling point not lower than 150° C., a metal soap, and a small amount of an orthosilicate of the general formula:



wherein R, R_1, R_2 and R_3 are selected from the group consisting of lower alkyl radicals having up to 6 carbon atoms, aromatic and hydroaromatic radicals and at least two of the same are selected from the group consisting of aromatic and hydroaromatic radicals.

2,735,817

STABILIZED LUBRICATING OIL ADDITIVES

Walter E. Waddey and Max W. Hill, Westfield, and Elmer B. Cyphers, Cranford, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Application November 17, 1950, Serial No. 196,362
3 Claims. (Cl. 252—46.7)

1. A process for reducing the tendency of a phosphorus sulfide treated sulfurized sperm oil to evolve hydrogen sulfide on storage which comprises treating said phosphorus sulfide treated sulfurized sperm oil with about 1 to 5% of its weight of guanidine carbonate in aqueous solution at a temperature between about 210° to 300° F. for a time sufficient to reduce its tendency to evolve H_2S on storage and to evaporate essentially all of the water, and removing normally solid undissolved constituents therefrom.

2,735,818

SCALE REMOVAL

Paul H. Cardwell and Louis H. Ellers, Tulsa, Okla., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application December 10, 1952, Serial No. 325,208
2 Claims. (Cl. 252—136)

1. A composition for descaling a surface comprising by weight in admixture from 0.2 to 0.8 per cent of an alkali metal silicate, from 0.3 to 25 per cent of a gelling agent selected from the group consisting of pectin, gum karaya, methyl cellulose, Irish moss, psyllium seed, gum ghatti, gum pershir, gum shiraz, from 6 to 30 per cent of a fragmented fibrous material selected from the group consisting of ground leather, sponge, wood, paper, cotton, bark, nut shells, peat, corn cob, the balance being aqueous hydrochloric acid containing from 5 to 30 per cent of HCl.

2,735,819

MANUFACTURE OF CATION EXCHANGE MATERIAL FROM COAL

Martinus L. Goedkoop, Geleen, Netherlands, assignor to Stamicarbon N. V., Heerlen, Netherlands

No Drawing. Application December 26, 1951, Serial No. 263,515
Claims priority, application Netherlands December 29, 1950
7 Claims. (Cl. 252—179)

1. In the production of cation exchange material from coal by a process which comprises heating, in a medium of a free oxygen-containing gas and at a temperature within the range of from 220° to 350° C. said coal which is oxidizable but not completely decomposable under the conditions employed and which is of about 0.2 to 1 mm. particle size, continuing said heating until said material is oxidized, subsequently hydrolyzing the oxidized product by treatment thereof with a hot aqueous strongly alkaline solution and thereafter separating the hydrolyzed product from said solution, the time of heating the initial coal being such that the particle size of the cation exchanger is substantially the same grain size as that of the starting material, the improvement whereby cation exchangers of increased capacity by volume are obtained, which comprises immersing said cation exchanger in solid form in an acid which is non-oxidizing and non-water adsorbing under conditions of use and is of sufficient strength to decrease the volume of said solid exchanger and continuing said treatment until the volume of said exchange material has been decreased by about 15% to 25%.

2,735,820

CALCIUM-LITHIUM HYDRIDE AND PROCESS OF MAKING IT

Leonard W. Steiger, Hackensack, N. J., assignor to Maywood Chemical Works, Maywood, N. J., a corporation of New Jersey

No Drawing. Application February 8, 1955, Serial No. 486,996
5 Claims. (Cl. 252—182)

1. A mixture of the hydrides of calcium and lithium, containing from about 1% to about 50% lithium hydride and containing not over 3% of calcium plus lithium in elemental form, said mixture being in the form of a solid solution of said hydrides.

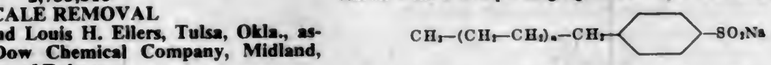
2,735,821

TREATING STARCHES WITH ALKYLARYL SULFONATES

Kenneth M. Gaver, Columbus, Ohio, assignor to The Keever Starch Company, Columbus, Ohio, a corporation of Ohio

Application July 8, 1952, Serial No. 297,741
4 Claims. (Cl. 252—188.3)

1. A composition of matter comprising a mixture of starch with a complexing agent having a formula of



where *n* is an integer of from 4 to 10 inclusive.

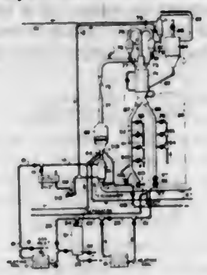
2,735,822

METHOD OF AND APPARATUS FOR CONTACTING SOLIDS AND GASES

Donald L. Campbell, Short Hills, Homer Z. Martin, Cranford, and Charles Wesley Tyson, Summit, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application August 20, 1946, Serial No. 691,862, which is a division of application Serial No. 359,854, October 5, 1940, now Patent No. 2,541,803, dated October 19, 1948. Divided and this application January 21, 1955, Serial No. 483,200
7 Claims. (Cl. 252—417)

1. In a catalytic conversion apparatus including a conversion chamber and a catalyst reactivation chamber, and a closed cyclic catalyst path therebetween including a vertical conduit, means for passing catalyst from one of said chambers to the upper end of said conduit, means for discharging the catalyst from the lower end of said conduit to the other of said chambers, means for introducing fluidizing gas into said conduit to fluidize the catalyst therein, said conduit being constructed to form a fluidized column of the received catalyst and to maintain a required pressure differential between said chambers by sealing effect of the fluidized catalyst column, and a level control device responsive to fluctuations in the level of the fluidized catalyst column to control said discharge of



the catalyst from the conduit for retention of a head of catalyst sufficient for maintaining said pressure differential.

2,735,823

BASIC CALCIUM PHOSPHATE COMPOSITION

Elliott P. Barrett, Baltimore, Md., assignor to Baugh and Sons Company, Baltimore, Md., a corporation of Pennsylvania

Application November 15, 1951, Serial No. 256,428
15 Claims. (Cl. 252—423)

12. In a method of making an adsorbent, the steps comprising adding to an agitated alkaline suspension of lime, clay, starch, and about 5 to 25 per cent of active carbon in water reactive phosphate at a rate such that the solution remains alkaline to form an intimate mixture of clay, starch, carbon and basic calcium phosphate at least as alkaline as hydroxyapatite, filtering and washing the filter cake free from water soluble matter, then adding water to provide a plastic mix, mixing the plastic material by high intensity shearing stresses and forming granules from the mixed material, drying the granules, and heating the dried material in substantial absence of air, to render it mechanically strong, at a temperature below that at which said clay vitrifies.

2,735,824

METHOD OF MANUFACTURING SEMICONDUCTIVE MATERIAL

Pieter Willem Haayman, Arie Bol, Frans Cornelis Romeyn, and Evert Johannes Willem Verwey, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

No Drawing. Application December 19, 1947, Serial No. 792,850
Claims priority, application Netherlands January 8, 1947
1 Claim. (Cl. 252—519)

A resistor having a given value of specific resistance consisting essentially of substantially homogeneous mixed crystals produced by heating a mixture of about 99 mol. percent of ferric oxide and about 1 mol. percent of titanium dioxide in air at a temperature of about 1200° C.

2,735,825

SILICONE-ALKYD COATING COMPOSITION

Bernard H. Kress, Toledo, Ohio, assignor, by mesne assignments, to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

No Drawing. Application October 4, 1952, Serial No. 313,193
11 Claims. (Cl. 260—22)

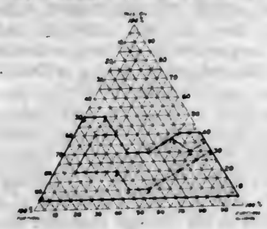
1. A coating composition that produces coatings of superior weather and chemical resistance, comprising an aliphatic hydrocarbon solution of the product of the heat-condensation of (1) an oil-modified alkyd resin with (2) a completely hydrolyzed acidic siloxanol having a molecular weight below 4500, an acid number above 5 and containing alkyl and aryl groups directly attached to different silicon atoms, said siloxanol containing from two to three alkyl and aryl groups for every two silicon atoms, and containing from one to twenty-eight alkyl groups for every eight aryl groups, and the weight of said siloxanol, on a fully condenser basis, constituting from 15 to 50 per cent of said condensation product.

2,735,826

FURAN RESIN-TALL OIL REACTION PRODUCT

Raymond M. Frey, Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware

Application March 4, 1953, Serial No. 340,281
10 Claims. (Cl. 260—23.5)



1. A composition comprising a polymerized material obtained by effecting reaction between a mixture of tall oil, furfural, and furfuryl alcohol, which are present in relative percentages by weight lying within the area defined approximately in the accompanying diagram by the solid lines AB, BC, CD, DE, EF, FG, GH, and HA.

2,735,827

ACRYLONITRILE COPOLYMERS

Maurice Louis Auguste Fluchaire and Jean Auguste Phelisse, Lyon, France, assignors to Societe des Usines Chimiques Rhone Poulenc, Paris, France

No Drawing. Application June 24, 1952, Serial No. 295,351
Claims priority, application France June 28, 1951
5 Claims. (Cl. 260—32.6)

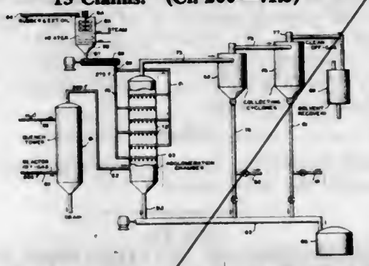
3. A composition of matter comprising, in a medium of dimethylformamide, polyacrylonitrile and a copolymer of acrylonitrile with a vinyl ether of an amino alcohol selected from the group consisting of diethylamino ethanol, dimethylamino ethanol and N-hydroxyethyl pyrrolidine, the said copolymer containing at least 20% by weight of the said vinyl ether of amino alcohol.

2,735,828

RECOVERY OF CARBON BLACK

James Q. Wood, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application December 29, 1952, Serial No. 328,350
13 Claims. (Cl. 260—41.5)



1. A method for separating and collecting carbon black from carbon black production furnace effluent gases comprising intimately contacting said furnace effluent with a viscous but pumpable composition made by mixing crumb rubber, an antioxidant and an extender oil, and separating said composition with adhering carbon black and gases of decreased carbon black content as separate products of the process.

2,735,829

COMPOSITIONS CONTAINING A MIXTURE OF GLYCIDYL POLYETHERS OF DIHYDRIC PHENOLS

Quentin T. Wiles, Ogallala, Nebr., and Daniel W. Elam, Berkeley, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application July 5, 1952, Serial No. 297,384
10 Claims. (Cl. 260—42)

1. A composition comprising a first glycidyl polyether of a dihydric phenol in admixture with about an added 3% to 20% by weight of a second glycidyl polyether of a dihydric phenol, which polyethers have a chain of alternating glyceryl and divalent aromatic radicals united through ether oxygen with glyceryl radicals in terminal position; said first polyether having a Durrans' Mercury Method melting point below 25° C., having a 1,2-epoxy equivalency between 1.7 and 2.0, and containing 1 to 1.5 of the aromatic radicals in the average molecule thereof; and said second polyether having a Durrans' Mercury Method melting point above 75° C., having a 1,2-epoxy equivalency of 1.2 to 1.8, and containing at least 4 of the aromatic radicals in the average molecule thereof.

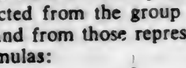
2,735,830

POLYMERIZATION OF ACRYLONITRILE IN THE PRESENCE OF N-VINYL ACYLAMIDE POLYMERS

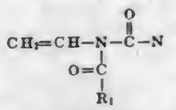
Harry W. Coover, Jr., Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 21, 1952, Serial No. 316,065
16 Claims. (Cl. 260—45.5)

1. A process for preparing resinous compositions comprising heating in the presence of a polymerization catalyst a dispersion of from 50 to 5 parts by weight of a monomer (1) selected from the group consisting of N-vinyl succinimide and from those represented by the following general formulas:



and



wherein R and R_1 each represents a member selected from the group consisting of an alkyl group containing from 1 to 3 carbon atoms and a phenyl group, until the monomer member has substantially completely polymerized, adding to the polymerization mixture containing the unseparated polymer from 50 to 95 parts by weight of a monomer mixture (2) consisting of from 85.0 to 99.5 percent by weight of acrylonitrile and from 15.0 to 0.5 percent by weight of a different monoethylenically unsaturated compound containing a

$$-CH{=}C<$$

group, and heating the reaction mixture until the monomer mixture has polymerized.

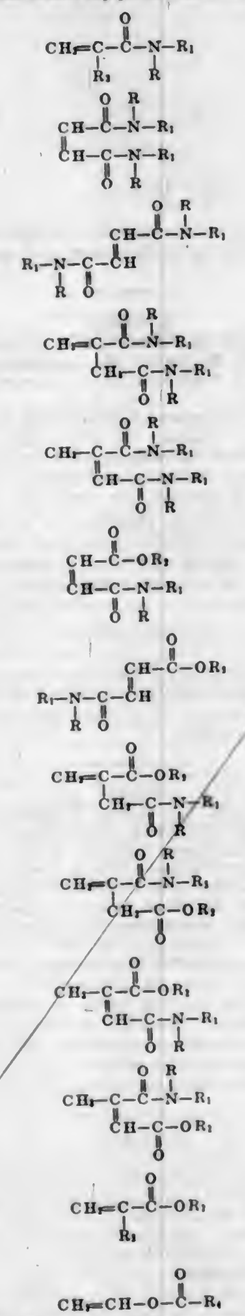
2,735,831

POLYMERIZATION OF ACRYLONITRILE IN THE PRESENCE OF MODIFIED PREFORMED POLYMERS

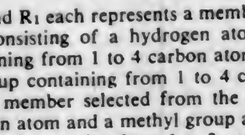
Harry W. Coover, Jr., Kingsport, Tenn., assignor to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application October 21, 1952, Serial No. 316,065
17 Claims. (Cl. 260—45.5)

1. A process for preparing resinous compositions comprising heating in the presence of a polymerization catalyst a dispersion containing as the sole polymerizable component from 1 to 10 parts by weight of a monomeric compound (1) selected from the group consisting of those represented by the following general formulas:



and



wherein R and R_1 each represents a member selected from the group consisting of a hydrogen atom and an alkyl group containing from 1 to 4 carbon atoms, R_2 represents an alkyl group containing from 1 to 4 carbon atoms, R_3 represents a member selected from the group consisting of a hydrogen atom and a methyl group and R_4 represents an alkyl group containing from 1 to 3 carbon atoms, until

the monomer has substantially completely homopolymerized, adding to the polymerization reaction mixture containing the unseparated homopolymer from 1 to 10 parts by weight of a different monomer selected from those represented by the above compound formulas, and heating the reaction mixture until the added monomer has substantially completely polymerized, then adding to the polymerization reaction mixture containing the composite polymer from 1 to 40 parts by weight of a member selected from the group consisting of acrylonitrile and an acrylonitrile mixture consisting of from 85.0 to 99.5 percent by weight of acrylonitrile and from 15.0 to 0.5 percent by weight of a different monoethylenically unsaturated, polymerizable compound containing a

$$-CH{=}C<$$

group, and heating the reaction mixture until the added monomer has polymerized.

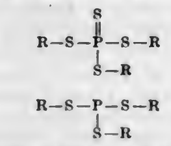
2,735,832

STABLE UNSATURATED ORGANIC-SULFUR DIOXIDE RESINS CONTAINING AN ESTER OF TETRATHIOPHOSPHORIC AND TRITHIOPHOSPHOROUS ACID AND METHOD OF PREPARING THE SAME

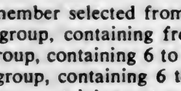
John E. Wicklatz, Bartlesville, Okla., and John Francis Howe, San Diego, Calif., assignors to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application March 7, 1952, Serial No. 275,472
19 Claims. (Cl. 260—45.7)

16. A thermally stable resin composition comprising a monoolefinic hydrocarbon-sulfur dioxide resin containing as a stabilizer an ester of an acid selected from the group consisting of tetrathiophosphoric acid and trithiophosphorous acid represented by the formula



and



wherein R is a member selected from the group consisting of an alkyl group, containing from 1 to 16 carbon atoms; an aryl group, containing 6 to 16 carbon atoms; a substituted aryl group, containing 6 to 16 carbon atoms; a cycloalkyl group, containing not more than 16 carbon atoms; and a substituted cycloalkyl group containing not more than 16 carbon atoms in an amount effective to impart stability to the composition thus produced.

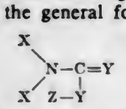
2,735,833

ACRYLONITRILE POLYMERS STABILIZED WITH CERTAIN CARBAMATES AND THIONOCARBAMATES

George W. Stanton and Forrest A. Ehlers, Walnut Creek, Calif., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application September 4, 1952, Serial No. 307,915
10 Claims. (Cl. 260—45.9)

1. A composition of matter the essential constituents of which are a polymeric body containing at least 60 per cent by weight of acrylonitrile polymerized in the polymer molecule, any balance being another monoethylenically unsaturated compound copolymerized with acrylonitrile, and, as a stabilizing agent therefor, from 2 to 20 percent, based on the weight of the polymer, of a compound having the general formula



wherein each X is selected independently from the group consisting of hydrogen, methyl, ethyl, 2-hydroxyethyl, propyl and isopropyl, the number of carbon atoms in the X substituents being at least one and not over 4; one Y is sulfur and the other Y is selected independently from the group consisting of oxygen and sulfur; and Z is an alkyl group containing from 1 to 4 carbon atoms; the total number of carbon atoms in the compound not exceeding 7.

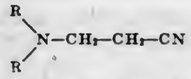
2,735,834

ACRYLONITRILE POLYMERS STABILIZED WITH CERTAIN BETA-ALKYLAMINOPROPIONITRILES

George W. Stanton and Forrest A. Ehlers, Walnut Creek, Calif., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application June 2, 1954, Serial No. 434,068
4 Claims. (Cl. 260—45.9)

1. A composition of matter the essential constituents of which are a polymeric body containing at least 60 per cent by weight of acrylonitrile in the polymer molecule and, as a stabilizing agent therefor, from 1 to 20 per cent by weight of a compound having the general formula



wherein one R is an alkyl group containing from 1 to 4 carbon atoms and the other R is selected from the class consisting of the same alkyl group and hydrogen.

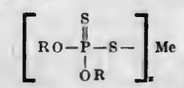
2,735,835

STABLE UNSATURATED ORGANIC-SULFUR DIOXIDE RESINS CONTAINING A SALT OF AN ESTER OF DITHIOPHOSPHORIC AND METHOD OF PREPARING THE SAME

John E. Wicklatz, Bartlesville, Okla., and John Francis Howe, San Diego, Calif., assignors to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application March 7, 1952, Serial No. 275,471
44 Claims. (Cl. 260—45.75)

6. A thermally stable heteropolymeric resin of an unsaturated organic compound containing aliphatic unsaturation and sulfur dioxide containing a material represented by the formula



wherein Me is a metal selected from groups I–A, II–A, II–B and IV–B of the Mendeleeff Periodic Table of the elements, x is equal to the valence of said metal; R is at least one member selected from the group consisting of an alkyl group, containing from 1–16 carbon atoms; an aryl group containing from 6–16 carbon atoms; a substituted aryl group, containing from 6–16 carbon atoms; a cycloalkyl group, containing not more than 16 carbons; and a substituted cycloalkyl group, containing not more than 16 carbon atoms in an amount sufficient to impart stability to the composition thus produced.

2,735,836

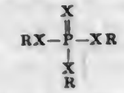
UNSATURATED ORGANIC COMPOUND-SULFUR DIOXIDE RESINS STABILIZED WITH THIOPHOSPHORIC ACIDS AND THEIR DERIVATIVES

Robert J. Fanning, Borger, Tex., assignor to Phillips Petroleum Company, a corporation of Delaware

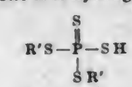
No Drawing. Application January 19, 1953, Serial No. 332,106
18 Claims. (Cl. 260—45.75)

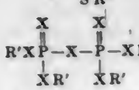
8. A stable heteropolymeric resin of an unsaturated organic compound and sulfur dioxide containing in an amount effective to impart stability to the composition

thus produced at least one of a thiophosphoric acid and a derivative of a thiophosphoric acid having the formulas

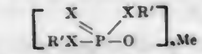
(1) 

wherein X is selected from the group consisting of oxygen and sulfur, at least one and not more than three X's are sulfur, wherein R is selected from the group consisting of an alkyl group containing 1 to 16 carbon atoms, monovalent aromatic hydrocarbon groups containing from 6 to 16 carbon atoms and monovalent cycloalkyl hydrocarbon groups containing not more than 16 carbon atoms and hydrogen, and wherein one R is hydrogen;

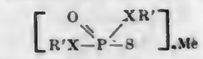
(2) 

(3) 

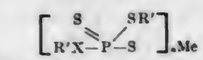
wherein X is selected from the group consisting of oxygen and sulfur and wherein at least three X's are sulfur;

(4) 

wherein X is selected from the group consisting of oxygen and sulfur and wherein at least one X is sulfur;

(5) 

wherein X is selected from the group consisting of oxygen and sulfur;

(6) 

wherein X is selected from the group consisting of oxygen and sulfur and wherein in Formulas 2 to 6 R′ is selected from the group consisting of monovalent alkyl hydrocarbon groups, monovalent aromatic hydrocarbon groups, monovalent cycloalkyl hydrocarbon groups, and wherein R′ contains no more than 16 carbon atoms at each occurrence, Me is a metal selected from groups I—A, II—A, II—B, IV—B of the Mendeleeff Periodic Table and n is equal to the valence of said metal.

2,735,837

INTERPOLYMER OF 2,5-DIACETOXYSTYRENE, VINYL HYDROQUINONE MONOACETATE, VINYL HYDROQUINONE, AND ACRYLIC ACID

Louis M. Minsk, Delbert D. Reynolds, and Jack L. R. Williams, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application April 15, 1952, Serial No. 282,488
2 Claims. (Cl. 260—47)

1. An interpolymer of 2,5-diacetoxystyrene, vinyl hydroquinone monoacetate, at least 10 mole percent of vinyl hydroquinone and at least 10 mole percent of acrylic acid.

2,735,838

METHOD OF PRODUCING A RESINOUS CONDENSATION PRODUCT

Rinse Dijkstra and Jelis de Jonge, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee

No Drawing. Application June 19, 1953, Serial No. 362,966
Claims priority, application Netherlands June 11, 1952
6 Claims. (Cl. 260—56)

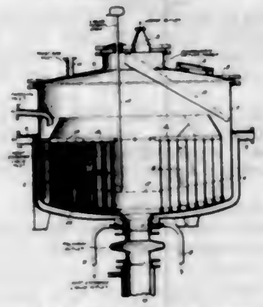
1. A method of producing a resinous condensation product of the phenol-aldehyde type which comprises mixing about one mole of phenol together with about one mole of furfural and less than 0.1 mole of an alkaline catalyst and in an amount sufficient to commence the reaction, heating the reaction mixture to a temperature of about 120 to 170° C., adding an additional quantity of the catalyst in an amount which together with the portion initially provided in the reaction mixture is less than 0.1 mol. of the catalyst per mol. of the phenol, and terminating the reaction when less than 1 mol. water per mol. of phenol is split off.

2,735,839

CONTINUOUS POLYMERIZATION OF MONOMERIC LACTAMS

Hans Alwin Schrenk, Arnhem, Netherlands, assignor, by mesne assignments, to American Enka Corporation, Enka, N. C., a corporation of Delaware

Application November 29, 1951, Serial No. 258,810
Claims priority, application Netherlands December 27, 1950
8 Claims. (Cl. 260—78)



1. A process for the continuous conversion of relatively low molecular weight monomeric lactams to relatively high molecular weight fiber-forming synthetic linear polyamides of substantially uniform quality, which comprises continuously passing said monomeric lactam in the molten state through a heated elongated spiral substantially horizontal polymerization zone of great length as compared to its height while continuously supported and in the form of a continuously flowing uninterrupted layer of liquid having an unconfined upper surface, and there subjecting said liquid to polymerization conditions including heating, thereby enabling gases and vapors including water and monomeric lactam that are evolved from the reaction mass readily to leave the upper surface of the flowing molten reaction mass with a minimum of disturbance to uniform flow of the molten mass through the polymerization zone and bringing about at least substantial polymerization of said monomeric lactam to relatively high molecular weight synthetic linear polyamide in said polymerization zone, the reaction being conducted while substantially completely excluding free oxygen from the polymerization zone, passing the thus-treated molten material to a discharge zone, maintaining the discharge zone substantially filled with a relatively large mass of the molten polymeric material, and removing the relatively high molecular weight fiber-forming synthetic linear polyamide product from said discharge zone.

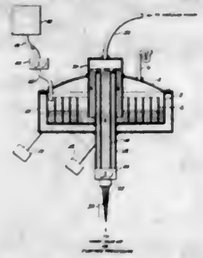
2,735,840

POLYMERIZATION OF MONOMERIC LACTAMS

Ridgeway T. Lynch, Asheville, N. C., assignor to American Enka Corporation, Enka, N. C., a corporation of Delaware

Application June 16, 1953, Serial No. 362,085
4 Claims. (Cl. 260—78)

1. A process for the continuous production of high molecular weight fiber-forming synthetic linear polyamides by heating relatively low molecular weight monomeric lactams which comprises heating such a monomeric lactam to be polymerized in the molten state while flowing through an elongated spiral substantially horizontal polymerization zone of great length as compared to its height while in the form of a continuously flowing uninterrupted layer of liquid having an unconfined upper surface, and under conditions such as to effect polymerization of said monomeric lactam, passing the polymerized material from the polymerization zone into a discharge zone through a communicating fluid sealing zone in which is maintained at all times a substantial quantity of the polymerized material in process to constitute the seal, applying a relatively high vacuum to the upper surface of the polymeric material in said fluid sealing zone in order substantially completely to remove residual low molecular weight substances including water from the polymeric material, maintaining the discharge zone substantially filled with a relatively large mass of the polymeric material, and removing thus-purified polyamide product from said discharge zone.



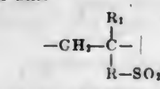
2,735,841

SULFINIC ACIDS OF POLYMERS CONTAINING AROMATIC GROUPS

Charles F. H. Allen and Louis M. Minsk, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a corporation of New Jersey

No Drawing. Application July 29, 1952, Serial No. 301,607
11 Claims. (Cl. 260—79.3)

1. A process for preparing a sulfinated polymer containing from 55 to 90 per cent by weight of a structural unit selected from those represented by the following general structural unit



wherein R represents an aromatic nucleus selected from the group consisting of a benzene nucleus and a naphthalene nucleus and R_1 represents a member selected from the group consisting of a hydrogen and methyl group, comprising reacting a polymer selected from the group consisting of polystyrene, poly-α-methylstyrene and polyvinylnaphthalene with sulfur dioxide, under anhydrous conditions and in the presence of a Friedel-Crafts type catalyst, at a temperature of from —10° to 25° C., and treating the resultant product with a strong mineral acid.

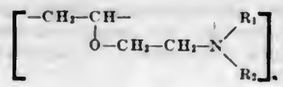
2,735,842

VINYL AMINO ETHER POLYMERS AND THEIR PREPARATION

Maurice Louis Auguste Fluchaire and Jean Auguste Phelisse, Lyon, France, assignors to Societe des Usines Chimiques Rhone-Poulenc, Paris, France

No Drawing. Application March 21, 1952, Serial No. 277,914
Claims priority, application France May 30, 1951
10 Claims. (Cl. 260—89.7)

10. A sulphur-free homopolymer of a vinyl dialkylaminoethyl ether corresponding essentially to the general formula:

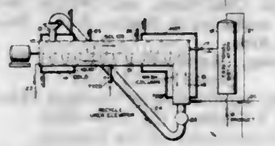


2,735,843

FRACTIONATION PROCESS

John A. Weedman, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application August 21, 1951, Serial No. 242,818
13 Claims. (Cl. 260—96.5)



1. A process for fractionating into at least two fractions a mixture of organic compounds selected from the group consisting of a mixture of C_3 to C_{50} straight chain organic compounds and a mixture of C_5 to C_{50} branched chain organic compounds, at least two of the compounds in said mixture being capable of forming a solid adduct with an amide selected from the group consisting of urea and thiourea, which comprises continuously moving by positive displacement from an influent end solid amide aggregated into a mass through an adduct-forming zone, continuously feeding the mixture to be fractionated to said zone at a point intermediate the influent and effluent ends thereof to contact said moving mass of amide, continuously decomposing less stable solid adduct formed as it moves toward the effluent end of said zone whereby the less stable adduct is substantially completely eliminated from the effluent adduct, continuously passing a liquid diluent easily separable from the several fractions and inert to the amide at the conditions existing in said zone through said zone countercurrently to the flow of solids, continuously removing effluent from said effluent end, continuously separating said effluent into solid amide and diluent admixed with the fraction which forms more stable adducts with the amide employed, continuously separating diluent from said admixture, continuously washing the amide separated from said effluent free from occluded organic compound with liquid diluent, continuously passing said diluent from said washing operation to the effluent end of said adduct-forming zone, continuously recycling said washed amide to the influent end of said zone, continuously removing liquid diluent from said influent end admixed with the fraction which forms less stable adducts with the amide employed, continuously separating diluent from said admixture, and recovering the fraction which forms the less stable adduct with the amide employed.

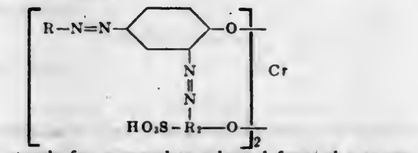
2,735,844

CHROMIUM-CONTAINING AZO DYESTUFFS

Reinhard Neier, Basel, and Charles Petitjean and Walter Wehrli, Rieben, Switzerland, assignors to Sandoz A. G., Basel, Switzerland

No Drawing. Application January 18, 1954, Serial No. 404,812
Claims priority, application Switzerland September 4, 1951
6 Claims. (Cl. 260—148)

1. A chromium-containing azo dyestuff which corresponds to the formula



wherein R stands for a member selected from the group consisting of the radicals of diazo components of the

benzene and naphthalene series free from sulfonic acid groups, HO_3—S—R_2—O— stands for a member selected from the group consisting of the radicals of coupling components of the hydroxybenzene, hydroxynaphthalene and pyrazolone series, and where in the —O— atom of R_2 is located in ortho-position to the respective —N=N— group.

2,735,845

AZO DYESTUFFS

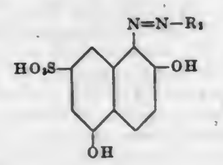
Hans Ruckstuhl, Otto Senn, and Walter Wehrli, Basel, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application February 28, 1951, Serial No. 213,303

Claims priority, application Switzerland March 2, 1950

6 Claims. (Cl. 260—200)

1. A dyestuff derivative of the formula



wherein R_2 stands for a mononuclear aryl radical of the benzene series.

2,735,846

PRODUCTION OF ALKALI CELLULOSE

George A. Richter, Jr., Springfield, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application December 8, 1951, Serial No. 260,777

5 Claims. (Cl. 260—233)

1. The method for the production of soda-cellulose which comprises mixing and shredding cellulose pulp, in bulk condition, with a sodium hydroxide solution the amount and concentration of which is calculated to produce a soda-cellulose of predetermined caustic and cellulose content, to produce an intimate physical mixture of the pulp and solution, the temperature throughout the mixing and shredding being maintained at a value of at least 30° C., reducing the temperature of the physical mixture to a temperature of about 5° C. to 25° C., and maintaining the mass at the reduced temperature until a mass of substantially homogeneous soda-cellulose is obtained.

2,735,847

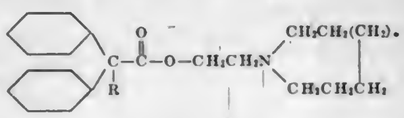
POLYMETHYLENEIMINOETHYL ESTERS OF DIPHENYLACETIC AND BENZILIC ACIDS, SALTS THEREOF AND PREPARATION THEREOF

Frederick F. Blicke, Ann Arbor, Mich., assignor to Regents of The University of Michigan, Ann Arbor, Mich., a corporation of Michigan

No Drawing. Application April 6, 1954, Serial No. 421,418

13 Claims. (Cl. 260—239)

1. A compound selected from the group consisting of basic esters having the formula



wherein R is selected from the group consisting of hydrogen and hydroxy, and *n* is an integer from 1 to 3; and water-soluble, non-toxic salts thereof.

2,735,848

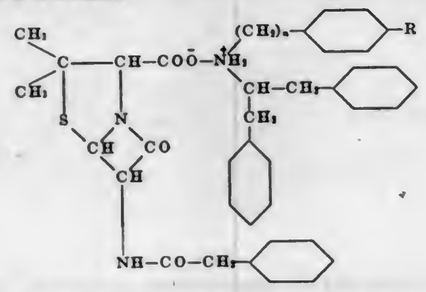
AMINE SALTS OF PENICILLIN G

William H. Edgerton, Huntington Woods, and Robert L. Hull, Detroit, Mich., assignors to Parke, Davis & Company, Detroit, Mich., a corporation of Michigan

No Drawing. Application August 11, 1953, Serial No. 373,655

8 Claims. (Cl. 260—239.1)

1. A N-phenalkyl-α-benzylphenethylamine salt of penicillin G of formula



where *n* is 1 to 3 and R is a member of the class consisting of hydrogen atom, a halogen atom, an alkoxy group, a lower alkyl group, a monohalo lower alkoxy group and a benzyloxy group.

2,735,849

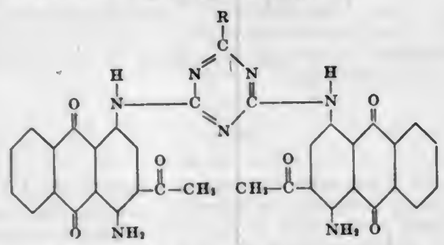
ANTHRAQUINONE TRIAZINE VAT DYESTUFFS

Friedrich Ebel, Mannheim-Feudenheim, Walter Rupp, Ludwigshafen (Rhine-Oppau), and Walter Keller, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application May 27, 1954, Serial No. 432,930

6 Claims. (Cl. 260—249)

1. A vat dyestuff of the general formula



wherein R stands for a radical selected from the class consisting of phenyl, 3'-methylphenyl, 4'-methylphenyl, 2'-methoxyphenyl, 3'-methoxyphenyl, 4'-methoxyphenyl, 4'-chlorphenyl and 2'4'-dichlorphenyl.

2,735,850

PREPARATION OF GUANAMINES

William Owen Jones, London, England, assignor to The British Oxygen Company Limited, London, England

No Drawing. Application February 18, 1954, Serial No. 411,288

Claims priority, application Great Britain February 18, 1953

8 Claims. (Cl. 260—249.9)

1. Process for the preparation of a guanamine comprising reacting dicyandiamide with a substance chosen from the group consisting of lower alkyl aliphatic and aromatic hydrocarbon nitriles and dinitriles in liquid ammonia in the presence of a catalyst chosen from the group consisting of alkali metals, alkaline earth metals, alkali metal hydroxides and amides and other strongly basic alkali metal compounds, at a temperature between 0° C. and 120° C.

2,735,851

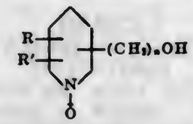
ALKANOLPYRIDINE-N-OXIDES

Francis E. Cislak, Indianapolis, Ind., assignor to Reilly Tar & Chemical Corporation, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application September 1, 1954, Serial No. 453,689

7 Claims. (Cl. 260—297)

2. Alkanolpyridine-N-oxides having the following general formula:



where *n* is 2 to 4 and R and R' are selected from the class consisting of hydrogen and lower alkyl.

2,735,852

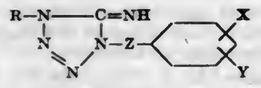
SUBSTITUTED TETRAZOLINES

Robert M. Herbst, East Lansing, Mich.

No Drawing. Application August 10, 1954 Serial No. 449,030

18 Claims. (Cl. 260—308)

1. A compound of the class consisting of a free base and its acid addition salts, said free base having the formula,



where X and Y are members of the class consisting of hydrogen, halogen, hydroxy, lower alkyl, lower alkoxy and nitro groups, Z is a divalent alkylene group containing from 1 to 4 carbon atoms inclusive, and R is an alkyl group containing from 5 to 17 carbon atoms inclusive.

2,735,853

ASYMMETRICAL INDIGOID DYESTUFFS

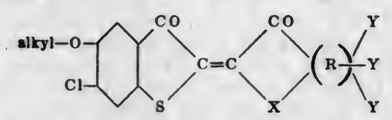
Jakob Mueller, Muenchenstein, Switzerland, assignor to Ciba Limited, Basel, Switzerland, a Swiss firm

No Drawing. Application August 18, 1952, Serial No. 305,085

Claims priority, application Switzerland August 23, 1951

9 Claims. (Cl. 260—332)

1. An asymmetrical indigoid vat dyestuff of the general formula



wherein X stands for a member of the group consisting of —NH— and —S—, wherein the "alkyl" radical contains at the most four carbon atoms, and wherein R stands for an aromatic radical containing at the most two rings both of which are six-membered carbon rings, and Y is selected from the group consisting of hydrogen, halogen, alkoxy and alkyl with at the most four carbon atoms.

2,735,854

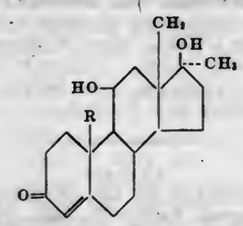
STEROID COMPOUNDS

Milton E. Herr, Kalamazoo Township, Kalamazoo County, Mich., assignor to The Upjohn Company, a corporation of Michigan

No Drawing. Application March 11, 1955, Serial No. 493,807

3 Claims. (Cl. 260—397.45)

1. An 11β-hydroxy-17α-methyltestosterone of the formula



wherein R is selected from the group consisting of hydrogen and methyl.

2,735,855

PROCESS FOR PRODUCING Δ^4-PREGNEN-11α,21-DIOL-3,20-DIONES AND INTERMEDIATE THEREFOR

Carl Djerassi, Birmingham, Mich., and George Rosenkranz, Mexico City, Mexico, assignors to American Syntex Incorporated, Hato Rey, Puerto Rico, a corporation of Puerto Rico

No Drawing. Application March 6, 1953, Serial No. 340,898

Claims priority, application Mexico March 7, 1952

4 Claims. (Cl. 260—397.45)

1. A process for the production of a compound selected from the class consisting of Δ^4-pregnen-11α,21-diol-3,20-dione, lower fatty acid esters thereof and benzoic acid esters thereof which comprises treating a compound selected from the class consisting of allopregnan-11α,21-diol-3,20-dione, lower fatty acid esters thereof and benzoic acid esters thereof with approximately 2 molar equivalents of bromine to form a 2,4-dibromo derivative, treating said dibromo derivative with an alkali metal iodide in the presence of a lower aliphatic ketone to form the corresponding 2-iodo-Δ^4-compound and then treating the 2-iodo-Δ^4-compound with a deiodinating agent.

2,735,856

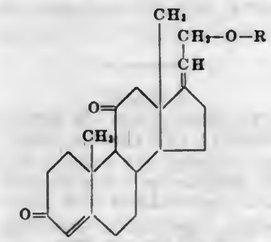
21-HYDROXY-4,17(20)-PREGNADIENE-3,11-DIONE AND ESTERS THEREOF

John A. Hogg, Kalamazoo Township, Kalamazoo County, Philip F. Beal, Portage Township, Kalamazoo County, and Frank H. Lincoln, Jr., Kalamazoo Township, Kalamazoo County, Mich., assignors to The Upjohn Company, Kalamazoo, Mich., a corporation of Michigan

No Drawing. Application March 30, 1953, Serial No. 345,675

4 Claims. (Cl. 260—397.45)

1. A compound represented by the following formula:



wherein R is selected from the group consisting of a hydrogen atom and acyl radicals of hydrocarbon carboxylic acids containing from one to eight carbon atoms, inclusive.

2,735,857

URANIUM ALKOXY COMPOUNDS AND METHOD OF PREPARING SAME

Henry Gilman, Ames, Iowa, and Ernest Bindschadler, Forest Hills, Pa., assignors to the United States of America as represented by the United States Atomic Energy Commission

No Drawing. Application October 17, 1944, Serial No. 559,124

20 Claims. (Cl. 260—429.1)

1. As a new composition of matter a compound having the formula $U(OR)_n$ where R represents a monovalent alkyl radical having a maximum of four carbon atoms and n represents one of the integers selected from the group consisting of 4, 5 and 6.

2,735,858

MANUFACTURE OF QUEBRACHO

William E. Bergman, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application June 29, 1951, Serial No. 234,300

2 Claims. (Cl. 260—448)

2. A method for producing a drilling mud additive which comprises leaching, with water, the tannins from tannin containing vegetable matter; adding sodium metaaluminate to the resulting non-alkaline aqueous extract, thus precipitating aluminum tannate; and separating, as a drilling mud additive, aluminum tannate from the aqueous phase.

2,735,859

DEHYDROCHLORINATION OF POLYCHLOROALKYL CHLOROSILANES EMPLOYING ALIPHATIC DINITRILE COMPOUNDS

George H. Wagner, Clarence, N. Y., assignor to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application June 29, 1954, Serial No. 440,295

8 Claims. (Cl. 260—448.2)

1. A process of dehydrochlorinating a polychloroalkyl chlorosilane in which only one of the chlorine atoms is bonded to the beta carbon atom of the polychloroalkyl group thereof with at least one chlorine atom bonded to a carbon atom adjacent to said beta carbon atom of said group, said polychloroalkyl chlorosilane being taken from the class consisting of: (*a*) polychloroalkyl chlorosilanes which contain only polychloroalkyl groups and chlorine atoms bonded to the silicon atom thereof, and (*b*) polychloroalkyl chlorosilanes which contain only polychloroalkyl groups, alkyl groups and chlorine atoms bonded to the silicon atom thereof, which comprises heating said polychloroalkyl chlorosilane with from about one per cent to about twenty per cent by weight of said polychloroalkyl chlorosilane of an aliphatic dinitrile having the formula:

$$N{\equiv}C{-}R{-}C{\equiv}N$$

where R is an alkylene radical containing from two to eight carbon atoms, at a temperature of from about 150° C. to about 220° C. to evolve hydrogen chloride and removing said hydrogen chloride from the reaction zone.

2,735,860

DEHYDROCHLORINATION OF BETA-CHLOROPROPYL CHLOROSILANES

Arthur N. Pines, Snyder, and Edward R. York, Tonawanda, N. Y., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application August 12, 1954, Serial No. 449,520

10 Claims. (Cl. 260—448.2)

1. A process of dehydrochlorinating a beta-chloropropyl chlorosilane taken from the class consisting of: (*a*) beta-chloropropyl chlorosilanes which contain only beta-chloropropyl groups and chlorine atoms bonded to the silicon atom thereof; and (*b*) beta-chloropropyl chlorosilanes which contain only beta-chloropropyl groups, alkyl groups and chlorine atoms bonded to the silicon atom thereof; which comprises heating said beta-chloropropyl chlorosilane with from about 5 per cent to about 40 per cent by weight of said beta-chloropropyl chlorosilane of isoquinoline at a temperature of from about 160° C. to about 210° C. to evolve hydrogen chloride and removing said evolved hydrogen chloride from the reaction zone.

2,735,861

DISPROPORTIONATION OF ALKOXY SILANE DERIVATIVES

Charles E. Erickson, Ithaca, and George H. Wagner, Clarence, N. Y., assignors, by mesne assignments, to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Original application April 22, 1948, Serial No. 22,703, now Patent No. 2,627,451, dated February 3, 1953. Divided and this application April 7, 1952, Serial No. 281,055

3 Claims. (Cl. 260—448.8)

1. Process of disproportionating a trialkoxy silane, to form the corresponding dialkoxy silane, which comprises heating the trialkoxy silane to a temperature of about 130° C. to 135° C., in the presence of an acid metal halide catalyst.

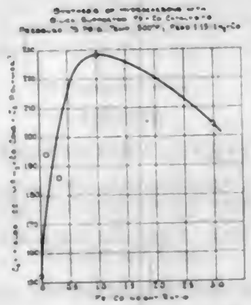
2,735,862

SYNTHESIS OF HYDROCARBONS WITH IRON-COBALT CATALYST

Fred J. Buchmann and William J. Mattox, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application May 8, 1951, Serial No. 225,095

6 Claims. (Cl. 260—449.6)



1. An improved process for converting CO and H_2 to normally liquid hydrocarbons of high olefinic content which comprises contacting in a once-through operation CO and H_2 in synthesis proportions in a reaction zone at synthesis conditions with a dense turbulent fluidized mass of finely divided synthesis catalyst, said catalyst comprising a silica gel support carrying as active component a mixture of cobalt and iron promoted with a minor amount of thoria, the wt. ratio of iron to cobalt being in the range of from about 0.6/1 to 2/1 and the thoria being present in the range of about 1 to 5% of the total weight of the catalyst, and recovering from said zone a product stream including a tail gas essentially free of carbon dioxide and a normally liquid product containing at least about 60 volume % of unsaturated hydrocarbons.

2,735,863

METHOD OF PREPARING 2-HYDROXY-METHYL-3-BUTENONITRILE AND THE DIMER OF 2-CYANOPRENE

Charles C. Price, South Bend, Ind., assignor to The General Tire and Rubber Company, Akron, Ohio, a corporation of Ohio

No Drawing. Application October 2, 1952, Serial No. 312,860

5 Claims. (Cl. 260—464)

1. A method of preparing 2-hydroxymethyl-3-butenonitrile and the dimer of 2-cyanobutadiene, comprising the steps of heating under non-catalytic conditions a mixture of allyl cyanide and formaldehyde at a temperature of between 120° C. and 200° C. and under super-atmospheric pressure of at least one atmosphere, maintaining the temperature of said mixture above 120° C. for a sufficient time to procure a reaction between the ingredients of said mixture.

2,735,864

PREPARATION OF 2,3,4-TRIHYDROXYALKANENITRILES

Curtis W. Smith and Roy T. Holm, Berkeley, Calif., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application May 29, 1953, Serial No. 358,568

9 Claims. (Cl. 260—465.6)

1. The process for the production of trihydroxyalkanenitriles having at least four carbon atoms to the molecule which comprises reacting a beta,gamma-unsaturated-alpha-hydroxyalkenenitrile having at least four carbon atoms to the molecule with a hydroxylating agent in the presence of a hydroxylation catalyst.

2,735,865

PROCESS FOR PURIFYING P-AMINOBENZOIC ACID

Arthur Robert Lyding, New Haven, Conn., assignor to Heyden Chemical Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application July 18, 1952, Serial No. 299,733

8 Claims. (Cl. 260—518)

1. A process for decolorizing p-aminobenzoic acid which comprises neutralizing an aqueous solution of said acid, adding a quantity of activated carbon varying between from 5% to 20% by weight of said p-aminobenzoic acid, heating said solution to a temperature ranging between 80°–90° C. under a blanket of nitrogen, removing said carbon by filtration, adding a further quantity of said activated carbon in the aforesaid amount to the filtrate followed by heating the solution to said temperature under a blanket of nitrogen, filtering the solution to remove the activated carbon, cooling the filtrate and then adding thereto a quantity of a water-soluble, inorganic alkali metal sulfite in an amount varying between 0.1–0.6% based on the weight of p-aminobenzoic acid followed by introducing into the resulting solution a further quantity of said activated carbon in the aforementioned amount, filtering to remove the carbon then heating the filtrate to a temperature of about 80° C., the aforementioned decolorization and purification steps being effected with the solution at a pH varying between 5–7, and acidifying the solution followed by cooling thereof to obtain p-aminobenzoic acid in substantially pure and color-free form.

2,735,866

METHOD FOR PRODUCING GLUCOHEPTONIC ACID AND ITS DERIVATIVES

Louis-Charles Clevenot, Nogent-sur-Marine, France

No Drawing. Application April 15, 1953, Serial No. 349,106

Claims priority, application France February 18, 1953

3 Claims. (Cl. 260—535)

1. Process for producing glucoheptonic acid consisting in reacting calcium cyanide with a solution of glucose in the presence of a slight excess of lime sufficient for maintaining the pH of the solution at approximately 10 eliminating all ammonia from said solution, and mixing the alkaline solution of calcium glucoheptonate obtained with a weak solution of oxalic acid sufficient for maintaining the pH of the solution at approximately 3.5 to 4.5 forming glucoheptonic acid with a 60 to 70% content of pure and colorless calcium glucoheptonate.

2,735,867

6-ETHYLMETHYLAMINO-5-METHYL-4,4-DIPHENYL-HEXAN-3 ONE

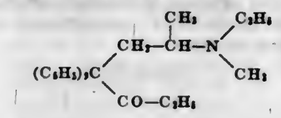
Eric Walton, London, England, assignor to Burroughs Wellcome & Co. (U. S. A.) Inc., Tuckahoe, N. Y., a corporation of New York

No Drawing. Application January 29, 1952, Serial No. 268,907

Claims priority, application Great Britain February 12, 1951

3 Claims. (Cl. 260—570.8)

1. A member of the class consisting of a free base and acid addition salts thereof with non-toxic acids, said free base possessing the formula



2,735,868

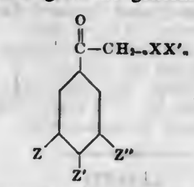
PRODUCING HALOMETHYL AROMATIC KETONES

Ludo K. Frevel and John W. Hedelund, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application June 2, 1952, Serial No. 291,301

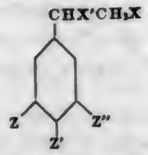
8 Claims. (Cl. 260—592)

1. In a method of preparing a halomethyl aromatic ketone corresponding to the general formula:



wherein X and X′ are independently selected from the group consisting of bromine and chlorine, n is an integer from 0 to 1, and Z, Z′ and Z″ are independently selected from the group consisting of hydrogen, bromine, chlorine, alkyl, and alkoxy, each of said alkyl and alkoxy groups containing no more than two carbon atoms, the step which comprises heating with aqueous nitric acid of not greater than 70 weight percent concentration in the

liquid phase at a reaction temperature, a compound corresponding to the general formula:



wherein X, X', Z, Z' and Z'' are as described above.

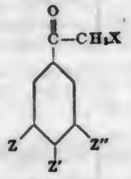
2,735,869

PROCESS FOR THE PREPARATION OF HALOMETHYL AROMATIC KETONES

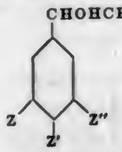
Ludo K. Frevel and John W. Hedelund, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

No Drawing. Application June 2, 1952, Serial No. 291,302
7 Claims. (Cl. 260—592)

1. In a method of preparing a halomethyl aromatic ketone corresponding to the general formula:



wherein X is a member of the group consisting of bromine and chlorine, and Z, Z', and Z'' are independently selected from the group consisting of hydrogen, bromine, chlorine, alkyl, and alkoxy, each of said alkyl and alkoxy groups containing no more than two carbon atoms, the step which comprises heating with aqueous nitric acid under conditions of good agitation in the liquid phase at a reaction temperature above 25° C., a compound corresponding to the general formula:



wherein X, Z, Z', and Z'' are as described above, said aqueous nitric acid containing water in an amount at least equal in weight to the initial organic compound with which it is reacted.

2,735,870

PEROXIDES OF SATURATED CYCLIC TERPENES AND METHOD OF PRODUCING SAME

Gordon S. Fisher and Leo A. Goldblatt, New Orleans, La., assignors to the United States of America as represented by the Secretary of Agriculture

No Drawing. Application December 8, 1950, Serial No. 199,910
10 Claims. (Cl. 260—610)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A tertiary pinanyl hydroperoxide.

2,735,871

TREATMENT OF ARALKYL HYDROPEROXIDES

Curtis W. Smith, Berkeley, Calif., assignor to Shell Development Company, Emeryville, Calif., a corporation of Delaware

No Drawing. Application January 21, 1952, Serial No. 267,497
19 Claims. (Cl. 260—610)

1. The method of treating impure aralkyl hydroperoxide containing oxygen-containing organic impurities in order to increase the purity thereof which comprises contacting said aralkyl hydroperoxide with hydrogen peroxide in the presence of an acid having a dissociation constant of at least 10^{-3} at a temperature in the range of from about −60 to about 35° C., maintaining said hydroperoxide at a temperature below about 35° C. at all times while in contact with said acid, and correlating the time of contact of said acid with said hydroperoxide and the temperature at which the resulting mixture is maintained to effect said treatment in the absence of any substantial cumene hydroperoxide decomposition.

2,735,872

TRIS-PHENOLS

David J. Beaver, Richmond Heights, Roland S. Shumard, Brentwood, and Paul J. Stoffel, Florissant, Mo., assignors to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application September 28, 1953, Serial No. 382,832
2 Claims. (Cl. 260—619)

1. A 4 - nonyl - a,a' - bis(5 - halo - 3 - methyl - 2-hydroxy-phenyl)-2,6-xylenol wherein the halogen substituent in the 5-position of the respective terminal phenyl nuclei is selected from the group consisting of chlorine and bromine.

2,735,873

PROCESS FOR THE PREPARATION OF PHENOL

Johan R. H. Goris, Geleen, Netherlands, assignor to Stamicarbon N. V., Heerlen, Netherlands

No Drawing. Application March 3, 1952, Serial No. 274,651
Claims priority, application Netherlands March 17, 1948
3 Claims. (Cl. 260—628)

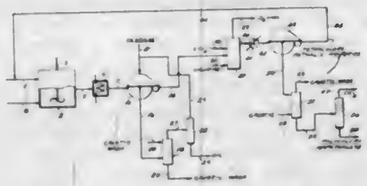
1. A process for the preparation of phenol which comprises first forming an aqueous solution of 65 to 75% by weight of an alkali metal salt of benzene monosulfonic acid at a temperature between 85° and 100° C., thereafter adding quick lime to said solution while maintaining said solution within said temperature range and stirring the resulting mixture, drying said mixture and thereafter heating the dried mixture in the presence of steam at a temperature between 350 and 450° C., whereby the salt of the sulfonic acid is transferred into phenol without any substantial frothing of the reaction mass.

2,735,874

SEPARATION OF HYDROCARBONS AND OTHER COMPOUNDS WITH CHEMICALS

Howard V. Hess, Beacon, and George B. Arnold, Glenham, N. Y., assignors to The Texas Company, New York, N. Y., a corporation of Delaware

Application June 26, 1951, Serial No. 233,568
10 Claims. (Cl. 260—650)



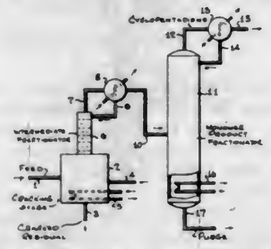
1. A process for separating fused polycylic aromatic hydrocarbons from mixtures containing the same in admixture with other similar boiling hydrocarbons which comprises contacting said mixture with a tetrahalophthalic anhydride whereby there is formed a complex consisting mainly of said tetrahalophthalic anhydride and said fused polycyclic aromatic hydrocarbons, separating said complex in solid form at a temperature below 150° F., halogenating said complex with a halogen selected from the group consisting of bromine, iodine and fluorine at a temperature in the range 70–480° F. in the presence of a halogenation catalyst selected from the group consisting of iron, phosphorus, sulfur, iodine, aluminum chloride, boron fluoride and ferric chloride, whereby said complex is decomposed into said tetrahalophthalic anhydride and the corresponding halogenated fused polycyclic aromatic hydrocarbon, and separating said halogenated fused polycyclic aromatic hydrocarbon from said tetrahalophthalic anhydride.

2,735,875

PROCESS FOR RECOVERY OF CYCLOALKADIENE MONOMERS FROM THEIR DIMERS

Addison W. Hubbard, Elizabeth, Fred W. Banes, Westfield, and John F. Johnson, Highland Park, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application June 18, 1952, Serial No. 294,161
4 Claims. (Cl. 260—666)



1. In the cracking of cyclopentadiene dimer concentrate, the improvement which comprises passing cyclopentadiene monomer formed from said concentrate in a cracking zone with uncracked dimer with hydrocarbons in the C_7–C_9 range into an intermediate fractionation zone, maintaining conditions in said intermediate fractionation zone such as to condense vapors of the dimer and reflux the condensed dimer while monomer of the cyclopentadiene remains in vapor phase with hydrocarbons in the C_7–C_9 range; returning the reflux of the dimer to the cracking zone from said intermediate fractionation zone but retaining said C_7–C_9 hydrocarbons in a vapor stream from said intermediate fractionation zone to prevent their return with the reflux to the cracking zone, passing the remaining vapors containing cyclopentadiene monomer with hydrocarbons in the C_7–C_9 range to an intermediate part of monomer fractionating zone, condensing vapors of hydrocarbons in the C_7–C_9 range and hydrocarbons higher boiling than the cyclopentadiene monomer in said monomer product fractionation zone, withdrawing overhead monomer vapors from said product fractionation zone, and purging the resulting bottoms of the product-fractionation zone including the condensed hydrocarbons in the C_7–C_9 range.

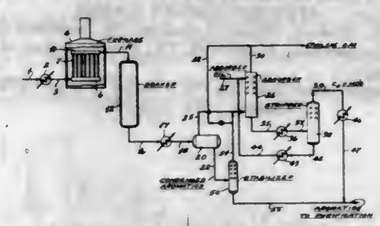
2,735,876

CONVERSION OF GASEOUS HYDROCARBONS INTO ETHYLENE AND AROMATICS

Howard V. Hess, Glenham, and Norman D. Carter, Poughkeepsie, N. Y., assignors to The Texas Company, New York, N. Y., a corporation of Delaware

Application August 20, 1952, Serial No. 305,332
4 Claims. (Cl. 260—673)

1. A process for converting a gaseous hydrocarbon selected from the group consisting of ethane, propane, propylene and mixtures thereof to ethylene and a liquid aromatic fraction which comprises introducing said hydrocarbon at a temperature from atmospheric to 800° F. into cracking tubes constructed of nickel-free chrome steel and having a relationship of surface area to volume of free space above 200 square feet per cubic foot, passing said hydrocarbon through said tubes at a pressure below 50 p. s. i. g. and at a rate such that a contact time of 0.5 to 2 seconds is obtained, raising said gaseous hydrocarbon to a temperature level of 1350 to 1550° F. during passage through said cracking tubes, removing an effluent gas from said cracking tubes at a temperature between 1350 and 1550° F., passing said effluent gas immediately through a soaker at a rate such that a residence time of 10 to 40 seconds is maintained and in said soaker allowing said effluent to cool essentially adiabatically, whereby more than 97 per cent hydrocarbon conversion is effected and the yield and quality of the liquid aromatic fraction are substantially improved, issuing a product gas from said soaker at a temperature in the range of 1100 to 1350° F. and separating said product gas into an ethylene-rich fraction and into a liquid aromatic fraction.



2,735,877

HYDROGENATION OF AROMATIC COMPOUNDS WITH THE USE OF MOLYBDENUM DISULFIDE ON A SPENT CRACKING CATALYST

Ivor W. Mills, Glenolden, and Herbert L. Johnson, Media, Pa., assignors to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

No Drawing. Original application December 13, 1950, Serial No. 200,700. Divided and this application October 24, 1951, Serial No. 252,976
5 Claims. (Cl. 260—667)

1. Process for the hydrogenation of aromatic hydrocarbons which comprises contacting aromatic hydrocarbons at a temperature of from 250° C. to 350° C. and a pressure of from 500 to 1800 p. s. i. with a catalyst consisting essentially of a spent cracking catalyst containing deposited thereon from 10% to 25% by weight molybdenum disulfide, said spent cracking catalyst comprising a cracking catalyst previously utilized as the catalyst in a process for cracking hydrocarbons until its cracking activity was spent to an extent of at least 30% of its initial cracking activity.

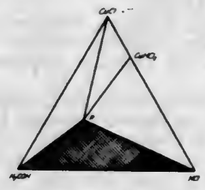
2,735,878

SEPARATION OF OLEFINS FROM HYDROCARBON MIXTURES, AND SOLVENT THEREFOR

Alfred W. Francis, Woodbury, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York

Application March 19, 1953, Serial No. 343,388
12 Claims. (Cl. 260—677)

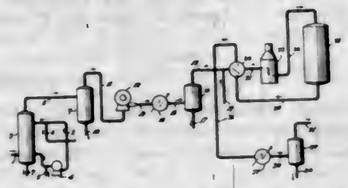
1. A solution characterized by a high selectivity for olefins as opposed to paraffins, which consists essentially of: cuprous chloride and anhydrous hydrogen chloride dissolved in methyl alcohol.



9. The process for preparing a solution characterized by a high selectivity for olefins as opposed to paraffins,

which comprises: admixing cuprous chloride with methyl alcohol, and adding thereto anhydrous hydrogen chloride in sufficient quantity to dissolve said cuprous chloride, the solution so formed being substantially free of any other ingredients.

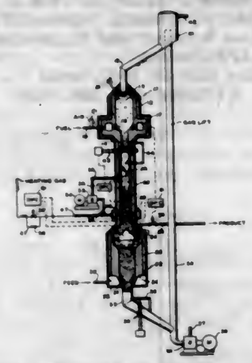
2,735,879
PURIFICATION OF UNSATURATED HYDROCARBON GASES
Aaron K. Redcay, Mount Lebanon, Pa., assignor to Gulf Oil Corporation, Pittsburgh, Pa., a corporation of Pennsylvania
Application July 22, 1953, Serial No. 369,678
9 Claims. (Cl. 260—677)



1. A process for selectively hydrogenating acetylenic compounds in a mixture comprising said compounds, olefins and hydrogen at least in an amount sufficient to hydrogenate said acetylenic compounds to the corresponding ethylenic compounds which comprises passing said mixture in the presence of added water vapor, the total water vapor content thereof after addition being in excess of that corresponding to saturation at a selected pressure within the range of about atmospheric to about 1500 pounds per square inch gauge and a temperature of about 125° F. but being no less than about 1.5 per cent nor more than about 11 per cent by volume, over a cobalt molybdate catalyst at said pressure and at a temperature of about 350° to about 600° F.

2,735,880
PEBBLE HEAT EXCHANGER AND PROCESS
John W. Begley and Robert L. McIntire, Bartlesville, Okla., assignors to Phillips Petroleum Company, a corporation of Delaware
Application July 31, 1952, Serial No. 301,818
17 Claims. (Cl. 260—679)

1. An improved pebble heater apparatus comprising a first closed upright shell having pebble inlet means in its upper end portion; gaseous material inlet means in one end portion of said shell; gaseous effluent outlet means in the end portion of said shell opposite the portion containing said gaseous inlet means; a second closed upright shell below first said shell; pebble outlet means in the lower end of said second shell; gaseous material inlet means in the lower end portion of said second shell; gaseous effluent outlet means in the upper end portion of said second shell; pebble conduit means extending from the lower end of said first shell to the upper end of said second shell; pebble flow control means in the upper end portion of said pebble conduit; a plurality of baffle means for mixing downflowing pebbles vertically spaced apart in the upper portion of said pebble conduit means and below said pebble flow control means; heating gas inlet means in the lower end portion of said pebble conduit means; gaseous material outlet means adjacent the lowermost of said baffles in said pebble conduit means; and elevator means extending from said pebble outlet means in said second shell to said pebble inlet means in said first shell.

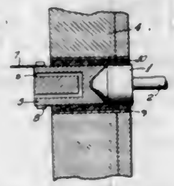


11. A method for providing pebbles of uniform elevated temperature in a reaction chamber of pebble heater apparatus which comprises in combination the steps of heating pebbles to an elevated temperature in a pebble heating zone; gravitating said pebbles through a pebble conduit zone as a continuous and contiguous pebble mass to a pebble flow control zone; gravitating said pebbles through said pebble flow control zone as a discontinuous pebble phase; tumbling said pebbles in said discontinuous phase in random admixture forming a contiguous mass of the randomly admixed pebbles within said pebble conduit zone; introducing a gaseous heating material into the lower portion of said contiguous pebble mass within said pebble conduit zone and passing said heating gas upwardly therethrough in direct heating exchange with said pebbles; removing said heating gas from said pebble conduit zone at a point above said contiguous pebble mass therein; and gravitating said pebbles into said reaction zone as a substantially uniform temperatured contiguous pebble mass.

ELECTRICAL

2,735,881
METAL-IMPREGNATED HEATING RODS FOR ELECTRIC FURNACES AND METHOD OF MAKING SAME
Franz Josef Mann, Erlangen, Germany, assignor to Siemens-Planiawerke Aktiengesellschaft für Kohlefabrikate, Metingen bei Augsburg, Germany, a corporation of Germany
Application December 27, 1952, Serial No. 328,187
Claims priority, application Germany January 25, 1952
16 Claims. (Cl. 13—25)

1. A resistor rod for an electric furnace comprising an elongated body made of porous material and forming a centrally axially extending rodlike heating portion and an enlarged terminal portion at each end of said heating portion which is integral therewith, said enlarged terminal portions being impregnated with metal throughout their respective cross-sectional areas and having due



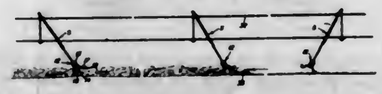
to such impregnation a specific resistance which is lower than that of said heating portion.

2,735,882
THERMOCOUPLE
Thomas S. Farley, Fair Haven, N. J.
Application May 27, 1954, Serial No. 432,949
3 Claims. (Cl. 136—4)
(Granted under Title 35, U. S. Code (1952), sec. 266)



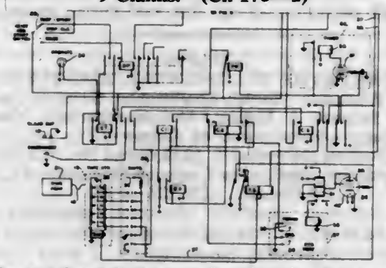
1. A thermocouple comprising two metals intimately twisted about each other to form a braid, said braid being spirally wound in a plurality of turns in substantial contact with each other to constitute a substantially flat disk for engaging a surface, the temperature of which is to be determined.

2,735,883
ELECTRIC FENCE POST
Ole T. Larson, Hereford, Tex., assignor of twenty-five per cent to Iaman L. Larson
Application April 14, 1950, Serial No. 155,858
4 Claims. (Cl. 174—161)



1. In a fence assembly, a fence post comprising a rigid, elongated body, said body including an upper pivot portion, a substantially horizontally disposed current conducting wire runner pivotally attached to the upper pivot portion of said post body permitting said post to pivot through a substantially vertical arcuate plane in generally parallel alignment with the longitudinal axis of said wire runner, a pair of oppositely disposed horizontally extending support arms on a lower end portion of said post body, said support arms extending normal to the longitudinal axis of said post body, a pair of oppositely disposed U-shaped base members secured in downwardly opening relationship from end portions of said support arms, each of said base members including a pair of aligned oppositely disposed leg portions extending substantially normal from said support arms in a plane substantially parallel to the longitudinal axis of said post body, said post body being disposed in an angular relationship relative to the longitudinal axis of the wire runner with one of the legs of each of the U-shaped bases engaged with the ground, the other legs of said bases extending upwardly toward the wire runner, said post body being pivotally movable through the vertical arcuate plane to a substantially oppositely disposed angular position relative to the longitudinal axis of said wire runner with the other legs of said bases in engagement with the ground.

2,735,884
TELEGRAPH SYSTEM
William B. Blanton, Rockville Centre, N. Y., and Frank L. Currie, Plainfield, N. J., assignors to The Western Union Telegraph Company, New York, N. Y., a corporation of New York
Application December 1, 1951, Serial No. 259,356
9 Claims. (Cl. 178—2)



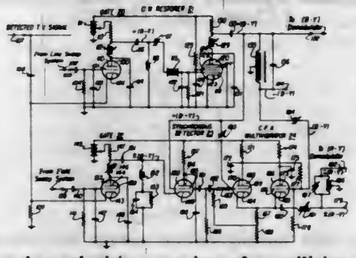
1. In a telegraph system for the simultaneous transmission of messages from a central office to a selected plurality of outgoing lines, means including a manually operable element individual to each line and normally operative to select the line and add it to the group to which a message is to be transmitted, another manually operable element common to all of said lines and means operative with said last mentioned common element operated to remove a selected line from a group on the operation of its manually operable element.

2,735,885
TELEGRAPHICALLY CONTROLLED TIMING MECHANISM
George G. Keyes, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a corporation of Delaware
Application November 3, 1952, Serial No. 318,494
3 Claims. (Cl. 178—4)



1. In a telegraphically controlled timing mechanism for controlling the operations of a telegraph recorder and a storage transmitter associated therewith, a control magnet for said storage transmitter, an operating circuit for said control magnet, a first contact in said unit for conditioning said circuit for operation of said control magnet, a sequential control unit responsive to received groups of code signals, said groups including a pause of predetermined duration interposed between predetermined conditioning codes, a timing means included in said control unit, a second control contact in said unit operated momentarily for establishing said control circuit for the operation of said storage transmitter, a third control contact in said unit operated in timed manner by said timing means in response to said pause for shunting said recorder unit until transmission from said storage transmitter is established, a fourth contact connected in parallel with said second contact, and a locking relay means dually controlled by said second and fourth contacts and effective pursuant to the momentary operation of said second contact to establish a locking circuit for said storage transmitter control magnet, said fourth contact operated in response to predetermined code signals to interrupt transmission from said storage transmitter, whereby transmission of urgent messages from other transmitters is facilitated.

2,735,886
COLOR TELEVISION SYSTEM
Kurt Schlesinger, Maywood, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Application July 9, 1952, Serial No. 297,963
6 Claims. (Cl. 178—5.2)



1. A color television receiver for utilizing a color television signal which includes line and field blanking pulses with a first series of signal bursts respectively

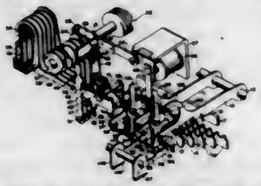
impressed on the line blanking pulses and a second series of signal bursts respectively impressed on the field blanking pulses, the bursts of the first series having the same frequency as the bursts of the second series and being in phase quadrature therewith and the bursts of the second series being in phase opposition on successive ones of the field blanking pulses, said receiver including in combination, a first gate circuit for selecting the first series of bursts, a continuous wave restorer circuit coupled to said first gate circuit for utilizing the selected bursts to produce a first continuous wave having the same frequency as such selected bursts and a selected phase relation therewith, a second gate circuit for selecting the second series of bursts, a synchronous detector coupled to said second gate circuit and to said restorer and responsive to the first continuous wave and to the selected second series of bursts for producing a control signal varying in amplitude at times corresponding to the times of occurrence of the field blanking pulses, and a control circuit coupled to said detector and to said restorer for utilizing the first continuous wave and the control signal to produce a second continuous wave in phase quadrature with the first continuous wave and having its phase inverted at times corresponding to the times of occurrence of the field blanking pulses.

2,735,887

CHARACTER SEQUENCE TRANSMITTER

Maurus T. Goetz, Chicago, Ill., assignor to Teletype Corporation, Chicago, Ill., a corporation of Delaware

Application January 11, 1952, Serial No. 265,953
26 Claims. (Cl. 178—17)



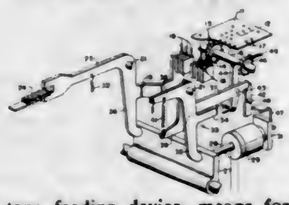
26. In an automatic telegraph transmitter, a plurality of movably mounted bars, a signal generating means, means for urging each bar into position to control the signal generating means, latch means for holding each bar from the control position, means common to all said bars for retaining said bars from the control position, means for cyclically releasing the retaining means, means for releasing the latch means associated with a first one of said bars, and means actuated by the movement of any of said bars into the control position for conditioning the latch means of the next succeeding bar for release upon a subsequent cyclic operation of said retaining means.

2,735,888

TAPE FEEDING DEVICE

Walter J. Zenner, Des Plaines, Ill., assignor to Teletype Corporation, Chicago, Ill., a corporation of Delaware

Application September 5, 1952, Serial No. 308,135
8 Claims. (Cl. 178—17)



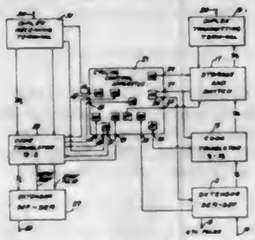
1. In a tape feeding device, means for advancing a tape, energy storing means connected to and adapted to operate the advancing means to advance the tape, and cyclically operable means for actuating the energy storing means to store energy and subsequently release the storing means to apply the stored energy to operate the tape advancing means to advance the tape.

2,735,889

AUTOMATIC TELEGRAPH CYCLING CONTROL APPARATUS

Arthur Eugene Canfora, Brooklyn, N. Y., assignor to Radio Corporation of America, a corporation of Delaware

Application September 14, 1953, Serial No. 379,859
19 Claims. (Cl. 178—23)



1. Cycling control apparatus for use with an automatic request and repetition telegraph signaling system including transmitter extensor, code translator, storage and switching apparatus, receiving code translator and extensor apparatus, said control apparatus comprising locking means responsive to operation of said receiving code translator indicating receipt of a predetermined character requesting repetition or receipt of a mutilated character to lock up both the transmitting and receiving extensor and code translator apparatus, delay means for shaping and timing operating pulses from the storage and switching apparatus for delivery to the transmitting extensor apparatus, storing means coupled to said delay means to store the last normal operating pulse from the transmitting extensor apparatus for application to the transmitting code translator apparatus, counting means connected to said extensor apparatus to produce pulses in timed relationship to the operation of said automatic telegraph signaling system, means coupled to said counting means to apply pulses to said storage and switching apparatus to activate the same at first count and after the last count, indicating means coupled to said locking means for showing the receipt of said predetermined character or a mutilated character as the basis for cycling, further indicating means coupled to said locking means for showing the detection of prearranged code characters by said receiving code translator apparatus, blocking means coupled to said further indicating means to block operating pulses from said receiving extensor apparatus to said receiving code translator apparatus upon detection of said prearranged characters, gating means coupled to said receiving code translator apparatus and arranged to release said transmitting and receiving apparatus on subsequent detection of said predetermined character in said receiving code translator apparatus, and further gating means coupled to said locking means and to said counting means to continue cycling in the event that subsequent detection occurs simultaneously with activation of the first said gating means.

2,735,890

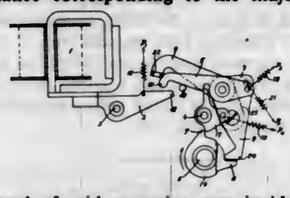
START-STOP TELEPRINTER RECEIVER

Herbert Wüsteney, Munich-Thalkirchen, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Munich, Germany, a corporation of Germany

Application December 1, 1952, Serial No. 323,487
Claims priority, application Germany December 21, 1951
9 Claims. (Cl. 178—33)

1. A start-stop signalling apparatus comprising cam means and means attempting to rotate it, a trigger lever and means for pivotally mounting it at a point between the opposite ends thereof, means acting upon one end of said trigger lever to hold the other end thereof in a

predetermined position, interlock means between said trigger lever and said cam means to hold said cam means against rotation by the means attempting to rotate it, a receiver magnet having a normally attracted pivoted armature, force means acting upon said armature attempting to move it into its released position, and an operating arm extending from said armature for coaction with said other end of said trigger lever, said operating arm being in attracted position of said armature spaced from such other end of said trigger lever by a predetermined distance corresponding to the major portion of



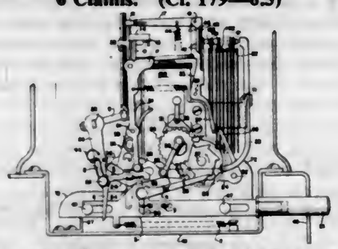
angular travel of said operating arm incident to the release of said armature responsive to deenergization of said receiver magnet, whereby said armature moves into released position by the action of said force means wholly unimpeded by any external force to move said operating arm wholly unimpeded by an angular amount corresponding to said predetermined distance so as to strike said other end of said trigger lever with the momentum stored in its unimpeded travel for the purpose of displacing said trigger lever positively to free said interlock means so as to effect rotation of said cam means.

2,735,891

TELEPHONE PAYSTATION MECHANISM

Hans Sengebusch, Chicago, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware

Application December 5, 1951, Serial No. 259,961
6 Claims. (Cl. 179—6.3)



1. In a subscriber controlled telephone paystation mechanism, manually operable means associated with said mechanism, means for initiating the refund operation of said mechanism to refund the deposit made on a call originated by a calling subscriber, means whereby said last-mentioned means is operated responsive to the operation of said manual means by said subscriber, a receiver controlled switch hook also associated with said mechanism, means associated with said switch hook for initiating the collect operation of said mechanism to collect the deposit made on a call originated by said calling subscriber, and means whereby said last-mentioned means is operated responsive to the operation of said switch hook, when the receiver is placed thereon by said subscriber.

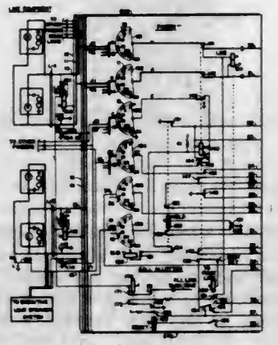
2,735,892

PARTY LINE SELECTIVE SIGNALLING SYSTEM HAVING CODE CALL

Roy W. Jones, Rochester, N. Y., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware

Application September 25, 1951, Serial No. 248,224
6 Claims. (Cl. 179—18)

1. In a code-call system, calling lines, code-calling equipment, regular finder switches having access to said lines, code-call finder switches also having access to said lines, a calling device and a manually operable circuit-closer other than said calling device for each line, means operated responsive to the initiation of a call over any line by removal of the receiver thereon for always causing one of the regular finder switches to seize and connect with the calling line, means operated thereafter over the said regular finder responsive to the operation of said calling device by said calling line for extending only a local connection from the line in case said circuit closer is not operated, and means operated responsive only to the op-



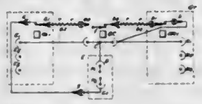
eration of the circuit-closer on said calling line when operated before any operation of the calling device thereat, for starting, by way of said connected regular finder switch, the operation of, one of said code-call finder switches to seize the calling line and extend a connection from the calling line direct to said code-calling equipment, said last mentioned connection thereby causing the release of said regular finder switch which has seized and connected with the calling line, said code calling equipment thereafter being operable by said calling device of said calling line to complete a code call.

2,735,893

AUTOMATIC SWITCHING SYSTEM APPLICABLE TO TELEPHONY

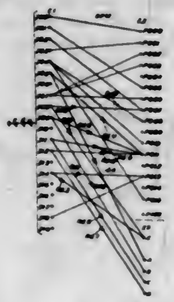
René Jean Joseph Le Gourriérec, Tunis, Tunisia

Application February 15, 1952, Serial No. 271,690
Claims priority, application France October 9, 1947
8 Claims. (Cl. 179—18)



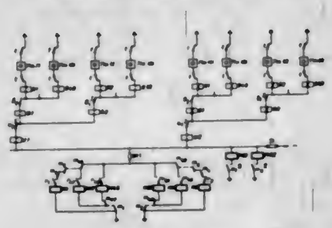
1. An automatic telephone system comprising a plurality of lines, a plurality of connecting circuits including cord circuits between a calling line and a called line, registering means for registering the identity of a called line in response to signals transmitted from a calling line, means in said registering means for producing signals, means for transmitting said signals to said called line over a path independent of said connecting circuits, means including a free one of said connecting circuits for transmitting said signals from said called line over the cord circuit of said connecting circuit to said registering means, and means in said registering means responsive to the receipt of said signals for completing the connection through said connecting circuit.

2,735,894
AUTOMATIC TELEPHONE SYSTEMS
Fernand Pierre Goborel, Antony, France, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application May 29, 1952, Serial No. 290,787
Claims priority, application France May 31, 1951
7 Claims. (Cl. 179—18)



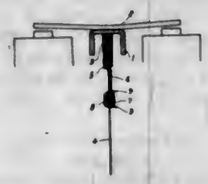
1. An automatic telephone exchange comprising a plurality of subscriber lines each having at least one call number, a final selector having a plurality of outlets, each outlet connected to a different one of said lines, a director connected to said final selector, means for setting said director in accordance with one of said call numbers, a distributing frame in said director comprising a first plurality of terminals each terminal thereof allocated to a different one of said call numbers, a second plurality of terminals each terminal thereof allocated to a different one of said lines and cross-connecting means coupling several of said first plurality of terminals to one of said second plurality of terminals, and means controlled by said cross-connecting means for actuating said final selector to select the line corresponding to said one of said second plurality of terminals when said director has been set in accordance with the call number corresponding to any one of said several terminals of said first plurality of terminals.

2,735,895
LINE SELECTING MEANS IN AUTOMATIC TELEPHONE SYSTEMS
Fritz Vollenschier, Stuttgart-Zuffenhausen, Germany, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application September 13, 1954, Serial No. 455,562
Claims priority, application Germany September 19, 1953
3 Claims. (Cl. 179—18)



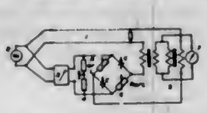
1. A circuit arrangement for marking subscribers' lines in automatic exchange systems comprising a plurality of subscribers' lines divided into groups and subgroups, a plurality of call relays, each having a winding for each group of lines and each being assigned a plurality of said subscribers' lines including one line from each group, a plurality of group relays, there being one for each group of lines, a plurality of sub-group relays, there being one for each sub-group of lines, each having a winding for the corresponding sub-group in each group of lines, a source of potential, circuit means for making a series connection from each line in a sub-group, through a winding of the associated call relay, which winding is peculiar to the particular group of lines including said sub-group, through break contacts of sub-group relays other than that associated with said sub-group including said line, through the winding of the sub-group relay associated with said sub-group including said line, through break contacts of group relays other than that associated with said group including said line, through a winding of the group relay associated with said group including said line, and through said source of potential back to said line, a plurality of switch setting magnets, and means controlled by the joint operation of a calling relay and a group relay for operating a combination of said switch setting magnets to initiate the marking of a particular line.

2,735,896
DAMPING MEANS FOR SELECTING FINGERS IN CROSSBAR SWITCHES OR THE LIKE
Gunnar Daniel Olsson, Stockholm, Sweden
Application December 28, 1951, Serial No. 263,808
5 Claims. (Cl. 179—27.54)



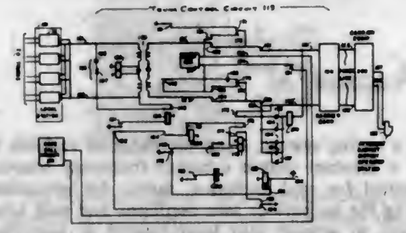
1. In crossbar switches and the like having swingable selecting fingers, a damping device for damping vibrations of the associate selecting finger, said damping device comprising a first hollow member surrounding one of said selecting fingers and leaving a free space between it and the selecting finger, a second hollow member surrounding said first hollow member and having a free space between it and the said first hollow member, and holding means for holding said first and said second hollow members in a predetermined axial position on the selecting finger, said holding means being so constructed and arranged as to guide the said hollow members in their transverse direction so as to permit them to move freely relative to each other and to said selecting finger.

2,735,897
METHOD OF BALANCING TELEPHONE CABLES, MEANS OF CARRYING OUT SAME AND CABLES BALANCED BY SAID METHOD
Joseph Antoine Giaro, Marcinelle, Belgium, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application June 11, 1952, Serial No. 292,941
Claims priority, application Belgium June 21, 1951
2 Claims. (Cl. 179—78)



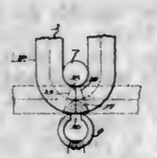
1. A method of installing a carrier current communication cable, comprising measuring the phase shift along each pair or quad of each manufacturing length of cable, where the propagation constant of a line is $A+jB$, B being the phase shift per unit length, and connecting the quads or pairs of successive manufacturing lengths together, to make the phase shifts of the total lengths of each of said pairs or quads approximately equal.

2,735,898
CARRIER SYSTEM SPLASH RING SIGNAL
Stephan J. Bartha, Lombard, Ill., assignor to Automatic Electric Laboratories, Inc., Chicago, Ill., a corporation of Delaware
Application May 24, 1952, Serial No. 289,821
17 Claims. (Cl. 179—84)



1. In a carrier current signalling system having a line with means for communicating thereover via carrier currents to an operator's position, and including substations having means for seizing said line and transmitting impulses thereover and for thereafter disconnecting the substation from the line, a balancing network normally connected to said line, means associated with the line for disconnecting said network therefrom, means whereby said last means is operated in response to the seizure of said line, means for transmitting a signal to said operator position, means whereby said last means is operated in response to receipt of impulses transmitted over said line, means for transmitting another signal to said operator position and for reconnecting said network to the line, means whereby said last means is operated responsive to the disconnection of the substation from the line, a code signalling equipment associated with said line, means for operating said signalling equipment to signal one of said substations, means whereby said last means is operated in response to a call over said line from the operator position, other means for indicating to any other substation attempting a call that said line is occupied, and means whereby said last mentioned means is also operated in response to a call over said line from the operator position.

2,735,899
DEVICE FOR GUIDING THE TAPE IN MAGNETIC TAPE RECORDERS
Anton Essel, Munich, Germany, assignor to Klangfilm Gesellschaft mit beschraenkter Haftung, Berlin and Karlsruhe, Germany, a German corporation
Application June 19, 1951, Serial No. 232,295
Claims priority, application Germany October 1, 1948
7 Claims. (Cl. 179—100.2)



1. In a magnetic recorder having a tape carrying a magnetic layer and a first and a second transducer coacting therewith and having means for moving said tape, a device for guiding said tape in its motion with respect to said transducers, said device comprising first means for deflecting said tape for motion through a first path along which the constituents of said magnetic layer are extended for motion in extended condition past said first transducer, and second means for thereafter deflecting said tape for motion through a second path along which the constituents of said magnetic layer are compressed for motion in compressed condition past said second transducer.

2,735,900
MAGNETIC TAPE RECORDER
Hans-Christoph Wohlrab and Werner Jahn, Emmendingen (Baden), Germany, assignors to Klangfilm Gesellschaft mit beschraenkter Haftung, Berlin and Karlsruhe, Germany, a German corporation
Application June 19, 1951, Serial No. 232,367
Claims priority, application Germany October 1, 1948
8 Claims. (Cl. 179—100.2)



1. In a tape recorder having a tape forming a sound carrier and means for moving said tape and having a capstan drum for guiding said tape through an arcuate path and a rotatably mounted shaft carrying said capstan drum, said capstan drum comprising two generally cup-like coacting elements axially spaced on said shaft, one of said elements being rotatable with said shaft and the other element being rotatable thereon, each element having an axially inwardly extending annular flange defining on its outside a track for said tape, the inner edges of said flanges being axially spaced apart to define an annular gap, a bracket forming a holder extending from the outside radially into said gap, said shaft extending through said holder, and a plurality of magnetic heads carried by said holder inside said capstan drum, said heads being spaced on said holder for coaction each with a different area of said tape along the inner concave side thereof which faces said capstan drum.

2,735,901
ELECTROMAGNETIC TRANSDUCER
Colin Coates, Oxhey, Watford, Charles H. Gray, Colindale, London, and Charles J. P. Small, Mill Hill, London, England, assignors to Westrex Company, Limited, formerly Western Electric Company, Limited, London, England
Application July 23, 1954, Serial No. 445,346
4 Claims. (Cl. 179—100.2)

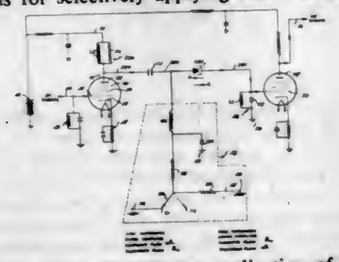


1. A magnetic head for an electromagnetic transducing device, said magnetic head comprising a plurality of spaced core members mounted on a common support, a plurality of pairs of air-gap forming pole members, each of said pairs of pole members being magnetically insulated from an adjacent one of said pairs of pole members, each of said pairs of pole members being mounted in magnetic conductive contact with an individual one of said plurality of core members, a member of nonmagnetic material to which all of said pairs of pole members are secured, said member of nonmagnetic material being removably mounted on said common support for said plurality of spaced core members.

2,735,902
MEANS FOR CHANGING COUPLING IMPEDANCE
Aubrey W. Vose, Inglewood, Calif., assignor to The Houston Corporation, Los Angeles, Calif., a corporation of California
Application June 25, 1951, Serial No. 233,303
1 Claim. (Cl. 179—171)

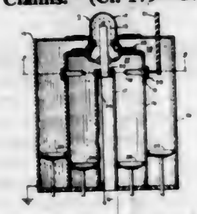
An amplifier comprising two amplifier stages connected in cascade, one of said stages having a compara-

tively high Q circuit, the other of said stages including resistance that may be effectively inserted in said high Q circuit by way of coupling between said two stages to thereby broaden the frequency pass band of said amplifier, a crystal connected between said stages to couple them and having the quality of a high impedance when an impressed net effective voltage is acting in one direction, and a low impedance when an impressed net effective voltage is acting in the other direction; means for applying a D. C. voltage to the crystal in one direction; means for applying a D. C. voltage in the other direction; said D. C. voltage being of a value sufficient to substantially override any radio frequency voltage applied in opposing direction; and means for selectively applying said voltages to said



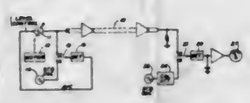
crystal simultaneously with the application of said radio frequency voltage thereto, said means for selectively applying said voltages to the crystal comprising a lead devoid of condensers from a D. C. voltage source connected to one side of said crystal; R. F. frequency filter means in said lead; a first conductor between the said lead and the negative side of a source of direct current; a second conductor connected to the positive side of a low impedance source of direct current; switch means for selectively opening or closing a connection between said lead and said second conductor, the relative resistance in said first conductor and said lead being proportioned to apply a substantial positive voltage to said crystal when the switch means is in closed position.

2,735,903
NEUTRALIZATION OF CAVITY TYPE HIGH FREQUENCY AMPLIFIER
Theo W. Williams, Buffalo, N. Y., assignor to the United States of America as represented by the Secretary of the Army
Application June 15, 1954, Serial No. 438,889
2 Claims. (Cl. 179—171)



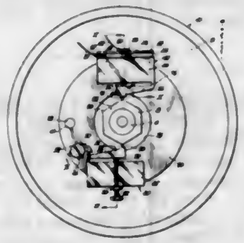
2. A high-frequency amplifier comprising an electron discharge device having a plurality of enclosed electrodes including an anode, a cathode and a grid, a plurality of substantially concentric members connected respectively to said electrodes and defining anode-grid and grid-cathode space resonant regions, the intermediate concentric member being provided with a plurality of transverse slots for feeding back out-of-phase energy from the former to the latter space resonant region for neutralizing said amplifier, a concentric dielectric member positioned to cover said slots, a cylindrical member of conductive material adjustably fastened to the surface of said dielectric member and means extending externally for adjusting said last named cylindrical member to permit variation of the effective size of said slots.

2,735,904
MEASUREMENT OF TRANSMISSION LEVEL OF LINES
Thaddeus Slonczewski, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application November 7, 1952, Serial No. 319,386
3 Claims. (Cl. 179—175.3)



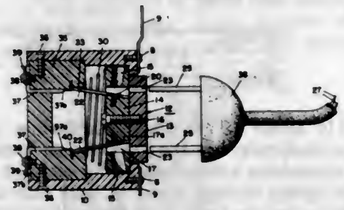
1. In a testing system, a test oscillator of variable frequency, a constant output constant frequency source, a level control for said oscillator, means for periodically comparing the outputs of said oscillator and said source and means to actuate said level control in accordance with changes in the output of said comparing means whereby the output of said oscillator is kept practically constant, a circuit to be tested connected to receive the output variable frequency constant level waves from said oscillator, a detector, a second constant output constant frequency source, a calibrated attenuator in the output of said second source, a switch for periodically connecting said detector alternately to receive the output waves from said circuit under test, and the output waves from said attenuator, an indicator in the output of said detector, and means operating said periodically comparing means and said switch at a sufficiently high rate to substantially eliminate the effects on the output waves of variable operation of said comparing means and said detector.

2,735,905
PRESSURE EQUALIZING BREAKER POINT ASSEMBLY
Andrew Craig Russell, Shawnee, Okla.
Application January 17, 1955, Serial No. 481,989
6 Claims. (Cl. 200—31)



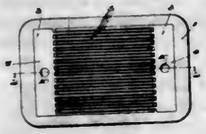
1. A breaker point assembly for use with an internal combustion engine having a distributor mechanism conventionally including a base, a pivot pin extending from the base, a rotatable shaft extending from the base in spaced parallelism to the pin and a cam carried on the shaft, said assembly comprising, in combination, a rigid member adapted to be pivotally mounted on said pin; an unyielding element mounted on the member and adapted to engage said cam when the member is so mounted on the pin; a breaker point device mounted on the member and having a stationary contact, whose position is fixed relative to the member, a movable contact whose position is shiftable relative to the member and shiftable structure adapted to engage said cam oppositely to the zone of engagement of the element therewith when the member is so mounted on the pin, said structure being operably coupled with the movable contact for shifting the latter to and from a position in engagement with the stationary contact as said cam is rotated; and means yieldably biasing said structure toward said cam.

2,735,906
SAFETY ELECTRIC SOCKET
Victor Avrunin, Jamaica, N. Y.
Application January 13, 1954, Serial No. 403,803
5 Claims. (Cl. 200—51.09)



1. An electrical safety socket construction comprising a housing, fixed electrical contact elements supported in said housing, a movable member retained in said housing, said movable member being provided with spring electrical contact members, said movable member also being provided with openings for receiving the prong members of a plug, abutments in said housing for normally engaging said spring electrical contact members and maintaining them out of electrical contact with the said fixed electrical contact elements supported in said housing, said spring contact members being adapted to be sprung inwardly of said socket member upon insertion of the prongs of the plug member therein and released from engagement with said abutments to bring said spring contact members into contact with the said fixed electrical contact elements in said housing for completing electrical circuit therewith.

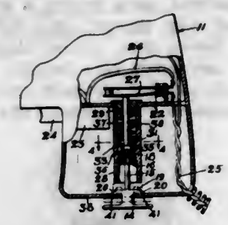
2,735,907
MOISTURE ACTUATED CIRCUIT CLOSER
Hollis C. Inman, Miami, Fla., assignor, by mesne assignments, to Micro-Moisture Controls, Inc., New York, N. Y., a corporation of Delaware
Application May 2, 1952, Serial No. 285,810
6 Claims. (Cl. 200—61.05)



1. A circuit closer for installation in a position exposed to the weather for signalling the occurrence of rain on contact therewith, comprising: a base of insulating material and a pair of elongated conductors secured to said base in separated but closely adjacent position so that the space between said conductors may be bridged by a drop of rain, each of said conductors including a first layer of conducting metal printed on said insulating base, a second layer of conducting metal applied to said first layer to improve its conducting properties, and a third layer of conduction metal inert to oxidation and corrosion covering said second layer, each of said layers being coextensive with each other, whereby said circuit closer is rendered adaptable for outdoor use.

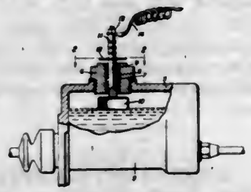
2,735,908
POWER TOOLS
Leonard G. Peretti, Chicago, and Joseph J. Ratti, Shiller Park, Ill.
Application September 19, 1952, Serial No. 310,406
2 Claims. (Cl. 200—61.92)

1. In a power tool of the type having a key-operated chuck, a stationary contact mounted in the tool, a resilient movable contact mounted in said tool and normally engaging said stationary contact, a key socket in said tool and being rigidly secured to said tool, said socket having its inner end located adjacent said movable contact, a key removably positioned in said socket, said key having a stud element projecting axially from its end, slidable plunger means disposed in said inner end of the socket, said plunger means being engaged by said axially projecting stud element and engaging said movable contact to hold said movable contact in engagement with



the stationary contact, an abutment element on said plunger means, and a coiled spring surrounding said plunger means and bearing between said abutment element and said inner end of the socket to bias the plunger means away from said movable contact, whereby the switch is opened responsive to the removal of the key.

2,735,909
WARNING SIGNAL FOR HYDRAULIC BRAKE SYSTEMS
Leldon O. Floyd and Thomas O. Manning, Sr., San Angelo, Tex.
Application October 13, 1952, Serial No. 314,422
1 Claim. (Cl. 200—84)

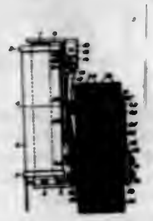


In a liquid level chamber of the class described, a chamber, a float in the chamber and having a rod slidable in the top thereof and projecting above the chamber, said rod and said chamber being of electrically conductive material, insulation means between the rod and the chamber, said rod being adapted for connection in a circuit with a signalling element, vertically spaced apart horizontal grooves formed in the sides of the rod and a U-shaped spring clip secured in a selected groove to support the clip in a straddling vertically adjusted position to the outer end of the rod and maintained in an elevated position above the top of the chamber by the float, said clip being lowered to engage the top of the chamber in a circuit closing position upon a predetermined lowering movement of the float.

2,735,910
ELECTROMAGNETIC RELAY
Daniel Dautry, Clamart, France, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application December 13, 1951, Serial No. 261,538
Claims priority, application France December 15, 1950
6 Claims. (Cl. 200—104)

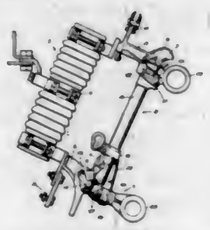
1. A multi-contact relay comprising an electromagnet, a mounting yoke attached to said electromagnet, an armature cooperating with said electromagnet, an assembly of contact springs insulatedly mounted from a base and from each other in a single pile-up, the springs of said assembly being of initial identical profile, each spring having a free end and a mounting end and further having a notch in an edge thereof adjacent the free end, said springs arranged so that the notches of alternate of

said springs are in register and in a line in a first plane normal to the longitudinal axes of the springs in said pile-up and the notches of intervening of said springs are in register and in a line in a second plane parallel to said first plane, said lines being in a third plane normal to said first and second planes, a pair of guide bars of insulating material, each having a series of spaced notches along an edge thereof, said bars spaced from each other and having their notched edges facing each other, a first of said guide bars coupled to alternate of said springs, each coupled alternate spring adapted to have its notch seated within a different one of the notches



in said first bar, the second of said bars coupled to intervening of said springs, each coupled intervening spring adapted to have its notch seated within a different one of the notches in said second bar, corresponding of the notches of said bars being staggered with respect to each other, a common stop member disposed between said yoke and said guide bars, a pair of separate tensioning devices associated with said bars, each adapted to tension a different one of said bars against said stop member, means coupled between said armature and said first bar for moving said first bar against the tension of its associated tension device upon energization of said electromagnet.

2,735,911
CIRCUIT INTERRUPTER
Ralph P. Sant, South Milwaukee, Wis., assignor to McGraw Electric Company, Milwaukee, Wis., a corporation of Delaware
Application April 6, 1953, Serial No. 347,044
2 Claims. (Cl. 200—117)



1. A fuse cutout including in combination spaced-apart line terminals, an insulating fuse tube having an open end, a fuse link in said tube comprising a fusible element and a conducting leader and normally electrically connecting said line terminals, clamping means on said fuse tube intermediate the ends thereof arranged for retaining the leader end of said fuse link, and a manually operable link-break lever pivotally mounted on one of said terminals adjacent the open end of said fuse tube and having a manipulating means spaced laterally outwardly from said tube, said lever being apertured to receive a looped portion of said leader and including a flip out arm pivotally mounted thereon and engageable with said leader, said arm being biased for outward rotational movement relative to said lever and away from said open end of said fuse tube.

2,735,912
ADJUSTABLE, HERMETICALLY SEALED THERMOSTATIC SWITCHES
Herman Ulanet, Maplewood, N. J.
Application September 5, 1952, Serial No. 308,077
10 Claims. (Cl. 200—138)



1. In a device of the class described, a sealed container or enclosure; switching mechanism mounted therein and comprising a thermo-sensitive element and a plurality of spring contact arms, at least one of which is movable under the control of the said thermo-sensitive element, another of said contact arms being adjustable relatively to said movable contact arm; and means insulated from said contact arms for effecting the positive adjustment of said adjustable contact arm from the exterior of the said container or enclosure with the seal of the container intact and without imparting movement to the thermostatic element.

2,735,913
THERMO-DETECTOR
Thomas W. Bland and Lester A. O'Brien, San Jose, Calif.
Application September 1, 1953, Serial No. 377,812
4 Claims. (Cl. 200—140)

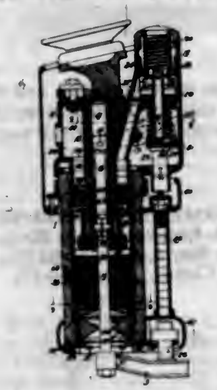


1. A thermo-detector for electrical fire alarm devices comprising a base having a recess formed therein, a housing defining an air chamber, a diaphragm in said air chamber, a spring biased plunger carrying electrical contacts and normally urged into abutting relation with said diaphragm, a pair of spaced contacts to be disposed in said recess in the base carried by said base adjacent said contacts carried by said plunger and having one of the spaced contacts in engagement with said plunger carried contact, said diaphragm movable on expansion of the air in said chamber to force said plunger against its spring to move the contact carried by said plunger from its contacting relation with one of said spaced contacts into engaging relation with the other of said spaced contacts so as to cause the fire alarm device to operate.

2,735,914
CIRCUIT BREAKER CONTACT ACTUATING MECHANISM WITH SEPARABLE CONNECTION TO OIL PUMP
Philip L. Taylor, Abington, and Joseph M. Ramrath, Mattapan, Mass., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application April 24, 1953, Serial No. 350,868
9 Claims. (Cl. 200—150)

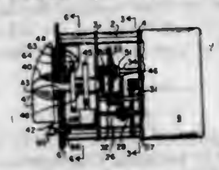
1. In a circuit interrupter, means for establishing and lengthening an arc comprising a lever pivotally mounted at a point between the ends thereof, a pair of arcing contacts comprising a movable contact mounted at one end of said lever, means for guiding said movable contact for reciprocal longitudinal motion, a cradle pivotally mounted at the other end of said lever, a cylinder containing an arc extinguishing fluid, a piston arranged in said cylinder, a push rod guided for reciprocal longitudinal motion, means for detachably connecting said push rod to said cradle and to said piston including plane

cooperating surfaces of said push rod and of said cradle to cause said cradle to receive a parallel displacement during movement of said cradle in engagement with said push rod, means for biasing said lever, said piston and said cradle in contact open direction, means for actuating said push rod in one direction to move said cradle, said piston and said lever to contact closed position against the biasing action of said biasing means, and means for



actuating said push rod in another direction to disconnect said push rod, said cradle and said lever from said piston and to cause said biasing means to move said lever and said cradle in contact opening direction to separate said arcing contacts independently of the movement of said piston and to cause said piston to force fluid under pressure adjacent said arcing contacts to extinguish the arc.

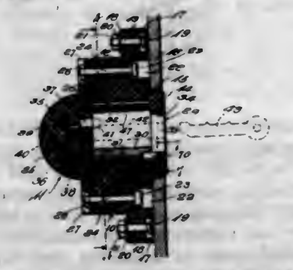
2,735,915
TOOL LIFE INDICATORS
Paul A. Hagen, Baraboo, Wis., assignor to Hagen Manufacturing Company, Inc., Moline, Ill., a corporation of Illinois
Application January 10, 1955, Serial No. 480,781
7 Claims. (Cl. 200—153)



1. A tool life indicator comprising, in combination, an element responsive to the passage of a piece through the station where the tool operates on the piece, a shaft turned through a small increment by said element upon each passage of a piece through said station, a second shaft manually movable by a handle, a friction clutch between said two shafts, a movable stop limiting the angle through which said handle may be manually turned when a new tool is installed, a device to lock the stop in a fixed angular position, means to release said lock so that the stop may be reset by hand, a switch actuated by said second shaft when the element has turned the second shaft back to its initial position through said friction clutch.

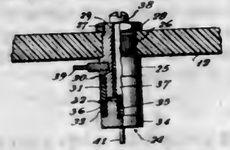
2,735,916
SWITCH FOR CONTROL SYSTEM OF IGNITION AND STARTER OF MOTOR VEHICLES
Anthony Arnejo, Detroit, Mich.
Application June 3, 1953, Serial No. 359,407
1 Claim. (Cl. 200—155)

A device of the character described comprising, in combination with an automobile dashboard having a circular opening therein, the provision of a casing, means for attaching said casing to the rear of said dashboard, an integrally formed forwardly extending cylindrical portion for said casing adapted to extend into said circular opening to lie flush with said dashboard, a cover affixed to the rear of said casing, a lock cylinder revolubly mounted in said cylindrical portion and having a key passage therethrough, an arcuate band of electrically conductive material embedded in the outer periphery of said



shell, a battery contact member, an ignition contact member, and a starter motor contact member extending successively and radially into said casing to frictional selective contact with said shell and band, said band having normal contact only with said battery contact member and adapted, when moved in one direction, to first additionally contact said ignition contact member, and upon still further movement in the same direction to contact all three of said contact members.

2,735,917
SHORTING SWITCH
William L. Davis, Denver, Colo., assignor to Hathaway Instrument Company, Denver, Colo.
Application June 29, 1953, Serial No. 364,741
1 Claim. (Cl. 200—158)



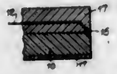
A shorting switch for a low resistance galvanometer resistor comprising a cylindrical highly conductive metal member having a reduced diameter portion at each end, one portion being knurled so as to be mounted in a hole in an insulated panel, said reduced diameter portion terminating in a threaded portion adapted to receive a fastening nut, said member having an axial bore extending throughout its length, an insulating sleeve fitted within said bore, a second highly conductive cylindrical metal member, having a reduced diameter portion, reduced diameter portion of said latter member and the other reduced diameter portion of said first member being adjacent each other, and a second insulated sleeve surrounding said adjacent reduced diameter portions to support said second member in spaced relation and axial alignment with said first member, said second member having a threaded axial bore of smaller diameter than the bore of the sleeve in said first member, a cap screw engaging said threaded bore and extending through the sleeve of said bore of said first member, said cap screw having a head adapted to engage the reduced diameter end of said first member to complete an electric circuit between said two members and to tend to compress said second insulating sleeve to insure a low resistance circuit connection at all times that the head of said screw engages the end of said first cylinder, and electric terminals connected to each of said cylindrical members for connection to the terminal of a galvanometer resistor.

2,735,918
ELECTRICAL RELAY AND COVER THEREFOR
Christian Darr, Munich, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Munich and Berlin, Germany, a German corporation
Application March 9, 1953, Serial No. 341,320
2 Claims. (Cl. 200—168)



1. In combination with a sensitive electrical relay having operating parts secured on a mounting plate carrying plug means electrically connected with said operating parts and extending rearwardly of said mounting plate for removably plugging said relay into a suitable socket, a cover for said operating relay parts consisting of a transparent shell made of insulating material and having a front wall and side walls rearwardly extending therefrom, said front wall forming a generally rectangular platelike portion projecting forwardly to form a peripheral rectangular recessed portion thereon, screw means extending from said front wall rearwardly to said mounting plate for removably securing said cover thereon, the head of said screw means being in fastened position thereof buried in a depression formed in the platelike portion of said front wall so as to be normally inaccessible, and a generally U-shaped handle having its legs pivotally mounted near the bottom of the opposite sides of said forwardly projecting rectangular platelike portion on the front wall of said cover for out-of-way disposal in normal position thereof along said peripheral rectangular recessed portion, whereby said handle can be rotated outwardly from such normal out-of-way position for the purpose of manipulating said cover, said relay and cover being removable as a unit when said screw means is in fastening position and said cover being removable individually upon loosening of said screw means while leaving said relay plugged to said socket.

2,735,919
PHOTOTRANSISTOR AND METHOD OF MANUFACTURE
Edmund G. Shower, Quakertown, Pa., assignor to National Union Electric Corporation, Hatboro, Pa., a corporation of Delaware
Application May 20, 1953, Serial No. 356,281
11 Claims. (Cl. 201—63)



1. The method of making a phototransistor which comprises, melting a piece of transistor impurity material to a localized region of a semi-conductor material to form a phototransistor alloy junction, attaching a lead-in wire to the alloy material at a point offset from the margin thereof, and then slicing through said junction at a point between the margin and the place of contact of said lead-in wire therewith, and thence through the semi-conductor to form a substantially flat exposure phototransistor surface which is free from light obstruction by said wire.

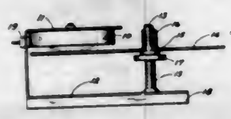
2,735,920
WELDING CURRENT CONTACT TUBE
Leopold Valliere, Montreal, Quebec, Canada, assignor to Air Reduction Company, Incorporated, New York, N. Y., a corporation of New York
Application July 15, 1952, Serial No. 298,893
6 Claims. (Cl. 219—8)

1. In welding apparatus for use with a consumable wire electrode, a tubular welding current contact member of electrically conductive material having a smooth bore through which the electrode is passed in continuous contact therewith for presentation to the arc, and a ring of



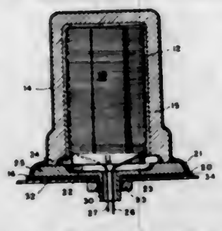
refractory material arranged on the end of said member adjacent the arc, said ring having an inner diameter substantially equal to the diameter of said bore.

2,735,921
ENAMEL FIRING STAND
Arthur H. Edgerton, Rocky River, Ohio
Application May 4, 1954, Serial No. 427,521
5 Claims. (Cl. 219—19)



1. Apparatus for firing vitreous enamel on metal articles comprising a stand embodying a base, a vertical leg thereon, a horizontal flange on the upper portion of said leg parallel said base, an electric heater formed to produce temperatures within a range of 1300° F. to 1600° F. on said flange disposed in confronting relation with said base, a threaded post on said base mounted beyond the edge of said heater, a nut on said post and a work supporting plate pivotally mounted on said post and supported by said nut whereby metal articles coated with vitreous enamel that fuses at approximately 1500° F. may be placed on said plate elevated by said nut into close proximity with said heater, rotated in a horizontal plane under the heating element to effect the fusion of the vitreous enamel and momentarily rotated from beneath the heating element to inspect the progress of fusion of the vitreous enamel and accommodate the removal thereof upon maturity of fusion.

2,735,922
HEATING ELEMENT FOR COFFEE MAKERS, ETC.
Howard R. Johnson, Collingswood, N. J.
Application February 2, 1955, Serial No. 485,678
1 Claim. (Cl. 219—19)



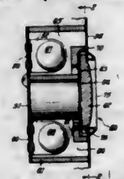
A heating element for liquids comprising a resistance wire wound on a ceramic spool, an insulating ceramic coating surrounding the coil so formed, a metal casing having an open end, surrounding the coating and spaced therefrom, a heat conductor completely filling such space and comprising a low-fusing metal, and a base secured to the casing by an epoxy resin sealing compound, said base being formed of a material of low heat conducting and high electrical insulating properties, and closing the open end of the casing.

2,735,923
TEMPERATURE-CONTROLLED SOLDERING IRON
James W. Juvinall, La Grange Park, and Merton R. Miller, Lombard, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application December 29, 1948, Serial No. 67,814
10 Claims. (Cl. 219—26)



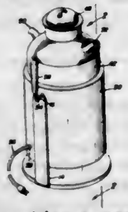
7. In a light-weight soldering iron, the combination of a metal tip having a working surface, a heating element in said tip, a thermocouple in said tip disposed between said heating element and the working surface of said tip and in close proximity to said working surface, means including a handle for supporting said tip, conductors connected to said heating element and connectible to a power supply for heating said tip, and conductors connected to said thermocouple and connectible to a control circuit for controlling said power supply.

2,735,924
SIGNAL LIGHT FOR A RANGE
Richard K. Shaw, Effingham, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application May 15, 1952, Serial No. 288,001
1 Claim. (Cl. 219—37)



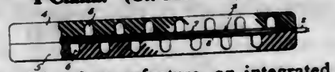
In an electric range having a two-circuit heating element, a visual means for indicating which circuit is energized comprising a glass lens, said glass lens having raised portions formed on one side thereof, said raised portions being contoured to represent a diagrammatic facsimile of the two-circuit heating element, an opaque washer having cut-out portions formed therein, said cut-out portions having a configuration corresponding to the contour of said raised portions so that the washer is engageable with marginal regions of the lens immediately surrounding the raised portions, a bezel for retaining said lens and said washer in intimate contact so that upon illuminating the washer side of the lens, the opposite side thereof will reveal a representation of the heating element and illuminating means associated with the lens including a pair of separate chambers each housing an individual light source, said illuminating means being operable selectively to reveal a representation of one or the other or both circuits of said two-circuit heating element.

2,735,925
WATER HEATER
Edward W. Nickolay, Park River, N. Dak.
Application May 19, 1953, Serial No. 355,903
1 Claim. (Cl. 219—43)



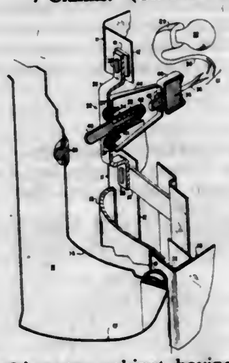
A liquid heater comprising a stand having a pair of spaced apart standards provided with upwardly opening recesses in upper ends thereof, a substantially cylindrical heating chamber having hollow insulation filled side and bottom walls, an internal annular ledge in said heating chamber adjacent its bottom wall, a heating element in said heating chamber mounted on said bottom wall below said ledge, a substantially cylindrical liquid container with a closed top and slidably fitting in said heating chamber to rest on said ledge, a pair of oppositely extending pouring spouts on the top of said liquid container at opposite sides thereof, and a pair of lateral trunnions on the side wall and adjacent the top and at opposite sides of the heating chamber at a right angle to said spouts rotatably seating in said recesses for swinging in opposite directions of said heating chamber between said standards to tilt the liquid container in opposite directions for pouring out of said spouts selectively while being heated.

2,735,926
ELECTRICALLY HEATED MATTRESS AND CUSHION
Oscar H. Langlois, Roxbury, Mass.
Application July 21, 1953, Serial No. 369,288
1 Claim. (Cl. 219—46)



As a new article of manufacture, an integrated stratiform flexible resilient structure for bedding, cushioning and the like use in supportive relation to a prone, reclining or seated human body receivable thereon, said structure comprising upper and lower stratum-defining sections separable at least partly from each other and being composed of multi-cavitied stratiform masses of foam rubber, a generally conformant layer-form removable electric pad-like heating unit interposed between the two sections, and a heat insulative and reflective element substantially co-extensive with the heating unit and disposed between the latter and the lower section and comprising a fabricated web incorporating a generally uniformly distributed co-extensive discontinuous dispersion of aluminum powder affording a heat-reflective medium substantially to exclude heat from the lower section and to reflect it to the upper section, said heating unit and said heat insulative and reflective element being mutually interchangeable positionally between the upper and the lower sections for use of the structure as a whole in one or the inverted flatwise position.

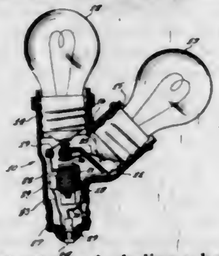
2,735,927
REFRIGERATOR ILLUMINATING DEVICE
Robert William Brace, Evansville, Ind., assignor to International Harvester Company, a corporation of New Jersey
Application August 11, 1953, Serial No. 373,480
7 Claims. (Cl. 240—4)



4. In a refrigerator cabinet having a latchable door and having a lamp mounted interiorly thereof, means for simultaneously forcing the refrigerator door to the open position and for illuminating the lamp when the refrigerator door is unlatched and for extinguishing said

lamp when said door is closed, said means comprising a plunger mounted within one wall of said refrigerator cabinet, switching means mounted within said one wall of said refrigerator cabinet in cooperation with said plunger and said lamp, power means mounted in cooperation with said plunger for causing said plunger to be projected against said refrigerator door when said refrigerator door is unlatched, whereby said refrigerator door is forced to the open position, said switching means operating responsive to the projection of said plunger against said refrigerator door to force said refrigerator door to the open position for illuminating said lamp, means for restoring said plunger when said refrigerator door is latched, said switching means operating responsive to the restoration of said plunger for extinguishing said lamp.

2,735,928
EMERGENCY LAMP
Harold A. Smethurst, New York, N. Y.
Application April 12, 1954, Serial No. 422,473
1 Claim. (Cl. 240—37.1)



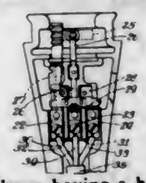
An electric light fixture including a hollow casing having two openings in one end thereof with sheet metal shells in the openings and a center contact at the opposite end of said casing, two capacitors connected in parallel to the center contact, an external threaded sheet metal shell upon the same end of the casing with said center contact and connected in series with one of the capacitors and the latter also connected to one of the two sheet metal shells, both of the shells being adapted to receive the bases of two lamps so that the center contacts of the lamps project into the casing, a stationary contact in the latter making contact with the center contact of one lamp, a relay coil within the casing connected at one end with said stationary contact and at the other end with the other of the two capacitors, a movable armature for said coil connected at one end with the last mentioned capacitor and overlying the other end of said coil, a second contact within said casing disposed in the path of the armature when the same is released by the coil and having an end thereof in active contact with the other of the two lamps, and means interconnecting the two metal shells receiving the two lamps.

2,735,929
LIGHTING DIMMERS
Louis Erhardt and Tommy Temple, Los Angeles, Calif., assignors to Century Lighting, Inc., New York, N. Y., a corporation of New York
Application September 3, 1952, Serial No. 307,582
11 Claims. (Cl. 240—46.13)



1. A lighting dimmer comprising a support having an aperture, several elongated shutter blades, each of said blades having a base and a tip, each said blade tapering from its base toward its tip, each said blade being constructed and arranged to be transversely fan-expansible about its tip so that the breadth of the base is expansible and the breadth of the tip is constant, means pivotally mounting said blades adjacent their bases at spaced intervals on the support adjacent the aperture for movement from a first position in which the blades extend longitudinally along and are located at the periphery of the aperture and thereby provide a clear opening through the aperture to a second position in which the blades extend radially from their bases to their tips into the aperture and the tips of the blades are adjacent the center of the aperture, the spacing between the pivotal mounting means exceeding the unexpanded widths of the bases of the blades, and means to move the blades from the first to the second position and to expand the blades so as to close the aperture.

2,735,930
PORTABLE HAND LAMP
Charles H. Weight, Valparaiso, Ind., assignor to McGill Manufacturing Company, Inc., Valparaiso, Ind., a corporation of Indiana
Application September 20, 1952, Serial No. 310,603
4 Claims. (Cl. 240—54)

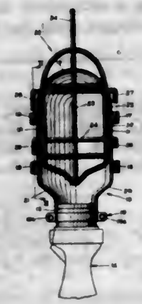


1. In a portable lamp having a hollow handle divided longitudinally into a pair of first and second complementary handle sections, a metallic guard cage secured to the forward end of the handle, a lamp socket mounted in the forward end of the handle coaxial with the longitudinal axis thereof, and a switch mounted in the handle to the rear of the lamp socket having a first contact electrically connected to the lamp socket and having a second contact; an electrical system including in combination, a group of electrical terminals rigidly mounted on the internal surface of the first handle section and spaced and insulated one from the other on a transverse axis to the rear of the switch, an electrically conductive ground strip mounted on the external surface of the first handle section at the forward end thereof in electrical contact with the metallic guard cage, a group of electrically conductive strips rigidly mounted on the internal surface of the first handle section spaced and insulated one from the other, one of said strips being connected from one of said terminals to the lamp socket, a second of said strips being connected from a second of said terminals to said ground strip, an electrical conductor connected from a third of said terminals to the second contact of the switch, and an inlet cord for connecting the lamp to a source of power and including a pair of energizing leads respectively connected to said one of said terminals and to said third of said terminals and including a ground lead connected to said second terminal.

2,735,931
SEPARABLE SUSPENSION DEVICE FOR AN EXTENSION LAMP
Rodger F. Becker, Kalamazoo, Mich.
Original application December 6, 1949, Serial No. 131,398, now Patent No. 2,716,701, dated August 30, 1955. Divided and this application June 28, 1955, Serial No. 518,578
6 Claims. (Cl. 240—54)

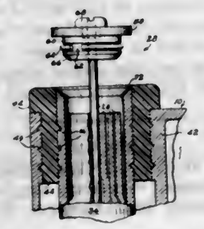
1. In an extension lamp having a reflective shell and a guard having a suspension device thereon, detachable

means for securing said guard to said shell comprising: a first pair of hollow, pin engaging brackets secured to opposite outer edges of said shell; a second pair of hollow, pin engaging brackets longitudinally spaced from said first pair of engaging brackets and similarly secured to said shell; a first pair of pins secured to said guard and disposed, respectively, to fit snugly, but slidably, within the hollow portion of said first pair of brackets; a second



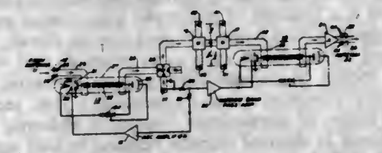
pair of pins secured to said guard and adapted, respectively, to fit snugly, but slidably, within the hollow portion of said second pair of brackets, one pin being slightly misaligned with its corresponding bracket, said suspension device extending in a direction opposite to the direction in which said pins extend, whereby a force exerted on said suspension device in a direction opposite to the direction in which said pins extend will urge said pins to move out of said brackets.

2,735,932
ANTENNA FOR COMPACT RADIO EQUIPMENT
Ralph Textrom, Los Angeles, and John W. Daniels, Alhambra, Calif., assignors to Hoffman Electronics Corporation, Los Angeles, Calif., a corporation of California
Application November 7, 1952, Serial No. 319,336
6 Claims. (Cl. 250—14)



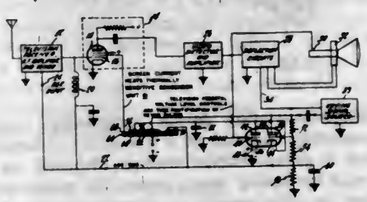
1. An extendable antenna for compact radio equipment of the cased type, comprising a sleeve mounted in the casing and having its ends secured in opposite walls thereof, telescopically related antenna sections disposed in said sleeve and extendable therefrom for use, a button carried by one of said sections and arranged to be received resiliently within one end of said sleeve to retain said sections in collapsed condition therein, said end of the sleeve being internally chamfered to guide said button into received position and a manually operable ejecting element mounted adjacent the opposite end of said sleeve to contact said sections and operable to overcome the retaining force of said button, whereby upon operation of said ejecting element said sections are forcibly projected from said sleeve with a snap action.

2,735,933
PULSE REPEATER
John R. Pierce, Berkeley Heights, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application September 9, 1950, Serial No. 184,046
15 Claims. (Cl. 250—15)



2. A repeater for relaying and regenerating signals in the form of signal-modulated pulses comprising means for receiving said signals, amplitude discriminator means comprising means for expanding an intermediate fixed range of signal amplitudes, means for applying said received signals to said amplitude discriminator means, amplifier means, means for applying the output of said amplitude discriminator means to the input of said amplifier, means for varying the gain of said amplifier in an approximately sinusoidal manner, means for synchronizing said gain varying means with the average pulse repetition rate of said signals, and means for transmitting the output of said amplifier means.

2,735,934
AUTOMATIC GAIN CONTROL
Eugene O. Keizer, Princeton, N. J., and Marlin G. Kroger, Oak Park, Ill., assignors to Radio Corporation of America, a corporation of Delaware
Application November 29, 1954, Serial No. 471,779
The terminal 15 years of the term of the patent to be granted has been disclaimed
6 Claims. (Cl. 250—20)

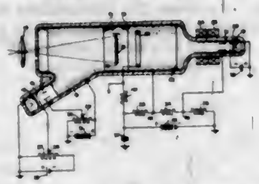


1. An electrically controllable variable capacitance apparatus comprising in combination: a body of electrically conductive material of relatively high resistivity suitable for use as a heater element, said body having working surface areas thereon which undergo temperature change upon current flow through said body; electrical connection means fastened to said body to permit a flow of heating current to be established in said body; a first body of non-conducting dielectric material fastened to one area of said working surface and having a positive dielectric temperature coefficient; a second body of non-conducting dielectric material fastened to another area of said working surface and having a negative dielectric temperature coefficient; conduction means fastened to each of said bodies of dielectric material to establish capacitances between said conduction means and said conductive body, the value of capacitances established by said conduction means being a function of the temperature of said conductive body.

4. A variable capacitance controlled automatic gain controlled system for a television receiver comprising in combination: a circuit ground terminal means; a television signal processing circuit including an automatic gain control circuit having a first, second, and third capacity responsive control terminals for respectively controlling the correction speed, keying mode and intensity of keying in said gain control circuit, said control terminals being

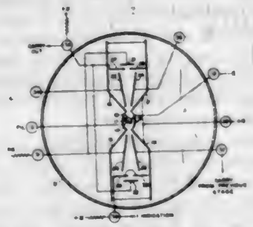
referenced to said ground terminal means; a wafer of relatively high resistivity heater material having a first and second electrically conductive connection means fastened theretof to direct current flow through said wafer; electrical connections from said signal processing circuit to said wafer terminal means, from a position in said processing circuit establishing through said wafer a current flow which is a function of automatic gain control potential developed by said automatic gain control circuit, said connections further being such as to establish said wafer terminal means at substantially ground potential for higher order television signal frequencies; a first, second and third bodies of temperature responsive dielectric material fastened in thermal transfer relation to said wafer; electrode means fastened to said dielectric bodies so as to form a first, second and third capacitance units all having a common electrode defined by one of said wafer conductive connection means; and electrical connections from said first, second and third capacitance units to said first, second and third capacitive responsive control terminals whereby said correction speed keying mode and intensity of keying in said automatic gain control circuit are together rendered a function of received signal strength.

2,735,935
IMAGE-TRANSLATING DEVICE
George Stanley Percival Freeman, Chiswick, London, England, assignor to Cinema-Television Limited, London, England, a British company
Application February 3, 1950, Serial No. 142,111
Claims priority, application Great Britain February 7, 1949
9 Claims. (Cl. 250—27)



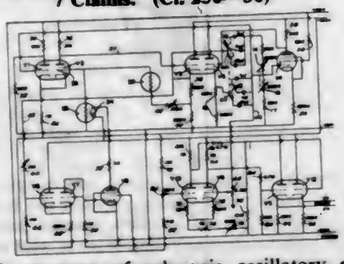
1. An image-translating device comprising: a target electrode consisting essential of a thin sheet of insulating material and a photosensitive mosaic disposed on one surface of said insulating sheet; means for projecting an optical image on said mosaic; an electron source facing the surface of said sheet opposite said mosaic; an electrode system for projecting a scanning electron beam towards said mosaic; and a load impedance coupled to said electrode system for developing an output signal dedetermined by the charge distribution on said mosaic.

2,735,936
DEFLECTED BEAM TUBE BINARY ADDER
Darrin H. Gridley, Washington, D. C.
Application July 13, 1950, Serial No. 173,638
6 Claims. (Cl. 250—27)
(Granted under Title 35, U. S. Code (1952), sec. 266)



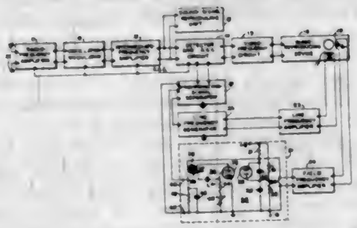
3. An electron tube comprising, a cathode surface for providing electron emission, beam forming means for concentrating emitted electrons into two electron beams, first electron collector plates for each beam positioned to collect undeflected electrons, secondary collector plates for each beam positioned beside the first collector plates operative to collect deflected electrons, deflection means for each electron beam disposed between the beam forming means and the collector plates operative to deflect the electron beams to fall on selected collector plates in dependency on applied signals, a conductive path connecting the first electron collector plate for one beam with the deflection means for the other beam, and a conductive path connecting a secondary collector plate for the first beam with a collector plate for the second beam.

2,735,937
LOW-FREQUENCY OSCILLATOR
Randolph G. Poole, Jr., Seattle, Wash.
Application March 4, 1952, Serial No. 274,792
7 Claims. (Cl. 250—36)



1. In a generator of sub-sonic oscillatory electrical energy comprising frequency control means and amplitude control means, in combination: a first voltage amplifying means having nominally 0 degrees phase shift between input and output voltages, a second voltage amplifying means having nominally 180 degrees phase shift between input and output voltages, said first and second amplifying means having their inputs connected in parallel, a series impedance comprising reactive means and resistive means connected in parallel with said amplifier inputs, a positive feedback circuit adapted to transfer energy from the output of said first amplifying means to the inputs of both first and second amplifying means, an output circuit coupling the output of said second amplifying means to the resistive means in said series impedance, the instantaneous relative polarities of the input and output voltages of said second amplifying means cooperating to increase the admittance of said series impedance, and included in said positive feedback circuit, variable adjustable resistive means adapted to adjust the frequency of said generator as desired.

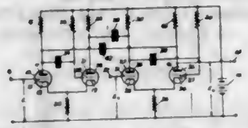
2,735,938
POTENTIAL WAVE-GENERATING SYSTEMS
George B. Townsend, Wembley, England, assignor to Hazeltine Research, Inc., Chicago, Ill., a corporation of Illinois
Application March 28, 1952, Serial No. 278,994
Claims priority, application Great Britain April 10, 1951
18 Claims. (Cl. 250—36)



3. A system for generating a television scanning potential wave having retrace portions and trace portions

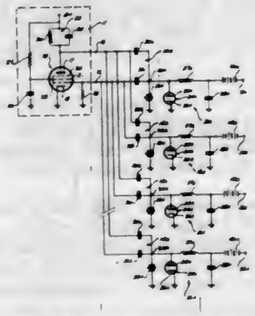
long relative to said retrace portions comprising: a condenser including a pair of terminals; a charging circuit for supplying energy to said condenser to develop on one of said terminals with respect to the other thereof said trace portions of said wave; a circuit for periodically discharging said condenser to develop on said one terminal with respect to said other terminal said retrace portions of said wave, the amplitudes of said retrace portions tending to vary with variations in the operating conditions of said discharge circuit; and a control circuit for causing said retrace portions to be terminated at a constant termination potential including a source of fixed reference potential substantially equal to said termination potential and a unidirectionally conductive device coupled between said source and said one terminal of said condenser for preventing said termination potential on said one terminal from decreasing below said fixed potential.

2,735,939
VOLTAGE-CONTROLLED RING OSCILLATORS
Kenneth E. Forsberg, Great Neck, N. Y., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware
Application November 3, 1952, Serial No. 318,439
8 Claims. (Cl. 250—36)



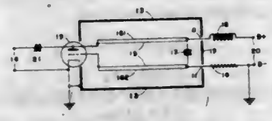
1. A voltage-controlled oscillator comprising a plurality of multivibrators arranged in a ring-oscillator circuit, each having a normally conducting and a normally nonconducting electron discharge device having a plate, a grid and a cathode, capacitive means to couple the plate of the normally nonconducting device of each multivibrator except the first to the plate of the normally conducting device of the preceding multivibrator and the plate of the normally nonconducting device of the first multivibrator to the plate of the normally conducting device of the last multivibrator, means to apply a controlling voltage to the grid of the normally nonconducting device of each multivibrator to linearly control the pulse duration and repetition rate of the output.

2,735,940
MULTIFREQUENCY KEYED OSCILLATOR CIRCUIT
Harold A. Norby, Culver City, Calif., assignor to Hughes Aircraft Company, a corporation of Delaware
Application January 12, 1954, Serial No. 403,612
4 Claims. (Cl. 250—36)



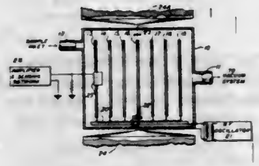
1. A keyed oscillator circuit, responsive to an applied keying pulse, for generating an electrical signal having one of a plurality of predetermined frequencies, said circuit comprising: an amplifier for producing a plurality of electrical signals having the plurality of predetermined frequencies, respectively; a plurality of frequency-selective feedback networks corresponding, respectively, to the plurality of electrical signals, each feedback network including a resonant circuit tuned to the frequency of the associated electrical signal and being operable to regeneratively return a portion of the associated electrical signal to said amplifier for amplifying said associated signal; and a plurality of keying circuits corresponding, respectively, to said plurality of feedback networks, each of said keying circuits including a rectifier connected in shunt with an associated resonant circuit and being responsive to the applied keying pulse for rendering operable the associated feedback network, thereby to generate said associated electrical signal.

2,735,941
HIGH FREQUENCY VACUUM TUBE CIRCUIT
Richard C. Peck, Washington, D. C.
Application September 17, 1945, Serial No. 616,948
8 Claims. (Cl. 250—36)
(Granted under Title 35, U. S. Code (1952), sec. 266)



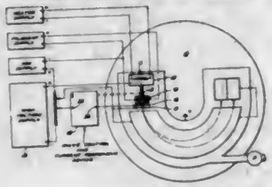
6. An oscillator comprising a vacuum tube having a grid and a plate; a tank circuit effectively comprising the grid, the plate, leads thereto within the tube, and a section of transmission line; and a cavity resonator having a cutoff frequency higher than the frequency of the fundamental mode of oscillation of the tank circuit, said cavity resonator enclosing the section of transmission line and enclosing at least in part said leads within the tube, said cavity resonator serving to suppress fundamental mode oscillations in the tank circuit.

2,735,942
MASS SPECTROMETER
Wilson M. Brubaker, Arcadia, Calif., assignor to Consolidated Engineering Corporation, Pasadena, Calif., a corporation of California
Application June 1, 1954, Serial No. 433,752
7 Claims. (Cl. 250—41.9)



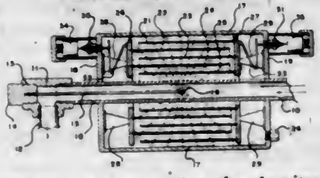
1. In a mass spectrometer the combination comprising an analyzer chamber, means for ionizing a gas admitted to the chamber within a restricted region of the chamber, means for producing a high frequency electrical field across the chamber, means for producing a non-uniform magnetic field across the chamber transverse to the electrical field, the strength of the magnetic field being at a maximum in a central region of the analyzer chamber and decreasing outwardly thereof in the direction of the electrical field, and a collector electrode disposed in the chamber and spaced from the region of ion formation.

2,735,943
AUTOMATIC VAPOR CONTROL
Byron T. Wright, Los Angeles, and William R. Baker, Berkeley, Calif., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application March 4, 1947, Serial No. 732,350
5 Claims. (Cl. 250—41.9)



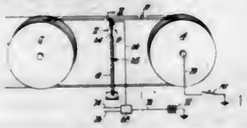
1. An ion generator comprising a source of vapor, an ionization chamber communicating with said source of vapor, means for establishing an electric arc discharge through said ionization chamber in order to ionize the vapor contained therein, means to expel ions from said ionization chamber, means including a valve for controlling the flow of vapor from said source of vapor into said ionization chamber, and means responsive to the amount of ions expelled from said ionization chamber for adjusting said valve in order to regulate the flow of vapor into said ionization chamber.

2,735,944
APPARATUS FOR DETERMINING DENSITY OF FLUIDS
Walton J. Greer, Houston, Tex., assignor to Halliburton Oil Well Cementing Company, Duncan, Okla.
Application October 13, 1951, Serial No. 251,156
4 Claims. (Cl. 250—43.5)



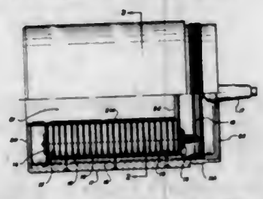
1. Apparatus for determining the density of fluid including a conduit for containing the fluid, a source of gamma radiation mounted in the conduit in such position that the fluid may flow around the source substantially on all sides, means forming a closed chamber outside of said conduit and in such position that the source of gamma radiation is substantially in the center thereof, and means including electrodes mounted in the closed chamber for detecting radiations from the source within the conduit.

2,735,945
FAULT DETECTOR FOR STRANDING MACHINES
Wilbert G. Colton and Henry Buszka, Buffalo, N. Y.
Application March 26, 1951, Serial No. 217,502
1 Claim. (Cl. 200—61.41)



In a fault detector for testing stranded wire cable, a pair of jaws each having a semi-cylindrical groove substantially perpendicular to the plane of said jaws, means mounting each of said jaws for separate spreading movement to open positions, spring means arranged to urge said jaws into contact at a closed position with said grooves in complementing relation whereby to form a cylindrical bore of similar shape and slightly larger diameter than the normal diameter of the wire cable under test, stop means for said jaws arranged to define the closed position of each against the urge of said spring means for fixing the location of said bore when the jaws are closed, said jaws being chamfered at one end of said groove to form a conically countersunk portion at one end of said bore to provide a funnel shaped entrance thereto, cable feeding and tensioning guide means arranged to normally pass said cable centrally through said bore by and during maintenance of the cable tension, and electric circuit means including said jaws and said guide means closable by means of current conducting contact between said cable and said bore as a result of a structural fault in said cable, said stop means including manually operable cam means for spreading said jaws simultaneously against the urge of said spring means to said open positions whereby to open said bore to facilitate placing the cable in said bore during detector setting-up operations.

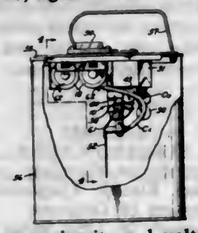
2,735,946
PROSPECTING
William M. Stratford, New York, and Charles F. Teichmann, Fleetwood, N. Y., and Gerhard Herzog, Houston, Tex., assignors to The Texas Company, New York, N. Y., a corporation of Delaware
Application August 3, 1951, Serial No. 240,182
6 Claims. (Cl. 250—83.6)



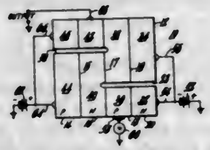
1. In geophysical examinations, the improvement which comprises measuring the respective intensities of at least two of the three types of radiation consisting of alpha, beta, and gamma radiation emitted naturally by each of a series of different earth masses spaced from each other across a known mineral deposit, and determining the ratio of intensity of the different types of radiation for each of said masses, and thereby determining a characteristic anomaly for the known mineral deposit in terms of variations in ratios of intensities determined for the several different earth masses, measuring the respective intensities of the same types of radiation emitted naturally by each of a second series of different earth masses spaced from each other along a traverse in the neighborhood of a suspected but unexposed mineral deposit in the same general area as the known deposit and determining the ratios of intensity of said types of radiation for each of said masses along said traverse to determine whether an anomaly similar to that characteristic of the known deposit is associated with the earth masses along the traverse of the suspected deposit.

2,735,947
RADIATION DETECTOR
Everett W. Molloy, Wilmar, Calif., assignor to Beckman Instruments, Inc., South Pasadena, Calif., a corporation of California
Application December 5, 1951, Serial No. 259,954
18 Claims. (Cl. 250—83.6)

6. A portable radiation detector of the character described, comprising: a housing adapted to be carried manually to serve both as an ionization chamber and as an enclosure for the detector parts; a removable closure for said housing; an inner electrode for the ionization chamber mounted on the inner side of said closure; a detector circuit mounted on the inner side of said closure including a vacuum tube with its grid in communication with said inner electrode; signal means on said closure responsive to said detector circuit; and voltage supply means on the inner side of said closure for energizing said detector circuit.



2,735,948
MULTIELEMENT SEMICONDUCTOR DEVICES
George C. Sziklai, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application January 21, 1953, Serial No. 332,459
10 Claims. (Cl. 307—88.5)



4. An electrical device comprising a semiconductor body having four alternating regions of P-type and N-type conductivity material, the first and fourth of said regions being biased in the forward direction with respect to the region adjacent thereto, one of the second and third regions being adapted to have an electrical input signal applied thereto, and a plurality of transverse channels formed in said body, said channels intersecting in alternate arrangement first said first, second and third regions and then said second, third and fourth regions.

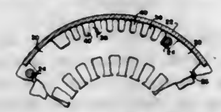
2,735,949
ELECTROLYTIC ACCELERATION SENSING DEVICE
Boris Podolsky, Cincinnati, Ohio
Application June 11, 1954, Serial No. 435,977
11 Claims. (Cl. 310—2)



1. An acceleration sensing device comprising a housing formed of a non-conducting material and configurated to form a capillary channel, a first and second immiscible liquid disposed within said channel said first liquid being one of the class comprising mercury and gallium, said second liquid constituting an electrolyte, said housing material not being wettable by the first liquid, said liquids forming at least one interface within said channel, and a stabilizing ring formed by a material wettable by the first liquid, said stabilizing ring being disposed in said capillary bore in contact with said first liquid and electrodes in contact with liquid on opposite sides of said interface.

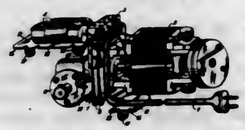
2,735,950
ELECTRIC MOTOR AND METHOD OF COOLING
Steffen S. Brown, Dayton, Ohio, assignor to The Brown-Brockmeyer Company, Dayton, Ohio, a corporation of Ohio
Application October 24, 1952, Serial No. 316,713
2 Claims. (Cl. 310—57)

1. In a dynamoelectric machine, a tubular frame member, end frame members having upstanding portions abutting opposite ends of said tubular member, said end frame members being of smaller diameter than said tubular member, a stator made up of aligned and similarly shaped stacked laminations between said end frame members and within said tubular frame member, said stator comprising radially extending angularly spaced projections running from end to end thereof engaging the tubular frame member to support the stator therein and to define channels for cooling air along the stator and the tubular frame member, a plurality of angularly spaced axially extending projections on said stator in said channels for increasing the effective heat dissipating area of the stator, said projections being less in width than said supporting



projections and extending outwardly into engagement with the inner surface of the tubular frame member whereby each of said channels is subdivided into a plurality of passages, the bottom of each said passage being substantially even with the outer diameters of said end frame members, a plurality of through bolts extending through certain of said passages and interconnecting the upstanding portions of said end frame members, an outer end casing member extending from one end of said tubular frame member and over one of said end frame members, an opening in the end of said end casing member, and means between said end casing member and said end frame member for driving air over said end frame members and through said passages.

2,735,951
DRIVING MECHANISM FOR OFFICE MACHINES
Georg Walther, Gerstetten, Germany
Application September 17, 1953, Serial No. 380,781
1 Claim. (Cl. 310—91)

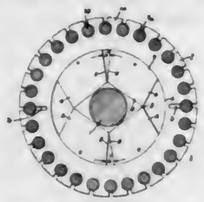


A motor driven unit for operating an office machine having side walls, comprising an electric motor, a speed reduction gear connected to said motor, and a bracket of substantially Z-shaped form including upper and lower horizontal sections and a vertical section connecting the same, said electrical means including a control switch for operating said motor, and suppressor means, and a terminal block, said suppressor means and terminal block being mounted on the upper section of said bracket, said gear mounted on one side of said vertical section and said motor and control switch on the other side thereof, all of said bracket sections having extensions and angular flanges on one edge thereof, some of said extensions adapted to fit into corresponding apertures in one of the side walls of said machine, the other extensions adapted to rest against said side wall, said angular flanges adapted to be secured to said side wall for mounting the entire unit thereon.

2,735,952
DYNAMOELECTRIC MACHINE MAGNETIC CORE MEMBER
Frank W. Merrill, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application January 4, 1954, Serial No. 401,907
9 Claims. (Cl. 310—156)

1. In a permanent magnet rotor for synchronous motor, the improvement comprising a rotor shaft hav-

ing a rhombic cross-section, four magnet blocks having inner surfaces respectively secured to said shaft, said the two blocks of each pair being respectively arranged blocks being arranged in two pairs, each pair being com-



prised of two adjacent blocks having the same polarity, on the shaft surfaces forming an obtuse angle of the rhombus, and a laminated rotor ring surrounding said blocks and having an inner surface secured to and abutting the outer surface of each of said blocks.

2,735,953

RADIATION DETECTOR

Arthur L. Tirico, Glen Ridge, N. J., assignor to The Texas Company, New York, N. Y., a corporation of Delaware

Application March 28, 1952, Serial No. 278,993
11 Claims. (Cl. 313—93)



1. A detector of penetrative radiation comprising a cathode array of hollow tubular elements stacked together with their side surfaces defining open spaces extending within the array lengthwise thereof; an anode having a charged particle receiving surface which is smaller than said side surfaces by a very large factor such as one over 100, the anode being insulatingly supported outside of the array near an end thereof to receive charged particles escaping from the array along said spaces; and means having at least two terminals and responsive upon connection of said terminals to a pre-determined source of electrical energy to provide within the array and along said spaces electrical fields for controlling the movement of charged particles along said spaces from the array to said anode, said last-mentioned means being thus responsive independently of the presence of any potential difference between the cathode array and the anode.

2,735,954

GAS DISCHARGE TUBE

Frederick Rawls, River Edge, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware

Application August 3, 1951, Serial No. 240,180
1 Claim. (Cl. 313—216)



A voltage regulator tube for regulating the voltage from an unregulated D. C. source, comprising a cylindrical envelope of conducting material forming one electrode, and a rod-like element extending into said envelope coaxially thereof and forming a second electrode, a seal of insulating material closing one end of said envelope and maintaining said electrodes assembled, said seal having a cylindrical portion extending into said envelope between said electrodes to shield adjacent portions of said electrodes from one another and an ionizing gas contained in said cyclindrical envelope.

2,735,955

ELECTRON TUBE

Albert Lieb, Oberesslingen, Germany, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware

Application January 26, 1954, Serial No. 406,243
Claims priority, application Germany January 29, 1953
1 Claim. (Cl. 313—294)



An electron discharge device comprising a cathode and a plurality of grids surrounding said cathode at different distances therefrom, comprising a first grid having interstices between successive turns at least two of which fit within the interstice between two successive turns of a second grid farther from said cathode, said first grid comprising a plurality of wire helices each of the same pitch as the second grid, one helix of the first grid being spaced from the cathode at distances different from those at which the other helix of this grid is spaced from the cathode.

2,735,956

CATHODE RAY APPARATUS

Joseph T. McNaney, San Diego, Calif., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware

Application July 12, 1952, Serial No. 298,603
6 Claims. (Cl. 315—24)



1. Cathode ray tube display means for visually presenting characters in response to a predetermined set of binary code signals, said display means including beam generating means, selection means for deflecting the beam along two directions in response to one of said set of code signals, a unitary thin beam-shaping member positioned to intercept said beam and presenting character-shaped apertures substantially non-serially aligned in conformance with the set of code signals, said apertures being arranged in a system of Cartesian coordinates, the coordinate arrangement being adapted to convert the code signals into intelligible characters, positioning means for deflecting the character-shaped beam to any predetermined position upon a target, said member being disposed along the path of the beam intermediate the selection means and the positioning means.

2,735,957

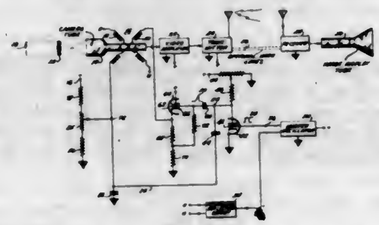
ELECTRON TUBE AMPLIFIER CIRCUIT

Robert G. Neuhauser, Lancaster, Pa., assignor to Radio Corporation of America, a corporation of Delaware

Application July 16, 1952, Serial No. 299,115
7 Claims. (Cl. 315—27)

1. In a cathode ray beam deflection system employing an electromagnetic deflection yoke having at least a first and a second input terminals, the combination of: a source of deflection signal having a first and a second

output terminals between which is established an output signal at a given output impedance; an output amplifier designated to drive said electromagnetic deflection yoke by said signal derived from said source, said output amplifier having a first and a second input terminals and a first and a second output terminals; means signally connecting said amplifier second input terminal, said amplifier second output terminal and said source second output terminal with one another to form a circuit reference datum; signal coupling means connecting said yoke first terminal with said amplifier first output



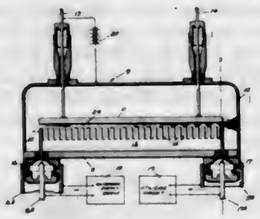
terminal; a capacitor connected from said yoke second terminal to said amplifier second output terminal to develop across said capacitor a feedback signal representing variations in current flow through said yoke; means signally coupling said deflection signal source first output terminal with said amplifier first input terminal to apply deflection signal in operatively driving relation to said amplifier; and means signally coupling said capacitor with said amplifier first input terminal with such electrical sense as to linearize current flow in said yoke by the combining of said feedback signal with the driving signal waveform applied to said amplifier input terminal.

2,735,958

ELECTRON DISCHARGE DEVICE OF THE TRAVELING WAVE TYPE

William C. Brown, Lincoln, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware

Application May 3, 1947, Serial No. 745,703
4 Claims. (Cl. 315—39.3)



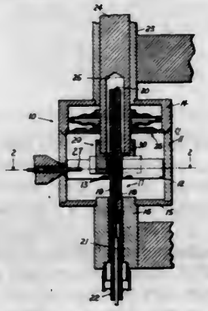
1. A high frequency electronic device comprising an electron source and a non-reentrant signal wave transmission delay network disposed in substantially extended parallel space relation, means for directing electrons from said source along a path in proximity to said network in a direction substantially parallel to the direction of transmission of waves along said network and at velocities at which substantial interaction occurs between signal waves along said network and said electrons, said network consisting of a plurality of periodically spaced elements, each having one extremity attached to a common base and having the other extremity free and signal means tightly coupled to said network adjacent at least one end of said network, said coupling means being conductively connected directly to the end of said network and including a conductive portion attached to one of said elements adjacent to its free extremity.

2,735,959

TUNABLE MAGNETRON DEVICE

Erich N. Kather, South Lincoln, Mass., assignor to Raytheon Manufacturing Company, Newton, Mass., a corporation of Delaware

Application October 6, 1949, Serial No. 119,938
17 Claims. (Cl. 315—39.61)



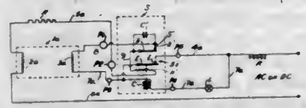
1. An electron discharge device comprising an anode structure defining a cavity resonator which has a plurality of cavities, a cathode adjacent said structure, and a tuning structure movably positioned with respect to said cavity resonator, an element of said tuning structure extending into each cavity of said cavity resonator, each tuning element comprising a rod positioned in the high capacity area of said cavity adjacent said cathode, said rod having metallic portions thereof adjacent the walls of said cavity and a portion thereof between said metallic portions which is void of metal.

2,735,960

STARTING AND OPERATING CIRCUITS FOR FLUORESCENT LAMPS

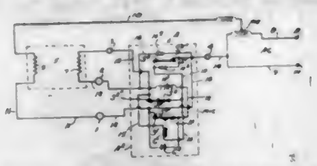
William S. H. Hamilton, Larchmont, N. Y.

Application September 29, 1950, Serial No. 187,593
6 Claims. (Cl. 315—100)



1. A starter for an electric discharge device comprising a thermostatic operating mechanism including a heater therefor, at least one normally closed movable switch member and cooperating contact, an actuating thermostatic element of the quick acting type, and an electromagnetic coil and cooperating armature, an electrical discharge device of the low pressure type having two electrodes, at least one of which is constructed to receive preheating current, a supply circuit, means including an inductive reactance device and said coil for connecting said electrodes to said supply circuit, a preheating circuit for said discharge device extending from one side of a voltage source to the opposite side of said source and including in series connection the electrode to be preheated, said normally closed switch member and contact and said heater, the operation of said quick acting thermostatic element causing said switch member to move away from said contact so as to break the preheating circuit and fire the discharge device by an inductive voltage surge, and said armature being mechanically connected to said switch member and said thermostatic element so that said armature is moved by said thermostatic element into proximity to said coil and so that said switch member is held in actuated position when said coil is energized by the operating current through said discharge device, thus holding said switch member in actuated position after the heater for the thermostatic operating mechanism cools.

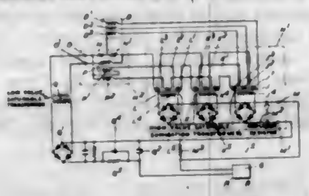
2,735,961
STARTERS FOR FLUORESCENT LAMPS
William S. H. Hamilton, Larchmont, N. Y.
Application October 21, 1952, Serial No. 315,984
3 Claims. (Cl. 315—100)



3. In a system for starting and operating an electric discharge device, said system comprising a gaseous electric discharge device having two electrodes constructed to receive preheating current, a normally closed electromagnetic switch, a normally closed time delay thermostatic switch having an operating heater, and a cut-out thermostatic switch having main and auxiliary heaters, an inductive device, one terminal of one of said electrodes being connected to one side of a source of current supply through said inductance device and one terminal of the other electrode being connected to the opposite side of said source through said cut-out switch and the winding of said electromagnetic switch in series connection, said electromagnetic switch and the heater for said time delay switch being in series connection in a circuit connected between the other terminals of said electrodes, said circuit completing a preheating circuit for said electrodes capable of producing firing temperature electrode heating, said time delay switch being connected across said winding so that the opening of said switch introduces said winding into said preheating circuit and causes rapid opening of the electromagnetic switch to cause the discharge device to fire by an inductive voltage kick, and mechanical means operatively interconnecting said electromagnetic switch and said time delay thermostatic switch to hold said latter switch open after the heater therefor cools, the operating current of said device continuing to energize said winding and hold both of said switches open during the operation of the device, and, should the device not fire, said electromagnetic switch continuing to open and close thereby repeatedly attempting to cause the device to fire, the main heater for said cut-out switch being connected in a circuit which is connected across said electromagnetic switch so that after several actuations of the electromagnetic switch the resulting heat from said main heater causes said cut-out switch to open, and the auxiliary heater for said cut-out switch being connected across said switch so that the opening of said switch introduces the auxiliary heater into said preheating circuit to maintain said cut-out switch in open position, said auxiliary heater having a resistance value which limits the current through the preheating circuit to a magnitude insufficient to open said electromagnetic switch.

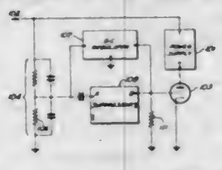
2,735,962
ELECTRIC PROTECTIVE ARRANGEMENTS
Norman Sadler Ellis, South Shields, and Clemett Harrison Lackey, Newcastle-on-Tyne, England, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, a company of Great Britain
Application October 15, 1951, Serial No. 251,418
17 Claims. (Cl. 317—29)

1. A fault-responsive starting device for controlling a relay or other device in a protective arrangement for a three-phase electric circuit having current transformers in its individual phases, comprising a three-phase operating phase sequence segregating network, a three-phase bias phase sequence segregating network, means connecting the two networks to the secondaries of the respective current transformers, means in each of said networks having resistance and reactance values connected to said respective current transformer secondaries whereby the two networks are caused to give equal outputs so long as balanced three-phase primary currents of magnitude not greater than the normal maximum load current are flowing in the



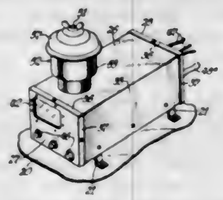
protected circuit, circuit means connecting the two network out-puts in opposition for controlling the relay or other device, and a delay device connected across the output circuit of said bias network for delaying the response of the bias network to sudden changes in the primary currents.

2,735,963
SUPPRESSOR CIRCUIT
William R. Baker and Quentin A. Kerns, Berkeley, Calif., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application December 10, 1947, Serial No. 790,910
5 Claims. (Cl. 317—31)



4. A regulator for a direct current high voltage power supply including a regulator tube having a control electrode and grounding one terminal of said power supply, a suppressor circuit including two electron vacuum tubes connected as a locked multivibrator, a gaseous discharge device coupling said two multivibrator tubes whereby the output of said suppressor circuit assumes the form of a negative square wave signal, means to impress a portion of any rapid fluctuation in the output of said high voltage power supply voltage upon said suppressor circuit, and further means impressing the output of said suppressor circuit upon the control electrode of said regulating tube thereby disconnecting said high voltage power supply at the time of any rapid voltage fluctuations of said high voltage power supply.

2,735,964
VENTILATED HOUSING FOR RADIO APPARATUS AND THE LIKE
George Price Grieve, Glenview, and Trillie Lee Hendry, Wood Dale, Ill.
Application April 5, 1952, Serial No. 282,732
2 Claims. (Cl. 317—101)



1. Dust-proof radio apparatus for use on tractors and the like and comprising, in combination, a chassis having radio parts mounted thereon and control shafts projecting from one end thereof, a housing having separable parts secured together to provide a substantially dust-proof enclosure for the chassis and radio parts, said housing including a base having side and end flanges extending upwardly from a bottom wall and of a size to receive the chassis therein, a cover having top and side walls of a size to fit over the base with the side walls overlapping the side flanges of the base, said side and top walls of the cover each having inwardly extending end flanges in substantially flush relationship to the end flanges on the bottom wall when the cover is in place on the base, said side walls also having inwardly projecting angle strips secured to the opposed inner surfaces thereof and carrying resilient sealing strips which engage the edges of the side flanges of the base to provide dust seals, and end caps having flanges thereon which fit over the top and side walls of the cover and the bottom wall of the base and having within the flanges resilient strips which engage and form dust seals with the end flanges of the cover and base, one of said end caps having openings therein through which the control shafts extend and having sealing washers providing dust seals with each of said shafts.

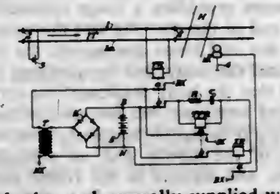
2,735,965
ELECTRICAL EQUIPMENT COMPONENT MOUNTING
Anthony J. Balanda, Waterbury, Conn., assignor to The Bristol Company, Waterbury, Conn., a corporation of Connecticut
Application May 2, 1952, Serial No. 285,827
11 Claims. (Cl. 317—101)



1. A mounting for removably installing equipment components on an installation frame comprising: a support; a component-bearing assembly; said support having guide means to constrain said assembly to motion in a straight-line path; first connection means carried by said support for communication with an external system; second connection means carried by said assembly for communication with the first connection means and with a component; and make-break mechanism for said connection means including, a cam pivotally mounted on said support, a cam follower carried by said assembly, a disconnect arm linked to said cam and engageable with the assembly, and cam actuating means operating said cam on make movement to urge the connection means into communication and on break movement to engage the disconnect arm with the assembly and withdraw the connection means from communication.

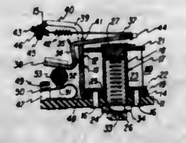
2,735,966
BATTERY CHECKING CIRCUIT ARRANGEMENT
Arthur E. Dodd, Edgewood, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application May 21, 1952, Serial No. 289,112
6 Claims. (Cl. 317—141)

1. In combination with a battery normally supplied with charging current from a suitable source of energy, a relay provided with a capacitor across its winding for controlling its release time, a first and second contacts, means for opening and closing said first and second contacts in synchronism, circuit means including said first contact for controlling the supply of energy from said battery and the charging source to said relay, circuit means for governing the supply of charging current to the battery including in multiple a back contact of said relay and said second contact, and circuit means including



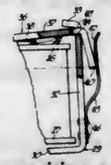
a contact of said relay and normally supplied with energy from the battery and the charging source.

2,735,967
ELECTROMAGNETIC RELAYS
Alexander Jay Lewus, Cicero, Ill.
Application December 29, 1951, Serial No. 264,016
10 Claims. (Cl. 317—176)



1. An electromagnetic relay comprising a magnetic field element, a longitudinally extending tubular non-magnetic metal member secured at its inner end to said field element, a longitudinally extending winding carried by said tubular member in surrounding relation therewith, a substantially plug-like magnetic pole piece secured in the outer end of said tubular member in fixed relation thereto, a magnetic armature, a pivotal connection between said armature and said field element, said armature having a free end cooperating with said pole piece and movable toward and away from said pole piece, means biasing the free end of said armature away from said pole piece, said field element having an opening formed therein in longitudinal alignment with said tubular member and communicating with the inner end thereof, a longitudinally extending magnetic core element carried by said field element within said opening and projecting longitudinally into said tubular member and having an outer pole end disposed adjacent to said pole piece and spaced longitudinally therefrom by a gap positioned within said tubular member and intermediate the ends thereof, and means for selectively adjusting the longitudinal position of said core element in said tubular member so as selectively to adjust the length of the gap between the pole end of said core element and said pole piece.

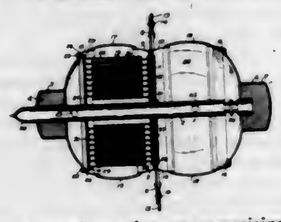
2,735,968
RELAY STRUCTURE
Edward A. Bogue, South Bend, Ind., and Charles W. Musser, Niles, Mich., assignors to ETC, Inc., Niles, Mich., a corporation of Illinois
Application February 19, 1952, Serial No. 272,334
4 Claims. (Cl. 317—198)



1. An assembly comprising a magnetizable core, a substantially L-shaped frame of magnetizable material having one leg secured to one end of the core and another leg extending along the core in spaced relationship thereto so that the core and other leg have adjacent free ends,

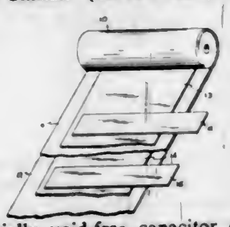
an armature having a body portion and an integral leg extending in angular relationship to one another from a vertex, means providing a hinge connection between the said free end of the core leg and the vertex of the armature with the said hinge connection, the latter mentioned core leg and the body and leg portions of the armature so related that the body portion of the armature is swingable toward and from the free end of the core and the armature leg is swingable angularly toward and from said other leg of the frame, and an elongated leaf spring having one end secured to the frame and its other end extending in the general direction of the core into overlapping relationship with the leg of the armature, said leaf spring being longitudinally shaped so as normally to engage the armature leg only at a position near the said hinge connection between the armature and frame, and the shape of the spring being such that the position of engagement between the armature leg and spring moves toward the end of the armature leg as the armature leg swings away from the leg of the frame.

2,735,969
FEED THROUGH CONDENSER
Jo Emmett Jennings, San Jose, Calif., assignor, by mesne assignments, to Jennings Radio Manufacturing Corporation, San Jose, Calif., a corporation of California
Application August 19, 1952, Serial No. 305,155
9 Claims. (Cl. 317—244)



1. A feed through condenser comprising a first and a second generally cylindrical section disposed end-to-end about a central long axis to form a vacuumized envelope, the free end of each section constituting a metallic terminal and having a concentric flange extending toward the other terminal, the adjacent ends of the sections being a metallic junction ring having a concentric flange on each side extending toward the adjacent terminal flange, a concentric glass shell arranged between the mutually reaching flanges of each section and hermetically sealed therewith, a set of condenser plates mounted in the first section on the terminal flange thereof, a set of companion condenser plates mounted in the first section on the junction ring, and a metallic rod within the envelope and electrically connecting the end terminals.

2,735,970
ELECTRICAL CONDENSERS
David B. Peck and Preston Robinson, Williamstown, Mass., assignors to Sprague Electric Company, North Adams, Mass., a corporation of Massachusetts
Application July 16, 1951, Serial No. 237,049
5 Claims. (Cl. 317—258)

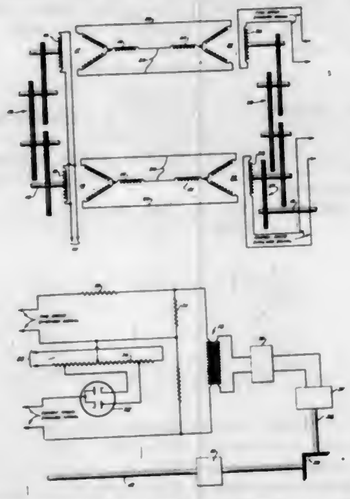


2. A substantially void-free capacitor of convolutely wound electrodes and dielectric resin films, the resin being a substantially linear polyester having the recurrent formula

$$(-O-\overset{O}{\overset{\|}{C}}-R-\overset{O}{\overset{\|}{C}}-O-R'-)_n$$

where R stands for a bivalent radical containing the benzene nucleus and R' stands for a bivalent aliphatic radical containing from 2 to 8 carbon atoms, the resin having been relaxed in situ from oriented condition at a relaxation temperature of 165 to 218° C.

2,735,971
TWO SPEED CONTROL CIRCUIT
Robert S. Raven, Catonsville, and Harry C. Moses, Baltimore, Md., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application July 24, 1953, Serial No. 370,024
1 Claim. (Cl. 318—30)

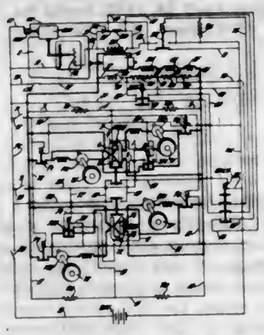


In a servo system, fine and coarse transmission systems, a servomotor connected for control by a combined voltage output of said fine and coarse systems, and a circuit for combining the individual outputs of said fine and coarse systems to produce the said combined voltage output comprising impedance means for attenuating the output of said fine system, two diodes inversely connected to the output of said coarse system, adjustable bias voltage means for said diodes whereby no current is passed in the coarse system output unless the magnitude of the voltage output of said coarse system exceeds the biasing voltages, an impedance connected in the output of said coarse system, series means for connecting the coarse system impedance and a portion of the fine system impedance means in series, a transformer connected in parallel with said series means, and electrical connections between said transformer and said servomotor.

2,735,972
WHEEL SLIP CONTROL
Paul H. Seward, Downers Grove, Ill., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application September 13, 1951, Serial No. 246,369
10 Claims. (Cl. 318—52)

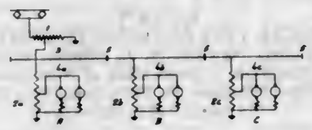
1. In a generating electric locomotive having a plurality of traction wheels, a plurality of electric traction motors, each of said motors being connected in driving relation to a traction wheel to drive said plurality of wheels at equal speeds, a prime mover driven electric

generator connected in balanced electrical power circuit relation with said plurality of traction motors when the traction wheels are driven at equal speeds thereby, said generator having power output control means normally acting to maintain the power output of the generator substantially constant and operable to successively reduce and increase the generator power output to the traction motors, electric relay control means connected in balanced electrical relation with the traction motors



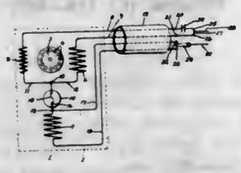
and operable only upon unbalanced electrical power relations between the motors upon slight slippage of any traction wheel to control operation of the generator output control means and thereby stop wheel slippage, and means operable by said electric relay control for retarding operation of said power output control means when reducing generator output to eliminate wheel slip and restoring the balanced electrical power relations between the motors to prevent further wheel slippage.

2,735,973
INSTALLATION FOR THE OPERATION OF THE TRACTION MOTORS OF ELECTRIC TRAINS WITH THE USE OF SINGLE PHASE ALTERNATING CURRENT
Olov Akerman, Stockholm, Sweden, assignor to Ab. Hagglund & Söner, Ornskoldsvik, Sweden
Application January 16, 1950, Serial No. 138,819
Claims priority, application Sweden January 25, 1949
1 Claim. (Cl. 318—94)



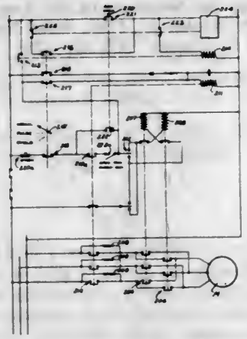
In an electric train including a plurality of cars, the combination of at least one single-phase low-tension driving motor in each of said cars, said motors being grounded through the wheels of the cars, an autotransformer in each of said cars, ground connections between said auto-transformers and the wheels of the car for grounding said auto-transformers, said auto-transformers having pre-set secondary outlets connected to said motors respectively, a unipolar feeder extending along each of said cars and having terminals at the respective ends of the car for connection to the unipolar feeder of an adjacent car, connecting means connecting said unipolar feeder to the primary inlet of each said auto-transformer, a high-tension auto-transformer in one of said cars of the train, means connecting said last-mentioned auto-transformer to the wheels of the car carrying it to ground, said last-mentioned auto-transformer having an adjustable secondary outlet connected to the unipolar feeder of the car carrying it for feeding a controlled high tension current through said unipolar feeder to said first-mentioned auto-transformers in the individual cars of the train, and a current collector on one of said cars of the train, means connecting said current collector to the primary inlet of said last-mentioned high tension auto-transformer.

2,735,974
MULTISPEED ELECTRIC MOTOR PROTECTIVE CIRCUIT
James H. Capps, Fort Wayne, Ind., assignor to General Electric Company, a corporation of New York
Application June 10, 1955, Serial No. 514,513
2 Claims. (Cl. 318—220)



1. A multispeed single phase alternating current induction-type motor including an auxiliary winding and a plurality of main winding sections, said auxiliary winding and at least one of said sections being connected in parallel, all of said sections being connected in series, a conductor extending from one end of said auxiliary winding to a point accessible from outside said motor and adapted to be connected through a capacitor to one side of a source of power, a second conductor extending from one end of said one section to a point accessible from outside said motor and adapted to be connected to said one side of said source of power, additional conductors respectively extending from the other end of said one section and from the end of each additional section which is electrically remote from said one section to points accessible from outside said motor and adapted to be connected to a switch thereby to be selectively connected to the other side of said source of power, and a thermal protector in series with said auxiliary winding and all said sections and connected between said auxiliary winding and said one section on the one hand and that one of said additional conductors that extends from the other end of said one section on the other hand.

2,735,975
MOTOR CONTROL SYSTEM FOR MACHINE TOOLS
Keith F. Gallimore, Fond du Lac, Wis., assignor to Giddings & Lewis Machine Tool Company, Fond du Lac, Wis., a corporation of Wisconsin
Application January 8, 1952, Serial No. 265,478
3 Claims. (Cl. 318—443)



1. In a machine tool having rotatable and translatable parts, in combination, an electric motor for driving said parts, a control circuit for said motor including a timer, a manually operable switch, and a multi-position selector switch connected in said control circuit and operable in one position to place said motor under control of said

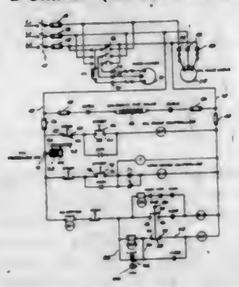
manually operable switch alone and in another position to place said motor under joint control of said manually operable switch and said timer.

2,735,976

MOTOR CURRENT ACTUATED PRESS CONTROL CIRCUIT

James C. Danly, River Forest, Ill., assignor to Danly Machine Specialties, Inc., Chicago, Ill., a corporation of Illinois

Application September 15, 1951, Serial No. 246,830
1 Claim. (Cl. 318—447)



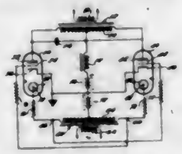
A control assembly for power presses including in combination a motor, a circuit for energizing the motor, a normally open switch in the motor circuit, a relay winding in the motor circuit, electromagnetic means for closing the normally open motor circuit switch, a circuit for energizing the electromagnetic means including a normally open manually operable switch and a normally closed relay contact in series, a normally open relay contact, circuit means including the normally open relay contact for shunting the normally open manually operable switch, a normally open time-controlled switch, circuit means including the time-controlled switch for shunting the normally closed relay contact, means for closing the normally open relay contact upon energization of the electromagnetic means, time-controlled means for closing for a predetermined time interval the time-controlled switch upon the closing of the manually operable switch, said motor circuit relay winding adapted to open the normally closed relay contact when a predetermined excess of normal current flows through the motor circiut.

2,735,977

INVERTER CIRCUIT

William M. Webster, Jr., Princeton, N. J., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Army

Application October 31, 1952, Serial No. 317,963
11 Claims. (Cl. 321—36)



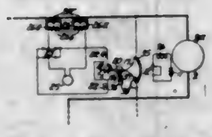
1. An inverter circuit comprising a first and a second gas tube each having an anode, a grid, a main cathode, an auxiliary cathode, and a constricting electrode surrounding a portion of said auxiliary cathode, output means coupled to said anodes, means including a portion of said output means to apply a source of unidirectional voltage between the main cathode and anode of each of said tubes, and A. C. input means coupled to said auxiliary cathodes and to said grids to apply alternately voltages of one polarity to the auxiliary cathode of said first tube and to the grid of said second tube, and voltages of an opposite polarity to said one polarity to the grid of said first tube and to the auxiliary cathode of said second tube, whereby said first and second tubes are fired alternately.

2,735,978

ELECTRIC POWER OUTPUT RESPONSIVE SYSTEM

Richard W. Jones, Evanston, Ill., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.

Application April 30, 1952, Serial No. 285,229
9 Claims. (Cl. 322—25)



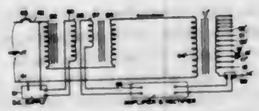
1. An electrical regulating device for a unidirectional current circuit comprising resistance means connected to said circuit to impress on a portion of said resistance means the voltage of said circuit, the resistance of said resistance means being uniformly distributed per unit length, control means for said circuit connected in series with said portion of said resistance means, an arcuate conductive sector adapted to move on said resistance means to vary the length of said portion thereof, electric actuating means for urging movement of said sector in one direction linearly per unit variation of said current, spring means for urging movement of said sector in the opposite direction, said spring means and said actuating means being arranged to jointly move said sector hyperbolically per unit variation of said current, a source of alternating current, a saturable reactor having a control winding and a reactance winding, means connecting said control winding to said circuit to respond to the current therein, means connecting said actuating means to said source through said reactive winding for impressing on said actuating means a voltage dependent upon said current to move said arcuate conductive sector for causing the resistance of said portion of said resistance means to vary according to a hyperbolic function of said current to thereby energize said control means substantially in direct proportion to the power of said circuit.

2,735,979

ELECTRICAL TEST LOADING TRANSFORMER

Melvin S. Coben, Newark, N. J., assignor to Multi-Amp Corporation, a corporation of New Jersey

Application February 24, 1953, Serial No. 338,481
7 Claims. (Cl. 323—2)



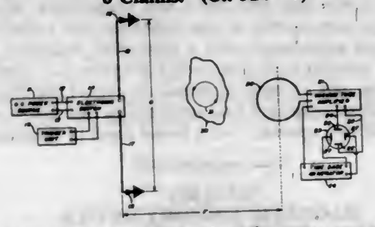
7. An electrical test loading device comprising a saturable reactor adapted for connection to a source of electric power, and a step transformer including a primary winding and a secondary winding, said primary winding being connected to said saturable reactor, said secondary winding being of decreasing cross-section from one end toward the other end thereof, whereby any selected combination of voltage and amperage is available at said secondary winding within a predetermined kilovolt-ampere range, wherein said saturable reactor includes current transformer means responsive to current variations in the primary winding of said step transformer for varying the reactance of said saturable reactor, to thereby maintain a constant output current through the secondary of said step transformer.

2,735,980

METHOD OF GEOPHYSICAL EXPLORATION

James R. Wait, Westboro, Ottawa, Canada, assignor to Newmont Mining Corporation, New York, N. Y., a corporation of Delaware

Application December 23, 1953, Serial No. 400,064
8 Claims. (Cl. 324—7)



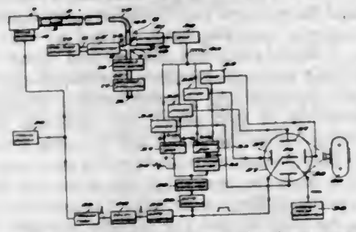
1. The method of detecting the presence of a subsurface conducting body by applying to a selected region of ground a primary magnetic field of square wave form and having a time duration of 100 or more milliseconds, and measuring the resultant magnetic field response after a period of 50–100 microseconds following the initial application of the said primary field.

2,735,981

MICROWAVE INTERFEROMETER

Harald Schutz, Stoneleigh, Charles Edgar Thomas, Jr., Middle River, and Hugh C. Hanks, Jr., Baltimore, Md., assignors to The Glenn L. Martin Company, Middle River, Md., a corporation of Maryland

Application April 17, 1952, Serial No. 282,758
12 Claims. (Cl. 324—70)



1. Apparatus for determining the instantaneous position of a projectile within a gun barrel comprising means for generating electromagnetic energy having a half wave length substantially shorter than the internal diameter of such barrel, radio-frequency detector means, and means electrically connecting said generator and said detector for transmitting energy from said generator to said detector along two different paths, one of said paths including a transmission line connected to said generator and electromagnetically coupled to but physically separated from said gun barrel whereby that portion of the energy traveling along said line from said generator will be coupled into and travel down said barrel and be reflected from the projectile therein and recoupled into said line, said detector means being adapted to produce an output voltage corresponding to the vector sum of the individual radio-frequency voltages of the energy arriving at said detector means along said two paths, and means connected to said detector for indicating said output voltage.

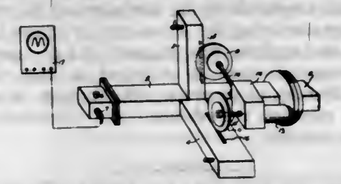
2,735,982

RADIO FREQUENCY POWER COMPARATOR

Kenneth C. C. Gunn, Concord, and Kenneth O. Holmes, Natick, Mass., assignors to the United States of America as represented by the Secretary of the Air Force

Application December 14, 1951, Serial No. 261,736
3 Claims. (Cl. 324—95)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A radio frequency power comparator comprising a first input circuit having a first cyclically variable dissipative attenuator therein, a second input circuit having a second similar cyclically variable dissipative attenuator therein, coupling means between said attenuators for establishing an inverse phase relation between their attenuation cycles, said attenuators permitting the simultaneous passage of power over at least a portion of their cycle of operation,



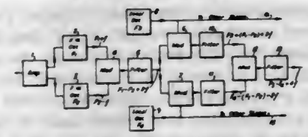
a common output circuit having a radio frequency detector coupled thereto, a hybrid circuit connected between said input circuits and said output circuit for coupling said input circuits to said output circuit and for preventing the transfer of energy between said input circuits, and means for indicating the output of said detector along a time axis.

2,735,983

ELECTRIC FREQUENCY MODULATING CIRCUITS

Thomas Symington McLeod, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware

Application February 13, 1952, Serial No. 271,340
Claims priority, application Great Britain February 15, 1951
4 Claims. (Cl. 332—22)



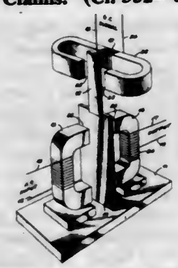
1. An electric frequency modulation system comprising means for generating a frequency modulated carrier wave having a given mean frequency, a frequency changing circuit including first and second frequency-changing modulator circuits, means for supplying said carrier wave to each of said modulators, the outputs from said modulators having a predetermined relationship, means for applying said outputs to a third modulator, the output thereof being such that the ratio of the frequency deviation of the output carrier wave to that of the input carrier wave is greater than 1, and that the corresponding ratio of the mean carrier frequencies is less than the first mentioned ratio.

2,735,984

SIGNAL CONVERTOR

Mark Shepherd, Jr., Dallas, Tex., assignor to Texas Instruments Incorporated, Dallas, Tex., a corporation of Delaware

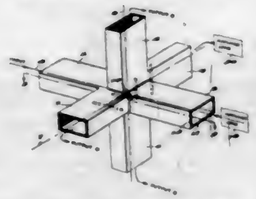
Application October 28, 1954, Serial No. 465,283
3 Claims. (Cl. 332—51)



1. A method of converting small direct current signals into larger alternating current signals that comprises

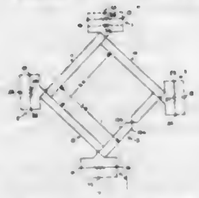
applying a constant frequency, constant amplitude alternating magnetic field to a vibratable magnetic member to cause it to vibrate at a substantially constant frequency and amplitude, positioning a pick-up device adjacent said vibrating member so that the vibrations thereof will induce an alternating current in said pick-up device, and varying the amplitude of the vibrations of the vibratable member by converting the direct-current signals into magnetic flux and applying that magnetic flux to a conductive, but non-magnetic member attached to said vibratable member, thereby to generate eddy currents in the non-magnetic member and dampen the vibrations of the vibratable member.

2,735,985
WAVEGUIDE JUNCTION
Charles Edgar Thomas, Jr., Middle River, Md., assignor to The Glenn L. Martin Company, Middle River, Md., a corporation of Maryland
Application July 21, 1952, Serial No. 300,091
8 Claims. (Cl. 333—8)



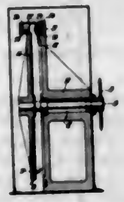
1. A waveguide junction comprising three pairs of axially aligned hollow rectangular waveguide sections, the axes of said pairs being mutually perpendicular to one another and intersecting at a common point, said sections having their inner end portions joined together to form a common enclosed junction area into which each of said sections open, three of said sections having their broader walls arranged parallel to a common plane and the remaining sections having their broader walls arranged perpendicular to said plane.

2,735,986
ELECTRICAL HYBRID RING NETWORK
Albert E. Hylas, Clifton, and Walter V. Tyminski, Nutley, N. J., assignors to Allen B. Du Mont Laboratories, Inc., Clifton, N. J., a corporation of Delaware
Application March 5, 1953, Serial No. 340,644
2 Claims. (Cl. 333—11)



1. A hybrid ring comprising first, second, third, and fourth pairs of two-wire transmission lines, said transmission lines being connected end to end to form a closed loop with the wires of one of said transmission lines being transposed to invert the polarity of signals passing therethrough; a first pair of input terminals at the junction of said first and fourth transmission lines; a second pair of input terminals at the junction of said second and third transmission lines; a source of electrical signals connected to said first pair of input terminals to energize said ring with a signal in a predetermined frequency band, each of said transmission lines being approximately a quarter wave long for frequencies in said band; a first pair of output terminals at the junction of said first and second transmission lines; a second pair of output terminals at the junction of said third and fourth transmission lines; a first load impedance connected between the terminals of said first pair of output terminals and comprising resistance and capacitance; a second load impedance connected between the terminals of said second pair of output terminals and comprising resistance and capacitance substantially equal respectively to the resistance and capacitance of said first impedance; and a capacitive reactance connected in parallel with said source between the terminals of said first pair of input terminals to cancel the effect of said capacitances in said load impedances thereby to make said hybrid ring operate over a broad band of frequencies.

2,735,987
MAGNETIC MEMORY DEVICE
James B. Camp, Fairfield, and Coleman H. Watson, Birmingham, Ala., assignors to United States Steel Corporation, a corporation of New Jersey
Application November 28, 1951, Serial No. 258,699
1 Claim. (Cl. 333—29)

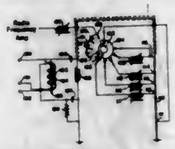


A memory device comprising a stand and a wheel rotatably mounted thereon and both being of nonmagnetic material, a magnetic recording track carried by said wheel around its circumference, the face of said stand on the side toward said wheel containing a continuous slot of T-shape in cross-section and circular outline surrounding the circumference of said wheel, the cross-arm portion of the T being within the stand and the stem extending through the face thereof, said stand having an access opening extending from the bottom of the cross-arm portion of said slot to the opposite face thereof, a plurality of nuts larger than the stem of said slot slidably mounted in the cross-arm portion of said slot and being insertable and removable through said opening, screw-threaded fasteners carried by each of said nuts and extending through the stem of said slot, a pair of plates each of which is carried by a different spaced pair of said fasteners for adjustment with said nuts circumferentially of said wheel, a magnetic recording head mounted on one of said plates, a magnetic pickup mounted on the other of said plates, said recording head and pickup projecting over said recording track and being adjustable toward and away from the wheel circumference, and a magnet eraser carried by another of said fasteners.

2,735,988
TELEVISION RECEIVER ANTENNA INPUT CIRCUIT
George W. Fyler, Lombard, Ill., assignor to Motorola, Inc., Chicago, Ill., a corporation of Illinois
Original application April 24, 1947, Serial No. 743,700, now Patent No. 2,530,329, dated November 14, 1950. Divided and this application September 8, 1950, Serial No. 183,729
4 Claims. (Cl. 333—70)

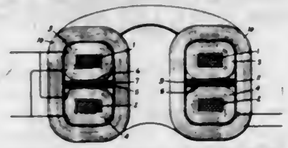
1. In a television receiver having a radio frequency amplifier with a tuned circuit for selecting signals in a band between a first high frequency and a second low frequency and having an intermediate frequency amplifier tuned to a third predetermined frequency less than said second low frequency, the antenna circuit for matching a transmission line to the television receiver and to filter

signals passed therethrough including in combination, a coil having a center terminal and two end terminals defining two series connected substantially identical coil portions, one portion providing impedance match for a 75 ohm transmission line and the two portions together providing match for a 300 ohm transmission line, said coil being formed by a pair of conductors wound together on a form of small diameter to provide maximum coupling therebetween, said one portion of said coil being of such impedance that the same provides substantial cutoff of signals below a frequency substantially midway between said second low frequency and said third predetermined



frequency, inductance means having a first part connected to ground and a second part connected to said first part and to the tuned circuit in the radio frequency amplifier for coupling signals to the same, and a pair of capacitors interconnecting the ends of said first part of said inductance means to the ends of said one portion of said coil whereby said one portion of said coil, said pair of capacitors and said first part of said inductance means provide a high pass filter to reject signals below said second low frequency, and said second part of said inductance means provides impedance matching for applying signals to the radio frequency amplifier.

2,735,989
VARIABLE INDUCTANCE
Charles E. Williams, Stanmore, England, assignor to General Electric Company, a corporation of New York
Application September 16, 1952, Serial No. 309,842
5 Claims. (Cl. 336—155)



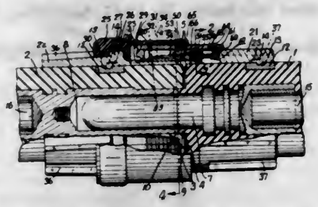
1. In combination, a two-coil winding, saturable magnetic core means for said winding, another winding linking said core means, the coils of said two coil winding being interconnected for reverse polarity, and an additional magnetic core means linking only said other winding.

2,735,990
MAGNET CONTROLLED CONNECTORS
Reimer G. Gehlsen, St. Louis, Mo., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Continuation of application Serial No. 125,758, November 5, 1949. This application February 26, 1953, Serial No. 339,125
11 Claims. (Cl. 339—86)



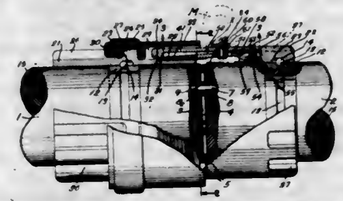
1. In a coupling plug, in combination, connector elements of non-conducting material, power contact elements carried by said connector elements and mutually engageable to establish electrical circuit connections, non-magnetic coupling sleeves freely rotatable relative to said connector elements and releasably interlockingly connected to each other housing and preventing separation of said contact elements and of said connector elements, lock means for preventing the release of one of said sleeves from the other, said lock means including a lock element housed within one of said sleeves and operable by pull exerted thereon by a magnet external to said sleeves to release the same, the other of said sleeves having a circumferential groove for receiving said lock element when said sleeves are in position to be locked together.

2,735,991
MAGNET CONTROLLED CONNECTORS
James H. Simpson, Ladue, Mo., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Continuation of application Serial No. 134,925, December 24, 1949. This application July 24, 1953, Serial No. 370,070
9 Claims. (Cl. 339—86)



1. In a plug-socket connector, in combination, a pair of insulating bodies each carrying at least one power plug-socket contact formed and positioned for connection with a power plug-socket contact on the other body, housing means for at least the mutually adjacent ends of said bodies comprising screw collars one on each of said bodies and freely rotatable relative thereto, said screw collars so formed and so mounted on said bodies that relative rotation between them, when they are in coaxial relation, may effect relative longitudinal movement between the power plug-socket contacts on said bodies, and means precluding inadvertent separative movement between said collars including a cross-shaped, magnetically releasable latch having a crossarm and carried by and housed within one of said collars and pivotally supported at one side of its crossarm and means forming an elongated slot in the other of said collars extending longitudinally of the latter for receiving the portion of said cross-shaped latch at the other side of said crossarm and from which slot said portion is swingable outwardly to effect unlatching.

2,735,992
SWIVEL COUPLINGS WITH MAGNET CONTROLLED LOCK
Norman I. Bailey, Kirkwood, Mo., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application May 12, 1951, Serial No. 226,055
8 Claims. (Cl. 339—91)



5. In a plug-socket connector, in combination, a pair of insulating bodies each carrying one or more power

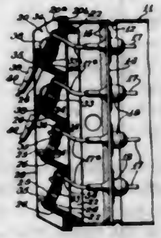
plug-socket contacts connectable with a power plug-socket contact on the other body, screw collars mounted one on each of said bodies, each of which is freely rotatable relative to the body on which it is mounted, said screw collars when screwed together and when unscrewed respectively effecting engaging and disengaging movement between the power plug-socket contacts on said bodies, and a magnetically releasable latch housed within a collar which is rotatable relative to its associated body for holding it against rotation relative to the latter, said last mentioned collar having means for interlockingly securing to it a magnet in latch releasing position, said last mentioned means and said magnet having surfaces coacting when said magnet is in latch releasing position to preclude movement of the magnet radially away from said collar.

2,735,993
CABLE CONNECTOR
Samuel A. Humphrey, Silver Spring, Md., assignor to the United States of America as represented by the Secretary of the Navy
Application November 30, 1953, Serial No. 395,326
8 Claims. (Cl. 339—91)
(Granted under Title 35, U. S. Code (1952), sec. 266)



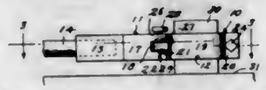
1. In an electrical cable connecting device of the character described comprising the combination of a plug assembly and a receptacle assembly, a pair of non-conducting insert members with one each carried respectively by said plug and said receptacle, a plurality of separable mating conductors carried respectively by said pair of inserts, cylindrical housing means for said receptacle of a character providing for telescopic reception and locking of said plug therein and incorporating complementary automatic release means therefor, a lock-sleeve member insert and having a grooved portion thereon adapted for locking with mating telescopically engageable portions of said receptacle housing means, an axially slidable cylindrical releasing key sleeve carried by the plug, a slidable bolt-sleeve carried by the receptacle and adapted for engagement by said sliding key of the plug, locking means carried by the receptacle to engage said grooved portion of the plug, a sleeve member adapted for axial movement therein and having at least one locking member of said locking means carried in apertures therein, a spring disposed between the said sleeve member and the sliding bolt-sleeve to provide locking bias relative movement therebetween, and said locking action being adapted for release upon engagement of said bolt-sleeve by the key sleeve of the plug or an axial pull on said plug, said bolt sleeve being disposed for movement to provide for engagement of the locking means between the respective locked members of the plug and receptacle housing means upon insertion of the mating elements of the inserts, and adapted upon key release to provide a locked relationship between the plug and receptacle which is automatically separable upon axial withdrawal of the plug by an axial displacement of the locking means of the receptacle followed by a radial displacement thereof, and means carried by the plug for explosion proof mating engagement with the insert elements of the receptacle.

2,735,994
TERMINAL BLOCK FOR HERMETICALLY SEALED RELAY
Theodore J. Obczarny, Chicago, Ill., assignor to Guardian Electric Manufacturing Co., Chicago, Ill., a corporation of Illinois
Application April 9, 1951, Serial No. 219,921
3 Claims. (Cl. 339—198)



1. A molded terminal block formed of material possessing electrical insulating characteristics, said block having a plurality of spaced apart parallel rows of embossments, each embossment having a surface disposed at an inclined angle to the main planes of the block, said embossment being arranged with their inclined surfaces disposed in parallel spaced apart stepped relation, and a plurality of parallel, spaced apart ribs extending between adjacent parallel rows of embossments projecting outwardly beyond said embossments to separate said parallel rows into a plurality of individual, apertured, terminal mounting areas.

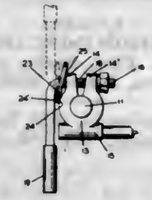
2,735,995
QUICK RELEASE BATTERY TERMINAL CLAMP
Charles M. Cotterell, Bennett, Colo.
Application April 4, 1952, Serial No. 280,516
1 Claim. (Cl. 339—235)



A quick detachable battery post clamp comprising clamp sections having complementary ends detachably and adjustably connected by an adjustable clamping unit, said clamp sections having portions disposed remote from said ends in crossed relation to one another, means extending detachably through one of said crossed portions and bearing detachably against the other crossed portion and forming a pivotal and limited sliding connection of the clamp sections, said clamp sections having complementary post engaging portions disposed between said crossed portions and ends, said means comprising a headed pull pin having a stop spaced from the head thereof for spacing the head of the pin from said crossed portions to facilitate the disengagement of the pin therefrom, and means of which said stop forms a part to prevent bending of the pin when a pressure is exerted thereon by the clamp sections being drawn toward one another.

2,735,996
STORAGE BATTERY TERMINAL CLAMPS
Robert E. Zak, Forest Park, Ill.
Application December 12, 1952, Serial No. 325,578
1 Claim. (Cl. 339—238)

A clamping device to be used in combination with a conventional battery cable terminal which consists of a split circular body having a pair of wing sections projecting outwardly therefrom, said wing sections being provided with transverse apertures and said wing sections being offset inwardly of the circular body; said clamping device comprising a rod having a right angularly disposed handle and shank and having an arcuate portion between said handle and shank, said shank having a washer thereon of a diameter greater than the distance between said circular body and the outer end of the next adjacent wing section, said shank being extended



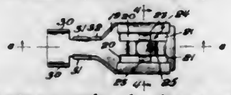
through the transverse apertures of said wing sections, said shank being threaded, a washer on said shank positioned adjacent the other of said wing sections and a nut on said shank for drawing said first named washer into forcible engagement with the circular outer surface of said terminal body and the outer end of the next adjacent inwardly offset wing section, said arcuate portion between said handle and shank causing angular contacting engagement with the circular body and said next adjacent wing section.

2,735,997
ELECTRICAL CONNECTOR
Kenneth E. Peterson, New Cumberland, Pa., assignor to Aircraft-Marine Products Inc., Harrisburg, Pa.
Application October 23, 1951, Serial No. 252,623
5 Claims. (Cl. 339—258)



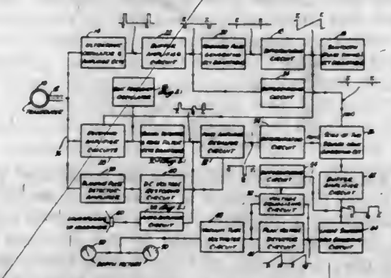
1. An electrical connector comprised of a ferrule portion adapted to be telescoped over and indented onto a bare electrical conductor, the interior of said ferrule portion being provided with smoothly round indents spaced apart and distributed in the areas of its inner face where the ferrule is to be crimped, the bottom of each indent being farther radially from the central axis of said ferrule portion than adjacent areas of said inner face, whereby to provide a forged interlock and intimate electrical bond with the conductor when it is crimped thereon.

2,735,998
FEMALE CONNECTOR MEMBER
Rene Martinez, Warwick, R. I.
Application January 3, 1955, Serial No. 479,283
1 Claim. (Cl. 339—258)



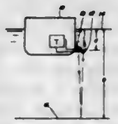
A female connector member having a pair of arms at one end for attachment to an electrical conductor and a channel portion at the other end formed with a bottom wall and overhanging flanges to receive a male connector member, said bottom wall comprising a peripheral portion and a centrally located arched protuberance, four right angularly arranged arms radiating from said protuberance and connected to a marginal edge at the peripheral portion of said bottom wall, two of said arms being parallel to the flanges and two at right angles thereto whereby said protuberance is suspended at four spaced locations in said bottom wall to cause the flexing thereof to be symmetrically distributed with reference to the member.

2,735,999
ECHO SYSTEM FOR DETERMINING NATURE OF SEA BOTTOM
Wayne M. Ross, Seattle, Wash., assignor to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a corporation of Delaware
Original application August 3, 1948, Serial No. 42,239, now Patent No. 2,599,586, dated June 10, 1952. Divided and this application February 16, 1952, Serial No. 271,961
4 Claims. (Cl. 340—3)



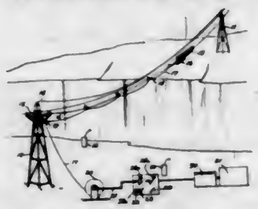
3. An underwater ultrasonic pulse transmission-reception depth sounding system comprising downwardly directed transducer means to transmit ultrasonic energy impulses recurringly at a predetermined repetition rate toward the ocean bottom, means to receive directly a portion of the energy of said transmitted pulses as well as returning echo pulse ultrasonic energy reflected from the ocean bottom, local oscillator means operable to generate continuous-wave energy at a substantially constant frequency differing by an audio frequency from the frequency of said transmitted pulse energy portion and of said echo pulse in the receiver means, mixer means energized by such generated wave energy and by such directly received and echo pulse energies in the receiver means for converting said directly received and echo pulse energies into audio-frequency electrical energy, and audio-frequency sound producing means energized by the output of said mixer means to produce sound impulses representing both the directly received impulses and also the echo impulses, both having a tonal characteristic determined by said audio frequency, said echo pulse energy sounds differing from the directly received pulse energy sounds according to the nature of the reflecting ocean bottom.

2,736,000
SYSTEM OF DEPTH MEASUREMENT IN THE ACOUSTIC FATHOMETER OR THE LIKE
Shinpei Nakano and Iku Yosano, Minato-ku, Tokyo, Japan, assignors to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application May 22, 1952, Serial No. 289,262
Claims priority, application Japan May 24, 1951
18 Claims. (Cl. 340—3)



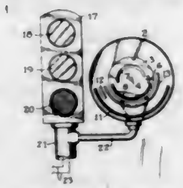
1. A method of measuring the depth of a body of fluid consisting of emitting a signal from a position below the fluid level and in a direction to effect, by reflection, double reversal of direction thereof between the upper and lower surfaces of said fluid and a return of said signal to approximately the location from which it was emitted, detecting said signal after said double reversal thereof and measuring the time lag between the transmission and reception thereof as indicative of the distance between said upper and lower fluid surfaces.

2,736,001
WARNING LIGHT FOR POWER LINES
Homer J. Dana, Pullman, Jack D. Fogelquist, Richland, and Russell O. Ohlson, Rockford, Wash., assignors, by mesne assignments, to Research Corporation, New York, N. Y., a corporation of New York
Application May 19, 1952, Serial No. 288,726
6 Claims. (Cl. 340—28)



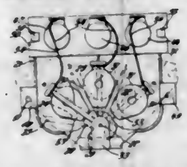
1. A warning light for indicating the position of a suspended power line conductor at a distance from its supports, comprising a supporting case, a transformer carried thereby, an electric lamp carried by the cage and connected to the transformer, said cage having spaced guides open at one side to receive a power line conductor, closures for the open sides of said guides cooperating with said guides to secure the cage on the conductor for endwise movement along the conductor, clamps on said cage adapted to engage the conductor and secure the cage against movement along the conductor, a self-propelled carriage having drive sheaves thereon mounting the carriage on the conductor, securing means on the carriage operable to secure the cage to the carriage, cooperating members on the cage and carriage, engaged when the cage is secured to the carriage, for closing and opening the clamps, power means on the carriage for operating the clamp opening and closing members, power means on the carriage for operating said securing means, and a remote control device for said power means.

2,736,002
CONSTRUCTION OF IMPROVED TRAFFIC SIGNAL LIGHT-TIME LAPSE INDICATOR
Benjamin J. Oriel, New York, N. Y.
Application September 2, 1952, Serial No. 307,508
1 Claim. (Cl. 340—43)



A traffic signal indicating "Stop" and "Go" periods and the elapsed time remaining for each period comprising a set of at least two concentrically arranged arcuate illuminable sign elements of different radii, differently colored to indicate respectively "Stop" and "Go" and subtending angles corresponding to the time division between "Stop" and "Go" periods, a second set of at least two concentrically arranged arcuate illuminable sign elements of different radii, of colors corresponding respectively to the colors of the sign elements of the first set, offset radially from said sign elements of the first set and subtending respectively angles corresponding to the angles subtended by said first sign elements, the corresponding angles of the two sets of sign elements being superposed one upon the other, a revoluble shutter overlying only the second set of sign elements and having at least two slots therein cooperating respectively with the sign elements of the second set to cover and uncover them to extents determined by the position of the revoluble shutter and means for selectively illuminating corresponding elements of each set for periods corresponding to their subtended angles and synchronously moving the shutter to selectively cover and uncover portions of the sign elements of the second set, whereby the elapsed time for the different periods may be ascertained by comparing the constant length arcs of the first set with the uncovered lengths of the arcs of the second set.

2,736,003
GEAR SHIFT POSITION INDICATOR MECHANISM
Homer R. Hastings, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application September 11, 1952, Serial No. 309,043
7 Claims. (Cl. 340—52)



1. A transmission position indicating device including in combination a transmission selector lever, a multiposition switch actuatable by said lever, a source of electrical energy connected to said switch, an electrically operated follower mechanism controlled by and remotely located from said switch, said mechanism including a supporting bracket, a plurality of electro-magnetic members mounted upon said bracket, a plurality of leads electrically connecting said members with said switch, a pointer pivotally supported by said bracket, said pointer being selectively positionable in response to the energization of said members individually and in combination, said bracket including means for individually adjusting the position of said members relative to said pointer for altering the magnetic field produced by said members when energized in combination.

2,736,004
DASH TIRE-PRESSURE INSTRUMENTS FOR VEHICLES
Edgeworth Greene, Little Falls, N. J.
Application July 18, 1951, Serial No. 237,330
2 Claims. (Cl. 340—58)



1. In an electric protection system for the pneumatic tires of vehicles, the combination with a vehicle chassis having a plurality of wheels equipped with pneumatic tires, of an electro-pneumatic switch associated with each tire and responsive to the pressure prevailing therein, a normally open wheel circuit for each tire switch which includes a storage battery carried by said chassis and the switch associated with the tire as elements thereof, an associated, normally open chassis circuit which also includes said storage battery and also includes an electric signal as elements thereof, each wheel circuit having one of its terminals permanently grounded to the chassis via the wheel axle and having its other terminal grounded to the chassis via the said storage battery, a master relay serving to first establish a flow of current in said chassis circuit and to then open a circuit in a wheel circuit that has been established by the closing of its tire switch to thereby confine the flow of current exclusively to the chassis circuit and prevent any tendency for the vehicle bearings to become damaged by prolonged flow of current therethrough and means for maintaining such relay energized during such operation.

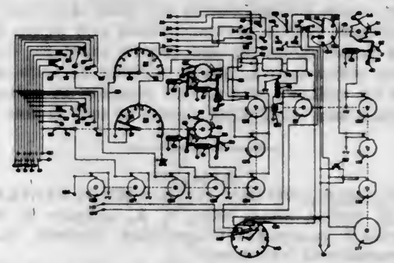
2,736,005
TRUNK LIGHT AND WARNING FLASHER
Charles L. Craddock, North Hollywood, Calif., assignor of one-half to J. E. Metcalf, Los Angeles, and one-half to Flasher Electronic Corporation, Los Angeles, Calif., a corporation of California
Application May 6, 1954, Serial No. 428,008
3 Claims. (Cl. 340—87)



1. In combination: a trunk light including a lamp, a housing therefor having light openings through which light may pass in opposite directions from said lamp, and a colored lens covering one of said openings; means for mounting said trunk light on the inner surface of the lid of the luggage trunk of an automobile toward the rear edge of said lid, which lid swings upwardly when opened thereby elevating said trunk light to a relatively high rearwardly exposed position and rotating said trunk light through an angle of approximately 90°, said trunk light normally lying close to said lid with the axis of said light openings disposed approximately horizontal when said lid is closed, said trunk light turning with said lid, as the latter opens, to turn said axis approximately to a vertical position with said lens covered light opening disposed upwardly and said other light opening disposed downwardly; a switch responsive to said opening of said lid to energize said lamp to cause light passing downward through said other light opening to illuminate said luggage trunk; a flasher switch; and a third switch operable by rotating said trunk light about its pivotal axis approximately 90° for introducing said flasher switch in the circuit of said lamp, said rotation of said trunk light shifting said light opening axis to a substantially horizontal position and causing said lens to face rearwardly whereby said lamp is intermittently energized causing said lens to emit a flashing warning light rearwardly from said automobile.

2,736,006
ELECTRICAL POTENTIAL TABULATING DEVICE
Robert A. Langevin, Glenburnie, Md., and Arling Dix Brown, Jr., Cleveland Heights, and Charles H. O'Donnell, Willowick, Ohio, assignors, by mesne assignments, to Clevite Corporation, Cleveland, Ohio, a corporation of Ohio
Application May 15, 1952, Serial No. 288,082
8 Claims. (Cl. 340—183)

1. A device for periodically tabulating electrical potentials associated with a plurality of pairs of electrical terminals comprising: a tabulating device; means for successively effectively connecting said tabulating device to said pairs of electrical terminals to tabulate the individual potential associated with each particular pair of electrical terminals during the interval said tabulating device is connected thereto; a source of reference potential; a step-switch device having a first decade section for successively selecting progressively changing portions of said reference potential, during the interval said tabulating device is effectively connected to each of said pairs of terminals, in a series of relatively large equal steps taken in a single progressive stepping sequence through said first decade section and adapted to cover a predetermined range of potentials to be tabulated; means for comparing each said selected portion of said reference potential with the potential associated with the pair of said terminals to which said tabulating device is effectively connected; means responsive to said comparing means for developing a control signal when said reference portion selected by said first decade section of said step-switch device and said potential associated with the one of said pairs of terminals to which said tabulating device is effectively connected are related within predetermined limits; means dependent upon the timing of said control signal for causing said tabulating device to record an indication of the first significant figure of said potential associated with the pair of said terminals to which said tabulating device is effectively connected and which indication corresponds to one unit less than the setting associated with said

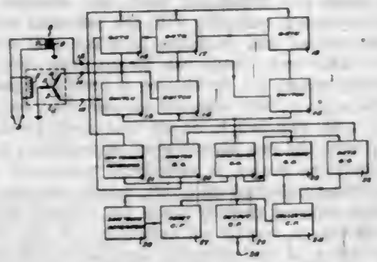


step-switch when said control signal is developed; a second decade section in said step-switch device for successively selecting progressively changing portions of said reference potential adapted, in a series of potential steps individually one tenth as large as each of said first-mentioned series of potential steps and taken consecutively thereafter in a single progressive stepping sequence through said second decade section, to cover the larger potential step represented by the portion of said reference potential which had been selected by said first section at the time said responsive means developed said control signal; means for comparing the potential associated with said pair of terminals to which said tabulating device is effectively connected with the potential actually recorded by the action of the first decade section and to which is added the various potential steps selected by said second decade section of said step-switch device; means responsive to said last-named comparing means for developing a control signal when said compared voltages are related within predetermined limits; and means dependent upon the timing of said last-named control signal for causing said tabulating device to record an indication of the second significant figure of the potential associated with the pair of said terminals to which said tabulating device is effectively connected.

2,736,007
TELEDATA SYSTEM
David E. Kenyon, Cold Spring Harbor, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application November 19, 1946, Serial No. 710,781
14 Claims. (Cl. 340—183)

1. Apparatus for conveying a plurality of intelligence signals to a remote point, which comprises the combination of: means for developing a plurality of voltages whose

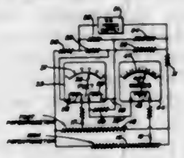
relative values represent said intelligence signals; means for developing a plurality of intelligence pulses occurring in consecutive time-spaced relation, the intermediate intelligence pulses determining both the end of one time interval and the beginning of the next and the time intervals between consecutive intelligence pulses being dependent upon the magnitude of respective ones of said voltages; timing means for controlling said pulse-developing means and means for supplying said voltages cyclically in succession to control said timing means whereby the elapsed times between consecutive operations of said pulse-developing means are respectively dependent upon the magnitudes of said voltages during one cycle of application of said voltages; means for transmitting said pulses to said remote point; means at said remote point for converting said pulses into a second plurality of voltages; and means for utilizing said second plurality of voltages to reproduce said intelligence signals at said remote point.



2,736,008
COARSE AND FINE MEASURING SYSTEM

John H. Miller, Short Hills, N. J., assignor to Weston Electrical Instrument Corporation, Newark, N. J., a corporation of New Jersey

Application October 15, 1951, Serial No. 251,359
4 Claims. (Cl. 340—184)



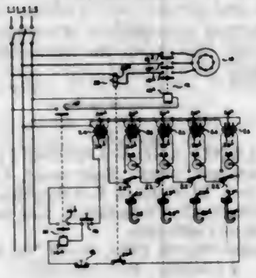
1. An electrical system responsive to changes in a variable condition said system comprising a first potentiometer including a slider, means moving the slider in response to changes in the variable condition, a second potentiometer including a slider, means moving the slider of the second potentiometer in response to changes in the variable condition and at a rate different from that of the slider of the first potentiometer, a source of electrical potential, circuit elements connecting the fixed ends of each potentiometer to the source of potential, a first member including an electrical coil energized by the potential output of the first potentiometer, a second member comprising two coils arranged in electrical opposition one such coil energized by the potential output of the second potentiometer and the other coil connected in a series with the coil of said first member.

2,736,009
SUPERVISORY CONTROL AND FAULT INDICATING SYSTEM

Arthur K. Barnickel, Whitefish Bay, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware

Application September 18, 1953, Serial No. 381,016
2 Claims. (Cl. 340—213)

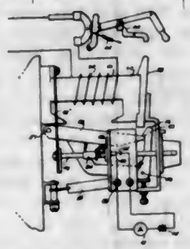
1. For use with an electric motor and a source of power therefor, in combination, means comprising a first electroresponsive switch energizable to connect the motor to the source of power, a second electroresponsive switch having an energizing circuit and a first normally open contact in the energizing circuit of said first electroresponsive switch and having a second normally open contact, a plurality of indicating devices having individual energizing circuits, and individual single pole, double throw condition responsive switches for said indicating device energizing circuits, a start switch, said second normally open contact of said second electroresponsive switch being connected in parallel with said start switch, said condition responsive switches having series connections when each is in normal position and being included in series circuit with said start switch in said energizing circuit of said second electroresponsive switch, each of said single pole, double throw switches being individually responsive to any desired preselected condition to interrupt said energizing circuit of said second electroresponsive switch and to complete its respective indicating device circuit.



2,736,010
THERMAL ALARM DEVICES

Cornelius J. Ridgley, deceased, late of Philadelphia, Pa., by Charlotte H. Ridgley, administratrix, Philadelphia, Pa., assignor to I-T-E Circuit Breaker Company, Philadelphia, Pa., a corporation of Pennsylvania

Application July 10, 1951, Serial No. 235,922
2 Claims. (Cl. 340—222)

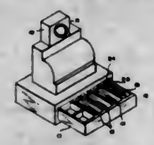


1. In a multipole circuit breaker for protecting an electric circuit comprising a time delay device an instantaneous trip device and a signal device; said instantaneous trip comprising an electromagnet responsive to fault currents above 1200%, an armature for said electromagnet, and a latch engaging said armature and normally preventing operation of said armature by said electromagnet for fault currents below a predetermined amplitude; said time delay device operating said latch out of engagement with said armature to permit operation of its associated armature by said electro-magnet in response to said predetermined fault currents between 250% and 1200% of normal load current, said signal device and said time delay device comprising a bimetallic element, a first and second contact, a source of power and an indicating means, said indicating means being energized by said power source when said first and second contacts are in the engaged position; said first contact being attached to said bimetallic element and constructed to be movable into engagement with said second contact responsive to movement of said bimetallic element to thereby allow energization of said indicating means by said power source when the magnitude of current is between 115% and 250% of the normal load current.

2,736,011
BILL DENOMINATION INDICATOR FOR CASH REGISTERS

Alfred E. Previti, Brooklyn, N. Y.

Application July 17, 1953, Serial No. 368,710
3 Claims. (Cl. 340—223)

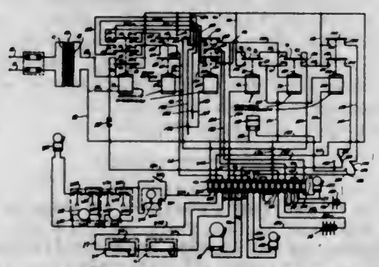


3. In combination, a cash register having a cash drawer, said drawer being divided into a plurality of currency receiving compartments and having a hold-down finger disposed in each of said compartments, electrical switching means associated with each of said hold-down fingers adapted to be closed upon the lifting of said hold-down finger, a plurality of electromagnets having the electric circuit thereof in series with the switching means, each of which is adapted to be energized respectively upon closing of one of the switching means associated with each currency receiving compartment, each of said electromagnets being provided with a magnetically responsive normally open switch and a hold down circuit, electrically responsive indicator means in circuit with each of said switches, said switches being arranged in banks, said means including a selector switch in circuit with said banks of switches adapted to progressively select a single bank of switches to be subject to energization upon the lifting of a hold-down finger and to second simultaneously deenergize the hold-down circuit of the second preceding bank.

2,736,012
ELECTRIC FIRE ALARM SYSTEM

Thomas W. Bland and Lester A. O'Brien, San Jose, Calif., assignors to Fire Spotter Electric Alarm Co., San Jose, Calif., a firm

Application February 6, 1953, Serial No. 335,446
4 Claims. (Cl. 340—227)

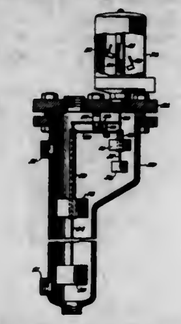


1. An electric fire alarm system comprising a protective circuit including normally closed temperature-responsive switches connected together in series, a resistance element connected across each temperature-responsive switch in shunt thereof, a source of electrical energy, a fire alarm signal device, a circuit trouble signal device, a control relay connected in series with said energy source and said protective circuit and having switch means and a winding normally energized as long as all of said temperature-responsive switches are closed, said temperature-responsive switches being arranged to open upon abnormal rise in temperature, whereby the resistance elements are substituted for the temperature-responsive switches, said resistance elements being sufficiently large in value to reduce the current in said protective circuit sufficiently to de-energize said control relay, a signal drop relay having a winding connected in series with said energy source and the switch means of said control relay and energized when the winding of said control relay is de-energized, said signal drop relay having switch means connected in series with said energy source and said fire alarm signal device effective to establish an energizing circuit for said fire alarm signal device when the coil of said signal drop relay is energized, a supervisory relay having a winding connected in series with said energy source and said protective circuit means arranged to energize said supervisory relay only as long as said protective circuit is continuous through the resistance elements connected across said temperature-responsive switches, and switch means formed and arranged to establish an energizing circuit for said circuit trouble signal device when the winding of said supervisory relay is deenergized.

2,736,013
LIQUID LEVEL RESPONSIVE MECHANISM

Benjamin L. Binford, Chicago, Ill., assignor to Magnetrol, Inc., Chicago, Ill., a corporation of Illinois

Application December 13, 1952, Serial No. 325,870
8 Claims. (Cl. 340—244)



1. A liquid level responsive mechanism comprising a pair of vertically spaced displacers, one lying above and the other below the normal level of liquid to be measured, supporting means for the displacers, the displacers and supporting means being so constructed and arranged that when the liquid is at its normal level said one of the displacers exerts a downward force and said other of the displacers exerts an upward force not greater than the downward force, a stop to limit downward movement of said one of the displacers without affecting freedom of said other of the displacers to move downward, interengaging parts in the supporting means defining a lost motion connection between the displacers, and indicating means connected to said other of the displacers to be operated thereby, said other of the displacers having sufficient buoyancy when submerged and sufficient weight when unsubmerged to operate the indicating means, said one of the displacers rising with the liquid to remove its downward force and allow said other of the displacers to rise and operate the indicating means in one direction and said one of the displacers remaining in engagement with the stop as the liquid falls to the level of the other of the displacers which falls with the liquid due to the lost motion connection to operate the indicating means in the opposite direction.

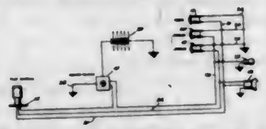
2,736,014
SIGNAL FOR LIGHTS OF AUTOMOBILE

Frank G. Goedderz, Minneapolis, Minn.

Application August 1, 1952, Serial No. 302,206
1 Claim. (Cl. 340—252)

A signal device for an automobile having headlamps with high and low beam filaments and having parking

lamps, having in combination a casing generally parallelepiped in form disposed in an upright position on the cowl of said automobile within the line of vision of the operator thereof, a base member movably secured to said cowl, a stem supporting said casing and being swingably secured to said base member for more specific adjustment of said device to accommodate different heights of operators, said casing having a plurality of



openings vertically alined therein, lens of different colors respectively secured in each of said openings, lamps secured in said casing and respectively aligned with said openings and said lens and means for respectively connecting said lamps to said high and low beam filaments and to said parking lights whereby said lamps will be respectively lighted when said high or low beam filaments or parking light filaments are illuminated.

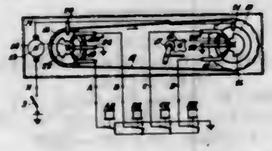
2,736,015
AUTOMOBILE PARKING AID
John J. Gilvarry, Los Angeles, Linn A. Gore and Bruno W. Augenstein, Santa Monica, and William C. Randels, Los Angeles, Calif., assignors to said Gilvarry and said Gore
Application November 9, 1951, Serial No. 255,576
4 Claims. (Cl. 340—282)



1. A parking device of the type described, intended for attachment to a wheeled vehicle having at least one dirigible wheel, and including: rotatable means connectible to at least one of the ground-engaging wheels of said vehicle for rotation thereby; manually operable means effective to connect said rotatable means to said ground-engaging wheel for a portion of one revolution of said rotatable means, thereafter automatically disconnecting the two; indicating means including electric switch assemblies, one of said assemblies being operable to provide a signal calling for the turning of said dirigible wheel to an inward position, and another of said assemblies being operable to provide a signal calling for the turning of said dirigible wheel to an outward position; and control means connected to and driven by said rotatable member and moved thereby to operatively engage said one of said switch assemblies to first provide an inward signal, and after said vehicle has moved a predetermined distance, to engage said other of said switch assemblies to provide an outward signal.

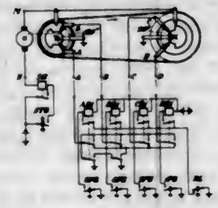
2,736,016
VARIABLE CHARACTER DISPLAY INDICATOR
Elbert W. Marlowe, Penn Township, Allegheny County, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application January 24, 1952, Serial No. 268,021
9 Claims. (Cl. 340—316)

1. A display indicator having a member movable through selectable positions for the display of symbols, with means for moving said member to said positions, comprising two wheels of different size, and a motor for rotating said wheels through different angular positions, said wheels being of such size that the product of the numbers of positions which said wheels may assume equals the number of selectable positions of said member and the wheels have a characteristic relative position for each



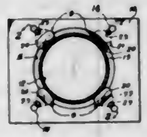
such position, an operating circuit for said motor, circuit controllers on said wheels for opening or closing said circuit as said wheels assume different relative positions, and control means for supplying energy to said circuit.

2,736,017
DISPLAY INDICATOR AND CONTROL SYSTEM
Elbert W. Marlowe, Penn Township, Allegheny County, and Lloyd V. Lewis, Pittsburgh, Pa., assignors to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application January 24, 1952, Serial No. 268,022
11 Claims. (Cl. 340—316)



1. In combination, an indicator comprising a member having a plurality of positions each selectable by a binary code signal, a motor for moving said member, a normally open circuit for said motor, a set of two-position contacts actuated by said member for selectively establishing connections from a corresponding set of control wires to said motor circuit, said contacts assuming a different combination of positions in each selectable position of said member, the number of selectable positions being less than 2^n when n is the number of control wires, control means for said indicator comprising a second set of two-position contacts each connected to one of said control wires, control means adapted to operate the contacts of said second set in 2^n different combinations of positions to supply energy to said motor circuit when the contacts of the two sets are in dissimilar positions, and means for preventing such supply of energy when the combination of positions of the contacts of said second set is one which is not selectable by the movement of said member.

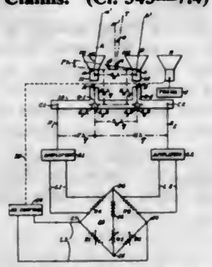
2,736,018
PICTURE TUBE CUSHIONING MEANS
Harold M. Samson, Sherman Oaks, Calif.
Application July 31, 1953, Serial No. 371,588
2 Claims. (Cl. 340—367)



1. The combination with a plate having through it a spacious opening to receive a television tube or the like, there being a plurality of apertures through said plate circumjacent to said opening; of a set of elastic cushioning clips, said clips individually comprising two spaced

apart portions each of which has in it a groove, the groove in one of said portions facing and being spaced away from the groove in the other of said portions, one of said grooves being positioned to fit over an edge portion of said plate beside any one of said apertures and the other of said grooves being positioned to fit over the adjacent edge portion of the plate which surrounds said one aperture, thus supporting a substantial portion of the clip in a position wherein it bridges the space between the edge of said opening and a tube spaced radially within the part of the plate surrounding said opening.

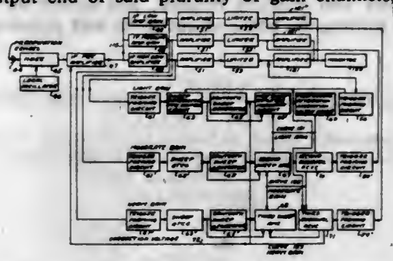
2,736,019
PHASE-COMPARATOR TRACKING-SYSTEM
Clyde E. Vogeley, Jr., and Theadore Miller, Pittsburgh, Pa., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application November 2, 1948, Serial No. 57,986
11 Claims. (Cl. 343—7.4)



1. A target-tracking echo-wave device, comprising a transmitter-system, a directional antenna-system for aiming a transmitted wave from said transmitter-system to a target and for receiving an echo-wave from said target, at least the receiving part of said directional antenna-system including two spaced, substantially parallel-aimed antenna-means for in effect receiving two echo-waves A and B from said target, a phase-comparator for responding to the relative phase-angle between the two-input-waves A and B, said phase-comparator comprising means for obtaining, from wave-A, two derived A-waves having certain phase-shifts introduced therein, means for obtaining, from wave-B, two derived B-waves having certain phase-shifts introduced therein, the phase-shift introduced in the first derived B-wave being greater than the phase-shift introduced in the first derived A-wave by a certain angle, and the phase-shift introduced in the second derived B-wave being less than the phase-shift introduced in the second derived A-wave by a certain angle, said certain angles approximating an optimum value equal to an odd number of 90°, means for vectorially combining the first derived A-wave and the first derived B-wave to produce a first resultant-wave, means for vectorially combining the second derived A-wave and the second derived B-wave to produce a second resultant-wave, means for comparing the relative magnitudes of the two resultant-waves, and automatic antenna-aiming means for correcting the antenna-aim in one direction or the other, according as the ratio of the magnitudes of the two resultant-waves increases or decreases above or below a value corresponding to on-target conditions.

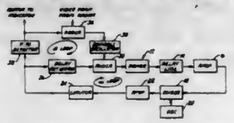
2,736,020
ARAC—AUTOMATIC RAIN ATTENUATION CORRECTION
David Atlas, Newton Center, Mass.
Application September 22, 1950, Serial No. 186,298
4 Claims. (Cl. 343—17.1)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. A radar receiver circuit for storm density observations, comprising signal reception means inclusive of an intermediate frequency preamplifier, a plurality of gain channels receiving and separating by magnitude of signal amplitude their signal inputs from the output from said preamplifier, indicator means providing a presentation at the output end of said plurality of gain channels, rain-



fall attenuation correction signal producing means deriving its input from said plurality of gain channels and producing a plurality of rainfall attenuation correction signals applicable to said preamplifier for modifying the presentation on said indicator.

2,736,021
SIGNAL INTEGRATING SYSTEM
David E. Sunstein, Bala-Cynwyd, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application December 24, 1953, Serial No. 400,179
9 Claims. (Cl. 343—17.2)

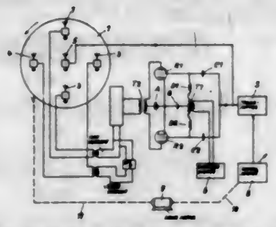


1. A system for filtering a signal, said filtering system comprising a delay means, a multistage feedback circuit coupling the output of said delay means to the input thereof, thereby to form a recirculating signal loop in which intelligence may be stored as a shift in frequency of a circulating signal, said signal loop being constructed and arranged to have a predetermined intelligence feedback factor, said integrating system further comprising an auxiliary loop, said auxiliary loop having a first input circuit associated with one stage of said multistage feedback circuit, a second input circuit adapted to receive the signal to be integrated, means associated with said first and second input circuits for combining the signals supplied thereto, and an output circuit connected to a second stage in said multistage feedback circuit, said second stage being responsive to signals received from said output circuit of said auxiliary loop to produce momentary deviations in the frequency of the signal circulating in said recirculating loop, said deviations being such that the overall intelligence feedback factor of said integrating system is reduced below said predetermined value, the stages to which said first input circuit and said output circuit of said auxiliary loop are connected being so selected that the delay encountered in the passage of a signal through said auxiliary loop is at least partially compensated for by the delay encountered in the passage of a signal between said first and second stages of said feedback circuit.

2,736,022
RADIO BEACON
Ernst Kramar, Pforzheim, Germany, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application June 7, 1951, Serial No. 230,298
Claims priority, application Germany June 9, 1950
6 Claims. (Cl. 343—106)

1. An omnidirectional radio beacon comprising means for radiating energy in a directive pattern having a null

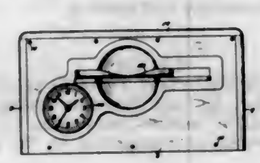
point, means for effectively rotating said pattern at a predetermined speed, means for transmitting signals indicative of the direction of said null point in synchronization with said effective rotation, and means for alternately shifting the phase of energy in said directive pat-



tern at a rate relatively high with respect to said predetermined speed, whereby said signals will be obscured by the phase modulation of said phase shift, except in the direction of said null point.

2,736,023
RECORDER AND METHOD FOR RECORDING ELAPSED TIME
La Vergne H. Williams, Columbia Lake, Conn.
Application February 11, 1953, Serial No. 336,325
15 Claims. (Cl. 346—82)

1. A time recording device for stamping upon a card "In" time, "Out" time, and elapsed time in between; said device having a stamping mechanism including a bar movable from a starting position and having thereon a pair of elapsed time scales running along one side thereof, an "In" and an "Out" time scale opposite to the elapsed time scales and in register therewith and an arrow adjacent to and in register with the zero position between the elapsed time scales, a pair of stationary spaced arrows adjacent to each of the "In" and "Out"



scales, the said arrows being spaced for a distance equal to the length of one of said latter scales, and means for returning the said movable member to its starting position after having travelled the length of one of the scales thereon, said device including a stamp wheel disconnected from the movable member and located between the said spaced arrows for denoting the A. M. and P. M. of the days of the week, and means for changing the position of said stamping wheel upon each return of the stamp bar to its starting position.

DESIGNS

FEBRUARY 21, 1956

176,939
TEXTILE FABRIC OR SIMILAR ARTICLE
Sergei Bogdanovich, Carmel, N. Y., assignor to Weil & Durrse, Inc., New York, N. Y., a corporation of New York
Application May 19, 1955, Serial No. 36,107
Term of patent 3½ years
(Cl. D92—1)



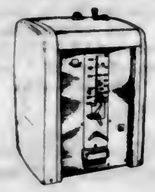
176,940
TEXTILE FABRIC OR SIMILAR ARTICLE
Sergei Bogdanovich, Carmel, N. Y., assignor to Weil & Durrse, Inc., New York, N. Y., a corporation of New York
Application May 24, 1955, Serial No. 36,189
Term of patent 3½ years
(Cl. D92—1)



176,941
TEMPLE FOR SPECTACLES
Gerald Courtney, Hollywood, Calif.
Application June 4, 1954, Serial No. 30,800
Term of patent 14 years
(Cl. D57—1)



176,942
ELECTRIC ARC WELDER
Lincoln W. Cross, York, Pa., assignor to General Electric Company, a corporation of New York
Application September 28, 1954, Serial No. 32,461
Term of patent 14 years
(Cl. D26—5)



176,943
COMBINED FISHERMAN'S BAIT BUCKET AND TACKLE BOX
Albert H. Edmonds and Robert A. Snider, Lancaster, Ohio
Application April 29, 1955, Serial No. 35,758
Term of patent 14 years
(Cl. D58—12)



176,944
HOPSCOTCH BLOCK OR SIMILAR ARTICLE
Orval Galloway, Ogden, Utah
Application September 7, 1954, Serial No. 32,170
Term of patent 3½ years
(Cl. D34—5)



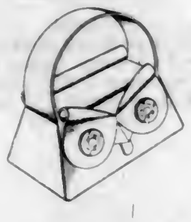
176,945
WING NUT
Channing Wallace Gilson, Los Angeles, Calif., assignor to Magna Engineering Corporation, Menlo Park, Calif., a corporation
Application March 15, 1955, Serial No. 35,049
Term of patent 14 years
(Cl. D54—9)



176,946
CONSOLE
Herbert J. Hampel, Philadelphia, Pa.
Application November 30, 1954, Serial No. 33,336
Term of patent 14 years
(Cl. D26—5)



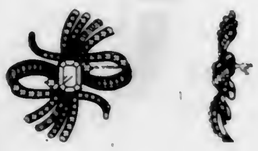
176,947
CHILD'S PURSE
Alfred C. Kather, San Francisco, Calif.
Application June 24, 1954, Serial No. 31,166
Term of patent 14 years
(Cl. D87—3)



176,948
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 6, 1955, Serial No. 37,815
Term of patent 7 years
(Cl. D45—19)



176,949
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 6, 1955, Serial No. 37,824
Term of patent 7 years
(Cl. D45—19)



176,950
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 9, 1955, Serial No. 37,853
Term of patent 7 years
(Cl. D45—9)



176,951
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 9, 1955, Serial No. 37,854
Term of patent 7 years
(Cl. D45—16)



176,952
LINK CHAIN FOR A NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 9, 1955, Serial No. 37,855
Term of patent 7 years
(Cl. D45—16)



176,953
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 9, 1955, Serial No. 37,859
Term of patent 7 years
(Cl. D45—9)



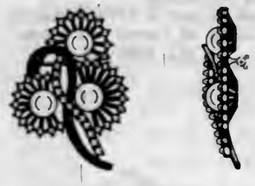
176,954
LINK CHAIN FOR A BRACELET OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 15, 1955, Serial No. 37,929
Term of patent 7 years
(Cl. D45—16)



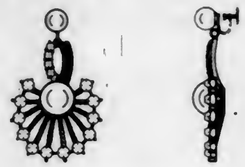
176,955
NECKLACE OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 15, 1955, Serial No. 37,930
Term of patent 7 years
(Cl. D45—16)



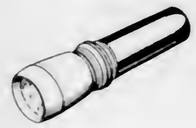
176,956
BROOCH OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 15, 1955, Serial No. 37,931
Term of patent 7 years
(Cl. D45—19)



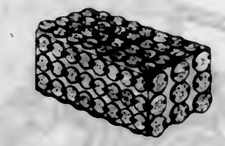
176,957
EARRING OR THE LIKE
Adolph Katz, Providence, R. I., assignor to Coro, Inc., New York, N. Y., a corporation of New York
Application September 15, 1955, Serial No. 37,933
Term of patent 7 years
(Cl. D45—9)



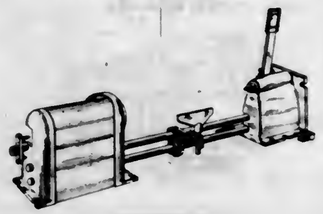
176,958
FLASHLIGHT
Edward C. Klotz, Jr., Milwaukee, Wis., assignor to Ray-O-Vac Company, Madison, Wis., a corporation of Wisconsin
Application June 29, 1954, Serial No. 31,222
Term of patent 14 years
(Cl. D48—24)



176,959
COIN BANK
Raymond Lesiowski, Columbus, Ohio
Application October 28, 1954, Serial No. 32,861
Term of patent 3½ years
(Cl. D34—11)



176,960
LATHE
Carl F. Lindee, Jr., Chicago, Ill., assignor to Portable Electric Tools, Inc., Chicago, Ill., a corporation of Illinois
Application August 3, 1953, Serial No. 26,236
Term of patent 14 years
(Cl. D54—6)



176,961
PERFUME CONTAINER OR SIMILAR ARTICLE
Giullo Linetti, Venice, Italy
Application April 30, 1954, Serial No. 30,267
Term of patent 14 years
(Cl. D86—10)



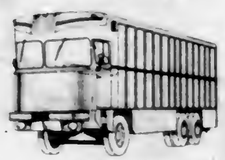
176,962
AUTOMOBILE
Edward R. Macauley, Grosse Pointe Farms, and Richard A. Teague, Birmingham, Mich., assignors to Studebaker-Packard Corporation, Detroit, Mich., a corporation of Michigan
Application November 18, 1953, Serial No. 27,653
Term of patent 14 years
(Cl. D14—27)



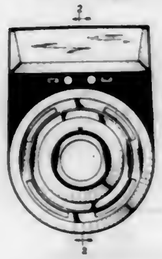
176,963
GASOLINE ENGINE UNIT FOR CHAIN SAWS
Arthur W. Mall, Flossmoor, Ill., and Michael O. Kos, Ithaca, N. Y., assignors to Mall Tool Company, Chicago, Ill.
Application May 19, 1954, Serial No. 30,560
Term of patent 14 years
(Cl. D93—3)



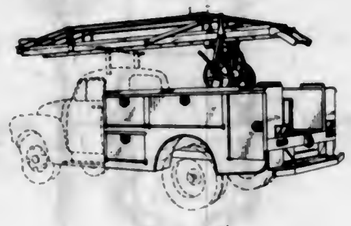
176,964
TRUCK
William L. McCullough, Lehighton, Pa.
Application October 6, 1953, Serial No. 27,091
Term of patent 14 years
(Cl. D14—3)



176,965
CONTROL PANEL FOR LAUNDRY APPLIANCES
Stuart G. Mundt, Syracuse, N. Y., assignor, by mesne assignments, to The Murray Corporation of America, Detroit, Mich., a corporation of Delaware
Application March 31, 1955, Serial No. 35,303
Term of patent 14 years
(Cl. D49—1)



176,966
LADDER-TRUCK BODY
John J. Powers, University City, Mo.
Application August 18, 1952, Serial No. 21,087
Term of patent 14 years
(Cl. D14—3)



176,967
CIGARETTE DISPENSER OR SIMILAR ARTICLE
Russell J. Wolfe, Buffalo, N. Y., assignor, by mesne assignments, to Brown and Bigelow, St. Paul, Minn., a corporation of Minnesota
Application January 6, 1955, Serial No. 33,862
Term of patent 3½ years
(Cl. D85—2)



LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 21ST DAY OF FEBRUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

Brown, Paul, to Packaging Materials Corp. Packaging material. Re. 24,120, 2–21–56, Cl. 154—55.
Gaikin, Joseph. Puller feed carrier attachment. Re. 24,121, 2–21–56, Cl. 112—214.
Packaging Materials Corp.: *See*—
Brown, Paul. Re. 24,120.
Randol, Glenn T. Automotive variable-ratio power transmission. Re. 24,122, 2–21–56, Cl. 192—.073.

LIST OF DESIGN PATENTEES

Bogdanovich, Sergei, to Weil & Durrse, Inc. Textile fabric or similar article. 176,939, 2–21–56, Cl. D92—1.
Bogdanovich, Sergei, to Weil & Durrse, Inc. Textile fabric or similar article. 176,940, 2–21–56, Cl. D92—1.
Brown and Bigelow: *See*—
Wolfe, Russell J. 176,967.
Coro, Inc.: *See*—
Katz, Adolph. 176,948–176,957.
Courtney, Gerald. Temple for spectacles. 176,941. 2–21–56, Cl. D57—1.
Cross, Lincoln W., to General Electric Co. Electric arc welder. 176,942, 2–21–56, Cl. D26—5.
Edmonds, Albert H., and R. A. Snider. Combined fisherman's bait bucket and tackle box. 176,943, 2–21–56, Cl. D58—12.
Galloway, Orval. Hopscotch block or similar article. 176,944, 2–21–56, Cl. D34—5.
General Electric Co.: *See*—
Cross, Lincoln W. 176,942.
Gilson, Channing W., to Magna Engineering Corp. Wing nut. 176,945, 2–21–56, Cl. D54—9.
Hampel, Herbert J. Console. 176,946, 2–21–56, Cl. D26—5.
Kather, Alfred C. Child's purse. 176,947, 2–21–56, Cl. D87—3.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,948, 2–21–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,949, 2–21–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,950, 2–21–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Necklace or the like. 176,951, 2–21–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Link chain for a necklace or the like. 176,952, 2–21–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,953, 2–21–56, Cl. D45—9.
Katz, Adolph, to Coro, Inc. Link chain for a bracelet or the like. 176,954, 2–21–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Necklace or the like. 176,955, 2–21–56, Cl. D45—16.
Katz, Adolph, to Coro, Inc. Brooch or the like. 176,956, 2–21–56, Cl. D45—19.
Katz, Adolph, to Coro, Inc. Earring or the like. 176,957, 2–21–56, Cl. D45—9.
Klotz, Edward C., Jr., to Ray-O-Vac Co. Flashlight. 176,958, 2–21–56, Cl. D48—24.
Kos, Michael O.: *See*—
Mall, Arthur W., and Kos. 176,963.
Leslowski, Raymond. Coin bank. 176,959, 2–21–56, Cl. D34—11.
Lindee, Carl F., Jr., to Portable Electric Tools, Inc. Lathe. 176,960, 2–21–56, Cl. D54—6.
Linetti, Giulio. Perfume container or similar article. 176,961, 2–21–56, Cl. D86—10.
Macauley, Edward R., and R. A. Teague, to Studebaker-Packard Corp. Automobile. 176,962, 2–21–56, Cl. D14—27.
Magna Engineering Corp.: *See*—
Gilson, Channing W. 176,945.
Mall, Arthur W., and M. O. Kos, to Mall Tool Co. Gasoline engine unit for chain saws. 176,963, 2–21–56, Cl. D93—3.
Mall Tool Co.: *See*—
Mall, Arthur W., and Kos. 176,963.
McCullough, William L. Truck. 176,964, 2–21–56, Cl. D14—3.
Mundt, Stuart G., to The Murray Corp. of America. Control panel for laundry appliances. 176,965, 2–21–56, Cl. D49—1.
Murray Corp. of America, The: *See*—
Mundt, Stuart G. 176,965.
Portable Electric Tools, Inc.: *See*—
Lindee, Carl F., Jr. 176,960.
Powers, John J. Ladder-truck body. 176,966, 2–21–56, Cl. D14—3.
Ray-O-Vac Co.: *See*—
Klotz, Edward C., Jr. 176,958.
Snider, Robert A.: *See*—
Edmonds, Albert H., and Snider. 176,943.
Studebaker-Packard Corp.: *See*—
Macauley, Edward R., and Teague. 176,962.
Teague, Richard A.: *See*—
Macauley, Edward R., and Teague. 176,962.
Weil & Durrse, Inc.: *See*—
Bogdanovich, Sergei. 176,939.
Bogdanovich, Sergei. 176,940.
Wolfe, Russell J., to Brown and Bigelow. Cigarette dispenser or similar article. 176,967, 2–21–56, Cl. D85—2.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 21ST DAY OF FEBRUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

A & W Machine Co., The: *See*—
Wilson, Harry A., and Allx. 2,735,158.
Wilson, Harry A., and Allx. 2,735,159.

Ab. Hagglund & Söner: *See*—
Akerman, Olov. 2,735,973.

Abel, Martin S. Syringe construction. 2,735,735, 2–21–56, Cl. 309—4.

Abrahamsen, Henry C., to International Harvester Co. Adjustable louver ventilating grille assembly. 2,735,351, 2–21–56, Cl. 98—40.

Abramson, Harold A. Epinephrine ointment and method of preparation thereof. 2,735,799, 2–21–56, Cl. 167—63.

Aco Inc.: *See*—
Duchesneau, Herve R., and Carling. 2,735,688.

Adams, David H. Paint roller for woven wire fences, etc. 2,735,128, 2–21–56, Cl. 15—230.

Adams, Harold K. Engraving instrument used in map making. 2,735,177, 2–21–56, Cl. 30—164.9.

Adams, Harold K. Engraving instrument used in map making. 2,735,178, 2–21–56, Cl. 30—164.9.

Agar, Kenneth C., to Clinton Machine Co. Outboard motor column construction. 2,735,396, 2–21–56, Cl. 115—17.

Agriculture, United States of America as represented by the Secretary of: *See*—
Fisher, Gordon S., and Goldblatt. 2,735,870.
Le Compte, George C., and Ault. 2,735,780.

Ahlgren, Erick L. Fluid content gauge for lighter. 2,735,293, 2–21–56, Cl. 73—73.

Aircraft-Marine Products Inc.: *See*—
Peterson, Kenneth E. 2,735,997.

Air Force, United States of America as represented by the Secretary of the: *See*—
Gunn, Kenneth C. C., and Holmes. 2,735,982.

Air Reduction Co., Inc.: *See*—
Vallière, Leopold. 2,735,920.

Airetool Mfg. Co., The: *See*—
Fisher, Frank F. 2,735,294.

Akerman, Olov, to Ab. Hagglund & Söner. Installation for the operation of the traction motors of electric trains with the use of single phase alternating current. 2,735,973, 2–21–56, Cl. 318—94.

Aklin, George H., to Eastman Kodak Co. Photographic objectives formed of two simple positive components and two negative meniscus components axially aligned therebetween. 2,735,340, 2–21–56, Cl. 88—57.

Aladdin Industries, Inc.: *See*—
Bramming, Carl. 2,735,566.

Albertson & Co., Inc.: *See*—
Madsen, Jens A. W. 2,735,689.

Alford, Grace H.: *See*—
Alford, Le Roy H. 2,735,097.

Alford, Le Roy H., deceased, by G. H. Alford, administratrix. Shingler's hatchet. 2,735,097, 2–21–56, Cl. 1—45.

Allx, Elmer C.: *See*—
Wilson, Harry A., and Allx. 2,735,158.
Wilson, Harry A., and Allx. 2,735,159.

Allen, Charles F. H., and H. R. Bellfuss, to Eastman Kodak Co. Stabilized photographic silver halide emulsions. 2,735,769, 2–21–56, Cl. 95—7.

Allen, Charles F. H., and P. W. Vittum, to Eastman Kodak Co. Heterocyclic antistain agents. 2,735,764, 2–21–56, Cl. 95—6.

Allen, Charles F. H., and L. M. Minsk, to Eastman Kodak Co. Sulfinic acids of polymers containing aromatic groups. 2,735,841, 2–21–56, Cl. 260—79.3.

Allen, Kenneth M.: *See*—
Harper, Chester H., and Allen. 2,735,255.

Allen, Louis N., Jr., and H. G. Boeckino, to Chemical Construction Corp. Co Co₂ precipitation from Ni-Co solutions. 2,735,760, 2–21–56, Cl. 75—119.

Allied Chemical & Dye Corp.: *See*—
Kress, Bernard H. 2,735,825.

Allis-Chalmers Mfg. Co.: *See*—
Jones, Richard W. 2,735,978.
Kenney, Clarence E. 2,735,367.
Taylor, Philip L., and Ramrath. 2,735,914.

Allison, Hugh V., to American Chain and Cable Co., Inc. Abrasive cutting wheels. 2,735,243, 2–21–56, Cl. 51—207.

Aluminex Inc.: *See*—
Estey, James R. 2,735,224.

American Chain and Cable Co., Inc.: *See*—
Allison, Hugh V. 2,735,243.

American Enka Corp.: *See*—
Godehn, Donald J. 2,735,742.
Lynch, Ridgeway T. 2,735,840.
Schrenk, Hans A. 2,735,839.

American Platinum Works, The: *See*—
Greenspan, Lawrence. 2,735,808.
Greenspan, Lawrence. 2,735,809.

American Syntex Inc.: *See*—
Djerassi, Carl, and Rosenkranz. 2,735,855.

American Viscose Corp.: *See*—
Craver, Augustus E. 2,735,156.
Dooley, William P. 2,735,510.
Dungan, William E., and Watrous. 2,735,300.
Richter, George A., Jr. 2,735,846.

American Writing Paper Corp.: *See*—
Willemain, Fernand H. 2,735,343.

Anderson, Harold S., and S. W. Dow. Perforating attachment for printing machines for producing longitudinal and transverse rows of perforations in sheets. 2,735,488, 2–21–56, Cl. 164—100.

Anderson, Thomas F., and K. W. Benham, to The Sanymetal Products Co., Inc. Hinge assemblies for swinging doors. 2,735,144, 2–21–56, Cl. 20—16.

Anthes Force Oiler Co.: *See*—
Tolbert, William P. 2,735,637.

Apps, David C., to General Motors Corp. Tire thump measuring apparatus. 2,735,292, 2–21–56, Cl. 73—69.

Antonazzi, Mario, to Bendix Aviation Corp. Fuel control system. 2,735,368, 2–21–56, Cl. 103—13.

Armbrust, Roy J., and J. E. La Rocque, to Vapor Heating Corp. Water by-pass regulator for steam generator control mechanism. 2,735,410, 2–21–56, Cl. 122—448.

Armco Steel Corp.: *See*—
Brayton, Robert A., Boyle, and Campbell. 2,735,450.

Armerding, Anthony H., to Armerding Developments, Inc. Window construction with means for holding the sash in open positions. 2,735,521, 2–21–56, Cl. 189—72.

Armerding Developments, Inc.: *See*—
Armerding, Anthony H. 2,735,521.

Armstrong, Gerald M.: *See*—
Tamblyn, John W., and Armstrong. 2,735,783.

Army, United States of America as represented by the Secretary of the: *See*—
Boor, Ladislav, and Di Filippo. 2,735,297.
Paden, Frederick T., and Weiss. 2,735,690.
Seiler, Ernst E. 2,735,669.
Webster, William M., Jr. 2,735,977.
Williams, Theo W. 2,735,903.

Arnejo, Anthony. Switch for control system of ignition and starter of motor vehicles. 2,735,916, 2–21–56, Cl. 200—155.

Arnold, George B.: *See*—
Hess, Howard V., and Arnold. 2,735,874.

Aro Equipment Corp., The: *See*—
Wilkening, Walter O. 2,735,425.

Arps, Bruno F., to Arps Corp. Dual-action bulldozer tractor attachment. 2,735,200, 2–21–56, Cl. 37—144.

Arps Corp.: *See*—
Arps, Bruno F. 2,735,200.

Askania Regulator Co.: *See*—
Zieboltz, Herbert. 2,735,630.

Atherton, George H., to the State of Oregon, acting by and through the State Board of Forestry. Combination apparatus for producing power from wood waste. 2,735,266, 2–21–56, Cl. 60—39.12.

Atlas, David. Arac-automatic rain attenuation correction. 2,736,020, 2–21–56, Cl. 343—17.1.

Atlas Press Co.: *See*—
Karr, Michael J. 2,735,685.

Atwood, Lyle C., and A. Johnson, to Atwood Vacuum Machine Co. Bicycle kick stand mounting bracket. 2,735,694, 2–21–56, Cl. 280—301.

Atwood Vacuum Machine Co.: *See*—
Atwood, Lyle C., and Johnson. 2,735,694.

Augenstein, Bruno W.: *See*—
Gilvarry, John J., Gore, Augenstein, and Randels. 2,736,015.

Ault, Waldo C.: *See*—
Le Compte, George C., and Ault. 2,735,780.

Aurin, Bruno, and W. Dehne, to H. E. Thomas. Blast nozzles for melting furnaces. 2,735,409, 2–21–56, Cl. 122—6.6.

Austin, Ruth A.: *See*—
Austin, Walter S. 2,735,529.

Austin, Walter S., ½ to R. A., and ½ to W. S., Jr. Variable-ratio hydraulic transmission. 2,735,529, 2–21–56, Cl. 192—58.

Austin, Walter S., Jr.: *See*—
Austin, Walter S. 2,735,529.

Automatic Electric Laboratories, Inc.: *See*—
Bartha, Stephan J. 2,735,898.
Jones, Roy W. 2,735,892.
Sengebusch, Hans. 2,735,891.

Averill, Charles C., to Union Steel Products Co. Collapsible walled stacking pallet and stacking container. 2,735,569, 2–21–56, Cl. 220—6.

Avrunin, Victor. Safety electric socket. 2,735,906, 2–21–56, Cl. 200—51.09.

Ayres, John E., to Oil Equipment Laboratories, Inc. Combined closure and valve operating member. 2,735,590, 2–21–56, Cl. 222—394.

Babcock, Roger S.: *See*—
Kelley, Dewitt T., Babcock, and Holub. 2,735,796.

Babson Bros. Co.: *See*—
Henrard, Fernand J. J. J. 2,735,399.

Badische Anilin & Soda-Fabrik Aktiengesellschaft: *See*—
Ebel, Friedrich, Rupp, and Keller. 2,735,849.

Baehr, Carl G., and J. Connors, to The Greist Mfg. Co. Button-sewing attachments. 2,735,387, 2–21–56, Cl. 112—115.

Baehr, Carl G., to The Greist Mfg. Co. Binders. 2,735,388, 2–21–56, Cl. 112—137.

Baer, Austin R. Sanding device. 2,735,242, 2–21–56, Cl. 51—170.

Bailey, Charles S., to General Motors Corp. Thermostatically operable valve mechanisms. 2,735,620, 2–21–56, Cl. 236—34.

Bailey, Norman L., to Joy Mfg. Co. Swivel couplings with magnet controlled lock. 2,735,992, 2–21–56, Cl. 339—91.

Bailey, Regis G.: *See*—
Brown, Harry J., and Bailey. 2,735,223.

Baines, Frederick: *See*—
Booth, Douglas G., and Baines. 2,735,372.

Baker, Charles L. Deaerating vacuum return receiver. 2,735,623, 2–21–56, Cl. 237—68.

Baker Oil Tools, Inc.: *See*—
Muse, John F. 2,735,498.

Baker, Opal, to Far East Associates, Inc. Headwear for women. 2,735,110, 2–21–56, Cl. 2—198.

Baker, William R.: *See*—
Wright, Byron T., and Baker. 2,735,943.

Baker, William R., and Q. A. Kerns, to the United States of America as represented by the United States Atomic Energy Commission. Suppressor circuit. 2,735,963, 2–21–56, Cl. 317—31.

Balanda, Anthony J., to The Bristol Co. Electrical equipment component mounting. 2,735,965, 2–21–56, Cl. 317—101.

Balcrank, Inc.: *See*—
Field, Richard P. 2,735,586.

Ballman, Charles W. Collapsible anchor. 2,735,395, 2–21–56, Cl. 114—207.

Balsiger, Harold E.: *See*—
Fries, John R., and Balsiger. 2,735,240.

Balsiger, Harold E., to Landis Tool Co. Speed regulation for control wheels. 2,735,237, 2–21–56, Cl. 51—103.

Bammann, Heinrich. Sand and stone intercepting means for beet-floating troughs. 2,735,549, 2–21–56, Cl. 209—454.

Banes, Fred W.: *See*—
Hubbard, Addison W., Banes, and Johnson. 2,735,875.

Bangs, Joseph F., and T. R. Duncan, said Bangs to said Duncan. Music comb mounting means. 2,735,328, 2–21–56, Cl. 84—94.

Banker, Oscar H., to New Products Corp. Self-cleaning apparatus for purifying sea water by distillation. 2,735,807, 2–21–56, Cl. 202—238.

Banks, George, deceased; M. A. Banks, administratrix, to said G. Banks. Folding support for receptacles. 2,735,640, 2–21–56, Cl. 248—166.

Banks, Mary A.: *See*—
Banks, George. 2,735,640.

Barg, Herbert, to True Form Corset Co., Inc. Brassiere construction. 2,735,101, 2–21–56, Cl. 2—42.

Barney, Freeman: *See*—
Lee, James E., and Barney. 2,735,650.

Barnickel, Arthur K., to Cutler-Hammer, Inc. Supervisory control and fault indicating system. 2,736,009, 2–21–56, Cl. 340—213.

Barrett, Elliott P., to Baugh and Sons Co. Basic calcium phosphate composition. 2,735,823, 2–21–56, Cl. 252—423.

Barrett, Harry B. Hydraulic brake servicing equipment. 2,735,601, 2–21–56, Cl. 226—113.

Bartha, Stephen J., to Automatic Electric Laboratories, Inc. Carrier system splash ring signal. 2,735,898, 2–21–56, Cl. 179—84.

Bartlett, John E. Fishing rods. 2,735,208, 2–21–56, Cl. 43—24.

Bassick Co., The: *See*—
Kramcsak, Michael, Jr. 2,735,131.

Battke, Willie, to F. Ritter & Sohn. Lemon slice squeezers. 2,735,360, 2–21–56, Cl. 100—234.

Baugh and Sons Co.: *See*—
Barrett, Elliott P. 2,735,823.

Baum, John W. Trolling release. 2,735,212, 2–21–56, Cl. 43—43.12.

Baum, Victor E. Positive suspension, leveling, and aligning. 2,735,169, 2–21–56, Cl. 29—458.

Baur, Willy: *See*—
Leonhardt, Fritz, and Baur. 2,735,168.

Beal, Philip F.: *See*—
Hogg, John A., Beal, and Lincoln. 2,735,856.

Beaver, David J., R. S. Shumard, and P. J. Stoffel, to Monsanto Chemical Co. Tris-phenols. 2,735,872, 2–21–56, Cl. 260—619.

Beck, Clarence E. Automatic bi-directional flow valves. 2,735,443, 2–21–56, Cl. 137—493.3.

Beck, Roland A., to The Texas Co. Pulverizing process, including forming a slurry of solid particles and a liquified normally gaseous refrigerant, vaporizing the liquid, and turbulently passing the vaporized dispersion through a zone of high velocity and decreasing pressure. 2,735,624, 2–21–56, Cl. 241—17.

Becker, Rodger F. Separable suspension device for an extension lamp. 2,735,931, 2–21–56, Cl. 240—54.

Beckman Instruments, Inc.: *See*—
Molloy, Everett W. 2,735,947.

Beery, Lambert L. Antiskid device for vehicle tires. 2,735,472, 2–21–56, Cl. 152—242.

Begley, John W., and R. L. McIntire, to Phillips Petroleum Co. Pebble heat exchanger and process. 2,735,880, 2–21–56, Cl. 260—679.

Bellfuss, Harry R.: *See*—
Allen, Charles F. H., and Bellfuss. 2,735,769.

Bell Telephone Laboratories, Inc.: *See*—
Pierce, John R. 2,735,933.
Slonczewski, Thaddeus. 2,735,904.

Bendix Aviation Corp.: *See*—
Antonazzi, Mario. 2,735,368.
Rawls, Frederick. 2,735,954.

Benham, Kent W.: *See*—
Anderson, Thomas F., and Benham. 2,735,144.

Benjamin, Milburn J. Cervical brace. 2,735,424, 2–21–56, Cl. 128—87.

Berger-Amour: *See*—
Berger, Sol J., and Jacobson. 2,735,203.

Berger, Sol J., and O. W. Jacobson, to Berger-Amour. Advertising display devices and method for forming and assembling the same. 2,735,203, 2–21–56, Cl. 40—128.

Bergman, William E., to Phillips Petroleum Co. Manufacture of quebracho. 2,735,858, 2–21–56, Cl. 260—448.

Berne, William E. Attachment for operating tables. 2,735,738, 2–21–56, Cl. 311—10.

Bersudsky, Sidney, to Kelton Corp. Ltd. Projector for casting images of opaque objects upon a screen. 2,735,336, 2–21–56, Cl. 88—24.

Berwick, John D., Jr., to Olin Mathieson Chemical Corp. Method of evaluating copper base alloys. 2,735,304, 2–21–56, Cl. 73—432.

Better Boxes, Inc.: *See*—
Killian, George P., Hall, and Sanders. 2,735,154.

Beuchat, Roland, and S. Junod. Buckle and catch device for belts, straps and the like flexible strips. 2,735,152, 2–21–56, Cl. 24—178.

Beutler, Abigail E. C.: *See*—
Freebairn, Darwin L., Jr., Kinsey, and Beutler. 2,735,731.

Bickel, Wilhelm, to Calgon, Inc. Process for treatment of meats, sausage products, and intestines. 2,735,776, 2–21–56, Cl. 99—107.

Bickerstaff, Inc.: *See*—
Bickerstaff, Lindsay N. 2,735,564.

Bickerstaff, Lindsay N., to Bickerstaff, Inc. Lift fork for brick stacks. 2,735,564, 2–21–56, Cl. 214—655.

Bielstein, Walter J., to Esso Research and Engineering Co. Device for drilling wells. 2,735,653, 2–21–56, Cl. 255—3.

Bindschadler, Ernest: *See*—
Gilman, Henry, and Bindschadler. 2,735,857.

Binford, Benjamin L., to Magetrol, Inc. Liquid level responsive mechanism. 2,736,013, 2–21–56, Cl. 340—244.

Bingham-Herbrand Corp., The: *See*—
Hinsey, Robert S. 2,735,311.

Bishofberger, Carl J., to Minneapolis-Honeywell Regulator Co. Valve. 2,735,644, 2–21–56, Cl. 251—77.

Bishop, Joseph F. Door signaling means. 2,735,397, 2–21–56, Cl. 116—100.

Bitney, Dewey H., to Union Steel Products Co. Collapsible walled pallets. 2,735,568, 2–21–56, Cl. 220—6.

Bjering, Olav: *See*—
Hohl, John, Bjering, and Ringel. 2,735,600.

Bjornberg, Swan O., to Illinois Tool Works. Apparatus for testing splines. 2,735,189, 2–21–56, Cl. 33—179.5.

Blackburn, John F., and Shih-Ying Lee, to the United States of America. Flowmeter. 2,735,299, 2–21–56, Cl. 73—228.

Blakeley, Edna B.: *See*—
Blakeley, Gordon M. 2,735,713.

Blakeley, Gordon M., deceased, by E. B. Blakeley, executrix, to The Diamond Match Co. Log grab. 2,735,713, 2–21–56, Cl. 294—67.

Bland, Thomas W., and L. A. O'Brien. Thermo-detector. 2,735,913, 2–21–56, Cl. 200—140.

Bland, Thomas W., and L. A. O'Brien, to Fire Spotter Electric Alarm Co. Electric fire alarm system. 2,736,012, 2–21–56, Cl. 340—227.

Blanton, William B., and F. L. Currie, to The Western Union Telegraph Co. Telegraph system. 2,735,884, 2–21–56, Cl. 178—2.

Blicke, Frederick F., to Regents of The University of Michigan. Polymethyleneiminoethyl esters of diphenylacetic and benzilic acids, salts thereof and preparation thereof. 2,735,847, 2–21–56, Cl. 260—239.

Blue, Sidney D. Can opening implement. 2,735,171, 2–21–56, Cl. 30—6.1.

Boeckino, Harry G.: *See*—
Allen, Louis N., Jr., and Boeckino. 2,735,760.

Boehm, Walter G., to Jervis B. Webb Co. Coil unloader. 2,735,538, 2–21–56, Cl. 198—209.

Bogue, Edward A., and C. W. Musser, to ETC, Inc. Relay structure. 2,735,968, 2–21–56, Cl. 317—198.

Bohn Aluminum & Brass Corp.: *See*—
Moffatt, Chester C. 2,735,170.

Bol, Arie: *See*—
Haayman, Pieter W., Bol, Romeyn, and Verwey. 2,735,824.

Bonmartini, Giovanni, to "Est" Etablissement Sciences Techniques. Reducing the frictional resistance between belts and pulleys. 2,735,727, 2–21–56, Cl. 305—1.

Boor, Ladislav, and T. Di Filippo, to the United States of America as represented by the Secretary of the Army. Paper humidity expansion apparatus. 2,735,297, 2–21–56, Cl. 73—159.

Booth, Douglas G., and F. Baines, to The Plessey Co. Ltd. Gear pump or motor. 2,735,372, 2–21–56, Cl. 103—126.

Boppel, Henry L., to The Sheffield Corp. Gauging device. 2,735,186, 2–21–56, Cl. 33—147.

Borg-Warner Corp.: *See*—
Christy, Robert A. 2,735,453.
Shaw, Richard K. 2,735,924.

Born, Ellis H.: *See*—
Shaw, Edwin D., and Born. 2,735,374.

Born, Ellis H., to The Denison Engineering Co. Hydraulic motor. 2,735,407, 2–21–56, Cl. 121—62.

Borolite Corp.: *See*—
Glaser, Frank W. 2,735,155.

Borsody, Benjamin F. Reflective traffic signal spotter. 2,735,341, 2–21–56, Cl. 88—81.

Boston, Edward D., and B. I. Smith, to Esso Research and Engineering Co. Use of normally gaseous hydrocarbon for stripping of circulating coke in a fluidized coking process. 2,735,804, 2–21–56, Cl. 202—14.

Bowan, Walter J., and D. W. Ferry, to Mueller Co. Packed screw thimble pipe joint. 2,735,700, 2–21–56, Cl. 285—122.

Bowes, Leslie H. Means for tableting sugar. 2,735,380, 2–21–56, Cl. 107—17.

Bowles, Eugene V. and G. C. Spiraled hub for tractor rear wheels. 2,735,722, 2–21–56, Cl. 301—1.

Bowles, Geraldine C.: *See*—
Bowles, Eugene V. and G. C. 2,735,722.

Boyce, John, to Food Machinery and Chemical Corp. Filling valve. 2,735,446, 2–21–56, Cl. 137—625.42.

Boyd, Roy W., A. Van Vooren, and H. Ruehl, to International Harvester Co. Machine for removing spacers from radiator cores. 2,735,164, 2–21–56, Cl. 29—202.

Boyle, William C.: *See*—
Brayton, Robert A., Boyle, and Campbell. 2,735,450.

Brace, Robert W., to International Harvester Co. Refrigerator illuminating device. 2,735,927, 2–21–56, Cl. 240—4.

Bradley, Stephen D., to Spring Cover Mfg. Co., Inc. Combined liner and protector for leaf springs. 2,735,672, 2–21–56, Cl. 267—49.

Brady, Edward F., to Eastman Oil Well Survey Co. Core taking and orienting method. 2,735,652, 2–21–56, Cl. 255—1.4.

Braendle, Harold A., to Columbian Carbon Co. Manufacture of carbon black. 2,735,753, 2–21–56, Cl. 23—209.4.

Bramming, Carl, to Aladdin Industries, Inc. Pouring stopper for containers. 2,735,566, 2–21–56, Cl. 215—77.

Branchflower, Lyle E. Ice making machine and the art thereof. 2,735,275, 2–21–56, Cl. 62—107.

Branchflower, Lyle E. Apparatus for storing and dispensing ice in particle form. 2,735,591, 2–21–56, Cl. 222—405.

Brand, Rafael H.: *See*—
Meyer, Wolfgang E., and Brand. 2,735,413.

Brandenthaler, Anthony: *See*—
Gyllenberg, John L. 2,735,174.

Brayton, Robert A., W. C. Boyle, and C. H. Campbell, to Armco Steel Corp. Locking structure for nestable culvert pipe. 2,735,450, 2–21–56, Cl. 138—70.

Breed, Bowman K., to Preferred Utilities Mfg. Corp. Oil fired bake oven. 2,735,381, 2–21–56, Cl. 107—55.

Brenner, Alexander S., to Donuts Inc. Frying device for doughnuts. 2,735,355, 2–21–56, Cl. 99—336.

Brickley, James L. Rock grinding mill. 2,735,627, 2–21–56, Cl. 241—270.

Brinen, Howard F., to Young Radiator Co. Header plate-tube joint for heat-exchanger core-units. 2,735,698, 2–21–56, Cl. 285—56.

Bristol Co., The: *See*—
Balanda, Anthony J. 2,735,965.

British Oxygen Co. Ltd., The: *See*—
Jones, William O. 2,735,850.

Britton, Robert E., ½ to F. G. Filippi. Pressure fluid vane type motor for steering mechanisms and the like. 2,735,406, 2–21–56, Cl. 121—41.

Brodbeck, Almer H., and B. C. Douglas, to Magic Chef, Inc. Igniter systems for gas ranges. 2,735,483, 2–21–56, Cl. 158—122.

Bromberg, Edward S., to Pollock Paper Corp. Elevator structure for printing presses. 2,735,365, 2–21–56, Cl. 101—181.

Bronstein, Jesse B., Jr., and F. B. Wells, to Trojan Powder Co. Silage additive. 2,735,775, 2–21–56, Cl. 99—8.

Brooker, Leslie G. S., to Eastman Kodak Co. Sensitized photographic emulsion. 2,735,767, 2–21–56, Cl. 95—7.

Brooker, Leslie G. S., and F. L. White, to Eastman Kodak Co. Sensitized photographic silver halide. 2,735,770, 2–21–56, Cl. 95—7.

Brooks, William B., and C. M. Shigley, to The Dow Chemical Co. Composite magnesium-iron articles. 2,735,163, 2–21–56, Cl. 29—196.2.

Brown, Arling D., Jr.: *See*—
Langevin, Robert A., Brown, and O'Donnell. 2,736,006.

Brown-Brockmeyer Co., The: *See*—
Brown, Steffen S. 2,735,950.

Brown & Green Ltd.: *See*—
Gudgeon, Ronald P. 2,735,201.

Brown, Harry J., and R. G. Bailey. Decorative toy for Christmas trees. 2,735,223, 2–21–56, Cl. 46—240.

Brown, Howard P. Concrete grinder. 2,735,244, 2–21–56, Cl. 51—209.

Brown, Steffen S., to The Brown-Brockmeyer Co. Electric motor and method of cooling. 2,735,950, 2–21–56, Cl. 310—57.

Brown, William C., to Raytheon Mfg. Co. Electron discharge device of the traveling wave type. 2,735,958, 2–21–56, Cl. 315—39.3.

Browne, Frances and H. A., ¼ to J. T. Mains and ¼ to F. P. Kelper. Finger tip tools. 2,735,321, 2–21–56, Cl. 81—13.

Browne, Harry A.: *See*—
Browne, Frances and H. A. 2,735,321.

Brubaker, Wilson M., to Consolidated Engineering Corp. Mass spectrometer. 2,735,942, 2–21–56, Cl. 250—41.9.

Brumleu, Edward C., and R. M. Mehl, to Western Pressure Control. Tubing anchor. 2,735,497, 2–21–56, Cl. 166—212.

Bryant Chucking Grinder Co.: *See*—
Grobey, Paul A. 2,735,187.

Bryngelson, Lyle M. Billing book. 2,735,695, 2–21–56, Cl. 282—23.

Buchmann, Albin. Self-feeding saw blade for reciprocating motor saws. 2,735,458, 2–21–56, Cl. 143—133.

Buchmann, Fred J., and W. J. Mattox, to Esso Research and Engineering Co. Synthesis of hydrocarbons with iron-cobalt catalyst. 2,735,862, 2–21–56, Cl. 260—449.6.

Budd Co., The: *See*—
Dean, Walter B. and A. G. 2,735,714.

Buddecke, Heinrich. Method of and means for the manufacture of thread packs. 2,735,250, 2–21–56, Cl. 53—7.

Bugg, Hubert D., 25% to J. S. Bugg, Jr. Leg rest attachment for a folding chair. 2,735,479, 2–21–56, Cl. 155—171.

Bugg, J. S., Jr.: *See*—
Bugg, Hubert D. 2,735,479.

Bumgardner, Clifton Y., to The Springs Cotton Mills. Lifting device for card licker-in rolls. 2,735,648, 2–21–56, Cl. 254—6.

Burdick, Will S., and K. Schneider, to Harnischfeger Corp. Excavator dipper door. 2,735,539, 2–21–56, Cl. 214—145.

Burroughs Wellcome & Co. (U. S. A.) Inc.: *See*—
Walton, Eric. 2,735,867.

Buschers, Herbert H., to The Glenn L. Martin Co. Warship weapons system, including aircraft storing and launching arrangement. 2,735,391, 2–21–56, Cl. 114—1.

Buszka, Henry: *See*—
Colton, Wilbert G., and Buszka. 2,735,945.

Butler, Wallace B., and M. M. Johnson, Jr., to Olin Mathieson Chemical Corp. Box-magazine for firearms. 2,735,206, 2–21–56, Cl. 42—18.

C. J. W. Corp.: *See*—
Eisner, Edwin C. 2,735,377.

C. V. A. Jigs, Moulds & Tools Ltd.: *See*—
Pulman, William E. R. 2,735,161.

Cain, Stanley, to McGill Metal Products Co. Hand punch. 2,735,492, 2–21–56, Cl. 164—121.

Calgon, Inc.: *See*—
Bickel, Wilhelm. 2,735,776.
Meyer, Albert. 2,735,777.

Calling, John. Refrigeration unit. 2,735,613, 2–21–56, Cl. 230—206.

Calresin Corp.: *See*—
Luehm, Francis H., and Smith. 2,735,138.

Camp, James B., and C. H. Watson, to United States Steel Corp. Magnetic memory device. 2,735,987, 2–21–56, Cl. 333—29.

Campbell, Charles H.: *See*—
Brayton, Robert A., Boyle, and Campbell. 2,745,450.

Campbell, Donald L., H. Z. Martin, and C. W. Tyson, to Esso Research and Engineering Co. Method of and apparatus for contacting solids and gases. 2,735,822, 2–21–56, Cl. 252—417.

Canfora, Arthur E., to Radio Corp. of America. Automatic telegraph cycling control apparatus. 2,735,889, 2–21–56, Cl. 178—23.

Cappa, James H., to General Electric Co. Multispeed electric motor protective circuit. 2,735,974, 2–21–56, Cl. 318—220.

Cardwell, Paul H., and L. H. Eilers, to The Dow Chemical Co. Scale removal. 2,735,818, 2–21–56, Cl. 252—136.

Carling, Arthur R.: *See*—
Duchesneau, Herve R., and Carling. 2,735,688.

Carlson, Marvin C. Steering controlled vehicle stabilizing system. 2,735,691, 2–21–56, Cl. 280—112.

Carnes, Samuel J. Pouring spout attachment. 2,735,594, 2–21–56, Cl. 222—567.

Carney, Samuel C., to Phillips Petroleum Co. Method of liquid-liquid contacting. 2,735,755, 2–21–56, Cl. 23—310.

Carpenter, Paul G., to Phillips Petroleum Co. Sealing porous formations. 2,735,269, 2–21–56, Cl. 61—36.

Carpenter, Victor H. Dental grinding tool. 2,735,181, 2–21–56, Cl. 32—59.

Carpinella, Michael J., to Scovill Mfg. Co. Fastener attaching machine. 2,735,567, 2–21–56, Cl. 218—6.

Carter, Leslie F., to Sperry Rand Corp. Gyroscopic compass instrument. 2,735,191, 2–21–56, Cl. 33—226.

Carter, Norman D.: *See*—
Hess, Howard V., and Carter. 2,735,876.

Carter, Ralph H., to North American Rayon Corp. Yarn stretching device. 2,735,160, 2–21–56, Cl. 28—71.4.

Case, J. I., Co.: *See*—
Omon, Gene L., and Hohnl. 2,735,696.

Caston Barber Ltd.: *See*—
Lindsey, Eric S. 2,735,675.

Celanese Corp. of America: *See*—
Legard, Robert H., Jr., and Meadows. 2,735,257.

Century Engineering Corp.: *See*—
Lattner, Emert J., and McLeland. 2,735,587.

Century Lighting, Inc.: *See*—
Erhardt, Louis, and Temple. 2,735,929.

Cen-Vi-Ro Pipe Corp.: *See*—
Chanlund, Carl W. 2,735,153.

Cepco, Inc.: *See*—
Lee, Sherman H. 2,735,522.

Chadbourne, William H., to The Danielson Mfg. Co. Snap fit plastic pipe connector assembly. 2,735,699, 2–21–56, Cl. 285—71.

Challenge Machinery Co., The: *See*—
Lee, James E., and Barney. 2,735,650.

Chamberlain, Royal E. Roof framer. 2,735,184, 2–21–56, Cl. 33—91.

Chandler, Jasper S.: *See*—
Sandvik, Otto, and Chandler. 2,735,677.

Chanlund, Carl W., to Cen-Vi-Ro Pipe Corp. Mold. 2,735,153, 2–21–56, Cl. 25—127.

Charshafian, Jack O., to Curtiss-Wright Corp. Combination rocket and ram-jet power plant. 2,735,263, 2–21–56, Cl. 60—35.6.

Chemical Construction Corp.: *See*—
Allen, Louis N., Jr., and Boccklno. 2,735,760.

Chemstrand Corp., The: *See*—
Gibson, Eugene C., and Holt. 2,735,540.
Waitkus, Calvin J. 2,735,790.

Chesher, William J. Automatic lowering and unloading apparatus. 2,735,558, 2–21–56, Cl. 214—103.

Chiappe, Orlando J.: *See*—
Homfeldt, Bransford R., and Chiappe. 2,735,621.

Chillson, Charles W., to Curtiss-Wright Corp. Brake mechanism. 2,735,516, 2–21–56, Cl. 188—105.

Christiansen, Christian, and G. O. K. Rüsch. Circular looms for weaving of hoses. 2,735,451, 2–21–56, Cl. 139—13.

Christiansen, Thorbjörn N. Automatic fishing apparatus. 2,735,207, 2–21–56, Cl. 43—15.

Christy, Robert A., to Borg-Warner Corp. Screen take-up control mechanism. 2,735,453, 2–21–56, Cl. 139—304.

Ciba Ltd.: *See*—
Mueller, Jakob. 2,735,853.

Cincinati Milling Machine Co., The: *See*—
Dall, Albert H. 2,735,420.
Ritter, Eugene L. 2,735,327.

Cinema-Television Ltd.: *See*—
Freeman, George S. P. 2,735,935.

Cislak, Francis E., to Reilly Tar & Chemical Corp. Alkanol-pyridine-N-oxides. 2,735,851, 2–21–56, Cl. 260—297.

Clark, Adna R., to International Harvester Co. Combination panel and refrigeration unit. 2,735,277, 2–21–56, Cl. 62—117.

Clark, James d'A. Wood pulping process. 2,735,762, 2–21–56, Cl. 92—6.

Clausing, Henry G., to Vulcan Corp. Toe finishing machine for lasts. 2,735,460, 2–21–56, Cl. 144—134.

Claydon, John M., to Connecticut Bandage Mills, Inc. Foam rubber sheet material. 2,735,426, 2–21–56, Cl. 128—156.

Cleveland Pneumatic Tool Co., The: *See*—
Smith, Ira D., Takacs, and Warner. 2,735,674.

Clevenot, Louis-Charles. Method for producing glucoheptonic acid and its derivatives. 2,735,866, 2–21–56, Cl. 260—535.

Clevite Corp.: *See*—
Langevin, Robert A., Brown, and O'Donnell. 2,736,006.

Clinton Machine Co.: *See*—
Agar, Kenneth C. 2,735,396.

Cloudsley, John L. Fluid pressure relieving apparatus. 2,735,515, 2–21–56, Cl. 188—88.

Coates, Colin, C. H. Gray, and C. J. P. Small, to Westrex Co. Ltd., formerly Western Electric Co., Ltd. Electromagnetic transducer. 2,735,901, 2–21–56, Cl. 179—100.2.

Coben, Melvin S., to Multi-Amp Corp. Electric test loading transformer. 2,735,979, 2–21–56, Cl. 323—2.

Coffey, Charles D., to Minneapolis-Honeywell Regulator Co. Combined manual and safety valve. 2,735,439, 2–21–56, Cl. 137—66.

Coles, Percy A.: *See*—
Hufnagel, John P. 2,735,217.

Collins, Leland O., to L. A. Young Spring & Wire Corp. Spring assembly. 2,735,114, 2–21–56, Cl. 5—266.

Collins, Samuel V. Launching structures and methods. 2,735,270, 2–21–56, Cl. 61—72.

Collins, Tappan, to National Steel Corp. Structural member. 2,735,520, 2–21–56, Cl. 189—37.

Collins, William F., and T. J. Scarnato, to International Harvester Co. Harvesting gathering mechanism. 2,735,533, 2–21–56, Cl. 198—162.

Colton, Wilbert G., and H. Buszka. Fault detector for stranding machines. 2,735,945, 2–21–56, Cl. 200—61.41.

Columbia Carbon Co.: *See*—
Braendle, Harold A. 2,735,753.

Columbia Machinery and Engineering Corp.: *See*—
Pater, Paul G. 2,735,461.

Columbia-Southern Chemical Corp.: *See*—
Rahn, Henry W. 2,735,750.

Commonwealth Engineering Co. of Ohio, The: *See*—
Wenzelberger, Elwood P. 2,735,779.

Commonwealth Scientific and Industrial Research Organization: *See*—
Weiss, Donald E., and Swinton. 2,735,795.

Compagnie Des Machines Bull (Societe Anonyme): *See*—
Knutsen, Knut A. 2,735,617.

Compo Shoe Machinery Corp.: *See*—
Dodge, Milton L. 2,735,119.

Connecticut Bandage Mills, Inc.: *See*—
Claydon, John M. 2,735,426.

Connors, John: *See*—
Baehr, Carl G., and Connors. 2,735,387.

Consolidated Engineering Corp.: *See*—
Brubaker, Wilson M. 2,735,942.

Cook, Robin J., to Diamond Abrasive Products Ltd. Shaping of bodies of crystalline carbon. 2,735,421, 2–21–56, Cl. 125—30.

Cook, Stanley S., to The Parsons Marine Steam Turbine Co. Ltd. Tubular surface heat exchanger. 2,735,658, 2–21–56, Cl. 257—236.

Coover, Harry W., Jr., to Eastman Kodak Co. Polymerization of acrylonitrile in the presence of N-vinyl acylamide polymers. 2,735,830, 2–21–56, Cl. 260—45.5.

Coover, Harry W., Jr., to Eastman Kodak Co. Polymerization of acrylonitrile in the presence of modified preformed polymers. 2,735,831, 2–21–56, Cl. 260—45.5.

Corey, Calvin H. Fire escape. 2,735,603, 2–21–56, Cl. 228—40.

Costin, William J. Veterinary surgical knife. 2,735,176, 2–21–56, Cl. 30—162.

Cotterell, Charles M. Quick release battery terminal clamp. 2,735,995, 2–21–56, Cl. 339—235.

Counts, Leon: *See*—
Grant, Irvin R. 2,735,204.

Courchene, Theodore P., A. Eppler, Jr., and H. W. Jarvis, to United Shoe Machinery Corp. Apparatus to facilitate joinder of uppers and insoles. 2,735,117, 2–21–56, Cl. 12—1.

Cox, Earl W. Boat hull having an upwardly arched bottom. 2,735,392, 2–21–56, Cl. 114—62.

Cox, John R. Chucking device. 2,735,686, 2–21–56, Cl. 279—50.

Cox, John R. Cam-operated chuck. 2,735,687, 2–21–56, Cl. 279—51.

Coyle, Francis S. Dental floss applicator. 2,735,437, 2–21–56, Cl. 132—92.

Craddock, Charles L., ½ to J. E. Metcalf, and ½ to Flasher Electronic Corp. Trunk light and warning flasher. 2,736,005, 2–21–56, Cl. 340—87.

Craig, Olllson, to Riley Stoker Corp. Air heating. 2,735,660, 2–21–56, Cl. 257—224.

Crandall, Julian T. Manufacture and construction of strings. 2,735,258, 2–21–56, Cl. 57—140.

Craver, Augustus E., to American Viscose Corp. Curved spreader guide. 2,735,156, 2–21–56, Cl. 26—63.

Cremer, Frits, to Marbill Co. Heat insulating hand covering. 2,735,108, 2–21–56, Cl. 2—158.

Crerar Adams & Co.: *See*—
Klingler, Karl A., and Martin. 2,735,726.

Currie, Frank L.: *See*—
Blanton, William B., and Currie. 2,735,884.

Curtiss-Wright Corp.: *See*—
Charshafian, Jack O. 2,735,263.
Chillson, Charles W. 2,735,516.
Cushman, Maurice E. 2,735,733.
Jewett, Charles S. 2,735,264.

Cushman, Maurice E., to Curtiss-Wright Corp. Blade retention bearing. 2,735,733, 2–21–56, Cl. 308—174.

Cutler-Hammer, Inc.: *See*—
Barnickel, Arthur K. 2,736,009.

Cyphers, Elmer B.: *See*—
Waddey, Walter E., Hill, and Cyphers. 2,735,817.

Dall, Albert H., to The Cincinnati Milling Machine Co. Grinding wheel truing mechanism. 2,735,420, 2–21–56, Cl. 125—11.

Dana, Homer J., J. D. Fogelquist, and R. O. Ohlson, to Research Corp. Warning light for power lines. 2,736,001, 2–21–56, Cl. 340—28.

Daniels, John W.: *See*—
Textrom, Ralph, and Daniels. 2,735,932.

Danielson Mfg. Co., The: *See*—
Chadbourne, William H. 2,735,699.

Danly, James C., to Danly Machine Specialties, Inc. Motor current actuated press control circuit. 2,735,976, 2–21–56, Cl. 318—447.

Danly Machine Specialties, Inc.: *See*—
Danly, James C. 2,735,976.

Darr, Christian, to Siemens & Halske, Aktiengesellschaft. Electrical relay and cover therefor. 2,735,918, 2–21–56, Cl. 200—168.

Dautry, Daniel, to International Standard Electric Corp. Electromagnetic relay. 2,735,910, 2–21–56, Cl. 200—104.

Davis, William L., to Hathaway Instrument Co. Shorting switch. 2,735,917, 2–21–56, Cl. 200—158.

Dean, Albert G.: *See*—
Dean, Walter B. and A. G. 2,735,714.

Dean, Walter B. and A. G., to The Budd Co. Body framework for large-capacity vehicles, particularly busses. 2,735,714, 2–21–56, Cl. 296—28.

De Ascentiis, Gaetano. Draft control for furnaces. 2,735,385, 2–21–56, Cl. 110—163.

Deckert, Oscar R. Food processing machine. 2,735,136, 2–21–56, Cl. 17—26.

Deckwa, Cecil V.: *See*—
Hotchkiss, Dean, Deckwa, and Pettigrew. 2,735,157.

De Croes, George C., and J. W. Tamblyn, to Eastman Kodak Co. Stabilized pigmented cellulose acetate-butyrate molding compositions containing propyl gallate. 2,735,782, 2–21–56, Cl. 106—182.

Deden, Louis W. Can opener. 2,735,173, 2–21–56, Cl. 30—22.

Deering Milliken Research Corp.: *See*—
Tew, Gilbert W. 2,735,309.

Dees, George D. Toboggan. 2,735,115, 2–21–56, Cl. 9—21.

Dehne, Willi: *See*—
Aurin, Bruno, and Dehne. 2,735,409.

De Jahn, Fredrik W., 55% to A. N. Mann. Process of decomposing barium sulfate and obtaining products of value therefrom. 2,735,751, 2–21–56, Cl. 23—186.

De Jonge, Jells: *See*—
Dijkstra, Rinse and de Jonge. 2,735,838.

De Lorenzo, Anthony. Variable capacity poultry trough. 2,735,402, 2–21–56, Cl. 119—61.

Demuth, Charles, to Charles Demuth & Sons, Inc. Air discharging and distributing means. 2,735,352, 2–21–56, Cl. 98—40.

Demuth, Charles, & Sons, Inc.: *See*—
Demuth, Charles. 2,735,352.

Denekar, Joseph. Sling shot. 2,735,417, 2–21–56, Cl. 124—20.

Denison Engineering Co., The: *See*—
Born, Ellis H. 2,735,407.
Hippie, George M. 2,735,405.
Shaw, Edwin L., and Born. 2,735,374.

Denman, Harry B., to Detroit Gasket & Mfg. Co. Liner material for leaf spring assemblies. 2,735,813, 2–21–56, Cl. 252—12.

De Rossett, Prentiss P. Callus remover. 2,735,434, 2–21–56, Cl. 132—76.4.

Detroit Duo-Grip Brake Corp.: *See*—
House, Bryan E. 2,735,513.

Detroit Gasket & Mfg. Co.: *See*—
Denman, Harry B. 2,735,813.

Detroit Stamping Co.: *See*—
Kreger, Ralph E. 2,735,172.

Diamond Abrasive Products Ltd.: *See*—
Cook, Robin J. 2,735,421.

Diamond Match Co., The: *See*—
Blakeley, Gordon M. 2,735,713.

Dickson, John, to General Motors Corp. Follower. 2,735,313, 2–21–56, Cl. 74—569.

Diehl, G. M., Machine Works, Inc., The: *See*—
Miller, Robert G. 2,735,095.
Miller, Robert G. 2,735,096.

Di Filippo, Thomas: *See*—
Boor, Ladislav, and Di Filippo. 2,735,297.

Diget, Lewis K., and R. S. Doerr, to H. B. Sherman Mfg. Co. Hose coupling mounting machine. 2,735,473, 2–21–56, Cl. 153—1.

Dijkstra, Rinse, and J. de Jonge, to Hartford National Bank and Trust Co., trustee. Method of producing a resinous condensation product. 2,735,838, 2–21–56, Cl. 260—56.

Dingman, Thomas C., and J. W. Jamieson, to Ford Motor Co. Door lock. 2,735,710, 2–21–56, Cl. 292—280.

Dippel, Cornelis J., and H. J. Houtman, to Hartford National Bank and Trust Co., trustee. Method of producing a photographic image by physical development. 2,735,773, 2–21–56, Cl. 95—88.

Diseker, Alan G. Poultry feeder. 2,735,401, 2–21–56, Cl. 119—52.

Dispenza, Charles. Recording rain gauge. 2,735,298, 2–21–56, Cl. 73—171.

Djerassi, Carl, and G. Rosenkranz, to American Syntex Inc. Process for producing Δ4-pregnen-11α, 21-diol-3, 20-diones and intermediate therefor. 2,735,855, 2–21–56, Cl. 260—397.45.

Dlugosch, Paul A., to Noble Mfg. Co. Sectional hinge connected drawbars. 2,735,251, 2–21–56, Cl. 55—150.

Dobson, Frank E.: *See*—
Rowlands, Tom, and Dobson. 2,735,732.

Dodd, Arthur E., to Westinghouse Air Brake Co. Battery checking circuit arrangement. 2,735,966, 2–21–56, Cl. 317—141.

Dodge, Adiel Y. Tooth clutches. 2,735,528, 2–21–56, Cl. 192—48.

Dodge, Milton L., to Compo Shoe Machinery Corp. Shoe pressing machine. 2,735,119, 2–21–56, Cl. 12—51.

Doerr, Raymond S.: *See*—
Diget, Lewis K., and Doerr. 2,735,473.

Doi, Yoshikazu, to Fuji Photo Film Co., Ltd. Wide angle high aperture five component photographic objective. 2,735,339, 2–21–56, Cl. 88—57.

Done, Harry. Shoe innersole with filler retaining means. 2,735,196, 2–21–56, Cl. 36—22.

Donuts, Inc.: *See*—
Brenner, Alexander S. 2,735,355.

Dooley, William P., to American Viscose Corp. Stationary condenser. 2,735,510, 2–21–56, Cl. 183—57.

Douglas, Bradley C.: *See*—
Brodbeck, Almer H., and Douglas. 2,735,483.

Douglass, Edward T, Jr. Apparatus for conveying wood shavings and the like. 2,735,585, 2–21–56, Cl. 222—238.

Dow Chemical Co., The: *See*—
Brooks, William B., and Shigley. 2,735,163.
Cardwell, Paul H., and Ellers. 2,735,818.
Frevel, Ludo K., and Hedelund. 2,735,868.
Frevel, Ludo K., and Hedelund. 2,735,869.
Stanton, George W., and Ehlers. 2,735,833.
Stanton, George W., and Ehlers. 2,735,834.

Dow, Sumner W.: *See*—
Anderson, Harold S., and Dow. 2,735,488.

Dravnieks, Andrew, to Standard Oil Co. Industrial corrosion testing and recording. 2,735,754, 2–21–56, Cl. 23—230.

Drumstick, Inc.: *See*—
Orrell, Joseph B., and Wilshusen. 2,735,398.

Duchesneau, Herve R., and A. R. Carling, to Aco Inc. Collet and chuck. 2,735,688, 2–21–56, Cl. 279—53.

Du Mont, Allen B., Laboratories, Inc.: *See*—
Hylas, Albert E., and Tyminski. 2,735,986.

Duncan, Theodore R.: *See*—
Bangs, Joseph F., and Duncan. 2,735,328.

Dungan, William E., and R. L. Watrous, Jr., to American Viscose Corp. Flow indicator. 2,735,300, 2–21–56, Cl. 73—228.

Duport, Pierre, to Etablissements Neyrpic. Impulse turbine arrangements. 2,735,647, 2–21–56, Cl. 253—140.

Duriron Co., Inc., The: *See*—
Freed, Jacob B. 2,735,645.

ETC, Inc.: *See*—
Bogue, Edward A., and Musser. 2,735,968.

Eastern Malleable Iron Co., The: *See*—
Pelcin, Albert L. 2,735,706.

Eastman, du Bois, to The Texas Co. Process and apparatus for the generation of power from a solid carbonaceous fuel. 2,735,265, 2–21–56, Cl. 60—39.05.

Eastman, du Bois, and L. P. Gaucher, to The Texas Co. Process for pulverizing solid materials. 2,735,787, 2–21–56, Cl. 117—66.

Eastman Kodak Co.: *See*—
Aklin, George H. 2,735,340.
Allen, Charles F. H., and Beilfuss. 2,735,769.
Allen, Charles F. H., and Minsk. 2,735,841.
Allen, Charles F. H., and Vittum. 2,735,764.
Brooker, Leslie G. S. 2,735,767.
Brooker, Leslie G. S., and White. 2,735,770.
Coover, Harry W., Jr. 2,735,830.
Coover, Harry W., Jr. 2,735,831.
De Croes, George C., and Tamblyn. 2,735,782.
Fordyce, Charles R., and Michener. 2,735,771.
Henn, Richard W. 2,735,774.
Hill, George D. 2,735,766.
Hoadley, Harvey O. 2,735,615.
Hoadley, Harvey O. 2,735,616.
Loria, Anthony, Vittum, and Weissberger. 2,735,765.
McFall, John C., and Yutzy. 2,735,768.
Mihalyi, Joseph. 2,735,332.
Mihalyi, Joseph. 2,735,772.
Minsk, Louis M., Reynolds, and Williams. 2,735,837.
Robinette, Marion L., and Faw. 2,735,632.
Sandvik, Otto, and Chandler. 2,735,677.
Shields, Donald J., Thompson, and Knowles. 2,735,218.
Tamplyn, John W., and Armstrong. 2,735,783.

Eastman Oil Well Survey Co.: *See*—
Brady, Edward F. 2,735,652.

Eaton, Mark S., to Propack, Inc. Disposable slipper. 2,735,195, 2–21–56, Cl. 36—9.

Eaves, William C., and R. W. Whitehill. Mud guard for tractor cab. 2,735,693, 2–21–56, Cl. 280—154.5.

Ebel, Friedrich, W. Rupp, and W. Keller, to Badische Anilin & Soda-Fabrik Aktiengesellschaft. Anthraquinone triazine vat dyestuffs. 2,735,849, 2–21–56, Cl. 260—249.

Ecker, Murry F., and D. B. Harney, to Pacific Pumps, Inc. Seal construction. 2,735,701, 2–21–56, Cl. 286—11.14.

Edgar, Albert C., and H. T. Spannuth, to Wilson & Co., Inc. Method of treating containers for food. 2,735,354, 2–21–56, Cl. 99—187.

Edgerton, Arthur H. Enamel firing stand. 2,735,921, 2–21–56, Cl. 219—19.

Edgerton, William H., and R. L. Hull, to Parke, Davis & Co. Amine salts of penicillin G. 2,735,848, 2–21–56, Cl. 260—239.1.

Ehlers, Forrest A.: *See*—
Stanton, George W., and Ehlers. 2,735,833.
Stanton, George W., and Ehlers. 2,735,834.

Ehlers, Otto W. Dual purpose gas turbine engine. 2,735,409, 2–21–56, Cl. 170—135.71.

Ehlers, Louis H.: *See*—
Cardwell, Paul H., and Ehlers. 2,735,818.

Elam, Daniel W.: *See*—
Wiles, Quentin T., and Elam. 2,735,829.

Elliott Addressing Machine Co., The: *See*—
Ketter, Arthur W., and Elliott. 2,735,361.

Elliott, Harmon P.: *See*—
Ketter, Arthur W., and Elliott. 2,735,361.

Elliott, Sam D.: *See*—
Rice, Robert B., and Elliott. 2,735,503.

Ellis, Norman S., and C. H. Lackey, to A. Reyrolle & Co. Ltd. Electric protective arrangements. 2,735,962, 2–21–56, Cl. 317—29.

Elsner, Edwin C., to C. J. W. Corp. Cargo tie-down. 2,735,377, 2–21–56, Cl. 105—369.

Elton, Eugene D., to O. A. Miller. Pump attachment for fluid cans. 2,735,588, 2–21–56, Cl. 222—324.

Emery, Herbert F., and D. E. Peru. Indexing device. 2,735,334, 2–21–56, Cl. 88—24.

Embart Mfg. Co.: *See*—
Honiss, William T. 2,735,229.

Engel, John H. Method of producing deep-drawn shapes in sheet metal. 2,735,390, 2–21–56, Cl. 113—51.

Engineering Development Co., Inc., The: *See*—
Wagner, George P. 2,735,646.

Eppler, Andrew, Jr.: *See*—
Courchene, Theodore P., Eppler, and Jarvis. 2,735,117.

Erbs, Hocken C. Foam generating cleaning device. 2,735,125, 2–21–56, Cl. 15—131.

Erdmann, Hans, to Waldes Kohinoor, Inc. Dispensers for retaining rings. 2,735,581, 2–21–56, Cl. 221—220.

Erhardt, Louis, and T. Temple, to Century Lighting, Inc. Lighting dimmers. 2,735,929, 2–21–56, Cl. 240—46.13.

Erickson, Charles E., and G. H. Wagner, to Union Carbide and Carbon Corp. Disproportionation of alkoxy silane derivatives. 2,735,861, 2–21–56, Cl. 260—448.8.

Erteszek, Olga. Girdle. 2,735,100, 2–21–56, Cl. 2—37.

Essel, Anton, to Klangfilm Gesellschaft mit beschraenkter Haftung. Device for guiding the tape in magnetic tape records. 2,735,899, 2–21–56, Cl. 179—100.2.

Esso Research and Engineering Co.: *See*—
Bielstein, Walter J. 2,735,653.
Boston, Edward D., and Smith. 2,735,804.
Buckmann, Fred J., and Mattox. 2,735,862.
Campbell, Donald L., Martin, and Tyson. 2,735,822.
Hildebrandt, Alexander B. 2,735,654.
Hubbard, Addison W., Banes, and Johnson. 2,735,875.
Jahnig, Charles E. 2,735,802.
Moistedt, Byron V., and Moser. 2,735,806.
Morway, Arnold J. 2,735,815.
Ortloff, John E. 2,735,655.
Rex, Walter A. 2,735,743.
Rex, Walter A. 2,735,744.
Stone, Albert L. 2,735,556.
Waddey, Walter E., Hill, and Cyphers. 2,735,817.

"Est" Etablissement Sciences Techniques: *See*—
Bonmartini, Giovanni. 2,735,727.

Estes, Carney M. Seed covering drag control for row crop planters. 2,735,350, 2–21–56, Cl. 97—56.

Estes, Nelson N. Condenser for crystal growing apparatus. 2,735,659, 2–21–56, Cl. 257—28.

Estey, James R., to Aluminex Inc. Adjustable lath house. 2,735,224, 2–21–56, Cl. 47—26.

Etablissements Neyrpic: *See*—
Duport, Pierre. 2,735,647.

Evans, Edmond W., to Phillips Petroleum Co. Dehydration of liquefied petroleum gas. 2,735,271, 2–21–56, Cl. 62—1.

Evert, Orville F. Carbonator. 2,735,720, 2–21–56, Cl. 299—120.

F. A. Krauss-Maffei A. G.: *See*—
Laubender, Ludwig. 2,735,260.

Fagerberg, Bengt G., to Sala Maskinfabriks A. B. Method and device for magnetic filtration. 2,735,550, 2–21–56, Cl. 210—1.5.

Fanning, Robert J., to Phillips Petroleum Co. Unsaturated organic compound-sulfur dioxide resins stabilized with thiophosphoric acids and their derivatives. 2,735,836, 2–21–56, Cl. 260—45.75.

Farber, Eduard, to Timber Engineering Co. Process for preparing soil improvement materials. 2,735,756, 2–21–56, Cl. 71—23.

Far East Associates, Inc.: *See*—
Baker, Opal. 2,735,110.

Farley, Thomas S. Thermocouple. 2,735,882, 2–21–56, Cl. 136—4.

Farnsworth Research Corp.: *See*—
Snyder, Lester R. 2,735,636.

Faulkner, Thomas G. Plastic fish bait. 2,735,209, 2–21–56, Cl. 43—42.35.

Faust, Delbert G., to C. A. Norgren Co. Wick type oil-fog lubricator. 2,735,512, 2–21–56, Cl. 184—55.

Faw, Wendell G.: *See*—
Robinette, Marion L., and Faw. 2,735,632.

Feinstein, Samuel S. Applicator for lipstick. 2,735,435, 2–21–56, Cl. 132—88.7.

Feldman, Samuel. Novelty cap construction. 2,735,109, 2–21–56, Cl. 2—195.

Ferguson, Harry, Inc.: *See*—
Ferguson, Henry G., Senkowski, and Harrow. 2,735,416.

Ferguson, Henry G., A. Senkowski, and W. H. Harrow, to Harry Ferguson, Inc. Piston and cylinder construction for internal-combustion engine. 2,735,416, 2–21–56, Cl. 123—191.

Ferleger, George, to Penn Wax Works, Inc. Ornamental candle. 2,735,285, 2–21–56, Cl. 67—21.

Ferry, Donald W.: *See*—
Bowan, Walter J., and Ferry. 2,735,700.

Fieber, Herman P. Crash seat. 2,735,476, 2–21–56, Cl. 155—9.

Field, Richard P., to Balcrank, Inc. Sealed follow-plate for lubricant dispensers. 2,735,586, 2–21–56, Cl. 222—260.

Fields, Arnold C., to Westinghouse Electric Corp. Electrostatic precipitator. 2,735,509, 2–21–56, Cl. 183—7.

Fields, Ernest. Toy weapon carrier. 2,735,221, 2–21–56, Cl. 46—202.

Filippi, Francis G.: *See*—
Britton, Robert E. 2,735,406.

Finan, Charles J. Collar stay. 2,735,104, 2–21–56, Cl. 2—132.

Finch, Harold W. Date and number stamp. 2,735,363, 2–21–56, Cl. 101—111.

Fino, Alexander F., to Hammond Iron Works. Floating roof seal. 2,735,573, 2–21–56, Cl. 220—26.

Fire Spotter Electric Alarm Co.: *See*—
Bland, Thomas W., and O'Brien. 2,736,012.

Fisher, Frank F., to The Airetool Mfg. Co. Apparatus for testing the effectiveness of tube rolling. 2,735,294, 2–21–56, Cl. 73—88.

Fisher, Gordon S., and L. A. Goldblatt, to the United States of America as represented by the Secretary of Agriculture. Peroxides of saturated cyclic terpenes and method of producing same. 2,735,870, 2–21–56, Cl. 260—610.

Flasher Electronic Corp.: *See*—
Craddock, Charles L. 2,736,005.

Flexonics Corp.: *See*—
Homfeldt, Bransford R., and Chiappe. 2,735,621.

Flook, Edward R., and R. G. Sweet, to the United States of America as represented by the United States Atomic Energy Commission. Oxidation of uranosic oxide to uranium trioxide with nitric acid vapor. 2,735,745, 2–21–56, Cl. 23—14.5.

Floseal Corp.: *See*—
Read, Arthur. 2,735,605.

Floyd, Leldon O., and T. O. Manning, Sr. Warning signal for hydraulic brake systems. 2,735,909, 2–21–56, Cl. 200—84.

Fluchaire, Maurice L. A., and J. A. Phelisse, to Societe des Usines Chimiques Rhone Poulenc. Acrylonitrile copolymers 2,735,827, 2–21–56, Cl. 260—32.6.

Fluchaire, Maurice L. A., and J. A. Phelisse, to Societe des Usines Chimiques Rhone-Poulenc. Vinyl amino either polymers and their preparation. 2,735,842, 2–21–56, Cl. 260—89.7.

Fodor, Zoltan D.: *See*—
Longee, Nelson C., Godzyk, and Fodor. 2,735,684.

Fogelquist, Jack D.: *See*—
Dana, Homer J., Fogelquist, and Ohlson. 2,736,001.

Foin, Theodore C.: *See*—
Hodson, Lee N., Sr., and Foin. 2,735,814.

Food Machinery and Chemical Corp.: *See*—
Boyce, John. 2,735,446.
Kellogg, Bruce H. 2,735,465.

Foote, Daniel J.: *See*—
Soref, Harry E., and Foote. 2,735,165.

Ford Motor Co.: *See*—
Dingman, Thomas C., and Jamieson. 2,735,710.
Muller, George H. 2,735,502.
Muller, George H. 2,735,673.

Fordyce, Charles R., and B. C. Michener, to Eastman Kodak Co. Combined light sensitive film and draw tab for film packs and method of making same. 2,735,771, 2–21–56, Cl. 95—9.

Forman, Herbert B.: *See*—
Lowenheim, Frederick A., and Forman. 2,735,788.

Forsberg, Harold S. Portable hand-held power saw tool and angle guide therefor. 2,735,455, 2–21–56, Cl. 143—6.

Forsberg, Kenneth E., to Raytheon Mfg. Co. Voltage-controlled ring oscillators. 2,735,939, 2–21–56, Cl. 250—36.

Forster, John O., to Heli-Coil Corp. Method and a device for making wire coils. 2,735,454, 2–21–56, Cl. 140—1.

Fosness, John P., to North American Aviation, Inc. Extensible strut. 2,735,634, 2–21–56, Cl. 244—104.

Fournier, Edmond E. Card clothing. 2,735,140, 2–21–56, Cl. 19—114.

Frans, Foster, to the United States of America as represented by the Solicitor of the Department of the Interior. Thermal conditioning for electrostatic separation of garnet. 2,735,546, 2–21–56, Cl. 209—11.

Fraizy, Jean, to Societe "Rhodiaceta." Sizing of textiles. 2,735,781, 2–21–56, Cl. 106—135.

Francis, Alfred W., to Socony Mobil Oil Co., Inc. Separation of olefins from hydrocarbon mixtures, and solvent therefor. 2,735,878, 2–21–56, Cl. 260—677.

Frank, Joseph J. Closure fastener. 2,735,149, 2–21–56, Cl. 24—30.5.

Franklin, Edna M. Belt loop holder. 2,735,111, 2–21–56, Cl. 2—236.

Franks, Gerald N., and C. S. Shaw. Method and apparatus for treating cotton seed. 2,735,226, 2–21–56, Cl. 47—58.

Frantz, Frederick H., to General Aniline & Film Corp. Apparatus for automatic disposal of waste developer in dry printing and developing machines. 2,735,346, 2–21–56, Cl. 95—94.

Freebairn, Darwin L., Jr., E. E. Kinsey, and A. E. C. Beutler, to North American Aviation, Inc. Three-element flexure pivot. 2,735,731, 2–21–56, Cl. 308—2.

Freed, Jacob B., to The Duriron Co., Inc. Plug valve with plug retaining liner key. 2,735,645, 2–21–56, Cl. 251—192.

Freeman, George S. P., to Cinema-Television Ltd. Image-translating device. 2,735,935, 2–21–56, Cl. 250—27.

Fresolone, Vito. Emergency fuel supply device for internal combustion engines. 2,735,666, 2–21–56, Cl. 261—71.

Frevel, Ludo K., and J. W. Hedelund, to The Dow Chemical Co. Producing halomethyl aromatic ketones. 2,735,868, 2–21–56, Cl. 260—592.

Frevel, Ludo K., and J. W. Hedelund, to The Dow Chemical Co. Process for the preparation of halomethyl aromatic ketones. 2,735,869, 2–21–56, Cl. 260—592.

Frey, Raymond M., to McGraw Electric Co. Furan resin-tall oil reaction product. 2,735,826, 2–21–56, Cl. 260—23.5.

Friedman, John H., to The National Machinery Co. Nut piercing machine. 2,735,487, 2–21–56, Cl. 164—86.

Fries, John R., and H. E. Balsiger, to Landis Tool Co. Grinding wheel mounting. 2,735,240, 2–21–56, Cl. 51—166.

Frischmann, Karl, to Ernst Leitz, G. m. b. H. Binocular microscope. 2,735,337, 2–21–56, Cl. 88—39.

Frischmann, Karl, to Ernst Leitz, G. m. b. H. Dovetail connection for microscopes. 2,735,519, 2–21–56, Cl. 189—36.

Frost, Albert E., to The Western Union Telegraph Co. Metered circuit for effecting repeated recording operations. 2,735,491, 2–21–56, Cl. 164—113.

Fuge, Harry B., to The Singer Mfg. Co. Electric clutch-brake driving devices. 2,735,534, 2–21–56, Cl. 192—18.

Fuji Photo Film Co., Ltd.: *See*—
Doi, Yoshikazu. 2,735,339.

Fyler, George W., to Motorola, Inc. Television receiver antenna input circuit. 2,735,988, 2–21–56, Cl. 333—70.

Gagliano, Francis P., to Secon Metals Corp. Recovery of gold from scrap containing it. 2,735,810, 2–21–56, Cl. 204—110.

Gagnon, Marcel A.: *See*—
Gagnon, Robert E. 2,735,357.

Gagnon, Paul V.: *See*—
Gagnon, Robert E. 2,735,357.

Gagnon, Robert E., ½ to P. V. Gagnon, and ½ to M. A. Gagnon. Cooking apparatus turnover device. 2,735,357, 2–21–56, Cl. 99—409.

Galin, Harry, and L. Reiss. Combined selecting and ejecting mechanism for multiple vending machines. 2,735,580, 2–21–56, Cl. 221—127.

Galle, Hans E., to F. L. Smidth & Co. Apparatus for discharging pulverulent material. 2,735,725, 2–21–56, Cl. 302—52.

Gallimore, Keith F., to Giddings & Lewis Machine Tool Co. Motor control system for machine tools. 2,735,975, 2–21–56, Cl. 318—443.

Gamble, John G. Carburetor for internal combustion engines. 2,735,664, 2–21–56, Cl. 261—23.

Gates, Victor G. Toy boat. 2,735,219, 2–21–56, Cl. 46—95.

Gaucher, Leon P.: *See*—
Eastman, Du Bois, and Gaucher. 2,735,787.

Gaver, Kenneth M., to The Keever Starch Co. Treating starches with alkylarylsulfonates. 2,735,821, 2–21–56, Cl. 252—188.3.

Gaylord Container Corp.: *See*—
George, Walter C. 2,735,608.
Wasyluka, Paul. 2,735,607.

Geary, Frederick L., to United Aircraft Corp. Support means. 2,735,262, 2–21–56, Cl. 60—35.6.

Gehlsen, Reimer G., to Joy Mfg. Co. Magnet controlled connectors. 2,735,990, 2–21–56, Cl. 339—86.

Gemmel, Wilbur R., to Teletype Corp. Positive engaging clutch. 2,735,526, 2–21–56, Cl. 192—28.

General Aniline & Film Corp.: *See*—
Frantz, Frederick H. 2,735,346.

General Controls Co.: *See*—
Ray, William A. 2,735,447.
Ray, William A., and Rossow. 2,735,445.

General Dynamics Corp.: *See*—
McNaney, Joseph T. 2,735,956.
Sherman, Kenneth C. 2,735,081.

General Electric Co.: *See*—
Capps, James H. 2,735,974.
Kalikow, Irving. 2,735,734.
Laben, Edward S. 2,735,741.
Martin, William, and Weller. 2,735,249.
Merrill, Frank W. 2,735,952.
Williams, Charles E. 2,735,989.

General Motors Corp.: *See*—
Apps, David C. 2,735,292.
Bailey, Charles S. 2,735,620.
Dickson, John. 2,735,313.
Hastings, Homer R. 2,736,003.
Mann, Leonard J., Murphy, and Sharpe. 2,735,274.
Owen, Webster J. 2,735,657.
Reppert, Erwin J., and Kelly. 2,735,643.
Schultze, Harold E. 2,735,670.
Schutt, Arthur J., and Whitmore. 2,735,619.
Seward, Paul H. 2,735,972.
Tuck, Robert M. 2,735,267.

General Slicing Machine Co., Inc.: *See*—
Green, Xan B. K., and Preble. 2,735,134.
Green, Xan B. K., and Preble. 2,735,468.

General Tire and Rubber Co., The: *See*—
Price, Charles C. 2,735,863.

George Walter C., to Gaylord Container Corp. Basket with stacking lid. 2,735,608, 2–21–56, Cl. 229—43.

Gerbracht, Fred. Roof and wall construction for prefabricated buildings. 2,735,383, 2–21–56, Cl. 108—21.

Getz, Delmond L., to The Steel Products Engineering Co. Filler cap assembly. 2,735,572, 2–21–56, Cl. 220—25.

Geul, Herman. Drying kiln. 2,735,192, 2–21–56, Cl. 34—223.

Giaro, Joseph A., to International Standard Electric Corp. Method of balancing telephone cables, means of carrying out same and cables balanced by said method. 2,735,897, 2–21–56, Cl. 179—78.

Gibbs, Charles W. and D. E. Fowl slaughtering stand. 2,735,135, 2–21–56, Cl. 17—11.

Gibbs, Darrel E.: *See*—
Gibbs, Charles W. and D. E. 2,735,135.

Gibson, Eugene C., and L. C. Holt, to The Chemstrand Corp. Lacing-up device. 2,735,540, 2-21-56, Cl. 203—67.

Gibson, George W., to United States Shoe Machinery Corp. Lining roughing machines. 2,735,239, 2-21-56, Cl. 51—128.

Giddings & Lewis Machine Tool Co.: *See*—
Gallimore, Keith F. 2,735,975.

Gilbert, Maxon E. Charcoal broiler grill. 2,735,358, 2-21-56, Cl. 99—427.

Gilfry, Otto H. Antenna mast support. 2,735,639, 2-21-56, Cl. 248—43.

Gillette Co., The: *See*—
Shnitzler, Meyer J. 2,735,542.
Shnitzler, Meyer J., and Sinclair. 2,735,552.

Gillis, Harry W.: *See*—
Leyerle, Arthur R., and Gillis. 2,735,523.

Gilman, Henry, and E. Bindschadler, to the United States of America as represented by the United States Atomic Energy Commission. Uranium alkoxy compounds and method of preparing same. 2,735,857, 2-21-56, Cl. 260—429.1.

Gilvarry, John J., L. A. Gore, B. W. Augenstein, and W. C. Randels; assors. to said Gilvarry and said Gore. Automobile parking aid. 2,736,015, 2-21-56, Cl. 340—282.

Gindi, Joseph M. Pocket handkerchief having fold indicia thereupon. 2,735,098, 2-21-56, Cl. 2—1.

Gisiger, Armin. Watertight watchcase. 2,735,259, 2-21-56, Cl. 58—90.

Glaser, Frank W., to Borolite Corp. Production of metal boride without and with an excess of boron. 2,735,155, 2-21-56, Cl. 25—156.

Glaser, Rolf, to Rigid Ltd. Servomotor control system for copying machine tools. 2,735,342, 2-21-56, Cl. 90—62.

Glasgow, Clarence O., to National Tank Co. Combination dehydrator-separators for petroleum well streams. 2,735,506, 2-21-56, Cl. 183—2.7.

Glass, Marvin I. Spring wound toys. 2,735,222, 2-21-56, Cl. 46—208.

Glover, William C., Jr. Garment finishing machine. 2,735,595, 2-21-56, Cl. 223—70.

Godehn, Donald J., to American Enka Corp. Inhibition of dark spots on freshly spun viscose by washing with a specific sequestering agent. 2,735,742, 2-21-56, Cl. 8—137.5.

Godzyk, Nufer, Jr.: *See*—
Longee, Nelson C., Godzyk, and Fodor. 2,735,684.

Goedderz, Frank G. Signal for lights of automobile. 2,736,014, 2-21-56, Cl. 340—252.

Goedkoop, Martinus L., to Stamicarbon N. V. Manufacture of cation exchange material from coal. 2,735,819, 2-21-56, Cl. 252—179.

Goetz, Maurus T., to Teletype Corp. Character sequence transmitter. 2,735,887, 2-21-56, Cl. 178—17.

Gohorel, Fernand P., to International Standard Electric Corp. Automatic telephone systems. 2,735,894, 2-21-56, Cl. 179—18.

Goldblatt, Leo A.: *See*—
Fisher, Gordon S., and Goldblatt. 2,735,870.

Goldwater, Maurice H., and V. R. Hermanson. Friction action ratchet wrench. 2,735,324, 2-21-56, Cl. 81—60.

Goodhue, Lyle D., and J. E. Mahan, to Phillips Petroleum Co. Pyrimidines as plant response substances. 2,735,225, 2-21-56, Cl. 47—57.5.

Goodman, William D. Pivoted rod joint. 2,735,703, 2-21-56, Cl. 287—99.

Gordon, Emanuel: *See*—
Gruber, Bernard A., Gordon, and Jermain. 2,735,668.

Gore, Linn A.: *See*—
Gilvarry, John J., Gore, Augenstein, and Randels. 2,736,015.

Goris, Johan R. H., to Stamicarbon N. V. Process for the preparation of phenol. 2,735,873, 2-21-56, Cl. 260—628.

Grahame, James H., to The Texas Co. Pipe spacing device. 2,735,449, 2-21-56, Cl. 138—85.

Grant, Irvin R., 50% to L. Countz. Advertising sign. 2,735,204, 2-21-56, Cl. 40—128.

Gray, Charles H.: *See*—
Coates, Colin, Gray, and Small. 2,735,901.

Greaves, Joseph. Disk seeder attachment. 2,735,349, 2-21-56, Cl. 97—55.

Green, Ralph W., to Radio Corp. of America. Wire stripping device. 2,735,320, 2-21-56, Cl. 81—9.5.

Green, Xan B. K., and H. Preble, Jr., to General Slicing Machine Co., Inc. Lock hinge. 2,735,134, 2-21-56, Cl. 16—144.

Green, Xan B. K., and H. Preble, Jr., to General Slicing Machine Co., Inc. Detachably-mounted disc blade for food slicing machines. 2,735,468, 2-21-56, Cl. 146—102.

Greenawalt, William E. Process of smelting copper sulfide ores. 2,735,759, 2-21-56, Cl. 75—74.

Greene, Edgeworth. Dash tire-pressure instruments for vehicles. 2,736,004, 2-21-56, Cl. 340—58.

Greenspan, Lawrence, to The American Platinum Works. Mirror bright silver plating. 2,735,808, 2-21-56, Cl. 204—46.

Greenspan, Lawrence, to The American Platinum Works. Mirror bright silver plating. 2,735,809, 2-21-56, Cl. 204—46.

Greer, Walton J., to Halliburton Oil Well Cementing Co. Apparatus for determining density of fluids. 2,735,944, 2-21-56, Cl. 250—43.5.

Greig, Harold G., to Radio Corp. of America. Process of electrostatic printing. 2,735,785, 2-21-56, Cl. 117—17.5.

Greig, Harold G., and C. J. Young, to Radio Corp. of America. Process of electrostatic printing. 2,735,784, 2-21-56, Cl. 117—17.5.

Greist Mfg. Co., The: *See*—
Baehr, Carl G. 2,735,388.
Baehr, Carl G., and Connors. 2,735,387.

Gridley, Darrin H. Deflected beam tube binary adder. 2,735,936, 2-21-56, Cl. 250—27.

Grieco, Rocco F. Fixture for supporting a tool subject to grinding. 2,735,245, 2-21-56, Cl. 51—220.

Grier, James W. W. and V. P. Portable saw guide and miter attachment. 2,735,456, 2-21-56, Cl. 143—6.

Grier, Verlee P.: *See*—
Grier, James W. W. and V. P. 2,735,456.

Grieve, George P., and T. L. Hendry. Ventilated housing for radio apparatus and the like. 2,735,964, 2-21-56, Cl. 317—101.

Griner, Clarence O., to United States Register Co. Butterfly damper. 2,735,353, 2-21-56, Cl. 98—40.

Grobey, Paul A., to Bryant Chucking Grinder Co. Taper gage. 2,735,187, 2-21-56, Cl. 33—174.

Grobl, Jon E., and R. J. Renholts. Sinker release structure. 2,735,211, 2-21-56, Cl. 43—43.12.

Gruber, Bernard A., and R. A. Jermain, to Metal Hydrides Inc. Recovery of sodium and calcium metals from electrolytic sludge. 2,735,668, 2-21-56, Cl. 266—19.

Guardian Electric Mfg. Co.: *See*—
Obszarny, Theodore J. 2,735,994.

Gudgeon, Ronald P., to Brown & Green Ltd. Laundry presses. 2,735,201, 2-21-56, Cl. 38—21.

Guilleminot, Roger. Continuous manufacture of corrugated glass sheets. 2,735,227, 2-21-56, Cl. 49—3.

Gulf Oil Corp.: *See*—
Redcay, Aaron K. 2,735,879.

Gunn, Kenneth C. C., and K. O. Holmes, to the United States of America as represented by the Secretary of the Air Force. Radio frequency power comparator. 2,735,982, 2-21-56, Cl. 324—95.

Gutzeit, Carlos L., to Socony Mobil Oil Co., Inc. Catalyst supports and process for preparing the same. 2,735,801, 2-21-56, Cl. 196—50.

Guyer, Reynolds, to Waldorf Paper Products Co. Surgical drape package. 2,735,544, 2-21-56, Cl. 206—63.2.

Gyllenberg, John L., to A. Brandenthaler. Safety razor construction. 2,735,174, 2-21-56, Cl. 30—49.

Haase, Richard J., to Shell Development Co. Seismic depth gauging system. 2,735,303, 2-21-56, Cl. 73—398.

Haayman, Pieter W., F. C. Romeyn, and E. J. W. Verwey, to Hartford National Bank and Trust Co., trustee. Method of manufacturing semi-conductive material. 2,735,824, 2-21-56, Cl. 252—519.

Haefliger, William W.: *See*—
Holzhausen, Glen H., and Haefliger. 2,735,247.

Hagen Mfg. Co., Inc.: *See*—
Hagen, Paul A. 2,735,915.

Hagen, Paul A., to Hagen Mfg. Co., Inc. Tool life indicators. 2,735,915, 2-21-56, Cl. 200—153.

Hague, Robert Z.: *See*—
Rochford, Patrick J., and Hague. 2,735,408.

Hall, Dudley O.: *See*—
Wanner, William F., Williamson, and Hall. 2,735,199.

Hall, Jesse E., Sr. Well bore scratcher. 2,735,495, 2-21-56, Cl. 166—173.

Hall, Marvin F.: *See*—
Killian, George P., Hall, and Sanders. 2,735,154.

Halliburton Oil Well Cementing Co.: *See*—
Greer, Walton J. 2,735,944.

Hamilton, William S. H. Starting and operating circuits for fluorescent lamps. 2,735,960, 2-21-56, Cl. 315—100.

Hamilton, William S. H. Starters for fluorescent lamps. 2,735,961, 2-21-56, Cl. 315—100.

Hammond Iron Works: *See*—
Fino, Alexander F. 2,735,573.

Hancock, Helen C. Disappearing support. 2,735,737, 2-21-56, Cl. 311—2.

Haneberg, Raymond A.: *See*—
Hobing, John W. 2,735,284.

Haneberg, Richard H.: *See*—
Hobing, John W. 2,735,284.

Hanks, Hugh C., Jr.: *See*—
Schutz, Harald, Thomas, and Hanks. 2,735,981.

Hansen, Arnold A. Wall supported shoe holder and stretcher. 2,735,121, 2-21-56, Cl. 12—128.6.

Hansen, Francis F. Cross or diagonal sheeting of dough. 2,735,382, 2-21-56, Cl. 107—54.

Hanson, Wallace E., to Sample-Durick Co., Inc. Portable cardboard display members. 2,735,638, 2-21-56, Cl. 248—35.

Hapman, Hannah J.: *See*—
Hapman, Henry W. 2,735,534.

Hapman, Henry W., 40% to H. J. Hapman. Flight conveyor. 2,735,534, 2-21-56, Cl. 198—176.

Harman, Gerald J. Fueling apparatus for aircraft. 2,735,717, 2-21-56, Cl. 299—78.

Harney, Doran B.: *See*—
Ecker, Murry F., and Harney. 2,735,701.

Harnischfeger Corp.: *See*—
Burdick, Will S., and Schneider. 2,735,559.

Harper, Chester H., and K. M. Allen. Hydraulic tree shaker. 2,735,255, 2-21-56, Cl. 56—328.

Harrow, William H.: *See*—
Ferguson, Henry G., Senkowski, and Harrow. 2,735,416.

Hart, Claude W., to Seymour Mfg. Co. Hinge and stop provisions for hand operated implements or tools. 2,735,712, 2-21-56, Cl. 294—50.5.

Hartenberg, I. L.: *See*—
Morgan, Porter S. 2,735,326.

Hartford National Bank and Trust Co.: *See*—
Dijkstra, Rinse, and de Jonge. 2,735,838.
Dippel, Cornelis J., and Houtman. 2,735,773.
Haayman, Pieter W., Bol, Romeyn, and Verwey. 2,735,824.

Harwood, Stanley G.: *See*—
Kenney, Robert W. 2,735,442.

Hastings, Homer R., to General Motors Corp. Gear shift position indicator mechanism. 2,736,003, 2-21-56, Cl. 340—52.

Hathaway Instrument Co.: *See*—
Davis, William L. 2,735,917.

Hausmann, George F., to United Aircraft Corp. Blade passage construction for compressors and diffusers. 2,735,612, 2-21-56, Cl. 230—122.

Haseltine Research, Inc.: *See*—
Townsend, George B. 2,735,938.

Heath, Alfred E., to Radio Corp. of America. Process for manufacturing small parts from thin metals. 2,735,763, 2-21-56, Cl. 95—5.7.

Hedelund, John W.: *See*—
Frevel, Ludo K., and Hedelund. 2,735,868.
Frevel, Ludo K., and Hedelund. 2,735,869.

Hefley, Howard H., to The Toledo Plate and Window Glass Co. Glass polishing machine. 2,735,238, 2-21-56, Cl. 51—110.

Heli-Coil Corp.: *See*—
Forster, John O. 2,735,454.

Hellebrekers, Henricus W. J., to Koninklijke Vereenigde Tapijtfabrieken N. V. Method for the production of patterned double woven pile fabric having floating pile threads. 2,735,452, 2-21-56, Cl. 139—397.

Hellmich, Ernst. Apparatus for cutting up onions and the like. 2,735,467, 2-21-56, Cl. 146—78.

Hendry, Trillie L.: *See*—
Grieve, George P., and Hendry. 2,735,964.

Henkel, Ferdinand J., to Lamina Dies and Tools, Inc. Lapping machine. 2,735,233, 2-21-56, Cl. 51—50.

Henn, Richard W., to Eastman Kodak Co. Concentrated photographic fixing solutions. 2,735,774, 2-21-56, Cl. 95—88.

Henrard, Fernard J. J. J., to Babson Bros. Co. Milking apparatus. 2,735,399, 2-21-56, Cl. 119—14.46.

Henry, J. T., Mfg. Co., Inc.: *See*—
Townshend, Henry H. 2,735,236.

Herb-Shelly-Inc.: *See*—
Schjeldahl, Gilmore T. 2,735,475.
Schjeldahl, Gilmore T. 2,735,797.

Herbst, Robert M. Substituted tetrazolines. 2,735,852, 2-21-56, Cl. 260—308.

Hercules Motors Corp.: *See*—
Knepfer, Matthew C. 2,735,412.

Herff Jones Co.: *See*—
Kaiser, Paul A. 2,735,194.

Hermanson, Vernon R.: *See*—
Goldwater, Maurice H., and Hermanson. 2,735,324.

Herr, Milton E., to The Upjohn Co. Steroid compounds. 2,735,854, 2-21-56, Cl. 260—397.45.

Herzog, Gerhard: *See*—
Stratford, William M., Teichmann, and Herzog. 2,735,946.

Hesemann, Bernard H. Railroad tie replacing machine. 2,735,375, 2-21-56, Cl. 104—9.

Hess, Howard V., and G. B. Arnold, to The Texas Co. Separation of hydrocarbons and other compounds with chemicals. 2,735,874, 2-21-56, Cl. 260—650.

Hess, Howard V., and N. D. Carter, to The Texas Co. Conversion of gaseous hydrocarbons into ethylene and aromatics. 2,735,876, 2-21-56, Cl. 260—673.

Hey, Lester L., and E. M. Pipal; said Hey assor. to Pipal. Hinge. 2,735,133, 2-21-56, Cl. 16—128.

Heyden Chemical Corp.: *See*—
Lyding, Arthur R. 2,735,865.

Hicks, William T., J. E. Leard, and W. G. Pharo, to Western Electric Co., Inc. Take-up reel apparatus. 2,735,629, 2-21-56, Cl. 242—25.

Hildebrandt, Alexander B., to Esso Research and Engineering Co. Expanding type momentum pellet impact drilling apparatus. 2,735,654, 2-21-56, Cl. 255—61.

Hilgers, Robert W., to Sundstrand Machine Tool Co. Rubbing machine. 2,735,241, 2-21-56, Cl. 51—170.

Hill, George D., to Eastman Kodak Co. Prevention of dye wandering in photographic emulsions. 2,735,766, 2-21-56, Cl. 95—7.

Hill, Max W.: *See*—
Waddey, Walter E., Hill, and Cyphers. 2,735,817.

Hinkal, Charles A. Weed guard. 2,735,210, 2-21-56, Cl. 43—43.6.

Hinsey, Robert S., to The Bingham-Herbrand Corp. Mechanism control. 2,735,311, 2-21-56, Cl. 74—502.

Hipple, George M., to The Denison Engineering Co. Hydroelectric control system for hydraulic apparatus. 2,735,405, 2-21-56, Cl. 121—38.

Hirdler, Louis C.: *See*—
Prutton, Carl F., Miller, and Hirdler. 2,735,749.

Hoadley, Harvey O., to Eastman Kodak Co. Electronic analog multiplier circuit. 2,735,615, 2-21-56, Cl. 235—61.

Hoadley, Harvey O., to Eastman Kodak Co. Electronic multiplier circuit. 2,735,616, 2-21-56, Cl. 235—61.

Hobing, John W., to R. A. and R. H. Haneberg. Gas lighting implement. 2,735,284, 2-21-56, Cl. 67—6.1.

Hodson Corp., The: *See*—
Hodson, Lee N., Sr., and Foin. 2,735,814.

Hodson, Lee N., Sr., and T. C. Foin, to The Hodson Corp. Die forging compound. 2,735,814, 2-21-56, Cl. 252—30.

Hoff, John M., to The Tappan Stove Co. Automatic ignition and control mechanism for gaseous fuel burners. 2,735,484, 2-21-56, Cl. 161—9.

Hoffman Electronics Corp.: *See*—
Textrom, Ralph, and Daniels. 2,735,932.

Hoffman, James D., to North American Aviation, Inc. Fire prevention arrangement. 2,735,635, 2-21-56, Cl. 244—135.

Hogg, John A., P. F. Beal, and F. H. Lincoln, Jr., to The Upjohn Co. 21-Hydroxy-4,17(20)-pregnadiene-3,11-dione and esters thereof. 2,735,856, 2-21-56, Cl. 260—397.45.

Höglund, Stig P. G., and A. G. Kindahl, to Sandvikens Jernverks Aktiebolag. Rock drilling bit. 2,735,656, 2-21-56, Cl. 255—63.

Hohl, John O. Bjering, and W. J. Ringel, to Owens-Illinois Glass Co. Apparatus for sealing containers. 2,735,600, 2-21-56, Cl. 226—82.

Hohnl, Kurt E.: *See*—
Omon, Gene L., and Hohnl. 2,735,696.

Holness, Alice C. Sifter device. 2,735,548, 2-21-56, Cl. 209—283.

Hoke, Charles E., to United States Rubber Co. Processing of rubber. 2,735,793, 2-21-56, Cl. 134—6.

Holdeman, Lloyd H., to Manning, Maxwell & Moore, Inc. Apparatus for supporting railway vehicles. 2,735,376, 2-21-56, Cl. 104—32.

Holm, Roy T.: *See*—
Smith, Curtis W., and Holm. 2,735,864.

Holmberg, Rudolph A., to International Harvester Co. Internal-combustion engine spark arrestor. 2,735,511, 2-21-56, Cl. 183—72.

Holmes, Kenneth O.: *See*—
Gunn, Kenneth C. C., and Holmes. 2,735,982.

Holt, Lawrence C.: *See*—
Gibson, Eugene C., and Holt. 2,735,540.

Holt, William E. Mixing device. 2,735,663, 2-21-56, Cl. 259—75.

Holub, Edward M.: *See*—
Kelley, Dewitt T., Babcock, and Holub. 2,735,796.

Holzhausen, Glen H., and W. W. Haefliger. Knife sharpener attachment. 2,735,247, 2-21-56, Cl. 51—241.

Homfeldt, Bransford R., and O. J. Chiappe, to Flexonics Corp. By-pass thermostat. 2,735,621, 2-21-56, Cl. 236—34.5.

Honiss, William T., to Emhart Mfg. Co. Forehearth high efficiency cooling section. 2,735,229, 2-21-56, Cl. 49—54.

Hooe, Hunter E., to Royal McBee Corp. Keysort keypunch. 2,735,490, 2-21-56, Cl. 164—112.

Hoseason, Harry J. Hand hole forming method for cellular floor wire distributing systems. 2,735,166, 2-21-56, Cl. 29—407.

Hotchkiss, Dean, C. V. Deckwa, and F. Pettigrew. Adjustable casket bed. 2,735,157, 2-21-56, Cl. 27—12.

House, Bryan E., to Detroit Duo-Grip Brake Corp. Brake mechanism. 2,735,513, 2-21-56, Cl. 188—76.

Houston Corp., The: *See*—
Vose, Aubrey W. 2,735,902.

Houtman, Harke J.: *See*—
Dippel, Cornelis J., and Houtman. 2,735,773.

Howard, Charles E. Accelerator pedal operating attachment for motor vehicles. 2,735,312, 2-21-56, Cl. 74—562.5.

Howe, John F.: *See*—
Wicklatz, John E., and Howe. 2,735,832.
Wicklatz, John E., and Howe. 2,735,835.

Hrebicek, James. Bottle cap opener with cap piercing means. 2,735,318, 2-21-56, Cl. 81—3.48.

Hubbard, Addison W., F. W. Banes, and J. F. Johnson, to Esso Research and Engineering Co. Process for recovery of cycloalkadiene monomers from their dimers. 2,735,875, 2-21-56, Cl. 260—666.

Huber, Jennie L.: *See*—
Huber, Ralph L. 2,735,428.
Huber, Ralph L. 2,735,429.
Huber, Ralph L. 2,735,430.

Huber, Ralph L., deceased, by J. L. Huber, administratrix. Hypodermic syringes. 2,735,428, 2-21-56, Cl. 128—218.

Huber, Ralph L., deceased, by J. L. Huber, administratrix. Hypodermic syringes. 2,735,429, 2-21-56, Cl. 128—218.

Huber, Ralph L., deceased, by J. L. Huber, administratrix. Hypodermic syringes. 2,735,430, 2-21-56, Cl. 128—218.

Hubert, Clarence A., and J. R. Orelind, to International Harvester Co. Shrouded power take-off shaft for tractors. 2,735,281, 2-21-56, Cl. 64—1.

Hubmann, Paul, to Package Machinery Co. Apparatus for standardizing milk. 2,735,614, 2-21-56, Cl. 233—29.

Huck, Alfred J., to Knapp-Monarch Co. Method of making heating elements. 2,735,162, 2-21-56, Cl. 29—155.5.

Huddle, Edwin F., to International Harvester Co. Tractor-implement coupling arrangement for a harvester. 2,735,253, 2-21-56, Cl. 56—27.

Huddle, Edwin F., to International Harvester Co. Double sickle cutting assembly. 2,735,254, 2-21-56, Cl. 56—297.

Hudson, Charles H. Cannula. 2,735,432, 2-21-56, Cl. 128—348.

Hufnagel, John P., 50% to P. A. Coles. Fly swatter. 2,735,217, 2-21-56, Cl. 43—137.

Hughes Aircraft Co.: *See*—
Norby, Harold A. 2,735,940.

Hull, Robert L.: *See*—
Edgerton, William H., and Hull. 2,735,848.

Humphrey, Samuel A., to United States of America as represented by the Secretary of the Navy. Cable connector. 2,735,993, 2-21-56, Cl. 339—91.

Hunter, Scott L. Reversible pump. 2,735,366, 2-21-56, Cl. 103—3.

Husqvarna Vapenfabriks Aktiebolag: *See*—
Zapf, Heinz G. G. 2,735,757.

Huston, Doris K. Ornamental clasp. 2,735,150, 2-21-56, Cl. 24—85.

Huther Brothers Saw Mfg. Co.: *See*—
Stauder, Emanuel. 2,735,459.

Hydrocarbon Research, Inc.: *See*—
Tuttle, Malcolm H. 2,735,482.

Hylas, Albert E., and W. V. Tyminski, to Allen B. Du Mont Laboratories, Inc. Electrical hybrid ring network. 2,735,986, 2-21-56, Cl. 333—11.

I-T-E Circuit Breaker Co.: *See*—
Ridgley, Cornelius J. 2,736,010.

Idaho Sprocket and Machine Works: *See*—
Shrock, Daniel A. 2,735,514.

Illinois Tool Works: *See*—
Bjornberg, Swan O. 2,735,189.
Poupitch, Ougljesa J. 2,735,470.

Industrial Tool & Machine Co.: *See*—
Kalberer, Otto F. 2,735,182.

Inman, Hollis C., to Micro-Moisture Controls, Inc. Moisture actuated circuit closer. 2,735,907, 2-21-56, Cl. 200—61.05.

Interior, United States of America as represented by the Solicitor of the Department of the: *See*—
Fraas, Foster. 2,735,546.

International Harvester Co.: *See*—
Abrahamsen, Henry C. 2,735,351.
Boyd, Roy W., Van Vooren, and Ruehl. 2,735,104.
Bruce, Robert W. 2,735,927.
Clark, Adna R. 2,735,277.
Collins, William F., and Scarnato. 2,735,533.
Holmberg, Rudolph A. 2,735,511.
Hubert, Clarence A., and Orelind. 2,735,281.
Huddle, Edwin F. 2,735,253.
Huddle, Edwin F. 2,735,254.
Meile, Carl H. 2,735,314.
Williams, St J., Jr. 2,735,273.
Williams, St J., Jr. 2,735,279.
Williams, St J., Jr. 2,735,280.

International Standard Electric Corp.: *See*—
Dautry, Daniel. 2,735,910.
Glaro, Joseph A. 2,735,897.
Gohorel, Fernand P. 2,735,894.
Kramar, Ernst. 2,736,022.
Lieb, Albert. 2,735,955.
McLeod, Thomas S. 2,735,983.
Nakano, Shinpei, and Yosano. 2,736,060.
Vollenschier, Fritz. 2,735,895.

Jacobson, Oscar W.: *See*—
Berger, Sol J., and Jacobson. 2,735,203.

Jagenberg-Werke Akt.-Ges.: *See*—
Zerlin, Hans. 2,735,604.

Jahn, Werner: *See*—
Wohlrab, Hans-Christoph, and Jahn. 2,735,900.

Jahnig, Charles E., to Esso Research and Engineering Co. Method for controlling temperatures in fluidized solids systems for the conversion of hydrocarbons. 2,735,802, 2-21-56, Cl. 196—52.

Jamieson, John W.: *See*—
Dingman, Thomas C., and Jamieson. 2,735,710.

Jarvis, Herbert W.: *See*—
Courchene, Theodore P., Eppler, and Jarvis. 2,735,117.

Jennings, Jo E., to Jennings Radio Mfg. Corp. Feed through condenser. 2,735,969, 2-21-56, Cl. 317—244.

Jennings Radio Mfg. Corp.: *See*—
Jennings, Jo E. 2,735,969.

Jermain, Robert A.: *See*—
Gruber, Bernard A., Gordon, and Jermain. 2,735,668.

Jewett, Charles S., to Curtiss-Wright Corp. Nozzle construction for jet engines. 2,735,264, 2-21-56, Cl. 60—35.55.

Joecks, Edmund W. Collapsible can holder. 2,735,641, 2-21-56, Cl. 248—210.

Johnson, Agnar: *See*—
Atwood, Lyle C., and Johnson. 2,735,694.

Johnson, Edward H., to The Keelavite Co. Ltd. Rotary fluid pressure engine. 2,735,371, 2-21-56, Cl. 103—125.

Johnson Fare Box Co.: *See*—
Rogier, Clarence F. 2,735,438.

Johnson, Harry V. and N. J., to Union Carbide and Carbon Corp. Electrode joint. 2,735,705, 2-21-56, Cl. 287—127.

Johnson, Henry L.: *See*—
Sherwood, Glenn L. 2,735,474.

Johnson, Herbert L.: *See*—
Mills, Ivor W., and Johnson. 2,735,877.

Johnson, Howard R. Heating element for coffee makers, etc. 2,735,922, 2-21-56, Cl. 219—19.

Johnson, James W., Jr.: *See*—
Vogt, Kenneth T. 2,735,692.

Johnson, John F.: *See*—
Hubbard, Addison W., Banes, and Johnson. 2,735,875.

Johnson, Melvin M., Jr.: *See*—
Butler, Wallace B., and Johnson. 2,735,206.

Johnson, Neal J.: *See*—
Johnson, Harry V. and N. J. 2,735,705.

Jones, Richard W., to Allis-Chalmers Mfg. Co. Electric power output responsive system. 2,735,978, 2-21-56, Cl. 322—25.

Jones, Roy W., to Automatic Electric Laboratories, Inc. Party line selective signalling system having code call. 2,735,892, 2-21-56, Cl. 179—18.

Jones, William L. Exercise cycle. 2,735,422, 2-21-56, Cl. 128—25.

Jones, William O., to The British Oxygen Co. Ltd. Preparation of guanamines. 2,735,850, 2-21-56, Cl. 260—249.9.

Jordan, Woodrow W., and P. W. Spencer; said Jordan assor. to L. McCubbin. Pipe marking device. 2,735,190, 2-21-56, Cl. 33—189.

Joy Mfg. Co.: *See*—
Bailey, Norman I. 2,735,992.
Gehlsen, Reimer G. 2,735,990.
Potvin, Raoul. 2,735,667.
Simpson, James H. 2,735,991.

Junod, Samuel: *See*—
Beuchat, Roland, and Junod. 2,735,152.

Juvinall, James W., and M. R. Miller, to Western Electric Co., Inc. Temperature-controlled soldering iron. 2,735,923, 2-21-56, Cl. 219—26.

Kaiser, Paul A., to Herff Jones Co. Ring design display device. 2,735,194, 2-21-56, Cl. 35—49.

Kalberer, Otto F., to Industrial Tool & Machine Co. Protractor. 2,735,182, 2-21-56, Cl. 33—75.

Kalikow, Irving, to General Electric Co. Bearing mounting. 2,735,734, 2-21-56, Cl. 308—189.

Kille, Karl T. Device for continuous supply of a liquid. 2,735,440, 2-21-56, Cl. 137—87.

Karr, Michael J., to Atlas Press Co. Chuck for jig saws or the like. 2,735,685, 2-21-56, Cl. 279—44.

Kasey, John B. Method of treating rare earth ores. 2,735,747, 2-21-56, Cl. 23—16.

Kather, Erich N., to Raytheon Mfg. Co. Tunable magnetron device. 2,735,959, 2-21-56, Cl. 315—39.61.

Kauffman, John H., and R. H. Moore, to Studebaker-Packard Corp. Pneumatic material handling apparatus. 2,735,724, 2-21-56, Cl. 302—28.

Kazanjian, Casey. Golf ball retrieving apparatus. 2,735,562, 2-21-56, Cl. 214—350.

Kearns, Harlan M. Panel siding. 2,735,143, 2-21-56, Cl. 20—5.

Keck, Charles D. Saw sharpening device. 2,735,316, 2-21-56, Cl. 76—40.

Keelavite Co. Ltd., The: *See*—
Johnson, Edward H. 2,735,371.

Keever Starch Co., The: *See*—
Gaver, Kenneth M. 2,735,821.

Keiper, Francis P.: *See*—
Browne, Frances, and H. A. 2,735,321.

Kelzer, Eugene O., and M. G. Kroger, to Radio Corp. of America. Automatic gain control. 2,735,934, 2-21-56, Cl. 250—20.

Keller, Henry G., to Link-Belt Co. Belt conveyor. 2,735,537, 2-21-56, Cl. 198—203.

Keller, Walter: *See*—
Ebel, Friedrich, Rupp, and Keller. 2,735,849.

Kelley, Dewitt T., R. S. Babcock, and E. M. Holub, to Union Carbide and Carbon Corp. Process for thermochemically washing ferrous metal castings. 2,735,796, 2-21-56, Cl. 148—9.3.

Kellogg, Bruce H., to Food Machinery and Chemical Corp. Machine for orienting and slicing ovaloidal fruit such as apricots. 2,735,465, 2-21-56, Cl. 146—72.

Kelly, Henry L. Running board handling attachment for lift trucks. 2,735,363, 2-21-56, Cl. 214—620.

Kelly, John M.: *See*—
Reppert, Erwin J., and Kelly. 2,735,643.

Kelton Corp. Ltd.: *See*—
Bersudsky, Sidney. 2,735,336.

Kenney, Clarence E., to Allis-Chalmers Mfg. Co. Liquid supply means for a rotary machine. 2,735,367, 2-21-56, Cl. 103—4.

Kenney, Robert W., to S. G. Harwood. Automatic control for liquid supplying conduit. 2,735,442, 2-21-56, Cl. 137—413.

Kenyon, David E., to Sperry Rand Corp. Teledata system. 2,736,007, 2-21-56, Cl. 340—183.

Kerns, Quentin A.: *See*—
Baker, William R., and Kerns. 2,735,963.

Kerven, Danyal N. Automatic evacuator for removing the eggmeat contents of eggs. 2,735,464, 2-21-56, Cl. 146—2.

Ketter, Arthur W., and H. P. Elliott, to The Elliott Addressing Machine Co. Apparatus for printing roll control. 2,735,361, 2-21-56, Cl. 101—53.

Keyes, George G., to Teletype Corp. Telegraphically controlled timing mechanism. 2,735,885, 2-21-56, Cl. 178—4.

Killian, George P., M. F. Hall, and W. S. Sanders, to Better Boxes, Inc. Pipe joint mold. 2,735,154, 2-21-56, Cl. 25—127.

Kim, Harold Y. W.: *See*—
Shimabukuro, Leona S. 2,735,716.

Kindahl, Anders G.: *See*—
Höglund, Stig P. G., and Kindahl. 2,735,656.

King, Bertell W. Automobile toll collector with barrier. 2,735,202, 2-21-56, Cl. 39—6.

Kinney, J. Warren, Jr.: *See*—
Reifsteck, Francis. 2,735,715.

Kinsey, Eugene E.: *See*—
Freebairn, Darwin L., Jr., Kinsey, and Beutler. 2,735,731.

Klangfilm Gesellschaft mit beschraenkter Haftung: *See*—
Essel, Anton. 2,735,899.
Wohlrab, Hans-Christoph, and Jahn. 2,735,900.

Kleiman, Harry. Flexible packing in supplemental socket. 2,735,505, 2-21-56, Cl. 182—7.

Klein, Victor G., R. F. Schneller, and C. H. Mueller, to Lincoln Engineering Co. Record player. 2,735,683, 2-21-56, Cl. 274—10.

Klingler, Karl A., and W. O. Martin, to Crerar Adams & Co. Railroad air valve. 2,735,726, 2-21-56, Cl. 303—68.

Knapp-Monarch Co.: *See*—
Huck, Alfred J. 2,735,162.

Knowles, M B: *See*—
Shields, Donald J., Thompson, and Knowles. 2,735,218.

Knox, David M. Invertible and adjustable picture frames. 2,735,205, 2-21-56, Cl. 40—155.

Knutsen, Knut A., to Compagnie Des Machines Bull (Societe Anonyme). Process for recording on a recording card or strip. 2,735,617, 2-21-56, Cl. 235—61.12.

Kohout, George A. Stoker. 2,735,384, 2-21-56, Cl. 110—104.

Komph, William L., Sr., to The Wellman Engineering Co. Reciprocating fluid actuated motors and cushioning valve therefor. 2,735,404, 2-21-56, Cl. 121—38.

Koninklijke Vereenigde Tapijtfabrieken N. V.: *See*—
Hellebrekers, Henricus W. J. 2,735,452.

Korber, Kurt & Co. K. G.: *See*—
Rode, Ludwig. 2,735,345.

Kostenko, Fedir. Hydraulic transmission. 2,735,530, 2-21-56, Cl. 192—60.

Kraesky, Michael. Window construction. 2,735,145, 2-21-56, Cl. 20—52.2.

Kramar, Ernst, to International Standard Electric Corp. Radio beacon. 2,736,022, 2-21-56, Cl. 343—106.

Kramcsak, Michael, Jr., to The Bassick Co. Caster glide. 2,735,131, 2-21-56, Cl. 16—42.

Krauss-Maffei Aktiengesellschaft: *See*—
Laubender, Ludwig. 2,735,736.

Kreger, Ralph E., to Detroit Stamping Co. Can opener. 2,735,172, 2-21-56, Cl. 30—10.

Kress, Bernard H., to Allied Chemical & Dye Corp. Silicone-alkyd coating composition. 2,735,825, 2-21-56, Cl. 260—22.

Krieble, Elvin L., to Selas Corp. of America. Gas cleaner. 2,735,508, 2-21-56, Cl. 183—4.3.

Kroger, Marlin G.: *See*—
Kelzer, Eugene O., and Kroger. 2,735,934.

Kroyer, Karl K. K. Apparatus for the continuous conversion of starch. 2,735,792, 2-21-56, Cl. 127—1.

Krstinich, Martin. Apricot splitter. 2,735,466, 2-21-56, Cl. 146—72.

Kuepfer, Matthew C., to Hercules Motors Corp. Compression ignition internal-combustion engine construction. 2,735,412, 2-21-56, Cl. 123—32.

Kuhn, Frank O. Time delay mechanism. 2,735,671, 2-21-56, Cl. 267—1.

Kupferberg, Alfred B., W. C. Mende, N. Millman, and H. O. Singher, to Ortho Pharmaceutical Corp. Acyl amino-nitrothiazole compositions for oral administration in control of trichomonas vaginalis vaginitis. 2,735,798, 2-21-56, Cl. 167—55.

Laben, Edward S., to General Electric Co. Refrigerator shelf construction. 2,735,741, 2-21-56, Cl. 312—351.

Lackey, Clemett H.: *See*—
Ellis, Norman S., and Lackey. 2,735,962.

Lamina Dies and Tools, Inc.: *See*—
Henkel, Ferdinand J. 2,735,233.

Lance, Harold E., to Temprite Products Corp. Carbonating apparatus. 2,735,370, 2-21-56, Cl. 103—118.

Lance, Harold E., to Temprite Products Corp. Carbonator. 2,735,665, 2-21-56, Cl. 261—27.

Landis Tool Co.: *See*—
Balsiger, Harold E. 2,735,237.
Fries, John R., and Balsiger. 2,735,240.

Lange, Harold T., to Sporlan Valve Co, Inc. Liquid-level control devices. 2,735,272, 2-21-56, Cl. 62—8.

Lange, Howard E. Window regulator. 2,735,676, 2-21-56, Cl. 268—104.

Langevin, Robert A., A. D. Brown, Jr., and C. H. O'Donnell, to Clevite Corp. Electrical potential tabulating device. 2,736,006, 2-21-56, Cl. 340—183.

Langlois, Oscar H. Electrically heated mattress and cushion. 2,735,926, 2-21-56, Cl. 219—46.

La Rocque, Joseph E.: *See*—
Armbrust, Roy J., and La Rocque. 2,735,410.

Larson, Charles O. Bracket for folding leg. 2,735,702, 2-21-56, Cl. 287—14.

Larson, Inman L.: *See*—
Larson, Ole T. 2,735,883.

Larson, Ole T., 25% to I. L. Larson. Electric fence post. 2,735,883, 2-21-56, Cl. 174—161.

Larsson, Olof E. Box folding and stapling machines. 2,735,344, 2-21-56, Cl. 93—49.

Lattner, Emert J., and H. H. McLeland, to Century Engineering Corp. Material distributing means. 2,735,587, 2-21-56, Cl. 222—267.

Laubender, Ludwig, to F. A. Krauss-Maffei A. G. Means for preventing the formation of oil carbon deposits on the inner surface of the exhaust port in a two-cycle Diesel engine. 2,735,260, 2-21-56, Cl. 60—29.

Laubender, Ludwig, to Krauss-Maffei Aktiengesellschaft. Apparatus for sealing the space between a piston and floating wrist pin thereof and process for assembling the same. 2,735,736, 2-21-56, Cl. 309—19.

Layne, Leslie A.: *See*—
Munhausen, Theodore W. 2,735,493.

Leard, Jack E.: *See*—
Hicks, William T., Leard, and Pharo. 2,735,629.

Le Clair, Camille C. S., to Tecalemit Ltd. Means for priming the liquid circuit of reciprocating pumps for liquid or oil. 2,735,373, 2-21-56, Cl. 103—153.

Le Compte, George C., and W. C. Ault, to the United States of America as represented by the Secretary of Agriculture. Marking compositions. 2,735,780, 2-21-56, Cl. 106—19.

Lee, James E., and F. Barney, to The Challenge Machinery Co. Printer's quoin. 2,735,650, 2-21-56, Cl. 254—42.

Lee, Sherman H., ¼ to Cepco, and ¾ to Lippincott & Smith. Light control fixture. 2,735,522, 2-21-56, Cl. 189—84.

Lee, Shih-Ying: *See*—
Blackburn, John F., and Lee. 2,735,299.

Leeds and Northrup Co.: *See*—
Polster, Norman E. 2,735,330.

Leffer, Frederick W., to Universal Oil Products Co. Method for contacting sub-divided solid particles with different fluid streams within separate superimposed contacting zones. 2,735,803, 2-21-56, Cl. 196—52.

Legard, Robert H., Jr., and E. R. Meadows, to Celanese Corp. of America. Winding and twisting. 2,735,257, 2-21-56, Cl. 57—93.

Le Gourriérec, René J. J. Automatic switching system applicable to telphony. 2,735,893, 2-21-56, Cl. 179—18.

Lehman, Eugene J., to McGraw Electric Co. Sealing enclosure for tank. 2,735,575, 2-21-56, Cl. 220—46.

Lehman, Robert M. Front feeder shelf merchandizer. 2,735,553, 2-21-56, Cl. 211—49.

Leitz, Ernst, G. m. b. H.: *See*—
Frischmann, Karl. 2,735,337.
Frischmann, Karl. 2,735,519.

Lenkeit, Willy W.: *See*—
Plitz, Erich. 2,735,282.

Leonhardt, Fritz, and W. Baur. Method for prestressing. 2,735,168, 2-21-56, Cl. 29—452.

Levinson, Samuel H. Dispensing guide element for cartons. 2,735,593, 2-21-56, Cl. 222—531.

Lewis, Howard B. Safety hat. 2,735,099, 2-21-56, Cl. 2—3.

Lewis, Lloyd V.: *See*—
Marlowe, Elbert W., and Lewis. 2,736,017.

Lewis, Alexander J. Electromagnetic relays. 2,735,967, 2-21-56, Cl. 317—176.

Leyerle, Arthur R., and H. W. Gillis, to Vitreous Steel Products Co. Tile faced wall. 2,735,523, 2-21-56, Cl. 189—85.

Libbey-Owens-Ford Glass Co.: *See*—
McMaster, Harold A., and Wampler. 2,735,331.

Lieb, Albert, to International Standard Electric Corp. Electron tube. 2,735,955, 2-21-56, Cl. 313—294.

Lifegard Sign Corp.: *See*—
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Lincoln Engineering Co.: *See*—
Klein, Victor G., Schneller, and Mueller. 2,735,683.

Lincoln, Frank H., Jr.: *See*—
Hogg, John A., Beal, and Lincoln. 2,735,856.

Lindsey, Eric S., to Caston Barber Ltd. Means for closing doors. 2,735,675, 2-21-56, Cl. 268—69.

Link-Belt Co.: *See*—
Keller, Henry G. 2,735,537.

Lippincott & Smith: *See*—
Lee, Sherman H. 2,735,522.

Lockwood, Arthur E., to The Steel Products Engineering Co. Filler cap assembly. 2,735,571, 2-21-56, Cl. 220—25.

Loe, Dan. Paint sprayer. 2,735,719, 2-21-56, Cl. 299—86.

Loeffler, Martin O. Stone grooving machine. 2,735,418, 2-21-56, Cl. 125—9.

Loewy Engineering Co., Ltd., The: *See*—
Norman, Eric. 2,735,545.

Löfqvist, Bengt E. R., to Sandvikens Jernverks Aktiebolag. Joint for rock drills. 2,735,704, 2-21-56, Cl. 287—114.

Longee, Nelson C., N. Godzyk, Jr., and Z. D. Fodor, to United States Rubber Co. Self-closing safety mechanism for releasably retaining a rotatable member. 2,735,684, 2-21-56, Cl. 279—1.

Longenecker, Levi S. Furnace doors and seals. 2,735,386, 2-21-56, Cl. 110—176.

Lorenz, Wallace J. Sponge rubber broom. 2,735,129, 2-21-56, Cl. 15—244.

Loria, Anthony, P. W. Vittum, and A. Weissberger, to Eastman Kodak Co. Bihydroquinone antistain agents. 2,735,765, 2-21-56, Cl. 95—6.

Lorig, Edwin T., to United States Steel Corp. Apparatus for automatically centering and aligning moving objects. 2,735,536, 2-21-56, Cl. 198—202.

Lowenheim, Frederick A., and H. B. Forman, to Metal & Thermit Corp. Immersion tinning from stannate solutions. 2,735,788, 2-21-56, Cl. 117—130.

Loyd, Clyde C.: *See*—
Loyd, Joe D. 2,735,501.

Loyd, Joe D., by decree of distribution of ½ to M. H. Loyd and ½ to C. C. Loyd. Tractor rear axle housing assembly support. 2,735,501, 2-21-56, Cl. 108—75.

Loyd, Myrtle H.: *See*—
Loyd, Joe D. 2,735,501.

Luehm, Francis H., and E. B. Smith, to Calresin Corp. Water cooled vacuum and pressure mold. 2,735,138, 2-21-56, Cl. 18—26.

Luers, John M. Grinding machines. 2,735,235, 2-21-56, Cl. 51—100.

Luker, Jackson M.: *See*—
Reifsteck, Francis. 2,735,175.

Lyding, Arthur R., to Heyden Chemical Corp. Process for purifying P-aminobenzoic acid. 2,735,865, 2-21-56, Cl. 260—518.

Lynch, Ridgeway T., to American Enka Corp. Polymerization of monomeric lactams. 2,735,840, 2-21-56, Cl. 260—78.

MacKenzie, Fred T., to United Shoe Machinery Corp. Sole locating and holding apparatus. 2,735,118, 2-21-56, Cl. 12—17.

Macks, Elmer F. Wear Testing device. 2,735,290, 2-21-56, Cl. 73—7.

Madsen, Jens A. W., to Albertson & Co., Inc. Chuck mechanism. 2,735,689, 2-21-56, Cl. 279—74.

Magic Chef, Inc.: *See*—
Brodbeck, Almer H., and Douglas. 2,735,483.

Magna Engineering Corp.: *See*—
Unsworth, Robert K. 2,735,130.

Magnetrol, Inc.: *See*—
Binford, Benjamin L. 2,736,013.

Mahan, John E.: *See*—
Goodhue, Lyle D., and Mahan. 2,735,225.

Mains, John T.: *See*—
Browne, Frances and H. A. 2,735,321.

Mann, Alan N.: *See*—
De Jahn, Fredrik W. 2,735,751.

Mann, Franz J., to Siemens-Planiawerke Aktiengesellschaft für Kohlefabrikate. Metal-impregnated heating rods for electric furnaces and method of making same. 2,735,881, 2-21-56, Cl. 13—25.

Mann, Leonard J., J. M. Murphy, and V. G. Sharpe, to General Motors Corp. Refrigerating apparatus with air baffle. 2,735,274, 2-21-56, Cl. 62—103.

Manning, James W. Jet propelled aircraft. 2,735,633, 2-21-56, Cl. 244—74.

Manning, Maxwell & Moore, Inc.: *See*—
Holdeman, Lloyd H. 2,735,376.

Manning, Thomas O., Sr.: *See*—
Floyd, Leldon O., and Manning. 2,735,909.

Marbill Co.: *See*—
Cremer, Frits. 2,735,108.

Marlowe, Elbert W., to Westinghouse Air Brake Co. Variable character display indicator. 2,736,016, 2-21-56, Cl. 340—316.

Marlowe, Elbert W., and L. V. Lewis, to Westinghouse Air Brake Co. Display indicator and control system. 2,736,017, 2-21-56, Cl. 340—316.

Martin, Glenn L., Co., The: *See*—
Buschers, Herbert H. 2,735,391.
Schutz, Harald, Thomas, and Hanks. 2,735,981.
Thomas, Charles E., Jr. 2,735,985.

Martin, Homer Z.: *See*—
Campbell, Donald L., Martin, and Tyson. 2,735,822.

Martin, William, and E. J. Weller, to General Electric Co. Cold grinding machine. 2,735,249, 2-21-56, Cl. 51—267.

Martin, William O.: *See*—
Klingler, Karl A., and Martin. 2,735,726.

Martindell, Frank, to Teletype Corp. Clutch. 2,735,525, 2-21-56, Cl. 192—27.

Martines, Rene. Female connector member. 2,735,998, 2-21-56, Cl. 339—258.

Maschinenfabrik Augsburg-Nurnberg A. G.: *See*—
Zinner, Karl. 2,735,411.

Massey-Harris-Ferguson Inc.: *See*—
Todd, Everett W. 2,735,347.

Master Lock Co.: *See*—
Soref, Harry E., and Foote. 2,735,165.
Mathiesen, James C., to Norden-Ketay Corp. Balanced gyroscope. 2,735,305, 2–21–56, Cl. 74—5.
Mattox, William J.: *See*—
Buchjann, Fred J., and Mattox. 2,735,862.
Mayer, James R. Convertible table and seat. 2,735,478, 2–21–56, Cl. 155—43.
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Stelger, Leonard W. 2,735,820.
McClendon, Robert W. Lawn edger. 2,735,252, 2–21–56, Cl. 56—25.4.
McClernon, Francis H. Tractor attachment. 2,735,651, 2–21–56, Cl. 254—124.
McCombie, Horace R., and E. L. Wagner, to the United States of America as represented by the United States Atomic Energy Commission. Method of producing uranium tetrachloride. 2,735,746, 2–21–56, Cl. 23—14.5.
McCubbin, Lewis: *See*—
Jordan, Woodrow W., and Spencer. 2,735,190.
McFall, John C., and H. C. Yutzy, to Eastman Kodak Co. Reduction of viscosity of packet photographic emulsions. 2,735,768, 2–21–56, Cl. 95—7.
McFarland, Forest R., to Studebaker-Packard Corp. Anti-rattling planetary gearing. 2,735,310, 2–21–56, Cl. 74—409.
McFarland, Forest R., to Studebaker-Packard Corp. Trapped spring sprag clutch. 2,735,527, 2–21–56, Cl. 192—45.1.
McGill Mfg. Co., Inc.: *See*—
Weight, Charles H. 2,735,930.
McGill Metal Products Co.: *See*—
Cain, Stanley. 2,735,492.
McGraw Electric Co.: *See*—
Frey, Raymond M. 2,735,826.
Lehman, Eugene J. 2,735,575.
Sant, Ralph P. 2,735,911.
McIntire, Robert L.: *See*—
Begley, John W., and McIntire. 2,735,880.
McKay, James G. Folded carton feeding and printing device. 2,735,678, 2–21–56, Cl. 271—10.
McLean, Wallace W. Ventilating apparatus. 2,735,611, 2–21–56, Cl. 230—117.
McLean, Willard D. Supplemental shoe for automobile tires. 2,735,471, 2–21–56, Cl. 152—187.
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Lattner, Emert J., and McLeland. 2,735,587.
McLeod, Thomas S., to International Standard Electric Corp. Electric frequency modulating circuits. 2,735,983, 2–21–56, Cl. 332—22.
McMaster, Harold A., and R. W. Wampler, to Libbey-Owens-Ford Glass Co. Apparatus for optical inspection of glass sheets. 2,735,331, 2–21–56, Cl. 88—14.
McNaney, Joseph T., to General Dynamics Corp. Cathode ray apparatus. 2,735,936, 2–21–56, Cl. 315—24.
Mead, Theodore E., to Lifegard Sign Corp. Seat and leg rest. 2,735,480, 2–21–56, Cl. 155—182.
Meadows, Earl R.: *See*—
Legard, Robert H., Jr., and Meadows. 2,735,257.
Mehl, Rose M.: *See*—
Brumleu, Edward C., and Mehl. 2,735,497.
Melle, Carl H., to International Harvester Co. Sectional crankshaft. 2,735,314, 2–21–56, Cl. 74—598.
Meisler, Sidney S. Pivoted hand tool for compressing clips around flanges. 2,735,322, 2–21–56, Cl. 81—15.
Mende, William C.: *See*—
Kupferberg, Alfred B., Mende, Millman, and Singher. 2,735,798.
Mercer, John F. Combined necktie holder and necktie knot. 2,735,106, 2–21–56, Cl. 2—150.
Merker, Robert L., and W. A. Zisman. Fluid compositions containing an orthosilicate. 2,735,816, 2–21–56, Cl. 252—40.7.
Merrill, Frank W., to General Electric Co. Dynamoelectric machine magnetic core member. 2,735,952, 2–21–56, Cl. 310—156.
Messenger, Desmond, S. Whithard, and G. W. Phelps, to The Track Corp. Ltd. Vehicle track shoe construction. 2,735,729, 2–21–56, Cl. 305—10.
Messenger, Desmond, S. Whithard, and G. W. Phelps, to The Track Corp. Ltd. Vehicle track shoe assembly. 2,735,730, 2–21–56, Cl. 305—10.
Messinger, Lester H., to Remington Arms Co., Inc. Packaging machine. 2,735,598, 2–21–56, Cl. 226—14.
Metal Fabricators & Finishers, Inc.: *See*—
Stephens, David D. 2,735,433.
Metal Hydrides Inc.: *See*—
Gruber, Bernard A., Gordon, and Jermain. 2,735,668.
Metal & Thermit Corp.: *See*—
Lowenheim, Frederick A., and Forman. 2,735,788.
Metcalf, George E., Jr. Casing cutting tool. 2,735,485, 2–21–56, Cl. 164—.8.
Metcalf, J. E.: *See*—
Craddock, Charles L. 2,736,005.
Meunier, Frederick A., to Republic Steel Corp. Tear detecting and indicating means for sheet metal. 2,735,329, 2–21–56, Cl. 88—14.
Meyer, Albert, to Calgon, Inc. Process for the improvement of taste, digestibility, and stability of fish meat. 2,735,777, 2–21–56, Cl. 99—111.
Meyer, Georg, to Siemag Feinmechanische Werke G. m. b. H. Apparatus for controlling keys of business machines. 2,735,532, 2–21–56, Cl. 197—19.
Meyer, Wolfgang E., and R. H. Brand, to The Texas Co. Internal-combustion engines. 2,735,413, 2–21–56, Cl. 123—32.
Michener, Ben C.: *See*—
Fordyce, Charles R., and Michener. 2,735,771.
Micro-Moisture Controls, Inc.: *See*—
Inman, Hollis C. 2,735,907.
Mihalyi, Joseph, to Eastman Kodak Co. Motion-picture camera. 2,735,332, 2–21–56, Cl. 88—16.
Mihalyi, Joseph, to Eastman Kodak Co. Chamber closing member. 2,735,772, 2–21–56, Cl. 95—31.
Miles, Richard D. Noise-making toy device. 2,735,220, 2–21–56, Cl. 46—175.
Milliard, Arnold A. Abrasive disc or gasket cutter mounted for rotation about a spindle. 2,735,486, 2–21–56, Cl. 164—71.
Miller, John H., to Weston Electrical Instrument Corp. Coarse and fine measuring system. 2,736,008, 2–21–56, Cl. 340—184.
Miller, Merton R.: *See*—
Juvinall, James W., and Miller. 2,735,923.
Miller, Olen A.: *See*—
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Miller, Robert G., to The G. M. Diehl Machine Works, Inc. Nail clincher mechanism. 2,735,095, 2–21–56, Cl. 1—15.
Miller, Robert G., to The G. M. Diehl Machine Works, Inc. Nailing machine, hopper, feeder and picker mechanism. 2,735,096, 2–21–56, Cl. 1—16.
Miller, Theadore: *See*—
Vogeley, Clyde E., Jr., and Miller. 2,736,019.
Miller, Theodore A. and T. A., Jr. Mechanical extracting apparatus for stripping flexible hollow articles from reentrant mold cavities. 2,735,137, 2–21–56, Cl. 18—2.
Miller, Theodore A., Jr.: *See*—
Miller, Theodore A. and T. A., Jr. 2,735,137.
Miller, Warren S.: *See*—
Prutton, Carl F., Miller, and Hirdler. 2,735,749.
Millers Falls Co.: *See*—
Shortell, William H. 2,735,228.
Millman, Nathan: *See*—
Kupferberg, Alfred B., Mende, Millman, and Singher. 2,735,798.
Mills, Ivor W., and H. L. Johnson, to Sun Oil Co. Hydrogenation of aromatic compounds with the use of molybdenum disulfide on a spent cracking catalyst. 2,735,877, 2–21–56, Cl. 260—677.
Milster, Arthur N., and R. W. Shartle, to Wagner Electric Corp. Portable device for filling hydraulic brake systems with brake fluid. 2,735,589, 2–21–56, Cl. 222—386.5.
Minneapolis-Honeywell Regulator Co.: *See*—
Bishofberger, Carl J. 2,735,644.
Coffey, Charles D. 2,735,439.
Ross, Wayne M. 2,735,999.
Minsk, Louis M.: *See*—
Allen, Charles F. H., and Minsk. 2,735,841.
Minsk, Louis M., D. D. Reynolds, and J. L. R. Williams, to Eastman Kodak Co. Interpolymer of 2,5-diacetoxystyrene, vinyl hydroquinone monoacetate vinyl hydroquinone, and acrylic acid. 2,735,837, 2–21–56, Cl. 260—47.
Misch, Charles E. Materials dispensing device. 2,735,583, 2–21–56, Cl. 222—129.
Mitchell Camera Corp.: *See*—
Mitchell, George A. 2,735,333.
Mitchell, George A., to Mitchell Camera Corp. Motion picture-television system with intermittent film movement. 2,735,333, 2–21–56, Cl. 88—18.4.
Moffatt, Chester C., to Bohn Aluminum & Brass Corp. Method of producing a multilayer strip. 2,735,170, 2–21–56, Cl. 29—488.
Molins Machine Co. Ltd.: *See*—
Rowlands, Tom, and Dobson. 2,735,732.
Molloy, Everett W., to Beckman Instruments, Inc. Radiation detector. 2,735,947, 2–21–56, Cl. 250—83.6.
Molstedt, Byron V., and J. F. Moser, Jr., to Esso Research and Engineering Co. Method of scouring equipment in a fluid coking process. 2,735,806, 2–21–56, Cl. 202—38.
Monsanto Chemical Co.: *See*—
Beaver, David J., Shumard, and Stoffel. 2,735,872.
Moore, Raymond H.: *See*—
Kauffman, John H., and Moore. 2,735,724.
Mora, Fernando M. Method and retort arrangement for carbonizing sawdust from wood. 2,735,805, 2–21–56, Cl. 202—27.
Morgan, Porter S., to I. L. Hartenberg, trustee. Quick-adjusting wrench. 2,735,326, 2–21–56, Cl. 81—100.
Morin, Louis H. Method of securing separable fastener elements to stringer tapes. 2,735,139, 2–21–56, Cl. 18—59.
Morrill, Harry L., Jr. Ink supply means for fountain pen. 2,735,403, 2–21–56, Cl. 120—42.16.
Morrill, Vaughan, Jr. Process of fabricating glass articles. 2,735,230, 2–21–56, Cl. 49—79.
Morrison, Philip: *See*—
Weinberg, Alvin M., Young, Morrison, and Ohlinger. 2,735,811.
Mortenson, Harold A. Combined teeter-totter and merry-go-round. 2,735,679, 2–21–56, Cl. 272—30.
Morway, Arnold J., to Esso Research and Engineering Co. Preparation of soap-salt complexes utilizing preformed acid salt. 2,735,815, 2–21–56, Cl. 252—39.
Moser, John F., Jr.: *See*—
Molstedt, Byron V., and Moser. 2,735,806.
Moses, Harry C.: *See*—
Raven, Robert S., and Moses. 2,735,971.
Mosler, Arthur R., to The Mosler Safe Co. Device for storing paper money and coins. 2,735,541, 2–21–56, Cl. 206—0.81.
Mosler Safe Co., The: *See*—
Mosler, Arthur R. 2,735,541.
Motorola, Inc.: *See*—
Fyler, George W. 2,735,988.
Schlesinger, Kurt. 2,735,886.
Moulton, Lee A. Reading training device. 2,735,193, 2–21–56, Cl. 35—35.
Moyer, Golden A., to Phillips Petroleum Co. Pulsation dampener for gaseous streams. 2,735,504, 2–21–56, Cl. 181—36.
Mueller, Carl H.: *See*—
Klein, Victor G., Schneller, and Mueller. 2,735,683.

Mueller Co.: *See*—
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Mueller, Frank H. 2,735,116.
Mueller, Frank H., and Tinker. 2,735,444.
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Mueller, Frank H., to Mueller Co. Combined drill and tap. 2,735,116, 2–21–56, Cl. 10—140.
Mueller, Frank H., and F. Tratzik, to Mueller Co. Pipe cleaning tool. 2,735,123, 2–21–56, Cl. 15—104.09.
Mueller, Frank H., and E. E. Tinker, to Mueller Co. Fluid pressure regulator. 2,735,444, 2–21–56, Cl. 137—505.44.
Mueller, Jakob, to Ciba Ltd. Asymmetrical indigoid dyestuffs. 2,735,853, 2–21–56, Cl. 260—332.
Muller, George H., to Ford Motor Co. Hydraulic power steering with valved piston. 2,735,502, 2–21–56, Cl. 180—79.2.
Muller, George H., to Ford Motor Co. Auxiliary suspension bumper. 2,735,673, 2–21–56, Cl. 267—63.
Müller, Rudolf. Offset printing process and mechanism therefor. 2,736,364, 2–21–56, Cl. 101—142.
Multi-Amp Corp.: *See*—
Coben, Melvin S. 2,735,979.
Munhausen, Theodore W., to L. A. Layne. Screen and liner setting, setting tool and wash pipe. 2,735,493, 2–21–56, Cl. 166—144.
Murphy, John M.: *See*—
Mann, Leonard J., Murphy, and Sharpe. 2,735,274.
Murray, Herbert C., and D. H. Peterson, to The Upjohn Co. Steroids. 2,735,800, 2–21–56, Cl. 195—51.
Muse, John F., to Baker Oil Tools, Inc. Apparatus for automatically filling a well bore conduit. 2,735,498, 2–21–56, Cl. 166—225.
Musser, Charles W.: *See*—
Bogue, Edward A., and Musser. 2,735,968.
Myers, George. Flush valve. 2,735,112, 2–21–56, Cl. 4—57.
Myers, John L. Pleat forms for neckties. 2,735,107, 2–21–56, Cl. 2—153.
Nakano, Shinpei, and I. Yosano, to International Standard Electric Corp. System of depth measurement in the acoustic fathometer or the like. 2,736,000, 2–21–56, Cl. 340—3.
Naphtal, Irving: *See*—
Naphtal, Max. 2,735,185.
Naphtal, Max, ½ to I. Naphtal. Protractor. 2,735,185, 2–21–56, Cl. 33—120.
National Cornice Works: *See*—
Ness, William H. C. 2,735,535.
National Machinery Co., The: *See*—
Friedman, John H. 2,735,487.
National Steel Corp.: *See*—
Collins, Tappan. 2,735,520.
Strassburger, Julius H. 2,735,758.
National Tank Co.: *See*—
Glasgow, Clarence O. 2,735,506.
National Union Electric Corp.: *See*—
Shower, Edmund G. 2,735,919.
Navy, United States of America as represented by the Secretary of the: *See*—
Humphrey, Samuel A. 2,735,993.
Raven, Robert S., and Moses. 2,735,971.
Vogeley, Clyde E., Jr., and Miller. 2,736,019.
Nederlandse Centrale Organisatie Voor Toegepast-Natuurwetenschappelijk Onderzoek: *See*—
Van Hoek, Corneilis. 2,735,812.
Neier, Reinhard, C. Petitjean, and W. Wehrli, to Sandoz A. G. Chromium-containing azo dyestuffs. 2,735,844, 2–21–56, Cl. 260—148.
Ness, William H. C., to National Cornice Works. Reinforcement for flights in endless metal conveyors. 2,735,535, 2–21–56, Cl. 198—195.
Neth, Floyd T., to The Ohio State University Research Foundation. Hydrazine recovery process. 2,735,752, 2–21–56, Cl. 23—190.
Neuhauser, Robert G., to Radio Corp. of America. Electron tube amplifier circuit. 2,735,957, 2–21–56, Cl. 315—27.
Newmont Mining Corp.: *See*—
Watt, James R. 2,735,980.
New Products Corp.: *See*—
Banker, Oscar H. 2,735,807.
Nickolay, Edward W. Water heater. 2,735,925, 2–21–56, Cl. 219—43.
Nielsen, Friedrich. Gating system for casting metals. 2,735,147, 2–21–56, Cl. 22—134.
Noble Mfg. Co.: *See*—
Dlugosch, Paul A. 2,735,251.
Nolles, Douglas G., to Saco-Lowell Shops. Clearers. 2,735,142, 2–21–56, Cl. 19—139.
Norby, Harold A., to Hughes Aircraft Co. Multifrequency keyed oscillator circuit. 2,735,940, 2–21–56, Cl. 250—36.
Norden-Ketay Corp.: *See*—
Mathiesen, James C. 2,735,305.
Nordsieck, Arnold T. Mechanical integrating device. 2,735,307, 2–21–56, Cl. 74—194.
Norgren, C. A., Co.: *See*—
Faust, Delbert G. 2,735,512.
Norman, Eric, to The Loewy Engineering Co., Ltd. Means for preventing axial displacement of billet containers in metal extrusion presses. 2,735,545, 2–21–56, Cl. 207—15.
Norman, James E. Fluid flow regulating valve. 2,735,642, 2–21–56, Cl. 251—5.
North American Aviation, Inc.: *See*—
Fosness, John P. 2,735,634.
Freebairn, Darwin L., Jr., Kinsey, and Beutler. 2,735,731.
Hoffman, James D. 2,735,635.
North American Rayon Corp.: *See*—
Carter, Ralph H. 2,735,160.
Northern Indiana Brass Co.: *See*—
Wurzburger, Paul D. 2,735,389.
Ober, Roy, to Robbins & Myers, Inc. Hoist with tilted drum. 2,735,554, 2–21–56, Cl. 212—134.
O'Brien, Lester A.: *See*—
Bland, Thomas W., and O'Brien. 2,735,913.
Bland, Thomas W., and O'Brien. 2,736,012.
Obszarny, Theodore J., to Guardian Electric Mfg. Co. Terminal block for hermetically sealed relay. 2,735,994, 2–21–56, Cl. 339—198.
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Langevin, Robert A., Brown, and O'Donnell. 2,736,006.
Ohio State University Research Foundation, The: *See*—
Neth, Floyd T. 2,735,752.
Ohlinger, Leo A.: *See*—
Weinberg, Alvin M., Young, Morrison, and Ohlinger. 2,735,811.
Ohlson, Russell O.: *See*—
Dana, Homer J., Fogelquist, and Ohlson. 2,736,001.
Oil Equipment Laboratories, Inc.: *See*—
Ayres, John E. 2,735,590.
Olin Mathieson Chemical Corp.: *See*—
Berwick, John D., Jr. 2,735,304.
Butler, Wallace B., and Johnson. 2,735,206.
Prutton, Carl F., Miller, and Hirdler. 2,735,749.
Olsen, Joseph. Clamp with pivoted bench mounting means. 2,735,462, 2–21–56, Cl. 144—304.
Olsen, William. Method of and apparatus for attaching a member to a resilient body. 2,735,167, 2–21–56, Cl. 29—433.
Olson, Gunnar D. Damping means for selecting fingers in crossbar switches or the like. 2,735,896, 2–21–56, Cl. 179—27.54.
Omon, Gene L., and K. E. Hohnl, to J. I. Case Co. Coupling. 2,735,696, 2–21–56, Cl. 284—19.
Orelind, John R.: *See*—
Hubert, Clarence A., and Orelind. 2,735,281.
Oriel, Benjamin J. Construction of improved traffic signal light-time lapse indicator. 2,736,002, 2–21–56, Cl. 340—43.
Orrell, Joseph B., and A. E. Wilshusen, to Drumatick, Inc. Confection machine. 2,735,398, 2–21–56, Cl. 118—28.
Ortho Pharmaceutical Corp.: *See*—
Kupferberg, Alfred B., Mende, Millman, and Singher. 2,735,798.
Ortloff, John E., to Esso Research and Engineering Co. Recharging device for pellet impact drill bits. 2,735,655, 2–21–56, Cl. 255—61.
Osplack, Joseph J., to Vinco Corp. Abrasive wheel dresser. 2,735,419, 2–21–56, Cl. 125—11.
Owen, Webster J., to General Motors Corp. Refrigerating apparatus for automobiles with reheat means. 2,735,657, 2–21–56, Cl. 257—3.
Owens-Illinois Glass Co.: *See*—
Hohl, John, Bjering, and Ringel. 2,735,600.
Wheaton, Jack M., and Pellett. 2,735,565.
Pacific Pumps, Inc.: *See*—
Ecker, Murry F., and Harney. 2,735,701.
Package Machinery Co.: *See*—
Hubmann, Paul. 2,735,614.
Paden, Frederick T., and A. C. H. Weiss, to the United States of America as represented by the Secretary of the Army. Sled with detachable runner. 2,735,690, 2–21–56, Cl. 280—12.
Page Engineering Co.: *See*—
Slonek, Frank G. 2,735,415.
Paige, Richard E. Shipping vessels for television tubes. 2,735,606, 2–21–56, Cl. 229—14.
Parke, Davis & Co.: *See*—
Edgerton, William H., and Hull. 2,735,848.
Parlier, Roger. Key-operated lock. 2,735,287, 2–21–56, Cl. 70—129.
Parson Marine Steam Turbine Co. Ltd., The: *See*—
Cook, Stanley S. 2,735,658.
Parsons, Henry M., to Psychological Research Associates Corp. Finger coot eraser. 2,735,127, 2–21–56, Cl. 15—227.
Pater, Paul G., to Columbia Machinery and Engineering Corp. Press for making multi-ply panels. 2,735,461, 2–21–56, Cl. 144—281.
Patriarca, Domenico. Self-server display cabinet. 2,735,739, 2–21–56, Cl. 312—31.
Patterson, Charles L. Molasses mixer. 2,735,661, 2–21–56, Cl. 259—22.
Peck, David B., and P. Robinson, to Sprague Electric Co. Electrical condensers. 2,735,970, 2–21–56, Cl. 317—258.
Peck, Richard C. High-frequency vacuum tube circuit. 2,735,941, 2–21–56, Cl. 250—36.
Pelcin, Albert L., to The Eastern Malleable Iron Co. Multiple-bolt flush door lock. 2,735,706, 2–21–56, Cl. 292—34.
Pellett, Fred G.: *See*—
Wheaton, Jack M., and Pellett. 2,735,565.
Penn Wax Works, Inc.: *See*—
Ferleger, George. 2,735,285.
Peretti, Leonard G., and J. J. Rath. Power tools. 2,735,908, 2–21–56, Cl. 200—61.92.
Perry, John A. Helicopter rotor structure. 2,735,500, 2–21–56, Cl. 170—160.25.
Peru, Donald E.: *See*—
Emery, Herbert F., and Peru. 2,735,334.
Peterson, Alf A. Variable speed drive and clutch. 2,735,308, 2–21–56, Cl. 74—230.17.
Peterson, Durey H.: *See*—
Murray, Herbert C., and Peterson. 2,735,800.
Peterson, Kenneth E., to Aircraft-Marine Products Inc. Electrical connector. 2,735,997, 2–21–56, Cl. 339—258.
Peterson, William H., to Pullman-Standard Car Mfg. Co. Vehicle floor. 2,735,517, 2–21–56, Cl. 189—34.
Petitjean, Charles: *See*—
Neier, Reinhard, Petitjean, and Wehrli. 2,735,844.
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Hotchkiss, Dean, Deckwa, and Pettigrew. 2,735,157.
Peyrot, Pierre P., and J. Proriol, to Societe des Usines Chimiques Rhone-Poulenc. Waterproofing compositions and their use in coating. 2,735,791, 2–21–56, Cl. 117—161.

Pharo, William G.: *See*—
Hicks, William T., Leard, and Pharo. 2,735,629.
Phelisse, Jean A.: *See*—
Fluchaire, Maurice L. A., and Phelisse. 2,735,827.
Fluchaire, Maurice L. A., and Phelisse. 2,735,842.
Phelps, Glen W.: *See*—
Messenger, Desmond, Whithard, and Phelps. 2,735,729.
Messenger, Desmond, Whithard, and Phelps. 2,735,730.
Phelps, Lewis H., Jr., to The Texas Co. Pipe spacing device. 2,735,448, 2-21-56, Cl. 138—65.
Philbrick, Raymond D. Saw with carrying case handle. 2,735,403, 2-21-56, Cl. 145—31.
Philco Corp.: *See*—
Sunstein, David E. 2,736,021.
Phillips Petroleum Co.: *See*—
Begley, John W., and McIntire. 2,735,880.
Bergman, William E. 2,735,858.
Carney, Samuel C. 2,735,755.
Carpenter, Paul G. 2,735,260.
Evans, Edmond W. 2,735,271.
Fanning, Robert J. 2,735,836.
Goodhue, Lyle D., and Mahan. 2,735,225.
Moyer, Golden A. 2,735,504.
Piety, Raymond G. 2,735,295.
Rice, Robert B., and Elliott. 2,735,503.
Weedman, John A. 2,735,843.
Wicklatz, John E., and Howe. 2,735,832.
Wicklatz, John E., and Howe. 2,735,835.
Wood, James Q. 2,735,828.
Phillips, Thomas D. Quick-setting vise clamp. 2,735,323, 2-21-56, Cl. 81—17.
Pierce, John R., to Bell Telephone Laboratories, Inc. Pulse repeater. 2,735,933, 2-21-56, Cl. 250—15.
Piety, Raymond G., to Phillips Petroleum Co. Apparatus for testing rubber. 2,735,295, 2-21-56, Cl. 73—100.
Pill, Max. Skiving tool. 2,735,180, 2-21-56, Cl. 30—283.
Piltz, Erich, to W. W. Lenkeit. Thread guide for hand-operated knitting machines. 2,735,282, 2-21-56, Cl. 66—60.
Pines, Arthur N., and E. R. York, to Union Carbide and Carbon Corp. Dehydrochlorination of beta-chloropropyl chlorosilanes. 2,735,860, 2-21-56, Cl. 260—448.2.
Pintarelli, Ralph. Heating system. 2,735,622, 2-21-56, Cl. 237—63.
Pipal, Eldon M.: *See*—
Hey, Lester L., and Pipal. 2,735,133.
Pipe-Pac Tobacco Corp.: *See*—
Trow, William. 2,735,543.
Plattner, Sybil E. Infant's overall garment. 2,735,102, 2-21-56, Cl. 2—80.
Plessey Co. Ltd., The: *See*—
Booth, Douglas G., and Baines. 2,735,372.
Pletcher, Clarence B. Tube cleaning. 2,735,122, 2-21-56, Cl. 15—104.3.
Pletcher, Clarence B. Method of cleaning and sterilizing tubular members. 2,735,794, 2-21-56, Cl. 134—24.
Plotkin, Theodore. Paper stapling machine. 2,735,094, 2-21-56, Cl. 1—3.
Podolsky, Boris. Electrolytic acceleration sensing device. 2,735,949, 2-21-56, Cl. 310—2.
Pollock Paper Corp.: *See*—
Bronberg, Edward J. 2,735,365.
Polster, Norman E., to Leeds and Northrop Co. Spectrograph system with motor controlled dispersing element. 2,735,330, 2-21-56, Cl. 88—14.
Ponting, Fred W. Lapidary template and dop-stick. 2,735,240, 2-21-56, Cl. 51—229.
Poole, Randolph G., Jr. Low-frequency oscillator. 2,735,937, 2-21-56, Cl. 250—36.
Porter, Louis S. Ophthalmic devices. 2,735,338, 2-21-56, Cl. 88—52.
Potvin, Raoul, to Joy Mfg. Co. Coal mining apparatus with relatively movable cutter bars. 2,735,667, 2-21-56, Cl. 262—29.
Poupitch, Ougljesa J., to Illinois Tool Works. Lock washer with biting teeth. 2,735,470, 2-21-56, Cl. 151—37.
Powell, Alfred A. Eye exercising device. 2,735,423, 2-21-56, Cl. 128—76.5.
Powell, Dana C. Track structure for track-laying vehicles. 2,735,728, 2-21-56, Cl. 305—10.
Preble, Harry, Jr.: *See*—
Green, Xan B. K., and Preble. 2,735,134.
Green, Xan B. K., and Preble. 2,735,468.
Preeman, Marvin B., to Standard Steel Corp. Apparatus and method for processing asphalt. 2,735,625, 2-21-56, Cl. 241—18.
Preferred Utilities Mfg. Corp.: *See*—
Breed, Bowman K. 2,735,381.
Previti, Alfred E. Bill denomination indicator for cash registers. 2,736,011, 2-21-56, Cl. 340—223.
Prew, Howard A., to Pru-Lesco, Inc. Hinge and rim for a box. 2,735,609, 2-21-56, Cl. 229—44.
Price, Charles C., to The General Tire and Rubber Co. Method of preparing 2-hydroxy-methyl-2-butenonitrile and the dimer of 2-cyanoprene. 2,735,863, 2-21-56, Cl. 260—464.
Proffit, John R. Mop holder having clamping jaws. 2,735,126, 2-21-56, Cl. 15—147.
Progressive Engineering, Inc.: *See*—
Swanson, Kenneth P. 2,735,234.
Propack, Inc.: *See*—
Eaton, Mark S. 2,735,195.
Proriol, Jacques: *See*—
Peyrot, Pierre P., and Proriol. 2,735,791.
Pru-Lesco, Inc.: *See*—
Prew, Howard A. 2,735,609.
Prutton, Carl F., W. S. Miller, and L. C. Hirdler, to Olin Mathieson Chemical Corp. The separate recovery of ammonia and hydrogen chloride from ammonium chloride. 2,735,749, 2-21-56, Cl. 23—154.
Psychological Research Associates Corp.: *See*—
Parsons, Henry M. 2,735,127.
Pullen, Raymond R. Combination salt and pepper shaker. 2,735,584, 2-21-56, Cl. 222—142.1.
Pullman-Standard Car Mfg. Co.: *See*—
Peterson, William H. 2,735,517.
Pulman, William E. R., to C. V. A. Jigs, Moulds & Tools Ltd. Operating mechanism for reciprocating turret slides and indexing the turret thereon in machine tools. 2,735,161, 2-21-56, Cl. 29—44.
Purviance, Nathan M. Building block construction. 2,735,146, 2-21-56, Cl. 20—92.
Quinn, James E., to Streeter-Amet Co. Weight and center of gravity computing apparatus. 2,735,291, 2-21-56, Cl. 73—65.
Radio Corp. of America: *See*—
Canfora, Arthur E. 2,735,889.
Green, Ralph W. 2,735,320.
Greig, Harold G. 2,735,785.
Greig, Harold G., and Young. 2,735,784.
Heath, Alfred E. 2,735,763.
Kelzer, Eugene O., and Kroger. 2,735,934.
Neuhauser, Robert G. 2,735,957.
Sziklai, George C. 2,735,948.
Rafferty, Bertha S. Method of making a disposable scouring pad. 2,735,721, 2-21-56, Cl. 300—21.
Rahn, Henry W., to Columbia-Southern Chemical Corp. Method of reducing the chlorate content of aqueous alkali metal hydroxide which contains chlorate. 2,735,750, 2-21-56, Cl. 23—184.
Ramrath, Joseph M.: *See*—
Taylor, Philip L., and Ramrath. 2,735,914.
Randels, William C.: *See*—
Gilvarry, John J., Gore, Augenstein, and Randels. 2,736,015.
Raspanti, Matthew. Scroll saw blade holding means. 2,735,457, 2-21-56, Cl. 143—73.
Rath, Joseph J.: *See*—
Peretti, Leonard G., and Rath. 2,735,908.
Rattenbury, Kenneth H.: *See*—
Toy, Arthur D. F., and Rattenbury. 2,735,789.
Raven, Robert S., and H. C. Moses, to the United States of America as represented by the Secretary of the Navy. Two speed control circuit. 2,735,971, 2-21-56, Cl. 318—30.
Rawls, Frederick, to Bendix Aviation Corp. Gas discharge tube. 2,735,954, 2-21-56, Cl. 313—216.
Ray, William A., to General Controls Co. Valve structure. 2,735,447, 2-21-56, Cl. 137—630.19.
Ray, William A., and E. W. Rossow, to General Controls Co. Relief valve. 2,735,445, 2-21-56, Cl. 137—620.
Raytheon Mfg. Co.: *See*—
Brown, William C. 2,735,958.
Forsberg, Kenneth E. 2,735,939.
Kather, Erich N. 2,735,959.
Read, Arthur, to Floseal Corp. Pouring spout for containers. 2,735,605, 2-21-56, Cl. 229—7.
Redcay, Aaron K., to Gulf Oil Corp. Purification of unsaturated hydrocarbon gases. 2,735,879, 2-21-56, Cl. 260—677.
Reed, Otis P. Torque increasing means. 2,735,306, 2-21-56, Cl. 74—120.
Reeves, Frederick M. Fishing device. 2,735,213, 2-21-56, Cl. 43—43.13.
Reflectone Corp., The: *See*—
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Simjian, Luther G. 2,735,232.
Regna, Paul G., to Wagner Electric Corp. Valve cage assembly. 2,735,441, 2-21-56, Cl. 137—102.
Reichhelm, Robert, to The Robert Reichhelm Co., Inc. Burners for liquid fuels. 2,735,481, 2-21-56, Cl. 158—5.
Reichhelm, Robert, Co., Inc., The: *See*—
Reichhelm, Robert. 2,735,481.
Reifsteck, Francis, ⅛ to J. W. Kinney, Jr., ⅛ to R. E. Winkelman, and ¼ to J. M. Luker. Tail gate hinge and latch device. 2,735,715, 2-21-56, Cl. 296—51.
Reilly Tar & Chemical Corp.: *See*—
Cislak, Francis E. 2,735,851.
Reiss, Lawrence: *See*—
Galin, Harry, and Reiss. 2,735,580.
Remington Arms Co., Inc.: *See*—
Messinger, Lester H. 2,735,598.
Renholts, Roy J.: *See*—
Grobl, Jon E., and Renholts. 2,735,211.
Reppert, Erwin J., and J. M. Kelly, to General Motors Corp. Throttle return check. 2,735,643, 2-21-56, Cl. 251—54.
Republic Steel Corp.: *See*—
Meunier, Frederick A. 2,735,329.
Research Corp.: *See*—
Dana, Homer J., Fogelquist, and Ohlson. 2,736,001.
Rex, Virginia C.: *See*—
Rex, Walter A. 2,735,743.
Rex, Walter A. 2,735,744.
Rex, Walter A., deceased; V. C. Rex, administratrix, to Esso Research and Engineering Co. Transfer of heat in fluidized solids systems. 2,735,743, 2-21-56, Cl. 23—1.
Rex, Walter A., deceased; V. C. Rex, administratrix, to Esso Research and Engineering Co. Method of and apparatus for controlling regenerator temperatures. 2,735,744, 2-21-56, Cl. 23—1.
Reynolds, Delbert D.: *See*—
Minsk, Louis M., Reynolds, and Williams. 2,735,837.
Reyrolle, A., & Co. Ltd.: *See*—
Ellis, Norman S., and Lackey. 2,735,962.
Rice, Philip K., to Union Carbide and Carbon Corp. Cold accumulator. 2,735,278, 2-21-56, Cl. 62—122.
Rice, Robert B., and S. D. Elliott, to Phillips Petroleum Co. Method of seismic prospecting. 2,735,503, 2-21-56, Cl. 181—.5.
Richter, George A., Jr., to American Viscose Corp. Production of alkali cellulose. 2,735,846, 2-21-56, Cl. 260—233.
Ridgley, Charlotte H.: *See*—
Ridgley, Cornelius J. 2,736,010.

Ridgley, Cornelius J., deceased, by C. H. Ridgley, administratrix, to I-T-E Circuit Breaker Co. Thermal alarm devices. 2,736,010, 2-21-56, Cl. 340—222.
Rigid Ltd.: *See*—
Glaser, Rolf. 2,735,342.
Riley Stoker Corp.: *See*—
Craig, Ollison. 2,735,660.
Ringel, Walter J.: *See*—
Hohl, John, Bjering, and Ringel. 2,735,600.
Ritter, Eugene L., to The Cincinnati Milling Machine Co. Automatic thread stop mechanism. 2,735,327, 2-21-56, Cl. 82—21.
Ritter, F., & Sohn: *See*—
Rattke, Willie. 2,735,360.
Robbins & Meyers, Inc.: *See*—
Ober, Roy. 2,735,554.
Robinette, Marion L., and W. G. Faw, to Eastman Kodak Co. Warper tension device. 2,735,632, 2-21-56, Cl. 242—150.
Robinson, James D. Solution forming and dispensing device. 2,735,718, 2-21-56, Cl. 299—83.
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Rochford, Patrick J., and R. Z. Hague, to Rockwell Mfg. Co. Meter. 2,735,408, 2-21-56, Cl. 121—68.
Rockwell Mfg. Co.: *See*—
Rochford, Patrick J., and Hague. 2,735,408.
Rode, Ludwig, to Kurt Korber & Co. K. G. Methods and apparatus for inserting filter substances in mouthpieces for cigarettes, cigars, and the like. 2,735,345, 2-21-56, Cl. 93—77.
Rogier, Clarence F., to Johnson Fare Box Co. Fare box. 2,735,438, 2-21-56, Cl. 133—5.
Romeyn, Frans C.: *See*—
Haayman, Pieter W.; Bol, Romeyn, and Verwey. 2,735,824.
Rosenkranz, George: *See*—
Djerassi, Carl, and Rosenkranz. 2,735,855.
Ross, Howard M. Basketball goal. 2,735,680, 2-21-56, Cl. 273—1.5.
Ross, Wayne M., to Minneapolis-Honeywell Regulator Co. Echo system for determining nature of sea bottom. 2,735,999, 2-21-56, Cl. 340—3.
Rossow, Everett W.: *See*—
Ray, William A., and Rossow. 2,735,445.
Rough, Frank A., and H. A. Saller, to the United States of America as represented by the United States Atomic Energy Commission. Ternary uranium alloy. 2,735,761, 2-21-56, Cl. 75—134.
Rowlands, Tom, and F. E. Dobson, to Molins Machine Co. Ltd. Adjusting devices for adjustable members such as rollers. 2,735,732, 2-21-56, Cl. 308—60.
Royal McBee Corp.: *See*—
Hooe, Hunter E. 2,735,490.
Ruckstuhl, Hans, O. Senn, and W. Wehrli, to Sandoz A. G. Azo dyestuffs. 2,735,845, 2-21-56, Cl. 260—200.
Rudd, Hilton A., Sr. Multiple wrench with telescoping sections. 2,735,325, 2-21-56, Cl. 81—71.
Ruehl, Harold: *See*—
Boyd, Roy W., Van Vooren, and Ruehl. 2,735,164.
Rupp, Walter: *See*—
Ebel, Friedrich, Rupp, and Keller. 2,735,849.
Rüsch, Gustav O. K.: *See*—
Christiansen, Christian, and Rüsch. 2,735,451.
Russell, Andrew C. Pressure equalizing breaker point assembly. 2,735,905, 2-21-56, Cl. 200—31.
Russell, Glenn M. Shield for pump cradles. 2,735,577, 2-21-56, Cl. 220—55.
Russo, Louis. Dental-floss holder. 2,735,436, 2-21-56, Cl. 132—91.
Rutledge, Robert E. Live bait bag. 2,735,215, 2-21-56, Cl. 43—55.
Sacks, Irving. Electric grills. 2,735,356, 2-21-56, Cl. 99—339.
Saco-Lowell Shops: *See*—
Nolles, Douglas G. 2,735,142.
Tarbox, Philip B. 2,735,141.
Saftlas, Celia. Child's overall garment with bib. 2,735,103, 2-21-56, Cl. 2—80.
Sala Maskinfabriks A. B.: *See*—
Fagerberg, Bengt G. 2,735,550.
Salem Tool Co., The: *See*—
Wilson, James H. 2,735,582.
Saller, Henry A.: *See*—
Rough, Frank A., and Saller. 2,735,761.
Sample-Durick Co., Inc.: *See*—
Hanson, Wallace E. 2,735,638.
Samson, Harold M. Picture tube cushioning means. 2,736,018, 2-21-56, Cl. 340—367.
Samuelson, Cyrus D.: *See*—
Vogt, Kenneth T. 2,735,692.
Samuelson and Johnson: *See*—
Vogt, Kenneth T. 2,735,692.
Samuelson, Norman H.: *See*—
Vogt, Kenneth T. 2,735,692.
Sanders, Wharton S.: *See*—
Killian, George P., Hall, and Sanders. 2,735,154.
Sandoz A. G.: *See*—
Neier, Reinhard, Petitjean, and Wehrli. 2,735,844.
Ruckstuhl, Hans, Senn, and Wehrli. 2,735,845.
Sandvik, Otto, and J. S. Chandler, to Eastman Kodak Co. Automatic loop control mechanism. 2,735,677, 2-21-56, Cl. 271—2.3.
Sandvikens Jernverks Aktiebolag: *See*—
Höglund, Stig P. G., and Kindahl. 2,735,656.
Löfqvist, Bengt E. R. 2,735,704.
Sant, Ralph P., to McGraw Electric Co. Circuit interrupter. 2,735,911, 2-21-56, Cl. 200—117.
Sanymetal Products Co. Inc.: *See*—
Anderson, Thomas F., and Benham 2,735,144.
Saylor, Mackay C. Liquid level indicator. 2,735,302, 2-21-56, Cl. 73—313.
Scarnato, Thomas J.: *See*—
Collins, William F., and Scarnato. 2,735,533.
Schaufelberger, Henry W., to Western Electric Co., Inc. Wire stripping scissors. 2,735,319, 2-21-56, Cl. 81—9.5.
Schjeldahl, Gilmore T., to Herb-Shelly-Inc. Apparatus for welding large sheets of thermoplastic material. 2,735,475, 2-21-56, Cl. 154—42.
Schjeldahl, Gilmore T., to Herb-Shelly-Inc. Method of heat sealing and severing plastic sheets. 2,735,797, 2-21-56, Cl. 154—116.
Schlesinger, Kurt, to Motorola, Inc. Color television system. 2,735,886, 2-21-56, Cl. 178—5.2.
Schmit, Robert R.: *See*—
Shannon, John K., and Schmit. 2,735,148.
Schneider, Karl: *See*—
Burdick, Will S., and Schneider. 2,735,559.
Schneller, Rudy F.: *See*—
Klein, Victor G., Schneller, and Mueller. 2,735,683.
Schopper, Aaron W. Prefabricated wall panels. 2,735,518, 2-21-56, Cl. 189—34.
Schramm, August F., Jr. Air permeable, resin-coated fabric and process of making the same. 2,735,786, 2-21-56, Cl. 117—19.
Schrenk, Hans A., to American Enka Corp. Continuous polymerization of monomeric lactams. 2,735,839, 2-21-56, Cl. 260—78.
Schrock, Daniel A., to Idaho Sprocket and Machine Works. Back-stop mechanism. 2,735,514, 2-21-56, Cl. 188—82.4.
Schuessler, Walter E. Knitted cap structure. 2,735,283, 2-21-56, Cl. 66—171.
Schultze, Harold E., to General Motors Corp. Self-centering shock absorber. 2,735,670, 2-21-56, Cl. 267—1.
Schutt, Arthur J., and C. F. Whitmore, to General Motors Corp. Thermostat for engine cooling systems. 2,735,619, 2-21-56, Cl. 236—34.
Schutz, Harald, C. E. Thomas, Jr., and H. C. Hanks, Jr., to The Glenn L. Martin Co. Microwave interferometer. 2,735,981, 2-21-56, Cl. 324—70.
Schwob, Louis, ½ to Societe Anonyme Dite: "Appareillage V. F. B." High accuracy electric level indicator. 2,735,301, 2-21-56, Cl. 73—304.
Scovill Mfg. Co.: *See*—
Carpinella, Michael J. 2,735,567.
Secon Metals Corp.: *See*—
Gagliano, Francis P. 2,735,810.
Seller, Ernst E., to the United States of America as represented by the Secretary of the Army. Step valve for pressure regulation. 2,735,669, 2-21-56, Cl. 267—1.
Selas Corp. of America: *See*—
Krieble, Elvin L. 2,735,508.
Sengebusch, Hans, to Automatic Electric Laboratories, Inc. Telephone paystation mechanism. 2,735,891, 2-21-56, Cl. 179—6.3.
Senkowski, Alexander: *See*—
Ferguson, Henry G., Senkowski, and Harrow. 2,735,416.
Senn, Otto: *See*—
Ruckstuhl, Hans, Senn, and Wehrli. 2,735,845.
Seward, Paul H., to General Motors Corp. Wheel slip control. 2,735,972, 2-21-56, Cl. 318—52.
Sexton, John R. Display mounting for spools. 2,735,631, 2-21-56, Cl. 242—139.
Seymour Mfg. Co.: *See*—
Hart, Claude W. 2,735,712.
Shannon, John K., and R. R. Schmit. Process for casting storage battery straps and terminals. 2,735,148, 2-21-56, Cl. 22—202.
Sharpe, Verlos G.: *See*—
Mann, Leonard J., Murphy, and Sharpe. 2,735,274.
Shartle, Ralph W.: *See*—
Milster, Arthur N., and Shartle. 2,735,589.
Shaw, Charles S.: *See*—
Franks, Gerald N., and Shaw. 2,735,226.
Shaw, Edwin L., and E. H. Born, to The Denison Engineering Co. Pump compensator. 2,735,374, 2-21-56, Cl. 103—162.
Shaw, Ralph R. Photographic apparatus. 2,735,335, 2-21-56, Cl. 88—24.
Shaw, Richard K., to Borg-Warner Corp. Signal light for a range. 2,735,924, 2-21-56, Cl. 219—37.
Sheffield Corp., The: *See*—
Boppel, Henry L. 2,735,186.
Shell Development Co.: *See*—
Hanse, Richard J. 2,735,303.
Smith, Curtis W. 2,735,871.
Smith, Curtis W., and Holm. 2,735,864.
Wiles, Quentin T., and Elam. 2,735,829.
Shepherd, Mark, Jr., to Texas Instruments Inc. Signal convertor. 2,735,984, 2-21-56, Cl. 332—51.
Sherman, H. B., Mfg. Co.: *See*—
Diget, Lewis K., and Doerr. 2,735,473.
Sherman, Kenneth C., to General Dynamics Corp. Sweep mechanism for bowling alley. 2,735,681, 2-21-56, Cl. 273—54.
Sherwood, Glenn L., ⅛ to H. L. Johnson, and ⅛ to F. J. Thar. Method of producing compression stresses in the edges and substantially reducing the camber of an elongated flexible metal strip. 2,735,474, 2-21-56, Cl. 153—32.
Shields, Donald J., J. W. Thompson, and M B Knowles, to Eastman Kodak Co. Amino nitriles as metal complexing agents in cracked gasoline. 2,735,218, 2-21-56, Cl. 44—72.
Shigley, Claire M.: *See*—
Brooks, William B., and Shigley. 2,735,163.
Shimabukuro, Leona S., ½ to H. Y. W. Kim. Baby stroller protector. 2,735,716, 2-21-56, Cl. 296—78.
Shireman, William D. Traction attachment for vehicle wheels. 2,735,723, 2-21-56, Cl. 301—44.

Shnitzler, Meyer J., to The Gillette Co. Container for safety razor and blades. 2,735,542, 2–21–56, Cl. 206—16.

Shnitzler, Meyer J., and R. L. Sinclair, to The Gillette Co. Display rack. 2,735,552, 2–21–56, Cl. 211—49.

Shortell, William H., to Millers Falls Co. Glass cutting tool. 2,735,228, 2–21–56, Cl. 49—52.

Shower, Edmund G., to National Union Electric Corp. Photo-transistor and method of manufacture. 2,735,919, 2–21–56, Cl. 201—63.

Shumard, Roland S.: *See*—
Beaver, David J., Shumard, and Stoffel. 2,735,872.

Siemag Feinmechanische Werke G. m. b. H.: *See*—
Meyer, Georg. 2,735,532.

Siemens & Halske, Aktiengesellschaft: *See*—
Darr, Christian. 2,735,918.
Wüsteney, Herbert. 2,735,890.

Siemens-Planiawerke Aktiengesellschaft für Kohlefabrikate: *See*—
Mann, Franz J. 2,735,881.

Simjian, Luther G., to The Reflectone Corp. Sharpening or polishing device. 2,735,231, 2–21–56, Cl. 51—7.

Simjian, Luther G., to The Reflectone Corp. Polishing device. 2,735,232, 2–21–56, Cl. 51—7.

Simpson, James H., to Joy Mfg. Co. Magnet controlled connectors. 2,735,991, 2–21–56, Cl. 339—86.

Sinclair, Robert L.: *See*—
Shnitzler, Meyer J., and Sinclair. 2,735,552.

Singer Mfg. Co., The: *See*—
Fuge, Hary B. 2,735,524.

Singher, Heron O.: *See*—
Kupferberg, Alfred B., Mende, Millman, and Singher. 2,735,798.

Slonczewski, Thaddeus, to Bell Telep. one Laboratories, Inc. Measurement of transmission level of lines. 2,735,904, 2–21–56, Cl. 179—175.3.

Slonek, Frank G., to Page Engineering Co. Cooling system for diesel engine. 2,735,415, 2–21–56, Cl. 123—41.44.

Small, Charles J. P.: *See*—
Coates, Colin, Gray, and Small. 2,735,901.

Smedley, Claude C.: *See*—
Smedley, Wiley R. and C. C. 2,735,596.

Smedley, Wiley R. and C. C. Device for holding a fishing pole. 2,735,596, 2–21–56, Cl. 224—5.

Smethurst, Harold A. Emergency lamp. 2,735,928, 2–21–56, Cl. 240—37.1.

Smidth, F. L., & Co.: *See*—
Galle, Hans E. 2,735,725.

Smith, Brook I.: *See*—
Boston, Edward D., and Smith. 2,735,804.

Smith, Curtis W., and R. T. Holm, to Shell Development Co. Preparation of 2,3,4-trihydroxyalkanenitriles. 2,735,864, 2–21–56, Cl. 260—465.6.

Smith, Curtis W., to Shell Development Co. Treatment of aralkyl hydroperoxides. 2,735,871, 2–21–56, Cl. 260—610.

Smith, Edwin B.: *See*—
Luehm, Francis H., and Smith. 2,735,138.

Smith, Ira D., J. J. Takacs, and R. F. Warner, to The Cleveland Pneumatic Tool Co. Shock absorbing strut. 2,735,674, 2–21–56, Cl. 267—64.

Snyder, Lester R., to Farnsworth Research Corp. Mounting device for vacuum tubes. 2,735,636, 2–21–56, Cl. 248—27.

Snyder, Phillip T. Automatic electrically controlled conveyor. 2,735,539, 2–21–56, Cl. 198—209.

Soans, Cyril A. Toilet paper cabinet. 2,735,740, 2–21–56, Cl. 312—234.

Societe Anonyme Dite: "Appareillage V. F. B.": *See*—
Schwob, Louis. 2,735,301.

Societe des Usines Chimiques Rhone Poulenc: *See*—
Fluchaire, Maurice L. A., and Phelisse. 2,735,827.
Fluchaire, Maurice L. A., and Phelisse. 2,735,842.
Peyrot, Pierre P., and Proriol. 2,735,791.

Societe "Rhodiaceta": *See*—
Fraizy, Jean. 2,735,781.

Socony Mobil Oil Co., Inc.: *See*—
Francis, Alfred W. 2,735,878.
Gutzeit, Carlos L. 2,735,801.
Traver, Alfred E. 2,735,296.

Soref, Harry E., and D. J. Foote, to Master Lock Co. Method of assembling lock tumbler pins or the like. 2,735,165, 2–21–56, Cl. 29—407.

Spannuth, Hiram T.: *See*—
Edgar, Albert C., and Spannuth. 2,735,354.

Spencer, Phillip W.: *See*—
Jordan, Woodrow W., and Spencer. 2,735,190.

Sperry, Pierce. Water powered washing machine. 2,735,286, 2–21–56, Cl. 68—151.

Sperry Rand Corp.: *See*—
Carter, Leslie F. 2,735,191.
Kenyon, David E. 2,736,007.
Tarbox, John P. 2,735,359.
West, James R., and Stackhouse. 2,735,248.
West, James R. 2,735,256.
West, James R. 2,735,469.

Spivey, Sylvia E. Attachment for flour sifter. 2,735,531, 2–21–56, Cl. 193—2.

Sporlan Valve Co. Inc.: *See*—
Lange, Harold T. 2,735,272.

Sprague Electric Co.: *See*—
Peck, David B., and Robinson. 2,735,970.

Spring Cover Mfg. Co., Inc.: *See*—
Bradley, Stephen D. 2,735,672.

Springs Cotton Mills, The: *See*—
Bumgardner, Clifton Y. 2,735,648.

Sprink, Robert H., to Toledo Die & Mfg. Co. Product disposal for machine tools. 2,735,317, 2–21–56, Cl. 78—96.

Stackhouse, James L.: *See*—
West, James R., and Stackhouse. 2,735,248.

Stamicarbon N. V.: *See*—
Goedkoop, Martinus L. 2,735,819.
Goris, Johan R. H. 2,735,873.

Standard Oil Co.: *See*—
Dravnieks, Andrew. 2,735,754.

Standard Railway Equipment Mfg. Co.: *See*—
Swann, James S. 2,735,555.
Thompson, Alfred L. 2,735,709.

Standard Steel Corp.: *See*—
Freeman, Marvin B. 2,735,625.

Stanger, Frank N. Measuring and dispensing device for bottles and containers. 2,735,592, 2–21–56, Cl. 222—449.

Stanton, Edward W. Chisel for removing putty. 2,735,179, 2–21–56, Cl. 30—168.

Stanton, George W., and F. A. Ehlers, to The Dow Chemical Co. Acrylonitrile polymers stabilized with certain carbamates and thionocarbamates. 2,735,833, 2–21–56, Cl. 260—45.9.

Stanton, George W., and F. A. Ehlers, to The Dow Chemical Co. Acrylonitrile polymers stabilized with certain beta-alkylaminopropionitriles. 2,735,834, 2–21–56, Cl. 260—45.9.

State of Oregon, acting by and through the State Board of Forestry, The: *See*—
Atherton, George H. 2,735,266.

Stauder, Emanuel, to Huther Brothers Saw Mfg. Co. Circular saw blade for cutting wood which contains nails. 2,735,459, 2–21–56, Cl. 143—133.

Stebbins, James H. Mouse trap. 2,735,216, 2–21–56, Cl. 43—83.5.

Steel Products Engineering Co., The: *See*—
Getz, Delmond L. 2,735,572.
Lockwood, Arthur E. 2,735,571.

Stelger, Leonard W., to Maywood Chemical Works. Calcium-lithium hydride and process of making it. 2,735,820, 2–21–56, Cl. 252—182.

Stelzer, William. Booster brake mechanism. 2,735,268, 2–21–56, Cl. 60—54.6.

Stenseng, Gilbert. Bait holding fish lures. 2,735,214, 2–21–56, Cl. 43—44.4.

Stephens, David D., to Metal Fabricators & Finishers, Inc. Binder for magazines and the like. 2,735,433, 2–21–56, Cl. 129—38.

Stephens, William E.: *See*—
Zogg, Alvin A., and Stephens. 2,735,198.

Stiles, Le Conie. Art of sheeting dough. 2,735,379, 2–21–56, Cl. 107—12.

Stockton, Raymond F. Basket. 2,735,570, 2–21–56, Cl. 220—19.

Stoffel, Paul J.: *See*—
Beaver, David J., Shumard, and Stoffel. 2,735,872.

Stone, Albert L., to Esso Research and Engineering Co. Apparatus for handling pipe in a derrick. 2,735,556, 2–21–56, Cl. 214—2.5.

Strassburger, Julius H., to National Steel Corp. Method of treating iron bearing material in metallurgical furnaces. 2,735,758, 2–21–56, Cl. 75—41.

Stratford, William M., C. F. Teichmann, and G. Herzog, to The Texas Co. Prospecting. 2,735,946, 2–21–56, Cl. 250—83.6.

Streeter-Amet Co.: *See*—
Quinn, James E. 2,735,291.

Structural Clay Products Research Foundation: *See*—
Taylor, Robert B. 2,735,183.

Struemph, John F. Timber rake attachment. 2,735,197, 2–21–56, Cl. 37—2.

Stubbs, Sherman C. Automatic feed poultry battery. 2,735,400, 2–21–56, Cl. 119—18.

Studebaker-Packard Corp.: *See*—
Kauffman, John H., and Moore. 2,735,724.
McFarland, Forest R. 2,735,310.
McFarland, Forest R. 2,735,527.
Teed, Floyd J. 2,735,708.
Zenker, Richard L. 2,735,315.

Sullivan, John J. Hypodermic syringe. 2,735,427, 2–21–56, Cl. 128—218.

Sun Oil Co.: *See*—
Mills, Ivor W., and Johnson. 2,735,877.

Sunstrand Machine Tool Co.: *See*—
Hilgers, Robert W. 2,735,241.

Sunnen, Joseph. Hole gage. 2,735,188, 2–21–56, Cl. 33—178.

Sutstein, David E., to Philco Corp. Signal integrating system. 2,736,021, 2–21–56, Cl. 343—17.2.

Svit, Narodni Podnik: *See*—
Zelinka, Josef. 2,735,120.

Swallert, Sven A. Pneumatic spike extractor. 2,735,649, 2–21–56, Cl. 254—18.

Swann, James S., to Standard Railway Equipment Mfg. Co. Coupler operating rod bracket. 2,735,555, 2–21–56, Cl. 213—171.

Swanson, Francis J. Vaccinating gun. 2,735,431, 2–21–56, Cl. 128—224.

Swanson, Kenneth P., to Progressive Engineering, Inc. Buffing attachment for drawing rolls. 2,735,234, 2–21–56, Cl. 51—95.

Sweet, Robert E. Basketball game. 2,735,682, 2–21–56, Cl. 273—85.

Sweet, Roger G.: *See*—
Flook, Edward R., and Sweet. 2,735,745.

Swinton, Everard A.: *See*—
Weiss, Donald E., and Swinton. 2,735,795.

Sylvan, Joseph. Sash latching mechanism. 2,735,707, 2–21–56, Cl. 292—57.

Sylvania Electric Products Inc.: *See*—
Walner, Eugene. 2,735,748.

Sziklai, George C., to Radio Corp. of America. Multielement semiconductor devices. 2,735,948, 2–21–56, Cl. 307—88.5.

Tacchella, Adolph. Liquid cooling system for internal-combustion engines. 2,735,414, 2–21–56, Cl. 123—41.23.

Takacs, Julius J.: *See*—
Smith, Ira D., Takacs, and Warner. 2,735,674.

Tallman, John R. Aluminum cable cutter. 2,735,175, 2–21–56, Cl. 30—91.

Tamblyn, John W.: *See*—
De Croes, George C., and Tamblyn. 2,735,782.

Tamblyn, John W., and G. M. Armstrong, to Eastman Kodak Co. Cellulose organic ester molded objects containing phototropic dyes. 2,735,783, 2–21–56, Cl. 106—193.

Tappan Stove Co. The: *See*—
Hoff, John M. 2,735,484.

Tarbox, John P., to Sperry Rand Corp. Bale side wire tier mechanism. 2,735,359, 2–21–56, Cl. 100—23.

Tarbox, Philip B., to Saco-Lowell Shops. Condenser supports. 2,735,141, 2–21–56, Cl. 19—131.

Taylor, Don A. Individually packaged frozen confection. 2,735,778, 2–21–56, Cl. 99—180.

Taylor, Joseph H. Plow construction. 2,735,348, 2–21–56, Cl. 97—47.1.

Taylor, Philip L., and J. M. Ramrath, to Allis-Chalmers Mfg. Co. Circuit breaker contact actuating mechanism with separable connection to oil pump. 2,735,914, 2–21–56, Cl. 200—150.

Taylor, Robert B., to Structural Clay Products Research Foundation. Aligning guide for masons. 2,735,183, 2–21–56, Cl. 33—86.

Tecalemit Ltd.: *See*—
Le Clair, Camille C. S. 2,735,373.

Teed, Floyd J., to Studebaker-Packard Corp. Door lock. 2,735,708, 2–21–56, Cl. 292—182.

Teichmann, Charles F.: *See*—
Stratford, William M., Teichmann, and Herzog. 2,735,946.

Teletype Corp.: *See*—
Gemmel, Wilbur R. 2,735,526.
Goetz, Maurus T. 2,735,887.
Keyes, George G. 2,735,885.
Martindell, Frank. 2,735,525.
Zenner, Walter J. 2,735,888.

Temple, Tommy: *See*—
Erhardt, Louis, and Temple. 2,735,929.

Temprite Products Corp.: *See*—
Lance, Harold E. 2,735,370.
Lance, Harold E. 2,735,665.

Tew, Gilbert W., to Deering Milliken Research Corp. Change gear support for spinning frames and the like. 2,735,309, 2–21–56, Cl. 74—325.

Texas Co., The: *See*—
Beck, Roland A. 2,735,624.
Eastman, du Bois. 2,735,265.
Eastman, du Bois, and Gaucher. 2,735,787.
Grahame, James H. 2,735,449.
Hess, Howard V., and Arnold. 2,735,874.
Hess, Howard V., and Carter. 2,735,876.
Meyer, Wolfgang E., and Brand. 2,735,413.
Phelps, Lewis H., Jr. 2,735,448.
Stratford, William M., Teichmann, and Herzog. 2,735,946.
Tirico, Arthur L. 2,735,953.

Texas Instruments Inc.: *See*—
Shepherd, Mark, Jr. 2,735,984.

Textrom, Ralph, and J. W. Daniels, to Hoffman Electronics Corp. Antenna for compact radio equipment. 2,735,932, 2–21–56, Cl. 250—14.

Thar, Ferdinand J.: *See*—
Sherwood, Glenn L. 2,735,474.

Thomas, Charles E., Jr.: *See*—
Schutz, Harald, Thomas, and Hanks. 2,735,981.

Thomas, Charles E., Jr., to The Glenn L. Martin Co. Waveguide junction. 2,735,985, 2–21–56, Cl. 333—8.

Thomas, Herr E.: *See*—
Aurin, Bruno, and Dehne. 2,735,409.

Thompson, Alfred L., to Standard Railway Equipment Mfg. Co. Hatch cover lock. 2,735,709, 2–21–56, Cl. 292—241.

Thompson, Emery, Jr., to Emery Thompson Machine & Supply Co. Process and apparatus for continuously freezing confections. 2,735,276, 2–21–56, Cl. 62—114.

Thompson, Emery, Machine & Supply Co.: *See*—
Thompson, Emery, Jr. 2,735,276.

Thompson, John W.: *See*—
Shields, Donald J., Thompson, and Knowles. 2,735,218.

Thurman, Amos L. Bottle case filling machine. 2,735,599, 2–21–56, Cl. 226—14.

Timber Engineering Co.: *See*—
Farber, Eduard. 2,735,756.

Tinker, Earl E.: *See*—
Mueller, Frank H., and Tinker. 2,735,444.

Tirico, Arthur L., to The Texas Co. Radiation detector. 2,735,953, 2–21–56, Cl. 313—93.

Todd, Everett W., to Massey-Harris-Ferguson Inc. Lift shaft for tractors. 2,735,347, 2–21–56, Cl. 97—46.43.

Tolbert, William P., to Anthes Force Oiler Co. Signaling device. 2,735,637, 2–21–56, Cl. 248—33.

Toledo Die & Mfg. Co.: *See*—
Sprink, Robert H. 2,735,317.

Toledo Plate and Window Glass Co., The: *See*—
Heffley, Howard H. 2,735,238.

Toledo Scale Co.: *See*—
Williams, Lawrence S. 2,735,362.

Townsend, George B., to Hazeltine Research, Inc. Potential wave-generating systems. 2,735,938, 2–21–56, Cl. 250—36.

Townshend, Henry H., to J. T. Henry Mfg. Co., Inc. Grinding device for knives and the like. 2,735,236, 2–21–56, Cl. 51—102.

Toy, Arthur D. F., and K. H. Rattenbury, to Victor Chemical Works. Brominated phosphonate polymers and methods of flameproofing therewith. 2,735,789, 2–21–56, Cl. 117—137.

Trachsler, Fred A. Lock guard. 2,735,711, 2–21–56, Cl. 292—346.

Track Corp. Ltd., The: *See*—
Messenger, Desmond, Whithard, and Phelps. 2,735,729.
Messenger, Desmond, Whithard, and Phelps. 2,735,730.

Trammell, Earl M., Jr. Lock. 2,735,288, 2–21–56, Cl. 70—135.

Trammell, Earl M., Jr. Plunger-guard assemblies for automobile doors. 2,735,289, 2–21–56, Cl. 70—181.

Tratzik, Frederick: *See*—
Mueller, Frank H., and Tratzik. 2,735,123.

Traub, Emil. Tie barrettes. 2,735,105, 2–21–56, Cl. 2—150.

Traver, Alfred E., to Socony Mobil Oil Co., Inc. Spark advance indicator. 2,735,296, 2–21–56, Cl. 73—116.

Tre Brothers Mfg. Co.: *See*—
Treleven, Howard E. 2,735,597.

Treleven, Howard E., to Tre Brothers Mfg. Co. Spectacle holder for attachment to a panel surface in an automobile. 2,735,597, 2–21–56, Cl. 224—29.

Trojan Powder Co.: *See*—
Bronstein, Jesse B., Jr., and Wells. 2,735,775.

Trost, Conrad M. Jet grinding mill. 2,735,626, 2–21–56, Cl. 241—39.

Trow, William, to Pipe-Pac Tobacco Corp. Smoking pipe tobacco cartridge packages. 2,735,543, 2–21–56, Cl. 206—48.5.

True Form Corset Co., Inc.: *See*—
Barg, Herbert. 2,735,101.

Tuck, Robert M., to General Motors Corp. Fluid torque converter construction. 2,735,267, 2–2–56, Cl. 60—54.

Turner, William J. Auto bed for infant. 2,735,113, 2–21–56, Cl. 5—94.

Turvey, William E., to Universal Oil Products Co. Bellows pump. 2,735,369, 2–21–56, Cl. 103—44.

Tuttle, Malcolm H., to Hydrocarbon Research, Inc. Burners for the production of synthesis gas. 2,735,482, 2–21–56, Cl. 158—118.

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Van Fowler, Jess. Quick-release knockout punch. 2,735,489, 2–21–56, Cl. 164—101.

Van Hoek, Cornelis, to Nederlandse Centrale Organisatie Voor Toegepast-Natuurwetenschappelijk Onderzoek. Electrodialyzing apparatus with supported membranes. 2,735,812, 2–21–56, Cl. 204—301.

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Wagner, George P., to The Engineering Development Co., Inc. Oil well drilling turbine screen assembly. 2,735,646, 2–21–56, Cl. 253—32.

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Webster, William M., Jr., to the United States of America as represented by the Secretary of the Army. Inverter circuit. 2,735,977, 2–21–56, Cl. 321—36.

Weedman, John A., to Phillips Petroleum Co. Fractionation process. 2,735,843, 2–21–56, Cl. 260—96.5.

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Weinberg, Alvin M., G. J. Young, P. Morrison, and L. A. Ohlinger, to the United States of America as represented by the United States Atomic Energy Commission. Reactor control. 2,735,811, 2–21–56, Cl. 204—193.

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West, Frederick J. and E., to West's Gas Improvement Co. Ltd. Coke extractor for vertical retort. 2,735,557, 2–21–56, Cl. 214—35.

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West, James R., to Sperry Rand Corp. Reel type chopping mechanism. 2,735,469, 2–21–56, Cl. 146—117.

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Messenger, Desmond, Whithard, and Phelps. 2,735,730.

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Wicklatz, John E., and J. F. Howe, to Phillips Petroleum Co. Stable unsaturated organic-sulfur dioxide resins containing an ester of tetrathiophosphoric and trithiophosphorous acid and method of preparing the same. 2,735,832, 2–21–56, Cl. 260—45.7.

Wicklatz, John E., and J. F. Howe, to Phillips Petroleum Co. Stable unsaturated organic-sulfur dioxide resins containing a salt of an ester of dithiophosphoric and method of preparing the same. 2,735,835, 2–21–56, Cl. 260—45.75.

Wiles, Quentin T., and D. W. Elam, to Shell Development Co. Compositions containing a mixture of glycidyl polyethers of dihydric phenols. 2,735,829, 2–21–56, Cl. 260—42.

Wilkening, Walter O., to The Aro Equipment Corp. Anti-negative G valve mechanism. 2,735,425, 2–21–56, Cl. 128—142.

Wilkins, Margaret R. Key structure for tear strip containers. 2,735,576, 2–21–56, Cl. 220—52.

Willemain, Fernand H., to American Writing Paper Corp. Combined slice and adjustable deckle mechanism for Fourdrinier machine. 2,735,343, 2–21–56, Cl. 93—44.

Williams, Charles E., to General Electric Co. Variable inductance. 2,735,989, 2–21–56, Cl. 336—155.

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Williams, La Vergne H. Recorder and method for recording elapsed time. 2,736,023, 2–21–56, Cl. 346—82.

Williams, Lawrence S., to Toledo Scale Co. Roller printer. 2,735,362, 2–21–56, Cl. 101—93.

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Williams, Si J., Jr., to International Harvester Co. Refrigerator evaporator. 2,735,279, 2–21–56, Cl. 62—126.

Williams, Si J., Jr., to International Harvester Co. Refrigerator evaporator. 2,735,280, 2–21–56, Cl. 62—126.

Williams, Theo W., to the United States of America as represented by the Secretary of the Army. Neutralization of cavity type high frequency amplifier. 2,735,903, 2–21–56, Cl. 179—171.

Williams, William H. Floating roof for a hydrocarbon storage tank. 2,735,574, 2–21–56, Cl. 220—26.

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Wilson, James H., to The Salem Tool Co. Apparatus for distributing comminuted material. 2,735,582, 2–21–56, Cl. 222—43.

Wilson, Nathan B. Device for finishing floors. 2,735,124, 2–21–56, Cl. 15—131.

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Wohlrab, Hans-Christoph, and W. Jahn, to Klangfilm Gesellschaft mit beschränkter Haftung. Magnetic tape recorder. 2,735,900, 2–21–56, Cl. 179—100.2.

Wood, James Q., to Phillips Petroleum Co. Recovery of carbon black. 2,735,828, 2–21–56, Cl. 260—41.5.

Woodruff, Almon C. Beverage vending machine. 2,735,578, 2–21–56, Cl. 221—11.

Wright, Byron T., and W. R. Baker, to the United States of America as represented by the United States Atomic Energy Commission. Automatic vapor control. 2,735,943, 2–21–56, Cl. 250—41.9.

Wright, Kenneth A. Hinge for well scratcher. 2,735,494, 2–21–56, Cl. 166—173.

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Zapf, Heinz G. G., to Husqvarna Vapenfabrika Aktiebolag. Manufacture of iron powder. 2,735,757, 2–21–56, Cl. 75—.5.

Zelinka, Josef, to Svit, narodni podnik. Machine for manufacture of shoe soles. 2,735,120, 2–21–56, Cl. 12—85.2.

Zenker, Richard L., to Studebaker-Packard Corp. Differential pedestals having longitudinally adjustable antispread member. 2,735,315, 2–21–56, Cl. 74—607.

Zenner, Walter J., to Teletype Corp. Tape feeding device. 2,735,888, 2–21–56, Cl. 178—17.

Zerlin, Hans, ½ to Jagenberg-Werke Akt.-Ges. Fiber container end structure. 2,735,604, 2–21–56, Cl. 229—5.5.

Ziebolz, Herbert, to Askania Regulator Co. Laminating web guide. 2,735,630, 2–21–56, Cl. 242—76.

Zinner, Karl, to Maschinenfabrik Augsburg-Nurnberg A. G. Method of operating supercharged four-stroke internal-combustion engines. 2,735,411, 2–21–56, Cl. 123—1.

Zisman, William A.: *See*—
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Zogg, Alvin A., and W. E. Stephens. Tractor actuated grubbing implement for small trees and the like. 2,735,198, 2–21–56, Cl. 37—2.

CLASSIFICATION OF PATENTS

ISSUED FEBRUARY 21, 1956

NOTE.—First number = class, second number = subclass, third number = patent number

1— 3: 2,735,094
15: 2,735,095
16: 2,735,096
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TRADEMARKS

NOTICES

Service by Publication

Oregon-Washington Pear Bureau, its assigns or legal representatives, take notice:

A petition having been filed in this Office, No. 6613, by Oregon-Washington-California Pear Bureau to effect the cancelation of trademark registration of Oregon-Washington Pear Bureau, No. 609 Ranke Bldg., 418 Pike Street, Seattle, Washington, No. 347,900, dated July 13, 1937, and this Office having been unable to obtain service of a notice of default upon said registrant, notice is hereby given that unless said Oregon-Washington Pear Bureau, its assigns or legal representatives, shall enter an appearance within thirty days from the date of this publication, the cancelation will be proceeded with as in the case of default.

DAPHNE LEEDS,
Assistant Commissioner of Patents.

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 341,330, TM 553,794 ("Ballantine's," etc. and design), **TM 508,704** (Ballantine's), George Ballantine & Son, Limited, Whisky, **filed** Jan. 24, 1956, D. C., E. D. Mo. (St. Louis). Doc. 10591(2), *George Ballantine & Son, Limited* v. *Peoples Liquor, Inc., et al.* Same, **filed** Jan. 27, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16213, *George Ballantine & Son, Ltd.* v. *Silver Hill Products, Inc.*

TM 379,634 (a trademark design), International Latex Corp., Girdles, **filed** Aug. 7, 1953, D. C., S. D. N. Y., Doc. 87/111, *International Latex Corp.* v. *Flexees, Inc., et al.* Consent judgment: defendants enjoined Jan. 27, 1956.

TM 399,421 (Hycodan), Endo Products, Inc., Narcotic preparation used as an analgesic and antitussive, **filed** Mar. 29, 1954, D. C., S. D. N. Y., Doc. 92/121, *Endo Products Inc.* v. *American Druggist Syndicate, Inc.* Stipulation and order of discontinuance Jan. 30, 1956.

TM 508,704. (See TM 341,330.)

TM 553,794. (See TM 341,330.)

CONDITION OF TRADEMARK APPLICATIONS AS OF JANUARY 27, 1956

Total number of applications awaiting action (excluding renewals and republications) ---------- 8,216
Date of oldest new application ---------- June 27, 1955
Date of oldest amended application ---------- Oct. 3, 1955

MERCHANT, JOHN, Executive Examiner

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application: New	Oldest Application: Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	9-1-55	10-14-55
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	6-27-55	10-3-55
III. WENDT C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	7-12-55	10-24-55
Renewals (All Classes)	12-7-55	------
Sec. 12 (c) Publications (All Classes)	12-7-55	------

Applications Filed During Week Ending January 27, 1956—474

Registrations Issued ---------- 460—No. 621,488 to No. 621,947
Renewals Issued ---------- 36

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.

As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 2

SN 660,921. Continental Can Company, Inc., New York, N. Y. Filed Feb. 11, 1954.

Upak

Applicant claims ownership of Reg. No. 415,251.
For Packing Drums of Fiber or Fiber With Metallic Ends.
Use since November 1946.

SN 665,264. Atlas Plywood Corporation, Boston, Mass. Filed Apr. 27, 1954.

ATLAS
PLY-8-CRATE

Applicant claims ownership of Reg. No. 209,886.
For Plywood Packing Cases.
Use since Nov. 25, 1953.

SN 669,068. Wirecraft Manufacturing Co., St. Louis, Mo. Filed June 28, 1954.

KNEAD-POT

For Flexible Flower Pot Containers for Plants.
Use since May 7, 1954.

SN 680,349. Melvin L. Armstrong, d. b. a. Dura-Lite Plastics Company, Kent, Wash. Filed Jan. 24, 1955.

Glasket

For Mortuary Products—Namely, Caskets of Construction Including Glass Fibers.
Use since Oct. 11, 1954.

SN 684,102. Carol Beatty Co., Los Angeles, Calif. Filed Mar. 24, 1955.

JONNY PLANTER

For Receptacle for Plants.
Use since Sept. 1, 1954.

SN 686,531. F. Richard Coughlin, d. b. a. Frank Richard Agency, Chicago, Ill. Filed Apr. 29, 1955.

GOODY BOY

For Plastic Child's Eating Dish.
Use since on or about Mar. 15, 1955.

SN 690,615. Fablok Mills, Inc., Irvington, N. J. Filed July 1, 1955.

VERSADYE

For Containers Made of Natural and/or Synthetic Fiber Net Used for Dyeing and Laundering.
Use since Apr. 20, 1955.

SN 691,181. United States Rubber Company, New York, N. Y. Filed July 12, 1955.

SEALDRUM

For Containers of Rubber Coated Fabric in Various Sizes.
Use since May 2, 1955.

SN 691,182. United States Rubber Company, New York, N. Y. Filed July 12, 1955.

SEALDBIN

For Containers of Rubber Coated Fabric in Various Sizes.
Use since Oct. 21, 1954.

SN 692,654. Sunbeam Corporation, Chicago, Ill. Filed Aug. 8, 1955.

DRILLMASTER

For Cases and Chests for Carrying and Storing Portable Tools.
Use since Oct. 26, 1954.

SN 692,980. Western Lithograph Company, also d. b. a. Westline Products Div., Los Angeles, Calif. Filed Aug. 12, 1955.

BIN-BOKS

For Imprinted Cardboard Boxes Which Nest Vertically and Horizontally To Form Their Own Bins for Holding Pressure Sensitive Adhesive Identification Markers.
Use since July 1955.

SN 693,059. Kent Plastics Corporation, Evansville, Ind. Filed Aug. 15, 1955.

kube keeper

For Insulated Containers.
Use since Apr. 10, 1955.

SN 695,356. E. Shipton & Company Limited, Ferndown, Northwood Hills, England. Filed Sept. 26, 1955.

NYLO-TAINER

Applicant claims ownership of British Reg. No. 739,496, dated Feb. 18, 1955.
For Bottles and Containers All Made Only or Principally of Nylon.

SN 696,239. Kaumagraph Company, Wilmington, Del. Filed Oct. 11, 1955.

PRESTO-LOC

For Folding Paper Cartons.
Use since Sept. 27, 1955.

SN 696,269. Union Bag & Paper Corporation, New York, N. Y. Filed Oct. 11, 1955.

2-20

For Paper Boxes.
Use since July 14, 1955.

SN 696,270. Union Bag & Paper Corporation, New York, N. Y. Filed Oct. 11, 1955.

TWO-TWENTY

For Paper Boxes.
Use since July 14, 1955.

CLASS 4

SN 680,993. The American Floor Surfacing Machine Co., Toledo, Ohio. Filed Feb. 3, 1955. Sec. 2(f) as to "American."

AMERICAN
SUPER SPEED

The words "Super Speed" are disclaimed apart from the mark as shown. Applicant claims ownership of Reg. Nos. 538,990, 543,663, and others.
For Sandpaper, Abrasive Paper, and Abrasive Cloth in Disk-Form, and Otherwise, for Use in Abrading Machines.
Use since Jan. 26, 1955; and since August 1922 as to "American."

CLASS 5

SN 687,522. The American Sealants Company, Hartford, Conn. Filed May 16, 1955.

LOCTITE

For Settable Resinous Liquid Composition Suitable for Use as a Bonding Agent.
Use since Oct. 7, 1954.

SN 691,823. Catalin Corporation of America, New York, N. Y. Filed July 25, 1955.

CATALIN

Applicant claims ownership of Reg. Nos. 245,592, and 395,982.
For Synthetic Resins in Either Powdered or Liquid Form for Use as Adhesives or Bonding or Laminating Agents.
Use since at least as early as Jan. 1, 1937.

SN 695,129. Archer-Daniels-Midland Company, Cleveland, Ohio. Filed Sept. 22, 1955.

LIN-O-SET

Applicant claims ownership of Reg. Nos. 113,815, 570,649, and others.
For Binders for Core Sands and Mold Sands.
Use since July 18, 1955.

CLASS 6

SN 666,693. Solvic Société Anonyme, Brussels, Belgium. Filed May 19, 1954.

SOLVIC

Applicant claims ownership of Belgian Reg. No. 73,490, dated Mar. 28, 1953.
For Synthetic Resin Plastics, Synthetic Resins, Plastic Compounds, Alloys and Dispersions, Plasticizers, Fillers, Chemical Substances Used in the Manufacture of Synthetic Resins Plastics.

SN 666,694. Solvic Société Anonyme, Brussels, Belgium. Filed May 19, 1954.

SOLVIC

Applicant claims ownership of Belgian Reg. No. 69,654, dated Apr. 7, 1951.
For Synthetic Resin Plastics, Synthetic Resins, Plastic Compounds, Alloys and Dispersions, Plasticizers, Fillers, Chemical Substances Used in the Manufacture of Synthetic Resins Plastics.

SN 666,695. Solvic Société Anonyme, Brussels, Belgium. Filed May 19, 1954.

SOLVIC

Applicant claims ownership of Belgian Reg. No. 73,409, dated Mar. 16, 1953.
For Synthetic Resin Plastics, Synthetic Resins, Plastic Compounds, Alloys and Dispersions, Plasticizers, Fillers, Chemical Substances Used in the Manufacture of Synthetic Resins Plastics.

SN 688,944. Lebec Chemical Corporation, Paramount, Calif. Filed June 6, 1955.

LEBEC

For Synthetic Resins of the Phenolic, Urea, and Methyl Methacrylate Types in Dry Granular and Liquid Form and Paint Stabilizers.
Use since 1951.

SN 688,953. National Polychemicals, Inc., Wilmington, Mass. Filed June 6, 1955.

NP

For Chemicals—Namely, Accelerators, Blowing Agents, and Plasticizers.
Use since Nov. 12, 1953.

SN 689,021. Cary Chemicals, Inc., Paterson, N. J. Filed June 7, 1955.

SYNOWAX

For Synthetic Waxes.
Use since May 23, 1955.

SN 689,075. Harry H. Patrick, d. b. a. Ade-O-Matic Company, Chicago, Ill. Filed June 7, 1955.

Cling-Free

For Fabric Rinse for Eliminating Static in Fabrics.
Use since July 1953.

SN 689,115. American Cyanamid Company, New York, N. Y. Filed June 8, 1955.

ACCONOX

For Antioxidant.
Use since May 27, 1955.

CLASS 7

SN 677,615. Ti-All Fasteners Inc., White Plains, N. Y. Filed Dec. 1, 1954.

TI-ALL

For Paper Tape With Wire Core for Use in Tying Up Plants, Vegetables, Flowers, Packages.
Use since July 1954.

CLASS 8

SN 687,895. Rogers Imports Inc., New York, N. Y. Filed May 19, 1955. Sec. 2(f).

AIR-TITE

Applicant claims ownership of Reg. No. 346,304.
For Tobacco Pouches.
Use since Jan. 29, 1936.

CLASS 12

SN 659,824. Servto Corporation, Cleveland, Ohio. Filed Jan. 20, 1954.

SERVTO

For Milk Chutes.
Use since Feb. 6, 1953.

SN 680,204. Linville's, Inc., Wilson, N. C. Filed Jan. 20, 1955.

LINSTONE

The masonry unit is disclaimed when used apart from the mark as shown.
For Concrete Building Blocks.
Use since Nov. 1, 1951.

SN 682,163. Minnesota Mining & Manufacturing Company, St. Paul, Minn. Filed Feb. 23, 1955.

SAFETY-WALK

Applicant claims ownership of Reg. No. 542,361.
For Trowel-On Type Compound for Application to Walkways, Etc. To Provide a Non-Slip, Anti-Skid Surface Thereon.
Use since at least as early as Oct. 4, 1954.

SN 682,811. Lusterglo, Inc., Wickliffe, Ohio. Filed Mar. 4, 1955.

LUSTERGLO

For Fiberglass Sheets and Parts Made Therefrom Comprising Awning Members and Decorative Wall Sections.
Use since on or about Sept. 30, 1954.

SN 682,961. Minnesota Mining & Manufacturing Company, St. Paul, Minn. Filed Mar. 7, 1955.

CORONASTONE

For Coarse Aggregate Colored Stone.
Use since at least as early as Sept. 11, 1954.

SN 683,088. Harry P. Anderson, Harlingen, Tex. Filed Mar. 9, 1955.

AZTEC

For Hand-Made Bricks.
Use since Feb. 6, 1952.

SN 684,720. Dulaney Plywood Corporation, Louisville, Ky. Filed Apr. 1, 1955.

FINE WOOD

The words "Fine Wood" are hereby disclaimed apart from the mark as shown.
For Plywood Panels.
Use since Mar. 8, 1955.

SN 688,777. Windo-Tenda, Inc., Greenville, S. C. Filed June 2, 1955.

Windo-Tenda

For Window Jalousies.
Use since Apr. 18, 1955.

SN 689,012. Aluminum Products, Inc., Saginaw, Mich. Filed June 7, 1955.

QUALITY SEAL

For Combination Storm Sash and Doors.
Use since July 1, 1954.

SN 689,734. Nickey Brothers, Inc., Memphis, Tenn. Filed June 17, 1955.

Stabilite
IT "STAYS PUT"

The phrase "It Stays Put" is disclaimed apart from the mark as shown.
For Laminated, Resin-Impregnated Plywood.
Use since May 17, 1955.

SN 691,597. Wilson Stone Company, Old Hickory, Tenn. Filed July 19, 1955.

LUSTERSTONE

For Building Stone.
Use since Sept. 27, 1954.

SN 691,623. Green Mfg. Corp., Erie, Pa. Filed July 20, 1955.

Phillips Customatic

For Windows, Doors, Screens, Storm Windows, Storm Doors, Screen Doors, and Similar Constructions.
Use since Sept. 1, 1953.

SN 692,468. Humble Oil & Refining Company, Houston, Tex. Filed Aug. 4, 1955. Sec. 2(f).

THREDKOTE

Applicant claims ownership of Reg. No. 332,147.
For Sealing Compound for Pipe Joints.
Use since Sept. 14, 1932.

SN 693,630. Robbins Floor Products, Inc., Tuscumbia, Ala. Filed Aug. 24, 1955.

BUBLTILE

For Rubber and Vinyl Floor Tile.
Use since Aug. 4, 1955.

SN 693,631. Robbins Floor Products, Inc., Tuscumbia, Ala. Filed Aug. 24, 1955.

POLKATILE

For Rubber and Vinyl Floor Tile.
Use since Aug. 4, 1955.

SN 695,671. Wolverine Mouldings, Inc., Lincoln Park, Mich. Filed Sept. 30, 1955.

W M

For Metal Mouldings.
Use since June 3, 1954.

SN 697,305. The Master Builders Company, Cleveland, Ohio, to American-Marietta Company, Chicago, Ill. Filed Oct. 28, 1955.

ANVIL-TOP

For Cementitious Composition Containing Metallic Aggregate for Surfacing Masonry and Concrete Floors.
Use since Aug. 30, 1955.

SN 697,317. Pennington Manufacturing Company, Addison, Ill. Filed Oct. 28, 1955.

BAR MESH

For Corn Cribs.
Use since Oct. 12, 1955.

SN 697,510. United States Plywood Corporation, New York, N. Y. Filed Nov. 1, 1955.

"PERFOWOOD"

For Perforated Hardboard or Perforated Veneer Faced Hardboard.
Use since on or about July 28, 1955.

SN 698,048. The Mastic Tile Corporation of America, Newburgh, N. Y. Filed Nov. 10, 1955.

For Rubber Floor Tile.
Use since Oct. 11, 1955.

SN 698,125. J. H. Baxter & Co., San Francisco, Calif. Filed Nov. 14, 1955.

BAXCO

For Poles, Piling, Timber, and Lumber.
Use since 1932.

SN 698,394. Armco Steel Corporation, Middletown, Ohio. Filed Nov. 17, 1955.

SHEF-TEN

For Alloy Carbon Steel for Structural Shapes—Namely, Angles, Channels, and Beams.
Use since Mar. 1, 1955.

CLASS 13

SN 679,853. Kokomo Sanitary Pottery Corporation, Chicago, Ill. Filed Jan. 13, 1955.



The words "Unit Closet" are disclaimed apart from the mark as shown.
For Vitreous China Water Closets, Tanks, and Bowls.
Use since Oct. 1, 1948.

SN 685,440. Enardo Manufacturing Company, Tulsa, Okla. Filed Apr. 13, 1955.

VAPO-GARD

For Valve Used To Regulate the Flow of Gas In and Out of a Gas Reservoir.
Use since the summer of 1952.

SN 685,441. Enardo Manufacturing Company, Tulsa, Okla. Filed Apr. 13, 1955.

ENARDO

For Float Valves, Pilot Valves, Vapor and Liquid Valves, Butterfly Valves, Diaphragm Valves, Pipe Flanges, and Pipe Couplings.
Use since the summer of 1933.

SN 688,223. The Dole Valve Company, Chicago, Ill. Filed May 25, 1955. Sec. 2(f).

DOLE

For Parts and Accessories for Steam and Hot Water Heating Systems—Namely, Air Vent Valves, Vacuum Air Valves, Compression Needle Valves, Compression Shut-Off Valves, Key Air Valves, Syphon Air Valves, Needle Seat Shut-Off Valves, Drain Cocks, Shut-Off Cocks, Compression Couplings, Seamed and Seamless Tubing Couplings, Flared Tubing Couplings; Pipe Fittings—Namely, Elbows, T's, Reducers, Bosses, Unions, Couplings, Cross Connections, Pipe Flanges, Bushings, Nuts, Sleeves, Compression Screws, Nipples, Check Valves, Plugs; Parts and Accessories for Automotive Vehicles—Namely, Primers, Priming Cups, Water Line and Hose Line Parts of Automobile Hot Water Heaters—Namely, Motor Block Connector T's, Shut-O Cocks, Pipe Plugs, Hose Connection Nipples, Washers, Lock Nuts, Hose Clamps; Aircraft Valves—Namely, Oil Separator Valves, Faucet Valves, De-Icer Anti-Drain Check Valves, Globe Valves, Needle Valves, Plug Valves; Soft Drink Dispensers; Water Mixers; and Water Control Mixing Valves for Domestic Washing Machines.
Use since Aug. 14, 1923, on air vent valves and water mixers.

SN 689,531. Titeflex, Inc., Newark, N. J. Filed June 14, 1955.

Titeflex

"500"

Applicant claims ownership of Reg. Nos. 111,854, 602,899, and others.
For Helically Corrugated Tubing of Laminated Strip Material.
Use since June 1, 1955.

SN 694,948. American Radiator & Standard Sanitary Corporation, New York, N. Y. Filed Sept. 20, 1955.

MASTER PEMBROKE

For Bathtubs.
Use since May 17, 1937.

CLASS 14

SN 679,016. J. Stone & Company (Charlton) Limited, Charlton, London, England. Filed Dec. 27, 1954.

NOVOSTON

For Copper-Base Alloys Containing Aluminum and Manganese.
Use since Nov. 21, 1951.

SN 685,612. Republic Steel Corporation, Cleveland, Ohio. Filed Apr. 15, 1955.

REPUBLIC
ELECTRO
FLASHCOTE

Applicant disclaims the term "Electro" apart from the mark as shown. Applicant claims ownership of Reg. Nos. 395,814, 399,172, and 512,025.
For Electro Galvanized Steel Sheet and Strip.
Use since Feb. 26, 1955.

SN 691,768. The International Nickel Company, Inc., New York, N. Y. Filed July 22, 1955.

INCO

Applicant claims ownership of Reg. Nos. 299,596 and 128,408.
For Nickel and Nickel-Containing Alloys.
Use since Apr. 8, 1955.

SN 695,328. Mid-States Steel & Wire Co., Crawfordsville, Ind. Filed Sept. 26, 1955.

MS
SW

For Clothesline Wire, Stitching Wire, Florist Wire, Stone Wire, Mechanics' Wire, and Wire Nails.
Use since March 1950.

CLASS 15

SN 691,203. Fleet-Wing Corporation, Cleveland, Ohio. Filed July 13, 1955.

MG

The drawing is lined to indicate the color red.
For Lubricating Oil.
Use since about June 30, 1955.

CLASS 16

SN 683,894. Maurice A. Knight, Akron, Ohio. Filed Mar. 21, 1955.

PERMANITE

For Acid-Proof Furfural Alcohol Resin Coatings for Vessels, Tanks, and Other Structures.
Use since in the year 1945.

SN 697,328. Sheffield Bronze Paint Corporation, Cleveland, Ohio. Filed Oct. 28, 1955.

Sheffield
tints-all

Applicant claims ownership of Reg. No. 521,283.
For Color Pigments in Paste Form for Oil, Latex, and Alkyd Paints.
Use since June 23, 1955.

SN 697,832. Pratt & Lambert-Inc., Buffalo, N. Y. Filed Nov. 7, 1955.

PRIMAFIL

For Primer, Filler, and Undercoating.
Use since July 21, 1955.

CLASS 18

SN 678,240. A. Jay Loomis, Niles, Mich. Filed Dec. 13, 1954.

DAD'S

For Antiseptic Surgical Dressing.
Use since Nov. 1, 1954.

SN 682,187. Chas. Pfizer & Co., Inc., Brooklyn, N. Y. Filed Feb. 23, 1955.

Tetracyn-SF

Applicant claims ownership of Reg. Nos. 598,390 and 599,891.
For Antibiotic Preparation Containing Vitamins.
Use since Feb. 2, 1955.

SN 686,081. Physiological Research Corporation, St. Louis, Mo. Filed Apr. 22, 1955.

Citranoid

For Preparation for the Treatment of Common Colds.
Use since Mar. 30, 1955.

SN 689,079. Rhodes Pharmacal Company, Inc., Cleveland, Ohio. Filed June 7, 1955.

Zestin

For Vitamin Supplement.
Use since Sept. 7, 1954.

SN 689,477. Fil-A-Lac Mineral Co., Caldwell, Idaho. Filed June 14, 1955.

FIL-A-LAC

For Vitamin and Mineral Supplement in Tablet Form.
Use since May 15, 1952.

SN 689,650. Chas. Pfizer & Co., Inc., Brooklyn, N. Y. Filed June 16, 1955.

ANTIVERT

For Preparation To Convert Vertigo.
Use since Apr. 20, 1955.

SN 689,755. Remedia, Inc., New York, N. Y. Filed June 17, 1955.

CALMASMA

For Medicinal Preparation Indicated in and for the Relief of the Paroxysms of Asthma, Bronchitis, and Hay Fever.
Use since Jan. 18, 1955.

SN 690,726. Mead Johnson & Company, Evansville, Ind. Filed July 5, 1955.

Deca-Mulcin

Applicant claims ownership of Reg. Nos. 414,494, 592,022, and others.
For Emulsion of Vitamins.
Use since June 17, 1955.

SN 691,079. Physiological Research Corporation, St. Louis, Mo. Filed July 11, 1955.

BIOFLAV

For Pharmaceutical Compound for the Relief of Suffering From Colds.
Use since June 21, 1955.

SN 691,080. Physiological Research Corporation, St. Louis, Mo., to Grove Laboratories, Inc., St. Louis, Mo. Filed July 11, 1955.

CITROID

For Pharmaceutical Compound for the Relief of Suffering From Colds.
Use since June 20, 1955.

SN 691,195. John Calvin Core, Jr., Huntington, W. Va. Filed July 13, 1955.

YOGI OIL

Applicant claims ownership of Reg. Nos. 547,127 and 264,552.
For Preparation Used Externally for the Relief of Muscular Aches and Pains Associated With Arthritis, Neuritis, Bursitis, Bruises, and Sprains.
Use since Dec. 27, 1954.

CLASS 19

SN 677,982. Protexacar, Elizabeth, N. J. Filed Dec. 8, 1954. Sec. 2(f).

STAFAST

Applicant claims ownership of Reg. No. 365,983.
For Removable, Flexible Automobile Fender Covers or Protectors Formed of Cloth or the Like.
Use since Jan. 4, 1938.

SN 679,432. U. S. Industries, Inc., Chicago, Ill. Filed Jan. 4, 1955.

USI

The drawing is shaded for deep red.
For Airplane Parts—Namely, Struts and Landing Gear Assemblies.
Use since Oct. 8, 1954.

CLASS 21

SN 667,267. General Dynamics Corporation, New York, N. Y., from Stromberg-Carlson Company. Filed May 27, 1954.

Dial-X

For Inter-Communicating Telephone Systems and Parts Thereof Comprising Telephone Instruments, Switchboard Equipment Including Supporting and Enclosing Structures, Power Supply, Paging and Signaling Equipment, Step-by-Step Switches, and Parts Thereof.
Use since Feb. 26, 1954.

SN 677,815. Russ-Elektroofen K. G., Koln-Bayenthal, Germany. Filed Dec. 6, 1954.

RUSS

Applicant claims ownership of German Reg. No. 655,738, dated Mar. 31, 1954.
For Electric Furnaces.

SN 678,825. General Dynamics Corporation, New York, N. Y., from Stromberg-Carlson Company. Filed Dec. 22, 1954. Sec. 2(f).

STROMBERG CARLSON

The word "Sound" is disclaimed apart from the mark as shown. Applicant claims ownership of Reg. Nos. 215,238, 528,263, and others.
For Sound Systems Comprising Public Address and Paging Systems, Intercommunicating Systems, Home Type High-Fidelity Systems, and Speech, Music, Radio and Television Distribution Systems, Comprising Sound Reproduction Devices Including Speakers and Speaker Baffles, Microphones, Transducers, Record Changers, Phonographs, Amplifiers, Tuners, Transformers, Cabling, Supporting and Enclosing Structure, and Parts Thereof.
Use since Jan. 1, 1949.

SN 678,826. General Dynamics Corporation, New York, N. Y., from Stromberg-Carlson Company. Filed Dec. 22, 1954. Sec. 2(f).

STROMBERG CARLSON Sound EQUIPMENT

The words "Sound" and "Equipment" are disclaimed apart from the mark as shown. Applicant claims ownership of Reg. Nos. 215,238, 528,263, and others.
For Sound Systems Comprising Public Address and Paging Systems, Intercommunicating Systems, Home Type High-Fidelity Systems, and Speech, Music, Radio and Television Distribution Systems, Comprising Sound Reproduction Devices Including Speakers and Speaker Baffles, Microphones, Transducers, Record Changers, Phonographs, Amplifiers, Tuners, Transformers, Cabling, Supporting and Enclosing Structure, and Parts Thereof; Telephone Systems Comprising Telephonic Receiving and Talking Instruments, Step-by-Step Switches, Interconnecting Equipment and Parts Thereof; and Radio and Television Receivers, and Parts Thereof.
Use since Jan. 1, 1949.

SN 681,398. Auto Arc-Weld Manufacturing Company, Cleveland, Ohio. Filed Feb. 10, 1955.

Magna Welder

For Semi-Automatic Welding Machines.
Use since on or about July 21, 1954.

SN 682,456. North American Aviation, Inc., Los Angeles, Calif. Filed Feb. 28, 1955.

NADAR

For Magnetic Recording and Reproducing Equipment.
Use since July 16, 1954.

SN 684,272. Calbest Engineering & Electronics Co., Los Angeles, Calif. Filed Mar. 28, 1955.

MUSICALL

For Radio Receiving Sets.
Use since Nov. 4, 1954.

SN 684,701. Stuart Corporation, Baltimore, Md. Filed Mar. 31, 1955.

SINUSAIRE

For Thermostatically Controlled Electric Heaters.
Use since Jan. 8, 1955.

SN 689,364. Daystrom Pacific Corporation, Santa Monica, Calif. Filed June 13, 1955.

"TINY TRIM"

For Miniature Potentiometers for Resistance Compensation in Electrical Circuits.
Use since Apr. 12, 1955.

SN 691,378. Marion-Kay Products Co. Inc., Brownstown, Ind. Filed July 15, 1955.

Party Pot

For Coffee Urns.
Use since May 1, 1955.

SN 694,386. Racine Industrial Plant, Inc., Racine, Wis. Filed Sept. 8, 1955.

HOST Electric Brush

For Carpet, Rug and Like Mechanical Scrubbing Machines Embodying a Rotary Brush.
Use since Jan. 5, 1955.

SN 694,739. Oxy-Dry Sprayer Corporation, New York, N. Y. Filed Sept. 15, 1955.

OXY-SPEED

For Power Transmission Mechanism—Namely, Variable Speed Electronic Drive Mechanism.
Use since July 1, 1955.

SN 694,865. Florida Aircraft Radio and Marine, Inc., Miami, Fla. Filed Sept. 19, 1955.

For Radio Receiving and Transmitting Equipment and Parts Thereof.
Use since January 1946.

SN 694,964. Otis T. Carr, Baltimore, Md. Filed Sept. 20, 1955.

UTRON

For Electric Batteries.
Use since Apr. 12, 1955.

SN 695,299. Globe American Corporation, Kokomo, Ind. Filed Sept. 26, 1955.

glo-tisserie

For Rotisserie Mounted in the Oven of an Electric Range.
Use since June 15, 1955.

CLASS 22

SN 644,983. Higbie Manufacturing Company, Bronson, Mich. Filed Apr. 9, 1953. Sec. 2(f) as to "Bronson."

Bronson MULTI-ROYAL

For Fishing Reels.
Use since Aug. 5, 1952; and during the year 1924 as to "Bronson."

SN 644,984. Higbie Manufacturing Company, Bronson, Mich. Filed Apr. 9, 1953. Sec. 2(f) as to "Bronson."

Bronson
ROYAL-MATIC

For Fishing Reels.
Use since Jan. 2, 1953; and during the year 1924 as to "Bronson."

SN 644,985. Higbie Manufacturing Company, Bronson, Mich. Filed Apr. 9, 1953. Sec. 2(f) as to "Bronson."

Bronson
ROYALIST

For Fishing Reels.
Use since Aug. 5, 1952; and during the year 1924 as to "Bronson."

SN 676,293. American Machine & Foundry Company, New York, N. Y. Filed Nov. 9, 1954.

AMF

Applicant claims ownership of Reg. Nos. 168,740, 441,863, and others.

For Wheel Goods Including Children's Wagons, Automobiles, Tractors, Trucks, Dump Cars, Sports Cars, Station Wagons, Convertible Cars, Hook and Ladder Fire Trucks, Racing Cars, Trailers, Tow Cars, Bulldozers, Scoop Shovels, Fire Fighting Trailers, Wheel Barrows, Derricks, and Accessories Pertaining Thereto; and Children's Cycles and Velocipedes.
Use since on or about Aug. 29, 1952, on children's cycles and velocipedes.

SN 689,294. Virgil L. McCormack, d. b. a. V. L. McCormack Company, St. Louis, Mo. Filed June 10, 1955.

STRAT-O-WHEEL

For Children's Ferris Wheels.
Use since Apr. 15, 1955.

SN 689,489. Cycraft Products Co., Youngstown, Ohio. Filed June 14, 1955.

Oopfli

For Stick and Ring Game.
Use since Mar. 15, 1955.

SN 689,686. Western Grinders, Glendale, Calif. Filed June 16, 1955. Sec. 2(f).

Featherweight

For Fishing Reel Ferrules.
Use since Aug. 8, 1946.

SN 689,725. Paul Jenisch, d. b. a. Paul Jenisch Creations, Mount Vernon, N. Y. Filed June 17, 1955.

Top-Five

For Game Using Cards and Playing Board.
Use since June 6, 1955.

SN 689,925. Colt Golf, New York, N. Y. Filed June 21, 1955.

Colt

For Golf Balls.
Use since May 19, 1955.

CLASS 23

SN 659,731. Modern Industrial Engineering Company, Detroit, Mich. Filed Jan. 19, 1954.

BURR MASTER

For Chamfering Machines for Gears and Similar Toothed Machine Elements.
Use since Nov. 10, 1949.

SN, 662,025. Societe Auxiliaire d'Industrie (Sadi), Forest-Bruxelles, Belgium. Filed Mar. 4, 1954.

SADI

Applicant claims ownership of Belgian Reg. No. 48,919, dated July 17, 1935; and U. S. Reg. No. 435,447.

For Mechanical Power Transmission Equipment and Parts—Namely, Geared Motors, Gear Housings, Variable Speed Transmissions, Speed Reduction Gears, Clutches, Safety Couplings, Valve Motorization, Machine Tool Drives and the Like; and Haulage and Lifting Devices and Parts Thereof—Namely, Mono-Rail Cranes, Capstans, Winches, Hoists, and the Like.

SN 669,316. A. P. de Sanno & Son, Inc., Phoenixville, Pa. Filed July 2, 1954.

TRAVELER

For Portable Abrasive Cut-Off Machines.
Use since Feb. 1, 1953.

SN 671,227. Wall Colmonoy Corporation, Detroit, Mich. Filed Aug. 5, 1954. Sec. 2(f).

SPRAYWELDER

For Spray Gun Type Mechanism for Applying a Metal Coating on a Metal Part.
Use since Sept. 30, 1946.

SN 676,947. The Everprint Corporation, Garden City, N. Y. Filed Nov. 19, 1954.

EVERPRINT

For Ink Impregnated Stamps.
Use since in or about April 1953.

SN 678,638. Kiekhaefer Corporation, Cedarburg, Wis. Filed Dec. 20, 1954.

AEROCAST

For Outboard Motor Parts Including Center Main Bearings and Starter Flywheels.
Use since Oct. 1, 1954.

SN 678,861. General Filter Company, Ames, Iowa. Filed Dec. 23, 1954.

GARD

For Rotary Distributor for a Trickling Filter.
Use since Nov. 5, 1954.

SN 679,430. U. S. Industries, Inc., Chicago, Ill. Filed Jan. 4, 1955.

USI

The drawing is shaded for deep red.
For Deep Well Plunger Pumps and Parts Thereof, and Oil Well Drilling Equipment—Namely, Sucker Rods, Pony Rods, Polished Rods, Couplings, Sub-Couplings, and Stuffing Boxes.
Use since Oct. 12, 1954.

SN 680,125. Burrell Cutlery Company, Inc., Ellicottville, N. Y. Filed Jan. 19, 1955.

Holiday

For Steak, Paring, Sandwich, Boning, Utility, Butcher, Carving, and Slicing Knives.
Use since Dec. 3, 1954.
Subj. to Intf. with SN 687,403.

SN 680,248. Blackhawk Mfg. Co., West Allis, Wis. Filed Jan. 21, 1955.

Service Chief

For Vehicle Lifting and Lowering Jacks.
Use since Sept. 21, 1954.

SN 683,072. Wilson Brothers, Springfield, Mo. Filed Mar. 8, 1955.

LITTLE GIANT

For Razor Blade Hand Planers and Planer Sets.
Use since Jan. 20, 1955.

SN 683,408. Philip C. Lucido, d. b. a. Reliable Utilities Company, St. Louis, Mo. Filed Mar. 14, 1955.

HEIRLOOM

For Sewing Machines.
Use since Feb. 1, 1955.

SN 684,072. George Schoenborn-Buchheim, d. b. a. Garvenswerke, Vienna, Austria. Filed Mar. 23, 1955.

MIMOT

For Domestic Water Systems Comprising Pump, Motor, Switch, Pressure Tank and Bleeder Valve, and Submersible Pumps.
Use since 1869.

SN 684,073. George Schoenborn-Buchheim, d. b. a. Garvenswerke, Vienna, Austria. Filed Mar. 23, 1955.

GARVENS

For Domestic Water Systems Comprising Pump, Motor, Switch, Pressure Tank and Bleeder Valve, and Submersible Pumps.
Use since 1869.

SN 687,403. Otto Owings, Inc., Dallas, Tex. Filed May 12, 1955.

Holiday

For Salad Cutter.
Use since Jan. 22, 1954.
Subj. to Intf. with SN 680,125.

SN 690,982. Cornelis van der Lely, Maasland, Netherlands. Filed July 8, 1955.

KRINON

Applicant claims ownership of Dutch Reg. No. 120,802, dated Feb. 5, 1955.
For Agricultural and Horticultural Machines and Implements, Including Tractors, Machines for Groundwork and Dredging, Machines and Implements for Dairies and Parts Thereof.

SN 691,330. Speed-D-Burr Corporation, Glendale, Calif. Filed July 14, 1955.

SPEED-D-BURR

For Barrel Finishing Machinery and Parts Thereof.
Use since Sept. 10, 1953.

SN 692,694. American Road Equipment Company, Omaha, Nebr. Filed Aug. 9, 1955.

ECONMOBILE

For Tractor Mounted, Hydraulically Operated, Material Hoisting and Loading Apparatus, and Tractor Mounted Earth and Snow Moving Apparatus.
Use since Oct. 12, 1954.

SN 692,695. American Road Equipment Company, Omaha, Nebr. Filed Aug. 9, 1955.

UTIL-A-LIFT

For Tractor Mounted, Hydraulically Operated, Material Hoisting and Loading Apparatus, and Tractor Mounted Earth and Snow Moving Apparatus.
Use since May 14, 1955.

SN 692,975. Wagner Electric Corporation, St. Louis, Mo. Filed Aug. 12, 1955. Sec. 2(f).

WAGNER

Applicant claims ownership of Reg. Nos. 536,118, 539,296, and 566,208.
For Air Brake Systems and Parts Thereof—Namely, Compressors, Application Valves, Hand Control Valves, Relay Valves, Emergency Valves, Pressure Reducing Valves, Check Valves, Pressure Distributing Valves, Safety Valves, Power Clusters, Power Cylinders, Slack Adjusters, Cam Brake Actuators, Couplers, Reservoirs, and Gauges.
Use since 1934.

SN 693,114. Rudi L. Baer, d. b. a. Progressus Company, New York, N. Y. Filed Aug. 16, 1955.

PROGRESSUS

For Housewares, Kitchen Utensils, Gadgets, and Gift Items—Namely, Scoops, Ice Cream Spades, French Fry Cutters, Mixing Spoons, Measuring Spoons, Forks, Spoons, Pepper Mills, Garlic Presses, Hamburger Presses, Corkscrews, Nut and Lobster Crackers, Ham Boards, Rolling Pins, Kitchen Tools, Cutlery, Egg Beaters.
Use since January 1952.

SN 693,464. Kiekhaefer Corporation, Cedarburg, Wis. Filed Aug. 22, 1955.

OUTBOARD MOTORS

The words "Outboard Motors" shown in the drawing of the mark are disclaimed. Applicant claims ownership of Reg. Nos. 529,404, 530,864, and others.
For Outboard Motors and Parts Thereof.
Use since Jan. 14, 1955.

SN 693,494. Sauven Perforating Machine Co., London, England. Filed Aug. 22, 1955.

Codedge

For Machines for Applying Dates and Identification Marks to Labels.
Use since April 1949.

SN 693,652. American Pamcor, Inc., Havertown, Pa. Filed Aug. 25, 1955.

api

For Electrical Terminal Applying Devices.
Use since Apr. 6, 1953.

SN 693,934. The Reliance Electric and Engineering Company, d. b. a. Reeves Pulley Company, Columbus, Ind. Filed Aug. 30, 1955. Sec. 2(f).

REEVES

For Speed Varying Power Transmission Devices.
Use since in the fall of 1897.

SN 693,979. East Carolina Supply Company, Plymouth, N. C. Filed Aug. 31, 1955.

PAPER MAKER

For Knives.
Use since July 23, 1955.

SN 695,146. Armand M. Dreyfuss, New York, N. Y. Filed Sept. 22, 1955.

ACC-U-MAT

For Hydraulic Lathe Copying Attachment Machine.
Use since January 1954.

SN 695,191. U. S. Auto Accessories Corporation, Boston, Mass. Filed Sept. 22, 1955.

Springee

For Automobile Tail Pipe Extensions.
Use since July 18, 1955.

SN 695,196. Wales-Strippit Corporation, North Tonawanda, N. Y. Filed Sept. 22, 1955.

"A"

For Self-Contained Perforating Implements.
Use since Jan. 27, 1937.

SN 695,314. Lee Engineering Company, Pawtucket, R. I. Filed Sept. 26, 1955.

PRESTO

For Tire Demounters, Portable Hydraulic Lifts, Jacks, Cylinders, Hydraulic Power Packs, and Floor Brakes.
Use since on or about December 1947.

SN 695,359. S. G. Taylor Chain Company, Hammond, Ind. Filed Sept. 26, 1955.

TRACTO-GRIP

For Tractor Chains.
Use since Dec. 1, 1938.

SN 695,462. Worthington Corporation, Harrison, N. J. Filed Sept. 27, 1955. Sec. 2(f).

Work Positioning Pays



Applicant claims ownership of Reg. No. 433,157.
For Welding Positioners and Work Positioning Equipment.
Use since June 1944.

SN 695,570. Robertson-Hedges, Inc., Kansas City, Mo. Filed Sept. 29, 1955.

DRAGONFLY

For Airdrive Outboard Motors.
Use since Jan. 24, 1955.

SN 695,629. Illinois Tool Works, Chicago, Ill. Filed Sept. 30, 1955.

SEMSPAK

For Power Driven Screw Drivers.
Use since Aug. 15, 1955.

SN 695,707. Duplicators, Inc., New York, N. Y. Filed Oct. 3, 1955.

ALISON

For Liquid Process Duplicators.
Use since July 6, 1955.

SN 695,734. N. J. La Barre, d. b. a. Sta-Sharp Knife Co., Brockton, Mass. Filed Oct. 3, 1955. Sec. 2(f).

STA-SHARP

Applicant claims ownership of Reg. No. 419,444.
For Circular Skiving Knives, Trimming Knives, Stripping Knives, and Scoring Knives Used in Leather and Shoe Machinery.
Use since Sept. 7, 1938.
Subj. to Intf. with SN 662,809.

SN 695,735. Landbouwwerktuigen- en Machinefabriek H. Vissers N. V., Nieuw Vennep, Netherlands. Filed Oct. 3, 1955.

VICON

Applicant claims ownership of Dutch Reg. No. 91,552, dated Mar. 1, 1948.
For Agricultural Implements, Agricultural Machines, and Tractors.

SN 698,675. Manufacturers Supplies Co., St. Louis, Mo. Filed Dec. 5, 1955.

SAS

For Machines for Skiving Leather and Leather-Like Material.
Use since in or about November 1948.
Subj. to Intf. with SN 650,496.

CLASS 26

SN 679,677. Peerless Camera Stores, Inc., New York, N. Y. Filed Jan. 10, 1955.

Peerflekta

For Cameras, Camera Equipment—Namely, Photographic Lenses, Tripods, Photo-Copying Dryers and Machines, Binoculars.
Use since January 1954.

SN 694,579. Keystone View Company, Meadville, Pa. Filed Sept. 13, 1955. Sec. 2(f).

KEYSTONE STEREO-MOTIVATOR

Applicant claims ownership of Reg. No. 442,622.
For Apparatus for the Testing and Training of Vision—Namely, a Triple Slide Holder Assembly With a Micrometer Adjustment Providing for Equal but Oppositely Directed Motions of Two Slide Holders Against a Stationary Third Slide.
Use since May 9, 1946.

SN 694,786. Durst S.-A., Bolzano, Italy. Filed Sept. 16, 1955.

Unomat

Applicant claims ownership of Italian Reg. No. 85,817, dated May 4, 1948.
For Copying Cameras and Photographic Enlargers.
Use since on or about September 1948.

SN 694,790. Durst S. A. Bolzano, Bolzano, Bozen, Italy. Filed Sept. 16, 1955.

NEOTAR

Applicant claims ownership of Italian Reg. No. 58,611, dated Dec. 10, 1938.
For Lenses for Optical Instruments and Photographic Articles, Including Copying Cameras and Photographic Enlargers.
Use since on or about December 1954.

SN 695,547. Houze Glass Corporation, Point Marion, Pa. Filed Sept. 29, 1955.

Lo-tran

For Spectacle Lenses.
Use since Aug. 22, 1955.

CLASS 27

SN 694,442. Norman M. Morris Corporation, New York, N. Y. Filed Sept. 9, 1955.

Ladymatic

For Watches.
Use since Aug. 3, 1953.

SN 695,712. Fabrique d'Horlogerie de Fontainemelon S. A., Fontainemelon, Canton of Neuchatel, Switzerland. Filed Oct. 3, 1955.

ROTOSTOP

Applicant claims ownership of Swiss Reg. No. 155,456, dated Mar. 24, 1955.
For Timepieces of All Kinds and Parts Thereof.

SN 696,464. Rodi & Wienenberger Aktiengesellschaft, Pforzheim, Germany. Filed Oct. 14, 1955.

RfW

Applicant claims ownership of German Reg. No. 472,003, dated Dec. 29, 1934.
For Pocket Watch Cases and Wristlet Watch Cases.

SN 696,545. I. D. Watch Case Co., Inc., Jamaica, N. Y. Filed Oct. 17, 1955.

I.d.

For Watch Cases.
Use since 1936.

SN 697,161. The Gruen Watch Company, Cincinnati, Ohio. Filed Oct. 26, 1955.

ATOMICRONIC

For Watches, Watch Cases, and Watch Movements.
Use since Oct. 1, 1955.

CLASS 28

SN 696,462. Rodi & Wienenberger Aktiengesellschaft, Pforzheim, Germany. Filed Oct. 14, 1955.

RfW

Applicant claims ownership of German Reg. No. 472,004, dated Dec. 29, 1934.
For Genuine and Imitation Jewelry.

SN 696,465. Rodi & Wienenberger Aktiengesellschaft, Pforzheim, Germany. Filed Oct. 14, 1955.

Fixoflex

Applicant claims ownership of German Reg. No. 618,121, dated Mar. 20, 1952.
For Genuine and Imitation Jewelry, Bracelets, and Metallic Wrist Watch Bracelets.

SN 696,466. Rodi & Wienenberger Aktiengesellschaft, Pforzheim, Germany. Filed Oct. 14, 1955.

ElastofixO

Applicant claims ownership of German Reg. No. 661,401, dated Aug. 13, 1954.
For Genuine and Imitation Jewelry, Bracelets, and Metallic Wrist Watch Bracelets.

SN 697,953. Phi Psi Fraternity, Clemson, S. C. Filed Nov. 16, 1955.

ΦΨ

For Fraternity Pins, Rings, Buttons, Arm Bands, Pennants, Badges, Novelties, and Miscellaneous Jewelry.
Use since 1903.

CLASS 29

SN 684,083. Edward Weil, Leonia, N. J. Filed Mar. 23, 1955.

VACU

For Clothes Brush.
Use since on or about Feb. 7, 1940.

SN 691,197. Denta-Fresh, Incorporated, Evansville, Ind. Filed July 13, 1955.

DENTA-FRESH

For Disposable Tooth Brushes.
Use since Oct. 6, 1954.

CLASS 30

SN 694,684. The Yale & Towne Manufacturing Company, Stamford, Conn. Filed Sept. 14, 1955. Sec. 2(f).

YALE

Applicant claims ownership of Reg. Nos. 63,654, 577,895, and others.
For Ceramic Furniture Trim.
Use since April 1954.

CLASS 31

SN 655,097. Universal Major Elec. Appliances, Inc., Lima, Ohio, to Universal Major Corporation. Filed Oct. 20, 1953.

Universal

Applicant claims ownership of Reg. No. 156,697.
For Refrigerators and Freezers.
Use since May 1912.

SN 684,853. The Marley Company, Kansas City, Mo. Filed Apr. 4, 1955.

DUO COOLER

For Liquid Cooling Towers and Parts Thereof.
Use since Feb. 24, 1955.

SN 686,716. American Rock Wool Corp., Wabash, Ind. Filed May 3, 1955.

DUSTGARD

For Air Filters.
Use since Apr. 13, 1955.

SN 687,923. Detrex Corporation, Detroit, Mich. Filed May 20, 1955.

STEDY-FLO

For Filters for Dry Cleaning Machines.
Use since Mar. 2, 1955.

SN 687,968. Metallizing Engineering Co. Inc., Westbury, N. Y. Filed May 20, 1955.

METCO

Applicant claims ownership of Reg. Nos. 358,092, 552,362, and others.
For Gas Purification Filters for the Removal of Dirt, Oil, Moisture, and Other Foreign Matter From Gases, Including Air.
Use since Oct. 20, 1934.

SN 688,199. The Warren Company, Incorporated Atlanta, Ga. Filed May 24, 1955.

COLORAMICS

For Commercial Refrigerators and Freezers.
Use since Apr. 29, 1955.

SN 688,418. Houdaille-Hershey of Indiana, Inc., Lebanon, Ind. Filed May 27, 1955.

FLO-PAC

For Filter Cartridges.
Use since Dec. 24, 1954.

SN 689,029. Farr Company, El Segundo, Calif. Filed June 7, 1955. Sec. 2(f).

FAR-AIR

Applicant claims ownership of Reg. No. 594,228.
For Air Filter Panels.
Use since Oct. 15, 1944.

SN 689,215. Dorr-Oliver Incorporated, Stamford, Conn. Filed June 9, 1955.

PeriFilter

For Apparatus for the Treatment of Water and More Particularly for Combined Pretreatment and Filtration.
Use since May 27, 1955.

SN 689,441. Uniflow Manufacturing Company, Erie, Pa. Filed June 13, 1955.

UNIFLOW

For Bottle Coolers, Water Coolers, Walk-In Coolers, Electric and Other Refrigerating Apparatus, Combined Cooling and Beverage Dispensing Cabinets, Air Filters for Use in Conjunction With Beverage Dispensing Apparatus, Ice Cube Making Apparatus, and Drinking Fountains for Human Consumption.
Use since Mar. 23, 1955.

SN 689,735. Northern Blower Company, Cleveland, Ohio. Filed June 17, 1955.

Norblo

Applicant claims ownership of Reg. No. 233,317.
For Air Filters and Dust Arrestors Having Filter Screens.
Use since Mar. 1, 1953; and in January 1927 as to "Norblo."

SN 690,203. Softmagic Corporation, Whittier, Calif. Filed June 24, 1955.

SOFTMAGIC

For Tank Type Water Softeners Containing Ion Exchange Resins.
Use since June 3, 1955.

SN 690,204. Softmagic Corporation, Whittier, Calif. Filed June 24, 1955.

SOFTMAGIC LAUNDRY *mate*

For Tank Type Water Softeners Containing Ion Exchange Resins.
Use since June 3, 1955.

SN 690,782. Whirlpool Corporation, St. Joseph, Mich., to Whirlpool-Seeger Corporation, St. Joseph, Mich. Filed July 5, 1955.

Whirlpool

For Water Softeners, Refrigerators, and Freezer Chests.
Use since May 2, 1955, on water softeners, refrigerators, and freezer chests.

SN 690,952. Johnson & Johnson, New Brunswick, N. J. Filed July 8, 1955. Sec. 2(f).

Hi-Temp
RAPID-FLO

Applicant claims ownership of Reg. No. 570,577.
For Filter Disks, Rolls, and Strips.
Use since July 1952.

SN 691,421. Beloit Iron Works, Beloit, Wis. Filed July 18, 1955.



Applicant claims ownership of Reg. Nos. 371,917, 371,918, and 566,846.
For Oil Filter Tanks.
Use since Dec. 1, 1954.

SN 691,438. Culligan, Inc., Northbrook, Ill. Filed July 18, 1955.

CUL-CLEER

For Filter Apparatus and Parts Thereof.
Use since Mar. 10, 1953.

SN 691,619. Gits Molding Corporation, Chicago, Ill. Filed July 20, 1955.

CHIPPER

For Trays in Which Water Can Be Frozen and Then Crushed.
Use since Jan. 8, 1954.

SN 692,112. Bell & Gossett Company, Morton Grove, Ill. Filed July 29, 1955.

Hydro-Flo

Applicant claims ownership of Reg. Nos. 542,172, 554,429, and 555,376.
For Refrigerating Apparatus—Namely, Condensers, Evaporators or Chillers, Compressors and Controls, Liquid Receivers, Combination Heat Exchangers and Liquid Receivers, and Water Coolers.
Use since Oct. 26, 1948.

SN 692,567. Borg-Warner Corporation, Chicago, Ill. Filed Aug. 8, 1955.



WEATH-R-CARD

For Control for a Refrigerator and Parts Thereof for Replacement and Repair.
Use since on or about Feb. 15, 1955.

SN 692,568. Borg-Warner Corporation, Chicago, Ill. Filed Aug. 8, 1955.



For Control for a Refrigerator and Parts Thereof for Replacement and Repair.
Use since on or about Feb. 15, 1955.

SN 692,569. Borg-Warner Corporation, Chicago, Ill. Filed Aug. 8, 1955.

WEATH-R-GARD

For Control for a Refrigerator and Parts Thereof for Replacement and Repair.
Use since on or about Feb. 15, 1955.

SN 693,072. Frank Mittelberger, d. b. a. American Plant Equipment Company, New York, N. Y. Filed Aug. 15, 1955.

PRONTO

For Pressure Vessel Containing Filtering Elements Used in the Filtration of Liquids and Gases for the Purpose of Removing Solids Therefrom.
Use since July 18, 1955.

SN 693,616. Micro Metallic Corporation, Glen Cove, N. Y. Filed Aug. 24, 1955.

GLAS-KLEEN

For Filters.
Use since Apr. 21, 1955.

SN 694,192. Bowser, Inc., Fort Wayne, Ind. Filed Sept. 6, 1955.

Con-O-Mite

For Filters and Filtration Systems.
Use since July 22, 1955.

SN 696,231. General Motors Corporation, Detroit, Mich. Filed Oct. 11, 1955.

Mult-A-Pliance

For Electric Refrigerators and Food Freezers.
Use since Aug. 17, 1955.

SN 696,304. Kem Manufacturing Company, Inc., Fair Lawn, N. J. Filed Oct. 12, 1955.

LIFETIME

For Automobile Fuel Filters.
Use since Mar. 2, 1950.

SN 696,883. General Motors Corporation, Detroit, Mich. Filed Oct. 21, 1955.

GM SEPRIFUGE

For Oil Cleaners.
Use since Sept. 28, 1955.

SN 696,988. Intlico Incorporated, Tucson, Ariz. Filed Oct. 24, 1955.

INTERNATIONAL

Applicant claims ownership of Reg. No. 425,985.
For Filtering Apparatus for the Clarification and Purification of Aqueous Liquids and Suspensions.
Use since Apr. 16, 1955.

SN 697,051. Sunbeam Corporation, Chicago, Ill. Filed Oct. 24, 1955.

JET ACTION

For Filters for Coffee Makers.
Use since Aug. 25, 1954.

SN 697,093. Houdaille-Hershey of Indiana, Inc., Lebanon, Ind. Filed Oct. 25, 1955.

DRI-PURE

For Filtering Devices for Separating Water From Oil.
Use since November 1951.

SN 698,270. Dorr-Oliver Incorporated, Stamford, Conn. Filed Nov. 15, 1955.



Applicant claims ownership of Reg. Nos. 264,054, 527,189, and 534,973.
For Filters.
Use since Jan. 4, 1955.

SN 698,440. Komline-Sanderson Engineering Corporation, Peapack, N. J. Filed Nov. 17, 1955.

PIONEER

For Filters.
Use since Sept. 12, 1955.

SN 698,444. The Marley Company, Kansas City, Mo. Filed Nov. 17, 1955.

MARCLAD

For Liquid Cooling Towers and Parts Thereof.
Use since Oct. 24, 1955.

CLASS 32

SN 693,980. The Englander Company, Inc., Chicago, Ill. Filed Aug. 31, 1955.

SLEEPSTAKES

For Mattresses and Box Springs.
Use since Nov. 16, 1954.

SN 694,017. Strat-O-Lounger, Inc., Chicago, Ill. Filed Aug. 31, 1955.

Stratorester

Applicant claims ownership of Reg. No. 589,562.
For Chairs.
Use since May 20, 1954.

CLASS 34

SN 683,753. Chelsea Products Incorporated, Plainfield, N. J. Filed Mar. 18, 1955.

Challenger

For Ventilating Fans.
Use since October 1947.

SN 686,378. Jerrold B. Meyer, d. b. a. Clayton Specialty Mfg. Co., Chicago, Ill. Filed Apr. 27, 1955.

CHILL-A-BREEZE

For Air Conditioning Units in the Form of Receptacles Containing Water and Sponges for Attachment to Air Circulating Fans, Wall Registers, and the Like.
Use since Jan. 21, 1955.

SN 690,490. Samuel Stamping & Enameling Company, Chattanooga, Tenn. Filed June 29, 1955.

BELAIRE

For Free Standing Gas Ranges.
Use since on or about June 1, 1955.

SN 690,812. The Duriron Company, Inc., Dayton, Ohio. Filed July 6, 1955.

HI-EX

For Heat Exchangers and Parts Thereof.
Use since June 2, 1955.

SN 690,956. Lakewood Manufacturing Co., Westlake, Ohio. Filed July 8, 1955.

HANG IT ALL

For Portable Broiler.
Use since June 18, 1955.

CLASS 35

SN 679,728. The B. F. Goodrich Company, Akron, Ohio. Filed Jan. 11, 1955.

AUTOMATION

For Conveyor Belts.
Use since July 9, 1954.

SN 683,299. Ramsey Corporation, St. Louis, Mo. Filed Apr. 11, 1955.

RTC
RAMCO TOP CHROME

Applicant claims ownership of Reg. No. 516,548.
For Piston Rings.
Use since Dec. 17, 1954.

SN 692,354. Seiberling Rubber Company, Barberton, Ohio. Filed Aug. 2, 1955. Sec. 2(f).

TRACTION LUG

For Pneumatic Tires.
Use since Jan. 15, 1946.

CLASS 38

SN 673,456. Kennedy Sinclaire, Inc., New York, N. Y. Filed Sept. 20, 1954. Sec. 2(f).

BLUEPRINTS
IN
ESTATE PLANNING

Applicant claims ownership of Reg. Nos. 571,495 and 611,937.
For Periodical Publications Prepared for Distribution by Others.
Use since September 1947.

SN 688,278. Telenews Productions, Inc., Cleveland, Ohio. Filed May 25, 1955. Sec. 2(f).

COMMERCIAL REFRIGERATION & AIR CONDITIONING

Applicant claims ownership of Reg. No. 532,606.
For Publication Published Monthly or From Time to Time, the Subject Matter of Which Is Directed to Commercial Refrigeration and Air Conditioning.
Use since on or about Apr. 1, 1949.

SN 692,735. Police and Firemen National Press, Inc., Brooklyn, N. Y. Filed Aug. 9, 1955.

POLICE ··· FIREMEN
NATIONAL PRESS

For Monthly Periodical Publication.
Use since Oct. 1, 1954.

SN 692,759. The Aro Equipment Corporation, Bryan, Ohio. Filed Aug. 10, 1955.

AROLINES

For House Organ Published at Irregular Intervals.
Use since June 30, 1943.

SN 692,849. Logetronics, Inc., Washington, D. C. Filed Aug. 11, 1955.

LogEtronic

For Photographic Prints.
Use since at least as early as Jan. 5, 1955.

SN 693,076. Norcross, Inc., New York, N. Y. Filed Aug. 15, 1955.

A Perfect Saint

For Greeting Cards and Printed Greeting Folders.
Use since on or about June 29, 1955.

CLASS 39

SN 635,316. Plastimayd Products Corporation, Portland, Oreg., from Plastic Sheeting Company. Filed Sept. 16, 1952.

Plastimayd

For Rain Jackets, Rain Coats, and Raincapes.
Use since Dec. 23, 1947.

SN 665,827. La Chemise Lacoste, Paris, France. Filed May 6, 1954.

Crocodile

Priority under Sec. 44(d). French Reg. No. 435,000, dated Nov. 6, 1953 (Paris); Natl. Inst. No. 27,594. The drawing is lined for the colors green and red but no claim is made to color.
For Sport Shirts of Absorbent Type Fabrics, for Men, Women, Boys, and Girls.

SN 674,669. Federated Department Stores, Inc., d. b. a. Wm. Filene's Sons Company, Boston, Mass. Filed Oct. 12, 1954.



front row

For Women's Hosiery.
Use since on or before Jan. 1, 1949; and on Aug. 29, 1948, as to "Front Row."

SN 685,351. Cluett, Peabody & Co., Inc., Troy, N. Y. Filed Apr. 12, 1955.

LA VACANZA

The English translation of "La Vacanza" is "the vacation."
For Outer Shirts.
Use since Feb. 16, 1955.

SN 686,249. Wells International Corporation, New York, N. Y. Filed Apr. 25, 1955.

MONSIEUR "X"

For Men's Neckwear.
Use since Mar. 9, 1955.

SN 686,838. The Nensteter Co., Denver, Colo. Filed May 4, 1955.

PENGRAS

For Men's, Women's, and Children's Shoes Made From Leather, Fabric, Rubber or a Combination of These Materials.
Use since on or about Mar. 1, 1933.

SN 686,914. Knight Slipper Manufacturing Corporation, Brooklyn, N. Y. Filed May 5, 1955.

Dilties
a new star by KNIGHT

Applicant claims ownership of Reg. Nos. 342,676 and 519,456.
For Slippers of Leather and Fabric and Combinations Thereof, for Men, Women, and Children.
Use since Jan. 21, 1955.

SN 688,839. Middletown Footwear Inc., Middletown, N. Y. Filed June 3, 1955.

Jacques

For Women's Shoes and Slippers Made of Leather, Fabric or Rubber, and of Combinations of Those Materials.
Use since July 5, 1951.

SN 689,102. Warner & Co. Incorporated, d. b. a. Warner & Co., Baltimore, Md. Filed June 7, 1955.

Wyeloch

For Men's Clothing—Namely, Topcoats, Suits, Sportcoats, Slacks, Jackets, and Sport Shirts.
Use since Aug. 12, 1954.

SN 689,146. Mavest, Inc., New York, N. Y. Filed June 8, 1955. Sec. 2(f).

The Woodstock

Applicant claims ownership of Reg. No. 560,655.
For Men's Coats.
Use since October 1947.

SN 689,290. Langerman Shoe Co., New York, N. Y. Filed June 10, 1955.

FOAM FLUFFS

For Women's Shoes.
Use since May 31, 1955.

SN 689,519. Schildkraut Shoe Corporation, New York, N. Y. Filed June 14, 1955.

KUSHION DEBS

For Women's, Misses', and Children's Shoes.
Use since Mar. 2, 1955.

SN 690,254. Ephrata Sportswear Co., Ephrata, Pa. Filed June 27, 1955.

LITTLE SWEET TEE

For Slacks, Dungarees, and Overalls for Women and Children.
Use since May 28, 1954.

SN 690,471. I. C. Isaacs & Company, Incorporated, Baltimore, Md. Filed June 29, 1955.

BEAU GEM

For Ladies' Slacks, Shorts, and Pedal Pushers.
Use since June 20, 1955.

SN 694,598. Rockford Textile Mills, Inc., McMinnville, Tenn. Filed Sept. 13, 1955.

GoldenKing

For Socks.
Use since July 27, 1955.

SN 694,639. David M. Blumberg, d. b. a. Superette Hosiery, Reading, Pa. Filed Sept. 14, 1955.

Superette

For Ladies' Hosiery.
Use since Jan. 1, 1952.

SN 694,936. Vocational Footwear, Inc., Lutesville, Mo. Filed Sept. 19, 1955.

S-O-S

Applicant claims ownership of Reg. No. 375,401.
For Shoes, Principally of Leather.
Use since Nov. 1, 1938.

SN 694,942. Whittenton Garment Corporation, Taunton, Mass. Filed Sept. 19, 1955.

Whittenton

Applicant claims ownership of Reg. No. 415,776.
For Nurses' and Maids' Uniforms.
Use since Apr. 6, 1918.

SN 694,971. Carol Crawford, Inc., New York, N. Y. Filed Sept. 20, 1955.

Casualette

For Women's and Misses' Dresses.
Use since Sept. 8, 1955.

SN 695,011. J. J. Newberry Co., New York, N. Y. Filed Sept. 20, 1955.

Clever-Teens

For Girls' Dresses, Blouses, Cotton Knit Blouses, Skirts, Suits, Jackets, Topper and Coats and Shoes.
Use since May 2, 1955.

SN 695,083. Feldan Brothers, Inc., New York, N. Y. Filed Sept. 21, 1955.

STREAMLINER

For Men's Work Socks.
Use since Dec. 15, 1952.

SN 695,255. Victory Girl Coat Co., New York, N. Y. Filed Sept. 23, 1955.

Vickshire

For Girls' Coats and Jackets.
Use since Aug. 29, 1955.

SN 695,300. William Gluckin & Co., Inc., New York, N. Y. Filed Sept. 26, 1955.

"teen-hi"

For Brassieres.
Use since July 21, 1955.

SN 695,427. Jonathan Logan, Inc., New York, N. Y. Filed Sept. 27, 1955.

JEANNE CARR

"Jeanne Carr" is Mrs. Douglas Duke, consent of record.
For Women's and Misses' Wearing Apparel Including Dresses, Suits, Skirts, Blouses, Shorts, Slacks, Jackets, Halters, Bathing Suits.
Use since Aug. 29, 1955.

CLASS 40

SN 677,755. Accurate Casting Co. Inc., New York, N. Y. Filed Dec. 6, 1954. Sec. 2(f) as to "Accurate."

ACCURATE

For Buckles and Castings for Buckles.
Use since Dec. 1, 1953; and since Jan. 1, 1930, as to "Accurate."

SN 679,284. The Gillette Company, Boston, Mass. Filed Jan. 3, 1955. Sec. 2(f).

SPIN

For Hair Curlers.
Use since Apr. 27, 1949.

SN 686,537. Weyland Echols, Los Gatos, Calif. Filed Apr. 29, 1955.

'MEND-A-HEEL'

For Repair Patches for Clothing.
Use since Jan. 10, 1955.

CLASS 42

SN 620,036. Allan Goldfarb Corporation, New York, N. Y. Filed Oct. 16, 1951.

Raven King

For Textile Fabrics of Cotton, Wool, and Synthetic Fibers.
Use since June 1, 1950.

SN 670,541. Edward P. Leveen Sales Corporation, New York, N. Y., from Woolmark Corporation, by change of name from Carleton Sales Corporation. Filed July 26, 1954.

WASHELLA

For Woven Piece Goods of One or More of Wool and Synthetic Fibers Including Nylon.
Use since June 15, 1954.

SN 670,542. Woolmark Corporation, New York, N. Y., by change of name from Carleton Sales Corporation. Filed July 26, 1954.

Loungella

For Woven Piece Goods of One or More of Wool and Synthetic Fibers Including Nylon.
Use since June 15, 1954.

SN 675,538. Woolmark Corporation, New York, N. Y., by change of name from Carleton Sales Corporation. Filed Oct. 27, 1954.

WEDGMOOR

For Woven Piece Goods of One or More of Wool and Synthetic Fibers Including Nylon.
Use since Sept. 23, 1954.

SN 675,539. Woolmark Corporation, New York, N. Y., by change of name from Carleton Sales Corporation. Filed Oct. 27, 1954.

WOOLMARK

For Woven Piece Goods of Wool and Wool Blends.
Use since Sept. 24, 1954.

SN 694,302. Cortley Curtain Corp., New York, N. Y. Filed Sept. 7, 1955.

Le Bouton

For Window Curtains.
Use since Mar. 1, 1955.

SN 694,310. Fieldcrest Mills, Inc., Spray, N. C. Filed Sept. 7, 1955.

ROYAL VELVET

For Towels, Bath Cloths, and Bath Mats.
Use since July 1954.

SN 694,456. Swift Manufacturing Company, Columbus, Ga. Filed Sept. 9, 1955.

NEO-PRINT

For Woven Paper Fabrics Used in the Manufacture of Automobile Seat Covers and the Like.
Use since on or about Aug. 20, 1955.

SN 604,457. Swift Manufacturing Company, Columbus, Ga. Filed Sept. 9, 1955.

NEO-JET

For Woven Paper Fabrics Used in the Manufacture of Automobile Seat Covers and the Like.
Use since on or about Aug. 20, 1955.

SN 694,602. Shirley Fabrics Corp., New York, N. Y. Filed Sept. 13, 1955.

PUKKAH

For Textile Fabrics in the Piece of Cotton, Rayon, Wool, and Combinations Thereof.
Use since Aug. 16, 1954.

CLASS 45

SN 689,019. W. R. Beyer, d. b. a. Beyer Company, Odessa, Tex. Filed June 7, 1955.

RED ROVER

For Soft Drinks.
Use since July 1, 1954.

CLASS 46

SN 644,348. River Brand Rice Mills Inc., New York, N. Y. Filed Mar. 27, 1953. Sec. 2(f).

A#1

Applicant claims ownership of Reg. No. 314,243.
For Rice.
Use since May 9, 1933.

SN 649,396. Superior Feed Mills, Inc., Oklahoma City, Okla. Filed June 25, 1953.

ALL-IN-ONE

Applicant claims ownership of Reg. Nos. 313,683 and 411,080.
For Feed for Rabbits.
Use since Jan. 1, 1932.

SN 658,748. Antonia Nash, Los Angeles, Calif. Filed Dec. 29, 1953.

LOVE and KISSES

For Candies.
Use since on or about Jan. 15, 1944.

SN 661,096. O. K. Feed Mills, Inc., Fort Smith, Ark. Filed Feb. 15, 1954.

OK's HUSH PUPPIES

The notation "Hush Puppies" is disclaimed apart from the mark as shown.
For Dog Food.
Use since Jan. 28, 1954.

SN 663,292. L. & T. Provision Company, Ellliston, Va. Filed Mar. 25, 1954.

Green Hill

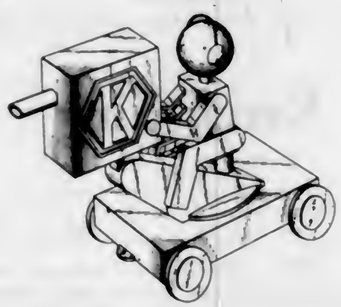
For Bacon.
Use since 1939.

SN 665,412. R. E. Funsten Company, St. Louis, Mo. Filed Apr. 29, 1954. Sec. 2(f).

Funsten's

The lining on the drawing represents the colors blue and orange, but no claim is made as to color. Applicant claims ownership of Reg. Nos. 84,618 and 612,724.
For Shelled and Unshelled Nuts.
Use since on or about Oct. 24, 1921.

SN 667,243. Kraft Foods Company, Chicago, Ill. Filed May 27, 1954.



The mark consists of a three dimensional representation of a television camera, carriage and operator. Applicant claims ownership of Reg. No. 241,112.
For Cheeses, Cheese Foods, and Cheese Spreads, French Dressing, Mayonnaise, Salad Dressing, Sandwich Spread, Cooking and Salad Oil, Macaroni and Cheese, Margarine, Mustard, Jams and Jellies, Malted Milk Powder, and Candy.
Use since Feb. 25, 1954.

SN 675,828. Roman Products Corporation, South Hackensack, N. J. Filed Nov. 1, 1954. Sec. 2(f).

Roman

For Frozen Meat Ravioli, Cheese Ravioli, Meat Sauce, Mushroom Sauce, Pizza Pies, and Manicotti.
Use since Aug. 19, 1947.

SN 678,807. Pharr Canning Co., Inc., Van Buren, Ark. Filed Dec. 22, 1954.

VITA VALLEY

Applicant claims ownership of Reg. No. 392,736.
For Canned Vegetables.
Use since Sept. 13, 1946.

SN 679,972. Best Markets, Inc., Philadelphia, Pa. Filed Jan. 17, 1955.

BEST PRIZE

For Ice Cream.
Use since on or about Jan. 5, 1954.

SN 681,786. J. L. Paine & Son, East Corinth, Maine. Filed Feb. 16, 1955.

DIRIGO

Applicant disclaims the right to the exclusive use of the outline representation of the map of the State of Maine. The drawing is lined for dark blue.
For Potatoes in Their Natural State.
Use since Oct. 1, 1953.

SN 681,799. Realemon-Puritan Co., Chicago, Ill. Filed Feb. 16, 1955.

Regency

Applicant claims ownership of Reg. No. 519,479.
For Olives, Maraschino Cherries, and Reconstituted Lime Juice.
Use since Mar. 19, 1948.

SN 684,264. Baffin, Inc., Scarsdale, N. Y. Filed Mar. 28, 1955. Sec. 2(f).

Baffin

Applicant claims ownership of Reg. No. 557,770.
For Frozen Lobster Tails, for Canned Tuna Fish, Lobsters, Lobster Paste, Lobster Tails, Crabmeat and Trout, and Canned Fruits—Namely, Mandarin Oranges.
Use since Mar. 10, 1950, on canned tuna fish, lobsters, lobster tails, crabmeat, and mandarin oranges.

SN 684,476. E. E. Saunders & Company, Pensacola, Fla. Filed Mar. 29, 1955.



For Cat Food.
Use since Oct. 15, 1954.

SN 684,840. The Holly Farms Poultry Company, Wilkesboro, N. C. Filed Apr. 4, 1955.



For Fresh Dressed and Frozen Poultry.
Use since on or about Dec. 1, 1951.

SN 685,100. Dennis Chicken Products Co., Augusta, Ill. Filed Apr. 7, 1955. Sec. 2(f).

Dennis

For Boned Chicken, Chicken Broth, Canned Whole Chicken, Chicken Noodle Dinner, Boned Turkey, Dressing Composed Principally of Chicken Derivatives and Bread, and Pineapple-Apricot Biscuit Spread.
Use since July 14, 1940.

SN 686,518. American Bakeries Company, Atlanta, Ga. Filed Apr. 29, 1955.

THIN LADY

For Bread.
Use since Mar. 10, 1955.

SN 686,526. Colt Ranch, Inc., Firebaugh, Calif. Filed Apr. 29, 1955.

Mendota GOLD

For Fresh Melons.
Use since July 25, 1950.

SN 687,249. Berns & Koppstein, Inc., New York, N. Y. Filed May 11, 1955.

Don Cerdo

The English translation of "Don Cerdo" is "Mr. Pig."
For Pure Refined Lard.
Use since Mar. 25, 1955.

SN 687,417. Roll Packing House, Chula Vista, Calif. Filed May 12, 1955.

TOP O' THE HEAP

For Fresh Vegetables.
Use since Nov. 9, 1954.

SN 688,159. The Kolter-Buckeye Company, Lima, Ohio. Filed May 24, 1955.

Kreme Kist

For Ice Cream Bars.
Use since Apr. 25, 1955.

SN 688,775. Ward Baking Company, New York, N. Y. Filed June 2, 1955.

DAINTY MAIDS

Applicant claims ownership of Reg. No. 93,139.
For Cup Cakes.
Use since November 1953.

SN 688,852. Pure Frozen Lemon Juice Corporation of America, Hubbard Woods, Ill. Filed June 3, 1955.

NILCAR

For Frozen Lemon Juice and Lime Juice.
Use since May 4, 1950.

SN 688,861. Seaside Fisheries Company, Long Beach, Calif. Filed June 3, 1955.

SEA GLADE

For Canned Fish.
Use since 1943.

SN 689,147. Mille Lacs Maple Products Corporation, St. Paul, Minn. Filed June 8, 1955.

HIAWATHA

For Pancake Mix.
Use since June 1, 1954.

SN 689,159. The Charles A. Peterson Company, Cleveland, Ohio. Filed June 8, 1955.

RED JACKS

For Shelled Edible Nuts, Raw or Salted.
Use since on or about Feb. 25, 1955.

SN 689,160. The Charles A. Peterson Company, Cleveland, Ohio. Filed June 8, 1955.

Champagne

For Shelled Edible Nuts, Raw or Salted.
Use since on or about Feb. 23, 1955.

SN 689,524. Snively Groves, Inc., Winter Haven, Fla. Filed June 14, 1955.

BLUE SAILS

For Fresh Citrus Fruits.
Use since 1936.

SN 689,527. Snively Groves, Inc., Winter Haven, Fla. Filed June 14, 1955.

Lake Eloise

For Fresh Citrus Fruits.
Use since 1936.

SN 689,528. Snively Groves, Inc., Winter Haven, Fla. Filed June 14, 1955. Sec. 2(f).

SNIVELY

Applicant claims ownership of Reg. Nos. 421,285 and 433,143.
For Fresh and Canned Citrus Fruits and Canned Citrus Fruit Juices.
Use since Nov. 9, 1943.

SN 689,543. Big Stone Canning Co., Ortonville, Minn. Filed June 15, 1955.

BANTAM

For Canned Vegetables.
Use since Jan. 3, 1910.

SN 689,774. Wass Food Products Co., Chicago, Ill. Filed June 17, 1955.

OPEN HEARTH

Applicant claims ownership of Reg. No. 596,059.
For Barbecue Sauce.
Use since May 21, 1955.

SN 689,775. Wass Food Products Co., Chicago, Ill. Filed June 17, 1955.

OPEN SEASON

Applicant claims ownership of Reg. No. 596,059.
For Sea Food Sauce.
Use since May 21, 1955.

SN 690,029. Perkins Products Company, Chicago, Ill. Filed June 22, 1955.

Genii

For Salad Dressing Mix.
Use since on or about June 6, 1955.

SN 690,030. Perkins Products Company, Chicago, Ill. Filed June 22, 1955.

Theme

For Salad Dressing Mix.
Use since on or about June 6, 1955.

SN 690,031. Perkins Products Company, Chicago, Ill. Filed June 22, 1955.

Brisq

For Salad Dressing Mix.
Use since on or about June 6, 1955.

SN 690,033. Perkins Products Company, Chicago, Ill. Filed June 22, 1955.

Chant

For Salad Dressing Mix.
Use since on or about June 6, 1955.

SN 690,212. Yakima Fruit Growers Association, Yakima, Wash. Filed June 24, 1955.

SNO-KIST

Applicant claims ownership of Reg. No. 196,049.
For Fresh Deciduous Fruits.
Use since October 1916 on fresh apples.

SN 690,223. Chehalis Packing Co., Seattle, Wash. Filed June 27, 1955.

Misty Vale

For Frozen Peas.
Use since June 16, 1955.

CLASS 47

SN 690,487. Fernand, Victor, Joseph Rossignol, Segre (Maine-et-Loire), France. Filed June 29, 1955.

Rose Perle

The French words "Rose Perle" mean, in English, "Pink Pearl."
For Wines.
Use since 1934.

CLASS 48

SN 686,896. Esslinger's, Inc., Philadelphia, Pa. Filed May 5, 1955.

Keglet

Applicant claims ownership of Reg. Nos. 314,835, 604,041, and others.
For Beer.
Use since Apr. 12, 1955.

SN 694,691. The Burger Brewing Company, Cincinnati, Ohio. Filed Sept. 15, 1955.



For Beer.
Use since Apr. 26, 1954.

CLASS 49

SN 687,058. The Drambuie Liqueur Co. Ltd., Edinburgh, Scotland. Filed May 9, 1955.



For Distilled Alcoholic Liqueur Having a Scotch Whisky Base.
Use since July 1954.

SN 690,128. Brown-Forman Distillers Corporation, d. b. a. Early Times Distillery Company, Louisville, Ky. Filed June 24, 1955.



Applicant claims ownership of Reg. Nos. 327,086 and 609,695.
For Whiskey.
Use since June 1, 1938.

CLASS 50

SN 623,797. Flex-O-Glass, Inc., d. b. a. Warp Brothers, Chicago, Ill. Filed Jan. 19, 1952. Sec. 2(f).

WINDOW-FABRIC

Applicant claims ownership of Reg. No. 356,394.
For Flexible, Translucent, Wax-Coated, and Impregnated Cotton Material for Use in Connection With Greenhouses, Hotbeds, Poultry, and Animal Houses, and as a Closure for Light Admitting Openings in Other Structures Where Transparency Is Not Essential.
Use since December 1933.

SN 656,597. Spring Packing Corporation, Chicago, Ill. Filed Nov. 18, 1953. Sec. 2(f).

MR. ESPEY

For Felt Sold by the Piece or Roll.
Use since June 27, 1952.

SN 689,091. Standard Packaging Corporation, Chicago, Ill. Filed June 7, 1955.

Saracote

For Plastic Coated Paper Liners for Closures.
Use since June 1, 1953.

SN 690,136. Closures, Inc., Waterbury, Conn. Filed June 24, 1955.

CHROMCOTE

For Plastic Closure Caps for Bottles, Jars, Vials, Collapsible Tubes, Etc.
Use since May 26, 1955.

CLASS 51

SN 657,429. Valoré Inc., Greenwich, Conn., from Irving A. Grannick. Filed Dec. 4, 1953.

Cyriaque

For Toilet Water, Cologne.
Use since Dec. 1, 1953.

SN 667,008. Bristol-Myers Company, New York, N. Y. Filed June 15, 1954.

ban

Applicant claims ownership of Reg. No. 218,261.
For Combined Antiperspirant and Deodorant for External Application to the Body.
Use since Mar. 25, 1954.

SN 674,707. Societe Monsavon-L'Oreal, Societe Anonyme, d. b. a. L'Oreal-Paris, Paris (Seine), France. Filed Oct. 12, 1954.

CHROMO

Applicant claims ownership of French Reg. No. 434,624, dated Oct. 27, 1953 (Seine); Natl. Inst. No. 21,293.
For Perfumes, Nail Polish, Lipsticks, Rouge, Face and Body Powder, Sun Tan Oil, Beautifying Skin Lotions, and Hair Preparations—Namely, Hair Lotions, Hair Dyes, Color Rinses, Hair Tints, Hair Bleaches, Hair Rinses, Permanent Waving Liquids and Hair Oils.

SN 686,223. Pharma-Craft Corporation, New York, N. Y. Filed Apr. 25, 1955.

ZIRPRESION

For Sodium Zirconium Lactate an Antiperspirant Agent Used as an Ingredient in Personal Deodorant Products.
Use since Mar. 9, 1955.

SN 687,269. Enid Edson, New York, N. Y. Filed May 11, 1955.

BLINKY

For Baby Oil.
Use since Mar. 14, 1955.

SN 688,122. Harriet Hubbard Ayer, Inc., New York, N. Y. Filed May 24, 1955.

Midas Touch

For Hair Coloring Preparation.
Use since May 10, 1955.

CLASS 52

SN 656,925. Armour and Company, Chicago, Ill. Filed Nov. 25, 1953.

ARMOSOL

Applicant claims ownership of Reg. No. 564,095.
For Soaps and Detergents for Laundering and Brightening Fabrics.
Use since Nov. 2, 1953.

SN 663,503. Charles J. Radosevich, d. b. a. Nurex Chemical Company, Centerville, Iowa. Filed Mar. 29, 1954.

NUREX the Perfumed BLEACH

Applicant is not making a claim to the exclusive appropriation of the words "The Perfumed Bleach" except as used in the precise relation and association in which it appears.
For Disinfectant and Bleach for Clothes of Material Other Than Silk, Wool, and Rayon, Which Product Is Also Used as a Disinfecting and Cleansing Agent for Sinks, Basins, Tubs, Drains, and Showers.
Use since Apr. 1, 1953.

SN 677,427. Willi Maurer K. G., Boppard, Germany. Filed Nov. 29, 1954.

REI

Applicant claims ownership of German Reg. No. 643,543, dated Sept. 3, 1953.
For Household Washing and Cleaning Powder With Bleaching Properties, Soap, Cleansing and Detergent Preparations.

SN 677,672. O-Cedar of Canada Limited, Stratford, Ontario, Canada. Filed Dec. 2, 1954.

CHANITE

Applicant claims ownership of Canadian Reg. No. N. S. 189/48186, dated Dec. 2, 1953.
For Wax Removers.

SN 679,492. The Sanfax Company, Atlanta, Ga. Filed Jan. 5, 1955.

SANFAX

The lining is for red.
For Cleaning and Sanitary Chemical Compounds and Mixtures Used in Cleaning Buildings of All Types and Fixtures and Attachments Therein; To Clean All Types of Equipment—Namely, Industrial Equipment, Transportation Equipment, and Food Processing Eqnipment; To Clean Meat in the Process of Being Slaughtered for Human Consumption; To Clean All Types of Sewer Lines; for Use in Laundries in the Course of Cleaning Clothing; and for Use as Deodorants in Treatment of Sewerage Plants and in Treatment for Industrial Odors of All Types.
Use since May 1950.

SN 687,738. Teen Sheen, Inc., Shaker Heights, Ohio. Filed May 17, 1955.

Teen Sheen

For Shampoo.
Use since Aug. 28, 1954.

SN 692,802. Rayette, Inc., St. Paul, Minn. Filed Aug. 10, 1955.

ROIL

For Shampoos.
Use since May 1950.

SN 693,636. R. R. Street & Co. Inc., Chicago, Ill. Filed Aug. 24, 1955.

FABRICLEAN

For Cleaning Fluid for Fabrics, Rugs, and Wood Surfaces.
Use since June 1, 1952.

SERVICE MARKS

CLASS 100

SN 681,289. The Peelers Company, New Orleans, La. Filed Feb. 8, 1955.



All wording is disclaimed apart from the mark as a whole without waiving any common law rights thereto.

For Leasing of Shrimp Processing Machinery.

Use since Dec. 16, 1954.

SN 686,578. Smith Kline & French Laboratories, Philadelphia, Pa. Filed Apr. 29, 1955.

VIDECLINIC

For Information Service Rendered Through the Medium of a Closed-Circuit Television Broadcast Program Consisting of Medical News, Research, Treatment, and Progress.

Use since Jan. 28, 1955.

CLASS 101

SN 645,171. Meredith Publishing Company, Des Moines, Iowa. Filed Apr. 13, 1953.



Applicant disclaims the wording "Home Planning Service" apart from the mark as shown. Applicant claims ownership of Reg. No. 203,616.

For Home Planning Service—Namely, Assisting Licensee Retail Stores in Counseling Home Owners and the Purchasing Public Generally in Problems of Home Construction, Improvement, and Interior Decoration.

Use since February 1950.

SN 677,739. Saunders Distributors, Inc., d. b. a. Gold Stamp Premium Company, Charlotte, N. C. Filed Dec. 3, 1954.



The words "Gold Stamp" are disclaimed apart from the mark as shown.

For Sales Promotion of the Goods and Services of Others Through the Medium of Trading Stamps Which Are Redeemable in Merchandise.

Use since June 3, 1954.

CLASS 106

SN 692,118. Bradford Dyeing Association (U. S. A.), New York, N. Y. Filed July 29, 1955.

BRADSKILL

Applicant claims ownership of Reg. Nos. 188,786, 585,566, and others.

For Services Rendered Manufacturers of All Types of Cotton Fabrics and Mixtures Thereof Which Services Consist of Rendering Said Fabrics Crease Resistant and Further Rendering Said Fabrics Shrunk to Within Two Per Cent Average Residual Shrinkage by Government Test Methods.

Use since June 16, 1955.

CLASS 107

SN 666,962. Sam H. Kaufman, Esther F. Swanson, and Oreland R. Johnson, Minneapolis, Minn. Filed May 24, 1954.



The mark constitutes the title of a television program.

For Entertainment Service in the Nature of a Television Quiz Program.

Use since Jan. 1, 1953.

CERTIFICATION MARKS

CLASS A

SN 694,609. Tobacco Workers International Union, Washington, D. C. Filed Sept. 13, 1955.



The mark certifies that the work or labor on the goods was performed by a member of the Tobacco Workers International Union.

For Manufactured Tobacco Products.

Use since approximately Oct. 27, 1899.

TRADEMARK REGISTRATIONS ISSUED

PRINCIPAL REGISTER

CLASS 1

621,488. CAR-CON. Smith-Byrne Company, Inc. SN 672,450. Pub. 11–22–55. Filed 8–30–54.

621,489. ONEIDA. Fred Rueping Leather Company. SN 675,011. Pub. 11–22–55. Filed 10–18–54.

621,490. IBH AND DESIGN. Ivan B. Hart & Sons, Inc. SN 679,904. Pub. 11–22–55. Filed 1–14–55.

621,491. RUGLAWN. O. S. Baker. SN 680,578. Pub. 11–29–55. Filed 1–27–55.

621,492. MODOCLAY. Dorothy Ford Montgomery. SN 680,777. Pub. 11–22–55. Filed 1–31–55.

621,493. CORKETTE CALF. Hermann Loewenstein, Inc. SN 683,213. Pub. 11–29–55. Filed 3–10–55.

621,494. SUPERIOR TANNING CO. ETC. AND DESIGN. Superior Tanning Company. SN 684,358. Pub. 11–29–55. Filed 3–28–55.

621,495. ABC CHICKS. American Baby Chick Company. SN 685,081. Pub. 11–22–55. Filed 4–7–55.

621,496. BAR-B-FUEL. Western Chef Products, Inc. SN 685,150. Pub. 11–22–55. Filed 4–7–55.

621,497. LOVE APPLES. Stella G. Dabbs. SN 685,172. Pub. 11–22–55. Filed 4–8–55.

621,498. CAPER CALF. American Hide and Leather Company. SN 685,630. Pub. 11–22–55. Filed 4–18–55.

621,499. 'TUF-CELL-FOAM'. Hadley Bros.-Uhl Company. SN 686,736. Pub. 11–29–55. Filed 5–3–55.

621,500. KENTUCKY WINNER AND DESIGN. Alston Coal Company. SN 685,804. Pub. 11–22–55. Filed 4–19–55.

621,501. LYNNVILLE AND DESIGN. Lynnville Coal Company. SN 685,836. Pub. 11–22–55. Filed 4–19–55.

621,502. PIP. Foramino Incorporated. SN 685,975. Pub. 11–29–55. Filed 4–21–55.

621,503. IT'S A PIP. Foramino Incorporated. SN 685,976. Pub. 11–29–55. Filed 4–21–55.

621,504. POLY-THANE. Hadley Bros.-Uhl Company. SN 686,737. Pub. 11–29–55. Filed 5–3–55.

CLASS 2

621,505. GLADMARK. Markham Wood Products. SN 673,113. Pub. 11–22–55. Filed 9–13–54.

621,506. NEST-A-BIN BY KAISER AND DESIGN. Willys Motors, Inc., to Kaiser Aircraft & Electronics Corporation. SN 676,022. Pub. 11–29–55. Filed 11–3–54.

621,507. KONE PAK. Armco Steel Corporation. SN 681,054. Pub. 11–29–55. Filed 2–4–55.

621,508. KORDITE. Kordite Corporation, to Textron American, Inc. SN 681,773. Pub. 11–29–55. Filed 2–16–55.

621,509. SPOTLESS. Spotless Plastics Corporation, to Textron American, Inc. SN 682,682. Pub. 11–29–55. Filed 3–2–55.

621,510. OXFORD BRAND AND DESIGN. Center Chemical Company. SN 683,578. Pub. 11–22–55. Filed 3–16–55.

621,511. THE CRONCO SKIPPER AND DESIGN. Cronstroms Manufacturing, Inc., d. b. a. Cronstroms Manufacturing Co. SN 683,761. Pub. 11–22–55. Filed 3–18–55.

621,512. T-BOARD. Marathon Corporation. SN 685,838. Pub. 11–22–55. Filed 4–19–55.

621,513. HOWARD SEAL AND DESIGN. Howard Plastics, Inc. SN 686,367. Pub. 11–22–55. Filed 4–27–55.

621,514. KID-DO. The Linvure Co., Inc. SN 686,753. Pub. 11–22–55. Filed 5–3–55.

621,515. AMPSTEEL QUALITY PRODUCTS AND DESIGN. American Pipe & Steel Corporation. SN 687,036. Pub. 11–22–55. Filed 5–9–55.

621,516. CW AND DESIGN. Schenley Distillers, Inc. SN 688,270. Pub. 11–22–55. Filed 5–25–55.

621,517. VAC-PAK. David Rubin, d. b. a. New Way Garment Bag Co. SN 689,417. Pub. 11–29–55. Filed 6–13–55.

621,518. DURO CORES. Sonoco Products Company. SN 690,042. Pub. 11–29–55. Filed 6–22–55.

CLASS 3

621,519. ALDENS. Aldens, Inc. SN 674,860. Pub. 11–22–55. Filed 10–15–54.

621,520. "CLIFTON'S" HAND TOOLED AND DESIGN. Western Supply Company. SN 685,063. Pub. 11–22–55. Filed 4–6–55.

621,521. LASSIE. Nash Inc. SN 686,674. Pub. 11–22–55. Filed 5–2–55.

CLASS 4

621,522. SIDOL. Siegel & Co. SN 641,238. Pub. 11–22–55. Filed 12–19–52.

621,523. SILVER KLEEN AND DESIGN. Kilgiar Manufacturing Company. SN 685,720. Pub. 11–22–55. Filed 4–18–55.

621,524. MARBELIZE. William S. Brown, d. b. a. Brown Distributing Company. SN 685,812. Pub. 11–22–55. Filed 4–19–55.

621,525. TARGET AND DESIGN. Robert G. Evans Co. SN 687,270. Pub. 11–22–55. Filed 5–11–55.

621,526. POLISEAL. H. & B. Distributors. SN 687,468. Pub. 11–22–55. Filed 5–13–55.

621,527. GULF AND DESIGN (LINED FOR ORANGE AND BLUE). Gulf Oil Corporation. SN 687,565. Pub. 11–22–55. Filed 5–16–55.

621,528. GULF AND DESIGN (LINED FOR ORANGE AND BLUE). Gulf Oil Corporation. SN 687,566. Pub. 11–22–55. Filed 5–16–55.

621,529. GULF AND DESIGN (LINED FOR ORANGE AND BLUE). Gulf Oil Corporation. SN 687,567. Pub. 11–22–55. Filed 5–16–55.

621,530. SPIN-SHINE. K. J. Quinn & Co. Inc. SN 688,353. Pub. 11–22–55. Filed 5–26–55.

CLASS 5

621,531. "FORM-ON." Mid-States Gummed Paper Co. SN 684,859. Pub. 11–22–55. Filed 4–4–55.

621,532. BE BE ROD. B. B. Chemical Co. SN 685,239. Pub. 11–22–55. Filed 4–11–55.

621,533. MASTER-MASTIC. Miraplas Tile Company. SN 685,454. Pub. 11–22–55. Filed 4–13–55.

621,534. FOAM-TAPE. Central Manufacturing Company. SN 685,475. Pub. 11–22–55. Filed 4–14–55.

621,535. DRIFLEX. Armour and Company. SN 685,807. Pub. 11–22–55. Filed 4–19–55.

621,536. GRIP TITE AND DESIGN. Lino Paste Company. SN 686,195. Pub. 11–22–55. Filed 4–25–55.

621,537. GRIP-RITE. Lino Paste Company. SN 686,196. Pub. 11–22–55. Filed 4–25–55.

621,538. COACH. Johnson & Johnson. SN 686,832. Pub. 11–22–55. Filed 5–4–55.

621,539. GULF AND DESIGN (LINED FOR ORANGE AND BLUE). Gulf Oil Corporation. SN 687,568. Pub. 11–22–55. Filed 5–16–55.

621,540. GULF AND DESIGN (LINED FOR ORANGE AND BLUE). Gulf Oil Corporation. SN 687,569. Pub. 11–22–55. Filed 5–16–55.

621,541. GULF AND DESIGN (LINED FOR ORANGE AND BLUE). Gulf Oil Corporation. SN 687,570. Pub. 11–22–55. Filed 5–16–55.

621,542. UBAGRIP. Union Bay State Chemical Co., Inc. SN 688,479. Pub. 11–22–55. Filed 5–27–55.

621,543. UBABOND. Union Bay State Chemical Co., Inc. SN 688,481. Pub. 11–22–55. Filed 5–27–55.

621,544. LEBEC. Lebec Chemical Corporation. SN 688,945. Pub. 11–29–55. Filed 6–6–55.

CLASS 6

621,545. HYDRASOLV. Crosby Chemicals, Inc. SN 670,730. Pub. 11–22–55. Filed 7–28–54.

621,546. MONOX. Petrolite Corporation. SN 671,580. Pub. 11–22–55. Filed 8–12–54.

621,547. SIMOL. Geigy Chemical Corporation. SN 672,337. Pub. 11–22–55. Filed 8–27–54.

621,548. PROTECTO AND DESIGN. Prairie States Oil & Grease Company, d. b. a. Protecto Chemical Company. SN 675,099. Pub. 11–29–55. Filed 10–19–54.

621,549. FR 28. Borax Consolidated, Limited, d. b. a. Pacific Coast Borax Co., division of Borax Consolidated, Limited. SN 676,461. Pub. 11–29–55. Filed 11–12–54.

621,550. BICKATOL A. Hans C. Bick, Inc. SN 676,591. Pub. 11–29–55. Filed 11–15–54.

621,551. ROBECO ETC. AND DESIGN. Rosenthal Bercow Co., Inc. SN 681,882. Pub. 11–22–55. Filed 2–17–55.

621,552. UREABOR. Borax Consolidated, Limited, d. b. a. Pacific Coast Borax Co., division of Borax Consolidated, Limited. SN 681,986. Pub. 11–29–55. Filed 2–21–55.

621,553. SHARK CHASER AND DESIGN. Alvin L. Allyn, d. b. a. Shark Chaser Chemicals. SN 684,090. Pub. 11–22–55. Filed 3–24–55.

621,554. KLARITE AND DESIGN. Water Control Engineering Company. SN 684,506. Pub. 11–22–55. Filed 3–29–55.

621,555. CHARLAB IDENTA-SOL. Charlotte Chemical Laboratories, Inc. SN 684,534. Pub. 11–22–55. Filed 3–30–55.

621,556. REPRESENTATION OF DANCER AND CANDLE. Geigy Chemical Corporation. SN. 684,554. Pub. 11–22–55. Filed 3–30–55.

621,557. DURABLUE. Southern Dyestuff Corporation. SN 684,599. Pub. 11–22–55. Filed 3–30–55.

621,558. DENIVAT. Southern Dyestuff Corporation. SN 684,601. Pub. 11–22–55. Filed 3–30–55.

621,559. STAY. Southern Dyestuff Corporation. SN 684,603. Pub. 11–22–55. Filed 3–30–55.

621,560. PRUF. Colgate-Palmolive Company. SN 684,642. Pub. 11–29–55. Filed 3–31–55.

621,561. RANEY AND DESIGN. Murray Raney, d. b. a. Raney Catalyst Company. SN 684,881. Pub. 11–29–55. Filed 4–4–55.

621,562. SUPERNATINE. Sandoz Chemical Works, Inc. SN 684,886. Pub. 11–29–55. Filed 4–4–55.

621,563. VIT-A-PLATE AND DESIGN. The Vit-A-Plate Company. SN 684,900. Pub. 11–22–55. Filed 4–4–55.

621,564. POLY-SOLV. Olin Mathieson Chemical Corporation. SN 685,201. Pub. 11–29–55. Filed 4–8–55.

621,565. SEAL-SKIN AND DESIGN. Cornelius J. Flanigan, d. b. a. C. J. Flanigan Belting Co. SN 685,264. Pub. 11–29–55. Filed 4–11–55.

621,566. FARM-OYL. The Farm-Oyl Company. SN 685,361. Pub. 11–29–55. Filed 4–12–55.

621,567. SANI-DRINK. Alex C. Fergusson Company. SN 685,827. Pub. 11–29–55. Filed 4–19–55.

621,568. MAGIC ROACH BOX AND DESIGN. Ohio Valley Seed Co., Inc. SN 685,847. Pub. 11–29–55. Filed 4–19–55.

621,569. STACOLLOID. A. E. Staley Manufacturing Company. SN 685,862. Pub. 11–29–55. Filed 4–19–55.

621,570. SOLAR SCREEN AND DESIGN. Solar Screen Corporation. SN 686,002. Pub. 11–29–55. Filed 4–21–55.

621,571. CAVITOL. Undertakers Supply Company. SN 686,009. Pub. 11–29–55. Filed 4–21–55.

CLASS 8

621,572. SUPERTEX. Cigarette Components Limited. SN 674,499. Pub. 11–22–55. Filed 10–8–54.

CLASS 10

621,573. GREENER. Western Livestock Order Buyers, d. b. a. Greener Plant Food Co. SN 670,639. Pub. 11–22–55. Filed 7–26–54.

621,574. URAN. Allied Chemical & Dye Corporation. SN 676,445. Pub. 11–22–55. Filed 11–12–54.

CLASS 11

621,575. PRODUCT OF PORT HURON AND DESIGN. Port Huron Sulphite & Paper Co. SN 659,735. Pub. 11–22–55. Filed 1–19–54.

621,576. HURON CARBON PRODUCT OF PORT HURON AND DESIGN. Port Huron Sulphite & Paper Co. SN 659,736. Pub. 11–22–55. Filed 1–19–54.

621,577. MASTER. James Weiss, d. b. a. Master Products Company. SN 661,383. Pub. 11–22–55. Filed 2–19–54.

621,578. SUNBRITE. Sun Chemical Corporation. SN 661,918. Pub. 11–22–55. Filed 3–2–54.

621,579. IDOL. Columbia Ribbon & Carbon Manufacturing Company, Inc. SN 686,808. Pub. 11–29–55. Filed 5–4–55.

621,580. IMAGE. Columbia Ribbon & Carbon Manufacturing Company, Inc. SN 686,809. Pub. 11–29–55. Filed 5–4–55.

621,581. INDEX. Columbia Ribbon & Carbon Manufacturing Company, Inc. SN 686,810. Pub. 11–29–55. Filed 5–4–55.

621,582. IRON. Columbia Ribbon & Carbon Manufacturing Company, Inc. SN 686,811. Pub. 11–29–55. Filed 5–4–55.

CLASS 12

621,583. TAYLOR MADE AND DESIGN. Taylor Made Garage Doors, Inc., by change of name from Johannsen & Taylor, Inc., successor to R. L. Taylor, Inc. SN 615,145. Pub. 11–22–55. Filed 6–13–51.

621,584. PERM-A-TRIM AND DESIGN. Dewey S. Johnston, d. b. a. Perm-A-Trim Company. SN 662,542. Pub. 10–4–55. Filed 3–12–54.

621,585. TRUSSLESS WONDER BUILDING AND DESIGN. M. P. H. Manufacturing Corp., Inc. SN 671,844. Pub. 11–22–55. Filed 8–17–54.

621,586. KOLD METAL AND DESIGN. Metalastic Chemical Products Co. SN 676,128. Pub. 11–29–55. Filed 11–5–54.

621,587. ARTSEAL. Artco, Inc. SN 680,057. Pub. 11–22–55. Filed 1–18–55.

621,588. HUFCOR AND DESIGN. Hough Shade Corporation. SN 680,079. Pub. 11–22–55. Filed 1–18–55.

621,589. MAGIC-FOLD. Closures, Inc. SN 681,991. Pub. 11–22–55. Filed 2–21–55.

621,590. ALSAR. Alsar Distributors, Inc. SN 687,163. Pub. 11–29–55. Filed 5–10–55.

621,591. DRI-SEAL. Continental Chemical Company. SN 688,024. Pub. 11–29–55. Filed 5–23–55.

621,592. HPI PLY-SHELF AND DESIGN. Hardwood Plywood Institute. SN 688,241. COLLECTIVE MARK. Pub. 11–29–55. Filed 5–25–55.

621,593. LONE STAR PIPE WRAP ETC. AND DESIGN. Texas Glass Fiber Corporation. SN 688,279. Pub. 11–29–55. Filed 5–25–55.

621,594. WACO. Waco Manufacturing Company, d. b. a. Waco Manufacturing Co. SN 688,377. Pub. 11–22–55. Filed 5–26–55.

621,595. RANCH ROOF. Bird & Son, Inc. SN 688,499. Pub. 11–22–55. Filed 5–31–55.

621,596. M. A. P. INC. AND DESIGN OF A MAP. Missouri Aluminum Products, Inc. SN 688,840. Pub. 11–29–55. Filed 6–3–55.

621,597. OI. Owens-Illinois Glass Company. SN 688,958. Pub. 11–22–55. Filed 6–6–55.

621,598. FOAM-COTE. Allied Chemical & Dye Corporation. SN 689,201. Pub. 11–29–55. Filed 6–9–55.

621,599. RE-INSUL-MI-CRETE. Re-Insul-Mi-Crete Plank & Products Corporation. SN 689,591. Pub. 11–22–55. Filed 6–15–55.

621,600. REDONDO TRUSIZE. Redondo Tile Company, Ltd., to Redondo Tile Co. SN 689,655. Pub. 11–22–55. Filed 6–16–55.

621,601. SPEED SEAL. Gladding, McBean & Co. SN 690,700. Pub. 11–29–55. Filed 7–5–55.

621,602. FURN-A-RAM. Mexico Refractories Company. SN 690,735. Pub. 11–29–55. Filed 7–5–55.

621,603. MATICORK. The Mastic Tile Corporation of America. SN 691,058. Pub. 11–29–55. Filed 7–11–55.

621,604. CAP-LOK. Keystone Flashing Company. SN 691,697. Pub. 11–22–55. Filed 7–21–55.

621,605. INSULSTEEL. Conynghain Sales Co. SN 691,830. Pub. 11–22–55. Filed 7–25–55.

621,606. FIBERSAN. Globe Roofing Products Co., Inc. SN 691,942. Pub. 11–29–55. Filed 7–26–55.

621,607. RANDOM-GRAIN. Globe Roofing Products Co., Inc. SN 691,943. Pub. 11–22–55. Filed 7–26–55.

621,608. RURALIFE. Koppers Company, Inc. SN 692,067. Pub. 11–29–55. Filed 7–28–55.

CLASS 13

621,609. BROMOP. Herman Leiser. SN 674,337. Pub. 11–22–55. Filed 10–5–54.

621,610. ACE-ITE AND DESIGN. American Hard Rubber Company. SN 684,790. Pub. 11–22–55. Filed 4–4–55.

621,611. SA AND DESIGN. Sanders Associates Incorporated. SN 685,304. Pub. 11–22–55. Filed 4–11–55.

621,612. SURFA-CHEK. The Aro Equipment Corporation. SN 686,598. Pub. 11–22–55. Filed 5–2–55.

621,613. WUNDA ROLL. Republic Import Corp. SN 688,355. Pub. 11–29–55. Filed 5–26–55.

621,614. EAGLE BRAND AND REPRESENTATION OF AN EAGLE. The Turner & Seymour Manufacturing Co. SN 689,101. Pub. 11–29–55. Filed 6–7–55.

621,615. GRIP-RITE. Triangle Specialties Company. SN 689,183. Pub. 11–29–55. Filed 6–8–55.

621,616. SOLOMITE. Aquamatic Inc. SN 689,604. Pub. 11–22–55. Filed 6–16–55.

621,617. "PINTA." Pinta Products, Inc. SN 690,325. Pub. 11–22–55. Filed 6–27–55.

621,618. KAYLOCK. The Kaynar Company. SN 690,787. Pub. 11–29–55. Filed 7–5–55.

621,619. K AND DESIGN. Kepner Products Company. SN 691,302. Pub. 11–22–55. Filed 7–14–55.

621,620. KEP-O-SEAL. Kepner Products Company. SN 691,303. Pub. 11–22–55. Filed 7–14–55.

621,621. CUL-FLO-VALV. Culligan, Inc. SN 691,440. Pub. 11–22–55. Filed 7–18–55.

621,622. TOASTEE SUSAN. Shawnee Pottery Company. SN 691,638. Pub. 11–22–55. Filed 7–20–55.

621,623. SAUCY SUSAN. Shawnee Pottery Company. SN 691,639. Pub. 11–22–55. Filed 7–20–55.

621,624. FLO-LIM. The W. A. Kates Company. SN 692,236. Pub. 11–22–55. Filed 8–1–55.

621,625. DRI-TANK. Chicago Pottery Company. SN 692,383. Pub. 11–22–55. Filed 8–3–55.

621,626. FLAT FOOT. Drialre Incorporated. SN 692,917. Pub. 11–22–55. Filed 8–12–55.

621,627. NO-PROBLEM. Frank J. Valtri. SN 693,338. Pub. 11–29–55. Filed 8–18–55.

621,628. "SEA HORSE." Wolverine Brass Works. SN 693,411. Pub. 11–29–55. Filed 8–19–55.

621,629. DIET-MASTER. National Presto Industries, Inc. SN 693,761. Pub. 11–29–55. Filed 8–26–55.

621,630. ROBOT GARDENER. Walter Ratner, d. b. a. The Grant Company. SN 693,846. Pub. 11–29–55. Filed 8–29–55.

CLASS 14

621,631. CROLOY. The Babcock & Wilcox Company. SN 674,127. Pub. 11–29–55. Filed 10–1–54.

621,632. "MIKROSHEEN" AND DESIGN. Al-Mag Corporation. SN 675,046. Pub. 11–22–55. Filed 10–19–54.

621,633. DURAFLEX. The American Brass Company. SN 679,627. Pub. 11–29–55. Filed 1–10–55.

621,634. RIGID-TEX METAL ETC. AND DESIGN. Rigidized Metals Corporation. SN 681,204. Pub. 11–22–55. Filed 2–7–55.

621,635. ZIV'S NEWMAX. Ziv Steel & Wire Co. SN 684,004. Pub. 11–22–55. Filed 3–22–55.

621,636. GRAMTEX. L. F. Grammes & Sons, Inc. SN 685,492. Pub. 11–29–55. Filed 4–14–55.

621,637. STRESSPROOF. La Salle Steel Company. SN 686,062. Pub. 11–22–55. Filed 4–22–55.

621,638. PERMA-LATEM. Permalatem Welding Alloys, Inc. SN 689,156. Pub. 11–29–55. Filed 6–8–55.

621,639. PERMA-LOY. Permalatem Welding Alloys, Inc. SN 689,158. Pub. 11–29–55. Filed 6–8–55.

621,640. URITE. Urick Foundry Co. SN 689,318. Pub. 11–22–55. Filed 6–10–55.

621,641. NIMCOLOY. Nickles Machine Corporation. SN 690,573. Pub. 11–22–55. Filed 6–30–55.

621,642. McCANNACORE. Hills-McCanna Company. SN 690,882. Pub. 11–29–55. Filed 7–7–55.

621,643. DISKETS. Max Zuckerman. SN 692,290. Pub. 11–29–55. Filed 8–1–55.

621,644. NI-O-NEL. The International Nickel Company, Inc. SN 692,397. Pub. 11–29–55. Filed 8–3–55.

621,645. "65." The International Nickel Company, Inc. SN 692,398. Pub. 11–29–55. Filed 8–3–55.

CLASS 15

621,646. ATOM-LUBE. Jet Tool Company. SN 672,155. Pub. 11–22–55. Filed 8–24–54.

621,647. SOLAR. The Standard Oil Company. SN 673,788. Pub. 11–22–55. Filed 9–24–54.

621,648. ICA. Ashland Oil & Refining Company. SN 684,797. Pub. 11–22–55. Filed 4–4–55.

621,649. TUNG-LUBE. Reduction and Refining Company. SN 684,967. Pub. 11–22–55. Filed 4–5–55.

621,650. GULF AND DESIGN (LINED FOR ORANGE AND BLUE). Gulf Oil Corporation. SN 687,559. Pub. 11–29–55. Filed 5–16–55.

621,651. GULF. Gulf Oil Corporation. SN 687,576. Pub. 11–29–55. Filed 5–16–55.

621,652. GULFPRIDE. Gulf Oil Corporation. SN 687,583. Pub. 11–29–55. Filed 5–16–55.

621,653. GULFLUBE. Gulf Oil Corporation. SN 687,584. Pub. 11–29–55. Filed 5–16–55.

621,654. GULFWAX. Gulf Oil Corporation. SN 687,585. Pub. 11–29–55. Filed 5–16–55.

621,655. GULFCO. Gulf Oil Corporation. SN 687,587. Pub. 11–29–55. Filed 5–16–55.

621,656. GULFOIL. Gulf Oil Corporation. SN 687,590. Pub. 11–29–55. Filed 5–16–55.

621,657. GULFLEX. Gulf Oil Corporation. SN 687,593. Pub. 11–29–55. Filed 5–16–55.

CLASS 16

621,658. GUARDSMAN DO-IT-YOURSELF AND DESIGN. Grand Rapids Varnish Corporation. SN 672,073. Pub. 11–29–55. Filed 8–23–54.

621,659. ANCHOR AND DESIGN. The Irvin, Jewell and Vinson Company. SN 684,661. Pub. 11–8–55. Filed 3–31–55.

621,660. METCO AND DESIGN. Metallizing Engineering Co. Inc. SN 687,966. Pub. 11–29–55. Filed 5–20–55.

621,661. INSUL-PLATE. Hoyt Ecker, d. b. a. Ecker Industries. SN 688,225. Pub. 11–22–55. Filed 5–25–55.

621,662. SPEEDY-WIPE. Vita-Var Corporation. SN 689,187. Pub. 11–29–55. Filed 6–8–55.

621,663. SPORTSMEN'S. The Valspar Corporation. SN 689,252. Pub. 11–29–55. Filed 6–9–55.

621,664. O & D ON DRY. The Foy Paint Company, Inc., d. b. a. The R. F. Johnston Paint Company and The A. Burdsal Company. SN 689,277. Pub. 11–29–55. Filed 6–10–55.

621,665. LASTING. Lasting Products Company. SN 689,393. Pub. 11–29–55. Filed 6–13–55.

621,666. TEMPO. Tempo Products Co. SN 690,048. Pub. 11–29–55. Filed 6–22–55.

621,667. EACRON. Stacoat Paint and Varnish Company. SN 692,279. Pub. 11–29–55. Filed 8–1–55.

CLASS 17

621,668. BOLD. Bobrow Bros., Inc. SN 679,819. Pub. 11–29–55. Filed 1–13–55.

621,669. KAREL I. N. V. Karel I Sigarenfabrieken v/h H. J. van Abbe. SN 682,987. Pub. 11-29-55. Filed 3-7-55.

621,670. MATINÉE. Imperial Tobacco Company of Canada, Limited. SN 683,047. Pub. 11-29-55. Filed 3-8-55.

CLASS 18

621,671. NUTRIDINE. Willis M. Torbert. SN 622,565. Pub. 2-9-54. Filed 12-15-51.

621,672. SANOX. Claude R. Cooper, d. b. a. Sanox Co. SN 641,017. Pub. 8-24-54. Filed 1-21-53.

621,673. TRIPLE-BARB. Moore and Company, Inc. SN 658,129. Pub. 11-29-55. Filed 12-17-53.

621,674. ADCORTYL. Mathieson Chemical Corporation, now by merger and change of name Olin Mathieson Chemical Corporation. SN 670,433. Pub. 11-22-55. Filed 7-22-54.

621,675. M. I. V. The Wm. S. Merrell Co. SN 672,237. Pub. 11-22-55. Filed 8-25-54.

621,676. TROPH-IRON. Smith Kline & French Laboratories. SN 673,689. Pub. 11-22-55. Filed 9-23-54.

621,677. OCEANIC. Amos R. Beamon, d. b. a. Oceanic Products Co. SN 678,589. Pub. 11-22-55. Filed 12-20-54.

621,678. DISIPAL. N. V. Koninklijke Pharmaceutische Fabrieken v/h Brocades-Stheeman & Pharmacia. SN 679,395. Pub. 11-22-55. Filed 1-4-55.

621,679. CE-RUTINION-TRAUBENZUCKER. Rhein-Chemie G. m. b. H. SN 680,224. Pub. 11-29-55. Filed 1-20-55.

621,680. PAS-NIAZID. Pacific States Laboratories, Inc. SN 680,971. Pub. 11-29-55. Filed 2-2-55.

621,681. SERNYL. Parke, Davis & Company. SN 681,623. Pub. 11-22-55. Filed 2-14-55.

621,682. CAMOPRIM. Parke, Davis & Company. SN 681,624. Pub. 11-22-55. Filed 2-14-55.

621,683. YANKEE DOODLE. The American Feed Stores (Home Organization) Inc. SN 681,667. Pub. 11-22-55. Filed 2-15-55.

621,684. MERPHENE. Barry Laboratories, Inc. SN 681,980. Pub. 11-29-55. Filed 2-21-55.

621,685. DELTACORTRIL. Chas. Pfizer & Co., Inc. SN 682,751. Pub. 11-22-55. Filed 3-3-55.

621,686. VIBIRIL. Merck & Co., Inc. SN 688,055. Pub. 11-29-55. Filed 5-23-55.

621,687. REDITRIN. Merck & Co., Inc. SN 688,056. Pub 11-29-55. Filed 5-23-55.

621,688. HYDROSPRAY. Merck & Co., Inc. SN 688,058. Pub. 11-29-55. Filed 5-23-55.

621,689. OSTEO-MIN. George Wayne Edwards, d. b. a. Deaf Smith County Pharmaceutical Co. SN 688,224. Pub. 11-22-55. Filed 5-25-55.

621,690. PROVIMIN AND DESIGN. Feed Products, Inc. SN 688,230. Pub. 11-22-55. Filed 5-25-55.

621,691. PRO-STREP. Merck & Co., Inc. SN 688,337. Pub. 11-22-55. Filed 5-26-55.

621,692. GLAUMEBA. Merck & Co., Inc. SN 688,339. Pub. 11-22-55. Filed 5-26-55.

621,693. MERCUDROX. E. Fougera & Co., Inc. SN 688,404. Pub. 11-29-55. Filed 5-27-55.

621,694. LIFE-GUIDES AND DESIGN. Gildes, Incorporated. SN 688,407. Pub. 11-29-55. Filed 5-27-55.

621,695. TOPICORT. Roussel Corporation. SN 688,466. Pub. 11-29-55. Filed 5-27-55.

621,696. NEMBU-SERPIN. Abbott Laboratories. SN 688,494. Pub. 11-29-55. Filed 5-31-55.

621,697. TRONOLEN. Abbott Laboratories. SN 688,495. Pub. 11-29-55. Filed 5-31-55.

621,698. BUTISERPINE. McNeil Laboratories, Incorporated. SN 688,555. Pub. 11-29-55. Filed 5-31-55.

621,699. EMULSION GIMENEZ. Jorge Gimenez. SN 693,958. Pub. 11-22-55. Filed 9-16-55.

CLASS 19

621,700. DUPLEX. Lighthouse Trailer Company. SN 674,165. Pub. 11-22-55. Filed 10-1-54.

621,701. DYNAMAX ETC. AND DESIGN. Dynamax Limited. SN 675,773. Pub. 11-22-55. Filed 11-1-54.

621,702. ACF. ACF Industries, Incorporated. SN 677,279. Pub. 11-29-55. Filed 11-26-54.

621,703. SAFE RIDE. Ben C. Arquitt, d. b. a. Safety Engineering Co. SN 684,008. Pub. 11-29-55. Filed 3-23-55.

621,704. THE FOUR HUNDRED. Studebaker-Packard Corporation. SN 686,399. Pub. 11-29-55. Filed 4-27-55.

621,705. 400. Studebaker-Packard Corporation. SN 686,400. Pub. 11-29-55. Filed 4-27-55.

621,706. TOWNER. Towner Manufacturing Co. SN 687,649. Pub. 11-29-55. Filed 5-16-55.

621,707. LDR. Francis J. Ditter, d. b. a. Federal Aircraft Works. SN 687,924. Pub. 11-29-55. Filed 5-20-55.

621,708. FEDERAL. Francis J. Ditter, d. b. a. Federal Aircraft Works. SN 687,925. Pub. 11-29-55. Filed 5-20-55.

621,709. NSU. NSU-Werke Aktiengesellschaft. SN 687,973. Pub. 11-29-55. Filed 5-20-55.

621,710. BRAKEMAN. Sanford-Day Iron Works, Inc. SN 687,988. Pub. 11-29-55. Filed 5-20-55.

621,711. ANDORI AND DESIGN. Cal Specialties, Inc. SN 688,502. Pub. 11-29-55. Filed 5-31-55.

621,712. PLASTI-CAR. Atlas Specialty Manufacturing Company. SN 688,887. Pub. 11-29-55. Filed 6-6-55.

621,713. LITTLE DUDE AND DESIGN. Little Dude Trailer Company, Inc. SN 692,069. Pub. 11-22-55. Filed 7-28-55.

621,714. CAMAIR AND DESIGN. Cameron Iron Works, Inc. SN 692,765. Pub. 11-22-55. Filed 8-10-55.

621,715. MOBILPLANK. Clark Equipment Company. SN 693,015. Pub. 11-29-55. Filed 8-15-55.

621,716. MOBILOCK. Clark Equipment Company. SN 693,016. Pub. 11-29-55. Filed 8-15-55.

621,717. GEMMER GUIDE. Gemmer Manufacturing Company. SN 693,042. Pub. 11-29-55. Filed 8-15-55.

621,718. ROAMER. Roamer Boat Corporation. SN 693,090. Pub. 11-29-55. Filed 8-15-55.

CLASS 21

621,719. NAME PLATE DESIGN. Cutler-Hammer, Inc. SN 654,796. Pub. 11-22-55. Filed 10-15-53.

621,720. GALVITE. Republic Steel Corporation. SN 664,357. Pub. 11-22-55. Filed 4-12-54.

621,721. SPACEPHONES. Hoffman Radio Corporation, now by change of name to Hoffman Electronics Corporation. SN 665,204. Pub. 11-22-55. Filed 4-26-54.

621,722. ELECTRIC-AIRE. Electric-Aire Engineering Corporation. SN 666,339. Pub. 11-22-55. Filed 5-14-54.

621,723. PARA-LOUVER. Day-Brite Lighting, Inc. SN 668,826. Pub. 11-22-55. Filed 6-24-54.

621,724. MINICORD AND DESIGN. Maurice J. Ojserkis. SN 670,435. Pub. 11-22-55. Filed 7-22-54.

621,725. AUTO BAKE. James W. Swenson. SN 670,625. Pub. 11-29-55. Filed 7-26-54.

621,726. FILMPOT. Fairchild Camera and Instrument Corporation. SN 671,890. Pub. 11-22-55. Filed 8-18-54.

621,727. SOUNDORAMA. Hoffman Radio Corporation, now by change of name to Hoffman Electronics Corporation. SN 672,338. Pub. 11-22-55. Filed 8-27-54.

621,728. LEVELEX. The Electric Storage Battery Company. SN 674,144. Pub. 11-22-55. Filed 10-1-54.

621,729. SANTA LITE. Micro-Lite Co. Inc. SN 674,174. Pub. 11-22-55. Filed 10-1-54.

621,730. PINDICATOR. American Machine & Foundry Company. SN 675,248. Pub. 11-22-55. Filed 10-22-54.

621,731. STUDIO. Webster-Chicago Corporation. SN 677,842. Pub. 11-22-55. Filed 12-6-54.

621,732. SCIALYTIC. Anciens Etablissements Barbier-Benard & Turenne. SN 677,847. Pub. 11-29-55. Filed 10-13-54.

621,733. LUSTRE LITE. Light House of California. SN 678,334. Pub. 11-22-55. Filed 12-14-54.

621,734. CH. John Edward Collins. SN 678,598. Pub. 11-22-55. Filed 12-20-54.

621,735. UNIMOUNT. U. S. Electrical Motors, Inc. SN 678,754. Pub. 11-22-55. Filed 12-21-54.

621,736. ROTO BUN. Savory Equipment, Incorporated. SN 679,535. Pub. 11-29-55. Filed 1-6-55.

621,737. STENORETTE. Grundig Radio-Werke G. m. b. H. SN 685,019. Pub. 11-29-55. Filed 4-6-55.

621,738. VO-TRON. Vokar Corporation. SN 686,791. Pub. 11-22-55. Filed 5-3-55.

621,739. CITI-FONE. Multi-Products Company. SN 687,711. Pub. 11-22-55. Filed 5-17-55.

621,740. SLIM JIM. Union Carbide and Carbon Corporation. SN 687,834. Pub. 11-22-55. Filed 5-18-55.

621,741. ARNO-POWER. Arnolt Corporation. SN 688,207. Pub. 11-22-55. Filed 5-25-55.

621,742. PULSOLITE. Electronic Control Corporation. SN 688,228. Pub. 11-22-55. Filed 5-25-55.

621,743. EN-AR-CO AND DESIGN. Mid-West Refineries, Inc. SN 688,341. Pub. 11-22-55. Filed 5-26-55.

621,744. MONTGOMERY. Montgomery Elevator Company. SN 688,347. Pub. 11-29-55. Filed 5-26-55.

621,745. SE AND DESIGN. Superior Electronics Corporation. SN 688,365. Pub. 11-22-55. Filed 5-26-55.

621,746. NATEAB. National Fabricated Products, Inc., to Hoffman Electronics Corporation. SN 688,444. Pub. 11-22-55. Filed 5-27-55.

621,747. HANKSCRAFT. Hankscraft Company. SN 688,530. Pub. 11-22-55. Filed 5-31-55.

621,748. DRI-AD. Ace Battery Manufacturing Company. SN 688,693. Pub. 11-29-55. Filed 6-2-55.

621,749. SUBMINAX. American Phenolic Corporation. SN 688,695. Pub. 11-22-55. Filed 6-2-55.

621,750. SUBMINAX. American Phenolic Corporation. SN 688,696. Pub. 11-22-55. Filed 6-2-55.

621,751. CYANODES. Lea-Ronal, Inc. SN 688,739. Pub. 11-22-55. Filed 6-2-55.

621,752. VISCOFILM. Industrial Condenser Corporation. SN 688,822. Pub. 11-29-55. Filed 6-3-55.

621,753. AQUA RANGE. The Cleveland Heater Company. SN 689,022. Pub. 11-22-55. Filed 6-7-55.

621,754. PLASTI-PAK. Globe-Union Inc. SN 689,033. Pub. 11-22-55. Filed 6-7-55.

621,755. BLEON. Miller Engineering & Manufacturing Co. SN 689,066. Pub. 11-29-55. Filed 6-7-55.

621,756. LORAIN. Lorain Products Corporation. SN 689,229. Pub. 11-29-55. Filed 6-9-55.

621,757. MINSTREL. Stromberg-Carlson Company, to General Dynamics Corporation. SN 689,314. Pub. 11-22-55. Filed 6-10-55.

621,758. KARSHAVE. Terado Company. SN 689,530. Pub. 11-29-55. Filed 6-14-55.

621,759. MANLEY AND DESIGN. Manley, Inc. SN 691,055. Pub. 11-29-55. Filed 7-11-55.

CLASS 22

621,760. SEVENSTRAND. Sevenstrand Tackle Mfg. Company. SN 640,768. Pub. 11-29-55. Filed 11-17-52.

621,761. CONTROL-IT. A. G. Spalding & Bros. Inc. SN 648,702. Pub. 11-29-55. Filed 6-12-53.

621,762. STROKE FINDER. Arthur F. Zadina. SN 655,395. Pub. 11-22-55. Filed 10-26-53.

621,763. HANDY STOP ETC. AND DESIGN. Slusser Wholesale Company, Inc., d. b. a. Swift Sales Co. SN 656,855. Pub. 11-22-55. Filed 11-23-53.

621,764. WOODY-JACK. Swank-Woodward Bait Mfg. Co. SN 662,266. Pub. 11-29-55. Filed 3-8-54.

621,765. SHUR-HOOKS. House of Champion Research Laboratory. SN 662,539. Pub. 11-22-55. Filed 3-12-54.

621,766. SPEC-TOYS AND DESIGN. Spectoyculars Incorporated. SN 664,990. Pub. 11-29-55. Filed 4-21-54.

621,767. GOLDFISH. Herbert A. Stuart, d. b. a. Sportsmen's Centre. SN 665,533. Pub. 11-22-55. Filed 4-30-54.

621,768. PARISETTE. Paris Doll Corp. SN 667,828. Pub. 11-22-55. Filed 6-7-54.

621,769. MAGIC DRYEX. Ideal Toy Corporation. SN 668,096. Pub. 11-22-55. Filed 6-11-54.

621,770. CRADLE POUND. Sifo Company. SN 669,366. Pub. 11-29-55. Filed 7-2-54.

621,771. CHAMPION. Ernest Haecker, d. b. a. Haecker Industries. SN 669,435. Pub. 11-22-55. Filed 7-6-54.

621,772. DYNAGLAS. Jack B. Nethercutt, d. b. a. Dale Boison Co. SN 671,921. Pub. 11-29-55. Filed 8-18-54.

621,773. AIR CEL. Scientific Anglers Incorporated. SN 672,537. Pub. 11-29-55. Filed 8-31-54.

621,774. ED-U-GAMES. Ed-U-Cards Mfg. Corp. SN 672,880. Pub. 11-29-55. Filed 9-8-54.

621,775. EVEREST AND DESIGN (REPRESENTATION OF A MOUNTAIN TOP). Mitchel & King Limited. SN 672,904. Pub. 11-29-55. Filed 9-8-54.

621,776. MONARCH AND DESIGN (REPRESENTATION OF A CROWN). Mitchel & King Limited. SN 672,905. Pub. 11-29-55. Filed 9-8-54.

621,777. DONA DOLL. Natanel Abramoff, d. b. a. The Donaty Trading Co. SN 676,440. Pub. 11-29-55. Filed 11-12-54.

CLASS 23

621,778. ROLLWAY. Detroit Harvester Company. SN 665,573. Pub. 11-15-55. Filed 5-3-54.

CLASS 26

621,779. SIEMENS. Siemens & Halske Aktiengesellschaft. SN 664,560. Pub. 9-27-55. Filed 4-14-54.

CLASS 31

621,780. YORK AND DESIGN. York Corporation. CONSOLIDATED CERTIFICATE. SN 675,521, pub. 12-13-55, filed 10-26-54, Cl. 31; SN 675,520, pub. 12-20-55, filed 10-26-54, Cl. 34.

CLASS 34

621,780. CONSOLIDATED CERTIFICATE. See Class 31.

CLASS 37

621,781. PAPER-KADDY. Gits Molding Corporation. SN 651,761. Pub. 11-29-55. Filed 8-13-53.

621,782. BONDWARE. Continental Can Company, Inc., from Bowes Industries, Inc. SN 654,715. Pub. 11-29-55. Filed 10-14-53.

621,783. CLA-RING. Belford Company Inc. SN 679,632. Pub. 11-29-55. Filed 1-10-55.

621,784. VU-PLUS. Crown Zellerbach Corporation. SN 683,025. Pub. 11-29-55. Filed 3-8-55.

621,785. THE REMIND-OMATIC. Carey Press Corporation. SN 681,064. Pub. 12-13-55. Filed 2-4-55.

621,786. TRIAD AND DESIGN. Groveton Papers Co. SN 683,198. Pub. 11-29-55. Filed 3-10-55.

621,787. DESIGN OF TREE WITHIN CIRCLES. Nekoosa-Edwards Paper Company. SN 683,303. Pub. 11-29-55. Filed 3-11-55.

621,788. "RIB TONE." Columbia Envelope Company. SN 683,666. Pub. 11-29-55. Filed 3-17-55.

CLASS 38

621,789. VIRGINIA MUNICIPAL REVIEW. Ralph L. Dombrower. SN 673,581. Pub. 11-29-55. Filed 9-22-54.

621,790. SANTA'S TREASURE CHEST. Oakes Consumer Catalogs. SN 675,157. Pub. 11-29-55. Filed 10-20-54.

621,791. ALADDIN READI-CUT HOMES ETC. AND DESIGN. The Aladdin Co. SN 682,225. Pub. 11-29-55. Filed 2-24-55.

621,792. JOY DESIGNS. Marcel Schurman, d. b. a. Marcel Schurman Company. SN 684,689. Pub. 11-29-55. Filed 3-31-55.

621,793. TECHBUILT. Techbuilt Inc. SN 684,764. Pub. 11-29-55. Filed 4-1-55.

621,794. JOHNSON CITY PRESS-CHRONICLE ETC. AND DESIGN. Press, Inc. SN 684,876. Pub. 11-29-55. Filed 4-4-55.

621,795. CATHOLIC LIFE. Missionaries of SS. Peter & Paul. SN 685,843. Pub. 11-29-55. Filed 4-19-55.

621,796. ROYAL. Mossberg & Howell, Inc. SN 685,992. Pub. 11-29-55. Filed 4-21-55.

CLASS 39

621,797. PIROUETTES BY BEN SALLI. Ben & Sally Dance Footwear, Inc. SN 624,325. Pub. 11-29-55. Filed 1-31-52.

621,798. BLOUSEMAKER. Blousemaker, Inc. SN 644,214. Pub. 11-29-55. Filed 3-26-53.

621,799. "SNOWMAN" AND DESIGN. Globe Manufacturing Company. SN 650,989. Pub. 11–29–55. Filed 7–28–53.

621,800. 24 KARAT. Bartlay, Ltd. SN 658,767. Pub. 11–29–55. Filed 12–30–53.

621,801. DREAM STEP "TEENS" AND DESIGN. Shoe Corporation of America. SN 673,304. Pub. 11–29–55. Filed 9–16–54.

621,802. FITZ-ON. James F. Fitzsimmons, d. b. a. Fitz-On Heel Company. SN 676,369. Pub. 11–29–55. Filed 11–10–54.

621,803. STA NEAT. Marlboro Shirt Company, Inc. SN 680,087. Pub. 11–29–55. Filed 1–18–55.

621,804. TURHANG. Turbang Corporation. SN 680,702. Pub. 11–29–55. Filed 1–28–55.

621,805. DROOLAWAY. Bernard R. Townley, d. b. a. Drool-A-Way Bib. SN 680,917. Pub. 11–29–55. Filed 2–1–55.

621,806. KAYTEENS. Kay Teens, Inc. SN 680,938. Pub. 11–29–55. Filed 2–2–55.

621,807. SILCREST. Hart Schaffner & Marx. SN 681,012. Pub. 11–29–55. Filed 2–3–55.

621,808. REX HOSE. Ma-Ro Hosiery Co., Inc. SN 681,525. Pub. 11–29–55. Filed 2–11–55.

621,809. REX JR. HOSE. Ma-Ro Hosiery Co., Inc. SN 681,526. Pub. 11–29–55. Filed 2–11–55.

621,810. ARTHUR MURRAY AND DESIGN. Arthur Murray Enterprises, Inc. SN 682,287. Pub. 11–29–55. Filed 2–24–55.

621,811. BUSHWHACKERS. Donald G. Lynch, d. b. a. Don Lynch. SN 682,315. Pub. 11–29–55. Filed 2–25–55.

621,812. BABY DOT. S. H. Kress and Company. SN 683,053. Pub. 11–29–55. Filed 3–8–55.

621,813. WESTMINSTER. Morris Belt and Suspender Co., Inc. SN 683,415. Pub. 11–29–55. Filed 3–14–55.

621,814. NORTHERNER AND DESIGN. The Servus Rubber Company. SN 686,231. Pub. 11–29–55. Filed 4–25–55.

621,815. MALBAR. Sport-Wear Hosiery Mills, Inc. SN 686,583. Pub. 11–29–55. Filed 4–29–55.

621,816. NURSERY RHYME AND DESIGN. Ettelbrick Shoe Company. SN 686,731. Pub. 11–29–55. Filed 5–3–55.

621,817. CUDDLE BUNDLE. North Shore Manufacturing Company. SN 687,213. Pub. 11–29–55. Filed 5–10–55.

621,818. IT MUST BE LOVE. Joseph Love, Inc. SN 687,606. Pub. 11–29–55. Filed 5–16–55.

621,819. "WUNDA-FIT." The House of Perfection, Inc. SN 688,181. Pub. 11–29–55. Filed 5–24–55.

621,820. FINE-TEX. Bullock's, Inc. SN 688,300. Pub. 11–29–55. Filed 5–26–55.

621,821. "EVERYWEAR-EVERYWHERE." David Crystal, Inc. SN 688,395. Pub. 11–29–55. Filed 5–27–55.

CLASS 40

621,822. MINXIE. Natural Mink Flowers Corporation. SN 678,499. Pub. 11–29–55. Filed 12–16–54.

621,823. BARBER. Nancy B. Leahey, d. b. a. Barber Manufacturing Co. SN 684,439. Pub. 11–29–55. Filed 3–29–55.

621,824. VERNALITE. The Governor Fastener Company. SN 685,444. Pub. 11–29–55. Filed 4–13–55.

621,825. TWI-NIGHTER. Hunter Douglas Corporation. SN 685,497. Pub. 11–29–55. Filed 4–14–55.

621,826. WIL-HOLD. Wilson Products, Incorporated. SN 685,627. Pub. 11–29–55. Filed 4–15–55.

CLASS 42

621,827. MILIHUES. Deering, Milliken & Co. Inc. SN 643,822. Pub. 11–29–55. Filed 3–18–53.

621,828. LINOTEX. Lini & Lane, S. P. A. SN 676,813. Pub. 11–29–55. Filed 11–17–54.

621,829. NELTWEED. Hugh-Nelson-Columbia Carpet Mills, Inc. SN 680,275. Pub. 11–29–55. Filed 1–21–55.

621,830. KEVON KLOTH. Kevon Textile Products Corporation. SN 683,121. Pub. 11–29–55. Filed 3–9–55.

621,831. MOHAWK AND DESIGN. Mohawk Carpet Mills, Inc. SN 684,453. Pub. 11–29–55. Filed 3–29–55.

621,832. KING KROWN. The John P. King Mfg. Co. SN 684,568. Pub. 11–29–55. Filed 3–30–55.

621,833. RIBCHENE. D. B. Fuller & Co., Inc. SN 684,725. Pub. 11–29–55. Filed 4–1–55.

621,834. OLD COLONY PRIDE. Bates Manufacturing Company. SN 684,798. Pub. 11–29–55. Filed 4–4–55.

621,835. CHENESAIL. D. B. Fuller & Co., Inc. SN 684,830. Pub. 11–29–55. Filed 4–4–55.

621,836. "PROTEXIT." Fulton Bag and Cotton Mills. SN 685,182. Pub. 11–29–55. Filed 4–8–55.

621,837. "FOLLOW ME." Checker Fabrics & Net Co. SN 685,427. Pub. 11–29–55. Filed 4–13–55.

621,838. "DATE ME." Checker Fabrics & Net Co. SN 685,428. Pub. 11–29–55. Filed 4–13–55.

621,839. MAYFAIR. Nye-Walt Company, Inc. SN 685,457. Pub. 11–29–55. Filed 4–13–55.

621,840. ZIBROI. Security Mills, Inc. SN 685,465. Pub. 11–29–55. Filed 4–13–55.

621,841. ROMANCE. Pepperell Manufacturing Company. SN 685,515. Pub. 11–29–55. Filed 4–14–55.

621,842. SUEDEMONT. Botany Mills, Inc. SN 685,555. Pub. 11–29–55. Filed 4–15–55.

621,843. CLASSIC'S TESTED VALUE FABRICS AND DESIGN. Classic Weaving Corporation. SN 685,657. Pub. 11–29–55. Filed 4–18–55.

621,844. 'KNIGHTS OF THE NEEDLE'. Howard B. Schneidewind, Inc. SN 685,764. Pub. 11–29–55. Filed 4–18–55.

621,845. ROYAL ANACO. H. M. Prince Textiles Inc. SN 685,927. Pub. 11–29–55. Filed 4–20–55.

CLASS 43

621,846. SWIFTY CROCHET AND DESIGN. Kaminow Bros. SN 687,601. Pub. 11–29–55. Filed 5–16–55.

621,847. PLAY-KNIT TURBLON. Play-Knit Mills. SN 687,622. Pub. 11–29–55. Filed 5–16–55.

621,848. BAN-LON. Joseph Bancroft & Sons Co. SN 687,663. Pub. 11–29–55. Filed 6–2–55.

621,849. RHEEFLEX. Rhee Elnatic Thread Corporation. SN 690,194. Pub. 11–29–55. Filed 6–24–55.

CLASS 44

621,850. "V" FORM. Personal Products Corporation. SN 689,512. Pub. 11–29–55. Filed 6–14–55.

621,851. RILLAX. The Rilling-Dermetics Company. SN 689,592. Pub. 11–29–55. Filed 6–15–55.

621,852. D-E HINGE. Austenal Laboratories, Incorporated. SN 689,922. Pub. 11–29–55. Filed 6–21–55.

621,853. MACBICK. Macalaster Bicknell Parenteral Corporation. SN 690,285. Pub. 11–29–55. Filed 6–27–55.

621,854. CALCI-PLAST. Robert Holer. SN 690,381. Pub. 11–29–55. Filed 6–28–55.

CLASS 45

621,855. MASON'S AND DESIGN. Mason & Mason, Inc. SN 673,364. Pub. 11–29–55. Filed 9–17–54.

621,856. SILVER SADDLE. W. R. Beyer, d. b. a. Beyer & Company. SN 683,094. Pub. 11–29–55. Filed 3–9–55.

621,857. NILCAR. Pure Frozen Lemon Juice Corporation of America. SN 688,851. Pub. 11–29–55. Filed 6–3–55.

621,858. VARIETY CLUB. Variety Club Beverage Company. SN 689,319. Pub. 11–29–55. Filed 6–10–55.

CLASS 46

621,859. HALF AND HALF AND DESIGN. Knudsen Creamery Co. of California. SN 611,436. Pub. 6–17–52. Filed 3–16–51.

621,860. TOP NOTCH AND DESIGN. James Richardson & Sons, Limited. SN 644,456. Pub. 11–29–55. Filed 3–30–53.

621,861. OLD YORK. Cooperative G. L. F. Marketing Service, Inc. SN 649,928. Pub. 11–29–55. Filed 7–7–53.

621,862. BARRICINI MADE WITH A TOUCH OF MAGIC AND DESIGN. Barricini, Inc. SN 655,749. Pub. 11–29–55. Filed 11–3–53.

621,863. CHOC AND DESIGN. Frank H. Fleer Corporation, d. b. a. F. H. Fleer Co. SN 655,771. Pub. 11–29–55. Filed 11–3–53.

621,864. CHOCO AND DESIGN. Frank H. Fleer Corporation, d. b. a. F. H. Fleer Co. SN 655,773. Pub. 11–29–55. Filed 11–3–53.

621,865. HI BOY. Wendt's Cream Top Dairy, Inc., d. b. a. Wendt's. SN 658,679. Pub. 11–29–55. Filed 12–28–53.

621,866. REGAL. Regal Stores, Inc. SN 660,074. Pub. 3–22–55. Filed 1–25–54.

621,867. S. C. ABEL PEREIRA DA FONSECA S. A. R. L. AND DESIGN. Soc. Com. Abel Pereira da Fonseca (S. A. R. L.). SN 664,039. Pub. 11–29–55. Filed 4–6–54.

621,868. BOWMAN BOW-VEEN. Bowman Dairy Company. SN 664,652. Pub. 11–29–55. Filed 4–16–54.

621,869. CHICKEN OF THE SEA. Van Camp Sea Food Company, Inc. SN 664,812. Pub. 11–29–55. Filed 4–19–54.

621,870. HENNY PENNY. G. P. Gundlach & Co., Inc. SN 669,547. Pub. 11–29–55. Filed 7–7–54.

621,871. DIAZ. Joseph L. Sclafani, Inc. SN 671,204. Pub. 11–29–55. Filed 8–5–54.

621,872. CHOCOLECA. Societe Industrielle de Produits Africains, Societe Anonyme. SN 671,871. Pub. 11–29–55. Filed 8–17–54.

621,873. C-ROLA JUICE. Sasson-King Inc. SN 673,868. Pub. 11–29–55. Filed 9–27–54.

621,874. LOUIS SHERRY. Louis Sherry, Inc. SN 675,728. Pub. 11–29–55. Filed 10–29–54.

621,875. EVERSWEET. Swift & Company. SN 679,687. Pub. 11–29–55. Filed 1–10–55.

621,876. MILK MAID AND DESIGN. Ward Baking Company. SN 680,117. Pub. 11–29–55. Filed 1–18–55.

621,877. THOROBEEF. Robert F. Hunsicker. SN 680,956. Pub. 11–29–55. Filed 2–2–55.

621,878. MEDFORD. Rogue River Packing Corporation. SN 682,069. Pub. 11–29–55. Filed 2–21–55.

621,879. NEW THERMOGIZED AND DESIGN. Western Condensing Company. SN 682,093. Pub. 11–29–55. Filed 2–21–55.

621,880. PRINCE AND PRINCESS. Marotta & Cella. SN 682,160. Pub. 11–29–55. Filed 2–23–55.

621,881. TRI-NUT. E. F. Drew & Co., Inc. SN 682,250. Pub. 11–29–55. Filed 2–24–55.

621,882. DESIGN OF MAN. Louisiana State Rice Milling Company, Inc. SN 682,449. Pub. 11–29–55. Filed 2–28–55.

621,883. DREAM MAID AND DESIGN. Dream Maid Pak Corp. SN 682,625. Pub. 11–29–55. Filed 3–2–55.

621,884. CHEE-ZIP. Safeway Stores, Incorporated. SN 683,315. Pub. 11–29–55. Filed 3–11–55.

621,885. COTTON BLOOM. Swift & Company. SN 684,170. Pub. 11–29–55. Filed 3–24–55.

621,886. PETER APPLE EATER. Hubbard & Petersen, Inc. SN 684,841. Pub. 11–29–55. Filed 4–4–55.

621,887. MILLION DOLLAR. D. Walter Turner, d. b. a. The Walter Turner Coffee Company. SN 684,898. Pub. 11–29–55. Filed 4–4–55.

CLASS 47

621,888. S. C. ABEL PEREIRA DA FONSECA AND DESIGN. Soc. Com. Abel Pereira Da Fonseca (S. A. R. L.). SN 664,040. Pub. 11–29–55. Filed 4–6–54.

621,889. REAL VINÍCOLA PORTUGAL AND DESIGN. Real Companhia Vinícola do Norte de Portugal, S. A. R. L. SN 673,770. Pub. 11–29–55. Filed 9–24–54.

621,890. CHATEAU BEAULIEU. Beaulieu Vineyard. SN 689,017. Pub. 11–29–55. Filed 6–7–55.

621,891. GUILD. Wine Growers Guild. SN 689,913. Pub. 11–29–55. Filed 6–20–55.

CLASS 48

621,892. MONKSHOF AND DESIGN. Kulmbacher Exportbrauerei Mönchshof Aktiengesellschaft. SN 687,788. Pub. 11–29–55. Filed 5–18–55.

621,893. CHIEF AND DESIGN. Oshkosh Brewing Company. SN 688,176. Pub. 11–29–55. Filed 5–24–55.

CLASS 49

621,894. CHIVAS REGAL ETC. AND DESIGN. Chivas Brothers Limited. SN 657,112. Pub. 11–29–55. Filed 11–30–53.

621,895. PETER THE GREAT. Arrow Liqueurs Corporation. SN 687,335. Pub. 11–29–55. Filed 5–12–55.

621,896. H AND CARICATURES OF 2 MEN. G. F. Heublein & Bro. Incorporated, now by change of name to Heublein, Inc. SN 687,471. Pub. 11–29–55. Filed 5–13–55.

621,897. MC GINNIS. Schenley Distillers, Inc. SN 687,814. Pub. 11–29–55. Filed 5–18–55.

621,898. GUILD. Wine Growers Guild. SN 689,912. Pub. 11–29–55. Filed 6–20–55.

CLASS 50

621,899. INDOR-SUNLITE ETC. AND DESIGN. Transolene Corporation. SN 673,882. Pub. 11–29–55. Filed 9–27–54.

621,900. FASHON AND DESIGN. The General Tire & Rubber Company. SN 679,223. Pub. 10–4–55. Filed 12–31–54.

CLASS 51

621,901. JUST WONDERFUL! Caryl Richards, Inc. SN 660,441. Pub. 11–29–55. Filed 2–1–54.

621,902. ARIEL. Ariel Products Corporation, Inc., now by change of name Ariel, Incorporated. SN 672,268. Pub. 11–8–55. Filed 8–26–54.

621,903. ANTI-TERGE AND DESIGN. Comfort Manufacturing Company. SN 681,070. Pub. 11–29–55. Filed 2–4–55.

621,904. 4 VENTS. Parfums Revillon, Société Anonyme, d. b. a. Revillon. SN 681,622. Pub. 11–29–55. Filed 2–14–55.

621,905. DELILAH. National Chemical Products Pty. Limited. SN 683,798. Pub. 11–29–55. Filed 3–18–55.

621,906. BEACH AND TRAVEL. Parfums Evyan Inc. SN 684,059. Pub. 11–29–55. Filed 3–23–55.

CLASS 52

621,907. SULFOPON. Dehydag Deutsche Hydrierwerke GMBH. SN 668,534. Pub. 11–29–55. Filed 6–21–54.

621,908. WOOL-CHARM (FANCIFUL). Irving Colbert. SN 671,721. Pub. 11–29–55. Filed 8–16–54.

621,909. CLE-CHLOR. Wyandotte Chemicals Corporation. SN 672,326. Pub. 11–29–55. Filed 8–26–54.

621,910. REARDON'S. The Reardon Company. SN 674,475. Pub. 11–29–55. Filed 10–7–54.

621,911. AFTER-GLO AND DESIGN. The Barcolene Company. SN 675,253. Pub. 11–29–55. Filed 10–22–54.

621,912. FUR FROST. White Frost Chemicals, Inc. SN 684,254. Pub. 11–29–55. Filed 3–25–55.

621,913. SQUEAKY-KLEAN. Sun Chemical Corporation. SN 686,585. Pub. 11–29–55. Filed 4–29–55.

621,914. A–27. The Pennsylvania Salt Manufacturing Company. SN 688,178. Pub. 11–29–55. Filed 5–24–55.

621,915. AE–16. The Pennsylvania Salt Manufacturing Company. SN 688,180. Pub. 11–29–55. Filed 5–24–55.

621,916. SPRAY FLO. The Pennsylvania Salt Manufacturing Company. SN 688,848. Pub. 11–29–55. Filed 6–3–55.

Service Marks

CLASS 102

621,917. ALLSTATE. Allstate Insurance Company. SN 626,130. Pub. 4–28–53. Filed 3–8–52.

621,918. YOU'RE IN GOOD HANDS WITH ALLSTATE AND PICTURE OF EXTENDED HANDS HOLDING AUTOMOBILE. Allstate Insurance Company. SN 626,131. Pub. 4–28–53. Filed 3–8–52.

CLASS 105

621,919. CTDC & HU OF C & V AND HORSE DESIGN. Chicago Truck Drivers, Chauffeurs and Helpers Union of Chicago and Vicinity, Local 705. SN 674,373. COLLECTIVE MARK. Pub. 11–29–55. Filed 10–6–54.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 2

621,920. Tension Envelope Corporation, Kansas City, Mo. SN 654,020. Filed P. R. 9–30–53. Am. S. R. 9–20–54.

TENSION CUSH-N-PAK ENVELOPES

For Merchandise Envelopes.
Use since July 1, 1953.

CLASS 6

621,921. The Du Bois Co., Inc., Cincinnati, Ohio. SN 675,624. Filed P. R. 10–28–54. Am. S. R. 10–17–55.

Dri-IT

For Combination of Wetting Agents Adapted To Be Injected Into the Rinse Water in Mechanical Dishwashers To Promote More Complete Run Off of the Water and Faster Drying.
Use since Apr. 10, 1954.

CLASS 12

621,922. V. E. Anderson Manufacturing Company, Owensboro, Ky. SN 686,414. Filed P. R. 4–28–55. Am. S. R. 9–2–55.

ANDERSON

For Aluminum-Framed Glass Louvers, Aluminum and Wood-Framed Combination Storm Windows and Doors With Screens, Wood-Framed Porch and Breezeway Enclosures, and Wood Window Units.
Use since on or about Aug. 1, 1954.

CLASS 16

621,923. Pioneer Paint & Varnish Co., Tucson, Ariz. SN 649,534. Filed P. R. 6–29–53. Am. S. R. 12–8–55.

WALLCOTE
HIGH HIDING

For Flat Paints.
Use since 1945.

CLASS 19

621,924. H. V. Keller Mfg. Co., Minneapolis, Minn. SN 680,151. Filed P. R. 1–19–55. Am. S. R. 11–3–55.

BRUNCH WAGON

For Serving Carts.
Use since on or about Mar. 1, 1954.

CLASS 23

621,925. Firma Ferdinand Bernhard Schmetz, Herzogenrath near Aachen, Germany. SN 657,024. Filed 11–27–53.

Priority under Sec. 44(d) on German application filed June 23, 1953; Reg. No. 642,983, dated Aug. 22, 1953.
For Sewing Machine Needles.

621,926. Al Johnson, d. b. a. Valley Pattern Manufacturing Company, Stockton, Calif. SN 675,635. Filed P. R. 10–28–54. Am. S. R. 10–6–55.

EASY FOLD

For Carton Folding and Closing Machines.
Use since May 12, 1954.

621,927. Titan Metal Manufacturing Company, Bellefonte, Pa. SN 676,420. Filed P. R. 11–10–54. Am. S. R. 9–14–55.

TRU SHAFT

No registration rights are claimed for the word "Shaft" apart from the mark shown.
For Boat and Motor Shaftings.
Use since Sept. 1, 1954.

621,928. Astor Equipment Corporation, New York, N. Y. SN 678,181. Filed P. R. 12–13–54. Am. S. R. 11–8–55.

ASTOR

For Household Sewing Machines.
Use since Oct. 18, 1954.

621,929. Astor Equipment Corporation, New York, N. Y. SN 678,182. Filed P. R. 12–13–54. Am. S. R. 11–8–55.

DORSET

For Household Sewing Machines.
Use since Oct. 18, 1954.

621,930. C. Conradty, Nurnberg, Germany. SN 679,211. Filed 12–31–54.

CONRADTY

For Carbon and Graphite Bearings for Liquid Meters, Pumps, and Textile Machinery.

621,931. Dodge Manufacturing Corporation, Mishawaka, Ind. SN 692,916. Filed 8–12–55.

AIR-GRIP

For Pneumatically Operated Clutches.
Use since on or about Apr. 29, 1954.

CLASS 26

621,932. Tarc Electronics, Inc., Westbury, N. Y. SN 691,336. Filed P. R. 7–14–55. Am. S. R. 11–14–55.

COLORSCOPE

For Instruments for Color and Black and White Signal Analysis in Television and the Like.
Use since Apr. 1, 1954.

CLASS 31

621,933. Dairy Equipment Company, Madison, Wis. SN 676,877. Filed P. R. 11–18–54. Am. S. R. 11–28–55.

MILKOOL

For Mechanically Refrigerated Milk Coolers.
Use since Oct. 27, 1954.

CLASS 39

621,934. Cooper's Incorporated, Kenosha, Wis. SN 692,684. Filed 8–19–55.



The drawing is lined for red but no claim is made to color.
For Men's and Boys' Underwear, Undershirts, Hosiery, Sport Shorts, Sport Shirts, and T-Shirts.
Use since May 2, 1955.

CLASS 46

621,935. The Gourmet Guild, Miami Beach, Fla. SN 657,426. Filed P. R. 12–4–53. Am. S. R. 10–6–55.

The Gourmet Guild
Food-of-the-Month-Club

For Canned Cheeses, Canned Fish, and Canned Soups.
Use since Aug. 10, 1953.

621,936. Donald J. Chappell, d. b. a. K. C. Steak Sauce Co., Kansas City, Mo. SN 660,470. Filed 2–2–54.

KC
KANSAS BULL SAUCE
STEAK SAUCE
THE SAUCE THAT MADE K. C. STEAKS FAMOUS

For Steak Sauce for Flavoring Steak and Other Foods.
Use since July 1, 1946.

621,937. S. J. Miller Packing Company, Grand Junction, Colo. SN 663,042. Filed P. R. 3–22–54. Am. S. R. 11–14–55.

Fast-E-Est

For Canned Fruits and Canned Vegetables.
Use since Feb. 11, 1947.

621,938. Karl Haller, d. b. a. Firma Karl Haller, Stuttgart-Oberturkheim, Germany. SN 664,224. Filed P. R. 4–9–54. Am. S. R. 12–17–54.

Haller

For Candy, Chocolate Coating and Icing for Candy and Baked Goods, Cocoa and Chocolate Syrups.
Use since 1921.

621,939. Droste's Cacao- en Chocoladefabrieken N. V., Haarlem, Netherlands. SN 668,640. Filed P. R. 6–22–54. Am. S. R. 6–8–55.



For Chocolate Candy in the Form of an Apple.
Use since Jan. 1, 1931.

621,940. Consetta Santomauro, d. b. a. C. Di Palo, New York, N. Y. SN 672,497. Filed P. R. 8–31–54. Am. S. R. 11–3–55.

Di Palo's



For Cheese.
Use since Apr. 23, 1954.

621,941. Frostee Maid Products Company, Longview, Tex. SN 677,053. Filed P. R. 11–22–54. Am. S. R. 12–1–55.

INSTANT FRIES

For Partially-Cooked, French Fried Potatoes.
Use since Sept. 1, 1953.

621,942. Hollywood Brands, Inc., Centralia, Ill. SN 689,573. Filed 6–15–55.

Unlimited Taste

For Candy.
Use since August 1952.

621,943. Hollywood Brands, Inc., Centralia, Ill. SN 689,574. Filed 6–15–55.

YOU NEVER HAD IT SO CANDY GOOD!

For Candy.
Use since August 1953.

CLASS 51

621,944. Helena Rubinstein, Inc., New York, N. Y. SN 670,616. Filed P. R. 7–26–54. Am. S. R. 11–17–55.

Turn Blonde

For Hair Lightener Consisting of a Liquid and a Cream Which Are Mixed Together To Form a Foam Which Lightens the Hair.
Use since Mar. 16, 1954.

CLASS 52

621,945. The Gillette Company, Boston, Mass. SN 676,314. Filed 11–9–54.

Gentle as a lamb

For Shampoo.
Use since Sept. 21, 1953.

621,946. Tanner Products Corp., Los Angeles, Calif. SN 688,094. Filed P. R. 5–23–55. Am. S. R. 10–25–55.

leather kleen



For Cleaner and Conditioner for Leather.
Use since Jan. 1, 1952.

Service Mark

CLASS 101

621,947. Pacific Telephone Exchange, Los Angeles, Calif. SN 682,053. Filed P. R. 2–21–55. Am. S. R. 12–2–55.

PACIFIC TELEPHONE EXCHANGE
WE ANSWER WHEN YOU ARE OUT

For Telephone Answering Service.
Use since May 1, 1950.

TRADEMARK REGISTRATIONS RENEWED

106,834. DIAMOND BRAND AND DESIGN. Cl. 46. 11–2–15.
107,703. LION AND DESIGN. Cl. 12. 12–21–15.
107,843. ESTABLISHED 1851 AND DESIGN OF MAN AND ICE CREAM FREEZER. Cl. 46. 12–28–15.
107,962. ARROW AND DESIGN. Cl. 39. 1–4–16.
108,019. JIFFY. Cl. 13. 1–11–16.
108,156. CLINCHFIELD ETC. Cl. 12. 1–18–16.
108,166. PORCELIRON AND DESIGN. Cl. 32. 1–18–16.
108,210. FACIAL. Cl. 52. 1–18–16.
108,233. WIZARD. Cl. 4. 1–18–16.
108,511. PALM BEACH AND DESIGN. Cl. 42. 2–15–16.
108,917. P. Q. CO. Cl. 6. 3–7–16.
109,527. ESCO. Cl. 44. 4–11–16.
109,620. ELECTRIC AND DESIGN. Cl. 35. 4–11–16.
109,710. BOWSER ETC. Cl. 26. 4–18–16.
109,880. SUPER-GLASS. Cl. 33. 4–18–16.
319,279. RUBY PORT FCC ETC. AND DESIGN. Cl. 47. 11–20–34.
319,775. ORLANDO ETC. AND DESIGN. Cl. 47. 12–4–34.

323,579. E-Z. Cl. 13. 4–23–35.
326,333. AMBROSE. Cl. 47. 7–23–35.
327,427. KING. Cl. 26. 8–27–35.
328,111. RICHELIEU A AND DESIGN. Cl. 47. 9–17–35.
328,785. RADIUS. Cl. 34. 10–8–35.
328,821. KOSCIUSKO. Cl. 46. 10–8–35.
329,520. NATION WIDE PAPERS AND DESIGN. Cl. 37. 11–5–35.
330,148. AUTO-PAK. Cl. 37. 11–19–35.
330,215. TREADLITE AND DESIGN. Cl. 20. 11–26–35.
330,362. FULSCOPE. Cl. 26. 11–26–35.
330,391. SO-LO GRIP. Cl. 39. 12–3–35.
330,540. SMR AND DESIGN. Cl. 44. 12–3–35.
332,011. PRYSTAL. Cl. 1. 1–28–36.
332,113. COUNTRY SIDE. Cl. 42. 2–4–36.
332,180. TEGUL. Cl. 12. 2–4–36.
332,196. COEUR D'ALENE. Cl. 23. 2–4–36.
332,203. LEA & PERRINS. Cl. 46. 2–4–36.
332,392. KEDETTES. Cl. 39. 2–11–36.
332,522. RUBCO. Cl. 21. 2–18–36.
332,549. TURF RIDER. Cl. 22. 2–18–36.
332,550. SWEEPSTAKES. Cl. 22. 2–18–36.
332,606. MANSHADES. Cl. 39. 2–18–36.
332,898. HABITANT. Cl. 46. 3–3–36.
333,029. DOÑA. Cl. 46. 3–10–36.
333,058. FLUFTEX. Cl. 46. 3–10–36.
333,067. SUB-ZERO. Cl. 35. 3–10–36.
333,197. FROM THE RECIPE OF A NOBLEMAN IN THE COUNTRY AND SHIELD DESIGN. Cl. 46. 3–10–36.
333,330. LITHO BRADE. Cl. 4. 3–17–36.
333,435. PERM-O-FLUX. Cl. 21. 3–24–36.
333,749. JIFFON. Cl. 39. 4–7–36.
333,759. DONNYMOOR AND DESIGN. Cl. 39. 4–7–36.
333,927. SUPER-LAMM. Cl. 42. 4–14–36.
334,044. BULS-EYE. Cl. 46. 4–21–36.
334,195. OH ! SEE. Cl. 46. 4–21–36.
334,264. CASTALU. Cl. 34. 4–28–36.
334,323. PYLUMIN. Cl. 16. 4–28–36.
334,380. FLOATINGAIR. Cl. 31. 4–28–36.
334,570. MIRACLE MAID ETC. Cl. 13. 5–5–36.
334,574. CON FEX W. J. B. AND DESIGN. Cl. 37. 5–5–36.
334,641. IN THIS CORNER. Cl. 38. 5–12–36.
334,650. VIGOTONE AND DESIGN. Cl. 51. 5–12–36.

TRADEMARK REGISTRATIONS CANCELED

Section 8

74,570. SWANSDOWN AND REPRESENTATION OF SWAN. Cl. 6. 7–20–09.
112,980. AAA AND DESIGN. Cl. 38. 10–10–16.
140,145. SAL-FATE. Cl. 6. 3–8–21.
142,822. BESTWEST AND REPRESENTATION OF HANDS HOLDING PRUNES. Cl. 46. 5–17–21.
200,961. TTT TY.PHOO TEA ETC. AND DESIGN. Cl. 46. 7–14–25.
205,762. SOUR BALLS. Cl. 46. 11–17–25.
207,176. SIMPLICITY. Cl. 23. 12–22–25.
237,555. FORT DUMMER. Cl. 46. 1–10–28.
252,730. ROUBECHEZ. Cl. 6. 2–12–29.
253,315. KLIC-OFF. Cl. 33. 2–26–29.
254,458. KONGA. Cl. 42. 3–26–29.
256,108. WIZARD AND DESIGN. Cl. 46. 5–7–29.
256,879. SOLO. Cl. 39. 5–28–29.
260,329. LEFCO. Cl. 46. 8–20–29.
260,330. VIM. Cl. 46. 8–20–29.
284,111. KAYO AND REPRESENTATION OF CHILD. Cl. 45. 6–16–31.
341,044. AAA WITHIN OVAL DESIGN. Cl. 2. 12–1–36.
341,529. AAA WITHIN OVAL DESIGN. Cl. 11. 12–8–36.
341,530. AAA WITHIN OVAL DESIGN. Cl. 3. 12–8–36.
341,577. AAA WITHIN OVAL DESIGN. Cl. 13. 12–15–36.
341,578. AAA WITHIN OVAL DESIGN. Cl. 35. 12–15–36.
342,144. AAA WITHIN OVAL DESIGN. Cl. 38. 1–5–37.
342,145. AAA WITHIN OVAL DESIGN. Cl. 21. 1–5–37.
342,479. AAA WITHIN OVAL DESIGN. Cl. 8. 1–19–37.
343,877. AAA WITHIN OVAL DESIGN. Cl. 37. 3–9–37.
344,376. AAA WITHIN OVAL DESIGN. Cl. 50. 3–23–37.
344,381. AAA WITHIN OVAL DESIGN. Cl. 39. 3–23–37.
356,922. TEXAS JULEP WITHIN CIRCULAR DESIGN. Cl. 45. 5–17–38.
358,164. WAROPA. Cl. 44. 6–28–38.
359,545. SANDALAIRE. Cl. 39. 8–23–38.
361,696. JOHN O'GROAT'S AND SHIELD DESIGN. Cl. 49. 10–25–38.
374,886. ISO-Q. Cl. 21. 1–30–40.
376,000. MOOR MAN'S. Cl. 6. 3–12–40.
382,022. SOFTAIRE AND DESIGN. Cl. 6. 10–15–40.
384,123. SWEET DREAMS. Cl. 39. 1–7–41.
385,392. MASHTRATE. Cl. 46. 2–25–41.
386,134. CASUALAIRES. Cl. 39. 3–25–41.
388,859. PATHFINDER. Cl. 15. 7–15–41.
403,028. LIFE OYL AND REPRESENTATION OF WOMAN. Cl. 6. 8–31–43.
404,686. REVERE. Cl. 24. 12–14–43.
409,538. LOOK. Cl. 26. 10–10–44.
417,109. MICRONIZED. Cl. 6. 10–16–45.
429,806. SLUMBERTOTS. Cl. 39. 5–20–47.
435,538. CHRONOMATIC. Cl. 26. 12–30–47.
438,758. UNIFAST. Cl. 6. 5–11–48.
438,856. DURAT PLACET AND SHIELD DESIGN. Cl. 42. 5–11–48.
441,059. MARVEL COAL AND DESIGN. Cl. 1. 10–19–48.
441,808. DURAT PLACET AND SHIELD DESIGN. Cl. 42. 1–4–49.
441,944. MISS COQUETTE. Cl. 39. 2–1–49.
442,051. NOX-TROL. Cl. 6. 2–8–49.
442,500. ELMER SQUEE. Cl. 38. 4–19–49.
514,653. STARRSIL. Cl. 12. 9–6–49.
514,654. ELNO AND DESIGN. Cl. 21. 9–6–49.
514,656. MIDGE TOOL AND DESIGN. Cl. 23. 9–6–49.
514,657. TRUEDALE. Cl. 39. 9–6–49.
514,659. AFRIC. Cl. 29. 9–6–49.
514,660. MIDWEST. Cl. 29. 9–6–49.
514,663. COMET. Cl. 26. 9–6–49.
514,665. PEARL-ART SPORTSWEAR AND REPRESENTATION OF PALETTE. Cl. 39. 9–6–49.
514,667. RESERVATION FOR TWO AND DESIGN. Cl. 6. 9–6–49.
514,669. LONDONTWIST. Cl. 39. 9–6–49.
514,675. DIAMOND DESIGN. Cl. 23. 9–6–49.
514,676. GUARDIAN AND REPRESENTATION OF BULL DOG. Cl. 12. 9–6–49.
514,680. GEOMETRIC DESIGN. Cl. 6. 9–6–49.
514,682. BENJAMIN. Cl. 13. 9–6–49.
514,688. LEATHERKRAFT. Cl. 39. 9–6–49.
514,694. MANZEL. Cl. 23. 9–6–49.
514,698. GFM. Cl. 23. 9–6–49.
514,701. FORMONA. Cl. 39. 9–6–49.
514,702. SSMCO WITHIN CIRCULAR DESIGN. Cl. 23. 9–6–49.
514,703. ACORN. Cl. 12. 9–6–49.
514,713. BRIGHT AND EARLY. Cl. 46. 9–6–49.
514,715. AMAZON. Cl. 46. 9–6–49.
514,716. PYRAMID. Cl. 46. 9–6–49.
514,720. CUSTOM. Cl. 46. 9–6–49.
514,721. FEATURE. Cl. 46. 9–6–49.
514,724. VELVECAST. Cl. 44. 9–6–49.
514,725. HOOD RIVER. Cl. 46. 9–6–49.
514,727. EVERWEAR. Cl. 13. 9–6–49.
514,731. SARAO. Cl. 42. 9–6–49.
514,732. JIF-FY-ALLS. Cl. 39. 9–6–49.
514,735. KALO WITHIN CIRCULAR DESIGN. Cl. 6. 9–6–49.
514,746. ORBEN EQUIPMENT. Cl. 26. 9–6–49.
514,747. IN THE MONTAUK MANNER WITHIN RECTANGULAR DESIGN. Cl. 42. 9–6–49.
514,750. S S S. Cl. 13. 9–6–49.
514,760. SHU NEBS. Cl. 13. 9–6–49.
514,762. SILASTIC. Cl. 42. 9–6–49.
514,763. KANSE. Cl. 26. 9–6–49.
514,764. HORTON. Cl. 24. 9–6–49.
514,768. ECON POWER AND DESIGN. Cl. 23. 9–6–49.
514,769. DANDYLITE. Cl. 39. 9–6–49.
514,774. BILT WELL. Cl. 12. 9–6–49.
514,778. TROCADERO. Cl. 8. 9–6–49.
514,781. LAWSON. Cl. 39. 9–6–49.

514,782. LAWSON QUALITY WITHIN OVAL DESIGN. Cl. 39. 9–6–49.
514,786. BURGAND. Cl. 39. 9–6–49.
514,794. FLUMITE. Cl. 13. 9–6–49.
514,801. W WIREWAY MAGNETIC WIRE RECORDER AND DESIGN. Cl. 21. 9–6–49.
514,803. W WONDERKOOL AND SHIELD DESIGN. Cl. 39. 9–6–49.
514,809. "WORLDFINE". Cl. 42. 9–6–49.
514,817. KARYALL. Cl. 3. 9–6–49.
514,820. TREASURE AND REPRESENTATION OF TREASURE CHEST. Cl. 21. 9–6–49.
514,822. ALLPHOS. Cl. 6. 9–6–49.
514,824. IMPROMPTU. Cl. 39. 9–6–49.
514,826. HANDCRAFT. Cl. 29. 9–6–49.
514,828. SANFORISERAD. Cl. 42. 9–6–49.
514,829. WONDER-AID WITHIN DIAMOND DESIGN. Cl. 21. 9–6–49.
514,830. BEAMASTER. Cl. 21. 9–6–49.
514,832. SNAPRON. Cl. 39. 9–6–49.
514,846. SASSTEX. Cl. 42. 9–6–49.
514,847. REPRESENTATION OF TIGER AND DESIGN WITH ARABIC LETTERING. Cl. 42. 9–6–49.
514,850. FOOT-ILL AND REPRESENTATION OF FOOT. Cl. 6. 9–6–49.
514,851. MONO-CAL. Cl. 13. 9–6–49.
514,855. THREE POINT AND DESIGN. Cl. 44. 9–6–49.
514,856. MAGGYANNE AND REPRESENTATION OF WOMAN. Cl. 39. 9–6–49.
514,860. PLA-MOR. Cl. 21. 9–6–49.
514,861. A CRESTCORD FABRIC. Cl. 42. 9–6–49.
514,862. GEOMETRIC DESIGN. Cl. 12. 9–6–49.
514,866. DREW & SONS. Cl. 29. 9–6–49.
514,868. LINMOP. Cl. 29. 9–6–49.
514,869. THE EGYPTIAN BEAUTY REVITALIZER AND DESIGN. Cl. 44. 9–6–49.
514,880. POLYCREST. Cl. 6. 9–6–49.
514,888. ANTABUS. Cl. 6. 9–6–49.
514,892. MASSAGE-O-MAT. Cl. 44. 9–6–49.
514,893. SYRETHADON. Cl. 6. 9–6–49.
514,900. REPRESENTATION OF LAMP AND HEAD OF MAN. Cl. 44. 9–6–49.
514,902. NUE. Cl. 6. 9–6–49.
514,903. VOLCANO. Cl. 6. 9–6–49.
514,904. ACRIBASE. Cl. 44. 9–6–49.
514,907. CACHALOT. Cl. 6. 9–6–49.
514,908. DENT-LYKE. Cl. 44. 9–6–49.
514,912. CALOL. Cl. 6. 9–6–49.
514,914. "PLASTI-SATIN". Cl. 42. 9–6–49.
514,915. WEBCO WITHIN DIAMOND DESIGN. Cl. 6. 9–6–49.
514,919. ROCHESTER. Cl. 6. 9–6–49.
514,920. DIAMOND. Cl. 13. 9–6–49.
514,921. PROPATHRICIN. Cl. 6. 9–6–49.
514,929. CRAMOTHALIDINE. Cl. 6. 9–6–49.
514,930. ROBIN HOOD. Cl. 27. 9–6–49.
514,933. SANTA. Cl. 27. 9–6–49.
514,939. PASTELLA. Cl. 42. 9–6–49.
514,942. OMNI-CHANNEL. Cl. 21. 9–6–49.
514,943. PERFECTION. Cl. 13. 9–6–49.
514,949. SOILPAK. Cl. 12. 9–6–49.
514,950. DU-ALL. Cl. 12. 9–6–49.
514,954. HOLLOSTONE. Cl. 12. 9–6–49.
514,956. "DOES EVERYTHING BUT SPAWN". Cl. 22. 9–6–49.
514,961. STANDALAMP. Cl. 21. 9–6–49.
514,963. NERB'S. Cl. 6. 9–6–49.
514,964. MODELAGE DU VISAGE ET DU CORPS. Cl. 6. 9–6–49.
514,965. AUSTIN'S VERYBEST. Cl. 6. 9–6–49.

TRADEMARK REGISTRATIONS AMENDED, DISCLAIMED, CORRECTED, ETC.

320,606. RHEINGOLD. Cl. 48. 1–1–35. United States Brewing Co. of Chicago, now by change of name The Elston Company, assignor to United States Brewing Co. Liebmann Breweries, Inc., Brooklyn, N. Y. Amended: The restriction as to territory of use imposed by Commissioner's Order dated November 7, 1950 is deleted.

533,121. RHEINGOLD. Cl. 48. 11–7–50. Liebmann Breweries, Inc., Brooklyn, N. Y. Amended: In line 19 of the first paragraph of the statement, after "above" a period is inserted, and the remainder of said paragraph and the last paragraph of the statement are deleted.

TRADEMARK REGISTRATIONS—NEW CERTIFICATES

New Certificates issued under sections 7(c), 7(f), 7(g) of the Trademark Act of 1946 for the unexpired term of the original registrations.

221,835. MILES ETC. AND DESIGN. Cl. 39. W. H. Miles Shoe Co., Inc. 12–14–26. New Cert. Sec. 7(c), to Melville Shoe Corporation, New York, N. Y., 2–21–56.

221,836. ALWAYS MILES AHEAD AND DESIGN. Cl. 39. W. H. Miles Shoe Co., Inc. 12–14–26. New Cert. Sec. 7(c), to Melville Shoe Corporation, New York, N. Y., 2–21–56.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 6

292,823. Mar. 29, 1932. Royce Chemical Company, Carlton Hill, N. J. Pub. by registrant.

DISCOLITE

For Hydrosulphides for Textile Purposes.

CLASS 12

113,119. Oct. 10, 1916. The B. F. Nelson Manufacturing Company, Minneapolis, Minn. Pub. by registrant.

THE B F NELSON MFG. COMPANY N

For Asphalt Shingles, Asphalt and Coal-Tar Products, Building-Papers, Box-Boards, and Wallboards.

CLASS 14

106,094. Oct. 12, 1915. Firth-Sterling Steel Company, McKeesport, Pa. Pub. by Firth Sterling, Inc., Pittsburgh, Pa.

INVARO

For Tool-Steel.

CLASS 15

332,949. Mar. 3, 1936. Vern Dale, d. b. a. Outers Laboratories, Onalaska, Wis. Pub. by registrant.

REELSLICK

For Anhydrous Colloidal Graphitic Rust Preventing and Lubricating Oil.

CLASS 19

170,590. July 17, 1923. Humber Limited, Coventry, England. Pub. by registrant.

THE HUMBER HUMBER LTD. ENGLAND

For Bicycles and Tricycles.

CLASS 46

106,081. Oct. 5, 1915. Powells, New York, N. Y. Pub. by The Squirrel Brand Company, Cambridge, Mass.

SQUIRREL BRAND

The word "Brand" is disclaimed apart from the mark as shown.

For Candy.

270,968. May 20, 1930. Charles J. Shasteen, Toledo, Ohio. Pub. by Theodore H. Eggers, San Francisco, Calif.

PICNIC

For Potato Chips.

331,263. Dec. 31, 1935. Modern Health Products, Inc., Milwaukee, Wis. Pub. by Modern Products, Inc. of America, Milwaukee, Wis.

STAF

For Prepared Food Powder Containing Calcium and Phosphorus and Adapted for Independent Consumption or To Be Mixed With Other Foods.

331,569. Jan. 14, 1936. Modern Health Products, Milwaukee, Wis. Pub. by Modern Products, Inc. of America, Milwaukee, Wis.

SANTAY

For Meatless Bouillon, Garlic Seasoning, Anti-Diabetic Tea, and Strawberry Tea.

CLASS 52

340,421. Nov. 10, 1936. Mapor Corporation, New York, N. Y. Pub. by registrant.

MAPORIZE

For Cleaner for Automobiles, Floors, Walls, Furniture, Floor Coverings and the Like.

LIST OF REGISTRANTS OF TRADEMARKS

ACF Industries, Inc., New York, N. Y. 621,702, pub. 11–29–55. Cl. 19.
Abbott Laboratories, North Chicago, Ill. 621,696–7, pub. 11–29–55. Cl. 18.
Abramoff, Natanel, d. b. a. The Donaty Trading Co., New York, N. Y. 621,777, pub. 11–29–55. Cl. 22.
Ace Battery Mfg. Co., Los Angeles, Calif. 621,748, pub. 11–29–56. Cl. 21.
Ackerman, Mary D., Mechanicsburg, Ohio. 514,732, canc. Cl. 39.
Advance Aluminum Castings Corp., Chicago, Ill. 334,264, ren. 4–28–56. Cl. 34.
Advance Aluminum Castings Corp., Chicago, Ill. 334,570, ren. 5–5–56. Cl. 13.
Aktiebolaget Radius, Tellusborg, near Stockholm, Sweden. 328,785, ren. 10–8–55. Cl. 34.
Aladdin Co., The, Bay City, Mich. 621,791, pub. 11–29–55. Cl. 38.
Aldens, Inc., Chicago, Ill. 621,519, pub. 11–22–55. Cl. 3.
Allied Chemical & Dye Corp.: *See*—
Barrett Mfg. Co.
Allied Chemical & Dye Corp., New York, N. Y. 621,574, pub. 11–22–55. Cl. 10.
Allied Chemical & Dye Corp., New York, N. Y. 621,598, pub. 11–29–55. Cl. 12.
Allied Stores Corp., d. b. a. The Bon Marche, Dey Brothers & Co., and Quackenbush Co., Wilmington, Del., New York, N. Y., Seattle, Wash., Syracuse, N. Y., and Paterson, N. J. 514,657, canc. Cl. 39.
Allstate Insurance Co., Chicago, Ill. 621,917–18, pub. 4–28–53. Cl. 102.
Allyn, Alvin L., d. b. a. Shark Chaser Chemicals, San Pedro, Calif. 621,553, pub. 11–22–55. Cl. 6.
Al-Mag. Corp., Forest Hills, N. Y. 621,632, pub. 11–22–55. Cl. 14.
Alsar Distributors, Inc., Detroit, Mich. 621,590, pub. 11–29–55. Cl. 12.
Alston Coal Co., Kansas City, Mo. 621,500, pub. 11–22–55. Cl. 1.
Ambrose & Co., to Ambrose and Co. (1943), Denver, Colo. 326,333, ren. 7–23–55. Cl. 47.
Ambrose & Co., to Ambrose and Co. (1943), Denver, Colo. 328,111, ren. 9–17–55. Cl. 47.
Ambrose and Co. (1943): *See*—
Ambrose & Co.
American Automobile Association, Washington, D. C. 112,980, canc. Cl. 38.
American Automobile Association, Inc., Washington, D. C. 341,044, canc. Cl. 2.
American Automobile Association, Inc., Washington, D. C. 341,529, canc. Cl. 11.
American Automobile Association, Inc., Washington, D. C. 341,530, canc. Cl. 3.
American Automobile Association, Inc., Washington, D. C. 341,577, canc. Cl. 13.
American Automobile Association, Inc., Washington, D. C. 341,578, canc. Cl. 35.
American Automobile Association, Inc., Washington, D. C. 342,144, canc. Cl. 38.
American Automobile Association, Inc., Washington, D. C. 342,145, canc. Cl. 21.
American Automobile Association, Inc., Washington, D. C. 342,479, canc. Cl. 8.
American Automobile Association, Inc., Washington, D. C. 343,877, canc. Cl. 37.
American Automobile Association, Inc., Washington, D. C. 344,376, canc. Cl. 21 and 50.
American Automobile Association, Inc., Washington, D. C. 344,381, canc. Cl. 39.
American Baby Chick Co., Eldorado, Ill. 621,495, pub. 11–22–55. Cl. 1.
American Brass Co., The, Waterbury, Conn. 621,633, pub. 11–29–55. Cl. 14.
American Crucible Co., North Haven, Conn. 514,653, canc. Cl. 12.
American Feed Stores (Home Organization) Inc., The, Minneapolis, Minn. 621,683, pub. 11–22–55. Cl. 18.
American Hard Rubber Co., New York, N. Y. 621,610, pub. 11–22–55. Cl. 13.
American Hide and Leather Co., Lowell Mass. 621,498, pub. 11–22–55. Cl. 1.
American Machine & Foundry Co., New York, N. Y. 621,730, pub. 11–22–55. Cl. 21.
American Maize-Products Co., New York, N. Y. 333,058, ren. 3–10–56. Cl. 46.
American Phenolic Corp., Chicago, Ill. 621,749–50, pub. 11–22–55. Cl. 21.
American Pipe & Steel Corp., Alhambra, Calif. 621,515, pub. 11–22–55. Cl. 2.
American Watch Co. of Canada: *See*—
Lechter, B.
Anciens Etablissements Barbier-Benard & Turenne, Paris, France. 621,732, pub. 11–29–55. Cl. 21.
Anderson, V. E., Mfg. Co., Owensboro, Ky. 621,922. Cl. 12.
Apple Growers Association, Hood River, Oreg. 514,725, canc. Cl. 46.
Aquamatic Inc., Rockford, Ill. 621,616, pub. 11–22–55. Cl. 13.
Ariel, Inc.: *See*—
Ariel Products Corp., Inc.
Ariel Products Corp., Inc., St. Paul, Minn., now by change of name Ariel, Inc. 621,902, pub. 11–8–55. Cl. 51.
Armco Steel Corp., Middletown, Ohio. 621,507, pub. 11–29–56. Cl. 2.
Armour and Co., Chicago, Ill. 621,535, pub. 11–22–55. Cl. 5.
Arnolt Corp., Warsaw, Ind. 621,741, pub. 11–22–55. Cl. 21.
Aro Equipment Corp., The, Bryan, Ohio. 621,612, pub. 11–22–55. Cl. 13.
Arquitt, Ben C., d. b. a. Safety Engineering Co., Dubuque, Iowa. 621,703, pub. 11–29–55. Cl. 19.
Arrow Liqueurs Corp., Detroit, Mich. 621,895, pub. 11–29–55. Cl. 49.
Arto, Inc., Chicago, Ill. 621,587, pub. 11–22–55. Cl. 12.
Ashland Oil & Refining Co., Ashland, Ky. 621,648, pub. 11–22–55. Cl. 15.
Astor Equipment Corp., New York, N. Y. 621,928–9. Cl. 23.
Atlas Specialty Mfg. Co., Chicago, Ill. 621,712, pub. 11–29–55. Cl. 19.
Austenal Laboratories, Inc., New York, N. Y. 621,852, pub. 11–29–55. Cl. 44.
Austin, Guy D., d. b. a. Guy D. Austin & Co., Miami, Fla. 514,965, canc. Cl. 6.
Austin, Guy D., & Co.: *See*—
Austin, Guy D.
Automatic Headlight Dimmer Corp., Camden, N. J. 514,830, canc. Cl. 21.
Ayerst, McKenna & Harrison Ltd.: *See*—
Det Danske Medicinal- & Kemikalie-Kompagni A/S.
B. B. Chemical Co., Boston, Mass. 621,532, pub. 11–22–55. Cl. 5.
Babcock & Wilcox Co., The, New York, N. Y. 621,631, pub. 11–29–55. Cl. 14.
Baker, O. S., Miami, Fla. 621,491, pub. 11–29–55. Cl. 1.
Bancroft, Joseph, & Sons Co., Wilmington, Del. 621,848, pub. 11–29–55. Cl. 43.
Barber Mfg. Co.: *See*—
Leahey, Nancy B.
Barcolene Co., The, Boston, Mass. 621,911, pub. 11–29–55. Cl. 52.
Barrett Mfg. Co., to Allied Chemical & Dye Corp., New York, N. Y. 107,703, ren. 12–21–56. Cl. 12.
Barricini, Inc., Long Island City, N. Y. 621,862, pub. 11–29–55. Cl. 46.
Barry Laboratories, Inc., Detroit, Mich. 621,684, pub. 11–29–55. Cl. 18.
Bartlay, Ltd., New York, N. Y. 621,800, pub. 11–29–55. Cl. 39.
Bates Mfg. Co., Lewiston, Maine. 621,834, pub. 11–29–55. Cl. 42.
Beamon, Amos R., d. b. a. Oceanic Products Co., Los Angeles, Calif. 621,677, pub. 11–22–55. Cl. 18.
Beaulieu Vineyard, San Francisco, Calif. 621,890, pub. 11–29–55. Cl. 47.
Belford Co. Inc., New York, N. Y. 621,783, pub. 11–29–55. Cl. 37.
Ben & Sally Dance Footwear, Inc., New York, N. Y. 621,797, pub. 11–29–55. Cl. 39.
Benjamin Air Rifle Co., St. Louis, Mo. 514,682, canc. Cl. 13.
Berger, Harry, d. b. a. Kosciusko Products Co., to Kosciusko Products Co., New York, N. Y. 328,821, ren. 10–8–55. Cl. 46.
Beyer & Co.: *See*—
Beyer, W. R.
Beyer, W. R., d. b. a. Beyer & Co., Odessa, Tex. 621,856, pub. 11–29–55. Cl. 45.
Bick, Hans C., Inc., Reading, Pa. 621,550, pub. 11–29–55. Cl. 6.
Bird & Son, Inc., East Walpole, Mass. 621,595, pub. 11–22–55. Cl. 12.
Bishop, Howard B., d. b. a. Service Engineering Co., Summit, N. J. 514,949, canc. Cl. 12.
Block, B. E., & Bros., Norristown, Pa. 514,669, canc. Cl. 39.
Blousemaker, Inc., New York, N. Y. 621,798, pub. 11–29–55. Cl. 39.
Bobrow Bros., Inc., Philadelphia, Pa. 621,668, pub. 11–29–55. Cl. 17.
Bon Marche, The: *See*—
Allied Stores Corp.
Borax Consolidated, Ltd., d. b. a. Pacific Coast Borax Co., Division of Borax Consolidated, Ltd., Los Angeles, Calif. 621,549, pub. 11–29–55. Cl. 6.
Borax Consolidated, Ltd., d. b. a. Pacific Coast Borax Co., Division of Borax Consolidated, Ltd., Los Angeles, Calif. 621,552, pub. 11–29–55. Cl. 6.
Borden Co., The: *See*—
Fussell Ice Cream Co.
Botany Mills, Inc., Passaic, N. J. 621,842, pub. 11–29–55. Cl. 42.
Bowes Industries, Inc.: *See*
Continental Can Co., Inc.
Bowman Dairy Co., Chicago, Ill. 621,868, pub. 11–29–55. Cl. 46.
Bowser, Inc.: *See*—
Bowser, S. F., & Co., Inc.
Bowser, S. F., & Co., Inc., to Bowser, Inc., Fort Wayne, Ind. 109,710, ren. 4–18–56. Cl. 26.
Boyle-Midway Inc.: *See*—
Wizard Products Co.
Bradford, W. J., Paper Co., Chicago, Ill. 334,574, ren. 5–5–56. Cl. 37.
Brennan, Eugene B., Locust Valley, N. Y. 514,963, canc. Cl. 6.

Brown Distributing Co.: *See*—
Brown, William S.
Brown, William S., d. b. a. Brown Distributing Co., Kansas City, Kans. 621,524, pub. 11–22–55. Cl. 4.
Bullocks', Inc., Los Angeles, Calif. 621,820, pub. 11–29–55. Cl. 39.
Burdsal, A., Co., The: *See*—
Foy Paint Co., Inc., The.
Burgand Shirt Co., Inc., New Haven, Conn. 514,786, canc. Cl. 39.
CAL Specialties, Inc., Gardena, Calif. 621,711, pub. 11–29–55. Cl. 19.
California Spray-Chemical Corp., Wilmington, Del., and Richmond, Calif. 514,822, canc. Cl. 6.
California Walnut Growers Association, Los Angeles, Calif. 106,834, ren. 11–2–55. Cl. 46.
Cameron Iron Works, Inc., Houston, Tex. 621,714, pub. 11–22–55. Cl. 19.
Cantor, Jacob J., Los Angeles, Calif. 330,540, ren. 12–3–55. Cl. 44.
Cap-Cal-Ox: *See*—
Regan, William H.
Carey Press Corp., New York, N. Y. 621,785, pub. 12–13–55. Cl. 37.
Carpenter Paper Co.: *See*—
Nation Wide Papers, Inc.
Carr, Adams & Collier Co., Dubuque, Iowa. 514,774, canc Cl. 12.
Carroll, Anna L. S., New York, N. Y. 514,832, canc. Cl. 39.
Carter, William, Co., The, Needham Heights, Mass. 333,749, ren. 4–7–56. Cl. 39.
Catalin Corp. of America, New York, N. Y. 332,011, ren. 1–28–56. Cl. 1.
Center Chemical Co., Atlanta, Ga. 621,510, pub. 11–22–55. Cl. 2.
Central Industries, Inc., Watertown, Conn. 514,656, canc Cl. 23.
Central Mfg. Co., Macedonia, Ohio. 621,534, pub. 11–22–55. Cl. 5.
Chappell, Donald J., d. b. a. K. C. Steak Sauce Co., Kansas City, Mo. 621,936. Cl. 46.
Charlotte Chemical Laboratories, Inc., Charlotte, N. C. 621,555, pub. 11–22–55. Cl. 6.
Checker Fabrics & Net Co., New York, N. Y. 621,837–8, pub. 11–29–55. Cl. 42.
Chicago Pottery Co., Chicago, Ill. 621,625, pub. 11–22–55. Cl. 13.
Chicago Truck Drivers, Chauffeurs and Helpers Union of Chicago and Vicinity, Local 705, Chicago, Ill. 621,919, pub. 11–29–55. Cl. 105.
Chivas Brothers Ltd., Aberdeen, Scotland. 621,894, pub. 11–29–55. Cl. 49.
Chocolate Products Co., Chicago, Ill. 284,111, canc. Cl. 45.
Cigarette Components Ltd., London, England. 621,572, pub. 11–22–55. Cl. 8.
Clark Equipment Co., Buchanan, Mich. 621,715–16, pub. 11–29–55. Cl. 19.
Classic Weaving Corp., North Bergen, N. J. 621,843, pub. 11–29–55. Cl. 42.
Cleman, Donald V., Seattle, Wash. 514,855, canc. Cl. 44.
Cleveland Heater Co., The, Cleveland, Ohio. 514,654, canc. Cl. 21.
Cleveland Heater Co., The, Cleveland, Ohio. 621,753, pub. 11–22–55. Cl. 21.
Clinchfield Portland Cement Corp., Kingsport, Tenn., to Penn-Dixie Cement Corp., Nazareth, Pa. 108,156, ren. 1–18–56. Cl. 12.
Clinical Products Ltd., Richmond, Surrey, England. 514,880, canc. Cl. 6.
Closures, Inc., Detroit, Mich. 621,589, pub. 11–22–55. Cl. 12.
Cluett, Peabody & Co., Inc., Troy, N. Y. 107,962, ren. 1–4–56. Cl. 39.
Cluett, Peabody & Co., Inc., Troy, N. Y. 514,828, canc. Cl. 42.
Coeur d'Alene Hardware & Foundry Co., Wallace, Idaho. 332,196, ren. 2–4–56. Cl. 23.
Colbert, Irving, Long Island City, N. Y. 621,908, pub. 11–29–55. Cl. 52.
Colgate-Palmolive Co., Jersey City, N. J. 621,560, pub. 11–29–55. Cl. 6.
Collins, John E., Dallas, Tex. 621,734, pub. 11–22–55. Cl. 21.
Collins Radio Co., Cedar Rapids, Iowa. 514,942, canc. Cl. 21.
Columbia Envelope Co., Melrose Park, Ill. 621,788, pub. 11–29–55. Cl. 37.
Columbia Ribbon & Carbon Mfg. Co., Inc., Glen Cove, N. Y. 621,579–82, pub. 11–29–55. Cl. 11.
Comfort Mfg. Co., Chicago, Ill. 621,903, pub. 11–29–55. Cl. 51.
Conoy, H., & Co., Ltd., London, England. 514,778. canc. Cl. 8.
Concrete Engineers Co., Glendale, Calif. 514,676, canc. Cl. 12.
Congoleum-Nairn Inc., Kearny, N. J. 330,215, ren. 11–26–55. Cl. 20.
Conradty, C., Nurnberg, Germany. 621,930. Cl. 23.
Continental Can Co., Inc., New York, N. Y., from Bowes Industries, Inc. 621,782, pub. 11–29–55. Cl. 37.
Continental Chemical Co., Los Angeles, Calif. 621,591, pub. 11–29–55. Cl. 12.
Continental Motors Corp., Detroit and Muskegon, Mich., to Permoflux Corp., Chicago, Ill. 333,435, ren. 3–24–56. Cl. 21.
Conyngham Sales Co., Hazleton, Pa. 621,605, pub. 11–22–55. Cl. 12.
Cooper, Claude R., d. b. a. Sanox Co., Toledo, Ohio. 621,672, pub. 8–24–54. Cl. 18.
Cooperative G. L. F. Marketing Service, Inc., Canandaigua, N. Y. 621,801, pub. 11–29–55. Cl. 46.
Cooper's Inc., Kenosha, Wis. 621,934. Cl. 39.
Cowles Magazines, Inc.: *See*—
Look Inc.
Crest Fabrics Corp., New York, N. Y. 514,861, canc. Cl. 42.
Cronstroms Mfg. Co.: *See*—
Cronstroms Mfg., Inc.
Cronstroms Mfg., Inc., d. b. a. Cronstroms Mfg. Co., Minneapolis, Minn. 621,511, pub. 11–22–55. Cl. 2.
Crosby Chemicals, Inc., De Ridder, La. 621,545, pub. 11–22–55. Cl. 6.
Crown Fabrics Corp., New York, N. Y. 332,113, ren. 2–4–56. Cl. 42.
Crown Zellerbach Corp., San Francisco, Calif. 621,784, pub. 11–29–55. Cl. 37.
Crystal, David, Inc., New York, N. Y. 621,821, pub. 11–29–55. Cl. 39.
Culligan, Inc., Northbrook, Ill. 621,621, pub. 11–22–55. Cl. 13.
Custom House Packing Co., Monterey, Calif. 514,720–1, canc. Cl. 46.
Cutler-Hammer, Inc., Milwaukee, Wis. 621,719, pub. 11–22–55. Cl. 21.
Dabbs, Stella G., Mayesville, S. C. 621,497, pub. 11–22–55. Cl. 1.
Dairy Equipment Co., Madison, Wis. 621,933. Cl. 31.
Dale Bolson Co.: *See*—
Nethercutt, Jack.
Dale, Vern, d. b. a. Outers Laboratories, Onalaska, Wis. 332,949, 12(c) pub. 2–21–56. Cl. 15.
Davis, Thomas A., d. b. a. Fresh Orange Juice Co., Dallas, Tex. 356,922, canc. Cl. 45.
Day-Brite Lighting, Inc., St. Louis, Mo. 621,723, pub. 11–22–55. Cl. 21.
Deaf Smith County Pharmaceutical Co.: *See*—
Edwards, George W.
Deering, Milliken & Co. Inc., New York, N. Y. 621,827, pub. 11–29–55. Cl. 42.
Dehydag Deutsche Hydrierwerke GMBH, Dusseldorf, Germany. 621,907, pub. 11–29–55. Cl. 52.
Dell Products: *See*—
Holtze, Irene L.
Dent-Iyke Co.: *See*—
Kempster, George A.
Det Danske Medicinal- & Kemikalie-Kompagni A/S, Copenhagen, Denmark, to Ayerst, McKenna & Harrison Ltd., New York, N. Y. 514,888, canc. Cl. 6.
Detroit Harvester Co., Detroit, Mich. 621,778, pub. 11–15–55. Cl. 23.
De Witt Grocery Co., Brattleboro, Vt. 237,555, canc. Cl. 46.
Dey Brothers & Co.: *See*—
Allied Stores Corp.
Diamond Chain Co., Inc., Indianapolis, Ind. 514,675, canc. Cl. 23.
Di Palo, C.: *See*—
Santomaure, Concetta.
Ditter, Francis J., d. b. a. Federal Aircraft Works, Minneapolis, Minn. 621,707–8, pub. 11–29–55. Cl. 19.
Dodge Mfg. Corp., Mishawaka, Ind. 621,931. Cl. 23.
Dombrower, Ralph L., Richmond, Va. 621,789, pub. 11–29–55. Cl. 38.
Dominion Preserving Co. Ltd., Montreal, Quebec, Canada, to Habitant Soup Co., Manchester, N. H. 332,898, ren. 3–3–56. Cl. 46.
Donaty Trading Co., The: *See*—
Abramoff, Nataneł.
Donnybrook Coat Co., Inc., to Philip Shlansky & Sons, Inc., New York, N. Y. 333,759, ren. 4–7–56. Cl. 39.
Dow Corning Corp., Midland, Mich. 514,762, canc. Cl. 42.
Dream Maid Pak Corp., Ridgefield, N. J. 621,883, pub. 11–29–55. Cl. 46.
Drew, E. F., & Co., Inc., New York, N. Y. 621,881, pub. 11–29–55. Cl. 46.
Driaire Inc., South Norwalk, Conn. 621,626, pub. 11–22–55. Cl. 13.
Drool-A-Way Bib: *See*—
Townley, Bernard R.
Droste's Cacao-En Chocoladefabrieken N. V., Haarlem, Netherlands. 621,939. Cl. 46.
Du Bois Co., Inc., The, Cincinnati, Ohio. 621,921. Cl. 6.
Duncan Coffee Co., Houston, Tex. 514,713, canc. Cl. 46.
Dynamux Ltd., Ville St. Miche, Quebec, Canada. 621,701, pub. 11–22–55. Cl. 19.
Ecker, Hoyt, d. b. a. Ecker Industries, Watertown, Mass. 621,661, pub. 11–22–55. Cl. 16.
Ecker Industries: *See*—
Ecker, Hoyt.
Ed-U-Cards Mfg. Corp., New York, N. Y. 621,774, pub. 11–29–55. Cl. 22.
Edwards, George W., d. b. a. Deaf Smith County Pharmaceutical Co., Hereford, Tex. 621,689, pub. 11–22–55. Cl. 18.
Eggers, Theodore H.: *See*—
Silvasteen, Charles J.
Electric-Aire Engineering Corp., Chicago, Ill. 621,722, pub. 11–22–55. Cl. 21.
Electric Heat Control Co., The, to King Electric Equipment Co., Cleveland, Ohio. 327,427, ren. 8–27–55. Cl. 26.
Electric Storage Battery Co., The, Philadelphia, Pa. 621,728, pub. 11–22–55. Cl. 21.
Electronic Control Corp., Detroit, Mich. 621,742, pub. 11–22–55. Cl. 21.
Elston Co., The: *See*—
United States Brewing Co. of Chicago.
Embalmers Supply Co., The, Westport, Conn. 109,527, ren. 4–11–56. Cl. 44.
Estep, William, Chicago, Ill. 514,763, canc. Cl. 26.
Ettelbrick Shoe Co., Greenup, Ill. 621,816, pub. 11–29–55. Cl. 39.
Evans, Robert G., Co., Kansas City, Mo. 621,525, pub. 11–22–55. Cl. 4.

Fairchild Camera and Instrument Corp., Syosset, N. Y. 621,726, pub. 11–22–55. Cl. 21.
Farm-Oyl Co., The, St. Paul, Minn. 621,566, pub. 11–29–55. Cl. 6.
Federal Aircraft Works: *See*—
Ditter, Francis J.
Feed Products, Inc., Fort Worth, Tex. 621,690, pub. 11–22–55. Cl. 18.
Fergusson, Alex C., Co., Philadelphia, Pa. 621,567, pub. 11–29–55. Cl. 6.
Fielding, Rodney, Inc., New York, N. Y. 514,809, canc. Cl. 42.
Firma Ferdinand Bernhard Schmetz, Herzogenrath, near Aachen, Germany. 621,925. Cl. 23.
Firma Karl Haller: *See*—
Haller, Karl.
Firth Sterling, Inc.: *See*—
Firth-Sterling Steel Co.
Firth-Sterling Steel Co., McKeesport, by Firth Sterling, Inc., Pittsburgh, Pa. 106,094, 12(c) pub. 2–21–56. Cl. 14.
Fischer, B., & Co., Inc., New York, N. Y. 514,715–16, canc. Cl. 46.
Fitz-On Heel Co.: *See*—
Fitzsimmons, James F.
Fitzsimmons, James F., d. b. a. Fitz-On Heel Co., Cambridge, Mass. 621,802, pub. 11–29–55. Cl. 39.
Flamhaft, Harry, d. b. a. Roubachez Import Co., New York, N. Y. 252,730, canc. Cl. 6.
Flanigan, C. J., Belting Co.: *See*—
Flanigan, Cornelius J.
Flanigan, Cornelius J., d. b. a. C. J. Flanigan Belting Co., Fort Worth, Tex. 621,565, pub. 11–29–55. Cl. 6.
Fleer, F. H., Co.: *See*—
Fleer, Frank H., Corp.
Fleer, Frank H., Corp., d. b. a. F. H. Fleer Co., Philadelphia, Pa. 621,863–4, pub. 11–29–55. Cl. 46.
Foramino Inc., Kenova, W. Va. 621,502–3, pub. 11–29–55. Cl. 1.
Forstmann & Huffmann Co., Passaic, N. J. 254,458, canc. Cl. 42.
Fougera, E., & Co., Inc., New York, N. Y. 621,693, pub. 11–29–55. Cl. 18.
Four Roses Malt Extract Co., d. b. a. Wizard Malt Extract Co., Cincinnati, Ohio. 256,108, canc. Cl. 46.
Foy Paint Co., Inc., The, d. b. a. The R. F. Johnston Paint Co., and The A. Burdsal Co., Cincinnati, Ohio. 621,664, pub. 11–29–55. Cl. 16.
Fresh Orange Juice Co.: *See*—
Davis, Thomas A.
Friedrich, Ed., Inc., San Antonio, Tex. 334,380, ren. 4–28–56. Cl. 31.
Frostee Maid Products Co., Longview, Tex. 621,941. Cl. 46.
Fuller, D. B., & Co., Inc., New York, N. Y. 621,833, pub. 11–29–55. Cl. 42.
Fuller, D. B., & Co., Inc., New York, N. Y. 621,835, pub. 11–29–55. Cl. 42.
Fulton Bag and Cotton Mills, Atlanta, Ga. 621,836, pub. 11–29–55. Cl. 42.
Fussell Ice Cream Co., to The Borden Co., New York, N. Y. 107,843, ren. 12–28–55. Cl. 46.
Geigy Chemical Corp., New York, N. Y. 621,547, pub. 11–22–55. Cl. 6.
Geigy Chemical Corp., New York, N. Y. 621,556, pub. 11–22–55. Cl. 6.
Gemmer Mfg. Co., Detroit, Mich. 621,717, pub. 11–29–55. Cl. 19.
General Dynamics Corp.: *See*—
Stromberg-Carlson Co.
General Fluid Machinery Co., Inc., Huntsville, Ala. 514,698, canc. Cl. 23.
General Sports, Inc., to Wilson Sporting Goods Co., Chicago, Ill. 332,549–50, ren. 2–18–56. Cl. 22.
General Tire & Rubber Co., The, Akron, Ohio. 621,900, pub. 10–4–55. Cl. 50.
Genli Inc., St. Paul, Minn. 514,900, canc. Cl. 44.
Getz, William, Corp., The, Chicago, Ill. 514,724, canc. Cl. 44.
Gides, Inc., Beverly Hills, Calif. 621,694, pub. 11–29–55. Cl. 18.
Gillette Co., The, d. b. a. The Toni Co., Boston, Mass. 621,945. Cl. 52.
Gimenez, Jorge, Catano, Puerto Rico. 621,699, pub. 11–22–55 Cl. 18.
Gits Modling Corp., Chicago, Ill. 621,781, pub. 11–29–55. Cl. 37.
Gladding, McBean & Co., Los Angeles, Calif. 621,601, pub. 11–29–55. Cl. 12.
Globe Mfg. Co., Pittsfield, N. H. 621,799, pub. 11–29–55. Cl. 39.
Globe Roofing Products Co., Inc., Whiting, Ind. 621,606, pub. 11–29–55. Cl. 12.
Globe Roofing Products Co., Inc., Whiting, Ind. 621,607, pub. 11–22–55. Cl. 12.
Globe-Union Inc., Milwaukee, Wis. 621,754, pub. 11–22–55. Cl. 21.
Goodall-Sanford, Inc.: *See*—
Goodall Worsted Co.
Goodall Worsted Co., Sanford, Maine, and New York, N. Y., to Goodall-Sanford, Inc., Sanford, Maine. 108,511, ren. 2–15–56. Cl. 42.
Gourmet Guild, The, Miami Beach, Fla. 621,935. Cl. 46.
Governor Fastener Co., The, Meriden, Conn. 621,824, pub. 11–29–55. Cl. 40.
Grammes, L. F., & Sons, Inc., Allentown, Pa. 621,636, pub. 11–29–55. Cl. 14.
Grand Rapids Varnish Corp., Grand Rapids, Mich. 621,658, pub. 11–29–55. Cl. 16.
Grant Co., The: *See*—
Ratner, Walter.
Greener Plant Food Co.: *See*—
Western Livestock Order Buyers.
Greenwald, Alex, d. b. a. Pearl-Art Sportswear, Los Angeles, Calif. 514,665, canc. Cl. 39.
Groveton Papers Co., Groveton, N. H. 621,786, pub. 11–29–55. Cl. 37.
Grundig Radio-Werke G. m. b. H. Furth, Bayern, Germany. 621,737, pub. 11–29–55. Cl. 21.
Gulf Oil Corp., Pittsburgh, Pa. 621,527–9, pub. 11–22–55. Cl. 4.
Gulf Oil Corp., Pittsburgh, Pa. 621,539–41, pub. 11–22–55. Cl. 5.
Gulf Oil Corp., Pittsburgh, Pa. 621,650–7, pub. 11–29–55. Cl. 15.
Gundlach, G. P., & Co., Inc., Cincinnati, Ohio. 621,870, pub. 11–20–55. Cl. 46.
H. & B. Distributors, Lyndhurst, N. J. 621,526, pub. 11–22–55. Cl. 4.
Habitant Soup Co.: *See*—
Dominion Preserving Co. Ltd.
Hadley Bros.-Uhl Co., St. Louis, Mo. 621,499, pub. 11–29–55. Cl. 1.
Hadley Bros.-Uhl Co., St. Louis, Mo. 621,504, pub. 11–29–55. Cl. 1.
Haecker, Ernest, d. b. a. Haecker Industries, Philadelphia, Pa. 621,771, pub. 11–22–55. Cl. 22.
Haecker Industries: *See*—
Haecker, Ernest.
Haller, Karl, d. b. a. Firma Karl Haller, Stuttgart-Oberturkheim, Germany. 621,938. Cl. 46.
Hankscraft Co., Reedsburg, Wis. 621,747, pub. 11–22–55. Cl. 21.
Hardwood Plywood Institute, Chicago, Ill. 621,592, pub. 11–29–55. Cl. 12.
Hart, Ivan B., & Sons, Inc., Boston, Mass. 621,490, pub. 11–22–55. Cl. 1.
Hart Schaffner & Marx, Chicago, Ill. 621,807, pub. 11–29–55. Cl. 39.
Hawie Mfg. Co., The, Bridgeport, Conn. 330,391, ren. 12–3–55. Cl. 39.
Hearst Corp., The, New York, N. Y. 442,500, canc. Cl. 38.
Heublein, G. F., & Bro. Inc., Hartford, Conn., now by change of name to Heublein, Inc. 621,896, pub. 11–29–55. Cl. 49.
Heublein, Inc.: *See*—
Heublein, G. F., & Bro., Inc.
Hills-McCanna Co., Chicago, Ill. 621,642, pub. 11–29–55. Cl. 14.
Hoffman Electronics Corp.: *See*—
Hoffman Radio Corp.
National Fabricated Products, Inc.
Hoffman Radio Corp., Los Angeles, Calif., now by change of name to Hoffman Electronics Corp. 621,721, pub. 11–22–55. Cl. 21.
Hoffman Radio Corp., Los Angeles, Calif., now by change of name to Hoffman Electronics Corp. 621,727, pub. 11–22–55. Cl. 21.
Holer, Robert, Paris, France. 621,854, pub. 11–29–55. Cl. 44.
Hollostone Co., Inc., North Hollywood, Calif. 514,954, canc. Cl. 12.
Hollywood Brands, Inc., Centralia, Ill. 621,942–3. Cl. 46.
Hollywood Cosmetics Co.: *See*—
Pacini, Anna.
Holtz, Irene L., d. b. a. Dell Products, Plainfield, N. J. 514,902, canc. Cl. 6.
Horton Mfg. Co., Fort Wayne, Ind. 514,764, canc. Cl. 24.
Hough Shade Corp., Janesville, Wis. 621,588, pub. 11–22–55. Cl. 12.
House Beautiful Curtains, Inc., New York, N. Y. 514,914, canc. Cl. 42.
House of Champion Research Laboratory, Akron, Ohio. 621,765, pub. 11–22–55. Cl. 22.
House of Perfection, Inc., The, New York, N. Y. 621,819, pub. 11–29–55. Cl. 39.
Howard Plastics, Inc., Council Bluffs, Iowa. 621,513, pub. 11–22–55. Cl. 2.
Hubbard & Petersen, Inc., Manson, Wash. 621,886, pub. 11–29–55. Cl. 46.
Hudson, John J., Baltimore, Md. 140,145, canc. Cl. 6.
Hugh-Nelson-Columbia Carpet Mills, Inc., Philadelphia, Pa. 621,829, pub. 11–29–55. Cl. 42.
Humber Ltd., Coventry, England. 170,590, 12(c) pub. 2–21–56. Cl. 19.
Hunsicker, Robert F., Allentown, Pa. 621,877, pub. 11–29–55. Cl. 46.
Hunter Douglas Corp., New York, N. Y. 621,825, pub. 11–29–55. Cl. 40.
Ideal Toy Corp., Hollis, N. Y. 621,769, pub. 11–22–55. Cl. 22.
Imperial Tobacco Co. of Canada, Ltd., Montreal, Quebec, Canada. 621,670, pub. 11–29–55. Cl. 17.
Industrial Condenser Corp., Chicago, Ill. 621,752, pub. 11–29–55. Cl. 21.
Ingram-Richardson Mfg. Co., Beaver Falls, Pa. 108,166, ren. 1–18–56. Cl. 32.
International Nickel Co., Inc., The, New York, N. Y. 621,644–5, pub. 11–29–55. Cl. 14.
International Pulverizing Corp., Moorestown, N. J. 417,109, canc. Cl. 6.
Irvin, Jewell and Vinson Co., The, Dayton, Ohio. 621,659, pub. 11–8–55. Cl. 16.
Isolantite Inc., Belleville, N. J. 374,886, canc. Cl. 21.
Jergens, Andrew, Co., The, Cincinnati, Ohio. 108,210, ren. 1–18–56. Cl. 52.
Jet Tool Co., Milford, Conn. 621,646, pub. 11–22–55. Cl. 15.
Johanssen & Taylor, Inc.: *See*—
Taylor Made Garage Doors, Inc.
Johnson, Al, d. b. a. Valley Pattern Mfg. Co., Stockton, Calif. 621,926. Cl. 23.
Johnson & Johnson, New Brunswick, N. J. 621,538, pub. 11–22–55. Cl. 5.
Johnston, Dewey S., d. b. a. Perm-A-Trim Co., Fort Worth, Tex. 621,584, pub. 10–4–55. Cl. 12.

Johnston, R. F., Paint Co., The: *See*—
Foy Paint Co., Inc., The.
K. C. Steak Sauce Co.: *See*—
Chappell, Donald J.
Kaiser Aircraft & Electronics Corp.: *See*—
Willys Motors Inc.
Kalo Co., The, Quincy, Ill. 514,735, canc. Cl. 6.
Kaminow Bros., New York, N. Y. 621,846, pub. 11–29–55. Cl. 43.
Kates, W. A., Co., The, Deerfield, Ill. 621,624, pub. 11–22–55. Cl. 13.
Kaustine Co., Inc., to Kaustine Furnace & Tank Corp., Perry, N. Y. 323,579, ren. 4–23–55. Cl. 13.
Kaustine Furnace & Tank Corp.: *See*—
Kaustine Co., Inc.
Kay Teens, Inc., Boston, Mass. 621,806, pub. 11–29–55. Cl. 39.
Kaynar Co., The, Los Angeles, Calif. 621,618, pub. 11–29–55. Cl. 13.
Kayser, Julius, & Co., New York, N. Y. 256,879, canc. Cl. 39.
Keller, H. V., Mfg. Co., Minneapolis, Minn. 621,924. Cl. 19.
Kempster, George A., d. b. a. Dent-lyke Co., Brockton, Mass. 514,908, canc. Cl. 44.
Kenley, Joan, Inc., New York, N. Y. 514,824, canc. Cl. 39.
Kepner Products Co., Summit, Ill. 621,619–20, pub. 11–22–55. Cl. 13.
Kevon Textile Products Corp., Philadelphia, Pa. 621,830, pub. 11–29–55. Cl. 42.
Keystone Flashing Co., Philadelphia, Pa. 621,604, pub. 11–22–55. Cl. 12.
Kilgiar Mfg. Co., Kansas City, Mo. 621,523, pub. 11–22–55. Cl. 4.
Kimble Glass Co., Vineland, N. J. 253,315, canc. Cl. 33.
King Electric Equipment Co.: *See*—
Electric Heat Control Co., The.
King, John P., Mfg. Co., The, Augusta, Ga. 621,832, pub. 11–29–55. Cl. 42.
Knudsen Creamery Co. of California, Los Angeles, Calif. 621,859, pub. 6–17–52. Cl. 46.
Koppers Co., Inc., Pittsburgh, Pa. 621,608, pub. 11–29–55. Cl. 12.
Kordite Corp., Macedon, N. Y., to Textron American, Inc., Providence, R. I. 621,508, pub. 11–29–55. Cl. 2.
Kosciusko Products Co.: *See*—
Berger, Harry.
Kress, S. H., and Co., New York, N. Y. 621,812, pub. 11–29–55. Cl. 39.
Kulmbacher Exportbrauerei Mönchshof Aktiengesellschaft, Kulmbach, Bavaria, Germany. 621,892. pub. 11–29–55. Cl. 48.
Lander Co., Inc., The, New York, N. Y. 334,650, ren. 5–12–56. Cl. 51.
La Salle Steel Co., Hammond, Ind. 621,637, pub. 11–22–55. Cl. 14.
Lasting Products Co., Baltimore, Md. 621,665, pub. 11–29–55. Cl. 16.
Lawson, H. W., Mfg. Co., Los Angeles, Calif. 514,781–2, canc. Cl. 39.
Lea & Perrins, Inc., New York, N. Y. 332,203, ren. 2–4–56. Cl. 46.
Lea & Perrins, Inc., New York, N. Y. 333,197, ren. 3–10–56. Cl. 46.
Lea-Ronal, Inc., Long Island City, N. Y. 621,751, pub. 11–22–55. Cl. 21.
Leahey, Nancy B., d. b. a. Barber Mfg. Co., Lowell, Mass. 621,823, pub. 11–29–55. Cl. 40.
Leatherkraft, Inc., Minneapolis, Minn. 514,688, canc. Cl. 39.
Lebec Chemical Corp., Paramount, Calif. 621,544, pub. 11–29–55. Cl. 5.
Lechter, B., d. b. a. American Watch Co. of Canada, Montreal, Quebec, Canada. 514,933, canc. Cl. 27.
Leffingwell Rancho Lemon Association, Whittier, Calif. 205,762, canc. Cl. 46.
Leffingwell Rancho Lemon Association, Whittier, Calif. 260,329–30, canc. Cl. 46.
Lehman Mfg. Co.: *See*—
Lehman, Roger.
Lehman, Roger, d. b. a. Lehman Mfg. Co., Newark, N. J. 514,768, canc. Cl. 23.
Leiser, Herman, New Orleans, La. 621,609, pub. 11–22–55. Cl. 13.
Levenson, Herbert, New York, N. Y. 429,806, canc. Cl. 39.
Liebmann Breweries, Inc.: *See*—
United States Brewing Co. of Chicago.
Liebmann Breweries, Inc., Brooklyn, N. Y. 533,121. Am. 7(d). Cl. 48.
Lifola Co., The: *See*—
Wiggins, George L.
Wiggins, Myrtle E.
Light House of California, Los Angeles, Calif. 621,733, pub. 11–22–55. Cl. 21.
Lighthouse Trailer Co., Chicago, Ill. 621,700, pub. 11–22–55. Cl. 19.
Lini & Lane, S. P. A., Florence, Italy. 621,828, pub. 11–29–55. Cl. 42.
Linmop Mfg. Co., Dayton, Ohio. 514,868, canc. Cl. 29.
Lino Paste Co., Chicago, Ill. 621,536–7, pub. 11–22–55. Cl. 5.
Linvure Co., Inc., The, Boston, Mass. 621,514, pub. 11–22–55. Cl. 2.
Little Dude Trailer Co., Inc., Fort Worth, Tex. 621,713, pub. 11–22–55. Cl. 19.
Loewenstein, Hermann, Inc., New York, N. Y. 621,493, pub. 11–29–55. Cl. 1.
Look Inc., now by change of name to Cowles Magazines, Inc., Des Moines, Iowa. 409,538, canc. Cl. 26.
Lorain Products Corp., Lorain, Ohio. 621,756, pub. 11–29–55. Cl. 21.
Louisiana State Rice Milling Co., Inc., Abbeville, La. 621,882, pub. 11–29–55. Cl. 46.
Love, Joseph, Inc., New York, N. Y. 621,818, pub. 11–29–55. Cl. 39.
Lowe, Joe, Corp., New York, N. Y. 334,044, ren. 4–21–56. Cl. 46.
Lynch, Don: *See*—
Lynch, Donald G.
Lynch, Donald G., d. b. a. Don Lynch, Cincinnati, Ohio. 621,811, pub. 11–29–55. Cl. 39.
Lynnville Coal Co., Kansas City, Mo. 621,501, pub. 11–22–55. Cl. 1.
M. P. H. Mfg. Corp., Inc., Chicago, Ill. 621,585, pub. 11–22–55. Cl. 12.
MacAlaster Bicknell Parenteral Corp., Cambridge, Mass. 621,853, pub. 11–29–55. Cl. 44.
Manhattan Shirt Co., The, New York, N. Y. 332,606, ren. 2–18–56. Cl. 39.
Manley, Inc., Kansas City, Mo. 621,759, pub. 11–29–55. Cl. 21.
Manzel, Inc., Buffalo, N. Y. 514,694, canc. Cl. 23.
Mapor Corp., New York, N. Y. 340,421, 12(c) pub. 2–21–56. Cl. 52.
Marathon Corp., Menasha, Wis. 621,512, pub. 11–22–55. Cl. 2.
Markham Wood Products, Burbank, Calif. 621,505, pub. 11–22–55. Cl. 2.
Marlboro Shirt Co., Inc., Baltimore, Md. 621,803, pub. 11–29–55. Cl. 39.
Ma-Ro Hosiery Co., Inc., New York, N. Y. 621,808–9, pub. 11–29–55. Cl. 39.
Marotta & Cella, Brooklyn, N. Y. 621,880, pub. 11–29–56. Cl. 46.
Masclet, Marie Françoise, Paris, France. 514,964, canc. Cl. 6.
Mason & Mason, Inc., Chicago, Ill. 621,855, pub. 11–29–55. Cl. 45.
Massage-O-Mat Corp., New York, N. Y. 514,892, canc. Cl. 44.
Master Products Co.: *See*—
Weiss, James.
Mastic Tile Corp. of America, The, Newburgh, N. Y. 621,603, pub. 11–29–55. Cl. 12.
Mathieson Chemical Corp., New York, N. Y., now by merger and change of name Olin Mathieson Chemical Corp. 621,674, pub. 11–22–55. Cl. 18.
McKesson & Robbins, Inc., New York, N. Y. 361,696, canc. Cl. 49.
McNeil Laboratories, Inc., Philadelphia, Pa. 621,698, pub. 11–29–55. Cl. 18.
Mecco Sales Co.: *See*—
Redmond, Dumas M.
Melville Shoe Corp.: *See*—
Miles, W. H., Shoe Co., Inc.
Merck & Co., Inc., Rahway, N. J. 621,686–8, pub. 11–29–55. Cl. 18.
Merck & Co., Inc., Rahway, N. J. 621,691–2, pub. 11–22–55. Cl. 18.
Merrell, Wm. S., Co., The, Reading, Cincinnati, Ohio. 621,675, pub. 11–22–55. Cl. 18.
Metalastic Chemical Products Co., McDonald, Pa. 621,586, pub. 11–29–55. Cl. 12.
Metallizing Engineering Co., Inc., Westbury, N. Y. 621,660, pub. 11–29–55. Cl. 16.
Mexico Refractories Co., Mexico, Mo. 621,602, pub. 11–29–55. Cl. 12.
Michel, M., & Co., Inc., New York, N. Y. 514,907, canc. Cl. 6.
Micro-Lite Co. Inc., New York, N. Y. 621,729, pub. 11–22–55. Cl. 21.
Mid-States Gummed Paper Co., Chicago, Ill. 621,531, pub. 11–22–55. Cl. 5.
Mid-West Refineries, Inc., Grand Rapids, Mich. 621,743, pub. 11–22–55. Cl. 21.
Miles, W. H., Shoe Co., Inc., to Melville Shoe Corp., New York, N. Y. 221,835–6, new certificate. Cl. 39.
Miller Engineering & Mfg. Co., Minneapolis, Minn. 621,755, pub. 11–29–55. Cl. 21.
Miller, S. J., Packing Co., Grand Junction, Colo. 621,937. Cl. 46.
Minerallac Electric Co., Chicago, Ill. 108,019, ren. 1–11–56. Cl. 13.
Mingea, John, Long Island City, N. Y. 514,869, canc. Cl. 44.
Minneapolis Star Co., to Minneapolis Star and Tribune Co., Minneapolis, Minn. 334,641, ren. 5–12–56. Cl. 38.
Minneapolis Star and Tribune Co.: *See*—
Minneapolis Star Co.
Miraplas Tile Co., Columbus, Ohio. 621,533, pub. 11–22–55. Cl. 5.
Miss Coquette, Inc., New York, N. Y. 441,944, canc. Cl. 39.
Missionaries of SS. Peter & Paul, Detroit, Mich. 621,795, pub. 11–29–55. Cl. 38.
Missouri Aluminum Products, Inc., St. Louis, Mo. 621,596, pub. 11–29–55. Cl. 12.
Mitchel & King Ltd., Slough, England. 621,775–6, pub. 11–29–55. Cl. 22.
Modern Health Products, by Modern Products, Inc. of America, Milwaukee, Wis. 331,569, 12(c) pub. 2–21–56. Cl. 46.
Modern Health Products, Inc., by Modern Products, Inc. of America, Milwaukee, Wis. 331,263, 12(c) pub. 2–21–56. Cl. 46.
Modern Products, Inc. of America: *See*—
Modern Health Products.
Modern Health Products, Inc.
Mohawk Carpet Mills, Inc., Amsterdam, N. Y. 621,831, pub. 11–29–55. Cl. 42.
Monarch Garment Corp., New York, N. Y. 514,701, canc. Cl. 39.

Monogram Mfg. Co., West Los Angeles and Los Angles, Calif. 514,851, canc. Cl. 13.
Montgomery, Dorothy F., West Chester, Pa. 621,492, pub. 11–22–55. Cl. 1.
Montgomery Elevator Co., Moline, Ill. 621,744, pub. 11–29–55. Cl. 21.
Moore and Co., Inc., Worcester, Mass. 621,673, pub. 11–29–55. Cl. 18.
Moorman Mfg. Co., Quincy, Ill. 376,000, canc. Cl. 6.
Moorman Mfg. Co., Quincy, Ill. 385,392, canc. Cl. 46.
Morgado & Silva, to Morgado & Silva, Lda., Villa Nova de Gaya, Portugal. 319,279, ren. 11–20–34. Cl. 47.
Morgado & Silva, to Morgado & Silva, Lda., Villa Nova de Gaya, Portugal. 319,775, ren. 12–4–54. Cl. 47.
Morgado & Silva, Lda.: *See*—
Morgado & Silva.
Morris Belt and Suspender Co., Inc., New York, N. Y. 621,813, pub. 11–29–55. Cl. 39.
Mossberg & Howell, Inc., Stevens Point, Wis. 621,796, pub. 11–29–55. Cl. 38.
Muehnick, Morris, d. b. a. Wonder-Aid Products Co., Burbank, Calif. 514,829, canc. Cl. 21.
Multi-Products Co., Oak Park, Mich. 621,739, pub. 11–22–55. Cl. 21.
Murray, Arthur, Enterprises, Inc., New York, N. Y. 621,810, pub. 11–29–55. Cl. 39.
NSU-Werke Aktiengesellschaft, Neckarsulm, Wurttemberg, Germany. 621,709, pub. 11–29–55. Cl. 19.
N. V. Karel I Sigarenfabrieken v/h H. J. Van Abbe, Eindhoven, Netherlands. 621,669, pub. 11–29–55. Cl. 17.
N. V. Koninklijke Pharmaceutische Fabrieken v/h Brocades-Stheeman & Pharmacia, Meppel, Netherlands. 621,678, pub. 11–22–55. Cl. 18.
Nash, Inc., Jersey City, N. J. 621,521, pub. 11–22–55. Cl. 3.
Nation Wide Papers, Inc., Chicago, Ill., to Carpenter Paper Co., Omaha, Nebr. 329,520, ren. 11–5–55. Cl. 37.
National Brief Case Mfg. Co., Inc., Chicago, Ill. 514,817, canc. Cl. 3.
National Chemical Products Pty. Ltd., East Sydney, New South Wales, Australia. 621,905, pub. 11–29–55. Cl. 51.
National Fabricated Products, Inc., Chicago, Ill., to Hoffman Electronics Corp., Los Angeles, Calif. 621,746, pub. 11–22–55. Cl. 21.
National Presto Industries, Inc., Eau Claire, Wis. 621,629, pub. 11–29–55. Cl. 13.
Natural Mink Flowers Corp., New York, N. Y. 621,822, pub. 11–29–55. Cl. 40.
Nebiker, Julius F., d. b. a. Nebiker Products Co., Peoria, Ill. 514,760, canc. Cl. 13.
Nebiker Products Co.: *See*—
Nebiker, Julius F.
Nekoosa-Edwards Paper Co., Port Edwards, Wis. 621,787, pub. 11–29–55. Cl. 37.
Nelson, B. F., Mfg. Co., The, Minneapolis, Minn. 113,119, 12(c) pub. 2–21–56. Cl. 12.
Nethercutt, Jack B., d. b. a. Dale Boison Co., Santa Monica, Calif. 621,772, pub. 11–29–55. Cl. 22.
Newell & Errecart, Stockton, Calif. 442,051, canc. Cl. 6.
New Way Garment Bag Co.: *See*—
Rubin, David.
Nickles Machine Corp., Ponca City, Okla. 621,641, pub. 11–22–55. Cl. 14.
Norlund, O. A., Co., Inc., Williamsport, Pa. 514,920, canc. Cl. 13.
North Shore Mfg. Co., Duluth, Minn. 621,817, pub. 11–29–55. Cl. 39.
Northwest Tube & Metal Fabricators, Portland, Oreg. 514,794, canc. Cl. 13.
Norton Co., Worcester, Mass. 333,330, ren. 3–17–56. Cl. 4.
Nu-Tek Co., The, Toledo, Ohio. 514,904, canc. Cl. 44.
Nye-Wait Co., Inc., Auburn, N. Y. 621,839, pub. 11–29–55. Cl. 42.
Oakes Consumer Catalogs, Chicago, Ill. 621,790, pub. 11–29–55. Cl. 38.
Oceanic Products Co.: *See*—
Beamon, Amos R.
Ohio Valley Seed Co., Inc., Evansville, Ind. 621,568, pub. 11–29–55. Cl. 6.
Ojserkis, Maurice J., Atlantic City, N. J. 621,724, pub. 11–22–55. Cl. 21.
Olin Mathieson Chemical Corp.: *See*—
Mathieson Chemical Corp.
Olin Mathieson Chemical Corp., New York, N. Y. 621,564, pub. 11–29–55. Cl. 6.
Oroville-Cordell Fruit Growers, Inc., Oroville, Wash. 334,195, ren. 4–21–56. Cl. 46.
Oshkosh Brewing Co., Oshkosh, Wis. 621,893, pub. 11–29–55. Cl. 48.
Outers Laboratories: *See*
Dale, Vern.
Owens-Illinois Glass Co., Toledo, Ohio. 621,597, pub. 11–22–55. Cl. 12.
Pacific Clay Products, Los Angeles, Calif. 514,703, canc. Cl. 12.
Pacific Coast Borax Co., Division of Borax Consolidated, Ltd.: *See*—
Borax Consolidated, Ltd.
Pacific Coast Cement Co., Seattle, Wash. 514,862, canc. Cl. 12.
Pacific States Laboratories, Inc., San Francisco, Calif. 621,680, pub. 11–29–55. Cl. 18.
Pacific Telephone Exchange, Los Angeles, Calif. 621,947. Cl. 101.
Pacini, Anna, d. b. a. Hollywood Cosmetics Co., Memphis, Tenn. 514,919, canc. Cl. 6.
Paiubert, Jeanne, born Jeanne Quanon, Paris, France. 514,680, canc. Cl. 6.
Parfums Evyan Inc., New York, N. Y. 621,906, pub. 11–29–55. Cl. 51.
Parfums Revillon, Société Anonyme, d. b. a. Revillon, Paris, France. 621,904, pub. 11–29–55. Cl. 51.
Paris Doll Corp., Brooklyn, N. Y. 621,768, pub. 11–22–55. Cl. 22.
Parke, Davis & Co., Detroit, Mich. 621,681–2, pub. 11–22–55. Cl. 18.
Pathfinder Petroleum Co., Los Angeles, Calif. 388,859, canc. Cl. 15.
Pearl-Art Sportswear: *See*—
Greenwald, Alex.
Peerless Undergarment Co., New York, N. Y. 384,123, canc. Cl. 39.
Penn-Dixie Cement Corp.: *See*—
Clinchfield Portland Cement Corp.
Pennsylvania Salt Mfg. Co., The, Philadelphia, Pa. 621,914–16, pub. 11–29–55. Cl. 52.
Pepperell Mfg. Co., Boston, Mass. 621,841, pub. 11–29–55. Cl. 42.
Perfection Products Co., Chicago, Ill. 514,943, canc. Cl. 13.
Permalatem Welding Alloys, Inc., Red Bank, N. J. 621,638–9, pub. 11–29–55. Cl. 14.
Perm-A-Trim Co.: *See*—
Johnston, Dewey S.
Permoflux Corp.: *See*—
Continental Motors Corp.
Personal Products Corp., North Brunswick Township, New Brunswick, N. J. 621,850, pub. 11–29–55. Cl. 44.
Petrolite Corp., St. Louis, Mo. 621,546, pub. 11–22–55. Cl. 6.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 621,685, pub. 11–22–55. Cl. 18.
Philadelphia Quartz Co., Philadelphia, Pa. 108,917, ren. 3–7–56. Cl. 6.
Photo Refrigeration Equipment Co., Kansas City, Mo. 514,746, canc. Cl. 26.
Pierce, S. S., Co., Boston, Mass. 74,570, canc. Cl. 6.
Pinta Products, Inc., Johnston, R. I. 621,617, pub. 11–22–55. Cl. 13.
Pioneer Paint & Varnish Co., Tucson, Ariz. 621,923. Cl. 16.
Placentia Orange Growers Association, Fullerton, Calif. 333,029, ren. 3–10–56. Cl. 46.
Play-Knit Mills, West New York, N. J. 621,847, pub. 11–29–55. Cl. 43.
Port Huron Sulphite & Paper Co., Port Huron, Mich. 621,575–6, pub. 11–22–55. Cl. 11.
Powells, New York, N. Y., by The Squirrel Brand Co., Cambridge, Mass. 106,081, 12(c) pub. 2–21–56. Cl. 46.
Prairie States Oil & Grease Co., d. b. a. Protecto Chemical Co., Danville, Ill. 621,548, pub. 11–29–55. Cl. 6.
Press, Inc., Johnson City, Tenn. 621,794, pub. 11–29–55. Cl. 38.
Prince, H. M., Textiles Inc., New York, N. Y. 621,845, pub. 11–29–55. Cl. 42.
Protecto Chemical Co.: *See*—
Prairie States Oil & Grease Co.
Pure Frozen Lemon Juice Corp. of America, Hubbards Woods, Ill. 621,857, pub. 11–29–55. Cl. 45.
Pyrene Mfg. Co., Newark, N. J. 334,323, ren. 4–28–56. Cl. 16.
Quackenbush Co.: *See*—
Allied Stores Corp.
Quanon, Jeanne: *See*—
Paiubert, Jeanne.
Quinn, K. J., & Co. Inc., Malden, Mass. 621,530, pub. 11–22–55. Cl. 4.
Raney Catalyst Co.: *See*—
Raney, Murray.
Raney, Murray, d. b. a. Raney Catalyst Co., Chattanooga, Tenn. 621,561, pub. 11–29–55. Cl. 6.
Ratner, Walter, d. b. a. The Grant Co., Chicago, Ill. 621,630, pub. 11–29–55. Cl. 13.
Real Companhia Vinfcola do Norte de Portugal, S. A. R. L., Porto, Portugal. 621,889, pub. 11–29–55. Cl. 47.
Reardon Co., The, St. Louis County, Mo. 621,910, pub. 11–29–55. Cl. 52.
Redmond, Dumas M., d. b. a. Mecco Sales Co., Brooklyn and New York, N. Y. 614,850, canc. Cl. 6.
Redondo Tile Co.: *See*—
Redondo Tile Co., Ltd.
Redondo Tile Co., Ltd., to Redondo Tile Co., Redondo Beach, Calif. 621,600, pub. 11–22–55. Cl. 12.
Reduction and Refining Co., Kenilworth, N. J. 621,649, pub. 11–22–55. Cl. 15.
Regal Stores, Inc., Indianapolis, Ind. 621,866, pub. 3–22–55. Cl. 46.
Regan, William H., d. b. a. Cap-Cal-Ox, Bergenfield, N. J. 514,903, canc. Cl. 6.
Re-Insul-Mi-Crete Plank & Products Corp., New York, N. Y. 621,599, pub. 11–22–55. Cl. 12.
Republic Import Corp., New York, N. Y. 621,613, pub. 11–29–55. Cl. 13.
Republic Steel Corp., Cleveland, Ohio. 621,720, pub. 11–22–55. Cl. 21.
Revere Copper and Brass Inc., New York, N. Y. 404,686, canc. Cl. 24.
Revillon: *See*—
Parfums Revillon, Société Anonyme.
Rhee Elastic Thread Corp., Warren, R. I. 621,849, pub. 11–29–55. Cl. 43.
Rhein-Chemie G. m. b. H., Mannheim, Germany. 621,679, pub. 11–29–55. Cl. 18.
Rhinelander Paper Co., Rhinelander, Wis. 330,148, ren. 11–19–55. Cl. 37.
Richards, Caryl, Inc., Brooklyn, N. Y. 621,901, pub. 11–29–55. Cl. 51.
Richardson, James, & Sons, Ltd., Winnipeg, Manitoba, Canada. 621,860, pub. 11–29–55. Cl. 46.
Rigidized Metals Corp., Buffalo, N. Y. 621,634, pub. 11–22–55. Cl. 14.
Rilling-Dermetics Co., The, New York, N. Y. 621,851, pub. 11–29–55. Cl. 44.

Roamer Boat Corp., Holland, Mich. 621,718, pub. 11–29–55. Cl. 19.
Robinson & Cleaver Ltd., London, England. 438,856, canc. Cl. 42.
Robinson & Cleaver Ltd., London, England. 441,808, canc. Cl. 42.
Roden Coal Co., Birmingham, Ala. 441,059, canc. Cl. 1.
Rogue River Packing Corp., Medford, Oreg. 621,878, pub. 11–29–55. Cl. 46.
Rondeau, H. O., Shoe Co., Farmington, N. H. 386,134, canc. Cl. 39.
Rondeau, H. O., Shoe Co., Inc., Farmington, N. H. 359,545, canc. Cl. 39.
Rosenthal Bercow Co., Inc., New York, N. Y. 621,551, pub. 11–22–55. Cl. 6.
Roubechez Import Co.: *See*—
Flamhaft, Harry.
Ronssel Corp., New York, N. Y. 621,695, pub. 11–29–55. Cl. 18.
Royce Chemical Co., Carlton Hill, N. J. 292,823, 12(c) pub. 2–21–56. Cl. 6.
Rubin, David, d. b. a. New Way Garment Bag Co., Detroit, Mich. 621,517, pub. 11–29–55. Cl. 2.
Rubinstein, Helena, Inc., New York, N. Y. 621,944. Cl. 51.
Rueping, Fred, Leather Co., Fond du Lac, Wis. 621,489, pub. 11–22–55. Cl. 1.
Safetee Glass Co.: *See*—
Super-Glass Co., The.
Safety Engineering Co.: *See*—
Arquitt, Ben C.
Safeway Stores, Inc., Oakland, Calif. 621,884, pub. 11–29–55. Cl. 46.
Sanders Associates Inc., Nashua, N. H. 621,611, pub. 11–22–55. Cl. 13.
Sandoz Chemical Works, Inc., New York, N. Y. 621,562, pub. 11–29–55. Cl. 6.
Sanford-Day Iron Works, Inc., Knoxville, Tenn. 621,710, pub. 11–29–55. Cl. 19.
Sanox Co.: *See*—
Cooper, Claude R.
Santomauro Concetta, d. b. a. C. Di Palo, New York, N. Y. 621,940. Cl. 46.
Sasson-King Inc., Lakeland, Fla. 621,873, pub. 11–29–55. Cl. 46.
Sassoons, Inc., New York, N. Y. 514,846–7, canc. Cl. 42.
Savory Equipment, Inc., Newark, N. J. 621,736, pub. 11–29–55. Cl. 21.
Schenley Distillers, Inc., New York, N. Y. 621,516, pub. 11–22–55. Cl. 2.
Schenley Distillers, Inc., New York, N. Y. 621,897, pub. 11–29–55. Cl. 49.
Schieren, Chas. A., Co., New York, N. Y. 109,620, ren. 4–11–56. Cl. 35.
Schiller Bros., Union City, N. J. 514,820, canc. Cl. 21.
Schneidewind, Howard B., Inc., New York, N. Y. 621,844, pub. 11–29–55. Cl. 42.
Schurman, Marcel, d. b. a. Marcel Schurman Co., San Francisco, Calif. 621,792, pub. 11–29–55. Cl. 38.
Schurman, Marcel, Co.: *See*—
Schurman, Marcel.
Scientific Anglers Inc., Midland, Mich. 621,773, pub. 11–29–55. Cl. 22.
Sclafani, Joseph L., Inc., Brooklyn, N. Y. 621,871, pub. 11–29–55. Cl. 46.
Security Mills, Inc., New York, N. Y. 333,927, ren. 4–14–56. Cl. 42.
Security Mills, Inc., New York, N. Y. 621,840, pub. 11–29–55. Cl. 42.
Service Engineering Co.: *See*—
Bishop, Howard B.
Servus Rubber Co., The, Rock Island, Ill. 621,814, pub. 11–29–55. Cl. 39.
Sevenstrand Tackle Mfg. Co., Long Beach, Calif. 621,760, pub. 11–29–55. Cl. 22.
Shark Chaser Chemicals: *See*—
Allyn, Alvin L.
Sharp & Dohme, Inc., Philadelphia, Pa. 514,921, canc. Cl. 6.
Sharp & Dohme, Inc., Philadelphia, Pa. 514,929, canc. Cl. 6.
Shasteen, Charles J., Toledo, Ohio, by T. H. Eggers, San Francisco, Calif. 270,968, 12(c) pub. 2–21–56. Cl. 46.
Shawnee Pottery Co., Zanesville, Ohio. 621,622–3, pub. 11–22–55. Cl. 13.
Sherry, Louis, Inc., Long Island City, N. Y. 621,874, pub. 11–29–55. Cl. 46.
Sherwin-Williams Co., The, Cleveland, Ohio. 514,826, canc. Cl. 29.
Shlansky, Philip, & Sons, Inc.: *See*—
Donnybrook Coat Co., Inc.
Shoe Corp. of America, Columbus, Ohio. 621,801, pub. 11–29–55. Cl. 39.
Siegel & Co., Koln-Braunsfeld, Germany. 621,522, pub. 11–22–55. Cl. 4.
Siemens & Halske Aktiengesellschaft, Munich, Germany. 621,779, pub. 9–27–55. Cl. 26.
Sifo Co., St. Paul, Minn. 621,770, pub. 11–29–55. Cl. 22.
Simplicity Engine and Mfg. Co., Port Washington, Wis. 207,176, canc. Cl. 23.
Slusser Wholesale Co., Inc., d. b. a. Swift Sales Co., Idaho Falls, Idaho. 621,763, pub. 11–22–55. Cl. 22.
Smith-Byrne Co., Inc., Graceton, Pa. 621,488, pub. 11–22–55. Cl. 1.
Smith Kline & French Laboratories, Philadelphia, Pa. 621,676, pub. 11–22–55. Cl. 18.
Smith, Webster Deroyce, Inglewood, Calif. 514,961, canc. Cl. 21.
Soc. Com. Abel Pereira Da Fonseca (S. A. R. L.), Lisbon, Portugal. 621,867, pub. 11–29–55. Cl. 46.
Soc. Com. Abel Pereira Da Fonseca (S. A. R. L.), Lisbon, Portugal. 621,888, pub. 11–29–55. Cl. 47.
Societe Industrielle des Produits Africains, Societe Anonyme, Senegal, Dakar, French West Africa. 621,872, pub. 11–29–55. Cl. 46.
Solar Screen Corp., Long Island City, N. Y. 621,570, pub. 11–29–55. Cl. 6.
Sonoco Products Co., Hartsville, S. C. 621,518, pub. 11–29–55. Cl. 2.
Southern Dyestuff Corp., Charlotte, N. C. 621,557–9, pub. 11–22–55. Cl. 6.
Southern States Iron Roofing Co., Savannah, Ga. 514,727, canc. Cl. 13.
Southwest Steel Rolling Mills, Los Angeles, Calif. 514,750, canc. Cl. 13.
Spalding, A. G., & Bros. Inc., Chicopee, Mass. 621,761, pub. 11–29–55. Cl. 22.
Spectoyculars Inc., Long Island City, N. Y. 621,766, pub. 11–29–55. Cl. 22.
Sport-Wear Hosiery Mills, Inc., New York, N. Y. 621,815, pub. 11–29–55. Cl. 39.
Sportsmen's Centre: *See*—
Stuart, Herbert A.
Spotless Plastics Corp., Rochester, N. Y., to Textron American, Inc., Providence, R. I. 621,509, pub. 11–29–55. Cl. 2.
Squirrel Brand Co., The: *See*—
Powells.
Stacoat Paint and Varnish Co., Los Angeles, Calif. 621,667, pub. 11–29–55. Cl. 16.
Staley, A. E., Mfg. Co., Decatur, Ill. 621,569, pub. 11–29–55. Cl. 6.
Standard Oil Co. of California, Wilmington, Del., and San Francisco, Calif. 514,912, canc. Cl. 6.
Standard Oil Co., The, Cleveland, Ohio. 621,647, pub. 11–22–55. Cl. 15.
Standard Shoe Machinery Co., Chicago, Ill. 514,702, canc. Cl. 23.
Stein, S., & Co., Inc., New York, N. Y. 514,939, canc. Cl. 42.
Stern and Stern Textiles, Inc., New York, N. Y. 514,731, canc. Cl. 42.
Stonecutter Mills Corp., New York, N. Y. 514,747, canc. Cl. 42.
Stromberg-Carlson Co., to General Dynamics Corp., Rochester, N. Y. 621,757, pub. 11–22–55. Cl. 21.
Stuart, Herbert A., d. b. a. Sportsmen's Centre, Indian Orchard, Springfield, Mass. 621,767, pub. 11–22–55. Cl. 22.
Studebaker-Packard Corp., Detroit, Mich. 621,704–5, pub. 11–29–55. Cl. 19.
Stylepark Hats, Inc., Philadelphia, Pa. 514,769, canc. Cl. 39.
Sumner's Ty.phoo Tea Ltd., Birmingham, England. 200,961, canc. Cl. 46.
Sun Chemical Corp., Long Island City, N. Y. 621,578, pub. 11–22–55. Cl. 11.
Sun Chemical Corp., Long Island City, N. Y. 621,913, pub. 11–29–55. Cl. 52.
Super-Glass Co., The, to Safetee Glass Co., Philadelphia, Pa. 109,880, ren. 4–18–56. Cl. 33.
Superior Electronics Corp., Clifton, N. J. 621,745, pub. 11–22–55. Cl. 21.
Superior Tanning Co., Chicago, Ill. 621,494, pub. 11–29–55. Cl. 1.
Swank-Woodward Bait Mfg. Co., Topeka, Kans. 621,764, pub. 11–29–55. Cl. 22.
Swenson, James W., Detroit, Mich. 621,725, pub. 11–29–55. Cl. 21.
Swift Sales Co.: *See*—
Slusser Wholesale Co., Inc.
Swift & Co., Chicago, Ill. 621,875, pub. 11–29–55. Cl. 46.
Swift & Co., Chicago, Ill. 621,885, pub. 11–29–55. Cl. 46.
Tanner Products Corp., Los Angeles, Calif. 621,946. Cl. 52.
Tarc Electronics, Inc., Westbury, N. Y. 621,932. Cl. 26.
Taylor Instrument Companies, Rochester, N. Y. 330,362, ren. 11–26–55. Cl. 26.
Taylor Made Garage Doors, Inc., Detroit, Mich., by change of name from Johanssen & Taylor, Inc., successor to R. L. Taylor, Inc. 621,583, pub. 11–22–55. Cl. 12.
Taylor, R. L., Inc.: *See*—
Taylor Made Garage Doors, Inc.
Techbuilt Inc., Cambridge, Mass. 621,793, pub. 11–29–55. Cl. 38.
Tempo Products Co., Cleveland, Ohio. 621,666, pub. 11–29–55. Cl. 16.
Tension Envelope Corp., Kansas City, Mo. 621,920. Cl. 2.
Terado Co., St. Paul, Minn. 621,758, pub. 11–29–55. Cl. 21.
Texas Glass Fiber Corp., Grandview, Tex. 621,593, pub. 11–29–55. Cl. 12.
Texas Gulf Sulphur Co., New York, N. Y. 332,180, ren. 2–4–56. Cl. 12.
Textron American, Inc.: *See*—
Kordite Corp.
Spotless Plastics Corp.
Tichenor & Ferguson, Los Angeles, Calif. 514,856, canc. Cl. 39.
Titan Metal Mfg. Co., Bellefonte, Pa. 621,927. Cl. 23.
Toni Co., The: *See*—
Gillette Co., The.
Torbert, Willis M., New Rochelle, N. Y. 621,671, pub. 2–9–54. Cl. 18.
Towner Mfg. Co., Santa Ana, Calif. 621,706, pub. 11–29–55. Cl. 19.
Townley, Bernard R., d. b. a. Drool-A-Way Bib, Plainfield, N. J. 621,805, pub. 11–29–55. Cl. 39.
Transolene Corp., Barrington, Ill. 621,899, pub. 11–29–55. Cl. 50.
Triangle Specialties Co., Detroit, Mich. 621,615, pub. 11–29–55. Cl. 13.
Turbang Corp., New York, N. Y. 621,804, pub. 11–29–55. Cl. 39.
Turner, D. Walter, d. b. a. The Walter Turner Coffee Co., Lenoir, N. C. 621,887, pub. 11–29–55. Cl. 46.

Turner & Seymour Mfg. Co., The, Torrington, Conn. 621,614, pub. 11–29–55. Cl. 13.
Turner, Walter, Coffee Co., The: *See*—
Turner, D. Walter.
Undertakers Supply Co., Chicago, Ill. 621,571, pub. 11–29–55. Cl. 6.
Union Bay State Chemical Co., Inc., Cambridge, Mass. 621,542–3, pub. 11–22–55. Cl. 5.
Union Carbide and Carbon Corp., New York, N. Y. 621,740, pub. 11–22–55. Cl. 21.
United Piece Dye Works, The, Lodi, N. J., and New York, N. Y. 438,758, canc. Cl. 6.
United States Brewing Co.: *See*—
United States Brewing Co. of Chicago.
United States Brewing Co. of Chicago, now by change of name The Elston Co., to United States Brewing Co. Liebmann Breweries, Inc., Brooklyn, N. Y. 320,606. Am. 7(d). Cl. 46.
U. S. Electrical Motors, Inc., Los Angeles, Calif. 621,735, pub. 11–22–55. Cl. 21.
United States Rubber Co.: *See*—
United States Rubber Products, Inc.
United States Rubber Products, Inc., New York, N. Y., to United States Rubber Co., Passaic, N. J. 332,392, ren. 2–11–56. Cl. 39.
United States Rubber Products, Inc., New York, N. Y., to United States Rubber Co., Passaic, N. J. 332,522, ren. 2–18–56. Cl. 21.
United States Rubber Products, Inc., New York, N. Y., to United States Rubber Co., Passaic, N. J. 333,067, ren. 3–10–56. Cl. 35.
Universal Camera Corp., New York, N. Y. 435,538, canc. Cl. 26.
Upjohn Co., The, Kalamazoo, Mich. 514,893, canc. Cl. 6.
Urick Foundry Co., Erie, Pa. 621,640, pub. 11–22–55. Cl. 14.
Valley Pattern Mfg. Co.: *See*—
Johnson, Al.
Valspar Corp., The, Ardmore, Pa. 621,663, pub. 11–29–55. Cl. 16.
Valtri, Frank J., Philadelphia, Pa. 621,627, pub. 11–29–55. Cl. 13.
Van Camp Sea Food Co., Inc., Terminal Island, Calif. 621,869, pub. 11–29–55. Cl. 46.
Variety Club Beverage Co., Toledo, Ohio. 621,858, pub. 11–29–55. Cl. 45.
Viking Mercantile Corp., New York, N. Y. 514,930, canc. Cl. 27.
Vit-A-Plate Co., The, Fort Worth, Tex. 621,563, pub. 11–22–55. Cl. 6.
Vita-Var Corp., Newark, N. J. 621,662, pub. 11–29–55. Cl. 16.
Vokar Corp., Dexter, Mich. 621,738, pub. 11–22–55. Cl. 21.
Waco Mfg. Co., d. b. a. Waco Mfg. Co., Minneapolis, Minn. 621,594, pub. 11–22–55. Cl. 12.
Wallace Co., Inc., The, Philadelphia, Pa. 514,803, canc. Cl. 39.
Ward Baking Co., New York, N. Y. 621,876, pub. 11–29–55. Cl. 46.
Waropa A. G. (S. A. Waropa), Basel, Switzerland. 358,164, canc. Cl. 44.
Warren, Bill: *See*—
Warren, William W.
Warren, William W., d. b. a. Bill Warren, Pitsburg, Kans. 514,956, canc. Cl. 22.
Washington Growers Packing Corp., Vancouver, Wash. 142,822, canc. Cl. 46.
Water Control Engineering Co., Kansas City, Mo. 621,554, pub. 11–22–55. Cl. 6.
Watts, Sidney A., New York, N. Y. 514,866, canc. Cl. 29.
Webble, George J., d. b. a. Webby Co., Brockton, Mass. 514,915, canc. Cl. 6.
Webby Co.: *See*—
Webble, George J.
Webster-Chicago Corp., Chicago, Ill. 621,731, pub. 11–22–55. Cl. 21.
Weiss, James, d. b. a. Master Products Co., Chicago, Ill. 621,577, pub. 11–22–55. Cl. 11.
Weller Adjustable Steel Post Co.: *See*—
Weller, Fred A., Jr.
Weller, Fred A., Jr., d. b. a. Weller Adjustable Steel Post Co., Fond du Lac, Wis. 514,950, canc. Cl. 12.
Wendt's: *See*—
Wendt's Cream Top Dairy, Inc.
Wendt's Cream Top Dairy, Inc., d. b. a. Wendt's, Niagara Falls, N. Y. 621,865, pub. 11–29–55. Cl. 46.
Western Auto Supply Co., Kansas City, Mo. 514,860, canc. Cl. 21.
Western Chef Products, Inc., Spokane, Wash. 621,496, pub. 11–22–55. Cl. 1.
Western Condensing Co., Petaluma, Calif. 621,879, pub. 11–29–55. Cl. 46.
Western Livestock Order Buyers, d. b. a. Greener Plant Food Co., Salt Lake City, Utah. 621,573, pub. 11–22–55. Cl. 10.
Western Supply Co., Ardmore, Okla. 621,520, pub. 11–22–55. Cl. 3.
White Frost Chemicals, Inc., New York, N. Y. 621,912, pub. 11–29–55. Cl. 52.
Whiting-Adams Co., Inc., Boston, Mass. 514,659–60, canc. Cl. 29.
Wiggins, George Linton, d. b. a. The Lifola Co., Tulsa, Okla. 382,022, canc. Cl. 6.
Wiggins, Myrtle Evans, d. b. a. The Lifola Co., Tulsa, Okla. 403,028, canc. Cl. 6.
Willys Motors Inc., Toledo, Ohio, to Kaiser Aircraft & Electronics Corp., San Leandro, Calif. 621,506, pub. 11–29–55. Cl. 2.
Wilson Products, Inc., New York, N. Y. 621,826, pub. 11–29–55. Cl. 40.
Wilson Sporting Goods Co.: *See*—
General Sports, Inc.
Wine Growers Guild, Lodi, Calif. 621,891, pub. 11–29–55. Cl. 47.
Wine Growers Guild, Lodi, Calif. 621,898, pub. 11–29–55. Cl. 49.
Wire Recording Corp. of America, Brooklyn, N. Y. 514,801, canc. Cl. 21.
Wizard Malt Extract Co.: *See*—
Four Roses Malt Extract Co.
Wizard Products Co., Chicago, Ill., to Boyle-Midway Inc., New York, N. Y. 108,233, ren. 1–18–56. Cl. 4.
Wolverine Brass Works, Grand Rapids, Mich. 621,628, pub. 11–29–55. Cl. 13.
Wonder-Aid Products Co.: *See*—
Muchnick, Morris.
Wrisley, Allen B., Co., Chicago, Ill. 514,667, canc. Cl. 6.
Wyandotte Chemicals Corp., Wyandotte, Mich. 621,909, pub. 11–29–56. Cl. 52.
York Corp., York, Pa. 621,780. Pub. 12–13–55, Cl. 31; pub. 12–20–55, Cl. 34. (Consolidated certificate, Classes 31 and 34.)
Zadina, Arthur F., Terre Haute, Ind. 621,762, pub. 11–22–55. Cl. 22.
Zenith Camera Corp., Chicago, Ill. 514,663, canc. Cl. 26.
Ziv Steel & Wire Co., Chicago, Ill. 621,635, pub. 11–22–55. Cl. 14.
Zuckerman, Max, Baltimore, Md. 621,643, pub. 11–29–55. Cl. 14.

U. S. GOVERNMENT PRINTING OFFICE: 0—1956

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
February 28, 1956 Volume 703 Number 4

PATENTS

NOTICES

Commissioner's Administrative Order No. 51

Divisions 10, 44 and 46 are hereby re-established in the Patent Examining Operation.

The following classes or parts of classes previously assigned to Division 70 are transferred to the divisions indicated:

Division 10—Classes 42, 86, 89, 102 part, and miscellaneous

Division 44—Classes 114 part, 250 part, 244 part, 310 part, 313 part, 318 part, 324 part, 340 part, 343 part, and miscellaneous

Division 46—Classes 23 part, 29 part, 52 all, 60 part, 75 part, 102 part, 128 part, 167 part, 204 part, 260 part and miscellaneous.

ARTHUR W. CROCKER,
Acting Commissioner of Patents.

Adjudicated Patents

(C. A. Calif.) Rust Patent No. 2,380,794 (160—328), for a tensioning and locking device for frameless window screens, *Held* valid and infringed. *Ry-Lock Company, Ltd.* v. *Sears, Roebuck & Co.*, 107 USPQ 292; 227 F.2d 615.

(C. A. Ill.) Wittlin Patent No. 2,624,308 (116—117), for a liquid flow indicator. Claims 3 and 6 *Held* invalid. *Wittlin* v. *Remco, Inc., et al.*, 107 USPQ 289; 227 F.2d 396.

(C. A. Ill.) Helms et al. Patent No. 2,637,132 (40—156), for a transparency viewer, *Held* valid. *Helms Products* v. *Lake Shore Mfg. Co.*, 227 F.2d 677; — USPQ —.

Disclaimer

2,650,370.—*Roger G. Cudini*, Birmingham, Mich. BEATH STRUCTURE. Patent dated Sept. 1, 1953. Disclaimer filed Jan. 26, 1956, by the assignee, *Moynahan Bronze Company.*

Hereby enters this disclaimer to claims 14 and 18 of said patent.

Patents Available for Licensing or Sale

2,636,499. Hair Waver (Mechanical Finger for Setting Finger Waves). Mrs. Lucynda Fink, Liscomb, Iowa.

2,710,545. Operating Arrangement for Gear Transmissions. Adolf Ortlinghaus, Remscheid, Germany. Correspondence to Michael S. Striker, 511 Fifth Ave., New York 17, N. Y.

2,716,953. Zig-Zag Stitching Apparatus for Sewing Machines. Ingolf Felix Friedrich Emil Pauls, Basel, Switzerland. Correspondence to Michael S. Striker, 511 Fifth Ave., New York 17, N. Y.

2,720,237. Vehicle Carried Anti-Skid Device. Lamar E. Chamberlain, 3700 Massachusetts Ave., N. W., Washington 16, D. C.

2,730,354. Hydraulic Interval Timer. Glenn A. Burris, Route 1, Box 424, Bayside, Calif.

2,730,612. Trouble Light Guard. W. J. Westendorf, 319 Ridge, Kittanning, Pa.

General Electric Company is prepared to grant non-exclusive licenses under the following 17 patents upon reasonable terms to domestic manufacturers.

Applications for licenses under the following five patents should be directed to: General Electric Company, Transformer Division, 100 Woodlawn Ave., Pittsfield, Mass. Attention—Patent Counsel.

2,142,347. Silicon Steel Strip and Manufacture Thereof.

2,150,777. Alkaline Coating for Sheet Steel.

2,528,216. Selective Grain Growth of Silicon Steel.

2,591,460. Process for Providing Magnetic Sheet Steel With an Insulative Film.

2,700,006. Process for Producing Fine-Grained Highly Oriented Silicon Steel.

Applications for licenses under the following two patents should be directed to: Patent Counsel, Construction Materials Division, General Electric Company, 1285 Boston Ave., Bridgeport 2, Conn.

2,290,693. Gaseous Electric Discharge Apparatus.

2,294,191. Starting Switch.

Applications for licenses under the following two patents should be directed to: General Electric Company, Aircraft Products Department, 1 River Road, Schenectady 5, N. Y.

2,575,916. Electric Selecting Matrix.

2,722,659. Testing Device.

Applications for licenses under the following eight patents should be directed to: General Electric Company, Patent Counsel, Chemical and Metallurgical Division, 1 River Road, Schenectady 5, N. Y.

2,546,047. Sintered Anisotropic Alnico Magnet.

2,565,333. Masonry Drill.

2,617,723. Sintered High Energy Permanent Magnets.

2,630,383. Method of Making a Porous Sintered Carbide Tool.

2,652,520. Composite Sintered Metal Powder Article.

2,694,790. Sintered Anisotropic Permanent Magnet.

2,698,232. Method of Making Cemented Carbide Articles and Casting Compositions Therefor.

2,708,518. Method of Separation of Magnetic Particles of High Retentivity From Those of Low Retentivity.

Dedication

2,723,116.—*Elbert V. Abbott*, San Francisco, Calif. AUTOMATIC BUSINESS REGISTER. Patent dated Nov. 8, 1955. Disclaimer filed Feb. 6, 1956, by the assignee, *Sunset-McKee Company.*

Hereby irrevocably dedicates the above numbered patent to the people of the United States of America.

New Applications Received During December 1955

Patents	6,501
Designs	429
Plants	11
Reissues	10
Total	6,951

Issue

Patents	874	No. 2,736,024 to No.	2,736,897, incl.
Designs	31	No. 176,968 to No.	176,998, incl.
Reissues	3	No. 24,123 to No.	24,125, incl.
Total	908		

CONDITION OF PATENT APPLICATIONS AS OF DECEMBER 30, 1955

Total number of pending applications (excluding Designs)	221,231
Total number of pending Design applications	7,028
Total number of applications awaiting action (excluding Designs)	134,473
Total number of Design applications awaiting action	2,993
Date of oldest new application	Aug. 2, 1954
Date of oldest amended application	Oct. 13, 1953

ROSA, M. C., Executive Examiner

PATENT EXAMINING GROUPS, AND SUPERVISORY EXAMINERS	DIVISIONS
I. STONE, I. G., CHEMICAL AND RELATED ARTS	6, 31, 38, 43, 50, 56, 59, 63, 64.
II. STRACHAN, O. W., COMMUNICATIONS, RADIANT ENERGY AND ELECTRICAL ARTS	16, 23, 26, 37, 42, 48, 51, 54, 60, 70.
III. YUNG KWAI, B., MECHANICAL MANUFACTURING, MACHINE ELEMENTS AND DESIGNS	2, 12, 13, 14, 21, 24, 57, 58, 61, Designs.
IV. FREEHOF, H. B., MATERIAL HANDLING AND TREATING, OPTICS, RAILWAYS AND AMUSEMENT DEVICES.	7, 11, 17, 27, 34, 35, 39, 53, 62.
V. HULL, J. S., STATIC STRUCTURES AND INSTRUMENTS OF PRECISION	8, 20, 29, 33, 36, 40, 41, 52, 66.
VI. MURPHY, T. F., AGRICULTURE, TRANSPORTATION, PUMPS AND MOTORS	1, 4, 5, 9, 18, 22, 28, 45, 47.
VII. KAUFFMAN, H. E., HEATING AND COOLING, PLASTIC SHAPING AND COATING, SEPARATION AND MIXING, BODY TREATMENT AND CARE.	3, 15, 19, 25, 30, 32, 49, 55, 67.

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
1. (VI) GOLDBERG, A. J., Brakes; Excavating; Planting; Plant Husbandry; Scattering Unloaders	12-30-54	1-28-54
2. (III) HERRMANN, D., Fishing, Trapping and Vermin Destroying; Presses; Tobacco; Textile Wringers	5-2-55	11-16-54
3. (VII) LE ROY, C. A., Metal Founding and Treatment; Metallurgy (Process and Apparatus); Alloys; Sintered Metal Stock; Miscellaneous Heating	4-5-55	1-25-54
4. (VI) FALLER, E. A., Hoists; Power Driven Conveyors; Handling Apparatus; Elevators; Feeding of Indefinite Lengths	3-31-55	3-26-54
5. (VI) ROBINSON, C. W., Harvesters; Potato Diggers; Stalk Pullers and Choppers; Stone Gatherers; Threshing; Knotters; Animal Husbandry; Bee Culture; Dairy; Butchering; Vegetable and Meat Cutters and Comminutors; Fences; Gates	2-23-55	5-28-54
6. (I) SURLE, H., Carbon Chemistry (part), e. g. Natural Resins, Proteins, Heterocyclic, Amides, Amines, General Organic Processes	2-9-55	4-2-54
7. (IV) GONSALVES, J. E., Optics, Photographic Apparatus	4-7-55	12-14-53
8. (V) LEWIS, R. O., Beds; Chairs and Seats; Cabinets; Tables; Miscellaneous Furniture	12-8-54	4-14-54
9. (VI) BRANSON, J. H., Pumps; Fans; Turbines	4-4-55	3-22-54
11. (IV) BENHAM, E. V., Boots, Shoes and Leggings; Shoe and Leather Manufacture; Button, Eyelet and Rivet Setting; Nailing, Stapling and Clip Clenching; Card, Picture and Sign Exhibiting; Cutlery; Cleaning and Liquid Treatment of Solids	5-2-55	6-21-54
12. (III) SPINTMAN, S., Machine Elements; Engine Starters; Clutches; Interrelated Clutch and Motor Controls	3-2-55	11-6-53
13. (III) BEALL, T. E., Gear Cutting; Electric Lamp and Tube Manufacture; Needle and Pin Making; Metal Working (part), e. g. Special Work, Forging, Plastic Working, Drawing, Sawing, Milling, Planing, Turning	2-14-55	2-10-54
14. (III) MANIAN, J. C., (WILTZ, W. A., acting), Metal Working (part), e. g. Sheet Metal, Wire, Bending, Miscellaneous Processes, Assembly and Disassembly Apparatus; Wire Fabrics; Air Brakes	2-4-55	3-9-54
15. (VII) BRINDISI, M. V., Plastics; Plastic Block and Earthenware Apparatus; Glass	4-1-55	3-30-54
16. (II) LOVEWELL, N. N., Television; Telephony; Recorders	2-4-55	1-11-54
17. (IV) LEIGHEY, R. A., Paper Manufactures; Packaging; Typewriters; Printing; Type Casting and Setting; Sheet Material Association or Folding; Sheet or Web Feeding	3-24-55	6-21-54
18. (VI) BLUM, A., Power Plants; Fluid Transmissions; Servomotor Systems; Jet Motors; Combustion Turbines; Speed Responsive Devices	12-8-54	1-7-54
19. (VII) PATRICK, P. L., Stoves and Furnaces; Boilers; Concentrating Evaporators; Fluid Fuel Burners	3-8-55	5-20-54
20. (V) BROWN, L. M., Miscellaneous Hardware; Closure Fasteners; Locks; Safes; Bank Protection; Bread, Pastry and Confection Making; Tents and Canopies; Umbrellas; Canes; Undertaking	4-22-55	4-22-54
21. (III) MADER, R. C., Textiles	3-21-55	3-22-54
22. (VI) MARLAND, M. L., Aeronautics; Boats; Buoys; Ships; Marine Propulsion; Propellers; Windmills; Fluid Diaphragms and Bellows; Boring and Drilling	3-7-55	3-31-54
23. (II) ANDRUS, L. M., Cash and Fare Registers; Calculators and Counters; Education	9-16-54	10-15-53
24. (III) DRACOPOULOS, P. T., (HICKEY, T. J., acting), Apparel (except Corsets and Brassieres); Apparel Apparatus; Sewing Machines; Textiles, Ironing or Smoothing	2-9-55	10-13-54
25. (VII) NEVIUS, R. D., Coating—Processes, Miscellaneous Products and Apparatus; Distillation; Wood Treating Apparatus	3-3-55	3-3-54
26. (II) YOUNG, R. R., Electricity—Generation, Motive Power, Transmission Systems, Voltage and Phase Control Systems, Furnaces, Battery Charging and Discharging, Arc Lamps, Resistors and Rheostats, Prime Mover Dynamo Plants; Elevators (part), e. g. Miscellaneous Electric Control Mechanism	4-25-55	11-8-54
27. (IV) JAMES, S., Brushing, Scrubbing and General Cleaning; Brush, Broom and Mop Making	3-23-55	8-12-54
28. (VI) BRAUNER, R. H., Internal Combustion Engines; Expansible Chamber Motors; Fluid Servomotors; Spring, Weight and Animal Powered Motors; Cylinders; Pistons; Drive Shafts; Flexible-Shaft Couplings; Chucks or Sockets; Chute, Skid, Guide and Way Conveyers; Fluid Current Conveyers; Pressure Modulating Relays; Pneumatic Dispatch; Store Service; Wheel Substitutes	3-2-55	5-14-54
29. (V) HABECKER, L. B., Tools; Woodworking; Button, Barrel and Wheel Making; Rubber Tire Removing Tools; Washing Machines; Baggage; Cloth, Leather and Rubber Receptacles; Package and Article Carriers	3-2-55	8-3-54
30. (VII) O'LEARY, R. A., Refrigeration; Heating Systems; Automatic Temperature and Humidity Regulation, Thermostats, Humidistats; Illuminating Burners; Fluid Sprinkling, Spraying and Diffusing	6-23-55	7-6-54

DIVISIONS, EXAMINERS AND SUBJECTS OF INVENTION (Roman numerals in parentheses indicate Examining Group)	Oldest Application: New	Amended
31. (I) HUTCHISON, E. W., Mineral Oils; Carbon Chemistry (part), e. g. Urea Adducts, Silicon Containing Carbon Compounds, Hydrogenation of Carbon Oxides, Partial Oxidation of Non-Aromatic Hydrocarbon Mixtures, Hydrocarbons, Halogenated Hydrocarbons	1-17-55	7-26-54
32. (VII) BERMAN, H., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation; Agitation; Self Proportioning Fluid Systems; Liquid Level Responsive Systems; Fire Extinguishers	4-4-55	9-13-54
33. (V) MUSHAKE, W. L., Bridges; Hydraulic and Earth Engineering; Building Structures; Roads and Pavements	2-17-55	1-29-54
34. (IV) SAPERSTEIN, S., Railways—Draft Appliances, Switches and Signals, Surface Track, Rolling Stock Track Sanders; Electricity, Transmission to Vehicles; Dumping Vehicles; Vehicle Fenders; Hand and Hoist Line Imple ments	3-3-55	3-2-54
35. (IV) BROMLEY, E. D., Dispensing; Filling and Closing Receptacles; Toilet, Kitchen and Table Articles	3-10-55	6-1-54
36. (V) McFADYEN, A. D., Measuring and Testing	2-14-55	11-10-54
37. (II) LEVY, M. L., Electricity—Switches, Welding, Heating	1-31-55	7-6-54
38. (I) MARMELSTEIN, N., Carbon Chemistry (part), e. g. Azo, Carbocyclic or Acyclic Compounds (part), e. g. Anthrones, Triarylmethanes, Esters, Acids, Ketones, Aldehydes, Ethers, Phenols, Alcohols	3-10-55	5-26-54
39. (IV) WEIL, I., Fluid-Pressure Regulators; Valves; Fluid Handling (except Pressure Modulating Relays, Self-Proportioning Systems, Float Valves, Diaphragms and Bellows)	4-1-55	4-2-54
40. (V) DRUMMOND, E. J., Receptacles—Metallic, Paper, Wooden, Glass; Special Receptacles and Packages	4-1-55	5-10-54
41. (V) GURLEY, R. B., Coin Controlled Apparatus; Dispensing Cabinets; Coin Handling; Mail, Fare or Other Collection Boxes or Chutes; Buckles, Buttons and Clasps; Racks; Fire Escapes; Ladders; Scaffolds	10-8-54	12-13-53
42. (II) MARANS, H., Electric Signaling; Signals and Indicators; Telegraphy; Electrical Connectors	12-17-54	6-4-54
43. (I) ARNOLD, D., Medicines, Poisons, Cosmetics; Sugar and Starch; Bleaching, Dyeing, Fluid Treatment of Textiles, Skins, and Leathers; Preserving, Sterilizing and Disinfecting (except Wood Treatment Apparatus)	3-15-55	3-22-54
45. (VI) MANIAN, J. A., Wheels, Tires and Axles; Railway Wheels and Axles; Lubrication; Bearings and Guides; Belt and Sprocket Gearing; Spring Devices; Animal Draft Appliances	2-25-55	11-16-54
47. (VI) KANOF, W. J., Mining, Quarrying, and Ice Harvesting; Motor Vehicles; Land Vehicles	4-4-55	9-9-54
48. (II) BERNSTEIN, S., Electricity—Conversion Systems, Protective Systems; Measuring and Testing (except Meters); Spark Plugs and Ignition Systems, Switchboards, Relays, Magnets, Inductors, Transformers, Condensers, Transistors, Barrier Layer Rectifiers	1-3-55	2-4-54
49. (VII) BENDETT, B., Drying and Gas or Vapor Contact with Solids; Ventilation; Wells; Earth Boring	2-28-55	8-19-54
50. (I) BENGEL, W. G., Carbon Chemistry (part), e. g. Synthetic Resins, Natural or Synthetic Rubber	4-5-55	4-7-54
51. (II) YAFFEE, S., Radio Transmitters, Receivers and Tuners; Modulators; Piezoelectric Devices; Music	3-23-55	4-2-54
52. (V) NEFF, P. R., Supports; Joint Packing; Valved Pipe Joints or Couplings; Rod Joints or Couplings; Tool Handle Fastenings; Pipes and Tubular Conduits; Shaft Packing	3-10-55	6-3-54
53. (IV) REYNOLDS, E. R., Label Pasting and Paper Hanging; Books and Book Making; Manifolding; Printed Matter; Stationery; Paper Files and Binders; Flexible or Portable Closures or Partitions; Doors, Windows, Awnings and Shutters; Harness; Whip Apparatus	4-27-55	3-22-54
54. (II) NILSON, R. G., Electric Lamps; Electronic Tubes; Miscellaneous Discharge Devices; Lamp, Cathode Ray and Gas Discharge Device Circuits; Ray Energy (e. g. X-Ray, Ultraviolet, Radioactive) Applications	2-1-55	2-8-54
55. (VII) KLINE, J. R., Surgery; Dentistry; Artificial Body Members; Separating and Sorting Solids; Centrifugal Bowl Separators; Comminutors	12-10-54	3-3-54
56. (I) KEELY, J. E., (SPECK, J. R., acting), Abrading Compositions; Batteries; Coating or Plastic Compositions; Electrical and Wave Energy Chemistry	3-17-55	7-8-54
57. (III) MILLER, A. B., Bolt, Nut, Rivet, Nail, Screw, Chain and Horseshoe Making; Driven and Screw Fastenings; Nut and Bolt Locks; Jewelry; Pipe Joints or Couplings	7-1-55	7-2-54
58. (III) DOWELL, E. F., Rolls and Rollers; Making Metal Tools and Implements; Stone Working; Abrading Processes and Apparatus; Food Apparatus; Closure Operators; Baths, Closets, Sinks and Spittoons	3-17-55	2-11-54
59. (I) HENKIN, B., (BRINDISI, M. A., acting), Inorganic Chemistry; Fertilizers; Gas, Heating and Illuminating	2-24-55	3-5-54
61. (III) MORSE (Miss), E. L., Winding and Reeling; Pushing and Pulling; Horology; Time Controlling Apparatus; Railway Mail Delivery	4-1-55	10-11-54
62. (IV) SHAPIRO, A., Games; Toys; Amusements and Exercising Devices; Mechanical Guns and Projectors; Illumination	3-1-55	8-23-54
63. (I) WINKELSTEIN, A. H., Foods and Beverages; Carbon Chemistry (part), e. g., Lignins, Carbohydrate Derivatives; Fats and Metal Containing Carbocyclic or Acyclic Carbon Compounds	3-17-55	1-15-54
64. (I) GORECKI, G. A., Fuels; Miscellaneous Compositions	3-15-55	3-1-54
66. (V) LISANN, I., Geometric Instruments; Automatic Weighing Scales; Acoustics	2-25-55	12-30-53
67. (VII) KRAFFT, C. F., Laminated Fabrics; Photographic Processes and Products; Ornamentation	2-17-55	10-12-54
69. (II) GALVIN, D. J., Wave Guides; Electric Meters; Sound Recording; Conductors; Insulators	3-1-55	11-19-53
70. (II) BREWRINK, J. L., Explosive Weapons, Ammunition, Charges and Composition; Explosive Charge Manufacturing; Jet Motor Processes; Torpedoes; Radar; Sonar; Automatic Pilots; Antennas; Actinide Series (e. g. Fissionable) Compounds; Irradiation Chemistry; Mass Spectrometers	8-2-54	10-13-53
CLASS. DIVS. I (VII) LANHAM, B. E., Paper Making	5-2-55	11-1-54
CLASS. DIVS. II (II) LADY, J. E., Oscillators; Amplifiers	4-5-55	6-11-54
CLASS. DIVS. III (III) WAHL, R. A., Cutting and Punching; Apparel (part) e. g., Corsets and Brassieres	5-31-55	8-11-54
CLASS. DIVS. IV (VI) SMITH, (Mrs.) M. P., Harrows; Plows; Earth Rollers	4-14-55	8-23-54
CLASS. DIVS. V (I) ANGEL, C. D., Liquid Separation or Purification; Sewerage	4-7-55	12-8-54
DESIGNS (III) A—BREHM, G. I., Industrial Arts	6-17-55	7-5-55
DESIGNS (III) B—GRAY, M. A., Household, Personal and Fine Arts	6-1-55	8-2-55

The following divisions have been abolished: 10, 44, 46, 60, 65 and 68

EXPIRATION OF PATENTS

The patents within the range of numbers indicated below expire during February 1956, except those which may have been extended under the provisions of the Veterans Patent Extension Act (64 Stat. 316 as amended by 66 Stat. 321) and those which may have expired earlier due to shortened terms under the provisions of Public Law 690. A list of Veterans' patents which have been extended appears in the *Annual Index of Patents—1955*.

Patents	Numbers 2,145,844 to 2,149,249, inclusive
Plant Patents	Numbers 313 to 316, inclusive

DECISIONS IN PATENT CASES

U. S. Court of Customs and Patent Appeals

IN RE BARANAUKAS ET AL.

No. 6153. Decided December 8, 1955. Petition for Rehearing Denied January 20, 1956.

[—F.2d—; —USPQ—]

1. ANTICIPATION—DOCTRINE OF *In Re Von Bramer et al.*
"It is well settled • • • that a reference which clearly names a compound or identifies it by structural formula constitutes a full anticipation of a claim to that compound, even though the reference contains only an inoperative method for producing the compound, or no method at all."

2. SAME—SAME.
A reference that, within a series of structural formulae, sets out the structural formula of the bromine analogue of a claimed chlorine containing compound, and that throughout the description uses the generic term "halogen," thereby clearly indicating that all halogens will perform in the same way, and that the bromine compounds are shown by way of illustration only *Held* to disclose the claimed compound in a sufficiently clear and definite manner to anticipate the claim.

3. SAME—SAME.
Where the reference disclosure, as a whole, would clearly teach a person of ordinary skill in the art that if chlorine were substituted for bromine in the process described, there would result a series of compounds having exactly the structural formulae shown by the reference except that bromine would, in every instance, be replaced by chlorine, *Held* that the disclosure "is exactly equivalent to one in which the chlorine compounds in question are actually illustrated by structural formulae."

4. SAME—SAME—IMPLICIT DISCLOSURE.
"We cannot see a logical distinction between this case, where the compound was revealed as clearly as if it had been explicitly named, and those cases in which it happened to be named explicitly. In this case it would not have changed the force or meaning of the reference in the slightest if it had specifically named each of the corresponding chlorine compounds. We can see no reason why we should hold an explicit naming of a compound to be an anticipation, and hold an equally clear, though implicit, disclosure not to be an anticipation."

5. SAME—SAME—LIMITS OF DOCTRINE.
Held that while the precise boundary lines of the doctrine of *In re Von Bramer et al.* are not discernible, certainly "they do not extend so far as to permit publication of theoretical lists of hundreds or thousands of possible compounds to deny patent protection on such compounds to those who actually discovered them later."

6. PATENTABILITY—PARTICULAR SUBJECT MATTER—CHLORINATED CYCLOPENTADIENE COMPOUNDS.
Claims to chlorinated cyclopentadiene compounds *Held* unpatentable over the cited prior art.

APPEAL from the Patent Office. Serial No. 242,432.

AFFIRMED.

Dean Laurence for Baranauckas et al.

Clarence W. Moore for the Commissioner of Patents.

Before O'CONNELL, *Acting Chief Judge*, and JOHNSON, WORLEY, COLE and JACKSON (retired), *Associate Judges*

COLE, *J.*, delivered the opinion of the court.

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the final rejection by the Primary Examiner of the two product claims of appellants' application No. 242,432 for patent on an allegedly new chemical compound and a process for producing it. The process claims of the application were allowed by the Examiner.

The appealed claims are as follows:

21. A compound selected from the group consisting of 1,2,3,4-tetrachlorocyclopentadiene-1,3 and a 1,2,3,4-tetrachlorocyclopentadiene-1,3 wherein a ring chlorine atom has been replaced by a trichlorovinyl group.
22. 1,2,3,4-Tetrachlorocyclopentadiene-1,3.

The rejection is based solely on an alleged disclosure in the prior art of the compound of claim 22, which compound is a member of the Markush group of claim 21. Under these circumstances it is clear that claim 21 will stand or fall with claim 22 and accordingly only the latter claim will be considered in detail.

The prior art disclosure relied on by the Patent Office tribunals is found in an extract from an article by Straus et al. in Berichte der Deutschen Chemischen Gesellschaft, Vol. 63, page 1870 (1930), hereinafter refererd to as Straus. That article discloses the reaction of cyclopentadiene with hypobromite solution to make hexabromocyclopentadiene, and the pertinent portion of the text of the article is as follows:

• • • Thus in the case of cyclopentadiene it amounts to a replacement of all 6 hydrogen atoms by halogen without the low substituted preliminary stages having to be included (16) and in the case of indiene the reaction remains in harmony therewith after taking on 3 halogen atoms. Chlorine and bromine behave in the same way. One must regard the process as taking place through the following intermediate stages to which it is common that the linkage is supported as far as possible by carbon atoms already carrying halogen.

The quoted statement is immediately followed by a series of structural formulae beginning with cyclopentadiene and passing through a number of intermediates to hexabromocyclopentadiene, and one of the intermediates shown is 1,2,3,4-tetrabromocyclopentadiene-1,3, which is the bromine compound exactly corresponding to the chlorine compound recited in appealed claim 22.

Straus does not state that any of the intermediates whose formulae he gives can actually be obtained by his process, and there is an affidavit of record indicating that they cannot. [1] It is well settled, however, that a reference which clearly names a compound or identifies it by structural formula constitutes a full anticipation of a claim to that compound, even though the reference contains only an inoperative method for producing the compound, or no method at all. *In re Von Bramer et al.*, 29 CCPA (Patents) 1018, 127 F.2d 149; *In re Stoll et al.*, 34 CCPA (Patents) 1058, 161 F.2d 241; *In re Crosley et al.*, 34 CCPA (Patents) 882, 159 F.2d 735; *In re Shackell*, 39 CCPA (Patents) 847, 194 F.2d 720; *In re Kebrich*, 40 CCPA (Patents) 780, 201 F.2d 951; *Eastman Kodak Co.* v. *Coe*, 51 USPQ 407; *Merck & Co., Inc., et al.* v. *Marzall*, 91 U. S. App. D. C. 50, 197 F.2d 206.

In the Von Bramer case, supra, we said:

It is not necessary that a reference patent for a device or chemical compound disclose an operative process for producing the article or product.

and in the Crosley case, supra, we said:

Furthermore, this court is committed to the doctrine that where a product is clearly disclosed in a publication, the operativeness of any of the processes by which it is claimed the product could be produced is immaterial, and that the disclosure of the composition is sufficient to anticipate a claim therefor.

It follows that if Straus showed the structural formula of 1,2,3,4-tetrachlorocyclopentadiene-1,3, instead of that of 1,2,3,4-tetrabromocyclopentadiene-1,3, appealed claim 22 would be clearly anticipated, and this is conceded in appellants' brief, wherein it is stated that:

• • • If the compound of appealed Claim 22 were named; or pictured by formula in the reference, or its properties recited, the Von Bramer rule would apply, but such is not the case.

[2] While it is true that Straus neither names nor gives the formula of the compound of appealed claim 22, it is our opinion that he discloses that compound in a sufficiently clear and definite manner to anticipate that claim.

We cannot agree with appellants' contention that the statement by Straus that "chlorine and bromine behave in the same way" is limited to the reactions described in the sentence immediately preceding it. Straus uses the generic term "halogen" throughout his description, including the final sentence before his structural formulae, which clearly indicates that all the halogens will perform in the same way, and that the bromine compounds are shown by way of illustration only.

[3] We believe that the Straus disclosure, as a whole, would clearly teach a person of ordinary skill in the art that if chlorine were substituted for bromine in the process described, there would result a series of compounds having exactly the structural formulae shown by Straus except that bromine would, in every instance, be replaced by chlorine. The disclosure, therefore, is exactly equivalent to one in which the chlorine compounds in question are actually illustrated by structural formulae, and hence constitutes an anticipation of the appealed claims under the authorities above cited.

Our holding in this respect is supported by that in *In re Stoll et al.*, supra. In that case the appealed claim called for dihydro-derivatives of the group consisting of ergotamine, ergotoxine and other specified substances, while the reference patent actually named only dihydro-ergotocin and its salts. However, the patentee stated that "I have also hydrogenated ergotoxin and ergotamine by the procedures herein set forth." That disclosure was held to be sufficient to anticipate the substances claimed by the appellant, even though they were not expressly named nor identified by formula.

Similarly, in *Merck & Co., Inc., et al.* v. *Marzall*, supra, it was held by the United States Court of Appeals for the District of Columbia Circuit that a claim for a compound was anticipated by a prior art disclosure which did not name the compound or give its formula but which contained language which the court considered sufficient to identify the compound to one skilled in the art.

Our position in the present case is dictated by what we conceive to be the necessary interpretation of the prior cases. [4] We cannot see a logical distinction between this case, where the compound was revealed as clearly as if it had been explicitly named, and those cases in which it happened to be named explicitly. In this case it would not have changed the force or meaning of the reference in the slightest if it had specifically named each of the corresponding chlorine compounds. We can see no reason why we should hold an explicit naming of a compound to be an anticipation, and hold an equally clear, though implicit, disclosure not to be an anticipation.

At the same time, however, though our decision is compelled by the existing law, we feel constrained to point out that there are limits to the doctrine of those cases. [5] What the precise boundary lines are, we are unable now to discern. Certainly they do not extend so far as to permit publication of theoretical lists of hundreds or thousands of possible compounds to deny patent protection on such compounds to those who actually discovered them later. The exact boundaries will have to be delineated on a case by case basis. But whatever they may be, we have not reached them here.

[6] Upon careful consideration of this case we conclude that Straus identifies 1,2,3,4-tetrachlorocyclopentadiene-1,3 with sufficient clarity and distinctness to constitute an anticipation of the claims here involved, and the decision of the Board of Appeals is accordingly affirmed.

AFFIRMED.

JACKSON, *J.*, retired, recalled to participate.

PATENT SUITS

Notices under 35 U. S. C. 290; Patent Act of 1952

1,994,073, Hartman and Whitmore, Composition for impregnating wood and other celluiosic materials, **appeal** filed Aug. 9, 1955, C. C. A., 2nd Cir., Doc. 23759, *Protexol Corp.* v. *Koppers Co., Inc.* Decision of District Court affirmed Jan. 30, 1956.

2,017,022. (See 2,079,338.)

2,044,401. (See 2,079,338.)

2,079,338, **2,017,022**, C. K. Ross, Cementitious material; **2,060,009**, same, Plaster wallboard and method of making it; **2,044,401**, same, Core composition and method of manufacturing same, **filed** Feb. 27, 1953, D. C., S. D. N. Y., Doc. 83/83, *United States Gypsum Co.* v. *Ebsary Gypsum Co., Inc.* Notice of voluntary dismissal Feb. 1, 1956.

2,060,009. (See 2,079,338.)

2,212,997, Blanchard and Mulloy, Safety valve, **filed** Jan. 30, 1956, D. C., S. D. Tex. (Houston), Doc. 9502, *Inferno Co.* v. *Texsteam Corp. et al.*

2,304,053, C. A. Kaufman, Stocking and method of knitting, **filed** Dec. 22, 1952, D. C., S. D. N. Y., Doc. 81/195, *Berkshire Knitting Mills* v. *Julius Kayser & Co. et al.* Stipulation and order; defendant Chester H. Roth Co., Inc. is successor by merger of Standard Hosiery Mills, Inc. another defendant; Alamance Industries, Inc. substituted as defendant-counterclaimant; consent judgment holding patent valid and infringed Jan. 10, 1956. Same, **suit** for Declaratory Judgment filed Feb. 11, 1952, D. C., S. D. N. Y., Doc. 73/161, *Aberdeen Hosiery Mills Co., Inc., et al.* Stipulation and order; Ocean Factors, Inc. substituted for Hugh Grey Hosiery Co., Inc.; defendant Chester H. Roth Co., Inc. is successor by merger of Standard Hosiery Mills, Inc. another defendant; Alamance Industries, Inc. substituted as defendant-counterclaimant; complaint and counterclaim dismissed without prejudice as to certain parties plaintiff; consent judgment holding patent valid and infringed by certain plaintiffs Jan. 10, 1956. Same, **filed** Mar. 15, 1954, D. C., S. D. N. Y., Doc. 92/7, *Adorable F. F. Hosiery Mill et al.* v. *Standard Hosiery Mills, Inc., et al.* Stipulation and order; defendant Chester H. Roth Co., Inc. is successor by merger of Standard Hosiery Mills, Inc. another defendant; Almance Industries, Inc. substituted as defendant-counterclaimant; complaint and counterclaim dismissed without prejudice as to certain parties plaintiff; consent judgment holding patent valid and infringed by certain plaintiffs Feb. 3, 1956.

2,310,680, C. F. Dinley, Solvent saver, filed Jan. 31, 1956, D. C. Mass. (Boston), Doc. 56/100–A, *Detrex Corp.* v. *Hoyt. Mfg. Corp.*

2,412,758. (See 2,632,417.)

2,416,412. (See 2,632,417.)

2,448,145, A. Holterhoff, Producing moiré designs; **2,513,646**, same, Art of producing moiré pattern effects in fabrics, filed Feb. 5, 1954, D. C. N. J. (Newark), Doc. 626/51, *Newburgh Moire Co., Inc.* v. *Superior Moire Co., Inc.* Date of judgment holding patent invalid Jan. 30, 1956. (Change for previous report; notice Jan. 31, 1956.)

2,513,646. (See 2,448,145.)

2,538,925, J. J. Steffan, Door jamb; **2,661,084**, same, Doorframe; **2,678,843**, same, Keeper mechanism, filed July 16, 1954, D. C., E. D. Mo. (St. Louis), Doc. 9885(1), *Julius A. Steffan and Dolores H. Williams, executors of the estate of Joseph J. Steffan* v. *Weber Heating and Sheet Metal Co. et al.* Stipulation of dismissal without prejudice as to cause relating to patents 2,538,925 and 2,661,084 on June 29, 1955; decree holding invalid claims 1 and 2 of patent 2,678,843; complaint dismissed Jan. 31, 1956.

2,554,067. (See 2,632,417.)

2,556,116. (See 2,632,417.)

2,564,932. (See 2,632,417.)

2,565,826. (See 2,632,417.)

2,578,156. (See 2,632,417.)

2,595,088, E. E. Woller, Sofa bed, filed Jan. 31, 1956, D. C., N. D. Ill. (Chicago), Doc. 56c203, *Sealy Mattress Co.* v. *Simmons Co.*

2,597,106, J. W. Murray, End bracket for utility stands, filed Jan. 27, 1956, D. C., W. D. Wis. (Madison), Doc. 2769, *Maso Steel Products, Inc., et al.* v. *Badger, Inc.*

2,606,932. (See 2,632,417.)

2,606,549. (See 2,632,417.)

2,613,771, D. Levine, Article of luggage hardware, filed July 19, 1954, D. C., S. D. N. Y., Doc. 94/273, *Crest-Lock Co. Inc.* v. *Myers Safety Lock and Machine Co. Inc.* Stipulation and order of discontinuance Jan. 31, 1956.

2,618,919, R. O. Hutchens, Lawn trimming and edging apparatus, filed Aug. 16, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 18564–WM, *Ralph O. Hutchens* v. *Louis B. Faas et al.* Patent held not infringed; validity of patent not settled by Court; action dismissed favor defendants (notice Jan. 31, 1956).

2,624,366, A. Wittlin, Liquid flow indicator, filed Feb. 4, 1953, D. C., E. D. Ill. (Danville), Doc. 2544, *Albert Wittlin* v. *Remco, Inc., et al.* Decision appealed and mandate of Nov. 29, 1955 affirmed judgment of District Court (notice Jan. 3, 1956).

2,632,417, O. R. Smith, Pipe reforming clamp; **2,641,066**, same, Pipe reconditioning machine; **2,412,758**, same, Apparatus for cleaning pipe; **2,554,067**, same, Pipe coating machine; **2,556,116**, same, Pipe cleaning equipment; **2,564,932**, same, Motor vehicle drive; **2,578,156**, same, Vehicle with drive shaft coupled to forward extremity of engines; **2,606,549**, same, Heating apparatus for the coating containing tanks of pipe conditioning machines; **2,565,826**, **2,606,932**, same, Mixing device; **2,416,412**, F. A. Smith, Pipe cleaning oven, filed Mar. 21, 1955, D. C., S. D. Tex. (Houston), Doc. 8827, *O. R. Smith* v. *The Texas Pipe Line Co.* "Stipulated dismissal of complaint and counterclaim," with approval of Court thereon; complaint dismissed with prejudice as to acts prior to this date but without prejudice to plaintiff as to acts subsequent to this date; counterclaim filed by defendant dismissed without prejudice Nov. 10, 1955 (amended report dated Jan. 31, 1956).

2,641,066. (See 2,632,417.)

2,661,084. (See 2,538,925.)

2,666,651, E. W. Jones, Master sound record, filed Jan. 30, 1956, D. C., E. D. N. Y. (Brooklyn), Doc. 16215, *Earle W. Jones* v. *Fairchild Graphic Equipment Inc. et al.*

2,674,237, C. R. Noe, Underground drainage and disposal system, filed Jan. 31, 1956, D. C., S. D. Fla. (Miami), Doc. 6723–M, *Broward Septic Tank Co., Inc., et al.* v. *Smith Plumbing & Appliances et al.*

2,678,843. (See 2,538,925.)

2,729,719, C. G. Kronmiller, Control device; **Des. 176,657**, H. Dreyfuss, Control instrument, filed Jan. 30, 1956, D. C., S. D. Ohio (Columbus), Doc. 4576, *Minneapolis-Honeywell Regulator Co.* v. *Acro Mfg. Co.*

Des. 146,181, J. G. Lippincott, Cap for a fountain pen or similar article, filed Jan. 31, 1956, D. C., S. D. N. Y., Doc. 106/362, *Eberhard Faber Pencil Co.* v. *Waterman Pen Co., Inc.*

Des. 176,657. (See 2,729,719.)

REISSUES

FEBRUARY 28, 1956

Matter enclosed in heavy brackets [ ] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates additions made by reissue.

24,123
POLYCYCLIC DIBASIC ACIDS

Charles A. Cohen, Roselle Park, N. J., and Louis A. Mikeska, Dunedin, Fla., assignors to Esso Research and Engineering Company, a corporation of Delaware

No Drawing. Original No. 2,716,662, dated August 30, 1955, Serial No. 268,122, January 24, 1952. Application for reissue December 16, 1955, Serial No. 553,681

11 Claims. (Cl. 260—514)

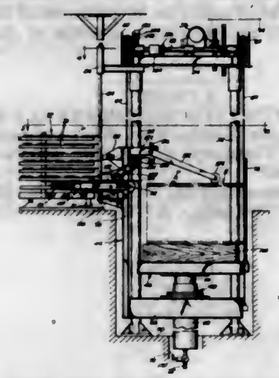
5. A process for producing disodium dimethyl [alpha-] dicyclopentadiene [3,7] dicarboxylic acid which comprises reacting finely-dispersed sodium having an average particle size of less than 50 microns in diameter with methylcyclopentadiene in the presence of less than 1 molar equivalent based on the sodium of substantially anhydrous aliphatic alcohol and thereafter treating the product with carbon dioxide at superatmospheric pressure.

24,124
SHEET HANDLING MECHANISM

Alfred F. Pierce, Olympia, Wash., assignor to American Manufacturing Company, Inc., Tacoma, Wash., a corporation of Washington

Original No. 2,647,645, dated August 4, 1953, Serial No. 97,411, June 6, 1949. Application for reissue July 18, 1955, Serial No. 522,890

20 Claims. (Cl. 214—6)



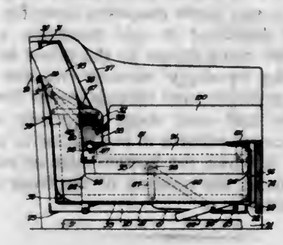
12. Sheet handling mechanism comprising first elevator means, second elevator means movable relative to said first elevator means, sheet stack supporting means carried by said second elevator means, sheet transfer means carried by said first elevator means at one side of and higher than said sheet stack supporting means, means operable to move said first elevator means to dispose said sheet transfer means in various vertical positions, and means operable to effect movement of said second elevator means relative to said first elevator means to shift the top of a stack of sheets on said sheet stack supporting means relative to said sheet transfer means.

24,125
SOFA BED

Edward E. Woller, Kenosha, Wis., assignor to Simmons Company, a corporation of Delaware

Original No. 2,352,989, dated July 4, 1944, Serial No. 409,951, September 8, 1941. Application for reissue August 9, 1955, Serial No. 527,434

9 Claims. (Cl. 5—13)



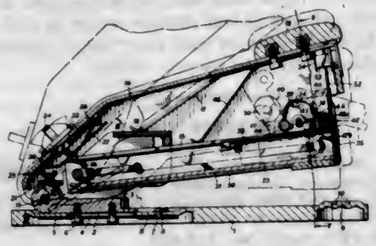
[6. In a sofa bed of the class described, the combination of a plurality of bed bottom sections connected together so as to be foldable from and to sofa-forming position respectively to and from bed position, one of said sections constituting a sofa seat section when the sections are in sofa-forming position, a front member connected to certain of said sections and depending from adjacent the front edge of said seat section when in sofa position, mattress supporting fabric in said sections which, in the seat section, is also operative to support a seat cushion when the sections are in sofa-forming position, the arrangement being such that said fabric, when the sections are in sofa-forming position, is spaced from the upper edge of said front member, and a fabric element connecting the upper edge of said front member and the front portion of the cushion supporting fabric in said seat section when in sofa-forming position, said fabric element serving to provide seat cushion support intermediate the fabric in said seat section and the upper edge of said front member.]

PATENTS.

GRANTED FEBRUARY 28, 1956

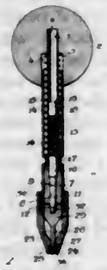
GENERAL AND MECHANICAL

2,736,024
STAPLING MACHINES
Edward Harold Cole, London, England
Original application July 23, 1951, Serial No. 238,087. Divided and this application November 6, 1952, Serial No. 319,042
Claims priority, application Great Britain August 2, 1950
6 Claims. (Cl. 1—3)



1. In a stapling machine in combination a staple magazine assembly, a driver lever and a staple blade member guided in said staple magazine assembly to drive the front staple contained in said magazine assembly, said blade member being driven by the driver lever, said driver lever being arcuately movable relative to said staple magazine assembly, and locking means for locking said driver lever and said staple magazine assembly against any movement relative to each other in a relative angular position in which the bottom edge of said staple blade is raised above the position of the front staple in said staple magazine.

2,736,025
ADAPTER FOR GEM SETTING DEVICE
Dan G. Wood, Chicago, Ill., assignor to Dorothy Dahl, Inc., a corporation of Illinois
Application August 13, 1954, Serial No. 449,734
6 Claims. (Cl. 1—50)



1. An adapter for a gem setting tool having a cylindrical sleeve, a tubular shaft mounted for sliding movement in said sleeve, and a spring-pressed pin projecting from said shaft, said adapter comprising an outer member and a plunger, said outer member having a cylindrical upper portion frictionally engageable with the peripheral surface of said sleeve to secure said adapter to said tool, said outer member having an axial bore extending through its lower end, said plunger having a shank mounted for sliding movement in said axial bore and an upper cylindrical portion mounted for sliding movement in said sleeve, the top surface of said plunger having an axial recess to receive the projecting end of said spring-pressed pin when said adapter is secured to the gem setting tool.

2,736,026
DEVICE FOR ATTACHING A WEIGHT TO A FISHLINE
Paul Belokin, Jr., Stickney, Ill., assignor to Modern Tackle Co., Chicago, Ill., a corporation of Illinois
Application June 1, 1953, Serial No. 358,591
3 Claims. (Cl. 1—187)



1. Apparatus for attaching a pliant rectangularly and V-shaped weight to a fishline comprising a generally square prismatic magazine adapted to hold slidably a plurality of said weights against rotation therein, a side of said magazine being constructed of flexible material, resilient means for urging said weights toward one end of said magazine, the sides of said magazine adjoining said first-named side being slotted at said end to guide a fishline between the arms of the weight nearest the end, a weight clamping member including a segment partly severed from said first-named side and operative on one arm of said weight nearest the end, said member being cooperative with the opposing magazine side for clamping the said weight nearest the end therebetween, and a catch projecting inwardly from said end and adapted to engage the free end of said arm for retention of the weight until clamped and then to permit ejection of the weight.

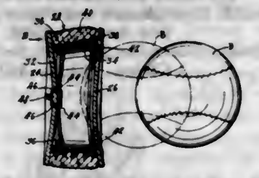
2,736,027
PIVOT MOUNTING FOR WELDER'S FACE SHIELD
Alfred F. Parmelee, Kansas City, Mo., assignor to Parmelee Plastics Company, Kansas City, Mo., a corporation of Missouri
Application November 26, 1951, Serial No. 258,217
1 Claim. (Cl. 2—8)



In combination with a welder's face shield, a headband and a U-shaped member mounted on the headband, a hinge between the shield and said member comprising a pair of identical discs; pivot means mounting the discs for rotation on a common axis, said shield being swingable on the pivot means; resilient means mounted on said pivot means and yieldably holding the discs biased together, each disc being provided with a central depressed portion and an annular, raised marginal edge at the periphery thereof concentric with said axis and surrounding the depression, presenting a chamber between the discs; two pairs of diametrically opposed, equally spaced, radial abutments on said edge of each disc respectively, the abutments of each disc extending toward the opposite disc; a pair of diametrically opposed radial stops on the proximal faces of each depressed portion respectively

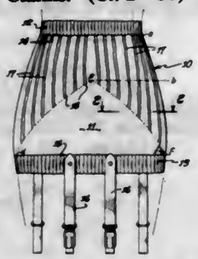
and within the chamber, the radial disposition of the stops being offset relative to the radial disposition of the abutments whereby, upon relative rotation of the discs, the abutments releasably limit the extent of relative rotation of the discs between the stops and the latter positively limit the extent of relative rotation of the discs; a plate between the discs and the shield; means attaching one of the discs to the member and the other disc to the plate including ears extending outwardly from the depressed portions of each disc respectively; and releasable take-up means spaced from said pivot means and extending through the plate and the shield for holding the latter against swinging movement on the pivot means relative to the plate, said plate having an arcuate slot concentric with the pivot means and receiving the take-up means, permitting adjustment of the shield relative to the plate upon release of the take-up means.

2,736,028
SHOCK SHIELD CUSHION FOR BASEBALL GLOVES
Larry Sternlicht, Brooklyn, N. Y.
Application December 14, 1953, Serial No. 397,969
7 Claims. (Cl. 2—19)



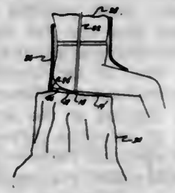
1. The combination, with a baseball glove having front and back panels, of a shock shield interposed between said panels and including a cushioning paid proportioned to fit the contour of the crotch defined between the thumb and index finger of a hand inserted in the glove, said shield further including an arcuate wall member set edgewise between the panels and having the cushioning pad secured thereto, said shield additionally including a generally semicircular back piece secured peripherally to the wall member.

2,736,029
ELASTIC GIRDLE
Henri Claude Jean Marie Diogene, Perpignan, France, assignor to Hollywood-Maxwell Company, Los Angeles, Calif., a corporation of California
Application February 13, 1953, Serial No. 336,825
3 Claims. (Cl. 2—37)



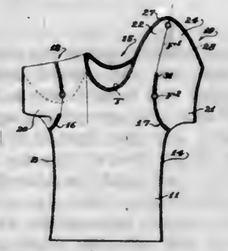
1. A girdle for molding the human figure, adapted to extend across the lower torso of the wearer and having hip and upper thigh covering portions, said girdle having peripherally spaced pleats formed to permit elastic peripheral expansion and contraction for donning and removing the girdle, each pleat extending longitudinally of the girdle, the lower ends of the pleats being at graduated levels above the bottom edge of the girdle, the upper ends of the pleats being located adjacent the upper edge of the girdle.

2,736,030
HUNTING SEAT
Roy M. Moody, Walled Lake, Mich.
Application July 13, 1953, Serial No. 367,560
5 Claims. (Cl. 2—94)



1. A seat particularly adapted for use by a hunter wearing a hunting coat comprising a flexible pad formed in two halves which are hingedly joined together, means on the free end of one of the halves adapted to attach such free end adjacent the lower edge of the coat, and a pair of straps connected at their lower ends to the opposite ends of the hinged joint and adapted to be attached at their upper ends to upper portions of said coat.

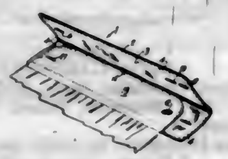
2,736,031
BODY GARMENT
Justin L. Wyner, Brookline, Mass., assignor to The Vanta Company, Inc., Brockton, Mass., a corporation of Rhode Island
Application September 24, 1953, Serial No. 382,067
2 Claims. (Cl. 2—111)



2. A body garment designed to be donned by drawing it upwardly over the feet of the wearer, said garment having armscyes and sleeves and a neck opening of usual and normal size, the garment comprising a front panel and a rear panel, the front and rear panels each having an integral upward extension at one shoulder portion at least of the garment, each extension tapering upwardly in width and having a curved free marginal edge forming a smooth continuation of the edge of the central part of the neck opening, the sleeve at said one shoulder portion, at least, of the garment also having an upward extension at its front and rear respectively, each upward extension of said sleeve having a free marginal edge which joins the free marginal edge of the corresponding upward extension of the front and rear panel respectively, in a smooth, upwardly convex curve, a seam uniting the inner edge of each upward extension of said sleeve to the outer edge of the upward extension of the corresponding panel, said seam extending from the junction of the free marginal edge of the front upward extension of the sleeve and the upward extension of the front panel downwardly along the armscye and then upwardly to the junction of the free marginal edge of the rear upper extension of the sleeve with the upward extension of the rear panel, the united front and rear extensions of said sleeve with the upward extensions of the front and rear panels respectively, constituting front and rear shoulder flaps, one of said flaps overlying the other flap to form a double thickness of material over the shoulder of the wearer when the garment is in use, one element of a separable fas-

tener being exposed at the inner surface of that flap which is to be the overlying flap, said fastener element being located close to the free marginal edge of said overlying flap and adjacent to the same which unites the sleeve and panel extensions, one element of a second separable fastener being exposed at the inner surface of said overlying flap near the seam which unites the sleeve to the corresponding panel extension and at about the horizontal level of the lowest point of the neck opening, the complemental elements of the separable fasteners being exposed at the exterior surface of the underlying flap at locations corresponding to those of the first-named separable fastener elements, the upward extensions of said sleeve overlapping when the garment is in use.

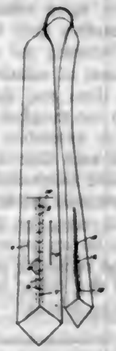
2,736,032
FRENCH CUFF
Francis X. Bode, Albany, N. Y.
Application August 24, 1953, Serial No. 375,991
4 Claims. (Cl. 2—124)



1. A French cuff for converting a barrel cuff having a button adjacent one end thereof and a buttonhole adjacent the other end thereof into a cuff of the French type; said French cuff comprising an elongated, generally rectangular structure formed of at least two layers of the same fabric secured together by stitching along their marginal edges; said French cuff being of a width at least approximating twice the width of said barrel cuff and of a length substantially exceeding the length of said barrel cuff whereby when said French cuff is folded along its longitudinal center line said barrel cuff may be substantially concealed between the folds thereof; said French cuff having two transversely spaced buttonholes adjacent each end thereof symmetrically disposed with respect to the longitudinal center line of said cuff; and a fifth buttonhole longitudinally spaced from one of said end buttonholes a distance substantially equal to the distance between said button and buttonhole of said barrel cuff and in longitudinal alignment with said one buttonhole and the buttonhole adjacent the opposite end of said French cuff and on the same side of the longitudinal center line thereof.

2,736,033
NECKTIE RETAINER
Leonello Brunetti and Emilio Alchera, San Francisco, Calif.
Application August 27, 1953, Serial No. 376,898
1 Claim. (Cl. 2—145)

In a four-in-hand tie, a tubular body folded longitudinally upon itself providing a front and rear fold and a wide end and a narrow end, said rear fold of the wide end having a longitudinal slit extending inwardly from the end thereof terminating in a transverse slit at the innermost end of said longitudinal slit through which said narrow end of the tie extends, stitches connecting the edges of said slit of the rear fold of the wide end of the tie providing a plurality of buttonholes, the rear fold of said narrow end of the tie being also longitudinally slit, stitches spaced apart connecting said edges of the latter slit dividing said latter slit into elongated buttonholes disposed longitudinally of said narrow end of the tie, adapted to register with buttonholes of said rear fold of the wide end,



for attachment to a button of a shirt with which the tie is worn.

2,736,034
FINGER EXERCISING GLOVE
Eva Redick Fredenhagen and Franz A. Fredenhagen, Los Angeles, Calif.
Application December 29, 1951, Serial No. 264,148
1 Claim. (Cl. 2—161)



A finger exercising glove comprising fabric sheet material with individual finger and thumb enclosing portions, close-fitting sheaths encasing the finger tip and thumb tip portions of said sheet material, and a miniature metal weight encased in each finger tip and thumb tip portion between each of said sheaths and the underlying sheet material, said weights being maintained in position entirely by said sheaths wherein they overlie the nails of the thumb and fingers of the wearer but are completely separated by a part of the sheet material from the nails of the wearer, said sheaths consisting of rubber coatings which adhere both to said weights and to the finger tip and thumb tip portions of said sheet material.

2,736,035
ONE-PIECE CAPS
Jacques Spreiregen, London, England
Application June 24, 1953, Serial No. 363,768
2 Claims. (Cl. 2—195)



1. A substantially circular head covering comprising a single seamless piece of felted fabric forming a one-piece cap with an upper substantially circular portion and a lower substantially annular portion contiguous with said upper portion and lying wholly within the periphery of said upper portion, said upper portion and said lower portion both being of a single thickness of said felted fabric, a crescent-shaped stiffener inside said cap between said upper portion and said lower portion and having a front

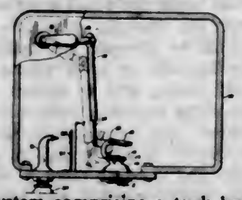
arcuate edge which at one point is closely adjacent to the outer periphery of said upper portion, and securing means extending only along said front arcuate edge of said stiffener and permanently securing said stiffener inside said cap to said upper portion and said lower portion, the rear edge of said stiffener being free.

2,736,036
SEAMLESS ELASTIC DRAWERS
Alberto Steigaglioni, Turin, Italy
Application April 7, 1953, Serial No. 347,327
Claims priority, application Italy June 7, 1952
1 Claim. (Cl. 2—224)



An undergarment of the class described comprising an upper girdle portion and a lower portion formed from a single tubular knitted fabric, the upper girdle portion being formed of the same knitted fabric as the lower portion, said upper girdle portion only having an elastic thread spirally interlaced between the meshes of the knitted fabric thereof, the lower portion being diagonally cut on each side and edged to provide openings for the wearer's thighs with front and back lower free ends, the lower free ends at the front and back of the garment being stitched together to form a crotch portion for said garment, the lower portion being provided with a fly opening in the front thereof, and a reinforcing patch secured to the outside of said crotch portion of the garment extending from the bottom of the seat portion at the rear of the garment forwardly over said crotch portion and upwardly over said fly opening with the upper edge thereof secured to the upper part of the lower portion of said garment.

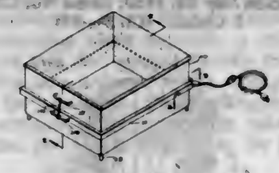
2,736,037
AUTOMATIC VALVE APPARATUS
Harry L. Hardie, Lorain, Ohio
Application June 18, 1954, Serial No. 437,797
7 Claims. (Cl. 4—26)



1. A valve system comprising a tank having a bottom and having an inlet at a definite distance above said bottom and an outlet, a valve on said outlet at a spaced distance from the inlet, means for manually opening the valve, said valve also having means positioned in alignment with the inlet and at the same distance above said bottom whereby fluid entering the tank through the inlet will hit said means and close the valve when the fluid level of the tank is closer to the bottom than the inlet.

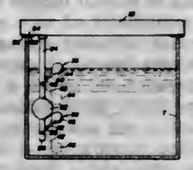
2,736,038
FOOT TREATING VESSEL
Raymond P. Mansfield, Groton, Conn.
Application June 25, 1954, Serial No. 439,260
2 Claims. (Cl. 4—182)

1. A foot treating apparatus comprising a pan-like vessel, a similarly shaped heating element assembly, handles projecting outwardly from said vessel and said assembly at each of two opposing sides, a liner member for said vessel of resilient material removably positioned there-



within, and means for releasably securing the handles at each side of the vessel to the corresponding handle of the assembly for support of the assembly on said vessel at a spaced distance from said vessel's handles.

2,736,039
DISINFECTANT DISPENSER
Freeman C. Majo, Canal Fulton, Ohio, assignor of fifty per cent to Jerald J. Keplinger, Orrville, Ohio
Application February 19, 1952, Serial No. 272,397
7 Claims. (Cl. 4—227)



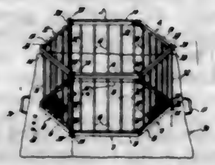
4. For use with a flush tank, a reservoir forming a top for the tank and having a filling opening and an outlet, a conduit attached to and depending from the outlet, said conduit having a lower discharge end disposed close to the bottom of the tank, and a float valve at the lower end of the conduit, said valve being movable to its open position as the level of water in the tank goes below the lower end of the conduit, whereby a detergent in the reservoir may pass into the tank and be mixed with water as the tank is refilled and a plurality of straps at the undersurface of said reservoir, a suction cup at each end of each strap and engaging the undersurface of the reservoir, the upper edges of the walls of the tank being received between the suction cups of each strap.

2,736,040
CRUMCUP STRAINER AND STOPPER
Charles W. Mackey, West Cheshire, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a corporation of Connecticut
Original application May 2, 1951, Serial No. 224,125. Divided and this application March 26, 1952, Serial No. 278,706
2 Claims. (Cl. 4—287)



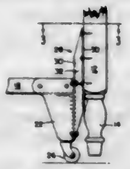
1. A drain assembly comprising, in combination a cup-shaped strainer having a clearance aperture located in the bottom thereof and a lip projecting outwardly from the rim for hanging the strainer in a drain; a stopper provided with a spindle adapted to extend through the clearance aperture; and cooperating permanent magnet and armature holding means carried by said strainer and said stopper.

2,736,041
PORTABLE PENS FOR CONFINING BABIES AND SMALL CHILDREN
John J. Maleof, East Hartford, Conn.
Application July 21, 1950, Serial No. 175,182
1 Claim. (Cl. 5—99)



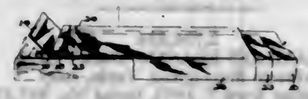
A portable pen for confining babies comprising a plurality of identical sections each comprising a pair of relatively stiff, self-sustaining panels of substantially identical shape and size, the two panels of each section being permanently hinged together at one end of each panel and being provided at their opposite ends with means for detachably pivotally connecting the section to a pair of adjacent sections, said means comprising upper and lower eyes outstanding in vertical register from the upper and lower portions respectively of each panel and a removable connecting rod extending through the registering eyes in the adjoining panels of each adjacent pair of sections, each connecting rod having a lower end portion adapted to extend below the sections into the ground or other support for the pen and having an upper end enlargement for limiting penetration of the rod through the upper registering eyes, and a floor mat comprising a sheet of flexible material having spaced positioning openings penetrated by said connecting rods.

2,736,042
COMBINATION HEADBOARD, BED FRAME, AND CONNECTING BRACKET
Frank T. Parrish, Gardner, Mass., assignor to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application April 15, 1953, Serial No. 348,979
1 Claim. (Cl. 5—131)



In combination with a footless bed frame, a headboard having decorative legs; means for mounting said headboard on said frame including a pair of brackets, one of which is a right-hand bracket and the other of which is a left-hand bracket, each said bracket including a flange attached to said frame, a flange attached to said headboard, and a web element integral with and interconnecting said flanges; said flanges and web being arranged in balanced symmetry whereby a single form may serve as a right-hand or left-hand member of said pair of brackets; and said web supporting said flanges in offset relation vertically whereby one said flange is secured to said headboard above said decorative leg, in offset relation transversely whereby to compensate for a greater width in said headboard than in said frame, and in offset relation longitudinally whereby to provide room for a caster on said frame as well as space for a bedspread between a bed on said frame and said headboard.

2,736,043
BEDSHEET BLANKET ATTACHMENT DEVICE
Ruth M. Temple, Franklin, Ky.; now by change of name Ruth M. Elliott, assignor to Gustave Miller, Washington, D. C.
Application December 17, 1952, Serial No. 326,460
5 Claims. (Cl. 5—334)



1. A bedsheet blanket attachment device for detachably securing a blanket in position on a bedsheet during use, said device comprising a strip of flexible sheet material arranged to be attached laterally across the bedsheet adjacent to but spaced from one end thereof, a strip of flexible sheet material arranged to be attached laterally across the blanket adjacent one end thereof, and fastening means for readily and detachably securing said blanket strip to said bedsheet strip.

2,736,044
MARINE MARKER
Stewart P. Lewis, Washington, D. C.
Application July 10, 1944, Serial No. 544,301
4 Claims. (Cl. 9—8.3)
(Granted under Title 35, U. S. Code (1952), sec. 266)

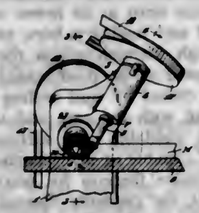


1. A marine marker comprising a buoyant casing having two chambers therein, one of the chambers being adapted to hold water activated igniter gas forming material in the lower portion thereof and water activated primer means including an additional quantity of igniter gas forming material for initially igniting the marker in the upper portion thereof, the other of the chambers being adapted to hold water activated acetylene gas forming material, said gas forming materials and primer means being adapted to generate and ignite gas by the addition of water thereto, an inner screen member arranged within said casing and in spaced relation with respect thereto, an outer screen member surrounding said inner screen member and arranged in spaced relation thereto and with respect to the casing, an annular plate arranged in coaxial and abutting relation with the lower end of said outer screen member and about the inner screen member whereby a space is formed within the lower portion of the casing outside the inner screen member and below said plate for receiving said acetylene gas forming material, means for admitting water to each of said chambers when the marker is launched, and means detachably secured to the casing and adapted to seal said water admitting means hermetically prior to the launching of the marker.

2,736,045
PROGRESSIVE-TYPE CEMENT LASTING MACHINE
Jacob S. Kamborian, West Newton, Mass.
Application August 21, 1951, Serial No. 242,913
29 Claims. (Cl. 12—1)

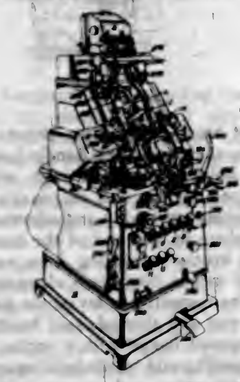
4. In a lasting machine a pair of work-gripping rolls having cooperating peripheral surfaces, said rolls being

mounted on shafts whose axes are non-intersecting and downwardly inclined, the lower part of one roll constituting a hold-down for the bottom of a shoe held thereagainst with the lasting margin projecting upwardly and the second roll cooperating with the first roll simul-



taneously to feed the work along and to subject it to updrafting force, said stressed margin, after being released from between the gripping rolls, being pressed into engagement with the bottom of the shoe by the second of said rolls acting alone.

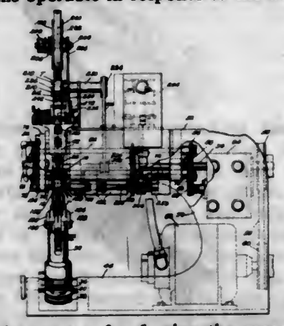
2,736,046
MACHINES FOR SHAPING UPPERS OVER LASTS
Jacob C. Jorgensen, Beverly, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application January 21, 1953, Serial No. 332,238
154 Claims. (Cl. 12—10.4)



13. In a machine for shaping uppers over lasts, gripping means for seizing the upper materials of a shoe, in different locations adjacent to the toe end and opposite sides of the forepart of a last, and for exerting a pull thereon to shape the upper materials over the last, fluid-pressure-operated means for actuating said gripping means, overlaying and fastening-inserting means for laying the lasting margin of the upper materials inwardly over and for securing said lasting margin of the upper materials to an insole assembled on the last, in each of said locations, power-operated means for actuating said overlaying and fastening-inserting means, a support for the shoe and its last, a heel rest for engaging the heel end portion of the shoe, and fluid-pressure operated means for moving the heel rest from a retracted position to an operative position in which it engages the heel end of the shoe on the support during the operation of said gripping means.

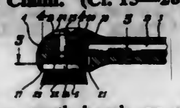
2,736,047
SEAM PRESSING AND TAPING MACHINES
Milton H. Roske, Malden, Mass., assignor to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application July 24, 1952, Serial No. 300,574
3 Claims. (Cl. 12—59.5)

1. In a machine for applying reinforcing material to the back seams of shoe uppers, means for feeding a workpiece consisting of two quarters joined by a back seam, means for progressively applying a run of tape of indefinite length to the workpiece as the workpiece by its feeding movement draws the tape from a source of supply, a measuring wheel normally in driving engagement with the tape and rotated thereby from an initial position as the tape is drawn by the workpiece, a cutter for severing the tape, means for operating the cutter actuated upon rotation of the measuring wheel a definite amount, means operable in response to the action of said



cutter operating means for freeing the measuring wheel from driving engagement with the tape when the tape is severed, means for rotating the measuring wheel back to its initial position when it has thus been freed, and means actuated in response to the return of the measuring wheel to initial position for advancing the cut end of the tape to a position for application to the next workpiece to be fed by the feeding means and for restoring the normal driving engagement between the tape and the measuring wheel.

2,736,048
MOTOR DRIVEN BRUSH
Joseph P. Gregoire, Sherman Oaks, Calif.
Application September 3, 1953, Serial No. 378,387
1 Claim. (Cl. 15—28)



In a motor driven tooth brush, an arm terminating in a head, said arm and head comprising a single piece of material, said head having a gear chamber, said arm having a shaft, a gear in said chamber for said shaft, said head having a bearing bore opening into said gear chamber, said bearing bore extending transversely of and to opposite sides of said shaft, a brush having a head having a spindle thereon rotatable in said bore, said brush head having a cooperating gear thereon fitting in said gear chamber, said head having a cavity opening into said bore, a snap pin concealed in said cavity and a cooperating groove on said spindle for removably supporting said brush in said head with said gears in engagement, said gear chamber having an opening at one side of said head, said first mentioned gear being movable edgewise through said opening into position opposite said shaft for assembly thereon, said brush head being insertible into and removable from said opening for coupling its said spindle with or uncoupling the same from said snap pin.

2,736,049
WATER-FED BRUSH
Ernest Cohen, Glossop, England
Application June 7, 1951, Serial No. 230,300
Claims priority, application Great Britain June 13, 1950
3 Claims. (Cl. 15—129)

1. A water-fed brush consisting of a rigid hollow stock open on one face, a feed tube entering said hollow

stock at the face opposite to said open face, a substantially flat bristle-carrying member of flexible rubber removably held in said open side and forming with said stock an elongated chamber having substantially parallel roof and floor formed by said stock and member respectively, a plurality of depressions in the inner face of said roof for holding a solid soluble body in each depression, said depressions being spaced along the periphery of said stock, said feed tube entering said stock centrally



between said depressions and adapted to distribute liquid to all said bodies without impinging directly thereon, the distance between said roof and floor being such that said bodies may lie in said depressions in contact with said floor, a plurality of rows of projections depending from said roof and between adjacent depressions to prevent said bodies from moving out of said depressions while permitting free access of liquid to said bodies, and a plurality of openings in said member intermediate said bristles.

2,736,050
CONTAINER STRUCTURE HAVING A CLOSURE CARRYING A BRUSH AND AN AUXILIARY RESERVOIR
Henry Y. Lee, Honolulu, Territory of Hawaii
Application October 27, 1952, Serial No. 317,067
1 Claim. (Cl. 15—140.4)



A container structure of the character described comprising a liquid container having an externally threaded neck, a throat member mounted in said neck and provided at its lower end with a restricted throat opening, a cap having a threaded socket in one end thereof threadedly receiving and closing said threaded neck, an applicator including a stem having one end anchored in said cap and extending therefrom outwardly through the neck receiving socket and supported by the cap within said container, said applicator including a brush head depending from the opposite end of said stem and supported thereby within the container, said throat opening being sized to compress the brush head when the applicator is withdrawn from the container whereby excess liquid is squeezed from the brush head, an elongated handle detachably connected to and projecting from the opposite end of said cap and provided with a hollow interior constituting a liquid storage chamber for a liquid to be supplied to said container, said cap having an upwardly opening threaded well in its upper end, a sealing means in the bottom of said well, and said handle having a threaded discharge stem at its lower end threadedly engaging said well and having a bore extending longitudinally therethrough through which the contents of said chamber is adapted to be discharged, the outer end of said bore being closed by said sealing means when said handle is engaged with the cap, and said handle having a relatively thin yieldable wall surrounding the storage chamber thereof capable of being partially collapsed by a compressing pressure thereon for restricting the storage chamber to eject the contents thereof through the dispenser bore when the handle is disconnected from the closure and which wall will return to its normal shape when the compressing force is released therefrom to provide a relatively stiff, non-limber handle.

2,736,051
PAINT BRUSHES FOR PAINTING CORNERS
Barkere Boodakian, New York, N. Y.
Application July 27, 1953, Serial No. 370,395
2 Claims. (Cl. 15—160)



1. A paint brush for painting objects with angular and arcuate surfaces comprising a handle having an upper end, two bristle holding members each with a plurality of bristles secured therein and diagonally extending therefrom, and means removably and adjustably to secure each of said members to said end of the handle with the free ends of the bristles extending from said members converging, said means being two elongated retainer bands secured to the respective sides of the handle and extending beyond one end thereof, said bands each having an inwardly disposed flange with a spring dependent therefrom and engaging said bristle holding members, and mating spaced projections and recesses in the bottoms of the bristle holding members and the end of the brush to which the bands are secured for the springs to hold the holding members so engaged.

2,736,052
MULTIPLE UNIT DUSTING, CLEANING, AND POLISHING MITTEN
Amalia Tufarolo, Seattle, Wash.
Application May 18, 1951, Serial No. 227,041
2 Claims. (Cl. 15—227)



1. A multiple unit mitten comprising a plurality of mitts of soft pliable material adapted to be telescopically fitted one over another and having their wrist ends flush when they are thus telescopically fitted; means permanently securing together the wrist portions of all of said mitts at one location, the major portion of the wrist portions of said mitts being free from each other, whereby said mitts when telescopically assembled and on a hand may be separately telescopically dis-assembled one after another and bunched up at the location of the secured together wrist portions thereof; and flexible mitt holding means attached to the secured together wrist portions of said mitts and adapted to receive and hold the bunched up mitts.

2,736,053
WINDSHIELD WIPER CARRYING ARM
John R. Oishei, Buffalo, and William C. Riester, Eggertsville, N. Y., assignors to Trico Products Corporation, Buffalo, N. Y.
Application May 29, 1953, Serial No. 358,434
11 Claims. (Cl. 15—255)



1. A wiper arm for windshield cleaners comprising a mounting section and a wiper carrying section pivotally connected to the mounting section, a spring connected at its outer end to the wiper carrying section and its line of spring force extending lengthwise of the arm and transversely of the pivot axis, said mounting section having spaced ears formed with registering series of seats extending away from the pivot axis, and a spring anchoring pin connected to the inner end of the spring, the opposite ends of the pin being selectively engageable in the seats to vary the perpendicular distance between the pivot axis and the line of spring force.

2,736,054
ANCHOR TRIM
Joseph M. White, Yorktown Village, Md.
Application October 2, 1952, Serial No. 312,781
5 Claims. (Cl. 16—16)



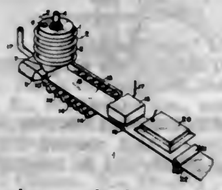
2. In a unitary longitudinally extending carpet anchor trim and fastener, the combination of carpet securing means and means for securing the anchor trim to flooring, said carpet securing means comprising a rearwardly extending flange having a downwardly extending lip, a longitudinal rib, the crest of which is directed toward the junction of said flange and the horizontal trim surface, a double row of slanting hook-shaped prongs pressed out of the metal of said horizontal trim surface adapted to engage the underside of said carpet rearwardly of said longitudinal rib, the edge of said carpet extending over said rib into said junction and compressed therein when said flange is bent into a plane proximate to that of the carpet, and said downwardly extending lip engaging said carpet between said prongs and said longitudinal rib.

2,736,055
ANTIFRICTION EXTENSION ROD AND TRACK
Ralph E. Bell, Sturgis, Mich., assignor to Kirsch Company, Sturgis, Mich., a corporation of Michigan
Application September 30, 1953, Serial No. 383,295
6 Claims. (Cl. 16—95)



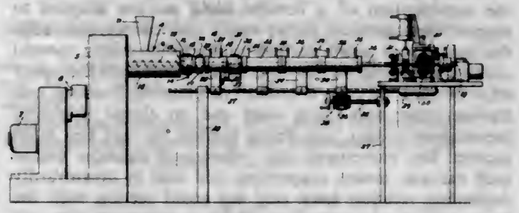
3. A sheet metal curtain rod of C-shaped cross-section having a longitudinal slot comprising a pair of telescoping sections of telescoping sheet metal of C-shaped cross-section overlapping for a portion only of the length of the rod and a track comprising a Nylon strip having a longitudinal groove therein fitted over the sheet metal of one edge of said slot and having resilient walls frictionally engaging the sides of the sheet metal to retain said track in position.

2,736,056
METHOD AND APPARATUS FOR FORMING PLASTIC FILM AND PRINTING IT
Harry A. Toulmin, Jr., Dayton, Ohio, assignor to The Commonwealth Engineering Co. of Ohio, Dayton, Ohio, a corporation of Ohio
Application May 27, 1952, Serial No. 290,359
6 Claims. (Cl. 18—4)



3. In combination, a plastic containing tank, means for heating the contents of the tank, means for applying gas pressure to the contents of the tank, said tank having an aperture for the exit of the plastic material, and means for directing, supporting and hardening the plastic material in the form of a continuous length film as it moves from the container comprising a plurality of gas jets arranged longitudinally of said film, at least one of said jets being arranged to direct gas against said film at an angle thereto to determine the direction of the film and at least one or more of the other jets being arranged to assist in moving the film while being supported upon a gas whereby any mechanical contact with the film after extrusion is eliminated until it hardens.

2,736,057
EQUIPMENT FOR MAKING ELONGATED SHAPES FROM POLYAMIDES
William J. Davis and Robert B. Koch, Reading, Pa., assignors to Polymer Corporation, Reading, Pa., a corporation of Pennsylvania
Application May 19, 1952, Serial No. 288,598
12 Claims. (Cl. 18—12)

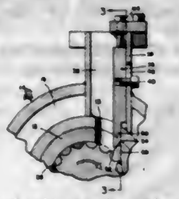


1. Equipment for making elongated shapes from synthetic linear polyamides comprising an open-ended forming tube, a feeder for delivering molten polyamide into the entrance end of the forming tube to be solidified therein and discharged in solidified form from the opposite end of the forming tube, the tube having a lining of polytetrafluorethylene in the form of a thin coating bonded to the internal surface of the tube, and a temperature regulating element for the tube arranged in heat exchange relation to the exterior of the forming tube and mounted for shifting movement lengthwise of the tube.

2,736,058
EXTRUSION APPARATUS
Arthur F. Dellheim, Baltimore, Md., assignor to The National Plastic Products Company, Odenton, Md., a corporation of Maryland
Application January 6, 1955, Serial No. 480,135
13 Claims. (Cl. 18—12)

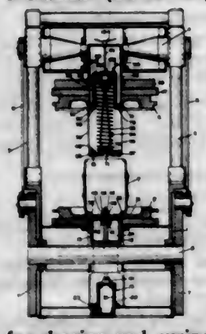
7. Apparatus for extruding plastic materials, comprising a barrel, a feeding means operating within said barrel, a hopper at one end of said barrel, a die at the other end of said barrel, an opening in said barrel intermediate the ends thereof, a devolatilization chamber attached to

said opening, and a baffle extending into said opening extending substantially the entire length thereof and less than the width thereof, said baffle being located along the



downstream wall of said opening whereby the plastic material tending to rise in said opening will contact the lower surface of said baffle and be directed downwardly into said barrel.

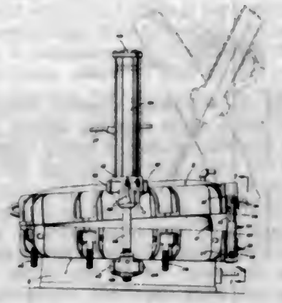
2,736,059
TIRE CURING PRESS
Paul A. Frank, Akron, Ohio
Application July 6, 1950, Serial No. 172,313
5 Claims. (Cl. 18—17)



1. In a press for shaping and curing pneumatic tires, the combination of a bottom mold section adapted to support an uncured pulley-band tire carcass on edge thereon, a top mold section movable coaxially toward said bottom mold section into engagement with the upper edge of such carcass, a radially expansible forming unit having upper and lower ends and an elastic side wall therebetween, said unit being carried by said top mold section for movement into telescoped relation within such carcass, means supporting said unit in downwardly depending relation from said top mold section with the lower end of said unit disposed for engagement with said bottom mold section during downward movement of said top mold section for causing the ends of said unit to be moved toward each other thereby making possible radial expansion of the side wall of said unit by application of internal fluid pressure therein, means for moving said top mold section downwardly to progressively deform the carcass to tire shape between said mold sections and around said unit, a valve mechanism in the lower end of said unit for disposing when opened of fluids which may collect in the lower end portion of said unit incidental of circulation of heated curing medium therethrough, and means for opening said valve mechanism upon movement of said unit to a position with its lower end engaged with said bottom mold section.

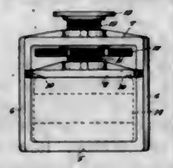
2,736,060
POWER MECHANISM FOR TIRE MOLDS
Edwin Allen Glynn, Lodi, Calif., assignor to Super Mold Corporation of California, Lodi, Calif., a corporation of California
Application December 16, 1952, Serial No. 326,189
1 Claim. (Cl. 18—18)

A power mechanism for a tire retreading mold which includes upper and lower body sections, and a transverse axis hinge unit connecting said body sections at the rear for relative opening and closing motion; said mechanism comprising a pair of upstanding fluid pressure actuated power cylinders disposed at the sides of the mold, and means including universal mounts pivotally connecting the power cylinders between said body sections; each



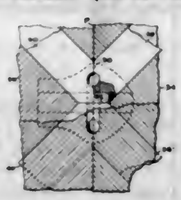
mount comprising a tubular boss secured to and projecting laterally of the related body section, a spindle turnable in the boss, a yoke on the outer end of the spindle straddling an adjacent part of the related power cylinder, and means pivoting said part in the yoke at right angles to the spindle.

2,736,061
RETAINER FOR DENTAL FLASKS
Thomas F. Fagan, Columbia, Conn.
Application August 20, 1953, Serial No. 375,414
3 Claims. (Cl. 18—33)



1. A flask retainer including a frame having a base, a crossbar having a vertical hole therein, a pressure plate movable relatively to said base, a threaded shaft upon said pressure plate and slidable through said hole, and a nut threaded to said shaft and engageable with the bottom of said crossbar to retain the pressure plate in position relatively to the base.

2,736,062
MOLDING OF SLIDE FASTENER SLIDERS
Otto G. Scheuermann, Westfield, N. J., and Paul Natzler, Jackson Heights, N. Y., assignors to Conmar Products Corporation, Newark, N. J., a corporation of New Jersey
Original application February 7, 1946, Serial No. 646,102. Divided and this application November 13, 1952, Serial No. 320,283
9 Claims. (Cl. 18—42)

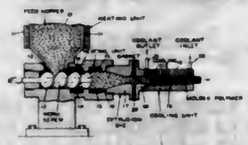


1. A mold for molding a slider having a lug made up of two posts joined by a rail, and a pull made up of a handle having two arms joined by a pivot pin passing through the lug, said mold being separable on a parting face and having appropriate cavities to form the slider and pull, and said mold including retractable cores movable in a plane approximately perpendicular to the parting face, the ends of said cores having die cavities which form the posts, rail, arms and pivot pin.

2,736,063
CORK-BOUND HOT-PRESSED BOARDS
Clark C. Heritage, Tacoma, Wash., assignor to Weyerhaeuser Timber Company, Tacoma, Wash., a corporation of Washington
No Drawing. Application June 21, 1951, Serial No. 232,863
19 Claims. (Cl. 18—47.5)

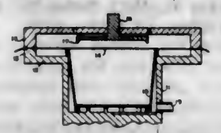
6. A method of making a hot pressed hard rigid board of the character of lumber comprising the steps of admixing wood particles and a separated cork fraction of the bark of a coniferous tree, the latter being in an amount of at least 5% of the mixture, and pressing the mixture under conditions of heat, pressure and time sufficient to increase the density of the mixed mass into a hard compact board and to cause the cork component to flow into intimate bonding admixture with the wood particles.

2,736,064
EXTRUSION MOLDING OF PERFLUOROCHLOROCARBON PLASTICS
Louis C. Rubin, West Caldwell, N. J., assignor to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware
Application November 25, 1953, Serial No. 394,300
16 Claims. (Cl. 18—55)



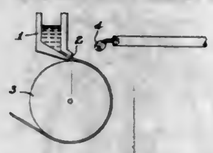
1. In a process for shaping in an extrusion machine a thermoplastic material comprising a trifluorochloroethylene polymer, the steps which comprise: heating said material; moving said heated material through an extrusion chamber; extruding said heated material through a die land at a predetermined extrusion pressure and extrusion temperature above its conversion point; passing said heated extruded material directly into and through a second die provided with cooling means, said second die having a cross-section not larger than the cross-section of said first die and being insulated from said first die, whereby transfer of heat from said first die is substantially reduced; and in said second die cooling said extruded material through a critical range extending from its conversion point to at least about 25° F. therebelow.

2,736,065
METHOD OF FORMING LINERS FOR PAPER CONTAINERS
Isaac L. Wilcox, Fulton, N. Y., assignor to Oswego Falls Corporation, Fulton, N. Y., a corporation of New York
Application August 31, 1953, Serial No. 377,576
2 Claims. (Cl. 18—56)



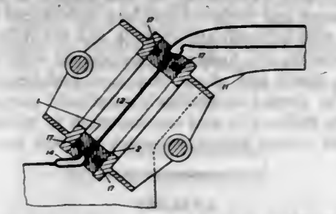
1. The method of forming liners from thin sheet plastic material for paper containers, the improvement consisting in positioning a heated sheet of the plastic material on the open end of the container, securing the marginal portion of the sheet against movement, engaging an annular area in the central portion of the sheet by a plunger, drawing the sheet partially into the container by the plunger and thereupon applying fluid pressure to the outer surface of the sheet in excess of the fluid pressure between the sheet and the inner surface of the container.

2,736,066
PROCESS FOR FILM CASTING
William Anthony Chren, Wilmington, Del., and Charles H. Hofrichter, Jr., Madison, Conn., assignors to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application October 28, 1952, Serial No. 317,202
2 Claims. (Cl. 18—57)



1. In the process wherein molten, thermoplastic, film-forming, synthetic, polymeric material is extruded in the form of a thin film onto a moving quenching surface and longitudinal stretching forces are imposed on the freshly extruded film prior to quenching, the improvement which comprises directing a localized jet of inert gas against the upper surface of the film adjacent each side edge thereof only, at the point where said side edge of the film first contacts the quenching surface, and with sufficient force to effect firm contact between the film and said quenching surface, whereby the edges of the film are caused to firmly adhere to the quenching surface at said point.

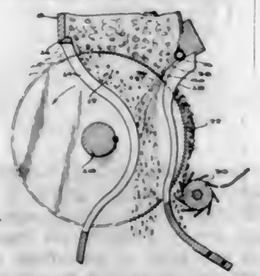
2,736,067
BEDDING AND POINTING OF FIXED GLASSES ON MOTOR CAR BODIES
Antonio Boschi, Milan, Italy, assignor to Pirelli Societa per Azioni, Milan, Italy, a limited liability company of Italy
Application November 26, 1951, Serial No. 258,248
Claims priority, application Italy December 22, 1950
5 Claims. (Cl. 18—59)



1. A method of fixing an unframed windscreen, window or like glass panel in its opening in an already finally shaped and enamelled motor car body, said method comprising the steps of (1) assembling in predetermined position relatively to one another and to said opening (*a*) the panel to be fixed, said panel being placed in the position it has finally to occupy in the opening, (*b*) two internally heated mutually complementary mould halves, said mould halves being so placed, one on either side of a marginal portion of the panel extending along the edges thereof and also of a marginal portion of the car body extending along the edge of the opening therein, as to define a closed space into which said marginal portions extend with a gap between them, one of said mould halves when so placed being on the outside of the car body and the other on

the inside thereof, and (*c*) a mass of thermo-curing jointing material in uncured condition, said mass filling said space; (2) applying by means of said mould halves heat and pressure to said material filling said space so as to cure the same in situ therein, transforming it into a moulding constituting a permanent connection between the panel and the car body, said moulding having the interior shape of the mould halves and being permanently bonded to said marginal portions; and (3) removing the mould halves from the said moulding.

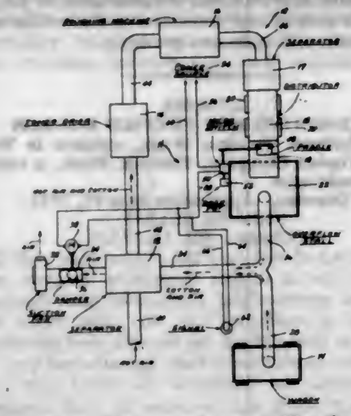
2,736,068
TRASH REMOVING MEANS FOR COTTON GINS
Tino S. Lopez, Maiaga, N. Mex.
Application January 16, 1953, Serial No. 331,529
1 Claim. (Cl. 19—59)



In a cotton gin having a roll box, a plurality of spaced gin saws, and a huller rib disposed between each pair of adjacent gin saws; a gin lambrequin construction comprising an elongated air supply tube adapted to be connected in communication with a source of air under pressure, spaced moisture and heat supply tubes connected in communication with said air supply tube and adapted to be connected in communication with a source of moisture and a source of heat respectively, control means in said moisture and heat supply tubes for regulating the supply of moisture and heat entering into said air supply tube, a plurality of long lambrequin prongs spaced longitudinally of said air supply tube; and a plurality of short, tubular lambrequin prongs alternating with the long prongs and communicating with the interior of the air supply tube, said short lambrequin prongs being disposed in the planes of the gin saws of a cotton gin and having nozzles arranged transversely of said planes, to direct air under pressure and moisture and heat introduced into said air supply tube substantially radially and inwardly of each gin saw adjacent the huller ribs associated with said saw, thereby to direct jets of air, moisture and heat through cotton to be ginned immediately after said cotton passes between the huller ribs and causing trash to be blown out of the seed cotton before it enters the roll box.

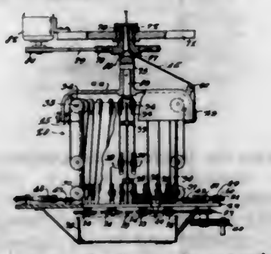
2,736,069
AUTOMATIC CONTROL FOR COTTON PROCESSING EQUIPMENT
Orville Mitchell, Dallas, Tex., assignor to John E. Mitchell Company, Dallas, Tex., a corporation of Missouri
Application August 15, 1951, Serial No. 242,026
5 Claims. (Cl. 19—69)

1. A device of the type described, comprising means for processing cotton including a distributor having an overflow outlet; means for causing the cotton to flow through the processing means; means for introducing cotton into the processing means including a suction fan, a pipe connected to the inlet of the suction fan, and a motor operated damper valve in the pipe for controlling the flow of air therethrough; and means for stopping the introduction of cotton into the processing means when the quantity of cotton flowing from the overflow outlet of the distributor exceeds a predetermined amount, said last named means including a switch responsive to the flow of said predetermined amount of excess cotton, said switch



being connected to said motor for controlling the operation of said damper valve.

2,736,070
METHOD AND APPARATUS FOR PRODUCING FIBERS
Warren Wendell Drummond, Newark, Ohio, assignor to Owens-Corning Fiberglas Corporation, a corporation of Delaware
Application May 31, 1950, Serial No. 165,260
6 Claims. (Cl. 19—144)

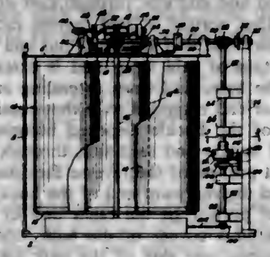


1. Apparatus for collecting and conveying fibers including a support; an endless cable; guiding means for supporting said cable whereby portions thereof are disposed in adjacent relation presenting fiber collecting surfaces; means for driving said cable at a substantially constant speed to move the fiber collecting surfaces simultaneously in one direction; means movable relative to the collecting surfaces for depositing fibers on said surfaces; means for establishing tension in said cable, said cable guiding means being arranged to modify the direction of movement of the fiber collecting surfaces to effect a discharge of the collected fibers therefrom.

2,736,071
APPARATUS FOR COILING SLIVER IN CANS
George Forsythe, Ballardvale, and Harold W. Russell, Andover, Mass., assignors to Pacific Mills, Lawrence, Mass., a corporation of Massachusetts
Application May 31, 1952, Serial No. 291,016
4 Claims. (Cl. 19—159)

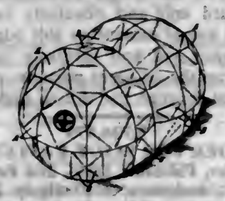
3. In an apparatus for coiling sliver in a cylindrical can, the combination of a table for supporting a plurality of such cans, rotary calender rolls located above said cans to deliver sliver to one of said cans, means to drive said calender rolls, means for bodily revolving said table in a horizontal orbit in its plane to move the can being filled about an axis displaced from the axis of the can, and means operating in timed relation to the rotation of

said calender rolls periodically to rotate about a different axis said second-mentioned means and said table in a horizontal plane the fraction of a revolution represented



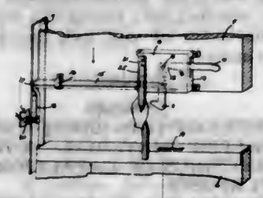
by the reciprocal of the number of cans to periodically displace the can being filled and replace it by an empty can.

2,736,072
BUILDING UNITS
George Bryant Woods, Washington, D. C., assignor to Spheric Structures, Inc., Washington, D. C., a corporation of Delaware
Application July 31, 1951, Serial No. 239,500
9 Claims. (Cl. 20—2)



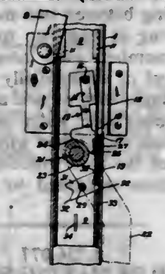
1. A building unit for use in erecting shelters of generally spherical contour comprising, four side members joined together at their ends to form a perimetric frame, at least two adjacent said side members being arcuate from end to end in the same depthwise direction, a cover of flat sheet material bridging said frame and having its edges bent to conform to the shapes of the edges of said side members upon which it rests and joined thereto, said cover having a planar area bounded by straight lines the corners of which intersect the side edges of the cover and triangular areas at the corners of said cover which are of cylindrical curvature.

2,736,073
FLEXIBLE SAFETY ELEVATOR DOOR PULL
Charles E. Pardoe, Lewistown, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application November 6, 1952, Serial No. 319,028
2 Claims. (Cl. 20—19)



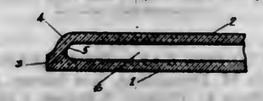
1. In combination, a vertically movable elevator door, an elongated pull strap affixed to the door a predetermined distance from the bottom edge of the door whereby the strap extends below the bottom edge of the door, pockets formed within the strap which are uniformly spaced lengthwise of the strap, and weights in the pockets to cause the free end of the strap to hang vertically downward at all times and thereby prevent it from curling under the edge of the door.

2,736,074
CONTROL MECHANISM FOR MULTIPLE SASH WINDOW STRUCTURES
Louis E. Deruette, San Francisco, Calif.; Teresa Margaret Deruette, administratrix of said Louis E. Deruette, deceased; assignor to The Brookman Co., Inc., San Francisco, Calif.
Application February 23, 1952, Serial No. 273,032
10 Claims. (Cl. 20—42)



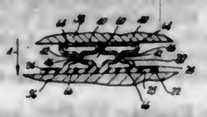
1. In a multiple sash window structure of the character described, the combination with a plurality of swingable sashes mounted on a frame and a connecting mechanism for operating said sashes, said mechanism being operable by manipulation of one of said sashes as a control sash to connect said sashes together for operation in unison and to permit independent operation of said control sash, said connecting mechanism including a travel member; of a locking mechanism to prevent the movement of said travel member for opening said sashes when said control sash is closed, comprising, a lock bolt supported for actuation by the closing of said sashes, and a keeper associated with said travel member for alignment and engagement with the lock bolt when said sashes are closed, said keeper being of such length as to be engageable by said lock bolt prior to the complete closing of said sashes as said sashes approach their closed position.

2,736,075
PRESTRESSING DOUBLE GLAZING UNITS
Arvid H. Baker, Port Allegany, Pa., assignor, by mesne assignments, to Pittsburgh Plate Glass Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application September 17, 1949, Serial No. 116,308
4 Claims. (Cl. 20—56.5)



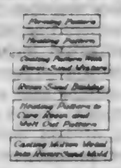
1. A hermetically sealed multiple glazed unit for use as a closure for openings in ground-supported building structures comprising spaced substantially flat sheets of glass fused at their marginal edges, the inside surfaces of the fused edges being in the form of a rounded, substantially semi-circular fillet and the unit containing a gas sealed therein at conditions of pressure and temperature, at least one of which sealing conditions is different from ambient pressure and room temperature at the time of sealing said unit, the glass adjacent the outside surfaces of the fused edges comprising said fillet being stressed in a greater degree of compression and a lesser degree of tension at all conditions of use of said multiple glazed unit in said ground-supported building structures than said glass would be if the gas were sealed within said unit at said ambient pressure and room temperature at the time of sealing said unit.

2,736,076
SEALING STRIP
Russell J. Bush, Dayton, and Cletus L. Moorman, Trotwood, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application January 30, 1953, Serial No. 334,108
5 Claims. (Cl. 20—69)



1. An elongate composite elastomeric sealing strip adapted for sealing between two members comprising; a sealing strip having at least two spaced longitudinal extending sealing members each integrally associated with a base section and of substantially the same height and cross-sectional shape, each of said members being hollow and having opposed side walls adapted to buckle inwardly and contact each other when pressure is applied in the direction of the base whereby said members form two hollow sections separated by the buckled portion thereof.

2,736,077
METHOD OF MAKING SHELL MOLD COMPONENTS
Kenneth M. Bartlett, South Euclid, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application May 23, 1951, Serial No. 227,789
5 Claims. (Cl. 22—193)



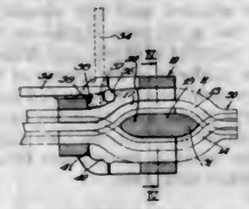
4. In the method of making mold components in which a pattern material is coated with particles of a refractory material bonded together with a thermosetting binder, the steps which comprise providing a pattern of a material having a melting point between the bonding temperature and the setting temperature of said thermosetting binder, coating said pattern with a dry mixture of said refractory material particles and thermosetting binder, heating the coated pattern for a time sufficient to build up a coating of said mixture on the surface of said pattern, and removing the pattern in liquid form from the built up coating.

2,736,078
COTTON BALE TIE MEANS
Harris M. Donaldson, San Mateo, and William D. Hebern, Kerman, Calif.
Application June 22, 1954, Serial No. 438,555
2 Claims. (Cl. 24—22)



2. In combination, a cotton bale maintained under compression, and tie means disposed therearound, said means comprising a flat sided wholly planar rectangular metal buckle of substantial thickness having obverse and reverse faces and forward and rearward ends, an elongated rectangular slot formed in said buckle extending in parallel relation with said ends and disposed closer to said forward end than to said rearward end, a relatively thin metal strap having one end thereof extending over that portion of said obverse face disposed between said rearward end and said slot, through said slot, and reversely beneath that portion of said reverse face disposed between said slot and said rearward end and beneath a substantial portion of said strap that is extended around a corner of the bale, said strap extending around the bale with its other end extended over that portion of said obverse face of the buckle disposed between the forward end of said buckle and said slot, through said slot, and beneath that portion of the reverse face disposed between said slot and the rearward end of the buckle and beneath a substantial portion of the other end of the strap that extends around a corner of the bale, said buckle being positioned along one side of the bale and being canted with its forward end being fulcrumed on the bale, the longer dimension of said slot being slightly greater than the width of the strap, and the shorter dimension of said slot being such that with the buckle in said canted position, said other end of said strap may be readily passed through said slot with substantially minimum clearance, whereby upon the bale being released from compression the first mentioned end of the strap will cause said buckle to pivot about the fulcrumed forward end thereof and snap the same flat against the side of the bale, and whereby that portion of the longer dimension slot edge adjacent the forward end and obversely faced end of the buckle and the longer dimension slot edge disposed adjacent the rearward end and reversely faced end of the buckle will crimp the adjacent portions of the end of the strap last passed through the slot to prevent slippage.

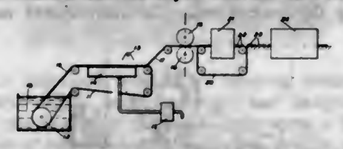
2,736,079
SLIDER FOR SLIDE FASTENERS
Karel Jan Staller, Fairborn, Ohio, and Emil F. Svec, New York, N. Y., assignors to Flexigrip Inc., New York, N. Y., a corporation of New York
Application February 8, 1952, Serial No. 270,682
2 Claims. (Cl. 24—201)



1. In a slider for engaging and disengaging overlapping marginal portions of a pair of flexible slide fastener members upon reciprocable movement along said marginal portions, a lock member having first abutment means cammingly engaged within the slider for pressing a portion of said lock member into engagement with one of said marginal portions on longitudinal movement thereof relative to the slider, and second abutment means on said lock member interlockingly engageable within the slider on pivotal movement of said lock member about said first abutment means.

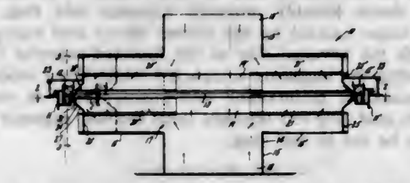
2,736,080
MANUFACTURE OF THIN SHEETS OR PLATES OF HEAT-TREATED MATERIAL SUITABLE FOR THE DIELECTRICS OF CAPACITORS AND FOR OTHER PURPOSES
Herbert Walker and Tzu En Shen, London, England, assignors to British Dielectric Research Limited, London, England, a British company
Application February 28, 1951, Serial No. 213,107
Claims priority, application Great Britain March 9, 1950
6 Claims. (Cl. 25—156)

1. A method of manufacturing a thin, strongly coherent electrically insulating sheet from a ceramic powder which comprises preparing a suspension of cellulose fibers and said powder in an aqueous liquid by a beating process, taking up a layer of said suspension of not more than about 10 mils thickness on a pervious support, the relative proportions of cellulose and ceramic powder in said suspension being such that at least 95% by weight of the solid content of said layer consists of said powder,



draining liquid contained in said layer through said support, drying said layer until it is self supporting, removing said layer as a sheet from said support, consolidating said sheet by the application of pressure and heating said sheet under oxidising conditions first to burn off the cellulose and then at a higher temperature to sinter said powder and form a sheet of strongly coherent material.

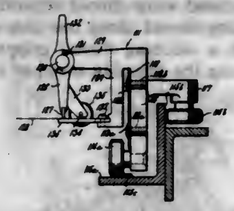
2,736,081
SELVEDGE DRIER-NOZZLE
Julien Dungler, Basel, Switzerland
Application December 6, 1951, Serial No. 260,257
7 Claims. (Cl. 26—60)



6. A tentering machine for treating cloth and like web material comprising oppositely disposed rows of nozzle means, opposite and substantially horizontal end walls defining adjacent ends of said nozzle means to thereby provide a path along which said cloth is moved for treatment by fluid discharged from said nozzle means, conveyor means arranged adjacent the lateral ends of said rows of nozzle means for engagement with the side edges of said cloth to thereby move the latter through said path intermediate said rows of nozzle means, said end walls of said nozzle means being provided with respective slots extending in crosswise direction to the length of said cloth, whereby said cloth may be subjected to uniform treatment of fluid when discharged from said slots of said nozzle means, and triangular-shaped wall extension portions, each wall extension portion forming a corresponding lateral continuation of the end wall of a respective nozzle means and being arranged adjacent said conveyor means, said extension portions being provided with additional slots directed to said conveyor means and to said side edges of said cloth when engaged by said conveyor means, said additional slots and said slots of said end walls terminating in a common horizontal plane, some of said additional slots extending in a direction angularly to that of said slots provided in said end walls.

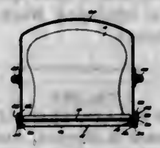
2,736,082
CLOTH ENGAGING MEANS
Julien Dungler, Basel, Switzerland
Application September 2, 1950, Serial No. 183,035
6 Claims. (Cl. 26—61)

1. The combination, with a movable steel band, of tentering clip devices including cloth engaging means spaced from one of the faces of said steel band, and a support for said cloth engaging means, said support being in contact with only the other of the faces of said steel band, and fastening means securing said support to said steel band, said support being provided with an extension overlying but spaced from said one of said band faces,



said fastening means comprising at least one screw bolt, said extension being provided with a cutout giving access to said screw bolt.

2,736,083
COMBINATION CASKET AND BURIAL VAULT
Don A. Rogers, Oklahoma City, Okla.
Application April 18, 1952, Serial No. 282,931
1 Claim. (Cl. 27—35)

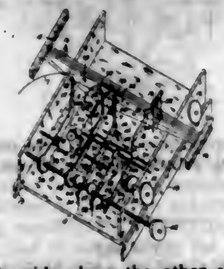


A combination casket and burial vault comprising a casket having a bottom wall and upwardly and inwardly extending side walls on said bottom wall, an outwardly extending flange on said bottom wall extending around the perimeter thereof, said side walls having an upwardly and inwardly extending groove therein extending around the perimeter of its junction with said flange, a sealing gasket of yielding material seated on said flange and in said groove, a hollow cover seated on the gasket and said flange wholly enclosing the side walls and top of said casket, an outwardly extending flange carried by said cover extending around the periphery thereof adjacent the flange of the bottom and said casket, said bottom wall of said casket having a recess on the lower side thereof, said last mentioned flange having spaced openings therethrough, clamp hooks having a threaded stem extending through said openings and an arm perpendicular to one end of said stem projecting beneath the bottom side of said bottom wall and inclined upwardly and inwardly at one end thereof remote from said stem for engagement within said recess, a fastening means engaging said clamping means upwardly of said openings for clamping said cover on said casket and compressing said gasket so that the gasket fills the groove and the gasket clamped between the cover and casket forms an hermetic seal between said casket and the cover for holding the cover in position on the casket.

2,736,084
DEVICE FOR ENSURING THE CORRECT SEQUENCE OF THREADS IN A WARP
Svend Sigurd Christie Fleischer, Charlottenlund, Denmark
Application April 20, 1955, Serial No. 502,587
7 Claims. (Cl. 28—22)

1. A device for ensuring the correct sequence of threads in a warp from which threads or thread groups are to be separated singly, comprising a carriage arranged for displacement transversely in relation to the warp, a plurality of wheels mounted on the carriage, a driving shaft rotatably journalled within the said carriage, means for rotating the said shaft, within the carriage a thread separating member for separating threads singly from the warp and operated from said driving shaft, a guide mem-

ber for a stitch forming thread, means attached to the said driving shaft for actuating the guide member in time with the aforesaid warp thread separating member to place the stitching thread along one side of the separated warp thread, a stitching thread gripping member, means for displacing the gripping member in time with



the said thread guide along the other side of the separated warp thread through a previously formed stitching thread loop in order to form a loop encircling the said separated warp thread, and a hook member arranged to engage and hold the separated warp thread with the encircling stitching thread.

2,736,085
METHOD OF GRAIN FLOW CONTROL
Edwin Parre and Gordon R. Rogers, Aurora, Ill., assignors to Stoner Manufacturing Corporation, Aurora, Ill., a corporation of Illinois
Application December 24, 1951, Serial No. 263,050
2 Claims. (Cl. 29—1.3)



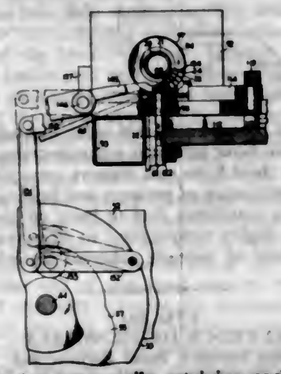
1. In the process of making a shaped metal body with an external circumferential shear-proof rim at one end which comprises forming a slug having its grain flow parallel to its axis with a reduced outside dimension at one end, pressing it in a die cavity to fold the material in the area of the reduced dimension outwardly so as to fill the void initially present in the die cavity because of the reduced dimension with the metal having its grain flow perpendicular to the slug axis.

2,736,086
CORROSION-RESISTANT CEMENTED TITANIUM CARBIDE MATERIAL
Thomas Raine, Bramhall, Cheshire, England, assignor to American Electric Metal Corporation, Yonkers, N. Y., a corporation of Maryland
No Drawing. Application May 22, 1953, Serial No. 356,873
2 Claims. (Cl. 29—182.7)

1. A shaped body of high hot strength and resistance to corrosion in oxidizing gases at high temperatures, 40% to 60% of said body consisting principally of titanium carbide, the balance of said body consisting of at least 10% and up to 30% chromium, 4% to 5% cobalt and as balance nickel, said body having been shaped after presintering at a temperature below about 1300° C. and further sintered at an elevated temperature above about 1300° C.

2,736,087
ASSEMBLING DEVICE
Robert Stevens, Boston, N. Y., assignor to Wiesner-Rapp Co., Inc., Buffalo, N. Y.
Application January 15, 1952, Serial No. 266,483
5 Claims. (Cl. 29—205)

3. In a device for assembling commutator segments, an assembling ring formed with a circular cavity and a radial slot extending downwardly therefrom, means for successively placing individual segments within the cavity of said ring comprising lifter means for feeding said segments into the cavity through said slot, means for periodically operating said lifter means in intermittent manner, pusher means for moving each segment around in the cavity after it is fed thereto, means for periodically operating the pusher means in intermittent manner,



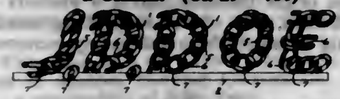
detent means for temporarily retaining each assembled segment in its initial assembled position, a rotatable presser sleeve slidably mounted adjacent said ring, a presser finger carried by the presser sleeve and engageable with the advance side of the first fed segment for maintaining the segments compacted while being assembled, means for maintaining said presser finger in contact with said first fed segment until the last segment is ready to be fed to said ring.

2,736,088
TOOL FOR REMOVING SNAP STRIPS
John R. Thygeson, Fox Chase Manor, Abington Township, Philadelphia County, Pa., assignor to Proctor and Schwartz, Inc., Philadelphia, Pa., a corporation of Pennsylvania
Application February 18, 1953, Serial No. 337,587
5 Claims. (Cl. 29—270)



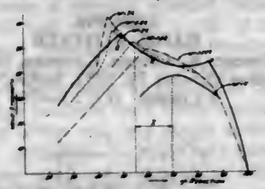
1. A tool for removing flanged snap strips from wall structures comprising an elongated handle, a head at one end of the handle comprising a base extending transversely of said handle and having side walls extending outwardly from the opposite ends of said base portion and terminating in inwardly turned flanges disposed substantially parallel to the base portion with their free edges relatively spaced apart and arranged to engage between the wall structure and the flanges of the snap strip as the tool is manipulated in a direction longitudinally of the snap strip, said free edges of the flanges converging for a portion of the length of the head from the leading end thereof and merging into inturned cam portions disposed substantially normal to the flanges, said cam portions being of gradually increasing height lengthwise of the head and operable upon movement of the tool longitudinally of the snap strip to force the flanges of the snap strip outwardly away from the wall structure and disengage the snap strip therefrom.

2,736,089
METHOD OF MAKING SIGNS OF CHAIN
John Dewitt Cooper, Jasper, Ala.
Application March 16, 1953, Serial No. 342,553
2 Claims. (Cl. 29—460)



1. An improved method of forming letters, ciphers, numerals, initials, arms, symbols, and designs, and the like by placing parts of metal chain upon a flat surface in shapes of letters, ciphers, numerals, initials, arms, symbols and designs and then spot welding the chain links together where they make contact with each other, then attach by spot welding the thus assembled chain parts to a supporting metal member, then painting same.

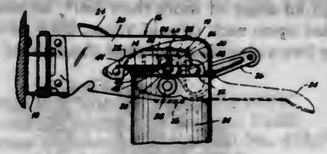
2,736,090
COLD PRESSURE WELDING
Anthony Reginald Sowter, Ickenham, and Raymond Kenneth Hilton, West Dulwich, London, England, assignors to The General Electric Company Limited, London, England, a British company
Application October 4, 1952, Serial No. 313,116
2 Claims. (Cl. 29—470.1)



1. A method of producing a cold pressure spot weld between two superposed metallic members of pressure weldable material comprising applying, without the use of external welding heat, indenting pressure to opposed rectangular welding areas of said members having a width substantially greater than one and a half times the thickness of the individual members, such that the characteristics of the strength of the joint as a function of increasing indentation increases at first relatively rapidly to a point of peak strength (Q, Fig. 5) within a region characterized by a change from a substantially adhesive joint between the members to a full and true weld at said peak strength point and that, with continued increasing indentation, the strength of the joint decreases gradually within a region (Q—S, Fig. 5) of true welding of the members at first substantially linearly within the first portion (Q—R, Fig. 5) of said true welding region and thereafter at an increasingly lesser rate within the subsequent portion (R—S, Fig. 5) of said true welding region as a result of work-hardening, and controlling the pressure applied to said members to cause indentations at said areas and effect welding thereat at a point within said first portion (Q—R, Fig. 5) of said true welding region sufficiently beyond said peak strength point (Q, Fig. 5) to insure welds of consistent maximum strength and substantially free from the effects of work-hardening of the weld metal.

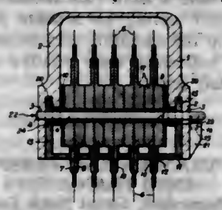
2,736,091
MAGNETIC LID LIFTER
Walter E. Moore, Bel Nor, Erich R. Andrae, Ferguson, and Fred F. Southeimer, Baden, Mo., assignors to Swing-A-Way Manufacturing Company, St. Louis, Mo., a corporation of Missouri
Application October 23, 1950, Serial No. 191,646
11 Claims. (Cl. 30—6.4)

1. The combination with a can opener including means for severing a top from a can, of magnetic means mounted on said can opener for retaining a severed top so as to prevent its falling into the open can including an enclosure, a permanent magnet having two dissimilar pole shoes se-



cured thereto, and means associated with one of said pole shoes suspension mounting said permanent magnet in said enclosure.

2,736,092
MACHINE FOR MINCING FOODSTUFF
Edouard Joyet, Lausanne, Switzerland
Application May 25, 1953, Serial No. 357,094
2 Claims. (Cl. 30—307)

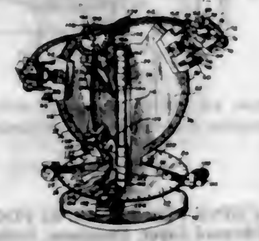


1. In a device for mincing foodstuff, an elongated upwardly convex casing having substantially a constant width over its length, the shape of said casing being adapted to constitute a handle for reciprocating the device, said casing having a lower opening and comprising two opposite walls provided with alined bearings located in recesses provided on the inside of said opposite walls, a spindle slidably mounted in said bearings, a sleeve revolubly fitted on said spindle between said alined bearings, a row of coaxial holding and spacing discs and a row of circular coaxial knives tightly fitted on said sleeve, whereby each circular knife is clamped between two adjacent stiffening discs which comprise a thick central portion for spacing purpose and an annular peripheral thinner portion, a lower cover adapted to close said lower opening and formed with parallel slots arranged for the passage therethrough of said peripheral thinner portions of the corresponding stiffening discs with a small clearance, said cover having two upstanding opposite side walls provided with alined perforations for the passage of said spindle therethrough, said side walls being partly inserted in said recesses provided in the inside of each of said opposite walls of the casing, each of said perforations of the cover side wall being located between the adjacent bearing in the casing and the corresponding end of said sleeve, whereby, upon sliding and removal of said spindle, the lower cover as one unit and the rows of stiffening discs in unison with the row of said circular knives fitted on said sleeve, as a second unit, can immediately be removed from the casing through the lower opening thereof.

2,736,093
FIX FINDER
Louis J. Zerbee, Bellefontaine, Ohio
Application September 8, 1951, Serial No. 245,740
5 Claims. (Cl. 33—1)

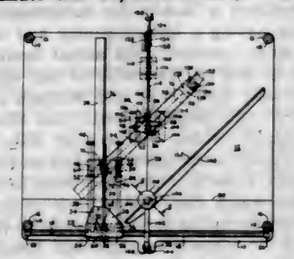
1. In a navigational instrument adapted to find fixes in the polar to equatorial regions, a base, a graduated circular scale including degree numerals reading to 360° and being fixedly mounted upon the base and concentric therewith, a centrally disposed standard fixedly attached to the base and projecting upwardly and vertically from the center of the base, a pair of vanes, means for ro-

tatably supporting the vanes upon the standard, the standard forming the sole support for the vanes, the vanes being supported for free rotation upon the standard through an angle of more than 360°, an arcuate quadrant mounted upon each of said vanes, each of said quadrants having free swinging movement through an angle of more



than 360° and over the polar region in any position of the supporting vane, a third vane rotatably mounted upon the standard and having an arcuate portion extending across the top of the standard, and means associated with the vanes for indicating their relative angular positions on the graduated scale.

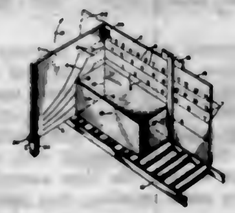
2,736,094
MEANS FOR TRANSLATING PERSPECTIVE VIEWS INTO PLAN VIEWS
Sol Domesbek, Great Neck Township, Nassau County, N. Y.
Application August 13, 1952, Serial No. 304,232
15 Claims. (Cl. 33—1)
(Granted under Title 35, U. S. Code (1952), sec. 266)



13. A plotting device comprising a plotting-surface member, a parallel arm disposed against said plotting-surface member, mechanism for guiding said parallel arm in a first line of direction across said plotting-surface member, a horizon arm, a horizon arm guide member secured to said plotting-surface member, means for mounting rotatably one end of said horizon arm with respect to said parallel arm, means for mounting rotatably and slidably the other end of said horizon arm with respect to said horizon arm guide member, means for adjusting the position of said horizon arm guide member in a second line of direction perpendicular to said first line of direction, and an iso-arm disposed rotatably with respect to said plotting surface member and having its axis of rotation perpendicular to and in line with said second line of direction.

2,736,095
VOLUME MEASURING DEVICE
Leonard Krauss, San Francisco, Calif., assignor to Regents of The University of California, Berkeley, Calif., a corporation of California
Application July 19, 1954, Serial No. 444,269
8 Claims. (Cl. 33—1)

1. A device for measuring the volume of solids of regular cross-section throughout their length comprising a first plate having an origin point, an origin line, and a plurality of indicating lines marked thereon, each said indicating line being the locus of predetermined points on regular plane figures of equal area located with reference to said origin point and said origin line, a second plate perpendicular to and intersecting said first plate along said origin line and having a plurality of scales marked thereon, each of said scales being identified with one of said indicating lines and having increments equal



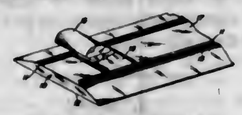
to the reciprocal of said area related to said one indicating line whereby, when the cross-section of a solid of the type described is so referenced with respect to said origin point and said origin line and with its predetermined point on said one indicating line, the volume of said solid is indicated on the said scale related to said one indicating line opposite a second predetermined point on said solid.

2,736,096
RADIO PLOTTER
Clarence K. Greene, Cananea, Mexico
Application October 29, 1951, Serial No. 253,685
4 Claims. (Cl. 33—75)



1. A device of the character described, comprising the combination of: a protractor having a slit intercepting a central opening; an arm integrally formed with and projecting from said protractor, said arm having a lateral edge extending radially from said central opening calibrated in distance graduations; a pivot member having a headed end; and a mounting disc at the other end of said pivot member, having an adhesive surface, said pivot member being adapted for mounting on a chart by engaging said adhesive surface against a chart surface at a desired position on the chart to enable effecting snap action connection and disconnection of the protractor with said pivot member at a desired position by inserting the pivot member head through said central opening.

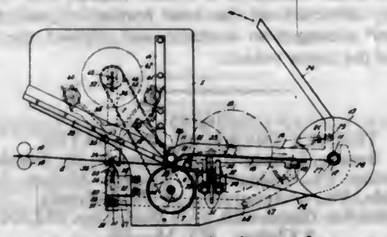
2,736,097
MAGNIFYING MEASURING SCALE
Charles G. Coleman, Jr., Suitland, Md.
Application February 13, 1953, Serial No. 336,895
2 Claims. (Cl. 33—107)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A measuring instrument comprising a transparent member having an upper and a lower surface and having at least one straight edge, first spaced parallel longitudinal guideways on said upper surface, a transparent slide mounted on said upper surface between said guideways for longitudinal motion along said upper surface, second spaced parallel transverse guideways mounted on said transparent slide, magnifying means slidably mounted on

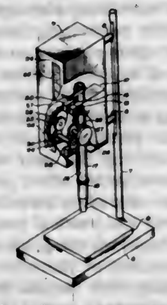
said slide between said second guideways, and calibration markings positioned across the entire of said lower surface at right angles to said straight edge.

2,736,098
WINDING, MEASURING, AND SEVERING MECHANISM
Samuel Cohn and Jules G. Walter, New York, N. Y., assignors to Samcoe Holding Corporation, Woodside, N. Y., a corporation of New York
Original application December 13, 1945, Serial No. 634,701, now Patent No. 2,622,817, dated December 23, 1952. Divided and this application May 6, 1952, Serial No. 286,396
5 Claims. (Cl. 33—130)



1. In a fabric winding mechanism, a frame, a driven roll in the frame, a mandrel adapted initially to engage the driven roll and to support a roll of fabric as it is formed, pivoted guideways for the mandrel, means for severing the fabric positioned to engage the fabric when the guideways have been turned about their pivots, a pair of yardage counters each being operatively engageable with said driven roll, and means actuated by movement of said guideways to place said yardage counters alternately into operative engagement with said driven roll whereby said yardage counters are operated alternately each for a period between movements of said pivoted guideways.

2,736,099
CORE SAMPLE MICROMETER
Rudolf G. Fischer, Dallas, Tex., assignor, by mesne assignments, to Socony Mobil Oil Company, Inc., a corporation of New York
Application August 18, 1952, Serial No. 305,047
5 Claims. (Cl. 33—147)



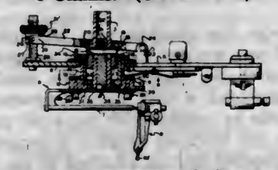
1. A core sample micrometer comprising in combination a flat base, a substantially flat plate secured to the upper side of said base, a standard secured to said base and extending upwardly therefrom, a vertical rod movably secured to said standard, a tip threadedly secured to the lower end of said vertical rod, a rack bar made integral with said vertical rod, a gear engaging said rack bar for raising and lowering said vertical rod, an operating knob secured to said gear, a pointer arm secured to the upper end of said vertical rod, a vertical scale secured to said standard and cooperating with said pointer arm, a drum scale inscribed on its outer periphery into a plurality of equal parts, a gear fixed within and to a shaft of said drum scale, a gear connection between said gear and said rack bar whereby said drum scale is rotated one complete revolution for each unit of vertical movement of said vertical rod, and a reference point secured to said standard adjacent said drum scale.

2,736,100
HEIGHT MEASURING DEVICE
Irving J. Landau, Los Angeles, Calif.
Application October 4, 1954, Serial No. 459,981
2 Claims. (Cl. 33—169)



1. A height measuring device comprising: a vertically disposed elongated hollow frame having a vertical channel therein and a vertical slot in communication with the channel; a carrier including a body slidably mounted in the channel, a forwardly projecting integrally formed portion extending through the slot and a pair of integrally formed laterally spaced parallel wings extending upwardly from said portion and spaced forwardly out of contact with the body; and an elongated arm pivotally attached to said wings for movement about a horizontal axis, said arm and the inner opposed surfaces of the wings being provided with interengageable retaining means for holding the arm in upper position with its inner portion between the wings.

2,736,101
TRAMMING TOOL
Carl T. Blume, West Newton, Mass.
Application July 3, 1950, Serial No. 171,977
8 Claims. (Cl. 33—172)

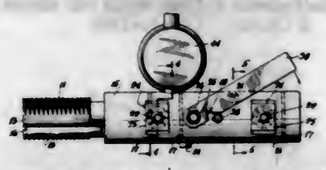


1. In an electrical tramming indicator, a stationary member, a rotatable member supported for rotation by the stationary member, a tramming unit supported by the rotating member including a tramming arm and point and an electrical translating device having a moving element supported by the tramming arm, a commutator coaxially mounted with respect to said rotatable members and rotated therewith, said commutator having four segments with a pair of diametrically opposite segments connected to said electrical translating device, a plurality of brushes connected to contact said commutator in different angular positions, switching means for selectively making connections to said brushes and indicating means connected to said switching means whereby the operation of said electrical translating device in different positions of the commutator contact with said brushes may be observed.

2,736,102
CONTRACTIBLE PLUG GAGE
Paul W. Johnson, Bloomfield, Conn., assignor, by mesne assignments, to The Johnson Gage Development Company, a corporation of Connecticut
Application January 24, 1950, Serial No. 140,336
12 Claims. (Cl. 33—199)

3. A contractible screw thread plug gage for internal threads comprising a pair of complementary gage mem-

bers each forming a segment whose outer periphery is less than half of a circle in cross section and having a chord between the ends of the outer periphery, an arcuate screw threaded gaging surface on a portion of the outer periphery of each gage member conforming to the arc of the desired internal screw thread, the threaded gaging surface of each member being diametrically opposite that of the other member, the remaining portion of the outer periphery of each gaging member being a clearance portion of a lesser dimension than the minimum diameter of the in-



ternal thread of a test part and each clearance portion being diametrically opposite that of the other member, means movably mounting at least one gage member with respect to the other for relative movement towards and away from each other in a plane in the region of forty-five degrees with respect to the chord of the gage members to contract the over all dimension of the gage members to less than the minimum diameter of the screw thread to be tested, and means spaced from the gage members to contract the same.

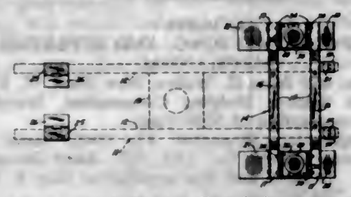
2,736,103
GAGE FOR CHECKING TAPERED THREADS
Lloyd L. Kahle, Cleveland, Ohio
Application June 4, 1953, Serial No. 359,538
15 Claims. (Cl. 33—199)



15. In a device for checking the characteristics of a tapered thread on a work piece, a body, a taper threaded adapter attached to the body and upon which a work piece may be threaded, a first plunger mounted on the body and movable by contact with the work piece when the latter is on the threaded adapter, a second adapter having a plain tapered surface attached to the body and upon which the work piece may be transferred, a second plunger mounted on the body and movable by contact with the work piece when the latter is on the plain adapter, a first calibrated dial fixed to the body, a gear wheel carried by the body, each of said plungers having a gear rack engageable with the gear wheel for rotating the same, a pointer rotatable by the gear wheel with respect to the first dial, a second calibrated dial mounted on the body and manually settable with respect to the pointer, said second dial being of transparent material and superimposed over said first dial.

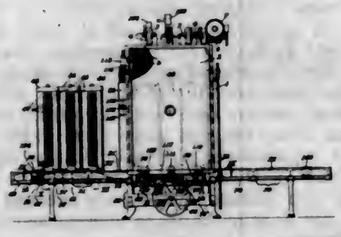
2,736,104
CAR LIFT WHEEL ALIGNMENT APPARATUS
Willard T. Sherman, Kaumeonga Lake, N. Y.
Application February 11, 1955, Serial No. 487,576
3 Claims. (Cl. 33—203.12)

1. In a motor vehicle lift device, a longitudinal main frame, a transverse subframe adjustably secured on the forward portion of said main frame, said subframe comprising a pair of transverse, inverted, channel-shaped bars having horizontal, downwardly offset opposite end portions on the opposite sides of the main frame, vertically adjustable support elements mounted on said end portions, respective trough-like members on the end portions of the bars, said trough-like members having upwardly offset opposite end flanges supportingly engaged on said support elements, indicator plates disposed in said trough-like members between said end portions, respective wheel alignment indicator discs rotatably mounted on said in-



dicator plates, said indicator discs being arranged to underlie the front wheels of a motor vehicle, and means adjustably mounted on the rear portion of said main frame and arranged to underlie and support the rear portion of the motor vehicle.

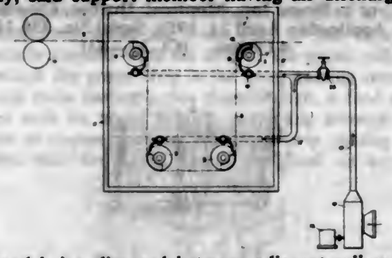
2,736,105
TEXTILE TREATING APPARATUS
Emil J. Berger, Lansdale, and Howard W. Matthews, Souderton, Pa., assignors to Dexdale Hosiery Mills, Lansdale, Pa., a corporation of Pennsylvania
Application October 30, 1951, Serial No. 253,936
9 Claims. (Cl. 34—45)



1. In a textile treating machine having a treating chamber with a door movable forwardly to open position in parallel relation to the front of the chamber, a guideway with straight horizontal sections longitudinally of the front of the chamber respectively beyond opposite sides of the latter, an auxiliary track section on the door registering with the stationary track sections when the door is open, carriages for the support of the textile material to be treated respectively associated with the stationary track sections, and a conveying element movable along the guideway; means for connecting the carriages to opposite ends of the conveying element so that one carriage is at the remote end of its track section when the other carriage is at the auxiliary track section on the door, said means comprising a toothed rack teeth on the conveying element; a gear wheel in mesh with the rack; a reversible motor for driving the gear wheel; a pair of gravity-influenced arms movable about pivots respectively at opposite ends of the conveying element, said arms respectively having lateral and vertical projections at their distal ends; and cam tracks on the guideways cooperative with the lateral projections of the arms for lifting the arms and thereby causing their vertical projections to engage the respective carriages in preparation for their advancement from the auxiliary track sections on the door to or from the respective stationary track sections.

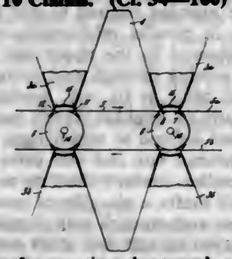
2,736,106
SUPPORT MEMBERS FOR WET, PRINTED WEBS
Bernard Offen, Chicago, Ill.
Application February 4, 1953, Serial No. 335,097
8 Claims. (Cl. 34—156)

1. In a support member for wet, printed webs, the combination of a shaft, rotatable rollers mounted on the shaft and spaced from each other to support a web passing thereover, and at least one stationary, sector-shaped support member adapted to receive air from a source of supply, said support member having air discharge open-



ings and being disposed between adjacent rollers to provide an air cushion to support a web passing over the rollers.

2,736,107
DRYING APPARATUS FOR LENGTHY WEB MATERIAL
Julien Dungler, Basel, Switzerland
Application March 6, 1952, Serial No. 275,083
Claims priority, application France March 16, 1951
10 Claims. (Cl. 34—160)



1. A machine for treating sheet, web and like lengthy material comprising a group of roller means mounted for rotation about spaced, parallel axes, a group of nozzle means arranged substantially opposite said roller means, respectively, and spaced therefrom to define therewith a predetermined substantially rectilinear path for said lengthy material, each nozzle means being provided with an end wall defining said path at said nozzle means, said end wall being provided with at least one pair of fluid outlets arranged coplanar with said end wall for facilitating discharge of jets of treatment fluid, and exhaust channels means arranged intermediate adjacent nozzle means for evacuating spent treatment fluid, each pair of said fluid outlets being arranged to direct said jets in planes asymmetrically with respect to the axis of the respective roller means opposite thereto and being spaced from the latter a predetermined distance ensuring positive linear guidance of said lengthy material in a direction transverse to the axes of said roller means and from one to an adjacent roller means, each fluid outlet of said pair of outlets being arranged on a respective side of the rotational axis of said roller means, one of said fluid outlets being arranged to direct the jet tangentially to the surface of the respective roller means.

2,736,108
DRYING ARRANGEMENT SUCH AS A TUNNEL KILN WITH TRANSVERSE CIRCULATION
Coert D. Muyderman, Utrecht, Netherlands, assignor to Nederlandse Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek ten behoeve van Nijverheid, Handel en Verkeer, The Hague, Netherlands, a corporation of the Netherlands
Application April 18, 1951, Serial No. 221,565
Claims priority, application Netherlands April 27, 1950
6 Claims. (Cl. 34—212)

1. A kiln for drying stock, comprising an elongated housing including transverse and longitudinal partition walls dividing the space within the housing in a longitudinal outer chamber transversely sub-divided in a plurality of compartments and a longitudinal inner chamber disposed within the outer chamber extending along the length of the housing and separated from the outer chamber by side walls and a top wall formed by the respective ones of said partition walls, the said inner chamber constituting a drying space for the stock to be dried, the side walls being formed with transverse passage openings connecting the inner chamber with said compartments, pairs of gas impervious deflectors, the deflectors of each pair being disposed in one of said compartments adjacent to opposite side walls of the inner chamber and slanted outwardly from the base of the respective side wall toward the juxtaposed housing wall to partition each of said compartments in an upper part and two lower parts, the latter being situated on opposite sides of the drying chamber, the upper part of each compartment forming a circulation path transverse to the housing and including the respective



juxtaposed section of the inner chamber, blower means in the upper part of each compartment for circulating a gaseous drying fluid through said transverse circulation paths, the said passage openings and the said deflectors effecting a substantially uniform distribution of the transverse fluid flow through the respective section of the inner chamber, inlet conduit means communicating with an upper compartment part situated near one end of the housing for feeding a gaseous drying fluid into the said compartment part, outlet conduit means communicating with the upper part of a compartment situated near the other end of the housing for discharging the drying fluid from said latter compartment part after the fluid has traversed all the upper compartment parts intermediate of the inlet and the outlet compartment part respectively and the inner chamber, and reflux conduit means connecting the outlet conduit means with the inlet conduit means for refluxing discharged drying fluid through the housing.

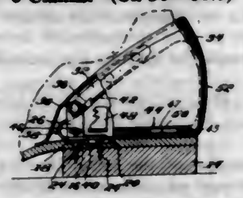
2,736,109
LAMINATED INSOLE
William M. Scholl, Chicago, Ill.
Application June 6, 1951, Serial No. 230,216
1 Claim. (Cl. 36—44)



A reversible insole for free disposition in an article of footwear comprising a ball portion, a shank portion and a heel portion, said ball, shank and heel portions consisting of a thin sheet-form member made of metal foil providing continuous upper and lower moisture impervious, heat reflective surfaces, a top cushioning member made of a layer of foam latex coextensive in area with said metal sheet-form member and being relatively thick with respect to said metal sheet-form member to provide a top shock absorber on one side of said metal sheet-form member, a bottom cushioning member made of a layer of foam latex coextensive in area with said metal sheet-form member and being of identical thickness with said top cushioning member to provide a bottom shock absorber on the opposite side of said metal sheet-form member, means securing said sheet-form member and said top and bottom cushioning members in a unitary laminar assembly with said sheet-form member disposed intermediate said top and bottom cushioning members and said members together forming said ball portion, said shank portion and said heel

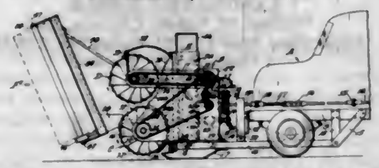
portion of the reversible insole, and a pair of top and bottom smooth fabric covering members relatively thin with respect to said cushioning members and being coextensive in area therewith fastened on the outside of said top and bottom cushioning members, respectively, to provide identical reversible surfaces on the top and bottom sides of the ball portion, shank portion and heel portion of the reversible insole for engaging the foot of a user, or upon reversal, for engaging the insole of an article of foot wear.

2,736,110
SHOE
Robert Henderson Hardimon, Memphis, Tenn.
Application July 31, 1953, Serial No. 371,575
6 Claims. (Cl. 36—58.5)



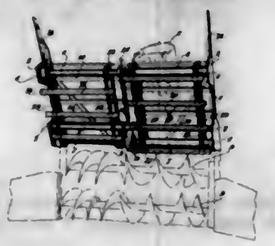
1. In a shoe having a heel, arms carried by the heel to move in vertical arcuate paths above opposite sides of the heel about a common axis adjacent the front of the shoe heel, lugs carried by the arms and extending laterally therefrom for movement therewith in vertical arcuate paths, a treadle carried by the heel to move above the heel about an axis which lies parallel to the common axis, springs carried by the shoe heel for moving the arms upwardly in their arcuate paths, and toothed quadrants carried by the treadle for movement thereby in paths which intersect the paths of movement of the lugs to engage the lugs and hold the arms against movement under the influence of the springs.

2,736,111
ROTARY SNOW PLOW
Anver B. Moen, St. James, Minn.
Application July 7, 1949, Serial No. 103,432
8 Claims. (Cl. 37—43)



5. A snow plow comprising a moldboard, a blower receiving centrally therefrom and discharging upwardly therefrom, supports projecting forwardly from the ends of said moldboard, a snow disintegrating conveyor working within said moldboard, said conveyor comprising a shaft journaled in said supports, concavo-convex arms mounted on said shaft and projecting radially outwardly therefrom, and flat cutter blades fixed to and across the outer ends of said arms to extend beyond opposite sides thereof, said arms being spaced from each other longitudinally of said shaft and outwardly and circumferentially from the central portions of said shaft in spiral patterns which are directed outwardly in a direction opposite to the direction of rotation of said shaft, the concave sides of the arms to the right and to the left of the central portion of said moldboard facing inwardly and the blades being of such number and width that the path cut by one blade during rotation of said shaft will overlap slightly the paths cut by adjacent blades, and means for rotating said shaft in a predetermined direction opposite to the direction of said spiral patterns.

2,736,112
SNOW THROWER RAKING MECHANISM
Ronaldo Boisvenuelt, Montreal, Quebec, Canada, assignor to Sicard Inc., Montreal, Quebec, Canada
Application April 21, 1953, Serial No. 350,167
4 Claims. (Cl. 37—43)



1. In combination with a snow thrower, a snow raking mechanism comprising a straight arm rigidly secured at each side of the thrower casing and extending upwardly and forwardly thereof, a transverse brace horizontally disposed and connecting said arms, a drive box secured to the middle portion of said brace, a first shaft passing through said drive box and journalled to said arms at its ends, a frame member secured to said brace and extending upwardly in parallel relationship with said arms, a journal box secured to the upper end of said brace, a second shaft passing through said journal box and journalled to said arms at its end, spaced flanges on said shafts, two pairs of sprocket wheels mounted on each of said shafts, and secured to said flanges, one pair on each side of said journal box and said drive box respectively, two pairs of endless chains trained on said sprocket wheels to connect said shafts, a plurality of spaced rake members secured at their ends to each pair of said chains, a driving gear wheel keyed to said first shaft and disposed within said drive box and means for rotating said driving gear wheel.

2,736,113
ADVERTISING DISPLAYS
James L. D. Morrison, Benton Harbor, Mich.
Application February 17, 1951, Serial No. 211,496
6 Claims. (Cl. 40—76)

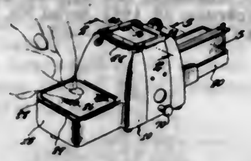


1. In an intelligence bearing rotating unit for a display surface or the like, each of said intelligence bearing units having three non-coplanar sides spaced from the axis of rotation of said unit and being rotatable into a position of juxtaposition with respect to the sides of like units to form said display surface, each of said units comprising an individual intermittently operated motor for turning said unit to a selected position, said motor having an armature adapted to be rotated through a limited angle substantially equal to 120°, a lock for locking said unit in a preselected position, means for releasing said lock upon the initial operation of said motor so that said unit may be rotated by said motor to a preselected position, and means for controlling said motor selectively in accordance with the desired intelligence to be displayed.

2,736,114
MACHINE FOR TAKING FINGER PRINTS
Theodore H. Krueger, Stratford, Conn., assignor to Better Packages, Inc., a corporation of New York
Application November 15, 1952, Serial No. 320,721
1 Claim. (Cl. 41—4)

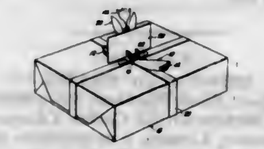
A fixture for taking finger prints comprising a central casing having a chamber therein of such size as to hold a roll of gummed paper, the top wall of the chamber

being substantially horizontal and constituting a table, a support in the chamber for supporting a roll of adhesive paper with its axis substantially horizontal, means for guiding the paper strip from the roll over said table with the ungummed side of the paper exposed, a tearoff blade supported above the front edge of the table and substantially parallel with the axis of the paper roll, and under which the paper strip is fed after passing over the table, said table having a slot therethrough, a feed roller mounted with its upper portion projecting through said slot so as to engage and feed the paper strip passing over the table, said feed roller being mounted on an axle



parallel with the axis of the roll of paper, said axle projecting at one side of said casing and having the means thereon by which the axle and feed roller may be rotated, said casing having a wing portion projecting from one side thereof, formed to hold a pad of finger treating preparation in a substantially horizontal position at a lower level than the level of said table, said casing carrying a second wing portion projecting from the side thereof opposite to the side at which the pad holding wing is located, said second wing portion having means for holding a moistener for the gummed tape projecting in a direction parallel with the axis of said paper roll, but at a lower level than said table.

2,736,115
INTERCHANGEABLE CENTER UNIT FOR DECORATIVE PACKAGE BOW
Bill Y. James, Miami, Okla.
Application April 12, 1954, Serial No. 422,345
1 Claim. (Cl. 41—10)



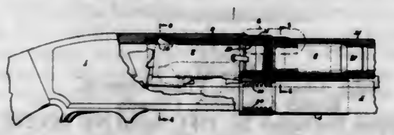
In a decorative package wrapping including a tape having a perforated stretch atop the package, a laterally extending bow having a perforated, central stretch atop said stretch of the tape, a fastener having its normally uppermost extremity headed to prevent passage of said extremity through the perforations of said stretches and the remainder thereof adapted to be initially passed through said perforations then bent laterally beneath the tape to prevent repassage therethrough, and a flat, ornamental card, the improvement of which consists of means attachable upon the bow by said fastener and adapted for receiving and positively holding the card in upright disposition, said means comprising a generally U-shaped holder having a flat bight and a pair of flat, opposed, spaced, parallel, upstanding legs, each leg having an uppermost edge, there being a straight, elongated slit in each leg extending downwardly therein from said uppermost edge thereof, said slits being in spaced, parallel alignment with each other defining a normally vertical plane perpendicular to the bight and each of the legs, the lowermost extremity of the slits being equally spaced above the bight, said slits each being adapted to receive and frictionally hold a lower portion of said card with the opposed sides of each slit oppositely engaging the card thereby releasably holding the latter, said bight being provided with an opening of size adapted to pass said remainder of the fastener before bending thereof and to prevent passage of said headed extremity thereof, said legs being sufficiently spaced to clear said headed extremity of the fastener, said lowermost extremities of the slits being sufficiently spaced above the bight to prevent engagement of the lowermost extremity of the card with the headed extremity of the fastener when the card is received by said slits and said headed extremity is operatively seated upon the bight between the legs.

2,736,116
METAL CHRISTMAS TREE
Viola C. Cummings, Miami, Fla.
Application June 23, 1953, Serial No. 363,529
4 Claims. (Cl. 41—15)



3. As a new article of manufacture, a metal Christmas tree fabricated from an empty tin can of cylindrical shape that has been emptied of its contents, and comprising a horizontally disposed base, said base being circular, an upright portion extending upwardly from said base and secured thereto, said upright portion being the seam of the tin can formed at the place where the can is initially closed during formation thereof, and a plurality of twisted limbs extending from one side of said upright portion, each of said limbs being in the shape of a cylindrical spiral and each including a substantially horizontal portion and a substantially vertical portion, the upper ends of said limbs being open to provide supports for candles.

2,736,117
FIREARM WITH ALUMINUM BARREL AND RECEIVER
Ralph E. Clarkson, Hamden, and Tuines W. van Wilgen, Branford, Conn., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application December 18, 1951, Serial No. 262,281
10 Claims. (Cl. 42—75)



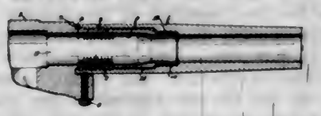
9. The combination in shotguns which comprises an aluminum receiver, a unitary liner-chamber having a receiver liner and a chamber liner, the receiver liner having a breech block and locking means therefor and being in threaded connection with the receiver, a rib on the liner-chamber located at the junction of the receiver liner and the chamber liner, exterior threads on the receiver liner and on the chamber liner, said receiver liner being threaded into the receiver, an aluminum barrel having interior threads in threaded connection with the chamber liner which is inserted into the barrel, said rib being in abutting engagement with the receiver and the barrel being in abutting engagement with the rib, said chamber liner having sufficient structural strength to contain the pressure of the explosion independently of the barrel.

2,736,118
FIREARM WITH CHAMBER MEMBER REMOVABLY CONNECTED TO RECEIVER
Ralph E. Clarkson, Hamden, and Tuines W. van Wilgen, Branford, Conn., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application December 18, 1951, Serial No. 262,282
3 Claims. (Cl. 42—75)



1. The improvement in firearms which comprises a chamber member of sufficient thickness and strength to contain the explosive force of a shell, an aluminum barrel mounted over the major portion of the chamber member in fixed connection with respect thereto, and means for removably connecting the chamber member to a receiver in an immovable operative position, whereby the chamber member and barrel are removable as a unit.

2,736,119
FIREARM HAVING CHAMBER MEMBER INTEGRAL WITH RECEIVER
Ralph E. Clarkson, Hamden, and Tuines W. van Wilgen, Branford, Conn., assignors to Olin Mathieson Chemical Corporation, a corporation of Virginia
Application December 18, 1951, Serial No. 262,283
2 Claims. (Cl. 42—75)



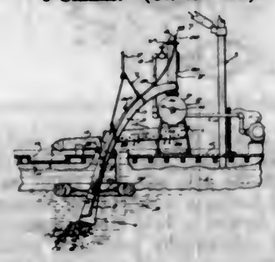
1. The improvement in firearms comprising a receiver, a chamber member integral with the receiver, a barrel mounted over the chamber member and removably but operatively connected thereto at a fixed position, the chamber member including a wall section defining a chamber for an explosive shell, said wall section being of sufficient thickness and strength to contain the force of an explosion of a shell therein, and a neck portion at the forward end of the chamber member, said barrel surrounding said neck portion and extending backward therefrom and over at least the major portion of said chamber, said neck portion having a reduced outside diameter and being sufficiently thin and lying sufficiently close to the barrel that on an explosion of a shell within said chamber it will expand within its elastic limits into sealing contact with the barrel.

2,736,120
DECOY
John Albert Lestin, Prince George, British Columbia, Canada
Application December 26, 1951, Serial No. 263,233
1 Claim. (Cl. 43—3)



A decoy fowl or bird comprising an inflatable body of desired shape having an air inlet passage in its bottom wall and an opening for reception of a socket member, an air tight compartment formed within said body centrally of the bottom wall and including a portion of the bottom wall as a part thereof, a wood block fitted within said compartment having a central vertical recess in alignment with the opening in the body, a socket member fitted in the recess of said block having an annular flange at its external end engaging the edge of the opening, and a stake having its upper end fitted in said socket and depending from the bottom of said body.

2,736,121
APPARATUS FOR HANDLING FISH OR THE LIKE
Howard J. Kimmerle, Los Angeles, Calif.
Application February 20, 1951, Serial No. 211,843
6 Claims. (Cl. 43—6.5)



1. Apparatus for handling fish in water that is exposed to atmospheric pressure including, a tank above the water, a control at the lower end of the tank adapted to pass water and fish from the tank, means exhausting air from the upper end portion of the tank to maintain a subatmospheric pressure in the top of the tank, an unrestricted flow line handling water and fish and having an open receiving end submerged in a fish carrying body of water and an outlet end open and communicating with the tank, the line being adapted to have water with fish therein flow therethrough due to the difference in pressures at the ends of the line, and flow inducing means in connection with the flow line aiding the said flow of water and fish due to pressure differential between the ends of the flow line.

2,736,122
MID-WATER TRAWL
Donald S. Johnson, Ketch Harbour, Nova Scotia, Canada, assignor to Drummondville Cotton Company Limited, Montreal, Quebec, Canada, a corporation of Canada
Application August 14, 1953, Serial No. 374,353
4 Claims. (Cl. 43—9)

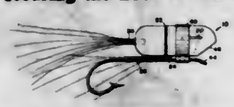


1. A door for a mid-water trawl, comprising a hollow body of frustoconical formation having open ends, the wider end of said conical body constituting the front end of said door and the narrow end of said conical body constituting the rear end of said door, reinforcing and connecting means mounted on said conical body in spaced apart relationship adjacent said front and rear ends respectively, said front connecting means being adapted to receive a tow line and said rear connecting means being adapted to receive a traction line extending from a net.

2,736,123
ARTIFICIAL LURE
Aldon M. Peterson, Deephaven, Minn.
Application June 24, 1954, Serial No. 439,043
5 Claims. (Cl. 43—42.09)

5. A fishing lure comprising a body with a channel on one side extending only part of the length of the body, said channel extending part of the length of the body

from one end thereof, the body having an annular groove extending therearound intersecting the channel, a band, a hook carried by the band, at least one detent in the band on the side opposite that of the hook, said detent cooperating with the groove, the band and the channel for removably securing the hook to the body, said band



having a greater diameter than the largest diameter of the body and of greater width than the annular groove said body having a weight receiving aperture in the body at the intersection of the channel and groove, said aperture being adapted to be completely closed by the band secured to the body.

2,736,124
FISHING LURE
Joseph J. Wittmann, Jr., Tucson, Ariz.
Application December 23, 1953, Serial No. 399,911
1 Claim. (Cl. 43—42.23)



A fish lure comprising a hollow body of generally oval cross section having a mouth at one end thereof, outwardly projecting upper and lower lips on said body at the mouth end thereof, and a fishing line attachment plate positioned wholly within said body adjacent said mouth and extending along the longitudinal center line of said body, said plate being secured along its opposite longitudinal edges to said body and having a row of spaced apertures along one free transverse marginal edge thereof adjacent said mouth whereby a fishing line can be selectively secured in one of said apertures.

2,736,125
FISH LURE
John L. Perkins, Los Angeles, Calif.
Application March 31, 1953, Serial No. 345,943
1 Claim. (Cl. 43—42.34)



A fishing lure having greater length than width and comprised of a rear portion and a front portion, the rear portion having opposite faces thereof serrated, the serrations on one face extending for a greater part of the length of the rear portion than the serrations on the opposite face, the front portion having a maximum width greater than the width of the rear portion and provided with concavities on opposite faces thereof, the concavity on one face being of greater length than the concavity of the opposite face, the concavity of greater length having a part thereof disposed opposite the serrations of greater length and the front and rear portions having openings therein for the connection of a fishing line and a hook respectively.

2,736,126
FISHHOOK REMOVER
Lewis H. Mathews, Houston, Tex.
Application September 21, 1953, Serial No. 381,329
3 Claims. (Cl. 43—53.5)



1. A fish hook remover comprising a shaft having a hook-engaging notch at one end, a handle on the other end of the shaft and coaxial therewith, said shaft having an enlargement mediate its ends shaped to provide a laterally extending face and said handle having an end face engageable with said face of said enlargement, said shaft having a laterally extending lug thereon spaced longitudinally from the enlargement, a rod journalled in said enlargement and lug for axial rotation and having a laterally extending portion at one end movable by rotation of the rod into and out of a position to hold a hook in said notch to prevent withdrawal of the hook from the notch, and means on the other end of the rod operable to rotate the rod.

2,736,127
POISON BAIT HOLDER
Frederick W. McCann, Hawthorne, Calif.
Application January 15, 1953, Serial No. 331,417
2 Claims. (Cl. 43—131)

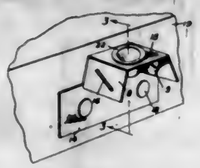


1. A poison bait holder comprising a container composed of a tray-like base including upstanding side and end walls, a cover resting on said end walls and spaced above the side walls to form an entrance therebetween, an upstanding bendable tongue rising from said side walls, an inverted V-shaped ramp having an opening in which said tongue is lockably engaged to provide an entrance ramp on the outside of the container and an exit ramp on the inside of the container, an inverted U-shaped anchoring member having its leg portions secured to said end walls, stakes at the lower ends of said leg portions and passing downwardly through the bottom of said base, a threaded member carried by said anchoring member and projecting upwardly from the upper portion of the latter, a cover resting on said end walls and overlying the ramp, and means detachably securing the cover to said threaded member.

2,736,128
INSECT EXTERMINATOR
John E. Conyers, Hialeah, Fla.
Application May 25, 1954, Serial No. 432,121
3 Claims. (Cl. 43—131)

1. An insect exterminator comprising a sheet of bendable material adapted for attaching to the vertical surface of a supporting structure, said sheet including a pair of

bendable tabs at each side edge portion of the sheet, a central bendable tab between said pairs of tabs and having an opening therein, said central tab forming a shelf



projecting at right angles to the surface of the sheet, means securing the adjacent side tabs in confronting relation to each other below the shelf, and a bait cup removably supported in the opening of the shelf.

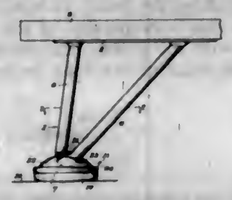
2,736,129
MOLDED FLY SWATTER
Nathan W. Roop, Columbus, Ohio, assignor to Columbus Plastic Products, Inc., Columbus, Ohio, a corporation of Ohio
Application May 2, 1952, Serial No. 285,630
2 Claims. (Cl. 43—137)



1. A fly swatter comprising: a molded blade member of flexible material having an inner end formed centrally and longitudinally thereof with an integral sheathing defining an internal wedge-shaped and resiliently expansible socket opening substantially at the inner end of said blade member and having forwardly converging top and bottom walls and side walls uniting said top and bottom walls; a lug formed on said bottom wall and projecting into said socket adjacent to the open end thereof; an elongated handle member comprising an integral molding formed at the forward end thereof with a longitudinally tapered, wedge-shaped tongue extension for close-fitting, frictional insertion into and in engagement with the internal wall surfaces of said socket, said tongue extension being of a size to resiliently expand the walls of said sheathing when inserted in said socket; and a positioning stop flange integrally formed with said handle member at the rear end of said extension for abutting engagement with the open end of said socket, said tongue extension being formed on one side thereof with a recess which, when the tongue extension is fully inserted into said socket with the flange of said handle member in engagement with the wall surfaces defining the open end of said socket, receives said lug to retain positively the blade and handle members in operatively united but detachable relationship, said tongue extension being formed on the side thereof opposite to that containing the lug-receiving recess, and slightly forward thereof, with a second recess to provide an air pocket, and a portion of the lug-receiving recess being of different curvature than the curvature of the corresponding portion of the lug to provide a space between the lug and tongue, said space and said second recess facilitating separation of the handle member from the sheathing.

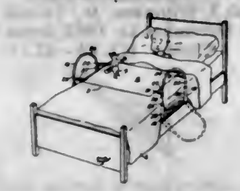
2,736,130
FOOT FOR FURNITURE LEG
Max Reu Boiu, Pasadena, Calif.
Application July 23, 1953, Serial No. 369,748
5 Claims. (Cl. 45—137)

1. A foot for a furniture or like leg, comprising a padded member provided with an upper domed and transversely-slotted cover, and a spring clip carried by said member and aligned with the middle of said slot, said



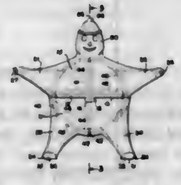
clip having an upwardly open throat adapted to pass a leg portion into operative engagement with the clip.

2,736,131
TOY FOR BEDRIDDEN CHILDREN
Frank B. Lewis, Jr., Vandalia, Mich.
Application November 12, 1954, Serial No. 468,246
3 Claims. (Cl. 46—32)



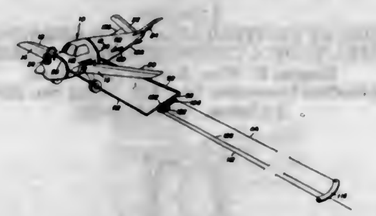
3. A toy comprising: a sheet of supple material; a three dimensional figure secured to said sheet and projecting up from the upper surface thereof so that flatwise motion of different parts of the sheet causes the figure to assume different attitudes to thus create the effect of animation of the figure; and means for supporting the sheet in a substantially horizontal position and in a manner permitting different parts of the sheet to be flatwise movable with respect to the remainder thereof, said means comprising a supporting member attachable to a part of a bed with portions thereof adjacent to each side of the bed, a standard pivotally mounted on each of said portions of the supporting member for swinging movement to and from an upright operative position in which the standard projects above the top of the bed clothes, and detachable connections between the sheet and the standards whereby the sheet holds the standards in upright position but allows the standards to be swung down when the sheet is disconnected therefrom.

2,736,132
GYROSCOPIC FIGURE TOY
Albert Rodney Murray, Oreland, Pa.
Application February 12, 1954, Serial No. 409,858
6 Claims. (Cl. 46—50)



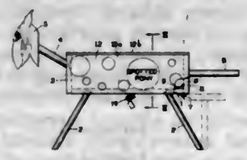
1. A gyroscopic figure toy comprising a hollow body, a plurality of extensions projecting from said body in separated axes, each of said extensions comprising a component portion of the figure simulated by the toy, a gyroscope adapted to be placed within the interior of the body, and means for mounting said gyroscope in selective positions therein with the axis of its spindle in coincidence with the axis of any one of the extensions.

2,736,133
CONTROL DEVICE FOR MODEL AIRPLANES
George C. Carpenter, Grantsburg, Wis.
Application April 27, 1953, Serial No. 351,423
2 Claims. (Cl. 46—77)



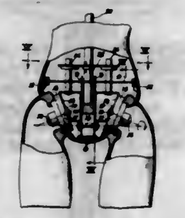
1. A control device for model airplanes comprising a shaft secured in the fuselage of an airplane, a control block rotatably mounted on said shaft, operating arms slidably mounted on said shaft and connected to the ailerons and elevators of said airplane and means for slidably moving said arms secured to said block, said means comprising crank arms pivotally secured to said control block, means connecting said crank arms with said operating arms, and actuating means attached to said crank arms for controlling the position of said crank arms, said actuating means comprising links each attached to said crank arms at one end thereof, said operating arms being rotatably mounted on bearing mounts, said bearing mounts being slidably positioned on said shaft, said operating arms rotating independently of their associated bearing mounts and slidable with their associated bearing mounts, the other ends of said links being attached to said bearing mounts, said control block having tubular conduits attached thereto and flexible control wires extending through said tubular conduits, said control wires being attached to said crank arms, a U-shaped control yoke, said tubular conduits forming a portion of said U-shape control yoke, said yoke being rotatably mounted on said shaft, the fuselage of said airplane having circumferential slots permitting 360° rotation of said yoke relative to said fuselage, said tubular conduits being of a greater length than one-half the wing span of the airplane to permit said airplane to maneuver.

2,736,134
CONVERTIBLE TOY
Samuel H. Bennett, Louisville, Ky.
Application May 28, 1954, Serial No. 433,037
2 Claims. (Cl. 46—116)



1. A convertible toy simulating an animal comprising: a base or belly board; leg means to support said belly board; an anterior end board secured at one end of said belly board; a posterior end board hinged to the opposite end of said belly board; said end boards in upright position with the belly board simulating the breast, rump, belly and legs of an animal; means to support the posterior board in horizontal position; a detachably mounted board having sections simulating the back and sides of said animal, said sections being connected together for manual manipulation from an animal simulating form of inverted U-shape to a relatively flat form; and means to removably secure said detachable board to said base board with the detachable board in its animal simulating form and with its sections positioned to extend from one end board to the other.

2,736,135
WALKING MECHANISM FOR DOLLS
Robert Gardel, New York, and Arthur Rogovin, Far Rockaway, N. Y., assignors to Delgar Inc., Brooklyn, N. Y., a corporation of New York
Application December 1, 1953, Serial No. 395,374
10 Claims. (Cl. 46—149)



1. A walking doll mechanism comprising, a vertically disposed rigid support adjacent the vertical median plane of the doll body, leg mounting members pivotally mounted on said support for rocking motion about a common horizontal axis, and means reversibly connecting said leg mounting members for simultaneous equal rocking motion in opposite directions, each of said leg mounting members including a flat vertical part lying against the rigid support and a flat part connected to and inclined away from said vertical part at an angle substantially less than a right angle and provided with leg mounting means.

2,736,136
BICYCLE NOISEMAKER
Philip W. Modlin, Minneapolis, Minn., assignor of one-half to Alton O. Juul, Minneapolis, Minn.
Application July 27, 1954, Serial No. 446,050
2 Claims. (Cl. 46—175)

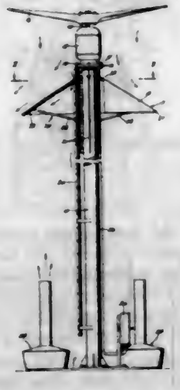


1. A noisemaker for vehicles with spoked wheels comprising, an elongated clamping band having a pair of spaced traversely formed bending slits defining a medial area therebetween and abutting firmly at the medial area against the trailing edge of a bicycle frame member adjacent the spokes of a wheel thereof during use, the ends of the elongated band being bent convergently at the bending slits and secured together at the leading edge of said frame member, said medial area being provided with outwardly off-set clamp means formed from the flat band material, and a stiff flexible card removably clamped in flat relation with respect to the outer surface of said band, said card when mounted together with said clamping band to the vehicle frame, lying firmly positioned against displacement and projecting laterally into the pathway of the spokes of said adjacent wheel whereby to produce a noise during travel of said vehicle and said wheel spokes.

2,736,137
WIND MACHINE
Fred A. Thaheld, Brea, Calif., assignor to Diesel Power, Inc., Los Angeles, Calif., a corporation of Pennsylvania
Application May 25, 1953, Serial No. 357,322
5 Claims. (Cl. 47—2)

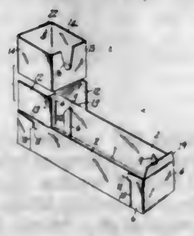
2. In a wind machine for use out of doors, the combination of: an upright support, a power-driven rotary propeller mounted on the support for rotation about a

substantially vertical axis and adapted to blow air downward, and a deflector encircling the support below the propeller for directing the major portion of the air outwardly away from the support, the deflector having a central opening therethrough of greater radial dimension than the adjacent portion of said support and being po-



sitioned sufficiently far below said propeller that the open passageway defined by said opening receives some of said downwardly blown air moving along said support to admit the same to the space below said deflector, the space below the said opening and deflector being laterally unobstructed.

2,736,138
COLLAPSIBLE CARTON ADAPTED FOR POTTED PLANTS
Kenneth T. Buttery, Kalamazoo, Mich., assignor to Sutherland Paper Company, Kalamazoo, Mich.
Application March 8, 1954, Serial No. 414,676
10 Claims. (Cl. 47—37)



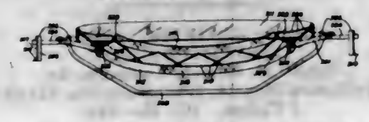
1. A collapsible carton adapted for potted plants comprising a bottom, side and end walls hingedly connected thereto, the end walls having corner flaps provided with tongues engaged within slits provided therefor in the side walls for holding the walls in erected position, the side walls having at one end thereof opposed rectangular holder-engaging flaps hingedly connected to their upper edges, and an open topped rectangular tubular holder member disposed within the erected walls adjacent the end wall of the carton at the end of the carton having said holder engaging flaps and in spaced relation from the opposite end wall of the carton, the holder engaging flaps being folded downwardly within the holder, said holder being of dimensions to be fittingly received within the erected walls and sidewise supportingly engage the said tongues at the end of the carton having the holder engaging flaps, said holder flaps being of such dimension that oppositely disposed edges thereof coact with the end walls of the holder to support the same against endwise shifting movement, the outer end wall of the holder so supported by the holder flaps being disposed adjacent and reinforcing the end wall of the carton at the end of the carton having the holder engaging flaps, the inner end wall of the holder having an opening extending from its upper edge to receive the stem of a potted plant when the pot thereof is disposed horizontally within the holder.

2,736,139
METHOD OF CONTROLLING SEED GERMINATION BY MEANS OF A COMPOSITE SEED ASSEMBLY
Eugene P. Wise, Kansas City, Kans.
Application December 18, 1952, Serial No. 326,755
8 Claims. (Cl. 47—58)



1. A method of preventing germination of a primary plant seed until the soil in which it is planted rises to a predetermined temperature, said method including the steps of coating the primary plant seed with a fast-drying, naturally adhesive composition, incapable of ready disintegration when dry and hard; drying the composition until the same is tacky; placing a plurality of secondary plant seeds in the tacky composition on the primary plant seed characterized by an incapability of germination at temperatures below said predetermined temperature, with the secondary plant seeds partially exposed to the primary plant seed and partially exposed to the atmosphere; and drying the composition until hard, whereby the same attaches the secondary plant seeds to the primary plant seed.

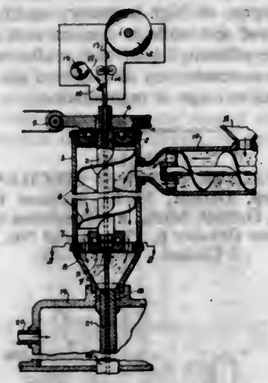
2,736,140
APPARATUS FOR TREATING SHEET GLASS
Lloyd V. Black, Tarentum, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
Application July 27, 1951, Serial No. 238,943
8 Claims. (Cl. 49—67)



8. Glass bending apparatus comprising a supporting frame having end portions upon which a sectional mold is slidably connected, a mold center section having spaced glass shaping surfaces, a supporting arm pivotally connected to each side of each end of the center section and slidably engaging the adjacent supporting frame end section, mold end sections rigidly mounted on the adjacent supporting arms to form continuations of the glass shaping surfaces of the mold center section, and adjustable means on at least one of the supporting arms at each end of the center section for limiting relative movement between the center and adjacent end sections in mold closing position.

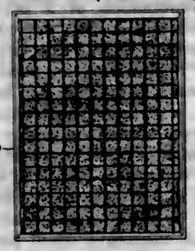
2,736,141
METHOD OF PRODUCING GLASS FILAMENTS
Alexander Silverman, Pittsburgh, Pa., and Leon Parker, Burbank, Calif., assignors, by mesne assignments, to said Silverman
Application May 9, 1952, Serial No. 286,996
12 Claims. (Cl. 49—77)

1. A method of forming glass filaments, which comprises forming an elongated rod of bonded powdered glass-forming material, said rod containing reinforcing wires of elements whose oxide is a glass-forming oxide, complementary to the said glass-forming material, oxidizing the said reinforcing wires to convert said elements to the oxide of said elements, raising the temperature of the said rod sufficiently to fuse the glass-forming material and said



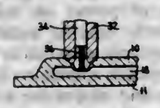
oxide, forming a molten glass filament of said glass-forming material and said oxide, attenuating said molten filament, and chilling said filament to form solid glass filaments.

2,736,142
PROCESS FOR MANUFACTURING CELLULATED MATERIAL
Karl Baumler, Sedalia, Mo., and Walter D. Ford, Port Allegany, Pa., assignors to Pittsburgh Corning Corporation
Application June 3, 1953, Serial No. 359,271
8 Claims. (Cl. 49—77)



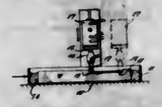
1. A method of preparing a vitreous cellulated material from a pulverulent batch comprising the vitreous material and a cellulating agent which comprises forming the batch into small segments and heating the segments to a temperature sufficient to cause the segments to sinter and cellulate and expand by entrapment of gases formed therein and become consolidated into a unitary structure.

2,736,143
METHOD OF PORE CLOSURE FOR DOUBLE GLAZED UNIT
Walter D. Ford, Port Allegany, Pa., assignor, by mesne assignments, to Pittsburgh Plate Glass Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application April 16, 1952, Serial No. 282,620
5 Claims. (Cl. 49—82)



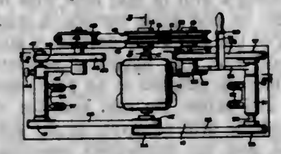
1. A method of sealing a pore opening of a double glazing unit comprising the steps of providing a pore opening in the face of one of the two spaced glass sheets forming the unit, heating the glass in the area surrounding the pore opening, projecting a hollow tube of graphite having a rod of diameter greater than the pore opening in the center of the graphite tube centrally into the heated glass edges around the pore for a short distance, withdrawing the rod to form a capillary tube and thereafter sealing the capillary tube.

2,736,144
MACHINING BY HIGH-FREQUENCY VIBRATORY ABRASION
Charles J. Thatcher, New York, N. Y., assignor to Robert O. Thatcher
Application November 20, 1952, Serial No. 321,579
23 Claims. (Cl. 51—64)



7. In a machine for high frequency vibratory abrasion comprising a hydraulic power transmission device, a conduit containing a liquid column, a movable closure for one end of said column connected to a cutting tool outside said conduit, means at the other end of said conduit for imparting resonant, ultrasonic frequency alterations of pressure in said liquid for delivery therethrough to said tool, a hydrostatic pressure control device branching off from said liquid column and means therein to vary the said pressure to that which maintains conditions of mass-unit action in said device, a workpiece holder adapted to move and urge a workpiece into proximity to the end of the cutting tool, and means to flow a liquid suspension of a finely divided abrasive between the adjacent surfaces of the tool end and said workpiece.

2,736,145
MACHINE FOR REMOVING FLASH FROM MOLDED RUBBER RINGS
Dewey Davidson, Santa Ana, Calif., assignor to Reeves Rubber, Inc., San Clemente, Calif., a corporation of California
Application October 25, 1954, Serial No. 464,515
9 Claims. (Cl. 51—89)



1. A device of the class described including a rotary flash-removing means, means for rotating the flash-removing means, pulley halves at opposite sides of the flash-removing means rotatable about axes coincident with that of the flash-removing means and relatively thereto, said pulley halves being shaped to cooperate to form a grooved pulley adapted to receive a ring from which flash is to be removed and means for training a ring from which the flash is to be removed over the pulley halves so that its flash may be removed by the flash-removing means.

2,736,146
CYLINDER HONE
Thomas E. Brooks, Clarinda, Iowa, assignor to Lisle Corporation, Clarinda, Iowa, a corporation of Iowa
Application December 10, 1953, Serial No. 397,311
7 Claims. (Cl. 51—184.4)

1. In a honing device, a body member having a radial notch therein, an arm suspended in said notch and having laterally extending portions, said portions having a pivotal movement relative to the top of said body member and engaging said top, a shaft extending upwardly from said

body member, a cone element guided thereby, adjustable toward and away from said body member and engageable with the upper end of said lever, spring means biasing said



body member and said cone relatively toward each other, and a honing member pivotally carried by the lower end of said arm.

2,736,147
DRILL SHARPENING FIXTURE
Julius Michelson, Worcester, Mass.
Application January 5, 1952, Serial No. 265,073
3 Claims. (Cl. 51—219)

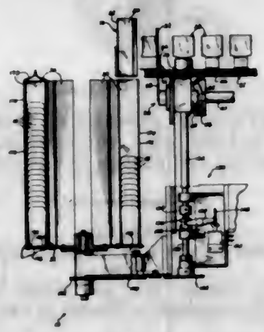


1. A device of the character described comprising a frame having a guide portion projecting therefrom, the said portion having a hole extending therethrough for receiving a drill, a guide surface on said portion, a drill holder for holding a drill in said hole with its end positioned relatively to said guide surface, a stud projecting from the back of the said guide portion, a guide member slidable on said stud and having a projection with a straight edge thereon adapted to be positioned upon the guide surface and across the said hole for locating the cutting edges of the drill relatively to the guide surface, means on said stud for frictionally retaining the guide member against the back of the guide portion, means permitting removal of the guide member from the guide surface while retaining it in a retracted position thereon, a supporting post swivelly mounted upon said stud, abutment means engageable with the said guide portion for positioning said post relatively to the guide surface, a magnifying glass mounted on said post and means on said post for positioning the magnifying glass to focus it upon the end of the drill.

2,736,148
METHOD OF MACHINING BY HIGH FREQUENCY VIBRATORY ABRASION
Charles J. Thatcher, New York, N. Y., assignor to Robert O. Thatcher
No Drawing. Application July 30, 1953, Serial No. 371,406
8 Claims. (Cl. 51—281)

1. In the drilling, shaping or milling of workpieces of a hard substance by the circulation, between a work face and tool end, of a film of a liquid slurry containing a gas in solution together with comminuted abrasive particles in suspension, the improved method which comprises the steps of imparting high frequency oscillations to said tool end and maintaining it adjacent to said work, flowing a film of said slurry therebetween, generating pulsating gas bubbles in said liquid film from the dissolved gas by the impact thereupon of high-frequency mechanical vibrations of the tool end while in contact with said film, recirculating the effluent, liquid slurry after said use, and increasing the concentration of dissolved gas in the liquid during an inactive stage of recirculation.

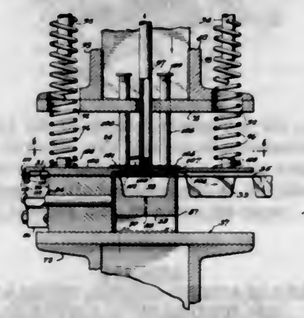
2,736,149
CONTAINER NESTING MECHANISM
James F. Earp, Detroit, Mich., assignor to Ex-Cell-O Corporation, Detroit, Mich., a corporation of Michigan
Application October 6, 1951, Serial No. 250,170
8 Claims. (Cl. 53—7)



1. In a machine for handling open-mouthed tapered containers, the combination of a generally horizontal conveyor to receive and convey the containers, a drive to advance the conveyor step-by-step, upright guides along said conveyor for maintaining the containers in upright position thereon, each advancing step being followed by a period of dwell, a generally horizontal rotatable table adjacent the conveyor having a plurality of generally vertical tubular accumulator pockets spaced around a vertical rotary axis, means supporting said table for rotation about said axis, a pusher to eject successive containers from the conveyor into one of the pockets, means to advance the pusher during each successive dwell period of the conveyor, a generally vertical channel-shaped guide member to guide the containers into the pockets, a container counter operable by movement of the containers in the conveyor to the ejection point, and a clutch operable by the counter to connect the table to the conveyor after a predetermined number of containers has been nested in each pocket, the table thereby being indexed to bring an unfilled pocket into container-receiving position during the next advancing step of the conveyor.

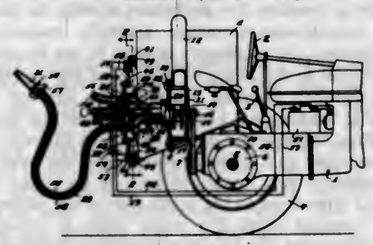
2,736,150
PACKAGING APPARATUS
Theodore Loew, Stamford, Conn., assignor to Kraft Foods Company, Chicago, Ill., a corporation of Delaware
Application February 28, 1952, Serial No. 273,878
14 Claims. (Cl. 53—90)

1. Apparatus for forming packages comprising a frame structure, a source of power on said frame structure, means for successively heating equally spaced sections of a strip of thermoplastic material as it is drawn through the apparatus, a vertically movable platform mounted on said frame structure and supporting a hollow forming die for movement therewith, a platen carried by said frame structure in vertically spaced relation to said hollow forming die and having a vertical opening therethrough communicating with a source of super-atmospheric gas pressure, a strip feeding means supported by said frame structure and driven by said source of power to move said material into position adjacent said heating means and between said platen and die, said strip feeding means being operatively interconnected with said platform and said source of gas pressure so that equally spaced sections of said material are successively heated to a moldable state and then deformed by the application of gas pressure to the surface of the heated section overlying said die to adopt the shape of said die thereby forming a series of interconnected open topped containers, conveyor mechanism operably carried by said frame struc-



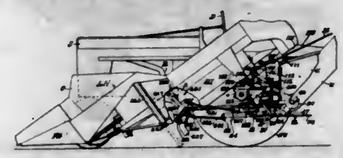
ture and positioned thereon to receive the formed containers for movement therewith, filler means disposed in overlying relation to said conveyor and operable to place a measured portion of substance in each of said containers, means for feeding a second strip of thermoplastic material in parallel covering relation to each of said filled containers, a heat conductor suported by said frame structure and disposed in overlying relation to one of said covered containers, means for pressing the covered surface of said container into contact with said heat conductor to hermetically seal said cover strip to said container, and a cutting means for separating the filled and sealed containers.

2,736,151
PNEUMATIC COTTON HARVESTER
George Dewey McKenzie, Evergreen, Ala.
Application September 16, 1953, Serial No. 380,541
2 Claims. (Cl. 56—13)



1. In a cotton harvester, a vehicle having a power take-off shaft extending therefrom, a hopper on said vehicle, a suction fan casing suspended laterally from one side of said hopper and communicating therewith, a plurality of fan blades positioned in said casing, belt and pulley means connecting said blades to said power take-off shaft, a cover plate releasably connected to said casing, a collar extending from said plate, a coupling on said collar having a plurality of pipes extending rearwardly therefrom, valve casings supported on said hopper and connected to said pipes, each of said valve casings being hollow and having a cover plate releasably connected thereto, an outwardly extending hollow boss projecting from said last named cover plate forming an inlet port, a flexible elongated hose having one end releasably connected to said boss and its other end connected with a suction nozzle, a segmental valve positioned in said valve casing and having its smaller end keyed to a cross shaft, a rock bar connected to said cross shaft, a tension spring and solenoid for actuating said valve.

2,736,152
VEHICLE-ATTACHABLE AGRICULTURAL MACHINE UNIT
Norman F. Andrews, Ankeny, and Wayne E. Slavens and Evert W. Adolphson, Des Moines, Iowa, assignors to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa
Application April 5, 1952, Serial No. 280,821
28 Claims. (Cl. 56—15)

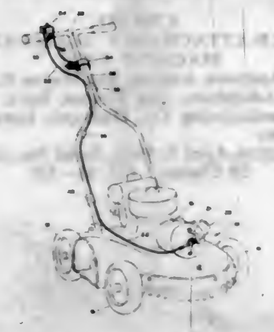


1. For use with a tractor having a longitudinal body carried on a transverse axle structure and including a longitudinal power take-off shaft rearwardly of the axle structure: a harvester row unit of elongated construction, positionable lengthwise of the tractor body and including a fore part ahead of the tractor axle structure and a rear part positionable in vertically spaced relation to and substantially directly over the tractor axle structure; harvesting mechanism carried by a fore part of the row unit and having a longitudinal input shaft terminating in a rear end portion ahead of and below the level of the tractor axle structure; means for connecting the row unit to the tractor, including a mounting element having leg means secured to and depending from the rear part of said row unit and transverse pivot means on the lower end of the leg means positionable proximate and parallel to the tractor axle structure, said pivot means being disconnectibly securable to the tractor axle structure above the level of the rear end portion of the input shaft and providing a pivot on a transverse axis about which the row unit can have tilting movement relative to the tractor; a longitudinal drive shaft alongside the row unit and having a front end proximate to the rear end portion of the aforesaid input shaft and a rear end substantially transversely alinable with the tractor power take-off shaft; a support connected to the mounting element substantially as a coaxial extension of the transverse pivot means and projecting in proximity to the drive shaft; a shaft carrier having a bearing on a longitudinal axis and rotatably carrying the drive shaft, and further being pivoted on the support for upward and downward rocking thereof with the drive shaft and shaft carrier about said transverse pivot axis; flexible and longitudinally telescopic drive means interconnecting the front end of the drive shaft to the rear end portion of the input shaft to accommodate rocking of the drive shaft; means on the shaft carrier for disconnectibly fixing said shaft carrier to the tractor axle structure; and means on the rear end of the drive shaft affording a power-receiving connection to the tractor power take-off shaft.

2,736,153
IGNITION SHORTING ATTACHMENT FOR AN INTERNAL-COMBUSTION POWERED LAWN MOWER
Alfred Louis Dunn, Washington, D. C.
Application October 19, 1954, Serial No. 463,245
1 Claim. (Cl. 56—25.4)

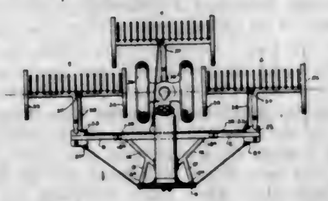
An ignition shorting attachment for a power lawn mower of that type which includes a wheel supported frame of electrically conductive material, an angularly disposed conductive handle terminating in a transverse

gripping bar, an internal combustion motor carried on said frame and a spark plug carried by said motor, said attachment comprising an insulated switch carried by said transverse gripping bar, an insulated wire connected to one side of said switch, a clip on the end of said wire



connected to one terminal of said spark plug, a second insulated wire connected to the other side of said switch, and a clip on the end of said second wire connected to said conductive handle, whereby closure of said switch to place said wire in electrical association grounds said spark plug and short-circuits the ignition.

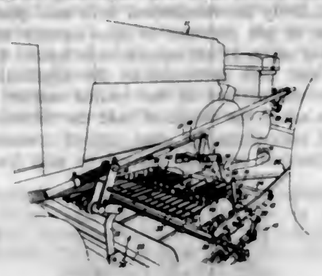
2,736,154
MASTER DRAWBARS FOR HAYRAKES
Jack E. Fine, Frenchglen, Oreg.
Application June 27, 1952, Serial No. 296,010
8 Claims. (Cl. 56—27)



1. A master drawbar assembly for use with a tractor having a frame, said assembly including a transverse end member for connection with one end of the tractor frame and another spaced parallel end member forming a medial section of the drawbar, said spaced parallel members being connected by spaced pairs of diagonal brackets secured together at their inner intersecting ends, connector plates supported by said brackets and said first-mentioned end member, said connector plates being arranged for supporting engagement with said tractor frame, vertically swinging wing members connected to the ends of the medial section of the drawbar, end plate members secured to the bottom face of the free ends of the drawbar wing members and extending forwardly and rearwardly thereof, caster elements supporting said wing portions and carried by said plates, coupler elements connected to the forward ends of said end plates, and an adjustable cable connecting the first transverse end member of the assembly with said end plates.

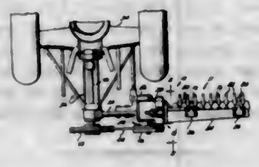
2,736,155
BACK RACK FRAME FOR BEET HARVESTERS
Knud B. Sorensen, Rock Island, and Francis M. Brinkmeyer, Moline, Ill., assignors to Deere & Company, Moline, Ill., a corporation of Illinois
Application October 10, 1952, Serial No. 314,068
6 Claims. (Cl. 56—121.45)

1. In a harvester, a supporting frame, a back rack frame, generally parallel links pivotally connected between said supporting frame and said back rack frame and disposed in a generally vertical position to provide for generally fore-and-aft movement of said back rack frame, and spring-biased fingers pivotally carried by said back



rack frame for movement relative to the latter about a generally transverse horizontal axis, whereby said spring-biased fingers may move in a generally fore-and-aft direction in addition to the fore-and-aft movement of said back rack frame by virtue of said parallel links.

2,736,156
COUNTERBALANCED DRIVE MECHANISM FOR RECIPROCATING CUTTERS
James Abraham Hardman, Logan, Utah, assignor to Utah Scientific Research Foundation, Logan, Utah, a corporation of Utah
Application January 28, 1953, Serial No. 333,769
8 Claims. (Cl. 56—296)



1. In a power-driven mowing machine the combination of a reciprocating cutter knife and balanced oscillatory drive means therefor comprising a housing, a power transmitting member, means pivotally mounting the power transmitting member for oscillatory motion in the housing, a counterbalance means pivotally mounting the counterbalance for oscillatory motion in the housing in a plane parallel to the plane of motion of the power transmitting member, a crank shaft having opposed cranks mounted in the housing, a crank arm connecting the power transmitting member and one of the crank throws, a crank arm connecting said counterbalance and the other crank throw whereby said counterbalance is oscillated in synchronized opposition to the oscillation of the power transmitting member when the crank shaft is rotated, and means connecting the power transmitting member to the cutter knife.

2,736,157
NUT GATHERER
Ella C. Weathersby, Hattiesburg, Miss.
Application February 15, 1954, Serial No. 410,377
5 Claims. (Cl. 56—328)

1. A nut gatherer comprising, in combination, a nut receiving and accumulating bag of elongate form having an intake mouth at its bottom portion and a complemental elongated sleeve-like extension at its top portion and gradually tapering in cross-section and defining a flexible snout-like bag emptying funnel for cooperation with a separate shoulder sack or similar container, pressure responsive pickup members operatively mounted in said bag with certain of said members registering with,

spanning and providing an expansible and contractible grille for the otherwise fully open intake mouth and a



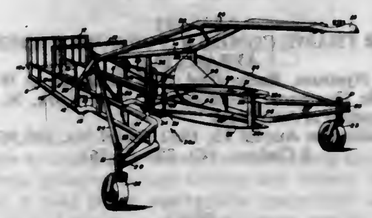
trapping cage for the gathered nuts, and handle-equipped means operatively connected with said cage.

2,736,158
FRUIT PICKING DEVICE
Melvin G. Lynch, Wood River, Nebr.
Application January 7, 1955, Serial No. 480,399
1 Claim. (Cl. 56—333)



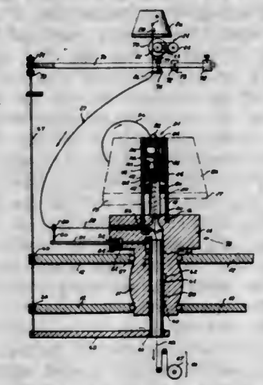
A fruit picking device including an open top, wire, framelike basket formed of wire rod and adapted to receive and support a plurality of fruit having stems, such as apples, said basket including a plurality of circumferentially spaced, longitudinally extending, wirelike rod members interconnected adjacent one end thereof to provide a basket bottom, an annular wire member interconnecting said circumferentially spaced wire members adjacent the opposite end thereof and forming the top of said basket, a pair of wire jaws each composed of a single piece of wire hingedly connected with said basket adjacent the top thereof, spring means connected between each of said jaws and said basket normally retaining said jaws in an open position on opposite sides of said basket, each of said jaws including a crank arm portion disposed outwardly of said basket, a link member connected to each of said crank portions, a ringlike member connected with the free end of each of said link members, an elongated, rigid handle member releasably connected with said basket adjacent the bottom thereof and adjacent one side thereof above said bottom, a sleeve slidably supported on said handle, a ropelike member connected with said sleeve and with said ring member so that downward movement of said sleeve and said handle will cause said jaws to swing together and close about a fruit and engage the stem thereof so that thereafter downward movement of the picking device will remove the fruit with the stem thereon so that the fruit may drop into the basket without damage.

2,736,159
BALE ASSEMBLER AND ALIGNER
James W. Marshall, Cozad, Nebr.
Application July 26, 1954, Serial No. 445,641
10 Claims. (Cl. 56—475)



1. A bale assembler and aligner, comprising an elongated bottomless cage adapted to be pulled along the ground by a baling machine, said cage having an entrance opening at its forward end, aligned to receive and rearwardly direct, bales discharged from said baling machine, a latch gate at the opposite end of said cage, a latch for said tail gate, carried by said cage, a trip rod connected to said latch, a trip lever pivotally mounted on said cage in the path of movement of rearwardly directed bales and intermittently operable by transient bales as they enter said cage, connecting means associated with said trip lever, engageable with but normally disengaged from said trip rod, and means operable by a bale in predetermined sequence, for conditioning said trip rod for operative engagement by said connecting means upon the subsequent actuation of said trip lever by a succeeding bale.

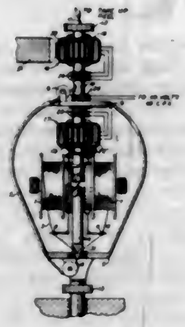
2,736,160
TWISTING AND PLYING SPINDLE BALLOON CONTROL
Alfred W. Vibber, Ridgewood, N. J.
Application June 16, 1953, Serial No. 361,999
21 Claims. (Cl. 57—58.3)



5. Mechanism for twisting together two strands so as to form a two-ply strand, comprising a source of supply of a first strand and a support carrying a let-off strand package for a second strand, a rotatable shaft operable to rotate a loop of the first strand about the let-off package and also to ply the two strands together, a first means for feeding the first strand into the loop, means on the shaft for detecting changes in the shape of the loop, said last-named means comprising a loop-generating strand-engaging guide mounted on the shaft adjacent the periphery thereof, an arm to which the guide is connected,

means mounting the arm for oscillation on the shaft in a plane parallel to the axis of the shaft and generally normal to a radius of the shaft, a second means for feeding the second strand to the junction where they are plied together, means taking up the plied strand, and means responsive to the loop-shape-detecting means to vary the speeds of the first and second feeding means relative to each other whereby to maintain the diameter of the loop within predetermined limits.

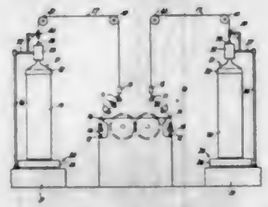
2,736,161
ARBOR FRAME CONTROL FOR WIRE TWISTING APPARATUS
Axel C. Nystrom, Rutherford, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application August 23, 1952, Serial No. 305,956
2 Claims. (Cl. 57—58.76)



2. In a flier type strand twisting machine the combination with a support frame, a drive shaft rotatably mounted on the frame, a flier member connected to the drive shaft for rotation thereby within an orbit, a supply reel support carriage mounted to the flier member within said orbit, the flier being rotatable relative to the carriage, means for guiding strands drawn from reels mounted on the support carriage to the flier member and guiding means for the strands drawn from the flier member, of first and second synchronous control transformers each having a stator and a rotor mounted for rotation about the axis of rotation for the flier member, the stator of the first transformer being mounted on the stationary frame of the machine outside the orbit of the flier, the stator of the second transformer being mounted on the carriage within the orbit of the flier member, the rotors of the two synchronous control transformers being fixed to the flier drive shaft, a common pair of slip rings located on the flier drive shaft outside the orbit of the flier for supplying field currents for the two rotors electrically connected to the two rotors by conductors located within the drive shaft, and two sets of slip rings mounted on the flier drive shaft, one set being connected to the stator of the first transformer, and located outside the orbit of the flier, the other set being connected to the stator of the second transformer and located within the orbit of the flier, and conductors located within the drive shaft connecting the two sets of slip rings.

2,736,162
METHOD AND APPARATUS FOR FEEDING SLIVER
Franklin Steinberger, Bardonia, N. Y.
Application July 29, 1952, Serial No. 301,438
14 Claims. (Cl. 57—61)

7. Apparatus for continuously supplying a twisted sliver to a spinning frame, said apparatus comprising: means for receiving a cylindrical feed can of loosely coiled sliver, drive mechanism for rotating the can-receiving means at a predetermined rate of speed about the axis of the feed can, a compacting funnel mounted on the axis of the feed can adjacent the open end thereof and rotated at the



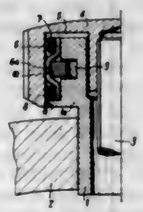
same speed as said feed can and in the same direction, and a stationary compacting funnel coaxial with said rotating funnel and mounted a short distance therefrom in the direction of travel of the sliver to a spinning frame.

2,736,163
GLASS FIBER TWINE AND METHOD OF MAKING THE SAME
Albert R. Morrison, Newark, Ohio, assignor to Owens-Corning Fiberglas Corporation, a corporation of Delaware
Application September 28, 1951, Serial No. 248,816
15 Claims. (Cl. 57—150)



1. A method for the manufacture of tough twine that comprises assemblying a plurality of glass fiber strands into longitudinally generally parallel relationship, adhering said strands to a longitudinally extending strip of tough, thin, tough fibrous material transversely upon itself to form a narrow laminated tape enclosing said strands between the folds of said fibrous material and attenuating the assembled structure into a generally circular cross section.

2,736,164
FLUIDTIGHT WINDER FOR A TIMEPIECE
Ervin Piquerez, Bassecourt, Switzerland
Application March 21, 1955, Serial No. 495,431
Claims priority, application Switzerland April 13, 1954
11 Claims. (Cl. 58—90)



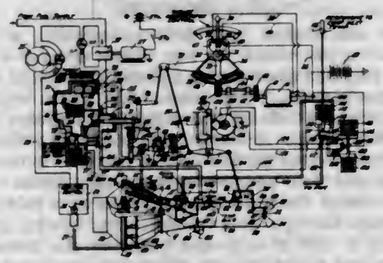
1. In a watch, the provision of a watch case and of fluidtight winding means comprising a crown, a pendant engaging the watch case and extending axially inside the crown, a sleeve of deformable material fitted coaxially between the crown and the pendant, means for securing both edges of the sleeve to one of the cooperating members, the crown and the pendant, to form with said member an annular chamber and means enclosed in said chamber for urging radially the medial section of the sleeve extending between said sleeve edges against the other member.

2,736,165
CRYSTAL FOR A TIMEPIECE
Ervin Piquerez, Bassecourt, Switzerland
Application March 21, 1955, Serial No. 495,396
Claims priority, application Switzerland April 20, 1954
6 Claims. (Cl. 58—91)



1. A crystal adapted to be fitted in the rim of a timepiece, comprising a cap fitted in the rim and made of unbreakable transparent material and a carrier extending underneath the said cap and including a ring matching the inner periphery of the cap and arms starting from said ring and meeting one another to form with the ring and with each other an open-work carrier structure for the cap.

2,736,166
AFTERBURNING AND EXHAUST NOZZLE CONTROLS FOR GAS TURBINE ENGINE
Frank C. Mock, St. Joseph, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application May 8, 1948, Serial No. 25,828
29 Claims. (Cl. 60—35.6)

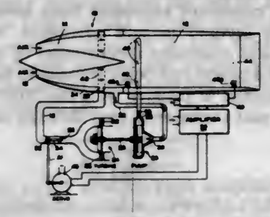


14. In a thrust augmenting system for a turbo-jet engine having a gas turbine, a burner system including a plurality of burners, a tail pipe chamber, and a reaction jet; first means for supplying fuel to said burners for normal engine operation, means for metering fuel directly to said tail pipe chamber, and means for insuring ignition of the fuel discharge into said tail pipe chamber comprising second means for supplying additional fuel to at least one of said burners, said second means being so arranged that the additional fuel supplied to the burner is ignited therein to cause a spurt of flame to be projected outwardly through the turbine into said tail pipe chamber.

25. In a power control system for gas turbine engines having a compressor, a tailpipe terminating in a reaction jet and movable means for varying the area of the jet, means for controlling the position of the movable means and thereby the area of the jet in such a manner that a substantially constant preselected pressure ratio is maintained between compressor inlet pressure and tailpipe pressure during all conditions of engine operation comprising means responsive to compressor inlet pressure and tailpipe pressure operatively connected to the movable means for adjusting the area of the jet, and means responsive to compressor inlet temperature operatively connected to said pressure responsive means for modifying the action thereof.

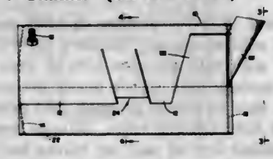
2,736,167
AIR FUEL RATIO CONTROL FOR RAM JETS
Walter D. Teague, Jr., Alpine, and Pasquale A. De Padova, Newark, N. J., assignors to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application February 7, 1950, Serial No. 142,808
11 Claims. (Cl. 60—39.28)

9. In a system for controlling the air fuel ratio of an aircraft engine including a combustion chamber having an exhaust gas outlet conduit and a ram air inlet conduit; the improvement comprising temperature sensing means at the inlet and outlet conduits of said chamber, a variable speed pump for supplying fuel to said combustion chamber, a turbine driven by fluid pressure from one of said conduits, means drivingly connecting said



turbine to said pump, means for controlling the supply of the fluid pressure to said turbine and thereby the driven speed of said pump, and means operatively connecting said control means to the temperature sensing means to regulate the driven speed of said pump and thereby the quantity of fuel pumped into said combustion chamber in accordance with said inlet and outlet temperatures.

2,736,168
COMBUSTION CHAMBER AND METHOD OF MIXING AND BURNING FUEL
Harvey H. Hanley, Hawthorne, N. J.
Application November 25, 1950, Serial No. 197,547
9 Claims. (Cl. 60—39.69)



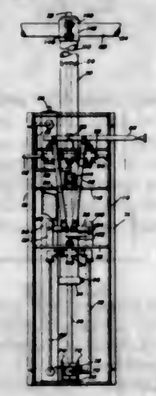
1. A combustion chamber for use in connection with a gas turbine, including a cylindrical shell having a closed end, input means for admitting fuel into said chamber near said closed end, and air input means for introducing and directing high velocity air into said chamber tangentially near the circumference thereof and biased toward said fuel input means, said air input means being located axially away from said fuel input means and said closed end to form a rotating mass of relatively cool air surrounding the fuel-air mixture after ignition.

9. In the combustion of a fuel utilizing the expansion pressure of a mixture of fuel and air or other oxidizing agent, the method of mixing and burning said fuel and air within a combustion chamber having a closed end and an exhaust end, comprising the steps of: admitting substantially all of said air into said combustion chamber in a manner such as to form a unidirectional, rotating vortex of input air moving axially toward said closed end and away from said exhaust end; injecting fuel into said chamber; igniting the fuel air mixture, whereby said closed end in conjunction with said vortex of input air will act to create a reverse axial flow of the mixture in an inner, flame confining core of said vortex towards said exhaust and so as to cause substantially complete combustion within said core without causing undue heating to said combustion chamber.

2,736,169
HYDROPNEUMATIC SYSTEM FOR RADIATOR REPAIR LIFT
Samuel A. Chilton, Suffolk, Va., assignor of one-half to R. R. Harrell, Jr., Suffolk, Va.
Application March 7, 1951, Serial No. 214,376
2 Claims. (Cl. 60—51)

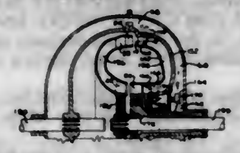
1. For use in lifting radiators for the repair thereof, an extensible support consisting of a stationary hollow

housing, a cylinder slidable from said housing, a piston in said cylinder and including a head with a piston rod extending therefrom, said piston rod having a longitudinal passage therethrough, a fluid storage tank disposed in said housing, means including an air inlet line and an air inlet valve for applying air pressure to the fluid in said storage tank, a fluid conductor extending from said tank, a fluid control valve secured to said conductor, a casing connected with said conductor downstream of said fluid control valve, said piston rod being secured to said casing and having its passage in registry with the interior thereof so that fluid in said casing may pass through said piston rod



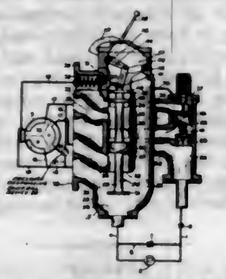
and into said slidable cylinder to push said cylinder outwardly of said stationary housing, an air exhaust valve connected with said air inlet line to vent the interior of said fluid storage tank of air under pressure and thereby permit the fluid to return through said piston rod passage, casing and fluid control valve, linkage means to simultaneously actuate one of said air valves and said fluid control valve, a structural support in said housing on which said linkage means is mounted, a guide coacting with said cylinder while it is extended from and withdrawn into said housing, and means in said hollow housing supporting said guide in contacting relation with said cylinder.

2,736,171
ROTARY HYDRAULIC TORQUE CONVERTER EMPLOYING BOUNDARY LAYER CONTROL
Edward A. Stalker, Bay City, Mich.
Original application March 26, 1949, Serial No. 83,711, now Patent No. 2,663,996, dated December 29, 1953. Divided and this application December 31, 1952, Serial No. 329,040
4 Claims. (Cl. 60—54)



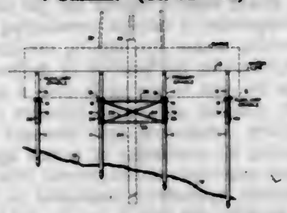
1. In combination in a fluid transmission, a pump wheel, a turbine wheel, the two wheels defining a work circuit, each said wheel having a plurality of spaced blades with flow passages therebetween, case means enclosing said wheels and defining a working fluid chamber therewith, said means rotatably mounting said wheels in tandem relation for the flow of fluid from one to the other through said flow passages between said blades to exchange energy therebetween, the blades of a said pump wheel each having a hollow interior and having opening means in a wall of each said blade for the passage of fluid into the hollow interior thereof, means to maintain a fluid static pressure in said circuit higher than in a region of said chamber outside said circuit, and means of communication between a said blade interior and said region for the induction of boundary layer fluid through said opening means into said blade interior and said region.

2,736,170
HYDRAULIC SYSTEM AND CONTROL MEANS THEREFOR
Hans Vestre Huse, Brattvaag, Norway, assignor to Hydraulik A/S, Brattvaag, Norway, a Norwegian company
Application November 24, 1954, Serial No. 470,925
Claims priority, application Norway November 28, 1953
8 Claims. (Cl. 60—53)



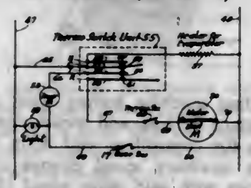
5. A manually adjustable control valve for a hydraulic transmission system, comprising a hollow casing, a cylinder within said casing, a slide member axially slidable within said cylinder and carrying a plurality of flanges arranged to form closed spaces for communication between axially spaced ports in the wall of said cylinder. two ports for discharge fluid one at each end of said cylinder and a channel for communication between both of said discharge ports, two axially spaced ports for pressure supply fluid intermediate the ends of said cylinder and a channel for communication between both of said ports, a check valve in said channel which check valve opens in the direction of the flow of the supplied pressure fluid, ports leading to and from a hydraulic motor circuit each of which ports are situated between both of said supply ports and an individual end of said cylinder.

2,736,172
REMOVABLE DRILLING BARGE CRADLE
Thomas C. McChesney, Odessa, Tex.
Application January 30, 1950, Serial No. 141,250
4 Claims. (Cl. 61—46)



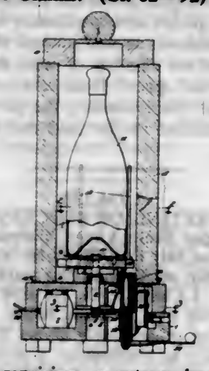
1. A support for an oil well drilling barge comprising a plurality of vertically disposed piling the bottom ends of which are driven into the earth beneath the body of water and their top ends terminating in a common horizontal plane below the surface of said body of water at its highest normal level, a pile of said plurality of piling disposed at each of the corners of a rectangle, and a removable non-floatable cradle member resting on said piling, said cradle member comprising, in combination, a separate plate member resting on each pile of said plurality of piling, a horizontally disposed member rigidly attached to and extending from each of said plate members to each adjacent plate member and defining the sides of said rectangle, a separate hollow cylindrical and vertically disposed guide member rigidly attached at one end to the underside of each plate member and extending downward therefrom and around the top ends of said piling to prevent horizontal movement of said cradle with respect to said piling, and a vertically disposed member rigidly attached to and extending vertically upward from each end of one parallel pair of said horizontally disposed members to prevent side slippage of said barge.

2,736,173
AUTOMATIC REFRIGERATOR DEFROSTERS
Thomas W. Duncan, Evansville, Ind., assignor, by mesne assignments, to Whirlpool-Seeger Corporation, a corporation of Delaware
Application February 21, 1952, Serial No. 272,812
15 Claims. (Cl. 62—4)



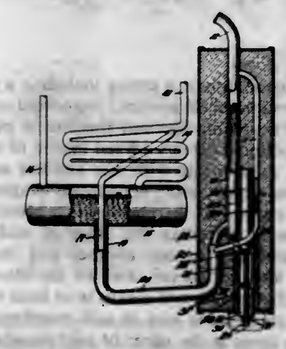
2. A defrosting refrigeration system, comprising a refrigerator cabinet, an evaporator in said cabinet, a motor compressor, a condenser, said cabinet having a door, and a door switch controlled by the opening or closing of said floor, said door switch being closed when the door is opened, a timing motor controlled by said door switch and driving a cam responsive to the amount of time the door is open, during which the evaporator is exposed to damp exterior air, said cam having a rise and a drop and actuating a resilient switch arm carrying a refrigeration contact, a common insulating support, a timer resilient switch arm, a common energized resilient switch arm, and a heater resilient switch arm carried by said support, the said cam and switch arms operating with a common, timer, and refrigeration contacts engaged until the cam rise reaches a predetermined point, when the actuation of the refrigeration contact causes the opening of the refrigeration and timer contacts, and the closure of the heating contact cutting off refrigeration and energizing an electric heater for defrosting said evaporator, and a latching means for engaging the common contact and holding it in engagement with the heater contact after said cam passes its rise and drop.

2,736,174
COOLER FOR PACKAGED BEVERAGES AND METHOD
Reuben S. Tice, Monterey, Calif.
Application January 11, 1954, Serial No. 403,336
10 Claims. (Cl. 62—92)



1. A cooler comprising: a rotary, horizontal support for supporting an article to be cooled, means for causing rotation of said support, a closed heat insulated housing including a bottom wall, side walls, and a top wall, enclosing said support and the article to be cooled when the latter is supported on said support, means carried by said support for releasably holding said article on the latter spaced from said side walls, a conduit for CO_2 having a discharge opening directed into the space around such article when the latter is held on said support and within said housing, a valve movable to and from a position closing said discharge opening and means connected with said valve and accessible to an operator outside said housing for moving said valve.

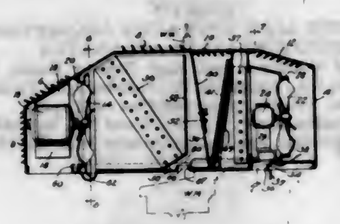
2,736,175
ELECTRICALLY OPERATED ABSORPTION REFRIGERATION APPARATUS
Axel Harald Ostergren and Karl Gunnar Borén, Stockholm, Sweden, assignors to Aktiebolaget Elektrolux, Stockholm, Sweden, a corporation of Sweden
Application June 12, 1953, Serial No. 361,388
Claims priority, application Sweden June 20, 1952
13 Claims. (Cl. 62—119.5)



1. In absorption refrigeration apparatus, a generator comprising an upright shell having a first end wall at one level and a second end wall at a higher level and an upstanding side wall connecting said first and second end walls, said shell having an opening at one of said end walls, and a single body of insulating material retained in said shell, a vertically extending heating tube having an access opening which is embedded in said body of insulating material and spaced from both end walls of said shell, said heating tube being formed of material having good heat conductivity and providing a heat transfer surface, a circuit for absorption liquid including a plurality of vertically extending conduits in which liquid therein is arranged to receive heat from said heating tube, one of said conduits serving as a boiler and another as a vapor-lift pump, an electrical heating element and electrical conductors therefor adapted to be connected to a source of electrical supply, a hollow sleeve enveloped in said body of insulating material which extends from the opening in said one end wall to the access opening of said heating tube to provide a permanent passage in said shell through which said heating element is movable for insertion into and withdrawal from said heating tube, the electrical conductors for said heating element extending lengthwise of said passage when said element is positioned in said heating tube, means for electrically insulating said conductors and thermally shielding the latter from the surroundings, said last-mentioned means comprising a plurality of apertured bodies of insulating material in end to end relation in said passage and through which the electrical conductors extend, said bodies and electrical conductors passing therethrough forming a non-rigid structure with respect to said heating element and which is freely insertable into and removable from the permanent passage in said shell through the opening in said

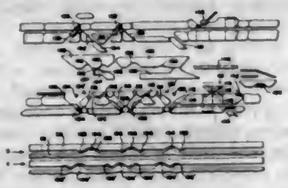
one end wall, one or more of said apertured bodies in said passage having a relatively small area or region thereof in physical contact with the inner surface of said sleeve, and means including said bodies of insulating material, when the latter are in physical contact with the inner surface of said sleeve, for retaining said heating element in position in said heating tube.

2,736,176
AIR CONDITIONER CHASSIS
Cecil F. Carlton, Larchmont, N. Y.
Application October 29, 1953, Serial No. 389,053
7 Claims. (Cl. 62—129)



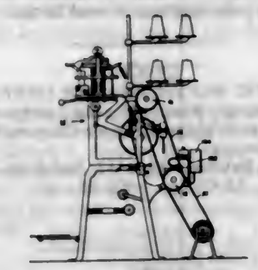
1. In an air conditioner: a casing including a tray member, an open-bottom shell member supported on the tray member and removably secured thereto; a plurality of refrigerant handling elements affixed in one of said members in spaced relationship with one another and including a refrigerant compressor, condenser, evaporator, and fluid conduits connected therebetween; a plurality of air handling elements affixed in the other of said members in spaced relationship to one another and including at least one fan and fan motor, and an air filter; and air intake and discharge aperture means in at least one of said members; the elements in one of said members interdigitating between those in the other of said members whereby the air handling elements may be separated, as a unit, from the refrigerant handling members by removal of said shell member from said tray member.

2,736,177
KNITTING MACHINE AND METHOD
Paul W. Bristow, deceased, late of Laconia, N. H., by Mildred S. Bristow, executrix, Laconia, N. H., assignor to Scott & Williams, Incorporated, Laconia, N. H., a corporation of Massachusetts
Application October 18, 1951, Serial No. 251,868
24 Claims. (Cl. 66—14)



1. A knitting machine comprising a needle cylinder, means for imparting reciprocatory movements to said cylinder, needles slidable in said cylinder, means for feeding yarns to needles at two feed points, cams for moving moving needles to form stitches at both of said feed points during reciprocations in both directions, sinkers cooperating with the needles in the formation of stitches, sinker cams for imparting movements to the sinkers, and means for effecting for each reciprocation of the needle cylinder a shift of said sinker cams about the cylinder axis which is opposite the direction of reciprocation of the needle cylinder.

2,736,178
SPEED CHANGING MECHANISM FOR KNITTING MACHINES
Robert H. Lawson, Laconia, N. H., assignor to Scott & Williams, Incorporated, Laconia, N. H., a corporation of Massachusetts
Application November 17, 1954, Serial No. 469,529
7 Claims. (Cl. 66—56)



1. In a knitting machine having main speed change mechanism, pattern devices, and means operated by said pattern devices for controlling said main speed change mechanism, an auxiliary speed change mechanism in mechanical series with said main speed change mechanism, and means operated by said pattern devices for controlling said auxiliary speed change mechanism.

2,736,179
METHOD AND APPARATUS FOR MAKING CROCHET CURTAIN MATERIALS AND SIMILAR TEXTILE GOODS WITH A NET-LIKE BASIC PATTERN
Rudolf Dittrich, Marienheide, Germany
Application December 13, 1954, Serial No. 474,951
Claims priority, application Germany December 17, 1953
3 Claims. (Cl. 66—85)



1. A galloon crocheting machine adapted to produce crochet curtain fabrics and similar textile wares having a net-like basic pattern, comprising in combination: a number of spaced crochet needles arranged side by side and reciprocable in an at least approximately horizontal plane, a like number of similarly spaced weft thread guides, the lower ends of which being arranged at equal distances from the working points of the crochet needles, a pivoted shaft arranged above the crochet needles behind the weft thread guides and a plurality of straight finger sinkers rigidly mounted on said pivoted shaft, corresponding in number to the number of weft thread guides and crochet needles and spaced from each other at distances equal to those of these needles, the pivot axle of these sinkers being parallel to the said moving-plane of the crochet needles.

2,736,180
KNITTING OF STOCKINGS
Viggo Skole, Laven, Denmark
Application July 6, 1953, Serial No. 366,324
Claims priority, application Denmark July 8, 1952
1 Claim. (Cl. 66—89)

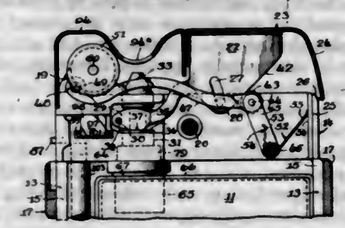
In a flat knitting of a stocking blank, the steps of performing, in a zone immediately above the point at which the heel portion is to commence, a plurality of progressive inward transfers starting from the firm selvages of the blank, the first transfer comprising one wale only

immediately adjacent each firm selvage of the blank, and the succeeding transfers comprising an increasing number of wales from each firm selvage inwards, keeping the width over which the yarn is carried constant while all of these inward transfers are being effected, and then



performing a plurality of progressive outward transfers of all the wales included in the last one of said inward transfers, while at the same time correspondingly increasing the width over which the yarn is carried, to form the heel widening of the blank.

2,736,181
CIGARETTE AND CIGAR LIGHTER
Ernest H. Seibert and Richard S. Krause, Chicago, Ill., assignors, by mesne assignments, to Cory Corporation, a corporation of Delaware
Application August 9, 1952, Serial No. 303,564
10 Claims. (Cl. 67—7.1)



1. In a cigarette and cigar lighter, a housing providing a base, side walls and head, a pressure-tight fuel tank containing a liquefied petroleum gas, a valve carried by said tank for controlling the discharge from the tank and provided with a valve stem projecting thereabove and a resilient cap through which the valve stem is adapted to project when the tank is mounted in the housing, said tank and its valve being mounted within said housing, a sparking wheel, a valve control mounted in said head vertically movable in a bore in said head and provided with a burner at its upper end and at its lower end adapted to engage the valve stem and control the opening of said valve, and actuating mechanism adapted to depress said valve control and stem to open the valve for the passage of gas from the tank, through the valve control to the burner, and to rotate the sparking wheel, said valve control and burner being disposed between said sparking wheel and said actuating mechanism.

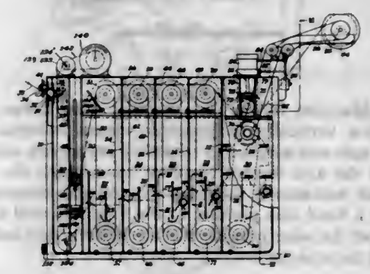
2,736,182
DECORATIVE ARTICLE IN THE NATURE OF A CANDLE HOLDER
Bill Y. James, Miami, Okla.
Application September 10, 1953, Serial No. 379,385
6 Claims. (Cl. 67—23)

1. In a decorative candle holder, a support; a body consisting of a stack of elongated, initially flat strips of flexible material mounted on the support, each strip being provided with a pin-receiving hole at each end thereof respectively, a pin-receiving hole intermediate the ends thereof and being rebent upon itself to align its holes whereby to present a plurality of loops extending from



the support in all directions; and means on the support holding the strips thereon, said means including a member having a candle-receiving cavity.

2,736,183
TEXTILE ROPE WASHER
Walter W. Arnold, Snyder, N. Y., assignor to Wiesner-Rapp Company, Inc., Buffalo, N. Y.
Application January 22, 1953, Serial No. 332,606
12 Claims. (Cl. 68—22)



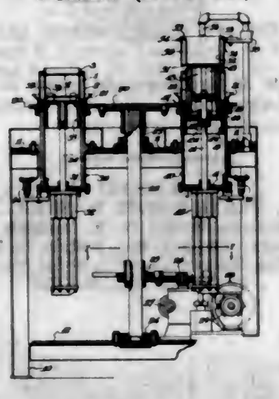
1. A machine for continuous treatment of fabric strand material comprising a tank structure being interiorly compartmented by partition devices extending vertically transversely within the tank providing a plurality of tank compartments, said partition devices having fluid transfer apertures in staggered relation at progressively opposite side portions thereof, paired rolls mounted respectively at the top and at the bottom portions of said tank compartments, a squeeze roll unit mounted in the tank compartment at the fabric discharge end, fabric strand inlet means at one end of said tank operable to guide the incoming strand of fabric to enter the tank and to then train over one of said upper rolls and thence downwardly around the paired bottom roll thereof and thence upwardly and again over said upper roll at a position spaced longitudinally therealong and thence downwardly and around said lower roll again, and so on until said fabric strand traverses the lengthwise extents of said upper and lower rolls whereupon said strand is threaded to pass over into the next compartment portion of said tank and over and around the paired upper and lower rolls thereof in like manner, and so on throughout the various compartments of said tank until said fabric strand is finally threaded through said squeeze roll unit and then discharged from said tank, power supply means operably connected separately to each upper roll of said machine and selectively adjustable while the machine is operating whereby the speeds of said upper rolls may be relatively adjusted at will while a fabric strand is running through said machine, treating fluid supply connection means disposed in communication with the compartment adjacent the discharge end portion of said machine and adapted to deliver thereinto supplies of treating fluid, a fluid outlet connection disposed at the opposite end portion of said tank, whereby the treating fluid will criss-cross through the length of said tank from the fabric strand discharge end thereof toward the fabric strand inlet end thereof.

2,736,184

MACHINE FOR REMOVING CORES FROM YARN CAKES AND THEN SUPPORTING AND WETTING THE CAKES

John Wesley Harvey, Jr., Petersburg, and Frederick Gray Kraft, Richmond, Va., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

Application June 28, 1950, Serial No. 170,838
6 Claims. (Cl. 68—205)



1. Machine for treating annular yarn cakes, comprising first vertically reciprocable means mounted upon a fixed axis and adapted to remove from a yarn cake located about the axis thereof the core upon which the yarn was wound, and second vertically reciprocable means mounted upon a fixed axis parallel to the first axis and adapted to support the inner periphery of a core-free yarn cake located about the axis thereof.

2,736,185

SLIDING DOOR LOCK ASSEMBLY

Frank R. Collar, Los Angeles, Calif., assignor to Adams Rite Manufacturing Company, Glendale, Calif., a corporation of California

Application June 15, 1953, Serial No. 361,721
7 Claims. (Cl. 70—100)



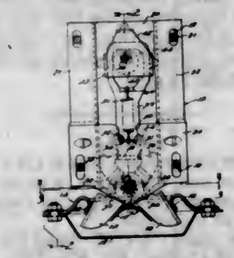
1. In a door lock: a supporting member arranged to be secured to a door element, said supporting member having front and rear spaced plates; an operating crank carried by said supporting member, comprising a hub with end portions set in openings in said spaced plates, and a lever portion with a projecting pin and a locking projection thereon spaced from said hub; a swingable support having one end thereof pivotally connected to said supporting member; a pivot pin on said swingable support; a locking lever swingable on said pivot pin from retracted position to a position extending from said supporting member; an adjusting screw in said supporting member; a nut on said adjusting screw connected to said swingable support so that movement of said nut by rotation of said adjusting screw will effect a swinging of said swingable support and change the position of said locking lever in its extended position; a link connecting said pin of said operating crank with a portion of said locking lever to swing said locking lever between retracted and extended positions in response to swinging of said operating crank between first and second positions thereof; a locking plate having a part projecting from said supporting member in such position that it will project from the edge of said door element, said locking plate being movable from extended to retracted position and having a shoulder operating when said locking plate is in extended position to engage said projection when said crank is in said first position thereof to prevent rotation of said operating crank from said first to said second position thereof; and spring means urging said locking plate into said extended position thereof and permitting movement thereof into retracted position by pressure applied to said projecting part.

2,736,186

LATCHING MECHANISM

Rollo Marple, Jackson, Mich., assignor to Hancock Manufacturing Company, Jackson, Mich., a corporation of Michigan

Application April 21, 1951, Serial No. 222,182
3 Claims. (Cl. 70—142)



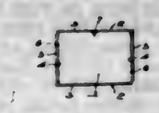
2. In a latching mechanism, a pair of bolts independently pivoted on a common axis in crossed relation, each of said bolts having a latching arm and a locking arm extending in substantially opposite directions, said bolts being relatively movable between latching and unlatching positions, said pairs of arms being adjacent each other when in unlatching position and spread apart when in latching position, resilient means urging said bolts into unlatching position, a pair of curved edges on said latching arms, said edges facing each other and being adapted simultaneously to engage opposite sides of a central keeper element when moved thereagainst, whereby said bolts will be spread into their latching position, a locking slide movable between unlocking and locking positions, said slide when in its locking position having a portion in obstructing relation with said locking arms to prevent said unlatching movement, a spring urging said slide into its locking position, means for moving said slide from its locking to its unlocking position, and a retaining portion on at least one of said locking arms movable into obstructing relation with said slide when the bolts are moved into unlatching position, whereby said slide will be held in its unlocking position.

2,736,187

COMPOSITE FURNACE BLOCK

James E. Coffman, Glen Burnie, and Thomas W. Lloyd, Pasadena, Md., assignors to Harbison-Walker Refractories Company, Pittsburgh, Pa., a corporation of Pennsylvania

Application December 22, 1954, Serial No. 477,054
5 Claims. (Cl. 72—35)



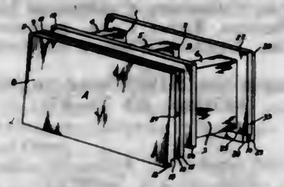
1. A composite furnace block comprising a basic refractory brick, a pair of steel channels having webs very tightly engaging two opposite sides of the brick and having side flanges covering the other two sides of the brick, and welds joining the flanges at each of said last-mentioned sides to form a metal case tightly enclosing the brick.

2,736,188

BUILDING BLOCK

John Wilhelm, Cambridge, Ohio

Application July 3, 1952, Serial No. 296,989
1 Claim. (Cl. 72—41)



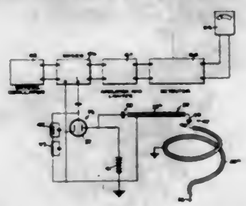
A building block comprising, a front wall and a rear wall spaced therefrom, spaced ribs interconnecting the walls, a flange extending longitudinally of the inner upper edge of the front wall and a similar flange at the inner upper edge of the rear wall, a wide shoulder adjacent each of said flanges extending throughout the lengths thereof, a flange at the lower front edge of the front wall and extending throughout the length thereof, a wide shoulder behind said flange and extending throughout the length thereof, a narrow shoulder behind said wide shoulder and extending throughout the length thereof, a narrow shoulder extending throughout the length of the inner lower edge of the rear wall, a wide flange behind said shoulder, a longitudinally extending keyway extending throughout the length of both of the shoulders at the upper edges of the front and rear walls, a keyway extending throughout the length of the wide shoulder at the bottom edge of the front wall and a similar keyway in the wide flange at the lower edge of the rear wall, the opposed ends of the front and rear walls at one end of the block being provided at their inner edges with vertically extending flanges and each having a wide shoulder adjacent its respective flange, the opposite opposed ends of the front and rear walls of the block each being provided at its inner edge with a vertically extending narrow shoulder and each having adjacent said narrow shoulder a wide flange, each of the vertically extending wide shoulders and each of the vertically extending wide flanges being provided with vertically extending keyways, said wall flanges adapted to seat on shoulders of a similarly constructed block in the erection of a wall, said keyways adapted to receive insertable keys extending horizontally and vertically in respect to the blocks of a wall, the parts operating as and for the purpose described.

2,736,189

APPARATUS FOR TESTING TIMERS OR THE LIKE

Raymond W. Brandt, Janesville, Wis., assignor to Gibbs Manufacturing and Research Corporation, Janesville, Wis., a corporation of Wisconsin

Application October 27, 1952, Serial No. 317,079
13 Claims. (Cl. 73—5)



1. Apparatus for measuring the frequency of oscillation of an oscillating part during rotation of a device carrying the part comprising a support adapted to mount said device for rotation at high speed, a high frequency oscillation generator having a resonant circuit including a length of resonant coaxial transmission line having one end connected in the circuit and having a pickup element at its other end, said pickup element being mounted on said support for rotation therewith and in a fixed position with respect to said device to cooperate with said part to form a reactance which varies in accordance with oscillations of the part, a coupling capacitor interposed in said transmission line and having one plate mounted on and rotatable with said support and having a stationary plate cooperating therewith, and means responsive to the output of said generator for indicating the frequency of oscillation of said part.

2,736,190

TESTING DEVICE FOR DETERMINING VOLUME OF GAS IN LIQUID

John B. Bockelmann, Tenafly, N. J., and Charles Hanft, Hicksville, N. Y., assignors to The F. & M. Schaefer Brewing Co., Brooklyn, N. Y.

Application October 22, 1954, Serial No. 463,967
9 Claims. (Cl. 73—19)



1. A device for determining the gas content of a liquid containing the gas in solution comprising a container, a pressure gauge and a temperature gauge mounted on said container, a flexible impervious diaphragm mounted on said container forming a main chamber and an auxiliary chamber having a predetermined volume ratio, said pressure gauge and temperature gauge having communication with the interior of said main chamber, an inlet to said main chamber for filling said main chamber with the liquid to be tested, an outlet to said main chamber for removing the liquid from said chamber during the preliminary purging of said main chamber; means for maintaining said diaphragm in fixed position during the filling of said main chamber with the liquid to be tested and means for releasing said diaphragm after the filling of said main chamber to augment the volume of said main chamber by substantially the volume of said auxiliary chamber.

2,736,191

DEVICE FOR DETERMINING VOLUME OF GAS IN LIQUID

John B. Bockelmann, Tenafly, N. J., and Charles Hanft, Hicksville, N. Y., assignors to The F. & M. Schaefer Brewing Co., Brooklyn, N. Y.

Application October 22, 1954, Serial No. 464,002
7 Claims. (Cl. 73—19)

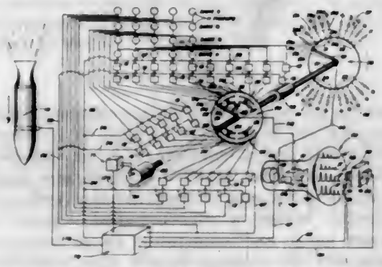
1. A device for directly determining the gas content of a liquid containing a gas in solution comprising a container having a testing chamber and a pressure chamber, inlet and outlet means in said testing chamber, means for establishing a specific ratio between the volume of liquid in said testing chamber to be tested and the volume of said testing chamber, a plate secured to said container having an opening therein dividing said container into said two chambers, a diaphragm extending

over said opening thereby sealing said chambers from one another, a bi-metallic strip secured on said plate having a free end movable responsive to temperature changes within said testing chamber containing the liquid to be tested, a pressure gauge mounted on said container



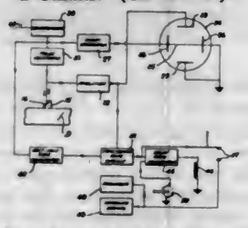
having a hydraulic connection through said pressure chamber with said diaphragm and a connection between the free end of said strip and said diaphragm so that said pressure gauge gives a pressure reading modified by the temperature changes in said testing chamber containing the liquid to be tested.

2,736,192
CONDITION ANALYZING AND RECORDING APPARATUS
Clifford M. Ryerson, Kinsale, and James T. Bull, Falls Church, Va.
Application February 16, 1950, Serial No. 144,552
1 Claim. (Cl. 73—35)
(Granted under Title 35, U. S. Code (1952), sec. 266)



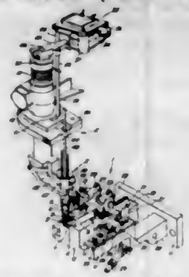
A device of the type described comprising a plurality of condition responsive signal producing pickups spatially oriented with respect to a condition producing source, a multiple face multiple contact switch, each face being a signal collector having contact elements arranged in spaced relation thereon, a plurality of transmitting channels, one associated with each pickup connecting said pickups to the contacts on a first face of said switch, a peak voltmeter included in each channel for storing the peak signals produced by said pickups, each channel thereby impressing the peak signal generated by its associated pickup on the associated contact, a first wiper arm on said switch designed to traverse said face and to engage said contacts successively, a plurality of separately energized contacts on a second face of said switch, a second wiper arm ganged to said first wiper arm, means including a normally de-energized electric motor for rotating said arms, means operating in predetermined time relationship to said condition producing source to energize said motor, and to cause said motor to drive said arm through only a single revolution, thereby causing performance of a single cycle of movement embracing the transmission of a single signal impulse through each of said transmitting channels in succession, recording means comprising a cathode ray tube having horizontal and vertical deflecting plates, means electrically connecting said ganged arms to said horizontal and vertical plates respectively, to produce upon rotation of the wiper arms and resulting successive engagement of the collectors an indication on the screen of said tube of the intensity of said condition at each point of pickup, as previously registered by said storing peak voltmeter, the indication on the tube screen thus illustrating the relationship between condition intensity and spatial orientation.

2,736,193
ULTRASONIC INSPECTION OF RAIL JOINTS
Howard E. Van Valkenburg, Candlewood Isle, and Raymond E. Sansom, Bethel, Conn., assignors to Sperry Products, Inc., Danbury, Conn., a corporation of New York
Application July 2, 1953, Serial No. 365,632
2 Claims. (Cl. 73—67)



1. In a rail flaw detector mechanism, said rails having bolt holes in the joint areas, means for detecting cracks originating at the bolt holes, said means comprising means movable relative to the rail for periodically transmitting ultrasonic wave trains into the rail and receiving reflections from reflecting surfaces in the rail, said bolt holes forming reflecting surfaces, indicating means normally maintained ineffective, a bolt hole gate generator adapted to be energized periodically in synchronism with said wave train transmitting means to generate a signal gate voltage after the termination of said transmitted pulse, a coincidence gate circuit adapted to be rendered effective by the coincidence of signal voltages from said bolt hole gate generator and from said receiving means in response to a reflection from a bolt hole, a delay gate generator rendered effective by the signal voltage from the coincidence gate circuit, said delay gate generator generating a signal voltage after a predetermined delay corresponding to the time that the transmitting and receiving means travels past the bolt hole, said delayed signal gate voltage continuing for a time corresponding to the travel of the transmitting and receiving means between bolt holes, and means whereby the signal voltage from the delay gate generator renders said indicating means effective.

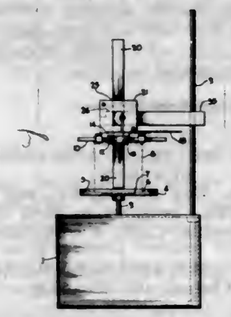
2,736,194
FILAMENT MOUNT TESTING APPARATUS
Lee E. Dilts, South Euclid, Ohio, assignor to General Electric Company, a corporation of New York
Application February 23, 1951, Serial No. 212,279
5 Claims. (Cl. 73—88)



1. Apparatus for testing mounts of the class described having a filament connected across and between parallel

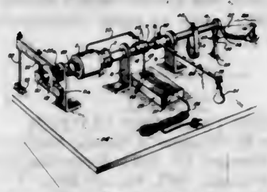
spaced lead-in wires and comprising a pair of finger members insertable between said lead-in wires, a pair of levers supporting said fingers at adjacent proximate ends thereof, means mounting said levers for pivotal movement to spread the finger members laterally of and against the lead-in wires, and a pair of magnets mounted on the remote ends of said levers with the end faces of unlike poles in closely spaced relation and so that they face and attract each other to urge the finger members apart and against the lead-in wires with progressively increasing force tending to displace said wires in case the filament is ruptured or defectively connected thereto.

2,736,195
INSTRUMENT FOR PAINT TESTING
Conrad J. Christianson, Markham, Ill., assignor to The Sherwin-Williams Company, Cleveland, Ohio, a corporation of Ohio
Application March 15, 1954, Serial No. 416,340
5 Claims. (Cl. 73—101)



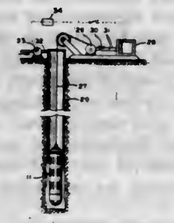
1. An analytical instrument for measurement of settlement characteristics of solid-in-liquid suspensions which comprises a base, a horizontal turntable above said base, means to rotate said turntable at constant speed, stop means supported by said base, a bearing support adapted to be centrally mounted over containers of test substances, a thrust bearing rotatably supported by said bearing support whose axis of rotation is common with that of said turntable, means interiorly of said thrust bearing to accommodate an elongated blade therein, a blade, clamping means adapted to slide lengthwise of said blade, said clamping means further adapted to secure a length of deflectable strip normal to said blade and extending outward to said stop means, and means to indicate the degree of deflection of said strip upon transfer of turning moment from said turntable through the test substance, vertical elongated blade, and horizontal deflectable strip when said strip is stilled at its free end by contact with said stop.

2,736,196
DYNAMOMETER
Talbot R. Knowles, Los Angeles, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application December 1, 1951, Serial No. 259,402
6 Claims. (Cl. 73—136)



1. A dynamometer for testing a motor having a stator member and a rotor member, comprising: a shaft, means for fixedly and coaxially mounting said stator member on said shaft, the rotor of said motor being freely rotatable with respect to said shaft, said shaft being supported in nearly frictionless bearings, a first lever arm attached to said shaft to normally lie in a horizontal plane perpendicular to said shaft, a second lever arm attached to said shaft to normally lie in a vertical direction perpendicular to said shaft, a pendulous means rotatively adjustably attached to said shaft for initially bringing said shaft to a null condition wherein said first lever arm is directed horizontally and said second lever arm is directed vertically, means for applying power to said motor, means for applying relatively high known values of torque to said shaft through one of said lever arms, and means for applying relatively low known values of torque through the other one of said lever arms.

2,736,197
APPARATUS FOR DETERMINING RELATIVE PERMEABILITY OF FORMATIONS
Richard L. Doan, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application January 2, 1951, Serial No. 204,002
5 Claims. (Cl. 73—155)

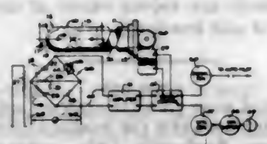


4. An apparatus for determining relative permeability of formations penetrated by a well bore which comprises, in combination: an elongated flow meter comprising a shell perforate throughout its length and containing a mobile contactor free to move through the length of said shell, said mobile contactor having a conducting element thereon extending from one side thereof to the other and adapted to contact opposing pairs of electrical contacts extending through the inner wall of said shell at equally spaced intervals along the length of said shell; means for introducing a first liquid into said well bore so as to form a liquid head in said well bore; means for lowering said flow meter into said well bore and into said head of liquid to a position adjacent said formations the permeability of which is to be determined, so as to cause said mobile contactor to be elevated to the upper end of said shell; means for introducing additional liquid into said well bore under such pressure as to force said first liquid into said formations and to force said mobile contactor downwardly through said shell at the rate of flow of said liquid in said well bore; means including a recorder for recording the rate of downward travel of said mobile contactor through said shell; and means for operating said recorder at a rate of speed which is in direct response to the rate of input of said additional liquid to said well bore.

2,736,198
FLUID STREAM DIRECTION INDICATOR
John Kuhn, Los Angeles, Calif., assignor to The Garrett Corporation, Los Angeles, Calif., a corporation of California
Application August 31, 1951, Serial No. 244,633
4 Claims. (Cl. 73—180)

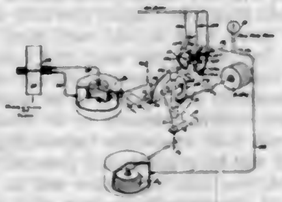
1. In a fluid stream direction indicator: a sensing head adapted to be exposed to the fluid stream; a duct in said

sensing head having its ends terminating in spaced openings in said sensing head, said duct being closed from one of said openings to the other whereby a differential of pressure at said openings will cause passage of fluid through said duct from one opening to the other and fluid passage through said duct is nullified with equal pressure at said openings resulting from symmetrical disposition of said openings with respect to the direction of the fluid stream; first and second heated resistance elements in spaced relationship longitudinally within said duct so as to be successively contacted by fluid passing through said duct, said resistance elements having the characteristic of change in resistance with change in temperature, pas-



sage of fluid in either direction through said duct causing cooling of the first contacted element of said resistance elements to a greater degree than the second contacted element of said resistance elements; an electrical circuit including said resistance elements and means for heating such elements, said circuit providing an output voltage whose sign reverses in accordance with the direction of fluid flow past said resistance elements; means controlled by said circuit and responsive to changes in said output voltage for moving said sensing head in a direction to establish symmetrical disposition of said openings with respect to the direction of the fluid stream; and means controlled by said circuit for indicating the fluid stream direction.

2,736,199
APPARATUS RESPONSIVE TO MULTIPLE FLUID PRESSURES
Harold William Ibbott, London, England, assignor to Negretti & Zambra Limited, London, England, a company of Great Britain
Application July 17, 1950, Serial No. 174,154
Claims priority, application Great Britain November 29, 1949
7 Claims. (Cl. 73—205)



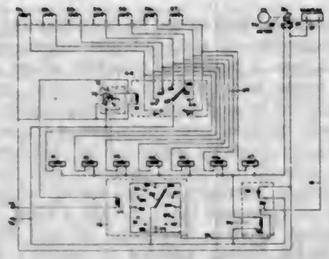
1. Proportionally responsive apparatus comprising a pivoted member which is in shape at least three-quarters of an annulus, an arm projecting therefrom, a bellows, a force-transmitting linkage between said bellows and said arm, a rotatable spindle mounted within the space enclosed by the pivoted member and at right angles to the pivot axis thereof, an arm carried by the spindle, a second bellows, a force-transmitting linkage between said second bellows and said arm, a second arm carried by said spindle, a third bellows, a force-transmitting linkage between said third bellows and said second arm, an air pressure system, two air escape nozzles in said system located one on each side of the pivoted member and both in close proximity thereto, and an air relay in said system connected to the nozzles and to at least one of said three bellows.

2,736,200
PRESSURE MEASURING APPARATUS
Joseph John Kleimack, Scotch Plains, and Weldon R. Sittner, Neshanic Station, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application August 23, 1950, Serial No. 181,088
9 Claims. (Cl. 73—399)



1. A heat conductivity manometer comprising an envelope, a block of material supported within said envelope and defining a heat sink, said block having a flat surface and a groove in said surface, a strip of resistance material mounted on said surface and across said groove, conductive surfaces on said resistance material and defining a small active length heat source formed by the portion of said resistance material intermediate said conductive surfaces, said active length being adjacent said block at said groove, said groove thereby defining a minute distance between said heat sink and said heat source, and lead wires electrically connected to said conductive surfaces and extending through said envelope.

2,736,201
AUTOMATIC METERING AND SAMPLING STATION
Rodney M. Ohlsen, New Orleans, La., and Grafton A. Smith, Tulsa, Okla., assignors to Shell Development Company, Emeryville, Calif., a corporation of Delaware
Application April 7, 1953, Serial No. 347,212
10 Claims. (Cl. 73—422)

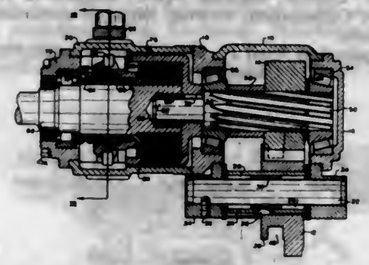


2. Apparatus for automatically metering and sampling the production fluid in the flow lines of a plurality of wells, said apparatus comprising an electrically-actuated valve in each of said flow lines, a by-pass line leading from each valve, a manifold connecting said by-pass lines, a flowmeter in communication with said manifold, electrically-actuated sampling means for removing a composite sample from the fluid passing through said manifold, a plurality of recorders adapted to be individually actuated by said flowmeter in response to fluid flow therethrough, said recorders being equal in number to the number of wells being metered, and electrical circuit means including switch means actuated by said flow meter for successively actuating one of said valves together with one of said recorders and second switch means for actuating said sampling means as equal increments of fluid pass through said flowmeter.

2,736,202
POWER TAKE-OFF CLUTCH
Robert W. Wagner, Chelsea, Mich.
Application February 12, 1952, Serial No. 271,229
4 Claims. (Cl. 74—15.86)

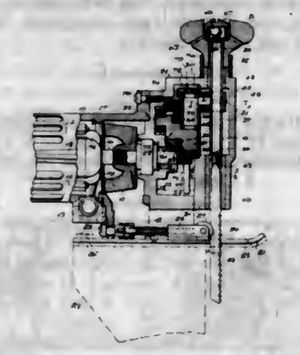
1. In a power take-off unit for connection to be driven by a main transmission, casing structure, a gear train

mounted in said casing structure, said gear train including an idler gear, a driven shaft and a gear on said driven shaft, said driven shaft having an end extension and said casing structure including a clutch housing, said shaft extension being located in said clutch housing, a power take-off shaft, means mounting said power take-off shaft in said clutch housing in coaxial extension of said driven shaft, said driven shaft and extension being rotatably supported in an end portion of said power take-off shaft, a clutch connecting said power take-off shaft with said driven shaft and actuating means for releasing said clutch, said actuating means being adapted for connection with the clutch pedal controlling the actuation of the clutch of the main transmission, said clutch including a first thrust member keyed upon said driven



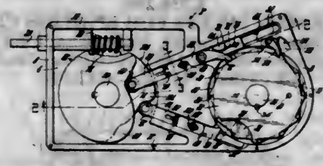
shaft, a second thrust member axially slidable upon said power take-off shaft, a series of clutch discs enclosed between said thrust members and a coil spring urging said axially slidable thrust member into position to engage said clutch discs, said actuating means including a shifter collar mounted about said coil spring and stressed by the spring into clutch applying relationship with respect to said second thrust member and lever means connected with said collar to shift the collar axially against the spring action and thereby disengage the clutch discs, said lever means including a lever on the outside of the clutch housing adapted for connection with the clutch pedal of the main transmission to synchronize the release of the power take-off clutch with the depression of the clutch pedal of the main transmission.

2,736,203
MECHANICAL MOVEMENT
William E. Shore, West New Brighton, N. Y., assignor to Harold S. Forsberg, Shelton, Conn.
Application September 9, 1950, Serial No. 183,988
17 Claims. (Cl. 74—52)



1. Mechanism for converting rotary motion to reciprocatory motion comprising, in combination, a gear box housing, a master gear, means for driving the master gear, a gear casing within the gear box housing in which the master gear rotates, the inner surface of the gear casing surrounding the master gear forming a bearing surface for the lands of the gear teeth of the master gear, an annular gear in the gear casing co-axially aligned with the master gear, an integral co-axial hub extending from the master gear into the annular gear, the lands of the teeth of the annular gear providing a bearing surface for the hub, a bearing shaft extending from the said hub and journalled in the gear box housing, a rotatable drum member eccentrically journalled in the said master gear and having a bearing shaft journalled in the hub of the master gear, the axes of the drum member and the master gear being parallel, a gear secured on the drum member shaft within the annular gear and in engagement therewith so that rotation of the master gear in the gear casing causes the drum member to rotate about its own axis while it moves simultaneously in a circular orbit about the axis of the master gear, a member to be reciprocated, and a crank pin projecting from the face of the drum member for operatively engaging the member to be reciprocated.

2,736,204
INDEXING APPARATUS
George Hastings Hill, Williamsburg, Mass.
Application November 2, 1953, Serial No. 389,716
6 Claims. (Cl. 74—125)

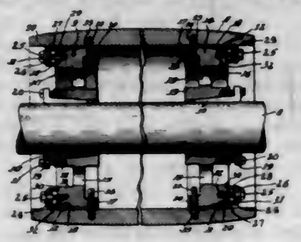


1. Indexing apparatus comprising in combination, a support, an index shaft journalled relative to said support for step-by-step indexing rotation, an index ratchet and a stop ratchet having relatively opposed teeth, elongated actuating pawl means reciprocable in said support for a forward movement to engage a tooth of said index ratchet for rotating it through a certain angle and a rearward retracting movement to release said tooth, elongated stop pawl means reciprocable in said support for a forward movement to a stop position for engagement by a tooth of said stop ratchet and a rearward retracting movement away from said stop position, operating means to move said actuating and stop pawl means forwardly arranged and adapted to position said stop pawl means in stop position prior to the limit of forward movement of the actuating pawl means, and means to move said actuating and stop pawl means rearwardly, said actuating and stop pawl means each being adjustable longitudinally, said ratchets and said support provided with registrable openings for receiving a locking pin, said openings of said ratchets being relatively arranged so that with a locking pin in said openings and in the opening of the support said ratchets are locked against rotation with a certain tooth of one ratchet disposed at a predetermined angle relative to a certain tooth of the other ratchet whereby said actuating and stop pawl means may be adjusted so as to engage said certain teeth of the ratchets.

2,736,205
PULLEY AND METHOD OF MAKING SAME
Maurice F. Dunne, Jr., Winnetka, Ill.
Application January 21, 1955, Serial No. 483,236
11 Claims. (Cl. 74—230.3)

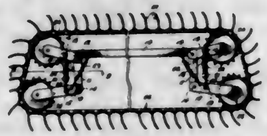
1. A pulley adapted to support a conveyor belt and comprising a pair of circular end walls positioned in coaxial relation and a predetermined distance apart, provided on the central portions thereof with shaft receiving hubs, and having annular outwardly tapered surfaces on their outer peripheral portions, and an elongated substan-

tially cylindrical side wall extending around and between the end walls and having the ends thereof spaced radially outwards a small distance from said outer peripheral portions of the end walls, and a pair of split wedge-type rings interposed between the outer peripheral portions of the end walls and the ends of the side wall, having the outer



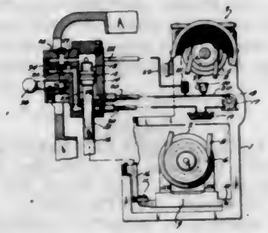
peripheries thereof cylindrical and in gripping relation with the end portions of the inner periphery of the side wall and their inner peripheries flared inwards and in gripping relation with said annular outwardly tapered surfaces, and serving releasably to secure said side wall in connected relation with the end walls.

2,736,206
TIGHTENING MEANS FOR ENDLESS CHAINS
Clarence L. Conner, McFarland, Calif.
Application May 9, 1952, Serial No. 286,939
2 Claims. (Cl. 74—242.11)



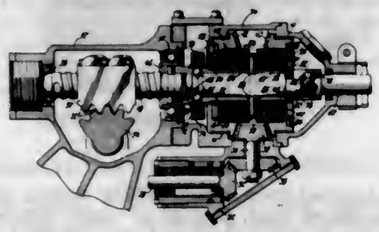
1. A device of the character described comprising a frame of inverted U-shape having an elongated bight portion and a pair of dependent legs, a pair of upper arms each pivotally connected to the upper portion of one of said legs, a pair of lower arms each pivotally connected to the lower end of one of said legs, a compression spring interposed between the pair of arms pivoted to each leg, a sprocket mounted upon the outer end of each arm, and an endless chain entrained over all of said sprockets, said upper arms being of lesser length than said lower arms.

2,736,207
HYDRAULIC MOTOR ADJUSTMENT FOR MACHINE TOOLS
Lorenz Albert Leifer, Madison, Wis., assignor to Gisholt Machine Company, Madison, Wis., a corporation of Wisconsin
Application December 20, 1951, Serial No. 262,615
2 Claims. (Cl. 74—242.15)



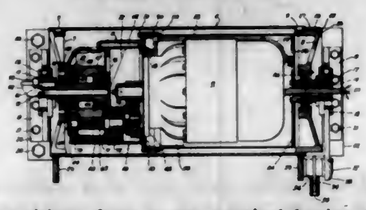
1. In a machine tool of the class described, a base having a headstock, a motor carried by the base below said headstock, a belt extending upwardly from said motor to drive said headstock, a cylinder carried by said base above said motor, a piston movable within said cylinder and connected to said motor to raise and lower the same, separate fluid pressure supply means connected respectively to the opposite ends of said cylinder to act against said piston to support a predetermined part of the weight thereof whereby the given unsupported weight of the motor is utilized to effect tightening of said belt, and valve means to control the hydraulic actuation of said piston between two positions in one of which the belt is maintained tight with a predetermined portion of the weight of said motor counterbalanced and in the other of which the motor is raised to release the belt for adjustment.

2,736,208
FOLLOW-UP MECHANISM
Clovis W. Lincoln, Saginaw, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 29, 1953, Serial No. 351,900
14 Claims. (Cl. 74—388)



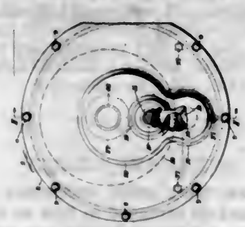
1. A follow-up mechanism comprising a working member supported for rotary movement and having associated therewith a pair of oppositely disposed clutch units, the driving components of said units being rotatable relative to said member, the driven components thereof being incapable of such relative rotation, transmission means through which the opposed driving components may be constantly rotated in opposite directions in the operation of the mechanism, a control member supported for rotary movement with said working member and for limited axial movement, said control member having a lost motion connection with said working member permitting limited rotary movement thereof relative to said working member, yieldable centering means associated with said members serving to prevent rotary movement of said control member relative to said working member in the absence of a predetermined load on said working member, means interconnecting said members for inducing relative axial movement of said control member on rotation of the same relative to said working member, and means operably associated with said control member responsive on said relative axial movement to cause engagement of one of said clutches.

2,736,209
DRIVEN DRUM POWER TERMINAL
Joseph D. Christian, San Francisco, Calif.
Application July 31, 1952, Serial No. 301,910
2 Claims. (Cl. 74—421)



1. In a driven drum power terminal having a prime mover device, means supporting each end of the prime mover device, a cylindrical drum surrounding the prime mover device, said drum having a belt extended thereabout for driving by the drum, the belt extending from the drum in such relation to the drum that a load on the belt tends to rotate the drum in a first direction, means supporting the drum for rotation on the prime mover device in a selected position of alignment, a driving connection between the prime mover device and the drum enabling the prime mover to rotate the drum in a second direction, brake means permitting rotation of the drum in only said second direction, and means supporting the drum in substantially said selected position of alignment and independently of said means supporting said drum for rotation on the prime mover device.

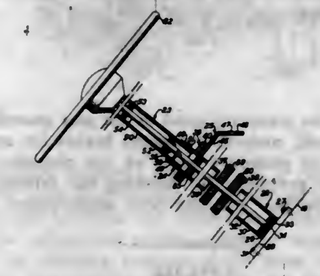
2,736,210
GEAR REDUCTION DRIVE UNITS
Joseph Dennis Christian, San Francisco, Calif., assignor to The American Pulley Company, Philadelphia, Pa., a corporation of Pennsylvania
Application October 27, 1952, Serial No. 317,116
4 Claims. (Cl. 74—421)



1. In a two stage gear reduction drive unit a cylindric casing; an output shaft with one end thereof rotatively supported axially in and protruding through one side wall of the casing, and its other end rotatively supported in the other side wall of the casing; a low speed gear wheel on said shaft within the casing, said gear wheel having its toothed peripheral flange projecting laterally from the innermost side of its radial web and overhanging the inner end portion of said shaft with provision of a relatively deep annular hollow between said flange and said shaft; a parallel countershaft spaced from the input shaft with its ends rotatively supported in the opposite side walls of the casing; a high speed gear and a pinion side by side on the countershaft, said pinion being in mesh with the low speed gear; a parallel input shaft with an elongate pinion thereon in mesh with the gear on the countershaft and extending into the hollow of the slow speed gear on the output shaft, said input shaft being disposed intermediate the output shaft and the countershaft and extending to the exterior through and rotatively borne in the casing wall opposite that penetrated by the output shaft; a thimble-like bracket projection secured to the inner side of the casing wall penetrated by the input shaft and surrounding the pinion on the input shaft except at the region of intermesh of said pinion with the gear on the countershaft; and a bearing within the hollow of said bracket projection for the inner end of the input shaft.

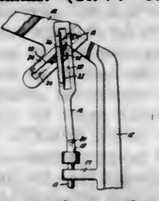
2,736,211
DETACHABLE AUXILIARY STEERING WHEEL FOR MOTOR VEHICLES
Haven D. Umstott, Arlington, Va.
Application July 9, 1953, Serial No. 366,896
7 Claims. (Cl. 74—494)

1. A detachable auxiliary steering wheel for vehicles comprising a lower column including a tubular member secured to a foot plate, means for attaching said foot plate to the floor board of a vehicle, a thrust bearing carried by said foot plate within said tubular member, a lower steering shaft journalled in said thrust bearing and extending upwardly through said tubular member, an intermediate column including a second tubular member, a bearing in said second tubular member rotatably receiving said lower steering shaft, a pair of pulleys fixed to said lower steering shaft between the upper end of said tubular member and the lower end of said second tubular member, a V-shaped slot in the upper end of said lower steering shaft, means for supporting said intermediate column from the dash of the vehicle comprising a bracket, a clamping block having one portion secured to said bracket and a removable portion for engaging and securing said intermediate column to said bracket, a bayonet slot in the upper end of said second tubular member,



an upper column including a third tubular member having a tight sliding fit in the upper end of said second tubular member, an upper steering shaft journalled for rotation in said third tubular member, a steering wheel fixed to the upper end of said upper steering shaft, a V-shaped projection on the lower end of said upper steering shaft, a pin on said third tubular member engaging in said bayonet slot for detachably securing said upper column to said intermediate column with said V-shaped projection in engagement with said V-shaped slot and flexible power transmission means for connecting said pulleys and the conventional steering mechanism on said vehicle.

2,736,212
ADJUSTABLE LEVER VALVE
Paulsen Spence, Baton Rouge, La.
Application April 24, 1953, Serial No. 350,970
18 Claims. (Cl. 74—522)

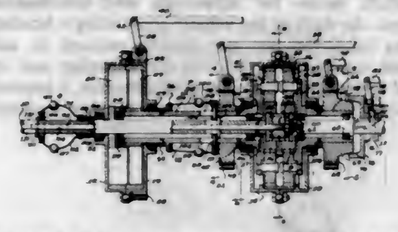


1. In a lever-valve actuating mechanism, frame means, valve-stem connecting means including frame-based guide means on a valve-stem guide axis, an actuating lever pivotally supported on a frame-based axis transverse to said guide axis and generally aligned with said guide axis, pivot-guide means on said actuating lever and generally aligned with said guide axis when said lever is in the position corresponding to valve-closed position of said valve-stem connecting means, pivot means adjustably positionable along said pivot-guide means, and connecting means connecting said pivot means with said valve-stem connecting means.

2,736,213
COMBINATION PLANETARY GEAR AND FLUID BRAKE TYPE TRANSMISSION
David Farjon, Willemstad, Curacao, Netherlands Antilles
Application January 9, 1953, Serial No. 330,515
6 Claims. (Cl. 74—752)

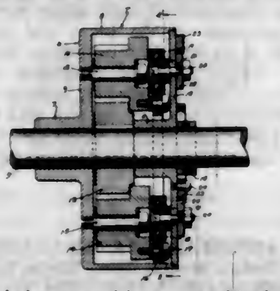
1. A motor vehicle transmission comprising a driving shaft, a driven shaft, a pair of planetary gear assemblies

positioned with one assembly on the driving shaft and the other on the driven shaft, a ring gear having an internal gear meshing with pinions of the planetary gear assembly on the driving shaft and a similar internal gear meshing with pinions of the planetary gear assembly on the driven shaft, a fluid type brake positioned to control



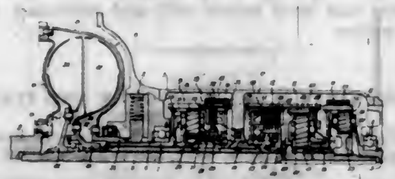
the travel of the planetary gears of the gear assembly on the driving shaft, manually actuated brakes for controlling rotation of planetary gears of the planetary gear assembly, and governors for meshing the driving shaft with the driven shaft whereby both shafts rotate at the same speed.

2,736,214
PLANETARY GEAR TRANSMISSION
Stephen W. Stortz, Fort Atkinson, Wis.
Application November 3, 1954, Serial No. 466,614
3 Claims. (Cl. 74—752)



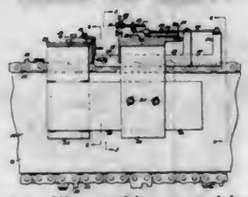
1. A transmission comprising a rotatable shaft, a casing rotatable on the shaft, a sun gear disposed within said casing and secured to the shaft for rotation therewith, idle planet gears meshing with the sun gear and normally rotatably carried by the casing, an eccentrically disposed lock ring movable within the casing and eccentrically mounted on the planet gears for turning movement, a cover plate for said casing rotatable relative to the shaft and the casing, and means responsive to the speed of the cover plate engaging said ring for gradually holding the planet gears against free rotation upon increased speed of the cover plate.

2,736,215
TRANSMISSION
Clifford L. Swift, Muncie, Ind., assignor to The Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application May 8, 1951, Serial No. 225,158
3 Claims. (Cl. 74—759)



1. In a transmission, the combination of a drive shaft, a driven shaft, means for providing a plurality of power trains through the transmission and including a pair of planetary gear sets connected between said shafts, each of said gear sets including a sun gear, a ring gear and a planet gear carrier, the sun gear of one of the sets being connected to rotate with the ring gear of the other, the ring gear of said one set being connected to rotate with the sun gear of said other set, the planet gear carrier of said other set being connected directly with said driven shaft, a brake for the carrier of said one gear set for completing one of the power trains through the transmission, and a brake for the sun gear of said one gear set and the ring gear of said other gear set for completing another of the power trains through the transmission.

2,736,216
CHAIN SAW FILING TOOL
Ernest Paradis and Romeo Paradis, Oakfield, N. Y.
Application February 1, 1954, Serial No. 407,372
3 Claims. (Cl. 76—31)



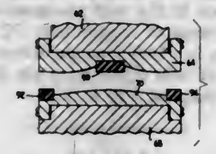
1. A chain saw filing guide comprising a first pair of upstanding brackets arranged in face to face relation, each of said pair of brackets having one of its legs extending at a right angle from its non-confronting face, a first plate adjustably secured on one side to each of said extended legs, the other leg of each of said first pair of brackets being L-shaped and adjustably supported on its extended base, one each of a second pair of brackets having similarly spaced confronting faces and one leg each similarly extended, a second plate similarly secured on one face to the extended legs of the last-named brackets and forming with said first plate an interrupted table having a central opening, said first and second pairs of brackets being adapted and arranged to engage the sides of a chain saw bar between their confronting faces, a combined rake tooth gauge and file guide adjustably positioned in said opening, a movable stop in said opening adapted to position a chain saw therein, a pair of cutting teeth file guides slidable in said opening and having spaced confronting faces, said pair of file guides having a file-receiving opening therethrough, and means on said second plate for adjustably positioning said file guides in said opening relative to each other whereby a file slidable in the file-receiving opening of each is angularly disposed in tooth filing position for either a left-facing or right-facing cutting tooth of a chain saw.

2,736,217
ADJUSTING DEVICE IN ROLLING MILLS
Paul Blain, Firminy, France, assignor to Societe Anonyme des Acieries et Forges de Firminy, Paris, France
Application October 18, 1952, Serial No. 315,482
Claims priority, application France September 16, 1952
3 Claims. (Cl. 80—56)



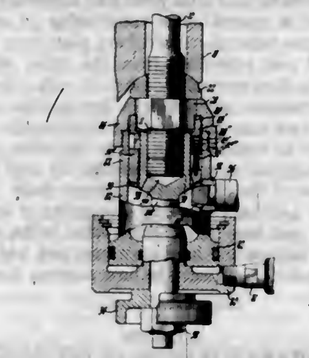
1. A device for maintaining the initial parallel setting and reference spacing of a pair of rotary rolls mounted in bearings supported by a pair of uprights, said pair of rolls having extensions on either side of said bearings in the form of ground cylindrical journals, the device comprising a pair of reference units each comprising a frame having four lower abutments, an upper abutment and a hook member, a slide vertically adjustable in guide means provided in said frame and a feeler member rigidly mounted on said slide, a pair of springs each having one end anchored on an upright and the other end engaged on the hook member of the frame of one of the reference units so as to urge said frame in such a direction that said four lower abutments of said frame will engage one journal of said lower roll and the upper abutment of the same frame will engage one journal of said upper roll, said feeler shifting position in response to the shifting of said upper roll.

2,736,218
CUTTING TOOLS
Florian V. Atkeson, Tarentum, Pa., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania
Application October 14, 1952, Serial No. 314,705
9 Claims. (Cl. 81—5.1)



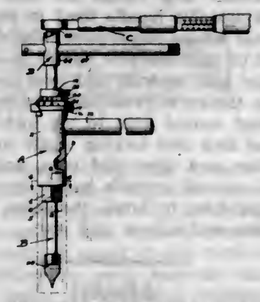
1. A device for use in cutting glass-like material comprising a first element having a surface of convex contour protruding centrally, an opposed element having a pair of convexly contoured surfaces on opposite sides of a depressed center portion, and means for urging the elements against opposite sides of a piece of glass-like material with the protruding portion of the surface of the first element disposed in line contact with the glass-like material on the side opposite from and cross-sectionally aligned with a score line in the glass-like material.

2,736,219
BOLT TENSIONER AND WRENCH
Joseph May, Parma Heights, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application July 8, 1954, Serial No. 442,067
10 Claims. (Cl. 81—52.4)



8. A tool including power means for first applying axial tensile stresses to a bolt and means for then advancing a nut thereon while maintaining said axial tensile stresses in said bolt, said last mentioned means including a driving connection releasable upon application of a predetermined torque to said nut.

2,736,220
BOLT-HOLDING WRENCH
John Kamuk, Van Nuys, Calif.
Application September 13, 1954, Serial No. 455,501
1 Claim. (Cl. 81—55)



A wrench assembly for use with a combination adjustment screw and lock nut assembly comprising: a shank having one terminus for removable driving engagement with the adjustment screw; a handle engaged with the shank for effecting rotation of the same about its axis; a barrel telescopically mounted on the shank, rotatable with reference to the shank and slidable axially thereof; a wrench socket telescopically mounted on the shank, removably secure to the barrel, and arranged for removable driving engagement with the lock nut; a handle engaged with the barrel for rotating the same about the axis of the shank, whereby the lock nut may be rotated relative to the screw for loosening the same by grasping the barrel handle and rotating the barrel and the wrench socket relative to the shank, whereby the adjustment screw may be adjusted by grasping the shank handle and rotating the shank relative to the barrel and the adjustment screw relative to the lock nut, and whereby the lock nut may then be retightened relative to the screw by grasping the barrel handle and rotating the barrel and wrench socket relative to the shank, all of such operations being affected while the wrench socket remains in driving engagement with the lock nut and the terminus of the shank is simultaneously in engagement with the adjustment screw; said barrel including an extension having a longitudinally extending corner for engagement in a complementary recess for such corner in the wrench socket, and a bent pin fixed in the corner of the barrel for removable securing the wrench socket relative to the barrel extension.

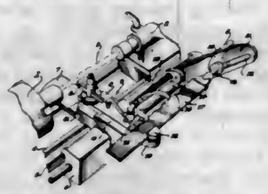
2,736,221
DUAL PIVOT TOGGLE MECHANISM FOR LOCKING AND RELEASING PIVOTED JAW WRENCH
Ernest A. von Seggern, Burbank, Calif.
Application June 14, 1954, Serial No. 436,330
8 Claims. (Cl. 81—84)



1. In a wrench of the type described, comprising a stationary jaw and handle, a first pivot means supported by said handle at a distance from said jaw, and a movable jaw pivotally connected to said handle adjacent said stationary jaw and operative with said stationary jaw, said movable jaw including a second pivot means, an over-center toggle type jaw closing and releasing mechanism pivotally connected between said movable jaw and said handle at said first and second pivot means, said mechanism comprising: a dual pivot toggle comprising three pivotally connected links, including a first link pivotally connected to one of said pivot means, a second link

pivotally connected to said first link at a release toggle joint, over-center stop means for said release toggle joint, a third link pivotally connected to the other of said pivot means and to said second link at a locking toggle joint, over-center stop means for said locking toggle joint, and a movable handle fixed to one of said links pivoted at said release toggle joint, whereby closing pressure exerted on said movable handle reacts first on said release toggle joint to lock said joint in an over-center position and thence to react secondly through the then rigid first and second links to the locking toggle joint to move and lock said locking toggle joint in an over-center position and close said jaws, and opening pressure exerted on said movable handle reacts first on said release toggle joint to break the same from an over-center position and release said jaws.

2,736,222
CONTOUR ATTACHMENT FOR LATHES AND THE LIKE
John E. Campbell, Long Beach, Calif.
Application May 19, 1953, Serial No. 355,953
1 Claim. (Cl. 82—14)



A contour attachment for lathes and the like, comprising a base, mounting means on the base for attachment to a lathe carriage, a contour plate, a swivel journaled in said base, said swivel having a slot therein in which the contour plate fits and is slidably supported, a bracket, means on the bracket securing said bracket to the bed of a lathe, a pin pivotally attached to one end of the contour plate, and means securing the pin to the bracket, a slide plate mounted on the base for horizontal movement thereon, a stylus projecting from the slide plate and bearing against one edge of the contour plate, a tool rest on the slide plate, said slide plate having a cylinder therein, a piston in the cylinder, means mounting the piston on the base, and conduit means conveying pneumatic pressure to one side of said piston, and a ball race in the base on each side of the slide plate, said slide plate bearing against the ball races in its horizontal movement.

2,736,223
ELECTRIC BELLOW-OPERATED MUSIC INSTRUMENT
René Seybold, Strasbourg, France
Application August 2, 1951, Serial No. 239,888
13 Claims. (Cl. 84—1.10)



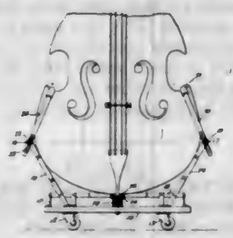
1. In an electrical musical instrument having two frame portions and a bellows movably connecting the said frame portions, a keyboard having a plurality of keys, a frequency generator unit, including a grid, a resistance unit coordinated to each of the said keys, and contact means operated by the said keys for electrically connecting the said corresponding resistance unit, an amplifying unit and a loudspeaker unit, means electrically connecting the said electrical units, and means responsive to the relative movement of the said frame parts for controlling the volume of the sound produced by the said instrument.

2,736,224
PIN BLOCK
Carl Trinkle, Cincinnati, Ohio, assignor to The Baldwin Piano Company, Cincinnati, Ohio, a corporation of Ohio
Application October 12, 1955, Serial No. 540,098
10 Claims. (Cl. 84—202)



1. A pin block for the tuning pins of a stringed musical instrument, said block having its full pin-receiving depth made up of cross-grain plies of hard wood bonded with a set resin, said plies having a thickness not substantially greater than ⅛ in. and not substantially less than 1/28 in., the said pin block in the said pin-receiving depth having a density in the range of substantially .72 to .87 grams per cubic centimeter, in which pins are driven in holes, and in which the ratio of hole diameter to pin diameter lies substantially in the range of .925 to .975.

2,736,225
BASS VIOL CART
George L. Marcus, Brooklyn, N. Y.
Application April 1, 1952, Serial No. 279,880
5 Claims. (Cl. 84—280)

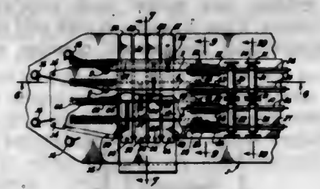


1. A bass viol cart comprising a base plate, caster wheels secured to said base plate and extending from one side thereof in spaced apart relationship to each other, end structures secured to said base plate one near each end thereof and projecting from the other side of said base plate in divergent relationship to each other, each of said end structures comprising a first portion secured at one end to said base plate and a bail pivotally secured at its open end to said first portion at the other end of the latter, a compression spring mounted on said base plate at the center of the side thereof remote from said caster wheels, and a socket carried by said spring in spaced relationship to said base plate, said socket being adapted to receive the bottom end boss on a bass viol and said bails being adapted to hook into the bow recesses thereof.

2,736,226
KEY OPERATED MUSICAL INSTRUMENT
John W. McBride, Burbank, Calif., assignor to Bantar, Incorporated, Burbank, Calif., a corporation of California
Application May 17, 1951, Serial No. 226,853
30 Claims. (Cl. 84—315)

1. In a friction drive mechanism for a selectively positionable load: a linearly movable member for positioning

the load and having converging surfaces on opposite faces; friction rollers respectively engaging said surfaces; one of



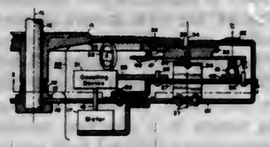
said rollers operating as a driving roller; and means for adjusting the spacing between the axes of the rollers.

2,736,227
QUICK CHANGE NUT WITH PIVOTED THREAD SEGMENTS
Joe A. Stroble, La Mesa, Calif.
Application October 29, 1952, Serial No. 317,609
1 Claim. (Cl. 85—33)
(Granted under Title 35, U. S. Code (1952), sec. 266)



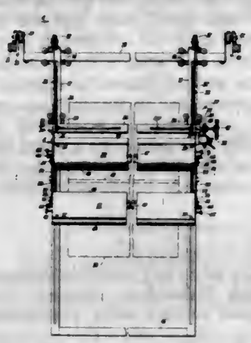
A quick change locking nut stop means adapted to be released and slipped along a threaded shaft and relocked in a selected position thereon comprising two main nuts parts, ball and groove means on said parts for securing said parts together for limited relative rotation, said parts being centrally apertured for free sliding movement along the shaft, means for preventing rotary movement of one of said parts on the shaft, the other of said parts being internally enlarged to provide a chamber between said other part and the shaft, a pair of threaded dogs enclosed within the enlarged portion of the other of said parts in mutually spaced relation circumferentially therewithin and having threaded portions engageable in matched threaded relation with said shaft, a pair of diametrically opposed pivot pins secured to said one part and pivotally securing the respective dogs at the heel portion thereof to said one of the parts whereby said threaded portions of the dogs may be swung into and out of said threaded engagement with the shaft, a pair of tension coil springs disposed respectively in the spaces between the dogs for yieldably urging the dogs pivotally in one direction about said pivot pins thereof as the parts are rotated in one direction through said limited movement thereof, each of said springs being connected between the pivot pin of one dog and a toe portion of the other dog remote from the pivot pin thereof, a pair of pins secured to said other part and respectively abutting the ends of the toe portions of said dogs for pivoting the dogs in the opposite direction about said pivot pins as the parts are rotated in the opposite direction through said limited movement thereof, an externally threaded fine adjustment stop member threadedly secured to said one of the parts for axial displacement with respect thereto as the member is threadedly adjusted on said one of the parts, said stop member having a pair of axially spaced abutment surfaces thereon, and a cap sleeved on said member and having a portion extending between said surfaces, said cap being fixed to said one part for limiting axial displacement of said stop member.

2,736,228
PHONOGRAPH SPEED INDICATOR
Maurice E. Hardy, Chicago, Ill., assignor to Zenith Radio Corporation, a corporation of Illinois
Application May 20, 1952, Serial No. 288,903
3 Claims. (Cl. 88—14)



1. In a phonograph comprising a record-supporting turntable of predetermined diameter mounted for rotation about a predetermined axis, a driving system for rotating said turntable, and a speed control means for adjusting the rotational speed of said turntable, a speed indicator comprising: a speed indicator disc including a plurality of series of elemental substantially light-transparent areas with the areas of each series equally spaced in an annular pattern about the periphery of said disc and each such series corresponding to a predetermined standard rotational speed; means for supporting said speed indicator disc for rotational movement about a separate reference axis with a substantial part of said disc extending beyond said turntable; mechanical coupling means for maintaining said speed indicator disc in mechanical engagement with said driving system at all times when said phonograph is in operation to rotate said disc about said reference axis at an angular velocity directly proportional to the angular speed of said turntable; and a source of intermittent light having a fixed frequency substantially equal to an integral multiple of each of said standard rotational speeds, said light source being mounted beneath said disc for projecting light through at least a portion of said light-transparent areas in said extended part of said disc for direct view from an observational vantage point.

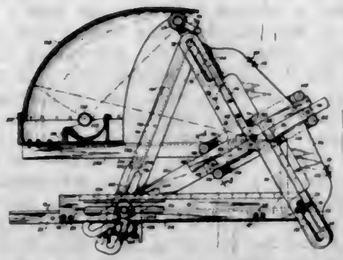
2,736,229
APPARATUS FOR COLOR SEPARATION
William C. Huebner, Mamaroneck, N. Y.
Original application July 18, 1947, Serial No. 761,783, now Patent No. 2,614,042, dated October 14, 1952. Divided and this application September 6, 1952, Serial No. 308,228
5 Claims. (Cl. 88—24)



1. An apparatus for illuminating copy which is to be reproduced in a plurality of separate preselected colors, comprising a first source of substantially white light, a first means for separating the light from said source into its spectrum, means supporting said first means in a position for directing the spectrum upon the copy to be reproduced, a second source of substantially white light, a second means for separating the light from said second

source into its spectrum, means supporting said second light separating means in a position for directing the said second mentioned spectrum upon said copy in inverse order to that of the first spectrum and superposed thereon, means to adjust one of said light separating means relative to the other to thereby secure superposition of said selected portions of the two spectra, separate masking means intermediate each of said light separating means and said copy for selectively masking all but a selected band of the corresponding spectrum, and means for producing relative movement between said copy and said light separating means in a direction parallel with said surface while maintaining the said light separating means in predetermined spaced relationship, whereby the copy is scanned by a continuous band of preselected colored light having substantially uniform characteristics throughout its width.

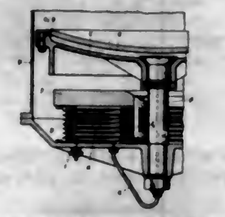
2,736,230
PHOTOGRAPHIC RECTIFIERS
Sol Domeshek, Great Neck, N. Y.
Application July 20, 1953, Serial No. 369,262
10 Claims. (Cl. 88—24)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A rectifier for high-oblique photographs comprising an object plate adapted to carry a photographic negative, a base plate defining an image plane, said object plate being carried by said base plate rotatably about a first axis parallel to said image plane, an image-forming lens having its optical center on a line perpendicular to said axis and to a second axis in said image plane, said first and second axes being parallel, means to rotate said base plate about said second axis, and means connecting said lens, said object plate and said base plate to maintain intersection of the transverse central plane of said lens containing said optical center, the photographic negative plane defined by said object plate and the image plane defined by said base plate on a common line parallel to and equidistant from said axes, a light source fixed with respect to said lens and an ellipsoidal reflector having its foci at said light source and at the entrance pupil of said lens respectively, and a mirror positioned to fold the optical path through said lens from a point in the object plane to a point in said image plane so that both of said points lie on the same side of the plane defined by said axes.

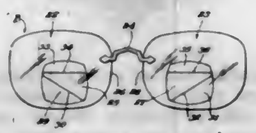
2,736,231
MOUNTING FOR TELESCOPE MIRRORS
Walther Bauersfeld, Heidenheim (Brenz), Wurttemberg, Germany, assignor to Carl Zeiss, Heidenheim (Brenz), Germany
Application June 27, 1952, Serial No. 295,963
Claims priority, application Germany June 29, 1951
2 Claims. (Cl. 88—32)

1. In a mounting for concave telescope mirrors of large diameter comprising a mounting body having an annular marginal bearing surface engaging said mirror, means for tightly embedding said mirror at all its marginal points, said mounting body and said mirror forming an air-tight sealed chamber behind the mirror, a second chamber of bellows-like form fixed to said mounting body and having a movable cover plate and a weight body connected to said cover plate, means for practically frictionless guiding said weight body parallel to the axis of said mirror, a gas arranged in both said chambers, means interconnecting said second chamber with said



first chamber so that said weight body presses the gas in dependence from the inclination of the mirror against the rear mirror surface, said gas having a specific gravity greater than air for achieving complete equalization of the weight components of the mirror in the case that the optical axis of the mirror lies horizontal.

2,736,232
MULTIFOCAL INSERTS FOR OPHTHALMIC LENSES
Ernest J. Brusell, St. Paul, Minn.
Application December 2, 1949, Serial No. 130,724
4 Claims. (Cl. 88—54)



1. Multifocal eyeglasses including a pair of lenses, a two-power insert in each of said lenses, said inserts each having a reading segment and an intermediate vision segment, said intermediate vision segment being disposed beneath said reading segment, and said segments being joined along a line extending without interruption in a distinctly upwardly and outwardly direction from the nasal edge of said insert to the temporal edge thereof, said inserts each being so formed that said reading segment is of considerably greater vertical depth near its nasal edge than near its temporal edge thereby providing a near vision field which is of considerable vertical depth when the eyes are fully converged for reading and of diminished vertical depth when the eyes are less converged for more distant vision.

2,736,233
MULTIFOCAL INSERTS FOR OPHTHALMIC LENSES
Ernest J. Brusell, St. Paul, Minn.
Application February 6, 1950, Serial No. 142,665
5 Claims. (Cl. 88—54)



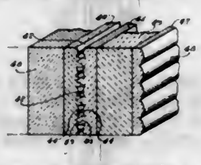
1. Multifocal eyeglasses including a pair of lenses, a two-power insert in each of said lenses, each insert having a reading segment and an intermediate vision segment, said segments being joined along a line inclined at a distinct angle with respect to the horizontal and extending without interruption from the nasal edge to the temporal edge of said insert, and said insert being so formed that said reading segment is of greater vertical depth near its nasal edge than near its temporal edge and said intermediate vision segment is of greater vertical depth near its temporal edge than near its nasal edge, thereby providing a near vision field which is of considerable vertical depth when the eyes are fully converged for reading and of diminished vertical depth when the eyes are less converged for more distant vision, and an intermediate vision field which is of inconsiderable vertical depth when the eyes are fully converged for reading and of considerable vertical depth when the eyes are less converged for more distant vision.

2,736,234
PHOTOGRAPHIC OBJECTIVE OF THREE AIR SPACED LENSES
Hans Schlumpf, Aarau, Switzerland
Application May 21, 1951, Serial No. 227,315
3 Claims. (Cl. 88—57)



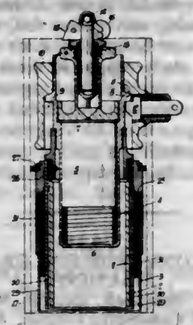
1. A photographic objective having a focal length f=100 comprising an anterior collecting component, an intermediate dispersing component, and a posterior collecting component separated by air spaces one from another, the apex thickness of the dispersing component being between 15 and 30 percent of the focal length of the objective, and the radii of the surfaces of said components having the relationship $r_1=+44.37$; $r_2=\infty$; $r_3=-75.08$; $r_4=+36.18$; $r_5=+54.61$ and $r_6=-60.24$; wherein, as seen in the direction of the incident light, r_1 is a radius of the anterior surface of the anterior collecting component, r_2 is the radius of the posterior surface of the anterior collecting component, r_3 is the radius of the anterior surface of the dispersing component, r_4 is the radius of the posterior surface of the dispersing component, r_5 is the radius of the anterior surface of the posterior collecting component and r_6 is the radius of the posterior surface of the posterior collecting component.

2,736,235
OPTICAL LENS SYSTEMS
Pierre Marie Gabriel Toulon, New York, N. Y., assignor, by direct and mesne assignments, of seventy-five per cent to Products and Licensing Corporation, Greenwich, Conn., a corporation of Delaware, and twenty-five per cent to Nelson Moore and William D. Hall, as joint tenants
Application January 23, 1952, Serial No. 267,821
10 Claims. (Cl. 88—57)



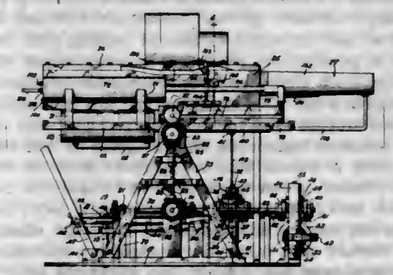
1. An optical system comprising a first plurality of object lenses; a first transparent body member coupled to said first plurality of lenses, a second transparent body member coupled to said first body member, said first and second transparent body members having lenticular surfaces for defining a first plurality of diverging air lenses therebetween in a first plane, a third transparent body member coupled to said second body member and defining a second plurality of diverging air lenses in a second plane parallel to said first plane, each lens of said plurality of object lenses having a complementary lens in each of said first and second plurality of lenses, said first, second and third transparent body members being rigidly coupled together by transparent fastening means interposed between each lens of said first and second pluralities of air lenses.

2,736,236
APPARATUS FOR EJECTING SEATS FROM AIRCRAFT
James Martin, Higher Denham, near Uxbridge, England
Application August 23, 1952, Serial No. 305,952
2 Claims. (Cl. 89—1)



1. A telescopic ejection gun for an ejection seat of an aircraft comprising a fixed cylinder, closure means at the lower end thereof, a sleeve member into which the upper end of said cylinder projects, an internal shoulder on the sleeve member, an inner piston and an intermediate piston moving in said cylinder, a cartridge chamber and firing means at the upper end of said inner piston, a shock absorber consisting of a stack of independent hollow metal rings interposed between the cylinder and the intermediate piston, one end of the stack resting against the internal shoulder and a sleeve on the intermediate piston which towards the end of the stroke of said piston contacts the other end of the stack of hollow metal rings and crushes these against the internal shoulder whereby the kinetic energy of the intermediate piston is absorbed or damped out partly by permanent deformation of the walls of the metal rings and partly by compression of the air enclosed within the rings.

2,736,237
GAS EXPLOSION MEANS FOR A GUN
Nolan P. Broussard, Kaplan, La.
Application April 22, 1952, Serial No. 283,732
1 Claim. (Cl. 89—7)



A gas explosion means for a gun mounted on a carriage, said means including a valve casing extending from a side of the gun, said carriage having a longitudinal slot therein wherein the valve casing moves as the gun reciprocates, an inwardly opening check valve at the inner end of the casing, a stem projecting from said valve through the opposite end of the casing, a charge holding tube opening into said casing and extending rearwardly along the carriage, a charge forming and compressing cylinder having tubular connection with the free end

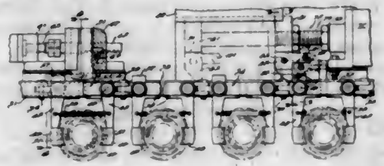
of said tube, a piston on said tubular connection within the tube, a second piston in said cylinder, a solid piston rod extending forwardly from the said cylinder and having the second piston fixed thereto, a reservoir for gas, a separate pipe connection between the reservoir and the rear end of the cylinder and including a needle valve and an inwardly opening check valve at the cylinder, a second similar check valve in the rear end of the cylinder for admitting air to the cylinder, a housing supported from the carriage for longitudinal sliding movement below said cylinder, means connecting the forward ends of said housing and piston rod, a rack extending longitudinally in said housing, a shaft supported in said carriage, a main shaft supported from the rotary platform parallel to the carriage, and a gear train connecting the main shaft and the last mentioned shaft, cam means operable by said gear train for reciprocating said pistons, said gear train including a pair of coacting bevel gears and manual means for moving said bevel gears into and out of mesh.

2,736,238

AUTOMATIC CONVEYOR FOR GEAR FINISHING MACHINES

Alexander D. F. Moncrieff, Detroit, Mich., assignor to Michigan Tool Company, Detroit, Mich., a corporation of Delaware

Application February 20, 1950, Serial No. 145,140
1 Claim. (Cl. 90—1)



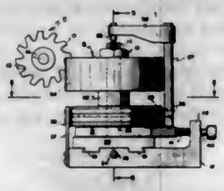
In combination, a machine for performing work on a gearlike workpiece, including a base, spaced apart head and tail stock elements movably supported on said base and adapted to support a gearlike workpiece, a tooth element supported on said machine for engaging the gearlike workpiece and performing an operation thereon, mechanism for conveying a workpiece into and out of position for engagement by said machine head and tail stock elements, including a conveyor movable past said machine, jaw means connected with said conveyor for releasably supporting a workpiece, said jaw means including pairs of spaced jaw elements pivotally connected with and depending from said conveyor, means for moving said conveyor so as to position the workpiece in engagement with the machine tooth element and in position for engagement by the head and tail stock elements, said jaw elements having opposed arcuate relatively smooth and generally concave faces rotatably supporting the workpiece so that when the workpiece is moved into engagement with the machine tooth element it can rotate relative to said jaw elements and roll into proper engagement with said tooth element, means for causing said head and tail stock elements to move toward each other into engagement with the workpiece to engage and support the workpiece prior to the operation thereon, means operable to release said jaw means from the workpiece after the workpiece is supported by the machine head and tail stock elements, means operable at the completion of the work operation of the machine for causing the jaw means to again engage and support the workpiece, means operable to disengage said head and tail stock elements from the workpiece after the workpiece is again engaged by said jaw means, and means operable thereafter to cause the conveyor to move the workpiece away from the machine.

2,736,239

IRREGULAR GEAR CUTTING APPARATUS

Yazo Higashi and Takehiko Mori, Tokyo, Japan

Application November 30, 1953, Serial No. 395,238
8 Claims. (Cl. 90—3)



1. Apparatus for cutting an irregular gear from a blank whose outer surface has a shape corresponding to the ends of the teeth to be cut from the blank, comprising a base; a first slide mounted on said base and movable thereon in either direction along a first longitudinal, horizontal path; a second slide mounted on said first slide and movable thereon in either direction along a horizontal path perpendicular to said first longitudinal path; means for moving said first slide along its path; a vertical shaft mounted for rotation on said second slide; a cam mounted on said shaft and fixed thereto, said cam having a peripheral edge corresponding in shape to the pitch line of the irregular gear to be cut from said blank, said blank being mounted on said shaft and fixed thereto in a corresponding position to said cam; a tape wound around said cam with the opposite ends of said tape extending on the same side of said cam in opposite directions parallel to said first longitudinal path; a support for each end of said tape, the ends of said tape being fixed to said supports; a horizontal cutter shaft mounted with its axis parallel to said first longitudinal path and also mounted for vertical translation; and a rotating cutter mounted on said cutter shaft for cutting teeth from said blank through vertical movement of said cutter shaft and the combined movement of said blank parallel to and perpendicular to said first longitudinal path produced by said tape and said means for moving said first slide.

2,736,240

RELIEVING SPINDLE MECHANISM

Arthur I. Bean, Springfield, Vt., assignor to The Fellows Gear Shaper Company, Springfield, Vt., a corporation of Vermont

Application June 5, 1951, Serial No. 229,966
8 Claims. (Cl. 90—7)



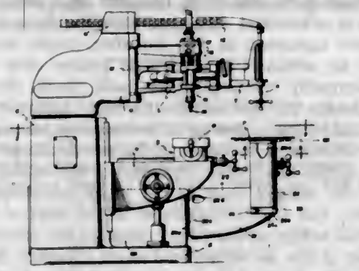
1. In a gear shaper, a mounting member, a reciprocating cutter spindle carrier mounted in said member, a cutter spindle mounted coaxially in said spindle carrier, means on said spindle to attach a cutter thereto, means to hold said spindle against rotation in said carrier, means operable to engage and disengage said holding means in response to reciprocation of said carrier and spindle, guide means to control the rotation of said spindle carrier and said spindle and supplementary guide means to control the rotation of said spindle with respect to said carrier when said holding means become disengaged.

2,736,241

COPY TABLE AND MOUNTING THEREFOR

Peter M. Henkes, Racine, Wis., assignor to George Gorton Machine Co., Racine, Wis., a corporation of Wisconsin

Application September 23, 1953, Serial No. 381,844
9 Claims. (Cl. 90—13)



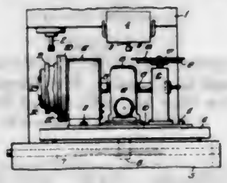
1. In combination, a main base; a vertical column on and integral with said base extending upwardly from one side of the rear portion thereof; a sub-base on and integral with said main base position extending upwardly therefrom at one side of and integral with said vertical column; said sub-base extending horizontally forwardly across said main base to and terminating at the front end thereof; a horizontally disposed arm member rigidly attached to and extending forwardly from the front end of said sub-base in forward continuation thereof to a location spaced forwardly a distance outwardly from said main base; a vertically disposed post member integral with said arm member located at the forward end thereof spaced forwardly from said main base and said sub-base and extending a distance upwardly above said arm member; a table support column vertically slidably mounted on said post member of said arm member for movements upwardly and downwardly thereon constrained to a straight-line, perpendicular path of movement; a horizontally disposed table mounted on the upper end of said support column for movements therewith as a unit assembly; adjusting mechanism mounted on said post member in operative connection with said vertically movable support column for vertically adjusting said support column and table thereon as a unit assembly on and relative to said post member; and means for releasably locking said support column in any position of vertical adjustment thereof on said vertical post of said arm member.

2,736,242

APPARATUS FOR CUTTING DRUM CAMS

Henry T. Cripps, Chicago, Ill.

Application August 23, 1950, Serial No. 181,049
2 Claims. (Cl. 90—13.9)



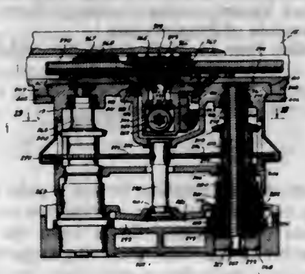
1. Apparatus for forming a drum cam on a duplicating machine having a cutter rotatable around a fixed axis and movable longitudinally of said axis into registration with the work, and a tracer normally having its axis parallel to the axis of the cutter, which tracer is mounted for movement in a plane through said axes, which machine has a work table movable in said plane by power controlled by said tracer, comprising: a disklike pattern having the cam path defined as radial variations; means for mounting said pattern on said work table for rotation around an axis disposed in said plane parallel to the axes of the cutter and tracer in its normal position; a shaft journaled upon the work table for rotation around an axis in said plane disposed at right angles to said axes; a face plate fixed upon said shaft; an arbor carried by said face plate to which a drum cam blank is attached; a key engaging the arbor and blank for specifically locating the blank around the axis of the shaft; and means for simultaneously rotating said cam blank and pattern at the same speed to cause the pattern to move the tracer and thereby apply power to move the work table to feed the cutter into the work thereby to cause it to translate the radial variations of the pattern path into axial variations of the path in the cam blank.

2,736,243

MACHINE TOOL ELEVATING MECHANISM

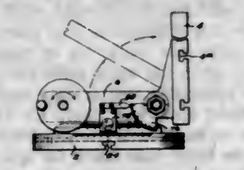
Joseph B. Armitage, Wauwatosa, and James N. Flannery, West Milwaukee, Wis., assignors to Kearney & Trecker Corporation, West Allis, Wis., a corporation of Wisconsin

Application January 19, 1950, Serial No. 139,342
18 Claims. (Cl. 90—21)



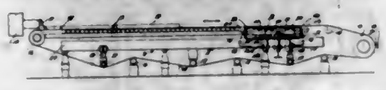
1. In combination with a column provided with a forwardly extending base, a vertically adjustable knee slidably carried by said column for selective vertical movement above said base and presenting spaced bearing surfaces, a work support slidably carried on said bearing surfaces of said knee, a drive bracket secured to said work support for movement therewith and arranged to extend downwardly between the said bearing surfaces of said knee, driving means including a shaft disposed to connect said knee and said work support in manner to effect selective movement thereof, a pair of telescoping members spaced in parallelism toward the opposite outer sides of said knee interconnected between said base and said knee, said telescoping members having their upper ends respectively disposed immediately beneath said said bearing surfaces of said knee, said telescoping members being spaced apart a distance approximately five-eighths to three-fourths the width of said knee, a pair of bearings carried within the lower portion of said knee adapted to support the central portions of said telescoping members in manner to resist lateral deflection thereof, said bearings being so positioned in said knee as to be midway between the upper and lower ends of said telescoping members when said knee is in its lowermost position, an idler journalled in said knee intermediately of said telescoping members, a pair gears of relatively large diameter secured to each of the said movable elements of said members and disposed to engage said idler for effecting a substantially equalized vertical adjustment of said knee.

2,736,244
UNIVERSAL ROTARY ANGLE TABLE
Gordon L. Olson, Arlington, Mass.
Application March 3, 1953, Serial No. 340,061
7 Claims. (Cl. 90—59)



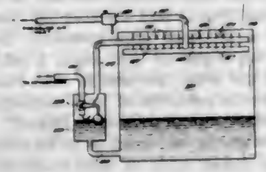
1. A work supporting device comprising a work holding element, said work holding element being formed with a cylindrical extension having an annular gear portion formed around the outer periphery thereof, a split ring member mounted for rotation on the cylindrical extension, means for clamping the split ring in locked relationship around the cylindrical extension, a second work holding element mounted at one side of said split ring for hinging about a horizontal axis, a gear member supported at an opposite side of the split ring and extending therethrough into engagement with the annular gear portion on the cylindrical extension.

2,736,245
METHOD AND APPARATUS FOR MAKING PAPER
Theodore A. McArn, Downingtown, Pa., assignor to Downingtown Manufacturing Company, Downingtown, Pa., a corporation of Pennsylvania
Application June 14, 1952, Serial No. 293,620
10 Claims. (Cl. 92—38)



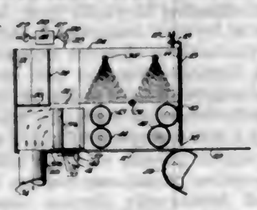
1. In a paper making machine having a pulp receiving and conveying endless wire and a suction box over which the wire passes for removing liquid from the web of pulp stock carried by the wire: a moving support for the wire in its traverse over the suction box, comprising a plurality of elongated moving supporting elements, each engaging and supporting the wire in a zone extending along the wire in the general direction of travel of the wire, and means for moving each of said elements in a path lying in a plane parallel to the plane of the wire but angularly offset, in said plane, from the longitudinal axis of the wire.

2,736,246
PAPERMAKING MACHINE
Adam Jay Crittenden, Sylacauga, Ala., and Charles A. Lee, Neenah, Wis., assignors, by mesne assignments, to Kimberly-Clark Corporation, a corporation of Delaware
Application May 29, 1951, Serial No. 228,934
19 Claims. (Cl. 92—44)



1. In apparatus of the class described, means defining the walls of an enclosed chamber which is adapted to receive a body of stock, said chamber having a stock inflow opening and a stock outflow opening located below the normal level of the body of stock which is contained therein, means for delivering stock continuously to said chamber through said stock inflow opening, said apparatus being adapted to discharge stock continuously through said outflow opening, means defining the walls of an auxiliary enclosed chamber, the vertical dimension and position of said auxiliary chamber being such that its upper and lower ends are respectively located substantially above and substantially below the normal level of the stock contained within said stock chamber, the lower end of said auxiliary chamber connecting with said stock chamber at a point which is a substantial distance below the normal level of the stock contained within said stock chamber, the upper end of said auxiliary chamber connecting with said stock chamber at a point which is spaced a substantial distance above the normal level of the stock contained in that chamber, means operable to deliver air which is at a pressure greater than the pressure normally existing within said stock chamber to the interior of said stock chamber, said air delivery means including a source of pressure air, an air conduit which terminates in an air diffusing discharge unit disposed within said stock chamber a substantial distance above the normal level of the stock contained in that chamber, and means responsive to the level of the stock contained within said auxiliary chamber for controlling the pressure of the air within said stock chamber, thereby to regulate the level of the stock within that chamber.

2,736,247
VANE TYPE STOCK INLET
Lloyd Hornbostel, Beloit, Wis., assignor to Beloit Iron Works, Beloit, Wis., a corporation of Wisconsin
Application December 4, 1951, Serial No. 259,756
6 Claims. (Cl. 92—44)



1. A stock inlet box for a paper making machine comprising a head box having a generally horizontal floor extending longitudinally from an inlet opening at one end for receiving stock from a source thereof to an outlet opening at the other end for flowing stock onto the forming wire of the machine, a duct mounted at the head box inlet, said duct expanding laterally from a pipe inlet opening to a head box size exit from which stock flows into the head box inlet, a horizontally aligned transversely extending rectifier roll mounted within the box in spaced relation from the duct exit to present a uniform restriction to the flow of stock through the box for preventing rolling of stock and the formation of dead stock areas within the box, laterally directed upright vanes mounted in the duct for equalizing the stock flow across the head box, and means for maintaining a level of stock in the box that will submerge the roll and the vanes.

2,736,248
SHEET METAL AIRFIELD DECK PLANKS
Gerald G. Greulich, Pittsburgh, Pa.
Application May 25, 1951, Serial No. 228,190
4 Claims. (Cl. 94—13)



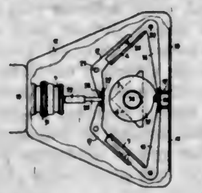
4. A plurality of sheet metal planks laid with overlapping sides to form an airfield deck, each plank being corrugated lengthwise to provide parallel channels connected at their tops by integral tread plates, the channels having upwardly diverging side walls so that overlapping planks nest together, the inner side wall of each outer channel in each plank being provided with longitudinally extending slots having lugs integral with an end wall of the slots, the outer side wall of each of said outer channels being provided with openings receiving lugs projecting into them from the adjoining plank, said outer side walls each being provided with integral laterally projecting tongues lying substantially in a common plane, the tongues at one side of each plank projecting through the slots in the adjoining overlapped planks, whereby each pair of overlapping planks are fastened together along both sides of their nesting channels.

2,736,249
PHOTOGRAPHIC COMPOSING APPARATUS
Rene Higonnet and Louis M. Moyroud, Cambridge, Mass., assignors to Graphic Arts Research Foundation, Inc., Cambridge, Mass., a corporation of Delaware
Application January 30, 1952, Serial No. 269,056
13 Claims. (Cl. 95—4.5)



1. Photographic composing apparatus comprising a carrier including two disks in rigid relationship, one disk bearing the characters to be photographed and the other disk bearing a number of apertures, each in precise angular relation to a corresponding character about a given axis, a source of light in position to illuminate an aperture, an optical system to receive the light from the illuminated aperture and to direct an image of the aperture toward its corresponding character to form a partial image of the character, projection means to focus the partial image upon a sensitive material, and mechanism for rotating the disks continuously relative to the source of light, optical system and projection means, and about said axis, whereby the image of the aperture moves progressively across the character and the entire image of the character is projected.

2,736,250
APPARATUS FOR TAKING STEREOSCOPIC PICTURES INTENDED FOR MOUNTING IN FRONT OF THE ADJUSTABLE OBJECTIVE OF A CAMERA FOR TAKING TWO-DIMENSIONAL PICTURES
Franz Papritz, Yverdon, Vaud, Switzerland, assignor to Paillard S. A., Sainte-Croix, Switzerland, a corporation of Switzerland
Application October 19, 1953, Serial No. 386,886
Claims priority, application Switzerland May 13, 1953
2 Claims. (Cl. 95—18)



1. Apparatus for making stereopictures, comprising, in combination, a camera having an objective including an adjusting member, a support member secured to the camera, reflecting means pivotally mounted on said support member for varying the convergence angle included between a pair of ray bundles reflected by the reflecting means and for recording a pair of similar images on a film, said reflecting means including two reflecting surface members, a first pair of levers fulcrumed on said support member, each of said two reflecting surface members being mounted on the respective lever of said first pair of levers, a mechanism for operating said adjusting member, thereby varying the convergence angle, said mechanism coupling said adjusting member and said reflecting means, said mechanism including a shaft slidably mounted on said support member, said shaft engaging said objective adjusting member, a second pair of levers fulcrumed on said support member, each of said second pair of levers being operatively connected to said shaft and to each of the respective levers of said first pair of levers, selectively operable means for rendering the convergence angle smaller than the angle corresponding to a given adjustment of the objective adjusting member, said means being operatively connected to said first pair of levers and to said support member, spring means for urging said first pair of levers and said reflecting surfaces mounted thereon in a direction increasing the convergence angle and for urging said shaft into engagement with said objective adjusting member, said spring means being mounted on said support member and being operatively connected to said first pair of levers, whereby every adjustment of the objective automatically varies the angle of convergence.

2,736,251
PHOTOGRAPHIC ROLL FILM CAMERA
Ludwig Sachsinger, Munich, Germany, assignor to Agfa Camera-Werk Aktiengesellschaft, Munich, Germany, a corporation of Germany
Application August 4, 1951, Serial No. 240,311
Claims priority, application Germany August 12, 1950
4 Claims. (Cl. 95—32)

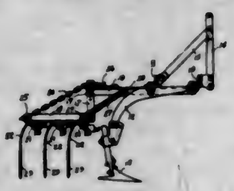


1. A folding roll film camera including a camera body having an extensible central shutter mechanism comprising a lazy tongs linkage, a pivot means mounted upon said lazy tongs linkage, a motion transmitting lever for tensioning said shutter mechanism, said lever being rotatably mounted upon said pivot means, a film transport means mounted upon said camera body, a linking member coupled to said film transport means, peg and slot means, said linking member being coupled to said lever by said peg and slot means to operatively couple said transport means to said lever, a guide means disposed on said camera body, said peg being operatively coupled with said guide means, and said guide means and said slot having cooperative shapes for conditioning said peg and slot means and said lever to transmit motion from said transport means to tension said shutter mechanism when said camera is unfolded and to fold said lever when said camera is folded.

2,736,252
HARROWING AND WEEDING IMPLEMENT
Marvin Latshaw, Frankfort, Ind.
Application August 2, 1954, Serial No. 447,105
4 Claims. (Cl. 97—8)

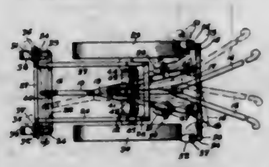
1. In combination with a cultivator having a supporting frame, a harrowing and weeding unit comprising a pair of angle iron extensions rigidly secured to said frame to overhang rearwardly thereof, a depending L-bar pivotally mounted on the rear ends of said extensions respectively including a pivoted hanger strap and a rearwardly extending arm rigidly connected thereto, a plurality of

parallel bars carried transversely of said arms, a series of spaced spring harrowing and weeding teeth secured to said bars respectively in offset relation to extend downwardly therefrom, a supporting chain adjustably



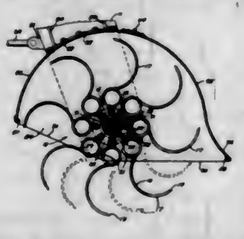
connected between the free end of each arm and extension respectively, and a spring connected under spring tension from said L-bar adjacent the lower end of said hanger strap and the central portion of said extension for urging said teeth downwardly.

2,736,253
SYNCHRONIZED CONTROL FOR TRACTOR CULTIVATORS
James T. M. Holt, Tyler, Tex.
Application September 1, 1953, Serial No. 377,847
4 Claims. (Cl. 97—47.01)



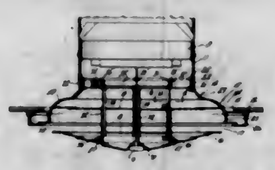
1. A cultivator attachment for use on a tractor having wheels carried by an axle comprising a drawbar adapted to be mounted in a longitudinally disposed position on the tractor, a cultivator shovel carrying frame comprising a pair of diverging bars connected at one of their ends by a crossbar and having their other ends pivotally connected to said drawbar at a point spaced forwardly of the axle of the tractor, handles extended from the drawbar for actuating the drawbar laterally to move the cultivator shovels laterally, and means actuated by the drawbar for steering the tractor.

2,736,254
SOIL CONDITIONER
Roy A. Kropp, River Forest, Ill., assignor to Kropp Forge Company, Cicero, Ill., a corporation of Illinois
Division of application Serial No. 792,381, December 18, 1947, now Patent No. 2,638,830, dated May 19, 1953, which is a division of application Serial No. 530,797, April 13, 1944, now Patent No. 2,438,707, dated March 30, 1948, and which is a continuation of abandoned application Serial No. 557,153, October 4, 1944. This application January 19, 1953, Serial No. 333,262
1 Claim. (Cl. 97—220)



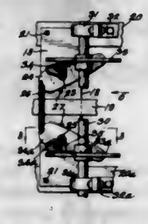
In a soil conditioning machine having a shaft for receiving a series of identical tine units, an elongated spacer hub for each tine unit having opposite annular abutment faces for engagement with the corresponding faces of longitudinally aligned adjacent units on the shaft and having a radially extending tine attachment plate integral therewith and extending from one end thereof, said integral attachment plate having radially disposed recesses spaced about the periphery thereof opening radially outwardly and opening axially in the direction of extension of said spacer hub from said attachment plate, said recesses being of generally U configuration and having radially extending parallel side wall portions and a semi-circular radially inner end wall portion joining said side wall portions, the side and end wall portions defining the axial depth of each recess, said recesses each having a radially disposed planar bottom wall portion joining said side and end wall portions at the bottom of the recess, said bottom wall portions each having a circular aperture extending therethrough axially of said attachment plate and generally at the center of curvature of the adjoining semi-circular end wall portion, said side and end wall portions of each recess being of dimensions to confine and closely conform with a U-shaped attachment hook of a tine unit with the hook disposed in the recess and extending about the attachment plate aperture thereof, and an annular retaining plate fitting over the spacer hub and having a flat end face opposing the attachment plate for closing the open axial side of each of said recesses to confine the tine attachment hooks therein against axial displacement away from said attachment plate, said retaining plate having a series of circumferentially spaced apertures registering with the apertures in the attachment plate, and bolts extending through the registering apertures of the attachment plate and retaining plate to define a generally U-shaped channel for receiving the respective tine attachment hooks and for clamping said retaining plate to said attachment plate.

2,736,255
AIR DIFFUSER
Richard D. Tutt, New Britain, and George T. Davis, Newington, Conn., assignors, by mesne assignments, to Allied Thermal Corporation, New Britain, Conn., a corporation of Connecticut
Application January 29, 1952, Serial No. 268,736
7 Claims. (Cl. 98—40)



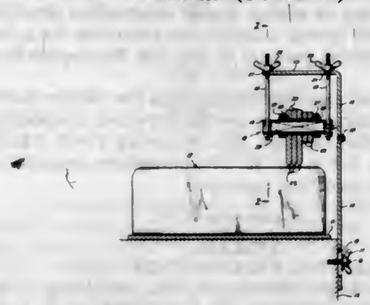
1. A ceiling diffuser for varying the direction of discharge from an air duct outlet substantially without throttling comprising in combination, a downwardly and outwardly inclined outer deflector ring disposed between the duct and the ceiling surface, said outer ring having an annular downwardly directed concave portion adjacent its outer edge arranged to discharge air from the diffuser in a direction substantially normal to the ceiling surface, support means disposed adjacent the duct outlet, a deflector plate secured to said support means transversely of the duct and in outwardly spaced relation to the ceiling surface, said plate being constructed and arranged to discharge air in a direction substantially parallel to the ceiling surface, and a flat inner deflector ring rotatably mounted on said support means for axial movement thereon between an upper position directing air against said outer ring for increased downward discharge thereby and a lower position adjacent said plate, permitting increased horizontal discharge thereby.

2,736,256
AUTOMATIC TWINE TIE BALER
Glynn R. Walker, Atwood, Kans.
Application June 15, 1955, Serial No. 515,581
2 Claims. (Cl. 100—19)



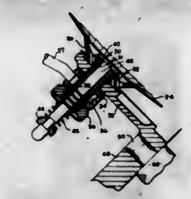
1. A slack producing device for use with hay balers having a bale forming mechanism including means for encircling the bale lengthwise with twine, a bill-hook and means for rotating the same for tying the ends of the twine, said slack producing device comprising, a base for attachment to the baler adjacent one side thereof, a lever pivoted to the base, one end having a projection on the side facing the bale, positioned to engage the twine, spring means operatively associated with the lever urging the projection away from the twine and a cam mounted for rotation adjacent the base and adapted to move said lever into contact with the twine in opposition to the spring means, the lever having a cam follower projecting outwardly therefrom positioned to engage the cam surface, and means comprising the bill-hook rotating means for turning the cam to effect a release of the twine slack immediately before the bill-hook turns.

2,736,257
CODE MARKING DEVICE FOR WRAPPING SHEETS
Jake M. Stephenson, Houston, Tex., assignor to J. C. Koetting, Houston, Tex.
Application March 12, 1952, Serial No. 276,201
4 Claims. (Cl. 101—8)



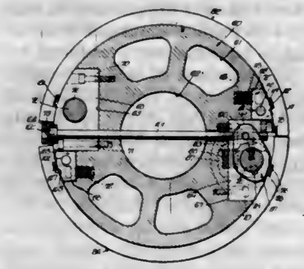
1. In combination with means for moving a plurality of articles enclosed in wrapping sheets successively past a marking station, a marking device for applying code markings to said wrapping sheets, comprising, a shaft constructed of heat-conducting material positioned transversely above the path of movement of said articles, an elongated die member constructed of heat-conducting material and journalled near one end thereof to be eccentrically mounted for free swinging movement on said shaft and depending therefrom with its center of gravity below its center of rotation to a position wherein said die member is successively engaged by the surfaces of the wrapping sheets enclosing successive ones of said articles as the latter are presented to said die member, and whereby the die member is caused automatically to return by gravity to marking position after passage of each article, and means for heating said shaft whereby to transmit heat by conduction therefrom to said die member.

2,736,258
BOTTLE CLOSURE TRANSFER AND PRINTING MEANS
William J. Vedder, Flushing, N. Y., assignor to Oswego Falls Corporation, Fulton, N. Y., a corporation of New York
Application February 14, 1952, Serial No. 271,571
4 Claims. (Cl. 101—35)



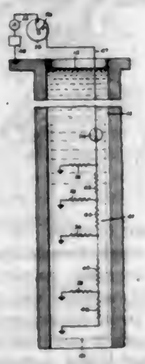
1. A bottle closure transfer for transferring closures successively from a supply to a discharge point comprising a closure engaging member, motion transmitting means operable to move said member over a predetermined path from said discharge point to a closure supply and thence, reversely over said path to said discharge point, said closure engaging member being operable upon engagement with a closure in said supply to withdraw the closure from the supply and to release the closure at said discharge point, a printing type carried by said closure engaging member for printing the closure while the same is engaged by said closure engaging member, and ink furnishing means operable to ink the surface of said type prior to engagement of said closure engaging member with a closure in said supply.

2,736,259
PREMAKE READY PLATE CYLINDER
Oliver H. Sather, Chicago, Ill.
Application February 5, 1952, Serial No. 269,946
15 Claims. (Cl. 101—378)



1. A printing cylinder assembly comprising a cylinder and separable shells therefor adapted to cover the peripheral surface of the cylinder except for the conventional opening at the gap side of the cylinder, each shell being semi-circular in cross-section, and clamping means engaging each shell adjacent the longitudinal edges respectively, said clamping means including a movable clamping member mounted for movement by the cylinder, an actuating screw having threaded relation with the clamping member for effecting movement thereof, and a second clamping member for each shell also having an actuating screw in threaded relation therewith, the actuating screws for both clamping members terminating at the gap side of the cylinder and being operable from this side of the cylinder, the second mentioned clamping member being loosely secured to the cylinder and each of said clamping members being capable of movement relative to the cylinder to a limited extent.

2,736,260
ELECTRICAL FIRING SYSTEM FOR EXPLOSIVELY OPERATED BOREHOLE TOOLS
Marcel Schlumberger, Paris, France, assignor to Societe de Prospection Electrique Procedes, Schlumberger, Paris, France, a corporation of France
Application November 19, 1949, Serial No. 128,386
Claims priority, application France February 19, 1949
9 Claims. (Cl. 102—20)



1. In a system for controlling the firing of a plurality of explosive charges, the combination of an electrical transmission channel having an input end and a terminus, a plurality of electrical igniters of equal impedance connected in shunt in said channel, a plurality of equal impedances connected in series in said channel between adjacent igniters, and an impedance connected to said channel at the terminus thereof and being substantially equal to the characteristic impedance of said channel.

8. In a system for controlling the firing of a plurality of explosive charges in a bore hole tool adapted to be lowered into a bore hole, the combination of a plurality of electrical igniters of equal impedance associated with corresponding explosive charges in the tool, a plurality of equal electrical impedances, means connecting said igniters in shunt and said impedances in series between adjacent igniters to form a simulated electrical transmission line having an input end and a terminus, an impedance connected to said terminus of said line and equal to the characteristic impedance of said line, a source of electrical energy at the surface of the earth, electrical connections between said source and the input end of the line, normally open switching means at the surface of the earth for controlling the connections between the source and said input end of the line, means responsive to current flowing to said line for maintaining said switching means closed, and normally closed concussion operated switching means operatively associated with said tool for breaking the connections between the source and said input end of the line to render said current responsive means inoperative.

2,736,261
BLASTING MEANS
Clyde O. Davis, Wenonah, N. J., Richard C. Gloeau, West Chester, Pa., and Frank A. Loving, Wenonah, and James P. Swed, Gibbstown, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
Application July 20, 1950, Serial No. 174,818
5 Claims. (Cl. 102—23)

5. A method of blasting comprising heating in a pressure-resistant tube having a frangible closure at one end a gas-generating composition comprising a major proportion of ammonium nitrate, said gas-generating composition being distributed along the axis of said pressure-resistant tube in such amount that the loading density of the ammonium nitrate throughout the pressure-resistant tube is 0.1 to 0.3 gram per cubic centimeter and at any cross-section of the pressure-resistant tube is less than



0.5 gram per cubic centimeter, the solid free space being occupied by gaseous material.

2,736,262
LOW DENSITY SAFETY AMMONIUM NITRATE BLASTING EXPLOSIVE AND PROCESS FOR PRODUCING SAME
James Taylor, Saltcoats, Scotland, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain
No Drawing. Application March 5, 1951, Serial No. 214,029
Claims priority, application Great Britain March 29, 1950
5 Claims. (Cl. 102—24)

1. A low density safety ammonium nitrate blasting powder explosive composition of the kind including sodium chloride as the sole flame-quenching ingredient characterized in that the sodium chloride is dendritic and has a bulk density not exceeding 0.9 gm./cc. at 1.7 atmospheres pressure.

3. In a process for the production of a low density safety ammonium nitrate blasting powder explosive composition, the step of adding to said composition dendritic sodium chloride having a density not exceeding 0.9 g./cc. at 1.7 atmospheres pressure as the sole flame-quenching ingredient.

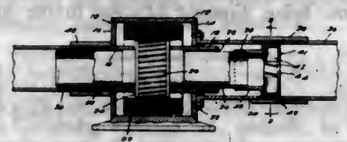
5. A blasting cartridge containing a low density safety ammonium nitrate blasting powder explosive composition including dendritic sodium chloride having a bulk density not exceeding 0.9 g./cc. at 1.7 atmospheres pressure as the sole flame-quenching ingredient.

2,736,263
BLASTING EXPLOSIVE DEVICE
Harold Arthur Lewis, Wilmington, Del., and George Adelbert Noddin, Clarksboro, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
Application April 17, 1951, Serial No. 221,374
4 Claims. (Cl. 102—27)



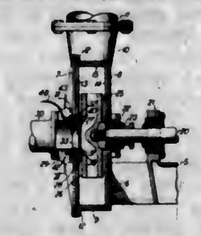
1. An explosive assembly wherein two lengths of detonating fuse are connected by a delay connector, said connector comprising a tubular shell of rigid material, each end of which is fastened about one end of each of the two said lengths of detonating fuse, a delay element within said shell, at each end of said delay element a charge ignitable by high temperature, and adjacent to each of said charges ignitable by high temperature a detonating charge, each of said detonating charges being alike and in detonation-propagation relationship to one of the ends of said lengths of detonating fuse.

2,736,264
PRIME MOVERS
Fred J. Ehlers, Lodi, Calif.
Application September 3, 1952, Serial No. 307,679
1 Claim. (Cl. 103—87)



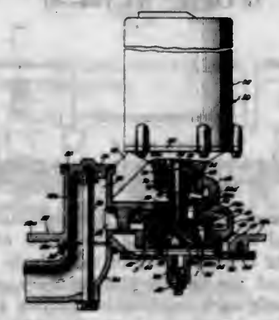
In an electric motor structure, a casing having two opposite walls, a pair of aligned sleeves extending through said walls, bearing elements in said sleeves, field magnet windings within the casing disposed in circular arrangement around the axial center of said bearing elements, a tubular armature shaft extending through said bearing elements and having its ends extending beyond the outer ends of said sleeves, an armature winding encircling and supported on said shaft within the circular area defined by the field windings, each end of said tubular shaft being screw threaded, a tubular coupling nipple secured to one of said walls and enclosing the adjacent ends of a sleeve and the shaft, said nipple being adapted for connection with an end of a pipe, a circular housing coupled to the said adjacent end of said shaft and opening into the bore thereof, said housing having an outer end wall provided with a centered opening of a lesser diameter than that of the shaft bore, and a fluid impeller unit mounted on said shaft within said housing, said housing having a diameter slightly less than that of the bore of said nipple.

2,736,265
CENTRIFUGAL PUMP
Donald S. Higgins, Balboa, Calif., assignor to Shellmaker Inc., Los Angeles, Calif., a corporation of California
Application June 4, 1952, Serial No. 291,684
2 Claims. (Cl. 103—103)



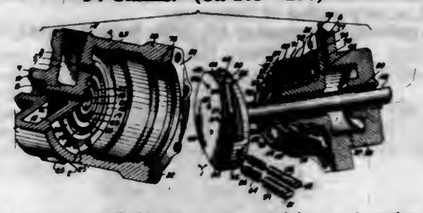
1. A centrifugal pump for use particularly in pumping liquid containing solid particles, comprising: a casing having a forward wall, an axial inlet port and a substantially radial discharge port; an impeller rotatable within said casing and having a shroud disposed adjacent, but spaced from, said wall; a resilient sealing ring slidably mounted in a recess in a side of said casing; means operative to adjust said ring toward and away from said impeller, said ring having a pair of concentric, annular, compressible beads on its side facing said impeller, said beads having substantially semi-circular ends engageable with said shroud and defining therewith a fluid pressure chamber located in the annular clearance space between said shroud and said wall; and means connected to said sealing ring and communicating with its said chamber for introducing fluid into said chamber at a pressure in excess of the fluid pressure developed within said casing by said impeller so as to prevent passage of the fluid from the pressure side of said casing to the inlet port thereof by way of said annular space, said fluid introducing means including a metal reinforcing ring embedded in said sealing ring and having at least one threaded hole therein registering with at least one transverse hole in the ring communicating with said pressure chamber; and a tubular stud screwed into said threaded hole for conducting pressure fluid to the chamber.

2,736,266
PUMP IMPELLER CONSTRUCTION
William H. Eisele, Cleveland, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application May 5, 1950, Serial No. 160,343
3 Claims. (Cl. 103—115)



1. A rotatable centrifugal pump impeller comprising a hub having a ring of circumferentially spaced radially curved outwardly extending centrifugal pumping vanes, each vane having a blade portion extending in axial direction, said blade portions having an inner axially extending edge spaced outwardly of the axis of the impeller, each said inner edge constituting the generatrix of a vorticiform surface of revolution upon rotation of the impeller, said blade portions terminating in a tongue-like axial flow inducer, whereby upon rotation of said impeller a vortex gas chamber is formed at the axis thereof and liquid fluid is advanced axially and impelled radially outwardly by said pumping vanes.

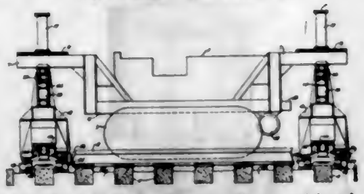
2,736,267
PUMP, MOTOR OR LIKE DEVICE
Bruce H. Mosbacher, Rockford, Ill.
Application April 29, 1950, Serial No. 159,110
34 Claims. (Cl. 103—158)



1. A pump or fluid motor comprising a housing defining a chamber and carrying a wall which presents a flat face extending across one end of said housing chamber and at which are located inlet and outlet ports, fluid displacement means in said housing cooperating with said housing to provide a fluid displacement chamber of variable volume and including an actuator in said housing chamber mounted for cyclical translatory relative movement across said flat housing face to vary cyclically the volume of said fluid displacement chamber and of smaller size than said housing chamber in the direction of said translatory relative movement between the actuator and the housing, said actuator abutting against said flat housing face and selectively controlling the flow of fluid between said fluid displacement chamber and said inlet and outlet ports in the relative translatory movement between the actatuor and the housing to cyclically pass fluid to said fluid displacement chamber from said inlet port and discharge fluid from said fluid displacement chamber to said outlet port as the volume of said fluid

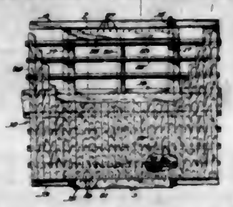
displacement chamber is varied cyclically by the relative translatory movement between the actuator and the housing.

2,736,268
RAILROAD TRACK ALIGNER
John K. Yohe, New Brighton, Pa., assignor to Woodings-Verona Tool Works, Verona, Pa., a corporation of Pennsylvania
Application January 3, 1955, Serial No. 479,516
10 Claims. (Cl. 104—8)



1. In a railroad track aligner, the combination with a vehicle adapted to move along the track, of machines mounted on the opposite ends of the vehicle for raising it above the track ties and for shifting them and the rails laterally as a unit, each machine comprising a horizontal frame projecting lengthwise from the vehicle, a cross member below the frame, bearing means carried by the cross member adapted to be pressed down against the track ballast between a pair of ties, means mounted on the frame normally supporting the cross member with said bearing means above the ties but adapted to elevate the frame after lowering said bearing means onto said ballast, a horizontal fluid pressure cylinder, means mounted on said cross member for moving the cylinder vertically relative to said member, piston rods projecting from opposite ends of the cylinder, rail-engaging means carried by the outer ends of said rods, and means for introducing fluid pressure into said cylinder to actuate the rods, whereby to move the track sideways.

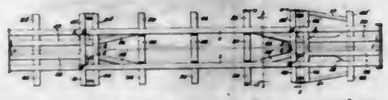
2,736,269
BOX CAR SIDE SILL CONSTRUCTION
Franklin P. Adler, Michigan City, Ind., assignor to Pullman-Standard Car Manufacturing Company, Chicago, Ill., a corporation of Delaware
Application September 14, 1950, Serial No. 184,763
11 Claims. (Cl. 105—414)



1. In a railway box car having a side wall including a door opening, a side sill, a stringer member paralleling said sill in horizontally spaced relation thereto, and a reinforcing member positioned longitudinally of the car opposite the door opening between said sill and stringer and extending slightly beyond the full width of the door opening and connected to said sill and said stringer.

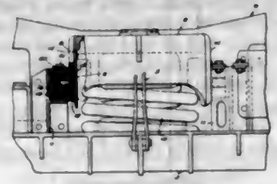
2,736,270
LOCOMOTIVE FRAME
Joseph C. Esher, Thornton, Pa., assignor to Baldwin-Lima-Hamilton Corporation, a corporation of Pennsylvania
Application June 24, 1950, Serial No. 170,133
18 Claims. (Cl. 105—172)

1. A locomotive frame comprising, in combination, a pair of longitudinal transversely spaced I-beam sills each of which extends along a single straight line that is continuous from end to end of the frame, said beams being disposed with their webs vertically, transverse I-beams positioned between said sills and placed with their webs vertically and being of less height than the sills, said transverse beams being disposed adjacent to the lower sill



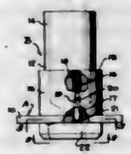
flanges and being welded to said flanges and to the sill webs, and other I-beams placed with their webs vertically and extending laterally from the sills as cantilever beams whose outer ends are free, the inner ends of said cantilever beams being disposed adjacent to the upper flanges of the sills and being welded to said upper flanges and to the sill webs.

2,736,271
BOLSTER FRICTION SNUBBER
Michael Volpe, Pittsburgh, Pa.
Application August 14, 1952, Serial No. 304,249
2 Claims. (Cl. 105—193)



1. In a railway car truck, a truck frame embodying a cross member, vertical snubber supports embodying spaced side walls, rising from said cross member at the ends thereof, each snubber support having an open side, a bolster, means for connecting said bolster to said cross member for vertical sliding movement, said bolster operating above said cross member, said bolster having wear surfaces disposed opposite to the open sides of said vertical snubber supports, a snubber operating in each snubber support, each snubber comprising a wooden body portion having a horizontally disposed opening formed centrally thereof, vertical plates secured to the side edges of said wooden body portion, extending beyond the front and rear sides of said wooden body portion engaging the side walls of the snubber support, a prestressed rubber block secured to one surface of the wooden body portion resting against one surface of said snubber support, a snubber plate, a pin extending from said snubber plate disposed in said opening of the wooden body, connecting said snubber plate to said wooden body, and a snubber member secured to said plate movable over a wear surface of said bolster, restricting movements of the cross member and bolster with respect to each other.

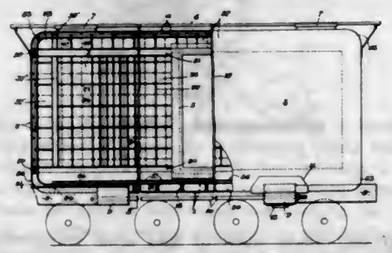
2,736,272
QUICK ATTACHMENT FITTING
Edwin C. Elsner, Glendale, Calif.
Application May 15, 1952, Serial No. 287,880
16 Claims. (Cl. 105—369)



1. An attachment fitting, comprising: a body structure; a bayonet projection carried by said body adapted for insertion into an opening of a complementary member;

side shoulders carried by said projection having cam surfaces interlockingly engageable with a part of said complementary member, upon relative rotation of said projection and said complementary member, for rigidly interconnecting and securing said body structure and said complementary member against separation.

2,736,273
WOOD CELLULAR LAMINATED RAILWAY CAR
Bertrand Goldberg, Chicago, Ill., assignor, by mesne assignments, to U. S. Industries, Inc., a corporation of Delaware
Application March 25, 1950, Serial No. 151,883
9 Claims. (Cl. 105—404)



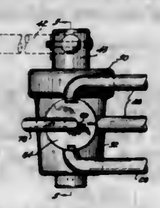
5. A vehicle body adapted to be load and form sustaining when supported by a pair of spaced longitudinal points near its respective ends comprising a homogeneous shell of wood laminated cellular construction, consisting of unitary laminated floor, wall and roof panels, and separate unitary corner members interconnecting the proximal edges of said panels to form a complete monocoque housing, each of said panels having at least two plywood skins united by spacing members adhesively bound therebetween throughout their areas of contact, an opposite pair of said wall panels consisting of a plurality of spaced plywood sheets and separator members lying between said sheets and connected thereto, said pair of panels having door openings therein, metal framing members lying on opposite sides of said panels at said openings and a plurality of lugs attached to said framing members and lying in apertures in the adjacent plywood sheets, and means for attaching said metal members to said panels.

6. A stressed skin vehicle body comprising a homogeneous wooden shell of laminated cellular construction having a unitary laminated cellular panel forming the floor thereof, said panel being composed in part of a plurality of heavy wooden members extending longitudinally of the shell, a pair of bolsters extending transversely of the shell near each end thereof and abutting the ends of said longitudinal members, draft sills extending outwardly to the ends of the car and abutting said bolsters respectively at one end, and means for securing the outer end of each draft sill to the end of said shell.

7. In the combination of claim 6, tension members extending between said bolsters to preload said wooden members under compression.

2,736,274
ICE CREAM FLAVOR INSERTER
Harold William Atkins, Pensacola, Fla., assignor to Dari-Go-Round, Inc., Minneapolis, Minn., a corporation of Minnesota
Application August 8, 1950, Serial No. 178,334
4 Claims. (Cl. 107—1)

1. In an extrusion controller for attachment to the product outlet of a freezer capable of producing in a continuous manner a frozen food product such as ice cream, an extrusion valve connected to the said freezer, a plurality of flavor syrup pans, a flavor valve communicating with each of the said pans, a single entrance port communicating with a single exit port in said flavor valve, the said exit port extruding syrup into the said extrusion valve, and means maintaining the said flavor valve in



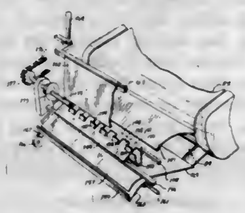
communication with any one pressure pan and the said extrusion controlling valve.

2,736,275
SHREDDED CEREAL APPARATUS
Scott H. Perky, Keeseville, N. Y.
Application August 16, 1948, Serial No. 44,508
13 Claims. (Cl. 107—2)



1. In apparatus for making multi-layer shredded cereal products of the type having a pair of shredding rolls depositing cereal shreds on a reciprocating support, the combination of an endless conveyor on which the shreds are deposited by said rolls, conveyor-reciprocating means whereby a multi-layer shred structure of a length equal to the reciprocation stroke is built up on a section of said conveyor, conveyor-advancing means for advancing said section of the conveyor beyond its forwardmost position of reciprocation by a distance at least equal to the reciprocation stroke, thereby removing said structure from the shred-depositing zone while depositing the first layer of a second multi-layer structure on a succeeding section of said conveyor, and means for alternately operating said conveyor-reciprocating and conveyor-advancing means to form a plurality of multi-layer structures by continuous deposition of shreds by said pair of rolls.

2,736,276
PRETZEL TWISTING MACHINE
Harrison S. Gipe, Reading, Pa., assignor to Quinlan Pretzel Company, Inc., Reading, Pa., a corporation of Pennsylvania
Original application March 18, 1947, Serial No. 735,422, now Patent No. 2,628,577, dated February 17, 1953. Divided and this application December 4, 1951, Serial No. 259,838
13 Claims. (Cl. 107—8)



1. In a pretzel twisting machine, a feeder for transferring straight strips of dough to a twisting mechanism, said feeder comprising: an inclined plate receiving dough strips, a receiving plate disposed beneath the lower edge of said inclined plate and having a plurality of fingers along one edge defined by notches between the fingers, abutment means at the free ends of each of said fingers, a pivotally mounted delivery plate having fingers received in said notches and which fingers are spaced apart by notches receiving the fingers on said receiving plate

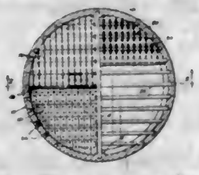
and the abutment means, and means for rotating said delivery plate to cause the fingers thereon to remove pretzels from the receiving plate over said abutment means.

2,736,277
SPLIT METAL MOLD FOR PACKAGING FOODS FOR FREEZING
Theodore S. Cole, Jr., Madison, Conn.
Application July 6, 1951, Serial No. 235,513
3 Claims. (Cl. 107—19)



1. A mold for retaining a food package in brick-like form during freezing having a sheet metal body part consisting of a front wall to cover one wide face of the package, parallel side walls extending the full thickness of the package and one end wall to extend entirely across the bottom of the package, said front, side and end walls being joined along their corresponding edges; a sheet metal cover part hinged to the body part adjacent said bottom end wall and adapted to form the other wide face of the package, said cover part being slightly wider and longer than the front wall of said body part so as to bear against the free edges of said side walls and said end wall when swung to closed position, said cover part having parallel side flanges directed toward said front wall so as to snugly embrace the side walls to prevent bulging of said side walls during freezing of the food package; and releasable latch means for holding the cover part in closed position against the body part without obstructing the open end of the mold.

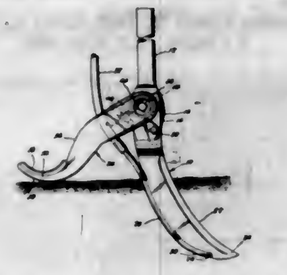
2,736,278
KILN AND CEILING STRUCTURE THEREFOR
Alonzo G. Boyles, New Cumberland, W. Va.
Application March 27, 1953, Serial No. 345,136
3 Claims. (Cl. 110—99)



3. In a dry-laid ceiling structure for kilns, a bottom layer of abutting ceiling blocks; a layer of abutting cover blocks overlying the ceiling blocks, the joints between adjacent cover blocks being offset in both lateral and longitudinal directions from the joints of adjacent ceiling blocks; and a plurality of sealing blocks supported upon the cover blocks, each sealing block being disposed over the point of crossing of an edge of a cover block and an edge of a ceiling block underlying said cover block.

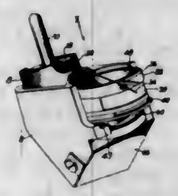
2,736,279
SEALER ATTACHMENT FOR ANHYDROUS AMMONIA APPLICATOR
Douglas Johnston, Huntsville, Ala., assignor to John Blue Company, Huntsville, Ala., a corporation of Alabama
Application September 17, 1951, Serial No. 246,946
5 Claims. (Cl. 111—7)

1. In fertilizing apparatus for applying a normally-gaseous pressurized liquid into the ground, the combination comprising: a thin soil-penetrating blade; conduit means associated with said blade for conducting a normally-gaseous pressurized liquid to the soil-embedded end of said blade for escape into and absorption by the soil; a pivot pin extending transversely through the above-ground end of said blade; a pair of arms pivotally mounted on said pin on opposite sides of said blade and having trailing portions for riding the surface of the soil behind said blade and covering the furrow formed thereby, said portions having opposed edges disposed in planes substantially parallel to and on opposite sides of the plane of said blade and spaced apart a distance less than the



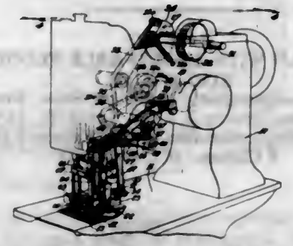
width of said blade, each of said arms comprising an elongated plate-like member having a gradual 90° helical twist intermediate its length, one end of said member being mounted on said pivot pin flatwise against said blade and the trailing porton of said member beng longitudinally curved to provide a convex undersurface; and a pair of coil springs mounted on said pin on opposite sides of said blade and engaging the latter and said arms for individually urging said arms into engagement with the soil.

2,736,280
SEWING MACHINE BOBBIN PREHEATER ATTACHMENTS
Maurice Roberts and Gordon Cecil John Wakefield, Leicester, England, assignors to United Shoe Machinery Corporation, Flemington, N. J., a corporation of New Jersey
Application February 23, 1955, Serial No. 490,102
Claims priority, application Great Britain March 4, 1954
7 Claims. (Cl. 112—41)



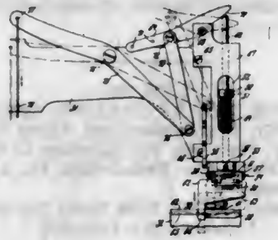
1. A bobbin and bobbin case preheater for mounting on a sewing machine, said preheater comprising a pair of separated heated holders shaped to accommodate a bobbin and a cylindrical closed ended bobbin case formed with external thread engaging devices along a limited section of its cylindrical wall and a projection on its closed end, said holders being sufficiently close together to enable thread to be carried from the bobbin through the thread engaging devices on the bobbin case without cooling the thread excessively, and the bobbin case holder being cup shaped with an opening in its side wall through which the bobbin case may be inserted, in combination with means on the bobbin case holder fitting the projection on the closed end of the bobbin case for retaining the case in its holder at an angular relationship with the holder, in which the thread engaging devices are exposed in the opening of the holder side wall.

2,736,281
GARMENT FINISHING DEVICE
Joseph Henry Beserie, South Amboy, N. J., assignor to Man-Sew Corp., New York, N. Y., a corporation of New York
Continuation of abandoned application Serial No. 234,294, June 29, 1951. This application May 18, 1955, Serial No. 509,173
17 Claims. (Cl. 112—98)



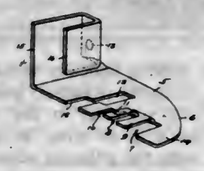
1. In a zigzag sewing machine having a base and a pivotally mounted, laterally oscillating guide frame for a vertically reciprocating needle bar carrying a needle, trimming means comprising a plate slidably disposed on said base for lateral movement with respect to the line of feed, a cutting element disposed in said slide plate, a cutting element movably mounted on said slide plate above and in mating relation with said lower cutting element for coaction therewith, said cutting elements being positioned on said slide plate to make cuts in the work immediately adjacent alternate needle penetrations, means carried by said slide plate connecting with the upper cutting element to move it into cutting engagement with the lower cutting element and means depending from said needle guide frame arranged to engage said slide plate for movement in unison therewith.

2,736,282
SEVERING ATTACHMENT FOR SEWING MACHINES
Herbert Bierman, New York, Harry Blum, Bronx, and Philip Pantuosco, Jackson Heights, N. Y., assignors to Selecta Glove Corporation, New York, N. Y.
Application March 5, 1951, Serial No. 213,978
2 Claims. (Cl. 112—130)



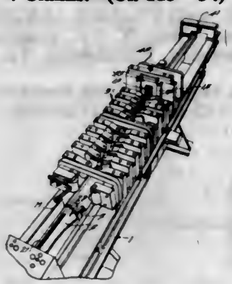
1. In a sewing machine having a work surface provided with a slot; severing means detachably securable to a portion of said machine, said severing means comprising a vertically reciprocable cutter bar, adjustable spring means surrounding said cutter bar and normally maintaining said cutter bar in a position spaced from said work surface, a springedly disposed cutting blade, means pivotally mounting said cutting blade with respect to said cutter bar, said cutting blade being disposed to extend transversely of the direction of feed of the workpiece on said work surface, said cutting blade being provided with a positive guide extension arranged for movement within said slot of said work surface and further provided with a first cutting edge normally disposed above said work surface in a position corresponding to said normal position of said cutter bar, a fixed member adjacent said slot and defining a second cutting edge complementary to said first cutting edge and fixed substantially flush with said work surface, resilient means wound around said pivot means and urging said first cutting edge of said cutting blade into operative cutting contact against said second cutting edge, and means for actuating said cutter bar and for periodically depressing the latter against the action of said spring means and driving said first cutting edge into said slot and against said second cutting edge to thereby sever said workpiece on said work surface.

2,736,283
WORK GUIDE ATTACHMENT FOR FORMING INVISIBLE STITCHES
Chelsie I. Adams, Blairsville, Pa.
Application April 22, 1953, Serial No. 350,385
1 Claim. (Cl. 112—140)



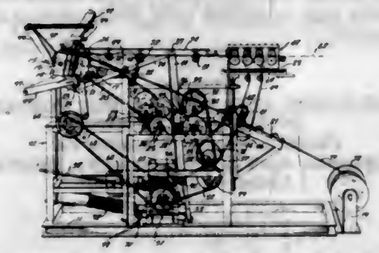
A work guide adapted to be secured to the presser foot of a sewing machine, comprising a plate having cut out portions extending inwardly from the front edge thereof, the portions of said plate between said cut out portions providing tongues and being offset laterally providing shoulders at the inner ends of said tongues, said tongues being extended forwardly providing a substantially long tongue at the front end of said plate, and a second shorter tongue adjacent thereto, disposed in a plane above said substantially long tongue, and a third tongue disposed in a plane below said substantially long tongue, and said tongues adapted to extend into the folds of work, guiding the work under the needle of the machine.

2,736,284
MUFFLER SHELL FORMING MACHINE
Benton D. Jacokes, Jackson, Mich., assignor to Walker Manufacturing Company of Wisconsin, Racine, Wis., a corporation of Wisconsin
Application September 2, 1950, Serial No. 183,047
4 Claims. (Cl. 113—34)



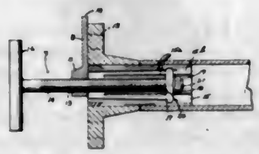
1. In a shell forming machine, the combination of an arbor, a narrow lock seam die bar mounted in a narrow slot on said arbor and movable radially thereof, means for moving said die bar radially, said die bar having a corrugated surface which upon radial movement of the bar may be positioned above or below the surface of the arbor, a roll having a corrugated periphery adapted to mesh with the die bar surface, a frame for supporting the roll, a slide mounted on the frame for motion radial to the arbor but restrained from motion parallel to the arbor, said roll being rotatably mounted on the slide, and a resilient means interconnecting the slide and frame to yieldably resist radial motion of the slide.

2,736,285
MACHINE FOR MAKING NONCIRCULAR TUBING WITH HELICALLY WOUND STRIP
Philip M. Padgett, Newark, N. J., assignor, by mesne assignments, to Titeflex Inc., Newark, N. J., a corporation of Massachusetts
Application May 10, 1951, Serial No. 225,541
3 Claims. (Cl. 113—35)



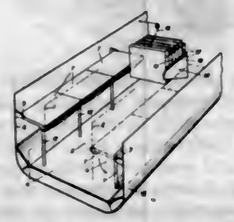
1. A machine for making helically wound non-circular tubing including a rotatable mandrel, guide means that supply preformed strip material to the mandrel at an angle that causes the strip to wrap as a helix, as the mandrel is rotated, with the adjacent edges of successive convolutions engaged with one another to form a seam, rollers at angularly spaced locations around the mandrel in position for operating on the helical seam, bearing means coaxial with the axis of the mandrel, a frame movable on said bearing means about an axis in substantial alignment with the axis of rotation of the mandrel, arms carried by the frame, means for effecting movement of the arms with respect to the frame toward the axis of the mandrel, one of said rollers being carried by each arm in a position to operate on the seam of the tubing which is formed by the wrapping of the strip on the mandrel, mechanism including an operating cam for oscillating the frame on its bearing, driving mechanism that imparts intermittent rotation to the mandrel, said driving mechanism including an intermittent motion device, and a continuously operating motor operatively connected with the intermittent motion device and with the mechanism for operating the frame and mandrel in timed relation with one another.

2,736,286
PIPE AND FLANGE ALIGNER
Vance B. Britton, Nitro, W. Va., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application March 28, 1952, Serial No. 279,140
1 Claim. (Cl. 113—102)



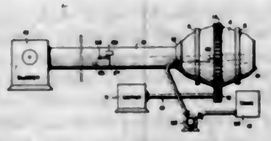
A fixture for clamping a pipe flange to a pipe section in abutting alignment for welding comprising an elongated sleeve having a tapered bore, said sleeve having a plurality of circumferentially spaced longitudinal slots extending along a portion of its length, with alternate slots opening at opposite ends of said sleeve to form radially expansible resilient fingers, a plate secured to one end of said sleeve and having a flat face disposed at right angles to the axis of said sleeve, said plate being of substantially greater radial extent than said bore, a shaft passing through said plate and having a threaded connection therewith, an actuating handle on one end of said shaft, said shaft being adapted to move longitudinally through said sleeve when rotated relative to said plate by said actuating handle, and an enlarged annular abutment secured on the end of said shaft remote from said handle and being mounted for rotation relative thereto, said abutment being adapted to be axially advanced into said tapered bore as said shaft is rotated to expand said resilient fingers outwardly against the internal walls of pipe flange and pipe section for maintaining the same clamped in aligned position relative to each other.

2,736,287
SHIP HOLD WITH REMOVABLE FLOORING STRUCTURE
Henri Kummerman, Neuilly-sur-Seine, France
Application January 7, 1952, Serial No. 265,265
Claims priority, application France February 16, 1951
6 Claims. (Cl. 114—72)



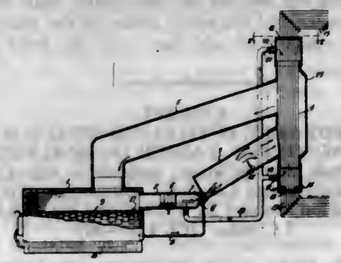
1. In a ship's hold having two side walls and a floor, a removable flooring structure comprising at least one panel hingedly connected at one edge thereof to one of the side walls of the hold and disposed in a plane generally parallel to and spaced from the floor of the hold, at least a second panel hingedly connected at one edge thereof to the other side wall of the hold and disposed generally in the plane of the first panel, retractible supporting means engaging said panels and supporting said panels in a substantially horizontal plane with the free edges of the panels in spaced apart relation, guiding means on the free ends of said panels, a series of movable panels for filling in the space between the free edges of said first and second panels, rollers on said series of panels of a configuration and spacing to engage said guiding means, whereby said series of panels are supported in substantially the same horizontal plane as said first and second panels to provide therewith a floor structure which is substantially parallel to and vertically spaced above the floor of the hold.

2,736,288
AUTOMATIC TABLET COATING APPARATUS
Edward B. Clay, Philadelphia, and Alfred J. D'Angelo, Penn Valley, Narberth, Pa., assignors to Smith, Kline & French Laboratories, Philadelphia, Pa., a corporation of Pennsylvania
Application May 28, 1954, Serial No. 432,977
3 Claims. (Cl. 118—19)



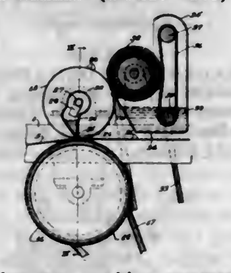
1. Apparatus for coating small objects comprising a rotatable coating pan, means for rotating said pan, a container for coating liquid, a pump having its intake side connected to said container, an open discharge line connected to said pump and terminating in said coating pan, means for providing a flow of air through said pan, control means responsive to the flow of air, and timer means responsive to said control means for actuating said pump at fixed intervals of time for a predetermined length of time.

2,736,289
APPARATUS FOR APPLYING A PLASTIC COATING TO THREADS, YARNS, ETC.
Alfred W. Allen, Greensboro, N. C.
Application November 23, 1954, Serial No. 470,649
6 Claims. (Cl. 118—48)



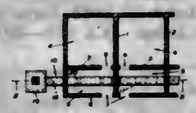
1. Thread coating apparatus comprising the following elements arranged to form a recurrent circulation system for conducting a mist of atomized liquid plastic particles in ambient relation to threads to be coated with said plastic: a tank for containing a body of said plastic up to a predetermined high level thermostatically controlled heating means for said tank for creating an atmosphere of vapor from said plastic above said liquid level, a coating chamber having top and bottom walls with similar patterns of perforations through which moving threads are adapted to pass vertically through said chamber, a mist-supplying conduit establishing communication between said tank above said liquid level and the lower part of said coating chamber, an atomizing nozzle in said conduit connected to said tank below said liquid level, a blower in said conduit between said tank and nozzle for directing a blast of the vapor from said plastic across said nozzle to raise liquid to the mouth of said nozzle and atomize it producing a mist, and a return conduit establishing communication between the upper part of said coating chamber and said tank above said liquid level.

2,736,290
APPARATUS FOR MAKING ADHESIVE TAPE
William M. Scholl, Chicago, Ill.
Application December 18, 1952, Serial No. 326,676
3 Claims. (Cl. 118—203)



1. An adhesive tape making apparatus designed to apply a viscous adhesive mass of a viscosity exceeding 35 centistokes per minute at 20° C. on a backing strip, consisting of a set of rolls between which a backing strip passes, said rolls comprising a backing roll and an adhesive applying roll, said applying roll being relatively thin and provided with numerous apertures therein, means to feed adhesive inside said applying roll, and doctor means to force the adhesive through the apertures into contact with said strip, said backing roll having a resilient cover and being of larger diameter than the applying roll to provide more than mere line contact between the rolls to effect a withdrawing action on the adhesive through the apertures in the applying roll akin to suction.

2,736,291
PIGGERIES AND SEWAGE DRAINAGE SYSTEMS THEREFOR
Samuel Duff, Killaughy, Donaghadee, Northern Ireland
Application December 17, 1952, Serial No. 326,539
Claims priority, application Great Britain December 31, 1951
10 Claims. (Cl. 119—16)



1. For use in association with a pig-house or the like, a drainage or the like system for excreta, said system comprising conduit means located at a lower level than the floor of the house and leading to a sump, and outlet means in the floor of the house through which liquid excreta may drain and solid excreta may be swept into the conduit means, said conduit means incorporating baffle means adapted to retard the flow of liquid excreta through the conduit means so that the solid and liquid excreta may become mixed before passing to the sump.

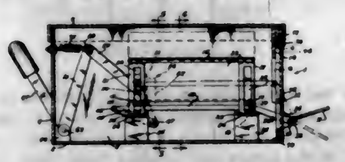
2,736,292
INK FEED DEVICE FOR FOUNTAIN PENS
Ragnar Tanberg, Drammen, Norway
Application May 13, 1953, Serial No. 354,677
1 Claim. (Cl. 120—45.4)



A fountain pen construction, comprising, a permanent base assembly and a replaceable barrel ink supply member, said base assembly having in internally threaded sleeve adapter, an externally threaded needle holder to fit said internal thread of the sleeve adapter, a needle carried by said holder, said needle extending through said holder, said needle having a tubular bore opening in the end of the needle on one side of the holder and an opening in a side port on the other side of the holder, a needle point projecting beyond said side port, said holder threadably mounted in said sleeve adapter near one end thereof with the needle extending coaxially of the adapter toward the opposite end, said needle holder being internally threaded on at least the end opposite said needle point, a pen point and feed bar holder having external threads engageable into said internal threads of said needle holder, a feed bar and pen point carried by said holder, an ink feed device to carry ink from said barrel to said feed bar and to admit air into said barrel in controlled amounts to meter ink output, said feed device comprising a filler body carried by said feed bar and insertable into said tubular bore in said needle, said filler body having a cross-sectional configuration filling all of said bore except an air bleed channel, the surfaces of said filler body along said channel having capillary size slots extending longitudinally thereof, and said barrel having an externally threaded end threadable into the said sleeve adapter opposite said

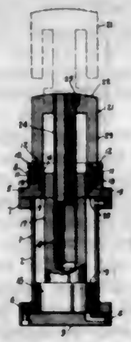
pen and feed bar holder, said barrel having a puncturable member closing said barrel to retain an ink supply therein until pierced by said needle point.

2,736,293
AUTOMATIC TWO-SIDES CHALK SHARPENERS
Isaac Kalish, Brooklyn, N. Y.
Application March 25, 1955, Serial No. 496,714
3 Claims. (Cl. 120—89)



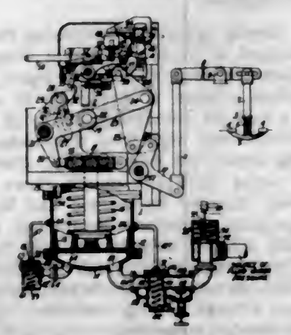
1. A device of the character described comprising a housing having a bottom as well as side wall portions one of which is provided with an opening, a cover member closing the top of said housing having a perforation for passing therethrough a piece of chalk, means for receiving said piece of chalk and for holding it in frictional engagement within said housing, a first handle member mounted on the outer side of said housing, means for opening said chalk receiving means being connected to said first handle member, resilient means tending to close said chalk receiving means being provided on the same, chalk sharpening elements mounted on said housing adjacent the opening in one of said side wall portions of the housing, pushing means for forcing the piece of chalk held by said chalk receiving means through the same and through said sharpening elements being mounted on said housing, and a second handle member mounted on the outer side of said housing being connected to said pushing means.

2,736,294
ADJUSTABLE STROKE RAM AND PISTON ASSEMBLY
Howard A. Buehner, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application August 9, 1951, Serial No. 241,119
1 Claim. (Cl. 121—38)



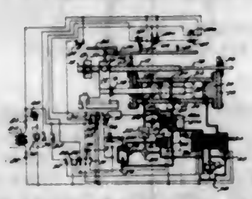
A variable stroke hydraulic ram and piston assembly comprising a hollow cylinder having a base and a head secured to opposite ends thereof with said cylinder having aperture means therein for flow of hydraulic fluid into and out of said cylinder, said head being provided with an axial opening therein, a piston rod slidably received within said opening, a piston connected to the inner end of said rod and adapted for sliding movement in said cylinder in response to the pressure of said hydraulic fluid, a ram having an axial recess therein adapted to receive the outer end of said piston rod, a threaded shaft secured to the base of said recess and threadably engaged with the outer end of said piston rod to move said ram longitudinally in relation to said piston to vary the stroke of the piston at any given relative position between said ram and said piston, the outer stroke of the piston being limited by contact of said piston with the head of said cylinder and the inner stroke of the piston being limited by contact of said ram with the head of said cylinder.

2,736,295
CIRCUIT BREAKER WITH FLUID MOTOR HAVING FLUID ADMISSION VARIED DURING STROKE
Henry L. Peek, Boston, Mass., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application January 23, 1953, Serial No. 332,877
5 Claims. (Cl. 121—38)



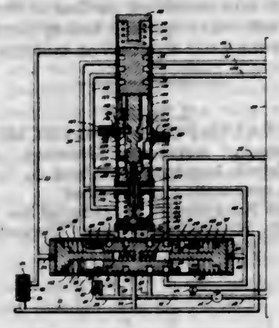
1. In an operating mechanism for circuit breakers, a motor operable by fluid under pressure and comprising a cylinder and a piston movably arranged therein, a source of fluid under pressure, a ram on said piston for reclosing said breaker, and means for controlling the flow of fluid under pressure to said cylinder to close said breaker, said controlling means comprising a permanently open passage for supplying fluid for actuating said piston in breaker closing direction and a normally closed passage, said normally closed passage being opened by the fluid under pressure from said first passage upon said piston reaching a predetermined position in breaker closing direction to actuate said breaker to closed position.

2,736,296
HYDRAULIC STEP DRILLING UNIT
Paul W. Romine and Andrew Armstrong, St. Clair Shores, Mich., assignors of one-third to Charles Leitschuh
Application December 26, 1952, Serial No. 327,999
11 Claims. (Cl. 121—45)



1. In a step feeding apparatus for a machine tool holder, fluid actuated means shiftably mounted within a chamber and operatively engaged with the holder to advance or retract the same, means to retard the rate of advance of said holder at successively advanced positions thereof in successive feeding steps including dashpot means comprising a dashpot chamber having a movable element therein and a constricted outlet means for fluid, said movable element being operatively engageable with said fluid actuated means to be driven forward thereby upon predetermined advance movement of the latter during each feeding step, a fluid conduit system including conduit means connected with the first named chamber both in advance of and behind said fluid actuated means, valve means in said system shiftable to a closed condition to close said conduit means to said first named chamber, said valve means being shiftable to a forward movement condition to connect said conduit means behind and in advance of said fluid actuated means with a source of pressurized fluid and to exhaust respectively and being also shiftable to a return movement condition to connect said conduit means in advance of and behind said fluid actuated means with a source of pressurized fluid and to exhaust respectively, a second valve means in the conduit means between said first valve means and said first named chamber in advance of said pressure actuated means, resetting conduit means in said system connecting said second valve means and said dashpot chamber at a location intermediate said movable element and constricted outlet means, said second valve means being shiftable to an operating condition to block said resetting conduit means from said first valve means and to connect the first named conduit means in advance of said fluid actuated means with said first valve means and being also shiftable to a resetting condition to block the first named conduit means in advance of said fluid actuated means from said first valve means and to connect said resetting conduit means with said first valve means.

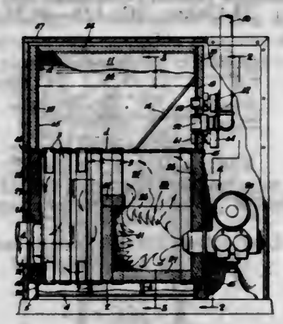
2,736,297
INTERMITTENT FLUID FLOW CONTROL MECHANISM
Donald A. MacDonald, Houston, Tex.
Application July 3, 1953, Serial No. 366,001
4 Claims. (Cl. 121—150)



1. Control valve mechanism for controlling the intermittent application of fluid under pressure to and relieving the pressure from pressure fluid operated apparatus comprising a valve casing, a valve body movable in the casing to one position to permit the flow of pressure fluid to said apparatus and to another position to cut off said flow, latch means in said casing movable into engagement with said body to hold the body in said positions and out of engagement with the body to release the body, and means operable by the pressure of said fluid upon a predetermined change in said pressure to move said latch means out of engagement with the body and move said body from one to the other of said positions.

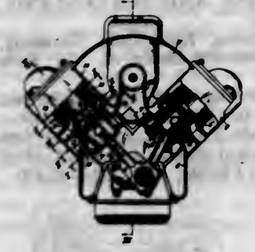
2,736,298
WELDED STEEL BOILER
Frank Smith, Philadelphia, Pa.
Application July 23, 1952, Serial No. 300,553
6 Claims. (Cl. 122—145)

6. A tubular boiler consisting of a unitary metallic structure comprising confronting upper and lower tube plates and tubes connecting said plates and confined to areas of the latter spaced from the perimetral edges thereof, a plurality of pre-formed complementary wall panels of non-metallic refractory material removably supported between the perimetral edge portions of said tube plates and forming with the latter an enclosed combustion chamber embracing the said tubes, metallic members secured to the



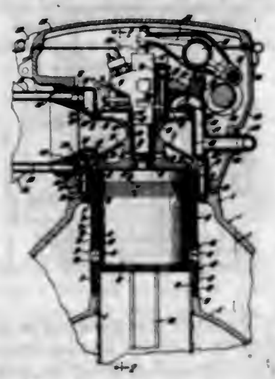
upper surface of the upper tube plate and to the lower surface of the lower tube plate and forming header chambers communicating with the ends of the tubes, said tubes being arranged to afford a space at one end of said chamber unobstructed by the tubes, and a refractory fire box structure within said space.

2,736,299
AIR COOLED TWO STROKE CYCLE INTERNAL-COMBUSTION ENGINE
Bernhard Medenus, Koln-Kalk, Germany, assignor to Klöckner-Humboldt-Deutz Aktiengesellschaft, Koln, Germany
Application August 2, 1952, Serial No. 302,368
Claims priority, application Germany August 11, 1951
5 Claims. (Cl. 123—41.6)



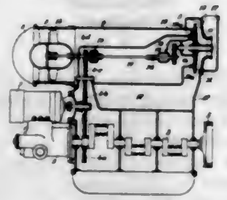
1. In an air cooled two-line V-engine of the two-stroke cycle internal combustion type, in which the cylinders are provided with scavenging air inlet and outlet passages for admitting scavenging air into and discharging the same from said cylinders, said cylinders having their lower ends inserted in a crankcase, the combination of: a pair of scavenging air receiving chambers respectively associated with each line of cylinders of said engine and surrounding said lower cylinder ends, said cylinders having connected thereto cooling fins below said passages, wall means connected to said cylinders and respectively confining with outer surface portions thereof cooling air passages extending around said second cooling fins for guiding cooling air around the same, said wall means also forming part of passage means having the interior thereof separated from said cooling air passages and respectively effecting communicating between said scavenging air receiving chambers and the scavenging air inlet passages of the respective lines of cylinders pertaining thereto, chamber means arranged between said lines of cylinders and communicating with said scavenging air receiving chambers, and blower means arranged to blow scavenging air directly into said chamber means.

2,736,300
ENGINE CYLINDER CONSTRUCTION
Gregory Flynn, Jr., Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 5, 1951, Serial No. 229,914
18 Claims. (Cl. 123—41.31)



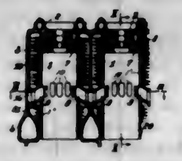
1. In an engine, spaced inner and outer cylinder mounting decks having aligned cylinder openings, a cylinder and cylinder head assembly insertable in the aligned cylinder openings, each assembly comprising a cylinder head having separately defined coolant spaces therein and removably secured to the outer deck, a cylinder secured to the cylinder head and coolant jackets on the cylinder and seated in the cylinder head defining a coolant space in series coolant communication between said head coolant spaces.

2,736,301
BLOWER FOR COOLING AN INTERNAL-COMBUSTION ENGINE AND SCAVENGING OR SUPERCHARGING
Bernhard Medenus, Koln-Kalk, Germany, assignor to Klöckner-Humboldt-Deutz A. G., Koln am Rhine, Germany
Application August 11, 1950, Serial No. 178,795
In Germany April 2, 1949
Public Law 619, August 23, 1954
Patent expires August 23, 1969
3 Claims. (Cl. 123—41.65)



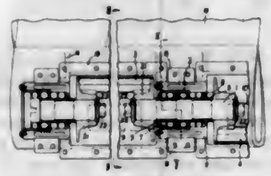
1. An air-cooled internal combustion engine, having V-arranged cylinders and comprising a crankcase structure, a crank shaft journalled in said structure, a cooling blower having a rotor and being disposed at one end of said structure, another blower for cylinder air having a rotor of higher speed than said rotor of said cooling blower and being disposed at the opposite end of said structure, said two rotors having respective axes parallel to that of said crank shaft, a spur gear transmission connecting said crank shaft with said rotor of said cooling blower, step-up transmission means having a driving gear and a driven gear, said driven gear being connected with said rotor of said other blower, a housing detachably secured to said structure, said transmission means and said rotor of said other blower being journalled in said housing independently of said structure, and a connecting shaft coupling said driving gear with said rotor of said cooling blower and being coaxial with said driving gear and said latter rotor.

2,736,302
AIR-COOLED TWO-CYCLE INTERNAL-COMBUSTION ENGINES
Johann Keylwert, Koln-Kalk, Germany, assignor to Klockner-Humboldt-Deutz A. G., Koln am Rhein, Germany, a firm
Application January 5, 1951, Serial No. 204,583
Claims priority, application Germany January 11, 1950
4 Claims. (Cl. 123—41.67)



1. An air-cooled two-cycle internal-combustion engine with piston-controlled scavenging and exhaust ports, comprising an engine housing having a cylinder cavity, a working cylinder structure disposed in said cavity and having a single-piece barrel forming an annular interstitial air space together with said housing, said barrel having one end portion rigidly joined with said housing so as to be capable of axial expansion, said barrel having an integral and radially projecting shoulder zone extending around said barrel, said shoulder zone having an outer peripheral surface of cylindrical shape in slidable sealing engagement with said housing, said scavenging and exhaust ports being located in said shoulder zone and having respective outer openings located in said peripheral surface at the same axial height, all of said outer openings having the same lengths respectively in the axial direction of said structure.

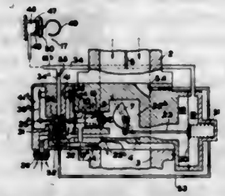
2,736,303
CONTROL VALVE FOR A TWO CYCLE ENGINE
Georg Seidemann, Augsburg, Germany, assignor to Maschinenfabrik Augsburg-Nurnberg A. G., Augsburg, Germany, a corporation of Germany
Application November 8, 1951, Serial No. 255,351
Claims priority, application Germany December 28, 1950
9 Claims. (Cl. 123—59)



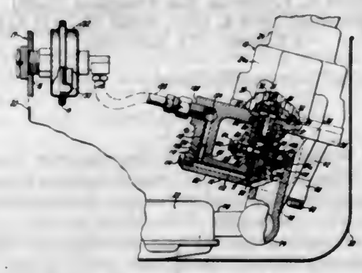
1. In a multicylinder internal combustion engine having valve controlled exhaust ports in said cylinders and exhaust connections from individual cylinders to an exhaust manifold, the combination which comprises individual rotary valves for said ports, individual shafts connecting adjacent ends of adjacent said valves, bearings for rotatably supporting each said shaft disposed between said valves, cylindrical housings for said bearings, each said housing extending axially over its respective said shaft to substantially adjacent said valves, means for mounting said housings on said engine with said shafts and said valves coaxially aligned, semicircular surfaces on said exhaust connections, and means for mounting said exhaust connections on said engine over said exhaust ports and valves with said semicircular surfaces forming with end portions of said cylindrical housings a gas tight seal.

2,736,304
ENGINE GOVERNOR
Robert H. Thorner, Detroit, Mich.
Application November 9, 1948, Serial No. 59,109
31 Claims. (Cl. 123—103)

1. A governor for an internal combustion engine comprising means having an intake passage and throttling means therein, a fluid motor for actuating said throttling means, said motor comprising a casing forming a fluid chamber, a member displaceable in said casing dividing said casing into two chambers and operable by fluid pressure differential, means operable to connect said displaceable member and throttle valve for correlated movement therewith, a fluid flow circuit communicating with at least one of said chambers and through which fluid is adapted to be circulated, one end of said circuit being exposed to pressure which is always higher than the pressure in the other end of said circuit at all loads during all governor operating conditions, two fluid restrictions in the said circuit, the communication of said one chamber with the said circuit being at a point between the said two fluid restrictions, at least one of the said restrictions being variable, the flow of fluid past said variable restriction being always in the same direction under governor operation, said variable restriction being operable by a movable pressure responsive sensing member, a pressure chamber, said movable member comprising one wall of said last-named pressure chamber, means to subject said chamber always to substantially the full unmodified quantitative value of the vacuum in the said intake passage, the movement of said variable restriction and cooperating movable member being responsive to variations in pressure in said chamber, and means connected to said throttle and operable in accordance with the opening of said throttle to control the differential of the forces acting on the said movable member, whereby the movement of said movable member is made responsive substantially solely to the changes in pressure resulting from changes in engine speed.

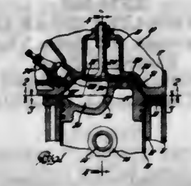


2,736,305
HYDRAULIC GOVERNOR
Wallace Murray Kennedy, Bloomfield Hills, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application April 16, 1953, Serial No. 349,291
15 Claims. (Cl. 123—103)



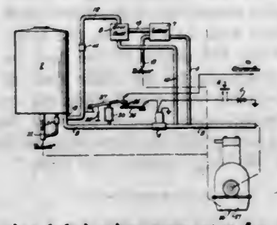
1. In combination with an engine accessory having a housing and an engine driven shaft rotatable in the housing, a support having a journal in a portion thereof detachable from said housing, a rotatable governor element having a plurality of passages therein, one end of said rotatable governor element being journaled in said support, a separable rotative drive connection between the other end of said rotatable governor element and said shaft and a centrifugally unbalanced spring biased valve slidably mounted in said rotatable governor element between the said passages therein for controlling communication therebetween.

2,736,306
COMBUSTION CHAMBER
Archie D. McDuffie, Berkley, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 8, 1952, Serial No. 313,679
10 Claims. (Cl. 123—191)



1. An engine comprising a cylinder having a pair of inlet and exhaust valves in the head of said cylinder, said valves being mounted with the end surfaces thereof extending normally to the axis and spaced beyond the end of said cylinder, said head beyond said end of said cylinder being formed to provide connecting walls sloping toward and extending to the edges of said valves throughout the peripheral extent of said end of said cylinder, a piston disposed in said cylinder and having an end wall adapted to project into said head, said end wall being complementary to the surfaces of said head and said valves and extending diametrically across said cylinder and throughout the greater part of the end of said piston, a spark plug disposed in said head and projecting through one of said connecting walls at the side of said cylinder and said valves, and a combustion chamber formed between said head and said piston walls and said valves and including a firing chamber extending into said piston end wall at the side of said cylinder adjacent said spark plug and including a clearance space extending between said head and piston walls and said valves on the side of said cylinder opposite said spark plug and said firing chamber.

2,736,307
PREOILING SYSTEM AND APPARATUS
Harry A. Wilcox, Westport, Conn.
Application July 24, 1953, Serial No. 370,126
6 Claims. (Cl. 123—196)



1. Pre-starting lubrication apparatus for internal combustion engines comprising in combination with an internal combustion engine a pressure storage, expulsive delivery reservoir adapted for storage of a quantity of lubricating oil under pressure; conduit means connecting said reservoir with parts of said engine to be lubricated; a solenoid valve in said conduit biased to closed posi-

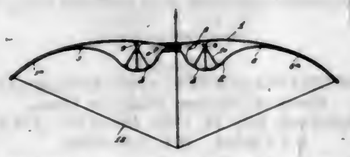
tion; conventional engine electrical starting circuit including a starter switch and a source of electrical energy; said starter switch having an open and closed position; a solenoid valve circuit including said starting switch and source of electrical energy to actuate said valve to open position when said starter switch is closed; and pressure-operated switch means in said starting circuit fluid-connected to said reservoir responsive to predetermined higher pressure in the latter to hold it and consequently said starting circuit open until certain release of pressure in said reservoir through said valve upon energization of the latter to open position, said pressure-operated switch being biased toward closed position automatically to close said starting circuit when the reservoir pressure is reduced to a predetermined value by such pressure release.

2,736,308
UNDERWATER SPEAR GUN
Juan Vilarrubis Ferrando and Pedro Vilarrubis Ferrando, Barcelona, Spain
Application October 27, 1952, Serial No. 317,088
4 Claims. (Cl. 124—13)



1. A gun for discharging a harpoon in undersea fishing comprising an air chamber having an air outlet port, means for supplying compressed air to said chamber, a barrel connected to said chamber for receiving and guiding said harpoon, a harpoon carrier slidably positioned in the bore of said barrel and capable of closing said chamber outlet port, means manually operable exteriorly of and mounted on said gun for quickly reducing the interior area of said chamber for increasing the pressure of the air therein when desired and a trigger mechanism normally holding said carrier against said chamber outlet port.

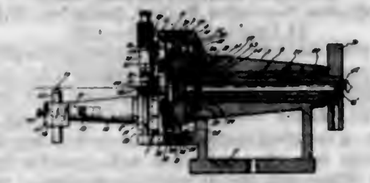
2,736,309
ARCHERY BOW
Robert John Hoffman, Glendale, Calif.
Application June 9, 1952, Serial No. 292,522
4 Claims. (Cl. 124—23)



1. An archery bow comprising, a front limb, and a rear limb rigidly connected to the front limb at the center and at the outer ends of the bow, the front limb extending forward from the center of the bow on symmetrical curves and continuing to the outer ends of the bow on gradually decreasing rearwardly directed curves, thereby to provide unobstructed spaces wide at the inner ends thereof, the spaces gradually decreasing in width until the limbs meet at the outer ends of the bow.

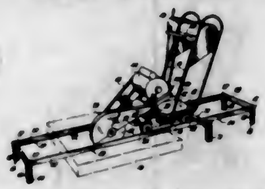
2,736,310
WHEEL DRESSERS
Poul Hoegh Baumann, Toronto, Ontario, Canada
Application March 4, 1954, Serial No. 414,090
18 Claims. (Cl. 125—11)

1. In a wheel dresser, a rotatable head, an arm carried by said head, a cutting element carried by said arm whereby said cutting element is adjustable relative to the said head, and optical sighting means extending through said head and coincident with and including cross



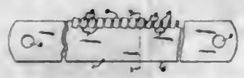
hairs intersecting at the axis of said rotatable head for centering said cutting element on the axis of rotation of said head.

2,736,311
TRACK MOUNTED CUTTER FOR CONCRETE SLABS AND THE LIKE
Neligh C. Coates, Kansas City, Mo., assignor to Concrete Saw Company, Kansas City, Mo., a corporation of Missouri
Application January 2, 1952, Serial No. 264,589
1 Claim. (Cl. 125—14)



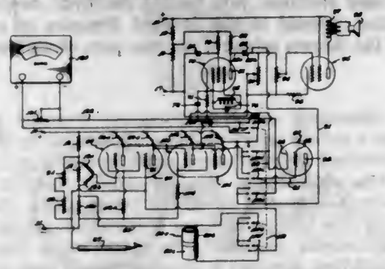
For a pavement cutting machine having a frame, a pair of spaced axles attached to the frame, a pair of wheels on each axle respectively, and a rotatable cutter disc operably carried by the frame, an assembly adapting said machine for use as a slab cutter comprising a continuous, rectangular support including a pair of elongated, longitudinal members having an L-shaped, cross-sectional contour, presenting an upstanding flange and an inwardly-extending track adapted to receive said wheels between the flanges, and cross elements joining the members at the ends thereof; a plurality of legs; structure joining the legs to the support for holding the same elevated above a slab to be cut; and a sheave on one end of each axle respectively, the diameters of the sheaves being less than the diameters of the wheels and said sheaves being provided with peripheral grooves receiving the uppermost edge of one of said flanges when the wheels are riding on the tracks, said structure including bolt and nut means and a plurality of bolt-receiving slots in the legs whereby the height of the support may be varied to accommodate slabs of differing thicknesses.

2,736,312
SAW BLADE WITH INSERTED TEETH
Oscar G. Goldman, San Francisco, Calif.
Application April 8, 1954, Serial No. 421,910
3 Claims. (Cl. 125—18)



1. In a straight saw blade of the character described a cutting edge, a plurality of spaced sockets formed in said cutting edge, each socket having a bottom diverging away from the cutting edge of the blade and having sides generally at right angles to said bottom, and abrasive tips of generally oblong rectangular cross section fitting in the respective sockets, the outer ends of the respective tips being generally parallel with the bottom of the respective sockets so as to form a rake for the leading edge of the tip and a relief behind said leading edge.

2,736,313
ELECTROPSYCHOMETER OR BIOELECTRONIC INSTRUMENT
Volney G. Mathison, Los Angeles, Calif., assignor to Muriel N. Warkentin, Los Angeles, Calif.
Application October 5, 1954, Serial No. 460,384
21 Claims. (Cl. 128—2.1)



1. An audio-registration type of electropsychometer or bioelectronic instrument comprising five vacuum tubes, or a lesser number of twin type tubes functioning as five separate tubes and hereinafter designated as the first, second, third, fourth and fifth vacuum tubes, a transitron oscillator, an audio-frequency amplifier and audio signalling device, and a system of skin-contacting electrode elements, means for establishing an electrical potential between the terminals of the said system of skin-contacting electrode elements, means for relating the ohmic resistance existing between the terminals of the said system of skin contacting electrodes to the values of biasing voltages appearing at the grid terminals of the above-mentioned first and second vacuum tubes, means for establishing an electrical potential between the plate and cathode elements of the said first and second vacuum tubes, two conductors, one from each plate terminal of the aforesaid first and second vacuum tubes, to the grid and cathode elements of a previously mentioned third vacuum tube, a transitron type of audio-frequency oscillator, the said oscillator consisting of a previously mentioned fourth vacuum tube and the associated resistances and capacitors required to constitute the said transitron oscillator, and including a capacitor, the said capacitor being designated as a transitron plate circuit capacitor, one terminal of the said capacitor being connected to the plate terminal of the aforesaid fourth vacuum tube, the other terminal of the said capacitor being connected to the plate terminal of the previously mentioned third vacuum tube, means for connecting the cathode and control-grid terminals of the aforesaid fourth vacuum tube in common to the cathode terminal of the aforesaid third vacuum tube, means for applying the audio-frequency signalling potential generated by the aforesaid transitron oscillator to the grid terminal of a previously mentioned fifth vacuum tube, the said fifth vacuum tube functioning as an audio-frequency amplifier and operating an audio-frequency signalling device, means for adjusting the operating characteristics of the instrument, whereby the registration or non-registration of a signal by the above-mentioned audio-frequency signalling device is governed by the value of ohmic resistance existing between the terminals of the afore mentioned skin-contacting electrode elements.

2,736,314
CERVICAL BRACE
Randall H. Hale, Los Angeles, Calif.
Application April 13, 1953, Serial No. 348,421
1 Claim. (Cl. 128—87)

A cervical appliance comprising a chin cup, an occipital part and anterior and posterior sections, all of light transmitting thermoplastic material, presenting a front sheet to their respective parts and including a backing pad, said pads having free edge portions protruding beyond the edges of the thermoplastic sheets, separate adjustable straps for connection between said chin cup and the occipital part on each side of a patient's neck, means detachably connecting said straps with said chin cup and occipital part, separate adjustable shoulder and underarm straps for connection with said anterior and



posterior parts, means detachably connecting said straps with said anterior and posterior parts, tension rods connected between the chin cup and the anterior section and between the occipital part and the posterior section, and means securing said rods upon the thermoplastic material of said parts, said tension rods including means for adjusting the effective length of the rods.

2,736,315
HYPODERMIC SYRINGE PISTON AND ACTUATING STEM ASSEMBLY
James F. Feeney, Methuen, Mass.
Application March 23, 1954, Serial No. 418,087
3 Claims. (Cl. 128—218)



1. In a veterinary syringe and the like, a glass barrel, a piston of ceramic material having a coefficient of expansion substantially equal to that of the glass and an axial cavity in its rear face, an anchor lodged in said cavity and having an axial bore, a stem having axially spaced dosage measuring graduations and a threaded bore in its distal end, and an adapter including a flange and oppositely disposed threaded parts in respective ones of said bores, said bores and threaded portions being proportioned to bring one face of said flange into engagement with the rear face of the piston and the distal end of said stem into engagement with the other face of said flange.

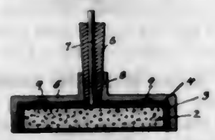
2,736,316
REFLECTOR DEVICE
John B. Stovall, West Hollywood, Calif., assignor of one-third to Ryal F. Clingen, Hollywood, Calif.
Application September 14, 1954, Serial No. 456,020
4 Claims. (Cl. 128—233)



1. A medicine dropper comprising a tube for dropping medicine into the eye of the user, a support for said tube carried thereby having an inner face directed toward the discharge end of the tube, a reflector on said tube overlying said face, said tube having a dropping end extending away from said inner face of said support, and a free end extending from the outer face of said support, and a manually compressible bulb mounted on the free end of said tube, said support consisting of an interiorly threaded cap applicable to a container of the liquid to be dropped, and a reflector encircling said tube and fac-

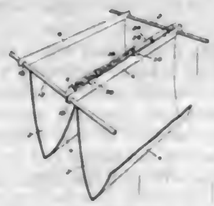
ing the dropping end of the tube to enable the user to aim liquid being dropped from the tube at a selected part of the user's eye.

2,736,317
THERAPEUTIC MOIST-HEAT-TREATMENT APPARATUS
Clara C. Alexander, Prince George, British Columbia, Canada
Application January 5, 1955, Serial No. 479,951
5 Claims. (Cl. 128—254)



1. An apparatus of the class described comprising a heat-resistant porous pad; flexible means over the top, bottom and sides of said pad pervious to the passage of moist steam generally therethrough; a flexible impervious cap covering the top and sides of said pervious means; an insulated conduit held by and opening through said impervious means whereby moist heat is supplied to said pad; and flexible means to insulate said pervious means and said impervious means against contact with any part of the body.

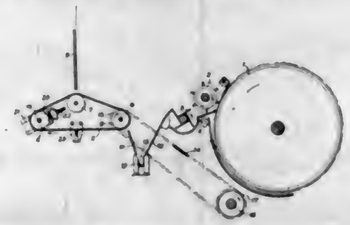
2,736,318
LABEL CARRIER FOR OFFICE EQUIPMENT
Edgar Frederick Shannon, New Malden, England, assignor to The Shannon Limited
Application July 31, 1951, Serial No. 239,469
2 Claims. (Cl. 129—16.7)



1. In a device of the class described, a file having an edge portion, a bar formed of metal strip folded longitudinally to grip said edge portion permanently in the fold of said strip and to form, in cross section, a first leg having a label-carrying surface and a second leg which intermediate the fold and its free edge is bent away from the free edge of the first leg, a flat strip label having substantially the same depth as the first leg and resting thereagainst, the first leg and label being covered by a transparent sheath of flat strip material with hooked edges which engage around the fold and around the free edge of the first leg, said edge portion being held permanently against the second leg by tongue-like means which project from the second leg through the edge portion, said tongue-like means projecting from the second leg in portions of said leg below the bend therein.

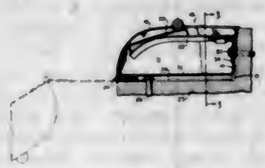
2,736,319
TOBACCO-FEEDING APPARATUS
Desmond Walter Molins, Deptford, London, England, assignor to Molins Machine Company Limited, London, England, a British company
Application June 18, 1954, Serial No. 437,599
Claims priority, application Great Britain June 29, 1953
2 Claims. (Cl. 131—109)

1. Tobacco feeding apparatus comprising a toothed conveyor for cut tobacco, means to pick tobacco from said conveyor, a winnowing device arranged to receive tobacco so picked and throw it upwardly and forwardly, a partition located to intercept some of the tobacco so thrown while permitting heavier particles to pass over it, and a second conveyor having a smooth, relatively hard surface disposed transversely of and extending beneath said partition, said second conveyor moving in a direction opposed to the forward direction of movement of the thrown tobacco, the rear part of said second



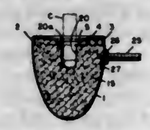
conveyor being located in a position to intercept only tobacco particles thrown over said partition, whereby hard particles such as stalk are thrown so as to strike the said rear part and tend to rebound therefrom in a direction opposed to the direction of movement of said second conveyor, while softer particles striking said second conveyor surface tend to remain on it and to be carried forwardly by it.

2,736,320
ASH TRAY
Joseph H. Roberts, Gardner, Mass., assignor to Heywood-Wakefield Company, Gardner, Mass., a corporation of Massachusetts
Application April 10, 1953, Serial No. 348,077
2 Claims. (Cl. 131—235)



2. In combination with a chair-arm, an ash tray, walls forming a recess in said chair-arm complementary in size and shape to said tray to receive said tray, a hinge having two leaves interconnecting said tray to said chair-arm, one said leaf secured to said tray, the other leaf being secured to an elongated plate having an elongated slot extending along the longitudinal axis thereof, means secured to said chair-arm extending into said slot whereby a sliding connection is provided between said chair-arm and said plate whereby said tray may be withdrawn from said recess and pivoted about said interconnection to empty the same and whereby said tray may be inserted into said recess, means locking said tray within said recess including a bolt in the rear of said recess, latch mechanism pivotally mounted on said tray adapted to hook onto said bolt when said tray is in place within said recess, a snuffer mounted on said latch mechanism adapted to conceal the bolt and the operative portions of the latch mechanism, said locking means being adapted to lock said tray against longitudinal motion and also to lock the rear end of said tray against vertical motion, and said hinge being adapted to secure the front end of said tray against vertical motion whereby said hinge and locking means cooperate to support said tray within said chair-arm and secure said tray against random jarring forces.

2,736,321
CIGARETTE EXTINGUISHER
Walter C. Lewis, San Gabriel, Calif.
Application January 16, 1953, Serial No. 331,554
1 Claim. (Cl. 131—256)



In a cigarette extinguishing device mountable on the body of an automobile, a hollow casing having a top cover presenting a central axial access opening therethrough, a soft, moisture absorbent body mounted in said casing beneath said cap and having an upwardly opening, said body having a cylindrical recess in register with said opening, said recess being of a diameter substantially ⅛" greater than the diameter of a cigarette and flaring outwardly at its top end, whereby when the burning end portion of a cigarette is inserted in said recess its burning end engages the bottom of said recess while its peripheral surface adjacent said burning end engages the side of said wall of said recess, and mounting means carried by said casing for securing the same to the body of an automobile.

2,736,322
CIGARETTE HOLDING DEVICE
Charles A. Ford, Elizabeth, N. J.
Application June 3, 1953, Serial No. 359,381
1 Claim. (Cl. 131—256)



A cigarette holding tongs comprising a one-piece body formation produced from stiff springy wire doubled upon itself to provide a pair of leg members tensionally biased for relative outward movement, said leg members terminating in inwardly projecting and lapped arms, opposed arcuate cigarette gripping jaw portions dependent from said arms to lie intermediate said leg members and to be yieldably biased by the latter for movement one toward the other, and said jaw portions terminating in crossed and lapped outwardly bowed tail pieces, whereby parts of the jaw portions lie in the plane of and in opposition to the leg members so as to impinge upon the latter with limiting effect upon the separating movement of said jaw portions, while mutual impingement of intersecting points of said jaw portions and said tail pieces operates to limit tensional closing movements of said jaw portions, whereby to grip an interposed cigarette without undue squeezing restriction.

2,736,323
PERMANENT WAVING SOLUTIONS AND METHOD
Everett G. McDonough, Yonkers, N. Y., assignor, by mesne assignments, to Tide Water Patent Development Company, Incorporated, Norfolk, Va., a corporation of Virginia
No Drawing. Application August 13, 1949, Serial No. 110,239
25 Claims. (Cl. 132—7)

9. A permanent waving composition comprising a mercaptan selected from the group consisting of mercapto-acetic acid, mercapto-propionic acid, mercapto-butyric acid, and mercapto-caproic acid, in a solution containing an alkaline material having a dissociation constant less than 5×10^{-3}, said solution having a pH higher than pH 7 and not higher than pH 9.5, the concentration of said mercaptan in terms of weight per volume ranging from about 2% to about 6%, the concentration of mercaptan and the pH of the solution being adjusted within said ranges to obtain a permanent change in the configuration of human hair during a given time of application at temperatures tolerable to the human body without damage to the hair structure.

2,736,324
PIN CURL CLIP
Charles R. Cochran, Chicago, Ill.
Application July 7, 1954, Serial No. 441,715
5 Claims. (Cl. 132—52)



1. A pin curl clip formed integrally of a resilient material comprising upper and lower clip portions joined by an interconnecting U-shaped portion urging a portion of said upper clip portion remote from said U-shaped portion into resilient engagement with said lower clip portion, said upper clip portion having at least one leaf extending substantially parallel with said lower clip portion, said leaf extending beyond said U-shaped portion.

2,736,325
METHOD OF MAKING TOUPEES
Charles Dvorzsak, New York, N. Y.
Application November 17, 1954, Serial No. 469,427
4 Claims. (Cl. 132—53)



1. A toupee comprising a thin, transparent, flexible hair and part line member adapted to be adhered to a person's head, a reticulate member underlying said hair and part line member, a plurality of spaced strands of hair each secured to the reticulate member and extending through the hair and part line member, a scalp member peripherally secured to the other two members, said scalp member having a plurality of closely spaced tufts of hair secured thereto, said tufts each being a plurality of strands of hair extending through spaced portions of the scalp member and bent double with a loop end encircling the tuft adjacent the scalp member to lock the tuft to the scalp member, and reinforcing members secured to the scalp member at front and rear end portions thereof, said scalp member and said reinforcing members being of fabric, and said reticulate member being of net fabric, said hair and part line member being of plastic.

2,736,326
TISSUE HOLDING COSMETIC RECEPTACLE COVERS
Martha K. Cramer, New York, N. Y.
Application February 23, 1954, Serial No. 411,639
3 Claims. (Cl. 132—79)

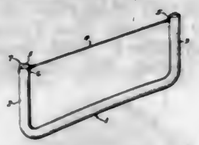
1. A tissue holding cosmetic receptacle cover comprising a first cylindrical portion being closed at its top

and open at its bottom and constructed and arranged for having a cosmetic receptacle inserted thereinto, a second cylindrical portion encompassing said first cylindrical portion and having a longitudinal slot, a flange portion joining the lower end of said first cylindrical portion



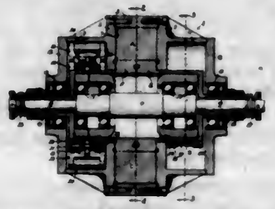
to the lower end of said second cylindrical portion, a cap member covering the upper end of said second cylindrical portion, and a longitudinal strip of tissue paper rotatably interposed between said first and said second cylindrical member and having one of its end portions extended through said slot in said second cylindrical portion.

2,736,327
DENTAL FLOSS DEVICE
Theodore F. Schlicksupp, Long Island City, N. Y.
Application January 26, 1953, Serial No. 333,241
2 Claims. (Cl. 132—91)



1. A dental floss device comprising a U-shaped frame of stiff metal, the end portion of each arm of said frame having a cut therein formed with two portions disposed at an angle of less than 180° to each other, the cuts in the two arms being disposed approximately in alignment with one another and generally parallel to the plane of the frame, and a filament of dental floss having its opposite ends positioned within said respective cuts, the portions of each arm on opposite sides of said cuts clampingly engaging the filament and anchoring it by the rigidity of the metal of said portions.

2,736,328
ROTARY MACHINE
George E. Mallinckrodt, St. Louis, Mo.
Application February 26, 1952, Serial No. 273,392
18 Claims. (Cl. 123—11)



1. In a rotary machine having a frame carrying a toroidal cylinder, a rotary power shaft and relatively movable rotors located around said shaft, each rotor having at least one piston in the cylinder, an inwardly directed cam track on the frame for each rotor, at least one reverse-locking portion in each cam track, at least one outwardly biased and pivoted swinging arm on each rotor having endwise means engaging its respective cam track and adapted to reverse lock its respective rotor upon reaching a reverse-locking portion on the cam track, first means in each cam track located in approach to its reverse-locking portion and adapted to control outward swinging movement of an arm and second means in each cam track located in recess from each reverse-locking portion and adapted to control reverse inward movement of the arm, and a driving connection between each rotor and the shaft, each driving connection being adapted to permit overrunning of one rotor and the shaft with respect to the other rotor.

2,736,329
UMBRELLA
Maurice H. Cornellier, Dearborn, Mich.
Application June 22, 1953, Serial No. 363,082
2 Claims. (Cl. 135—20)



1. A collapsible umbrella comprising a tubular staff, a plunger having a piston mounted at one end thereof for reciprocation in said staff, an inflatable canopy, a flanged coupling connecting said canopy to one end of said staff, said coupling having an air passage extending therethrough and communicating the interior of said inflatable canopy with the interior of said staff, a suction closed valve in said flanged coupling and with said staff, plunger and piston forming a pump for inflating said canopy, a cap secured to the end of said plunger opposite to said piston, a hollow handle, means on said cap for removably securing said plunger to said handle with the plunger and staff protruding coaxially therefrom and selectively to said handle with said plunger, staff and canopy within said hollow handle for storage, a locking device for releasably securing said staff to said plunger to prevent relative movement therebetween, a sliding ring on said staff, flexible members secured to said ring and to the outer edge of said canopy to prevent inversion of said canopy, a stop carried by said staff for limiting the movement of said ring on said staff in one direction, and means in said canopy to relieve the air therefrom.

2,736,330
CRUTCH
Lorin A. Wood, Los Angeles, Calif.
Application May 18, 1953, Serial No. 355,520
7 Claims. (Cl. 135—49)

1. A crutch comprising: a single support shaft, an under-arm rest member mounted on the upper end of the shaft; and a handgrip mounted on said shaft at an intermediate point thereof and extending laterally therefrom, the upper end portion of said shaft being offset to extend from said rest member in a direction away from a straight-line support axis extending from the center of weight application on said rest member to the bottom end of the

shaft, the remaining major portion of said shaft below said offset end portion being substantially straight with



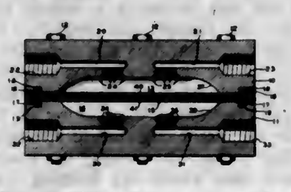
said support axis intercepting the intermediate portion of said handgrip where weight is imposed by the user's hand.

2,736,331
RESUSCITATOR
Henry Seeler, Dayton, Ohio, assignor to the United States of America as represented by the Secretary of the Air Force
Application April 1, 1952, Serial No. 279,906
7 Claims. (Cl. 137—63)
(Granted under Title 35, U. S. Code (1952), sec. 266)



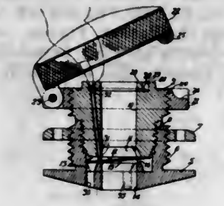
6. In a resuscitator, a slidable valve actuating rod, actuating means for said rod, an iron armature rotatably mounted on said rod, a permanent magnet adjacent to said armature and surrounding said rod, said magnet having opposed magnetic poles on opposite sides of the rod providing a polar axis transverse to the rod, and said armature being relatively rotatable between a position wherein the armature lies in a plane parallel to the plane of the polar axis to produce a maximum holding force of the magnet on the armature to a position wherein the armature lies in a plane perpendicular to the plane of the polar axis to produce a minimum holding force of the magnet on the armature.

2,736,332
FLUID PRESSURE EQUALIZER
Bill J. Simmons, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware
Application January 2, 1952, Serial No. 264,515
5 Claims. (Cl. 137—87)



1. Means for equalizing the pressures of a static body of fluid and a flowing body of fluid comprising, in combination, first and second adjacent plates having a flexible diaphragm interposed therebetween, the opposing faces of said plates being provided with smooth concave walls thereby forming two opposing chambers separated by said diaphragm, said first plate being provided with first and second spaced passages each communicating between a region exterior of said first plate and a region within said first plate adjacent the chamber in said first plate, said first plate also being provided with a plurality of third passages extending between each of said first and second passages and the chamber in said first plate thereby forming separate inlet and outlet openings for the chamber in said first plate whereby the flowing body of fluid can be circulated through the chamber in said first plate, said second plate being provided with fourth and fifth spaced passages each communicating between a region exterior of said second plate and a region within said second plate adjacent the chamber in said second plate, said second plate being provided with a plurality of sixth passages extending between each of said fourth and fifth passages and the chamber in said second plate thereby forming separate inlet and outlet openings for the chamber in said second plate whereby the static body of fluid can be circulated through the chamber in said second plate, and sealing means providing fluid-tight connections between said first plate and said diaphragm and between said second plate and said diaphragm, said diaphragm being deflected by unequal pressures in the chambers in said first and second plates, said third and sixth passages remaining unobstructed irrespective of the pressure differential across said diaphragm.

2,736,333
LOW PRESSURE SEALING VALVES
Burton W. Hancox, Springfield, Pa.
Application December 7, 1951, Serial No. 260,425
5 Claims. (Cl. 137—232)



5. A valve assembly comprising a valve body having an inlet passage at one side thereof terminating at its inner end in a valve seat inside said body; walls defining a chamber adjacent said valve seat, said chamber being larger in diameter than said seat; a disk-like valve freely floating in said chamber and mounted for movement between closed and open positions and having one side operable to engage said valve seat to prevent the escape of fluid through said valve body when said disk-like valve is in its closed position, the outside dimension of the disk-like valve being sufficiently less than the dimension of said chamber to permit free fluid passage around the periphery of said disk-like valve; a face in the valve body oppositely disposed to said valve seat and defining a predetermined limited unseating clearance for the disk-like valve and operable to be engaged by the opposite side of said disk-like valve; walls defining a series of second fluid passages terminating in said face in register with said opposite side of said disk-like valve and providing fluid communication with the chamber in any position of said disk-like valve; an annular cap seat on the outer end of said inlet passage with an annular groove surrounding said cap seat; and a spring seated on said annular groove

and having a portion extending interiorly of the valve seat to unseat said disk-like valve when said spring is pressed into said groove.

2,736,334
TWIN-ARCH PIPE LINE SPAN
Walter E. Riley, Franklin J. Foltz, and Richard Bennett, Phoenix, Ariz.
Application November 23, 1951, Serial No. 257,912
3 Claims. (Cl. 137—236)



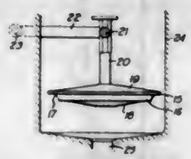
1. A pipe line span for crossing an obstruction comprising abutments located at each end of the span, a pair of curved pipes extending between the abutments and over the obstruction in the form of adjacent arches, the arches being inclined toward each other so that the opposed surfaces of the pipes are closer together at the center of the arches than at the ends, a plurality of struts extending between the two pipes for providing lateral stability, the struts being connected to the respective pipes by horizontal pivots so that the pivots permit relative movement between the two pipes in the vertical direction while maintaining the relative spacing between the two pipes substantially fixed, and at least one of the curved pipes being coupled to portions of a pipe line which extend from opposite sides of the obstruction, with the end portions of the curved pipe forming obtuse angles with respect to the portions of the pipe line to which they are coupled so that a portion of the thrust of the arches is supported by the portions of the pipe line which extend from opposite sides of the arch.

2,736,335
TAPPING AND CUTOFF CONNECTION TO PLASTIC FLUID PRESSURE MAIN
Claude H. Webber, Tucson, Ariz.
Application March 23, 1953, Serial No. 344,101
3 Claims. (Cl. 137—318)



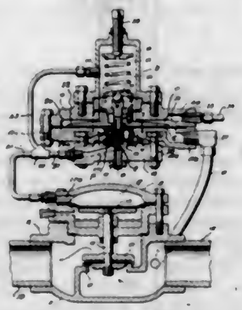
1. In a connection of the character described, the combination comprising: a plastic main; a combined tapping and service plastic T having a through bore, a lateral outlet, and a saddle on one end of said T solvent-welded to said main with said T positioned substantially radially thereon, said bore being of uniform diameter and threaded throughout its length; and a plug threaded into said bore from the other end of said T with the inner end of said plug being provided with cutting means for advancing into engagement with and cutting a hole through said main on rotation of said member, the length of the bore section extending between said outlet and said T other end being sufficient to receive said plug for blocking said bore section while permitting unobstructed flow from said main to said outlet after a hole has been cut in said main by said cutting means, and the length of said cutting means being less than the length of the bore section extending between said outlet and said T one end, whereby said plug blocks communication between said lateral outlet and said main immediately when the hole is cut in the latter.

2,736,336
FLOATS FOR USE IN MEASURING INSTRUMENTS
Edward David Low, Luton, England, assignor to George Kent Limited, London, England, a company of Great Britain
Application June 25, 1954, Serial No. 439,411
Claims priority, application Great Britain June 29, 1953
7 Claims. (Cl. 137—452)



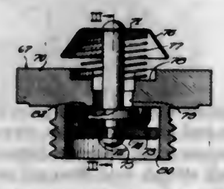
1. A float for use in a measuring instrument having a liquid column of a cross section only sufficiently greater than the cross section of the float to allow sideways play of the float under the action of its connecting mechanism when the liquid level changes, said float comprising a lower part having a bottom face terminating in a peripheral edge and an upper part positioned atop said lower part, said upper part having a lower face projecting beyond said lower part so as to provide an overhanging ledge and terminating in a well defined peripheral edge, said lower part providing such buoyancy when submerged in the liquid concerned that the said upper part is lifted clear of the liquid to the extent that its said overhanging lower face only is in the surface of the liquid and is gripped by the meniscus.

2,736,337
REGULATOR DEVICES AND CONTROL ASSEMBLIES THEREFOR
Asbury S. Parks, Houston, Tex., and Garman O. Kimmell, Britton, Okla.; said Parks assignor to said Kimmell
Application May 7, 1951, Serial No. 224,996
10 Claims. (Cl. 137—492.5)



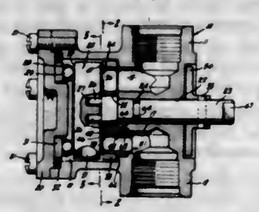
1. A control assembly for controlling the pressure in the motor chamber of a motor valve and including, a housing, a control diaphragm mounted within the housing, means for establishing communication between the housing and the motor chamber of the motor valve, means for conducting a variable pressure to one side of the control diaphragm to impart movement thereto in accordance with variations in said pressure, a movable pilot valve unit including a double valve element mounted within the housing and connected with the control diaphragm for controlling the admission of an operating pressure to the communication establishing means and to the motor chamber of the motor valve, said pilot valve unit also controlling the venting of the operating pressure from the motor chamber to atmosphere, flexible annular sealing means surrounding the lower portion of the pilot valve unit within the housing for sealing off between the unit and housing, said sealing means having its lower side exposed to the operating pressure acting upon the motor of the motor valve, and means also secured to the pilot valve unit for balancing out the effect of the operating pressure acting against the sealing means.

2,736,338
CHECK VALVE
Karl B. Britton, Bratenahl, Ohio
Original application June 23, 1948, Serial No. 34,723, now Patent No. 2,607,194, dated August 19, 1952. Divided and this application December 29, 1951, Serial No. 265,139
3 Claims. (Cl. 137—516.29)



1. A valve comprising a plug having a head portion with a central passage therethrough and a hollow exteriorly threaded shank portion providing a passage of larger diameter than the passage through the head portion, a valve seat between the passage in the head portion and the passage in the shank portion, a guide plate slidable in the passage of the shank portion, said guide plate coacting with said shank portion to provide for flow of fluid through the shank portion, a stem on the guide plate projecting through the passage in the head, concentric valves on said stem for coacting with said seat, one of said valves projecting beyond the other of said valves to contact said seat before the other of said valves and being deformable into flush relationship with the other of said valves, a cap on said stem adapted to seat on the outer face of the head of said plug, a spring surrounding the stem between the cap and head of the plug for urging the valve into closed position, and a groove in said plug head communicating with the passage in the head to facilitate flow to and from said passage even when the cap is seated on the plug head.

2,736,339
ROTARY VALVE
Donald C. Asbury and Theodore H. Holzer, Glendale, Calif., assignors, by mesne assignments, to The Parker Appliance Company, Cleveland, Ohio, a corporation of Ohio
Application November 28, 1952, Serial No. 323,072
11 Claims. (Cl. 137—624)



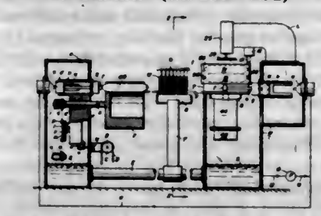
1. In a rotary selector valve the combination of: a body, a ported rotor in the body, means extending exteriorly of the body for turning the rotor, the body having flow passage means including a plurality of bores, a non-rotary carrier ring assembly including a ring and a plurality of tubes fixed thereto, each tube extending loosely into one of the body bores, means sealing each tube with respect to its body bore, the rotor having an end surface, and resilient means on the body urging the carrier ring assembly toward sealing engagement with said rotor surface.

2,736,340
DEVICES FOR BRAKING AND PROPELLING THE SHUTTLE IN MECHANICAL LOOMS
Pedro Cerdans Sellés, Barcelona, Spain
Application January 9, 1953, Serial No. 330,388
Claims priority, application Spain January 11, 1952
4 Claims. (Cl. 139—185)



1. In a mechanical loom including a shuttle, a shuttle braking device, comprising in combination, a stop adapted to engage the shuttle; a carriage supporting said stop; a pair of parallel cylindrical members closed at one end and adapted to extend in the direction of shuttle movement; a pair of elongated piston members having a pair of ends projecting into said cylindrical members so that movement of said stop by the shuttle in one direction reduces the air spaces defined in said cylindrical members by said piston members, said piston members being formed with conduits opening at said pair of ends of said piston members into said air spaces and adapted to communicate with a source of pressurized air for moving said cylindrical members in an opposite direction; an elongated friction belt member extending in said one direction for engaging said carriage so as to brake movement of the same in said one direction; and an adjustable member having one end engaging said elongated friction member and being movable between a plurality of advanced positions for urging said friction member at variable pressure against said carriage.

2,736,341
SHUTTLE REPLACING MEANS FOR LOOMS
Carl Fuchs, Heidenheim-Mergelstetten, Germany, assignor to Wolldeckenfabrik Zoeppritz Aktiengesellschaft, Heidenheim-Mergelstetten, Germany
Application December 28, 1951, Serial No. 263,904
Claims priority, application Germany December 28, 1950
19 Claims. (Cl. 139—232)

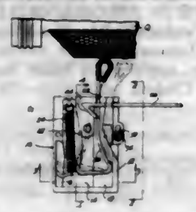


1. In a loom; a shuttle box at one side thereof for receiving the shuttle at one end of its travel across the loom, a multiple compartment reserve shuttle magazine above the shutle box releasably supporting reserve shuttles in vertically stacked relation in the compartments thereof to be transferred to the box, hydraulically operable pusher means acting downwardly from above said magazine for forcing a reserve shuttle out of said magazine into said shuttle box, said shuttle box releasably supporting the shuttle thereon for discharge thereof from the box upon the application of a downwardly acting force thereon, and hydraulic control means for moving said magazine to bring the compartments thereof into registration with said box.

2,736,342
LOOM FEELER MECHANISM
Charlie L. Whitley, Sr., La Grange, Ga.
Application April 23, 1954, Serial No. 425,176
5 Claims. (Cl. 139—270)

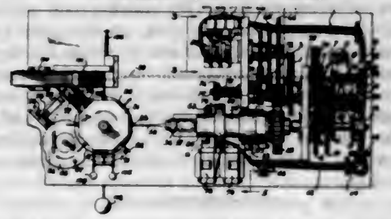
1. In a loom feeler mechanism, a transmission rod mounted on a loom to move longitudinally and initiate the operation of filling replenishing mechanism carried by

said loom, a feeler mounted on said loom to move transversely relative to said rod intermediate the ends thereof,



and means carried by the feeler and movable therewith transversely across one end of said rod for engaging said rod and moving it longitudinally.

2,736,343
MACHINE FOR WINDING FILAMENTS
Alexander Zbigniew Sidorowicz, Montreal, Quebec, Canada, assignor to Northern Electric Company, Limited, Montreal, Quebec, Canada, a corporation of Canada
Application March 27, 1953, Serial No. 345,200
8 Claims. (Cl. 140—71.5)



1. A device for continuously convoluting filaments composed of spaced coiled and looped sections on a pair of stationary mandrels, comprising: a winding unit assembly having a pair of rotatable hollow shafts in extended relation, a winding shaft in internal rotatable engagement with the first shaft and rotating eccentrically within the other, a winding arm eccentrically disposed thereon and extending externally from the other shaft and a differential means including a spider gearing therefor arranged to rotate the hollow shafts independently of each other, a driving assembly; a rotatable element in slipping engagement therewith and in operable engagement with the gearing and slidable therealong; means to control the rotation of the shafts comprising an electrically energized circuit having therein a pair of electromagnetic devices individual thereto and in yieldable engagement with stops on the hollow shafts when deenergized, a pair of switching elements, a cam actuated by the rotatable element engaging with the first of the elements arranged in time relation therewith to alternatively complete the circuit to a device and a second cam actuated in speed reduction by the driving assembly engaging the other element arranged in time relation therewith to disable the circuit, when a predetermined number of filaments have been formed, for a predetermined time; a reciprocable assembly rotated coaxially therewith in movable engagement with the winding unit assembly arranged to impart a pitch to the filaments and to return the arm to its forward position during the said predetermined time.

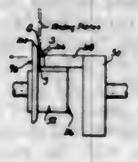
2,736,344
METHOD OF STRETCHING A FILAMENT
Lee E. Dilts, South Euclid, Ohio, assignor to General Electric Company, a corporation of New York
Application November 6, 1951, Serial No. 255,112
3 Claims. (Cl. 140—71.6)

1. A method of stretching the coiled filament of an incandescent lamp mount having a pair of lead-in wires anchored in and extending longitudinally from a stem, tie wires extending laterally from the stem and having their ends looped loosely about intermediate portions of the lead-in wires and the coiled filament connected between the ends of the lead-in wires, which method comprises holding the mount by its stem, bracing the lead-in wires against spreading at points adjacent to the tie wires and between the tie wires and said stem while applying pres-



sure to said lead-in wires at points on the opposite side of said tie wires and in directions to spread apart the free ends of said lead-in wires without distorting the loops in said tie wires and stretch said filament sufficiently so that upon releasing the pressure the intermediate portions of the lead-in wires bear against adjacent edges of the looped ends of the tie wires and the filament is retained in a predetermined stretched condition.

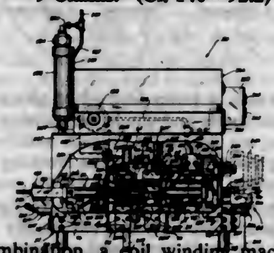
2,736,345
METHOD OF AND MACHINE FOR WINDING COILS CONTINUOUSLY
Washington J. Caldwell, Toledo, Ohio
Application August 29, 1952, Serial No. 307,106
7 Claims. (Cl. 140—92.2)



1. In a device of the class described, a winding form having two cooperating members adapted to rotate together to provide a smaller and a larger perimeter to form a coil body on the smaller perimeter and a loop on the larger perimeter to provide opposite coil ends on adjacent coils, a guide means rotating with the members to control a strand adapted to be wound on both the smaller and larger perimeter repetitively and alternately, means to rotate the form members and the guide means continuously to wind the strand on the form members, said guide means being positioned in spaced relation in one phase of the winding cycle to form a gap with the member defining the larger perimeter, the strand passing through the gap to wind on the smaller perimeter defining thereby a normal winding plane, said guide means being movable to a second position to close the gap and move the just-wound turn on the smaller perimeter axially along the portion of the form defining the smaller perimeter and also to guide the strand out of the normal winding plane to an adjacent plane to wind the strand on the larger perimeter, and means to move the elements of the device in timed relation continuously with the rotation of the form members to alternately wind the strand on both perimeters repetitively.

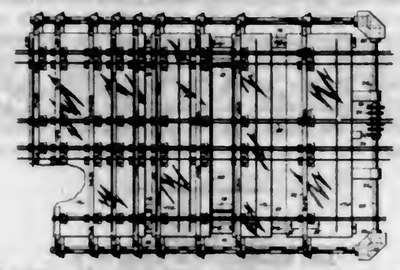
5. The method of continuously winding a strand into coils on an open-ended rotating form having portions forming larger and smaller perimeters, comprising guiding the strand alternately and repetitively to the larger and smaller perimeters to form larger and smaller turns of the coil, simultaneously shifting the already-wound coil axially along the form portions, and cutting the larger turn of the coil preparatory to ejecting the severed coil from the form.

2,736,346
COIL WINDING MACHINE
Bernard W. Ammann, Northwoods, Mo., assignor to The Emerson Electric Manufacturing Company, St. Louis, Mo., a corporation of Missouri
Application December 12, 1952, Serial No. 325,676
9 Claims. (Cl. 140—92.2)



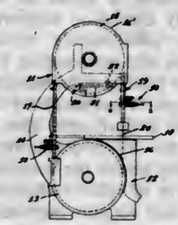
2. In combination, a coil winding machine on which coils of a selectively predetermined number of steps and of a selectively predetermined number of turns per step are automatically wound comprising a base, a member for receiving a coil winding jig rotatably mounted on said base, power means for rotating said member, a wire guide, and means for supporting said wire guide in operative positions for feeding wire onto a rotatably supported coil winding jig comprising an actuating air-hydraulic cylinder assembly including a hydraulic cylinder and piston, an air cylinder and piston aligned with said hydraulic piston, means for alternately supplying air to opposite sides of the air cylinder piston, a common piston rod connected to both pistons and extending beyond said cylinders, an adjustable metering valve interconnected with said hydraulic cylinder determining the rate of oscillating movement of said piston rod, and means for rendering said metering valve momentarily inoperative upon the completion of the initial and intermediate steps of a coil to permit a predetermined jump of said cylinder assembly to a new winding position, said wire guide being mounted on said piston rod for reciprocative and jump movement therewith.

2,736,347
ELECTRIC WELDING MACHINE
Clyde F. Kaunitz, Bay City, Mich.
Application October 8, 1954, Serial No. 461,199
3 Claims. (Cl. 140—112)



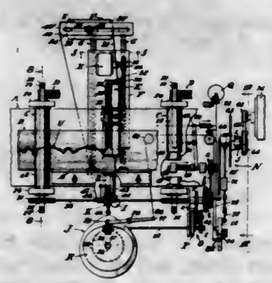
2. In a machine for welding wires into a determinable pattern and individually moving some of said wires, the combination of, a frame, a group of platens adapted for differing reciprocating longitudinal movement in said frame, and means for effectuating said movement, a pair of first shafts each in spaced relationship to the inner side of said frame and engaging said frame at one end thereof, a second shaft in transverse alignment with said frame in geared relationship with each of said first shafts, a plurality of ratchet gears intermediate the ends of said second shaft, an actuator on one of said platens for engaging one of said ratchet gears, spools in variable positions on said first shafts, each of said spools having a stud thereon at angular displacement coinciding with the angular displacement of facing on one of said ratchet gears, a plurality of mating cradles for supporting said spools, several rack bars transversely positioned across said group of platens and adapted for actuation by said group of platens, actuating members fastened to said platens and carrying said rack bars, means whereby on intermittent rotary movement of one of said ratchet gears the related rack bar raises, and one of said group of platens reciprocatingly moves the related actuating members, thereby intermittently moving some of said wires in accordance with any preset pattern as determined by the angular positioning of the studs on said spools with relation to each other.

2,736,348
BAND SAW BLADE TRAP
John H. Nelson, Palos Park, Ill., assignor to Kropp Forge Company, Chicago, Ill., a corporation of Illinois
Application April 23, 1954, Serial No. 425,203
6 Claims. (Cl. 143—17)



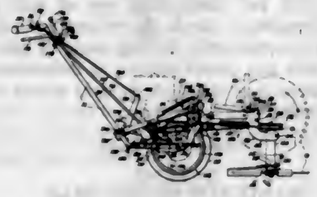
1. A safety mechanism for a band saw of the type including an endless blade moving through a guard-like housing, comprising electric circuit means automatically energized upon breaking of the blade, blade clamping means movable into said housing to clamp the broken blade thereagainst, force transmitting means for projecting said clamping means against the blade in the housing, means normally restraining said clamping means and an electric element actuated upon energization of said circuit means to cause said restraining means to release the force of said transmitting means to project said clamping means against the broken blade.

2,736,349
MACHINE FOR SAWING CONTOURED MARGINS ON STRIPS OR PANELS
Ross M. Francis, Santa Monica, Calif.
Application April 13, 1953, Serial No. 348,437
11 Claims. (Cl. 143—26)



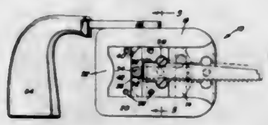
10. In a machine for sawing contoured margins on sheet material embodying a band saw having a vertically extending blade; feed rollers for rectilineally advancing a strip to be sawed to said blade, mechanism for bodily moving said band saw back and forth in transverse relation to the advancing strip, and adjustable means in said mechanism for varying the length of transverse travel of said band saw.

2,736,350
WEED CUTTER AND SAW
Stanley E. Hill and George W. Welsh, Kankakee, Ill., assignors to Sears, Roebuck and Co., Chicago, Ill., a corporation of New York
Application December 21, 1951, Serial No. 262,738
2 Claims. (Cl. 143—43)



1. An apparatus of the character described, comprising a frame, a power unit mounted thereon, a transverse axle fixed to said frame, a wheel on each end of said axle, a longitudinally extending support member rigidly fixed to said frame substantially midway between the planes of said wheels and terminating forwardly thereof, said support member having its forward portion upwardly offset from said frame, a substantially L-shaped bracket having a vertical and a horizontal arm, the vertical arm being mounted on the forward portion of said support member for swiveling about the longitudinal axis thereof, the horizontal arm of said bracket extending in offset parallel relation to said support member, a mandrel supported for rotation in said horizontal arm, the axis of said mandrel being at a right angle to the longitudinal axis of said support member, a cutting tool mounted on one end of said mandrel, a pulley mounted on the other end of said mandrel, a belt operatively connecting said power unit with said pulley, a quadrant plate having a plurality of notches therein and fixed on said support member in close proximity to said bracket, a lever pivotally supported at one end on said bracket and adapted to engage in one of the notches in said quadrant to lock said bracket in a position of adjustment, and resilient means adapted to normally urge said lever into engagement with one of said notches.

2.736,351
SLIDE BLOCK CONNECTION FOR RECIPROCATING FLUSH-CUTTING TOOL
Calvin A. Baker, Denver, Colo., assignor of twenty-five and one-half per cent to Glenn A. Laughlin and twenty-five and one-half per cent to James F. Friel, Denver, Colo.
Application June 29, 1953, Serial No. 364,867
1 Claim. (Cl. 143—60)



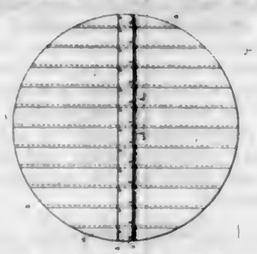
A tool comprising a casing, a slide block slidably mounted in said casing, said slide block having a recess therein, a blade, a pair of threaded clamp members threadedly secured in said slide block, said clamp members having portions thereof overlying said recess and overlying opposed edges of said blade to clampingly hold said blade in said recess, said blade having crimps in said opposed edges extending inwardly from the outer face of said blade, said clamp members respectively engaging said crimps to lie flush with the outer face of said blade.

2,736,352
SAW TOOTH ASSEMBLY
John W. Wright, Bridgeport, Conn.
Application May 9, 1950, Serial No. 160,964
6 Claims. (Cl. 143—135)



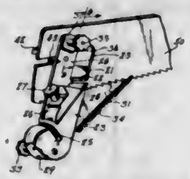
1. In a chain saw, a series formed of alternating teeth and guides, each tooth and guide comprising a circular working portion, an integrally formed axially extending shank extending rearwardly from the working portion of each tooth or guide, the rear face of the working portion forming an annular stop shoulder at the front end of the shank, each shank having a rearwardly converging taper, a socket for each tooth and guide in which the shank is inserted, the channel in each socket being tapered to correspond with said shank, links connecting said sockets to form a chain, and the working portion of each tooth having a concave front face, the peripheral edge of which forms an arcuate cutting edge.

2,736,353
METHOD OF MAKING A TOBACCO HOGSHEAD HEAD
Kemper N. Moseley, Tifton, Ga.
Application January 2, 1953, Serial No. 329,341
1 Claim. (Cl. 144—309)



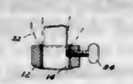
The method of making a hogshead head, comprising placing a plurality of elongated board members of substantially equal width and with interengaging tongue and groove edge portions designed to restrain buckling onto a flat surface, applying compressive force to the free edges of the external members in order transversally of the tongues and grooves to compress all the members together to form a panel, fastening a crosspiece of a length to extend entirely across the width of the panel and centrally thereof while the compressive force is applied, and sawing the panel into the desired circular configuration with the cross piece in diametrical position of the panel.

2,736,354
SAW HANDLE
Joel Koskela, New York, N. Y.
Application August 30, 1952, Serial No. 307,243
1 Claim. (Cl. 145—108)



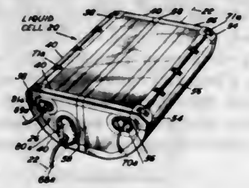
In a tool holder, a handle construction comprising an elongated metal body having plane side and bottom walls, a shield plate having an elongated side portion with a flange extending along one longitudinal edge thereof, means to secure a saw blade having a T-slot at one end to the body, said means including a stud projecting from the side wall of the body adjacent one end thereof and a cooperating threaded pin and nut spaced from the stud, means pivotally securing the shield plate to the body in selective angular positions, said means being located at the end of the body opposite from said one end, whereby the free end of the flange on the shield can be positioned to engage the edge of a saw blade between a pair of adjacent teeth while the stud is received within one portion of the T-slot and the threaded pin is received within the other portion thereof to securely hold the blade to the handle.

2,736,355
HAM HOLDER FOR SLICING HAM
James N. Kalkanis, Detroit, Mich.
Application August 24, 1954, Serial No. 451,864
3 Claims. (Cl. 146—218)



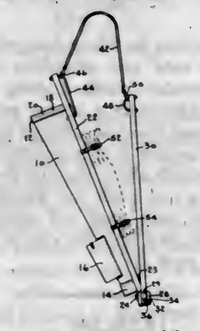
1. A ham holder comprising, in combination, a base, an upright U-shaped member having opposed arms and provided with a tubular bottom extension opening interiorly of the U-shaped member and having a portion projecting below the bottom of the U-shaped member, said projecting portion of the tubular extension journaled within the base supporting the U-shaped member for rotation about a vertical axis relative to the base, means carried by the base releasably engaging the U-shaped member to lock the same at adjusted positions of rotation relative to the base, the opposed arms of the U-shaped member provided with opposed cooperating ham-engaging parts movable toward and away from each other interiorly of the U-shaped member, means carried by the arms engageable with said parts for locking the parts in adjusted position relative to each other, said tubular extension adapted to receive the bone end of a ham supported between the opposed arms of the U-shaped member and held supported by said parts.

2,736,356
EXPELLANT BLADDER TYPE FUEL CELL
Edward E. Bender, Cuyahoga Falls, Ohio, Clifford Oates, Jr., North Hollywood, Calif., and Walter J. Phane, Cuyahoga Falls, Ohio, assignors of one-half to Chance Vought Aircraft, Incorporated, Dallas, Tex., a corporation of Delaware, and one-half to The Goodyear Tire & Rubber Company, Akron, Ohio, a company of Ohio
Application October 18, 1954, Serial No. 462,844
10 Claims. (Cl. 150—.5)



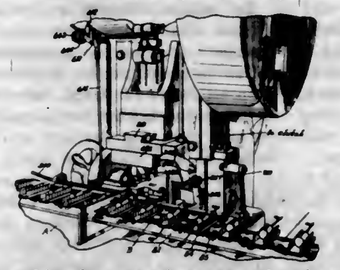
1. In an expellant bladder flexible liquid tank having a liquid cell and a pressure gas cell, said liquid cell having an outlet means and said gas cell having an inlet means, wherein one side of the liquid cell is collapsed against the other side of the liquid cell by expansion of the pressure gas cell to expel the liquid from within the liquid cell, availability means comprising a plurality of perforated tubes secured to and covering a major portion of the internal surface of said liquid cell for preventing pocketing of the liquid and for providing complete availability and expulsion of the liquid from said liquid cell when it is collapsed by the pressure gas cell.

2,736,357
COMBINED GOLF BAG AND SEAT
Hugo O. Stamp, Milwaukee, Wis.
Application June 24, 1953, Serial No. 363,815
19 Claims. (Cl. 150—1.5)



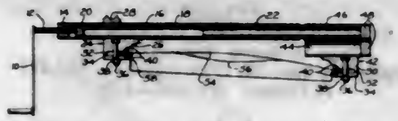
1. A golf bag and seat comprising, two pivotally interconnected rigid supports, a golf club holder mounted on one of the supports, a strap having one end connected to said one support adjacent the upper end of the support by means of a sliding connection, the other end of the strap being connected to the upper end of the other support, said strap serving as a seat or as a shoulder strap.

2,736,358
APPARATUS FOR ATTACHING A TERMINAL CLIP TO A WIRE
James S. Burge, Floyd J. Foust, Willard C. Shaw, and Warren M. Rider, Anderson, and Hilton J. McKee, Middletown, Ind., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Original application July 29, 1946, Serial No. 686,964. Divided and this application May 24, 1950, Serial No. 163,961
3 Claims. (Cl. 153—1)



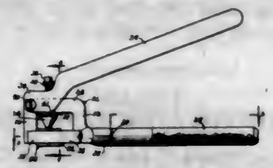
1. A machine for operating on an electric wire extending from an electrical device the combination comprising; a holder for said device, detecting means operable to detect the presence of the device in said holder, a pair of members forming a longitudinal slot therebetween adopted for guiding a terminal end of a wire extending from said device transversely along said slot, a locating block against which the wire of the device when at the station is pressed to locate it in proper position to receive a clip, a holding means effective only after said wire is against said block for holding said wire in position against the block, applying means for attaching a clip to the terminal end of the wire while in position against said block, ejecting means for removing the wire from the holding means, subsequent to the application of said clip and timing means dependent upon the operation of the detecting means for operating all of the above means in sequential relation.

2,736,359
DOOR STRAIGHTENING TOOL
Joseph Russell Bowman, Tippecanoe County, Ind.
Application July 7, 1952, Serial No. 297,431
7 Claims. (Cl. 153—35)



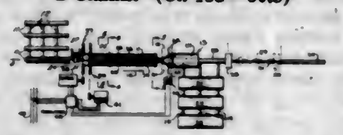
1. A tool comprising an elongated guide tube, a push rod in said guide tube and extending beyond the end thereof, a vise adjustably clamped along said guide tube, a second vise provided with a socket generally in alignment with said second vise and adapted to receive the end of said push rod whereby it is removably secured to said push rod and swivelable about the axis thereof and means for forcibly moving said push rod within the guide tube for separating said vises, said last named means comprising a screw threaded into the end of said guide tube and engaging said push rod.

2,736,360
TUBE FLARING PLIERS
Louis C. Quercetti, Philadelphia, Frank A. Palladino, Pottstown, and Anthony J. Marino, Philadelphia, Pa.
Application November 5, 1954, Serial No. 467,126
5 Claims. (Cl. 153—79)



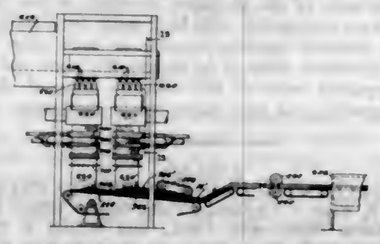
1. Tube flaring pliers comprising an oblong die holder having closed ends and side rails, the latter provided with interior opposed parallel tracks extending from one of the holder ends towards the other holder end but terminating short of the latter, said tracks and the one end of the holder defining a chamber and the side rails and the other end of the holder defining an entrance of greater width than said chamber, a pair of clamping and forming die members adapted to be projected into the entrance and slid along the tracks for positioning said die members to clamp a tube to be flared, means including a clutching handle on the holder for propelling one of the die members into clamping position and retracting the same, a bridge on the holder, a punch located between said holder and bridge and slidably mounted on said bridge for reciprocation relative to the clamped die members, and an operating handle pivoted on the bridge and having cam portions engageable with the punch to propel the latter forwardly as said operating handle is moved towards the clutching handle.

2,736,361
MACHINE FOR EXPANDING TUBES
Friedrich Kocks, Dusseldorf, Germany
Application May 19, 1950, Serial No. 162,975
2 Claims. (Cl. 153—80.5)



1. In a machine for expansion of a series of tubes, in combination, a taper for expanding said tubes, a mandrel connected to the smaller side of said taper guiding the tubes to said taper for expansion and having a length greater than a tube before expansion, two alternately actuatable oppositely disposed devices operable to take up the axial force applied to said taper from said tube during tube expansion for immobilizing said taper during feeding and discharge of tubes in succession, comprising a first device including a clamp operable for releasably clamping said mandrel near the free end thereof to apply tension to said taper at the small side thereof against said axial force, and a second device including a ram reciprocable axially of said taper and operable for releasably applying pressure against the large side of said taper against said axial force, the length of said ram being greater than the length of an expanded tube, means connected to said ram and operable for projecting said ram and for holding it in the projected position and, respectively, for retracting said ram to clear a discharge path for the expanded tube, a reciprocably movable powered first feed mechanism operable to feed a tube in direction towards said taper, a powered second reciprocably movable feed mechanism, actuatable to take over the tube feeding prior to and during expansion thereof on said taper while said first mechanism is returned to its initial position for subsequent feeding of a succeeding tube, each feed mechanism including a clamping element for releasable tube gripping for feeding, said mechanisms being energizable and movable independently of each other, and power means for energizing said mechanisms.

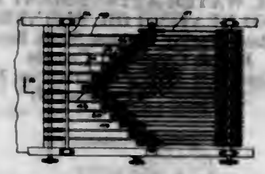
2,736,362
FIBROUS MAT AND METHOD AND APPARATUS FOR PRODUCING SAME
Games Slayter and Henry J. Snow, Newark, and Samuel D. Phillipps, Granville, Ohio, assignors to Owens-Corning Fiberglas Corporation, Toledo, Ohio, a corporation of Delaware
Application June 29, 1951, Serial No. 234,252
26 Claims. (Cl. 154—29)



5. A method of producing a continuous laminated body of fibrous material including the steps of flowing groups of streams of fiber forming material from a supply; of attenuating the groups of streams to form individual groups of fibers; of collecting the groups of fibers upon independent surfaces; of moving the surfaces in directions to bring the groups of fibers into contiguous relation to form a laminar body; of directing the laminar body away from the collecting surfaces in a substantially vertical direction; of delivering a bonding agent in a dry state into the body during vertical movement thereof, and of agitating the body to secure substantially homogeneous distribution of the bonding agent throughout the laminated fibrous body.

2,736,363
SILK CRUSHING AND CRIMPING MACHINE
Lee O. Elkins, Groves, Tex.
Application December 23, 1954, Serial No. 477,363
2 Claims. (Cl. 154—30)

1. A machine for forming crimps in the upper and lower surface of a continuous web of sheet material comprising a frame, a plurality of endless belts carried by said frame arranged in side-by-side spaced relation, a second plurality of endless belts arranged in side-to-side spaced relation superimposed over said first-named belts, means connected to said belts for moving the latter longitudinally with respect to said frame, the upper flight of the lower ones of said belts being in abutting face-to-face relation with the lower flight of the upper ones of said belts, a plurality of upstanding lugs secured to each of



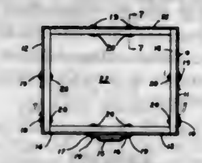
said belts, the lugs associated with the upper ones of said belts being arranged in a continuous V-formation and the lugs associated with the lower ones of said belts being arranged in a continuous Y-formation with one arm of each Y-formation lug arranged in parallel spaced relation with one arm of a V-formation lug on an adjacent one of said upper belts.

2,736,364
BABY SEAT
Alexander G. Janus, Falls Church, Va., assignor to George Boudouris, Jr.
Application May 22, 1953, Serial No. 356,643
6 Claims. (Cl. 155—131)



1. A baby seat adapted to be anchored in the corner of a cushioned chair or sofa comprising a generally flat sheet of semirigid material having a back, a pair of arms extending forwardly from the back and a pair of flanged anchoring supports extending outwardly from the lower part of the lower back portion at about a 90° angle from one another, said flanged supports being relatively wide whereby the seat may be secured on a sofa without additional holding means.

2,736,365
PORTABLE FOLDING SEAT
Willis B. Hines, Canton, Ohio, assignor to Herbert S. Freed, doing business as H. S. Freed & Co., Canton, Ohio
Application May 9, 1952, Serial No. 286,962
3 Claims. (Cl. 155—133)



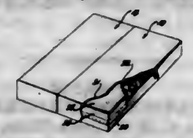
1. In a portable folding seat of the character described, a seat frame comprising a strip of metal providing a front, and sides, the ends of said strip forming the back of the frame, one of said ends extending from the rear edge of one of said sides to a point spaced from the rear edge of the other side, and the other of said ends extending from the rear edge of said other side with a portion thereof overlapping said first-named portion formed in the shape of a carrying-handle.

2,736,366
COLLAPSIBLE AND FOLDING SEATS
Thomas A. Calabrese, Cambridge, Mass.
Application September 28, 1954, Serial No. 458,866
2 Claims. (Cl. 155—150)



1. A folding seat comprising a hollow central portion open at both ends, said central portion at each end on the undersurface thereof having a pair of openings having extensions, said central portion on the upper surface thereof at each end having a pair of openings aligned lineally with each of said openings having said extensions, an elongated rod slidable through each of said lineally aligned openings, releasable means for retaining said rods in fixed position within said lineally aligned openings, flexible seat means secured to the upper ends of said legs, and resilient support means at the lower ends of each of said legs.

2,736,367
SPRING SEAT FOR A SOFA-BED
Albert Myron Spound, Los Angeles, Calif.
Application August 17, 1953, Serial No. 374,663
1 Claim. (Cl. 155—180)



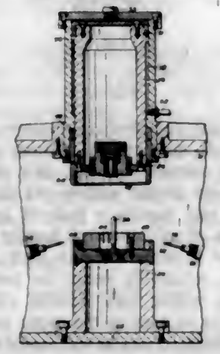
In a sofa bed having a seat, a seat assembly comprising a base of rectangular outline and substantially uniform rectangular cross section, coil springs therein, a molded foam rubber mattress element having circumferential lips encasing said base and coil springs and preventing movement between said coil springs and said foam rubber mattress elements, and means for securing the sides of said mattress elements to the sides of said seat, said last-named means including a circumferential strip of flexible material secured to the lips and to the base in tensioned relation of the foam rubber to the coil springs.

2,736,368
METHOD AND APPARATUS FOR THE ASSEMBLY OF WIRE-SPOKE WHEELS
Walter Lines, Merton, London, England, assignor to Lines Bros. Limited, London, England, a British company
Application December 5, 1949, Serial No. 131,143
Claims priority, application Great Britain
December 10, 1948
5 Claims. (Cl. 157—1.5)

1. A method for assembling a wire-spoke wheel, comprising the steps of loosely placing the spokes in position between the hub and rim of said wheel, holding said hub and rim firmly in relative position, applying a plurality of rotatable tools to the outer ends of said spokes, imparting to all said tools simultaneously a small torque to take up slack in said spokes and maintaining said small torque until said tools have all ceased to turn, and thereafter imparting to all said tools simultaneously a large torque to tighten said spokes and maintaining said large torque until said tools have again all ceased to turn.

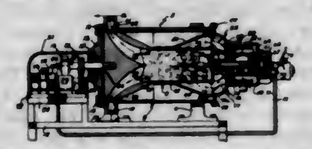
2. Apparatus for tightening the spokes of a wire spoke wheel comprising, in combination, a jig adapted to grip the hub and rim of a wheel, a plurality of rotatable

tightening tools, one of said tools corresponding to each spoke of said wheel, means for simultaneously applying said tools to the outer ends of said spokes, individual motor means for driving each of said tools, means for selectively applying a small torque and subsequently a large torque simultaneously to each of said motor means, said motor means stalling when said spokes are tightened to an intermediate position by said small torque, first



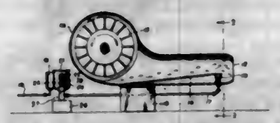
clutch means associated with each of said tools for selectively disengaging said motor means and said tools when said spokes are tightened to a final position by the large torque, means to maintain each of said tools disengaged from said motor means when no pressure is applied against said tools and second clutch means to engage each of said tools with its motor when pressure is exerted against said tools.

2,736,369
AUTO-ROTATIVE COMBUSTION HEATER
James A. Hall, Santa Clara, Calif.
Application June 22, 1953, Serial No. 363,301
2 Claims. (Cl. 158—4)



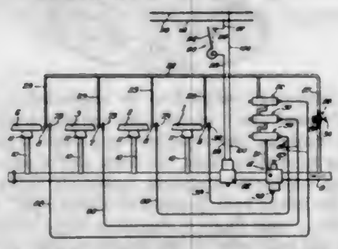
1. A self propelled continuous flame internal combustion heater comprising a housing, a rotor mounted for rotation within said housing, one end of said rotor having a relatively small combustion chamber therein, a discharge head of larger diameter than said combustion chamber mounted on the other end of said rotor, a plurality of exhaust passages in said discharge head opening at one end thereof into the combustion chamber adjacent the axis thereof and opening at the other end thereof to discharge peripherally about the rotor head, the discharge ends of said passages being directed at an acute angle in a predetermined rotative direction, said housing having an annular discharge passage formed therein surrounding the discharge ends of said exhaust passages, an impeller mounted co-axially on the rotor at the opposite end thereof from said discharge passages, a tapered skirt of truncated conical shape mounted co-axially on the combustion chamber end of the rotor to surround the combustion chamber and provide a forwardly tapering air inlet passage, the combustion chamber walls interiorly of said skirt having a plurality of air inlet holes therein, said housing having an air intake portion surrounding said impeller and formed to direct air discharged by the impeller into and through the tapered air inlet passage and through the air inlet holes into the combustion chamber, a fuel nozzle mounted to discharge a spray of fuel into the incoming air within said combustion chamber, spark means mounted in the zone of fuel discharge from said nozzle, and means for energizing said spark means to ignite the fuel-air mixture within the combustion chamber.

2,736,370
AUTOMATIC WATER ATTACHMENT FOR FUEL AND HEATING OIL BURNERS
Cecil Elmo Mackly Perkins, South Burnaby, British Columbia, Canada
Application May 27, 1952, Serial No. 290,230
3 Claims. (Cl. 158—74)



1. An air duct of a gun type oil burner comprising a tubular shell having a reduced discharge end, a blower connected to the other end of said shell for directing a current of air through the shell, a trough extending transversely of said shell adjacent the discharge end adapted to receive water, a plate extending longitudinally of said shell and inclined downwardly from the upper edge of said trough in the direction towards said blower.

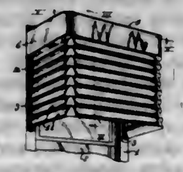
2,736,371
BURNER CONTROL SYSTEM
Roy F. Rafenstein, Long Beach, Calif., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis., a corporation of Wisconsin
Application March 20, 1951, Serial No. 216,596
17 Claims. (Cl. 158—131)



13. In a fuel flow control system, in combination, at least one main burner, a plurality of pilot burners, fuel supply means for said main and pilot burners, first control means for said fuel supply means under the direct control of one only of said pilot burners for controlling the flow of fuel to said main and pilot burners, said first control means being responsive to flame extinguishment of said one of said pilot burners to interrupt fuel flow to said main and pilot burners, and second control means for said fuel supply means under control of the other of said pilot burners for directly controlling the flow of fuel to all of said pilot burners only, said second control means being responsive to flame extinguishment of any one of said other pilot burners to directly interrupt fuel flow to all of said pilot burners.

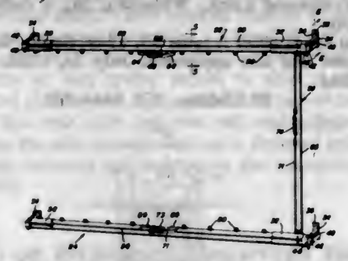
2,736,372
ADJUSTABLE AWNING
Nicholas L. Etten, Cedar Falls, Iowa, assignor to Chamberlain Corporation, Waterloo, Iowa, a corporation of Iowa
Application April 19, 1951, Serial No. 221,780
3 Claims. (Cl. 160—62)

1. In an awning structure, a pair of opposed channel-shaped mounting brackets, a top, flexible supporting elements depending from said top, U-shaped slats carried by said elements in vertically spaced relationship, each of said slats having a bight portion and a pair of leg portions in generally horizontal alignment with the ends of



the leg portions riding in the channels of said brackets, and means to raise and lower said slats.

2,736,373
DRAW CURTAIN CONSTRUCTION
Cavour L. Truesdale, Richmond, Va.
Application October 5, 1951, Serial No. 249,893
3 Claims. (Cl. 160—124)



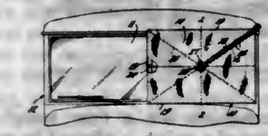
1. A draw curtain construction for windows comprising a support means, an endless draw cord carried by said support means, a window curtain comprising a pair of sections each consisting of a sheet of a pliable material, fasteners securing each section at its top and bottom to said draw cord, said support means including a pair of horizontally disposed upper and lower hollow members positioned respectively at the top and bottom of a window opening, said draw cord including parallel reaches each of U-shaped configuration, each reach including horizontal upper and lower flights each housed in one of said members, the horizontal flights of each reach being connected at one end by a vertical flight positioned at one side of said window, said members having longitudinal slots therein, said fasteners being disposed in said members and extending through said slots and attached to said sections, said members being closed at their ends by terminal sleeves in telescoping embracing relation, said sleeves having pulleys journaled therein, said draw cord being entrained over said pulleys, openings in said sleeves for said vertical flights, a tension member incorporated in one of said vertical flights for taking up slack in the draw cord, brackets engaging said sleeves for supporting said members, said sections being supported solely by the upper member in depending relation therefrom, the fasteners of the lower member engaging the bottom end of the sections for holding the latter taut.

2,736,374
GLARE SHIELD
Lauren E. Iverson, St. Paul, Minn.
Application May 31, 1952, Serial No. 291,049
6 Claims. (Cl. 160—220)



1. A plastic glare shield for standing on edge on a sun visor comprising a substantially flat body of transparent material which reduces glare and softens light rays, an integral flanged edge forming a flat side extending substantially at right angles longitudinally along the length of one side of said body of transparent material and forming a stand and support therefor, and a pair of resilient bands for mounting the said glare shield on a sun visor extending transversely of the flat side of said flanged edge and through the body in spaced relation thereabout, whereby when the said bands mount said shield on a sun visor the said flat side of said flanged edge is designed to be held by said pair of resilient bands flush against the sun visor to support the shield at substantially right angles to the plane of the sun visor.

2,736,375
PROTECTIVE SHIELD FOR VEHICLE WINDSHIELDS, WINDOWS AND THE LIKE
Russell Rupert, Cleveland, Ohio
Application April 14, 1952, Serial No. 282,155
5 Claims. (Cl. 160—352)



4. A protective shield for vehicle windshields, windows and the like, comprising a sheet of foldable material, a post extending through said sheet of material, a plurality of stays mounted on said post and secured to spaced portions of said sheet, said stays being swingable on said post to move the sheet between folded and extended positions, said sheet having oppositely disposed straight edges and intervening corners in its extended position, some of said stays extending to the corners of said sheet and others to portions of said edges intermediate the corners, said stays terminating at the associated edges and corners of the sheet, the edges of said sheet being substantially straight and in a common plane when the sheet is in extended position, and a vacuum cup mounted on one end of said post for securing the shield to a surface to be protected in said plane, the edges of said sheet and the vacuum cup being disposed in substantially the same plane.

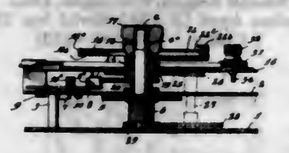
2,736,376
SCREEN AND FRAME ASSEMBLY
Walkley B. Ewing, Grand Rapids, Mich., assignor, by mesne assignments, to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application October 21, 1952, Serial No. 315,938
14 Claims. (Cl. 160—395)



14. A window screen and frame assembly including a piece of longitudinally resilient screen composed of a plurality of pairs of longitudinally extending warp wires and a plurality of parallel ribbon-like louver wires disposed with their major surfaces at a predetermined angle to the normal plane of the screen and held in position by integrating twists between said warp wires, end frame members for holding the end portions of said screen under tension, each of said end frame members being formed with an elongated recess opening toward the normal plane of said screen, and means for securing said end portions of said screen to said end frame members for holding said screen under longitudinal tension, said last-named means comprising retainer means having portions disposed between an adjacent pair of said parallel ribbon-like louver wires at the respective ends of said screen and an insert

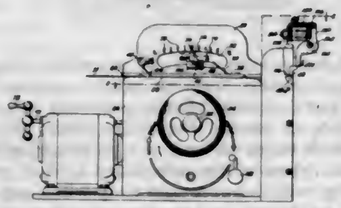
partially disposed within and in holding engagement with the sides of the recess formed in the respective end frame members, each of said inserts including means defining an elongated channel disposed outside of the recess in the respective end frame member and opening generally toward the normal plane of said screen for respectively receiving other portions of said retainer means for holding said screen and end frame members in assembly.

2,736,377
MULTIPLE DIAL TIME SWITCH
Joseph J. Everard, Manitowoc, Wis., assignor to Paragon Electric Company, Two Rivers, Wis., a corporation of Wisconsin
Application March 29, 1954, Serial No. 419,455
11 Claims. (Cl. 161—1)



1. A dial mechanism for a time switch apparatus wherein the closing of a switch is effected by power transmitted through a small dial and the opening thereof is controlled by elements on a large dial, both dials being driven by a continuously operating motor; composed of a shaft adapted to be power driven, a bushing loose and rotatable on the shaft, a sleeve, somewhat shorter than the bushing, loosely surrounding the latter, a large dial fixed to the sleeve in coaxial relation therewith and carrying trip pins adjustably disposed along the margin thereof, gearing connecting the inner end of the shaft to said large dial so as to cause the latter to turn more slowly than the shaft, a radial finger for operating a switch actuator connected to the inner end of the bushing for rotation therewith, a radial pointer interlocked with the outer end of the bushing for rotation with the same, a small dial mounted on the shaft, at the outer end of the bushing, so as to be slidable on and off the shaft, means to lock the small dial to the shaft, and cooperating elements on the small dial and the pointer to permit the pointer to be locked to the small dial for rotation therewith or be left freed to allow it to be turned about the axis of the shaft independently of that dial.

2,736,378
MACHINE FOR SEVERING SELECTED MULTIPLES OF FABRIC STRIP LENGTHS
Victor J. Sigoda, Great Neck, and Edwin W. Whitman, Richmond Hill, N. Y.
Application October 23, 1950, Serial No. 191,548
10 Claims. (Cl. 164—48)



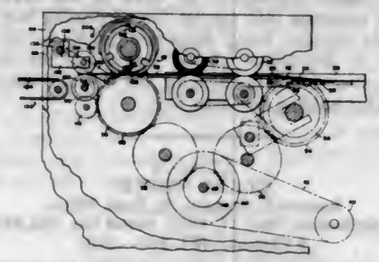
1. In apparatus for feeding and severing lengths of strip material having a support to guide and direct the strip, cutting mechanism positioned adjacent one end of said guide, operating means for the cutting mechanism, and reciprocating means for engaging and feeding selected lengths of strip on the forward stroke and disengaging the strip on the return stroke: means for actuating the operating means for the cutting mechanism only after a selected number of strip lengths have been fed, said actuating means comprising a continuously moving member, a member connected with the cutting mechanism operating means for actuating it when said second mentioned member is moved, and means for connecting said members to actuate the cutting mechanism operating means including a solenoid, mechanism actuated thereby for engaging said members, a switch, and a circuit connecting said solenoid through said switch with a source of electrical power, and means associated with the strip feeding means arranged to actuate said switch only after the selected number of strip lengths have been fed.

2,736,379
FORCE MULTIPLYING PUNCHING DEVICES UTILIZING RELATIVE MOVEMENT
John Winn, Chicago, and Edward S. Peterson, Elmwood Park, Ill., assignors, by direct and mesne assignments, to Wynnwood Corp., Winnetka, Ill., a corporation of Illinois
Original application August 13, 1949, Serial No. 110,241. Divided and this application July 21, 1952, Serial No. 300,082
20 Claims. (Cl. 164—90)



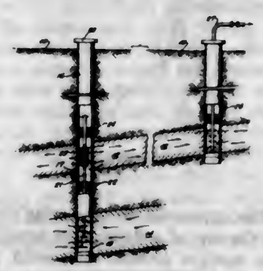
1. A device for punching web material comprising a frame, a plurality of punching means, means movably mounted on the frame for selectively operating the punching means, means for moving the punching means into engagement with the operating means to produce unidirectional movement of said punching means and said operating means, and linkage interconnecting the punching means and the operating means and actuated by said unidirectional movement to move said punching means and said operating means relatively closer to each other to selectively operate the punching means.

2,736,380
ROTARY CUT-OFF ASSEMBLY WITH A PULL-OUT ROLL
Robert A. Dillenburger, Cincinnati, Ohio, assignor to The Hamilton Tool Company, Hamilton, Ohio, a corporation of Ohio
Application February 26, 1951, Serial No. 212,825
1 Claim. (Cl. 164—201)



An apparatus for successively severing end sections from a continuous composite web consisting of alternate strips of record and transfer material comprising a rotary cylinder constituting a continuous anvil, a rotary blade-carrying cylinder disposed close to and spaced from said anvil by a dimension at least as great as the overall thickness of the composite web and rotating at the same surface speed as the anvil, a blade carried by said blade-carrying cylinder and projecting radially therefrom and moving forwardly with the blade-carrying cylinder into and out of position for momentary contact with a portion of the composite web between the cylinders, means spaced rearwardly from the cylinders for advancing the web forwardly between the anvil and blade-carrier at the same speed the blade moves forwardly with the anvil, a lower pull-out roll spaced forwardly from said cylinders rotatably mounted in stationary bearings and rotating at a higher peripheral speed than said cylinders, gripper disks disposed above said pull-out roll, means for shifting the gripper disks toward and away from the pull-out roll comprising a rocker shaft, a plurality or brackets rigidly carried by said rocker shaft and having portions extending over the pull-out roll, each bracket rotatably supporting a gripper disk, spring means engaged with the rocker shaft and serving to turn the rocker shaft in a direction urging the gripper disks from the pull-out roll to an elevated inoperative position, a lever extending laterally from the rocker shaft, a cam secured relative to the blade cylinder and rotating therewith, a cam follower on said lever engaging said cam for moving the lever against the counterforce of said spring means to shift the gripper disks toward the pull-out roll as the blade moves into contact with the web, said pull-out roll and gripper disks constituting the sole means exerting a forward pull upon the web for severing the web along the contacting edge of the blade.

2,736,381
METHOD OF INCREASING RECOVERY FROM A SUBSURFACE OIL OR CONDENSATE RESERVOIR
Joseph C. Allen, Bellaire, Tex., assignor to The Texas Company, New York, N. Y., a corporation of Delaware
Application October 26, 1953, Serial No. 388,113
1 Claim. (Cl. 166—9)



A method for the production of normally liquid hydrocarbons from a plurality of subsurface condensate reservoirs where a low pressure condensate reservoir containing retrograde fluid relatively rich with respect to normally liquid hydrocarbons is located above a high pressure condensate reservoir containing retrograde fluid relatively lean with respect to normally liquid hydrocarbons, which comprises placing said condensate reservoirs in direct fluid communication, directly injecting the high pressure retrograde fluid contents of said high pressure condensate reservoir into said low pressure condensate reservoir and producing said low pressure condensate reservoir at a location removed from the zone at which the contents of said high pressure reservoir are injected thereinto whereby there is recovered from said low pressure reservoir an amount of normally liquid hydrocarbons greater than the total amount separately recoverable from said high pressure and low pressure reservoirs and whereby the fluid so produced from said low pressure reservoir contains an increased amount of normally liquid hydrocarbons with respect to the normally liquid hydrocarbon content of the retrograde fluid originally present in said high pressure reservoir.

2,736,382
WELL TOOL
Sterling P. Bedingfield, Bossier City, La.
Application April 8, 1950, Serial No. 155,351
15 Claims. (Cl. 166—128)

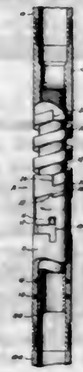


1. In combination in a well testing tool having a packer member and a main check valve, an upper actuating sub member, a packing gland in said sub member, a hollow mandrel extended through said packing gland and mounted for movement to selected positions within said sub member, said submember also including a sleeve surrounding said mandrel and having an inner wall spaced from said mandrel to provide a fluid conducting passageway, a check valve within said mandrel, upper and lower fluid ports in said mandrel positioned respectively above and below said check valve for downward flow of fluid to by-pass said check valve through said ports when said mandrel is in one position, said packing gland being arranged to close said lower port from fluid flow when said mandrel is moved to another position.

2,736,383
OIL WELL TESTING TOOL
Sterling P. Bedingfield, Bossier City, La.
Application March 31, 1951, Serial No. 218,593
5 Claims. (Cl. 166—188)

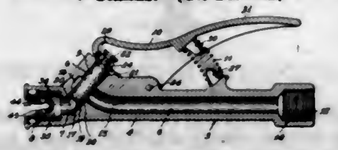
1. An oil well testing tool comprising a series of threadably joined tubular sleeves, a hollow mandrel having the upper end thereof arranged for threaded attachment to a string of drill pipe or the like, a portion of the lower end of said mandrel being enclosed in the upper end of said joined tubular sleeves, said mandrel being further provided with locking means between the same and the side walls of the sleeve enclosing it, said mandrel being unlocked from said sleeve by lowering the pipe string to which said mandrel is attached to permit both longitudinal and rotative movements of said mandrel independently of said joined tubular sleeves, a valve for stopping fluid flow upwardly through said tubular sleeves, said valve including a valve stem connectable with said mandrel and movable longitudinally therewith, an annular valve seat formed on an end of one of said sleeves, means for locking said valve stem against rotative movement relative to said sleeves but permitting longitudinal movement thereof with the mandrel to which the same is attached, and means for closing said valve against said valve seat operable upon rotating said mandrel when the same is in an unlocked position to disconnect it from the valve stem.

2,736,384
RELEASABLE COUPLING DEVICES
Ernest L. Potts, Houston, Tex., assignor to Cicero C. Brown, Houston, Tex.
Application October 16, 1950, Serial No. 190,256
10 Claims. (Cl. 166—220)



1. A releasable coupling device including, an outer tubular member adapted to be connected to the upper end of a section of well pipe, an inner member telescoping the outer member and connected to the lower end of a second section of well pipe, the outer member having a slot therein which is formed with a vertical leg having an open end, a lateral leg and a vertical offset portion at the end of the lateral leg, a projection on the inner member engageable within the offset portion for coupling the members together, and a resilient torque means acting on said inner member and said outer member for maintaining said projection within said offset portion during longitudinal movement of said projection in said offset portion to maintain the members in coupled position while applying a jarring action from said inner member to said outer member.

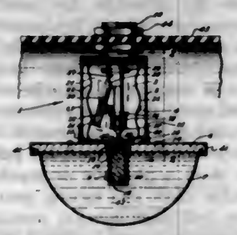
2,736,385
DRY POWDER FIRE EXTINGUISHER NOZZLE
Norman H. Siebens, Cedar Grove, N. J., assignor to C-O-Two Fire Equipment Company, Newark, N. J.
Application December 26, 1951, Serial No. 263,387
7 Claims. (Cl. 169—1)



1. A nozzle for a dry powder fire extinguisher for reducing discharge velocity and for providing a discharge pattern of desired cross sectional shape comprising a housing having an expansion chamber, inlet and outlet means for the expansion chamber, the inlet of lesser diameter than the outlet, and a diffusion member closing the outlet, the diffusion member of conical shape with its apex turned inwardly into the expansion chamber and having a pair of angularly oppositely positioned orifices in its conical wall, the outer end of the nozzle defined by the base of the conical-shaped diffusion member.

2,736,386
EXPLOSION SUPPRESSION DEVICE
Joseph R. Klompar, Manhattan Beach, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application May 4, 1953, Serial No. 352,642
5 Claims. (Cl. 169—4)

1. A self-contained explosion suppression device of the kind described, comprising: an apertured housing; flexible diaphragm means dividing said housing and provided with a restricted orifice; a firing pin mounted within said housing; resilient means urging said firing pin toward firing position; detent means engageable with said firing



pin and mounted in said housing to be operable by movement of said flexible diaphragm and effective to hold said firing pin from movement against the effort of said resilient means until actuation of said detent by movement of said diaphragm means to release the firing pin.

2,736,387
HYDRAULICALLY OPERATED FOAM TOWER
Lewis W. Boerner, West Chester, Pa., assignor to National Foam System, Inc., a corporation of Delaware
Application April 26, 1954, Serial No. 425,684
16 Claims. (Cl. 169—4)

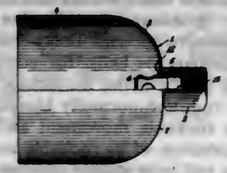


1. A portable apparatus for injecting fire extinguishing foam into the top of a flammable liquid storage tank comprising an upright ground supported tower having a plurality of tubular sections disposed in telescoped relation, means for closing the lower end of the outermost one of said tubular sections and placing the interior thereof in communication with a fluid pressure source, and fire extinguishing foam delivery means extending upwardly the longitudinal continuation of, and in positionally fixed relation to the innermost one of said tubular sections, said tubular sections being axially shiftable under the influence of said fluid pressure to extend said tower for elevating said foam delivery means.

2,736,388
FIRE EXTINGUISHER DISCHARGE DEVICE
Frank B. Allen, Towaco, N. J., assignor to C-O-Two Fire Equipment Company, Newark, N. J.
Application February 19, 1953, Serial No. 337,724
3 Claims. (Cl. 169—11)

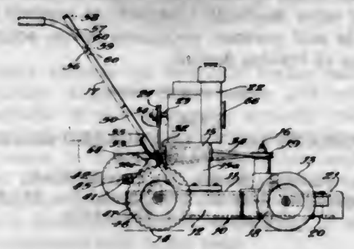
1. A discharge device for carbon dioxide fire extinguishing fluid comprising directing tube means with a closed apertured end, a bushing member having a passage therethrough with a threaded portion, shoulder means in the passage, a thin-walled nozzle member formed into a tubular shape with a closed end and having a plurality of apertures in its side wall adjacent its closed end, flange

means about the open end of the nozzle member abutting against the shoulder, and a retaining member threadedly



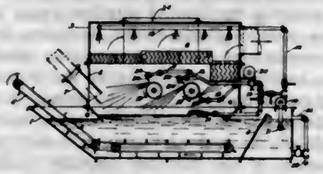
engaged with the wall of the bushing member holding the nozzle in position.

2,736,389
DRIVE MECHANISM FOR A POWER MOWER
William H. Phelps, Ralston, Nebr.
Application November 6, 1951, Serial No. 255,065
6 Claims. (Cl. 180—19)



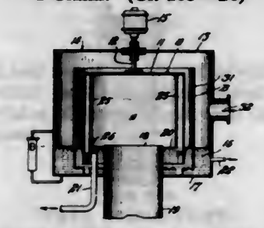
1. A power driven vehicle comprising: a generally rectangular frame having front and rear wheels adjacent its four corners; handle means extending upwardly and rearwardly from the frame; drive tires on the rear wheels; an elevated motor support; a motor on said support having a pulley on its drive shaft; a transverse intermediate shaft below the motor, said shaft having three pulleys; a driven element forward of the motor which has a shaft provided with a pulley; a power belt extending from the pulley on the drive shaft, over a pair of said pulleys on the intermediate shaft, forward beneath the motor support and around the pulley on the driven element; a transverse drive shaft connected by a belt to the third said pulley on the intermediate shaft, the ends of said drive shaft being provided with means which make driving engagement with the drive tires; and drive control means for disengaging said means from the drive tires.

2,736,390
WET TYPE DUST COLLECTOR
Algot A. Wickland, Chicago, Ill.
Application February 4, 1953, Serial No. 335,081
3 Claims. (Cl. 183—22)



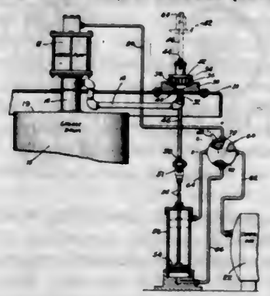
1. A washer of the class described comprising a vertical housing, a rectangular water reservoir integral therewith, said housing having two side walls, two end walls and a roof, the end walls of the housing being spaced from the end of the reservoir and extending into the reservoir beneath the water level therein, whereby an enclosure bounded by said end walls, side walls, roof, and water surface in the reservoir is formed, water eliminating baffles so positioned as to divide said enclosure into an upper and lower compartment, an air inlet duct for dust laden air extending diagonally downwardly into said lower compartment, an air outlet passage for clean air extending from said upper compartment, a plurality of motor driven rotors in said lower compartment, water inlet means comprising a plurality of longitudinal pipes having orifices therein, deflectors adjacent the periphery of said rotors and in impinging relationship with jets of water issuing from said orifices, whereby said jets are broken up and deflected into contact with the atomizing rotors, said pipes and deflectors extending parallel to the periphery of the rotors for substantially the axial length thereof.

2,736,391
CENTRIFUGAL STRIPPER
Richard S. Jones, Bayside, N. Y., assignor to Donald B. Adams, New York, N. Y.
Application December 14, 1953, Serial No. 397,964
1 Claim. (Cl. 183—26)



In a centrifugal separation an outer casing having means maintaining a constant level liquid pool at the bottom thereof and a gas discharge opening above the level of said pool, a gas inlet pipe opening into the center of said casing above the level of said pool, a stationary baffle open at its upper end and surrounding said inlet opening and adjacent thereto and intervening between said opening and said gas discharge, an annular rotary member surrounding said inlet opening and positioned within said baffle and engaging said liquid pool to draw a film of liquid therefrom and having its upper end closed against escape of fluids and provided with peripheral perforations below the level of the top of said baffle, and means for rotating said member to discharge a mixture of liquid and gases through said perforations and against said baffle acting to separate said liquid and gases with release of gases at the said upper end of said baffle and downward flow and discharge of liquid along said baffle into said constant level pool, the released gases passing out through said discharge opening in said casing.

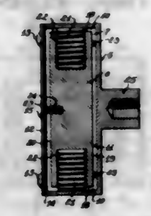
2,736,392
APPARATUS FOR PACKING BEARINGS
Joseph M. Slivar, Ventura, Calif.
Application June 23, 1953, Serial No. 363,701
1 Claim. (Cl. 184—1)
(Granted under Title 35, U. S. Code (1952), sec. 266)



A pressure lubricating device for roller bearings, comprising a container for grease, clamping means having a

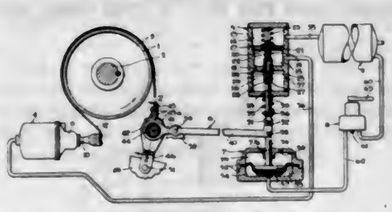
fixed and a movable member for retaining a bearing in position for being lubricated, a conduit of considerable length leading from said container and communicating with a bearing in said clamping means, a pump in said conduit operative to supply grease under pressure through said conduit, air pressure means for actuating said pump and said clamping means, and a valve operative in three successive positions to cause said air pressure means to actuate said clamping means, to energize said pump, and to retract said clamping means.

2,736,393
TUNED VIBRATION DAMPER
Bernard E. O'Connor, Buffalo, N. Y., assignor to Houdaille-Hershey Corporation, Detroit, Mich., a corporation of Michigan
Application June 2, 1950, Serial No. 165,724
7 Claims. (Cl. 188—1)



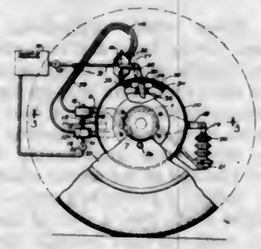
1. A linear vibration damper comprising in combination, a housing defining a rectangular chamber, an inertia mass of complementary rectangular and smaller dimensions with respect to the dimensions within the chamber housed within the chamber and rectilinearly movable therein, tuned spring means between opposite ends of the inertia mass and opposite end walls defining the chamber, and viscous damping fluid in the chamber and operative between all opposing faces of the inertia mass and surfaces defining the chamber for supplementing the tuned spring means in damping linear vibrations outside of the frequency for which the spring means are tuned, the opposing longitudinal surfaces of the inertia mass and of the walls defining said chamber being in uniform closely spaced relation providing very narrow gaps therebetween through which displacement of the damping fluid occurs under relatively high resistance.

2,736,394
TORQUE CONTROLLED BRAKE
Ellis E. Hewitt, Westmoreland, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application December 18, 1952, Serial No. 326,640
2 Claims. (Cl. 188—151)



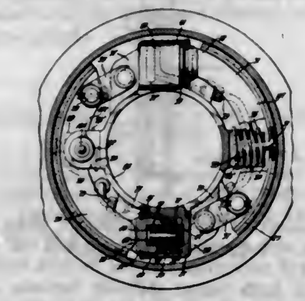
1. Brake apparatus for controlling braking force applied to a rotatable element, comprising in combination, a brake band adapted for frictional engagement with the periphery of said rotatable element; fluid pressure operated brake applying means operatively connected to the live end of said brake band; a valve device having an actuating rod normally in position for effecting operation of said valve device to vent said brake means but movable to effect operation of said valve device to lap the pressure in said brake means and upon further movement to effect operation of said valve device to supply fluid under pressure to said brake means; a lever fulcrumed intermediate its ends, for controlling, according to its rockable position, the movement of said valve device actuating rod, and normally biased toward one limit position of its rockable movement and movable toward another limit position of its rockable movement in which such actuating rod is in supply position, said lever being movable to said one limit position by bias means when said brake means is devoid of fluid under pressure and also returnable toward said one limit position by braking torque developed on said band by said brake applying means, one end of said lever being operably connected to the opposite end of said band; fluid pressure operated means to exert a moment on said lever for moving said valve device actuating rod into supply position in opposition to action of said brake torque on said lever; and a control valve manually adjustable to regulate pressure of fluid in said pressure responsive device according to the degree of braking desired.

2,736,395
AUTOMATICALLY CONTROLLED BRAKING APPARATUS
Harry L. Keeler, Jr., Detroit, Mich.
Application June 27, 1951, Serial No. 233,883
6 Claims. (Cl. 188—181)



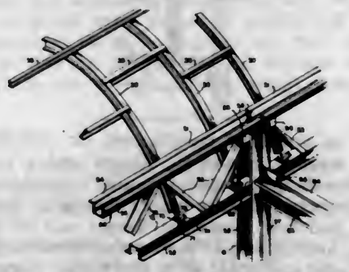
1. Braking apparatus for controlling the application of the brakes to a revolving brake drum on a vehicle having an axle housing, having in combination a brake operating member, a motor with a movable element having a connection with a source of energy and a control for the energy said movable element being actuated in one direction under control of the driver, and activated in the other direction under automatic control as hereinafter stated, connections between said movable element and the brake operating member to move the brakes with respect to the brake-drum, brake shoes, a brake-carrying plate movably supporting the shoes and supported by the wheel axle housing for limited rotation about said housing, yielding resistance means for opposing the limited turning movement of the brake-carrying plate in one direction, a control arm fastened to the brake-carrying plate, and a brake compensating unit movably supported upon the axle housing and having control members one on each side of the end of the control arm to control the effectiveness of the movable element of the motor, one of said control members having means, upon application of the brakes, for decreasing resistance in the motor to the movement of the motor element to make fully effective the brake operating motor to apply the brakes when the coefficient of friction between the outer wheel surface on which it rolls is substantial, the other of said control members having means, upon decrease of said coefficient of friction, to apply counter energy to reverse the movement of said motor element thereby partially or completely releasing the brakes.

2,736,396
BRAKE SLACK ADJUSTER
Olaf Rasmussen, Port Clinton, and Richard C. Rike, Dayton, Ohio, assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Original application November 23, 1945, Serial No. 630,226. Divided and this application June 4, 1951, Serial No. 229,836
5 Claims. (Cl. 188—196)



1. A slack adjuster for hydraulic brakes including a wheel cylinder, a hollow piston within said cylinder, a limited number of teeth projecting inwardly within said piston, a tubular adjusting pin having a slotted wall and a head, means in the cylinder to provide limited free movement for said head, said slotted wall having one or more formations extending outwardly to engage said piston teeth to determine progressive positions of brake release to correspond with lining wear.

2,736,397
LONG SPAN ARCH RIB BUILDINGS
Roy L. Colby, Jr., Dearborn, Mich., assignor to National Steel Corporation, a corporation of Delaware
Application October 9, 1952, Serial No. 313,966
15 Claims. (Cl. 189—1)



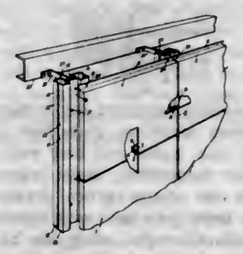
1. Building construction including a truss member, support means for the truss member, the truss member including identical spaced upper and lower chord members bridging the support means and web members joining the chord members and connected to the chord members at panel points, and loading members supported on the lower chord member and joined to the lower chord member at points on the lower chord member spaced from the panel points, the upper and lower chord members being stressed in the neighborhood of the allowable stress for compression members and tension members respectively.

2,736,398
GUY WIRE CONSTRUCTION
Thomas F. Peterson, Cleveland, Ohio, assignor to Preformed Line Products Company, a corporation of Ohio
Application September 14, 1949, Serial No. 115,672
7 Claims. (Cl. 189—31.5)

1. A tension brace construction in which a principal load-bearing member comprises a flexible loop formed of strand having its opposite ends brought together to form a joint, said joint comprising helically preformed splicing elements surrounding each end of said strand in gripping relation therewith and extending along the strand in each direction from said ends for a substantial distance to splice said ends together, said loop being twisted to wrap said strand and splicing elements about each other along the major axis of load.

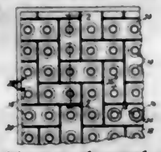


2,736,399
WALL STRUCTURE
Herbert R. Spencer, Erie, Pa., assignor to The Erie Enameling Company, Erie, Pa., a corporation of Pennsylvania
Application May 2, 1950, Serial No. 159,403
6 Claims. (Cl. 189—34)



1. In a fire resistant wall construction having inner and outer wall surface elements, one of which comprises a plurality of metal panels having attaching parts spaced inward toward the center of the wall from the portion of the panels forming wall surfaces, vertical studs for supporting said wall surface elements comprising opposed spaced inner and outer metal members, a sheet of insulating board sandwiched between the members and preventing direct metallic heat transfer between the major portion of the area of the members, said members having opposed webs on opposite sides of the insulating board, aligned pairs of dimples extending from the opposed webs through the insulating board and spot welded to each other, said pairs of dimples being spaced along the length of the studs and occupying a minor portion of the area of the webs, said inner and outer members having opposed vertical channels offset from the center of the wall respectively toward but short of the inner and outer wall surfaces, said channels being arranged face to face and spaced from each other by the insulating board and having attaching surfaces on the outer surfaces of the channels, connections between the attaching parts of the panels and the attaching surfaces of the studs, and insulation interposed between the portions of the panels forming the wall surfaces and the attaching surfaces of the studs.

2,736,400
WALL CONSTRUCTION
Cecil H. Gay, Akron, and Glen J. Schoessow and Earl E. Schoessow, Barberton, Ohio, assignors to The Babcock & Wilcox Company, Rockleigh, N. J., a corporation of New Jersey
Application September 10, 1951, Serial No. 245,843
6 Claims. (Cl. 189—34)



1. In apparatus subject to thermal expansion and contraction, a flexible gas-tight wall comprising a multiplicity of elongated rectangular seal pans having a substantially flat bottom and flaring flexible edge flanges, means forming a sealing connection between the edge portions of contracting flaring flexible flanges of adjoining seal pans, and said seal pans being relatively arranged with the short sides of each pan abutting the long sides of transverse adjoining pans at opposite ends thereof.

2,736,401
STORM DOOR CONSTRUCTION AND HINGE MOUNTING
Louis J. Milone, Livingston, N. J., assignor to The Eagle-Picher Company, Cincinnati, Ohio, a corporation of Ohio
Original application February 3, 1949, Serial No. 74,357, now Patent No. 2,695,084, dated November 23, 1954. Divided and this application March 28, 1952, Serial No. 279,167
5 Claims. (Cl. 189—46)



1. A hinge mounting structure for a storm door having vertical framing members of hollow cross section providing spaced side walls and end walls, said hinge mounting structure comprising, hinge leaves adapted to be mounted upon one of the vertical framing members, said hinge leaves being provided with rimmed mounting holes forming collars integral with the hinge leaf, the hollow framing member having sets of hinge mounting holes extending through both side walls thereof, the hinge leaf being mounted in facial engagement upon the framing member with said collars engaged in said holes, a plurality of sleeves having substantially the same diameter as said collars and adapted to be inserted through the hinge mounting holes through the opposite side wall of the hollow framing member, said sleeves having a head formed on the outer end thereof adapted to engage the external surface of the side wall, the sleeve having a length dimension substantially equal to the spacing of the side walls and adapted to extend into endwise engagement with said collars, and a plurality of screws extending through the rimmed holes of the hinge leaf into internally threaded engagement with the sleeves, the sleeves providing spacers to control the stress imposed upon the spaced side walls of the framing member and said collars being effective to transmit the weight load of the door directly to the hinge leaf independently of said screws.

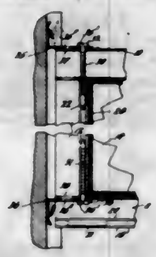
2,736,402
VEHICLE SAFETY EXIT WINDOW STRUCTURE
Earl M. Hicks, Lebanon, Ind.
Application April 13, 1950, Serial No. 155,673
7 Claims. (Cl. 189—64)

1. A safety exit window assembly primarily intended for vehicle bodies and comprising, for use with a wall structure having an opening therein, a frame proportioned and designed to fit in and fill such opening, a pair of sashes carried in said frame, at least one of said sashes being movable relative to said frame and the other sash between open and closed positions, flange means arranged along one edge of said frame, offset in one direction from the plane of said movable sash and positioned to engage



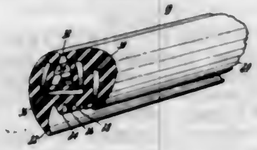
the outer surface of said wall structure when said frame is located in such opening to restrain said one frame edge against inward movement relative to such wall structure, and movable latch means shiftable between an inactive position and a position providing a positive connection between another edge of said frame and the boundary of such opening to hold said frame in such filling relation to such opening.

2,736,403
METAL FRAME CONSTRUCTIONS
Jacob M. Gwynne, Smithtown, Pa.
Application May 18, 1953, Serial No. 355,733
6 Claims. (Cl. 189—76)



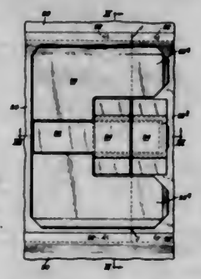
6. As an article of manufacture, an extruded metal framing member comprising flanges and a connecting web, said web having spaced parallel connector-engaging flanges projecting from a surface thereof at points lying between said first mentioned flanges and in the same direction, and adapted to receive therebetween the shank of a threaded connector, all of said flanges extending longitudinally of said member, the inner surfaces of said connector-engaging flanges being curved toward each other at their bases and at their distal edges, the space therebetween being approximately parti-cylindrical.

2,736,404
SEALING STRIP
Paul E. Clingman, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 19, 1952, Serial No. 294,417
2 Claims. (Cl. 189—78)



1. A sealing strip for holding a panel in a predetermined position relative thereto comprising, an elongated body of resilient rubber-like material including a longitudinally extending groove at one surface thereof, said body also including a longitudinally extending void substantially complementary in cross section to said groove and surrounding said groove and disposed entirely within said body, said groove and void therearound defining a preformed longitudinally extending channel therebetween that is attached to said body adjacent its longitudinal edges only whereby the channel is swingable within the void and relative to the body, said channel being adapted to receive said panel.

2,736,405
CONNECTOR FOR FLANGED SHEETS ABUTTING ENDWISE
Otis W. Hovey, Pittsburgh, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
Original application September 20, 1951, Serial No. 247,439. Divided and this application December 19, 1952, Serial No. 326,828
3 Claims. (Cl. 189—85)



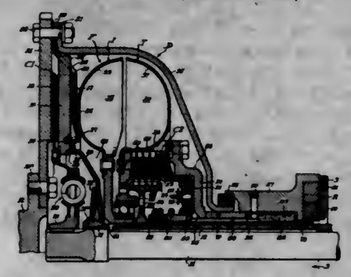
1. A structural joint comprising a pair of elongated metal sheets abutting end-to-end, both having a channel-section loop at the abutting ends thereof, and an E-shaped sheet-metal key in flatwise engagement with one of said sheets, the spaced upper and lower portions of said key extending across the plane between said ends outside of said loops and the mid-portion of the key extending through both said loops and fitting snugly therein.

2,736,406
PANEL CEILING PANEL UNIT
Dale L. Johnson, Waukegan, Ill., assignor to Burgess-Manning Company, Libertyville, Ill., a corporation of Illinois
Application February 18, 1952, Serial No. 272,134
5 Claims. (Cl. 189—88)



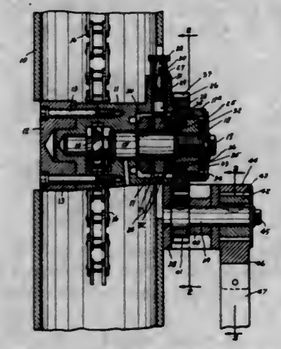
1. In a panel ceiling for a heat transfer system, a plurality of rectangular panels arranged in a plane to form a ceiling, each said panel having a first flange rising from one side thereof and having an outwardly facing arcuate portion and interlocking means disposed at the extremity thereof and a second flange rising from the side of said panel opposite said first flange and having an outwardly facing arcuate portion and interlocking means complementary with the interlocking means of said first flange and disposed at the extremity of said second flange, said first and second flanges of each panel being integral with said panel and extending substantially the full length of the side thereof, said panels being arranged in said ceiling with the first and second flanges of adjoining panels interlocked and substantially encircling and clamping a pipe therebetween.

2,736,407
TRANSMISSION
Richard L. Smirl, La Grange, Ill., assignor to Borg-Warner Corporation, Chicago, Ill., a corporation of Illinois
Application December 19, 1949, Serial No. 133,873
3 Claims. (Cl. 192—3.2)



1. In a transmission, a drive member, a driven shaft, and a hydrokinetic device and friction clutch arranged in series between and drivingly connecting said driven shaft to said drive member upon engagement of said clutch, said kinetic device comprising an impeller connected to said drive member, and a turbine rotatable relative to said drive member and driven shaft, said turbine having a hub, a drum-like member connected to said hub, said friction clutch comprising a plurality of driving clutch plates disposed within said drum-like member and connected thereto for rotation therewith, a plurality of driven clutch plates connected to said driven shaft and engageable with said driving clutch plates, a piston connected for rotation with said drum-like member and movement axially thereof to engage said driving and driven clutch plates, a source of fluid supply, a pump connected to said source, and a housing for said piston and providing a pressure fluid chamber adapted to receive fluid under pressure to move said piston to engage said clutch, said housing having a passage therein communicating with said chamber and being connected to said drum-like member and said pump for driving said pump to supply fluid under pressure through said passage to said pressure fluid chamber.

2,736,408
CLUTCH AND BRAKE FOR A HOIST
Fredrick W. Coffing, Danville, Ill., assignor, by mesne assignments, to Duff-Norton Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application July 7, 1952, Serial No. 297,513
2 Claims. (Cl. 192—16)



1. A hoist structure of the character described including a housing, a main shaft carrying a load wheel having its bearings in said housing, said shaft having an extension terminating in a threaded portion, disk clutch members carried by said shaft extension including a ratchet member, a holding pawl on said housing normal-

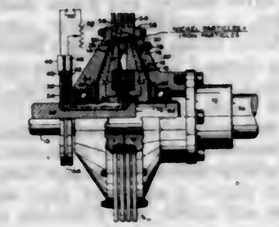
ly biased to load holding engagement with said ratchet member, a clutching washer in face abutting engagement with one of said members and having a notch provided in its exposed face, a clutch controlling nut threaded on the threaded portion of said shaft for axial displacement into and out of shaft clutching engagement upon rotation thereof, one face of said nut abutting said washer and having a washer actuating pin engaging in the notch thereof to permit free play and limited angular displacement therebetween, a driving gear slidably mounted on said nut externally of said housing, an auxiliary shaft supported on said housing in axial and radial offset relation to said main shaft, a pinion secured to said auxiliary shaft in meshing engagement with said gear, a ratchet wheel secured to said auxiliary shaft, and a handle operated load pawl in driving engagement with said ratchet wheel.

2,736,409

MAGNETIC FLUID MIXTURE CLUTCH CONTAINING IRON AND NICKEL PARTICLES

Frank G. Logan, Kirkwood, Mo., assignor to Vickers Incorporated, Detroit, Mich., a corporation of Michigan

Application November 16, 1950, Serial No. 196,059
10 Claims. (Cl. 192—21.5)



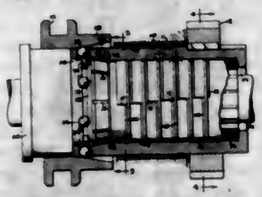
1. A magnetic coupling device comprising a pair of spaced relatively movable coupling members defining a gap therebetween, means for establishing a magnetic field across said gap, and magnetic particles in said gap and responsive to said field for establishing a force-transmitting bond between said members, whereby movement of one member at least tends to cause movement of the other member, said particles including discrete nickel particles and discrete iron particles.

2,736,410

MULTIPLE SHOE FRICTION CLUTCH

Harold Horton Turner, Rockford, Ill., assignor to The Ingersoll Milling Machine Company, Rockford, Ill., a corporation of Illinois

Application December 11, 1950, Serial No. 200,255
11 Claims. (Cl. 192—35)



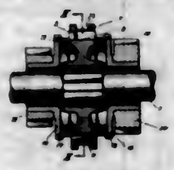
1. A friction clutch comprising a rotary driving drum, a set of rigid semicircular flat ring sectors disposed side by side within said drum on one side thereof, each of said sectors having a uniform cross section throughout its length, a second set of similar sectors disposed side by side within and on the other side of said drum and offset axially so that one end of each sector in one set partially overlaps and is engageable with the adjacent end of two adjacent sectors of the other set so as to interconnect all of the sectors in a helically extending series and leave both ends of the terminal sector at opposite ends of the series partially exposed, springs urging said sectors radially inwardly, a rotary driven element having two oppositely facing radially disposed abutments thereon disposed adjacent and engageable with the respective ends on one of said terminal sectors, a rotary member having two oppositely facing radially disposed abutments thereon disposed adjacent and engageable with the respective ends on the other of said terminal sectors, and means by which an actuating torque may be applied to said rotary member.

2,736,411

SYNCHRONIZING MECHANISMS FOR CHANGE SPEED GEARS

Leopold Schmid, Stuttgart-Sillenbuch, Germany, assignor, by mesne assignments, to Dr. Ing. h. c. F. Porsche K. G., Stuttgart-Zuffenhausen, Germany, a corporation of Germany

Application December 5, 1951, Serial No. 260,059
Claims priority, application Austria January 11, 1951
7 Claims. (Cl. 192—53)



1. Change-speed gears including a synchronizing means therefor, comprising a sleeve carrier, a laterally slidable sleeve on said sleeve carrier, a coupling gear axially mounted with respect to said carrier and sleeve and having a set of external gear teeth, said slidable sleeve being provided with a set of internal gear teeth adapted to mesh with the external gear teeth of the coupling gear, a spring ring member mounted between the sleeve carrier and the coupling gear having a peripheral friction surface located in a position to be engaged by the inwardly facing surfaces of the gear teeth of the sleeve when the latter is shifted toward the coupling gear, said spring ring member being connected with the coupling gear for rotation therewith, the inner surfaces of the gear teeth of the slidable sleeve serving as friction bodies for frictionally engaging said spring ring member for bringing the sleeve and coupling gear in synchronism with each other, and a plurality of stop members fixed to and projecting from the peripheral surface of the sleeve carrier and engaged in the set of internal gear teeth of the slidable sleeve for keying the sleeve to the sleeve carrier, at least some of said stop members including an enlarged head portion facing toward the coupling gear and having a sloping surface extending from the enlarged head portion to the narrower portion of the stop member, a tooth of said set of gear teeth of the sleeve adjacent to said stop member having a sloping surface cooperating with and adapted to engage the sloping surface of the stop member associated therewith when the sleeve is shifted toward the coupling gear.

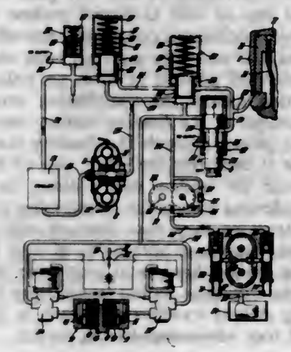
2,736,412

FLUID CLUTCHES WITH MULTIPLE PUMPS

William G. Livezey, Indianapolis, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application June 17, 1950, Serial No. 168,681
9 Claims. (Cl. 192—85)

1. In a transmission for a self-propelled vehicle having an engine, an output shaft, a clutch effective when engaged to establish driving connection between said engine and said output shaft, a chamber adapted to contain liquid under pressure, means operative on the supply of liquid under pressure to said chamber to engage said clutch, a first pump having its inlet connected through a first check valve to a source of liquid and having its outlet connected to a supply passage, a second pump having its inlet connected to said source of liquid and having its outlet connected to the inlet of said first pump, the outlet of said second pump also being connected to said supply passage through a check valve arranged to permit flow of



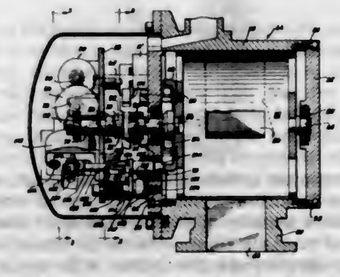
liquid to said supply passage, means adapted to be connected to the engine for driving one of said pumps, means connected to the output shaft for driving the other one of said pumps, and manually controlled means for supplying liquid from said supply passage to the chamber of said clutch.

2,736,413

MULTISTATION ANGULAR-MOVEMENT ACTUATOR

Charles E. Bieber, Elizabeth, and Robert S. Carr, Summit, N. J., assignors to Airtron, Inc., Linden, N. J., a corporation of New Jersey

Application October 6, 1954, Serial No. 460,692
2 Claims. (Cl. 192—142)



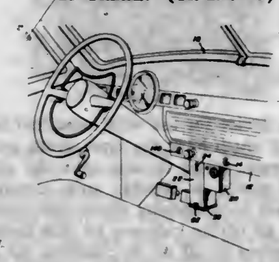
1. A multi-station angular-movement actuator comprising a coaxial, circular, notched portion of a rotor to be angularly moved having circumferentially spaced notches therein corresponding to points to which said rotor is to be turned, a motor drivingly connected to said rotor, a plunger adapted to coact with said notches to control rotation of said rotor by said motor, means for withdrawing said plunger from any one of said notches in which it may have been disposed to free the rotor to enable it to be turned by said motor, means for projecting said plunger into any selected one of said notches to terminate turning of said rotor, and shock-absorbing means associated with said plunger, restraining the latter yieldably against lateral movement in the direction of rotary movement of said notched portion, to cushion the stopping of said rotor when said plunger is projected into any of said notches, said shock-absorbing means comprising a pivotal member mounted for limited angular movement about an axis approximately parallel to the line of longitudinal movement of said plunger toward said notched portion and having an arm-constituting means for guiding said plunger in its said longitudinal movement to maintain the plunger in alignment with said notched portion, and means yieldably urging said arm and said plunger oppositely to the direction of rotation of said notched portion.

2,736,414

COIN CONTROL SWITCH

Glen D. Gaddis, Salt Lake City, Utah

Application March 20, 1952, Serial No. 277,706
13 Claims. (Cl. 194—9)



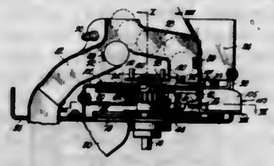
1. In a vehicle having an ignition system including a source of electric energy and a control lock for said system, a timer comprising a coin chute, a first switch mounted in said chute, said first switch being operable by a coin passing through said chute, a primary timing device, electric winding means for said primary timing device, circuit means including said first switch connecting said winding means to said source of energy, passage of a proper coin through said chute momentarily closing said first switch to energize said winding means, a second switch mounted in said chute in spaced relation to said first switch, a coin stop in said chute adjacent said second switch, a secondary timing device operatively connected to said primary timing device, circuit means including said second switch operable to connect said secondary timing device to said source of energy, said second switch being closed by a coin retained by said coin stop.

2,736,415

PLURAL COIN MECHANISM FOR VENDING MACHINES

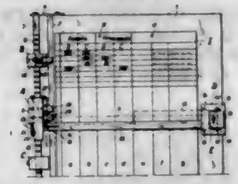
Charles S. Hedges, Kansas City, Mo., assignor to The Vendo Company, Kansas City, Mo., a corporation of Missouri

Application January 21, 1952, Serial No. 267,391
7 Claims. (Cl. 194—61)



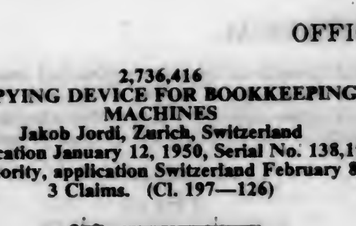
1. Control means comprising a coin chute; releasable structure for supporting a first coin inserted in the chute; a pair of spaced-apart, rotatable devices; releasable mechanism for holding one of said devices against rotation; means on the other device for receiving a second coin inserted in the chute and disposed to move said coin into releasing engagement with said mechanism as the other device is rotated through a portion of its path of travel; means on said one device for releasing said structure upon rotation of the one device; manual means for rotating said one device; and means coupled with said manual means for forcing a third coin inserted in the chute out of the latter as the manual means is actuated.

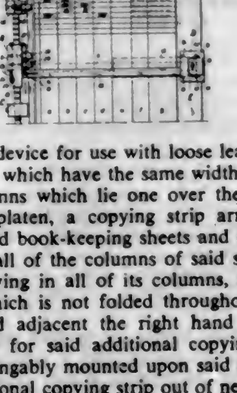
2,736,416
COPYING DEVICE FOR BOOKKEEPING MACHINES
Jakob Jordi, Zurich, Switzerland
Application January 12, 1950, Serial No. 138,193
Claims priority, application Switzerland February 8, 1949
3 Claims. (Cl. 197—126)



1. A copying device for use with loose leaf book-keeping sheets, all of which have the same width and are provided with columns which lie one over the other, comprising a rigid platen, a copying strip arranged to lie above one of said book-keeping sheets and extending the entire width of all of the columns of said sheet so as to provide for copying in all of its columns, an additional copying strip which is not folded throughout its extent, a shaft mounted adjacent the right hand side of said platen, a holder for said additional copying strip, said holder being swingably mounted upon said shaft so as to swing said additional copying strip out of neutral position into the position for use in which it extends from right to left over only a part of the columns of the book-keeping sheets, and a shifting device for executing line-by-line relative movement between said book-keeping sheets and said copying strip and additional copy strip.

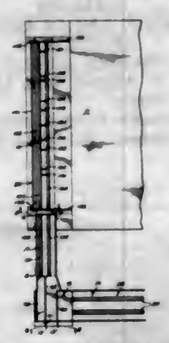
2,736,417
TRAY CONVEYOR MECHANISM
Fred W. Greer, South Lincoln, Mass., assignor to J. W. Greer Company, Cambridge, Mass., a corporation of Massachusetts
Application April 13, 1951, Serial No. 220,927
13 Claims. (Cl. 198—31)





5. In combination with a conveyor mechanism having a series of trays suspended in spaced relation to one another and driving means for advancing said trays along an endless path, including a U-shaped portion having non-horizontal legs and another non-horizontal portion, and guide means for maintaining each of said trays in horizontal position as they advance along said non-horizontal path portions, a horizontal cross conveyor extending beside and transversely of said tray path between the non-horizontal legs of said U-shaped portion to form a loading station, horizontal conveyors extending beside and transversely of said tray path on each side of said other non-horizontal portion to form an unloading station, transferring means for transferring articles from said cross-conveyor at the loading station over one side of a tray as it passes through the loading station along one leg of the U and over the other side of the tray as it passes through the loading station along the other leg of the U, transferring means for transferring articles carried by said trays as they pass through said unloading station off said trays over both sides of said trays onto said unloading station horizontal conveyors and means for actuating said loading station transferring means and said unloading station transferring means in timed relation with said tray advancing driving means.

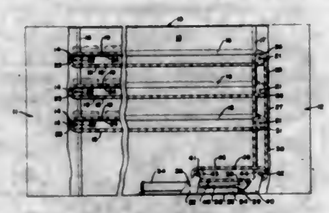
2,736,418
CONVEYOR SYSTEM WITH ARTICLE SPACING APPARATUS
Hiram E. Temple, San Gabriel, Calif., assignor to Read Standard Corporation, a corporation of Delaware
Application June 5, 1952, Serial No. 291,895
16 Claims. (Cl. 198—31)



2. In a conveyor system, the combination of: a conveyor; means for delivering a series of spaced articles to said conveyor; a plurality of stops spaced apart along said conveyor and movable from retracted to extended positions to intercept the respective articles in the series; a plurality of electrical devices respectively connected to said stops for extending same; a plurality of switches respectively connected to said electrical devices and actuable to cause said electrical devices to extend said stops, respectively; and cam means engageable with said switches and operating in timed relation with said conveyor for actuating said switches seriatim so as to cause said stops to be extended seriatim.

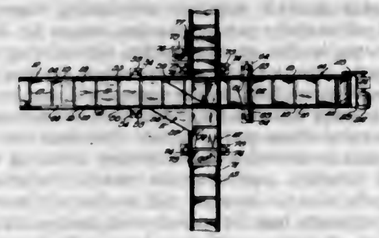
2,736,419
PUSHER BAR RETRACTOR FOR BREAD COOLER
Anthony J. Ferro, York, Pa., assignor to Read Standard Corporation, New York, N. Y., a corporation of Delaware
Application July 15, 1954, Serial No. 443,641
6 Claims. (Cl. 198—75)

1. In a conveying system, supporting means for articles to be conveyed, a plurality of pusher bars movable along said supporting means for advancing successive articles therealong, actuating means for moving said pusher bars, control means for intermittently operating said pusher bar actuating means for pushing said articles along said supporting means in step-by-step movement, and said actuating means including means for retracting said pusher bars from engagement with said articles after each pushing stroke of said pusher bars, said last named means comprising an endless chain and a reciprocating actuator, means carried by said reciprocating actuator engaging



said chain throughout movement of said actuator in one direction only for advancing said pusher bars one step, and means carried by said reciprocating actuator engaging said chain during a portion only of movement of said actuator in the opposite direction for retracting said pusher bars.

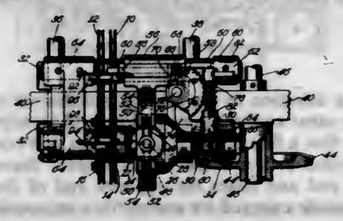
2,736,420
AUTOMATIC COAL TRANSFER CONVEYOR
Timothy F. McCarthy, Indiana, Pa.
Application December 6, 1951, Serial No. 260,215
9 Claims. (Cl. 198—79)



1. In a material transportation system for mines underground, a room conveyor comprising a pan line having a conveying medium movable therealong, a plurality of spaced wheels supporting said pan line for advancing movement along a mine room, a main gathering conveyor extending transversely of said room conveyor and held from movement during advancing movement of said room conveyor, and means accommodating said room conveyor for advancing movement with respect to said main gathering conveyor and lifting said conveying medium and its load out of said pan line for discharge onto said main gathering conveyor comprising an inclined transfer pan nested within said pan line and extending over the top of said main gathering conveyor and having an open bottom in registry therewith, and means supporting and holding said inclined transfer pan from movement with respect to said main gathering conveyor.

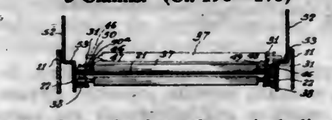
2,736,421
INFEED CONVEYOR FLIGHT ADJUSTING MECHANISM
Leo R. Bell, Snyder, N. Y., assignor to American Machine & Foundry Company, a corporation of New Jersey
Application July 2, 1953, Serial No. 365,587
10 Claims. (Cl. 198—168)

1. In an article conveyor having adjacent endless chains and article engaging flights mounted on each chain at equidistantly spaced points therealong, the flights on one chain being so spaced with respect to the flights on the other chain as to provide article receiving and conveying pockets, a drive shaft, a sprocket fixed to said shaft adapted to drive one of said chains, a bevel gear loosely mounted on said drive shaft, a sprocket fixed to said bevel gear and adapted to drive the other of said chains, a bevel gear fixed to said shaft, a pair of opposed bevel gears coupling said loosely mounted and said fixed bevel gears, stud shafts mounting said opposed bevel gears, an operating arm attached to each of said stud shafts, a cam follower on the free end of each of said arms, a ring cam engaged by said cam followers encir-



cling said shaft and mounted for axial movement relative thereto, and means for moving said ring cam to rock said arms and thereby turn said opposed bevel gears and rotate said shaft and said bevel gear loosely mounted on said shaft to turn said sprockets through substantially equal angular distances whereby to vary the spacing between said opposed flights.

2,736,422
ENDLESS FLIGHT CONVEYOR WITH READILY REMOVABLE FLIGHTS
Robert A. McCallum, Clarendon Hills, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application August 26, 1952, Serial No. 306,383
3 Claims. (Cl. 198—175)

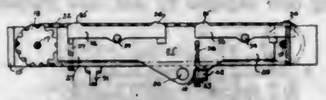


1. In a shuttle car having a frame including side frame members and a floor plate defining a material carrying compartment, an endless conveyor movable along said floor plate and including a pair of driving chains movable along said side members with flights connected to said driving chains and movable thereby, said endless conveyor being characterized by being confined on both the conveying and return reaches thereof between said side frame members, each of said flights extending substantially for the distance between said side frame members, each of said driving chains being essentially rigid in planes parallel to said floor plate, said flights having flight ends of reduced cross sectional area, each of said flight ends being of a length which is approximately twice the width of one of said driving chains, means disposed along said frame for enabling one of said drive chains together with a flight to be lifted from said floor plate and said flight moved in endwise fashion a distance sufficient for disengagement of a flight end with an opposite driving chain, and for enabling the so freed flight to be moved in an opposite endwise direction for disengagement of the first named flight end with the said one drive chain, and means supported by each of said flight ends of reduced cross sectional area for holding the driving chains against said side frame members to prevent material being transported from being wedged between the driving chains and the side frames.

2,736,423
CHAIN CONVEYOR LIFT
Clem Beals, Springfield, Ohio
Application November 21, 1952, Serial No. 321,908
12 Claims. (Cl. 198—185)

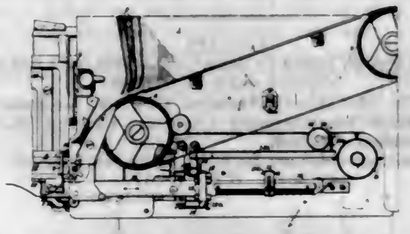
3. Conveyor unloading apparatus, including a relatively fixed support, a conveyor, lever means pivotally mounted

on said support, including a lever in parallel relation to the conveyor pivotally connected at its mid point to said support, independent means on each end of said lever engageable by an object on the conveyor and operable in response to continued motion of the conveyor to lift such object from the conveyor, and yielding means urging said



lever in a direction to elevate one end thereof and to depress the other end, the construction and arrangement being such that a first object is lifted from said conveyor by said elevated end and the weight thereof depresses said elevated end and raises the opposite end of the lever in position to be engaged by and to lift a succeeding object.

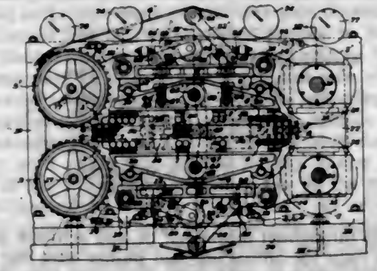
2,736,424
TYPOGRAPHICAL COMPOSING MACHINE
Louis Rossetto, Flushing, N. Y., assignor to Mergenthaler Linotype Company, a corporation of New York
Application September 20, 1951, Serial No. 247,501
10 Claims. (Cl. 199—30)



1. In a typographical composing machine, the combination of a vertically movable assembler elevator wherein selected matrices and spacebands are composed in line, a constantly rotated starwheel for advancing the matrices and spacebands into the elevator, a yieldable assembler slide spring-biased toward the starwheel, a line resistant mounted on the slide for supporting the composed line endwise, an assembler slide brake to normally prevent retrograde movement of the slide, a power operated cam shaft for raising the elevator, and means for releasing the assembler slide brake after a line has been composed to permit the assembler slide through the line resistant to press the composed line yieldingly against the rotating starwheel to straighten up an improperly composed end matrix, said brake releasing means being independent of the composed line and actuated by the power operated cam shaft during the initial period of its rotation and before said shaft starts the raising of the elevator.

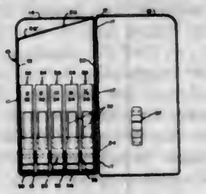
9. An automatic tape control unit for a typographical composing machine equipped with a vertically movable assembler elevator, a constantly rotating starwheel for advancing the matrices and spacebands into the elevator, a yieldable assembler slide against which the matrices are composed and which is spring-biased toward the starwheel, and an assembler slide brake, said automatic control unit comprising a power driven shaft, means for starting and stopping said shaft for a single rotation at each cycle of operation, a cam on said shaft for raising the assembler elevator and a second cam on said shaft for momentarily releasing the assembler slide brake, the two said cams being angularly displaced so that during the rotation of the shaft the second cam releases the assembler slide brake before the first cam starts the upward movement of the elevator, whereby the assembler slide is permitted to press the composed line yieldingly against the starwheel to straighten up an improperly composed end matrix.

2,736,425
FLYING TRACTION VISE
Gustaf L. Fisk, New Fairfield, Conn.; Hazel S. Fisk, executrix of said Gustaf L. Fisk, deceased
Application December 6, 1949, Serial No. 131,419
26 Claims. (Cl. 203—310)



4. A flying traction vise for advancing elongated articles in the direction of the length thereof comprising two spaced apart housings, an upper and a lower shaft bearing in each housing, four shafts, one rotatably mounted in each bearing, the four shafts all having parallel axes, a rotatable traction element carrying member fixed to each shaft, an endless traction element carried by and extending about said members on the upper shafts, an endless traction element carried by and extending about said members on the lower shafts, the two traction elements being generally coplanar and having respectively opposed substantially parallel reaches, means for driving the elements so that at said reaches thereof they move in the same direction at the same speed, bearing actuating means connected with the upper and lower bearings in each housing effective upon operation for moving the bearings equal distances in opposite directions and operating means connected with the bearing actuating means in both housings operating the same synchronously whereby the distance between said reaches of the endless traction elements may be varied while maintaining said reaches at all times equidistant from a fixed pass line extending in the direction of advance of articles acted on by the vise.

2,736,426
DRILL, TAP AND DIE INDEX
Clark H. Hamilton, Whittier, Calif.
Application March 18, 1955, Serial No. 495,191
2 Claims. (Cl. 206—17)



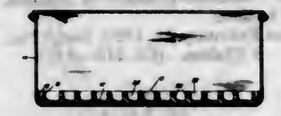
1. A drill case comprising an outer casing having side also upper and lower end walls, a cover hingedly mounted on one of said side walls; an inner case frictionally mounted within said outer case and adapted to be removed therefrom, and having side walls extending substantially parallel with said side walls of said outer casing, and having a bottom wall substantially parallel with said lower end wall of said outer casing, said bottom wall of said inner case being slotted to provide a plurality of fingers; a rod supported by said side walls of said inner case, said rod being disposed in a removable relation relative to said inner case and substantially parallel to the bottom thereof; a plurality of trays pivotally mounted on said rod within said inner case, said trays being arranged in a parallel relation relative to the side walls of said inner case, and adapted to engage said fingers in said bottom wall of said inner case; means formed in said trays defining cavities of proportional size to receive different size drills, a tap and a thread cutting die; and means on said trays to indicate the size of drills and tap in each of said trays.

2,736,427
CUT FLOWER PACKAGE
Charles Trombetta, Marlboro, Mass.
Application January 5, 1955, Serial No. 480,001
1 Claim. (Cl. 206—45.31)



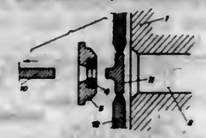
A cut flower package comprising: a substantially rectangular end wall, front and back walls integral with the opposite transverse edges of the end wall and tapered in a direction away from said end wall and one of which has tapered side walls integral with its lateral edges, said tapered side walls being provided along their longitudinal free edges with flaps adapted to be folded into the interior of the container, there being flaps at the larger end of the container adapted to be folded into the interior of the container, means securing the lateral margins of the front and back walls in contacting relation at locations distant from the end wall and near the narrower ends of said front and back walls to leave a slot at the narrower end of the container, an array of flowers arranged within the container with the blooms adjacent the end wall and the stems projecting through and gripped by said slot, the sides and larger end of the container being closed by said side and end walls, said front wall having a window opening through which said flowers are exposed to view, and at least one of the walls having ventilation openings.

2,736,428
GLOVE COMPARTMENT PAD
Harvey R. Wenger, Sabetha, Kans.
Application November 20, 1953, Serial No. 393,387
1 Claim. (Cl. 206—72)



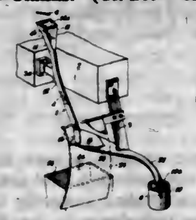
A pad of resilient material insertable in an automobile glove compartment through the front thereof and conforming to the shape of said compartment, upstanding resilient rims integral with the side and rear marginal portions of the pad and yieldingly and frictionally engageable with the walls of the compartment, and a plurality of spaced, parallel ribs integral with the pad and extending longitudinally from the rear marginal rim to the front of said pad, said ribs defining longitudinal channels open at their front ends for the slidable insertion and removal of articles, said ribs having transversely aligned recesses in their upper portions for the reception of additional articles, said rims being of a material thickness and having substantially V-shaped grooves therein for wedgingly receiving and frictionally retaining flat articles.

2,736,429
HOT EXTRUSION OF METALS
Jacques Sejournet, Paris, and Jean Delcroix, L'Isle Adam, France, assignors to Comptoir Industriel d'Etirage et Profilage de Metaux, Paris, France, a corporation of France
Application September 5, 1952, Serial No. 308,064
Claims priority, application France November 8, 1951
1 Claim. (Cl. 207—10)



In the hot extrusion of metals wherein a heated billet is placed in a container, a dummy block is placed in the container at the rear of the billet, the billet is extruded through a die located at the front end of the container by a ram entering the rear end of the container to form an extruded article and to leave a discard portion of the billet and the dummy block in and adhered to the container, the die and container are moved axially apart while the discard portion and dummy block adhere to the container, the extruded article is severed between the die and container to provide a stub on the discard projecting from the container and the dummy block and discard are ejected from the container, the improved method of removing from the die the extruded article which has been severed from the discard, which comprises moving the container with the discard and dummy block adhered thereto and the die closer together until the stub acting as a ram on the severed extruded article disengages it from the die, and thereafter moving the die and container apart to disengage the discard and stub from the die.

2,736,430
PIN SORTER
Mario Ratti, Teaneck, N. J., assignor to Kahle Engineering Co., North Bergen, N. J., a copartnership
Application August 10, 1954, Serial No. 448,945
10 Claims. (Cl. 209—82)

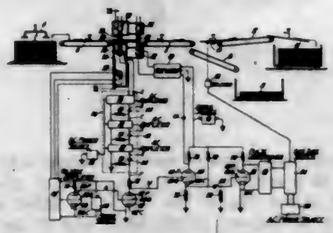


1. A pin sorting device comprising an inclined hollow tube, a rejection plate having an upwardly curving portion along one edge and being located beneath and spaced from the lower end of said tube and said curving portion having its upper edge spaced horizontally from the lower end of said tube whereby pins dropped into the upper end of said tube slide downwardly onto said plate and whereby pins of a given length are retained by said curving portion and pins shorter than said given length pass over the edge of said curving portion.

2,736,431
SHEET PIN HOLE DETECTOR
William E. Coleman and George H. Rendel, Pittsburgh, Pa., assignors to United States Steel Corporation, a corporation of New Jersey
Application February 19, 1952, Serial No. 272,471
15 Claims. (Cl. 209—111)

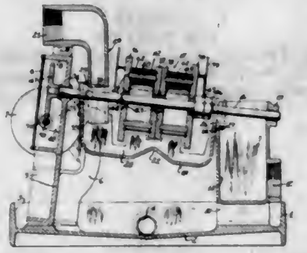
1. Apparatus for detecting pin holes in moving sheets comprising means for moving the sheets along a normal

path of movement, a source of light on one side of the normal path of movement of said sheets, a photosensitive device on the other side of the normal path of movement constructed and arranged for detecting pin holes, means operable by light falling on said photosensitive device for directing sheets with a pin hole therein out of the normal path of movement of said sheets, a second photosensitive device operable by light from said first light source lo-



cated adjacent the first photosensitive device constructed and arranged for preventing operation of said means when there is no sheet between the light and said photosensitive devices, a second source of light on the exit side of said first source, a photosensitive device on the other side of the normal path of movement operable by said second light source, and means operable by light falling on said last named photosensitive device for controlling start of operation of said first named means.

2,736,432
MAGNETIC CLARIFIER
Alfred W. Gardes, Detroit, Mich., assignor to Houdaille-Hershey of Indiana, Inc., a corporation of Indiana
Application February 8, 1951, Serial No. 210,060
17 Claims. (Cl. 210—1.5)



1. In a magnetic clarifier, a tank for flowing liquid, means to deliver contaminated fluid into one end of said tank, spaced ribs extending inwardly from the wall of said tank to cause turbulence in the fluid, rotary magnetized pickup means movable in said tank, certain of said ribs having notches therein, and said pickup means including outwardly extending magnetized members passing through said notches.

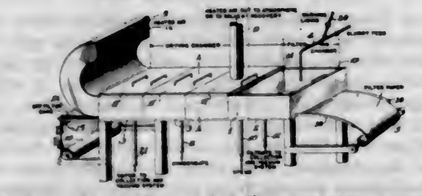
2,736,433
FILTER CARTRIDGE AND METHOD OF MAKING THE SAME
Sylvester J. Fresch, Lebanon, Ind., assignor to Houdaille-Hershey of Indiana, Inc., a corporation of Indiana
Application February 7, 1952, Serial No. 270,421
2 Claims. (Cl. 210—148)

1. In a filter cartridge, a filter medium formed into substantially the shape of a hollow cylinder, a removable smooth surfaced temporary tube of comparatively rigid material inside said cylindrical medium, said tube being of sufficient length to slide out of said medium and a fabric tube between the medium and said temporary tube, one end of the fabric tube being reversely turned and stretched over an end and a short portion of the side of the medium, the other end of the fabric tube being reversely turned and stretched over the entire outer surface of the medium, over the first tube end and tucked in be-



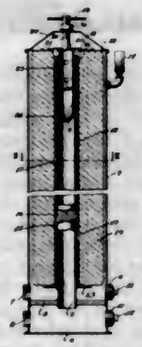
tween the first tube end and the temporary tube, whereby the temporary tube may be forced out of the cartridge when the same is placed in a casing without disrupting the cartridge.

2,736,434
SEMICONTINUOUS COMBINED FILTER AND DRIER
Jesse Craig Yacoe, New Castle, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware
Application August 9, 1952, Serial No. 303,622
5 Claims. (Cl. 210—150.6)



1. A combined filter and drying apparatus comprising a plurality of enclosed intercommunicating sections, each of said sections being provided with a bottom comprising a perforated plate, a filtering medium disposed longitudinally over the said plates, means for advancing and stopping the said filtering medium intermittently, an inlet for the first of the said sections for introducing the slurry to be filtered and liquid for washing the filtered slurry, temporary dams for confining the slurry to the said first section, suction means for drawing off the filtrate from the said section, an inlet and outlet for passing heated air over the subsequent sections, and additional means in the said subsequent sections, said means being in contact with the under side of the said perforated plate.

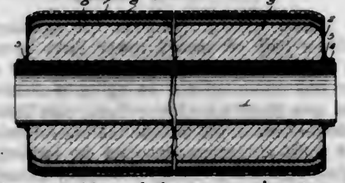
2,736,435
FILTER ASSEMBLY
Alfred W. Gardes and Nicholas Dudchik, Lebanon, Ind., assignors to Houdaille-Hershey of Indiana, Inc., a corporation of Indiana
Application February 21, 1952, Serial No. 272,828
3 Claims. (Cl. 210—183)



1. In a filter assembly, a casing having an outlet opening in the lower end thereof and an inlet opening spaced

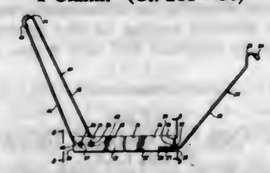
therefrom, an upstanding imperforate center tube having securing means on its upper end mounted in said casing over said outlet opening, a filter cartridge in said casing around said tube and extending thereabove, a hollow nipple having an open lower end and connecting means thereon for engagement with said securing means, said nipple being perforated above said connecting means, a lateral flange carried by said nipple above any perforation therein closing the top of the nipple and establishing a seal with the top of the cartridge, a member fixedly connected to said flange and nipple, means to actuate said member to effect removal and replacement of said nipple, a cover for said casing through which said member extends, and means on said member outside said cover and independently operable to clamp said cover on said casing.

2,736,436
FILTER CARTRIDGE UNIT AND METHOD OF MAKING THE SAME
Sylvester J. Fresch, Lebanon, Ind., assignor to Houdaille-Hershey of Indiana, Inc., a corporation of Indiana
Application February 7, 1952, Serial No. 270,422
2 Claims. (Cl. 210—203)



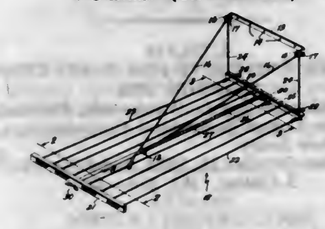
2. A filter cartridge of the progressive-stage type for liquids, including a closed bag of fine earth filtering medium, said bag having an aperture longitudinally therethrough, a smooth surfaced temporary tube of at least the length of said bag in said aperture, a layer of laminated cellulosic sheet material wound around said bag as a core, a layer of felt wound around said layer of cellulosic sheet material, both said layers being porous but said felt layer being more porous than the cellulosic layer, and a fabric covering enclosing all of said cartridge except said temporary tube, whereby said center tube may be slipped out of said cartridge when the cartridge is mounted for use.

2,736,437
CLOTHES RACK
Harold D. Boycott, Huntington Park, Calif.
Application July 31, 1953, Serial No. 371,554
1 Claim. (Cl. 211—86)



A new and improved folding clothes rack which comprises: a central rack portion comprising parallel side walls; a bottom wall connecting said parallel side walls; opposed aperture means within said side walls adjacent to a first end of said rack; notch means in said rack at said first end; rod-like hook arm means positioned through said apertures and extending substantially parallel to said side walls, said hook arm means terminating in hook elements; means carried by said hook arm means for coacting with said notch means in said end of said rack portion to prevent movement of said hook arm means with respect to said central rack portion; shank means pivotally mounted on a second end of said central rack portion removed from said first end, said shank means comprising an upstanding rod portion, a curved section attached to said portion removed from said central rack portion, and a shank portion extending from said curved portion back toward said central rack portion, said shank portion carrying at its lower extremity a plurality of first ratchet means adapted to be positioned adjacent to said side wall portions; and second ratchet means positioned upon said central rack portion adjacent said second end, said second ratchet means being capable of coacting with said first ratchet means on said shank portion to prevent movement of said shank means with respect to said central rack portion.

2,736,438
CLOTHES DRIER
Norman E. Frey, Albany, N. Y.
Application April 29, 1952, Serial No. 284,939
4 Claims. (Cl. 211—104)

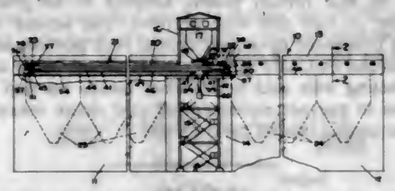


1. In a device of the character described, the improvement comprising a frame supporting member adapted to be secured to a vertical supporting surface; a frame, including an I-shaped structure adapted to support articles; means, including a strut pivotally secured to said member at one end, and to said structure at the other end, to suspend the frame when not in use in a depending, vertical, out of the way position adjacent said wall surface, and in a braced position substantially normal to said surface when in use, but with the inner end of said frame freely movable toward and away from said surface, yet adapted to abut the same at a pre-determined angular position below said supporting member when in use and when out of use; and a cord connecting said member and the inner and outer ends of said structure and adapted freely and swingably to support said entire frame in spaced-apart relation from said supporting member, said cord extending toward the forward end of said frame and being movable substantially reciprocably of its longitudinal axis, whereby to raise and lower the inner end of said frame and to select its angular abutting position against said surface; said structure comprising a rigid central member, and a crosspiece secured to opposite ends thereof, substantially perpendicular thereto and substantially parallel with respect to each other; said central member being tubular, and through which said cord is threaded.

2,736,439
FEEDING AND SEALING APPARATUS FOR BUNKERS, CHUTES, AND THE LIKE
Stanley M. Mercier, Bexley, Ohio, assignor to The Jeffrey Manufacturing Company, a corporation of Ohio
Application June 2, 1953, Serial No. 359,113
15 Claims. (Cl. 214—17)

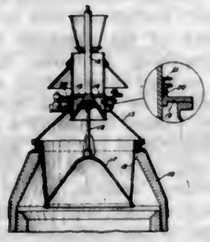
1. Feeder means adapted to shuttle along a longitudinal axis about which the feed opening forming means of material receiving means is arranged, said feeder means including substantially dust tight housing means, means for closing said feed opening means between each of opposite ends of said housing means and the adjacent end of said feed opening means including a pair of seal belts, means mounting each of said seal belts adjacent one of said opposite ends of said housing means, a pair

of reel means each adapted to carry one of said seal belts whereby one of said belts winds on one of said reels and the other of said belts winds off of the other of said reels as said feeder housing means shuttles along



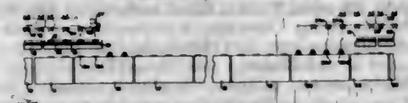
said longitudinal axis, and means urging said reels to wind said seal belts thereon whereby said reels may rotate at different speeds as said feeder housing means shuttles along said longitudinal axis.

2,736,440
POSITIONER AND DRIVE FOR BLAST FURNACE DISTRIBUTOR
Charles Steckle and Roy L. Wingenroth, Pittsburgh, Pa., assignors to United States Steel Corporation, a corporation of New Jersey
Application October 26, 1954, Serial No. 464,792
3 Claims. (Cl. 214—37)



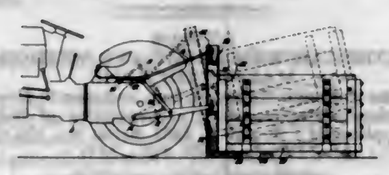
1. In a blast furnace which includes a spider fixed adjacent the upper end of the furnace, a distributor supported on said spider for rotation on a vertical axis, a ring gear carried by said distributor, a pinion meshing with the outside of said ring gear, and drive means for said pinion supported on said spider, the combination with said ring gear of a positioner comprising a support fixed with respect to said spider above said pinion and extending over said ring gear, at least one bearing carried by said support, and a depending backing roller journaled in said bearing and engaging the inside of said ring gear opposite said pinion.

2,736,441
PROCESSING MACHINES FOR ELECTROPLATING AND LIKE OPERATIONS
Paul A. Hauck, Union, N. J., assignor to Hanson-Van Winkle-Munning Company, Matawan, N. J., a corporation of New Jersey
Application November 15, 1954, Serial No. 468,686
9 Claims. (Cl. 214—89)



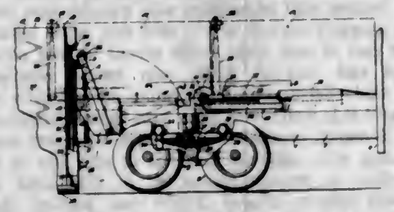
1. A processing machine, which comprises carriers for workpieces to be treated, a series of treatment stations, an elevator for lowering the carriers to and raising them from the stations, the elevator having horizontal members extending along the stations and providing supports for horizontal movement of the carriers, lifter elements on the elevator at the stations operable to raise individual carriers selectively with the elevator, a conveyor for advancing the carriers along the supports, the conveyor including a chain and means on the chain engageable with the carriers raised by the lifter elements, and means independent of the conveyor at at least one station for moving individual carriers horizontally into alignment with carrier-engaging means at rest at said station during movement of the carriers with the elevator at said station.

2,736,442
LIFT ATTACHMENT FOR TRACTORS
Lloyd R. Westholt, Lee's Summit, Mo., assignor to Dwight Manufacturing Company, Inc., Lee's Summit, Mo., a corporation of Missouri
Application August 30, 1952, Serial No. 307,258
1 Claim. (Cl. 214—130)



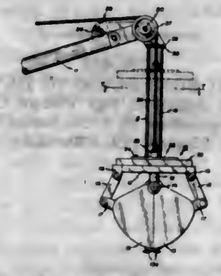
For a tractor having hydraulic lift mechanism provided with a pair of spaced lower links mounted for swinging movement on a common horizontal axis, and an upper link mounted for swinging movement on a horizontal axis above said lower links, said links extending beyond the rear of the tractor, the improvement which comprises a lift attachment adapted for receiving a box including an upstanding frame; a laterally extending support on the frame, said frame having a pair of upright, parallel legs in spaced relation on the inner side of said lower links, an upwardly and inwardly extending framepiece integral with the uppermost end of each leg respectively, said framepieces terminating in upright, parallel end portions adapted to receive said upper link therebetween, said support comprising a pair of spaced, parallel beams extending from the frame oppositely to the links, said beams being normal to the legs at the lowermost end of the latter; an inclinded brace interconnecting the uppermost end of each framepiece respectively with corresponding beams; and means on said frame for each link respectively for pivotally connecting the links to the frame, said means including a pivot pin joining the upper link and said end portions, a pair of oppositely-extending pintles, one for each of said lower links respectively, each pintle joining one leg of the frame with a proximal brace, said pintles and said pin being parallel with the swinging axes of the links, and the pintles being at the uppermost ends of said legs, whereby the attachment may be shifted to and from a position resting on the ground with said beams horizontally disposed and said frame in a vertical position.

2,736,443
LOADING AND UNLOADING DEVICE FOR VEHICLES
Ralph E. Seidle, Martinsville, Va.
Application March 5, 1951, Serial No. 213,872
15 Claims. (Cl. 214—146.5)



1. A loading and unloading device for vehicles comprising fluid pressure means pivotally mounted on a vehicle, a load-supporting member carried and reciprocable by said fluid pressure means, means connected to said member for causing said member to move in an arcuate path during reciprocation thereof, and means for enabling said member to move in a substantially straight path independently of said arcuate movement.

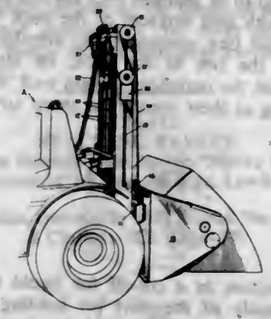
2,736,444
IMPACT-TYPE MATERIAL HANDLING CLAM-SHELL APPARATUS
Luke E. Smith, Denver, Colo.
Application July 24, 1953, Serial No. 370,054
2 Claims. (Cl. 214—657)



1. Material handling equipment comprising a bucket of the clamshell type including a plurality of scoops depending from a connecting member and pivoted thereon, means attached to said connecting member for lifting and closing said bucket, a first head member above said bucket and having an opening to afford passage of said lifting means, a plurality of bars each pivoted on said head and on a respective scoop of said bucket remote from said connecting member, a second head member reciprocally disposed above said first head member, spline means for preventing relative rotation of said first and second head members, a readily detachable plate secured to the top of said second head member, a pair of lifting cables attached to said plate and arranged to maintain a predetermined angular position of said plate about a vertical axis, means for attaching said plate to said second head member in any one of a plurality of angular positions whereby the angle of said clamshell with respect to said predetermined position may be adjusted about its vertical axis, and means utilizing said cables for lifting said second head member from said first head member whereby it may be released and dropped as a hammer to strike said first head member and drive the lips of said bucket into the material to be handled, the force of the hammer blows being transmitted through said bars to said bucket.

2,736,445
FLEXIBLE LINE GUIDE FOR ELECTRIC TRUCK
Edward D. Hoban, Philadelphia, Pa., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn., a corporation of Connecticut
Application April 15, 1952, Serial No. 282,494
2 Claims. (Cl. 214—701)

1. In a truck of the class described, a main frame having primary uprights, secondary uprights sliding vertically on said primary uprights, a load carriage sliding vertically on said secondary uprights forwardly of said uprights relatively to said main frame, a load manipulator on said load carriage, a source of power rearwardly of said uprights, a flexible line for carrying power from said source forwardly to said load manipulator on said load carriage, a reel mounted on a primary upright to rotate on a horizontal axis, a mounting member mounted to slide vertically on said primary upright below said reel, a second reel carried on said mounting member and rotatable on a horizontal axis, said flexible line reeved around both of said reels intermediate the source of power and the load manipulator and of that length so that said second reel lies in a raised position relatively to the first reel when said carriage and secondary uprights are in their lowest position relatively to the primary uprights, said second reel moving with its mounting member to a



lowermost position when said carriage is raised relatively to said primary uprights, and said second reel lying in an uppermost position when both said secondary uprights and carriage are raised fully relatively to said primary uprights.

2,736,446
NIPPLE CONSTRUCTION
Paul A. Raiche, North Providence, R. I., assignor to Davol Rubber Company, a corporation of Rhode Island
Application September 17, 1952, Serial No. 309,982
6 Claims. (Cl. 215—11)

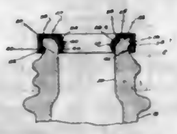


1. A nurser combination, including a feeding bottle having a threaded neck, a nipple having a cylindrical body, a reduced neck portion, and a feeding tip, said nipple body having an annular flange extending from the lower portion thereof and inclining downwardly and having a peripheral portion seated on the bottle neck, and a retainer cap threaded on the bottle neck and having an outer peripheral portion pressing the nipple flange downwardly on the bottle neck and an inner annular portion engaging the upper surface of the nipple flange to press the downwardly inclined nipple flange towards a horizontal position on the bottle neck, said nipple flange having an air vent passage, and said nipple body having a depending annular skirt of triangular cross-section and having a thin flexible edge positioned at an acute angle to the nipple flange for contacting the interior wall of the bottle with increasing pressure as the cap is threaded down, whereby the bottle is normally sealed against air inflow and the thin skirt edge moves under suction pressures to permit air inflow, through the flange air vent.

2,736,447
COMBINED SEALING RING AND POUR-OUT FITMENT
Robert F. De Brock, Maumee, Ohio, assignor to Owens-Illinois Glass Company, a corporation of Ohio
Application August 31, 1953, Serial No. 377,334
5 Claims. (Cl. 215—40)

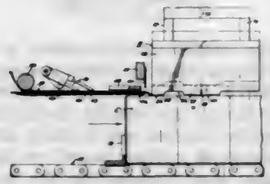
4. In combination, a bottle having a neck portion defining an axial filling and discharge opening, said neck portion including a circumferential outwardly facing rim having a surface disposed in a plane normal to the axis of the neck, an external cylindrical surface having a

lower margin, an annular inwardly inclined shoulder contiguous to said margin and an annular inwardly inclined and curved surface merging with the inner margin of the rim, a linerless closure attachable to the neck portion, a resilient combined sealing ring and pour-out fitment adapted to be snapped over the rim and into snug engagement with said surfaces of the neck in proximity to the rim, said ring comprising an annular upper wall lying against the rim of the neck, an attaching skirt depending from the periphery of said wall, said wall and skirt providing at their juncture a sharp circumferential



corner to function as a cut-off for liquid flow, a bead formed internally of the skirt for holding engagement with said inclined shoulder and an annular internal flange depending from the inner margin of said upper wall and snugly engaging the aforementioned inner surface of the neck portion, a major lower portion of that surface of the annular internal flange facing the axis of the neck opening being curved generally downwardly and inwardly and thence downwardly and outwardly to a point of merger with that surface of the flange in contact with the neck of the container.

2,736,448
STAMPING MACHINE
Robert G. Winn, Oak Park, Ill., assignor to American Decalcomania Company, Inc., Chicago, Ill., a corporation of Illinois
Application October 20, 1952, Serial No. 315,635
8 Claims. (Cl. 216—30)



8. In an apparatus for affixing stamps upon a series of adjacent packages intermittently advancing step by step along a track, a presser member movably mounted for cyclic movement toward and away from said packages, means for moving said presser member in synchronized relation with the step-by-step advancement of said packages, said presser member being equipped with both a tacking head and a securing head spaced therefrom, and means for placing a stamp upon each of said packages in their advancement along said track, said tacking head being operative to engage and partially secure a stamp upon a package during one cycle of said presser member and said securing head being operative to completely affix the partially secured stamp upon said package during the next cycle of said presser member.

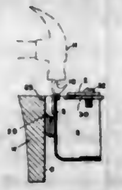
2,736,449
TANK CONSTRUCTION
Orlando J. Bruderer, San Francisco, Calif.
Application January 21, 1953, Serial No. 332,209
1 Claim. (Cl. 220—1)

In a device of the character described, a horizontally disposed cylindrical tank having a relatively thin wall structure, the ends of said tank having internal parallel braces extending thereacross and secured thereto, a supporting bar horizontally arranged beneath and extending parallel to the longitudinal axis of said tank, cross members secured to the ends of said bar and at right angles thereto, and lifting bars connected to said cross



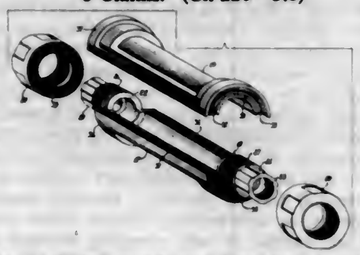
members and extending upwardly parallel to the vertical ends of said tank whereby said tank and bars can be elevated as a unit.

2,736,450
OUTLET BOX SECURING DEVICE
Earl B. Atkinson, Bay Village, Ohio
Application September 20, 1951, Serial No. 247,440
1 Claim. (Cl. 220—3.4)



A combination with an outlet box and a wall having an opening adapted to receive the outlet box, the box having projections adapted to lie against the outer face of the wall, and the opening having two opposite sides parallel with and spaced from the sides of the outlet box, of a plurality of fastening devices comprising identical anchoring members adapted to be forced between the wall opening surface and the box, and each of said members being formed of a single narrow strip of flat spring metal and having at one end a hook engaging an outer side edge of the outlet box, and having a straight portion extending inwardly along a side of the box, the strip beyond the straight portion being curved outwardly in the form of a loop, the outside dimension of which is of less than the normal distance between the box and the wall opening, and the free end of the loop having a portion sloping away from the box at an acute angle and of a length substantially one-half of the width of the loop, the direction of the slope being such that said portion may be wedged inwardly toward the box as the anchoring element is forced into securing position.

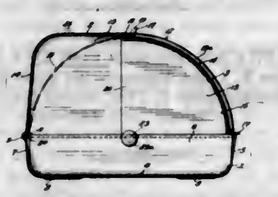
2,736,451
PULL BOX FOR ELECTRICAL CONDUIT LINES
Daniel A. Fogg, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a corporation of New Jersey
Application March 17, 1952, Serial No. 276,956
5 Claims. (Cl. 220—3.8)



1. An explosion-proof container for electrical apparatus comprising a body trough shaped in cross section

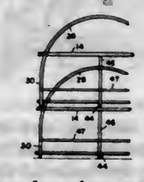
and having cylindrical necks at opposite ends, thread means formed on the peripheral surfaces of said necks, one side of said body between said necks forming an opening providing access to the interior of said body, a cover for said opening and engaging said body at longitudinally extending abutment surfaces formed on said body at the edges of said opening and on said cover, respectively, said abutment surfaces being shaped to provide a flame-proof path of greater length than the thickness of the body and the cover at said abutment surfaces, said cover and said body together providing a portion of larger diameter than said reduced necks longitudinally inwardly of said necks and having formed thereon a first circumferentially continuous abutment surface adjacent each of said necks, and a nut threaded on each neck, each said nut having a second circumferentially continuous abutment surface formed thereon complementary to and engaging with said first abutment surface upon axial advance of said nut on said neck to lock said cover to said body member and to form a flame-proof path between said first and second abutment surfaces, said neck having openings extending therethrough adapted to receive conduits, whereby said body member may be permanently received in a conduit, said first and second abutment surfaces constituting radially extending confronting surfaces having a plurality of concentric radially spaced ribs and recesses formed therein.

2,736,452
RECEPTACLE FOR BAKERY PRODUCTS
Nathan W. Roop, Columbus, Ohio, assignor to Columbus Plastic Products, Inc., Columbus, Ohio, a corporation of Ohio
Application October 21, 1952, Serial No. 315,905
1 Claim. (Cl. 220—4)



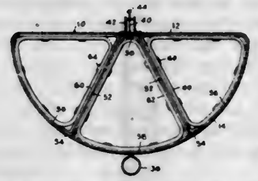
A plastic bread box comprising an integral base section including a bottom wall and upstanding front, side and back walls; an integral upper hood section including a generally arcuate front wall, a generally flat top wall merging into and forming a continuation of said arcuate front wall and generally vertically arranged back and side walls, the back and side walls of said hood section being secured to the back and side walls of said base section, and said base and hood sections defining a compartment for the reception of bread loaves, the front wall of said hood section being formed with a slotted region defining an access opening extending substantially from the upper edge of the front wall of said base section to the top wall of said hood section and the top wall of said hood section adjacent said access opening being formed with a downturned marginal flange extending transversely of said access opening; a pair of opposed longitudinally aligned trunnions formed integral with the opposite side walls of said base section and projecting inwardly thereof above the bottom wall of said base section; and a swinging cover member positioned within said hood section and formed with a generally arcuate outer wall terminating on each side thereof in depending perpendicularly related webs, the webs of said cover member being formed with bearing openings encircling said trunnions and said trunnions supporting said cover member for swinging movement between positions opening and closing said access opening, the outer wall of said cover member being formed along the rearward edge thereof with an integral radially and outwardly offset lip adapted to slidably engage the downturned flange of the top wall of said hood section upon closure of said cover member, and thereby to provide a substantially tight fit between said lip and said flange when said cover member is closed, the body portion of the outer wall of said cover member being spaced radially inwardly relative to the flange of said hood section to prevent abrading of the outer surface thereof against said flange during swinging movement of said cover member.

2,736,453
STACKING BASKET
George Lewis Russell, Fair Haven, Mich.; Emily Louise Russell, executrix of said George Lewis Russell, deceased
Application October 8, 1951, Serial No. 250,213
5 Claims. (Cl. 220—19)



1. A wire basket adapted to stack with like baskets comprising a top border frame, wire handles secured tangentially to the outer surfaces of the mid-portion of the end sections of said top border frame, said handles each including a loop portion extending above the border frame and end support portions extending downwardly from the border frame to the bottom of the basket, the innermost surfaces of the end support portions of each handle adjacent the bottom of the basket being spaced apart a distance substantially equal to the spacing between the laterally outer surfaces of the handle portion directly above said border frame, the handle portion and end support portions of each handle being disposed substantially in a vertical plane, the handle portions of each basket being snugly receivable between the end support portions of a superimposed basket in a stack, a wire runner extending longitudinally of the basket at its bottom and midway between its sides, said runner having its ends upturned, the longitudinally outer surface of each of said upturned ends being located substantially in a plane tangent to the longitudinally inner surfaces of the adjacent pair of end support portions.

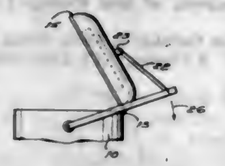
2,736,454
COMPARTMENTED CLOTHES HAMPER
Mildred G. McConnell, Oakland, Calif.
Application March 24, 1953, Serial No. 344,285
2 Claims. (Cl. 220—20)



1. A clothes hamper comprising: an outer receptacle having a flat back wall and an arcuate front wall cooperating to impart a semi-circular cross sectional configuration to said receptacle; a horizontally disposed U-shaped brace positioned within said receptacle and having its bight abutting and secured to the intermediate portion of said back wall, the legs of said brace extending in a diverging direction from said bight and having their free ends engaging and secured to the adjacent portions of said front wall, said brace subdividing the outer

receptacle into a plurality of sections each of approximately triangular cross section; a container for clothes and the like removably mounted in each of said sections; and separable fastener means spaced circumferentially about each of said containers and about the walls of the respective sections, for removably suspending the containers within their associated sections.

2,736,455
HOLDERS
Martin Rosen, Flushing, N. Y.
Application March 29, 1954, Serial No. 419,431
5 Claims. (Cl. 220—23)



3. A holder for a material and implements for handling the same, comprising, in combination, an open-top container for holding the material therein; a first cover located over said open-top container for closing the latter; a first hinge interconnecting a first peripheral portion of said first cover with an upper portion of said container; a second cover located over said first cover and defining therewith a compartment for implements; and a second hinge interconnecting said second cover with a second peripheral portion of said first cover spaced from and located opposite said first peripheral portion, so that when said second cover is turned about said first hinge said first cover turns with said second cover to give access to said container and when said second cover is turned about said second hinge said second cover turns with respect to said first cover to give access to said compartment; a substantially U-shaped handle having opposite free end portions pivotally connected respectively to upper outer portions of said container each of which is located substantially midway between said first and second peripheral portions of said first cover; and a bar pivotally connected at one end to a central portion of said handle and at an opposite end to a central portion of said second cover so that when said handle is vertical, said bar will lie in the same vertical plane as the handle.

2,736,456
SHUTTER FOR EGG CARRIER
Hilda B. Clifford, Eckelson, N. Dak.
Application June 25, 1954, Serial No. 439,311
1 Claim. (Cl. 220—31)



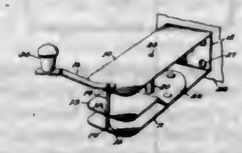
In an egg carrier, an elongated bottom shutter member having a plurality of openings therein, a pintle pin secured to said shutter member adjacent said openings, a plurality of closure plates hingedly secured to said pintle pin for swinging upwardly to underlie and close the openings and gravity actuated to swing downwardly to open said openings, a latching tongue secured to and depending from said shutter adjacent each of its openings, and an upwardly opening U-shaped clamp member on each of said closure plates adapted to frictionally engage an associated tongue and maintain the plates in closed position when said closure plates are swung upwardly.

2,736,457
SPRING LOADED SEALING MEANS
Charles Warren Hurley, Gaithersburg, Md., assignor to the United States of America as represented by the Secretary of the Army
Application December 10, 1954, Serial No. 474,631
1 Claim. (Cl. 220—40)



In a closure for an opening in a container, the combination with actuating means for moving the closure into and out of an opening sealing position; of a dished sealing plate mounting a sealing gasket, said plate having an endless side wall formed with a radially inwardly facing annular channel, a spring disc of hollow frustroconical configuration, said disc having a base edge loosely seated in said channel to connect said spring and sealing plate together, said spring having a frustrum edge, said actuating means having a central portion formed to provide a hollow boss integral with said actuating means and depending therefrom axially thereof, a radially outwardly directed annular groove formed in said boss, and said frustrum edge of said spring disc being loosely seated in said groove to connect said spring and actuating means together.

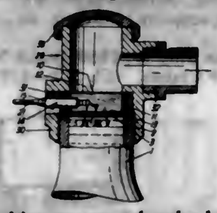
2,736,458
WALL TYPE CAN OPENER FOR KEY TYPE CANS
Arthur E. Lines, Farmersville Station, N. Y.
Application June 4, 1954, Serial No. 434,477
3 Claims. (Cl. 220—52)



1. In a wall bracket can opener, the combination which comprises a U-shaped bracket having spaced horizontally disposed arms extended from upper and lower ends of a vertically disposed base, a horizontally disposed partition spaced from and mounted upon one of said arms and positioned between the arms, said arms and partition having aligned openings in the extended ends, a shaft having an open slot in the lower end rotatably mounted in the openings of the arms and partition, and a crank having a knob on the extended end secured to the upper end of the shaft.

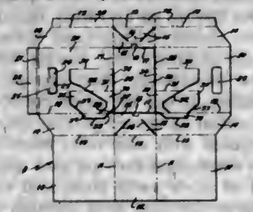
2,736,459
MEANS FOR THE RELEASE OF COMPRESSED FLUIDS FROM CONTAINERS
Reginald W. J. Cockram and Neil Sullivan, Brentford, and Cyril Frank Wilkinson, Winsford, England, assignors to The Pyrene Company Limited, Brentford, England
Application February 4, 1953, Serial No. 335,008
Claims priority, application Great Britain February 8, 1952
12 Claims. (Cl. 220—89)

1. A container for fluid under pressure comprising a container body having an outlet, closure means for the outlet, ignition means, and chemical heat producing means in juxtaposition to the closing means and adapted to be



ignited by the ignition means, whereby heat is produced opening the closure means for the release of the fluid.

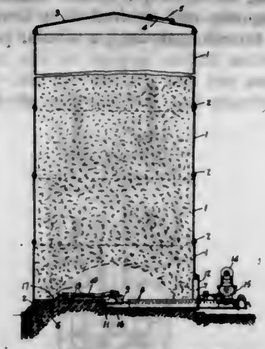
2,736,460
BOTTLE CARRIER
Robert J. Schoknecht, Olivette, and Edwin J. Spiegel, Jr., Webster Groves, Mo., assignors to Gaylord Container Corporation, St. Louis, Mo., a corporation of Maryland
Application April 10, 1952, Serial No. 281,544
1 Claim. (Cl. 220—113)



A bottle carrier comprising a unitary cardboard structure having two bottle receiving open top units each provided with an outer side wall and an inner side wall, each side wall being integrally united with its outer wall by opposite end walls, oppositely disposed transverse compartment forming partitions struck out from each inner side wall intermediate its side edge portions downwardly through each lower marginal edge thereof thus defining opposite openings in the side walls and forming along with the outer walls and end wall portions an end compartment at each end of each unit, a substantially rigid one-piece bottom wall integral with the lower ends of said outer walls, a foldable section at each end of the bottom wall consisting of adjacent foldably connected intermediate and end triangularly shaped flaps, the intermediate flap being connected to the bottom wall and the end triangular shaped flaps to the end walls, and each intermediate flap being in face contacting relation to the adjacent interior bottom wall with the end flaps superposed thereon with one end flap disposed only in the bottom of each end compartment of each unit, a central longitudinal bottle protecting panel coextensive in length and width with the bottom wall and integrally and foldably connected to the lower marginal edge of one of said compartments of one inner side wall and also connected to a lower corner portion integral with the said one side wall thus providing a free marginal bottom edge for the panel between the connected portions and which free marginal edge of the panel is substantially equal in width to that of the opening in said one side wall, said panel being vertically disposed in substantially parallel relationship between said inner side walls and over the openings therein to protect the bottles, and the lateral edges of said panel extending substantially into the same plane as the end walls.

2,736,461
METHOD OF UNLOADING STORAGE STRUCTURES
Erwin G. Dueringer and Wesley G. Martin, Milwaukee, Wis., assignors to A. O. Smith Corporation, Milwaukee, Wis., a corporation of New York
Application June 11, 1952, Serial No. 293,014
7 Claims. (Cl. 222—1)

1. The method of removing stored material from the bottom of a storage structure which comprises dislodging and removing a central portion of the bottom layers of the material by an unloading apparatus disposed within said structure to establish an upwardly extending arch in the remaining material, and subsequently dislodging and



removing a further outward portion of the bottom layers of the remaining material by said apparatus to thereby decrease the width of the base of said arch and permit the remaining material to feed downwardly at a rate substantially corresponding to the rate of removal of the material.

2,736,462
INFLATING DEVICE
Albert Manhartsberger, Orange, N. J., assignor, by mesne assignments, to Worcester Pressed Steel Company, Worcester, Mass., a company of Massachusetts
Application July 18, 1952, Serial No. 299,626
3 Claims. (Cl. 222—5)

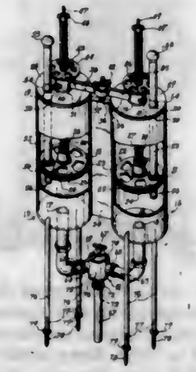


1. A compressed gas cartridge inflating device comprising a housing having a fluid passage therethrough with inlet and outlet ends, the surface of the inlet end of the housing passage threaded to receive a conventional gas cartridge with an externally threaded neck, a portion of the housing passage of reduced diameter forming a shoulder, an apertured resilient gasket member abutting against the outward side of the shoulder so as to be compressed thereagainst by the end of the neck of the cartridge, means providing a transversely extending recess in the housing and opening through a portion of the threaded inlet surface, and resilient material in the recess and extending outwardly through a portion of the threaded surface so as to be compressed by the threaded neck of the cartridge, whereby the cartridge is held in position by the combined resilient action of the gasket and the resilient material.

2,736,463
ADJUSTABLE MEASURING AND DELIVERY DEVICE FOR MILK OR OTHER LIQUID
Louis Michael Levine, Brooklyn, N. Y., assignor to Mejur Corporation, New York, N. Y., a corporation of New York
Application September 16, 1952, Serial No. 309,774
8 Claims. (Cl. 222—26)

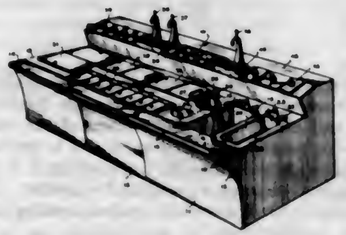
1. In a machine capable of filling containers with a measured quantity of fluid, two closed measuring tanks

each having an inlet and outlet opening in its lower end and a top opening in the upper end, a fluid tight fitting piston slidable in each tank, each of said pistons having two plates with a resilient seal therebetween, two externally threaded tubular piston rods, each having one end abutting an upper plate, two smaller diameter rods each having one end secured to a lower plate and an upper end extending through a tubular piston rod, means



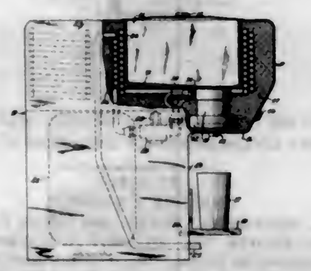
removably secured to the upper end of each of the smaller rods to bear against tubular piston rods and force the plates together to extend the resilient seal therebetween and secure a liquidtight seal in the tanks, two positioning wheels each having a threaded opening engageable with the tubular piston rod for piston location within the tanks, and a fixed bearing support for each wheel rotatably to hold the wheels above the tanks.

2,736,464
SODA FOUNTAIN
George M. Walton, Thomson, Ga., assignor to Darrell M. Johnson, Thomson, Ga.
Application April 25, 1952, Serial No. 284,401
6 Claims. (Cl. 222—129.1)



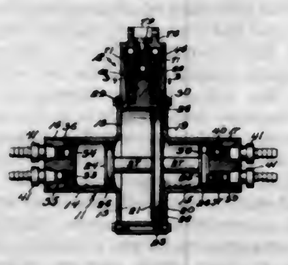
1. A soda fountain unit comprising a cabinet having a rear wall surface curving rearwardly adjacent its upper edge and providing an overhanging ledge defining a work table, spaced stepped upper surface areas defining a serving counter along the front of the cabinet and a work table at a lower elevation along the rear of the cabinet, dispensing pumps having inclined upper surfaces with forward edges adjacent the rear of the serving counter and rear edges at a lower elevation, multiple temperature compartments along the intermediate area of the cabinet, a series of receptacles along the rear portion of said unit adjacent the length of said work table, sinks adjacent the forward edge of said work table near one end of the same, said work table having a raised rim around the major portion of its margin providing a sluiceway from said work table into one of said sinks so that liquid and solid matter on said work table may be discharged into such sink.

2,736,465
BEVERAGE DISPENSER
Carl C. Bauerlein, Mukwonago, Wis., assignor to The Dole Valve Company, Chicago, Ill., a corporation of Illinois
Application July 18, 1950, Serial No. 174,441
19 Claims. (Cl. 222—129.2)



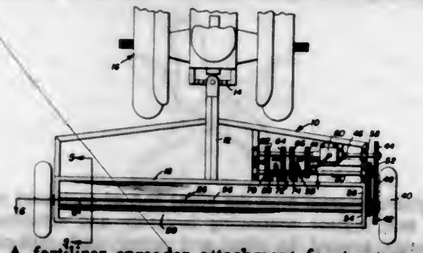
1. In a constant flow valve, a valve chamber, a member in said chamber having an upwardly facing valve element thereon, a flow characterizing head seated in the upper portion of said chamber and having an open portion forming a flow passageway therethrough, a flexible diaphragm extending across the open portion of said head and having a central apertured portion disposed above and in direct alignment with said valve member, the head of liquid on said diaphragm moving said diaphragm toward or allowing it to move away from said valve element to reduce or enlarge the flow area through said diaphragm and provide a uniform flow through said diaphragm regardless of the head thereon, and a jet above said diaphragm directing an aspirating stream on said apertured portion of said diaphragm and mixing with fluid passing through said flow passageway and also scavenging said head and apertured portion.

2,736,466
LIQUID METERING AND DISPENSING DEVICE
Joseph J. Rodth, Swansea, Mass.
Application October 11, 1950, Serial No. 189,573
5 Claims. (Cl. 222—136)



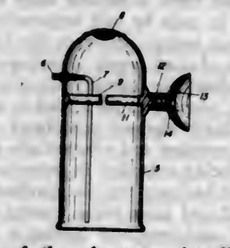
1. A metering device for dispensing a measured quantity of two liquids comprising a body having walls forming adjacent cylinders opening one into the other, said cylinders having ports for the passage of the liquid into and out thereof, valve means for controlling the direction of flow of the liquid through said ports, a piston in each of said cylinders reciprocal therein and connected to each other to be reciprocated in unison in the same direction where upon movement of said pistons in one direction said cylinders will be filled with the said liquids and upon movement in the other direction, said liquids within said cylinders will be discharged therefrom in predetermined quantities, said pistons being connected to each other by a stem of a diameter less than said pistons whereupon liquid in one of said cylinders will flow in the other cylinder in the rear of the piston therein during the reciprocation of said pistons.

2,736,467
FERTILIZER SPREADER, INCLUDING VARIABLE SPEED AUGER
Eugene M. Durand, El Centro, Calif.
Application February 19, 1952, Serial No. 272,414
4 Claims. (Cl. 222—177)



1. A fertilizer spreader attachment for tractors comprising a wheeled frame, a hopper supported on the frame and having a bottom provided with discharge openings, a power driven cylinder in the hopper, bearings supported on the frame at the ends of the hopper, tubes fitted in the ends of the cylinder and journaled for rotation in the bearings, a plurality of circumferentially spaced half tubes having their convex surfaces fixed to the outer periphery of said cylinder, said frame including a ground wheel, and a variable speed connection between said ground wheel and said cylinder, said variable speed connection including a pair of spaced parallel shafts rotatably supported on the frame, one of said shafts being connected to the wheel and the other of said shafts being connected to the cylinder, a group of various sized sprockets keyed on the said one of said shafts, a second group of various sized sprockets journaled on the said other shaft, chains connecting the sprockets of the first group to the sprockets of the second group, and clutch elements slidably keyed on said other shaft for engaging the sprockets of the second group.

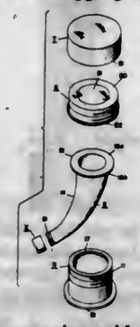
2,736,468
LIQUID SOAP DISPENSER
Everill J. Hills, San Francisco, Calif.
Application October 5, 1953, Serial No. 384,023
1 Claim. (Cl. 222—180)



In a device of the character described, a flexible receptacle having a stub-like projection formed thereon, a suction cup mounted on said stub, and a pair of opposed projections mounted in said receptacle and in alignment with said stub, whereby pressure on the opposite side of said receptacle and in the direction of said stub will cause said projections to move against each other to prevent the collapse of said receptacle.

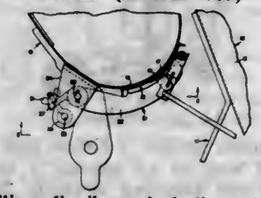
2,736,469
SEALING AND POURING CLOSURES
Ashton K. Stone, Merion, Pa.
Application April 15, 1952, Serial No. 282,313
6 Claims. (Cl. 222—529)

1. In combination with a container having a threaded neck extending exteriorly of the container, a sealing and pouring closure for said container comprising a pouring spout of deformable material, said pouring spout having an open inlet end with an integral flange of said material extending outwardly from said open inlet end, said spout for shipping of the container extending into said neck and for pouring from the container extending outwardly from said neck, and a screw cap having a threaded side section for removably threadably engaging the neck of the container, said screw cap having a closed top formed by a rim section, and an integral central section defining and bounded by said rim section, said rim section of the screw cap for both said shipping and pouring positions



of the spout directly engaging said deformable flange of the spout and squeezing it against the container neck to provide a tight seal for the container, said integral central section of the screw cap overlying and closing off the spout when the spout is in shipping position, said integral central section of the screw cap being severed from the rim section after shipment of the container, then to provide an opening through which the spout extends in pouring position with said deformable flange of the spout squeezed against the neck of the container by the rim section of the screw cap.

2,736,470
FERTILIZER DISTRIBUTOR
Robert E. Loomans, Mayville, Wis., assignor to John Deere Van Brunt Company, Horicon, Wis., a corporation of Wisconsin
Application February 1, 1955, Serial No. 485,550
4 Claims. (Cl. 222—559)

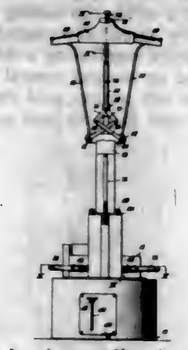


1. In a fertilizer distributor including a hopper having discharge openings in the bottom portion thereof, a discharge control gate slidably disposed along the underside of said hopper, a plurality of levers pivotally connected with said hopper bottom and each including an end portion having slide-engaging means, and means connected with the other end portion of each of said levers for forcing said first-mentioned end portion against the slide to hold the latter against the hopper bottom.

2,736,471
REVOLVING TYPE GARMENT FINISHER HAVING ADJUSTABLE SHOULDER STRUCTURE
Nolan C. Jackson, Wichita, Kans., assignor to Wichita Precision Tool Company, Inc., Wichita, Kans., a corporation of Kansas
Application February 15, 1954, Serial No. 410,296
18 Claims. (Cl. 223—67)

1. In a garment finisher, a support; a frame member; means mounting the member for reciprocation on the

support; a neck element mounted on the member for reciprocation therewith; an elongated, flexible bag carried by said element; retainer means connected with the support; fastener means joining said retainer means to the bag; resilient means engaging the member for yieldably



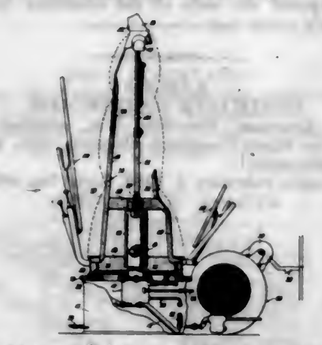
biasing the member in one direction away from the support to hold the bag longitudinally taut; and an expander mounted on the support and secured to the bag between the fastener means and the support for holding the bag transversely taut.

2,736,472

GARMENT FINISHING MACHINE HAVING AUTOMATIC FLUID FLOW CONTROL

Nolan C. Jackson, Wichita, Kans., assignor to Wichita Precision Tool Company, Inc., Wichita, Kans., a corporation of Kansas

Application February 17, 1955, Serial No. 488,943
5 Claims. (Cl. 223—67)



1. In a garment finisher, a hollow base having a top wall provided with an air passage; a frame mounted on said base and extending upwardly from said wall for supporting an inflatable, garment-receiving bag of permeable material in communication with said passage; structure communicating with the base for producing artificial currents of air and directing the same through said passage into the bag on said frame; steam control means having a discharge within the bag above the wall; and a closure valve for said passage movable to an open position under pressure of air emanating from said structure, said valve being floatingly mounted on the top wall for gravitational movement to a position closing the air passage.

2,736,473

STOCKING DRYER AND STRETCHER

Wayne William McLean, Vancouver, British Columbia, Canada

Application November 27, 1953, Serial No. 394,790
2 Claims. (Cl. 223—75)

1. In a stocking dryer and stretcher frame, the combination of two jointly angularly disposed members, co-incident and co-operative medially of the frame, the periphery of each of said members substantially defining the outline of a foot member of a flattened stocking; alternate means for depending the frame, each such means comprising an arcuate appendage formed by a



peripheral ingress near the distal end of each said member, said ingress continuing inwardly and substantially upwardly toward the distal end proper, each said means being entirely contained within the contour of its foot member and the extrados of each appendage forming the periphery of the toe portion thereof.

2,736,474

GARMENT HANGER

Osvald Carl L. Janik, Old Greenwich, Conn.

Application January 28, 1952, Serial No. 268,559
2 Claims. (Cl. 223—90)



1. A foldable garment hanger comprising a suspension member having an integral loop transverse thereto, a loosely connected and freely movable hook element swiveling in said loop of said suspension member, a pair of arms pivoted to one end of said suspension member and having the free ends thereof each formed into a loop transverse to said arms, a flexible strap being supported intermediate of its ends by said suspension member, said ends of said strap being secured to the loops at the free ends of said pair of arms, a pair of spring-operated clamps on said arms adjustable laterally relative to each other, said arms being adapted to be folded in a compact position with said hook element positioned on one side of said suspension member and substantially parallel thereto, and said arms being extended in opposite directions for normal garment-hanging use in another position, and a lug on one of said arms being located adjacent to the pivoted end of said arm and having a portion thereof projecting laterally therefrom in a direction transverse to the longitudinal axes of said arms and in the path of movement of said other arm to thereby engage the other of said arms when said arms are in extended position to keep said arms aligned substantially co-axially to each other and substantially perpendicular to said suspension member.

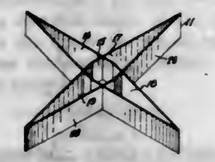
2,736,475

HOLDER AND ADVERTISING MEDIUM FOR ICE CREAM CONES

Dwight L. Lehman, Portland, Oreg., assignor of one-third to Belle M. Lehman and one-third to Blanche C. Hughes, both of Portland, Oreg.

Application September 29, 1952, Serial No. 312,031
1 Claim. (Cl. 224—48)

A portable self-sustaining open bottom hand carrier for ice cream cones and the like comprising a pair of assembled identical tubular sections, each section being transversely creased equi-distantly and adapted to be folded and lie flat when the sections are disassembled, said sections being identically transversely slotted halfway through the width thereof perpendicular to one edge to interlock when superimposed and the slots thereof en-



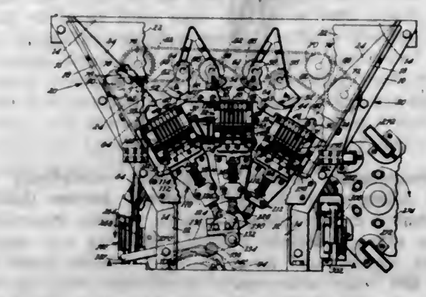
gaged with each other to form a four pointed star shaped holder having five compartments for five identical objects, said sections comprising flat bands of stiff material which are disposed in substantially flat vertical planes in assembled position forming a central compartment and one outlying compartment in each star point.

2,736,476

CIGARETTE FEED FOR PACKAGING MACHINES

John Jackson and John A. Maul, Brooklyn, and Ernst E. Pohl, Queens, N. Y., assignors to American Machine & Foundry Company, a corporation of New Jersey

Application August 28, 1952, Serial No. 306,912
19 Claims. (Cl. 226—5)



1. In a cigarette feed for packaging machines, a hopper adapted to contain a bulk supply of cigarettes, a plurality of chutes located at the bottom of said hopper, oppositely movable sets of lifting arms in said hopper provided with means for engaging and supporting a portion of said bulk supply of cigarettes above said chutes, and means for moving said sets of lifting arms in opposite directions to lift said portion of said bulk supply of cigarettes supported thereby and thereby relieve the pressure of said portion of said cigarettes in said hopper on cigarettes entering said chutes.

2,736,477

PACKAGING APPARATUS

Charles H. Krebs and John D. Franks, Chicago, Ill., assignors to Atlas Boxmakers, Inc., Chicago, Ill., a corporation of Delaware

Application August 18, 1952, Serial No. 305,034
12 Claims. (Cl. 226—14)

1. An apparatus for charging a stack of round discs into a polygonal container comprising rod-supporting means, a plurality of parallel rods projecting therefrom and having free ends remote from said supporting means in positions corresponding with corner locations of the container, the outer increments of said rods being located within the inside dimension of the container, the inner increments of said rods being located outside the periphery of the discs, projections on the ends opposite said supporting means of some of said rods extending in-



wardly of the periphery of said discs, and means for retracting said projections.

2,736,478

COIN ASSEMBLER AND WRAPPER

Adolph C. Bernhardt, Jr., Baltimore, Md., assignor to G. Edward Green and Charles W. Lehardy, Baltimore County, Md.

Application January 7, 1953, Serial No. 330,093
1 Claim. (Cl. 226—14)



A coin envelope filler comprising a trough-like shell having converging straight sidewalls in V-like formation, joined by a rounded-out portion, said trough slanting from one end towards the other end, an upright plate blocking said last mentioned end at right-angles to the trough, said plate having indicia on the side thereof facing the shell, said indicia corresponding to coins of different sizes, said plate also having a vertical slot therethrough, a flexible circular bumper secured to said plate and projecting inwardly of the trough, means extending through the slot for adjusting the position of the bumper to selectively locate the bumper in alignment with a selected index, said trough being adapted to receive aligned abutting circular coins standing up on edge and the last one of said coins abutting the aforesaid bumper, the diameter of the bumper being smaller than that of the smallest coins lined up in the trough, there being a space between the aforementioned rounded-out portion and the adjoining periphery of the lined-up coins in the trough whereby a circular envelope may be slid in said space to round up the aligned coins.

2,736,479

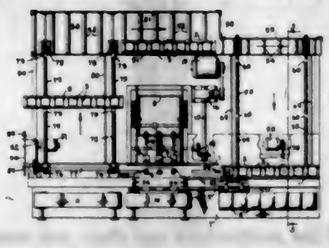
CONTINUOUS FEED FOR SPRING LOADING MACHINE

William K. McInerney and James M. McInerney, Grand Rapids, Mich.

Application March 3, 1952, Serial No. 274,552
3 Claims. (Cl. 226—18)

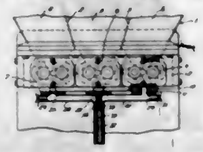
1. The combination with a filling machine having conveyor means for passing article holding racks therethrough

and means for processing articles in said racks while in the filling machine, of a continuous feeding device for the filling machine comprising, a loading platform to receive said racks, an infeed conveyor extending between said loading platform and the filling machine conveyor, and adapted to receive racks from the loading platform, an outfeed conveyor extending between said filling machine conveyor and said loading platform and adapted to receive racks from the filling machine conveyor, means for



moving said infeed conveyor toward said filling machine conveyor, automatic means for ceasing movement of the infeed conveyor upon alignment of a rack with the filling machine conveyor and for resuming movement of the infeed conveyor upon removal of a rack therefrom, and automatic means for starting movement of the outfeed conveyor toward said loading platform upon deposit of a rack thereon and for ceasing movement thereof upon removal of said rack from the filling machine conveyor.

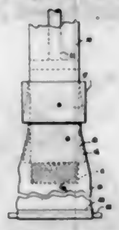
2,736,480
MULTIFLOW FILLER NOZZLE FOR PLASTIC COMESTIBLES
Ralph F. Anderson, Rockford, Ill.
Application April 18, 1952, Serial No. 282,981
15 Claims. (Cl. 226—100)



1. A multiple flavor filler nozzle for filling a receptacle with a plurality of layers of ice cream and the like comprising a downwardly extending outer nozzle tube having a discharge outlet at its lower end, an inner nozzle tube disposed within the outer nozzle tube in annularly spaced relation thereto and approximately coextensive therewith having an inlet at its upper end to communicate with a first source of material and a discharge outlet at its lower end, a plurality of supply passages extending laterally from said outer tube and communicating therewith at spaced locations therearound, said supply passages having inlets in spaced relation to said outer tube for communication with separate sources of material, and ribs extending across the annular space between said nozzle tubes to separate the respective flows from said supply passages through said annular space, said ribs extending downwardly along the nozzle tubes to divide said annular space into separate passages for segregated flows therethrough of material from said supply passages.

2,736,481
GREASE PACKAGING, AND DISPENSING MEANS FOR GREASE GUNS
Norman C. Currell, Moose Jaw, Saskatchewan, Canada
Application April 20, 1955, Serial No. 502,583
6 Claims. (Cl. 226—125)

1. A device for packaging grease and adapted to facilitate the loading of grease guns, comprising a flexible container for said grease, said container having a filling neck on the upper end thereof, said neck adapted to be placed over the open end of the associated grease gun barrel, means extending around said open end adapted to detachably clamp said filling neck in a substantially air-



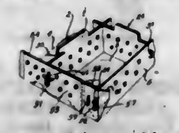
tight manner around said open end, and means on the base of said container adapted to restrict the movement of said flexible container into said grease gun barrel when the plunger of said grease gun is withdrawn, thus forcing said grease into said barrel.

2,736,482
DISAPPEARING STAIRWAY SYSTEM
Clayton B. Borden and James T. Borden, Jr., Plantersville, Miss.
Application December 27, 1951, Serial No. 263,544
3 Claims. (Cl. 228—50)



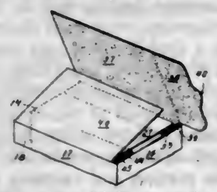
1. Disappearing stairway apparatus comprising a hinged ceiling door, an upper stairway section rigidly fixed thereto in substantially parallel relation therewith, a lower stairway section slideably engaging said upper stairway section, said lower stairway section being of length and width substantially equal respectively to the length and width of said upper stairway section, said door being slightly longer and wider than said upper and lower stairway sections; said upper stairway section comprising a pair of hollow substantially tubular metal stringers each having a longitudinally extending slit therein, and a series of treads supported by said stringers therebetween; said lower stairway section comprising a pair of stringers each telescopically slideable within the respective stringers of the upper stairway section, a series of treads each anchored securely at both ends to said lower section stringers by fastening means registering with the longitudinal slits in said upper section stringers; means connected to said hinged ceiling door for swinging said door down to a position of a predetermined maximum inclination, the treads of said lower section being substantially horizontal when said door is at said position of maximum inclination, means for limiting said lower section to a range of travel from a fully telescoped position in said upper section to a position of maximum extension whereat telescopic alignment with said upper section is retained, a plurality of the treads of said upper section being hinge-pivoted at their noses into the respective upper section stringers and having lift pins extending through said longitudinal slits into the interiors of said upper section stringers, said last-named treads normally resting in substantially horizontal positions when said door is in its predetermined inclined position and said lower stairway section is extended, and said lower section stringers having bias-cut upper ends for engaging the lift pins of successive ones of said upper section treads as said lower section is moved upward into its telescoped position and angularly shifting the successive treads into positions substantially parallel to longitudinal axes of said upper section stringers, the lower section stringers being of less width than the internal width dimension of the upper section stringers whereby said lift pins are accommodated in the intervening internal space above said lower section stringers after the respective treads have been raised into their positions substantially parallel to the axes of said upper section stringers.

2,736,483
SHIPPING CONTAINERS
Arthur C. Moore, Terre Haute, Ind., assignor to Highland Box Co., Highland, Ill., a corporation of Delaware
Application March 16, 1950, Serial No. 149,939
8 Claims. (Cl. 229—6)



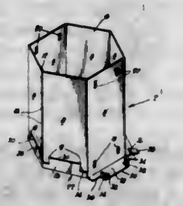
1. A chick box comprising a blank of double-faced corrugated paperboard, said blank being centrally folded upon itself along a line transverse to the corrugations to form a partition extending integrally the length of the box with the corrugations running vertically, a bottom panel extending integrally from each side of said partition the length of the box, an integral side panel extending vertically from each of said bottom panels, a pair of integral end panels extending vertically from each of said bottom panels, and a second partition member of double-faced corrugated paperboard extending transversely of the first partition with its corrugations also running vertically, said partitions having upper portions which project above the upper edges of said side and end panels to support a second box in spaced relationship.

2,736,484
DISPENSING CARTON
Oscar L. Vines, New York, N. Y., assignor to Alford Cartons, Ridgefield Park, N. J., a corporation of New Jersey
Application April 20, 1953, Serial No. 349,588
1 Claim. (Cl. 229—17)



A dispensing carton which comprises a front wall, a rear wall, two side walls, the top edges of said walls lying in the same plane, a bottom closure structure, and a top closure structure, the top closure structure being composed essentially of three substantially coextensive flaps adhesively secured to one another in superimposed position to form a top cover panel comprising, first and second cover flaps integrally connected along one edge thereof to like inwardly folded gussets which are integrally connected to the top edge of the front and rear walls respectively, said inwardly folded gussets defined by substantially parallel fold lines, a third cover panel flap being integrally connected directly to the top edge of one of the side walls so that the cover panel is permanently and hingedly joined to said side wall, the top cover panel being provided adjacent the opposite end thereof with a glue flap adapted to engage the other side wall.

2,736,485
BOX WITH READILY ATTACHABLE END CLOSURE
Joseph Glenn Rabby, Jacksonville, Fla., assignor to National Container Corporation, New York, N. Y., a corporation of Delaware
Application June 20, 1952, Serial No. 294,638
4 Claims. (Cl. 229—23)



3. A box comprising an open-ended tubular casing having at least one open end and an end closure therefor, said tubular casing comprising wall panels connected at their side edges and having end edges at said open end, some of said panels being provided with a pair of spaced slots substantially equally spaced from and substantially perpendicular to an end edge thereof and positioned close to the side edges thereof, spaced from one another by a distance which is a major fraction of the distance between said side edges, said end closure comprising a wall of a size to close the open end of said casing, flaps foldably connected to said wall and adapted to fold up alongside the outer surface of said panels, said flaps having body portions the length of which is not substantially greater than the width of said slotted panels, the end edges of said flap body portions being exposed, said flaps having end portions of a length substantially equal to the spacing between said slots and substantially rigidly connected to said body portions so as not to be readily bendable relative thereto, securing tabs foldably secured to opposite end edges of said flap end portions so as to be foldable with respect thereto along lines registering with said slots, and locking tabs foldably attached to said securing tabs along lines angularly related to the fold-lines between said securing tabs and said flap end portions and extending from said securing tabs in a direction away from said flap body portions, said locking tabs normally assuming a position remote from said securing tabs but being bendable to a temporary position substantially parallel to and alongside said securing tabs, the length of said locking tabs in a direction parallel to the length of said securing tabs being less than the length of said securing tabs by a distance at least equal to the thickness of said slotted panels, and said slots having a width substantially equal to the combined thicknesses of a locking tab and a securing tab, said securing tabs being passable through said slots from outside to inside of said casing when said locking tabs are in said temporary position, said locking tabs passing completely through said casing slots and springing to their normal condition, thus preventing withdrawal of said securing tabs from said slots and retaining said flaps alongside the outer surface of said slotted panels.

2,736,486
BOX WITH INWARDLY TELESCOPING COVER
Joseph Glenn Rabby, Jacksonville, Fla., assignor to National Container Corporation, New York, N. Y., a corporation of Delaware
Application October 15, 1952, Serial No. 314,829
8 Claims. (Cl. 229—43)

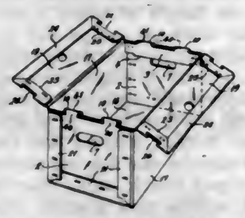
1. In combination, a container comprising side walls, flaps of abbreviated height foldably secured to the upper edges of said side walls and folded down inside said side walls, said container having slots of appreciable length, less than the width of said side walls, adjacent

the fold line between said side walls and said flaps, and said side walls having finger holes under said slots and positioned below said slots by a distance slightly greater than the height of the flaps foldably secured to said side walls, and a cover comprising a top wall with leaves depending therefrom, said leaves having a width corresponding to the length of said slots and being passable



through said slots between said side walls and said flaps, said leaves having a height greater than the height of said flaps so that a portion of said leaves extends below the lower edges of the flaps associated therewith when said top wall rests on the top of said container, said extending leaf portions having tabs bendable out therefrom so as to project under said flap edges and registrable with said finger holes.

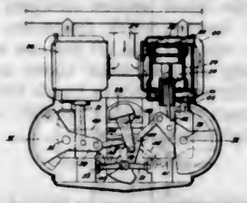
2,736,487
COVER LOCKING MEANS FOR A CONTAINER
Walter C. George, St. Louis, Mo., assignor to Gaylord Container Corporation, St. Louis, Mo., a corporation of Maryland
Application March 19, 1952, Serial No. 277,417
10 Claims. (Cl. 229—45)



1. In a container having a polygonal shaped body consisting of connected together opposed upstanding wall members and a bottom and being open-topped, and a complemental shaped hinged closure member for the open top; means for releasably locking the cover member to the body wall member and preventing movement between the cover and wall member in any direction in the plane of the cover, said means comprising a compound dove-tail joint, a portion of which is carried by each of said members, the portion of the joint carried by one of the members being an outwardly flaring dove-tail, the inner longitudinal face thereof being longer than the outer face, the free end edges of said dove-tail being formed at an angle less than 90° with respect to the adjacent upper edge of said one member, and the portion of said joint carried by the other of said members being in the form of a recess substantially complemental in outline to said flaring dove-tail, the said joint in the closed position locking said cover to said body member against displacement in the plane of the cover in any direction and restraining movement of the cover upward away from said body wall sufficiently to prevent accidental displacement during handling.

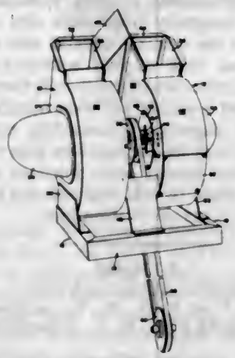
2,736,488
ENGINE-UNIT CONSISTING OF AT LEAST ONE WORKING CYLINDER AND AT LEAST ONE COMPRESSOR CYLINDER
Albert August Dros, Eindhoven, Netherlands
Application August 13, 1952, Serial No. 304,192
20 Claims. (Cl. 230—56)

1. An engine-driven compressor unit comprising in combination, a piston type engine, a piston type compressor, and a driving mechanism connecting an engine piston with a compressor piston to maintain constant the strokes and the phase relationship of said pistons, said driving mechanism including three systems of movable elements, one system being movable at a frequency double



that of the other two systems and being mechanically coupled to said other two systems, said engine piston being a part of said system movable at said double frequency and all of said systems consisting solely of reciprocating elements.

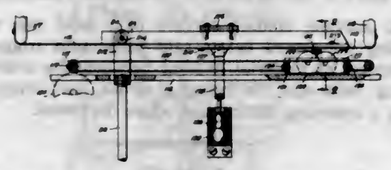
2,736,489
DUAL HOUSING AND SHAFT COUPLING ARRANGEMENT
Edward C. Bopf, Des Moines, Iowa, assignor to Deere Manufacturing Co., Dubuque, Iowa, a corporation of Iowa
Application March 1, 1955, Serial No. 491,273
7 Claims. (Cl. 230—132)



7. A blower fan or like structure, comprising: a support having a transverse portion and an upright portion rigid thereon; a transverse rotor shaft projecting from the upright portion to a free terminal end remote from said upright portion; a first bearing journaling the shaft in the upright portion and fixing the shaft against axial displacement; a rotor coaxially fixed to the terminal end of the shaft in axially spaced relation to the upright portion; an upright housing rigid on the support in axially spaced relation to the upright portion and encasing the rotor, said housing having an outer radial wall axially spaced from the proximate radial face of the rotor and the terminal end of the shaft, a peripheral wall circumferentially spacedly encircling the rotor, and an inner radial wall axially spaced inwardly from the other face of the rotor and axially spaced outwardly from the upright portion so as to afford between the housing and said upright portion an axial space traversed by the rotor shaft; a sheave coaxially fixed to the shaft in said space and in interspaced relation to the housing and upright portion; a second bearing rotatable on the shaft and fixed against axial displacement relative to the shaft, said second bearing being disposed proximate to the inner wall of the housing; said inner wall having a central opening therein materially larger than the second bearing; filler means concentric with the second bearing between the sheave and housing and having radially inner mounting portions removably secured to the sheave side

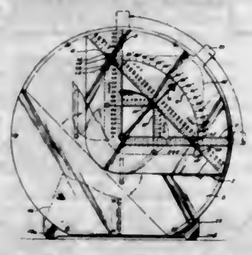
of the second bearing and radially outer mounting portions removably secured to the sheave side of said inner wall about said opening, whereby said filler means is removable from said second bearing and inner wall to uncover said opening; and one of the walls of the housing having therein an endless-belt-receiving access opening in addition to the inner wall opening.

2,736,490
COMPUTING DEVICE
John W. Schneider, Upper Darby, Pa.
Application December 19, 1950, Serial No. 201,564
10 Claims. (Cl. 235—61)



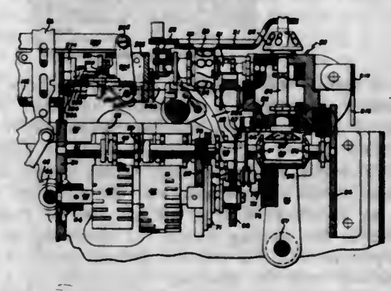
10. In apparatus for determining a ratio between two quantitative measurements, two separate measuring devices each independently operable to produce a given deflection according to the magnitudes of said measurements, a housing, mechanism including a lever in said housing, a fulcrum mounted in said housing about which said lever can pivot, means operable to move said fulcrum longitudinally with respect to said lever toward one end of said lever upon an increase in deflection of one of said measuring devices and toward the other end of said lever upon a decrease in said deflection, means to pivot said one end of said lever about said fulcrum according to the deflection produced by the other of said measuring devices, a member carried by said lever between said fulcrum and said one end thereof, indicating means to indicate the ratio between said two measurements, an electric circuit including a pair of variable core transformers and a reversible motor controlled by said transformers, means interconnecting said lever with one of said transformers operable upon movement of said lever to variably position the core of said transformer and vary the inductance and operate the motor, mechanism connecting said motor with said indicating means to indicate the ratio between said measurements, and means actuatable by said indicating means to vary the inductance of the other transformer to stop the motor.

2,736,491
TRIGONOMETRY FUNCTION CALCULATOR
Kenneth G. Potter, Hermosa Beach, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California
Application July 26, 1954, Serial No. 445,767
4 Claims. (Cl. 235—61)



1. A calculator for providing values of the basic trigonometry functions for any angle, comprising: a back plate; an intermediate plate provided with a sine scale and a cosine scale on axes meeting at right angles thereon; means connecting said intermediate plate adjacent and parallel to the face of said back plate, said connecting means restricting movement of said intermediate plate to a combined translatory motion along the axes of said sine and cosine scales; a frontal plate having a quadrant sector cutout therein, a secant scale and a cosecant scale provided along the radial edges thereof and an angle scale provided around the circular edge of said cutout; means for securing said frontal plate to said back plate before said intermediate plate, said frontal plate in superposed position oriented whereby the axes of said sine and cosine scales intersect at right angles with the axes of said secant and cosecant scales respectively; a transparent plate being provided with a pointer, a tangent scale and a cotangent scale provided on opposite halves of an axis intersecting said pointer at right angles thereon; means for rotatably mounting said transparent plate on an axis passing through the juncture of said secant and cosecant axes, said juncture lying in line with the axis of said pointer indicating against said angle scale viewed through said transparent plate; and means for coupling rotary motion of said transparent plate to said intermediate plate whereby mutual intersections of scale axes are effected for readings on said trigonometry function scales.

2,736,492
SQUARE ROOT MECHANISM
Grant C. Ellerbeck, San Leandro, Calif., assignor to Friden Calculating Machine Co., Inc., a corporation of California
Application February 8, 1951, Serial No. 210,079
21 Claims. (Cl. 235—63)

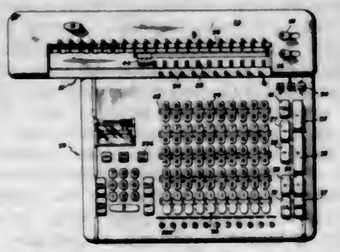


1. A calculating machine comprising a keyboard, a carriage, an accumulator and a counter mounted in said carriage, a tens-transfer mechanism between the respective orders of the accumulator, means for shifting said carriage with respect to said keyboard, a locking means for locking values in the keyboard, an actuator operative to transmit values from the keyboard into the accumulator additively or subtractively, and means operated by the tens-transfer mechanism in a selected order for locking the keyboard, for initiating a single additive cycle of the actuator, and for subsequently initiating a carriage shift of one order to the left.

2,736,493
SQUARE ROOT CALCULATING MACHINE
Grant C. Ellerbeck, San Leandro, Calif., assignor to Friden Calculating Machine Co., Inc., a corporation of California
Application August 31, 1951, Serial No. 244,518
46 Claims. (Cl. 235—63)

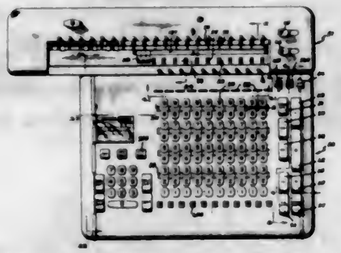
1. In a calculating machine having a plurality of ordinally arranged selection members positionable to represent various digital values, an accumulator, an automatic division mechanism for dividing a dividend factor set in said accumulator by a divisor factor set in the selection members, and a motor, means driven by said

motor concurrently with operation of said division mechanism and operative to position the selection member of



a preselected order to positions corresponding to a predetermined numerical progression.

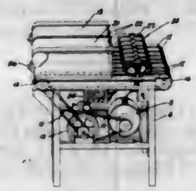
2,736,494
SQUARE ROOT CALCULATING MACHINE
Grant C. Ellerbeck, San Leandro, and Donald L. Rolph, Hayward, Calif., assignors to Friden Calculating Machine Co., Inc., a corporation of California
Application April 1, 1952, Serial No. 279,832
33 Claims. (Cl. 235—63)



26. A square root computer for a mechanical digital calculator comprising a manually operated starting means; an accumulator; a selection mechanism in which a radicand can be set; a cyclically operable differential actuating means; means for shifting the relative decimal positions of the accumulator and the selection mechanism; an overdraft sensing means; control means responsive to the starting means for operating the shifting means to shift the relative decimal position of the accumulator and the selection mechanism to a preselected ordinal position, thereafter operating the differential actuating means to enter the radicand into the accumulator five times, and finally operating the differential actuating means to perform a first series of subtractions, means for changing the subtrahend setting in the selection mechanism progressively during such series of subtractions starting with "5" in the first cycle of operation and increasing by an interval of "10" in each successive cycle thereafter; means operated by said overdraft sensing means to terminate such operation of the differential actuating means, to then reverse the operation of the differential actuating means to correct the overdraft, thereafter operate the shifting means to shift the relative decimal position of the accumulator, and finally initiate another series of subtractions of a similar progressively changing subtrahend; and counting means for counting the number of subtractions in each series.

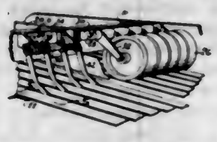
2,736,495
LAUNDRY COUNTING DEVICE
Raymond P. Calou, Oakland, Calif.
Application June 4, 1952, Serial No. 291,661
3 Claims. (Cl. 235—98)

1. A machine for counting soft, flexible articles comprising at least two parallel, endless conveying belts, a rotating device mounted over said belts and normally in contact therewith whereby an article carried by said conveying belts will pass between said belts and said rotating device and a trigger extending between said belts at a point of contact between said rotating device and said belts, said trigger having an upwardly extending, re-en-



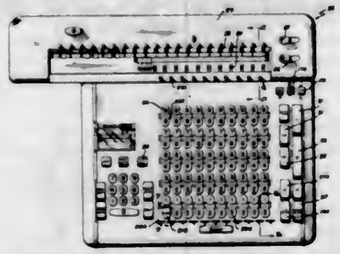
trant, arcuate, contact surface with solid side wall extending downward below said belts, said trigger being depressed by material passing between the endless conveying belts and the rotating device, said trigger actuating a counting mechanism when depressed.

2,736,496
COUNTING MACHINE
Raymond P. Calou, Oakland, Calif.
Application September 14, 1953, Serial No. 379,768
3 Claims. (Cl. 235—98)



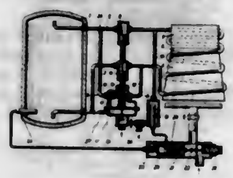
1. A machine for counting articles of the class described comprising in combination a plurality of endless belts lying parallel and close to each other, means for driving said belts in the same direction, rotating means mounted over each of said belts and normally in contact with said belt, and a trigger mechanism independent of said rotating means consisting of a series of triggers, each of said triggers being supported by a common shaft located above the belts, said triggers depending to a position between adjacent belts substantially at the point of contact between the belt and the rotating means, and means actuated by the shaft for operating a counter.

2,736,497
AUXILIARY KEYBOARD MECHANISM ADAPTED FOR SQUARE ROOT OPERATIONS
Grant C. Ellerbeck, San Leandro, Calif., assignor to Friden Calculating Machine Co., Inc., a corporation of California
Application June 17, 1952, Serial No. 293,973
6 Claims. (Cl. 235—146)



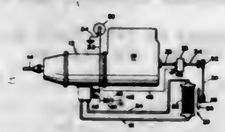
2. In a calculating machine having an ordinally arranged selection mechanism, an ordinally arranged keyboard having value keys representative of the values "1" to "9" inclusive for operating said selection mechanism, and an ordinal latch for each order of said keys, the improvement which comprises an additional bank of value keys, means operated by each of said additional keys for inserting a value of "5" into the related order of said selection mechanism, means operated by each of said additional keys for disabling the ordinal latch for the related order of said keyboard, a common latch for said bank of additional keys, and means operated by each of said additional keys for releasing said common latch.

2,736,498
GAS FIRED STORAGE WATER HEATER
Walter Brummerhoff, Remscheid-Lennep, Germany, assignor to Johann Vaillant Kommanditgesellschaft, Remscheid, Germany
Application February 2, 1952, Serial No. 271,950
1 Claim. (Cl. 236—20)



A gas water heater consisting of a gas fired continuous-flow heater with a pipe coil to conduct the water to be heated, a storage tank, a connecting pipe leading from the upper end of the pipe coil to the upper portion of the storage tank, a tapping pipe having a tapping valve, said tapping pipe in connection with said connecting pipe, a second connection pipe leading from the second end of said pipe coil to the bottom of said storage tank, a cold water supply pipe connected to said second connection pipe, a shut off valve in each of said connecting pipes, means for closing said shut off valves on the opening of said tapping valve, a by-pass connection between said connection pipes by-passing said shut off valves and a temperature controlled valve inserted in said by-pass connection.

2,736,499
FLUID TEMPERATURE CONTROL
Edward J. Hazen, Woodcliff Lake, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application February 8, 1952, Serial No. 270,728
11 Claims. (Cl. 236—35)



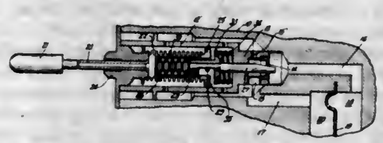
3. The combination with an engine having a hydraulic transmission of a system for controlling the temperature of the fluid used in the transmission, said system comprising a control device having a first chamber to receive fluid from the transmission, a second chamber to deliver fluid from said control device to the transmission, a heat exchange unit, conduit means delivering the fluid from said first chamber to said heat exchange unit and from said heat exchange unit to said second chamber, electrically operated means for passing a heat transfer medium through said heat exchange unit to vary the temperature of the fluid therein, a source of electrical energy, circuits electrically connecting the source of electrical energy to the electrically operated means, a first circuit serving to provide a low current flow to the electrically operated means, a second circuit serving to provide an increased current flow to the electrically operated means, an operator-warning signal lamp, a third circuit serving to illuminate the latter, a normally open switch for closing each circuit, rotatable cam means for closing the switches in sequence to energize the circuits in order upon rotation of the cam means, control means responsive to temperature increases in the fluid of the first chamber, and means operatively connected to the latter means serving to rotate the cam means in a ratio proportionate to the temperature increases.

2,736,500
DRAFT REGULATOR
Andrew H. Ziph, St. Joseph, Mo., assignor to Walker Manufacturing and Sales Corporation, St. Joseph, Mo., a corporation of Missouri
Application November 26, 1952, Serial No. 322,596
1 Claim. (Cl. 236—45)



A draft regulator for combustion apparatus comprising a frame having an opening therein, a circular blade of a size to substantially completely fill said opening, said blade being pivoted to said frame within said opening on an axis lying in the plane of the blade and subtending an arc of less than 180 degrees thereof, whereby said blade is divided into major and minor segments, a weight carried by the minor segment of the blade, means for moving said weight toward and from said blade, said last means including a tubular sleeve fixed in said minor blade segment normally to the plane thereof, a screw threaded in said weight and having a portion of reduced diameter rotatably mounted in said sleeve, an adjusting knob mounted on that portion of said screw at the side of said blade opposite the side on which said weight is disposed, whereby longitudinal movement of said screw is prevented, a radially extending indicator finger mounted on said screw in fixed angular relationship thereto adjacent said knob, and a rod-like member secured to said weight in spaced relation to said screw and extending parallel thereto, said member extending slidably through an aperture formed therefor in said blade and into the path of said indicator finger, whereby said member serves to limit the turning motion of said screw, and whereby the distance of extension of said rod-like member through said blade indicates the position of said weight on said screw.

2,736,501
TEMPERATURE COMPENSATING DEVICE
George M. Widell, South Bend, Ind., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application April 20, 1951, Serial No. 222,001
7 Claims. (Cl. 236—99)



1. In a temperature compensating system, a hollow expansible and contractible member internally charged with a fluid medium which changes in volume in response to changes in temperature of a parameter, a temperature sensing device in pressure communication with the fluid medium in said member, and means for compensating for responses of said member to changes in temperature of a fluid medium in the immediate region of and external

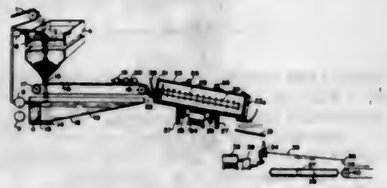
to said member comprising a temperature responsive element disposed within said member, said element being so constructed that it expands and contracts as a result of being subjected to changes in the temperature whenever said member contracts and expands, respectively.

2,736,502

METHOD OF AND APPARATUS FOR SEPARATING THE SOFT ROCK COMPONENT OF MIXTURES OF HARD AND SOFT ROCK

Harry A. Toulmin, Jr., Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio

Application September 12, 1952, Serial No. 309,167
7 Claims. (Cl. 241—14)



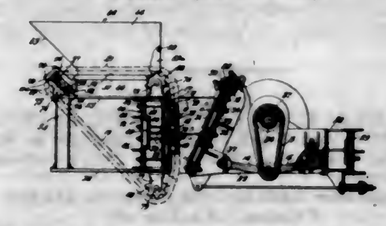
1. The method of separating soft rock in the form of particles of relatively small size from a mixture comprising soft and hard rocks in the form of aggregates of relatively large size which comprises soaking the mixture in an aqueous medium containing a wetting agent, removing excess soaking medium from the mixture, subjecting the soaked mixture to dry heat to bring it to the softening temperature for the soft rock while simultaneously continuously tumbling the mixture to thereby effect disintegration of the soft rock into particles of relatively small size and leave the hard rock in the form of aggregates of relatively large size, and thereafter separating the relatively small soft rock particles from the hard rock aggregates.

2,736,503

JAW CRUSHER WITH MATERIAL FEEDING AND TURNING BELT MOVING OVER THE STATIONARY CRUSHING PLATE

Edwin H. Keiper, Philadelphia, Pa., assignor, by mesne assignments, to Bath Iron Works Corporation, Bath, Maine, a corporation of Maine

Application August 8, 1951, Serial No. 240,839
7 Claims. (Cl. 241—200)



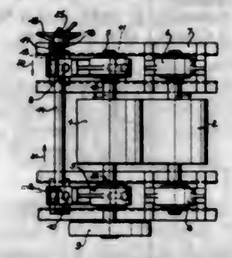
1. In combination with a jaw crusher having a fixed crushing member extending vertically and a movable crushing member spaced from the fixed member and having a crushing surface spaced away from the fixed member at its upper portion to form a crushing chamber, said movable crushing member being pivoted at the material receiving end and oscillating to and from the fixed crushing member with an upward component of movement, an endless chain of links movable continuously downward in a vertical direction across the said surface of said fixed crushing member in the direction of movement of the crushed material through the jaw crusher and forming a crushing surface moving downward along one side of said crushing chamber and opposite the upwardly swinging pivoted member to the vertical component of movement of the oscillating crushing surface so as to rotate the crushed material to successive crushing positions as it passes between the crushing surfaces.

2,736,504

ROLL CRUSHER WITH MEANS TO AXIALLY ADJUST THE POSITION OF AT LEAST ONE ROLL

Paul Hannes, Essen-Steele-Horst, Germany, assignor, by mesne assignments, to Koppers Company, Inc., Pittsburgh, Pa., a corporation of Delaware

Application June 7, 1954, Serial No. 434,797
2 Claims. (Cl. 241—231)



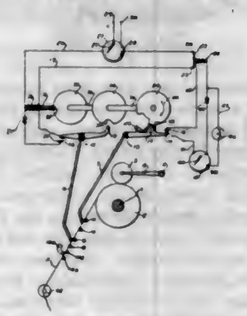
1. Roll crushing mill for crushing coke fines and coal comprising, parallel grinding rolls with mounting means for axially displaceably mounting of at least one of the grinding rolls longitudinally one relative to another, characterized by said mounting means comprising oppositely disposed bearings resting against an attachment on a shaft which supports the grinding roll to be displaced, said bearings being pivotally connected each to one of oppositely disposed levers which are also disposed transverse to the axis of the shaft of said roll to be displaced, each lever being pivotally connected at one point at a fixed region relative to the shaft to be displaced and at an opposite point pivotally connected to a third shaft which is also axially adjustable parallelly with the aforesaid shaft of the grinding roll to be longitudinally displaced relative to another, and means for axially moving the third shaft longitudinally.

2,736,505

THREAD WINDING APPARATUS

Stefan Fürst, Munich-Gladbach, and Walter Reiners, Waldniel (Niederrhein), Germany; said Fürst assignor to said Reiners

Application January 10, 1952, Serial No. 265,791
17 Claims. (Cl. 242—36)



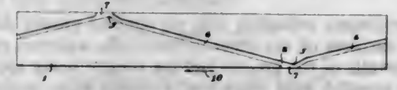
1. Thread testing apparatus, comprising in combination, a thread-guiding roller rotatably mounted on the apparatus, a take-up spool resting against said roller to be rotated by the same when the latter is rotated, first pulling means operatively connected to said take-up spool for pressing the same against said roller, a pair of spaced, stationary thread supports located along a tangent to said roller, a testing lever pivotally mounted at an intermediate part thereof on the apparatus and having one end portion thereof located opposite the space between said thread supports and an opposite end portion thereof operatively connected to a second pulling means for turning said-lever and moving said one end portion thereof into said space, and an actuating means common and operatively connected to said first and second pulling means for actuating the same to simultaneously press said take-up spool against said guiding roller and move said one end portion of said testing lever into said space so as to tension thread moving along said tangent on said supports toward said guiding roller and located opposite said one end portion of said testing lever.

2,736,506

TRAVERSE-ROLL

Donald William Selby, Wilmington, Del., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

Application February 2, 1953, Serial No. 334,606
13 Claims. (Cl. 242—43)



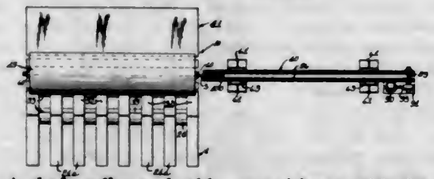
12. In a grooved roll for traversing yarn, an outer shell concentric with an inner surface for supporting the traversing yarn, said outer shell having an endless slot through its surface, which slot comprises at least two reversal sections and helical sections between said reversal sections; and a thread guide at each reversal section extending radially from the inner surface substantially to the outer shell.

2,736,507

WINDER SHAFT PULLER AND TABLE

Alonzo A. Neese and Edward D. Beachler, Beloit, Wis., assignors to Beloit Iron Works, Beloit, Wis., a corporation of Wisconsin

Application November 2, 1950, Serial No. 193,585
5 Claims. (Cl. 242—55)



1. A shaft puller and table comprising a table for receiving a body having an axial shaft therethrough and said table having a positioning recess for retaining said body in predetermined position thereon, a shaft pulling conveyor movable both vertically and longitudinally with respect to said body on said table in alignment with the axis of said body when seated in said recess, means on said conveyor engaging the shaft to remove the same upon movement of said conveying means longitudinally away from said table and for repositioning said shaft in said recess on said table upon movement of the conveying means in an opposite direction, and means for removing said body from said table after said shaft has been removed.

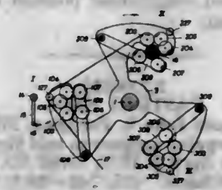
2,736,508

WINDING MACHINE FOR PAPER ROLLS

Georg Langbo, Gulskogen, Norway

Application February 19, 1953, Serial No. 337,810
Claims priority, application Norway February 21, 1952
5 Claims. (Cl. 242—56)

1. An automatic winding machine for making paper rolls comprising a plurality of sets of mutually parallelly disposed rotatable rollers for the consecutive winding of one roll after another in the free space enclosed by the said rollers of each of the said set of rollers, a rotatable frame structure including end members supporting the said sets of rollers therebetween, lever members pivotally mounted in the said end members and supporting therebetween at least one roller of each set of rollers, means mounted in the machine for cutting the paper web at



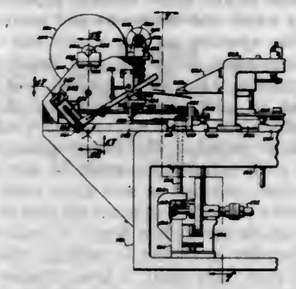
the completion of the winding of a roll, means for continuously rotating the said frame structure and each of the rollers of the said sets of rollers, means for actuating the said paper cutting means, and means for pivoting the said lever members, said cutting means and said pivoting means being actuated when the associated set of rollers reaches a predetermined position in the rotation of the said frame structure.

2,736,509

FEED MECHANISM FOR BOX MAKING MACHINE

Vincent D. Hery, Norwood, and Beldon L. Rich, Cincinnati, Ohio, assignors to The American Tool Works, Cincinnati, Ohio, a corporation of Ohio

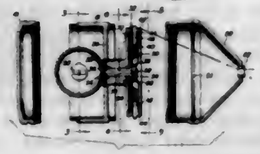
Original application February 7, 1947, Serial No. 727,220, now Patent No. 2,618,207, dated Nov. 18, 1952. Divided and this application January 9, 1952, Serial No. 272,362
2 Claims. (Cl. 242—58)



1. A feed mechanism for lineally measuring and advancing a strip length of sheet material from a continuous roll, said mechanism adapted to present the measured strip length at a predetermined longitudinal position to the suction element of a box making machine or the like, said feed mechanism comprising a base, a pair of spaced vertical support plates, slide bearings on said plates engaging the base for longitudinal movement of the plates on said base, bearing means on said support plates rotatably mounting said roll of sheet material, a pair of feed rollers rotatably journalled between said spaced plates, a gear connected to one of said rollers for rotating the same, the sheet material extending from the roll being engaged between said rollers for advancement upon rotation thereof, a rack meshing with said gear, a crank arm rotatably mounted on one of said support plates, means connected to the crank arm for rotating the same, a pivot stud connecting an end of said rack to said crank arm, shiftable means connecting the said pivot stud to the crank arm to vary the position of the pivot stud relative to the arm, thereby to measure the length of sheet material advanced by the rollers upon reciprocation of the rack, releasable clamping means on the base engag-

ing the support plates, a cross shaft extending transversely between said support plates and rotatably journalled therein, a gear keyed to said cross shaft, a rack mounted upon said base and in mesh with said gear, rotation of said cross shaft being effective to shift the side plates in a direction parallel to the direction of advancement of said sheet in accordance with the position of said pivot stud and to advance the measured sheet to a predetermined longitudinal position relative to the said suction element.

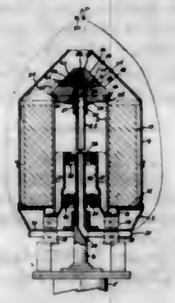
2,736,510
CASTING REEL
Peter A. Skelton and John B. Poepping, Missoula, Mont., said Poepping assignor to said Skelton
Application April 2, 1953, Serial No. 346,404
6 Claims. (Cl. 242—84.5)



1. A casting reel comprising a stationary spool having a central line receiving drum portion having a pair of spaced flange portions secured at opposite ends thereof, a longitudinal bore extending through said drum, a winding wheel having a central outwardly extending tubular hub journaled within the bore of said drum for rotation therein, the winding wheel including a circumferentially disposed rim overlying the periphery of one of the flange portions of the drum in one direction and extending away from the winding wheel in an opposite direction, an aperture portion in the latter portion of the winding wheel rim, an elongated pickup finger element adjacent one side of the winding wheel and having an end portion extendable through the aperture portion in said rim for engaging a line and winding the same upon the drum of the spool due to rotation of the winding wheel, said finger element including an elongated longitudinal slot portion therein, a retaining pin extending from the winding wheel and reciprocably retaining the finger element on said wheel, a drive shaft extending through the tubular hub of the winding wheel, one end of said drive shaft including a shoulder portion extending adjacent the side of the winding wheel on which the pickup finger is located, a pivot pin on said shoulder extending in radially offset parallel relationship to said drive shaft, a lever element pivotally connected at one end to said pivot pin and pivotally connected at the other end to a pivot pin secured to an intermediate portion of said pick-up finger, a tension spring operatively connected to said pickup finger urging the end out of a line engaging position away from the aperture portion in the rim of the winding wheel and toward the driving shaft, rotation of the drive shaft in a direction for winding the line upon the drum resulting in positioning of the pivot pin on the shoulder of the drive shaft radially away from the axis of rotation of said drive shaft to overcome the tension spring and urge the pickup finger into a line engaging position.

2,736,511
TWISTER TENSION ASSEMBLY
Ingham S. Roberts, Ridley Park, Pa., assignor to American Viscose Corporation, Philadelphia, Pa., a corporation of Delaware
Application August 2, 1952, Serial No. 302,358
11 Claims. (Cl. 242—149)

1. A tension device mounted to receive a strand passing from a revolving path comprising a member having a central passageway and alternately recessed and protruding annular surfaces in concentric relationship with the axis of the passageway, said surfaces being disposed radially outwardly and concentrically with respect to one end of the passageway, and another member having annular alternately recessed and protruding surfaces and a central stem of smaller diameter than the passageway extending in coaxial relation with said surfaces of the latter-named member, the surfaces of at least one member defining an



annular tongue extending into an annular groove defined by the surfaces of the other member, the adjacent opposing sidewalls of the groove and the tongue being approximately parallel with respect to a radial cross section of the members and disposed in spaced relationship when one member engages the other in coaxial relation, said members having spaced surfaces extending radially from the passageway to provide an annular clearance therebetween contiguous with the passageway.

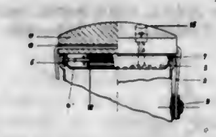
2,736,512
PACKAGE FOR CONTINUOUS STRANDS
Warren Wendell Drummond and William R. Steitz, Newark, and Philip J. Frickert, Hebron, Ohio, assignors to Owens-Corning Fiberglas Corporation, a corporation of Delaware
Application April 16, 1952, Serial No. 282,728
4 Claims. (Cl. 242—159)



1. A package of strand material consisting of the combination of a continuous length of multifilament strand built up progressively in superposed spiral layers of random waves and swirls and with each layer interiorly located relative to each preceding layer, the mass being torus shaped, with a torus-like container and accumulator therefor having an open semi-circular cross section with closed peripheral walls extending adjacent the outer surfaces of said mass of strand.

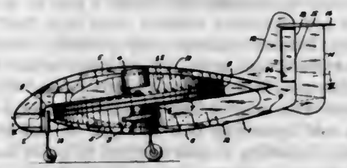
2,736,513
LOCKING CLOSURE LID FOR CONTAINERS PARTICULARLY FOR PNEUMATIC TUBE SYSTEMS
Max Amann, Stuttgart-Bad Cannstatt, and Karl Knodler, Fellbach, Kreis, Waiblingen, Wurttemberg, Germany, assignors to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application May 17, 1952, Serial No. 288,472
Claims priority, application Germany May 17, 1951
5 Claims. (Cl. 243—39)

1. A locking lid structure for a cylindrical container comprising a closure lid, resilient means extending from diametrically opposite points on said lid, means for securing the depending ends of said resilient means to diametrically opposite points on the wall of said container, said resilient means being of such length that they are under tension when said lid is in closed locked position with respect to said container, at least one spring-pressed detent extending radially from said lid, a co-operating



detent-receiving sector-shaped groove in the inner wall of the end of said container the depth of said groove being a maximum at its center and decreasing towards its ends, and the deepest region of said groove being so located that when said detent is in locking position in said region said resilient means extend parallel to the axis of said cylindrical container.

2,736,514
CONVERTIBLE AIRCRAFT
Robert S. Ross, Warrensville Heights, Ohio, assignor to Goodyear Aircraft Corporation, Akron, Ohio, a corporation of Delaware
Application March 9, 1953, Serial No. 340,957
5 Claims. (Cl. 244—15)



1. A propeller-driven convertible aircraft comprising a body having a top and a bottom surface forming together an airfoil of substantially lenticular transverse cross-section, said body being of substantially oval shape in plan view and of greater width than length and having its greatest height from the front at about one-third of its length, a front to rear air passage including a propeller well having a forwardly tilted fixed vertical axis, said air passage having a substantially rectangular cross-section of approximately the same width as the diameter of said well, adjustable inwardly foldable louvers supported in said body concentric with said well and flush with the top and bottom surfaces of the body for regulating the vertical air passage therethrough, a driving motor axially aligned with said well, a pair of counter-rotating variable pitch propellers driven by said motor and rotating within said well with their center plane passing substantially through the intersection of the motor axis and the longitudinal center axis of the body, an empennage including a rudder, an elevator, and ailerons, two pairs of segmental slidable covers for unsymmetrically changing the area of the opening for the bottom louvers, one pair being arranged transversely and the other pair longitudinally of the aircraft, control means linking together said transverse covers with said elevators for simultaneous operation and the longitudinal covers with said ailerons for simultaneous operation, and control means for simultaneous operation of said upper and lower louvers, the louvers being held in closed position for forward movement, in open position for vertical movement and in intermediate positions for combined horizontal and vertical movement of the aircraft.

2,736,515
SYNCHRONIZING DEVICE FOR AIRCRAFT FOLDING WING HYDRAULIC SYSTEMS
Thomas E. Dolan, Dallas, and John B. Murray, Arlington, Tex., assignors, by mesne assignments, to Chance Vought Aircraft, Incorporated, a corporation of Delaware
Application November 24, 1952, Serial No. 322,281
2 Claims. (Cl. 244—49)



1. In an aircraft wing fold system, an articulated wing panel having two sections which fold, each of which has a pivoted connection to the next adjacent wing section; a source of fluid under pressure; a pair of hydraulic struts for folding each section located one on each side of the wing section fold and pivot axis and having opposed piston rods; and mechanism for synchronizing the folding of said sections comprising, a valve including a base fixedly mounted on aircraft wing structure, a valve housing slidable on said base and having ports having fluid connection with said pressure source and said hydraulic struts, and a valve rod slidable within said housing and having lands for directing the flow of fluid from said source selectively to said ports, linkage associated with one of said wing fold pivot connections and having an operable connection with said housing; and linkage associated with the other of said wing fold pivot connections and having an operable connection with said valve rod, the relative positions of said housing and said valve rod being positioned by said linkage to control the flow of fluid through said ports to said hydraulic struts by positioning of said lands in relation to said ports.

2,736,516
STEERABLE AIRPLANE LANDING WHEEL
Edward Wolf, Cuyahoga Falls, Ohio, assignor to Goodyear Aircraft Corporation, Akron, Ohio, a corporation of Delaware
Application April 27, 1953, Serial No. 351,096
4 Claims. (Cl. 244—50)

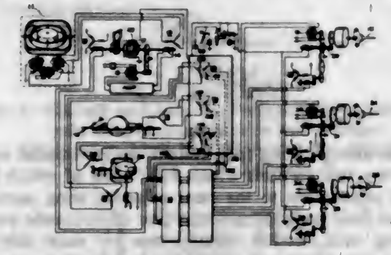


1. In combination with a steerable airplane landing wheel an axle provided with a forked end, a king pin, having a splined middle portion and journaled end portions, inserted in splined engagement into said forked axle end and fixed thereto with said journaled portions extending therefrom, a hub, having said wheel rotatably mounted thereon, being swingable about said journaled pin portions, and an arcuate hydraulic torque motor, mounted between said forked end and using the king pin as shaft in actuating engagement between said hub and said king pin for steering the wheel.

2,736,517
TURN CONTROLLER FOR AUTOMATIC PILOT SYSTEMS
Francis Henry S. Rossire, Leonia, N. J., assignor to Bendix Aviation Corporation, Teterboro, N. J., a corporation of Delaware
Application May 27, 1950, Serial No. 164,659
7 Claims. (Cl. 244—77)

1. A controller unit for an automatic pilot for use in aircraft, said pilot having rudder, aileron and elevator actuating motors together with master instruments for normally

controlling said motors, comprising turn, bank and pitch signal developing devices adapted to be connected to the master instruments and to the rudder, aileron and elevator motors for controlling the motors independently of their related master instruments, a driving arrangement including a settable airspeed linkage interconnecting the turn and bank devices, the linkage being settable to provide relatively small displacement of the turn device for



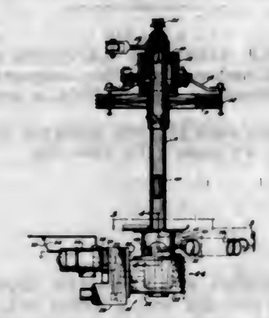
a relatively large displacement of the bank device, a rotatable shaft included in the driving arrangement and connected to displace the turn device, a loosely mounted member on said shaft drivably connected with said pitch device, and means comprising a turn control member drivably connected with the settable airspeed linkage and the loosely mounted member for simultaneously operating said bank, turn and pitch devices.

2,736,518

AIRCRAFT TRIM AND ARTIFICIAL FEEL SYSTEM

Walter B. Degenfelder, Inglewood, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California

Application July 29, 1952, Serial No. 301,531
3 Claims. (Cl. 244—83)



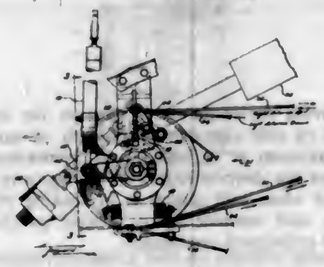
1. In a power controlled system including a pilot's control element and cable and linkage means for operating an altitude control surface of an aircraft, an artificial feel and trim device comprising: a hollow shaft mounted on fixed structure of said aircraft for angular movement about the axis of said shaft; a solid rod coaxially arranged within said hollow shaft and having a first end fixedly secured to said shaft and the other end thereof extending beyond an end of said shaft; driving means mounted on fixed structure of said aircraft and having a rotatable portion thereof in contact with the extending end of said rod whereby the latter may be maintained in a first position corresponding to the normal neutral position of said pilot's control element and in which said rod is free of torsional stress and movable to a plurality of operational positions located angularly in each direction from said first position; lever means attached to said shaft whereby movements of said control element may be transmitted to said shaft; and a cable quadrant fixedly secured to said shaft in coaxial relationship and being adapted to receive a pair of cables whereby angular movement of said shaft may be transmitted to said control surface.

2,736,519

AILERON ACTUATING MECHANISM

John E. Glenn, Hawthorne, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California

Application July 6, 1954, Serial No. 441,342
4 Claims. (Cl. 244—90)



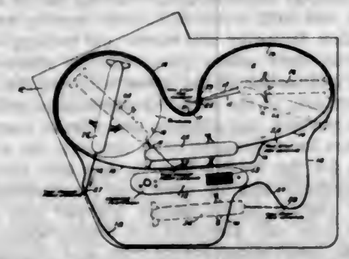
1. A mechanism of the class described comprising: a supporting structure; a shaft rotatably mounted in said structure; a pair of cable pulleys mounted for angular movement on said shaft and having respective first positions in which a predetermined angular relationship exists therebetween and being movable through operating ranges to respective second positions in which the pulleys are angularly moved an equal amount from said first positions thereof in opposite directions; a pair of spaced arms keyed to and extending radially from said shaft; an operating link located between and pivotally supported by the free ends of said arms; first and second links pivotally attached to said link at spaced positions and spaced from the pivotal axis of said link on said arms and extending between said operating link and one of said pulleys, respectively; actuating means adapted to pivot said operating link about the pivotal axis thereof on said arms when energized; said actuating means, operating link, and first and second links cooperating to move said pulleys between said first and second respective positions when said actuating means is energized and to maintain said pulleys at any position in said operating ranges when said actuating means is de-energized; and means secured to said shaft for imparting angular movements thereto.

2,736,520

HANDLING SYSTEM FOR AIRCRAFT

Sidnor Tebbs Chichester, Jr., Washington, D. C., assignor of one-third to James Perkins Parker, Washington, D. C.

Application October 9, 1953, Serial No. 385,185
6 Claims. (Cl. 244—114)



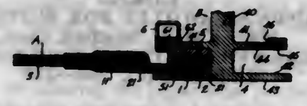
1. In a system for handling aircraft during landing, loading and takeoff operations, a landing station comprising a turntable for orienting an aircraft landing thereon, a takeoff area, a loading platform located substantially midway between said landing station and said takeoff area and to one side thereof, an endless trackway extending around said takeoff area and said landing station and passing inwardly of said loading platform, tow means carried by said trackway, a second endless trackway extending around said takeoff area and said landing station and passing outwardly of said loading platform, a second tow means carried by said second trackway, means for detachably coupling an aircraft to either of said tow means whereby an aircraft landing on said turntable may be oriented and coupled to either of said tow means and said tow means operated to move said aircraft into position opposite said loading platform and upon further operation of said tow means to move said aircraft into said takeoff area, the configuration of said first trackway being such as to position said aircraft substantially parallel to said loading platform on the inner side thereof and to orient said aircraft in said takeoff area in proper position for takeoff and the configuration of said second trackway being such as to position said aircraft substantially parallel to said loading platform on the outer side thereof and to orient said aircraft in said takeoff area in proper position for takeoff.

2,736,521

FLEXIBLE TANK WALL EDGE SEALS

Charles A. Bonnerman, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware

Application April 13, 1954, Serial No. 422,739
17 Claims. (Cl. 244—135)



1. Means detachably edge-securing and sealing a pliant sheet, such as an internal wing fuel tank section, to a support structure, such as the wing bulkhead structure of an airplane, comprising two separate beads formed continuously along and in general extension of the edge of the pliant sheet, one bead being of relatively soft, resiliently deformable material, for sealing, and the other bead being of relatively hard and nondeformable material, for securement; the support structure having a substantially continuous groove of a width greater than the thickness of the harder, securing bead, and of a depth to receive, and receiving, both said beads, a filler bar of substantially noncompressible material received within and extending the length of the groove, said filler bar having a cross-section substantially filling the width of the groove alongside the harder bead, and crowding and deforming the softer sealing bead, said filler bar having a longitudinally extending flange located, by the bar's reception within the groove, in contact with the outer side of the harder securing bead, preventing withdrawal thereof, and means mounted upon the support structure and removably engaged with the filler bar, retaining it in such engagement with the beads and within the groove.

2,736,522

AIRCRAFT LOAD EJECTION DEVICE

Granville L. Wilson, Huntington Park, Calif., assignor to Northrop Aircraft, Inc., Hawthorne, Calif., a corporation of California

Application August 21, 1953, Serial No. 375,727
9 Claims. (Cl. 244—137)

1. In an airplane having a releasable externally carried stores cell fitted with securing means, and means permanently mounted on the plane and engaged with said securing means but releasable therefrom; releasing means comprising: a first pressure cylinder having a piston with a piston rod extending outwardly from said cylinder; a pressure plate actuated by said piston and adapted to exert outward thrust against a stores cell positioned adjacent thereto; a second cylinder having a piston with a piston rod extendable therefrom; a pressure switch actuated by the piston of said second cylinder to operate the permanently mounted means to release the securing means of the stores cell; means for producing a supply of fluid under pressure at said cylinders; means to establish the relative sequence and timing of movements of said pistons to assure movement of said pressure

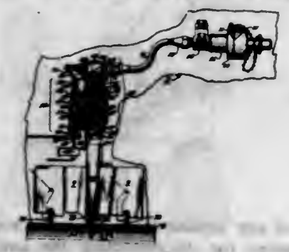


plate into firm pressure-loaded contact with said stores cell in advance of the operation of said pressure sensitive switch and subsequent outward thrust of said pressure plate; and means, remotely controlled, for directing fluid under pressure into said cylinders to extend said pistons, release the stores cell and force it away from the airplane.

2,736,523

SECTIONAL FUSELAGE FOR AIRCRAFT

Herbert Eugene Chaplin, Hayes, England, assignor to The Fairey Aviation Company Limited, Hayes, England, a company of Great Britain

Application December 30, 1952, Serial No. 328,746
Claims priority, application Great Britain January 2, 1952
18 Claims. (Cl. 244—140)



9. An aircraft having a fuselage formed in two portions, a body portion including wings for supporting substantially the whole aircraft, and a nose portion including opaque means forward of the pilot's face limiting his field of vision in a downward direction, a transverse pivotal connection between the portions permitting the nose portion to be pivoted downward relatively to the body portion from a normal flight position to a drooping nose position, and actuating means for moving the nose portion from the normal flight position to the drooping nose position and from the drooping nose position to the normal flight position.

12. An aircraft as claimed in claim 9 in which the nose portion contains a hermetically sealed cockpit.

13. An aircraft as claimed in claim 12 including means for completely disconnecting the nose portion from the body portion and a parachute connected to the nose portion.

2,736,524

PARACHUTE

Louis Thébault, Sucy-en-Brie, France

Application May 9, 1952, Serial No. 286,900
5 Claims. (Cl. 244—152)

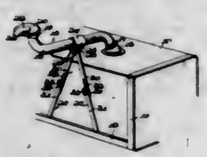
1. In a parachute, the combination of a canopy provided with a plurality of rings spaced from the center of the canopy; a set of normal cords, each having one end attached to the canopy at its edge, and the other ends of said cords being connected to one another, and connected to the load of the parachute; a set of auxiliary cords, each of which auxiliary cords has one end attached to the edge of the canopy and passes freely through at least one of said rings, said auxiliary cords being connected at their other ends; a cord for connect-

ing the connected auxiliary cords and the load of the parachute, the total length of each auxiliary cord and the cord connecting it to the load being less than the length of each normal cord so that the normal cords are



relieved of any tension from the load; and manually operated means for disconnecting the connection of the auxiliary cords to the load, regardless of air pressure, to relieve the auxiliary cords of tension from the load and to apply to the normal cords the tension of the load.

2,736,525
HOSE SUPPORT
Milton M. Jones, Philadelphia, Pa.
Application October 28, 1952, Serial No. 317,375
1 Claim. (Cl. 248—83)
(Granted under Title 35, U. S. Code (1952), sec. 266)



An adjustable supporting device for a hose or the like comprising a substantially rigid open-ended cylindrical sleeve adapted to slidably receive the hose and freely movable longitudinally of the hose to a selected adjusted position and free from clamping engagement with the hose, companion pairs of spaced opposed apertured lugs secured to the sleeve near its longitudinal center in circumferentially spaced relation and extending generally radially of the sleeve, the apertures of the lugs of each pair being in alignment and having their axis extending parallel to the longitudinal axis of said sleeve, a pair of longitudinally extensible legs extending substantially radially of the sleeve and having their upper ends engaging between the lugs of each pair, said upper ends of the legs having openings for substantial registration with the apertures of said lugs, bolts extending through the apertures of said lugs and legs and arranged parallel to the longitudinal axis of said sleeve and serving to pivotally secure the legs to the sleeve, whereby the legs may be swung in arcs circumferentially of the sleeve and about their inner ends to selected radially adjusted positions relative to said sleeve, clamping nuts carried by said bolts and engaging one lug of each pair for releasably clampingly securing the legs in their selected radially adjusted positions, and adjustable means carried by the extensible legs for releasably securing them in selected longitudinally adjusted positions.

2,736,526
LIFTING DEVICE FOR LIFTING HEAVY OBJECTS
Robert A. Forbes, Monroe, Mich.
Application June 2, 1952, Serial No. 291,135
1 Claim. (Cl. 248—125)

In a device of the character described, a wheeled base, an inverted U-shaped vertical upright mounted thereon, in spaced relation with one end of the base embodying legs teeth formed along one longitudinal edge of each leg of said upright, brace bars extending from the bight of said upright to said base, a supporting bracket carried by each leg, each bracket having a bore therein surrounding its associated leg, an extension on each bracket



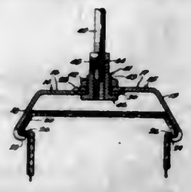
extending rearwardly of its associated leg, a V-shaped aperture in each bracket, a pawl pivotally mounted in each aperture, a pin carried by each pawl engageable in a selected tooth, a spring connection between each extension and the free end of its associated pawl, and a load supporting table pivotally mounted between and across said supporting brackets.

2,736,527
UPRIGHT OUTLET BOX SUPPORT
William Maier, Stratford, Conn.
Application February 12, 1953, Serial No. 336,521
2 Claims. (Cl. 248—228)



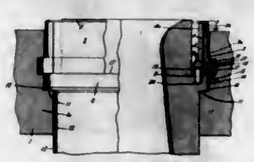
1. In combination with a channel bar supported in a horizontal position with its web in a vertical plane and its upper and lower flanges in parallel horizontal planes, an upright outlet box support comprising an elongated slotted box carrying member, fastener means for an outlet box adjustably carried by said slotted member intermediate the ends thereof, and means at the lower end of the elongated member coacting with the channel bar for holding the elongated member in upright position with a portion thereof directly contacting the vertical web of the channel bar, comprising an integral plate-like hook member including a lower horizontal portion adapted to fit against the under surface of the lower flange of the web, and an end portion bent at an acute angle to the horizontal portion and extending diagonally upwardly and inwardly over the top of the lower flange, a hooked clamp spaced above from the hook member and adjustably carried by the slotted portion of the elongated member, said hooked clamp including a spring clamping member comprising an apertured saddle portion having an integral hook portion for engaging the under surface of the upper horizontal flange of the channel bar, and a screw member passing through the aperture in the saddle and through the slotted elongated member, said elongated member, when supported by said spaced hook member and clamp, projecting vertically upwardly from the channel bar, and the outlet box fastener means lying directly above the flanges of the channel bar.

2,736,528
HANGER DEVICE FOR LIGHTING FIXTURE
Glen R. Le Brock, Chicago, Ill., assignor to Curtis Lighting, Inc., Chicago, Ill., a corporation of Illinois
Application January 11, 1950, Serial No. 137,979
2 Claims. (Cl. 248—317)



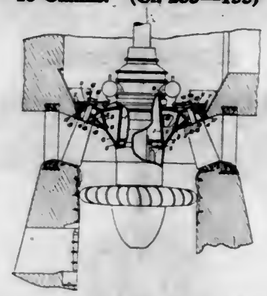
1. A hanger device for supporting onto the end of a hanger rod a fixture having laterally extending ledges in spaced relation with the upper edge comprising a pair of similar strip members each having an inturned outer end hook portion, an intermediate portion extending upwardly and inwardly in the direction toward each other but in spaced relation throughout and a horizontally disposed portion at the inner end having openings therein dimensioned to enable the rod to extend loosely therethrough and which when said horizontally disposed portions are in overlapping assembled relation are in registry, an adjustable fastening device for loosely securing the strips in the assembled relation onto the end portion of the hanger rod whereby, until said device is adjusted for tightening the end portions in overlapping relation, the strips may be rocked about the rod to spread the inturned end portions for clearing the upper edge portions of the fixture whereby the inturned end portions may drop naturally to establish a gripping relation as they clear the ledges and which when tightened prevent relative movement between the strip members to fix the assembled relation.

2,736,529
VALVE SEAT LOCKING MECHANISM
Leo W. Songer, Scotia, N. Y., assignor to General Electric Company, a corporation of New York
Application April 27, 1955, Serial No. 504,238
6 Claims. (Cl. 251—360)



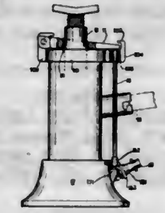
1. In a valve seat assembly, the combination of a generally cylindrical valve seat member defining an axial passage therethrough, the valve seat member having a radially extending annular lip defined between first and second radially extending annular surfaces, a supporting member for the valve seat defining a circular opening of two different diameter portions adapted to receive the valve seat, the supporting member defining a third radially extending annular surface connecting the two portions of different diameters and adapted to abut said first radially extending annular surface, an annular recess defined by the supporting member adjacent said second radially extending annular surface, and locking means comprising a first segmental ring member abutting said second radially extending surface and extending into said recess, whereby the valve seat member is locked relative to the supporting member, and a second retaining ring member disposed concentrically within the first ring for maintaining the locking means in position, and means securing said second ring to said first ring.

2,736,530
HEAD COVER FOR TURBINES AND PUMPS
Hans H. Koepke, Heidenheim, Germany, assignor to J. M. Voith, Heidenheim, Germany
Application February 24, 1950, Serial No. 146,127
Claims priority, application Germany March 19, 1949
13 Claims. (Cl. 253—155)



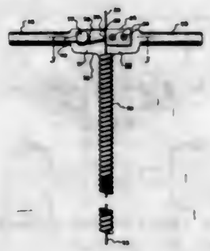
1. A head cover for a hydraulic turbine comprising a circular top flange, a circular distributor flange having a diameter greater than said top flange and substantially concentric therewith, a bottom ring coaxial with said flanges and disposed intermediate and lower than said flanges, and frusto-conical bowl-shaped means interconnecting each of said flanges with said bottom ring.

2,736,531
HYDRAULIC LIFTING JACK
Charles Louis Wilson, Birmingham, England, assignor to Prima Industries Limited, Upper Gornal, Worcester, England, a limited liability company of Great Britain and Northern Ireland
Application October 1, 1953, Serial No. 383,638
Claims priority, application Great Britain October 3, 1952
7 Claims. (Cl. 254—93)



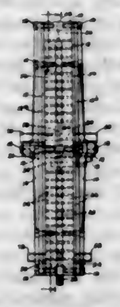
1. An hydraulic lifting jack incorporating a relatively stationary hydraulic cylinder, a ram axially displaceable within said hydraulic cylinder, a lever provided in an intermediate portion with a hole through which the ram passes, the lever being pivoted at one end to the said hydraulic cylinder and when the ram is stationary assuming a position in which the axis of the hole is oblique to the axis of the ram, the degree of obliquity being such as to permit the said lever to assume a substantially horizontal position with the wall bounding the hole in a non-binding relationship with the ram when the ram is stationary but to permit the lever a limited degree of turning movement with the free end moving upwardly during the raising of the ram and to permit the lever a limited degree of turning movement with the free end moving downwardly under the falling tendency of the ram in the event of the inadvertent lowering of the ram due to failure of hydraulic pressure, to bring the wall bounding the hole in the lever into frictional binding contact with the ram so as to restrain continued lowering thereof and means cooperating with the free end of the lever for preventing continued upward movement of the free end of the lever during the raising of the ram when the axis of the hole has attained coincidence with the axis of the ram so that the ram cannot bind in the hole in the lever during raising of the ram.

2,736,532
TOOL FOR PUSHING OR PULLING FISH TAPE THROUGH A CONDUIT
Elmer V. Hughes, Oceanside, Calif.
Application April 23, 1954, Serial No. 425,283
1 Claim. (Cl. 254—134.3)



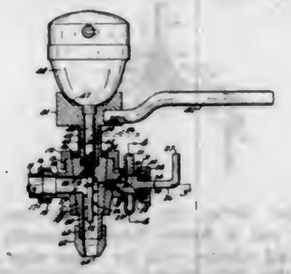
A fish tape pusher-puller tool comprising a handle of sufficient length to provide two hand grips; a flexible tube having one end thereof connected with the handle intermediate the two grips and extending transversely of the handle; a fish tape bearing block on the handle and having an elongated bearing face substantially axially aligned with the opening in said end of the tube; a bearing carried by the handle and extending parallelly of the said bearing face of the block; and a cam pivotally carried by the bearing and having a bearing face confronting the bearing face on the block for clutching a fish tape between the faces, the bearing surface of the bearing block extending on opposite sides of a plane, lying at right angles thereto and intersecting the axis of the bearing for the cam, and said cam being movable, while the tape is in position alongside the bearing surface on the bearing block, from a position in which the apex of the cam is on one side of said plane to a position in which the apex of said cam is on the other side of said plane.

2,736,533
HEAT EXCHANGE APPARATUS
John L. Allen, Boston, Mass.
Application March 26, 1953, Serial No. 344,877
10 Claims. (Cl. 257—241)



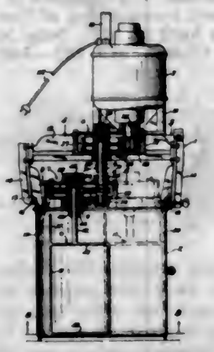
1. Heat exchange apparatus comprising a receptacle, a spiral coil in said receptacle, a separator member between opposite extremities of and within said receptacle and extending beyond and being connected to said coil whereby two passages are provided within said receptacle at opposite portions of said coil, said receptacle having three inlet openings and three outlet openings in communication with said coil and two passages, said receptacle embodying means, enclosing said passages, at opposite sides thereof.

2,736,534
FLAVOR MIXING VALVE
Harold W. Atkins, Minneapolis, Minn., assignor to Dari-Go-Round, Inc., Minneapolis, Minn., a corporation of Minnesota
Application February 12, 1953, Serial No. 336,606
3 Claims. (Cl. 259—8)



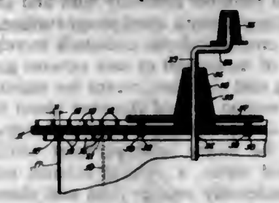
2. A flavor mixing valve adapted to be attached to the outlet of a freezing device designed for the manufacture of such frozen food bases as ice cream, milk shake and the like comprising, a casing having a first and a second inlet, an open-ended cylinder rotatably journalled within the casing, a first orifice in said cylinder adapted to cooperate with the first inlet in the casing for the introduction of frozen food base, a second orifice in said cylinder adapted to cooperate with a second inlet in said casing for the introduction of flavor fluid, means for controlling the rotation of said open-ended cylinder, and a stirring rotor mounted upon said cylinder and extending rotatably and axially into said cylinder for intermixing the frozen food base with flavor fluid prior to dispensing of the mixed product from said open-ended cylinder.

2,736,535
MIXING DEVICE
William R. Clark and Floyd Hinkson, Corte Madera, Calif.
Application April 24, 1953, Serial No. 351,015
5 Claims. (Cl. 259—102)



1. In a mixer of the character described, driving means adapted to be supported on a container, an output element of said driving means being located generally centrally to said container, a floating transmission supported on and driven by said output element, a support for the floating transmission journalled on and being freely shiftable about the axis of said output element, a driven output member of said floating transmission being eccentric with respect to said output element, and an agitator depending from said driven output member and being rotated thereby, said agitator being eccentric with respect to the axis of said output element so as to impart to said floating transmission turning moment about said axis according to the reaction forces and torque moment on said agitator.

2,736,536
COOKING VESSEL COVER AND AGITATOR
Benjamin B. Benowitz, Chicago, Ill.
Application April 2, 1953, Serial No. 346,467
5 Claims. (Cl. 259—122)



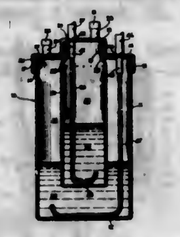
1. A combined lid and agitator structure for cooking vessels or the like comprising a generally flat cover member having a plurality of concentric circular grooves on opposite sides thereof for receiving the circumferential edges of cooking vessels of different sizes, the groove diameters on one side of said cover member being different from and interposed between the groove diameters on the other side of said cover member whereby the grooves on opposite sides of said cover member are staggered radially so that the cover member is reversible for fitting the cover member on vessels of different sizes, a rotatable member extending through said cover member in detachable journalled relation therewith and freely slidable axially of said cover member, handle means at one end of said rotatable member for operating the same, and a radially adjustable agitator member detachably carried by and extending outwardly from said rotatable member adjacent the opposite end thereof and adapted to rest on the bottom of the cooking vessel for sweeping rotation during operation of the handle means, the axial slidability of said rotatable member permitting automatic accommodation of the agitator structure to vessels of varying depth and the detachability of said rotatable member and said agitator member permitting assembly of the agitator means on either side of said cover member for reversible use thereof.

2,736,537
MIXING BIT
Nels Nelsson, Chicago, Ill.
Application September 3, 1952, Serial No. 307,643
2 Claims. (Cl. 259—134)



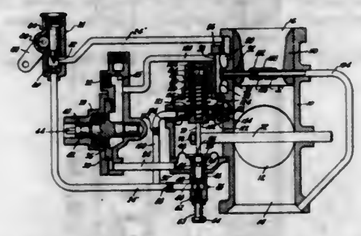
1. A mixing bit comprising a vertical shaft and spaced apart upper and lower mixing members adjacent the lower end of said shaft, each member comprising a plurality of propeller blades spaced equiangularly about and extending radially from said shaft and angularly disposed at an angle no greater than about 30° with respect to a plane extending at right angles to said shaft such that the leading edge of each of said blades constituting the upper member is above the trailing edge when said shaft is revolved in a clockwise direction, and the leading and trailing edges of said lower member being in opposite relation to said upper member, the blades of both mixing members having substantially the same equiangular spacing, the blades of one member being opposite the angular space between the blades of the other member and the outer portion of the leading edge of each of said propeller blades curved from the shaft in a direction contra to that of the direction of rotation.

2,736,538
ENGINE INDUCTION CHARGE FORMING AND UPPER CYLINDER LUBRICATING DEVICE
Joseph S. Barlow, Altadena, Calif.
Application October 28, 1952, Serial No. 317,256
3 Claims. (Cl. 261—18)



1. An induction charge forming and upper cylinder lubricating device comprising, in combination: a pair of sealed containers arranged in series one within the other; means providing communication between the interiors of said containers, the first of said containers being adapted to contain a supply of water/alcohol or the like, the second of said containers being adapted to contain a supply of lubricating oil; an air entrance structure for admitting air to the interior of said first container; an exit structure through which vapor may be drawn from the interior of said second container; wicks extending from each of said structures and adapted to be disposed in the liquids in said containers; a plurality of serially arranged orifices in said exit structure, the furthest upstream orifice being larger in diameter than the next following downstream orifice; impingement means associated with each of said orifices; and a plurality of orifices in an air passage of said entrance structure, said wicks having ends disposed adjacent one of each of said plurality of orifices in said structures.

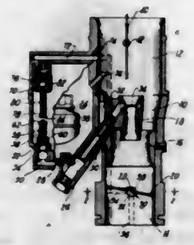
2,736,539
CARBURETOR
Emil O. Wirth and Frederik Barfod, South Bend, Ind., assignors to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Original application October 17, 1947, Serial No. 780,368, now Patent No. 2,617,397, dated November 11, 1952. Divided and this application November 26, 1951, Serial No. 258,151
5 Claims. (Cl. 261—34)



1. A mechanically actuated accelerating pump for a fuel system comprising a single pump chamber for supplying an increased flow of fuel to said system; a movable wall forming one side of said chamber and being adapted

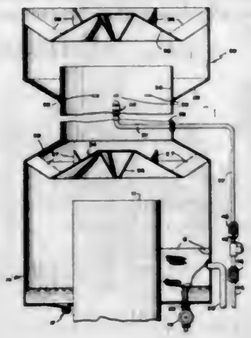
to be positively moved inwardly in respect to said chamber; a cylindrical element secured to said wall; a second movable wall forming another side of said chamber; a cylindrical element secured to said second wall adapted to slidably receive said first mentioned element; a spring for urging said elements apart; and a resilient means for urging said second wall inwardly in respect to said chamber.

2,736,540
CARBURETOR
Robert R. Dorland, Detroit, Mich., assignor to Bendix Aviation Corporation, South Bend, Ind., a corporation of Delaware
Application October 16, 1951, Serial No. 251,508
4 Claims. (Cl. 261—43)



1. In a carburetor: an induction passage, a throttle in said passage, a shaft and bearing for said throttle, a float chamber, a main discharge jet connecting said chamber with the induction passage, a passageway connecting said chamber with said jet, a valve in said passageway, a cylinder, a piston in said cylinder, a stem connected to said piston and adapted to contact and open said valve, a spring urging said stem and piston in the direction to open said valve, a conduit connecting said cylinder with said throttle shaft bearing, a constantly open bleed passageway connecting said conduit with the induction passage on the air intake side of the throttle a second conduit connecting said bearing with the induction passage on the engine side of said throttle, and a channel in said shaft at the point where said conduits intersect said bearing adapted to connect said conduits only when said throttle is closed a predetermined degree.

2,736,541
SPARK ARRESTER
Herbert Maiman, Bala-Cynwyd, Pa.
Application December 1, 1949, Serial No. 130,577
1 Claim. (Cl. 261—126)
(Granted under Title 35, U. S. Code (1952), sec. 266)

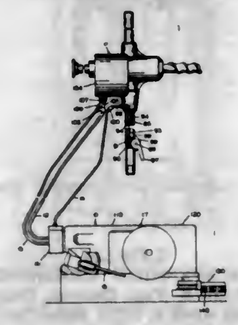


In a spark arrester for exhaust gases and particles from a smokestack, a tubular chamber having a diameter considerably larger than the diameter of said stack surrounding the end of said stack and in water-tight contact therewith, said stack extending into said chamber, a conical baffle having an inverted downwardly projecting tip mounted within said chamber coaxially with and above the end of said stack to present a continuous surface to the gases and particles emerging from said stack thereby to reverse the direction of movement of said exhaust gases and particles entering said chamber, means for maintaining water in the lower section of said chamber about the extension of said stack at a predetermined level thereby to separate and quench the larger solid particles which strike the surface of said water, a vertical exhaust tube having a diameter considerably smaller than said chamber extending from the end of said chamber housing the baffle, said exhaust tube having a series of slots on the extended end thereof, means including a fog spray nozzle mounted coaxially of said exhaust tube for spraying a finely divided spray of water therein to extinguish smaller particles, said water and smaller particles falling about said baffle into the water in the lower section of said chamber, a cap having a diameter considerably larger than said exhaust tube mounted on the slotted end of said exhaust tube, said exhaust tube extending into said cap, and a second conical baffle having an inverted downwardly projecting tip mounted in said cap coaxially with and above the end of said exhaust tube to prevent rain or other atmospheric condensate from falling into said exhaust tube other than through the slots in said exhaust tube, said exhaust gases passing about said baffle into said atmosphere.

2,736,542
RETRACTABLE BORING ASSEMBLY
Frank Cartlidge, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application October 22, 1954, Serial No. 463,867
2 Claims. (Cl. 262—7)

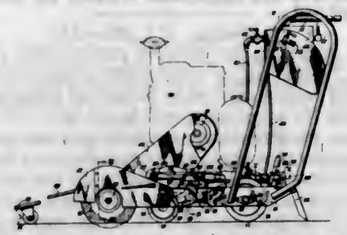
1. In a boring head for mining machines, a rotatable hollow hub having a plurality of hollow radial extensions with generally rectangular end openings, each of said extensions having a pivot pin mounted transversely of its end opening, a cutter arm pivotally mounted on each of said pivot pins for limited hinged adjustment toward and away from the axis of rotation of said hub, means enclosed in said hub and connected to the inner ends of said arms for causing simultaneous hinged adjustment of said arms, the side faces of each of said arms adjacent its pivot pin extending in close-fitting engagement into the end opening of its respective hollow radial extension, the portions of each arm forwardly and rearwardly of its pivot pin having arcuate faces concentric with the axis of said pin, and opposed wiper members mounted on the rim of said extension for engagement with the arcuate faces of the arms in all permissible positions of the latter.

2,736,543
KERF CUTTING MACHINE WITH HYDRAULICALLY OPERATED DRILL
Joseph J. Slomer, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application May 5, 1953, Serial No. 353,138
4 Claims. (Cl. 262—9)



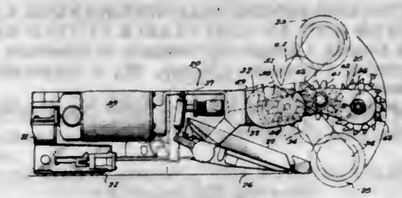
1. In a kerf cutting machine, a main frame, a head rope drum on the advance side of said main frame having a flexible draft device adapted to be wound thereon, a fluid operated motor for driving said head rope drum, a tail rope drum on the retreating side of said main frame having a flexible draft device wound thereon, a fluid operated motor for driving said tail rope drum, individual fluid pumps for supplying fluid under pressure to said head and tail rope drum drive motors, individual valve means controlling operation of said motors and drums, individual pressure lines from said pumps to said valve means for supplying fluid under pressure thereto and to said motors under the control of said valve means, the improvements comprising a drill take off valve connected in one of said pressure lines in series with one of said valve means and biased to supply fluid under pressure thereto, a pressure line leading from said drill take-off valve, a hydraulically operated drill connected with said pressure line and having a handle and a fluid operated motor for driving the drill, and fluid pressure operated means connected with said take-off valve independently of said pressure line and operated from said drill handle for operating said take-off valve against its spring bias to supply fluid under pressure to said last mentioned pressure line to operate said drill.

2,736,544
MOVABLE PAVEMENT CUTTING MACHINE WITH VERTICALLY ADJUSTABLE AND ROCKING AXLE
Harold J. Wright, Kansas City, Mo., assignor to Concrete Saw Company, Kansas City, Mo., a corporation of Missouri
Application September 17, 1951, Serial No. 246,935
14 Claims. (Cl. 262—20)



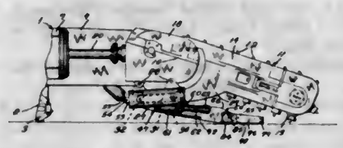
3. In a cutting machine having a platform, a combination platform raising and lowering means and platform leveling means, including a wheel and axle assembly; an element on the axle of said assembly; a member pivotally secured to the element for swinging movement on a first axis; means pivotally securing the member to the platform for swinging movement of the assembly, the member and the element as a unit on a second axis, relative to the platform, one of said axes being substantially parallel with said axle, the two axes being substantially relatively perpendicular; and extensible mechanism pivotally interconnecting the platform and the element for swinging the latter on the axis parallel with the axle to an adjusted position and for holding the element in said adjusted position while permitting swinging about said other axis.

2,736,545
MINING MACHINE ROTATING CUTTER HEAD WITH GEAR TRAIN DRIVE
Frank Cartlidge, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois
Application December 11, 1952, Serial No. 325,413
6 Claims. (Cl. 262—20)



1. In a continuous miner, a frame including a pair of spaced frame arms supporting a rotating cutter head having cutter bits mounted thereon, means for swiveling said frame together with said cutter head with respect to a seam of coal or the like, a gathering mechanism disposed beneath said frame and said cutter head to remove material which has been fragmented from said seam by said cutter head, said frame arms in side elevation being of inverted V-configuration whereby said cutter head may be disposed in position close to said gathering mechanism when said cutter head is fragmenting material from said seam near the bottom thereof to maintain the amount of fragmented material at said gathering mechanism at a minimum, and a gear train mounted on each of said frame arms for imparting rotative movement to said cutter head, each of said gear trains including a pair of reaching gears, each of which is angularly displaced from the other by approximately one-half a pitch distance, each of said reaching gears meshing with a final driven gear mounted on said cutter head, and means on the non-pressure faces of the teeth of such final driven gear for supporting a cutter bit rotatable therewith, each of said reaching gears having sufficient distance between adjacent teeth so as to enable said cutter bit and its supporting means to clear the teeth of said reaching gear.

2,736,546
MINING APPARATUS WITH CLEAN-UP DEVICE
Edson B. Steele, Sugar Creek Township, Venango County, Pa., assignor to Joy Manufacturing Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application July 2, 1949, Serial No. 102,786
7 Claims. (Cl. 262—29)



5. In combination, a base, a frame on said base mounted for reciprocation relative thereto, a disintegrating apparatus supported on said frame for movement relative

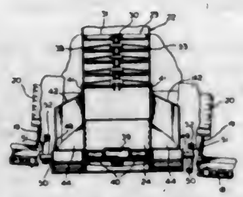
thereto in upright planes and for movement with said frame to effect sumping and withdrawing, a material-pushing device extending across the front end of the frame and reciprocably supported by said base for forward and rearward movement relative to said frame in the planes of swing of said disintegrating apparatus, and means for effecting advance and retraction of said device relative to said frame and of said disintegrating apparatus relative to said base including cylinder and piston mechanism for effecting advance and retraction of said device, and other cylinder and piston mechanism for effecting advance and retraction of said disintegrating apparatus and means for supplying operating fluid to said cylinder and piston mechanisms including fluid supply connections a portion of which is common to the supply of fluid to both cylinder and piston mechanisms and a control valve common to both of said cylinder and piston mechanisms.

2,736,547

CONTINUOUS MINING MACHINE HAVING A CONVEYOR AND AN ADJUSTABLE CUTTER BAR

Joseph Gonski, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a corporation of Illinois

Application August 31, 1954, Serial No. 453,304
4 Claims. (Cl. 262—29)



1. In a mining machine, a main frame, a cutting frame mounted on the forward end of said main frame including a horizontally disposed cutter bar along the bottom of said cutting frame, means affording lateral and vertical tilting adjustments of said cutting frame and cutter bar relative to said main frame, an endless flight conveyor on the main frame for discharging cuttings from said cutting frame, including a conveyor section fixed on said main frame rearwardly of said cutter bar, and an auxiliary conveyor section adapted to form a continuation of said fixed conveyor section having its rear end pivotally connected to the main frame on a transverse axis, said conveyor section and auxiliary conveyor section having continuous upright side walls along opposite sides thereof fixed to said main frame and terminating at their front ends in material-receiving relation to said cutter bar, and means flexibly connecting the front end of said auxiliary trough section to said cutter bar to maintain the latter in material-receiving relation to said cutter bar in all permissible positions of adjustment thereof.

2,736,548

APPARATUS FOR ACCELERATING CONVECTIVE HEAT TRANSFER BETWEEN A SOLID AND A GAS

Howard S. Orr and Alfred Teplitz, Pittsburgh, Pa., assignors to United States Steel Corporation, a corporation of New Jersey

Application November 14, 1952, Serial No. 320,571
3 Claims. (Cl. 263—3)

1. Apparatus for cooling heated strip which comprises vertically spaced rotatable rolls for supporting said strip, a cooling chamber between said rolls throughout the majority of the distance between the rolls, means for supplying a cooling medium to the cooling chamber, and means for moving the peripheral surface of the strip in a non-circular path while in contact with at least one of the rolls to rapidly vibrate the strip in its passage be-



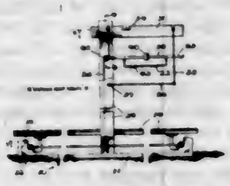
tween the rolls whereby heat transfer from the strip is accelerated.

2,736,549

TORQUE SUSPENSION WEIGHING SCALE

Claude K. Paul, Duncan, Okla.

Application April 6, 1953, Serial No. 346,943
8 Claims. (Cl. 265—55)



1. A torque suspension weighing scale comprising a base, L-shaped uprights on said base, a weighing platform, L-shaped legs depending from said platform, torque suspension means supporting said weighing platform on said base in free swinging relation thereto, said torque suspension means comprising a flexible means extending from the short leg of the L at the top of each upright to the short leg of the L at the bottom of the adjacent leg, the said flexible means being of a length to maintain said weighing platform out of contact with the tops of said uprights and said legs out of contact with said base, torque means out of contact with said leg and said uprights secured intermediately of said flexible means between each upright and its associated leg having a torque created thereon by said flexible means upon movement of said weighing platform, a scale, and means for transmitting the torque to said scale.

2,736,550

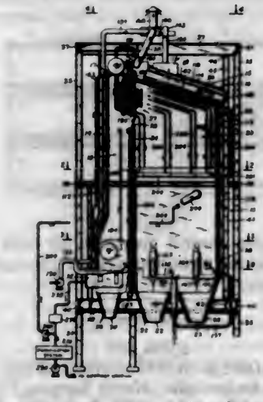
ORE ROASTING APPARATUS

Theodore S. Harrer, Stratford, N. J., assignor to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

Original application March 19, 1952, Serial No. 277,368. Divided and this application October 18, 1954, Serial No. 462,787
10 Claims. (Cl. 266—31)

6. An apparatus for roasting comminuted metal sulfide ore comprising a combustion chamber having a crown and vertical side walls formed of refractory material, means for introducing sulfide ore into said chamber, and means for introducing oxidizing gas into said chamber to support roasting; a cage-like supporting framework outwardly of and surrounding said crown and walls, means for independently supporting by said framework substantially each incremental part of those portions of said crown and walls which are immediately adjacent said framework so that such portions are suspension-supported by said framework, means for withdrawing sulfur dioxide gas from said chamber, a cinder hearth at the bottom of said chamber and having the periphery thereof adjacent

but separated from the periphery of the lower ends of said walls, means independent of said framework for



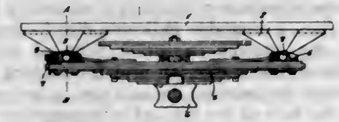
supporting said hearth, means for forming a gas-tight joint between said peripheries, and means for discharging cinder from said hearth.

2,736,551

ADJUSTABLE SUSPENSIONS FOR AUTOMOBILE VEHICLES

Alexandre Vaugoyeau, Marseille, France

Application October 5, 1953, Serial No. 385,387
Claims priority, application France October 9, 1952
2 Claims. (Cl. 267—54)



1. In a vehicle having a chassis and an axle carrying a wheel, a suspension for said wheel comprising a multiple-leaf spring secured centrally to the axle, a first shackle block pivotally mounted on the chassis for rotation about a horizontal axis parallel to the wheel axis and having a passage receiving as a sliding fit one end of a plurality of leaves of the spring, a second shackle block pivotally mounted on the chassis for rotation about a horizontal axis parallel to the wheel axis and having a passage receiving as a sliding fit the other end of the said plurality of leaves of the spring, said second shackle block having a screw-threaded bore in parallel alignment with the longitudinal axis of the spring leaves and means including a threaded bolt engaged with the end of one of said plurality of spring leaves and threaded into said bore for securing said leaf to the second shackle block whilst permitting adjustment of said leaf longitudinally with respect to the second shackle block.

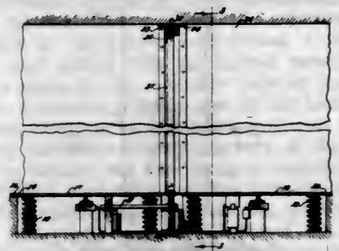
2,736,552

MECHANICAL DOOR OPERATOR

Benedict F. Diano and Simeon F. Diano, New Orleans, La.

Application October 2, 1952, Serial No. 312,728
1 Claim. (Cl. 268—33)

In combination, a vertically disposed shaft, a bar positioned on the upper end of said shaft, a door mounted on said bar, a pair of horizontally disposed floor plates arranged on opposite sides of said door, a plurality of coil springs engaging the lower surface of said plates, a motor positioned below one of said plates, a drive shaft operated by said motor and having a pinion thereon, a gear segment arranged in meshing engagement with said pinion, bearings arranged in engagement with said drive shaft, the upper end of said drive shaft being provided with a square section, said bar being provided with a socket in its lower surface for receiving said square section, pins extending upwardly from said bar and projecting into the lower end of said door, a horizontally disposed beam



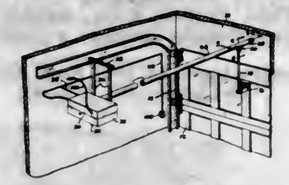
adapted to be secured to the ceiling and connected to said door, a floor surface arranged in the same plane as the upper surfaces of said plates, and switch means actuated by said floor plates for operating said motor.

2,736,553

DOOR OPERATOR

Steffen S. Brown, Dayton, Ohio, assignor to The Brown-Brockmeyer Company, Dayton, Ohio, a corporation of Ohio

Application December 1, 1954, Serial No. 472,383
6 Claims. (Cl. 268—59)



1. In an operator for an overhead garage door; a horizontal longitudinally slotted tube having means at the front end for connection thereof with the front wall of the garage above the door and means at the rear end of said tube for suspension thereof from the ceiling of the garage, an endless flexible drive element in the tube having one reach connected via said slot with the door to be operated, a reversible motor at the rear end of the tube for driving said element, said means at the rear end of the tube comprising a support member having a flanged base, said motor also having a base, bolts connecting said bases together to support the motor on the tube, a housing enclosing said motor and the electrical operating auxiliaries therefor, and said housing having one wall clamped between said bases for supporting the housing thereon.

2,736,554

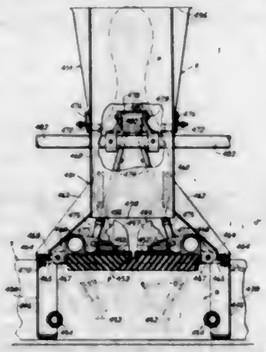
BOWLING PIN SPOTTING AND RESPOTTING MACHINE

John M. Fluke, Springdale, Conn., and Thomas Flint, Concord, Mass., assignors to American Machine & Foundry Company, a corporation of New Jersey

Application November 12, 1948, Serial No. 59,706
22 Claims. (Cl. 273—43)

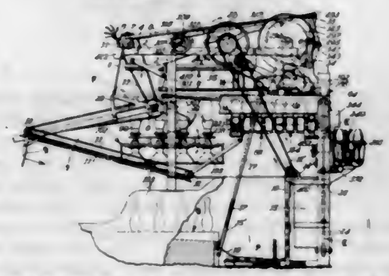
1. In a bowling pin spotting machine for use with a bowling alley, a pin spotting and respotting table, means mounting said table for movement to and from said alley, triangularly arranged pin spotting funnels mounted on said table, a set of opposed movable pin supports mounted on said table beneath each of said funnels, said funnels being adapted to position pins delivered thereinto in substantially upright position on said sets of movable pin supports, mechanism for simultaneously moving each of said supports out of pin supporting position relative

to a pin supported thereby for effecting the simultaneous discharge and deposit of said pins in playing arrangement on said alley, means on said movable supports adapted to clamp pins resiliently on said alley for lifting



by said table, means on said table for holding said last-named pins during the upward and downward movement of said table, and means for actuating said last-named means to release said pins in respotted arrangement on said alley.

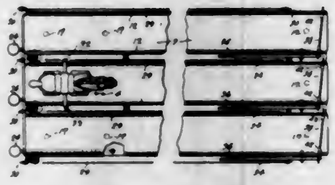
2,736,555
BOWLING PIN HANDLING AND CHANGING MACHINE
John M. Fluke, Fairfield, Conn., assignor to American Machine and Foundry Company, a corporation of New Jersey
Application August 18, 1947, Serial No. 769,214
26 Claims. (Cl. 273—43)



12. In a bowling pin spotting machine, a pin spotter for spotting bowling pins on the pin supporting bed of a bowling alley adjacent the pit thereof, a sweep for removing pins from said alley and delivering same into said pit, a pin assembling device, means for delivering a predetermined number of pins from said device to said spotter, a movable pin storage conveyor for out-of-play pins having a plurality of pin supporting means, mechanism for conveying in-play pins from said pit for selective delivery to said device or said storage conveyor, and selectively operated mechanism for routing a predetermined number of selected pins carried by said conveying mechanism to said pin supporting means of said movable pin storage conveyor.

2,736,556
INDIVIDUALLY CONTROLLED RACE TRACK
Wayne G. Dasher, Danbury, Conn.
Application February 27, 1953, Serial No. 339,369
9 Claims. (Cl. 273—86)

1. In a game of the character described, a plurality of tracks forming runways for self-walking figures incapable of walking the tracks when they are laterally inclined or tilted beyond a certain limit, mounting means for the tracks supporting them longitudinally inclined and for limited lateral rocking movement, yieldable means tending to tilt each track laterally so that it is normally inclined laterally in one direction an amount at least equal to said limit to hold a figure on it stationary, and



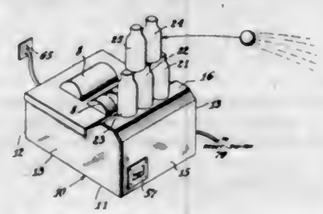
manually operable control means to tilt each track laterally in the opposite direction against the action of said first tilting means.

2,736,557
PADDLE WITH INDICATOR
Lucio Androsiglio, North Bergen, N. J.
Application March 24, 1954, Serial No. 418,280
3 Claims. (Cl. 273—97)



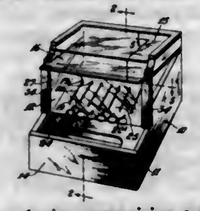
1. A game apparatus comprising a bat having an opening in its face, a rotatable indicator disc having a scale visible in the opening, a spring actuated means for rotating the indicator disc, an arm for cocking the said means, a latch for securing the said arm, a spring pressed button on the face of the bat and in engagement with the latch, an elastic band attached to the face of the bat, and a ball at the end of the elastic band.

2,736,558
RESETTABLE TARGET
Samuel Ruderman, Hillside, N. J.
Application November 25, 1952, Serial No. 322,500
10 Claims. (Cl. 273—105.6)



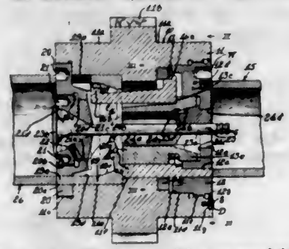
1. An amusement apparatus comprising a plurality of targets, with at least three of them arranged in one row and two of them arranged in a second row above the first row, said targets arranged in pyramid fashion, a plurality of supports for said targets, one of the ends of said supports secured to said targets, means for pivotally supporting said supports at the lower ends of said supports, means for swinging said supports about said first mentioned means to swing said targets into their normally upright positions, with one of said rows of targets being first located in position and then the other of said rows located in position; said last mentioned means including five individual fingers and a rotatable shaft carrying said fingers to swing said supports.

2,736,559
BALL GAME DEVICE
George H. Turner, Newark, N. J.
Application May 28, 1952, Serial No. 290,390
3 Claims. (Cl. 273—125)



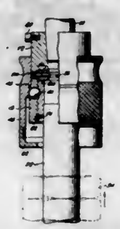
1. A ball game device comprising a frame, a plate supported in an inclined position within the frame and being provided with an aperture for passage of a ball therethrough, a pair of elongated vertically disposed members supported by said plate and defining therewith a passageway for a ball and whose longitudinal axis is substantially alined with the axis of said aperture, a stop bar pivotally connected to the underside of said plate adjacent said aperture for pivotal movement to two alternate positions, in one of which it is disposed beneath said aperture and parallel with said plate, a pin supported by said bar and adapted in said one position thereof to project through said aperture at a point in said axis which is spaced from the point of intersection of said axis and the perimeter of said aperture adjacent the outlet end of said passageway a distance less than the diameter of said ball, and the distance between said pin and the adjacent ends of said members being less than the diameter of said ball whereby same is blocked against passage through the aperture upon contacting said pin in its rolling movement down said passageway, and means supported by said frame and connected to said bar for imparting pivotal movement thereto with a resulting withdrawal of the pin from its ball blocking position in said aperture, for movement of the ball therethrough.

2,736,560
SPINDLE AND COLLET ASSEMBLY
George C. Melbuhr, Euclid, Ohio, assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application January 30, 1951, Serial No. 208,532
13 Claims. (Cl. 279—46)



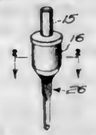
1. A spindle and collet assembly comprising a cylindrical housing having a ring gear therearound intermediate the ends thereof and cylindrical bearing surfaces on opposite sides of the ring gear, said housing having a plurality of bores in stepped relation extending inwardly from opposite side faces thereof and defining a plurality of bearing walls concentric with the bearing surfaces around the outside of the housing, an adjusting nut threaded into one end of the housing and piloted on an adjacent bearing wall defined by one of the larger bores, a retainer nut threaded into the other end of the housing, a collet sleeve slidably mounted on a small diameter bore intermediate the ends of the housing and having a plurality of equally spaced longitudinal slots around the outer periphery thereof, arcuate segments slidably disposed in alternate slots of said sleeve, said adjusting nut having arcuate slots therethrough receiving the outer ends of said segments in slidable relation, fingers in the slots of said sleeve alternating with the segment carrying slots, said sleeve having a head piloted in the adjusting nut and having a cylindrical bore therethrough with a diverging tapered mouth adjacent the adjusting nut, a spring collet in said sleeve bore having a segmented chucking head mating with the tapered mouth of the sleeve, said sleeve having a shoulder adjacent one end of said fingers, a pressure ring in a bore of said housing confronting the fingers to form a rocking fulcrum therefor, a cam ring slidably mounted in a bore of the housing adjacent the retainer nut and having a shoulder extending radially into confronting relation with the segments, said fingers extending into said cam ring, prongs on said cam ring projecting through the retainer nut, a work locator adjustably carried by said retainer nut, means for sliding the segments against the shoulder of the cam ring to tilt the fingers about their fulcrums for forcing the sleeve in a direction opposite to the direction of movement of the segments thereupon causing the tapered mouth of the sleeve to contract the segmented chucking head of the collet, and means for acting on the prongs of the cam ring projecting through the retainer nut to permit the fingers to rock about their fulcrums away from the shoulder of the sleeve, whereby the segmented chucking head of the collet can expand.

2,736,561
HOLDERS FOR ROTARY TOOLS
Aage C. C. Hansen, Nixon, N. J., assignor to Elastic Stop Nut Corporation of America, Union Township, N. J., a corporation of New Jersey
Application November 21, 1951, Serial No. 257,603
17 Claims. (Cl. 279—75)



1. A tool holder for rotary tools comprising a body adapted to be rotated, a tool engaging member rotatably carried by said body for driving a tool, first releasable means for selectively establishing a driving connection between said body and said member, second releasable means for selectively retaining a tool in engagement with said tool engaging member, and common control means movable to selectively engage and release said first and second releasable means while said tool engaging member is carried by said body.

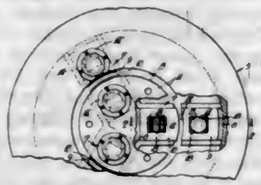
2,736,562
INTERCHANGEABLE DRILL
Howard D. Blackburn, Cranston, R. I.
Application October 27, 1953, Serial No. 388,650
3 Claims. (Cl. 279—76)



1. A drill comprising a holder and a separable cutting shank, said shank having an out of round base with an opening therein and a free end, and said holder having a body with an out of round recess axially receiving said base, with a hole through the wall of said recess, a ball

in said hole, a sleeve slidable along the outer surface of said body away from the outer free end of the shank with a cam surface to force the ball through said hole and into the opening of said base to lock the holder and shank against axial movement whereby pressure of the work on the sleeve will not move the sleeve to release position.

2,736,563
DOUBLE-ACTING CHUCK
Erich W. Work, New Britain, Conn., assignor to Union Manufacturing Company, New Britain, Conn., a corporation of Connecticut
Application August 27, 1952, Serial No. 306,673
13 Claims. (Cl. 279—121)



1. In a chuck, a chuck body, a plurality of chuck jaws carried by said body, said jaws being arranged in pairs, a generally axially extending and movable push rod for one jaw of each pair of jaws, means connecting said push rods and jaws for moving said one of said jaws of each pair, a second generally axially extending and movable push rod for the other jaw of each of said pair of jaws, and means connecting said second generally axially extending push rods and said other jaws for moving the latter.

2,736,564
CURB AND STAIR CLIMBER DEVICE
Fay B. Loam and Harry Loam, New York, N. Y.
Application February 12, 1953, Serial No. 336,582
2 Claims. (Cl. 280—5.26)



1. In a vehicle having an axle adapted for being provided with wheels, a curb and stair climber device comprising two pairs of substantially flat star-shaped members each of which has a center portion and three branch portions provided with pointed outer extremities and radially extending from the center portion and being gradually decreased in width from the center portion to the outer extremity of each branch portion, and each pair of said members being rotatably mounted on an end of the axle of the vehicle; a triangular spacing member interposed between the center portions of each pair of said star-shaped members and being located therebetween in such a manner that its pointed three ends point toward the junctures of the branch portions of the star-shaped members; and a wheel interposed between each pair of the branch portions of a pair of said star-shaped members and rotatably secured thereto.

2,736,565
COASTER SLED WITH FLEXIBLE RUNNERS
George O. Forseth, Minneapolis, Minn.
Application June 22, 1953, Serial No. 363,081
2 Claims. (Cl. 280—22)

1. In a coaster sled of the class described, an annular deck supporting frame comprising parallel side rails and front and rear semi-circular end portions, said frame being formed from a metallic bar of angle iron cross section having a lower horizontally disposed flange and an outer upright flange which defines the configuration of the deck supporting frame, a plurality of flat cross members interposed between said side rails and having their terminals abuttingly engaged with the inner edges of said side rails and fixedly welded thereto, an inverted channel-shaped bolster fixedly secured to the rear end portion of the deck supporting frame with its spaced parallel legs directed downwardly, brackets having elongated portions fitting into said channel shaped bolster and permanently welded thereto, said brackets depending from said bolster, runners secured to the lower-most ends of said brackets and extending forwardly thereof in spaced parallel relation, a front bolster of similar cross section at the forward end of the deck supporting frame having similar depending brackets secured to the ends thereof, the bottom ends of said front brackets being similarly secured to said runners,

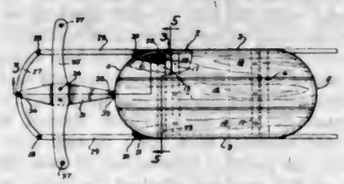
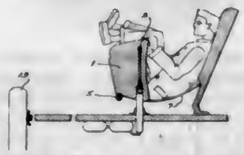


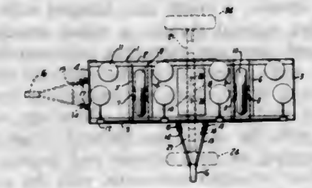
plate elements secured to the forward side portions of said annular deck supporting frame and each having an elongated slot therein, said slots being disposed at right angles to the longitudinal axis of said frame, studs secured to the front bolster and traversing said slots and cooperating therewith to inseparably secure the front end of the deck supporting frame to the front bolster, and permitting limited lateral movement of the frame relative to said front bolster to facilitate laterally flexing the runners to guide the sled in its forward movement, the forward end portions of said runners curving upwardly and having horizontally disposed terminal portions, a tie bar interposed between and pivotally connected to said terminal portions, elongated links having their forward ends pivotally connected to the ends of said tie bar and having their rear ends pivotally connected to said plate elements, and a steering mechanism operatively connected to said tie bar and the forward end of the deck supporting frame for laterally flexing the runners to guide the sled.

2,736,566
SAFETY SEAT CONSTRUCTION FOR VEHICLES
Max Hartl, Haar-Munich, Germany
Application March 25, 1953, Serial No. 344,525
16 Claims. (Cl. 280—29)



1. Safety apparatus for vehicles comprising, in combination, a seat having a forward part and a rear part; a back rest located adjacent said rear part of said set and being separate from the latter; support means supporting said seat for turning movement about an axis adjacent said forward part thereof; raising means connected to said seat for raising said axis and turning said rear part of said seat downwardly about said axis when the moving speed of the vehicle is suddenly retarded so as to locate said seat more distant from said back rest to provide an appreciable space for the occupant between said back rest and said seat so that he cannot be thrown forwardly; a floor on which said seat is located; and a roller turnably connected to said seat adjacent said rear part thereof and engaging said floor for movement therealong when said axis is raised.

2,736,567
AUXILIARY DEMOUNTABLE WHEELS FOR MOVING VEHICLE AT RIGHT ANGLES TO MOVEMENT BY PERMANENT WHEELS
Paul H. McMurray, Delphi, Ind., assignor to Delphi Products Company, Incorporated, Delphi, Ind., a corporation
Application April 10, 1953, Serial No. 348,064
2 Claims. (Cl. 280—34)



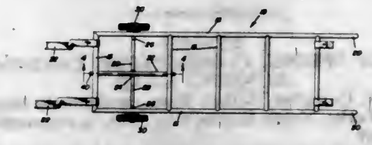
1. In implement transport construction of the class described, in combination, an implement frame of relatively great width and short length, permanently mounted wheels for supporting the frame for movement in the lengthwise direction to perform the implement operation, said wheels being mounted within the confines of said frame and having axes extending in the direction of width, connections for towing instrumentalities to effect such movement, an axle engaging member connected to said frame at right angles to the axis of the permanently mounted wheels, towing instrumentalities for said frame, connections at the short portion of the frame to which the towing instrumentalities are removably attached, and a pair of wheels having offset stub axles removably mounted in the axle member whereby the implement may be transported in a direction at right angles to the implement operation direction, said offset axles providing for positioning the permanently mounted wheels out of engagement with the ground.

2,736,568
UTILITY OR BOAT TRAILER AND WHEEL SUSPENSION THEREFOR
Clifford M. Martin, Grand Rapids, Mich.
Application August 7, 1953, Serial No. 373,028
2 Claims. (Cl. 280—44)



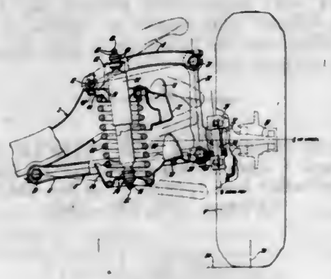
1. A vehicle wheel suspension comprising ground wheels mounted to rotate about a common axis, arms carried by the ground wheels for movement in vertical arcuate paths concentric about the common axis, a vehicle frame pivotally connected to the arms remote from the ground wheels, toggles carried by the arms and operatively connected to the vehicle frame for raising or lowering the vehicle frame and moving the arms in their vertical arcuate paths, means carried by the vehicle frame and operatively connected to the toggles for operating said toggles and raising or lowering the vehicle, and rings carried by the toggles for automatically descending into contraction preventing relation to said toggles when the vehicle attains its maximum elevated position above the ground wheels.

2,736,569
VEHICULAR TRUCK FOR CARRYING SOFAS OR THE LIKE
Eddie R. Davis, Midland, Tex.
Application July 17, 1953, Serial No. 368,604
4 Claims. (Cl. 280—47.24)



1. A sofa truck comprising a standard, a pair of wheels mounted for rotation on the lower end of said standard, and a base member pivotally mounted on said standard at the upper end thereof, said base member pivoting about an axis transverse to the axis of rotation of the wheels, said standard comprising an upright member, a shaft mounted on the lower end of said upright member and perpendicular thereto, said wheels being mounted on the opposite ends of said shaft, a tubular member fixedly secured to the upper end of said upright in a direction transverse to said shaft, a pair of downwardly extending ears secured to the bottom of the base member adjacent one end thereof, each of said ears having an aperture therein, the apertures in the ears being axially aligned, said ears being spaced apart a distance greater than the length of said tubular member, whereby the tubular member will be received between the ears and a rod extending through the apertures in said ears and through the tubular member whereby the base member is pivotally mounted on the standard.

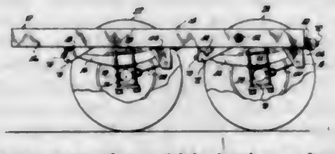
2,736,570
INDEPENDENT SPRING SUSPENSIONS FOR DIRIGIBLE WHEELS
Henry M. Crane, New York, N. Y., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 28, 1952, Serial No. 317,327
5 Claims. (Cl. 280—96.2)



1. In a vehicle having a frame and spaced dirigible road wheels, an independent suspension for each of said wheels adapted to modify roll camber, each suspension comprising a wheel supporting member, spaced upper and lower control arms pivotally supported at one of their ends on said frame, means pivotally connecting said upper and lower arms at their opposite ends to the opposite ends of said wheel supporting member, resilient means disposed between said frame and said suspension, each of said control arms being inclined upwardly from the horizontal, the upper arm being inclined more than the lower arm so that at predetermined normal load on said vehicle the extensions of the longitudinal axes of the respective arms converge on the supporting sur-

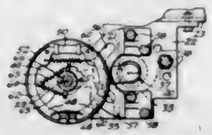
face for the wheel associated with said suspension at a point spaced from said wheel approximately twice the tread width of said dirigible wheels, the lengths of said arms being so proportioned that vertical movement of said wheel relative to said frame occurs with a minimum of tread width variation.

2,736,571
LEAF SPRING, CLOSE-SPACED TANDEM RUNNING GEAR
Arthur M. Compton, Bethel, Kans., assignor to Standard Steel Works, North Kansas City, Mo., a corporation of Missouri
Application September 13, 1954, Serial No. 460,470
5 Claims. (Cl. 280—104.5)



1. In a transportation vehicle having a frame having a pair of spaced, longitudinal beams, an undercarriage including an elongated equalizer directly beneath each beam respectively and pivotally secured thereto intermediate the ends of the equalizers for swinging movement on aligned horizontal axes transversely of the frame; a front wheel and axle assembly beneath the equalizers having a pair of spring sections secured to the axle thereof, there being a spring section underlying each equalizer respectively and having the forwardmost end thereof in supporting relationship to the forwardmost end of its corresponding equalizer; and a rear wheel and axle assembly provided with a pair of spring sections secured to the axle thereof and having the forwardmost ends thereof disposed beneath the rearmost ends of corresponding equalizers in supporting relationship thereto, all of said spring sections extending longitudinally of the trailer and having the rearmost ends thereof disposed beneath corresponding beams in supporting relationship thereto, the spring sections being pivotally secured to the axles for swinging movement about upright axes intersecting the axles diametrically thereof, said axes being normally inclined with respect to vertical to cant the spring sections with the forwardmost ends thereof higher than their rearmost ends.

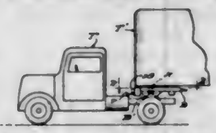
2,736,572
TORQUE STABILIZER FOR VEHICLE AXLES
Joseph J. Anthony Blazak, Sepulveda, Calif.
Application June 7, 1954, Serial No. 434,975
8 Claims. (Cl. 280—124)



1. A torque stabilizer device for use in connection with a vehicle wheel suspension including an axle having a shaft extending transversely of the vehicle chassis, a crank arm integral with and extending normal to the shaft, and a wheel spindle integral with the crank arm and extending substantially parallel to said shaft, said axle being pivotally connectible to the vehicle body with the crank arm extending rearwardly of the vehicle to adapt the spindle and wheel rotatable thereon for vertical movement, and spring means engageable between the shaft and the vehicle chassis and normally operative to pivot the axle in a direction to maintain the wheel in firm rolling engagement against the ground, comprising: a brake flange rotatable on the axle spindle; brake means carried by the flange and frictionally engageable with the wheel; and locking means, responsive to torque developed by the braked wheel and transmitted to said brake flange through said brake means, for checking rotation of the flange on said wheel spindle so as to effect stopping of the wheel, said locking means including a stationary element securable to the vehicle chassis and providing a locking surface, and a projection on said brake flange normally located adjacent but free from said surface, rotation of said brake flange under the effect of torque transmitted thereto by the wheel through said brake means engaging said projection against locking surface.

8. An axle braking means for use in connection with a vehicle having a chassis and an axle having a shaft adapted for rotation on an axis to extend transversely of the vehicle chassis, a crank arm integral with the shaft and extending normal thereto, a wheel spindle integral with the crank arm and extending substantially parallel to the shaft, and a wheel for rotation on said spindle, said wheel having a brake drum, comprising: a brake flange rotatable on said spindle; brake shoes on said flange engageable with the drum; an element adapted for stationary mounting on said chassis and having a curved locking surface arranged concentric with the axis of said axle shaft; and a projection on said flange engageable against said locking surface for limiting rotation of the flange on said spindle.

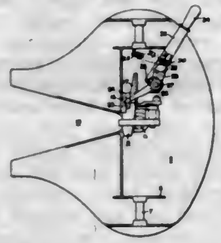
2,736,573
TRACTOR-TRAILER FIFTH WHEEL COUPLING SAFETY MEANS
Antonio Torre Fuschi, Los Angeles, Calif.
Application January 21, 1955, Serial No. 483,404
5 Claims. (Cl. 280—432)



1. The combination with a coupling means for a tractor and trailer including a depending king pin on the trailer and king pin receiving means on the tractor comprising a king pin guiding slot and releasable means for locking the king pin in the receiving means, of means for preventing the accidental uncoupling of the vehicles; said uncoupling preventing means comprising a hingedly mounted bar and spring means normally moving said bar upwardly to a position blocking exit of the king pin from the slot; said bar being momentarily displaceable on said hinged mounting against the bias of said spring means by entry of the king pin into the slot incident to coupling of the vehicles together, manually operable means for moving said bar out of the path of the king pin when moving out of the slot incident to intended uncoupling of the vehicles, a latch means manually operable to retain said bar moving means in position to hold said bar out of the path of the king pin against the bias of said spring means, and means connected to the vehicle braking system effective upon energization of the braking system to move said latch means to release said bar holding means with resultant return of said bar to exit blocking position by said spring means.

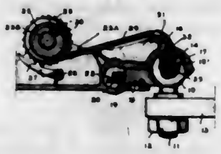
2,736,574
KING PIN LOCK FOR FIFTH WHEELS
Ray A. Braunberger, Chicago, Ill.
Application March 3, 1953, Serial No. 340,098
10 Claims. (Cl. 280—434)

1. A coupling between a semi-trailer and a tractor comprising, a king pin extending downward from the bottom of the trailer, a fifth wheel carried by the tractor having a slot into which the king pin may enter, a bolt adapted in its operative position to prevent the king pin from leaving the said slot, a lever assembly including a hand lever carried by the fifth wheel that controls the movement of said bolt, an abutment engaged by the lever assembly when



the hand lever has been moved far enough in one direction to move the bolt to operative position and which prevents the lever assembly from turning back under any force exerted on the bolt, means within the lever assembly which permit the assembly when the hand lever is moved in the reverse direction to both disengage from said abutment and to move said bolt toward inoperative position.

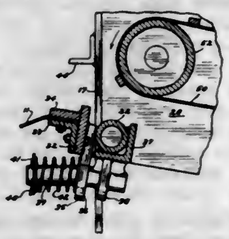
2,736,575
BALL AND SOCKET TRAILER COUPLING WITH CONNECTION FACILITATING MEANS
Floyd C. Gebhart, Springport, Ind.
Application May 19, 1953, Serial No. 355,911
4 Claims. (Cl. 280—477)



4. A coupling for connecting trailer tractor vehicles comprising a ball for attachment to one of said vehicles and a socket open at its bottom for attachment to the other, means for mounting said ball in upright position so that when located in said socket the major portion of said ball supports said socket, a cable for drawing said ball and socket from uncoupled into coupled relation, a curved guide for said cable connected to the upper portion of said socket so that when the cable is pulled it will travel in a curved path over said guide, an opening in the top of said socket through which said cable extends, means for applying tension to said cable to produce coupling of the parts, means for attaching said cable to said ball comprising a plug on the free end of said cable, said ball having a recess, and means for detaching and securing said plug in said recess, and locking means for securing said ball and socket in assembled relation, a portion of the lower edge of said socket being rounded for slidable engagement with said cable.

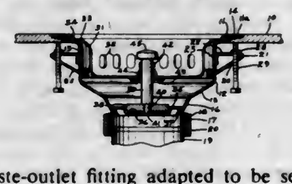
2,736,576
VEHICLE HITCH MEANS OF THE RESILIENT TYPE
Edward H. Blada, Newburg, N. Dak.
Application July 11, 1952, Serial No. 298,399
1 Claim. (Cl. 280—483)

Connecting means between a harvester device and a grain pickup device for travel in tandem relation over the ground, a bracket rigidly mounted on one device and presenting a generally vertical surface facing the other device, a tubular member rigidly mounted on the other device with the exterior thereof presenting a curved surface formed about a transverse axis and facing said one device, means for holding said tubular member surface in a line of contact with said vertical surface on the bracket for rolling movement of the tubular member along the vertical surface allowing relative adjustment between the two devices about a transverse axis, said means comprising a longitudinally extending pin on said other device



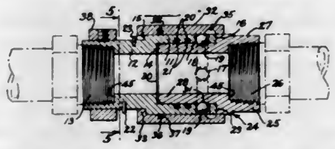
below the tubular member, said bracket having an opening for receiving said pin for longitudinal sliding of the pin through said bracket with such rolling movement, and a spring means on the pin and acting against the bracket for yieldably preserving the line of contact between the bracket and tubular member.

2,736,577
SINK WASTE FITTING
Charles W. Mackey, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a corporation of Connecticut
Application May 2, 1951, Serial No. 224,125
1 Claim. (Cl. 285—45)



In a waste-outlet fitting adapted to be secured within a drain aperture of a sink and comprising a body shell having an outward radial flange at its upper end and an inward tapering base portion at the opposite end terminating in a cylindrical wall, means for connecting a waste pipe to said cylindrical wall, an assembly ring having a slip fit on said shell, said shell having a circumferential recess, spring bracing means carried by said ring and having snap-locking engagement in said recess, and screw means threadedly fitted in said ring in circumferential alignment with said bracing means and engageable with said sink to secure said fitting within said drain aperture.

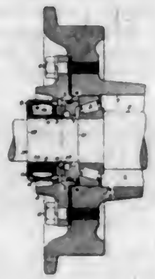
2,736,578
ROTATIVE SLEEVE LOCK SWIVEL COUPLER
Arthur W. Rafferty, Sacramento, Calif.
Application March 14, 1951, Serial No. 215,459
2 Claims. (Cl. 285—168)



1. A lockable swivel conduit coupling device comprising a tubular female member having at one end an internally cylindrical skirt portion having an open end for receiving therein a male stub member and having an extended neck portion at the opposite end thereof, the skirt being of greater external and internal diameters than the neck providing an internal shoulder and an external shoulder intermediate the axial length of

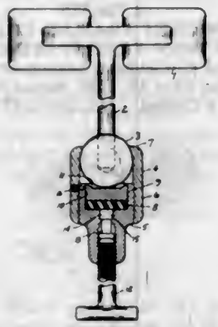
the female member, a lock lug extending radially from the neck in spaced relation to said external shoulder, said skirt having socket openings transversely through the wall thereof adjacently spaced from its said open end, detent balls mounted in said socket openings, the balls being of greater diameter than the thickness of the skirt wall, a tubular male member having a base portion and a cylindrical neck portion of relatively different external diameters providing an external stub shoulder intermediate the ends of said male member of a diameter substantially equal to the external diameter of the open end of the skirt, said stub being substantially equal in length to the internal length of the skirt and being insertable into the bore of the skirt of the female member and snugly rotatable therein, said stub having an external annular groove therein spaced from the stub shoulder substantially the same distance that the socket openings are spaced from the open end of the skirt, said groove registering with the socket openings in the skirt when the open end of the skirt is seated on the external stub shoulder, resilient gasket sealing means mounted in grooves in the inner cylindrical wall of the skirt, said sealing means being spaced intermediately between said internal shoulder and said sockets for providing a seal between the opposed cylindrical walls of the skirt of the female member and the stub of the male member, a locking sleeve mounted longitudinally snugly slidable and rotatable circumferentially of the female member, said sleeve being slidable for contacting said detent balls and selectively moving them radially in said socket openings for locking and unlocking the inter-engagement of the stub with the skirt of the female member, said sleeve having a radially inturned flange for seating on the external shoulder of the skirt, said flange being rotatable between said shoulder and the locking lug when said flange is so seated, the said flange having a slot therein for receiving the lock lug upon longitudinal sliding of the locking sleeve, and a brake means between the opposed cylindrical walls of the locking sleeve and the skirt of the female member for resisting casual longitudinal and rotative movement of said sleeve, said brake means comprising an annular groove in the inner cylindrical wall of the locking sleeve and a resilient ring gasket in said groove, said gasket having resilient sliding contact with the outer wall of the skirt of the female member.

2,736,579
AXIAL CONTACT SEAL
Sherman S. Dickinson, Santa Rosa, Calif., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis.
Application February 21, 1951, Serial No. 212,103
11 Claims. (Cl. 286—11)



1. In a sealing device comprising a support and an annular casing structure having a sleeve part in separable, press fitted engagement at one of its radially spaced inner and outer surfaces with said support, the combination of a circumferential series of radial through apertures formed in said sleeve part and covered at said one sleeve part surface by said support, a sealing ring, means mounting said sealing ring coaxially with said support and in radially spaced relation to said sleeve part, said means comprising a circumferential series of balls pocketed, respectively, in said covered through apertures and bearing radially upon said support independently of said casing structure, and radial recesses formed in said sealing ring for cooperative engagement, respectively, with said balls so as to establish an axially loose radial load transmitting connection between said support and said sealing ring and an axially loose torque transmitting connection between said sleeve part and said sealing ring, and means connecting said sealing ring in sealed and axially yieldable relation with said casing structure, said balls and apertures being relatively proportioned so that said balls will not pass through said apertures when said casing is removed from said support.

2,736,580
HYDRAULIC ACTUATORS
Carl H. Boetcker, Erie, Pa., assignor to American Sterilizer Company, Erie, Pa., a corporation of Pennsylvania
Application December 12, 1952, Serial No. 325,736
1 Claim. (Cl. 287—12)



An adjustable operating table support comprising a body supporting part, a stem having one end fixed to said part, a ball fixed to the other end of said part, a cup-shaped ball housing having a rim of smaller diameter than the ball with an internal surface making contact with the ball at an angle large enough so there is no tendency for the ball to wedge or lock against said surface, a metal piston having a sliding fit in the side walls of the cup and a central seat engaging the ball, a body of resilient elastomer substantially filling the space between the piston and the bottom of the cup, a piston of smaller area than the first piston slidably extending through the bottom of the cup toward the first piston and engaging the body to displace the body and force it against the first piston and develop a clamping pressure which is a direct force from the small piston to the first piston without multiplication until the body is compressed to fill completely the entire space between the first piston and the bottom of the cup and is thereafter multiplied by the ratio of areas of said first piston to said small piston, actuating means for moving the small piston from a retracted position toward an extended position engaging said body to develop the clamping pressure, the housing having a part containing the bottom of the cup and a part containing the rim of the cup, said housing parts being threaded together for axial adjustment of the rim toward and away from the bottom of the cup to preset an initial clamping pressure remaining in the retracted position of the small piston, and means for locking the housing parts in the adjusted position.

2,736,581
ADJUSTING SLEEVE
Bernard E. Ricks, Detroit, Mich., assignor to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application April 6, 1951, Serial No. 219,717
3 Claims. (Cl. 287—60)



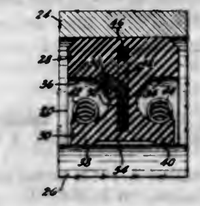
1. An adjusting sleeve assembly for adjustably clamping a pair of externally threaded members comprising an elongated internally threaded sheet metal tube having a longitudinal slot in each end portion, the tube wall defining the edge portions of each of said slots being radially outwardly bent to provide radially projecting longitudinally extending ribs along the sides of the slots, a split clamp disposed over each slotted end portion of the tube and having an arcuate bight portion with opposed spaced integral ears at the ends thereof forming heels at the juncture of the bight portions with the ears, said heels abutting said ribs on the faces thereof opposite from the respective slots, said tube having an integral stop formed on the outward surface of the tube opposite each slot and preventing axially inward movement of the clamps beyond the stops, and means for adjusting the distance between said clamp ears to contract the peripheral lengths of said clamps and draw the ribs of each slot together to thereby decrease the diameter of the slotted end portions of said tube whereby the slotted ends of said tube will be contracted by a drawing action into tight clamping engagement with respective externally threaded members threaded therein.

2,736,582
DETACHABLE ROCK DRILL BIT
George Dimitrieff, Noranda, Quebec, Canada
Application December 7, 1953, Serial No. 396,559
1 Claim. (Cl. 287—126)



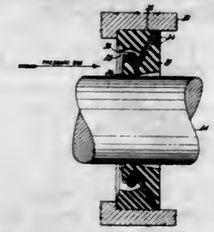
In a rock drill including a drill rod having a body portion, a cylindrical shank of less diameter than that of said body portion, and a tapered shoulder joining said body portion and shank, a drill bit having side and bottom walls forming a shank-receiving socket, the exterior surface of said side wall being substantially parallel to the longitudinal axis of the bit, said side wall having a single longitudinal slot therein extending from the mouth of the socket substantially throughout the depth of said exterior surface, and a ring surrounding said side wall and having a smooth exterior wall in completely overlying relation to said slot, the normal unexpanded interior diameter of said ring being approximately equal to the exterior diameter of said side wall whereby to hold said ring in snug position-retaining frictional engagement with said exterior surface, said exterior surface and said ring each having a depth slightly less than the depth of said socket, the diameter of the socket being approximately equal to the diameter of said shank and said socket receiving said shank in press fitting engagement therewith, the depth of said socket being slightly greater than the length of said shank and the end of said side wall of the bit being engageable by said tapered shoulder to expand said side wall and ring.

2,736,583
FLUID SEAL
John T. Marvin, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 21, 1951, Serial No. 232,734
3 Claims. (Cl. 288—2)



1. A fluid seal for insertion between two concentric cylindrical surfaces, comprising in combination; an outer positioning rim of elastic, deformable material, a flexible inner positioning rim spaced therefrom and of relatively less thickness, a central connecting web between said rims and forming two oppositely disposed circumferential grooves therebetween, a substantially flat, plate-like non-resilient reinforcing washer centrally located edgewise within said web so as to be transversely located with respect to said cylindrical surfaces and extending only partially into said two rims whereby the opposed circumferential outer edges of each rim are unsupported and have a marked degree of compressibility and are capable of flexing relative to said web, said washer having a series of knock-outs therein, each defining a perforation in the washer which is embedded in the material of said web, said knock-outs being bent outwardly from the plane of the washer and extending to the surface of at least one of said grooves, and a pair of garter springs, one of which is disposed in each of said grooves for exerting a radial pressure on the outer edges of the inner positioned rim at either side of said washer for tending to flex said edges radially inwardly.

2,736,584
FLUID SEAL
Ellwood F. Riesing, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 5, 1952, Serial No. 324,327
3 Claims. (Cl. 288—2)



1. A fluid seal of the radial type adapted to seal a rotating member within a non-rotating member, comprising in combination; an annular body member made from elastomeric material including an annular flexible sealing lip at its inner periphery and disposed adjacent one side thereof and adapted to sealingly engage the rotating member, said sealing lip having an annular spring receiving groove therearound, a garter spring positioned within said groove for increasing the sealing pressure of the lip against said rotating member, an outer annular portion on said body member adapted to be press-fitted within said non-rotating member in sealing engagement therewith, and at least two plate-like spring reinforcements of truncated conical shape nested together in juxtaposed relation and molded within the body member, said spring-like rein-

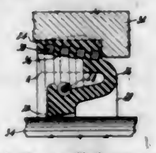
forcements being positioned and arranged with their largest diameter edges closely adjacent the outer surface of said outer annular portion of the body member at the side thereof opposite to said sealing lip and their smaller diameter edges adjacent the groove in said sealing lip wherein at least a portion of one of said plate-like springs is exposed within said groove.

2,736,585
FLUID SEAL
Ellwood F. Riesing, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 5, 1952, Serial No. 324,328
2 Claims. (Cl. 288—3)



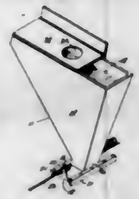
1. A fluid seal of the radial type adapted to seal a shaft rotatably journaled in a housing, comprising in combination: an elastomeric body portion adapted to sealingly engage the housing, a first elastomeric sealing lip having a diameter greater than the diameter of the shaft and encircling said shaft, said first lip having a circumferential groove therein facing said shaft, an elastomeric diaphragm portion connecting said body and said first sealing lip and integrally formed therewith, a sealing ring adapted to be immovably carried in said groove and including an inwardly extending resilient flexible lip portion having an inner diameter dimensioned so that the last-mentioned lip portion slidably and sealingly engages said shaft and a garter spring disposed about said first sealing lip in substantial radial alignment with said sealing ring whereby said sealing ring is urged into sealing engagement with said shaft.

2,736,586
FLUID SEAL
Ellwood F. Riesing, Dayton, Ohio, assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application December 5, 1952, Serial No. 324,325
3 Claims. (Cl. 288—11)



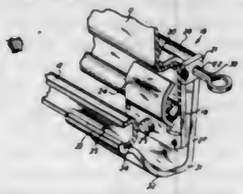
1. A fluid seal of the radial type adapted to be interposed between a housing member and a shaft, comprising in combination; an annular elastomeric body member having a free shape including an outer diameter less than the diameter of the housing and an outer diameter greater than the diameter of the housing, an integral annular resilient sealing ring including the lip thereon adapted to seal against the shaft, a flexible annular diaphragm portion connecting the body member and the sealing ring and integrally formed therewith, a garter spring surrounding the sealing lip, and a coil spring having spaced convolutes molded within the body member, said spring extending axially of said body member for providing a reinforcement therein against radial deformation thereof and for permitting excess body material occasioned by forcing the seal into the housing to flow between the spaces of said spring convolutes whereby said seal is self-adjusting.

2,736,587
SANDING DEVICES FOR MOTOR VEHICLES
Walter F. Sherman, Elsmere, N. Y.
Application November 9, 1951, Serial No. 255,639
2 Claims. (Cl. 291—34)



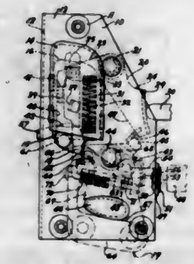
1. In a sanding device mounted within the trunk of an automobile, the improvement comprising a hopper for holding a quantity of sand and having an outlet portion for said sand; bridge means connected to the floor of the car to support said hopper and outlet portion above, but closely adjacent the inside floor surface of said trunk; an outlet nozzle for said sand having a shoulder thereon secured flush with the inside floor surface of said trunk in a recess provided for said shoulder and to extend a substantial distance beneath the bottom of said floor exterior of said automobile; a fan-shaped sand spreader removably mounted on said nozzle to spread sand underneath, toward and transversely of the path of the advancing wheel of said automobile; a flat gate valve having an opening therein approximately the diameter of said nozzle, said flat gate valve being movably mounted to reciprocate between said inside floor surface and nozzle, and the bottom of said outlet portion of said hopper, and in frictional engagement therewith, and with said floor surface; spaced-apart aligning and retaining tracks for said gate secured to said floor surface; said hopper, supporting means, tracks and flat gate valve being mounted wholly within the confines of said trunk; and manual means to reciprocate said flat gate valve to bring the opening therein into and out of registry with said nozzle, said last named means being mounted within the confines of said automobile, to protect the same against ice, slush and snow, which would otherwise prevent proper operation of said device.

2,736,588
LATCHING DEVICE
Paul Lindholm, Roselle, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application February 27, 1952, Serial No. 273,627
2 Claims. (Cl. 292—130)



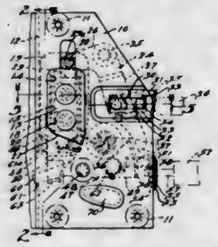
1. A latch for an open frame-like article having opposite first and second side portions hingedly supported at the first side portion thereof for movement in a path from an open position where the article is suspended from its hinge support to a closed position away from the open position, the latch comprising a fixed member mounted adjacent the second side portion of the article when in the closed position, an element pivotally supported by the fixed member and having a suspended position free of the path of the article when disengaged therefrom, and an upwardly bent hook-shaped end of the element adapted to extend beneath the second side portion of the frame-like article and extend upwardly into the article to engage an inner surface of said second side portion, after the article is moved into its closed position and the element is moved about its pivotal support toward the hinge support so that the weight of the article will create a frictional holding force between the upwardly bent hook-shaped end of the element and the article.

2,736,589
VERTICAL SLIDE BOLT DOOR LOCK
John H. Roethel, Coral Gables, Fla., assignor to Roethel Engineering Corporation, Detroit, Mich., a corporation of Michigan
Application June 4, 1954, Serial No. 434,504
8 Claims. (Cl. 292—165)



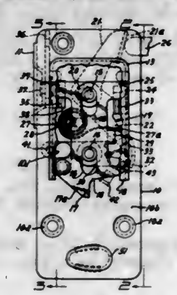
1. In a latch mechanism for a swinging door, a support having a plate portion adapted to be mounted on the free edge wall of the door, a vertically slidable latch device mounted on said plate portion for movement between a door latched and a door unlatched position, actuator means comprising a lever pivotally mounted on said plate portion and having a generally horizontally extending arm and a generally vertically extending arm, said horizontally extending arm having a part thereon arranged in opposing relation to a part of said latch device, said vertically extending arm having a blocking portion thereon, outer manually operable means engageable with said vertically extending arm of said lever to swing said horizontally extending arm to cause said parts to abut and move the latch device upwardly into door unlatched position, a substantially horizontally extending swingable member mounted on said plate portion and having blocking means for cooperation with said blocking portion, said swingable member being movable to dispose said blocking means in position to be engaged by said blocking portion and render the lever ineffective to move said latch device into door unlatched position.

2,736,590
VERTICAL SLIDE BOLT DOOR LOCK
John H. Roethel, Coral Gables, Fla., assignor to Roethel Engineering Corporation, Detroit, Mich., a corporation of Michigan
Application September 9, 1954, Serial No. 454,940
6 Claims. (Cl. 292—165)



1. In a latch mechanism for a swinging door, a support having a plate portion for disposition at the jamb edge of the door, a vertically slidable latch device, said latch device comprising a bolt member projecting from the outer face of said plate portion, said bolt member having a part thereof projecting through an aperture in said plate portion, a plate member, means securing said plate member to said bolt member part, said bolt member and plate member each being retained in slidable association with the outer and inner faces respectively of said plate portion, said bolt member having a striker engaging portion at the lower end thereof, spring means for urging said plate member and thus said bolt member downwardly, a bolt release member mounted on said plate portion and having a part extending in opposing relation to a part of said plate member, said release member having a portion shiftable by outer manually operable means transversely of the door in the direction of the inner edge of the plate portion to cause said parts to abut and raise the plate member and thereby the bolt member out of striker engagement, and means movable into and out of position for blocking operation of said release member.

2,736,591
DOOR LOCK
John H. Roethel, Detroit, Mich., assignor to Roethel Engineering Corporation, Detroit, Mich., a corporation of Michigan
Application July 20, 1953, Serial No. 368,966
9 Claims. (Cl. 292—166)

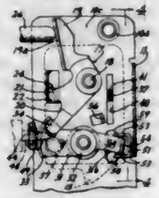


1. In a latch mechanism for a swinging door, a support having a plate portion adapted to be mounted on the free edge wall of the door, a latch device mounted on one side of said plate portion for movement between a door latched and a door unlatched position, an actuator mounted on the opposite side of said plate portion and having a blocking portion, said actuator having a part thereof projecting through an aperture in said plate portion and arranged in opposing relation to a part of said latch device, outer manually operable means engageable with said actuator to move the same in one direction to cause its said part to abut said latch device part and move the latch device into door unlatched position, a member movably mounted on said support and having blocking means thereon, and inner manually operable means for moving said member to dispose said blocking means in position to be engaged by said blocking portion thereby to block said actuator and render the same ineffective to move said latch device to door unlatched position.

2,736,592
DOOR LOCK
John H. Roethel, Coral Gables, Fla., assignor to Roethel Engineering Corporation, Detroit, Mich., a corporation of Michigan
Application September 17, 1953, Serial No. 380,710
5 Claims. (Cl. 292—166)

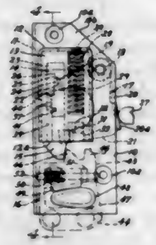
1. In a latch mechanism for a swinging door, a support having a plate portion for disposition at the free edge wall of the door and a flange extending angularly from said plate portion, a slidable latch device mounted on one

side of said plate portion for movement between a door latched and a door unlatched position, actuator means including a lever pivotally mounted on the opposite side of said plate portion, a blocking portion on said lever, said lever having a part thereon projecting through an aperture in said plate portion and arranged in opposing relation to a part of said latch device, outer manually operable means engageable with said actuator means lever to swing the same transversely of the door in one direction to cause said parts to abut and move the latch device into door unlatched position, a swingable member mounted



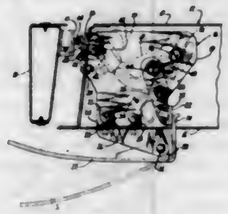
on said opposite side of the plate having a part movable in a substantially up and down direction, said part having blocking means for cooperation with said blocking portion, said swingable member being movable to dispose said blocking means in position to be engaged by said blocking portion thereby to render said actuator means ineffective to move said latch device into door unlatched position, and means effective when said blocking portion is engaged by said blocking means, for automatically moving said swingable member into non-blocking position upon movement of said latch device in door unlatching direction.

2,736,593
DOOR LOCK
John H. Roethel, Coral Gables, Fla., assignor to Roethel Engineering Corporation, Detroit, Mich., a corporation of Michigan
Application January 4, 1954, Serial No. 401,936
6 Claims. (Cl. 292—166)



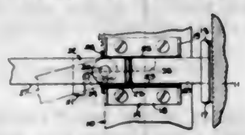
1. In a latch mechanism for a swinging door, a support having a plate portion adapted to be mounted on the vertical free edge wall of the door, a vertically slidable latch device mounted on the outer side of said plate portion for movement between a door latched and a door unlatched position, said latch device having a striker engaging portion at the lower end thereof, spring means urging said latch device into door latched position, an actuator mounted on the inner side of said plate portion and having a blocking portion, said actuator having a part thereof projecting through an aperture in said plate portion and arranged in opposing relation to a part of said latch device, said actuator being shiftable by outer manually operable means to cause said parts to abut and raise the latch device out of striker engagement and to move said blocking portion transversely of the door in the direction of the inner edge of the plate portion, and an inner manually operable member pivotally mounted on said support and having a portion shiftable in one direction into position between said blocking portion and the inner edge of said plate portion to block movement of said actuator and thereby render the same inoperative to move said latch device to a door unlatched position, said inner manually operable member being shiftable in the opposite direction out of blocking position with respect to said actuator and into position to move said latch device into door unlatched position independently of said actuator.

2,736,594
REFRIGERATOR DOOR LOCK
Edward D. Dall, Detroit, Mich., assignor to Houdaille-Hershey Corporation, Detroit, Mich., a corporation of Michigan
Application January 13, 1953, Serial No. 331,087
6 Claims. (Cl. 292—216)



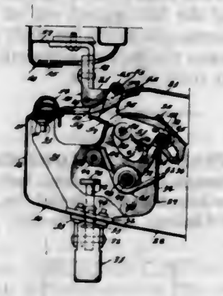
1. In a door lock, a rotary latch bolt having a locking arm for cooperation with a keeper, a bodily movable dog guided at two spaced apart points for pivotal and rectilinear movement and having an engaging end portion having slidable engagement with said latch bolt on the opposite side of the pivotal axis thereof from said locking arm, and a release lever pivoted for movement in the plane of movement of said latch bolt and having connection with said dog at one of said spaced apart points, for moving said dog in a release direction out of engagement with said latch bolt, to accommodate free rotation of said latch bolt in a release direction.

2,736,595
OPERATOR FOR WINDOWS WITH SWINGING SASHES
Karl H. Erickson, Rockford, Ill., assignor to American Cabinet Hardware Corporation, Rockford, Ill., a corporation of Illinois
Application July 13, 1955, Serial No. 521,821
7 Claims. (Cl. 292—262)



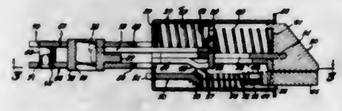
2. For use with a window having a frame and a sash mounted on the frame to swing toward and away from a position closing the frame opening, the combination of, a guide mountable on the frame, a bar extending through and slidable endwise in said guide, a device on said bar for securing one end thereof to said window, an elongated rigid link having one end disposed adjacent the other end of said bar, a pivot joining the adjacent ends of said bar and said link to permit the link to be swung out of alinement with the bar and behind said guide when the sash is in the closed position, an element rigid with said guide and having a surface disposed behind and facing the guide, and an abutment rigid with said link behind said pivot and operable to engage said surface and act as a fulcrum when the link is swung back into alinement with said bar thereby to project the bar outwardly through said guide and move the sash away from the closed position.

2,736,596
LATCH CONSTRUCTION
William O. Burke, Rockford, Ill., assignor to National Lock Company, Rockford, Ill., a corporation of Delaware
Application December 4, 1952, Serial No. 324,088
4 Claims. (Cl. 292—332)



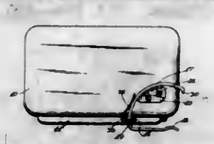
2. In a latch assembly adapted to be mounted within the closure of a cabinet for a refrigerator and the like and adapted for latching engagement with a strike hook on the cabinet, a stationary housing in the closure and a latch bolt cam and a latch bolt each swingably mounted in the housing upon separate pivots and capable of relative movement therebetween, said latch bolt cam having spaced side walls each provided with an arcuate slot with these slots disposed in alignment, a transverse pin carried by the housing and projecting through the aligned arcuate slots upon which the latch bolt is pivotally mounted and another slot in each side wall of the latch bolt cam, and a pair of rollers affixed to and carried by the latch bolt with a roller disposed at each side of the latch bolt and said rollers conformably received and guided in each of said last mentioned slots, said last mentioned slots each provided with a recess adjacent its opposite ends for receiving and retaining the rollers and latch bolt in cocked or in uncocked and latched position.

2,736,597
TAIL STRUCTURE FOR DOOR LOCKS
Fred J. Russell, Los Angeles, Calif.
Application June 1, 1954, Serial No. 433,413
4 Claims. (Cl. 292—337)



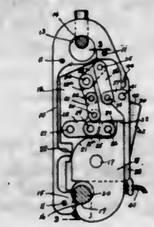
1. A latch construction comprising a substantially cylindrical casing having an inner end wall, an actuator plate adapted for engagement with a latch bolt shaft, said end wall having a slot therein having a width providing a sliding fit for said actuator plate and said plate extending through said slot, and a tail member on said housing comprising tail plates mounted in parallel spaced relation on said end wall and extending outwardly therefrom and having said actuator plate therebetween, said end wall having notches on the sides of the slot having a depth substantially equal to the thickness of the respective tail plate, one of said tail plates having straight lug means in engagement with the notches on one side, the other of said tail plates having a hooked lug means in engagement with notches on the other side and hooked over the inner face of said end wall, said actuator plate comprising a separator for said tail plates whereby to retain said plates extended laterally into the respective notches, and means connecting outer ends of the tail plates in spaced relation.

2,736,598
DOOR CONTROL FOR REFRIGERATORS
William J. Laffey, Chicago, Ill.
Application October 23, 1953, Serial No. 387,998
1 Claim. (Cl. 292—338)



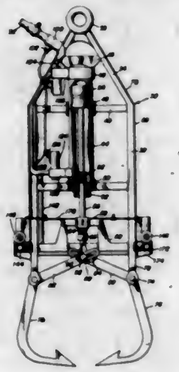
In a cabinet having a vertically hinged door of the same height as said cabinet, a curved rack providing a plurality of ratchet teeth mounted on the top of said cabinet adjacent said hinged door, and a support mounted on the upper edge of said door adjacent said curved rack, the improvement of; a fastener pivoted to said support comprising an arcuate pawl at one end thereof and a laterally extending handle at the opposite end to release said pawl, said pawl having ratchet engaging means, and spring means carried by said support and maintaining said pawl in contact with said rack.

2,736,599
DROP HOOK
Fredrick W. Coffing, Danville, Ill., assignor, by mesne assignments, to Duff-Norton Company, Pittsburgh, Pa., a corporation of Pennsylvania
Application March 8, 1952, Serial No. 275,628
6 Claims. (Cl. 294—83)



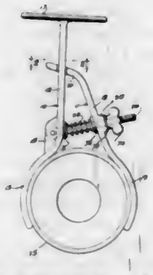
1. A drop hook of the character described including a housing having a fixed jaw, a swinging jaw fulcrumed on said housing with one end movable into and out of load supporting position relative to said fixed jaw, a load link having one end pivotally connected to the opposite end of said swinging jaw and normally seating on said jaw transversely thereof, a bell crank pivoted at one of its arms on said housing and pivotally connected intermediate its ends to the said opposite end of said load link, said pivots disposed in substantial alignment transversely to the direction of the load, said last-mentioned pivotal connection being slightly above center, a second bell crank lever fulcrumed intermediate its ends on said housing, a locking link pivotally connecting one arm of said last named lever to the opposite arm of said first named bell crank lever, the pivotal connection between said locking link and last named lever lying over center with respect to the plane through the fulcrum of said lever and the pivotal connection between said link and crank, said plane extending in the general direction of the load at a slight angle thereto, an operating arm in the form of a third bell crank lever fulcrumed intermediate its ends upon said housing with a short leg pivotally linked to the opposite end of said second bell crank lever by an operating link whereby said jaw will be locked in load supporting position by the over center relation of said locking link and said second bell crank lever relative to said bell crank and load link, and be released from said locking position upon said second bell crank lever being swung by said operating arm to throw its said over center connection with said locking link to the opposite side of its center into collapsed position.

2,736,600
CRANE HOOK WITH REACTION JET ORIENTING MEANS
Arthur J. Carlson, Toledo, Oreg.
Application September 23, 1952, Serial No. 311,037
6 Claims. (Cl. 294—88)



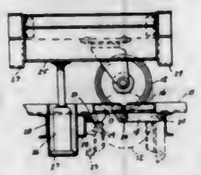
6. A power operated crane hook comprising a substantially cylindrical body, a suspension member swivelly connected to the top of said body, a material engaging assembly mounted on said body, opposed reaction jets mounted on said body, a source of fluid under pressure, conduit means including valve control means for applying fluid from said source of fluid under pressure to said jets, and valve controlling means controlling fluid communication between said source of fluid pressure into said reaction jets for providing rotary and lateral movement to said crane hook.

2,736,601
GENERATOR LIFTING TONGS
Erwin A. Hoffmann, Waskish, Minn.
Application June 19, 1953, Serial No. 362,726
1 Claim. (Cl. 294—104)



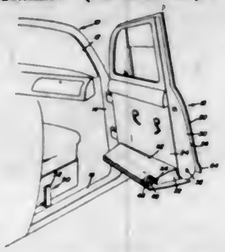
A generator tongs comprising: a first bar including an elongated, straight shank portion, a longitudinally curbed jaw extending from one end of the shank portion, and a handle mounted intermediate its ends to the other end of the shank portion, said shank portion having intermediate its ends a closed slot extending longitudinally and centrally thereof; a second bar including a substantially straight intermediate portion disposed at an acute angle to said shank portion, a longitudinally curved jaw extending from one end of said intermediate portion, said jaws being concavely opposed for gripping a cylindrical object therebetween, each jaw extending through substantially less than 180° of a circle, the first jaw being disposed wholly outside the acute angle defined between said portions and the second jaw having at least a major part of its length outside said angle, and an end portion on the second bar obtusely related to and rigid with the other end of said intermediate portion, said end portion being loosely and pivotally engaged in said slot; a shaft pivotally connected at one end to said first bar between the first named jaw and said slot and extending between the bars, the intermediate portion of the second bar having an opening receiving the shaft, said shaft being threaded at its other end; a nut threaded upon said other end of the shaft and bearing against the second bar to shift the bars toward each other responsive to threading of the nut toward the first named end of the shaft; and spring means circumposed about the shaft and held under compression between the bars to resiliently and yieldably urge the bars away from each other.

2,736,602
CARGO CONTAINER LOCKING STRUCTURE
Thomas J. Ault, Selma, Ind.
Application July 13, 1953, Serial No. 367,551
6 Claims. (Cl. 296—35)



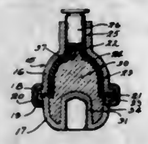
6. A locking device for locking a portable container to a vehicle bed, the container having casters mounted adjacent its corners, comprising parallel tracks mounted on the bed of a vehicle, each of said tracks including spaced hinged sections, the spacing thereof corresponding with the spacing of said casters, said hinged sections being movable away from one another to form a gap in said tracks beneath the casters of the container and including mutually cooperative members for locking said hinge sections together to close the gap in said track.

2,736,603
AUTOMOBILE DOOR WITH UPWARDLY FOLDING LOWER SECTION
Harold W. Payne, San Bernardino, Calif.
Application March 19, 1954, Serial No. 417,428
3 Claims. (Cl. 296—49)



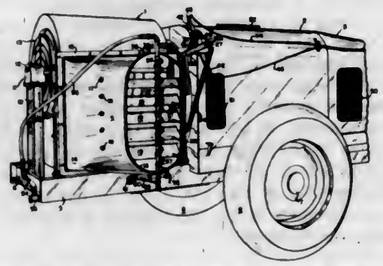
1. In combination with a vehicle having a body provided with a side door opening, a door hingedly secured to said body for selective movement into closing relationship with said opening, said door including an upper main portion and a lower folding obstruction clearing portion, said portions being pivotally interconnected so that the folding portion may swing upwardly and inwardly to provide clearance for the door over a relatively high obstacle, gutter curbings for example, spring means for normally urging said folding portion to the inwardly swung curb clearance position, and means for swinging said folding portion downwardly to its normal vertical position when the door is in its regularly closed position, said last named means comprising a roller mounted on the folding portion and a complemental cam plate mounted fixedly on said body in the path of movement of said roller.

2,736,604
THERMALLY RESPONSIVE DEVICE
John C. Albright, Chicago, Ill., assignor to William J. Adams, Chicago, Ill.
Application May 15, 1950, Serial No. 161,956
13 Claims. (Cl. 297—6)



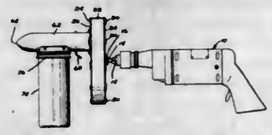
1. In a thermally responsive device of the character described, the combination with a receptacle having communicating first and second chamber portions with means for securing said chamber portions in abutting relation with respect to each other, the first chamber portion having a cylinder with a plunger guided for extensible movement therealong, said cylinder terminating into a uniformly diverging throat extending into said first chamber portion and diverging into a curvilinear wall portion extending from said throat and forming a curved wall uniformly converging into said cylinder, of an integral form sustaining diaphragm and skirt, the diaphragm extending across said cylinder and being movable therealong and the skirt extending along said throat and wall and preformed to conform to the form thereof and forming a liner therefor, said skirt terminating into an outwardly turned flange extending at substantially right angles to the body thereof and along the end face of said first chamber portion and clamped between the end faces of said chamber portion by said means securing said chamber portions in abutting relation with respect to each other, said second chamber portion being unlined and presenting a metallic heat conducting surface, and a body of thermally expansive material filling said first and second chamber portions within said liner.

2,736,605
VANE REGULATOR FOR FIELD CROP SPRAYER
Warren M. Spreng, Ashland, Ohio, assignor to The F. E. Myers & Bro. Company, Ashland, Ohio, a corporation of Ohio
Application October 2, 1953, Serial No. 383,734
7 Claims. (Cl. 299—43)



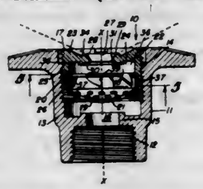
1. In a spraying machine of the class described, an air blower having inlet and outlet openings, sprayer means having nozzles disposed in said blower outlet opening for discharging insecticide material in the form of a spray at said outlet opening, means comprising a plurality of vanes pivotally mounted in said blower outlet opening for directing the combined air and insecticide therefrom, means for moving the vanes upwardly or downwardly in unison to change the directional flow of the outgoing air and insecticide, said last-mentioned means comprising one set of actuating levers comprising a pawl and ratchet for moving the vanes downwardly and a second set of actuating levers comprising a second pawl and ratchet for moving the vanes upwardly, control lever means positioned between said sets of pawl and ratchets and coating therewith, said last-mentioned lever being operatively connected with said vanes whereby as said control lever is moved to the right or left, it will swing either one set or the other set of levers to cause movement of the vanes either upwardly or downwardly.

2,736,606
SPRAY GUN ATTACHMENT FOR PORTABLE ELECTRIC DRILLS
Thomas E. Kmiotek, Brooklyn, N. Y.
Application September 11, 1953, Serial No. 379,505
2 Claims. (Cl. 299—89)



1. A spray gun attachment for a portable electric drill comprising: a rotary shaft adapted at one end for engagement in the chuck of a portable electric drill; a flat housing lying in a plane normal to the axis of rotation of the shaft and having a rear wall formed with a center opening in which the shaft rotates; a blower made fast to the other end of the shaft within the housing and rotating in the plane of the housing, said rear wall being of foraminous characteristics defining air inlet openings occurring over substantially the entire area of the blower at one side thereof; a discharge nozzle attached at one end to the front wall of the housing in the marginal region of the blower area, at the other side of the blower, and extending forwardly from the housing in communication with the interior thereof and in perpendicularly to the plane of blower rotation, the nozzle having an outlet aperture at the other end; the atomizer means connected to and extending within the nozzle and arranged to feed a jet of liquid into the path of air flowing through the aperture, thereby to cause said air to be broken up into finely divided droplets, for discharge as a spray from the nozzle.

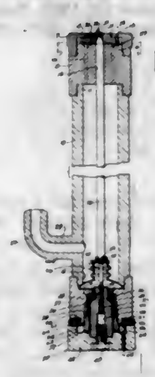
2,736,607
LOW ANGLE SPRINKLER NOZZLE
Walter Van E. Thompson, Los Angeles, Calif.
Application February 7, 1955, Serial No. 486,499
3 Claims. (Cl. 299—120)



2. In a sprinkler: a nozzle body comprising a cylindrical side wall and a top wall having therein a central opening circumscribed by an annular rib defined by upper and lower annular surfaces of generally conoidal form which meets so as to form an inwardly faced lip, the lower of said surfaces being the surface of revolution of a straight line disposed at an angle of approximately 71° to 77° revolved around the axis of said opening and said upper surface being a surface of revolution of a line which curves upwardly and outwardly from said lip so as to be upwardly convexed, there being a recessive shoulder at the outer margin of said upper surface, and the lower face of said top wall having a downwardly faced annular channel surrounding said lower surface of said rib; and swirl water inlet means carried by said cylindrical wall in spaced relation to the lower face of said top wall, having

therein openings to direct streams of water tangentially and upwardly into said annular channel, to cause the water to swirl in said channel and overflow the lower surface and said lip and then form into drops as it passes across the upper surface of said rib.

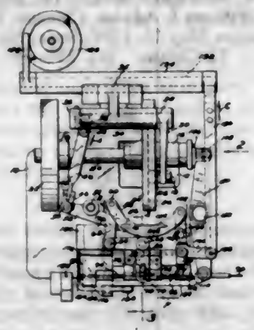
2,736,608
ADJUSTABLE LIQUID FUEL BURNER NOZZLE
Nicholas F. Martin, Wilmington, Del.
Application January 9, 1953, Serial No. 330,495
3 Claims. (Cl. 299—136)



1. In an adjustable liquid fuel nozzle having a tubular barrel, an orifice plate disposed at one end of said barrel and having an outwardly tapered orifice opening therethrough in communication with the interior of said barrel, a needle valve shank disposed coaxially of said barrel and having a pointed end projecting into said orifice opening, and means restraining said shank against rotational movements relative to said barrel while providing a limited freedom of longitudinal movement of the shank relative to the barrel; means arranged at the other end of said barrel for adjustably positioning said shank longitudinally of said barrel comprising means providing at one end of said barrel a bore coaxial of said barrel, a rotatable element having a portion disposed in said bore, means connected between said rotatable element and said barrel restraining said rotatable element against movement longitudinally of said barrel while providing freedom of rotational movement of said rotatable element relative to said barrel, means connected between said rotatable element and said shank effective to move said shank longitudinally of said barrel upon rotational movement of said rotatable element relative to said barrel, stop means mounted on said barrel adjacent said rotatable element for rotational movements of adjustment about the rotational axis of said rotatable element, and abutment means on said rotatable element engaging said stop means and limiting the rotational movement of said rotatable element relative to said barrel to an extent not exceeding one rotation.

2,736,609
BRISTLE FEEDING AND CUTTING MACHINE
Leroy W. Vinal, Leominster, Mass., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware
Application October 4, 1950, Serial No. 188,440
10 Claims. (Cl. 300—2)

1. Apparatus of the class described comprising a generally reciprocatory member, a filamentous material feed device movable therewith, means to reciprocate the feed device relative to the member, means to reciprocate the member, means controlling the reciprocating means of both member and device to feed the material in unequal steps and to constantly center the fed lengths of the material, the feed device reciprocating means including a pivoted lever having a movable pivot point, means to move



the lever to operate the feed device, and means to move the pivot point in a predetermined sequence.

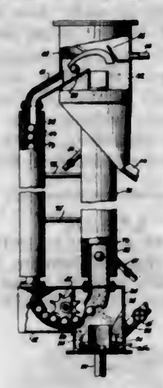
2,736,610
ORNAMENTAL HUB CAP WITH TEMPERATURE COMPENSATING RETAINING MEANS
George F. Waite, Pelham, N. Y., assignor to Curtiss-Wright Corporation, a corporation of Delaware
Application February 26, 1954, Serial No. 412,746
5 Claims. (Cl. 301—37)



1. An ornamental hub cap for a wheel structure having a body part extending outwardly from the wheel axis and a tire rim secured to said part, and having a flange portion on which said hub cap is mounted extending generally parallel to said wheel axis, said hub cap comprising a generally circular member of sheet material having an annular bead of rubber-like material to enter into tight fitting contact with said flange for holding the hub cap on the wheel by frictional engagement of the bead with said flange, the bead having a circumferential slot-like groove extending laterally into a side wall thereof, and a resilient ring mounted in said groove so as to exert an outward force on the flange-engaging portion of the bead for maintaining the bead in tight-fitting contact with the flange in the event there is a loss of resiliency in the bead due to a material drop in ambient temperature.

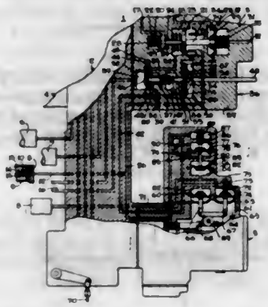
2,736,611
PUSH-TYPE FLUID CONVEYOR
Anthony J. Wesh, Woodbury, N. J., assignor to Socony Mobil Oil Company, Inc., a corporation of New York
Application January 12, 1951, Serial No. 205,654
7 Claims. (Cl. 302—17)

1. Apparatus for lifting particle-form solids comprising ascending and descending legs, a series of lifting members located in said descending leg, means for feeding a lifting member to the region of the bottom of said ascending leg, means for suspending the particle-form solids in the region of the lower end of the ascending leg including means for feeding suspending gas to said ascending leg to assist in conveying said particle-form solids and said lifting members from the bottom to the top of said ascending leg, means for withdrawing particle-form solids from the top of said ascending leg, means for withdrawing



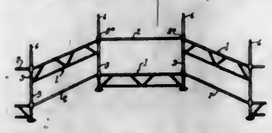
suspending gas from the top of said ascending leg, and further means for conducting the lifting member from the top of the ascending leg to the top of the descending leg.

2,736,612
LOAD COMPENSATING BRAKE APPARATUS
Earle S. Cook, Forest Hills, and Ralph T. Whitney, Irwin, Pa., assignors to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application August 9, 1951, Serial No. 241,144
7 Claims. (Cl. 303—22)



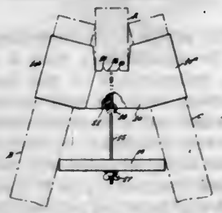
1. In a vehicle fluid pressure brake apparatus, in combination, a brake cylinder device, a volume reservoir, a passageway to which fluid under pressure is adapted to be supplied, valve means operative in response to supply of fluid under pressure to said passageway to supply fluid under pressure from said passageway to said brake cylinder device and operative in response to a preponderance of combined pressures in said brake cylinder device and said reservoir over pressure in said passageway to cut-off supply of fluid under pressure from said passageway to said brake cylinder device, a scale beam, two movable abutments connected to spaced apart portions of said beam and subject opposingly to pressures of fluid in said passageway and reservoir, a fulcrum element for said beam, means for adjusting said fulcrum element relative to said beam to vary the leverage of the one of said abutments which is subject to pressure of fluid in said passageway from zero for no load on a vehicle inversely according to the degree of load on said vehicle and valve means operative by said beam upon a preponderance of force created by fluid under pressure acting on the last named abutment over opposing force created by pressure of fluid on the other abutment to supply fluid from said passageway to said reservoir to a pressure to balance pressure of fluid in said passageway acting on the abutment subject to fluid under pressure in said passageway.

2,736,613
SECTIONAL FRAME STRUCTURE
Zigmund J. Jagiel, Swanton, Ohio
Application February 9, 1952, Serial No. 270,781
1 Claim. (Cl. 304—2)



In a structure of the class described, a first frame having an end post and a cross-bar projecting laterally from the post, the post having one end projected outwardly from the cross-bar, an axially projecting stud on said post end, a washer larger than the post diameter shouldered on the post end around said stud, a second frame having an end post and a cross-bar projecting laterally from such post, said last-mentioned post having a socket in an end thereof for receiving the stud of said first post and permitting said second post to rest down on said washer, together with a brace-bar for said connected posts having a sleeve at one end at an angle thereto and fitting over and around said stud on the post end that receives it and seating on said washer, said sleeve having a slot in its upper end receiving the cross-bar for said second frame section and cooperating therewith to prevent a relative twisting of the brace-bar and said second frame in the plane of said second frame and also to prevent relative angular movements of the cross-bar and connected posts in a plane longitudinal to the post axes and the tilting of the connected posts in parallelism.

2,736,614
TRESTLE ASSEMBLY
Floyd Emery Brewster, Jr., Los Angeles, Calif.
Application June 8, 1953, Serial No. 360,158
2 Claims. (Cl. 304—5)

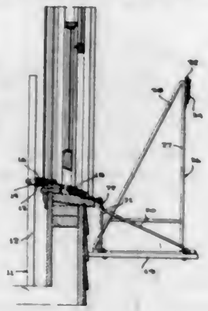


1. In a trestle having inwardly inclined legs and a top rail, a bracket comprising two identical inwardly opening channel-shaped guides for the legs of the trestle, the upper edges of the bracket being recessed to form a horizontal centrally positioned seat for the top rail, there being vertically alined centrally positioned perforations in the bracket below the top rail seat thereof, a plate having bosses seated in said perforations to lock the plate in position within the bracket, a brace placed between the legs of the trestle below the bracket, and means detachably interconnecting the plate and brace, said means being adjustable to press the brace against the legs thereby to clamp the trestle parts together.

2,736,615
WINDOW SCAFFOLD
Patrick Gormley, Corona, N. Y.
Application June 24, 1952, Serial No. 295,148
1 Claim. (Cl. 304—27)

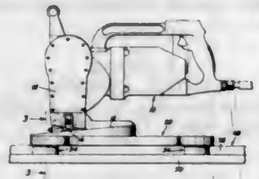
In a scaffold, a platform, a pair of right triangular guard frames having base sides secured to the platform, said guard frames having apex portions, brackets on said guard frames near said apex portions of the guard frames, and a guard rail extending between the guard

frames and removably and securably engaging the brackets, said guard frames extending crosswise of the platform, hinge means securing the guard frame to the platform, and braces on the guard frames engageable



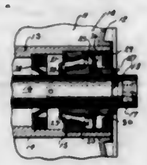
with the platform for holding the guard frames against pivoting inwardly beyond erect positions, the engagement of the guard rail with the brackets serving to preclude outward pivoting of the guard frames out of erect position.

2,736,616
GUIDE YOKE
Sam S. Brame, Waco, Tex.
Application April 17, 1953, Serial No. 349,493
1 Claim. (Cl. 308—6)



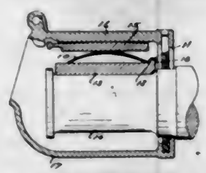
A guide yoke for power tools comprising an elongated base adapted to be secured to a tool, a pair of rollers journaled on the undersurface of said base about axes perpendicular thereto, each of said rollers including a circular center portion and an annular roller ring disposed concentrically of and journaled on said center portion, said center portions being provided with eccentrically disposed threaded apertures, and a pair of fastening elements projecting through said base and received in said threaded apertures, the undersurface of said base being provided with a pair of annular bosses through which said fasteners extend and clamp said center portions to said bosses in spaced relation to said base and in selected spaced apart positions relative to each other.

2,736,617
ROLLER BEARING
Arthur W. Lippmann, Milwaukee, Wis., assignor to Lippmann Engineering Works, Milwaukee, Wis., a partnership
Application November 23, 1953, Serial No. 393,660
1 Claim. (Cl. 308—20)



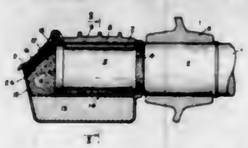
In a bearing assembly a stationary shaft having a groove, an idler roll mounted on the shaft including an axially disposed tube having an inner shoulder, an inner seal fitted around the shaft and carried by the tube, an anti-friction bearing adapted to be slidably mounted in said tube and including an outer race fitted against the shoulder and an inner race receiving the shaft, a spacer sleeve on the shaft, an outer seal engaging the tube and the spacer sleeve, a pair of facing resilient washers of a dished shape disposed between the inner race and the spacer sleeve with their peripheries in engagement and held under tension by the sleeve, and a lock washer engaging the spacer sleeve and fitting in the groove.

2,736,618
JOURNAL BOX BRASS RETAINING SPRING
Claude Watson, Danville, Ill.
Application February 16, 1954, Serial No. 410,641
1 Claim. (Cl. 308—53)



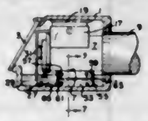
A journal box comprising a housing, a wedge positioned against the under surface of the upper part of the housing, a brass having a raised lip on one end positioned below the wedge, a flat spring having an arcuate intermediate portion positioned between the wedge and brass, and a flange on one end of said spring engaging the lip on said brass for retaining the spring in position between said wedge and said brass.

2,736,619
JOURNAL BOXES AND LUBRICANTS THEREFOR
Charles B. Francis, Pittsburgh, Pa., asisgnor to Loftus Engineering Corporation, a corporation of Maryland
Application February 13, 1952, Serial No. 271,318
6 Claims. (Cl. 308—79)



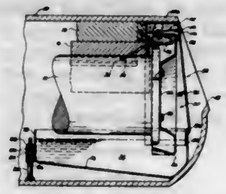
1. A railroad car axle having a journal, a journal box into which said journal extends, a bearing block in said box engaging said journal from above, a reservoir extending beneath and around the body portion of said journal exposed below said bearing block, a molten filler body poured into and solidified in said reservoir to form a floor beneath said journal, and a charge of lubricant, which is semi-solid at room temperature, supported on said floor in contact with said body portion of the journal below the bearing block.

2,736,620
POSITIVE PRESSURE JOURNAL BEARING
Hyman Brier, Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
Application March 26, 1953, Serial No. 344,818
4 Claims. (Cl. 308—84)



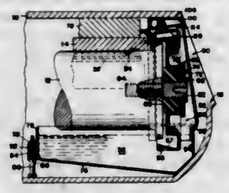
1. In a structure which includes a bearing housing and a shaft journaled therein, a bearing shoe having apertures, the shoe being supported against the shaft, means to supply a lubricant to the shaft through the apertures of the shoe, hollow sleeve filter means bearing against the shaft and capable of receiving lubricant therein, and means connected with the said filter means to return the fluid lubricant to the supply means.

2,736,621
JOURNAL BOX LUBRICATING SYSTEM
George Clark La Porte and Edwin W. Taylor, Baltimore, Md.
Application March 11, 1953, Serial No. 341,804
13 Claims. (Cl. 308—86)



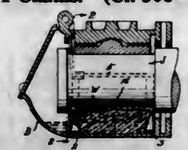
1. In a journal box having an oil reservoir, a journal and a bearing partially surrounding the top portion of the journal, the improvement which comprises an inclined ledge secured to the bearing and extending outwardly from the end of the latter, and a drum secured to said journal and provided with an anular flange overlying said ledge and dipping into the oil in said reservoir, said flange having a free edge and being provided with a plurality of spaced-apart axially arranged openings extending from said free edge through the width of said flange and defining a plurality of arcuate flange sections, the ends of a plurality of said sections being directed inwardly to provide triangular vanes for delivering oil from the reservoir to the ledge during rotation of the journal and drum, each of said triangular vanes having a base portion coincident with said free edge, and channel means for conducting oil from said ledge to said bearing.

2,736,622
LUBRICATING SYSTEM FOR JOURNAL BEARINGS
George C. La Porte and Edwin W. Taylor, Baltimore, Md.
Application March 15, 1954, Serial No. 416,236
18 Claims. (Cl. 308—86)



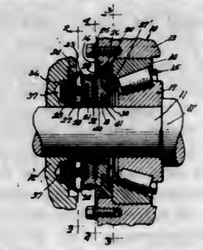
1. In a journal box having an oil reservoir, a journal and a bearing for the journal, the improvement which comprises an oil conveying part secured to the bearing and extending outwardly from the end of the latter, and an oil conveying member secured to said journal and provided with an annular flange overlying said part and dipping into the oil in said reservoir, said flange being provided with a plurality of spaced-apart openings, portions of said flange, defining side edges of said openings, being directed inwardly to provide a plurality of triangular vanes for delivering oil from the reservoir to said part during rotation of the journal and member, the tips of each of said vanes being formed with an outwardly directed portion to provide a gutter in each vane, and said bearing having a passage for conducting oil from said part to said journal.

2,736,623
WASTE RETAINER FOR JOURNAL BOXES
William J. Beason, Salem, Va.
Application June 1, 1953, Serial No. 358,721
11 Claims. (Cl. 308—89)



1. The combination with a journal box of a railway vehicle, a frame comprising first and second elongated members of resilient material each adapted to be flexed within the box to extend in axially-spaced relation between opposite sides of the box and in contact with the lower surface contour of the box, first and second rods each connected at its ends with the corresponding ends of said members, to be held thereby in contact with and along respective sides of the box generally parallel with the axis of a journal therein, and a bag of oil-permeable flexible material interposed between said box and frame below the journal and held by said frame in contact with the box surface along a substantially continuous line defined by said members and rods to define a pocket for lubricating waste between said box and journal.

2,736,624
OIL SEAL
Otto R. Schoenrock, Oak Park, Ill.
Application February 28, 1952, Serial No. 273,796
4 Claims. (Cl. 308—187.1)

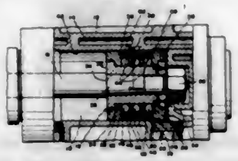


1. An oil seal bearing construction comprising a shaft, a bearing disposed about said shaft, a rotatable member engaging said bearing, a first seal ring member supported by said rotatable member and rotatable therewith, a second seal ring member abutting said first seal ring member, resilient means having one end limit thereof biasing said second seal ring member into abutting relationship with said first seal ring member, retaining means having hollow portions formed therein, a second end limit of said resilient means being housed in said retaining means hollow portions, an apertured housing disposed about said shaft, said retaining means hollow portions being insertable in said housing apertures, resilient cover means having one end limit frictionally secured between said retaining means and said housing, the opposed end limit of said cover means being detachably secured to the periphery of said second seal ring member, said latter cover means end limit being readily disengageable from said second seal ring member periphery from the exterior of said bearing construction when said latter construction is in the normal assembled position.

2,736,625
COMPRESSOR PISTON CONSTRUCTION
Julius Naab, Easton, Pa., assignor to Ingersoll-Rand Company, New York, N. Y., a corporation of New Jersey
Application May 4, 1953, Serial No. 352,619
3 Claims. (Cl. 309—4)

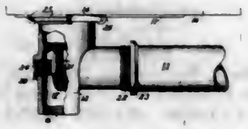
1. A compressor piston comprising a piston body having carbon wearing rings mounted on the terminal por-

tions thereof, a plurality of spacer discs on the piston body and between the wearing rings so as to form a series of peripheral grooves and alternate spacer discs consisting of carbon piston rings in the grooves, expander rings in the grooves to urge the piston rings outwardly



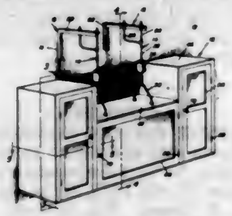
of the grooves said expander rings having a width exceeding the width of the piston rings, and abutments on the wearing rings and carbon spacer discs at the outer edge of the grooves for engagement with the expander rings to retain said expander rings within the peripheral grooves.

2,736,626
MEANS FOR SUPPORTING A FOLDING LEG TABLE SUPPORT IN FOLDED POSITION
Anthony Inpyn, Bronx, N. Y.
Application August 20, 1954, Serial No. 451,162
2 Claims. (Cl. 311—99)



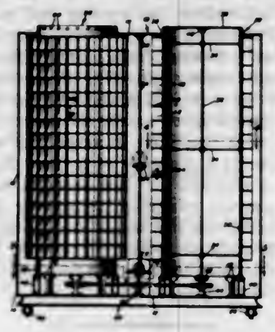
1. Foldable means for supporting tables or like objects comprising a tubular socket affixed to the supported object having two sets of internal threads separated by a non-threaded section, a boss formed on and projecting outwardly from one side of said socket and provided with an opening to the internal non-threaded surface of said socket, said opening being threaded, a slot disposed oppositely of said boss and extending downwardly to the bottom of the socket, and a leg member having two spaced apart sets of extrenal threads formed at the upper end thereof for engagement with the internal threads of the socket when said leg member is in object supporting position, the diameter of the upper threaded portion of the leg member being greater than the width of the slot in the tubular socket, and a threaded stud atop said leg member for engagement with the internally threaded boss when said leg member is in folded position, said threaded stud being of lesser diameter than the upper threaded portion of said leg member and the overall length of said stud and the upper threaded portion of the leg member is less than the diameter of the non-threaded section of the tubular socket.

2,736,627
CABINET
Birger J. Horn, Lake Charles, La.
Application September 17, 1953, Serial No. 380,667
1 Claim. (Cl. 312—213)



A cabinet comprising an elongated enclosure having a rear surface formed of reticulated material, the upper surface of said enclosure being recessed for forming a shelf with the reticulated material extending across the rear of the recessed portion, bracket means attached to the upper surface of the enclosure for suspending the enclosure in spaced relation to a vertical supporting surface, said bracket means including a pair of L-shaped brackets having a vertical leg attached to a vertical supporting surface and a horizontal leg projecting outwardly therefrom, a depending support rod attached to each of said horizontal legs, each of said rods terminating at the lower end thereof in a Y-shaped portion having the free ends thereof adjustably attached to the recessed portion of the upper surface of the enclosure, an offset member interconnecting the rods and the brackets in spaced relation to the point of attachment between the upper end of the rods and the horizontal legs of the brackets for permitting levelling of the enclosure, and receptacles surrounding each of said depending rods for containing a non-evaporative type of insect repellent to prevent passage of insects into the enclosure.

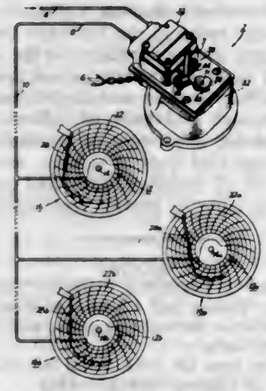
2,736,628
TOOL RACK
Walter E. Fadden, Jr., Santa Monica, Calif.
Application November 30, 1953, Serial No. 395,186
1 Claim. (Cl. 312—305)



A tool rack comprising a housing, a plurality of circumferentially arranged supports in said housing, circumferentially arranged wheels carried by said supports, a rack in said housing, said rack having a cylindrical main frame member, said main frame member having a lower edge thereof seated on said wheels for rotation, said main frame member having a plurality of vertically extending spaced partitions secured thereto, a plurality of concentric annularly spaced arcuate horizontally extending rods secured to said partitions and forming with said partitions a plurality of circumferentially and vertically spaced tool receptacles, a plurality of vertically aligned openings in said housing, means for rotating said rack to selectively align said receptacles with said openings, first indicia on said housing identifying said openings, said rack having a cover portion extending through and above said housing holding said rack in a vertical position in said housing, and second indicia on said cover portion identifying vertical rows of tool receptacles, said first and second indicia facilitating the identification of each individual tool receptacle.

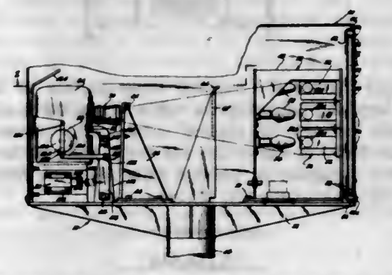
2,736,629
CHART DRIVE APPARATUS
Graydon Smith, Concord, Mass., assignor to The Foxboro Company, Foxboro, Mass., a corporation of Massachusetts
Application May 25, 1953, Serial No. 357,059
4 Claims. (Cl. 346—44)

1. For use with industrial recorders of the chart type, a centrally-controlled pulse energy system adapted for synchronously driving a plurality of recording charts whereby all of said charts are caused to be moved substantially in unison concurrently with the passage of specific time intervals measured by a coordinating master timer, comprising, in combination, a pressure pulse transmitter including a pneumatic relay, a flapper-nozzle valve associated with said relay, a source of gas under pressure communicating with said relay, spring means urging said flapper toward said nozzle, a rotatable cam operable to actuate said flapper intermittently at time-spaced intervals to open said flapper nozzle valve, means for driving said cam at a constant rate of speed, said relay including valve means arranged to move from closed to open position



as said flapper moves away from and toward said nozzle in conformance with the rotation of said cam, a pressure output line for said relay, said valve means being adapted to control the flow of gas from said source and to produce sharply defined pulses of gas pressure in said output line as said flapper-nozzle valve is opened and closed, a plurality of pulse receivers each including means for converting received gas pressure pulses into mechanical motion, an output mechanism for each of said receivers and connectible to a chart drive load, and means for conveying pulses of gas pressure from said transmitter to said receivers.

2,736,630
TOLL CHECKING SYSTEM
Benjamin Cooper, Brooklyn, N. Y., assignor to Research Electronics & Devices Co., Inc., Bayonne, N. J., a corporation of New Jersey
Application October 29, 1952, Serial No. 317,468
8 Claims. (Cl. 346—107)



1. In combination, photographic recording means, counting means including means to indicate a count thereon, vehicle wheel actuated means to actuate said counting means each time the wheels of a vehicle roll thereover, means actuatable by the passage of the front wheels of a vehicle over said vehicle actuated means to actuate said photographic recording means to photographically record both the actuating vehicle and the count indicating means on said counting means, a second counting means, and means to actuate said second counting means each time said means for actuating said photographic recording means is actuated.

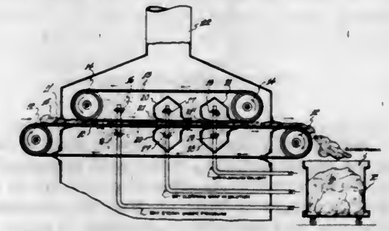
CHEMICAL

2,736,631
TREATMENT OF ORGANIC DERIVATIVES OF CELLULOSE TO PREVENT ACID-FADING
William J. Myles, Summit, N. J., assignor to Celanese Corporation of America, New York, N. Y., a corporation of Delaware
No Drawing. Application April 4, 1952, Serial No. 280,671
14 Claims. (Cl. 8—61)

9. Dyed cellulose acetate textile material dyed with a dyestuff normally tending to fade, on said material, on exposure to acid fumes and having incorporated therein, as an acid fading inhibitor, di-(diethylaminoethyl) phthalate.

2,736,632
DRY CLEANING PROCESS
Max Blau, Orlando, Fla., assignor to M. Blau Manufacturing Company, Incorporated, Orlando, Fla., a corporation of Florida
Application February 9, 1954, Serial No. 409,044
12 Claims. (Cl. 8—142)

1. A process for dry cleaning fabrics, which comprises spraying dry steam under a pressure of the order of 40 to 200 pounds per square inch onto a soiled fabric for a brief period whereby the fabric is softened and opened up and substantially no liquid is deposited thereon, then substantially immediately spraying under pressure of the order of 75 to 200 pounds per square inch onto the thus-treated fabric a solution of a dry cleaning soap in a dry cleaning solvent, the amount of said solution being sufficient to cause a flushing out of the fibres and to effect the

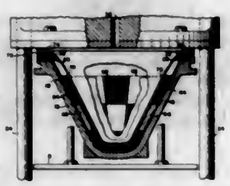


suspension of foreign matter therein, and then rinsing the fabric with a dry cleaning solvent.

2,736,633
METHOD OF DECORATING A HAT
Malcolm J. Reider, Shillington, Pa., assignor to Geo. W. Bollman & Co., Inc., Adamstown, Pa., a corporation of Pennsylvania
Application November 3, 1951, Serial No. 254,777
2 Claims. (Cl. 8—150)

1. The method of applying a uniform repeat decoration on a felt hat body which comprises lining a female mold member with a lining, said lining being made by forming segments of printing putty containing a dye distributed therethrough to form a design, said segments being formed so that when they are laid within the mold

they will form a continuous lining, laying the thus formed segments in the mold to form a continuous lining, impregnating the hat body with water, placing the thus impregnated hat body in the mold in substantially the shape of the mold, positioning a resilient membrane sub-



stantially against the exposed inner surface of the hat body, applying fluid pressure uniformly to the membrane, whereby pressure is applied substantially normally to the hat body to force the hat body against the lining to effect a transfer of the dye from the putty lining and fixing the dye to the felt fibers.

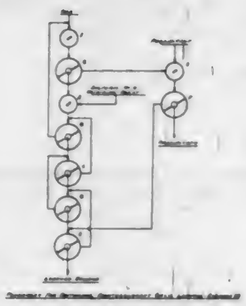
2,736,634

PROCESS FOR EXTRACTING URANIUM FROM ITS ORES

Antoine M. Gaudin, Newtonville, and Reinhardt Schuhmann, Jr., Winchester, Mass., assignors to the United States of America as represented by the United States Atomic Energy Commission

Application November 30, 1949, Serial No. 130,218

2 Claims. (Cl. 23—14.5)



1. A process of extracting uranium from a uranium bearing ore which contains a substantial amount of metatorbernite which comprises subjecting said ore to a moderate heat treatment at 110° C.–200° C. to convert the metatorbernite to a lower hydrate which is more readily soluble in an acid leaching solution, and then treating said ore at ambient temperatures with an unheated leaching solution containing sulfuric acid and initially added ferric sulfate.

2. A process of recovering uranium from a uranium bearing ore which contains an excess of magnesite, which comprises separating the magnesite from said ore by froth flotation, converting said magnesite by calcination to magnesia, treating the ore fraction from which the magnesite has been separated at ambient temperatures with an unheated leaching solution containing sulfuric acid and initially added ferric sulfate, separating the leach liquor from the leach residue, and then neutralizing the leach liquor with the calcined magnesia derived from the ore whereby the uranium values in the leach liquor are caused to precipitate.

2,736,635

METHOD OF PRODUCING SULFITE COOKING LIQUORS AND RECOVERING VALUABLE CONSTITUENTS THEREFROM

Gerald Haywood, Westernport, Md., assignor, by mesne assignments, to Ionics, Incorporated, Cambridge, Mass., a corporation of Massachusetts

Application July 7, 1951, Serial No. 235,614

5 Claims. (Cl. 23—129)

1. A method of recovering base ions selected from the group consisting of sodium and ammonium ions from waste liquor produced in a neutral sulfite pulping process and of producing fresh neutral sulfite cooking liquor containing said base ions which comprises passing said waste liquor successively through a plurality of bodies of cation exchange resins in the hydrogen form, one of said bodies being a carboxylic resin and the other a sulfonic resin, said waste liquor being passed firstly through said body of carboxylic resin and the effluent therefrom being passed through said body of sulfonic resin, and subsequently passing a solution of available sulfurous acid firstly through said body of sulfonic resin and then through said body of carboxylic resin and collecting the effluent from the latter to provide fresh cooking liquor.

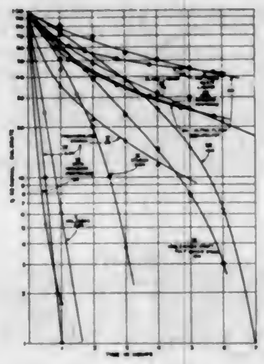
2,736,636

CHLORINE DIOXIDE PRODUCTION

George A. Day, Berlin, and Edward F. Fenn, Gorham, N. H., assignors to Brown Company, Berlin, N. H., a corporation of Maine

Application June 20, 1951, Serial No. 232,506

20 Claims. (Cl. 23—152)



1. A method for high efficiency production of chlorine dioxide with at least 89% purity by weight which comprises reacting in aqueous solution a chlorate, selected from the group consisting of sodium, potassium, calcium and magnesium chlorates, with an excess of at least 60% above the theoretical stoichiometric proportion of a nongaseous organic reducing agent in the presence of sulphuric acid in molar ratio to the chlorate between 1:1 and 3:1 and in a maintained concentration above about 3 N but not in excess of 14 N, until substantially all the chlorate is decomposed.

2,736,637

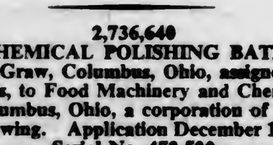
WATER HARDNESS MEASUREMENT—METHOD AND APPARATUS

Walter Juda, Lexington, Mass., assignor to Ionics, Incorporated, Cambridge, Mass., a corporation of Massachusetts

Application July 24, 1952, Serial No. 300,696

8 Claims. (Cl. 23—230)

4. A method of measuring the hardness of water comprising providing a mass of a cation exchange resin having sodium as the exchangeable ions, determining the conductivity of the mass after immersion in substantially soft water, then passing water to be tested over said mass,



draining the mass, and measuring the conductivity of the drained mass to thus determine its loss of conductivity.

2,736,638

DETECTION OF SULFUR DIOXIDE

Paul W. McConnaughey, Wilkinsburg, Pa., assignor to Mine Safety Appliances Company, Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application July 14, 1953, Serial No. 367,971

13 Claims. (Cl. 23—232)

1. That method of determining sulfur dioxide present in a gas which comprises the steps of passing gas to be tested through an elongate body of chemically inert granular solid carrying blue reaction product of tetramethyldiaminodiphenylmethane and an oxidizing agent of the group consisting of dilute iodine solution, dilute bromine solution and dilute nitric acid solution, which product upon contact with sulfur dioxide is bleached to white.

2,736,639

SURFACE TREATMENT OF GERMANIUM

Ray C. Ellis, Jr., Allston, Mass., assignor to Raytheon Manufacturing Company, Waltham, Mass., a corporation of Delaware

No Drawing. Application December 16, 1953, Serial No. 398,619

6 Claims. (Cl. 41—42)

1. The method of improving the electrical characteristics of germanium bodies which consists in subjecting a germanium body to a fluid mixture from which excess germanium is readily reclaimable, said mixture being comprised of a polybasic acid selected from the group consisting of tartaric acid, citric acid, and oxalic acid, an oxidizing agent, and water, and then washing said fluid mixture from said body.

2,736,640

CHEMICAL POLISHING BATH

Leslie D. McGraw, Columbus, Ohio, assignor, by mesne assignments, to Food Machinery and Chemical Corporation, Columbus, Ohio, a corporation of Ohio

No Drawing. Application December 1, 1954, Serial No. 472,520

5 Claims. (Cl. 41—42)

1. In the method of chemically polishing aluminum with a bath containing phosphoric acid and hydrogen peroxide, the improvement which comprises having present in said bath from about 1% to about 3% of graphitic carbon.

2,736,641

FUEL OIL ADDITIVE

Raymond W. Mattson, Yorba Linda, and Frederick S. Scott, Whittier, Calif., assignors to Union Oil Company of California, Los Angeles, Calif., a corporation of California

No Drawing. Application February 1, 1952, Serial No. 269,592

10 Claims. (Cl. 44—71)

1. A fuel oil containing a minor proportion, sufficient to inhibit the separation of sludge, of a surface active amido alcohol consisting essentially of a fatty acid amide of a lower alkanolamine, said fatty acid containing from 10 to 18 carbon atoms.

2,736,642

ABRASIVE DEVICES

William O. Baker, Morristown, and Richard O. Grisdale, Short Hills, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York

Application April 28, 1951, Serial No. 223,636

5 Claims. (Cl. 51—295)

1. An abrasive device having an abrasive surface formed of a plurality of sharp-edged particles of lustrous, hard, smooth, homogeneous carbon, held in place by a binder, said particles of carbon being fragments of a carbon body produced by baking, in an oxygen-containing atmosphere at between 200° C. and 300° C., a solid body consisting of a cross-linked hydrocarbon polymer incapable of swelling in benzene to more than 1.25 times its original volume, said polymer being selected from the group consisting of polymerized trivinyl benzene, polymerized divinyl benzene, polymerized vinyl acetylene and the copolymer of divinyl benzene with a monovinyl aromatic hydrocarbon, and dehydrogenating said baked polymer body in situ by heating it at a temperature of at least 850° C. in a non-oxidizing atmosphere until its hydrogen content is not more than .5 per cent by weight of the carbon.

2,736,643

APPLICATION OF HORMONES TO THE PRODUCTION OF EDIBLE BEAN SPROUTS

Charles F. Pentler and Fumiko Murayama, San Francisco, Calif.

No Drawing. Application April 18, 1952, Serial No. 283,123

10 Claims. (Cl. 71—2.1)

1. In the method of controlling the growth pattern of edible seed sprouts in separate growth stages the steps comprising one stage of submerging the seed sprouts in aerated water containing 0.02 to 0.40 part by weight of 2,4-dichlorophenoxyacetic acid per million part by weight of water, maintaining the water at a temperature of about 75° to 85° Fahrenheit, continuing seed sprout growth for a period of about 18 to about 30 hours substantially in the absence of light, and a subsequent stage of submerging the seed sprouts in aerated water containing 0.20 to 4.00 parts by weight beta-naphthoxyacetic acid per million parts by weight of water, maintaining the water of the subsequent stage at a temperature of about 75° to 85° Fahrenheit, and continuing the seed sprout growth for a period of about 12 hours to 24 hours substantially in the absence of light.

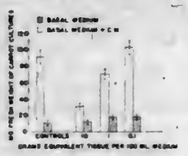
2,736,644

METHOD AND COMPOSITIONS FOR REGULATING PLANT GROWTH

Frederick C. Steward, Ithaca, and Samuel M. Caplin, Rochester, N. Y.

Application December 3, 1954, Serial No. 473,007

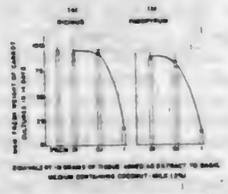
6 Claims. (Cl. 71—2.3)



1. A plant growth regulating composition comprising coconut milk and, in an amount sufficient to exert inhibitory action on the plant growth-promoting activity of coconut milk, a hydroxylic extract of plant tissue of an angiosperm of the class consisting of onion bulb and potato tuber, the extraction of from about 1 to 10 grams of said plant tissue yielding an extract containing an amount of an inhibitory substance sufficient to inhibit the plant growth-promoting activity of coconut milk when said ex-

tract is mixed with 100 milliliters of nutrient medium containing from about 3 to 15% by volume of coconut milk.

2,736,645
COMPOSITIONS AND METHOD FOR REGULATING PLANT GROWTH
Frederick C. Steward, Ithaca, and Samuel M. Caplin, Rochester, N. Y.
Application December 3, 1954, Serial No. 473,008
6 Claims. (Cl. 71—2.3)



1. A plant growth regulating composition comprising coconut milk and, in an amount sufficient to exert inhibitory action on the plant growth-promoting activity of coconut milk, a hydroxylic extract of plant tissue of a seed of the class consisting of castor bean and buckwheat, the extraction of from about 0.1 to 10 grams of said plant tissue yielding a hydroxylic extract containing an amount of an inhibitory substance sufficient to inhibit the growth-promoting activity of coconut milk, when said extract is mixed with 100 milliliters of nutrient medium containing from about 1 to 15% by volume of coconut milk.

2,736,646
N-1-NAPHTHYLPHTHALAMIC ACID HERBICIDAL COMPOSITIONS
Allen E. Smith, Oxford, Albert W. Feldman, North Haven, and Gracie M. Stone, Naugatuck, Conn., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey
No Drawing. Application October 27, 1954, Serial No. 465,153
14 Claims. (Cl. 71—2.4)

1. A herbicidal composition containing a phytotoxic concentration of N-1-naphthylphthalamic acid, and a water-soluble normal salt of a trivalent metal with a strong inorganic acid in proportion sufficient to reduce leaching in the soil of said N-1-naphthylphthalamic acid.

2,736,647
N-1-NAPHTHYLPHTHALAMIC ACID HERBICIDAL COMPOSITIONS
Allen E. Smith, Oxford, Albert W. Feldman, North Haven, and Gracie M. Stone, Naugatuck, Conn., assignors to United States Rubber Company, New York, N. Y., a corporation of New Jersey
No Drawing. Application October 27, 1954, Serial No. 465,152
15 Claims. (Cl. 71—2.6)

1. A herbicidal composition comprising a phytotoxic concentration of N-1-naphthylphthalamic acid occluded in another organic acid having a solubility in water less than 0.2% at 15° C., the ratio of N-1-naphthylphthalamic acid to the other organic acid being in the range of 1:5 to 5:1.

2,736,648
LOW METALLOID ENAMELING STEEL AND METHOD OF PRODUCING SAME
Joseph C. Eckel, Pittsburgh, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
No Drawing. Application March 6, 1952, Serial No. 275,243
3 Claims. (Cl. 75—123)

1. Low metalloid enameling stock containing less than .20% total metalloids and between .03% and .10% silicon and between .15% and .35% titanium with the balance substantially iron, said silicon and titanium combining to prevent fish scales, black specks and pull through upon application of a direct light-color vitreous enamel to said stock.

2,736,649
FERRITIC STAINLESS STEEL
Freeman J. Phillips, Pittsburgh, Pa., assignor to United States Steel Corporation, a corporation of New Jersey
No Drawing. Application December 4, 1953, Serial No. 396,338
4 Claims. (Cl. 75—124)

1. A ferritic stainless steel containing 9 to 11% chromium, .03% maximum carbon, titanium at least 10 times carbon but not over 1%, .02 to .30% aluminum and .10 to 1.00% manganese, balance iron except for residual impurities and elements in amounts that do not adversely affect the properties.

2,736,650
LOW ALLOY HIGH SPEED STEEL
Leonard C. Grimshaw, Pittsburgh, Pa., assignor to Firth Sterling, Inc., Pittsburgh, Pa., a corporation of Pennsylvania
No Drawing. Application June 8, 1953, Serial No. 360,340
3 Claims. (Cl. 75—126)

1. A low alloy, high speed steel consisting essentially of 4.79 to 5.97 atomic percent carbon, 3.70 to 4.80 atomic percent chromium, 3.98 to 4.86 atomic percent vanadium, 1.25 to 3.42 atomic percent molybdenum, and 0 to 1.05 atomic percent tungsten, the balance being substantially all iron, the steel complying with Rule 1 $C_t-(C_v+C_m)=-0.10$ to -0.40 atomic percent and also complying with Rule 2

$$\frac{C_t}{C_t-C_v}=4 \text{ to } 6$$

in which C_t is the atomic percent of all the carbon in the steel, C_v is the atomic percent of carbon needed to combine with all the vanadium in the steel to form VC, and C_m is the atomic percent of carbon needed to combine with all the tungsten, chromium and molybdenum in the steel to form $(W, Cr, Mo)_6C$ type carbides.

2,736,651
ZIRCONIUM TERNARY ALLOYS
Arthur D. Schwope, Cleveland, and Walston Chubb, Columbus, Ohio, assignors to the United States of America as represented by the United States Atomic Energy Commission
No Drawing. Application August 19, 1954, Serial No. 451,076
2 Claims. (Cl. 75—177)

1. A ternary zirconium base alloy containing 1 to 6 weight percent tin and 0.1 to 4.0 weight percent aluminum.

2,736,652
FIBROUS PRODUCTS COMPRISING FIBERS BONDED WITH DEXTRAN XANTHATE
Leo J. Novak, Dayton, Ohio, assignor to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
No Drawing. Application August 18, 1954. Serial No. 450,796
16 Claims. (Cl. 92—3)

1. A coherent fibrous structure comprising discontinuous fibers bonded together by dextran xanthate.

2,736,653
MANUFACTURE OF PAPER CONTAINING HYDROXYETHYL CELLULOSE
Donald Robert Erickson, Kalamazoo, Mich.
No Drawing. Application June 15, 1953, Serial No. 361,843
8 Claims. (Cl. 92—21)

1. The method of making paper of high dry tear strength comprising adsorbing on substantially unhydrated cellulose fibres an adhesive binder of a tacky temporary solution of water-insoluble hydroxyethyl cellulose having an ethylene oxide content of more than 13.5% by weight of the cellulose content of said hydroxyethyl cellulose and having a total hydroxyethyl cellulose content of from ½% to 2% of the weight of said cellulose fibres by dispersing said fibres in a temporary solution of said hydroxyethyl cellulose in aqueous sodium hydroxide having a sodium hydroxide concentration below that required for dissolution of said hydroxyethyl cellulose and then felting said fibres into a sheet while the adsorbed temporary solution of hydroxyethyl cellulose is in a tacky condition and draining the free liquid from said felted fibres and then precipitating the hydroxyethyl cellulose from said temporary solution by drying said sheet whereby said fibres are adhesively secured together in said felted sheet at their point of contact.

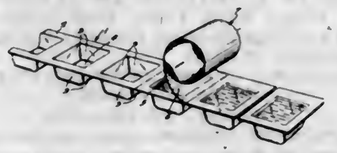
2,736,654
BREAD-MAKING COMPOSITION
Roland W. Selman, Jr., and Marvin K. Landcraft, Kansas City, Mo., assignors to De-Raef Corporation, Kansas City, Mo., a corporation of Missouri
No Drawing. Application April 22, 1952, Serial No. 283,754
8 Claims. (Cl. 99—91)

1. A composition for making bread including in combination a major proportion of dried cheese whey, a proportion of calcium carbonate between 11.47 and 19.12 per cent by weight and a proportion of calcium peroxide between 0.105 and 0.175 per cent by weight.

2,736,655
PROCESS FOR MAKING APPLE SYRUP
Max Gordon and Lelia Gordon, Rhinebeck, N. Y.
No Drawing. Application March 31, 1953, Serial No. 346,043
7 Claims. (Cl. 99—142)

1. A process for producing apple syrup which comprises, in combination, the steps of pressure extracting the juice of ripe apples, adding a catalyst thereto, filtering such juice until clear, concentrating the filtered juice to reduce its volume by lowering its water content, separating the apple essence from the concentrated apple juice, adding sugar to the residual apple juice to convert it to a syrup and re-incorporating the separated apple essence.

2,736,656
METHOD OF PACKAGING
John M. Marshall, Patchogue, N. Y., assignor to Kraft Foods Company, Chicago, Ill., a corporation of Delaware
Application February 11, 1952, Serial No. 271,001
1 Claim. (Cl. 99—171)



The method of packaging individual food servings which comprises forming an elongated first strip of thermoplastic material into a longitudinally spaced series of cups while leaving a horizontally extending border flange about each cup, successively filling the cups with a food material, applying a continuous second strip of thermoplastic material to said first strip to provide covers for said cups and border flanges, the width of said second strip being greater than the width of said first strip, so that an edge portion of said second strip extends beyond a marginal edge of said first strip, heat sealing said second strip to said first strip along said border flanges at a temperature such that a low strength hermetic seal is effected between said strips, and cutting the sealed strips transversely of said strips between said cups to provide a plurality of individual sealed packages each having a cover which includes an edge portion extending beyond a marginal edge of the associated border flange, said extending portion providing a finger grip for peeling said cover from said associated border flange.

2,736,657
DISPENSING CONTAINER FOR SUPPORT UPON AN EDGE OF A RECEPTACLE
Roger W. Schares, New Hampton, Iowa
Application December 30, 1952, Serial No. 328,585
3 Claims. (Cl. 99—171)



1. A juice dispensing device comprising a rigid back piece, an envelope secured to said back piece, the back piece and envelope being formed to simulate a fruit slice, the envelope being formed of a deformable material to permit dispensing of a fruit juice contained therein responsive to squeezing of the envelope, an arm arranged exteriorly of and in parallel spaced relation with respect to one of the edges of said envelope and having one end rigidly secured to the adjacent end of said back piece, a space between said arm and edge of said envelope being adapted to receive the rim of a beverage glass, and a frangible strip projecting perpendicularly from the inner face of said arm and having its free end abutting and secured to said edge of said envelope, the space between said strip and the end of said back piece connected to said arm forming a dispensing opening when the frangible strip is broken away from said edge of said envelope and the arm has been swung away from its parallel position.

2,736,658
METHOD OF PROTECTING METAL SURFACES FROM CORROSION AND CORROSION INHIBITOR COMPOSITIONS
Frank W. Pfohl, Westmont, Ill., and Vance P. Gregory, Elsmere, Del., assignors to Armour and Company, Chicago, Ill., a corporation of Illinois
No Drawing. Application July 23, 1952, Serial No. 300,488
20 Claims. (Cl. 106—14)

1. The method of inhibiting corrosion of a ferrous metal surface, comprising forming an adsorbed protective film on said metal surface of the salt reaction product of a polyamine compound with an acid, said polyamine compound containing at least 2 amine groups in its molecular structure connected by a polymethylene group having from 2 to 6 methylene groups, one of said amine

groups being connected to a radical selected from the group consisting of aliphatic radicals derived from fatty acids having from 8 to 22 carbon atoms and alicyclic radicals derived from rosin acids, said acid reacted with said polyamine compound to form a salt thereof being selected from the group consisting of fatty and rosin acids containing from 6 to 22 carbon atoms.

11. A composition for use in controlling corrosion of metal surfaces, comprising a protective grease composed mainly of a gelled hydrocarbon oil in admixture with at least 1 percent by weight of an N-tallow-trimethylene diamine oleate.

2,736,659

METHOD FOR PREPARATION OF HIGHLY REFRACTIVE MATERIAL

Langtry E. Lynd, South Plainfield, N. J., and Leon Merker, Bronx, N. Y., assignors to National Lead Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application July 23, 1954, Serial No. 445,462

3 Claims. (Cl. 106—42)

1. Method for the preparation of a hexagonal monocrystalline mass of barium titanate which comprises periodically introducing into an oxygen-hydrogen flame a powdered composition consisting essentially of barium titanate and from about 0.1% to about 20% by weight of an oxidic compound of barium and crystallizing the melted material as a monocrystalline mass in the form of a boule.

2,736,660

REFRACTORY COMPOSITION AND METHOD OF USE

Thomas E. Barlow, Jackson, Ohio, assignor, by mesne assignments, to International Minerals & Chemical Corporation, Chicago, Ill.

No Drawing. Application July 27, 1951, Serial No. 239,023

5 Claims. (Cl. 106—64)

5. The method of repairing furnace refractory linings, comprising blowing at high pressure against the furnace walls in the region of repair a fluid composition essentially consisting by weight of solid ingredients approximately 47.5% to 57% coarse silica fraction of about ½ inch to 40 mesh, about 23% to 37% fine silica fraction of about 50 to 300 mesh, and about 14% to 20% refractory cement; and to which there is added about 12% water.

2,736,661

WELL CEMENTING COMPOSITION AND METHOD OF PREPARING SAME

Bryan E. Morgan, Houston, and George K. Dumbauld, Bellaire, Tex., assignors to Humble Oil & Refining Company

No Drawing. Application January 23, 1952, Serial No. 267,922

20 Claims. (Cl. 106—90)

1. A cement composition adapted for use in well cementing operations having a density in the range from about 11 to approximately 12½ lbs. per gallon and having a tensile strength when set below 300 lbs. per sq. in. which consists of, a Portland cement, a liquid hydrocarbon having a viscosity at 100° F. less than 40 centipoises in an amount in the range between 15 cc. and 60 cc. per 100 grams of the dry cement, a water soluble salt of lignin sulfonic acid in an amount in the range between 0.1% and 1.0% by weight based on the dry cement, and water in an amount in the range between 50% and 100% by weight based on the dry cement.

2,736,662

LIQUID FOR RECLAIMING RUBBER

Edward A. Van Valkenburgh, Greene, N. Y.

No Drawing. Application August 14, 1951, Serial No. 241,889

5 Claims. (Cl. 106—123)

1. A homogeneous liquid for use in reclaiming rubber by the acid process, said composition consisting essentially of heat treated crude tall oil preheated to a temperature in excess of about 260° F. and blended with a much larger proportion of petroleum hydrocarbon oil, largely non-volatile at the temperature of vulcanization, the proportions of heat treated crude tall oil and hydrocarbon oil being from about 5% to 40% of the heat treated crude tall oil and 60% to 95% of liquid hydrocarbon oil.

2,736,663

PRODUCTION OF NONALLERGEN REACTING PROTEIN COATINGS FROM ALLERGEN-CONTAINING POMACES

Harry M. Weber, Avon Lake, Ohio, assignor to The Sherwin-Williams Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application March 9, 1951, Serial No. 214,834

8 Claims. (Cl. 106—154)

4. A process for producing a non-toxic, substantially entirely deallergenated castor protein composition which comprises treating an aqueous suspension of the toxin and allergen-containing castor pomace with an alkali metal hydroxide in the presence of from 20 to 50 parts of a resin acid material per 100 parts of castor pomace, at a pH of from 9.5 to 11, at a temperature of from 60° C. to 80° C. until a smooth dispersion is obtained, and, without precipitating the protein, adding a pigment slip comprising a finely divided chemically inert water insoluble filler.

2,736,664

POLYHYDRIC ALCOHOL ESTERS OF ROSIN AND A TERT-ALKYL BENZOIC ACID AND CELLULOSE COMPOUNDS CONTAINING THEM

Theodore F. Bradley and Roy W. H. Tess, Orinda, Calif., assignors to Shell Development Company, San Francisco, Calif., a corporation of Delaware

No Drawing. Application October 21, 1950, Serial No. 191,502

8 Claims. (Cl. 106—173)

8. A coating composition containing a cellulose derivative of the group consisting of cellulose nitrate, cellulose acetate, cellulose propionate, cellulose stearate, cellulose valerate, ethyl cellulose, methyl cellulose, butyl cellulose, benzyl cellulose, glycol cellulose, cellulose acetostearate, and cellulose acetotartarate and a completely esterified mixed ester of a polyhydric alcohol made up only of the elements carbon, hydrogen and oxygen and containing from 3 to 12 hydroxyl groups having at least one of the hydroxyl groups esterified with a tert-alkyl substituted benzoic acid wherein the tert-alkyl radical contains from 4 to 16 carbon atoms, and having the remaining hydroxyl groups esterified with a rosin acid.

2,736,665

METHOD OF STABILIZING SPRAYABLE PAINTS

Edmund Rogers, South Euclid, Ohio, assignor to The Engine Parts Manufacturing Company, Cleveland, Ohio, a corporation of Ohio

No Drawing. Application February 17, 1950, Serial No. 144,865

7 Claims. (Cl. 106—190)

1. A method for stabilizing pigmented lacquer compositions in which the pigment ordinarily has a tendency to agglomerate or settle to irreversible masses, which comprises adding to said lacquer an approximately equal volume of a fluoro-chloromethane.

2,736,666

GELLED COMPOSITIONS AND METHOD FOR MAKING THE SAME

Harry H. Beacham, Plainfield, N. J., assignor to National Lead Company, New York, N. Y., a corporation of New Jersey

No Drawing. Application June 8, 1951, Serial No. 230,703

9 Claims. (Cl. 106—244)

1. Preparation of a gelled composition which comprises oxidizing a triglyceride oil having an iodine number of at least 80 until the viscosity of the oxidized oil is from 15 to 150 poises and admixing said oxidized oil with a titanium ester in amount from about 2% to about 10%, said ester being selected from the group consisting of titanium orthoester and alkoxy titanium acylate wherein the sum of the alkoxy and carboxyl groups is substantially 4 per titanium atom, said orthoester being prepared by reacting a titanium compound with a monohydric saturated alcohol containing from 2 to 22 carbon atoms, said alkoxy group in said alkoxy titanium acylate containing from 2 to 22 carbon atoms, and said acylate group in said alkoxy titanium acylate containing from 3 to 30 carbon atoms, whereby said composition is formed substantially immediately upon admixture.

2,736,667

DEODORIZING PETROLEUM WAXES

Arthur C. Pabst, Douglaston, and Charles F. Duchacek, Long Island City, N. Y., assignors to Socony Mobil Oil Company, Inc., a corporation of New York

No Drawing. Application June 9, 1950, Serial No. 167,252

7 Claims. (Cl. 106—270)

7. A substantially odorless and color stable petroleum wax consisting essentially of a petroleum wax normally characterized by a rancid odor and color instability and a small amount, from about 0.005 to about one per cent of said wax, of a formaldehyde polymer selected from the group consisting of paraformaldehyde and trioxane.

2,736,668

PROCESS OF METHOXYLATING THE SURFACE OF A SILICEOUS MATERIAL, AND THE RESULTING PRODUCT

Edward C. Broge, Cecil County, Md., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 9, 1952, Serial No. 287,045

11 Claims. (Cl. 106—308)

2. A composition consisting of a substrate having methoxy groups chemically bound to its surface, the substrate consisting of a plurality of dense ultimate units of amorphous silica coherently joined into purverulent, supercolloidal aggregates having a specific surface area of at least one square meter per gram, the proportion of methoxy groups being at least 400 per hundred square millimicrons of surface area of said internal structure.

8. In a process for methoxylating the surface of a siliceous material the steps comprising effecting contact between methanol and an inorganic, supercolloidal, siliceous material having a specific surface area of at least one square meter per gram and having surface silanol groups, and heating the mixture at a temperature of about from 150 to 300° C. while maintaining the water content of the system initially below 1% and finally below 0.1% by weight, whereby chemical combination of methoxy groups with the siliceous material is effected, and continuing the heating until the proportion of combined methoxy groups is at least 400 per 100 square millimicrons of surface area of the original siliceous material.

2,736,669

METHOD OF ACTIVATING AND ESTERIFYING THE SURFACE OF FINELY DIVIDED PARTICLES OF SILICA HAVING SURFACE SILANOL GROUPS

Max T. Goebel, Landenberg, Pa., assignor to E. I. du Pont de Nemours and Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application December 11, 1951, Serial No. 261,140

4 Claims. (Cl. 117—54)

1. A process which comprises the steps of heating, at a temperature of from 300 to 800° C., a material having an internal structure of an inorganic, water-insoluble, siliceous solid in a supercolloidal state of subdivision having a specific surface area of at least 25 $m.^2/g.$ and bearing a sufficient proportion of surface silanol groups that the hydroxylated surface area is greater than 85% of the total surface area, the time of heating being sufficient to activate the surface of said solid and reduce its specific hydroxylated surface area to less than 85 percent of its specific surface area, and thereafter chemically reacting with the activated solid an alcohol of the formula ROH, in which R is a hydrocarbon radical having from 2 to 18 carbon atoms wherein the carbon attached to oxygen is also attached to hydrogen, the silica being cooled, prior to contact with the alcohol, to a temperature below the thermal decomposition temperature of the alcohol and being maintained in a dry atmosphere after the activation until contact with the alcohol is effected, said reaction with alcohol being effected at a temperature in the range from 30° C. to the thermal decomposition temperature of the alcohol and while the water content of the reaction system is maintained below 3 percent by weight based on the alcohol present and being continued until the product is sufficiently organophilic that it is preferentially wetted by butanol in a butanol-water mixture.

2,736,670

METHOD OF SURFACE TREATING AND EXTRUDING DIE WITH CHROMIUM

Edward M. Griffiths, Taunton, Mass., assignor to National Glass Company, Inc., a corporation of Massachusetts

Application September 17, 1954, Serial No. 456,817

2 Claims. (Cl. 117—65)



1. In a method of surface treating an extruding die formed of steel of approximately 50 Rockwell C hardness comprising the steps of coating said die with a layer of chromium of predetermined thickness, heating said coated die at approximately 2800° F. for a period of approximately six hours to form an austenitic chrome steel layer resulting from penetration of the steel by the chromium, air cooling said heated die for approximately six hours to stabilize the austenitic layer formed on the surface of said die, reheating said die at approximately 1600° F. to obtain a fine grain of austenetic layer on the surface of said die, and cooling said die to form a surface resistant to corrosion and electrolytic action during an extruding operation.

2,736,671

METHOD AND APPARATUS FOR REPOSITIONING COATING ATOMIZER MEANS

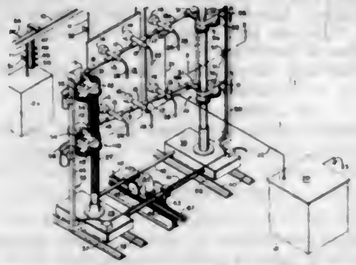
Edwin M. Ransburg and Emery P. Miller, Indianapolis, Ind., assignors to Ransburg Electro-Coating Corp., a corporation of Indiana

Application March 19, 1952, Serial No. 277,384

26 Claims. (Cl. 117—93)

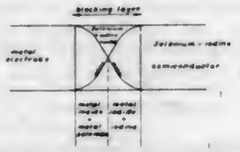
1. Coating apparatus adapted to coat articles of different sizes and shapes comprising an atomizing unit, means for adjustably supporting said atomizing unit, said sup-

porting means being adapted to adjustably move said atomizing unit to a plurality of different fixed predetermined coating positions for coating articles of different



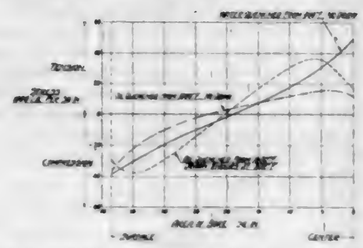
sizes and shapes, and electromotive means operably associated with said adjustable supporting means for moving said atomizing unit to said different fixed predetermined coating positions.

2,736,672
SELENIUM RECTIFIER OF INCREASED BLOCKING PROPERTIES
Otto Klein, Nurnberg, Bavaria, Germany, assignor to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application May 22, 1952, Serial No. 289,351
Claims priority, application Germany May 25, 1951
2 Claims. (Cl. 117—200)



1. A selenium rectifier comprising a base electrode, a halogen-containing selenium layer on said base electrode, and a second selenium layer substantially free of halogen, containing as an additive an alkaline metal and a crystallization-retarding substance taken from the class consisting of arsenic and phosphorous.

2,736,673
AXLE AND METHOD OF MAKING THE SAME
Rodney K. Potter, Hobart, Ind., assignor to United States Steel Corporation, a corporation of New Jersey
Application August 25, 1952, Serial No. 306,247
2 Claims. (Cl. 148—12)



1. The method of producing railway car axles having enhanced resistance to fatigue, comprising forming a roughly machined forged blank of steel containing .30 to .50% carbon, .50 to .80% manganese, .30% maximum silicon with the balance iron and residual impurities, heating said rough machined blank to a subcritical temperature between 700 and 1100° F., then quenching said heated blank to provide a Brinell hardness value less than 200 and residual surface stresses which combined with the stresses developed on the compression side of the axle during loading are less than the compression yield point of the steel, and then machining said quenched blank to its finished size.

2,736,674
FORGING ALUMINUM ALLOY DISC WHEELS
Edward H. Harmon, Westlake, Ohio, assignor to Aluminum Company of America, Pittsburgh, Pa., a corporation of Pennsylvania
Application October 18, 1954, Serial No. 462,915
7 Claims. (Cl. 148—12.7)



1. The method of making precipitation hardened deep drawn cup shaped forged disc wheels of heat treatable aluminum base alloys comprising hot forging from flat stock a contoured disc one surface of which consists of a substantially flat portion extending inwardly from the edge and merging into a central depressed area while the other and opposite surface consists of a flat inclined portion adjacent the edge, said inclined portion extending upwardly toward and merging with an annular relatively wide rounded cheek section, and a substantially flat central portion within said annular cheek section, said central flat portion being opposite the depresed area on the other side of the disc, hot pressing said disc into a cup shape of substantially the depth of the final wheel with said flat and depressed area surfaces forming the interior surface of the cup, hot pressing said cup a second time to complete shaping of the wheel body, solution heat treating said wheel body, quenching it, stretching said quenched body whereby the diameter of the wheel is slightly increased and the metal is cold worked and thereafter precipitation hardening said cold worked wheel body.

2,736,675
PREFORMED RIBBING FOR INSOLES
Manfred E. Pehrson, Malden, Mass., assignor to Prime Manufacturing Company, Lynn, Mass., a corporation of Massachusetts
Application February 8, 1955, Serial No. 486,793
3 Claims. (Cl. 154—53.5)



1. As an article of commerce, preformed ribbing for attachment to insoles, comprising a narrow strip of relatively thick fibre-board scored in its outer face and having a pyroxylin non-adherent coating on its scored face, and a wider strip of tape coated on one face with a tacky adhesive solvent-activatable coating on one face and being adhesively and permanently attached to the uncoated face of the fibre-board strip in face-to-face contact and folded to extend beyond one edge of said strip, whereby the pyroxylin coated face of the fibre-board strip and the uncoated face of the tape are presented on the same side of the ribbing and may be coiled without blocking.

2,736,676
FIBROUS MATS AND PRODUCTION THEREOF
Philip J. Frickert, Jr., Harbor Hills, Hebron, Ohio, assignor to Owens-Corning Fiberglas Corporation, a corporation of Delaware
Application April 24, 1953, Serial No. 351,000
22 Claims. (Cl. 154—54)

12. As an article of manufacture a mat made of an untwisted strand of continuous filaments in which at least a portion of the filaments are dispersed by being spaced from each other at each point along the length of the



strand while the remainder of the filaments are integrally associated in closely compacted relation.

2,736,677
METALLIZED INSULATORS
Paul Eisler, London, England, assignor to Technograph Printed Circuits Limited, London, England, a British company
Application November 29, 1951, Serial No. 258,807
Claims priority, application Great Britain December 1, 1950
10 Claims. (Cl. 154—127)



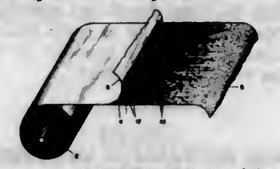
1. A metallised insulator comprising an insulating body and a metal body, said insulating body being composed of insulating laminae in direct insulation-to-insulation contact over parts of their areas and said metal body being composed of metal laminae in direct metal-to-metal contact over parts of their areas, other parts of said insulating laminae and other parts of said metal laminae being disposed in a mutually interleaved relationship in direct laminae-to-laminae contact to provide labyrinthic engagement between said metal body and said insulating body.

2,736,678
ADHESIVE SILICATE COMPOSITION AND METHOD OF USING THE SAME
Donald J. Olix, Fairport Harbor, Ohio, assignor to Diamond Alkali Company, Cleveland, Ohio, a corporation of Delaware
No Drawing. Application May 13, 1953,
Serial No. 354,867
30 Claims. (Cl. 154—138)

21. The method of preparing paperboard which includes applying to the sheets of paper to be laminated as the adhesive therefor, a composition comprising 50–75% by weight of an aqueous silicate glass solution having a solids content of 35–45% and an $Na_2O:SiO_2$ ratio of 1:2.5–4, 2–25% by weight of a starch ester of a hydrocarbon substituted dicarboxylic acid from the group consisting of glutaric and succinic acids, 5–20% by weight of a kaolin clay having an average particle size such that 80–85% of the particles are less than 2 microns, and water to make 100% by weight, pressing the sheets of paper together to form the laminate, and heating the laminate to set said adhesive composition.

2,736,679
MANUFACTURE OF LAMINATED MATERIAL
Franklin G. Nickerson, Jr., Attleboro, Mass., assignor to American Sisalkraft Corporation, Attleboro, Mass., a corporation of Delaware
Application February 16, 1954, Serial No. 410,728
13 Claims. (Cl. 154—138)

1. The method of adhesively securing a ply of sheet material by hot coating with an emulsion convertible to an adhesive gel of inhibited ability to flow at high temperature, which comprises forming a hot water-in-oil emulsion at an elevated temperature not exceeding 212° F. having as its continuous phase an organic plasticizer body thermoflowing at the elevated temperature and, as its disperse phase, an aqueous latex containing in minor proportion with respect to said plasticizer body an organic



gelating agent compatible with said plasticizer and selected from the group consisting of natural rubber and synthetic rubbery polymers, non-fluid at said elevated temperature, thereafter coating the ply with said emulsion while hot and subsequently extracting water to set the adhesive to a viscosity, at said elevated temperature, substantially greater than the viscosity of said emulsion.

2,736,680
LAMINATION OF FLUOROCARBONS SUCH AS POLYTRIFLUOROCHLOROETHYLENE WITH OTHER MATERIALS
Alfred S. Kidwell, Milford, Conn., assignor to The Connecticut Hard Rubber Company, New Haven, Conn., a corporation of Connecticut
No Drawing. Application April 7, 1953,
Serial No. 347,405
7 Claims. (Cl. 154—139)

1. The method of bonding a sheet of high-molecular-weight fluorocarbon polymer to another material, which comprises forming an intimate mixture of finely divided fluorocarbon polymer and finely divided polyalkylene polysulfide rubber on a surface of the sheet, fusing it thereon to provide on the sheet a composite priming coating, and then adhesively securing the sheet to the other material by the use of a cement applied to the other material and to said priming coating, said cement containing uncured polyalkylene polysulfide rubber, and letting the resulting assembly stand for about 24 hours at room temperature to accomplish the curing of the rubber in the cement.

6. A laminate of high-molecular-weight fluorocarbon polymer and another material, the fluorocarbon layer having on one surface a strongly adherent fused coating of particles of the same fluorocarbon polymer and particles of polyalkylene polysulfide rubber, and the layer of the other material being bonded to said coating by a layer of cured cement containing polyalkylene polysulfide rubber.

2,736,681
CHEMICAL COMPOUNDS
Max Tishler, Westfield, N. J., assignor to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey
No Drawing. Application February 11, 1955,
Serial No. 487,720
5 Claims. (Cl. 167—65)

2. Compositions comprising mixtures of 9α-fluoro-4-pregnene-11β,17α,21-triol-3,20-dione 21-tertiary-butylacetate and a pharmaceutical carrier.

2,736,682
METHOD OF MAKING A PROLONGED ACTION MEDICINAL TABLET
Victor M. Hermelin, Olivette, Mo.
Continuation of application Serial No. 195,369, November 13, 1950. This application October 11, 1954, Serial No. 461,354
6 Claims. (Cl. 167—82)

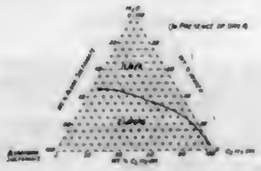
1. The method of making a prolonged action medicinal tablet which comprises mixing a dry powdered drug mate-

rial, confectioners' glaze, stearic acid and castor oil to a dough-like consistency, spreading the mixture to dry and, when dry, comminuting to granulate the mixture to form discrete granules, mixing said granules with a composition consisting of confectioners' glaze, stearic acid and castor oil to form a mixture of dough-like consistency, again spreading the latter dough-like mixture to dry and, when dry, comminuting same to form discrete granules, and compressing a measured quantity of the last-mentioned granules to form a solid tablet.

2,736,683
ALUMINUM SULFAMATE ANTIPERSPIRANT LIQUID

Lester D. Apperson, Convent Station, N. J., and Earl L. Richardson, Elkhart, Ind., assignors to Colgate-Palmolive Company, Jersey City, N. J., a corporation of Delaware

Application December 19, 1951, Serial No. 262,464
7 Claims. (Cl. 167—90)

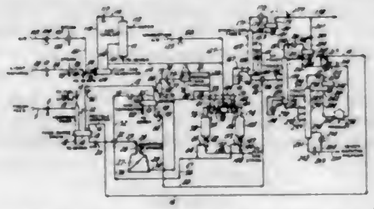


1. A liquid preparation for inhibiting or retarding perspiration comprising aluminum salt of sulfamic acid in an effective amount from about 5 to about 50% by weight in an aqueous lower saturated aliphatic monohydric alcoholic medium, said alcohol being at least about 5% by weight and said composition having essentially a single homogeneous liquid layer.

2,736,684
REFORMING PROCESS

Morris Tarnpoll, Newark, N. J., assignor to The M. W. Kellogg Company, Jersey City, N. J., a corporation of Delaware

Application September 5, 1952, Serial No. 308,083
4 Claims. (Cl. 196—50)

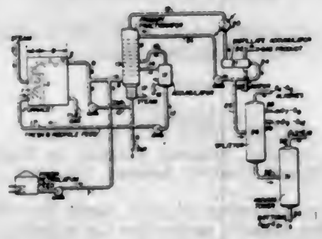


1. A reforming process for producing a 100/130 grade aviation gasoline which comprises contacting a naphtha having about 20 to about 60% naphthenes with a catalyst selected from the group consisting of molybdenum oxide, chromium oxide, and platinum metal at a temperature of about 850 to 1050° F., a pressure of about 25 to about 1000 p. s. i. g., in the presence of hydrogen supplied at the rate of about 500 to about 20,000 SCFB, at a weight space velocity of about 0.10 to about 4.0, thus producing a reaction product including aromatics and acyclic hydrocarbons having 5 and 6 carbon atoms, separating a C_5–C_6 fraction from the reaction product, recycling a portion of the C_5–C_6 fraction at a recycle ratio of about 0.5 to about 3.0:1 for further contact with the catalyst, separating an aromatic fraction having a boiling point of about 180° to about 225° F. and an end point of about 280° to about 325° F. from the remainder of the reaction product, and combining the remainder of the C_5–C_6 fraction and the aromatic fraction as the product of the process.

2,736,685
PROCESS OF PETROLATUM CRACKING IN LIQUID AND VAPOR PHASE

Howard L. Wilson, Raritan Township, Middlesex County, Fred W. Banes, Westfield, Brook I. Smith, Elizabeth, and Joseph F. Nelson, Westfield, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application January 2, 1953, Serial No. 329,168
8 Claims. (Cl. 196—50)

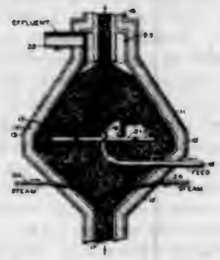


1. A process for cracking petrolatum for producing principally high yields of C_9 to C_{19} alpha olefins, which comprises heating petrolatum distillate freed from tarry residue boiling above 650° F. in liquid phase at liquid-phase cracking temperatures in the range of 750° to 950° F. for a period up to about 8 seconds to effect 12 to 20 wt. percent of total cracking while the petrolatum is maintained in liquid phase, dispersing the resulting liquid-phase cracked petrolatum products into a stream of steam superheated to above 1000° F. at the inlet to a vapor-phase cracking zone to vaporize the liquid phase cracked petrolatum products as they are admitted to said vapor phase cracking zone, then passing the steam containing said vaporized cracked products through said vapor phase cracking zone wherein said products are heated to a vapor phase cracking temperature in the range of 1000° to 1250° F. for a period to obtain the remainder of 25 to 45 wt. percent conversion of the petrolatum, then cooling the cracked products and fractionating from the cracked products C_9 through C_{19} olefins.

2,736,686
PEBBLE HEATER REACTOR EMPLOYED IN THE CONVERSION OF HYDROCARBONS, WITH THE USE OF INERT SOLIDS

Louis J. Weber, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

Application June 12, 1950, Serial No. 167,542
7 Claims. (Cl. 196—55)

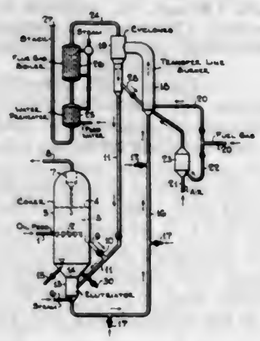


1. A process for cracking normally liquid hydrocarbon which comprises gravitating a hot compact stream of refractory pebbles at a temperature above the cracking temperature of said hydrocarbon to a cracking zone of uniformly increasing horizontal cross-sectional area in the direction of pebble flow; maintaining a compact gravitating bed of said pebbles in said reaction zone; introducing a stream of said hydrocarbon in liquid form to the lower portion of said bed of pebbles under conditions so as to vaporize a substantial portion of said hydrocarbon; passing the vaporized hydrocarbon upwardly through said reaction zone at a uniformly increasing flow rate and a contact time in the range of 0.5 to 0.0001 second so as to crack the same to lighter hydrocarbons; transferring pebbles from the bottom of said cracking zone to a heating zone above said cracking zone; contacting the pebbles in said heating zone with a stream of hot combustion gas so as to heat same to a temperature above said cracking temperature; gravitating the reheated pebbles to said cracking zone; coking the unvaporized portion of said hydrocarbon on the pebbles in the lower portion of said zone; and recovering an effluent from said cracking zone.

2,736,687
SHOT HEATED FLUID CONVERSION SYSTEM

Harvey E. W. Burnside, Locust, Charles E. Jahnig, Red Bank, and James W. Brown, Elizabeth, N. J., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application July 14, 1951, Serial No. 236,782
4 Claims. (Cl. 196—55)

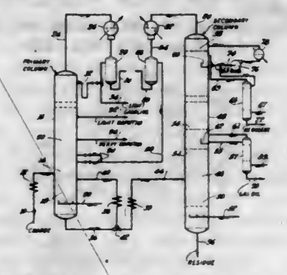


1. An improved fluid coking process which comprises the steps of converting a feed stock in a coking zone containing a dense turbulent bed of fluidized coke particles under about 500 microns in size maintained at a coking temperature and a coking pressure above 50 p. s. i. g. to produce vapors and coke which is deposited on said particles, withdrawing said vapors as product, introducing coke particles from said coking zone into a mixing zone maintained substantially at said coking pressure, mixing with the coke particles in said mixing zone heavier high temperature particulate heat carrier in the absence of feed stock, the free fall velocity of said heat carrier being at least 2 times the free fall velocity of said coke particles, said heat carrier having a bulk density in the range of 30 to 200 lbs./cu. ft., flowing the resulting mixture to an elutriation zone also maintained substantially at said coking pressure, passing an inert aeration gas upwardly through the particles in said elutriation zone in the absence of feed stock at a velocity sufficient to entrain only heated coke particles, returning heated coke particles and aeration gas from said elutriation zone to said coking zone to maintain said coking temperature, passing heat carrier from the lower portion of said elutriation zone in the form of a dense upwardly flowing aerated column in a reverse standpipe to a heating zone maintained at a pressure below 20 p. s. i. g., said column being of sufficient height to dissipate the pressure originally on said heat carrier, heating said heat carrier in said heating zone to a high temperature above said coking temperature, and passing only high temperature heat carrier from said heating zone to said mixing zone as a descending aerated column in a standpipe, said column being of sufficient height to generate a hydrostatic pressure on said high temperature heat carrier at least equal to said coking pressure.

2,736,688
METHOD FOR DISTILLING OILS

Wheaton W. Kraft, Scarsdale, N. Y., assignor to The Lummus Company, New York, N. Y., a corporation of Delaware

Application February 16, 1953, Serial No. 336,998
2 Claims. (Cl. 196—73)



1. The method of separating a hydrocarbon mixture by fractional distillation which comprises, heating the mixture and passing it to a primary fractionation column to obtain a light distillate and a bottoms under conditions which incompletely remove from the bottoms, materials boiling within the range of the light distillate, withdrawing the light distillate as an overhead from said column, withdrawing an intermediate side stream of controlled end point from said column, stripping the remainder of the mixture in said column to produce the desired bottoms, withdrawing said bottoms, heating one portion of the withdrawn bottoms in a separate reboiling circuit and reboiling said primary column with the hot bottoms, heating a second portion of said bottoms and passing said second portion to a secondary column, stripping said bottoms in the lower part of said secondary column and withdrawing stripped bottoms as product from said secondary column, substantially reducing the vapor load at the top of said secondary column by refluxing said secondary column at the top thereof with a reflux circuit comprising withdrawing a condensed side cut from the upper part of said column, passing a portion of the withdrawn side cut to a separate stripping operation, cooling the remaining portion of the withdrawn side cut and reintroducing said cooled portion into said tower above the point of withdrawal so as to control the amount of overhead in said column, withdrawing an overhead from said secondary column which includes all of the material boiling within the range of the overhead of said primary column, condensing said overhead, withdrawing a portion of said condensed overhead as product and returning the remaining portion of condensed overhead comprising not more than 2% by weight of the initial feed to the primary column.

2,736,689
HYDROGENATION OF UNSATURATED HYDROCARBONS EMPLOYING A METAL SULFIDE CATALYST HAVING A NITROGENOUS BASE CHEMISORBED THEREON

Archibald P. Stuart, Media, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a corporation of New Jersey

No Drawing. Application January 27, 1951, Serial No. 208,232
17 Claims. (Cl. 196—78)

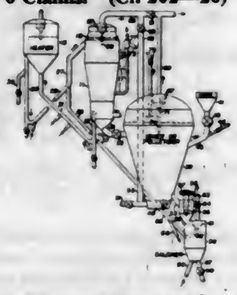
1. An improved hydrogenating catalytic composition prepared by depositing on an acid type carrier from 10% to 25% of a metal sulfide selected from the group consisting of iron sulfide, cobalt sulfide, nickel sulfide, molybdenum sulfide, chromium sulfide, tungsten sulfide, and vanadium sulfide, and treating the resulting composition under non-hydrogenating conditions with an organic nitrogenous base having from 4 to 16 carbon atoms per molecule for a time sufficient to chemisorb said base thereon in an amount effective to increase hydrogenating activity of said resulting composition.

2,736,690

INTEGRATED PROCESS FOR COKING, AGGLOMERATING AND CALCINING HYDROCARBON OIL

William J. Mattox, Roger W. Richardson, and Robert W. Krebs, Baton Rouge, La., assignors to Esso Research and Engineering Company, a corporation of Delaware

Application May 13, 1954, Serial No. 429,664
6 Claims. (Cl. 202—26)



1. An integrated process for preparing relatively large, dense, coke compactions which comprises the steps of coking a heavy hydrocarbon oil by contacting the oil coking charge stock at a coking temperature with a body of coke particles maintained in the form of a dense, turbulent, fluidized bed in a reaction zone wherein the oil is converted to product vapors and carbonaceous solids are continuously deposited on the coke particles; removing product vapors from the reaction zone; circulating the coke particles through an extraneous heating zone wherein a portion of them are heated and back to the reaction zone to supply heat thereto; withdrawing coke particles from the reaction zone to a mixing zone wherein they are admixed with an agglutinant at a lower temperature than the coking temperature and one in the range of about 750° to 950° F., the resulting system being maintained in the form of a dense, turbulent, fluidized bed; withdrawing resultant coke agglomerates which settle through the dense, turbulent, fluidized bed from the lower portion of the mixing zone and promptly compacting the agglomerates in a compacting zone.

2,736,691

SEPARATION OF AROMATIC HYDROCARBONS BY EXTRACTIVE DISTILLATION WITH PHOSPHOROUS TRIBROMIDE

William T. Nelson, Bartlesville, Okla., assignor to Phillips Petroleum Company, a corporation of Delaware

No Drawing. Application October 25, 1954, Serial No. 464,626
7 Claims. (Cl. 202—39.5)

1. The extractive distillation separation of close-boiling aromatic hydrocarbons which comprises admixing with said hydrocarbons as an extractive distillation entrainer phosphorus tribromide and then subjecting the admixture to distillation.

2,736,692

ELECTRODEPOSITION OF TIN

George F. Eckert, Niagara Falls, N. Y., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

No Drawing. Application May 14, 1952, Serial No. 287,815
10 Claims. (Cl. 204—54)

1. In a process for the electrodeposition of tin the step comprising effecting deposition from an aqueous, acidic solution of a stannous compound at a pH between 2 and 5 and containing 2 to 12 mols of alkali metal fluoride per mol of stannous compound, said bath also containing about 0.01 to 1 gram per liter of manganous manganese as manganous nitrate.

2,736,693

METHOD OF PRODUCING HYDRAZINE

Harry E. Gunning, Chicago, Ill., and Allan Kaba, Bellaire, Tex., assignors, by mesne assignments, to Illinois Institute of Technology, Chicago, Ill., a corporation of Illinois

No Drawing. Application January 10, 1952, Serial No. 265,916
4 Claims. (Cl. 204—157)

1. A process for producing hydrazine by photolyzing ammonia in the vapor phase to yield hydrazine and hydrogen, that comprises subjecting a fast flowing stream of ammonia flowing at a linear rate of at least 100 cm. per second to exposure by light of wave length 1849 A. and, during such exposure, withdrawing hydrogen from the stream in an amount sufficient to improve the hydrazine yield by reaction therewith of a vaporous olefinic compound having two to ten carbon atoms that is present in the stream.

2,736,694

HYDRAZINE PRODUCTION

Harry E. Gunning, Hazelcrest, and Charles Cameron McDonald, Chicago, Ill., assignors to Illinois Institute of Technology, Chicago, Ill., a corporation of Illinois

No Drawing. Application August 25, 1952, Serial No. 306,302
2 Claims. (Cl. 204—157)

1. A process for producing hydrazine by mercury photosensitization of ammonia to yield hydrazine, that comprises simultaneously subjecting a fast flowing stream of ammonia and mercury vapor at room temperature, having a linear speed of at least 10,000 cm. per second, to exposure by photosensitizing light for a time less than 0.01 second but at least sufficient to permit photosensitization and subsequent quenching of the mercury atoms in the stream and immediately thereafter condensing the condensable gases in the stream so as to effect a pressure drop in the stream during such exposure.

2,736,695

PROCESS FOR PREPARING TRICHLOROACETYL CHLORIDE

John D. Calfee, Dayton, Ohio, and Thomas A. Wallace, Jr., Carle Place, N. Y., assignors to Allied Chemical & Dye Corporation, New York, N. Y., a corporation of New York

No Drawing. Application June 5, 1951, Serial No. 230,072
4 Claims. (Cl. 204—158)

1. A process for preparing trichloroacetyl chloride, which comprises continuously mixing tetrachloroethylene vapor and air in the absence of elemental chlorine in the proportion of 1 part of tetrachloroethylene by volume to between about 1 part and about 6 parts of air, and continuously passing the resulting mixture through a zone of exposure to actinic radiation, said exposure enduring for a residence time of not more than about 3.3 minutes.

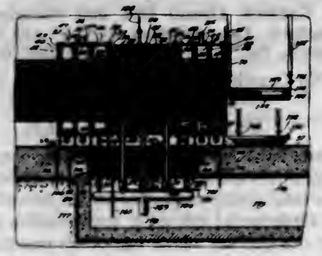
2,736,696

REACTOR

Eugene P. Wigner, Leo A. Ohlinger, Gale J. Young, and Alvin M. Weinberg, Chicago, Ill., assignors to the United States of America as represented by the United States Atomic Energy Commission

Application August 29, 1945, Serial No. 613,355
7 Claims. (Cl. 204—193)

1. In a neutronic system, a reactor tank in the form of a horizontally disposed tank, an active portion including a liquid neutron moderator in the tank, a moderator leakage chamber adjacent to an end of the tank, a second chamber adjacent to the leakage chamber, tubes in the tank passing through the moderator and said tank end wall and through both chambers, a gas in the second chamber under pressure greater than the moderator in the



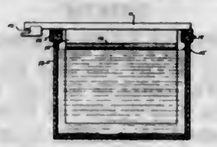
leakage chamber, and means for withdrawing moderator from the leakage chamber.

2,736,697

CATHODE PLATE FOR ZINC RECOVERY

John Franklin Vanderpool, Smelterville, Idaho

Application May 1, 1951, Serial No. 223,941
3 Claims. (Cl. 204—281)



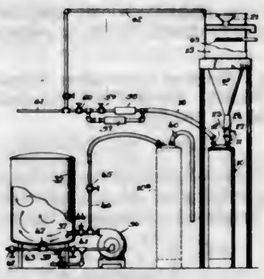
1. A stripping cathode plate for electro deposition of metal comprising a rolled metal sheet having an edge portion adapted for attachment to a suspension means for suspending the sheet in an electrolyte and having a rectangular, flat body portion of uniform thickness spaced from said edge portion to receive the deposited metal, said sheet having a portion connecting the edge portion and body portion of substantially greater thickness than the other portions and adapted to be partly in and partly out of the electrolyte, said portions all being composed of the same metal, the metal in said thickened portion being upset, and the opposite surfaces of said thickened portion being curved to merge smoothly with the body portion.

2,736,698

REGENERATION OF SERVICE DEMINERALIZERS

George H. Klumb, Northbrook, Robert E. Schulze, Deerfield, and Dale C. Bergstedt, Long Lake, Ill., assignors to Culligan, Inc., Northbrook, Ill., a corporation of Delaware

Application April 18, 1952, Serial No. 283,002
7 Claims. (Cl. 210—24)



3. The process of regenerating a service unit including a tank having an inlet for the water to be treated and an outlet for the treated water and containing anion and cation exchange resins operating on the mixed bed principle for deionization of water, comprising the steps of removing the exhausted service unit when it is no longer capable of purifying water to the desired degree, backwashing the exhausted unit to remove substantially all of the anion and a portion of the cation resins from the unit by flowing water upwardly through the bed in a direction reverse to that of the flow during normal service operation to thereby transfer a substantial portion of the mixed bed of resins into a separate vessel connected with the inlet of the tank, cleanse the bed of foreign matter and then hydraulically classify and divide the cleansed resins into their respective layers of anion and cation resins according to their density, selectively regenerating and rinsing excess regenerant from the layers of the hydraulically separated anion and cation exchange resins, combining the regenerated anion and cation exchange resins in the vessel in a fluidized bed, removing excess water from the vessel to adjust the fluidity of the combined resins, intimately mixing the regenerated anion and cation resins in the vessel, removing contained water from the tank, and transferring the slurry of mixed regenerated resins to the tank after which the unit is ready for service in the deionization of water.

2,736,699

COLD WORKING LUBRICANT FOR WIRE AND THE LIKE

Richard L. Carhart, Lockport, Ill., assignor to United States Steel Corporation, a corporation of New Jersey

No Drawing. Application November 2, 1950, Serial No. 193,761
6 Claims. (Cl. 252—18)

1. A cold working lubricant for wire or the like comprising a mixture of from 8 to 35% water insoluble metal soap, from 20 to 80% of a substance from the group consisting of ferrous sulphate, ferric sulphate and a combination thereof, each molecule of said ferrous sulphate and each molecule of said ferric sulphate having at least four molecules of water of crystallization, and from 10 to 45% of a filler compound having a metal radical which is above ferric iron in the electromotive series and which will satisfy the sulphate radical of said ferrous sulphate and the sulphate radical of said ferric sulphate, said filler being substantially inert with respect to the wire and being a compound from the group consisting of the borates, silicates, phosphates, carbonates, chromates, hydroxides, oxides, and sulphides of metals which are above ferric iron in the electromotive series, the percentages being by weight.

2,736,700

LUBRICANT FOR COLD DRAWING OF THORIUM WIRE

Charles D. Graham, Jr., Birmingham, England, and Raymond J. Donley, Elyria, Ohio, assignors to the United States of America as represented by the United States Atomic Energy Commission

No Drawing. Application March 16, 1954, Serial No. 416,721
4 Claims. (Cl. 252—25)

1. A wire drawing composition consisting essentially of a mixture of 2 to 5 parts by weight molybdenum disulfide and 1 part by weight of finely divided leaded zinc oxide suspended in a drying vehicle.

2,736,701

LUBRICATING OIL COMPOSITION

Loren L. Neff, Fullerton, Calif., assignor to Union Oil Company of California, Los Angeles, Calif., a corporation of California

No Drawing. Application April 22, 1952, Serial No. 283,760
19 Claims. (Cl. 252—32.7)

1. A lubricating oil additive concentrate adapted for addition to mineral lubricating oil which comprises a mineral oil solution containing 15% to 50% of an oil-soluble complex obtained by heating an oil solution of

an oil-soluble metal salt of a hydrocarbon substituted phenol-aldehyde resin, in which the aldehyde has not more than 5 carbon atoms per molecule, to a temperature between about 325° F. and about 400° F., adding to the heated solution an aqueous mixture of at least one basically reacting metal inorganic compound selected from the class consisting of the hydroxides, carbonates and bicarbonates of barium, strontium, sodium, potassium and lithium, said mixture containing between about 25% and about 90% by weight of said compound and being added at a rate such that the addition takes place over a period of at least about 30 minutes and continuing the heating for a time sufficient to volatilize water thereby solubilizing between about 0.1 and about 3 equivalents of said basically reacting metal inorganic compound per equivalent of phenol-aldehyde resin salt in the oil solution of said resin salt.

2,736,702

RESINOUS CONDENSATION PRODUCT OF FORMALDEHYDE, ALKALINE EARTH METAL SULFIDE, AND AN ALKYLATED MONOHYDRIC PHENOL

Herschel G. Smith, Wallingford, and Troy L. Cantrell, Drexel Hill, Pa., and John G. Peters, Audubon, N. J., assignors to Gulf Oil Corporation, Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application July 17, 1952, Serial No. 299,501

8 Claims. (Cl. 252—42.7)

1. The process of preparing an oil soluble, metal and sulfur containing, permanently thermoplastic, resinous condensation product which comprises condensing in an aqueous medium reactants consisting essentially of formaldehyde, an alkaline earth metal sulfide and an alkylated monohydric phenol having at least one free reactive position in the nucleus and at least one alkyl group containing at least 4 carbon atoms, at least one mol of formaldehyde being employed for every two mols of the phenol, and at least one equivalent of alkaline earth metal sulfide being employed for every two mols of the phenol, the condensation being conducted to avoid any substantial reaction between the phenol and formaldehyde in the absence of the alkaline earth metal sulfide.

2,736,703

RESINOUS PRODUCTS

Herschel G. Smith, Wallingford, and Troy L. Cantrell, Drexel Hill, Pa., and John G. Peters, Audubon, N. J., assignors to Gulf Oil Corporation, Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application July 17, 1952, Serial No. 299,502

37 Claims. (Cl. 252—42.7)

1. The process of preparing an oil soluble, metal and sulfur containing, permanently thermoplastic, resinous condensation product which comprises condensing in an aqueous medium reactants consisting essentially of formaldehyde, an alkali metal sulfide and an alkylated monohydric phenol having at least one free reactive position in the nucleus, at least one alkyl group of such alkylated phenol containing at least 4 carbon atoms, at least one mol of formaldehyde being employed for every two mols of the phenol, and at least one equivalent of alkali metal sulfide being employed for every two mols of the phenol, the condensation being conducted to avoid any substantial reaction between the phenol and formaldehyde in the absence of the alkali metal sulfide.

2,736,704

DETERGENT LUBRICATING OILS

Troy L. Cantrell, Drexel Hill, and Herschel G. Smith, Wallingford, Pa., assignors to Gulf Oil Corporation, Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application April 5, 1954, Serial No. 421,185

6 Claims. (Cl. 252—42.7)

1. A lubricant composition comprising a major amount of a mineral lubricating oil and a minor amount, sufficient to confer detergency properties on the composition, of an alkaline earth metal salt of a condensation product prepared by the process which comprises reacting a mixture of about 6 mols of a monoalkylated monohydric phenol, about 2 mols of aniline and about 1 mol of carbon disulfide, cooling the resulting mixture to room temperature, and then adding said cooled mixture to an aqueous slurry of about 3 mols of an alkaline earth metal hydroxide and about 8 mols of formaldehyde, and raising the temperature sufficiently to distill off all water.

2,736,705

DETERGENT LUBRICATING OILS

Troy L. Cantrell, Drexel Hill, and Herschel G. Smith, Wallingford, Pa., assignors to Gulf Oil Corporation, Pittsburgh, Pa., a corporation of Pennsylvania

No Drawing. Application April 5, 1954, Serial No. 421,186

6 Claims. (Cl. 252—42.7)

1. A lubricant composition comprising a major amount of a mineral lubricating oil and a minor amount, sufficient to confer detergency properties on the composition, of a product prepared by dehydrating the product of metathesis of: (1) a condensation product prepared by the process which comprises reacting a mixture of about 4 mols of a monohydric monoalkylated phenol and about 2 mols of an alkali metal hydroxide in aqueous solution, cooling the resulting mixture, adding thereto about 2 mols of carbon disulfide and additional water, heating to about 200° F., then adding thereto a mixture of about 1 mol of an alkaline earth metal hydroxide in an aqueous slurry and about 4 mols of formaldehyde and reacting the resulting mixture; with (2) an aqueous solution of a water-insoluble salt of an alkaline earth metal.

2,736,706

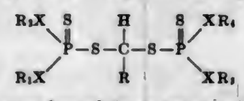
LUBRICANT CONTAINING A PHOSPHORUS ACID ESTER-ALDEHYDE CONDENSATION PRODUCT

John R. Morris, Fishkill, N. Y., assignor to The Texas Company, New York, N. Y., a corporation of Delaware

No Drawing. Original application August 22, 1950, Serial No. 180,901. Divided and this application July 24, 1952, Serial No. 300,757

3 Claims. (Cl. 252—46.6)

1. A lubricant composition comprising a major amount of a mineral lubricating oil and about 0.1 to about 10 per cent by weight of a compound having the formula



wherein X is a member of the group consisting of oxygen and sulfur, R is a member of the group consisting of hydrogen and aliphatic hydrocarbon groups containing from 1 to 6 carbon atoms, and R_1, R_2, R_3 and R_4 are aliphatic hydrocarbon substituted phenyl groups.

2,736,707

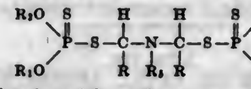
LUBRICANT CONTAINING PHOSPHATE PARTIAL ESTER - ALDEHYDE - AMINE CONDENSATION PRODUCT

John R. Morris, Fishkill, N. Y., assignor to The Texas Company, New York, N. Y., a corporation of Delaware

No Drawing. Original application August 22, 1950, Serial No. 180,902. Divided and this application June 24, 1952, Serial No. 295,344

4 Claims. (Cl. 252—46.7)

2. A lubricant composition comprising a major amount of a mineral lubricating oil and about 0.1 to about 10 per cent by weight of a compound having the formula:



wherein R is selected from the group consisting of hydrogen and aliphatic hydrocarbon groups, R_1, R_2, R_3 and R_4 are selected from the group consisting of C_4–C_{20} aliphatic hydrocarbon groups, alkylated phenyl groups and alkoxyaralkyl groups, and R_5 is an aliphatic hydrocarbon group.

2,736,708

MAGNETIC COMPOSITIONS

Henry L. Crowley, South Orange, and Arthur M. Hossenlopp, Maplewood, N. J., assignors, by mesne assignments, to Henry L. Crowley & Company, Inc., West Orange, N. J., a corporation of New Jersey

No Drawing. Application June 8, 1951, Serial No. 230,706

3 Claims. (Cl. 252—62.5)

1. In a method of preparing a magnetic composition in which ferric oxide, nickel oxide and zinc oxide are intimately mixed to produce an initial oxide mixture containing from 50 to 90% by weight of ferric oxide and in which the weight ratio of zinc oxide and nickel oxide is between about 2 to 1 and about 1 to 1, the oxide mixture is subjected to a two-stage heat-treatment followed by gradual cooling of the product of the second stage of heat-treatment and in the course of the first heat-treatment a portion of the ferric oxide is reduced to ferrous oxide and at the conclusion of the first heat-treatment the heat-treated product contains ferrous oxide and is non-magnetic, the first heat-treatment being carried out at a temperature between 800° and 1200° C. under non-oxidizing conditions, and the second heat-treatment being carried out at a somewhat higher temperature between 1000° and 1450° C., under non-oxidizing conditions, the non-oxidizing conditions of at least one of said heat-treatments being reducing to insure the presence of ferrous oxide in the second heat-treatment; the improvement which comprises intimately mixing with the product of the first heat-treatment an oxide of cobalt in the amount, expressed as Co_2O_3, of from 0.1 to 50 parts by weight of said oxide of cobalt per 100 parts by weight of said product.

2,736,709

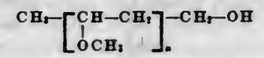
HYDRAULIC FLUIDS

Samuel A. Glickman and Joseph M. Wilkinson, Easton, Pa., assignors to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

No Drawing. Application August 17, 1954, Serial No. 450,512

4 Claims. (Cl. 252—74)

1. A hydraulic fluid composition consisting essentially of an alkaline buffering agent selected from the class consisting of alkaline borates, phosphates and phosphites, and a mixture of mono- and polymethoxy-1-alkanols consisting of 20 to 40% of 3-methoxy-1-butanol and 60 to 80% of at least one 1-polymethoxy-alkanol of the group consisting of 3,5-dimethoxy-1-hexanol, 3,5,7,-trimethoxy-1-octanol, 3,5,7,9-tetramethoxy-1-decanol, 3,5,7,9,11-pentamethoxy-1-dodecanol, and polymethoxy-1-alkanols characterized by the following formula:



wherein n represents an integer of from 6 to 10.

2,736,710

VARNISH REMOVER

Herman R. Nack, Troy, and Leo J. Novak, Dayton, Ohio, assignors to Chadeloid Corporation, Dayton, Ohio, a corporation of Delaware

No Drawing. Application June 29, 1951, Serial No. 234,476

2 Claims. (Cl. 252—170)

2. A liquid composition for removing varnish and lacquer, said composition consisting of hydrolyzed dextran, isopropyl alcohol, and water, the hydrolyzed dextran constituting at least about 40% by weight of the composition, and water in the range of about 15 to 50% by weight of the composition, and isopropyl alcohol from about 3% to 15% by weight of the composition.

2,736,711

LUMINESCENT SILICATES

Pamela Elfrida Gooding, Ruislip, and Alfred Hamilton McKeag, North Wembley, England

No Drawing. Application July 24, 1952, Serial No. 300,768

Claims priority, application Great Britain July 31, 1951

4 Claims. (Cl. 252—301.4)

1. A luminescent silicate of the oxides of lithium and at least one of the metals barium and strontium in which the molar ratio of $BaO+SrO+Li_2O:SiO_2$ is between 3:1 and 1:1, the molar ratio of $BaO+SrO:Li_2O$ is between 5:1 and 1:5, and the molar ratio of BaO:SrO is from 0:2 to 2:0, activated by about 1–20% by weight of trivalent cerium and 0 to about 5% by weight manganese.

2,736,712

LUMINESCENT MAGNESIUM OXIDE

William A. Runciman, Harrow Weald, England, assignor to General Electric Company, a corporation of New York

No Drawing. Application August 10, 1954, Serial No. 449,005

Claims priority, application Great Britain September 24, 1953

3 Claims. (Cl. 252—301.4)

1. A luminescent material consisting essentially of crystalline magnesium oxide containing in the crystal structure both activating chromium in a ratio of from .01% to 1% chromium atoms to magnesium atoms and at least one of the metals lithium, sodium, potassium and thallium in the monovalent form and in a ratio from 0.1% to 10% of atoms of said metal to magnesium atoms.

2,736,713

METHOD OF DISPERSING INORGANIC OXIDE SOLS

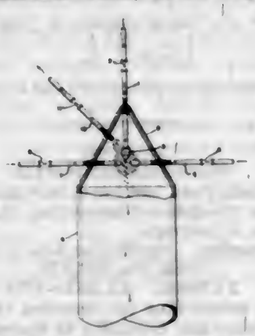
Maurice J. Murray, Naperville, and Donald L. Holden, Riverside, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a corporation of Delaware

Application September 2, 1952, Serial No. 307,454

10 Claims. (Cl. 252—448)

1. In the manufacture of inorganic oxide spheres wherein a gelable hydrous inorganic oxide sol is dispersed in droplet form through a dispersing device in the upper portion of a gelation zone containing a gelling medium through which the sol droplets descend and set to a gel during their descent through said medium, the method of preventing premature gelation of the sol and resultant clogging of the dispersing device which comprises intro-

ducing a gel-retarding gas to the upper portion of said zone in the immediate vicinity of the dispersing device



and maintaining a localized blanket of said gas around said device.

2,736,714
LEAD GLASS COMPOSITION
Ralph L. Tiede, Newark, Ohio, assignor to Owens-Corning Fiberglas Corporation, a corporation of Delaware
No Drawing. Application January 4, 1952, Serial No. 265,050
3 Claims. (Cl. 252—478)

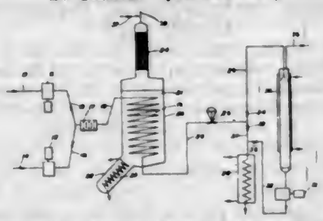
1. A glass having substantially the following composition:

	Weight percent
SiO_2	30.0–37.0
PbO	57.0–65.0
Al_2O_3	2.0– 5.0
Alkali metal oxide	1.5– 7.0

2,736,715
MODIFIED STYRENE COMPOSITIONS
Henry Brunner, Langley, England, assignor to Imperial Chemical Industries Limited, a corporation of Great Britain
No Drawing. Application January 28, 1952, Serial No. 268,669
Claims priority, application Great Britain February 2, 1951
3 Claims. (Cl. 260—23)

1. A process for producing a drying oil-soluble styrene interpolymer which comprises polymerizing, in the presence of a Friedel-Crafts catalyst, a mixture of styrene and a polyhydric alcohol ester of a resin acid, the proportion of styrene in the polymerized mixture being from 75% to 99% by weight.

2,736,716
PRODUCTION OF POLYMERIC PRODUCTS FROM STYRENE AND UNSATURATED FATTY COMPOUNDS
Arnold John Lowe, Manchester, and Donald Butler, Moston, Manchester, England, assignors to Oxirane Limited, London, England
Application January 31, 1952, Serial No. 269,222
Claims priority, application Great Britain February 7, 1951
20 Claims. (Cl. 260—23)

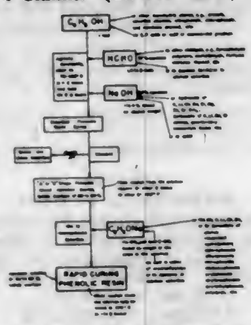


1. A process for the production of polymeric products from styrene and unsaturated fatty compounds selected from the group consisting of drying oil unsaturated fatty acids, and partial and full esters of polyhydric alcohols and said acids, which comprises continuously passing a reaction mixture of styrene and at least one of said unsaturated fatty compounds, in which the ratio by weight of styrene to fatty compounds is from about 6:4 to 4:6, through a reaction zone initially heated to a temperature of from about 210 to 270° C. and maintained at this temperature by the application of cooling to remove heat developed during the reaction, under a pressure at least sufficient to maintain the reaction mixture in the liquid state, the contact time within the reaction zone varying inversely with the temperature and ranging from about 5 to about 10 minutes at 270° C. to about 60 to about 120 minutes at 210° C., and being such that from about 30 to 90% by weight of the styrene is reacted.

2,736,717
COPOLYMERS OF VINYL AROMATIC COMPOUND, FATTY ACID ESTER OF EPOXY RESIN AND A VEGETABLE OIL
Charles Frazier, Yonkers, N. Y., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Application March 29, 1952, Serial No. 279,445
14 Claims. (Cl. 260—23)

1. A process which comprises coreacting at a temperature between 130–215° C., a styrene selected from the group consisting of styrene and ring-substituted alkyl and halo styrenes and an acid ester of an epoxy resinous material in a mutually inert solvent having a boiling point above 110° C. and a Kauri-butanol value between about 24 and 100, in the presence of (1) a catalyst selected from the group consisting of tertiary alkyl substituted diperoxides and ditertiary alkyl substituted peroxides and tertiary alkyl substituted hydroperoxides and (2) a material selected from the group consisting of drying and semi-drying oils, wherein said ester is the reaction product of an epoxy compound with a member selected from the group consisting of the fatty acids of natural drying oils, semi-drying oils and the lower alkyl ester of said fatty acids and wherein said epoxy compound is the resinous reaction product of a dihydric phenol and a difunctional halohydrin.

2,736,718
PHENOLIC RESIN PRODUCTS AND THEIR PRODUCTION
Charles S. Webber, Loudonville, N. Y., assignor, by mesne assignments, to Norton Company, Worcester, Mass., a corporation of Massachusetts
Application August 2, 1952, Serial No. 302,381
6 Claims. (Cl. 260—29.3)



1. A process for producing a rapid-curing phenolic resin adhesive composition which comprises: heating in an aqueous medium 1 mol of a monohydric phenol with between 1.5 and 2.8 mols of an aldehyde in the presence of between about 1 and 4% by weight of said phenol of an alkaline condensation catalyst until a fusible, heat-convertible condensation resin having a water tolerance not greater than 200 is formed; discontinuing the heating before the resin mass gels; distilling off volatile materials from the resulting resin solution under vacuum to give an aqueous solution of said resin of between about 60 and 90% solids by weight; and thereafter admixing with said resin solution a quantity of between 2 and 8% by weight of such resin of a phenolate selected from the group consisting of sodium, potassium, lithium, calcium, barium and strontium monocyclic and bicyclic phenolates.

2,736,719
PRINTING INKS
Hugo P. Stockmayer, Rutherford, N. J., assignor to Sun Chemical Corporation, Long Island City, N. Y., a corporation of Delaware
No Drawing. Application April 20, 1953, Serial No. 349,937
3 Claims. (Cl. 260—33.8)

1. A printing ink consisting of a pigment dispersed in a vehicle consisting of approximately 35% to 65% by weight of a resinous reaction product of epichlorhydrin and bis phenol, and approximately 65% to 35% by weight of a liquid chlorinated biphenyl having a distillation range within the range of approximately 275° C. to 360° C.

2,736,720
FUEL-RESISTANT ARTICLES HAVING LOW TEMPERATURE FLEXIBILITY FROM HALOGENATED POLYDIMETHYLSILOXANES
Alfred S. Kidwell, Milford, Conn., assignor to The Connecticut Hard Rubber Company, New Haven, Conn., a corporation of Connecticut
Application April 13, 1953, Serial No. 348,234
3 Claims. (Cl. 260—37)



1. The method of preparing an elastic member resistant to swelling in aromatic fuels which includes the steps of dissolving a polydimethylsiloxane elastomeric gum having a molecular weight of at least 400,000 in from ten to twenty parts of a volatile halogenated solvent to form a low viscosity solution, maintaining the solution at a temperature between 100° F. and 180° F., adding small amounts of an organic peroxide to the solution, passing a mixture of chlorine and several times as much inert gas into said solution at such a rate that some chlorine leaves the solution unreacted, and for such a period of time that the moles of chlorine passed into the solution constitute 110–210% of the siloxy monomer units of the siloxane, removing the hydrogen chloride as rapidly as formed, recovering the partially chlorinated polydimethylsiloxane gum having a chlorine to silicon ratio greater than one but less than two, mixing the partially chlorinated silicone gum with a filler selected from the class consisting of silicon dioxide, titanium dioxide, magnesium oxide, aluminum oxide and zinc oxide, and additional organic peroxide curing agent, molding and then baking the mixture to form said elastic member from partially chlorinated silicone rubber.

2,736,721
ADHESIVES FROM MIXED SILOXANES AND, OPTIONALLY, A TITANIUM ESTER
John F. Dexter, Midland, Mich., assignor to Dow Corning Corporation, Midland, Mich., a corporation of Michigan
No Drawing. Application April 1, 1953, Serial No. 346,277
19 Claims. (Cl. 260—42)

1. As a composition of matter a mixture comprising (*a*) 5 to 70 per cent by weight of a benzene soluble resin copolymer composed essentially of structural units of SiO_2 and $R_3SiO_{1/2}$ where R is a monovalent hydrocarbon selected from the group consisting of alkyl radicals of less than 4 carbon atoms and phenyl and at least 90 per cent of the total number of R radicals are alkyl and in said copolymer the ratio of $R_3SiO_{1/2}$ units to SiO_2 units is between 0.6 to 0.9 inclusive and (*b*) 95 to 30 per cent by weight of a benzene soluble organosiloxane of at least 1,000,000 centistokes viscosity at 25° C., said organosiloxane having the general formula R'_2SiO where R′ is a monovalent hydrocarbon radical selected from the group consisting of methyl and phenyl and at least 90 per cent of the total number of R′ radicals are methyl.

2,736,722
ACRYLONITRILE-ACRYLYLCARBAMATE COPOLYMERS AND PRODUCTS
John A. Price, Stamford, Conn., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine
No Drawing. Application November 13, 1952, Serial No. 320,347
9 Claims. (Cl. 260—77.5)

8. A product comprising a fiber-formable copolymer of copolymerizable ingredients including (1) an alkyl acrylylcarbamate represented by the general formula

$$CH_2{=}CH{-}\overset{O}{\overset{\|}{C}}{-}NH{-}\overset{O}{\overset{\|}{C}}{-}OR$$

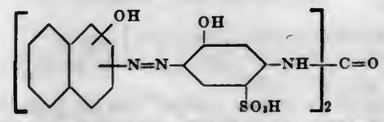
where R represents an alkyl radical containing from 1 to 4 carbon atoms, inclusive, and (2) acrylonitrile, the alkyl acrylylcarbamate of (1) constituting from about 3% to about 20% by weight of the total amount of (1) and (2).

2,736,723
MERCAPTAN MODIFIED HYDROCARBON POLYMERS
Frederick W. Breuer and Burt F. Hofferth, Manheim Township, Lancaster County, Pa., assignors to Armstrong Cork Company, Lancaster, Pa., a corporation of Pennsylvania
No Drawing. Application March 24, 1953, Serial No. 344,461
9 Claims. (Cl. 260—79.5)

1. A method of converting hard, brittle hydrocarbon resins of the group consisting of polystyrene, polymethyl styrene, resins obtained by polymerization of petroleum fractions rich in unsaturates, and resins obtained from coal tar to useful lower molecular weight plasticizer products which comprises heating the hydrocarbon in the presence of a compound of the group consisting of higher alkyl mercaptans and aromatic mercaptans and separating excess mercaptans from the reaction mass.

2,736,724
DISAZO DYESTUFFS
Piero Maderni, Basel, Switzerland, assignor to Sandoz A. G., Basel, Switzerland, a Swiss firm
No Drawing. Application August 24, 1953, Serial No. 376,239
Claims priority, application Switzerland September 18, 1952
7 Claims. (Cl. 260—175)

2. A disazo dyestuff which corresponds to the formula



wherein the hydroxy group linked to the naphthalene radical stands in ortho position to -N=N— and wherein the hydroxynaphthalene radical is selected from the group consisting of further unsubstituted hydroxynaphthalene and

chlorine-, hydroxy-, methoxy-, lower alkyl-, methylsulfonyl-, sulfonic acid amide-, carboxylic acid amide-, acylamino- and lower carbalkoxyamino-substituted hydroxynaphthalene.

2,736,725

COMPLEXES OF TETRACYCLINE ANTIBIOTICS AND PREPARATION OF SAME

Lawrence Ritter, Valley Cottage, N. Y., assignor to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application March 11, 1954, Serial No. 415,698
7 Claims. (Cl. 260—210)

1. A complex of a tetracycline antibiotic selected from the group consisting of chlortetracycline, oxytetracycline, and tetracycline; aluminum; a cation selected from the group consisting of the cations of hydrogen, antimony, cadmium, calcium, chromium, cobalt, copper, gold, iron, manganese, nickel, selenium, silver, strontium, tin and zinc and a non-toxic alpha-hydroxy carboxylic acid selected from the group consisting of citric acid, gluconic acid, glycollic acid, lactic acid, lactobionic acid, malic acid and tartaric acid in the ratio of the antibiotic to aluminum to acid of not less than 1:1:1 and not greater than 1:8:24.

5. The complex chlortetracycline aluminum lactobionate.

7. A process of preparing in aqueous solution a complex of a tetracycline antibiotic selected from the group consisting of chlortetracycline, oxytetracycline, and tetracycline; aluminum; a cation selected from the group consisting of the cations of hydrogen, antimony, cadmium, calcium, chromium, cobalt, copper, gold, iron, manganese, nickel, selenium, silver, strontium, tin, and zinc; and a non-toxic alpha-hydroxy carboxylic acid selected from the group consisting of citric acid gluconic acid, glycollic acid, lactic acid, lactobionic acid, malic acid and tartaric acid in the ratio of not less than 1:1:1:1 and not greater than 1:8:10:24, and the molar ratio of said acid to aluminum is greater than 1:1; comprising reacting the aluminum salt of the corresponding non-toxic alpha-hydroxy carboxylic acid, the corresponding tetracycline antibiotic selected from the group consisting of the free base and the water soluble non-toxic salts thereof, and where the cation is not hydrogen, a member of the group consisting of the water soluble non-toxic salts corresponding to said cation, and the hydroxides thereof; within the named molar ratios; thereby forming said complex.

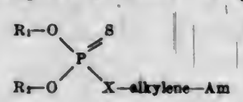
2,736,726

BASIC PHOSPHORIC ACID ESTERS

Karl Gaetzi and Paul Müller, Basel, Switzerland, assignors to J. R. Geigy A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application March 16, 1953, Serial No. 342,736
Claims priority, application Switzerland March 28, 1952
9 Claims. (Cl. 260—247.1)

1. A basic phosphoric acid ester corresponding to the formula:



wherein

R_1 and R_2 each represent a lower alkyl radical,

X represents a member selected from the group consisting of oxygen and sulphur,

Am represents a member selected from the group consisting of lower dialkylamino, alkylenimino containing 4 to 5 carbon atoms and morpholino radicals, and

Alkylene represents an alkylene radical containing from 2 to 4 carbon atoms.

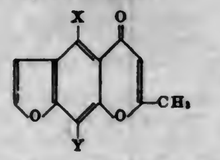
2,736,727

AMINO-ETHERS

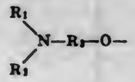
Jean Pierre Fourneau, Paris, France, assignor to Jean M. R. A. Delourme-Houde, Paris, France

No Drawing. Application January 8, 1953, Serial No. 330,355
Claims priority, application France January 24, 1952
6 Claims. (Cl. 260—247.7)

1. A new compound having valuable medicinal properties selected from the group consisting of the amino-ethers represented by the formula:



wherein one of X and Y represents a hydroxyl group and the other represents the group



wherein



represents a member of the group selected from a di-(lower alkyl)-amino, morpholino and a piperidino group, and R_3 represents a lower alkylene group, and the water-soluble normal salts and quaternary ammonium salts thereof.

2,736,728

PREPARATION OF LYSERGIC ACID AMIDES

Richard P. Pioch, Indianapolis, Ind., assignor to Eli Lilly & Company, Indianapolis, Ind., a corporation of Indiana

No Drawing. Application December 6, 1954, Serial No. 473,443
10 Claims. (Cl. 260—285.5)

1. The method which comprises reacting dry lysergic acid with trifluoroacetic anhydride at a temperature below about 0° C. to produce a mixed anhydride of lysergic and trifluoroacetic acids, and reacting said mixed anhydride with a nitrogenous base having at least one hydrogen linked to nitrogen, thereby to produce a lysergic acid amide.

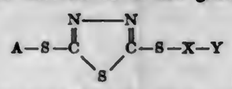
2,736,729

SUBSTITUTION PRODUCTS OF 1,3,4-THIADIAZOLE AND PROCESS

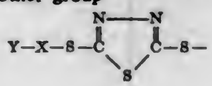
Hans Krzikalla, Heidelberg, and Heinz Pohlemann, Ludwigshafen (Rhine), Germany, assignors to Badische Anilin- & Soda-Fabrik Aktiengesellschaft, Ludwigshafen (Rhine), Germany

No Drawing. Application August 9, 1954, Serial No. 448,753
Claims priority, application Germany August 19, 1953
6 Claims. (Cl. 260—302)

1. Thiodiazole derivatives of the general formula



wherein X stands for a bivalent radicle selected from the group consisting of —CO—, —SO_2— and —CH_2— radicles, Y stands for a saturated hydrocarbon radicle containing from 5 to 18 carbon atoms and selected from the saturated aliphatic and cycloaliphatic series, and A represents a member of the group consisting of hydrogen, —X—Y and another group



2,736,730

EPOXY-POLYCHLORO-BICYCLO(2.2.1) HEPTENE

Morton Kleiman, Chicago, Ill., assignor to Velsicol Chemical Corporation, a corporation of Illinois

No Drawing. Application December 2, 1954, Serial No. 472,765
1 Claim. (Cl. 260—348)

As a new composition of matter, 5,6-epoxy-1,2,3,4,7,7-hexachlorobicyclo-(2.2.1)-2-heptene.

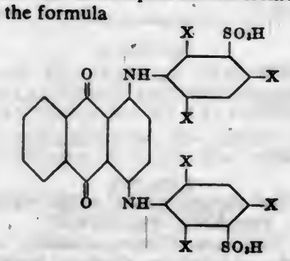
2,736,731

DYES OF THE ANTHRAQUINONE SERIES WHICH ARE FAST TO MILLING AND PROCESS FOR THEIR PREPARATION

Albin Peter and Erhard Wydler, Basel, Switzerland, assignors to Sandoz A. G., Basel, Switzerland, a Swiss firm

No Drawing. Application April 27, 1953, Serial No. 351,482
Claims priority, application Switzerland May 9, 1952
10 Claims. (Cl. 260—374)

1. A process for the manufacture of dyestuffs of the anthraquinone series which comprises the step of treating in sulfuric acid solution at a temperature from about −10° C. to about +20° C. and in the presence of free sulfur trioxide an anthraquinone-disulfonic acid corresponding to the formula



wherein each X stands for the same member selected from the group consisting of methyl and ethyl, with at least one and at most two atomic proportions of a halogen selected from the group consisting of chlorine and bromine.

2,736,732

3,11-DIKETO-17-ALDEHYDE-$\Delta^{4,16}$-ANDROSTADIENE AND PROCESS

William S. Knowles, Kirkwood, Mo., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application May 15, 1953, Serial No. 355,399
6 Claims. (Cl. 260—397.3)

1. 3,11-diketo-17-aldehyde-$\Delta^{4,16}$-androstadiene.

2,736,733

HYDROCORTISONE TERTIARY-BUTYLACETATE AND PROCESSES FOR PREPARING THE SAME

Edward F. Rogers, Middletown, N. J., and John P. Conbere, Cranston, R. I., assignors to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey

No Drawing. Application January 27, 1954, Serial No. 406,586
3 Claims. (Cl. 260—397.45)

1. Hydrocortisone tertiary butyl acetate.

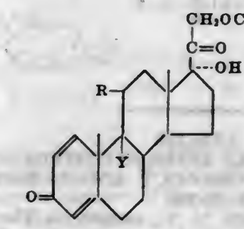
2,736,734

$\Delta^{1,4}$-3,20-DIKETO-11-OXYGENATED-17,21-DIHYDROXY-PREGNADIENE 21-TERTIARY BUTYL ACETATES AND 9-FLUORO DERIVATIVES THEREOF

Lewis H. Sarett, Princeton, N. J., assignor to Merck & Co., Inc., Rahway, N. J., a corporation of New Jersey

No Drawing. Application January 14, 1955, Serial No. 481,956
11 Claims. (Cl. 260—397.45)

1. A compound having the following formula:



wherein R is a radical selected from the group consisting of keto and hydroxy radicals, and Y is a substituent selected from the group consisting of hydrogen and fluoro substituents.

2,736,735

TETRACYCLINE ANTIBIOTIC ZIRCONIUM HYDROXYACID COMPLEXES

George Herman Michel, Dumont, and Clifford Everett Petersen, Hillsdale, N. J., and Merton Cooke Lockhart, Pearl River, N. Y., assignors to American Cyanamid Company, New York, N. Y., a corporation of Maine

No Drawing. Application July 8, 1952, Serial No. 297,768
5 Claims. (Cl. 260—429)

1. A complex of a broad spectrum tetracycline type antibiotic selected from the group consisting of chlortetracycline and oxytetracycline with a zirconium salt of carboxylic acid selected from the group consisting of citric acid, gluconic acid, tartaric acid, lactic acid, malic acid, ascorbic acid, mandelic acid and pyruvic acid.

2,736,736

DEHYDROCHLORINATION OF GAMMA-CHLOROPROPYL CHLOROSILANES

Arthur N. Pines, Snyder, and Edward R. York, Tonawanda, N. Y., assignors to Union Carbide and Carbon Corporation, a corporation of New York

No Drawing. Application August 12, 1954, Serial No. 449,519
12 Claims. (Cl. 260—448.2)

1. A process of dehydrochlorinating gamma-chloropropyl trichlorosilane which comprises heating said gamma-chloropropyl trichlorosilane with from about 5 per cent to about 40 per cent by weight of said chlorosilane of isoquinoline at a temperature of from about 180° C. to about 220° C. under reflux conditions and removing hydrogen chloride and allyl trichlorosilane from the reaction zone.

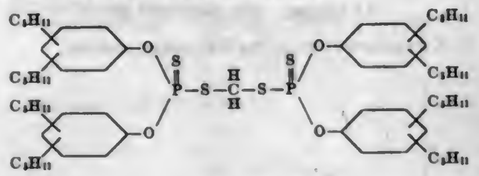
2,736,737

PHOSPHATE PARTIAL ESTER-ALDEHYDE CONDENSATION PRODUCT AND LUBRICANT CONTAINING THE SAME

John R. Morris, Fishkill, N. Y., assignor to The Texas Company, New York, N. Y., a corporation of Delaware

No Drawing. Application August 22, 1950, Serial No. 180,901
8 Claims. (Cl. 260—461)

1. A compound having the formula



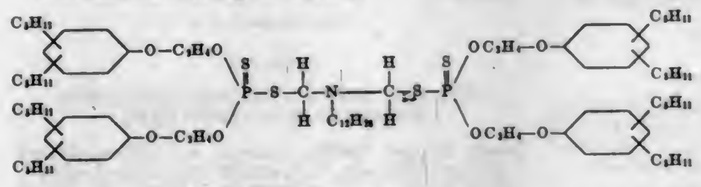
2,736,738

PHOSPHATE PARTIAL ESTER-ALDEHYDE-AMINE CONDENSATION PRODUCT AND LUBRICANT CONTAINING THE SAME

John R. Morris, Fishkill, N. Y., assignor to The Texas Company, New York, N. Y., a corporation of Delaware

No Drawing. Application August 22, 1950, Serial No. 180,902
4 Claims. (Cl. 260—461)

1. A compound having the formula



2,736,739

PREPARATION OF NITRILES

David C. England, Marshallton, Del., and Gene V. Mock, Woodbury, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a corporation of Delaware

Application August 5, 1952, Serial No. 302,782
9 Claims. (Cl. 260—465)

1. The process for the preparation of nitriles which comprises reacting nitric oxide with an alkyl-substituted organic compound containing at least one alkyl group directly attached to a carbon atom which is in turn attached to another carbon atom by a double bond, said reaction being carried out at temperatures between 400° and 700° C. in the presence of a dehydrogenation catalyst.

2,736,740

METHOD OF MAKING GAMMA-CYANOVALERIC ACID

Carl Bordenca and Henry G. Sellers, Jr., Birmingham, Ala., assignors to Newport Industries, Inc., Pensacola, Fla., a corporation of Delaware

No Drawing. Application May 14, 1953, Serial No. 355,194
5 Claims. (Cl. 260—465.4)

1. The method of preparing gamma-cyanovaleric acid, which comprises fusing gamma-valerolactone at atmospheric pressure with a cyanide selected from the group consisting of alkali metal and alkaline earth metal cyanides in the presence of a previously prepared gamma-cyanovalerate and acidifying the resulting gamma-cyanovalerate to liberate gamma-cyanovaleric acid.

2,736,741

ORGANIC REACTIONS INVOLVING ACETALS IN THE PRESENCE OF MIXED ANIONIC CATIONIC ION EXCHANGE RESINS AS CATALYSTS

Claude J. Schmidle, Moorestown, N. J., assignor to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application September 15, 1951, Serial No. 246,878
12 Claims. (Cl. 260—465.6)

1. A process which comprises reacting an acetal and an organic compound having an acidic hydrogen on a carbon atom and yielding a carbanion, which compound contains the group =CH— and is capable of reacting at this group with an alkali metal alcoholate to replace the hydrogen thereof with alkali metal, said reaction being effected in the presence of water and of a mixture of a basic anion-exchange resin and a strongly acidic cation exchanger, and separating an alcohol and the reaction product from said acetal and organic compound, said acetal having the structure $R^0R'C(OR)_2$, where the R's taken individually represent lower alkyl groups and when taken together represent an alkylene group of two to three carbon atoms which together with the oxygen atoms and connecting carbon atom forms a heterocycle, R^0 is a member of the class consisting of hydrogen, alkyl groups of not over 11 carbon atoms, and alkenyl groups of two to seven carbon atoms, and R' is a member of the class consisting of hydrogen and alkyl groups of not over seven carbon atoms.

2,736,742

METHOD OF PROCESSING ACID NITRATED ORGANIC PRODUCTS

Bertil Petrus Enoksson, Gyttorp, Sweden, assignor to Nitroglycerin Aktiebolaget, Gyttorp, Sweden, a company of Sweden

No Drawing. Application July 8, 1954, Serial No. 442,217
11 Claims. (Cl. 260—467)

1. Process which comprises at least partially neutralizing the free acid in an acid containing nitration product formed by the nitration of an organic compound with nitric acid, by the addition thereto of a mixture comprising a weight of ammonium nitrate at least equal to the weight of the free acid and an acid neutralizing agent of the group consisting of ammonia and organic bases.

2,736,743

REACTION OF VINYL ETHERS AND HYDROGEN DONORS

Claude J. Schmidle, Moorestown, and Richard C. Mansfield, Riverton, N. J., assignors to Rohm & Haas Company, Philadelphia, Pa., a corporation of Delaware

No Drawing. Application September 15, 1951, Serial No. 246,879
10 Claims. (Cl. 260—483)

1. A process in which the $CH_3CH=$ group is joined to a carbanion which comprises reacting a vinyl alkyl ether in which the alkyl group contains not over four carbon atoms, and an organic compound having an acidic hydrogen on a carbon atom and yielding a carbanion, the said compound containing a =CH— group which reacts with an alkali metal alcoholate to replace the hydrogen thereof with an alkali metal, said reaction being effected in liquid phase in the presence of water and of a mixture

of a basic anion-exchange resin and an acidic cation exchanger, and separating an alcohol and the reaction product of said ether and organic compound.

2,736,744

PURIFICATION OF α-CHLOROACRYLIC ACID DERIVATIVES

John William Croom Crawford, Welwyn Garden City, England, and John Segrue Secker, Belfast, Northern Ireland, assignors to Imperial Chemical Industries Limited, a corporation of Great Britain

No Drawing. Application February 5, 1952, Serial No. 270,117
Claims priority, application Great Britain September 4, 1950
8 Claims. (Cl. 260—486)

1. A process for the purification of a lower alkyl ester of α-chloroacrylic acid regardless of the method of preparation of said ester and of whether it possesses an undesirable color, so that polymers formed from said ester will not be undesirably colored and will possess a reduced tendency to develop color over long periods of time, said process comprising mixing together said ester and a small effective amount of a hydrazine derivative selected from the group consisting of acyl derivatives of hydrazine, carbamyl derivatives of hydrazine, and carbamyl derivatives of hydrazine in which at least one of the hydrogen atoms of the carbamyl group is replaced by an organic radical, and subsequently separating said hydrazine derivative from said ester by distillation.

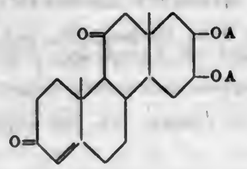
2,736,745

ESTERS AND ACETALS OF 16,17 DIHYDROXY-CYCLOHEXANOPHENANTHREN-3-ONE DERIVATIVES SUBSTITUTED AT 9,11 POSITIONS

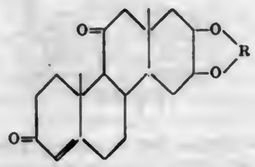
William S. Knowles, Kirkwood, Mo., assignor to Monsanto Chemical Company, St. Louis, Mo., a corporation of Delaware

No Drawing. Application July 1, 1953, Serial No. 365,525
16 Claims. (Cl. 260—488)

9. Compounds selected from the group consisting of esters of 16,17-dihydroxy-cyclohexano-10,13-dimethyl-Δ^4-dodecahydrophenanthren-3,11-dione of the structural formula



and acetals of 16,17-dihydroxy-cyclohexano-10,13-Δ^4-dodecahydrophenanthren-3,11-dione of the structural formula



wherein the foregoing structural formulae A is an acyl radical obtained upon removal of the hydroxy group of the carboxyl group of a mono-carboxylic acid selected from the group consisting of saturated fatty acids, phenylacetic acid, hydrocinnamic acid, gamma-phenyl butyric acid, benzoic acid and toluic acid, and where R is a hydrocarbon residue obtained upon removal of the oxygen atom of a symmetrical ketone selected from the class consisting of acetone, diethyl ketone, cyclohexanone and p-methylcyclohexanone.

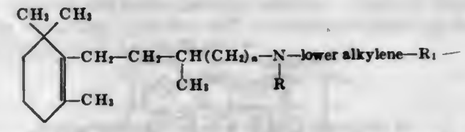
2,736,746

DIAMINE COMPOUNDS

Moses Wolf Goldberg, Upper Montclair, and Sidney Teitel, Nutley, N. J., assignors to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application September 8, 1954, Serial No. 454,827
8 Claims. (Cl. 260—501)

1. A compound having the formula



wherein R is a member of the group consisting of hydrogen, alkyl and acyl, R_1 is a tertiary amino group, and *n* represents a member of the group consisting of 0 and 1 and salts thereof.

2,736,747

BUTYLAMINE DERIVATIVES

Moses Wolf Goldberg, Upper Montclair, and Sidney Teitel, Nutley, N. J., assignors to Hoffmann-La Roche Inc., Nutley, N. J., a corporation of New Jersey

No Drawing. Application September 8, 1954, Serial No. 454,828
3 Claims. (Cl. 260—563)

1. A member of the group consisting of 2-methyl-4-(2,6,6-trimethyl - 1 - cyclohexen-1-yl)butylamine and salts thereof.

2,736,748

N-(2'-NAPHTHYL) AMIDINOALKANES

Gordon Keith Maliphant, Peter Oxley and Douglas Archibald Peak, Nottingham, England, assignors to Boots Pure Drug Company Limited, Nottingham, England, a British company

No Drawing. Application September 10, 1951, Serial No. 245,963
Claims priority, application Great Britain September 11, 1950
3 Claims. (Cl. 260—564)

1. An N-(2'-naphthyl) amidinoalkane selected from the group consisting of

N-(2'-naphthyl)-1-amidinoethane
N-(2'-naphthyl)-1-amidinopropane
N-(2'-naphthyl)-1-amidinobutane
N-(2'-naphthyl)-1-amidinopentane
N-(2'-naphthyl)-1-amidinohexane.
N-(2'-naphthyl)-1-amidinoheptane
N-(2'-naphthyl)-1-amidinooctane
N-(2'-naphthyl)-1-amidinononane.

2,736,749

DYE-FIXING AGENTS

Charles A. Robinson, Providence, R. I., assignor to Arnold, Hoffman & Co., Inc., Providence, R. I., a corporation of Rhode Island

No Drawing. Application June 10, 1952, Serial No. 292,741
8 Claims. (Cl. 260—564)

1. A process for the production of guanidine-formaldehyde condensation products which comprises heating an aqueous reaction mixture of guanidine and formaldehyde at a temperature between about 20 and 80° C. for a period of time ranging from up to fifteen minutes at 80° C. to at least six hours at 20° C., the reaction time varying inversely with the reaction temperature and hav-

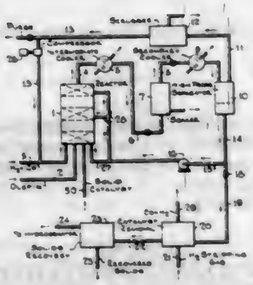
ing a maximum of about 24 hours at 20° C., said reaction mixture containing from 1.5 to 3.5 moles of formaldehyde per mole of guanidine and terminating said reaction of guanidine and formaldehyde upon the expiration of the said reaction time.

2,736,750

ALDEHYDE SYNTHESIS PROCESS

William E. Catterall, Roselle, N. J., assignor to Esso Research and Engineering Company, a corporation of Delaware

Application June 12, 1951, Serial No. 231,129
8 Claims. (Cl. 260—604)



1. In the process for converting olefins, CO and H_2 into aldehydes in the presence of a cobalt catalyst in a reaction zone under pressures of about 2000 to 4000 p. s. i. g. and at temperatures of about 300° to 375° F. and wherein a liquid aldehyde product containing in suspension, solid oil-insoluble forms of cobalt is withdrawn from said reaction zone and passed to a catalyst removal zone, the improvement which comprises passing said aldehyde product and finely divided cobalt comprising solids and unreacted carbon monoxide and hydrogen to a soaking zone, maintaining in said zone pressures of substantially the same order of magnitude as in said first-named zone, maintaining in said zone temperatures of above 200° and below 300° F., maintaining a residence time of said aldehyde product, cobalt and carbon monoxide and hydrogen for a period conducive to the conversion of said finely divided solid cobalt to cobalt carbonyl, thereafter withdrawing from said zone liquid aldehyde product depleted in solid cobalt and augmented in cobalt carbonyl, passing said aldehyde product and unreacted gases to a gas-liquid separation zone, withdrawing liquid product from said separation zone, and recycling at least a portion of the thus withdrawn liquid aldehyde product augmented in cobalt carbonyl dissolved therein to said first-named zone to provide cooling and active catalyst therein.

2,736,751

PROCESS OF STABILIZING 2,2-BIS (PARA METHOXY PHENYL) 1,1,1 TRICHLOROETHANE

Edward Bernsohn, New Milford, and Harold Krichman, Bayonne, N. J., assignors to Ipa Chemical Company, a corporation of New Jersey

No Drawing. Application October 1, 1952, Serial No. 312,672
10 Claims. (Cl. 260—611.5)

7. As a new composition of matter a 2,2-bis (para methoxy phenyl) 1,1,1 trichloroethane stabilized against decomposition by heat, which comprises 2,2-bis (para methoxy phenyl) 1,1,1 trichloroethane containing at least 0.25% by weight of a sodium salt of ethylenediaminetetraacetic acid and at least 0.1% by weight of a compound selected from the group consisting of alkali metal and alkaline earth metal salts which exhibit a basic reaction in aqueous solution.

2,736,752

PROCESS FOR THE PREPARATION OF HEXAHYDROXYBENZENE

Ullrich Hoffmann, Bad Homburg (Taunus), Otto Schweitzer, Frankfurt am Main, and Karl Rinn, Darmstadt, Germany, assignors to Deutsche Gold- und Silber-Scheideanstalt, vormals Roessler, Frankfurt am Main, Germany

No Drawing. Application November 24, 1952, Serial No. 322,348

Claims priority, application Germany December 1, 1951

9 Claims. (Cl. 260—621)

1. In a process for the production of hexa hydroxybenzene by reacting an alkali metal and carbon monoxide to form an alkali metal carbonyl and hydrolyzing such carbonyl the step which comprises reacting sodium with carbon monoxide at an elevated temperature up to 380° C. and an elevated pressure up to 180 atmospheres to form the alkali metal carbonyl.

2,736,753

RECOVERY OF PHENOLS

David Ian Hutchinson Jacobs, Upper Pine, Woodmansterne, England, assignor, by mesne assignments, to Hercules Powder Company, a corporation of Delaware

No Drawing. Application September 9, 1953, Serial No. 379,307

Claims priority, application Great Britain September 10, 1952

7 Claims. (Cl. 260—621)

1. In the process for the production of resorcinol by catalytic cleavage of a reaction mixture containing m-diisopropylbenzene dihydroperoxide wherein resorcinol and a higher boiling residue are produced, the improvement which comprises decomposing said residue by heating at a temperature in the range of 200°–400° C. and recoving resorcinol and m-isopropenyl phenol as decomposition products.

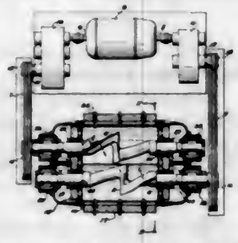
2,736,754

PROCESS AND APPARATUS FOR PRODUCING HYDROXY AROMATICS

George Arthur Webb, Pittsburgh, Pa., assignor to Koppers Company, Inc., a corporation of Delaware

Application December 4, 1951, Serial No. 259,866

15 Claims. (Cl. 260—628)



1. A fusion process for producing polyhydroxy aromatic compounds which includes the steps of fusing an alkali metal salt of an aromatic polysulfonic acid and an alkali metal hydroxide in about 5% to about 20% excess of the amount required to form the alkali metal polyphenate, and subjecting the viscous doughy reaction mass which results to simultaneous, positive, kneading and cutting forces during the course of reaction at a temperature of about 320° C. to about 360° C. and until a dry powder is obtained.

2,736,755

PROCESS FOR RECOVERING CYCLOHEXANE FROM THE WASTE GAS PRODUCED IN THE OXIDATION THEREOF

Walter Reuter, Werner Neumann, and Wilhelm Dietrich, Marl in Westphalia, Germany, assignors to Chemische Werke Huls Aktiengesellschaft, a corporation of Germany

No Drawing. Application March 11, 1953, Serial No. 341,814

Claims priority, application Germany March 28, 1952

5 Claims. (Cl. 260—666)

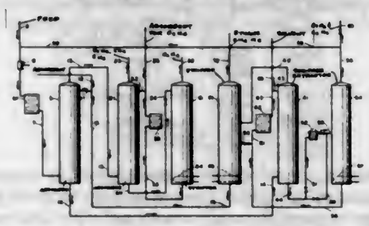
1. In the process for the recovery of cyclohexane by scrubbing with an absorbing liquid the waste gas produced in the oxidation of cyclohexane by passing an oxygen-containing gas in contact with liquid cyclohexane, the improvement which consists in using a liquid consisting essentially of cyclohexanol as the absorbing liquid.

2,736,756

RECOVERY OF ETHYLENE

Joseph C. Elgin, Princeton, N. J., assignor to Phillips Petroleum Company, a corporation of Delaware

Application April 10, 1950, Serial No. 154,992
4 Claims. (Cl. 260—677)



1. A process for the separation and recovery of ethylene from a gaseous mixture of ethylene and ethane and containing such other constituents as methane and hydrogen comprising admixing said gaseous mixture with a liquid saturated paraffinic hydrocarbon selected from the group of saturated paraffinic hydrocarbons containing 6 to 9 carbon atoms per molecule as an absorbent, subjecting said admixture to liquid-gas absorption conditions, separating the admixture into a liquid phase rich in ethane and containing some ethylene and said other constituents and a gas phase enriched in ethylene; extracting said liquid phase rich in ethane and containing some ethylene and said other constituents with a liquid extraction solvent selected from the group consisting of monosubstituted methanes containing the substitution groups $—NO_2$ and —CN under liquid-liquid extraction conditions, from the extraction operation separating said liquid saturated paraffinic hydrocarbon rich in ethane and containing a portion of said other constituents as a first liquid phase and said liquid extraction solvent rich in ethylene and containing some ethane and another portion of said other constituents as a second liquid phase, subjecting said second liquid phase to stripping conditions and recovering therefrom said extraction solvent and returning the recovered extraction solvent to the extraction operation, also recovering stripped gases rich in ethylene and recycling same into the gaseous feed to the process, subjecting said first liquid phase to stripping conditions, recovering said liquid saturated paraffinic hydrocarbon from this latter stripping operation and recycling same to the first admixing step as said liquid paraffinic hydrocarbon, also recovering stripped gases rich in ethane and containing some methane and hydrogen from this latter stripping operation as a minor product of the process, recovering the ethylene by contacting said gas phase enriched in ethylene with a solution comprising orthoanisidine and 5 to 18 per cent cuprous salt at a temperature between the limits of −22° F. to 86° F. under a pressure between the limits of atmospheric to 500 pounds per square inch gauge, from this contacting operation separating a gas phase rich in ethane and containing methane and hydrogen as a portion of the secondary product of the process and a liquid phase comprising a cuprous salt-orthoanisidine solution of ethylene, subjecting this latter solution to desorption conditions, recovering cuprous salt-orthoanisidine solution, returning same to its contacting operation and recovering ethylene as the main product of the process.

2,736,757

PROCESS OF PRODUCING SOLUBLE CHLORINATED RUBBER

Hendrik Albert Wildrik Nijveld, Delft, Netherlands, assignor to Rubber-Stichting, Delft, Netherlands

No Drawing. Application November 10, 1952, Serial No. 319,799

Claims priority, application Netherlands November 17, 1951

7 Claims. (Cl. 260—735)

1. The two-stage process of preparing aqueous dispersions of chlorinated rubber soluble in conventional solvents, which comprises introducing at a temperature below about 50° C. into latex stabilized against acid and having an acidity of at least 2 normal, chlorine gas, until the chlorinated rubber in the dispersion which has formed, contains at least 50% chlorine, diluting the dispersion with water to a dry solid contents of not more than 30% and then continuing the introduction of chlorine gas at a temperature within the range of 0° and 90° C. until the chlorinated rubber contains chlorine within the range of 63% and 68%.

2,736,758

PROCESS FOR THE MANUFACTURE OF SOLUBLE CHLORINATED RUBBER BY TREATMENT OF INSOLUBLE CHLORINATED RUBBER

Gerrit Jan van Amerongen, Delft, Jacob Leendert Poldervaart, Hengelo, and Albert Schreuder, Nijverdal, Netherlands, assignors to Rubber-Stichting, Delft, Netherlands

No Drawing. Application February 18, 1952, Serial No. 272,262

Claims priority, application Netherlands February 19, 1951

11 Claims. (Cl. 260—772)

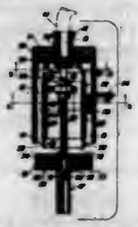
1. The process of converting chlorinated rubber having a chlorine content of about 60% which is insoluble in aromatic hydrocarbons, chlorinated hydrocarbons, esters, or ketones, into chlorinated rubber soluble in said solvents, which comprises reacting on a dispersion of the insoluble chlorinated rubber with a dispersion of an aqueous inorganic hypochlorite solution in one of said solvents, the upper limit of concentration of insoluble chlorinated rubber being about 25% of the weight of solvent, the quantity of hypochlorite ranging from about 0.2% to about 3.0% by weight of the insoluble chlorinated rubber, and the amount of water present ranging from about 4.5% to about 15.5% of the weight of solvent.

2,736,759
ELECTRODE ASSEMBLY FOR GLASS FURNACES
Harvey L. Penberthy, Seattle, Wash.
Application October 22, 1954, Serial No. 464,004
15 Claims. (Cl. 13—17)



1. In an electrode assembly in an apertured furnace wall, a sleeve in said aperture and having an end protruding from said wall, a bushing mounted in said sleeve at the end opposite from said protruding end, an electrode extending through said sleeve and said bushing, sealing means on said sleeve at the protruding end thereof providing a fluid seal between said sleeve and said electrode, and means for delivering a supply of coolant to said bushing and electrode.

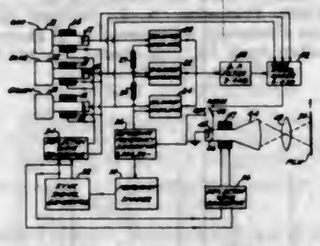
2,736,760
DEVICE FOR INTENSIFYING ELECTRICAL ENERGY
Frank A. Kane, Jr., Stratford, Conn.
Application May 18, 1954, Serial No. 430,501
12 Claims. (Cl. 123—148)



1. In a device for intensifying the electrical energy delivered by a high tension circuit through a high tension conductor to a terminal connection of an electrical apparatus, a cylinder of dielectric material, an inner and an outer plate of conducting material in engagement with opposite portions of the respective inner and outer surfaces of said cylinder, said inner plate having an inwardly protruding high section, a post of conducting material extending longitudinally through the interior of said cylinder, an electrode eccentrically mounted on said post and spaced from said high section to form an air gap, a socket electrically connected to said post and adapted operatively to receive therein said high tension conductor, a terminal plug electrically connected to said post and adapted for contacting engagement with said terminal connection of said electrical apparatus, and conductor means electrically connected to said outer plate with a metallic terminal for operative connection to an electrical ground.

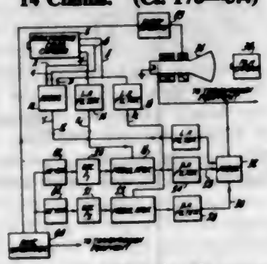
2,736,761
COLOR TELEVISION IMAGE SIGNAL TRANSLATING SYSTEMS
George C. Sziklai and Ray D. Kell, Princeton, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application June 26, 1952, Serial No. 295,614
20 Claims. (Cl. 178—5.2)

5. A color image signal translating system comprising a source of signals representative of the brightness of the images during normal operating periods, a second source of signals representative of the chromaticity of the images during said normal operating periods and representative of a reference chromaticity value during reference periods of operation, means for simultaneously converting the signals from said two sources into superimposed visual displays during said normal operating periods and for converting the signals from said second source into reference visual displays during said reference periods, means for recording the superimposed visual displays on a photographic recording medium during said normal operating periods and for recording the reference visual displays on a photographic recording medium during said reference periods, and signal reproducing means including flying spot scanning means for scanning the recording of said superimposed displays while simultaneously scanning the recording of said reference displays, light-responsive means associated with said scanning means



for producing image-representative signals in response to the scanning of said superimposed display recording, additional light-responsive means associated with said scanning means for producing reference signals in response to the scanning of said reference display recording, and television apparatus coupled to both of said light-responsive means for utilizing said image-representative signals and said reference signals, said apparatus including phase comparison means for comparing the phase of the reference signals with the phase of the image-representative signals, a source of oscillations, means for phase modulating oscillations from said source in accordance with the output of said phase comparison means, an amplitude detector for detecting the amplitude of the image-representative signals, means for amplitude modulating the output of said phase modulating means in accordance with the output of said amplitude detector, and means for adding the output of said amplitude modulating means to the image-representative signals.

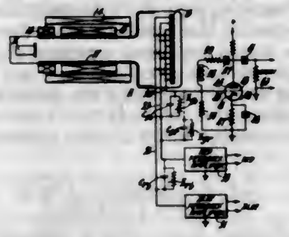
2,736,762
RECORDING OF COLORED IMAGES
Ray D. Kell, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application November 12, 1952, Serial No. 319,926
14 Claims. (Cl. 178—5.4)



1. Apparatus for recording signals representing colored images on monochrome film comprising in combination a source of signals corresponding to brightness variations

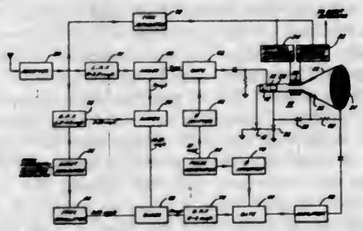
as a scene is scanned, a source of a first carrier wave having a frequency that is substantially greater than the highest frequency in the brightness signal, a source of a second carrier wave having a frequency that is higher than the first, a source of a first color signal, a source of a second color signal, a first amplitude modulator coupled to the source of the first carrier and the source of the first color signal in such manner that the first carrier is amplitude modulated in accordance with the first color signal, a second amplitude modulator coupled to the source of the second carrier and the source of the second color signal in such manner that the second carrier is amplitude modulated in accordance with the second color signal, means for combining the brightness signal and the products of modulation produced by said modulators so as to form a composite signal, means for emitting light in accordance with the composite signal, and means for recording the light variations on film.

2,736,763
COLOR TELEVISION PICKUP SYSTEMS
Paul K. Weimer, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application May 27, 1953, Serial No. 357,865
11 Claims. (Cl. 178—5.4)



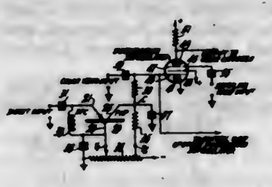
1. In a color television system wherein it is desired to utilize color information over only a given portion of the total video frequency range, said color television system including a cathode ray pickup tube having an electron target structure comprising a plurality of interleaved sets of conducting strips for deriving respective component color signals, a signal amplifying system comprising a plurality of signal amplifying means, each of said strip sets being coupled to a respectively different one of said signal amplifying means, and means for rendering the effective input impedance of each said signal amplifying means directly proportional to frequency over a portion of the video frequency range higher than said given range portion.

2,736,764
ELECTRICAL SYSTEMS
Frank J. Bingley, Meadowbrook, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application June 29, 1953, Serial No. 364,678
28 Claims. (Cl. 178—5.4)



1. A cathode-ray tube system comprising: a cathode-ray tube having a member adapted to intercept charged particles, comprising a plurality of first spaced-apart portions arranged in a given geometric configuration and adapted to produce a first given response upon impingement by said particles, said member further comprising a plurality of second portions arranged in a second given configuration indicative of said first configuration and distributed throughout the area occupied by said first portions in the spaces between said first portions, said second portions being adapted to produce a second given response different from said first given response upon impingement by said particle; said cathode ray tube further comprising means for generating charged particles and for directing the same in beam formation toward said intercepting member and control means for varying the flow of said particles from said generating means; means for applying to said control means a wave having, during first given time intervals, variations indicative of desired variations of said first portions and having, during second given time intervals, a substantially constant amplitude value; means for scanning said charged particles in beam formation across said intercepting member thereby to energize said first and second portions and produce a first control signal determined by the response to said charged particles; and means for interrupting said control signal during said first given time intervals thereby to produce a second control signal determined by the response of said second portions and by the intensity of said wave during said second time intervals.

2,736,765
AUTOMATIC SWITCHING
Robert D. Lohman, Princeton Junction, and Gerald B. Herzog, Princeton, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application July 27, 1953, Serial No. 370,344
7 Claims. (Cl. 178—5.4)



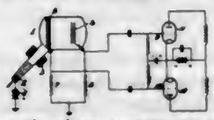
1. In a color television receiver adapted to receive composite color television signals which include a color subcarrier wave modulated in accordance with color information, and periodically repeating color synchronization bursts of several cycles of subcarrier frequency, as well as black and white television signals which do not include said bursts, and wherein there are provided means for separating said bursts from said composite signal, and apparatus for demodulating said modulated color subcarrier, the combination comprising a charge storage device, a charging circuit for charging said storage device to a cutoff potential, said charging circuit having a time constant which is relatively long compared to the period of repetition of said bursts, a discharging circuit operable for altering the charge of said storage device to an operating potential, a semiconductor device, said discharging circuit including a current path in said semiconductor device, means for rendering said current path normally nonconducting, means responsive to said bursts for rendering said current path conducting and thereby operating said discharging circuit, and means coupled to said charge storage device for disabling said demodulating apparatus when the charge on said storage device substantially corresponds to said cutoff potential and for enabling the operation of said demodulating apparatus when the charge on said storage device substantially corresponds to said operating potential.

2,736,766
COLOR TELEVISION RECEIVERS
Gordon L. Fredendall, Huntingdon Valley, Pa., assignor to Radio Corporation of America, a corporation of Delaware
Application August 31, 1953, Serial No. 377,495
12 Claims. (Cl. 178—5.4)



1. In a color television receiver adapted to receive and convert to intermediate frequencies composite color television signals including a picture carrier, a sound carrier and a color subcarrier, the combination comprising a common intermediate frequency amplifier, a brightness signal channel including a second intermediate frequency amplifier coupled to said common amplifier, and a color signal channel including a third intermediate frequency amplifier also coupled to said common amplifier, the response characteristic of said second amplifier being such as to provide substantial attenuation of said sound carrier intermediate frequency relative to said color subcarrier intermediate frequency, and the response characteristic of said third amplifier being such as to provide substantially equal response to said sound carrier intermediate frequency and to said color subcarrier intermediate frequency.

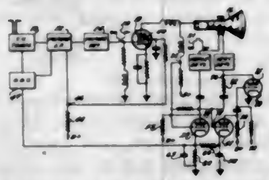
2,736,767
TELEVISION AMPLIFIER CIRCUIT
Pieter Schagen, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application August 22, 1950, Serial No. 180,745
Claims priority, application Netherlands
September 3, 1949
3 Claims. (Cl. 178—7.2)



1. An amplifier circuit arrangement, comprising a television camera tube having first and second output electrodes, first and second electron discharge systems coupled in push-pull arrangement each having an input circuit and an output circuit, means to derive a first signal voltage having a first given phase from one of said output electrodes of said camera tube, means to derive a second signal voltage having a second given phase substantially in phase opposition to said first given phase from the other of the output electrodes of said camera tube, and means to apply each of said first and second signal voltages to a respective input circuit of said electron discharge systems to develop an amplified signal voltage in said output circuits of said electron discharge systems.

2,736,768
VIDEO FROM SYNC AND SYNC FROM SYNC SEPARATOR
Simeon I. Tourshou, Philadelphia, Pa., and Gordon E. Skorup, Westmont, N. J., assignors to Radio Corporation of America, a corporation of Delaware
Application August 1, 1951, Serial No. 239,777
1 Claim. (Cl. 178—7.3)

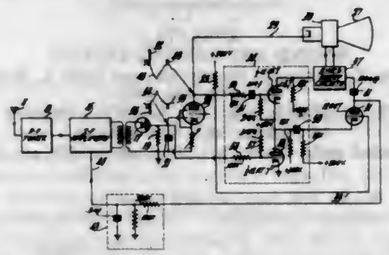
In a television receiver, a synchronizing signal separator circuit apparatus comprising in combination: a reference potential means forming an electrical reference for the circuit as hereinafter defined; variable gain means for receiving and demodulating television signals having a synchronizing component, said means being controllable by an automatic gain control signal; automatic gain control means connected with said receiving means applying an automatic gain control signal to said receiving means such to stabilize the amplitude of demodulated signals delivered by said receiving means; a noise clipping video signal amplifier stage coupled with said receiving means, said video amplifier including controllable bias means operatively coupled with said automatic gain control means for maintaining noise clipping of said video signals at a substantially constant level over a wide range of signal levels received by said receiving means; a vertical and a horizontal synchronizing separator circuit means each including a respective discharge tube, each tube having at least an anode, cathode and control electrode circuits so related that the separating level of each separator circuit is dependent upon the cathode bias potential caused to appear in the cathode circuit of each respective tube; means operatively coupling noise clipped signal from said video signal amplifier stage in operative relation to the control electrode circuits of said discharge tubes with such polarity as to increase current in said discharge tubes in response to synchronizing signals; the cathode circuit of the horizontal synchronizing separator tube comprising a relatively short time constant bias defining means connected between the cathode of said horizontal separator circuit discharge tube and said reference potential means, said time constant bias defining means comprising the parallel combination of a capacitor and a relatively low value of resistor to form a time constant which is short compared to the re-



currence rate of vertical synchronizing signals; the cathode circuit of the vertical synchronizing separator tube comprising a resistor of relatively high value compared to said low value resistor operatively connected from the cathode of said horizontal separator tube to the cathode of said vertical separator tube to form a galvanically conductive path between the cathodes of said horizontal separator tube and vertical separator tube, the value of said high value resistor being sufficient to substantially divorce horizontal separator action from influence by vertical separator action; a capacitor connected in the cathode circuit of said vertical separator tube of a value greater than the value of capacitor connected in the cathode circuit of said horizontal separator tube and connected in shunt with at least said high value resistor to form a bias defining time constant circuit for said vertical separator tube cathode circuit of time constant value sufficiently longer than said short time constant bias defining means that the cathode bias potential of said vertical separator tube is a function of the amplitude of vertical synchronizing signals; a first output resistor connected in series with said horizontal separator tube anode and a source of anode polarizing potentials that is positive with respect to said reference potential means; a second output resistor connected in series with the vertical separator tube anode and a source of anode polarizing potential that is positive with respect to said reference potential means, the values of said first and second resistor being so related to the gain of said discharge tubes that the bias in said horizontal separator tube cathode circuit is substantially independent of the bias developed in said vertical separator discharge tube cathode circuit while the bias developed in the cathode circuit of said vertical separator tube is a significant

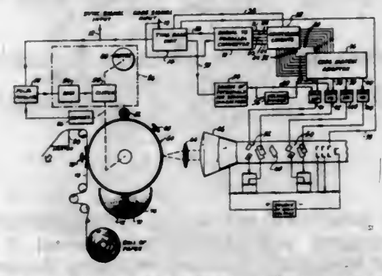
function of the bias developed in said horizontal separator discharge tube cathode circuit; horizontal and vertical television deflection circuits; means coupling said deflection circuits respectively to said first and second output resistors for response to separated synchronizing signals appearing thereacross; and regenerative feedback means operatively coupled from the anode circuit of the vertical separator tube to the input circuit of said vertical separator tube to regeneratively improve the waveform of the clipped synchronizing signals delivered by said vertical separation circuit.

2,736,769
NOISE CUT-OFF SYNCHRONIZING SIGNAL SEPARATOR
Albert Macovski, New York, N. Y., assignor to Radio Corporation of America, a corporation of Delaware
Application September 19, 1952, Serial No. 310,395
3 Claims. (Cl. 178—7.3)



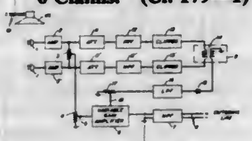
3. In a television receiver the combination of: a circuit ground signal reference means; means producing demodulated television signals having a direct current component and a synchronizing pulse component comprising pulses extending from the blanking level of said television signals and of an amplitude in excess of the amplitude of all other components in said signals, said signal producing means including means making available demodulated signal of a positive going synchronizing pulse polarity as well as demodulated signal of a negative going synchronizing pulse polarity relative to said circuit ground means; a first and a second amplifier device each having electrodes corresponding to a vacuum tube cathode, anode and control electrode; a direct current connection between said first device cathode and said second device anode placing said first and second amplifying devices in series with one another; direct current connection means connecting said second device cathode with circuit ground; positive potential power supply means referenced to circuit ground; a first resistor connected between said first device anode and said positive power supply means to form an output signal load circuit for said first device; a second resistor connected between said second device anode and said positive power supply means for operatively polarizing said second device anode; separate input resistance means respectively connected in a direct current conductive fashion between the control electrodes and cathodes of said first and second devices; a capacitor connected between said signal producing means and said first device control electrode such as to couple thereto video signal of positive going synchronizing pulse polarity such that control electrode current is established by successive synchronizing pulses with the values of said first device input resistance means and associated coupling capacitor forming a time constant biasing network for said first device such that anode current in said first device is established only by signal excursions in excess of said blanking level; a direct current video signal coupling means connected between said signal producing means and said second device control electrode coupling thereto video signal of a negative going synchronizing pulse polarity; bias means connected to said second device control electrode establishing bias of a value causing signal excursions in excess of synchronizing pulse peaks to establish non-conduction in said second device and thereby interrupt anode current flow in said first device; an automatic gain control circuit having a third amplifier device including an anode, cathode and control electrode, output load gain control voltage developing means connected between said anode and said cathode of said third device including a resistor connected between said third device anode and said positive power supply means; a direct current connection from said signal producing means and said third device control electrode applying thereto video signal including a direct current component; and a capacitor connected from said second device anode and said third device cathode.

2,736,770
PRINTER
Joseph T. McNaney, San Diego, Calif., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application June 25, 1952, Serial No. 295,589
10 Claims. (Cl. 178—15)



1. A recorder capable of responding to a source of input information, which source of input information includes code signals and synchronizing signals, said recorder comprising means for selectively displaying images on the screen of a cathode ray tube in response to the code signals, a movable photoconductive member charged and disposed to receive light from the screen of the tube so that the member is selectively discharged to record the images which are displayed on the screen of the tube, means generating rate signals for sensing movement of the photoconductive member while the images are being recorded, means comparing the synchronizing signals with the rate signals for synchronizing movement of the photoconductive member and orientation of the display of images on the screen of the tube whereby the images are recorded at predetermined locations on the photoconductive member.

2,736,771
DISTANT-TALKING TELEPHONE SYSTEM
Robert L. Hanson, Summit, and Winston E. Kock, Basking Ridge, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application December 6, 1951, Serial No. 260,166
6 Claims. (Cl. 179—1)



1. In a distant-talking two-way telephone system, the combination which comprises two like electrocoustic transducers arranged side by side on a base line and disposed to be energized by a sound source located substantially on the perpendicular bisector of said base line, means for additively combining the outputs of said trans-

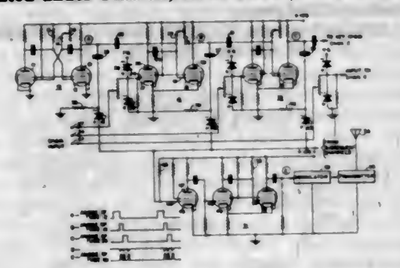
ducers, means including a variable-gain amplifier for transmitting said additively combined outputs as an outgoing telephone signal, means for individually clipping the outputs of said transducers, means for subtractively combining the outputs of said transducers as clipped to provide a control signal, and means for depressing the gain of said amplifier by said control signal, whereby signals originating at said sound source are transmitted without attenuation while signals originating off said perpendicular bisector are attenuated.

2,736,772

PULSE MULTIPLEX COMMUNICATION SYSTEM

Thomas Robert Burnight, Washington, D. C.

Original application January 29, 1947, Serial No. 724,935. Divided and this application September 23, 1948, Serial No. 50,723
2 Claims. (Cl. 179—15)
(Granted under Title 35, U. S. Code (1952), sec. 266)



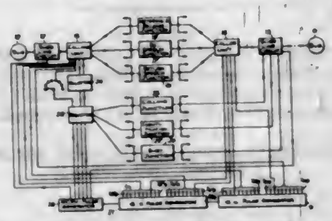
2. A pulse time multiplexing system comprising a chain oscillator, said oscillator being formed of a plurality of sequentially connected oscillating elements, the oscillation of each element being triggered by the oscillation of the next preceding element of said oscillator, means for limiting the duration of the oscillation of each of said elements, means generating a voltage pulse coincident with the termination of the oscillation of each of said elements, means varying the duration of the oscillation of each of said elements in accordance with a variable quantity, and means summing and transmitting said pulses.

2,736,773

AUTOMATIC EXCHANGES

Maurice Moise Levy, Ottawa, Ontario, Canada, assignor to The General Electric Company Limited, London, England

Application November 24, 1951, Serial No. 257,992
5 Claims. (Cl. 179—18)



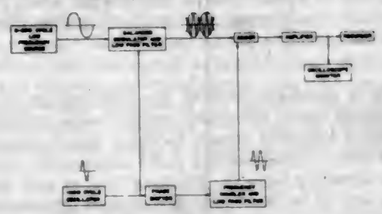
1. An automatic telephone exchange comprising a plurality of line terminating units terminating the subscribers' lines respectively connected to the exchange, a plurality of communication links for enabling communication to be established between pairs of said line terminating units, the number of links being substantially less than half the number of line terminating units, routing means connected to all said line terminating units enabling signals to be transmitted to any of said line terminating units, said routing means comprising selector means responsive to the reception at any one of said line terminating units of dialling impulses representative of the number of any other of said line terminating units to transmit a calling signal to said other of the line terminating units, further selector means connected to said line terminating units and responsive to said calling signal to connect said other line terminating unit to one end of a free one of said links, means generating a plurality of signals to identify the said links respectively, further selector means connected to the other ends of said links and to the line terminating units, further routing means connected between all said line terminating units and the last said selector means, and means to transmit from the said other line terminating unit through said further routing apparatus to the last said selector means the one of said identfying signals identifying the link connected to said other line terminating unit to cause the last said selector means to connect the other end of the said free link to the said one of the line terminating units.

2,736,774

SOUND RECORDING SYSTEM

Aaron Z. Robinson, Hyattsville, and Irvin L. Robey, Silver Spring, Md.

Application July 2, 1952, Serial No. 296,974
9 Claims. (Cl. 179—100.1)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A recording system comprising a low frequency signal source, means for producing a carrier, means connected to said signal source and carrier producing means for modulating said carrier by said low frequency signal source and suppressing said carrier to produce modulating components in the output thereof, carrier frequency multiplying means, means for combining said modulating components and said multiplied carrier frequency, recording means connected to said last named means whereby said multiplied carrier frequency signal and said components of modulation are recorded on a physical record.

2,736,775

MAGNETIC TRANSDUCER HEAD ASSEMBLY

Marvin Camras, Chicago, Ill., assignor to Armour Research Foundation of Illinois Institute of Technology, Chicago, Ill., a corporation of Illinois

Application October 3, 1950, Serial No. 188,208
4 Claims. (Cl. 179—100.2)



1. A multi-channel magnetic recording and reproducing system, comprising, a multi-channel record member having laterally adjacent channels, an erase head in operative relation to said record member over an operative width no wider than the width of said erase head of each said channel to erase magnetic traces from said channel, and a recording head in operative relation to said record member over an operative width of said recording head less than said operative width of said erase head, and spaced from said erase head in the direction

of movement of said record member to subsequently produce a recorded trace in said channel that will always be in a completely erased portion of said channel, thereby minimizing interference with the newly recorded trace.

2,736,776

MAGNETIC RECORDER HEAD ASSEMBLY

Marvin Camras, Chicago, Ill., assignor to Armour Research Foundation of Illinois Institute of Technology, Chicago, Ill., a corporation of Illinois

Application June 2, 1951, Serial No. 229,620
5 Claims. (Cl. 179—100.2)



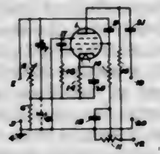
1. An electromagnetic transducer head assembly comprising magnetic erase head means having confronting poles means displaced longitudinally of the direction of travel of a record member thereover, said erase head pole means including pole portions engaging each of a pair of adjacent channels on the same side of the record member, first and second electromagnetic transducer heads, each disposed for engaging one of the adjacent channels of the record member after the channels have crossed said erase head means, said transducer heads each including a pair of confronting poles displaced longitudinally in the direction of travel of the record member and on the same side of the record member, and the poles of said first transducer head being laterally offset from the poles of said second transducer head, the confronting pole means of said erase head means being substantially wider than the sum of the widths of the confronting poles of the two transducer heads, and the portion of the erase head pole means contacting each channel of the record member extending laterally beyond both sides of the poles of the transducer head associated with the channel.

2,736,777

GROUNDED GRID RADIO TUBE CIRCUITS

Ray Lambert, Cincinnati, Ohio

Application July 1, 1953, Serial No. 365,334
5 Claims. (Cl. 179—171)



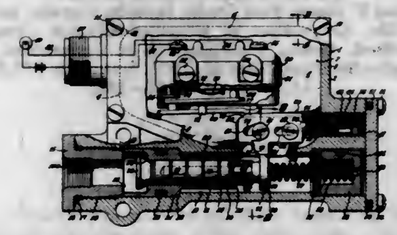
1. In a thermionic vacuum tube circuit comprising input terminals, said input terminals consisting of an input signal-voltage terminal and a grounded input terminal, a thermionic vacuum tube having a cathode, plate, control grid, a screen grid, an input load impedance connected between the cathode of said thermionic vacuum tube and ground, said thermionic vacuum tube having the signal grid connected to ground with respect to signal voltage relative to the signal voltage applied to said cathode, an output load impedance between the said plate of the said thermionic vacuum tube and ground, said plate circuit of said thermionic vacuum tube provided with output terminals whereby the signal output of said thermionic vacuum tube may be connected to utilization means, and a source of power for the cathode heater and plate and screen space currents for said thermionic vacuum tube, means are provided for applying a selected portion of the input signal voltage with controlled phase across the screen-cathode circuit of said thermionic vacuum tube, which said means comprise, in combination: an adjustable signal-voltage dropping resistor included between the above said input signal-voltage terminal and the above said input load impedance, said signal-voltage dropping resistor being in series with said input signal-voltage terminal and said input load impedance; the said signal-voltage dropping resistor shunted by an adjustable condenser; a condenser connected between the above said input signal-voltage terminal and said screen grid; a series screen current supply resistor isolating said screen from ground and connecting the above said screen grid and the above said source of power for said screen space current; whereby the signal impressed across the cathode-plate impedance of the above said thermionic vacuum tube due to the diode effect is balanced and cancelled at the above said plate of the above said thermionic vacuum tube by the signal voltage across the screen-cathode circuit of said thermionic vacuum tube.

2,736,778

HYDRAULIC PRESSURE OPERATED SWITCH

J. D. Buchanan, Burbank, Calif.

Application May 9, 1952, Serial No. 286,991
5 Claims. (Cl. 200—82)



1. An hydraulic pressure operated switch comprising a reciprocating plunger having a fluid pressure operated piston for operating said plunger to one position, a spring urging said plunger to another position, an operating member, a spring for said operating member, cooperating means on said member and on said plunger for operating said member to cock the same against the action of said spring of said operating member and means operated by said cocking movement for releasing said operating member for operation by its cocked spring with a snap action, a switch controlled by said operating member, and an operating connection between said operating member and said switch for maintaining said switch operated while said piston is operated to said one position by fluid pressure.

2,736,779

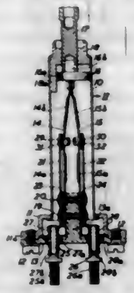
TEMPERATURE RESPONSIVE DEVICES

Anders Mathisen and Rupert Griffiths, London, England, assignors of one-half to Graviner Manufacturing Company Limited, London, England, a British company, and one-half to The Wilkinson Sword Company Limited, London, England, a British company

Application January 25, 1954, Serial No. 405,908
Claims priority, application Great Britain January 30, 1953
10 Claims. (Cl. 200—137)

1. A thermal detector comprising in combination an elongated metallic member, said elongated member having a substantial coefficient of thermal expansion over a predetermined temperature range, a second elongated metallic member comprising two relatively rigid portions united by a short flexible portion and having its ends fixed relative to said first member at two spaced points along the length of said second member, said second member

being flexed at low temperatures in said range and being composed of a material having a very low coefficient of thermal expansion over said temperature range, and a resilient member freely engaging said second member and adapted to urge it into a straightened condition as



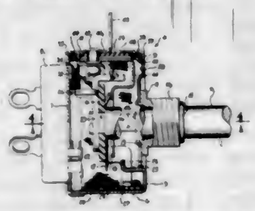
differential expansion occurs between the two elongated members when the temperature rises, said free engagement of said resilient member with said second member permitting free differential thermal expansion between said resilient member and said second member.

2,736,780
ROTARY ELECTRIC SWITCH
Rowland F. Gates, Port Credit, Ontario, Canada, assignor to The Arrow-Hart & Hegeman Electric Company, Hartford, Conn., a corporation of Connecticut
Application November 13, 1953, Serial No. 391,866
3 Claims. (Cl. 200—168)



1. In an electric switch, an insulating base hollowed out to provide a cavity for current-carrying switch parts, a rotatable switch-operating insulating cover cooperating with said base and covering said cavity, a spindle in said base on which said cover is mounted, said cover having a recess and said spindle having bifurcations on one end adapted to be bent down into said recess to retain said cover on said base, a flexible strip covering said recess, said strip having end portions adapted to become engaged with said cover upon bending of the strip to secure the strip removably on the cover.

2,736,781
VARIABLE RESISTOR
Arthur M. Daily and Mervin B. Arisman, Elkhart, Ind., assignors to Chicago Telephone Supply Corporation, Elkhart, Ind., a corporation of Indiana
Application June 8, 1953, Serial No. 360,047
10 Claims. (Cl. 201—48)



1. A resistance element and terminal assembly for variable resistors, comprising: a winding strip of insulating material curled into a hoop with the ends thereof in abutting relation; a coil of resistance wire wound toroidally about said strip with the ends of the coil spaced a short distance from the extremities of the strip so that the end portions of the strip are bare; a terminal for each end of the coil, said end terminals each having a U-shaped attaching portion embracing a group of turns at one end of the coil and the winding strip about which they are wound; a rivet passing through the legs of each of the U-shaped attaching portions and through the portion of the strip and the coil between said legs, clamping one of the legs to the adjacent wire turns; an insulated terminal board directly overlying the contiguous end portions of said strip and the adjacent end portions of the coil; a center terminal for the resistance element having a U-shaped attaching portion embracing the contiguous bare end portions of the strip and the medial portion of the terminal board; a rivet passing through the legs of the U-shaped attaching portion of the center terminal and the portions of the winding strip and the terminal board therebetween to thus clamp said parts together; and other connecting means between the terminal board and the winding strip positively holding the ends of the strip against separation so that the resistance element, its terminals and terminal board constitute a subassembly which is complete in itself, and as such may be incorporated in a variable resistor.

2,736,782
ELECTRICAL INDICATOR
Robert F. Brown, United States Navy
Application June 23, 1953, Serial No. 363,705
4 Claims. (Cl. 201—55)
(Granted under Title 35, U. S. Code (1952), sec. 266)

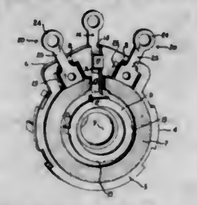


1. A device for measuring temperature which comprises an enclosed elongated tube having electrically non-conductive walls, a coating of semi-conductive resistive material formed along a substantial portion of the inner surface of said tube, an electrically conductive liquid filling one end of said tube, a portion of said liquid being in contact with a portion of said resistive material adjacent said one end of said tube, a first electrode in contact with said liquid near said one end of said tube and a second electrode spaced from said first electrode and in contact with said resistive material, said tube and said coating being so constructed and arranged that said liquid is spaced at all times from that portion of the coating which is in contact with said second electrode, said electrodes extending from the interior of said tube externally thereof.

2,736,783
TERMINAL CONSTRUCTION FOR VARIABLE RESISTORS
Arthur M. Daily, Elkhart, Ind., assignor to Chicago Telephone Supply Corporation, Elkhart, Ind., a corporation of Indiana
Application September 14, 1953, Serial No. 379,912
4 Claims. (Cl. 201—55)

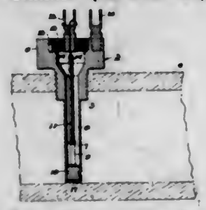
1. In a variable resistor having a base and a flat, split ring-shaped resistance element with a flat terminal tab

projecting from each end thereof flatwise overlying the base, common means for securing the resistance element to the base and for providing terminals for the ends of the resistance element, comprising: a sheet metal stamping clamping each terminal tab to the base, said stamping having a U-shaped attaching end, the bight of which provides a contact portion and the legs of which provide a pair of opposed attaching ears, said U-shaped attaching



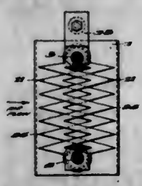
end straddling the terminal tab with its contact portion contiguous to the top face of the terminal tab and its attaching ears passing through holes in the base, the ends of said attaching ears being clinched over the underside of the base; each terminal tab having a hole opening to its top face; and a pimple-like protrusion on the contact portion provided by the bight of the attaching end of the stamping projecting into and pressing against the rim of said hole in the terminal tab.

2,736,784
ELECTRIC PROBE
Warren J. Gore, Baltimore, Md., assignor to Bendix Aviation Corporation, Baltimore, Md., a corporation of Delaware
Application June 1, 1953, Serial No. 358,730
3 Claims. (Cl. 201—63)



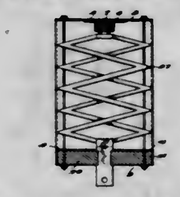
1. An improved condition-responsive probe, comprising: an elongated tubular member made of stainless steel and having at least one closed end, a cylindrical stainless steel plug enclosed in said tubular member in contact therewith in proximity to said closed end, said plug having a length at least equal to its cross-sectional radius, a ceramic conducting body in the form of a rod axially positioned in said tubular member and having one end thereof rigidly affixed to said plug in electrical contact therewith, said body comprising a resistor having a substantially high negative temperature coefficient of resistance, an insulated electrical lead projected into said tubular member and connected to the other end of said resistor, said plug to facilitate assembly being adapted for initial sliding engagement with the inner surface of said tubular member whereby said plug, said resistor and said lead can be assembled together as a unit prior to insertion in said tubular member, an enlarged head provided with a threaded shank connected to said tubular member opposite the closed end thereof, said head and shank being axially recessed to provide a continuation of the interior of said tubular member, a non-conducting element located in said head and closing off said recess, a first electric terminal supported by said non-conducting element and connected to said electric lead and a second electric terminal supported by the conducting portion of said enlarged head, said conducting portion of said head, said shank, said tubular member and said plug forming a return electrical path from said resistor.

2,736,785
ELECTRIC RESISTOR STRUCTURE
Robert E. Du Bois, Hammond, Ind.
Application November 12, 1953, Serial No. 391,568
4 Claims. (Cl. 201—69)



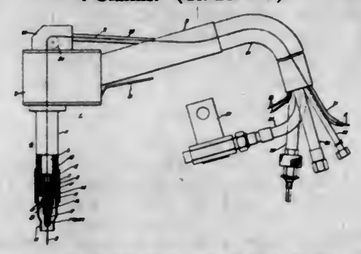
1. A resistor grid comprising a single strip of resistor material and a terminal portion at either end of said strip, said strip, between the terminals, being formed into identical angular sections with pointed extremities extending alternately to either side of a center line through the terminal portions of the grids the transverse dimension of the grid through the angular sections being substantially greater than the transverse dimension of the grid at said terminal portions.

2,736,786
RESISTOR STRUCTURE
Robert E. Du Bois, Hammond, Ind.
Application November 12, 1953, Serial No. 391,569
4 Claims. (Cl. 201—69)



1. A resistor structure comprising a supporting frame, a plurality of grid units within said frame, insulator means secured to the frame for freely carrying the tops of the grid units, insulator means for holding and positioning the bottoms of the grid units, and means for removably securing said bottom grid unit insulator means to the frame to permit ready removal of the grid units from the frame.

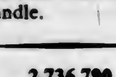
2,736,787
ARC WELDING APPARATUS
Alanson U. Welch, Jr., West Townsend, Mass., assignor to General Electric Company, a corporation of New York
Application October 26, 1951, Serial No. 253,282
4 Claims. (Cl. 219—8)



1. Arc welding apparatus comprising a metallic guide having an electrode passageway therethrough, means for feeding an electrode through said passageway in said guide, means for supplying welding current to an electrode in said guide from a source of welding current of predetermined maximum voltage, and a fiber tip mounted on the discharge end of said metallic guide and having an electrode passageway therethrough which forms a contin-

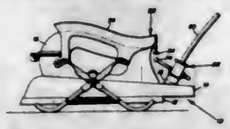
uation of the electrode passageway in said guide, said tip having a length which is effective, when the fusion rate of said electrode is greater than its feeding rate, in preventing the passage of the arcing terminal of said electrode through said tip and into engagement with said metallic guide prior to arc extinction due to a lengthening of the arc gap beyond that at which said welding current maximum voltage will maintain an arc.

2,736,788
METHOD AND MEANS FOR INDUCTION HEATING COIL CONTROL
Herman R. Nack, Troy, and John R. Whitacre, Dayton, Ohio, assignors to The Commonwealth Engineering Company of Ohio, Dayton, Ohio, a corporation of Ohio
Application December 27, 1952, Serial No. 328,190
5 Claims. (Cl. 219—10.75)



5. In an induction heating apparatus of the character described wherein selected portions thereof may be heated, said apparatus comprising a helically wound electric induction coil, said coil having a plurality of turns, there being spaces between adjacent turns, and means comprising an electrically conductive insert for positioning in said spaces between adjacent turns of the coil to short circuit said turns, said insert having grooved ends to conform to the contours of the coil turns.

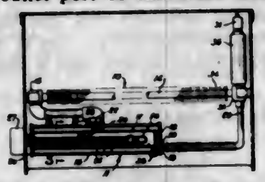
2,736,789
IRON ATTACHMENT
Maurice H. Cornellier, Dearborn, Mich.
Application June 22, 1953, Serial No. 363,102
4 Claims. (Cl. 219—25)



1. In combination with a sadiron including a handle and electrical terminals for heating the iron, an attachment for automatically lifting the iron and breaking the electrical circuit to the terminals upon release of pressure from the iron, said attachment including resiliently actuated scissored levers attached to said iron at their scissored connections and normally urging the same upward from a supporting surface, a saddle spacedly overlying said handle throughout the length thereof operatively connected to said levers for moving the same in opposition to said resilient means to seat the iron on the supporting surface as the saddle is pressed toward the handle, an electric plug engaging said terminals, and means on said plug engaging said saddle to provide electrical contact of said plug and said terminals when the saddle is pressed against the handle.

2,736,790
RADIATORS
Carl Z. Alexander, Chatham, N. J.
Application November 15, 1952, Serial No. 320,662
1 Claim. (Cl. 219—38)

A radiator comprising, in combination, a radiating unit for a fluid heat transfer medium, said unit having an inlet port and an outlet port formed therein, an electric heating unit for the medium disposed below said radiating unit, said heating unit comprising an outer housing of circular cross section and a concentric inner housing disposed in said outer housing, said outer housing having formed in the top thereof an outlet port and in the bottom thereof an inlet port, said inner housing having formed in the top thereof an opening substantially registering wtih the outlet port of said outer housing, said inner housing further having formed through the bottom thereof a plurality of spaced openings, a pipe interconnecting the outlet port of said outer housing with the



inlet port of said radiating unit, a thermo-siphonic tube for the registering opening of said inner housing with one end of said tube extended into said pipe, a second pipe for interconnecting the outlet port of said radiating unit with the inlet port of said outer housing, and an electric heating element disposed in said inner housing.

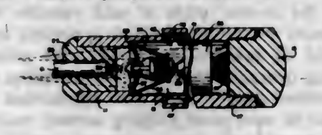
2,736,791
THERMOSTATICALLY CONTROLLED ELECTRIC WATER HEATER
Carl E. Krah and Edward Krah, Newark, N. J.
Application January 25, 1954, Serial No. 405,896
7 Claims. (Cl. 219—41)



1. A thermostatically controlled electric immersion heater comprising a shallow receptacle adapted to be removably secured to the side of an aquarium at right angle thereto; a tube open at one end, suspended by its open end through a hole in the bottom of the receptacle; a concave cover for the receptacle; a capacitor and a lamp in the cover with the lamp opposite a raised opening in the cover; an elongated switch mount friction fitted at its upper end within a boss on the inside of the cover and projecting downward within the tube; a flat ring and a sealing washer interposed between the periphery of the open end of the tube and the end of the said boss; a bi-metal switch arm fixed at one end to the switch mount with its other end free and bent at right angles inward of and below the switch mount; a bracket fixed to the switch mount; a threaded shaft mounted parallel with the mount through a threaded opening in the bracket with its lower end terminating in adjustable distance relationship with the free end of the bi-metal switch arm and its upper end terminating in a finger piece external of the heater; an electric resistance heater; and an electrical circuit including the electric resistance heater, lamp, capacitor, bi-metal switch arm, bracket and threaded shaft.

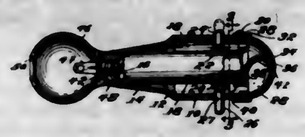
2,736,792
ILLUMINATED TOOL
Frederick F. Freeland, Morristown, N. J.
Application June 24, 1952, Serial No. 295,378
2 Claims. (Cl. 240—6.46)
(Granted under Title 35, U. S. Code (1952), sec. 266)

1. An illuminated tool comprising an elongated cylindrical casing, a longitudinally disposed bore defining a chamber within said casing, illuminating means within said chamber including a light bulb, a concave reflector mounted within said chamber and extending transversely of said light bulb, said light bulb projecting through said reflector, means in circuit with said light bulb for illuminating said bulb, a plug of translucent material posi-



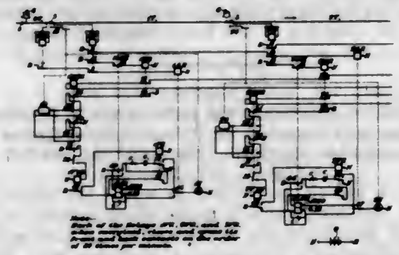
tioned anteriorly in said casing relative to said illuminating means; an axial bore in said plug, a tool positioned in said bore, said tool having a reflector affixed to its confined end immediately adjacent said bulb whereby rays from said bulb are reflected from said last mentioned reflector to said concave reflector and through said plug to the end of said tool.

2,736,793
PURSE LIGHT
Roger A. Raymond, Jefferson City, Mo.
Application June 24, 1955, Serial No. 517,740
5 Claims. (Cl. 240—10.6)



1. A purse light comprising an electrically conductive housing; an electrically conductive cap on one end thereof; an electrically conductive spring connected to the cap and having a portion covered by electrical insulation, said spring extending within the housing; a battery having a casing and a center post, said battery being supported in the housing for lateral movement between a first position in which the casing is engaged with the spring in electrical contact therewith and a second position in which the casing is engaged with said portion of the spring; a bulb having a base electrically connected to the casing and having a base contact engaged in both positions of the battery with the post of the battery; and means carried by the battery for shifting the same between its first and second positions.

2,736,794
LIGHTOUT PROTECTION FOR 3-BLOCK 4-INDICATION SIGNALLING SYSTEM
Arthur E. Dodd, Edgewood, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application October 25, 1951, Serial No. 253,156
10 Claims. (Cl. 246—50)



1. In a three-block four-indication signal control system in which each signal includes a lamp and is controlled by a train approaching it in the direction for which the signal governs traffic movements to display

an aspect comprising a steadv green light or a flashing yellow light or a steady yellow light or a steady red light according as the first three blocks in advance of the signal are unoccupied or the first two blocks in advance are unoccupied while the third block is occupied or the first block in advance is unoccupied while the second block is occupied or the first block in advance of the signal is occupied respectively, the combination comprising, a flashing yellow control relay for each signal, means responsive to a train occupying the third block in advance of each signal while the first two blocks in advance are unoccupied for energizing the corresponding flashing yellow control relay, a flasher relay for each signal which if energized closes and opens its front and back contacts alternately at a frequency which may be on the order of forty times per minute, means including a front contact of the flashing yellow control relay for each signal for effecting energization of the flasher relay for the same signal, a slow release lightout relay for each signal having a first winding with a high resistance which may be of the order of 1000 ohms and having a second winding with a low resistance which may be of the order of 0.58 ohms, an approach control relay for each signal normally energized but becoming deenergized in response to a train occupying the first block in the rear or the first block in advance of the corresponding signal, means controlled by a front contact of the approach control relay for each signal for energizing the first winding of the lightout relay for the same signal in series with the lamp for the same signal, means controlled by back contacts of the approach control relay and the flashing yellow control relay for each signal in series with each other and with the second winding of the lightout relay for the same signal for lighting the lamp for the same signal, and stick circuits for the first and second windings of each of said iightout relays controlled by means including front and back contacts respectively of the flasher relay for the same signal and the stick circuit for said second winding including the lamp for the same signal for maintaining said lightout relays energized when said same signal is displaying its flashing yellow aspect.

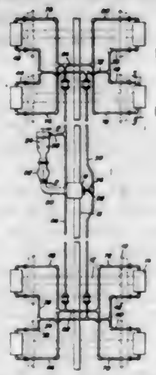
2,736,795
TRACK CIRCUITS FOR SUPPLYING TRAIN CONTROL ENERGY THROUGH CROSSOVERS
Harold G. Witmer, Edgewood, Pa., assignor to Westinghouse Air Brake Company, a corporation of Pennsylvania
Application August 19, 1950, Serial No. 180,404
14 Claims. (Cl. 246—63)



1. In combination, two parallel main tracks joined by scissors crossovers comprising a first and a second crossover, the rails of each said crossover formed by three pairs of insulated rail joints into two adjoining track sections, a first and a second pair of said pairs of joints of each said crossover inserted one pair in each of the two switch leads of the crossover to enable the joints of each of said first and second pair to be disposed substantially opposite each other, the third pair of said pairs of joints of each said crossover being inserted with one joint inside the diamond portion and one joint outside the diamond portion of said crossover to enable the joints of said third pair to be substantially opposite each other, and track circuit means for

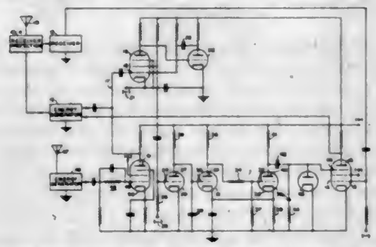
each of said crossover track sections having a source of periodic train control current and provided with connections from said source to the rails adjacent a selected end of the section for supplying current from said source to the rails of said section in series when traffic moves through the section toward said selected end.

2,736,796
HOT BOX DETECTOR SYSTEM
Arthur Joe Hebert, Scott, La., assignor to National Alarms Corporation, Lafayette, La., a corporation of Louisiana
Application February 27, 1953, Serial No. 339,410
4 Claims. (Cl. 246—169)



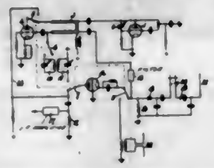
1. For use in a vehicle having journal mounted wheels with journal boxes enclosing the journal mountings and air brakes applied to the wheels and controlled by an air pressure line, a hot box responsive system comprising an escape valve communicated with said air pressure line, said escape valve having an air capacity substantially equal to the air capacity of said pressure line, resilient means biasing said escape valve to closed position, an air cylinder, a piston in said cylinder operatively connected to said escape valve, means for applying pressure in said cylinder including a pressure conduit, means communicating said pressure conduit with said pressure line, an air pressure transmitting line communicating with said cylinder, a control valve connecting said pressure conduit to said pressure transmitting line, a temperature responsive element mounted in the journal box in spaced proximity to the end of the journal for retaining said control valve in closed condition.

2,736,797
RADIO RELAY WITH FALSE RECEIVER SIGNAL SUPPRESSION
Henry M. Suski, Washington, D. C., and Malcolm H. Steward, Los Angeles, Calif.
Application April 2, 1947, Serial No. 738,904
1 Claim. (Cl. 250—15)
(Granted under Title 35, U. S. Code (1952), sec. 266)



In combination, signal reception means, first energy generating means operative to produce high power electrical energy signals; coupling means including a vacuum tube having at least first and second control grids for coupling the output of said signal reception means to said energy generating means, said coupling means being operable to trigger said energy generating means upon receiving an output signal from said signal reception means, the output of said signal reception means being applied to one of the control grids of said vacuum tube; pulse shaping means the output of which is applied to the other control grid of said vacuum tube, said pulse shaping means being operable to disable said coupling means for a predetermined time-interval after application of a pulse to the input of said pulse shaping means; second energy generating means; pulse forming means plurally connected to said first energy generating means, to said second energy generating means, and to said pulse shaping means, said pulse forming means being adapted to apply a pulse to said pulse shaping means upon actuation of either said first energy generating means or said second energy generating means.

2,736,798
RECEIVER FOR AT LEAST TWO ULTRAHIGH-FREQUENCY RANGES
Gerrit Jan Lubben, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application February 17, 1953, Serial No. 337,369
Claims priority, application Netherlands March 3, 1952
6 Claims. (Cl. 250—20)



1. A receiver for the selective reception of at least two ultra-high-frequency ranges, said receiver operating on the superheterodyne principle, comprising means providing a source of local variable oscillation, means coupled to said variable oscillation source means and including an electron discharge device for providing a source of local constant oscillations for mixing said variable oscillations and said constant oscillations to produce therein an oscillation having a variable algebraic sum frequency during the reception of the high frequency range of said ranges, means coupled to said device for mixing said variable algebraic sum frequency with the oscillations of the higher frequency range of said ultra-high-frequency ranges to reduce the oscillations of said higher frequency range to a definite intermediate frequency, and selective means for rendering said constant oscillation source means inoperative and for applying the incoming oscillations of the lower frequency range of said ultra-high-frequency ranges to said discharge device for mixing therein with the variable oscillations from said first-mentioned means to produce a frequency having a value of said intermediate frequency during the reception of said lower frequency range.

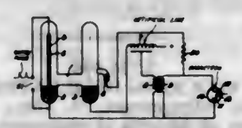
2,736,799
FOCUSSING SYSTEM FOR IONS AND ELECTRONS
Nicholas Christofilos (or Philos), Athens, Greece
Application March 10, 1950, Serial No. 148,920
8 Claims. (Cl. 250—27)

7. In a particle accelerator in which the accelerated particle oscillates within a plane whose normal is substantially parallel to the velocity vector of said particle, that improvement comprising a focussing field means which impresses a resultant electrical focussing force on said particle in said plane whose mean value increases as the distance of the particle from the path which is controlled by the accelerator increases, said focussing field means varying said force periodically with respect to direction along the path which is controlled by said accelerator whereby said particle moving in a path substantially parallel to said path controlled by said accelerator is subjected to alternately converging and diverging forces and thereby made to describe an oscillatory path



which is concave towards siad path controlled by the accelerator in converging sections and convex towards said path controlled by the accelerator in diverging sections thereof, the means distance of the particle from the path controlled by the accelerator being greater in the converging sections than in the diverging sections of said particle path.

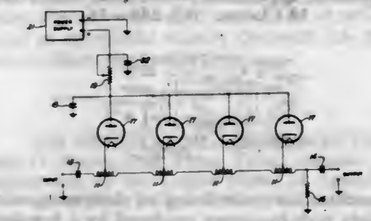
2,736,800
DEVICE FOR PRODUCING VOLTAGE-IMPULSES OF SHORT-DURATION, WHEREIN A DISCHARGE-PATH, WHICH IS CONDUCTIVE IN A NEGATIVE DIRECTION WITH RESPECT TO THE PULSES, IS CONNECTED IN PARALLEL WITH THE LOAD
Hugo Georg Bruijsing, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application January 6, 1951, Serial No. 204,798
Claims priority, application Netherlands January 11, 1950
4 Claims. (Cl. 250—27)



1. Apparatus for producing voltage impulses of brief duration comprising first and second discharge devices provided with a common gas-filled envelope, a common cathode and separate anodes, means to effect periodic discharge in said first device to produce impulses, means to apply said impulses to a load, and means connecting said second device across said load in a sense in which the second tube is conductive in a negative direction relative to said impulses.

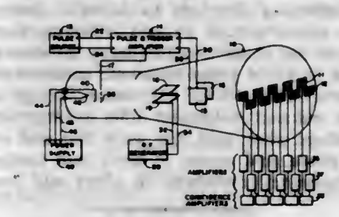
2,736,801
DISTRIBUTED PULSE HEIGHT DISCRIMINATOR
Clyde E. Wiegand, Oakland, and Owen Chamberlain, Berkeley, Calif., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application May 16, 1951, Serial No. 226,638
3 Claims. (Cl. 250—27)

1. In a pulse height discriminator, the combination comprising a plurality of series-connected inductances coupled at one end to an input terminal and at the other end to an output terminal, a plurality of diode tubes having the cathodes thereof respectively connected to a tap of said inductances and the anodes thereof directly connected together, the value of said inductances being selected to provide with the interelectrode capacitance of said tubes a section of artificial transmission line having a time constant of substantially 10^{-8} seconds, a resistor connected at the output end of said series of inductances and having a value substantially equal to the characteristic impedance of the artificial transmission line, a by-pass condenser connected from the anodes of said tubes to a ground connection, and a power supply having the negative terminal connected to ground and the positive terminal coupled to the anodes of said tube



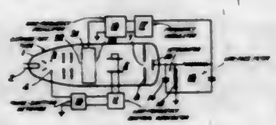
through a variable impedance element to render said tubes normally conductive whereby a positive pulse of voltage applied between said input terminal and a ground connection will be transmitted to said output terminal only when the value thereof exceeds the value of positive voltage applied to the anodes of said tubes.

2,736,802
PULSE HEIGHT ANALYZER SYSTEM
Lawrence Cranberg, Los Alamos, N. Mex., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application December 7, 1954, Serial No. 473,765
3 Claims. (Cl. 250—27)



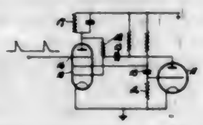
1. A pulse height amplitude analyzer for measuring various voltage amplitudes comprising a substantially conical evacuated glass tube, an electron gun having a cathode, filament, and control electrode positioned in a hollow cylindrical extension of the converging end of said cone, a plurality of anodes positioned across the face of said tube in two rows, said anodes positioned apart by one-third their width, a second row of anodes arranged below the first row of anodes but offset therefrom so that the anodes of the second row overlap by one-third the width of the anodes in said first row, a pair of horizontal deflecting plates positioned symmetrically about the axis of the tube in the converging portion thereof, a pair of vertical deflecting plates positioned symmetrically about the axis of the tube, a trigger and pulse amplifier for receiving and amplifying voltage pulses to be measured and connected to said horizontal deflecting plates, said trigger amplifier also connected to said control electrode for turning on an electron beam when the maximum of a voltage pulse is applied to said horizontal deflecting plates, high frequency generator connected to said vertical deflecting plates for deflecting said voltage pulses across the first and second rows of anodes, a plurality of amplifiers having their respective inputs connected to each of said anodes for amplifying a current change when the electron beam strikes said anode, a plurality of coincidence amplifiers connected between overlapping anode amplifiers for measuring said voltage pulse when said voltage pulse strikes the overlapping portions of said anodes in the first and second row of anodes.

2,736,803
FREQUENCY CONTROL
Eduard Herman Hugenholtz, Hilversum, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application March 15, 1950, Serial No. 149,692
Claims priority, application Netherlands March 16, 1949
18 Claims. (Cl. 250—36)



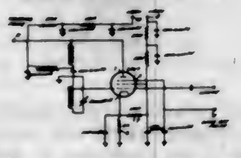
1. Apparatus for maintaining an electromagnetic wave of relatively high-frequency produced by a first source in isochronism with a given harmonic component of an electromagnet wave of lower frequency produced by a second source comprising a frequency modulator controlling said first source, a phase comparison device for producing said control voltage, said device comprising a cathode ray tube provided with an electron gun for producing an electron beam, a collecting electrode disposed in the path of said beam, deflection means for said beam and intersecting control means for said beam, means to supply said second wave to said deflection means to deflect said beam reciprocally in a direction at which said beam is caused intermittently to impinge upon said collecting electrode to produce current pulses herein, means to apply said first wave to said intensity control means to modulate said pulses in accordance with their phase relationship to said first wave and means including a low-pass filter coupled to said collecting electrode to derive a control voltage from the pulses yielded by said collecting electrode dependent on the phase and frequency difference between said wave and said given harmonic component whereby said control voltage is an alternating voltage when said first wave and said component differ in frequency and is a direct voltage when said first wave and said component differ in phase, and means to apply said control voltage to said frequency modulator to effect said isochronism.

2,736,804
OSCILLATOR SYNCHRONIZATION
Pieter Adrianus Neeteson, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application November 7, 1951, Serial No. 255,173
Claims priority, application Netherlands December 20, 1950
1 Claim. (Cl. 250—36)



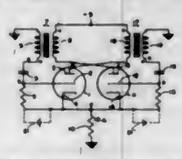
A synchronized oscillator comprising a first electron discharge tube having a cathode, a first control grid, a screen grid, a second control grid and an anode, a second electron discharge tube having a cathode, a single control grid and an anode, a source of operating voltage, a resistor and a condenser connected in parallel between said voltage source and the anode of said first tube, a resistor connected between the anode of said first tube and said first control grid, a condenser connected between said first control grid and the anode of said second tube, a condenser connected between said screen grid and said single control grid, a resistor connected between said voltage source and the anode of said second tube, a resistor connected between said voltage source and said screen grid, a common electrical connection between said cathodes, a resistor connected between said single control grid and said common connection, and a source of synchronizing signals connected to said second control grid.

2,736,805
PHASE SYNCHRONIZED OSCILLATOR
John M. Hollywood, Forest Hills, N. Y., assignor to the United States of America as represented by the Secretary of the Air Force
Application November 14, 1952, Serial No. 320,510
2 Claims. (Cl. 250—36)



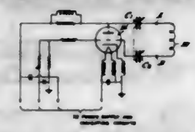
1. An oscillator of the phase synchronized type comprising an electron discharge device having at least an anode, a cathode, a first grid and a second grid; a tuned circuit, means to connect said anode and first grid to said tuned circuit so that said electron discharge device will supply sufficient energy to said tuned circuit that it will oscillate whenever said electron discharge device is conducting, means to apply to said second grid a negative gating off signal of sufficient magnitude to cause said electron discharge device to cease to conduct, means to apply to said cathode a fixed bias potential of sufficient magnitude to cause said electron discharge device to remain nonconducting after having been made nonconducting by said gating off signal and after removal of said gating off signal, and means to apply to said tuned circuit an alternating current phase locking signal having substantially the same frequency as the frequency of said tuned circuit and of sufficient magnitude to cause said electron discharge device to conduct.

2,736,806
BLOCKING OSCILLATOR
Jack C. Miller, Albuquerque, N. Mex., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application May 12, 1953, Serial No. 354,549
2 Claims. (Cl. 250—36)



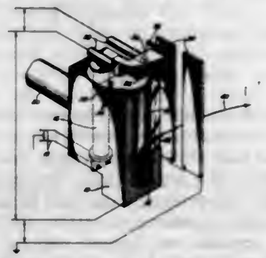
1. A blocking oscillator circuit comprising a first and second blocking oscillator, each including a vacuum tube provided with an anode, a control grid and a cathode, power supply for said oscillators, a first and a second transformer having each a primary and a secondary winding, one terminal of each primary winding being connected to the power supply while the other primary terminal of the first transformer is connected to the anode of the tube of the second oscillator and the other primary terminal of the second transformer is connected to the anode of the tube of the first oscillator, the secondary winding of the first transformer being connected in series with a first condenser between ground and the grid of the tube of the first oscillator, and the secondary winding of the second transformer being connected in series with a second condenser between ground and the grid of the tube of the second oscillator, the cathodes of both tubes being connected together and through a common resistance to ground and through individual resistors to the respective grids.

2,736,807
PROBE FOR GRID DIP METERS
Ernest A. Porter, Denville, N. J., assignor to Boonton Electronics Corporation, Boonton, N. J., a corporation of New Jersey
Application November 12, 1953, Serial No. 391,475
5 Claims. (Cl. 250—36)



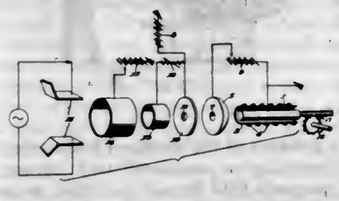
1. A probe for a grid dip meter comprising a series tuned circuit including an oscillator tube, a pair of variable capacitors and a UHF range changing coil, wherein said capacitors each comprise a stationary tubular plate member and a cooperative movable tubular plate member in telescopic relation, a movable carriage by which the movable tubular plate members of the capacitors and the oscillator tube are carried, means to connect the plate of the tube to the movable tubular plate member of one capacitor and means to connect the grid of said tube to the movable tubular plate member of the other capacitor, means to connect the tube in the power supply and indicating circuits of the grid dip meter, a manually rotatable drive cam to actuate the carriage for tuning control of the capacitors, means to detachably connect a range changing coil across the stationary tubular plate members of the capacitors, and a dial member rotatable with said drive cam and calibrated to indicate UHF in range from 300 to 1000 mc.

2,736,808
ION PRODUCING MECHANISM
William M. Brobeck, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application November 6, 1945, Serial No. 627,072
2 Claims. (Cl. 250—41.9)



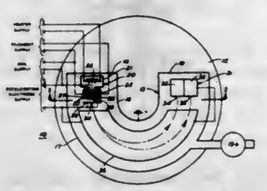
1. Ion producing mechanism comprising in combination a metallic block disposed in a magnetic field and having an open-ended cylindrical chamber formed therein for containing a source of ionizable vapor, said block being further provided with an open-ended slot elongated in the axial direction of said chamber and constituting a communicating passageway between said chamber and the exterior of said block and in alignment with said magnetic field, an electron emissive filament spaced from said block and aligned with the end of said slot, means impressing a potential between said filament and block whereby an arc discharge is established from said filament through the length of said slot to the end thereof under the influence of said magnetic field, accelerating electrode structure disposed adjacent said slot and externally of said block and maintained at a negative potential with respect to the latter whereby ions formed of said vapor by said arc are attracted from said block, and a shield of rigid sheet material "L-shaped" in cross-section, having one portion thereof secured to said block in closing relation to the open-end of said chamber and having the remaining angularly disposed portion thereof extending in parallelism with the axis of said chamber and disposed intermediate said filament and said accelerating electrode structure whereby the portion of the arc beyond said block is shielded from the potential of said accelerating electrode structure, said shield being provided with an aperture disposed adjacent the open end of said elongated slot and in substantial registry therewith for the passage of said arc discharge therethrough.

2,736,809
ION GENERATOR AND PROJECTOR
Conrad G. Bacon, Oak Ridge, Tenn., assignor, by mesne assignments, to the United States of America as represented by the United States Atomic Energy Commission
Application November 6, 1945, Serial No. 627,074
8 Claims. (Cl. 250—41.9)



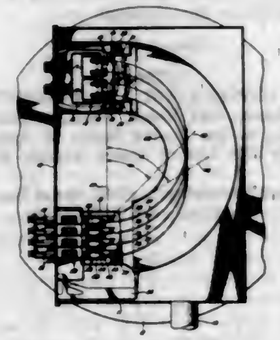
1. An ion source comprising a cathode made of uranium containing compound and an anode made of uranium containing compound, means for striking an arc between said cathode and said anode, whereby ions of uranium are produced, means for maintaining said cathode at a constant negative potential with respect to said anode, and means for causing ions to be projected from the ionizing region past the cathode in a direction away from the anode.

2,736,810
CHARGE RECEPTACLES FOR USE IN ION SOURCE UNITS
Arnold F. Clark, Berkeley, Calif., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application November 7, 1945, Serial No. 627,267
4 Claims. (Cl. 250—41.9)



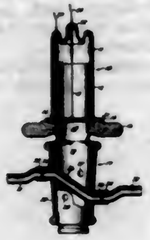
1. In combination with a calutron comprising a closed tank housing an ion source unit including structure wholly disposed within the magnetic field of said calutron and providing a charge reservoir and a communicating charge ionizing chamber, means adapted to evacuate said tank to a pressure substantially below atmospheric, a normally sealed receptacle having a frangible portion and containing a charge and positioned within said charge reservoir, a pull element connected to said frangible portion and extending to the exterior of said closed tank, and means sealing said pull element in movable relation to said tank wall, whereby the element may be pulled and the receptacle broken, permitting the charge to fill said reservoir and enter said communicating charge ionizing chamber.

2,736,811
CALUTRON RECEIVER
Harold F. Weaver, Berkeley, and Chester M. Van Atta, Los Angeles, Calif., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application June 28, 1946, Serial No. 679,952
13 Claims. (Cl. 250—41.9)



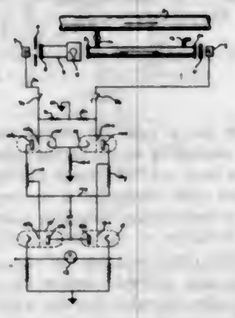
1. In a calutron of the shimmed beam type, the combination comprising an evacuated tank, means for establishing a magnetic field through said tank, means disposed within said tank for projecting ions in beam form transversely of said magnetic field, and a receiver having a viewing face disposed in the path of the beam and defining a beam delimiting slot lying in more than one plane.

2,736,812
RADIOACTIVITY MEASURING APPARATUS
Alfred I. Weinstein, Patchogue, and Francis T. Bonner, Brooklyn, N. Y., assignors to the United States of America as represented by the United States Atomic Energy Commission
Application October 10, 1951, Serial No. 250,625
3 Claims. (Cl. 250—43.5)



1. Apparatus for measuring relatively weak radioactivity in a fluid comprising in combination a rotatable tubular element having a chamber therein adapted to contain a fluid under pressure, a radiation detector mounted on said element for rotation therewith and having a thin window forming a part of the walls of said chamber, said window being adapted to permit the passage of weak radioactivity to the active volume of said detector, a conforming jacket supporting said element and having an inlet and an outlet port for the fluid, a conduit through said element for conducting a fluid therethrough while segregating the fluid from said window, means for passing said fluid through said chamber and means for rotating said element to at least two positions, in one of which said inlet and outlet ports communicate with said conduit and in the other of which said inlet and outlet ports communicate with said fluid-passing means.

2,736,813
GAS ANALYSIS
Claude Michel Cherrier, Saint-Maude, France, assignor to Societe Anonyme des Manufactures des Glaces et Produits Chimiques de Saint-Gobain, Chauny & Cirey, Paris, France
Application March 5, 1952, Serial No. 274,999
15 Claims. (Cl. 250—43.5)



1. The method of analyzing a gas for SO_2 that comprises passing light, having a wave length corresponding to that of a spectrum absorption band of SO_2 in ultraviolet, by one path to a photoelectric cell, passing identical light by another path to another such cell, activating balanced amplifiers by the current from said cells, directing the output of said amplifiers to balanced signalling apparatus, admitting the gas to be analyzed to one said path only, and determining the presence of SO_2 by the signal of the signalling apparatus.

2,736,814
DENTAL X-RAY FILM PACKET HOLDER
Albert Lederman and Paul B. Lederman, Cleveland Heights, Ohio
Application March 21, 1952, Serial No. 277,808
1 Claim. (Cl. 250—70)



An X-ray dental film packet holder, comprising an elongated body approximately two inches in length and one-fourth of an inch thick for providing ease in gripping between the jaws of a person, and a leg attached at one end to said body approximately one-half of an inch from one end thereof and extending alongside said body to approximately the opposite end thereof, said leg being yieldingly separated from said body to receive an X-ray film packet therebetween and to frictionally engage said packet substantially across one face thereof to secure said packet in a position to project beyond either of the planes of the surfaces of the body adapted to be engaged by the person's jaws, the portion at said one end of said body beyond said one end of said leg forming a finger grip area for manipulation of the film packet holder by the operator in placing the holder between the jaws of a person.

2,736,815
ATOMIC RADIATION DETECTOR
Hamilton L. J. Marshall, Mobile, Ala., assignor to International X Ray, Inc., Mobile, Ala., a corporation of Alabama
Application February 12, 1952, Serial No. 271,085
6 Claims. (Cl. 250—78)

1. An instrument for emergency directional detection of radio-activity produced by nucleonic fission comprising an elongated casing structure having a sighting end and including therein a tube having a chamber which is elongated, said tube being formed of a material having a high radiation absorption coefficient, and a fluorescent screen capable of fluorescing under the influence of radiation produced as a result of nucleonic fission disposed



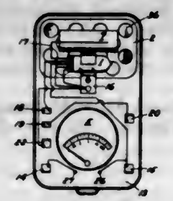
in a transverse plane across and within said tube at a distance appreciably to the rear of the fore end of said tube whereby to exclude substantially all rays except those which are substantially parallel to the axis of said tube.

2,736,816
IONIZATION CHAMBER
David H. Morley, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application April 24, 1953, Serial No. 350,997
3 Claims. (Cl. 250—83.1)



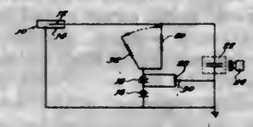
1. An ionization chamber comprising a hollow cylindrical collector electrode extending along a given axis, a cylindrical high voltage electrode surrounding said collector electrode and coaxial therewith, a pair of metallic end disks insulatingly supported from said high voltage electrode end portions, and means for insulatingly supporting said collector electrode from said end disks comprising an axially disposed support rod positioned within said collector electrode along the axis thereof and fixed at each end to said end disks, an insulating bushing surrounding a portion of said rod near each end thereof and fixed thereto, and a metallic flange member secured between each end of said collector electrode and said bushing.

2,736,817
POCKET RADIATION METER
Persa Raymond Bell, Jr., Oak Ridge, Tenn., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application September 26, 1951, Serial No. 248,425
4 Claims. (Cl. 250—83.6)



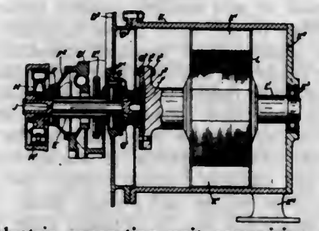
1. In combination, a vacuum tube having at least a cathode, a control grid, and an anode, a source of electrical potential operatively coupled between said anode and cathode, a source of cathode current, a meter in circuit with said anode, and an ion chamber including two electrodes, said control grid being connected solely to one of said electrodes and the other of said electrodes being connected to the positive terminal of said potential source.

2,736,818
MEASURING DEVICE AND APPARATUS
Francis R. Shonka, Riverside, Ill., assignor to the United States of America as represented by the United States Atomic Energy Commission
Application February 29, 1952, Serial No. 274,224
1 Claim. (Cl. 250—83.6)



A radiation measuring device comprising, in combination, an ionization chamber circuit including in series, an ionization chamber, a source of electrical potential, and an electrical impedance, means to visually indicate the potential drop across the electrical impedance of the ionization chamber circuit, said means being provided with parallel scales on a common surface, one scale being inverted with respect to the other, and a second electrical impedance having one end pivotally mounted and electrically connected to one end of the impedance in the ionization chamber circuit, an electrical contact disposed at the other end of the second impedance, and a stationary electrical contact electrically connected to the other end of the impedance in the ionization chamber circuit, said stationary electrical contact being positioned on a plane normal to the scales of the visual indicating means and traversing the pivot point of the second electrical impedance.

2,736,819
ELECTRIC GENERATING UNIT
George Hamilton Murray, Planer, England, assignor to D. Napier & Son Limited, London, England, a company of Great Britain
Application March 9, 1955, Serial No. 501,955
Claims priority, application Great Britain March 15, 1954
12 Claims. (Cl. 290—1)

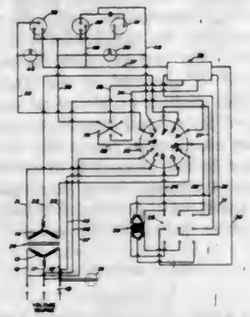


1. An electric generating unit comprising an internal combustion engine including at least one crankshaft, an output shaft, transmission gearing connecting the crankshaft to the output shaft, a gear casing rigid with and forming an integral part of the engine and enclosing said transmission gearing, a stubshaft projecting from the casing, a self-aligning bearing by which said stubshaft is supported in said casing and a direct connection between said output shaft and said stubshaft permitting limited mis-alignment between them, and an electric generator including an armature shaft, one end of which is rigidly connected to and supported solely by the stubshaft and a bearing supporting the other end of said armature shaft.

2,736,820
CONTROL PANEL FOR BALANCING ROTORS
Vernon V. Vaughan, Norfolk, Va.
Application August 11, 1953, Serial No. 373,694
4 Claims. (Cl. 307—17)
(Granted under Title 35, U. S. Code (1952), sec. 266)

2. A control panel comprising in combination, a three phase transformer having primary and secondary windings, said primary winding having terminals for connec-

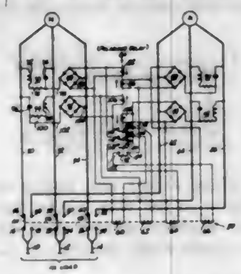
tion with a three phase source; multiple position contact switch means with one single phase and two sets of three phase input terminals, one set being connected to said primary winding and the other set being connected to said secondary winding, two single phase output terminals and a set of three phase output terminals on said switch, said three phase output terminals being alternatively connectable through said switch means to said primary winding and said secondary winding; a three pole double throw switch having two sets of input terminals and one set of output terminals; one set of said double throw switch input terminals connected to said three phase output terminals; a step-up transformer having a primary winding connected to said three phase output terminals and a secondary winding connected to the other set of said double throw switch input terminals; a three phase variac connected to the last-mentioned switch output terminals and having three output terminals; one single



phase and two three phase output receptacles; a reversible switch connected to two output terminals of said variac, the reversible switch having two output terminals one of which is connected to said receptacles and the other of which is connected to said single phase input terminal of said multiple position contact switch; one single phase output terminal of said multiple position contact switch being connected to one three phase receptacle and the other single phase output terminal connected to said single phase receptacle and the other three phase receptacle, the remaining output terminal of said variac being connected to said three phase receptacles whereby a three phase voltage of one magnitude can be obtained from one three phase receptacle for one alternative connection of said multiple position contact switch means and a three phase voltage and a single phase voltage of a different magnitude can be obtained from the other alternative connection of said multiple position contact switch means.

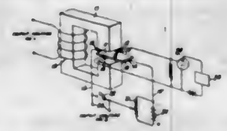
2,736,821
LOAD TRANSFER RELAYS
Russell W. Stineman, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash., a corporation of Delaware
Application June 12, 1953, Serial No. 361,274
12 Claims. (Cl. 307—64)

12. In a polyphase alternating current system including a normal alternating current power source, an alternate alternating current power source, load circuit means, and transfer switching means normally connecting said normal source to said load circuit means, said switching means being arranged and operable to disconnect said normal source from said load circuit means and connect said alternate source thereto, the combination comprising voltage detecting means connected to said normal source for detecting voltages from at least two phases of said normal source, similar voltage detecting means connected to said alternate source for detecting voltages from at least two phases of said alternate source, and sensing means responsively connected to both of said voltage detecting means and operatively connected to said transfer switching means for operating said switching means auto-



matically in response to a material decrease in the detected voltage of said normal source below the detected voltage of said alternate source.

2,736,822
HALL EFFECT APPARATUS
William C. Dunlap, Jr., Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application May 9, 1952, Serial No. 287,076
23 Claims. (Cl. 307—88.5)



1. Hall effect apparatus comprising a Hall plate including a germanium body member of predetermined polarity conductivity type and having a pair of input electrodes for supplying a current along one axis of said body member and a pair of output electrodes for providing an output Hall effect voltage developed along an orthogonal axis thereof, one of said input electrodes constituting a mobile charge emitting connection with said body member for emitting conduction carriers thereinto of opposite polarity to the conductivity type of said body member, means for establishing a magnetic field through said plate in a direction perpendicular to the plane thereof, and means for supplying to said mobile charge emitting electrode and relative to said other input electrode an electric potential having the same polarity as said emitted conduction carriers.

2,736,823
ACOUSTIC TRANSDUCER AND DAMPING ASSEMBLY
Charles Bradford Sheppard, Meadowbrook, Norman H. Goldich, Bala-Cynwyd, and Max H. Kraus, Elkins Park, Pa., assignors, by mesne assignments, to Sperry Rand Corporation, New York, N. Y., a corporation of Delaware
Application March 31, 1952, Serial No. 279,709
4 Claims. (Cl. 310—8.2)



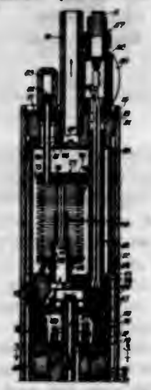
1. In an apparatus for the production and control of longitudinal waves in a wave transmitting medium, a transducer element including a piezo crystal, and multifaceted multifariously reverberating material secured to said crystal, said material comprising metal wool embedded in solder, and said solder comprising a mixture of tin and lead.

2,736,824
MAGNETOSTRICTIVE FERRITES
Walter van B. Roberts, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Application December 21, 1950, Serial No. 202,091
1 Claim. (Cl. 310—26)



A torsional mode magnetostrictive vibrator system comprising a substantially tubular ferrite resonator having closed magnetic flux lines disposed around and along the axis of said resonator, and means to establish a driving magnetic flux which is disposed at right angles to said closed magnetic flux lines and parallel with the axis of said resonator.

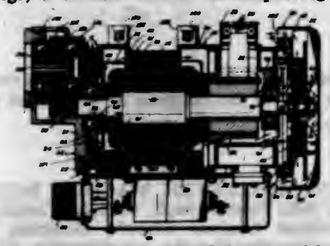
2,736,825
ELECTRIC MOTOR
Robert H. Hill, Fort Wayne, Ind., assignor, by mesne assignments, to Perfect Circle Corporation, Hagerstown, Ind., a corporation of Indiana
Application June 12, 1951, Serial No. 231,192
6 Claims. (Cl. 310—87)



1. An electric motor structure adapted for use with a reversible rotary pump comprising an elongated tubular housing structure having a sealed motor chamber at the lower portion thereof, said motor chamber containing a stator and a rotor and being filled with a supply of a protective fluid, partition means across said housing structure defining the upper end of said motor chamber, closure means at the upper end of said housing structure spaced above said partition means to define a second chamber therebetween, and pressure balancing means comprising an expansible bellows disposed in said second chamber with its interior in fluid communication through said partition means with the protective fluid in said motor chamber, said housing structure being provided adjacent said motor chamber with a plurality of circumferentially spaced axially extending fluid passages whereby to permit the passage of pumped fluid through the housing structure without contacting the operating parts of the motor contained in said motor chamber, and said passages being in fluid communication with said second chamber whereby to subject the exterior of said bellows to the pressure of the pumped fluid.

2,736,826
VENTILATED EXPLOSION-PROOF DYNAMO-ELECTRIC MACHINE
Vaino A. Hoover, Los Angeles, Calif.
Application April 13, 1953, Serial No. 348,516
9 Claims. (Cl. 310—88)

1. A dynamo-electric machine for use in an explosive fluid, comprising: a cylindrical housing, said housing being formed at one of its ends with an axially extending circumferential inlet opening and at its other end with an axially extending circumferential outlet opening; a stator core in said housing; a rotor in said housing; fan means mounted adjacent said outlet opening for drawing said fluid through the interior of said housing by means of said openings; a diffuser shroud encompassing said fan



means and arranged to direct the fluid moved by said fan means over the major portion of the exterior of said housing; and a flame arrester including a plurality of axially spaced cooling rings mounted by said housing adjacent each of said openings for reducing the temperature of the products of combustion of explosions produced within said interior.

2,736,827
MAGNETO ROTORS
Albin Buchmann, Soleure, Switzerland, assignor to Scintilla Ltd., Soleure, Switzerland
Application January 21, 1953, Serial No. 332,292
Claims priority, application Switzerland September 23, 1952
5 Claims. (Cl. 310—156)



1. A rotor for magnetos and the like, comprising, in combination, a plurality of permanent magnets formed in a closed ring and being located one next to the other, said ring having at its central opening a pluraliy of curved portions conforming to the lines of force of the magnets; a pair of end flanges respectively located against opposite faces of said ring, being made of a non-magnetic material, and being fixedly connected to each other and said ring, a part of one of said flanges forming with a part of another of said flanges a substantially cylindrical bore; a rotor shaft pressed into said bore and being fixed to said flanges; a housing for a centrifugal regulator located next to one of said flanges; and pivot pins located in said housing and having extensions which pass through said flanges and press the latter toward each other, said pins each being located between a pair of said curved portions of said ring.

2,736,828
COMMUTATION SYSTEM FOR UNIVERSAL MOTORS
Arthur Hemborough Maggs and Ambrose Ellison Young, Rugby, England, assignors to The British Thompson-Houston Company Limited, a British company
Application August 3, 1953, Serial No. 372,061
Claims priority, application Great Britain September 9, 1952
1 Claim. (Cl. 310—158)

An electric motor of the universal type comprising a stator forming a field system and provided with at least one pair of salient poles, a field winding on each of said poles, each of said pair of poles incorporating a shading ring embracing a portion of the pole at the trailing edge

thereof, an armature, and brushes co-operating with said armature, said brushes being positioned to bring at least



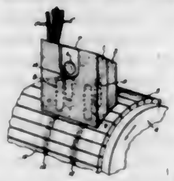
one side of each of the armature coils being commutated within the zone of the influence of the shaded portion of said poles.

2,736,829
DYNAMOELECTRIC MACHINE ROTOR
Hubert R. Sills, Peterborough, Ontario, Canada, assignor to Canadian General Electric Company, Limited, Toronto, Ontario, Canada, a corporation of Canada
Application September 30, 1953, Serial No. 383,219
Claims priority, application Canada October 11, 1952
12 Claims. (Cl. 310—218)



1. In a salient pole dynamoelectric machine rotor a pole body projecting from said rotor body, a coil surrounding the pole body, and a pole shoe projecting over the coil for restraining the coil from outward movement thereon, means for attaching the pole shoe to the pole body comprising a pinetree dovetail projection extending from the bottom of the pole shoe and means on the end of said pole body forming a complementary groove substantially parallel to the rotor axis providing serrations having surfaces for engaging said pinetree dovetail projection to secure said pole shoe to said pole body.

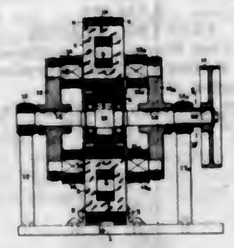
2,736,830
CURRENT-CONVEYING BRUSHES
Robert H. Savage, Scotia, N. Y., assignor to General Electric Company, a corporation of New York
Application July 25, 1951, Serial No. 238,472
13 Claims. (Cl. 310—228)



1. An electric contact-making brush comprising the combination of a main body consisting at least in part of carbonaceous material and one or more non-carbonaceous auxiliary inserts having current-carrying and filming properties forming part of said brush and being arranged to be exposed at the engaging surface thereof across only a portion of the lateral extent of said surface, said inserts including a component having chemical affinity for carbon.

2,736,831
ELECTRO-MACHINE WITH BALANCED ARMATURE REACTION
Paul Adam, Mulhouse, France
Application November 22, 1952, Serial No. 322,067
Claims priority, application France November 22, 1951
1 Claim. (Cl. 310—268)

An electric generator comprising a stationary structure formed with a central cylindrical aperture, a plurality of oblong rectangular soft-iron frames rigidly mounted on said structure around said central aperture in planes disposed radially thereto, said frames having their smaller sides parallel to the axis of said aperture and spaced at regular angular intervals thereabout so as to form an inner annular row and an outer annular row, a pair of output terminals, a conducting wire connected to one of said terminals, said conducting wire being wound successively around said smaller sides forming said inner annular row thus forming windings carried by said smaller sides and being connected subsequently to the other terminal of said pair of output terminals, a shaft extending through said central aperture, means for rotating said shaft, a pair of soft-iron disks rotatably fast with said shaft and disposed on either side of said structure, soft-iron cores fixed to each of said discs and disposed to form annular assemblies of the same radius as the said inner



annular row formed by said smaller sides of said frames, each core on one disc being opposite a core on the other disc, a pair of slip ring members rotatably fast with the said shaft, a second conducting wire connected to one of said rings, said second conducting wire being wound successively around said soft-iron cores and being connected subsequently to the other ring of said pair of rings, a source of electric current connected across said pair of rings, said source delivering direct current around said soft-iron cores and thus producing in said cores constant magnetic fluxes which pass intermittently through the said smaller sides forming the said inner annular row, thereby inducing an alternating current in the windings carried by said smaller sides, and short-circuited windings mounted around each of the said smaller sides forming said outer annular row, said short-circuited windings linking the magnetic flux induced in said frame and being energized by the current induced by said last flux.

2,736,832
HOOP ELECTRODE STRUCTURE
Renn Zaphiropoulos, Oakland, Calif., assignor to Chromatic Television Laboratories, Inc., New York, N. Y., a corporation of California
Application May 22, 1953, Serial No. 356,717
17 Claims. (Cl. 313—78)



1. Electrode structure comprising a light-transmissive base plate, hoop frame means positioned adjacent to one face of the base plate, resilient means securing the hoop frame means to the base plate, electrically conducting linear strands strung in substantially parallel chord fashion across the hoop frame means, and insulating means for securing the conducting strands to the hoop frame means in substantially uniformly spaced positions.

2,736,833
MEASURING CHAMBER FOR X-RAYS
Wijbe Johannes Oosterkamp, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application July 15, 1952, Serial No. 298,890
Claims priority, application Netherlands August 9, 1951
2 Claims. (Cl. 313—93)



2. An ionization gauge comprising a housing, an air-filled chamber in said housing, a pair of thin carbon coatings on opposite parallel walls of said chamber and spaced apart a distance of about 1 mm., a window in said housing communicating with said chamber for transmitting X-rays thereto, said window having a thickness of between about 0.2 and 0.5 mm. and exhibiting greater absorption for longer wave-length X-rays, and means for applying a potential between said pair of carbon coatings.

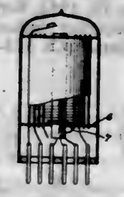
2,736,834
ELECTRON DISCHARGE TUBE COMPRISING A LUMINESCENT SCREEN
Franz Hermann Bitter, Hamburg, and Karl August Bisterfeld, Hamburg-Volksdorf, Germany, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application May 16, 1952, Serial No. 288,251
Claims priority, application Germany August 10, 1951
3 Claims. (Cl. 313—107.5)



1. An electrode system for a tuning indicator tube, comprising an elongated cathode having a given longitudinal axis, a wound grid electrode surrounding and concentric with said cathode, said grid having a variable winding pitch progressively decreasing in value toward one end of the cathode, an accelerating anode having an aperture therein spaced from said cathode and grid, said accelerating anode being inclined at an acute angle with respect to the axis of the cathode, and an elongated luminescent screen facing said cathode and being disposed substantially on the side of said accelerating anode remote from said cathode, said luminescent screen being aligned with the cathode and with said aperture in said anode, said luminescent screen being inclined at an acute angle with respect to said axis of said cathode different from the angle of inclination of said acceleration anode with respect to said cathode, said luminescent screen being closer to the other end of said cathode than to said one end.

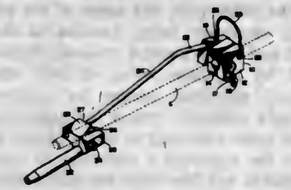
2,736,835
ELECTRIC DISCHARGE TUBE
Hendrikus Johannes Marie van Tol, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application June 12, 1952, Serial No. 293,069
Claims priority, application Netherlands June 22, 1951
3 Claims. (Cl. 313—331)

1. In an electric discharge tube the combination comprising a sleeve-type, indirectly heated cathode, said sleeve being provided with a collar adjacent to one end thereof, an insulating centering member positioned in said tube and having an aperture therein, part of said cathode being positioned in said aperture, and a relatively thin cathode supply conductor secured intermediate its ends to said cathode at a place at one end thereof adjacent to the



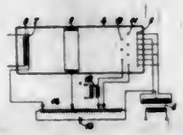
bottom circumferential edge of said cathode, said supply conductor having a free end held in said aperture between said collar and said centering member whereby said supply conductor and said collar coact to prevent said cathode from moving in axial directions thereof.

2,736,836
CARBON SAVER FOR MOTION PICTURE PROJECTORS
Delmer D. Osterhoudt, Des Moines, Wash.
Application October 18, 1954, Serial No. 463,016
5 Claims. (Cl. 314—1)



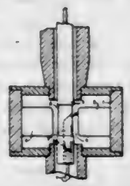
1. A positive carbon holder for an arc projector, comprising: a base block formed by a pair of juxtaposed plates having aligned recesses on their adjacent surfaces and a long carbon having one end portion positioned in said recesses and a clamp bolt in said block clamping said plates to said long carbon, one end portion of said bolt being of increased diameter abutting one of said plates and a pivoting block mounted on the enlarged portion of said bolt alongside said main block, said pivoting block having an arm extending therefrom having a bend in its central portion and straight end portions and a stub carbon block secured to the other end of said rod, said stop block being formed by a pair of juxtaposed clamping members and having a V rest on its upper surface in which said long carbon is received, a stub carbon and said clamp members having aligned recesses on their inner faces clamping the end of said stub carbon extending beyond the end of said long carbon, a rest member positioned below said stub carbon and having a groove in its upper surface in which said stub carbon rests for sliding movement toward the negative carbon and the lower surfaces of said clamp members being chamfered to slide through said groove and said long carbon being positioned to fall into said groove as said stub carbon and stub block pass said groove and fall, said rest member having secured to its lower end a horizontal base plate extending to one side thereof and a base member adapted to be secured to such projector on which the second end of said base plate rests, said second end of said base plate having an elongated slot and a bolt tapped into said base member and extending through said elongated slot and a secondary rest member extending horizontally laterally of said first base member and having an elongated slot in which said bolt is positioned and the end of said secondary base member having an inwardly sloping top rest surface to accept said stub block and rod as the stub block falls from said groove.

2,736,837
CATHODE-RAY TUBE
Jean Robert Perilhou, Johan Lodewijk Hendrik Jonker, and Benno Frederik Juergens, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application July 15, 1952, Serial No. 298,941
Claims priority, application Netherlands July 28, 1951
2 Claims. (Cl. 315—21)



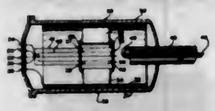
1. An electron discharge device comprising an electron gun including a cathode and accelerating anode for producing an electron beam, a collecting electrode, a pair of adjacent grids mounted between said collecting electrode and said accelerating anode and closer to the collecting electrode, each of said grids being constituted solely of a plurality of parallel fine wires lying in a single plane, the plane of the wires of one of said grids being spaced from and therefore different than the plane of the wires of the other grid, the wires of the grid adjacent the collecting electrode being parallel to the wires of the other grid and being located centrally behind the apertures defined by adjacent wires of said other grid, a source of D.-C. potential, means for applying a given potential to said cathode, means for applying potentials exceeding said given potential to said grid and accelerating anode, means for applying a potential to said collecting electrode which is not less than the potentials applied to said grids, said grids, accelerating anode and collecting electrode being spaced apart distances at which with the potentials applied thereto the beam is caused to converge towards the collecting electrode, a source of A.-C. control potentials, and means for applying A.-C. control potentials from said source to said pair of grids in different planes for deflecting the beam in accordance with said control potentials and to cause the beam to impact different portions of the collecting electrode.

2,736,838
STARTING APPARATUS FOR A COLD CATHODE ELECTRON DISCHARGE DEVICE
Richard B. Nelson, Mountain View, Calif., assignor to the United States of America as represented by the Secretary of the Army
Application April 3, 1951, Serial No. 218,927
7 Claims. (Cl. 315—39.63)



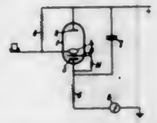
1. A secondary emission cathode for a discharge device having an electron emissive zone thereon, a channel formed in the cathode extending lengthwise thereof opening laterally into said zone and terminating in an angularly disposed target in line with said channel, a source of primary electrons in said channel remote from said emissive zone whereby primary electrons striking said target liberate secondary electrons into the space adjacent said zone.

2,736,839
MICROWAVE OSCILLATOR
Henry V. Neher, Pasadena, Calif., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application November 26, 1945, Serial No. 630,947
5 Claims. (Cl. 315—42)



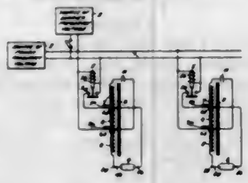
1. A microwave transit time oscillator tube comprising, an open ended conductive cylinder having two inwardly projecting anode vanes of rectangular cross section diametrically opposed, with a separation between the adjacent ends thereof substantially equal to the thickness of said vanes, a cathode disposed midway between said anode vanes, a pair of grids disposed respectively between said cathode and each of said anode vanes, a second pair of grids each disposed respectively between one of said first named grids and the adjacent anode vane, and an evacuated envelope containing the aforesaid components.

2,736,840
DEVICE COMPRISING A GLOW-DISCHARGE TUBE FOR AMPLIFYING VOLTAGE PULSES, AND GLOW DISCHARGE TUBE FOR USE IN SUCH DEVICES
Christopher Haly Tosswill, Carshalton, England, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application November 1, 1951, Serial No. 254,216
Claims priority, application Great Britain November 3, 1950
4 Claims. (Cl. 315—168)



1. A device for amplifying voltage pulses by means of a glow discharge tube in which the voltage pulse is fed to an ignition electrode arranged between anode and cathode and in which a capacitor is connected between anode and cathode and a high resistance is connected in series with the tube, characterised in that the glow discharge tube comprises between the cathode and the ignition electrode a grid-shaped auxiliary electrode which is connected to the cathode via a high resistance and which is spaced apart from the cathode by a distance such that it lies outside the region of the cathode drop.

2,736,841
ELECTROMAGNETIC SWITCHING MEANS
Harold W. Lord, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York
Application August 24, 1951, Serial No. 243,486
6 Claims. (Cl. 315—174)



1. In a frequency selective electromagnetic switching system for energizing an electric load device at the lower

of two frequencies from a pair of supply conductors having connected thereto in parallel circuit relation two sources of alternating current supply of appreciably different frequencies, an auto-transformer having loosely coupled primary and secondary windings providing a leakage reactance between said windings which is relatively inappreciable at said lower source frequency but which is appreciable at said higher source frequency, said auto-transformer having a pair of output terminals adapted to be connected to said load device and said primary winding having a pair of input terminals adapted to be connected to said supply conductors, a capacitor connected across at least said secondary winding, and having at said lower source frequency a reactance which is greater than said leakage reactance and which at said higher source frequency is less than said leakage reactance so that said leakage reactance serves as a current limit impedance in series with said capacitor for said higher source frequency but has no appreciable effect upon current flow at said lower source frequency and electromagnetic switching means connected to energize said load device through said transformer, said switching means being adapted to be connected for energization to said supply conductors and being selectively responsive to the higher of said source frequencies.

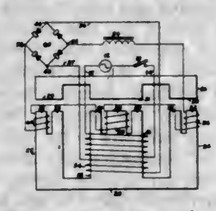
2,736,842
CIRCUIT COMPRISING AN ARC-DISCHARGE TUBE
Ernö Mann, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application March 7, 1952, Serial No. 275,419
Claims priority, application Netherlands April 17, 1951
3 Claims. (Cl. 315—263)



1. A circuit arrangement comprising a low-pressure arc-discharge tube having a given operating voltage and adapted to conduct a given value of current upon reaching the arc-discharge condition, said tube including a pair of activated main electrodes and an auxiliary electrode connected to one of the main electrodes and extending therefrom towards the other main electrode for igniting the tube without preheating the main electrodes, a potential source having a voltage greater than said operating voltage, and inductor having a given value of inductance connected in series with the tube and said source, an auxiliary impedance shunting said inductor, and a relay in series with said tube and responsive to the discharge current flowing through said tube to disconnect said auxiliary impedance from the circuit immediately after the discharge current through said tube has achieved a predetermined value.

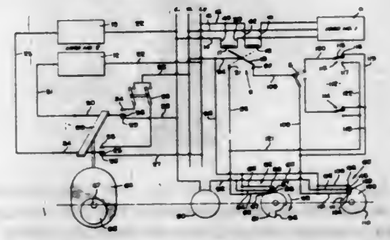
2,736,843
ALTERNATING CURRENT ELECTROMAGNETS
John F. H. Douglas and Arthur F. Kolb, Milwaukee, Wis., assignors to Cutler-Hammer, Inc., Milwaukee, Wis., a corporation of Delaware
Application July 25, 1952, Serial No. 300,862
6 Claims. (Cl. 317—156)

1. In an alternating current electromagnet, in combination, a magnetic structure comprising a pair of relatively movable elements, an alternating current energizing winding on one of the elements, a plurality of shading pole windings on at least one said pair of relatively movable elements, means including rectification means and a winding inductively related to said alternating current winding associated with said rectification means to supply unidirectional power to said shading pole windings, said shading pole windings being so wound and so disposed and so



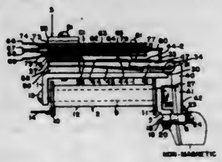
connected to said means that alternating voltages induced therein are effectively canceled.

2,736,844
ELECTRIC LOAD REGULATOR
Arthur J. Kercher, Berkeley, Calif., assignor of one-half to W. Wesley Hicks, San Francisco, Calif.
Original application October 10, 1949, Serial No. 120,510, now Patent No. 2,573,846, dated November 6, 1951. Divided and this application July 28, 1951, Serial No. 242,899
3 Claims. (Cl. 317—157)



1. In a control apparatus: a double throw switch having a switch arm movable between first and second contacting positions; means for cyclically moving said switch arm between said contacting positions; a motor for operating said moving means; a pair of circuit controllers for the motor, each having a pair of contacts, one contact of each being connected together and in electrical conducting relationship with said motor; means operated by said moving means for opening the contacts of one of the circuit controllers when said switch arm reaches second contacting position, and closing said contacts of said one circuit controller before said switch arm reaches first contacting positions; and means operated by said moving means for opening the contacts of the other of said circuit controllers when said switch arm reaches first contacting position, and closing said contacts of said other circuit controller before said switch arm reaches second contacting position.

2,736,845
ELECTROMAGNETIC COUNTING DEVICE
Richard P. Arthur, Chicago, Ill., assignor, by mesne assignments, to International Telephone and Telegraph Corporation, a corporation of Maryland
Application November 17, 1951, Serial No. 256,888
6 Claims. (Cl. 317—189)



1. In an electromagnetic counting device including an electromagnet and a series of armatures arranged side by side, the electromagnet including a main pole structure providing a tractive pole face extending along one

side of the armatures, control means including (1) means normally urging each armature toward a normal position and (2) means causing said armatures to move away from normal position toward the said tractive pole face in a counting sequence responsive respectively to the impulses of a series delivered to the electromagnet, said control means including auxiliary structure providing a path for delivering restraining flux through magnetic material from the main pole structure to the other side of each of said armatures for restraining any armature from moving away from normal position during an impulse, and non-magnetic members included in said auxiliary structure to provide two serially related non-magnetic gaps in said path which act together to secure a uniform restraining and releasing action as the armatures move successively away from normal position during the counting operation.

2,736,846
INTERFERENCE ELIMINATORS
Hall M. Gables, Venice, Calif.
Application July 14, 1951, Serial No. 236,774
2 Claims. (Cl. 317—230)



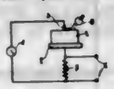
1. An interference eliminator for connection in an input circuit to a communication receiver comprising a pair of concentrically disposed silver cylinders spaced from each other to define an annular space therebetween, said annular space being filled with an electrolyte comprising an aqueous solution containing from five per cent to ten per cent silver nitrate.

2,736,847
FUSED-JUNCTION SILICON DIODES
Sanford H. Barnes, Los Angeles, Calif., assignor to Hughes Aircraft Company, Culver City, Calif., a corporation of Delaware
Application May 10, 1954, Serial No. 428,679
11 Claims. (Cl. 317—234)



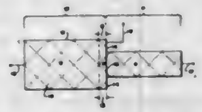
1. A fused-junction silicon diode comprising: a silicon crystal element having an acceptor-impurity-doped P-type region, an antimony-doped N-type region separated from said P-type region by a rectifying barrier, a layer of aluminum deposited on said P-type region and in ohmic contact therewith, a layer of gold deposited on said layer of aluminum, said gold layer blending with said aluminum layer, and an alloy button fused to said N-type region and in ohmic contact therewith, said alloy button including silicon, antimony, and gold; a first metallic electrode for supporting said crystal element, said first electrode having first and second ends; an insulative binder mechanically interconnecting said gold layer with said first end of said first electrode, said binder having gold particles dispersed therein to provide an ohmic connection between said first electrode and said P-type region; a vitreous tubular envelope for enclosing said crystal element, said envelope having first and second apertured ends, said first electrode extending through the aperture in said first end of said vitreous envelope and being hermetically sealed thereto whereby said crystal element is positioned within said envelope; a second metallic electrode having first and second ends, said second electrode extending through the aperture in said second end of said vitreous envelope and being hermetically sealed thereto whereby the first end of said second electrode extends within said envelope; and a resilient metallic element positioned within said envelope and electrically interconnecting said first end of said second electrode and said alloy button.

2,736,848
PHOTOCELLS
Albert Rose, Princeton, N. J., assignor to Radio Corporation of America, a corporation of Delaware
Original application March 3, 1949, Serial No. 79,348, now Patent No. 2,582,850, dated January 15, 1952. Divided and this application May 15, 1951, Serial No. 226,407
3 Claims. (Cl. 317—235)



1. A photo-conductive cell comprising a body of cadmium sulfide, two metallic electrodes in contact with said body with one of said electrodes having a point in contact therewith, the interior of said body containing donor impurities, a surface layer on said body containing acceptor impurities, and said electrode point being in contact with said surface layer.

2,736,849
JUNCTION-TYPE TRANSISTORS
Ronald W. Douglas and John W. Ryde, Wembley, England, assignors to Hazeltine Research, Inc., Chicago, Ill., a corporation of Illinois
Application December 23, 1952, Serial No. 327,482
Claims priority, application Great Britain December 31, 1951
6 Claims. (Cl. 317—235)



1. A junction-type transistor comprising: a body of semiconductive material including two members, one thereof having an electrical conductivity of one type in one zone thereof and an electrical conductivity of another type in another zone thereof and having a predetermined surface, and the other member having an electrical conductivity of said one type and a surface having an area less than that of said predetermined surface, said surface of said other member being heat and pressure bonded to said surface of said one member so that the interface of said surfaces has an area less than that of said predetermined surface; and means for making an electrical connection to each of said members and for making an electrical connection to said predetermined surface.

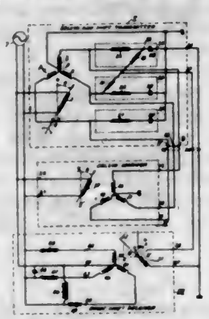
2,736,850
SELENIUM RECTIFIER CONTAINING TELLURIUM
Eric Lidow, Los Angeles, Calif.
Application November 24, 1952, Serial No. 322,291
4 Claims. (Cl. 317—241)

1. A selenium rectifier having a base plate, a semiconductor layer on the base plate and a counterelectrode layer over the semi-conductor layer, said semi-conductor layer comprising rectifier type selenium and tellurium in the proportion of about 90 to 1200 parts tellurium and



1,000,000 parts rectifier type selenium, by weight, whereby the threshold value of voltage in the reverse direction is substantially constant.

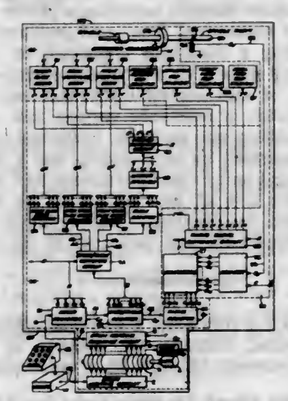
2,736,851
ELECTROMECHANICAL PHASE-SHIFTERS
Jean R. H. Dutilh, Paris, France
Application May 13, 1952, Serial No. 287,495
Claims priority, application France August 14, 1947
1 Claim. (Cl. 318—19)



An angular position data transmission device comprising, a multiple component output energy transfer device having a single phase input voltage circuit and four output component connections one of which being a neutral point, said device comprising inductive means having a rotor winding coupled to said input voltage circuit and a three-phase star-connected stator coupled to said output component connections and being so arranged that relative movement between the first and the second part produces relative variations of the alternating voltage component amplitudes between each output terminal coupled to one stator winding and the neutral terminal, three coupling networks constituted each by a capacitor having an impedance jX in series with a resistor having a value of $X\sqrt{3}$, these resistors being connected with the corresponding output terminals of said energy transfer device, and the capacitors being connected together to the neutral point, a high resistor connected with the point coupling the resistor and the capacitor in one phase, another high resistor which is double that of the former resistor connected with the output feeding the resistor of another phase, the output terminals of the device being the neutral point and the junction point of said high resistors wherefrom a voltage phase shifted with respect to the input voltage by the same angle as the angular rotor setting is collected.

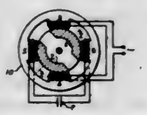
2,736,852
AUTOMATIC DIGITAL MOTOR CONTROL SYSTEM FOR MACHINE TOOLS
Eldred C. Nelson, Los Angeles, Calif.
Application January 10, 1955, Serial No. 480,836
19 Claims. (Cl. 318—162)

1. An automatic digital control system for automatically controlling mechanical motions of a tool of a tool machine in response to an order group, each order including at least two order sections of an order number section, a speed/angle instruction section, and a timing instruction section represented, respectively, by order number, speed/angle, and timing instruction binary electrical signals, the timing instruction section of each order indicating the time of execution of the order and time-referenced in a manner to allow sufficient time for the execution of the order before the execution of any other order of the order group, each order being time-referenced to an incremental motion of a selected moving part of the tool machine; said control system comprising: first means for storing an order group and for reproducing each order of the order group in a sequenital manner, each order being produced by said first means after the execution of the immediately preceding order; second means for developing counting binary signals in response to incremental motions of the selected moving part of the machine; third means coupled to said first and second means for



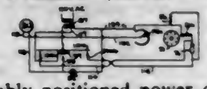
receiving the order number and timing instruction signals of each order produced by said first means, for comparing said counting binary signals with said timing instruction signals producing a time-reference signal each time a coincidence occurs between said counting binary signals and timing instruction signals, and for combining said timing signals with said order signals for producing a plurality of control timing signals; and fourth means coupled to said first and third means and responsive to said order number signals and said speed/angle signals produced by said first means, and said timing instruction signals produced by said third means for automatically controlling the motions of the tool of the machine.

2,736,853
INDUCED QUADRATURE FIELD MOTOR
Paul J. Selgin, Washington, D. C.
Application November 25, 1953, Serial No. 394,359
7 Claims. (Cl. 318—165)



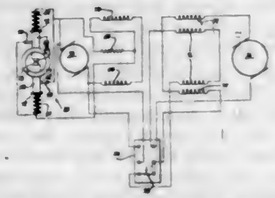
1. An alternating-current motor having a stator comprising two sets of circumferentially disposed poles, a primary winding on at least one of said sets arranged for connection to an alternating-current source, an independent winding on the other set connected in circuit relation with a capacitive reactance to form a composite secondary winding, and a rotor having a number of magnetic pole pieces each of sufficient arcuate extent to establish a low-reluctance magnetic circuit between two poles of respective sets when rotated to a position adjacent said two poles, there being otherwise only a high-reluctance magnetic path between the respective pole pieces of the rotor.

2,736,854
MOTOR OPERATED DEVICE AND REMOTE CONTROL THEREFOR
Wilbert A. Will, New Bremen, Ohio, assignor to Crown Controls Company, Inc., New Bremen, Ohio, a corporation of Ohio
Application November 25, 1949, Serial No. 129,265
6 Claims. (Cl. 318—289)



2. In a variably positioned power operated device including an electric driving motor, a remotely positioned control instrument therefor including a power source and a plurality of conductors from said instrument to said device including a conductor connected to said power source and said motor, an electrically operated indicator forming part of said control instrument and connected to said conductor, a resistance varying unit in said device for controlling said indicator connected to said conductor and operated by said device, and a return conductor from said unit to said instrument and a conductor from the other side of said instrument to said power source, whereby the position of said remotely positioned device is indicated by said indicator at the control instrument.

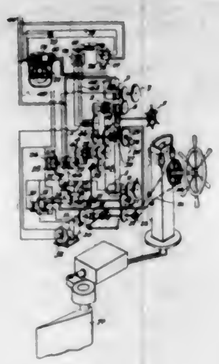
2,736,855
SPEED REGULATOR FOR A MOTOR GENERATOR
John G. Howard, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a corporation of New Jersey
Application March 18, 1953, Serial No. 343,066
13 Claims. (Cl. 318—325)



1. A safety device for a direct current electric motor having a field resistance comprising a brush holder having a guideway disposed on an axis intersecting a motor commutator means, brush means in said guideway having one end movable out of said brush holder for engagement with the commutator means and having the other end loaded by a continuous biasing means bottomed in said holder, and circuit means including a pair of interengaging switch contact members, one of said contact members being carried by said holder adjacent to said guideway and the other of said contact members being carried adjacent said other end of said brush means, thereby to engage near the outermost position of said brush means with respect to said holder, said circuit means being controlled by said contact members and being in circuit with said field resistance to automatically decrease the effective value of said field resistance and the speed of said motor in response to movement of said brush means toward said commutator means beyond a predetermined limit position.

2,736,856
ELECTRICAL RUDDER CONTROL APPARATUS
Jun-Ichi Sasaki and Minoru Kobayashi, Tokyo, and Kinzo Maeda, Kanagawa-ken, Japan, assignors to Kabushiki Kaisha Hokushin Denki Seisakusho, Tokyo, Japan, a corporation of Japan
Application May 4, 1951, Serial No. 224,506
Claims priority, application Japan May 18, 1950
4 Claims. (Cl. 318—489)

1. In apparatus for automatically controlling the steering of a craft provided with a rudder returning means responsive to the deviation of the craft from a prescribed course, a rudder checking means to prevent deviation of the craft beyond the prescribed course, means responsive to the angular velocity of deviation of the craft from the prescribed course and means connecting the said two rudder means and angular velocity of deviation means to a steering control device, that improvement comprising, a gyro-compass actuated azimuth motor which rotates in a direction and with a rotational velocity proportional to the angular and time deviation of the craft from the prescribed course, a rotary voltage regulator connected to said azimuth motor by a second-



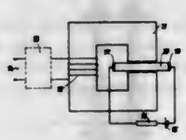
ary rotor in said voltage regulator to induce a voltage proportional to the angle of deviation of the craft from the prescribed course, and effectively measure the torque of said azimuth motor, a return-control voltage regulator to induce a voltage proportional to the angle of the rudder returning means, a reversible motor actuated by said rotary control voltage regulator and return-control voltage regulator which is connected to a steering motor, said steering motor being connected to said return-control voltage regulator and said reversible motor to control the rudder angle in response to the voltage of said return-control voltage regulator.

2,736,857
APPARATUS FOR CONTACT ARC SUPPRESSION IN AN ELECTRIC GENERATOR REGULATOR
Charles W. Klug, Chicago, Ill.
Application May 1, 1953, Serial No. 352,346
6 Claims. (Cl. 322—69)



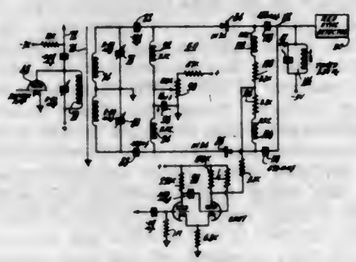
1. In an automobile, in combination, a generator having a field, contacts for intermittently energizing said field, a resistor, and a relay including an armature balanced about a pivotal axis, spring means urging said armature in one direction about said axis, electromagnetic means responsive to field current for urging said armature in a reverse direction, and contact means for limiting mechanical movement of said armature in said reverse direction and arranged for electrically connecting said resistor in circuit with said field.

2,736,858
CONTROLLABLE ELECTRIC RESISTANCE DEVICES
Heinrich Welker, Erlangen (Bay), Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Erlangen, Germany, a corporation of Germany
Application July 8, 1952, Serial No. 297,788
Claims priority, application Germany July 12, 1951
19 Claims. (Cl. 323—94)



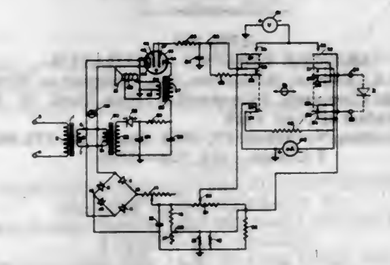
1. An electrical semiconductor device, comprising a crystalline semiconductor body of substantially intrinsic conductance having an elongated shape, two metallically conductive electrodes mounted on said body at the respective two longitudinal ends thereof, said body having two differently textured surface areas substantially opposite to each other and extending in the longitudinal direction of said body intermediate said two electrodes, one of said two areas having an etched surface texture for reduced surface recombination, and said other area having a polished surface texture for increased surface recombination.

2,736,859
COLOR PHASE ALTERNATION CONTROL SYSTEM
Dalton H. Pritchard, Princeton, N. J., and Alfred C. Schroeder, Huntingdon Valley, Pa., assignors to Radio Corporation of America, a corporation of Delaware
Application July 25, 1952, Serial No. 300,853
3 Claims. (Cl. 323—111)



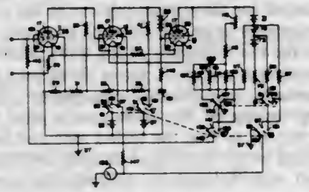
2. Apparatus for altering at a cyclic rate the phase of a wave appearing at a first output terminal with respect to the phase of a wave appearing at a second output terminal comprising in combination, a source of waves of a predetermined frequency, means for coupling said waves to said first terminal, a transformer having a primary and a secondary, said primary being coupled so as to be energized by waves provided by said source, a condenser connected in parallel with said primary, means for establishing the mid point of said secondary at ground potential for the waves of this predetermined frequency, a condenser connected between one end of said secondary and ground, a condenser connected between the other end of said secondary and ground, a diode, the cathode of the diode being coupled to one end of the secondary, the plate of said diode being coupled to said second terminal, another diode, the plate of the latter diode being coupled to the other end of said secondary, the cathode of the latter diode being coupled to said second terminal, means for applying a fixed potential to the cathode of one diode and to the plate of the other, means for applying a square wave to the plate of the one diode and the cathode of the other, and a tuned load circuit coupled between said second terminal and ground.

2,736,860
TESTER
Robert B. Trousdale, Rochester, N. Y., assignor, by mesne assignments, to General Dynamics Corporation, a corporation of Delaware
Application April 9, 1952, Serial No. 281,331
13 Claims. (Cl. 324—57)



5. In a diode tester, the combination of a first circuit for measuring the forward current of a diode under test potential; a second circuit for measuring the reverse current of a diode under test potential; means for connecting a particular diode to be tested to either of said first and second circuits at will, said means including terminals for accepting the leads from said particular diode under test; and means for giving a warning signal when said particular diode has less than a predetermined minimum value of back resistance but is connected to said terminals in correct polarity.

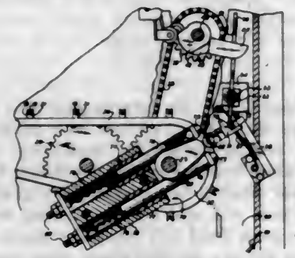
2,736,861
MULTIRANGE DIRECT CURRENT METER AMPLIFIER
Philip A. Duffy, Jr., Catonsville, and William J. Lee, Baltimore, Md., assignors, by mesne assignments, to the United States of America as represented by the Secretary of the Army
Application August 24, 1951, Serial No. 243,492
1 Claim. (Cl. 324—123)



In a multi-range apparatus for measuring direct currents; an amplifier with zero compensating means for each range comprising an electron discharge device, having an anode, a cathode, and a control electrode; means adapted to connect a source of direct current signals to said control electrode; a direct current meter connected in the anode-cathode circuit of said discharge device to indicate the magnitude of such signals; means for biasing said grid electrode to cause direct current of a predetermined magnitude to flow in the anode-cathode circuit of said discharge device with no signal applied to said grid electrode; bucking means connected to cause current having said predetermined magnitude but opposite polarity to flow thru said meter such that the net current flow thru said meter is zero when no signal is applied to said control grid; a plurality of direct current anode voltage sources, each connected in series with a resistor; means for selectively connecting any one of said voltage sources and its corresponding resistor in the anode-cathode circuit of said discharge device, the magnitudes of said resistors being such as to provide a plurality of sensitivity ranges for said meter, and the magnitudes of said voltage sources being such as to cause the load lines for each sensitivity range to intersect at a

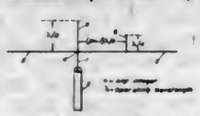
common point equivalent to a zero indication and at a predetermined current magnitude on the anode current versus anode voltage characteristic for said discharge device whereby any one of the plurality of sensitivity ranges may be selected without disturbing the zero adjustment of said indicator.

2,736,862
ARTICLE TESTING APPARATUS
Howard A. Tooker, Allentown, Pa., assignor to Western Electric Company, Incorporated, New York, N. Y., a corporation of New York
Application November 27, 1951, Serial No. 258,483
7 Claims. (Cl. 324—158)



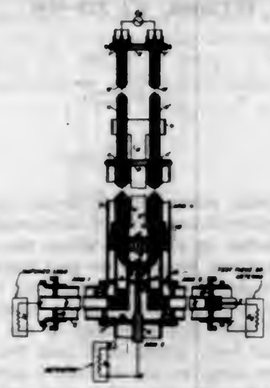
1. An apparatus for use in testing electrical units having substantially aligned terminals extending from opposing sides of the units, the apparatus comprising contacts mounted at spaced positions and included in a circuit with an electrical testing means, spaced parallel conveyors having aligned pairs of supports for the terminals of the units mounted at spaced positions thereon, companion members normally disposed in the paths of the terminals of the units, means to actuate the companion members simultaneously to remove the terminals of the successive units from their pairs of supports on the conveyors and position them singly adjacent their contacts, an element having insulated leg portions positioned to engage the terminals mounted for movement relative to the contacts, and means to normally urge the element to cause the leg portions to engage the terminals of the units while held singly by the companion members, move them into engagement with the contacts, hold them in engagement with the contacts during testing of the units and a cam actuable to move the element to free the tested unit and hold the legs of the element away from the contacts until the next unit is positioned with its contacts adjacent the contacts.

2,736,863
ELECTROMAGNETIC WAVE GUIDE SYSTEMS
Alfred Walter Gent and Ralph Thomas Lawrence, London, England, assignors to International Standard Electric Corporation, New York, N. Y.
Application May 29, 1952, Serial No. 290,782
Claims priority, application Great Britain July 13, 1951
2 Claims. (Cl. 333—9)



1. An arrangement for transferring high frequency waves between a coaxial line having outer and inner conductors and a single conductor transmission line, comprising an extension of said inner conductor from an open end of said coaxial line and extending at right angles to said transmission line, the inner conductor continuing beyond said transmission line a distance equal to an odd number of half wavelengths of said high frequency wave, and coupled thereto at the point of crossover.

2,736,864
BROADBAND HYBRID NETWORK
George Sinclair, Toronto, Ontario, Canada, and Robert B. Jacques, Columbus, Ohio, assignors, by mesne assignments, to Thompson Products, Inc., Cleveland, Ohio, a corporation of Ohio
Application June 6, 1950, Serial No. 166,398
3 Claims. (Cl. 333—11)

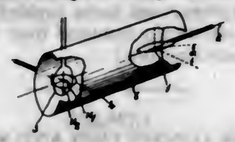


1. A broadband hybrid network comprising a single junction of four symmetrically disposed coaxial type transmission lines of which two are diametrically opposed transmission lines and a third transmission line all three of which are comprised of a single inner conductor and a single outer conductor, respectively, the remaining, fourth, transmission line comprising two parallel inner conductors and a single outer, hollow conductor shield; the hollow outer conductor of each of the two diametrically opposed of said symmetrically disposed transmission lines connected jointly at said junction to the hollow outer conductor of the third transmission line and to a hollow shield around the fourth transmission line therefor, the single inner conductor of one of said diametrically opposed transmission lines connected at said junction to one inner conductor of said fourth transmission line; the single inner conductor of the other of said diametrically opposed transmission lines connected at said junction to the other inner conductor of said fourth transmission line whereby said two diametrically opposed transmission lines and said fourth transmission line are series connected; and a single inner conductor of said third transmission line disposed at said junction and in the vicinity thereof, said inner conductor of said third transmission line being so positioned that all points thereon are substantially equidistant from the two inner conductors of said fourth transmssion line, and a coupling loop between the inner conductors of said fourth transmission line; said loop being adjustably positionable within the hollow outer conductor of said fourth transmission line to symmetrically feed wave energy into said fourth transmission line; and the junction end of the single inner conductor of said third transmission line is extended to a balance point in the loop and is coupled thereto; and a short circuit adjustably positionable across the outer termination of the two inner conductors of said fourth transmission line.

2,736,865
ADJUSTABLE PHASE-SHIFTING DEVICE FOR HIGH-FREQUENCY ALTERNATING VOLTAGES
Gunnar Thirup, Eindhoven, Netherlands, assignor to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application April 18, 1952, Serial No. 283,150
Claims priority, application Netherlands May 9, 1951
6 Claims. (Cl. 333—31)

1. An adjustable phase-shifting device for alternating voltages comprising means for producing a magnetic

rotational field, an output loop disposed without said means and rotatable about the axis of the rotational field, and a cylindrical wave-guide coupling the loop and the



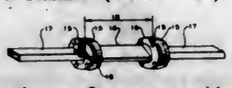
rotational field and having an axis coinciding with that of the rotational field, the diameter of said wave-guide being less than 0.578 times the wavelength corresponding to the frequency of the rotational field.

2,736,866
FILTER FOR TRANSMISSION LINE
André G. Clavier, Nutley, N. J., and David L. Thomas, Lee, London, England, assignors to International Standard Electric Corporation, New York, N. Y., a corporation of Delaware
Application March 27, 1950, Serial No. 152,132
13 Claims. (Cl. 333—73)



1. A high frequency band pass filter for use in conjunction with an insulated line conductor adapted singly to propagate high frequency energy through an electromagnetic field confined closely adjacent the surface of such conductor, comprising a single conductor and a plurality of groups of axially separated enlarged conductor sections extending outwardly about said conductor, each group consisting of a plurality of serially connected conductor sections, adjacent conductor sections of one group being spaced one wavelength apart, and adjacent conductor sections of a second group being spaced two wavelengths apart, the two groups being serially connected and the wavelength spacings representing the upper and lower cut-off wavelengths of said band pass filter.

2,736,867
CROSSED WAVE GUIDE VARIABLE IMPEDANCE
Dorothy D. Montgomery, Belmont, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application December 10, 1945, Serial No. 634,112
9 Claims. (Cl. 333—81)



1. In combination, a first wave guide of other than circular cross-section and a second wave guide dimensionally similar to the first, said first and second wave guides being disposed along a common longitudinal axis with cofacing ends in sufficient proximity to provide an aperture area therebetween effectively common to the apertures of said cofacing ends, said second wave guide being rotatable about its longitudinal axis, the impedance offered by said first and second wave guides in combination to electromagnetic fields travelling therethrough being determined by the angle through which said second wave guide is rotated relative to said first wave guide.

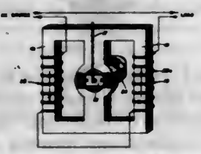
2,736,868
CAVITY TUNER
Persa R. Bell, Jr., Cambridge, Mass., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application January 11, 1946, Serial No. 640,448
13 Claims. (Cl. 333—83)

10. A tuning element for a cavity resonator comprising, a cylindrical dielectric rod, an axial recess in one end of said rod, and a U-shaped conductive member positioned within said recess, whereby the arms of said U-shaped



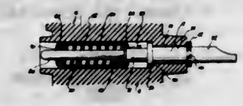
member and the walls of said cavity resonator form two series connected capacitors, the material of said rod functioning as the dielectric medium in said capacitors.

2,736,869
MECHANICO-ELECTRICAL CONVERTER
Harold B. Rex, Falls Church, Va.
Application August 20, 1952, Serial No. 305,521
3 Claims. (Cl. 336—30)
(Granted under Title 35, U. S. Code (1952), sec. 266)



1. A high gain pickup having a sharply defined null position including: a saturable core, a magnet movably positioned proximate the core for generating a magnetic flux therethrough whose density is related to the position of the magnet, a nonsaturable permeable member supported proximate the core and magnet and providing a magnetic shunt for the magnet in the null position. a coil wound about portions of the core, and means responsive to a measurable condition for changing the position of the magnet and diverting it from the shunted null position, thereby rapidly varying the saturation of the core and the inductance of the coil.

2,736,870
EASY-RELEASE DISCONNECTABLE ELECTRICAL CONNECTOR
Harry De Jur, New York, N. Y., and Leon Gilbert, Stamford, Conn., assignors to Continental Connector Corporation, Long Island City, N. Y., a corporation of New York
Application February 5, 1953, Serial No. 335,293
4 Claims. (Cl. 339—45)



1. An easy-release disconnectable electrical connector comprising two couplable connector parts, one connector part comprising an insulating support and a socket contact fixed thereto, and the other connector part comprising an insulating support provided with a deep recess and a pin contact fixed at one end to the insulating support at the base of the recess and having a front portion provided with a free and exposed end for electrical connection, the socket contact and pin contact being arranged for alignment and electrical connection when the connector parts are coupled together, and a spring-biased releasing means for the connector parts comprising a sleeve surrounding but spaced circumferentially from the front portion of said pin contact, and adapted to be engaged and moved axially by said socket contact, said sleeve being mounted in said recess for axially slidable movement therein between limits and guided by the walls of said recess, the said circumferential spacing permitting a limited transverse free-floating action of the said front portion of the pin con-

tact for enabling initial self-alignment of said pin contact with said socket contact, and a spring fully housed by said sleeve and active between a part of said pin contact and a part of said sleeve for biasing said sleeve towards the socket contact to effect the easy-release of the connector parts.

2,736,871
BAYONET CONNECTOR FOR DISTRIBUTOR TERMINAL
Max G. Bales, Anderson, Ind., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application June 30, 1952, Serial No. 296,377
4 Claims. (Cl. 339—94)



1. An electrical connector for use in combination with a terminal socket and an insulated conductor for forming a waterproof electrical connection therebetween, comprising in combination a cap member and a cooperating terminal socket member for receiving said cap; a bayonet connection between said members for releasably holding the members in assembled relation; a flanged metallic sleeve passing through an aperture in the upper end of said cap member and adapted to sealingly embrace an insulated conductor which is adapted to pass therethrough so as to be connectible to a portion of said socket member; a resilient gasket adapted to surround the conductor adjacent the lower end of said socket member and engage portions of the socket, and spring means adapted to surround said conductor and to bear against said gasket and the flange portion of said sleeve whereby, when said cap and socket members are assembled, said spring is under sufficient compression load to cause said gasket to seal against the conductor and the sleeve to seal against the cap member.

2,736,872
ELECTRICAL PLUG-IN CONNECTORS
Clarence Willans Heath, Bleasby, and Henry Graeme Aytoun Kay, Highgate, London, England, assignors to United Carr Fastener Corporation, Cambridge, Mass.
Application September 25, 1952, Serial No. 311,384
1 Claim. (Cl. 339—142)



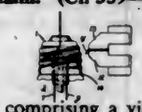
An electrical plug-in connector comprising a hollow terminal pin having a central conducting core and a braided metal outer cover adapted to be earthed, the said core being secured as by solder to the pin, said pin having a laterally-extending portion at its inner end, a pair of juxtaposed insulating blocks positioned to clamp said laterally-extending portion of the pin between their adjacent inner faces, a metal sleeve surrounding the metal braided outer cover of the cable or lead, the sleeve having an annular flange extending in parallel overlapping relation to the outer end face of the adjacent insulating block, the portion of the said outer cover of the cable being positioned to extend between said outer end face of said last mentioned block and the annular flange of the sleeve, and a metal housing having a substantially cylindrical body enclosing the insulating blocks and annular flange of the sleeve and having integral portions bent to respectively overlap the end face of the block adjacent to the terminal pin and the annular flange of the sleeve, whereby the parts of the connector are held in assembled relation with the housing in electrical conducting engagement with the sleeve and metal braided outer cover of the cable, but electrically insulated from the terminal pin and central conducting core.

2,736,873
LAMP BASE CONNECTION AND METHOD OF MANUFACTURE
Conrad E. Bechard, Mayfield Heights, and Waldemar P. Schoenoff, Cleveland, Ohio, assignors to General Electric Company, a corporation of New York; patent dedicated to the Public insofar as it relates to lamps and lamp parts to the extent stated in document recorded in the U. S. Patent Office, January 4, 1954, Liber U–238, page 394
Application December 1, 1951, Serial No. 259,338
4 Claims. (Cl. 339—146)



3. A connection between a lead-in wire of an electric lamp and a thin metal end contact member of a lamp base mounted on the lamp, said connection comprising a dome-shaped boss on said contact member having an aperture receiving the wire therein, the rim of said aperture being wedged in against the wire to tightly clamp the latter in place in said aperture and the said wire projecting outwardly of said boss and being bent over and being spun flat down onto and flush with the outer side of said boss.

2,736,874
ELECTRIC LAMP
Conrad E. Bechard, Mayfield Heights, and Waldemar P. Schoenoff, Euclid, Ohio, assignors to General Electric Company, a corporation of New York; patent dedicated to the Public insofar as it relates to lamps and lamp parts to the extent stated in document recorded in the U. S. Patent Office, January 4, 1954, Liber U–238, page 394
Application December 26, 1951, Serial No. 263,458
1 Claim. (Cl. 339—146)

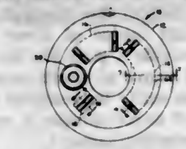


An electric lamp comprising a vitreous bulb having a neck portion and a lead-in wire emerging therefrom, a base comprising a generally cylindrical metal shell fastened to said neck portion, a seal shoulder in said neck portion having a diameter closely conforming to the inside diameter of the skirt of said shell to achieve a close fit therewith, said lead-in wire extending between said shoulder and said shell and being wedged between said shell and said shoulder, said lead-in wire being terminated at the point of emergence thereof from under the edge of said shell with a sharp bend partly around said edge just preceding the end of the wire and with the end of the wire lying against said edge, and with no portion of said wire projecting visibly beyond said edge.

2,736,875
ELECTRICAL RECEPTACLE
Edward H. Protz, Ann Arbor, Mich., assignor to Carter Parts Company, Chicago, Ill., a corporation of Illinois
Application December 22, 1951, Serial No. 262,939
3 Claims. (Cl. 339—198)

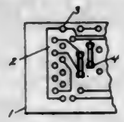
1. A terminal board unit for use with a rotary switch comprising a dielectric board having a plurality of radially

disposed slots extending therethrough and a plurality of spade type receptacles positioned within said slots each with one of its ends open to receive a spade type terminal and with its other end closed in flush relationship with



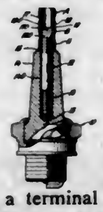
the surface of said board to provide a contact for a rotary switch element of said switch, at least two of said receptacles being joined at their other ends so as to form a relatively long unitary contact surface.

2,736,876
CONTACT CLIP
George Paul Gerbracht, Erie, Pa., assignor to Erie Resistor Corporation, Erie, Pa., a corporation of Pennsylvania
Application October 3, 1952, Serial No. 312,900
3 Claims. (Cl. 339—258)



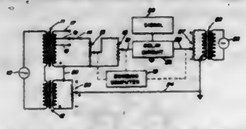
1. A contact clip assembly for elements in the form of a body having terminals at each end, comprising a support, a pair of spaced metal contact clips on the support, each having a base attached to the support, an upright wall integral with the base and transverse to the support, and spaced wings integral with the sides of the upright wall and converging toward each other and terminating in ends spaced apart in a distance less than the width between the sides of the upright wall, the wings on one of the clips extending toward the wings on the other of the clips, and the edges of the wings remote from the support being formed to provide entrances facing in the direction of the upright walls through which the terminals at each end of the body may be inserted by movement along the upright walls, said wings being spreadable by the terminals and the upright walls blocking endwise movement of the terminals.

2,736,877
SPARK PLUG TERMINAL
Wilfred A. Bychinsky, Ann Arbor, Mich., assignor to General Motors Corporation, Detroit, Mich., a corporation of Delaware
Application October 10, 1951, Serial No. 250,757
6 Claims. (Cl. 339—268)



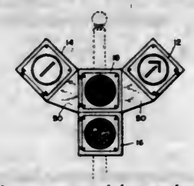
1. In a spark plug, a terminal including a relatively long head having an upper contoured portion to receive a cable terminal at the end thereof and a lower contoured portion to receive a cable terminal short of the end thereof, said head having a circumferential groove therearound between said contoured portions deeper adjacent the lower contoured portion than adjacent the upper contoured portion weakening the said terminal therebetween to permit breaking off the upper contoured portion accurately to provide a relatively shorter terminal spark plug.

2,736,878
DIVE-BOMBING BREAKAWAY COMPUTER
Edward B. Boyle, Jr., Severna Park, Md., assignor, by mesne assignments, to the United States of America as represented by the Secretary of the Navy
Application January 26, 1954, Serial No. 406,376
12 Claims. (Cl. 340—27)



1. A device which produces a signal when a dive bombing aircraft reaches a predetermined altitude comprising first means for producing a first voltage which is proportional to the airspeed, climb angle, instrumental errors inherent in obtaining said airspeed and climb angle, plus the altitude at which the aircraft is to start its upward climb after the dive has been completed, said first voltage being proportional to the altitude required to pull out of a dive plus a clearance altitude, second means for producing a second voltage which is proportional to the absolute altitude of the aircraft, and means for producing a warning signal when said first and second voltages bear a predetermined relationship to each other.

2,736,879
TRAFFIC SIGNAL
James Robert Ferguson, Bristol, Tenn., assignor of one-half to Bristol Steel & Iron Works, Inc., Bristol, Va.-Tenn., a corporation of Virginia
Application September 16, 1952, Serial No. 309,836
4 Claims. (Cl. 340—84)

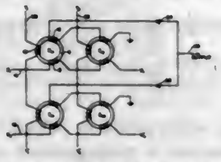


1. A traffic signal comprising a hollow central signal unit adapted to have branch signal unit secured thereto and to extend outwardly therefrom, said central signal unit comprising substantially horizontally disposed top and bottom walls, and substantially parallel side walls extending between and connected to said top and bottom walls, and a front face, said walls each having a pair of spaced parallel flanges projecting outwardly therefrom, each of said flanges being disposed adjacent an edge of a wall, a branch signal unit on one of said walls and engaging the flanges thereon, means to secure said units together, the front face of each unit being provided with an opening, a door to close said opening, a lens mounted in said door, a second branch signal unit mounted on one side of said first branch unit, means for mounting said second branch unit on said first branch unit comprising a triangular member attached to said first branch unit and having one side inclined downwardly with respect to said first branch unit, and said second branch unit being attached to said inclined side.

2,736,880
MULTICOORDINATE DIGITAL INFORMATION STORAGE DEVICE
Jay W. Forrester, Wellesley, Mass., assignor to Research Corporation, New York, N. Y., a corporation of New York
Application May 11, 1951, Serial No. 225,714
29 Claims. (Cl. 340—174)

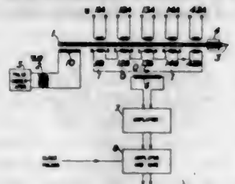
22. An information storage apparatus comprising a plurality of individual storage elements, each element hav-

ing two stable states and having a response-excitation characteristic of a substantially rectangular hysteresis-loop type, whereby any element will remain unchanged during one degree of excitation but is capable of changing upon a multiple of said excitation, the elements being arranged in groups according to two or more independent coordinates, whereby an element is uniquely designated by



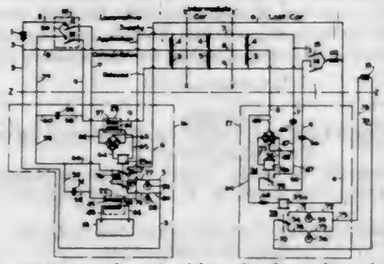
its coordinates, a plurality of energizing means for each element each capable of temporarily effecting a partial change of state and each being energized independently by one coordinate of that element, and circuit means to effect coincidental excitation of the energizing means of selected elements by energizing the coordinate groups including that element to control the transfer thereof from one stable state to the other.

2,736,881
DATA STORAGE DEVICE WITH MAGNETOSTRICTIVE READ-OUT
Andrew Donald Booth, Fenny Compton, England, assignor to The British Tabulating Machine Company Limited, London, England, a British company
Application April 22, 1952, Serial No. 283,785
Claims priority, application Great Britain July 10, 1951
15 Claims. (Cl. 340—174)



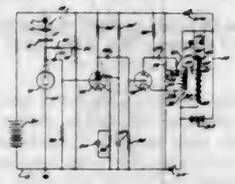
1. A method of storing and reproducing data comprising storing the data on a stationary magnetic member by selectively impressing on said member a plurality of discrete areas of remanent flux in accordance with said data said areas being spaced apart along said member, and reproducing said data as desired by transmitting a single read-out sonic impulse through all said areas and thereby momentarily varying the magnetic fields from said areas and detecting the change of flux resulting from the variation.

2,736,882
CIRCUIT INTEGRITY CHECKING SYSTEM
Andrew J. Sorensen, Edgewood, Pa., assignor to Westinghouse Air Brake Company, Wilmerding, Pa., a corporation of Pennsylvania
Application July 18, 1952, Serial No. 299,632
19 Claims. (Cl. 340—213)



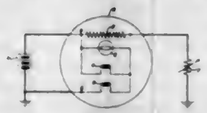
1. Apparatus for checking the integrity of a control circuit and of a source of direct current adapted to be connected to and disconnected from said control circuit for energizing and deenergizing same, said apparatus comprising a source of alternating current electrically interposed in series in said control circuit for generating flow of alternating current therethrough, and condenser means connecting said source of direct current to said control circuit to provide a path for flow of alternating current through said source of direct current and through said control circuit to verify the integrity thereof whether or not said source of direct current is connected to said control circuit for energizing same.

2,736,883
INTEGRATING RELAY AND SIGNAL MECHANISMS
Leonard Boddy, Ann Arbor, Mich., assignor to King-Seeley Corporation, Ann Arbor, Mich., a corporation of Michigan
Application June 10, 1955, Serial No. 514,585
25 Claims. (Cl. 340—213)



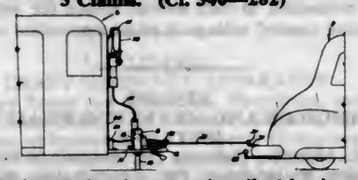
1. In an electrical network for association with a source of electrical potential the magnitude of which may be widely variable, a first circuit arranged to be energized from said source, ambient temperature compensated means providing a pulsating flow of electrical energy of a controlled but variable frequency through said circuit and current flow responsive means associated with said circuit and actuating a pair of contacts, said flow responsive means acting in response to current flow in said circuit to actuate said contacts for each said flow of said pulsating energy, a second circuit energized with a potential of a magnitude proportional to that of such source and including said contacts, and an integrating means for integrating the magnitude of average energy flow through said second ccircuit.

2,736,884
OVERCURRENT AND UNDERCURRENT INDICATING LAMP
Lucien Osborn Yeomans, Babylon, N. Y., assignor to American Telephone and Telegraph Company, a corporation of New York
Application February 9, 1954, Serial No. 409,225
6 Claims. (Cl. 340—253)



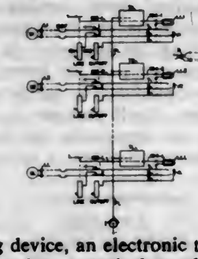
1. In an overcurrent and undercurrent indicating device, a source of potential, a first filament, a second filament, said filaments being of unequal resistance and connected in series across said source of potential, a negative temperature coefficient element connected in parallel with said first-mentioned filament, and means responsive to the magnitude of current in an external circuit to vary the temperature of said negative temperature coefficient element, thereby to cause one of said filaments to be illuminated during an overcurrent condition in said external circuit and the other of said filaments to be illuminated during an undercurrent condition in said external circuit.

2,736,885
TRAILER AND TOWING VEHICLE ALIGNING INDICATOR
William Lester Thompson, Orland, Calif.
Application March 14, 1955, Serial No. 494,200
3 Claims. (Cl. 340—282)



1. A device of the character described having a spring loaded take-up reel adapted to be attached to a trailer, a cord on said reel adapted to be attached to a towing vehicle, a guide adjacent said take-up reel through which the cord passes, said guide being adapted to turn in the direction said cord is extended, and an indicator turning with said guide and being visible from the towing vehicle showing the direction in which the cord is extended.

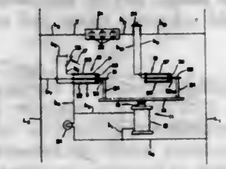
2,736,886
TELEPHONE SYSTEM PROVIDING TIME-DELAYED DISTINCTIVE CALL SIGNALLING
Arthur J. Radcliffe, Jr., La Grange, Ill., assignor to International Telephone and Telegraph Corporation, a corporation of Maryland
Application May 3, 1952, Serial No. 285,940
3 Claims. (Cl. 340—286)



1. In a timing device, an electronic tube having a cathode, an anode, and a control electrode, circuit elements providing a circuit path through the cathode and anode in series with a source of direct current, said circuit path being normally complete except for an open point between the negative pole of the current source and the cathode, a signal device connected in parallel with the cathode-anode circuit path, a control bridge connected between the cathode and the said current source and including a grid resistor and a timing condenser in series, the timing condenser being located between the grid resistor and the cathode, a connection from the junction of the grid resistor and condenser to said control electrode, means including said control bridge for maintaining said condenser normally charged to render the control electrode normally more negative than the cathode, means for closing said open point, thereby changing the potential of the cathode from positive to negative and energizing said signal device, said condenser acting to increase the said negative potential on the control electrode by substantially the value of the negative potential applied to the cathode, whereby the flow of cathode-anode current is blocked until some of the normal charge of the condenser has leaked off through said grid resistor.

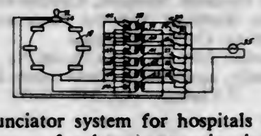
2,736,887
AIR RAID WARNING DEVICE
Ernest G. Hunsicker, Akron, Ohio
Application June 10, 1952, Serial No. 292,644
11 Claims. (Cl. 340—310)

1. An automatic warning device for use with an existing centrally controlled electrical wiring system of the type maintaining a source of electrical potential and normally utilized to operate various electrical appliances, including those of the class serviceable as a visible or audible warning signal means, said device comprising as a self-contained unit within a compact housing: an electrical connector having a portion presented outwardly of the housing for attachment of a said signal means; an electrical connector circuit having connected therein said connector, a normally closed connector switch, and means including an electrical extension cord from said



housing for connecting the circuit to a said system wiring; electrically energizable control means in a separate circuit to said means for connecting for holding said switch open when energized; means operable to maintain said control means energized as long as the current thereto from said system wiring is uninterrupted; whereby momentary interruption of said electrical potential is effective to deenergize said control means to close said connector switch and thereby close said connector circuit for operating a said signal means attached to said connector.

2,736,888
HOSPITAL ANNUNCIATOR SYSTEM
George H. McLain, Bedford, Ind.
Application February 9, 1953, Serial No. 335,644
10 Claims. (Cl. 340—316)



1. An annunciator system for hospitals comprising a centralized group of voltage responsive indicators each of which includes an attention light; a source of power; and a plurality of control circuits connected between said indicators and said source of power, each circuit comprising a plurality of transformers the secondary windings of which have different voltage outputs and are connected in multiple across one of said indicators to provide an indication correlated to a particular voltage output, normally open relay switch means connected across the secondary winding of each transformer for isolating non-energized secondary windings with respect to the output voltage of an energized secondary winding, and a plurality of signalling switches, each of which includes contacts connected between a primary winding of a different transformer and said source of power and other contacts connected between said attention signal and said source of power.

2,736,889
HIGH-SPEED ELECTRONIC DIGITAL-TO-ANALOGUE CONVERTER SYSTEM
Harold R. Kaiser, Woodlands Hills, Claude A. Lane, Culver City, and Wilford S. Shockency, Torrance, Calif., assignors, by mesne assignments, to Hughes Aircraft Company, a corporation of Delaware
Application April 2, 1953, Serial No. 346,393
13 Claims. (Cl. 340—347)

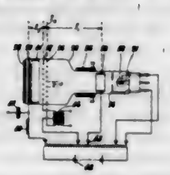
1. An electronic converter for developing an analogue output signal corresponding to an applied set of N digital input signals by changing the level of a variable output signal until it becomes equal to the analogue equivalent of the digital input signals, said converter comprising: a

register including N flip-flops for receiving said digital input signals and producing N corresponding output signals; first means coupled to said register and responsive to said output signals for producing a reference signal having a level equal to the analogue equivalent of the N digital input signals in said register; second means for producing a variable analogue output signal, said second means including a storage capacitor for producing said variable output signal, and charging and discharging circuits coupled to said storage capacitor; third means coupled to said first means and to said second means and responsive to said reference signal and to said variable



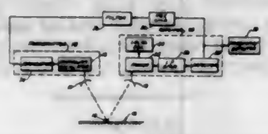
output signal for producing signals Co and $\overline{Co}$ when said reference signal is greater and less than said variable output signal, respectively; and fourth means coupling said second and third means for actuating said second means to increase and decrease the level of the variable output signal in response to signals Co and $\overline{Co}$, respectively, said fourth means including means for producing a charging signal Ch and a discharging signal Dc, said charging circuit being responsive to signal Ch to increase the level of said variable output signal in said capacitor and said discharging circuit being responsive to signal Dc to decrease the level of said variable output signal.

2,736,890
COLOR-TELEVISION CAMERA DEVICE
Jean Robert Perilhou, Johan Lodewijk Hendrik Jonker, and Benno Frederik Juergens, Eindhoven, Netherlands, assignors to Hartford National Bank and Trust Company, Hartford, Conn., as trustee
Application July 15, 1952, Serial No. 298,943
Claims priority, application Netherlands July 28, 1951
7 Claims. (Cl. 340—369)



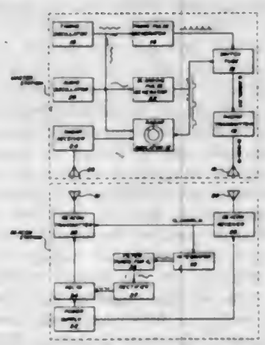
1. A color television camera device comprising a color filter constituted by a plurality of strips having different color absorption properties and periodically occurring in a given sequence, a photo-cathode sensitive to light rays passing through said filter, a target plate, a first source of potential, an electron gun including a cathode and an accelerating anode for producing an electron beam, means connected to said first source for applying a given potential to said cathode, a first grid comprising a plurality of parallel wires mounted between said accelerating anode and said target plate, a second grid comprising a plurality of parallel wires mounted between said first grid and said target plate, each of the wires of said second grid being parallel to the wires of said first grid and being located behind the center of an aperture formed by two adjacent wires of said first grid, means connected to said first source for applying potentials to said grids including a potential exceeding said given potential, means connected to said first source for applying a potential to said target plate at least equal to that applied to the grid having the lower potential, deflection means for causing the electron beam to scan the target plate, said target plate, grids and accelerating anode being spaced apart distances at which, with the potentials applied thereto, the beam forms at least one converging ray having a width measured at right angles to the direction of the grid wires at the area of impact on the target plate which is not more than two-thirds the width thereof measured at the area of the first grid, a second source of alternating control voltage, and means connected to said second source for applying an alternating control voltage in phase opposition to the two grids.

2,736,891
METHOD OF AND MEANS FOR MEASURING DISTANCE
Allen C. Munster, Hatboro, Pa., assignor to Philco Corporation, Philadelphia, Pa., a corporation of Pennsylvania
Application February 8, 1952, Serial No. 270,556
16 Claims. (Cl. 343—12)



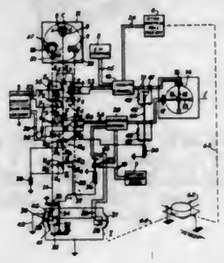
1. A method of measuring distance including the steps of radiating into space in a directive beam at the initial point of the distance to be measured a modulated, high frequency electromagnetic signal, receiving said modulated high frequency signal at the terminal point of the distance to be measured, detecting the modulation component of said received signal, causing said modulation component to produce the said modulation on said transmitted signal, limiting the frequency of the modulation on said transmitted signal to the lowest possible value, amplifying the said modulation component to a degree such that the system is self energizing as to said modulating component, and measuring the frequency of said modulation component to obtain a measure of said distance.

2,736,892
ECHO RANGING
Robert B. Moran, Jr., Pasadena, Calif., assignor to Moran Instrument Corporation, Pasadena, Calif., a corporation of California
Application December 14, 1950, Serial No. 200,737
11 Claims. (Cl. 343—13)



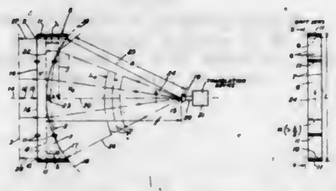
1. In echo ranging equipment including a master transmitter for radiating pulses at a predetermined repetition frequency, a transponder located at a distance from said master transmitter and including a receiver and slave transmitter for transponding radiated pulses, and registration means associated with said master transmitter for transponded pulses, the combination comprising means forming a part of said master transmitter to interrupt the pulses at a predetermined frequency which is less than the repetition frequency of the pulses, and means associated with said transponder to activate said slave transmitter responsive to and to transpond only received radiation interrupted at a predetermined frequency.

2,736,893
CRAFT GUIDANCE APPARATUS
Gert Sidney Zoege von Manteuffel, Wraysbury, and Colin Arthur Richardson, Ham Common, England, assignors, by mesne assignments, to The Sperry Gyroscope Company, Limited, Brentford, England, a British company
Application July 19, 1951, Serial No. 237,576
Claims priority, application Great Britain July 27, 1950
13 Claims. (Cl. 343—108)



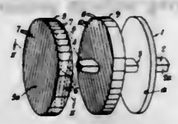
1. In a navigational aid for a dirigible craft, a system comprising elevation signal summation means including an amplifier capable of providing a control signal in proportion to the algebraic sum of a plurality of input signals thereto, glide path receiver means for supplying a signal that varies in accordance with the displacement of the craft vertically of a radio-defined glide path, means operable to connect the glide path signal in input fashion to said elevation signal summation means, sensitivity control means operable to increase the sensitivity of the system by a fixed amount, and signal-selecting means adapted to effect a substantially simultaneous operation of said last recited means with said glide path signal connecting means.

2,736,894
DIRECTIVE ANTENNA SYSTEMS
Winston E. Kock, Middletown, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a corporation of New York
Application January 22, 1946, Serial No. 642,723
18 Claims. (Cl. 343—753)



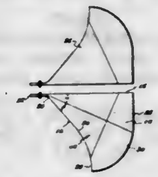
13. A stepped multiple-zone plano-elliptical lens comprising a pair of parallel stepped metallic plates and a dielectric medium included therebetween, each plate having at least one pair of arcuate notch edges corresponding to adjacent zone facets and a linear notch edge corresponding to a zone step and extending between the uncorrespondent extremities of said arcuate edges, said linear edge and the axis of said lens forming an acute angle smaller than the angle between said axis and a line passing through one of said uncorrespondent extremities and the focus of said lens.

2,736,895
HIGH FREQUENCY RADIO AERIALS
Charles Alexander Cochrane, Potters Bar, England, assignor to Elliott Brothers (London) Limited, London, England, a British company
Application February 15, 1952, Serial No. 271,679
Claims priority, application Great Britain February 16, 1951
10 Claims. (Cl. 343—756)



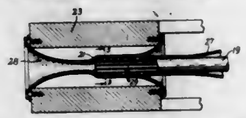
1. A high frequency radio aerial comprising a primary source emitting radiation polarized in a given plane, an auxiliary reflector arranged to be illuminated by said radiation and constructed to reflect substantially the whole of the incident radiation polarized in said given plane but to permit free passage of substantially all radiation incident thereon which has its plane of polarization at substantially 90° to said given plane, and a main reflector arranged to be illuminated by radiation reflected from said auxiliary reflector and constructed to re-reflect said reflected radiation as an emergent beam polarized in a plane substantially at 90° to said given plane and illuminating at least part of said auxiliary reflector.

2,736,896
HORN ANTENNA SYSTEM
Bernard Berkowitz, Jamaica, N. Y., assignor to Sperry Rand Corporation, a corporation of Delaware
Application December 4, 1951, Serial No. 259,862
9 Claims. (Cl. 343—776)



5. A horn for radiating electromagnetic energy in space, said horn including a relatively narrow planar wall, a flaring wall parallel to said plane wall for a small portion adjacent one end thereof and flaring at a relatively large angle to said planar wall throughout the remaining portion thereof, the outer half of the second wall gradually curving outwardly away from said planar wall and terminating substantially perpendicularly to said planar wall, and confining walls joining the longitudinal edges of the planar wall and the flaring wall, the four walls combining to form a substantially rectangular throat portion in the region in which the planar wall and flaring wall are parallel.

2,736,897
METHOD OF COVERING ROD-LIKE MATERIAL
John A. Parsons, Bainbridge, N. Y., assignor to American Plastics Corporation, New York, N. Y., a corporation of New York
Application September 2, 1953, Serial No. 378,154
3 Claims. (Cl. 18—59)



1. The method of applying a substantially blister-free, homogeneous, single-layered coating possessing frictional gripping qualities to rod-shaped material which comprises

feeding thermoplastic material in a heated and flowable condition through a grooved extrusion die orifice to form a continuous extruded tube larger than said rod-shaped material and having an exterior longitudinally-ridged surface, continuously introducing said rod-shaped material to be coated directly into said extruded tube thus providing an intermediate structure, passing said intermediate structure through a constriction chamber possessing expansible walls thereby applying uniform pressure to the exterior contours of said intermediate structure without completely flattening the exterior ridges of the tube of thermoplastic material to shape the form of said thermoplastic material to the contour of said rod-shaped material while simultaneously ejecting the vapors present within said intermediate structure, followed by cooling thereof, whereby the rod-shaped material is covered with an extruded tube of thermoplastic material presenting a longitudinally-ridged exterior surface.

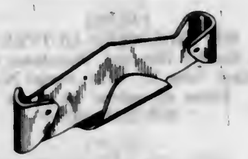
DESIGNS

FEBRUARY 28, 1956

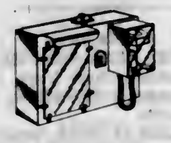
176,968
SPACE HEATER
Edwin C. Adams, Pittsburgh, Pa., assignor to Adams Bros. Mfg. Co., Inc., Pittsburgh, Pa., a corporation of Pennsylvania
Application May 8, 1953, Serial No. 24,914
Term of patent 3½ years
(Cl. D81—10)



176,969
HOLDER FOR A PAIR OF SPECTACLES
Lynn V. Adams, Raleigh, N. C.
Application March 10, 1955, Serial No. 34,988
Term of patent 7 years
(Cl. D57—1)



176,970
COIN-OPERATED ELECTRIC SHAVER UNIT
Matt E. Ambler, San Diego, Calif.
Application January 14, 1955, Serial No. 33,981
Term of patent 14 years
(Cl. D52—3)



176,971
BABY FOOD WARMING RACK
John D. Beinert, Babylon, N. Y.
Application March 22, 1955, Serial No. 35,150
Term of patent 14 years
(Cl. D44—1)



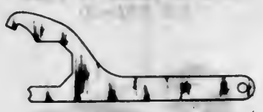
176,972
WEATHER VANE
John W. Bennett, Old Greenwich, Conn.
Application April 19, 1955, Serial No. 35,567
Term of patent 14 years
(Cl. D52—9)



176,973
HOLDER FOR A FLATIRON
William B. Braddock, Seattle, Wash.
Application January 18, 1954, Serial No. 28,544
Term of patent 14 years
(Cl. D49—6)



176,974
SPANNER WRENCH
Chauncey T. Brown, Seattle, Wash., assignor to Spring Load Manufacturing Corp., Seattle, Wash., a corporation of Washington
Application April 28, 1955, Serial No. 35,717
Term of patent 7 years
(Cl. D54—16)



176,975
BOTTLE
Arthur Raymond Dormer Chilton, East London, Cape of Good Hope, Union of South Africa, assignor to Motyer & Clement (Pty.) Limited, East London, Cape of Good Hope, Union of South Africa, a company of the Union of South Africa
Application July 29, 1954, Serial No. 31,647
Term of patent 14 years
(Cl. D58—8)



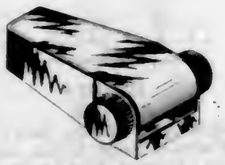
176,976
CLAMPING DEVICE FOR SCAFFOLD TUBES
Eric George Benjamin Crook, Osterley, England
Application August 2, 1955, Serial No. 37,285
Claims priority, application Great Britain February 9, 1955
Term of patent 14 years
(Cl. D54—2)



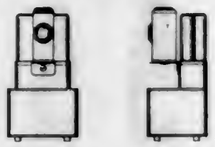
176,977
STEAM IRON
Robert O. Ernest, Oak Park, Ill., assignor to Sunbeam Corporation, Chicago, Ill., a corporation of Illinois
Application December 1, 1954, Serial No. 33,347
Term of patent 14 years
(Cl. D49—6)



176,978
COLLAPSIBLE TUBE PASTE DISPENSER
Edward J. Ernst, St. Johns, Mich.
Application April 22, 1955, Serial No. 35,633
Term of patent 14 years
(Cl. D52—2)



176,979
COMBINATION CIGARETTE STAND AND LIGHTER
Charles Getske, Miami, Fla.
Application May 5, 1955, Serial No. 35,824
Term of patent 14 years
(Cl. D48—27)



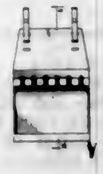
176,980
PHOTOGRAPHIC CAMERA
Clare E. Hodgman, Mamaroneck, N. Y.
Application May 4, 1954, Serial No. 30,328
Term of patent 14 years
(Cl. D61—1)



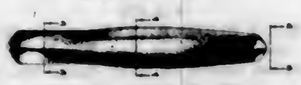
176,981
CUP OR SIMILAR ARTICLE
Lily Frona B. Holder, Temple City, Calif.
Application March 14, 1955, Serial No. 35,025
Term of patent 14 years
(Cl. D44—9)



176,982
HIP MOUNTED QUIVER
Jack Stanley Howard, Pasadena, Calif.
Application June 21, 1954; Serial No. 31,084
Term of patent 14 years
(Cl. D30—1)



176,983
KNIFE HANDLE OR THE LIKE
Leonard Garth Huxtable, New York, N. Y., assignor to Millers Falls Company, Greenfield, Mass., a corporation of Massachusetts
Application April 21, 1955, Serial No. 35,620
Term of patent 14 years
(Cl. D22—3)



176,984
FAN UNIT
Gustav H. Koch, Springfield, Mass., assignor to Westinghouse Electric Corporation, a corporation of Pennsylvania
Application September 10, 1954, Serial No. 32,239
Term of patent 14 years
(Cl. D26—7)



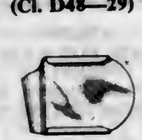
176,985
FRAME FOR A CHAIR OR SIMILAR ARTICLE
Clyde Chester Lamb, Milwaukie, Oreg.
Application October 18, 1954, Serial No. 32,708
Term of patent 14 years
(Cl. D15—1)



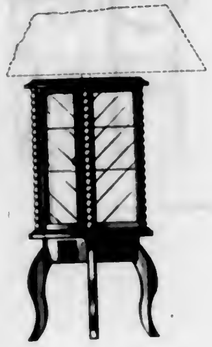
176,986
LIQUOR POURER
James E. McPhee, Culver City, Calif.
Application December 7, 1954, Serial No. 33,426
Term of patent 14 years
(Cl. D58—10)



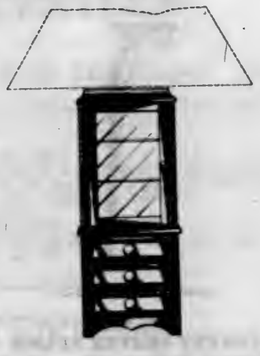
176,987
MATCHBOOK HOLDER
Edward D. Miller and Jesse Laurence Driscoll, Bellevue, Wash.
Application July 11, 1955, Serial No. 36,906
Term of patent 14 years
(Cl. D48—29)



176,988
COMBINATION LAMP BASE AND CABINET
John H. Miller, Kingsville, Md.
Application July 22, 1955, Serial No. 37,097
Term of patent 14 years
(Cl. D48—20)



176,989
COMBINATION LAMP BASE AND CABINET
John H. Miller, Kingsville, Md.
Application July 22, 1955, Serial No. 37,098
Term of patent 14 years
(Cl. D48—20)



176,990
MAILBOX SUPPORT OR THE LIKE
Robert W. Moore, Attleboro, Mass.
Application May 6, 1955, Serial No. 35,867
Term of patent 14 years
(Cl. D74—9)



176,991
MAILBOX SUPPORT OR THE LIKE
Robert W. Moore, Attleboro, Mass.
Application October 12, 1955, Serial No. 38,332
Term of patent 14 years
(Cl. D74—9)



176,992
MAILBOX SUPPORT OR THE LIKE
Robert W. Moore, Attleboro, Mass.
Application October 12, 1955, Serial No. 38,333
Term of patent 14 years
(Cl. D74—9)



176,993
COFFEE SERVER STAND
Daniel C. O'Connell, Bedford Village, N. Y., assignor to Sterno, Inc., New York, N. Y., a corporation of New York
Application December 2, 1954, Serial No. 33,372
Term of patent 14 years
(Cl. D81—10)



176,994
GAME SHEARS OR THE LIKE
Arthur Salm, Chicago, Ill., and Willi Spitzer, Solingen, Germany, assignors to Arthur Salm Inc., Chicago, Ill., a corporation of Illinois
Application May 18, 1955, Serial No. 36,096
Term of patent 14 years
(Cl. D22—5)



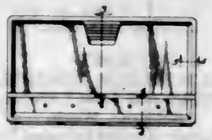
176,995
CLUTCH PURSE
Richard W. Samuelian, Fresno, Calif.
Application February 28, 1955, Serial No. 34,757
Term of patent 3½ years
(Cl. D87—3)



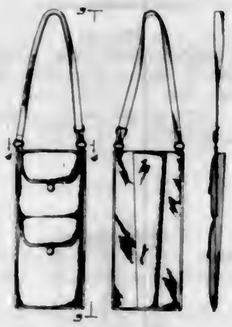
176,996
KNIFE SHARPENER
Leslie W. Seibert, Jr., Northbrook, Ill., assignor to Ekco Products Company, Chicago, Ill., a corporation of Illinois
Application September 9, 1954, Serial No. 32,200
Term of patent 14 years
(Cl. D37—1)



176,997
EVAPORATOR DOOR
Clifford Brooks Stevens, Fox Point, and John Hughes, Jr., Whitefish Bay, Wis., assignors to Gibson Refrigerator Company, Greenville, Mich., a corporation of Michigan
Application June 7, 1955, Serial No. 36,422
Term of patent 7 years
(Cl. D67—3)



176,998
CARRYING CASE FOR RAIN WEAR AND UMBRELLA
Ann Walla, Detroit, Mich.
Application September 30, 1954, Serial No. 32,486
Term of patent 14 years
(Cl. D87—5)



LIST OF REISSUE PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 28TH DAY OF FEBRUARY, 1956

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice).

American Mfg. Co., Inc.: *See*—
Pierce, Alfred F. Re. 24,124.
Cohen, Charles A., and L. A. Mikeska, to Esso Research and Engineering Co. Polycyclic dibasic acids. Re. 24,123, 2-28-56, Cl. 260—514.
Esso Research and Engineering Co.: *See*—
Cohen, Charles A., and Mikeska. Re. 24,123.
Mikeska, Louis A.: *See*—
Cohen, Charles A., and Mikeska. Re. 24,123.
Pierce, Alfred F., to American Mfg. Co., Inc. Sheet handling mechanism. Re. 24,124, Cl. 214—6.
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Woller, Edward E., to Simmons Co. Sofa bed. Re. 24,125, 2-28-56. Cl. 5—13.

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Adams, Edwin C. to Adams Bros. Mfg. Co., Inc. Space heater. 176,968, 2-28-56, Cl. D81—10.
Adams, Lynn V. Holder for a pair of spectacles. 176,969, 2-28-56, Cl. D57—1.
Ambler, Matt E. Coin-operated electric shaver unit. 176,970, 2-28-56, Cl. D52—3.
Beinert, John D. Baby food warming rack. 176,971, 2-28-56, Cl. D44—1.
Bennett, John W. Weather vane. 176,972, 2-28-56, Cl. D52—9.
Braddock, William B. Holder for a flatiron. 176,973, 2-28-56, Cl. D49—6.
Brown, Chauncey T., to Spring Load Mfg. Corp. Spanner wrench. 176,974, 2-28-56, Cl. D54—16.
Chilton, Arthur R. D., to Motyer & Clement (Pty.) Ltd. Bottle. 176,975, 2-28-56, Cl. D58—8.
Crook, Eric G. B. Clamping device for scaffold tubes. 176,976, 2-28-56, Cl. D54—2.
Driscoll, Jesse L.: *See*—
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Ekco Products Co.: *See*—
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Ernst, Edward J. Collapsible tube paste dispenser. 176,978, 2-28-56, Cl. D52—2.
Getske, Charles. Combination cigarette stand and lighter. 176,979, 2-28-56, Cl. D48—27.
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Holder, Lily F B. Cup or similar article. 176,981, 2-28-56, Cl. D44—9.
Howard, Jack S. Hip mounted quiver. 176,982, 2-28-56, Cl. D30—1.
Hughes, John, Jr.: *See*—
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Huxtable, Leonard G., to Millers Falls Co. Knife handle or the like. 176,983, 2-28-56, Cl. D22—3.
Koch, Gustav H., to Westinghouse Electric Corp. Fan unit. 176,984, 2-28-56, Cl. D26—7.
Lamb, Clyde C. Frame for a chair or similar article. 176,985, 2-28-56, Cl. D15—1.
McPhee, James E. Liquor pourer. 176,986, 2-28-56, Cl. D58—10.
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Miller, John H. Combination lamp base and cabinet. 176,988, 2-28-56, Cl. D48—20.
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Moore, Robert W. Mailbox support or the like. 176,992, 2-28-56, Cl. D74—9.
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Bingley, Frank J., to Philco Corp. Electrical systems. 2,736,764, 2–28–56, Cl. 178—5.4.
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Bowman, Joseph B. Door straightening tool. 2,736,359, 2–28–56, Cl. 153—35.
Boycott, Harold D. Clothes rack. 2,736,437, 2–28–56, Cl. 211—86.
Boyle, Edward B., Jr., to United States of America as represented by the Secretary of the Navy. Dive-bombing break-away computer. 2,736,878, 2–28–56, Cl. 340—27.
Boyles, Alonzo G. Kiln and ceiling structure therefor. 2,736,278, 2–28–56, Cl. 110—99.
Bradley, Theodore F., and R. W. H. Tess, to Shell Development Co. Polyhydric alcohol esters of rosin and a tert-alkyl benzoic acid and cellulose compounds containing them. 2,736,664, 2–28–56, Cl. 106—173.
Bråme, Sam S. Guide yoke. 2,736,616, 2–28–56, Cl. 308—6.
Brandt, Raymond W., to Gibbs Mfg. and Research Corp. Apparatus for testing timers or the like. 2,736,189, 2–28–56, Cl. 73—5.
Braunberger, Ray A. King pin lock for fifth wheels. 2,736,574, 2–28–56, Cl. 280—434.
Breuer, Frederick W., and B. F. Hofferth, to Armstrong Cork Co. Mercaptan modified hydrocarbon polymers. 2,736,723, 2–28–56, Cl. 260—79.5.
Brewster, Floyd E., Jr. Trestle assembly. 2,736,614, 2–28–56, Cl. 304—5.
Brier, Hyman, to The Commonwealth Engineering Co. of Ohio. Positive pressure journal bearing. 2,736,620, 2–28–56, Cl. 308—84.
Brinkmeyer, Francis M.: *See*—
Sorensen, Knud B., and Brinkmeyer. 2,736,155.
Bristol Steel & Iron Works, Inc.: *See*—
Ferguson, James R. 2,736,879.
Bristow, Mildred S.: *See*—
Bristow, Paul W. 2,736,177.
Bristow, Paul W., deceased, by M. S. Bristow, executrix, to Scott & Williams, Inc. Knitting machine and method. 2,736,177, 2–28–56, Cl. 66—14.
British Dielectric Research Ltd.: *See*—
Walker, Herbert, and Shen. 2,736,080.

British Tabulating Machine Co. Ltd., The: *See*—
Booth, Andrew D. 2,736,881.
British Thompson-Houston Co. Ltd., The: *See*—
Maggs, Arthur H., and Young. 2,736,828.
Britton, Karl B. Check valve. 2,736,338, 2–28–56, Cl. 137—516.29.
Britton, Vance B., to American Viscose Corp. Pipe and flange aligner. 2,736,286, 2–28–56, Cl. 113—102.
Brobeck, William M., to the United States of America as represented by the United States Atomic Energy Commission. Ion producing mechanism. 2,736,808, 2–28–56, Cl. 250—41.9.
Broge, Edward C., to E. I. du Pont de Nemours and Co. Process of methoxylating the surface of a siliceous material, and the resulting product. 2,736,668, 2–28–56, Cl. 106—308.
Brookman Co., Inc., The: *See*—
Deruette, Louis E. 2,736,074.
Brooks, Thomas E., to Lisle Corp. Cylinder hone. 2,736,146, 2–28–56, Cl. 51—184.4.
Broussard, Nolan P. Gas explosion means for a gun. 2,736,237, 2–28–56, Cl. 89—7.
Brown-Brockmeyer Co., The: *See*—
Brown, Steffen S. 2,736,553.
Brown, Cicero C.: *See*—
Potts, Ernest L. 2,736,384.
Brown Co.: *See*—
Day, George A., and Fenn. 2,736,636.
Brown, James W.: *See*—
Burnside, Harvey E. W., Jahnig, and Brown. 2,736,687.
Brown, Robert F. Electrical indicator. 2,736,782, 2–28–56, Cl. 201—55.
Brown, Steffen S., to The Brown-Brockmeyer Co. Door operator. 2,736,553, 2–28–56, Cl. 268—59.
Bruderer, Orlando J. Tank construction. 2,736,449, 2–28–56, Cl. 220—1.
Bruijning, Hugo G., to Hartford National Bank and Trust Co., trustee. Device for producing voltage-impulses of short-duration, wherein a discharge-path, which is conductive in a negative direction with respect to the pulses, is connected in parallel with the load. 2,736,800, 2–28–56, Cl. 250—27.
Brummerhoff, Walter, to Johann Vaillant Kommanditgesellschaft. Gas fired storage water heater. 2,736,498, 2–28–56, Cl. 236—20.
Brunetti, Leonello, and E. Alchera. Necktie retainer. 2,736,033, 2–28–56, Cl. 2—145.
Brunner, Henry, to Imperial Chemical Industries Ltd. Modified styrene compositions. 2,736,715, 2–28–56, Cl. 260—23.
Brusell, Ernest J. Multifocal inserts for ophthalmic lenses. 2,736,232, 2–28–56, Cl. 88—54.
Brusell, Ernest J. Multifocal inserts for ophthalmic lenses. 2,736,233, 2–28–56, Cl. 88—54.
Buchanan, J. D. Hydraulic pressure operated switch. 2,736,778, 2–28–56, Cl. 200—82.
Buchmann, Albin, to Scintilla Ltd. Magneto rotors. 2,736,827, 2–28–56, Cl. 310—156.
Buehner, Howard A., to A. O. Smith Corp. Adjustable stroke ram and piston assembly. 2,736,294, 2–28–56, Cl. 121—38.
Bull, James T.: *See*—
Ryerson, Clifford M., and Bull. 2,736,192.
Burge, James S., F. J. Foust, W. C. Shaw, W. M. Rider, and H. J. McKee, to General Motors Corp. Apparatus for attaching a terminal clip to a wire. 2,736,358, 2–28–56, Cl. 153—1.
Burgess-Manning Co.: *See*—
Johnson, Dale L. 2,736,406.
Burke, William O., to National Lock Co. Latch construction. 2,736,596, 2–28–56, Cl. 292—332.
Burnight, Thomas R. Pulse multiplex communication system. 2,736,772, 2–28–56, Cl. 179—15.
Burnside, Harvey E. W., C. E. Jahnig, and J. W. Brown, to Esso Research and Engineering Co. Shot heated fluid conversion system. 2,736,687, 2–28–56, Cl. 196—55.
Bush, Russell J., and C. L. Moorman, to General Motors Corp. Sealing strip. 2,736,076, 2–28–56, Cl. 20—69.
Butler, Donald: *See*—
Lowe, Arnold J., and Butler. 2,736,716.
Buttery, Kenneth T., to Sutherland Paper Co. Collapsible carton adapted for potted plants. 2,736,138, 2–28–56, Cl. 47—37.
Bychinsky, Wilfred A., to General Motors Corp. Spark plug terminal. 2,736,877, 2–28–56, Cl. 339—268.
C-O-Two Fire Equipment Co.: *See*—
Allen, Frank B. 2,736,388.
Siebens, Norman H. 2,736,385.
Calabrese, Thomas A. Collapsible and folding seats. 2,736,366, 2–28–56, Cl. 155—150.
Caldwell, Washington J. Method of and machine for winding coils continuously. 2,736,345, 2–28–56, Cl. 140—92.2.
Calfee, John D., and T. A. Wallace, Jr., to Allied Chemical & Dye Corp. Process for preparing trichloroacetyl chloride. 2,736,695, 2–28–56, Cl. 204—158.
Calou, Raymond P. Laundry counting device. 2,736,495, 2–28–56, Cl. 235—98.
Calou, Raymond P. Counting machine. 2,736,496, 2–28–56, Cl. 235—98.
Campbell, John E. Contour attachment for lathes and the like. 2,736,222, 2–28–56, Cl. 82—14.
Camras, Marvin, to Armour Research Foundation of Illinois Institute of Technology. Magnetic transducer head assembly. 2,736,775, 2–28–56, Cl. 179—100.2.
Camras, Marvin, to Armour Research Foundation of Illinois Institute of Technology. Magnetic recorder head assembly. 2,736,776, 2–28–56, Cl. 179—100.2.
Canadian General Electric Co., Ltd.: *See*—
Sills, Hubert R. 2,736,829.
Cantrell, Troy L.: *See*—
Smith, Herschel G., Cantrell, and Peters. 2,736,702.
Smith, Herschel G., Cantrell, and Peters. 2,736,703.
Cantrell, Troy L., and H. G. Smith, to Gulf Oil Corp. Detergent lubricating oils. 2,736,704, 2–28–56, Cl. 252—42.7.
Cantrell, Troy L., and H. G. Smith, to Gulf Oil Corp. Detergent lubricating oils. 2,736,705, 2–28–56, Cl. 252—42.7.
Caplin, Samuel M.: *See*—
Steward, Frederick C., and Caplin. 2,736,644.
Steward, Frederick C., and Caplin. 2,736,645.
Carhart, Richard L., to United States Steel Corp. Cold working lubricant for wire and the like. 2,736,609, 2–28–56, Cl. 252—18.
Carlson, Arthur J. Crane hook with reaction jet orienting means. 2,736,600, 2–28–56, Cl. 294—88.
Carlton, Cecil F. Air conditioner chassis. 2,736,176, 2–28–56, Cl. 62—129.
Carpenter, George C. Control device for model airplanes. 2,736,133, 2–28–56, Cl. 46—77.
Carr, Robert S.: *See*—
Bieber, Charles E., and Carr. 2,736,413.
Carter Parts Co.: *See*—
Protz, Edward H. 2,736,875.
Cartlidge, Frank, to Goodman Mfg. Co. Retractable boring assembly. 2,736,542, 2–28–56, Cl. 262—7.
Cartlidge, Frank, to Goodman Mfg. Co. Mining machine rotating cutter head with gear train drive. 2,736,545, 2–28–56, Cl. 262—20.
Catterall, William E., to Esso Research and Engineering Co. Aldehyde synthesis process. 2,736,750, 2–28–56, Cl. 260—604.
Celanese Corp. of America: *See*—
Myles, William J. 2,736,631.
Chadeloid Corp.: *See*—
Nack, Herman R., and Novak. 2,736,710.
Chamberlain Corp.: *See*—
Etten, Nicholas L. 2,736,372.
Chamberlain, Owen: *See*—
Wiegand, Clyde E., and Chamberlain. 2,736,801.
Chance Vought Aircraft, Inc.: *See*—
Bender, Edward E., Oates, and Phane. 2,736,356.
Dolan, Thomas E., and Murray. 2,736,515.
Chaplin, Herbert E., to The Fairey Aviation Co. Ltd. Sectional fuselage for aircraft. 2,736,523, 2–28–56, Cl. 244—140.
Chemische Werke Huls Aktiengesellschaft: *See*—
Reuter, Walter, Neumann, and Dietrich. 2,736,755.
Cherrier, Claude M., to Societe Anonyme des Manufactures des Glaces et Produits Chimiques de Saint-Gobain, Chauny & Cirey. Gas analysis. 2,736,813, 2–28–56, Cl. 250—43.5.
Chicago Telephone Supply Corp.: *See*—
Daily, Arthur M. 2,736,783.
Daily, Arthur M., and Arisman. 2,736,781.
Chichester, Sidnor T., Jr., ¼ to J. P. Parker. Handling system for aircraft. 2,736,520, 2–28–56, Cl. 244—114.
Chilton, Samuel A., ½ to R. R. Harrell, Jr. Hydropneumatic system for radiator repair lift. 2,736,169, 2–28–56, Cl. 60—51.
Chren, William A., and C. H. Hofrichter, Jr., to E. I. du Pont de Nemours and Co. Process for film casting. 2,736,066, 2–28–56, Cl. 18—57.
Christian, Joseph D. Driven drum power terminal. 2,736,209, 2–28–56, Cl. 74—421.
Christian, Joseph D., to The American Pulley Co. Gear reduction drive units. 2,736,210, 2–28–56, Cl. 74—421.
Christianson, Conrad J., to The Sherwin-Williams Co. Instrument for paint testing. 2,736,195, 2–28–56, Cl. 73—101.
Christofilo, Nicholas (or Philos). Focussing system for ions and electrons. 2,736,799, 2–28–56, Cl. 250—27.
Chromatic Television Laboratories, Inc.: *See*—
Zaphiropoulos, Renn. 2,736,832.
Chubb, Walston: *See*—
Schwope, Arthur D., and Chubb. 2,736,651.
Clark, Arnold F., to the United States of America as represented by the United States Atomic Energy Commission. Charge receptacles for use in ion source units. 2,736,810, 2–28–56, Cl. 250—41.9.
Clark, William R., and F. Hinkson. Mixing device. 2,736,535, 2–28–56, Cl. 259—102.
Clarkson, Ralph E., and T. W. van Wilgen, to Olin Mathieson Chemical Corp. Firearm with aluminum barrel and receiver. 2,736,117, 2–28–56, Cl. 42—75.
Clarkson, Ralph E., and T. W. van Wilgen, to Olin Mathieson Chemical Corp. Firearm with chamber member removably connected to receiver. 2,736,118, 2–28–56, Cl. 42—75.
Clarkson, Ralph E., and T. W. van Wilgen, to Olin Mathieson Chemical Corp. Firearm having chamber member integral with receiver. 2,736,119, 2–28–56, Cl. 42—75.
Clavier, André G., and D. L. Thomas, to International Standard Electric Corp. Filter for transmission line. 2,736,866, 2–28–56, Cl. 333—73.
Clay, Edward B., and A. J. D'Angelo, to Smith, Kline & French Laboratories. Automatic table coating apparatus. 2,736,288, 2–28–56, Cl. 118—19.
Clifford, Hilda B. Shutter for egg carrier. 2,736,456, 2–28–56, Cl. 220—31.
Clingen, Ryal F: *See*—
Stovall, John B. 2,736,316.
Clingman, Paul E., to General Motors Corp. Sealing strip. 2,736,404, 2–28–56, Cl. 189—78.
Coates, Nellgh C., to Concrete Saw Co. Track mounted cutter for concrete slabs and the like. 2,736,311, 2–28–56, Cl. 125—14.
Cochran, Charles R. Pin curl clip. 2,736,324, 2–28–56, Cl. 132—52.
Cochrane, Charles A., to Elliott Brothers (London) Ltd. High frequency radio aerials. 2,736,895, 2–28–56, Cl. 343—756.
Cockram, Reginald W. J., N. Sullivan, and C. F. Wilkinson, to The Pyrene Co. Ltd. Means for the release of compressed fluids from containers. 2,736,459, 2–28–56, Cl. 220—89.
Coffing, Frederick W., to Duff-Norton Co. Clutch and brake for a hoist. 2,736,408, 2–28–56, Cl. 192—16.

Coffing, Frederick W., to Duff-Norton Co. Drop hook. 2,736,599, 2–28–56, Cl. 294—83.
Coffman, James E., and T. W. Lloyd, to Harbison-Walker Refractories Co. Composite furnace block. 2,736,187, 2–28–56, Cl. 72—35.
Cohen, Ernest. Water-fed brush. 2,736,049, 2–28–56, Cl. 15—129.
Cohn, Samuel, and J. G. Walter, to Samcoe Holding Corp. Winding, measuring, and severing mechanism. 2,736,098, 2–28–56, Cl. 33—130.
Colby, Roy L., Jr., to National Steel Corp. Long span arch rib buildings. 2,736,397, 2–28–56, Cl. 189—1.
Cole, Edward H. Stapling machines. 2,736,024, 2–28–56, Cl. 1—3.
Cole, Theodore S., Jr. Split metal mold for packaging foods for freezing. 2,736,277, 2–28–56, Cl. 107—19.
Coleman, Charles G., Jr. Magnifying measuring scale. 2,736,097, 2–28–56, Cl. 33—107.
Coleman, William E., and G. H. Rendel, to United States Steel Corp. Sheet pin hole detector. 2,736,431, 2–28–56, Cl. 209—111.
Colgate-Palmolive Co.: *See*—
Apperson, Lester D., and Richardson. 2,736,683.
Collar, Frank R., to Adams Rite Mfg. Co. Sliding door lock assembly. 2,736,185, 2–28–56, Cl. 70—100.
Columbus Plastic Products, Inc.: *See*—
Roop, Nathan W. 2,736,129.
Roop, Nathan W. 2,736,452.
Commonwealth Engineering Co. of Ohio, The: *See*—
Toulmin, Harry A., Jr. 2,736,056.
Brier, Hyman. 2,736,620.
Nack, Herman R., and Whitacre. 2,736,788.
Novak, Leo J. 2,736,652.
Toulmin, Harry A., Jr. 2,736,502.
Comptoir Industriel d'Etirage et Profilage de Metaux: *See*—
Sejournet, Jacques, and Delcroix. 2,736,429.
Compton, Arthur M., to Standard Steel Works. Leaf spring, close-spaced tandem running gear. 2,736,571, 2–28–56, Cl. 280—104.5.
Conbere, John P.: *See*—
Rogers, Edward F., and Conbere. 2,736,733.
Concrete Saw Co.: *See*—
Coates, Nelgh C. 2,736,311.
Wright, Harold J. 2,736,544.
Conmar Products Corp.: *See*—
Scheuermann, Otto G., and Natzler. 2,736,062.
Connecticut Hard Rubber Co., The: *See*—
Kidwell, Alfred S. 2,736,680.
Kidwell, Alfred S. 2,736,720.
Conner, Clarence L. Tightening means for endless chains. 2,736,206, 2–28–56, Cl. 74—242.11.
Continental Connector Corp.: *See*—
De Jur, Harry, and Gilbert. 2,736,870.
Conyers, John E. Insect exterminator. 2,736,128, 2–28–56, Cl. 43—131.
Cook, Earle S., and R. T. Whitney, to Westinghouse Air Brake Co. Load compensating brake apparatus. 2,736,612, 2–28–56, Cl. 303—22.
Cooper, Benjamin, to Research Electronics & Devices Co., Inc. Toll checking system. 2,736,630, 2–28–56, Cl. 346—107.
Cooper, John D. Method of making signs of chain. 2,736,089, 2–28–56, Cl. 29—460.
Cornellier, Maurice H. Umbrella. 2,736,329, 2–28–56, Cl. 135—20.
Cornellier, Maurice H. Iron attachment. 2,736,789, 2–28–56, Cl. 219—25.
Cory Corp.: *See*—
Selbert, Ernest H., and Krause. 2,736,181.
Cramer, Martha K. Tissue holding cosmetic receptacle covers. 2,736,326, 2–28–56, Cl. 132—79.
Cranberg, Lawrence, to the United States of America as represented by the United States Atomic Energy Commission. Pulse height analyzer system. 2,736,802, 2–28–56, Cl. 250—27.
Crane, Henry M., to General Motors Corp. Independent spring suspensions for dirigible wheels. 2,736,570, 2–28–56, Cl. 280—96.2.
Crawford, John W. C., and J. S. Secker, to Imperial Chemical Industries Ltd. Purification of α-chloroacrylic acid derivatives. 2,736,744, 2–28–56, Cl. 260—486.
Cripps, Henry T. Apparatus for cutting drum cams. 2,736,242, 2–28–56, Cl. 90—13.9.
Crittenden, Adam J., and C. A. Lee, to Kimberly-Clark Corp. Papermaking machine. 2,736,246, 2–28–56, Cl. 92—44.
Crowley, Henry L., and A. M. Hossenlopp, to Henry L. Crowley & Co., Inc. Magnetic compositions. 2,736,708, 2–28–56, Cl. 252—62.5.
Crowley, Henry L., & Co., Inc.: *See*—
Crowley, Henry L., and Hossenlopp. 2,736,708.
Crown Controls Co., Inc.: *See*—
Will, Wilbert A. 2,736,854.
Culligan, Inc.: *See*—
Klumb, George H., Schulze, and Bergstedt. 2,736,698.
Cummings, Viola C. Metal Christmas tree. 2,736,116, 2–28–56, Cl. 41—15.
Currell, Norman C. Grease packaging, and dispensing means for grease guns. 2,736,481, 2–28–56, Cl. 226—125.
Curtis Lighting, Inc.: *See*—
Le Brack, Glen R. 2,736,528.
Curtiss-Wright Corp.: *See*—
Waite, George F. 2,736,610.
Cutler-Hammer, Inc.: *See*—
Douglas, John F. H., and Kolb. 2,736,843.
Dahl, Dorothy, Inc.: *See*—
Wood, Dan G. 2,736,025.
Daily, Arthur M., and M. B. Arisman, to Chicago Telephone Supply Corp. Variable resistor. 2,736,781, 2–28–56, Cl. 201—48.
Daily, Arthur M., to Chicago Telephone Supply Corp. Terminal construction for variable resistors. 2,736,783, 2–28–56, Cl. 201—55.
Dall, Edward D., to Houdaille-Hershey Corp. Refrigerator door lock. 2,736,594, 2–28–56, Cl. 292—216.
D'Angelo, Alfred J.: *See*—
Clay, Edward B., and D'Angelo. 2,736,288.
Dari-Go-Round, Inc.: *See*—
Atkins, Harold W. 2,736,274.
Atkins, Harold W. 2,736,534.
Dasher, Wayne G. Individually controlled race track. 2,736,556, 2–28–56, Cl. 273—86.
Davidson, Dewey, to Reeves Rubber, Inc. Machine for removing flash from molded rubber rings. 2,736,145, 2–28–56, Cl. 51—89.
Davis, Clyde O., R. C. Glogau, F. A. Loving, and J. P. Swed, to E. I. du Pont de Nemours & Co. Blasting means. 2,736,261, 2–28–56, Cl. 102—23.
Davis, Eddie R. Vehicular truck for carrying sofas or the like. 2,736,569, 2–28–56, Cl. 280—47.24.
Davis, George T.: *See*—
Tutt, Richard D., and Davis. 2,736,255.
Davis, William J., and R. B. Koch, to Polymer Corp. Equipment for making elongated shapes from polyamides. 2,736,057, 2–28–56, Cl. 18—12.
Davol Rubber Co.: *See*—
Raiche, Paul A. 2,736,446.
Day, George A., and E. F. Fenn, to Brown Co. Chlorine dioxide production. 2,736,636, 2–28–56, Cl. 23—152.
De Brock, Robert F., to Owens-Illinois Glass Co. Combined sealing ring and pour-out fitment. 2,736,447, 2–28–56, Cl. 215—40.
Deere & Co.: *See*—
Sorensen, Knud B., and Brinkmeyer. 2,736,155.
Deere, John, Van Brunt Co.: *See*—
Loomans, Robert E. 2,736,470.
Deere Mfg. Co.: *See*—
Andrews, Norman F., Slavens, and Adolphson. 2,736,152.
Bopf, Edward C. 2,736,489.
Degenfelder, Walter B., to Northrop Aircraft, Inc. Aircraft trim and artificial feel system. 2,736,518, 2–28–56, Cl. 244—83.
De Jur, Harry, and L. Gilbert, to Continental Connector Corp. Easy-release disconnectable electrical connector. 2,736,870, 2–28–56, Cl. 339—45.
Delcroix, Jean: *See*—
Sejournet, Jacques, and Delcroix. 2,736,429.
Delgar Inc.: *See*—
Gardel, Robert, and Rogovin. 2,736,135.
Delliheim, Arthur F., to The National Plastic Products Co. Extrusion apparatus. 2,736,058, 2–28–56, Cl. 18—12.
Delourme-Houde, Jean M. R. A.: *See*—
Fourneau, Jean P. 2,736,727.
Delphi Products Co., Inc.: *See*—
McMurray, Paul H. 2,736,567.
De Padova, Pasquale A.: *See*—
Teague, Walter D., Jr., and De Padova. 2,736,167.
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Selman, Roland W., Jr., and Landcraft. 2,736,654.
Deruette, Louis E., deceased, by T. M. Deruette, administratrix, to The Brookman Co., Inc. Control mechanism for multiple sash window structures. 2,736,074, 2–28–56, Cl. 20—42.
Deruette, Teresa M.: *See*—
Deruette, Louis E. 2,736,074.
Deutsche Gold- und Silber-Scheideanstalt, vormals Roessler: *See*—
Hoffmann, Ulrich, Schweitzer, and Rinn. 2,736,752.
Dexdale Hosiery Mills: *See*—
Berger, Emil J., and Matthews. 2,736,105.
Dexter, John F., to Dow Corning Corp. Adhesives from mixed siloxanes and, optionally, a titanium ester. 2,736,721, 2–28–56, Cl. 260—42.
Diamond Alkali Co.: *See*—
Olix, Donald J. 2,736,678.
Diano, Benedict F. and S. F. Mechanical door operator. 2,736,552, 2–28–56, Cl. 268—33.
Diano, Simeon F.: *See*—
Diano, Benedict F. and S. F. 2,736,552.
Dickinson, Sherman S., to Allis-Chalmers Mfg. Co. Axial contact seal. 2,736,579, 2–28–56, Cl. 286—11.
Diesel Power, Inc.: *See*—
Thaheld, Fred A. 2,736,137.
Dietrich, Wilhelm: *See*—
Reuter, Walter, Neumann, and Dietrich. 2,736,755.
Dillonburger, Robert A., to The Hamilton Tool Co. Rotary cut-off assembly with a pull-out roll. 2,736,380, 2–28–56, Cl. 164—201.
Dilts, Lee E., to General Electric Co. Filament mount testing apparatus. 2,736,194, 2–28–56, Cl. 73—88.
Dilts, Lee E., to General Electric Co. Method of stretching a filament. 2,736,344, 2–28–56, Cl. 140—71.6.
Dimitrieff, George. Detachable rock drill bit. 2,736,582, 2–28–56, Cl. 287—126.
Diogene, Henri C. J. M., to Hollywood-Maxwell Co. Elastic girdle. 2,736,029, 2–28–56, Cl. 2—37.
Ditirich, Rudolf. Method and apparatus for making crochet curtain materials and similar textile goods with a net-like basic pattern. 2,736,179, 2–28–56, Cl. 66—85.
Doan, Richard L., to Phillips Petroleum Co. Apparatus for determining relative permeability of formations. 2,736,197, 2–28–56, Cl. 73—155.
Dodd, Arthur E., to Westinghouse Air Brake Co. Lightout protection for 3-block 4-indication signalling system. 2,736,794, 2–28–56, Cl. 246—50.
Dolan, Thomas E., and J. B. Murray, to Chance Vought Aircraft, Inc. Synchronizing device for aircraft folding wing hydraulic systems. 2,736,515, 2–28–56, Cl. 244—49.
Dole Valve Co., The: *See*—
Bauerlein, Carl C. 2,736,465.

Domeshek, Sol. Means for translating perspective views into plan views. 2,736,094, 2–28–56, Cl. 33—1.

Domeshek, Sol. Photographic rectifiers. 2,736,230, 2–28–56, Cl. 88—24.

Donaldson, Harris M., and W. D. Hebern. Cotton bale tie means. 2,736,078, 2–28–56, Cl. 24—22.

Donley, Raymond J.: *See*—
Graham, Charles D., Jr., and Donley. 2,736,700.

Dorland, Robert R., to Bendix Aviation Corp. Carburetor. 2,736,540, 2–28–56, Cl. 261—43.

Douglas, John F. H., and A. F. Kolb, to Cutler-Hammer, Inc. Alternating current electromagnets. 2,736,843, 2–28–56, Cl. 317—156.

Douglas, Ronald W., and J. W. Ryde, to Hazeltine Research, Inc. Junction-type transistors. 2,736,849, 2–28–56, Cl. 317—235.

Dow Corning Corp.: *See*—
Dexter, John F. 2,736,721.

Downingtown Mfg. Co.: *See*—
McArn, Theodore A. 2,736,245.

Dr. Ing. h. c. F. Porsche K. G.: *See*—
Schmid, Leopold. 2,736,411.

Dros, Albert A. Engine-unit consisting of at least one working cylinder and at least one compressor cylinder. 2,736,488, 2–28–56, Cl. 230—56.

Drummond, Warren W., to Owens-Corning Fiberglas Corp. Method and apparatus for producing fibers. 2,736,070, 2–28–56, Cl. 19—144.

Drummond, Warren W., W. R. Steitz, and P. J. Frickert, to Owens-Corning Fiberglas Corp. Package for continuous strands. 2,736,512, 2–28–56, Cl. 242—159.

Drummondville Cotton Co. Ltd.: *See*—
Johnson, Donald S. 2,736,122.

Du Bois, Robert E. Electric resistor structure. 2,736,785, 2–28–56, Cl. 201—69.

Du Bois, Robert E. Resistor structure. 2,736,786, 2–28–56, Cl. 201—69.

Duchacek, Charles F.: *See*—
Pabst, Arthur C., and Duchacek. 2,736,667.

Dudchik, Nicholas: *See*—
Gardes, Alfred W., and Dudchik. 2,736,435.

Dueringer, Erwin G., and W. G. Martin, to A. O. Smith Corp. Method of unloading storage structures. 2,736,461, 2–28–56, Cl. 222—1.

Duff-Norton Co.: *See*—
Coffing, Fredrick W. 2,736,408.
Coffing, Fredrick W. 2,736,599.

Duff, Samuel. Piggeries and sewage drainage systems therefor. 2,736,291, 2–28–56, Cl. 119—16.

Duffy, Philip A., Jr., and W. J. Lee, to the United States of America as represented by the Secretary of the Army. Multirange direct current meter amplifier. 2,736,861. 2–28–56, Cl. 324—123.

Dumbauld, George K.: *See*—
Morgan, Bryan E., and Dumbauld. 2,736,661.

Duncan, Thomas W., to Whirlpool-Seeger Corp. Automatic refrigerator defrosters. 2,736,173, 2–28–56, Cl. 62—4.

Dungler, Julien. Selvedge drier-nozzle. 2,736,081, 2–28–56, Cl. 26—60.

Dungler, Julien. Cloth engaging means. 2,736,082, 2–28–56, Cl. 26—61.

Dungler, Julien. Drying apparatus for lengthy web material. 2,736,107, 2–28–56, Cl. 34—160.

Dunlap, William C., Jr., to General Electric Co. Hall effect apparatus. 2,703,822, 2–28–56, Cl. 307—88.5.

Dunn, Alfred L. Ignition shorting attachment for an internal-combustion powered lawn mower. 2,736,153, 2–28–56, Cl. 56—25.4.

Dunne, Maurice F., Jr. Pulley and method of making same. 2,736,205, 2–28–56, Cl. 74—230.3.

Du Pont, E. I., de Nemours and Co.: *See*—
Broge, Edward C. 2,736,668.
Chren, William A., and Hofrichter. 2,736,066.
Davis, Clyde O., Glogau, Loving, and Swed. 2,736,261.
Eckert, George F. 2,736,692.
England, David C., and Mock. 2,736,739.
Goebel, Max T., 2,736,669.
Harvey, John W., Jr., and Kraft. 2,736,184.
Lewis, Harold A., and Noddin. 2,736,263.
Selby, Donald W. 2,736,506.
Vinal, Leroy W. 2,736,609.
Yacoe, Jesse C. 2,736,434.

Dutilh, Jean R. H. Electromechanical phase-shifters. 2,736,851, 2–28–56, Cl. 318—19.

Durand, Eugene M. Fertilizer spreader, including variable speed auger. 2,736,467, 2–28–56, Cl. 222—177.

Dvorzsak, Charles. Method of making toupees. 2,736,325, 2–28–56, Cl. 132—53.

Dwight Mfg. Co., Inc.: *See*—
Westholt, Lloyd R. 2,736,442.

Eagle-Picher Co., The: *See*—
Milone, Louis J. 2,736,401.

Earp, James F., to Ex-Cello-O Corp. Container nesting mechanism. 2,736,149, 2–28–56, Cl. 53—7.

Eckel, Joseph C., to United States Steel Corp. Low metalloid enameling steel and method of producing same. 2,736,648. 2–28–56, Cl. 75—123.

Eckert, George F., to E. I. du Pont de Nemours & Co. Electrodeposition of tin. 2,736,692, 2–28–56, Cl. 204—54.

Ehlers, Fred J. Prime movers. 2,736,264, 2–28–56, Cl. 103—87.

Elsele, William H., to Thompson Products, Inc. Pump impeller construction. 2,736,266, 2–28–56, Cl. 103—115.

Eisler, Paul, to Technograph Printed Circuits Ltd. Metallised insulators. 2,736,677, 2–28–56, Cl. 154—127.

Elastic Stop Nut Corp. of America: *See*—
Hansen, Aage C. C. 2,736,561.

Elgin, Joseph C., to Phillips Petroleum Co. Recovery of ethylene. 2,736,756, 2–28–56, Cl. 260—677.

Elkins, Lee O. Silk crushing and crimping machine. 2,736,363, 2–28–56, Cl. 154—30.

Ellerbeck, Grant C., to Friden Calculating Machine Co., Inc. Square root mechanism. 2,736,492, 2–28–56, Cl. 235—63.

Ellerbeck, Grant C., to Friden Calculating Machine Co., Inc. Square root calculating machine. 2,736,493, 2–28–56, Cl. 235—63.

Ellerbeck, Grant C., and D. L. Rolph, to Friden Calculating Machine Co., Inc. Square root calculating machine. 2,736,494, 2–28–56, Cl. 235—63.

Elliott Brothers (London) Ltd.: *See*—
Cochrane, Charles A. 2,736,895.

Elliott, Ruth M.: *See*
Temple, Ruth M. 2,736,043.

Ellis, Ray C., Jr., to Raytheon Mfg. Co. Surface treatment of germanium. 2,736,639, 2–28–56, Cl. 41—42.

Elsner, Edwin C. Quick attachment fitting. 2,736,272, 2–28–56, Cl. 105—369.

Emerson Electric Mfg. Co., The: *See*—
Ammann, Bernard W. 2,736,346.

Engine Parts Mfg. Co., The: *See*—
Rogers, Edmund. 2,736,665.

England, David C., and G. V. Mock, to E. I. du Pont de Nemours & Co. Preparation of nitriles. 2,736,739, 2–28–56, Cl. 260—465.

Enoksson, Bertil P., to Nitroglycerin Aktiebolaget. Method of processing acid nitrated organic products. 2,736,742, 2–28–56, Cl. 260—467.

Erickson, Donald R. Manufacture of paper containing hydroxyethyl cellulose. 2,736,653, 2–28–56, Cl. 92—21.

Erickson, Karl H., to American Cabinet Hardware Corp. Operator for windows with swinging sashes. 2,736,595, 2–28–56, Cl. 292—262.

Erie Enameling Co., The: *See*—
Spencer, Herbert R. 2,736,399.

Erie Resistor Corp.: *See*—
Gerbracht, George P. 2,736,876.

Esher, Joseph C., to Baldwin-Lima-Hamilton Corp. Locomotive frame. 2,736,270, 2–28–56, Cl. 105—172.

Esso Research and Engineering Co.: *See*—
Burnside, Harvey E. W., Johnig, and Brown. 2,736,687.
Cutterall, William E. 2,736,750.
Mattox, William J., Richardson, and Krebs. 2,736,690.
Wilson, Howard L., Banes, Smith, and Nelson. 2,736,685.

Etten, Nicholas L., to Chamberlain Corp. Adjustable awning. 2,736,372, 2–28–56, Cl. 160—62.

Everard, Joseph J., to Paragon Electric Co. Multiple dial time switch. 2,736,377, 2–28–56, Cl. 161—1.

Ewing, Walkley B., to Borg-Warner Corp. Screen and frame Assembly. 2,736,376, 2–28–56, Cl. 160—395.

Ex-Cello-O Corp.: *See*—
Earp, James F. 2,736,149.

Fadden, Walter E., Jr. Tool rack. 2,736,628, 2–28–56, Cl. 312—305.

Fagan, Thomas F. Retainer for dental flasks. 2,736,061, 2–28–56, Cl. 18—33.

Fairey Aviation Co. Ltd., The: *See*—
Chaplin, Herbert E. 2,736,523.

Farjon, David. Combination planetary gear and fluid brake type transmission. 2,736,213, 2–28–56, Cl. 74—752.

Ellerbeck, Grant C., to Friden Calculating Machine Co., Inc. Auxiliary keyboard mechanism adapted for square root operations. 2,736,497, 2–28–56, Cl. 135—146.

Feeney, James F. Hypodermic syringe piston and actuating stem assembly. 2,736,315, 2–28–56, Cl. 128—218.

Feldman, Albert W.: *See*—
Smith, Allen E., Feldman, and Stone. 2,736,646.
Smith, Allen E., Feldman, and Stone. 2,736,647.

Fellows Gear Shaper Co., The: *See*—
Bean, Arthur I. 2,736,240.

Fenn, Edward F.: *See*—
Day, George A., and Fenn. 2,736,636.

Ferguson, James R., ¼ to Bristol Steel & Iron Works, Inc. Traffic signal. 2,736,879, 2–28–56, Cl. 340—84.

Ferrando, Juan V. and P. V. Underwater spear gun. 2,736,308, 2–28–56, Cl. 124—13.

Ferrando, Pedro V.: *See*—
Ferrando, Juan V. and P. V. 2,736,308.

Ferro, Anthony J., to Read Standard Corp. Pusher bar retractor for bread cooler. 2,736,419, 2–28–56, Cl. 198—75.

Fine, Jack E. Master drawbars for hayrakes. 2,736,154, 2–28–56, Cl. 56—27.

Firth Sterling, Inc.: *See*—
Grimshaw, Leonard C. 2,736,650.

Fischer, Rudolf G., to Socony Mobil Oil Co., Inc. Core sample micrometer. 2,736,099, 2–28–56, Cl. 33—147.

Fisk, Gustaf L., deceased; H. S. Fisk, executrix. Flying traction vise. 2,736,425, 2–28–56, Cl. 203—310.

Fisk, Hazel S.: *See*—
Fisk, Gustaf L. 2,736,425.

Flannery, James N.: *See*—
Armitage, Joseph B., and Flannery. 2,736,243.

Fleischer, S. S. C. Device for ensuring the correct sequence of threads in a warp. 2,736,084, 2–28–56, Cl. 28—22.

Flexigrip Inc.: *See*—
Staller, Karel J., and Svec. 2,736,079.

Flint, Thomas: *See*—
Fluke, John M., and Flint. 2,736,554.

Fluke, John M., and T. Flint, to American Machine & Foundry Co. Bowling pin spotting and respotting machine. 2,736,554, 2–28–56, Cl. 273—43.

Fluke, John M., to American Machine & Foundry Co. Bowling pin handling and changing machine. 2,736,555, 2–28–56, Cl. 273—43.

Flynn, Gregory, Jr., to General Motors Corp. Engine cylinder construction. 2,736,300, 2–28–56, Cl. 123—41.31.

Fogg, Daniel A., to The Pyle-National Co. Pull box for electrical conduit lines. 2,736,451, 2–28–56, Cl. 220—3.8.

Foltz, Franklin J.: *See*—
Riley, Walter E., Foltz, and Bennett. 2,736,334.

Food Machinery and Chemical Corp.: *See*—
McGraw, Leslie D. 2,736,640.

Forbes, Robert A. Lifting device for lifting heavy objects. 2,736,526, 2–28–56, Cl. 248—125.

Ford, Charles A. Cigarette holding device. 2,736,322, 2–28–56, Cl. 131—256.

Ford, Walter D.: *See*—
Baumler, Karl, and Ford. 2,736,142.

Ford, Walter D., to Pittsburgh Plate Glass Co. Method of pore closure for double glazed unit. 2,736,143, 2–28–56, Cl. 49—82.

Forrester, Jay W., to Research Corp. Multicoordinate digital information storage device. 2,736,880, 2–28–56, Cl. 340—174.

Forsberg, Harold S.: *See*—
Shore, William E. 2,736,203.

Forseth, George O. Coaster sled with flexible runners. 2,736,565, 2–28–56, Cl. 280—22.

Forsythe, George, and H. W. Russell, to Pacific Mills. Apparatus for coiling sliver in cans. 2,736,071, 2–28–56, Cl. 19—159.

Fourneau, Jean P., to Jean M. R. A. Delourme-Houde. Aminoethers. 2,736,727, 2–28–56, Cl. 260—247.7.

Foust, Floyd J.: *See*—
Burge, James S., Foust, Shaw, Rider, and McKee. 2,736,358.

Foxboro Co., The: *See*—
Smith, Graydon. 2,736,629.

Francis, Charles B., to Loftus Engineering Corp. Journal boxes and lubricants therefor. 2,736,619, 2–28–56, Cl. 308—79.

Francis, Ross M. Machine for sawing contoured margins on strips or panels. 2,736,349, 2–28–56, Cl. 143—26.

Frank, Paul A. Tire curing press. 2,736,059, 2–28–56, Cl. 18—17.

Franks, John D.: *See*—
Krebs, Charles H., and Franks. 2,736,477.

Frazier, Charles, to American Cyanamid Co.. Copolymers of vinyl aromatic compound, fatty acid ester of epoxy resin and a vegetable oil. 2,736,717, 2–28–56, Cl. 260—23.

Fredenall, Gordon L., to Radio Corp. of America. Color television receivers. 2,736,766, 2–28–56, Cl. 178—5.4.

Fredenhagen, Eva R. and F. A. Finger exercising glove. 2,736,034, 2–28–56, Cl. 2—161.

Fredenhagen, Franz A.: *See*—
Fredenhagen, Eva R. and F. A. 2,736,034.

Freed, H. S., & Co.: *See*—
Hines, Willis B. 2,736,365.

Freed, Herbert S.: *See*—
Hines, Willis B. 2,736,365.

Freeland, Frederick F. Illuminated tool. 2,736,972, 2–28–56, Cl. 240—6.46.

Fresch, Sylvester J., to Houdaille-Hershey of Indiana, Inc. Filter cartridge and method of making the same. 2,736,433, 2–28–56, Cl. 210—148.

Fresch, Sylvester J., to Houdaille-Hershey of Indiana, Inc. Filter cartridge unit and method of making the same. 2,736,436, 2–28–56, Cl. 210—203.

Frey, Norman E. Clothes drier. 2,736,438, 2–28–56, Cl. 211—104.

Frickert, Philip J.: *See*—
Drummond, Warren W., Steitz, and Frickert. 2,736,512.

Frickert, Philip J., Jr., to Owens-Corning Fiberglas Corp. Fibrous mats and production thereof. 2,736,676, 2–28–56, Cl. 154—54.

Friden Calculating Machine Co., Inc.: *See*—
Ellerbeck, Grant C. 2,736,492.
Ellerbeck, Grant C. 2,736,493.
Ellerbeck, Grant C. 2,736,497.
Ellerbeck, Grant C., and Rolph. 2,736,494.

Friel, James F.: *See*—
Baker, Calvin A. 2,736,351.

Fuchs, Carl, to Wolldeckenfabrik Zoeppritz Aktiengesellschaft. Shuttle replacing means for looms. 2,736,341, 2–28–56, Cl. 139—232.

Fürst, Stefan, and W. Reiners; said Fürst assor. to said Reiners. Thread winding apparatus. 2,736,505, 2–28–56, Cl. 242—36.

Fuschi, Antonio T. Tractor-trailer fifth wheel coupling safety means. 2,736,573, 2–28–56, Cl. 280—432.

Gables, Hall M. Interference eliminators. 2,736,846, 2–28–56, Cl. 317—230.

Gaddis, Glen D. Coin control switch.. 2,736,414, 2–28–56, Cl. 194—9.

Gaetzi, Karl, and P. Müller, to J. R. Geigy A. G. Basic phosphoric acid esters. 2,736,726, 2–28–56, Cl. 260—247.1.

Gardel, Robert, and A. Rogovin, to Delgar Inc. Walking mechanism for dolls. 2,736,135, 2–28–56, Cl. 46—149.

Gardes, Alfred W., to Houdaille-Hershey of Indiana, Inc. Magnetic clarifier. 2,736,432, 2–28–56, Cl. 210—1.5.

Gardes, Alfred W., and N. Dudchik, to Houdaille-Hershey of Indiana, Inc. Filter assembly. 2,736,435, 2–28–56, Cl. 210—183.

Garrett Corp., The: *See*—
Kuhn, John. 2,736,198.

Gates, Rowland F., to The Arrow-Hart & Hegeman Electric Co. Rotary electric switch. 2,736,780, 2–28–56, Cl. 200—168.

Gaudin, Antoine M., and R. Schuhmann, Jr., to the United States of America as represented by the United States Atomic Energy Commission. Process for extracting uranium from its ores. 2,736,634, 2–28–56, Cl. 23—14.5.

Gay, Cecil H., and G. J. and E. E. Schoessow, to The Babcock & Wilcox Co. Wall construction. 2,736,400, 2–28–56, Cl. 189—34.

Gaylord Container Corp.: *See*—
George, Walter C. 2,736,487.
Schoknecht, Robert J., and Spiegel. 2,736,460.

Gebhart, Floyd C. Ball and socket trailer coupling with connection facilitating means. 2,736,575, 2–28–56, Cl. 280—477.

Geigy, J. R., A. G.: *See*—
Gaetzi, Karl, and Müller. 2,736,726.

General Aniline & Film Corp.: *See*—
Glickman, Samuel A., and Wilkinson. 2,736,709.

General Dynamics Corp.: *See*—
McNaney, Joseph T. 2,736,770.
Trousdale, Robert B. 2,736,860.

General Electric Co.: *See*—
Bechard, Conrad E., and Schoenoff. 2,736,873.
Bechard, Conrad E., and Schoenoff. 2,736,874.
Dilts, Lee E. 2,736,194.
Dilts, Lee E. 2,736,344.
Dunlap, William C., Jr. 2,736,822.
Lord, Harold W. 2,736,841.
Morley, David H. 2,736,816.
Runciman, William A. 2,736,712.
Savage, Robert H. 2,736,830.
Songer, Leo W. 2,736,529.
Welch, Alanson U., Jr. 2,736,787.

General Electric Co. Ltd., The: *See*—
Levy, Maurice M. 2,736,773.

General Electric Co. Ltd., The: *See*—
Sowter, Anthony B., and Hilton. 2,736,090.

General Motors Corp.: *See*—
Bales, Max G. 2,736,871.
Burge, James S., Foust, Shaw, Rider, and McKee. 2,736,358.
Bush, Russel J., and Mormon. 2,736,076.
Bychinsky, Wilfred A. 2,736,877.
Clingman, Paul E. 2,736,404.
Crane, Henry M. 2,736,570.
Flynn, Gregory, Jr. 2,736,300.
Kennedy, Wallace M. 2,736,305.
Lincoln, Clovis W. 2,736,208.
Livezey, William G. 2,736,412.
Marvin, John T. 2,736,583.
May, Joseph. 2,736,219.
McDuffie, Archie D. 2,736,306.
Rasmussen, Olaf, and Rike. 2,736,396.
Riesing, Ellwood F. 2,736,584.
Riesing, Ellwood F. 2,736,585.
Riesing, Ellwood F. 2,736,586.

Gent, Alfred W., and R. T. Lawrence, to International Standard Electric Corp. Electromagnetic wave guide systems. 2,736,863. 2–28–56, Cl. 333—9.

George, Walter C., to Gaylord Container Corp. Cover locking means for a container. 2,736,487, 2–28–56, Cl. 229—45.

Gerbracht, George P., to Erie Resistor Corp. Contact clip. 2,736,876, 2–28–56, Cl. 339—258.

Gibbs Mfg. and Research Corp.: *See*—
Brandt, Raymond W. 2,736,189.

Gilbert, Leon: *See*—
De Jur, Harry, and Gilbert. 2,736,870.

Glge, Harrison S., to Quinlan Pretzel Co., Inc. Pretzel twisting machine. 2,736,276, 2–28–56, Cl. 107—8.

Gisholt Machine Co.: *See*—
Leifer, Lorenz A. 2,736,207.

Glenn, John E., to Northrop Aircraft, Inc. Aileron actuating mechanism. 2,736,519, 2–28–56, Cl. 244—90.

Glickman, Samuel A., and J. M. Wilkinson, to General Aniline & Film Corp. Hydraulic fluids. 2,736,709, 2–28–56, Cl. 252—74.

Glogau, Richard C.: *See*—
Davis, Clyde O., Glogau, Loving, and Swed. 2,736,261.

Glynn, Edwin A., to Super Mold Corp of California. Power mechanism for tire molds. 2,736,060, 2–28–56, Cl. 18—18.

Goebel, Max T., to E. I. du Pont de Nemours and Co. Method of activating and esterifying the surface of finely divided particles of silica having surface silanol groups. 2,736,669, 2–28–56, Cl. 117—54.

Goldberg, Bertrand, to U. S. Industries, Inc. Wood cellular laminated railway car. 2,736,273, 2–28–56, Cl. 105—404.

Goldberg, Moses W., and S. Teitel, to Hoffmann-La Roche Inc. Diamine compounds. 2,736,746, 2–28–56, Cl. 260—501.

Goldberg, Moses W., and S. Teitel, to Hoffmann-La Roche Inc. Butylamine derivatives. 2,736,747, 2–28–56, Cl. 260—563.

Goldrich, Norman H.: *See*—
Sheppard, Charles B., Goldrich, and Kraus. 2,736,823.

Goldman, Oscar G., Saw blade with inserted teeth. 2,736,312, 2–28–56, Cl. 125—18.

Gonski, Joseph, to Goodman Mfg. Co. Continuous mining machine having a conveyor and an adjustable cutter bar. 2,736,547, 2–28–56, Cl. 262—29.

Gooding, Pamela E., and A. H. McKeag. Luminescent silicates. 2,736,711, 2–28–56, Cl. 252—301.4.

Goodman Mfg. Co.: *See*—
Cartlidge, Frank. 2,736,542.
Cartlidge, Frank. 2,736,545.
Gonski, Joseph. 2,736,547.
McCallum, Robert A. 2,736,422.
Slomer, Joseph J. 2,736,543.

Goodyear Aircraft Corp.: *See*—
Ross, Robert S. 2,736,514.
Wolf, Edward. 2,736,516.

Goodyear Tire & Rubber Co., The: *See*—
Bender, Edward E., Oates, and Phane. 2,736,356.

Gordon, Lelia: *See*—
Gordon, Max and L. 2,736,655.

Gordon, Max and L. Process for making apple syrup. 2,736,655, 2–28–56, Cl. 99—142.

Gore, Warren J., to Bendix Aviation Corp. Electric probe. 2,736,784, 2–28–56, Cl. 201—63.

Gormley, Patrick. Window scaffold. 2,736,615, 2–28–56, Cl. 304—27.

Gorton, George, Machine Co.: *See*—
Henkes, Peter M. 2,736,241.

Graham, Charles D., Jr., and R. J. Donley, to the United States of America as represented by the United States Atomic Energy Commission. Lubricant for cold drawing of thorium wire. 2,736,700, 2–28–56, Cl. 252—25.

Graphic Arts Research Foundation, Inc.: *See*—
Higonnet, Rene, and Moyroud. 2,736,249.

Graviner Mfg. Co. Ltd.: *See*—
Mathisen, Anders, and Griffiths. 2,736,779.

Green, G. Edward: *See*—
Bernhardt, Adolph C., Jr. 2,736,478.

Greene, Clarence K. Radio plotter. 2,736,096, 2–28–56, Cl. 33—75.

Greer, Fred W., to J. W. Greer Co. Tray conveyor mechanism. 2,736,417, 2–28–56, Cl. 198—31.

Greer, J. W., Co.: *See*—
Greer, Fred W. 2,736,417.

Gregoire, Joseph P. Motor driven brush. 2,736,408, 2–28–56, Cl. 15—28.

Gregory, Vance P.: *See*—
Pfohl, Frank W., and Gregory. 2,736,658.

Greulich, Gerald G. Sheet metal airfield deck planks. 2,736,248, 2–28–56, Cl. 94—13.

Griffiths, Edward M., to National Glass Co., Inc. Method of surface treating and extruding die with chromium. 2,736,670, 2–28–56, Cl. 117—65.

Griffiths, Rupert: *See*—
Mathisen, Anders, and Griffiths. 2,736,779.

Grimshaw, Leonard C., to Firth Sterling, Inc. Low alloy high speed steel. 2,736,650, 2–28–56, Cl. 75—126.

Grisdale, Richard O.: *See*—
Baker, William O., and Grisdale. 2,736,642.

Gulf Oil Corp.: *See*—
Cantrell, Troy L., and Smith. 2,736,704.
Cantrell, Troy L., and Smith. 2,736,705.
Smith, Herschel G., Cantrell, and Peters. 2,736,702.
Smith, Herschel G., Cantrell, and Peters. 2,736,703.

Gunning, Harry E., and A. Kahn, to Illinois Institute of Technology. Method of producing hydrazine. 2,736,693, 2–28–56, Cl. 204—157.

Gunning, Harry E., and C. C. McDonald, to Illinois Institute of Technology. Hydrazine production. 2,736,694, 2–28–56, Cl. 204—157.

Gwynne, Jacob M. Metal frame constructions. 2,736,403, 2–28–56, Cl. 189—76.

Hale, Randall H. Cervical brace. 2,736,314, 2–28–56, Cl. 128—87.

Hall, James A. Auto-rotative combustion heater. 2,736,369, 2–28–56, Cl. 158—4.

Hall, William D.: *See*—
Toulon, Pierre M. G. 2,736,235.

Hamilton, Clark H. Drill, tap and die index. 2,736,426, 2–28–56, Cl. 206—17.

Hamilton Tool Co., The: *See*—
Dillenburger, Robert A. 2,736,380.

Hancock Mfg. Co.: *See*—
Marple, Rollo. 2,736,186.

Hancox, Burton W. Low pressure sealing valves. 2,736,333, 2–28–56, Cl. 137—232.

Hanft, Charles: *See*—
Bockelmann, John B., and Hanft. 2,736,190.
Bockelmann, John B., and Hanft. 2,736,191.

Hanley, Harvey H. Combustion chamber and method of mixing and burning fuel. 2,736,168, 2–28–56, Cl. 60—39.69.

Hannes, Paul, to Koppers Co., Inc. Roll crusher with means to axially adjust the position of at least one roll. 2,736,504, 2–28–56, Cl. 241—231.

Hansen, Aage C. C., to Elastic Stop Nut Corp. of America. Holders for rotary tools. 2,736,561, 2–28–56, Cl. 279—75.

Hanson, Robert L., and W. E. Kock, to Bell Telephone Laboratories, Inc. Distant-talking telephone system. 2,736,771, 2–28–56, Cl. 179—1.

Hanson-Van Winkle-Munning Co.: *See*—
Hauck, Paul A. 2,736,441.

Harbison-Walker Refractories Co.: *See*—
Coffman, James E., and Lloyd. 2,736,187.

Hardie, Harry L. Automatic valve apparatus. 2,736,037, 2–28–56, Cl. 4—26.

Hardimon, Robert H. Shoe. 2,736,110, 2–28–56, Cl. 36—58.5.

Hardman, James A., to Utah Scientific Research Foundation. Counterbalance drive mechanism for reciprocating cutters. 2,736,156, 2–28–56, Cl. 56—296.

Hardy, Maurice E., to Zenith Radio Corp. Phonograph speed indicator. 2,736,228, 2–28–56, Cl. 88—14.

Harmon, Edward H., to Aluminum Co. of America. Forging aluminum alloy disc wheels. 2,736,674, 2–28–56, Cl. 148—12.7.

Harrell, R. R., Jr.: *See*—
Chilton, Samuel A. 2,736,169.

Harrer, Theodore S., to Allied Chemical & Dye Corp. Ore roasting apparatus. 2,736,550, 2–28–56, Cl. 266—31.

Hartford National Bank and Trust Co.: *See*—
Bitter, Franz H., and Bisterfeld. 2,736,834,
Bruijning, Hugo G. 2,736,800.
Hugenholtz, Eduard H. 2,736,803.
Lubben, Gerrit J. 2,736,798.
Mann, Ernö. 2,736,842.
Neeteson, Pieter A. 2,736,804.
Oosterkamp, Wijbe J. 2,736,833.
Perilhou, Jean R., Jonker, and Juergens. 2,736,837.
Perilhou, Jean R., Jonker, and Juergens. 2,736,890.
Schagen, Pieter. 2,736,767.
Thirup, Gunnar. 2,736,865.
Tosswill, Christopher H. 2,736,840.
Van Tol, Hendrikus J. M. 2,736,835.

Hartl, Max. Safety seat construction for vehicles. 2,736,566, 2–28–56, Cl. 280—29.

Harvey, John W., Jr., and F. G. Kraft, to E. I. du Pont de Nemours & Co. Machine for removing cores from yarn cakes and then supporting and wetting the cakes. 2,736,184, 2–28–56, Cl. 68—205.

Hauck, Paul A., to Hanson-Van Winkle-Munning Co. Processing machines for electroplating and like operations. 2,736,441, 2–28–56, Cl. 214—89.

Haywood, Gerald, to Ionics, Inc. Method of producing sulfite cooking liquors and recovering valuable constituents therefrom. 2,736,635, 2–28–56, Cl. 23—129.

Hazeltine Research, Inc.: *See*—
Douglas, Ronald W., and Ryde. 2,736,849.

Hazen, Edward J., to Bendix Aviation Corp. Fluid temperature control. 2,736,499, 2–28–56, Cl. 236—35.

Heath, Clarence W., and H. G. A. Kay, to United Carr Fastener Corp. Electrical plug-in connectors. 2,736,872, 2–28–56, Cl. 339—142.

Hebern, William D.: *See*—
Donaldson, Harris M., and Hebern. 2,736,078.

Hebert, Arthur J., to National Alarms Corp. Hot box detector system. 2,736,796, 2–28–56, Cl. 246—169.

Hedges, Charles S., to The Vendo Co. Plural coin mechanism for vending machines. 2,736,415, 2–28–56, Cl. 194—61.

Henkes, Peter M., to George Gorton Machine Co. Copy table and mounting therefor. 2,736,241, 2–28–56, Cl. 90—13.

Hercules Powder Co.: *See*—
Jacobs, David I. H. 2,736,753.

Heritage, Clark C., to Weyerhaeuser Timber Co. Cork-bound hot-pressed boards. 2,736,063, 2–28–56, Cl. 18—47.5.

Hermelin, Victor M. Method of making a prolonged action medicinal tablet. 2,736,682, 2–28–56, Cl. 167—82.

Hery, Vincent D., and B. L. Rich, to The American Tool Works. Feed mechanism for box making machine. 2,736,509, 2–28–56, Cl. 242—58.

Herzog, Gerald B.: *See*—
Lohman, Robert D., and Herzog. 2,736,765.

Hewitt, Ellis E., to Westinghouse Air Brake Co. Torque controlled brake. 2,736,304, 2–28–56, Cl. 188—151.

Heywood-Wakefield Co.: *See*—
Parrish, Frank T. 2,736,042.
Roberts, Joseph H. 2,736,320.

Hicks, Earl M. Vehicle safety exit window structure. 2,736,402, 2–28–56, Cl. 189—64.

Hicks, Wesley: *See*—
Kercher, Arthur J. 2,736,844.

Higashi, Yazo, and T. Mori. Irregular gear cutting apparatus. 2,736,239, 2–28–56, Cl. 90—3.

Higgins, Donald S., to Shellmaker Inc. Centrifugal pump. 2,736,265, 2–28–56, Cl. 103—103.

Highland Box Co.: *See*—
Moore, Arthur C. 2,736,483.

Higonnet, Rene, and L. M. Moyroud, to Graphic Arts Research Foundation, Inc. Photographic composing apparatus. 2,736,249, 2–28–56, Cl. 95—4.5.

Hill, George H. Indexing apparatus. 2,736,204, 2–28–56, Cl. 74—125.

Hill, Robert H., to Perfect Circle Corp. Electric motor. 2,736,825, 2–28–56, Cl. 310—87.

Hill, Stanley E., and G. W. Welsh, to Sears, Roebuck and Co. Weed cutter and saw. 2,736,350, 2–28–56, Cl. 143—43.

Hills, Everill J. Liquid soap dispenser. 2,736,468, 2–28–56, Cl. 222—180.

Hilton, Raymond K.: *See*—
Sowter, Anthony B., and Hilton. 2,736,090.

Hines, Willis B., to H. S. Freed, d. b. a. H. S. Freed & Co. Portable folding seat. 2,736,365, 2–28–56, Cl. 155—133.

Hinkson, Floyd: *See*—
Clark, William R., and Hinkson. 2,736,535.

Hoban, Edward D., to The Yale & Towne Mfg. Co. Flexible line guide for electric truck. 2,736,445, 2–28–56, Cl. 214—701.

Hofferth, Burt F.: *See*—
Breuer, Frederick W., and Hofferth. 2,736,723.

Hoffman, Robert J. Archery bow. 2,736,309, 2–28–56, Cl. 124—23.

Hoffmann, Erwin A. Generator lifting tongs. 2,736,601, 2–28–56, Cl. 294—104.

Hoffmann-La Roche Inc.: *See*—
Goldberg, Moses W., and Teitel. 2,736,746.
Goldberg, Moses W., and Teitel. 2,736,747.

Hoffmann, Ulrich, O. Schweitzer, and K. Rinn, to Deutsche Gold- und Silber-Scheideanstalt, vormals Roessler. Process for the preparation of hexahydroxybenzene. 2,736,752, 2–28–56, Cl. 260—621.

Hofrichter, Charles H., Jr.: *See*—
Chren, William A., and Hofrichter. 2,736,066.

Holden, Donald L.: *See*—
Murray, Maurice J., and Holden. 2,736,713.

Hollywood, John M., to the United States of America as represented by the Secretary of the Air Force. Phase synchronized oscillator. 2,736,805, 2–28–56, Cl. 250—36.

Hollywood-Maxwell Co.: *See*—
Diogene, Henri C. J. M. 2,736,029.

Holt, James T. M. Synchronized control for tractor cultivators. 2,736,253, 2–28–56, Cl. 97—47.01.

Holzer, Theodore H.: *See*—
Asbury, Donald C., and Holzer. 2,736,339.

Hoover, Vaino A. Ventilated explosion-proof dynamoelectric machine. 2,736,826, 2–28–56, Cl. 310—88.

Horn, Birger J. Cabinet. 2,736,627, 2–28–56, Cl. 312—213.

Hornbostel, Lloyd, to Beloit Iron Works. Vane type stock inlet. 2,736,247, 2–28–56, Cl. 92—44.

Hossenlopp, Arthur M.: *See*—
Crowley, Henry L., and Hossenlopp. 2,736,708.

Houdaille-Hershey Corp.: *See*—
Dall, Edward D. 2,736,594.
O'Connor, Bernard E. 2,736,393.

Houdaille-Hershey of Indiana, Inc.: *See*—
Fresch, Sylvester J. 2,736,433.
Fresch, Sylvester J. 2,736,436.
Gardes, Alfred W. 2,736,432.
Gardes, Alfred W., and Dudchik. 2,736,435.

Hovey, Otis W., to United States Steel Corp. Connector for flanged sheets abutting endwise. 2,736,405, 2–28–56, Cl. 189—85.

Howard, John G., to The Pyle-National Co. Speed regulator for a motor generator. 2,736,855, 2–28–56, Cl. 318—325.

Huebner, William C. Apparatus for color separation. 2,736,229, 2–28–56, Cl. 88—24.

Hugenholtz, Eduard H., to Hartford National Bank and Trust Co., trustee. Frequency control. 2,736,803, 2–28–56, Cl. 250—36.

Hughes Aircraft Co.: *See*—
Barnes, Sanford H. 2,736,847.
Kaiser, Harold R., Lane, and Shockency. 2,736,889.

Hughes, Blanche C.: *See*—
Lehman, Dwight L. 2,736,475.

Hughes, Elmer V. Tool for pushing or pulling fish tape through a conduit. 2,736,532, 2–28–56, Cl. 254—134.3.

Humble Oil & Refining Co.: *See*—
Morgan, Bryan E., and Dumbauld. 2,736,661.

Hunsicker, Ernest G. Air raid warning device. 2,736,887, 2–28–56, Cl. 340—310.

Hurley, Charles W., to the United States of America as represented by the Secretary of the Army. Spring loaded sealing means. 2,736,457, 2–28–56, Cl. 220—40.

Huse, Hans V., to Hydraulik A/S. Hydraulic system and control means therefor. 2,736,170, 2–28–56, Cl. 60—53.

Hydraulik A/S: *See*—
Huse, Hans V. 2,736,170.

Ibbott, Harold W., to Negretti & Zambra Ltd. Apparatus responsive to multiple fluid pressures. 2,736,199, 2–28–56, Cl. 73—205.

Illinois Institute of Technology: *See*—
Gunning, Harry E., and Kahn. 2,736,693.
Gunning, Harry E., and McDonald. 2,736,694.

Imperial Chemical Industries Ltd.: *See*—
Brunner, Henry. 2,736,715.
Crawford, John W. C., and Secker. 2,736,744.
Taylor, James. 2,736,262.

Ingersoll Milling Machine Co., The: *See*—
Turner, Harold H. 2,736,410.

Ingersoll-Rand Co.: *See*—
Naab, Julius. 2,736,625.

Inpyn, Anthony. Means for supporting a folding leg table support in folded position. 2,736,626, 2–28–56, Cl. 311—99.

International Minerals & Chemical Corp.: *See*—
Barlow, Thomas E. 2,736,660.

International Standard Electric Corp.: *See*—
Amann, Max, and Knodler. 2,736,513.
Clavier, André G., and Thomas. 2,736,866.
Gent, Alfred W., and Lawrence. 2,736,863.
Kleinn, Otto. 2,736,672.

International Telephone and Telegraph Corp.: *See*—
Arthur, Richard P. 2,736,845.
Radcliffe, Arthur J., Jr. 2,736,886.

International X-Ray, Inc.: *See*—
Marshall, Hamilton L. J. 2,736,815.

Ionics, Inc.: *See*—
Haywood, Gerald. 2,736,635.
Juda, Walter. 2,736,637.

Ipa Chemical Co.: *See*—
Bernsohn, Edward, and Krichman. 2,736,751.

Iverson, Lauren E. Glare shield. 2,736,374, 2–28–56, Cl. 160—220.

Jackson, John, J. A. Maul, and E. E. Pohl, to American Machine & Foundry Co. Cigarette feed for packaging machines. 2,736,476, 2–28–56, Cl. 226—5.

Jackson, Nolan C., to Wichita Precision Tool Co., Inc. Revolving type garment finisher having adjustable shoulder structure. 2,736,471, 2–28–56, Cl. 223—67.

Jackson, Nolan C., to Wichita Precision Tool Co., Inc. Garment finishing machine having automatic fluid flow control. 2,736,472, 2–28–56, Cl. 223—67.

Jacobs, David I. H., to Hercules Powder Co. Recovery of phenols. 2,736,753, 2–28–56, Cl. 260—621.

Jacokes, Benton D., to Walker Mfg. Co. of Wisconsin. Muffler shell forming machine. 2,736,284, 2–28–56, Cl. 113—34.

Jacques, Robert B.: *See*—
Sinclair, George, and Jacques. 2,736,864.

Jagiel, Zigmund J. Sectional frame structure. 2,736,613, 2–28–56, Cl. 304—2.

Jahnig, Charles E.: *See*—
Burnside, Harvey E. W., Jahnig, and Brown. 2,736,687.

James, Bill Y. Interchangeable center unit for decorative package bow. 2,736,115, 2–28–56, Cl. 41—10.

James, Bill Y. Decorative article in the nature of a candle holder. 2,736,182, 2–28–56, Cl. 67—23.

Janik, Oswald C. L. Garment hanger. 2,736,474, 2–28–56, Cl. 223—90.

Janus, Alexander G., to G. Boudouris, Jr. Baby seat. 2,736,364, 2–28–56, Cl. 155—131.

Jeffrey Mfg. Co., The: *See*—
Mercier, Stanley M. 2,736,439.

Johnson, Dale L., to Burgess-Manning Co. Panel ceiling panel unit. 2,736,406, 2–28–56, Cl. 189—88.

Johnson, Darrel M.: *See*—
Walton, George M. 2,736,464.

Johnson, Donald S., to Drummondville Cotton Co. Ltd. Mid-water trawl. 2,736,122, 2–28–56, Cl. 43—9.

Johnson Gage Development Co., The: *See*—
Johnson, Paul W. 2,736,102.

Johnson, Paul W., to The Johnson Gage Development Co. Contractible plug gage. 2,736,102, 2–28–56, Cl. 33—199.

Johnston, Douglas, to John Blue Co. Sealer attachment for anhydrous ammonia applicator. 2,736,279, 2–28–56, Cl. 111—7.

Jones, Milton M. Hose support. 2,736,525, 2–28–56, Cl. 248—83.

Jones, Richard S., to D. B. Adams. Centrifugal stripper. 2,736,391, 2–28–56, Cl. 183—26.

Jonker, Johan L. H.: *See*—
Perilhou, Jean R., Jonker, and Juergens. 2,736,837.
Perilhou, Jean R., Jonker, and Juergens. 2,736,890.

Jordi, Jakob. Copying device for bookkeeping machines. 2,736,416, 2–28–56, Cl. 197—126.

Jorgensen, Jacob C., to United Shoe Machinery Corp. Machines for shaping uppers over lasts. 2,736,046, 2–28–56, Cl. 12—10.4.

Joy Mfg. Co.: *See*—
Steele, Edson B. 2,736,546.

Joyet, Edouard. Machine for mincing foodstuff. 2,736,092, 2–28–56, Cl. 30—307.

Juda, Walter, to Ionics, Inc. Water hardness measurement-method and apparatus. 2,736,637, 2–28–56, Cl. 23—230.

Juergens, Benno F.: *See*—
Perilhou, Jean R., Jonker, and Juergens. 2,736,837.
Perilhou, Jean R., Jonker, and Juergens. 2,736,890.

Juul, Alton O.: *See*—
Modlin, Philip W. 2,736,136.

Kabushiki Kaisha Hokushin Denki Seisakusho: *See*—
Sasaki, Jun-Ichi, Kobayashi, and Maeda. 2,736,856.

Kahle Engineering Co.: *See*—
Ratti, Mario. 2,736,430.

Kahle, Lloyd L. Gage for checking tapered threads. 2,736,103, 2–28–56, Cl. 33—109.

Kahn, Allan: *See*—
Gunning, Harry E., and Kahn. 2,736,693.

Kaiser, Harold R., C. A. Lane, and W. S. Shockency, to Hughes Aircraft Co. High-speed electronic digital-to-analogue converter system. 2,736,889, 2–28–56, Cl. 340—347.

Kalish, Isaac. Automatic two-sides chalk sharpeners. 2,736,293, 2–28–56, Cl. 120—89.

Kalkanis, James N. Ham holder for slicing ham. 2,736,355, 2–28–56 Cl. 146—218.

Kamborian, Jacob S. Progressive-type cement lasting machine. 2,736,045, 2–28–56, Cl. 12—1.

Kamuk, John. Bolt-holding wrench. 2,736,220, 2–28–56, Cl. 81—55.

Kane, Frank A., Jr. Device for intensifying electrical energy. 2,736,760, 2–28–56, Cl. 123—148.

Kaunitz, Clyde F. Electric welding machine. 2,736,347, 2–28–56, Cl. 140—112.

Kay, Henry G. A.: *See*—
Heath, Clarence W., and Kay. 2,736,872.

Kearney & Trecker Corp.: *See*—
Armitage, Joseph B., and Flannery. 2,736,243.

Keeler, Harry L., Jr. Automatically controlled braking apparatus. 2,736,395, 2–28–56, Cl. 188—181.

Keiper, Edwin H., to Bath Iron Works Corp. Jaw crusher with material feeding and turning belt moving over the stationary crushing plate. 2,736,503, 2–28–56, Cl. 241—200.

Kell, Ray D.: *See*—
Sziklai, George C., and Kell. 2,736,761.

Kell, Ray D., to Radio Corp. of America. Recording of colored images. 2,736,762, 2–28–56, Cl. 178—5.4.

Kellogg, M. W., Co., The: *See*—
Rubin, Louis C. 2,736,064.
Tarnpoll, Morris. 2,736,684.

Kennedy, Wallace M., to General Motors Corp. Hydraulic governor. 2,736,305, 2–28–56, Cl. 123—103.

Kent, George, Ltd.: *See*—
Low, Edward D. 2,736,336.

Keplinger, Jerald J.: *See*—
Majo, Freeman C. 2,736,036.

Kercher, Arthur J., ½ to W. Hicks. Electric load regulator. 2,736,844, 2–28–56, Cl. 317—157.

Keylwert, Johann, to Klockner-Humboldt-Deutz A. G. Air-cooled two-cycle internal-combustion engines. 2,736,302, 2–28–56, Cl. 123—41.67.

Kidwell, Alfred S., to The Connecticut Hard Rubber Co. Lamination of fluorocarbons such as polytrifluorochloroethylene with other materials. 2,736,680, 2–28–56, Cl. 154—139.

Kidwell, Alfred S., to The Connecticut Hard Rubber Co. Fuel-resistant articles having low temperature flexibility from halogenated polydimethylsiloxanes. 2,736,720, 2–28–56, Cl. 260—37.

Kimberly-Clark Corp.: *See*—
Crittenden, Adam J., and Lee. 2,736,246.

Kimmell, Garman O.: *See*—
Parks, Asbury S., and Kimmell. 2,736,337.

Kimmerle, Howard J. Apparatus for handling fish or the like. 2,736,121, 2–28–56, Cl. 43—6.5.

King-Seeley Corp.: *See*—
Boddy, Leonard. 2,736,883.

Kirsch Co.: *See*—
Bell, Ralph E. 2,736,055.

Kleimack, Joseph J., and W. R. Sittner, to Bell Telephone Laboratories, Inc. Pressure measuring apparatus. 2,736,200, 2–28–56, Cl. 73—399.

Kleiman, Morton, to Velsicol Chemical Corp. Epoxy-polychloro-bicyclo(2.2.1) heptene. 2,736,730, 2–28–56, Cl. 260—348.

Klein, Otto, to International Standard Electric Corp. Selenium rectifier of increased blocking properties. 2,736,672, 2–28–56, Cl. 117—200.

Klockner-Humboldt-Deutz A. G.: *See*—
Keylwert, Johann. 2,736,302.

Klöckner-Humboldt-Deutz A. G.: *See*—
Medenus, Bernard. 2,736,301.

Klöckner-Humboldt-Deutz Aktiengesellschaft: *See*—
Medenus, Bernhard. 2,736,299.

Klompar, Joseph R., to Northrop Aircraft, Inc. Explosion suppression device. 2,736,386, 2–28–56, Cl. 169—4.

Klug, Charles W. Apparatus for contact arc suppression in an electric generator regulator. 2,736,857, 2–28–56, Cl. 322—69.

Klumb, George H., R. E. Schulze, and D. C. Bergstedt, to Culligan, Inc. Regeneration of service demineralizers. 2,736,698, 2–28–56, Cl. 210—24.

Kmlotek, Thomas E. Spray gun attachment for portable electric drills. 2,736,606, 2–28–56, Cl. 299—89.

Knodler, Karl: *See*—
Amann, Max, and Knodler. 2,736,513.

Knowles, Talbot R., to Northrop Aircraft, Inc. Dynamometer. 2,736,196, 2–28–56, Cl. 73—136.

Knowles, William S., to Monsanto Chemical Co. 3,11-diketo-17-aldehyde-Δ4,16-androstadiene and process. 2,736,732, 2–28–56, Cl. 260—397.3.

Knowles, William S., to Monsanto Chemical Co. Esters and acetals of 16,17-dihydroxycyclohexanophenanthren-3-one derivatives substituted at 9,11 positions. 2,736,745, 2–28–56, Cl. 260—488.

Kobayashi, Minoru: *See*—
Sasaki, Jun-Ichi, Kobayashi, and Maeda. 2,736,856.

Koch, Robert B.: *See*—
Davis, William J., and Koch. 2,736,057.

Kock, Winston E.: *See*—
Hanson, Robert L., and Kock. 2,736,771.

Kock, Winston E., to Bell Telephone Laboratories, Inc. Directive antenna systems. 2,736,894, 2–28–56, Cl. 343—753.

Kocks, Friedrich. Machine for expanding tubes. 2,736,361, 2–28–56, Cl. 153—80.5.

Koepke, Hans H., to J. M. Voith. Head cover for turbines and pumps. 2,736,530, 2–28–56, Cl. 253—155.

Koetting, J. C.: *See*—
Stephenson, Jake M. 2,736,257.

Kolb, Arthur F.: *See*—
Douglas, John F. H., and Kolb. 2,736,843.

Koppers Co., Inc.: *See*—
Hannes, Paul. 2,736,504.
Webb, George A. 2,736,754.

Koskela, Joel. Saw handle. 2,736,354, 2–28–56, Cl. 145—108.

Kraft Foods Co.: *See*—
Loew, Theodore. 2,736,150.
Marshall, John M. 2,736,656.

Kraft, Frederick G.: *See*—
Harvey, John W., Jr., and Kraft. 2,736,184.

Kraft, Wheaton W., to The Lummus Co. Method for distilling oils. 2,736,688, 2–28–56, Cl. 196—73.

Krah, Carl E. and E. Thermostatically controlled electric water heater. 2,736,791, 2–28–56, Cl. 219—41.

Krah, Edward: *See*—
Krah, Carl E. and E. 2,736,791.

Kraus, Max H.: *See*—
Sheppard, Charles B., Goldich, and Kraus. 2,736,823.

Krause, Richard S.: *See*—
Seibert, Ernest H., and Krause. 2,736,181.

Krauss, Leonard, to Regents of The University of California. Volume measuring device. 2,736,095, 2–28–56, Cl. 33—1.

Krebs, Charles H., and J. D. Franks, to Atlas Boxmakers, Inc. Packaging apparatus. 2,736,477, 2–28–56, Cl. 226—14.

Krebs, Robert W.: *See*—
Mattox, William J., Richardson, and Krebs. 2,736,690.

Krichman, Harold: *See*—
Bernsohn, Edward, and Krichman. 2,736,751.

Kropp Forge Co.: *See*—
Kropp, Roy A. 2,736,254.
Nelson, John H. 2,736,348.

Kropp, Roy A., to Kropp Forge Co. Soil conditioner. 2,736,254, 2–28–56, Cl. 97—220.

Krueger, Theodore H., to Better Packages, Inc. Machine for taking finger prints. 2,736,114, 2–28–56, Cl. 41—4.

Krzikalla, Hans, and H. Pohlemann, to Badische Anilin- & Soda-Fabrik Aktiengesellschaft. Substitution products of 1,3,4-thiadiazole and process. 2,736,729, 2–28–56, Cl. 260—302.

Kuhn, John, to The Garrett Corp. Fluid stream direction indicator. 2,736,198, 2–28–56, Cl. 73—180.

Kummerman, Henri. Ship hold with removable flooring structure. 2,736,287, 2–28–56, Cl. 114—72.

Laffey, William J. Door control for refrigerators. 2,736,598, 2–28–56, Cl. 292—338.

Lambert, Ray. Grounded grid radio tube circuits. 2,736,777, 2–28–56, Cl. 179—171.

Landau, Irving J. Height measuring device. 2,736,100, 2–28–56, Cl. 33—169.

Landcraft, Marvin K.: *See*—
Selman, Roland W., Jr., and Landcraft. 2,736,654.

Lane, Claude A.: *See*—
Kaiser, Harold R., Lane, and Shockency. 2,736,889.

Langbo, Georg. Winding machine for paper rolls. 2,736,508, 2–28–56, Cl. 242—56.

La Porte, George C., and E. W. Taylor. Lubricating system for journal bearings. 2,736,622, 2–28–56, Cl. 308—86.

La Porte, George C., and E. W. Taylor. Journal box lubricating system. 2,736,621, 2–28–56, Cl. 308—86.

Latshaw, Marvin. Harrowing and weeding implement. 2,736,252, 2–28–56, Cl. 97—8.

Laughlin, Glenn A.: *See*—
Baker, Calvin A. 2,736,351.

Lawrence, Ralph T.: *See*—
Gent, Alfred W., and Lawrence. 2,736,863.

Lawson, Robert H., to Scott & Williams, Inc. Speed changing mechanism for knitting machines. 2,736,178, 2–28–56, Cl. 66—56.

Le Brock, Glen R., to Curtis Lighting, Inc. Hanger device for lighting fixture. 2,736,528, 2–28–56, Cl. 248—317.

Lederman, Albert and P. B. Dental X-ray film packet holder. 2,736,814, 2–28–56, Cl. 250—70.

Lederman, Paul B.: *See*—
Lederman, Albert and P. B. 2,736,814.

Lee, Charles A.: *See*—
Crittenden, Adam J., and Lee. 2,736,246.

Lee, Henry Y. Container structure having a closure carrying a brush and an auxiliary reservoir. 2,736,050, 2–28–56, Cl. 15—140.4.

Lee, William J.: *See*—
Duffy, Philip A., Jr., and Lee. 2,736,861.

Lehardy, Charles W.: *See*—
Bernhardt, Adolph C., Jr. 2,736,478.

Lehman, Belle M.: *See*—
Lehman, Dwight L. 2,736,475.

Lehman, Dwight L., ½ to B. M. Lehman and ½ to B. C. Hughes. Holder and advertising medium for ice cream cones. 2,736,475, 2–28–56, Cl. 224—48.

Leifer, Lorenz A., to Gisholt Machine Co. Hydraulic motor adjustment for machine tools. 2,736,207, 2–28–56, Cl. 74—242.15.

Leitschuh, Charles: *See*—
Romine, Paul W., and Armstrong. 2,736,296.

Lestin, John A. Decoy. 2,736,120, 2–28–56, Cl. 43—3.

Levine, Louis M., to Mejur Corp. Adjustable measuring and delivery device for milk or other liquid. 2,736,463, 2–28–56, Cl. 222—26.

Levy, Maurice M., to The General Electric Co. Ltd. Automatic exchanges. 2,736,773, 2–28–56, Cl. 179—18.

Lewis, Frank B., Jr. Toy for bedridden children. 2,736,131, 2–28–56, Cl. 46—32.

Lewis, Harold A., and G. A. Noddin, to E. I. du Pont de Nemours & Co. Blasting explosive device. 2,736,263, 2–28–56, Cl. 102—27.

Lewis, Stewart P. Marine marker. 2,736,044, 2–28–56, Cl. 9—8.3.

Lewis, Walter C. Cigarette extinguisher. 2,736,321, 2–28–56, Cl. 131—256.

Lidow, Eric. Selenium rectifier containing tellurium. 2,736,850, 2–28–56, Cl. 317—241.

Lilly, Eli, & Co.: *See*—
Ploch, Richard P. 2,736,728.

Lincoln, Clovis W., to General Motors Corp. Follow-up mechanism. 2,736,208, 2–28–56, Cl. 74—388.

Lindholm, Paul, to Western Electric Co., Inc. Latching device. 2,736,588, 2–28–56, Cl. 292—130.

Lines, Arthur E. Wall type can opener for key type cans. 2,736,458, 2–28–56, Cl. 220—52.

Lines Bros. Ltd.: *See*—
Lines, Walter. 2,736,368.

Lines, Walter, to Lines Bros. Ltd. Method and apparatus for the assembly of wire-spoke wheels. 2,736,368, 2–28–56, Cl. 157—1.5.

Lippmann, Arthur W., to Lippmann Engineering Works. Roller bearing. 2,736,617, 2–28–56, Cl. 308—20.

Lippmann Engineering Works: *See*—
Lippmann, Arthur W. 2,736,617.

Lisle Corp.: *See*—
Brooks, Thomas E. 2,736,146.

Livezey, William G., to General Motors Corp. Fluid clutches with multiple pumps. 2,736,412, 2–28–56, Cl. 192—85.

Lloyd, Thomas W.: *See*—
Coffman, James E., and Lloyd. 2,736,187.

Loam, Fay B. and H. Curb and stair climber device. 2,736,564, 2–28–56, Cl. 280—5.26.

Loam, Harry: *See*—
Loam, Fay B and H. 2,736,564.

Lockhart, Merton C.: *See*—
Michel, George H., Peterson, and Lockhart. 2,736,735.

Loew, Theodore, to Kraft Foods Co. Packaging apparatus. 2,736,150, 2–28–56, Cl. 53—90.

Loftus Engineering Corp.: *See*—
Francis, Charles B. 2,736,619.

Logan, Frank G., to Vickers Inc. Magnetic fluid mixture clutch containing iron and nickel particles. 2,736,409, 2–28–56, Cl. 192—21.5.

Lohman, Robert D., and G. B. Herzog, to Radio Corp of America. Automatic switching. 2,736,765, 2–28–56, Cl. 178—5.4.

Loomans, Robert E., to John Deere Van Brunt Co. Fertilizer distributor. 2,736,470, 2–28–56, Cl. 222—559.

Lopez, Tino S. Trash removing means for cotton gins. 2,736,068, 2–28–56, Cl. 19—59.

Lord, Harold W., to General Electric Co. Electromagnetic switching means. 2,736,841, 2–28–56, Cl. 315—174.

Loving, Frank A.: *See*—
Davis, Clyde O., Glogau, Loving, and Swed. 2,736,261.

Low, Edward D., to George Kent Ltd. Floats for use in measuring instruments. 2,736,336, 2–28–56, Cl. 137—452.

Lowe, Arnold J., and D. Butler, to Oxirane Ltd. Production of polymeric products from styrene and unsaturated fatty compounds. 2,736,716, 2–28–56, Cl. 260—23.

Lubben, Gerrit J., to Hartford National Bank and Trust Co., as trustee. Receiver for at least two ultra-high-frequency ranges. 2,736,798, 2–28–56, Cl. 250—20.

Lummus Co., The: *See*—
Kraft, Wheaton W. 2,736,688.

Lynch, Melvin G. Fruit picking device. 2,736,158, 2–28–56, Cl. 56—333.

Lynd, Langtry E., and L. Merker, to National Lead Co. Method for preparation of highly refractive material. 2,736,659, 2–28–56, Cl. 106—42.

MacDonald, Donald A. Intermittent fluid flow control mechanism. 2,736,297, 2–28–56, Cl. 121—150.

Mackey, Charles W., to Scovill Mfg. Co. Crumcup strainer and stopper. 2,736,040, 2–28–56, Cl. 4—287.

Mackey, Charles W., to Scovill Mfg. Co. Sink waste fitting. 2,736,577, 2–28–56, Cl. 285—45.

Macovski, Albert, to Radio Corp. of America. Noise cut-off synchronizing signal separator. 2,736,769, 2–28–56, Cl. 178—7.3.

Maderni, Piero, to Sandoz A. G. Disazo dyestuffs. 2,736,724, 2–28–56, Cl. 260—175.

Maeda, Kinzo: *See*—
Sasaki, Jun-Ichi, Kobayashi, and Maeda. 2,736,856.

Maggs, Arthur H., and A. E. Young, to The British Thompson-Houston Co. Ltd. Commutation system for universal motors. 2,736,828, 2–28–56, Cl. 310—158.

Maier, William. Upright outlet box support. 2,736,527, 2–28–56, Cl. 248—228.

Maiman, Herbert. Spark arrester. 2,736,541, 2–28–56, Cl. 261—126.

Majo, Freeman C., 50% to J. J. Keplinger. Disinfectant dispenser. 2,736,039, 2–28–56, Cl. 4—227.

Maliphant, Gordon K., P. Oxley, and D. A. Peak, to Boots Pure Drug Co. Ltd. N-(2'-naphthyl) amidinoalkanes. 2,736,748, 2–28–56, Cl. 260—564.

Mallinckrodt, George E. Rotary machine. 2,736,328, 2–28–56, Cl. 123—11.

Maloof, John J. Portable pens for confining babies and small children. 2,736,041, 2–28–56, Cl. 5—99.

Manhartsberger, Albert, to Worcester Pressed Steel Co. Inflating device. 2,736,462, 2–28–56, Cl. 222—5.

Mann, Ernö, to Hartford National Bank and Trust Co., as trustee. Circuit comprising an arc-discharge tube. 2,736,842, 2–28–56, Cl. 315—263.

Man-Sew Corp.: *See*—
Beuerle, Joseph H. 2,736,281.

Mansfield, Raymond P. Foot treating vessel. 2,736,038, 2–28–56, Cl. 4—182.

Mansfield, Richard C.: *See*—
Schmidle, Claude J., and Mansfield. 2,736,743.

Marcus, George L. Bass viol cart. 2,736,225, 2–28–56, Cl. 84—280.

Marino, Anthony J.: *See*—
Quercetti, Louis C., Palladino, and Marino. 2,736,360.

Marple, Rollo, to Hancock Mfg. Co. Latching mechanism. 2,736,186, 2–28–56, Cl. 70—142.

Marshall, Hamilton L. J., to International X Ray, Inc. Atomic radiation detector. 2,736,815, 2–28–56, Cl. 250—78.

Marshall, James W. Bale assembler and aligner. 2,736,159, 2–28–56, Cl. 56—475.

Marshall, John M., to Kraft Foods Co. Method of packaging. 2,736,656, 2–28–56, Cl. 99—171.

Martin, Clifford M. Utility or boat trailer and wheel suspension therefor. 2,736,568, 2–28–56, Cl. 280—44.

Martin, James. Apparatus for ejecting seats from aircraft. 2,736,236, 2–28–56, Cl. 89—1.

Martin, Nicholas F. Adjustable liquid fuel burner nozzle. 2,736,608, 2–28–56, Cl. 299—136.

Martin, Wesley G.: *See*—
Dueringer, Erwin G., and Martin. 2,736,461.

Marvin, John T., to General Motors Corp. Fluid seal. 2,736,583, 2–28–56, Cl. 288—2.

Maschinenfabrik Augsburg-Nurnberg A. G.: *See*—
Seidemann, Georg. 2,736,303.

Mathews, Lewis H. Fishhook remover. 2,736,126, 2–28–56, Cl. 43—53.5.

Mathisen, Anders and R. Griffiths, ½ to Graviner Mfg. Co. Ltd., and ½ to The Wilkinson Sword Co. Ltd. Temperature responsive devices. 2,736,779, 2–28–56, Cl. 200—137.

Mathison, Volney G., to M. N. Warkentin. Electropsychometer or bioelectronic instrument. 2,736,313, 2–28–56, Cl. 128—2.1.

Matthews, Howard W.: *See*—
Berger, Emil J., and Matthews. 2,736,105.

Mattox, William J., R. W. Richardson, and R. W. Krebs, to Esso Research and Engineering Co. Integrated process for coking, agglomerating and calcining hydrocarbon oil. 2,736,690, 2–28–56, Cl. 202—26.

Mattson, Raymond W., and F. S. Scott, to Union Oil Co. of California. Fuel oil additive. 2,736,641, 2–28–56, Cl. 44—71.

Maul, John A.: *See*—
Jackson, John, Maul, and Pohl. 2,736,476.

May, Joseph, to General Motors Corp. Bolt tensioner and wrench. 2,736,219, 2–28–56, Cl. 81—52.4.

McArn, Theodore A., to Downingtown Mfg. Co. Method and apparatus for making paper. 2,736, 245, 2–28–56, Cl. 92—38.

McBride, John W., to Bantar, Inc. Key operated musical instrument. 2,736,226, 2–28–56, Cl. 84—315.

McCallum, Robert A., to Goodman Mfg. Co. Endless flight conveyor with readily removable flights. 2,736,422, 2–28–56, Cl. 198—175.

McCann, Frederick W. Poison bait holder. 2,736,127, 2–28–56, Cl. 43—131.

McCarthy, Timothy F. Automatic coal transfer conveyor. 2,736,420, 2–28–56, Cl. 198—79.

McChesney, Thomas C. Removable drilling barge cradle. 2,736,172, 2–28–56, Cl. 61—46.

McConnaughey, Paul W., to Mine Safety Appliances Co. Detection of sulfur dioxide. 2,736,638, 2–28–56, Cl. 23—232.

McConnell, Mildred G. Compartmented clothes hamper. 2,736,454, 2–28–56, Cl. 220—20.

McDonald, Charles C.: *See*—
Gunning, Harry E., and McDonald. 2,736,694.

McDonough, Everett G., to Tide Water Patent Development Co., Inc. Permanent waving solutions and method. 2,736,323, 2–28–56, Cl. 132—7.

McDuffie, Archie D., to General Motors Corp. Combustion chamber. 2,736,306, 2–28–56, Cl. 123—191.

McGraw, Leslie D., to Food Machinery and Chemical Corp. Chemical polishing bath. 2,736,640, 2–28–56, Cl. 41—42.

McInerny, James M.: *See*—
McInerney, William K. and J. M. 2,736,479.

McInerney, William K. and J. M. Continuous feed for spring loading machine. 2,736,479, 2–28–56, Cl. 226—18.

McKeag, Alfred H.: *See*—
Gooding, Pamela E., and McKeag. 2,736,711.

McKee, Hilton J.: *See*—
Burge, James S., Foust, Shaw, Rider, and McKee. 2,736,358.

McKenzie, George D. Pneumatic cotton harvester. 2,736,151, 2–28–56, Cl. 56—13.

McLain, George H. Hospital annunciator system. 2,736,888, 2–28–56, Cl. 340—316.

McLean, Wayne W. Stocking dryer and stretcher. 2,736,473, 2–28–56, Cl. 223—75.

McMurray, Paul H., to Delphi Products Co., Inc. Auxiliary demountable wheels for moving vehicle at right angles to movement by permanent wheels. 2,736,567, 2–28–56, Cl. 280—34.

McNaney, Joseph T., to General Dynamics Corp. Printer. 2,736,770, 2–28–56, Cl. 178—15.

Medenus, Bernhard, to Klöckner-Humboldt-Deutz Aktiengesellschaft. Air cooled two stroke cycle internal-combustion engine. 2,736,299, 2–28–56, Cl. 123—41.6.

Medenus, Berhnard, to Klöckner-Humboldt-Deutz A. G. Blower for cooling an internal-combustion engine and scavenging or supercharging. 2,736,301, 2–28–56, Cl. 123—41.65.

Meibuhr, George C., to Thompson Products, Inc. Spindle and collet assembly. 2,736,560, 2–28–56, Cl. 279—46.

Mejur Corp.: *See*—
Levine, Louis M. 2,736,463.

Mercier, Stanley M., to The Jeffrey Mfg. Co. Feeding and sealing apparatus for bunkers, chutes, and the like. 2,736,439, 2–28–56, Cl. 214—17.

Merck & Co., Inc.: *See*—
Rogers, Edward F., and Conbere. 2,736,733.
Sarett, Lewis H. 2,736,734.
Tishler, Max. 2,736,681.

Mergenthaler Linotype Co.: *See*—
Rossetto, Louis. 2,736,424.

Merker, Leon: *See*—
Lynd, Langtry E., and Merker. 2,736,659.

Michel, George H., C. E. Petersen, and M. C. Lockhart, to American Cyanamid Co. Tetracycline antibiotic zirconium hydroxyacid complexes. 2,736,735, 2–28–56, Cl. 260—429.

Michelson, Julius. Drill sharpening fixture. 2,736,147, 2–28–56, Cl. 51—219.

Michigan Tool Co.: *See*—
Moncrieff, Alexander D. F. 2,736,238.

Miller, Emery P.: *See*—
Ransburg, Edwin M., and Miller. 2,736,671.

Miller, Gustave: *See*—
Temple, Ruth M. 2,736,043.

Miller, Jack C., to the United States of America as represented by the United States Atomic Energy Commission. Blocking oscillator. 2,736,806, 2–28–56, Cl. 250—36.

Milone, Louis J., to The Eagle-Picher Co. Storm door construction and hinge mounting. 2,736,401, 2–28–56, Cl. 189—46.

Milwaukee Gas Specialty Co.: *See*—
Rafenstein, Roy F. 2,736,371.

Mine Safety Appliances Co.: *See*—
McConnaughey, Paul W. 2,736,638.

Mitchell, John E., Co.: *See*—
Mitchell, Orville. 2,736,069.

Mitchell, Orville, to John E. Mitchell Co. Automatic control for cotton processing equipment. 2,736,069, 2–28–56, Cl. 19—69.

Mock, Frank C., to Bendix Aviation Corp. Afterburning and exhaust nozzle controls for gas turbine engine. 2,736,166, 2–28–56, Cl. 60—35.6.

Mock, Gene V.: *See*—
England, David C., and Mock. 2,736,739.

Modern Tackle Co.: *See*—
Belokin, Paul, Jr. 2,736,026.

Modlin, Philip W., ½ to A. O. Juul. Bicycle noisemaker. 2,736,136, 2–28–56, Cl. 46—175.

Moen, Anver B. Rotary snow plow. 2,736,111, 2–28–56, Cl. 37—43.

Molins, Desmond W., to Molins Machine Co., Ltd. Tobacco-feeding apparatus. 2,736,319, 2–28–56, Cl. 131—109.

Molins Machine Co., Ltd.: *See*—
Molins, Desmond W. 2,736,319.

Moncrieff, Alexander D. F., to Michigan Tool Co. Automatic conveyor for gear finishing machines. 2,736,238, 2–28–56, Cl. 90—1.

Monsanto Chemical Co.: *See*—
Knowles, William S. 2,736,732.
Knowles, William S. 2,736,745.

Montgomery, Dorothy D., to the United States of America as represented by the Secretary of the Navy. Crossed wave guide variable impedance. 2,736,867, 2–28–56, Cl. 333—81.

Moody, Roy M. Hunting seat. 2,736,030, 2–28–56, Cl. 2—94.

Moore, Arthur C., to Highland Box Co. Shipping containers. 2,736,483, 2–28–56, Cl. 229—6.

Moore, Nelson: *See*—
Toulon, Pierre M. G. 2,736,235.

Moore, Walter E., E. R. Andrae, and F. F. Sontheimer, to Swing-A-Way Mfg. Co. Magnetic lid lifter. 2,736,091, 2–28–56, Cl. 30—6.4.

Moorman, Cletus L.: *See*—
Bush, Russell J., and Moorman. 2,736,076.

Moran Instrument Corp.: *See*—
Moran, Robert B., Jr. 2,736,892.

Moran, Robert B., Jr., to Moran Instrument Corp. Echo ranging. 2,736,892, 2–28–56, Cl. 343—13.

Morgan, Bryan E., and G. K. Dumbauld, to Humble Oil & Refining Co. Well cementing composition and method of preparing same. 2,736,661, 2–28–56, Cl. 106—90.

Mori, Takehiko: *See*—
Higashi, Yazo, and Mori. 2,736,239.

Morley, David H., to General Electric Co. Ionization chamber. 2,736,816, 2–28–56, Cl. 250—83.1.

Morris, John R., to The Texas Co. Lubricant containing a phophorus acid ester-aldehyde condensation product. 2,736,706, 2–28–56, Cl. 252—46.6.

Morris, John R., to The Texas Co. Lubricant containing phosphate partial ester-aldehyde-amine condensation product. 2,736,707, 2–28–56, Cl. 252—46.7.

Morris, John R., to The Texas Co. Phosphate partial ester-aldehyde condensation product and lubricant containing the same. 2,736,737, 2–28–56, Cl. 260—461.

Morris, John R., to The Texas Co. Phosphate partial ester-aldehyde-amine condensation product and lubricant containing the same. 2,736,738, 2–28–56, Cl. 260—461.

Morrison, Albert R., to Owens-Corning Fiberglas Corp. Glass fiber twine and method of making the same. 2,736,163, 2–28–56, Cl. 57—150.

Morrison, James L. D. Advertising displays. 2,736,113, 2–28–56, Cl. 40—76.

Mosbacher, Bruce H. Pump, motor or like device. 2,736,267, 2–28–56, Cl. 103—158.

Moseley, Kemper N. Method of making a tobacco hogshead head. 2,736,353, 2–28–56, Cl. 144—309.

Moyroud, Louis M.: *See* Higonnet, Rene, and Moyroud. 2,736,249.

Müller, Paul: *See* Gaetzi, Karl, and Müller. 2,736,726.

Munster, Allen C., to Philco Corp. Method of and means for measuring distance. 2,736,891, 2–28–56, Cl. 343—12.

Murayama, Fumiko: *See* Pentier, Charles F., and Murayama. 2,736,643.

Murray, Albert R. Gyroscopic figure toy. 2,736,132, 2–28–56, Cl. 46—50.

Murray, George H., to D. Napier & Son Ltd. Electric generating unit. 2,736,819, 2–28–56, Cl. 290—1.

Murray, John B.: *See* Dolan, Thomas E., and Murray. 2,736,515.

Murray, Maurice J., and D. L. Holden, to Universal Oil Products Co. Method of dispersing inorganic oxide sols. 2,736,713, 2–28–56, Cl. 252—448.

Muyderman, Coert D., to Nederlandse Organisatie voor Toegepast-Natuurwetenshappelijk Onderzoek ten behoeve van Nijverheid, Handel en Verkeer. Drying arrangement such as a tunnel kiln with transverse circulation. 2,736,108, 2–28–56, Cl. 34—212.

Myers, F. E., & Bro. Co., The: *See* Spreng, Warren M. 2,736,605.

Myles, William J., to Celanese Corp. of America. Treatment of organic derivatives of cellulose to prevent acid-fading. 2,736,631, 2–28–56, Cl. 8—61.

Naab, Julius, to Ingersoll-Rand Co. Compressor piston construction. 2,736,625, 2–28–56, Cl. 309—4.

Nack, Herman R., and L. J. Novak, to Chadeloid Corp. Varnish remover. 2,736,710, 2–28–56, Cl. 252—170.

Nack, Herman R., and J. R. Whitacre, to The Commonwealth Engineering Co. of Ohio. Method and means for induction heating coil control. 2,736,788, 2–28–56, Cl. 219—10.75.

Napier, D., & Son Ltd.: *See* Murray, George H. 2,736,819.

National Alarms Corp.: *See* Hebert, Arthur J. 2,736,796.

National Container Corp.: *See* Rabby, Joseph G. 2,736,485. Rabby, Joseph G. 2,736,486.

National Foam System, Inc.: *See* Boerner, Lewis W. 2,736,387.

National Glass Co., Inc.: *See* Griffiths, Edward M. 2,736,670.

National Lead Co.: *See* Beacham, Harry H. 2,736,666. Lynd, Langtry E., and Merker. 2,736,659.

National Lock Co.: *See* Burke, William O. 2,736,596.

National Plastic Products Co., The: *See* Dellheim, Arthur F. 2,736,058.

National Steel Corp.: *See* Colby, Roy L., Jr. 2,736,397.

Natzler, Paul: *See* Scheuermann, Otto G., and Natzler. 2,736,062.

Navy, United States of America as represented by the Secretary of the: *See* Bell, Persa R., Jr. 2,736,868. Boyle, Edward B., Jr. 2,736,878. Montgomery, Dorothy D. 2,736,867. Neher, Henry V. 2,736,839.

Nederlandse Organisatie voor Toegepast-Natuurwetenshappelijk Onderzoek ten behoeve van Nijverheid, Handel en Verkeer: *See* Muyderman, Coert D. 2,736,108.

Neese, Alonzo A., and E. D. Beachler, to Beloit Iron Works. Winder shaft puller and table. 2,736,507, 2–28–56, Cl. 242—55.

Neeteson, Pieter A., to Hartford National Bank and Trust Co., trustee. Oscillator synchronization. 2,736,804, 2–28–56, Cl. 250—36.

Neff, Loren L., to Union Oil Co. of California. Lubricating oil composition. 2,736,701, 2–28–56, Cl. 252—32.7.

Negretti & Zambra Ltd.: *See* Ibbott, Harold W. 2,736,199.

Neher, Henry V., to the United States of America as represented by the Secretary of the Navy. Microwave oscillator. 2,736,839, 2–28–56, Cl. 315—42.

Nelson, Eldred C. Automatic digital motor control system for machine tools. 2,736,852, 2–28–56, Cl. 318—162.

Nelson, John H., to Kropp Forge Co. Band saw blade trap. 2,736,348, 2–28–56, Cl. 143—17.

Nelson, Joseph F.: *See* Wilson, Howard L., Banes, Smith, and Nelson. 2,736,685.

Nelson, Richard B., to the United States of America as represented by the Secretary of the Army. Starting apparatus for a cold cathode electron discharge device. 2,736,838, 2–28–56, Cl. 315—39.63.

Nelson, William T., to Phillips Petroleum Co. Separation of aromatic hydrocarbons by extractive distillation with phosphorous tribromide. 2,736,691, 2–28–56, Cl. 202—39.5.

Nelsson, Nels. Mixing bit. 2,736,537, 2–28–56, Cl. 259—134.

Neumann, Werner: *See* Reuter, Walter, Neumann, and Dietrich. 2,736,755.

Newport Industries, Inc.: *See* Bordenca, Carl, and Sellers. 2,736,740.

Nickerson, Franklin G., Jr., to American Sisalkraft Corp. Manufacture of laminated material. 2,736,679, 2–28–56, Cl. 154—138.

Nijveld, Hendrik A. W., to Rubber-Stichting. Process of producing soluble chlorinated rubber. 2,736,757, 2–28–56, Cl. 260—735.

Nitroglycerin Aktiebolaget: *See* Enoksson, Bertil P. 2,736,742.

Noddin, George A.: *See* Lewis, Harold A., and Noddin. 2,736,263.

Northern Electric Co., Ltd.: *See* Sidorowicz, Alexander Z. 2,736,343.

Northrop Aircraft, Inc.: *See* Degenfelder, Walter B. 2,736,518. Glenn, John E. 2,736,519. Klompar, Joseph R. 2,736,386. Knowles, Talbot R. 2,736,196. Potter, Kenneth G. 2,736,491. Wilson, Granville L. 2,736,522.

Norton Co.: *See* Webber, Charles S. 2,736,718.

Novak, Leo J.: *See* Nack, Herman R., and Novak. 2,736,710.

Novak, Leo J., to The Commonwealth Engineering Co. of Ohio. Fibrous products comprising fibers bonded with dextran xanthate. 2,736,652, 2–28–56, Cl. 92—3.

Nystrom, Axel C., to Western Electric Co., Inc. Arbor frame control for wire twisting apparatus. 2,736,161, 2–28–56, Cl. 57—58.76.

Oates, Clifford, Jr.: *See* Bender, Edward E., Oates, and Phane. 2,736,356.

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Orr, Howard S., and A. Teplitz, to United States Steel Corp. Apparatus for accelerating convective heat transfer between a solid and a gas. 2,736,548, 2–28–56, Cl. 263—3.

Ostergren, Axel H., and K. G. Borén, to Aktiebolaget Elektrolux. Electrically operated absorption refrigeration apparatus. 2,736,175, 2–28–56, Cl. 62—119.5.

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Roethel, John H., to Roethel Engineering Corp. Door lock. 2,736,593, 2-28-56, Cl. 292—166.
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Schulze, Robert E.: *See*—
Klumb, George H., Schulze, and Bergstedt. 2,736,698.
Schweitzer, Otto: *See*—
Hoffmann, Ullrich, Schweitzer, and Rinn. 2,736,752.
Schwope, Arthur D., and W. Chubb, to the United States of America as represented by the United States Atomic Energy Commission. Zirconium ternary alloys. 2,736,631, 2-28-56, Cl. 75—177.
Scintilla Ltd.: *See*—
Buchmann, Albin. 2,736,827.
Scott, Frederick S.: *See*—
Mattson, Raymond W., and Scott. 2,736,641.
Scott & Williams, Inc.: *See*—
Bristow, Paul W. 2,736,177.
Lawson, Robert H. 2,736,178.
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Mackey, Charles W. 2,736,040.
Mackey, Charles W. 2,736,577.
Sears, Roebuck and Co.: *See*—
Hill, Stanley E., and Welsh. 2,736,350.
Secker, John S.: *See*—
Crawford, John W. C., and Secker. 2,736,744.
Seeler, Henry, to the United States of America as represented by the Secretary of the Air Force. Resuscitator. 2,736,331, 2-28-56, Cl. 137—63.

Selbert, Ernest H., and R. S. Krause, to Cory Corp. Cigarette and cigar lighter. 2,736,181, 2-28-56, Cl. 67—7.1.
Seidemann, Georg, to Maschinenfabrik Augsburg-Nurnberg A. G. Control valve for a two cycle engine. 2,736,303, 2-28-56, Cl. 123—59.
Seidle, Ralph E. Loading and unloading device for vehicles. 2,736,443, 2-28-56, Cl. 214—146.5.
Sejournet, Jacques, and J. Delcroix, to Comptoir Industriel d'Etirage et Profilage de Metaux. Hot extrusion of metals. 2,736,429, 2-28-56, Cl. 207—10.
Selby, Donald W., to E. I. du Pont de Nemours and Co. Traverse-roll. 2,736,506, 2-28-56, Cl. 242—43.
Selecta Glove Corp.: *See*—
Bierman, Herbert, Blum, and Pantuosco. 2,736,282.
Selgin, Paul J. Induced quadrature field motor. 2,736,853, 2-28-56, Cl. 318—165.
Sellers, Henry G., Jr.: *See*—
Bordenca, Carl, and Sellers. 2,736,740.
Sellés, Pedro C. Devices for braking and propelling the shuttle in mechanical looms. 2,736,340, 2-28-56, Cl. 139—185.
Selman, Roland W., Jr., and M. K. Landcraft, to De-Raef Corp. Bread-making composition. 2,736,654, 2-28-56, Cl. 99—91.
Seybold, René. Electric bellow-operated music instrument. 2,736,223, 2-28-56, Cl. 84—1.10.
Shannon, Edgar F., to The Shannon Ltd. Label carrier for office equipment. 2,736,318, 2-28-56, Cl. 129—16.7.
Shannon Ltd., The: *See*—
Shannon, Edgar F. 2,736,318.
Shaw, Willard C.: *See*—
Burge, James S., Foust, Shaw, Rider, and McKee. 2,736,358.
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Bradley, Theodore F., and Tess. 2,736,664.
Ohlsen, Rodney M., and Smith. 2,736,201.
Shellmaker, Inc.: *See*—
Higgins, Donald S. 2,736,265.
Shen, Tzu F.: *See*—
Walker, Herbert, and Shen. 2,736,080.
Sheppard, Charles B., N. H. Goldich, and M. H. Kraus, to Sperry Rand Corp. Acoustic transducer and damping assembly. 2,736,823, 2-28-56, Cl. 310—8.2.
Sherman, Walter F. Sanding devices for motor vehicles. 2,736,587, 2-28-56, Cl. 291—34.
Sherman, Willard T. Car lift wheel alignment apparatus. 2,736,104, 2-28-56, Cl. 33—203.12.
Sherwin-Williams Co., The: *See*—
Christianson, Conrad J. 2,736,195.
Weber, Harry M. 2,736,663.
Shockency, Wilford S.: *See*—
Kaiser, Harold R., Lane, and Shockency. 2,736,889.
Shonka, Francis R., to the United States of America as represented by the United States Atomic Energy Commission. Measuring device and apparatus. 2,736,818, 2-28-56, Cl. 250—83.6.
Shore, William E., to H. S. Forsberg. Mechanical movement. 2,736,203, 2-28-56, Cl. 74—52.
Sicard, Inc.: *See*—
Boissonnault, Ronaldo. 2,736,112.
Sidorowicz, Alexander Z., to Northern Electric Co., Ltd. Machine for winding filaments. 2,736,343, 2-28-56, Cl. 140—71.5.
Siebens, Norman H., to C-O-Two Fire Equipment Co. Dry powder fire extinguisher nozzle. 2,736,385, 2-28-56, Cl. 169—1.
Siemens-Schuckertwerke Aktiengesellschaft: *See*—
Welker, Heinrich. 2,736,858.
Sigoda, Victor J., and E. W. Whitman. Machine for severing selected multiples of fabric strip lengths. 2,736,378, 2-28-56, Cl. 164—48.
Sills, Hubert R., to Canadian General Electric Co., Ltd. Dynamoelectric machine rotor. 2,736,829, 2-28-56, Cl. 310—218.
Silverman, Alexander, and L. Parker, to said Silverman. Method of producing glass filaments. 2,736,141, 2-28-56, Cl. 40—77.
Simmons, Bill J., to Phillips Petroleum Co. Fluid pressure equalizer. 2,736,332, 2-28-56, Cl. 137—87.
Sinclair, George, and R. B. Jacques, to Thompson Products, Inc. Broadband hybrid network. 2,736,864, 2-28-56, Cl. 333—11.
Sinigagliesi, Alberto. Seamless elastic drawers. 2,736,036, 2-28-56, Cl. 2—224.
Sittner, Weldon R.: *See*—
Kleimack, Joseph J., and Sittner. 2,736,200.
Skelton, Peter A., and J. B. Poepping; said Poepping assor. to said Skelton. Casting reel. 2,736,510, 2-28-56, Cl. 242—84.5.
Skorup, Gordon E.: *See*—
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Skole, Viggo. Knitting of stockings. 2,736,180, 2-28-56, Cl. 66—89.
Slavens, Wayne E.: *See*—
Andrews, Norman F., Slavens, and Adolphson. 2,736,152.
Slayter, Games, H. J. Snow, and S. D. Phillips, to Owens-Corning Fiberglas Corp. Fibrous mat and method and apparatus for producing same. 2,736,362, 2-28-56, Cl. 154—29.
Slivar, Joseph M. Apparatus for packing bearings. 2,736,392, 2-28-56, Cl. 184—1.
Slomer, Joseph J., to Goodman Mfg. Co. Kerf cutting machine with hydraulically operated drill. 2,736,543, 2-28-56, Cl. 262—9.
Smirl, Richard L., to Borg-Warner Corp. Transmission. 2,736,407, 2-28-56, Cl. 192—3.2.
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Buehner, Howard A. 2,736,294.
Dueringer, Erwin G., and Martin. 2,736,461.
Smith, Allen E., A. W. Feldman, and G. M. Stone, to United States Rubber Co. N-1-naphthylphthalamic acid herbicidal compositions. 2,736,646, 2-28-56, Cl. 71—2.4.
Smith, Allen E., A. W. Feldman, and G. M. Stone, to United States Rubber Co. N-1-naphthylphthalamic acid herbicidal compositions. 2,736,647, 2-28-56, Cl. 71—2.6.
Smith, Brook I.: *See*—
Wilson, Howard L., Banes, Smith, and Nelson. 2,736,685.
Smith, Frank. Welded steel boiler. 2,736,298, 2-28-56, Cl. 122—145.
Smith, Grafton A.: *See*—
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Smith, Graydon, to The Foxboro Co. Chart drive apparatus. 2,736,629, 2-28-56, Cl. 346—44.
Smith, Herschel G.: *See*—
Cantrell, Troy L., and Smith. 2,736,704.
Cantrell, Troy L., and Smith. 2,736,705.
Smith, Herschel G., T. L. Cantrell, and J. G. Peters, to Gulf Oil Corp. Resinous condensation product of formaldehyde, alkaline earth metal sulfide, and an alkylated monohydric phenol. 2,736,702, 2-28-56, Cl. 252—42.7.
Smith, Herschel G., T. L. Cantrell, and J. G. Peters, to Gulf Oil Corp. Resinous products. 2,736,703, 2-28-56, Cl. 252—42.7.
Smith, Kline & French Laboratories: *See*—
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Smith, Luke E. Impact-type material handling clam-shell apparatus. 2,736,444, 2-28-56, Cl. 214—657.
Snow, Henry J.: *See*—
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Societe Anonyme des Acieries et Forges de Firminy: *See*—
Blain, Paul. 2,736,217.
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Cherrier, Claude M. 2,736,813.
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Schlumberger, Marcel. 2,736,260.
Socony Mobil Oil Co., Inc.: *See*—
Fischer, Rudolf G. 2,736,099.
Pabst, Arthur C., and Duchacek. 2,736,667.
Wesh, Anthony J. 2,736,611.
Songer, Leo W., to General Electric Co. Valve seat locking mechanism. 2,736,529, 2-28-56, Cl. 251—360.
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Moore, Walter E., Andrae, and Sontheimer. 2,736,091.
Sorensen, Andrew J., to Westinghouse Air Brake Co. Circuit integrity checking system. 2,736,882, 2-28-56, Cl. 340—213.
Sorensen, Knud B., and F. M. Brinkmeyer, to Deere & Co. Back rack frame for beet harvesters. 2,736,155, 2-28-56, Cl. 56—121.45.
Sowter, Anthony B., and R. K. Hilton, to The General Electric Co. Ltd. Cold pressure welding. 2,736,090, 2-28-56, Cl. 29—470.1.
Spence, Paulsen. Adjustable lever valve. 2,736,212, 2-28-56, Cl. 74—522.
Spencer, Herbert R., to The Erie Enameling Co. Wall structure. 2,736,399, 2-28-56, Cl. 189—34.
Sperry Gyroscope Co., Ltd., The: *See*—
Von Manteuffel, Gert S. Z., and Richardson. 2,736,893.
Sperry Products, Inc.: *See*—
Van Valkenburg, Howard E., and Sansom. 2,736,193.
Sperry Rand Corp.: *See*—
Berkowitz, Bernard. 2,736,896.
Sheppard, Charles B., Goldich, and Kraus. 2,736,823.
Spheric Structures, Inc.: *See*—
Woods, George B. 2,736,072.
Spiegel, Edwin J., Jr.: *See*—
Schoknecht, Robert J., and Spiegel. 2,736,460.
Spound, Albert M. Spring seat for a sofa-bed. 2,736,367, 2-28-56, Cl. 155—180.
Spreiregen, Jacques. One-piece caps. 2,736,035, 2-28-56, Cl. 2—195.
Spreng, Warren M., to The F. E. Myers & Bro. Co. Vane regulator for field crop sprayer. 2,736,605, 2-28-56, Cl. 299—43.
Stalker, Edward A. Rotary hydraulic torque converter employing boundary layer control. 2,736,171, 2-28-56, Cl. 60—54.
Staller, Karel J., and E. F. Svec, to Flexigrip Inc. Slider for slide fasteners. 2,736,079, 2-28-56, Cl. 24—201.
Stamp, Hugo O. Combined golf bag and seat. 2,736,357, 2-28-56, Cl. 150—1.5.
Standard Steel Works: *See*—
Compton, Arthur H. 2,736,571.
Steckle, Charles, and R. L. Wingenroth, to United States Steel Corp. Positioner and drive for blast furnace distributor. 2,736,440, 2-28-56, Cl. 214—37.
Steele, Edson B., to Joy Mfg. Co. Mining apparatus with clean-up device. 2,736,546, 2-28-56, Cl. 262—29.
Steinberger, Franklin. Method and apparatus for feeding silver. 2,736,162, 2-28-56, Cl. 57—61.
Steitz, William R.: *See*—
Drummond, Warren W., Steitz, and Frickert. 2,736,512.
Stephenson, Jake M., to J. C. Koetting. Code marking device for wrapping sheets. 2,736,257, 2-28-56, Cl. 101—8.
Sternlicht, Larry. Shock shield cushion for baseball gloves. 2,736,028, 2-28-56, Cl. 2—19.
Stevens, Robert, to Wiesner-Rapp Co., Inc. Assembling device. 2,736,087, 2-28-56, Cl. 29—205.
Steward, Frederick C., and S. M. Caplin. Method and compositions for regulating plant growth. 2,736,644, 2-28-56, Cl. 71—2.3.
Steward, Frederick C., and S. M. Caplin. Compositions and method for regulating plant growth. 2,736,645, 2-28-56, Cl. 71—2.3.
Steward, Malcolm H.: *See*—
Suski, Henry M., and Steward. 2,736,797.

Stineman, Russell W., to Boeing Airplane Co. Load transfer relays. 2,736,821, 2–28–56, Cl. 307—64.

Stockmayer, Hugo P., to Sun Chemical Corp. Printing inks. 2,736,719, 2–28–56, Cl. 260—33.8.

Stone, Ashton K. Sealing and pouring closures. 2,736,469, 2–28–56, Cl. 222—529.

Stone, Gracie M.: *See*—
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Smith, Allen E., Feldman, and Stone. 2,736,647.

Stoner Mfg. Corp.: *See*—
Parre, Edwin, and Rogers. 2,736,085.

Stortz, Stephen W. Planetary gear transmission. 2,736,214, 2–28–56, Cl. 74—752.

Stovall, John B., ½ to R. F. Clingen. Reflector device. 2,736,316, 2–28–56, Cl. 128—233.

Stroble, Joe A. Quick change nut with pivoted thread segments. 2,736,227, 2–28–56, Cl. 85—33.

Stuart, Archibald P., to Sun Oil Co. Hydrogenation of unsaturated hydrocarbons employing a metal sulfide catalyst having a nitrogenous base chemisorbed thereon. 2,736,689, 2–28–56, Cl. 196—78.

Sullivan, Nell: *See*—
Cockram, Reginald W. J., Sullivan, and Wilkerson. 2,736,459.

Sun Chemical Corp.: *See*—
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Sun Oil Co.: *See*—
Stuart, Archibald P. 2,736,689.

Super Mold Corp. of California: *See*—
Glynn, Edwin A. 2,736,060.

Suski, Henry M., and M. H. Steward. Radio relay with false receiver signal suppression. 2,736,797, 2–28–56, Cl. 250—15.

Sutherland Paper Co.: *See*—
Buttery, Kenneth T. 2,736,138.

Svec, Emil F.: *See*—
Staller, Karel J., and Svec. 2,736,079.

Swed, James P.: *See*—
Davis, Clyde O., Glogau, Loving, and Swed. 2,736,261.

Swift, Clifford L., to The Borg-Warner Corp. Transmission. 2,736,215, 2–28–56, Cl. 74—759.

Swing-A-Way Mfg. Co.: *See*—
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Sziklai, George C., and R. D. Kell, to Radio Corp. of America. Color television image signal translating systems. 2,736,761, 2–28–56, Cl. 178—5.2.

Tanberg, Ragnar. Ink feed device for fountain pens. 2,736,292, 2–28–56, Cl. 120—45.4.

Tarnpoll, Morris, to The M. W. Kellogg Co. Reforming process. 2,736,684, 2–28–56, Cl. 196—50.

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La Porte, George C., and Taylor. 2,736,621.
La Porte, George C., and Taylor. 2,736,622.

Taylor, James, to Imperial Chemical Industries Ltd. Low density safety ammonium nitrate blasting explosive and process for producing same. 2,736,262, 2–28–56, Cl. 102—24.

Teague, Walter D., Jr., and P. A. De Padova, to Bendix Aviation Corp. Air fuel ratio control for ram jets. 2,736,167, 2–28–56, Cl. 60—39.28.

Technograph Printed Circuits Ltd.: *See*—
Eisler, Paul. 2,736,677.

Teitel, Sidney: *See*—
Godlberg, Moses W., and Teitel. 2,736,746.
Godlberg, Moses W., and Teitel. 2,736,747.

Temple, Hiram E., to Read Standard Corp. Conveyor system with article spacing apparatus. 2,736,418, 2–28–56, Cl. 198—31.

Temple, Ruth M., now by change of name R. M. Elliott, to G. Miller. Bedsheet blanket attachment device. 2,736,043, 2–28–56, Cl. 5—334.

Teplitz, Alfred: *See*—
Orr, Howard S., and Teplitz. 2,736,548.

Tess, Roy W. H.: *See*—
Bradley, Theodore F., and Tess. 2,736,664.

Texas Co., The: *See*—
Allen, Joseph C. 2,736,381.
Morris, John R. 2,736,706.
Morris, John R. 2,736,707.
Morris, John R. 2,736,737.
Morris, John R. 2,736,738.

Thaheld, Fred A., to Diesel Power, Inc. Wind machine. 2,736,137, 2–28–56, Cl. 47—2.

Thatcher, Charles J., to R. O. Thatcher. Machining by high-frequency vibratory abrasion. 2,736,144, 2–28–56, Cl. 51—64.

Thatcher, Charles J., to R. O. Thatcher. Method of machining by high frequency vibratory abrasion. 2,736,148, 2–28–56, Cl. 51—281.

Thatcher, Robert O.: *See*—
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Thatcher, Charles J. 2,736,148.

Thébault, Louis. Parachute. 2,736,524, 2–28–56, Cl. 244—152.

Thirup, Gunnar, to Hartford National Bank and Trust Co., trustee. Adjustable phase-shifting device for high-frequency alternating voltages. 2,736,865, 2–28–56, Cl. 333—31.

Thomas, David L.: *See*—
Clavier, André G., and Thomas. 2,736,866.

Thompson Products, Inc.: *See*—
Bartlett, Kenneth M. 2,736,077.
Eisele, William H. 2,736,266.
Melbuhr, George C. 2,736,560.
Ricks, Bernard E. 2,736,581.
Sinclair, George, and Jacques. 2,736,864.

Thompson, Walter Van E. Low angle sprinkler nozzle. 2,736,607, 2–28–56, Cl. 299—120.

Thompson, William L. Trailer and towing vehicle aligning indicator. 2,736,885, 2–28–56, Cl. 340—282.

Thorner, Robert H. Engine governor. 2,736,304, 2–28–56, Cl. 123—103.

Thygeson, John R., to Proctor and Schwartz, Inc. Tool for removing snap strips. 2,736,088, 2–28–56, Cl. 29—270.

Tice, Reuben S. Cooler for packaged beverages and method. 2,736,174, 2–28–56, Cl. 62—92.

Tide Water Patent Development Co., Inc.: *See*—
McDonough, Everett G. 2,736,323.

Tiede, Ralph L., to Owens-Corning Fiberglas Corp. Lead glass composition. 2,736,714, 2–28–56, Cl. 252—478.

Tishler, Max, to Merck & Co., Inc. Chemical compounds. 2,736,681, 2–28–56, Cl. 167—65.

Titeflex Inc.: *See*—
Padgett, Philip M. 2,736,285.

Tooker, Howard A., to Western Electric Co., Inc. Article testing apparatus. 2,736,862, 2–28–56, Cl. 324—158.

Tosswill, Christopher H., to Hartford National Bank and Trust Co., trustee. Device comprising a glow-discharge tube for amplifying voltage pulses, and glow discharge tube for use in such devices. 2,736,840, 2–28–56, Cl. 315—168.

Toulmin, Harry A., Jr., to The Commonwealth Engineering Co. of Ohio. Method and apparatus for forming plastic film and printing it. 2,736,056, 2–28–56, Cl. 18—4.

Toulmin, Harry A., Jr., to The Commonwealth Engineering Co. of Ohio. Method of and apparatus for separating the soft rock component of mixtures of hard and soft rock. 2,736,502, 2–28–56, Cl. 241—14.

Toulon, Pierre M. G., 75% to Products and Licensing Corp., and 25% to N. Moore and W. D. Hall, as joint tenants. Optical lens system. 2,736,235, 2–28–56, Cl. 88—57.

Tourshou, Simeon I., and G. E. Skorup, to Radio Corp. of America. Video from sync and sync from sync separation. 2,736,768, 2–28–56, Cl. 178—7.3.

Trico Products Corp.: *See*—
Olshel, John R., and Riester. 2,736,053.

Trinkle, Carl, to The Baldwin Piano Co. Pin block. 2,736,224, 2–28–56, Cl. 84—202.

Trombetta, Charles. Cut flower package. 2,736,427, 2–28–56, Cl. 206—45.31.

Trousdale, Robert B., to General Dynamics Corp. Tester. 2,736,860, 2–28–56, Cl. 324—57.

Truesdale, Cavour L. Draw curtain construction. 2,736,373, 2–28–56, Cl. 160—124.

Tufarolo, Amalia. Multiple unit dusting, cleaning, and polishing mitten. 2,736,052, 2–28–56, Cl. 15—227.

Turner, George H. Ball game device. 2,736,559, 2–28–56, Cl. 273—125.

Turner, Harold H., to The Ingersoll Milling Machine Co. Multiple shoe friction clutch. 2,736,410, 2–28–56, Cl. 192—35.

Tutt, Richard D., and G. T. Davis, to Allied Thermal Corp. Air diffuser. 2,736,255, 2–28–56, Cl. 98—40.

Umstott, Haven D. Detachable auxiliary steering wheel for motor vehicles. 2,736,211, 2–28–56, Cl. 74—494.

Union Carbide and Carbon Corp.: *See*—
Pines, Arthur N., and York. 2,736,736.

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Union Oil Co. of California: *See*—
Mattson, Raymond W., and Scott. 2,736,641.
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United Carr Fastener Corp.: *See*—
Heath, Clarence W., and Kay. 2,736,872.

United Shoe Machinery Corp.: *See*—
Jorgensen, Jacob C. 2,736,046.
Robert, Maurice, and Wakefield. 2,736,280.
Roske, Milton H. 2,736,047.

United States Atomic Energy Commission, United States of America as represented by the: *See*—
Bacon, Conrad G. 2,736,809.
Bell, Persa R., Jr. 2,736,817.
Brobeck, William M. 2,736,808.
Clark, Arnold F. 2,736,810.
Cranberg, Lawrence. 2,736,802.
Gaudin, Antoine M., and Schuhmann. 2,736,634.
Graham, Charles D., Jr., and Donley. 2,736,700.
Miller, Jack C. 2,736,806.
Schwope, Arthur D., and Chubb. 2,736,651.
Shonka, Francis R. 2,736,818.
Weaver, Harold F., and Van Atta. 2,736,811.
Weinstein, Alfred I., and Bonner. 2,736,812.
Wiegand, Clyde E., and Chamberlain. 2,736,801.
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U. S. Industries, Inc.: *See*—
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United States Rubber Co.: *See*—
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Smith, Allen E., Feldman, and Stone. 2,736,647.

United States Steel Corp.: *See*—
Carhart, Richard L. 2,736,699.
Coleman, William E., and Rendel. 2,736,431.
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Hovey, Otis W. 2,736,405.
Orr, Howard S., and Teplitz. 2,736,548.
Phillips, Freeman J. 2,736,649.
Potter, Rodney K. 2,736,673.
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Universal Oil Products Co.: *See*—
Murray, Maurice J., and Holden. 2,736,713.

University of California, Regents of The: *See*—
Krauss, Leonard. 2,736,095.

Utah Scientific Research Foundation: *See*—
Hardman, James A. 2,736,156.

Vaillant, Johann, Kommanditgesellschaft: *See*—
Brummerhoff, Walter. 2,736,498.

Van Amerongen, Gerritt J., J. L. Poldervaart, and A. Schreuder, to Rubber-Stitching. Process for the manufacturing of soluble chlorinated rubber by treatment of insoluble chlorinated rubber. 2,736,758, 2–28–56, Cl. 260—772.

Van Atta, Chester M.: *See*—
Weaver, Harold F., and Van Atta. 2,736,811.

Vanderpool, John F. Cathode plate for zinc recovery. 2,736,697, 2–28–56, Cl. 204—281.

Vanta Co., Inc., The: *See*—
Wyner, Justin L. 2,736,031.

Van Tol, Hendrikus J. M., to Hartford National Bank and Trust Co., trustee. Electric discharge tube. 2,736,835, 2–28–56, Cl. 313—331.

Van Valkenburg Howard E., and R. E. Sansom, to Sperry Products, Inc. Ultrasonic inspection of rail joints. 2,736,193, 2–28–56, Cl. 73—67.

Van Valkenburgh, Edward A. Liquid for reclaiming rubber. 2,736,662, 2–28–56, Cl. 106—123.

Van Wilgen, Tuines W.: *See*—
Clarkson, Ralph E., and van Wilgen. 2,736,117.
Clarkson, Ralph E., and van Wilgen. 2,736,118.
Clarkson, Ralph E., and van Wilgen. 2,736,119.

Vaughan, Vernon V. Control panel for balancing rotors. 2,736,820, 2–28–56, Cl. 307—17.

Vaugoyeau, Alexandre. Adjustable suspensions for automobile vehicles. 2,736,551, 2–28–56, Cl. 267—54.

Vedder, William J., to Oswego Falls Corp. Bottle closure transfer and printing means. 2,736,258, 2–28–56, Cl. 101—35.

Velsicol Chemical Corp.: *See*—
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Vendo Co., The: *See*—
Hedges, Charles S. 2,736,415.

Vibber, Alfred W. Twisting and plying spindle balloon control. 2,736,160, 2–28–56, Cl. 57—58.3.

Vickers Inc.: *See*—
Logan, Frank G. 2,736,409.

Vinal, Leroy W., to E. I. du Pont de Nemours & Co. Bristle feeding and cutting machine. 2,736,609, 2–28–56, Cl. 300—2.

Vines, Oscar L., to Alford Cartons. Dispensing carton. 2,736,484, 2–28–56, Cl. 229—17.

Voith, J. M.: *See*—
Koepke, Hans H. 2,736,530.

Volpe, Michael. Bolster friction snubber. 2,736,271, 2–28–56, Cl. 105—193.

Von Manteuffel, Gert S. Z., and C. A. Richardson, to The Sperry Gyroscope Co., Ltd. Craft guidance apparatus. 2,736,893, 2–28–56, Cl. 343—108.

Von Seggern, Ernest A. Dual pivot toggle mechanism for locking and releasing pivoted jaw wrench. 2,736,221, 2–28–56, Cl. 81—84.

Wagner, Robert W. Power take-off clutch. 2,736,202, 2–28–56, Cl. 74—15.86.

Waite, George F., to Curtiss-Wright Corp. Ornamental hub cap with temperature compensating retaining means. 2,736,610, 2–28–56, Cl. 301—37.

Wakefield, Gordon C. J.: *See*—
Roberts, Maurice, and Wakefield. 2,736,280.

Walker, Glynn R. Automatic twine tie baler. 2,736,256, 2–28–56, Cl. 100—19.

Walker, Herbert, and T. E. Shen, to British Dielectric Research Ltd. Manufacture of thin sheets or plates of heat-treated material suitable for the dielectrics of capacitors and for other purposes. 2,736,080, 2–28–56, Cl. 25—156.

Walker Mfg. Co. of Wisconsin: *See*—
Jacokes, Benton D. 2,736,284.

Walker Mfg. and Sales Corp.: *See*—
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Walton, George M., to D. M. Johnson. Soda fountain. 2,736,464, 2–28–56, Cl. 222—129.1.

Warkentin, Muriel N.: *See*—
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Watson, Claude. Journal box brass retaining spring. 2,736,618, 2–28–56, Cl. 308—53.

Weathersby, Ella C. Nut gatherer. 2,736,157, 2–28–56, Cl. 56—328.

Weaver, Harold F., and C. M. van Atta, to the United States of America as represented by the United States Atomic Energy Commission. Calutron receiver. 2,736,811, 2–28–56, Cl. 250—41.9.

Webb, George A., to Koppers Co., Inc. Process and apparatus for producing hydroxy aromatics. 2,736,754, 2–28–56, Cl. 260—628.

Webber, Charles S., to Norton Co. Phenolic resin products and their production. 2,736,718, 2–28–56, Cl. 260—29.3.

Webber, Claude H. Tapping and cutoff connection to plastic fluid pressure main. 2,736,335, 2–28–56, Cl. 137—318.

Weber, Harry M., to The Sherwin-Williams Co. Production of nonallergen reacting protein coatings from allergen-containing pomaces. 2,736,663, 2–28–56, Cl. 106—154.

Weber, Louis J., to Phillips Petroleum Co. Pebble heater reactor employed in the conversion of hydrocarbons, with the use of inert solids. 2,736,686, 2–28–56, Cl. 196—55.

Weimer, Paul K., to Radio Corp. of America. Color television pickup systems. 2,736,763, 2–28–56, Cl. 178—5.4.

Weinberg, Alvin M.: *See*—
Wigner, Eugene P., Ohlinger, Young, and Weinberg. 2,736,696.

Weinstein, Alfred I., and F. T. Bonner, to the United States of America as represented by the United States Atomic Energy Commission. Radioactivity measuring apparatus. 2,736,812, 2–28–56, Cl. 250—43.5.

Welch, Alanson U., Jr., to General Electric Co. Arc welding apparatus. 2,736,787, 2–28–56, Cl. 219—8.

Welker, Heinrich, to Siemens-Schuckertwerke Aktiengesellschaft. Controllable electric resistance devices. 2,736,858, 2–28–56, Cl. 323—94.

Welsh, George W.: *See*—
Hill, Stanley E., and Welsh. 2,736,350.

Wenger, Harvey R. Glove compartment pad. 2,736,428, 2–28–56, Cl. 206—72.

Wesh, Anthony J., to Socony Mobil Oil Co., Inc. Push type fluid conveyor. 2,736,611, 2–28–56, Cl. 302—17.

Western Electric Co., Inc.: *See*—
Lindholm, Paul. 2,736,588.
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Tooker, Howard A. 2,736,862.

Westholt, Lloyd R., to Dwight Mfg. Co., Inc. Lift attachment for tractors. 2,736,442, 2–28–56, Cl. 214—130.

Westinghouse Air Brake Co.: *See*—
Cook, Earle S., and Whitney. 2,736,612.
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Whirlpool-Seeger Corp.: *See*—
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Whitacre, John R.: *See*—
Nack, Herman R., and Whitacre. 2,736,788.

White, Joseph W. Anchor trim. 2,736,054, 2–28–56, Cl. 16—16.

Whitley, Charlie L., Sr. Loom feeler mechanism. 2,736,342, 2–28–56, Cl. 139—270.

Whitman, Edwin W.: *See*—
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Whitney, Ralph T.: *See*—
Cook, Earle S., and Whitney. 2,736,612.

Wichita Precision Tool Co., Inc.: *See*—
Jackson, Nolan C. 2,736,471.
Jackson, Nolan C. 2,736,472.

Wickland, Algot A. Wet type dust collector. 2,736,390, 2–28–56, Cl. 183—22.

Widell, George M., to Bendix Aviation Corp. Temperature compensating device. 2,736,501, 2–28–56, Cl. 236—99.

Wiegand, Clyde E., and O. Chamberlain, to the United States of America as represented by the United States Atomic Energy Commission. Distributed pulse height discriminator. 2,736,801, 2–28–56, Cl. 250—27.

Wiesner-Rapp Co., Inc.: *See*—
Stevens, Robert. 2,736,087.
Arnold, Walter W. 2,736,183.

Wigner, Eugene P., L. A. Ohlinger, G. J. Young, and A. M. Weinberg, to the United States of America as represented by the United States Atomic Energy Commission. Reactors. 2,736,696, 2–28–56, Cl. 204—193.

Wilcox, Harry A. Prcolling system and apparatus. 2,736,307, 2–28–56, Cl. 123—196.

Wilcox, Isaac L., to Oswego Falls Corp. Method of forming liners for paper containers. 2,736,065, 2–28–56, Cl. 18—56.

Wilhelm, John. Building block. 2,736,188, 2–28–56, Cl. 72—41.

Wilkinson, Cyril F.: *See*—
Cockran, Reginald W. J., Sullivan, and Wilkinson. 2,736,459.

Wilkinson, Joseph M.: *See*—
Glickman, Samuel A., and Wilkinson. 2,736,709.

Wilkinson Sword Co. Ltd., The: *See*—
Mathisen, Anders, and Griffiths. 2,736,779.

Will, Wilbert A., to Crown Controls Co., Inc. Motor operated device and remote control therefor. 2,736,854, 2–28–56, Cl. 318—289.

Wilson, Charles L., to Prima Industries Ltd. Hydraulic lifting jack. 2,736,531, 2–28–56, Cl. 254—93.

Wilson, Granville L., to Northrop Aircraft, Inc. Aircraft load ejection device. 2,736,522, 2–28–56, Cl. 244—137.

Wilson, Howard L., F. W. Banes, B. I. Smith, and J. F. Nelson, to Esso Research and Engineering Co. Process of petrolatum cracking in liquid and vapor phase. 2,736,685, 2–28–56, Cl. 196—50.

Wingenroth, Roy L.: *See*—
Steckle, Charles, and Wingenroth. 2,736,440.

Winn, John, and E. S. Peterson, to Wynnwood Corp. Force multiplying punching devices utilizing relative movements. 2,736,379, 2–28–56, Cl. 164—90.

Winn, Robert G., to American Decalcomania Co., Inc. Stamping machine. 2,736,448, 2–28–56, Cl. 216—30.

Wirth, Emil O., and F. Barfod, to Bendix Aviation Corp. Carburetor. 2,736,539, 2–28–56, Cl. 261—34.

Wise, Eugene P. Method of controlling seed germination by means of a composite seed assembly. 2,736,139, 2–28–56, Cl. 47—58.

Witmer, Harold G., to Westinghouse Air Brake Co. Track circuits for supplying train control energy through crossovers. 2,736,795, 2–28–56, Cl. 246—63.

Wittmann, Joseph J., Jr. Fishing lure. 2,736,124, 2–28–56, Cl. 43—42.23.

Wolf, Edward, to Goodyear Aircraft Corp. Steerable airplane landing wheel. 2,736,516, 2–28–56, Cl. 244—50.

Wolldeckenfabrik Zoeppritz Aktiengesellschaft: *See*—
Fuchs, Carl. 2,736,341.

Wood, Dan G., to Dorothy Dahl Inc. Adapter for gem setting device. 2,736,025, 2–28–56, Cl. 1—50.

Wood, Lorin A. Crutch. 2,736,330, 2–28–56, Cl. 135—49.

Woodings-Verona Tool Works: *See*—
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Woods, George B., to Spheric Structures, Inc. Building units. 2,736,072, 2–28–56, Cl. 20—2.

Worcester Pressed Steel Co.: *See*—
Manhartsberger, Albert. 2,736,462.

Work, Erich W., to Union Mfg. Co. Double-acting chuck. 2,736,563, 2–28–56, Cl. 279—121.

Wright, Harold J., to Concrete Saw Co. Movable pavement cutting machine with vertically adjustable and rocking axle. 2,736,544, 2–28–56, Cl. 262—20.

Wright, John W. Saw tooth assembly. 2,736,352, 2–28–56, Cl. 143—135.

Wydler, Erhard: *See*—
Peter, Albin, and Wydler. 2,736,731.

Wyner, Justin L., to The Vanta Co., Inc. Body garment. 2,736,031, 2–28–56, Cl. 2—111.

Wynwood Corp.: *See*—
Winn, John, and Peterson. 2,736,379.

Yacoe, Jesse C., to E. I. du Pont de Nemours and Co. Semi-continuous combined filter and drier. 2,736,434, 2–28–56, Cl. 210—150.6.

Yale & Towne Mfg. Co., The: *See*—
Hoban, Edward D. 2,736,445.

Yeomans, Lucien O., to American Telephone and Telegraph Co. Overcurrent and undercurrent indicating lamp. 2,736,884, 2–28–56, Cl. 340—253.

Yohe, John K., to Woodings-Verona Tool Works. Railroad track aligner. 2,736,268, 2–28–56, Cl. 104—8.

Young, Ambrose E.: *See*—
Maggs, Arthur H., and Young. 2,736,828.

Young, Gale J.: *See*—
Wigner, Eugene P., Ohlinger, Young, and Weinberg. 2,736,696.

York, Edward R.: *See*—
Pines, Arthur N., and York. 2,736,736.

Zaphiropoulos, Renn, to Chromatic Television Laboratories, Inc. Hoop electrode structure. 2,736,832, 2–28–56, Cl. 313—78.

Zeiss, Carl: *See*—
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Zenith Radio Corp.: *See*—
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Zerbee, Louis J. Fix finder. 2,736,093, 2–28–56, Cl. 33—1.

Ziph, Andrew H., to Walker Mfg. and Sales Corp. Draft regulator. 2,736,500, 2–28–56, Cl. 236—45.

CLASSIFICATION OF PATENTS

ISSUED FEBRUARY 28, 1956

NOTE.—First number = class, second number = subclass, third number = patent number

1— 3: 2,736,024
50: 2,736,025
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169— 1: 2,736,385
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7.3: 2,736,768
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184— 1: 2,736,392
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203— 310: 2,736,425
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206— 17: 2,736,426
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207— 10: 2,736,429
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210— 1.5: 2,736,432
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211— 86: 2,736,437
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10.6: 2,736,793
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242— 36: 2,736,505
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70: 2,736,814
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83.6: 2,736,817
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252— 18: 2,736,699
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32.7: 2,736,701
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46.7: 2,736,707
62.5: 2,736,708
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478: 2,736,714

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257— 241: 2,736,533
259— 8: 2,736,584
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134: 2,736,537
260— 23: 2,736,715
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247.7: 2,736,727
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514: Re.24,123
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266— 31: 2,736,550
267— 54: 2,736,551
268— 33: 2,736,552
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287— 12: 2,736,580
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310— 8.2: 2,736,823
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312— 213: 2,736,627
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313— 78: 2,736,832
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339— 45: 2,736,870
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369: 2,736,890
343— 12: 2,736,891
13: 2,736,892
108: 2,736,893
753: 2,736,894
756: 2,736,895
776: 2,736,896
346— 44: 2,736,629
107: 2,736,630

Classification of Designs

D15— 1: Des. 176,985
D22— 3: Des. 176,983
5: Des. 176,994
D26— 7: Des. 176,984
D30— 1: Des. 176,982
D37— 1: Des. 176,996

D44— 1: Des. 176,971
9: Des. 176,981
D48—20: Des. 176,988
Des. 176,989
27: Des. 176,979

D48—29: Des. 176,987
D49— 6: Des. 176,973
Des. 176,977
D52— 1: Des. 176,972
2: Des. 176,978

D52— 3: Des. 176,970
D54— 2: Des. 176,976
16: Des. 176,974
D57— 1: Des. 176,969
D58— 8: Des. 176,975

D58—10: Des. 176,986
D61— 1: Des. 176,980
D67— 3: Des. 176,997
D74— 9: Des. 176,990
Des. 176,991

D74— 9: Des. 176,992
D81—10: Des. 176,963
Des. 176,993
D87— 3: Des. 176,995
Des. 176,998

OFFICIAL GAZETTE • UNITED STATES PATENT OFFICE
February 28, 1956 Volume 703 Number 4

TRADEMARKS

NOTICES

Trademark Suits

Notices under 15 U. S. C. 1116; Trademark Act of July 5, 1946

TM 62,503 (Oxolin), Ball Chemical Co., Certain painters' materials, **filed** Feb. 17, 1955, D. C., S. D. Calif. (Los Angeles), Doc. 17887–Y, *Ball Chemical Co.* v. *Seal-Oxo-Lin Co., et al.* Trademark held valid and infringed; defendants enjoined from use of words "DE-OXO-LIN" and "SEAL-OXO-LIN" Feb. 2, 1956.

TM 345,836 (Bamboo), A. L. Helwith, Cotton, rayon and silk fabrics, in the piece, **filed** Feb. 2, 1956, D. C. N. J. (Newark), Doc. 100/56, *United Merchants and Manufacturers, Inc.* v. *Jersey Dyeing Co., Inc., et al.*

TM 350,640 (Nicolet), Bayer, Pretzfelder & Mills, Inc., Watches and clocks, **filed** Nov. 4, 1955, D. C., S. D. N. Y., Doc. 104/350, *Bayer, Pretzfelder & Mills, Inc.* v. *Winton Watch Co., Inc.* Stipulation and order of discontinuance (notice Feb. 1, 1956).

TM 576,542 (a trademark design), Haig & Haig Limited, Whisky, **filed** Aug. 15, 1955, D. C., N. D. Calif. (San Francisco), Doc. 34858, *Renfield Importers, Ltd.* v. *Stewart-Reynolds Co., Inc., et al.* Stipulation and decree holding trademark valid; defendants enjoined; counterclaim dismissed with prejudice Jan. 26, 1956.

Service by Publication

A petition to cancel each of the registrations identified below having been filed, and the notice of such proceedings sent by registered mail to each registrant at the last known address having been returned by the post office as undeliverable, notice is hereby given that unless the registrants listed herein, their assigns or legal representatives, shall enter an appearance within thirty days from the date of this publication, the cancelation will be proceeded with as in the case of default.

American Cooler Co., Inc., New York, N. Y., Reg. No. 347,876, Canc. 6635.

Howard Hosiery Company, Sinking Spring, Pa., Reg. No. 364,071, Canc. 6636.

My Pet Medicines, Inc., New York, N. Y., Reg. No. 351,458, Canc. 6653.

Guy Moore, Harlingen, Tex., Reg. No. 409,753, Canc. 6655.

DAPHNE LEEDS,
Assistant Commissioner of Patents.

CONDITION OF TRADEMARK APPLICATIONS AS OF FEBRUARY 3, 1956

Total number of applications awaiting action (excluding renewals and republications)..... 10,026
Date of oldest new application..... July 1, 1955
Date of oldest amended application..... Oct. 3, 1955

MERCHANT, JOHN, Executive Examiner

TRADEMARK EXAMINING DIVISIONS, EXAMINERS AND TRADEMARK CLASSES UNDER EXAMINATION	Oldest Application: New	Oldest Application: Amended
I. STERBA, J. R., Classes 2, 4, 5, 12, 13, 14, 16, 19, 21, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 44, 52 and Certification Marks (Goods) Class A	9-27-55	11-1-55
II. SHRYOCK, R. F., Classes 1, 6, 18, 46, 51 and Service Mark Classes 100, 101, 102, 103, 104, 105, 106, 107 and Certification Marks (Services) Class B	7-1-55	10-3-55
III. WENDT C. M., Classes 3, 7, 8, 9, 10, 11, 15, 17, 20, 22, 29, 36, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 49, 50	8-2-55	10-31-55
Renewals (All Classes)	12-13-55	
Sec. 12 (c) Publications (All Classes)	12-14-55	

Applications Filed During Week Ending February 3, 1956—411

Registrations Issued..... 527—No. 621,948 to No. 622,474
Renewals Issued..... 36

MARKS PUBLISHED FOR OPPOSITION

The following marks are published in compliance with section 12(a) of the Trademark Act of 1946. Notice of opposition under section 13 may be filed within thirty days of this publication. See Rules 20.1 to 20.5.
As provided by section 31 of said act, a fee of twenty-five dollars must accompany each notice of opposition.

CLASS 3

SN 652,026. Lewis W. Martin, Manheim, Lancaster, Pa. Filed Aug. 19, 1953.

BAGSKET

For Knitting and Crocheting Bags Sold Empty.
Use since about July 12, 1940.

CLASS 4

SN 682,787. Dolphin Chemical Company, St. Louis, Mo. Filed Mar. 4, 1955.



For General Polish.
Use since 1915.

CLASS 6

SN 685,296. Parker Rust Proof Company, Detroit, Mich. Filed Apr. 11, 1955.

PARKER PRE-NAMEL

Applicant claims ownership of Reg. Nos. 529,121, 531,511, and 535,608.
For Chemical Composition That Provides a Corrosion Inhibiting Coating for Metals and/or Conditions Metal for the Subsequent Application of Finish Coats.
Use since May 5, 1954.

SN 689,369. Eastman Kodak Company, Rochester, N. Y. Filed June 13, 1955.

KPR

For Photographic Resist, Photographic Resist Developer, Photographic Resist Thinner, and Photographic Resist Dye.
Use since May 11, 1955.

SN 689,624. Guardian Chemical Corporation, Long Island City, N. Y. Filed June 16, 1955.

VOIDOX

For Anti-Oxidants.
Use since Dec. 29, 1952.

CLASS 7

SN 675,990. Inlander-Steindler Paper Company, Chicago, Ill. Filed Nov. 3, 1954.



For Baler Twine.
Use since May 1, 1953.

SN 690,720. Norman Librett, Inc., New Rochelle, N. Y. Filed July 5, 1955.

norman

For Braided Cordage and Plastic Cordage.
Use since 1947.

CLASS 8

SN 694,919. Fritz Siegfried Rothschild, Montreal, Quebec, Canada. Filed Sept. 19, 1955.

Rosana

Applicant claims ownership of Canadian Reg. No. N. S. 97/25,153, dated Jan. 27, 1947.
For Smokers' Pipes, Cigar Holders, and Cigarette Holders.

CLASS 9

SN 694,622. American Weapons Corporation, Burbank, Calif. Filed Sept. 14, 1955.

PEACEMAKER

For Revolvers and Parts Thereof.
Use since Mar. 25, 1955.

CLASS 10

SN 691,027. Charles Wesley Frame, Salt Lake City, Utah. Filed July 11, 1955.



The drawing is lined for green and yellow.
For Fertilizer.
Use since on or about Mar. 15, 1954.

SN 691,286. Fertilene Corporation of America, Worthington, Ohio. Filed July 14, 1955.

FERTILENE

Applicant claims ownership of Reg. No. 603,806.
For Fertilizers.
Use since November 1953.

SN 694,219. The Farm Bureau Cooperative Association, Inc., Columbus, Ohio. Filed Sept. 6, 1955.

FARMGRO

For Fertilizer.
Use since Jan. 20, 1955.

SN 694,898. Minerals Processing Corporation, Syracuse, N. Y. Filed Sept. 19, 1955.

Sterilite

For Processed Volcanic Granulated Mineral Composition Having a Cellular Structure, Relatively Inert Chemically, Used as a Soil Conditioner for Aerating the Soil and Increasing Its Ability To Retain Moisture and Fertilizers.
Use since Jan. 19, 1953.

CLASS 11

SN 694,850. The Buckeye Ribbon & Carbon Co., Cleveland, Ohio. Filed Sept. 19, 1955.

Plyon

Applicant claims ownership of Reg. No. 375,925.
For Typewriter Ribbons, Business Machine Inked Ribbons, and Carbon Paper.
Use since Dec. 3, 1954.

CLASS 12

SN 681,176. Kerr Industries, Burbank, Calif. Filed Feb. 7, 1955.

ELEPHANT HIDE

For Plastic Splines or Welting Forming Edging for Such Articles as Window Screens and Automobile Seat Covers.
Use since about Nov. 1, 1953.

SN 689,610. Paul Collet & Co. Ltd., Montreal, Quebec, Canada. Filed June 16, 1955.

flexdoor

Applicant claims ownership of Canadian Reg. No. N. S. 178/45,498, dated Sept. 9, 1953.
For Folding Doors.

SN 690,871. The Eagle Window Sales, Inc., Louisville, Ky. Filed July 7, 1955.

KOOL-VIEW

For Ventilated Metal Awnings, Metal Canopies, and Metal Marquees.
Use since Feb. 20, 1955.

SN 693,694. National Tile & Manufacturing Co., Anderson, Ind. Filed Aug. 25, 1955.

CRYSTEX

For Ceramic Tile.
Use since on or about May 3, 1954.

SN 695,221. Hendrick Manufacturing Company, Carbondale, Pa. Filed Sept. 23, 1955.

HENDRICK MITCO

For Steel Floorings, Walkways, and Armor for Concrete Floors.
Use since Dec. 31, 1924.

SN 695,807. Duralite Window Corporation, Knoxville, Tenn. Filed Oct. 4, 1955.

VISTA-LITE

For Aluminum Windows.
Use since Apr. 6, 1955.

SN 695,958. Terox Manufacturing Corporation, Franklin Park, Ill. Filed Oct. 5, 1955.

TEROX

For Building Materials Consisting of Molded Members of Resin Simulating Stone.
Use since Aug. 26, 1955.

SN 696,043. Johns-Manville Corporation, New York, N. Y. Filed Oct. 7, 1955.

CERAFELT

For Refractory Fiber Felts.
Use since Aug. 12, 1955.

SN 698,515. A. P. Green Fire Brick Company, Mexico, Mo. Filed Nov. 18, 1955.

JERZITE

For Firebrick.
Use since Dec. 24, 1953.

SN 698,644. John L. Rogers, d. b. a. John L. Rogers Planing Mill, Tunnel Hill, Ga. Filed Nov. 21, 1955.

REGAL

For Wooden Window Units.
Use since June 20, 1955.

CLASS 13

SN 657,594. The Bead Chain Manufacturing Company, Bridgeport, Conn. Filed Dec. 8, 1953. Sec. 2(f).

BEAD CHAIN

Applicant claims ownership of Reg. No. 184,981.
For Chains of Nonprecious Metal, Plumbing Chains, and Key Rings.
Use since Dec. 6, 1923.

SN 660,188. Chicago Pump Company, Chicago, Ill. Filed Jan. 27, 1954.

FLEXOFUSER

For Elongated Porous Tubes Used To Diffuse Air or Other Gaseous Medium Into Sewage, Industrial Wastes, Water and Water-Containing Compositions in a Liquid State, Liquid Chemical Compositions, and the Like.
Use since on or about Feb. 22, 1952.

SN 674,718. Winston Screw Products Corporation, Teterboro, N. J. Filed Oct. 12, 1954.

"Wipe-Away"

For Baby Feeding Dishes Made of Porcelain Having an Outer Metallic Shell.
Use since Oct. 7, 1954.

SN 678,434. Brennan Illinois Iron Works, Inc., Chicago, Ill. Filed Dec. 16, 1954.

ORNA-BRAC

For Fruit Bowls and Shelving for Bath Rooms and Elsewhere, in All of Which Sheet Metal, Overall Perforated, Constitutes the Most Prominent Feature.
Use since Sept. 18, 1954.

SN 678,831. Vulcan Steel Products Company, Inc., Brooklyn, N. Y. Filed Dec. 22, 1954.

SNUBIT

For Cable Clamp.
Use since Oct. 7, 1949.

SN 680,113. Tack Band, Inc., Leominster, Mass. Filed Jan. 18, 1955. Sec. 2(f).

Tack Band

For Upholstering Strips and Tacking Strips.
Use since Jan. 15, 1950.

SN 684,117. Samuel J. Daner, Newark, N. J. Filed Mar. 24, 1955.

TYDEE

For Combined Mixing and Pouring Attachment for Cylindrical Paint Cans.
Use since Feb. 2, 1955.

SN 685,929. Stuart H. Reed and J. Herbert Gigandet, Pittsburgh, Pa. Filed Apr. 20, 1955.

TOOTHPASTER

For Mechanism Comprising a Rack and Gear for Dispensing Toothpaste From a Tube.
Use since Apr. 12, 1955.

SN 686,416. Belford Company, Inc., New York, N. Y. Filed Apr. 28, 1955.

handi-ring

For Tie Holders, Towel Holders and Hose Holders Each in the Form of a Highly Polished Smooth Circular Band Having an Opening Nearly Equal to Its Diameter.
Use since April 1955.

SN 687,683. Joseph T. Crowder, Toronto, Ontario, Canada. Filed May 17, 1955.

Crowdertrack

Priority under Sec. 44(d). Canadian application filed Mar. 10, 1955, Reg. No. 101,737, dated Oct. 28, 1955.
For Sliding Door Hardware.

SN 694,801. H-K Equipment Co., Swan Island, Portland, Oreg. Filed Sept. 16, 1955.

KELTON

For Gate Valves.
Use since Apr. 26, 1954.

SN 694,937. The Weatherhead Company, Cleveland, Ohio. Filed Sept. 19, 1955.

ROTO-MITE

For Hydraulic Swivel Fittings for Aircraft.
Use since May 27, 1955.

CLASS 14

SN 679,969. American Steel Foundries, Chicago, Ill. Filed Jan. 17, 1955.

WEARPACT

For Steel Castings and Forgings.
Use since on or about Apr. 22, 1954.

SN 688,779. Roy Zajon, d. b. a. Roy Zajon Machine Parts, Chicago, Ill. Filed June 2, 1955.

ZAJON

"SAVE DOLLARS by the hundredths"

For Metal Blanks Adapted To Be Machined and Finished To Form Cams, Rollers, and Other Machine Parts.
Use since Jan. 20, 1953.

SN 692,815. Hermann C. Starck Aktiengesellschaft, Berlin-Lichterfelde, Germany. Filed Aug. 10, 1955.

MARKE AMPERE

The English equivalent of the word feature of the mark is "Mark Ampere." Applicant claims ownership of German Reg. No. 638,415, dated May 19, 1953.
For Ferro Alloys, in Particular Ferrotungsten, Ferrochromium, Ferromolybdenum, Ferrovanadium, Ferroboron, and Ferrosilicon; Non-Precious Non-Ferrous Metals, Such as Tungsten, Chromium, Nickel, Molybdenum, Tantalum, and Titanium in Form of Powder or Bars.

SN 698,460. Research Products Corporation, Madison, Wis. Filed Nov. 17, 1955.

RP

Applicant claims ownership of Reg. No. 390,640.
For Perforated Metal Foil and Expanded Metal Foil for Decorative and Sundry Applications.
Use since Oct. 16, 1950.

CLASS 15

SN 665,805. Compinex Oil Company, New York, N. Y. Filed May 6, 1954.

COMPINEX

PENN

No claim is made to exclusive use of the word "Penn" apart from the mark as shown.
For Automotive and Industrial Lubricating Oil and Greases.
Use since Apr. 23, 1954.

SN 665,806. Compinex Oil Company, New York, N. Y. Filed May 6, 1954.

PLANET

For Automotive and Industrial Lubrication Oil and Greases.
Use since Apr. 23, 1954.

SN 670,372. Oklahoma Oil Products Corporation, Chicago, Ill. Filed July 21, 1954.

OPB "17"

For Lubricating Oils and Gasoline and an Additive in a Gasoline Type Motor Fuel To Increase Power Output.
Use since on or about Nov. 1, 1952.

SN 683,897. Link Petroleum Co., Inc., Laredo, Tex. Filed Mar. 21, 1955.

Link
SAFE DEPENDABLE ECONOMICAL

No claim is made to the words "Safe—Dependable—Economical," apart from the mark shown.
For Petroleum Products—Namely, Oils and Greases.
Use since Oct. 8, 1954.

CLASS 16

SN 641,666. J. E. Bauer Company, Los Angeles, Calif. Filed Feb. 3, 1953.

ZONE-LAC

For Quick-Drying Road-Marking Paint.
Use since Aug. 15, 1924.

SN 659,017. Trojan Powder Company, Allentown, Pa. Filed Jan. 5, 1954.

TROJAN CHEMICALS

For Chemical Compositions Used as an Ingredient of Paint, Varnish, and Lacquer Comprising Pentaerythritol Technical, Pentaerythritol Pure, Pentaerythritol Nitration Grade, Dipentaerythritol, Tripentaerythritol, Trimethylolpropane (T. M. P.), Trimethylolethane (T. M. E.).
Use since Dec. 9, 1953.

SN 666,413. Wolverine Finishes Corporation, Grand Rapids, Mich. Filed May 14, 1954.

CASUALITE

For Wood Finishing Coating.
Use since Feb. 23, 1954.

SN 690,049. Tempo Products Co., Cleveland, Ohio. Filed June 22, 1955.

INSTANT Tempo SPRAY

The words "Instant" and "Spray" are disclaimed apart from the mark as shown.
For Enamels, Lacquers and Paints, and Primers and Surfacers for Use in Conjunction Therewith, Packaged in Spray-Type Containers.
Use since January 1954.

SN 691,241. Standard-Toch Chemicals, Inc., Staten Island, N. Y. Filed July 13, 1955.

Color CAROUSEL

The word "Color" is disclaimed apart from the mark as a whole. Applicant claims ownership of Reg. Nos. 556,065 and 594,795.
For Gloss, Semi-Gloss, and Flat Paints, and Paint Enamels.
Use since Oct. 24, 1951.

SN 691,324. Pittsburgh Plate Glass Company, Pittsburgh, Pa., to Barreled Sunlight Paint Company, Providence, R. I. Filed July 14, 1955.

QUICKWALL PRIMER

The applicant disclaims the word "Primer" apart from the mark as shown.
For Paints, Paint Primers, and Paint Enamels.
Use since Feb. 1, 1955.

SN 691,535. Gerald J. Wyatt, d. b. a. Wyco Paint & Chemical Co., Oak Park, Mich. Filed July 18, 1955.

WYNEX

For Paint Having Rust Arresting, Sealing, and Water Proofing Properties.
Use since Nov. 1, 1954.

SN 691,536. Gerald J. Wyatt, d. b. a. Wyco Paint & Chemical Co., Oak Park, Mich. Filed July 18, 1955.

WYCOTE

For Paint Having Rust Arresting, Sealing, and Water Proofing Properties.
Use since Nov. 1, 1954.

SN 692,164. Republic Paint and Varnish Co., Chicago, Ill. Filed July 29, 1955.

Lustra-Lux *GLASS-GLOSS*

For Paints in Liquid and Paste Form.
Use since Feb. 16, 1955.

SN 695,852. Societe Anonyme Conte, Paris, France. Filed Oct. 4, 1955.

CIROLOR

For Paints, Coloring Materials, and Solvents Therefor.
Use since Jan. 1, 1953.

SN 696,886. Gypsy Paint & Varnish Co., Inc., Brooklyn, N. Y. Filed Oct. 21, 1955.

Alka Hide

For Paints.
Use since November 1954.

SN 697,928. Opalite, Inc., Minneapolis, Minn. Filed Nov. 8, 1955.

OPALITE

For Protective and Decorative Coating Material and More Particularly Wall Primer and Bond Coat, Cellulose Additive, Wall Surfacing Agent, Surface Conditioner, Glazing Sealer, Anti Acid Sealer, and Wall Surface Reagent.
Use since Oct. 1, 1955.

SN 698,014. Brooklyn Paint & Varnish Co., Inc., Brooklyn, N. Y. Filed Nov. 10, 1955.

SPEEDFLEX

For Varnishes and Paints.
Use since on or about Jan. 1, 1940.

SN 698,195. Benjamin Moore & Co., New York, N. Y. Filed Nov. 14, 1955.

CHEX-WEAR

For Enamels.
Use since Oct. 19, 1955.

SN 698,285. Inertol Co., Inc., Newark, N. J. Filed Nov. 15, 1955.

KATA-PONTEX

For Water-Resistant and Chemical Resistant Protective Coatings for Masonry and Metal Surfaces (in the Nature of a Paint and Applicable by Brush or Spray).
Use since Aug. 19, 1955.

CLASS 17

SN 691,961. Rembrandt Tobacco Corporation (Overseas) Limited, Stellenbosch, Cape Province, Union of South Africa. Filed July 26, 1955.

Rembrandt

Applicant claims ownership of South African Reg. No. 2,732/49, dated Dec. 6, 1949; and U. S. Reg. No. 385,374.
For Cigars, Cigarettes, Cut Tobacco, and Snuff.

CLASS 18

SN 677,824. The F. C. Sturtevant Company, Hartford, Conn. Filed Dec. 6, 1954. Sec. 2(f).

COLUMBIA

Applicant claims ownership of Reg. No. 93,615.
For Antiseptic Powder.
Use since in or about the year 1885.

SN 678,033. Humphreys Medicine Company, Incorporated, New York, N. Y. Filed Dec. 9, 1954. Sec. 2(f).

MARAVILLA CURATIVA

The words "Maravilla Curativa" are Spanish for "Marvel Cure." Applicant claims ownership of Reg. Nos. 377,261 and 436,544.
For Witch-Hazel.
Use since Feb. 1, 1891.

SN 679,249. Joseph Wyman Walker, Atlanta, Ga. Filed Dec. 31, 1954.

al-lo-gene

For Medicinal Cream Product Which Stops the Itching of Allergies From External Causes.
Use since June 1, 1954.

SN 682,752. Chas. Pfizer & Co., Inc., Brooklyn, N. Y. Filed Mar. 3, 1955.

TRACIQUENT

For Therapeutic Antibiotic Preparation for Topical Administration.
Use since Dec. 9, 1954.

SN 683,472. American Cyanamid Company, New York, N. Y. Filed Mar. 15, 1955.

KYNEX

Applicant claims ownership of Reg. No. 602,289.
For Sulfonamide Preparation.
Use since Feb. 28, 1955.

SN 685,878. American Cyanamid Company, New York, N. Y. Filed Apr. 20, 1955.

ATHROSYL

For Preparation for the Prevention of Cholesterol Build-Up in Humans.
Use since Apr. 5, 1955.

SN 685,879. American Cyanamid Company, New York, N. Y. Filed Apr. 20, 1955.

SITOSTIN

For Preparation for the Prevention of Cholesterol Build-Up in Humans.
Use since Apr. 5, 1955.

SN 688,340. Merck & Co., Inc., Rahway, N. J. Filed May 26, 1955.

DELTACORTONE

Applicant claims ownership of Reg. No. 531,347.
For Hormones and Hormonal Substances for Medicinal and Pharmaceutical Use.
Use since Apr. 27, 1955.

SN 689,199. Abbott Laboratories, North Chicago, Ill. Filed June 9, 1955.

Nembu-gesic

Applicant claims ownership of Reg. Nos. 285,003, 574,302, and others.
For Sedative and Analgesic Preparation.
Use since May 26, 1955.

SN 689,975. The Wellcome Foundation Ltd., London, England. Filed June 21, 1955.

EPIVAX

Applicant claims ownership of British Reg. No. 720,842, dated Aug. 13, 1953.
For Vaccines and Biological Preparations for Immunization Against and Treatment of Canine Distemper and Hard Pad Disease.

SN 690,715. Kenneth Products, Los Angeles, Calif. Filed July 5, 1955.

kid-i-mins

For Multiple Vitamin Preparation.
Use since June 20, 1955.

SN 691,667. Consolidated Midland Corporation, Katonah, N. Y. Filed July 21, 1955.

HYPERTENCIN

For Preparation for the Treatment of Hypertension.
Use since Feb. 1, 1953.

SN 691,670. Consolidated Midland Corporation, Katonah, N. Y. Filed July 21, 1955.

AMOEBICON

For Preparation for the Treatment of Intestinal Amebiasis.
Use since Feb. 1, 1953.

SN 691,676. Consolidated Midland Corporation, Katonah, N. Y. Filed July 21, 1955.

LIBEPLEX

For Preparation for the Treatment of Anemia.
Use since Feb. 1, 1954.

SN 691,677. Consolidated Midland Corporation, Katonah, N. Y. Filed July 21, 1955.

STREPTOCONIN SULFATE

Applicant disclaims the exclusive right to use the word "Sulfate" apart from the mark, as shown.
For Preparation for the Treatment of Tuberculosis.
Use since June 1, 1954.

SN 691,678. Consolidated Midland Corporation, Katonah, N. Y. Filed July 21, 1955.

FORTICON

For Preparation for the Treatment of Vitamin, Mineral, and Amino Acid Deficiency.
Use since Feb. 1, 1954.

CLASS 19

SN 668,811. The Anderson Company, Gary, Ind. Filed June 24, 1954.

SURGE-METER

For Resilient Housing Constituting a Component of Washer Apparatus for Forcing a Liquid Onto a Windshield.
Use since Apr. 5, 1954.

SN 683,583. B. T. Crump Company, Inc., Richmond, Va. Filed Mar. 16, 1955.

COVOLET

For Automobile Seat Covers.
Use since May 1928.

SN 689,866. George L. Pyritz, d. b. a. Pyritz Manufacturing Company, Indianapolis, Ind. Filed June 20, 1955.



No claim is made to the word "Hydraulic" apart from the mark as shown.
For Hydraulic Power Brake.
Use since on or about Aug. 3, 1954.

SN 692,680. E. W. & A. P. Dupont, Inc., Morgan City, La. Filed June 10, 1955. Sec. 2(f).

SAFTICRAFT

For Boats.
Use since Jan. 31, 1950.

SN 695,140. Crucible Corporation, Chicago, Ill. Filed Sept. 22, 1955.

WHEELMASTER

For Fifth Wheels for Trucks.
Use since July 15, 1955.

SN 695,516. Airstream Trailers, Inc., Jackson Center, Ohio. Filed Sept. 29, 1955.

Safari

For House Trailers.
Use since Mar. 20, 1954.

SN 696,256. Pacesetter Boats, Inc., Waxahachie, Tex. Filed Oct. 11, 1955.

Pacesetter

For Boats.
Use since Apr. 2, 1955.

SN 696,279. American Road Equipment Company, Omaha, Nebr. Filed Oct. 12, 1955.

MORTAR-HOP



For Manually Portable Wheel-Supported Containers for Transporting Mortar or Concrete.
Use since May 27, 1955.

CLASS 21

SN 650,870. Cable Electric Products, Inc., Providence, R. I. Filed July 27, 1953.

SWITCH KING

The word "Switch" is disclaimed from the mark shown.
For Flush Toggle Switches.
Use since Apr. 6, 1953.

SN 663,686. George Schoenborn-Buchheim, d. b. a. Garvenswerke, Vienna, Austria. Filed Mar. 31, 1954.

MIMOT

For Electric Motors, Electric Switches, and Electric Gears.
Use since 1928.

SN 663,687. George Schoenborn-Buchheim, d. b. a. Garvenswerke, Vienna, Austria. Filed Mar. 31, 1954.

UTA

For Electric Motors, Electric Switches, and Electric Gears.
Use since Feb. 13, 1929.

SN 664,579. Appleton Electric Company, Chicago, Ill. Filed Apr. 15, 1954. Sec. 2(f).

APPLETON

Applicant claims ownership of Reg. No. 165,305.
For Electrical Products, Including Outlet Boxes, Switch Boxes, Conduit Fittings, Gaskets, Wiring Devices, Junction Boxes, Receptacles, Splicing Covers, Cord Grips, Switch Covers, Fixture Hangers, Switch Guards, Switch and Receptacle Boxes, Plug Receptacle Housings, Circuit Breakers, Switch Operators, Guard Fixtures, Vaportight Fixtures, Explosion-Proof Fixtures, Hoods, Connection Blocks, Conduit Clamps, Pendant Fixture Loops and Hooks, Guy Wire Hanger and Rod Supports, Circuit Breaking Plug and Receptacle

Equipment, Plug Adaptors, Cable and Cord Connectors, Fuse Boxes, Conduit Couplings, Conduit Expansion Joints, Stuffing Boxes, Bonding Jumpers, Fixture Rings, Hub Plates, Conduit Hubs, Lamp Housings, Flexible Couplings for Conduit, Unions for Conduit, Flexible Conduit Connectors, Close-Up Plugs, Switches, Push Button Stations, Dead End Receptacles and Plugs, Sealed Safety Switch Receptacles, Combined Pilot Light and Switch Boxes and Covers Therefor, Circuit Breaking Plugs and Receptacles, Interlocking Type Safety Switch and Plug Receptacles, Explosion-Proof Lighting Fixtures, Fluorescent Lighting Fixtures, Explosion-Proof Fluorescent Lighting Fixtures, Globes, Guards and Reflectors, Canopies, Hand Lamps, Barrel Inspection Lamps, Gauge Lamps, Panel Boards, Explosion-Proof Panel Boards, Mercury Switches and Housings Therefor, Grounding Plugs and Receptacles, Cable Lift Reels, Entrance Fittings, Ground Fittings, Box Adaptors, Box Extensions, Rosettes, Globe Adaptors, Explosion-Proof Vented Clocks, X-Ray Film Illuminators, Light Diffusers, Sockets, Sign Reflectors, Shelving Reflectors, Gymnasium Fixtures, Yard Lights, Mercury Fixtures, Flood Lights, Cable Reels, Swivel Bases, and Balancers.
Use since February 1908.

SN 664,580. Appleton Electric Company, Chicago, Ill. Filed Apr. 15, 1954. Sec. 2(f).

APPLETON
THE STANDARD FOR BETTER WIRING

Applicant claims ownership of Reg. No. 165,305.
For Electrical Products, Including Outlet Boxes, Switch Boxes, Conduit Fittings, Gaskets, Wiring Devices, Junction Boxes, Receptacles, Splicing Covers, Cord Grips, Switch Covers, Fixture Hangers, Switch Guards, Switch and Receptacle Boxes, Plug Receptacle Housings, Circuit Breakers, Switch Operators, Guard Fixtures, Vaportight Fixtures, Explosion-Proof Fixtures, Hoods, Connection Blocks, Conduit Clamps, Pendant Fixture Loops and Hooks, Guy Wire Hanger and Rod Supports, Circuit Breaking Plug and Receptacle Equipment, Plug Adaptors, Extension Cable and Cord Connectors, Fuse Boxes, Conduit Couplings, Conduit Expansion Joints, Stuffing Boxes, Bonding Jumpers, Fixture Rings, Hub Plates, Conduit Hubs, Lamp Housings, Flexible Couplings for Conduit, Unions for Conduit, Flexible Conduit Connectors, Close-Up Plugs, Switches, Push Button Stations, Dead End Receptacles and Plugs, Sealed Safety Switch Receptacles, Combined Pilot Light and Switch Boxes and Covers Therefor, Circuit Breaking Plugs and Receptacles, Interlocking Type Safety Switch and Plug Receptacles, Explosion-Proof Lighting Fixtures, Fluorescent Lighting Fixtures, Explosion-Proof Fluorescent Lighting Fixtures, Globes, Guards and Reflectors, Canopies, Hand Lamps, Barrel Inspection Lamps, Gauge Lamps, Panel Boards, Explosion-Proof Panel Boards, Mercury Switches and Housings Therefor, Grounding Plugs and Receptacles, Electric Cable Lift Reels, Entrance Fittings, Ground Fittings.
Use since Sept. 21, 1932.

SN 676,859. Atlas Powder Company, Wilmington, Del. Filed Nov. 18, 1954.

Shotmaster

For Blasting Equipment—Namely, a Machine for Firing Electric Blasting Caps.
Use since July 22, 1954.

SN 678,421. Rome Cable Corporation, Rome, N. Y. Filed Dec. 15, 1954. Sec. 2(f).

Rome

For Wire and Cable.
Use since December 1939.

SN 678,900. Aeronautical Electronics, Inc., Raleigh, N. C. Filed Jan. 7, 1955.

AEROTRON

For Radio Receiving and Transmitting Apparatus, and Parts Thereof.
Use since May 1946.

SN 679,439. Zavody V. I. Lenina Plzen, Narodni Podnik, Plzen, Czechoslovakia. Filed Jan. 4, 1955.

PLZEN ZAVODY V.I.LENINA

The inscription "Zavody V. I. Lenina Plzen" indicates the Czech name of the applicant corporation and may be translated as "V. I. Lenin's Works Plzen." The word "Plzen" is the name of the city in Czechoslovakia where applicant's principal works are situated and no claim is made to said word apart from the association shown in the mark. Applicant claims ownership of Czechoslovakian Reg. No. 150,901, dated Jan. 17, 1952.
For Electric Motors; Generators Including Turbogenerators; Transformers; Rectifiers; Dynamotors; Electric Locomotives; Relays; Coils; Solenoids; Resistances; Resistors; Condensers; Capacitors; Rheostats; Switches; Starter Switches; Switchboards; Circuit Breakers; Starters; Magnetically Controlled, and Electric Brakes and Clutches; Electric Connectors and Contactors; Electric and Electromagnetic Controllers; Structural Parts of the Machines and Apparatus Named Before.

SN 679,874. The Udylite Corporation, Detroit, Mich. Filed Jan. 13, 1955.

UDYLITE

Applicant claims ownership of Reg. Nos. 220,590 and 229,519.
For Electroplating Machines and Apparatus and Parts and Attachments Therefor.
Use since 1936 on barrel plating machines.

SN 680,131. Dial Products Company, Newark, N. J. Filed Jan. 19, 1955.

DIAL

For Miniature Electromagnetic Clutches.
Use since Oct. 27, 1954.

SN 681,456. Speer Carbon Company, St. Marys, Pa. Filed Feb. 10, 1955.

ARC-KING

For Welding Carbons.
Use since Jan. 10, 1955.

SN 686,435. Electronic Devices, Inc., Brooklyn, N. Y. Filed Apr. 28, 1955.

PLASTISEL

For Selenium Rectifiers.
Use since Sept. 4, 1951.

SN 689,238. Palmer Manufacturing Corporation, Phoenix, Arix. Filed June 9, 1955.

PALMAIRE

Applicant claims ownership of Reg. No. 431,691.
For Portable and Wall Type Electric Heaters.
Use since Jan. 22, 1953.

SN 690,892. Manley, Inc., Kansas City, Mo. Filed July 7, 1955.

"THE FRANK-BANK"

For Electric Frankfurter Cooker.
Use since Mar. 1, 1952.

SN 691,122. Cosmos Electronic Machine Corp., New York, N. Y. Filed July 12, 1955.

CHROMOS

COSMO-CHROME

For Electronically Operated Sealing Machines for Plastic Material and Parts Thereof.
Use since June 15, 1955.

SN 693,659. The Brown-Brockmeyer Company, Dayton, Ohio. Filed Aug. 25, 1955.

FLEET-LINE

Applicant claims ownership of Reg. No. 508,176.
For Electric Motors.
Use since Aug. 25, 1947.

SN 693,859. Safety Warning Signal Co., Brooklyn, N. Y. Filed Aug. 29, 1955.

WARN FLASH

For Signal Flash Lamps.
Use since June 10, 1955.

SN 694,049. Clevite Corporation, Cleveland, Ohio. Filed Sept. 1, 1955.

CLEVITE

For Semiconductor Diodes and Transistors.
Use since Oct. 29, 1953.

SN 694,320. Jerrold Electronics Corporation, Philadelphia, Pa. Filed Sept. 7, 1955.

UNIVAMP

For Distribution Amplifiers.
Use since July 29, 1955.

SN 694,325. Marconi's Wireless Telegraph Company Limited, London, England. Filed Sept. 7, 1955.

MARCONI

Applicant claims ownership of British Reg. No. 521,638, dated Apr. 1, 1931.
For Wireless Telegraphic and Telephonic Transmitting and Receiving Plant for Use in Communications for Tolls, and Complete Wireless Telegraphic and Telephonic Transmitting and Receiving Installations in Ships and Aircraft, Primarily Intended for Navigational Purposes.

SN 694,481. Electro Manufacturing Corporation, Chicago, Ill. Filed Sept. 12, 1955.

MAGIC FRAME

For Fluorescent Lighting Fixtures.
Use since Aug. 1, 1954.

SN 694,503. The Ozo Sales Corporation, New Haven, Conn. Filed Sept. 12, 1955.

PURITRON

For Electric Air Purifiers.
Use since June 1, 1955.

SN 694,988. The Garrard Engineering & Manufacturing Co., Ltd., Swindon, England. Filed Sept. 20, 1955. Sec. 2(f).

GARRARD

Applicant claims ownership of Reg. No. 362,876.
For Electric Motors and Motor Driven Units for Gramophones and Record Changers in Gramophones, for Electrically Operable Automatic Record Changers, and for Gramophone Pick-Ups.
Use since November 1920.

SN 694,998. Jason Products, Inc., New York, N. Y. Filed Sept. 20, 1955.

CONDOR

For Electric Generating Sets.
Use since Apr. 12, 1954.

SN 695,147. Dukane Corporation, St. Charles, Ill. Filed Sept. 22, 1955.

DUKANE

Applicant claims ownership of Reg. No. 542,675.
For Dictating Machines of the Magnetic Type, Magnetizable Records for Such Machines, and Parts for Such Machines.
Use since Sept. 10, 1955.

SN 695,149. Elgin-Neomatic, Inc., Los Angeles, Calif. Filed Sept. 22, 1955.

ELGIN

For Electric Relays.
Use since Mar. 28, 1955.

SN 695,237. Arthur Murray Enterprises, Inc., New York, N. Y. Filed Sept. 23, 1955.

Arthur Murray

"Arthur Murray" is the name of the well-known dance instructor, whose consent to register is of record.
For Portable Electrically-Operated Phonograph-Record Players.
Use since June 1, 1955.

SN 695,408. Frenchtown Porcelain Company, Trenton, N. J. Filed Sept. 27, 1955.

MOLCOTE

For Ceramic Electrical Insulators With a Metallized Coating.
Use since Aug. 19, 1955.

SN 695,410. Frenchtown Porcelain Company, Trenton, N. J. Filed Sept. 27, 1955.

NICOTE

For Ceramic Electrical Insulators With a Metallized Coating.
Use since Aug. 12, 1955.

SN 695,447. Carl W. Scheel, d. b. a. Scheel Development Company, Cleveland, Ohio. Filed Sept. 27, 1955.

Fantom

For Motor Vehicle Burglar Alarm.
Use since June 1, 1955.

SN 695,467. Dow Corning Corporation, Midland, Mich. Filed Sept. 28, 1955.

SILASTIC

For Electrical Insulating Tape of Glass Cloth Coated With Semivulcanized Silicone Rubber.
Use since Dec. 13, 1949.

SN 695,634. The Lamb Electric Company, Kent, Ohio, to The Lamb Electric Company, Kent, Ohio. Filed Sept. 30, 1955.

UNISPUN

For Electric Motor Stators.
Use since June 27, 1955.

SN 695,635. The Lamb Electric Company, Kent, Ohio, to The Lamb Electric Company, Kent, Ohio. Filed Sept. 30, 1955.

ALSPUN

For Induction Motor Rotors.
Use since June 27, 1955.

SN 695,729. Illumitronic Engineering Co., Sunnyvale, Calif. Filed Oct. 3, 1955.

AIR DUX

For Inductance Coils.
Use since Dec. 13, 1954.

SN 695,759. Radio Receptor Company, Inc., Brooklyn, N. Y. Filed Oct. 3, 1955.

QUI-KLIP

For Selenium Rectifiers.
Use since Jan. 21, 1955.

SN 695,949. Sano Corporation, Irvington, N. J. Filed Oct. 5, 1955.

SANO

For Electrical Pick-Ups for Musical Instruments, Electrical Amplifiers for Musical Instruments; Electric Accordions.
Use since June 1952 on pick-ups and amplifiers.

SN 695,965. Aeroprojects, Inc., West Chester, Pa. Filed Oct. 6, 1955.

SONOBLEND

For Vibratory Homogenizing Apparatus.
Use since Aug. 26, 1955.

SN 695,980. Hewlett-Packard Company, Palo Alto, Calif. Filed Oct. 6, 1955.

hp

Applicant claims ownership of Reg. Nos. 399,314, 572,827, and others.
For Amplifiers, Transformers, Traveling Wave Tube Apparatus, Wave Function Generators, Waveguide to Coaxial Adapters.
Use since January 1941.

SN 696,030. Globe American Corporation, Kokomo, Ind. Filed Oct. 7, 1955.

Globe

For Electric Built-In Ovens and Surface Units.
Use since Feb. 15, 1955.

SN 696,161. Micafil Aktiengesellschaft Werke für Elektro-Isolation und Wicklerei-Einrichtungen, Zurich, Switzerland. Filed Oct. 10, 1955.

MICAFIL

For Electrically Insulating Materials Containing Molded Plastics, in Plate and Sheet Form; Electrically Insulated Parts for Electrical Machines and Apparatus—Namely, Electric Motors, Electric Generators, Transformers, Electric Switches, Electric Meters, Conductive Wire Windings and Conductors Subjected to Tension; and High-Voltage Apparatus and Electrical Testing Equipment—Namely, High-Voltage Rectifiers, Surge Generators, Voltage Dividers, Capacitors, Electrical Compressed Gas Condensers, High-Voltage Indicators, Meters for Measuring Very High Electric Tensions ("Ball Spark Gaps") Comprising Two Insulated Spherically-Ended Electrodes Adapted To Be Positioned at Varying Distances From Each Other, and Insulators Adapted To Resist Surface Breakdown by High-Tension Current ("Trackproof Insulators").
Use since May 1926.

SN 696,232. General Motors Corporation, Detroit, Mich. Filed Oct. 11, 1955.

Mult-A-Pliance

For Electric Ranges and Dish Washers.
Use since Aug. 17, 1955.

SN 696,285. John Edward Collins, d. b. a. C & H Supply Company, Dallas, Tex. Filed Oct. 12, 1955.

Musi-Matic

For Inter-Communication Systems, Including Radios, Installed in Residences for the Purpose of Speaking From Room to Room or the Playing of Music in the Various Rooms.
Use since Aug. 1, 1953.

SN 696,286. John Edward Collins, d. b. a. C & H Supply Company, Dallas, Tex. Filed Oct. 12, 1955.

Radio Call

For Inter-Communication Systems, Including Radios, Installed in Residences for the Purpose of Speaking From Room to Room or the Playing of Music in the Various Rooms.
Use since July 1, 1955.

SN 696,340. Hulsey Leger Weiss, Los Angeles, Calif. Filed Oct. 12, 1955.

TEMPOWER

For Portable Electric Power Distribution System.
Use since Mar. 11, 1954.

SN 696,353. The Emerson Electric Mfg. Co., St. Louis, Mo. Filed Oct. 13, 1955.



For Electric Fans and Electric Motors.
Use since Oct. 29, 1954, on electric fans.

SN 696,392. Westinghouse Electric Corporation, Pittsburgh, Pa. Filed Oct. 13, 1955.

TRAFFIC SENTINEL

For Elevator Door Controls.
Use since in or about April 1954.

SN 696,410. California Magnetic Control Corporation, North Hollywood, Calif. Filed Oct. 14, 1955.

CALMAG

For Components of Electrical and Electronic Systems—Namely, Magnetic Reactors, Transformers, Filters, and Components Thereof.
Use since Oct. 16, 1952.

SN 696,474. Turner Uni-Drive Company, Kansas City, Mo. Filed Oct. 14, 1955.

UNI-GAP

For Combination Electro-Magnetic Clutches.
Use since June 1945.

SN 696,528. General Dynamics Corporation, New York, N. Y. Filed Oct. 17, 1955.

S-C STROMBERG-CARLSON

Applicant claims ownership of Reg. Nos. 215,238, 528,263, and others.
For Radio and Television Receiving Sets, and Parts Thereof.
Use since July 1955.

SN 696,706. Glenco Corporation, Metuchen, N. J. Filed Oct. 19, 1955.

MINIPLATE

For Ceramic Capacitors.
Use since Oct. 3, 1955.

CLASS 22

SN 656,506. Ben B. Fowler, d. b. a. The Jet-Chute Company, Fort Worth, Tex. Filed Nov. 17, 1953.

Jet-chute

For Kit Containing Parts for Assembling a Toy Kite, an Airplane and a Parachute Along With a Pattern for Making Extra Parachutes.
Use since Jan. 1, 1953.

SN 657,753. Barakuda Gesellschaft fur Wassersport Ristau & Co., Hamburg, Germany. Filed Dec. 10, 1953.

Barakuda

Applicant claims ownership of German Reg. No. 646,351, dated Oct. 21, 1953.
For Toys, Gymnastic and Sporting Goods—Namely, Swimming Fins; Diving Masks; Diving Glasses; Snorkels; Swimming Gloves; Nose Clamps; Ear Plugs; Ear Caps; Body Attached Oxygen Supply Apparatus for Diving; Diving Suits; Diving Belts; Harpoons; Air Guns; Resting Mats; Tennis Rackets; Tennis Balls; Ping-Pong Balls; Ping-Pong Paddles; Ping-Pong Nets; Inflatable Mattresses; Sleeping Bags; Sport Balls.

SN 664,132. Ernest Chandler, Inc., New York, N. Y. Filed Apr. 8, 1954.

OCEANSIDE

For Wading Pools.
Use since Jan. 7, 1954.

SN 676,479. Thomas De La Rue & Company Limited, London, England. Filed Nov. 12, 1954.

CALYPSO

Priority claimed under Sec. 44(d) on British Reg. No. 733,650, dated Sept. 1, 1954.
For Ordinary Playing Cards.

SN 677,607. Warren K. Reynolds, Upper Darby, Pa. Filed Dec. 1, 1954.

RACE-RAMA

For Game Played on a Board With Cards and Replicas of Horses and Simulating a Day at the Races.
Use since Nov. 9, 1954.

SN 689,742. Phillips Petroleum Company, Bartlesville, Okla. Filed June 17, 1955.

66

The drawing is lined for black. Applicant claims ownership of Reg. No. 425,489.
For Savings Banks.
Use since in or about August 1941.

SN 689,751. Phillips Petroleum Company, Bartlesville, Okla. Filed June 17, 1955.



The drawing is lined for mandarin orange and black. Applicant claims ownership of Reg. No. 425,489.
For Savings Banks.
Use since in or about August 1941.

SN 689,993. Cortland Line Company, Inc., Cortland, N. Y. Filed June 22, 1955.

DAVY JONES

For Fishing Lines of Nylon, Linen, or the Like.
Use since in or about 1938.

SN 690,139. Wesley C. Darby, d. b. a. Kink-Kee Leader Company, Des Moines, Iowa. Filed June 24, 1955.

KINK-KEE LEADER

For Fishing Line Leaders.
Use since July 1954.

CLASS 23

SN 656,957. Klopp-Werke G. m. b. H., Solingen-Wald, Germany. Filed Nov. 25, 1953.

KLOPP

Applicant claims ownership of German Reg. No. 628,544, dated Oct. 21, 1952.
For Machine Tools—Namely, Milling Machines, High-Speed Planing Machines, Shaping Machines, Gear Wheel Shaping and Hobbing Machines, Hydraulic Driving Gears, Hydraulic Motors and Pumps and Parts of the Above Named Goods, Especially Hydraulic Gears, Motors and Pumps for the Operation of Machine Tools, Tools, Machine Castings.

SN 671,141. Diamond Chain Company, Inc., Indianapolis, Ind. Filed Aug. 5, 1954.

DIAMOND

ROLLER CHAIN

For Chains, Machine-Made Chains, Bicycle Chains, Motorcycle Chains, Automobile Chains, Chain Parts, Roller Links, and Connecting Links and Flexible Shaft-Couplings.
Use since on or about Jan. 1, 1952.

SN 672,055. Forest Cruse, Austin, Tex. Filed Aug. 23, 1954.



For Pocket Knives, Butcher Knives, Scissors, and Other Cutlery.
Use since Sept. 26, 1947.

SN 672,056. Forest Cruse, Austin, Tex. Filed Aug. 23, 1954. Sec. 2(f).

Jim Bowie Cutlery

For Pocket Knives, Butcher Knives, Scissors, and Other Cutlery.
Use since Sept. 26, 1947.

SN 672,057. Forest Cruse, Austin, Tex. Filed Aug. 23, 1954.



For Pocket Knives, Butcher Knives, Scissors, and Other Cutlery.
Use since Sept. 26, 1947.

SN 676,548. Societe Anonyme Cri-Dan, Paris, France. Filed Nov. 12, 1954.

PROFILAP

Priority claimed under Sec. 44(d). French Reg. No. 446,825, dated Oct. 19, 1954 (Seine); Natl. Inst. No. 45,327.

For Machines for Profiling and Dressing Cutting Tools and Parts Thereof.

SN 677,064. Jackson & Church Company, Saginaw, Mich. Filed Nov. 22, 1954. Sec. 2(f) as to "Jackson & Church."

JACKSON & CHURCH

For Plastic Working Machine, Particularly Injection Molding Machines, and Component Parts Thereof.
Use since November 1949.

SN 679,440. Zavody V. I. Lenina Plzen, Narodni Podnik, Plzen, Czechoslovakia. Filed Jan. 4, 1955.

PLZEN ZÁVODY V.I.LENINA

The inscription "Zavody V. I. Lenina Plzen" indicates the Czech name of the applicant corporation and may be translated as "V. I. Lenin's Works Plzen." The word "Plzen" is the name of the city in Czechoslovakia where applicant's principal works are situated and no claim is made to said word apart from the association shown in the mark. Applicant claims ownership of Czechoslovakian Reg. No. 150,901, dated Jan. 17, 1952.

For Steam and Gas Engines; Steam and Gas Turbines; Internal Combustion Engines; Diesel Engines; Steam and Diesel Locomotives; Tractors; Hydraulic Machines; Pumps; Blowers; Compressors; Rolling Mills and Structural Parts Thereof; Mill Trains; Ingot Pushers; Winding Engines; Hoisting Machines; Winches; Rock-Drills; Coal and Ore Shakers; Shaking Gates; Coal and Ore Washing Machinery; Coal Cutters; Crushers; Mine Cages; Coal and Ore Separating, Sorting and Sizing Machinery Including Drums; Centrifugal Separators; Ore Dressing Machinery; Excavating, Grading, Digging and Loading Machinery; Metal-Casting and Foundry Machinery; Die Casting Machines; Fans; Ventilators; Wire-Drawing Machines; Coiling Machines; Bending Machines Including Plate-Bending Machines; Mechanical, Hydraulic and Pneumatic Shearing Machines and Presses; Extrusion Presses; Scrubbers for Chemical Plants; Lathes; Boring Machines; Boring Heads; Drilling Machines; Milling Cutters; Milling and Planing Machines; Cutter Heads; Abrading, Grinding, Scraping and Lapping Machines; Mixing Machinery; Stirrers; Polishing Machines; Reamers; Countersinks and Counterborers; Screw Taps; Screw Dies; Threading Tools; Cutting Tools and Cutting Machinery; Die Heads; Milling Arbors; Vices; Gear Wheels; Gear Transmissions; Worms and Worm Wheels; Gearboxes; Clutches; Brakes; Brake Mechanisms and Actuators; Sparmers; Claws; Mandrels; Chucks; Engine Cylinders; Engine Valves; Throttles; Spindles; Crankshafts; Springs; Anchors; Bearings; Brushes; Pulleys.

SN 683,519. Koebel Diamond Tool Co., Detroit, Mich. Filed Mar. 15, 1955.

CDP

CEMENTED DIAMOND PARTICLES

No claim is made herein to the phrase "Cemented Diamond Particles" except in association with the trademark as shown.
For Diamond Carrying or Diamond Impregnated Rolls, Wheels, Drills, Dressing and Cutting Tools.
Use since on or about Jan. 21, 1955.

SN 685,193. S. S. Kresge Company, Detroit, Mich. Filed Apr. 8, 1955.

KRESCO

For Hand Tools and Garden Tools—Namely, Saws and Saw Blades, Screw Drivers, Drill Sets.
Use since Feb. 1, 1952.

SN 687,011. Sintercast Corporation of America, Yonkers, N. Y. Filed May 6, 1955.

FERROTIC

For Cutting Tools, Dies, Standard and Special Die Nibs for Cold Drawing Tubes and Rods, Wear Resisting Parts, Drill Jig Bushings, Special Sheet Metal Forming and Blanking and Shearing Die Inserts, Powder Metallurgy and Ceramic Compacting Dies for Punch Faces.
Use since Apr. 22, 1955.

SN 687,143. U. S. Tool Company, Inc., Ampere, N. J. Filed May 9, 1955.

MULTI-ROLL

For Stock Reels or Cradles for Holding Coils of Strip Stock and for Feeding the Strip Material to Punch Presses and Other Machines.
Use since on or about Dec. 2, 1954.

SN 690,852. Airtex Products, Inc., Fairfield, Ill. Filed July 7, 1955.

PEE-CEE

For Water Pumps, Tie Rod Ends, Bell Housing Supports, Clutch and Release Bearings, Front Wheel Bearings, Drag Links.
Use since Jan. 21, 1949.

SN 691,753. Eclipse Air Brush Co., Newark, N. J. Filed July 22, 1955.

ECLIPSE GAT

Applicant claims ownership of Reg. No. 444,438.
For Spray Guns.
Use since Sept. 6, 1938.

SN 691,754. Eclipse Air Brush Co., Newark, N. J. Filed July 22, 1955.

ECLIPSE-G-6

Applicant claims ownership of Reg. No. 444,438.
For Spray Guns.
Use since Oct. 16, 1933.

SN 691,827. Cincinnati Manufacturing Corporation, d. b. a. The United States Machine Tool Co., Cincinnati, Ohio. Filed July 25, 1955.

Quartet

For Milling Machines.
Use since Mar. 1, 1955.

SN 692,070. Lombard Corporation, Youngstown, Ohio. Filed July 28, 1955. Sec. 2(f).

LOMBARD

For Extrusion Presses, Mechanical and Hydraulic Presses, Casting Machines, Stretchers, Metal Formers, Mechanical Transfer Tables, Automatic Coilers and Twisters, Automatic Cut-Off Saws, Band Saws, Metal De-Scaling Units, Power Bailers, Billet Coring Machines, Metal Filing Machines, Mill Drives, Pinion and Roll Housings, Shears, Equipment for Flattening Tubular Members Into Sheets, Scale Breakers, Ejectors and Pushers, Belling and Expanding Equipment, Rolling Mills, and Drawbenches.
Use since September 1946 on an extrusion press.

SN 693,220. Whitin Machine Works, Whitinsville, Mass. Filed Aug. 16, 1955.

WHITIN AXI-FLO COMBER

The drawing is lined for red. Applicant claims ownership of Reg. Nos. 121,375, 320,322, and 349,639.
For Fiber Opening and Cleaning Machines.
Use since Jan. 7, 1955.

SN 693,221. Whitin Machine Works, Whitinsville, Mass. Filed Aug. 16, 1955.

WHITIN ROTO-DRAFTER AMERICAN SYSTEM

The drawing is lined for red. Applicant claims ownership of Reg. Nos. 121,375, 590,925, and others.
For Drawing Frames, Roving Frames, and Spinning Frames Which Are in the Nature of Textile Machinery.
Use since Dec. 21, 1954.

SN 693,222. Whitin Machine Works, Whitinsville, Mass. Filed Aug. 16, 1955.

WHITIN EVEN-DRAFT DRAWING

The drawing is lined for red. Applicant claims ownership of Reg. Nos. 121,375, 320,322, and 349,639.
For Drawing Frame.
Use since Sept. 9, 1954.

SN 693,303. B and W Incorporated, Los Angeles, Calif. Filed Aug. 18, 1955.

SCRATCHALIZER

For Tool for Abrading a Well Wall and for Centralizing Casing or Pipe in the Well Bore During Abrading.
Use since Dec. 17, 1954.

SN 694,068. James Mfg. Co., Fort Atkinson, Wis. Filed Sept. 1, 1955.

POWER CHORING

For Barn Gutter Cleaners.
Use since July 18, 1955.

SN 694,107. Winston M. Ward, d. b. a. Win Ward Co., Pomona, Calif. Filed Sept. 1, 1955.

MITY master

For Hydraulic Portable Crane.
Use since Mar. 4, 1955.

SN 694,209. Ekco Products Company, Chicago, Ill. Filed Sept. 6, 1955.

Arrowhead

For Cutlery—Namely, Paring Knives, Vegetable Knives, Utility Knives, Boning Knives, Fowl and Steak Knives, Roast Slicers, Steak Knives, Butcher Knives, Ham Slicers, Roast Beef Slicers, and Forks.
Use since on or about Apr. 16, 1951.

SN 694,293. Aerocem Limited, London, England. Filed Sept. 7, 1955.

AEROCEM

Applicant claims ownership of British Reg. No. 653,953, dated Nov. 25, 1946.
For Spray Guns.

SN 694,337. The Sheffield Corporation, Dayton, Ohio. Filed Sept. 7, 1955.

SONICUT

For Machine for Forming or Shaping a Workpiece by Means of an Electrically Driven Vibratory Tool.
Use since June 30, 1954.

SN 694,382. Phlomax (Overseas) Limited, Redhill, England. Filed Sept. 8, 1955.

PHLOMAX

Applicant claims ownership of British Reg. No. 718,680, dated June 4, 1953.
For Machines for Manufacturing Concrete Pipes.

SN 694,447. Phillips Drill Company, Michigan City, Ind. Filed Sept. 9, 1955.

PHILLIPS

Applicant claims ownership of Reg. Nos. 591,924 and 592,972.
For Self Drilling Expansion Shells for Concrete and Masonry, Self Drilling Expansion Shell Holders, Hammer Chucks, Hand Setting Tool and Manually and Power Operated Spring Hammers.
Use since on or about Jan. 1, 1926.

SN 694,593. Porter-McLeod Machine Tool Co., Inc., Hatfield, Mass. Filed Sept. 13, 1955.

DOUBLE-MATIC

For Single Spindle Automatic Screw Machine.
Use since April 1954.

SN 694,810. Mack Manufacturing Corporation, New York, N. Y. Filed Sept. 16, 1955.

Applicant claims ownership of Reg. No. 605,393.
For Transmissions and Axles for Motor Trucks and Tractor Trucks.
Use since on or about Nov. 1, 1932.

SN 694,827. United Aircraft Products, Inc., Dayton, Ohio. Filed Sept. 16, 1955.

HYD HEAT EXCHANGERS

Applicant claims ownership of Reg. No. 609,081.
For Heat Exchangers Presenting a Metal Surface Area for Heat Transfer Between Separated Fluids, Other Than Heat Exchangers Interposed as Accessories in Engine Fuel Supply Systems or in Engine Lubricant Circulating Systems or Both To Warm the Fuel or To Cool the Lubricant or Both.
Use since Aug. 19, 1954.

SN 694,828. United Aircraft Products, Inc., Dayton, Ohio. Filed Sept. 16, 1955.

UAP

Applicant claims ownership of Reg. Nos. 399,886, 595,323, and others.
For Heat Exchangers Presenting a Metal Surface Area for Heat Transfer Between Separated Fluids, Other Than Heat Exchangers Interposed as Accessories in Engine Fuel Supply Systems or in Engine Lubricant Circulating Systems or Both To Warm the Fuel or To Cool the Lubricant or Both.
Use since Apr. 1, 1954.

CLASS 26

SN 649,162. Jack J. Kuscher, d. b. a. Magicase Company, Westport, Conn. Filed June 22, 1953.

MAGICASE

For Carrying Cases and Bags for Photographic Equipment and Supplies.
Use since Mar. 2, 1953.

SN 681,747. Paul E. Chu, New York, N. Y. Filed Feb. 16, 1955.

Pres-flo

For Measuring Dispenser for Granular and Powdered Materials and Also for Liquids.
Use since Nov. 27, 1954.

SN 687,055. Daystrom Pacific Corporation, Santa Monica, Calif. Filed May 9, 1955.



The drawing is lined for red.
For Electrical Equipment and Components, Such as Gyros, Accelerometers, Airborne Computers, and Programmers.
Use since June 2, 1953.

SN 687,056. Daystrom Pacific Corporation, Santa Monica, Calif. Filed May 9, 1955.



For Electrical Equipment and Components, Such as Gyros, Accelerometers, Airborne Computers, and Programmers.
Use since June 2, 1953.

SN 694,331. The Powers Regulator Company, Skokie, Ill. Filed Sept. 7, 1955.

HYDROGUARD

For Thermostatic Water Controllers.
Use since July 29, 1955.

SN 694,472. Calgon, Incorporated, Pittsburgh, Pa. Filed Sept. 12, 1955.

calgon zeo-kit

For Test Kits Containing Reagent Solutions and the Like, Specifically for the Determination of Water Hardness.
Use since Jan. 10, 1955.

SN 694,636. Bendix Aviation Corporation, Detroit, Mich. Filed Sept. 14, 1955.

THERMOTRAP

For Temperature Sensing and Transmitting Devices.
Use since May 10, 1955.

SN 694,682. Way-Matic Regulator Company, Fulton, Ky. Filed Sept. 14, 1955.

waymatic

For Weighing Scales for Grain Including an Automatic Regulator for Measuring or Regulating the Flow of Grain.
Use since July 25, 1955.

SN 694,712. Richard Golze, Staten Island, N. Y. Filed Sept. 15, 1955.

CAPT R. GOLZE E-Z-LOG

For Automatic Record Keeping Instrument for Recording the Maneuvering of Ships.
Use since Mar. 14, 1955.

SN 695,109. Pioneer Scientific Corporation, Great Neck, N. Y. Filed Sept. 21, 1955.

ENDURON

For Lenses of Plastic Material.
Use since Feb. 19, 1954.

SN 695,308. Infilco Incorporated, Tucson, Ariz. Filed Sept. 26, 1955.

ROBOTEL

For Electrical Indicating and Recording Systems, and Parts of Such Systems.
Use since July 6, 1955.

CLASS 29

SN 692,319. Ekco Products Company, Chicago, Ill. Filed Aug. 2, 1955.

MINUTE

Applicant claims ownership of Reg. No. 545,580.
For Floor Mops, Dish Mops, Window Mops, Bathtub Mops, Toilet Bowl Brushes, Bottle Brushes, Soap Mitts, Wiping Cloths, Scouring Pads, Squeegee Window Brushes, and Refills for Mops With Detachable Mop Heads.
Use since on or about Jan. 1, 1952.

CLASS 31

SN 687,013. Emil Steinhorst & Sons, Inc., Utica, N. Y. Filed May 6, 1955.

HYDRO-CHILL

For Bulk Milk Cooling Tanks and Milk Coolers.
Use since Feb. 15, 1955.

SN 687,340. Joseph C. Bloom, d. b. a. Freeze Eazy Industries, Santa Rosa, Calif. Filed May 12, 1955.

FREEZE EAZY

For Deep Freeze Units and Refrigerated Display Cases.
Use since Feb. 4, 1954.

SN 687,611. McGraw Electric Company, Chicago, Ill. Filed May 16, 1955.

LONERGAN

Applicant claims ownership of Reg. No. 505,998.
For Dehumidifiers.
Use since during March 1951.

SN 687,883. Package Machinery Company, East Longmeadow, Mass. Filed May 19, 1955.

ROTO RITE-WAY COOL

For Bulk Milk Coolers.
Use since Nov. 8, 1954.

SN 688,417. Houdaille-Hershey of Indiana, Inc., Lebanon, Ind. Filed May 27, 1955.

KLEER-PAC

For Filter Cartridges.
Use since Dec. 10, 1954.

SN 688,868. Tri-State Electric Mfg. Co., Delphos, Ohio. Filed June 3, 1955.

Montclair

For Food Freezers, Refrigerators, and Frozen Food Cabinets.
Use since Apr. 19, 1955.

SN 695,718. Ed Friedrich, Inc., San Antonio, Tex. Filed Oct. 3, 1955.

Floatometic

For Hermetically Sealed Refrigerant Condensing Unit Consisting of Motor, Compressor, Condenser, and Receiver.
Use since July 1954.

CLASS 32

SN 669,394. Bernad Creations, Ltd., Yonkers, N. Y. Filed July 6, 1954.

Letterbug

For Letter Rack.
Use since Sept. 15, 1953.

SN 677,224. Ingram-Richardson Manufacturing Company, Beaver Falls, Pa. Filed Nov. 24, 1954.

ING-RICH

Applicant claims ownership of Reg. No. 78,975.
For Porcelain Enameled Table Tops, Kitchen Cabinets, Display Cases.
Use since during the year 1903.

SN 681,124. A A A Sales Company, Philadelphia, Pa. Filed Feb. 7, 1955.

Patio King

For Folding Aluminum Furniture for Outdoors.
Use since Mar. 1, 1954.

SN 690,466. The Hitchcock Chair Company, Riverton, Conn. Filed June 29, 1955. Sec. 2(f).

HITCHCOCK, ALFORD & Co HITCHCOCKSVILLE, COMM.

Applicant claims ownership of Reg. Nos. 514,621 and 555,506.
For Dining, Lounge, and Occasional Chairs and Mirrors.
Use since Feb. 12, 1947, on chairs.

SN 693,940. Slumberland Products Co., Waltham, Mass. Filed Aug. 30, 1955.

BACK PROTEK-TOR

For Mattresses, Couches, Bedsprings, and Beds.
Use since June 6, 1955.

SN 694,278. Union Steel Chest Corporation, Le Roy, N. Y. Filed Sept. 6, 1955.

STACKMASTER

For Utility Cabinets.
Use since May 2, 1955.

SN 694,533. William B. Wallace, d. b. a. William Wallace Company, Kilgore, Tex. Filed Sept. 12, 1955.

PLA-TRANER

For Nursery Chairs.
Use since Nov. 21, 1954.

SN 694,548. Central States Industries, Inc., Royal Oak, Mich. Filed Sept. 13, 1955.

CENT...

For Stool Ladders.
Use since July 11, 1955.

SN 694,637. Bethco Bedding Corporation, Allentown, Pa. Filed Sept. 14, 1955.

SPINE-A-LINER

For Mattresses.
Use since Aug. 15, 1955.

SN 694,902. National Foam Rubber Corp., Montebello, Calif. Filed Sept. 19, 1955.

LIFE FOAM

Applicant claims ownership of Reg. Nos. 599,673 and 599,674.
For Mattresses, Cushions for Upholstered Chairs, Pillows, Chair Seats, Chair Backs, Rocker Cushions, Divan Living Room Pieces.
Use since July 20, 1955.

SN 695,042. George D. Stanley, Salisbury, Md. Filed Sept. 20, 1955.

SET-T-COT

For Cots.
Use since 1929.

SN 695,043. George D. Stanley, Salisbury, Md. Filed Sept. 20, 1955.

TA-K-NAP

For Cots.
Use since 1929.

SN 695,103. New Waterford Furniture Co., New Waterford, Ohio. Filed Sept. 21, 1955.

"Peace Valley"

For Upholstered Chairs—Namely, Rockers.
Use since Nov. 16, 1953.

SN 695,305. The Hecht Company, Washington, D. C. Filed Sept. 26, 1955.

Harleigh Court

For Furniture—Namely, Tables, Chairs, Beds, Dressers, Chests, Credenzas, Serving Tables, Night Tables, and Cabinets.
Use since July 14, 1955.

SN 695,485. Nepengo, Inc., New York, N. Y. Filed Sept. 28, 1955.

THE MURRAY HILL GROUP

The words "The" and "Group" are disclaimed apart from the trademark as shown.
For Furniture—Namely, Beds, Benches, Bookcases, Chairs, Desks, Lamp Tables, Luggage Racks, Pier Cabinets, Room Dividers, Magazine Racks, Servers, Sofas, Tables, and Tea Carts.
Use since on or about July 1, 1955.

SN 695,611. J. L. Chase Company, Chicago, Ill. Filed Sept. 30, 1955.

Young America

Applicant disclaims the word "America" apart from the complete trademark.
For Chairs and Sofas.
Use since June 12, 1939.

CLASS 34

SN 683,947. Winro, Inc., Detroit, Mich. Filed Mar. 21, 1955.

PDQ

For Portable Barbeque Stoves.
Use since Mar. 11, 1955.

SN 686,211. Hermann Nier K. G., Lockstedter Lager (Holstein), Germany. Filed Apr. 25, 1955.

FEUER HAND

Applicant claims ownership of German Reg. No. 520,483, dated Apr. 13, 1940; and U. S. Reg. Nos. 362,891 and 383,308.
For Hurricane Lamps; Filling Screws, Burners, Oil Containers, Protective Grids, and Reflectors, All for Use With Hurricane Lamps; and Petroleum Stoves.
Use since May 2, 1939.

SN 686,212. Hermann Nier K. G., Lockstedter Lager (Holstein), Germany. Filed Apr. 25, 1955.

FIRE HAND

Applicant claims ownership of German Reg. No. 331,285, dated Mar. 31, 1925; and U. S. Reg. Nos. 362,891 and 383,308.
For Hurricane Lamps; Filling Screws, Burners, Oil Containers, Protective Grids, and Reflectors, All for Use With Hurricane Lamps; and Petroleum Stoves.
Use since Dec. 30, 1914.

SN 689,823. Elco Lamp & Shade Studio, Inc., Mount Vernon, N. Y. Filed June 20, 1955.

ELCO

Applicant claims ownership of Reg. Nos. 425,850, 425,851, and 427,930.
For Lamp Shades.
Use since Jan. 2, 1927.

SN 689,862. New York Shipbuilding Corporation, d. b. a. Nesco, Division of New York Shipbuilding Corporation, Milwaukee, Wis. Filed June 20, 1955.

GRILLRYTE

For Portable Charcoal Grills.
Use since Dec. 28, 1954.

SN 690,432. The Columbus Stove Company, Columbus, Ohio. Filed June 29, 1955.

Challenge

For Gas Cooking Ranges.
Use since Dec. 23, 1954.

CLASS 36

SN 689,678. Toreador Record Corporation, New York, N. Y. Filed June 16, 1955.

Puchito

For Grooved Disk Phonograph Records.
Use since on or about Oct. 1, 1952.

CLASS 37

SN 644,754. Interlake Tissue Mills Co. Limited, Toronto, Ontario, Canada. Filed Apr. 6, 1953.

VOGUE

For Facial Tissue Handkerchiefs, Paper Table Napkins, Paper Towels, and Toilet Tissue, All the Products Being Made of Paper.
Use since Mar. 19, 1953.

SN 661,392. American Printers & Lithographers, Inc., Chicago, Ill. Filed Feb. 23, 1954.

DUOPRINT

For Printed or Lithographed Translucent Accounting Forms.
Use since Jan. 4, 1954.

SN 681,939. The Parker Pen Company, Janesville, Wis. Filed Feb. 18, 1955.

LL

For Ball Point Pencils.
Use since on or about Feb. 12, 1955.

SN 689,092. Standard Packaging Corporation, Chicago, Ill. Filed June 7, 1955.

Saracote

For Saran-Coated Paper Sheet Material.
Use since June 1, 1953.

SN 689,093. The Sterilek Company, Inc., New York, N. Y. Filed June 7, 1955.

Topaz

For Bathroom Tissue.
Use since Apr. 23, 1931.

SN 689,151. Norcross, Inc., New York, N. Y. Filed June 8, 1955.

Sophisti-Cat

For Gift Wrapping Paper and Decorative Letter and Note Paper.
Use since on or about May 18, 1955.

SN 689,165. Saxon Paper Corporation, New York, N. Y. Filed June 8, 1955.

MACADAM BOND

No claim is made to the exclusive use of the word "Bond" apart from the mark as shown.
For Bond Paper.
Use since Sept. 10, 1924.

SN 689,166. Saxon Paper Corporation, New York, N. Y. Filed June 8, 1955.

Diplomacy Parchment

No claim is made to the exclusive use of the word "Parchment" apart from the mark as shown.
For Bond Paper.
Use since Jan. 20, 1928.

SN 689,203. A. P. W. Products Company, Inc., New York, N. Y. Filed June 9, 1955.

ROLLWON

Applicant claims ownership of Reg. Nos. 262,595 and 373,397.
For Paper Towels.
Use since May 26, 1955.

SN 689,351. Crocker, Burbank Papers Inc., Fitchburg, Mass. Filed June 13, 1955.

CHAPEL

For Printing Paper.
Use since in the month of January 1951.

SN 689,354. Crocker, Burbank Papers Inc., Fitchburg, Mass. Filed June 13, 1955. Sec. 2(f).

TRAFALGAR

For Printing Paper.
Use since October 1939.

SN 689,355. Crocker, Burbank Papers Inc., Fitchburg, Mass. Filed June 13, 1955. Sec. 2(f).

DOVER

For Printing Paper.
Use since April 1937.

SN 689,358. Crocker, Burbank Papers Inc., Fitchburg, Mass. Filed June 13, 1955.

CHANCEL

For Printing Paper.
Use since in the month of January 1951.

SN 689,468. Daniel Cooper, d. b. a. Supercraft Mfg. Co., New York, N. Y. Filed June 14, 1955.

Pocket PRIDE

For Writing Pens, Pencils, and Refills for Same.
Use since Feb. 15, 1955.

SN 690,196. S. P. Richards Paper Company, Atlanta, Ga. Filed June 24, 1955.

BILTWELL

For Bond Paper, Mimeograph Paper, Duplicator Paper, and Offset Paper.
Use since December 1932.

SN 690,233. Crown Zellerbach Corporation, San Francisco, Calif. Filed June 27, 1955.

Preview

For Bread Wrappers.
Use since Apr. 8, 1955.

SN 690,886. Jaclin Company, New York, N. Y. Filed July 7, 1955.

SOPPS

For Laminated Paper Coasters, Particularly Those Which Are Absorbent and Re-Usable.
Use since June 3, 1955.

CLASS 38

SN 659,737. Radio-Electronics-Television Manufacturers Association, Washington, D. C. Filed Jan. 19, 1954.

RETMA — RADIO-ELECTRONICS TELEVISION MANUFACTURERS ASSOCIATION

The words "Radio-Electronics-Television Manufacturers Association" are disclaimed apart from the mark as shown.
Applicant claims ownership of Reg. No. 563,010.
For Publications Issued From Time to Time Devoted to Electronics and Radio and Television Receiving and Transmitting Apparatus.
Use since July 1953.

SN 685,231. Joseph Ambrose, Jr., Vineland, N. J. Filed Apr. 11, 1955.

"JUMPIN" JOE

For Comic Strip.
Use since Feb. 3, 1955.

SN 690,177. Medical Economics, Inc., Oradell, N. J. Filed June 24, 1955.

PDR

For Annual Publication, a Periodical Reference Book Dealing With Pharmaceutical Specialties and Biologicals.
Use since December 1949.

SN 690,178. Medical Economics, Inc., Oradell, N. J. Filed June 24, 1955. Sec. 2(f).

PHYSICIANS'

DESK

REFERENCE

For Annual Publication, a Periodical Reference Book Dealing With Pharmaceutical Specialties and Biologicals.
Use since December 1946.

SN 693,043. Hugo Gernsback, New York, N. Y. Filed Aug. 15, 1955.

forecast

For Annual Publication Issued Without Charge By the Publisher and Owner.
Use since on or about Dec. 10, 1951.

SN 693,819. Harold Floyd Garland, Jr., Santa Ana, Calif. Filed Aug. 29, 1955.



For Music Books and Musical Compositions.
Use since Apr. 18, 1955.

SN 694,091. Photorama, Inc., Chicago, Ill. Filed Sept. 1, 1955.

photorama

For Greeting Cards.
Use since July 1, 1955.

SN 694,120. American Viscose Corporation, Philadelphia, Pa. Filed Sept. 2, 1955.

AVISCO

For Company Magazine.
Use since April 1947.

SN 694,122. Barbara M. Benedict, Lynden, Wash. Filed Sept. 2, 1955.

IMAGINE MY SURPRISE

For Informative Cartoons, Published in Newspapers, Magazines, and Other Periodicals.
Use since Mar. 24, 1955.

SN 694,178. Adco, Inc., Salt Lake City, Utah. Filed Sept. 6, 1955. Sec. 2(f).

DAHNKEN

For Periodically Issued Catalogues.
Use since 1939.

SN 694,240. I. Lodge, Philadelphia, Pa. Filed Sept. 6, 1955.

TOY-O-RAMA

For Catalogues Published From Time to Time.
Use since July 1, 1955.

SN 694,319. Steak N Shake, Inc., Bloomington, Ill. Filed Sept. 12, 1955.

STEAK n SHAKE NEWS

For Publication Published Monthly.
Use since January 1945.

SN 694,535. Watt Publishing Co., Mount Morris, Ill. Filed Sept. 12, 1955.

BROILER GROWING

Applicant claims ownership of Reg. No. 535,516.
For Magazine.
Use since Sept. 1, 1950.

SN 694,568. General Features Corporation, New York, N. Y. Filed Sept. 13, 1955.

MR. TWEEDY

For Newspaper Comic Feature.
Use since Aug. 26, 1955.

CLASS 39

SN 598,932. Société à Responsabilité Limitée Comptoir de l'Industrie Cotonniere, Paris, France, now by change of name Societe Comptoir de l'Industrie Cotonniere; Etablissements Boussac. Filed June 10, 1950.

CHRISTIAN DIOR

"Christian Dior" is the name of a living person, consent of record. Applicant claims ownership of French Reg. No. 382,801, dated Jan. 7, 1948 (Paris); Natl. Inst. No. 422,434; and U. S. Reg. Nos. 523,754 and 592,225.
For Neckties, Cravats, and Bowties.
Use since Feb. 11, 1949.

SN 654,671. Mr. Arnold, Inc., New York, N. Y. Filed Oct. 13, 1953.



For Ladies' Millinery—Namely, Hats, Bonnets, and Hat Bodies.
Use since March 1953.

SN 679,856. Niehues & Dutting, Nordhorn, Germany. Filed Jan. 13, 1955.

MADE OF GENUINE
NINO FLEX
SELF-VENTILATING

No claim is made to any of the wording shown on the drawing except the term "Nino Flex." Applicant claims ownership of German Reg. No. 628,771, dated Oct. 24, 1952.
For Woven Articles of Clothing—Namely, Coats, Anoraks, Windjackets, Shorts, Shirts, Suits, Trousers, and Caps for Men and Women; Woven Articles of Clothing—Namely, Dresses and Skirts for Women.

SN 684,954. March & Mendl, Inc., New York, N. Y. Filed Apr. 5, 1955.

SPLASH MATES

For Raincoats, Rain Hats, Rain Jackets, and Rain Capes.
Use since Feb. 15, 1955.

SN 685,507. S. Makransky & Sons, Inc., Philadelphia, Pa. Filed Apr. 14, 1955.

Hickory

For Men's Outer Clothing—Namely, Coats, Trousers, and Vests Not Made of Hickory Fabric.
Use since Sept. 11, 1950.

SN 686,017. Jordan Marsh Company, Boston, Mass. Filed Apr. 21, 1955.

ESCORT

Applicant claims ownership of Reg. No. 258,911.
For Men's Formal Evening Wear.
Use since October 1954.

SN 689,696. Harry Camp Millinery Company, San Francisco, Calif. Filed June 17, 1955.

SULGRAVE

For Ladies' Hats.
Use since June 3, 1955.

SN 689,744. Phillips Petroleum Company, Bartlesville, Okla. Filed June 17, 1955.

66

The drawing is lined for black. Applicant claims ownership of Reg. No. 295,326.
For Wearing Apparel—Namely, Men's Shirts and Trousers, Overalls or One-Piece Suits, Coats, Sweaters, Jackets, and Caps.
Use since Dec. 27, 1930.

SN 690,350. William Ernest Wandt, Long Island City, N. Y. Filed June 27, 1955.

BUMPY BOUNCEY

For Babies' Hats.
Use since May 24, 1955.

SN 690,422. The Williamson-Dickie Manufacturing Company, Fort Worth, Tex. Filed June 28, 1955.

RH

For Men's Work Clothing—Namely, Pants and Jeans.
Use since July 1, 1952.

SN 690,713. The Joseph & Feiss Company, Cleveland, Ohio. Filed July 5, 1955.

THREE-TIMER

For Men's Clothing—Namely, Suits and Coats.
Use since June 14, 1955.

SN 690,813. Farah Manufacturing Company, Inc., El Paso, Tex. Filed July 6, 1955. Sec. 2(f) as to "Farah."

FARAH
OF TEXAS

Applicant claims ownership of Reg. No. 558,581.
For Boys' and Men's Denim Jackets, Men's Work Pants and Shirts, Men's and Boys' Jeans, Girls' and Ladies' Jeans.
Use since Feb. 19, 1954; and since Mar. 24, 1948, as to "Farah."

SN 690,829. Lakeland Manufacturing Company, Sheboygan, Wis. Filed July 6, 1955.

CLICKER

For Men's and Boys' Outerwear—Namely, Jackets.
Use since March 1954.

SN 690,935. Joseph H. Cohen & Sons, Inc., New York, N. Y. Filed July 8, 1955.

GRANITONE

For Men's and Boys' Outer Garments—Namely, Coats, Suits, Jackets, Top Coats, Overcoats, Slacks, Trousers, and Vests.
Use since July 6, 1953.

SN 690,958. Linker & Herbert, Inc., New York, N. Y. Filed July 8, 1955.

JUNIOR-AIRE

For Coats, Suits, Short Jackets, and Toppers for Women in the Smaller Sizes.
Use since Apr. 15, 1955.

SN 691,346. All States Garment Corporation, New York, N. Y. Filed July 15, 1955.

WEATHERAMA

For Raincoats.
Use since June 29, 1955.

SN 694,356. Craddock-Terry Shoe Corporation, Lynchburg, Va. Filed Sept. 8, 1955.

Natural Bridge

Applicant claims ownership of Reg. Nos. 176,274, 541,181, and others.
For Shoes for Men and Women.
Use since Feb. 9, 1923.

SN 694,539. Albert, Inc., Chicago, Ill. Filed Sept. 21, 1955.

Deena

For Women's, Misses', and Junior Misses' or Girls' Undergarments—Namely, Slips, Nightgowns, Pajamas, Petticoats, and Panties.
Use since on or about Apr. 14, 1947.

SN 694,590. Nunn-Bush Shoe Company, Milwaukee, Wis. Filed Sept. 13, 1955.

PLI-FLEX

Applicant claims ownership of Reg. No. 436,781.
For Men's and Boys' Shoes and Moccasins Made of Leather, Fabric, Rubber, Plastics, and Combinations Thereof.
Use since October 1940.

SN 694,597. Rockford Textile Mills, Inc., McMinnville, Tenn. Filed Sept. 13, 1955.

Blue Castle

For Socks.
Use since July 18, 1955.

SN 694,760. Adorable Lingerie Co., Inc., New York, N. Y. Filed Sept. 16, 1955.

SLEEPERETTES

For Women's Pajamas.
Use since July 1, 1955.

SN 694,795. Glick Sportswear Co., Cleveland, Ohio. Filed Sept. 16, 1955.



No claim is made to the word "Sportswear" apart from its use in the mark as shown. Applicant claims ownership of Reg. No. 161,627.
For Children's Apparel—Namely, Shirts, Blouses, Trousers, Overalls, and Outer Shorts.
Use since June 1952 on shirts, blouses, trousers, and outer shorts.

SN 694,796. Glick Sportswear Co., Cleveland, Ohio. Filed Sept. 16, 1955.



No claim is made to the word "Sportswear" apart from its use in the mark as shown. Applicant claims ownership of Reg. No. 161,627.
For Children's Apparel—Namely, Shirts, Blouses, Suits, Trousers, Slacks, Dungarees, Overalls, Sweaters, Outer Shorts, Coats, Playsuits and Slack Suits, Belts, Suspenders, Ties, and Swim Wear.
Use since December 1939 on shirts and blouses.

SN 694,797. Glick Sportswear Co., Cleveland, Ohio. Filed Sept. 16, 1955.

Robin Hood

Applicant claims ownership of Reg. No. 161,627.
For Children's Apparel—Namely, Suits, Trousers, Slacks, Dungarees, Overalls, Sweaters, Outer Shorts, Coats, Playsuits, and Slack Suits, Belts, Suspenders, Ties, and Swim Wear.
Use since December 1940 on sweaters.

SN 694,826. Toby Tyler & Co., Inc., New York, N. Y., to Frank Becker, Eleanor Becker, and Ada Becker, New York, N. Y. Filed Sept. 16, 1955.

TOBETTE JUNIOR

For Junior Cotton and Rayon Dresses.
Use since Aug. 3, 1955.

SN 694,839. Alba Hosiery Mills, Inc., Valdese, N. C. Filed Sept. 19, 1955.

PAMPER

Applicant claims ownership of Reg. No. 509,100.
For Hosiery and Panties.
Use since Jan. 16, 1954, on panties.

SN 694,892. Lumbard-Watson Co., Auburn, Maine. Filed Sept. 19, 1955.

"MAIDEN MAINE"

For Shoes and Moccasins.
Use since Dec. 4, 1953.

SN 694,970. Carol Crawford, Inc., New York, N. Y. Filed Sept. 20, 1955. Sec. 2(f).

Miss Carol

Applicant claims ownership of Reg. No. 411,148.
For Women's and Misses' Dresses.
Use since Apr. 7, 1943.

SN 698,326. Wm. P. Goldman & Bros. Inc., New York, N. Y. Filed Nov. 9, 1955.

"S.S.S."

For Men's Suits, Topcoats, Overcoats, Slacks, Sport Coats, and Jackets.
Use since July 1, 1911.

SN 698,674. Celeste Frocks, Inc., New York, N. Y. Filed Dec. 5, 1955.

Celeste

For Children's Dresses, Including Children's Sun Dresses, Pinafores, Blouses, Jumpers, Christening Robes, Baby Dresses, Toddler Dresses, Party Dresses, Sport Dresses, and Matching Mother and Daughter Dresses.
Use since Nov. 29, 1927.

CLASS 40

SN 653,180. Star Watch Case Co., Ludington, Mich. Filed Sept. 14, 1953.



For Buckles of Non-Precious Metal for Watch Bands.
Use since April 1928.

CLASS 42

SN 679,200. Beautiflute, Incorporated, Keyport, N. J. Filed Dec. 31, 1954.

Beautiflute

For Fluted Nylon Fabrics Especially for Use on Ladies' Lingerie and Robes.
Use since Dec. 28, 1954.

SN 688,403. Fielderest Mills, Inc., Spray, N. C. Filed May 27, 1955.

a Kara-loc weave

Applicant makes no claim to exclusive rights to the word "Weave" as shown on the drawing.
For Textile Rugs.
Use since May 20, 1955.

SN 688,409. Glen Raven Knitting Mills, Inc., Glen Raven, N. C. Filed May 27, 1955.

Nyrocale*

For Sheets and Pillow Cases.
Use since Apr. 29, 1953.

SN 690,353. West Cumberland Silk Mills Limited, Hensingham, Whitehaven, Cumberland, England. Filed June 27, 1955.

SEKENS

For Piece Goods of Nylon, Rayon, Acetate, Silk, Synthetic Fibers, and Mixtures of Nylon, Rayon, Acetate, Silk, Wool, Tinsel, Cotton, Mohair, Linen, and Synthetic Fibers.
Use since 1948.

SN 690,619. Glen Raven Cotton Mills, Inc., Glen Raven, N. C. Filed July 1, 1955.

Bucaroni

For Fabrics in the Piece, of Cotton, Rayon or Acetate Staples, or Combinations Thereof.
Use since May 20, 1954.

SN 690,795. Milton C. Blum, Inc., New York, N. Y. Filed July 6, 1955.

Twistknot

For Cotton Piece Goods.
Use since February 1955.

SN 691,259. Amerotron Corporation, New York, N. Y. Filed July 14, 1955.

SUPERLITE II

The word "Superlite" is disclaimed apart from the mark as shown.
For Industrial Fabrics Consisting of 100% Nylon.
Use since Apr. 11, 1955.

SN 691,263. Amerotron Corporation, New York, N. Y. Filed July 14, 1955.

SUPERLITE V

The word "Superlite" is disclaimed apart from the mark as shown.
For Industrial Fabrics Consisting of 100% Nylon.
Use since Apr. 11, 1955.

SN 691,264. Amerotron Corporation, New York, N. Y. Filed July 14, 1955.

SUPER 8

For Industrial Fabrics Consisting of 100% Rayon.
Use since Apr. 11, 1955.

SN 691,506. Princeton Knitting Mills, Inc., New York, N. Y. Filed July 18, 1955.

O'llegro

For Knitted Fabrics Made of Synthetic and Wool Fibers.
Use since May 20, 1955.

SN 691,718. J. P. Stevens & Co., Inc., New York, N. Y. Filed July 21, 1955.

STORMTIME

For Cotton Piece Goods.
Use since June 24, 1955.

SN 692,358. J. P. Stevens & Co., Inc., New York, N. Y. Filed Aug. 2, 1955.

HANGOUT

For Cotton Piece Goods.
Use since June 27, 1955.

SN 692,359. J. P. Stevens & Co., Inc., New York, N. Y. Filed Aug. 2, 1955.

NEWSMAKER

For Woolen, Worsted, and Cotton Piece Goods.
Use since June 30, 1955.

SN 692,650. The Stearns & Foster Company, Lockland, Cincinnati, Ohio. Filed Aug. 8, 1955.

MARKFAST

For Non-Woven Fabric, Particularly Adapted for Use as a Marking Cloth in Garment Cutting.
Use since July 6, 1955.

SN 692,793. Marcus Brothers Textile Corp., New York, N. Y. Filed Aug. 10, 1955.

SMOOTH-MAGIC

For Textile Fabrics in the Piece of Cotton, Wool, Silk, Rayon, and Synthetic Fibres and Mixtures Thereof.
Use since July 1, 1955.

SN 693,116. Bates Manufacturing Company, Lewiston, Maine. Filed Aug. 16, 1955.

Betty Bates

Applicant claims ownership of Reg. Nos. 86,025, 524,395, and 524,396.
For Fabric Piece Goods of Cotton, Synthetic Fibres, and All Mixtures of Cotton and Synthetic Fibres.
Use since Aug. 4, 1955.

SN 693,314. Crompton Company, Crompton, R. I. Filed Aug. 18, 1955.

MELLOGLAZE

Applicant claims ownership of Reg. No. 599,736.
For Fabrics in the Piece Composed of Cotton, Wool, Silk, and Synthetic Fibers.
Use since July 12, 1955.

SN 694,150. Reeves Brothers, Inc., New York, N. Y. Filed Sept. 2, 1955.

MOUNTAIN

Applicant claims ownership of Reg. Nos. 416,173 and 419,564.
For Cotton Piece Goods.
Use since in or about June 1944.

SN 694,604. Simpson & Godlee Limited, Manchester, England. Filed Sept. 13, 1955.



Applicant claims ownership of British Reg. No. 721,596, dated Sept. 7, 1953; and U. S. Reg. No. 327,020.
For Piece Goods Wholly or Mainly of Cotton or of Rayon or of Mixtures of Cotton and Rayon.

SN 694,669. Reeves Brothers, Inc., New York, N. Y. Filed Sept. 14, 1955. Sec. 2(f).

REEVES

Applicant claims ownership of Reg. Nos. 376,993, 539,101, and others.
For Piece Goods of Cotton, Rayon, Wool, and Synthetic Fibers and Mixtures Thereof.
Use since in or about April 1944 on piece goods of cotton.

SN 694,726. Emile Marglub, Incorporated, New York, N. Y. Filed Sept. 15, 1955.

MARTISTE

For Fine Quality Batiste Cloth.
Use since Sept. 7, 1955.

SN 694,746. Spartan Mills, Spartanburg, S. C. Filed Sept. 15, 1955.



For Kitchen Towels and Toweling, Table Cloths, Napkins, Place Mats, Draperies and Curtains, All of Cotton or Linen and Blends Thereof.
Use since Aug. 9, 1955.

SN 694,759. A. Sagner's Son, Baltimore, Md. Filed Sept. 30, 1955.

NORTHCOOL

Applicant claims ownership of Reg. Nos. 407,981, 560,918, and 560,919.
For Fabrics in the Piece and in Cut Lengths, Which Fabrics Are To Be Used in Making Clothing for Men, Women, Children, Students, Cadets, Such as Coats, Suits, Robes, Shirts, Sportwears, Raincoats, Neckwear, Nylon Mesh for Shoes, Etc.
Use since Mar. 5, 1954.

SN 694,766. Bell Textile Co., Inc., New York, N. Y. Filed Sept. 16, 1955.

"GEORGETOWN"

For Bedspreads.
Use since June 1, 1955.

SN 694,767. Bell Textile Co., Inc., New York, N. Y. Filed Sept. 16, 1955.

"SAVANNAH"

For Bedspreads.
Use since June 1, 1955.

SN 694,847. E. T. Barwick Mills, Chamblee, Ga. Filed Sept. 19, 1955.

Chesterfield

For Fine Textured Carpets.
Use since June 1, 1955.

SN 694,848. E. T. Barwick Mills, Chamblee, Ga. Filed Sept. 19, 1955.

Fontainebleau

For Fine Textured Carpets.
Use since June 1, 1955.

SN 694,900. Monarch Rug Mills, Dalton, Ga. Filed Sept. 19, 1955.

montevideo

For Fine Textured Carpets.
Use since June 1, 1955.

SN 694,901. Morrill Manufacturing Company, Brookhaven, Ga. Filed Sept. 19, 1955.

Fairlane

For Fine Textured Carpets.
Use since June 1, 1955.

SN 694,941. Whittenton Garment Corporation, Taunton, Mass. Filed Sept. 19, 1955.

"24" HOUR DUTY

Applicant claims ownership of Reg. No. 414,845.
For Piece Goods of Silk, Wool, Cotton, Rayon, and Mixtures and Combinations Thereof.
Use since March 1944.

SN 698,471. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

ANGELEEN

For Woolen Piece Goods.
Use since Nov. 1, 1930.

SN 698,472. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

BURMANA

For Woolen Piece Goods.
Use since Nov. 1, 1931.

SN 698,473. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

CHONGA

Applicant claims ownership of Reg. Nos. 254,458 and 149,923.
For Woolen Piece Goods.
Use since Apr. 15, 1930.

SN 698,474. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

CHULANA

Applicant claims ownership of Reg. No. 261,399.
For Woolen Piece Goods.
Use since Feb. 1, 1931.

SN 698,478. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

KASHMIRLUXA

Applicant claims ownership of Reg. No. 225,529.
For Woolen Piece Goods.
Use since Apr. 1, 1929.

SN 698,479. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

MARVA

For Woolen Piece Goods.
Use since Apr. 1, 1929.

SN 698,480. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

MELVA

For Woolen Piece Goods.
Use since May 10, 1927.

SN 698,481. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

ORIELLA

For Woolen Piece Goods.
Use since Apr. 15, 1930.

SN 698,482. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

PALLINA

Applicant claims ownership of Reg. Nos. 188,667 and 215,475.
For Woolen Piece Goods.
Use since Jan. 3, 1927.

SN 698,483. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

SUDANA

Applicant claims ownership of Reg. No. 253,035.
For Woolen Piece Goods.
Use since Dec. 1, 1931.

SN 698,484. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

VALDEEMA

For Woolen Piece Goods.
Use since Feb. 1, 1928.

SN 698,485. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

VALORA

Applicant claims ownership of Reg. No. 117,430.
For Woolen Piece Goods.
Use since Dec. 1, 1932.

SN 698,486. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

VELZARA

Applicant claims ownership of Reg. No. 517,983 and others.
For Woolen Piece Goods.
Use since Sept. 1, 1931.

SN 698,487. Forstmann Woolen Co., Passaic, N. J. Filed Dec. 2, 1955.

VIO CREPE

For Woolen Piece Goods.
Use since Oct. 15, 1929.

CLASS 43

SN 694,562. Farbenfabriken Bayer Aktiengesellschaft, Leverkusen-Bayerwerk, Germany. Filed Sept. 13, 1955.

CUPRADOR

Applicant claims ownership of German Reg. No. 663,240, dated Sept. 24, 1954.
For Yarns of Synthetic Fibers.

SN 698,723. Max Pollack & Company, Inc., New York, N. Y. Filed Nov. 22, 1955.

EMPECO

For Sewing Threads.
Use since May 1, 1921.

SN 698,725. Max Pollack & Company, Inc., New York, N. Y. Filed Nov. 22, 1955.

KNIGHT BRAND

For Sewing Threads.
Use since about May 1, 1921.

SN 698,727. Max Pollack & Company, Inc., New York, N. Y. Filed Nov. 22, 1955.

MECCA

For Sewing Threads.
Use since Mar. 15, 1931.

SN 698,728. Max Pollack & Company, Inc., New York, N. Y. Filed Nov. 22, 1955.

METEOR

For Sewing Threads.
Use since 1902.

SN 698,729. Max Pollack & Company, Inc., New York, N. Y. Filed Nov. 22, 1955.

PARCIVAL

For Sewing Threads.
Use since 1896.

SN 698,730. Max Pollack & Company, Inc., New York, N. Y. Filed Nov. 22, 1955.

STRONGHOLD

For Thread.
Use since February 1933.

CLASS 44

SN 675,946. Harry E. Rice and Trenton L. Rice, Columbus, Ind. Filed Oct. 28, 1954. Sec. 2(f).

SAFE-T-TILT

Applicant claims ownership of Reg. No. 552,901.
For Nursing Bottle Holders.
Use since Oct. 4, 1949.

SN 678,256. Pharmaceuticals, Inc., Newark, N. J. Filed Dec. 13, 1954.

AURITONE

For Hearing Aid.
Use since Nov. 29, 1954.

SN 682,106. Baxter Laboratories, Inc., Morton Grove, Ill. Filed Feb. 23, 1955.

FLASHBALL

For Vein Puncture Indicators for Parenteral Administration Sets.
Use since Feb. 14, 1955.

SN 683,951. Young Dental Manufacturing Co., St. Louis, Mo. Filed Mar. 21, 1955. Sec. 2(f).

SNAPON

For Dental Polishers, and Dental Angles for Rotating Dental Polishers.
Use since June 8, 1933.

SN 694,932. Edward Taylor Ltd., Monton, Eccles, England. Filed Sept. 19, 1955.

Flexoplast

For Elastic Adhesive Bandages.
Use since January 1930.

CLASS 45

SN 660,768. MacDonald Laboratories, Inc., St. Paul, Minn. Filed Feb. 8, 1954.

pop drops

For Carbonating Tablets Used in Making Carbonated Soft Drinks.
Use since Aug. 29, 1953.

CLASS 46

SN 561,681. Pillsbury Mills, Inc., Minneapolis, Minn. Filed July 19, 1948. Sec. 2(f) as to "A1."



The drawing is lined for red and blue but color is not claimed. Applicant claims ownership of Reg. No. 162,762.
For Wheat Flour, Pancake and Waffle Mix, and Biscuit Mix.
Use since Sept. 18, 1947, on wheat flour; and since 1898 as to "Globe A1."

SN 657,548. Northeast Feeds, Inc., Oswego, N. Y. Filed Dec. 7, 1953.



For Dog Food Packaged in an Edible, Cone-Shaped Container.
Use since Sept. 23, 1953.

SN 659,864. Hilliard Joseph, d. b. a. Joseph Northwest, Yakima, Wash. Filed Jan. 21, 1954.

FLAVOR CHEST

For Fresh Apples.
Use since Dec. 7, 1953.

SN 670,092. Daniele Calanca, d. b. a. Danny's Products, Washington, D. C. Filed July 16, 1954.

Danny's Tasty-Tender

For Foods, Such as Meats and Fish, Said Products Containing Flavoring Agents of the Character of Salt, Sodium Glutamate, Spices, and May Further Contain Onion, Garlic and a Meat Tenderizer Such as Papain Being in the Form of Powders, Granules, Flakes and Solutions and Suspensions in Liquids.
Use since July 1, 1954.

SN 672,949. Josephine Grasser, Paris, France. Filed Sept. 9, 1954.

APISERUM

Applicant claims ownership of French Reg. No. 424,814, dated Jan. 5, 1953.
For Food Drink Containing Basal Royal Bees' Jelly.

SN 675,123. Armour and Company, Chicago, Ill. Filed Oct. 20, 1954.



For Fresh Frozen Meats—Namely, Beef Steaks, Veal Cutlets, Chopped Beef, Sweet Breads, Brains, Pork Cutlets, Ox Tail Joints, Liver, Tenderloin Steaks, Pork Steaks, Pork Chops, Beef Stew, Hamburger, and Veal Steaks.
Use since Mar. 8, 1954.

SN 678,918. The Kraft Foods Company, Chicago, Ill. Filed Dec. 24, 1954. Sec. 2(f) as to "Martin's."

MARTIN'S
RABBIT BRAND

No registration rights are claimed for the word "Brand" apart from the mark shown. Applicant claims ownership of Reg. No. 223,947.
For Cheese.
Use since January 1891.

SN 679,692. Wedgworth Produce, Inc., Belle Glade, Fla. Filed Jan. 10, 1955.

DOUBLE H

For Fresh Vegetables.
Use since Dec. 1, 1935.

SN 681,868. F. O. Mitchell & Bro., Inc., Perryman, Md. Filed Feb. 17, 1955. Sec. 2(f).

DON'T COOK HEAT

No exclusive claim is made to the words "Don't Cook Heat" apart from the mark as shown.
For Canned Corn.
Use since June 23, 1927.

SN 682,674. L. Rose & Co., Limited, St. Albans, Hertfordshire, England. Filed Mar. 2, 1955. Sec. 2(f).

ROSE'S

Applicant claims ownership of British Reg. Nos. 631,970 and 631,971, dated Oct. 9, 1944; and U. S. Reg. No. 548,165.
For Lime Juice and Lime Marmalade.
Use since May 1, 1932.

SN 688,160. The Kolter-Buckeye Company, Lima, Ohio. Filed May 24, 1955.

Fros-Kist

For Frozen Fruit Juice Bars.
Use since Apr. 25, 1955.

SN 689,140. E. F. Kemp Corp., Somerville, Mass. Filed June 8, 1955.

SALTED NUTS GOLDEN GLOW NUT PRODUCTS

The words "Salted Nuts" and "Nut Products" are disclaimed apart from the mark as shown. Applicant claims ownership of Reg. Nos. 97,059 and 111,367.
For Salted and Unsalted Nuts and Shelled and Unshelled Nuts and Peanut Butter.
Use since in or about November 1913.

SN 690,589. Allen Foods, Inc., St. Louis, Mo. Filed July 1, 1955.

Lasco

Applicant claims ownership of Reg. No. 613,246.
For Canned Fruits and Berries, Canned Vegetables, Canned Fruit Juices, Canned Vegetable Juices, Canned Cranberry Sauce, Evaporated Fruits, Dehydrated Vegetables and Fruits, Candy, Breakfast Cereals, Coffee, Cocoa, Tea, Cooking and Salad Oils, Salt, Pepper, Vinegar, and Molasses.
Use since on or before Dec. 31, 1940.

SN 690,633. The Nestlé Company, Inc., White Plains, N. Y. Filed July 1, 1955.

Mellco

Applicant claims ownership of Reg. No. 104,606.
For Powdered Nonfat Dry Skimmed Milk Solids.
Use since June 8, 1955.

SN 690,830. Loeb Dietetic Food Co., Inc., New York, N. Y. Filed July 6, 1955.

STEDA-SUGAR

Applicant claims ownership of Reg. No. 528,923.
For Sugar Substitute.
Use since Mar. 23, 1955.

SN 690,847. D. Thompson Swing, Price, Md. Filed July 6, 1955.

Three Sisters

For Canned Vegetables.
Use since Mar. 23, 1955.

SN 690,903. The Procter & Gamble Company, Cincinnati, Ohio. Filed July 7, 1955.

Golden Fluffo

Applicant claims ownership of Reg. Nos. 131,026, 418,774, and 506,853.
For Shortening Made From Hydrogenated Vegetable Oils or a Blend of Hydrogenated Meat Fats and Vegetable Oils.
Use since June 2, 1954.

SN 690,931. Arnold Bakers, Inc., Port Chester, N. Y. Filed July 8, 1955. Sec. 2(f).

BRICK OVEN

Applicant claims ownership of Reg. No. 521,329.
For Bread, Rolls, and Cookies.
Use since on or about July 18, 1946, on bread and rolls.

SN 691,061. Mendelson-Zeller Co., San Francisco, Calif. Filed July 11, 1955.

Spud Valley

For Fresh Potatoes.
Use since June 8, 1955.

SN 691,199. E. I. du Pont de Nemours and Company, Wilmington, Del. Filed July 13, 1955.

CYLAN

For Cyclohexylsulfamic Acid Salts and Derivatives for Use as Non-Nutritive Sweetening Agents.
Use since June 24, 1955.

SN 692,701. Bay State Milling Co., Winona, Minn. Filed Aug. 9, 1955.

RY-DO

For Blend of Wheat and Rye Flour.
Use since Nov. 18, 1936.

SN 692,958. Southern Fruit Distributors, Inc., Orlando, Fla. Filed Aug. 12, 1955.

BLUEBIRD

Applicant claims ownership of Reg. Nos. 294,117, 563,524, and others.
For Dried Citrus Pulp, and Citrus Molasses as Animal Feeds.
Use since not later than March 1941 on dried citrus pulp.

SN 694,027. Locatelli, Inc., New York, N. Y. Filed Aug. 24, 1955.

VERO

"Vero" means "true."
For Cheese.
Use since May 1928.

SN 694,578. Key Brands Company, Los Angeles, Calif. Filed Sept. 13, 1955.

STRATO
OUT OF THIS WORLD

For Canned Dog Food.
Use since Aug. 24, 1955; and since Mar. 21, 1955, as to "Strato."

CLASS 47

SN 678,149. Real Companhia Vinicola do Norte de Portugal, S. A. R. L., Porto, Portugal. Filed Dec. 10, 1954.

REAL COMPANHIA VINICOLA DO NORTE
NEC TEMERE NEC TIMIDE
PORTUGAL

A translation of the Latin words "Nec Temere nec Timide" is "Neither bold nor timid." Applicant claims ownership of Portuguese Reg. No. 910, dated Feb. 20, 1890.
For Wines.

SN 690,559. Kotobukiya Limited, Higashi-ku, Osaka, Japan. Filed June 30, 1955.

AKADAMA RED LIGHT WINE

The drawing is lined for red. Applicant disclaims the words "Red," "Light," and "Wine" except as shown. The word "Akadama" is the phonetic equivalent of the Japanese characters for "Red Ball."
For Wine.
Use since 1908.

CLASS 48

SN 689,881. Sicks' Seattle Brewing & Malting Co., Seattle, Wash. Filed June 20, 1955.

R

For Beer.
Use since Aug. 13, 1953.
Subj. to Intf. with SN 690,243.

CLASS 49

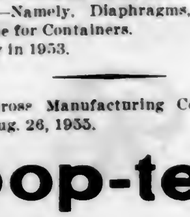
SN 685,342. Brown-Forman Distillers Corporation, Louisville, Ky. Filed Apr. 12, 1955.

KING

Applicant claims ownership of Reg. No. 319,755.
For Whisky.
Use since Aug. 25, 1941.

CLASS 50

SN 667,043. Northern Engraving & Manufacturing Co., La Crosse, Wis. Filed May 25, 1954.



Applicant claims ownership of Reg. No. 200,910.
For Nameplates, and Decorated Metal Stampings.
Use since Feb. 24, 1925.

SN 678,218. Hinson Manufacturing Company, Waterloo, Iowa. Filed Dec. 13, 1954.

Weather Brake

For Canvas Products—Namely, Tarpaulins and Tractor Covers.
Use since August 1953.

SN 690,525. Berkeley Industries, Jersey City, N. J. Filed June 30, 1955.

SQUEEZE-ME

For Skirt Hangers.
Use since June 20, 1955.

SN 693,044. The B. F. Goodrich Company, New York, N. Y. Filed Aug. 15, 1955.

VULCAFILM

For Industrial Products Made From Flexible Impervious Sheet Material—Namely, Diaphragms, Membrane Linings, Seals and the Like for Containers.
Use since early in 1953.

SN 693,783. Stross Manufacturing Company, Ann Arbor, Mich. Filed Aug. 26, 1955.

pop-tent

For Portable Shelters.
Use since June 12, 1955.

CLASS 51

SN 687,653. Valmor Products Co., Chicago, Ill. Filed May 16, 1955.

Slick-Strate

Applicant claims ownership of Reg. No. 394,688.
For Hair Dressing.
Use since on or about Nov. 1, 1954.

SN 687,654. Valmor Products Co., Chicago, Ill. Filed May 16, 1955.

GLOW STRATE

For Hair Dressing.
Use since on or about Nov. 1, 1954.

CLASS 52

SN 653,226. Drew Kloman, d. b. a. Beaver Alkali Products, Rochester, Pa. Filed Sept. 15, 1953.

BAP

For Paint Cleaner, a Waterless Hand Soap, a Detergent for Washing Dishes, a Detergent for Washing Metal Parts, and a Granular Preparation for Absorbing Grease and Oil From Floors.
Use since Jan. 2, 1950.

SN 663,953. Hans Schwarzkopf, Hamburg-Altona, Germany. Filed Apr. 5, 1954.



Applicant claims ownership of German Regs. No. 69,147, dated May 10, 1904, and No. 87,486, dated May 5, 1906; and U. S. Reg. No. 317,195.
For Shampoo.

SN 667,387. Diamond Alkali Company, Cleveland, Ohio. Filed June 1, 1954. Sec. 2(f).

HI-RATIO SILICATE

The word "Silicate" is disclaimed apart from the mark as shown.
For Detergents for Use in Metal Cleaning, Heavy Duty Laundry Operations, and the Like.
Use since May 1, 1951.

SN 667,781. Colgate-Palmolive Company, Jersey City, N. J. Filed June 7, 1954. Sec. 2(f) as to "Colgate."

COLGATE Sparkle

Applicant claims ownership of Reg. Nos. 55,886, 388,964, and others.
For Liquid Household Detergent.
Use since Nov. 20, 1953; and since 1858 as to "Colgate."

SN 678,854. Fidelity Chemical Products Corp., Newark, N. J. Filed Dec. 23, 1954.

HYDROPURGE

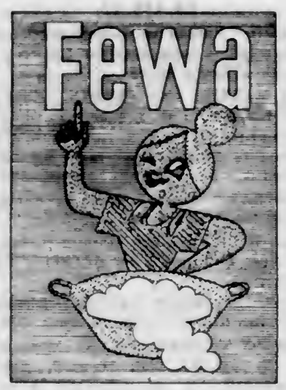
For Cleaner for Water Wash Spray Booths.
Use since May 15, 1954.

SN 685,169. Chemicals & Materials Distributors Corporation, d. b. a. Chemicals & Materials Corporation, Terre Haute, Ind. Filed Apr. 8, 1955.

VEGO

Applicant claims ownership of Reg. Nos. 590,836, 595,805, and others.
For Waterless Hand Cleaner.
Use since Feb. 16, 1955.

SN 686,023. Bohme Fettchemie G. m. b. H., Dusseldorf, Germany. Filed Apr. 22, 1955.



The drawing is lined for the colors orange, yellow, and blue.
Applicant claims ownership of German Reg. No. 641,951, dated July 25, 1953; and U. S. Reg. Nos. 303,348 and 305,892.
For Fine Washing Preparations.

SN 689,267. David A. Cohen, d. b. a. Daycon Products Co., Washington, D. C. Filed June 10, 1955.

Sea-Spray

For Oven Cleaners in Pressurized Dispensers.
Use since on or about May 6, 1955.

SN 689,939. The Gillette Company, d. b. a. The Toni Company, Boston, Mass. Filed June 21, 1955.

ringlet

Applicant claims ownership of Reg. No. 561,985.
For Shampoo.
Use since Mar. 24, 1955.

SN 690,766. Tesco Chemicals, Inc., Atlanta, Ga. Filed July 5, 1955.

GRIME-GO

For Powdered All Purpose Cleaner.
Use since on or about Mar. 1, 1932.
Subj. to Intf. with Reg. No. 616,977.

SN 692,343. Montgomery Chemical Company, Rydal, Pa. Filed Aug. 2, 1955.

AQUANEX

Applicant claims ownership of Reg. No. 606,157.
For Cleaning and Reconditioning Composition for Painting Equipment—Namely, Brushes, Rollers, and the Like.
Use since Dec. 29, 1952.

SN 692,756. Abco, Inc., McKeesport, Pa. Filed Aug. 10, 1955.
Applicant claims ownership of Reg. No. 592,041.

SUPER DISIT

For Cleanser Having Disinfecting, Deodorizing, and Sanitizing Properties for Use on: Floors, Walls, Furniture, Windows, Bathroom Fixtures, Sinks, Carpets, Automobiles, Respiration Equipment, Dairy Equipment, and Food Handling Apparatus.
Use since on or about Aug. 1, 1954.

SN 693,836. Masury-Young Company, Boston, Mass. Filed Aug. 29, 1955.

PRO-MO-LITE

For General Purpose Cleaner for Floors, Walls, Woodwork, and Concrete.
Use since Aug. 10, 1955.

TRADEMARK REGISTRATIONS ISSUED
PRINCIPAL REGISTER

CLASS 1

621,948. DU PONT IN OVAL DESIGN. E. I. du Pont de Nemours and Company. SN 672,878. Pub. 12–6–55. Filed 9–8–54.

621,949. CONSOL HANNA PINEY FORK H AND DESIGN. Pittsburgh Consolidation Coal Company. SN 681,292. Pub. 12–6–55. Filed 2–8–55.

621,950. SIR WILLIAM FARM AND DESIGN. Atalanta Products Corp. SN 682,614. Pub. 12–6–55. Filed 3–2–55.

621,951. JETLOCK. Ruburite, Incorporated. SN 684,068. Pub. 12–6–55. Filed 3–23–55.

621,952. INTERPOLY. Kleinwanzlebener Saatzucht vorm. Rabbethge & Giesecke Aktiengesellschaft. SN 685,110. Pub. 12–6–55. Filed 4–7–55.

621,953. SULTRA. Alexander Becher. SN 685,553. Pub. 12–6–55. Filed 4–15–55.

621,954. CASUPA. Kurt Servos, d. b. a. K. Servos. SN 685,765. Pub. 12–6–55. Filed 4–18–55.

621,955. DEPENDABLE. Fairway Seed Co. SN 686,175. Pub. 12–6–55. Filed 4–25–55.

621,956. SHADY DELL. Fairway Seed Co. SN 686,177. Pub. 12–6–55. Filed 4–25–55.

621,957. FAIRDALE. Fairway Seed Co. SN 686,179. Pub. 12–6–55. Filed 4–25–55.

621,958. VICTORIA V AND DESIGN. Victoria Coal Corporation. SN 686,931. Pub. 12–6–55. Filed 5–5–55.

621,959. CLYDE CALF. A. F. Gallun & Sons Corporation. SN 687,063. Pub. 12–6–55. Filed 5–9–55.

621,960. BUCKRIDGE AND DESIGN. Bell and Zoller Coal Company. SN 687,174. Pub. 12–6–55. Filed 5–10–55.

621,961. PICKFAIR. Bell and Zoller Coal Company. SN 687,176. Pub. 12–6–55. Filed 5–10–55.

621,962. "COLORSET." Glovecraft, Inc. SN 687,465. Pub. 12–6–55. Filed 5–13–55.

CLASS 3

621,963. FETCH-ALL. Arron R. Chisholm. SN 687,850. Pub. 12–6–55. Filed 5–19–55.

621,964. BINGO. Aristocrat Leather Products, Inc. SN 690,055. Pub. 12–6–55. Filed 6–23–55.

CLASS 6

621,965. RASORITE. Borax Consolidated, Limited, d. b. a. in the U. S. as Pacific Coast Borax Co., Division of Borax Consolidated, Limited. SN 671,241. Pub. 12–6–55. Filed 8–6–54.

621,966. RESODOR. Sindar Corporation. SN 674,422. Pub. 12–6–55. Filed 10–6–54.

621,967. DEODALL. Sindar Corporation. SN 674,423. Pub. 12–6–55. Filed 10–6–54.

621,968. SELECT-O-SPRAY AND DESIGN (REPRESENTATION OF SPRAY CONTAINER IN A RED CIRCLE). Bostwick Laboratories, Inc. SN 676,467. Pub. 12–6–55. Filed 11–12–54.

621,969. CHLOROPHEN. Reichhold Chemicals, Inc. SN 677,987. Pub. 10–18–55. Filed 12–8–54.

621,970. HEXAGLAS. X-L Laboratories, Inc. SN 678,700. Pub. 12–6–55. Filed 12–20–54.

621,971. Withdrawn.

621,972. VIRGINIA CHEMICALS AND DESIGN. Virginia Smelting Company. SN 683,458. Pub. 12–6–55. Filed 3–14–55.

621,973. PHYTOMYCIN. Olin Mathieson Chemical Corporation. SN 683,791. Pub. 12–6–55. Filed 3–18–55.

621,974. SPERMEX. Special Oils Manufacturing Co. SN 684,487. Pub. 11–22–55. Filed 3–29–55.

621,975. MONDUR. Mobay Chemical Company. SN 685,288. Pub. 12–6–55. Filed 4–11–55.

621,976. NEOPRALAC. Compagnie Francaise des Matieres Colorantes. SN 685,353. Pub. 12–6–55. Filed 4–12–55.

621,977. HAN. Esso Standard Oil Company. SN 685,684. Pub. 12–6–55. Filed 4–18–55.

621,978. FERTOSAN. Fertosan Limited. SN 686,039. Pub. 12–6–55. Filed 4–22–55.

621,979. DESIGN OF HUMAN MALE. Julius Samann. SN 686,097. Pub. 12–6–55. Filed 4–22–55.

621,980. PETER PINE. Julius Samann. SN 686,098. Pub. 12–6–55. Filed 4–22–55.

621,981. SCENT-SAVER. Julius Samann. SN 686,100. Pub. 12–6–55. Filed 4–22–55.

621,982. SIPONIC. American Alcolac Corporation. SN 686,261. Pub. 12–6–55. Filed 4–26–55.

621,983. DESERT. Hill Brothers Chemical Co. SN 686,447. Pub. 12–6–55. Filed 4–28–55.

621,984. SONOSIZE. L. Sonneborn Sons, Inc. SN 686,581. Pub. 12–6–55. Filed 4–29–55.

621,985. SONOWAX. L. Sonneborn Sons, Inc. SN 686,582. Pub. 12–6–55. Filed 4–29–55.

CLASS 7

621,986. HOLLAND PRAIRIE PRIDE. N. V. Vereenigde Touwfabrieken. SN 678,489. Pub. 12–6–55. Filed 12–16–54.

621,987. TIME O'HARVEST. F. Patron, Jr., d. b. a. H. T. Cottam & Company. SN 682,465. Pub. 11–22–55. Filed 2–28–55.

621,988. BALEMORE. Karl Kinzler. SN 687,072. Pub. 12–6–55. Filed 5–9–55.

CLASS 9

621,989. SENTINEL. The High Standard Manufacturing Corporation. SN 686,643. Pub. 11–29–55. Filed 5–2–55.

621,990. NITRAMITE. E. I. du Pont de Nemours and Company. SN 687,455. Pub. 12–6–55. Filed 5–13–55.

CLASS 10

621,991. VIGOSAN. Sawan, Inc. SN 643,725. Pub. 4–12–55. Filed 3–16–53.

621,992. "VIGOSAN PURPLE." Sawan, Inc. SN 658,932. Pub. 4–12–55. Filed 1–4–54.

621,993. ORANGE. Smith-Douglass Company, Incorporated. SN 675,022. Pub. 11–22–55. Filed 10–18–54.

CLASS 12

621,994. DREVO. Bureau de Representations J. Trachet, Société de Personnesà Responsabilité Limitée. SN 643,816. Pub. 11–22–55. Filed 3–18–53.

621,995. SUN MASTER AND DESIGN. Kool Breeze Awning Co. SN 658,619. Pub. 1–4–55. Filed 12–28–53.

621,996. PLASTI-PANE. Roy S. Helm, d. b. a. Helm Filtration Company, to Flex-O-Glass, Inc. SN 667,882. Pub. 6–7–55. Filed 6–8–54.

621,997. AUSTRAL. Austral Products Corporation. SN 668,719. Pub. 12–6–55. Filed 6–23–54.

621,998. SEAL RITE. Sealrite Manufacturing Co., d. b. a. Shadelight Mfg. Co., Inc. SN 672,911. Pub. 12–6–55. Filed 9–8–54.

621,999. WB SILENT-GLIDE ETC. AND DESIGN. Wister-Belfield Corp. SN 675,341. Pub. 12–6–55. Filed 10–22–54.

622,000. MORGAN SWING'N CLEAN. Morgan Company of Wisconsin. SN 676,392. Pub. 12–6–55. Filed 11–10–54.

622,001. EBBTONE. F. E. Schundler & Co. Inc. SN 678,269. Pub. 12–6–55. Filed 12–13–54.

622,002. PATTY-O-PANELS AND DESIGN. Potlatch Forests Inc. SN 692,542. Pub. 12–13–55. Filed 8–5–55.

622,003. DISPERSALL. The Upco Company. SN 685,145. Pub. 12–6–55. Filed 4–7–55.

CLASS 13

622,004. REPRESENTATION OF RED COLORED BARB ON WIRE. Keystone Steel & Wire Company (Illinois corporation), to Keystone Steel & Wire Company (Delaware corporation). SN 664,320. Pub. 12–6–55. Filed 4–12–54.

622,005. BEAUTY FLEX BY ALL POWER. All-Power Manufacturing Company. SN 670,448. Pub. 3–15–55. Filed 7–23–54.

622,006. RAINSPRAY. National Sprinkler & Irrigation Corp. SN 671,517. Pub. 12–6–55. Filed 8–11–54.

622,007. DIAMOND. Diamond Expansion Bolt Co., Inc. SN 675,369. Pub. 12–6–55. Filed 10–25–54.

622,008. DESIGN OF DIAMOND. Diamond Expansion Bolt Co., Inc. SN 675,370. Pub. 12–6–55. Filed 10–25–54.

622,009. ROLL-EEZ. Walter D. Hedenkamp, d. b. a. Junior-Pro Products Company. SN 675,386. Pub. 12–6–55. Filed 10–25–54.

622,010. NO-NAIL. Jack Rubinovitch, d. b. a. No-Nail Hanger Co. SN 677,352. Pub. 12–6–55. Filed 11–26–54.

622,011. DE ROLL AND DESIGN. Gesellschaft der Ludw. Von Roll'schen Eisenwerke ag. SN 678,914. Pub. 12–6–55. Filed 12–24–54.

622,012. TUFF TITE. Townsend Company. SN 680,169. Pub. 12–6–55. Filed 1–19–55.

622,013. SMITH BLAIR AND DESIGN. Smith-Blair, Inc. SN 684,250. Pub. 12–6–55. Filed 3–25–55.

622,014. TEAKOE. Ekco Products Company. SN 684,294. Pub. 12–6–55. Filed 3–28–55.

622,015. QUAKER WARE. The Griswold Manufacturing Company. SN 685,268. Pub. 12–6–55. Filed 4–11–55.

622,016. LUSTERTONE. Elkay Manufacturing Company. SN 685,680. Pub. 12–6–55. Filed 4–18–55.

CLASS 14

622,017. RODOX TUBES AND DESIGN. Manufacturers Chemical Corporation. SN 684,445. Pub. 12–6–55. Filed 3–29–55.

CLASS 15

622,018. MOLLY OIL. John B. McLeran, d. b. a. McLeran's Industries. SN 647,867. Pub. 2–9–54. Filed 5–28–53.

622,019. KOOLAX AND DESIGN. The Warren Soap Manufacturing Company, Inc. SN 680,828. Pub. 12–6–55. Filed 1–31–55.

622,020. DICOLUBE. The Diversey Corporation. SN 685,818. Pub. 12–6–55. Filed 4–19–55.

CLASS 16

622,021. BEHR PROCESS AND DESIGN OF BEAR. Linseed Oil Products Corporation. SN 674,166. Pub. 12–6–55. Filed 10–1–54.

622,022. TUF-FLEX. Brooklyn Paint & Varnish Co., Inc. SN 674,442. Pub. 12–6–55. Filed 10–7–54.

622,023. MARB L COTE. National Chemical & Manufacturing Company. SN 676,394. Pub. 12–6–55. Filed 11–10–54.

622,024. MOTOROLA. Motorola, Inc. SN 676,514. Pub. 12–6–55. Filed 11–12–54.

622,025. "44." Watson-Standard Company. SN 676,564. Pub. 12–6–55. Filed 11–12–54.

622,026. UNI-MULSION. Universal Paint & Varnish Inc. SN 677,370. Pub. 12–6–55. Filed 11–26–54.

622,027. METALGUILD. Fidelity Chemical Products Corp. SN 679,833. Pub. 12–6–55. Filed 1–13–55.

622,028. HAMMERGUILD. Fidelity Chemical Products Corp. SN 679,834. Pub. 12–6–55. Filed 1–13–55.

622,029. SWIFT'S. Swift & Company. SN 681,720. Pub. 12–6–55. Filed 2–15–55.

622,030. BRIGHT STAR ETC. AND DESIGN. Nankee Aluminum Paint Co., Inc. SN 685,919. Pub. 12–6–55. Filed 4–20–55.

622,031. MINE-LOK. Overall Paint and Lead Co., Inc., d. b. a. Overall Paint and Lead, Inc. SN 692,419. Pub. 12–6–55. Filed 8–3–55.

CLASS 17

622,032. MAPLETON. Fleming-Hall Tobacco Co., Inc., to United States Tobacco Company. SN 611,065. Pub. 9–23–52. Filed 2–27–51.

622,033. EL TRELLES. M. Trelles & Co. SN 671,542. Pub. 12–6–55. Filed 7–30–54.

622,034. REPRESENTATION OF WOMAN'S HEAD. M. Trelles & Co. SN 671,543. Pub. 12–6–55. Filed 7–30–54.

622,035. GREAT SOUTHERN. M. Trelles & Co. SN 671,545. Pub. 12–6–55. Filed 7–30–54.

622,036. KEEP MOVING. M. Trelles & Co. SN 671,546. Pub. 12–6–55. Filed 7–30–54.

622,037. FOUR SQUARE. George Doble & Son Limited. SN 676,025. Pub. 12–6–55. Filed 10–22–54.

622,038. ETON. Riggio Tobacco Corporation. SN 685,463. Pub. 12–6–55. Filed 4–13–55.

CLASS 18

622,039. LIPOFAX. Mezger Pharmacal Co., Inc. SN 596,039. Pub. 3–27–51. Filed 4–20–50.

622,040. IOBLETS. Chase Chemical Company. SN 666,167. Pub. 8–30–55. Filed 5–12–54.

622,041. RAUDIXOID. Olin Mathieson Chemical Corporation. SN 677,591. Pub. 7–26–55. Filed 12–1–54.

622,042. RAUDIXOIDE. Olin Mathieson Chemical Corporation. SN 677,592. Pub. 7–26–55. Filed 12–1–54.

622,043. SALCORT. The S. E. Massengill Company. SN 678,242. Pub. 12–6–55. Filed 12–13–54.

622,044. REDIFACT. Merck & Co., Inc. SN 678,658. Pub. 12–6–55. Filed 12–20–54.

622,045. LONGESTROL. Serdex, Societe d'Etudes, de Recherches de Diffusion et d'Exploitation. SN 679,358. Pub. 12–6–55. Filed 1–3–55.

622,046. CE-RUTINION. Rhein-Chemie G. m. b. H. SN 680,222. Pub. 11–29–55. Filed 1–20–55.

622,047. CALCIUM-RUTINION. Rhein-Chemie G. m. b. H. SN 680,223. Pub. 11–29–55. Filed 1–20–55.

622,048. NASO-CLEAR. Vincent H. Gattone, d. b. a. Gattone Research Laboratory. SN 681,154. Pub. 12–6–55. Filed 2–7–55.

622,049. TERRAMYCIN-SF. Chas. Pfizer & Co., Inc. SN 682,186. Pub. 12–6–55. Filed 2–23–55.

622,050. SEAL-O-SAN. Lyle W. Mills, d. b. a. Hill's Laboratories. SN 682,352. Pub. 12–6–55. Filed 2–25–55.

622,051. GERITONIC. Geriatric Pharmaceutical Corp. SN 683,111. Pub. 12–6–55. Filed 3–9–55.

622,052. BILOBLETS. Chase Chemical Company. SN 683,179. Pub. 9–27–55. Filed 3–10–55.

622,053. SCAMBELLINE. Sandoz Chemical Works, Inc. SN 684,156. Pub. 12–6–55. Filed 3–24–55.

622,054. FLUOROSSTEOL. Armour and Company. SN 684,261. Pub. 12–6–55. Filed 3–28–55.

622,055. BYVIROL. Pure Laboratories, Inc. SN 684,878. Pub. 12–6–55. Filed 4–4–55.

622,056. PLACIDYL. Abbott Laboratories. SN 685,152. Pub. 11–29–55. Filed 4–8–55.

622,057. ROVAMYCINE. Societe des Usines Chimiques Rhone-Poulenc. SN 685,934. Pub. 12–6–55. Filed 4–20–55.

622,058. Withdrawn.

622,059. ORTHOXINE. The Upjohn Company. SN 686,502. Pub. 12–6–55. Filed 4–28–55.

622,060. AFUBESE AND DESIGN. Max H. Swerdlow, d. b. a. K & M Laboratories. SN 686,785. Pub. 12–6–55. Filed 5–3–55.

622,061. SCOTCHAN-S. Joe Chandler, d. b. a. Chandler Chemical Co. SN 687,764. Pub. 12–6–55. Filed 5–18–55.

622,062. SALONPAS. Hisamitsu Brothers & Co., Inc. SN 687,942. Pub. 12–6–55. Filed 5–20–55.

622,063. LIVATRIN. Ef-En Laboratories, Inc. SN 689,127. Pub. 12–6–55. Filed 6–8–55.

CLASS 19

622,064. STAGEWAY. Queen City Chevrolet Company. SN 682,980. Pub. 7–5–55. Filed 3–7–55.

622,065. VIKING. Viking Boat Corporation, to Howard Clarence Gibson. SN 690,850. Pub. 10–18–55. Filed 7–6–55.

CLASS 21

622,066. MARKITE (FANCIFUL). Myron A. Coler, d. b. a. The Markite Company. SN 644,899. Pub. 11–9–54. Filed 4–8–53.

622,067. STANDARD ELECTRIC GOLD RIBBON FANS AND DESIGN. Standard Electric Manufacturing Company, Inc. SN 653,784. Pub. 12–6–55. Filed 9–25–53.

622,068. RAM (REPRESENTATION OF RAM'S HEAD AND DESIGN). Ram Electronics Sales Co. SN 670,308. Pub. 9–13–55. Filed 7–20–54.

622,069. DURAVIN. Whitaker Cable Corporation. SN 673,490. Pub. 12–6–55. Filed 9–20–54.

622,070. RED DOT AND DESIGN. International Rectifier Corporation. SN 674,596. Pub. 12–6–55. Filed 10–11–54.

622,071. RC AND DESIGN. Roanwell Corporation. SN 677,445. Pub. 12–6–55. Filed 11–29–54.

622,072. ROANWELL. Roanwell Corporation. SN 677,446. Pub. 12–6–55. Filed 11–29–54.

622,073. COUNTER-BALANCED. Trojan Battery Company. SN 682,999. Pub. 12–6–55. Filed 3–7–55.

622,074. COLLARO. Collaro Limited. SN 684,196. Pub. 12–6–55. Filed 3–25–55.

622,075. MINI TORQUE. G. M. Giannini & Co. Inc. SN 685,016. Pub. 12–6–55. Filed 4–6–55.

622,076. FIREROD. Watlow Electric Manufacturing Company. SN 689,443. Pub. 12–6–55. Filed 6–13–55.

622,077. ELGIN. Elgin-Neomatic, Inc. SN 689,614. Pub. 12–6–55. Filed 6–16–55.

622,078. AUTHORITY. Hester Battery Manufacturing Company, Inc. SN 689,629. Pub. 12–6–55. Filed 6–16–55.

622,079. WHIRLPOOL. Whirlpool Corporation, to Whirlpool-Seeger Corporation. SN 690,780. Pub. 12–6–55. Filed 7–5–55.

622,080. MANLEY. Manley, Inc. SN 691,054. Pub. 12–6–55. Filed 7–11–55.

622,081. MANLEY INC. AND DESIGN. Manley, Inc. SN 691,056. Pub. 12–6–55. Filed 7–11–55.

CLASS 22

622,082. LUCKY SPIN. John P. Urso. SN 680,706. Pub. 11–29–55. Filed 1–28–55.

622,083. SPIN-A-WORD. Keller Corporation. SN 682,566. Pub. 12–6–55. Filed 3–1–55.

622,084. DUNCAN. Donald F. Duncan, Incorporated. SN 682,626. Pub. 12–6–55. Filed 3–2–55.

622,085. MY FIRST. M-K Enterprises Inc. SN 682,743. Pub. 11–29–55. Filed 3–3–55.

622,086. SURF KING. Leonard W. Cheslak. SN 683,965. Pub. 11–29–55. Filed 3–22–55.

622,087. KELP-KUTTER. Lester M. Davis, d. b. a. Davis Fishing Tackle Co. SN 684,284. Pub. 11–29–55. Filed 3–28–55.

622,088. TOODLES. American Character Doll Co. SN 684,519. Pub. 11–29–55. Filed 3–30–55.

622,089. TRI-PONY. Fields-Mabie Corporation. SN 684,547. Pub. 11–29–55. Filed 3–30–55.

622,090. "TEN-Q" AND DESIGN. K-T Games, Inc. SN 685,194. Pub. 12–6–55. Filed 4–8–55.

CLASS 23

622,091. HYDE HAMMER HEAD. Hyde Manufacturing Company. SN 661,339. Pub. 12–6–55. Filed 2–19–54.

622,092. SUBURBAN STAINLESS. Burrell Cutlery Company, Inc. SN 670,774. Pub. 3–15–55. Filed 7–29–54.

622,093. HR (R REVERSED). H. D. Hume Company. SN 671,158. Pub. 11–29–55. Filed 8–5–54.

622,094. CROWN AND DESIGN. Crown Cork & Seal Company, Inc. SN 671,492. Pub. 12–6–55. Filed 8–11–54.

622,095. ENDORSOGRAPH AND DESIGN. Commercial Controls Corporation. SN 671,883. Pub. 12–6–55. Filed 8–18–54.

622,096. MULTIPOST. Commercial Controls Corporation. SN 671,884. Pub. 12–6–55. Filed 8–18–54.

622,097. LAHER MUSTANG MUFFLERS. Laher Spring and Tire Corporation. SN 671,948. Pub. 11–29–55. Filed 8–19–54.

622,098. BYCO AND DESIGN. Byco Industries. SN 671,980. Pub. 11–29–55. Filed 8–20–54.

622,099. AD-A-HARNESS. Leroy W. Macomber. SN 673,601. Pub. 11–29–55. Filed 9–22–54.

622,100. SPIROLWRAP AND DESIGN (REPRESENTATION OF A RECTANGLE). Rice Barton Corporation. SN 674,048. Pub. 12–6–55. Filed 9–30–54.

622,101. MICAFIL AND DESIGN. Micafil Aktiengesellschaft Werke fur Elektro-Isolation und Wicklerei-Einrichtungen. SN 674,524. Pub. 12–6–55. Filed 10–8–54.

622,102. FRANK-O-PEN'R AND DESIGN (REPRESENTATION OF A TOOL). Max Frank. SN 675,273. Pub. 11–29–55. Filed 10–22–54.

622,103. WIL-FLO. Wil Flo Company. SN 675,606. Pub. 11–29–55. Filed 10–27–54.

622,104. CHAMPION. Toolcraft Company. SN 677,748. Pub. 11–29–55. Filed 12–3–54.

622,105. HYDRO JET. Ware Machine Works, Inc. SN 679,251. Pub. 11–29–55. Filed 12–31–54.

622,106. VALENITE AND DESIGN. Valenite Metals Corporation. SN 681,113. Pub. 11–29–55. Filed 2–4–55.

622,107. DANFOSS. Danfoss ved Mads Clausen. SN 681,385. Pub. 11–29–55. Filed 1–6–55.

622,108. AJAX AND DESIGN. Ajax Flexible Coupling Co. Inc. SN 681,737. Pub. 12–6–55. Filed 2–16–55.

622,109. OUTBOARD MOTORS K AND DESIGN. Kiekhaefer Corporation. SN 682,436. Pub. 11–29–55. Filed 2–28–55.

622,110. NUPLAFLEX. New Plastic Corporation. SN 682,820. Pub. 11–29–55. Filed 3–4–55.

622,111. WEST-CUT. Western States Cutlery Company. SN 683,159. Pub. 11–29–55. Filed 3–9–55.

622,112. FLO-TORQ. Kiekhaefer Corporation. SN 683,402. Pub. 11–29–55. Filed 3–14–55.

622,113. RESLIN AND DESIGN. Appleton Wood Products Co. SN 684,098. Pub. 12–6–55. Filed 3–24–55.

622,114. DABSAW. City Glass Company, Inc. SN 684,112. Pub. 11–29–55. Filed 3–24–55.

622,115. INTERCEPTOR. Dearborn Marine Engines, Inc. SN 684,814. Pub. 11–29–55. Filed 4–4–55.

622,116. SAN-BLO. The Federal Foundry Supply Co. SN 685,687. Pub. 11–29–55. Filed 4–18–55.

622,117. GAY-BLADE. Roswell H. Rausch, d. b. a. Dec Paper Company. SN 687,626. Pub. 11–29–55. Filed 5–16–55.

622,118. SILVERNOSE. Vlier Engineering, Inc. SN 687,656. Pub. 12–6–55. Filed 5–16–55.

622,119. HEX NOSE. Vlier Engineering, Inc. SN 687,657. Pub. 12–6–55. Filed 5–16–55.

622,120. GAR-PAK. The Gardner Board and Carton Co. SN 687,691. Pub. 12–6–55. Filed 5–17–55.

622,121. BLITZ FOG AND DESIGN. Northern Industries, Inc., d. b. a. The Blitz Fog Company, Division of Northern Industries, Inc. SN 687,717. Pub. 11–29–55. Filed 5–17–55.

622,122. DENSLUDGE. Dorr-Oliver Incorporated. SN 687,773. Pub. 11–29–55. Filed 5–18–55.

622,123. SAND HOG ETC. Albert Kareilus & Sons. SN 687,863. Pub. 11–29–55. Filed 5–19–55.

622,124. CULTI-MATIC. Dempster Mill Manufacturing Company. SN 687,922. Pub. 11–29–55. Filed 5–20–55.

622,125. HARCO. Walter Haertel Company. SN 687,940. Pub. 11–29–55. Filed 5–20–55.

622,126. TURBO-FOUR. Kiekhaefer Corporation. SN 688,047. Pub. 11–29–55. Filed 5–23–55.

622,127. MEKYDRO. Maybach-Motorenbau G. m. b. H. SN 688,052. Pub. 12–6–55. Filed 5–23–55.

622,128. SIMFLEX. Jerome J. Sloyan, d. b. a. Automatic Motor Base Co. SN 688,087. Pub. 11–29–55. Filed 5–23–55.

622,129. B B. Jerome J. Sloyan, d. b. a. Automatic Motor Base Co. SN 688,088. Pub. 11–29–55. Filed 5–23–55.

622,130. WONDER BAR. Whitney Manufacturing Co. SN 688,113. Pub. 12–6–55. Filed 5–23–55.

622,131. GOFLEX. Adolph Gottscho, Inc. SN 688,139. Pub. 11–29–55. Filed 5–24–55.

622,132. CLOTOL. Slewek Tool Company. SN 688,190. Pub. 11–29–55. Filed 5–24–55.

622,133. RODMIZER. The Hydro-Blast Corporation. SN 688,243. Pub. 12–6–55. Filed 5–25–55.

622,134. PEARCE. Pearce Corporation. SN 688,257. Pub. 12–6–55. Filed 5–25–55.

622,135. TWISTITE SHRINKWRAP AND DESIGN. Amsco Packaging Machinery Leasing Corp. SN 688,293. Pub. 12–6–55. Filed 5–26–55.

622,136. OMC. Owatonna Manufacturing Company, Inc. SN 688,454. Pub. 12–6–55. Filed 5–27–55.

622,137. OWATONNA. Owatonna Manufacturing Company, Inc. SN 688,455. Pub. 12–6–55. Filed 5–27–55.

622,138. CLIP-O-MAT. Texpak, Inc. SN 688,476. Pub. 12–6–55. Filed 5–27–55.

622,139. EUREKA. S. Howes Company, Inc. SN 688,533. Pub. 12–6–55. Filed 5–31–55.

622,140. HOLEWAY. National Automatic Tool Company, Inc. SN 688,560. Pub. 11–29–55. Filed 5–31–55.

622,141. DIXIE-MAID AND DESIGN. Otto Owings, Inc. SN 688,570. Pub. 12–6–55. Filed 5–31–55.

622,142. SPC START PILOT AND DESIGN. Start Pilot Corporation. SN 688,593. Pub. 12–6–55. Filed 5–31–55.

622,143. TRIMSNIP. The Village Blacksmith Company. SN 688,689. Pub. 11–29–55. Filed 6–1–55.

622,144. OUTLINER. Electro Tool Corporation. SN 688,718. Pub. 11–29–55. Filed 6–2–55.

622,145. TEXLITE. Allis-Chalmers Manufacturing Company. SN 688,788. Pub. 11–29–55. Filed 6–3–55.

622,146. ROTOR TOOLS. The Rotor Tool Company. SN 688,858. Pub. 12–6–55. Filed 6–3–55.

622,147. MERCELECTRIC. Kiekhaefer Corporation. SN 688,941. Pub. 12–6–55. Filed 6–6–55.

622,148. MH AND DESIGN. Mackintosh-Hemphill Company, to E. W. Bliss Company. SN 689,061. Pub. 12–6–55. Filed 6–7–55.

622,149. PIPEMASTER. The Erie Tool Works. SN 689,371. Pub. 12–6–55. Filed 6–13–55.

622,150. CL 77. Clevite Corporation. SN 689,552. Pub. 12–6–55. Filed 6–15–55.

622,151. 100–100 SERIES. The Murray Company of Texas, Inc., d. b. a. Boston Gear Works. SN 689,585. Pub. 12–6–55. Filed 6–15–55.

622,152. MASTERMATIC. Regina Sewing Machine Corp. SN 689,656. Pub. 12–6–55. Filed 6–16–55.

622,153. CHALLENGER. N. S. Meyer, Inc. SN 689,851. Pub. 12–6–55. Filed 6–20–55.

622,154. SPARTAN. N. S. Meyer, Inc. SN 689,852. Pub. 12–6–55. Filed 6–20–55.

622,155. START PILOT. Start Pilot Corporation. SN 689,890. Pub. 12–6–55. Filed 6–20–55.

622,156. ETERNA. Ekco Products Company. SN 689,932. Pub. 11–29–55. Filed 6–21–55.

622,157. VERTI-LINE. Layne & Bowler Pump Company. SN 689,948. Pub. 12–6–55. Filed 6–21–55.

622,158. AMPHENOL AND DESIGN. American Phenolic Corporation. SN 690,115. Pub. 12–6–55. Filed 6–24–55.

622,159. DIAMOND DESIGN. The Carburetor Company. SN 690,131. Pub. 11–29–55. Filed 6–24–55.

622,160. STRAIGHTLINE AND DESIGN. Link-Belt Company. SN 690,173. Pub. 12–6–55. Filed 6–24–55.

622,161. STANDARD. Standard Duplicating Machines Corporation. SN 690,205. Pub. 12–6–55. Filed 6–24–55.

622,162. FLODRAULIC. Dover Corporation. SN 690,245. Pub. 12–6–55. Filed 6–27–55.

622,163. LAWNCREST. The International Silver Company. SN 690,265. Pub. 12–6–55. Filed 6–27–55.

622,164. LUBRISTYL. V. Meylan & Fils. SN 690,291. Pub. 12–6–55. Filed 6–27–55.

622,165. TYSON. Tyson Bearing Corporation. SN 690,349. Pub. 11–29–55. Filed 6–27–55.

622,166. NIKE. Better Packages, Incorporated. SN 690,364. Pub. 12–6–55. Filed 6–28–55.

622,167. AUTO MOTION. The Leea-Brudner Company. SN 690,384. Pub. 12–6–55. Filed 6–28–55.

622,168. SUPERMATIC. National Cooperatives, Incorporated. SN 690,481. Pub. 11–29–55. Filed 6–29–55.

622,169. SUPER CHIEF. American Type Founders, Inc., to American Type Founders Co., Inc. SN 690,593. Pub. 12–6–55. Filed 7–1–55.

622,170. KWIKMRK. Kwikmrk, Incorporated. SN 690,631. Pub. 12–6–55. Filed 7–1–55.

622,171. CONTINENTAL AVIATION AND DESIGN. Continental Aviation and Engineering Corporation. SN 690,685. Pub. 12–6–55. Filed 7–5–55.

622,172. NP AND DESIGN. National Pneumatic Co., Inc. SN 690,809. Pub. 12–6–55. Filed 7–7–55.

622,173. ELLICOTT AND DESIGN. Ellicott Machine Corporation. SN 691,021. Pub. 12–6–55. Filed 7–11–55.

622,174. OXY-DRY. Oxy-Dry Sprayer Corporation. SN 691,317. Pub. 12–6–55. Filed 7–14–55.

622,175. JOLTCRETE. Stearns Manufacturing Company, Inc. SN 691,901. Pub. 12–6–55. Filed 7–25–55.

622,176. BAR-A-CUDA. Harwood Shepard. SN 691,965. Pub. 12–6–55. Filed 7–26–55.

622,177. OPTI-CHEK. Earle L. Harley, d. b. a. The Harley Co. SN 691,998. Pub. 12–6–55. Filed 7–27–55.

622,178. DYNA-SHIFT. The Monarch Machine Tool Company. SN 692,946. Pub. 12–6–55. Filed 8–12–55.

622,179. SPEED-O-PRINT. Speed-O-Print Corporation. SN 692,962. Pub. 12–6–55. Filed 8–12–55.

622,180. MINI-DRILL. Du-Jac Mfg. Corporation. SN 693,126. Pub. 12–6–55. Filed 8–16–55.

622,181. JOYCE. The Joyce-Cridland Co. SN 693,152. Pub. 12–6–55. Filed 8–16–55.

622,182. MULTI-JET. Lummus Cotton Gin Co. SN 693,159. Pub. 12–6–55. Filed 8–16–55.

622,183. BUCKETEER. Rival Manufacturing Company. SN 693,194. Pub. 11–29–55. Filed 8–16–55.

622,184. MASTER PROCESS PRINTER AND DESIGN. Pace Mfg. Co. SN 693,265. Pub. 12–6–55. Filed 8–17–55.

622,185. BUD JET. Aermotor Company. SN 693,348. Pub. 12–6–55. Filed 8–19–55.

622,186. NY. The New York Air Brake Company. SN 693,478. Pub. 12–6–55. Filed 8–22–55.

622,187. ALLEGRO. Industrie A.-G. Allegro. SN 693,748. Pub. 12–6–55. Filed 8–26–55.

622,188. DART. Rolls-Royce Limited. SN 693,771. Pub. 12–6–55. Filed 8–26–55.

622,189. DERWENT. Rolls-Royce Limited. SN 693,773. Pub. 12–6–55. Filed 8–26–55.

622,190. FLASH CHANGE. De Vlieg Microbore Company. SN 694,305. Pub. 12–13–55. Filed 9–7–55.

CLASS 24

622,191. SUDS-MISER. Whirlpool Corporation, to Whirlpool-Seeger Corporation. SN 676,020. Pub. 11–29–55. Filed 11–3–54.

622,192. SUE-Z SEAL SZS AND DESIGN (IRONING BOARD). Robert E. Ruffolo, d. b. a. Bob Ruff. SN 678,815. Pub. 11–29–55. Filed 12–22–54.

CLASS 25

622,193. WESTERN. Western Lock Mfg. Co. SN 689,908. Pub. 11–29–55. Filed 6–20–55.

CLASS 26

622,194. ISOTOPE AND DESIGN. Isotope Products Limited. SN 644,178. Pub. 12–6–55. Filed 3–25–53.

622,195. TESA AND DESIGN. Tesa S. A. SN 652,638. Pub. 11–29–55. Filed 9–1–53.

622,196. CELLOMATIC. Howell-Rogin. SN 660,411. Pub. 12–6–55. Filed 2–1–54.

622,197. RUGGED. The Lufkin Rule Company. SN 661,578. Pub. 11–29–55. Filed 2–24–54.

622,198. PERSPECTA AND DESIGN. Perspecta Sound Inc. SN 670,375. Pub. 11–29–55. Filed 7–21–54.

622,199. NOBEL CHEVRON. The Kono Manufacturing Company. SN 670,932. Pub. 12–6–55. Filed 8–2–54.

622,200. BIW. American Locomotive Company, now by change of name Alco Products, Incorporated. SN 672,209. Pub. 11–29–55. Filed 8–25–54.

622,201. GUILD OF PRESCRIPTION OPTICIANS OF AMERICA B. Guild of Prescription Opticians of America, Inc. SN 672,652. COLLECTIVE MARK. Pub. 12–6–55. Filed 9–2–54.

622,202. ELECTROMEC, INC. AND DESIGN. Electromec, Inc. SN 673,975. Pub. 12–6–55. Filed 9–29–54

622,203. YAR WAY AND DESIGN. Yarnall-Waring Company. SN 674,359. Pub. 12–6–55. Filed 10–5–54.

622,204. BOSCAR. Benson-Lehner Corporation. SN 674,930. Pub. 11–29–55. Filed 10–18–54.

622,205. ANSCO EASY-LOADER. General Aniline & Film Corporation. SN 675,783. Pub. 12–6–55. Filed 11–1–54.

622,206. TECHNICOLOR. Technicolor Motion Picture Corporation. SN 676,557. Pub. 12–6–55. Filed 11–12–54.

622,207. FIELDEN. Robertshaw-Fulton Controls Company. SN 677,678. Pub. 12–6–55. Filed 12–2–54.

622,208. ZUNOW. Teikoku Kogaku Kogyo Kabushiki Kaisha (Teikoku Optical Industry Company, Limited). SN 677,909. Pub. 12–6–55. Filed 12–7–54.

622,209. FIBRE-METAL. The Fibre-Metal Products Co. SN 680,377. Pub. 12–6–55. Filed 1–24–55.

622,210. HI-TRANS. Tiffen Marketing Company. SN 683,821. Pub. 11–29–55. Filed 3–18–55.

622,211. ANKER. Anker-Werke A. G. SN 684,095. Pub. 12–6–55. Filed 3–24–55.

622,212. TIMETROL. Penn Controls, Inc. SN 684,873. Pub. 12–6–55. Filed 4–4–55.

622,213. SA SANDERS ASSOCIATES AND DESIGN: Sanders Associates Incorporated. SN 685,406. Pub. 12–6–55. Filed 4–12–55.

622,214. MICROSKANER. Microreader Mfg. & Sales Corp. SN 686,471. Pub. 11–29–55. Filed 4–28–55.

622,215. CAN TROL. Wesco Machine Products, Inc. SN 686,708. Pub. 11–29–55. Filed 5–2–55.

622,216. TEL-ANIMA AND DESIGN. S. O. S. Cinema Supply Corp. SN 686,852. Pub. 11–29–55. Filed 5–4–55.

622,217. ELECTRONIC ENGINEERING CO. OF CALIFORNIA AND DESIGN. Electronic Engineering Company of California. SN 686,895. Pub. 11–29–55. Filed 5–5–55.

622 218. GULF (WITHIN A DOUBLE CIRCLE). Gulf Oil Corporation. SN 687,582. Pub. 12–6–55. Filed 5–16–55.

622,219. EECO AND DESIGN. Electronic Engineering Company of California. SN 687,688. Pub. 11–29–55. Filed 5–17–55.

622,220. MP MECHANICAL PRODUCTS. Mechanical Products Corporation. SN 687,709. Pub. 11–29–55. Filed 5–17–55.

622,221. SEE BETTER. Edward J. Herbert, d. b. a. Edroy Products Company. SN 688,413. Pub. 12–6–55. Filed 5–27–55.

622,222. MERIT SEAL OF QUALITY AND DESIGN. Merit Manufacturing Company. SN 688,836. Pub. 11–29–55. Filed 6–3–55.

622,223. TEMPRUF AND DESIGN. John Chatillon & Sons. SN 689,342. Pub. 11–29–55. Filed 6–13–55.

622,224. CROSBY. Crosby Steam Gage & Valve Company. SN 689,361. Pub. 12–6–55. Filed 6–13–55.

622,225. FILMPOT. Fairchild Camera and Instrument Corporation. SN 689,997. Pub. 11–29–55. Filed 6–22–55.

622,226. QUIKSITE. H-B Instrument Co., Inc. SN 690,004. Pub. 11–29–55. Filed 6–22–55.

622,227. PDL AND DESIGN. Perceptual Development Laboratories, Incorporated. SN 690,485. Pub. 11–29–55. Filed 6–29–55.

622,228. EDUCATOR. American Optical Company. SN 690,592. Pub. 11–29–55. Filed 7–1–55.

622,229. SPEED-ECTOR. Sinko Mfg. & Tool Co. SN 690,840. Pub. 11–29–55. Filed 7–6–55.

622,230. MICROSIX. P. Gossen & Co. G. m. b. H. SN 691,131. Pub. 12–6–55. Filed 7–12–55.

622,231. POMPEII. Pompeii, Inc. SN 691,387. Pub. 12–6–55. Filed 7–15–55.

622,232. WATCH MASTER ETC. AND DESIGN. American Time Products, Inc. SN 692,679. Pub. 12–6–55. Filed 7–1–55.

CLASS 27

622,233. THE PROMPTER. Bernard S. Lippman. SN 673,460. Pub. 12–6–55. Filed 9–20–54.

622,234. LUX TIME YOUR TIME-REMINDER LINE AND DESIGN. The Lux Clock Manufacturing Company, Inc. SN 675,155. Pub. 11–29–55. Filed 10–20–54.

622,235. RF MR. CONTROLS AND REPRESENTATION OF A GROTESQUE FIGURE. Robertshaw-Fulton Controls Company. SN 689,971. Pub. 12–6–55. Filed 6–21–55.

CLASS 28

622,236. VIRGIN. C. A. Kiger Company Jewelry Corporation. SN 686,458. Pub. 12–6–56. Filed 4–28–55.

622,237. VIRGIN DIAMONDS. C. A. Kiger Company Jewelry Corporation. SN 686,459. Pub. 11–29–55. Filed 4–28–55.

622,238. H. L. P. HANDCRAFTED. Nlash Refining Company, Inc., d. b. a. His Lordship Products Company. SN 687,400. Pub. 12–6–55. Filed 5–12–55.

622,239. COTILLION. E. Coplan Sons. SN 690,544. Pub. 12–6–55. Filed 6–30–55.

622,240. STEPPING STONES. Speidel Corporation. SN 690,656. Pub. 12–6–55. Filed 7–1–55.

622,241. CRISSCROSS. Speidel Corporation. SN 690,657. Pub. 12–6–55. Filed 7–1–55.

622,242. BALL OF FIRE. Speidel Corporation. SN 690,658. Pub. 12–6–55. Filed 7–1–55.

622,243. OUTDORABLE. Speidel Corporation. SN 690,659. Pub. 12–6–55. Filed 7–1–55.

622,244. HEART MATE. Van Craeynest & Linzer, Inc. SN 690,918. Pub. 12–6–55. Filed 7–7–55.

622,245. PLACE MATE. R. Wallace & Sons Manufacturing Company. SN 691,250. Pub. 12–6–55. Filed 7–13–55.

622,246. GRAND RECOLLECTION. Century Metalcraft Corporation. SN 691,825. Pub. 12–6–55. Filed 7–25–55.

622,247. CINDERELLA. Blancard & Company, Inc. SN 691,926. Pub. 12–6–55. Filed 7–26–55.

622,248. CINDERELLA AND DESIGN. Blancard & Company, Inc. SN 691,927. Pub. 12–6–55. Filed 7–26–55.

622,249. LIZARD LINKS. Speidel Corporation. SN 692,095. Pub. 12–6–55. Filed 7–28–55.

CLASS 29

622,250. KLIK-KWIK. Keystone Stamping Corporation. SN 659,352. Pub. 11–29–55. Filed 1–12–54.

622,251. MOP-EEZ. The New York Association for the Blind, Inc. SN 671,187. Pub. 12–6–55. Filed 8–5–54.

622,252. COLLO ALL FOAM AND DESIGN. American Collo Corporation. SN 673,495. Pub. 12–6–55. Filed 9–21–54.

622,253. POCKET PAL. Diagraph-Bradley Industries Inc. SN 674,949. Pub. 12–6–55. Filed 10–18–54.

622,254. EXPLODED-TIP. The Wooster Brush Company. SN 684,614. Pub. 11–29–55. Filed 3–30–55.

622,255. DUET. American Sponge & Chamois Company, Inc. SN 685,332. Pub. 12–6–55. Filed 4–12–55.

622,256. ROYAL. Pro-Phy-Lac-Tic Brush Company. SN 685,396. Pub. 12–6–55. Filed 4–12–55.

622,257. MERCURY AND DESIGN. National Automotive Fibres, Inc. SN 686,207. Pub. 12–6–55. Filed 4–25–55.

622,258. ZIP-ZORB. Industrial Service Company. SN 686,053. Pub. 12–6–55. Filed 4–22–55.

CLASS 30

622,259. DESIGN OF BOWL AND WREATH. The Nippon Toki Kaisha, Ltd. SN 692,010. Pub. 12–13–55. Filed 7–27–55.

622,260. NYMOLLE. A/S Rafa. SN 683,989. Pub. 12–6–55. Filed 3–22–55.

CLASS 31

622,261. SUNROC AND DESIGN. Sunroc Refrigeration Company. SN 666,549. Pub. 11–29–55. Filed 5–17–54.

622,262. AQUATROL AND CIRCLE DESIGN. Aquatrol Laboratories, Inc. SN 672,556. Pub. 11–29–55. Filed 9–1–54.

622,263. FERR-X AND CIRCLE DESIGN. Aquatrol Ferr-X Corporation. SN 672,557. Pub. 11–29–55. Filed 9–1–54.

622,264. DOWCO. J. R. Dowdell & Co. SN 682,879. Pub. 11–29–55. Filed 3–7–55.

622,265. AQUACOOLER. The Marley Company. SN 683,413. Pub. 12–6–55. Filed 3–14–55.

CLASS 32

622,266. TU-VUE. Ornas & Labarre. SN 642,299. Pub. 11–29–55. Filed 2–16–53.

622,267. FIRM SLEEPER AMERICAN. American Bedding Company. SN 665,674. Pub. 5–3–55. Filed 5–4–54.

622,268. M FUTURONIC AND DESIGN. Morval Corporation. SN 671,658. Pub. 11–29–55. Filed 8–13–54.

622,269. MINIT-MAKE. John Clark Brown, Inc. SN 674,132. Pub. 11–29–55. Filed 10–1–54.

622,270. ENGLANDER TRUNDLBUNK. The Englander Company, Inc. SN 676,486. Pub. 11–29–55. Filed 11–12–54.

622,271. AIRLINE AND DESIGN. Airway Finishing Corporation, now by change of name to Airway Products Corporation. SN 677,917. Pub. 11–29–55. Filed 12–8–54.

622,272. FACE-DOWN MATTRESS AND DESIGN. Face-Down Products Co. SN 684,204. Pub. 11–29–55. Filed 3–25–55.

622,273. GOOD LUCK. Alfred N. Phillips, d. b. a. Phillips Special Products. SN 684,340. Pub. 11–29–55. Filed 3–28–55.

622,274. SIESTA. The Dayton Rubber Company. SN 684,929. Pub. 11–29–55. Filed 4–5–55.

622,275. FESTIVAL. Wayniine, Inc. SN 685,539. Pub. 12–6–55. Filed 4–14–55.

622,276. TWIN TRAY. Craig Machine, Inc. SN 685,564. Pub. 12–6–55. Filed 4–15–55.

622,277. SCOTCH MATTRESS AND DESIGN. Stanley Atchason, d. b. a. Cliff-Bay Company. SN 685,635. Pub. 12–6–55. Filed 4–18–55.

622,278. 'JETONE.' Standard Wrought Iron & Mfg. Corp. SN 685,864. Pub. 12–6–55. Filed 4–19–55.

622,279. VIRCO. Virco Mfg. Corporation. SN 685,872. Pub. 12–6–55. Filed 4–19–55.

622,280. VET-TRO-CAB. Charles E. Inks. SN 685,982. Pub. 12–6–55. Filed 4–21–55.

622,281. SPRING FOAM. Pullman Couch Company. SN 686,088. Pub. 12–6–55. Filed 4–22–55.

622,282. FRAMINGHAM. Drexel Furniture Company. SN 686,294. Pub. 12–6–55. Filed 4–26–55.

622,283. THE "BIRCHMASTER." Kroehler Mfg. Co. SN 686,318. Pub. 12–6–55. Filed 4–26–55.

622,284. DESIGN OF HAND AND KEY. P. O. Moore, Inc. SN 686,326. Pub. 12–6–55. Filed 4–26–55.

CLASS 33

622,285. CAMBRIDGE SQUARE. The Cambridge Glass Company. SN 679,453. Pub. 12–6–55. Filed 1–5–55.

622,286. FRIENDLY FARM. General Petroleum Corporation. SN 676,047. Pub. 12–20–55. Filed 11–4–54.

622,287. BO-BO THE CLOWN. Brockway Glass Company, Inc. SN 686,420. Pub. 12–6–55. Filed 4–28–55.

CLASS 34

622,288. APCO AND DESIGN. The Air Preheater Corporation. SN 619,493. Pub. 8–4–53. Filed 10–2–51.

622,289. DORMEYER FRI-WELL. Dormeyer Corporation. SN 637,705. Pub. 11–29–55. Filed 11–6–52.

622,290. SPACE-SAVER. Pioneer Water Heater Corporation. SN 660,066. Pub. 11–29–55. Filed 1–25–54.

622,291. DELTA STEEL BOILER AND TRIANGLE DESIGN. Wm. C. Zingheim Company, Inc. SN 670,397. Pub. 8–9–55. Filed 7–21–54.

622,292. "SNAPPY." Tri-State Heating, Inc. SN 677,830. Pub. 11–29–55. Filed 12–6–54.

622,293. FREE HEATER AND DESIGN. Hoskinson Free Heater Inc. SN 680,077. Pub. 11–29–55. Filed 1–18–55.

622,294. ACE. Crown Stove Works. SN 682,623. Pub 11–29–55. Filed 3–2–55.

622,295. MARKE TURM AND DESIGN. Metallwarenfabrik Meyer & Niss G. m. b. H. SN 682,654. Pub. 11–29–55. Filed 3–2–55.

622,296. INSTO-HOT. Insto-Gas Corporation. SN 682,929. Pub. 11–29–55. Filed 3–7–55.

622,297. SURFACE. Surface Combustion Corporation. SN 683,154. Pub. 12–6–55. Filed 3–9–55.

622,298. PYROVENT. The Harvey P. Bertram Co., Inc., to Wasco Products, Inc. SN 683,839. Pub. 12–6–55. Filed 3–21–55.

622,299. AUER P40 AND DESIGN. Auergesellschaft Aktiengesellschaft. SN 683,935. Pub. 12–6–55. Filed 3–22–55.

CLASS 35

622,300. CONTINENTAL AND DESIGN. Continental Gummiwerke Aktiengesellschaft. SN 648,843. Pub. 11–29–55. Filed 6–16–53.

622,301. SAVOY MASTER. Savoy Tire & Rubber Company, Inc. SN 676,082. Pub. 12–6–55. Filed 11–4–54.

622,302. MOLI-PAK. Harper Packing Company, Incorporated. SN 692,230. Pub. 12–6–55. Filed 8–1–55.

622,303. DUOMATIC C-9. Ramsey Corporation. SN 692,423. Pub. 12–6–55. Filed 8–3–55.

622,304. WAGNER. Wagner Electric Corporation. SN 692,976. Pub. 12–6–55. Filed 8–12–55.

CLASS 36

622,305. SPIN-O-RAMA. Nehi Corporation. SN 684,583. Pub. 11–29–55. Filed 3–30–55.

622,306. REPLICA AND DESIGN. Replica Records. SN 686,227. Pub. 12–6–55. Filed 4–25–55.

622,307. BIGSBY. Paul A. Bigsby. SN 686,948. Pub. 11–29–55. Filed 5–6–55.

CLASS 37

622,308. BEST PENCILS AND DESIGN. Richard Best Pencil Company, Inc. SN 524,900. Pub. 3–4–52. Filed act of 1905, 6–26–47. Am. P. R. 10–25–48.

622,309. CIROLOR. Societe Anonyme Conte. SN 672,913. Pub. 12–6–55. Filed 9–8–54.

622,310. SEAL-X THE SAFETY SEAL. Puritan Stationery Company, Inc. SN 676,660. Pub. 12–6–55. Filed 11–15–54.

622,311. KREKO. S. H. Kress and Company. SN 682,023. Pub. 12–6–55. Filed 2–21–55.

622,312. FORMVELOPE AND DESIGN. Tension Envelope Corporation of Kansas City. SN 683,728. Pub. 12–6–55. Filed 3–17–55.

622,313. CORRO-SET. Gibraltar Corrugated Paper Company, Inc. SN 683,771. Pub. 12–6–55. Filed 3–18–55.

622,314. DOVESOFT. Thomson Paper Mills, Inc. SN 683,937. Pub. 12–6–55. Filed 3–21–55.

622,315. WHITIN W. Whitin Machine Works. SN 684,175. Pub. 12–6–55. Filed 3–24–55.

CLASS 38

622,316. BETTER FARMING METHODS. Watt Publishing Co. SN 668,065. Pub. 9–28–54. Filed 7–13–54.

622,317. NOW HEAR THIS AND DESIGN. Mary Stewart. SN 682,206. Pub. 12–6–55. Filed 2–23–55.

622,318. I'VE GOT A QUESTION. United Newspapers Magazine Corporation. SN 682,210. Pub. 12–6–55. Filed 2–23–55.

622,319. UP BEAT. Down Beat, Incorporated. SN 682,543. Pub. 12–6–55. Filed 3–1–55.

622,320. GOLD BELL. Gold Bell Gift Stamps Co-Operative, Inc. SN 685,185. Pub. 12–6–55. Filed 4–8–55.

622,321. PROCEEDINGS OF THE IRE. The Institute of Radio Engineers, Inc. SN 686,054. Pub. 12-6-55. Filed 4-22-55.

622,322. GEO. LEVY SAYS:—. George A. Levy. SN 686,065. Pub. 12-6-55. Filed 4-22-55.

622,323. DAYS AND CUSTOMS OF ALL FAITHS. General Features Corporation. SN 686,365. Pub. 12-6-55. Filed 4-27-55.

622,324. SCEN-O-TOUR. Douglas Laing, d. b. a. Scen-O-Tour Publishing Co. SN 686,463. Pub. 12-6-55. Filed 4-28-55.

622,325. ARMORED SENTINEL AND DESIGN. Temple Sales Circular Company. SN 686,498. Pub. 12-6-55. Filed 4-28-55.

622,326. FAIRLY SPOKEN. The Hearst Corporation. SN 686,640. Pub. 12-6-55. Filed 5-2-55.

622,327. INTERNATIONAL MASTERS. Charles Leonce. SN 686,986. Pub. 12-6-55. Filed 5-6-55.

CLASS 39

622,328. REGENCY HOUSE. Malcolm Kenneth Co. SN 645,811. Pub. 10-12-54. Filed 4-23-53.

622,329. MAGIC SIZE SNUGFIT. A. Kommel & Sons. SN 654,980. Pub. 11-30-54. Filed 10-19-53.

622,330. ROULETTE. Charmitt of Hollywood, Inc. SN 666,728. Pub. 3-22-55. Filed 5-20-54.

622,331. GLASS SLIPPER. S. D. Arrowood & Co., Incorporated. SN 670,021. Pub. 1-18-55. Filed 7-15-54.

622,332. GLAS SLIPPERS. Henry A. Dewenter. SN 670,732. Pub. 4-5-55. Filed 7-28-54.

622,333. "FAST CAP." Hyman Glasberg, d. b. a. Evelyn Hat Company. SN 671,099. Pub. 3-8-55. Filed 8-4-54.

622,334. "NEK-LOK." Hydro-Tex Corp. SN 672,819. Pub. 12-6-55. Filed 9-7-54.

622,335. LO-LO'S BY OSCAR "TEENS" AND DESIGN. Shoe Corporation of America. SN 673,305. Pub. 11-29-55. Filed 9-16-54.

622,336. MAGIC-FIT. W. E. Stephens Mfg. Co. SN 674,709. Pub. 12-6-55. Filed 10-12-54.

622,337. LET'S PRETEND AND DESIGN (REPRESENTATION OF A MASK). Caroline L. Phelps. SN 676,526. Pub. 12-6-55. Filed 11-12-54.

622,338. BUST NORMALIZER. California Forms, Inc. SN 676,940. Pub. 12-6-55. Filed 11-19-54.

622,339. TAMI. Garay & Co., Inc. SN 677,055. Pub. 12-6-55. Filed 11-22-54.

622,340. CONTROL-LIFT. Cordelia of Hollywood Brassieres, Inc. SN 679,272. Pub. 12-6-55. Filed 1-3-55.

622,341. GRANTS-KNOWN FOR VALUES. W. T. Grant Company. SN 679,386. Pub. 12-6-55. Filed 1-4-55.

622,342. EARLY BIRD AND DESIGN. Garden Spot Shoes, Inc. SN 681,153. Pub. 12-6-55. Filed 2-7-55.

622,343. HAPPY BIRTHDAY. Ainsbrooke Co., Inc. SN 682,101. Pub. 12-6-55. Filed 2-23-55.

622,344. FUTURAMIC. The Shirtcraft Company, Inc. SN 685,310. Pub. 12-6-55. Filed 4-11-55.

622,345. REST ASSURED. Cluett, Peabody & Co., Inc. SN 685,352. Pub. 12-6-55. Filed 4-12-55.

622,346. GOLDEN HOUSE. Wembley, Inc. SN 685,415. Pub. 12-6-55. Filed 4-12-55.

622,347. SPANISH MAIN. Cluett, Peabody & Co., Inc. SN 685,430. Pub. 12-6-55. Filed 4-13-55.

622,348. RAPALLO. Cluett, Peabody & Co., Inc. SN 685,431. Pub. 12-6-55. Filed 4-13-55.

622,349. GEMSHEEN. I. C. Isaacs & Company, Inc. SN 685,498. Pub. 12-6-55. Filed 4-14-55.

622,350. CAMICIA. Clarise Blouse Co. Inc. SN 685,559. Pub. 12-6-55. Filed 4-15-55.

622,351. CRAFT MILLS. Craft Mills, Inc. SN 685,563. Pub. 12-6-55. Filed 4-15-55.

622,352. CAGLECO. Cagleco Sportswear. SN 685,651. Pub. 12-6-55. Filed 4-18-55.

622,353. "MODE DE REINE." Irwill Knitwear Corp. SN 685,713. Pub. 12-6-55. Filed 4-18-55.

622,354. FRENCH-O-LETTE. Surprise Brassiere Co., Inc. SN 685,778. Pub. 12-6-55. Filed 4-18-55.

622,355. M GLOVEMASTER AND REPRESENTATION OF GLOVE. Marquette Glove Corp. SN 685,839. Pub. 12-6-55. Filed 4-19-55.

622,356. SPINKASTER AND DESIGN. The Servus Rubber Company. SN 686,230. Pub. 12-6-55. Filed 4-25-55.

622,357. GOLDEN-GAIT-ARCH. Quality Maid Footwear, Inc. SN 686,333. Pub. 12-6-55. Filed 4-26-55.

622,358. SARONG. Sarong, Inc. SN 686,394. Pub. 12-6-55. Filed 4-27-55.

622,359. MAKE-BELIEVE ETC. Rice Mills, Inc. SN 686,479. Pub. 12-6-55. Filed 4-28-55.

622,360. BLEUETTE. Bleuette, Inc. SN 686,949. Pub. 12-6-55. Filed 5-6-55.

CLASS 40

622,361. ARCULON. S. & S. Industries, Inc. SN 682,205. Pub. 12-6-55. Filed 2-23-55.

CLASS 42

622,362. SYMBOL OF QUALITY FOR OVER 100 YEARS AND DESIGN. J. P. Stevens & Co., Inc. SN 643,985. Pub. 12-6-55. Filed 3-20-53.

622,363. CARTEX. Feinberg Textile Co. SN 670,916. Pub. 10-4-55. Filed 8-2-54.

622,364. VILENE AND DESIGN. Carl Freudenberg Kommanditgesellschaft auf Aktien. SN 678,387. Pub. 12-6-55. Filed 12-15-54.

622,365. DETCO PROCESS. Dettra Flag Company, Inc. SN 680,736. Pub. 12-6-55. Filed 1-31-55.

622,366. PROVENCE C'EST CHARMANT. Charles Bloom, Inc. SN 682,112. Pub. 12-6-55. Filed 2-23-55.

622,367. A TRINITY FABRIC AND DESIGN. Trinity Trading Corporation. SN 682,998. Pub. 12-6-55. Filed 3-7-55.

622,368. ROCKLEDGE. Columbia Coat Company. SN 683,020. Pub. 12-6-55. Filed 3-8-55.

622,369. GRANVILLE. Columbia Coat Company. SN 683,022. Pub. 12-6-55. Filed 3-8-55.

622,370. SARANDELLE. C. H. Masland & Sons. SN 683,057. Pub. 12-6-55. Filed 3-8-55.

622,371. SUBTLESHEEN. Fruit of The Loom, Inc. SN 683,289. Pub. 12-6-55. Filed 3-11-55.

622,372. TASMONA. Botany Mills, Inc. SN 684,803. Pub. 12-6-55. Filed 4-4-55.

622,373. VICUNITA. Baitch & Castaldi, Inc. SN 685,089. Pub. 12-6-55. Filed 4-7-55.

622,374. EMPIRE. Samuel Perlmutter, d. b. a. Empire Curtain Mfg. Co. SN 685,304. Pub. 12-6-55. Filed 4-12-55.

622,375. REGENCE. Botany Mills, Inc. SN 686,024. Pub. 12-6-55. Filed 4-22-55.

622,376. RANDI-LEE. American Quilt Cover Mfrs., Inc. SN 686,133. Pub. 12-6-55. Filed 4-25-55.

622,377. DYAK AND DESIGN. The Linen Thread Co., Inc. SN 686,319. Pub. 12-6-55. Filed 4-26-55.

622,378. BEVALURA. H. M. Prince Textile Inc. SN 686,330. Pub. 12-6-55. Filed 4-26-55.

622,379. PRINCE AND DESIGN. H. M. Prince Textiles Inc. SN 686,331. Pub. 12-6-55. Filed 4-26-55.

622,380. CALVERT., The May Department Stores Company. SN 686,759. Pub. 12-6-55. Filed 5-3-55.

622,381. VACATION. McCampbell & Company, Inc. SN 686,760. Pub. 12-6-55. Filed 5-3-55.

622,382. STARFIRE. McCampbell & Company, Inc. SN 686,762. Pub. 12-6-55. Filed 5-3-55.

622,383. NORLESSE. Chatham Manufacturing Company. SN 686,805. Pub. 12-6-55. Filed 5-4-55.

622,384. PINEHURST. Chatham Manufacturing Company. SN 686,806. Pub. 12-6-55. Filed 5-4-55.

622,385. WASH N' DRY. John Wolf Textiles, Inc. SN 686,869. Pub. 12-6-55. Filed 5-4-55.

622,386. FROSSETTE. D. B. Fuller & Co., Inc. SN 686,966. Pub. 12-6-55. Filed 5-6-55.

622,387. FROSTWEAVE. D. B. Fuller & Co., Inc. SN 686,967. Pub. 12-6-55. Filed 5-6-55.

CLASS 43

622,388. NYLENKA. American Enka Corporation. SN 685,548. Pub. 12-6-55. Filed 4-15-55.

CLASS 44

622,389. BASALMETER. The Liebel-Flarsheim Company. SN 688,551. Pub. 12-6-55. Filed 5-31-55.

CLASS 45

622,390. GRAND UNION FOOD MARKETS AND DESIGN. The Grand Union Company. SN 686,542. Pub. 12-6-55. Filed 4-29-55.

CLASS 46

622,391. DESIGN OF HALO AND STAR. Halo-Star Corporation. SN 613,004. Pub. 3-18-52. Filed 4-23-51.

622,392. EPESA. Elaboraciones Pesqueras del Cantabrico S. A. SN 630,621. Pub. 12-6-55. Filed 12-17-52.

622,393. REPRESENTATION OF TOWN CRIER (FANCIFUL). Colonial Beef Co., d. b. a. Colonial Beef Company. SN 640,442. Pub. 12-6-55. Filed 1-7-53.

622,394. EGGO AND DESIGN. Eggo Food Products, Inc. SN 641,412. Pub. 12-6-55. Filed 12-20-52.

622,395. GOYA AND DESIGN. Unanue & Sons, Inc. SN 646,179. Pub. 12-6-55. Filed 4-29-53.

622,396. SALISBURY-NIPS. Salisbury House, Ltd. SN 651,131. Pub. 12-6-55. Filed 7-30-53.

622,397. BTC. M. H. Greenebaum, Inc., to Baltic Trading Company, Ltd. SN 652,520. Pub. 12-6-55. Filed 8-31-53.

622,398. SHASTA. Swift & Company. SN 655,555. Pub. 3-29-55. Filed 10-29-53.

622,399. KK AND DESIGN. Krispy Kreme Doughnut Company. SN 657,537. Pub. 3-8-55. Filed 12-7-53.

622,400. COASTAL. Ventura Coastal Lemon Company. SN 657,580. Pub. 12-6-55. Filed 12-7-53.

622,401. FRESH-IN-FOIL. Chapman & Smith Company. SN 658,890. Pub. 12-6-55. Filed 1-4-54.

622,402. "ARLECCHINO" AND DESIGN. Otello Piersanti, d. b. a. Ditta Piersanti-Industria Conserve Alimentari. SN 660,668. Pub. 12-6-55. Filed 2-5-54.

622,403. REPRESENTATION OF TWO PIGS. Pee Dee Company. SN 661,285. Pub. 12-6-55. Filed 2-18-54.

622,404. PASHA. United States Products Corporation, Ltd. SN 664,486. Pub. 7-5-55. Filed 4-13-54.

622,405. EL MARINERO. Fisher Flouring Mills Company. SN 672,937. Pub. 12-6-55. Filed 9-9-54.

622,406. GARDNER'S MR. BIG ETC., AND DESIGN. Gardner's Drive-In Sandwich Stand. SN 673,174. Pub. 12-6-55. Filed 9-14-54.

622,407. PAR-X. Kirby and Little Packing Company. SN 674,515. Pub. 12-6-55. Filed 10-8-54.

622,408. C & T. Societe Tur Sucesores, S. A. SN 674,545. Pub. 12-6-55. Filed 8-6-54.

622,409. FAMO. Harris Milling Company. SN 679,043. Pub. 12-6-55. Filed 12-28-54.

622,410. KNOTT'S BERRY FARM. Knott's Berry Farm. SN 679,167. Pub. 12-6-55. Filed 12-30-54.

622,411. ECLIPSE MAKEM BRAND AND DESIGN. Gardena Valley Milling Company. SN 682,637. Pub. 12-6-55. Filed 3-2-55.

622,412. BONNEVILLE. Steinfeld's Products Company. SN 682,762. Pub. 12-6-55. Filed 3-3-55.

622,413. EAS AND DESIGN. Atalanta Trading Corp. SN 682,776. Pub. 12-6-55. Filed 3-4-55.

622,414. ARATEX. The Glidden Company, d. b. a. Durkee Famous Foods. SN 682,906. Pub. 12-6-55. Filed 3-7-55.

622,415. CREAMTEX. The Glidden Company, d. b. a. Durkee Famous Foods. SN 682,907. Pub. 12-6-55. Filed 3-7-55.

622,416. MELVO. The Glidden Company, d. b. a. Durkee Famous Foods. SN 682,908. Pub. 12-6-55. Filed 3-7-55.

622,417. BOLD. Husky Food Products, Inc. SN 683,045. Pub. 12-6-55. Filed 3-8-55.

622,418. CALISTAR. H. A. Irving, d. b. a. H. A. Irving Co. SN 683,050. Pub. 12-6-55. Filed 3-8-55.

622,419. "HAPPY" AND DESIGN. The Schwebel Baking Company. SN 683,319. Pub. 12-6-55. Filed 3-11-55.

622,420. M AND DESIGN OF LEAF. Moriarty Meat Company. SN 683,461. Pub. 12-6-55. Filed 3-28-55.

622,421. ZIG-ZAG. David Michael & Co., Incorporated. SN 683,611. Pub. 12-6-55. Filed 3-16-55.

622,422. ICKY. R. Paul Gilmore, d. b. a. Gilmore Produce Company. SN 684,913. Pub. 12-6-55. Filed 4-25-55.

CLASS 47

622,423. SWEET 'N HEARTY AND DESIGN. The Welch Grape Juice Company, to The Welch Grape Juice Company, Inc. SN 618,770. Pub. 3-16-54. Filed 9-13-51.

622,424. GIGOLO. Meier's Wine Cellars, Inc. SN 683,792. Pub. 12-6-55. Filed 3-18-55.

622,425. BARROS. Barros, Almeida & Ca. SN 685,640. Pub. 12-6-55. Filed 4-18-55.

622,426. PAUL DUPRÉ. Monarch Wine Company of Georgia. SN 686,767. Pub. 12-6-55. Filed 5-3-55.

CLASS 49

622,427. DOMINION TEN. Montmorency Distillery Ltd. SN 634,650. Pub. 6-16-53. Filed 8-29-52.

622,428. OLD DOMINION. Continental Distilling Corporation. SN 640,727. Pub. 12-28-54. Filed 1-14-53.

622,429. LARIVIÈRE. Eastern Liquor Company, Inc. SN 677,702. Pub. 12-6-55. Filed 12-3-54.

622,430. HIGHLAND VELVET. John Gross and Company. SN 683,503. Pub. 12-6-55. Filed 3-15-55.

622,431. OLD DAN. J. A. Dougherty's Sons, Inc., Distillers. SN 684,405. Pub. 12-6-55. Filed 3-29-55.

622,432. GOVERNOR'S CLUB. J. A. Dougherty's Sons, Inc., Distillers. SN 684,406. Pub. 12-6-55. Filed 3-29-55.

622,433. BARROS. Barros, Almeida & Ca. SN 685,810. Pub. 12-6-55. Filed 4-19-55.

CLASS 50

622,434. EXCELSIOR KNOX ETC., AND DESIGN. Knox Woolen Company. SN 638,935. Pub. 12-6-55. Filed 11-19-52.

622,435. AUTO-SWAT. U. S. Manufacturing Corporation. SN 643,569. Pub. 12-6-55. Filed 3-12-53.

622,436. WG (FANCIFUL). W. Goebel, Porzellanfabrik Oeslau und Wilhelmsfeld. SN 652,389. Pub. 12-6-55. Filed 8-27-53.

622,437. V. W. Goebel, Porzellanfabrik Oeslau und Wilhelmsfeld. SN 652,391. Pub. 12-6-55. Filed 8-27-53.

622,438. JAMESWAY BIRD-O-MATIC CONTROL AND DESIGN. James Mfg. Co. SN 659,266. Pub. 12-6-55. Filed 1-11-54.

622,439. DRISEAL. Anchor Hocking Glass Corporation. SN 663,994. Pub. 12-6-55. Filed 4-6-54.

622,440. SLED SHANTY. Turner Equipment Company. SN 667,474. Pub. 12-6-55. Filed 6-1-54.

622,441. QUIET. Robert W. Beyland, d. b. a. Beyland Engineering Company. SN 686,273. Pub. 12-6-55. Filed 4-26-55.

622,442. "PRE-LAY." The Luxor Products Company. SN 686,377. Pub. 12-6-55. Filed 4-27-55.

622,443. HEARTFELT. The Felters Company. SN 686,820. Pub. 12-6-55. Filed 5-4-55.

622,444. ADVERMAT. Perfo Mat & Rubber Co. Inc. SN 686,919. Pub. 12-6-55. Filed 5-5-55.

622,445. KWIK-KOVER. Kwik-Kover Mfg. Co., Inc. SN 687,074. Pub. 12-6-55. Filed 5-9-55.

CLASS 51

622,446. SAYTOO C'EST TOUT. William Z. Goodman, d. b. a. William Zachary Company. SN 624,084. Pub. 2-9-54. Filed 1-25-52.

622,447. VARON DANDY. Perfumeria Parera S. A. SN 679,738. Pub. 12-6-55. Filed 1-11-55.

622,448. DISCOVERY 21 AND DESIGN. Joseph C. Urkov, d. b. a. Discovery Products Company. SN 681,959. Pub. 12-6-55. Filed 2-18-55.

622,449. DISCOVERY 22 AND DESIGN. Joseph C. Urkov, d. b. a. Discovery Products Company. SN 681,960. Pub. 12-6-55. Filed 2-18-55.

622,450. DESIGN OF FENCER. Rolley, Inc. SN 684,470. Pub. 12-6-55. Filed 3-29-55.

CLASS 52

622,451. B-KLEER. The Pennsylvania Salt Manufacturing Company. SN 654,915. Pub. 11-2-54. Filed 10-16-53.

622,452. STIEFEL AND DESIGN. Stiefel Medicinal Soap Company, Inc. SN 674,628. Pub. 12-6-55. Filed 10-11-54.

Service Marks

CLASS 100

622,453. DIGITAB. Fingerprint, Incorporated. SN 635,257. Pub. 12-6-55. Filed 9-15-52.

622,454. SPEEDY AND DESIGN. Florists' Telegraph Delivery Association. SN 653,827. Pub. 12-6-55. Filed 9-28-53.

622,455. REPRESENTATION OF GREEK LETTERS AND DESIGN. International Fraternity of Delta Sigma Pi, Inc. SN 654,973. Pub. 12-6-55. Filed 10-19-53.

622,456. INVEST IN REST, ETC., AND DESIGN. National Association of Bedding Manufacturers. SN 669,463. Pub. 12-6-55. Filed 7-6-54.

622,457. NEW YORK TESTING LABORATORIES, INC., ETC., AND DESIGN. New York Testing Laboratories Inc. SN 671,519. Pub. 12-6-55. Filed 8-11-54.

622,458. EASTERN MOTELS, ETC., AND DESIGN. Eastern Motel Association. SN 677,495. COLLECTIVE MARK. Pub. 12-6-55. Filed 11-30-54.

622,459. ASSOCIATION OF THE JUNIOR LEAGUES OF AMERICA, ETC., AND DESIGN. Association of the Junior Leagues of America, Inc. SN 684,100. Pub. 12-6-55. Filed 3-24-55.

CLASS 103

622,460. SPOTLESS. Spotless Stores, Inc. SN 663,066. Pub. 12-6-55. Filed 3-22-54.

622,461. SYLVAN. Sylvan Pools, Inc. SN 674,910. Pub. 12-6-55. Filed 10-15-54.

CLASS 104

622,462. INTRAFAX. The Western Union Telegraph Company. SN 667,276. Pub. 12-6-55. Filed 5-27-54.

CLASS 106

622,463. AMP-1937 AND DESIGN (REPRESENTATION OF A SHIELD). Jersey Sheet Metal Products Inc., d. b. a. Associated Metal Fabricators. SN 658,568. Pub. 12-6-55. Filed 12-28-53.

622,464. ALDAIR. Aldan Rubber Co. SN 678,580. Pub. 12-6-55. Filed 12-20-54.

CLASS 107

622,465. CINEMA 16. Cinema 16, Inc. SN 638,569. Pub. 12-6-55. Filed 11-25-52.

622,466. "MAN ON THE GO." Alex Dreier. SN 680,590. Pub. 12-6-55. Filed 1-27-55.

SUPPLEMENTAL REGISTER

These registrations are not subject to opposition.

CLASS 16

622,467. James K. Harbinson & Co., Inc., Buffalo, N. Y. SN 674,071. Filed P. R. 9-30-54. Am. S. R. 12-1-55.

SEALANT

For Colloidal Lead Composition Used for Protective Coating on Closed Surfaces.
Use since July 23, 1954.

CLASS 18

622,468. The Borden Company, New York, N. Y. SN 690,797. Filed P. R. 7-6-55. Am. S. R. 11-21-55.

BETTER FEEDS THROUGH RESEARCH

For Vitamin and Mineral Supplements for Poultry and Livestock Feeds.
Use since Dec. 31, 1953.

CLASS 21

622,469. Thompson and Sons, Inc., Lyons, Ill. SN 679,427. Filed P. R. 1-4-55. Am. S. R. 11-21-55.

THOMPSON INDUSTRIAL

For Electric Vacuum Cleaners.
Use since Nov. 1, 1954.

622,470. Fluorescent Fixtures of California, San Francisco, Calif. SN 682,003. Filed P. R. 2-21-55. Am. S. R. 8-26-55.

AREA/LITER

For Fluorescent Lighting Fixtures.
Use since June 1, 1954.

CLASS 23

622,471. Ex-Cell-O Corporation, Detroit, Mich. SN 678,097. Filed P. R. 12-10-54. Am. S. R. 11-18-55.

BOR-DRIL

For Machines for Employing on a Workpiece Conventional or Special Tools of the Sort Known in the Trade as Gun-Drills.
Use since July 1954.

622,472. The Welsbach Corporation, Philadelphia, Pa. SN 691,108. Filed P. R. 7-11-55. Am. S. R. 11-23-55.

WELSBACH

For Tapping Machines and Parts Thereof.
Use since 1953.

CLASS 46

622,473. Kalen Trading Corporation, New York, N. Y. SN 653,225. Filed P. R. 9-15-53. Am. S. R. 6-30-54.

KALO

For Instant Coffee, Chocolate Malted Milk Powder and Chocolate Malt Syrup.
Use since Jan. 1, 1952.

CLASS 52

622,474. Milner Products Company, Jackson, Miss. SN 673,041. Filed P. R. 9-10-54. Am. S. R. 11-4-55.

MILNER HOUSEHOLD CLEANER

For the purpose of this registration applicant does not claim exclusive of the words "Household Cleaner" apart from the rest of the mark.
For Liquid Household Cleaner.
Use since Aug. 2, 1954.

TRADEMARK REGISTRATIONS RENEWED

107,399. R. I. W. ETC. Cl. 16. 11-23-15.
108,126. TUXEDO CHOP AND DESIGN. Cl. 46. 1-18-16.
108,400. R-V-B. Cl. 46. 2-8-16.
108,987. PORTRAIT AND DESIGN. Cl. 46. 3-14-16.
108,989. STONEWALL JACKSON AND DESIGN. Cl. 46. 3-14-16.
109,475. CHESTNUT HILL. Cl. 46. 4-11-16.
109,637. VICTOR. Cl. 35. 4-11-16.
110,014. CASHIER. Cl. 26. 5-2-16.
110,246. ARKADY AND DESIGN. Cl. 46. 5-9-16.
323,163. MESCO COFFEE NO SHELF AGE. Cl. 46. 4-2-35.
323,170. MESCO COFFEE NATURALLY FRESH. Cl. 46. 4-2-35.
324,225. RHUM DES PLANTATIONS SAINT JAMES ETC. Cl. 49. 5-14-35.
324,504. MESCO. Cl. 46. 5-21-35.
324,770. JULEP ADE. Cl. 45. 5-28-35.
327,281. TRU-VIS ETC. AND DESIGN. Cl. 15. 8-20-35.
330,377. MARBLETTE. Cl. 1. 12-3-35.
330,411. DALARE ASSOCIATES AND DESIGN. Cl. 18. 12-3-35.
330,469. CRYSTALITE. Cl. 44. 12-3-35.
330,874. DIX-MAKE AND DESIGN. Cl. 42. 12-17-35.
331,049. B G AND DESIGN. Cl. 21. 12-24-35.
331,081. WESTERN AND DESIGN. Cl. 14. 12-24-35.
331,448. BON-EX. Cl. 46. 1-7-36.
331,469. TENSOPLAST. Cl. 18. 1-7-36.
331,626. GREENSEAL AND DESIGN. Cl. 21. 1-14-36.
331,789. DESIGN OF GROTESQUE HUMAN. Cl. 38. 1-21-36.
331,856. OLD TANKARD. Cl. 48. 1-21-36.
331,894. ROYALITE. Cl. 4. 1-21-36.
332,295. SWEET-MUSIC. Cl. 39. 2-11-36.
332,404. CLO-RUBBER. Cl. 16. 2-11-36.
333,542. XLO AND DESIGN. Cl. 36. 3-24-36.
334,321. SORBOLITE. Cl. 2. 4-28-36.
334,409. BASIC. Cl. 39. 5-5-36.
334,469. STILLBROOK. Cl. 49. 5-5-36.
334,536. KAYEWOOD SHIRT. Cl. 39. 5-5-36.
334,635. TOMIX. Cl. 45. 5-12-36.
335,026. DESIGN OF GEOMETRIC FIGURE COLORED YELLOW AND GREEN. Cl. 51. 5-19-36.

TRADEMARK REGISTRATIONS CANCELED

Section 8

173,372. MISSION-KNIT. Cl. 39. 9-25-23.
188,181. EQUATOR. Cl. 42. 8-19-24.
191,364. GOLD WING. Cl. 46. 11-4-24.
191,365. RED WING. Cl. 46. 11-4-24.
202,725. PORIT. Cl. 4. 9-1-25.
209,353. BLUE WING. Cl. 46. 2-23-26.
220,463. MAPLE WREATH. Cl. 46. 11-9-26.
220,920. HOW'S THIS. Cl. 46. 11-16-26.
226,347. GOLDEN SWEETS. Cl. 46. 4-5-27.
262,473. MASTER FARMERS OF AMERICA. Cl. 38. 10-15-29.
262,531. PURPLE COLORED TWISTED ENDS OF GOODS WRAPPER. Cl. 46. 10-15-29.
262,532. PINK COLORED TWISTED ENDS OF GOODS WRAPPER. Cl. 46. 10-15-29.
262,533. BLACK COLORED TWISTED ENDS OF GOODS WRAPPER. Cl. 46. 10-15-29.
268,535. "THERM-A-HOT". Cl. 21. 3-18-30.
355,614. CAMELINE AND REPRESENTATION OF CAMEL. Cl. 1. 3-22-38.
369,791. WESTERN VENETIAN BLINDS AND REPRESENTATION OF VENETIAN BLIND WITHIN RECTANGULAR DESIGN. Cl. 32. 8-1-39.
371,022. KOMFO. Cl. 32. 9-12-39.
372,818. ALPINE. Cl. 32. 11-14-39.
420,144. VERTI-COIL. Cl. 31. 3-26-46.
433,460. TRANSGLO. Cl. 4. 10-14-47.
442,457. IVY LEAGUE. Cl. 22. 4-12-49.
514,970. ADAMAR. Cl. 37. 9-13-49.
514,974. EMSEL WITHIN CIRCULAR DESIGN. Cl. 15. 9-13-49.
514,975. HI-Q AND SUNBURST DESIGN. Cl. 46. 9-13-49.
514,977. SUPER INKSOL. Cl. 4. 9-13-49.
514,978. INKSOL. Cl. 4. 9-13-49.
514,979. HOLLYWOOD PIC-TOURS WITHIN RECTANGULAR DESIGN. Cl. 26. 9-13-49.
514,980. PIC-TOURS. Cl. 26. 9-13-49.
514,981. OREGON SUN. Cl. 46. 9-13-49.
514,983. SEE ALL AND REPRESENTATION OF EYE. Cl. 32. 9-13-49.
514,985. FRETONE. Cl. 15. 9-13-49.
514,986. PCF. Cl. 4. 9-13-49.
514,987. OLD HAMPSHIRE. Cl. 28. 9-13-49.
514,997. NALCOSTILL. Cl. 31. 9-13-49.
515,004. BLUE JAY. Cl. 37. 9-13-49.
515,005. ROYAL SMOKELESS. Cl. 1. 9-13-49.
515,010. GEOMETRIC DESIGN. Cl. 32. 9-13-49.
515,018. YO! HO! Cl. 46. 9-13-49.
515,019. SONGSTER. Cl. 46. 9-13-49.
515,023. STAR STRIP-EASY. Cl. 12. 9-13-49.
515,024. MAID OF CALIFORNIA. Cl. 46. 9-13-49.
515,028. REPRESENTATION OF CHILD PLAYING WITH BLOCKS. Cl. 46. 9-13-49.
515,030. MENGEL MODULE AND DESIGN. Cl. 32. 9-13-49.
515,035. CHIPPEWA AND REPRESENTATION OF INDIAN WITHIN RECTANGULAR DESIGN. Cl. 45. 9-13-49.
515,040. CAMBRO. Cl. 32. 9-13-49.

515,041. IVANHOE. Cl. 32. 9–13–49.
515,045. ECONOMY. Cl. 46. 9–13–49.
515,053. INSUL-VENT AND DESIGN. Cl. 12. 9–13–49.
515,056. BLACK EAGLE. Cl. 4. 9–13–49.
515,059. 10,000 LAKES. Cl. 22. 9–13–49.
515,061. SPARKLE BRITE AND DESIGN. Cl. 4. 9–13–49.
515,063. FULLA-FRUIT. Cl. 46. 9–13–49.
515,066. SAVA-SENTA. Cl. 4. 9–13–49.
515,068. CLEAN TIM. Cl. 4. 9–13–49.
515,077. TELEPHONE. Cl. 46. 9–13–49.
515,079. MOUNT STIRLING. Cl. 46. 9–13–49.
515,083. CHLORASEC. Cl. 6. 9–13–49.
515,085. 24–S. Cl. 4. 9–13–49.
515,087. SPORTSMAN. Cl. 22. 9–13–49.
515,097. MEET THE SPECS WITH SEALTEX. Cl. 12. 9–13–49.
515,103. MINE-E-VITA. Cl. 46. 9–13–49.
515,108. MIRAMONTE. Cl. 46. 9–13–49.
515,109. WOOZIE-WOOZIE. Cl. 46. 9–13–49.
515,116. GLOSS STICKS. Cl. 44. 9–13–49.
515,123. METEOR AND REPRESENTATION OF METEOR. Cl. 22. 9–13–49.
515,124. GRIFFINET. Cl. 32. 9–13–49.
515,125. SLIPKOTE. Cl. 15. 9–13–49.
515,126. JJT MUSICAL EDUCATIONAL JINGLE BLOCKS WITHIN CIRCULAR DESIGN. Cl. 22. 9–13–49.
515,128. D TEE AND REPRESENTATION OF GOLF TEE. Cl. 22. 9–13–49.
515,129. SAMBA. Cl. 22. 9–13–49.
515,133. PIERMONT FABRIC. Cl. 37. 9–13–49.
515,137. JOLLY BUTCHER. Cl. 37. 9–13–49.
515,138. VELTEX AND DESIGN. Cl. 22. 9–13–49.
515,142. MADAM W. F. BETTIS AND PORTRAIT DESIGN. Cl. 6. 9–13–49.
515,146. V VOORHEES RUBBER MFG. CO. INC. Cl. 12. 9–13–49.
515,148. THRIFTY SERVICE. Cl. 37. 9–13–49.
515,155. SR WITHIN CIRCULAR DESIGN. Cl. 44. 9–13–49.
515,156. DRAGON'S TEETH. Cl. 22. 9–13–49.
515,157. TEXTANT. Cl. 6. 9–13–49.
515,160. WINGS. Cl. 22. 9–13–49.
515,165. SMOOCHIN' WITHIN OVAL DESIGN. Cl. 45. 9–13–49.
515,174. SCHOOL PALS. Cl. 37. 9–13–49.
515,178. INVISIBLE ACCESSORY. Cl. 4. 9–13–49.
515,181. SOLVITE. Cl. 6. 9–13–49.
515,182. BEAUTY IN THE MORNING AND REPRESENTATION OF HEAD OF WOMAN. Cl. 4. 9–13–49.
515,184. INJEX. Cl. 6. 9–13–49.
515,186. MANIKURIA. Cl. 44. 9–13–49.
515,187. PURE WITHIN CIRCLE DESIGN. Cl. 19. 9–13–49.
515,189. SKID. Cl. 4. 9–13–49.
515,191. TORNADO. Cl. 4. 9–13–49.
515,192. NURATEX. Cl. 6. 9–13–49.
515,194. MEDIM. Cl. 6. 9–13–49.
515,196. PEN-TROCHE. Cl. 6. 9–13–49.
515,205. MAGNA-VUE. Cl. 26. 9–13–49.
515,207. LORD CROMWELL AND DESIGN. Cl. 28. 9–13–49.
515,208. PRIME-PAC. Cl. 37. 9–13–49.
515,209. FOIL-TITE. Cl. 37. 9–13–49.
515,211. GOLDEN AMBER. Cl. 46. 9–13–49.
515,213. MICHIGAN. Cl. 26. 9–13–49.
515,216. E-Z-E ASSEMBLY "THE FAMOUS KIT CAMERAS" CAM-KITS. Cl. 26. 9–13–49.
515,217. NITE-LITE AND REPRESENTATION OF OWL. Cl. 26. 9–13–49.
515,218. LUMINOUS FROST. Cl. 50. 9–13–49.
515,219. JET-HEET AND DESIGN. Cl. 34. 9–13–49.
515,220. HERSEY. Cl. 26. 9–13–49.
515,222. TEX-RED. Cl. 46. 9–13–49.
515,224. THE LAKEVIEW NEWS. Cl. 38. 9–13–49.
515,225. ANTIQUARIAN BOOKMAN. Cl. 38. 9–13–49.
515,226. RHODES. Cl. 16. 9–13–49.
515,228. WAXTEX AND DESIGN. Cl. 37. 9–13–49.
515,229. SEGAL GALLERY OF NUTS AND DESIGN. Cl. 46. 9–13–49.
515,230. S. GREEN. Cl. 6. 9–13–49.
515,231. "LOST YOUR WAY". Cl. 38. 9–13–49.
515,235. EL TRELLES. Cl. 17. 9–13–49.

REGISTRATIONS PUBLISHED UNDER SEC. 12(c)

The following marks registered under the act of 1905, or the act of 1881, are published under the provisions of section 12(c) of the Trademark Act of 1946. These registrations are not subject to opposition but are subject to cancellation under section 14 of the act of 1946.

CLASS 6

144,038. June 21, 1921. Fred H. Perfect, Columbus, Ohio. Pub. by The Ruby Chemical Company, Columbus, Ohio.

Ruby-fluid

The words "Fluid" and "Trade-Mark Reg." are disclaimed apart from the mark as shown.
For Soldering and Tinning Flux.

330,372. Dec. 3, 1935. The River Plate Dairy Company, Limited, Buenos Aires, Argentina. Pub. by River Plate Dairy Co., S. A., Buenos Aires, Argentina.

PEACHE

For Casein for Use in Manufactures.

330,443. Dec. 3, 1935. The River Plate Dairy Company, Limited, Buenos Aires, Argentina. Pub. by River Plate Dairy Co., S. A., Buenos Aires, Argentina.

DAIRYCO

For Casein for Use in Manufactures.

CLASS 12

333,551. Mar. 24, 1936. Globe Roofing Products Co. Inc., Whiting, Ind. Pub. by registrant.

BEACON

For Asphalt Composition Roofing and Building Papers.

CLASS 17

325,999. July 9, 1935. George Doble & Son Limited, Paisley, Scotland. Pub. by registrant.

FOUR SQUARE

For Pipe Tobacco, Cigarette Tobacco, Cigars, and Cigarettes.

CLASS 18

359,292. Aug. 9, 1938. Parke, Davis & Company, Detroit, Mich. Pub. by registrant.

DILANTIN

For Preparation Intended for the Treatment of Spasmodic and Convulsive Conditions.

CLASS 22

336,291. June 30, 1936. The United States Playing Card Company, East Norwood, Cincinnati, Ohio. Pub. by registrant.



The outline representation of the carton per se, the words "Bridge," "Made in U. S. A.," and "Cincinnati, Ohio, U. S. A." are disclaimed apart from the mark as shown.
For Playing Cards.

CLASS 27

298,817. Nov. 8, 1932. The Lux Clock Manufacturing Company, Waterbury, Conn. Pub. by registrant.

THERMO

For Combined Clocks and Temperature Indicating Devices.

CLASS 42

246,693. Sept. 11, 1928. The Cleveland Liner & Manufacturing Company, Cleveland, Ohio. Pub. by registrant.

CLIMCO

For Processed or Coated Cloth.

CLASS 46

330,829. Dec. 17, 1935. The Griffith Laboratories, Inc., d. b. a. The Griffith Laboratories, Chicago, Ill. Pub. by registrant.



For Curing Salt Composition for the Treating and Curing of Hams, Bacon, Sausage, and Other Meats.

LIST OF REGISTRANTS OF TRADEMARKS

A/S Rafa, Copenhagen K., Denmark. 622,260, pub. 12–6–55. Cl. 30.
Abbott Laboratories, North Chicago, Ill. 622,056, pub. 11–29–55. Cl. 18.
Adamar Accounting Systems, Jeannette, Pa. 514,970, canc. Cl. 37.
Aermotor Co., Chicago, Ill. 622,185, pub. 12–6–55. Cl. 23.
Ainsbrooke Co., Inc., New York, N. Y. 622,343, pub. 12–6–55. Cl. 39.
Air Preheater Corp., The, Wellsville, N. Y. 622,288, pub. 8–4–53. Cl. 34.
Airway Finishing Corp., Schiller Park, Ill., now by change of name to Airway Products Corp. 622,271, pub. 11–29–55. Cl. 32.
Airway Products Corp.: *See*—
Airway Finishing Corp.
Ajax Flexible Coupling Co. Inc., Westfield, N. Y. 622,108, pub. 12–6–55. Cl. 23.
Alco Products, Inc.: *See*—
American Locomotive Co.
Aldan Rubber Co., Philadelphia, Pa. 622,464, pub. 12–6–55. Cl. 106.
Allis-Chalmers Mfg. Co., West Allis, Wis. 622,145, pub. 11–29–55. Cl. 23.
All-Power Mfg. Co., Montebello, Calif. 622,005, pub. 3–15–55. Cl. 13.
Altman, B., & Co., New York, N. Y. 334,409, ren. 5–5–56. Cl. 39.
American Alcolac Corp., Baltimore, Md. 621,982, pub. 12–6–55. Cl. 6.
American Bedding Co., Charlotte, N. C. 622,267, pub. 5–3–55. Cl. 32.
American Character Doll Co., New York, N. Y. 622,088, pub. 11–29–55. Cl. 22.
American Club Beverages: *See*—
White, Maurice J.
American Collo Corp., New York, N. Y. 622,252, pub. 12–6–55. Cl. 29.
American Distilling Co., The, New York, N. Y. 334,469, ren. 5–5–56. Cl. 49.
American Enka Corp., Enka, N. C. 622,388, pub. 12–6–55. Cl. 43.
American Home Products Corp.: *See*—
International Vitamin Corp.
American Locomotive Co., New York, N. Y., now by change of name Alco Products, Inc. 622,200, pub. 11–29–55. Cl. 26.
American Optical Co., Southbridge, Mass. 622,228, pub. 11–29–55. Cl. 26.
American Phenolic Corp., Cicero, Ill. 622,158, pub. 12–6–55. Cl. 23.
American Quilt Cover Mfrs., Inc., New York, N. Y. 622,376, pub. 12–6–55. Cl. 42.
American Sponge & Chamois Co., Inc., New York, N. Y. 622,255, pub. 12–6–55. Cl. 29.
American Time Products, Inc., New York, N. Y. 622,232, pub. 12–6–55. Cl. 26.
American Type Founders Co., Inc.: *See*—
American Type Founders, Inc.
American Type Founders, Inc., to American Type Founders Co., Inc., Elizabeth, N. J. 622,169, pub. 12–6–55. Cl. 23.
Amsco Packaging Machinery Leasing Corp., Long Island City, N. Y. 622,135, pub. 12–6–55. Cl. 23.
Anchor Hocking Glass Corp., Lancaster, Ohio. 622,439, pub. 12–6–55. Cl. 50.
Anker-Werke A. G., Bielefeld, Germany. 622,211, pub. 12–6–55. Cl. 26.
Appleton Wood Products Co., Appleton, Wis. 622,113, pub. 12–6–55. Cl. 23.
Aquatrol Ferr-X Corp., Clifton, N. J. 622,263, pub. 11–29–55. Cl. 31.
Aquatrol Laboratories, Inc., Clifton, N. J. 622,262, pub. 11–29–55. Cl. 31.
Aristocrat Leather Products, Inc., New York, N. Y., 621,964, pub. 12–6–55. Cl. 3.
Armour and Co., Chicago, Ill. 622,054, pub. 12–6–55. Cl. 18.
Armstrong Paint & Varnish Works, d. b. a. Nickel Plate Stove Polish Co., Chicago, Ill. 515,056, canc. Cl. 4.
Arrowood, S. D., & Co., Inc., New York, N. Y. 622,331, pub. 1–18–55. Cl. 39.
Associated Metal Fabricators: *See*—
Jersey Sheet Metal Products Inc.
Association of the Junior Leagues of America, Inc., New York, N. Y. 622,459, pub. 12–6–55. Cl. 100.
Atalanta Products Corp., New York, N. Y. 621,950, pub. 12–6–55. Cl. 1.
Atalanta Trading Corp., New York, N. Y. 622,413, pub. 12–6–55. Cl. 46.
Atchason, Stanley, d. b. a. Cliff-Bay Co., Scituate, Mass. 622,277, pub. 12–6–55. Cl. 32.
Auergesellschaft Aktiengesellschaft, Berlin, Germany. 622,299, pub. 12–6–55. Cl. 34.
Austral Products Corp., New York, N. Y. 621,997, pub. 12–6–55. Cl. 12.
Automatic Motor Base Co.: *See*—
Sloyan, Jerome J.
Azpeco Chemical Co., Havana, Cuba. 622,058, pub. 12–6–55. Cl. 18.
B. G. Corp., The, Ridgefield, N. J. 331,049, ren. 12–24–55. Cl. 21.
Baitch & Castaldi, Inc., New York, N. Y. 622,373, pub. 12–6–55. Cl. 42.
Baltic Trading Co., Ltd.: *See*—
Greenebaum, M., II., Inc.
Barros, Almeida & Ca., Villa Nova De Gaya, Oporto, Portugal. 622,425, pub. 12–6–55. Cl. 47.
Barros, Almeida & Ca., Villa Nova De Gaya, Oporto, Portugal. 622,433, pub. 12–6–55. Cl. 49.
Barton, Carl J., d. b. a. Barton Products, Chicago, Ill. 515,181, canc. Cl. 6.
Barton Products: *See*—
Barton, Carl J.
Bates, C. J., & Son: *See*—
Bates, Hamilton C.
Bates, Hamilton C., d. b. a. C. J. Bates & Son, to C. J. Bates & Son, Chester, Conn. 330,469, ren. 12–3–55. Cl. 44.
Becher, Alexander, Brooklyn, N. Y. 621,953, pub. 12–6–55. Cl. 1.
Bell and Zoller Coal Co., Chicago, Ill. 621,960–1, pub. 12–6–55. Cl. 1.
Benson-Lehner Corp., West Los Angeles, Calif. 622,204, pub. 11–29–55. Cl. 26.
Berry, Marguerett R., Cleveland, Ohio. 515,142, canc. Cl. 6.
Bertram, Harvey P., Co., Inc., The, Cincinnati, Ohio, to Waxco Products, Inc., Cambridge, Mass. 622,298, pub. 12–6–55. Cl. 34.
Best, Richard, Pencil Co., Inc., Springfield, N. J. 622,308, pub. 3–4–52. Cl. 37.
Better Packages, Inc., Shelton, Conn. 622,166, pub. 12–6–55. Cl. 23.
Beyland Engineering Co.: *See*—
Beyland, Robert W.
Beyland, Robert W., d. b. a. Beyland Engineering Co., Yalesville, Conn. 622,441, pub. 12–6–55. Cl. 50.
Bigsby, Paul A., Downey, Calif. 622,307, pub. 11–29–55. Cl. 36.
Blackwell-Wielandy Co., St. Louis, Mo. 515,004, canc. Cl. 37.
Blancard & Co., Inc., New York, N. Y. 622,247–8, pub. 12–6–55. Cl. 28.
Blenette, Inc., New York, N. Y. 622,360, pub. 12–6–55. Cl. 39.
Blish Milling Co., Seymour, Ind. 515,077, canc. Cl. 46.
Bliss, E. W., Co.: *See*—
Mackintosh-Hemphill Co.
Blitz Fog Co., Division of Northern Industries, Inc., The: *See*—
Northern Industries, Inc.
Bloom, Charles, Inc., New York, N. Y. 622,366, pub. 12–6–55. Cl. 42.
Borax Consolidated, Ltd., d. b. a. Pacific Coast Borax Co. Division of Borax Consolidated, Ltd., Los Angeles, Calif. 621,965, pub. 12–6–55. Cl. 6.
Borden Co., The, New York, N. Y. 622,468. Cl. 18.
Boston Gear Works: *See*—
Murray Co. of Texas, Inc., The.
Bostwick Laboratories, Inc., Bridgeport, Conn. 621,968, pub. 12–6–55. Cl. 6.
Boswell, J. Stewart, d. b. a. The Julep Co., Chicago, Ill., to The Julep Co., Sycamore, Ill. 324,770, ren. 5–28–55. Cl. 45.
Botany Mills, Inc., Passaic, N. J. 622,372, pub. 12–6–55. Cl. 42.
Botany Mills, Inc., Passaic, N. J. 622,375, pub. 12–6–55. Cl. 42.
Bowers Rubber Works, San Francisco, Calif., to H. K. Porter Co., Inc., Philadelphia, Pa. 109,637, ren. 4–11–56. Cl. 35.
Bowker, R. R., Co., New York, N. Y. 515,225, canc. Cl. 38.
Brainerd Bait Co., St. Paul, Minn. 515,059, canc. Cl. 22.
Brandt Automatic Cashier Co.: *See*—
Brandt Cashier Co.
Brandt Cashier Co., Chicago, Ill., to Brandt Automatic Cashier Co., Watertown, Wis. 110,014, ren. 5–2–56. Cl. 26.
Brener Electric Mfg. Co., Chicago, Ill. 515,191, canc. Cl. 4.
Brewer, David R., Pasadena, Calif. 515,231, canc. Cl. 38.
Brockway Glass Co., Inc., Brockway, Pa. 622,287, pub. 12–6–55. Cl. 33.
Brooklyn Paint & Varnish Co., Inc., Brooklyn, N. Y. 622,022, pub. 12–6–55. Cl. 16.
Brown, John Clark, Inc., Belleville, N. J. 622,269, pub. 11–29–55. Cl. 32.
Brunswick-Balke-Collender Co., Chicago, Ill. 515,087, canc. Cl. 22.
Buckham, Waller M., Glendale, Calif. 515,165, canc. Cl. 45.
Bureau de Representations J. Trachet, Société de Personnes à Responsabilité Limitée, Brussels, Belgium. 621,994, pub. 11–22–55. Cl. 12.
Burrell Cutlery Co., Inc., Ellicottville, N. Y. 622,092, pub. 3–15–55. Cl. 23.
Busse, Ewald A., d. b. a. Gridd Stone Co., to Gridd Stone Co., Canton, Ohio. 514,986, canc. Cl. 4.
Byco Industries, Minneapolis, Minn. 622,098, pub. 11–29–55. Cl. 23.
Caglecc Sportswear, Cape Girardeau, Mo. 622,352, pub. 12–6–55. Cl. 39.
Calgon, Inc., Pittsburgh, Pa. 433,460, canc. Cl. 4.
California Forms, Inc., Culver City, Calif. 622,338, pub. 12–6–55. Cl. 39.
Cambridge Glass Co., The, Cambridge, Ohio. 622,285, pub. 12–6–55. Cl. 33.
Campbell, Harry T., Sons' Co., Towson, Md. 355,614, canc. Cl. 1.
Carburetor Co., The, Los Angeles, Calif. 622,159, pub. 11–29–55. Cl. 23.

Century Metalcraft Corp., Los Angeles, Calif. 622,246, pub. 12–6–55. Cl. 28.
Chandler Chemical Co.: *See*—
Chandler, Joe.
Chandler, Joe, d. b. a. Chandler Chemical Co., Draper, N. C. 622,061, pub. 12–6–55. Cl. 18.
Chapman & Smith Co., Melrose Park, Ill. 622,401, pub. 12–6–55. Cl. 46.
Charmfit of Hollywood, Inc., Los Angeles, Calif. 622,330, pub. 3–22–55. Cl. 39.
Charteris, Leslie, Lantana, Fla. 331,789, ren. 1–21–56. Cl. 38.
Chase Chemical Co., Newark, N. J. 622,040, pub. 8–30–55. Cl. 18.
Chase Chemical Co., Newark, N. J. 622,052, pub. 9–27–55. Cl. 18.
Chatham Mfg. Co., Elkin, N. C. 622,383–4, pub. 12–6–55. Cl. 42.
Chatillon, John, & Sons., New York, N. Y. 622,223, pub. 11–29–55. Cl. 26.
Cheslak, Leonard W., Detroit, Mich. 622,086, pub. 11–29–55. Cl. 22.
Chippewa Springs Corp., Minneapolis, Minn. 515,035, canc. Cl. 45.
Chisholm, Arron R., New York, N. Y. 621,963, pub. 12–6–55. Cl. 3.
Cinema 16, Inc., New York, N. Y. 622,465, pub. 12–6–55. Cl. 107.
City Glass Co., Inc., Hartford, Conn. 622,114, pub. 11–29–55. Cl. 23.
Clarise Blouse Co., Inc., New York, N. Y. 622,350, pub. 12–6–55. Cl. 39.
Clean Tim, Ltd., Toronto, Ontario, Canada. 515,068, canc. Cl. 4.
Cleveland Liner & Mfg. Co., The, Cleveland, Ohio. 246,693, 12(c) pub. 2–28–56. Cl. 42.
Clevite Corp., Cleveland, Ohio. 622,150, pub. 12–6–55. Cl. 23.
Cliff-Bay Co.: *See*—
Atchason, Stanley.
Cluett, Peabody & Co., Inc., Troy, N. Y. 622,345, pub. 12–6–55. Cl. 39.
Cluett, Peabody & Co., Inc., Troy, N. Y. 622,347–8, pub. 12–6–55. Cl. 39.
Codman, F. L. & J. C., Co., Rockland, Mass. 515,066, canc. Cl. 4.
Coler, Myron A., d. b. a. The Markite Co., New York, N. Y. 622,066, pub. 11–49–54. Cl. 21.
Collaro Ltd., Barking, England. 622,074, pub. 12–6–55. Cl. 21.
Colonial Beef Co., d. b. a. Colonial Beef Co., Philadelphia, Pa. 622,393, pub. 12–6–55. Cl. 46.
Columbia Coat Co., Boston, Mass. 622,368–9, pub. 12–6–55. Cl. 42.
Columbia River Packers Association, to Columbia River Packers Association, Inc., Astoria, Oreg. 108,987, ren. 3–14–56. Cl. 46.
Columbia River Packers Association, to Columbia River Packers Association, Inc., Astoria, Oreg. 108,989, ren. 2–14–56. Cl. 46.
Columbia River Packers Association, Inc.: *See*—
Columbia River Packers Association.
Columbus Dental Mfg. Co., The, Columbus, Ohio. 515,116, canc. Cl. 44.
Commercial Controls Corp., Rochester, N. Y. 622,095–6, pub. 12–6–55. Cl. 23.
Compagnie Francaise des Matieres Colorantes, Paris, France. 621,976, pub. 12–6–55. Cl. 6.
Consolidated Cosmetics, Chicago, Ill. 515,178, canc. Cl. 4.
Continental Aviation and Engineering Corp., Detroit, Mich. 622,171, pub. 12–6–55. Cl. 23.
Continental Distilling Corp., Philadelphia, Pa. 622,428, pub. 12–28–54. Cl. 49.
Continental Gummiwerke Aktiengesellschaft, Hannover, Germany. 622,300, pub. 11–29–55. Cl. 35.
Coplan, E., Sons, Baltimore, Md. 622,239, pub. 12–6–55. Cl. 28.
Cordelia of Hollywood Brassieres, Inc., Los Angeles, Calif. 622,340, pub. 12–6–55. Cl. 39.
Corry-Jamestown Mfg. Corp., Corry, Pa. 515,053, canc. Cl. 12.
Cottam, H. T., & Co.: *See*—
Patton, F., Jr.
Craft Mills, Inc., Boston, Mass. 622,351, pub. 12–6–55. Cl. 39.
Craig Machine, Inc., Danvers, Mass. 622,276, pub. 12–6–55. Cl. 32.
Cromwell Mfg. Corp., Brooklyn, N. Y. 515,207, canc. Cl. 28.
Crosby Steam Gage & Valve Co., Wrentham, Mass. 622,224, pub. 12–6–55. Cl. 26.
Crown Cork & Seal Co., Inc., Baltimore, Md. 622,094, pub. 12–6–55. Cl. 23.
Crown Stove Works, Chicago, Ill. 622,294, pub. 11–29–55. Cl. 34.
Cutter Laboratories, Berkeley, Calif. 515,196, canc. Cl. 6.
Dalare Associates, Philadelphia, Pa. 330,411, ren. 12–3–55. Cl. 18.
Danfoss ved Mads Clausen, Nordborg, Als, Denmark. 622,107, pub. 11–29–55. Cl. 23.
Davis Fishing Tackle Co.: *See*—
Davis, Lester M.
Davis, Lester M., d. b. a. Davis Fishing Tackle Co., Tacoma, Wash. 622,087, pub. 11–29–55. Cl. 22.
Dayton Rubber Co., The, Dayton, Ohio. 622,274, pub. 11–29–55. Cl. 32.
Dearborn Marine Engines, Inc., Detroit, Mich. 622,115, pub. 11–29–55. Cl. 23.
Dec Paper Co.: *See*—
Rausch, Roswell H.
Dempster Mill Mfg. Co., Beatrice, Nebr. 622,124, pub. 11–29–55. Cl. 23.
Dettra Flag Co., Inc., Oaks, Pa. 622,365, pub. 12–6–55. Cl. 42.
De Vilbiss Microbore Co., Royal Oak, Mich. 622,190, pub. 12–13–55. Cl. 23.
Dewenter, Henry A., South Pasadena, Calif. 622,332, pub. 4–5–55. Cl. 39.
Diagraph-Bradley Industries Inc., Herrin, Ill. 622,253, pub. 12–6–55. Cl. 29.
Diamond Expansion Bolt Co., Inc., Garwood, N. J. 622,007–8, pub. 12–6–55. Cl. 13.
Discovery Products Co.: *See*—
Urkov, Joseph C.
Ditta Piersanti-Industrie Conserve Alimentari: *See*—
Piersanti, Otello.
Diversey Corp., The, Chicago, Ill. 622,020, pub. 12–6–55. Cl. 15.
Dix, Henry A., & Sons Corp., New York, N. Y. 330,874, ren. 12–17–55. Cl. 42.
Doble, George, & Son Ltd., Paisley, Scotland. 325,999, 12(c) pub. 2–28–56. Cl. 17.
Doble, George, & Son Ltd., Paisley, Scotland. 622,037, pub. 12–6–55. Cl. 17.
Dormeyer Corp., Chicago, Ill. 622,289, pub. 11–29–55. Cl. 34.
Dorr-Oliver Inc., Stamford, Conn. 622,122, pub. 11–29–55. Cl. 23.
Dougherty's, J. A., Sons, Inc., Distillers, Philadelphia, Pa. 622,431–2, pub. 12–6–55. Cl. 49.
Dover Corp., Memphis, Tenn. 622,162, pub. 12–6–55. Cl. 23.
Dowdell, J. R., & Co., Dallas, Tex. 622,264, pub. 11–29–55. Cl. 31.
Down Bent, Inc., Chicago, Ill. 622,319, pub. 12–6–55. Cl. 38.
Dreier, Alex, Chicago, Ill. 622,466, pub. 12–6–55. Cl. 107.
Drexel Furniture Co., Drexel, N. C. 622,282, pub. 12–6–55. Cl. 32.
Du-Jac Mfg. Corp., Houston, Tex. 622,180, pub. 12–6–55. Cl. 23.
Duncan, Donald F., Inc., Chicago, Ill. 622,084, pub. 12–6–55. Cl. 22.
Du Pont, E. I., de Nemours and Co., Wilmington, Del. 621,948, pub. 12–6–55. Cl. 1.
Du Pont, E. I., de Nemours and Co., Wilmington, Del. 621,990, pub. 12–6–55. Cl. 9.
Durkee Famous Foods: *See*—
Glidden Co., The.
Early & Daniel Co., The, Cincinnati, Ohio. 108,126, ren. 1–18–56. Cl. 46.
East Whittier Citrus Assn., Whittier, Calif. 515,045, canc. Cl. 46.
Eastern Liquor Co., Inc., New Haven, Conn. 622,429, pub. 12–6–55. Cl. 49.
Eastern Motel Assn., Bangor, Maine. 622,458, pub. 12–6–55. Cl. 100.
Eastern Oregon Canning Co., Inc., Weston, Oreg. 514,981, canc. Cl. 46.
Edroy Products Co.: *See*—
Herbert, Edward J.
Ef-En Laboratories, Inc., New York, N. Y. 622,063, pub. 12–6–55. Cl. 18.
Eggo Food Products, Inc., San Jose, Calif. 622,394, pub. 12–6–55. Cl. 46.
Ehrenberg, Bertram, New York, N. Y. 188,181, canc. Cl. 42.
Ekco Products Co., Chicago, Ill. 622,014, pub. 12–6–55. Cl. 13.
Ekco Products Co., Chicago, Ill. 622,156, pub. 11–29–55. Cl. 23.
Elaboraciones Pesqueras del Cantabrico S. A., Bilbao, Spain. 622,392, pub. 12–6–55. Cl. 46.
El-Bee Laboratories, Inc., Springfield, Ill. 515,218, canc. Cl. 50.
Electric Game Co., The, d. b. a. The Holyoke Game Co., Holyoke, Mass. 515,156, canc. Cl. 22.
Electric Tool Corp., Racine, Wis. 622,144, pub. 11–29–55. Cl. 23.
Electromec, Inc., Los Angeles, Calif. 622,202, pub. 12–6–55. Cl. 26.
Electronic Engineering Co. of California, Los Angeles, Calif. 622,217, pub. 11–29–55. Cl. 26.
Electronic Engineering Co. of California, Los Angeles, Calif. 622,219, pub. 11–29–55. Cl. 26.
Elgin-Neomatic, Inc., Los Angeles, Calif. 622,077, pub. 12–6–55. Cl. 21.
Elkay Mfg. Co., Chicago, Ill. 622,016, pub. 12–6–55. Cl. 13.
Ellicott Machine Corp., Baltimore, Md. 622,173, pub. 12–6–55. Cl. 23.
Ellmore Silver Co., Inc., The, Meriden, Conn. 514,987, canc. Cl. 28.
Emblem Oil Co.: *See*—
Sessions, Henry H.
Empire Curtain Mfg. Co.: *See*—
Perlmutter, Samuel.
Englander Co., Inc., The, Chicago, Ill. 622,270, pub. 11–29–55. Cl. 32.
Erie Tool Works, The, Erie, Pa. 622,149, pub. 12–6–55. Cl. 23.
Esso Standard Oil Co., Wilmington, Del., and New York, N. Y. 515,125, canc. Cl. 15.
Esso Standard Oil Co., New York, N. Y. 621,977, pub. 12–6–55. Cl. 6.
Evelyn Hat Co.: *See*—
Glasberg, Hyman.
Ex-Cell-O Corp., Detroit, Mich. 622,471. Cl. 23.
Exhibit Supply Co., Chicago, Ill. 515,129, canc. Cl. 22.
Face-Down Products Co., Hammond, La. 622,272, pub. 11–29–55. Cl. 32.
Failey, Harris D.: *See*—
White, Maurice J.

Fairchild Camera and Instrument Corp., Syosset, N. Y. 622,225, pub. 11–29–55. Cl. 26.
Fairway Seed Co., Jersey City, N. J. 621,955–7, pub. 12–6–55. Cl. 1.
Federal Foundry Supply Co., The, Cleveland, Ohio. 622,116, pub. 11–29–55. Cl. 23.
Feinberg Textile Co., Philadelphia, Pa. 622,363, pub. 10–4–55. Cl. 42.
Felters Co., The, Boston, Mass. 622,443, pub. 12–6–55. Cl. 50.
Fertosan Ltd., Wolverhampton, England. 621,978, pub. 12–6–55. Cl. 6.
Fibre-Metal Products Co., The, Chester, Pa. 622,209, pub. 12–6–55. Cl. 26.
Fidelity Chemical Products Corp., Newark, N. J. 622,027–8, pub. 12–6–55. Cl. 16.
Fields-Mable Corp., Chicago, Ill. 622,089, pub. 11–29–55. Cl. 22.
Fingerprint, Inc., Milwaukee, Wis. 622,453, pub. 12–6–55. Cl. 100.
Fisher Flouring Mills Co., Seattle, Wash. 622,405, pub. 12–6–55. Cl. 46.
Fleming-Hall Tobacco Co., Inc., to United States Tobacco Co., New York, N. Y. 622,032, pub. 9–23–52. Cl. 17.
Flex-O-Glass, Inc.: *See*—
Helm, Roy S.
Florists' Telegraph Delivery Association, Detroit, Mich. 622,454, pub. 12–6–55. Cl. 100.
Fluorescent Fixtures of California, San Francisco, Calif. 622,470. Cl. 21.
Frank, Max, New York, N. Y. 622,102, pub. 11–29–55. Cl. 23.
Freezer, J., & Son, Inc., New York, N. Y. 334,536, ren. 5–5–56. Cl. 39.
Freudenberg, Carl, Kommanditgesellschaft auf Aktien, Weinheim, an der Bergstrasse, Germany. 622,364, pub. 12–6–55. Cl. 42.
Fruit of the Loom, Inc., Providence, R. I. 622,371, pub. 12–6–55. Cl. 42.
Fuller, D. B., & Co., Inc., New York, N. Y. 622,386–7, pub. 12–6–55. Cl. 42.
Fullerton Mutual Orange Association, Fullerton, Calif. 191,364–5, canc. Cl. 46.
Fullerton Mutual Orange Association, Fullerton, Calif. 209,353, canc. Cl. 46.
Gallun, A. F., & Sons Corp., Milwaukee, Wis. 621,959, pub. 12–6–55. Cl. 1.
Gamay & Co., Inc., New York, N. Y. 622,339, pub. 12–6–55. Cl. 39.
Garden Spot Shoes, Inc., Lititz, Pa. 622,342, pub. 12–6–55. Cl. 39.
Gardena Valley Milling Co., Gardena, Calif. 622,411, pub. 12–6–55. Cl. 46.
Gardner Board and Carton Co., The, Middletown, Ohio. 622,120, pub. 12–6–55. Cl. 23.
Gardner's Drive-In Sandwich Stand, Fort Wayne, Ind. 622,406, pub. 12–6–55. Cl. 46.
Gattone Research Laboratory: *See*—
Gattone, Vincent H.
Gattone, Vincent H., d. b. a. Gattone Research Laboratory, Morton, Pa. 622,048, pub. 12–6–55. Cl. 18.
Gechtman, Abraham S., Newark, N. J. 515,189, canc. Cl. 4.
General Aniline & Film Corp., New York, N. Y. 622,205, pub. 12–6–55. Cl. 26.
General Features Corp., New York, N. Y. 622,323, pub. 12–6–55. Cl. 38.
General Petroleum Corp., Los Angeles, Calif. 622,286, pub. 12–20–55. Cl. 33.
Geriatric Pharmaceutical Corp., Bellerose, N. Y. 622,051, pub. 12–6–55. Cl. 18.
Gesellschaft der Ludw. Von Roll 'Schen Eisenwerke Ag., Gerlafingen, Switzerland. 622,011, pub. 12–6–55. Cl. 13.
Giannini, G. M., & Co. Inc., Pasadena, Calif. 622,075, pub. 12–6–55. Cl. 21.
Gibraltar Corrugated Paper Co., Inc., North Bergen, N. J. 622,313, pub. 12–6–55. Cl. 37.
Gibson, Howard C.: *See*—
Viking Boat Corp.
Gilmore Produce Co.: *See*—
Gilmore, R. Paul.
Gilmore, R. Paul, d. b. a. Gilmore Produce Co., Brownsville, Tex. 622,422, pub. 12–6–55. Cl. 46.
Glasberg, Hyman, d. b. a. Evelyn Hat Co., Boston, Mass. 622,333, pub. 3–8–55. Cl. 39.
Glidden Co., The, d. b. a. Durkee Famous Foods, Cleveland, Ohio. 622,414–16, pub. 12–6–55. Cl. 46.
Globe Roofing Products Co. Inc., Whiting, Ind. 333,551, 12(c) pub. 2–28–56. Cl. 12.
Glovecraft, Inc., Johnstown, N. Y. 621,962, pub. 12–6–55. Cl. 1.
Goebel, W., Porzellanfabrik Oeslau und Wilhelmsfeld, Oeslau bei Coburg, Bavaria, Germany. 622,436–7, pub. 12–6–55. Cl. 50.
Gold Bell Gift Stamps Co-Operative, Inc., Detroit, Mich. 622,320, pub. 12–6–55. Cl. 38.
Goodman, William Z., d. b. a. William Zachary Co., Newton Centre, Mass. 622,446, pub. 2–9–54. Cl. 51.
Gossen, P., & Co., G. m. b. H., Erlangen, Bavaria, Germany. 622,230, pub. 12–6–55. Cl. 26.
Gottscho, Adolph, Inc., Hillside, N. J. 622,131, pub. 11–29–55. Cl. 23.
Grand Union Co., The, East Paterson, N. J. 622,390, pub. 12–6–55. Cl. 45.
Grant, W. T., Co., New York, N. Y. 622,341, pub. 12–6–55. Cl. 39.
Green, Sam, New York, N. Y. 515,230, canc. Cl. 6.
Greenebaum, M. H., Inc., to Baltic Trading Co., Ltd., New York, N. Y. 622,397, pub. 12–6–55. Cl. 46.
Gridd Stone Co.: *See*—
Busse, Ewald A.
Griffin Mfg. Co., Inc., Brooklyn, N. Y. 515,124, canc. Cl. 32.
Griffith Laboratories, Inc., The, d. b. a. The Griffith Laboratories, Chicago, Ill. 330,829, 12(c) pub. 2–28–56. Cl. 46.
Griffith Laboratories, The: *See*—
Griffith Laboratories, Inc., The.
Griswold Mfg. Co., The, Erie, Pa. 622,015, pub. 12–6–55. Cl. 13.
Gross, John, and Co., Baltimore, Md. 622,430, pub. 12–6–55. Cl. 49.
Guild of Prescription Opticians of America, Inc., Philadelphia, Pa. 622,201, pub. 12–6–55. Cl. 26.
Gulf Oil Corp., Pittsburgh, Pa. 622,218, pub. 12–6–55. Cl. 26.
H-B Instrument Co., Inc., Philadelphia, Pa. 622,226, pub. 11–29–55. Cl. 26.
Haertel, Walter, Co., South Minneapolis, Minn. 622,125, pub. 11–29–55. Cl. 23.
Hagaman, Charles B., d. b. a. Medi-Phragm Products, Arvada, Colo. 515,194, canc. Cl. 6.
Hall, C. P., Co., The, Akron, Ohio. 514,977–8, canc. Cl. 4.
Halo-Star Corp., Oak Park, Ill. 622,391, pub. 3–18–52. Cl. 46.
Harbinson, James K., & Co., Inc., Buffalo, N. Y. 622,467. Cl. 16.
Harley Co., The: *See*—
Harley, Earle L.
Harley, Earle L., d. b. a. The Harley Co., Brooklyn, N. Y. 622,177, pub. 12–6–55. Cl. 23.
Harper Packing Co., Inc., Chester, Pa. 622,302, pub. 12–6–55. Cl. 35.
Harrington Paint Co., Inc., The, East Cleveland, Ohio. 332,404, ren. 2–11–56. Cl. 16.
Harris Milling Co., Owosso, Mich. 622,409, pub. 12–6–55. Cl. 46.
Hearst Corp., The, New York, N. Y. 622,326, pub. 12–6–55. Cl. 38.
HedenKamp, Walter D., d. b. a. Junior-Pro Products Co., St. Louis, Mo. 622,009, pub. 12–6–55. Cl. 13.
Helm, E. "Tex," Camera Works, Carlsbad, N. Mex. 515,216, canc. Cl. 26.
Helm Filtration Co.: *See*—
Helm, Roy S.
Helm, Roy S., d. b. a. Helm Filtration Co., Kennett Square, Pa., to Flex-O-Glass, Inc., Chicago, Ill. 621,996, pub. 6–7–55. Cl. 12.
Herbert, Edward J., d. b. a. Edroy Products Co., New York, N. Y. 622,221, pub. 12–6–55. Cl. 26.
Hersey Mfg. Co., Boston, Mass. 515,220, canc. Cl. 26.
Hester Battery Mfg. Co., Inc., Nashville, Tenn. 622,078, pub. 12–6–55. Cl. 21.
Hewitt, Charles, & Sons Co.: *See*—
Winston and Newell Co.
High Standard Mfg. Corp., The, Hamden, Conn. 621,989, pub. 11–29–55. Cl. 9.
Hill Brothers Chemical Co., Los Angeles, Calif. 621,983, pub. 12–6–55. Cl. 6.
Hill's Laboratories: *See*—
Mills, Lyle W.
Hi-Q Products Co., Chicago, Ill. 514,975, canc. Cl. 46.
His Lordship Products Co.: *See*—
Niash Refining Co., Inc.
Hisamitsu Brothers & Co., Inc., Tosu-shi, Saga-Ken, Japan. 622,062, pub. 12–6–55. Cl. 18.
Hoberg Paper Mills, Inc., Green Bay, Wis. 515,148, canc. Cl. 37.
Holyoke Game Co., The: *See*—
Electric Game Co., The.
Hoskinson Free Heater Inc., New York, N. Y. 622,293, pub. 11–29–55. Cl. 34.
Howell-Rogin, New York, N. Y. 622,196, pub. 12–6–55. Cl. 26.
Howes, S., Co., Inc., Silver Creek, N. Y. 622,139, pub. 12–6–55. Cl. 23.
Hume, H. D., Co., Mendota, Ill. 622,093, pub. 11–29–55. Cl. 23.
Husky Food Products, Inc., Wyncote, Pa. 622,417, pub. 12–6–55. Cl. 46.
Hyde Mfg. Co., Southbridge, Mass. 622,091, pub. 12–6–55. Cl. 23.
Hydro-Blast Corp., The, Chicago, Ill. 622,133, pub. 12–6–55. Cl. 23.
Hydro-Tex Corp., Chicago, Ill. 622,334, pub. 12–6–55. Cl. 39.
Industrial Service Co., Milwaukee, Wis. 622,258, pub. 12–6–55. Cl. 29.
Industrie A.-G. Allegro, Emmenbrucke, Switzerland. 622,187, pub. 12–6–55. Cl. 23.
Inks, Charles E., Plymouth, Ind. 622,280, pub. 12–6–55. Cl. 32.
Institute of Radio Engineers, Inc., The, New York, N. Y. 622,321, pub. 12–6–55. Cl. 38.
Insto-Gas Corp., Detroit, Mich. 622,296, pub. 11–29–55. Cl. 34.
International Fraternity of Delta Sigma Pi, Inc., Chicago, Ill. 622,455, pub. 12–6–55. Cl. 100.
International Minerals and Chemical Corp., Chicago, Ill. 515,083, canc. Cl. 6.
International Rectifier Corp., El Segundo, Calif. 622,070, pub. 12–6–55. Cl. 21.
International Silver Co., The, Meriden, Conn. 622,163, pub. 12–6–55. Cl. 23.
International Vitamin Corp., to American Home Products Corp., New York, N. Y. 331,448, ren. 1–7–56. Cl. 46.
Irving, H. A., d. b. a. H. A. Irving Co., San Francisco, Calif. 622,418, pub. 12–6–55. Cl. 46.
Irving, H. A., Co.: *See*—
Irving, H. A.
Irwill Knitwear Corp., New York, N. Y. 622,353, pub. 12–6–55. Cl. 39.

Isaacs, I. C., & Co., Inc., Baltimore, Md. 622,349, pub. 12–6–55. Cl. 39.
Isotope Products Ltd., Oakville, Ontario, Canada. 622,194, pub. 12–6–55. Cl. 26.
James Mfg. Co., Fort Atkinson, Wis. 622,438, pub. 12–6–55. Cl. 50.
Jersey Sheet Metal Products Inc., d. b. a. Associated Metal Fabricators, Clifton, N. J. 622,463, pub. 12–6–55. Cl. 106.
Jet-Heet, Inc., Englewood, N. J. 515,219, canc. Cl. 34.
Jingle Joy Toys, Inc., Orlando, Fla. 515,126, canc. Cl. 22.
Joanna Western Mills Co., Chicago, Ill. 515,040–1, canc. Cl. 32.
Johnson Steel & Wire Co., Inc., Worcester, Mass. 333,542, ren. 3–24–56. Cl. 36.
Joyce-Cridland Co., The, Dayton, Ohio. 622,181, pub. 12–6–55. Cl. 23.
Julep Co., The: *See*—
Boswell, J. Stewart.
Junior-Pro Products Co.: *See*—
Hedenkamp, Walter D.
K & M Laboratories: *See*—
Swerdlow, Max H.
K-T Games, Inc., Sayville, N. Y. 622,090, pub. 12–6–55. Cl. 22.
Kalen Trading Corp., New York, N. Y. 622,473. Cl. 46.
Karellus, Albert, & Sons, Monterey Park, Calif. 622,123, pub. 11–29–55. Cl. 23.
Keller Corp., Brooklyn, N. Y. 622,083, pub. 12–6–55. Cl. 22.
Kemp, Edward F., Somerville, Mass. 262,531–3, canc. Cl. 46.
Keystone Stamping Corp., Irvington, N. J. 622,250, pub. 11–29–55. Cl. 29.
Keystone Steel & Wire Co., to Keystone Steel & Wire Co., Peoria, Ill. 622,004, pub. 12–6–55. Cl. 13.
Kiekhaefer Corp., Cedarburg, Wis. 622,109, pub. 11–29–55. Cl. 23.
Kiekhaefer Corp., Cedarburg, Wis. 622,112, pub. 11–29–55. Cl. 23.
Kiekhaefer Corp., Cedarburg, Wis. 622,126, pub. 11–29–55. Cl. 23.
Kiekhaefer Corp., Cedarburg, Wis. 622,147, pub. 12–6–55. Cl. 23.
Kiger, C. A., Co. Jewelry Corp., Kansas City, Mo. 622,236, pub. 12–6–55. Cl. 28.
Kiger, C. A., Co., Jewelry Corp., Kansas City, Mo. 622,237, pub. 11–29–55. Cl. 28.
Kinzler, Karl, New York, N. Y. 621,988, pub. 12–6–55. Cl. 7.
Kirby and Little Packing Co., Salinas, Calif. 622,407, pub. 12–6–55. Cl. 46.
Kleinwanzlebener Saatzucht vorm. Rabbethge & Giesecke Aktiengesellschaft, Einbeck Hannover, Germany. 621,952, pub. 12–6–55. Cl. 1.
Knapp-Monarch Co., St. Louis, Mo., and Webster City, Iowa. 268,535, canc. Cl. 21.
Knott's Berry Farm, Buena Park, Calif. 622,410, pub. 12–6–55. Cl. 46.
Knox Woolen Co., Camden, Maine. 622,434, pub. 12–6–55. Cl. 50.
Komfo Products Corp., Allentown, Pa. 371,022, canc. Cl. 32.
Kommel, A., & Sons, New York, N. Y. 622,329, pub. 11–30–54. Cl. 39.
Kono Mfg. Co., The, Woodside, N. Y. 622,199, pub. 12–6–55. Cl. 26.
Kool Breeze Awning Co., Salt Lake City, Utah. 621,995, pub. 1–4–55. Cl. 12.
Kress, S. H., and Co., New York, N. Y. 622,311, pub. 12–6–55. Cl. 37.
Krispy Kreme Doughnut Corp. Winston-Salem, N. C. 622,399, pub. 3–8–55. Cl. 46.
Kroehler Mfg. Co., Naperville, Ill. 622,283, pub. 12–6–55. Cl. 32.
Kwik-Kover Mfg. Co., Inc., Chicago, Ill. 622,445, pub. 12–6–55. Cl. 50.
Kwikmrk, Inc., El Monte, Calif. 622,170, pub. 12–6–55. Cl. 23.
Laher Spring and Tire Corp., Oakland, Calif. 622,097, pub. 11–29–55. Cl. 23.
Laing, Douglas, d. b. a. Scen-O-Tour Publishing Co., Miami, Fla. 622,324, pub. 12–6–55. Cl. 38.
Lakeview News, The: *See*—
Udell, Alonzo E.
Lamkin Leather Co., Chicago, Ill. 515,138, canc. Cl. 22.
Layne & Bowler Pump Co., Montebello, Calif. 622,157, pub. 12–6–55. Cl. 23.
Lees-Bradner Co., The, Cleveland, Ohio. 622,167, pub. 12–6–55. Cl. 23.
Leonce, Charles, New York, N. Y. 622,327, pub. 12–6–55. Cl. 38.
Levy, George A., East St. Louis, Mo. 622,322, pub. 12–6–55. Cl. 38.
Lewis, Lorena, to Parx Products Corp., New York, N. Y. 515,186, canc. Cl. 44.
Liebel-Flarsheim Co., The, Cincinnati, Ohio. 622,389, pub. 12–6–55. Cl. 44.
Lindsay District Orange Co., Lindsay, Calif. 220,463, canc. Cl. 46.
Lindsay District Orange Co., Lindsay, Calif. 220,920, canc. Cl. 46.
Lindsay District Orange Co., Lindsay, Calif. 226,347, canc. Cl. 46.
Linen Thread Co., Inc., The, New York, N. Y. 622,377, pub. 12–6–55. Cl. 42.
Link-Belt Co., Chicago, Ill. 622,160, pub. 12–6–55. Cl. 23.
Linseed Oil Products Corp., Alhambra, Calif. 622,021, pub. 12–6–55. Cl. 16.
Lippman, Bernard S., New York, N. Y. 622,233, pub. 12–6–55. Cl. 27.
Londonville Milling Co., The, Loudonville, Ohio, to Standard Milling Co., Chicago, Ill. 515,018–19, canc. Cl. 46.
Lufkin Rule Co., The, Saginaw, Mich. 515,213, canc. Cl. 26.
Lufkin Rule Co., The, Saginaw, Mich. 622,197, pub. 11–29–55. Cl. 26.
Lummus Cotton Gin Co., Columbus, Ga. 622,182, pub. 12–6–55. Cl. 23.
Lux Clock Mfg. Co., The, Waterbury, Conn. 298,817, 12(c) pub. 2–28–56. Cl. 27.
Lux Clock Mfg. Co., Inc., The, Waterbury, Conn. 622,234, pub. 11–29–55. Cl. 27.
Luxor Products Co., The, Akron, Ohio. 622,442, pub. 12–6–55. Cl. 50.
M-K Enterprises Inc., Chicago, Ill. 622,085, pub. 11–29–55. Cl. 22.
Mackintosh-Hemphill Co., Pittsburgh, Pa., to E. W. Bliss Co., Canton, Ohio. 622,148, pub. 12–6–55. Cl. 23.
Macomber, Leroy W., Saugus, Mass. 622,099, pub. 11–29–55. Cl. 23.
Magna-Vue Co., The, New York, N. Y. 515,205, canc. Cl. 26.
Maid of California Milk Co., Vallejo, Calif. 515,024, canc. Cl. 46.
Maiden Form Brassiere Co., Inc., New York, N. Y. 332,295, ren. 2–11–56. Cl. 39.
Maison Joubert Inc., to The Nestle-LeMur Co., New York, N. Y. 335,026, ren. 5–19–56. Cl. 51.
Malcolm Kenneth Co., Boston, Mass. 622,328, pub. 10–12–54. Cl. 39.
Manley, Inc., Kansas City, Mo. 622,080–1, pub. 12–6–55. Cl. 21.
Manufacturers Chemical Corp., New York, N. Y. 622,017, pub. 12–6–55. Cl. 14.
Marathon Corp., Rothschild, Wis. 515,228, canc. Cl. 37.
Marblette Corp., The, Long Island City, N. Y. 330,377, ren. 12–3–55. Cl. 1.
Markite Co., The.: *See*—
Coler, Myron A.
Marley Co., The, Kansas City, Mo. 622,265, pub. 12–6–55. Cl. 31.
Marquette Glove Corp., Chicago, Ill. 622,353, pub. 12–6–55. Cl. 39.
Masland, C. H., & Sons, Carlisle, Pa. 622,370, pub. 12–6–55. Cl. 42.
Massengill, S. E., Co., The, Bristol, Tenn. 622,043, pub. 12–6–55. Cl. 18.
May Department Stores Co., The, New York, N. Y. 622,380, pub. 12–6–55. Cl. 42.
Maybach-Motorenbau G. m. b. H., Friedrichshafen (Lake Constance), Germany. 622,127, pub. 12–6–55. Cl. 23.
McCampbell & Co., Inc., New York, N. Y. 622,381–2, pub. 12–6–55. Cl. 42.
McLeran, John B., d. b. a. McLeran's Industries, Duluth, Minn. 622,018, pub. 2–9–54. Cl. 15.
McLeran's Industries: *See*—
McLeran, John B.
Mechanical Products Corp., Chicago, Ill. 622,220, pub. 11–29–55. Cl. 26.
Medi-Phram Products: *See*—
Hagaman, Charles B.
Meier's Wine Cellars, Inc., Silverton, Ohio. 622,424, pub 12–6–55. Cl. 47.
Mengel Co., The, Louisville, Ky. 515,030, canc. Cl. 32.
Merck & Co., Inc., Rahway, N. J. 622,044, pub. 12–6–55. Cl. 18.
Merit Mfg. Co., Central Falls, R. I. 622,122, pub. 11–29–55. Cl. 26.
Metallwarenfabrik Meyer & Niss G. m. b. H., Hamburg-Bergedorf, Germany. 622,295, pub. 11–29–55. Cl. 34.
Meyer, N. S., Inc., New York, N. Y. 622,153–4, pub. 12–6–55. Cl. 23.
Meylan, V., & Fils, Renens, Vaud, Switzerland. 622,164, pub. 12–6–55. Cl. 23.
Mezger Pharmacal Co., Inc., Roslyn Heights, N. Y. 622,039, pub. 3–27–51. Cl. 18.
Micafil Aktiengesellschaft Werke fur Elektro-Isolation und Wickleroi-Einrichtungen, Zurich Switzerland. 622,101, pub. 12–6–55. Cl. 23.
Michael, David, & Co., Inc., Philadelphia, Pa. 622,421, pub. 12–6–55. Cl. 46.
Microreader Mfg. & Sales Corp., Milwaukee, Wis. 622,214, pub. 11–29–55. Cl. 26.
Midwest Industries, Inc., Cleveland, Ohio. 515,123, canc. Cl. 22.
Mills, Lyle W., d. b. a. Hill's Laboratories, Herndon, Va. 622,050, pub. 12–6–55. Cl. 18.
Milner Products Co., Jackson, Miss. 622,474. Cl. 32.
Mission Fruit & Vegetable Co., Mission, Tex. 515,222, canc. Cl. 46.
Mission Hosiery Mills: *See*—
Wittenberg, Armin H.
Mitchell, F. O., & Bro., to F. O. Mitchell & Bro. Inc., Perryman, Md. 109,475, ren. 4–11–56. Cl. 46.
Mitchell, F. O., & Bro. Inc.: *See*—
Mitchell, F. O., & Bro.
Mitchell & Ness, Inc., Philadelphia, Pa. 442,457, canc. Cl. 22.
Mitchell Optical Co., Kirkwood, Mo. 515,217. Cl. 26.
Mobay Chemical Co., St. Louis, Mo. 621,975, pub. 12–6–55. Cl. 6.
Monarch Machine Tool Co., The, Sidney, Ohio. 622,178, pub. 12–6–55. Cl. 23.
Monarch Wine Co. of Georgia, Atlanta, Ga. 622,426, pub. 12–6–55. Cl. 47.
Montmorency Distillery Ltd., Beaupre, Quebec, Canada. 622,427, pub. 6–16–53. Cl. 49.
Moore, P. O., Inc., New York, N. Y. 622,284, pub. 12–6–55. Cl. 32.
Morgan Co. of Wisconsin, Oshkosh, Wis. 622,000, pub. 12–6–55. Cl. 12.

Moriarty Meat Co., Chicago, Ill. 622,420, pub. 12–6–55. Cl. 46.
Morval Corp., Herkimer, N. Y. 622,268, pub. 11–29–55. Cl. 32.
Motorola, Inc., Chicago, Ill. 622,024, pub. 12–6–55. Cl. 16.
Mueller, C. F., Co., Jersey City, N. J., now by merger C. F. Mueller Co. 515,028, canc. Cl. 46.
Murray Co. of Texas, Inc., The, d. b. a. Boston Gear Works, North Quincy, Mass. 622,151, pub. 12–6–55. Cl. 23.
N. V. Vereenigde Touwfabrieken, Rotterdam, Netherlands. 621,986, pub. 12–6–55. Cl. 7.
Nankee Aluminum Paint Co., Inc., Brooklyn, N. Y. 622,030, pub. 12–6–55. Cl. 16.
National Aluminate Corp., Chicago, Ill. 514,997, canc. Cl. 31.
National Association of Bedding Manufacturers, Washington, D. C. 622,456, pub. 12–6–55. Cl. 100.
National Automatic Tool Co., Inc., Richmond, Ind. 622,140, pub. 11–29–55. Cl. 23.
National Automotive Fibres, Inc., Detroit, Mich. 622,257, pub. 12–6–55. Cl. 29.
National Chemical & Mfg. Co., Chicago, Ill. 622,023, pub. 12–6–55. Cl. 16.
National Cooperatives, Inc., Albert Lea, Minn. 622,168, pub. 11–29–55. Cl. 23.
National Pneumatic Co., Inc., Boston, Mass. 622,172, pub. 12–6–55. Cl. 23.
National Sprinkler & Irrigation Corp., Long Island City, N. Y. 622,006, pub. 12–6–55. Cl. 13.
Nehi Corp., Columbus, Ga. 622,305, pub. 11–29–55. Cl. 36.
Nestle-LeMur Co., The.: *See*—
Maison Joubert Inc.
New Plastic Corp., Los Angeles, Calif. 622,110, pub. 11–29–55. Cl. 23.
New York Air Brake Co., The, New York, N. Y. 622,186, pub. 12–6–55. Cl. 23.
New York Association for the Blind, Inc., The, New York, N. Y. 622,251, pub. 12–6–55. Cl. 29.
New York Testing Laboratories Inc., New York, N. Y. 622,457, pub. 12–6–55. Cl. 100.
Niash Refining Co., Inc., d. b. a. His Lordship Products Co., New York, N. Y. 622,238, pub. 12–6–55. Cl. 28.
Nickel Plate Stove Polish Co.: *See*—
Armstrong Paint & Varnish Works.
Nippon Toki Kaisha, Ltd., The, Nishiju, Nagoya, Japan. 622,259, pub. 12–13–55. Cl. 30.
Noah's Ark Auto Accessories, Inc., Rochester, N. Y. 331,626, ren. 1–14–56. Cl. 21.
No-Nail Hanger Co.: *See*—
Rabinovitch, Jack.
Norrington, John S., San Francisco, Calif. 515,128, canc. Cl. 22.
Northern Industries, Inc., d. b. a. The Blitz Fog Co., Division of Northern Industries, Inc., Milwaukee, Wis. 622,121, pub. 11–29–55. Cl. 23.
Nu-Way Products Co.: *See*—
Sullivan, J. C.
Olin Mathieson Chemical Corp.: *See*—
Western Cartridge Co.
Olin Mathieson Chemical Corp., New York, N. Y. 621,973, pub. 12–6–55. Cl. 6.
Olin Mathieson Chemical Corp., New York, N. Y. 622,041–2, pub. 7–26–55. Cl. 18.
Ornas & Labarre, Centerline, Mich. 622,266, pub. 11–29–55. Cl. 32.
Osborn Paper Co., Inc., Marion, Ind. 515,133, canc. Cl. 37.
Overall Paint and Lead Co., Inc., d. b. a. Overall Paint and Lead, Inc., Cleveland, Ohio. 622,631, pub. 12–6–55. Cl. 16.
Overall Paint and Lead, Inc.: *See*—
Overall Paint and Lead Co., Inc.
Owatonna Mfg. Co., Inc., Owatonna, Minn. 622,136–7, pub. 12–6–55. Cl. 23.
Owings, Otto, Inc., Dallas, Tex. 622,141, pub. 12–6–55. Cl. 23.
Oxy-Dry Sprayer Corp., New York, N. Y. 622,174, pub. 12–6–55. Cl. 23.
Pabst Brewing Co.: *See*—
Premier-Pabst Corp.
Pace Mfg. Co., Des Moines, Iowa. 622,184, pub. 12–6–55. Cl. 23.
Pacific Coast Borax Co. Division of Borax Consolidated, Ltd.: *See*—
Borax Consolidated, Ltd.
Parke, Davis & Co., Detroit, Mich. 359,292, 12(c) pub. 2–28–56. Cl. 18.
Parker Brothers, Inc., Salem, Mass. 515,160, canc. Cl. 22.
Parx Products Corp.: *See*—
Lewis, Lorena.
Patron, F., Jr., d. b. a. H. T. Cottam & Co., New Orleans, La. 621,987, pub. 11–22–55. Cl. 7.
Payne, T. D., Laboratories: *See*—
Payne, Thomas D.
Payne, Thomas D., d. b. a. T. D. Payne Laboratories, Houston, Tex. 515,061, canc. Cl. 4.
Pearce Corp., Milwaukee, Wis. 622,134, pub. 12–6–55. Cl. 23.
Pee Dee Co., Memphis, Tenn. 622,403, pub. 12–6–55. Cl. 46.
Penn Controls, Inc., Goshen, Ind. 622,212, pub. 12–6–55. Cl. 26.
Pennsylvania Salt Mfg. Co., The, Philadelphia, Pa. 622,451, pub. 11–2–54. Cl. 52.
Perceptual Development Laboratories, Inc., Clayton, Mo. 622,227, pub. 11–29–55. Cl. 26.
Perfect, Fred H., by The Ruby Chemical Co., Columbus, Ohio. 144,038, 12(c) pub. 2–28–56. Cl. 6.
Perfo Mat & Rubber Co. Inc., New York, N. Y. 622,444, pub. 12–6–55. Cl. 50.
Perfumeria Parera S. A., Barcelona, Spain. 622,447, pub. 12–6–55. Cl. 51.
Perlmutter, Samuel, d. b. a. Empire Curtain Mfg. Co., Boston, Mass. 622,374, pub. 12–6–55. Cl. 42.
Perspecta Sound Inc., New York, N. Y. 622,198, pub. 11–29–55. Cl. 26.
Pfizer, Chas., & Co., Inc., Brooklyn, N. Y. 622,049, pub. 12–6–55. Cl. 18.
Phelps, Caroline L., Cazenovia, N. Y. 622,337, pub. 12–6–55. Cl. 39.
Phillips, Alfred N., d. b. a. Phillips Special Products, Darien, Conn. 622,273, pub. 11–29–55. Cl. 32.
Phillips Special Products: *See*—
Phillips, Alfred N.
Piersanti, Otello, d. b. a. Ditta Piersanti–Industria Conserve Alimentari, Rome, Italy. 622,402, pub. 12–6–55. Cl. 46.
Pioneer Water Heater Corp., Los Angeles, Calif. 622,290, pub. 11–29–55. Cl. 34.
Pittsburg & Midway Coal Mining Co., The, Kansas City, Mo. 515,005, canc. Cl. 1.
Pittsburgh Consolidation Coal Co., Pittsburgh, Pa. 621,949, pub. 12–6–55. Cl. 1.
Pompeii, Inc., Woodside, N. Y. 622,231, pub. 12–6–55. Cl. 26.
Porter, H. K., Co., Inc.: *See*—
Bowers Rubber Works.
Potlatch Forests Inc., Lewiston, Idaho. 622,002, pub. 12–13–55. Cl. 12.
Prairie Farmer Publishing Co., The, Chicago, Ill. 262,473, canc. Cl. 38.
Premier-Pabst Corp., Peoria Heights, to Pabst Brewing Co., Chicago, Ill. 331,856, ren. 1–21–56. Cl. 48.
Prince, H. M., Textiles Inc., New York, N. Y. 622,378–9, pub. 12–6–55. Cl. 42.
Pro-phy-lac-tic Brush Co., Northampton, Mass. 622,256, pub. 12–6–55. Cl. 29.
Pullman Couch Co., Chicago, Ill. 622,281, pub. 12–6–55. Cl. 32.
Pure Laboratories, Inc., New York, N. Y. 622,055, pub. 12–6–55. Cl. 18.
Pure Oil Co., The, Chicago, Ill. 515,187, canc. Cl. 19.
Puritan Stationery Co., Inc., Philadelphia, Pa. 622,310, pub. 12–6–55. Cl. 37.
Quality Maid Footwear, Inc., New York, N. Y. 622,357, pub. 12–6–55. Cl. 39.
Queen City Chevrolet Co., Cincinnati, Ohio. 622,064, pub. 7–5–55. Cl. 19.
Rabinovitch, Jack, d. b. a. No-Nail Hanger Co., Flint, Mich. 622,010, pub. 12–6–55. Cl. 13.
Ram Electronics Sales Co., Irving-on-Hudson, N. Y. 622,068, pub. 9–13–55. Cl. 21.
Ramsey Corp., St. Louis, Mo. 622,303, pub. 12–6–55. Cl. 35.
Rausch, Roswell H., d. b. a. Dec Paper Co., Oak Tree, N. J. 622,117, pub. 11–29–55. Cl. 23.
Ray Bros. Oil Co.: *See*—
Refinery Products, Inc.
Ray, James R.: *See*—
Refinery Products, Inc.
Refinery Products, Inc., Los Angeles, to J. R. Ray, d. b. a. Ray Bros. Oil Co., Long Beach, Calif. 327,281, ren. 8–20–55. Cl. 15.
Regina Sewing Machine Corp., New York, N. Y. 622,152, pub. 12–6–55. Cl. 23.
Reichhold Chemicals, Inc., Detroit, Mich. 621,969, pub. 10–18–55. Cl. 6.
Replica Records, Des Plaines, Ill. 622,306, pub. 12–6–55. Cl. 36.
Reymer & Brothers, Inc., Pittsburgh, Pa. 108,400, ren. 2–8–56. Cl. 46.
Rhein-Chemie G. m. b. H., Mannheim, Germany. 622,046–7, pub. 11–29–55. Cl. 18.
Rhodes, D. H., & Co.: *See*—
Turnley, Susan E.
Rice Barton Corp., Worcester, Mass. 622,100, pub. 12–6–55. Cl. 23.
Rice Mills, Inc., Belton, S. C. 622,359, pub. 12–6–55. Cl. 39.
Riggio Tobacco Corp., Brightwaters, N. Y. 622,038, pub. 12–6–55. Cl. 17.
Rival Mfg. Co., Kansas City, Mo. 622,183, pub. 11–29–55. Cl. 23.
River Plate Dairy Co., Ltd., The, by River Plate Dairy Co., S. A., Buenos Aires, Argentina. 330,443, 12(c) pub. 2–28–56. Cl. 6.
River Plate Dairy Co., Ltd., The, by River Plate Dairy Co., S. A., Buenos Aires, Argentina. 330,372, 12(c) pub. 2–28–56. Cl. 6.
River Plate Dairy Co., S. A.: *See*—
River Plate Dairy Co., Ltd., The.
Roanwell Corp., Brooklyn, N. Y. 622,071–2, pub. 12–6–55. Cl. 21.
Robertshaw-Fulton Controls Co., Greensburg, Pa. 622,207, pub. 12–6–55. Cl. 26.
Robertshaw-Fulton Controls Co., Greensburg, Pa. 622,235, pub. 12–6–55. Cl. 27.
Rolley, Inc., San Francisco, Calif. 622,450, pub. 12–6–55. Cl. 51.
Rolls-Royce Ltd., Derby, England. 622,188–9, pub. 12–6–55. Cl. 23.
Rotor Tool Co., The, Cleveland, Ohio. 622,146, pub. 12–6–55. Cl. 23.
Rubarite, Inc., Chicago, Ill. 621,951, pub. 12–6–55. Cl. 1.
Ruby Chemical Co., The: *See*—
Perfect, Fred H.
Ruff, Bob: *See*—
Ruffolo, Robert E.
Ruffolo, Robert E., d. b. a. Bob Ruff, Philadelphia, Pa. 622,192, pub. 11–29–55. Cl. 24.
S. O. S. Cinema Supply Corp., New York, N. Y. 622,216, pub. 11–29–55. Cl. 26.
S. & S. Industries, Inc., New York, N. Y. 622,361, pub. 12–6–55. Cl. 40.

Salisbury House, Ltd., Winnipeg, Manitoba, Canada. 622,396, pub. 12–6–55. Cl. 46.
Samann, Julius, Zugerhof, Zug, Switzerland. 621,979–81, pub. 12–6–55. Cl. 6.
Sanders Associates Inc., Nashua, N. H. 622,213, pub. 12–6–55. Cl. 26.
Sandoz Chemical Works, Inc., Hanover, N. J. 622,053, pub. 12–6–55. Cl. 18.
Sarong, Inc., New Haven, Conn. 622,358, pub. 12–6–55. Cl. 39.
Savoy Tire & Rubber Co., Inc., San Francisco, Calif. 622,301, pub. 12–6–55. Cl. 35.
Sawan, Inc., Columbus, Miss. 621,991–2, pub. 4–12–55. Cl. 10.
Scen-O-Tour Publishing Co.: *See*—
Laing, Douglas.
Schiavon & Bauer, Watsonville, Calif. 515,211, canc. Cl. 46.
Schundler, F. E., & Co. Inc., Joliet, Ill. 622,001, pub. 12–6–55. Cl. 12.
Schwebel Baking Co., The, Youngstown, Ohio. 622,419, pub. 12–6–55. Cl. 46.
Sealrite Mfg. Co., d. b. a. Shadelight Mfg. Co., Inc., Lincoln, Nebr. 621,998, pub. 12–6–55. Cl. 12.
Seamless Rubber Co., The, New Haven, Conn. 515,155, canc. Cl. 44.
Segal, L., & Co.: *See*—
Segal, Louis.
Segal, Louis, d. b. a. L. Segal & Co., Philadelphia, Pa. 515,229, canc. Cl. 46.
Serdex, Societe d'Etudes, Derecherches de Diffusion et d'Exploitation, Paris, Seine, France. 622,045, pub. 12–6–55. Cl. 18.
Servos, K.: *See*—
Servos, Kurt.
Servos, Kurt, d. b. a. K. Servos, Vineland, N. J. 621,954, pub. 12–6–55. Cl. 1.
Servus Rubber Co., The, Rock Island, Ill. 622,356, pub. 12–6–55. Cl. 39.
Sessions, Henry Howard, d. b. a. Emblem Oil Co., North Long Beach, Calif. 514,974, canc. Cl. 15.
Shadelight Mfg. Co.: *See*—
Sealrite Mfg. Co.
Shepard, Harwood, Auburn, N. Y. 622,176, pub. 12–6–55. Cl. 23.
Shirtcraft Co., Inc., The, New York, N. Y. 622,344, pub. 12–6–55. Cl. 39.
Shoe Corp of America, Columbus, Ohio. 622,335, pub. 11–29–55. Cl. 39.
Siewek Tool Co., Detroit, Mich. 622,132, pub. 11–29–55. Cl. 23.
Sindar Corp., New York, N. Y. 621,966–7, pub. 12–6–55. Cl. 6.
Sinko Mfg. & Tool Co., Chicago, Ill. 622,229, pub. 11–29–55. Cl. 26.
Sloyan, Jerome J., d. b. a. Automatic Motor Base Co., Windsor, N. J. 622,128–9, pub. 11–29–55. Cl. 23.
Smith-Blair, Inc., South San Francisco, Calif. 622,013, pub. 12–6–55. Cl. 13.
Smith-Douglass Co., Inc., Norfolk, Va. 621,993, pub. 11–22–55. Cl. 10.
Smith, T. J., & Nephew, Ltd., Hull, England. 331,469, ren. 1–7–56. Cl. 18.
Snead & Co., Orange, Va. 515,010, canc. Cl. 32.
Societe Anonyme Coloniale Ernest Lambert & Cie, Neuilly-sur-Seine, France, to Societe Anonyme des Plantations Saint-James, Pointe Simon, Fort-de-France (Martinique). 324,225, ren. 5–14–55. Cl. 49.
Societe Anonyme Conte, Paris, France. 622,309, pub. 12–6–55. Cl. 37.
Societe Anonyme des Plantations Saint-James: *See*—
Societe Anonyme Coloniale Ernest Lambert & Cie.
Societe des Usines Chimiques Rhone-Poulenc, Paris, France. 622,057, pub. 12–6–55. Cl. 18.
Societe Tur Sucesores, S. A., Zaragoza, Spain. 622,408, pub. 12–6–55. Cl. 46.
Sonneborn, L., Sons, Inc., New York, N. Y. 621,984–5, pub. 12–6–55. Cl. 6.
Speaker, J. W., Corp., Milwaukee, Wis. 514,985, canc. Cl. 15.
Special Oils Mfg. Co., West New York, N. J. 621,974, pub. 11–22–55. Cl. 6.
Speed-O-Print Corp., Chicago, Ill. 622,179, pub. 12–6–55. Cl. 23.
Speidel Corp., Providence, R. I. 622,240–3, pub. 12–6–55. Cl. 28.
Speidel Corp., Providence, R. I. 622,249, pub. 12–6–55. Cl. 28.
Spotless Stores, Inc., New York, N. Y. 622,460, pub. 12–6–55. Cl. 103.
Standard Brands Inc.: *See*—
Ward Baking Co.
Standard Diary Co., The, Cambridge, Mass. 515,174, canc. Cl. 37.
Standard Duplicating Machines Corp., Everett, Mass. 622,161, pub. 12–6–55. Cl. 23.
Standard Electric Mfg. Co., Inc., West Berlin, N. J. 622,067, pub. 12–6–55. Cl. 21.
Standard Milling Co.: *See*—
Loundonville Milling Co., The.
Standard Oil Co., The, Cleveland, Ohio. 515,184, canc. Cl. 6.
Standard Wrought Iron & Mfg. Corp., Maynard, Mass. 622,278, pub. 12–6–55. Cl. 32.
Star Expansion Products Co., New York, N. Y. 515,023, canc. Cl. 12.
Star Pilot Corp., New York, N. Y. 622,142, pub. 12–6–55. Cl. 23.
Star Pilot Corp., New York, N. Y. 622,155, pub. 12–6–55. Cl. 23.
Stearns Mfg. Co., Inc., Adrian, Mich. 622,175, pub. 12–6–55. Cl. 23.
Steinfeld's Products Co., Portland, Oreg. 622,412, pub. 12–6–55. Cl. 46.
Stensgaard, W. L., and Associates, Inc., Chicago, Ill. 514,983, canc. Cl. 32.
Stephens, W. E., Mfg. Co., Nashville, Tenn. 622,336, pub. 12–6–55. Cl. 39.
Stevens, J. P., & Co., Inc., New York, N. Y. 622,362, pub. 12–6–55. Cl. 42.
Stewart, Mary, La Jolla, Calif. 622,317, pub. 12–6–55. Cl. 38.
Stiefel Medicinal Soap Co., Inc., Oak Hill, N. Y. 622,452, pub. 12–6–55. Cl. 32.
Sullivan, J. C., d. b. a. Nu-Way Products Co., North Little Rock, Ark. 515,192, canc. Cl. 6.
Sunroc Refrigeration Co., Glen Riddle, Pa. 622,261, pub. 11–29–55. Cl. 31.
Surface Combustion Corp., Toledo, Ohio. 622,297, pub. 12–6–55. Cl. 34.
Surprise Brassiere Co., Inc., New York, N. Y. 622,354, pub. 12–6–55. Cl. 39.
Swedish Venetian Blind Corp., North Bergen, N. J. 372,818, canc. Cl. 32.
Swerdlow, Max H., d. b. a. K & M Laboratories, Columbus, Ohio. 622,060, pub. 12–6–55. Cl. 18.
Swift & Co., Chicago, Ill. 622,029, pub. 12–6–55. Cl. 16.
Swift & Co., Chicago, Ill. 622,398, pub. 3–29–55. Cl. 46.
Swing, Edward M., d. b. a. M. E. Swing Co., to M. E. Swing Co., Inc., Washington, D. C. 323,163, ren. 4–2–55. Cl. 46.
Swing, Edward M., d. b. a. M. E. Swing Co., to M. E. Swing Co., Inc., Washington, D. C. 323,170, ren. 4–2–55. Cl. 46.
Swing, Edward M., d. b. a. M. E. Swing Co., to M. E. Swing Co., Inc., Washington, D. C., 324,504, ren. 5–21–55. Cl. 46.
Swing, M. E., Co.: *See*—
Swing, Edward M.
Swing, M. E. Co., Inc.: *See*—
Swing, Edward M.
Sylvan Pools, Inc., Doylestown, Pa. 622,461, pub. 12–6–55. Cl. 103.
Tarentum Products Corp., Tarentum, Pa. 515,137, canc. Cl. 37.
Taylor & Sledd, Inc., Richmond, Va. 515,079, canc. Cl. 46.
Techkote Co., The, Inglewood, Calif. 515,097, canc. Cl. 12.
Technicolor Motion Picture Corp., Hollywood, Calif. 622,206, pub. 12–6–55. Cl. 26.
Teikoku Kogaku Kabushiki Kaisha (Teikoku Optical Industry Co., Ltd.), Suginami-ku, Tokyo, Japan. 622,208, pub. 12–6–55. Cl. 26.
Temple Sales Circular Co., Temple, Tex. 622,325, pub. 12–6–55. Cl. 38.
Tension Envelope Corp. of Kansas City, Kansas City, Mo. 622,312, pub. 12–6–55. Cl. 37.
Tesa S. A., Renens, Switzerland. 622,195, pub. 11–29–55. Cl. 26.
Texpak, Inc., New York, N. Y. 622,138, pub. 12–6–55. Cl. 23.
Thompson and Sons, Inc., Lyons, Ill. 622,469. Cl. 21.
Thomson Paper Mills, Inc., New York, N. Y. 622,314, pub. 12–6–55. Cl. 37.
Tiffen Marketing Co., Roslyn Heights, N. Y. 622,210, pub. 11–29–55. Cl. 26.
Toch Brothers, New York, to Toch Brothers, Inc., Staten Island, N. Y. 107,399, ren. 11–23–55. Cl. 16.
Toch Brothers, Inc.: *See*—
Toch Brothers.
Toolcraft Co., Bronx, N. Y. 622,104, pub. 11–29–55. Cl. 23
Townsend Co., New Brighton, Pa. 622,012, pub. 12–6–55. Cl. 13.
Traver Corp., Chicago, Ill. 515,208–9, canc. Cl. 37.
Trelles, M., & Co., New Orleans, La. 515,235, canc. Cl. 17.
Trelles, M., & Co., New Orleans, La. 622,033–6, pub. 12–6–55. Cl. 17.
Trinity Trading Corp., New York, N. Y. 622,367, pub. 12–6–55. Cl. 42.
Tri-State Heating, Inc., Detroit Lakes, Minn. 622,292, pub. 11–29–55. Cl. 34.
Trojan Battery Co., Los Angeles, Calif. 622,073, pub. 12–6–55. Cl. 21.
Turner Equipment Co., Detroit, Mich. 622,440, pub. 12–6–55. Cl. 50.
Turnley, Susan E., d. b. a. D. H. Rhodes & Co., San Francisco, Calif. 515,226, canc. Cl. 16.
Tyson Bearing Corp., Massillon, Ohio. 622,165, pub. 11–29–55. Cl. 23.
Udell, Alonzo E., d. b. a. The Lakeview News, Battle Creek, Mich. 515,224, canc. Cl. 38.
Unanue & Sons, Inc., New York, N. Y. 622,395, pub. 12–6–55. Cl. 46.
United Newspapers Magazine Corp., New York, N. Y. 622,318, pub. 12–6–55. Cl. 38.
U. S. Mfg. Corp., Decatur, Ill. 622,435, pub. 12–6–55. Cl. 50.
United States Playing Card Co., The, East Norwood, Cincinnati, Ohio. 336,291, 12(c) pub. 2–28–56. Cl. 22.
United States Products Corp., Ltd., San Jose, Calif. 622,404, pub. 7–5–55. Cl. 46.
United States Rubber Co., Passaic, N. J. 331,894, ren. 1–21–56. Cl. 4.
United States Tobacco Co.: *See*—
Fleming-Hall Tobacco Co., Inc.
Universal Laboratories, Inc., East Orange, N. J. 515,182, canc. Cl. 4.
Universal Paint & Varnish Inc., Bedford, Ohio. 622,026, pub. 12–6–55. Cl. 16.
Upco Co., The, Cleveland, Ohio. 622,003, pub. 12–6–55. Cl. 12.
Upjohn Co., The, Kalamazoo, Mich. 622,059, pub. 12–6–55. Cl. 18.

Upland Heights Orange Association, Upland, Calif. 515,108, canc. Cl. 46.
Urkov, Joseph C., d. b. a. Discovery Products Co., Chicago, Ill. 622,448–9, pub. 12–6–55. Cl. 51.
Urso, John P., New York, N. Y. 622,082, pub. 11–29–55. Cl. 22.
Valenite Metals Corp., Royal Oak, Mich. 622,106, pub. 11–29–55. Cl. 23.
Van Craeynest & Linzer, Inc., San Francisco, Calif. 622,244, pub. 12–6–55. Cl. 28.
Ventura Coastal Lemon Co., Ventura, Calif. 622,400, pub. 12–6–55. Cl. 46.
Victoria Coal Corp., Kansas City, Mo. 621,958, pub. 12–6–55. Cl. 1.
Viking Boat Corp., Wakulla, to H. C. Gibson, Tallahassee, Fla. 622,065, pub. 10–18–55. Cl. 19.
Village Blacksmith Co., The, Watertown, Wis. 622,143, pub. 11–29–55. Cl. 23.
Villard, A. T., Blythe, Calif. 515,103, canc. Cl. 46.
Virco Mfg. Corp., Los Angeles, Calif. 622,279, pub. 12–6–55. Cl. 32.
Virginia Smelting Co., West Norfolk, Va. 621,972, pub. 12–6–55. Cl. 6.
Vlier Engineering, Inc., Los Angeles, Calif. 622,118–19, pub. 12–6–55. Cl. 23.
Voorhees Rubber Mfg. Co., Inc., New York, N. Y. 515,146, canc. Cl. 12.
Wagner, Electric Corp., St. Louis, Mo. 622,304, pub. 12–6–55. Cl. 35.
Waldorf Paper Products Co., St. Paul, Minn. 334,321, ren. 4–28–56. Cl. 2.
Wallace, R., & Sons Mfg. Co., Wallingford, Conn. 622,245, pub. 12–6–55. Cl. 28.
Ward Baking Co., to Standard Brands Inc., New York, N. Y. 110,246, ren. 5–9–56. Cl. 46.
Ward Blenkinsop & Co., Ltd., London, England. 515,157, canc. Cl. 6.
Ware Machine Works, Inc., Ware, Mass. 622,105, pub. 11–29–55. Cl. 23.
Warren Soap Mfg. Co., Inc., The, Boston, Mass. 622,019, pub. 12–6–55. Cl. 15.
Wasco Products, Inc.: *See*—
Bertram, Harvey P., Co., Inc., The.
Watlow Electric Mfg. Co., St. Louis, Mo. 622,076, pub. 12–6–55. Cl. 21.
Watson-Standard Co., Pittsburgh, Pa. 622,025, pub. 12–6–55. Cl. 16.
Watt Publishing Co., Mount Morris, Ill. 622,316, pub. 9–28–54. Cl. 38.
Wayniine, Inc., Chicopee Falls, Mass. 622,275, pub. 12–6–55. Cl. 32.
Welch Grape Juice Co., Inc., The: *See*—
Welch Grape Juice Co., The.
Welch Grape Juice Co., The, to The Welch Grape Juice Co., Inc., Westfield, N. Y. 622,423, pub. 3–16–54. Cl. 47.
Welsbach Corp., The, Philadelphia, Pa. 622,472. Cl. 23.
Wembley, Inc., New Orleans, La. 622,346, pub. 12–6–55. Cl. 39.
Wesco Machine Products, Inc., Philadelphia, Pa. 622,215, pub. 11–29–55. Cl. 26.
West, Dr., Co.: *See*—
West, Earl C.
West, Earl C., d. b. a. Dr. West Co., Mora, Minn. 515,085, canc. Cl. 4.
Western Cartridge Co., to Olin Mathieson Chemical Corp., East Alton, Ill. 331,081, ren. 12–24–55. Cl. 14.
Western Features Syndicate, Inc., Rosemead, Calif. 514,979–80, canc. Cl. 26.
Western Lock Mfg. Co., Los Angeles, Calif. 622,193, pub. 11–29–55. Cl. 25.
Western States Cutlery Co., Boulder, Colo. 622,111, pub. 11–29–55. Cl. 23.
Western Union Telegraph Co., The, New York, N. Y. 622,462, pub. 12–6–55. Cl. 144.
Western Venetian Blind Co., North Bergen, N. J. 369,791, canc. Cl. 32.
Whirlpool Corp., to Whirlpool-Seeger Corp., St. Joseph, Mich. 622,079, pub. 12–6–55. Cl. 21.
Whirlpool Corp., to Whirlpool-Seeger Corp., St. Joseph, Mich. 622,191, pub. 11–29–55. Cl. 24.
Whirlpool-Seeger Corp.: *See*—
Whirlpool Corp.
Whitaker Cable Corp., North Kansas City, Mo. 622,069, pub. 12–6–55. Cl. 21.
White, Maurice J., d. b. a. American Club Beverages, to H. D. Failey and M. J. White, d. b. a. American Club Beverages, Rochester, N. Y. 334,635, ren. 5–12–56. Cl. 45.
Whitin Machine Works, Whitinsville, Mass. 622,315, pub. 12–6–55. Cl. 37.
Whitney Mfg. Co., San Francisco, Calif. 622,130, pub. 12–6–55. Cl. 23.
Wil Flo Co., Chicago, Ill. 622,103, pub. 11–29–55. Cl. 23.
Wilson Cabinet Co., Smyrna, Del. 420,144, canc. Cl. 31.
Winston and Newell Co., d. b. a. Charles Hewitt & Co., Wilmington, Del., and Minneapolis, Minn. 515,063, canc. Cl. 46.
Wister-Belfield Corp., Philadelphia, Pa. 621,999, pub. 12–6–55. Cl. 12.
Wittenberg, Armin H., d. b. a. Mission Hosiery Mills, Los Angeles, Calif. 173,372, canc. Cl. 39.
Wolf, John, Textiles, Inc., New York, N. Y. 622,385, pub. 12–6–55. Cl. 42.
Wooster Brush Co., The, Wooster, Ohio. 622,254, pub. 11–29–55. Cl. 29.
X-L Laboratories, Inc., Long Beach, Calif. 621,970, pub. 12–6–55. Cl. 6.
Yarnall-Waring Co., Philadelphia, Pa. 622,203, pub. 12–6–55. Cl. 26.
Yeckes-Eichenbaum, Inc., New York, N. Y. 515,109, canc. Cl. 46.
Young, Chas. W., & Co., Philadelphia, Pa. 202,725, canc. Cl. 4.
Zachary, William, Co.: *See*—
Goodman, William Z.
Zingheim, Wm. C., Co., Inc., Chicago, Ill. 622,291, pub. 8–9–55. Cl. 34.

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